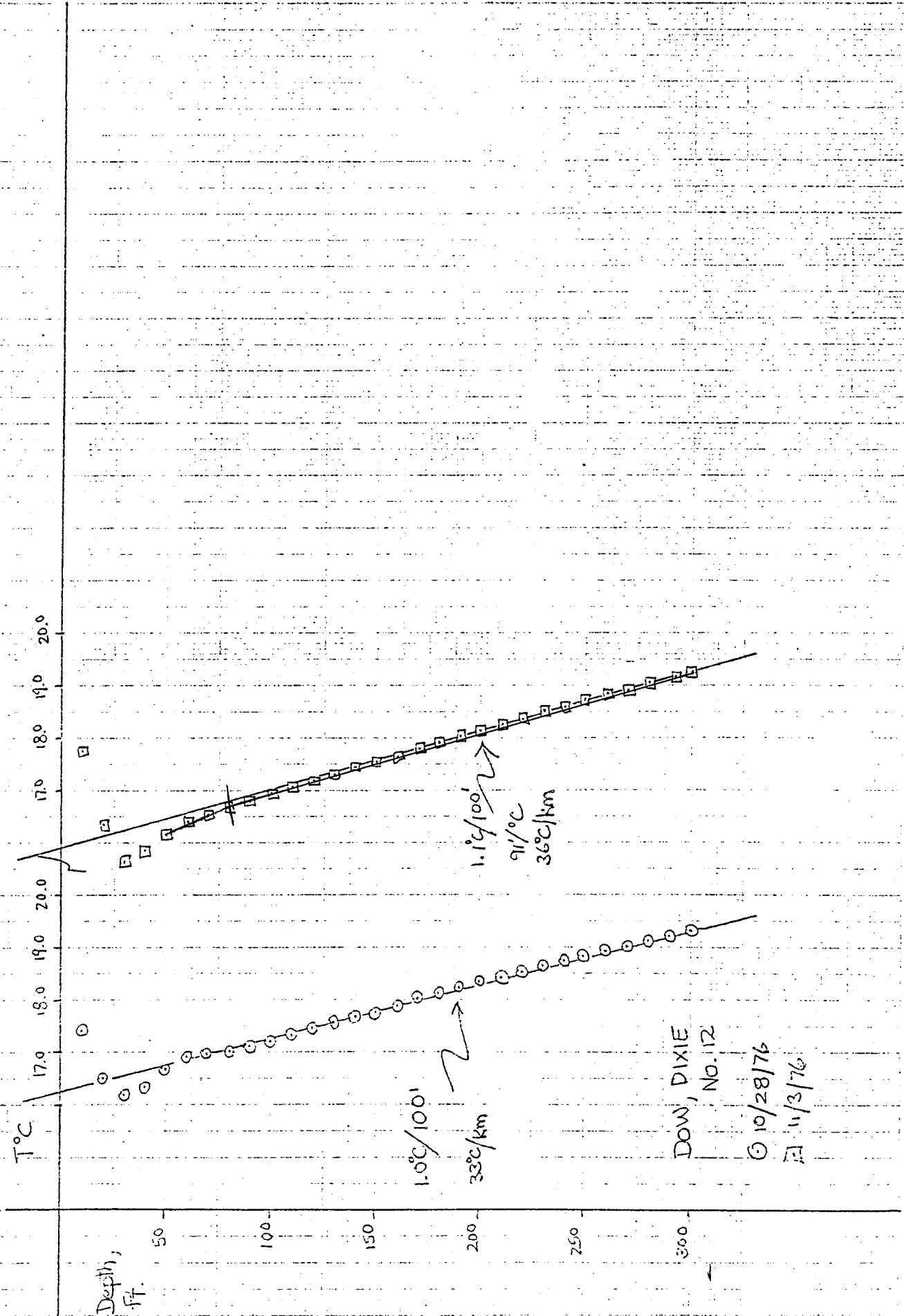


DOW DIXIE NO. 12 = 903 - 29



DOW, DIXIE
No. 112

○ 10/28/76

□ 11/3/76

DOW, DIXIE No. 12

TEMPERATURE LOG

c. Klein

Loc: Bend in trail, SW 1/4, Sec. 2, T23N, R35E

Date: 11/3/76

Time: 1450 hrs.

Depth T°C, down

10	17.75
20	16.34
30	15.65
40	15.87
50	16.17
60	16.40
70	16.54
80	16.67
90	16.80
100	16.93
110	17.07
120	17.19
130	17.32
140	17.43
150	17.55
160	17.63
170	17.80
180	17.91
190	18.03
200	18.15
210	18.27
220	18.37
230	18.52
240	18.60
250	18.72
260	18.84
270	18.92
280	19.06
290	19.18
300	19.25

24

380
K

92

(19.6)
4.74

(29)

38
150 4.0

Dow, DIXIE No. 12

TEMPERATURE LOG

M. Gardner,
transcribed by
C. Klein

Loc: Bend in trail, SW $\frac{1}{4}$, Sec. 2, T23N, R35E

Date: 10/28/76

Time:

<u>Depth</u>	<u>T°C, down</u>
10	17.4
20	16.50
30	16.2
40	16.34
50	16.66
60	16.91
70	16.96
80	17.02
90	17.12
100	17.2
110	17.32
120	17.47
130	17.56
140	17.69
150	17.76
160	17.83
170	18.03
180	18.11
190	18.22
200	18.34
210	18.42
220	18.52
230	18.64
240	18.74
250	18.82
260	18.92
270	19.02
280	19.11
290	19.22
300	19.32 TD

Hole No. 12
Operation Summary,

C. Klein
page 2

10/25/76 (cont.)

1115 At 20 ft. Kelly cable, caught by long bolt in bushing, breaks.

Trip out. Rods bind. Hole crooked. Boulder at 3 ft drags on collar. Hole will have to be relocated.

1215 Shutdown. R. Cardell to phone for cable. L. Millard remains to work on rig repair.

1643 New cable arrives. Installation begins c. 2100 hrs, complete.

10/26/76

(both crews)

0730 Drillers arrive, portable sump removed from hole, boulders removed from upper few feet of hole. Sump replaced.

0935 Drilling at 70 ft. R. Cardell

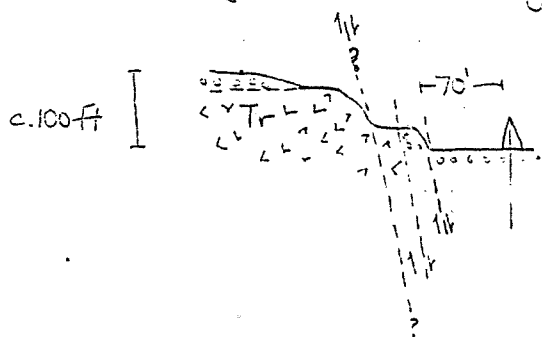
1230 At 190 ft. Pause to thin mud.

1240 Drilling

1715 Reach TD, 300 ft. Drill cellar.

1830 300 ft. PVC pipe in place. Remove to site 10A.

Geologic Setting: Seventy feet from base of fault scarp in fan deposits which overlie Tertiary reddish brown rhyolite. (see sketch x-section (schematic & simplified))



Geologic Summary: Angular pebbles ^{and sand} fan debris - with a matrix of brown silt and clay to c. 145 ft and red brown silt and clay c. 145-190 ft. From c. 190-300 ft. recovery consisted of angular sand plus occasional clots of gray to pinkish gray sandy silt-clay; penetration of this zone was slow, suggesting slight to moderate consolidation or lithification. Presence of clasts or cuttings coarser than

Hole No. 12

by: C. Klein

Operation Summary

Loc: Bend in trail, SW $\frac{1}{4}$, Sec. 2, T33N, R35E

Drilling log:

Driller: R. Cardell
L. Millard

10/22/76

- 1245 Arrive, set-up
- 1355 Start drilling
- 1400 Engine breakdown at 9 ft.
- 1430 Driller L. Millard comes on shift, R. Cardell off.
- 1645 Engine repaired. Start drilling
- 1700 At 15 ft., stop for water trip.
- 1800 Resume drilling
- 1945 At 25 ft., repeated caving, redrilling. Shutdown

10/23/76

- 0715 Arrive, motor repairs. Driller L. Millard
- 1130 Start drilling through slough at 15 ft.
- 1410 Repeated caving has hindered drilling. Finally succeeds in placing 20 ft. collar below Kelley rod.
- 1535 Caving at 35-40 ft. Shutdown for water trip.
- 1545 Resume activities. Unsuccessful.
- 1615 Begin abandonment of site. Move 50 ft. to north. Set-up.
- 1810 Spud-in.
- 1900 Drilling loose boulder at 3 ft. Shutdown.

10/24/76

- 0715 Arrive. Resume drilling. Driller L. Millard
- 0930 Bolts holding Kelley bushing to pulldown broken + stripped. Shutdown. Driller leaves valley in search of replacements

10/25/76

- 0900 Driller R. Cardell arrives. Begin drilling. wedges past boulder at 3 ft.
- 0915 At 20 ft.
- 1030 L. Millard arrives

DOW
DIXIE V. No. 12

LITHOLOGICAL LOG

Site Geologist C. Klein
Date 10/22/76

INTERVAL	SCHEMATIC OF STRATIGRAPHY	LITHOLOGIC DESCRIPTION	COMMENTS, INTERPRETATION
0-20'		Fine debris: angular sand and pebbles gabbro, mafic volcanics. Pebbles to 2 cm.	Clastic debris from Jurassic complex. Note Tertiary volcanics absent. Drilling indicates occas. cobbles, boulders.
20-30'		same lithologies. Coarsest returns are fine pebbles. (7mm)	
30-40'		coarsest returns are coarse sand, occas. fragments silicic volcanics, clots brown sandy silt-clay.	Probable sandy-pebbly fanglomerate. Size of coarsest clasts not known, may be only sand, but sorting would seem unlikely.
40-50'		same	
50-60'		same	
60-70'		same	
70-85'		same	
85-100'		same	
100-115'		same	

LITHOLOGICAL LOG

Geothram Ex, Inc.
 Site Geologist C. Klein
 Date 10/26/76

INTERVAL	SCHEMATIC OF STRATIGRAPHY	LITHOLOGICAL DESCRIPTION	COMMENTS, INTERPRETATION
115-130		same	
130-145		same	c 145 mud changes brown to red.
145-160		sharp? Sand, fine coarse, most medium, lithologies as above, plus clots full brownish red Sandy silt clay.	Probable poorly consolidated sand-silt-clay deposits. Cannot discount presence of larger clasts, and since sorting of clasts to purley sand + finer may be unlikely in this environment, presence of pebbles seems reasonable speculation.
160-175		same	
175-190		same	190' mud changed. Does not thicken notably during subsequent drilling.
190-205		gradational? same, but recovered clots red sandy silt-clay fewer. Most of sample is sand. Note also occasional clots pinkish gray sandy silt-clay.	c. 190: suspect gradation to fairly consolidated sandstone or fine conglomerate with thin minor gray silt-clay interbeds
205-220		sand, occasional clots pinkish gray sandy silt-clay.	215: note penetration rate has slowed considerably (exactly when, on gradation, not certain)
220-235		same	220-235/30 min
235-250		same. Clots silt-clay rare	235-250p/35 min.

DOW
DIXIE No. 12

LITHOLOGICAL LOG

Site Scientist E. Klein
Date 10/26/76

INTERVAL	SCHEMATIC OF STRATIGRAPHY	LITHOLOGICAL DESCRIPTION	COMMENTS, INTERPRETATION
250-265'		Clots gray clay-silt, sandy, common. Occas. angular, small pebbles.	
265-280'		No pebbles. Otherwise same.	
280-295'		Same, occas. pebbles, v. angular.	
295-300'			
TD 300 ft			