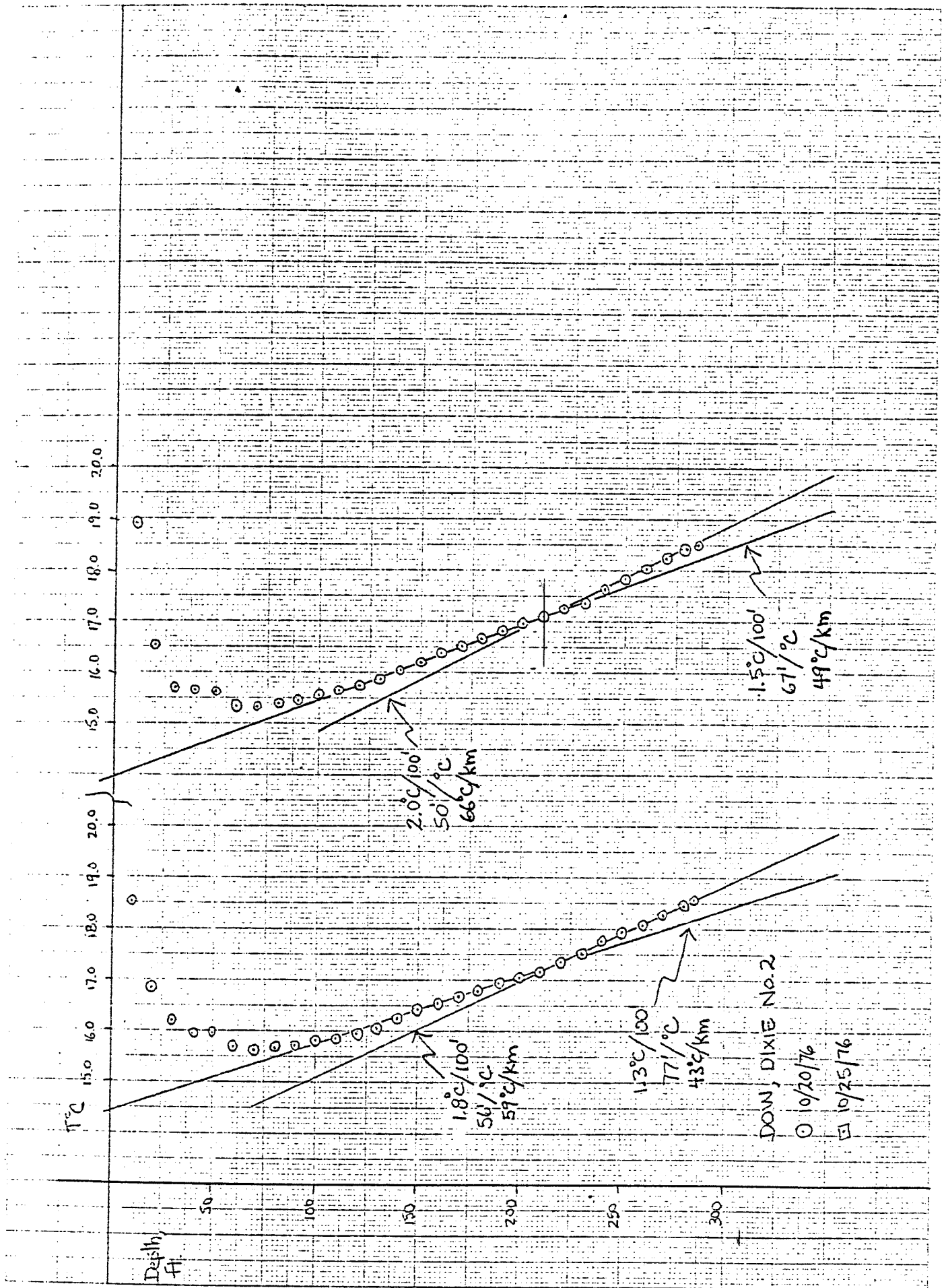


DOW DIXIE NO. 2 = 903-22



DOW, DIXIE No. 2

TEMPERATURE LOG

c. Klein

Loc:

Date: 10/25/76

Time: 1430 hrs

Depth      T°C, down

10	18.91
20	16.54
30	15.70
40	15.56
50	15.52
60	15.34
70	15.31
80	15.39
90	15.44
100	15.56
110	15.64
120	15.75
130	15.88
140	16.05
150	16.20
160	16.38
170	16.51
180	16.66
190	16.81
200	16.94
210	17.10
220	17.27
230	17.46
240	17.63
250	17.82
260	18.02
270	18.22
280	18.40
285	18.50

34

73

64

62°/km

85

1.300

← bottom

Note: This survey carried out after 7 day rather than 9 day post drilling interval.

Opportunity afforded to break in drilling activities.

(19.3)

2.9

(22)

73, 62

2.5 @ 4.0

DOW, DIXIE No.2

TEMPERATURE LOG

C. Klein

Loc: Barri of trail, NE  $\frac{1}{4}$  Sec. 30, T23N, R35E.

Date: 10/20/76

Time:

Depth.      T°C, down

10	18.53
20	16.83
30	16.20
40	15.95
50	15.95
60	15.70
70	15.62
80	15.66
90	15.73
100	15.82
110	15.86
120	15.96
130	16.09
140	16.26
150	16.41
160	16.53
170	16.69
180	16.78
190	16.94
200	17.06
210	17.18
220	17.35
230	17.51
240	17.74
250	17.91
260	18.08
270	18.28
280	18.44
285	18.53 ← bottom

Temp. gradient:

$$210-285' : (16.75-15.13)^\circ/100' = 1.82^\circ/100'$$
$$55.6'/^\circ\text{C}$$

Hole No. 2

Operation Summary

by: C. Klein

Loc: Bend of trail, NE  $\frac{1}{4}$  Sec. 30 T23 N R35 E

Drilling Log:

10/5/76

1015 Rig lvs. Reno. Driller: Randy Cardell, Asst: Kenny Howard

1515 Arr. site

1645 Spud in, drilling w/air

1700 Shut down

10/6/76

0700 water trip

0900 Drilling w/air, foam - poor return (cns cuttings, gravel)

0945 Set-up to drill w/mud

1330 Redrilling top 20 ft. - caving, slough

1330-1400 Lunch Water trip

1600 Have reached max. 35 ft.; continued slough, zones of fluid loss - gravel w/ occas boulders. Cottonseed hulls added 1535. Water trip.

1745 Repeated caving - drill to c. 25, w/draw, hole open to c. 14 ft. Fluid loss (v. thick mud, cottonseed) cont.

By agreement w/ Gerald \_\_\_\_\_ (driller foreman - left site c. 1530 hrs) this hole to be temp abandoned.

Will return w/ casing, welder? Moving this site only sev. 100 ft seems unlikely to find better conditions, as still would be on alluv. fan.

1800 Rig lowered

1900 Shut down

10/14/76

morning - repairs to rig transmission, brakes at site No. 6

early afternoon - re-inhibit site, drill spot relocated

c. 100 ft. NW of abortive hole 10/5-10/6. Spud-in, drilling w/mud

1420 - Caving of boulders in hole necessitates repeated re-drilling of upper 20 ft.

Hole No 2 - cont.

1600 At 40 ft. slow drilling due to repeated swing.  
1800 At 70 ft. Shutdown.

10/15/76

0730 Start-up

- c. 80 ft - driller reports ground is mostly clay, gray color.

0910 At 100 ft, clay continues

1010 At 145 ft, clay continues, gravel bed between 135-140?

1130 At 175 ft, shutdown for water trip.

1145 Resume drilling

1300 At 205 ft. Trip out for new bit

c. 1430 Shutdown

10/18/76

Late morning - arrive, trip down.

1320 - Reach TD 300 ft. - drill cellar to 305

1500 - 290 ft PVC casing down. Great resistance to last 40 ft of insertion, decide to stop at 290 rather than risk damage to pipe (wt. of Kelley & pulldown hydraulic used to force last 40 ft. down).

Geologic Setting: Head of alluvial fan at entrance to canyon, close to line of (buried) range bounding fault, 100 ft. N. of present day stream gully on fan.

Geologic Summary: (0-75'): fan conglomerate deposit, <sup>to occas subrounded</sup> angular, sand, pebbles to 3cm, brown silt and clay; purple, red, tan, brown, green volcanics, mostly tuff, minor gabbro. (75-300'): sandy clay, mostly <sup>light</sup> gray, but purplish brown in 110-120' and 130-140'

DOW  
 DIXIE No. 2

LITHOLOGICAL LOG

INTERVAL	SCHEMATIC OF STRATIGRAPHY	LITHOLOGICAL DESCRIPTION	COMMENTS, INTERPRETATION
10/14 10-20'		Fan deposits: angular sand, pebbles to 3cm, brown silt + clay (not recovered), some clasts subrounded. Purple, red, tan, brown, green volcanics, mostly tuff; minor gabbro. Tuff is silicious-intermed, vitric, vitric crystal.	Drilling mud brown
20-30'		Same	
30-40'		Same	
40-50'		Same	
50-60'		Same	
60-70'		Same	
10/15 70-80'		Angular pebbles, sand as above, plus abundant clots clay, dark gray, light + dark gray brown, brown.	
80-90'		similar, but fewer pebble-sized clasts recovered	c. 90-ft - drilling mud notably gray.
90-100'		Same	

DOW  
DIXIE No. 2

LITHOLOGICAL LOG

Continuum Ex, Inc.

Site Director: T.C. Klein

Date: 10/15/76

INTERVAL	SCHEMATIC OF STRATIGRAPHY	LITHOLOGICAL DESCRIPTION	COMMENTS, INTERPRETATION
100-110'		Med grained angular sand, clots of lt. gray and purplish brown clay, sandy clay. Sudden absence of crs. sand + pebbles (compare 90-100) probably due to change in sampling technique, see comments.	Change in sampling technique: to 100' sampled cuttings by scooping from portable sump w/ shovel at 10' intervals, technique used also at holes 3, 6 & 8. Feel that technique tends to mix recent cuttings/returns w/ material from higher up. Here & below sieve suspended at hole outlet to catch cuttings directly as come up. Sieve in place for only 2-3' of drilling prior to completion of interval recorded so, e.g. sample 100-110 comprises cuttings returned to surface while drilling c. 107-110.
110-120'		Same, purplish brown clay dominates, sandy	
120-130'		Same, gray clay dominates, sandy	
130-140'		Same, purplish brown clay dominates, sandy	
140-150'		Same, gray clay dominates, sandy	
150-160'		Same	
160-170'		Same	
170-190'		Same	
190-200'		Same	



DOW  
DIXIE No. 2

LITHOLOGIC LOG

Geophysical Ex, Inc.  
Site Scientist: T. Klein  
Date 10/18/76

INTERVAL	SCHEMATIC OF STRATIGRAPHY	LITHOLOGIC DESCRIPTION	COMMENTS, INTERPRETATION
200-210		same	<p>Note: driller collected samples 200-210 to 280-290, washed off most clay from sand. C.K. collected 280-300.</p>
210-220		same	
220-230		same	
230-240		same	
240-250		same	
250-260		same	
260-270		same	
270-280		same	
280-290		same	
290-300		same	
300 TD			