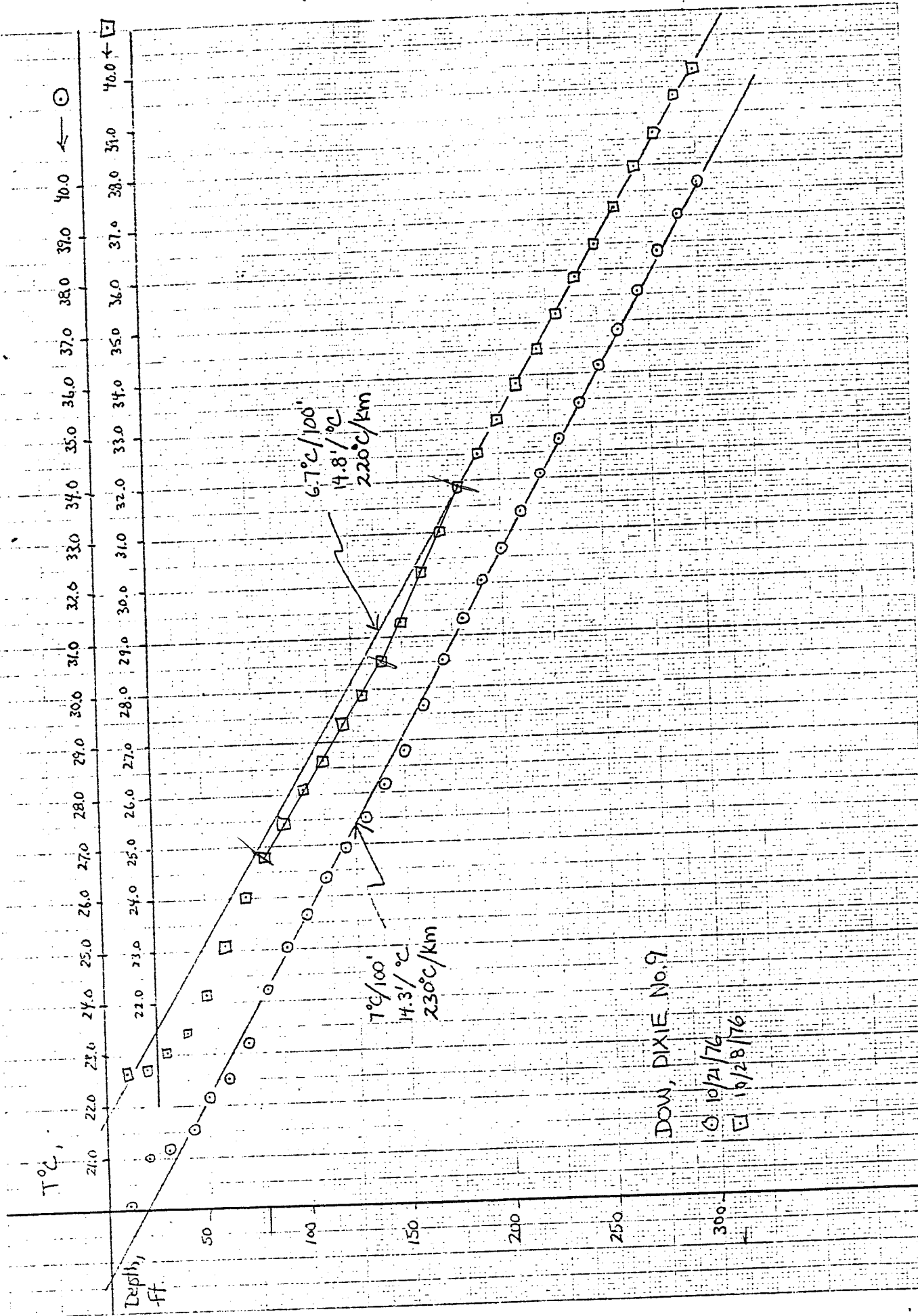


DOW DIXIE NO. 9 = 903-26



DOW, DIXIE No. 9

10/21/76

10/28/76

12-188

# TEMPERATURE LOG

GeothermEx

Project: \_\_\_\_\_  
 Hole No.: DOW-DIXIE No.9  
 Loc.: \_\_\_\_\_

Date: 12/2/76  
 Time: 1000 hrs  
 by: CLK

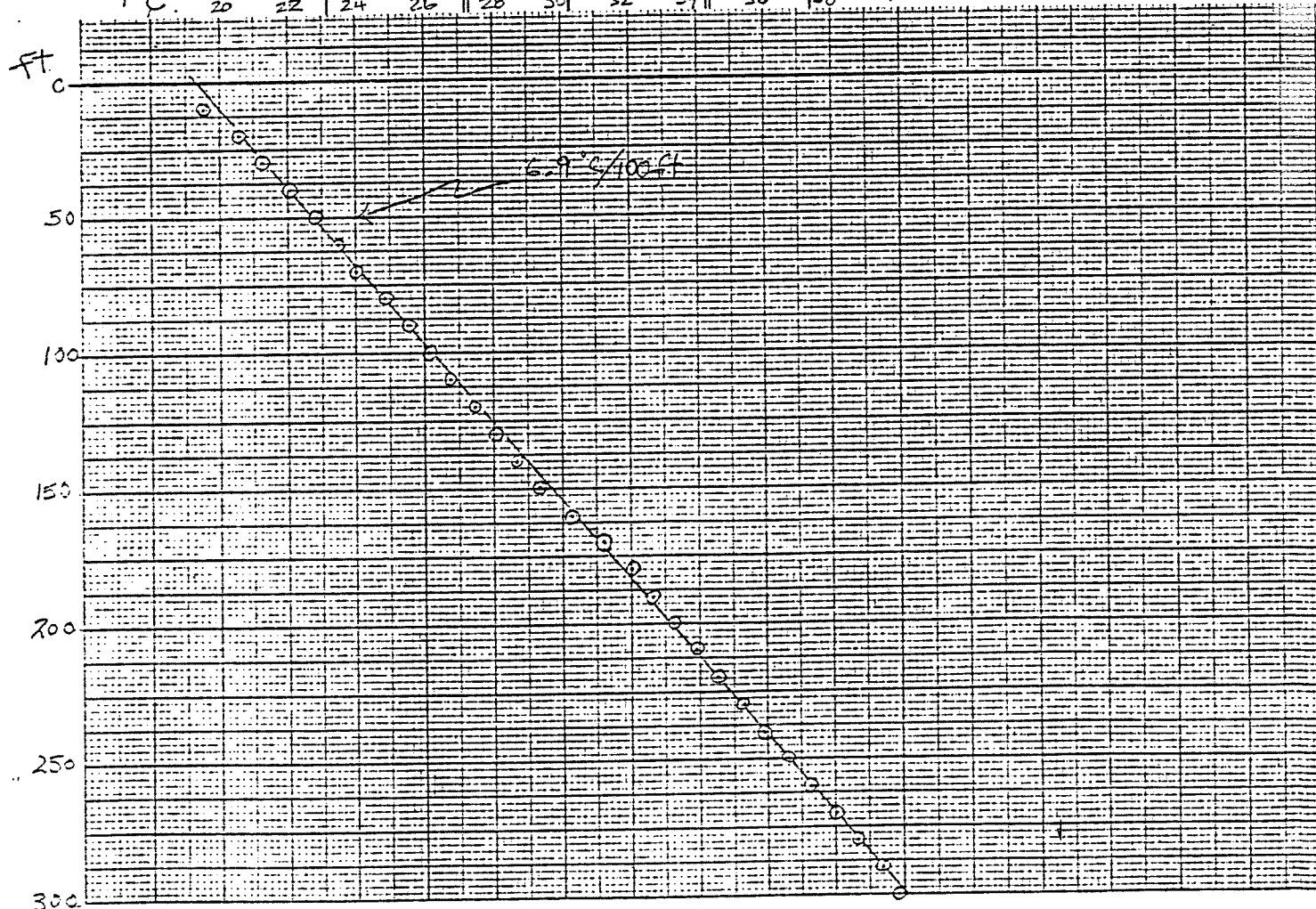
Depth	T°C.(down)	Depth	T°C.	Depth	T°C.
10	19.53	230	35.32		
20	20.58	240	35.98		
30	21.27	250	36.62		
40	22.12	260	37.30		
50	22.88	270	38.07		
60	23.49	280	38.72		
70	24.03	290	39.40		
80	24.68	300	39.89		
90	25.52				
100	26.16				
110	26.77				
120	27.45				
130	28.06				
140	28.67				
150	29.35				
160	30.26				
170	31.20				
180	32.02				
190	32.63				
200	33.25				
210	33.97				
220	34.58				

Slope = 6.9°C/100'

$$\frac{(4.6)}{0.85} = (26) \frac{210, 279, 213}{7.5 @ 3.5}$$

24  
 210°C/km  
 43  
 279°C/km  
 55  
 213°C/km

T°C. 20 22 24 26 28 30 32 34 36 38 40



DOW, DIXIE No. 9

TEMPERATURE LOG

M. Gardner,  
transcribed by  
E. Klein

LOC:

Date: 10/28/76

Time: 1740 hrs.

Depth      T°C down

10	20.65
20	20.72
30	21.04
40	21.43
50	22.14
60	23.1
70	24.02
80	24.79
90	25.44
100	26.1
110	26.66
120	27.35
130	27.92
140	28.55
150	29.3
160	30.24
170	31.02
180	31.91
190	32.5
200	33.16
210	33.84
220	34.5
230	35.18
240	35.89
250	36.50
260	37.2
270	37.98
280	38.62
290	39.35
300	39.85 TD

Gradient:  $26.5 - 19.8 / 100' = 6.7^{\circ}\text{C} / 100^{\circ}\text{C}$

TEMPERATURE LOG

C. Klein

Daw, DIXIE No. 9

loc:

Date: 10/21/76

Time: 1730

<u>Depth</u>	<u>T°C, down</u>
0	14.95
10	20.50
20	21.01
30	21.17
40	21.54
50	22.18
60	22.51
70	23.22
80	24.22
90	25.03
100	25.66
110	26.36
120	26.94
130	27.51
140	28.15
150	28.81
160	29.69
170	30.53
180	31.32
190	32.05
200	32.68
210	33.37
220	34.08
230	34.77
240	35.44
250	36.15
260	36.85
270	37.58
280	38.31
290	39.02
300	39.66

Finish 1830

$$\text{Gradient: } \frac{39.66 - 25.66}{300' - 100'} = 7^\circ\text{C}/100' \equiv 14.3'/^\circ\text{C}$$

## Hole No. 9

### Operation Summary

by C. Klein

Loc: Intersection near center, Sec. 14, T23N, R35E

### Drilling Log:

10/18/76 : 1630 move onto site from Hole No. 2, begin set-up.  
1730 Shutdown.  
10/19/76 : 0800 Arrive, water trip, complete set-up.  
0915 Spud-in.  
1000 c. 40-45 ft. fluid loss to formation  
50 ft - enter clay.  
1130 At 155 ft., smooth drilling.  
1310 Reach TD 300 ft.  
1400 1 1/4" PVC pipe in place

Geologic Setting: Near base of fan about 1/4 mile from mountain front. Narrow width of fan relates to lack of major gully in mountains at this location. Dixie Constock mine is immediately NW of site, 1/4 mile away, at base of range. Ten to fifteen-foot high east-facing fault scarp cuts alluvium c. 500 ft (not paced) to west.

Geologic Summary: Alternating distal alluvial fan and basin clay deposits.  
0-45 ft: fan deposit angular sand and pebbles, silt and clay, pebbles to 2.5 cm diameter, mafic volcanics, gabbro; 40-60 ft: medium grayish green clay, with medium to coarse sand in c. 50-60 ft; 60-70 ft: light brown clay-silt with minor sand; 70-150 ft: fan deposit of coarse, angular sand, light brown clay-silt, possible thin interbeds of medium gray clay; 150-180 ft: medium gray clay, lesser fan debris as in 70-150 ft.; 180-300 ft.: fan deposits as in 70-150 ft.

DOW  
DIXIE No. 9

LITHOLOGICAL LOG

Site Scientist: Klein  
Date 10/19/76

INTERVAL	SCHEMATIC OF STRATIGRAPHY	LITHOLOGICAL DESCRIPTION	COMMENTS, INTERPRETATION
0-10'		Fan deposit; angular sand and pebbles, med. brown silt and clay; red, green, gray, brown volcanics, tsars, gabbro. Pebbles to 2.5 cm dia. Volcanics are mafic, gabbro often altered.	Detritus from Jurassic volcanic complex and underlying gabbro
10-20'		same	
20-30'		same	
30-40'		Coarse sand, fine pebbles (max. 7mm dia.), medium to pale H. brown sandy clay-silt in clots	
40-50'		Medium grayish green clay.	
50-60'		Med. grayish green clay, light greenish gray clay, med. to coarse subangular-subrounded sand, mostly of an aphanitic dark greenish gray rock which occas. shows traces of mineralization	Gold? <sup>dark</sup> in greenstone formed from gabbro or basalt. Also traces of a red phase (cinnabar?; hematite?)
60-70'		H. brown clay-silt; sandy, w/ grains as immed. above but less abundant. Occas. clots gray clay (slough?)	
70-80'		to fine Coarse, angular sand gabbro, mafic volcanics, H. brown clay-silt.	Drilling mud thickens, returns of sand relatively small. Pebbles, cobbles could be present, ground to finer cuttings.
80-90'		same	

DOW  
DIXIE No. 9

LITHOLOGICAL LOG

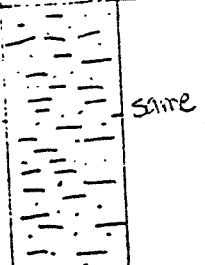

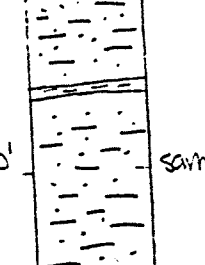
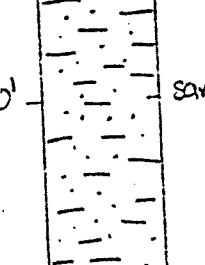
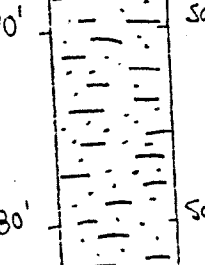
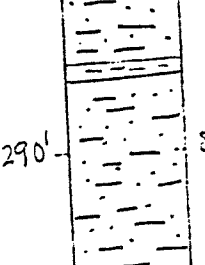
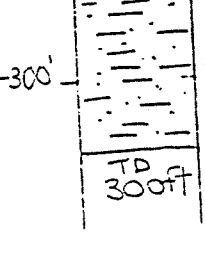
Site Scientist C. Klein  
Date 10/19/76

INTERVAL	SCHEMATIC OF STRATIGRAPHY	LITHOLOGICAL DESCRIPTION	COMMENT, INTERPRETATION
90-110'		same; occas. clots med. gray clay	Med. gray clay prob. represents interbeds or lenses w/in sandy silt-clay fan deposits in alternating fan-basin environment.
110-120'		same, gray clay rare	
120-130'		same	
140-150'		same	
150-170'		Med. gray clay; lesser crs. sand, brown sandy silt-clay. to fine sand, brown sandy silt-clay. Clay-rich zone 150-180'.	
170-180'		same, gray clay sometimes greenish	
180-190'		similar, less gray clay.	
190-200'		same	
200-210'		Crs. sand, brown sandy silt-clay; rare clots gray clay.	Sand grains to 7mm.



Site Scientist C. Klein  
 Date 10/19/76

DOW  
 DIXIE No. 9  
 LITHOLOGICAL LOG

INTERVAL	SCHEMATIC OF STRATIGRAPHY	LITHOLOGICAL DESCRIPTION	COMMENTS, INTERPRETATION
210-220'		same, coarsest sand c. 4 mm.	
220-230'		same, coarsest sand c. 3 mm	
230-240'		same	
240-250'		same	
250-260'		same	
260-270'		same	
270-280'		same	
280-290'		same	
290-300'		same	
	TD 300ft		