GL02430

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: 5776

Date Drilled 26/3/81 thru 3/5/81

Location: NWSW Sec 9 T22N R40E

Method: rotary/air/ and/or mud

Geologist: Avery

Gamma:

Depth ( )	Description
0- 15'	Overburden: Edwards Creek tuff float, and Triassic basal conglomerate float in mud-silt-sand.
15- 65'	Triassic basal conglomerate (T_{rc}): Strongly cemented sub-rounded to subangular gravel and pebble size clasts of brown, reddish brown, red, gray and green chert; white gray and brown quartzite. Cement is SiO_2, with much iron staining along clast edges, in fractures, and in cement itself. Few boulder-size clasts of chert/quartzite.
65- 75'	Same as above, with addition of rounded reddish-purple f.c. quartzite, and yellow-brown chert fragments.
75- 85'	Same as above, with appearance of reddish brown, finely crushed siltstone making up approximately 20-30 % of total sample.
85- 95'	Same as 15'-65', with quartzite clasts ≃80% of total. rounded chert pebbles ≃10% of total. reddish-brown siltstone ≃10% of total.
95-125'	Same as above, but siltstone now ≃30-40% of total.
125-155'	Same T_{rc}, with appearance of buff (orange-gray) ss pebbles, and reddish-buff silt-st. pebbles (both well-rounded/rounded) - new material ≃25-35% of total.
155-215'	T_{rc} with finely crushed, orange-gray silty sand-st. making up between 20% and 55% of total sample in this interval. Rounded-subrounded pebbles (chert/quartzite) still constitute up to 80% of total.
215-225'	Same as above. Silty ss <20% of total now.
225-245'	T_{rc} with 80% white qtzite/qtzite conglomerate that is densely cemented, l.g. qtzite with gravel-size, subangular clasts. Iron staining on fracture faces, and some hydrous copper oxide coatings on some fragments (qtzite retains sedimentary features as opposed to older quartzites such as Valmy, etc.).

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth (ft)	Description
990-1090'	30-90% chert/qtzite subrounded-subangular gravel conglomerate with green, gray, brown chert and gray qtzite (as before, T_{rc}) 10-70%. F.g.-f.c. gray quartzite.
1090-1100'	40-50% conglomerate as above; 60-50% orange-gray sandy silt-st.
1100-1200'	30-50% greenish gray chert, rounded-angular pebble-gravel size chips-clasts. 30-50% gray, brownish-gray f.g. qtzite; 10-40% silty ss (orange-gray). T_{rc}
1200-1440'	50-95% chert, qtzite, chert/qtzite conglomerate (T_{rc}) as before. 5-50% buff, orange-gray or lt. brown-tan silty ss to sandy ss. Appearance of purple/red-gray qtzite, conglomerate. T_{rc}
1440-1460'	60-70% tan-lt. brown sandy silt-st. 30-40% gravel conglomerate. T_{rc}
1460-1540'	40-80% gravel-pebble (T_{rc}) conglomerate. Mostly v.f. gravels, rounded-angular. 20-60% orange-gray to lt. brown silty-ss and sandy silt-st.
1540-1600'	Chocolate-brown qtzite/chert gravel-pebble conglomerate (60% of total). Brown silty-ss, orange-gray sandy ss (40%). T_{rc}
1600-1620'	80-100% chert/qtzite conglomerate w/bedded chert (angular chert clasts 40%).
1620-1640'	50% reddish-purple, silicified, subrounded to rounded silt-st. pebbles and finely crushed silt-st. containing large angular quartz phenocrysts. Many pebbles are graywacke (clay/silt-st. matrix with quartz phenocrysts - see sample!). 30-40% T_{rc} conglomerate as before. 10-20% grayish green qtzite and chert. Havallah Formation.
1640-1650'	Fault zone: about 2% of total is greenish-white, soft (H< 2), w/greasy feel, splintery soapstone (tall and/or other clay minerals). Does not expand when heated. 40%

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth	Description
	brown, lt. brown, red-brown, white, gray v.f.g. qtzite. 58% (!) red-purple silicified siltstone conglomerate or fault breccia with very angular clasts of chert, qtzite, and silt-st. Many have calcite veins, caps. Calcite shows stress in curved cleavage faces.
1650-1660	As above, but no clay minerals present. Few pebbles of graywacke with micaceous flakes (muscovite). Appearance of green/lime-green chert w/iron staining (PPh?). (Note: basal T_{rc} unit mapped east of 864-90 contains siltstones and conglomerates with identical micaceous flakes).
1660-1690	As above (1640-1660), but increasing amount of green, green w/red iron stains on micro-fractures chert (20-75% of total). Fault breccia still present (10-50%). Very little graywacke (PPh).
1690-1740	As above with 30-60% green, gray, dk. green chert. 20-30% silty graywacke which is now slightly calcareous and has pheocrysts of qtzite (no micaceous flakes). 0-10% brown qtzite (f.g.).
1740-1750	No sample.
1750-1880	40-80% green-gray chert as angular gravel size chips. 15-45% reddish brown-purple silicified siltstone gravel size chips. 5-30% gray brown quartzite gravel size chips (P_{ph}). 5-30% graywacke (calcareous w/SiO_2 phenocrysts - not micaceous).
1880-2000	80-90% chert and dark purple/brown silicified silt-st.; 10-20% buff to gray quartzite; occasional rock fragments of T_{rc} chert gravel-pebble conglomerate from uphole - very iron-stained. (Note: Both the chert (green, lime-green, dk. green iron stained on micro-fractures green) and the silicified silt-st. (dark reddish-purple brown to reddish orange to gray-orange) were mapped as outcrops and low "rubble" hills 1-2 miles east of 25-9 and 1-3 miles east of 864-90. Hand samples of these PP Havallah sequence rocks are available - see Avery's rock collection!).

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: 5169

Date Drilled: 16/4/81 thru 9/5/81

Location: SESW Sec 9 T23NR40E

Method: rotary/air

Geologist: Avery

Gamma:

Depth ( )	Description
0-15'	Orange-gray silty sandstone, partly silicified, alteration (clay) present, brecciated and containing iron veinlets and staining (50%). Chert-gray/pebble (T_{rc}) conglomerate in silica matrix. Iron-stained.
15-25'	Broken, brecciated, altered (clay) T_{rc}? silicified silt-st., sandstone, chert congl. Drillers (Pat Edwards) say that rock is fractured, poor drilling. Iron-stained.
25-45'	30-50% of original rock (Ls?) is totally replaced with silica. Some T_{rc} conglomerate (<5%). 50-70% brown, white, gray F-m.g. quartzite.
45-55'	Same. Chips are smaller. Some chert. Strongly iron-stained formation. 20% silty sandstone of an orange-gray color.
55-65'	As above, with 50% T_{rc} chert/qtzite silica cemented conglomerate and 5-45% silty-sandstone of orange-gray color.
65-75'	As above, with 20-60% conglomerate and coarse sandstone. Very iron-stained.
75-85'	As above, w/clay alteration and brecciated conglomerate, chert. Fault?
85-115'	Same as 65-75'.
115-135'	85% chert/qtzite gravel-pebble conglomerate. 10% orange-gray silty-ss matrix of conglomerate? 5% gray-white m.g. qtzite.
135-155'	Very silicified conglomerate as above w/fault breccia & silic. Ls? - original rock totally replaced with silica. Very iron-stained. One fragment with cinnabar. 5-20% silty ss, 20% quartzite.
155-175'	Same as above, but now all silicified rock (Ls?) - no conglomerate, some breccia. Another cinnabar fragment. Iron-stained. Silty ss < 10%.
175-185'	Same as above with 30% f-mg. White-buff qtzite.

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Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
185-215'	Appearance of tan, buff, brown and orange white-gray F.M.G. qtzite. Many chips have black spotty appearance due to pheonocrysts (coarse sand grains). H ≃ 7. 60-80% total (congl., silicified congl. Ls 20-40%) .
215-225'	60% orange-gray F.M.G. ss. 40% above. (silty-ss too).
225-235'	As above, but ss is siltier, and is sometimes a silty ss congl. with gravel size clasts of chert, 5% red silt st (silicified). Ss is orange-gray to lt. brown.
235-245'	Same as above.
245-255'	Same as above. 50% ss, ss congl.
255-265'	Same as above. 80% ss.
265-275'	Same as above. Some of ss is stained a flamingo pink-red. Mercury?
275-285'	50% tan-gray fg-mg qtzite (H ≃7). 50% congl./silicified Ls.
285-295'	80% gravel-pebble congl. in orange-gray silic. silty ss. Maxtrix.
295-307'	50% gravel-pebble congl. in orange-gray silic. silty ss or silicified. 50% qtzite, brown-orange gray interbedded w/reddish brown silt. st.
307-320'	Red siltstone w/thin interbeds, laminae of tan qtzite as above. 5% green chert angular chips. (PPh).
320-330'	As above with 40-50% red siltst (silic). 30-35% tan-orange qtzite. 15-20% green chert. (PPh).
330-340'	60% gray silicified Ls. No effervescence in acid. Grain size is too small to see w/hand lens and silt. effervescence when scratched. 40% orange gray-brown ss.
340-350'	60-70% orange-gray-brown silty ss. 30-40% gray ss as above.

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Hole: 38-9

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Depth ( )	Description
350-360'	40% interbedded, thinly bedded orange-gray-brown silty ss. 60% gray-dk. gray chert gravel highly silicified congl. w/rounded-angular chasts.
360-370'	Same as above,but was 80% congl. Very tightly silicified clasts "melted" into each other.
370-380'	70% very silicified conglomerate. 30% brown-orange-gray silty ss. Looks like t_{rc}. Two chips have cinnabar xls.
380-390'	Same as above but now 70% orange-gray silty ss. 30% congl.
390-400'	90% orange-gray to brown silty ss; & ss (f-mg), 10% conglomerate.
400-410'	90% iron-stained, gray silicified Ls, silty ss, orange-gray, 10% conglomerate.
410-420'	50% orange-gray ss (fg), 50% dense, gray silicified Ls or calcareous silt-st.
420-430'	80% dense, gray silic. calc. siltst. or Ls.
430-440'	Dense gray-dk. gray (bedded) siltst. and day st. (H $\simeq$4). Some is silicified. Few qtz. w/sulfide picas.
440-450'	Same as above.
450-460'	Brown, brownish green-gray siltst. silty ss. Orange-gray too.
460-470'	Brown, brownish green-gray siltst. silty ss. Orange-gray too.
470-480'	Brown appearance of red silic. siltst.
480-490'	Brown, brown, brownish green-gray siltst. silty ss, but some iron-stained silty ss. Some of it is conglometric.
490-500'	" " " " " "
500-510'	Gray f.g. ss, silty ss, clayst. siltst. (silicified) fractured, iron-stained.

LITHOLOGIC LOG

Project: 864

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Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
510-520'	Same as above, but now 50% gravel chert silicified congl.
520-530'	60% gray fg ss, silic. siltstone is gray-reddish gray-silic claystone is white-greenish gray while 40% congl.
530-540'	Dk. gray chert/qtzite gravel congl. Very dense. Silicified. Sulfides occur as granular fracture fillings, coatings, pyrite, c/pyrite, others. Most clasts are well-rounded to subrounded.
540-550'	Lt. gray - gray fg quartzite.
550-560'	Gray-brownish gray fg qtzite (95%) red silicified silt. st. (5%)
560-570'	Gray-brownish gray fg qtzite (60%) red silicified silt. st. (40%)
570-580'	Gray-brownish gray fg qtzite (95%) red silicified silt. st. (5%)
580-590'	Gray-dk. gray chert and qtzite (Fe) sulfides (minor).
590-600'	Gray, thinly bedded vfg qtzite, some silica silt. st., v. minor chert, sulfides (v. minor).
600-610'	Gray-red silicified siltstone, ss, and claystone.
610-620'	Gray-brownish gray fg-vfg qtzite, some silica silt. st., chert (v. minor sulfides)
620-630'	Gray-dk. gray qtzite (fg), chert, and qtzite (chert congl. sulfides).
630-640'	Same but mostly conglomerate (chert/qtzite rounded-angular pebbles).
640-650'	Same as 600-620 - congl. w/sulfides interval 6.
650-660'	95% red silicified silt. st., qtzite (fg)
660-670'	85% " " " "
670-680'	60% " " " "

LITHOLOGIC LOG

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Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
680-690'	Same as 600-610', mostly gray chert, qtzite (fg) 10-15% red silt. st.
690-700'	Same as 600-610' with gray qtzite, green-gray chert, and chert congl.
700-710'	" " " " "
710-720'	" " " " "
720-730'	Same as 600-610'
730-740'	Gray silicified siltstone ss, greenish gray chert, iron-staining.
740-750'	Brownish gray qtzite, red silt. st., chert qtzite congl. (20%).
750-760'	Cong., chert, qtzite, 15% red silic. silt. st.
760-770'	Chert, qtzite, congl., minor sulfides.
770-780'	Chert, qtzite, congl., minor sulfides.
780-790'	Same as 750-760' 10% silt. st.
790-800'	" " mostly qtzite.
800-810'	" " w/buff qtzite, green chert, gray-brown qtzite, red silt. st. (5%).
810-820'	Same as above. No buff qtzite.
820-830'	Chert, congl.
830-840'	" ". some minor sulfides.
840-850'	Chert, congl., red silt. st. (30-40%).
850-860'	" " " (40-50%).
860-870'	Chert, congl., buff iron-stained qtzite (25%).
870-880'	" " " " (40%) w/orange-gray ss cong. (30%).

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Depth ( )	Description
880-890'	Green-gray chert congl.
890-900'	Mostly brownish-gray chert. 30% congl.
900-910'	" " " "
910-920'	Chert, congl. 50-56
920-930'	as in 890-900.
930-950'	Clear, brown, green chert, gray-brown fg ss minor sulfides w/FeS.
930-940'	Gray, brown-gray, dk. gray chert, qtzite; minor sulfides.
940-950'	Gray, brown-gray, with some red chert. Minor sulfides.
950-960'	Same as above.
960-970'	Same as above 5% red sulfides (minor pyrite).
970-980'	" " " " "
980-990'	" " " " "
990-1000'	" " red chert ≈20% sil. red silt. st. 5%, congl. 20% and/or breccia.
1000-1010'	Same as above, 10% sulfides, congl. 20% and/or breccia.
1010-1020'	Same, no red chert, mostly grayish chert, sulfides, and/or breccia.
1020-1030'	" " " "
1030-1040'	" " " "
1040-1050'	" " " "
1050-1060'	Mostly cong. (green chert, gray-brown qtzite pebbles, gravels). Sufides.

LITHOLOGIC LOG

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Depth ( )	Description
1060-1070'	Same but more alteration, breccia. Iron-staining, sulfides less.
1070-1080'	Mostly green-gray chert, & brown chert w/ congl., sulfides.
1080-1090'	Iron-stained chert, qtzite, very little sulfides.
1090-1100'	Iron-stained chert, qtzite, very little sulfides.
1100-1110'	Iron-stained chert, qtzite, very little sulfides.
1110-1120'	Gray-brown-green chert qtzite, minor sulfides & congl.
1120-1130'	" " " "
1130-1140'	" " " "
1140-1150'	" " " "
1150-1160'	Same as 1110-1150' minor sulfides.
1160-1170'	Same as 1110-1150' minor sulfides.
1170-1180'	Same as 1110-1150' minor sulfides.
1180-1190'	Same as 1110-1150' no sulfides.
1190-1200'	More reddish brown F.C. qtzite, chert congl. No sulfides.
1200-1210'	Same as above.
1210-1220'	Mostly brown-gray-green chert (90%). No sulfides.
1220-1230'	Chert, qtzite, no sulfides.
1230-1240'	Same as above
1240-1250'	Same as above
1250-1260'	Same as above

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

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Geologist: _____ Gamma: _____

Depth ( )	Description
1260-1270'	Same as above
1270-1280'	Same as above w/minor sulfides (minor pyrite).
1280-1290'	Same as above.
1290-1300'	Same as above.
1300-1310'	plus, silicified siltst. (red): 20% of total.
1310-1320'	Same as above, no sulfides.
1320-1330'	Same as above.
1330-1340'	Gray-green chert, orange-gray-brownish-gray-reddish-brown qtzite, red silic-silt. st. and 40-50% chert gravel congl., v. minor sulfides as FeS_2.
1340-1350'	As above.
1350-1360'	Gray-reddish brown qtzite (60%), gray-green chert (20%), chert congl. (20%).
1360-1370'	Chert; qtzite - gray, brown, red, green, yellow, clear.
1370-1380'	" " " "
1380-1390'	Reddish-brown silicified siltstone, silty-qtzite, silt. st. congl. w/some red chert.
1390-1400'	as above, w/ 10% green chert.
1400-1410'	Green chert (iron-stained), brown qtzite, red silic. silt. st.
1410-1420'	Dk. gray-green chert, qtzite as above, fault breccia only and chert congl., minor sulfide as FeS, red silic. silt. st.
1420-1430'	As above, no silt. st.

AMAX EXPLORATION, INC.

TEMPERATURE/DEPTH LOG

864-65

ΔT Well No. 25-9

Property-Project McCoy Depth Logged 600m

Map _____ Scale 7½ Date: Drilled 5-2-81 Logged 8-5-81

State NV County Churchill, ____ of ____ of NW of SW of Sec 9 T22N R40E

Instrument #46 Operator JED Elevation _____ (ft / m)

Comments 2⅞ pipe Filled with H2O hung in open hole. Temps From upper 90 m of hole Taken on 5-15-81

Card A

JUSTIFY	Proj No	Well No	DA	MO	YR	*
	864	65	08	05	81	C M

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

Site Description	Operator	Editor	Drilled DA	Drilled MO	Drilled YR
9.05 KM S WHITE HORSE MINE	JED	/DP	02	05	81

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

MCCOY

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	39.	45.0	117.	30.0

Use decimals

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

Northing	Easting	Elev	
16.7	3.85	.	F

Use decimals

← Write M if if meters

Segment ! = Depths

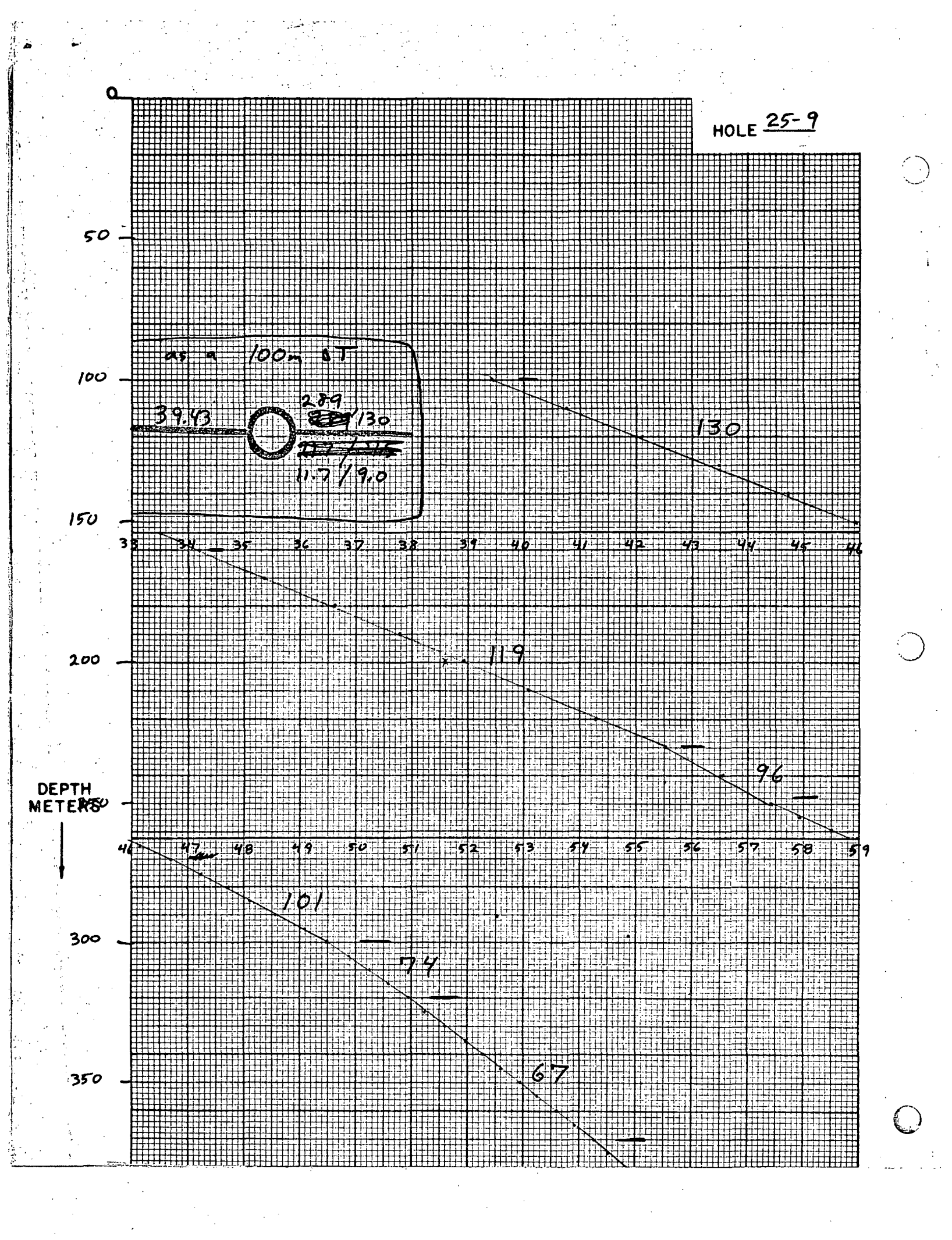
Conductivity

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment	Start	End	K	ΔK
1	100.0	160.0	-9.0	-0.5
2	160.0	230.0		
3	230.0	250.0		
4	250.0	300.0		
5	300.0	320.0		
6	320.0	370.0		
7	370.0	405.0		
8	405.0	435.0		
9				

HOLE 25-9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50
100
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DEPTH METERS
as a 100m BT
39.43
289
130
11.7 / 9.0
130
119
96
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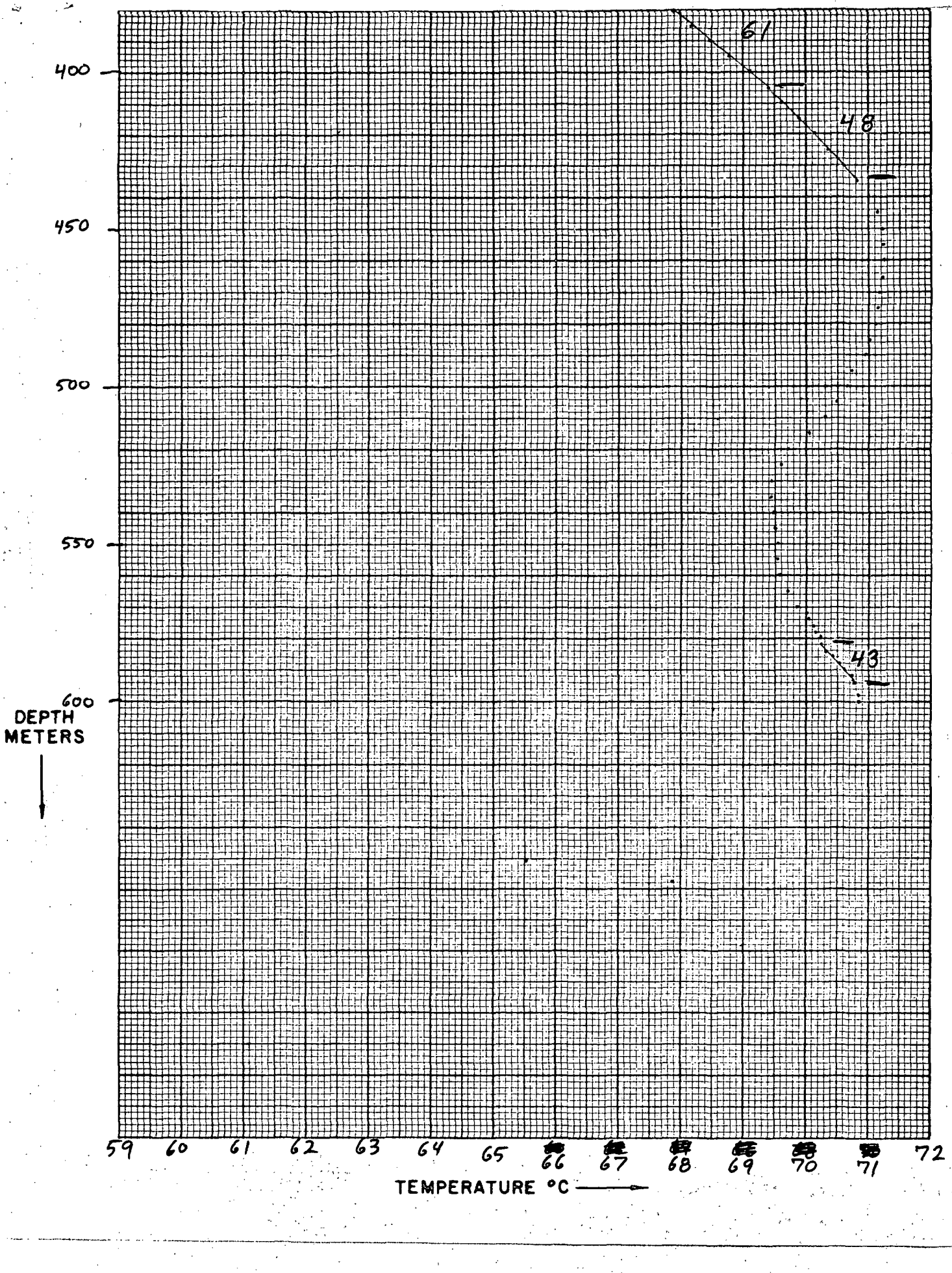
61
48
43
400
450
500
550
600
DEPTH METERS
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67
68
69
70
71
72
TEMPERATURE °C

Date Logged: 5-15-81

ΔT Well No. _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
90	55.04	38.02					
100	52.24	39.43					
110	49.72	40.76					
120	47.31	42.10					
130	44.94	43.48					
140	42.93	44.71					
150	41.05	45.92					
160	39.15	47.20					
170	37.50	48.37					
180	35.79	49.63					
190	34.30	50.79					
CONTINUED ON NEXT PAGE,							

K=Conductivity

Date Logged: ____________________ ΔT Well No. ______________

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.

K=Conductivity

Date Logged: _____ ΔT Well No. 25-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
200	33.30	51.60					Cable in .0973 out .1309
			5.82				
250	26.94	57.42					
			0.54	108			
255	26.42	57.96					
			0.55	110			
260	25.90	58.51					
			0.65	130			
265	25.30	59.16					
			0.54	108			
270	24.81	59.70					
			0.56	112			
275	24.32	60.26					
			0.46	92			
280	23.92	60.72					
			0.37	74			
285	23.61	61.09					
			0.45	90			
290	23.23	61.54					
			0.56	112			
295	22.77	62.10					
			0.27	54			
300	22.47	62.47					
			0.40	80			
305	22.15	62.87					
			0.39	78			
310	21.85	63.26					
			0.33	66			
315	21.60	63.59					
			0.35	70			
320	21.33	63.94					
			0.29	58			
325	21.11	64.23					
			0.34	72			
330	20.84	64.60					
			0.37	74			
335	20.57	64.97					
			0.30	60			
340	20.35	65.27					
			0.34	68			
345	20.11	65.61					
			0.34	68			
350	19.87	65.95					
			0.31	62			
355	19.65	66.26					
			0.35	70			
360	19.41	66.61					
			0.31	62			
365	19.20	66.92					
			0.35	70			
370	18.97	67.27					
			0.26	52			
375	18.80	67.53					

K=Conductivity

Date Logged: _____ ΔT Well No. 25-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
380	18.56	67.89	0.36	72			
385	18.37	68.19	0.30	60			
390	18.18	68.49	0.30	60			
395	18.00	68.77	0.28	56			
400	17.80	69.09	0.32	64			
405	17.61	69.40	0.31	62			
410	17.48	69.61	0.21	42			
415	17.31	69.89	0.28	56			
420	17.17	70.13	0.26	52			
425	17.03	70.36	0.23	46			
430	16.90	70.59	0.23	46			
435	16.76	70.83	0.24	48			
440	16.66	71.00	0.17	34			
445	16.58	71.14	0.14	28			
450	16.54	71.21	0.07	14			
455	16.53	71.23	0.02	4			
460	16.52	71.24	0.01	2			
465	16.53	71.23	-0.01	-2			
470	16.56	71.17	-0.06	-12			
475	16.58	71.14	-0.03	-6			
480	16.60	71.10	-0.04	-8			
485	16.64	71.03	-0.07	-14			
490	16.69	70.95	-0.08	-16			
495	16.76	70.83	-0.12	-24			
500	16.86	70.65	-0.18	-36			
505	16.96	70.48	-0.17	-34			
510	17.07	70.30	-0.18	-36			

K=Conductivity

Date Logged: _____ ΔT Well No. 25-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
515	17.21	70.06	-0.24	-48			
520	17.36	69.81	-0.35	-70			
525	17.49	69.60	-0.21	-42			
530	17.58	69.45	-0.15	-30			
535	17.58	69.45	0.00	0			
540	17.57	69.47	0.02	4			
545	17.54	69.51	0.04	8			
550	17.52	69.55	0.04	8			
555	17.52	69.55	0.00	0			
560	17.50	69.58	0.03	6			
565	17.42	69.71	0.13	26			
570	17.32	69.88	0.17	34			
572	17.24	70.01	0.13	65			
574	17.21	70.06	0.05	25			
576	17.17	70.13	0.07	35			
578	17.15	70.16	0.03	15			
580	17.12	70.21	0.05	25			
582	17.10	70.25	0.04	20			
584	17.06	70.31	0.06	30			
586	16.99	70.43	0.12	60			
588	16.93	70.53	0.10	50			
590	16.88	70.62	0.09	45			
592	16.83	70.71	0.09	45			
594	16.80	70.76	0.05	25			
596	—	—	0.08	20			
598	16.75	70.84					
600	16.74	70.86	0.04	20			

K=Conductivity

Date Logged: _____ ΔT Well No. 25-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
598	16.73	70.88	0.02	10			
~~600~~	~~16.73~~						
~~602~~	~~16.73~~						
~~604~~	~~16.72~~						

K=Conductivity

AMAX EXPLORATION, INC.

TEMPERATURE/DEPTH LOG

864-62

ΔT Well No. 38-9

Property-Project McCoy Depth Logged 620m

Map Gilbert Ck SW, Scale 7½ Date: Drilled 5-21-81 Logged 7-31-81

State NV County Churchill, ___ of ___ of SE of SW of Sec 9 T 23 N R 40 E

Instrument #46 Operator JED Elevation ___ (ft m)

Comments 2⅜" H2O Filled steel pipe in open 6¼" hole

Card A

RT JUSTIFY	Proj No	Well No	DA	MO	YR	*
	864	62	31	07	81	C M

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

Site Description	Operator	Editor	Drilled DA	Drilled MO	Drilled YR
0.35 KM N McCOY MINE	JED	/DD	21	05	81

(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 **
CM	7.5	39.	45.0	117.	30.0

Use decimals

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

Northing	Easting	Elev	
55.55	4.09	.	F

Use decimals

← Write M if if meters

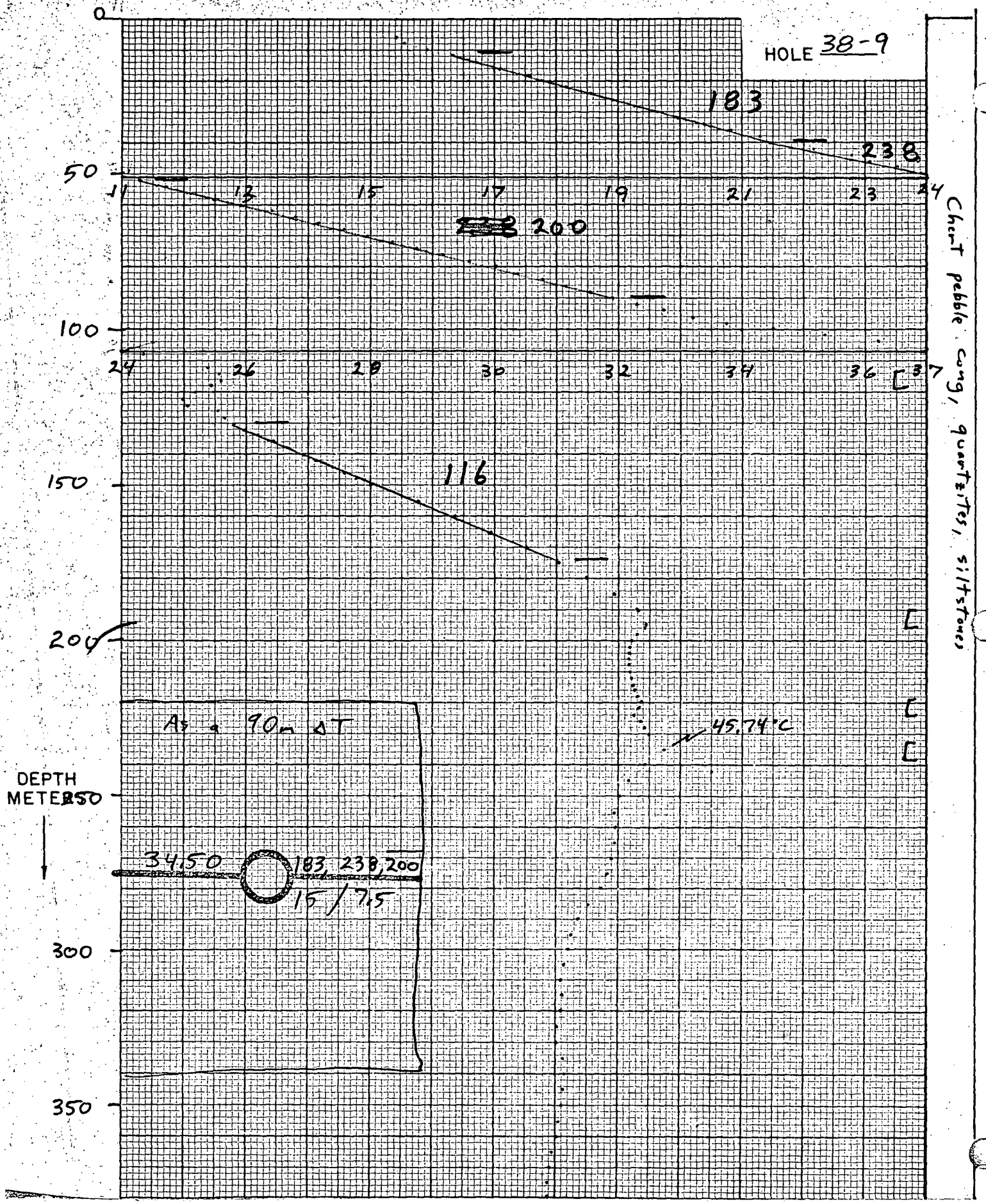
Segment 1 = Depths

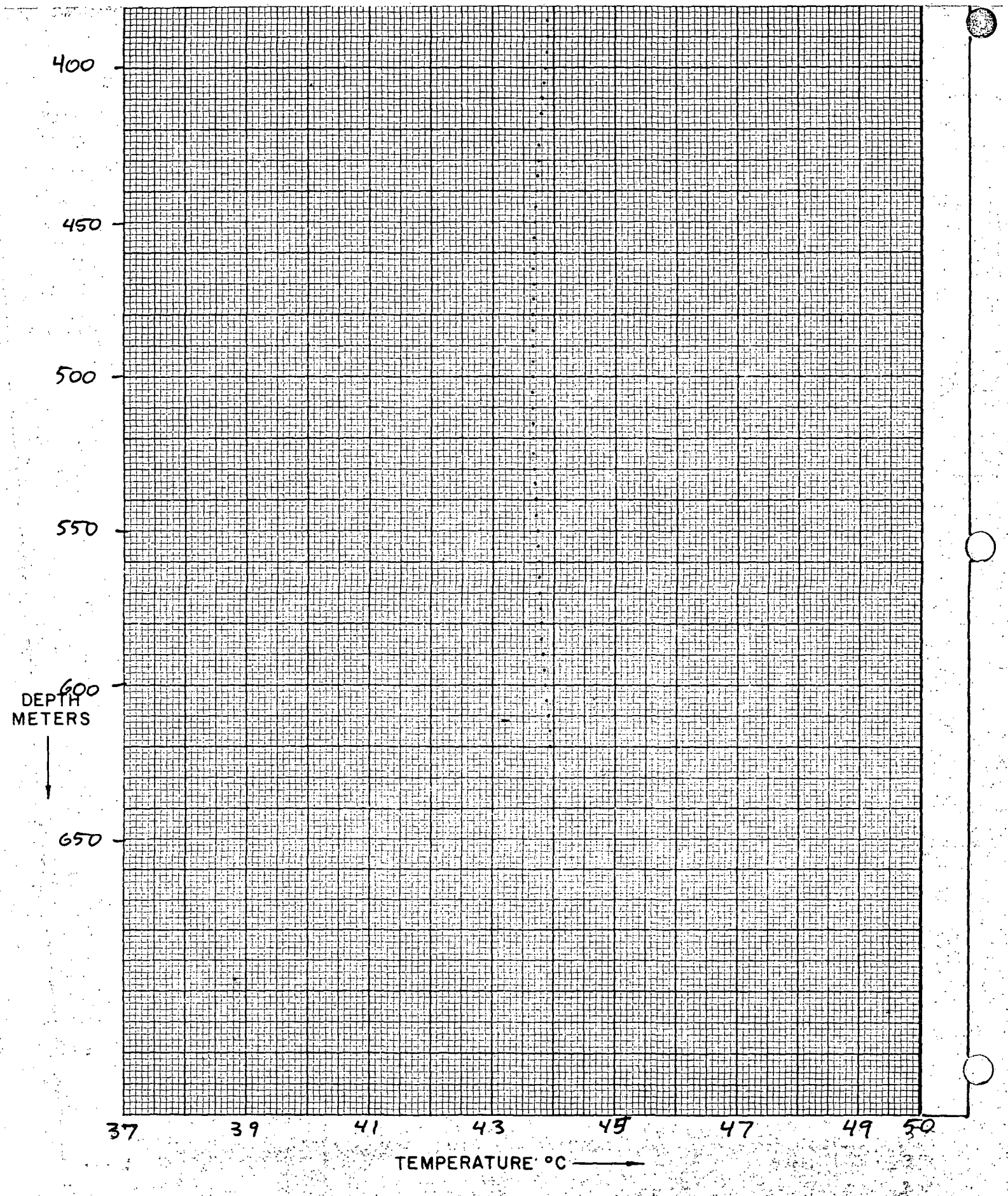
Start	End	Conductivity K	ΔK
12.0	40.0		

Best cond. (-K)

Downward extrapolations (-ΔK)

	Start	End	K	ΔK
Segment 2	40.0	52.0		
Segment 3	52.0	90.0	-7.5	-0.5
Segment 4	90.0	130.0		
Segment 5	130.0	175.0		
Segment 6	175.0	195.0		
Segment 7	195.0	620.0		
Segment 8	.999			
Segment 9				


HOLE 38-9
183
238
200
116
As a 90m ΔT
45.74°C
34.50
183, 238, 200
15 / 7.5
DEPTH METERS
0
50
100
150
200
250
300
350
11
13
15
17
19
21
23
24
24
26
28
30
32
34
36
37
Chert pebble cong, quartzites, siltstones
C
C
C


400
450
500
550
600
650
DEPTH
METERS
37
39
41
43
45
47
49
50
TEMPERATURE °C

Date Logged: 7-31-81

ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
6	124.60	15.41				H_2O	Cable in .1060
8	123.99	15.56					Cable out .0926
			0.35	175			
10	122.50	15.91					
			0.43	215			
12	120.73	16.34					
			0.42	210			
14	118.99	16.76					
			0.34	170			
16	117.60	17.10					
			0.44	220			
18	115.85	17.54					
			0.36	180			
20	114.40	17.90					
			0.29	145			
22	113.25	18.19					
			0.35	175			
24	111.91	18.54					
			0.39	195			
26	110.37	18.93					
			0.34	170			
28	109.07	19.27					
			0.37	185			
30	107.67	19.64					
			0.34	170			
32	106.41	19.98					
			0.42	210			
34	104.83	20.40					
			0.42	210			
36	103.30	20.82					
			0.48	240			
38	101.56	21.30					
			0.15	75			
40	100.01	21.45					
			0.72	360			
42	98.45	22.17					
			0.53	265			
44	96.60	22.70					
			0.39	195			
46	95.28	23.09					
			0.47	235			
48	93.68	23.56					
			0.37	185			
50	92.43	23.93					
			0.37	185			
52	91.22	24.30					
			0.40	200			
54	89.89	24.70					
			0.35	175			
56	88.78	25.05					
			0.42	210			
58	87.42	25.47					

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
60	86.02	25.92	0.45	225			
62	84.49	26.41	0.49	245			
64	83.34	26.79	0.38	190			
66	82.20	27.17	0.38	190			
68	80.98	27.58	0.41	205			
70	79.91	27.94	0.36	180			
72	78.71	28.35	0.41	205			
74	77.51	28.77	0.42	210			
76	76.38	29.17	0.40	200			
78	75.20	29.60	0.43	215			
80	74.04	30.02	0.42	210			
82	73.05	30.39	0.37	185			
84	71.97	30.79	0.40	200			
86	70.96	31.17	0.38	190			
88	69.95	31.56	0.39	195			
90	69.05	31.91	0.35	175			
92	68.04	32.31	0.40	200			
94	67.03	32.72	0.41	205			
96	65.85	33.20	0.48	240			
98	64.50	33.75	0.55	275			
100	62.73	34.50	0.75	375			
102	60.79	35.35	0.85	425			
104	59.86	36.22	0.87	435			
106	57.17	37.00	0.78	390			
108	56.44	37.35	0.35	175			
110	—		~~1.03~~	~~258~~			
112	54.31	38.38	—	—			

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
114	53.93	38.57	0.19	95			
116	53.89	38.59	0.02	10			
118	54.18	38.45	-0.14	-70			
120	54.70	38.19	-0.26	-130			
122	55.10	38.00	-0.19	-95			
124	54.97	38.06	0.06	30			
126	53.98	38.55	0.49	245			
128	53.76	38.66	0.11	55			
130	53.45	38.81	0.15	75			
132	53.10	38.99	0.18	90			
134	52.66	39.21	0.22	110			
136	52.21	39.44	0.23	115			
138	51.78	39.67	0.23	115			
140	51.28	39.93	0.26	130			
142	50.84	40.16	0.23	115			
144	50.38	40.40	0.24	120			
146	50.03	40.59	0.19	95			
148	49.68	40.78	0.19	95			
150	49.24	41.02	0.24	120			
155	47.89	41.77	0.75	150			
160	46.83	42.37	0.60	120			
165	45.83	42.95	0.58	116			
170	44.88	43.51	0.56	112			
175	44.04	44.02	0.49	98			
180	43.29	44.49	0.47	94			
185	42.56	44.95	0.46	92			
190	42.00	45.30	0.35	70			

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
195	41.81	45,43	0,13	26			
196	41.84	45,41	-0.02	-20			
197	41.95	45,34	-0.07	-70			
198	42.01	45,30	-0.04	-40			
199	4207	45,26	-0.04	-40			
200	4213	45,22	-0.04	-40			
202	4220	45,17	-0.05	-25			
204	42.22	45,16	-0.01	-5			
206	42.22	45,16	-0.00	0			
208	42.22	45,16	-0.00	0			
210	42.19	45,18	0.02	10			
212	42.16	45,20	0.02	10			
214	42.11	45,23	0.03	15			
216	42.06	45,26	0.03	15			
218	41.99	45,31	0.05	25			
220	41.91	45,36	0.05	25			
~~220~~ 222	41.98	45,32	-0.04	-20			
224	42.06	45,26	-0.06	-30			
226	41.95	45,34	0.08	40			
228	41.83	45,41	0.07	35			
230	41.72	45,48	0.07	35			
235	41.32	45,74	0.26	52			Highest measured Temp
240	41.82	45,42	-0.32	-64			
245	42.19	45,18	-0.24	-48			
250	42.46	45,01	-0.17	-34			
255	42.57	44,94	-0.07	-14			
260	42.55	44,95	0.01	2			

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
265	42.54	44.96	0.01	2			
270	42.65	44.89	-0.07	-14			
275	42.76	44.82	-0.07	-14			
280	42.95	44.70	-0.12	-24			
285	43.24	44.52	-0.18	-36			
290	43.50	44.36	-0.16	-32			
295	43.68	44.25	-0.11	-22			
300	43.76	44.20	-0.05	-10			
305	43.86	44.13	-0.07	-14			
310	43.92	44.10	-0.03	-6			
315	43.91	44.10	0.00	0			
320	43.93	44.09	-0.01	-2			
325	44.05	44.02	-0.07	-14			
330	44.06	44.01	-0.01	-2			
335	43.89	44.12	0.11	22			
340	43.85	44.14	0.02	4			
345	43.89	44.12	-0.02	-4			
350	43.94	44.09	-0.03	-6			
355	43.99	44.05	-0.04	-8			
360	44.07	44.01	-0.04	-8			
365	44.17	43.94	-0.07	-14			
370	44.25	43.90	-0.04	-8			
375	44.28	43.88	-0.02	-4			
380	44.26	43.89	0.01	2			
385	44.24	43.90	0.01	2			
390	44.25	43.90	0.00	0			
395	44.26	43.89	-0.01	-2			

K=Conductivity

Date Logged: _____ ΔT Well No. _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
400	44.31	43.86	-0.03	-6			
405	44.34	43.84	-0.02	-4			
410	44.38	43.82	-0.02	-4			
415	44.40	43.80	-0.02	-4			
420	44.44	43.78	-0.02	-4			
425	44.47	43.76	-0.02	-4			
430	44.50	43.74	-0.02	-4			
435	44.53	43.72	-0.01	-2			
440	44.56	43.71	-0.03	-6			
445	44.60	43.68	0.00	0			
450	44.61	43.68	-0.01	-2			
455	44.63	43.67	0.01	2			
460	44.61	43.68	-0.03	-6			
465	44.66	43.65	0.00	0			
470	44.65	43.65	0.00	0			
475	44.66	43.65	-0.01	-2			
480	44.68	43.64	0.00	0			
485	44.68	43.64	0.00	0			
490	44.68	43.64	0.00	0			
495	44.68	43.64	0.00	0			
500	44.68	43.64	0.00	0			
505	44.68	43.64	0.00	0			
510	44.68	43.64	0.00	0			
515	44.67	43.64	0.01	2			
520	44.66	43.65	0.00	0			
525	44.65	43.65	0.00	0			
530	44.65	43.65					

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
535	44.61	43.68	0.03	6			
540	44.59	43.69	0.01	2			
545	44.58	43.70	0.01	2			
550	44.58	43.70	0.00	0			
555	44.54	43.72	0.02	4			
560	44.52	43.73	0.01	2			
565	44.50	43.74	0.01	2			
570	44.48	43.76	0.02	4			
575	44.45	43.77	0.01	2			
580	44.43	43.79	0.02	4			
585	44.40	43.80	0.01	2			
590	44.38	43.82	0.02	4			
595	44.35	43.83	0.01	2			
600	44.31	44.86	0.03	6			
605	44.27	43.88	0.02	4			
610	44.23	43.91	0.03	6			
615	44.19	43.93	0.02	4			
620	44.15	43.96	0.03	6			

K=Conductivity

Date Logged: ____________________   ΔT Well No. ____________

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.

K=Conductivity

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: 5776

Date Drilled 26/3/81 thru 3/5/81

Location: NWSW Sec 9 T22N R40E

Method: rotary/air/ and/or mud

Geologist: Avery

Gamma:

Depth ( )	Description
0- 15'	Overburden: Edwards Creek tuff float, and Triassic basal conglomerate float in mud-silt-sand.
15- 65'	Triassic basal conglomerate (T_{rc}): Strongly cemented sub-rounded to subangular gravel and pebble size clasts of brown, reddish brown, red, gray and green chert; white gray and brown quartzite. Cement is SiO_2, with much iron staining along clast edges, in fractures, and in cement itself. Few boulder-size clasts of chert/quartzite.
65- 75'	Same as above, with addition of rounded reddish-purple f.c. quartzite, and yellow-brown chert fragments.
75- 85'	Same as above, with appearance of reddish brown, finely crushed siltstone making up approximately 20-30 % of total sample.
85- 95'	Same as 15'-65', with quartzite clasts ≃80% of total. rounded chert pebbles ≃10% of total. reddish-brown siltstone ≃10% of total.
95-125'	Same as above, but siltstone now ≃30-40% of total.
125-155'	Same T_{rc}, with appearance of buff (orange-gray) ss pebbles, and reddish-buff silt-st. pebbles (both well-rounded/rounded) - new material ≃25-35% of total.
155-215'	T_{rc} with finely crushed, orange-gray silty sand-st. making up between 20% and 55% of total sample in this interval. Rounded-subrounded pebbles (chert/quartzite) still constitute up to 80% of total.
215-225'	Same as above. Silty ss <20% of total now.
225-245'	T_{rc} with 80% white qtzite/qtzite conglomerate that is densely cemented, l.g. qtzite with gravel-size, subangular clasts. Iron staining on fracture faces, and some hydrous copper oxide coatings on some fragments (qtzite retains sedimentary features as opposed to older quartzites such as Valmy, etc.).

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: Avery Gamma: _____

Depth (')	Description
245-260'	Gray-orange sand-st./silty sand-st. conglomerate similar to 155-215' interval.
260-300'	T_{rc} (as before) with iron stained gravel-pebble conglomerate. Addition of a few limestone pebble-size fragments (angular). Some larger fragments of conglomerate (chert-quartzite) in last 20'.
300-320'	Chert T_{rc} conglomerate (60-40%), orange gray silty ss (as in 245-260') (40-60%).
320-330'	90% chert pebble conglomerate (T_{rc}). One clast shows FeS_2, $CuFeS_2$ mineralization (as granular coating on pebble and as stringer vein through pebble).
330-350'	T_{rc} with orange-gray silty ss as in 300-320'. Percent of silty ss drops from 50% to 20% over this interval.
350-360'	80% qtzite chert/qtzite pebble conglomerate: (T_{rc}).
360-390'	Same as 330-350'
390-410'	90% gravel-pebble-boulder chert/qtzite conglomerate: (T_{rc}), 10% silty ss.
410-420'	Gravel size chert/qtzite conglomerate with qtzite (35%): (T_{rc}).
420-440'	Gray-orange silty ss (35%), chert/qtzite conglomerate (65%): (T_{rc}).
440-450'	Same T_{rc} conglomerate with $CuFeS_2$, bornite, pyrite mineralization as granular fracture fillings, coatings, stringers in pebbles of qtzite. Few green/red banded chert clasts.
450-500'	T_{rc} (as before) with up to 50% orange-gray ss sand. (m.g., subrounded grains). Purple color to some conglomerate fragments. Color of ss becomes darker throughout interval.

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth (')	Description
500-560'	T_{rc} (as before but now all gravel size subrounded to subangular clasts of chert and quartzite with 20-60% orange-gray silty sandstone).
560-580'	T_{rc} as before but now 70% quartzite; 20% silty-ss; 10% chert gravels and pebbles.
580-620'	T_{rc} as before but no orange-gray silty ss.
620-640'	T_{rc} as before with 5-30% silty ss.
640-650'	T_{rc} pebble conglomerate (chert & quartzite about 30-50%).
650-720'	T_{rc} chert, quartzite, and dark brown to reddish brown silicified siltstone gravels and pebbles, rounded to angular, with varying ratios of up to 40% siltstone, 60% quartzite.
720-730'	90% reddish dk. brown silicified siltstone. 10% gravels (T_{rc}).
730-760'	T_{rc} silicified siltstone as above with a siltstone/chert gravel conglomerate in a siltstone matrix (up to 70% matrix).
760-780'	T_{rc} chert/qtzite pebble-gravel conglomerate with siltstone.
780-790'	T_{rc} as above w/20% silt-st. pebbles. Pyrite and chalcopyrite? As granular fracture fillings, coatings.
790-800'	Quartzite: v.f.g. w/distinct black grains in otherwise white quartzite w/blebs or nodules of black, sulfide-rich silicified siltstone.
800-820'	T_{rc} chert/qtzite pebble-gravel conglomerate w/minor pyrite (granular).
820-840'	T_{rc} as before but no mineralization.

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: Avery Gamma: _____

Depth (')	Description
840-850'	T_{rc} as before with 20% brown silicified silt-st.
850-880'	Quartzite: f.c. to l.g., dense, well-cemented (gray). Very minor sulfide mineralization (pyrite) as before. T_{rc}
880-900'	30% quartzite as above, 60% dk. gray, dense, silicifed silt-st. Slight effervescence in dilute HCl, with minor sulfide mineralization as granular coatings and in stringers. Very few chips of gray ls with dk. gray silt-st. inclusions (silt-st. slightly calcareous).
900-920'	20% gray Ls, (hardness ≃ 2 1/2); 30% gray-dk. gray calcareous silt-st., (hardness ≃2 1/2-3); gray-lt. gray calcareous ss (hardness ≃4 1/2) and a f.c. silty ss make up 50% of total. T_{rc}
920-940'	As above, with 50% of total sample comprised of dense, gray, non-calcareous quartzite (hardness ≃ 6-7). T_{rc}
940-960'	Quartzite, as above with 50% qtzite/chert gravel conglomerate.
960-970'	30-40% reddish-brown silicified silt-st., some with calcite stringer veings (H ≃4), 50-60% gray, dense, f.c. quartzite (some brownish-gray) (H 6) and about 10% chert/quartzite gravel conglomerate. Minor sulfides (granular pyrite c-pyrite).
970-980'	90% mottled and banded lt. gray - v. dk. gray calcareous silt-st. (H ≃2 1/2 to 3 1/2). Some fragments have f.c. appearance. Minor sulfides as granular fracture fillings, veinlets? 10% or less silt-st. as before. T_{rc}
980-990'	80% gray-dk. gray f.g-f.c. quartzite w/minor sulfides as before. 20% chert/qtzite gravel conglomerate w/minor sulfides as before. T_{rc}

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth (ft)	Description
990-1090'	30-90% chert/qtzite subrounded-subangular gravel conglomerate with green, gray, brown chert and gray qtzite (as before, T_{rc}) 10-70%. F.g.-f.c. gray quartzite.
1090-1100'	40-50% conglomerate as above; 60-50% orange-gray sandy silt-st.
1100-1200'	30-50% greenish gray chert, rounded-angular pebble-gravel size chips-clasts. 30-50% gray, brownish-gray f.g. qtzite; 10-40% silty ss (orange-gray). T_{rc}
1200-1440'	50-95% chert, qtzite, chert/qtzite conglomerate (T_{rc}) as before. 5-50% buff, orange-gray or lt. brown-tan silty ss to sandy ss. Appearance of purple/red-gray qtzite, conglomerate. T_{rc}
1440-1460'	60-70% tan-lt. brown sandy silt-st. 30-40% gravel conglomerate. T_{rc}
1460-1540'	40-80% gravel-pebble (T_{rc}) conglomerate. Mostly v.f. gravels, rounded-angular. 20-60% orange-gray to lt. brown silty-ss and sandy silt-st.
1540-1600'	Chocolate-brown qtzite/chert gravel-pebble conglomerate (60% of total). Brown silty-ss, orange-gray sandy ss (40%). T_{rc}
1600-1620'	80-100% chert/qtzite conglomerate w/bedded chert (angular chert clasts 40%).
1620-1640'	50% reddish-purple, silicified, subrounded to rounded silt-st. pebbles and finely crushed silt-st. containing large angular quartz phenocrysts. Many pebbles are graywacke (clay/silt-st. matrix with quartz phenocrysts - see sample!). 30-40% T_{rc} conglomerate as before. 10-20% grayish green qtzite and chert. Havallah Formation.
1640-1650'	Fault zone: about 2% of total is greenish-white, soft (H< 2), w/greasy feel, splintery soapstone (tall and/or other clay minerals). Does not expand when heated. 40%

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth (')	Description
	brown, lt. brown, red-brown, white, gray v.f.g. qtzite. 58% (!) red-purple silicified siltstone conglomerate or fault breccia with very angular clasts of chert, qtzite, and silt-st. Many have calcite veins, caps. Calcite shows stress in curved cleavage faces.
1650-1660	As above, but no clay minerals present. Few pebbles of graywacke with micaceous flakes (muscovite). Appearance of green/lime-green chert w/iron staining (PPh?). (Note: basal T_{rc} unit mapped east of 864-90 contains siltstones and conglomerates with identical micaceous flakes).
1660-1690	As above (1640-1660), but increasing amount of green, green w/red iron stains on micro-fractures chert (20-75% of total). Fault breccia still present (10-50%). Very little graywacke (PPh).
1690-1740	As above with 30-60% green, gray, dk. green chert. 20-30% silty graywacke which is now slightly calcareous and has pheocrysts of qtzite (no micaceous flakes). 0-10% brown qtzite (f.g.).
1740-1750	No sample.
1750-1880	40-80% green-gray chert as angular gravel size chips. 15-45% reddish brown-purple silicified siltstone gravel size chips. 5-30% gray brown quartzite gravel size chips (P_{ph}). 5-30% graywacke (calcareous w/SiO_2 phenocrysts - not micaceous).
1880-2000	80-90% chert and dark purple/brown silicified silt-st.; 10-20% buff to gray quartzite; occasional rock fragments of T_{rc} chert gravel-pebble conglomerate from uphole - very iron-stained. (Note: Both the chert (green, lime-green, dk. green iron stained on micro-fractures green) and the silicified silt-st. (dark reddish-purple brown to reddish orange to gray-orange) were mapped as outcrops and low "rubble" hills 1-2 miles east of 25-9 and 1-3 miles east of 864-90. Hand samples of these PP Havallah sequence rocks are available - see Avery's rock collection!).

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: 5169 Date Drilled: 16/4/81 thru 9/5/81

Location: SESW Sec 9 T23NR40E Method: rotary/air

Geologist: Avery Gamma:

Depth ( )	Description
0-15'	Orange-gray silty sandstone, partly silicified, alteration (clay) present, brecciated and containing iron veinlets and staining (50%). Chert-gray/pebble (T_{rc}) conglomerate in silica matrix. Iron-stained.
15-25'	Broken, brecciated, altered (clay) T_{rc}? silicified silt-st., sandstone, chert congl. Drillers (Pat Edwards) say that rock is fractured, poor drilling. Iron-stained.
25-45'	30-50% of original rock (Ls?) is totally replaced with silica. Some T_{rc} conglomerate (<5%). 50-70% brown, white, gray F-m.g. quartzite.
45-55'	Same. Chips are smaller. Some chert. Strongly iron-stained formation. 20% silty sandstone of an orange-gray color.
55-65'	As above, with 50% T_{rc} chert/qtzite silica cemented conglomerate and 5-45% silty-sandstone of orange-gray color.
65-75'	As above, with 20-60% conglomerate and coarse sandstone. Very iron-stained.
75-85'	As above, w/clay alteration and brecciated conglomerate, chert. Fault?
85-115'	Same as 65-75'.
115-135'	85% chert/qtzite gravel-pebble conglomerate. 10% orange-gray silty-ss matrix of conglomerate? 5% gray-white m.g. qtzite.
135-155'	Very silicified conglomerate as above w/fault breccia & silic. Ls? - original rock totally replaced with silica. Very iron-stained. One fragment with cinnabar. 5-20% silty ss, 20% quartzite.
155-175'	Same as above, but now all silicified rock (Ls?) - no conglomerate, some breccia. Another cinnabar fragment. Iron-stained. Silty ss < 10%.
175-185'	Same as above with 30% f-mg. White-buff qtzite.

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
185-215'	Appearance of tan, buff, brown and orange white-gray F.M.G. qtzite. Many chips have black spotty appearance due to pheonocrysts (coarse sand grains). H ≈ 7. 60-80% total (congl., silicified congl. Ls 20-40%) .
215-225'	60% orange-gray F.M.G. ss. 40% above. (silty-ss too).
225-235'	As above, but ss is siltier, and is sometimes a silty ss congl. with gravel size clasts of chert, 5% red silt st (silicified). Ss is orange-gray to lt. brown.
235-245'	Same as above.
245-255'	Same as above. 50% ss, ss congl.
255-265'	Same as above. 80% ss.
265-275'	Same as above. Some of ss is stained a flamingo pink-red. Mercury?
275-285'	50% tan-gray fg-mg qtzite (H ≈7). 50% congl./silicified Ls.
285-295'	80% gravel-pebble congl. in orange-gray silic. silty ss. Maxtrix.
295-307'	50% gravel-pebble congl. in orange-gray silic. silty ss or silicified. 50% qtzite, brown-orange gray interbedded w/reddish brown silt. st.
307-320'	Red siltstone w/thin interbeds, laminae of tan qtzite as above. 5% green chert angular chips. (PPh).
320-330'	As above with 40-50% red siltst (silic). 30-35% tan-orange qtzite. 15-20% green chert. (PPh).
330-340'	60% gray silicified Ls. No effervescence in acid. Grain size is too small to see w/hand lens and silt. effervescence when scratched. 40% orange gray-brown ss.
340-350'	60-70% orange-gray-brown silty ss. 30-40% gray ss as above.

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
350-360'	40% interbedded, thinly bedded orange-gray-brown silty ss. 60% gray-dk. gray chert gravel highly silicified congl. w/rounded-angular chasts.
360-370'	Same as above,but was 80% congl. Very tightly silicified clasts "melted" into each other.
370-380'	70% very silicified conglomerate. 30% brown-orange-gray silty ss. Looks like t_{rc}. Two chips have cinnabar xls.
380-390'	Same as above but now 70% orange-gray silty ss. 30% congl.
390-400'	90% orange-gray to brown silty ss; & ss (f-mg), 10% conglomerate.
400-410'	90% iron-stained, gray silicified Ls, silty ss, orange-gray, 10% conglomerate.
410-420'	50% orange-gray ss (fg), 50% dense, gray silicified Ls or calcareous silt-st.
420-430'	80% dense, gray silic. calc. siltst. or Ls.
430-440'	Dense gray-dk. gray (bedded) siltst. and day st. (H ≃4). Some is silicified. Few qtz. w/sulfide picas.
440-450'	Same as above.
450-460'	Brown, brownish green-gray siltst. silty ss. Orange-gray too.
460-470'	Brown, brownish green-gray siltst. silty ss. Orange-gray too.
470-480'	Brown appearance of red silic. siltst.
480-490'	Brown, brown, brownish green-gray siltst. silty ss, but some iron-stained silty ss. Some of it is conglometric.
490-500'	" " " " " "
500-510'	Gray f.g. ss, silty ss, clayst. siltst. (silicified) fractured, iron-stained.

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
510-520'	Same as above, but now 50% gravel chert silicified congl.
520-530'	60% gray fg ss, silic. siltstone is gray-reddish gray-silic claystone is white-greenish gray while 40% congl.
530-540'	Dk. gray chert/qtzite gravel congl. Very dense. Silicified. Sulfides occur as granular fracture fillings, coatings, pyrite, c/pyrite, others. Most clasts are well-rounded to subrounded.
540-550'	Lt. gray - gray fg quartzite.
550-560'	Gray-brownish gray fg qtzite (95%) red silicified silt. st. (5%)
560-570'	Gray-brownish gray fg qtzite (60%) red silicified silt. st. (40%)
570-580'	Gray-brownish gray fg qtzite (95%) red silicified silt. st. (5%)
580-590'	Gray-dk. gray chert and qtzite (Fe) sulfides (minor).
590-600'	Gray, thinly bedded vfg qtzite, some silica silt. st., v. minor chert, sulfides (v. minor).
600-610'	Gray-red silicified siltstone, ss, and claystone.
610-620'	Gray-brownish gray fg-vfg qtzite, some silica silt. st., chert (v. minor sulfides)
620-630'	Gray-dk. gray qtzite (fg), chert, and qtzite (chert congl. sulfides).
630-640'	Same but mostly conglomerate (chert/qtzite rounded-angular pebbles).
640-650'	Same as 600-620 - congl. w/sulfides interval 6.
650-660'	95% red silicified silt. st., qtzite (fg)
660-670'	85% " " " "
670-680'	60% " " " "

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
680-690'	Same as 600-610', mostly gray chert, qtzite (fg) 10-15% red silt. st.
690-700'	Same as 600-610' with gray qtzite, green-gray chert, and chert congl.
700-710'	" " " " "
710-720'	" " " " "
720-730'	Same as 600-610'
730-740'	Gray silicified siltstone ss, greenish gray chert, iron-staining.
740-750'	Brownish gray qtzite, red silt. st., chert qtzite congl. (20%).
750-760'	Cong., chert, qtzite, 15% red silic. silt. st.
760-770'	Chert, qtzite, congl., minor sulfides.
770-780'	Chert, qtzite, congl., minor sulfides.
780-790'	Same as 750-760' 10% silt. st.
790-800'	" " mostly qtzite.
800-810'	" " w/buff qtzite, green chert, gray-brown qtzite, red silt. st. (5%).
810-820'	Same as above. No buff qtzite.
820-830'	Chert, congl.
830-840'	" ". some minor sulfides.
840-850'	Chert, congl., red silt. st. (30-40%).
850-860'	" " " (40-50%).
860-870'	Chert, congl., buff iron-stained qtzite (25%).
870-880'	" " " " (40%) w/orange-gray ss cong. (30%).

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
880-890'	Green-gray chert congl.
890-900'	Mostly brownish-gray chert. 30% congl.
900-910'	" " " "
910-920'	Chert, congl. 50-56
920-930'	as in 890-900.
930-950'	Clear, brown, green chert, gray-brown fg ss minor sulfides w/FeS.
930-940'	Gray, brown-gray, dk. gray chert, qtzite; minor sulfides.
940-950'	Gray, brown-gray, with some red chert. Minor sulfides.
950-960'	Same as above.
960-970'	Same as above 5% red sulfides (minor pyrite).
970-980'	" " " " "
980-990'	" " " " "
990-1000'	" " red chert ≈20% sil. red silt. st. 5%, congl. 20% and/or breccia.
1000-1010'	Same as above, 10% sulfides, congl. 20% and/or breccia.
1010-1020'	Same, no red chert, mostly grayish chert, sulfides, and/or breccia.
1020-1030'	" " " "
1030-1040'	" " " "
1040-1050'	" " " "
1050-1060'	Mostly cong. (green chert, gray-brown qtzite pebbles, gravels). Sufides.

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
1060-1070'	Same but more alteration, breccia. Iron-staining, sulfides less.
1070-1080'	Mostly green-gray chert, & brown chert w/ congl., sulfides.
1080-1090'	Iron-stained chert, qtzite, very little sulfides.
1090-1100'	Iron-stained chert, qtzite, very little sulfides.
1100-1110'	Iron-stained chert, qtzite, very little sulfides.
1110-1120'	Gray-brown-green chert qtzite, minor sulfides & congl.
1120-1130'	" " " "
1130-1140'	" " " "
1140-1150'	" " " "
1150-1160'	Same as 1110-1150' minor sulfides.
1160-1170'	Same as 1110-1150' minor sulfides.
1170-1180'	Same as 1110-1150' minor sulfides.
1180-1190'	Same as 1110-1150' no sulfides.
1190-1200'	More reddish brown F.C. qtzite, chert congl. No sulfides.
1200-1210'	Same as above.
1210-1220'	Mostly brown-gray-green chert (90%). No sulfides.
1220-1230'	Chert, qtzite, no sulfides.
1230-1240'	Same as above
1240-1250'	Same as above
1250-1260'	Same as above

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
1260-1270'	Same as above
1270-1280'	Same as above w/minor sulfides (minor pyrite).
1280-1290'	Same as above.
1290-1300'	Same as above.
1300-1310'	plus, silicified siltst. (red): 20% of total.
1310-1320'	Same as above, no sulfides.
1320-1330'	Same as above.
1330-1340'	Gray-green chert, orange-gray-brownish-gray-reddish-brown qtzite, red silic-silt. st. and 40-50% chert gravel congl., v. minor sulfides as FeS_2.
1340-1350'	As above.
1350-1360'	Gray-reddish brown qtzite (60%), gray-green chert (20%), chert congl. (20%).
1360-1370'	Chert; qtzite - gray, brown, red, green, yellow, clear.
1370-1380'	" " " "
1380-1390'	Reddish-brown silicified siltstone, silty-qtzite, silt. st. congl. w/some red chert.
1390-1400'	as above, w/ 10% green chert.
1400-1410'	Green chert (iron-stained), brown qtzite, red silic. silt. st.
1410-1420'	Dk. gray-green chert, qtzite as above, fault breccia only and chert congl., minor sulfide as FeS, red silic. silt. st.
1420-1430'	As above, no silt. st.

AMAX EXPLORATION, INC.

TEMPERATURE/DEPTH LOG

864-65

ΔT Well No. 25-9

Property-Project McCoy Depth Logged 600m

Map _____ Scale 7½ Date: Drilled 5-2-81 Logged 8-5-81

State NV County Churchill, ____ of ____ of NW of SW of Sec 9 T22N R40E

Instrument #46 Operator JED Elevation _____ (ft m)

Comments 2⅜ pipe filled with H2O hung in open hole. Temps from upper 90 m of hole taken on 5-15-81

Card A

JUSTIFY

Proj No	Well No	DA	MO	YR	*
864	65	08	05	81	C M

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

Site Description	Operator	Editor	Drilled DA	Drilled MO	Drilled YR
9.05 KM S WM TEPHORSE MINE	JED	DP	02	05	81

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

Card B

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	39.	45.0	117.	30.0	

Use decimals

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

Northing	Easting	Elev	
16.7	3.85		F

Use decimals

← Write M if if meters

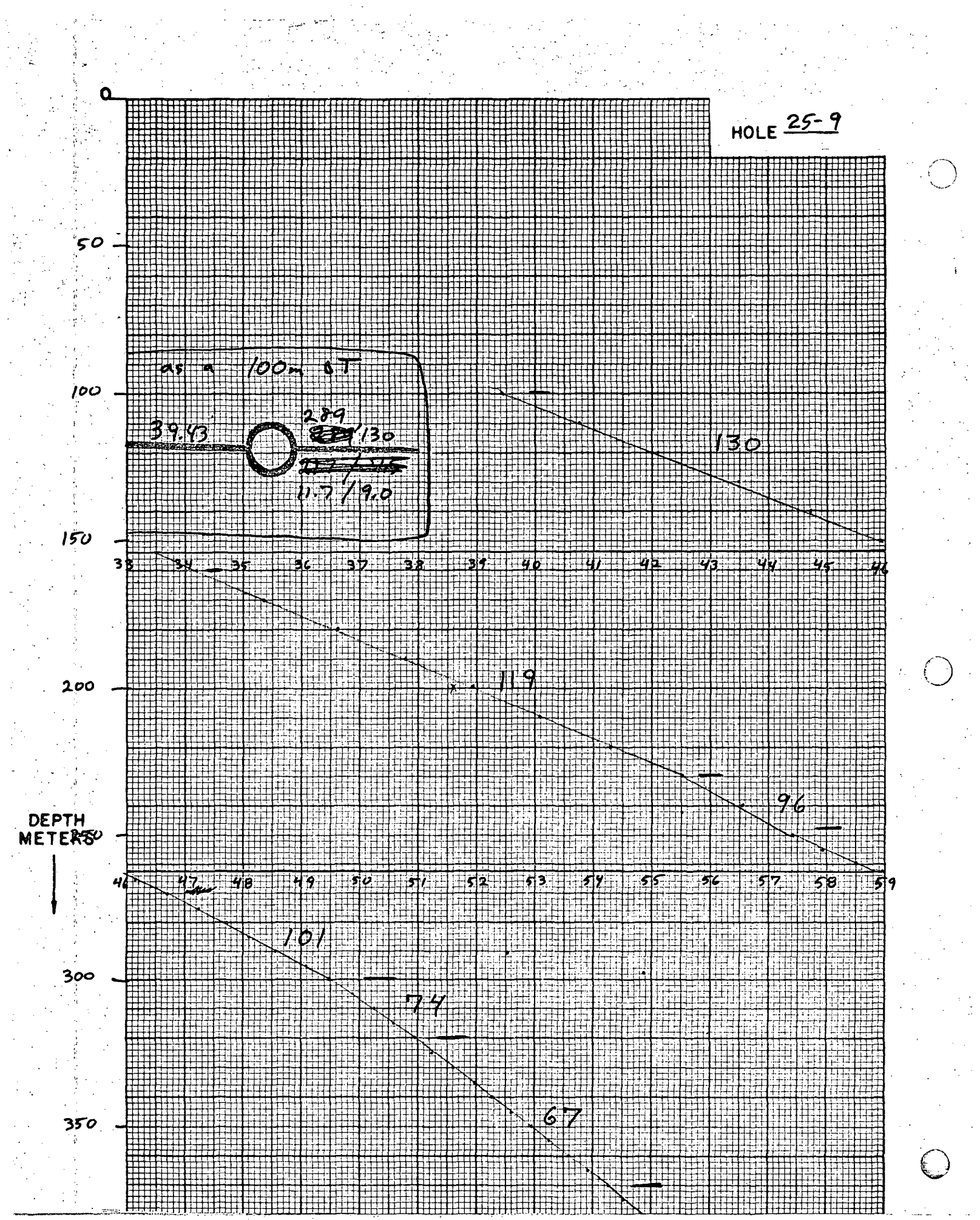
Segment .!= Depths

Conductivity

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment	Start	End	K	ΔK
	100.0	160.0	-9.0	-0.5
Segment 2	160.0	230.0		
Segment 3	230.0	250.0		
Segment 4	250.0	300.0		
Segment 5	300.0	320.0		
Segment 6	320.0	370.0		
Segment 7	370.0	405.0		
Segment 8	405.0	435.0		
Segment 9				


HOLE 25-9
0
50
100
150
200
300
350
DEPTH METERS
as a 100m ΔT
39.43
289
130
11.7 / 9.0
130
119
96
101
74
67
38
34
35
36
37
38
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40
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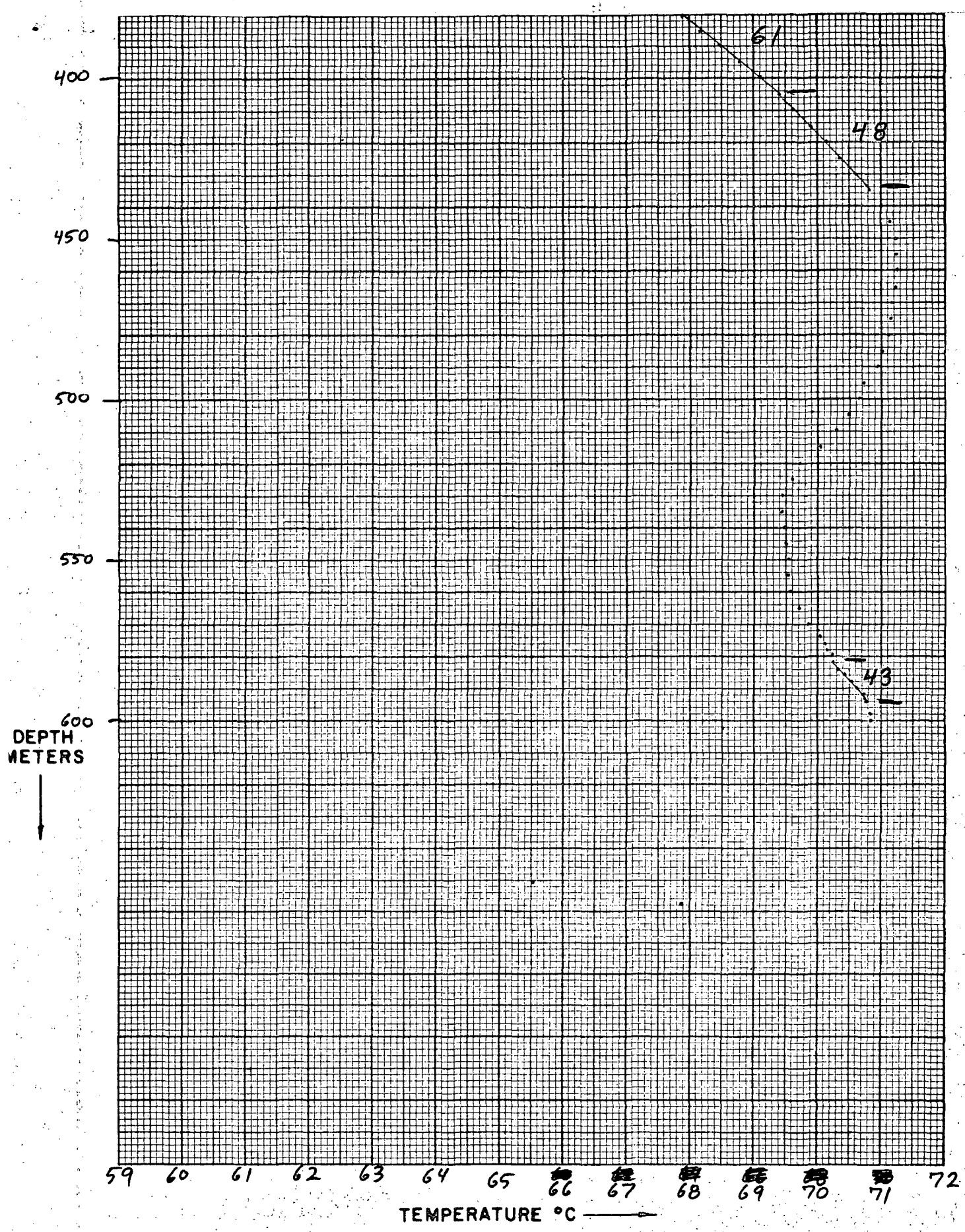
59


61
48
43
400
450
500
550
600
DEPTH METERS
59
60
61
62
63
64
65
66
67
68
69
70
71
72
TEMPERATURE °C

Date Logged: 5-15-81

ΔT Well No. _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
90	55,04	38.02					
100	52.24	39.43					
110	49,72	40.76					
120	47.31	42.10					
130	44.94	43.48					
140	42.93	44,71					
150	41.05	45,92					
160	39.15	47.20					
170	37,50	48,37					
180	35,79	49,63					
190	34,30	50.79					
CONTINUED ON NEXT PAGE,							

K=Conductivity

Date Logged: ____________________ ΔT Well No. ____________

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.

K=Conductivity

Date Logged: _____ ΔT Well No. 25-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
200	33.30	51.60					Cable in .0973 out .1309
			5.82				
250	26.94	57.42					
			0.54	108			
255	26.42	57.96					
			0.55	110			
260	25.90	58.51					
			0.65	130			
265	25.30	59.16					
			0.54	108			
270	24.81	59.70					
			0.56	112			
275	24.32	60.26					
			0.46	92			
280	23.92	60.72					
			0.37	74			
285	23.61	61.09					
			0.45	90			
290	23.23	61.54					
			0.56	112			
295	22.77	62.10					
			0.27	54			
300	22.47	62.47					
			0.40	80			
305	22.15	62.87					
			0.39	78			
310	21.85	63.26					
			0.33	66			
315	21.60	63.59					
			0.35	70			
320	21.33	63.94					
			0.29	58			
325	21.11	64.23					
			0.34	72			
330	20.84	64.60					
			0.37	74			
335	20.57	64.97					
			0.30	60			
340	20.35	65.27					
			0.34	68			
345	20.11	65.61					
			0.34	68			
350	19.87	65.95					
			0.31	62			
355	19.65	66.26					
			0.35	70			
360	19.41	66.61					
			0.31	62			
365	19.20	66.92					
			0.35	70			
370	18.97	67.27					
			0.26	52			
375	18.80	67.53					

K=Conductivity

Date Logged: _____ ΔT Well No. 25-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
380	18.56	67.89	0.36	72			
385	18.37	68.19	0.30	60			
390	18.18	68.49	0.30	60			
395	18.00	68.77	0.28	56			
400	17.80	69.09	0.32	64			
405	17.61	69.40	0.31	62			
410	17.48	69.61	0.21	42			
415	17.31	69.89	0.28	56			
420	17.17	70.13	0.26	52			
425	17.03	70.36	0.23	46			
430	16.90	70.59	0.23	46			
435	16.76	70.83	0.24	48			
440	16.66	71.00	0.17	34			
445	16.58	71.14	0.14	28			
450	16.54	71.21	0.07	14			
455	16.53	71.23	0.02	4			
460	16.52	71.24	0.01	2			
465	16.53	71.23	-0.01	-2			
470	16.56	71.17	-0.06	-12			
475	16.58	71.14	-0.03	-6			
480	16.60	71.10	-0.04	-8			
485	16.64	71.03	-0.07	-14			
490	16.69	70.95	-0.08	-16			
495	16.76	70.83	-0.12	-24			
500	16.86	70.65	-0.18	-36			
505	16.96	70.48	-0.17	-34			
510	17.07	70.30	-0.18	-36			

K=Conductivity

Date Logged: _____ ΔT Well No. 25-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
515	17.21	70.06	-0.24	-48			
520	17.36	69.81	-0.35	-70			
525	17.49	69.60	-0.21	-42			
530	17.58	69.45	-0.15	-30			
535	17.58	69.45	0.00	0			
540	17.57	69.47	0.02	4			
545	17.54	69.51	0.04	8			
550	17.52	69.55	0.04	8			
555	17.52	69.55	0.00	0			
560	17.50	69.58	0.03	6			
565	17.42	69.71	0.13	26			
570	17.32	69.88	0.17	34			
572	17.24	70.01	0.13	65			
574	17.21	70.06	0.05	25			
576	17.17	70.13	0.07	35			
578	17.15	70.16	0.03	15			
580	17.12	70.21	0.05	25			
582	17.10	70.25	0.04	20			
584	17.06	70.31	0.06	30			
586	16.99	70.43	0.12	60			
588	16.93	70.53	0.10	50			
590	16.88	70.62	0.09	45			
592	16.83	70.71	0.09	45			
594	16.80	70.76	0.05	25			
596	—	—	~~0.08~~	~~20~~			
598	16.75	70.84					
600	16.74	70.86	0.04	20			

K=Conductivity

Date Logged: _____ ΔT Well No. 25-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
598	16.73	70.88	0.02	10			
~~600~~	~~16.73~~						
~~602~~	~~16.73~~						
~~604~~	~~16.72~~						

K=Conductivity

AMAX EXPLORATION, INC.

TEMPERATURE/DEPTH LOG

864-62

ΔT Well No. 38-9

Property-Project McCoy Depth Logged 620m

Map Gilbert Ck SW, Scale 7½ Date: Drilled 5-21-81 Logged 7-31-81

State NV County Churchill, ___ of ___ of SE of SW of Sec 9 T 23N R 40E

Instrument #46 Operator JED Elevation ___ (ft m)

Comments 2 3/8" H2O Filled steel pipe in open 6 1/4" hole

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	
8 6 4		6 2	3 1	0 7	8 1	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	51 52 53 54 55	56 57 58 59 60	61 62	63 64 65	66 67 68
0.35 KM N MCCOY MINE	JED	/DD	21	05	81

(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	7.5	39.	45.0	117.	30.0

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
55.55	4.09	.	F

Use decimals

← Write M if if meters

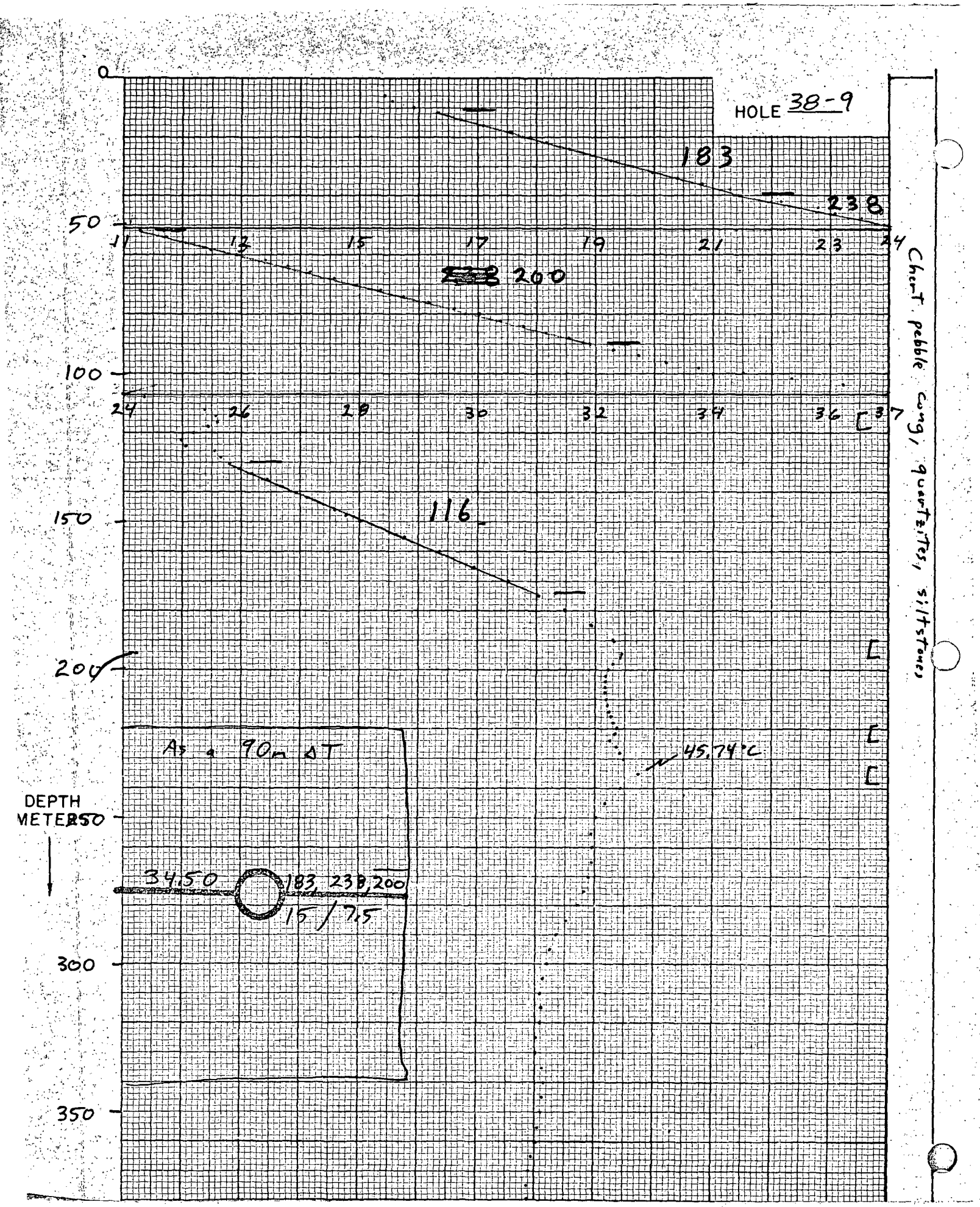
Segment 1 = Depths

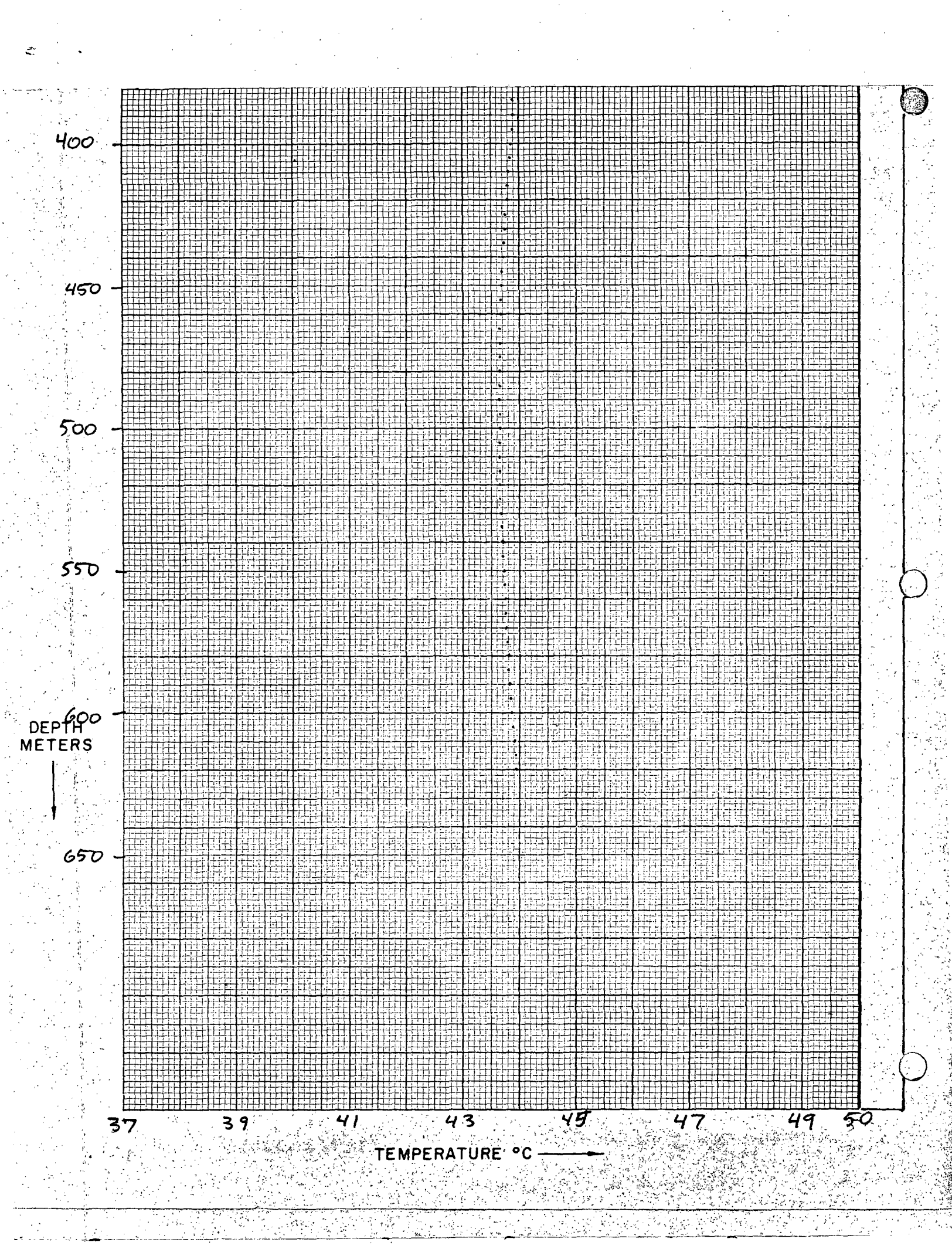
Start	End	Conductivity K	Conductivity ΔK
21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
12.0	40.0		

Best cond. (-K)

Downward extrapolations (-ΔK)

	Start	End	K	ΔK
Segment 2	40.0	52.0		
Segment 3	52.0	90.0	-7.5	-0.5
Segment 4	90.0	130.0		
Segment 5	130.0	175.0		
Segment 6	175.0	195.0		
Segment 7	195.0	620.0		
Segment 8	.999			
Segment 9				


HOLE 38-9
183
238
200
116
45.74°C
As a 90m ΔT
34.50
183, 238, 200
15 / 7.5
DEPTH METERS
0
50
100
150
200
250
300
350
11
13
15
17
19
21
23
24
26
28
30
32
34
36
Chert pebble cong, quartzites, siltstones


400
450
500
550
600
650
DEPTH METERS
37
39
41
43
45
47
49
50
TEMPERATURE °C

Date Logged: 7-31-81 ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
6	124.60	15.41				H_2O	Cable in .1060
8	123.99	15.56	0.35	175			Cable out .0926
10	122.50	15.91	0.43	215			
12	120.73	16.34	0.42	210			
14	118.99	16.76	0.34	170			
16	117.60	17.10	0.44	220			
18	115.85	17.54	0.36	180			
20	114.40	17.90	0.29	145			
22	113.25	18.19	0.35	175			
24	111.91	18.54	0.39	195			
26	110.37	18.93	0.34	170			
28	109.07	19.27	0.37	185			
30	107.67	19.64	0.34	170			
32	106.41	19.98	0.42	210			
34	104.83	20.40	0.42	210			
36	103.30	20.82	0.48	240			
38	101.56	21.30	0.15	75			
40	100.01	21.45	0.72	360			
42	98.45	22.17	0.53	265			
44	96.60	22.70	0.39	195			
46	95.28	23.09	0.47	235			
48	93.68	23.56	0.37	185			
50	92.43	23.93	0.37	185			
52	91.22	24.30	0.40	200			
54	89.89	24.70	0.35	175			
56	88.78	25.05	0.42	210			
58	87.42	25.47					

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
60	86.02	25.92	0.45	225			
62	84.49	26.41	0.49	245			
64	83.34	26.79	0.38	190			
66	82.20	27.17	0.38	190			
68	80.98	27.58	0.41	205			
70	79.91	27.94	0.36	180			
72	78.71	28.35	0.41	205			
74	77.51	28.77	0.42	210			
76	76.38	29.17	0.40	200			
78	75.20	29.60	0.43	215			
80	74.04	30.02	0.42	210			
82	73.05	30.39	0.37	185			
84	71.97	30.79	0.40	200			
86	70.96	31.17	0.38	190			
88	69.95	31.56	0.39	195			
90	69.05	31.91	0.35	175			
92	68.04	32.31	0.40	200			
94	67.03	32.72	0.41	205			
96	65.85	33.20	0.48	240			
98	64.50	33.75	0.55	275			
100	62.73	34.50	0.75	375			
102	60.79	35.35	0.85	425			
104	59.86	36.22	0.87	435			
106	57.17	37.00	0.78	390			
108	56.44	37.35	0.35	175			
110	—		~~1.03~~	~~258~~			
112	54.31	38.38					

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
114	53.93	38.57	0.19	95			
116	53.89	38.59	0.02	10			
118	54.18	38.45	-0.14	-70			
120	54.70	38.19	-0.26	-130			
122	55.10	38.00	-0.19	-95			
124	54.97	38.06	0.06	30			
126	53.98	38.55	0.49	245			
128	53.76	38.66	0.11	55			
130	53.45	38.81	0.15	75			
132	53.10	38.99	0.18	90			
134	52.66	39.21	0.22	110			
136	52.21	39.44	0.23	115			
138	51.78	39.67	0.23	115			
140	51.28	39.93	0.26	130			
142	50.84	40.16	0.23	115			
144	50.38	40.40	0.24	120			
146	50.03	40.59	0.19	95			
148	49.68	40.78	0.19	95			
150	49.24	41.02	0.24	120			
155	47.89	41.77	0.75	150			
160	46.83	42.37	0.60	120			
165	45.83	42.95	0.58	116			
170	44.88	43.51	0.56	112			
175	44.04	44.02	0.49	98			
180	43.29	44.49	0.47	94			
185	42.56	44.95	0.46	92			
190	42.00	45.30	0.35	70			

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
195	41.81	45.43	0.13	26			
196	41.84	45.41	-0.02	-20			
197	41.95	45.34	-0.07	-70			
198	4201	45.30	-0.04	-40			
199	4207	45.26	-0.04	-40			
200	4213	45.22	-0.04	-40			
202	4220	45.17	-0.05	-25			
204	42.22	45.16	-0.01	-5			
206	42.22	45.16	-0.00	0			
208	42.22	45.16	-0.00	0			
210	42.19	45.18	0.02	10			
212	42.16	45.20	0.02	10			
214	42.11	45.23	0.03	15			
216	42.06	45.26	0.03	15			
218	41.99	45.31	0.05	25			
220	41.91	45.36	0.05	25			
~~220~~ 222	41.98	45.32	-0.04	-20			
224	42.06	45.26	-0.06	-30			
226	41.95	45.34	0.08	40			
228	41.83	45.41	0.07	35			
230	41.72	45.48	0.07	35			
235	41.32	45.74	0.26	52			Highest measured Temp
240	41.82	45.42	-0.32	-64			
245	42.19	45.18	-0.24	-48			
250	42.46	45.01	-0.17	-34			
255	42.57	44.94	-0.07	-14			
260	42.55	44.95	0.01	2			

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
265	42.54	44.96	0.01	2			
270	42.65	44.89	-0.07	-14			
275	42.76	44.82	-0.07	-14			
280	42.95	44.70	-0.12	-24			
285	43.24	44.52	-0.18	-36			
290	43.50	44.36	-0.16	-32			
295	43.68	44.25	-0.11	-22			
300	43.76	44.20	-0.05	-10			
305	43.86	44.13	-0.07	-14			
310	43.92	44.10	-0.03	-6			
315	43.91	44.10	0.00	0			
320	43.93	44.09	-0.01	-2			
325	44.05	44.02	-0.07	-14			
330	44.06	44.01	-0.01	-2			
335	43.89	44.12	0.11	22			
340	43.85	44.14	0.02	4			
345	43.89	44.12	-0.02	-4			
350	43.94	44.09	-0.03	-6			
355	43.99	44.05	-0.04	-8			
360	44.07	44.01	-0.04	-8			
365	44.17	43.94	-0.07	-14			
370	44.25	43.90	-0.04	-8			
375	44.28	43.88	-0.02	-4			
380	44.26	43.89	0.01	2			
385	44.24	43.90	0.01	2			
390	44.25	43.90	0.00	0			
395	44.26	43.89	-0.01	-2			

K=Conductivity

Date Logged: _____ ΔT Well No. _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
400	44.31	43.86	-0.03	-6			
405	44.34	43.84	-0.02	-4			
410	44.38	43.82	-0.02	-4			
415	44.40	43.80	-0.02	-4			
420	44.44	43.78	-0.02	-4			
425	44.47	43.76	-0.02	-4			
430	44.50	43.74	-0.02	-4			
435	44.53	43.72	-0.01	-2			
440	44.56	43.71	-0.03	-6			
445	44.60	43.68	0.00	0			
450	44.61	43.68	-0.01	-2			
455	44.63	43.67	0.01	2			
460	44.61	43.68	-0.03	-6			
465	44.66	43.65	0.00	0			
470	44.65	43.65	0.00	0			
475	44.66	43.65	-0.01	-2			
480	44.68	43.64	0.00	0			
485	44.68	43.64	0.00	0			
490	44.68	43.64	0.00	0			
495	44.68	43.64	0.00	0			
500	44.68	43.64	0.00	0			
505	44.68	43.64	0.00	0			
510	44.68	43.64	0.00	0			
515	44.67	43.64	0.01	2			
520	44.66	43.65	0.00	0			
525	44.65	43.65	0.00	0			
530	44.65	43.65					

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
535	44.61	43.68	0.03	6			
540	44.59	43.69	0.01	2			
545	44.58	43.70	0.01	2			
550	44.58	43.70	0.00	0			
555	44.54	43.72	0.02	4			
560	44.52	43.73	0.01	2			
565	44.50	43.74	0.01	2			
570	44.48	43.76	0.02	4			
575	44.45	43.77	0.01	2			
580	44.43	43.79	0.02	4			
585	44.40	43.80	0.01	2			
590	44.38	43.82	0.02	4			
595	44.35	43.83	0.01	2			
600	44.31	44.86	0.03	6			
605	44.27	43.88	0.02	4			
610	44.23	43.91	0.03	6			
615	44.19	43.93	0.02	4			
620	44.15	43.96	0.03	6			

K=Conductivity

Date Logged: ______________________ ΔT Well No. ______________

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.

K=Conductivity

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: 5776

Date Drilled: 26/3/81 thru 3/5/81

Location: NWSW Sec 9 T22N R40E

Method: rotary/air/ and/or mud

Geologist: Avery

Gamma:

Depth ( )	Description
0- 15'	Overburden: Edwards Creek tuff float, and Triassic basal conglomerate float in mud-silt-sand.
15- 65'	Triassic basal conglomerate (T_{rc}): Strongly cemented sub-rounded to subangular gravel and pebble size clasts of brown, reddish brown, red, gray and green chert; white gray and brown quartzite. Cement is SiO_2, with much iron staining along clast edges, in fractures, and in cement itself. Few boulder-size clasts of chert/quartzite.
65- 75'	Same as above, with addition of rounded reddish-purple f.c. quartzite, and yellow-brown chert fragments.
75- 85'	Same as above, with appearance of reddish brown, finely crushed siltstone making up approximately 20-30 % of total sample.
85- 95'	Same as 15'-65', with quartzite clasts ≃80% of total. rounded chert pebbles ≃10% of total. reddish-brown siltstone ≃10% of total.
95-125'	Same as above, but siltstone now ≃30-40% of total.
125-155'	Same T_{rc}, with appearance of buff (orange-gray) ss pebbles, and reddish-buff silt-st. pebbles (both well-rounded/rounded) - new material ≃25-35% of total.
155-215'	T_{rc} with finely crushed, orange-gray silty sand-st. making up between 20% and 55% of total sample in this interval. Rounded-subrounded pebbles (chert/quartzite) still constitute up to 80% of total.
215-225'	Same as above. Silty ss <20% of total now.
225-245'	T_{rc} with 80% white qtzite/qtzite conglomerate that is densely cemented, l.g. qtzite with gravel-size, subangular clasts. Iron staining on fracture faces, and some hydrous copper oxide coatings on some fragments (qtzite retains sedimentary features as opposed to older quartzites such as Valmy, etc.).

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: Avery Gamma: _____

Depth (')	Description
245-260'	Gray-orange sand-st./silty sand-st. conglomerate similar to 155-215' interval.
260-300'	T_{rc} (as before) with iron stained gravel-pebble conglomerate. Addition of a few limestone pebble-size fragments (angular). Some larger fragments of conglomerate (chert-quartzite) in last 20'.
300-320'	Chert T_{rc} conglomerate (60-40%), orange gray silty ss (as in 245-260') (40-60%).
320-330'	90% chert pebble conglomerate (T_{rc}). One clast shows FeS_2, $CuFeS_2$ mineralization (as granular coating on pebble and as stringer vein through pebble).
330-350'	T_{rc} with orange-gray silty ss as in 300-320'. Percent of silty ss drops from 50% to 20% over this interval.
350-360'	80% qtzite chert/qtzite pebble conglomerate: (T_{rc}).
360-390'	Same as 330-350'
390-410'	90% gravel-pebble-boulder chert/qtzite conglomerate: (T_{rc}), 10% silty ss.
410-420'	Gravel size chert/qtzite conglomerate with qtzite (35%): (T_{rc}).
420-440'	Gray-orange silty ss (35%), chert/qtzite conglomerate (65%): (T_{rc}).
440-450'	Same T_{rc} conglomerate with $CuFeS_2$, bornite, pyrite mineralization as granular fracture fillings, coatings, stringers in pebbles of qtzite. Few green/red banded chert clasts.
450-500'	T_{rc} (as before) with up to 50% orange-gray ss sand. (m.g., subrounded grains). Purple color to some conglomerate fragments. Color of ss becomes darker throughout interval.

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth (')	Description
500-560'	T_{rc} (as before but now all gravel size subrounded to subangular clasts of chert and quartzite with 20-60% orange-gray silty sandstone).
560-580'	T_{rc} as before but now 70% quartzite; 20% silty-ss; 10% chert gravels and pebbles.
580-620'	T_{rc} as before but no orange-gray silty ss.
620-640'	T_{rc} as before with 5-30% silty ss.
640-650'	T_{rc} pebble conglomerate (chert & quartzite about 30-50%).
650-720'	T_{rc} chert, quartzite, and dark brown to reddish brown silicified siltstone gravels and pebbles, rounded to angular, with varying ratios of up to 40% siltstone, 60% quartzite.
720-730'	90% reddish dk. brown silicified siltstone. 10% gravels (T_{rc}).
730-760'	T_{rc} silicified siltstone as above with a siltstone/chert gravel conglomerate in a siltstone matrix (up to 70% matrix).
760-780'	T_{rc} chert/qtzite pebble-gravel conglomerate with siltstone.
780-790'	T_{rc} as above w/20% silt-st. pebbles. Pyrite and chalcopyrite? As granular fracture fillings, coatings.
790-800'	Quartzite: v.f.g. w/distinct black grains in otherwise white quartzite w/blebs or nodules of black, sulfide-rich silicified siltstone.
800-820'	T_{rc} chert/qtzite pebble-gravel conglomerate w/minor pyrite (granular).
820-840'	T_{rc} as before but no mineralization.

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: Avery Gamma: _____

Depth (')	Description
840-850'	T_{rc} as before with 20% brown silicified silt-st.
850-880'	Quartzite: f.c. to l.g., dense, well-cemented (gray). Very minor sulfide mineralization (pyrite) as before. T_{rc}
880-900'	30% quartzite as above, 60% dk. gray, dense, silicifed silt-st. Slight effervescence in dilute HCl, with minor sulfide mineralization as granular coatings and in stringers. Very few chips of gray ls with dk. gray silt-st. inclusions (silt-st. slightly calcareous).
900-920'	20% gray Ls, (hardness ≈ 2 1/2); 30% gray-dk. gray calcareous silt-st., (hardness ≈2 1/2-3); gray-lt. gray calcareous ss (hardness ≈4 1/2) and a f.c. silty ss make up 50% of total. T_{rc}
920-940'	As above, with 50% of total sample comprised of dense, gray, non-calcareous quartzite (hardness ≈ 6-7). T_{rc}
940-960'	Quartzite, as above with 50% qtzite/chert gravel conglomerate.
960-970'	30-40% reddish-brown silicified silt-st., some with calcite stringer veings (H ≈4), 50-60% gray, dense, f.c. quartzite (some brownish-gray) (H 6) and about 10% chert/quartzite gravel conglomerate. Minor sulfides (granular pyrite c-pyrite).
970-980'	90% mottled and banded lt. gray - v. dk. gray calcareous silt-st. (H ≈2 1/2 to 3 1/2). Some fragments have f.c. appearance. Minor sulfides as granular fracture fillings, veinlets? 10% or less silt-st. as before. T_{rc}
980-990'	80% gray-dk. gray f.g-f.c. quartzite w/minor sulfides as before. 20% chert/qtzite gravel conglomerate w/minor sulfides as before. T_{rc}

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth (ft)	Description
990-1090'	30-90% chert/qtzite subrounded-subangular gravel conglomerate with green, gray, brown chert and gray qtzite (as before, T_{rc}) 10-70%. F.g.-f.c. gray quartzite.
1090-1100'	40-50% conglomerate as above; 60-50% orange-gray sandy silt-st.
1100-1200'	30-50% greenish gray chert, rounded-angular pebble-gravel size chips-clasts. 30-50% gray, brownish-gray f.g. qtzite; 10-40% silty ss (orange-gray). T_{rc}
1200-1440'	50-95% chert, qtzite, chert/qtzite conglomerate (T_{rc}) as before. 5-50% buff, orange-gray or lt. brown-tan silty ss to sandy ss. Appearance of purple/red-gray qtzite, conglomerate. T_{rc}
1440-1460'	60-70% tan-lt. brown sandy silt-st. 30-40% gravel conglomerate. T_{rc}
1460-1540'	40-80% gravel-pebble (T_{rc}) conglomerate. Mostly v.f. gravels, rounded-angular. 20-60% orange-gray to lt. brown silty-ss and sandy silt-st.
1540-1600'	Chocolate-brown qtzite/chert gravel-pebble conglomerate (60% of total). Brown silty-ss, orange-gray sandy ss (40%). T_{rc}
1600-1620'	80-100% chert/qtzite conglomerate w/bedded chert (angular chert clasts 40%).
1620-1640'	50% reddish-purple, silicified, subrounded to rounded silt-st. pebbles and finely crushed silt-st. containing large angular quartz phenocrysts. Many pebbles are graywacke (clay/silt-st. matrix with quartz phenocrysts - see sample!). 30-40% T_{rc} conglomerate as before. 10-20% grayish green qtzite and chert. Havallah Formation.
1640-1650'	Fault zone: about 2% of total is greenish-white, soft (H< 2), w/greasy feel, splintery soapstone (tall and/or other clay minerals). Does not expand when heated. 40%

LITHOLOGIC LOG

Project: McCoy

Hole: 25-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth (')	Description
	brown, lt. brown, red-brown, white, gray v.f.g. qtzite. 58% (!) red-purple silicified siltstone conglomerate or fault breccia with very angular clasts of chert, qtzite, and silt-st. Many have calcite veins, caps. Calcite shows stress in curved cleavage faces.
1650-1660	As above, but no clay minerals present. Few pebbles of graywacke with micaceous flakes (muscovite). Appearance of green/lime-green chert w/iron staining (PPh?). (Note: basal T_{rc} unit mapped east of 864-90 contains siltstones and conglomerates with identical micaceous flakes).
1660-1690	As above (1640-1660), but increasing amount of green, green w/red iron stains on micro-fractures chert (20-75% of total). Fault breccia still present (10-50%). Very little graywacke (PPh).
1690-1740	As above with 30-60% green, gray, dk. green chert. 20-30% silty graywacke which is now slightly calcareous and has pheocrysts of qtzite (no micaceous flakes). 0-10% brown qtzite (f.g.).
1740-1750	No sample.
1750-1880	40-80% green-gray chert as angular gravel size chips. 15-45% reddish brown-purple silicified siltstone gravel size chips. 5-30% gray brown quartzite gravel size chips (P_{ph}). 5-30% graywacke (calcareous w/SiO_2 phenocrysts - not micaceous).
1880-2000	80-90% chert and dark purple/brown silicified silt-st.; 10-20% buff to gray quartzite; occasional rock fragments of T_{rc} chert gravel-pebble conglomerate from uphole - very iron-stained. (Note: Both the chert (green, lime-green, dk. green iron stained on micro-fractures green) and the silicified silt-st. (dark reddish-purple brown to reddish orange to gray-orange) were mapped as outcrops and low "rubble" hills 1-2 miles east of 25-9 and 1-3 miles east of 864-90. Hand samples of these PP Havallah sequence rocks are available - see Avery's rock collection!).

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: 5169

Date Drilled: 16/4/81 thru 9/5/81

Location: SESW Sec 9 T23NR40E

Method: rotary/air

Geologist: Avery

Gamma:

Depth ( )	Description
0-15'	Orange-gray silty sandstone, partly silicified, alteration (clay) present, brecciated and containing iron veinlets and staining (50%). Chert-gray/pebble (T_{rc}) conglomerate in silica matrix. Iron-stained.
15-25'	Broken, brecciated, altered (clay) T_{rc}? silicified silt-st., sandstone, chert congl. Drillers (Pat Edwards) say that rock is fractured, poor drilling. Iron-stained.
25-45'	30-50% of original rock (Ls?) is totally replaced with silica. Some T_{rc} conglomerate (<5%). 50-70% brown, white, gray F-m.g. quartzite.
45-55'	Same. Chips are smaller. Some chert. Strongly iron-stained formation. 20% silty sandstone of an orange-gray color.
55-65'	As above, with 50% T_{rc} chert/qtzite silica cemented conglomerate and 5-45% silty-sandstone of orange-gray color.
65-75'	As above, with 20-60% conglomerate and coarse sandstone. Very iron-stained.
75-85'	As above, w/clay alteration and brecciated conglomerate, chert. Fault?
85-115'	Same as 65-75'.
115-135'	85% chert/qtzite gravel-pebble conglomerate. 10% orange-gray silty-ss matrix of conglomerate? 5% gray-white m.g. qtzite.
135-155'	Very silicified conglomerate as above w/fault breccia & silic. Ls? - original rock totally replaced with silica. Very iron-stained. One fragment with cinnabar. 5-20% silty ss, 20% quartzite.
155-175'	Same as above, but now all silicified rock (Ls?) - no conglomerate, some breccia. Another cinnabar fragment. Iron-stained. Silty ss < 10%.
175-185'	Same as above with 30% f-mg. White-buff qtzite.

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
185-215'	Appearance of tan, buff, brown and orange white-gray F.M.G. qtzite. Many chips have black spotty appearance due to pheonocrysts (coarse sand grains). H ≃ 7. 60-80% total (congl., silicified congl. Ls 20-40%) .
215-225'	60% orange-gray F.M.G. ss. 40% above. (silty-ss too).
225-235'	As above, but ss is siltier, and is sometimes a silty ss congl. with gravel size clasts of chert, 5% red silt st (silicified). Ss is orange-gray to lt. brown.
235-245'	Same as above.
245-255'	Same as above. 50% ss, ss congl.
255-265'	Same as above. 80% ss.
265-275'	Same as above. Some of ss is stained a flamingo pink-red. Mercury?
275-285'	50% tan-gray fg-mg qtzite (H ≃7). 50% congl./silicified Ls.
285-295'	80% gravel-pebble congl. in orange-gray silic. silty ss. Maxtrix.
295-307'	50% gravel-pebble congl. in orange-gray silic. silty ss or silicified. 50% qtzite, brown-orange gray interbedded w/reddish brown silt. st.
307-320'	Red siltstone w/thin interbeds, laminae of tan qtzite as above. 5% green chert angular chips. (PPh).
320-330'	As above with 40-50% red siltst (silic). 30-35% tan-orange qtzite. 15-20% green chert. (PPh).
330-340'	60% gray silicified Ls. No effervescence in acid. Grain size is too small to see w/hand lens and silt. effervescence when scratched. 40% orange gray-brown ss.
340-350'	60-70% orange-gray-brown silty ss. 30-40% gray ss as above.

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
350-360'	40% interbedded, thinly bedded orange-gray-brown silty ss. 60% gray-dk. gray chert gravel highly silicified congl. w/rounded-angular chasts.
360-370'	Same as above,but was 80% congl. Very tightly silicified clasts "melted" into each other.
370-380'	70% very silicified conglomerate. 30% brown-orange-gray silty ss. Looks like t_{rc}. Two chips have cinnabar xls.
380-390'	Same as above but now 70% orange-gray silty ss. 30% congl.
390-400'	90% orange-gray to brown silty ss; & ss (f-mg), 10% conglomerate.
400-410'	90% iron-stained, gray silicified Ls, silty ss, orange-gray, 10% conglomerate.
410-420'	50% orange-gray ss (fg), 50% dense, gray silicified Ls or calcareous silt-st.
420-430'	80% dense, gray silic. calc. siltst. or Ls.
430-440'	Dense gray-dk. gray (bedded) siltst. and day st. (H ≈4). Some is silicified. Few qtz. w/sulfide picas.
440-450'	Same as above.
450-460'	Brown, brownish green-gray siltst. silty ss. Orange-gray too.
460-470'	Brown, brownish green-gray siltst. silty ss. Orange-gray too.
470-480'	Brown appearance of red silic. siltst.
480-490'	Brown, brown, brownish green-gray siltst. silty ss, but some iron-stained silty ss. Some of it is conglometric.
490-500'	" " " " " "
500-510'	Gray f.g. ss, silty ss, clayst. siltst. (silicified) fractured, iron-stained.

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
510-520'	Same as above, but now 50% gravel chert silicified congl.
520-530'	60% gray fg ss, silic. siltstone is gray-reddish gray-silic claystone is white-greenish gray while 40% congl.
530-540'	Dk. gray chert/qtzite gravel congl. Very dense. Silicified. Sulfides occur as granular fracture fillings, coatings, pyrite, c/pyrite, others. Most clasts are well-rounded to subrounded.
540-550'	Lt. gray - gray fg quartzite.
550-560'	Gray-brownish gray fg qtzite (95%) red silicified silt. st. (5%)
560-570'	Gray-brownish gray fg qtzite (60%) red silicified silt. st. (40%)
570-580'	Gray-brownish gray fg qtzite (95%) red silicified silt. st. (5%)
580-590'	Gray-dk. gray chert and qtzite (Fe) sulfides (minor).
590-600'	Gray, thinly bedded vfg qtzite, some silica silt. st., v. minor chert, sulfides (v. minor).
600-610'	Gray-red silicified siltstone, ss, and claystone.
610-620'	Gray-brownish gray fg-vfg qtzite, some silica silt. st., chert (v. minor sulfides)
620-630'	Gray-dk. gray qtzite (fg), chert, and qtzite (chert congl. sulfides).
630-640'	Same but mostly conglomerate (chert/qtzite rounded-angular pebbles).
640-650'	Same as 600-620 - congl. w/sulfides interval 6.
650-660'	95% red silicified silt. st., qtzite (fg)
660-670'	85% " " " "
670-680'	60% " " " "

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
680-690'	Same as 600-610', mostly gray chert, qtzite (fg) 10-15% red silt. st.
690-700'	Same as 600-610' with gray qtzite, green-gray chert, and chert congl.
700-710'	" " " " "
710-720'	" " " " "
720-730'	Same as 600-610'
730-740'	Gray silicified siltstone ss, greenish gray chert, iron-staining.
740-750'	Brownish gray qtzite, red silt. st., chert qtzite congl. (20%).
750-760'	Cong., chert, qtzite, 15% red silic. silt. st.
760-770'	Chert, qtzite, congl., minor sulfides.
770-780'	Chert, qtzite, congl., minor sulfides.
780-790'	Same as 750-760' 10% silt. st.
790-800'	" " mostly qtzite.
800-810'	" " w/buff qtzite, green chert, gray-brown qtzite, red silt. st. (5%).
810-820'	Same as above. No buff qtzite.
820-830'	Chert, congl.
830-840'	" ". some minor sulfides.
840-850'	Chert, congl., red silt. st. (30-40%).
850-860'	" " " (40-50%).
860-870'	Chert, congl., buff iron-stained qtzite (25%).
870-880'	" " " " (40%) w/orange-gray ss cong. (30%).

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
880-890'	Green-gray chert congl.
890-900'	Mostly brownish-gray chert. 30% congl.
900-910'	" " " "
910-920'	Chert, congl. 50-56
920-930'	as in 890-900.
930-950'	Clear, brown, green chert, gray-brown fg ss minor sulfides w/FeS.
930-940'	Gray, brown-gray, dk. gray chert, qtzite; minor sulfides.
940-950'	Gray, brown-gray, with some red chert. Minor sulfides.
950-960'	Same as above.
960-970'	Same as above 5% red sulfides (minor pyrite).
970-980'	" " " " "
980-990'	" " " " "
990-1000'	" " red chert ≈20% sil. red silt. st. 5%, congl. 20% and/or breccia.
1000-1010'	Same as above, 10% sulfides, congl. 20% and/or breccia.
1010-1020'	Same, no red chert, mostly grayish chert, sulfides, and/or breccia.
1020-1030'	" " " "
1030-1040'	" " " "
1040-1050'	" " " "
1050-1060'	Mostly cong. (green chert, gray-brown qtzite pebbles, gravels). Sufides.

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
1060-1070'	Same but more alteration, breccia. Iron-staining, sulfides less.
1070-1080'	Mostly green-gray chert, & brown chert w/ congl., sulfides.
1080-1090'	Iron-stained chert, qtzite, very little sulfides.
1090-1100'	Iron-stained chert, qtzite, very little sulfides.
1100-1110'	Iron-stained chert, qtzite, very little sulfides.
1110-1120'	Gray-brown-green chert qtzite, minor sulfides & congl.
1120-1130'	" " " "
1130-1140'	" " " "
1140-1150'	" " " "
1150-1160'	Same as 1110-1150' minor sulfides.
1160-1170'	Same as 1110-1150' minor sulfides.
1170-1180'	Same as 1110-1150' minor sulfides.
1180-1190'	Same as 1110-1150' no sulfides.
1190-1200'	More reddish brown F.C. qtzite, chert congl. No sulfides.
1200-1210'	Same as above.
1210-1220'	Mostly brown-gray-green chert (90%). No sulfides.
1220-1230'	Chert, qtzite, no sulfides.
1230-1240'	Same as above
1240-1250'	Same as above
1250-1260'	Same as above

LITHOLOGIC LOG

Project: 864

Hole: 38-9

Elevation: _____ Date Drilled: _____

Location: _____ Method: _____

Geologist: _____ Gamma: _____

Depth ( )	Description
1260-1270'	Same as above
1270-1280'	Same as above w/minor sulfides (minor pyrite).
1280-1290'	Same as above.
1290-1300'	Same as above.
1300-1310'	plus, silicified siltst. (red): 20% of total.
1310-1320'	Same as above, no sulfides.
1320-1330'	Same as above.
1330-1340'	Gray-green chert, orange-gray-brownish-gray-reddish-brown qtzite, red silic-silt. st. and 40-50% chert gravel congl., v. minor sulfides as FeS_2.
1340-1350'	As above.
1350-1360'	Gray-reddish brown qtzite (60%), gray-green chert (20%), chert congl. (20%).
1360-1370'	Chert; qtzite - gray, brown, red, green, yellow, clear.
1370-1380'	" " " "
1380-1390'	Reddish-brown silicified siltstone, silty-qtzite, silt. st. congl. w/some red chert.
1390-1400'	as above, w/ 10% green chert.
1400-1410'	Green chert (iron-stained), brown qtzite, red silic. silt. st.
1410-1420'	Dk. gray-green chert, qtzite as above, fault breccia only and chert congl., minor sulfide as FeS, red silic. silt. st.
1420-1430'	As above, no silt. st.

AMAX EXPLORATION, INC.

TEMPERATURE/DEPTH LOG

864-62

ΔT Well No. 38-9

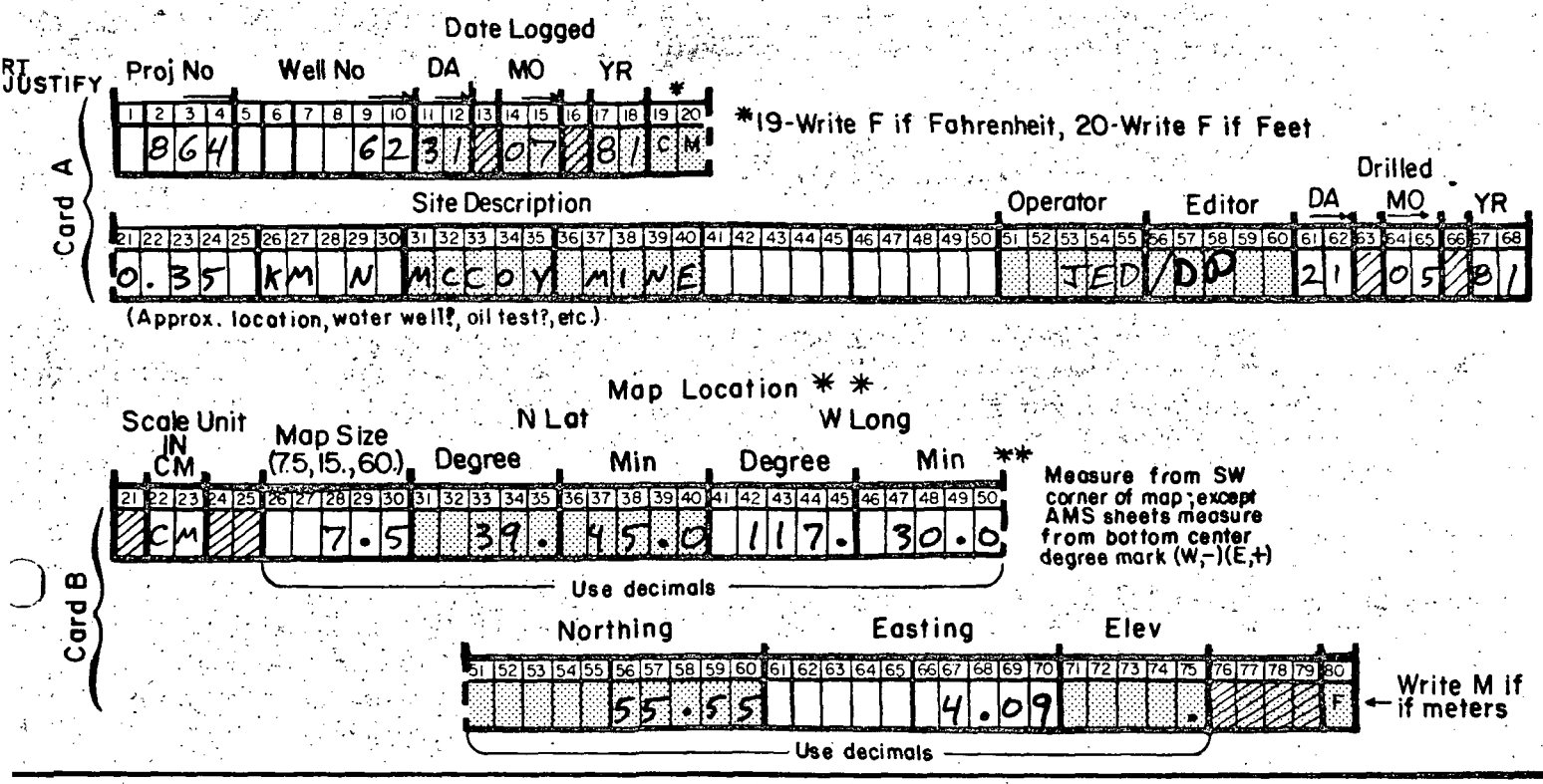
Property-Project McCoy Depth Logged 620m

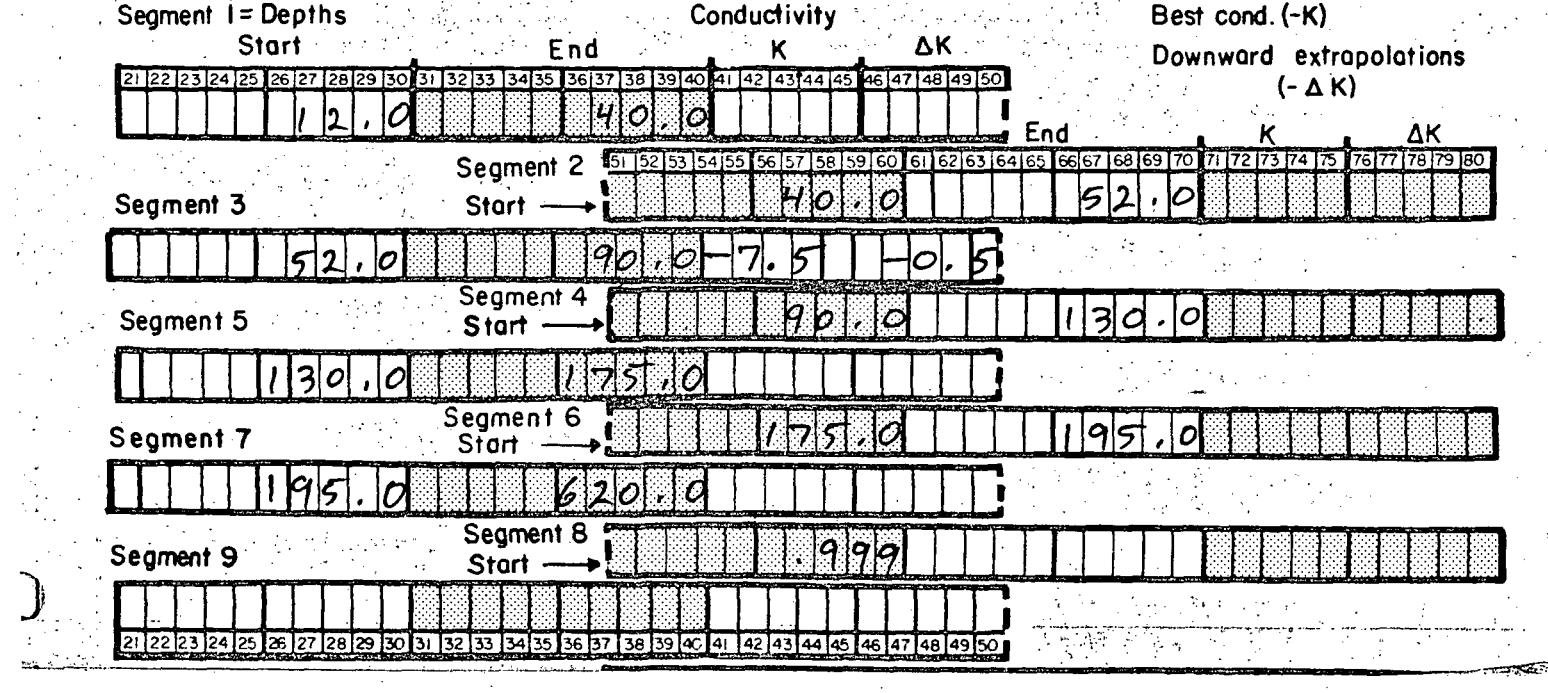
Map Gilbert Ck SW, Scale 7½ Date: Drilled 5-21-81 Logged 7-31-81

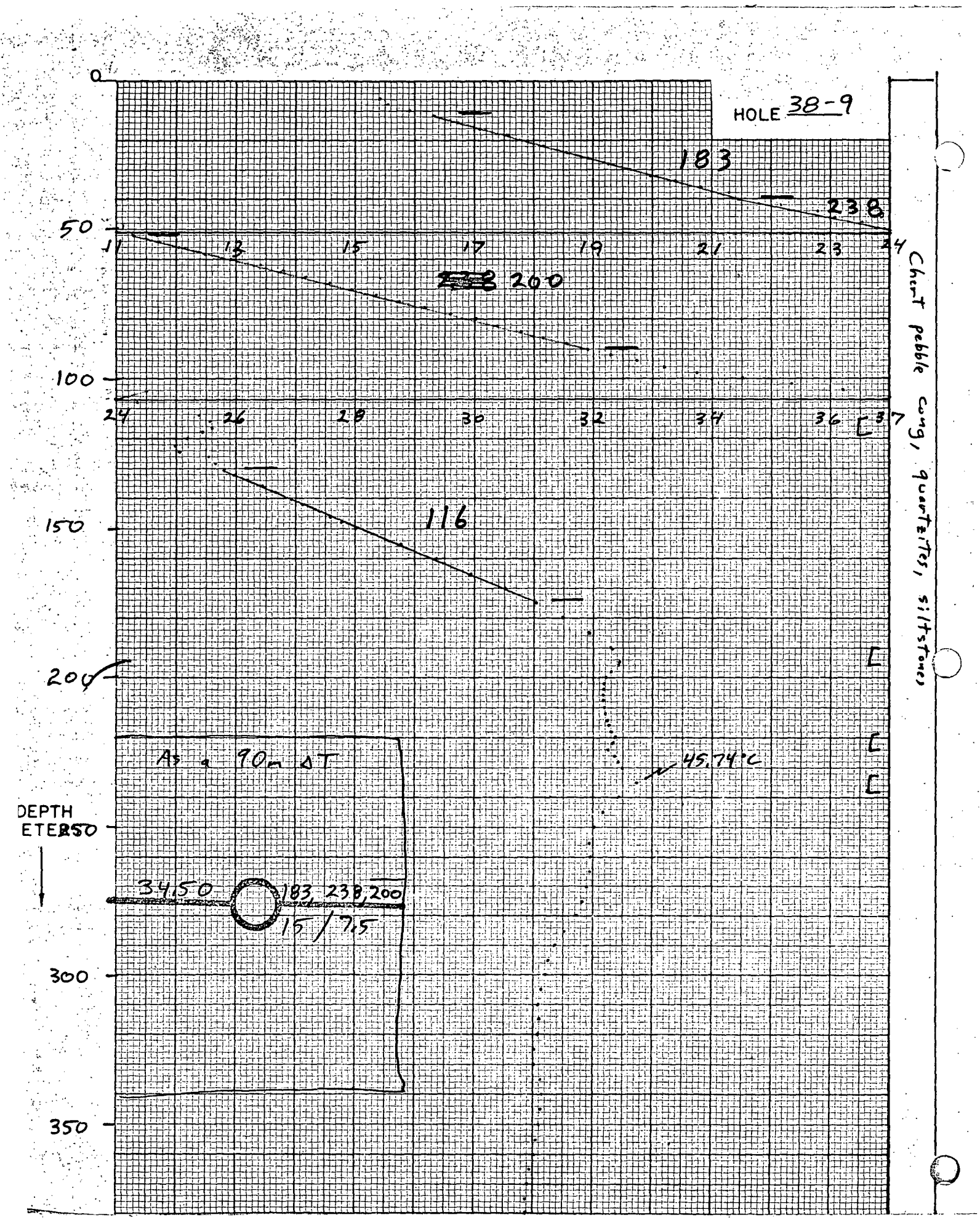
State NV County Churchill, ___ of ___ of SE of SW of Sec 9 T 23 N R 40 E

Instrument #46 Operator JED Elevation ___ (ft m)

Comments 2¾" H2O Filled steel pipe in open 6¼" hole






HOLE 38-9
183
238
200
116
As a 90m ΔT
45.74°C
34.50
183 238 200
15 / 7.5
Chert pebble cong, quartzites, siltstones
DEPTH
ETERS
0
50
100
150
200
250
300
350
11
13
15
17
19
21
23
24
24
26
28
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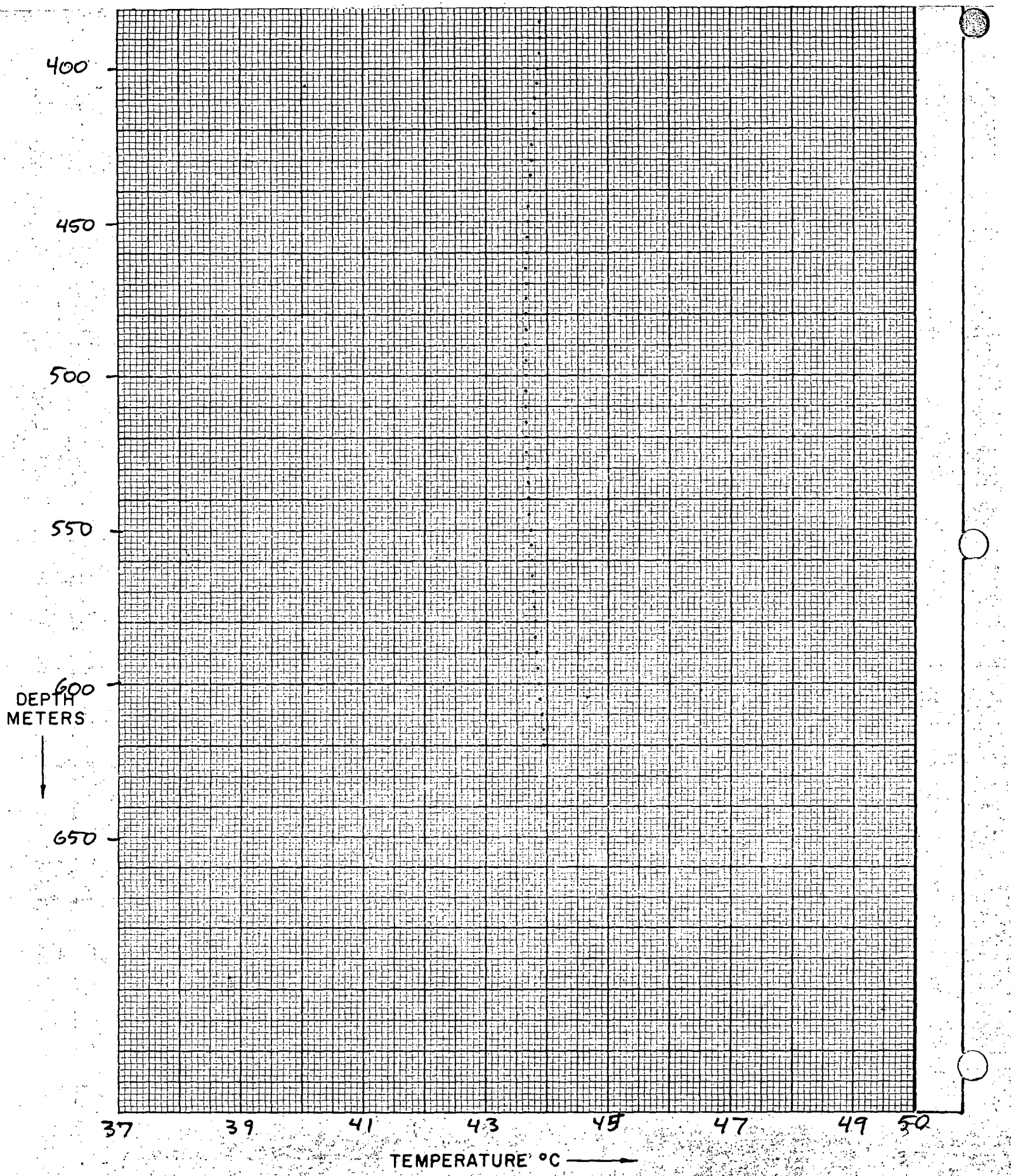
37


400
450
500
550
600
650
DEPTH METERS
37
39
41
43
45
47
49
50
TEMPERATURE °C

Date Logged: 7-31-81 ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
6	124.60	15.41				H_2O	Cable in .1060
8	123.99	15.56	0.35	175			Cable out .0926
10	122.50	15.91	0.43	215			
12	120.73	16.34	0.42	210			
14	118.99	16.76	0.34	170			
16	117.60	17.10	0.44	220			
18	115.85	17.54	0.36	180			
20	114.40	17.90	0.29	145			
22	113.25	18.19	0.35	175			
24	111.91	18.54	0.39	195			
26	110.37	18.93	0.34	170			
28	109.07	19.27	0.37	185			
30	107.67	19.64	0.34	170			
32	106.41	19.98	0.42	210			
34	104.83	20.40	0.42	210			
36	103.30	20.82	0.48	240			
38	101.56	21.30	0.15	75			
40	100.01	21.45	0.72	360			
42	98.45	22.17	0.53	265			
44	96.60	22.70	0.39	195			
46	95.28	23.09	0.47	235			
48	93.68	23.56	0.37	185			
50	92.43	23.93	0.37	185			
52	91.22	24.30	0.40	200			
54	89.89	24.70	0.35	175			
56	88.78	25.05	0.42	210			
58	87.42	25.47					

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
60	86.02	25.92	0.45	225			
62	84.49	26.41	0.49	245			
64	83.34	26.79	0.38	190			
66	82.20	27.17	0.38	190			
68	80.98	27.58	0.41	205			
70	79.91	27.94	0.36	180			
72	78.71	28.35	0.41	205			
74	77.51	28.77	0.42	210			
76	76.38	29.17	0.40	200			
78	75.20	29.60	0.43	215			
80	74.04	30.02	0.42	210			
82	73.05	30.39	0.37	185			
84	71.97	30.79	0.40	200			
86	70.96	31.17	0.38	190			
88	69.95	31.56	0.39	195			
90	69.05	31.91	0.35	175			
92	68.04	32.31	0.40	200			
94	67.03	32.72	0.41	205			
96	65.85	33.20	0.48	240			
98	64.50	33.75	0.55	275			
100	62.73	34.50	0.75	375			
102	60.79	35.35	0.85	425			
104	59.86	36.22	0.87	435			
106	57.17	37.00	0.78	390			
108	56.44	37.35	0.35	175			
110	—		~~1.03~~	~~258~~			
112	54.31	38.38					

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
114	53.93	38.57	0.19	95			
116	53.89	38.59	0.02	10			
118	54.18	38.45	-0.14	-70			
120	54.70	38.19	-0.26	-130			
122	55.10	38.00	-0.19	-95			
124	54.97	38.06	0.06	30			
126	53.98	38.55	0.49	245			
128	53.76	38.66	0.11	55			
130	53.45	38.81	0.15	75			
132	53.10	38.99	0.18	90			
134	52.66	39.21	0.22	110			
136	52.21	39.44	0.23	115			
138	51.78	39.67	0.23	115			
140	51.28	39.93	0.26	130			
142	50.84	40.16	0.23	115			
144	50.38	40.40	0.24	120			
146	50.03	40.59	0.19	95			
148	49.68	40.78	0.19	95			
150	49.24	41.02	0.24	120			
155	47.89	41.77	0.75	150			
160	46.83	42.37	0.60	120			
165	45.83	42.95	0.58	116			
170	44.88	43.51	0.56	112			
175	44.04	44.02	0.49	98			
180	43.29	44.49	0.47	94			
185	42.56	44.95	0.46	92			
190	42.00	45.30	0.35	70			

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
195	41.81	45,43	0,13	26			
196	41.84	45,41	-0,02	-20			
197	41.95	45,34	-0,07	-70			
198	4201	45,30	-0,04	-40			
199	4207	45,26	-0,04	-40			
200	4213	45,22	-0,04	-40			
202	4220	45,17	-0,05	-25			
204	42.22	45,16	-0.01	-5			
206	42.22	45,16	-0.00	0			
208	42.22	45,16	-0.00	0			
210	42.19	45,18	0.02	10			
212	42.16	45,20	0.02	10			
214	42.11	45,23	0.03	15			
216	42.06	45,26	0.03	15			
218	41.99	45,31	0.05	25			
220	41.91	45,36	0.05	25			
~~220~~ 222	41.98	45,32	-0,04	-20			
224	42.06	45,26	-0.06	-30			
226	41.95	45,34	0.08	40			
228	41.83	45,41	0.07	35			
230	41.72	45,48	0.07	35			
235	41.32	45,74	0,26	52			Highest measured Temp
240	41.82	45,42	-0,32	-64			
245	42.19	45,18	-0.24	-48			
250	42.46	45,01	-0,17	-34			
255	42.57	44,94	-0,07	-14			
260	42.55	44,95	0.01	2			

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
265	42.54	44.96	0.01	2			
270	42.65	44.89	-0.07	-14			
275	42.76	44.82	-0.07	-14			
280	42.95	44.70	-0.12	-24			
285	43.24	44.52	-0.18	-36			
290	43.50	44.36	-0.16	-32			
295	43.68	44.25	-0.11	-22			
300	43.76	44.20	-0.05	-10			
305	43.86	44.13	-0.07	-14			
310	43.92	44.10	-0.03	-6			
315	43.91	44.10	0.00	0			
320	43.93	44.09	-0.01	-2			
325	44.05	44.02	-0.07	-14			
330	44.06	44.01	-0.01	-2			
335	43.89	44.12	0.11	22			
340	43.85	44.14	0.02	4			
345	43.89	44.12	-0.02	-4			
350	43.94	44.09	-0.03	-6			
355	43.99	44.05	-0.04	-8			
360	44.07	44.01	-0.04	-8			
365	44.17	43.94	-0.07	-14			
370	44.25	43.90	-0.04	-8			
375	44.28	43.88	-0.02	-4			
380	44.26	43.89	0.01	2			
385	44.24	43.90	0.01	2			
390	44.25	43.90	0.00	0			
395	44.26	43.89	-0.01	-2			

K=Conductivity

Date Logged: _____ ΔT Well No. _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
400	44.31	43.86	-0.03	-6			
405	44.34	43.84	-0.02	-4			
410	44.38	43.82	-0.02	-4			
415	44.40	43.80	-0.02	-4			
420	44.44	43.78	-0.02	-4			
425	44.47	43.76	-0.02	-4			
430	44.50	43.74	-0.02	-4			
435	44.53	43.72	-0.01	-2			
440	44.56	43.71	-0.03	-6			
445	44.60	43.68	0.00	0			
450	44.61	43.68	-0.01	-2			
455	44.63	43.67	0.01	2			
460	44.61	43.68	-0.03	-6			
465	44.66	43.65	0.00	0			
470	44.65	43.65	0.00	0			
475	44.66	43.65	-0.01	-2			
480	44.68	43.64	0.00	0			
485	44.68	43.64	0.00	0			
490	44.68	43.64	0.00	0			
495	44.68	43.64	0.00	0			
500	44.68	43.64	0.00	0			
505	44.68	43.64	0.00	0			
510	44.68	43.64	0.00	0			
515	44.67	43.64	0.01	2			
520	44.66	43.65	0.00	0			
525	44.65	43.65	0.00	0			
530	44.65	43.65					

K=Conductivity

Date Logged: _____ ΔT Well No. 38-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
535	44.61	43.68	0.03	6			
540	44.59	43.69	0.01	2			
545	44.58	43.70	0.01	2			
550	44.58	43.70	0.00	0			
555	44.54	43.72	0.02	4			
560	44.52	43.73	0.01	2			
565	44.50	43.74	0.01	2			
570	44.48	43.76	0.02	4			
575	44.45	43.77	0.01	2			
580	44.43	43.79	0.02	4			
585	44.40	43.80	0.01	2			
590	44.38	43.82	0.02	4			
595	44.35	43.83	0.01	2			
600	44.31	44.86	0.03	6			
605	44.27	43.88	0.02	4			
610	44.23	43.91	0.03	6			
615	44.19	43.93	0.02	4			
620	44.15	43.96	0.03	6			

K=Conductivity

Date Logged: ____________________ ΔT Well No. ____________

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.

K=Conductivity

AMAX EXPLORATION, INC.

TEMPERATURE/DEPTH LOG

864-65

ΔT Well No. 25-9

Property-Project Mc Coy Depth Logged 600m

Map _____ Scale 7½ Date: Drilled 5-2-81 Logged 8-5-81

State NV County Churchill, ____ of ____ of NW of SW of Sec 9 T22N R 40E

Instrument #46 Operator JED Elevation _____ (ft m)

Comments 2⅜ pipe Filled with H_2O hung in open hole. Temps From upper 90 m of hole Taken on 5-15-81

Card A

JUSTIFY	Proj No	Well No	Date Logged DA	MO	YR	*
	864	65	08	05	81	C M

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

Site Description	Operator	Editor	Drilled DA	MO	YR
9.05 KM S WH. TE HORSE MINE	JED	DP	02	05	81

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

MCCOY

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	39.	45.0	117.	30.0	

Use decimals

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

Northing	Easting	Elev	
16.7	3.85		F

Use decimals

← Write M if if meters

Segment ! = Depths

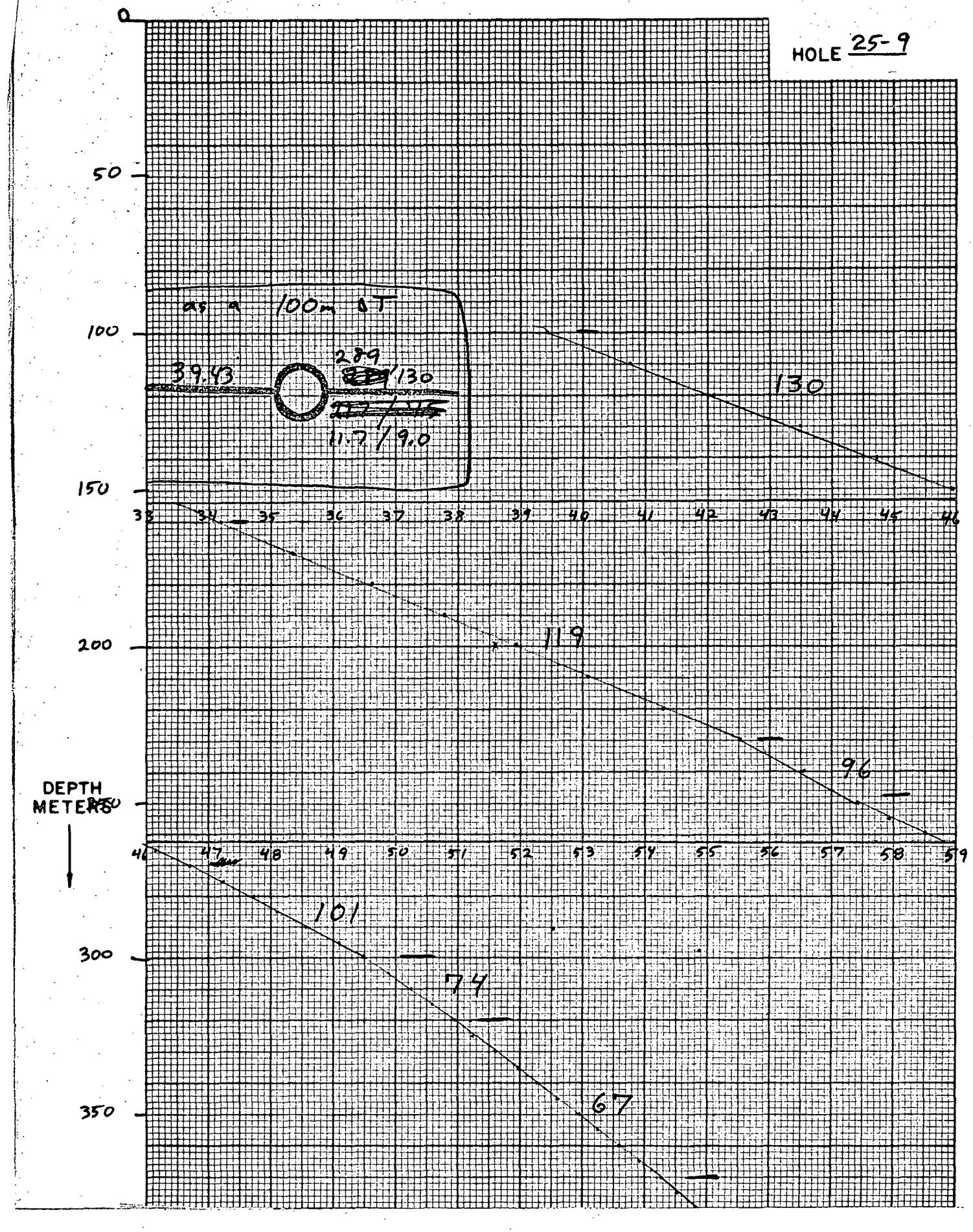
Start	End	Conductivity K	ΔK
100.0	160.0	-9.0	-0.5

Best cond. (-K)

Downward extrapolations (-ΔK)

	Start	End	K	ΔK
Segment 2	160.0	230.0		
Segment 3	230.0	250.0		
Segment 4	250.0	300.0		
Segment 5	300.0	320.0		
Segment 6	320.0	370.0		
Segment 7	370.0	405.0		
Segment 8	405.0	435.0		
Segment 9				

HOLE 25-9


0
50
100
150
200
300
350
DEPTH METERS
as a 100m AT
39.43
289
130
11.7 / 9.0
130
119
96
101
74
67
33
34
35
36
37
38
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41
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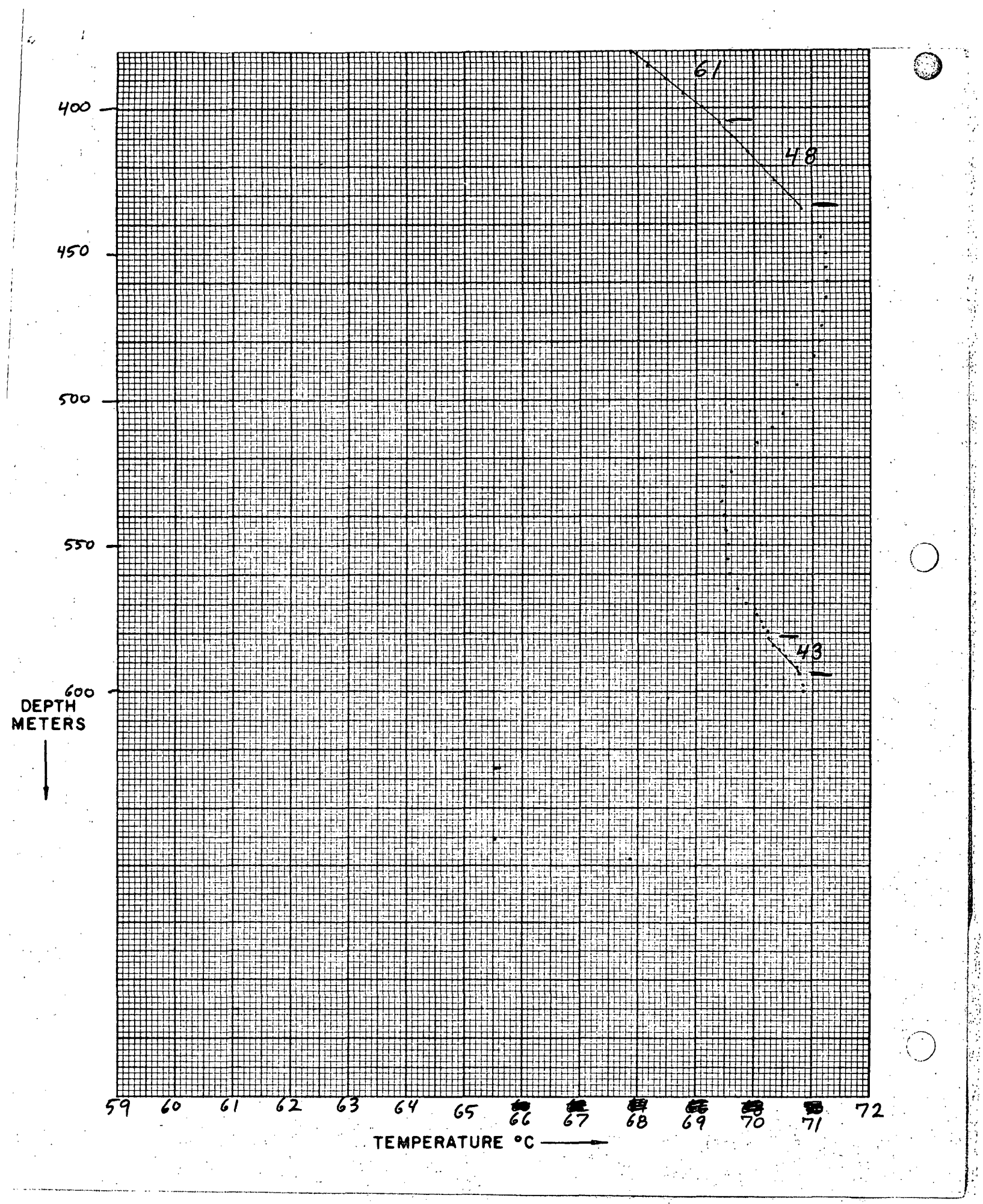
61
48
43
400
450
500
550
600
DEPTH METERS
59
60
61
62
63
64
65
66
67
68
69
70
71
72
TEMPERATURE °C

Date Logged: 5-15-81

ΔT Well No. _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
90	55.04	38.02					
100	52.24	39.43					
110	49.72	40.76					
120	47.31	42.10					
130	44.94	43.48					
140	42.93	44.71					
150	41.05	45.92					
160	39.15	47.20					
170	37.50	48.37					
180	35.79	49.63					
190	34.30	50.79					
CONTINUED ON NEXT PAGE,							

K=Conductivity

Date Logged: ____________________ ΔT Well No. ______________

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.

K=Conductivi

Date Logged: _____ ΔT Well No. 25-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
							Cable in .0973 out .1309
200	33.30	51.60					
			5.82				
250	26.94	57.42					
			0.54	108			
255	26.42	57.96					
			0.55	110			
260	25.90	58.51					
			0.65	130			
265	25.30	59.16					
			0.54	108			
270	24.81	59.70					
			0.56	112			
275	24.32	60.26					
			0.46	92			
280	23.92	60.72					
			0.37	74			
285	23.61	61.09					
			0.45	90			
290	23.23	61.54					
			0.56	112			
295	22.77	62.10					
			0.27	54			
300	22.47	62.47					
			0.40	80			
305	22.15	62.87					
			0.39	78			
310	21.85	63.26					
			0.33	66			
315	21.60	63.59					
			0.35	70			
320	21.33	63.94					
			0.29	58			
325	21.11	64.23					
			0.34	72			
330	20.84	64.60					
			0.37	74			
335	20.57	64.97					
			0.30	60			
340	20.35	65.27					
			0.34	68			
345	20.11	65.61					
			0.34	68			
350	19.87	65.95					
			0.31	62			
355	19.65	66.26					
			0.35	70			
360	19.41	66.61					
			0.31	62			
365	19.20	66.92					
			0.35	70			
370	18.97	67.27					
			0.26	52			
375	18.80	67.53					

K=Conductivity

Date Logged: _____ ΔT Well No. 25-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
380	18.56	67.89	0.36	72			
385	18.37	68.19	0.30	60			
390	18.18	68.49	0.30	60			
395	18.00	68.77	0.28	56			
400	17.80	69.09	0.32	64			
405	17.61	69.40	0.31	62			
410	17.48	69.61	0.21	42			
415	17.31	69.89	0.28	56			
420	17.17	70.13	0.26	52			
425	17.03	70.36	0.23	46			
430	16.90	70.59	0.23	46			
435	16.76	70.83	0.24	48			
440	16.66	71.00	0.17	34			
445	16.58	71.14	0.14	28			
450	16.54	71.21	0.07	14			
455	16.53	71.23	0.02	4			
460	16.52	71.24	0.01	2			
465	16.53	71.23	-0.01	-2			
470	16.56	71.17	-0.06	-12			
475	16.58	71.14	-0.03	-6			
480	16.60	71.10	-0.04	-8			
485	16.64	71.03	-0.07	-14			
490	16.69	70.95	-0.08	-16			
495	16.76	70.83	-0.12	-24			
500	16.86	70.65	-0.18	-36			
505	16.96	70.48	-0.17	-34			
510	17.07	70.30	-0.18	-36			

K=Conductivity

Date Logged: _____ ΔT Well No. 25-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
515	17.21	70.06	-0.24	-48			
520	17.36	69.81	-0.35	-70			
525	17.49	69.60	-0.21	-42			
530	17.58	69.45	-0.15	-30			
535	17.58	69.45	0.00	0			
540	17.57	69.47	0.02	4			
545	17.54	69.51	0.04	8			
550	17.52	69.55	0.04	8			
555	17.52	69.55	0.00	0			
560	17.50	69.58	0.03	6			
565	17.42	69.71	0.13	26			
570	17.32	69.88	0.17	34			
572	17.24	70.01	0.13	65			
574	17.21	70.06	0.05	25			
576	17.17	70.13	0.07	35			
578	17.15	70.16	0.03	15			
580	17.12	70.21	0.05	25			
582	17.10	70.25	0.04	20			
584	17.06	70.31	0.06	30			
586	16.99	70.43	0.12	60			
588	16.93	70.53	0.10	50			
590	16.88	70.62	0.09	45			
592	16.83	70.71	0.09	45			
594	16.80	70.76	0.05	25			
596	—	—	0.08	20			
598	16.75	70.84					
600	16.74	70.86	0.04	20			

K=Conductivity

Date Logged: _____ ΔT Well No. 25-9

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
598	16.73	70.88	0.02	10			
~~600~~	~~16.73~~						
~~602~~	~~16.73~~						
~~604~~	~~16.72~~						

K=Conductivity