

STATE OF OREGON  
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES  
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Portland, Oregon 97201

OPEN-FILE REPORT 0-78-4  
GEOTHERMAL GRADIENT DATA

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1978

## INTRODUCTION

As part of its continuing assessment of Oregon's geothermal energy resources, the Department of Geology and Mineral Industries has a program of measuring geothermal gradients in water wells, mineral exploration holes, and oil wells drilled by others. This report contains geothermal gradient data, in tabular and graphic form, collected between December 1976 and December 1977.

Previous reports in this series contain similar data collected between 1972 and 1976 (Bowen, 1975; Hull, 1975; Hull and others, 1976; and Hull and others, 1977).

In the tables, temperatures and depths are given in both metric and English units, and gradients are listed in units of degrees Celsius per kilometer of depth and degrees Fahrenheit per 100 ft of depth. Graphs for each well are plotted in degrees Celsius versus depth in meters.

The quality of these data is extremely variable, and this report includes wells for which no useful linear gradients were obtained. The measurements were made primarily in the Deschutes-Umatilla Plateau (Columbia Plateau), Cascade Range, and northern Willamette Valley physiographic provinces.

Individual well locations are shown on Plate 1; well numbers on the tables and graphs represent location by township, range, and section. The quarter section and quarter-quarter section location of each well are represented by designations of A, B, C, and D for the northeast, northwest, southwest, and southeast quarter or quarter-quarter section respectively. The first letter designates the quarter section, and the second letter represents the quarter-quarter section; e.g., hole 6N/35E-31BD is located in the SE 1/4 of the NW 1/4 of sec. 31, T. 6 N., R. 35 E.

Included in this report are data, not previously released, from seven heat-flow holes in the Cascade Range and Blue Mountains, drilled by the Department in the fall of 1976, as well as temperature data from deep oil wells in the Willamette Valley, drilled over a period of several years. Although the bottom hole temperature data for the oil wells may not strictly represent equilibrium values, they represent a useful check on regional gradient patterns obtained by measurements in shallow water wells and mineral exploration holes.

Funds for some of the work involved in the data collection were provided by U.S. Department of Energy Contract EG-77-C-06-1040.

### ACKNOWLEDGMENTS

The access to various wells was made possible through the courtesies of numerous individual landowners and mining companies. Information contained in this report represents a continuation of a project initiated by Richard G. Bowen. David Klanderman was involved in collection of data from many of the wells.

### REFERENCES

- Bowen, R.G., 1975, Geothermal gradient data: Oregon Department of Geology and Mineral Industries Open-File Report 0-75-3, 114 p. (contains data collected between 1970 and 1974).
- Hull, D.A., 1975, Geothermal gradient data, Vale area, Malheur County, Oregon: Oregon Department of Geology and Mineral Industries Open-File Report 0-75-4, 18 p. (contains data collected between October 1974 and June 1975).
- Hull, D.A., Bowen, R.G., Blackwell, D.D., and Peterson, N.V., 1976, Geothermal gradient data, Brothers fault zone, Oregon: Oregon Department of Geology and Mineral Industries Open-File Report 0-76-2, 25 p. (contains data from holes drilled by the Department in the summer of 1975).
- Hull, D.A., Blackwell, D.D., Bowen, R.G., Peterson, N.V., and Black, G.L., 1977, Geothermal gradient data: Oregon Department of Geology and Mineral Industries Open-File Report 0-77-2, 134 p. (contains data collected by the Department between September 1975 and December 1976).

LOCATION: PENDLETON AMS, OREGON  
 6N/3SE-31BD  
 HOLE NUMBER: KEYS  
 DATE MEASURED: 3/ 1/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOOTHERMAL GRADIENT DEG C/KM	GEOOTHERMAL GRADIENT DEG F/100 FT
10.0	32.8	11.370	52.47	0.0	0.0
15.0	49.2	12.050	53.69	136.0	7.5
20.0	65.5	11.980	53.96	-14.0	0.0
25.0	82.0	12.080	53.74	20.0	1.1
30.0	98.4	12.140	53.85	12.0	0.7
35.0	114.8	12.210	53.98	14.0	0.8
40.0	131.2	12.280	54.12	16.0	0.9
45.0	147.6	12.380	54.28	18.0	1.0
50.0	164.0	12.480	54.46	20.0	1.1
55.0	180.4	12.600	54.68	24.0	1.3
60.0	196.8	12.720	54.90	24.0	1.3
65.0	213.2	12.800	55.04	16.0	0.9
70.0	229.6	12.880	55.26	18.0	1.0
75.0	246.0	12.920	55.31	6.0	0.0
80.0	262.4	12.950	55.44	6.0	0.0
85.0	278.8	13.020	55.67	14.0	1.4
90.0	295.2	13.150	55.89	26.0	1.3
95.0	311.6	13.270	55.99	24.0	1.3
100.0	328.0	13.450	56.21	36.0	1.4
105.0	344.4	13.640	56.55	38.0	1.4
110.0	360.8	13.860	56.95	44.0	2.0
115.0	377.2	14.040	57.27	36.0	1.4
120.0	393.6	14.170	57.51	26.0	1.4
125.0	410.0	14.330	57.79	32.0	1.0
130.0	426.4	14.470	58.05	28.0	1.0
135.0	442.8	14.610	58.30	28.0	1.0
140.0	459.2	14.750	58.55	28.0	1.0
145.0	475.6	14.920	58.86	34.0	1.0
150.0	492.0	15.080	59.14	32.0	1.0
155.0	508.4	15.250	59.45	34.0	1.0
160.0	524.8	15.410	59.74	32.0	1.0
165.0	541.2	15.590	60.06	36.0	1.0
170.0	557.6	15.750	60.35	32.0	1.0
175.0	574.0	15.900	60.62	30.0	1.0
180.0	590.4	16.110	61.00	42.0	1.4
185.0	606.8	16.410	61.54	60.0	1.0
190.0	623.2	16.740	62.13	65.0	1.0
195.0	639.6	17.230	63.01	98.0	1.4
200.0	656.0	17.310	63.16	16.0	0.0

LOCATION: PENDLETON AMS, OREGON

PAGE 2

64/35E-31BD

HOLE NUMBER: KEYS

DATE MEASURED: 3/ 1/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
205.0	672.4	17.350	63.23	8.0	0.4
210.0	689.8	17.360	63.25	8.0	0.1
215.0	705.2	17.370	63.27	8.0	0.1
220.0	721.6	17.390	63.30	4.0	0.3
225.0	738.0	17.580	63.82	58.0	0.3
230.0	754.4	18.150	64.67	94.0	0.3
235.0	770.8	18.360	65.05	42.0	0.3
240.0	787.2	18.570	65.43	42.0	0.3
245.0	803.6	18.720	65.70	30.0	0.3
250.0	820.0	18.930	66.07	42.0	0.3
255.0	836.4	19.120	66.42	38.0	0.3
260.0	852.8	19.260	66.67	28.0	1.1
265.0	869.2	19.400	66.92	28.0	1.1
270.0	885.6	19.540	67.17	28.0	1.1
275.0	902.0	19.660	67.39	24.0	1.1
280.0	918.4	19.780	67.60	24.0	1.1
285.0	934.8	19.880	67.78	20.0	1.1
290.0	951.2	19.940	67.89	12.0	0.7

LOCATION: PENDLETON AMS, OREGON  
 6N/3SE-35DD  
 HOLE NUMBER: ELIZABET  
 DATE MEASURED: 3/ 1/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
12.5	41.0	9.700	49.46	0.0	0.0
15.0	49.2	9.450	49.01	-100.0	-5.5
17.5	57.4	9.440	48.99	-4.0	-0.2
20.0	65.6	9.460	49.03	8.0	0.4
22.5	73.8	9.470	49.05	4.0	0.2
25.0	82.0	9.490	49.08	8.0	0.4
27.5	90.2	9.570	49.23	32.0	1.8
30.0	98.4	9.630	49.33	24.0	1.3

LOCATION: PENDLETON AMS, OREGON  
 5N/27E-21AB  
 HOLE NUMBER: MORROW  
 DATE MEASURED: 9/30/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.8	13.210	56.78	0.0	0.0
12.5	41.0	13.540	56.37	132.0	7.2
15.0	49.2	13.900	57.02	144.0	7.9
17.5	57.4	14.270	57.69	148.0	8.1
20.0	65.6	14.650	58.37	152.0	8.3
22.5	73.8	15.120	59.22	188.0	10.3
25.0	82.0	15.630	60.13	204.0	11.2
27.5	90.2	16.180	61.12	220.0	12.1
30.0	98.4	16.570	62.01	196.0	10.8
32.5	106.6	16.570	62.01	0.0	0.0
35.0	114.8	16.710	62.08	16.0	0.9
37.5	123.0	16.760	62.17	20.0	1.1
40.0	131.2	16.810	62.26	20.0	1.1
42.5	139.4	16.850	62.33	16.0	0.9
45.0	147.6	16.900	62.42	20.0	1.1
50.0	164.0	16.960	62.53	12.0	0.7
55.0	180.4	17.030	62.65	14.0	0.8
60.0	196.8	17.070	62.73	8.0	0.4
65.0	213.2	17.110	62.80	8.0	0.4
70.0	229.6	17.120	62.82	2.0	0.1

LOCATION: PENDLETON AMS, OREGON  
 SN/28E-22BC  
 HOLE NUMBER: RIVERBEN  
 DATE MEASURED: 2/ 3/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
15.0	49.2	15.130	59.23	0.0	0.0
20.0	65.6	15.190	59.34	12.0	0.7
25.0	82.0	15.360	59.65	34.0	1.9
30.0	98.4	15.450	59.81	18.0	1.0
35.0	114.8	15.540	59.97	18.0	1.0
40.0	131.2	15.620	60.12	16.0	0.9
45.0	147.6	15.900	60.62	56.0	3.1
50.0	164.0	15.910	60.64	2.0	0.1
55.0	180.4	15.910	60.64	0.0	0.0
60.0	196.8	15.920	60.66	2.0	0.1
65.0	213.2	15.920	60.66	0.0	0.0
70.0	229.6	15.920	60.66	0.0	0.0
75.0	246.0	15.920	60.66	0.0	0.0
80.0	262.4	15.920	60.66	0.0	0.0

LOCATION: PENDLETON AMS, OREGON  
 4N/25E-10AC  
 HOLE NUMBER: BOARDMAN  
 DATE MEASURED: 10/ 4/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
20.0	65.6	17.680	63.82	0.0	0.0
25.0	82.0	17.080	62.64	-132.0	-7.0
30.0	98.4	17.160	62.89	28.0	1.55
35.0	114.8	17.270	63.09	22.0	1.22
40.0	131.2	17.430	63.37	32.0	1.8
45.0	147.6	17.550	63.59	24.0	1.39
50.0	164.0	17.590	63.66	0.0	0.4
55.0	180.4	17.610	63.70	4.0	0.22
60.0	196.8	17.640	63.76	6.0	0.3
65.0	213.2	17.630	63.73	12.0	-0.1
70.0	229.6	17.650	63.77	4.0	0.22
75.0	246.0	17.710	63.88	12.0	0.7
80.0	262.4	18.020	64.44	62.0	3.4
85.0	278.8	18.490	65.28	94.0	5.2
90.0	295.2	18.550	65.39	12.0	0.7
95.0	311.6	18.580	65.44	6.0	0.3
100.0	328.0	18.590	65.46	2.0	0.1
105.0	344.4	18.590	65.46	0.0	0.0
110.0	360.8	18.590	65.46	0.0	0.0
115.0	377.2	18.590	65.46	0.0	0.0
120.0	393.6	18.600	65.48	2.0	0.1
125.0	410.0	18.670	65.81	14.0	0.8
130.0	426.4	18.770	65.79	20.0	1.1
135.0	442.8	18.930	66.07	32.0	1.8
140.0	459.2	19.300	66.74	74.0	4.1
145.0	475.6	19.510	67.12	42.0	2.3
150.0	492.0	20.050	68.09	108.0	5.9
155.0	508.4	20.340	68.61	58.0	3.2

LOCATION: PENDLETON AMS, OREGON  
 4N/37E-26CD  
 HOLE NUMBER: TOLGATE  
 DATE MEASURED: 2/16/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOHERMAL GRADIENT DEG C/KM	GEOHERMAL GRADIENT DEG F/100 FT
40.0	131.2	4.670	40.41	0.0	0.0
50.0	164.0	4.630	40.33	-4.0	-0.2
60.0	196.8	4.610	40.30	-2.0	-0.1
70.0	229.6	4.630	40.33	2.0	0.1
75.0	246.0	4.630	40.33	0.0	0.0
80.0	262.4	4.630	40.33	0.0	0.0
85.0	278.8	4.630	40.33	0.0	0.0
90.0	295.2	4.630	40.33	0.0	0.0
95.0	311.6	4.640	40.35	2.0	0.1
100.0	328.0	4.670	40.41	6.0	0.3
105.0	344.4	4.730	40.51	12.0	0.7

LOCATION: VANCOUVER AMS, OREGON  
 3N 4W-36CA  
 HOLE NUMBER: KELLY  
 DATE MEASURED: 8/30/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOHERMAL GRADIENT DEG C/KM	GEOHERMAL GRADIENT DEG F/100 FT
10.0	32.8	9.640	49.35	0.0	0.0
15.0	49.2	9.590	49.26	-10.0	-0.5
20.0	65.6	9.540	49.17	-10.0	-0.5
25.0	82.0	9.500	49.10	-8.0	-0.4
30.0	98.4	9.460	49.03	-8.0	-0.4
35.0	114.8	9.430	48.97	-8.0	-0.3
40.0	131.2	9.400	48.92	-8.0	-0.3
45.0	147.6	9.390	48.90	-2.0	-0.1
50.0	164.0	9.380	48.88	-2.0	-0.1
55.0	180.4	9.390	48.90	2.0	0.1
60.0	196.8	9.470	49.05	16.0	0.9
65.0	213.2	9.470	49.05	0.0	0.0
70.0	229.6	9.510	49.12	8.0	0.4
75.0	246.0	9.570	49.23	12.0	0.7
80.0	262.4	9.640	49.35	14.0	0.8
85.0	278.8	9.710	49.48	14.0	0.8
90.0	295.2	9.800	49.64	18.0	1.0
95.0	311.6	9.880	49.78	16.0	0.9
100.0	328.0	9.970	49.95	18.0	1.0
105.0	344.4	10.090	50.16	24.0	1.3
110.0	360.8	10.220	50.40	26.0	1.4
115.0	377.2	10.350	50.63	26.0	1.4

LOCATION: PENDLETON AMS, OREGON  
 3N/12E-32CB  
 HOLE NUMBER: MEMALSEP  
 DATE MEASURED: 6/28/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEOOTHERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
10.0	32.8	12.150	53.87	0.0	0.0
20.0	65.6	12.240	54.03	0.0	0.0
30.0	98.4	12.790	55.02	55.0	3.0
35.0	114.8	13.050	55.49	52.0	2.9
37.5	123.0	13.210	55.78	64.0	3.6
40.0	131.2	13.330	55.99	48.0	2.6
42.5	139.4	13.490	56.28	64.0	3.5
45.0	147.6	13.590	56.46	40.0	2.3
47.5	155.8	13.740	56.73	60.0	3.3
50.0	164.0	13.830	56.89	36.0	2.0
52.5	172.2	14.010	57.20	72.0	4.0
55.0	180.4	14.180	57.50	68.0	3.7
57.5	188.6	14.320	57.79	56.0	3.1
60.0	196.8	14.430	57.97	44.0	2.4
62.5	205.0	14.580	58.24	60.0	3.3
65.0	213.2	14.660	58.39	32.0	1.8
67.5	221.4	14.860	58.75	80.0	4.4

LOCATION: THE DALLES AMS, OREGON  
 3N/10E-33CA  
 HOLE NUMBER: CARTER  
 DATE MEASURED: 7/27/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEOOTHERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
10.0	32.8	8.520	47.34	0.0	0.0
20.0	65.6	8.800	47.84	28.0	1.5
30.0	98.4	9.290	48.72	49.0	2.7
35.0	114.8	9.310	48.76	4.0	0.2
40.0	131.2	9.320	48.78	2.0	0.1
45.0	147.6	9.330	48.79	2.0	0.1
50.0	164.0	9.330	48.79	0.0	0.0
55.0	180.4	9.330	48.79	0.0	0.0
60.0	196.8	9.310	48.76	-4.0	0.2
65.0	213.2	9.320	48.78	2.0	0.1
70.0	229.6	9.340	48.81	4.0	0.2
75.0	246.0	9.360	48.85	4.0	0.2
80.0	262.4	9.360	48.85	0.0	0.0

LOCATION: PENDLETON AMS, OREGON  
 3N/30E- 6CBA  
 HOLE NUMBER: STAGE  
 DATE MEASURED: 12/12/76

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
25.0	82.0	16.770	62.19	0.0	0.0
30.0	98.4	16.840	62.31	14.0	0.0
35.0	114.8	16.960	62.53	24.0	1.33
40.0	131.2	17.130	62.83	34.0	1.00
45.0	147.6	17.330	63.19	40.0	0.80
50.0	164.0	17.510	63.53	36.0	0.60
55.0	180.4	17.750	63.95	48.0	0.40
60.0	196.8	18.040	64.47	58.0	0.34
65.0	213.2	18.430	65.17	78.0	0.27
70.0	229.6	18.850	65.93	84.0	0.24
75.0	246.0	19.280	66.70	88.0	0.17
80.0	262.4	19.840	67.71	112.0	0.17
85.0	278.8	20.450	68.81	122.0	0.17
90.0	295.2	21.090	69.96	128.0	0.14
95.0	311.6	21.950	71.51	172.0	0.14
100.0	328.0	22.460	72.43	102.0	0.14
105.0	344.4	22.520	72.54	12.0	0.14
110.0	360.8	22.590	72.86	14.0	0.14
115.0	377.2	22.630	72.73	8.0	0.14
120.0	393.6	22.660	72.79	8.0	0.14
125.0	410.0	22.720	72.90	12.0	0.14
130.0	426.4	22.740	72.93	4.0	0.14
135.0	442.8	22.780	73.00	8.0	0.14
140.0	459.2	22.800	73.04	4.0	0.14
145.0	475.6	22.850	73.13	10.0	0.14
150.0	492.0	22.860	73.15	2.0	0.14
155.0	508.4	22.890	73.20	6.0	0.14
160.0	524.8	22.930	73.27	8.0	0.14
165.0	541.2	22.970	73.35	8.0	0.14
170.0	557.6	22.990	73.38	4.0	0.14
175.0	574.0	23.020	73.44	6.0	0.14
180.0	590.4	23.040	73.47	4.0	0.14
185.0	606.8	23.060	73.51	4.0	0.14
190.0	623.2	23.070	73.53	2.0	0.14
195.0	639.6	23.070	73.53	0.0	0.14
200.0	656.0	23.100	73.58	6.0	0.3
205.0	672.4	23.200	73.76	20.0	1.1
210.0	688.8	23.210	73.78	2.0	0.1
215.0	705.2	23.220	73.80	2.0	0.1

LOCATION: PENDLETON AMS, OREGON  
 3N/30E - 6CBA  
 HOLE NUMBER: STAGE  
 DATE MEASURED: 12/12/76

PAGE 2

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
220.0	721.6	23.230	73.81	2.0	0.1
225.0	738.0	23.230	73.81	0.0	0.0
230.0	754.4	23.240	73.89	2.0	0.1
235.0	770.8	23.220	73.86	-4.0	-0.8
240.0	787.2	23.440	74.19	44.0	2.4
245.0	803.6	23.480	74.26	8.0	0.4
250.0	820.0	23.510	74.32	6.0	0.3
255.0	836.4	23.520	74.34	2.0	0.1
260.0	852.8	23.520	74.34	0.0	0.0
265.0	869.2	23.520	74.34	0.0	0.0
270.0	885.6	23.510	74.32	-2.0	-0.1
275.0	902.0	23.510	74.32	0.0	0.0
280.0	918.4	23.500	74.30	-2.0	-0.1
285.0	934.8	23.470	74.25	-8.0	-0.3
290.0	951.2	23.410	74.14	-12.0	-0.7
295.0	967.6	23.380	74.08	-6.0	-0.3
300.0	984.0	23.350	74.03	-6.0	-0.3
305.0	1000.4	23.350	74.03	0.0	0.0
310.0	1016.8	23.380	74.08	6.0	0.3

LOCATION: VANCOUVER AMS, OREGON  
 2N/ 4W-15CC  
 HOLE NUMBER: CHRYSLER  
 DATE MEASURED: 8/30/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	10.510	50.92	0.0	0.0
15.0	49.2	9.830	49.69	-136.0	-7.5
20.0	65.6	9.600	49.28	-46.0	-2.5
25.0	82.0	9.590	49.26	-2.0	0.1
30.0	98.4	9.540	49.17	-10.0	-0.5
35.0	114.8	9.520	49.14	-4.0	-0.2
40.0	131.2	9.520	49.14	0.0	0.0
45.0	147.6	9.530	49.15	2.0	0.1
50.0	164.0	9.540	49.17	2.0	0.1
55.0	180.4	9.560	49.21	4.0	0.2
60.0	196.8	9.590	49.26	6.0	0.3
65.0	213.2	9.640	49.35	10.0	0.5
70.0	229.6	9.710	49.49	14.0	0.8
75.0	246.0	9.780	49.60	14.0	0.8

LOCATION: VANCOUVER AMS, OREGON  
 2N/ 1W-32BB  
 HOLE NUMBER: PELTZ  
 DATE MEASURED: 7/ 8/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
20.0	65.6	9.880	49.78	0.0	0.0
30.0	98.4	10.000	50.00	12.0	0.7
40.0	131.2	9.790	49.62	-21.0	-1.2
50.0	164.0	9.750	49.55	-4.0	-0.2
60.0	196.8	9.730	49.51	-2.0	-0.1
70.0	229.6	9.780	49.60	5.0	0.3
75.0	246.0	9.900	49.82	24.0	1.3
80.0	262.4	9.920	49.86	4.0	0.2
85.0	278.8	9.940	49.89	4.0	0.2
90.0	295.2	10.140	50.25	40.0	2.3
95.0	311.6	10.260	50.47	24.0	1.3
100.0	328.0	10.500	50.90	48.0	2.6
105.0	344.4	10.540	50.97	8.0	0.4
110.0	360.8	10.530	50.95	-2.0	-0.1
115.0	377.2	10.540	50.97	2.0	0.1
120.0	393.6	10.560	51.01	4.0	0.2
125.0	410.0	10.620	51.12	12.0	0.7
130.0	426.4	10.690	51.24	14.0	0.8
135.0	442.8	10.760	51.37	14.0	0.8
140.0	459.2	10.850	51.53	18.0	1.0
145.0	475.6	10.910	51.64	12.0	0.7
150.0	492.0	11.010	51.82	20.0	1.1
155.0	508.4	11.230	52.21	44.0	2.4
160.0	524.8	11.280	52.30	10.0	0.5

LOCATION: THE DALLES AMS, OREGON  
 2N/10E-18AA  
 HOLE NUMBER: YORK HL  
 DATE MEASURED: 7/ 7/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
10.0	32.8	9.120	48.42	0.0	0.0
20.0	65.6	9.410	48.94	29.0	1.6
30.0	98.4	9.610	49.30	20.0	1.1
40.0	131.2	9.710	49.48	10.0	0.5
50.0	164.0	9.820	49.68	11.0	0.6

LOCATION: THE DALLES AMS, OREGON  
 2N/11E- 5DA  
 HOLE NUMBER: HOODRMTN  
 DATE MEASURED: 6/30/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
40.0	131.2	10.830	51.49	0.0	0.0
50.0	164.0	10.900	51.44	-3.0	-0.2
60.0	196.8	10.940	51.69	14.0	0.8

LOCATION: THE DALLES AMS, OREGON  
 2N/11E-20AB  
 HOLE NUMBER: HAUNT  
 DATE MEASURED: 6/30/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.0	9.840	49.71	0.0	0.0
20.0	65.0	10.120	50.22	0.0	0.0
30.0	98.4	10.270	50.49	0.0	0.0
40.0	131.0	10.450	50.81	0.0	0.0
50.0	164.0	10.670	51.21	0.0	0.0
60.0	196.0	10.750	51.39	0.0	0.0
70.0	229.0	11.020	51.84	0.0	0.0
80.0	262.4	11.220	52.00	0.0	0.0
90.0	295.0	11.490	52.60	0.0	0.0
100.0	328.0	11.770	53.19	0.0	0.0
110.0	360.8	12.050	53.69	0.0	0.0
120.0	393.6	12.290	54.12	0.0	0.0

LOCATION: THE DALLES AMS, OREGON  
 2N/12E-30C  
 HOLE NUMBER: ROWENACK  
 DATE MEASURED: 8/ 1/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
15.0	49.0	8.020	46.44	0.0	0.0
20.0	65.0	8.210	46.78	0.0	0.0
30.0	98.4	8.840	47.91	0.0	0.0
35.0	114.0	9.120	48.42	0.0	0.0
45.0	147.0	10.340	50.01	0.0	0.0
50.0	164.0	11.080	51.94	0.0	0.0
55.0	180.4	11.100	51.80	0.0	0.0
60.0	196.0	11.130	51.83	0.0	0.0
65.0	213.0	11.180	51.10	0.0	0.0
70.0	229.0	11.210	51.00	0.0	0.0
75.0	246.0	11.240	51.23	0.0	0.0
80.0	262.4	11.280	51.30	0.0	0.0
85.0	278.0	11.320	51.38	0.0	0.0
90.0	295.0	11.420	52.00	0.0	0.0
95.0	311.0	11.450	52.61	0.0	0.0
100.0	328.0	11.480	52.69	0.0	0.0
105.0	344.4	11.530	52.79	0.0	0.0
110.0	360.0	11.680	53.30	0.0	0.0
115.0	377.0	11.770	53.70	0.0	0.0
120.0	393.0	11.830	53.90	0.0	0.0
125.0	410.0	11.860	53.99	0.0	0.0
130.0	426.4	11.970	53.57	0.0	0.0
135.0	442.0	11.960	53.49	0.0	0.0
140.0	459.0	11.920	53.56	0.0	0.0
145.0	475.0	11.980	53.59	0.0	0.0

LOCATION: THE DALLES AMS, OREGON  
 2N/12E- 5BA  
 HOLE NUMBER: BERTHOLD  
 DATE MEASURED: 6/28/??

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
50.0	164.0	12.650	54.77	0.0	0.0
100.0	328.0	13.530	56.35	17.6	1.0
130.0	426.4	14.710	58.49	39.3	2.0
140.0	459.0	14.790	58.62	8.0	0.4
145.0	475.6	14.840	58.71	10.0	0.55
150.0	492.0	14.890	58.80	10.0	0.55
155.0	508.4	14.980	58.96	18.0	1.0
160.0	524.0	15.040	59.07	12.0	0.7
165.0	541.0	15.110	59.20	14.0	0.8
170.0	557.6	15.170	59.31	12.0	0.7
175.0	574.0	15.270	59.49	20.0	1.1
180.0	590.4	15.390	59.70	24.0	1.3
185.0	606.8	15.450	59.81	12.0	0.7

LOCATION: THE DALLES AMS, OREGON  
 2N/12E- 6BB  
 HOLE NUMBER: WILSON B  
 DATE MEASURED: 6/28/??

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.8	11.860	53.35	0.0	0.0
15.0	49.0	12.050	53.09	38.0	2.1
20.0	65.0	12.210	53.98	32.0	1.8
25.0	82.0	12.340	54.21	26.0	1.4
30.0	98.4	12.470	54.45	26.0	1.4
35.0	114.0	12.600	54.68	26.0	1.4
40.0	131.0	12.730	54.91	26.0	1.4
45.0	147.6	12.890	55.18	30.0	1.6
50.0	164.0	13.040	55.47	32.0	1.6
55.0	180.4	13.240	55.83	40.0	2.0
60.0	196.0	13.310	55.99	14.0	0.8
65.0	213.0	13.450	56.21	28.0	1.5
70.0	229.0	13.610	56.50	32.0	1.6
75.0	246.0	13.790	56.89	36.0	2.0
80.0	262.4	13.970	57.15	36.0	2.0
85.0	278.0	14.350	57.83	76.0	4.0
90.0	295.0	14.650	58.37	60.0	3.6
93.5	306.7	14.880	58.78	65.7	3.6

LOCATION: THE DALLES AMS, OREGON  
 2N/12E-18CBA  
 HOLE NUMBER: 7 MI HLL  
 DATE MEASURED: 8/ 2/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOHERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	11.870	53.97	0.0	0.0
20.0	65.6	12.330	54.19	46.0	2.6
30.0	98.4	12.740	54.93	41.0	2.0
40.0	131.2	13.190	55.74	46.0	1.4
50.0	164.0	13.650	56.57	46.0	1.0
60.0	196.8	14.170	57.51	52.0	1.0
70.0	229.6	14.600	58.28	43.0	0.9
80.0	262.4	15.100	59.18	50.0	1.0
90.0	295.2	15.710	60.28	61.0	1.1
100.0	328.0	16.080	60.94	37.0	0.9
110.0	360.8	16.430	61.57	35.0	0.9
120.0	393.6	16.640	61.95	21.0	1.0
130.0	426.4	17.040	62.67	40.0	1.4
140.0	459.2	17.310	63.16	27.0	0.9
150.0	492.0	17.570	63.63	26.0	0.9
160.0	524.8	18.080	64.54	51.0	1.0
165.0	541.0	18.290	64.92	42.0	0.9
170.0	557.6	18.450	65.21	32.0	1.0
175.0	574.0	18.610	65.50	32.0	1.0
180.0	590.4	18.760	65.77	30.0	1.0
185.0	606.8	18.880	65.98	24.0	1.3

LOCATION: THE DALLES AMS, OREGON  
 2N/13E-31CD  
 HOLE NUMBER: MONTGOMRY  
 DATE MEASURED: 8/ 3/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOHERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	11.810	53.26	0.0	0.0
20.0	65.6	12.290	54.12	46.0	2.6
30.0	98.4	12.680	54.79	37.0	2.0
40.0	131.2	12.920	55.26	26.0	1.4
50.0	164.0	13.110	55.60	19.0	1.0
60.0	196.8	13.440	56.19	33.0	1.0
70.0	229.6	13.920	57.06	48.0	2.0
80.0	262.4	14.110	57.40	19.0	1.0
90.0	295.2	14.860	58.75	75.0	4.1
100.0	328.0	15.400	59.72	54.0	0.9
110.0	360.8	15.820	60.48	42.0	0.9
120.0	393.6	16.230	61.21	41.0	0.9
130.0	426.4	16.830	62.29	60.0	1.4
140.0	459.2	17.260	63.07	43.0	0.9
150.0	492.0	17.730	63.91	47.0	0.9
160.0	524.8	18.310	64.96	58.0	1.0
170.0	557.6	18.650	65.57	34.0	1.0
175.0	574.0	18.810	65.86	32.0	1.0

LOCATION: THE DALLES AMS, OREGON  
2N/14E-31DA  
HOLE NUMBER: WATERS  
DATE MEASURED: 7/ 1/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
30.0	98.4	14.090	57.36	0.0	0.0
35.0	114.8	14.120	57.42	6.0	0.33
40.0	131.2	14.220	57.60	20.0	1.1
45.0	147.6	14.200	57.56	-4.0	-0.22
50.0	164.0	14.220	57.60	4.0	0.08
55.0	180.4	14.270	57.69	10.0	0.5
60.0	196.8	14.260	57.67	-2.0	-0.1
65.0	213.2	14.300	57.74	8.0	0.4
70.0	229.6	14.330	57.79	6.0	0.3
75.0	246.0	14.390	57.90	12.0	0.7
80.0	262.4	14.410	57.94	4.0	0.2
85.0	278.8	14.400	57.92	-2.0	-0.1
90.0	295.2	14.450	58.01	10.0	0.55
95.0	311.6	14.500	58.10	10.0	0.55
100.0	328.0	14.490	58.08	-2.0	-0.1
104.0	341.1	14.660	58.39	42.5	2.3

LOCATION: PENDLETON AMS, OREGON  
2N/26E-32CC  
HOLE NUMBER: GRIEB  
DATE MEASURED: 2/24/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
100.0	328.0	19.480	67.06	0.0	0.0
105.0	344.4	19.690	67.46	40.0	0.0
110.0	360.8	19.850	67.70	34.0	1.9
115.0	377.2	20.110	68.20	56.0	2.9
120.0	393.6	20.150	68.27	8.0	0.4
125.0	410.0	20.160	68.29	2.0	0.1
130.0	426.4	20.180	68.32	4.0	0.2
135.0	442.8	20.190	68.34	2.0	0.1
140.0	459.2	20.210	68.38	4.0	0.2
145.0	475.6	20.220	68.40	2.0	0.1
150.0	492.0	20.230	68.41	2.0	0.1
155.0	508.4	20.230	68.41	0.0	0.0
160.0	524.8	20.230	68.41	0.0	0.0
165.0	541.2	20.220	68.40	12.0	-0.1
170.0	557.6	20.550	68.99	66.0	3.6
175.0	574.0	20.790	69.48	48.0	2.6
180.0	590.4	20.970	69.75	36.0	2.0
185.0	606.8	21.130	70.03	32.0	1.5
190.0	623.2	21.270	70.29	28.0	1.5
195.0	639.6	21.280	70.36	2.0	0.1
200.0	656.0	21.280	70.36	0.0	0.0
205.0	672.4	21.280	70.36	0.0	0.0
210.0	688.8	21.290	70.38	2.0	0.1
215.0	705.2	21.300	70.34	2.0	0.1
220.0	721.6	21.450	70.61	30.0	1.6
225.0	738.0	21.440	70.59	-2.0	-0.1
230.0	754.4	21.430	70.57	-2.0	-0.1
235.0	770.8	21.440	70.59	2.0	0.1
240.0	787.2	21.450	70.61	2.0	0.1
245.0	803.6	21.450	70.61	0.0	0.0
250.0	820.0	21.510	70.72	12.0	0.7
255.0	836.4	21.500	70.70	-2.0	-0.1
260.0	852.8	21.900	71.42	80.0	4.4
265.0	869.2	21.840	71.31	-12.0	-0.7
270.0	885.6	21.830	71.29	-2.0	-0.1
275.0	902.0	21.840	71.31	2.0	0.1
280.0	918.4	21.850	71.33	2.0	0.1
285.0	934.8	21.850	71.33	0.0	0.0
290.0	951.2	21.850	71.33	0.0	0.0

LOCATION: PENDLETON AMS, OREGON  
2N/26E-32CC  
HOLE NUMBER: GRIEB  
DATE MEASURED: 2/24/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
295.0	967.6	21.850	71.33	0.0	0.0
300.0	984.0	21.860	71.35	2.0	0.1
305.0	1000.4	21.860	71.35	0.0	0.0
310.0	1016.8	21.860	71.35	0.0	0.0

LOCATION: GRANGEVILLE AMS, OREGON

2N/40E- 8CBA

HOLE NUMBER: EDMUND

DATE MEASURED: 8/25/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
20.0	65.6	10.960	51.73	0.0	0.0
30.0	98.4	11.090	51.96	13.0	0.0
40.0	131.2	11.260	52.27	17.0	0.0
50.0	164.0	11.600	52.88	34.0	1.0
60.0	196.8	11.990	53.58	39.0	1.0
70.0	229.6	12.220	54.00	23.0	1.0
80.0	262.4	12.580	54.64	36.0	1.0
90.0	295.2	12.790	55.02	21.0	1.0
100.0	328.0	13.150	55.67	36.0	1.0
110.0	360.8	13.490	56.28	34.0	1.0
120.0	393.6	13.950	57.11	46.0	1.0
130.0	426.4	14.270	57.69	32.0	1.0
140.0	459.2	14.660	58.39	39.0	1.0
150.0	492.0	15.116	59.20	45.0	1.0
160.0	524.8	15.530	59.95	42.0	1.0
170.0	557.6	15.760	60.37	23.0	1.0
180.0	590.4	16.210	61.18	45.0	1.0
185.0	606.0	16.640	61.95	86.0	4.0
190.0	623.0	16.710	62.08	14.0	0.0
195.0	639.6	16.810	62.26	20.0	1.1

LOCATION: GRANGEVILLE AMS, OREGON

2N/40E-27CA

HOLE NUMBER: HUFFMAN

DATE MEASURED: 8/25/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
20.0	65.6	8.680	47.62	0.0	0.0
30.0	98.4	8.860	47.95	18.0	1.0
35.0	114.0	8.940	48.09	16.0	0.9
40.0	131.0	9.120	48.42	36.0	0.9
45.0	147.6	9.320	48.78	40.0	0.9
50.0	164.0	9.530	49.15	42.0	0.9
55.0	180.4	9.760	49.57	46.0	0.9

LOCATION: VANCOUVER AMS, OREGON  
 1N 1W-25BG  
 HOLE NUMBER: THMPSNRD  
 DATE MEASURED: 7/29/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
50.0	164.0	9.590	49.26	0.0	0.0
60.0	196.8	9.570	49.23	-2.0	-0.1
65.0	213.2	9.590	49.26	4.0	0.2
70.0	229.6	9.600	49.28	2.0	0.1
75.0	246.0	9.780	49.60	36.0	0.0
80.0	262.4	9.810	49.66	6.0	0.3
85.0	278.8	9.880	49.78	14.0	0.0
90.0	295.2	9.970	49.95	18.0	1.0
95.0	311.6	10.070	50.13	20.0	1.1
100.0	328.0	10.170	50.31	20.0	1.1
105.0	344.4	10.260	50.47	18.0	1.0
110.0	360.8	10.340	50.61	16.0	0.9
115.0	377.2	10.410	50.74	14.0	0.8
120.0	393.6	10.490	50.88	16.0	0.9
125.0	410.0	10.600	51.08	20.0	1.2
130.0	426.4	10.700	51.26	20.0	1.1
135.0	442.8	10.800	51.44	20.0	1.1
140.0	459.2	10.850	51.55	12.0	0.7
145.0	475.6	10.920	51.66	12.0	0.7
150.0	492.0	11.000	51.80	16.0	0.9

LOCATION: VANCOUVER AMS, OREGON  
 1N/ 2E-16AB  
 HOLE NUMBER: PORTAIR  
 DATE MEASURED: 6/22/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	11.760	53.17	0.0	0.0
12.5	41.0	11.750	53.15	-4.0	-0.017
15.0	49.2	11.720	53.10	-12.0	-0.7
17.5	57.4	11.670	53.01	-20.0	-1.1
20.0	65.6	11.640	52.95	-12.0	-0.7
22.5	73.8	11.620	52.90	-8.0	-0.4
25.0	82.0	11.590	52.86	-12.0	-0.7
27.5	90.2	11.560	52.81	-12.0	-0.7
30.0	98.4	11.560	52.81	0.0	0.0
35.0	114.8	11.570	52.83	0.0	0.1
37.5	106.6	11.550	52.79	0.0	0.4
40.0	123.0	11.580	52.84	0.0	0.3
42.5	131.2	11.600	52.88	0.0	0.4
45.0	139.4	11.640	52.95	16.0	0.9
47.5	147.6	11.670	53.01	12.0	0.9
50.0	155.8	11.710	53.08	16.0	0.9
52.5	164.0	11.770	53.19	24.0	1.1
55.0	172.2	11.840	53.31	28.0	1.1
57.5	180.4	11.930	53.47	36.0	1.0
60.0	188.6	12.010	53.62	32.0	1.0
62.5	196.8	12.120	53.82	44.0	2.4
65.0	213.2	12.350	54.23	46.0	2.5
70.0	229.6	12.600	54.68	50.0	2.7
75.0	246.0	12.850	55.13	50.0	2.7
80.0	262.4	13.020	55.44	34.0	1.3
85.0	278.8	13.140	55.65	24.0	1.3
90.0	295.2	13.160	55.69	4.0	0.6
95.0	311.6	13.160	55.69	0.0	0.6
100.0	328.0	13.160	55.69	0.0	0.6
104.5	342.8	13.200	55.76	8.9	0.5

LOCATION: VANCOUVER, AMS, OREGON  
 1N 2E-24DA  
 HOLE NUMBER: 158THAVE  
 DATE MEASURED: 7/25/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEOTHERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
5.0	16.4	12.680	54.88	0.0	0.0
10.0	32.0	12.630	54.74	-90.0	-1.4
15.0	49.0	12.600	54.44	14.0	1.1
20.0	65.0	12.540	53.67	-150.0	-1.1
25.0	80.0	11.880	53.38	-130.0	-1.1
30.0	96.0	11.790	53.23	-18.0	1.1
35.0	114.0	11.700	53.06	-18.0	1.1
40.0	131.0	11.650	52.97	-10.0	1.0
45.0	147.0	11.650	52.97	0.0	0.0
50.0	164.0	11.680	53.02	0.0	0.0
55.0	180.4	11.740	53.13	12.0	1.1
60.0	196.0	11.830	53.29	18.0	1.1
65.0	213.0	11.920	53.49	18.0	1.1
70.0	229.0	11.950	53.63	26.0	1.1
75.0	246.0	12.170	53.93	24.0	1.1
80.0	262.4	12.320	54.16	30.0	1.1
85.0	279.0	12.480	54.44	34.0	1.1
90.0	295.0	12.620	54.72	28.0	1.1
95.0	311.6	12.750	54.96	26.0	1.1

LOCATION: VANCOUVER AMS, OREGON

1N/ 2E-29DA

HOLE NUMBER: 79-THOMP

DATE MEASURED: 10/13/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
55.0	180.4	11.730	53.11	0.0	0.0
60.0	196.0	11.420	52.56	-62.0	-13.4
65.0	213.0	11.270	52.06	-30.0	-11.0
70.0	229.0	11.140	51.85	-26.0	-11.4
75.0	246.0	11.040	51.74	-26.0	-11.4
80.0	262.4	10.970	51.70	-14.0	-11.0
85.0	279.0	10.920	51.70	-10.0	-11.0
90.0	295.0	10.900	51.68	-4.0	-11.0
95.0	311.6	10.900	51.68	0.0	-11.0
100.0	328.0	10.920	51.68	4.0	-11.0
105.0	344.4	10.940	51.68	4.0	-11.0
110.0	360.0	10.980	51.78	0.0	-11.0
115.0	377.2	11.030	51.85	10.0	-11.0
120.0	393.6	11.090	51.98	10.0	-11.0
125.0	410.0	11.180	52.18	10.0	-11.0
130.0	426.4	11.260	52.38	10.0	-11.0
135.0	442.0	11.320	52.58	10.0	-11.0
140.0	459.2	11.370	52.78	10.0	-11.0
145.0	475.6	11.460	52.98	10.0	-11.0
150.0	492.0	11.550	53.18	10.0	-11.0
155.0	508.4	11.660	53.38	10.0	-11.0
160.0	524.0	11.750	53.58	10.0	-11.0
165.0	541.2	11.890	53.88	10.0	-11.0
170.0	557.6	12.040	54.18	10.0	-11.0
175.0	574.0	12.210	54.48	10.0	-11.0
180.0	590.4	12.370	54.78	10.0	-11.0
185.0	606.8	12.510	54.98	10.0	-11.0
190.0	623.2	12.680	55.18	10.0	-11.0
195.0	639.6	12.840	55.38	10.0	-11.0
200.0	656.0	13.010	55.42	10.0	-11.0
205.0	672.4	13.170	55.71	10.0	-11.0
210.0	688.8	13.320	55.90	10.0	-11.0
215.0	705.2	13.490	56.09	10.0	-11.0
220.0	721.6	13.670	56.28	10.0	-11.0
225.0	738.0	13.820	56.48	10.0	-11.0
230.0	754.4	13.980	56.71	10.0	-11.0
235.0	770.8	14.100	56.93	10.0	-11.0
240.0	787.2	14.210	57.16	10.0	-11.0
245.0	803.6	14.310	57.36	20.0	1.1

LOCATION: VANCOUVER AMS, OREGON

1N/ 3E-33AD

HOLE NUMBER: PWB-WH

DATE MEASURED: 10/12/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
55.0	180.4	11.950	51.91	0.0	0.0
60.0	196.0	11.990	53.10	0.0	0.0
65.0	213.0	12.050	53.90	0.0	0.0
70.0	229.0	12.130	54.10	0.0	0.0
75.0	246.0	12.200	54.30	0.0	0.0
80.0	263.4	12.280	54.40	0.0	0.0
85.0	279.0	12.370	54.70	0.0	0.0
90.0	295.0	12.470	55.00	0.0	0.0
95.0	311.0	12.580	55.40	0.0	0.0
100.0	328.0	12.700	55.90	0.0	0.0
105.0	344.4	12.870	56.40	0.0	0.0
110.0	360.0	12.990	56.60	0.0	0.0
115.0	377.0	13.050	56.80	0.0	0.0
120.0	393.0	13.120	57.00	0.0	0.0
125.0	410.0	13.190	57.20	0.0	0.0
130.0	426.4	13.320	57.50	0.0	0.0
135.0	443.0	13.530	57.90	0.0	0.0
140.0	459.0	13.810	58.30	0.0	0.0
145.0	476.0	14.080	58.70	0.0	0.0
150.0	492.4	14.260	59.10	0.0	0.0
155.0	508.0	14.410	59.40	0.0	0.0
160.0	524.0	14.600	59.80	0.0	0.0
165.0	541.0	14.800	60.10	0.0	0.0
170.0	557.0	14.800	60.10	0.0	0.0
175.0	574.0	14.810	60.10	0.0	0.0
180.0	590.4	15.260	60.47	0.0	0.0
185.0	606.0	15.530	60.90	0.0	0.0
190.0	623.0	15.630	60.40	0.0	0.0
195.0	639.0	16.020	60.84	0.0	0.0
200.0	656.0	16.190	61.14	0.0	0.0
205.0	672.4	16.360	61.40	0.0	0.0
210.0	688.0	16.540	61.70	0.0	0.0
215.0	705.2	16.670	62.01	0.0	0.0
220.0	721.6	16.890	62.40	0.0	0.0
225.0	738.0	17.130	62.80	0.0	0.0
230.0	754.4	17.340	63.21	0.0	0.0
235.0	770.8	17.520	63.54	0.0	0.0
240.0	787.2	17.700	63.86	0.0	0.0
245.0	803.6	17.890	64.20	0.0	0.0

LOCATION: VANCOUVER AMS, OREGON  
 1N 3E-33AD  
 HOLE NUMBER: PWB-WH  
 DATE MEASURED: 10/12/77

PAGE 2

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
250.0	820.0	18.090	64.56	40.0	
255.0	836.4	18.270	64.89	36.0	
260.0	852.0	18.450	65.01	36.0	
265.0	869.0	18.620	65.14	34.0	
270.0	885.0	18.800	65.27	36.0	
275.0	902.0	18.970	65.40	34.0	
280.0	918.4	19.140	65.53	34.0	
285.0	934.0	19.310	65.66	34.0	
290.0	951.0	19.470	65.79	32.0	
295.0	967.0	19.630	65.92	32.0	
300.0	984.0	19.780	66.05	36.0	
305.0	1000.4	19.940	66.18	32.0	
310.0	1016.8	20.080	66.31	28.0	
315.0	1033.2	20.210	66.44	26.0	
320.0	1049.6	20.360	66.57	30.0	
325.0	1066.0	20.540	66.70	36.0	
330.0	1082.4	20.830	66.49	58.0	

LOCATION: VANCOUVER AMS, OREGON  
 1N 3E-36B9  
 HOLE NUMBER: TRTDLCTY  
 DATE MEASURED: 11/4/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
55.0	180.4	11.060	51.91	0.0	0.0
60.0	196.0	11.060	51.91	0.0	0.0
65.0	213.0	11.060	51.91	0.0	0.0
70.0	229.0	11.060	51.91	0.0	0.0
75.0	246.0	11.050	51.89	-0.1	-0.1
80.0	262.4	11.050	51.89	0.0	0.0
85.0	278.0	11.050	51.89	0.0	0.0
90.0	295.0	11.050	51.89	0.0	0.0
95.0	311.0	11.050	51.89	0.0	0.0
100.0	328.0	11.050	51.89	0.0	0.0
105.0	344.4	11.050	51.89	0.0	0.0
110.0	360.0	11.050	51.89	0.0	0.0
115.0	377.0	11.060	51.91	2.0	0.1
120.0	393.0	11.060	51.91	0.0	0.0
125.0	410.0	11.080	51.94	4.0	0.0
130.0	426.4	11.190	52.14	22.0	0.0
135.0	442.0	11.710	53.68	104.0	0.0
140.0	459.0	12.220	54.99	102.0	0.0
145.0	475.0	12.770	54.99	110.0	0.0
150.0	492.0	13.300	55.94	106.0	0.0
155.0	508.4	13.660	56.59	72.0	0.0
160.0	524.0	14.000	57.20	68.0	0.0
165.0	541.0	14.370	57.87	74.0	0.1

LOCATION: THE DALLIES AMS, OREGON  
 12<sup>W</sup> SEC 1 AC  
 HOLE NUMBER: PNCHBWL  
 DATE MEASURED: 6/ 7/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	BEDTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
20.0	65.6	11.190	52.14	0.0	0.0
30.0	98.4	13.150	55.67	196.0	10.0
35.0	114.0	14.070	57.30	184.0	10.0
40.0	131.0	16.370	61.47	460.0	80.0
45.0	147.0	19.350	66.93	596.0	80.0
50.0	164.0	19.750	67.52	880.0	40.0
55.0	180.4	19.370	65.07	124.0	0.0
60.0	196.0	19.370	65.07	0.0	0.0
65.0	213.0	19.380	65.08	0.0	0.1
70.0	229.6	19.380	65.08	0.0	0.1
75.0	246.4	19.370	65.04	0.0	0.1
80.0	262.0	19.410	66.04	0.0	0.1
85.0	278.0	19.420	66.04	0.0	0.1
90.0	295.0	19.420	66.04	0.0	0.1
95.0	311.0	19.470	66.65	10.0	0.0
100.0	328.0	19.470	66.65	0.0	0.4
105.0	344.4	19.510	66.94	0.0	0.4
110.0	360.0	19.590	66.99	-16.0	0.0
115.0	377.0	19.690	71.76	-500.0	0.0
120.0	393.6	20.060	71.71	-16.0	0.0
125.0	410.0	20.060	71.71	0.0	0.0
130.0	426.4	20.060	71.71	0.0	0.0
135.0	442.0	20.080	71.74	4.0	0.0
140.0	458.0	20.090	71.76	1.0	0.0
145.0	475.0	20.090	71.74	1.0	0.0
150.0	492.0	20.070	71.73	1.0	0.0
155.0	508.4	20.050	71.69	0.0	0.0
160.0	524.0	20.050	71.69	0.0	0.0
165.0	541.0	20.050	71.69	0.0	0.0
170.0	557.6	20.050	71.69	0.0	0.0
175.0	574.0	20.050	71.69	0.0	0.0

LOCATION: THE DALLES AMS, OREGON  
1N/13E-1CB  
HOLE NUMBER: DALLESCT  
DATE MEASURED: 7/22/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
25.0	82.0	14.180	57.58	0.0	0.0
30.0	98.4	14.600	58.88	84.0	4.6
35.0	114.0	15.220	59.40	124.0	6.0
40.0	131.2	15.250	59.45	6.0	0.3
45.0	147.6	15.280	59.56	6.0	0.3
50.0	164.0	15.490	59.88	48.0	1.0
55.0	180.4	15.640	60.15	36.0	1.0
60.0	196.8	15.790	60.42	36.0	1.0
65.0	213.2	15.790	60.42	0.0	0.0
70.0	229.6	15.800	60.44	0.0	0.0
75.0	246.0	15.820	60.48	4.0	0.6
80.0	262.4	15.820	60.48	0.0	0.0
85.0	278.8	15.850	60.53	0.0	0.0
90.0	295.2	15.870	60.59	0.0	0.0
95.0	311.6	15.860	60.58	0.0	0.0
100.0	328.0	15.910	60.64	16.0	0.6
105.0	344.4	15.980	60.76	14.0	0.6
110.0	360.8	16.000	60.86	4.0	0.3
115.0	377.2	16.030	60.86	6.0	0.3
120.0	393.6	16.100	60.98	14.0	0.3
125.0	410.0	16.150	61.07	10.0	0.3
130.0	426.4	16.170	61.11	4.0	0.3

LOCATION: PENDLETON AMS, OREGON  
1N/30E-27BB  
HOLE NUMBER: FIX  
DATE MEASURED: 11/8/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
75.0	246.0	13.190	55.74	0.0	0.0
80.0	262.4	14.580	58.24	278.0	15.3
85.0	278.8	14.580	58.24	0.0	0.0
90.0	295.2	14.600	58.28	4.0	0.1
95.0	311.6	14.610	58.30	0.0	0.1
100.0	328.0	14.610	58.30	0.0	0.0
105.0	344.4	14.650	58.37	0.0	0.4
110.0	360.8	14.670	58.41	0.0	0.2
115.0	377.2	14.700	58.46	0.0	0.3
120.0	393.6	14.730	58.51	0.0	0.3
125.0	410.0	14.760	58.57	0.0	0.3
130.0	426.4	14.770	58.59	0.0	0.4
135.0	442.8	14.810	58.66	0.0	0.4
140.0	459.2	14.830	58.69	0.0	0.4
145.0	475.6	14.870	58.77	0.0	0.4
150.0	492.0	14.910	58.84	0.0	0.4
155.0	508.4	14.940	58.89	0.0	0.3
160.0	524.8	15.040	59.07	0.0	1.1
165.0	541.2	15.050	59.09	0.0	0.1
170.0	557.6	15.060	59.11	0.0	0.1
175.0	574.0	15.050	59.09	0.0	0.1

LOCATION: PENDLETON AMS, OREGON  
 1N/38E-24AC  
 HOLE NUMBER: BAYLINK  
 DATE MEASURED: 7/22/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
45.0	147.6	9.600	49.28	0.0	0.0
50.0	164.0	9.510	49.12	-10.0	-1.0
55.0	180.4	9.430	48.97	-16.0	-0.9
60.0	196.8	9.360	48.85	-14.0	-0.8
65.0	213.2	9.310	48.76	-10.0	-0.7
70.0	229.6	9.250	48.65	-12.0	-0.7

LOCATION: GRANGEVILLE AMS, OREGON  
 1N/39E-23DC  
 HOLE NUMBER: WESTNSKOW  
 DATE MEASURED: 8/24/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
5.0	16.4	11.260	52.27	0.0	0.0
7.5	24.6	11.370	52.47	44.0	0.4
10.0	32.8	11.440	52.59	28.0	1.5
12.5	41.0	11.500	52.70	24.0	1.0
15.0	49.2	11.540	52.77	16.0	0.9
17.5	57.4	11.660	52.99	48.0	2.6
20.0	65.6	11.680	53.02	8.0	0.4
22.5	73.8	11.780	53.20	40.0	0.20
25.0	82.0	11.800	53.24	8.0	0.4
27.5	90.2	11.860	53.35	24.0	1.0
30.0	98.4	11.890	53.40	12.0	0.5
32.5	106.6	11.940	53.49	20.0	1.1
35.0	114.8	11.960	53.53	8.0	0.4
37.5	123.0	11.980	53.56	8.0	0.4
40.0	131.2	11.990	53.58	4.0	0.20
42.5	139.4	12.010	53.62	8.0	0.4

LOCATION: VANCOUVER AMS, OREGON  
 1S/ 2E- 2BD  
 HOLE NUMBER: DDHS  
 DATE MEASURED: 7/18/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
40.0	131.2	11.950	53.51	0.0	0.0
45.0	147.6	11.630	52.93	-64.0	-3.5
50.0	164.0	11.360	52.45	-54.0	-3.0
55.0	180.4	11.160	52.09	-40.0	-2.0
60.0	196.8	10.990	51.78	-34.0	-1.7
65.0	213.2	10.870	51.57	-24.0	-1.3
70.0	229.6	10.760	51.37	-22.0	-1.1
75.0	246.0	10.730	51.31	-6.0	-0.3
80.0	262.4	10.720	51.30	-2.0	-0.1
85.0	278.8	10.700	51.26	-4.0	-0.2
90.0	295.2	10.700	51.26	0.0	0.0
95.0	311.6	10.700	51.26	0.0	0.0
100.0	328.0	10.740	51.33	8.0	0.4

LOCATION: VANCOUVER AMS, OREGON  
 1S/ 3E-33DB  
 HOLE NUMBER: DMSCS WD  
 DATE MEASURED: 6/21/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
30.0	98.4	10.860	51.55	0.0	0.0
40.0	131.2	10.900	51.68	4.0	0.0
50.0	164.0	11.540	52.77	64.0	0.0
55.0	180.4	11.600	52.88	12.0	0.0
60.0	196.8	11.770	53.19	34.0	1.0
65.0	213.2	11.830	53.29	12.0	0.0
70.0	229.6	11.880	53.38	10.0	0.0
75.0	246.0	11.950	53.51	14.0	0.0

LOCATION: THE DALLES AMS, OREGON  
 1S/13E-34AC  
 HOLE NUMBER: 15 MI CK  
 DATE MEASURED: 6/ 8/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.8	16.360	61.45	0.0	0.0
15.0	49.2	16.360	61.45	0.0	0.0
20.0	65.6	16.360	61.45	0.0	0.0
30.0	92.0	16.360	61.45	0.0	0.0
30.0	98.4	16.370	61.47	0.0	0.1
35.0	114.8	16.370	61.47	0.0	0.0
40.0	131.2	16.380	61.48	0.0	0.1
45.0	147.6	16.380	61.48	0.0	0.0
50.0	164.0	16.380	61.48	0.0	0.0
55.0	180.4	16.390	61.58	0.0	0.1
60.0	196.8	16.400	61.58	0.0	0.1
65.0	213.2	16.400	61.58	0.0	0.0
70.0	229.6	16.400	61.58	0.0	0.0
75.0	246.0	16.410	61.54	0.0	0.1
80.0	262.4	16.410	61.54	0.0	0.0
85.0	278.8	16.410	61.54	0.0	0.0
90.0	295.2	16.420	61.58	0.0	0.1
95.0	311.6	16.420	61.58	0.0	0.0
100.0	328.0	16.420	61.56	0.0	0.0
105.0	344.4	16.430	61.57	0.0	0.1
110.0	360.8	16.430	61.57	0.0	0.0
115.0	377.2	16.430	61.57	0.0	0.0
120.0	393.6	16.430	61.57	0.0	0.0
125.0	410.0	16.430	61.57	0.0	0.0
130.0	426.4	16.460	61.63	0.0	0.0
135.0	442.8	16.470	61.65	-16.0	-0.1
140.0	459.2	16.440	61.59	-16.0	-0.1
145.0	475.6	16.550	61.79	-22.0	-0.0
150.0	492.0	16.570	61.83	4.0	0.0
155.0	508.4	16.610	61.90	0.0	0.4
160.0	524.8	16.650	61.97	0.0	0.4
165.0	541.2	16.630	61.93	-4.0	-0.0
170.0	557.6	16.630	61.93	0.0	0.0

LOCATION: PENDLETON AMS, OREGON  
 15/24E-35AA  
 HOLE NUMBER: PADBERG  
 DATE MEASURED: 2/24/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
45.0	147.6	15.960	62.53	0.0	0.0
50.0	164.0	15.810	60.81	-270.0	-14.5
55.0	180.4	15.690	60.06	-104.0	-1.1
60.0	196.0	15.150	59.30	12.0	1.1
65.0	213.0	15.290	59.14	24.0	1.0
70.0	229.0	15.410	59.74	24.0	1.0
75.0	246.0	15.530	59.95	24.0	1.0
80.0	262.4	15.630	60.14	24.0	1.0
85.0	278.0	15.700	60.63	14.0	1.0
90.0	295.0	15.740	60.90	24.0	1.0
95.0	311.0	15.860	61.30	40.0	1.0
100.0	328.0	15.960	61.91	30.0	1.0
105.0	344.4	16.050	61.91	40.0	1.0
110.0	360.0	16.450	61.95	30.0	1.0
115.0	377.0	16.640	61.99	30.0	1.0
120.0	393.0	16.820	62.99	30.0	1.0
125.0	410.0	17.010	63.91	30.0	1.0
130.0	426.4	17.170	63.99	30.0	1.0
135.0	442.0	17.270	63.99	30.0	1.0
140.0	459.0	17.390	63.30	24.0	1.0

LOCATION: PENDLETON AMS, OREGON  
 15/32E-29AD  
 HOLE NUMBER: WILSON  
 DATE MEASURED: 2/25/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
20.0	65.6	13.830	56.88	0.0	0.0
30.0	98.4	13.890	57.00	0.0	0.0
40.0	131.2	13.970	57.15	0.0	0.0
50.0	164.0	14.090	57.30	12.0	0.0
60.0	196.8	14.290	57.70	20.0	1.1
70.0	229.6	14.510	58.10	22.0	1.1
75.0	246.0	14.580	58.24	14.0	0.0
80.0	262.4	14.690	58.44	20.0	1.0
85.0	278.8	14.810	58.66	24.0	1.0
90.0	295.2	14.960	58.90	30.0	1.0
95.0	311.6	15.140	59.20	30.0	1.0
100.0	328.0	15.230	59.41	18.0	1.0
105.0	344.4	15.320	59.58	18.0	1.0
110.0	360.8	15.440	59.78	24.0	1.0
115.0	377.2	15.560	60.01	24.0	1.0
120.0	393.6	15.980	60.70	84.0	0.0
125.0	410.0	16.060	60.91	16.0	0.0
130.0	426.4	16.090	60.98	6.0	0.0
135.0	442.8	16.140	61.05	10.0	0.0
140.0	459.2	16.200	61.16	12.0	0.0
145.0	475.6	16.270	61.29	14.0	0.0
150.0	492.0	16.340	61.41	14.0	0.0
155.0	508.4	16.430	61.57	18.0	1.0
160.0	524.8	16.530	61.75	20.0	1.1
165.0	541.2	16.610	61.90	16.0	0.0
170.0	557.6	16.710	62.08	20.0	1.1
175.0	574.0	16.820	62.28	22.0	1.1
180.0	590.4	16.920	62.46	20.0	1.1
185.0	606.8	17.260	63.07	68.0	1.3
190.0	623.2	17.350	63.23	18.0	1.0
195.0	639.6	17.450	63.41	20.0	1.1
200.0	656.0	17.560	63.61	22.0	1.0
205.0	672.4	17.680	63.82	24.0	1.0
210.0	688.8	17.710	63.98	6.0	0.0

LOCATION: VANCOUVER AMS, OREGON  
 PS/ 4E-16CD  
 HOLE NUMBER: SANDY  
 DATE MEASURED: 7/28/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
20.0	65.6	9.770	49.59	0.0	0.0
25.0	82.0	9.740	49.53	-16.0	-0.3
30.0	98.4	9.900	49.82	32.0	1.8
35.0	114.8	9.980	49.96	16.0	0.9
40.0	131.2	10.120	50.22	28.0	1.55
45.0	147.6	10.270	50.49	30.0	1.6
50.0	164.0	10.760	51.37	98.0	5.4
55.0	180.4	10.910	51.64	30.0	1.6
60.0	196.8	11.050	51.89	28.0	1.55
65.0	213.2	11.440	52.59	28.0	4.3
70.0	229.6	11.450	52.61	2.0	0.1
75.0	246.0	11.510	52.72	12.0	0.7

LOCATION: VANCOUVER AMS, OREGON  
 2S/ 4E-18AD  
 HOLE NUMBER: TICKLECK  
 DATE MEASURED: 6/21/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
55.0	180.4	10.940	51.69	0.0	0.0
60.0	196.8	10.950	51.71	2.0	0.1
65.0	213.2	10.980	51.76	5.0	0.3
66.5	218.1	11.010	51.82	20.0	1.1

LOCATION: THE DALLES AMS, OREGON  
 2S/ 7E- 7BD  
 HOLE NUMBER: ASCHOFFB  
 DATE MEASURED: 6/23/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
7.5	24.6	5.510	41.92	0.0	0.0
10.0	32.8	5.560	42.01	20.0	1.1
12.5	41.0	5.570	42.03	4.0	0.2
15.0	49.2	5.570	42.03	0.0	0.0
17.5	57.4	5.530	41.95	-16.0	-0.9
20.0	65.6	5.510	41.92	-18.0	-0.4
22.5	73.8	5.480	41.86	-12.0	-0.7
25.0	82.0	5.490	41.88	4.0	0.2
27.5	90.2	5.460	41.83	-12.0	-0.7
30.0	98.4	5.470	41.85	4.0	0.2
32.5	106.6	5.470	41.85	0.0	0.0
35.0	114.8	5.410	41.74	-24.0	-1.3

LOCATION: THE DALLES AMS, OREGON  
 29/12E-38A  
 HOLE NUMBER: STELZER  
 DATE MEASURED: 7/13/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
10.0	32.8	10.170	50.31	0.0	
20.0	65.6	11.220	52.00	105.0	
30.0	98.4	11.490	52.08	87.0	
40.0	131.2	12.080	53.74	99.0	
50.0	164.0	12.400	54.32	92.0	
60.0	196.8	12.780	55.00	88.0	
70.0	229.6	13.650	56.57	87.0	
80.0	262.4	14.110	57.40	46.0	
90.0	295.2	14.680	58.40	57.0	
100.0	328.0	15.030	59.05	35.0	
110.0	360.8	15.680	60.00	65.0	
120.0	393.6	16.160	61.00	48.0	
130.0	426.4	17.350	63.00	120.0	
140.0	459.2	18.060	64.01	70.0	
150.0	492.0	18.580	65.41	52.0	
160.0	524.8	19.250	66.88	67.0	
170.0	557.6	19.970	67.55	72.0	
180.0	590.4	20.620	69.10	65.0	
190.0	623.2	21.240	70.23	62.0	
200.0	656.0	21.570	70.83	33.0	
205.0	672.4	23.210	73.78	328.0	
210.0	688.8	23.760	74.77	110.0	
215.0	705.2	23.810	74.86	10.0	
220.0	721.6	23.840	74.91	6.0	
225.0	738.0	23.870	74.97	6.0	
230.0	754.4	24.010	75.22	28.0	
235.0	770.8	24.190	75.54	36.0	
240.0	787.2	24.360	75.65	34.0	
245.0	803.6	24.570	76.00	42.0	
250.0	820.0	24.830	76.89	52.0	
255.0	836.4	25.050	77.09	44.0	
260.0	852.8	25.270	77.49	44.0	
265.0	869.2	25.470	77.85	40.0	
270.0	885.6	25.680	78.22	42.0	
275.0	902.0	25.890	78.58	40.0	
285.0	934.8	26.280	79.36	40.0	
295.0	967.6	26.570	79.63	29.0	

LOCATION: THE DALLES AMS, OREGON  
 25/12E-27DC  
 HOLE NUMBER: FRI-MAR  
 DATE MEASURED: 7/15/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.8	10.120	50.22	0.0	0.0
15.0	49.2	10.710	51.28	118.0	6.0
20.0	65.6	10.920	51.66	42.0	4.0
25.0	82.0	11.340	52.41	84.0	7.0
30.0	98.4	11.980	53.56	128.0	10.0
35.0	114.8	12.450	54.41	94.0	8.0
40.0	131.2	12.730	54.91	56.0	4.0
45.0	147.6	13.230	55.81	100.0	6.0
50.0	164.0	13.720	56.70	98.0	5.0
55.0	180.4	14.200	57.56	96.0	4.0
60.0	196.8	14.660	58.39	92.0	3.0
65.0	213.2	15.060	59.11	80.0	4.4

LOCATION: THE DALLES AMS, OREGON  
 25/13E-36CD  
 HOLE NUMBER: TYGH RDG  
 DATE MEASURED: 7/11/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.8	10.420	50.76	0.0	0.0
20.0	65.6	10.900	51.62	48.0	3.0
30.0	98.4	11.200	52.16	30.0	1.9
35.0	114.8	11.330	52.39	26.0	1.4
40.0	131.2	11.420	52.56	18.0	1.0
45.0	147.6	11.530	52.75	22.0	1.5

LOCATION: THE DALLES AMS, OREGON  
 25/15E-38B  
 HOLE NUMBER: CLAUSON  
 DATE MEASURED: 7/12/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.8	10.000	50.00	0.0	0.0
20.0	65.6	10.470	50.85	47.0	2.6
25.0	82.0	10.640	51.15	34.0	1.9
30.0	98.4	10.810	51.46	34.0	1.9
35.0	114.8	10.920	51.66	22.0	1.4
40.0	131.2	11.130	52.03	42.0	2.6
45.0	147.6	11.230	52.32	32.0	2.0
50.0	164.0	11.470	52.65	36.0	2.4
55.0	180.4	11.650	52.97	35.0	2.4
60.0	196.8	11.690	53.04	0.0	0.0
65.0	213.2	11.730	53.11	0.0	0.0
70.0	229.6	11.780	53.20	10.0	5.0
75.0	246.0	11.810	53.26	0.0	0.0

LOCATION: THE DALLES AMS, OREGON  
 2S/21E-36AA  
 HOLE NUMBER: WOLF HOL  
 DATE MEASURED: 6/ 6/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.0	11.750	53.15	0.0	0.0
20.0	65.6	11.990	53.58	0.4	1.1
30.0	98.4	12.230	54.01	0.4	1.1
40.0	131.0	12.350	54.23	12.0	1.0
50.0	164.0	12.560	54.61	21.0	1.0
60.0	196.0	12.680	54.82	12.0	1.0
70.0	229.0	12.830	55.09	15.0	1.0
80.0	262.4	12.990	55.38	16.0	1.0
90.0	295.0	13.180	55.72	19.0	1.4
95.0	311.0	13.610	56.50	86.0	1.4
100.0	328.0	13.700	56.66	18.0	1.0
105.0	344.4	13.930	57.07	48.0	1.0
110.0	360.0	13.980	57.16	10.0	0.0
115.0	377.0	14.030	57.25	10.0	0.0
120.0	393.0	14.090	57.38	12.0	0.0
125.0	410.0	14.150	57.47	12.0	0.0
130.0	426.4	14.220	57.60	14.0	1.1
135.0	442.0	14.320	57.78	20.0	1.1
140.0	459.0	14.420	57.96	20.0	1.4
145.0	475.0	14.550	58.19	26.0	0.4
150.0	492.0	14.610	58.30	12.0	1.1
155.0	508.4	14.850	58.37	20.0	1.0
160.0	524.0	14.750	58.55	20.0	1.0
165.0	541.0	14.870	58.77	24.0	1.0
170.0	557.0	14.960	58.93	18.0	1.0
175.0	574.0	15.060	59.11	20.0	1.0
180.0	590.4	15.220	59.40	32.0	1.0
185.0	606.0	15.330	59.59	22.0	1.0
190.0	623.0	15.430	59.77	20.0	1.4
195.0	639.0	15.560	60.11	26.0	1.1
200.0	656.0	15.680	60.22	24.0	1.1
205.0	672.4	15.820	60.48	28.0	1.1
210.0	688.0	15.990	60.78	34.0	1.1
215.0	705.0	16.100	60.98	22.0	1.4
220.0	721.0	16.340	61.41	48.0	1.0
225.0	738.0	16.470	61.65	26.0	1.0
230.0	754.4	16.610	61.90	28.0	1.0
235.0	770.0	16.770	62.19	32.0	1.4
240.0	787.2	16.900	62.42	26.0	1.4

LOCATION: THE DALLES AMS, OREGON PAGE 2  
 2S/21E-36AA  
 HOLE NUMBER: WOLF HOL  
 DATE MEASURED: 6/ 6/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
245.0	803.6	17.010	62.52	22.0	1.0
250.0	820.0	17.040	62.67	6.0	0.0
255.0	836.4	17.220	63.00	36.0	2.0
260.0	852.8	18.540	65.37	264.0	14.0
265.0	869.2	19.690	67.44	230.0	12.0
270.0	885.6	20.500	68.90	162.0	8.0
275.0	902.0	20.920	69.66	84.0	4.0
280.0	918.4	21.340	70.41	84.0	4.0

LOCATION: PENDLETON AMS, OREGON  
 2S/37E-25DB  
 HOLE NUMBER: THOMAS  
 DATE MEASURED: 8/23/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
20.0	65.6	7.850	46.13	0.0	0.0
30.0	98.4	8.070	46.53	22.0	1.0
40.0	131.2	8.270	46.89	20.0	1.1
50.0	164.0	8.600	47.48	33.0	1.0
60.0	196.8	8.940	48.00	34.0	1.0
70.0	229.6	9.160	48.49	22.0	1.0
80.0	262.4	9.500	49.10	34.0	1.0
90.0	295.2	9.810	49.56	31.0	1.0
100.0	328.0	10.190	50.34	28.0	1.0
110.0	360.8	10.510	50.92	32.0	1.0
120.0	393.6	10.840	51.51	33.0	1.0
130.0	426.4	11.240	52.23	40.0	1.0
140.0	459.2	11.610	52.90	37.0	1.0
145.0	476.0	11.850	53.33	48.0	1.0
150.0	492.0	11.980	53.56	26.0	1.4

LOCATION: PENDLETON AMS, OREGON  
 2S/38E- 4DC  
 HOLE NUMBER: SUBROCK  
 DATE MEASURED: 8/24/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
10.0	32.8	8.440	47.19	0.0	0.0
20.0	65.6	9.010	48.28	57.0	3.1
30.0	98.4	9.240	48.63	23.0	1.3
40.0	131.2	9.680	49.49	44.0	1.4
50.0	164.0	9.980	49.96	30.0	1.0
60.0	196.8	10.310	50.56	33.0	1.0
65.0	213.0	10.460	50.83	30.0	1.0
70.0	229.0	10.580	51.34	24.0	1.0
75.0	246.0	10.720	51.39	28.0	1.0
80.0	262.4	10.850	51.53	26.0	1.4
85.0	278.0	11.020	51.84	34.0	1.0
90.0	295.0	11.110	52.00	18.0	1.0
95.0	311.6	11.260	52.27	30.0	1.0
100.0	328.0	11.350	52.43	18.0	1.0
102.0	336.2	11.400	52.52	20.0	1.1

LOCATION: PENDLETON AMS, OREGON  
 2S/38E- 9AA  
 HOLE NUMBER: SUBROCK  
 DATE MEASURED: 8/24/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
17.5	57.4	9.970	49.95	0.0	0.0
20.0	65.6	10.160	50.28	76.0	4.2
22.5	73.8	10.270	50.49	44.0	2.4
25.0	82.0	10.330	50.59	24.0	1.3

LOCATION: PENDLETON AMS, OREGON  
 2S/3BE-10AB  
 HOLE NUMBER: RASMUSSEN  
 DATE MEASURED: 11/ 9/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
5.0	16.4	12.170	53.91	0.0	0.0
10.0	32.0	11.930	53.86	-0.8	-1.0
15.0	49.2	12.150	53.99	36.0	41.0
20.0	65.6	12.340	54.21	36.0	41.0
25.0	82.0	12.490	54.48	36.0	41.0
30.0	98.4	12.730	54.91	48.0	54.0
35.0	114.8	13.000	55.86	54.0	60.0
40.0	131.2	13.270	56.09	54.0	60.0
45.0	147.6	13.620	56.48	66.0	72.0
50.0	164.0	13.930	57.16	76.0	82.0
55.0	180.4	14.320	57.76	68.0	74.0
60.0	196.8	14.720	58.56	80.0	86.0
65.0	213.2	15.240	59.43	104.0	110.0
70.0	229.6	15.820	60.58	128.0	134.0
75.0	246.0	16.520	61.74	128.0	134.0
80.0	262.4	17.270	63.09	150.0	156.0
85.0	278.8	18.030	64.54	162.0	168.0
90.0	295.2	18.770	65.79	138.0	144.0
95.0	311.6	19.450	67.03	138.0	144.0
100.0	328.0	19.320	67.86	92.0	98.0
105.0	344.4	20.070	68.13	30.0	34.0
110.0	360.8	20.120	68.22	10.0	10.0
115.0	377.2	20.120	68.22	0.0	0.0
120.0	393.6	20.120	68.22	0.0	0.0
125.0	410.0	20.120	68.22	0.0	0.0
130.0	426.4	20.120	68.22	0.0	0.0
135.0	442.8	20.120	68.22	0.0	0.0
140.0	459.2	20.130	68.23	0.0	0.1
145.0	475.6	20.130	68.23	0.0	0.0
150.0	492.0	20.130	68.23	0.0	0.0
155.0	508.4	20.130	68.23	0.0	0.0
160.0	524.8	20.130	68.23	0.0	0.0
165.0	541.2	20.130	68.23	0.0	0.0
170.0	557.6	20.130	68.23	0.0	0.0
175.0	574.0	20.130	68.23	0.0	0.0
180.0	590.4	20.130	68.23	0.0	0.0
185.0	606.8	20.130	68.23	0.0	0.0
190.0	623.2	20.130	68.23	0.0	0.0
195.0	639.6	20.140	68.25	2.0	0.1

LOCATION: PENDLETON AMS, OREGON  
 2S/38E-10AB  
 HOLE NUMBER: RASMUSSEN  
 DATE MEASURED: 11/ 9/77

PAGE 2

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
200.0	656.0	20.140	68.25	0.0	0.0
205.0	672.4	20.140	68.26	0.0	0.0
210.0	688.8	20.150	68.27	0.0	0.1
215.0	705.2	20.150	68.27	0.0	0.0
220.0	721.6	20.150	68.28	0.0	0.1
225.0	738.0	20.150	68.29	0.0	0.0
230.0	754.4	20.150	68.30	0.0	0.1
235.0	770.8	20.170	68.31	0.0	0.1
240.0	787.2	20.170	68.31	0.0	0.1
250.0	820.0	20.180	68.32	1.0	0.1
245.0	803.6	20.170	68.31	1.0	0.1
255.0	836.4	20.180	68.32	1.0	0.1
260.0	852.0	20.180	68.34	1.0	0.1
265.0	869.2	20.180	68.34	1.0	0.0
270.0	885.6	20.180	68.34	0.0	0.0
275.0	902.0	20.180	68.34	0.0	0.0
280.0	918.4	20.200	68.36	0.0	0.1
285.0	934.8	20.220	68.38	0.0	0.0
290.0	951.2	20.210	68.38	0.0	0.1
295.0	967.6	20.220	68.40	0.0	0.1
300.0	984.0	20.230	68.41	0.0	0.1

LOCATION: GRANGEVILLE AMS, OREGON  
 2S/39E-28AC  
 HOLE NUMBER: B JONES  
 DATE MEASURED: 8/24/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.8	9.760	49.57	0.0	0.0
12.5	41.0	10.040	50.07	112.0	6.1
15.0	49.2	10.340	50.61	120.0	6.6
17.5	57.4	10.560	51.01	88.0	4.8
20.0	65.6	10.760	51.37	88.0	4.4
22.5	73.8	11.000	51.80	96.0	4.4
25.0	82.0	11.150	52.07	60.0	4.4
27.5	90.2	11.330	52.39	72.0	4.4
30.0	98.4	11.500	52.70	60.0	4.4
32.5	106.6	11.640	52.95	66.0	4.4
35.0	114.8	11.790	53.24	66.0	4.4
37.5	123.0	11.930	53.47	66.0	4.4
40.0	131.2	12.070	53.73	66.0	4.4
42.5	139.4	12.190	53.94	48.0	4.4
45.0	147.6	12.310	54.16	48.0	4.4

LOCATION: VANCOUVER AMS, OREGON  
 36° 4E - 3AD  
 HOLE NUMBER: HAIGARSRN  
 DATE MEASURED: 7/27/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
12.5	41.0	11.330	52.39	0.0	0.0
15.0	49.2	11.330	52.39	0.0	0.0
17.5	57.4	11.210	52.18	-48.0	-1.5
20.0	65.6	11.140	52.05	-28.0	-0.1
25.0	82.0	11.130	52.03	0.0	0.0
27.5	90.2	11.130	52.03	0.0	0.0
30.0	98.4	11.130	52.03	0.0	0.0
32.5	106.6	11.140	52.05	4.0	0.0
35.0	114.8	11.140	52.05	0.0	0.0
37.5	123.0	11.130	52.03	-4.0	-0.4
40.0	131.2	11.120	52.02	-4.0	-0.4
42.5	139.4	11.100	51.98	-8.0	-0.8
45.0	147.6	11.100	51.98	0.0	0.0
47.5	155.8	11.110	52.00	4.0	0.0
50.0	164.0	11.110	52.00	0.0	0.0
52.5	172.2	11.120	52.02	4.0	0.0
55.0	180.4	11.130	52.03	4.0	0.0
57.5	188.6	11.150	52.07	0.0	0.4
60.0	196.8	11.170	52.11	0.0	0.4
65.0	213.2	11.190	52.14	4.0	0.5
70.0	229.6	11.240	52.23	16.0	1.1
75.0	246.0	11.330	52.39	18.0	1.3
80.0	262.4	11.600	52.88	54.0	1.8
85.0	278.8	11.860	53.35	52.0	1.4
90.0	295.2	12.170	53.91	62.0	3.4

THE DALLES TELL (THE DALLES AMS) DRILLING  
39/ BE-24BBD

HOLE NUMBER: BE-24 BBD  
DATE MEASURED: 5/25/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOThERMAL GRADIENT DEG C/KM	GEOThERMAL GRADIENT DEG F/100 FT
0.0	0.0	6.450	43.50	0.0	0.0
10.0	32.8	5.780	42.40	-122.0	-6.7
15.0	49.2	5.530	41.95	-50.0	-2.7
20.0	65.6	5.240	41.43	-58.0	-3.2
25.0	82.0	5.020	41.00	-48.0	-2.6
30.0	98.4	4.760	40.91	-10.0	-0.5
35.0	114.8	4.420	40.91	0.0	0.0
40.0	131.2	4.050	40.91	32.0	1.8
45.0	147.6	3.710	41.20	12.0	0.7
50.0	164.0	3.370	41.31	4.0	0.2
55.0	180.4	3.030	41.34	20.0	1.1
60.0	196.8	2.690	41.34	38.0	2.1
65.0	223.2	2.360	42.44	64.0	3.5
70.0	249.6	2.030	44.58	238.0	13.1
75.0	266.0	1.700	44.71	14.0	0.8
80.0	272.4	1.370	44.96	56.0	3.1

LOCATION: THE DALLES AMS, OREGON

39/ BE-24BBD

HOLE NUMBER: SKI-BOWL

DATE MEASURED: 5/25/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOThERMAL GRADIENT DEG C/KM	GEOThERMAL GRADIENT DEG F/100 FT
0.0	0.0	7.030	44.65	0.0	0.0
5.0	16.4	7.360	45.25	66.0	3.6
10.0	32.8	7.660	45.79	60.0	3.3
15.0	49.2	7.830	46.09	34.0	1.9
20.0	65.6	8.030	46.45	40.0	2.2
25.0	82.0	8.150	46.67	24.0	1.3
30.0	98.4	8.230	46.81	16.0	0.9
35.0	114.8	8.230	46.81	0.0	0.0
40.0	131.2	8.300	46.94	14.0	0.8
45.0	147.6	8.350	47.00	10.0	0.5
50.0	164.0	8.380	47.08	6.0	0.3
55.0	180.4	8.380	47.08	0.0	0.0
60.0	196.8	8.400	47.12	4.0	0.2

TEST NO. T-1000, THERMOMETERS, ANS, IRING  
TEST NO. 38 / 82/1636  
TEST NO. 1000, Cn = 1.0  
TEST NO. 44 ASSISTANT 27/7/77

TEMPERATURE DEPTH GEOTHERMAL GRADIENT  
DEG F DEG C DEG F DEG C/KM DEG F/100 FT

DEPTH IN FEET	DEPTH IN METERS	TEMPERATURE DEG F	TEMPERATURE DEG C	GRADIENT DEG F/100 FT	GRADIENT DEG C/KM
4604	1393	46.3	46.53	*0	*0
4600	1392	46.40	47.37	32.0	4.5
4592	1382	46.12	46.60	-36.0	-4.7
4586	1376	46.00	46.40	-22.0	-1.2
4580	1370	46.43	46.53	*0	*0
4574	1364	46.52	46.62	14.0	0.8
4568	1358	46.12	46.22	10.0	0.5
4562	1352	46.71	46.85	10.0	0.5
4556	1346	46.25	46.35	16.0	0.9
4550	1340	46.39	47.51	18.0	1.0
4544	1334	46.85	47.21	22.0	1.2
4538	1328	46.61	47.41	22.0	1.2
4532	1322	46.73	47.71	34.0	1.9
4526	1316	46.27	47.37	28.0	1.5
4520	1310	46.32	48.25	32.0	1.8
4514	1304	46.39	48.54	32.0	1.8
4508	1298	46.19	48.54	32.0	1.8
4502	1292	46.30	48.74	22.0	1.2
4496	1286	46.27	48.97	22.0	1.2
4490	1280	46.42	49.22	20.0	1.1
4484	1274	46.30	49.15	26.0	1.4
4478	1268	46.30	49.37	24.0	1.3
4472	1262	46.40	49.59	26.0	1.4
4466	1256	46.30	49.34	26.0	1.4
4460	1250	46.12	49.37	26.0	1.4
4454	1244	46.42	49.69	24.0	1.3
4448	1238	46.21	49.38	10.0	0.5

LOCATION: THE DALLES AMS, OREGON  
 3S/14E- 7DC  
 HOLE NUMBER: TIGH RDG  
 DATE MEASURED: 7/14/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOHERMAL GRADIENT DEG C/KM	GEOHERMAL GRADIENT DEG F/100 FT
10.0	32.8	11.000	51.80	0.0	0.0
15.0	49.2	11.190	52.14	38.0	2.1
20.0	65.6	11.290	52.32	20.0	1.1
25.0	82.0	11.410	52.54	24.0	1.3
30.0	98.4	11.500	52.70	18.0	1.0
35.0	114.8	11.670	53.01	34.0	1.9
40.0	131.2	11.760	53.17	18.0	1.0
45.0	147.6	11.910	53.44	30.0	1.6
50.0	164.0	12.030	53.55	24.0	1.3
55.0	180.4	12.160	53.89	26.0	1.4
60.0	196.8	12.280	54.10	24.0	1.3
65.0	213.2	12.380	54.28	20.0	1.1

LOCATION: PENDLETON AMS, OREGON  
 3S/38E- 3DC  
 HOLE NUMBER: ISLCTYCM  
 DATE MEASURED: 8/23/??

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOHERMAL GRADIENT DEG C/KM	GEOHERMAL GRADIENT DEG F/100 FT
7.5	24.6	10.210	50.38	0.0	0.0
10.0	32.8	10.230	50.41	8.0	0.4
12.5	41.0	10.300	50.54	28.0	1.5
15.0	49.2	10.350	50.63	20.0	1.1
17.5	57.4	10.430	50.77	32.0	1.8
20.0	65.6	10.480	50.86	20.0	1.1
22.5	73.8	10.510	50.92	12.0	0.7
25.0	82.0	10.530	50.95	8.0	0.4
27.5	90.2	10.550	50.99	8.0	0.4
30.0	98.4	10.560	51.01	4.0	0.2
32.5	106.6	10.580	51.04	8.0	0.4
35.0	114.8	10.600	51.08	8.0	0.4
37.5	123.0	10.620	51.12	8.0	0.4
40.0	131.2	10.650	51.17	12.0	0.7
42.5	139.4	10.670	51.21	8.0	0.4
45.0	147.6	10.700	51.26	12.0	0.7
50.0	164.0	10.760	51.37	12.0	0.7
55.0	180.4	10.810	51.46	10.0	0.5
60.0	196.8	10.910	51.64	20.0	1.1
65.0	213.2	11.010	51.82	20.0	1.1
70.0	229.6	11.160	52.09	30.0	1.6
75.0	246.0	11.300	52.34	28.0	1.5
80.0	262.4	11.460	52.63	32.0	1.8
85.0	278.8	11.710	53.08	50.0	2.7
90.0	295.2	11.810	53.26	20.0	1.1

LOCATION: PENDLETON AMS, OREGON  
 39°38'N 43°W  
 HOLE NUMBER: HIGHDEPT  
 DATE MEASURED: 8/22/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
5.0	16.4	15.670	60.21	0.0	0.0
7.5	24.6	12.280	54.10	-1356.0	-74.4
10.0	32.0	12.210	53.98	-108.0	-1.0
12.5	41.0	12.120	53.82	-36.0	-1.0
15.0	49.0	11.950	53.53	-64.0	-1.0
17.5	57.4	11.870	53.37	-36.0	-1.0
20.0	65.0	11.760	53.17	-44.0	-1.0
22.5	73.0	11.650	53.04	-72.0	-1.0
25.0	82.0	11.670	53.01	-18.0	-1.0
27.5	90.4	11.630	52.93	-16.0	-1.0
30.0	98.4	11.650	52.97	0.0	0.4
32.5	106.6	11.670	53.01	0.0	0.4
35.0	114.0	11.670	53.01	0.0	0.0
37.5	123.0	11.660	52.99	-4.0	-1.0
40.0	131.2	11.660	52.99	0.0	0.0
42.5	139.4	11.670	53.01	4.0	0.0
45.0	147.6	11.670	53.01	0.0	0.0
50.0	164.0	11.670	53.01	0.0	0.0
55.0	180.4	11.670	53.01	0.0	0.0
60.0	196.0	11.670	53.01	0.0	0.0
65.0	213.2	11.670	53.01	0.0	0.0
70.0	229.6	11.670	53.01	0.0	0.0
75.0	246.0	11.670	53.01	0.0	0.0

LOCATION: GRANGEVILLE AMS, OREGON

35/39E- 2CD

HOLE NUMBER: HAMMAN

DATE MEASURED: 8/22/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
5.0	16.4	10.370	50.67	0.0	0.0
7.5	24.6	10.380	50.68	4.0	0.0
10.0	32.8	10.370	50.67	-4.0	0.0
12.5	41.0	10.410	50.74	16.0	0.0
15.0	49.2	10.450	50.81	16.0	0.4
17.5	57.4	10.470	50.86	0.0	0.0
20.0	65.6	10.480	50.86	4.0	0.0
22.5	73.8	10.550	50.99	28.0	1.0
25.0	82.0	10.570	51.03	0.0	0.4
27.5	90.2	10.620	51.12	28.0	1.1
30.0	98.4	10.660	51.19	16.0	0.0
32.5	106.6	10.700	51.26	16.0	0.0
35.0	114.8	10.740	51.33	16.0	0.0
37.5	123.0	10.790	51.42	20.0	1.1
40.0	131.2	10.850	51.53	24.0	1.0
42.5	139.4	10.890	51.60	16.0	0.0
45.0	147.6	10.950	51.71	24.0	1.0
50.0	164.0	11.060	51.91	22.0	1.0
55.0	180.4	11.170	52.11	22.0	1.0
60.0	196.8	11.330	52.38	32.0	1.0
65.0	213.2	11.490	52.60	32.0	1.0
70.0	229.6	11.610	52.80	24.0	1.0
75.0	246.0	11.700	53.06	18.0	1.0
80.0	262.4	11.780	53.20	16.0	0.0
85.0	278.8	11.850	53.33	14.0	0.0

LOCATION: GRANGEVILLE AMS, OREGON

35/40E-14CB 1

HOLE NUMBER: COVE 1

DATE MEASURED: 8/24/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
22.5	73.8	10.870	51.57	0.0	0.0
25.0	82.0	10.910	51.64	16.0	0.0
27.5	90.2	10.980	51.76	28.0	1.0
30.0	98.4	11.040	51.87	24.0	1.0
32.5	106.6	11.100	51.98	24.0	1.0
35.0	114.8	11.180	52.12	32.0	1.0
37.5	123.0	11.260	52.27	32.0	1.0
40.0	131.2	11.310	52.36	20.0	1.1
42.5	139.4	11.350	52.43	16.0	0.0
45.0	147.6	11.380	52.48	12.0	0.7

LOCATION: GRANGEVILLE AMS, OREGON  
 3S/40E-14CB 2  
 HOLE NUMBER: COVE 2  
 DATE MEASURED: 8/24/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
20.0	65.6	11.040	51.87	0.0	0.0
22.5	73.8	11.070	51.93	12.0	0.7
25.0	82.0	11.130	52.03	24.0	1.3
27.5	90.2	11.200	52.16	28.0	1.5
30.0	98.4	11.340	52.41	56.0	3.1
32.5	106.6	11.390	52.50	20.0	1.1
35.0	114.8	11.400	52.52	4.0	0.2
37.5	123.0	11.430	52.57	12.0	0.7
40.0	131.2	11.450	52.61	8.0	0.4
42.5	139.4	11.510	52.72	24.0	1.3
45.0	147.6	11.520	52.74	4.0	0.2
50.0	164.0	11.540	52.77	4.0	0.2
55.0	180.4	11.780	53.20	48.0	2.7
60.0	196.8	12.470	54.45	138.0	7.5
65.0	213.2	12.620	54.72	30.0	1.6
70.0	229.6	12.970	55.35	70.0	3.8
75.0	246.0	13.260	55.87	56.0	3.1
80.0	262.4	13.670	56.61	82.0	4.5
85.0	278.8	14.140	57.45	94.0	5.0
90.0	295.2	14.530	58.15	78.0	4.3
95.0	311.6	14.860	58.75	66.0	3.6
100.0	328.0	15.170	59.31	62.0	3.4
105.0	344.4	15.350	59.53	36.0	2.0

LOCATION: THE DALLES AMS, OREGON  
 45/12E-10DD  
 HOLE NUMBER: TRAEHOR  
 DATE MEASURED: 6/10/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
10.0	32.8	11.890	53.40	0.0	0.0
20.0	65.6	11.490	52.68	-40.0	-2.2
30.0	98.4	12.350	54.23	86.0	4.7
40.0	131.2	13.200	55.76	85.0	4.7
50.0	164.0	13.560	56.41	36.0	2.0
60.0	196.8	13.940	57.09	38.0	2.1
65.0	213.2	14.000	57.20	12.0	0.7
70.0	229.6	14.000	57.20	0.0	0.0
75.0	246.0	14.020	57.24	4.0	0.2
80.0	262.4	14.130	57.43	22.0	1.2
85.0	278.8	14.130	57.43	0.0	0.0
90.0	295.2	14.330	57.79	40.0	2.2

LOCATION: THE DALLES AMS, OREGON  
 45°12' E-17BC  
 HOLE NUMBER: 3 MI CK  
 DATE MEASURED: 6/17/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
35.0	114.8	11.740	53.13	0.0	0.0
40.0	131.2	11.760	53.17	4.0	0.1
45.0	147.6	11.770	53.19	2.0	0.1
50.0	164.0	11.800	53.24	6.0	0.1300
55.0	180.4	11.820	53.28	4.0	0.1
60.0	196.8	11.850	53.33	6.0	0.1300
65.0	213.2	11.880	53.38	6.0	0.1300
70.0	229.6	11.910	53.44	6.0	0.1300
75.0	246.0	11.940	53.49	6.0	0.1300
80.0	262.4	11.980	53.56	8.0	0.4
85.0	278.8	12.020	53.64	8.0	0.4
90.0	295.2	12.070	53.73	10.0	0.57
95.0	311.6	12.130	53.83	12.0	0.57
100.0	328.0	12.180	53.92	10.0	0.57
105.0	344.4	12.240	54.03	12.0	0.7
110.0	360.8	12.280	54.10	8.0	0.4
115.0	377.2	12.290	54.12	2.0	0.1
120.0	393.6	12.410	54.34	24.0	1.3
125.0	410.0	12.500	54.50	18.0	1.0
130.0	426.4	12.570	54.63	14.0	0.8
135.0	442.8	12.670	54.81	20.0	1.1
140.0	459.2	12.750	54.95	16.0	0.8
145.0	475.6	12.770	54.99	4.0	0.1
150.0	492.0	12.820	55.08	10.0	0.5

LOCATION: THE DALLES AMS, OREGON  
 45°12' E-17CC  
 HOLE NUMBER: OBERMEIR  
 DATE MEASURED: 6/17/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
30.0	98.4	11.240	52.23	0.0	0.0
50.0	164.0	11.340	52.41	5.0	0.3300
70.0	229.6	11.450	52.61	5.0	0.3300
90.0	295.2	11.560	52.81	5.0	0.3300
110.0	360.0	11.760	53.17	10.0	0.57
130.0	426.4	12.120	53.82	18.0	1.0
135.0	442.8	12.140	53.85	4.0	0.3000
140.0	459.2	12.250	54.05	22.0	1.3
145.0	475.6	12.350	54.23	20.0	1.1
150.0	492.0	12.390	54.30	8.0	0.4
155.0	508.4	12.630	54.73	48.0	2.6
160.0	524.8	12.830	55.09	40.0	2.000
165.0	541.2	12.940	55.29	22.0	1.2
170.0	557.6	14.070	57.33	226.0	12.4
175.0	574.0	14.090	57.36	4.0	0.2200
180.0	590.4	14.130	57.43	8.0	0.4
184.0	603.5	14.480	58.06	87.5	4.8

LOCATION: THE DALLES AMS, OREGON  
 49°13'N - 124°  
 HOLE NUMBER: ASHLEY 1  
 DATE MEASURED: 6/10/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	10.570	51.03	0.0	0.0
12.5	41.0	10.990	51.78	168.0	9.0
15.0	49.2	11.530	52.75	216.0	11.9
17.5	57.4	12.270	54.05	236.0	16.2
20.0	65.6	12.970	55.35	280.0	15.4
22.5	73.8	13.070	55.53	40.0	1.3
25.0	82.0	13.130	55.63	24.0	1.2
27.5	90.2	13.230	55.81	40.0	1.3
30.0	98.4	13.460	56.23	92.0	6.6
32.5	106.6	13.760	56.77	120.0	6.6
35.0	114.8	13.890	57.00	52.0	0.0
37.5	123.0	14.010	57.22	48.0	0.0
40.0	131.2	14.240	57.63	92.0	6.6
42.5	139.4	14.610	58.30	148.0	6.1
45.0	147.6	14.850	58.73	96.0	6.3
47.5	155.8	14.880	58.78	12.0	0.7
50.0	164.0	14.920	58.86	16.0	0.9
52.5	172.2	14.970	58.95	20.0	1.1
55.0	180.4	15.070	59.13	40.0	2.2
57.5	188.6	15.110	59.20	16.0	0.9
60.0	196.8	15.160	59.29	20.0	1.1
65.0	213.0	15.270	59.49	22.0	1.2
70.0	229.6	15.390	59.70	24.0	1.3
75.0	246.0	16.340	61.41	190.0	10.4

LOCATION: THE DALLES AMS, OREGON

49/13E-240A

HOLE NUMBER: HOOPER

DATE MEASURED: 6/ 9/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
40.0	131.2	12.010	53.62	0.0	0.0
45.0	147.6	11.940	53.49	-14.0	-0.8
50.0	164.0	11.880	53.38	-12.0	-0.7
55.0	180.4	11.840	53.31	-8.0	-0.4
60.0	196.8	11.780	53.20	-12.0	-0.7
65.0	213.2	11.710	53.08	-14.0	-0.8
70.0	229.6	11.680	53.02	-6.0	-0.3
75.0	246.0	11.640	52.95	-8.0	-0.4
80.0	262.4	11.200	52.16	-88.0	-4.0
85.0	278.8	11.180	52.12	-4.0	-0.2
90.0	295.2	11.170	52.11	-2.0	-0.1
95.0	311.6	11.150	52.07	-4.0	-0.2
100.0	328.0	11.110	52.00	-18.0	-0.4
105.0	344.4	11.100	51.98	2.0	-0.1
110.0	360.8	11.100	51.98	0.0	0.0
115.0	377.2	11.100	51.98	0.0	0.0
120.0	393.6	11.100	51.98	0.0	0.0
125.0	410.0	11.100	51.98	0.0	0.0
130.0	426.4	11.100	51.98	0.0	0.0
135.0	442.8	11.150	52.07	10.0	0.5
136.0	446.1	11.230	52.32	140.0	7.7

LOCATION: THE DALLES AMS, OREGON  
 45°13'32"E  
 HOLE NUMBER: PAULSON  
 DATE MEASURED: 6/ 9/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
20.0	65.6	12.440	54.39	0.0	0.0
30.0	98.4	12.460	54.43	2.0	0.1
40.0	131.2	12.500	54.50	4.0	0.0
50.0	164.0	12.550	54.59	5.0	0.0
60.0	196.8	12.590	54.66	4.0	0.2
70.0	229.6	12.710	54.88	12.0	0.7
75.0	246.0	12.860	55.15	30.0	1.6
80.0	262.4	13.030	55.45	34.0	1.9
85.0	278.8	13.070	55.53	8.0	0.4
90.0	295.2	13.340	56.01	54.0	3.0
95.0	311.6	14.210	57.58	174.0	9.5
100.0	328.0	15.060	59.11	170.0	9.0
105.0	344.4	15.860	60.55	160.0	8.0
110.0	360.8	16.430	61.57	114.0	6.0
115.0	377.2	16.880	62.38	90.0	4.0
120.0	393.6	17.320	63.18	88.0	4.0
125.0	410.0	17.610	63.70	58.0	2.0
130.0	426.4	17.930	64.27	64.0	3.0
135.0	442.8	18.200	64.76	54.0	3.0
140.0	459.2	18.390	65.16	38.0	2.1
144.7	474.6	18.630	65.53	51.1	2.0

LOCATION: THE DALLES AMS, OREGON  
 45°14'19"E  
 HOLE NUMBER: CHASTAIN  
 DATE MEASURED: 6/ 9/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
60.0	196.8	11.680	53.04	0.0	0.0
65.0	213.2	11.690	53.04	0.0	0.0
70.0	229.6	11.690	53.04	0.0	0.0
75.0	246.0	11.680	53.02	-2.0	-0.1
80.0	262.4	11.680	53.02	0.0	0.0
85.0	278.8	11.710	53.08	5.0	0.3
90.0	295.2	11.680	53.02	-5.0	-0.3
95.0	311.6	11.670	53.01	-2.0	-0.1
100.0	328.0	11.680	53.02	2.0	0.1

LOCATION: THE DALLES OMS, OREGON  
 45°14'48"-33°48'00"  
 HOLE NUMBER: BLMMAUPN  
 DATE MEASURED: 7/11/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
20.0	65.6	16.340	61.41	0.0	0.0
25.0	82.0	16.460	61.63	24.0	1.3
30.0	98.4	16.600	61.88	28.0	1.5
35.0	114.8	16.650	61.97	10.0	0.5
40.0	131.2	16.810	62.26	32.0	1.00
45.0	147.6	17.020	62.64	42.0	1.33
50.0	164.0	17.200	62.96	36.0	0.9
55.0	180.4	17.420	63.36	44.0	1.4
60.0	196.8	17.790	64.62	74.0	4.1
65.0	213.2	18.190	64.74	80.0	4.4
70.0	229.6	18.350	65.03	32.0	1.8

LOCATION: PENDLETON OMS, OREGON  
 49°28'45"-121°58'00"  
 HOLE NUMBER: BM-PDH  
 DATE MEASURED: 2/15/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
15.0	49.0	9.150	49.47	0.0	0.0
20.0	65.6	9.130	49.43	-4.0	-0.8000000000000001
25.0	82.0	9.190	49.47	4.0	0.8000000000000001
30.0	98.4	9.210	49.56	10.0	2.0000000000000002
35.0	114.8	9.230	49.76	16.0	3.2000000000000003
40.0	131.2	9.360	49.85	16.0	3.2000000000000003
45.0	147.6	9.460	49.86	24.0	4.8000000000000004
50.0	164.0	9.560	49.99	24.0	4.8000000000000004
55.0	180.4	9.730	49.91	36.0	7.2000000000000005
60.0	196.8	9.930	50.80	32.0	4.1000000000000004
65.0	213.2	10.050	50.16	40.0	4.0000000000000004
70.0	229.6	10.070	50.49	36.0	4.0000000000000004
75.0	246.0	10.410	50.79	34.0	4.1000000000000004
80.0	262.4	10.610	51.16	34.0	4.1000000000000004
85.0	278.8	10.790	51.47	36.0	4.1000000000000004
90.0	295.2	10.930	51.75	36.0	4.1000000000000004
95.0	311.6	11.100	52.09	36.0	4.1000000000000004
100.0	328.0	11.350	52.47	36.0	4.1000000000000004
105.0	344.4	11.530	52.75	36.0	4.1000000000000004
110.0	360.8	11.710	53.06	36.0	4.1000000000000004
115.0	377.2	11.890	53.42	36.0	4.1000000000000004
120.0	393.6	12.040	53.75	36.0	4.1000000000000004
125.0	410.0	12.270	54.09	36.0	4.1000000000000004
130.0	426.4	12.490	54.39	42.0	4.3000000000000004

LOCATION: GRANGEVILLE AMS, OREGON  
 49/40E-1BBA  
 HOLE NUMBER: UNIONETY  
 DATE MEASURED: 8/23/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.0	17.040	62.67	0.0	0.0
15.0	49.2	17.800	64.04	152.0	8.3
20.0	65.6	18.790	65.82	198.0	10.9
25.0	82.0	19.770	67.59	198.0	10.8
30.0	98.4	20.780	69.40	202.0	11.1
35.0	114.8	21.470	70.65	138.0	7.6
40.0	131.2	21.580	70.84	22.0	1.2
45.0	147.6	21.590	70.86	2.0	0.1
50.0	164.0	21.600	70.89	2.0	0.1
55.0	180.4	21.610	70.90	2.0	0.1
60.0	196.8	21.610	70.90	0.0	0.0
65.0	213.2	21.610	70.90	0.0	0.0
70.0	229.6	21.610	70.90	0.0	0.0
75.0	246.0	21.620	70.92	2.0	0.1
80.0	262.4	21.640	70.95	4.0	0.20
85.0	278.8	21.700	71.06	12.0	0.7
90.0	295.2	21.740	71.13	8.0	0.4
95.0	311.6	21.760	71.17	4.0	0.21
100.0	328.0	21.770	71.19	0.0	0.1
105.0	344.4	21.810	71.26	8.0	0.4
110.0	360.8	21.850	71.33	8.0	0.4
115.0	377.2	21.870	71.37	4.0	0.2
120.0	393.6	21.880	71.38	2.0	0.1
125.0	410.0	21.910	71.44	6.0	0.3
130.0	426.4	21.950	71.51	8.0	0.4
135.0	442.8	22.020	71.64	14.0	0.8
140.0	459.2	22.050	71.69	6.0	0.3
145.0	475.6	22.100	71.78	10.0	0.5
150.0	492.0	22.140	71.85	8.0	0.4
155.0	508.4	22.180	71.92	8.0	0.4
160.0	524.8	22.230	72.01	10.0	0.5
165.0	541.2	22.260	72.07	6.0	0.3
170.0	557.6	22.310	72.16	10.0	0.5
175.0	574.0	22.330	72.19	4.0	0.2
180.0	590.4	22.380	72.28	10.0	0.5
185.0	606.8	22.430	72.37	10.0	0.5
190.0	623.2	22.470	72.45	8.0	0.4
195.0	639.6	22.490	72.48	4.0	0.2
200.0	656.0	22.510	72.52	4.0	0.2

LOCATION: GRANGEVILLE AMS, OREGON  
 45°40' E-18BA  
 HOLE NUMBER: UNIONCTY  
 DATE MEASURED: 8/23/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
205.0	672.4	22.530	72.55	4.0	0.2
210.0	688.0	22.550	72.59	4.0	0.2
215.0	705.2	22.560	72.61	2.0	0.1
220.0	721.6	22.600	72.68	8.0	0.4
225.0	738.0	22.620	72.72	4.0	0.2
230.0	754.4	22.630	72.73	2.0	0.1
235.0	770.0	22.630	72.73	0.0	0.0
240.0	787.2	22.640	72.75	2.0	0.1
245.0	803.6	22.660	72.79	4.0	0.2
250.0	820.0	22.680	72.82	4.0	0.2
255.0	836.4	22.690	72.84	2.0	0.1
260.0	852.0	22.720	72.90	6.0	0.3
265.0	869.2	22.730	72.91	2.0	0.1
270.0	885.6	22.740	72.93	2.0	0.1
275.0	902.0	22.760	72.97	4.0	0.2
280.0	918.4	22.770	72.99	2.0	0.1
285.0	934.0	22.770	72.99	0.0	0.0
290.0	951.2	22.780	73.00	2.0	0.1
295.0	967.6	22.780	73.00	0.0	0.0
300.0	984.0	22.780	73.00	0.0	0.0
305.0	1000.4	22.780	73.00	0.0	0.0
310.0	1016.0	22.790	73.02	2.0	0.1

LOCATION: GRANGEVILLE AMS, OREGON  
 4S/40E-18CD  
 HOLE NUMBER: UNIONGRN  
 DATE MEASURED: 8/24/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
5.0	16.4	12.120	53.82	0.0	0.0
7.5	24.6	12.050	53.89	-28.0	-1.5
10.0	32.8	12.050	53.89	0.0	0.0
12.5	41.0	12.130	53.83	32.0	1.8
15.0	49.2	12.270	54.09	56.0	3.1
17.5	57.4	12.450	54.41	72.0	4.0
20.0	65.6	12.600	54.68	80.0	3.3
22.5	73.8	12.740	54.93	56.0	3.1
25.0	82.0	12.930	55.38	100.0	4.4
27.5	90.2	13.200	55.76	84.0	4.0
30.0	98.4	13.350	56.03	60.0	3.3
32.5	106.6	13.450	56.21	40.0	2.4
35.0	114.8	13.550	56.39	40.0	2.4
37.5	123.0	13.660	56.59	44.0	2.4
40.0	131.2	13.850	56.93	76.0	4.4
42.5	139.4	14.090	57.36	96.0	5.0
45.0	147.6	14.320	57.78	92.0	4.7
50.0	164.0	14.680	58.39	68.0	3.6
55.0	180.4	14.990	59.98	66.0	3.6
60.0	196.8	15.080	59.14	18.0	1.0
65.0	213.2	15.610	60.10	106.0	5.0
70.0	229.6	15.910	60.64	60.0	3.0
75.0	246.0	16.200	61.16	58.0	3.0

LOCATION: THE DALLES AMS, OREGON  
 5S/11E-14DD  
 HOLE NUMBER: WHITE R  
 DATE MEASURED: 6/14/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
100.0	328.0	10.900	51.62	0.0	0.0
120.0	393.6	10.900	51.62	0.0	0.0
140.0	459.2	11.020	51.54	5.0	0.35
160.0	524.8	11.220	52.20	10.0	0.50
180.0	590.4	11.500	52.70	14.0	0.67
200.0	656.0	11.950	53.51	22.5	1.20
220.0	721.6	12.210	53.96	13.0	0.7
240.0	787.2	12.380	55.36	38.5	2.1
245.0	803.6	13.050	55.49	14.0	0.8

LOCATION: THE DALLES AMS, OREGON  
 5S/12E- 8BB  
 HOLE NUMBER: SMOK PR  
 DATE MEASURED: 6/16/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
20.0	65.6	11.980	53.56	0.0	0.0
25.0	82.0	11.880	53.38	-20.0	-1.1
30.0	98.4	11.750	53.15	-26.0	-1.4
35.0	114.8	11.670	53.01	-16.0	-0.9

LOCATION: THE DALLES AMS, OREGON  
 5S/12E-31AA  
 HOLE NUMBER: Pngr SE  
 DATE MEASURED: 6/16/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
20.0	65.6	14.830	58.69	0.0	0.0
40.0	131.2	14.450	58.01	-19.0	-1.0
60.0	196.8	14.580	58.24	6.5	0.4
70.0	229.6	14.600	58.28	2.0	0.1
80.0	262.4	14.610	58.30	1.0	0.1
90.0	295.2	14.740	58.53	13.0	0.7
95.0	311.6	14.700	58.46	-0.0	-0.4
100.0	328.0	14.740	58.53	0.0	0.4
105.0	344.4	14.760	58.57	4.0	0.2
107.5	352.6	14.880	58.78	48.0	2.6

LOCATION: THE DALLES AMS, OREGON  
 5S/16E-26CB  
 HOLE NUMBER: WARD RNH  
 DATE MEASURED: 6/16/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
10.0	32.8	11.770	53.19	0.0	0.0
20.0	65.6	11.660	52.99	-11.0	-0.6
30.0	98.4	12.500	54.50	84.0	4.6
40.0	131.2	12.810	55.06	31.0	1.7
50.0	164.0	13.160	55.69	35.0	1.8
60.0	196.8	13.520	56.34	36.0	1.8
70.0	229.6	13.890	57.00	37.0	1.8
80.0	262.4	14.210	57.58	32.0	1.8
90.0	295.2	14.730	58.51	52.0	1.8
100.0	328.0	15.330	59.58	60.0	1.8
105.0	344.4	15.590	60.06	52.0	1.8
110.0	360.8	15.840	60.51	50.0	1.8
115.0	377.2	16.080	60.94	48.0	1.8
120.0	393.6	16.370	61.47	58.0	1.8

LOCATION: THE DALLES AMS, OREGON  
 5S/16E-33DC  
 HOLE NUMBER: SNODGRAS  
 DATE MEASURED: 6/16/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOOTHERMAL GRADIENT DEG C/KM	GEOETHERMAL GRADIENT DEG F/100 FT
20.0	65.6	11.860	53.35	0.0	0.0
30.0	98.4	12.320	54.18	46.0	0.5
35.0	114.8	12.750	54.95	86.0	4.7
37.5	123.0	12.780	55.00	12.0	0.7
40.0	131.2	12.820	55.08	16.0	0.9
42.5	139.4	12.880	55.18	24.0	1.3
45.0	147.6	12.910	55.24	12.0	0.7
47.5	155.8	13.070	55.53	64.0	3.5

LOCATION: VANCOUVER AMS, OREGON  
 6S/ 4W-31ACD  
 HOLE NUMBER: OW B1  
 DATE MEASURED: 6/ 1/60

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOOTHERMAL GRADIENT DEG C/KM	GEOETHERMAL GRADIENT DEG F/100 FT
0.0	0.0	19.700	51.26	0.0	0.0
565.0	1853.2	26.100	78.98	27.3	1.5
1884.0	5523.5	50.000	122.00	21.4	1.2

LOCATION: THE DALLES AMS, OREGON  
 6S/ 7E- 4DC  
 HOLE NUMBER: CR-LKH  
 DATE MEASURED: 7/25/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOOTHERMAL GRADIENT DEG C/KM	GEOETHERMAL GRADIENT DEG F/100 FT
5.0	16.4	8.400	47.12	0.0	0.0
7.5	24.6	8.130	46.63	-108.0	-5.9
10.0	32.8	8.020	46.44	-44.0	-2.4
12.5	41.0	7.900	46.22	-48.0	-2.6
15.0	49.2	7.820	46.08	-32.0	-1.8
17.5	57.4	7.770	45.99	-20.0	-1.1
20.0	65.6	7.760	45.86	-12.0	-0.7
22.5	73.8	7.670	45.81	-12.0	-0.7
25.0	82.0	7.520	45.56	-48.0	-2.6
27.5	90.2	7.530	45.59	-108.0	-5.9
30.0	98.4	7.530	45.59	0.0	0.0
32.5	106.6	7.540	45.59	4.0	0.000
35.0	114.8	7.550	45.59	4.0	0.000
37.5	123.0	7.570	45.63	8.0	0.4

LOCATION: THE DALLES AMS, OREGON  
 6S/7E-21CD  
 HOLE NUMBER: AUST HSE  
 DATE MEASURED: 6/29/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
7.5	24.6	10.690	51.24	0.0	0.0
10.0	32.8	11.150	52.07	184.0	10.1
12.5	41.0	11.530	52.75	152.0	8.3
15.0	49.2	12.410	54.34	352.0	19.3
17.5	57.4	13.280	55.93	348.0	19.1
20.0	65.6	13.770	56.70	196.0	10.0
22.5	73.8	14.160	57.49	156.0	8.5
25.0	82.0	14.940	58.99	312.0	17.1
27.5	90.2	15.300	59.52	384.0	21.1
30.0	98.4	16.260	51.27	144.0	7.9
32.5	106.6	16.720	52.10	184.0	10.1
35.0	114.8	17.140	52.85	168.0	9.0
37.5	123.0	17.350	53.23	84.0	4.5
40.0	131.2	17.870	54.17	293.0	11.4

LOCATION: THE DALLES AMS, OREGON  
 6S/14E-13DD  
 HOLE NUMBER: CRITRN 1  
 DATE MEASURED: 6/14/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.8	11.430	52.57	0.0	0.0
20.0	65.6	11.620	52.92	19.0	1.0
30.0	98.4	11.790	53.22	17.0	0.9
40.0	131.2	11.970	53.55	18.0	1.0
50.0	164.0	12.240	54.03	27.0	1.5
60.0	196.8	12.550	54.59	31.0	1.7
70.0	229.6	12.870	55.17	32.0	1.8
80.0	262.4	13.210	55.78	34.0	1.9
90.0	295.2	13.600	56.48	39.0	2.1
100.0	328.0	14.110	57.40	51.0	2.8
110.0	360.8	14.720	58.50	61.0	3.3
115.0	377.0	14.760	58.57	8.0	0.4
120.0	393.6	14.900	58.82	28.0	1.5

LOCATION: THE DALLES AMS, OREGON  
 6S/15E-5BA  
 HOLE NUMBER: MCLEOD R  
 DATE MEASURED: 6/15/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
35.0	114.8	12.820	55.88	0.0	0.0
40.0	131.2	12.990	55.98	34.0	1.9
45.0	147.6	13.360	56.05	74.0	4.1
50.0	164.0	13.610	56.50	50.0	2.7
55.0	180.4	13.770	56.79	32.0	2.0
60.0	196.8	13.960	57.13	38.0	2.1
65.0	213.2	14.160	57.49	40.0	2.0
70.0	229.6	14.360	57.85	40.0	2.0

LOCATION: GRANGEVILLE AMS, OREGON  
 6S/48E-21CA  
 HOLE NUMBER: ID-43P  
 DATE MEASURED: 5/16/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	12.010	53.62	0.0	0.0
15.0	49.2	12.050	53.69	8.0	0.4
20.0	65.6	11.990	53.58	-12.0	-0.7
25.0	82.0	11.890	53.40	-20.0	-1.1
30.0	98.4	11.790	53.22	-20.0	-1.1
35.0	114.8	11.980	53.56	38.0	2.1
40.0	131.2	12.110	53.86	26.0	1.4
45.0	147.6	12.180	53.89	10.0	0.5
50.0	164.0	12.300	54.14	28.0	1.5
55.0	180.4	12.480	54.46	38.0	2.0
60.0	196.8	12.610	54.70	26.0	1.4
65.0	213.2	12.770	54.99	32.0	1.8
70.0	229.6	12.950	55.31	36.0	2.0
75.0	246.0	13.130	55.63	36.0	2.0
80.0	262.4	13.290	55.92	32.0	1.8
85.0	278.8	13.500	56.30	42.0	2.0
90.0	295.2	13.630	56.53	26.0	1.4
95.0	311.6	13.750	56.75	24.0	1.3
100.0	328.0	14.010	57.22	52.0	2.8
105.0	344.4	14.170	57.51	32.0	1.8
110.0	360.8	14.290	57.72	24.0	1.3
115.0	377.2	14.280	57.70	-2.0	-0.1
120.0	393.6	14.540	58.17	52.0	2.8
125.0	410.0	14.590	58.26	10.0	0.5
130.0	426.4	14.760	58.57	34.0	1.9
135.0	442.8	14.840	58.71	16.0	0.9
140.0	459.2	14.940	58.89	20.0	1.2
145.0	475.6	15.060	59.11	24.0	1.3
150.0	492.0	15.210	59.38	30.0	1.6
155.0	508.4	15.440	59.79	46.0	3.0
160.0	524.8	15.640	60.15	40.0	2.0
165.0	541.2	15.810	60.46	34.0	1.9
170.0	557.6	15.870	60.57	12.0	0.7

LOCATION: SALEM AMS, OREGON  
 7S/ 1E-11ACA  
 HOLE NUMBER: DW W1  
 DATE MEASURED: 7/ /62

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEOOTHERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
0.0	0.0	9.800	49.64	0.0	0.0
354.0	1161.1	32.200	89.96	63.3	3.5
2379.0	7803.1	71.700	161.06	19.5	1.1

LOCATION: SALEM AMS, OREGON  
 7S/ 1E-32CC  
 HOLE NUMBER: FUNJAMEN  
 DATE MEASURED: 8/ 8/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEOOTHERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
65.0	213.2	11.370	52.47	0.0	0.0
70.0	229.6	11.500	52.70	26.0	1.4
75.0	246.0	11.680	53.02	36.0	2.0
80.0	262.4	11.830	53.29	30.0	1.6
85.0	278.8	12.110	53.80	56.0	3.1
90.0	295.2	12.420	54.36	52.0	3.4
95.0	311.6	12.620	54.72	40.0	2.0
100.0	328.0	12.810	55.06	38.0	2.1
105.0	344.4	12.980	55.36	34.0	1.9
110.0	360.8	13.140	55.65	32.0	1.8
115.0	377.2	13.320	55.98	36.0	2.0
120.0	393.6	13.440	56.19	24.0	1.05
125.0	410.0	13.560	56.48	32.0	1.8

LOCATION: CANYON CITY AMS, OREGON  
 79/38E-35CC  
 HOLE NUMBER: J KERNS  
 DATE MEASURED: 6/ 1/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
7.5	24.6	8.640	47.55	0.0	0.0
10.0	32.8	8.760	47.77	48.0	0.0
15.0	49.2	8.980	48.16	44.0	0.4
20.0	65.0	9.000	48.20	4.0	0.0
25.0	82.0	9.010	48.22	2.0	0.1
30.0	98.4	9.040	48.27	6.0	0.0
35.0	114.0	9.110	48.40	14.0	0.0
40.0	131.2	9.860	49.75	150.0	0.0
45.0	147.6	10.010	50.00	30.0	1.0
50.0	164.0	10.050	50.09	0.0	0.4
55.0	180.4	10.070	50.13	4.0	0.0
60.0	196.8	10.080	50.14	2.0	0.1
65.0	213.2	10.100	50.18	4.0	0.0
70.0	229.6	10.120	50.22	4.0	0.1
75.0	246.0	10.110	50.20	100.0	0.1
80.0	262.4	10.120	50.22	100.0	0.1
85.0	278.8	10.130	50.23	100.0	0.1
90.0	295.2	10.140	50.25	100.0	0.1
95.0	311.6	10.150	50.27	100.0	0.1
100.0	328.0	10.610	51.10	92.0	5.0
105.0	344.4	11.240	52.23	125.0	5.0
110.0	360.8	11.700	53.05	92.0	5.0
115.0	377.2	11.960	53.53	52.0	5.2

LOCATION: SALEM AMS, OREGON  
 85/ SE-31CC  
 HOLE NUMBER: CDR CK  
 DATE MEASURED: 10/26/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	6.380	43.48	0.0	0.0
15.0	49.2	6.280	43.30	-20.0	-1.1
20.0	65.6	6.390	43.50	22.0	1.00
25.0	82.0	6.600	43.88	42.0	1.00
30.0	98.4	7.060	44.71	32.0	1.00
35.0	114.8	7.310	45.16	50.0	1.00
40.0	131.2	7.470	45.45	30.0	1.00
45.0	147.6	7.610	45.70	28.0	1.00
50.0	164.0	7.750	45.95	28.0	1.00
55.0	180.4	7.890	46.20	28.0	1.00
60.0	196.8	8.030	46.45	28.0	1.00
65.0	213.2	8.150	46.67	24.0	1.00
70.0	229.6	8.260	46.87	22.0	1.00
75.0	246.0	8.400	47.12	28.0	1.00
80.0	262.4	8.540	47.37	28.0	1.00
85.0	278.8	8.690	47.64	30.0	1.00
90.0	295.2	8.830	47.89	28.0	1.00
95.0	311.6	8.970	48.15	28.0	1.00
100.0	328.0	9.100	48.38	26.0	1.4
105.0	344.4	9.250	48.65	30.0	1.00
110.0	360.8	9.450	49.01	40.0	1.00
115.0	377.2	9.610	49.30	32.0	1.00
120.0	393.6	9.880	49.75	50.0	1.00
125.0	410.0	10.010	50.02	30.0	1.00
130.0	426.4	10.080	50.14	14.0	0.00
135.0	442.8	10.220	50.40	28.0	1.00
140.0	459.2	10.380	50.68	32.0	1.00
145.0	475.6	10.560	51.01	38.0	1.00
150.0	492.0	10.720	51.30	32.0	1.00
155.0	508.4	10.890	51.60	34.0	1.00
160.0	524.8	11.070	51.93	36.0	1.00
165.0	541.2	11.230	52.21	32.0	1.00
170.0	557.6	11.400	52.50	34.0	1.00
175.0	574.0	11.570	52.83	34.0	1.00
180.0	590.4	11.770	53.19	40.0	1.00
185.0	606.8	11.910	53.44	28.0	1.00
190.0	623.2	12.110	53.80	40.0	1.00
195.0	639.6	12.280	54.10	34.0	1.00
200.0	656.0	12.460	54.43	36.0	1.00

LOCATION: SALEM AMS, OREGON  
85/ SE-310C  
HOLE NUMBER: CDR.CK  
DATE MEASURED: 10/26/77

PAGE 2

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
205.0	672.4	12.610	54.70	30.0	1.6
210.0	688.8	12.770	54.99	32.0	1.8
215.0	705.2	12.930	55.27	32.0	1.8
220.0	721.6	13.080	55.54	30.0	1.6
225.0	738.0	13.240	55.83	32.0	1.8
230.0	754.4	13.390	56.10	30.0	1.6
235.0	770.8	13.550	56.39	32.0	1.8
240.0	787.2	13.720	56.70	34.0	1.9
245.0	803.6	13.880	57.00	34.0	1.9
250.0	820.0	14.040	57.27	30.0	1.6
255.0	836.4	14.220	57.60	36.0	2.0
260.0	852.8	14.370	57.87	30.0	1.6
265.0	869.2	14.560	58.21	38.0	2.1
270.0	885.6	14.740	58.53	36.0	1.9
275.0	902.0	14.850	58.73	22.0	1.15
280.0	918.4	14.990	58.98	28.0	1.4
285.0	934.8	15.150	59.27	32.0	1.6
290.0	951.2	15.320	59.58	34.0	1.8
295.0	967.6	15.500	59.80	36.0	2.0
300.0	984.0	15.680	60.22	36.0	2.0
305.0	1000.4	15.850	60.53	34.0	1.8
310.0	1016.8	16.000	60.80	30.0	1.6
315.0	1033.2	16.180	61.12	36.0	2.0
320.0	1049.6	16.340	61.41	32.0	1.8
325.0	1066.0	16.500	61.70	32.0	1.8
330.0	1082.4	16.660	61.99	32.0	1.8
335.0	1098.8	16.900	62.42	48.0	2.4
340.0	1115.2	17.040	62.67	28.0	1.5
345.0	1131.6	17.180	62.92	28.0	1.5

LOCATION: SALEM AMS, OREGON  
 9S/11W- 8CCD  
 HOLE NUMBER: DEPOEBAY  
 DATE MEASURED: 8/25/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
5.0	16.4	10.690	51.24	0.0	0.0
10.0	32.8	10.590	51.06	-20.0	-1.1
15.0	49.2	10.670	51.21	16.0	0.9
20.0	65.6	10.770	51.39	20.0	1.1
25.0	82.0	10.860	51.55	18.0	1.0
30.0	98.4	10.960	51.73	20.0	1.1
35.0	114.8	11.040	51.87	16.0	0.9
40.0	131.2	11.130	52.03	18.0	1.0
45.0	147.6	11.220	52.20	18.0	1.0
50.0	164.0	11.330	52.39	22.0	1.2
55.0	180.4	11.430	52.57	20.0	1.1
60.0	196.8	11.560	52.81	26.0	1.4
65.0	213.2	11.680	53.02	24.0	1.3
70.0	229.6	11.800	53.24	24.0	1.3
75.0	246.0	11.910	53.44	22.0	1.2
80.0	262.4	11.980	53.56	14.0	0.8
85.0	278.8	12.230	54.01	50.0	1.2
90.0	295.2	12.360	54.28	30.0	1.6

LOCATION: SALEM AMS, OREGON  
 9S/11W-17BBA  
 HOLE NUMBER: DEPOEBAY  
 DATE MEASURED: 8/25/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
10.0	32.8	10.890	51.60	0.0	0.0
15.0	49.2	11.030	51.85	28.0	1.5
20.0	65.6	11.130	52.03	20.0	1.1
25.0	82.0	11.230	52.21	20.0	1.1
30.0	98.4	11.300	52.34	14.0	0.8
35.0	114.8	11.380	52.48	16.0	0.9
40.0	131.2	11.450	52.61	14.0	0.8
45.0	147.6	11.500	52.70	10.0	0.5
50.0	164.0	11.570	52.83	14.0	0.8
55.0	180.4	11.630	52.93	12.0	0.7
60.0	196.8	11.700	53.06	14.0	0.8
65.0	213.2	11.770	53.19	14.0	0.8
70.0	229.6	11.950	53.51	36.0	2.0
75.0	246.0	12.080	53.74	26.0	1.4
80.0	262.4	12.200	53.96	24.0	1.3
85.0	278.8	12.310	54.16	22.0	1.2
90.0	295.2	12.420	54.36	22.0	1.2
95.0	311.6	12.520	54.54	20.0	1.1

LOCATION: BEND AMS, OREGON  
9S/14E-23BB  
HOLE NUMBER: CHAMPION  
DATE MEASURED: 7/13/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
15.0	49.0	14.650	58.37	0.0	0.0
17.5	57.4	14.650	58.37	0.0	0.0
20.0	65.0	14.670	58.41	0.0	0.0
22.5	72.0	14.680	58.49	0.0	0.0
25.0	79.0	14.750	58.91	0.0	0.0
27.5	86.0	14.840	59.84	0.0	0.0
30.0	93.0	14.900	59.80	0.0	0.0
32.5	100.0	14.930	59.86	0.0	0.0
35.0	106.0	15.010	59.98	0.0	0.0
37.5	114.0	15.050	59.90	0.0	0.0
40.0	121.0	15.110	59.98	0.0	0.0
42.5	128.4	15.240	59.43	0.0	0.0
45.0	137.0	15.260	59.47	0.0	0.0
47.5	147.0	15.310	59.59	0.0	0.0
50.0	154.0	15.340	59.61	0.0	0.0
52.5	172.0	15.380	59.69	0.0	0.0
55.0	180.4	15.410	59.74	0.0	0.0
57.5	188.0	15.440	59.79	0.0	0.0
60.0	196.0	15.450	59.81	0.0	0.0
62.5	213.0	15.840	60.51	0.0	0.0
65.0	220.0	16.010	60.82	0.0	0.0
67.5	226.0	16.350	61.50	0.0	0.0
70.0	246.0	16.700	62.06	0.0	0.0

LOCATION: BEND AMS, OREGON  
9S/17E-6CAD  
HOLE NUMBER: MORSS  
DATE MEASURED: 8/ 4/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.8	11.370	52.47	0.0	0.0
20.0	65.0	12.040	53.82	67.0	3.7
30.0	98.4	12.790	56.00	75.0	4.7
35.0	114.0	12.820	56.08	8.0	0.4
40.0	131.0	12.830	56.09	14.0	0.8
45.0	147.0	12.940	56.32	10.0	0.6
50.0	164.0	13.170	56.71	40.0	2.4
55.0	180.4	13.360	56.65	38.0	2.2
60.0	196.0	13.540	56.32	36.0	2.0
65.0	213.0	13.730	56.71	38.0	2.2
70.0	229.0	13.770	56.79	8.0	0.4
75.0	246.0	14.030	57.29	52.0	3.1
80.0	262.4	14.160	57.45	26.0	1.6
85.0	278.0	14.350	57.82	38.0	2.3
90.0	295.0	14.570	58.09	44.0	2.7
95.0	311.0	14.810	58.80	48.0	3.0
100.0	328.0	14.970	59.91	30.0	1.8
105.0	344.4	15.150	59.97	39.0	2.4
110.0	360.0	15.300	59.68	46.0	2.8
115.0	377.0	15.580	60.04	40.0	2.4
120.0	393.0	15.650	60.17	14.0	0.8

LOCATION: BAKER AMS, OREGON  
 9S/40E-19DB  
 HOLE NUMBER: BAKERCTY  
 DATE MEASURED: 8/26/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
60.0	196.8	18.010	64.42	0.0	0.0
65.0	213.2	18.380	65.08	74.0	4.1
70.0	229.6	18.520	65.34	28.0	1.0
75.0	246.0	18.690	65.94	34.0	1.1
80.0	262.4	18.850	66.93	32.0	1.1
85.0	278.8	19.040	66.27	38.0	1.1
90.0	295.2	19.160	66.49	24.0	1.0
95.0	311.6	19.170	66.51	21.0	1.0
100.0	328.0	19.190	66.54	24.0	1.0
105.0	344.4	19.220	66.58	30.0	1.0
110.0	360.8	19.260	66.67	30.0	1.0
115.0	377.2	19.290	66.72	30.0	1.0
120.0	393.6	19.320	66.78	30.0	1.0
125.0	410.0	19.330	66.79	30.0	1.0
130.0	426.4	19.350	66.83	34.0	1.0
135.0	442.8	19.390	66.98	34.0	1.0
140.0	459.2	19.410	66.94	34.0	1.0
145.0	475.6	19.430	66.97	34.0	1.0
150.0	492.0	19.460	67.03	34.0	1.0
155.0	508.4	19.470	67.00	34.0	1.0
160.0	524.0	19.490	67.08	4.0	1.0
165.0	541.2	19.500	67.16	21.0	1.0
170.0	557.6	19.520	67.14	4.0	1.0
175.0	574.0	20.120	68.24	120.0	1.0
180.0	590.4	20.190	68.34	14.0	0.6
185.0	606.8	20.190	68.34	0.0	0.0
190.0	623.2	20.200	68.36	2.0	0.1

LOCATION: BAKER AMS, OREGON  
 9S/40E-20CA 1  
 HOLE NUMBER: BAKERGLF  
 DATE MEASURED: 8/19/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
30.0	98.4	12.010	53.62	0.0	0.0
35.0	114.8	12.120	53.82	22.0	1.0
40.0	131.2	12.340	54.21	44.0	1.4
45.0	147.6	12.380	54.28	8.0	0.4
50.0	164.0	12.410	54.34	8.0	0.4
55.0	180.4	12.540	54.57	26.0	1.3
60.0	196.8	12.730	54.91	38.0	1.6
65.0	213.2	12.930	55.27	40.0	1.6
70.0	229.6	13.170	55.71	48.0	1.6
75.0	246.0	13.610	56.50	88.0	4.1
80.0	262.4	13.800	56.84	38.0	1.6

LOCATION: BAKER AMS, OREGON  
 95/40E-20CA 2  
 HOLE NUMBER: BAKERGLF  
 DATE MEASURED: 9/14/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOOTHERMAL GRADIENT DEG C/KM	GEOETHERMAL GRADIENT DEG F/100 FT
30.0	98.4	12.800	55.04	0.0	0.0
35.0	114.8	12.790	55.02	-2.0	-0.1
40.0	131.2	12.800	55.04	2.0	0.1
45.0	147.6	12.820	55.08	4.0	0.2
50.0	164.0	12.910	55.24	18.0	1.0
55.0	180.4	12.960	55.33	10.0	0.5
60.0	196.8	12.990	55.38	6.0	0.3
65.0	213.2	13.010	55.42	4.0	0.2
70.0	229.6	13.060	55.51	10.0	0.5
75.0	246.0	13.080	55.54	4.0	0.2
80.0	262.4	13.110	55.60	6.0	0.3
85.0	278.8	13.140	55.65	6.0	0.3
90.0	295.2	13.150	55.67	2.0	0.1
95.0	311.6	13.190	55.74	8.0	0.4
100.0	328.0	13.170	55.71	-4.0	-0.2
105.0	344.4	13.210	55.78	8.0	0.4

LOCATION: SALEM AMS, OREGON  
 10S/ 3W-10D  
 HOLE NUMBER: OW M1  
 DATE MEASURED: 8/27/62

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOOTHERMAL GRADIENT DEG C/KM	GEOETHERMAL GRADIENT DEG F/100 FT
20.0	65.6	11.700	53.06	0.0	0.0
155.6	510.4	28.300	82.94	122.4	6.7
1498.2	4914.1	58.300	136.94	22.3	1.2

LOCATION: SALEM AMS, OREGON  
 11S/ 5W-21AB  
 HOLE NUMBER: HARRIS  
 DATE MEASURED: 8/22/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOOTHERMAL GRADIENT DEG C/KM	GEOETHERMAL GRADIENT DEG F/100 FT
10.0	32.8	11.050	51.89	0.0	0.0
15.0	49.2	11.150	52.07	20.0	1.1
20.0	65.6	11.370	52.47	44.0	2.4
25.0	82.0	11.620	52.92	50.0	2.7
30.0	98.4	11.710	53.08	18.0	1.0
35.0	114.8	11.830	53.29	24.0	1.3
40.0	131.2	11.960	53.53	26.0	1.4
45.0	147.6	12.090	53.76	26.0	1.4
50.0	164.0	12.230	54.01	28.0	1.5
55.0	180.4	12.360	54.25	26.0	1.4
60.0	196.8	12.490	54.48	26.0	1.4
64.0	209.9	12.510	54.70	30.0	1.6
70.0	229.6	12.700	54.86	15.0	0.8

LOCATION: SALEM AMS, OREGON  
 11S/ 1W-32BBB  
 HOLE NUMBER: 0W LCD  
 DATE MEASURED: 12/11/58

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
0.0	0.0	10.700	51.26	0.0	0.0
1347.0	4418.2	36.100	95.98	18.9	1.0
1345.0	4411.6	36.100	95.98	0.0	-0.0

LOCATION: BEND AMS, OREGON  
 11S/13E-24AA  
 HOLE NUMBER: SCHNEIDER  
 DATE MEASURED: 7/14/??

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
40.0	131.2	12.660	54.79	0.0	0.0
50.0	164.0	12.830	55.09	17.0	0.9
60.0	196.8	13.000	55.40	17.0	0.9
70.0	229.6	13.950	57.11	95.0	5.2
80.0	262.4	14.320	57.78	37.0	2.0
90.0	295.2	14.610	58.30	29.0	1.6
95.0	311.6	15.050	59.09	88.0	4.8
100.0	328.0	15.160	59.29	22.0	1.2
105.0	344.4	15.400	59.72	48.0	2.8
110.0	360.8	15.770	60.39	74.0	4.1
115.0	377.2	15.970	60.75	40.0	2.2
120.0	393.6	16.140	61.05	34.0	1.9
125.0	410.0	16.320	61.38	38.0	2.2
130.0	426.4	16.520	61.74	40.0	2.2
135.0	442.8	16.700	62.06	36.0	2.0
140.0	459.2	16.880	62.38	36.0	2.0
145.0	475.6	17.120	62.82	48.0	2.9
150.0	492.0	17.380	63.28	52.0	3.3
155.0	508.4	17.680	63.82	60.0	3.4
160.0	524.8	17.990	64.38	62.0	3.4
165.0	541.2	18.270	64.89	56.0	3.1
170.0	557.6	18.560	65.41	58.0	3.0
175.0	574.0	18.830	65.89	54.0	3.0
180.0	590.4	19.100	66.38	54.0	3.0
185.0	606.8	19.350	66.83	50.0	2.7
190.0	623.2	19.640	67.35	58.0	2.9
195.0	639.6	19.810	67.66	34.0	1.8
200.0	656.0	20.010	68.02	40.0	2.0
205.0	672.4	20.300	68.54	58.0	3.1
210.0	688.8	20.590	69.04	56.0	3.0
215.0	705.2	20.900	69.62	64.0	3.6
220.0	721.6	21.200	70.16	60.0	3.3
225.0	738.0	21.520	70.75	66.0	3.7
230.0	754.4	21.820	71.28	58.0	3.0
235.0	770.8	22.070	71.73	50.0	2.0
240.0	787.2	22.340	72.21	54.0	3.0
245.0	803.6	22.610	72.70	54.0	3.0
250.0	820.0	22.760	72.97	30.0	1.6
255.0	836.4	23.130	73.63	74.0	4.1

LOCATION: BEND AMS, OREGON  
11S/13E-24PA  
HOLE NUMBER: SCHNEIDER  
DATE MEASURED: 7/14/77

PAGE 2

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
260.0	852.8	23.400	74.12	54.0	3.0
265.0	869.2	23.570	74.61	54.0	3.0
270.0	885.6	23.920	75.06	50.0	2.7
275.0	902.0	24.170	75.51	50.0	2.7
280.0	918.4	24.370	75.87	40.0	2.0
285.0	934.8	24.570	76.23	40.0	2.0
290.0	951.2	24.710	76.48	28.0	1.4
295.0	967.6	24.920	76.86	42.0	3.0

LOCATION: BEND AMS, OREGON  
 11S/13E-24AC  
 HOLE NUMBER: SCHNEIDER  
 DATE MEASURED: 7/14/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
45.0	147.6	13.300	55.94	0.0	0.0
50.0	164.0	13.320	55.98	4.0	0.0
55.0	180.4	13.490	56.28	34.0	1.9
60.0	196.8	13.530	56.36	8.0	0.4
65.0	213.2	13.680	56.88	30.0	1.6
70.0	229.6	13.840	56.91	32.0	1.8
75.0	246.0	13.870	56.97	6.0	0.3
80.0	262.4	13.900	57.08	6.0	0.2
85.0	278.8	13.920	57.06	4.0	0.2
90.0	295.2	13.940	57.09	4.0	0.2
95.0	311.6	13.960	57.13	4.0	0.2
100.0	328.0	13.990	57.18	6.0	0.3
105.0	344.4	14.020	57.24	6.0	0.3
110.0	360.8	14.050	57.29	6.0	0.3
115.0	377.2	14.080	57.34	6.0	0.3
120.0	393.6	14.120	57.42	8.0	0.4
125.0	410.0	14.180	57.56	10.0	0.7
130.0	426.4	14.230	57.61	10.0	0.7
135.0	442.8	14.250	57.65	4.0	0.3
140.0	459.2	14.270	57.69	4.0	0.3
145.0	475.6	14.300	57.74	6.0	0.3
150.0	492.0	14.350	57.83	10.0	1.0
155.0	508.4	14.440	57.99	18.0	1.3
160.0	524.8	14.560	58.21	24.0	1.3
165.0	541.2	14.970	58.95	82.0	4.5
170.0	557.6	16.180	61.12	242.0	13.3
175.0	574.0	17.000	62.60	164.0	9.0
180.0	590.4	17.470	63.45	94.0	4.7
185.0	606.8	17.900	64.22	86.0	3.0
190.0	623.2	18.220	64.80	64.0	3.0
195.0	639.6	18.510	65.32	58.0	3.1
200.0	656.0	18.780	65.80	54.0	3.0
205.0	672.4	19.060	66.31	56.0	3.0
210.0	688.8	19.330	66.79	54.0	3.0
215.0	705.2	19.590	67.26	52.0	2.9
220.0	721.6	19.860	67.75	54.0	3.0
225.0	738.0	20.140	68.25	56.0	3.1
230.0	754.4	20.420	68.76	56.0	3.1
235.0	770.8	20.680	69.22	52.0	2.9
240.0	787.2	20.890	69.60	42.0	2.3
245.0	803.6	21.120	70.02	46.0	2.5

LOCATION: BEND AMS, OREGON  
 119/15E-22CD  
 HOLE NUMBER: HAYCK RN  
 DATE MEASURED: 8/10/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
165.0	541.2	18.790	65.82	0.0	0.0
170.0	557.6	18.870	65.97	16.0	0.9
175.0	574.0	19.070	66.33	40.0	1.1
180.0	590.4	19.190	66.54	24.0	1.4
185.0	606.8	19.640	67.35	96.0	4.5
190.0	623.2	20.100	68.18	92.0	4.5
195.0	639.6	20.330	68.59	46.0	1.4
200.0	656.0	20.610	69.10	56.0	1.4
205.0	672.4	20.800	69.44	38.0	1.4
210.0	688.8	21.150	70.07	70.0	1.4
220.0	721.6	21.710	71.08	56.0	1.4
225.0	738.0	21.930	71.47	44.0	1.4
230.0	754.4	22.120	71.82	38.0	1.4
235.0	770.8	22.720	72.96	126.0	4.4
240.0	787.2	22.910	73.24	38.0	4.4
245.0	803.6	23.050	73.49	28.0	4.4
250.0	820.0	23.470	74.25	84.0	4.4
255.0	836.4	23.860	74.95	78.0	4.4
260.0	852.8	24.370	75.87	102.0	4.4
265.0	869.2	24.920	76.86	110.0	4.4
270.0	885.6	25.250	77.45	66.0	4.4
275.0	902.0	25.450	77.81	40.0	4.4
280.0	918.4	25.590	78.08	28.0	4.4
285.0	934.8	25.750	78.35	32.0	4.4
290.0	951.2	26.030	78.85	56.0	4.4
295.0	967.6	26.290	79.32	52.0	4.4
300.0	984.0	26.440	79.59	30.0	4.4
305.0	1000.4	27.000	80.60	112.0	4.4
310.0	1016.8	27.150	80.87	30.0	4.4
315.0	1033.2	27.330	81.19	36.0	4.4
320.0	1049.6	27.530	81.55	40.0	4.4
325.0	1066.0	27.730	81.91	40.0	4.4
330.0	1082.4	28.080	82.54	70.0	4.4
335.0	1098.8	28.240	82.83	32.0	4.4
340.0	1115.2	28.390	83.10	36.0	4.4
345.0	1131.6	28.750	83.75	72.0	4.4
350.0	1148.0	28.860	83.95	32.0	4.4
355.0	1164.4	29.040	84.27	36.0	4.4
360.0	1180.8	29.360	84.85	64.0	4.4

LOCATION: BEND AMS, OREGON  
 11S/15E-22CD  
 HOLE NUMBER: HAYCK BN  
 DATE MEASURED: 8/10/77

PAGE 2

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
365.0	1197.2	29.580	85.24	44.0	2.4
370.0	1213.6	29.850	85.73	54.0	2.6
375.0	1230.0	30.220	86.46	74.0	4.1
380.0	1246.4	30.480	86.86	52.0	2.9
385.0	1262.8	30.680	87.28	40.0	2.4
390.0	1279.2	30.900	87.62	44.0	2.7
395.0	1295.6	31.150	88.07	50.0	3.2
400.0	1312.0	31.360	88.45	42.0	2.6
405.0	1328.4	31.610	88.90	50.0	2.9
410.0	1344.8	31.850	89.33	48.0	3.2
415.0	1361.2	32.110	89.80	52.0	3.7
420.0	1377.6	32.350	90.23	48.0	3.2
425.0	1394.0	32.600	90.68	50.0	3.7
430.0	1410.4	32.740	90.93	28.0	1.4
435.0	1426.8	32.940	91.29	40.0	2.4
440.0	1443.2	33.190	91.74	50.0	3.2
445.0	1459.6	33.450	92.21	52.0	3.7
450.0	1476.0	33.630	92.53	36.0	2.0
270.0	885.6	25.250	77.45	46.6	2.6
275.0	902.0	25.450	77.81	40.0	1.9
280.0	918.4	25.590	78.06	28.0	1.8
285.0	934.8	25.750	78.36	32.0	3.1
290.0	951.2	26.030	78.85	56.0	2.9
295.0	967.6	26.290	79.38	52.0	2.6
300.0	984.0	26.440	79.59	30.0	1.6
305.0	1000.4	27.000	80.60	112.0	6.1
310.0	1016.8	27.150	80.87	30.0	1.6
315.0	1033.2	27.330	81.19	36.0	2.0
320.0	1049.6	27.530	81.55	40.0	2.0
325.0	1066.0	27.730	81.91	40.0	3.8
330.0	1082.4	28.080	82.54	70.0	1.8
335.0	1098.8	28.240	82.83	32.0	1.6
340.0	1115.2	28.390	83.16	30.0	4.0
345.0	1131.6	28.750	83.75	72.0	1.2
350.0	1148.0	28.860	83.95	22.0	0.9
355.0	1164.4	29.040	84.27	36.0	0.8
360.0	1180.8	29.360	84.85	64.0	0.5
365.0	1197.2	29.580	85.24	44.0	2.4
370.0	1213.6	29.850	85.73	54.0	3.0

LOCATION: BEND AMS, OREGON  
 11S/15E-22CD  
 HOLE NUMBER: HAYCK RN  
 DATE MEASURED: 8/10/77

PAGE 3

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
375.0	1230.0	30.220	86.40	74.0	4.1
380.0	1245.4	30.480	86.86	52.0	
385.0	1262.8	30.680	87.22	40.0	
390.0	1279.2	30.900	87.62	44.0	
395.0	1295.6	31.150	88.07	50.0	
400.0	1312.0	31.360	88.45	42.0	
405.0	1328.4	31.610	88.80	50.0	
410.0	1344.8	31.850	89.33	48.0	
415.0	1361.2	32.110	89.80	52.0	
420.0	1377.6	32.350	90.23	48.0	
425.0	1394.0	32.600	90.68	50.0	
430.0	1410.4	32.740	90.93	28.0	
435.0	1426.8	32.940	91.29	40.0	
440.0	1443.2	33.190	91.74	50.0	
445.0	1459.6	33.450	92.21	52.0	
450.0	1476.0	33.630	92.53	36.0	
455.0	1492.4	33.900	93.02	54.0	
460.0	1508.8	34.120	93.42	44.0	
465.0	1525.2	34.310	93.76	38.0	
470.0	1541.6	34.560	94.21	50.0	
475.0	1558.0	34.800	94.64	48.0	
480.0	1574.4	34.980	94.96	36.0	
485.0	1590.8	35.210	95.38	48.0	
490.0	1607.2	35.480	95.86	54.0	
495.0	1623.6	35.710	96.28	46.0	
500.0	1640.0	35.950	96.71	48.0	
505.0	1656.4	36.180	97.12	46.0	
510.0	1672.8	36.440	97.59	52.0	
515.0	1689.2	36.570	98.01	46.0	
520.0	1705.6	36.890	98.40	44.0	
525.0	1722.0	37.170	98.91	56.0	
530.0	1738.4	37.400	99.32	46.0	
535.0	1754.8	37.550	99.77	50.0	
540.0	1771.2	37.880	100.18	46.0	
545.0	1787.6	38.080	100.54	40.0	
550.0	1804.0	38.400	101.12	54.0	
555.0	1820.4	38.560	101.41	32.0	
560.0	1836.8	38.770	101.79	42.0	
565.0	1853.2	39.100	102.38	56.0	3.6

LOCATION: BEND AMS, OREGON  
11S/15E-22CD  
HOLE NUMBER: HAYCK RN  
DATE MEASURED: 8/10/77

PAGE 4

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
570.0	1869.6	39.300	102.74	40.0	0.0
575.0	1886.0	39.530	103.15	40.0	0.0
580.0	1902.4	39.780	103.60	40.0	0.0
585.0	1918.8	40.030	104.05	40.0	0.0
590.0	1935.2	40.290	104.53	40.0	0.0
595.0	1951.6	40.540	104.97	40.0	0.0
600.0	1968.0	40.950	105.71	42.0	4.5
605.0	1984.4	40.950	105.71	42.0	0.0
610.0	2000.8	41.110	106.00	42.0	1.0
615.0	2017.2	41.340	106.41	42.0	2.5
620.0	2033.6	41.560	106.81	42.0	2.4
625.0	2050.0	41.680	107.02	42.0	1.3
630.0	2066.4	41.890	107.40	42.0	2.4
635.0	2082.8	42.110	107.80	42.0	2.0
640.0	2099.2	42.290	108.12	42.0	1.8
645.0	2115.6	42.450	108.41	42.0	1.0
650.0	2132.0	42.610	108.70	42.0	1.0
655.0	2148.4	42.770	108.99	42.0	1.0
660.0	2164.8	42.920	109.26	42.0	1.0
665.0	2181.2	43.030	109.45	42.0	1.0
670.0	2197.6	43.190	109.74	42.0	1.0
675.0	2214.0	43.370	110.07	42.0	2.0
680.0	2230.4	43.510	110.32	42.0	1.5
685.0	2246.8	43.690	110.64	42.0	2.0
690.0	2263.2	43.840	110.91	42.0	1.6
695.0	2279.6	44.010	111.22	42.0	1.9
700.0	2296.0	44.150	111.47	42.0	1.5
705.0	2312.4	44.300	111.74	42.0	1.6
710.0	2328.8	44.460	112.03	42.0	1.0
715.0	2345.2	44.640	112.35	42.0	2.0
720.0	2361.6	44.770	112.59	42.0	1.4
725.0	2378.0	44.920	112.86	42.0	1.6
730.0	2394.4	45.080	113.14	42.0	1.0
735.0	2410.8	45.270	113.49	42.0	2.1
740.0	2427.2	45.430	113.77	42.0	1.0
745.0	2443.6	45.570	114.03	42.0	1.5
750.0	2460.0	45.730	114.31	42.0	1.0
755.0	2476.4	45.870	114.57	42.0	1.5
760.0	2492.8	46.030	114.85	42.0	1.0

LOCATION: BEND AMS, OREGON  
 119/15E-22CD  
 HOLE NUMBER: HAYCK RN  
 DATE MEASURED: 8/10/77

PAGE 5

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
765.0	2509.2	46.140	115.05	22.0	1.1
770.0	2525.5	46.280	115.30	28.0	1.1
775.0	2542.0	46.420	115.56	28.0	1.1
780.0	2558.4	46.580	115.84	32.0	1.1
785.0	2574.8	46.710	116.08	36.0	1.1
790.0	2591.2	46.890	116.40	36.0	1.0
795.0	2607.6	46.990	116.58	20.0	1.1
800.0	2624.0	47.220	117.00	46.0	1.0
805.0	2640.4	47.380	117.28	32.0	1.0
810.0	2656.8	47.550	117.59	34.0	1.0
815.0	2673.2	47.620	117.72	14.0	0.9
820.0	2689.6	47.720	117.90	20.0	1.1

LOCATION: SALEM AMS, OREGON  
 125/ SN-100A  
 HOLE NUMBER: BROOK LN  
 DATE MEASURED: 7/ 9/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.0	12.040	53.67	0.0	0.0
15.0	49.2	12.350	54.23	62.0	3.4
20.0	65.0	12.630	54.73	56.0	3.4
25.0	82.0	12.900	55.28	54.0	3.4
30.0	98.4	13.110	55.60	42.0	3.4
35.0	114.0	13.300	55.94	38.0	3.4
40.0	131.0	13.440	56.19	38.0	3.4
45.0	147.6	13.560	56.41	24.0	1.3
50.0	164.0	13.660	56.59	20.0	1.1
55.0	180.4	13.750	56.75	18.0	1.0
60.0	196.0	13.840	56.91	18.0	1.0
65.0	213.0	13.920	57.06	16.0	1.0
70.0	229.0	14.010	57.22	18.0	1.0
75.0	246.0	14.080	57.34	14.0	0.9
80.0	262.4	14.150	57.47	14.0	0.9
85.0	278.0	14.220	57.60	14.0	0.9
90.0	295.0	14.320	57.78	20.0	1.1
95.0	311.0	14.370	57.87	10.0	1.0
100.0	328.0	14.450	58.01	16.0	0.9

LOCATION: BEND AMS, OREGON  
13S/14E-11CA  
HOLE NUMBER: MORROW N  
DATE MEASURED: 8/ 5/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.8	12.010	53.62	0.0	0.0
15.0	49.2	12.310	54.16	60.0	0.0
20.0	65.6	12.750	54.95	88.0	4.00
25.0	82.0	13.270	55.89	104.0	5.77
30.0	98.4	13.330	55.99	12.0	0.77
35.0	114.8	13.470	56.00	88.0	1.11
40.0	131.2	13.560	56.59	38.0	0.11
45.0	147.6	13.820	56.89	32.0	0.10
50.0	164.0	13.920	57.06	20.0	1.1

LOCATION: BEND AMS, OREGON  
13S/14E-11CC  
HOLE NUMBER: MOR-MID  
DATE MEASURED: 8/ 3/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.8	12.210	53.98	0.0	0.0
15.0	49.2	12.530	54.55	64.0	3.55
20.0	65.6	12.840	55.11	62.0	0.4
25.0	82.0	12.900	55.29	12.0	0.7
30.0	98.4	12.860	55.15	-8.0	-0.4
35.0	114.8	14.510	58.12	330.0	18.1
40.0	131.2	14.590	58.26	16.0	0.9
45.0	147.6	14.840	58.71	50.0	2.7

LOCATION: BEND AMS, OREGON  
13S/14E-11CD  
HOLE NUMBER: MORROW S  
DATE MEASURED: 8/ 3/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.8	12.060	53.71	0.0	0.0
15.0	49.2	12.390	54.30	66.0	0.0
20.0	65.6	13.080	55.54	138.0	7.9
25.0	82.0	13.660	56.59	116.0	6.4
30.0	98.4	14.710	58.48	210.0	11.00
35.0	114.8	14.740	58.53	6.0	0.0
40.0	131.2	14.750	58.55	2.0	0.1
45.0	147.6	14.760	58.57	2.0	0.1

LOCATION: SALEM AMS, OREGON  
 158/ 6E-11DC  
 HOLE NUMBER: CR-TBR  
 DATE MEASURED: 7/26/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	8.070	46.53	0.0	0.0
12.5	41.0	7.860	46.15	-84.0	-4.8
15.0	49.2	7.820	46.98	-16.0	-0.9
17.5	57.4	7.800	46.64	-8.0	-0.4
20.0	65.6	7.770	45.99	-12.0	-0.7
22.5	73.8	7.740	45.93	-12.0	-0.7
25.0	82.0	7.650	45.77	-36.0	-2.0
27.5	90.2	7.550	45.99	-40.0	-2.0
30.0	98.4	7.470	45.45	-32.0	-1.8
32.5	106.6	7.290	45.12	-72.0	-4.0
35.0	114.8	7.250	45.05	-16.0	-0.9
37.5	123.0	7.260	45.07	-4.0	0.2
40.0	131.2	7.280	45.16	8.0	0.4
42.5	139.4	7.310	45.16	12.0	0.7
45.0	147.6	7.350	45.30	46.0	0.9
47.5	155.8	7.400	45.30	20.0	1.1
50.0	164.0	7.480	45.45	32.0	1.3
52.5	172.2	7.520	45.54	20.0	1.1

LOCATION: BEND AMS, OREGON  
 155/ 7E-2BAA  
 HOLE NUMBER: CR-SM  
 DATE MEASURED: 7/26/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
7.5	24.6	5.990	42.78	0.0	0.0
10.0	32.8	5.570	42.03	-168.0	-9.2
12.5	41.0	5.440	41.79	-52.0	-2.9
15.0	49.2	5.400	41.76	-16.0	-0.9
17.5	57.4	5.370	41.67	-12.0	-0.7
20.0	65.6	5.400	41.72	12.0	0.7
22.5	73.8	5.310	41.56	-36.0	-2.0
25.0	82.0	5.210	41.38	-40.0	-2.2
27.5	90.2	5.120	41.22	-36.0	-1.8
30.0	98.4	5.030	41.05	-36.0	-1.8
32.5	106.6	4.970	40.95	-24.0	-1.3
35.0	114.8	4.920	40.85	-16.0	-1.1
37.5	123.0	4.880	40.78	-16.0	-1.0
40.0	131.2	4.760	40.57	-48.0	-2.7
42.5	139.4	4.520	40.14	-96.0	-5.4
45.0	147.6	4.630	40.33	44.0	2.4
47.5	155.8	4.540	40.17	-36.0	-2.0
50.0	164.0	4.490	40.00	-20.0	-1.1
52.5	172.2	4.400	39.92	-36.0	-2.0

LOCATION: BEND AMS, OREGON  
 15S/16E-16DA  
 HOLE NUMBER: FRSTUDCO  
 DATE MEASURED: 7/12/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
7.5	24.6	13.670	56.61	0.0	0.0
10.0	32.8	13.750	56.75	32.0	1.8
12.5	41.0	13.760	56.77	4.0	0.3
15.0	49.2	13.750	56.75	-4.0	-0.2
17.5	57.4	13.770	56.79	8.0	0.4
20.0	65.6	13.760	56.77	-4.0	-0.2
22.5	73.8	13.750	56.75	-4.0	-0.2
25.0	82.0	13.720	56.70	-12.0	-0.7
27.5	90.2	13.760	56.77	16.0	0.9
30.0	98.4	13.780	56.80	8.0	0.4
32.5	106.6	13.790	56.82	4.0	0.2
35.0	114.8	13.810	56.86	8.0	0.4
37.5	123.0	13.800	56.84	-4.0	-0.2
40.0	131.2	13.810	56.86	4.0	0.2
42.5	139.4	13.850	56.93	16.0	0.9
45.0	147.6	13.870	56.97	8.0	0.4
47.5	155.8	16.390	61.50	1008.0	55.3

LOCATION: SALEM AMS, OREGON  
 16S/10W-12DAC  
 HOLE NUMBER: OW FM1  
 DATE MEASURED: 1/27/56

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
20.0	65.6	9.600	49.28	0.0	0.0
927.0	3040.6	36.700	98.06	29.9	1.6
2013.0	6602.6	42.800	109.04	5.6	0.3
3889.0	12755.	82.200	179.96	21.0	1.2

LOCATION: BOISE AMS, OREGON  
 18S/45E-20CB  
 HOLE NUMBER: VALE CITY  
 DATE MEASURED: 7/ 7/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
7.5	24.6	16.430	61.57	0.0	0.0
10.0	32.8	16.340	61.41	-36.0	-2.0
12.5	41.0	16.340	61.41	0.0	0.0
15.0	49.2	16.360	61.45	8.0	0.4
17.5	57.4	16.390	61.56	12.0	0.7
20.0	65.6	16.460	61.63	28.0	1.5
22.5	73.8	16.460	61.63	0.0	0.0
25.0	82.0	16.450	61.61	-4.0	-0.2
27.5	90.2	16.680	62.02	92.0	5.0
30.0	98.4	16.910	62.44	92.0	5.0
32.5	106.6	17.220	63.00	124.0	6.0
35.0	114.8	17.570	63.63	140.0	7.7
37.5	123.0	17.840	64.11	108.0	5.9
40.0	131.2	18.140	64.65	120.0	6.6

LOCATION: BOISE AMS, OREGON  
 18S/45E-30AB  
 HOLE NUMBER: VALE CITY  
 DATE MEASURED: 7/ 7/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
7.5	24.6	12.570	54.63	0.0	0.0
10.0	32.8	12.880	55.18	124.0	6.8
12.5	41.0	13.060	55.51	72.0	4.0
15.0	49.2	13.300	55.94	96.0	5.3
17.5	57.4	13.450	56.21	60.0	3.2
20.0	65.6	13.640	56.55	76.0	4.2
22.5	73.8	13.800	56.84	64.0	3.5
25.0	82.0	14.030	57.25	92.0	5.0
27.5	90.2	14.260	57.67	92.0	5.0
30.0	98.4	14.440	57.99	72.0	4.0
32.5	106.6	14.640	58.35	80.0	4.4
35.0	114.8	14.860	58.75	88.0	4.0
37.5	123.0	15.070	59.13	84.0	4.0
40.0	131.2	15.250	59.45	72.0	4.0
42.5	139.4	15.510	59.92	104.0	5.7
45.0	147.6	15.720	60.30	84.0	4.5
47.5	155.8	15.900	60.62	72.0	4.0
50.0	164.0	16.110	61.00	84.0	4.0
52.5	172.2	16.240	61.23	52.0	2.9
55.0	180.4	16.640	61.95	160.0	8.0

LOCATION: BOISE AMS, OREGON  
18S/46E-21CC  
HOLE NUMBER: LEE  
DATE MEASURED: 7/ 8/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEO THERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
7.5	24.6	15.310	59.56	0.0	0.0
10.0	32.8	15.400	59.72	36.0	2.0
12.5	41.0	15.490	59.88	36.0	2.0
15.0	49.2	15.550	59.99	24.0	1.3
17.5	57.4	15.660	60.19	44.0	2.4
20.0	65.6	15.750	60.35	36.0	2.0
22.5	73.8	15.790	60.42	16.0	0.9
25.0	82.0	15.880	60.58	36.0	2.0
27.5	90.2	16.100	60.98	88.0	4.8
30.0	98.4	16.260	61.27	64.0	3.5
32.5	106.6	16.420	61.56	64.0	3.5
35.0	114.8	16.580	61.81	56.0	3.1
37.5	123.0	16.950	62.51	156.0	8.0
40.0	131.2	17.300	63.14	140.0	7.7
42.5	139.4	17.380	63.28	32.0	1.8
45.0	147.6	17.790	64.02	164.0	9.0

LOCATION: BAKER A.M.S., OREGON  
 108°47'E - 40°  
 HOLE NUMBER: ONTCTYPK  
 DATE MEASURED: 8/19/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	13.550	56.39	0.0	0.0
15.0	49.2	14.120	57.42	114.0	5.0
20.0	65.6	14.340	57.81	44.0	4.4
25.0	82.0	14.570	58.23	46.0	4.6
30.0	98.4	14.880	58.78	52.0	4.4
35.0	114.8	15.140	59.25	52.0	4.4
40.0	131.2	15.470	59.88	56.0	4.6
45.0	147.6	15.810	60.46	56.0	4.6
50.0	164.0	16.200	61.16	78.0	4.7
55.0	180.4	16.590	61.86	78.0	4.7
60.0	196.8	17.020	62.64	86.0	4.7
65.0	213.2	17.450	63.41	86.0	4.7
70.0	229.6	17.870	64.17	84.0	4.7
75.0	246.0	18.300	64.94	86.0	4.7
80.0	262.4	18.750	65.75	90.0	4.7
85.0	278.8	19.170	66.51	84.0	4.7
90.0	295.2	19.600	67.28	86.0	4.7
95.0	311.6	20.050	68.09	90.0	4.7
100.0	328.0	20.480	68.86	86.0	4.7
105.0	344.4	20.930	69.67	90.0	4.7
110.0	360.8	21.380	70.48	90.0	4.7
115.0	377.2	21.830	71.29	90.0	4.7
120.0	393.6	22.260	72.07	86.0	4.7
125.0	410.0	22.720	72.90	92.0	5.0
130.0	426.4	23.180	73.72	92.0	5.0
135.0	442.8	23.640	74.55	92.0	5.0
140.0	459.2	24.090	75.36	90.0	4.7
145.0	475.6	24.520	76.14	86.0	4.7
150.0	492.0	24.950	76.91	86.0	4.7

LOCATION: BOISE AMS, OREGON  
 19S/45E- 9DB  
 HOLE NUMBER: N HARPER  
 DATE MEASURED: 7/7/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
10.0	32.8	15.520	59.94	0.0	0.0
20.0	65.6	15.810	60.46	29.0	1.5
30.0	98.4	16.650	61.97	84.0	4.0
40.0	131.2	17.690	63.84	104.0	5.0
50.0	164.0	18.740	65.73	105.0	5.0
60.0	196.8	19.770	67.59	103.0	4.4
70.0	229.6	20.750	69.35	98.0	3.4
80.0	262.4	21.840	71.31	109.0	6.0
90.0	295.2	22.850	73.13	101.0	3.0
100.0	328.0	24.090	75.36	124.0	10.0
110.0	360.8	25.090	77.16	100.0	4.4
120.0	393.6	26.040	78.87	95.0	4.4
130.0	426.4	27.340	81.21	130.0	10.0
140.0	459.2	28.370	83.07	103.0	4.4
150.0	492.0	29.420	84.96	105.0	4.4
160.0	524.8	30.400	86.72	98.0	3.4
170.0	557.6	31.470	88.65	107.0	4.4
175.0	574.0	32.180	89.92	142.0	8.0
180.0	590.4	32.420	90.36	48.0	3.4
185.0	606.8	32.730	90.91	62.0	4.6
190.0	623.2	33.150	91.67	84.0	3.0
195.0	639.6	33.500	92.30	70.0	3.0
200.0	656.0	34.010	93.22	102.0	5.6
205.0	672.4	34.330	93.79	64.0	3.5

LOCATION: ROSEBURG AMS, OREGON  
 20S/10W-27CDB  
 HOLE NUMBER: OW GCP  
 DATE MEASURED: 10/20/57

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
2.0	6.6	11.100	51.98	0.0	0.0
1361.0	4464.1	48.900	120.02	27.8	1.5
1914.0	6277.9	50.000	122.00	2.0	0.1
2108.0	6914.2	50.000	122.00	0.0	0.0
2593.0	8505.0	60.000	140.00	20.6	1.1
2742.0	8993.8	61.700	143.06	11.4	0.6

LOCATION: MEDFORD AMS, OREGON  
 31S/ SW-23CD  
 HOLE NUMBER: SLURBUTT  
 DATE MEASURED: 8/12/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
5.0	16.4	7.110	44.80	0.0	0.0
10.0	32.8	7.000	44.60	-22.0	-1.0
15.0	49.2	7.110	44.80	22.0	1.0
20.0	65.6	7.120	44.82	22.0	0.1
25.0	82.0	7.170	44.91	10.0	0.55
30.0	98.4	7.220	45.00	10.0	0.55
35.0	114.8	7.300	45.14	16.0	0.98
40.0	131.2	7.370	45.27	14.0	0.88
45.0	147.6	7.450	45.41	16.0	0.97
50.0	164.0	7.510	45.52	12.0	0.7
55.0	180.4	7.570	45.63	12.0	0.7
60.0	196.8	7.620	45.72	10.0	0.55
65.0	213.2	7.670	45.81	10.0	0.55
70.0	229.6	7.720	45.90	10.0	0.55
75.0	246.0	7.770	45.99	10.0	0.5
80.0	262.4	7.810	46.06	8.0	0.4
85.0	278.8	7.850	46.13	8.0	0.4
90.0	295.2	7.890	46.20	8.0	0.4
95.0	311.6	7.930	46.27	8.0	0.4
100.0	328.0	7.970	46.35	8.0	0.4
105.0	344.4	8.010	46.42	8.0	0.4
110.0	360.8	8.050	46.54	14.0	0.8
115.0	377.2	8.080	46.54	0.0	0.0
120.0	393.6	8.110	46.60	6.0	0.3
125.0	410.0	8.150	46.67	8.0	0.4
130.0	426.4	8.180	46.72	6.0	0.3
135.0	442.8	8.220	46.80	8.0	0.4
140.0	459.2	8.250	46.85	5.0	0.3
145.0	475.6	8.280	46.90	6.0	0.3
150.0	492.0	8.320	46.98	8.0	0.4
155.0	508.4	8.360	47.05	8.0	0.4
160.0	524.8	8.390	47.10	6.0	0.3
165.0	541.2	8.430	47.17	8.0	0.4
170.0	557.6	8.460	47.23	6.0	0.3

LOCATION: MEDFORD AMS, OREGON  
 33S/ 2E-11AC  
 HOLE NUMBER: WILDWOOD  
 DATE MEASURED: 8/17/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEOOTHERMAL GRADIENT DEG C/KM	DEG F/100 FT
40.0	131.2	9.310	48.76	0.0	0.0
45.0	147.6	9.230	48.61	-16.0	-0.9
50.0	164.0	9.150	48.47	-16.0	-0.9
55.0	180.4	9.130	48.43	-4.0	-0.2
60.0	196.8	9.130	48.43	0.0	0.0

LOCATION: MEDFORD AMS, OREGON  
 33S/ 2E-19DD  
 HOLE NUMBER: DMND CK  
 DATE MEASURED: 8/18/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	9.500	49.10	0.0	0.0
15.0	49.2	9.220	48.60	-56.0	-3.1
20.0	65.6	8.950	48.11	-54.0	-3.0
25.0	82.0	8.720	47.70	-46.0	-2.5
30.0	98.4	8.710	47.68	-12.0	-0.1
35.0	114.8	8.710	47.68	0.0	0.0
40.0	131.2	8.760	47.77	10.0	0.5
45.0	147.6	8.830	47.89	14.0	0.8

LOCATION: KLAMATH FALLS AMS, ORE  
 34S/18E- BAC  
 HOLE NUMBER: RDH  
 DATE MEASURED: 11/ 1/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
20.0	65.6	11.090	51.96	0.0	0.0
25.0	82.0	11.790	53.22	140.0	7.7
30.0	98.4	12.180	53.92	78.0	4.3
35.0	114.8	12.470	54.45	58.0	3.2
40.0	131.2	12.650	54.77	36.0	2.0
45.0	147.6	12.800	55.04	30.0	1.6
50.0	164.0	13.110	55.60	62.0	3.4
55.0	180.4	13.290	55.92	36.0	2.0
60.0	196.8	13.600	56.48	62.0	3.4
65.0	213.2	14.000	57.20	80.0	4.4
70.0	229.6	14.330	57.79	66.0	3.6

LOCATION: MEDFORD AMS, OREGON  
35S/ SW-34CD  
HOLE NUMBER: MERLIN  
DATE MEASURED: 8/16/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	11.530	52.75	0.0	0.0
20.0	65.6	12.590	54.66	106.0	5.0
25.0	82.0	12.650	54.77	12.0	1.1
30.0	98.4	12.750	54.95	20.0	1.1
35.0	114.8	12.870	55.17	24.0	1.1
40.0	131.2	12.970	55.35	20.0	1.1
45.0	147.6	13.070	55.53	20.0	1.0
50.0	164.0	13.180	55.69	10.0	1.0
55.0	180.4	13.230	55.81	14.0	0.9
60.0	196.8	13.310	55.96	16.0	0.9
65.0	213.2	13.370	56.07	12.0	0.9
70.0	229.6	13.440	56.19	14.0	0.9
75.0	246.0	13.490	56.28	10.0	0.9
80.0	262.4	13.550	56.39	12.0	0.9
85.0	278.8	13.620	56.52	14.0	0.9
90.0	295.2	13.670	56.61	10.0	0.9
95.0	311.6	13.730	56.71	12.0	0.9
100.0	328.0	13.800	56.84	14.0	0.9
105.0	344.4	13.850	56.93	10.0	0.9
110.0	360.8	13.910	57.04	12.0	0.9
115.0	377.2	13.970	57.15	12.0	0.9
120.0	393.6	14.030	57.25	12.0	0.9
125.0	410.0	14.090	57.36	12.0	0.9
130.0	426.4	14.150	57.47	12.0	0.9
135.0	442.8	14.200	57.56	10.0	0.9
140.0	459.2	14.260	57.67	12.0	0.9
145.0	475.6	14.320	57.78	12.0	0.9
150.0	492.0	14.370	57.87	10.0	0.9

LOCATION: MEDFORD AMS, OREGON  
 35S/ 2W-28CC  
 HOLE NUMBER: SAMS VAL  
 DATE MEASURED: 8/ 9/??

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	15.400	59.72	0.0	0.0
15.0	49.2	15.500	59.90	20.0	1.1
20.0	65.6	15.530	59.95	6.0	0.34
25.0	82.0	15.570	60.03	0.0	0.44
30.0	98.4	15.640	60.15	14.0	0.88
35.0	114.8	15.730	60.31	18.0	1.0
40.0	131.2	15.880	60.58	30.0	1.00
45.0	147.6	16.040	60.87	32.0	1.00
50.0	164.0	16.200	61.16	32.0	1.00
55.0	180.4	16.360	61.45	32.0	1.00
60.0	196.8	16.360	61.45	0.0	0.0
65.0	213.2	16.280	61.30	-16.0	-0.94
70.0	229.6	16.280	61.27	-4.0	0.44
75.0	246.0	16.300	61.34	8.0	0.0
80.0	262.4	16.380	61.48	16.0	0.66
85.0	278.8	16.460	61.63	16.0	0.0
90.0	295.2	16.550	61.79	18.0	1.00
95.0	311.6	16.660	61.99	22.0	1.11
100.0	328.0	16.780	62.20	24.0	1.11
105.0	344.4	16.880	62.38	20.0	1.14
110.0	360.8	16.980	62.56	20.0	1.14
115.0	377.2	17.070	62.73	18.0	1.0
120.0	393.6	17.180	62.92	22.0	1.00
125.0	410.0	17.270	63.09	18.0	1.00
130.0	426.4	17.360	63.25	18.0	1.00
135.0	442.8	17.430	63.37	14.0	0.66
140.0	459.2	17.510	63.52	16.0	0.66
145.0	475.6	17.590	63.66	16.0	0.66
150.0	492.0	17.670	63.81	16.0	0.64
155.0	508.4	17.800	64.04	26.0	1.0
160.0	524.8	17.980	64.36	38.0	1.0
165.0	541.2	18.090	64.56	22.0	1.0

LOCATION: MEDFORD AMS, OREGON  
 35S/ 2W-30DA  
 HOLE NUMBER: SAMS VLF  
 DATE MEASURED: 8/ 9/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
10.0	32.8	13.450	56.21	0.0	0.0
15.0	49.2	14.170	57.51	144.0	7.9
20.0	65.6	14.260	57.67	18.0	1.0
25.0	82.0	14.310	57.76	10.0	0.5
30.0	98.4	14.340	57.81	6.0	0.3
35.0	114.8	14.350	57.83	2.0	0.1
40.0	131.2	14.360	57.85	2.0	0.1
45.0	147.6	14.410	57.94	10.0	0.5
50.0	164.0	14.500	58.10	18.0	1.0
55.0	180.4	14.580	58.24	16.0	0.9
60.0	196.8	14.730	58.51	30.0	1.6
65.0	213.2	14.890	58.80	32.0	1.8
70.0	229.6	15.030	59.05	28.0	1.5
75.0	246.0	15.140	59.25	22.0	1.2
80.0	262.4	15.220	59.40	16.0	0.9
85.0	278.8	15.370	59.67	30.0	1.6

LOCATION: MEDFORD AMS, OREGON  
 35S/ 1E-13AD  
 HOLE NUMBER: RAMBO  
 DATE MEASURED: 8/15/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
5.0	16.4	10.020	50.04	0.0	0.0
10.0	32.8	10.140	50.25	24.0	1.3
15.0	49.2	10.430	50.77	58.0	3.0
20.0	65.6	10.670	51.21	48.0	2.6
25.0	82.0	10.870	51.57	40.0	2.2
30.0	98.4	11.030	51.85	32.0	1.8
35.0	114.8	11.190	52.14	32.0	1.8
40.0	131.2	11.310	52.36	24.0	1.3

LOCATION: MEDFORD AMS, OREGON  
 36S/ 2W-31DD  
 HOLE NUMBER: WILLOWCOK  
 DATE MEASURED: 8/10/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEOTHERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
10.0	32.8	13.850	58.93	0.0	0.0
15.0	49.2	13.830	58.89	-4.0	-0.2
20.0	65.6	13.720	58.70	-22.0	-1.2
25.0	82.0	13.700	58.66	-4.0	-0.2
30.0	98.4	13.710	58.68	2.0	0.1
35.0	114.8	13.740	58.73	6.0	0.3
40.0	131.2	13.790	58.88	10.0	0.5
45.0	147.6	13.840	58.94	10.0	0.5
50.0	164.0	13.900	59.02	12.0	0.7
55.0	180.4	13.950	59.13	12.0	0.7
60.0	196.8	14.030	59.25	14.0	0.8
65.0	213.2	14.110	59.40	16.0	0.9
70.0	229.6	14.180	59.58	14.0	0.8
75.0	246.0	14.250	59.65	14.0	0.8
80.0	262.4	14.330	59.79	16.0	0.9
85.0	278.8	14.410	59.94	16.0	0.9
90.0	295.2	14.480	60.06	14.0	0.8
95.0	311.6	14.550	60.19	14.0	0.8
100.0	328.0	14.610	60.30	12.0	0.7
105.0	344.4	14.630	60.44	16.0	0.9
110.0	360.8	14.760	60.57	14.0	0.8
115.0	377.2	14.820	60.68	12.0	0.7
120.0	393.6	14.890	60.80	14.0	0.8
125.0	410.0	14.950	60.91	12.0	0.7
130.0	426.4	15.020	60.94	14.0	0.8
135.0	442.8	15.070	60.13	10.0	0.5
140.0	459.2	15.140	60.25	14.0	0.8
145.0	475.6	15.200	60.36	12.0	0.7
150.0	492.0	15.260	60.47	12.0	0.7

LOCATION: MEDFORD AMS, OREGON  
 36S/ 2W-31DD  
 HOLE NUMBER: WILLOWCOK  
 DATE MEASURED: 8/10/77

DEPTH METERS	DEPTH FEET	TEMPERATURE		GEOTHERMAL GRADIENT	
		DEG C	DEG F	DEG C/KM	DEG F/100 FT
10.0	32.8	14.570	58.23	0.0	0.0
15.0	49.2	14.580	58.24	0.0	0.1
20.0	65.6	14.590	58.26	0.0	0.1
25.0	82.0	14.560	58.21	-6.0	-0.3
30.0	98.4	14.540	58.17	-4.0	-0.2
35.0	114.8	14.530	58.15	-2.0	-0.1
40.0	131.2	14.520	58.14	-2.0	-0.1

LOCATION: MEDFORD AMS, OREGON  
3657 1E-1BCC  
HOLE NUMBER: OWENS  
DATE MEASURED: 8/10/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
5.0	16.4	13.480	56.26	0.0	0.0
10.0	32.8	13.590	56.46	22.0	1.2
15.0	49.2	13.810	56.86	44.0	2.4
20.0	65.6	14.020	57.24	42.0	2.3
25.0	82.0	14.230	57.61	42.0	2.3
30.0	98.4	14.380	57.88	30.0	1.6
35.0	114.8	14.550	58.19	34.0	1.9
40.0	131.2	14.690	58.44	28.0	1.5
45.0	147.6	14.830	58.69	28.0	1.5

LOCATION: KLAMATH FALLS AMS, ORE  
 368/19E-33AD  
 HOLE NUMBER: BEARFLT1  
 DATE MEASURED: 9/ 1/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEO THERMAL GRADIENT DEG C/KM	GEO THERMAL GRADIENT DEG F/100 FT
50.0	164.0	4.890	40.80	0.0	0.0
55.0	180.4	4.890	40.80	0.0	0.0
60.0	196.8	4.940	40.89	10.0	0.0
65.0	213.2	5.000	41.00	12.0	0.0
70.0	229.6	5.050	41.09	10.0	0.0
75.0	246.0	5.130	41.23	16.0	0.0
80.0	262.4	5.220	41.40	18.0	1.00
85.0	278.8	5.300	41.54	16.0	0.0
90.0	295.2	5.390	41.70	18.0	1.00
95.0	311.6	5.500	41.90	22.0	1.00
100.0	328.0	5.610	42.10	22.0	1.00
105.0	344.4	5.720	42.30	22.0	1.00
110.0	360.8	5.850	42.53	26.0	1.44
115.0	377.2	5.990	42.78	28.0	1.44
120.0	393.6	6.120	43.00	26.0	1.44
125.0	410.0	6.260	43.27	28.0	1.44
130.0	426.4	6.420	43.56	32.0	1.44
135.0	442.8	6.570	43.80	30.0	1.44
140.0	459.2	6.720	44.10	30.0	1.44
145.0	475.6	6.870	44.37	30.0	1.44
150.0	492.0	7.020	44.64	30.0	1.44
155.0	508.4	7.160	44.93	28.0	1.44
160.0	524.8	7.300	45.14	28.0	1.44
165.0	541.2	7.440	45.39	28.0	1.44
170.0	557.6	7.590	45.65	30.0	1.44
175.0	574.0	7.730	45.91	28.0	1.44
180.0	590.4	7.900	46.22	34.0	1.44
185.0	606.8	8.020	46.44	24.0	1.44
190.0	623.2	8.190	46.74	34.0	1.44
195.0	639.6	8.340	47.01	30.0	1.44
200.0	656.0	8.470	47.25	26.0	1.44
205.0	672.4	8.600	47.48	26.0	1.44
210.0	688.8	8.710	47.68	22.0	1.44
215.0	705.2	8.810	47.86	20.0	1.44
220.0	721.6	8.880	47.98	14.0	0.0
225.0	738.0	8.950	48.11	14.0	0.0
230.0	754.4	9.000	48.20	10.0	0.0
235.0	770.8	9.020	48.24	-4.0	0.0
240.0	787.2	8.960	48.13	-12.0	0.0
245.0	803.6	8.850	47.93	-22.0	1.00
250.0	820.0	8.800	47.84	-10.0	0.0
255.0	836.4	8.880	47.98	16.0	1.00
260.0	852.8	9.000	48.20	24.0	1.00
265.0	869.2	9.220	48.60	44.0	1.00

LOCATION: MEDFORD AMS, OREGON

37S/ 2W-97CB

HOLE NUMBER: JACKSNVIL

DATE MEASURED: 8/10/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	13.010	55.42	0.0	0.0
15.0	49.2	13.280	55.90	54.0	3.0
20.0	65.6	13.580	56.44	60.0	3.3
25.0	82.0	13.730	56.71	30.0	1.6
30.0	98.4	13.800	56.84	14.0	0.8
35.0	114.8	13.890	57.00	18.0	1.0
40.0	131.2	13.990	57.18	20.0	1.1

LOCATION: MEDFORD AMS, OREGON  
 37°5' 1W-58BC  
 HOLE NUMBER: PHOEN BL  
 DATE MEASURED: 8/ 9/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	13.170	55.71	0.0	0.0
15.0	49.2	13.470	56.95	60.0	1.0
20.0	65.6	13.700	56.60	46.0	1.0
25.0	82.0	13.900	57.02	49.0	1.0
30.0	98.4	14.050	57.31	32.0	1.0
35.0	114.8	14.230	57.61	34.0	1.0
40.0	131.2	14.420	57.95	38.0	1.0
45.0	147.6	14.640	58.35	44.0	1.0
50.0	164.0	14.820	58.68	36.0	1.0
55.0	180.4	15.000	59.80	36.0	1.0
60.0	196.8	15.130	59.23	28.0	1.0
65.0	213.2	15.330	59.55	40.0	1.0
70.0	229.6	15.480	59.85	30.0	1.0
75.0	246.0	15.650	60.17	34.0	1.0
80.0	262.4	15.750	60.35	20.0	1.0
85.0	278.8	15.870	60.57	24.0	1.0
90.0	295.2	15.980	60.76	22.0	1.0
95.0	311.6	16.080	60.96	22.0	1.0
100.0	328.0	16.210	61.18	24.0	1.0
105.0	344.4	16.310	61.36	20.0	1.0
110.0	360.8	16.430	61.57	24.0	1.0
115.0	377.2	16.540	61.77	22.0	1.0
120.0	393.6	16.690	62.04	30.0	1.0
125.0	410.0	16.840	62.31	36.0	1.0
130.0	426.4	16.960	62.53	24.0	1.0
135.0	442.8	17.100	62.78	22.0	1.0
140.0	459.2	17.230	63.01	26.0	1.4
145.0	475.6	17.360	63.23	26.0	1.4
150.0	492.0	17.470	63.45	22.0	1.0
155.0	508.4	17.600	63.68	26.0	1.4
160.0	524.8	17.720	63.90	24.0	1.0
165.0	541.2	17.850	64.13	26.0	1.4
170.0	557.6	17.960	64.33	22.0	1.0
175.0	574.0	18.090	64.56	26.0	1.4
180.0	590.4	18.210	64.78	24.0	1.0
185.0	606.8	18.340	65.01	26.0	1.4
190.0	623.2	18.460	65.23	24.0	1.3
195.0	639.6	18.590	65.46	26.0	1.4
200.0	656.0	18.710	65.68	24.0	1.0
205.0	672.4	18.840	65.91	26.0	1.4
210.0	688.8	19.140	66.45	60.0	0.0
220.0	721.6	19.310	66.76	17.0	0.0

LOCATION: KLAMATH FALLS AMS, ORE  
37S/18E-25AB  
HOLE NUMBER: LUCKLS1  
DATE MEASURED: 8/31/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	6.840	44.31	0.0	0.0
12.5	41.0	7.050	44.69	84.0	4.6
15.0	49.2	7.100	44.78	20.0	1.1
17.5	57.4	7.150	44.89	24.0	1.3
20.0	65.6	7.220	45.00	24.0	1.3
22.5	73.8	7.310	45.16	36.0	2.0
25.0	82.0	7.400	45.32	36.0	2.0
27.5	90.2	7.510	45.52	44.0	2.4
30.0	98.4	7.610	45.70	40.0	2.2
32.5	106.6	7.720	45.90	44.0	2.4
35.0	114.8	7.840	46.11	48.0	2.6
37.5	123.0	7.950	46.31	44.0	2.4
40.0	131.2	8.060	46.51	44.0	2.4
42.5	139.4	8.200	46.76	56.0	3.1
45.0	147.6	8.350	47.03	60.0	3.3
50.0	164.0	8.620	47.52	54.0	3.0
55.0	180.4	9.080	47.98	52.0	2.9
60.0	196.8	9.170	48.51	59.0	3.4
65.0	213.2	9.480	49.06	62.0	3.4
70.0	229.6	11.470	52.65	298.0	21.8
75.0	246.0	12.310	54.16	168.0	9.2

LOCATION: KLAMATH FALLS AMS, ORE  
 37S/18E-25AD  
 HOLE NUMBER: LUCKYLS2  
 DATE MEASURED: 8/31/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
12.5	41.0	6.830	44.29	0.0	0.0
15.0	49.2	6.930	44.47	0.0	0.0
17.5	57.4	6.980	44.56	0.0	0.1
20.0	65.6	7.070	44.73	0.0	0.0
22.5	73.8	7.170	44.91	0.0	0.0
25.0	82.0	7.280	45.10	0.0	0.4
27.5	90.2	7.450	45.41	0.0	0.7
30.0	98.4	7.560	45.61	0.0	0.4
32.5	106.6	7.630	45.73	0.0	1.5
35.0	114.8	7.650	45.77	0.0	0.4
37.5	123.0	7.780	46.00	0.0	0.9
40.0	131.2	7.930	46.27	0.0	0.3
42.5	139.4	8.070	46.53	0.0	1.0
45.0	147.6	8.200	46.76	0.0	0.3
50.0	164.0	8.320	46.98	0.0	1.0
55.0	180.4	8.430	47.17	0.0	1.0
60.0	196.8	8.620	47.52	0.0	1.1
65.0	213.2	8.820	47.88	0.0	0.8
70.0	229.6	9.170	48.51	0.0	0.3
75.0	246.0	9.290	48.72	0.0	0.3
80.0	262.4	9.720	49.50	0.0	1.7
85.0	278.8	9.940	49.89	0.0	0.4
90.0	295.2	10.400	50.70	0.0	0.3
95.0	311.6	10.830	51.49	0.0	0.3
100.0	328.0	11.130	52.03	0.0	0.6
105.0	344.4	11.640	52.95	0.0	0.6
110.0	360.8	12.220	54.00	0.0	0.4
115.0	377.2	12.890	55.20	0.0	0.4
120.0	393.6	13.620	56.50	0.0	0.0
125.0	410.0	14.280	57.70	0.0	0.2

LOCATION: KLAMATH FALLS AMS, ORE

37S/18E-26DC

HOLE NUMBER: THOMASCK

DATE MEASURED: 8/31/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
15.0	49.2	11.240	52.23	0.0	0.0
20.0	65.6	11.510	52.72	54.0	33.0
22.5	73.0	11.930	53.47	188.0	99.0
25.0	86.0	12.070	53.73	56.0	31.0
27.5	98.0	12.110	53.86	16.0	6.9
30.0	98.4	12.200	53.96	36.0	16.0
32.5	106.6	12.500	54.50	120.0	4.0
35.0	114.0	12.720	54.90	88.0	4.0
37.5	123.0	12.930	55.27	84.0	4.0
40.0	131.2	13.170	55.71	96.0	4.0
42.5	139.4	13.500	56.30	132.0	4.0
45.0	147.6	13.760	56.77	104.0	4.0
50.0	184.0	14.190	57.54	86.0	4.0
55.0	180.4	14.640	58.35	90.0	4.0
60.0	196.8	15.190	59.34	110.0	4.0
65.0	213.2	15.750	60.35	112.0	4.0
70.0	229.6	16.290	61.32	108.0	4.0
75.0	246.0	16.820	62.28	106.0	4.0
80.0	262.4	17.320	63.18	100.0	4.0
85.0	278.8	17.290	64.20	114.0	4.0

LOCATION: KLAMATH FALLS AMS, ORE

37S/19E-30DB

HOLE NUMBER: WMK-1

DATE MEASURED: 8/30/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	6.950	44.51	0.0	0.0
15.0	49.2	7.750	45.95	160.0	7.0
20.0	65.6	8.390	47.10	128.0	7.0
22.5	82.0	9.200	48.56	162.0	4.0
27.5	96.2	9.380	48.88	72.0	4.0
30.0	98.4	9.610	49.30	92.0	4.0
32.5	106.6	9.810	49.66	80.0	4.4
35.0	114.8	10.040	50.07	92.0	5.0
37.5	123.0	10.210	50.38	68.0	3.7
40.0	131.2	10.500	50.90	116.0	4.4
42.5	139.4	10.760	51.37	104.0	4.0
45.0	147.6	10.990	51.78	92.0	4.0
50.0	164.0	11.320	52.48	78.0	4.0
55.0	180.4	11.700	53.06	64.0	4.0

LOCATION: MEDFORD AMS, OREGON  
 38°S/ 2E- 7CC  
 HOLE NUMBER: LITHIASP  
 DATE MEASURED: 8/ 9/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOOTHERMAL GRADIENT DEG C/KM	GEOETHERMAL GRADIENT DEG F/100 FT
5.0	16.4	16.180	61.12	0.0	0.0
10.0	32.8	16.230	61.21	10.0	0.5
15.0	49.2	16.360	61.45	26.0	1.4
20.0	65.6	16.510	61.72	30.0	1.6
25.0	82.0	16.690	62.04	36.0	2.0
30.0	98.4	16.950	62.51	52.0	2.8
35.0	114.8	16.880	62.38	-14.0	-0.80
40.0	131.2	17.000	62.60	24.0	1.0
45.0	147.6	17.090	62.76	18.0	0.8
50.0	164.0	17.100	62.78	21.0	0.11
55.0	180.4	17.160	62.88	12.0	0.7
60.0	196.8	17.220	63.00	12.0	0.7
65.0	213.2	17.300	63.14	16.0	0.9
70.0	229.6	17.360	63.25	12.0	0.7
75.0	246.0	17.440	63.39	16.0	0.9
80.0	262.4	17.520	63.54	16.0	0.9
85.0	278.8	17.580	63.64	12.0	0.7
90.0	295.2	17.660	63.79	16.0	0.9
95.0	311.6	17.730	63.91	14.0	0.8
100.0	328.0	17.810	64.06	16.0	0.9
105.0	344.4	17.890	64.20	16.0	0.9
110.0	360.8	17.970	64.35	16.0	0.9
115.0	377.2	18.050	64.49	16.0	0.9
120.0	393.6	18.130	64.63	16.0	0.9
125.0	410.0	18.220	64.80	18.0	1.0
130.0	426.4	18.320	64.98	20.0	1.1

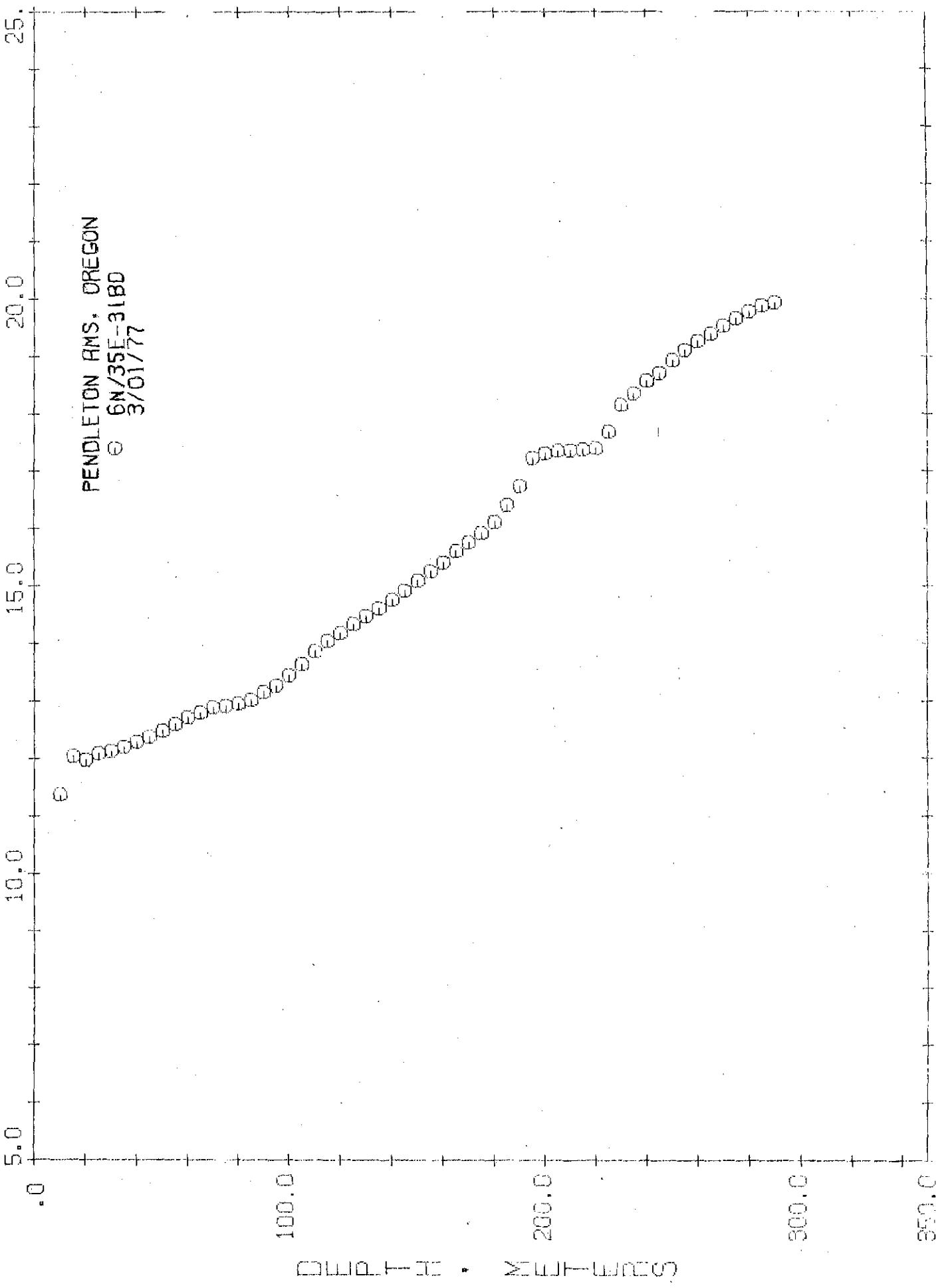
LOCATION: KLAMATH FALLS AMS, ORE.  
 39S/ 9E- 7DA  
 HOLE NUMBER: FRHUNSCH  
 DATE MEASURED: 8/18/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOOTHERMAL GRADIENT DEG C/KM	GEOETHERMAL GRADIENT DEG F/100 FT
10.0	32.8	12.150	53.87	0.0	0.0
15.0	49.2	14.520	58.14	474.0	26.0
20.0	65.6	15.800	60.44	256.0	14.0
25.0	82.0	19.790	67.62	798.0	43.8
30.0	98.4	20.240	68.43	90.0	4.9
35.0	114.8	21.040	69.87	160.0	8.8
40.0	131.2	21.950	71.51	182.0	10.0
45.0	147.6	22.890	73.20	188.0	10.3
50.0	164.0	23.160	73.59	54.0	3.0

LOCATION: MEDFORD AMS, OREGON  
 40577W-36AB  
 HOLE NUMBER: COLESTIN  
 DATE MEASURED: 8/11/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	DEG F	GEO THERMAL GRADIENT DEG C/KM	DEG F/100 FT
10.0	32.8	8.840	47.91	0.0	0.0
20.0	65.6	9.260	49.56	36.0	0.0
30.0	98.4	9.320	49.78	12.0	0.7
40.0	131.2	9.700	49.46	38.0	0.1
50.0	164.0	10.020	50.04	38.0	1.0
55.0	180.4	10.190	50.34	34.0	1.9
60.0	196.8	10.750	51.35	112.0	0.1
65.0	213.2	10.800	51.44	10.0	0.5
70.0	229.6	10.880	51.58	16.0	0.0
75.0	246.0	11.000	51.80	24.0	1.3
80.0	262.4	11.120	52.02	24.0	1.0
85.0	278.8	11.280	52.30	32.0	1.0
90.0	295.2	11.450	52.61	34.0	1.0
95.0	311.6	11.620	52.92	34.0	1.0
100.0	328.0	11.780	53.20	32.0	1.0
105.0	344.4	11.920	53.46	28.0	1.5
110.0	360.8	12.070	53.73	30.0	1.0
115.0	377.2	12.220	54.00	30.0	1.0
120.0	393.6	12.350	54.23	26.0	1.4
125.0	410.0	12.470	54.45	24.0	1.3
130.0	426.4	12.550	54.59	16.0	0.9
135.0	442.8	12.630	54.73	16.0	0.9
140.0	459.2	12.770	54.99	28.0	1.5

TEMPERATURE, DEG C



TEMPERATURE, DEG C

15.0  
11.0  
9.0  
7.0  
5.0  
0.0

PENDLETON AIRS, OREGON  
6N/35E-3500  
3/01/77

0  
0 0 0 0 0 0

25.0 50.0 75.0 100.0

COMBINE → SUM-MODE

TEMPERATURE, DEG C

10.0  
15.0

PENOLETON AMS, OREGON  
θ 5N 36' 21" W  
9/36/77

25.0

50.0

75.0

100.0

DEPTH METERS

TEMPERATURE, DEG C

20.0  
18.0  
16.0  
14.0  
12.0  
10.0  
0

PENDLETON AMS, OREGON  
E 5N/28E-228C  
2/03/77



CLOUDY-HI      SUNNY-HIGH

TEMPERATURE, DEG C

20.0  
15.0  
10.0  
0.

PENDLETON AMS, OREGON  
© 4N/25E-10 DAC  
16/4/77

50.0

100.0

150.0

200.0

DEPTH, METERS

TEMPERATURE, DEG C

10.0  
8.0  
6.0  
4.0  
2.0  
0.0

PENDLETON AIRS, OREGON  
④ 4/37E-26CD  
2/16/77

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SWELL - SWELL

100

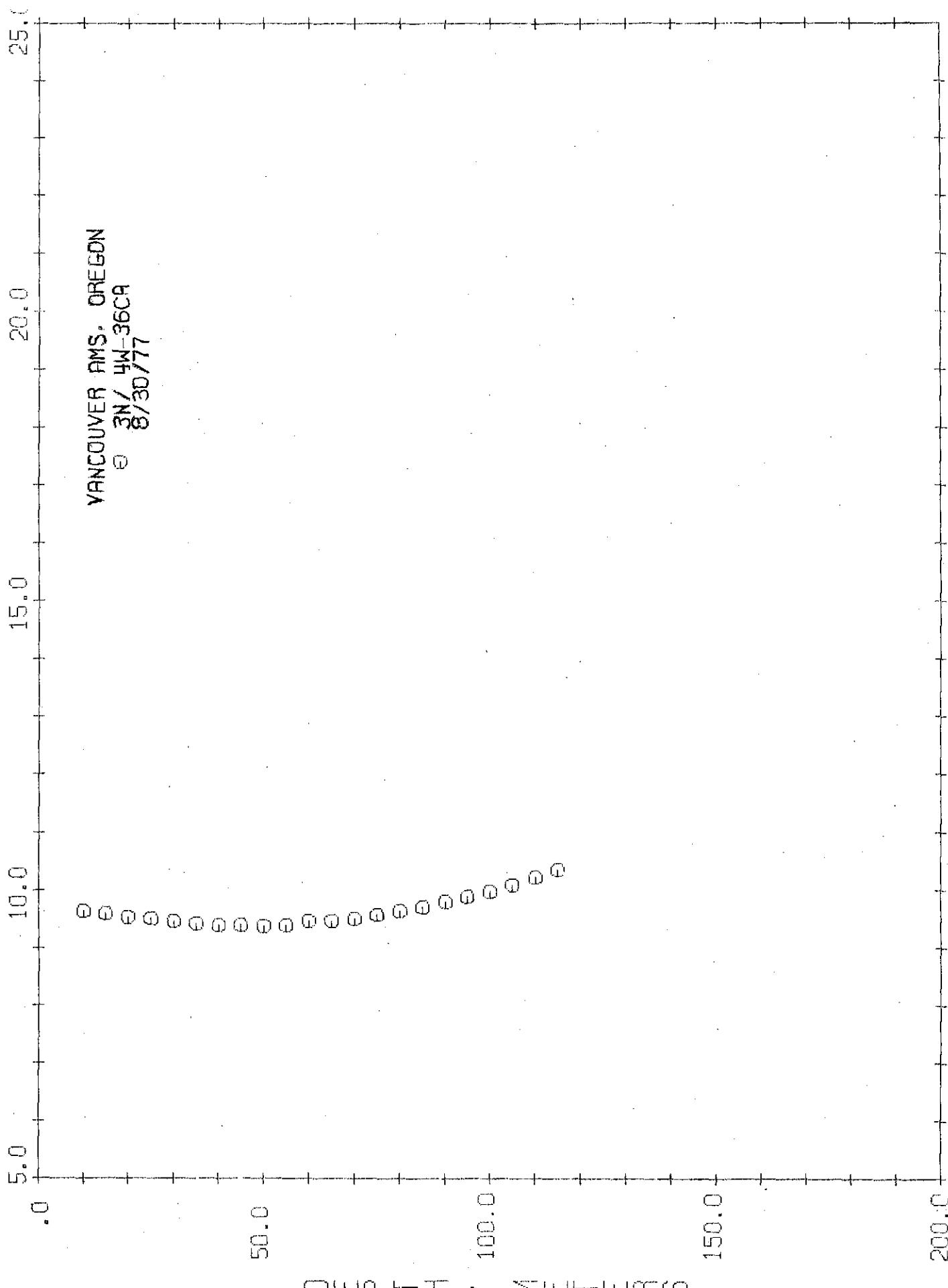
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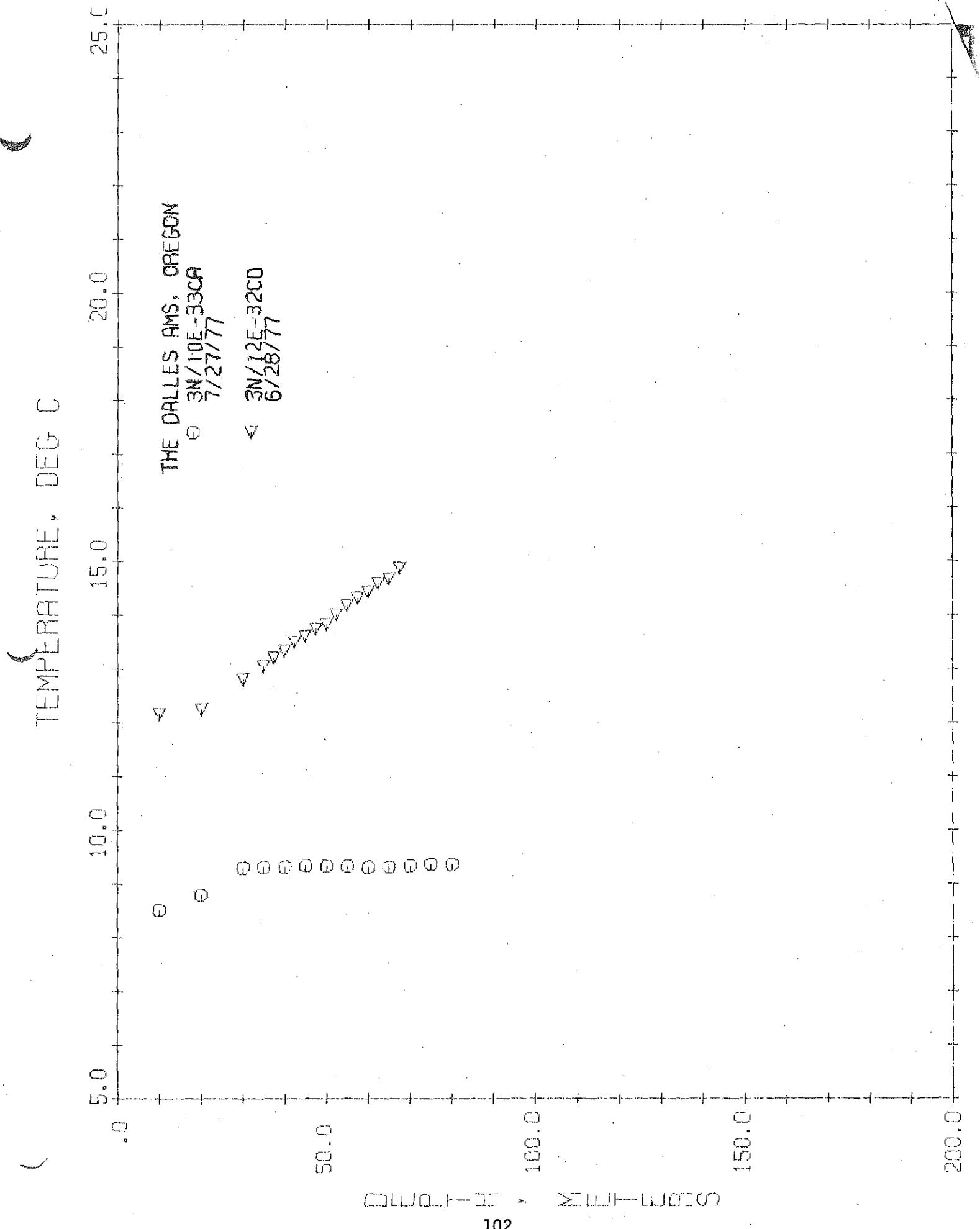
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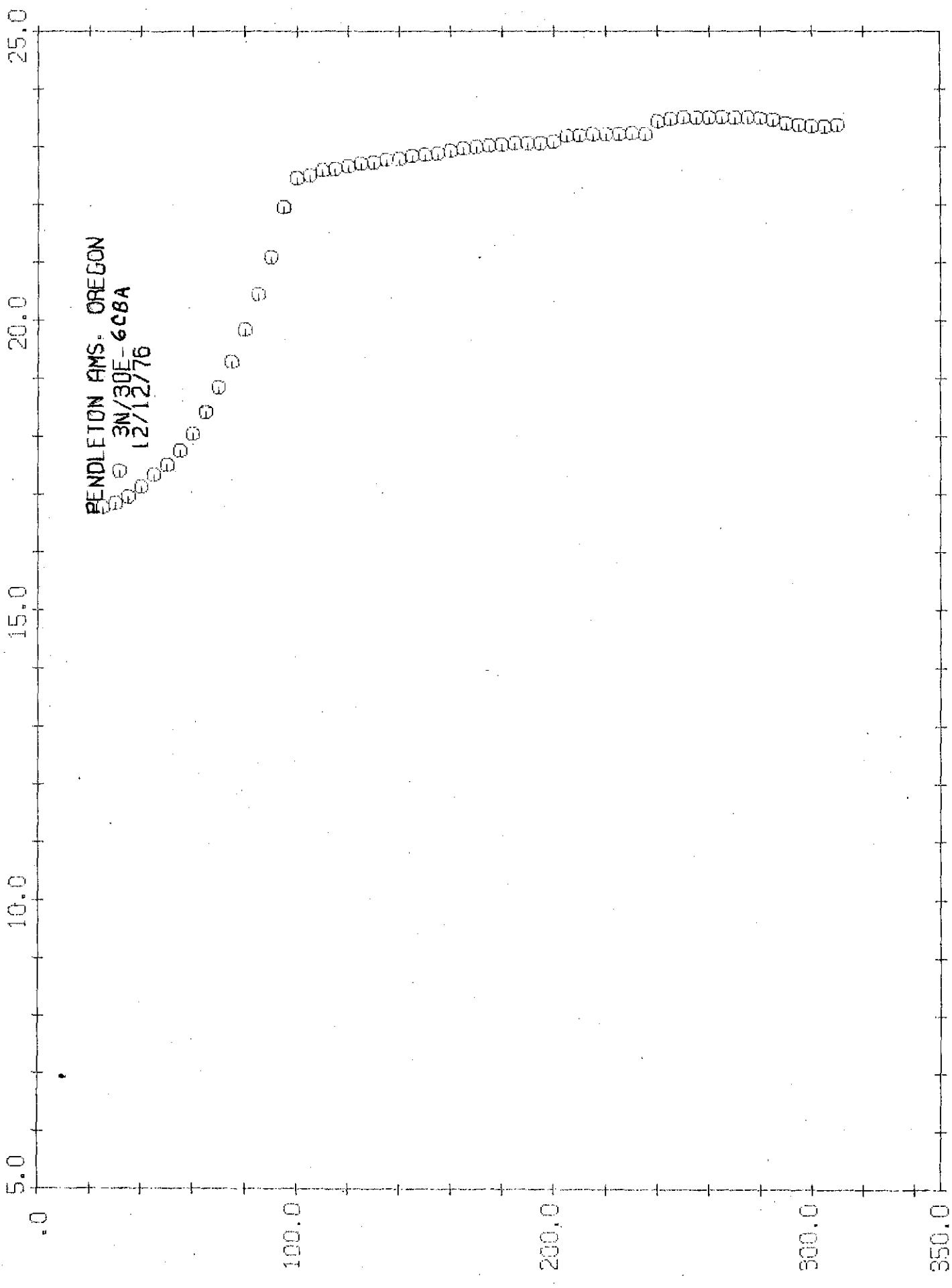
TEMPERATURE, DEG C



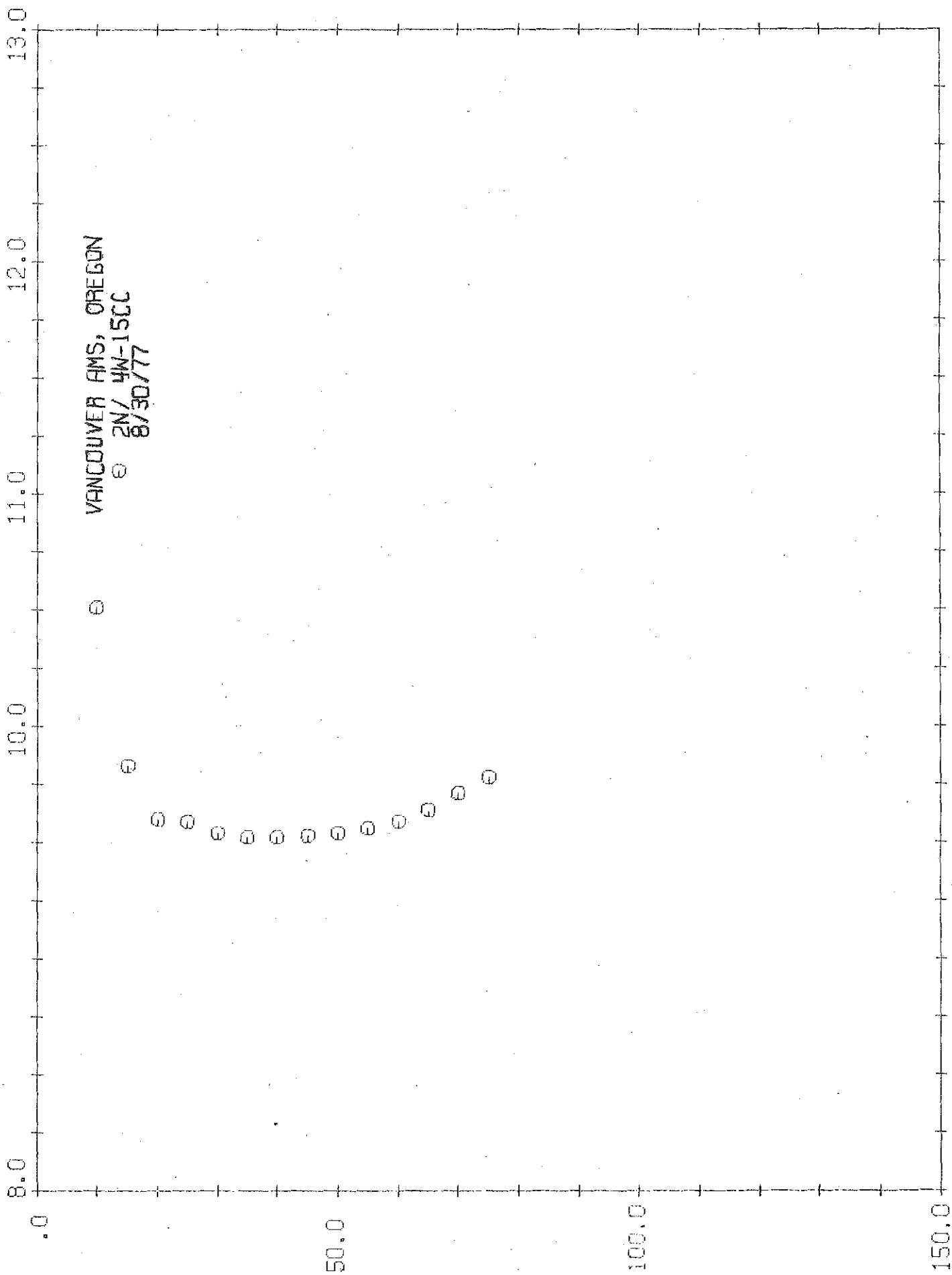
DEPTH - METRES



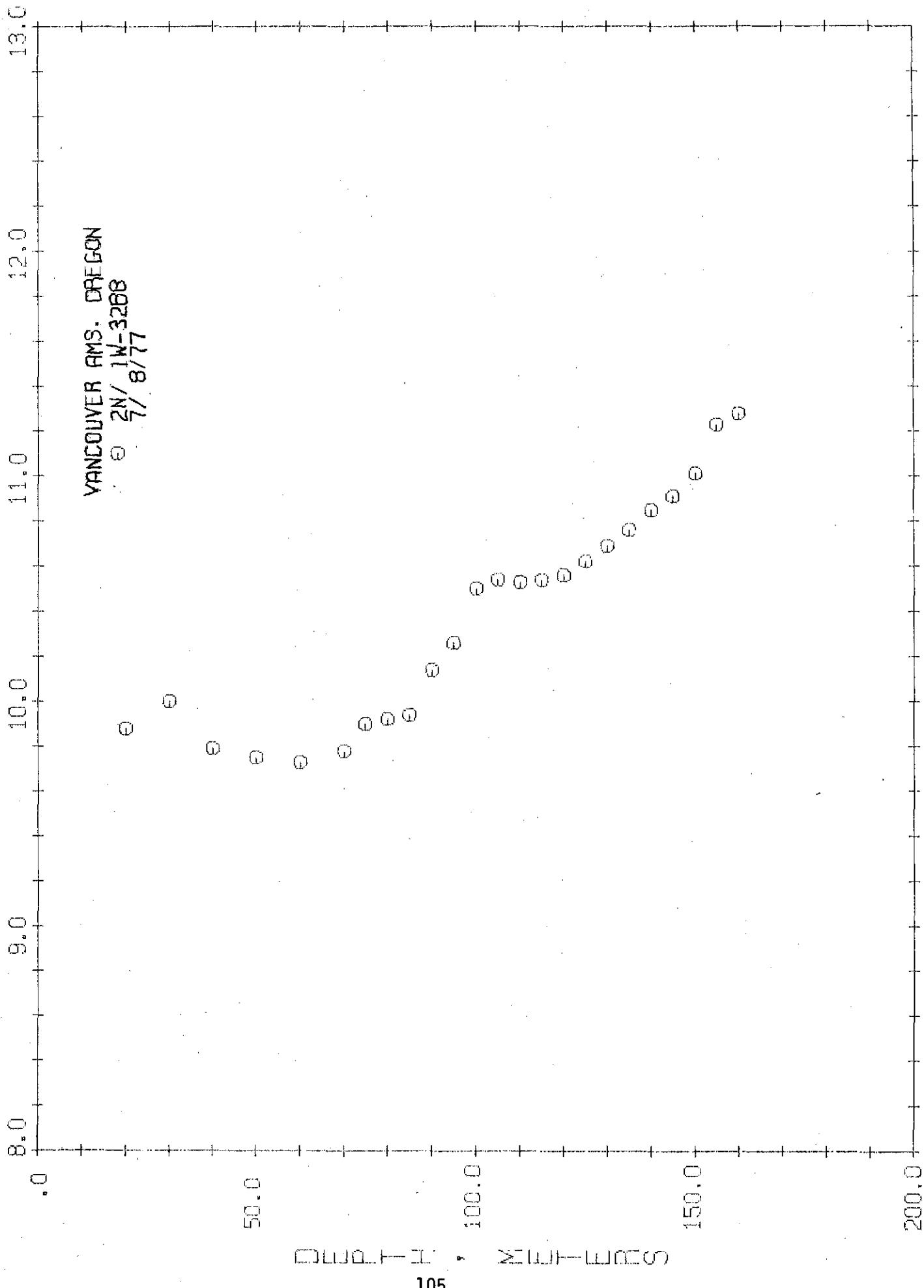
TEMPERATURE, DEG C



TEMPERATURE, DEG C

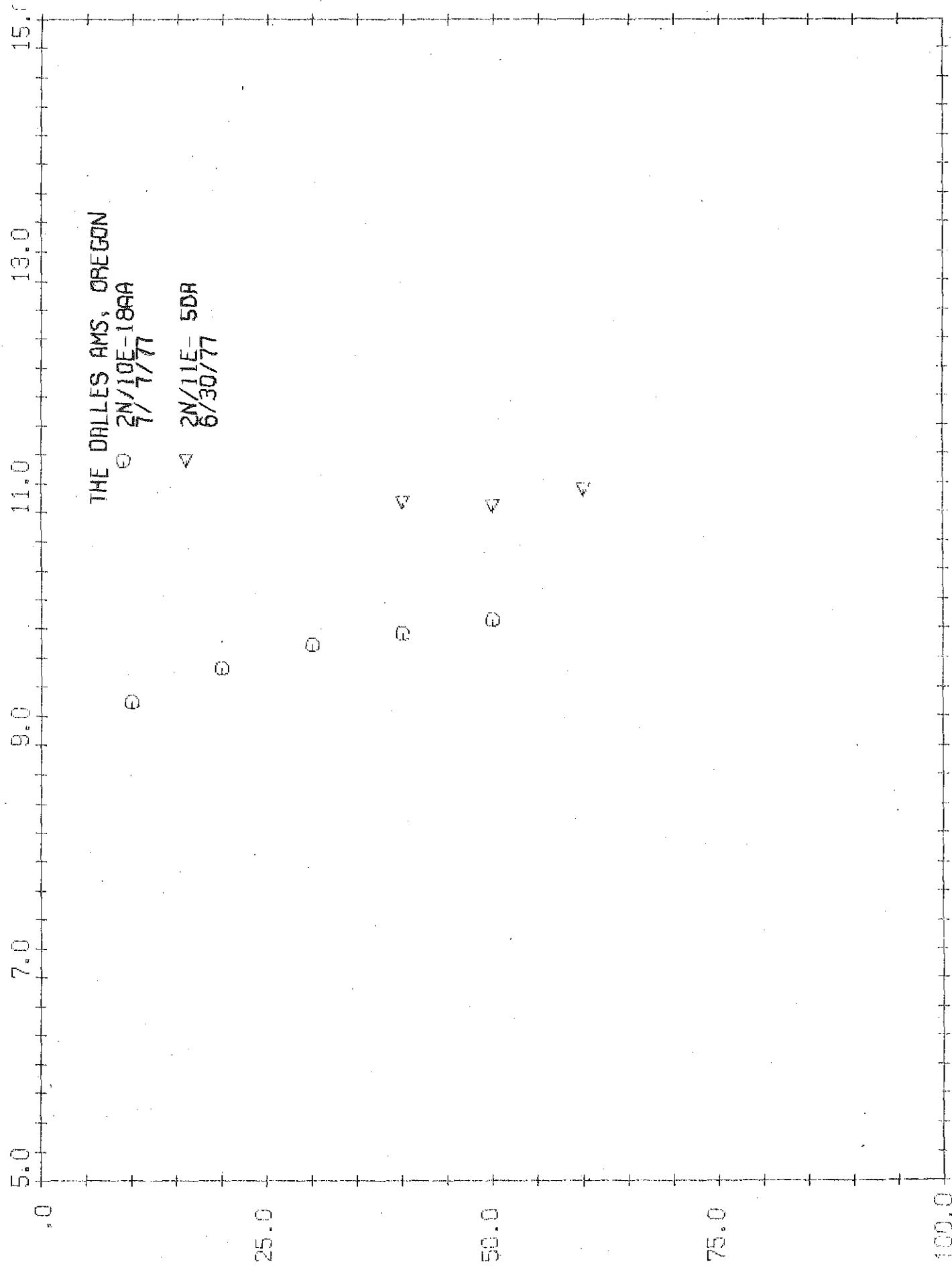


TEMPERATURE, DEG C



DEW POINT - SIGHTING

TEMPERATURE, DEG C



TEMPERATURE, DEG C

15.0  
13.0  
11.0  
9.0  
7.0  
5.0  
0

THE DALLES AMS, OREGON  
2N11E-20MB  
6/30/77

COOL-H-107 - SIGHT-MODE

50.0

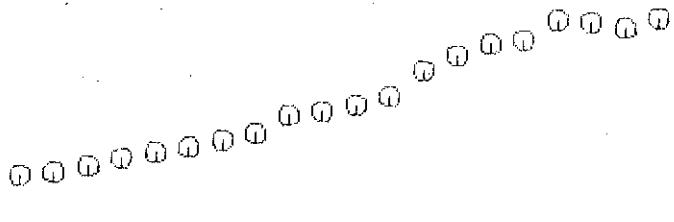
100.0

150.0

TEMPERATURE, DEG C

15.0  
13.0  
11.0  
9.0  
7.0  
5.0  
0.0

THE DALLIES AMS, OREGON  
8/12E 3CC  
8/177

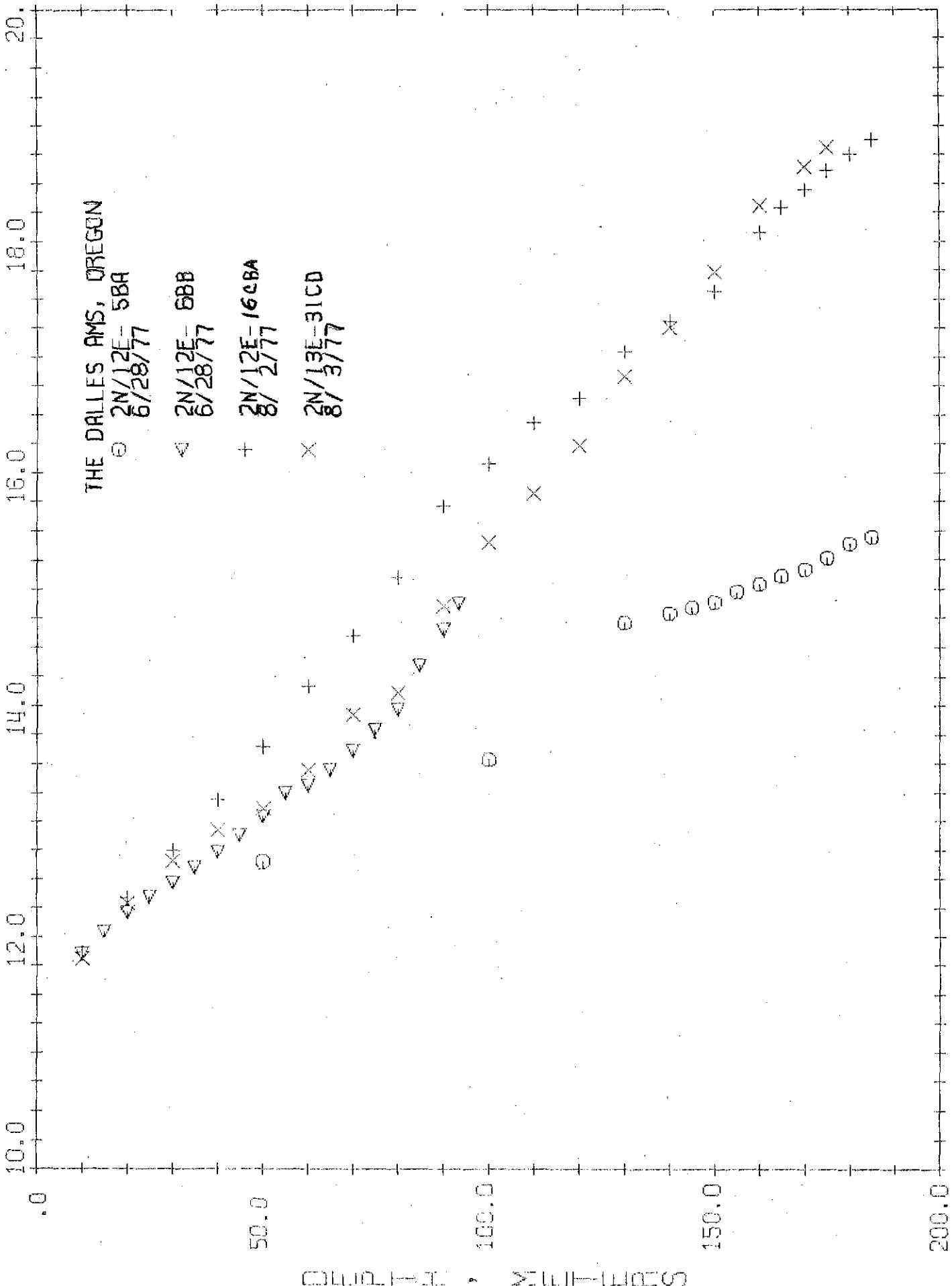


DEW POINT, DEG C

108

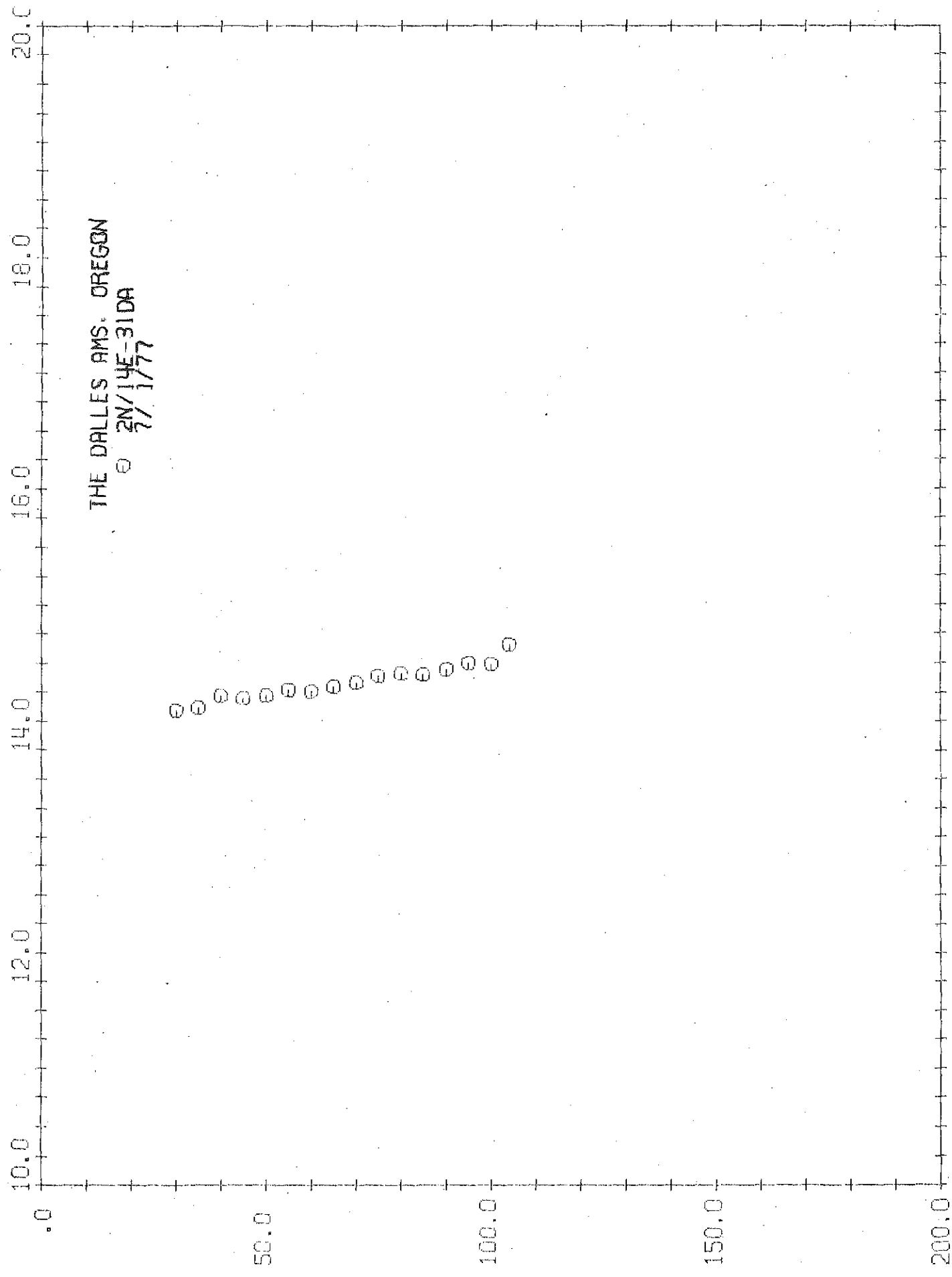
200.0

TEMPERATURE, DEG C



COLLECTION DATE → COLLECTION

TEMPERATURE, DEG C



TEMPERATURE, DEG C

25.0

20.0

15.0

10.0

5.0

0

PENDLETON AMS, OREGON  
O 2N/26E-32CC  
2/24/77

100.0

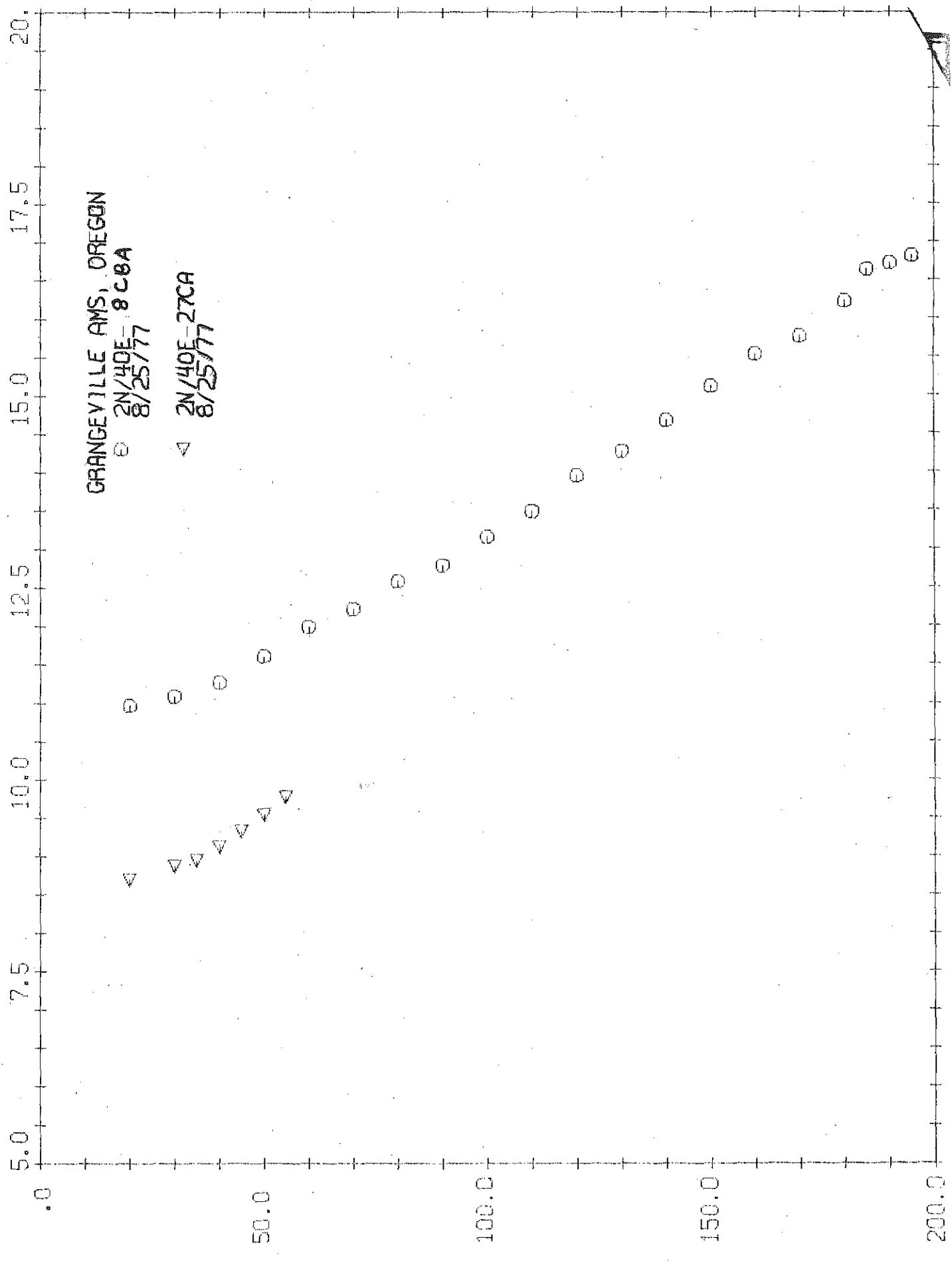
200.0

300.0

350.0

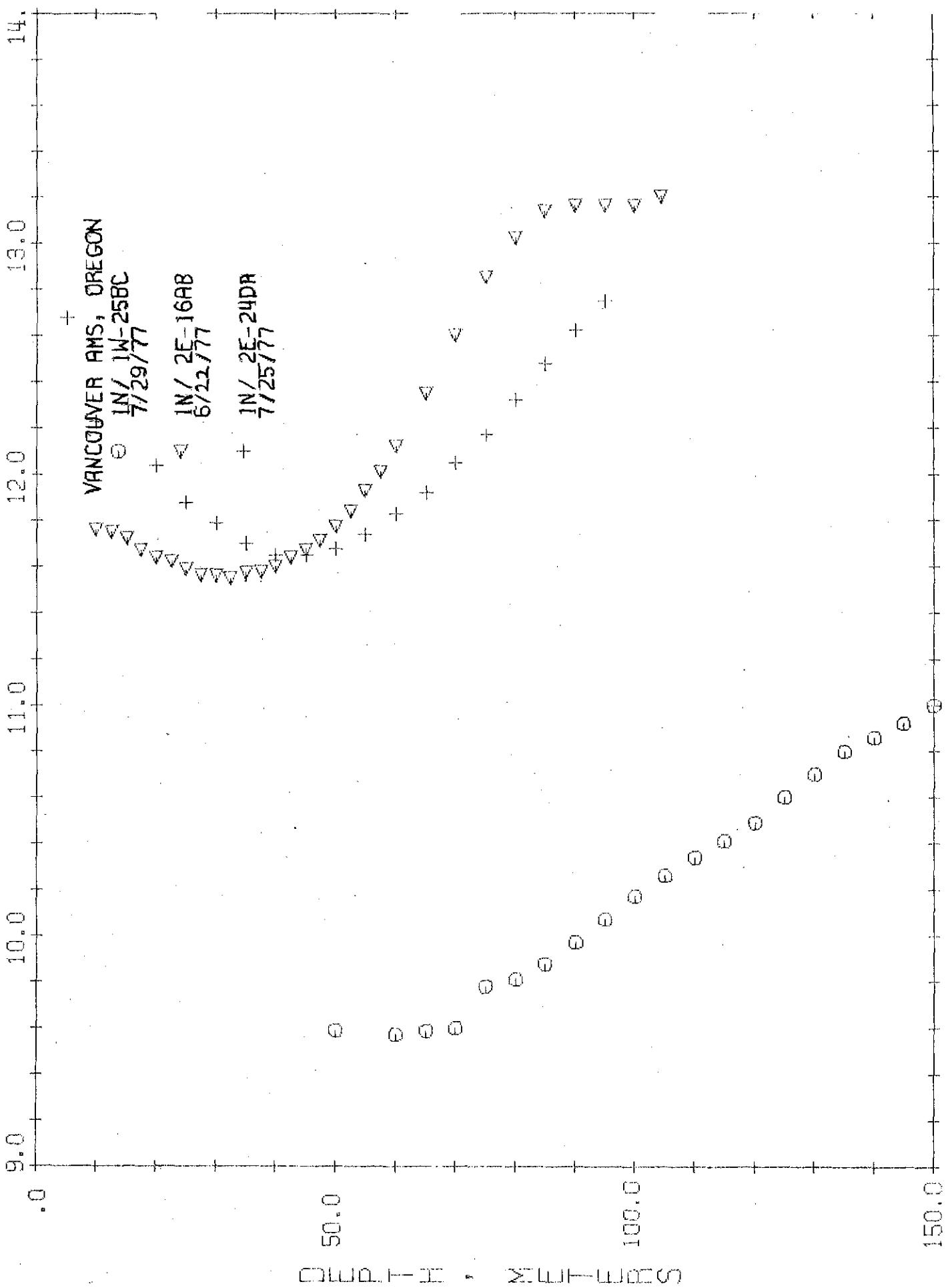
DATA - 111 → 250.0000

TEMPERATURE, DEG C



SCOTT-HUME • H-TOMO

TEMPERATURE, DEG C



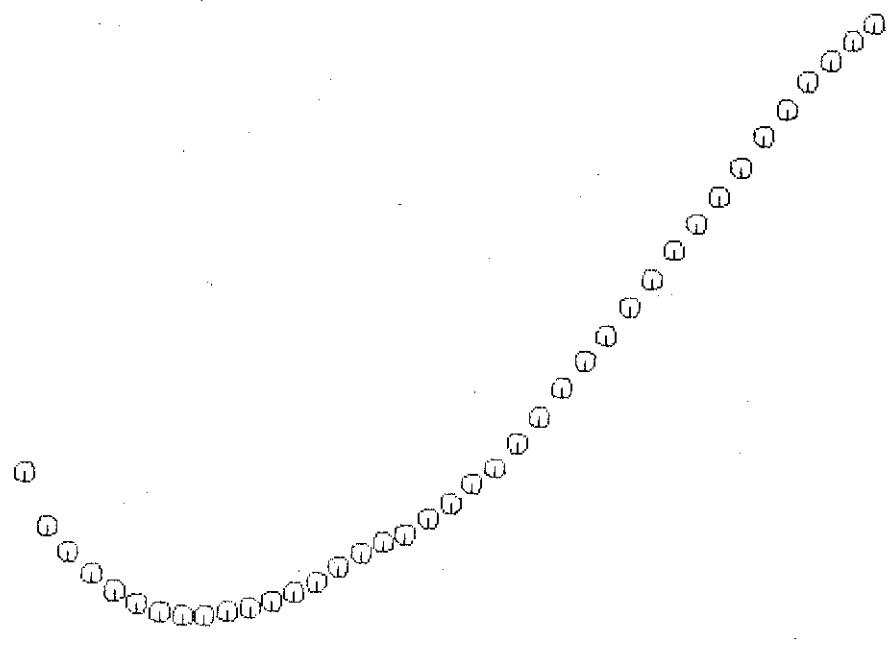
TEMPERATURE, DEG C

10.0

15.0

20

VANCOUVER AMS, OREGON  
1N 2E - 29DA  
10/13/77



DEPTH - METERS

TEMPERATURE, DEG C

25

20.0

15.0

10.0

0

VANCOUVER AMS, OREGON  
N 45° 35' 33" W  
10/12/77

100.0

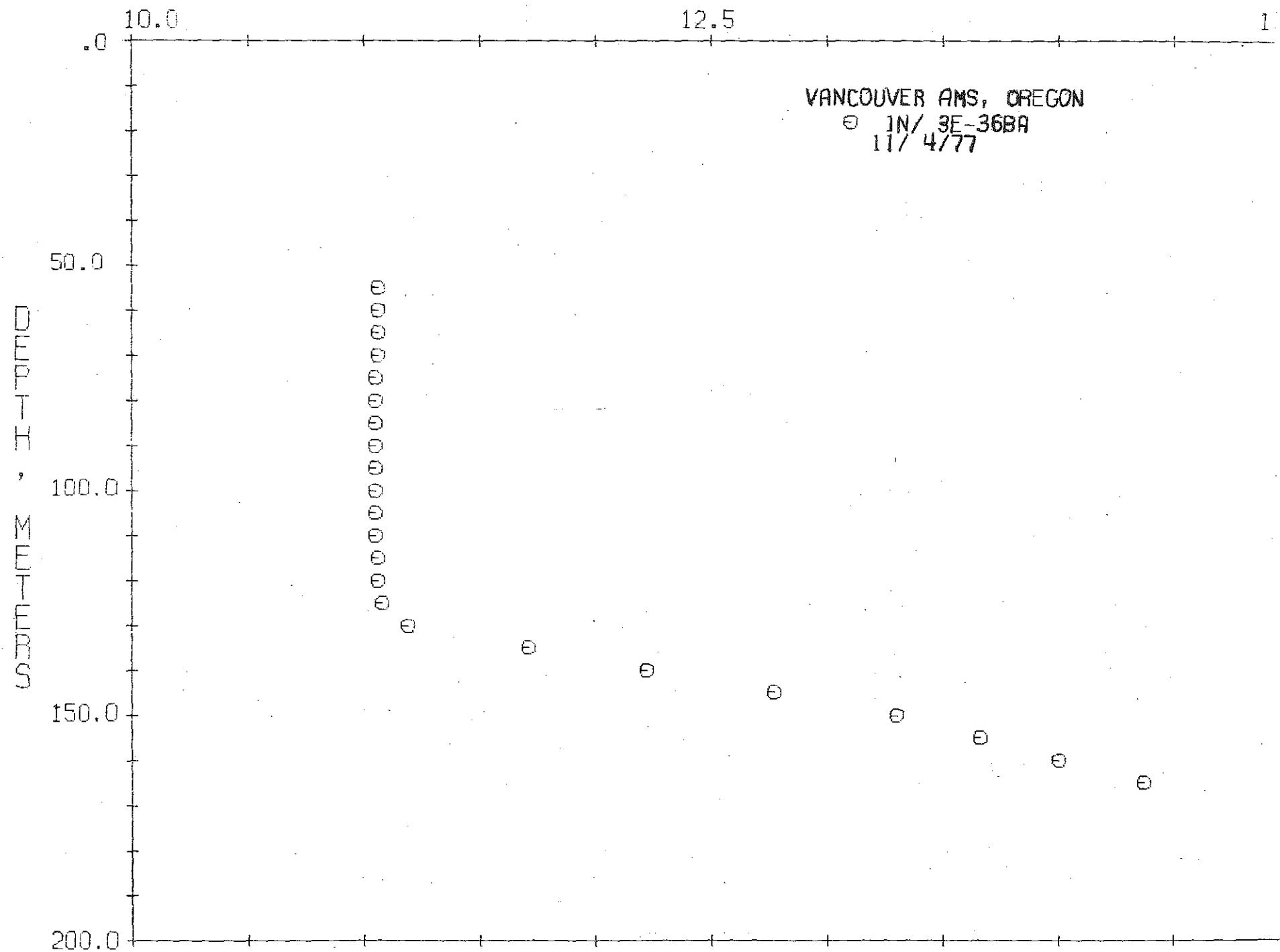
200.0

300.0

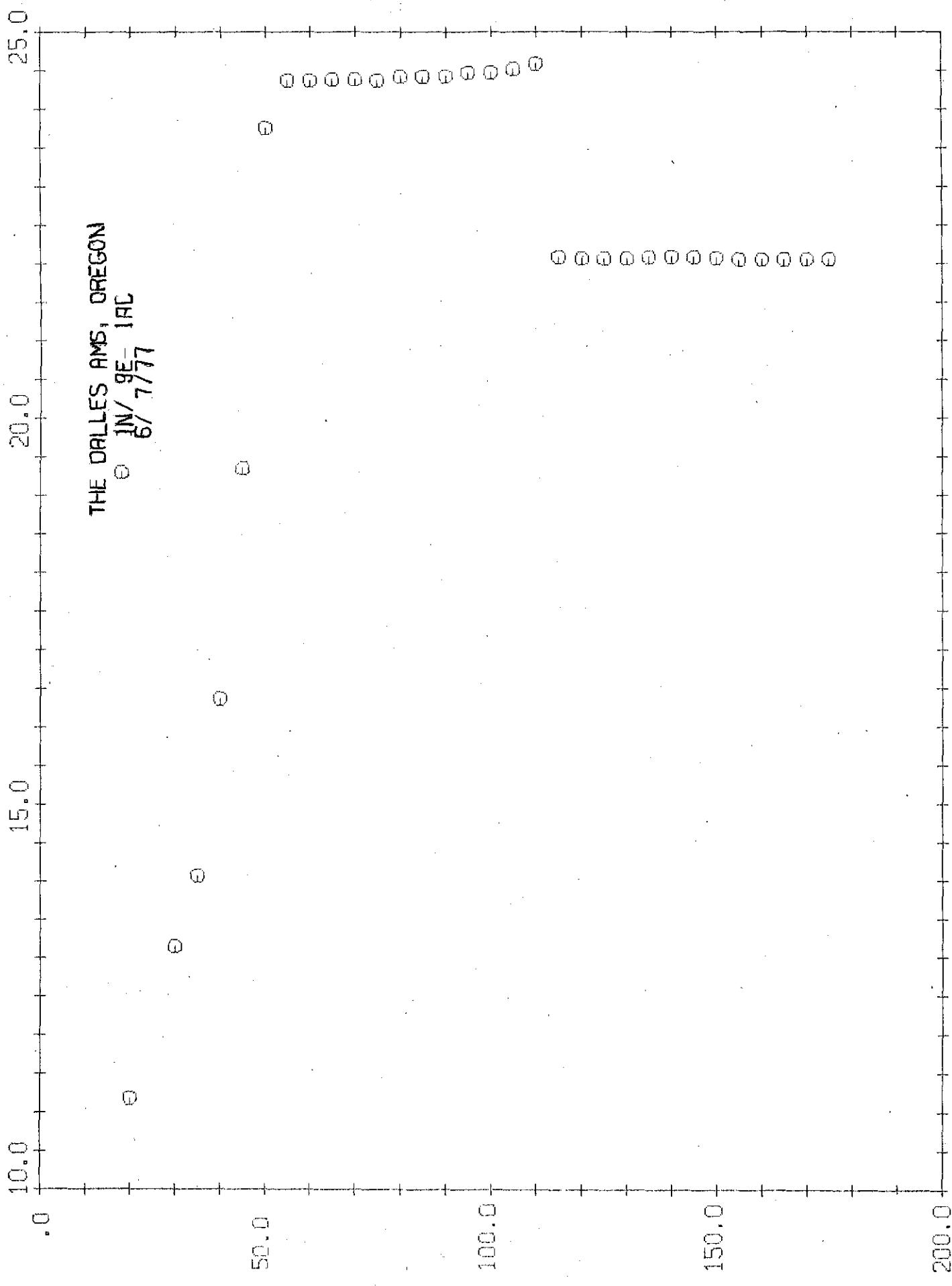
350.0

DEPTH, METERS

TEMPERATURE, DEG C



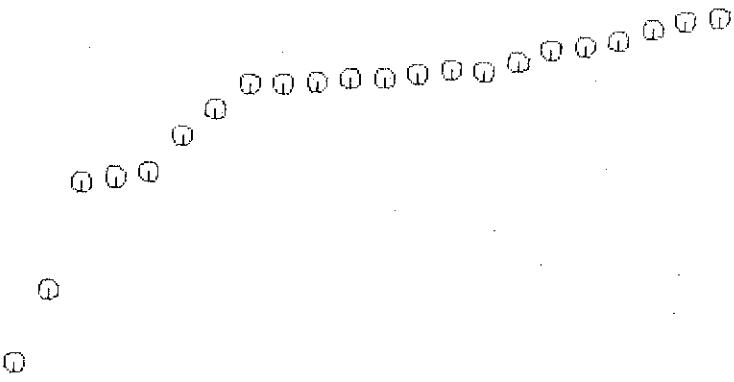
TEMPERATURE, DEG C



TEMPERATURE, DEG C

20.0  
18.0  
16.0  
14.0  
12.0  
10.0  
0.0

THE DALLES AMS, OREGON  
N 44° 13' E 113° 57' ICB



DEPTH, FT - SUMMER

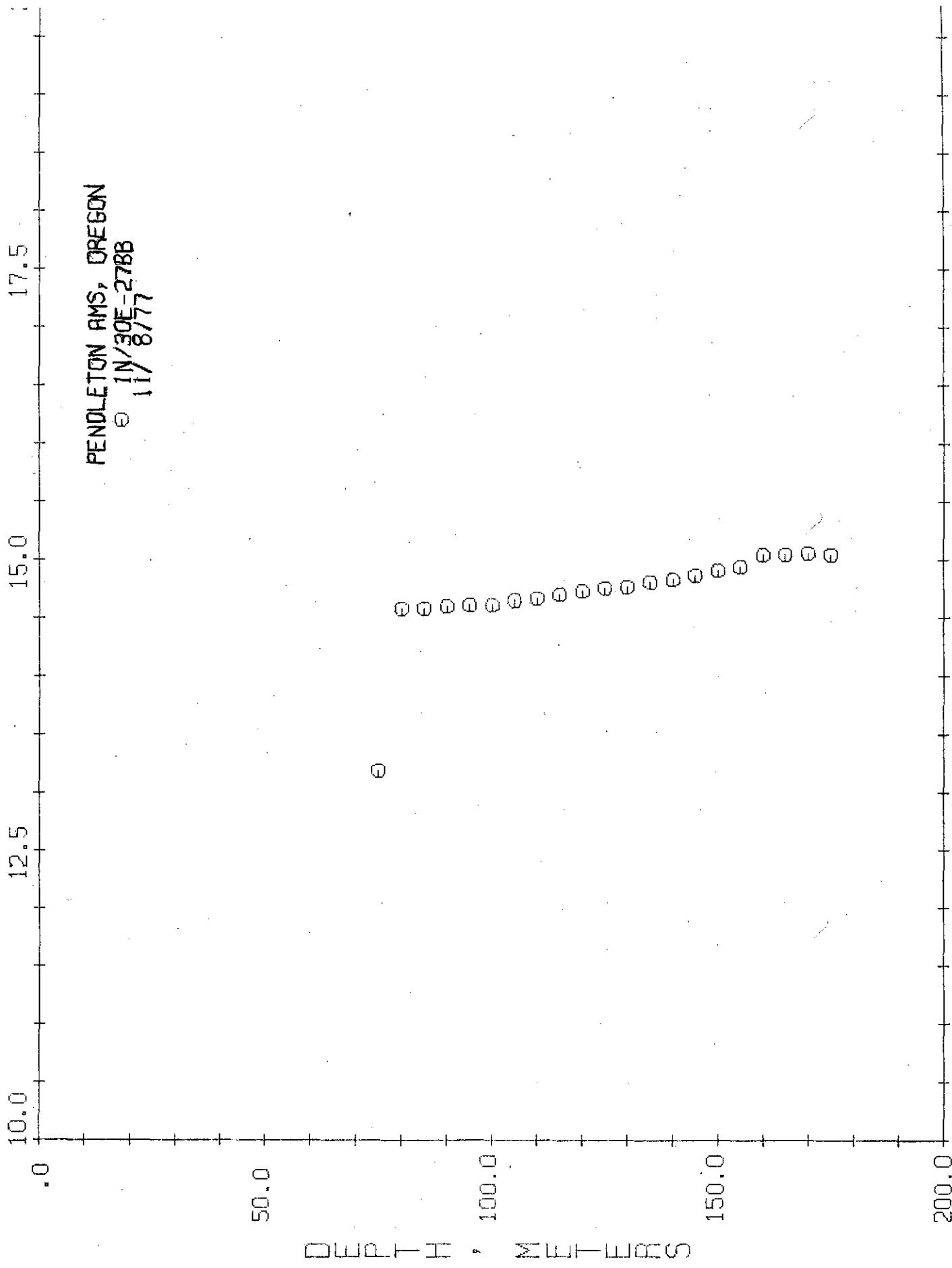
200.0

150.0

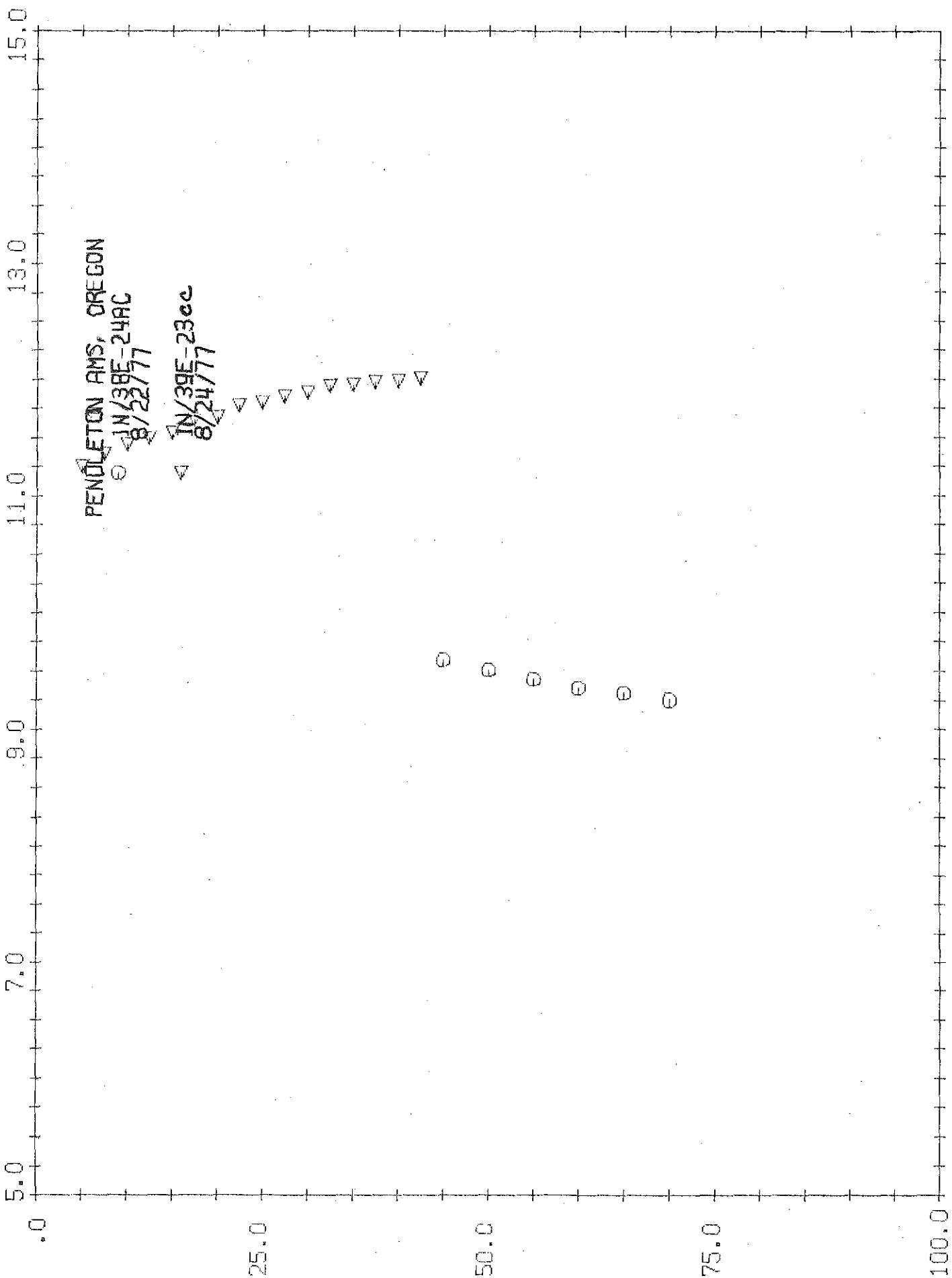
100.0

50.0

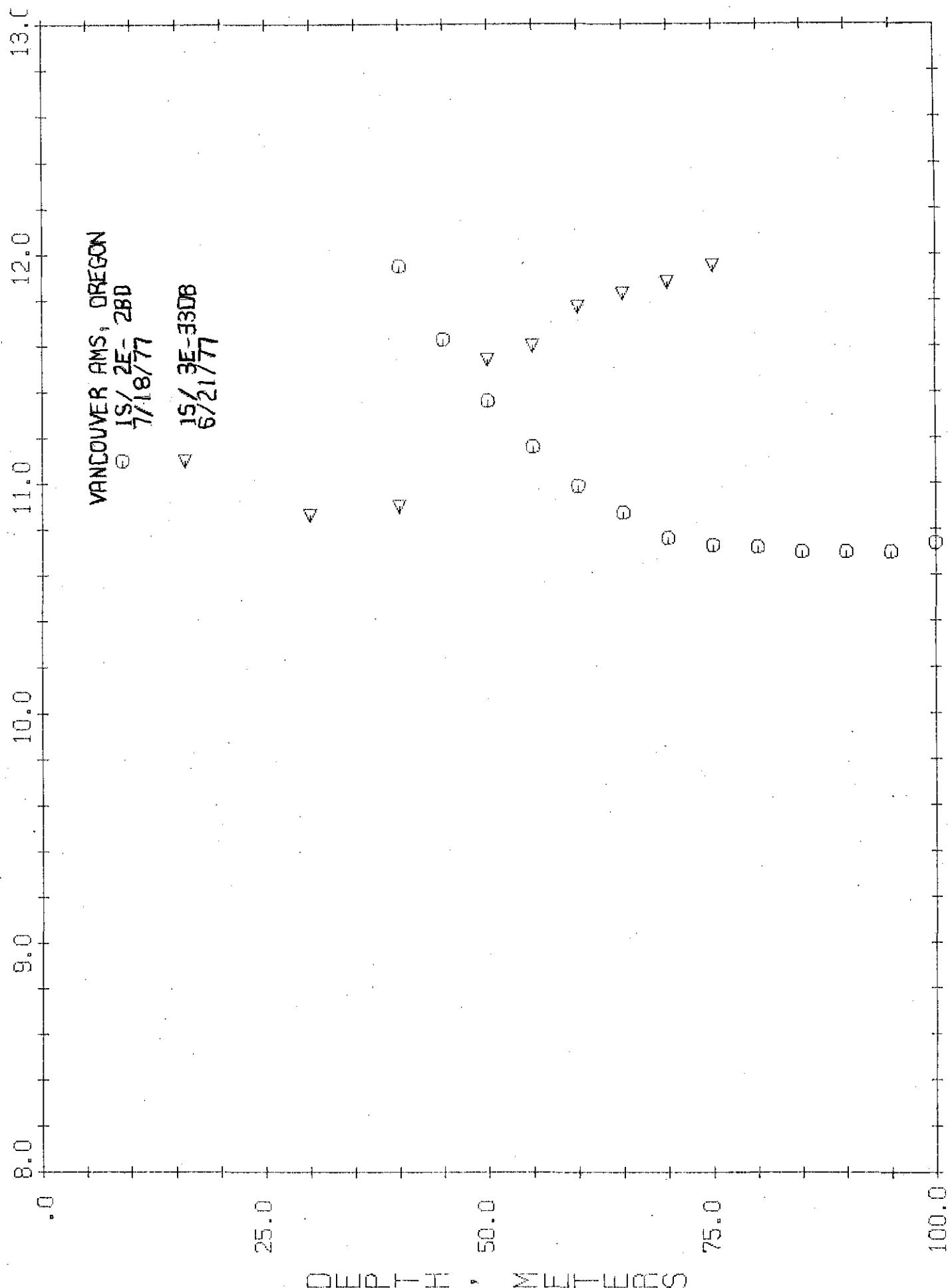
TEMPERATURE, DEG C



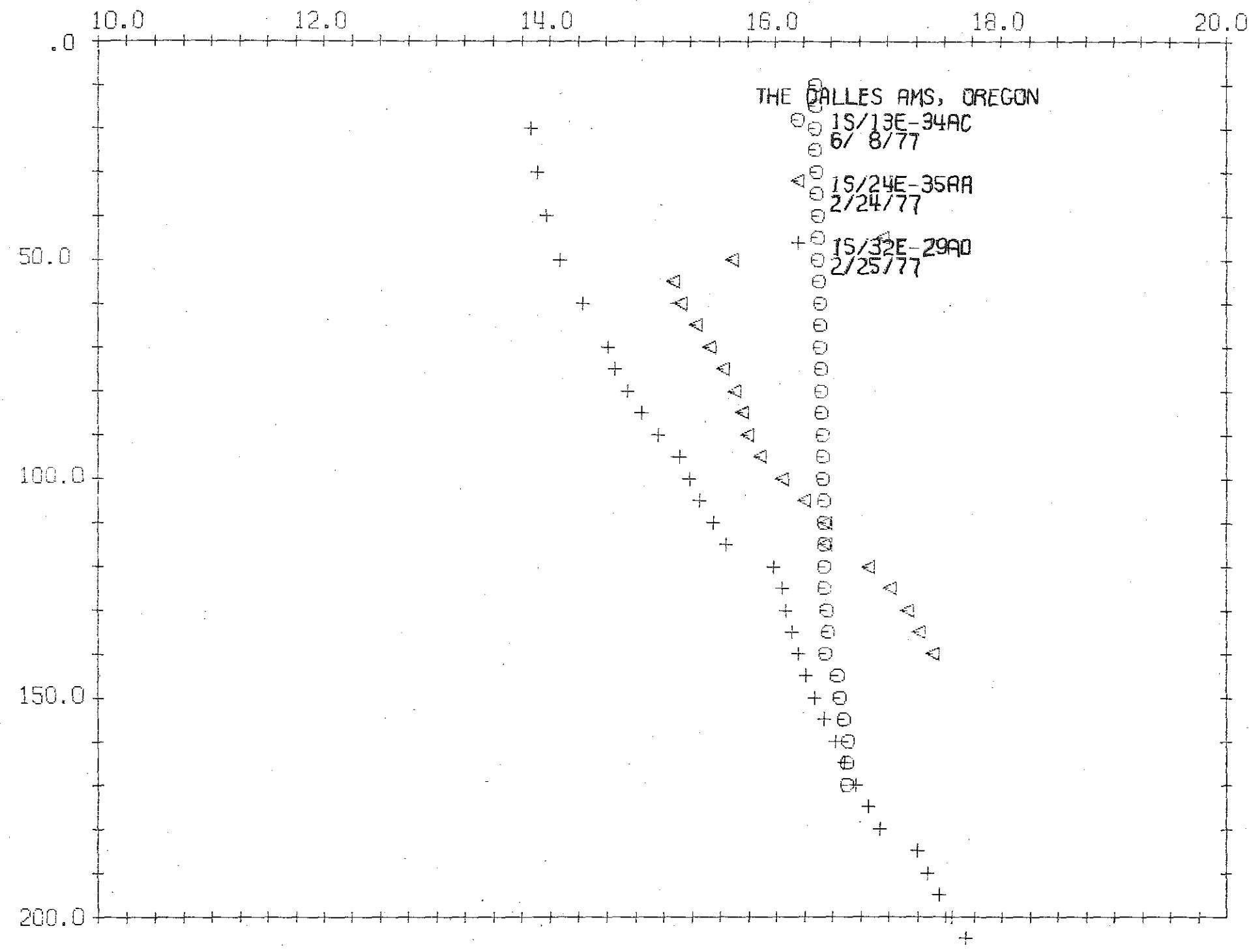
TEMPERATURE, DEG C



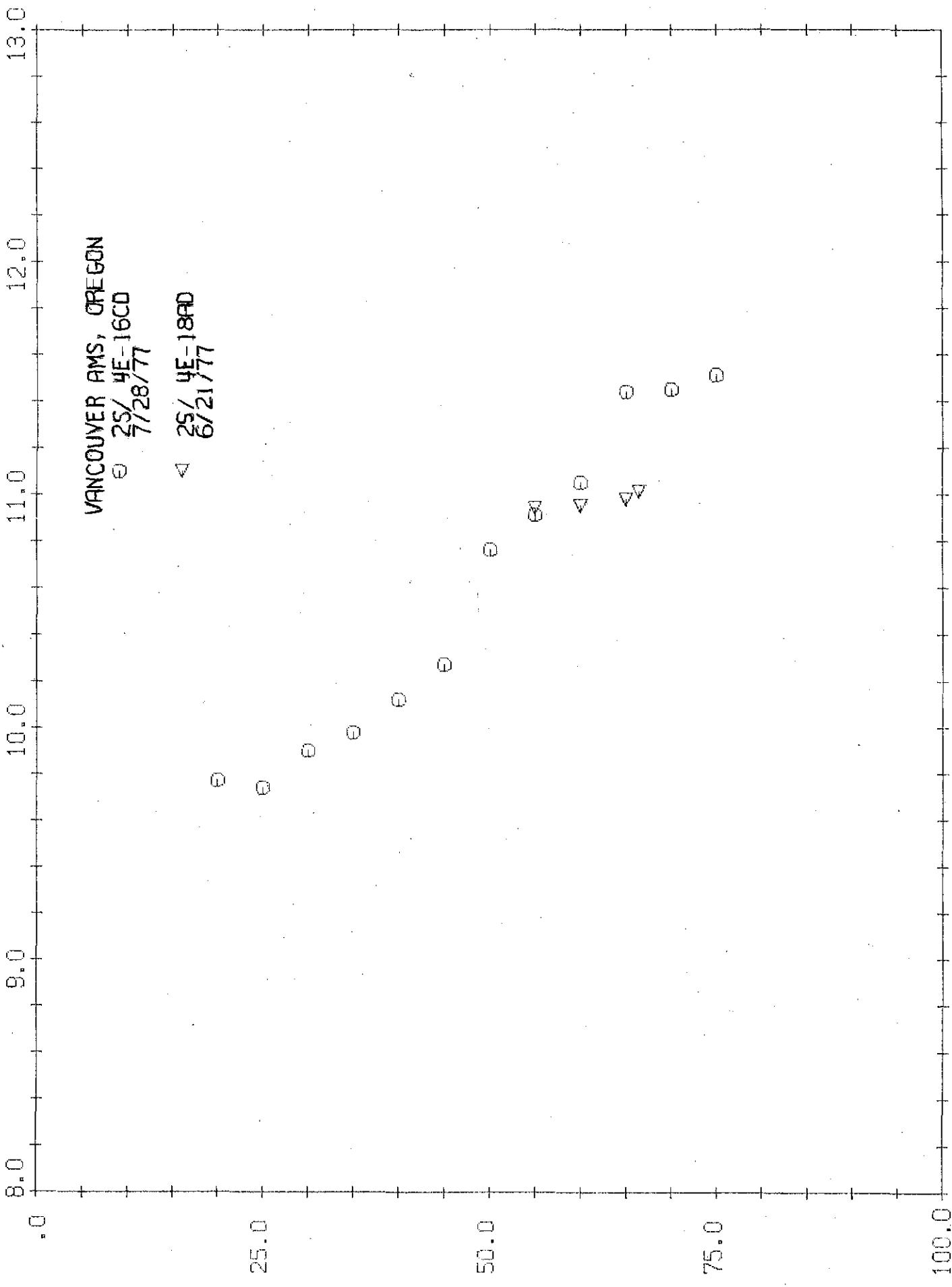
TEMPERATURE, DEG C



TEMPERATURE, DEG C

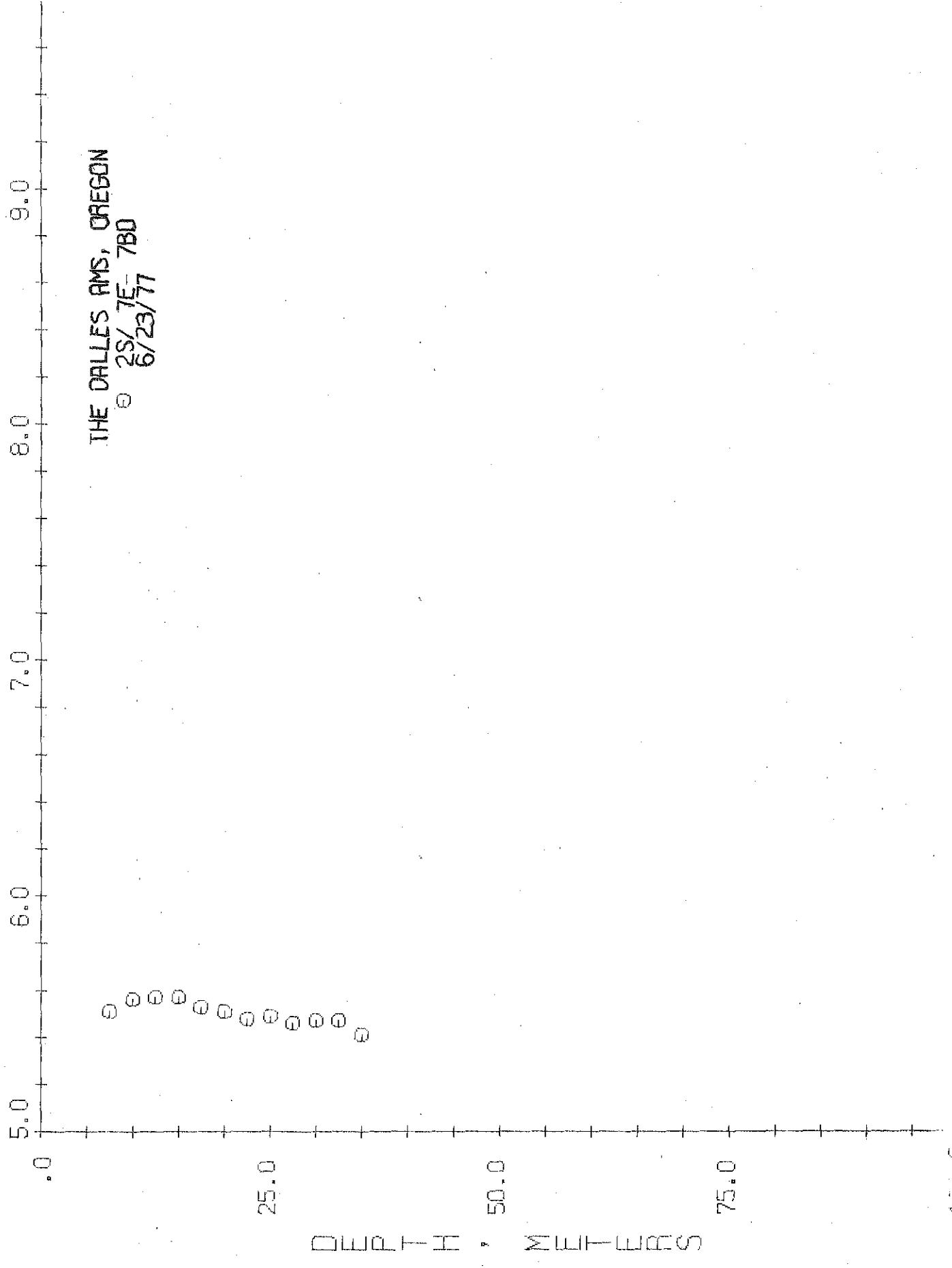


TEMPERATURE, DEG C

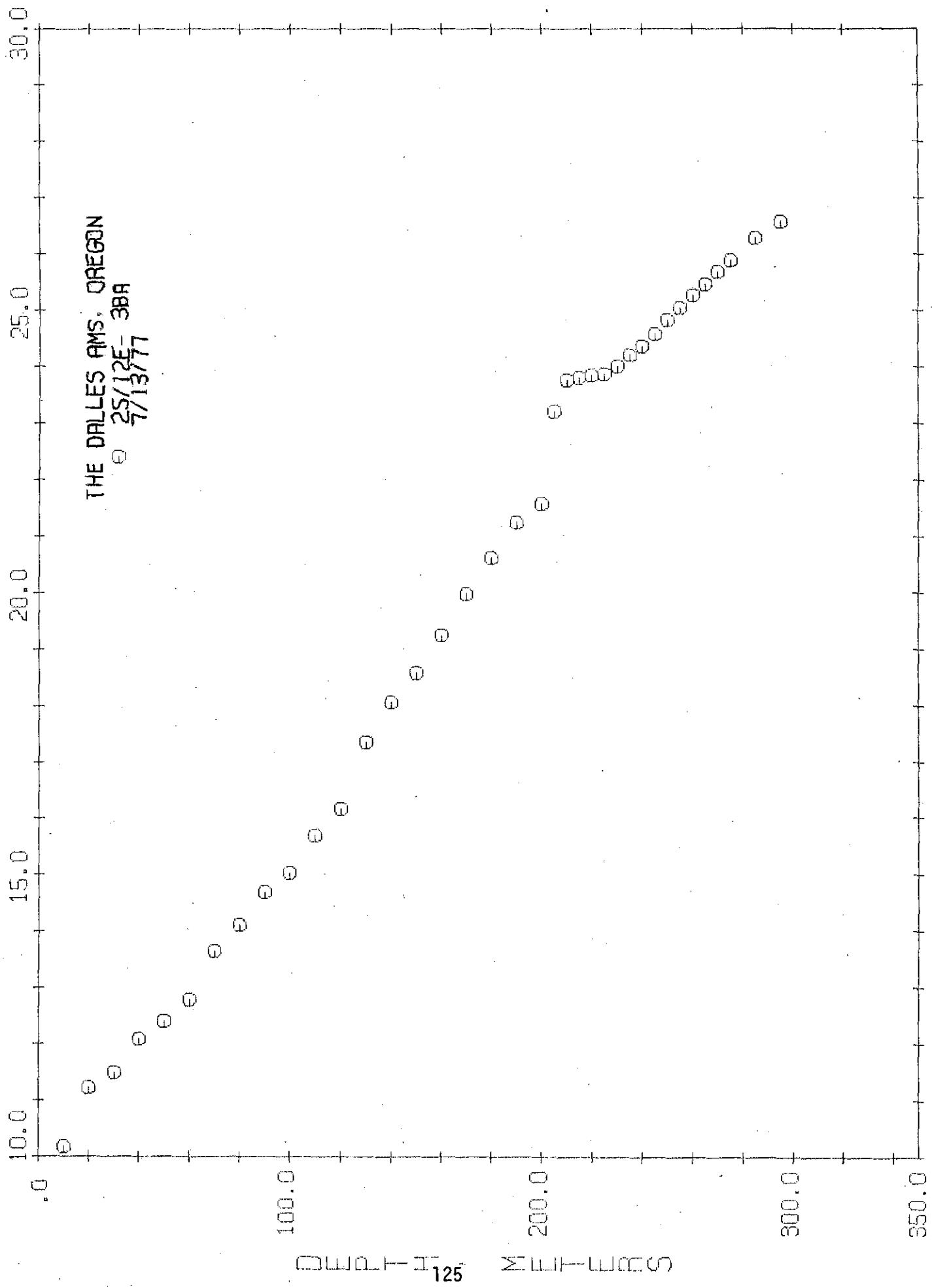


CLOUDS-HUMIDITY TEMPERATURE

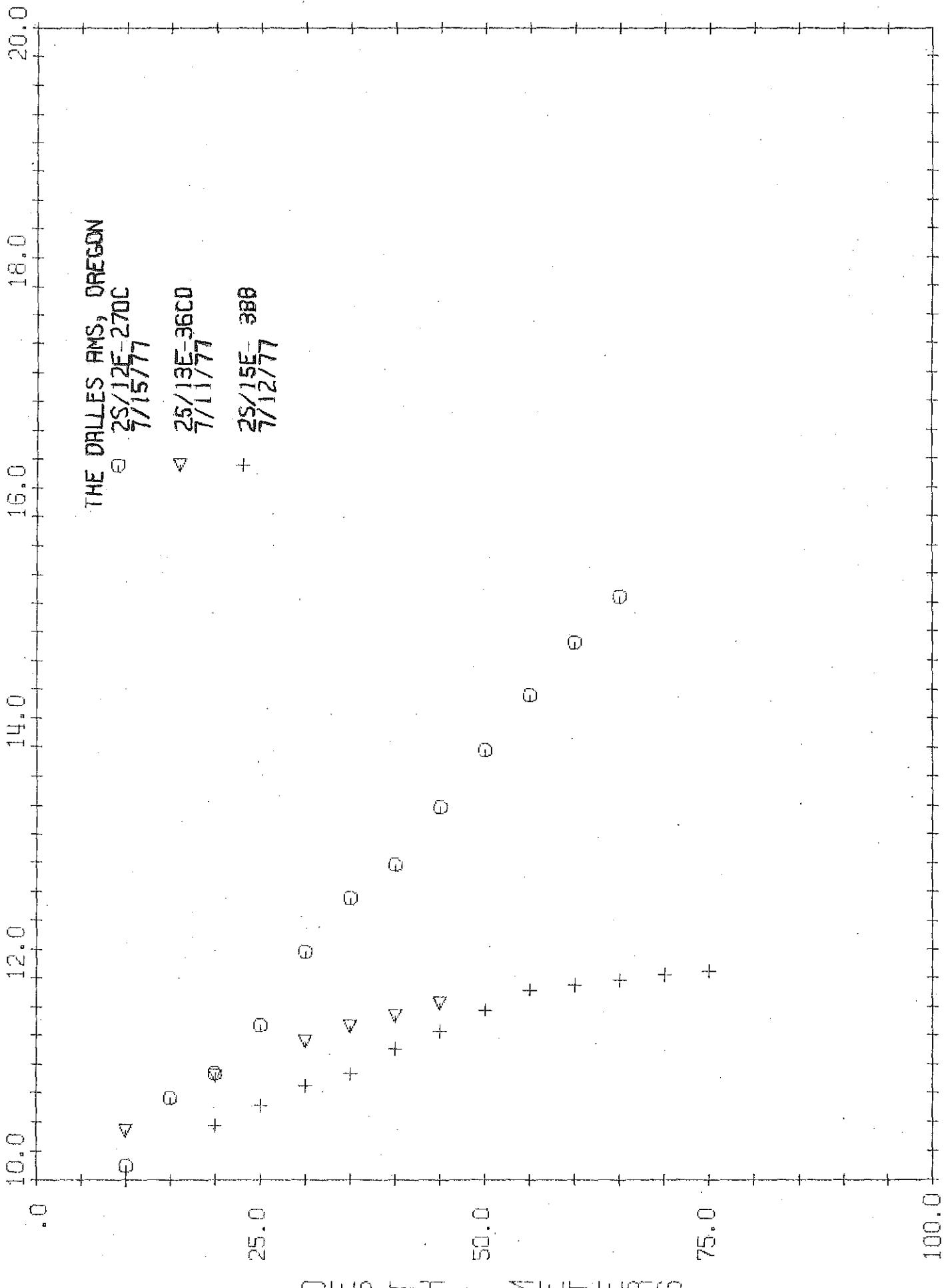
TEMPERATURE, DEG C



TEMPERATURE, DEG C

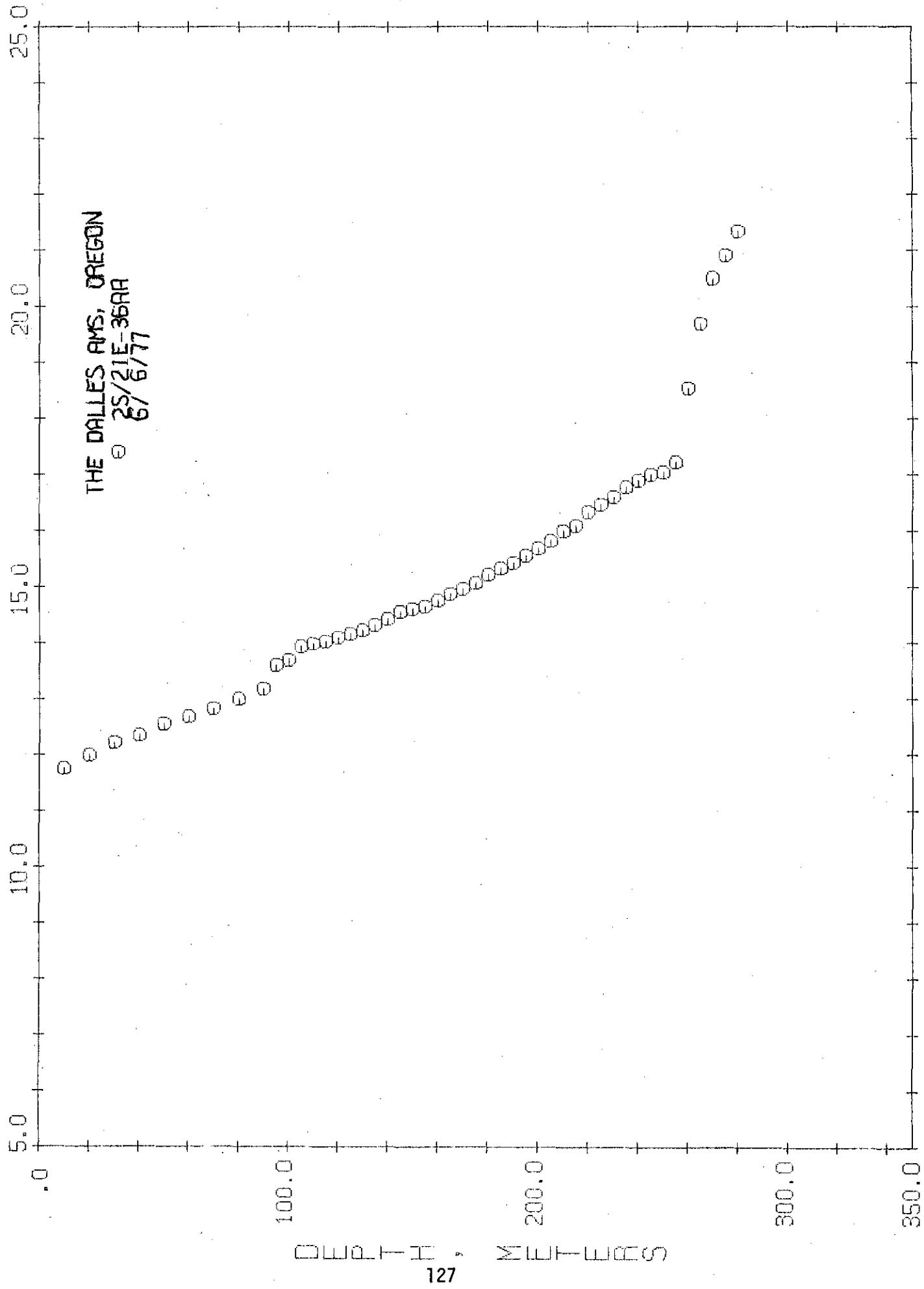


TEMPERATURE, DEG C

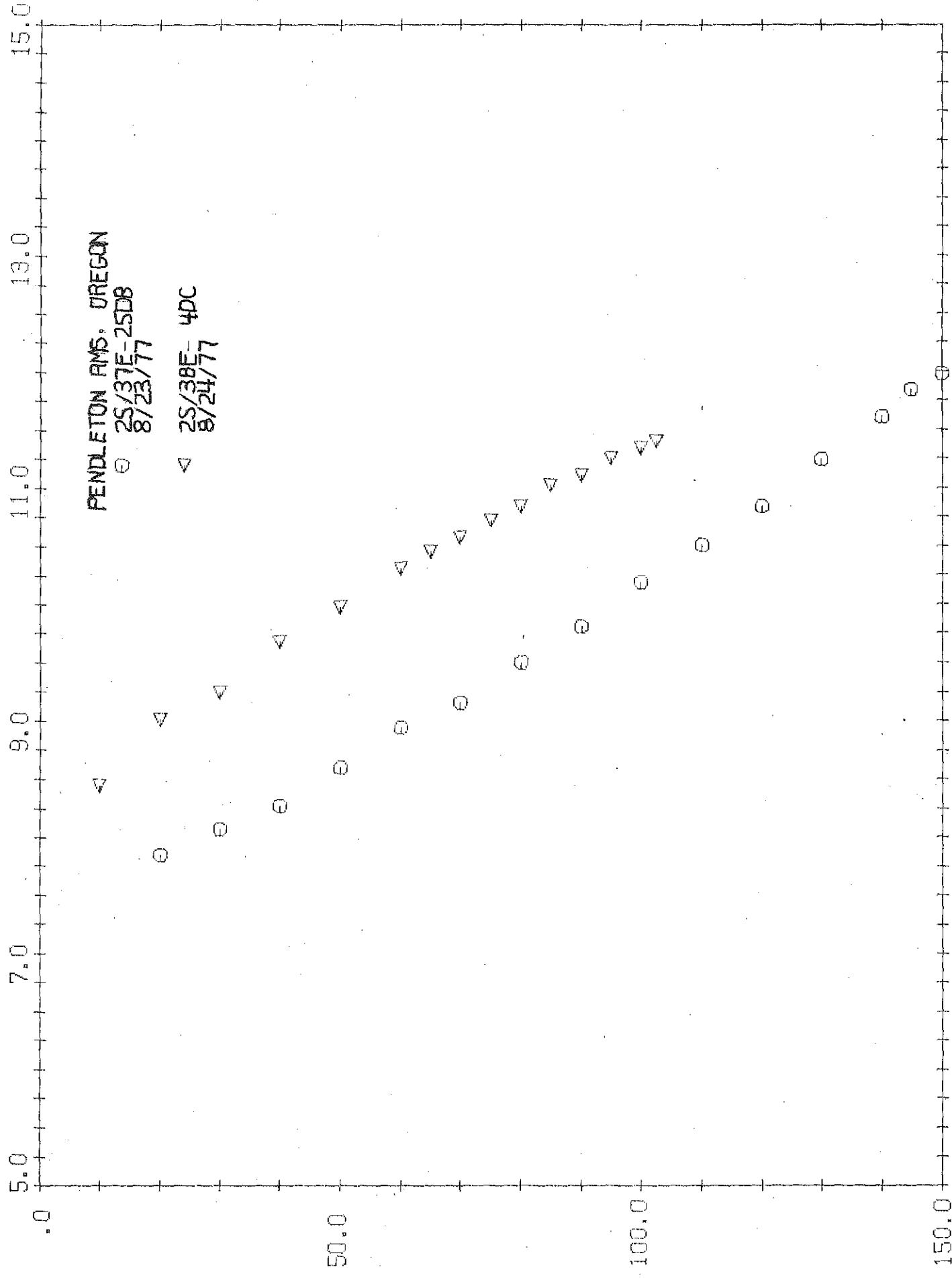


DWPT-H SWEATNESS

TEMPERATURE, DEG C

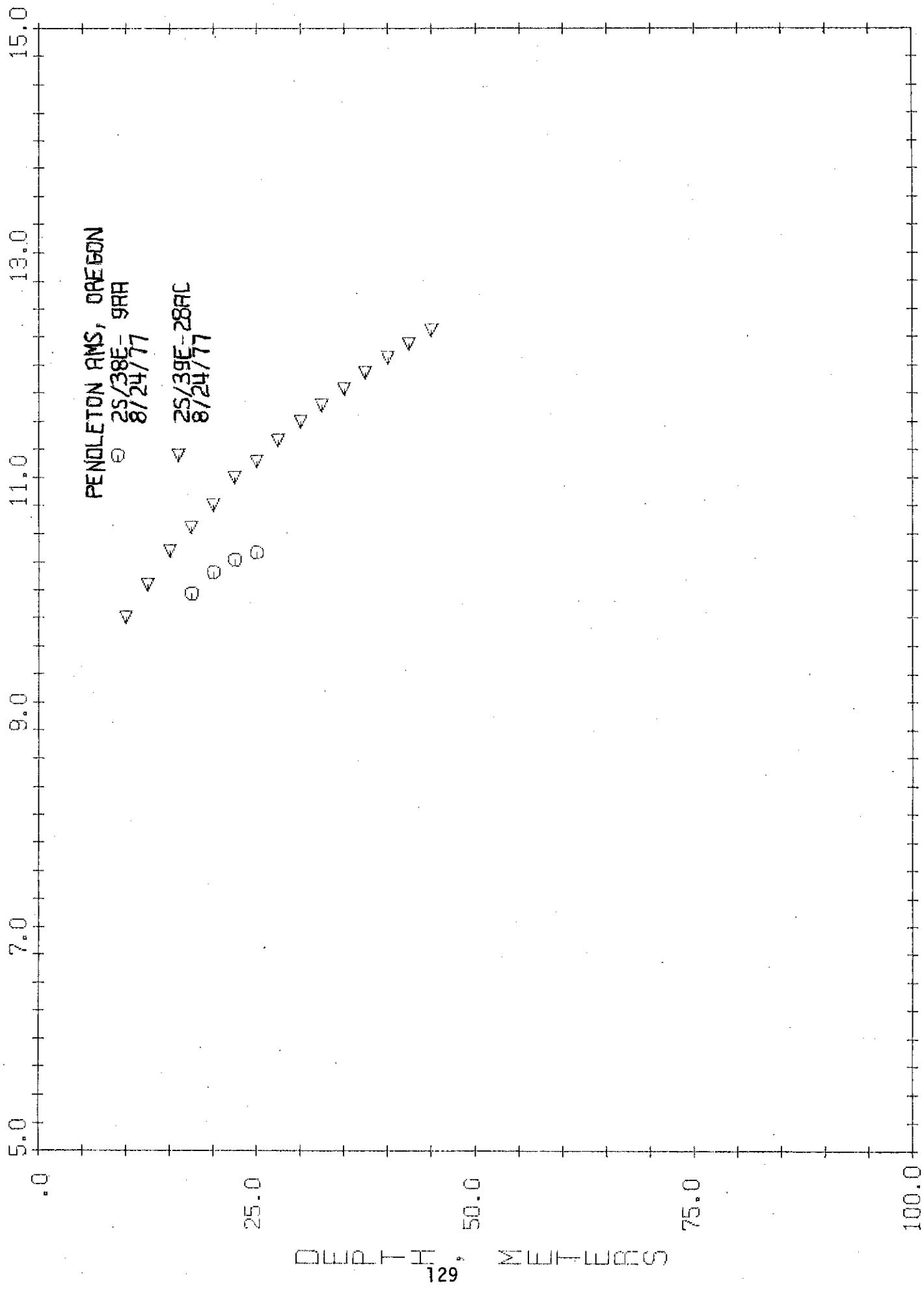


TEMPERATURE, DEG C



DWIGHT E. MURRAY

TEMPERATURE, DEG C



TEMPERATURE, DEG C

22.5  
20.0  
17.5  
15.0  
12.5  
10.0  
0

PENDLETON RIVER, OREGON  
2S/38E-10RB  
11/9/77

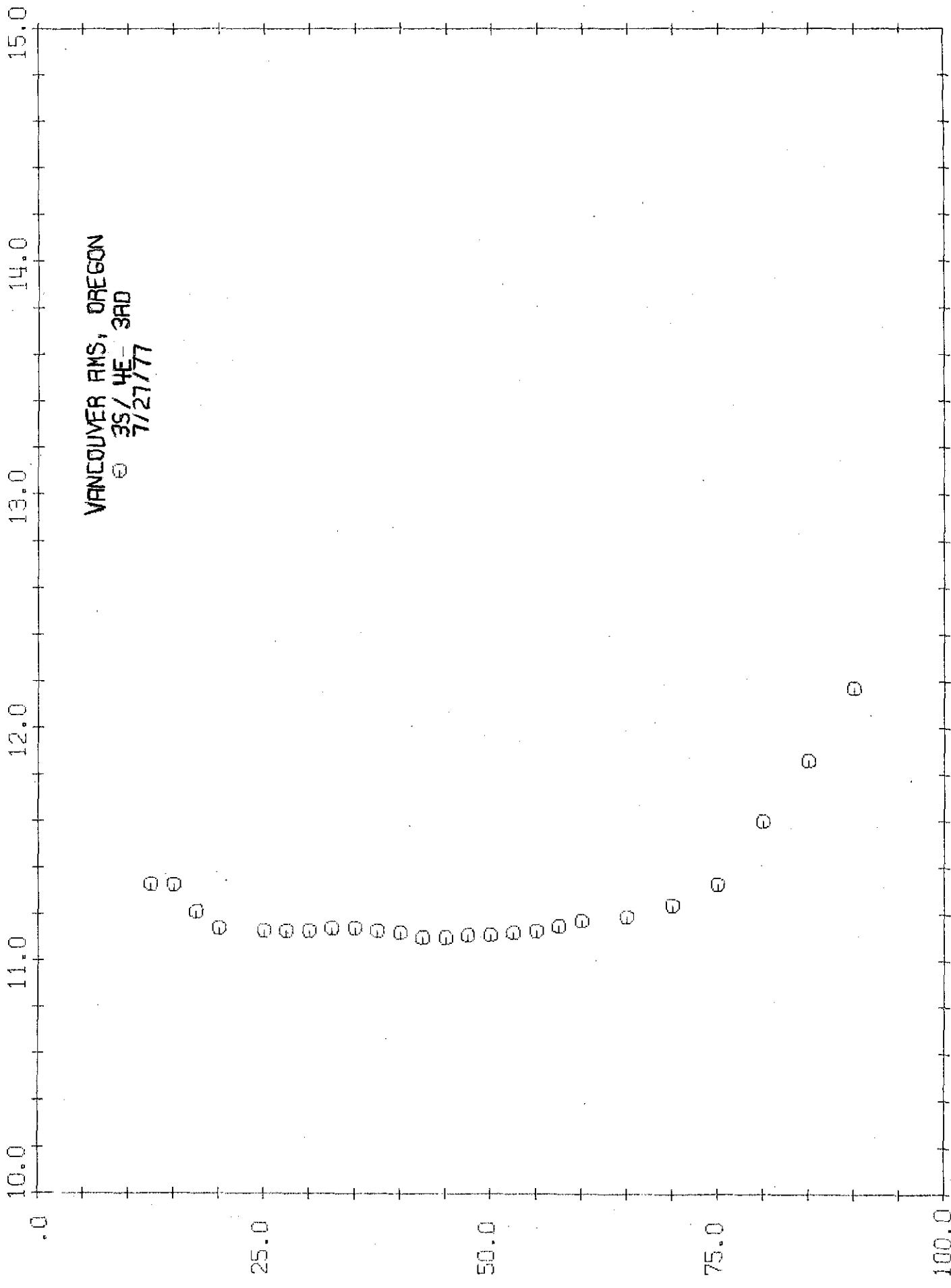
DEPTH - METERS

100.0

200.0

300.0

TEMPERATURE, DEG C



11.0

TEMPERATURE, DEG C

E

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

D

## THE DALLAS AMS, OREGON

X 35.8 SE/1600  
2/27/77

D 35.8 SE/2500  
2/27/77

TEMPERATURE, DEG C

9.0  
8.0  
7.0  
6.0  
5.0  
0.0

Θ THE DRILLERS RMS, OREGON  
Θ 35° 8E - 24BB0  
Θ 5/25/77

Θ

25.0

DEPTH, METERS

Θ  
Θ  
Θ  
Θ  
Θ  
Θ  
Θ  
Θ  
Θ  
Θ  
Θ  
Θ

50.0

75.0

100.0

TEMPERATURE, DEG C

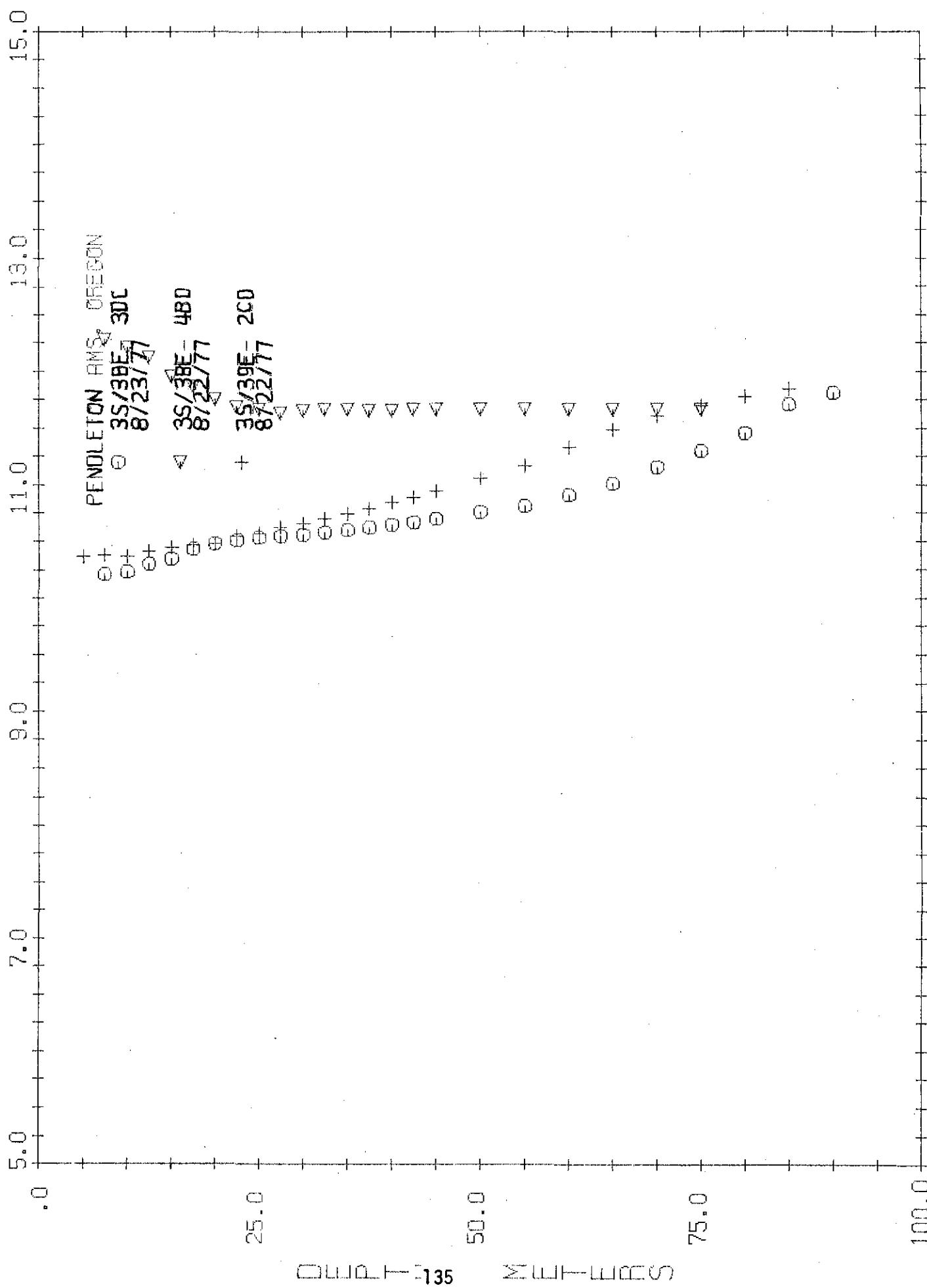
15.0  
14.0  
13.0  
12.0  
11.0  
10.0  
9.0  
8.0  
7.0  
6.0  
5.0  
0.0

THE DALLAS AMS, OREGON  
© 35/14E 7DC  
7/14/77

25.0  
50.0  
75.0  
100.0

134 SUMMERTIME

TEMPERATURE, DEG C



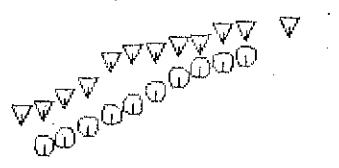
TEMPERATURE, DEG C

17.0  
15.0  
13.0  
11.0  
9.0  
7.0  
5.0

GRANGEVILLE AMS, GREGON

3S/40E-14CB1  
8/24/77

3S/40E-14CB2  
8/24/77

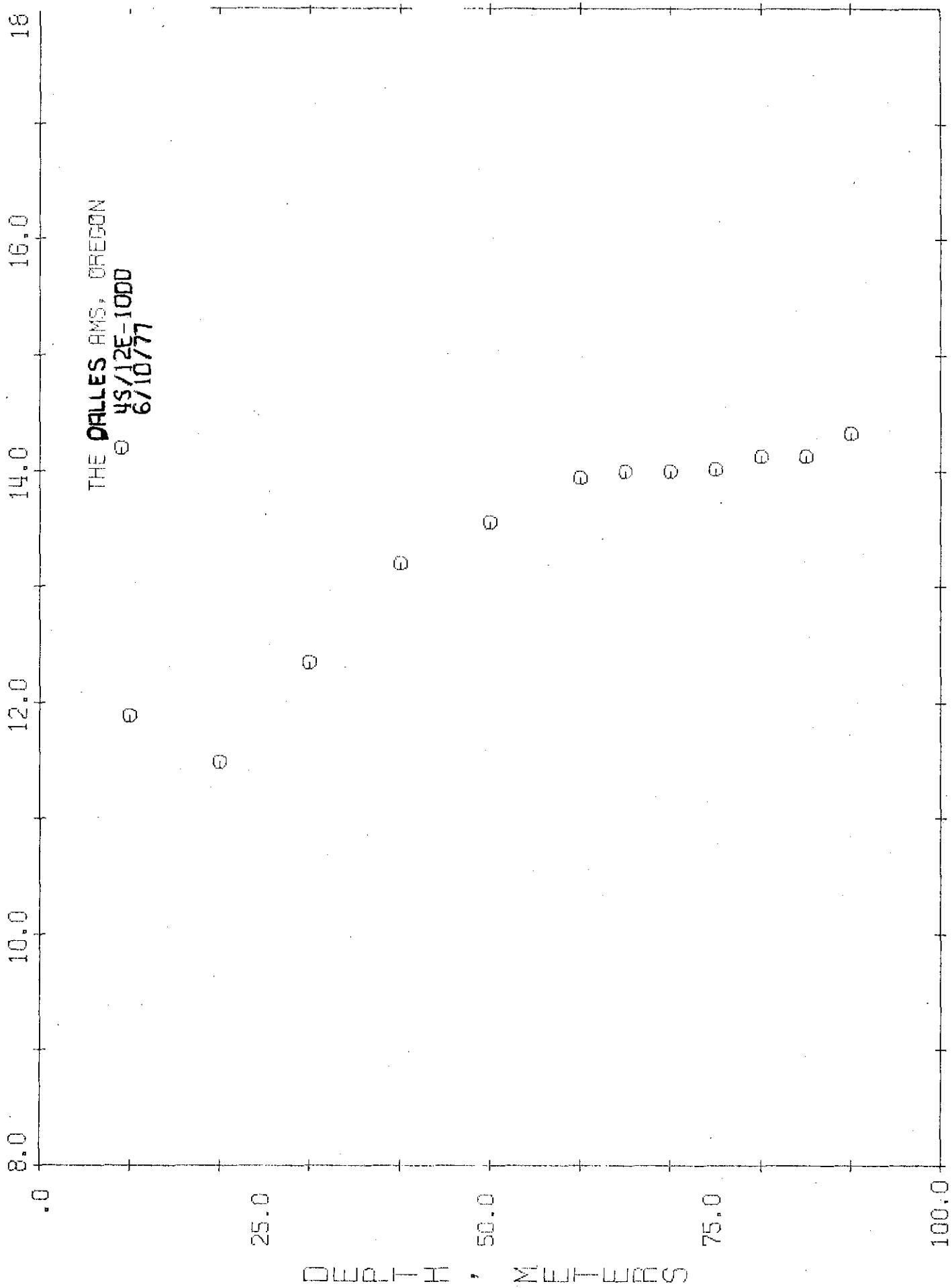


50.0

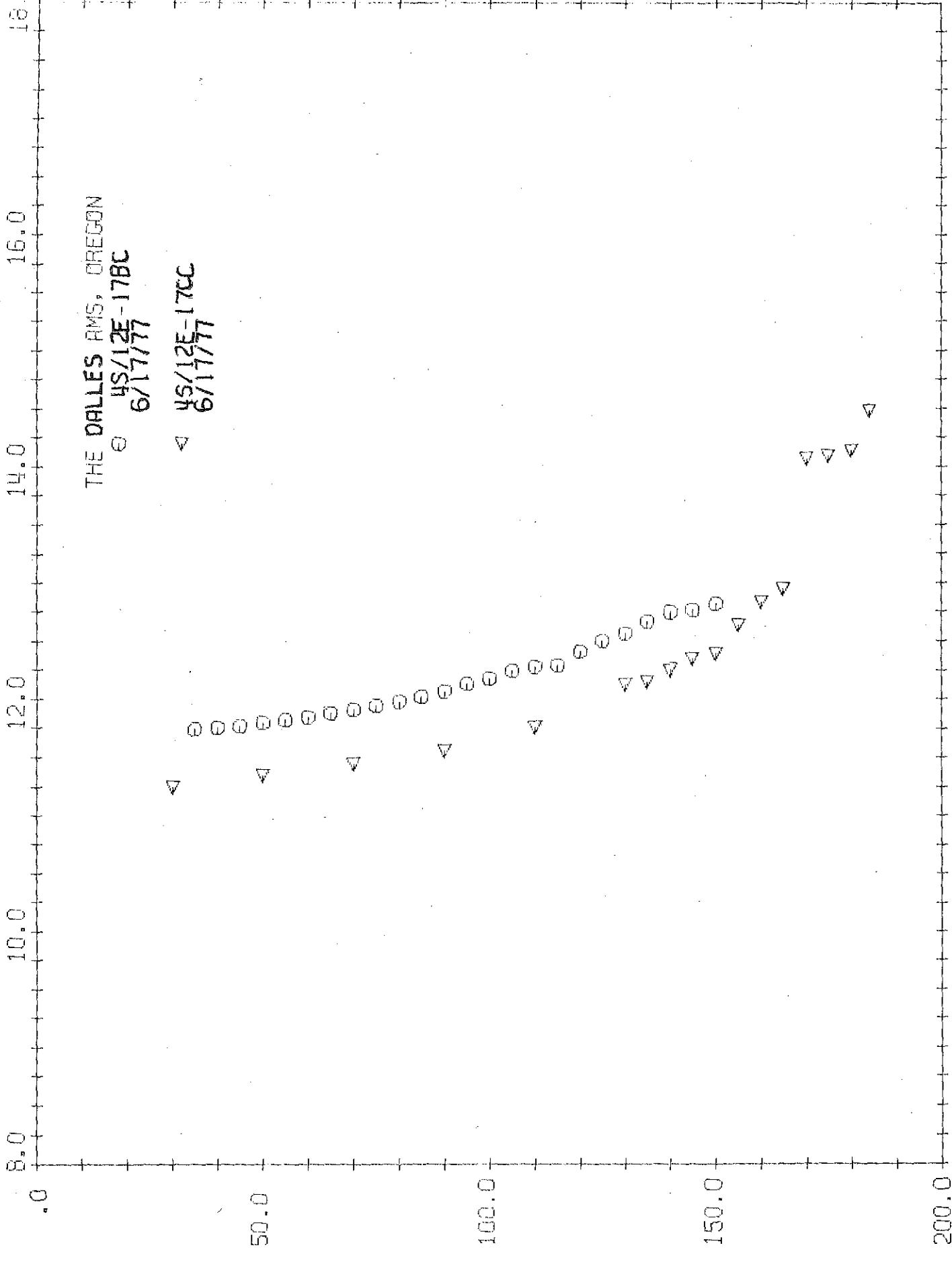
100.0

150.0

TEMPERATURE, DEG C



TEMPERATURE, DEG C



SUMMER - SUMMERS

TEMPERATURE, DEG C

18  
16.0  
14.0  
12.0  
10.0  
8.0  
0

THE DALLES AMS, OREGON  
6/16/77 ICR

25.0

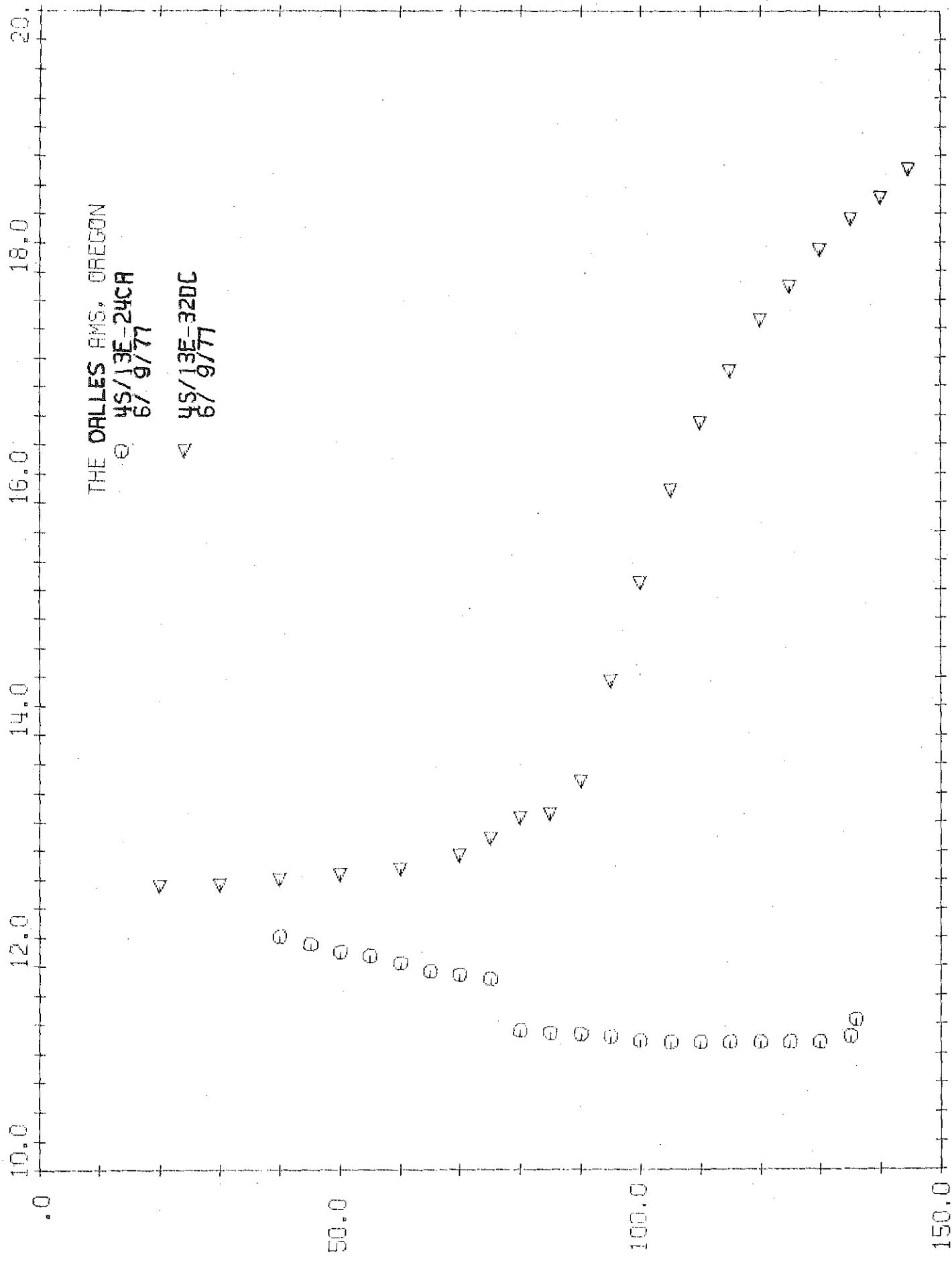
50.0

75.0

100.0

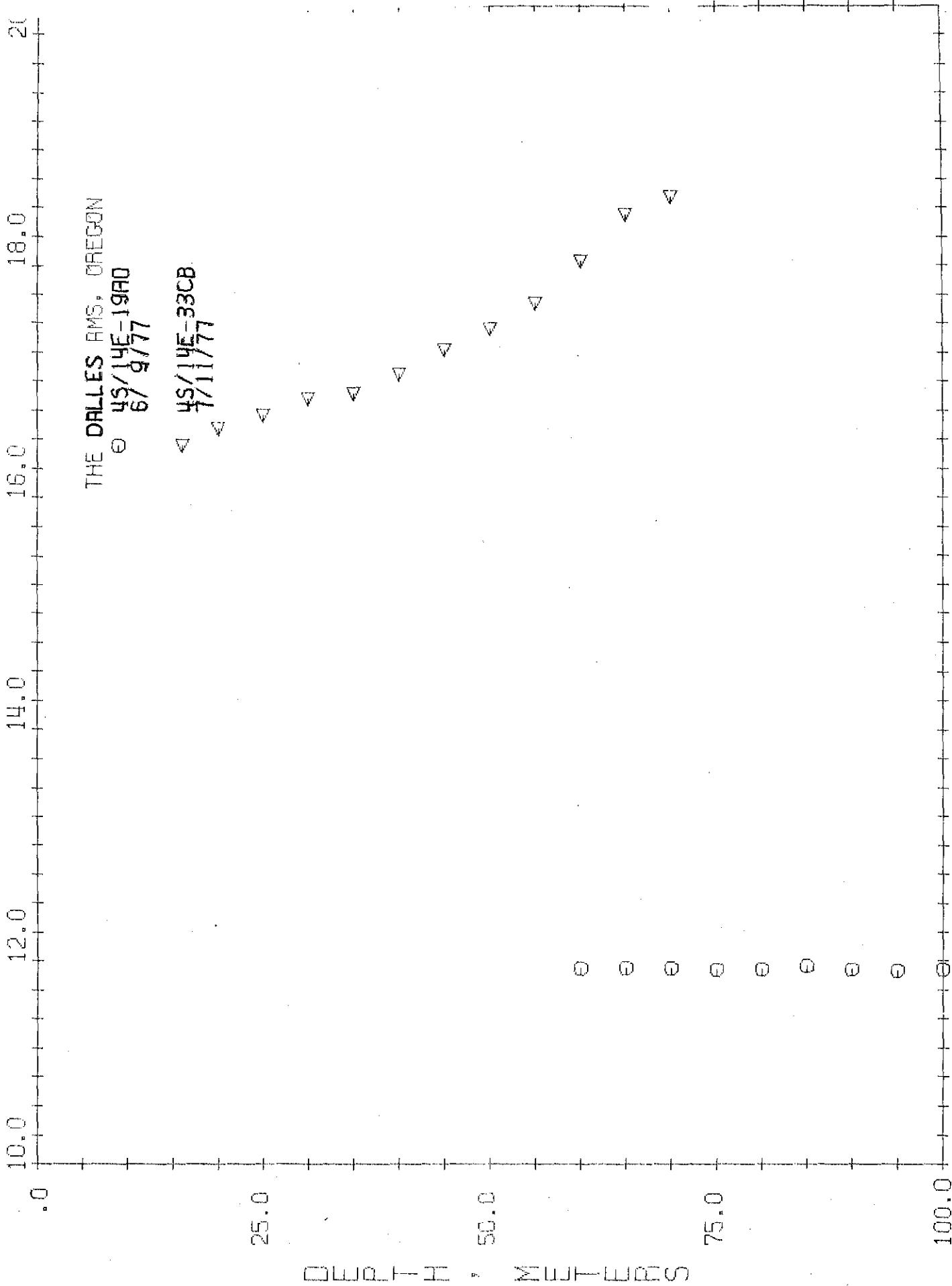
DWAT-H → MET-MOTS

TEMPERATURE, DEG C



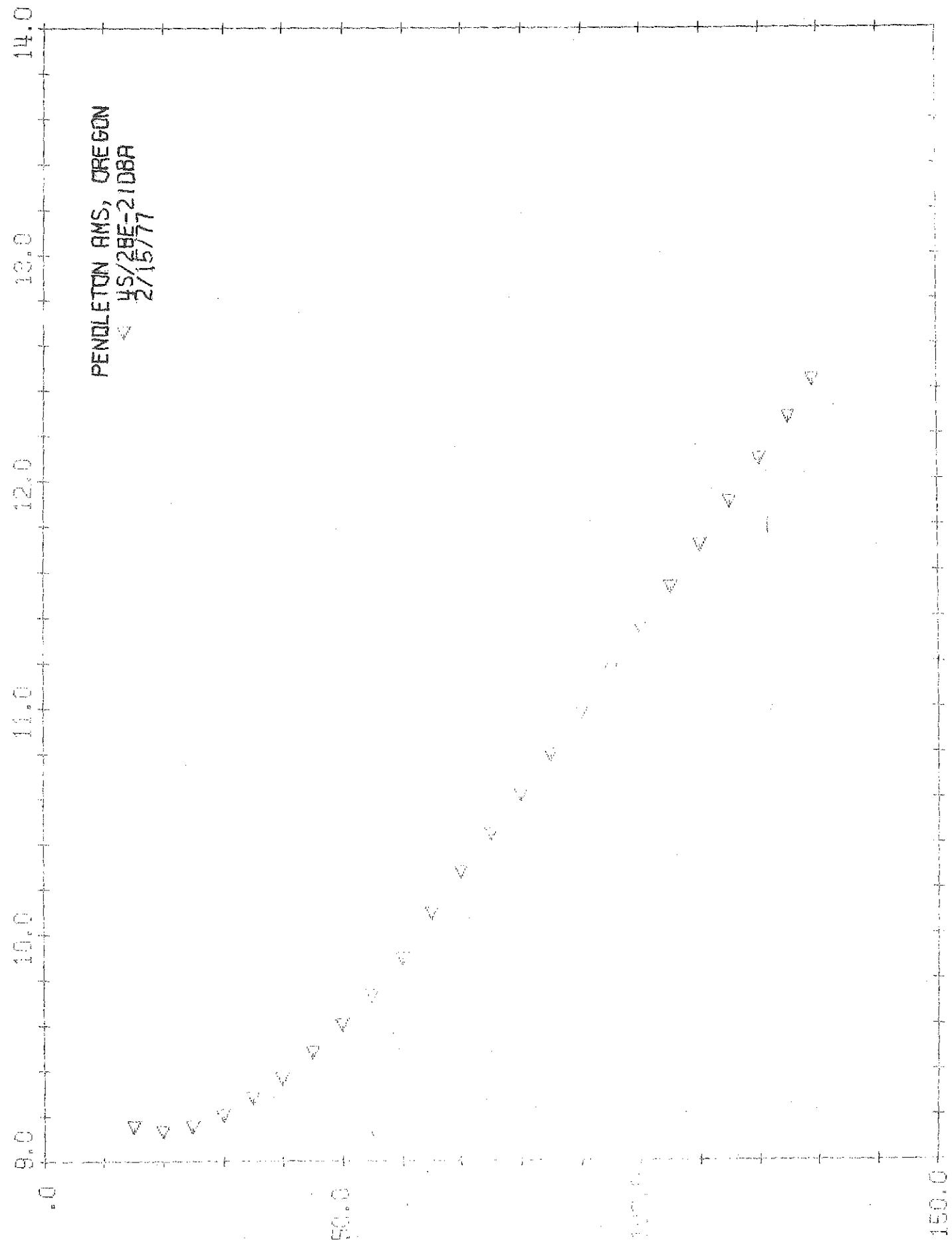
DEPTHT - 240000

TEMPERATURE, DEG C



DEPTH - METERS

TEMPERATURE, DEG C



TEMPERATURE, DEG C

20.0

15.0

10.0

5.0

0

GRANGEVILLE AMS, OREGON  
4S/405-18BA  
8/23/77

100.0

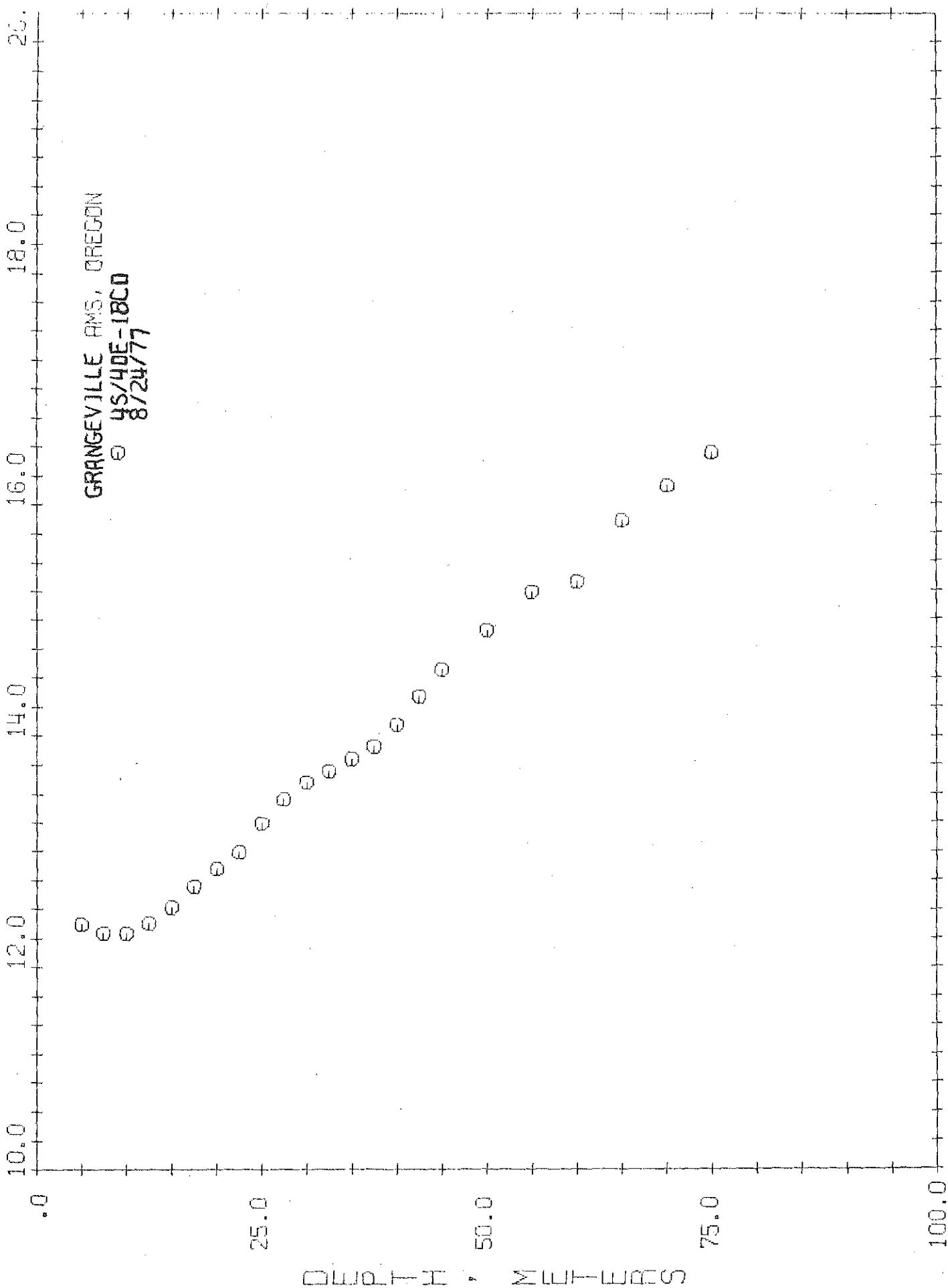
200.0

300.0

350.0

DEPTH - METERS

TEMPERATURE, DEG C

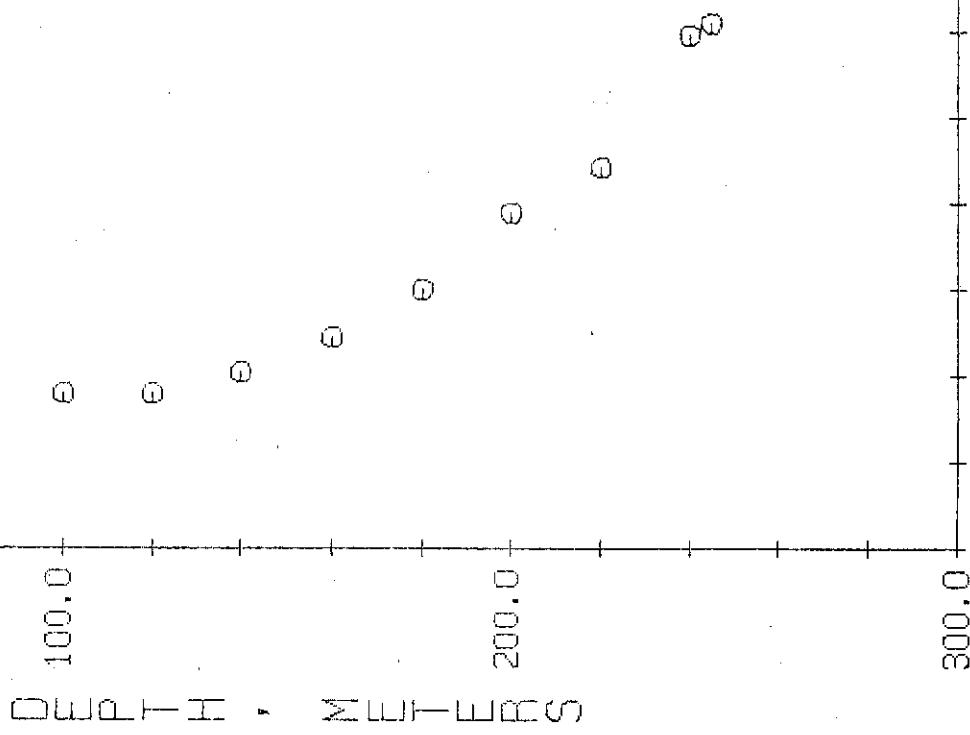


DEPTH IN METERS

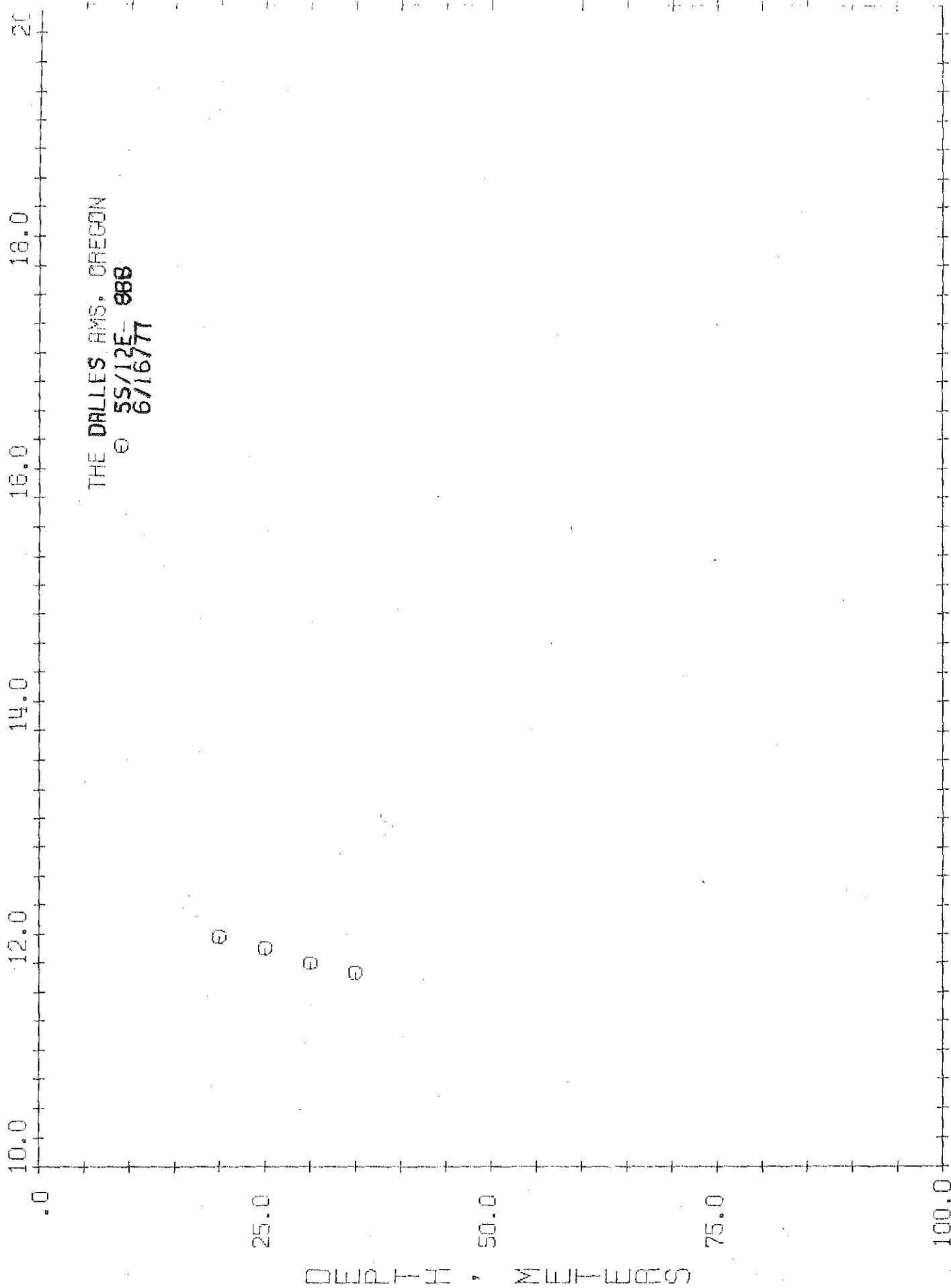
TEMPERATURE, DEG C

2  
17.5  
15.0  
12.5  
10.0  
0

THE DALLAS AMS, OREGON  
② 5S/11E-14DD  
6/14/77



) TEMPERATURE, DEG C )



TEMPERATURE, DEG C

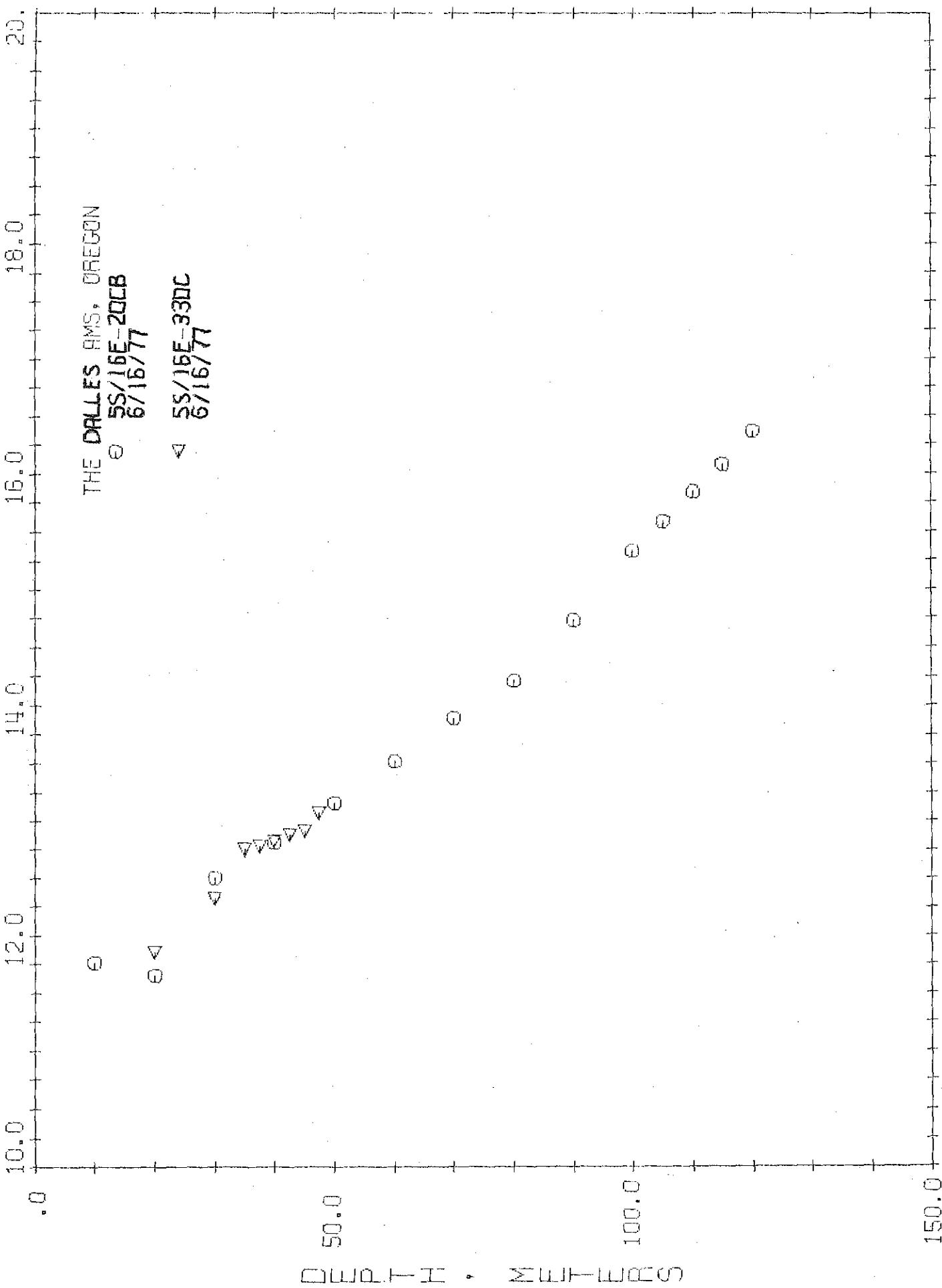
18.0  
16.0  
14.0  
12.0  
10.0  
0.0

THE DRILLES RMS, OREGON  
SS/125-31PH  
6/15/77

DEPTH, METERS  
50.0 100.0

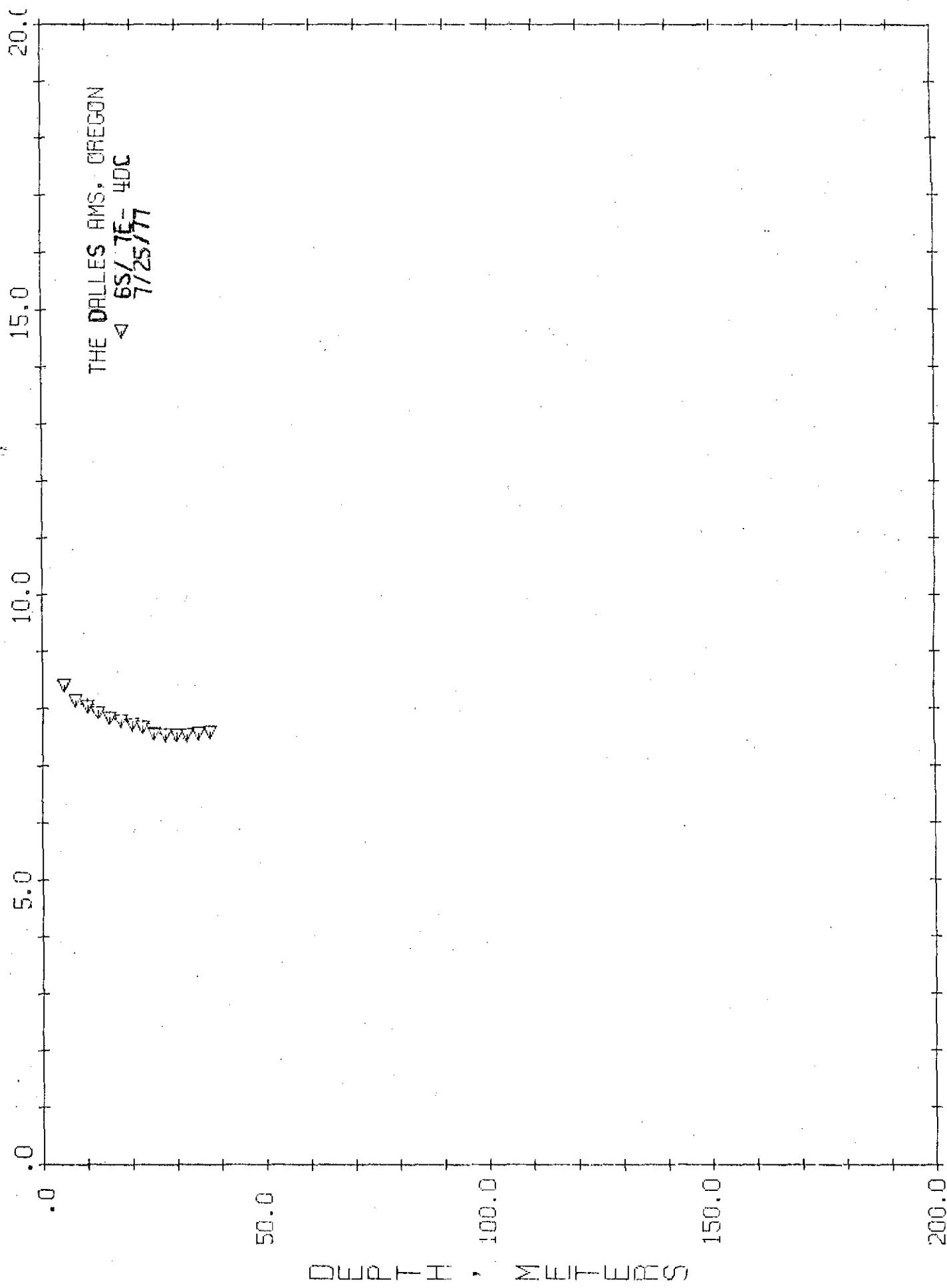
150.0

TEMPERATURE, DEG C

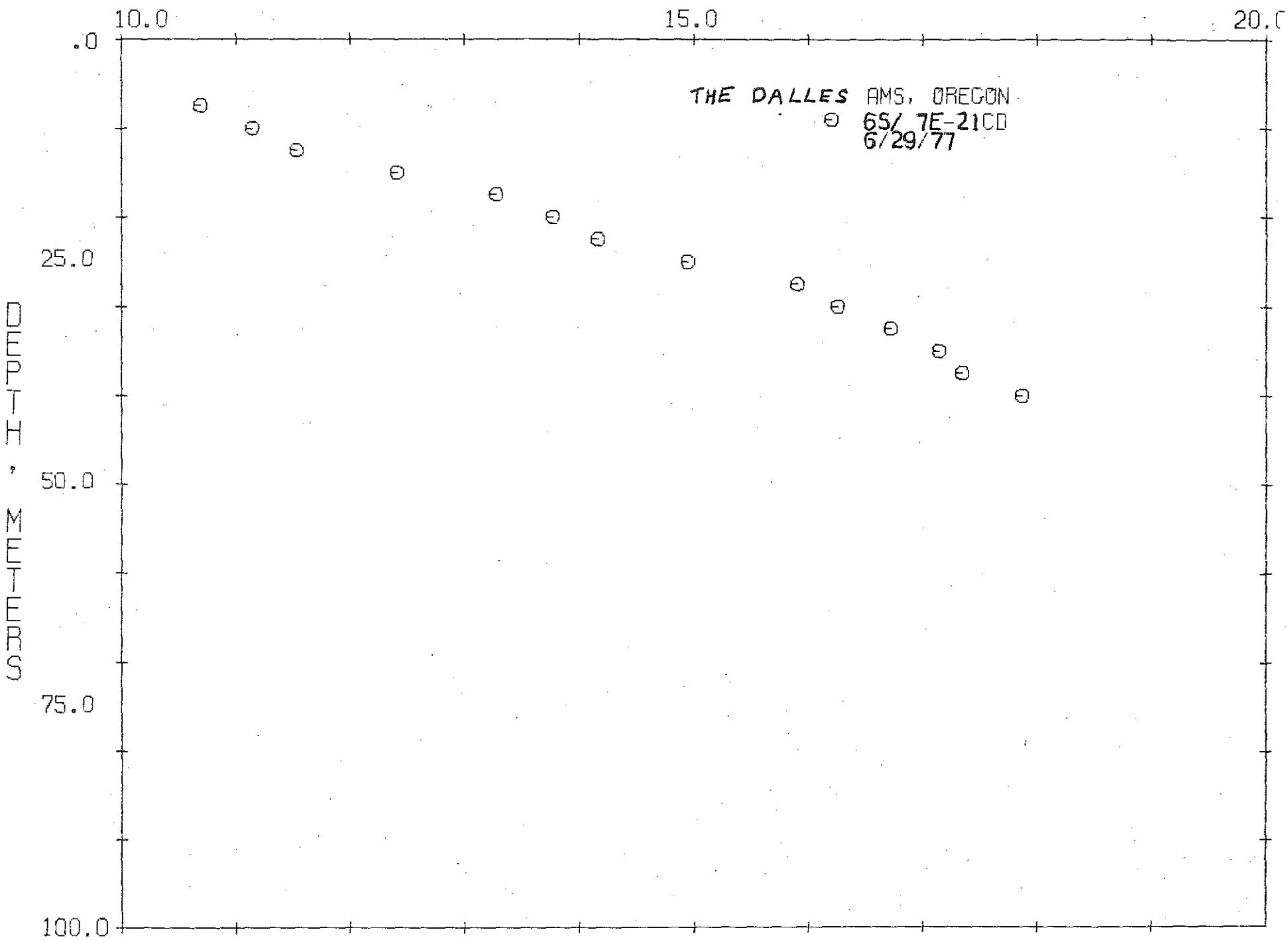


CLOUDS-HUMIDITY

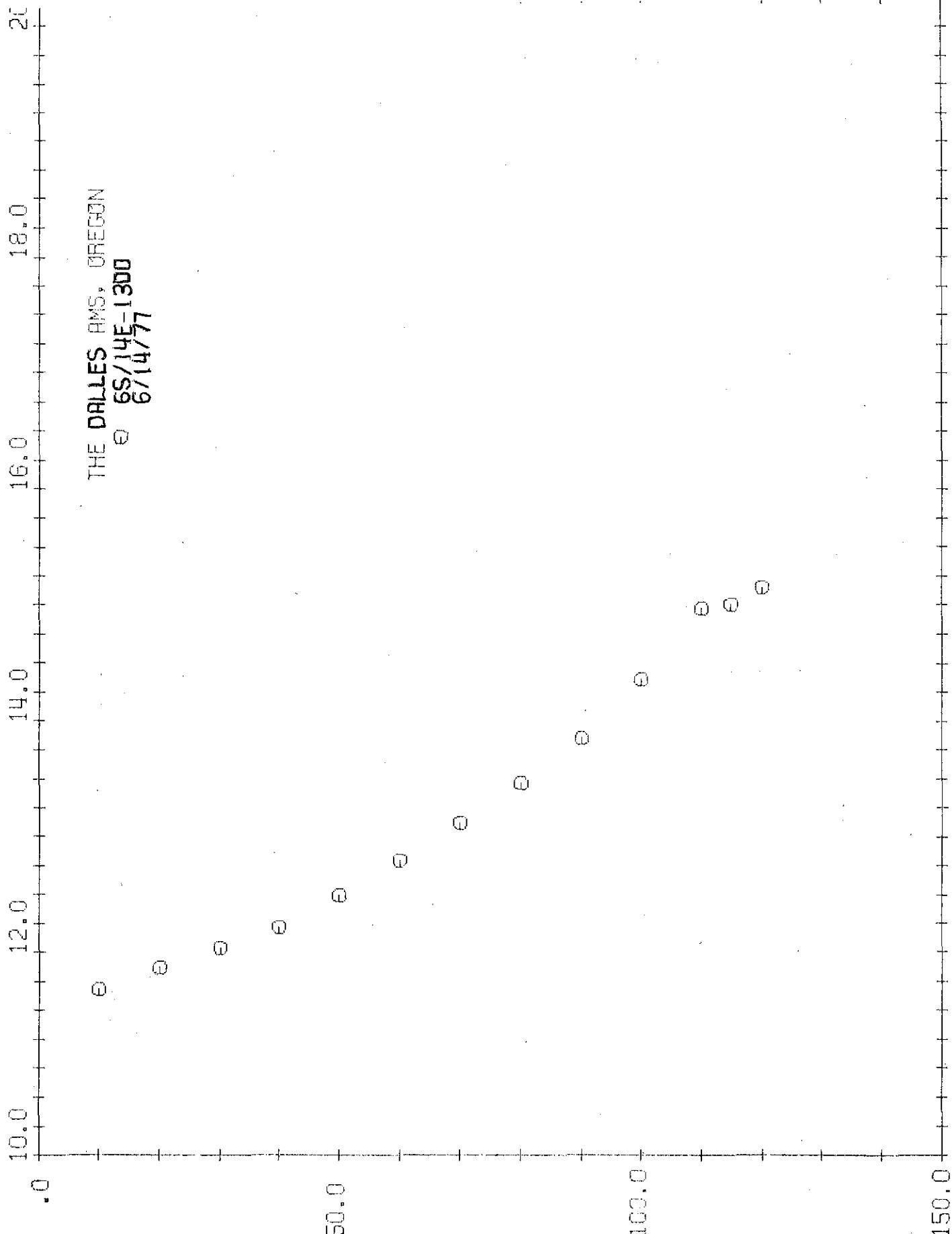
TEMPERATURE, DEG C



TEMPERATURE, DEG C



TEMPERATURE, DEG C



TEMPERATURE, DEG C

15.0  
14.0  
13.0  
12.0  
11.0  
10.0  
9.0  
8.0  
7.0  
6.0  
5.0  
4.0  
3.0  
2.0  
1.0  
0.0

THE DALLIES AREA, OREGON  
E 65°15' S 56° 56' 56S  
6/15/77

0

50.0

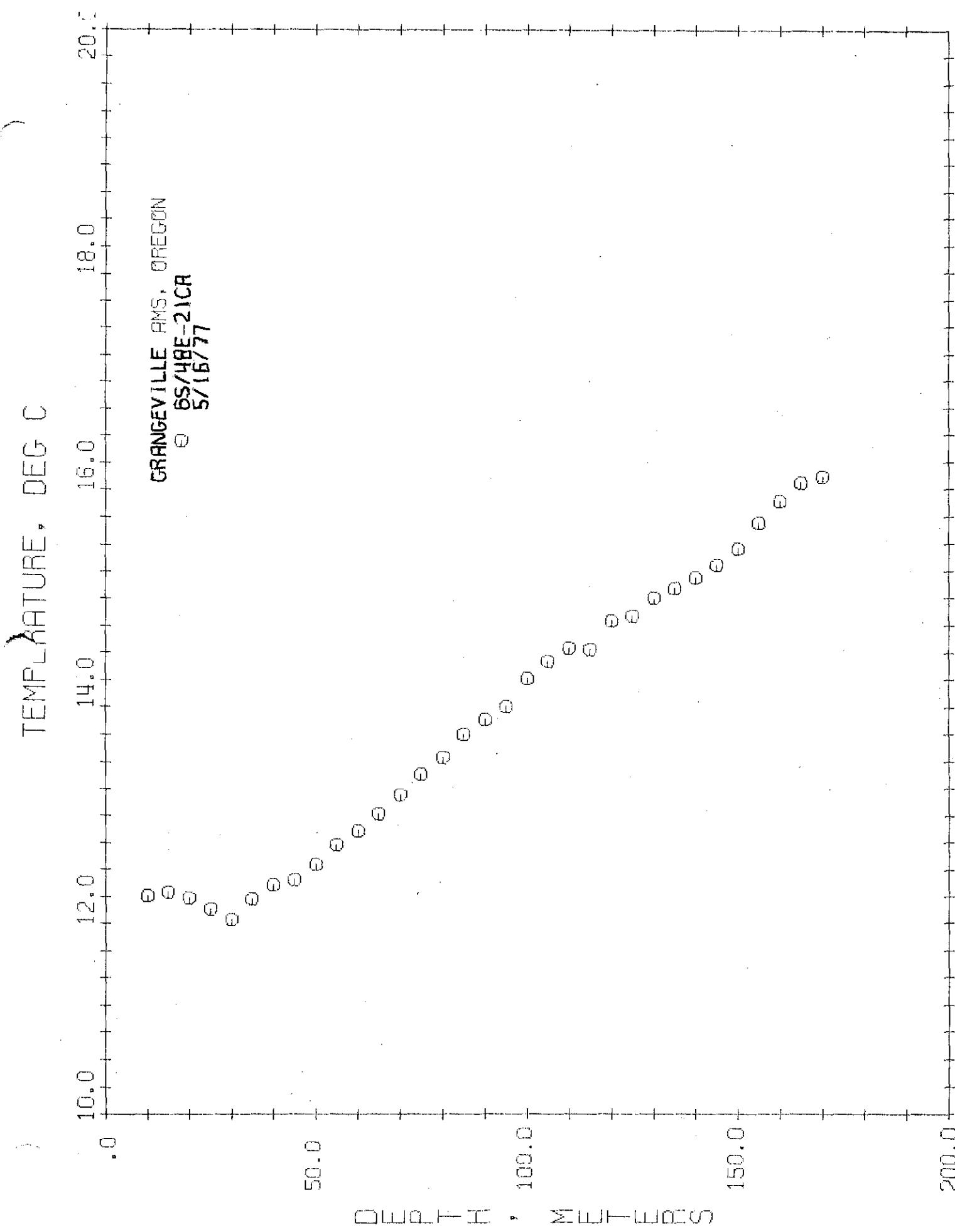
0

50.0

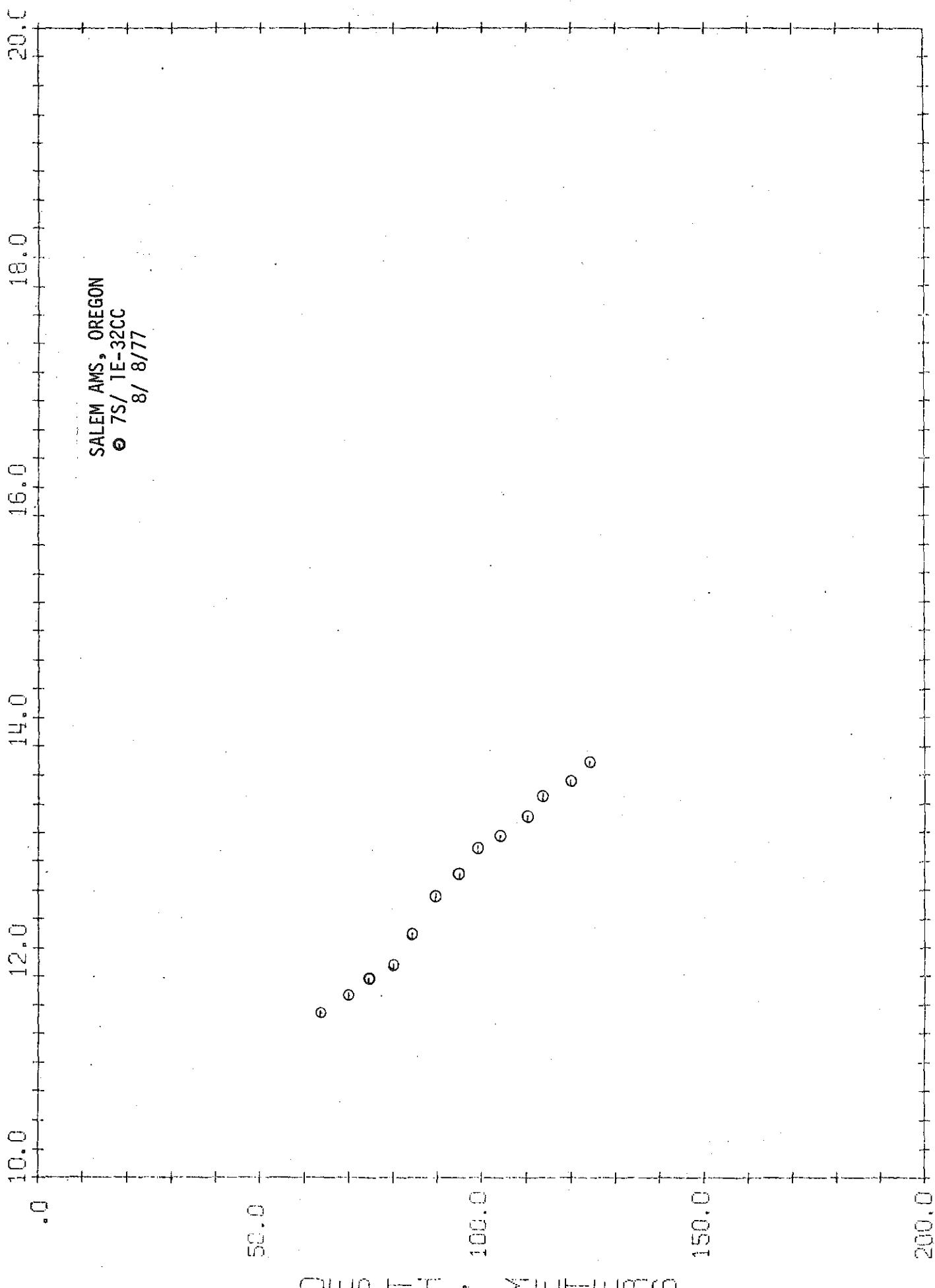
0

50.0

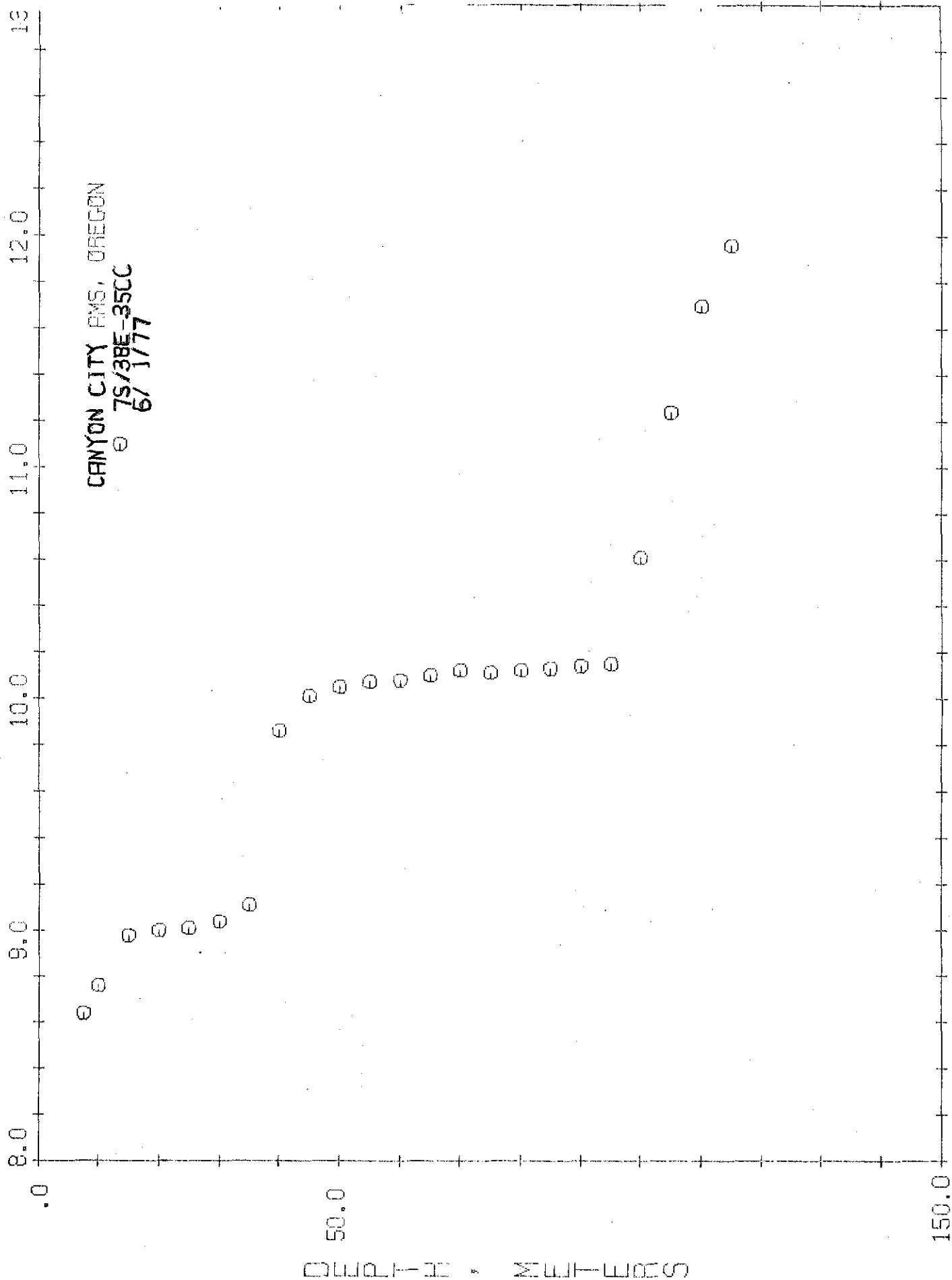
DEPTH - METERS



TEMPERATURE, DEG C



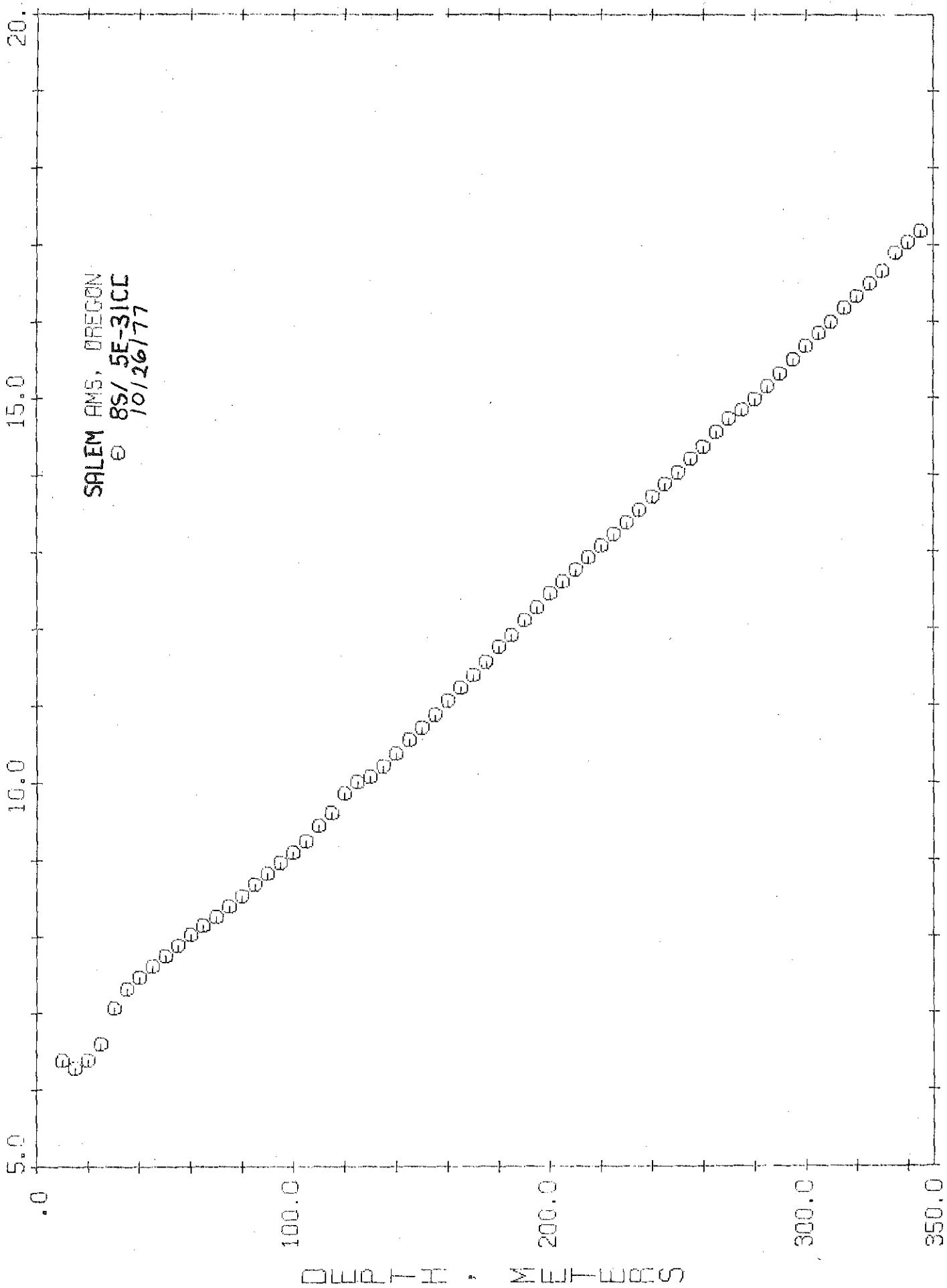
TEMPERATURE, DEG C



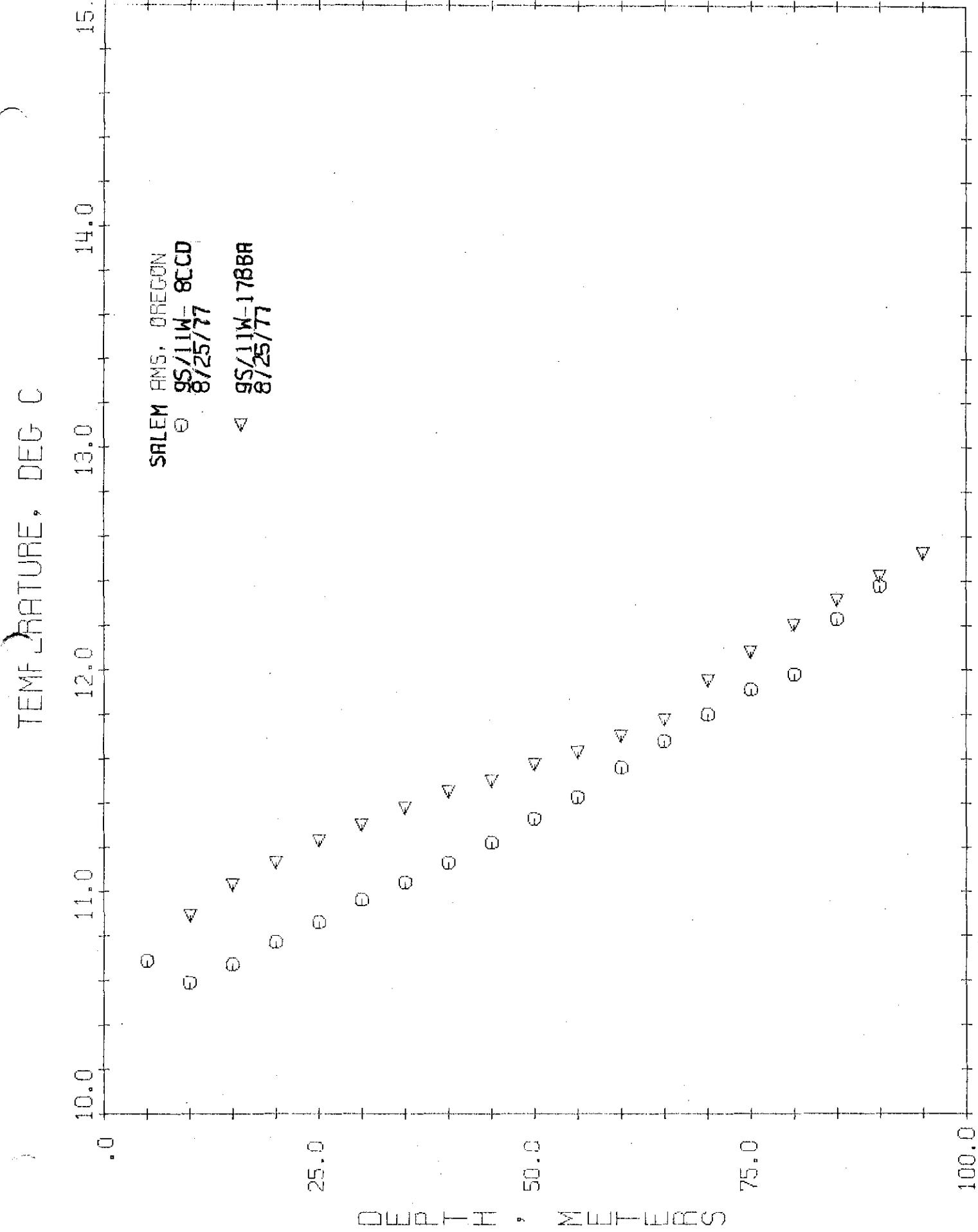
CANYON CITY PMS, OREGON  
E 7S/38E-35CC  
6/1/77

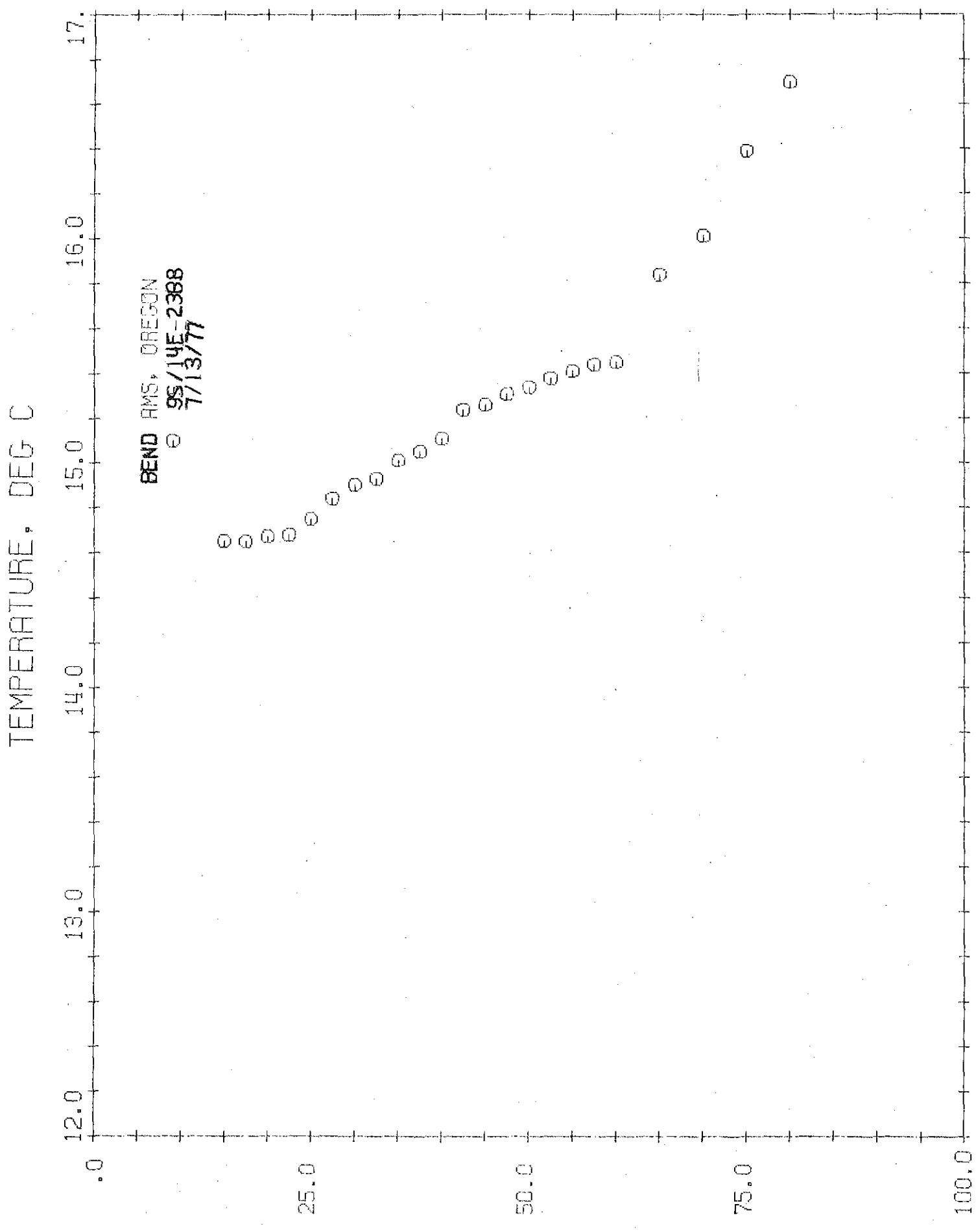
DEPTH - M      COUNT - 20

TEMPERATURE, DEG C



DRAFT II - MURKIN

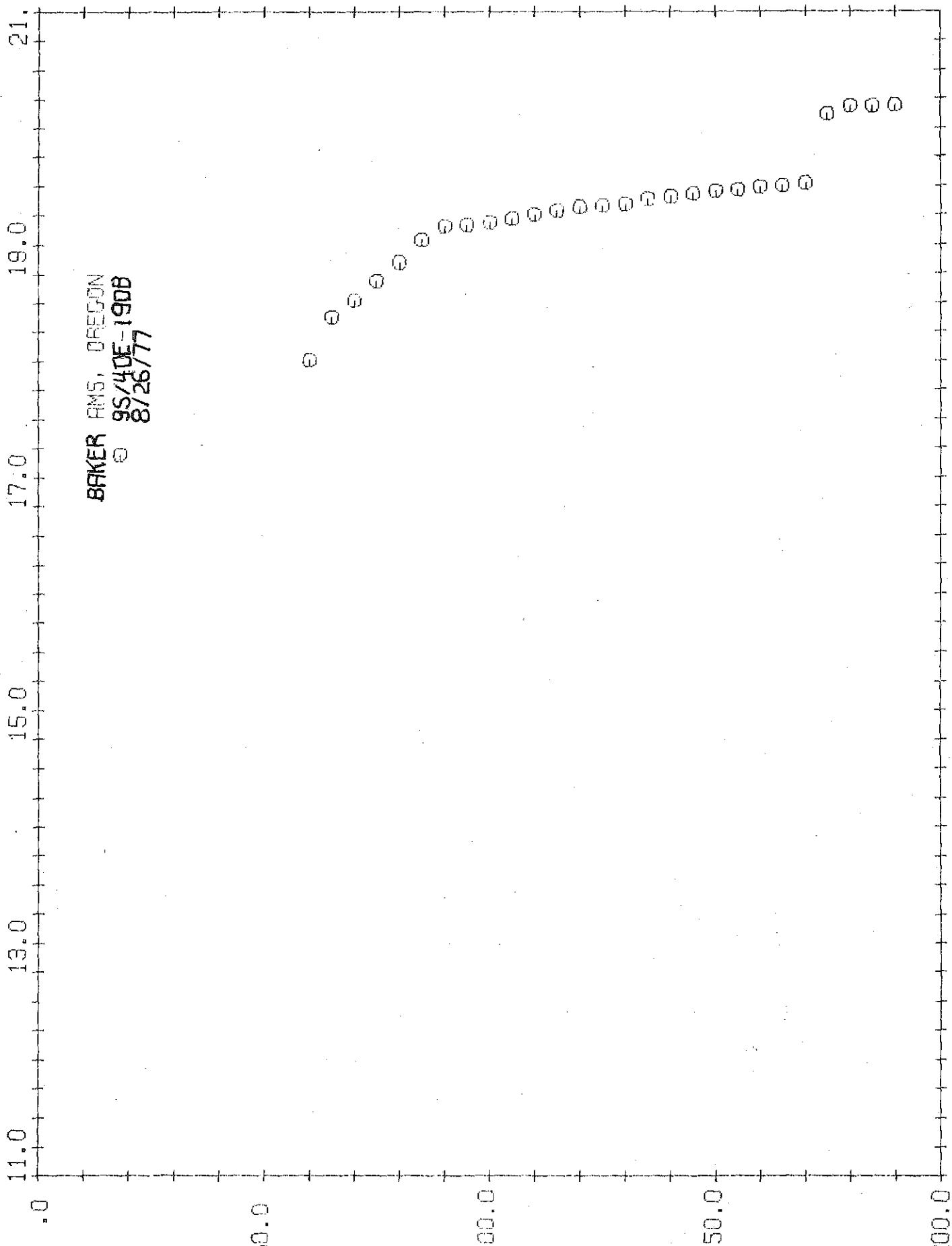




COULD-IT COULD-IT COULD-IT

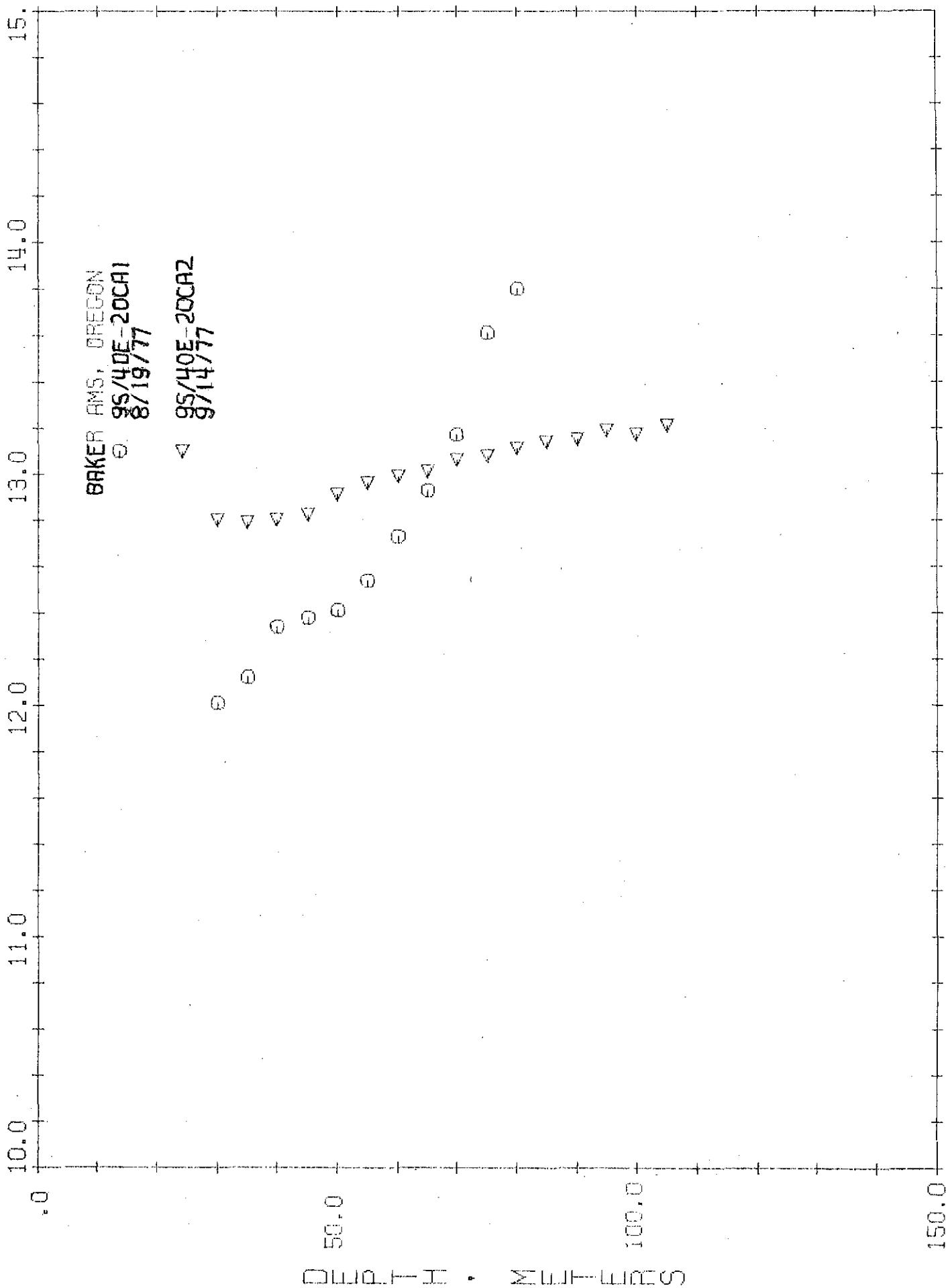
BEND RMS, OREGON  
8S/17E 6 CAD  
8/4/77

TEMPERATURE, DEG C

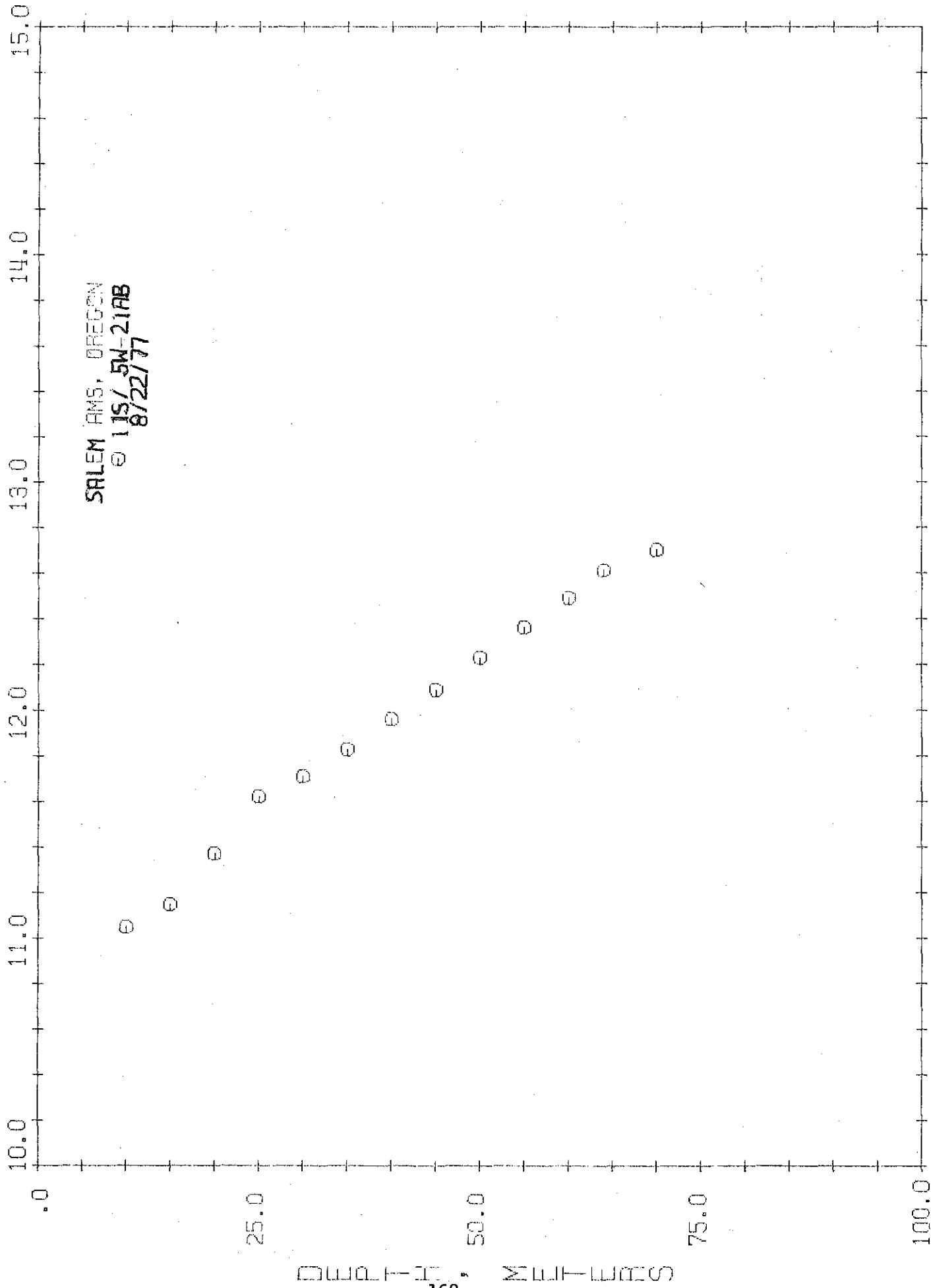


DEPTH - m      TEMPERATURE

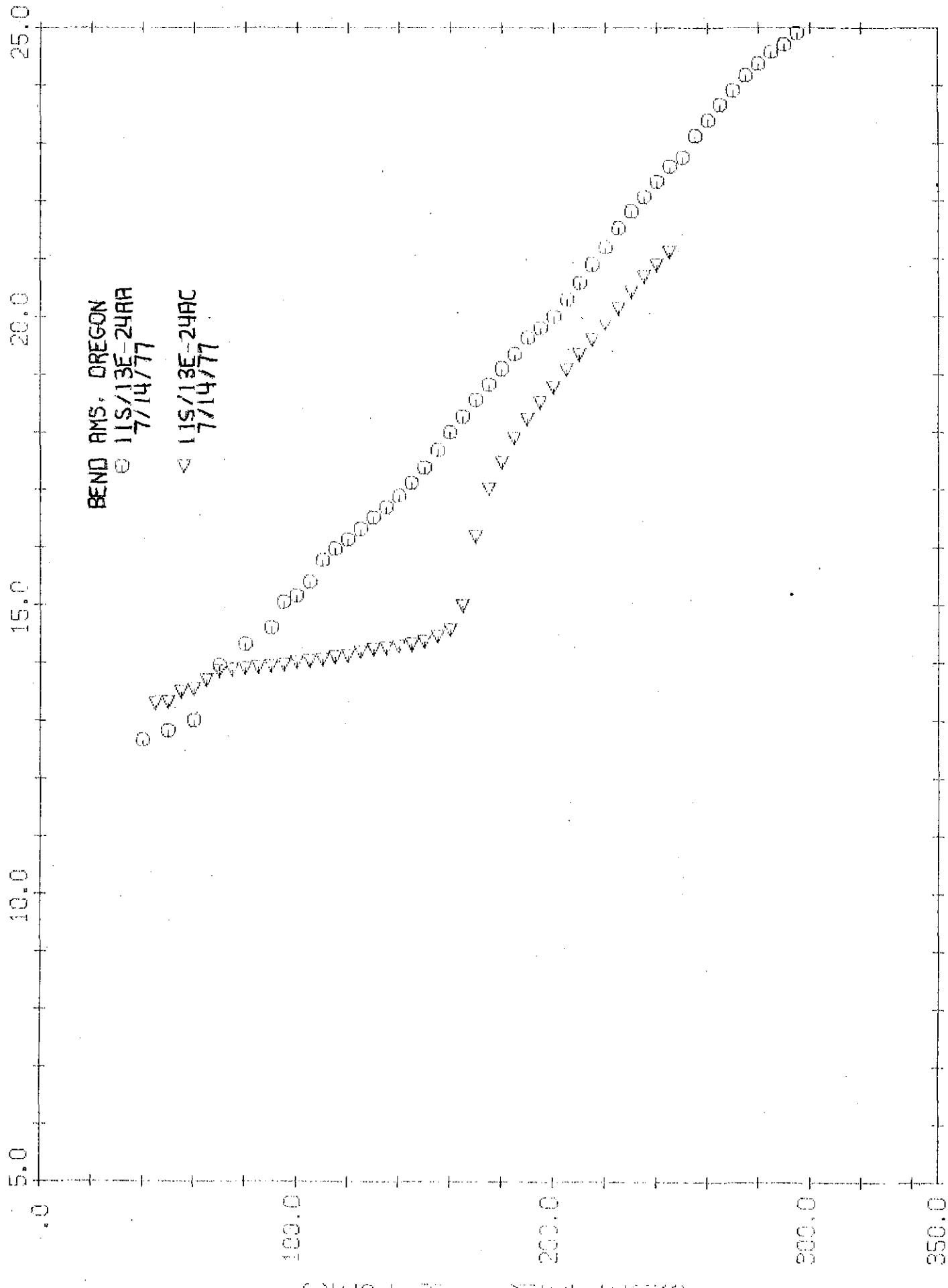
TEMPERATURE, DEG C



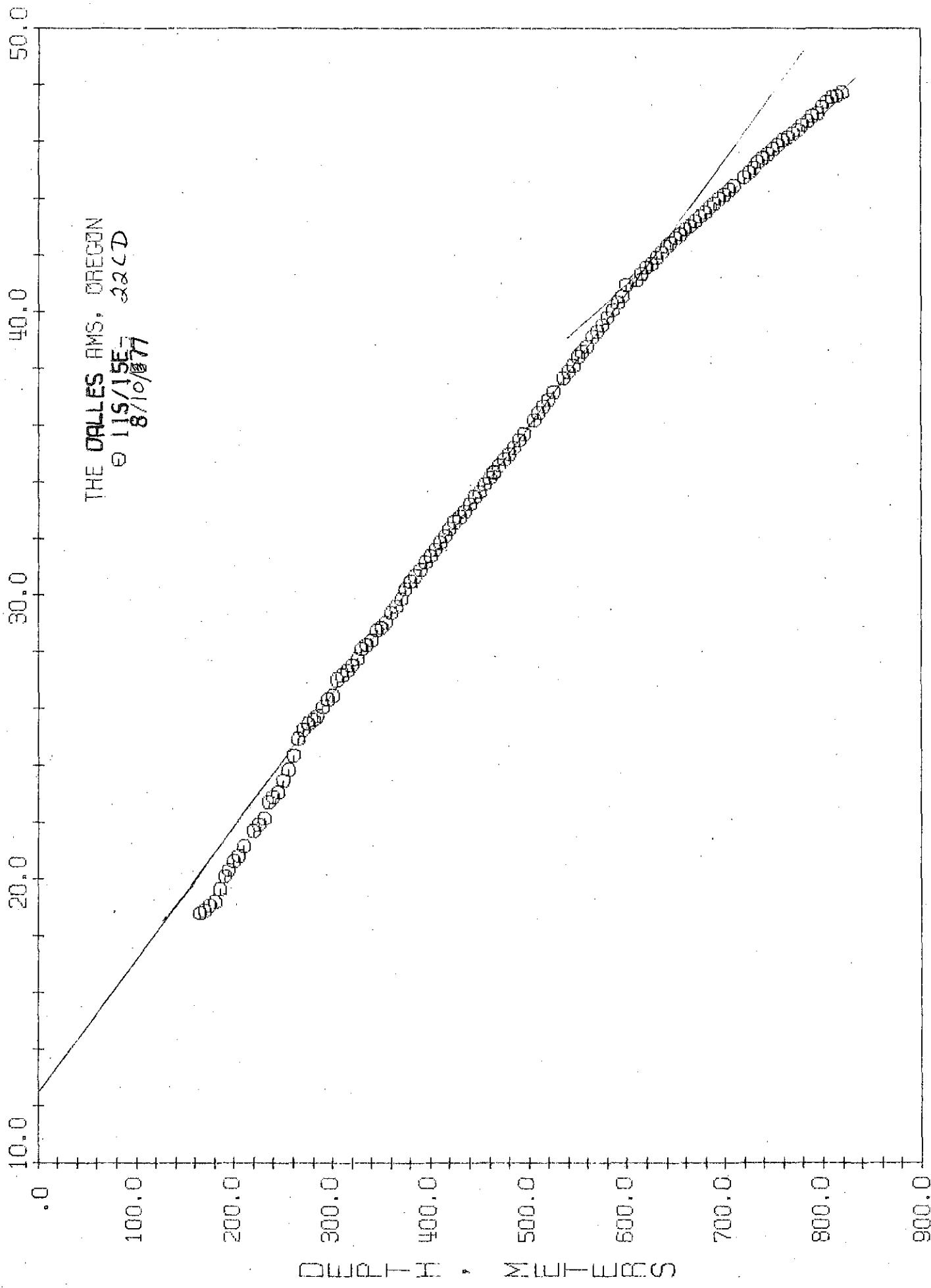
TEMPERATURE, DEG C



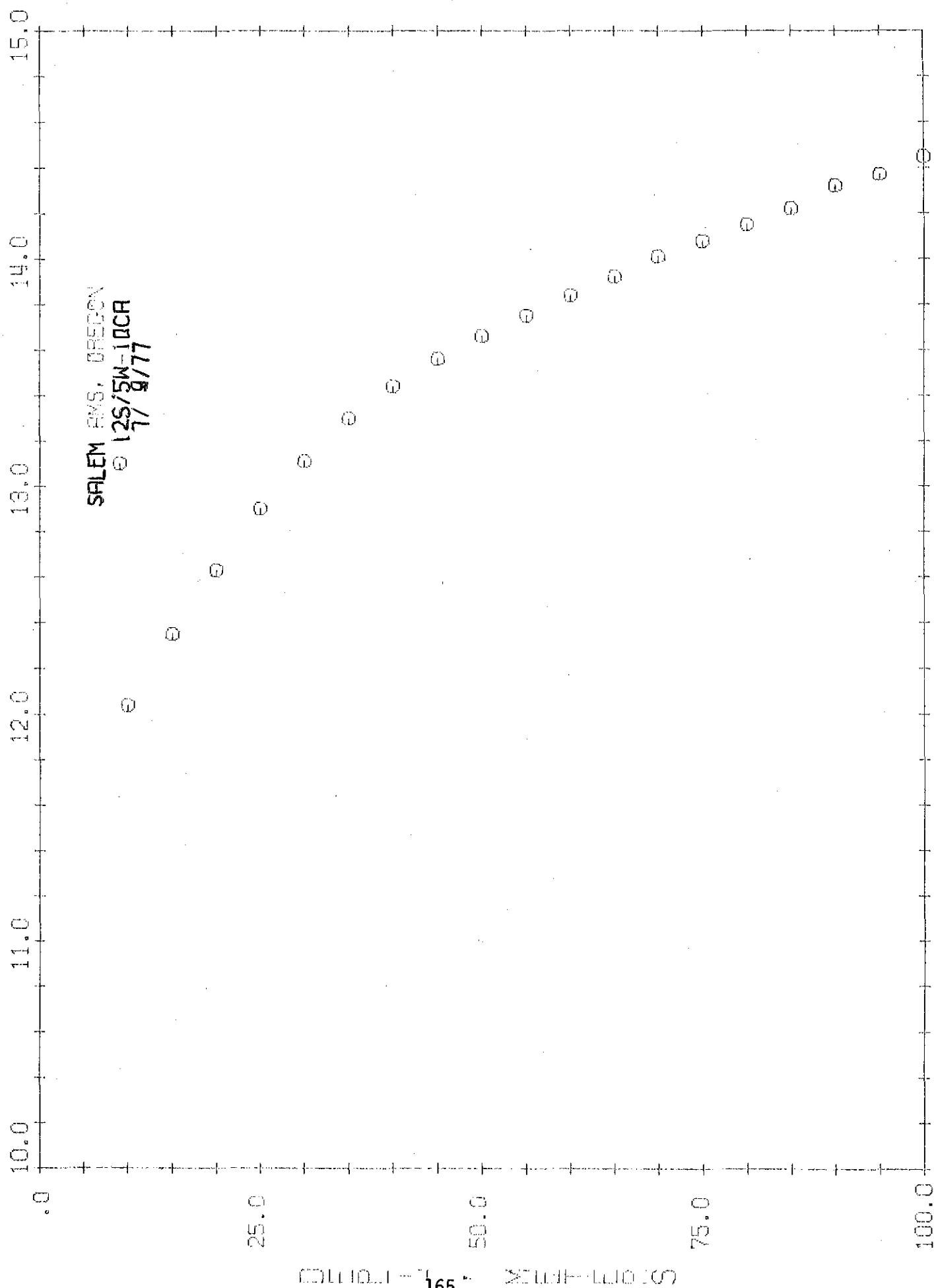
TEMPERATURE, DEG C



TEMPERATURE, DEG C

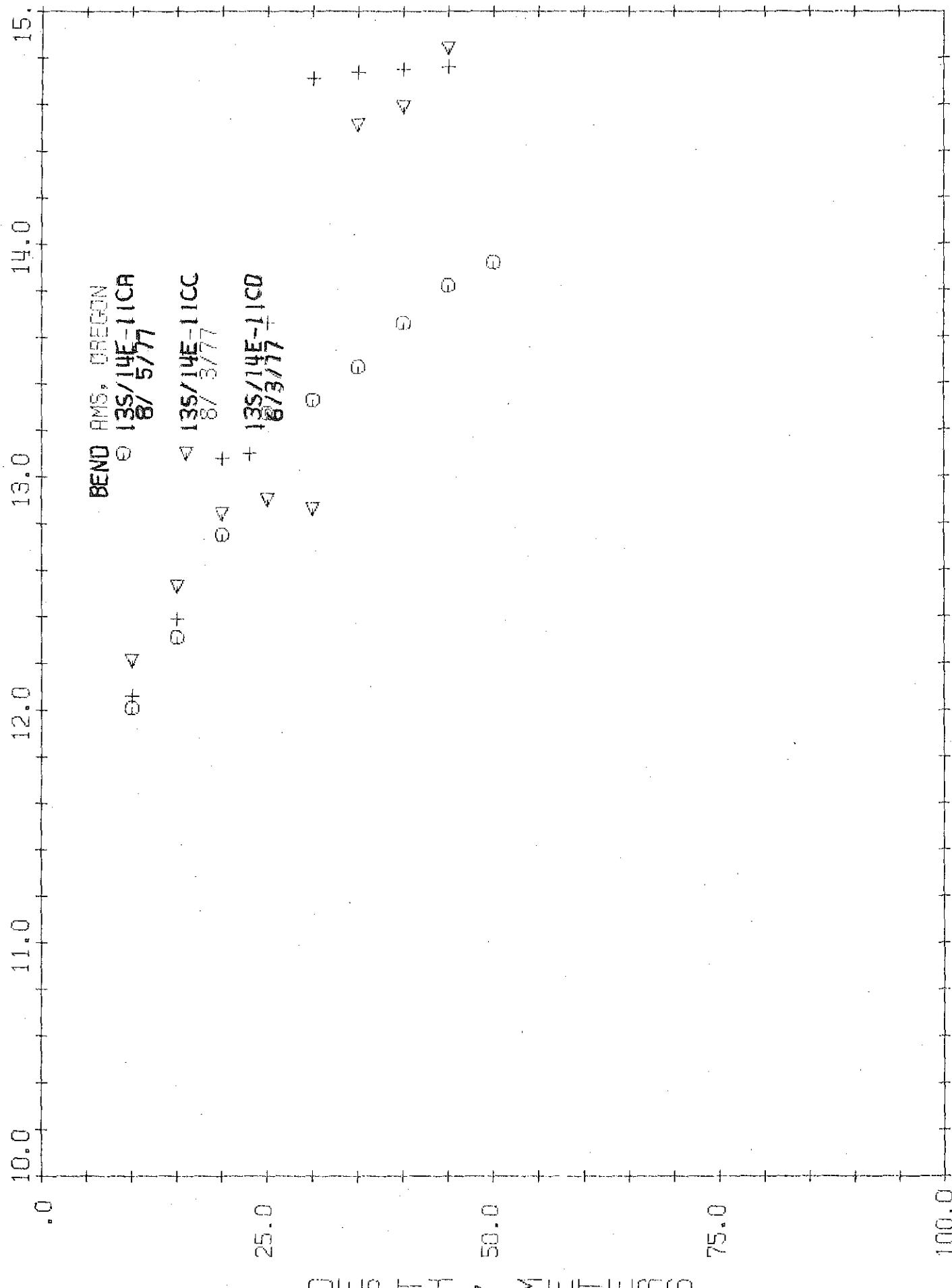


TEMPERATURE, DEG C



CONDITION = 165      ZONE = 100

## TEMPERATURE, DEG C



SOUTH EARTH - NORTH SEAS

3  
TEMPERATURE, DEG C

20.0

15.0

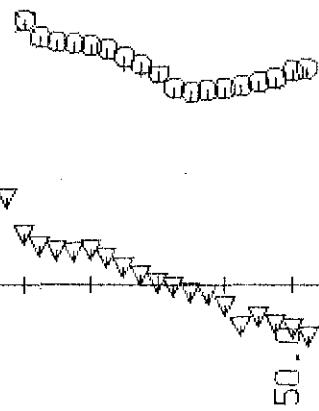
10.0

5.0

0

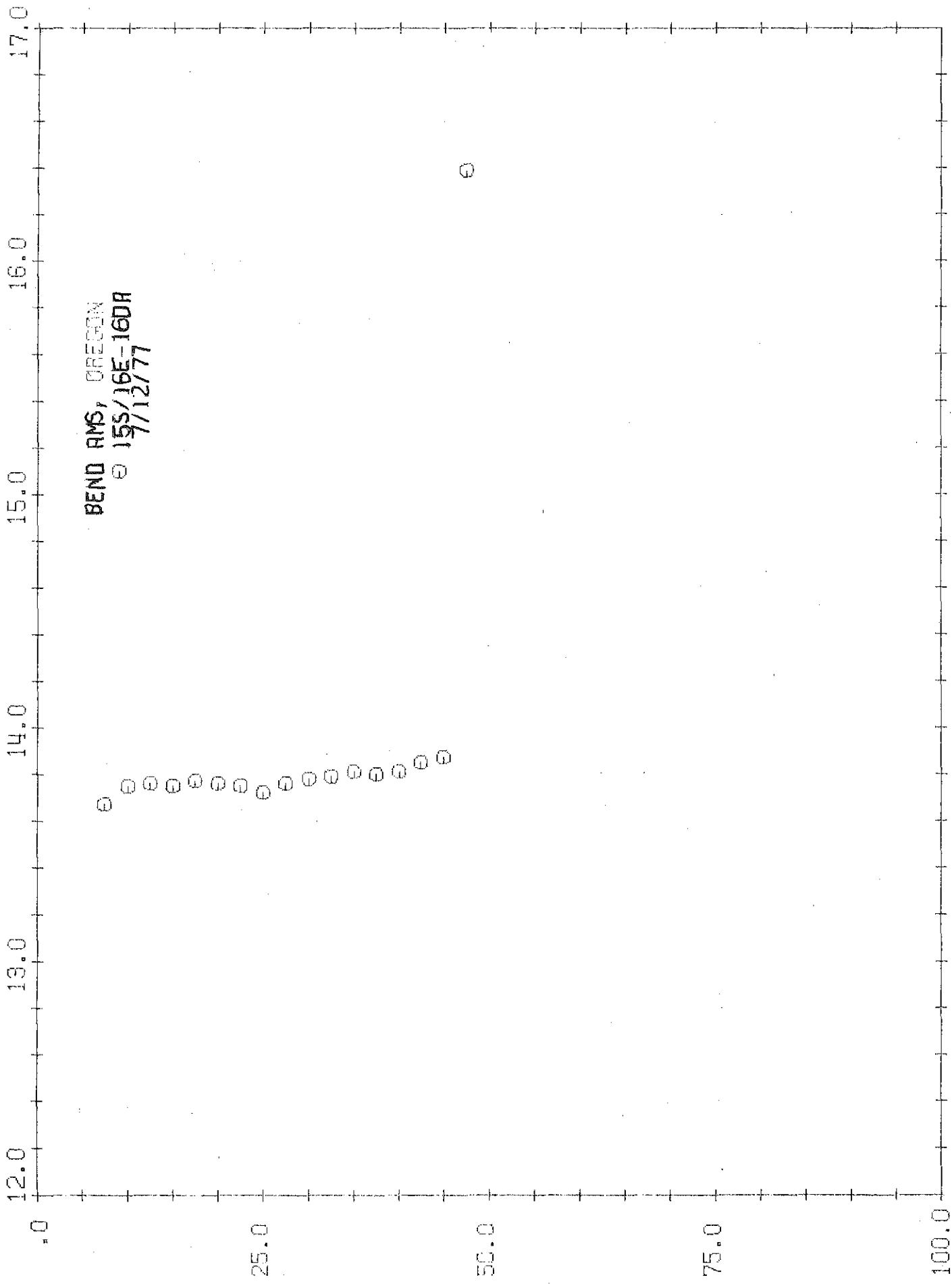
SALEM RMS, OREGON  
② 15S/ 6E-1100  
7/26/77

▽ 15S/ 7E-28RR

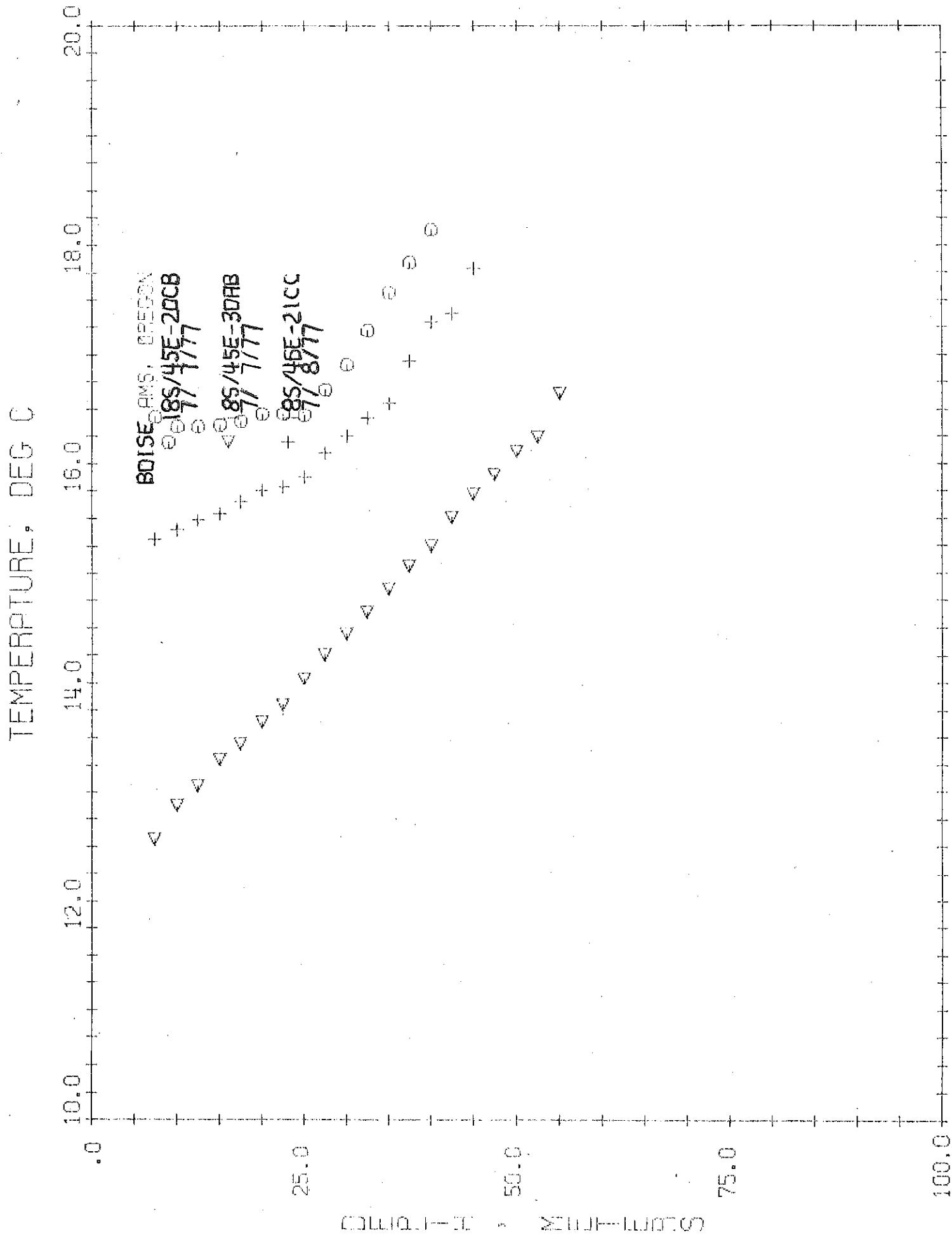


DEPTH, METERS

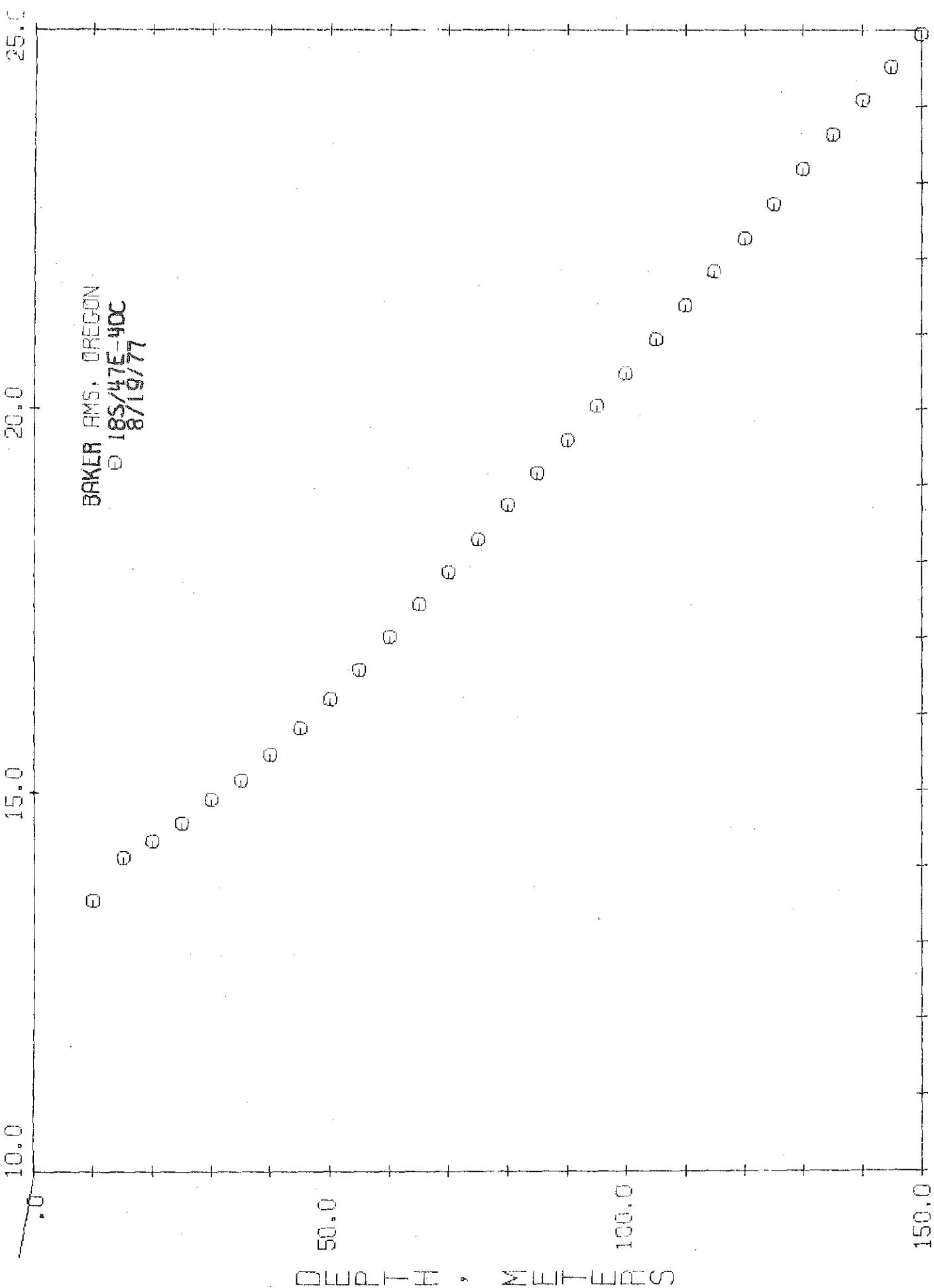
TEMPERATURE, DEG C



COLLECTOR - EXPLANATION

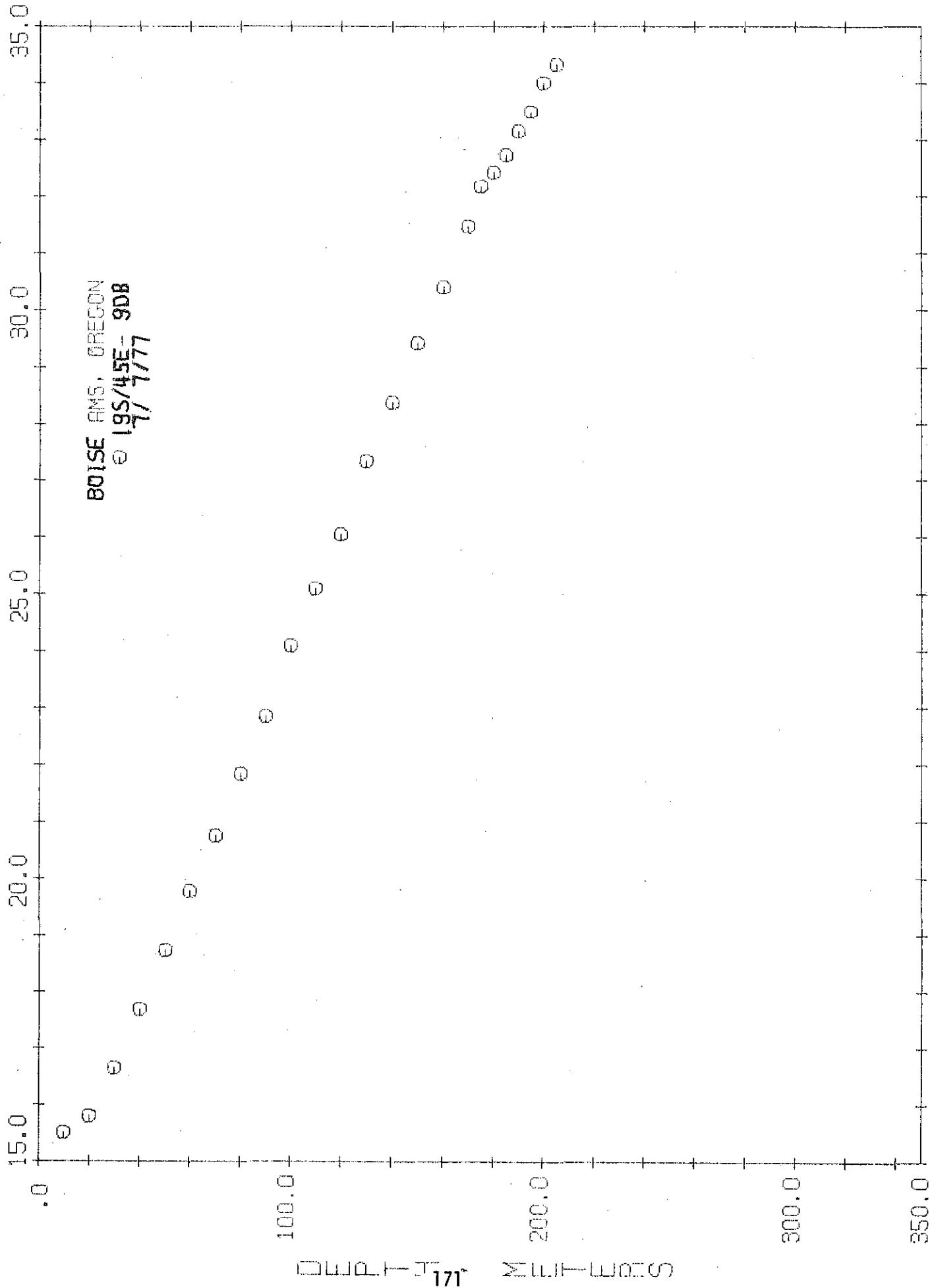


TEMPERATURE, DEG C

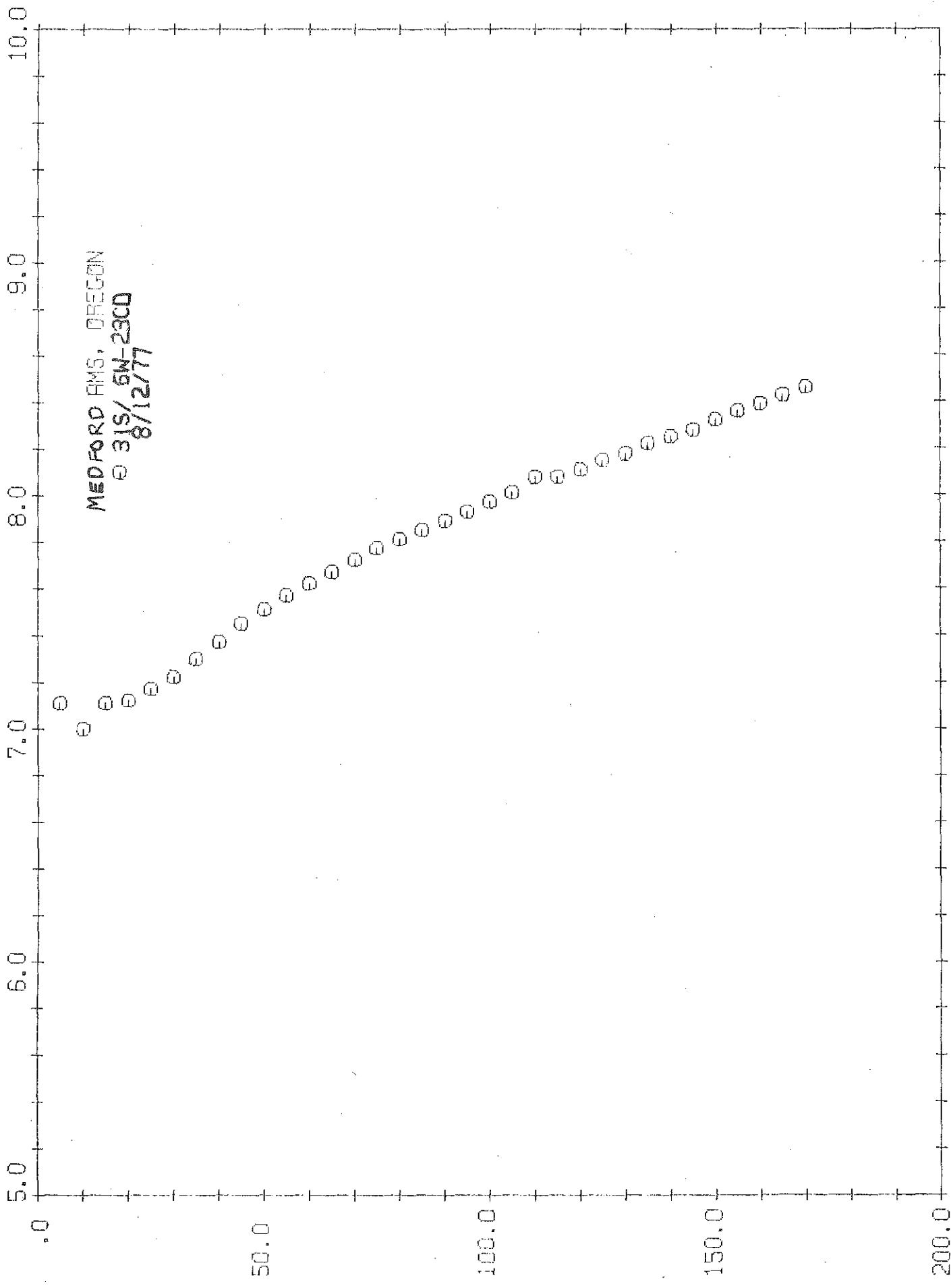


DEPTH → METERS

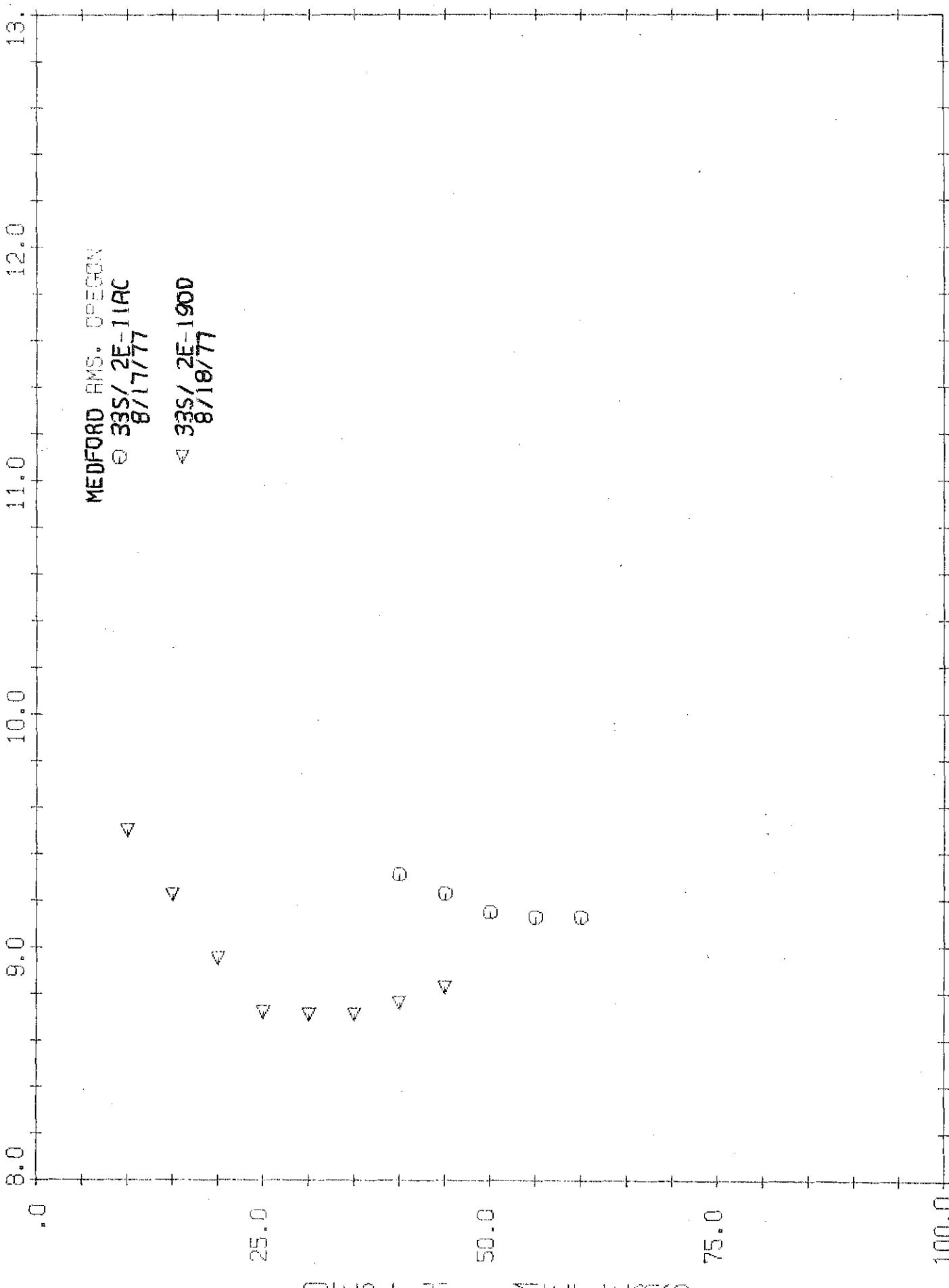
TEMPERATURE, DEG C



TEMPERATURE, DEG C

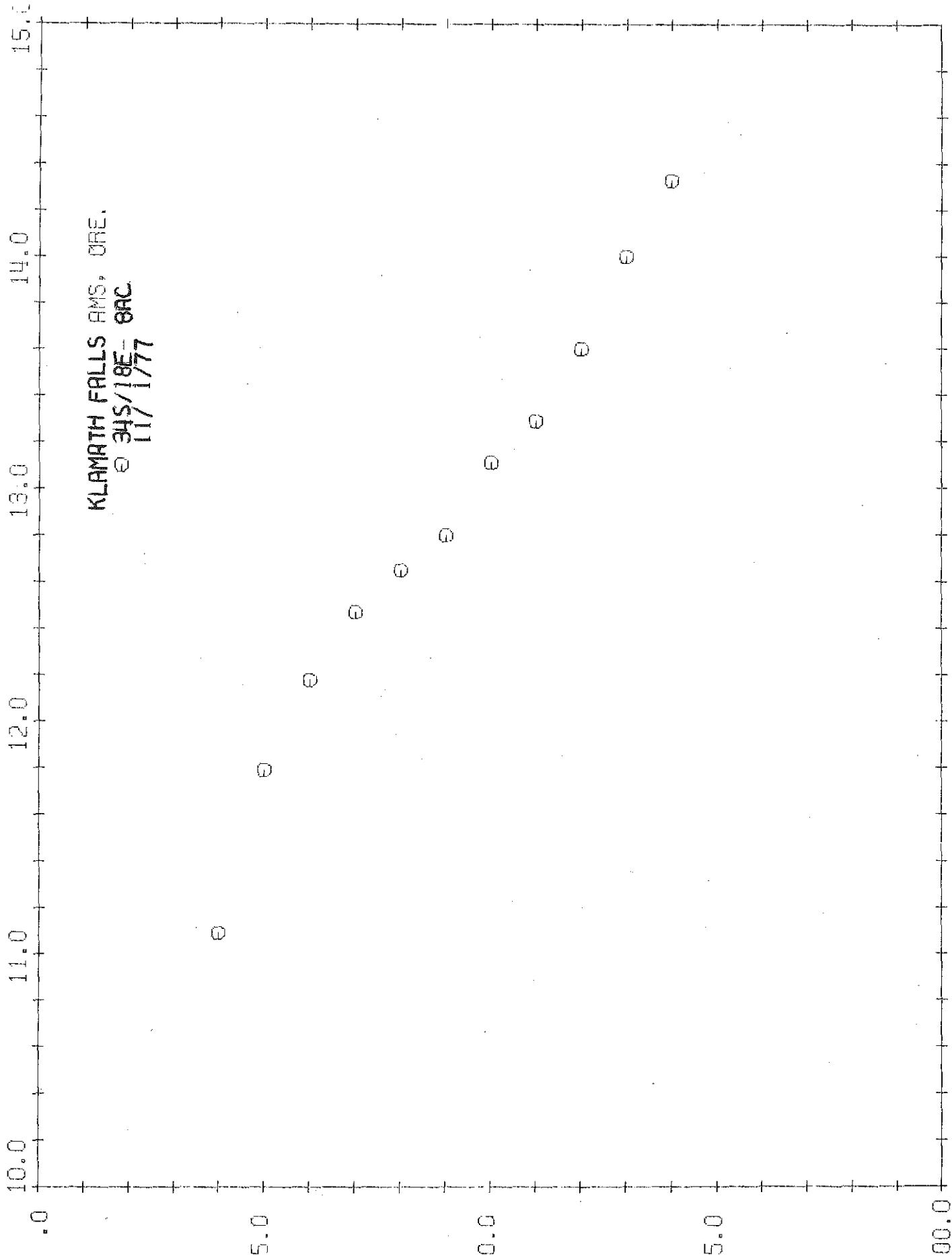


TEMPERATURE, DEG C



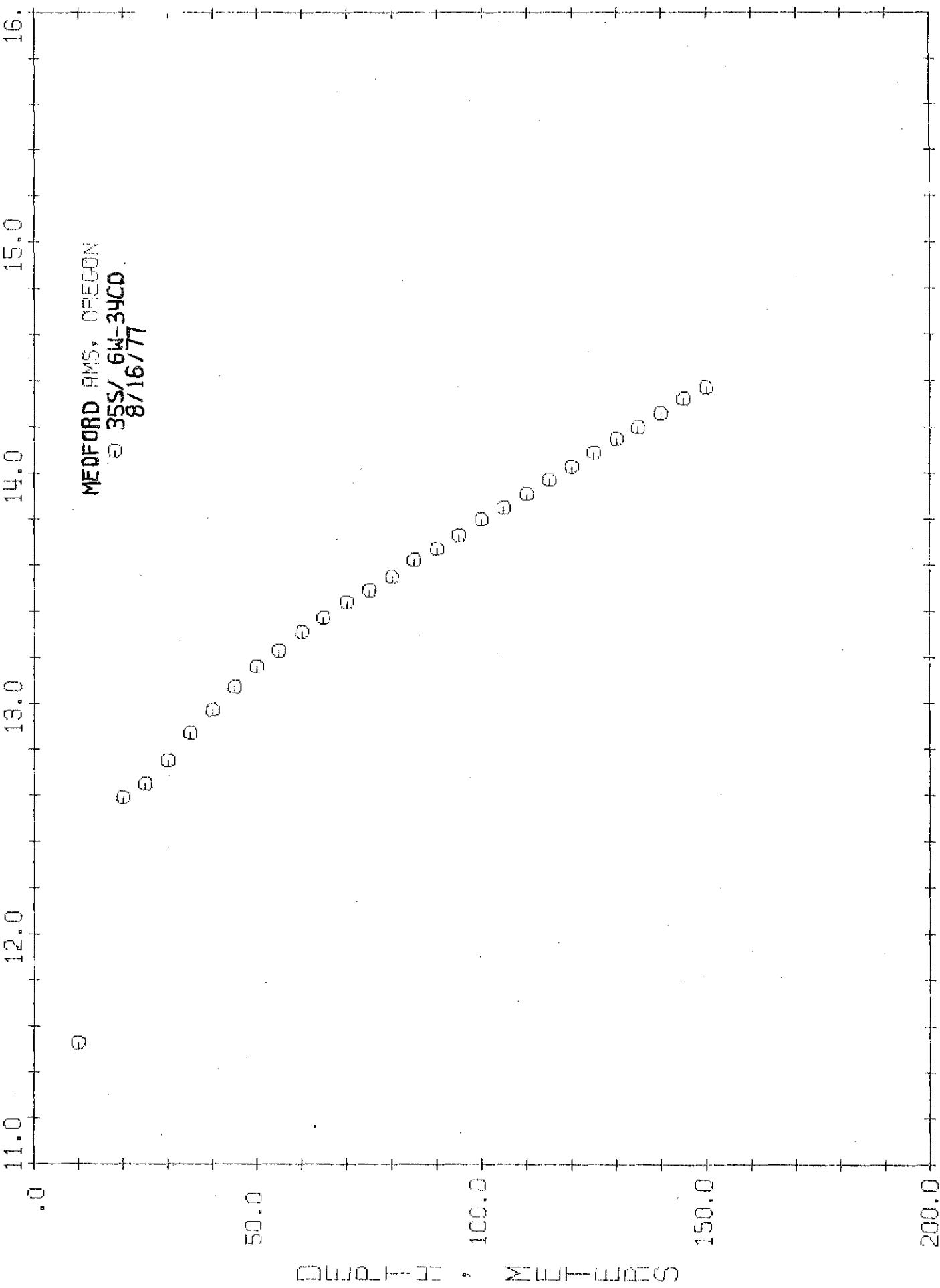
CONDUCTANCE • TEMPERATURE

TEMPERATURE, DEG C



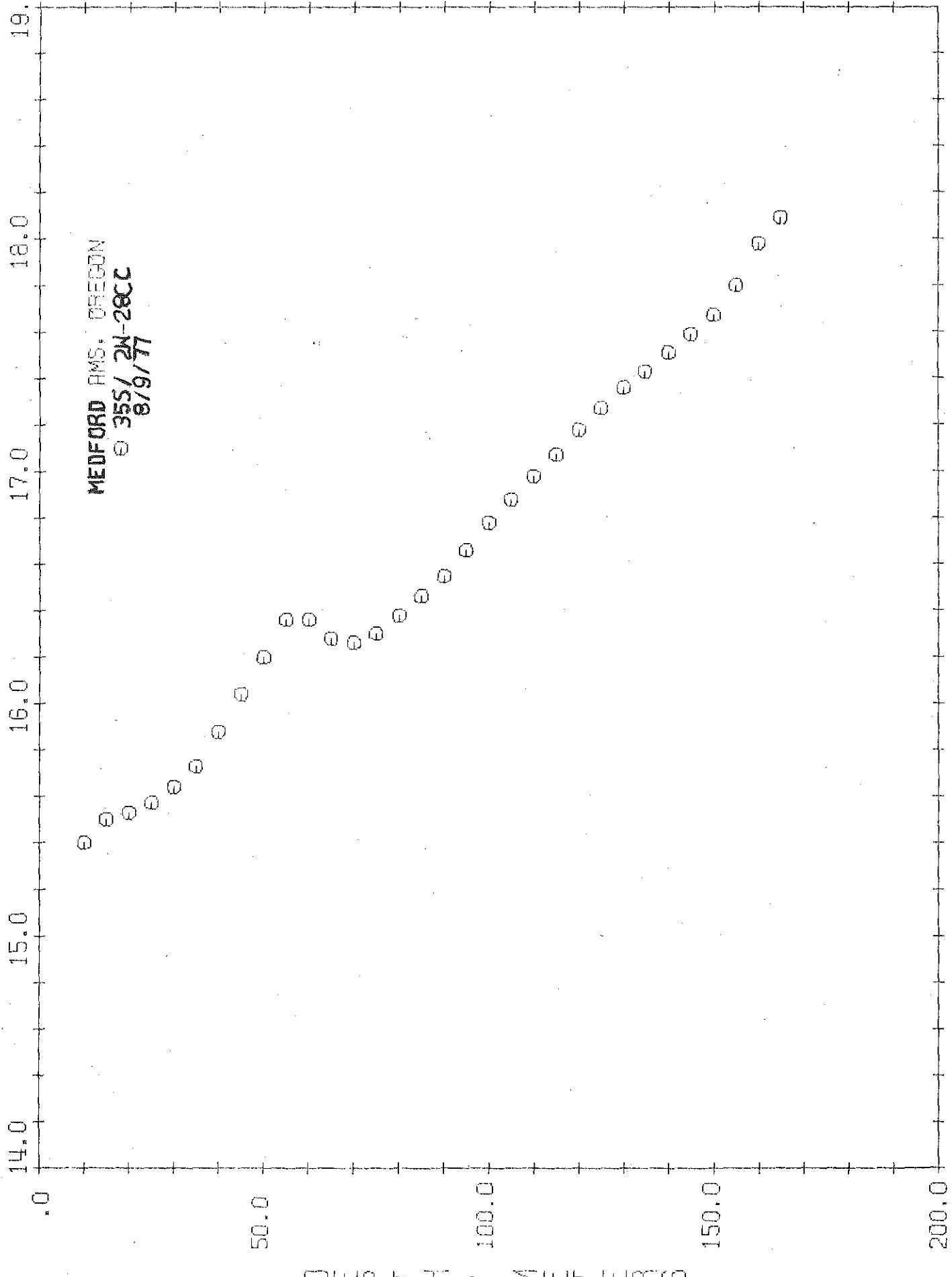
DEPTH, M      TEMPERATURE, C

TEMPERATURE, DEG C



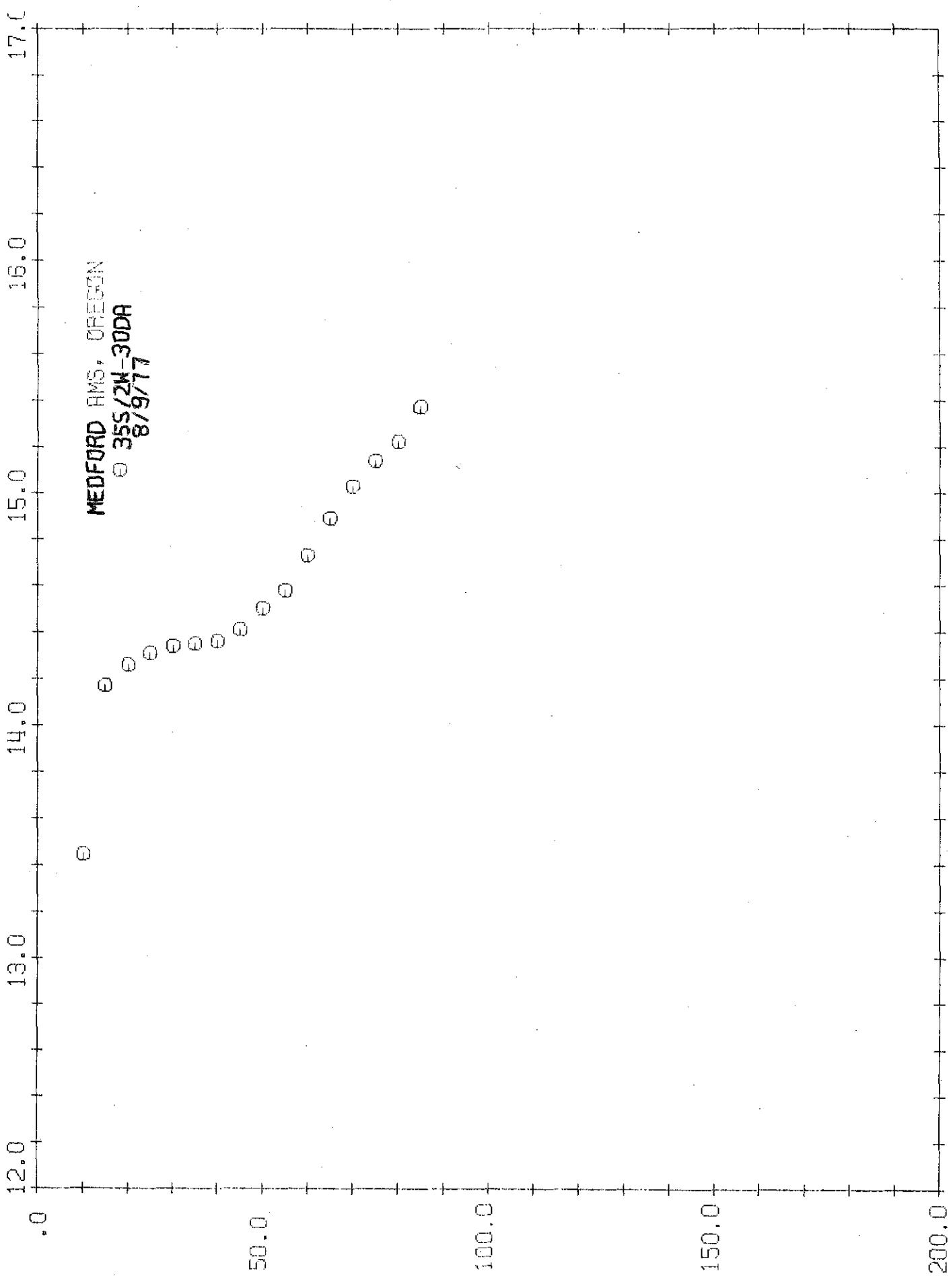
CUM-HT-DTNG

TEMPERATURE, DEG C

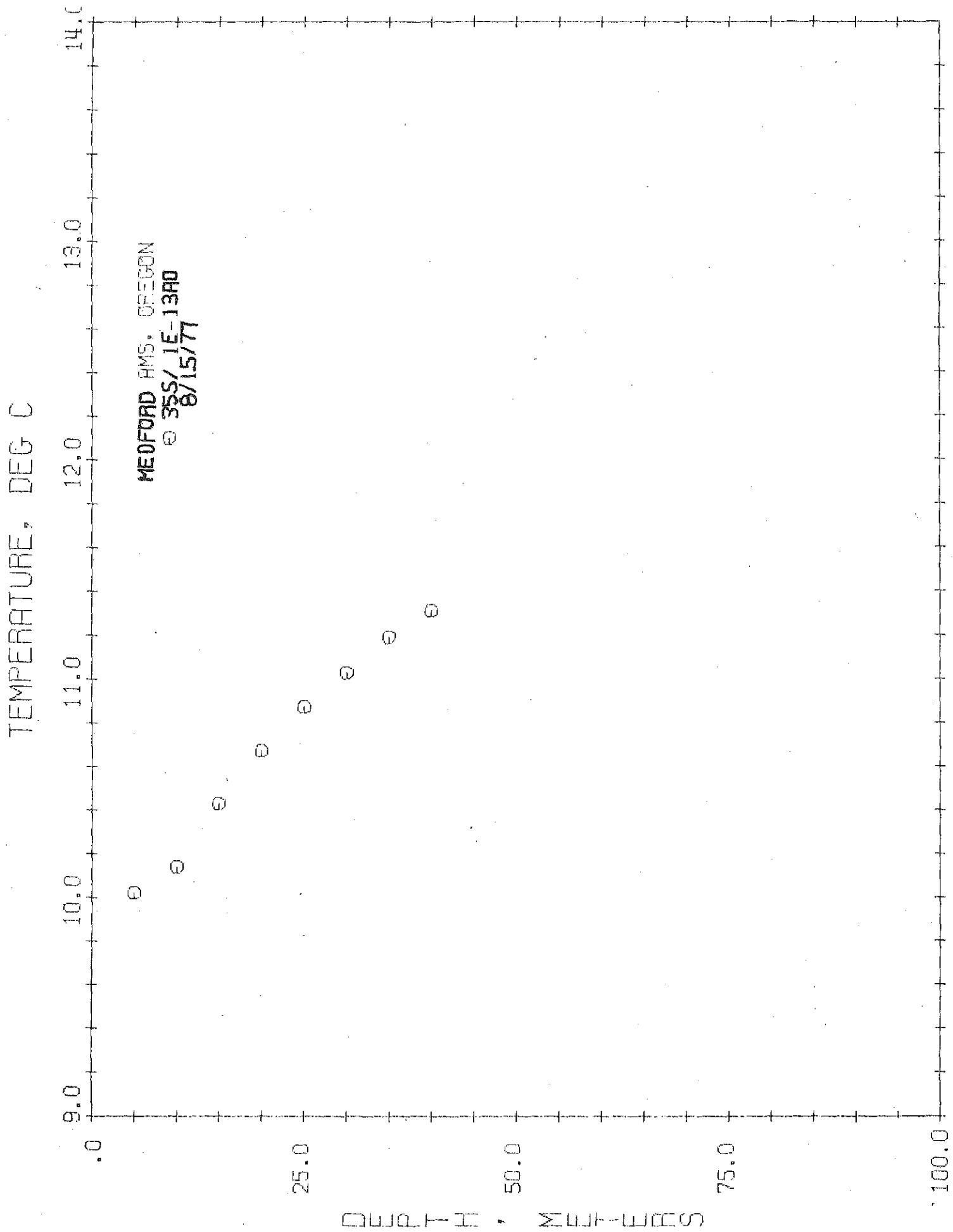


CUMULATIVE TIME

TEMPERATURE, DEG C

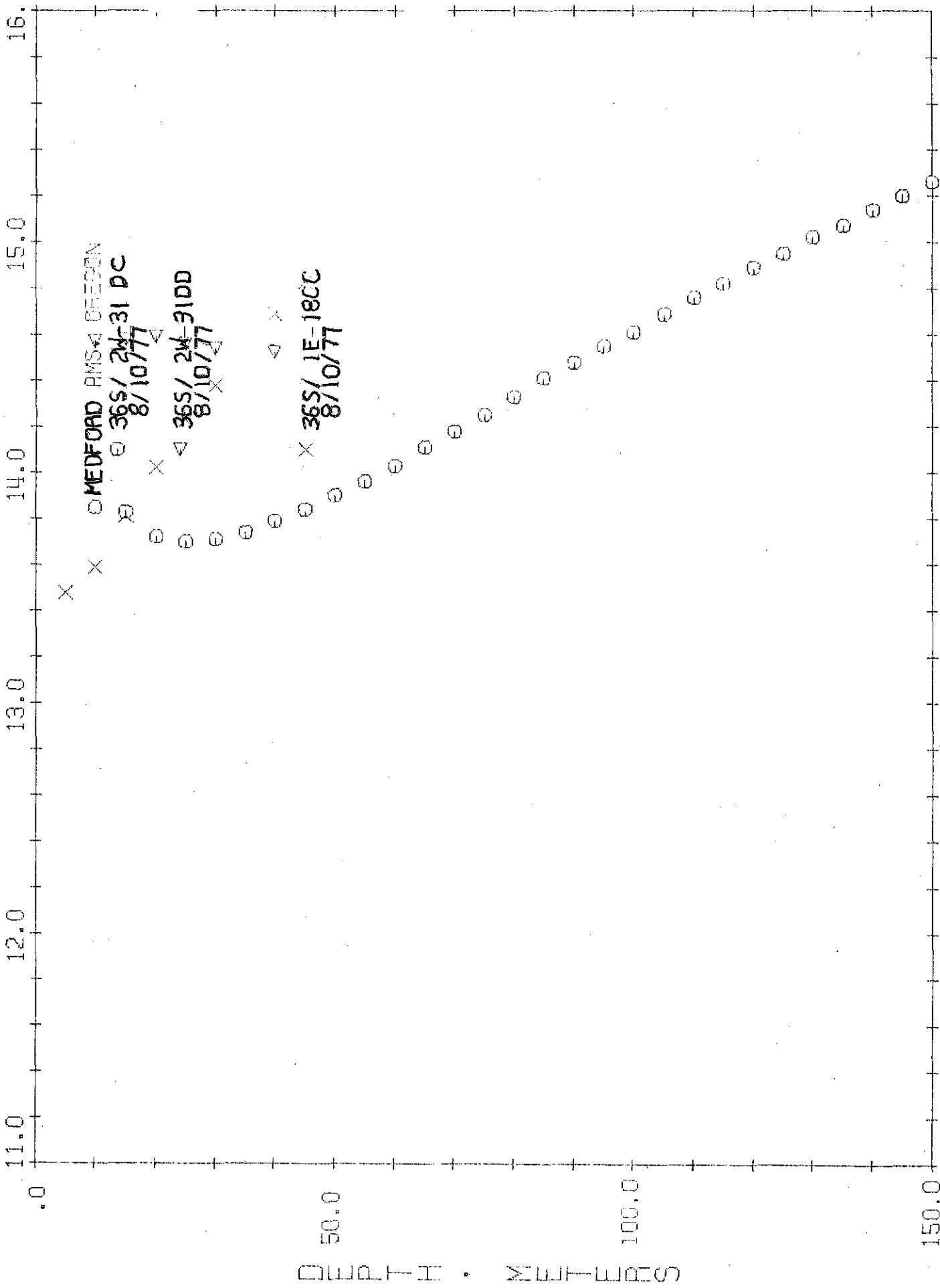


MEDFORD - AMS - 35S/24-30DA



DEPTH - METER

TEMPERATURE, DEG C



TEMPERATURE, DEG C

10.0  
8.0  
6.0  
4.0  
2.0  
0.0

KLAMATH FALLS RIVER, OREGON  
36°S / 125°E DEGREES

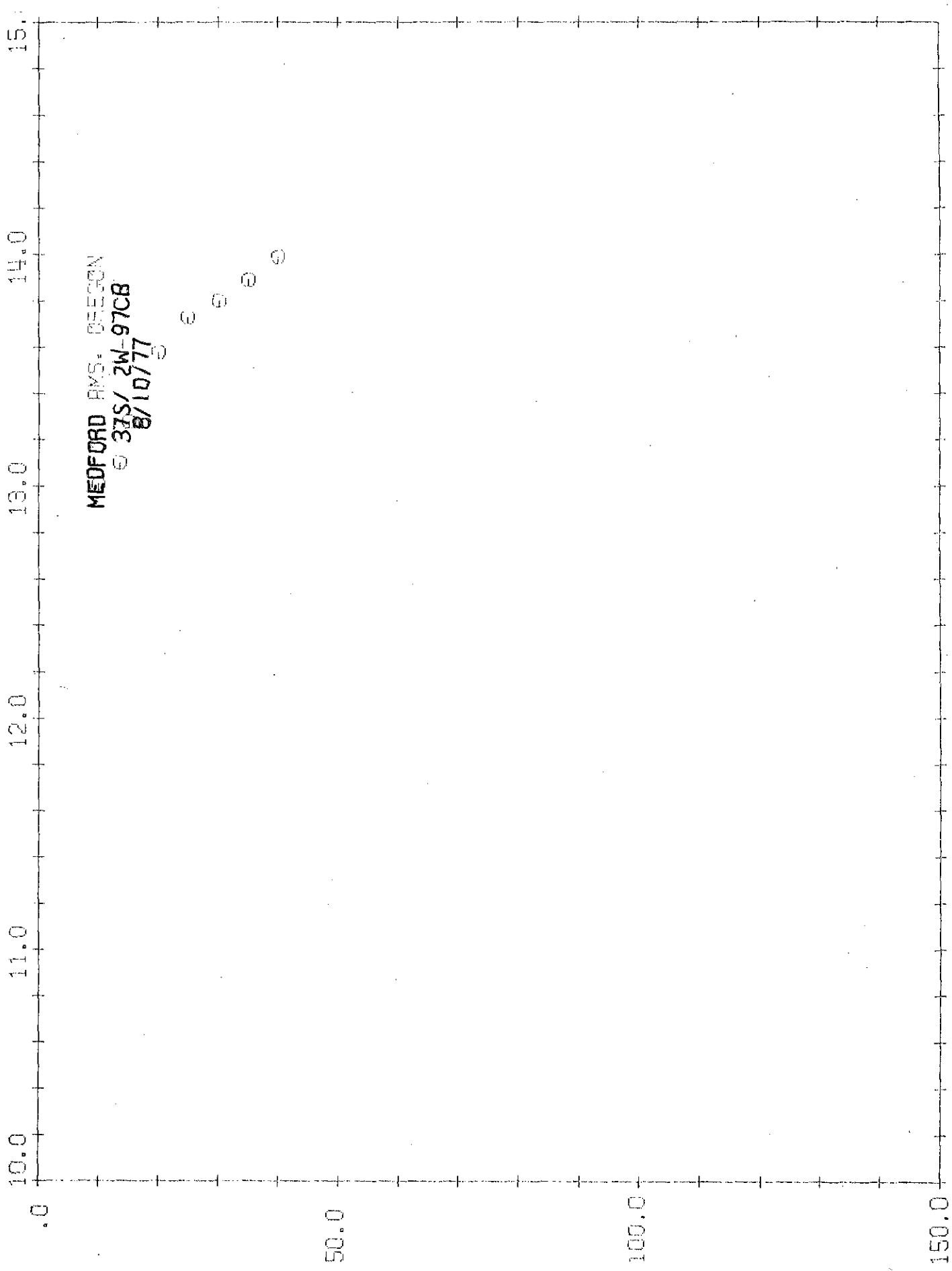
SUMMER-TIME \* AUTUMN

100.0

200.0

300.0

TEMPERATURE, DEG C



CONDUCTIVE • CONDUCTIVE

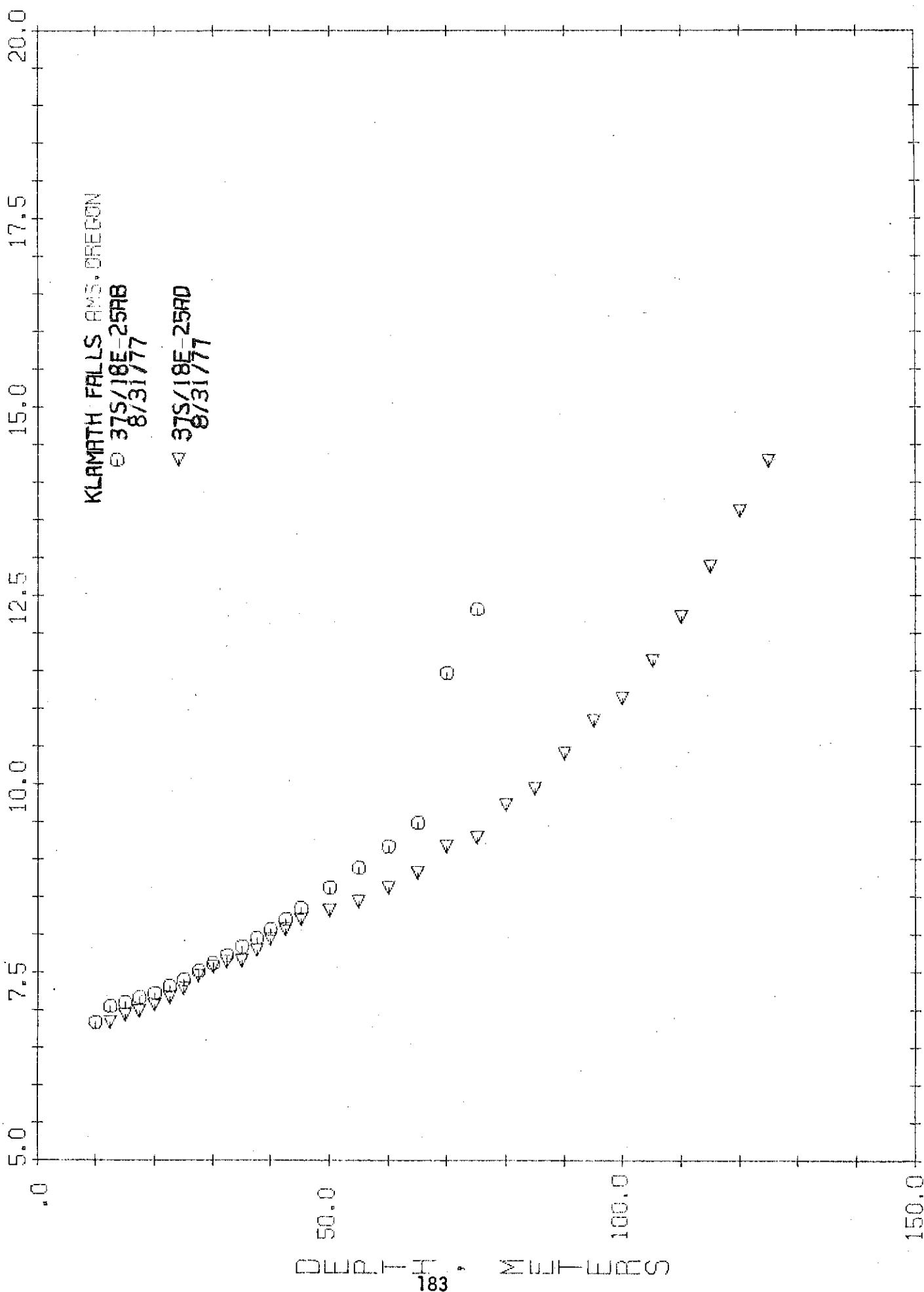
TEMPERATURE, DEG C

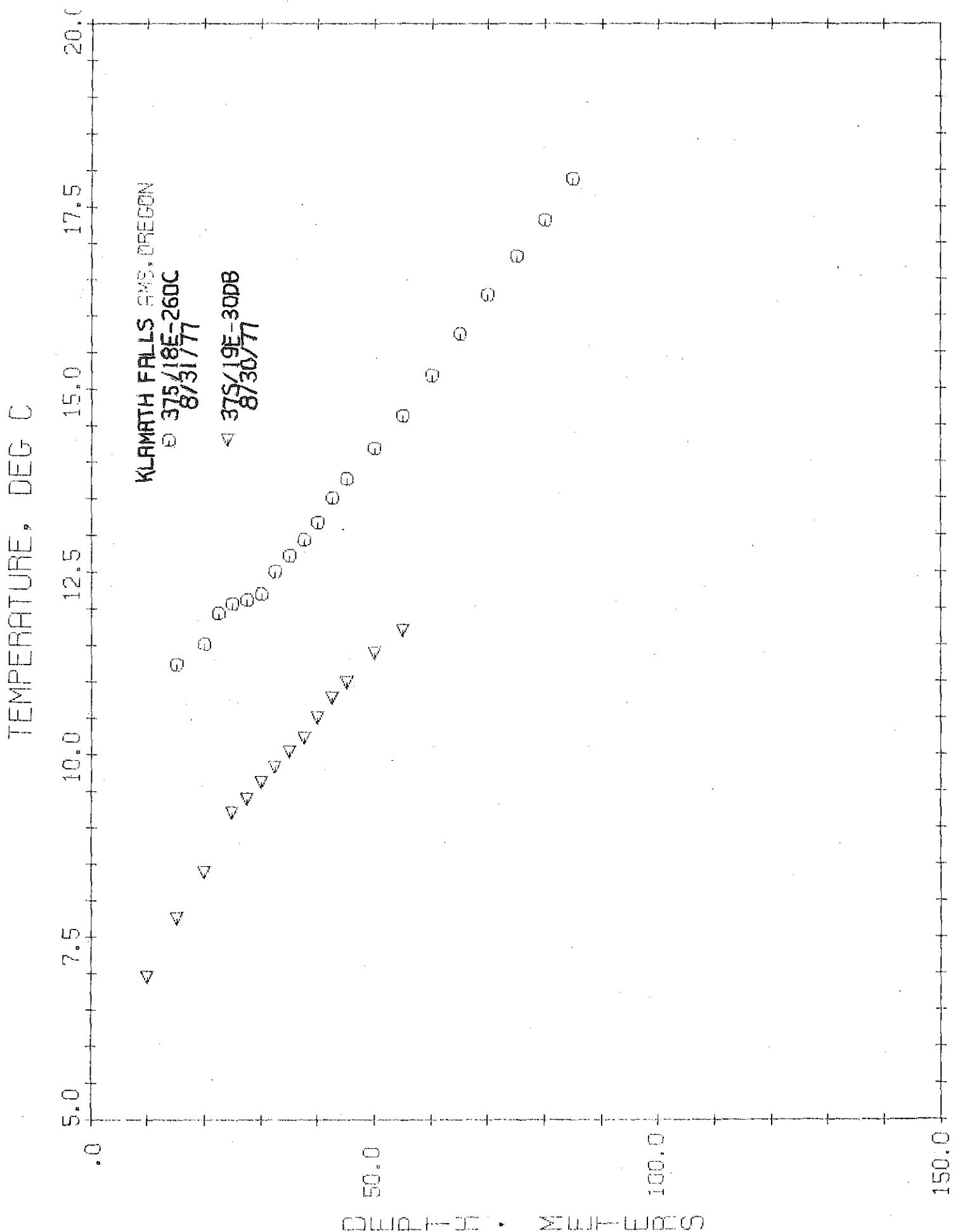
20.0  
18.0  
16.0  
14.0  
12.0  
10.0  
0.0

MEDFORD, OREGON  
E 3756 1W-58BC  
8/9/77

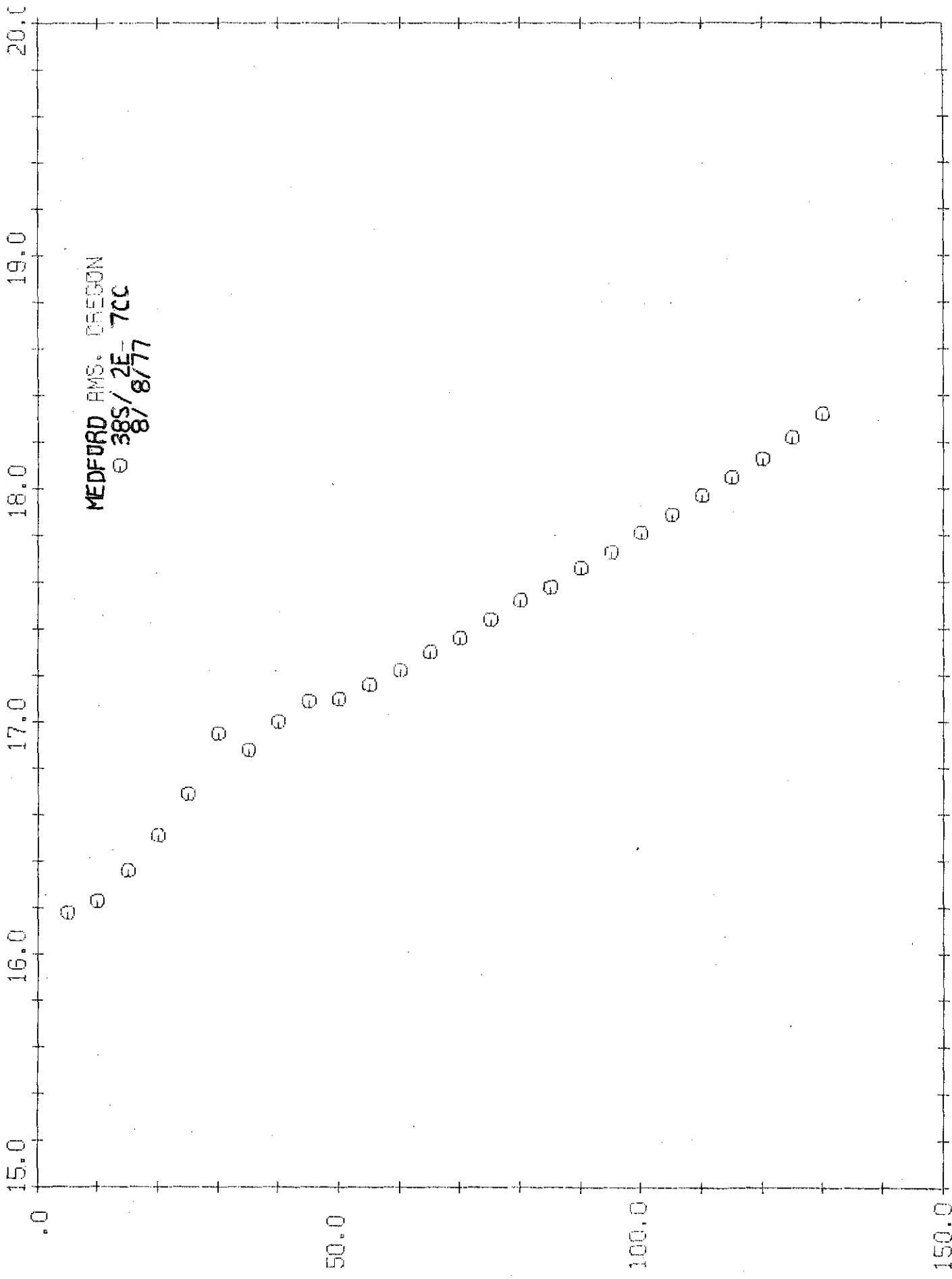
CURRENT - IN - & OUT - IN - OUT

TEMPERATURE, DEG C

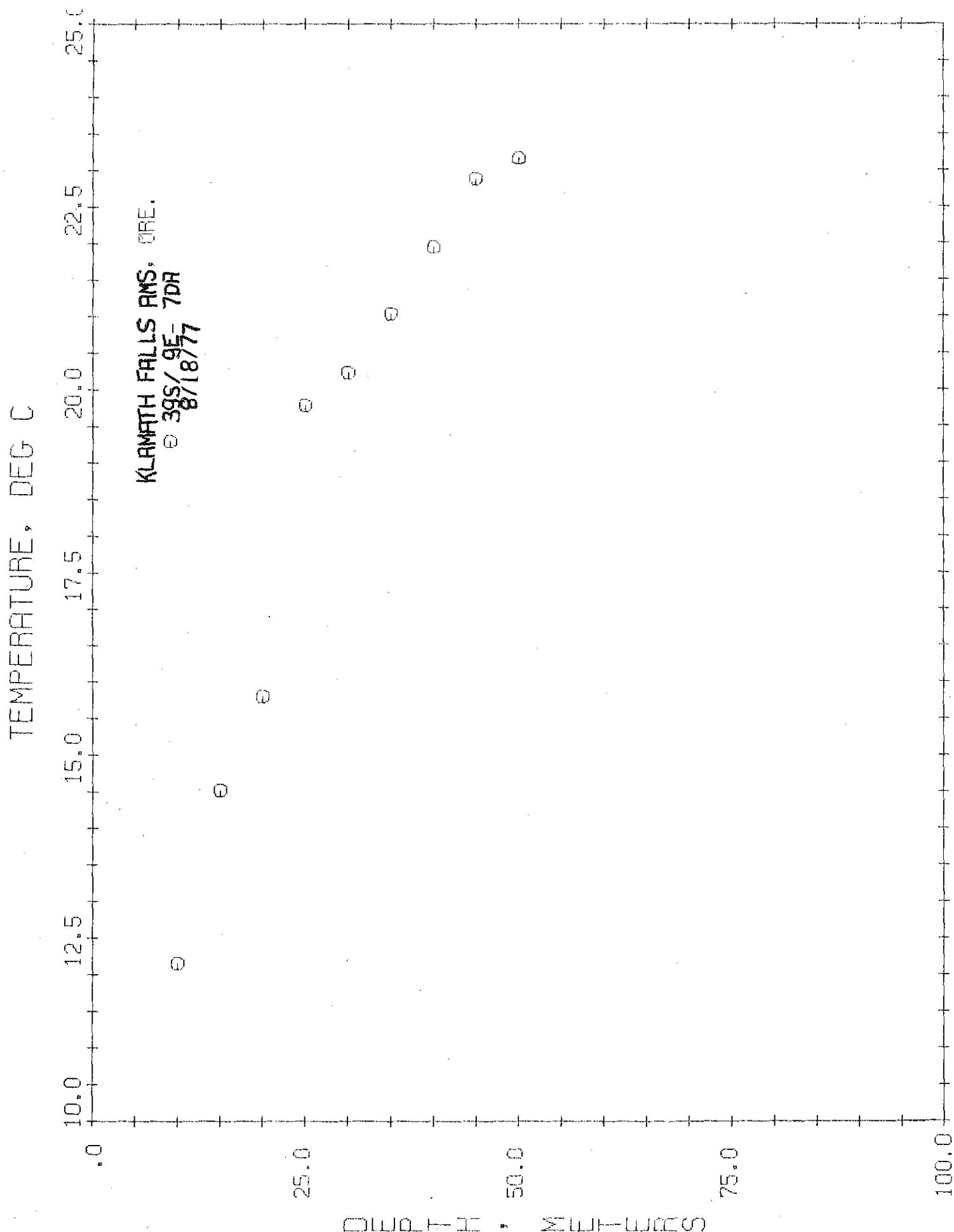




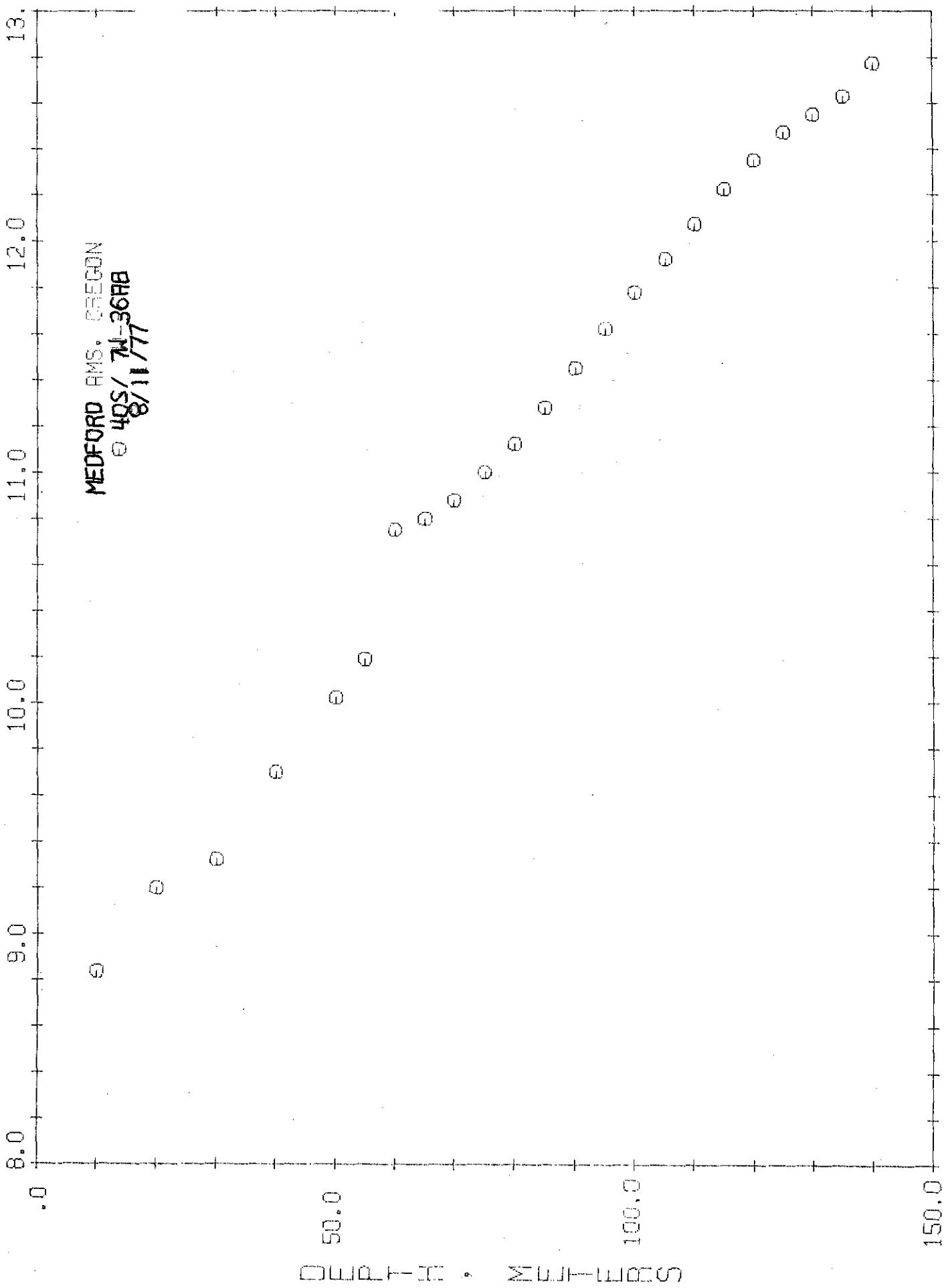
TEMPERATURE, DEG C



SALTWATER • SALTWATER



TEMPERATURE, DEG C



STATE OF OREGON  
PLATE 1 - WELL LOCATIONS

MAP OF  
OPEN-FILE REPORT 0-78-4

GEOTHERMAL GRADIENT DATA

LEGEND  
PRIMARY HIGHWAYS  
SECONDARY HIGHWAYS  
COUNTY ROADS  
INTERSTATE HIGHWAYS

WELL LOCATIONS

STATE OF OREGON  
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES  
DONALD A. HULL, STATE GEOLOGIST

