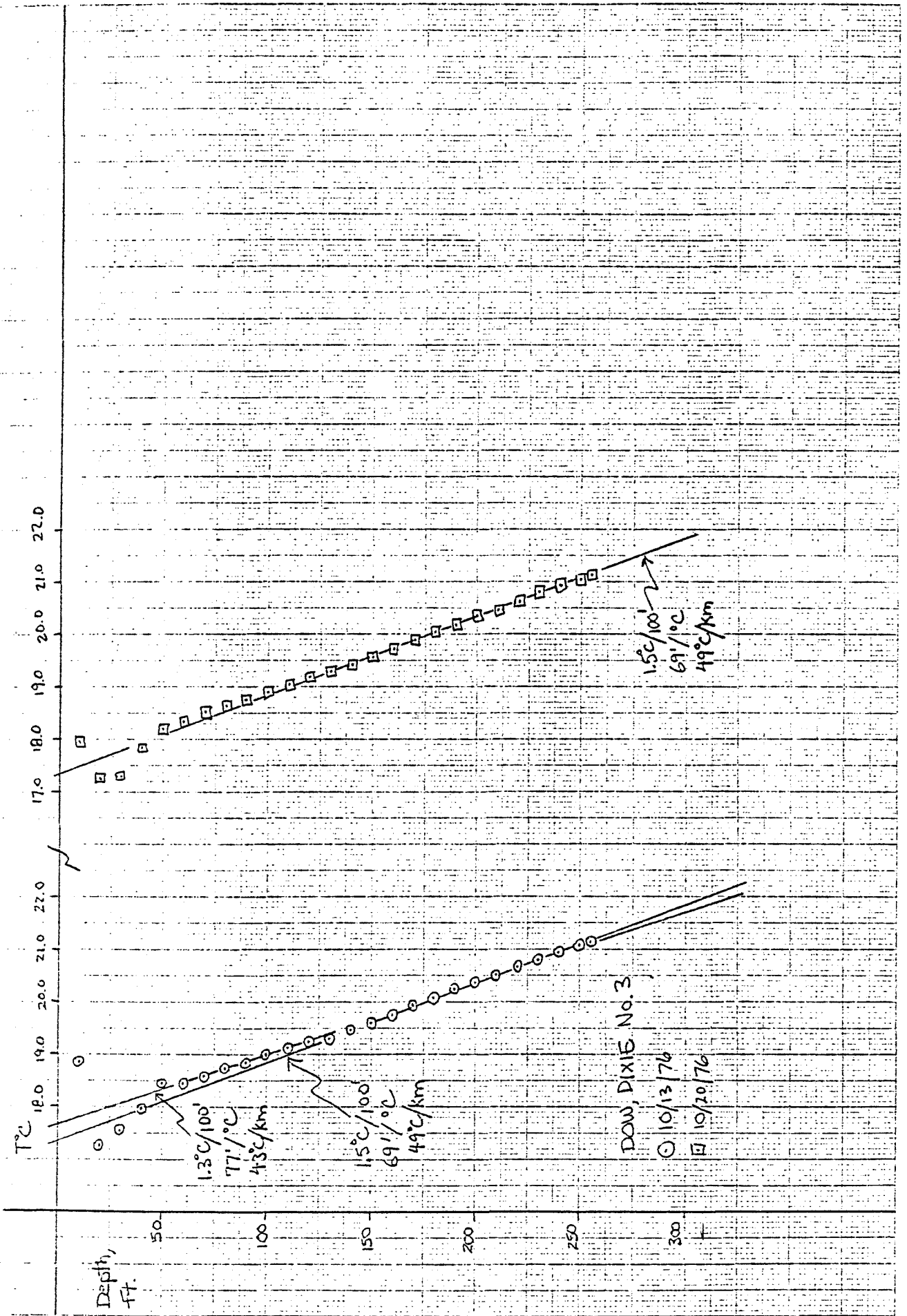


DOW DIXIE NO. 3 = 903-23



TEMPERATURE LOG

C. Klein

Daw DIXIE No.3

Date: 10/20/76

Time: 0815

Air temp: 9.3°C

Depth

T°C down

0	11.1°C
10	17.95
20	17.25
30	17.30
40	17.84
50	18.20
60	18.34
70	18.53
80	18.63
90	18.76
100	18.90
110	19.05
120	19.20
130	19.30
140	19.42
150	19.56
160	19.72
170	19.89
180	20.05
190	20.18
200	20.35
210	20.47
220	20.62
230	20.80
240	20.92
250	21.05
255	21.13

30

480

C/K

76

Finish: 0915 hrs.

$$\frac{(22.2)}{3.75} \approx 23 \quad \frac{48}{1.9 @ 4.0}$$

DOW DIXIE No. 3

TEMPERATURE LOG

C. Klein

10/13/76

Date: 10/13/76

Time: 0930 hrs.

Air temp: 12.8°C *

*Note: max reg. Hg therm - 14.5°C
dial therm - 12°C.

Depth

T°C down

T°C up

** in water; dial therm - 16.5°C.

ft. **

10	16.90
20	18.85
30	17.25
40	17.55
50	17.97
60	18.43
70	18.45
80	18.60
90	18.73
100	18.86
110	18.99
120	19.11
130	19.24
140	19.37
150	19.47
160	19.60
170	19.76
180	19.93
190	20.07
200	20.23
210	20.37
220	20.51
230	20.65
240	20.79
250	20.93
255	21.08
	21.13

19.00

20.38

← hole blocked below 257-257.5 ft.

Finish = 1145 hrs.

Gradient from plot of data

50-120' : 0' intercept = 17.7°C

300' " = 21.7°C

1.3°C/100' = 77' / °C

130-250' : 0' intercept = 17.34°C

300' " = 21.82°C

$(21.82 - 17.34) / 300' = 4.48 / 300' = 1.5°C / 100'$
= 69' / °C

Hole No. 3
Operation Summary

by: C. Klein

Loc: Near intersection, SE $\frac{1}{4}$ sec. 34, T23N, R35E

Drilling Log:

10/7/76

0700 Commence move to site

0900 Spud in - drilling in gravelly alluvium

0950 At c. 18 ft. Fluid loss bw, some slough

1100 Repeated re-drilling of zone c. 15-20 ft. Joe - driller
N end of valley } stops by

1330 Drilling at 40 ft., gravel

1400 At 60 ft. - gravel, clay since c. 40 ft.

- c. 60 ft. gravel, no clay, slight fluid loss

1530 At 80 ft., gravel, sand

1630 At 120 ft., gravel, sand

1645 At 135 ft. Stops to fix cable.

10/8/76 0730 Back into hole - clear to bottom

0845 At 165 ft. - mud temp 17.5°C

1020 205 ft. - harder rock? Mud is v. thick - cuttings not settling quickly.

1130 Shutdown - mud too thick, no settling of cuttings.
Water trip, mud dumped, new batch.

1410 Drilling resumes at 220' - quick penetration

1500 c. 260 ft - rate of penetration slows - driller feels bit worn

1515 Begin trip out

1345 Shutdown

10/11/76 mid-morning Hole completed to TD 300 ft, driller reports no change in conditions

late-morning PVC 1 $\frac{1}{2}$ " pipe set to TD, top 10 feet of annulus cemented. Rig removed to site #2.

Geologic setting: on lower portion of alluvial fan, c. 200 m from flat valley floor. Ground surface is mostly silt and clay; lesser sand, occas. pebbles, cobbles.

Geologic Summary: Entire section 0-300' is fan deposit of angular-subrounded sand, small pebbles in brown silt and clay matrix. Relative abundance of the various size fractions varies somewhat from level to level, but signs of sharp breaks or changes in sorting are generally absent. Brown silt-clay is most abundant in 40-60' level (clots of clay form c. 60% of recovery), where zones of clay-silt nearly devoid of sand may be present.

LITHOLOGIC LOG

DOW
DIXIE V. No. 3

INTERVAL	SUMMARY OF LITHOLOGIC	LITHOLOGIC DESCRIPTION	COMMENTS, INTERPRETATION
0-20'		Soil; sand, gravel. Angular, subrounded. Red, brn, purple, green, tan-colored tuff. Some greenish gabbro (alt'd). Rare slate (?), aph, dk gray, cleavage not apparent). Occas frag qtz, (c?, ep (rare)).	Vitric tuff. Vitric-tal tuff. Some banded & welded. Tuff or porph volcanics. Fspars, qtz, occas bio.
20-30'		no sample	
30-40'		as above, all returns sand-sized, angular-subrounded ^(?) .	
40-60'		sand, gravel as above; plus abundant brown silt and clay, in thumb-sized clots, generally free of sand. Sand, gravel c. 40%?, clay c. 60%?	Drop in return of drilling fluid, c. 60 ft. Extra mud, cottonseed added.
60-70'		gravel, ors sand as above; brn clay rare	
70-80'		some	
80-100'		gravel, sand - 90 to 95% brown or pinkish brn sandy clay-silt - 5-10%*	*percentages in sample. Amts of clay-silt in ground prob. much higher, mixed w/ drilling mud.
100-110'		some	
110'-120'		same	

LITHOLOGIC LOG

Sub Scientist C. Klein

Date 10/7/76

DOW
DIXIE V. No. 3, cont.

INTERVAL	SCHEMATIC OF STRATIGRAPHY	LITHOLOGIC DESCRIPTION	COMMENTS, INTERPRETATION
120-130'		as above. clots of brown sandy clay ^{silt} 10-15% of sample	
130-140'		same. Percent gravel recovered may be decreasing relative to sand, silt.	
140-150'		same. Clots of sandy brown silt-clay 15-20% of recovery.	
150-160'		same.	
160-170'		same	
170-180'		same. Gravel fraction* c. 20% of total. Clots of silt-clay-sand 30+%	*(> .5 cm)
180-190'		same	
190-200'		same	
200-210'			205' - driller suspects harder rock. Note: From c. 60 ft - 220' mud thickens to state where cutting no longer settle - samples prob. do not show lith. variati 220' - new mud. if any.

LITHOLOGIC LOG

DOW
 DIXIE No. 3

INTERVAL	SCHEMATIC OF STRATIGRAPHY	LITHOLOGIC DESCRIPTION	COMMENTS, INTERPRETATION
210-220		Same	
225-230		Same	
230-240		Same	
240-250		Same	
250-260		Same	c. 260 ft - penetration slows worn bit? no suspect boulder.
260-270		percent recovery silt-clay decreases, 98% is sand-gravel, most angular, to occas. rounded. Max dim. 2cm.	
270-280		same	
280-290		same	
290-300		same	
	300' TD		