HEAT FLOW AND GEOTHERMAL GRADIENT MEASUREMENTS IN WASHINGTON TO 1979 AND TEMPERATURE-DEPTH DATA COLLECTED DURING 1979

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Division of Geology and Earth Resources
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INTRODUCTION

This report represents a summary of all published and unpublished heat flow and geothermal measurements made in the state of Washington, prior to 1979 in the files of the Geothermal Laboratory at Southern Methodist University. The data in the files include published heat flow values and temperature-depth data with accompanying pertinent information from the publications of Roy (1963), Roy et al. (1968), Blackwell (1969, 1974), Sass et al. (1971), Steele (1975) and Schuster et al. (1978). Also included are temperature data from Spicer (1964) and Sass and Monroe (1974). A few unpublished temperature logs made by the U.S. Geological Survey Water Resources Division in Tacoma, Washington and by the U.S. Geological Survey Geothermal Group in Menlo Park, California are also included. The report is divided into two sections: in the first section a summary of the geothermal gradient data and locations is presented in tabular form and plotted on a map. In the second section of the report (Appendix A) listings for individual drill holes of temperature versus depth for all wells available in Washington are included. In some cases, more then one temperature logging is available. Each temperature-depth log has been plotted on a graph accompanying the temperature listings.

The history of geothermal measurements in Washington began in the 1930's when U.S. Geological Survey personel directed by VanOstrand made temperature measurements in several oil wells in the state of Washington. These data became available on open file in 1964 (Spicer, 1964). Temperature data from two of these wells (20N/12W- 8 and 11N/26E- 20CC) are included in the data set in this report and estimated heat flow values have been calculated for these two holes based upon thermal conductivity values estimated from the lithologic units encountered in the holes. Following these studies there was a long hiatus until the early 1960's when R.F. Roy made heat flow measurements in the Metaline mining district in Northeastern Washington and measured temperatures in a deep oil well drilled

in the Columbia Plateau (Development Associates Basalt Explorer #1, 21N/31E-10CB). The heat flow values in the Metaline District were published in 1963 (Roy 1963, Roy et al., 1968). In the mid 1960's investigations were started by the author of this report. The first results of these studies were published in 1969 (Blackwell, 1969). Continued investigations were supported by NSF Grant No. GA11351. The preliminary results were published in 1974 (Blackwell, 1974). The most up-to-date summary of heat flow and geothermal gradient from state wide point of view is the 1974 report. In that paper several preliminary heat flow values were discussed. The final heat flow values for those sites are included in this report. In the 1960's measurements were made at several localities in the state by the U.S. Geological Survey Geothermal Group in Menlo Park. These results were published by Sass et al. (1971).

All pertinent facts dealing with the measurements made in the 1960's (Roy et al., 1968; Blackwell, 1969; and Sass et al., 1971) are listed in Sass and Monroe (1974). Temperature-depth data, individual thermal conductivity measurements, terrain correction information etc, for each hole are included here. The temperature data have been abstracted from Sass and Monroe for inclusion in this report.

Subsequent to these studies detailed studies of more localized areas where made in the Turtle Lake quadrangle of Northeastern Washington (Steele, 1975) and in the Indian Heaven area in the southern Washington Cascade Range (Schuster et al., 1978). In 1978 a reconnaissance study of the southern Columbia Plateau was carried out to investigate the regional heat flow. Preliminary water chemistry studies indicated the possiblility of anomalous heat flow values in the area, (C.A. Swanberg, personal communication, 1977). The studies were part of a regional geothermal analysis of the Pacific Northwest supported by NSF Grant No. AER-76-00108 (see Blackwell, 1978). In the 1970's a few temperature logs were made by

the U.S. Geological Survey geothermal group at Menlo Park (holes 3N/5E-4CAB and 3N/5E-4BDC1, John Sass, personal communication, 1977). These data are included in this report. In addition miscellaneous data, mostly temperature data from holes for which no heat flow determinations were made, either because of lack of thermal conductivity information, poor quality gradients, etc, are included for completeness.

In addition to the data included in this report, there are two extensive sets of temperature logs available for the Columbia Plateau region. One set was obtained by investigators from the U.S.G.S. Water Resources Division in Tacoma, Washington and one set by the Washington State University Hydrologic Program at Pullman. These data are now on file at the Washington Department of Natural Resources and are in the process of being prepared for release.

DATA FORMAT

Geothermal information from the state of Washington is summarized in tabular form in Table 1. Included in Table 1 are location, hole name, elevation, geothermal gradient, depth interval, thermal conductivity (were available), heat flow (were available), a summary of the rocks encountered in the drill hole, and a quality indicator for all holes. This data has been taken from the publications discussed above, and from the files of the Geothermal Laboratory at Southern Methodist University. More recent studies (1979) by SMU and WDNR, supported by the Department of Energy are the subject of reports in preparation. The individual holes are located by latitude and longitude to the nearest 0.1' if possible. The holes are also located by township and range. Location within the section is by ¼ section where A = NE¼, B = NW¼, C = SW¼, D = SE¼ and 13 ABD indicates a hole in the SE¼ NW¼ NE¼ of section 13. Thermal conductivity values are from measurements on core or cuttings samples or estimated based on lithology (values in parenthesis). The heat flow values are generally given to two decimal places. Note, however, that the

TABLE 1. Geothermal data for the State of Washington available up to 1979. T C is thermal conductivity in watts per meter per °K ($Wm^{-1}K^{-1}$). Uncorrected and (terrain) corrected gradient and terrain corrected heat flow are shown. Significance of heat flow quality number is explained in text. Locations of data taken from the literature are listed at the end of the table.

TOWNSHIP RANGE	SECTION	N LAT	W LONG	HOLE NO.	MEASURED DATE	BOTTOM TEMP. °C	DEPTH INTERVAL M	AVG. T C $Wm^{-1}K^{-1}$	NO. T C	UNCORR. GRAD. °C/KM	CORR. GRAD. °C/KM	CORR. H F mWm^{-2}	H F QUALITY	
40N/27E-	6B1	48-59.8	119-29.4	DDH-A	7/17/71	14.62	50.0 140.0			30.2 .7			5	BES VALU 70
40N/27E-	6B2	48-59.9	119-29.3	DDH-C	7/17/71	13.91	45.0 210.0			21.3 .1			5	
40N/27E-	6B3	48-59.9	119-29.6	DDH-E	7/17/71	15.41	155.0 225.0			23.6 .2			5	
40N/27E-	6B4	48-59.8	119-29.5	DDH-	7/17/71	14.96	60.0 200.0			25.5 .1			5	
40N/27E-	6BDC	48-59.7	119-29.2	DDH-K-5	7/17/71	15.31	60.0 180.0	3.16 .08	19	25.2 .1	22.3	70.	1	
40N/33E-	2ACD	48-59.7	118-35.9	DDH-702	7/15/71	10.82	75.0 205.0	3.17 .13	22	25.2 .6	22.7	72.	1	BES VALU 72
40N/33E-	2DBB1	48-59.6	118-36.1	DDH-7012	7/15/71	9.39	100.0 150.0			26.5 .3			10	
40N/33E-	2DBB2	48-59.6	118-36.0	DDH-7013	7/22/71	9.38	130.0 155.0			25.8 .3			5	
40N/33E-	2DBB3	48-59.7	118-36.0	DDH-7011	7/22/71	10.78	80.0 215.0	3.15 .13	20	25.0 .3			1	
40N/43E-	3SD	48-55.0	117-20.0	METL-CS2	8/24/61	17.91	350.0 396.0	5.15	14	25.9	22.4	115.	6	BES VALU 10
40N/43E-	3SD	48-55.0	117-20.0	METL-CS9	8/29/61	16.82	320.0 356.0	4.81	5	22.0	20.0	96.	6	
39N/41E-	2BDB	48-55.0	117-35.7	DDH-3	6/16/65	12.37	100.0 240.0	5.98 .04	16	23.9 .1	21.0	126.	6	BE REGI VAL 8
39N/41E-	2CAB	48-54.9	117-35.8	DDH-2	6/17/65	13.34	290.0 340.0	6.02 .04	16	22.0 .1	20.4	123.	6	
39N/41E-	2CBA	48-54.9	117-36.0	DDH-4	6/16/65	9.56	120.0 200.0			14.1 .8			20	
39N/41E-	2CBB	48-54.9	117-36.1	DDH-5	6/16/65	9.92	120.0 180.0			17.2 .6			20	
41E-	2CBD	48-54.8	117-36.0	DDH-1	6/15/65	10.81	130.0 220.0			18.3 .7			20	
7N/26E-	8DBC	48-43.0	119-35.5	DDH-1	7/24/71	16.48	165.0 435.0	3.50 .13	26	19.4 .2	21.5	75.	1	

TOWNSHIP RANGE	SECTION	N LAT	W LONG	HOLE NO.	MEASURED DATE	BOTTOM TEMP. °C	DEPTH INTERVAL M	AVG. T C $Wm^{-1}K^{-1}$	NO. T C	UNCORR. GRAD. °C/KM	CORR. GRAD. °C/KM	CORR. H F mWm^{-2}	H F QUALITY	
37N/32E-	33AAC	48-40.0	118-46.4	DDH-3	7/21/70	14.39	150.0 260.0	2.41 .04	17	30.9 .2	31.1	76.	1	
37N/32E-	34B1	48-39.8	118-45.7	DDH-A	7/21/70	11.44	100.0 195.0			21.8 .2			10	
37N/32E-	34B2	48-39.8	118-45.7	DDH-B	7/31/70	9.13	50.0 95.0			24.5 .8			20	
37N/32E-	34B3	48-39.8	118-45.7	DDH-C	7/31/70	9.46							30	
36N/20E-	19ABB	48-36.8	120-23.3	DDH-LD13	8/ 8/71	11.68	75.0 170.0			23.7	23.2		5	
36N/20E-	19ADC	48-36.5	120-23.1	DDH-LD10	8/ 8/71	14.41	140.0 275.0	2.88 .08	15	28.3 .2	26.7	77.	1	BES VALU 75
36N/20E-	19DAB	48-36.3	120-23.1	DDH-LD7	8/ 8/71	14.94	240.0 360.0	3.19 .29	4	24.0 .1	23.0	73.	1	
34N/ 1E-	1CBB	48-27.5	122-38.0	DDH-1	8/ 2/71	11.61	80.0 220.0	2.96 .04	25	12.7 .1	12.6	37.	1	
33N/31E-	14ACB	48-21.8	118-52.3	DDH-3	8/ 7/70	11.44	205.0 270.0	3.11 .08	9	20.4 .3	22.4	69.	1	
3[illegible]/31E-	14BDA	48-21.8	118-52.6	DDH-1	6/20/70	9.86	130.0 230.0	3.36 .13	17	16.6 1.0	20.4	69.	6	BES VALU 68
33N/31E-	14BDC	48-21.6	118-52.8	DDH-2	6/20/70	9.35	120.0 200.0	3.36 .13	18	16.8 .3	19.5	66.	1	
31N/15E-		48-11.9	120-58.6	DDH-141	9/ 2/70	4.81							30	
31N/15E-		48-11.9	120-58.6	DDH-2	9/ 2/70	4.06	70.0 75.0			21.6 .3			30	
30N/16E-		48- 6.1	120-49.8	DDH-1	8/ 5/70	14.04	20.0 175.0			49.0 5.5			20	
30N/33E-	31BDD	48- 3.5	118-42.4	DDH-A	8/11/66	9.49	115.0 195.0	3.81	2	14.6 .2	19.7	75.	1	
30N/33E-	31CAB	48- 3.3	118-42.4	DDH-B	8/23/66	9.82	120.0 255.0	4.15 .21	11	11.6 .1	17.9	74.	1	BES VAL 71
30N/33E-	31CAC	48- 3.2	118-42.4	DDH-C	8/16/67	14.79	90.0 420.0	3.76 .17	28	13.5 3.5	18.6	68.	1	
							420.0 470.0	2.99 .21	8	17.4 1.4	23.2	69.	1	
29N/37E-	36DDD	47-58.5	118- 4.0	DDH-2	10/15/72	16.87	60.0 380.0	3.13	25	28.4 .3	27.0	85.	1	
28N/37E-	9DBD	47-56.6	118- 9.2	S-9	8/11/70	13.80	100.0 133.0	3.00 .04	6	26.0 .1	25.1	76.	6	

TOWNSHIP RANGE	SECTION	N LAT	W LONG	HOLE NO.	MEASURED DATE	BOTTOM TEMP. °C	DEPTH INTERVAL M	AVG. T C $Wm^{-1}K^{-1}$	NO. T C	UNCORR. GRAD. °C/KM	CORR. GRAD. °C/KM	CORR. H F mWm^{-2}	H F QUALITY	
[illegible]/37E-	2BBB	47-52.4	118- 7.4	WW-EAST	8/10/72	14.89	90.0 150.0	3.31 .04	6	24.8	26.7	87.	6	BES VAL 89
27N/37E-	3AAA	47-52.4	118- 7.4	WW-WEST	8/10/72	12.22	60.0 100.0	3.26	6	26.5	27.8	91.	6	
27N/38E-	28BBB	47-49.0	118- 1.5	S-28	8/10/72	13.58	100.0 145.0	2.54	2	33.8	33.0	84.	6	
25N/ 9E-	4AAD	47-41.1	121-38.9	DDH-11	11/ 1/72	2.98							30	
25N/ 9E-	4ADA	47-41.0	121-38.9	DDH-12	11/ 1/72	3.36	120.0 145.0	3.03	2	10.5 .1	20.0	61.	16	
23N/11E-	1C	47-30.5	121-21.2	DDH-1	6/25/65	6.79	80.0 130.0	3.93 .21	9	16.2 .3	14.7	58.	16	BES VAL 57
23N/11E-	10DCA	47-29.5	121-24.1	DDH-2	7/24/65	18.88	86.6 251.0	3.03 .08	24	25.2 1.0	18.6	56.	16	
22N/20E-	26CBB	47-22.1	120-18.0	NORCO-1	8/ 4/70	35.68	310.0 900.0	2.18 .21	18	26.8 .2	28.4	62.	1	
21N/31E-	10CB	47-20.0	118-55.0	DABE-1	8/31/61	57.54	61.0 1250.0	1.67 .21		42.0 2.0	42.0	70.	6	
[illegible]/12W-	8	47-14.3	124-11.5	VO-MO 1	0/ 0/30	35.56	304.8 1066.8	1.30		27.4 1.7	27.4	36.	6	
20N/15E-	18DDD	47-13.2	121- .5	DDH-E	7/14/72	11.61	5.0 200.0			20.8 3.5			20	
16N/12W-	24DAD	46-51.0	124- 6.0	TW-1	8/ 4/71	14.29	60.0 155.0	1.48 .04	22	26.5 2.2	26.5	39.	1	
16N/ 4E-	14CD	46-51.9	122-16.3	WW-14P1	12/ 8/71	10.23	40.0 75.0			12.4 .8			30	
16N/35E-	22CDA	46-51.4	118-24.5	BAUMN1WW	2/ 9/78	15.33	.0 315.0	1.59		≥ 23.0	≥ 23.0	≥ 36.	26	
13N/19E-	24AA	46-36.3	120-23.1	GJR-WW	3/13/72	19.95	120.0 225.0	1.59		26.4 .6			30	
13N/26E-	25	46-35.0	119-31.0	DH-1	1/13/70	21.89	53.0 183.0	1.71 .03	19	37.2 .3	37.2	64.	1	
12N/ 1W-	7AAB	46-32.7	122-50.8	RDH-SU8	1/ 7/72	25.21	50.0 565.0			29.0 .2			5	
							90.0 360.0			33.2 .2			5	
							375.0 565.0			25.2 .1			5	
[illegible] 1W-	8CAB	46-32.3	122-50.2	SU-14	6/13/67	25.55	100.0 400.0	1.09 .04	59	33.8 .1	33.8	36.	1	

TOWNSHIP RANGE	SECTION	N LAT	W LONG	HOLE NO.	MEASURED DATE	BOTTOM TEMP. °C	DEPTH INTERVAL M	AVG. T C $Wm^{-1}K^{-1}$	NO. T C	UNCORR. GRAD. °C/KM	CORR. GRAD. °C/KM	CORR. H F mWm^{-2}	H F QUALITY	
1[illegible] 1W-	8CCC	46-31.9	122-50.5	RDH-SU37	1/12/72	24.66	45.0 150.0			27.7 .4			5	
							150.0 395.0			33.5 .1			5	
							395.0 540.0			24.6 .1			5	
12N/ 1W-	8DAA	46-32.3	122-49.5	SU-12	1/12/72	25.72	110.0 365.0			27.3 .3			5	BES
							260.0 578.0			21.5 .3			5	VAL 3[illegible]
12N/ 1W-	8DAD	46-32.2	122-49.5	SU-11	6/12/67	21.31	100.0 340.0	1.09 .04	59	34.6 .2	34.6	37.	1	
12N/ 1W-	9CCC	46-32.0	122-48.7	SU-4	6/12/67	28.78	100.0 380.0	1.09 .04	59	32.8 .3	32.8	36.	1	
							710.0 760.0	1.77 .01	5	19.4 .6	19.4	34.	1	
12N/ 1W-	17ADA	46-31.6	122-50.1	SU-902	3/19/73	31.21	90.0 340.0			32.7 1.0			5	
							340.0 690.0			24.8 .5			5	
							690.0 847.0			22.2 .3			5	
12N/ 1W-	17BAD	46-31.8	122-49.5	SU-10	3/19/73	19.83	90.0 348.0			34.8 .9			5	
12N/40E-	14DAD	46-31.2	117-45.6	SCOTT-WW	7/29/78	13.54	15.0 62.5	1.59		33.9 .4	40.0	64.	16	
12N/40E-	17ADA	46-31.6	117-49.3	DODGEJCT	2/27/78	14.71	.0 90.0	1.59		42.0	41.7	66.	26	
11N/24E-	15 1	46-26.0	119-47.0	RS-1	6/ 7/67	96.29	900.0 2500.0	1.59 .13	6	34.8	37.1	58.	6	BE VAI 5
11N/24E-	15 2	46-26.0	119-47.0	RS-2	1/14/69	13.72	58.0 119.0	1.72 .04	14	28.0 .2	33.2	57.	6	
11N/26E-	20CC	46-25.2	119-35.4	VO-SOC 1	0/ 0/30	13.72	30.5 670.6	1.59		37.4 4.4	35.6	56.	6	
11N/45E-	32DAB	46-23.3	117-11.5	SILCOTWW	2/19/78	17.50	10.0 192.0	1.59		31.3 .5	32.0	51.	6	
11N/46E-	19BB	46-25.4	117- 5.9	PTWLMAWW	1/17/78	12.63							30	
11N/46E-	32BCA	46-23.5	117- 4.5	WWPC7-WW	2/15/78	26.17	15.0 405.0	1.59		35.6	35.6	56.	6	
10N/ 6E-	8DDA	46-21.6	122- 4.5	DDH-9	10/25/72	6.51	80.0 135.0			14.4 .5			20	
							80.0 270.0			9.9 1.1			20	
							120.0 270.0	3.68 .17	6	12.5	18.5	68.	16	B VA
10N/ 6E-	18BDB	46-21.1	122- 6.4	DDH-1	10/31/71	10.56	205.0 210.0	3.85 .13	6	22.0	18.0	69.	16	

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1. /28E-	14ACC	46-21.1	119-16.2	DH-3-WW	8/12/70	47.78	174.0 608.0	1.65 .07	16	25.1 .3			1
							608.0 1079.0	1.52 .03	15	34.6 .3			1
							174.0 1079.0	1.59		30.0	30.0	47.	1
10N/39E-	30AA	46-19.4	117-58.6	WARNERWW	2/10/78	11.86							30
10N/41E-	3DBD	46-22.4	117-39.5	NEIBLEWW	8/ 3/78	11.35	10.0 90.0	1.59		22.1 .6	27.2	43.	16
9N/32E-	13BA	46-16.0	118-45.2	POWER-WW	2/10/78	22.20	135.0 210.0	1.59		34.8 .6	34.8	55.	6
8N/33E-	21D	46- 9.3	118-41.0	GLUCK-WW	2/ 3/78	24.05	15.0 50.0			58.6 1.6	58.6		6
							50.0 200.0	1.59		37.7 1.0	37.7	60.	6
8N/36E-	30BA	46- 9.0	118-21.4	VANAUSWW	1/13/78	10.98							30
6N/44E-	2AAD	46-12.3	117-15.0	REEVESWW	7/28/78	10.93	10.0 50.0			19.4 .8			20
7N/ 8E-	2BCD	46- 7.5	121-46.2	DGER-4	9/14/76	9.10	85.0 150.0	1.25 .03	5	48.5 .5	44.5	56.	1
7N/ 8E-	36C	46- 2.9	121-45.0	DGER-7	9/14/76	3.55	15.0 25.0	1.17		70.0	58.0	67.	16
7N/ 9E-	17AA	46- 5.9	121-42.0	DGER-3	9/13/76	12.98	115.0 150.0	1.24 .11	4	58.5 2.5	53.4	66.	1
7N/33E-	24DC	46- 4.0	118-37.4	MT-WW	3/16/72	17.01	200.0 235.0	1.59		17.0 .5	17.0	27.	26
7N/34E-	36CAD	46- 2.3	118-30.3	STILERWW	2/ 8/78	13.39	10.0 32.5	1.00		55.4 3.2	55.4	56.	16
7N/35E-	25AAC	46- 3.7	118-22.2	ARTIDBWW	1/30/78	19.70	95.0 260.0	1.59		34.0	34.0	54.	16
7N/35E-	25ABA	46- 3.8	118-22.3	GUG-WW	1/30/78	12.72	45.0 70.0			33.7 9.8			30
7N/35E-	35AA	46- 2.9	118-22.3	WWCOLLWW	1/30/78	20.54	100.0 165.0			27.4 .4			30
7N/36E-	17CAD	46- 5.4	118-20.3	WWGC-WW	8/ 8/78	20.94	100.0 225.0	1.59		35.4 .5	35.4	56.	6
7N/36E-	19BD	46- 4.4	118-21.5	DKFF-WW	3/15/72	20.58	110.0 250.0			23.1 3.1			30
7N/36E-	33BB	46- 2.9	118-19.3	WW-7	3/14/72	28.64	.0 425.0	1.59		≥ 33.3	≥ 33.3	≥ 53.	16

TOWNSHIP RANGE	SECTION	N LAT	W LONG	HOLE NO.	MEASURED DATE	BOTTOM TEMP. °C	DEPTH INTERVAL M	AVG. T C $Wm^{-1}K^{-1}$	NO. T C	UNCORR. GRAD. °C/KM	CORR. GRAD. °C/KM	CORR. H F mWm^{-2}	H F QUALITY
N/46E-	2AA	46- 8.0	116-55.1	DODD-WW	2/18/78	15.31	160.0 275.0	1.59		27.6 .7	36.1	57.	16
7N/46E-	13DA	46- 9.7	116-53.5	HELBAR	3/ 4/78	13.01	15.0 85.0	1.59		53.0 1.0	40.8	65.	16
6N/ 7E-	23BAC	45-59.9	121-53.6	DGER-5	9/14/76	11.50	100.0 150.0	1.23 .06	6	51.0 .4	49.8	61.	1
6N/ 9E-	25ACC	45-58.6	121-37.4	DGER-2	9/13/76	12.19	100.0 150.0	1.42 .03	8	53.8 .8	52.7	75.	1
6N/33E-	1DBD	46- 1.5	118-37.3	BRNAMWW	2/ 2/78	31.78	10.0 60.0			78.9 4.8	78.9		10
							60.0 305.0	1.05		69.0 8.0	69.7	73.	6
6N/33E-	10AD	46- 1.0	118-40.6	GARDNAWW	2/ 2/78	16.39	20.0 85.0	1.05		104.1 5.0	106.8	112.	16
6N/36E-	4CA	46- 1.5	118-20.7	HILLRDWW	1/31/78	13.88	35.0 57.5	1.13		81.8 3.6	81.8	93.	16
6N/43E-	12CCC	46- .3	118-30.6	FROG-WW	2/ 8/78	13.01							30
5N/ 8E-	22ABC	45-54.8	121-46.8	DGER-6	9/14/76	2.71	15.0 55.0	1.26 .21		2.0			30
3N/ 5E-	4ACA	45-46.4	122-11.6	SS-21	9/15/76	13.66	25.0 305.0			23.5	20.0	56.	5
3N/ 5E-	4ACB	45-46.5	122-11.8	SS-23	9/15/76	11.35	15.0 150.0			16.7 .2			10
							150.0 245.0			24.6 .2			10
3N/ 5E-	4BCA	45-46.5	122-12.1	SS-18	9/15/76	13.19	30.0 140.0			20.3 .2			10
3N/ 5E-	4BDA	45-46.5	122-11.9	SS-8	10/ 9/75	9.42	20.0 70.0				20.0	56.	5
3N/ 5E-	4BDB	45-46.5	122-12.1	SS-20	9/15/76	13.52	35.0 300.0				20.0	56.	5
3N/ 5E-	4BDC1	45-46.5	122-12.0	SS-4	7/14/75	9.26	30.5 152.4			15.5 .2			5
3N/ 5E-	4BDC2	45-46.4	122-13.0	SS-22	9/16/76	11.51	30.0 220.0			23.2 .3			5
3N/ 5E-	4CAB	45-46.3	122-12.0	SS-3	9/16/76	14.20	205.0 390.0			24.4 .2			10
5E-	4CAC	45-46.2	122-12.0	SS-6	9/16/76	11.52	15.0 120.0				20.0	56.	5
							120.0 215.0						5

BES
VAL
56

TOWNSHIP RANGE	SECTION	N LAT	W LONG	HOLE NO.	MEASURED DATE	BOTTOM TEMP. °C	DEPTH INTERVAL M	AVG. T C $Wm^{-1}K^{-1}$	NO. T C	UNCORR. GRAD. °C/KM	CORR. GRAD. °C/KM	CORR. H F mWm^{-2}	H F QUALITY
-/21E-	19BAB	45-44.1	120-13.6	RB-1	10/30/74	19.03	30.0 70.0	1.59		54.3 2.0	53.8	85.	6
2N/ 7E-	22ABC	45-38.8	121-55.7	DH-1083	10/28/75	11.35							30
2N/ 7E-	22BBA1	45-38.9	121-56.1	DH-1201	10/28/75	12.45	40.0 82.0			40.5 1.2			10
2N/ 7E-	22BBA2	45-38.9	121-56.1	DH-1203	10/28/75	12.29	45.0 80.0			34.8 2.1			20
2N/ 7E-	22BBA3	45-38.9	121-56.1	DH-1204	10/28/75	11.72	40.0 60.0			24.6 1.3			30
2N/ 7E-	22BBA4	45-38.9	121-56.1	DH-1209	10/28/75	11.98	50.0 60.0			19.0 2.9			30
2N/ 7E-	22BBA5	45-38.9	121-56.0	DH-1210	10/28/75	12.77							30
2N/ 7E-	22BBA6	45-38.9	121-56.1	DH-1029	10/28/75	13.05							30
2N/ 7E-	22BBA7	45-38.9	121-56.1	USCE1440	4/12/77	12.62	20.0 85.0			30.4 6.1			20
							50.0 84.5			42.4 2.8			20
2N/ 7E-	22BBA8	45-38.9	121-56.1	USCE1329	4/12/77	12.47	25.0 75.0			29.3 2.7			10
2N/ 7E-	22BBC1	45-38.8	121-56.3	USCE1462	4/12/77	11.43							30
2N/ 7E-	22BBC2	45-38.8	121-56.3	USCE1465	4/12/77	11.99							30
2N/ 7E-	22BBC3	45-38.8	121-56.3	USCE1378	4/12/77	12.11	45.0 75.0			36.7 1.1			20
2N/ 7E-	22BBC4	45-38.8	121-56.3	USCE1455	4/12/77	12.29							30
2N/ 7E-	22BBC5	45-38.8	121-56.2	USCE1371	4/12/77	12.11							30
2N/ 7E-	22BBD1	45-38.8	121-56.2	USCE1385	4/12/77	13.02	25.0 75.0			34.2 2.7			10
2N/ 7E-	22BBD2	45-38.8	121-56.1	USCE1475	4/12/77	12.40	40.0 58.0			36.8 .8			20

TABLE 1 cont.

Sources of published temperature-depth and heat flow data

Hole Location	Reference
40N/43E-35D1	Roy, 1963; Roy *et al*, 1968; Sass and Munroe, 1974
40N/43E-35D2	" " " "
39N/41E-2BDB	Blackwell, 1969
39N/41E-2CAB	"
39N/41E-2CBA	"
39N/41E-2CBB	"
39N/41E-2CBD	"
30N/33E-31BDD	Blackwell, 1969 - Recorrected for this report
30N/33E-31CAB	" "
30N/33E-31CAC	" "
29N/37E-36DDD	Steele, 1975
28N/37E-9DBD	"
27N/37E-2BBB	"
27N/37E-3AAA	"
27N/38E-28BBB	"
23N/11E-1C	Blackwell, 1969 - Recorrected for this report
23N/11E-10DCA	" "
21N/31E-10CB	R.F. Roy, personal communication, 1964
20N/12W-8	Spicer, 1964
16N/12W-24DAD	Also logged by U.S.G.S. W.R.D., Tacoma
13N/26E-25	Sass *et al*., 1971; Sass and Munroe, 1974
12N/1W-8CAB	" " "
12N/1W-3DAD	" " "
12N/1W-9CCC	" " "
11N/24E-15 1	" " "
11N/24E-15 2	" " "
11N/26E-20CC	Spicer, 1964
10N/28E-14ACC	Sass *et al*, 1971

errors of the values are discussed below. The quality indicators are as follows: a quality number of 1,6, or 16 implies a heat flow value with an estimated error of approximately ±5%, ±10% and ±25% respectively. A quality value of 30 indicates that no reliable heat flow or geothermal gradient can be calculated from the data because of some problem in the measurements. Usually the poor quality is due to intradrill-hole water flow in holes which were used as water wells and thus are uncased and ungrouted. A quality indicator of 5, 10 or 20 indicates a hole for which the geothermal gradient shown has an estimated error of ±5%, ±10%, or ±25% respectively. Heat flow values have not been calculated for these holes, either because they are in an area where heat flow data are already available, or because there are no thermal conductivity information available.

The data are summarized on a map (Figure 1). Shown on this map are locations of holes for which data are available as listed in this report. In some cases several holes in very close proximity to one another have been included as a single symbol on a map. Also shown on the figure are heat flow values for holes of 1, 6, or 16 quality. Again multiple holes may have been included on this map as a single locality.

The second set of data included in this report (Appendix A) is a detailed listing of temperature-depth measurements for each hole and a plot of each temperature-depth log. The equipment which has been used for almost all of these measurements is described by Roy et al. (1968) and by Sass et al. (1971). The only exception are the measurements obtained by VanOstrand. These were measurements made with maximum reading thermometers. In general, the precision of the instruments is approximately ± .02°C and the accuracy is approximately ± 0.2°C.

DISCUSSION

The results of these studies have been discussed in preliminary form by Blackwell (1974) from a state wide point of view. These early data have been supplemented beginning in 1978 and 1979 by extensive new information of which the 1978 data are shown on the included map, in the table and listed in Appendix A. Brief descriptions of the data and results will be found in Blackwell (1978) and Sass *et al*. (1980). The 1979 data will be discussed together with the earlier data in technical reports to be issued in the near future.

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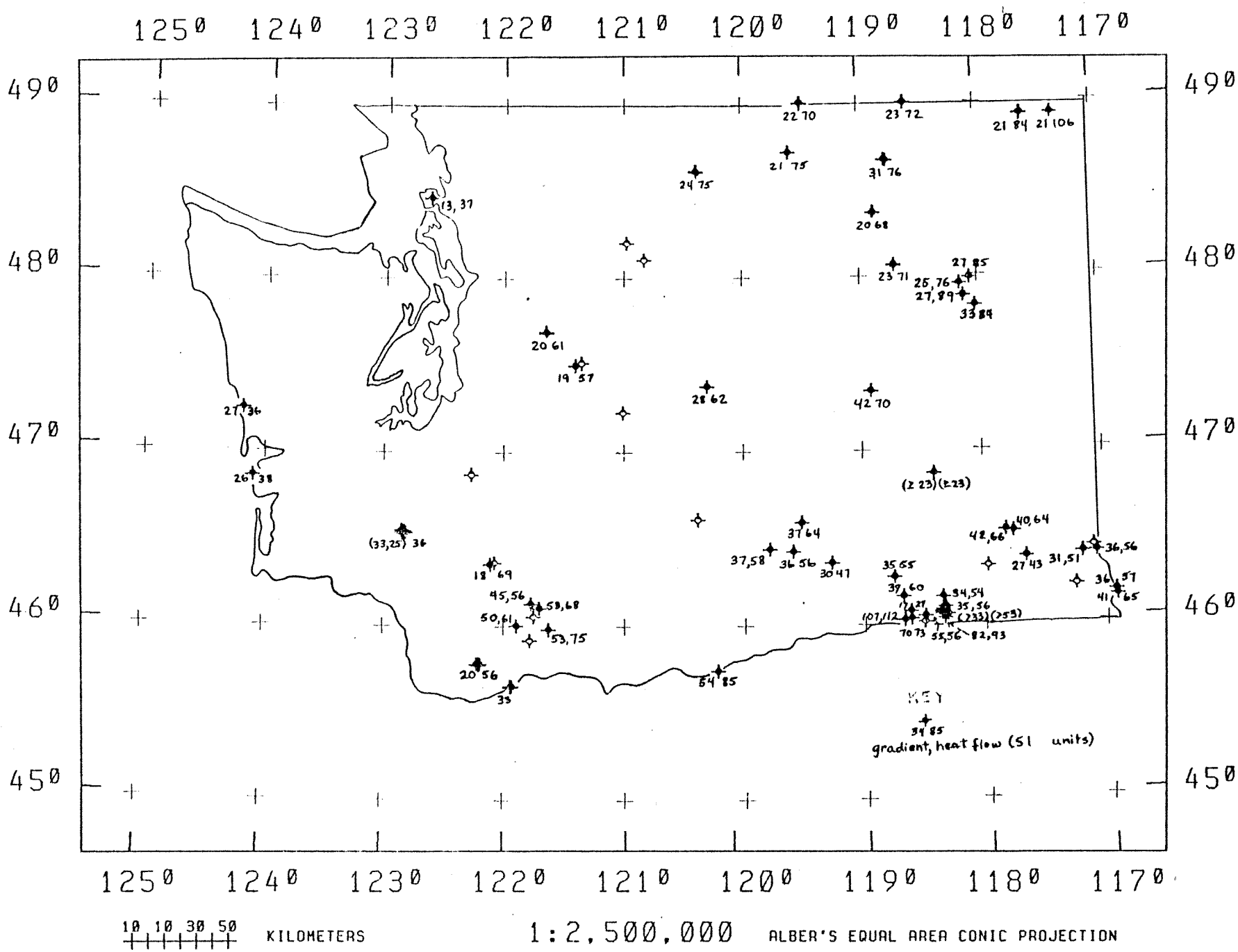
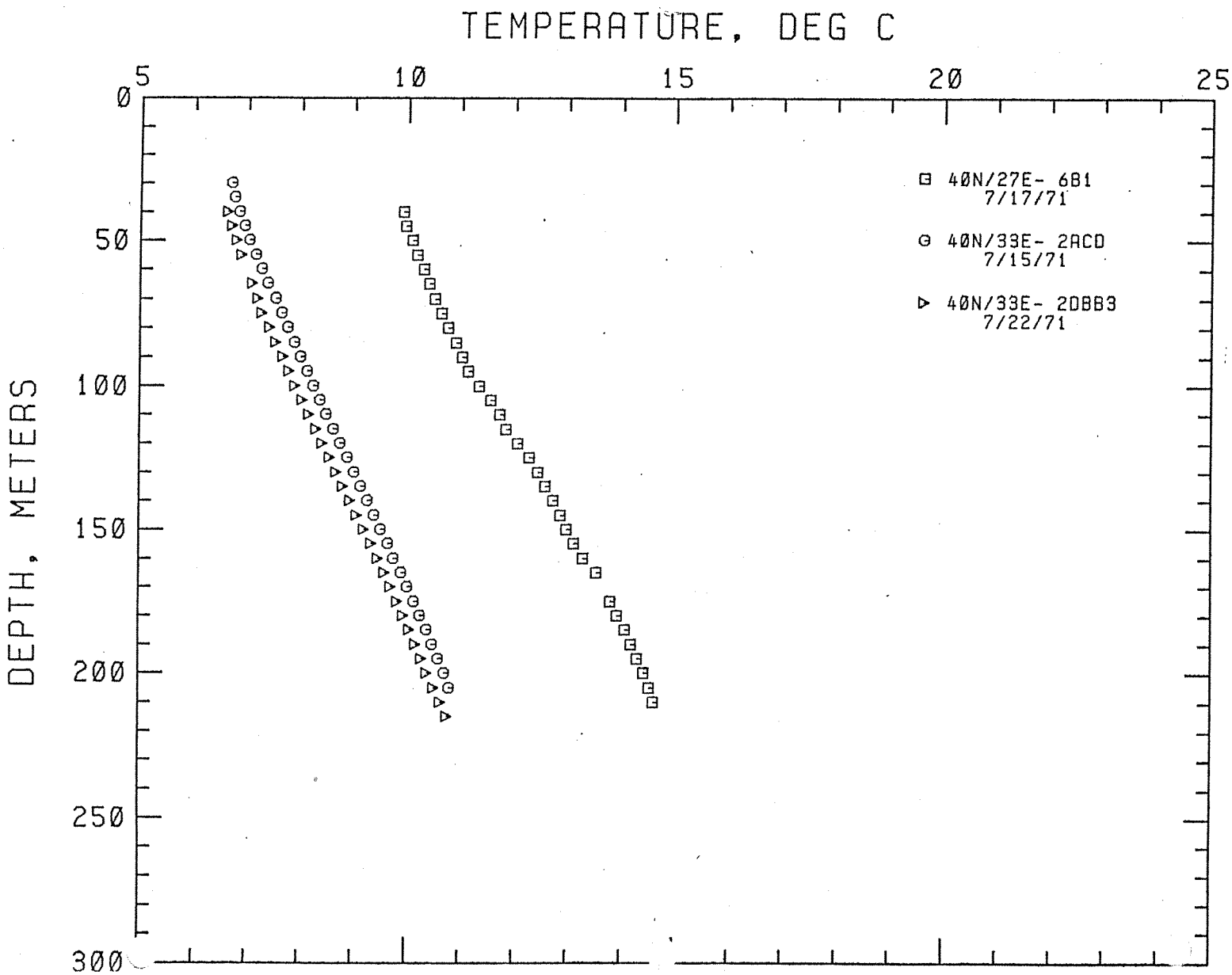


WASHINGTON PRE-79 LOCATION MAP

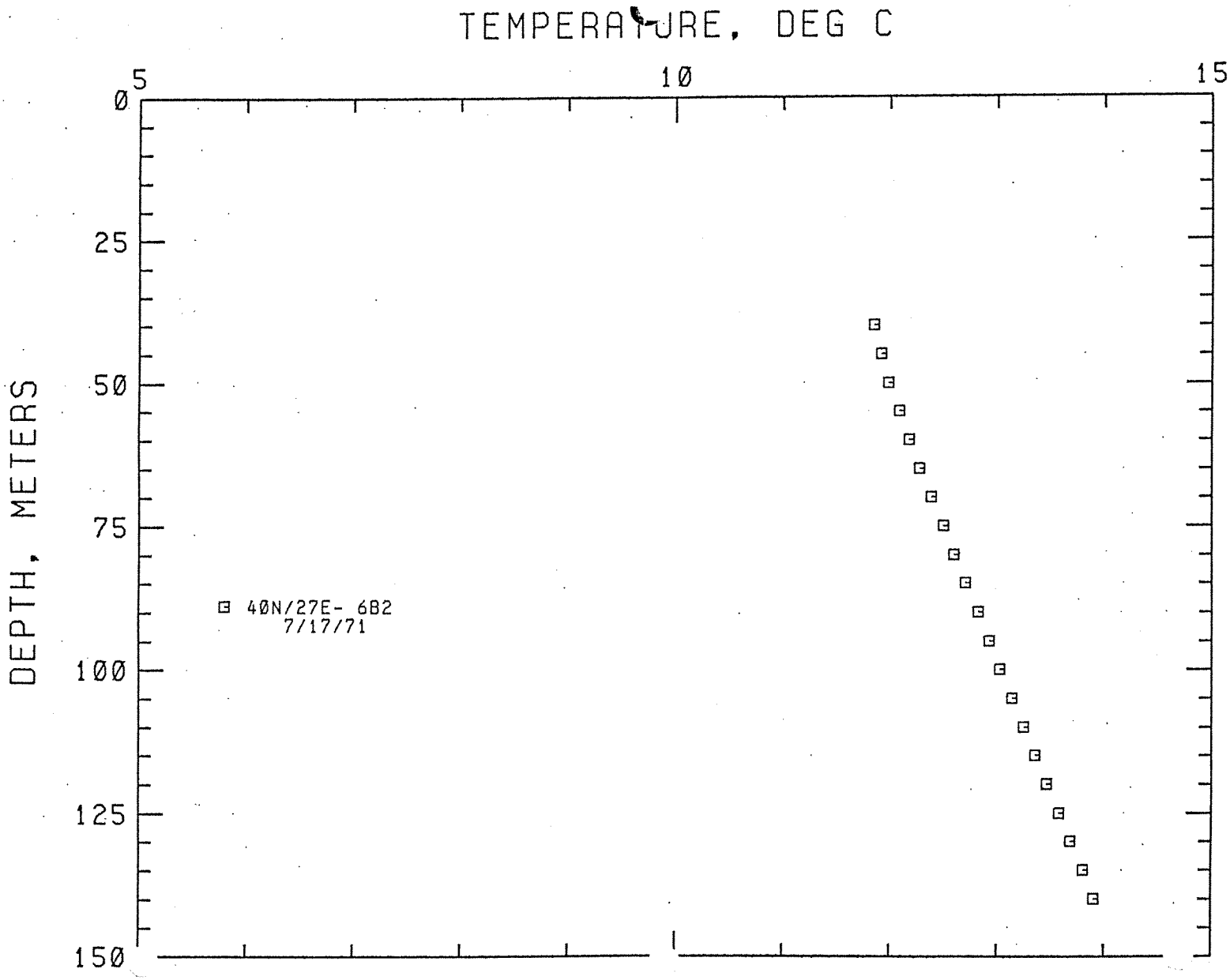
LOCATION: OKANOGAN AMS, WASH
40N/27E- 6B1
HOLE NAME: DDH-A
DATE MEASURED: 7/17/71

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	9.930	49.87	0.0	0.0
45.0	147.6	9.968	49.94	7.6	0.4
50.0	164.0	10.095	50.17	25.4	1.4
55.0	180.4	10.191	50.34	19.2	1.1
60.0	196.8	10.310	50.56	23.8	1.3
65.0	213.2	10.420	50.76	22.0	1.2
70.0	229.6	10.519	50.93	19.8	1.1
75.0	246.0	10.650	51.17	26.2	1.4
80.0	262.4	10.774	51.39	24.8	1.4
85.0	278.8	10.919	51.65	29.0	1.6
90.0	295.2	11.035	51.86	23.2	1.3
95.0	311.6	11.152	52.07	23.4	1.3
100.0	328.0	11.354	52.44	40.4	2.2
105.0	344.4	11.573	52.83	43.8	2.4
110.0	360.8	11.738	53.13	33.0	1.8
115.0	377.2	11.855	53.34	23.4	1.3
120.0	393.6	12.071	53.73	43.2	2.4
125.0	410.0	12.290	54.12	43.8	2.4
130.0	426.4	12.449	54.41	31.8	1.7
135.0	442.8	12.587	54.66	27.6	1.5
140.0	459.2	12.733	54.92	29.2	1.6
145.0	475.6	12.876	55.18	28.6	1.6
150.0	492.0	12.993	55.39	23.4	1.3
155.0	508.4	13.123	55.62	26.0	1.4
160.0	524.8	13.297	55.93	34.8	1.9
165.0	541.2	13.544	56.38	49.4	2.7
175.0	574.0	13.812	56.86	26.8	1.5
180.0	590.4	13.939	57.09	25.4	1.4
185.0	606.8	14.080	57.34	28.2	1.5
190.0	623.2	14.204	57.57	24.8	1.4
195.0	639.6	14.319	57.77	23.0	1.3
200.0	656.0	14.440	57.99	24.2	1.3
205.0	672.4	14.540	58.17	20.0	1.1
210.0	688.8	14.624	58.32	16.8	0.9


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
40N/27E- 6B1
7/17/71
40N/33E- 2ACD
7/15/71
40N/33E- 2DBB3
7/22/71

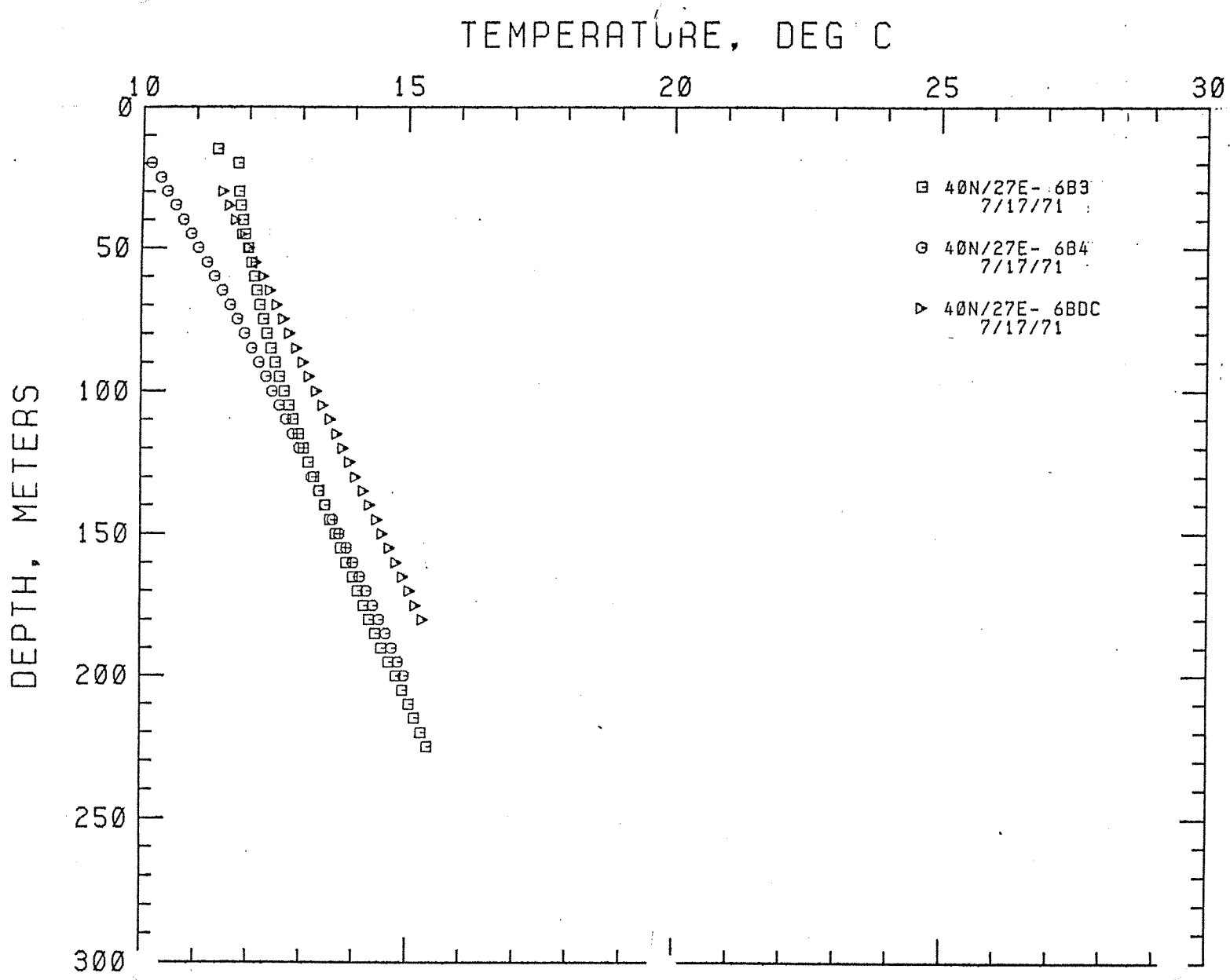
LOCATION: OKANOGAN AMS, WASH
40N/27E- 6B2
HOLE NAME: DDH-C
DATE MEASURED: 7/17/71

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	11.850	53.33	0.0	0.0
45.0	147.6	11.920	53.46	14.0	0.8
50.0	164.0	11.990	53.58	14.0	0.8
55.0	180.4	12.090	53.76	20.0	1.1
60.0	196.8	12.180	53.92	18.0	1.0
65.0	213.2	12.280	54.10	20.0	1.1
70.0	229.6	12.390	54.30	22.0	1.2
75.0	246.0	12.500	54.50	22.0	1.2
80.0	262.4	12.600	54.68	20.0	1.1
85.0	278.8	12.710	54.88	22.0	1.2
90.0	295.2	12.830	55.09	24.0	1.3
95.0	311.6	12.930	55.27	20.0	1.1
100.0	328.0	13.030	55.45	20.0	1.1
105.0	344.4	13.140	55.65	22.0	1.2
110.0	360.8	13.250	55.85	22.0	1.2
115.0	377.2	13.360	56.05	22.0	1.2
120.0	393.6	13.470	56.25	22.0	1.2
125.0	410.0	13.580	56.44	22.0	1.2
130.0	426.4	13.690	56.64	22.0	1.2
135.0	442.8	13.810	56.86	24.0	1.3
140.0	459.2	13.910	57.04	20.0	1.1


TEMPERATURE, DEG C
5
10
15
0
25
50
75
100
125
150
DEPTH, METERS
40N/27E- 6B2
7/17/71

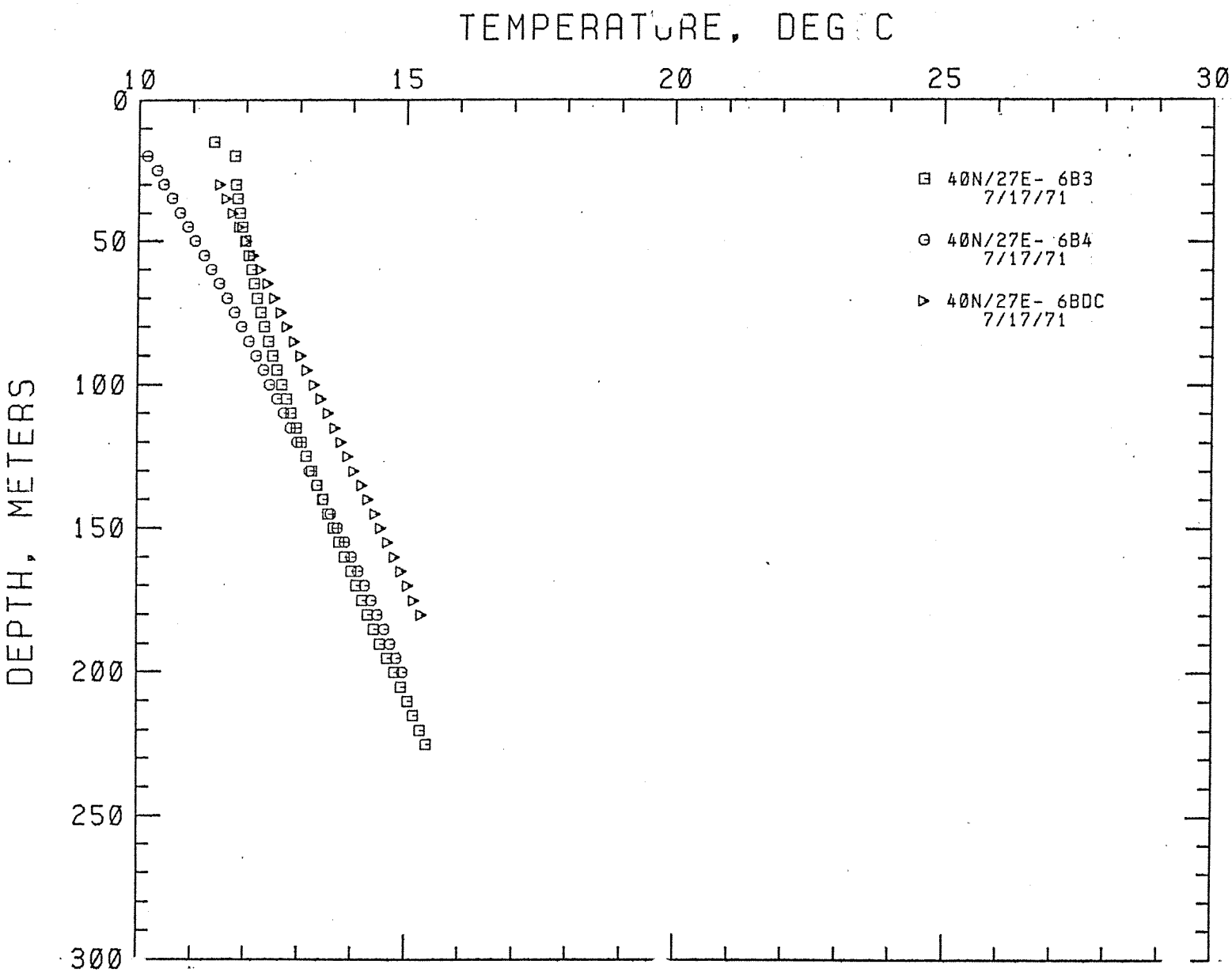
LOCATION: OKANOGAN AMS, WASH
40N/27E- 6B3
HOLE NAME: DDH-E
DATE MEASURED: 7/17/71

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
15.0	49.2	11.411	52.54	0.0	0.0
20.0	65.6	11.789	53.22	75.6	4.1
30.0	98.4	11.822	53.28	3.3	0.2
35.0	114.8	11.850	53.33	5.6	0.3
40.0	131.2	11.894	53.41	8.8	0.5
45.0	147.6	11.947	53.50	10.6	0.6
50.0	164.0	12.005	53.61	11.6	0.6
55.0	180.4	12.067	53.72	12.4	0.7
60.0	196.8	12.120	53.82	10.6	0.6
65.0	213.2	12.174	53.91	10.8	0.6
70.0	229.6	12.224	54.00	10.0	0.5
75.0	246.0	12.292	54.13	13.6	0.7
80.0	262.4	12.362	54.25	14.0	0.8
85.0	278.8	12.442	54.40	16.0	0.9
90.0	295.2	12.522	54.54	16.0	0.9
95.0	311.6	12.611	54.70	17.8	1.0
100.0	328.0	12.701	54.86	18.0	1.0
105.0	344.4	12.787	55.02	17.2	0.9
110.0	360.8	12.874	55.17	17.4	1.0
115.0	377.2	12.971	55.35	19.4	1.1
120.0	393.6	13.065	55.52	18.8	1.0
125.0	410.0	13.154	55.68	17.8	1.0
130.0	426.4	13.254	55.86	20.0	1.1
135.0	442.8	13.356	56.04	20.4	1.1
140.0	459.2	13.458	56.22	20.4	1.1
145.0	475.6	13.563	56.41	21.0	1.2
150.0	492.0	13.674	56.61	22.2	1.2
155.0	508.4	13.776	56.80	20.4	1.1
160.0	524.8	13.877	56.98	20.2	1.1
165.0	541.2	13.996	57.19	23.8	1.3
170.0	557.6	14.097	57.37	20.2	1.1
175.0	574.0	14.200	57.56	20.6	1.1
180.0	590.4	14.308	57.75	21.6	1.2
185.0	606.8	14.422	57.96	22.8	1.3
190.0	623.2	14.535	58.16	22.6	1.2
195.0	639.6	14.671	58.41	27.2	1.5
200.0	656.0	14.810	58.66	27.8	1.5
205.0	672.4	14.941	58.89	26.2	1.4
210.0	688.8	15.063	59.11	24.4	1.3
215.0	705.2	15.171	59.31	21.6	1.2
220.0	721.6	15.291	59.52	24.0	1.3
225.0	738.0	15.408	59.73	23.4	1.3


TEMPERATURE, DEG C
10
15
20
25
30
0
50
100
150
200
250
300
DEPTH, METERS
40N/27E- 6B3
7/17/71
40N/27E- 6B4
7/17/71
40N/27E- 6BDC
7/17/71

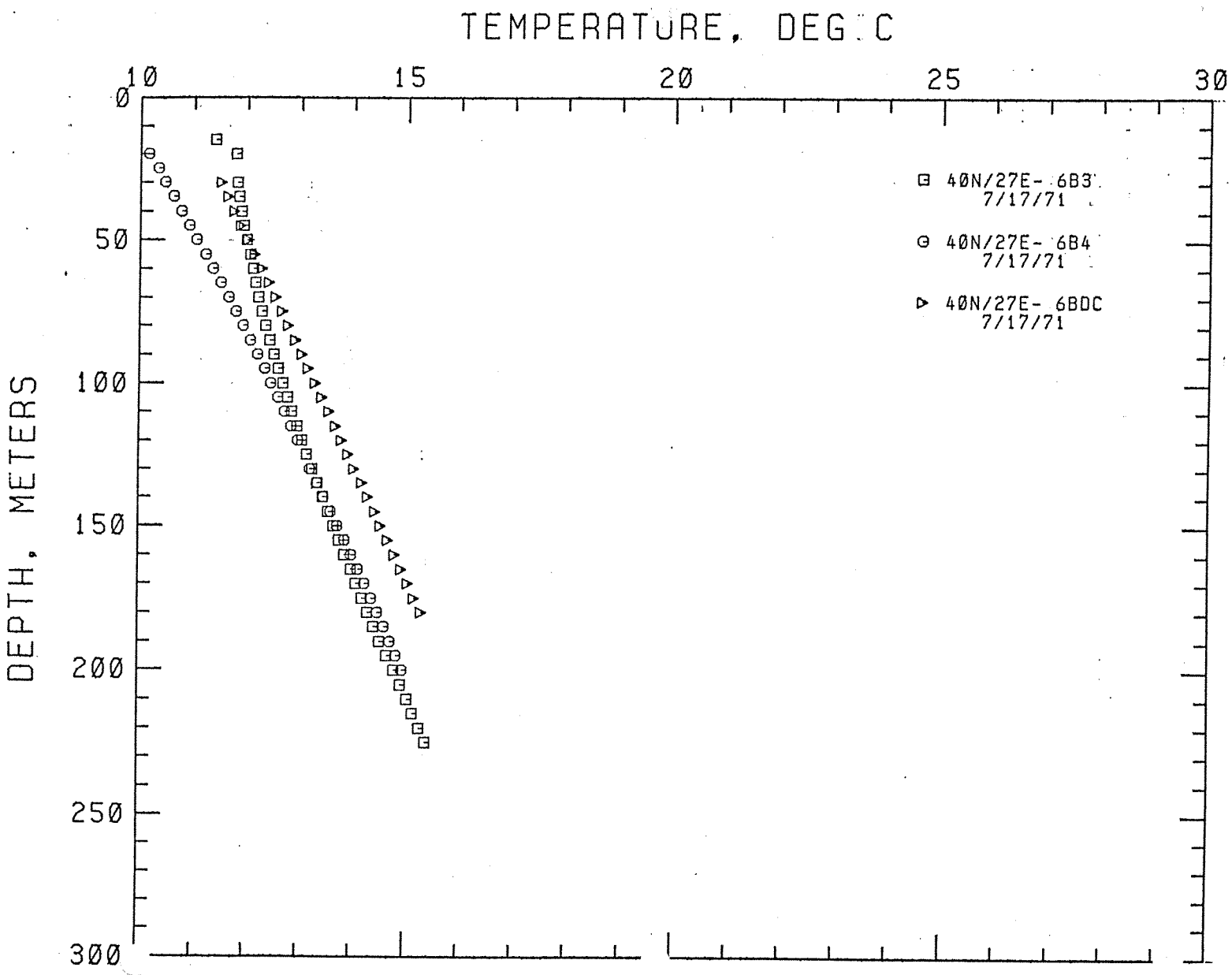
LOCATION: OKANOGAN AMS, WASH
40N/27E- 6B4
HOLE NAME: DDH-F
DATE MEASURED: 7/17/71

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	10.163	50.29	0.0	0.0
25.0	82.0	10.342	50.62	35.8	2.0
30.0	98.4	10.472	50.85	26.0	1.4
35.0	114.8	10.624	51.12	30.4	1.7
40.0	131.2	10.778	51.40	30.8	1.7
45.0	147.6	10.926	51.67	29.6	1.6
50.0	164.0	11.059	51.91	26.6	1.5
55.0	180.4	11.236	52.22	35.4	1.9
60.0	196.8	11.377	52.48	28.2	1.5
65.0	213.2	11.525	52.74	29.6	1.6
70.0	229.6	11.672	53.01	29.4	1.6
75.0	246.0	11.806	53.25	26.8	1.5
80.0	262.4	11.947	53.50	28.2	1.5
85.0	278.8	12.081	53.75	26.8	1.5
90.0	295.2	12.217	53.99	27.2	1.5
95.0	311.6	12.354	54.24	27.4	1.5
100.0	328.0	12.474	54.45	24.0	1.3
105.0	344.4	12.605	54.69	26.2	1.4
110.0	360.8	12.736	54.92	26.2	1.4
115.0	377.2	12.860	55.15	24.8	1.4
120.0	393.6	12.983	55.37	24.6	1.4
130.0	426.4	13.212	55.78	22.9	1.3
135.0	442.8	13.348	56.03	27.2	1.5
140.0	459.2	13.478	56.26	26.0	1.4
145.0	475.6	13.607	56.49	25.8	1.4
150.0	492.0	13.738	56.73	26.2	1.4
155.0	508.4	13.870	56.97	26.4	1.4
160.0	524.8	14.001	57.20	26.2	1.4
165.0	541.2	14.122	57.42	24.2	1.3
170.0	557.6	14.251	57.65	25.8	1.4
175.0	574.0	14.373	57.87	24.4	1.3
180.0	590.4	14.488	58.08	23.0	1.3
185.0	606.8	14.613	58.30	25.0	1.4
190.0	623.2	14.736	58.52	24.6	1.3
195.0	639.6	14.851	58.73	23.0	1.3
200.0	656.0	14.964	58.94	22.6	1.2


TEMPERATURE, DEG C
10
15
20
25
30
0
50
100
150
200
250
300
DEPTH, METERS
40N/27E- 6B3
7/17/71
40N/27E- 6B4
7/17/71
40N/27E- 6BDC
7/17/71

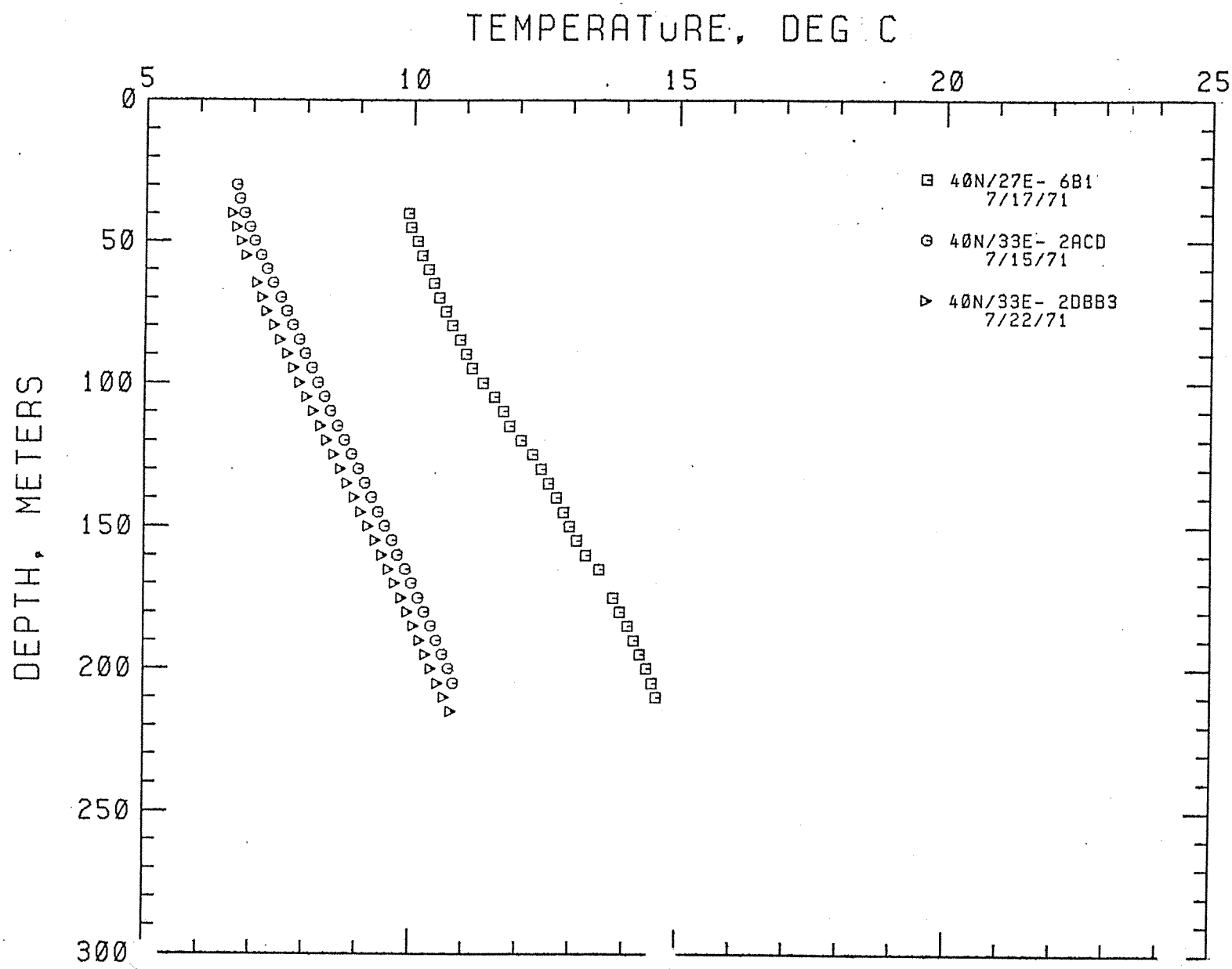
LOCATION: OKANOGAN AMS, WASH
40N/27E- 6BDC
HOLE NAME: DDH-K-5
DATE MEASURED: 7/17/71

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	11.520	52.74	0.0	0.0
35.0	114.8	11.640	52.95	24.0	1.3
40.0	131.2	11.760	53.17	24.0	1.3
45.0	147.6	11.890	53.40	26.0	1.4
50.0	164.0	12.020	53.64	26.0	1.4
55.0	180.4	12.150	53.87	26.0	1.4
60.0	196.8	12.280	54.10	26.0	1.4
65.0	213.2	12.420	54.36	28.0	1.5
70.0	229.6	12.550	54.59	26.0	1.4
75.0	246.0	12.670	54.81	24.0	1.3
80.0	262.4	12.790	55.02	24.0	1.3
85.0	278.8	12.930	55.27	28.0	1.5
90.0	295.2	13.050	55.49	24.0	1.3
95.0	311.6	13.170	55.71	24.0	1.3
100.0	328.0	13.300	55.94	26.0	1.4
105.0	344.4	13.430	56.17	26.0	1.4
110.0	360.8	13.560	56.41	26.0	1.4
115.0	377.2	13.690	56.64	26.0	1.4
120.0	393.6	13.810	56.86	24.0	1.3
125.0	410.0	13.930	57.07	24.0	1.3
130.0	426.4	14.050	57.29	24.0	1.3
135.0	442.8	14.190	57.54	28.0	1.5
140.0	459.2	14.310	57.76	24.0	1.3
145.0	475.6	14.440	57.99	26.0	1.4
150.0	492.0	14.550	58.19	22.0	1.2
155.0	508.4	14.690	58.44	28.0	1.5
160.0	524.8	14.810	58.66	24.0	1.3
165.0	541.2	14.940	58.89	26.0	1.4
170.0	557.6	15.060	59.11	24.0	1.3
175.0	574.0	15.180	59.32	24.0	1.3
180.0	590.4	15.310	59.56	26.0	1.4


TEMPERATURE, DEG C
10
15
20
25
30
0
50
100
150
200
250
300
DEPTH, METERS
40N/27E- 6B3
7/17/71
40N/27E- 6B4
7/17/71
40N/27E- 6BDC
7/17/71

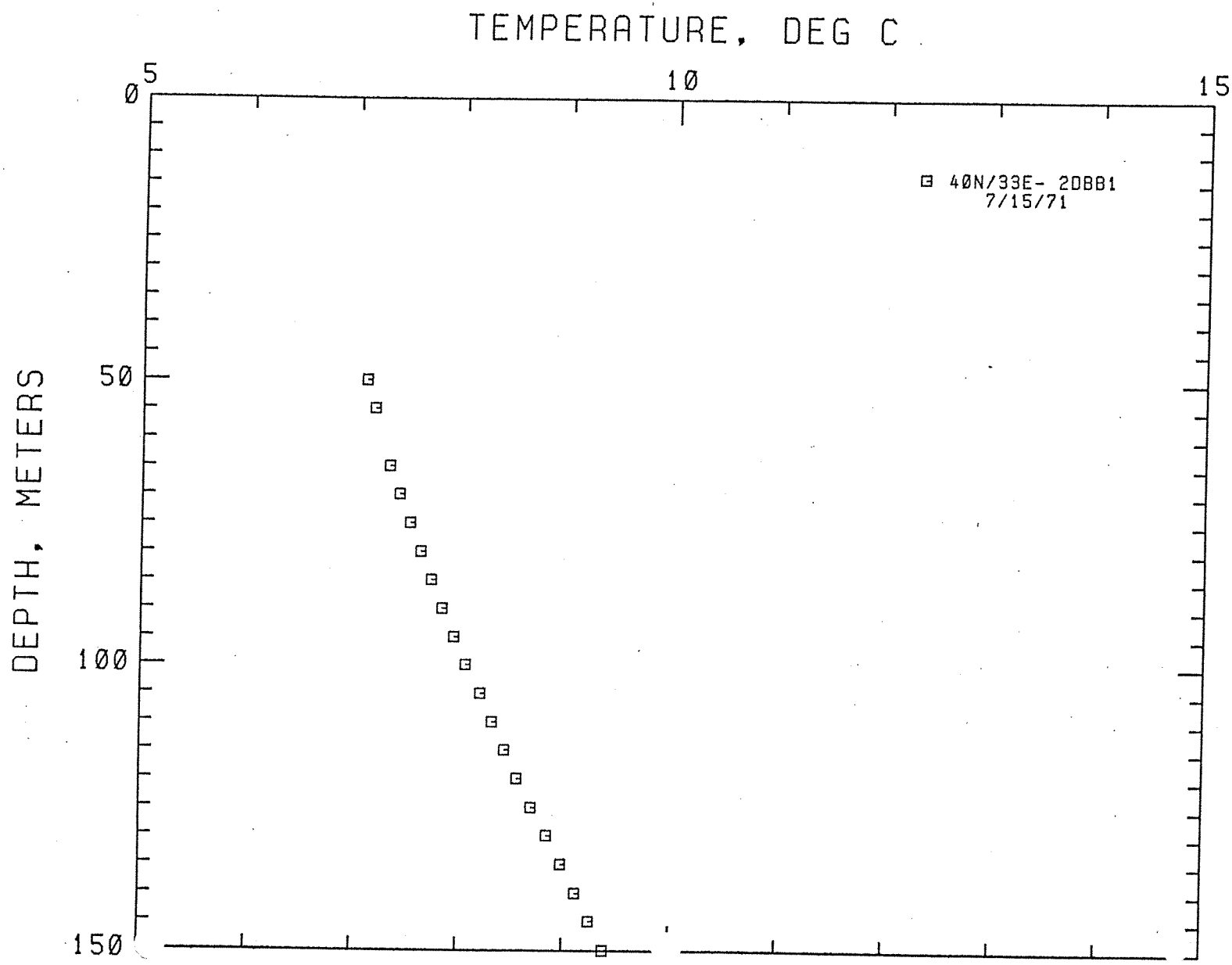
LOCATION: OKANOGAN AMS, WASH
40N/33E- 2ACD
HOLE NAME: DDH-702
DATE MEASURED: 7/15/71

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	6.700	44.06	0.0	0.0
35.0	114.8	6.760	44.17	12.0	0.7
40.0	131.2	6.850	44.33	18.0	1.0
45.0	147.6	6.950	44.51	20.0	1.1
50.0	164.0	7.050	44.69	20.0	1.1
55.0	180.4	7.170	44.91	24.0	1.3
60.0	196.8	7.290	45.12	24.0	1.3
65.0	213.2	7.400	45.32	22.0	1.2
70.0	229.6	7.550	45.59	30.0	1.6
75.0	246.0	7.660	45.79	22.0	1.2
80.0	262.4	7.780	46.00	24.0	1.3
85.0	278.8	7.900	46.22	24.0	1.3
90.0	295.2	8.020	46.44	24.0	1.3
95.0	311.6	8.140	46.65	24.0	1.3
100.0	328.0	8.260	46.87	24.0	1.3
105.0	344.4	8.380	47.08	24.0	1.3
110.0	360.8	8.500	47.30	24.0	1.3
115.0	377.2	8.630	47.53	26.0	1.4
120.0	393.6	8.760	47.77	26.0	1.4
125.0	410.0	8.900	48.02	28.0	1.5
130.0	426.4	9.020	48.24	24.0	1.3
135.0	442.8	9.150	48.47	26.0	1.4
140.0	459.2	9.270	48.69	24.0	1.3
145.0	475.6	9.400	48.92	26.0	1.4
150.0	492.0	9.530	49.15	26.0	1.4
155.0	508.4	9.660	49.39	26.0	1.4
160.0	524.8	9.770	49.59	22.0	1.2
165.0	541.2	9.910	49.84	28.0	1.5
170.0	557.6	10.030	50.05	24.0	1.3
175.0	574.0	10.150	50.27	24.0	1.3
180.0	590.4	10.270	50.49	24.0	1.3
185.0	606.8	10.390	50.70	24.0	1.3
190.0	623.2	10.500	50.90	22.0	1.2
195.0	639.6	10.610	51.10	22.0	1.2
200.0	656.0	10.720	51.30	22.0	1.2
205.0	672.4	10.820	51.48	20.0	1.1


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
40N/27E- 6B1
7/17/71
40N/33E- 2ACD
7/15/71
40N/33E- 2DBB3
7/22/71

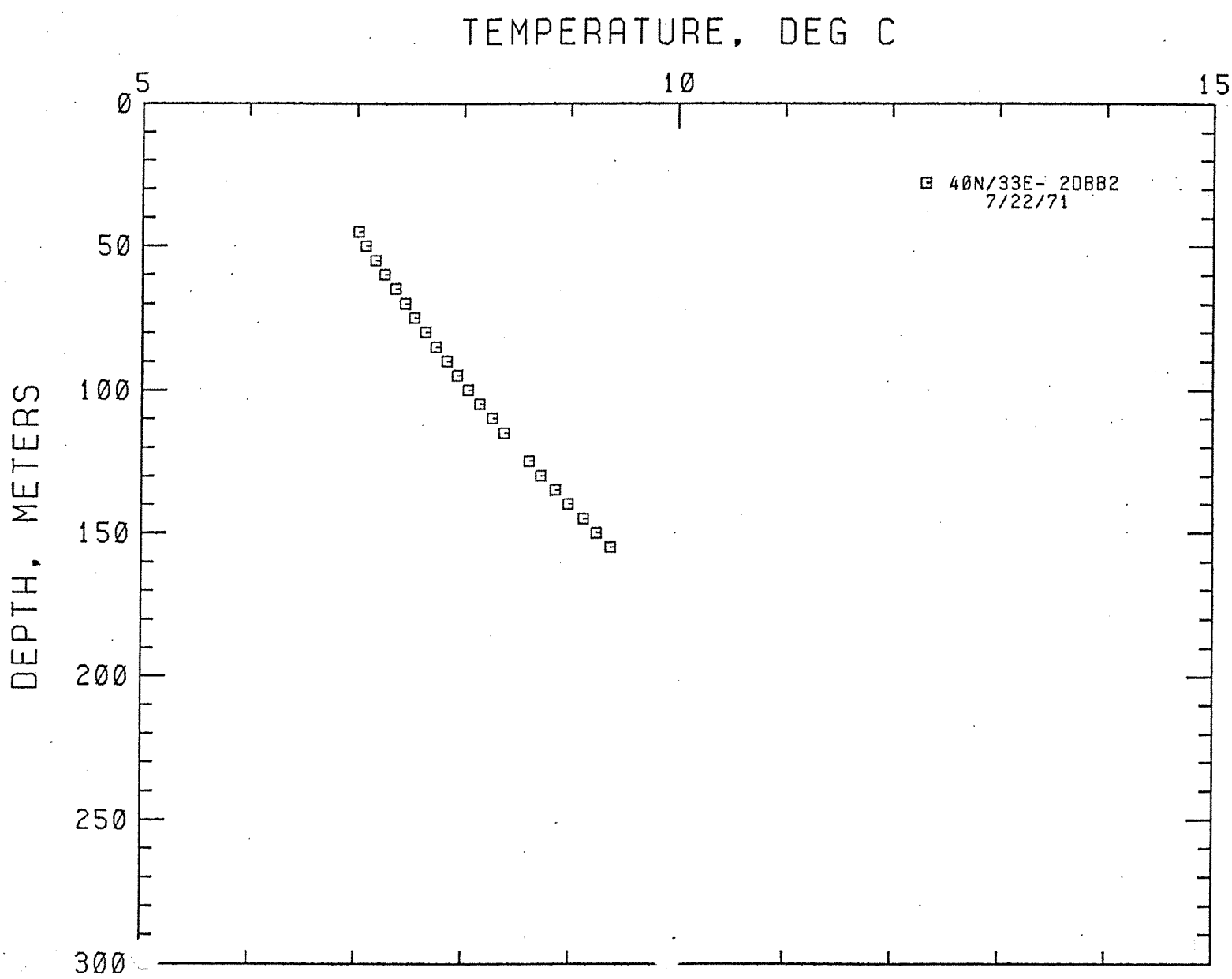
LOCATION: OKANOGAN AMS, WASH
40N/33E- 2DBB1
HOLE NAME: DDH-7012
DATE MEASURED: 7/15/71

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
50.0	164.0	7.101	44.78	0.0	0.0
55.0	180.4	7.180	44.92	15.8	0.9
65.0	213.2	7.327	45.19	14.7	0.8
70.0	229.6	7.423	45.36	19.2	1.1
75.0	246.0	7.524	45.54	20.2	1.1
80.0	262.4	7.627	45.73	20.6	1.1
85.0	278.8	7.730	45.91	20.6	1.1
90.0	295.2	7.837	46.11	21.4	1.2
95.0	311.6	7.946	46.30	21.8	1.2
100.0	328.0	8.065	46.52	23.8	1.3
105.0	344.4	8.206	46.77	28.2	1.5
110.0	360.8	8.319	46.97	22.6	1.2
115.0	377.2	8.439	47.19	24.0	1.3
120.0	393.6	8.559	47.41	24.0	1.3
125.0	410.0	8.697	47.65	27.6	1.5
130.0	426.4	8.843	47.92	29.2	1.6
135.0	442.8	8.984	48.17	28.2	1.5
140.0	459.2	9.120	48.42	27.2	1.5
145.0	475.6	9.251	48.65	26.2	1.4
150.0	492.0	9.389	48.90	27.6	1.5


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
40N/33E- 20BB1
7/15/71

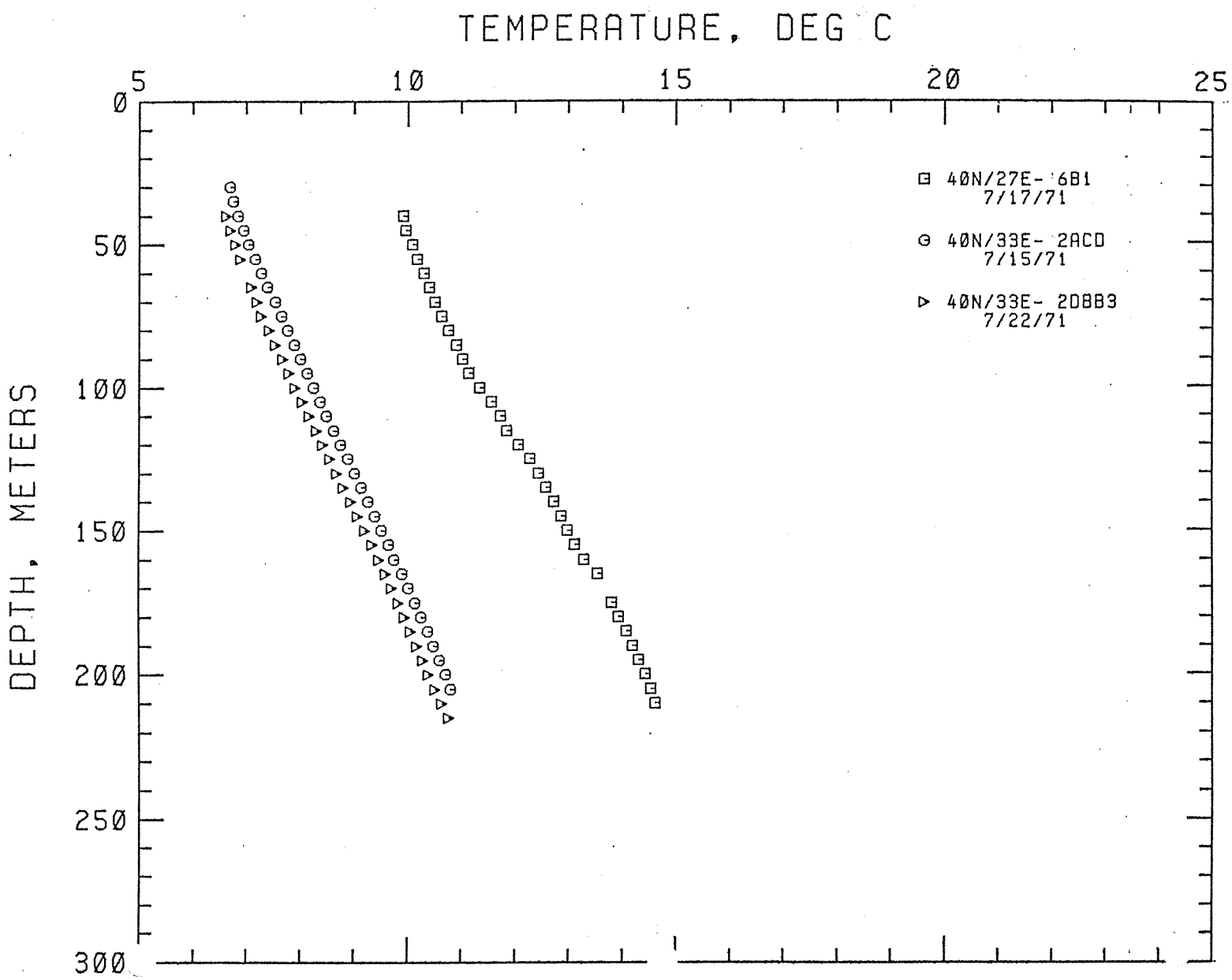
LOCATION: OKANOGAN AMS, WASH
40N/33E- 2DBB2
HOLE NAME: DDH-7013
DATE MEASURED: 7/22/71

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
45.0	147.6	7.020	44.64	0.0	0.0
50.0	164.0	7.090	44.76	14.0	0.8
55.0	180.4	7.180	44.92	18.0	1.0
60.0	196.8	7.270	45.09	18.0	1.0
65.0	213.2	7.370	45.27	20.0	1.1
70.0	229.6	7.460	45.43	18.0	1.0
75.0	246.0	7.550	45.59	18.0	1.0
80.0	262.4	7.650	45.77	20.0	1.1
85.0	278.8	7.750	45.95	20.0	1.1
90.0	295.2	7.850	46.13	20.0	1.1
95.0	311.6	7.950	46.31	20.0	1.1
100.0	328.0	8.050	46.49	20.0	1.1
105.0	344.4	8.160	46.69	22.0	1.2
110.0	360.8	8.280	46.90	24.0	1.3
115.0	377.2	8.390	47.10	22.0	1.2
125.0	410.0	8.620	47.52	23.0	1.3
130.0	426.4	8.730	47.71	22.0	1.2
135.0	442.8	8.870	47.97	28.0	1.5
140.0	459.2	8.990	48.18	24.0	1.3
145.0	475.6	9.130	48.43	28.0	1.5
150.0	492.0	9.250	48.65	24.0	1.3
155.0	508.4	9.380	48.88	26.0	1.4


TEMPERATURE, DEG C
5
10
15
0
50
100
150
200
250
300
DEPTH, METERS
40N/33E- 20BB2
7/22/71

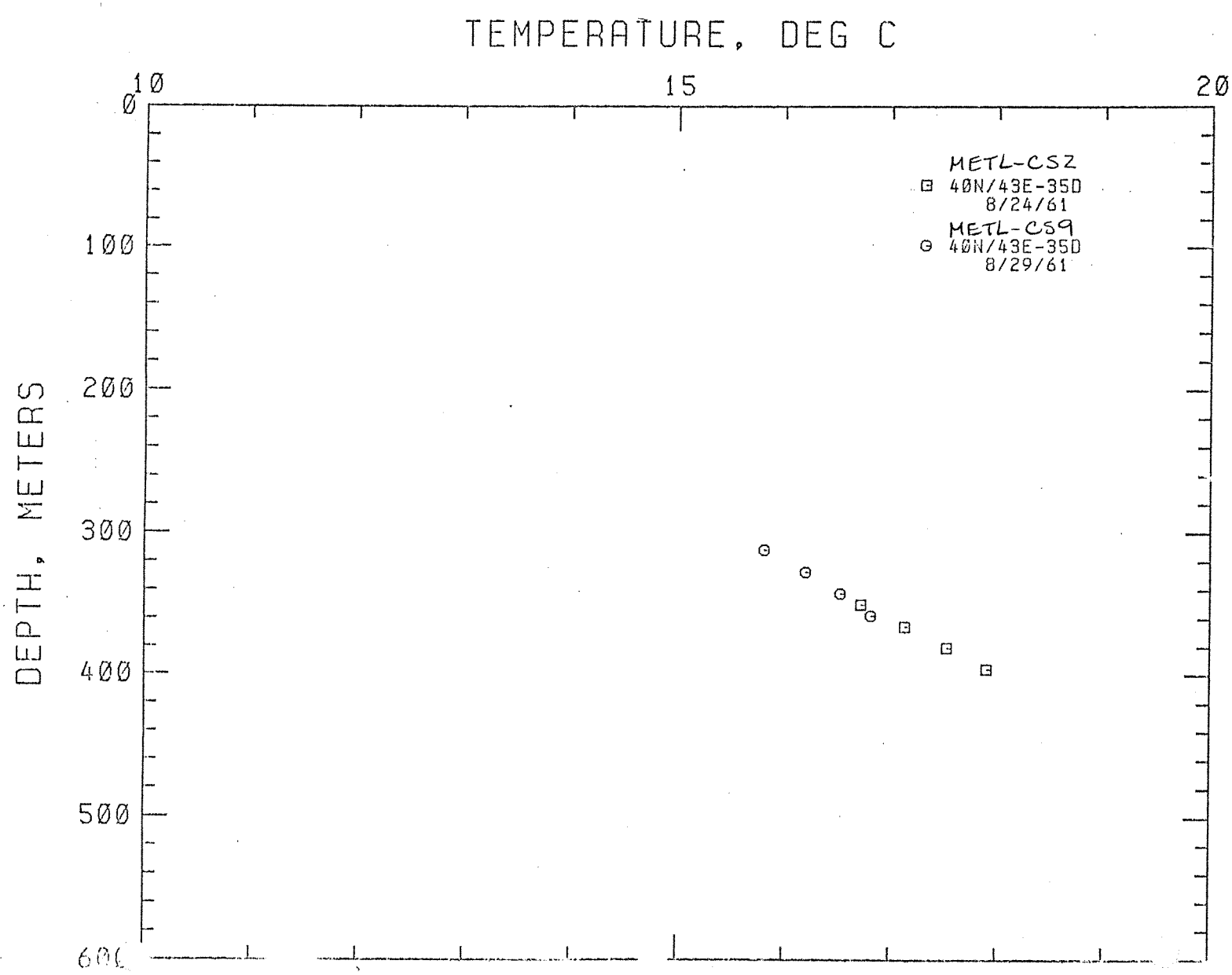
LOCATION: OKANOGAN AMS, WASH
40N/33E- 2DBB3
HOLE NAME: DDH-7011
DATE MEASURED: 7/22/71

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	6.630	43.93	0.0	0.0
45.0	147.6	6.710	44.08	16.0	0.9
50.0	164.0	6.800	44.24	18.0	1.0
55.0	180.4	6.900	44.42	20.0	1.1
65.0	213.2	7.100	44.78	20.0	1.1
70.0	229.6	7.200	44.96	20.0	1.1
75.0	246.0	7.290	45.12	18.0	1.0
80.0	262.4	7.430	45.37	28.0	1.5
85.0	278.8	7.550	45.59	24.0	1.3
90.0	295.2	7.680	45.82	26.0	1.4
95.0	311.6	7.800	46.04	24.0	1.3
100.0	328.0	7.919	46.25	23.8	1.3
105.0	344.4	8.050	46.49	26.2	1.4
110.0	360.8	8.177	46.72	25.4	1.4
115.0	377.2	8.311	46.96	26.8	1.5
120.0	393.6	8.434	47.18	24.6	1.3
125.0	410.0	8.563	47.41	25.8	1.4
130.0	426.4	8.692	47.65	25.8	1.4
135.0	442.8	8.822	47.88	26.0	1.4
140.0	459.2	8.950	48.11	25.6	1.4
145.0	475.6	9.076	48.34	25.2	1.4
150.0	492.0	9.218	48.59	28.4	1.6
155.0	508.4	9.352	48.83	26.8	1.5
160.0	524.8	9.484	49.07	26.4	1.4
165.0	541.2	9.602	49.28	23.6	1.3
170.0	557.6	9.724	49.50	24.4	1.3
175.0	574.0	9.847	49.72	24.6	1.4
180.0	590.4	9.956	49.92	21.8	1.2
185.0	606.8	10.076	50.14	24.0	1.3
190.0	623.2	10.187	50.34	22.2	1.2
195.0	639.6	10.306	50.55	23.8	1.3
200.0	656.0	10.411	50.74	21.0	1.2
205.0	672.4	10.526	50.95	23.0	1.3
210.0	688.8	10.654	51.18	25.6	1.4
215.0	705.2	10.778	51.40	24.8	1.4


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
40N/27E- 6B1
7/17/71
40N/33E- 2ACD
7/15/71
40N/33E- 2DBB3
7/22/71

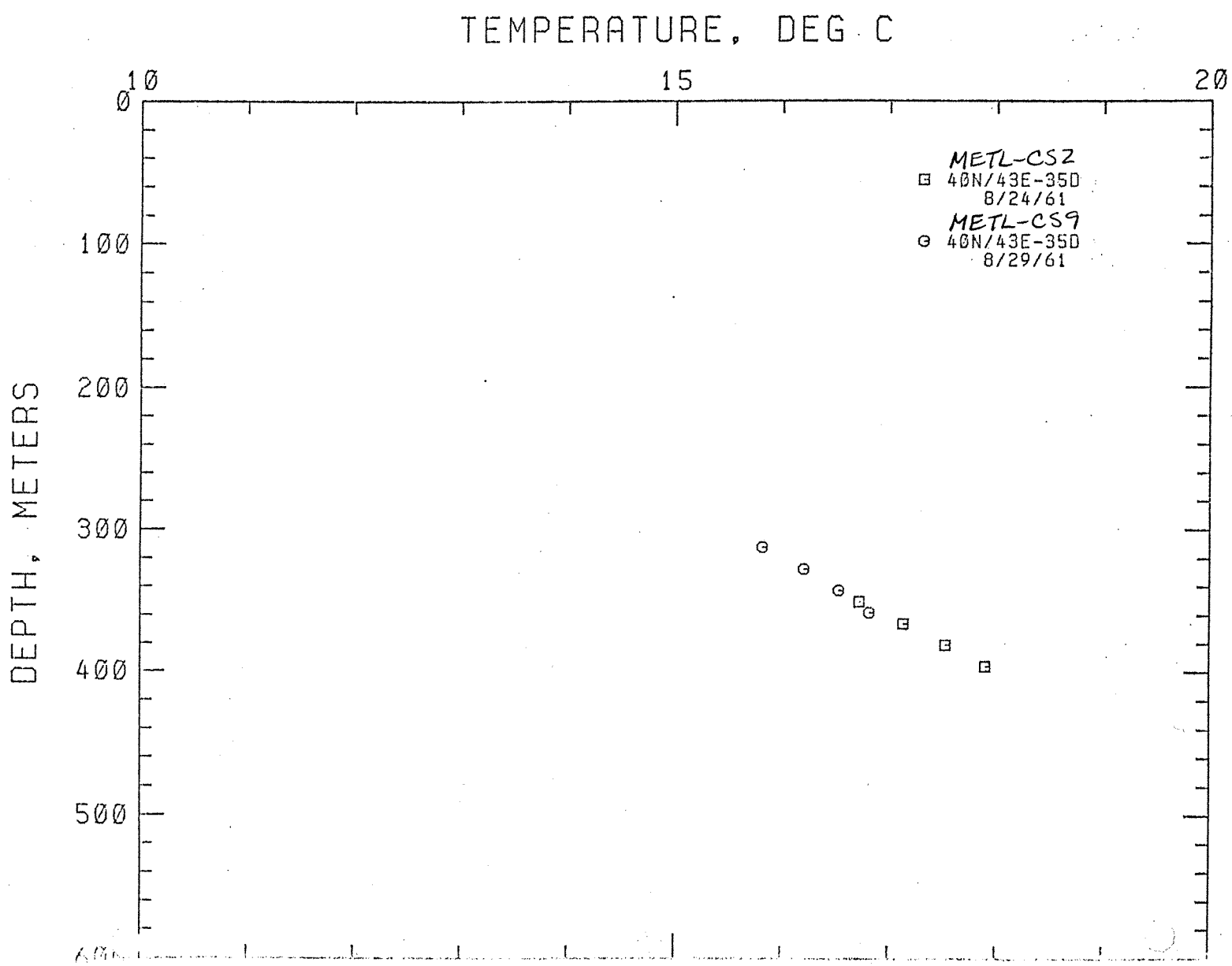
LOCATION: SANDPOINT AMS, WASH
40N/43E-35D
HOLE NAME: METL-CS2
DATE MEASURED: 8/24/61

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
350.5	1149.6	16.730	62.11	0.0	0.0
365.8	1199.8	17.140	62.85	26.8	1.5
381.0	1249.7	17.540	63.57	26.3	1.4
396.2	1299.5	17.910	64.24	24.3	1.3


TEMPERATURE, DEG C
10
15
20
0
100
200
300
400
500
600
DEPTH, METERS
METL-CS2
40N/43E-35D
8/24/61
METL-CS9
40N/43E-35D
8/29/61

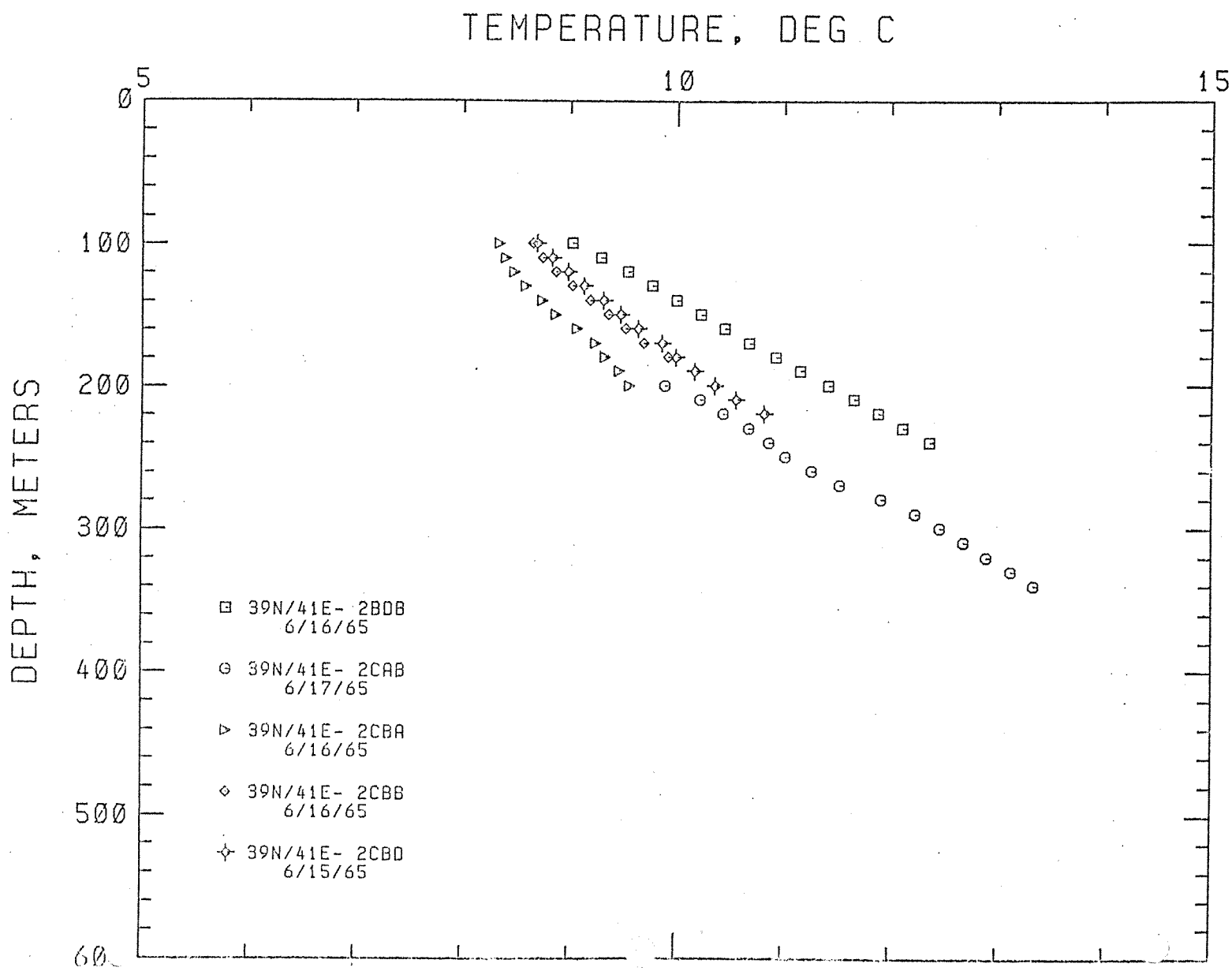
LOCATION: SANDPOINT AMS, WASH
40N/43E-35D
HOLE NAME: METL-CS9
DATE MEASURED: 8/29/61

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
312.4	1024.6	15.820	60.48	0.0	0.0
327.7	1074.8	16.210	61.18	25.5	1.4
342.9	1124.6	16.540	61.77	21.7	1.2
358.2	1174.8	16.820	62.28	18.3	1.0


TEMPERATURE, DEG C
10
15
20
0
100
200
300
400
500
DEPTH, METERS
METL-CS2
40N/43E-35D
8/24/61
METL-CS9
40N/43E-35D
8/29/61

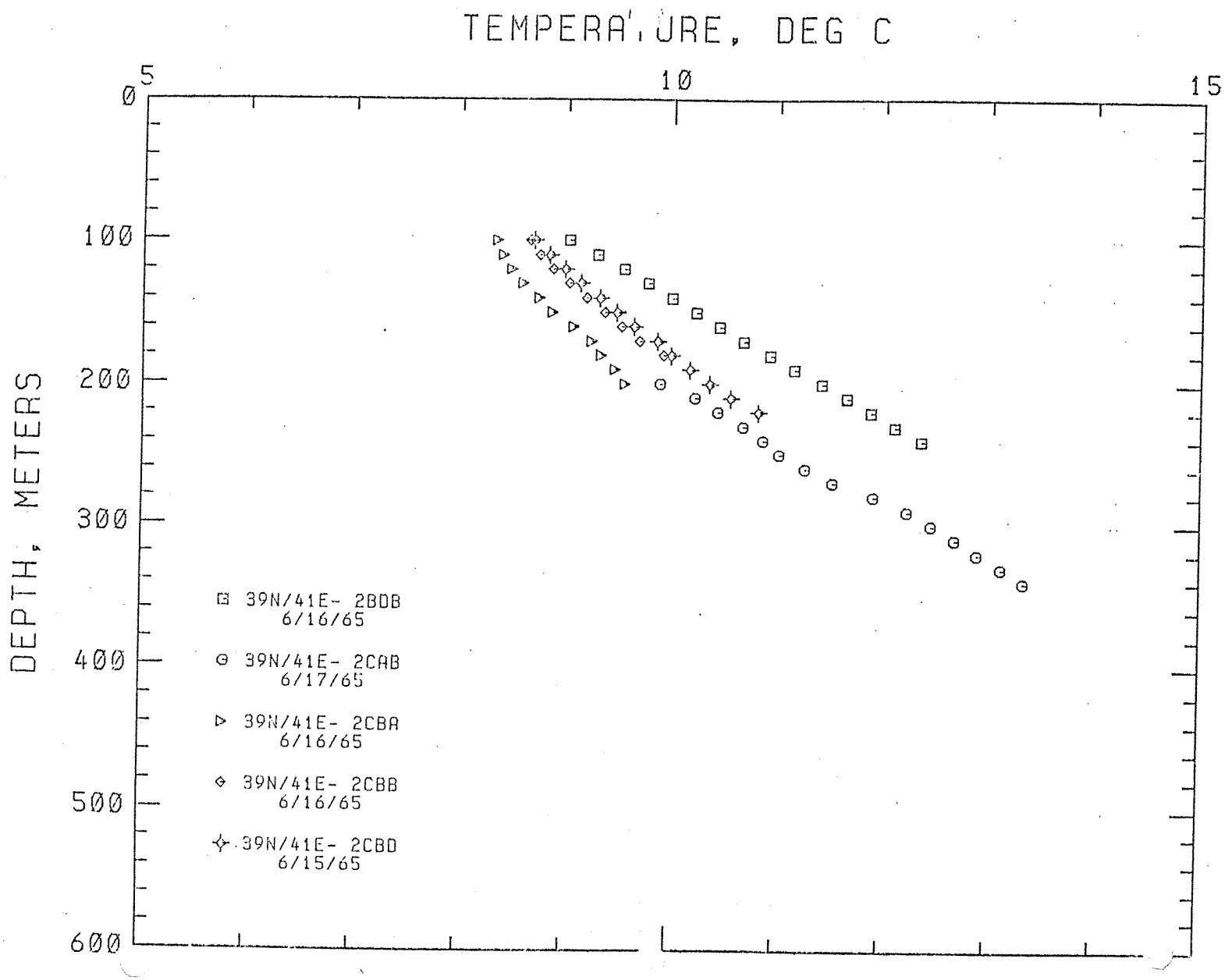
LOCATION: SANDPOINT AMS, WASH
39N/41E- 2BDB
HOLE NAME: DDH-3
DATE MEASURED: 6/16/65

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
100.0	328.0	9.020	48.24	0.0	0.0
110.0	360.8	9.290	48.72	27.0	1.5
120.0	393.6	9.540	49.17	25.0	1.4
130.0	426.4	9.770	49.59	23.0	1.3
140.0	459.2	10.000	50.00	23.0	1.3
150.0	492.0	10.230	50.41	23.0	1.3
160.0	524.8	10.450	50.81	22.0	1.2
170.0	557.6	10.680	51.22	23.0	1.3
180.0	590.4	10.930	51.67	25.0	1.4
190.0	623.2	11.160	52.09	23.0	1.3
200.0	656.0	11.420	52.56	26.0	1.4
210.0	688.8	11.660	52.99	24.0	1.3
220.0	721.6	11.890	53.40	23.0	1.3
230.0	754.4	12.120	53.82	23.0	1.3
240.0	787.2	12.370	54.27	25.0	1.4


TEMPERATURE, DEG C
5
10
15
0
100
200
300
400
500
600
DEPTH, METERS
39N/41E- 2BDB
6/16/65
39N/41E- 2CAB
6/17/65
39N/41E- 2CBA
6/16/65
39N/41E- 2CBB
6/16/65
39N/41E- 2CBD
6/15/65

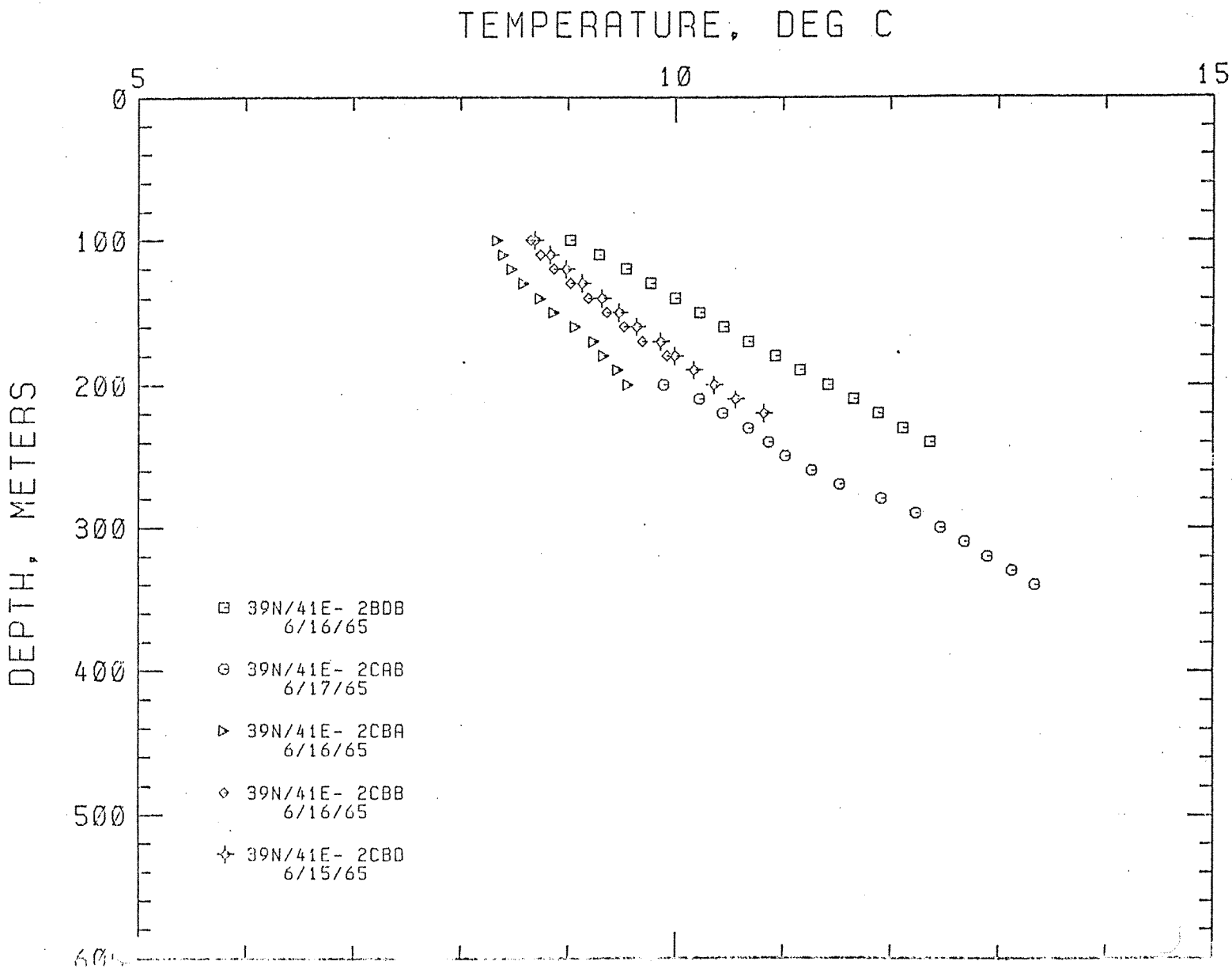
LOCATION: SANDPOINT AMS, WASH
39N/41E- 2CAB
HOLE NAME: DDH-2
DATE MEASURED: 6/17/65

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
200.0	656.0	9.890	49.80	0.0	0.0
210.0	688.8	10.220	50.40	33.0	1.8
220.0	721.6	10.440	50.79	22.0	1.2
230.0	754.4	10.680	51.22	24.0	1.3
240.0	787.2	10.870	51.57	19.0	1.0
250.0	820.0	11.020	51.84	15.0	0.8
260.0	852.8	11.270	52.29	25.0	1.4
270.0	885.6	11.530	52.75	26.0	1.4
280.0	918.4	11.920	53.46	39.0	2.1
290.0	951.2	12.240	54.03	32.0	1.8
300.0	984.0	12.470	54.45	23.0	1.3
310.0	1016.8	12.690	54.84	22.0	1.2
320.0	1049.6	12.900	55.22	21.0	1.2
330.0	1082.4	13.130	55.63	23.0	1.3
340.0	1115.2	13.340	56.01	21.0	1.2


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
100
200
300
400
500
600
39N/41E- 2BDB
6/16/65
39N/41E- 2CAB
6/17/65
39N/41E- 2CBA
6/16/65
39N/41E- 2CBB
6/16/65
39N/41E- 2CBD
6/15/65

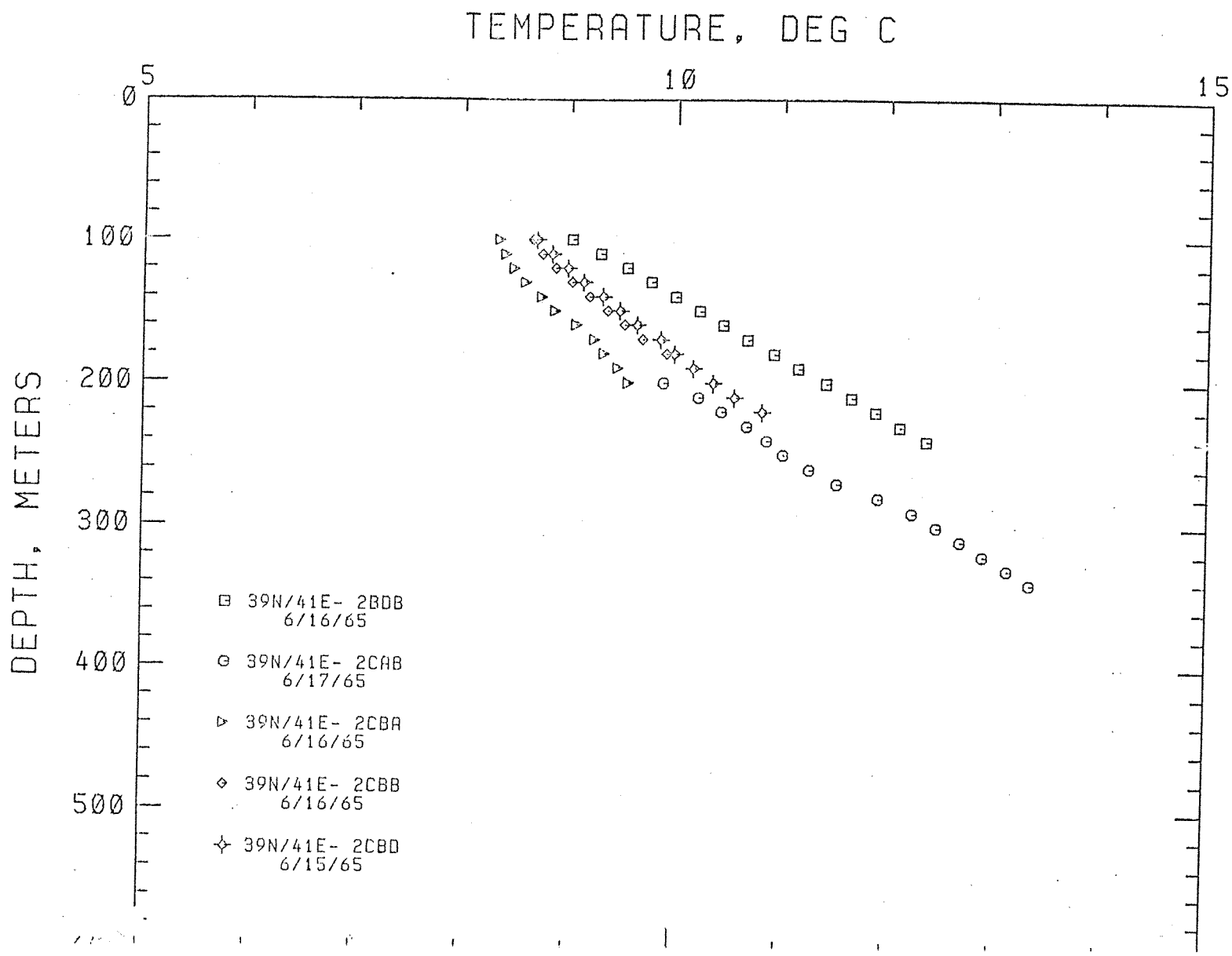
LOCATION: SANDPOINT AMS, WASH
39N/41E- 2CBA
HOLE NAME: DDH-4
DATE MEASURED: 6/16/65

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
100.0	328.0	8.340	47.01	0.0	0.0
110.0	360.8	8.400	47.12	6.0	0.3
120.0	393.6	8.480	47.26	8.0	0.4
130.0	426.4	8.590	47.46	11.0	0.6
140.0	459.2	8.740	47.73	15.0	0.8
150.0	492.0	8.870	47.97	13.0	0.7
160.0	524.8	9.070	48.33	20.0	1.1
170.0	557.6	9.240	48.63	17.0	0.9
180.0	590.4	9.330	48.79	9.0	0.5
190.0	623.2	9.460	49.03	13.0	0.7
200.0	656.0	9.560	49.21	10.0	0.5


TEMPERATURE, DEG C
5
10
15
0
100
200
300
400
500
600
DEPTH, METERS
39N/41E- 2BDB
6/16/65
39N/41E- 2CAB
6/17/65
39N/41E- 2CBA
6/16/65
39N/41E- 2CBB
6/16/65
39N/41E- 2CBD
6/15/65

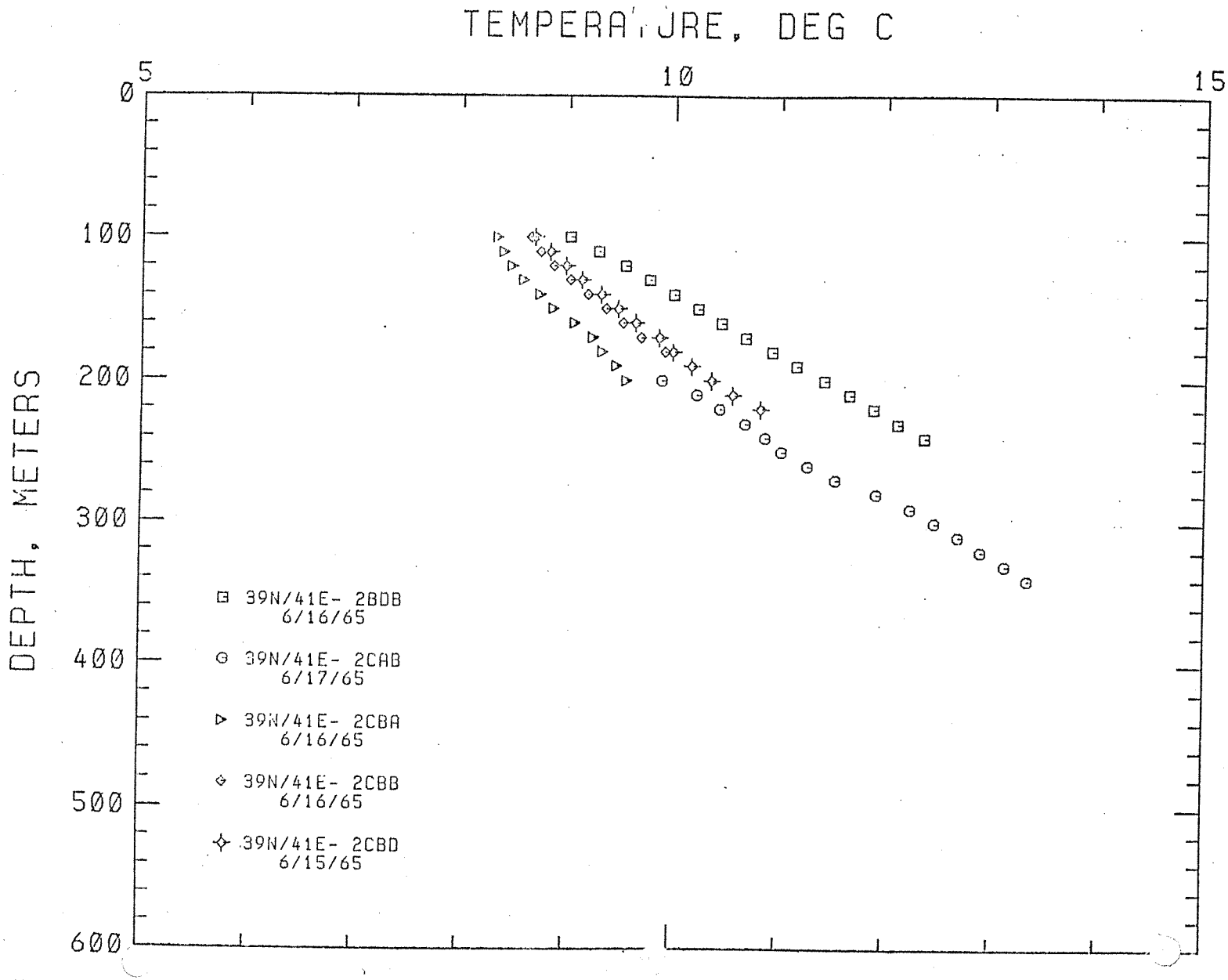
LOCATION: SANDPOINT AMS, WASH
39N/41E- 2CBB
HOLE NAME: DDH-5
DATE MEASURED: 6/16/65

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
100.0	328.0	8.650	47.57	0.0	0.0
110.0	360.8	8.740	47.73	9.0	0.5
120.0	393.6	8.870	47.97	13.0	0.7
130.0	426.4	9.020	48.24	15.0	0.8
140.0	459.2	9.190	48.54	17.0	0.9
150.0	492.0	9.360	48.85	17.0	0.9
160.0	524.8	9.520	49.14	16.0	0.9
170.0	557.6	9.690	49.44	17.0	0.9
180.0	590.4	9.920	49.86	23.0	1.3


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
100
200
300
400
500
39N/41E- 2BDB
6/16/65
39N/41E- 2CAB
6/17/65
39N/41E- 2CBA
6/16/65
39N/41E- 2CBB
6/16/65
39N/41E- 2CBD
6/15/65

LOCATION: SANDPOINT AMS, WASH
39N/41E- 2CBD
HOLE NAME: DDH-1
DATE MEASURED: 6/15/65

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
100.0	328.0	8.680	47.62	0.0	0.0
110.0	360.8	8.820	47.88	14.0	0.8
120.0	393.6	8.970	48.15	15.0	0.8
130.0	426.4	9.120	48.42	15.0	0.8
140.0	459.2	9.300	48.74	18.0	1.0
150.0	492.0	9.460	49.03	16.0	0.9
160.0	524.8	9.630	49.33	17.0	0.9
170.0	557.6	9.850	49.73	22.0	1.2
180.0	590.4	9.980	49.96	13.0	0.7
190.0	623.2	10.160	50.29	18.0	1.0
200.0	656.0	10.350	50.63	19.0	1.0
210.0	688.8	10.550	50.99	20.0	1.1
220.0	721.6	10.810	51.46	26.0	1.4

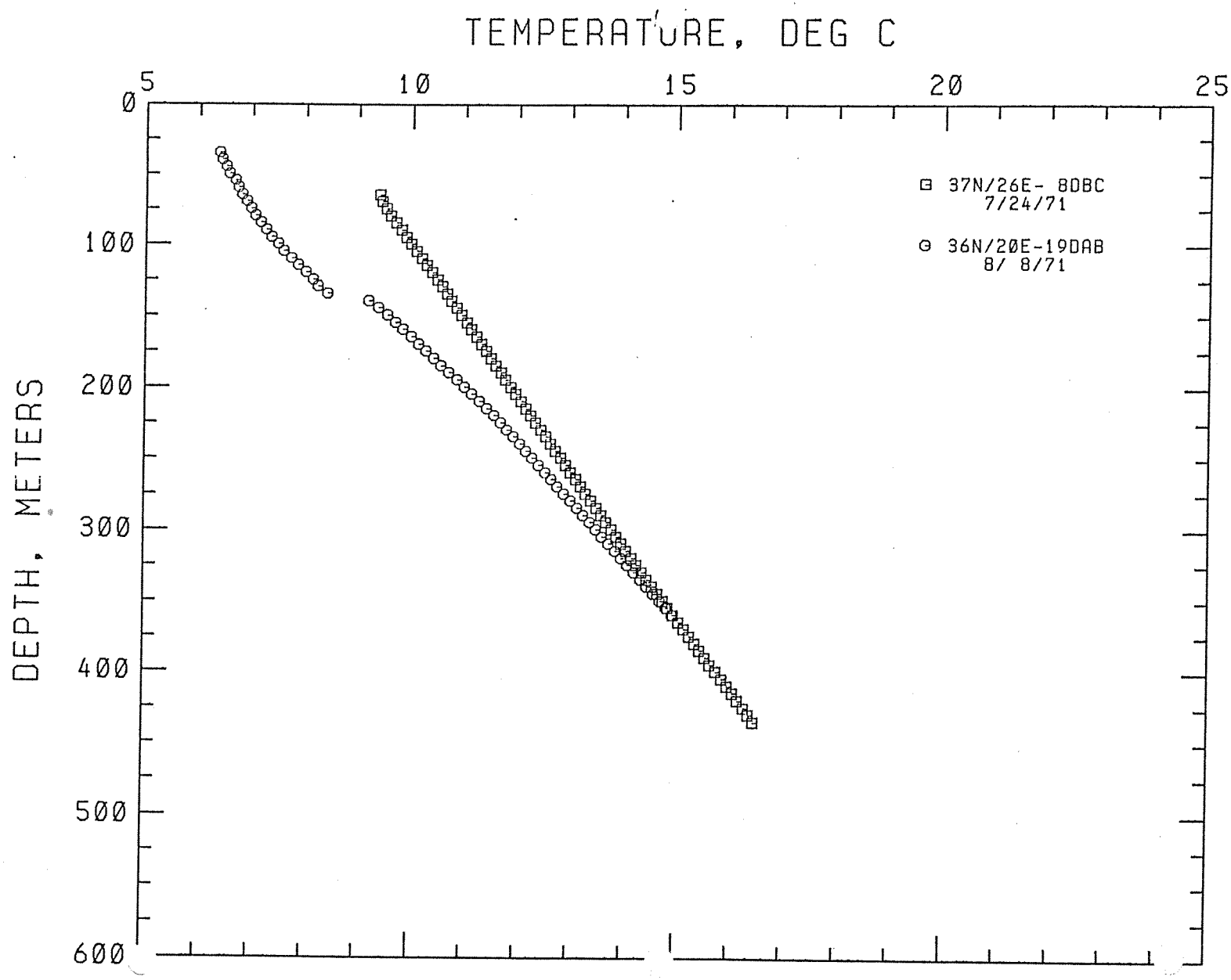

TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
100
200
300
400
500
600
39N/41E- 2BDB
6/16/65
39N/41E- 2CAB
6/17/65
39N/41E- 2CBA
6/16/65
39N/41E- 2CBB
6/16/65
39N/41E- 2CBD
6/15/65

LOCATION: OKANOGAN AMS, WASH
37N/26E- 8DBC
HOLE NAME: DDH-1
DATE MEASURED: 7/24/71

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
65.0	213.2	9.403	48.93	0.0	0.0
70.0	229.6	9.449	49.01	9.2	0.5
75.0	246.0	9.524	49.14	15.0	0.8
80.0	262.4	9.609	49.30	17.0	0.9
85.0	278.8	9.704	49.47	19.0	1.0
90.0	295.2	9.807	49.65	20.6	1.1
95.0	311.6	9.898	49.82	18.2	1.0
100.0	328.0	9.991	49.98	18.6	1.0
105.0	344.4	10.095	50.17	20.8	1.1
110.0	360.8	10.199	50.36	20.8	1.1
115.0	377.2	10.297	50.53	19.6	1.1
120.0	393.6	10.399	50.72	20.4	1.1
125.0	410.0	10.496	50.89	19.4	1.1
130.0	426.4	10.593	51.07	19.4	1.1
135.0	442.8	10.680	51.22	17.4	1.0
140.0	459.2	10.764	51.38	16.8	0.9
145.0	475.6	10.860	51.55	19.2	1.1
150.0	492.0	10.949	51.71	17.8	1.0
155.0	508.4	11.053	51.90	20.8	1.1
160.0	524.8	11.140	52.05	17.4	1.0
165.0	541.2	11.237	52.23	19.4	1.1
170.0	557.6	11.330	52.39	18.6	1.0
175.0	574.0	11.423	52.56	18.6	1.0
180.0	590.4	11.515	52.73	18.4	1.0
185.0	606.8	11.609	52.90	18.8	1.0
190.0	623.2	11.703	53.07	18.8	1.0
195.0	639.6	11.793	53.23	18.0	1.0
200.0	656.0	11.889	53.40	19.2	1.1
205.0	672.4	11.985	53.57	19.2	1.1
210.0	688.8	12.082	53.75	19.4	1.1
215.0	705.2	12.176	53.92	18.8	1.0
220.0	721.6	12.273	54.09	19.4	1.1
225.0	738.0	12.364	54.26	18.2	1.0
230.0	754.4	12.464	54.44	20.0	1.1
235.0	770.8	12.557	54.60	18.6	1.0
240.0	787.2	12.649	54.77	18.4	1.0
245.0	803.6	12.739	54.93	18.0	1.0
250.0	820.0	12.835	55.10	19.2	1.1
255.0	836.4	12.927	55.27	18.4	1.0
260.0	852.8	13.022	55.44	19.0	1.0
265.0	869.2	13.120	55.62	19.6	1.1
270.0	885.6	13.217	55.79	19.4	1.1

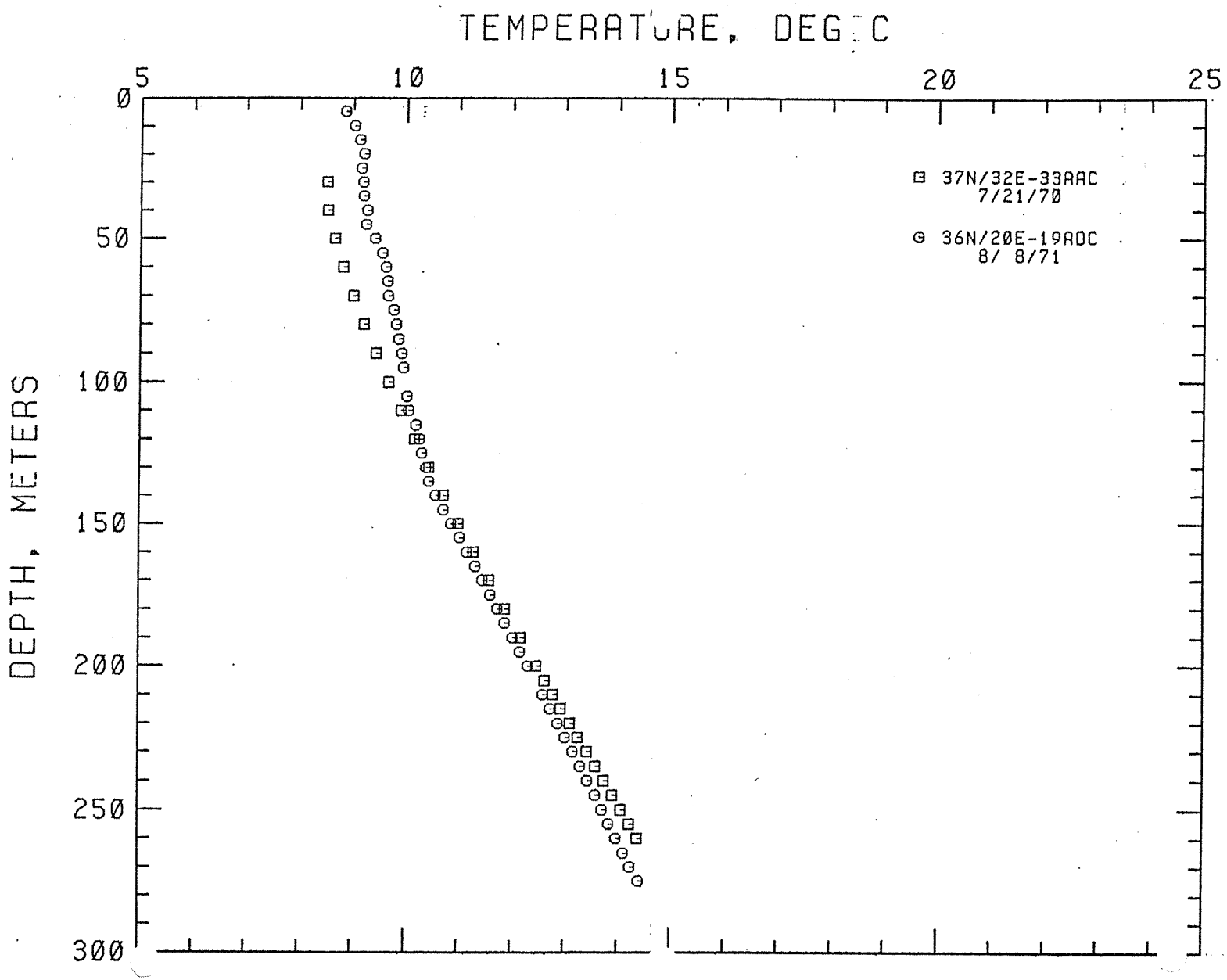
LOCATION: OKANOGAN AMS, WASH
37N/26E- 8DBC
HOLE NAME: DDH-1
DATE MEASURED: 7/24/71

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
275.0	902.0	13.314	55.97	19.4	1.1
280.0	918.4	13.411	56.14	19.4	1.1
285.0	934.8	13.509	56.32	19.6	1.1
290.0	951.2	13.608	56.49	19.8	1.1
295.0	967.6	13.701	56.66	18.6	1.0
300.0	984.0	13.800	56.84	19.8	1.1
305.0	1000.4	13.890	57.00	18.0	1.0
310.0	1016.8	13.980	57.16	18.0	1.0
315.0	1033.2	14.074	57.33	18.8	1.0
320.0	1049.6	14.175	57.51	20.2	1.1
325.0	1066.0	14.272	57.69	19.4	1.1
330.0	1082.4	14.373	57.87	20.2	1.1
335.0	1098.8	14.468	58.04	19.0	1.0
340.0	1115.2	14.570	58.23	20.4	1.1
345.0	1131.6	14.673	58.41	20.6	1.1
350.0	1148.0	14.767	58.58	18.8	1.0
355.0	1164.4	14.865	58.76	19.6	1.1
360.0	1180.8	14.970	58.95	21.0	1.2
365.0	1197.2	15.071	59.13	20.2	1.1
370.0	1213.6	15.168	59.30	19.4	1.1
375.0	1230.0	15.271	59.49	20.6	1.1
380.0	1246.4	15.372	59.67	20.2	1.1
385.0	1262.8	15.468	59.84	19.2	1.1
390.0	1279.2	15.566	60.02	19.6	1.1
395.0	1295.6	15.663	60.19	19.4	1.1
400.0	1312.0	15.782	60.41	23.8	1.3
405.0	1328.4	15.895	60.61	22.6	1.2
410.0	1344.8	15.996	60.79	20.2	1.1
415.0	1361.2	16.096	60.97	20.0	1.1
420.0	1377.6	16.188	61.14	18.4	1.0
425.0	1394.0	16.298	61.34	22.0	1.2
430.0	1410.4	16.391	61.50	18.6	1.0
435.0	1426.8	16.484	61.67	18.6	1.0


TEMPERATURE, DEG C
5
10
15
20
25
0
100
200
300
400
500
600
DEPTH, METERS
37N/26E- 8DBC
7/24/71
36N/20E-19DAB
8/ 8/71

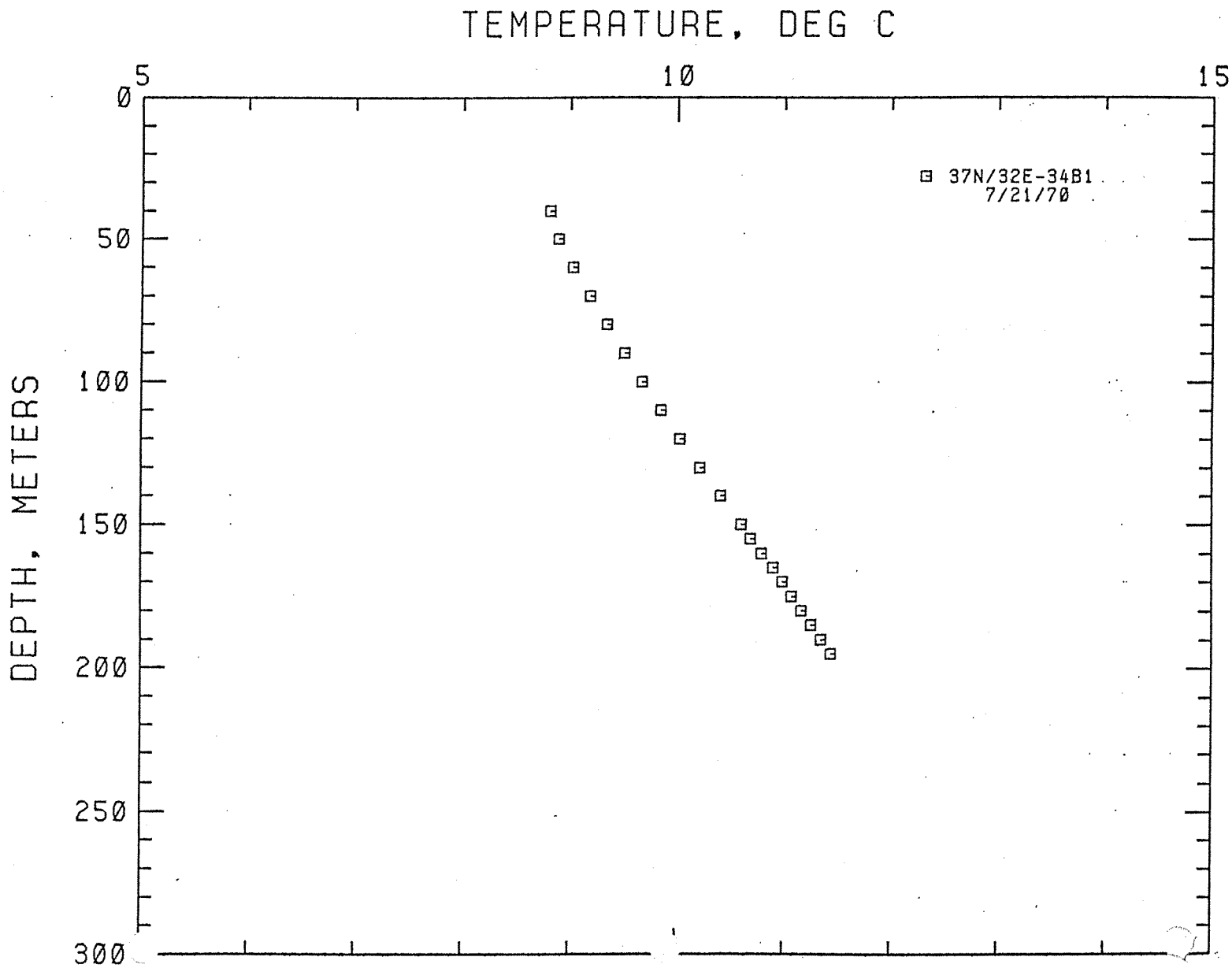
LOCATION: OKANOGAN AMS, WASH
37N/32E-33AAC
HOLE NAME: DDH-3
DATE MEASURED: 7/21/70

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	8.520	47.34	0.0	0.0
40.0	131.2	8.530	47.35	1.0	0.1
50.0	164.0	8.670	47.61	14.0	0.8
60.0	196.8	8.830	47.89	16.0	0.9
70.0	229.6	9.020	48.24	19.0	1.0
80.0	262.4	9.220	48.60	20.0	1.1
90.0	295.2	9.440	48.99	22.0	1.2
100.0	328.0	9.680	49.42	24.0	1.3
110.0	360.8	9.930	49.87	25.0	1.4
120.0	393.6	10.180	50.32	25.0	1.4
130.0	426.4	10.450	50.81	27.0	1.5
140.0	459.2	10.730	51.31	28.0	1.5
150.0	492.0	11.010	51.82	28.0	1.5
160.0	524.8	11.300	52.34	29.0	1.6
170.0	557.6	11.590	52.86	29.0	1.6
180.0	590.4	11.890	53.40	30.0	1.6
190.0	623.2	12.190	53.94	30.0	1.6
200.0	656.0	12.490	54.48	30.0	1.6
205.0	672.4	12.640	54.75	30.0	1.6
210.0	688.8	12.800	55.04	32.0	1.8
215.0	705.2	12.950	55.31	30.0	1.6
220.0	721.6	13.120	55.62	34.0	1.9
225.0	738.0	13.270	55.89	30.0	1.6
230.0	754.4	13.450	56.21	36.0	2.0
235.0	770.8	13.600	56.48	30.0	1.6
240.0	787.2	13.760	56.77	32.0	1.8
245.0	803.6	13.920	57.06	32.0	1.8
250.0	820.0	14.080	57.34	32.0	1.8
255.0	836.4	14.240	57.63	32.0	1.8
260.0	852.8	14.390	57.90	30.0	1.6


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
37N/32E-33AAC
7/21/70
36N/20E-19ADC
8/ 8/71

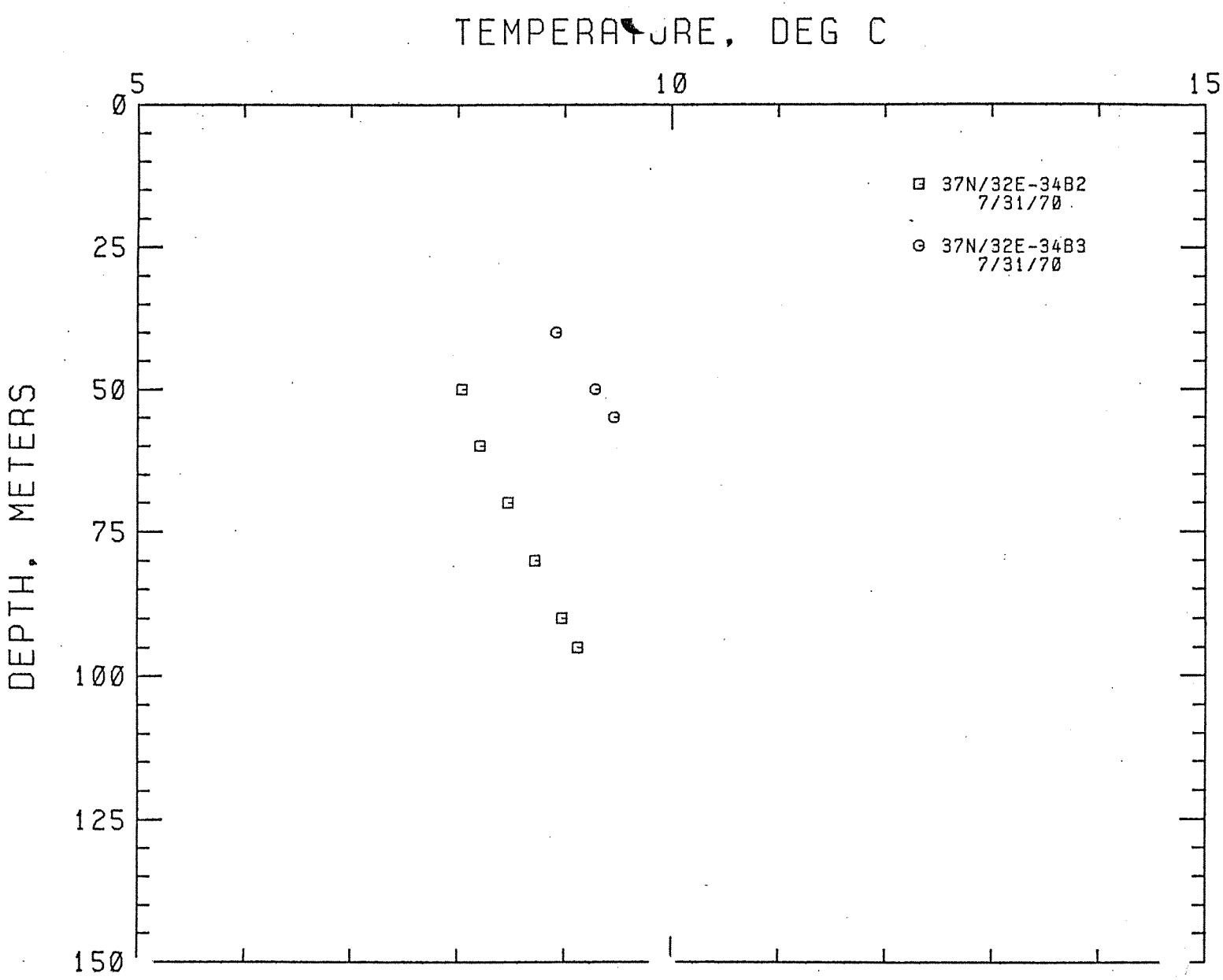
LOCATION: OKANOGAN AMS, WASH
37N/32E-34B1
HOLE NAME: DDH-A
DATE MEASURED: 7/21/70

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	8.810	47.86	0.0	0.0
50.0	164.0	8.890	48.00	8.0	0.4
60.0	196.8	9.026	48.25	13.6	0.7
70.0	229.6	9.187	48.54	16.1	0.9
80.0	262.4	9.347	48.82	16.0	0.9
90.0	295.2	9.512	49.12	16.5	0.9
100.0	328.0	9.682	49.43	17.0	0.9
110.0	360.8	9.858	49.74	17.6	1.0
120.0	393.6	10.033	50.06	17.5	1.0
130.0	426.4	10.225	50.40	19.2	1.1
140.0	459.2	10.418	50.75	19.3	1.1
150.0	492.0	10.609	51.10	19.1	1.0
155.0	508.4	10.699	51.26	18.0	1.0
160.0	524.8	10.802	51.44	20.6	1.1
165.0	541.2	10.908	51.63	21.2	1.2
170.0	557.6	10.994	51.79	17.2	0.9
175.0	574.0	11.079	51.94	17.0	0.9
180.0	590.4	11.171	52.11	18.4	1.0
185.0	606.8	11.262	52.27	18.2	1.0
190.0	623.2	11.356	52.44	18.8	1.0
195.0	639.6	11.444	52.60	17.6	1.0


TEMPERATURE, DEG C
5
10
15
0
50
100
150
200
250
300
DEPTH, METERS
37N/32E-34B1
7/21/70

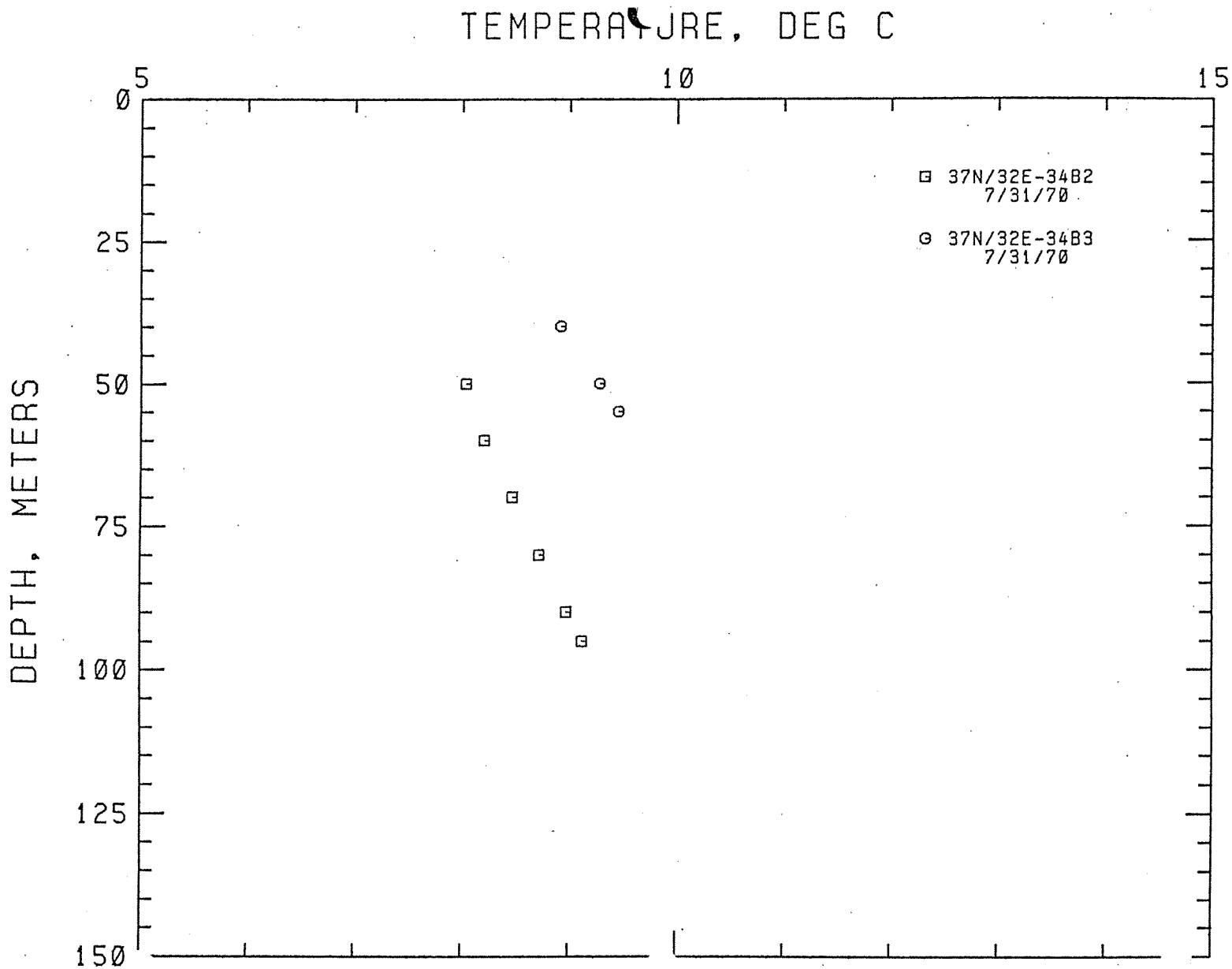
LOCATION: OKANOGAN AMS, WASH
37N/32E-34B2
HOLE NAME: DDH-B
DATE MEASURED: 7/31/70

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
50.0	164.0	8.040	46.47	0.0	0.0
60.0	196.8	8.210	46.78	17.0	0.9
70.0	229.6	8.476	47.26	26.6	1.5
80.0	262.4	8.726	47.71	25.0	1.4
90.0	295.2	8.979	48.16	25.3	1.4
95.0	311.6	9.128	48.43	29.8	1.6


TEMPERATURE, DEG C
5
10
15
0
25
50
75
100
125
150
DEPTH, METERS
37N/32E-34B2
7/31/70
37N/32E-34B3
7/31/70

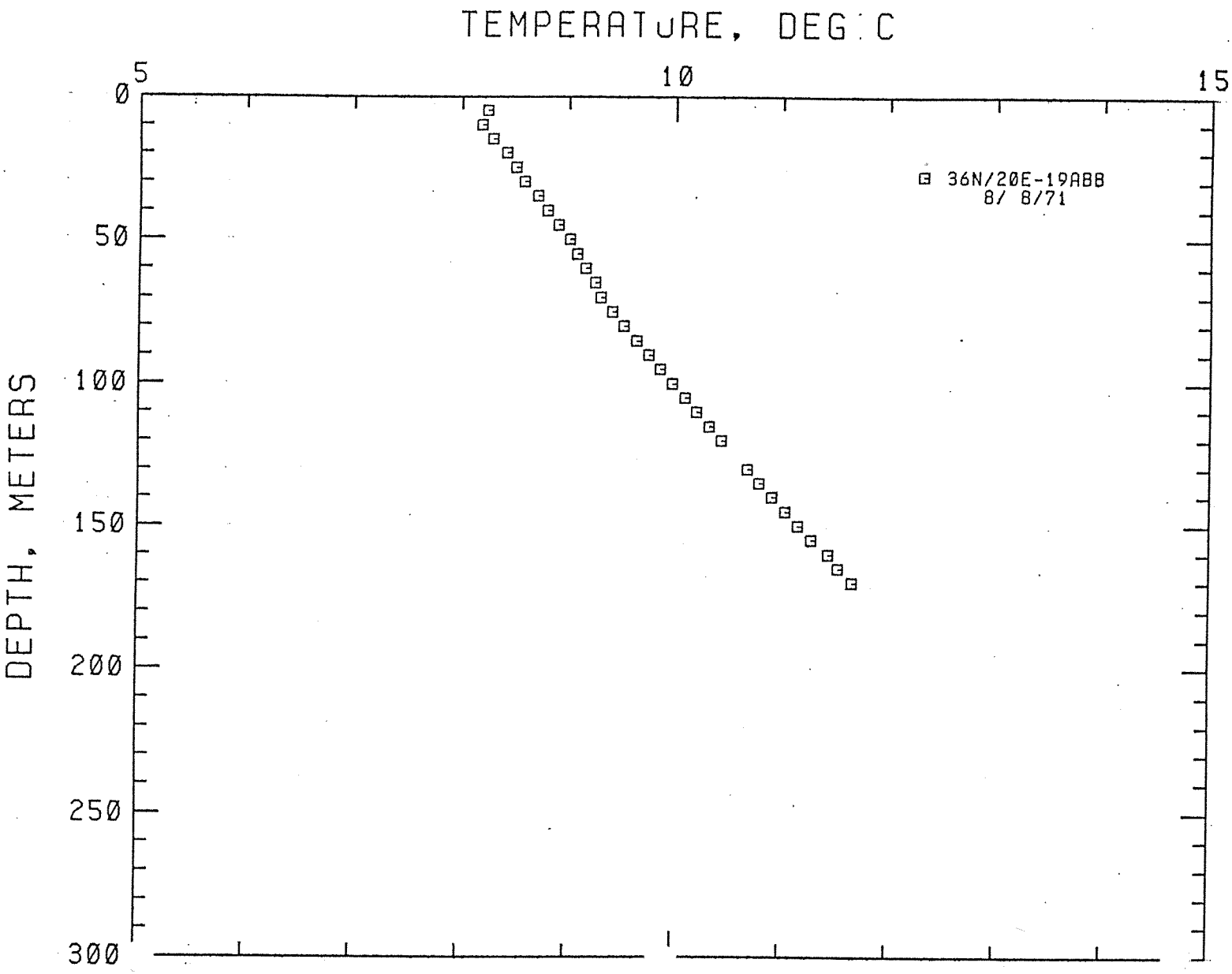
LOCATION: OKANOGAN AMS, WASH
37N/32E-34B3
HOLE NAME: DDH-C
DATE MEASURED: 7/31/70

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	8.922	48.06	0.0	0.0
50.0	164.0	9.285	48.71	36.3	2.0
55.0	180.4	9.461	49.03	35.2	1.9


TEMPERATURE, DEG C
5
10
15
0
25
50
75
100
125
150
DEPTH, METERS
37N/32E-34B2
7/31/70
37N/32E-34B3
7/31/70

LOCATION: CONCRETE AMS, WASH
36N/20E-19ABB
HOLE NAME: DDH-LD13
DATE MEASURED: 8/ 8/71

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	8.239	46.83	0.0	0.0
10.0	32.8	8.190	46.74	-9.8	-0.5
15.0	49.2	8.292	46.93	20.4	1.1
20.0	65.6	8.421	47.16	25.8	1.4
25.0	82.0	8.509	47.32	17.6	1.0
30.0	98.4	8.590	47.46	16.2	0.9
35.0	114.8	8.716	47.69	25.2	1.4
40.0	131.2	8.806	47.85	18.0	1.0
45.0	147.6	8.908	48.03	20.4	1.1
50.0	164.0	9.016	48.23	21.6	1.2
55.0	180.4	9.085	48.35	13.8	0.8
60.0	196.8	9.166	48.50	16.2	0.9
65.0	213.2	9.258	48.66	18.4	1.0
70.0	229.6	9.306	48.75	9.6	0.5
75.0	246.0	9.416	48.95	22.0	1.2
80.0	262.4	9.528	49.15	22.4	1.2
85.0	278.8	9.644	49.36	23.2	1.3
90.0	295.2	9.760	49.57	23.2	1.3
95.0	311.6	9.871	49.77	22.2	1.2
100.0	328.0	9.984	49.97	22.6	1.2
105.0	344.4	10.104	50.19	24.0	1.3
110.0	360.8	10.212	50.38	21.6	1.2
115.0	377.2	10.329	50.59	23.4	1.3
120.0	393.6	10.444	50.80	23.0	1.3
130.0	426.4	10.692	51.25	24.8	1.4
135.0	442.8	10.799	51.44	21.4	1.2
140.0	459.2	10.921	51.66	24.4	1.3
145.0	475.6	11.048	51.89	25.4	1.4
150.0	492.0	11.168	52.10	24.0	1.3
155.0	508.4	11.290	52.32	24.4	1.3
160.0	524.8	11.451	52.61	32.2	1.8
165.0	541.2	11.544	52.78	18.6	1.0
170.0	557.6	11.676	53.02	26.4	1.4

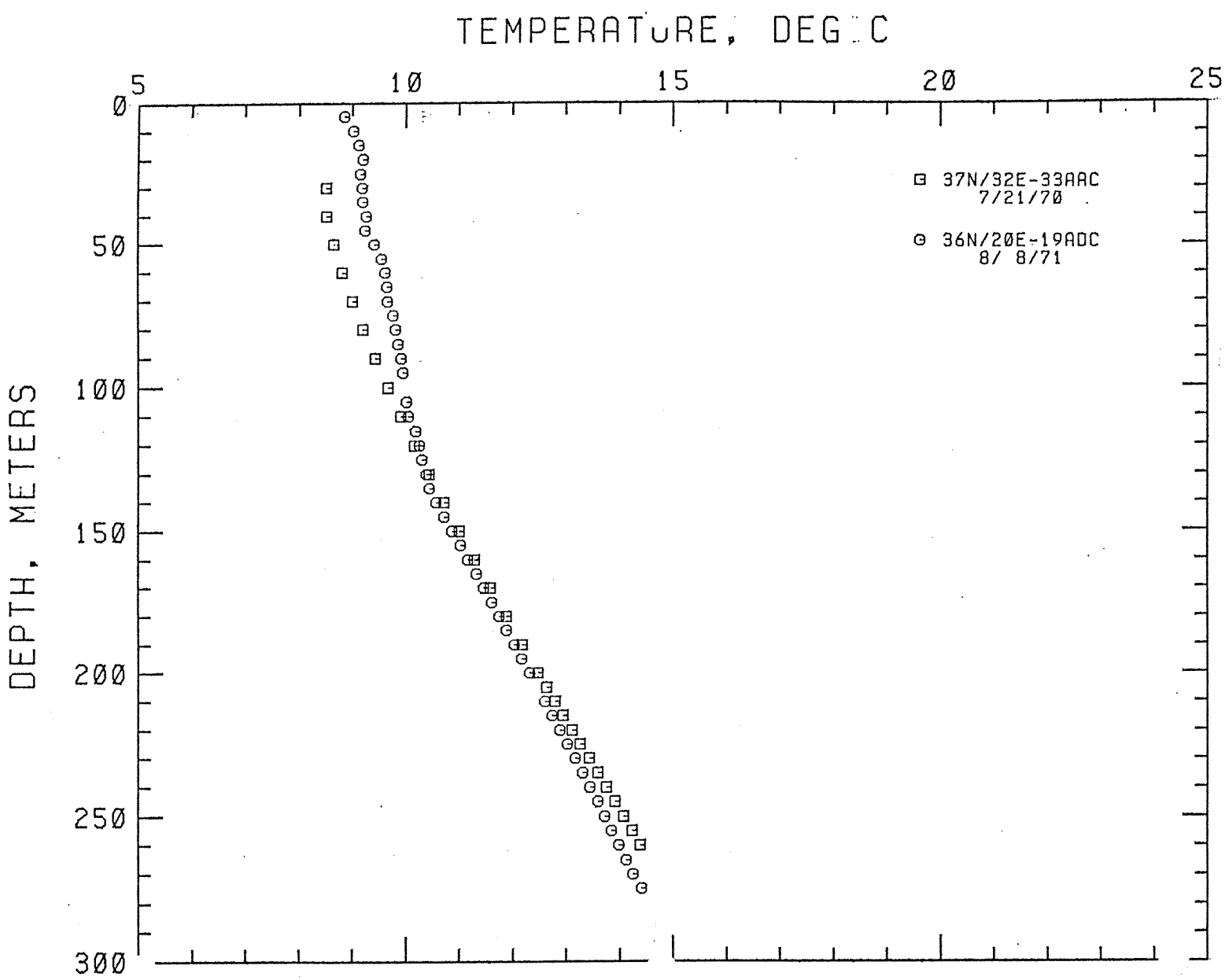

TEMPERATURE, DEG C
5
10
15
0
50
100
150
200
250
300
DEPTH, METERS
36N/20E-19ABB
8/ 8/71

LOCATION: CONCRETE AMS, WASH
36N/20E-19ADC
HOLE NAME: DDH-LD10
DATE MEASURED: 8/ 8/71

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	8.850	47.93	0.0	0.0
10.0	32.8	9.026	48.25	35.2	1.9
15.0	49.2	9.128	48.43	20.4	1.1
20.0	65.6	9.209	48.58	16.2	0.9
25.0	82.0	9.156	48.48	-10.6	-0.6
30.0	98.4	9.196	48.55	8.0	0.4
35.0	114.8	9.209	48.58	2.6	0.1
40.0	131.2	9.271	48.69	12.4	0.7
45.0	147.6	9.256	48.66	-3.0	-0.2
50.0	164.0	9.425	48.96	33.8	1.9
55.0	180.4	9.559	49.21	26.8	1.5
60.0	196.8	9.625	49.32	13.2	0.7
65.0	213.2	9.661	49.39	7.2	0.4
70.0	229.6	9.679	49.42	3.6	0.2
75.0	246.0	9.777	49.60	19.6	1.1
80.0	262.4	9.827	49.69	10.0	0.5
85.0	278.8	9.865	49.76	7.6	0.4
90.0	295.2	9.922	49.86	11.4	0.6
95.0	311.6	9.964	49.94	8.4	0.5
105.0	344.4	10.028	50.05	6.4	0.4
110.0	360.8	10.068	50.12	8.0	0.4
115.0	377.2	10.204	50.37	27.2	1.5
120.0	393.6	10.263	50.47	11.8	0.6
125.0	410.0	10.314	50.57	10.2	0.6
130.0	426.4	10.391	50.70	15.4	0.8
135.0	442.8	10.453	50.82	12.4	0.7
140.0	459.2	10.575	51.04	24.4	1.3
145.0	475.6	10.726	51.31	30.2	1.7
150.0	492.0	10.875	51.57	29.8	1.6
155.0	508.4	11.030	51.85	31.0	1.7
160.0	524.8	11.173	52.11	28.6	1.6
165.0	541.2	11.331	52.40	31.6	1.7
170.0	557.6	11.470	52.65	27.8	1.5
175.0	574.0	11.615	52.91	29.0	1.6
180.0	590.4	11.757	53.16	28.4	1.6
185.0	606.8	11.897	53.41	28.0	1.5
190.0	623.2	12.039	53.67	28.4	1.6
195.0	639.6	12.180	53.92	28.2	1.5
200.0	656.0	12.324	54.18	28.8	1.6
210.0	688.8	12.616	54.71	29.2	1.6
215.0	705.2	12.750	54.95	26.8	1.5
220.0	721.6	12.898	55.22	29.6	1.6

LOCATION: CONCRETE AMS, WASH
36N/20E-19ADC
HOLE NAME: DDH-LD10
DATE MEASURED: 8/ 8/71

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
225.0	738.0	13.039	55.47	28.2	1.5
230.0	754.4	13.184	55.73	29.0	1.6
235.0	770.8	13.316	55.97	26.4	1.4
240.0	787.2	13.461	56.23	29.0	1.6
245.0	803.6	13.601	56.48	28.0	1.5
250.0	820.0	13.728	56.71	25.4	1.4
255.0	836.4	13.862	56.95	26.8	1.5
260.0	852.8	13.993	57.19	26.2	1.4
265.0	869.2	14.131	57.44	27.6	1.5
270.0	885.6	14.254	57.66	24.6	1.3
275.0	902.0	14.414	57.95	32.0	1.8

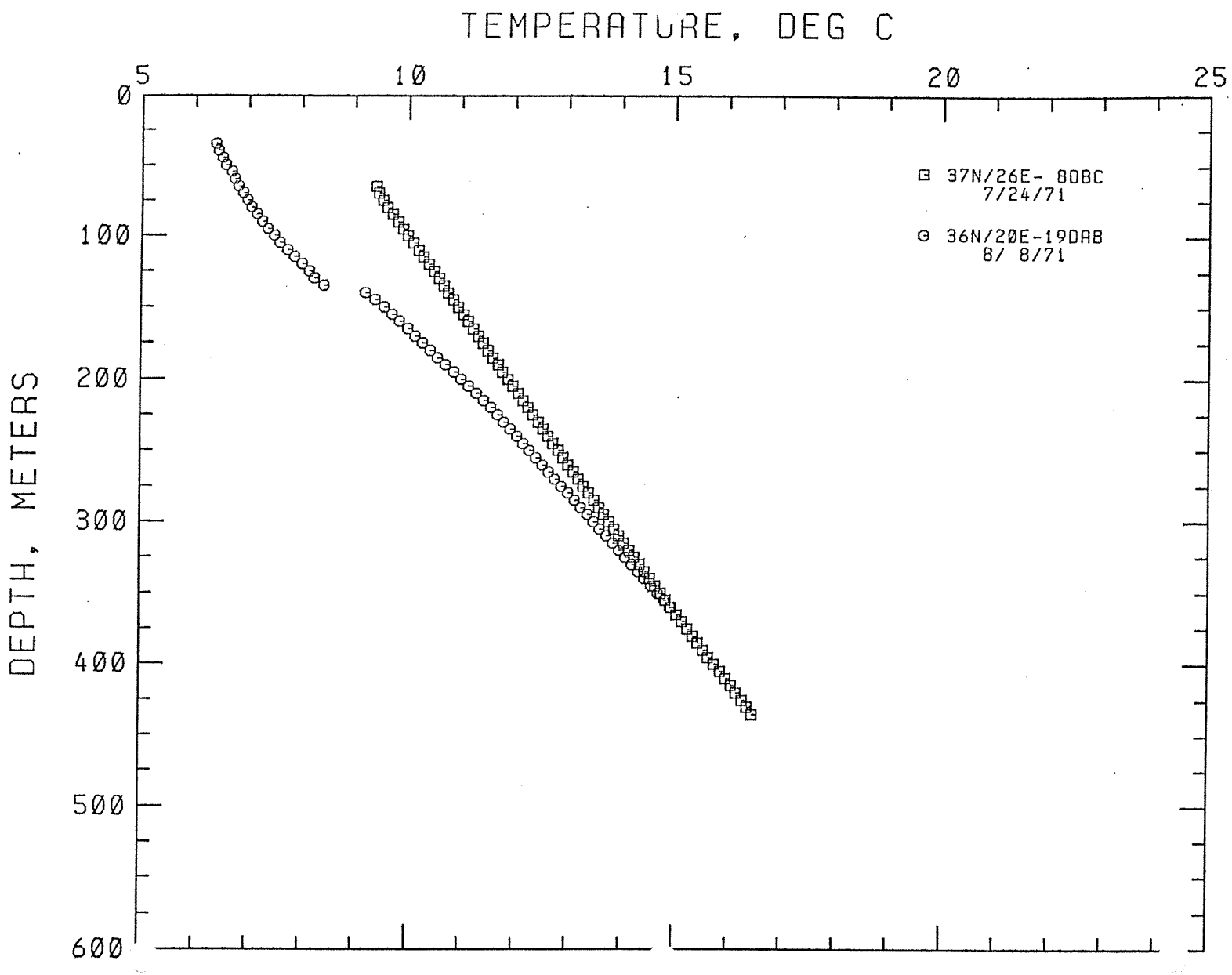

TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
37N/32E-33AAC
7/21/70
36N/20E-19ADC
8/ 8/71

LOCATION: CONCRETE AMS, WASH
36N/20E-19DAB
HOLE NAME: DDH-LD7
DATE MEASURED: 8/ 8/71

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	6.387	43.50	0.0	0.0
40.0	131.2	6.427	43.57	8.0	0.4
45.0	147.6	6.507	43.71	16.0	0.9
50.0	164.0	6.567	43.82	12.0	0.7
55.0	180.4	6.685	44.03	23.6	1.3
60.0	196.8	6.734	44.12	9.8	0.5
65.0	213.2	6.811	44.26	15.4	0.8
70.0	229.6	6.893	44.41	16.4	0.9
75.0	246.0	6.978	44.56	17.0	0.9
80.0	262.4	7.061	44.71	16.6	0.9
85.0	278.8	7.163	44.89	20.4	1.1
90.0	295.2	7.262	45.07	19.8	1.1
95.0	311.6	7.366	45.26	20.8	1.1
100.0	328.0	7.486	45.47	24.0	1.3
105.0	344.4	7.594	45.67	21.6	1.2
110.0	360.8	7.740	45.93	29.2	1.6
115.0	377.2	7.873	46.17	26.6	1.5
120.0	393.6	8.017	46.43	28.8	1.6
125.0	410.0	8.151	46.67	26.8	1.5
130.0	426.4	8.248	46.85	19.4	1.1
135.0	442.8	8.424	47.16	35.2	1.9
140.0	459.2	9.204	48.57	156.0	8.6
145.0	475.6	9.389	48.90	37.0	2.0
150.0	492.0	9.555	49.20	33.2	1.8
155.0	508.4	9.705	49.47	30.0	1.6
160.0	524.8	9.849	49.73	28.8	1.6
165.0	541.2	10.004	50.01	31.0	1.7
170.0	557.6	10.143	50.26	27.8	1.5
175.0	574.0	10.284	50.51	28.2	1.5
180.0	590.4	10.430	50.77	29.2	1.6
185.0	606.8	10.570	51.03	28.0	1.5
190.0	623.2	10.719	51.29	29.8	1.6
195.0	639.6	10.870	51.57	30.2	1.7
200.0	656.0	11.011	51.82	28.2	1.5
205.0	672.4	11.153	52.08	28.4	1.6
210.0	688.8	11.297	52.33	28.8	1.6
215.0	705.2	11.437	52.59	28.0	1.5
220.0	721.6	11.570	52.83	26.6	1.5
225.0	738.0	11.693	53.05	24.6	1.4
230.0	754.4	11.815	53.27	24.4	1.3
235.0	770.8	11.939	53.49	24.8	1.4
240.0	787.2	12.061	53.71	24.4	1.3

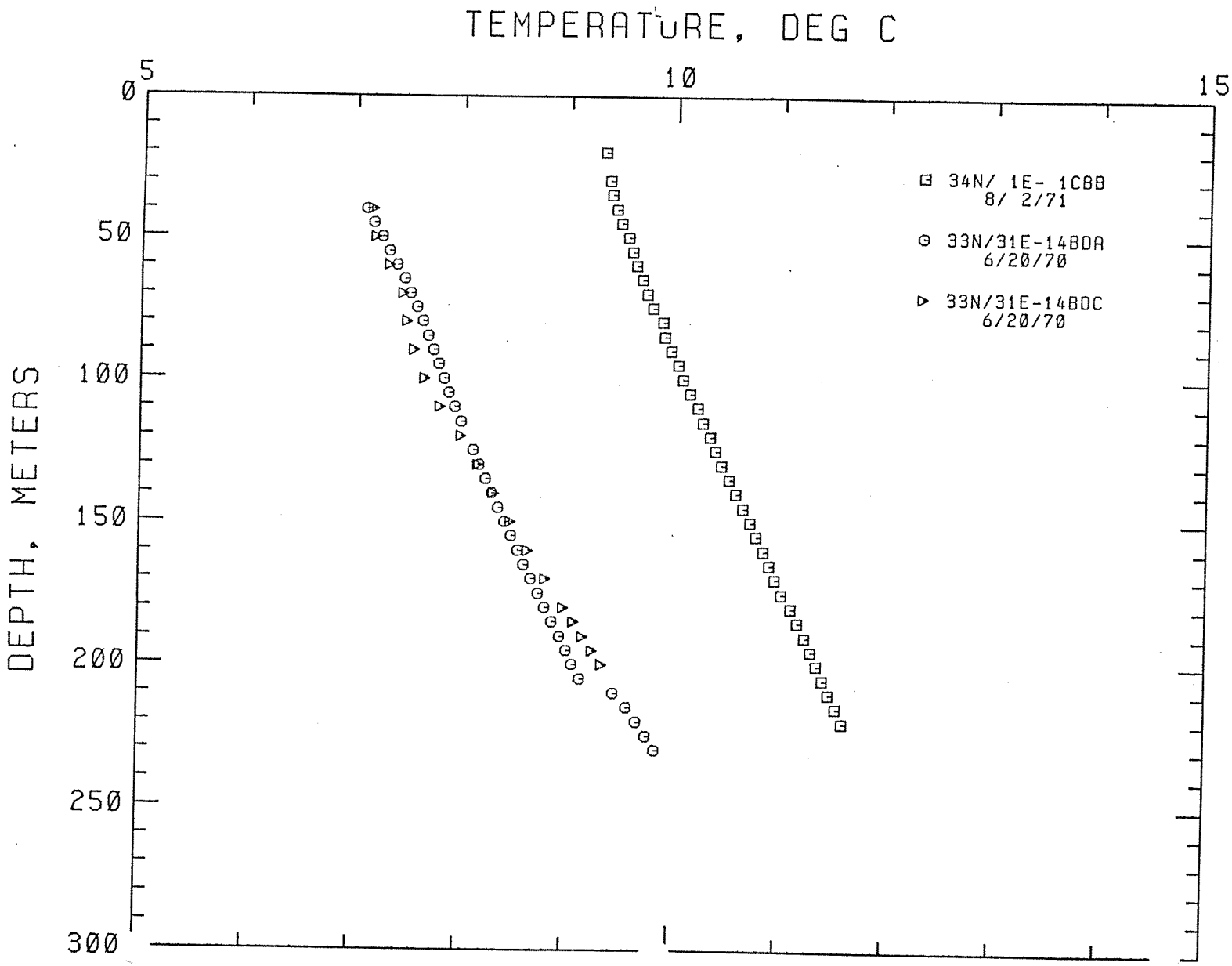
LOCATION: CONCRETE AMS, WASH
36N/20E-19DAB
HOLE NAME: DDH-LD7
DATE MEASURED: 8/ 8/71

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
245.0	803.6	12.182	53.93	24.2	1.3
250.0	820.0	12.297	54.13	23.0	1.3
255.0	836.4	12.421	54.36	24.8	1.4
260.0	852.8	12.545	54.58	24.8	1.4
265.0	869.2	12.660	54.79	23.0	1.3
270.0	885.6	12.777	55.00	23.4	1.3
275.0	902.0	12.897	55.21	24.0	1.3
280.0	918.4	13.019	55.43	24.4	1.3
285.0	934.8	13.144	55.66	25.0	1.4
290.0	951.2	13.262	55.87	23.6	1.3
295.0	967.6	13.383	56.09	24.2	1.3
300.0	984.0	13.501	56.30	23.6	1.3
305.0	1000.4	13.615	56.51	22.8	1.3
310.0	1016.8	13.741	56.73	25.2	1.4
315.0	1033.2	13.863	56.95	24.4	1.3
320.0	1049.6	13.983	57.17	24.0	1.3
325.0	1066.0	14.100	57.38	23.4	1.3
330.0	1082.4	14.222	57.60	24.4	1.3
335.0	1098.8	14.343	57.82	24.2	1.3
340.0	1115.2	14.464	58.04	24.2	1.3
345.0	1131.6	14.586	58.25	24.4	1.3
350.0	1148.0	14.712	58.48	25.2	1.4
355.0	1164.4	14.827	58.69	23.0	1.3
360.0	1180.8	14.942	58.90	23.0	1.3


TEMPERATURE, DEG C
5
10
15
20
25
0
100
200
300
400
500
600
DEPTH, METERS
37N/26E- 8DBC
7/24/71
36N/20E-19DAB
8/ 8/71

LOCATION: VICTORIA AMS, WASH
34N/ 1E- 1CBB
HOLE NAME: DDH-1
DATE MEASURED: 8/ 2/71

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	9.324	48.78	0.0	0.0
30.0	98.4	9.371	48.87	4.7	0.3
35.0	114.8	9.395	48.91	4.8	0.3
40.0	131.2	9.441	48.99	9.2	0.5
45.0	147.6	9.486	49.07	9.0	0.5
50.0	164.0	9.556	49.20	14.0	0.8
55.0	180.4	9.595	49.27	7.8	0.4
60.0	196.8	9.632	49.34	7.4	0.4
65.0	213.2	9.690	49.44	11.6	0.6
70.0	229.6	9.739	49.53	9.8	0.5
75.0	246.0	9.797	49.63	11.6	0.6
80.0	262.4	9.890	49.80	18.6	1.0
85.0	278.8	9.909	49.84	3.8	0.2
90.0	295.2	9.971	49.95	12.4	0.7
95.0	311.6	10.041	50.07	14.0	0.8
100.0	328.0	10.087	50.16	9.2	0.5
105.0	344.4	10.155	50.28	13.6	0.7
110.0	360.8	10.229	50.41	14.8	0.8
115.0	377.2	10.281	50.51	10.4	0.6
120.0	393.6	10.348	50.63	13.4	0.7
125.0	410.0	10.400	50.72	10.4	0.6
130.0	426.4	10.459	50.83	11.8	0.6
135.0	442.8	10.532	50.96	14.6	0.8
140.0	459.2	10.594	51.07	12.4	0.7
145.0	475.6	10.663	51.19	13.8	0.8
150.0	492.0	10.730	51.31	13.4	0.7
155.0	508.4	10.788	51.42	11.6	0.6
160.0	524.8	10.858	51.54	14.0	0.8
165.0	541.2	10.915	51.65	11.4	0.6
170.0	557.6	10.968	51.74	10.6	0.6
175.0	574.0	11.028	51.85	12.0	0.7
180.0	590.4	11.122	52.02	18.8	1.0
185.0	606.8	11.185	52.13	12.6	0.7
190.0	623.2	11.251	52.25	13.2	0.7
195.0	639.6	11.307	52.35	11.2	0.6
200.0	656.0	11.364	52.46	11.4	0.6
205.0	672.4	11.420	52.56	11.2	0.6
210.0	688.8	11.482	52.67	12.4	0.7
215.0	705.2	11.546	52.78	12.8	0.7
220.0	721.6	11.612	52.90	13.2	0.7


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
200
250
300
34N/ 1E- 1CBB
8/ 2/71
33N/31E-14BDA
6/20/70
33N/31E-14BDC
6/20/70

LOCATION: OKANOGAN AMS, WASH
33N/31E-14ACB
HOLE NAME: DDH-3
DATE MEASURED: 6/20/70

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	7.220	45.00	0.0	0.0
45.0	147.6	7.240	45.03	4.0	0.2
50.0	164.0	7.260	45.07	4.0	0.2
55.0	180.4	7.280	45.10	4.0	0.2
60.0	196.8	7.310	45.16	6.0	0.3
65.0	213.2	7.350	45.23	8.0	0.4
70.0	229.6	7.400	45.32	10.0	0.5
75.0	246.0	7.440	45.39	8.0	0.4
80.0	262.4	7.490	45.48	10.0	0.5
85.0	278.8	7.530	45.55	8.0	0.4
90.0	295.2	7.570	45.63	8.0	0.4
95.0	311.6	7.620	45.72	10.0	0.5
100.0	328.0	7.690	45.84	14.0	0.8
105.0	344.4	7.730	45.91	8.0	0.4
110.0	360.8	7.780	46.00	10.0	0.5
120.0	393.6	8.020	46.44	24.0	1.3
130.0	426.4	8.390	47.10	37.0	2.0
135.0	442.8	8.549	47.39	31.8	1.7
140.0	459.2	8.673	47.61	24.8	1.4
145.0	475.6	8.789	47.82	23.2	1.3
150.0	492.0	8.884	47.99	19.0	1.0
155.0	508.4	8.979	48.16	19.0	1.0
160.0	524.8	9.070	48.33	18.2	1.0
165.0	541.2	9.164	48.50	18.8	1.0
170.0	557.6	9.239	48.63	15.0	0.8
175.0	574.0	9.329	48.79	18.0	1.0
180.0	590.4	9.421	48.96	18.4	1.0
185.0	606.8	9.515	49.13	18.8	1.0
190.0	623.2	9.593	49.27	15.6	0.9
195.0	639.6	9.786	49.61	38.6	2.1
200.0	656.0	10.016	50.03	46.0	2.5
205.0	672.4	10.143	50.26	25.4	1.4
210.0	688.8	10.239	50.43	19.2	1.1
215.0	705.2	10.336	50.60	19.4	1.1
220.0	721.6	10.418	50.75	16.4	0.9
225.0	738.0	10.513	50.92	19.0	1.0
230.0	754.4	10.611	51.10	19.6	1.1
235.0	770.8	10.712	51.28	20.2	1.1
240.0	787.2	10.814	51.47	20.4	1.1
245.0	803.6	10.916	51.65	20.4	1.1
250.0	820.0	11.011	51.82	19.0	1.0

LOCATION: OKANOGAN AMS, WASH
33N/31E-14ACB
HOLE NAME: DDH-3
DATE MEASURED: 6/20/70

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
255.0	836.4	11.109	52.00	19.6	1.1
260.0	852.8	11.214	52.19	21.0	1.2
265.0	869.2	11.325	52.38	22.2	1.2
270.0	885.6	11.443	52.60	23.6	1.3

LOCATION: OKANOGAN AMS, WASH
33N/31E-14ACB
HOLE NAME: DDH-3
DATE MEASURED: 8/ 7/70

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	7.215	44.99	0.0	0.0
45.0	147.6	7.240	45.03	5.0	0.3
50.0	164.0	7.250	45.05	2.0	0.1
55.0	180.4	7.271	45.09	4.2	0.2
60.0	196.8	7.305	45.15	6.8	0.4
65.0	213.2	7.336	45.20	6.2	0.3
70.0	229.6	7.384	45.29	9.6	0.5
75.0	246.0	7.433	45.38	9.8	0.5
80.0	262.4	7.467	45.44	6.8	0.4
85.0	278.8	7.505	45.51	7.6	0.4
90.0	295.2	7.564	45.62	11.8	0.6
95.0	311.6	7.585	45.65	4.2	0.2
100.0	328.0	7.647	45.76	12.4	0.7
105.0	344.4	7.715	45.89	13.6	0.7
110.0	360.8	7.786	46.01	14.2	0.8
115.0	377.2	7.810	46.06	4.8	0.3
120.0	393.6	8.032	46.46	44.4	2.4
125.0	410.0	8.235	46.82	40.6	2.2
130.0	426.4	8.376	47.08	28.2	1.5
135.0	442.8	8.534	47.36	31.6	1.7
140.0	459.2	8.663	47.59	25.8	1.4
145.0	475.6	8.760	47.77	19.4	1.1
150.0	492.0	8.864	47.96	20.8	1.1
155.0	508.4	8.966	48.14	20.4	1.1
160.0	524.8	9.048	48.29	16.4	0.9
165.0	541.2	9.144	48.46	19.2	1.1
170.0	557.6	9.220	48.60	15.2	0.8
175.0	574.0	9.308	48.75	17.6	1.0
180.0	590.4	9.377	48.88	13.8	0.8
185.0	606.8	9.487	49.08	22.0	1.2
190.0	623.2	9.585	49.25	19.6	1.1
195.0	639.6	9.743	49.54	31.6	1.7
200.0	656.0	9.949	49.91	41.2	2.3
205.0	672.4	10.100	50.18	30.2	1.7
210.0	688.8	10.201	50.36	20.2	1.1
215.0	705.2	10.296	50.53	19.0	1.0
220.0	721.6	10.383	50.69	17.4	1.0
225.0	738.0	10.474	50.85	18.2	1.0
230.0	754.4	10.570	51.03	19.2	1.1
235.0	770.8	10.666	51.20	19.2	1.1
240.0	787.2	10.790	51.42	24.8	1.4

LOCATION: OKANOGAN AMS, WASH
33N/31E-14ACB
HOLE NAME: DDH-3
DATE MEASURED: 8/ 7/70

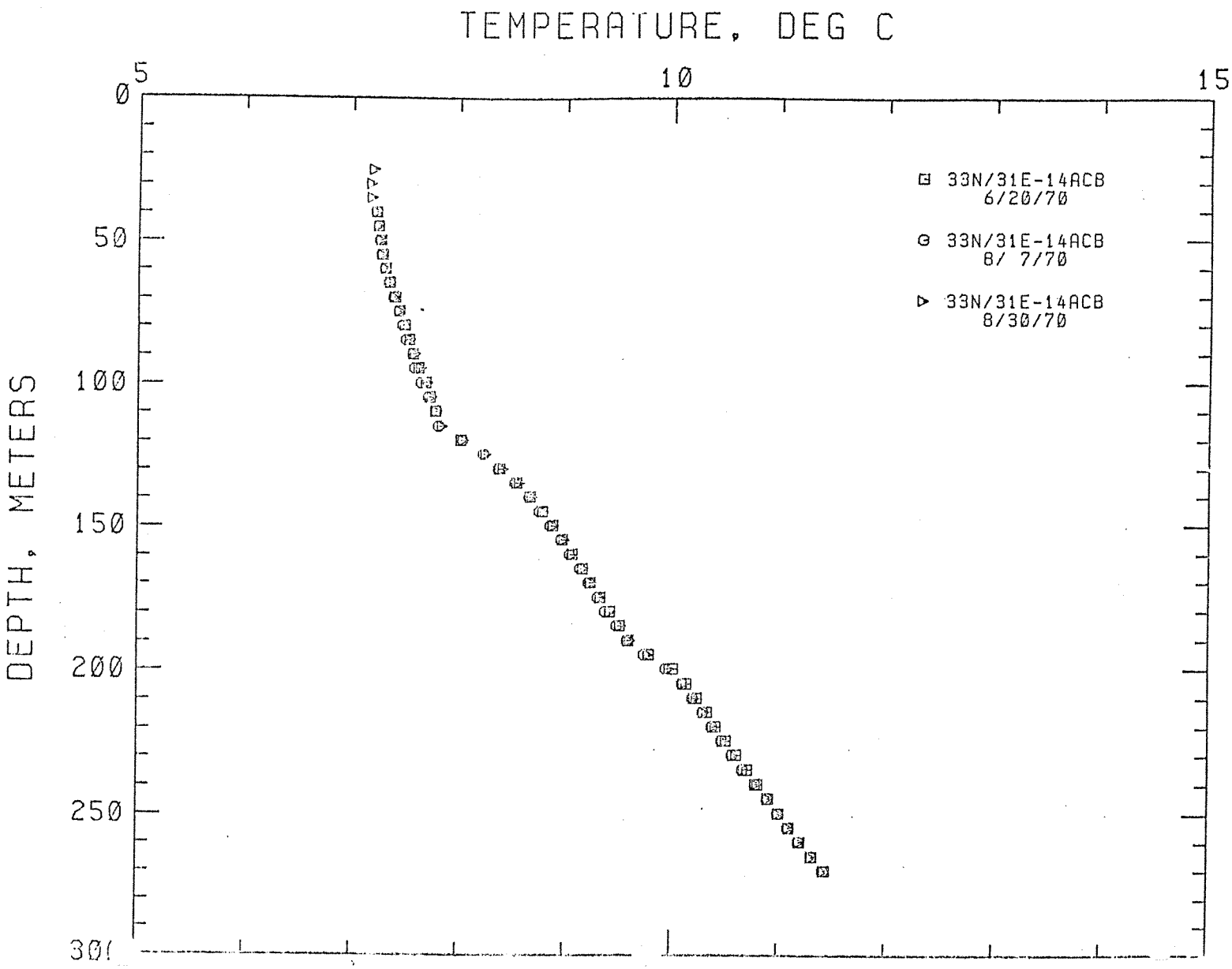
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
245.0	803.6	10.904	51.63	22.8	1.3
250.0	820.0	11.000	51.80	19.2	1.1
255.0	836.4	11.098	51.98	19.6	1.1
260.0	852.8	11.201	52.16	20.6	1.1
265.0	869.2	11.319	52.37	23.6	1.3
270.0	885.6	11.430	52.57	22.2	1.2

LOCATION: OKANOGAN AMS, WASH
33N/31E-14ACB
HOLE NAME: DDH-3
DATE MEASURED: 8/30/70

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
25.0	82.0	7.197	44.95	0.0	0.0
30.0	98.4	7.174	44.91	-4.6	-0.3
35.0	114.8	7.179	44.92	1.0	0.1
40.0	131.2	7.221	45.00	8.4	0.5
45.0	147.6	7.240	45.03	3.8	0.2
50.0	164.0	7.265	45.08	5.0	0.3
55.0	180.4	7.277	45.10	2.4	0.1
60.0	196.8	7.311	45.16	6.8	0.4
65.0	213.2	7.357	45.24	9.2	0.5
70.0	229.6	7.396	45.31	7.8	0.4
75.0	246.0	7.439	45.39	8.6	0.5
80.0	262.4	7.490	45.48	10.2	0.6
85.0	278.8	7.540	45.57	10.0	0.5
90.0	295.2	7.591	45.66	10.2	0.6
95.0	311.6	7.645	45.76	10.8	0.6
100.0	328.0	7.709	45.88	12.8	0.7
105.0	344.4	7.751	45.95	8.4	0.5
110.0	360.8	7.796	46.03	9.0	0.5
115.0	377.2	7.847	46.12	10.2	0.6
120.0	393.6	8.046	46.48	39.8	2.2
125.0	410.0	8.259	46.87	42.6	2.3
130.0	426.4	8.418	47.15	31.8	1.7
135.0	442.8	8.574	47.43	31.2	1.7
140.0	459.2	8.693	47.65	23.8	1.3
145.0	475.6	8.797	47.83	20.8	1.1
150.0	492.0	8.893	48.01	19.2	1.1
155.0	508.4	8.992	48.19	19.8	1.1
160.0	524.8	9.077	48.34	17.0	0.9
165.0	541.2	9.174	48.51	19.4	1.1
170.0	557.6	9.248	48.65	14.8	0.8
175.0	574.0	9.338	48.81	18.0	1.0
180.0	590.4	9.430	48.97	18.4	1.0
185.0	606.8	9.528	49.15	19.6	1.1
190.0	623.2	9.613	49.30	17.0	0.9
195.0	639.6	9.780	49.60	33.4	1.8
200.0	656.0	9.980	49.96	40.0	2.2
205.0	672.4	10.113	50.20	26.6	1.5
210.0	688.8	10.216	50.39	20.6	1.1
215.0	705.2	10.309	50.56	18.6	1.0
220.0	721.6	10.393	50.71	16.8	0.9
225.0	738.0	10.486	50.87	18.6	1.0

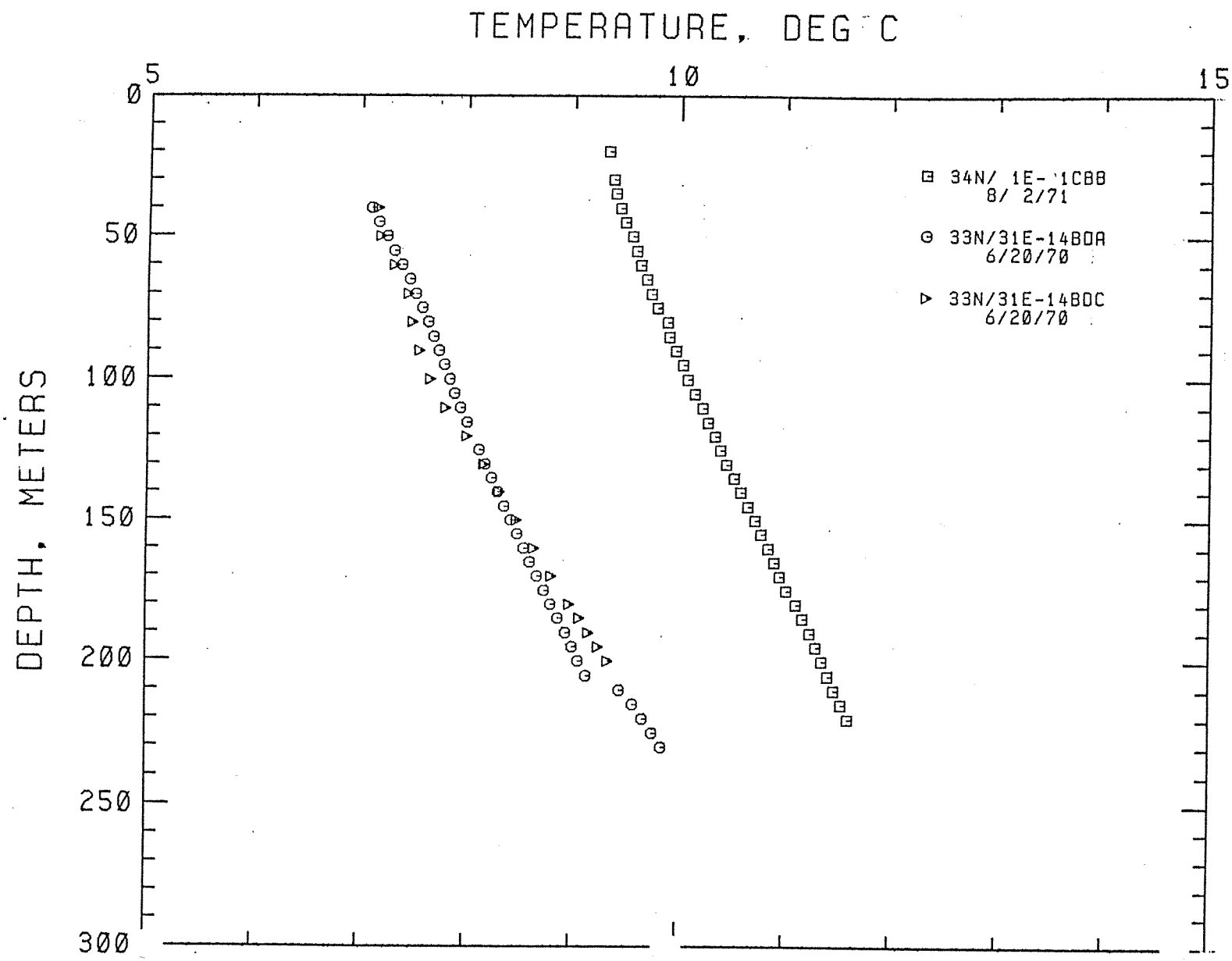
LOCATION: OKANOGAN AMS, WASH
33N/31E-14ACB
HOLE NAME: DDH-3
DATE MEASURED: 8/30/70

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
230.0	754.4	10.585	51.05	19.8	1.1
235.0	770.8	10.683	51.23	19.6	1.1
240.0	787.2	10.797	51.43	22.8	1.3
245.0	803.6	10.908	51.63	22.2	1.2
250.0	820.0	11.003	51.81	19.0	1.0
255.0	836.4	11.110	52.00	21.4	1.2
260.0	852.8	11.207	52.17	19.4	1.1
265.0	869.2	11.322	52.38	23.0	1.3
270.0	885.6	11.437	52.59	23.0	1.3


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
200
250
300
33N/31E-14ACB
6/20/70
33N/31E-14ACB
8/ 7/70
33N/31E-14ACB
8/30/70

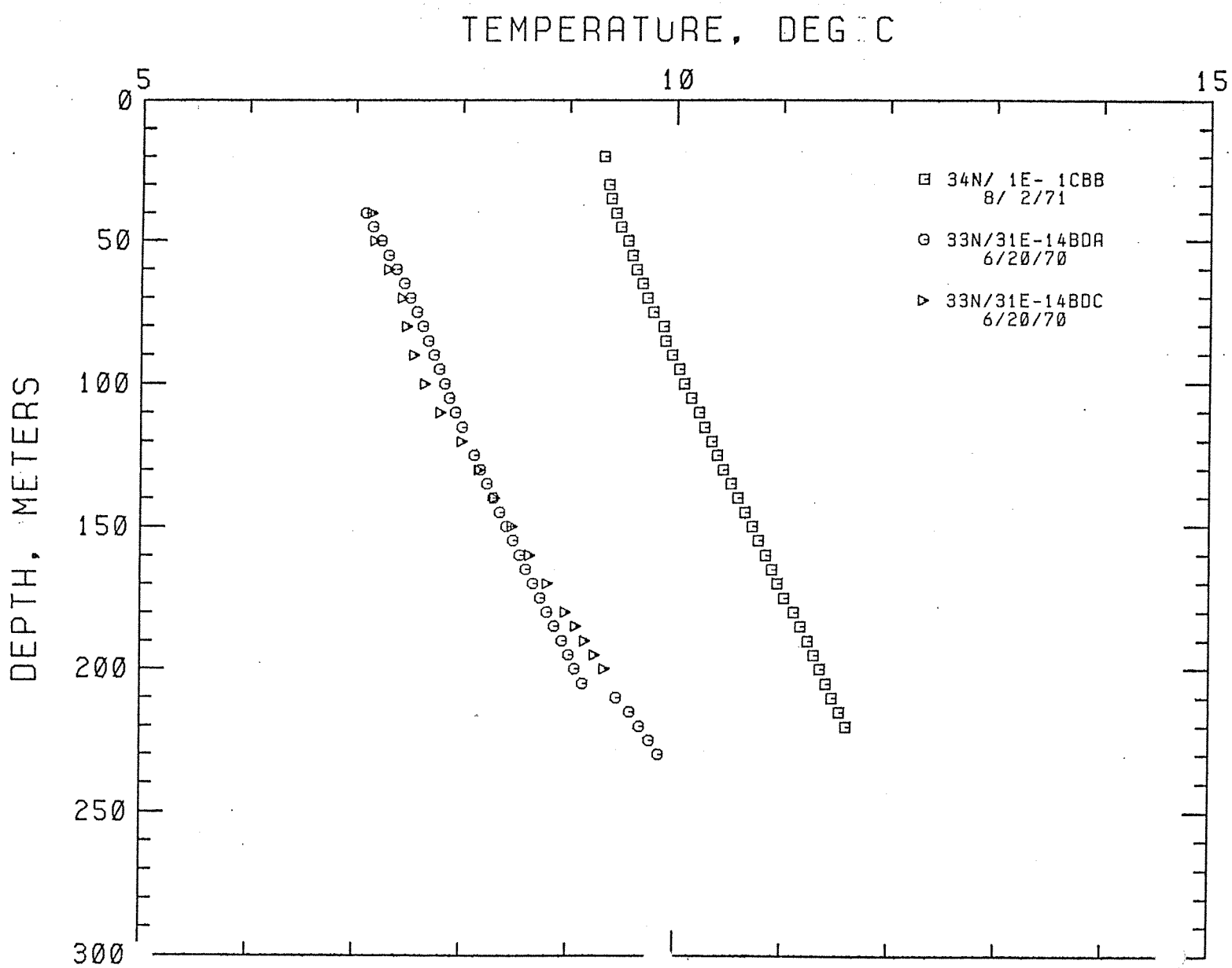
LOCATION: OKANOGAN AMS, WASH
33N/31E-14BDA
HOLE NAME: DDH-1
DATE MEASURED: 6/20/70

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	7.096	44.77	0.0	0.0
45.0	147.6	7.168	44.90	14.4	0.8
50.0	164.0	7.247	45.04	15.8	0.9
55.0	180.4	7.313	45.16	13.2	0.7
60.0	196.8	7.391	45.30	15.6	0.9
65.0	213.2	7.464	45.44	14.6	0.8
70.0	229.6	7.521	45.54	11.4	0.6
75.0	246.0	7.584	45.65	12.6	0.7
80.0	262.4	7.638	45.75	10.8	0.6
85.0	278.8	7.691	45.84	10.6	0.6
90.0	295.2	7.743	45.94	10.4	0.6
95.0	311.6	7.796	46.03	10.6	0.6
100.0	328.0	7.846	46.12	10.0	0.5
105.0	344.4	7.893	46.21	9.4	0.5
110.0	360.8	7.949	46.31	11.2	0.6
115.0	377.2	8.010	46.42	12.2	0.7
125.0	410.0	8.125	46.63	11.5	0.6
130.0	426.4	8.182	46.73	11.4	0.6
135.0	442.8	8.244	46.84	12.4	0.7
140.0	459.2	8.303	46.95	11.8	0.6
145.0	475.6	8.364	47.06	12.2	0.7
150.0	492.0	8.427	47.17	12.6	0.7
155.0	508.4	8.492	47.29	13.0	0.7
160.0	524.8	8.556	47.40	12.8	0.7
165.0	541.2	8.614	47.51	11.6	0.6
170.0	557.6	8.680	47.62	13.2	0.7
175.0	574.0	8.746	47.74	13.2	0.7
180.0	590.4	8.812	47.86	13.2	0.7
185.0	606.8	8.881	47.99	13.8	0.8
190.0	623.2	8.954	48.12	14.6	0.8
195.0	639.6	9.015	48.23	12.2	0.7
200.0	656.0	9.072	48.33	11.4	0.6
205.0	672.4	9.151	48.47	15.8	0.9
210.0	688.8	9.461	49.03	62.0	3.4
215.0	705.2	9.588	49.26	25.4	1.4
220.0	721.6	9.682	49.43	18.8	1.0
225.0	738.0	9.770	49.59	17.6	1.0
230.0	754.4	9.858	49.74	17.6	1.0


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
200
250
300
34N/ 1E- 1CBB
8/ 2/71
33N/31E-14BOA
6/20/70
33N/31E-14BOC
6/20/70

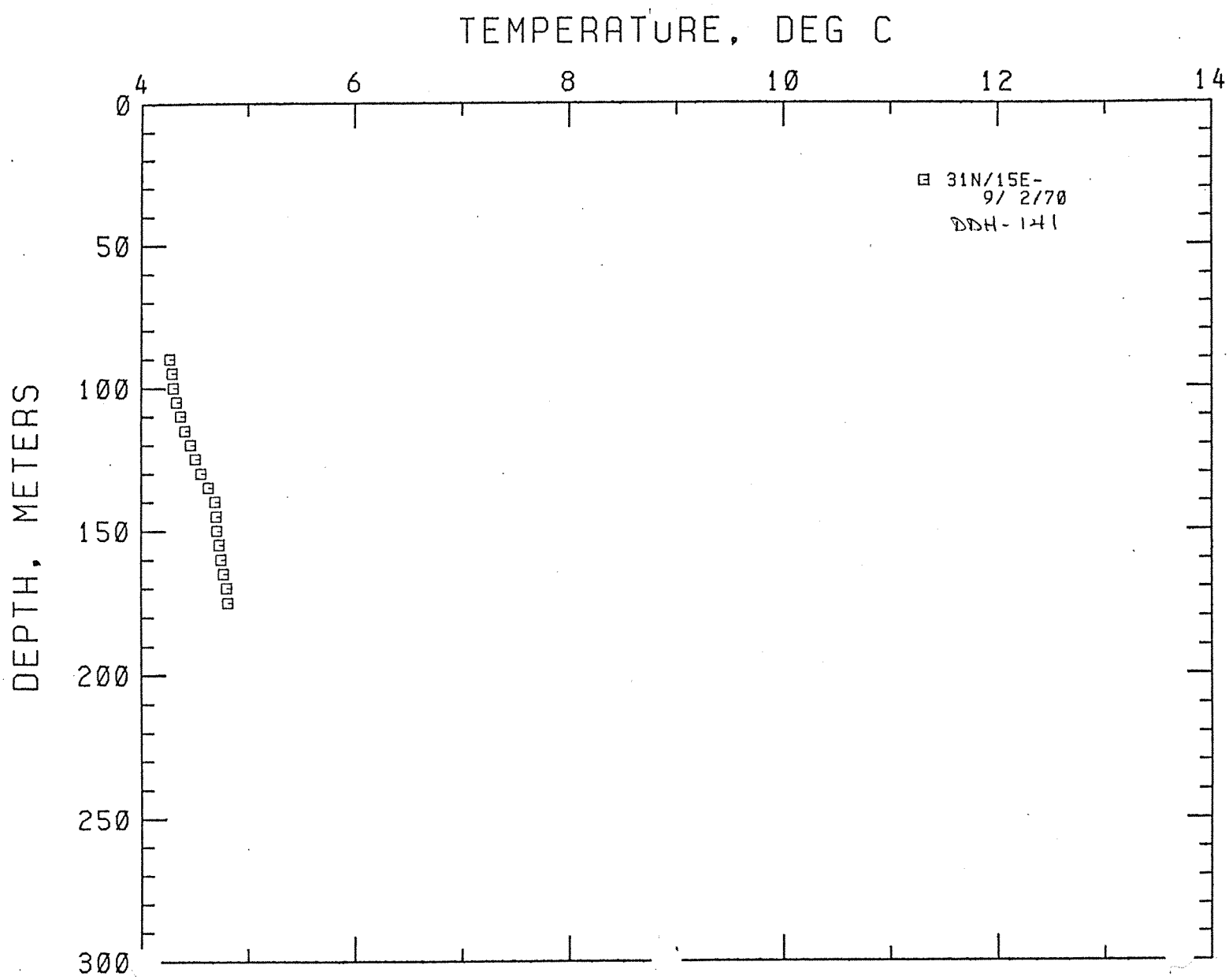
LOCATION: OKANOGAN AMS, WASH
33N/31E-14BDC
HOLE NAME: DDH-2
DATE MEASURED: 6/20/70

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	7.160	44.89	0.0	0.0
50.0	164.0	7.190	44.94	3.0	0.2
60.0	196.8	7.320	45.18	13.0	0.7
70.0	229.6	7.450	45.41	13.0	0.7
80.0	262.4	7.490	45.48	4.0	0.2
90.0	295.2	7.560	45.61	7.0	0.4
100.0	328.0	7.660	45.79	10.0	0.5
110.0	360.8	7.810	46.06	15.0	0.8
120.0	393.6	8.010	46.42	20.0	1.1
130.0	426.4	8.170	46.71	16.0	0.9
140.0	459.2	8.320	46.98	15.0	0.8
150.0	492.0	8.485	47.27	16.5	0.9
160.0	524.8	8.654	47.58	16.9	0.9
170.0	557.6	8.815	47.87	16.1	0.9
180.0	590.4	8.991	48.18	17.6	1.0
185.0	606.8	9.084	48.35	18.6	1.0
190.0	623.2	9.170	48.51	17.2	0.9
195.0	639.6	9.265	48.68	19.0	1.0
200.0	656.0	9.353	48.84	17.6	1.0


TEMPERATURE, DEG C
5
10
15
0
50
100
150
200
250
300
DEPTH, METERS
34N/ 1E- 1CBB
8/ 2/71
33N/31E-14BDA
6/20/70
33N/31E-14BDC
6/20/70

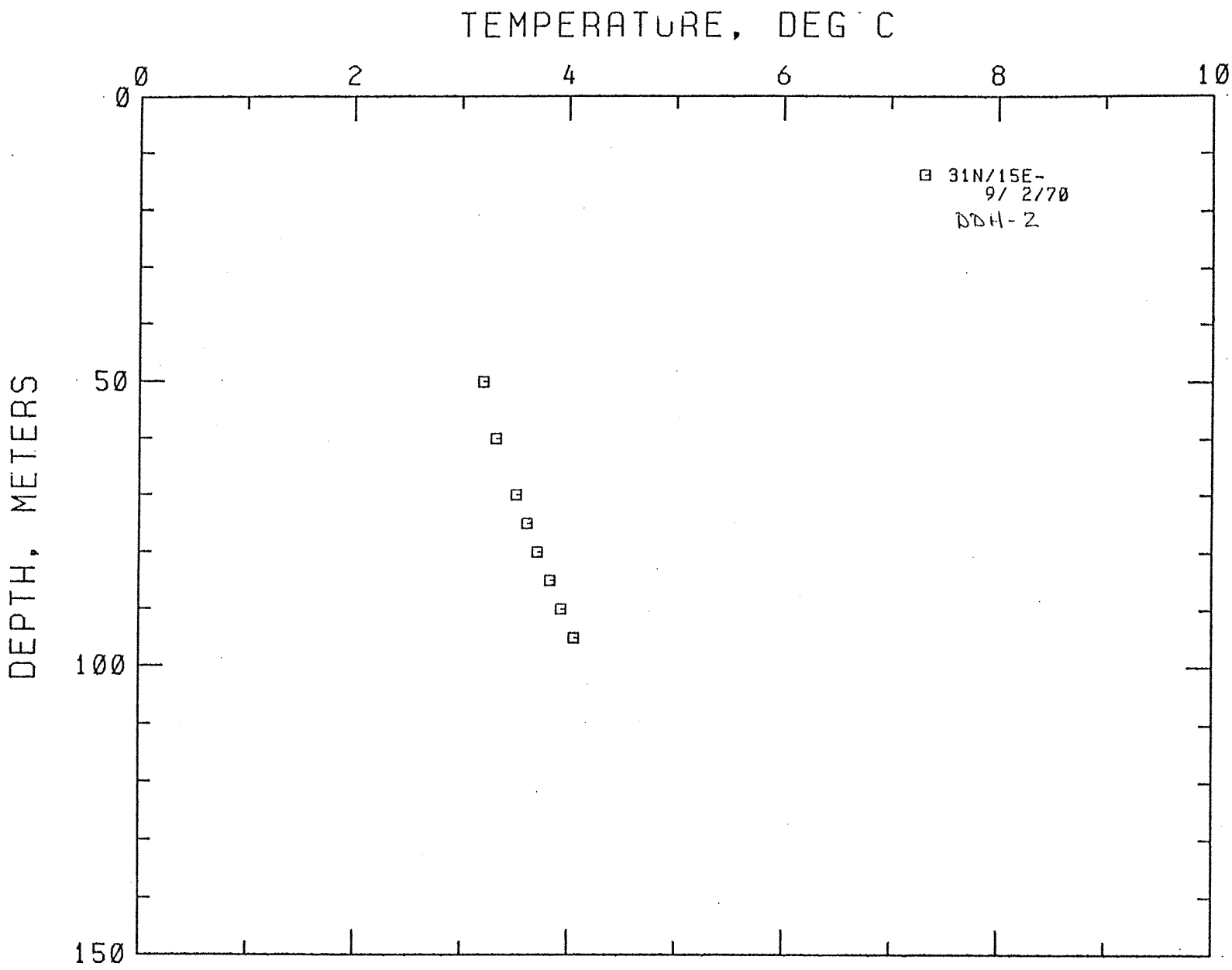
LOCATION: CONCRETE AMS,WASH
31N/15E-
HOLE NAME: DDH-141
DATE MEASURED: 9/ 2/70

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
90.0	295.2	4.270	39.69	0.0	0.0
95.0	311.6	4.290	39.72	4.0	0.2
100.0	328.0	4.300	39.74	2.0	0.1
105.0	344.4	4.330	39.79	6.0	0.3
110.0	360.8	4.370	39.87	8.0	0.4
115.0	377.2	4.410	39.94	8.0	0.4
120.0	393.6	4.460	40.03	10.0	0.5
125.0	410.0	4.510	40.12	10.0	0.5
130.0	426.4	4.560	40.21	10.0	0.5
135.0	442.8	4.630	40.33	14.0	0.8
140.0	459.2	4.690	40.44	12.0	0.7
145.0	475.6	4.700	40.46	2.0	0.1
150.0	492.0	4.710	40.48	2.0	0.1
155.0	508.4	4.730	40.51	4.0	0.2
160.0	524.8	4.750	40.55	4.0	0.2
165.0	541.2	4.770	40.59	4.0	0.2
170.0	557.6	4.800	40.64	6.0	0.3
175.0	574.0	4.810	40.66	2.0	0.1


TEMPERATURE, DEG C
4
6
8
10
12
14
0
50
100
150
200
250
300
DEPTH, METERS
31N/15E-
9/ 2/70
DDH-141

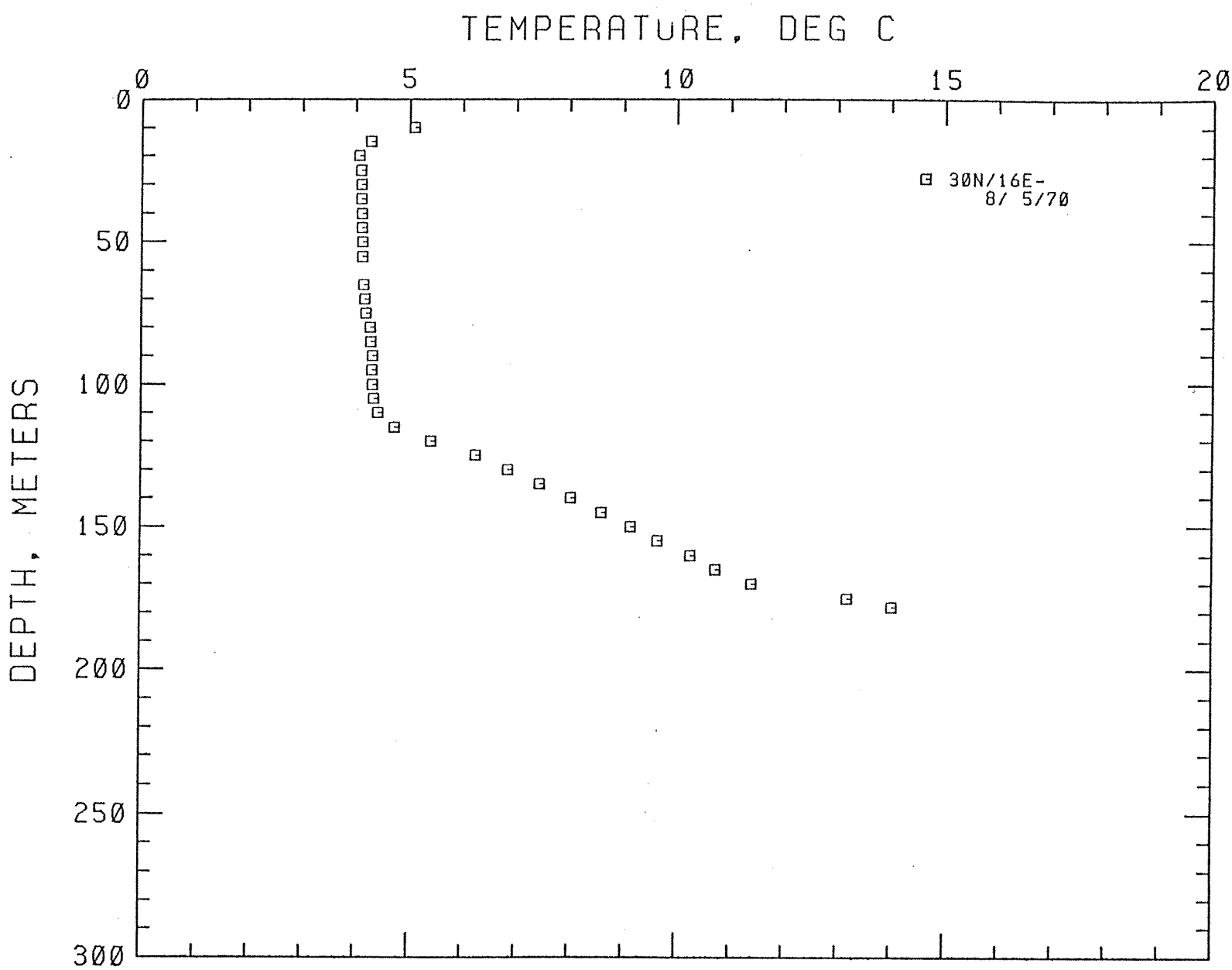
LOCATION: CONCRETE AMS, WASH
31N/15E-
HOLE NAME: DDH-2
DATE MEASURED: 9/ 2/70

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
50.0	164.0	3.210	37.78	0.0	0.0
60.0	196.8	3.330	37.99	12.0	0.7
70.0	229.6	3.520	38.34	19.0	1.0
75.0	246.0	3.620	38.52	20.0	1.1
80.0	262.4	3.720	38.70	20.0	1.1
85.0	278.8	3.840	38.91	24.0	1.3
90.0	295.2	3.940	39.09	20.0	1.1
95.0	311.6	4.060	39.31	24.0	1.3


TEMPERATURE, DEG C
0
2
4
6
8
10
0
50
100
150
DEPTH, METERS
31N/15E-
9/ 2/70
DDH-2

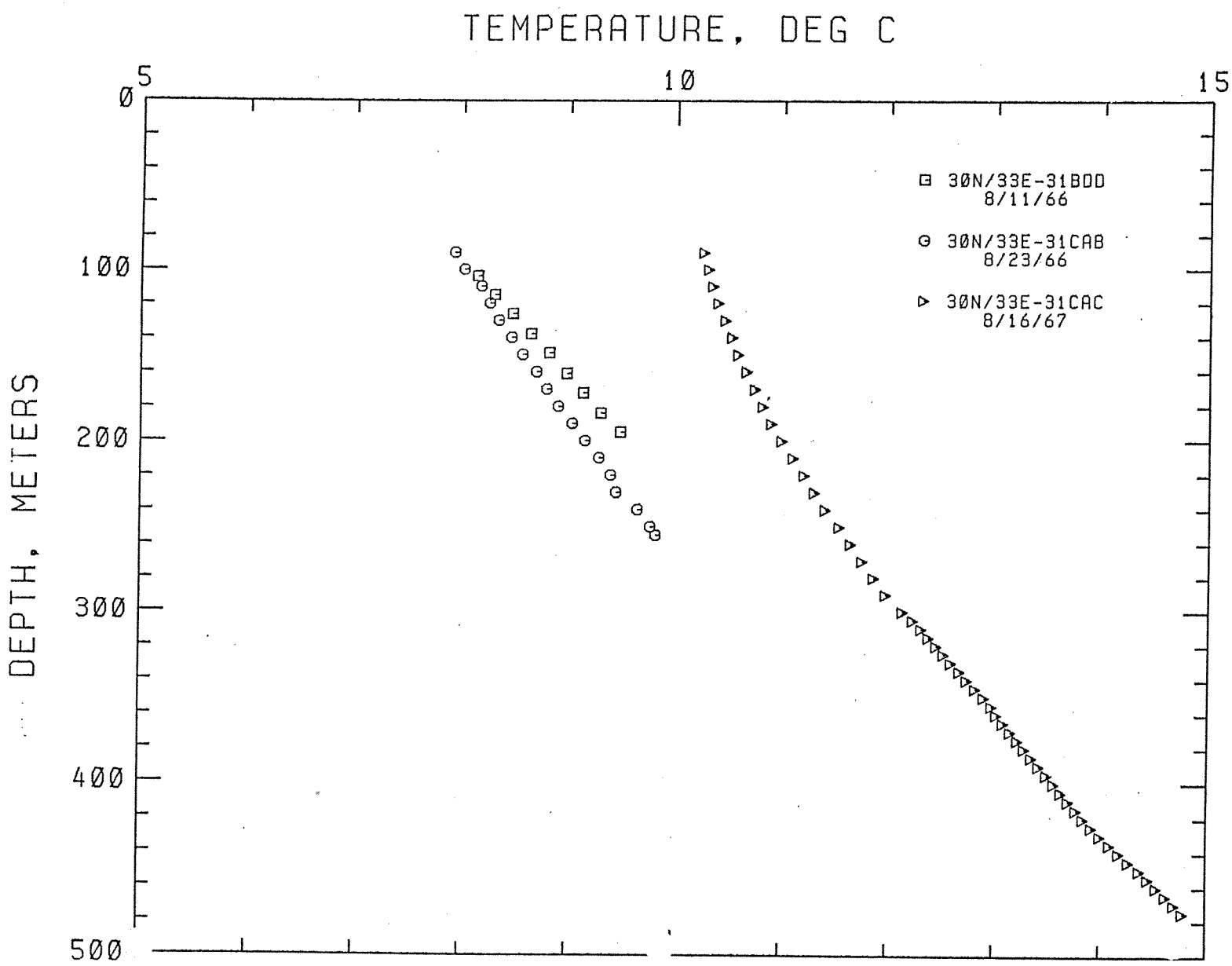
LOCATION: CONCRETE AMS, WASH
30N/16E-
HOLE NAME: DDH-1
DATE MEASURED: 8/ 5/70

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	5.100	41.18	0.0	0.0
15.0	49.2	4.290	39.72	-162.0	-8.9
20.0	65.6	4.070	39.33	-44.0	-2.4
25.0	82.0	4.100	39.38	6.0	0.3
30.0	98.4	4.110	39.40	2.0	0.1
35.0	114.8	4.110	39.40	0.0	0.0
40.0	131.2	4.120	39.42	2.0	0.1
45.0	147.6	4.130	39.43	2.0	0.1
50.0	164.0	4.140	39.45	2.0	0.1
55.0	180.4	4.140	39.45	0.0	0.0
65.0	213.2	4.160	39.49	2.0	0.1
70.0	229.6	4.180	39.52	4.0	0.2
75.0	246.0	4.210	39.58	6.0	0.3
80.0	262.4	4.280	39.70	14.0	0.8
85.0	278.8	4.300	39.74	4.0	0.2
90.0	295.2	4.330	39.79	6.0	0.3
95.0	311.6	4.320	39.78	-2.0	-0.1
100.0	328.0	4.330	39.79	2.0	0.1
105.0	344.4	4.350	39.83	4.0	0.2
110.0	360.8	4.430	39.97	16.0	0.9
115.0	377.2	4.740	40.53	62.0	3.4
120.0	393.6	5.430	41.77	138.0	7.6
125.0	410.0	6.260	43.27	166.0	9.1
130.0	426.4	6.870	44.37	122.0	6.7
135.0	442.8	7.460	45.43	118.0	6.5
140.0	459.2	8.040	46.47	116.0	6.4
145.0	475.6	8.620	47.52	116.0	6.4
150.0	492.0	9.170	48.51	110.0	6.0
155.0	508.4	9.670	49.41	100.0	5.5
160.0	524.8	10.280	50.50	122.0	6.7
165.0	541.2	10.750	51.35	94.0	5.2
170.0	557.6	11.430	52.57	136.0	7.5
175.0	574.0	13.210	55.78	356.0	19.5
178.0	583.8	14.040	57.27	276.7	15.2


TEMPERATURE, DEG C
0
5
10
15
20
DEPTH, METERS
0
50
100
150
200
250
300
30N/16E-
8/ 5/70

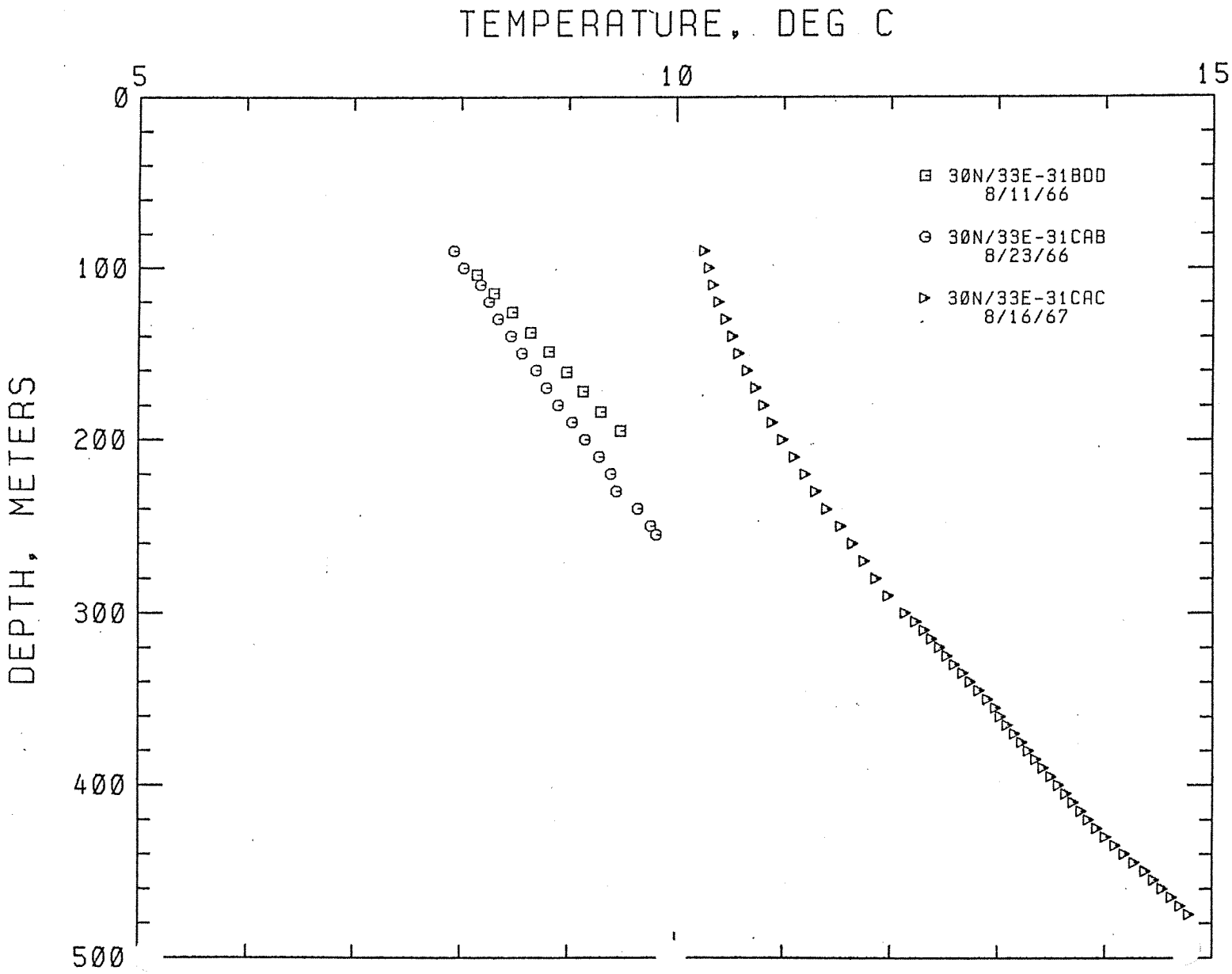
LOCATION: OKANOGAN AMS, WASH
30N/33E-31BDD
HOLE NAME: DDH-A
DATE MEASURED: 8/11/66

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
104.0	341.1	8.150	46.67	0.0	0.0
115.0	377.2	8.310	46.96	14.5	0.8
126.0	413.3	8.480	47.26	15.5	0.8
138.0	452.6	8.650	47.57	14.2	0.8
149.0	488.7	8.820	47.88	15.5	0.8
161.0	528.1	8.990	48.18	14.2	0.8
172.0	564.2	9.140	48.45	13.6	0.7
184.0	603.5	9.310	48.76	14.2	0.8
195.0	639.6	9.490	49.08	16.4	0.9


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
100
200
300
400
500
30N/33E-31BDD
8/11/66
30N/33E-31CAB
8/23/66
30N/33E-31CAC
8/16/67

LOCATION: OKANOGAN AMS, WASH
30N/33E-31CAB
HOLE NAME: DDH-B
DATE MEASURED: 8/23/66

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
90.0	295.2	7.930	46.27	0.0	0.0
100.0	328.0	8.020	46.44	9.0	0.5
110.0	360.8	8.180	46.72	16.0	0.9
120.0	393.6	8.260	46.87	8.0	0.4
130.0	426.4	8.350	47.03	9.0	0.5
140.0	459.2	8.470	47.25	12.0	0.7
150.0	492.0	8.570	47.43	10.0	0.5
160.0	524.8	8.700	47.66	13.0	0.7
170.0	557.6	8.800	47.84	10.0	0.5
180.0	590.4	8.910	48.04	11.0	0.6
190.0	623.2	9.040	48.27	13.0	0.7
200.0	656.0	9.160	48.49	12.0	0.7
210.0	688.8	9.290	48.72	13.0	0.7
220.0	721.6	9.400	48.92	11.0	0.6
230.0	754.4	9.450	49.01	5.0	0.3
240.0	787.2	9.650	49.37	20.0	1.1
250.0	820.0	9.770	49.59	12.0	0.7
255.0	836.4	9.820	49.68	10.0	0.5

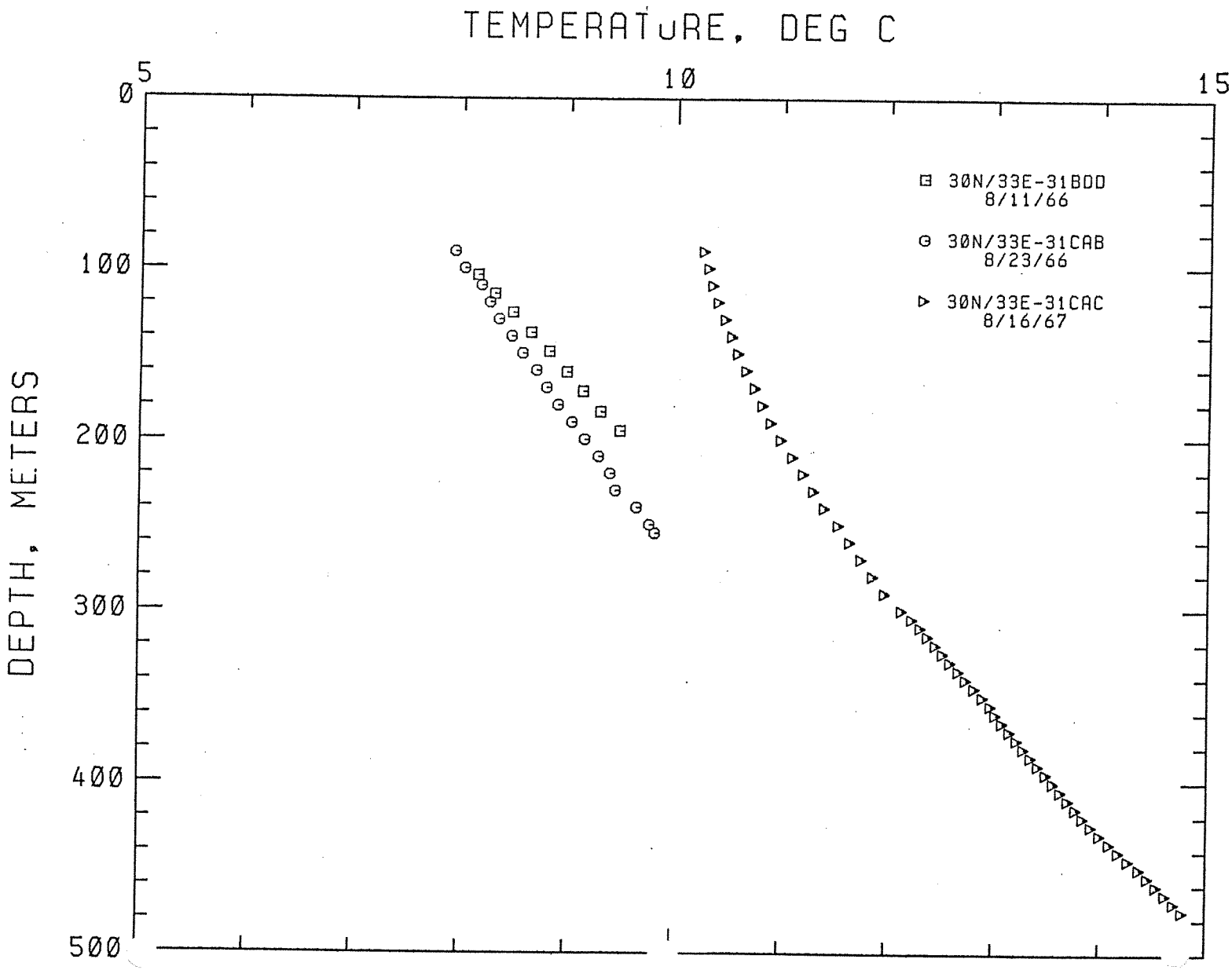

TEMPERATURE, DEG C
5
10
15
0
100
200
300
400
500
DEPTH, METERS
30N/33E-31BDD
8/11/66
30N/33E-31CAB
8/23/66
30N/33E-31CAC
8/16/67

LOCATION: OKANOGAN AMS, WASH
30N/33E-31CAC
HOLE NAME: DDH-C
DATE MEASURED: 8/16/67

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
90.0	295.2	10.260	50.47	0.0	0.0
100.0	328.0	10.310	50.56	5.0	0.3
110.0	360.8	10.350	50.63	4.0	0.2
120.0	393.6	10.400	50.72	5.0	0.3
130.0	426.4	10.470	50.85	7.0	0.4
140.0	459.2	10.530	50.95	6.0	0.3
150.0	492.0	10.590	51.06	6.0	0.3
160.0	524.8	10.670	51.21	8.0	0.4
170.0	557.6	10.750	51.35	8.0	0.4
180.0	590.4	10.820	51.48	7.0	0.4
190.0	623.2	10.900	51.62	8.0	0.4
200.0	656.0	11.000	51.80	10.0	0.5
210.0	688.8	11.110	52.00	11.0	0.6
220.0	721.6	11.210	52.18	10.0	0.5
230.0	754.4	11.310	52.36	10.0	0.5
240.0	787.2	11.410	52.54	10.0	0.5
250.0	820.0	11.540	52.77	13.0	0.7
260.0	852.8	11.650	52.97	11.0	0.6
270.0	885.6	11.760	53.17	11.0	0.6
280.0	918.4	11.870	53.37	11.0	0.6
290.0	951.2	11.980	53.56	11.0	0.6
300.0	984.0	12.140	53.85	16.0	0.9
305.0	1000.4	12.240	54.03	20.0	1.1
310.0	1016.8	12.320	54.18	16.0	0.9
315.0	1033.2	12.390	54.30	14.0	0.8
320.0	1049.6	12.460	54.43	14.0	0.8
325.0	1066.0	12.530	54.55	14.0	0.8
330.0	1082.4	12.600	54.68	14.0	0.8
335.0	1098.8	12.680	54.82	16.0	0.9
340.0	1115.2	12.750	54.95	14.0	0.8
345.0	1131.6	12.830	55.09	16.0	0.9
350.0	1148.0	12.910	55.24	16.0	0.9
355.0	1164.4	12.980	55.36	14.0	0.8
360.0	1180.8	13.030	55.45	10.0	0.5
365.0	1197.2	13.090	55.56	12.0	0.7
370.0	1213.6	13.160	55.69	14.0	0.8
375.0	1230.0	13.230	55.81	14.0	0.8
380.0	1246.4	13.290	55.92	12.0	0.7
385.0	1262.8	13.360	56.05	14.0	0.8
390.0	1279.2	13.430	56.17	14.0	0.8
395.0	1295.6	13.500	56.30	14.0	0.8

LOCATION: OKANOGAN AMS, WASH
30N/33E-31CAC
HOLE NAME: DDH-C
DATE MEASURED: 8/16/67

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
400.0	1312.0	13.570	56.43	14.0	0.8
405.0	1328.4	13.640	56.55	14.0	0.8
410.0	1344.8	13.710	56.68	14.0	0.8
415.0	1361.2	13.780	56.80	14.0	0.8
420.0	1377.6	13.850	56.93	14.0	0.8
425.0	1394.0	13.930	57.07	16.0	0.9
430.0	1410.4	14.010	57.22	16.0	0.9
435.0	1426.8	14.100	57.38	18.0	1.0
440.0	1443.2	14.190	57.54	18.0	1.0
445.0	1459.6	14.280	57.70	18.0	1.0
450.0	1476.0	14.380	57.88	20.0	1.1
455.0	1492.4	14.460	58.03	16.0	0.9
460.0	1508.8	14.540	58.17	16.0	0.9
465.0	1525.2	14.630	58.33	18.0	1.0
470.0	1541.6	14.710	58.48	16.0	0.9
475.0	1558.0	14.790	58.62	16.0	0.9


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
100
200
300
400
500
30N/33E-31BDD
8/11/66
30N/33E-31CAB
8/23/66
30N/33E-31CAC
8/16/67

LOCATION: RITZVILLE AMS, WASH
29N/37E-36DDD
HOLE NAME: DDH-2
DATE MEASURED: 10/15/72

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	7.090	44.76	0.0	0.0
25.0	82.0	7.210	44.98	24.0	1.3
30.0	98.4	7.320	45.18	22.0	1.2
35.0	114.8	7.350	45.23	6.0	0.3
40.0	131.2	7.380	45.28	6.0	0.3
45.0	147.6	7.460	45.43	16.0	0.9
50.0	164.0	7.560	45.61	20.0	1.1
55.0	180.4	7.680	45.82	24.0	1.3
60.0	196.8	7.820	46.08	28.0	1.5
65.0	213.2	7.950	46.31	26.0	1.4
70.0	229.6	8.090	46.56	28.0	1.5
75.0	246.0	8.230	46.81	28.0	1.5
80.0	262.4	8.370	47.07	28.0	1.5
85.0	278.8	8.520	47.34	30.0	1.6
90.0	295.2	8.680	47.62	32.0	1.8
95.0	311.6	8.880	47.98	40.0	2.2
100.0	328.0	8.990	48.18	22.0	1.2
105.0	344.4	9.120	48.42	26.0	1.4
110.0	360.8	9.260	48.67	28.0	1.5
115.0	377.2	9.400	48.92	28.0	1.5
120.0	393.6	9.560	49.21	32.0	1.8
125.0	410.0	9.710	49.48	30.0	1.6
130.0	426.4	9.860	49.75	30.0	1.6
135.0	442.8	10.000	50.00	28.0	1.5
140.0	459.2	10.150	50.27	30.0	1.6
145.0	475.6	10.310	50.56	32.0	1.8
150.0	492.0	10.450	50.81	28.0	1.5
155.0	508.4	10.600	51.08	30.0	1.6
160.0	524.8	10.740	51.33	28.0	1.5
165.0	541.2	10.890	51.60	30.0	1.6
170.0	557.6	11.040	51.87	30.0	1.6
175.0	574.0	11.170	52.11	26.0	1.4
180.0	590.4	11.310	52.36	28.0	1.5
185.0	606.8	11.450	52.61	28.0	1.5
190.0	623.2	11.580	52.84	26.0	1.4
195.0	639.6	11.720	53.10	28.0	1.5
200.0	656.0	11.850	53.33	26.0	1.4
205.0	672.4	11.990	53.58	28.0	1.5
210.0	688.8	12.130	53.83	28.0	1.5
215.0	705.2	12.270	54.09	28.0	1.5
220.0	721.6	12.400	54.32	26.0	1.4

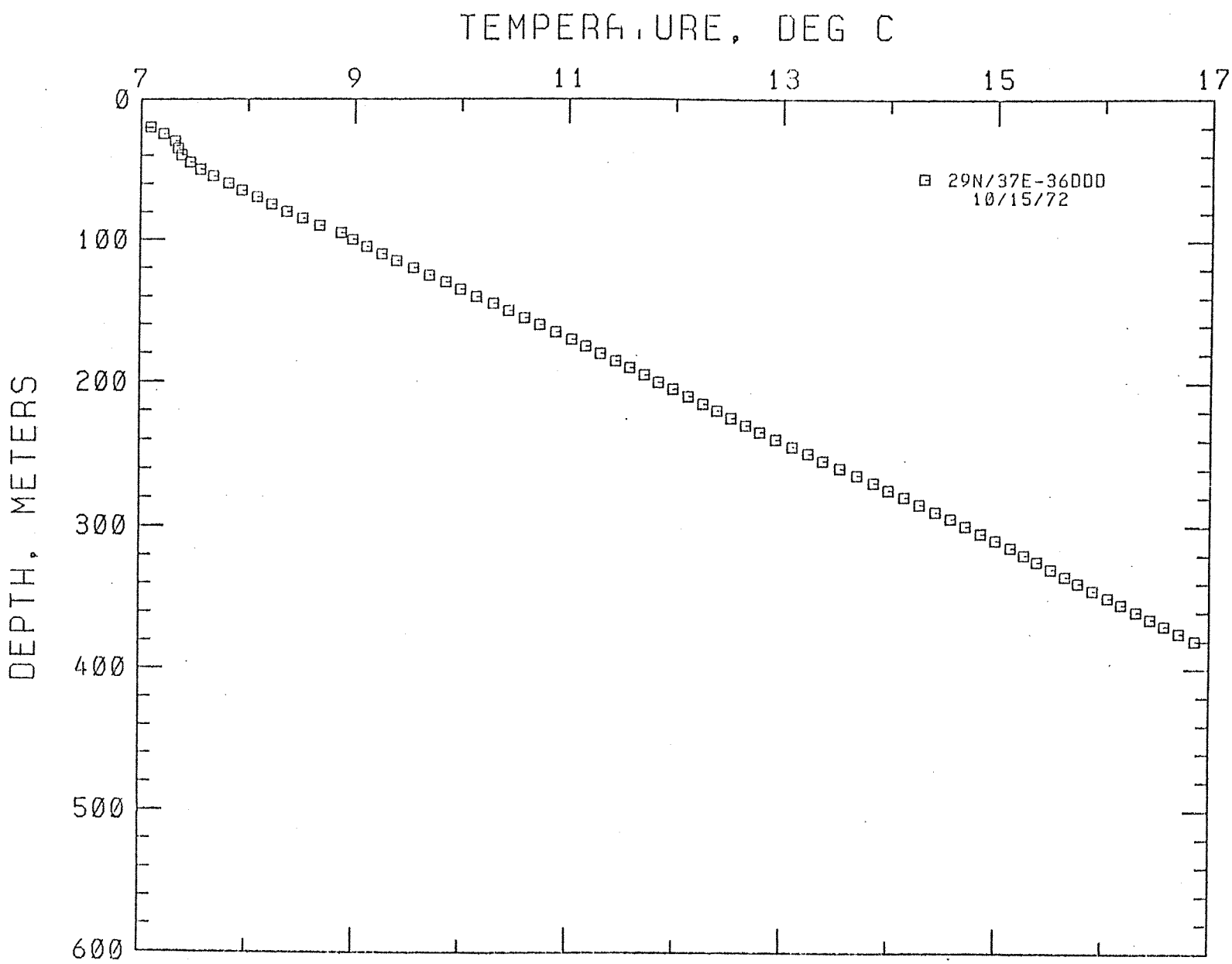
LOCATION: RITZVILLE AMS, WASH
29N/37E-36DDD

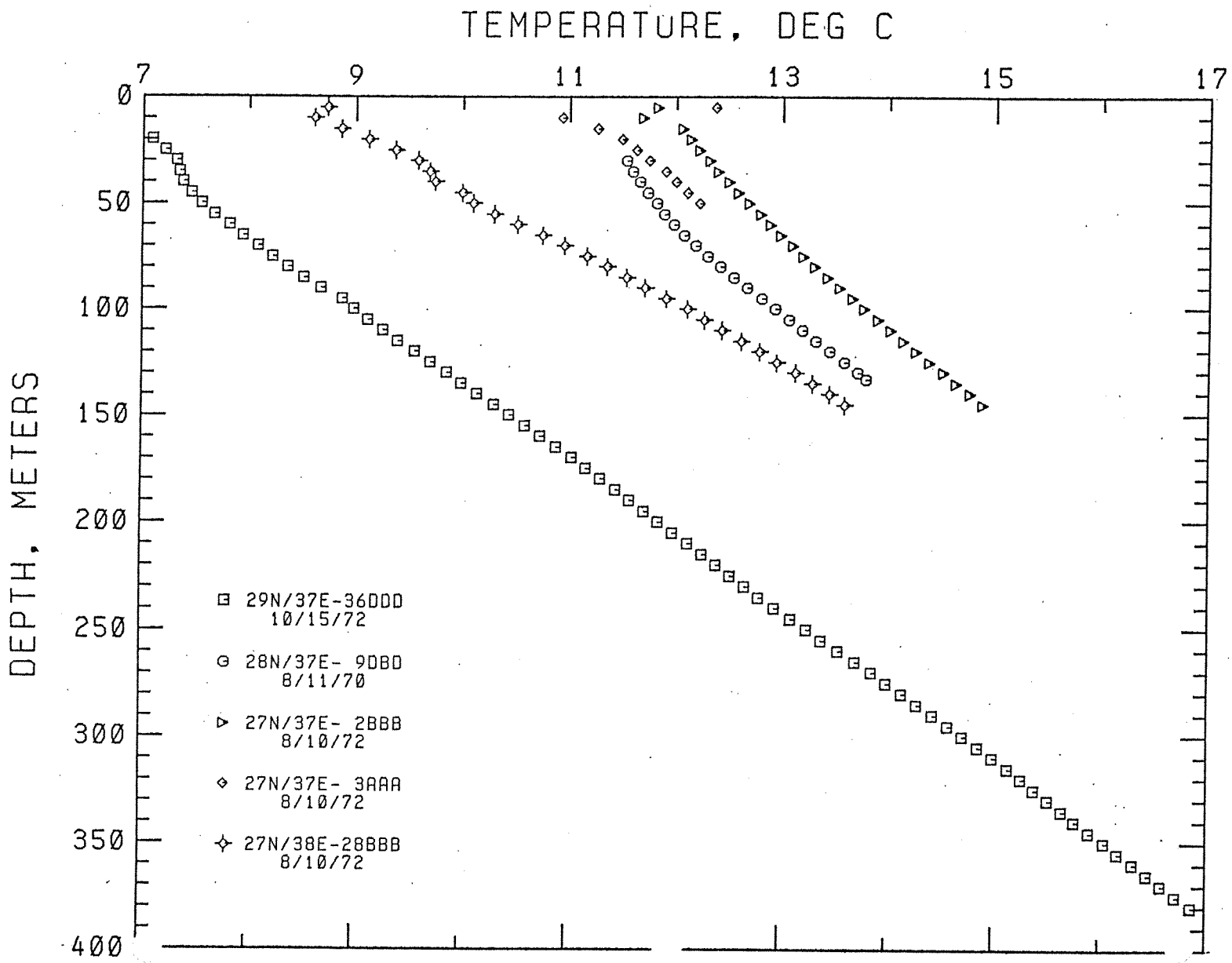
HOLE NAME: DDH-2
DATE MEASURED: 10/15/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
225.0	738.0	12.530	54.55	26.0	1.4
230.0	754.4	12.670	54.81	28.0	1.5
235.0	770.8	12.800	55.04	26.0	1.4
240.0	787.2	12.950	55.31	30.0	1.6
245.0	803.6	13.100	55.58	30.0	1.6
250.0	820.0	13.250	55.85	30.0	1.6
255.0	836.4	13.390	56.10	28.0	1.5
260.0	852.8	13.550	56.39	32.0	1.8
265.0	869.2	13.710	56.68	32.0	1.8
270.0	885.6	13.860	56.95	30.0	1.6
275.0	902.0	14.000	57.20	28.0	1.5
280.0	918.4	14.150	57.47	30.0	1.6
285.0	934.8	14.290	57.72	28.0	1.5
290.0	951.2	14.440	57.99	30.0	1.6
295.0	967.6	14.580	58.24	28.0	1.5
300.0	984.0	14.720	58.50	28.0	1.5
305.0	1000.4	14.860	58.75	28.0	1.5
310.0	1016.8	15.000	59.00	28.0	1.5
315.0	1033.2	15.140	59.25	28.0	1.5
320.0	1049.6	15.270	59.49	26.0	1.4
325.0	1066.0	15.390	59.70	24.0	1.3
330.0	1082.4	15.520	59.94	26.0	1.4
335.0	1098.8	15.650	60.17	26.0	1.4
340.0	1115.2	15.770	60.39	24.0	1.3
345.0	1131.6	15.910	60.64	28.0	1.5
350.0	1148.0	16.050	60.89	28.0	1.5
355.0	1164.4	16.180	61.12	26.0	1.4
360.0	1180.8	16.320	61.38	28.0	1.5
365.0	1197.2	16.450	61.61	26.0	1.4
370.0	1213.6	16.580	61.84	26.0	1.4
375.0	1230.0	16.720	62.10	28.0	1.5
380.0	1246.4	16.870	62.37	30.0	1.6

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 7AAB
HOLE NAME: RDH-SU8
DATE MEASURED: 1/ 7/72

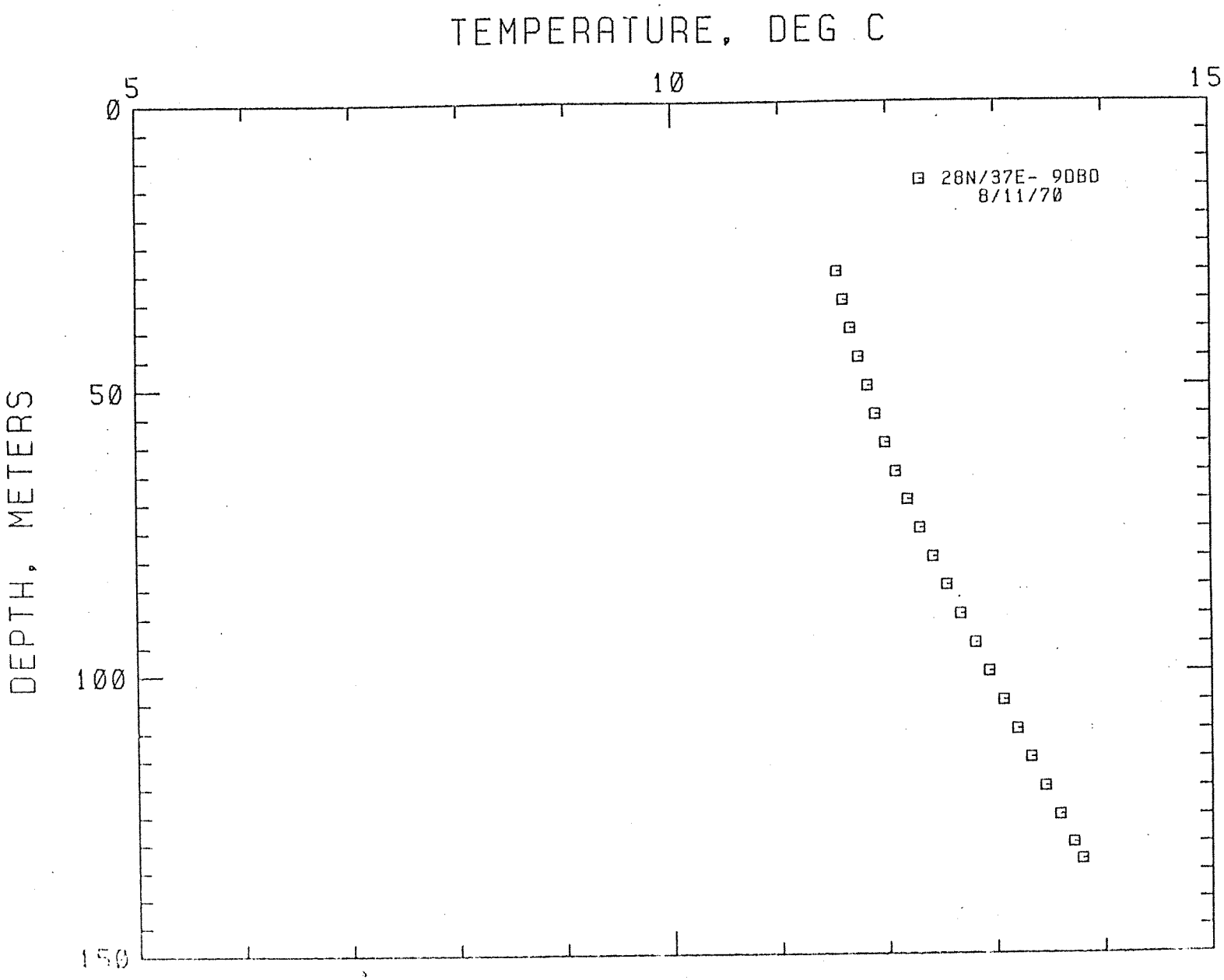
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
260.0	852.8	17.249	63.05	39.2	2.2
265.0	869.2	17.446	63.40	39.4	2.2
270.0	885.6	17.631	63.74	37.0	2.0
275.0	902.0	17.769	63.98	27.6	1.5
280.0	918.4	17.952	64.31	36.6	2.0
285.0	934.8	18.093	64.57	28.2	1.5
290.0	951.2	18.274	64.89	36.2	2.0
295.0	967.6	18.434	65.18	32.0	1.8
300.0	984.0	18.619	65.51	37.0	2.0
305.0	1000.4	18.744	65.74	25.0	1.4
310.0	1016.8	18.944	66.10	40.0	2.2
315.0	1033.2	19.064	66.32	24.0	1.3
320.0	1049.6	19.199	66.56	27.0	1.5
325.0	1066.0	19.323	66.78	24.8	1.4
330.0	1082.4	19.467	67.04	28.8	1.6
335.0	1098.8	19.602	67.28	27.0	1.5
340.0	1115.2	19.743	67.54	28.2	1.5
345.0	1131.6	19.873	67.77	26.0	1.4
350.0	1148.0	20.016	68.03	28.6	1.6
355.0	1164.4	20.081	68.15	13.0	0.7
360.0	1180.8	20.175	68.32	18.8	1.0
365.0	1197.2	20.499	68.90	64.8	3.6
370.0	1213.6	20.331	68.60	-33.6	-1.8
375.0	1230.0	20.417	68.75	17.2	0.9
380.0	1246.4	20.554	69.00	27.4	1.5
385.0	1262.8	20.647	69.16	18.6	1.0
390.0	1279.2	20.798	69.44	30.2	1.7
395.0	1295.6	20.914	69.65	23.2	1.3
400.0	1312.0	21.055	69.90	28.2	1.5
405.0	1328.4	21.146	70.06	18.2	1.0
410.0	1344.8	21.294	70.33	29.6	1.6
415.0	1361.2	21.401	70.52	21.4	1.2
420.0	1377.6	21.531	70.76	26.0	1.4
425.0	1394.0	21.656	70.98	25.0	1.4
430.0	1410.4	21.794	71.23	27.6	1.5
435.0	1426.8	21.941	71.49	29.4	1.6
440.0	1443.2	22.061	71.71	24.0	1.3
445.0	1459.6	22.178	71.92	23.4	1.3
450.0	1476.0	22.310	72.16	26.4	1.4
455.0	1492.4	22.434	72.38	24.8	1.4
460.0	1508.8	22.561	72.61	25.4	1.4
465.0	1525.2	22.700	72.86	27.8	1.5

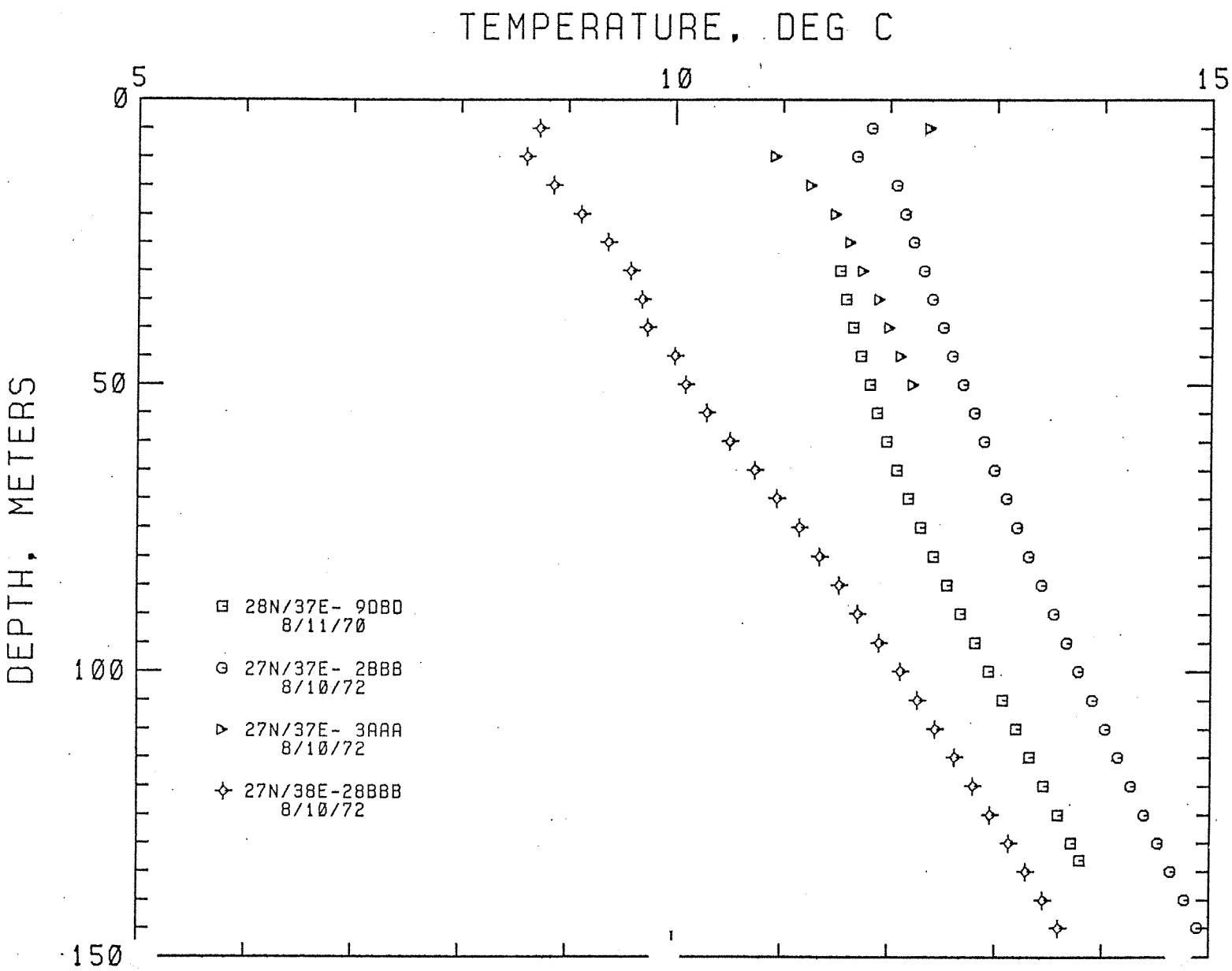

TEMPERATURE, DEG C
7
9
11
13
15
17
0
100
200
300
400
500
600
DEPTH, METERS
29N/37E-36DDD
10/15/72


TEMPERATURE, DEG C
7
9
11
13
15
17
DEPTH, METERS
0
50
100
150
200
250
300
350
400
29N/37E-36DDD
10/15/72
28N/37E- 9DBD
8/11/70
27N/37E- 2BBB
8/10/72
27N/37E- 3AAA
8/10/72
27N/38E-28BBB
8/10/72

LOCATION: RITZVILLE AMS, WASH
28N/37E- 9DBD
HOLE NAME: S-9
DATE MEASURED: 8/11/70

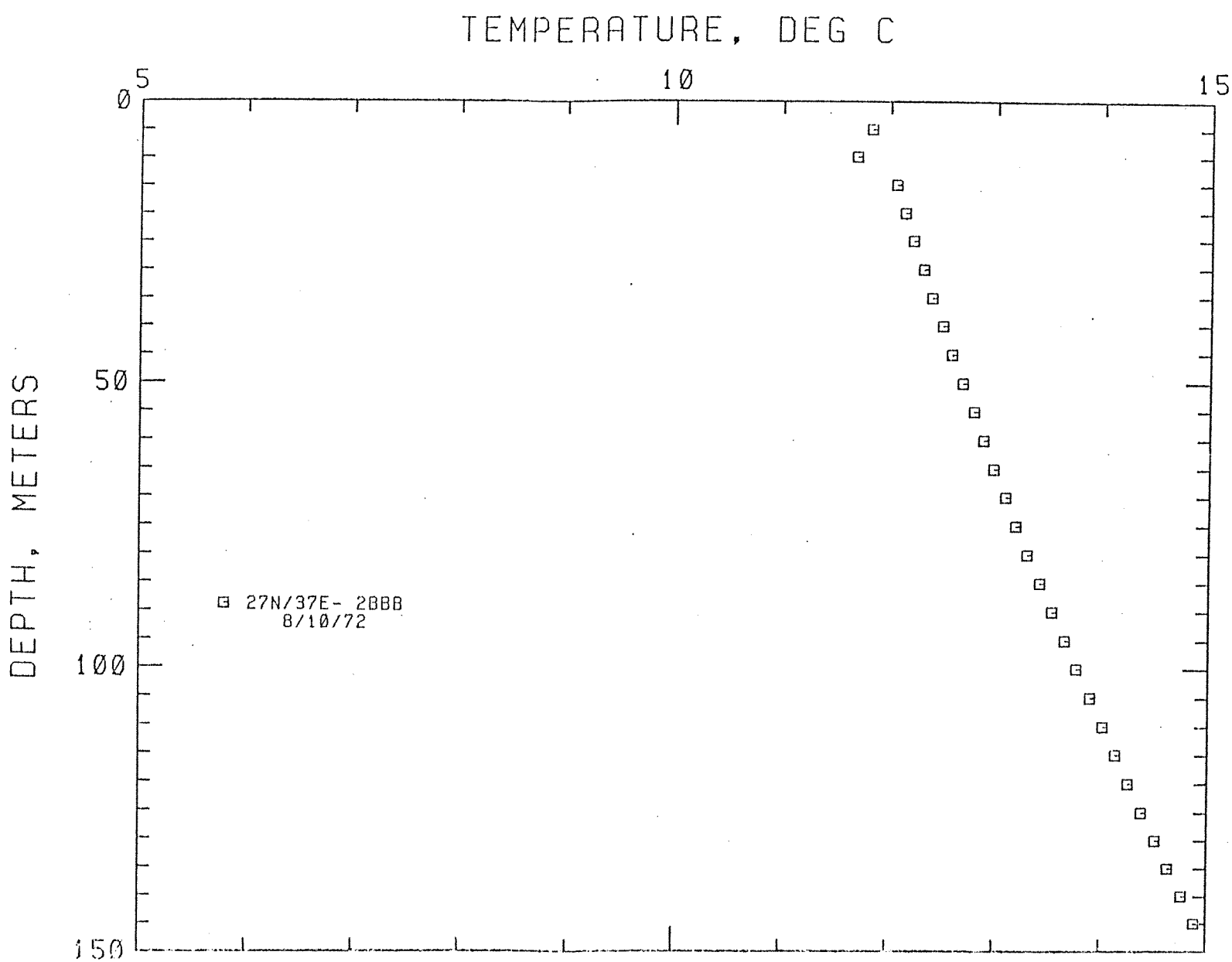
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
30.0	98.4	11.539	52.77	0.0	0.0
35.0	114.8	11.596	52.87	11.4	0.6
40.0	131.2	11.664	53.00	13.6	0.7
45.0	147.6	11.737	53.13	14.6	0.8
50.0	164.0	11.824	53.28	17.4	1.0
55.0	180.4	11.891	53.40	13.4	0.7
60.0	196.8	11.981	53.57	18.0	1.0
65.0	213.2	12.081	53.75	20.0	1.1
70.0	229.6	12.188	53.94	21.4	1.2
75.0	246.0	12.304	54.15	23.2	1.3
80.0	262.4	12.423	54.36	23.8	1.3
85.0	278.8	12.551	54.59	25.6	1.4
90.0	295.2	12.674	54.81	24.6	1.4
95.0	311.6	12.810	55.06	27.2	1.5
100.0	328.0	12.939	55.29	25.8	1.4
105.0	344.4	13.066	55.52	25.4	1.4
110.0	360.8	13.193	55.75	25.4	1.4
115.0	377.2	13.318	55.97	25.0	1.4
120.0	393.6	13.453	56.22	27.0	1.5
125.0	410.0	13.591	56.46	27.6	1.5
130.0	426.4	13.712	56.68	24.2	1.3
133.0	436.2	13.795	56.83	27.7	1.5

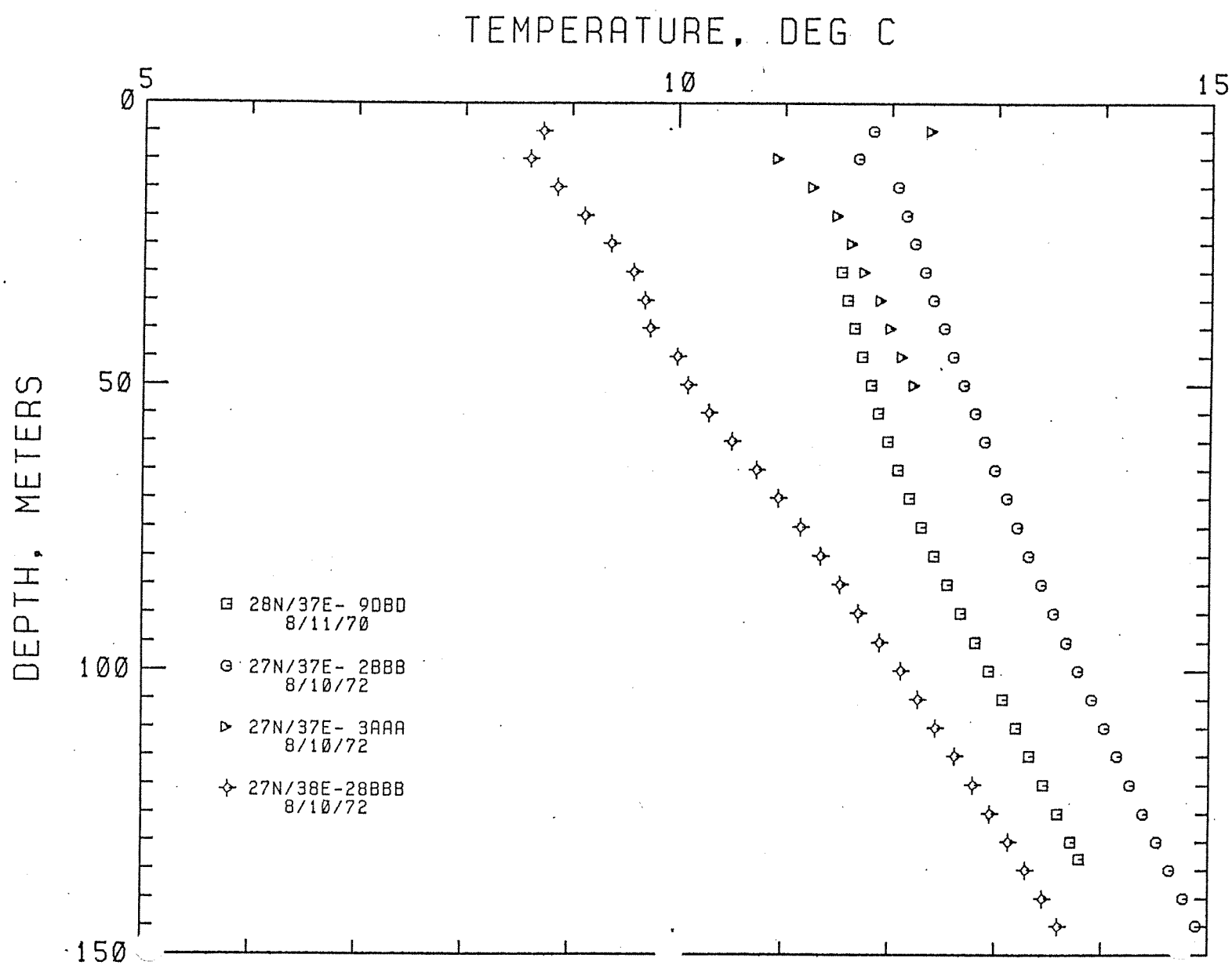

TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
28N/37E- 9DBD
8/11/70


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
28N/37E- 9DBD
8/11/70
27N/37E- 2BBB
8/10/72
27N/37E- 3AAA
8/10/72
27N/38E-28BBB
8/10/72

LOCATION: RITZVILLE AMS, WASH
27N/37E- 2BBB
HOLE NAME: WW-EAST
DATE MEASURED: 8/10/72

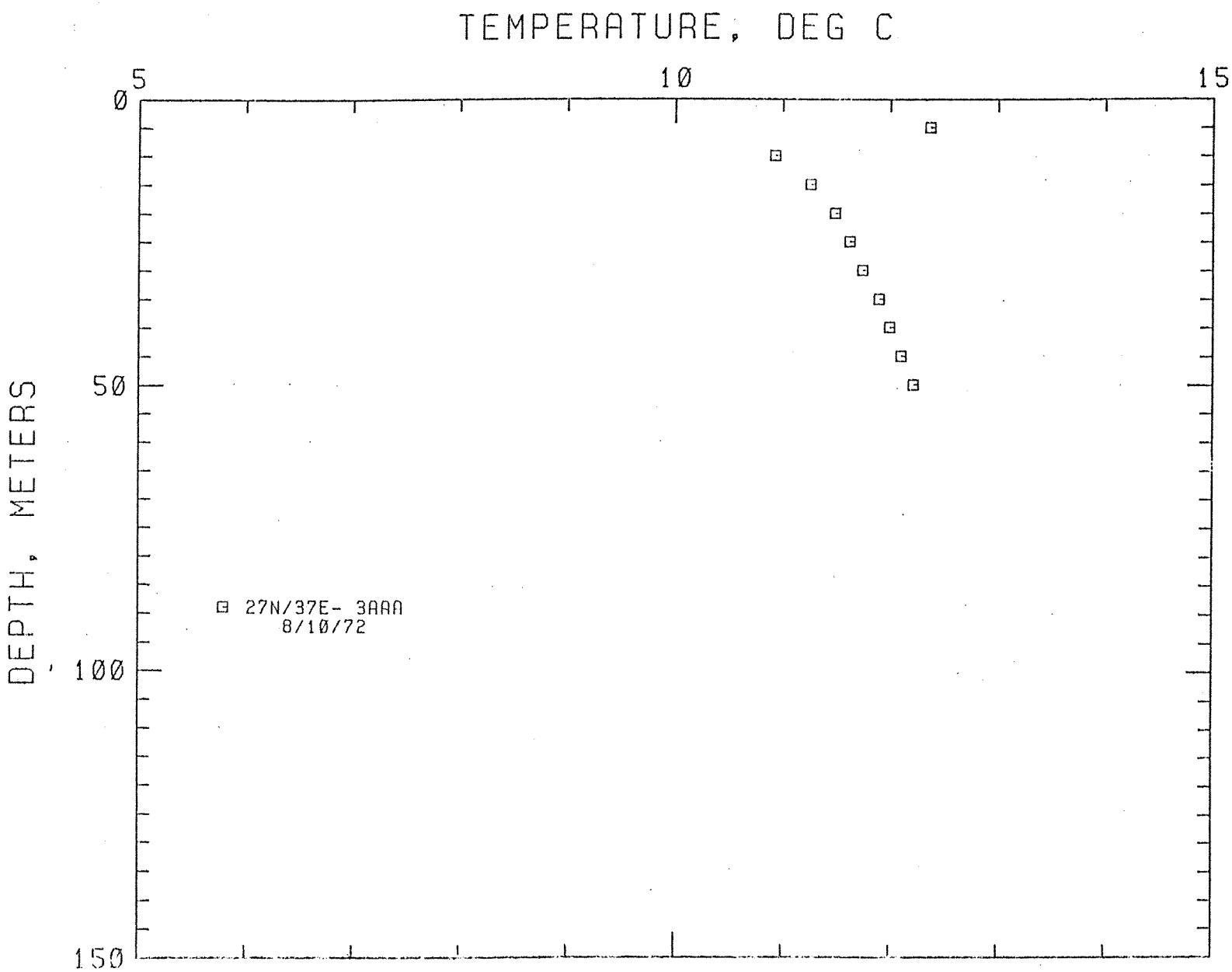
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	11.830	53.29	0.0	0.0
10.0	32.8	11.690	53.04	-28.0	-1.5
15.0	49.2	12.060	53.71	74.0	4.1
20.0	65.6	12.140	53.85	16.0	0.9
25.0	82.0	12.220	54.00	16.0	0.9
30.0	98.4	12.320	54.18	20.0	1.1
35.0	114.8	12.400	54.32	16.0	0.9
40.0	131.2	12.500	54.50	20.0	1.1
45.0	147.6	12.590	54.66	18.0	1.0
50.0	164.0	12.690	54.84	20.0	1.1
55.0	180.4	12.800	55.04	22.0	1.2
60.0	196.8	12.890	55.20	18.0	1.0
65.0	213.2	12.990	55.38	20.0	1.1
70.0	229.6	13.100	55.58	22.0	1.2
75.0	246.0	13.200	55.76	20.0	1.1
80.0	262.4	13.310	55.96	22.0	1.2
85.0	278.8	13.430	56.17	24.0	1.3
90.0	295.2	13.540	56.37	22.0	1.2
95.0	311.6	13.660	56.59	24.0	1.3
100.0	328.0	13.770	56.79	22.0	1.2
105.0	344.4	13.900	57.02	26.0	1.4
110.0	360.8	14.020	57.24	24.0	1.3
115.0	377.2	14.140	57.45	24.0	1.3
120.0	393.6	14.260	57.67	24.0	1.3
125.0	410.0	14.390	57.90	26.0	1.4
130.0	426.4	14.520	58.14	26.0	1.4
135.0	442.8	14.640	58.35	24.0	1.3
140.0	459.2	14.770	58.59	26.0	1.4
145.0	475.6	14.890	58.80	24.0	1.3

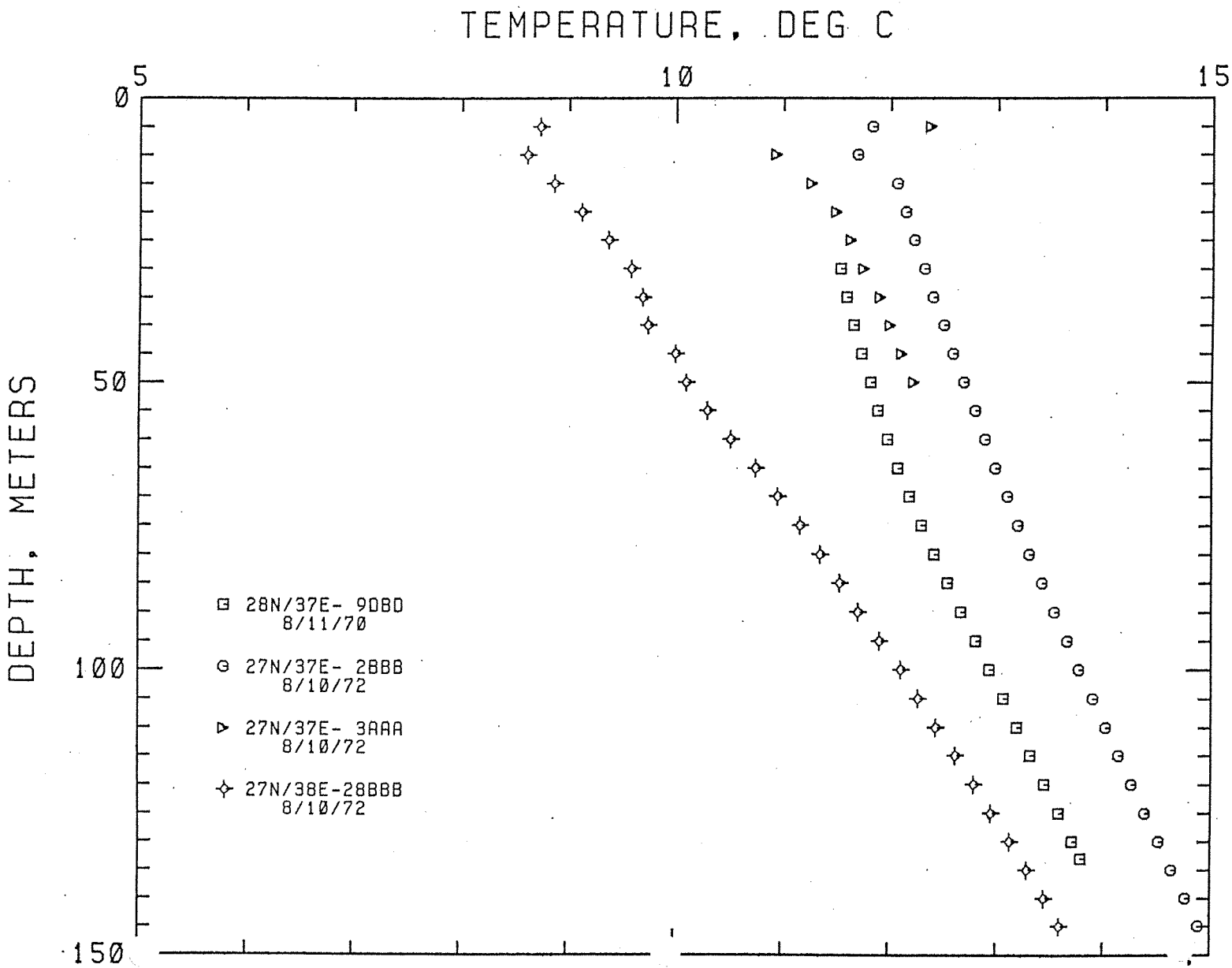

TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
27N/37E- 2BBB
8/10/72


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
28N/37E- 9DBD
8/11/70
27N/37E- 2BBB
8/10/72
27N/37E- 3AAA
8/10/72
27N/38E-28BBB
8/10/72

LOCATION: RITZVILLE AMS, WASH
27N/37E- 3AAA
HOLE NAME: WW-WEST
DATE MEASURED: 8/10/72

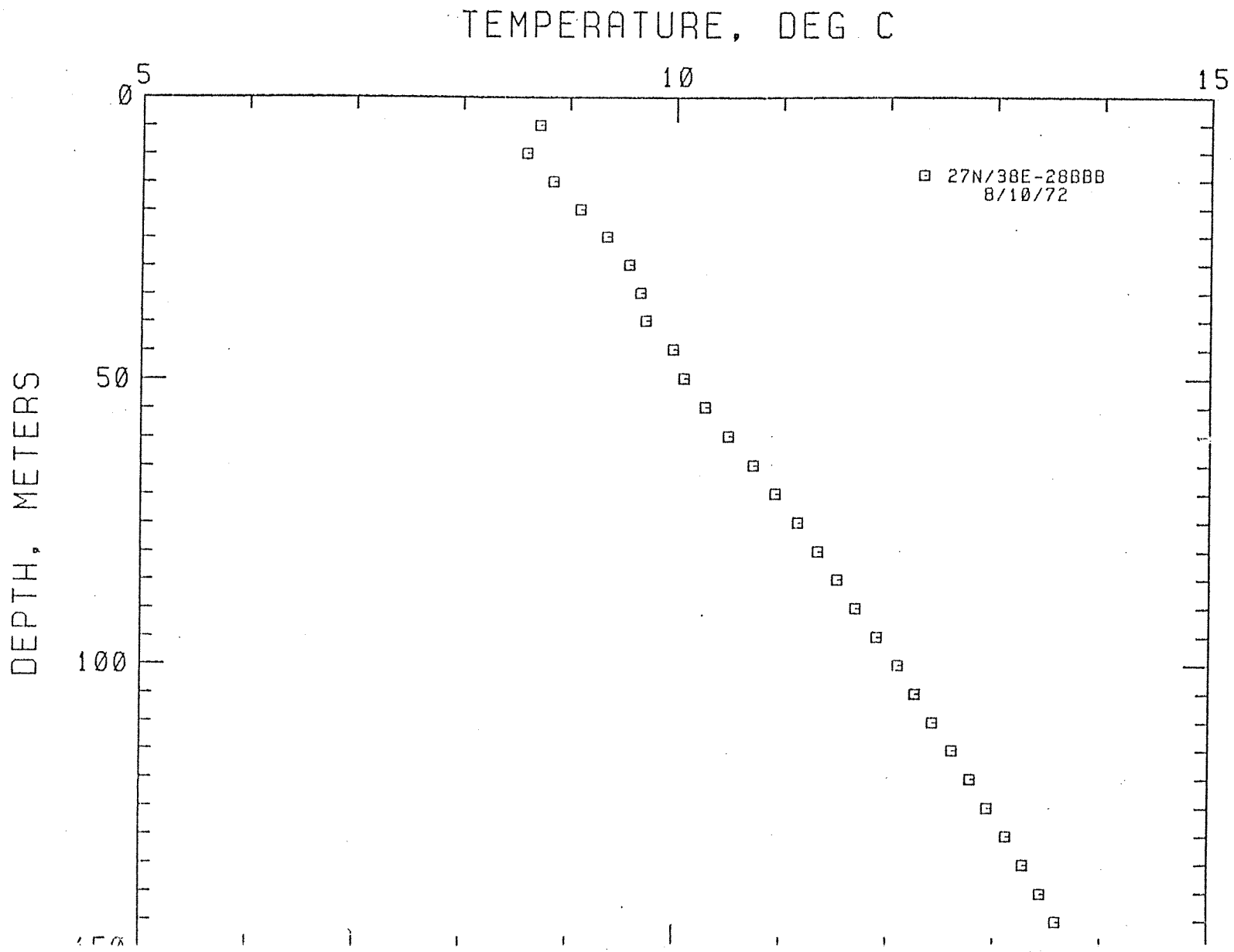
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	12.370	54.27	0.0	0.0
10.0	32.8	10.930	51.67	-288.0	-15.8
15.0	49.2	11.260	52.27	66.0	3.6
20.0	65.6	11.490	52.68	46.0	2.5
25.0	82.0	11.630	52.93	28.0	1.5
30.0	98.4	11.750	53.15	24.0	1.3
35.0	114.8	11.900	53.42	30.0	1.6
40.0	131.2	12.000	53.60	20.0	1.1
45.0	147.6	12.110	53.80	22.0	1.2
50.0	164.0	12.220	54.00	22.0	1.2

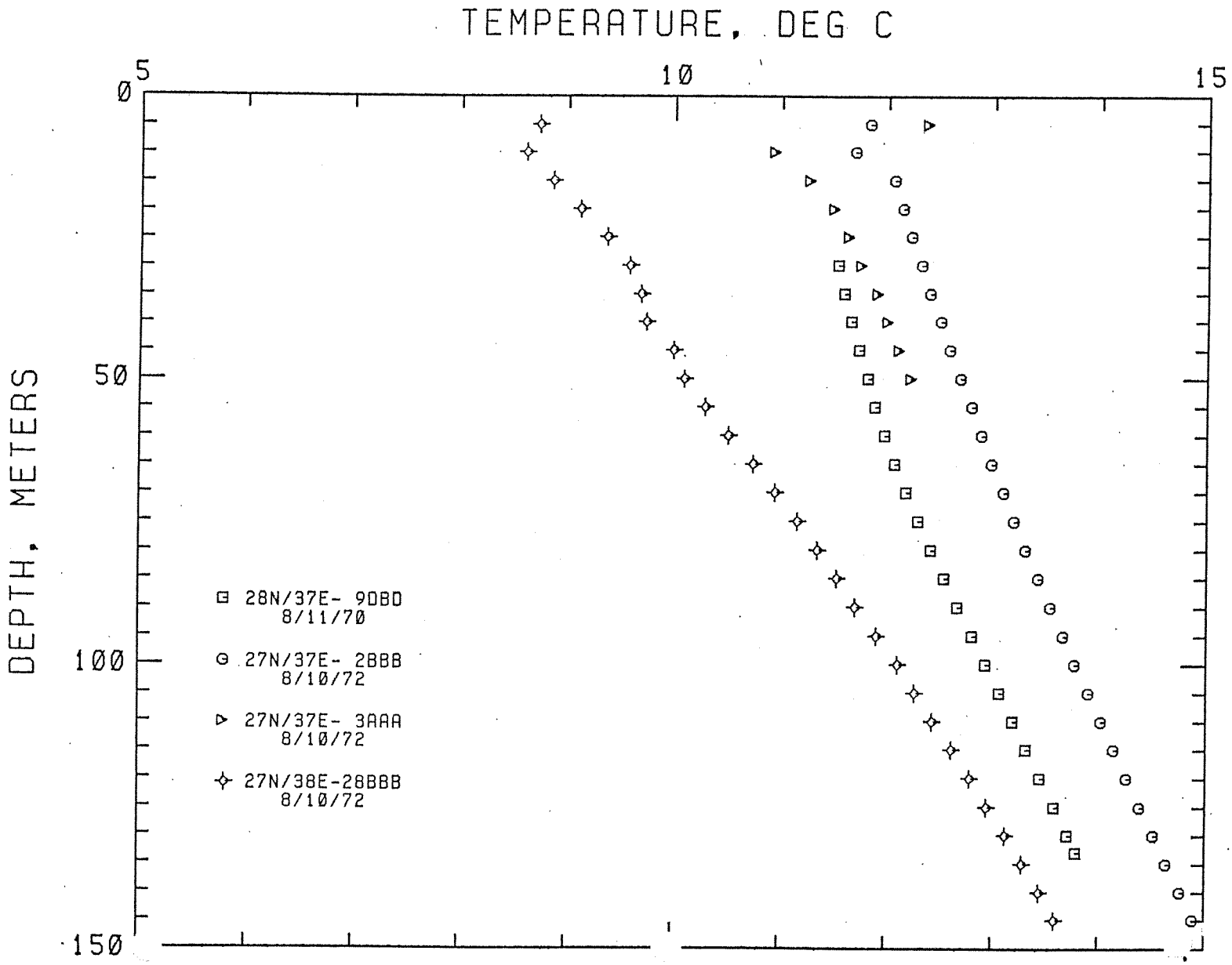

TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
27N/37E- 3AAA
8/10/72


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
28N/37E- 9DBD
8/11/70
27N/37E- 2BBB
8/10/72
27N/37E- 3AAA
8/10/72
27N/38E-28BBB
8/10/72

LOCATION: RITZVILLE AMS, WASH
27N/38E-28BBB
HOLE NAME: S-28
DATE MEASURED: 8/10/72

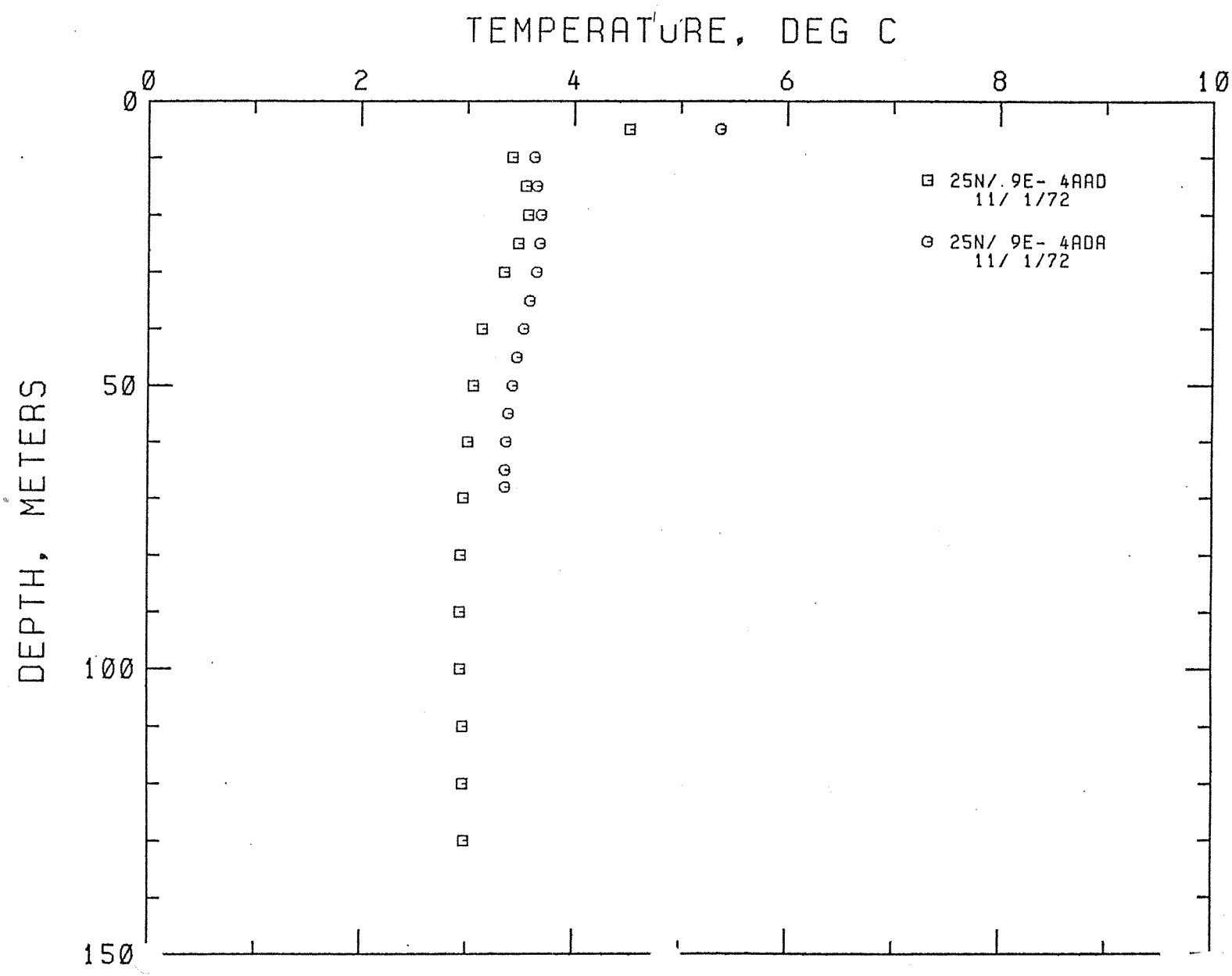
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	8.720	47.70	0.0	0.0
10.0	32.8	8.600	47.48	-24.0	-1.3
15.0	49.2	8.850	47.93	50.0	2.7
20.0	65.6	9.110	48.40	52.0	2.9
25.0	82.0	9.360	48.85	50.0	2.7
30.0	98.4	9.570	49.23	42.0	2.3
35.0	114.8	9.680	49.42	22.0	1.2
40.0	131.2	9.730	49.51	10.0	0.5
45.0	147.6	9.990	49.98	52.0	2.9
50.0	164.0	10.090	50.16	20.0	1.1
55.0	180.4	10.290	50.52	40.0	2.2
60.0	196.8	10.510	50.92	44.0	2.4
65.0	213.2	10.740	51.33	46.0	2.5
70.0	229.6	10.950	51.71	42.0	2.3
75.0	246.0	11.160	52.09	42.0	2.3
80.0	262.4	11.350	52.43	38.0	2.1
85.0	278.8	11.530	52.75	36.0	2.0
90.0	295.2	11.700	53.06	34.0	1.9
95.0	311.6	11.900	53.42	40.0	2.2
100.0	328.0	12.100	53.78	40.0	2.2
105.0	344.4	12.260	54.07	32.0	1.8
110.0	360.8	12.430	54.37	34.0	1.9
115.0	377.2	12.610	54.70	36.0	2.0
120.0	393.6	12.780	55.00	34.0	1.9
125.0	410.0	12.940	55.29	32.0	1.8
130.0	426.4	13.120	55.62	36.0	2.0
135.0	442.8	13.280	55.90	32.0	1.8
140.0	459.2	13.440	56.19	32.0	1.8
145.0	475.6	13.580	56.44	28.0	1.5


TEMPERATURE, DEG C
5
10
15
0
50
100
DEPTH, METERS
27N/38E-28BBB
8/10/72


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
28N/37E- 9DBD
8/11/70
27N/37E- 2BBB
8/10/72
27N/37E- 3AAA
8/10/72
27N/38E-28BBB
8/10/72

LOCATION: WENATCHEE AMS, WASH
25N/ 9E- 4AAD
HOLE NAME: DDH-11
DATE MEASURED: 11/ 1/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	4.520	40.14	0.0	0.0
10.0	32.8	3.420	38.16	-220.0	-12.1
15.0	49.2	3.550	38.39	26.0	1.4
20.0	65.6	3.570	38.43	4.0	0.2
25.0	82.0	3.480	38.26	-18.0	-1.0
30.0	98.4	3.350	38.03	-26.0	-1.4
40.0	131.2	3.140	37.65	-21.0	-1.2
50.0	164.0	3.060	37.51	-8.0	-0.4
60.0	196.8	3.010	37.42	-5.0	-0.3
70.0	229.6	2.970	37.35	-4.0	-0.2
80.0	262.4	2.950	37.31	-2.0	-0.1
90.0	295.2	2.940	37.29	-1.0	-0.1
100.0	328.0	2.950	37.31	1.0	0.1
110.0	360.8	2.970	37.35	2.0	0.1
120.0	393.6	2.970	37.35	0.0	0.0
130.0	426.4	2.980	37.36	1.0	0.1

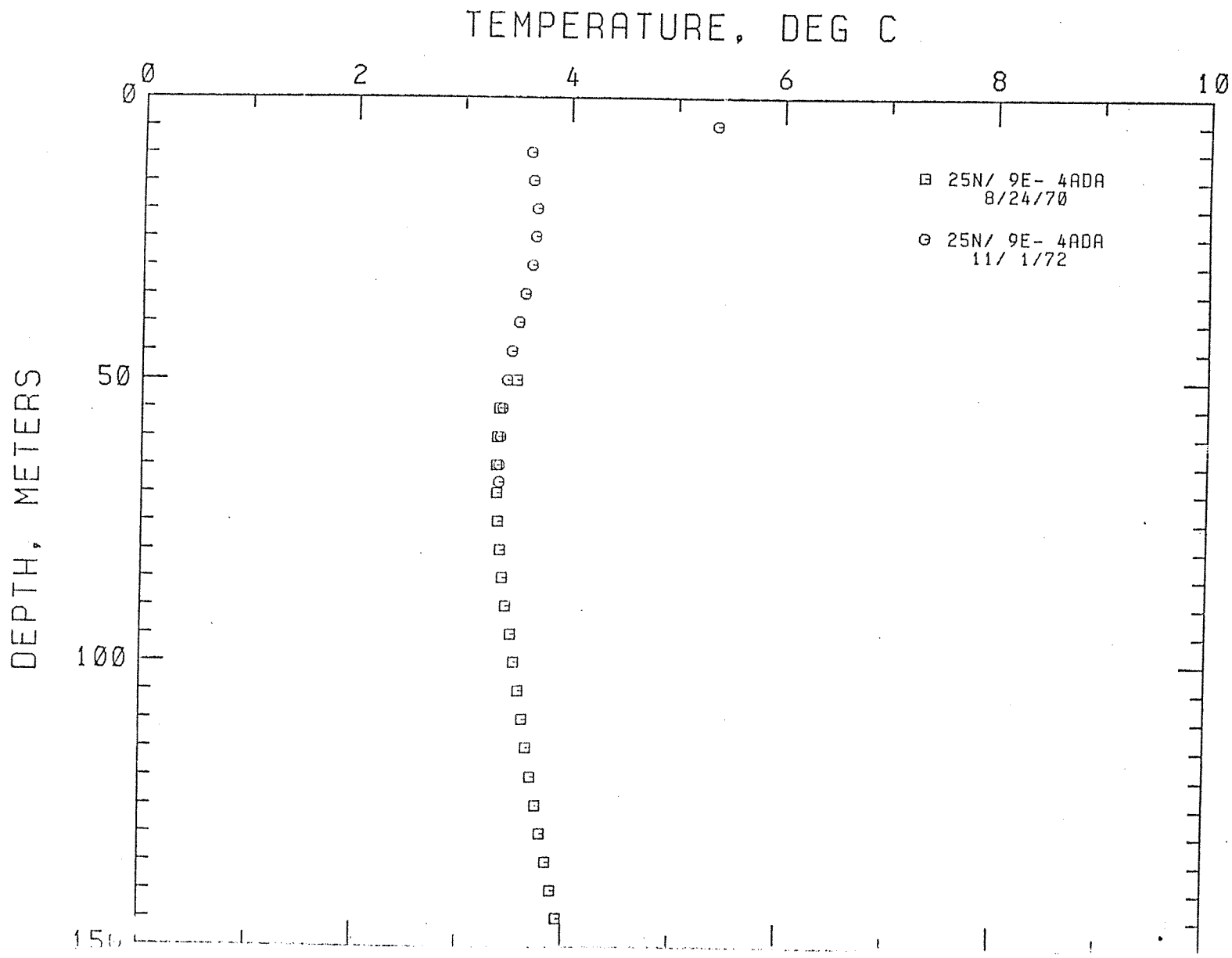

TEMPERATURE, DEG C
0
2
4
6
8
10
DEPTH, METERS
0
50
100
150
25N/ 9E- 4AAD
11/ 1/72
25N/ 9E- 4ADA
11/ 1/72

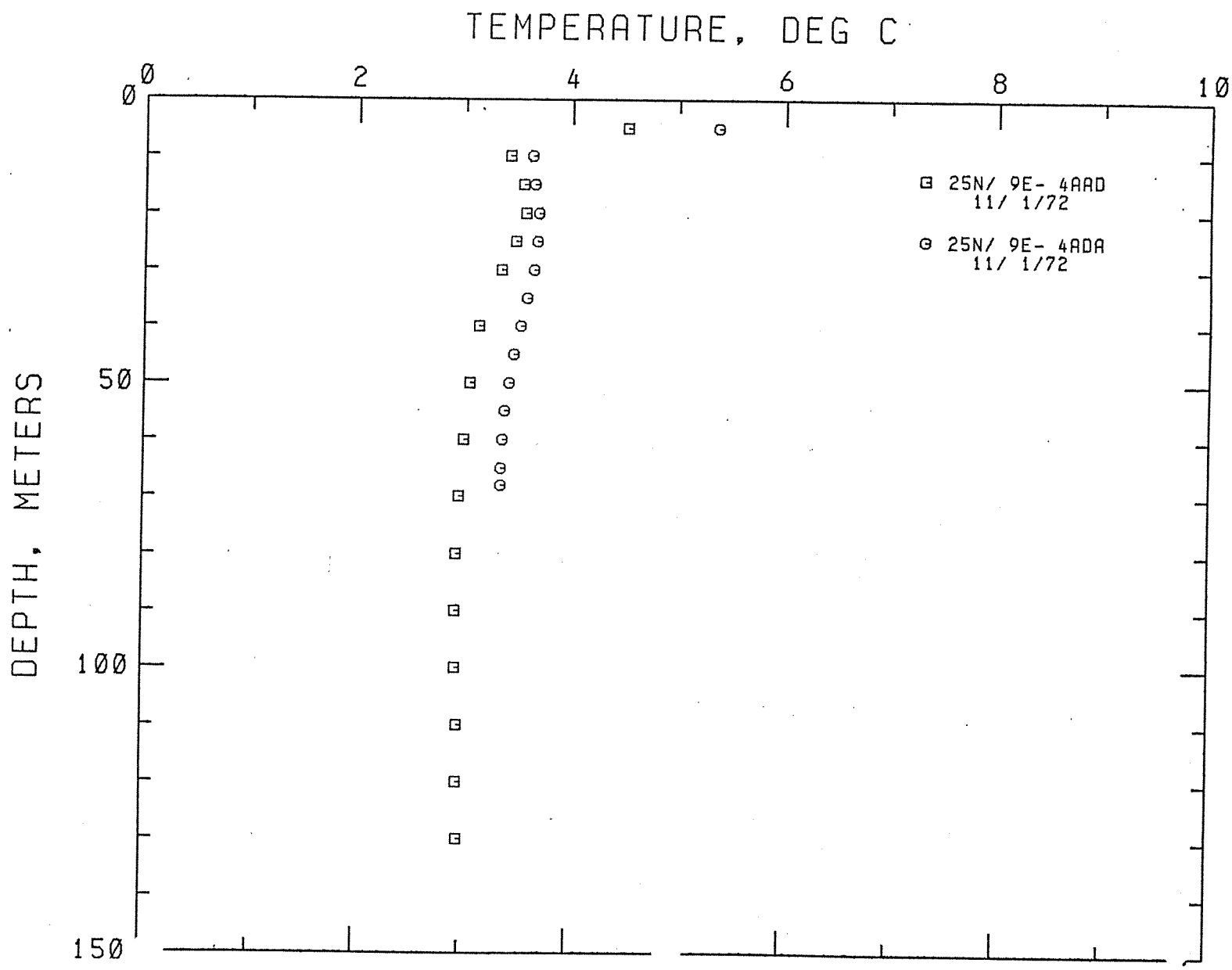
LOCATION: WENATCHEE AMS,WASH
25N/ 9E- 4ADA
HOLE NAME: PDH-12
DATE MEASURED: 8/24/70

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
50.0	164.0	3.522	38.34	0.0	0.0
55.0	180.4	3.358	38.04	-32.8	-1.8
60.0	196.8	3.341	38.01	-3.4	-0.2
65.0	213.2	3.336	38.00	-1.0	-0.1
70.0	229.6	3.341	38.01	1.0	0.1
75.0	246.0	3.354	38.04	2.6	0.1
80.0	262.4	3.376	38.08	4.4	0.2
85.0	278.8	3.402	38.12	5.2	0.3
90.0	295.2	3.435	38.18	6.6	0.4
95.0	311.6	3.485	38.27	10.0	0.5
100.0	328.0	3.522	38.34	7.4	0.4
105.0	344.4	3.565	38.42	8.6	0.5
110.0	360.8	3.608	38.49	8.6	0.5
115.0	377.2	3.646	38.56	7.6	0.4
120.0	393.6	3.692	38.65	9.2	0.5
125.0	410.0	3.741	38.73	9.8	0.5
130.0	426.4	3.791	38.82	10.0	0.5
135.0	442.8	3.845	38.92	10.8	0.6
140.0	459.2	3.898	39.02	10.6	0.6
145.0	475.6	3.955	39.12	11.4	0.6

LOCATION: WENATCHEE AMS, WASH
25N/ 9E- 4ADA
HOLE NAME: DDH-12
DATE MEASURED: 11/ 1/72

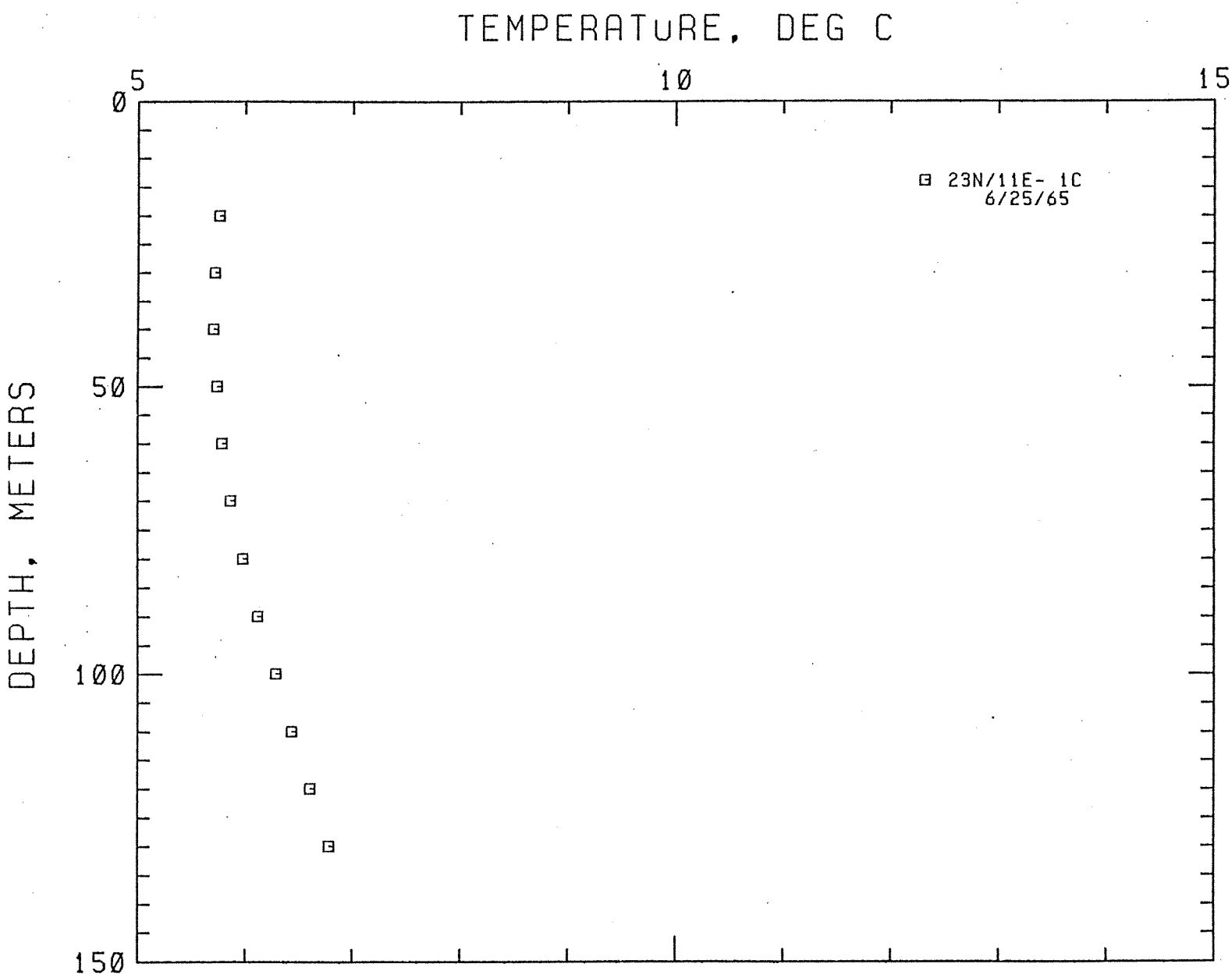
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	5.370	41.67	0.0	0.0
10.0	32.8	3.630	38.53	-348.0	-19.1
15.0	49.2	3.650	38.57	4.0	0.2
20.0	65.6	3.690	38.64	8.0	0.4
25.0	82.0	3.680	38.62	-2.0	-0.1
30.0	98.4	3.650	38.57	-6.0	-0.3
35.0	114.8	3.590	38.46	-12.0	-0.7
40.0	131.2	3.530	38.35	-12.0	-0.7
45.0	147.6	3.470	38.25	-12.0	-0.7
50.0	164.0	3.430	38.17	-8.0	-0.4
55.0	180.4	3.390	38.10	-8.0	-0.4
60.0	196.8	3.370	38.07	-4.0	-0.2
65.0	213.2	3.360	38.05	-2.0	-0.1
68.0	223.0	3.360	38.05	0.0	0.0


TEMPERATURE, DEG C
0
2
4
6
8
10
DEPTH, METERS
0
50
100
150
25N/ 9E- 4ADA
8/24/70
25N/ 9E- 4ADA
11/ 1/72


TEMPERATURE, DEG C
0
2
4
6
8
10
DEPTH, METERS
0
50
100
150
25N/ 9E- 4AAD
11/ 1/72
25N/ 9E- 4ADA
11/ 1/72

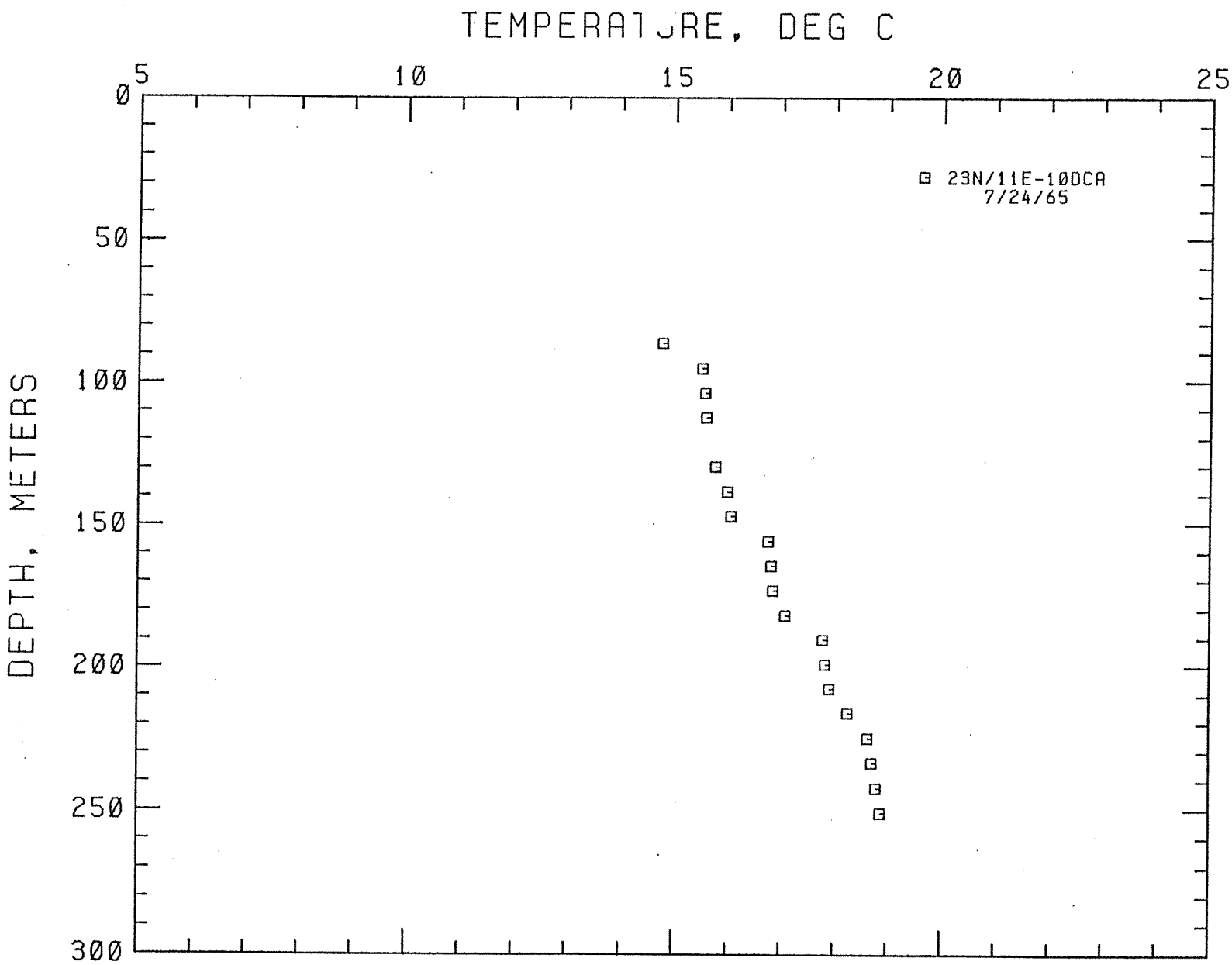
LOCATION: WENATCHEE AMS, WASH
23N/11E- 1C
HOLE NAME: DDH-1
DATE MEASURED: 6/25/65

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	5.760	42.37	0.0	0.0
30.0	98.4	5.720	42.30	-4.0	-0.2
40.0	131.2	5.710	42.28	-1.0	-0.1
50.0	164.0	5.740	42.33	3.0	0.2
60.0	196.8	5.790	42.42	5.0	0.3
70.0	229.6	5.870	42.57	8.0	0.4
80.0	262.4	5.980	42.76	11.0	0.6
90.0	295.2	6.120	43.02	14.0	0.8
100.0	328.0	6.290	43.32	17.0	0.9
110.0	360.8	6.440	43.59	15.0	0.8
120.0	393.6	6.610	43.90	17.0	0.9
130.0	426.4	6.790	44.22	18.0	1.0


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
23N/11E- 1C
6/25/65

LOCATION: WENATCHEE AMS, WASH
23N/11E-10DCA
HOLE NAME: DDH-2
DATE MEASURED: 7/24/65

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
86.6	284.0	14.780	58.60	0.0	0.0
95.3	312.6	15.520	59.94	85.1	4.7
103.9	340.8	15.580	60.04	7.0	0.4
112.6	369.3	15.610	60.10	3.4	0.2
129.9	426.1	15.780	60.40	9.8	0.5
138.6	454.6	16.010	60.82	26.4	1.5
147.2	482.8	16.070	60.93	7.0	0.4
155.9	511.4	16.770	62.19	80.5	4.4
164.5	539.6	16.830	62.29	7.0	0.4
173.2	568.1	16.860	62.35	3.4	0.2
181.9	596.6	17.090	62.76	26.4	1.5
190.5	624.8	17.800	64.04	82.6	4.5
199.2	653.4	17.850	64.13	5.7	0.3
207.8	681.6	17.930	64.27	9.3	0.5
216.5	710.1	18.270	64.89	39.1	2.1
225.2	738.7	18.640	65.55	42.5	2.3
233.8	766.9	18.730	65.71	10.5	0.6
242.5	795.4	18.810	65.86	9.2	0.5
251.1	823.6	18.880	65.98	8.1	0.4

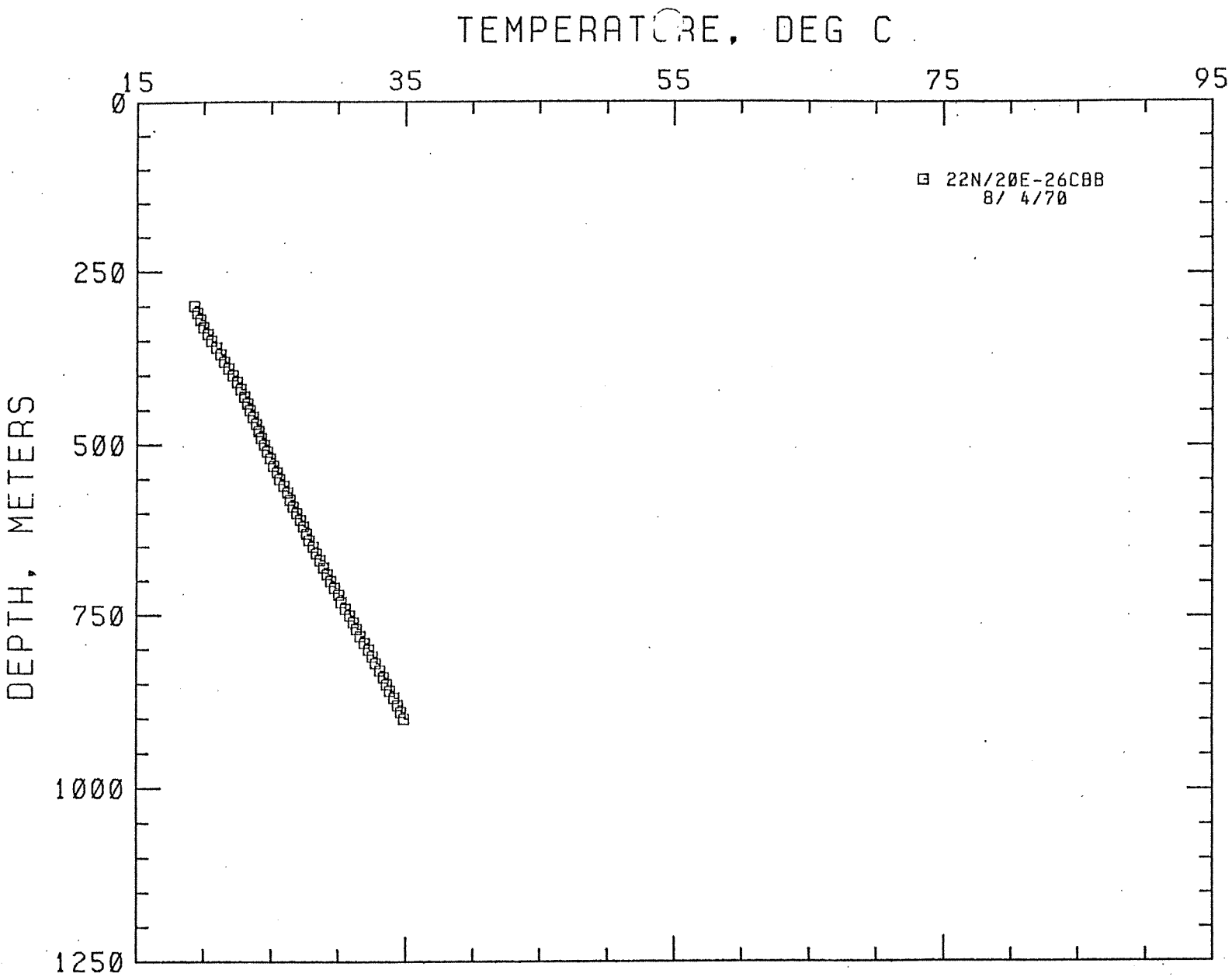

TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
23N/11E-10DCA
7/24/65

LOCATION: WENATCHEE AMS, WASH
22N/20E-26CBB
HOLE NAME: NORCO-1
DATE MEASURED: 8/ 4/70

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
300.0	984.0	19.480	67.06	0.0	0.0
310.0	1016.8	19.690	67.44	21.0	1.2
320.0	1049.6	19.910	67.84	22.0	1.2
330.0	1082.4	20.190	68.34	28.0	1.5
340.0	1115.2	20.480	68.86	29.0	1.6
350.0	1148.0	20.800	69.44	32.0	1.8
360.0	1180.8	21.150	70.07	35.0	1.9
370.0	1213.6	21.480	70.66	33.0	1.8
380.0	1246.4	21.800	71.24	32.0	1.8
390.0	1279.2	22.120	71.82	32.0	1.8
400.0	1312.0	22.440	72.39	32.0	1.8
410.0	1344.8	22.790	73.02	35.0	1.9
420.0	1377.6	23.070	73.53	28.0	1.5
430.0	1410.4	23.360	74.05	29.0	1.6
440.0	1443.2	23.570	74.43	21.0	1.2
450.0	1476.0	23.780	74.80	21.0	1.2
460.0	1508.8	23.990	75.18	21.0	1.2
470.0	1541.6	24.230	75.61	24.0	1.3
480.0	1574.4	24.460	76.03	23.0	1.3
490.0	1607.2	24.630	76.33	17.0	0.9
500.0	1640.0	24.860	76.75	23.0	1.3
510.0	1672.8	25.120	77.22	26.0	1.4
520.0	1705.6	25.350	77.63	23.0	1.3
530.0	1738.4	25.590	78.06	24.0	1.3
540.0	1771.2	25.850	78.53	26.0	1.4
550.0	1804.0	26.060	78.91	21.0	1.2
560.0	1836.8	26.360	79.45	30.0	1.6
570.0	1869.6	26.650	79.97	29.0	1.6
580.0	1902.4	26.860	80.35	21.0	1.2
590.0	1935.2	27.110	80.80	25.0	1.4
600.0	1968.0	27.390	81.30	28.0	1.5
610.0	2000.8	27.660	81.79	27.0	1.5
620.0	2033.6	27.890	82.20	23.0	1.3
630.0	2066.4	28.150	82.67	26.0	1.4
640.0	2099.2	28.350	83.03	20.0	1.1
650.0	2132.0	28.640	83.55	29.0	1.6
660.0	2164.8	28.910	84.04	27.0	1.5
670.0	2197.6	29.170	84.51	26.0	1.4
680.0	2230.4	29.450	85.01	28.0	1.5
690.0	2263.2	29.740	85.53	29.0	1.6
700.0	2296.0	30.030	86.05	29.0	1.6
710.0	2328.8	30.320	86.58	29.0	1.6

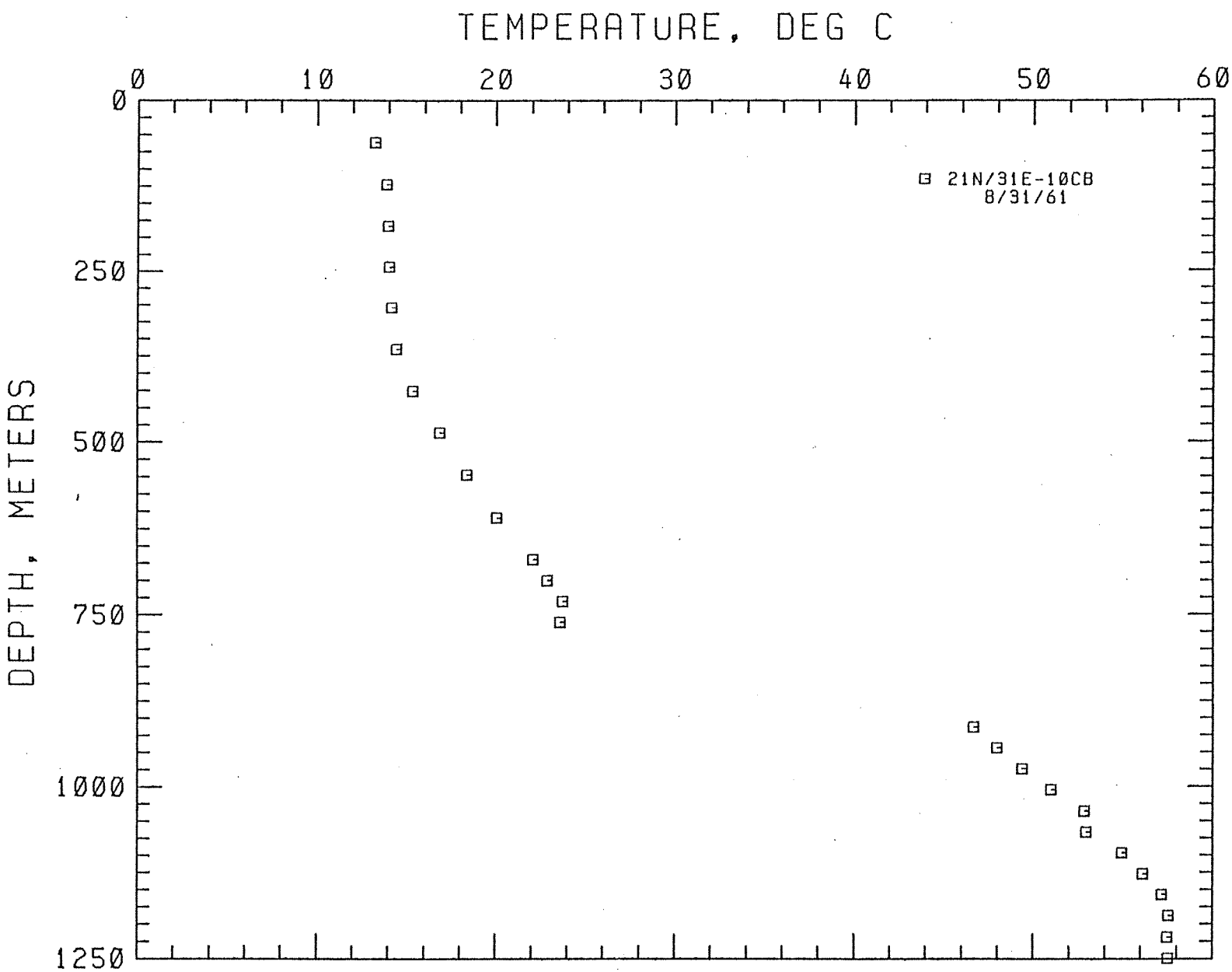
LOCATION: WENATCHEE AMS, WASH
22N/20E-26CBB
HOLE NAME: NORCO-1
DATE MEASURED: 8/ 4/70

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
720.0	2361.6	30.660	87.19	34.0	1.9
730.0	2394.4	30.830	87.49	17.0	0.9
740.0	2427.2	31.150	88.07	32.0	1.8
750.0	2460.0	31.490	88.68	34.0	1.9
760.0	2492.8	31.800	89.24	31.0	1.7
770.0	2525.6	32.020	89.64	22.0	1.2
780.0	2558.4	32.320	90.18	30.0	1.6
790.0	2591.2	32.660	90.79	34.0	1.9
800.0	2624.0	32.960	91.33	30.0	1.6
810.0	2656.8	33.250	91.85	29.0	1.6
820.0	2689.6	33.480	92.26	23.0	1.3
830.0	2722.4	33.830	92.89	35.0	1.9
840.0	2755.2	34.090	93.36	26.0	1.4
850.0	2788.0	34.350	93.83	26.0	1.4
860.0	2820.8	34.610	94.30	26.0	1.4
870.0	2853.6	34.940	94.89	33.0	1.8
880.0	2886.4	35.190	95.34	25.0	1.4
890.0	2919.2	35.440	95.79	25.0	1.4
900.0	2952.0	35.680	96.22	24.0	1.3


TEMPERATURE, DEG C
15
35
55
75
95
0
250
500
750
1000
1250
DEPTH, METERS
22N/20E-26CBB
8/ 4/70

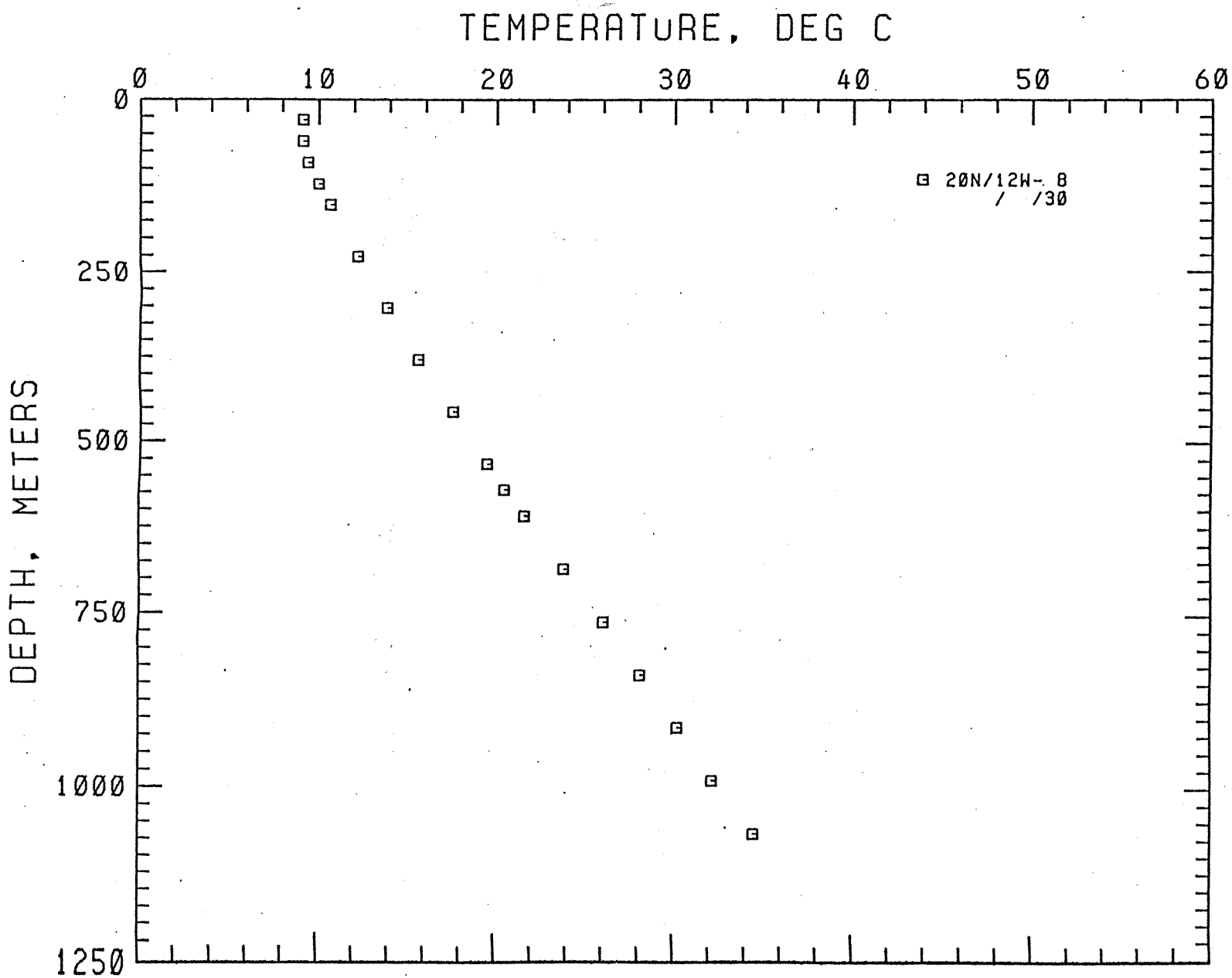
LOCATION: RITZVILLE AMS, WASH
21N/31E-10CB
HOLE NAME: DABE-1
DATE MEASURED: 8/31/61

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
61.3	201.1	13.220	55.80	0.0	0.0
121.9	399.8	13.900	57.02	11.2	0.6
183.2	600.9	13.990	57.18	1.5	0.1
243.8	799.7	14.060	57.31	1.2	0.1
304.8	999.7	14.190	57.54	2.1	0.1
365.8	1199.8	14.470	58.05	4.6	0.3
426.7	1399.6	15.410	59.74	15.4	0.8
487.7	1599.7	16.900	62.42	24.4	1.3
548.6	1799.4	18.400	65.12	24.6	1.4
609.6	1999.5	20.100	68.18	27.9	1.5
670.9	2200.6	22.110	71.80	32.8	1.8
700.7	2298.3	22.890	73.20	26.2	1.4
731.5	2399.3	23.770	74.79	28.6	1.6
762.0	2499.4	23.610	74.50	-5.2	-0.3
914.4	2999.2	46.700	116.06	151.5	8.3
944.9	3099.3	48.000	118.40	42.6	2.3
975.4	3199.3	49.390	120.90	45.6	2.5
1005.8	3299.0	51.030	123.85	53.9	3.0
1036.3	3399.1	52.860	127.15	60.0	3.3
1066.8	3499.1	52.960	127.33	3.3	0.2
1097.3	3599.1	54.950	130.91	65.2	3.6
1127.8	3699.2	56.120	133.02	38.4	2.1
1158.2	3798.9	57.200	134.96	35.5	1.9
1188.7	3898.9	57.570	135.63	12.1	0.7
1219.2	3999.0	57.510	135.52	-2.0	-0.1
1249.7	4099.0	57.540	135.57	1.0	0.1


TEMPERATURE, DEG C
0
10
20
30
40
50
60
DEPTH, METERS
0
250
500
750
1000
1250
21N/31E-10CB
8/31/61

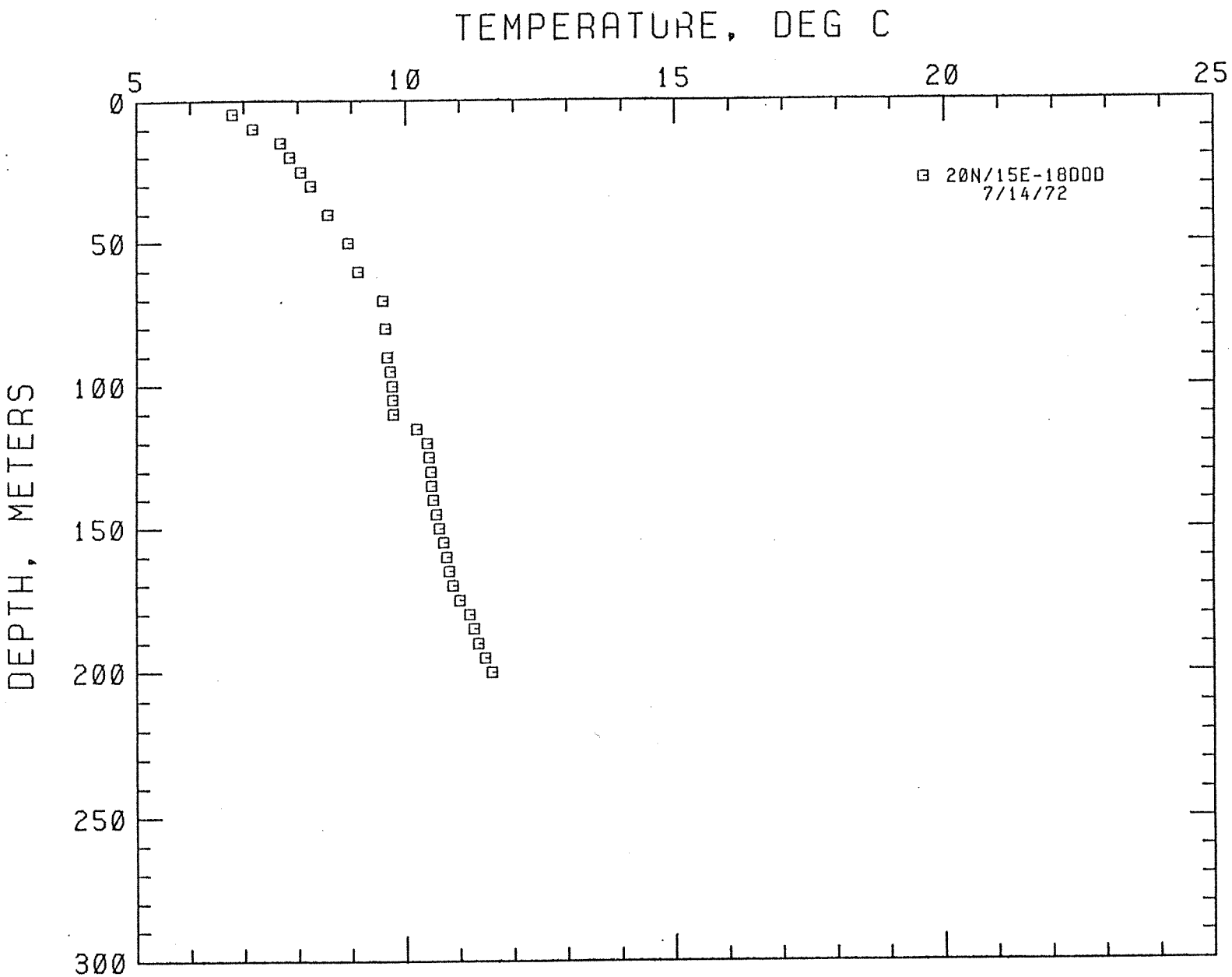
LOCATION: COPALIS BEACH AMS, WASH
20N/12W- 8
HOLE NAME: VO-MO 1
DATE MEASURED: 0/ 0/30

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
30.5	100.0	9.170	48.51	0.0	0.0
61.0	199.9	9.170	48.51	0.0	0.0
91.4	299.9	9.440	48.99	8.9	0.5
121.9	399.9	10.000	50.00	18.4	1.0
152.4	499.9	10.670	51.21	22.0	1.2
228.6	749.8	12.220	54.00	20.3	1.1
304.8	999.7	13.890	57.00	21.9	1.2
381.0	1249.7	15.670	60.21	23.4	1.3
457.2	1499.6	17.610	63.70	25.5	1.4
533.4	1749.6	19.560	67.21	25.6	1.4
571.5	1874.5	20.550	68.99	26.0	1.4
609.6	1999.5	21.670	71.01	29.4	1.6
685.8	2249.4	23.890	75.00	29.1	1.6
762.0	2499.4	26.110	79.00	29.1	1.6
838.2	2749.3	28.170	82.71	27.0	1.5
914.4	2999.2	30.280	86.50	27.7	1.5
990.6	3249.2	32.220	90.00	25.5	1.4
1066.8	3499.1	34.560	94.21	30.7	1.7


TEMPERATURE, DEG C
0
10
20
30
40
50
60
DEPTH, METERS
0
250
500
750
1000
1250
20N/12W- 8
/ /30

LOCATION: WENATCHEE AMS,WASH
20N/15E-18DDD
HOLE NAME: DDH-E
DATE MEASURED: 7/14/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	6.790	44.22	0.0	0.0
10.0	32.8	7.170	44.91	76.0	4.2
15.0	49.2	7.680	45.82	102.0	5.6
20.0	65.6	7.860	46.15	36.0	2.0
25.0	82.0	8.060	46.51	40.0	2.2
30.0	98.4	8.250	46.85	38.0	2.1
40.0	131.2	8.560	47.41	31.0	1.7
50.0	164.0	8.940	48.09	38.0	2.1
60.0	196.8	9.130	48.43	19.0	1.0
70.0	229.6	9.580	49.24	45.0	2.5
80.0	262.4	9.630	49.33	5.0	0.3
90.0	295.2	9.660	49.39	3.0	0.2
95.0	311.6	9.720	49.50	12.0	0.7
100.0	328.0	9.750	49.55	6.0	0.3
105.0	344.4	9.770	49.59	4.0	0.2
110.0	360.8	9.780	49.60	2.0	0.1
115.0	377.2	10.210	50.38	86.0	4.7
120.0	393.6	10.400	50.72	38.0	2.1
125.0	410.0	10.440	50.79	8.0	0.4
130.0	426.4	10.470	50.85	6.0	0.3
135.0	442.8	10.490	50.88	4.0	0.2
140.0	459.2	10.520	50.94	6.0	0.3
145.0	475.6	10.580	51.04	12.0	0.7
150.0	492.0	10.630	51.13	10.0	0.5
155.0	508.4	10.710	51.28	16.0	0.9
160.0	524.8	10.770	51.39	12.0	0.7
165.0	541.2	10.820	51.48	10.0	0.5
170.0	557.6	10.890	51.60	14.0	0.8
175.0	574.0	11.010	51.82	24.0	1.3
180.0	590.4	11.190	52.14	36.0	2.0
185.0	606.8	11.270	52.29	16.0	0.9
190.0	623.2	11.350	52.43	16.0	0.9
195.0	639.6	11.480	52.66	26.0	1.4
200.0	656.0	11.610	52.90	26.0	1.4

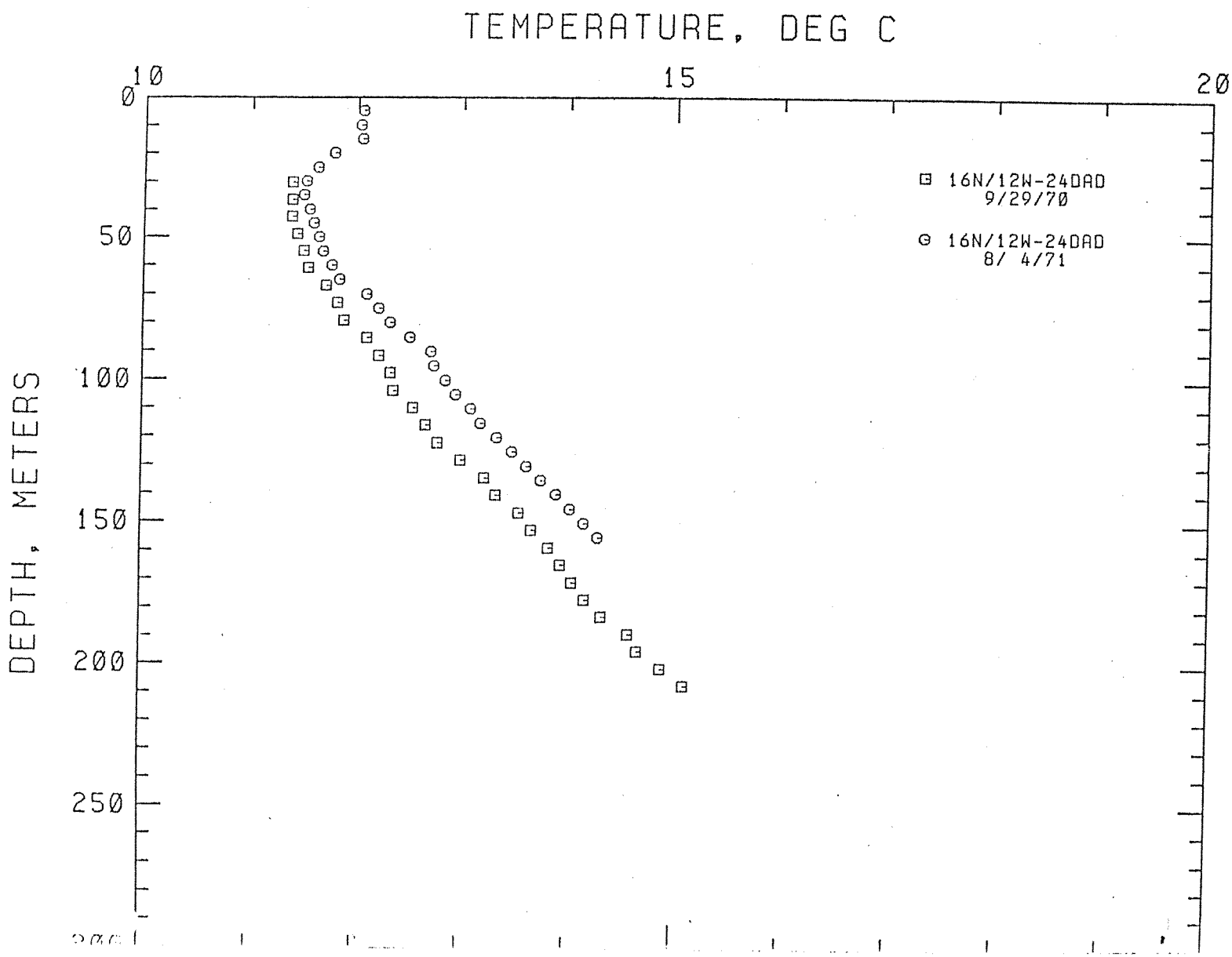

TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
20N/15E-18DDD
7/14/72

LOCATION: COPALIS BEACH AMS, WASH
16N/12W-24DAD
HOLE NAME: TW-1
DATE MEASURED: 9/29/70

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
30.5	100.0	11.390	52.50	0.0	0.0
36.6	120.0	11.390	52.50	0.0	0.0
42.7	140.0	11.390	52.50	0.0	0.0
48.8	160.0	11.440	52.59	8.2	0.4
54.9	179.9	11.500	52.70	9.9	0.5
61.0	199.9	11.550	52.79	8.2	0.4
67.1	220.0	11.720	53.10	27.9	1.5
73.1	239.9	11.830	53.29	18.1	1.0
79.2	259.9	11.890	53.40	9.8	0.5
85.3	279.9	12.110	53.80	36.1	2.0
91.4	299.9	12.220	54.00	18.0	1.0
97.5	319.9	12.330	54.19	18.0	1.0
103.6	339.9	12.360	54.25	4.9	0.3
109.7	359.9	12.550	54.59	31.1	1.7
115.8	379.9	12.670	54.81	19.7	1.1
121.9	399.9	12.780	55.00	18.0	1.0
128.0	419.9	13.000	55.40	36.1	2.0
134.1	439.9	13.220	55.80	36.1	2.0
140.2	459.9	13.330	55.99	18.0	1.0
146.3	479.9	13.550	56.39	36.1	2.0
152.4	499.9	13.670	56.61	19.7	1.1
158.5	519.9	13.830	56.89	26.2	1.4
164.6	539.9	13.940	57.09	18.1	1.0
170.7	559.9	14.050	57.29	18.0	1.0
176.8	579.8	14.170	57.51	19.7	1.1
182.9	599.8	14.330	57.79	26.2	1.4
189.0	619.9	14.580	58.24	41.0	2.2
195.1	639.8	14.670	58.41	14.8	0.8
201.2	659.8	14.890	58.80	36.1	2.0
207.3	679.8	15.110	59.20	36.1	2.0

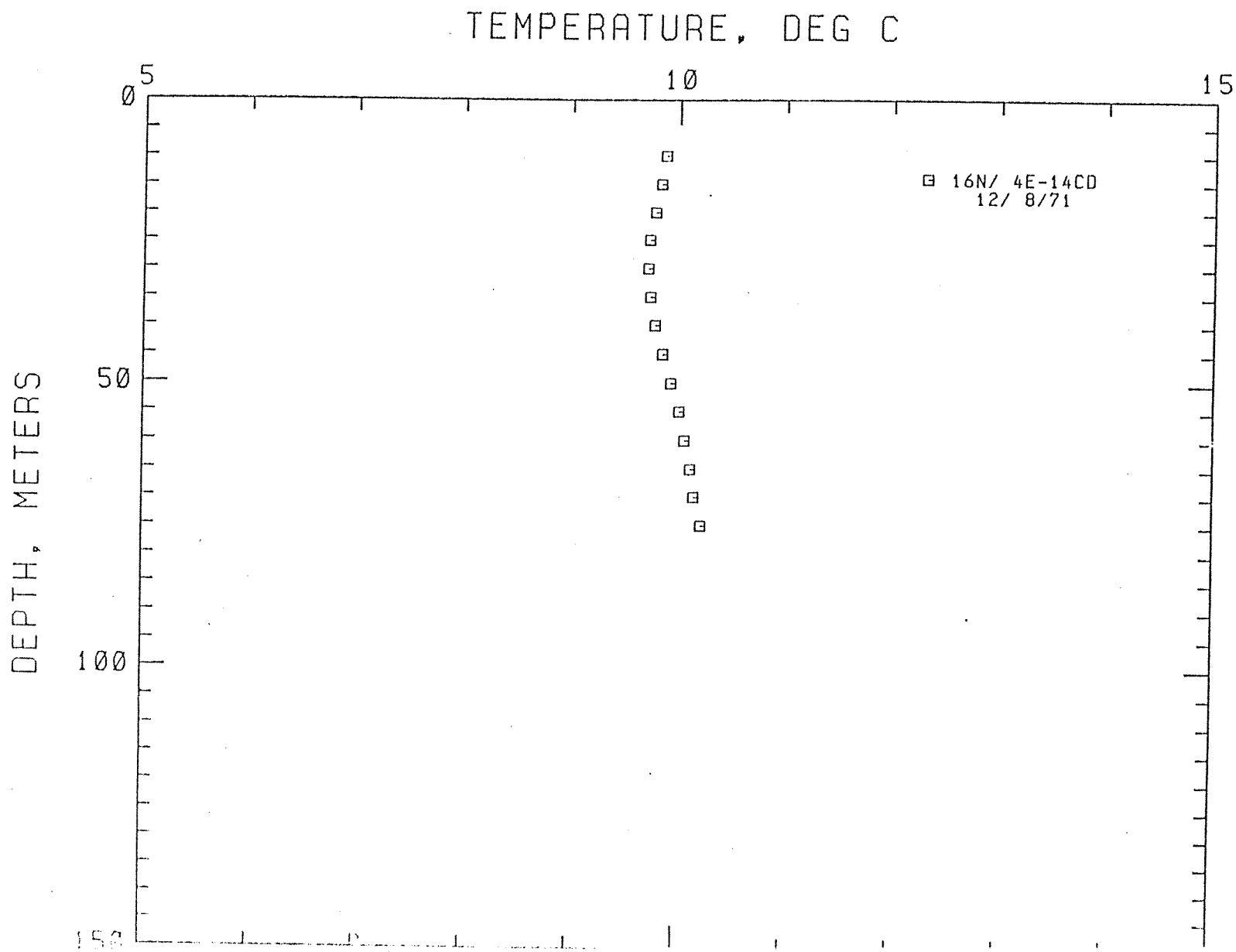
LOCATION: COPALIS BEACH AMS, WASH
16N/12W-24DAD
HOLE NAME: TW-1
DATE MEASURED: 8/ 4/71

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	12.049	53.69	0.0	0.0
10.0	32.8	12.029	53.65	-4.0	-0.2
15.0	49.2	12.044	53.68	3.0	0.2
20.0	65.6	11.784	53.21	-52.0	-2.9
25.0	82.0	11.631	52.94	-30.6	-1.7
30.0	98.4	11.518	52.73	-22.6	-1.2
35.0	114.8	11.496	52.69	-4.4	-0.2
40.0	131.2	11.553	52.80	11.4	0.6
45.0	147.6	11.596	52.87	8.6	0.5
50.0	164.0	11.643	52.96	9.4	0.5
55.0	180.4	11.687	53.04	8.8	0.5
60.0	196.8	11.772	53.19	17.0	0.9
65.0	213.2	11.843	53.32	14.2	0.8
70.0	229.6	12.102	53.78	51.8	2.8
75.0	246.0	12.219	53.99	23.4	1.3
80.0	262.4	12.324	54.18	21.0	1.2
85.0	278.8	12.515	54.53	38.2	2.1
90.0	295.2	12.713	54.88	39.6	2.2
95.0	311.6	12.743	54.94	6.0	0.3
100.0	328.0	12.849	55.13	21.2	1.2
105.0	344.4	12.951	55.31	20.4	1.1
110.0	360.8	13.093	55.57	28.4	1.6
115.0	377.2	13.184	55.73	18.2	1.0
120.0	393.6	13.338	56.01	30.8	1.7
125.0	410.0	13.481	56.27	28.6	1.6
130.0	426.4	13.616	56.51	27.0	1.5
135.0	442.8	13.757	56.76	28.2	1.5
140.0	459.2	13.895	57.01	27.6	1.5
145.0	475.6	14.026	57.25	26.2	1.4
150.0	492.0	14.161	57.49	27.0	1.5
155.0	508.4	14.290	57.72	25.8	1.4


TEMPERATURE, DEG C
10
15
20
0
50
100
150
200
250
DEPTH, METERS
16N/12W-24DAD
9/29/70
16N/12W-24DAD
8/ 4/71

LOCATION: HOQUIAM AMS, WASHINGTON
16N/ 4E-14CD
HOLE NAME: WW-14P1
DATE MEASURED: 12/ 8/71

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	9.873	49.77	0.0	0.0
15.0	49.2	9.832	49.70	-8.2	-0.5
20.0	65.6	9.780	49.60	-10.4	-0.6
25.0	82.0	9.730	49.51	-10.0	-0.5
30.0	98.4	9.721	49.50	-1.8	-0.1
35.0	114.8	9.742	49.54	4.2	0.2
40.0	131.2	9.791	49.62	9.8	0.5
45.0	147.6	9.863	49.75	14.4	0.8
50.0	164.0	9.942	49.90	15.8	0.9
55.0	180.4	10.024	50.04	16.4	0.9
60.0	196.8	10.076	50.14	10.4	0.6
65.0	213.2	10.134	50.24	11.6	0.6
70.0	229.6	10.163	50.29	5.8	0.3
75.0	246.0	10.233	50.42	14.0	0.8

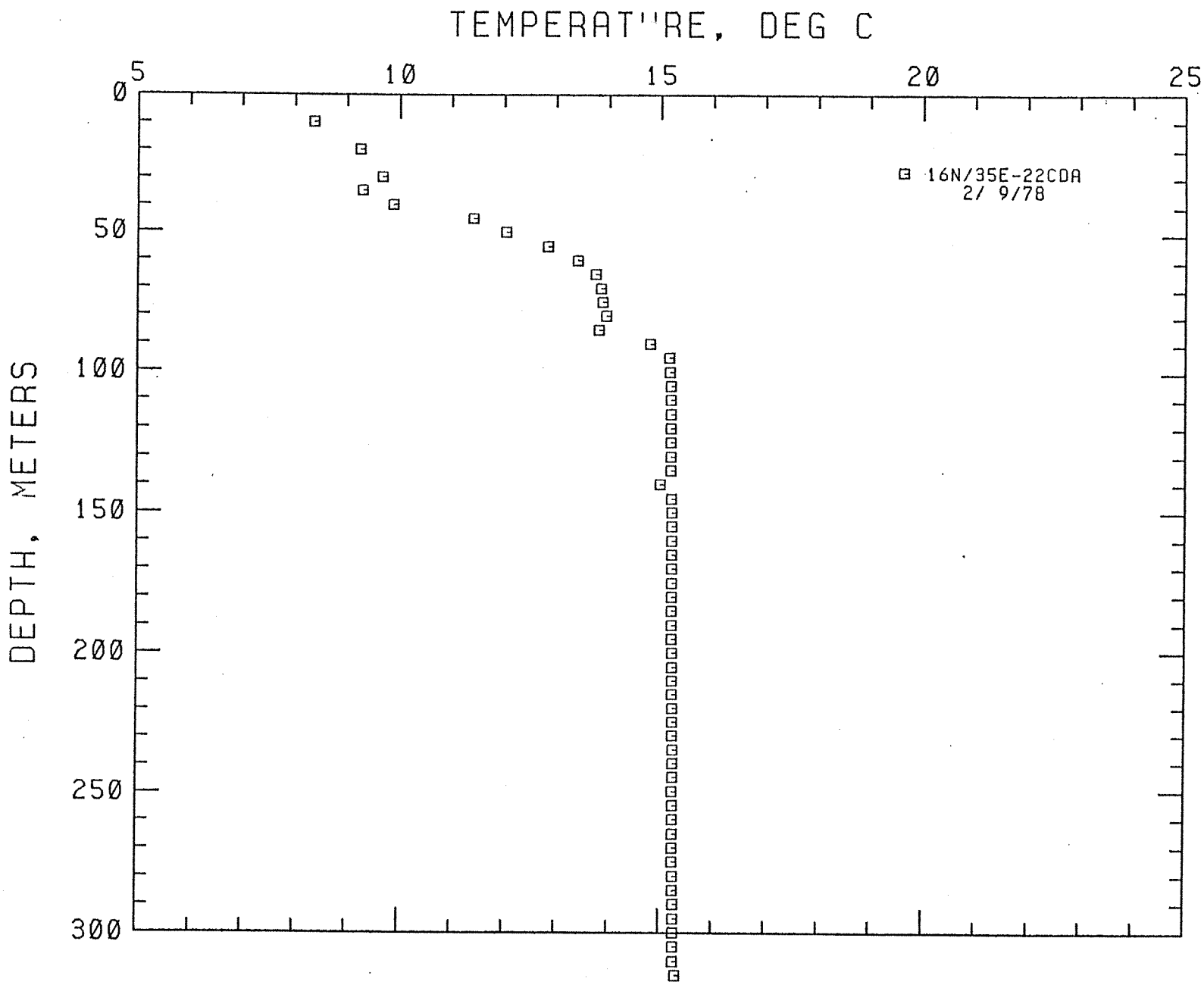

TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
16N/ 4E-14CD
12/ 8/71

LOCATION: WALLA WALLA AMS, WASH
16N/35E-22CDA
HOLE NAME: BAUMN1WW
DATE MEASURED: 2/ 9/78

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	8.370	47.07	0.0	0.0
20.0	65.6	9.250	48.65	88.0	4.8
30.0	98.4	9.670	49.41	42.0	2.3
35.0	114.8	9.300	48.74	-74.0	-4.1
40.0	131.2	9.880	49.78	116.0	6.4
45.0	147.6	11.410	52.54	306.0	16.8
50.0	164.0	12.040	53.67	126.0	6.9
55.0	180.4	12.840	55.11	160.0	8.8
60.0	196.8	13.410	56.14	114.0	6.3
65.0	213.2	13.750	56.75	68.0	3.7
70.0	229.6	13.860	56.95	22.0	1.2
75.0	246.0	13.890	57.00	6.0	0.3
80.0	262.4	13.960	57.13	14.0	0.8
85.0	278.8	13.820	56.88	-28.0	-1.5
90.0	295.2	14.800	58.64	196.0	10.8
95.0	311.6	15.170	59.31	74.0	4.1
100.0	328.0	15.180	59.32	2.0	0.1
105.0	344.4	15.200	59.36	4.0	0.2
110.0	360.8	15.200	59.36	0.0	0.0
115.0	377.2	15.200	59.36	0.0	0.0
120.0	393.6	15.210	59.38	2.0	0.1
125.0	410.0	15.210	59.38	0.0	0.0
130.0	426.4	15.210	59.38	0.0	0.0
135.0	442.8	15.210	59.38	0.0	0.0
140.0	459.2	15.000	59.00	-42.0	-2.3
145.0	475.6	15.220	59.40	44.0	2.4
150.0	492.0	15.230	59.41	2.0	0.1
155.0	508.4	15.230	59.41	0.0	0.0
160.0	524.8	15.230	59.41	0.0	0.0
165.0	541.2	15.230	59.41	0.0	0.0
170.0	557.6	15.230	59.41	0.0	0.0
175.0	574.0	15.230	59.41	0.0	0.0
180.0	590.4	15.230	59.41	0.0	0.0
185.0	606.8	15.230	59.41	0.0	0.0
190.0	623.2	15.230	59.41	0.0	0.0
195.0	639.6	15.230	59.41	0.0	0.0
200.0	656.0	15.240	59.43	2.0	0.1
205.0	672.4	15.240	59.43	0.0	0.0
210.0	688.8	15.240	59.43	0.0	0.0
215.0	705.2	15.240	59.43	0.0	0.0
220.0	721.6	15.250	59.45	2.0	0.1

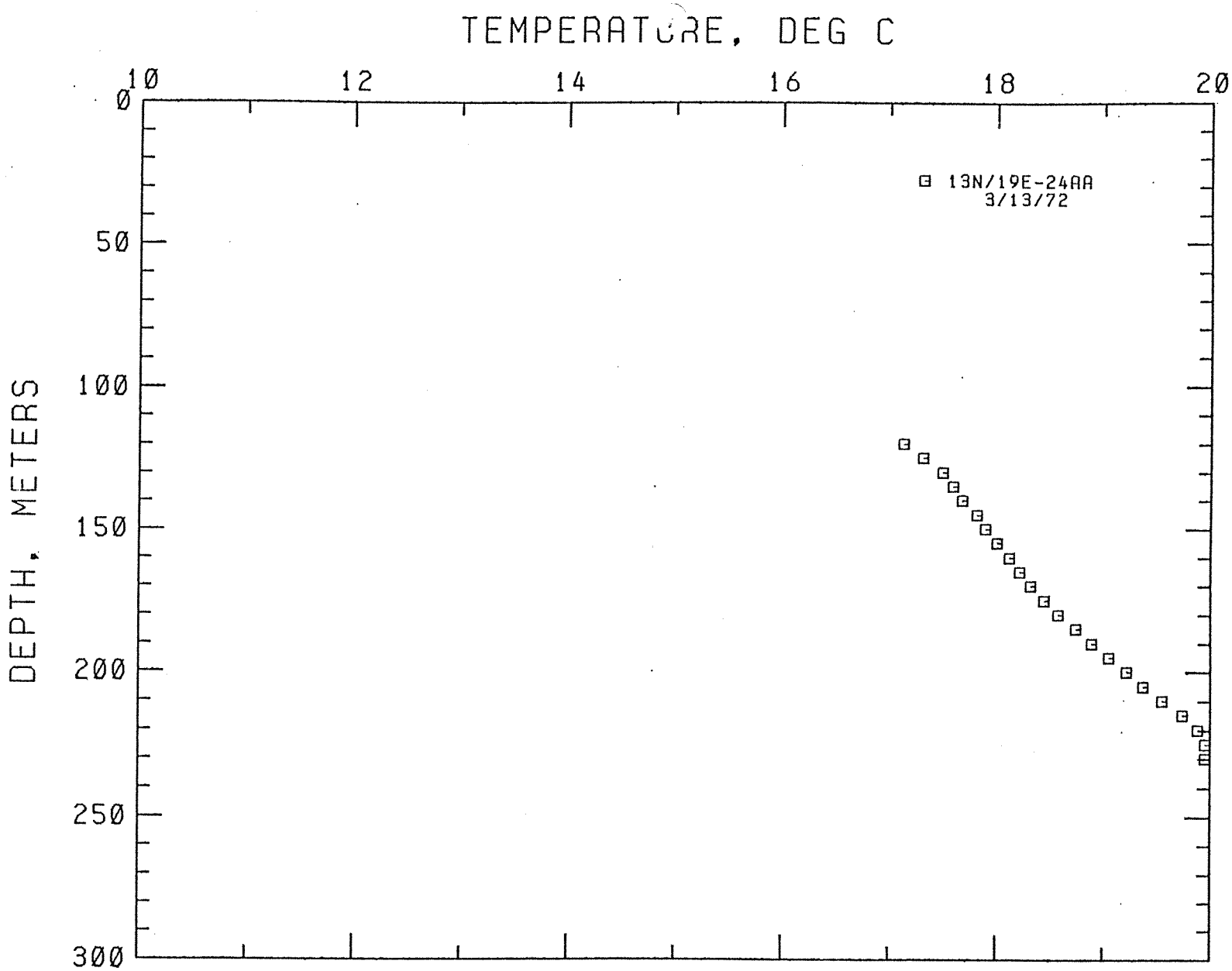
LOCATION: WALLA WALLA AMS, WASH
16N/35E-22CDA
HOLE NAME: BAUMN1WW
DATE MEASURED: 2/ 9/78

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
225.0	738.0	15.250	59.45	0.0	0.0
230.0	754.4	15.250	59.45	0.0	0.0
235.0	770.8	15.260	59.47	2.0	0.1
240.0	787.2	15.260	59.47	0.0	0.0
245.0	803.6	15.260	59.47	0.0	0.0
250.0	820.0	15.250	59.45	-2.0	-0.1
255.0	836.4	15.260	59.47	2.0	0.1
260.0	852.8	15.260	59.47	0.0	0.0
265.0	869.2	15.260	59.47	0.0	0.0
270.0	885.6	15.260	59.47	0.0	0.0
275.0	902.0	15.260	59.47	0.0	0.0
280.0	918.4	15.270	59.49	2.0	0.1
285.0	934.8	15.270	59.49	0.0	0.0
290.0	951.2	15.280	59.50	2.0	0.1
295.0	967.6	15.280	59.50	0.0	0.0
300.0	984.0	15.280	59.50	0.0	0.0
305.0	1000.4	15.280	59.50	0.0	0.0
310.0	1016.8	15.280	59.50	0.0	0.0
315.0	1033.2	15.330	59.59	10.0	0.5


TEMPERAT''RE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
16N/35E-22CDA
2/ 9/78

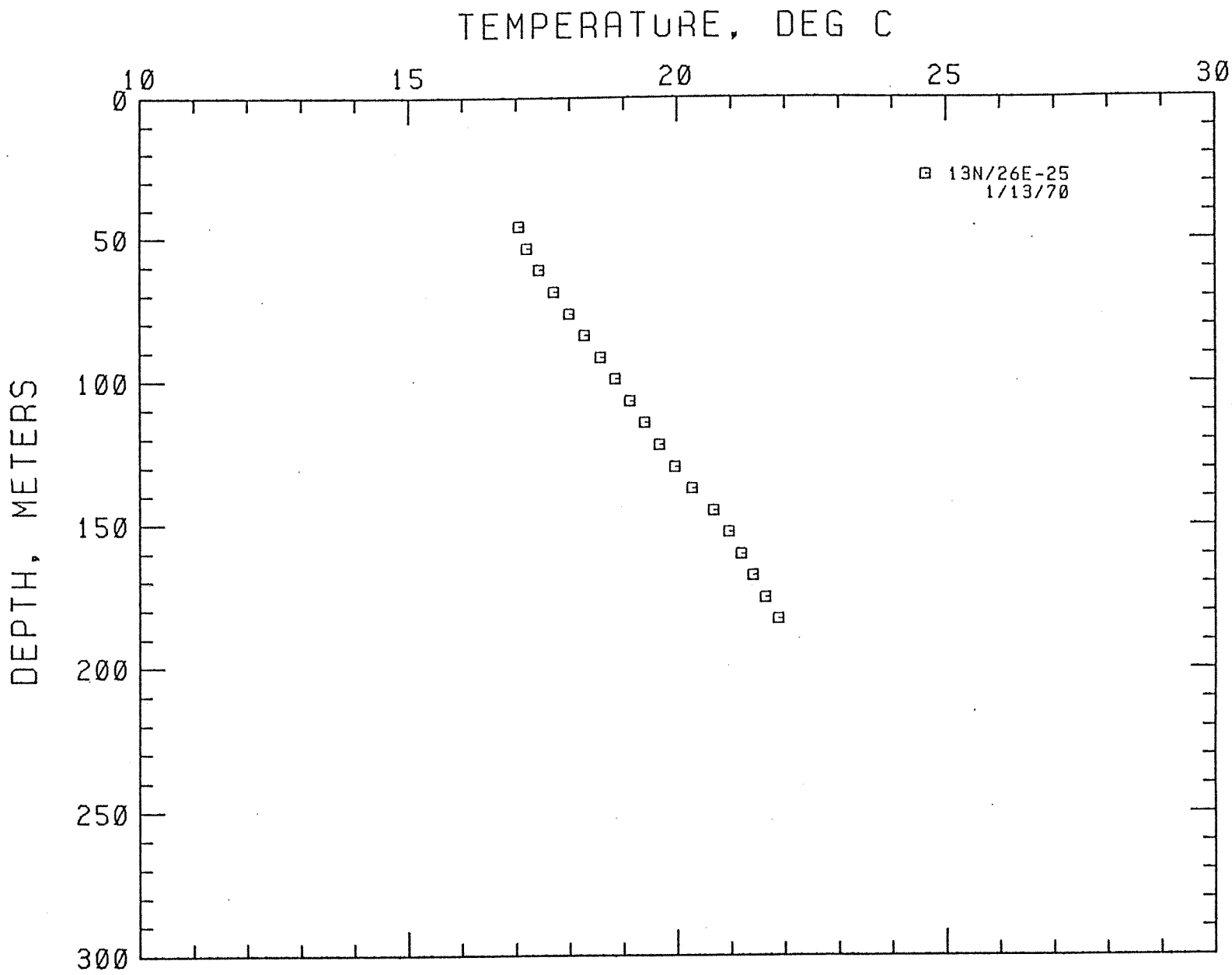
LOCATION: YAKIMA AMS, WASHINGTON
13N/19E-24AA
HOLE NAME: GJR-WW
DATE MEASURED: 3/13/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
120.0	393.6	17.138	62.85	0.0	0.0
125.0	410.0	17.320	63.18	36.4	2.0
130.0	426.4	17.505	63.51	37.0	2.0
135.0	442.8	17.602	63.68	19.4	1.1
140.0	459.2	17.688	63.84	17.2	0.9
145.0	475.6	17.823	64.08	27.0	1.5
150.0	492.0	17.903	64.23	16.0	0.9
155.0	508.4	18.010	64.42	21.4	1.2
160.0	524.8	18.126	64.63	23.2	1.3
165.0	541.2	18.223	64.80	19.4	1.1
170.0	557.6	18.327	64.99	20.8	1.1
175.0	574.0	18.453	65.22	25.2	1.4
180.0	590.4	18.582	65.45	25.8	1.4
185.0	606.8	18.747	65.74	33.0	1.8
190.0	623.2	18.895	66.01	29.6	1.6
195.0	639.6	19.059	66.31	32.8	1.8
200.0	656.0	19.224	66.60	33.0	1.8
205.0	672.4	19.375	66.88	30.2	1.7
210.0	688.8	19.555	67.20	36.0	2.0
215.0	705.2	19.742	67.54	37.4	2.1
220.0	721.6	19.884	67.79	28.4	1.6
225.0	738.0	19.954	67.92	14.0	0.8
230.0	754.4	19.954	67.92	0.0	0.0


TEMPERATURE, DEG C
10
12
14
16
18
20
0
50
100
150
200
250
300
DEPTH, METERS
13N/19E-24AA
3/13/72

LOCATION: WALLA WALLA AMS, WASH
13N/26E-25
HOLE NAME: DH-1
DATE MEASURED: 1/13/70

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
45.7	150.0	17.065	62.72	0.0	0.0
53.3	175.0	17.212	62.98	19.3	1.1
61.0	199.9	17.437	63.39	29.5	1.6
68.6	224.9	17.712	63.88	36.1	2.0
76.2	249.9	17.996	64.39	37.3	2.0
83.8	274.9	18.289	64.92	38.5	2.1
91.4	299.9	18.580	65.44	38.2	2.1
99.1	324.9	18.857	65.94	36.4	2.0
106.7	349.9	19.135	66.44	36.5	2.0
114.3	374.9	19.401	66.92	34.9	1.9
121.9	399.9	19.676	67.42	36.1	2.0
129.5	424.9	19.965	67.94	37.9	2.1
137.2	449.9	20.283	68.51	41.7	2.3
144.8	474.9	20.683	69.23	52.5	2.9
152.4	499.9	20.966	69.74	37.1	2.0
160.0	524.9	21.199	70.16	30.6	1.7
167.6	549.9	21.414	70.55	28.2	1.5
175.3	574.9	21.648	70.97	30.7	1.7
182.9	599.8	21.891	71.40	31.9	1.8

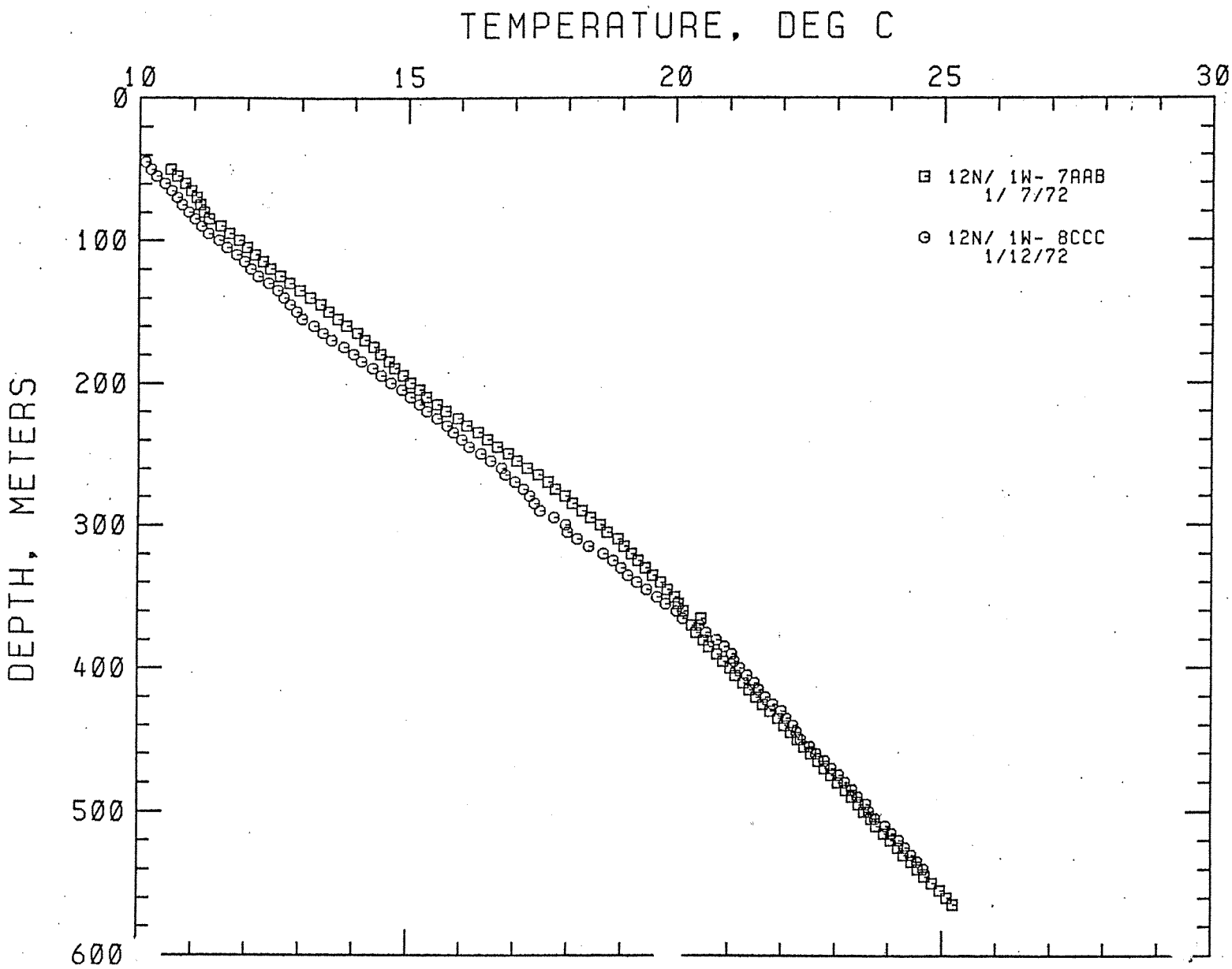

TEMPERATURE, DEG C
10
15
20
25
30
0
50
100
150
200
250
300
DEPTH, METERS
13N/26E-25
1/13/70

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 7AAB
HOLE NAME: RDH-SU8
DATE MEASURED: 1/ 7/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
50.0	164.0	10.578	51.04	0.0	0.0
55.0	180.4	10.706	51.27	25.6	1.4
60.0	196.8	10.856	51.54	30.0	1.6
65.0	213.2	10.969	51.74	22.6	1.2
70.0	229.6	11.071	51.93	20.4	1.1
75.0	246.0	11.145	52.06	14.8	0.8
80.0	262.4	11.211	52.18	13.2	0.7
85.0	278.8	11.308	52.35	19.4	1.1
90.0	295.2	11.521	52.74	42.6	2.3
95.0	311.6	11.676	53.02	31.0	1.7
100.0	328.0	11.868	53.36	38.4	2.1
105.0	344.4	12.009	53.62	28.2	1.5
110.0	360.8	12.161	53.89	30.4	1.7
115.0	377.2	12.306	54.15	29.0	1.6
120.0	393.6	12.451	54.41	29.0	1.6
125.0	410.0	12.628	54.73	35.4	1.9
130.0	426.4	12.805	55.05	35.4	1.9
135.0	442.8	12.993	55.39	37.6	2.1
140.0	459.2	13.193	55.75	40.0	2.2
145.0	475.6	13.380	56.08	37.4	2.1
150.0	492.0	13.532	56.36	30.4	1.7
155.0	508.4	13.708	56.67	35.2	1.9
160.0	524.8	13.862	56.95	30.8	1.7
165.0	541.2	14.066	57.32	40.8	2.2
170.0	557.6	14.208	57.57	28.4	1.6
175.0	574.0	14.375	57.88	33.4	1.8
180.0	590.4	14.500	58.10	25.0	1.4
185.0	606.8	14.658	58.38	31.6	1.7
190.0	623.2	14.768	58.58	22.0	1.2
195.0	639.6	14.928	58.87	32.0	1.8
200.0	656.0	15.062	59.11	26.8	1.5
205.0	672.4	15.234	59.42	34.4	1.9
210.0	688.8	15.365	59.66	26.2	1.4
215.0	705.2	15.569	60.02	40.8	2.2
220.0	721.6	15.727	60.31	31.6	1.7
225.0	738.0	15.952	60.71	45.0	2.5
230.0	754.4	16.113	61.00	32.2	1.8
235.0	770.8	16.326	61.39	42.6	2.3
240.0	787.2	16.502	61.70	35.2	1.9
245.0	803.6	16.691	62.04	37.8	2.1
250.0	820.0	16.888	62.40	39.4	2.2
255.0	836.4	17.053	62.70	33.0	1.8

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 7AAB
HOLE NAME: RDH-SUB
DATE MEASURED: 1/ 7/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
470.0	1541.6	22.811	73.06	22.2	1.2
475.0	1558.0	22.939	73.29	25.6	1.4
480.0	1574.4	23.059	73.51	24.0	1.3
485.0	1590.8	23.206	73.77	29.4	1.6
490.0	1607.2	23.323	73.98	23.4	1.3
495.0	1623.6	23.452	74.21	25.8	1.4
500.0	1640.0	23.555	74.40	20.6	1.1
505.0	1656.4	23.692	74.65	27.4	1.5
510.0	1672.8	23.787	74.82	19.0	1.0
515.0	1689.2	23.932	75.08	29.0	1.6
520.0	1705.6	24.059	75.31	25.4	1.4
525.0	1722.0	24.192	75.55	26.6	1.5
530.0	1738.4	24.296	75.73	20.8	1.1
535.0	1754.8	24.447	76.00	30.2	1.7
540.0	1771.2	24.557	76.20	22.0	1.2
545.0	1787.6	24.691	76.44	26.8	1.5
550.0	1804.0	24.822	76.68	26.2	1.4
555.0	1820.4	24.973	76.95	30.2	1.7
560.0	1836.8	25.100	77.18	25.4	1.4
565.0	1853.2	25.213	77.38	22.6	1.2


TEMPERATURE, DEG C
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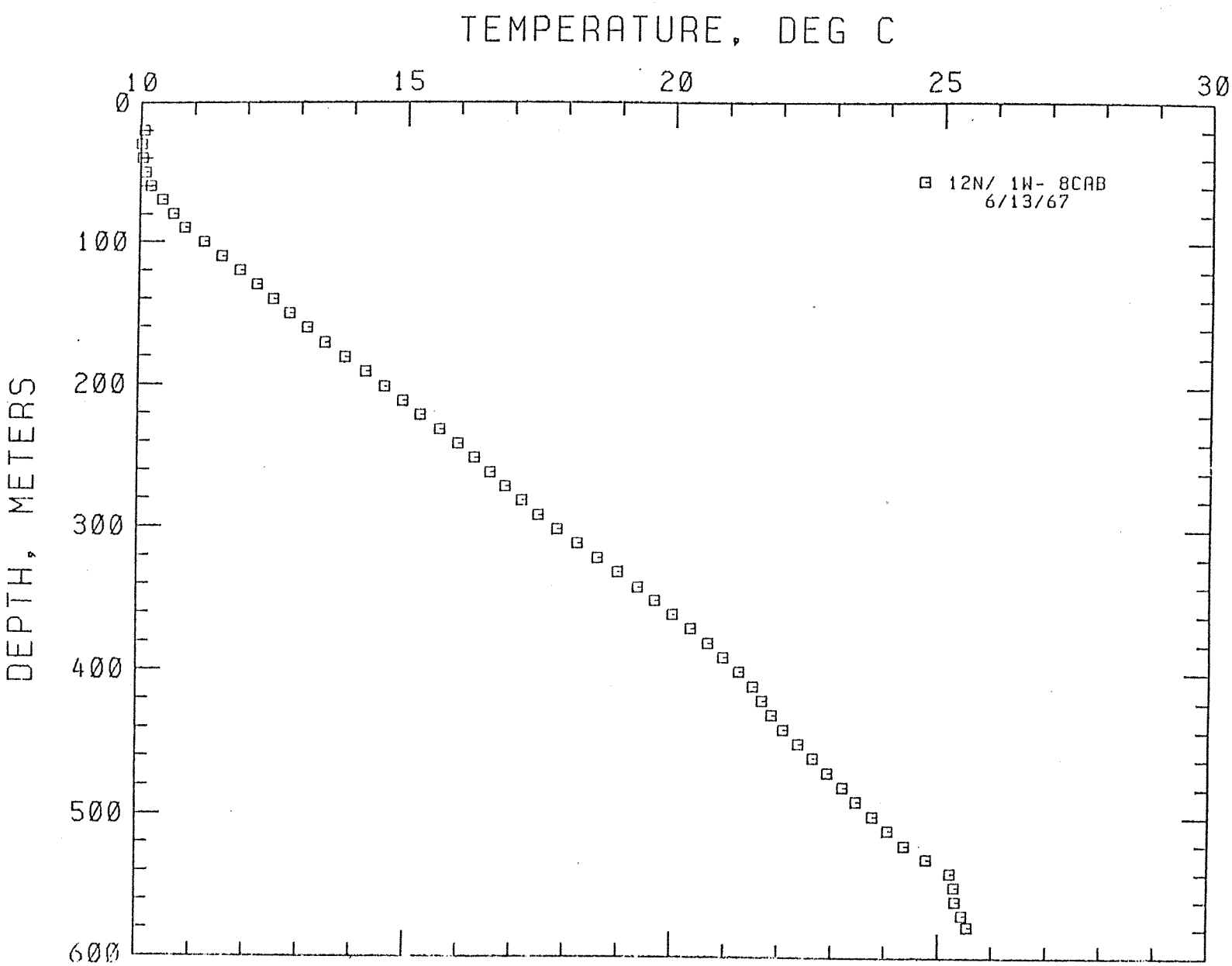
DEPTH, METERS
12N/ 1W- 7AAB
1/ 7/72
12N/ 1W- 8CCC
1/12/72

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 8CAB
HOLE NAME: SU-14
DATE MEASURED: 6/13/67

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	10.065	50.12	0.0	0.0
30.0	98.4	10.020	50.04	-4.5	-0.2
40.0	131.2	10.043	50.08	2.3	0.1
50.0	164.0	10.108	50.19	6.5	0.4
60.0	196.8	10.208	50.37	10.0	0.5
70.0	229.6	10.427	50.77	21.9	1.2
80.0	262.4	10.625	51.12	19.8	1.1
90.0	295.2	10.848	51.53	22.3	1.2
100.0	328.0	11.217	52.19	36.9	2.0
110.0	360.8	11.542	52.78	32.5	1.8
120.0	393.6	11.880	53.38	33.8	1.9
130.0	426.4	12.205	53.97	32.5	1.8
140.0	459.2	12.518	54.53	31.3	1.7
150.0	492.0	12.820	55.08	30.2	1.7
160.0	524.8	13.150	55.67	33.0	1.8
170.0	557.6	13.490	56.28	34.0	1.9
180.0	590.4	13.864	56.96	37.4	2.1
190.0	623.2	14.257	57.66	39.3	2.2
200.0	656.0	14.606	58.29	34.9	1.9
210.0	688.8	14.949	58.91	34.3	1.9
220.0	721.6	15.285	59.51	33.6	1.8
230.0	754.4	15.647	60.16	36.2	2.0
240.0	787.2	15.987	60.78	34.0	1.9
250.0	820.0	16.301	61.34	31.4	1.7
260.0	852.8	16.594	61.87	29.3	1.6
270.0	885.6	16.878	62.38	28.4	1.6
280.1	918.6	17.185	62.93	30.5	1.7
290.0	951.2	17.493	63.49	31.0	1.7
300.0	984.0	17.849	64.13	35.6	2.0
310.0	1016.8	18.225	64.81	37.6	2.1
320.0	1049.6	18.607	65.49	38.2	2.1
330.0	1082.4	18.978	66.16	37.1	2.0
340.6	1117.2	19.355	66.84	35.6	2.0
350.0	1148.0	19.675	67.42	34.0	1.9
360.0	1180.8	20.014	68.03	33.9	1.9
370.1	1213.8	20.351	68.63	33.5	1.8
380.0	1246.4	20.675	69.22	32.6	1.8
390.0	1279.2	20.963	69.73	28.8	1.6
400.0	1312.0	21.259	70.27	29.6	1.6
410.0	1344.8	21.515	70.73	25.6	1.4
420.0	1377.6	21.696	71.05	18.1	1.0

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 8CAB
HOLE NAME: SU-14
DATE MEASURED: 6/13/67

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
430.0	1410.4	21.875	71.37	17.9	1.0
440.0	1443.2	22.091	71.76	21.6	1.2
450.0	1476.0	22.375	72.28	28.4	1.6
460.0	1508.8	22.649	72.77	27.4	1.5
470.0	1541.6	22.931	73.28	28.2	1.5
480.1	1574.6	23.211	73.78	27.9	1.5
490.0	1607.2	23.461	74.23	25.1	1.4
500.0	1640.0	23.772	74.79	31.1	1.7
510.0	1672.8	24.053	75.30	28.1	1.5
520.8	1708.2	24.364	75.86	28.8	1.6
530.0	1738.4	24.778	76.60	45.0	2.5
540.0	1771.2	25.225	77.41	44.7	2.5
550.0	1804.0	25.301	77.54	7.6	0.4
560.0	1836.8	25.328	77.59	2.7	0.1
570.0	1869.6	25.456	77.82	12.8	0.7
578.0	1895.8	25.552	77.99	12.0	0.7


TEMPERATURE, DEG C
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100
200
300
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500
600
DEPTH, METERS
12N/ 1W- 8CAB
6/13/67

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 8CCC
HOLE NAME: RDH-SU37
DATE MEASURED: 1/12/72

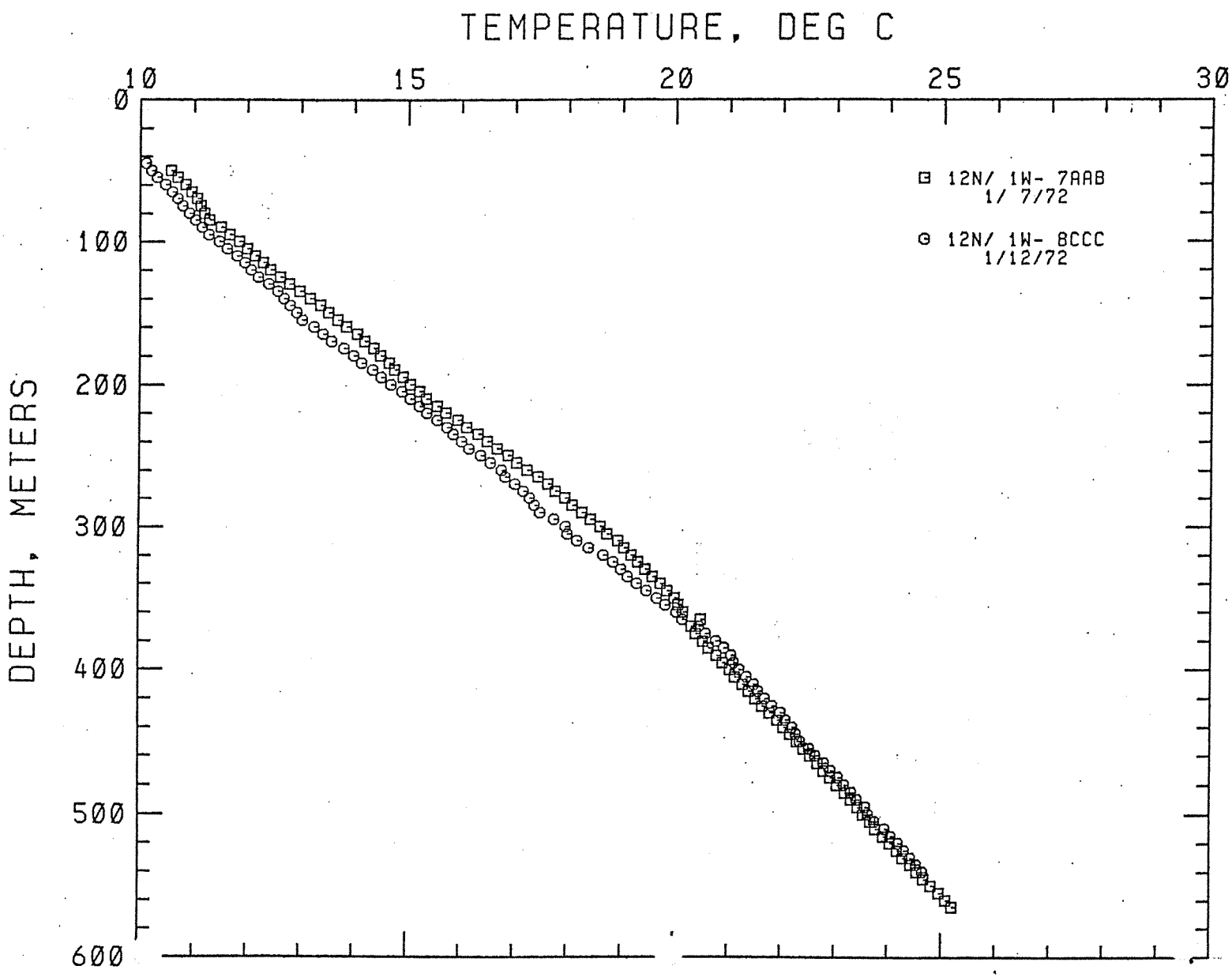
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
45.0	147.6	10.113	50.20	0.0	0.0
50.0	164.0	10.213	50.38	20.0	1.1
55.0	180.4	10.316	50.57	20.6	1.1
60.0	196.8	10.482	50.87	33.2	1.8
65.0	213.2	10.600	51.08	23.6	1.3
70.0	229.6	10.711	51.28	22.2	1.2
75.0	246.0	10.796	51.43	17.0	0.9
80.0	262.4	10.921	51.66	25.0	1.4
85.0	278.8	11.045	51.88	24.8	1.4
90.0	295.2	11.163	52.09	23.6	1.3
95.0	311.6	11.294	52.33	26.2	1.4
100.0	328.0	11.491	52.68	39.4	2.2
105.0	344.4	11.631	52.94	28.0	1.5
110.0	360.8	11.821	53.28	38.0	2.1
115.0	377.2	11.968	53.54	29.4	1.6
120.0	393.6	12.085	53.75	23.4	1.3
125.0	410.0	12.222	54.00	27.4	1.5
130.0	426.4	12.413	54.34	38.2	2.1
135.0	442.8	12.586	54.65	34.6	1.9
140.0	459.2	12.698	54.86	22.4	1.2
145.0	475.6	12.810	55.06	22.4	1.2
150.0	492.0	12.932	55.28	24.4	1.3
155.0	508.4	13.041	55.47	21.8	1.2
160.0	524.8	13.253	55.86	42.4	2.3
165.0	541.2	13.434	56.18	36.2	2.0
170.0	557.6	13.588	56.46	30.8	1.7
175.0	574.0	13.818	56.87	46.0	2.5
180.0	590.4	14.001	57.20	36.6	2.0
185.0	606.8	14.149	57.47	29.6	1.6
190.0	623.2	14.349	57.83	40.0	2.2
195.0	639.6	14.516	58.13	33.4	1.8
200.0	656.0	14.696	58.45	36.0	2.0
205.0	672.4	14.901	58.82	41.0	2.3
210.0	688.8	15.061	59.11	32.0	1.8
215.0	705.2	15.231	59.42	34.0	1.9
220.0	721.6	15.373	59.67	28.4	1.6
225.0	738.0	15.566	60.02	38.6	2.1
230.0	754.4	15.743	60.34	35.4	1.9
235.0	770.8	15.863	60.55	24.0	1.3
240.0	787.2	16.019	60.83	31.2	1.7
245.0	803.6	16.164	61.10	29.0	1.6
250.0	820.0	16.373	61.47	41.8	2.3

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 8CCC
HOLE NAME: RDH-SU37
DATE MEASURED: 1/12/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
255.0	836.4	16.561	61.81	37.6	2.1
260.0	852.8	16.761	62.17	40.0	2.2
265.0	869.2	16.832	62.30	14.2	0.8
270.0	885.6	17.016	62.63	36.8	2.0
275.0	902.0	17.176	62.92	32.0	1.8
280.0	918.4	17.289	63.12	22.6	1.2
285.0	934.8	17.383	63.29	18.8	1.0
290.0	951.2	17.489	63.48	21.2	1.2
295.0	967.6	17.754	63.96	53.0	2.9
300.0	984.0	17.962	64.33	41.6	2.3
305.0	1000.4	18.001	64.40	7.8	0.4
310.0	1016.8	18.185	64.73	36.8	2.0
315.0	1033.2	18.395	65.11	42.0	2.3
320.0	1049.6	18.674	65.61	55.8	3.1
325.0	1066.0	18.856	65.94	36.4	2.0
330.0	1082.4	19.001	66.20	29.0	1.6
335.0	1098.8	19.136	66.44	27.0	1.5
340.0	1115.2	19.301	66.74	33.0	1.8
345.0	1131.6	19.488	67.08	37.4	2.1
350.0	1148.0	19.680	67.42	38.4	2.1
355.0	1164.4	19.841	67.71	32.2	1.8
360.0	1180.8	20.049	68.09	41.6	2.3
365.0	1197.2	20.165	68.30	23.2	1.3
370.0	1213.6	20.470	68.85	61.0	3.3
375.0	1230.0	20.591	69.06	24.2	1.3
380.0	1246.4	20.788	69.42	39.4	2.2
385.0	1262.8	20.938	69.69	30.0	1.6
390.0	1279.2	21.070	69.93	26.4	1.4
395.0	1295.6	21.123	70.02	10.6	0.6
400.0	1312.0	21.219	70.19	19.2	1.1
405.0	1328.4	21.359	70.45	28.0	1.5
410.0	1344.8	21.499	70.70	28.0	1.5
415.0	1361.2	21.576	70.84	15.4	0.8
420.0	1377.6	21.704	71.07	25.6	1.4
425.0	1394.0	21.843	71.32	27.8	1.5
430.0	1410.4	21.997	71.59	30.8	1.7
435.0	1426.8	22.094	71.77	19.4	1.1
440.0	1443.2	22.213	71.98	23.8	1.3
445.0	1459.6	22.288	72.12	15.0	0.8
450.0	1476.0	22.368	72.26	16.0	0.9
455.0	1492.4	22.533	72.56	33.0	1.8
460.0	1508.8	22.652	72.77	23.8	1.3

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 8CCC
HOLE NAME: RDH-SU37
DATE MEASURED: 1/12/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
465.0	1525.2	22.810	73.06	31.6	1.7
470.0	1541.6	22.941	73.29	26.2	1.4
475.0	1558.0	23.074	73.53	26.6	1.5
480.0	1574.4	23.193	73.75	23.8	1.3
485.0	1590.8	23.328	73.99	27.0	1.5
490.0	1607.2	23.425	74.17	19.4	1.1
495.0	1623.6	23.583	74.45	31.6	1.7
500.0	1640.0	23.651	74.57	13.6	0.7
505.0	1656.4	23.756	74.76	21.0	1.2
510.0	1672.8	23.958	75.12	40.4	2.2
515.0	1689.2	24.065	75.32	21.4	1.2
520.0	1705.6	24.203	75.57	27.6	1.5
525.0	1722.0	24.321	75.78	23.6	1.3
530.0	1738.4	24.433	75.98	22.4	1.2
535.0	1754.8	24.552	76.19	23.8	1.3
540.0	1771.2	24.658	76.38	21.2	1.2


TEMPERATURE, DEG C
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DEPTH, METERS
12N/ 1W- 7AAB
1/ 7/72
12N/ 1W- 8CCC
1/12/72

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 8DAA
HOLE NAME: SU-12
DATE MEASURED: 1/12/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
85.0	278.8	14.000	57.20	0.0	0.0
90.0	295.2	13.989	57.18	-2.2	-0.1
95.0	311.6	14.064	57.32	15.0	0.8
100.0	328.0	14.128	57.43	12.8	0.7
105.0	344.4	14.145	57.46	3.4	0.2
110.0	360.8	14.194	57.55	9.8	0.5
115.0	377.2	14.445	58.00	50.2	2.8
120.0	393.6	14.772	58.59	65.4	3.6
125.0	410.0	14.987	58.98	43.0	2.4
130.0	426.4	15.206	59.37	43.8	2.4
135.0	442.8	15.318	59.57	22.4	1.2
140.0	459.2	15.482	59.87	32.8	1.8
145.0	475.6	15.593	60.07	22.2	1.2
150.0	492.0	15.722	60.30	25.8	1.4
155.0	508.4	15.796	60.43	14.8	0.8
160.0	524.8	15.981	60.77	37.0	2.0
165.0	541.2	16.137	61.05	31.2	1.7
170.0	557.6	16.248	61.25	22.2	1.2
175.0	574.0	16.336	61.40	17.6	1.0
180.0	590.4	16.484	61.67	29.6	1.6
185.0	606.8	16.722	62.10	47.6	2.6
190.0	623.2	17.054	62.70	66.4	3.6
195.0	639.6	17.204	62.97	30.0	1.6
200.0	656.0	17.406	63.33	40.4	2.2
205.0	672.4	17.523	63.54	23.4	1.3
210.0	688.8	17.649	63.77	25.2	1.4
215.0	705.2	17.757	63.96	21.6	1.2
220.0	721.6	17.840	64.11	16.6	0.9
225.0	738.0	17.953	64.32	22.6	1.2
230.0	754.4	18.082	64.55	25.8	1.4
235.0	770.8	18.258	64.86	35.2	1.9
240.0	787.2	18.338	65.01	16.0	0.9
245.0	803.6	18.464	65.24	25.2	1.4
250.0	820.0	18.562	65.41	19.6	1.1
255.0	836.4	18.632	65.54	14.0	0.8
260.0	852.8	18.703	65.67	14.2	0.8
265.0	869.2	18.786	65.81	16.6	0.9
270.0	885.6	18.858	65.94	14.4	0.8
275.0	902.0	19.029	66.25	34.2	1.9
280.0	918.4	19.159	66.49	26.0	1.4
285.0	934.8	19.277	66.70	23.6	1.3

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 8DAA
HOLE NAME: SU-12
DATE MEASURED: 1/12/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
290.0	951.2	19.356	66.84	15.8	0.9
295.0	967.6	19.446	67.00	18.0	1.0
300.0	984.0	19.630	67.33	36.8	2.0
305.0	1000.4	19.757	67.56	25.4	1.4
310.0	1016.8	20.047	68.08	58.0	3.2
315.0	1033.2	20.246	68.44	39.8	2.2
320.0	1049.6	20.444	68.80	39.6	2.2
325.0	1066.0	20.563	69.01	23.8	1.3
330.0	1082.4	20.694	69.25	26.2	1.4
335.0	1098.8	20.834	69.50	28.0	1.5
340.0	1115.2	20.933	69.68	19.8	1.1
345.0	1131.6	21.067	69.92	26.8	1.5
350.0	1148.0	21.192	70.15	25.0	1.4
355.0	1164.4	21.312	70.36	24.0	1.3
360.0	1180.8	21.449	70.61	27.4	1.5
365.0	1197.2	21.557	70.80	21.6	1.2
370.0	1213.6	21.638	70.95	16.2	0.9
375.0	1230.0	21.708	71.07	14.0	0.8
380.0	1246.4	21.799	71.24	18.2	1.0
385.0	1262.8	21.906	71.43	21.4	1.2
390.0	1279.2	21.998	71.60	18.4	1.0
395.0	1295.6	22.064	71.72	13.2	0.7
400.0	1312.0	22.151	71.87	17.4	1.0
405.0	1328.4	22.206	71.97	11.0	0.6
410.0	1344.8	22.033	71.66	-34.6	-1.9
415.0	1361.2	22.043	71.68	2.0	0.1
420.0	1377.6	22.108	71.79	13.0	0.7
425.0	1394.0	22.182	71.93	14.8	0.8
430.0	1410.4	22.270	72.09	17.6	1.0
435.0	1426.8	22.410	72.34	28.0	1.5
440.0	1443.2	22.601	72.68	38.2	2.1
445.0	1459.6	22.822	73.08	44.2	2.4
450.0	1476.0	23.032	73.46	42.0	2.3
455.0	1492.4	23.153	73.68	24.2	1.3
460.0	1508.8	23.268	73.88	23.0	1.3
465.0	1525.2	23.361	74.05	18.6	1.0
470.0	1541.6	23.448	74.21	17.4	1.0
475.0	1558.0	23.546	74.38	19.6	1.1
480.0	1574.4	23.645	74.56	19.8	1.1
485.0	1590.8	23.775	74.79	26.0	1.4
490.0	1607.2	23.873	74.97	19.6	1.1

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 8DAA
HOLE NAME: SU-12
DATE MEASURED: 1/12/72

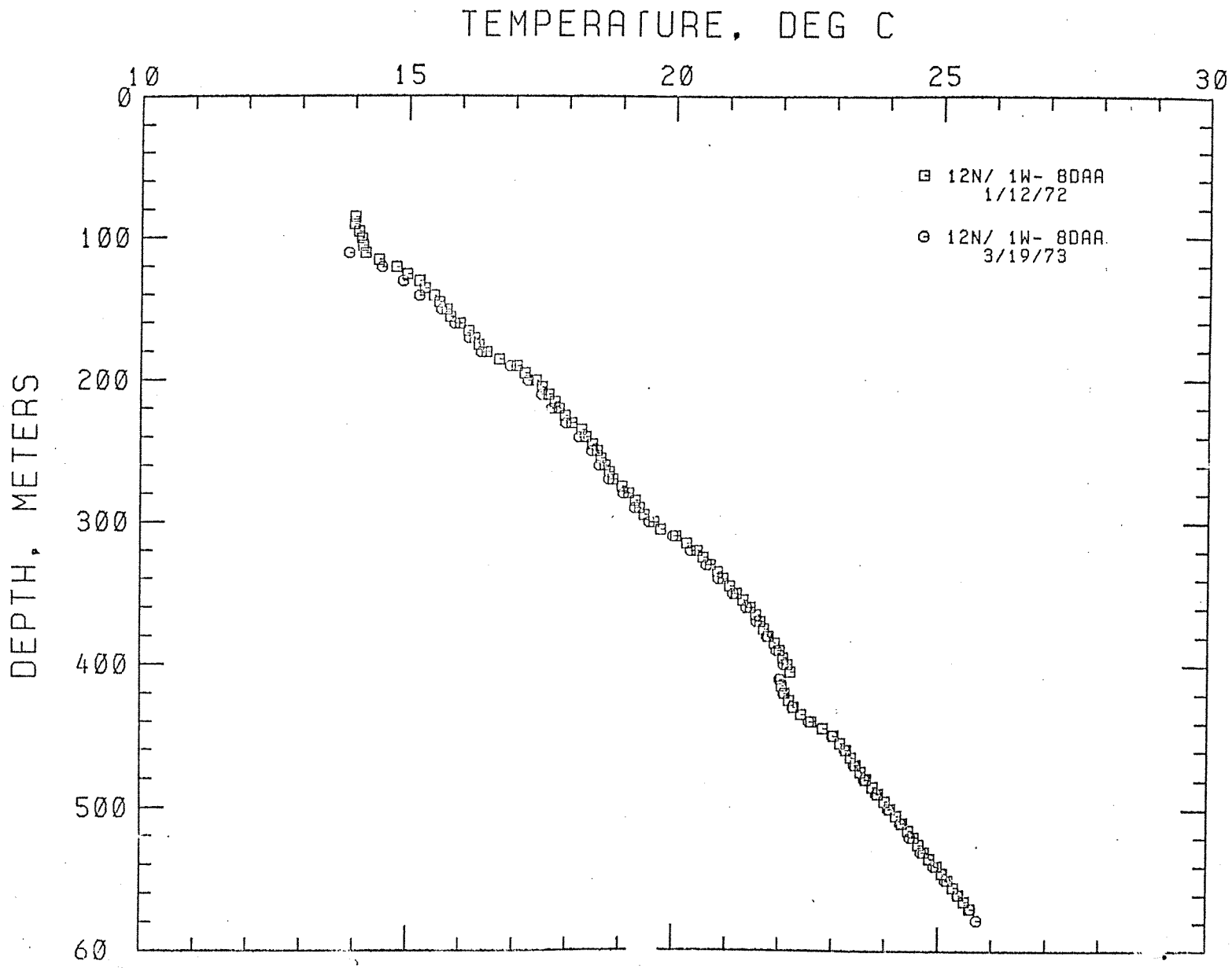
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
495.0	1623.6	23.999	75.20	25.2	1.4
500.0	1640.0	24.104	75.39	21.0	1.2
505.0	1656.4	24.218	75.59	22.8	1.3
510.0	1672.8	24.337	75.81	23.8	1.3
515.0	1689.2	24.446	76.00	21.8	1.2
520.0	1705.6	24.552	76.19	21.2	1.2
525.0	1722.0	24.644	76.36	18.4	1.0
530.0	1738.4	24.748	76.55	20.8	1.1
535.0	1754.8	24.850	76.73	20.4	1.1
540.0	1771.2	24.978	76.96	25.6	1.4
545.0	1787.6	25.082	77.15	20.8	1.1
550.0	1804.0	25.190	77.34	21.6	1.2
555.0	1820.4	25.294	77.53	20.8	1.1
560.0	1836.8	25.400	77.72	21.2	1.2
565.0	1853.2	25.496	77.89	19.2	1.1
570.0	1869.6	25.595	78.07	19.8	1.1

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 8DAA
HOLE NAME: SU-12
DATE MEASURED: 3/19/73

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
110.0	360.8	13.888	57.00	0.0	0.0
120.0	393.6	14.505	58.11	61.7	3.4
130.0	426.4	14.903	58.83	39.8	2.2
140.0	459.2	15.208	59.37	30.5	1.7
150.0	492.0	15.621	60.12	41.3	2.3
160.0	524.8	15.871	60.57	25.0	1.4
170.0	557.6	16.145	61.06	27.4	1.5
180.0	590.4	16.375	61.48	23.0	1.3
190.0	623.2	16.931	62.48	55.6	3.1
200.0	656.0	17.257	63.06	32.6	1.8
210.0	688.8	17.513	63.52	25.6	1.4
220.0	721.6	17.706	63.87	19.3	1.1
230.0	754.4	17.965	64.34	25.9	1.4
240.0	787.2	18.220	64.80	25.5	1.4
250.0	820.0	18.452	65.21	23.2	1.3
260.0	852.8	18.596	65.47	14.4	0.8
270.0	885.6	18.773	65.79	17.7	1.0
280.0	918.4	19.052	66.29	27.9	1.5
290.0	951.2	19.268	66.68	21.6	1.2
300.0	984.0	19.545	67.18	27.7	1.5
310.0	1016.8	19.984	67.97	43.9	2.4
320.0	1049.6	20.319	68.57	33.5	1.8
330.0	1082.4	20.618	69.11	29.9	1.6
340.0	1115.2	20.845	69.52	22.7	1.2
350.0	1148.0	21.119	70.01	27.4	1.5
360.0	1180.8	21.372	70.47	25.3	1.4
370.0	1213.6	21.565	70.82	19.3	1.1
380.0	1246.4	21.759	71.17	19.4	1.1
390.0	1279.2	21.942	71.50	18.3	1.0
400.0	1312.0	22.084	71.75	14.2	0.8
410.0	1344.8	22.003	71.61	-8.1	-0.4
420.0	1377.6	22.075	71.74	7.2	0.4
430.0	1410.4	22.251	72.05	17.6	1.0
440.0	1443.2	22.565	72.62	31.4	1.7
450.0	1476.0	23.007	73.41	44.2	2.4
460.0	1508.8	23.240	73.83	23.3	1.3
470.0	1541.6	23.418	74.15	17.8	1.0
480.0	1574.4	23.615	74.51	19.7	1.1
490.0	1607.2	23.838	74.91	22.3	1.2
500.0	1640.0	24.070	75.33	23.2	1.3
510.0	1672.8	24.298	75.74	22.8	1.3

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 8DAA
HOLE NAME: SU-12
DATE MEASURED: 3/19/73

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
520.0	1705.6	24.477	76.06	17.9	1.0
530.0	1738.4	24.681	76.43	20.4	1.1
540.0	1771.2	24.920	76.86	23.9	1.3
550.0	1804.0	25.143	77.26	22.3	1.2
560.0	1836.8	25.385	77.69	24.2	1.3
570.0	1869.6	25.608	78.09	22.3	1.2
578.0	1895.8	25.720	78.30	14.0	0.8


TEMPERATURE, DEG C
10
15
20
25
30
0
100
200
300
400
500
600
DEPTH, METERS
12N/ 1W- 8DAA
1/12/72
12N/ 1W- 8DAA
3/19/73

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 8DAD
HOLE NAME: SU-11
DATE MEASURED: 6/12/67

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
100.0	328.0	11.227	52.21	0.0	0.0
110.0	360.8	11.530	52.75	30.3	1.7
120.0	393.6	11.810	53.26	28.0	1.5
130.0	426.4	12.151	53.87	34.1	1.9
140.0	459.2	12.529	54.55	37.8	2.1
150.0	492.0	12.845	55.12	31.6	1.7
160.0	524.8	13.091	55.56	24.6	1.3
170.0	557.6	13.571	56.43	48.0	2.6
180.0	590.4	13.842	56.92	27.1	1.5
190.0	623.2	14.368	57.86	52.6	2.9
200.0	656.0	14.666	58.40	29.8	1.6
210.0	688.8	14.955	58.92	28.9	1.6
220.0	721.6	15.408	59.73	45.3	2.5
230.0	754.4	15.669	60.20	26.1	1.4
240.0	787.2	16.046	60.88	37.7	2.1
250.0	820.0	16.279	61.30	23.3	1.3
260.0	852.8	16.706	62.07	42.7	2.3
270.0	885.6	16.972	62.55	26.6	1.5
280.0	918.4	17.353	63.24	38.1	2.1
290.0	951.2	17.689	63.84	33.6	1.8
300.0	984.0	17.994	64.39	30.5	1.7
310.0	1016.8	18.453	65.22	45.9	2.5
320.0	1049.6	18.802	65.84	34.9	1.9
330.0	1082.4	19.144	66.46	34.2	1.9
340.0	1115.2	19.405	66.93	26.1	1.4
350.0	1148.0	19.894	67.81	48.9	2.7
360.0	1180.8	20.168	68.30	27.4	1.5
370.0	1213.6	20.435	68.78	26.7	1.5
380.0	1246.4	20.705	69.27	27.0	1.5
390.0	1279.2	20.970	69.75	26.5	1.5
400.0	1312.0	21.139	70.05	16.9	0.9
409.0	1341.5	21.310	70.36	19.0	1.0

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 8DAD
HOLE NAME: SU-11
DATE MEASURED: 1/ 7/72

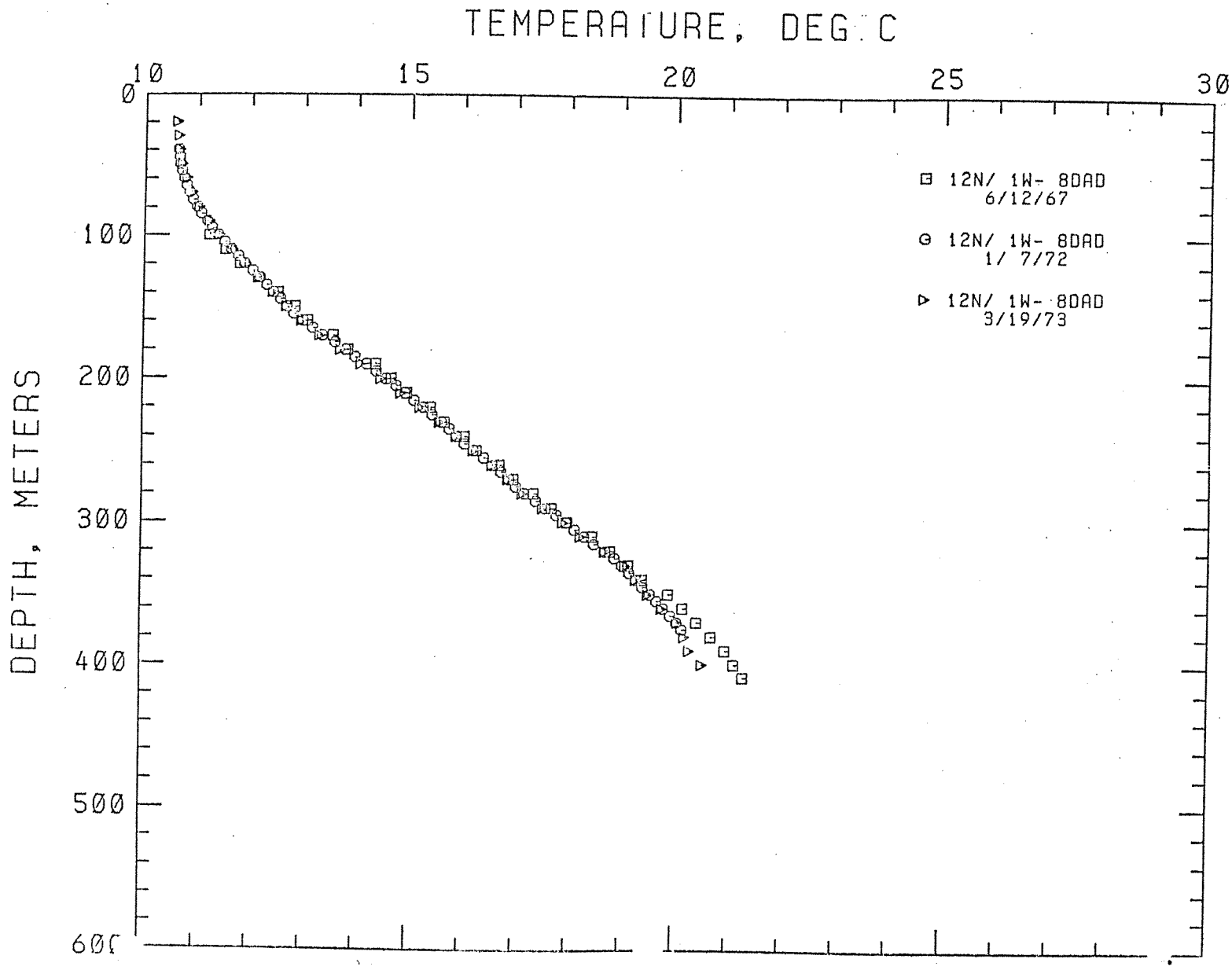
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
40.0	131.2	10.622	51.12	0.0	0.0
45.0	147.6	10.635	51.14	2.6	0.1
50.0	164.0	10.657	51.18	4.4	0.2
55.0	180.4	10.689	51.24	6.4	0.4
60.0	196.8	10.727	51.31	7.6	0.4
65.0	213.2	10.776	51.40	9.8	0.5
70.0	229.6	10.832	51.50	11.2	0.6
75.0	246.0	10.900	51.62	13.6	0.7
80.0	262.4	10.979	51.76	15.8	0.9
85.0	278.8	11.065	51.92	17.2	0.9
90.0	295.2	11.173	52.11	21.6	1.2
95.0	311.6	11.273	52.29	20.0	1.1
100.0	328.0	11.383	52.49	22.0	1.2
105.0	344.4	11.509	52.72	25.2	1.4
110.0	360.8	11.635	52.94	25.2	1.4
115.0	377.2	11.766	53.18	26.2	1.4
120.0	393.6	11.891	53.40	25.0	1.4
125.0	410.0	12.042	53.68	30.2	1.7
130.0	426.4	12.178	53.92	27.2	1.5
135.0	442.8	12.303	54.15	25.0	1.4
140.0	459.2	12.438	54.39	27.0	1.5
145.0	475.6	12.566	54.62	25.6	1.4
150.0	492.0	12.698	54.86	26.4	1.4
155.0	508.4	12.825	55.09	25.4	1.4
160.0	524.8	12.990	55.38	33.0	1.8
165.0	541.2	13.174	55.71	36.8	2.0
170.0	557.6	13.362	56.05	37.6	2.1
175.0	574.0	13.595	56.47	46.6	2.6
180.0	590.4	13.796	56.83	40.2	2.2
185.0	606.8	13.982	57.17	37.2	2.0
190.0	623.2	14.193	57.55	42.2	2.3
195.0	639.6	14.372	57.87	35.8	2.0
200.0	656.0	14.560	58.21	37.6	2.1
205.0	672.4	14.754	58.56	38.8	2.1
210.0	688.8	14.922	58.86	33.6	1.8
215.0	705.2	15.094	59.17	34.4	1.9
220.0	721.6	15.265	59.48	34.2	1.9
225.0	738.0	15.436	59.78	34.2	1.9
230.0	754.4	15.611	60.10	35.0	1.9
235.0	770.8	15.758	60.36	29.4	1.6
240.0	787.2	15.901	60.62	28.6	1.6

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 8DAD
HOLE NAME: SU-11
DATE MEASURED: 1/ 7/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
245.0	803.6	16.051	60.89	30.0	1.6
250.0	820.0	16.218	61.19	33.4	1.8
255.0	836.4	16.406	61.53	37.6	2.1
260.0	852.8	16.574	61.83	33.6	1.8
265.0	869.2	16.739	62.13	33.0	1.8
270.0	885.6	16.886	62.39	29.4	1.6
275.0	902.0	17.019	62.63	26.6	1.5
280.0	918.4	17.174	62.91	31.0	1.7
285.0	934.8	17.391	63.30	43.4	2.4
290.0	951.2	17.572	63.63	36.2	2.0
295.0	967.6	17.787	64.02	43.0	2.4
300.0	984.0	17.971	64.35	36.8	2.0
305.0	1000.4	18.122	64.62	30.2	1.7
310.0	1016.8	18.304	64.95	36.4	2.0
315.0	1033.2	18.496	65.29	38.4	2.1
320.0	1049.6	18.703	65.67	41.4	2.3
325.0	1066.0	18.875	65.98	34.4	1.9
330.0	1082.4	19.024	66.24	29.8	1.6
335.0	1098.8	19.163	66.49	27.8	1.5
340.0	1115.2	19.294	66.73	26.2	1.4
345.0	1131.6	19.422	66.96	25.6	1.4
350.0	1148.0	19.555	67.20	26.6	1.5
355.0	1164.4	19.680	67.42	25.0	1.4
360.0	1180.8	19.810	67.66	26.0	1.4
365.0	1197.2	19.948	67.91	27.6	1.5
370.0	1213.6	20.055	68.10	21.4	1.2
375.0	1230.0	20.156	68.28	20.2	1.1

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 8DAD
HOLE NAME: SU-11
DATE MEASURED: 3/19/73

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	10.598	51.08	0.0	0.0
30.0	98.4	10.623	51.12	2.5	0.1
40.0	131.2	10.650	51.17	2.7	0.1
50.0	164.0	10.701	51.26	5.1	0.3
60.0	196.8	10.788	51.42	8.7	0.5
70.0	229.6	10.897	51.61	10.9	0.6
80.0	262.4	11.034	51.86	13.7	0.8
90.0	295.2	11.219	52.19	18.5	1.0
100.0	328.0	11.421	52.56	20.2	1.1
110.0	360.8	11.670	53.01	24.9	1.4
120.0	393.6	11.915	53.45	24.5	1.3
130.0	426.4	12.187	53.94	27.2	1.5
140.0	459.2	12.436	54.38	24.9	1.4
150.0	492.0	12.685	54.83	24.9	1.4
160.0	524.8	12.966	55.34	28.1	1.5
170.0	557.6	13.315	55.97	34.9	1.9
180.0	590.4	13.698	56.66	38.3	2.1
190.0	623.2	14.093	57.37	39.5	2.2
200.0	656.0	14.472	58.05	37.9	2.1
210.0	688.8	14.846	58.72	37.4	2.1
220.0	721.6	15.216	59.39	37.0	2.0
230.0	754.4	15.572	60.03	35.6	2.0
240.0	787.2	15.896	60.61	32.4	1.8
250.0	820.0	16.215	61.19	31.9	1.8
260.0	852.8	16.572	61.83	35.7	2.0
270.0	885.6	16.868	62.36	29.6	1.6
280.0	918.4	17.145	62.86	27.7	1.5
290.0	951.2	17.527	63.55	38.2	2.1
300.0	984.0	17.906	64.23	37.9	2.1
310.0	1016.8	18.235	64.82	32.9	1.8
320.0	1049.6	18.702	65.66	46.7	2.6
330.0	1082.4	19.081	66.35	37.9	2.1
340.0	1115.2	19.296	66.73	21.5	1.2
350.0	1148.0	19.517	67.13	22.1	1.2
360.0	1180.8	19.782	67.61	26.5	1.5
370.0	1213.6	20.080	68.14	29.8	1.6
380.0	1246.4	20.218	68.39	13.8	0.8
390.0	1279.2	20.304	68.55	8.6	0.5
400.0	1312.0	20.545	68.98	24.1	1.3


TEMPERATURE, DEG.C
10
15
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25
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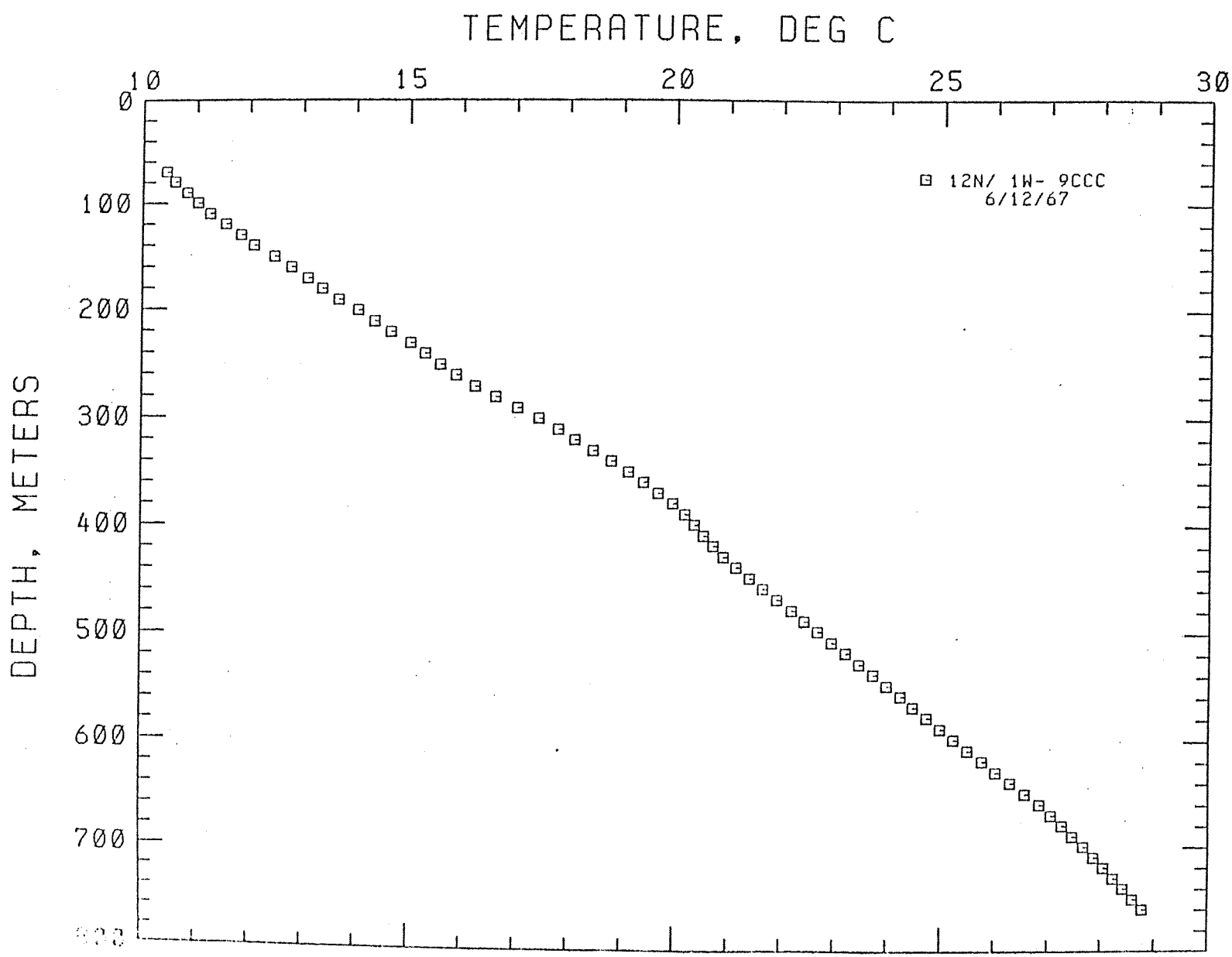
600
DEPTH, METERS
12N/ 1W- 8DAD
6/12/67
12N/ 1W- 8DAD
1/ 7/72
12N/ 1W- 8DAD
3/19/73

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 9CCC
HOLE NAME: SU-4
DATE MEASURED: 6/12/67

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
70.0	229.6	10.444	50.80	0.0	0.0
80.0	262.4	10.600	51.08	15.6	0.9
90.0	295.2	10.832	51.50	23.2	1.3
100.0	328.0	11.037	51.87	20.5	1.1
110.0	360.8	11.271	52.29	23.4	1.3
120.0	393.6	11.560	52.81	28.9	1.6
130.0	426.4	11.849	53.33	28.9	1.6
140.0	459.2	12.086	53.75	23.7	1.3
150.0	492.0	12.483	54.47	39.7	2.2
160.0	524.8	12.803	55.05	32.0	1.8
170.0	557.6	13.104	55.59	30.1	1.7
180.0	590.4	13.384	56.09	28.0	1.5
190.0	623.2	13.691	56.64	30.7	1.7
200.0	656.0	14.060	57.31	36.9	2.0
210.0	689.0	14.362	57.85	30.0	1.6
220.0	721.8	14.671	58.41	30.9	1.7
230.0	754.6	15.044	59.08	37.3	2.0
240.0	787.4	15.314	59.57	27.0	1.5
250.1	820.2	15.605	60.09	29.1	1.6
260.1	853.0	15.900	60.62	29.5	1.6
270.1	886.1	16.255	61.26	35.1	1.9
280.0	918.4	16.641	61.95	39.2	2.2
290.0	951.2	17.050	62.69	40.9	2.2
300.0	984.0	17.453	63.42	40.3	2.2
310.0	1016.8	17.818	64.07	36.5	2.0
320.0	1049.6	18.122	64.62	30.4	1.7
330.1	1082.7	18.464	65.24	33.9	1.9
340.0	1115.2	18.809	65.86	34.8	1.9
350.0	1148.0	19.127	66.43	31.8	1.7
360.0	1180.8	19.416	66.95	28.9	1.6
370.0	1213.6	19.689	67.44	27.3	1.5
380.0	1246.4	19.965	67.94	27.6	1.5
390.4	1280.3	20.192	68.35	21.9	1.2
400.0	1312.0	20.373	68.67	18.8	1.0
410.0	1344.8	20.549	68.99	17.6	1.0
420.0	1377.6	20.737	69.33	18.8	1.0
430.0	1410.4	20.920	69.66	18.3	1.0
440.0	1443.2	21.161	70.09	24.1	1.3
450.0	1476.0	21.414	70.55	25.3	1.4
460.0	1508.8	21.669	71.00	25.5	1.4
470.0	1541.6	21.929	71.47	26.0	1.4

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W- 9CCC
HOLE NAME: SU-4
DATE MEASURED: 6/12/67

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
480.3	1575.4	22.204	71.97	26.7	1.5
490.0	1607.2	22.446	72.40	24.9	1.4
500.0	1640.0	22.695	72.85	24.9	1.4
510.0	1672.8	22.955	73.32	26.0	1.4
520.0	1705.6	23.218	73.79	26.3	1.4
530.0	1738.4	23.470	74.25	25.2	1.4
540.0	1771.2	23.733	74.72	26.3	1.4
550.0	1804.0	23.988	75.18	25.5	1.4
560.0	1836.8	24.247	75.64	25.9	1.4
570.0	1869.6	24.482	76.07	23.5	1.3
580.0	1902.4	24.744	76.54	26.2	1.4
590.0	1935.2	24.993	76.99	24.9	1.4
600.0	1968.0	25.249	77.45	25.6	1.4
610.0	2000.8	25.505	77.91	25.6	1.4
620.0	2033.6	25.778	78.40	27.3	1.5
630.0	2066.4	26.040	78.87	26.2	1.4
640.0	2099.2	26.303	79.35	26.3	1.4
650.0	2132.0	26.588	79.86	28.5	1.6
660.0	2164.8	26.854	80.34	26.6	1.5
670.0	2197.6	27.070	80.73	21.6	1.2
680.0	2230.4	27.285	81.11	21.5	1.2
690.0	2263.2	27.474	81.45	18.9	1.0
700.0	2296.0	27.678	81.82	20.4	1.1
710.0	2328.8	27.877	82.18	19.9	1.1
720.0	2361.6	28.061	82.51	18.4	1.0
730.0	2394.4	28.239	82.83	17.8	1.0
740.0	2427.2	28.423	83.16	18.4	1.0
750.0	2460.0	28.611	83.50	18.8	1.0
760.0	2492.8	28.783	83.81	17.2	0.9

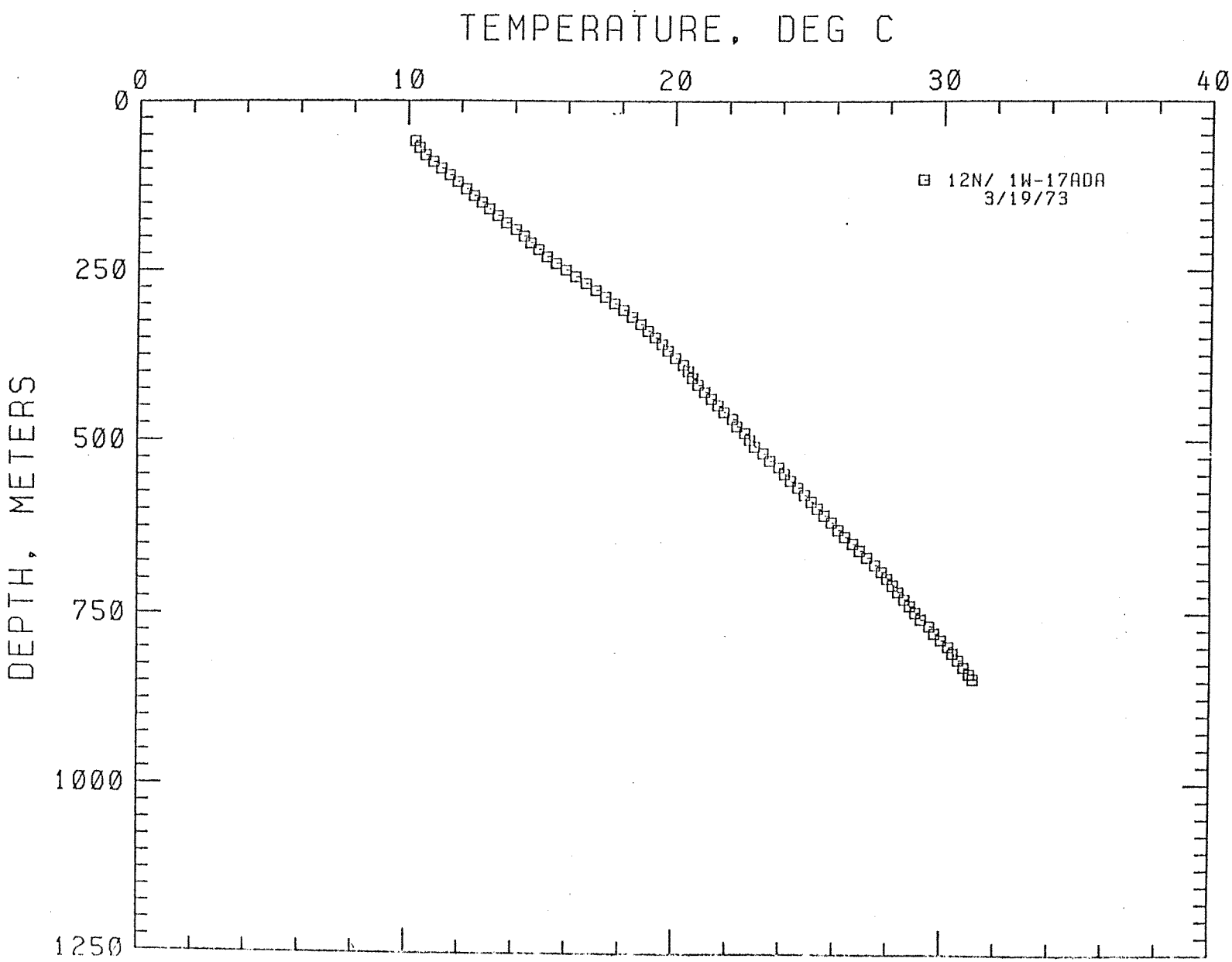

TEMPERATURE, DEG C
10
15
20
25
30
0
100
200
300
400
500
600
700
DEPTH, METERS
12N/ 1W- 9CCC
6/12/67

LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W-17ADA
HOLE NAME: SU-902
DATE MEASURED: 3/19/73

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
60.0	196.8	10.295	50.53	0.0	0.0
70.0	229.6	10.450	50.81	15.5	0.9
80.0	262.4	10.685	51.23	23.5	1.3
90.0	295.2	10.965	51.74	28.0	1.5
100.0	328.0	11.268	52.28	30.3	1.7
110.0	360.8	11.579	52.84	31.1	1.7
120.0	393.6	11.886	53.39	30.7	1.7
130.0	426.4	12.197	53.95	31.1	1.7
140.0	459.2	12.494	54.49	29.7	1.6
150.0	492.0	12.790	55.02	29.6	1.6
160.0	524.8	13.076	55.54	28.6	1.6
170.0	557.6	13.391	56.10	31.5	1.7
180.0	590.4	13.725	56.71	33.4	1.8
190.0	623.2	14.072	57.33	34.7	1.9
200.0	656.0	14.366	57.86	29.4	1.6
210.0	688.8	14.630	58.33	26.4	1.4
220.0	721.6	14.917	58.85	28.7	1.6
230.0	754.4	15.235	59.42	31.8	1.7
240.0	787.2	15.589	60.06	35.4	1.9
250.0	820.0	15.959	60.73	37.0	2.0
260.0	852.8	16.321	61.38	36.2	2.0
270.0	885.6	16.710	62.08	38.9	2.1
280.0	918.4	17.070	62.73	36.0	2.0
290.0	951.2	17.450	63.41	38.0	2.1
300.0	984.0	17.787	64.02	33.7	1.8
310.0	1016.8	18.128	64.63	34.1	1.9
320.0	1049.6	18.447	65.20	31.9	1.8
330.0	1082.4	18.767	65.78	32.0	1.8
340.0	1115.2	19.051	66.29	28.4	1.6
350.0	1148.0	19.311	66.76	26.0	1.4
360.0	1180.8	19.577	67.24	26.6	1.5
370.0	1213.6	19.800	67.64	22.3	1.2
380.0	1246.4	20.064	68.12	26.4	1.4
390.0	1279.2	20.355	68.64	29.1	1.6
400.0	1312.0	20.556	69.00	20.1	1.1
410.0	1344.8	20.717	69.29	16.1	0.9
420.0	1377.6	20.914	69.65	19.7	1.1
430.0	1410.4	21.156	70.08	24.2	1.3
440.0	1443.2	21.410	70.54	25.4	1.4
450.0	1476.0	21.662	70.99	25.2	1.4
460.0	1508.8	21.891	71.40	22.9	1.3

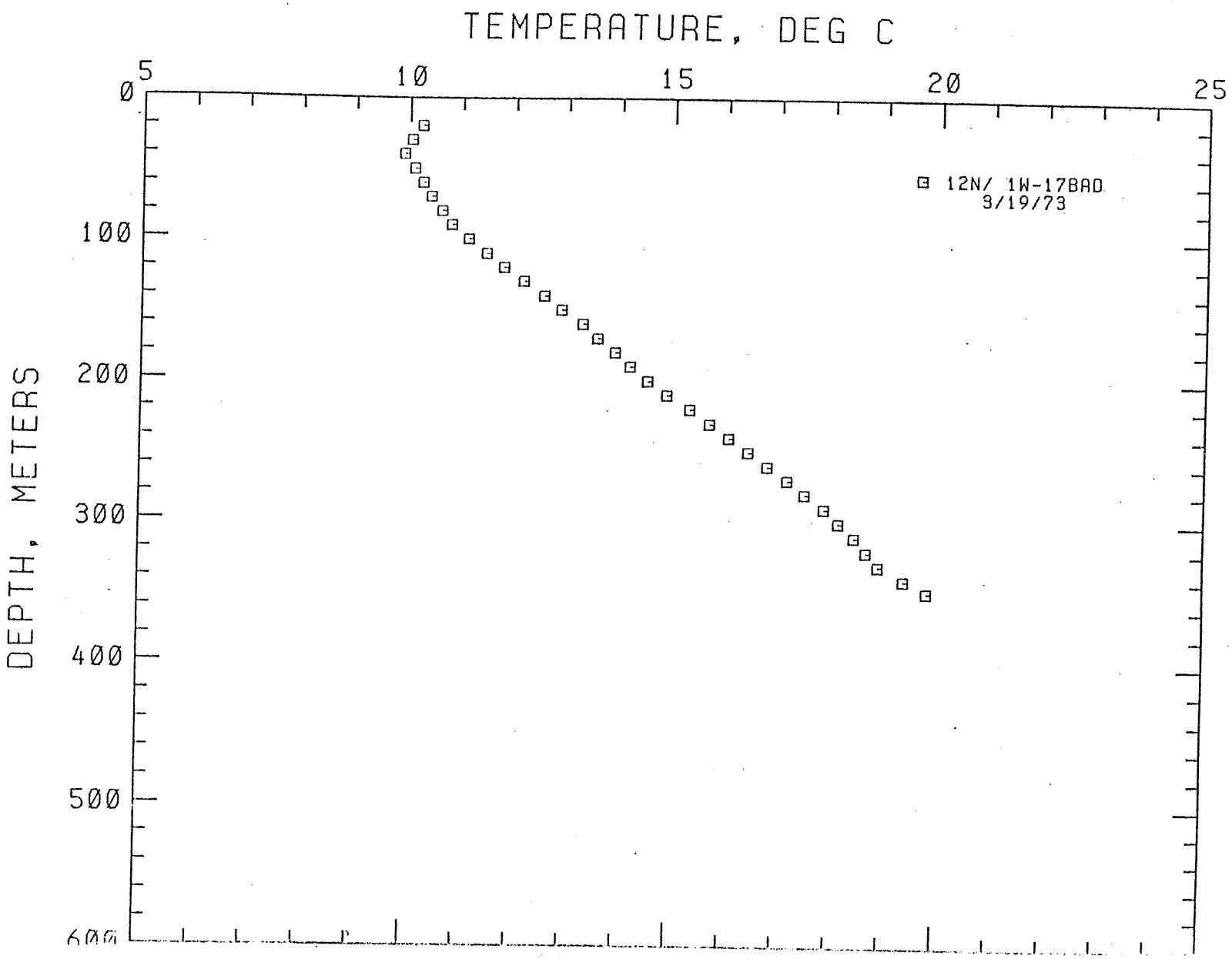
LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W-17ADA
HOLE NAME: SU-902
DATE MEASURED: 3/19/73

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
470.0	1541.6	22.218	71.99	32.7	1.8
480.0	1574.4	22.368	72.26	15.0	0.8
490.0	1607.2	22.665	72.80	29.7	1.6
500.0	1640.0	22.868	73.16	20.3	1.1
510.0	1672.8	23.034	73.46	16.6	0.9
520.0	1705.6	23.360	74.05	32.6	1.8
530.0	1738.4	23.620	74.52	26.0	1.4
540.0	1771.2	23.957	75.12	33.7	1.8
550.0	1804.0	24.150	75.47	19.3	1.1
560.0	1836.8	24.398	75.92	24.8	1.4
570.0	1869.6	24.657	76.38	25.9	1.4
580.0	1902.4	24.918	76.85	26.1	1.4
590.0	1935.2	25.160	77.29	24.2	1.3
600.0	1968.0	25.405	77.73	24.5	1.3
610.0	2000.8	25.655	78.18	25.0	1.4
620.0	2033.6	25.910	78.64	25.5	1.4
630.0	2066.4	26.160	79.09	25.0	1.4
640.0	2099.2	26.424	79.56	26.4	1.4
650.0	2132.0	26.713	80.08	28.9	1.6
660.0	2164.8	26.976	80.56	26.3	1.4
670.0	2197.6	27.255	81.06	27.9	1.5
680.0	2230.4	27.535	81.56	28.0	1.5
690.0	2263.2	27.805	82.05	27.0	1.5
700.0	2296.0	28.010	82.42	20.5	1.1
710.0	2328.8	28.202	82.76	19.2	1.1
720.0	2361.6	28.405	83.13	20.3	1.1
730.0	2394.4	28.648	83.57	24.3	1.3
740.0	2427.2	28.843	83.92	19.5	1.1
750.0	2460.0	29.040	84.27	19.7	1.1
760.0	2492.8	29.267	84.68	22.7	1.2
770.0	2525.6	29.582	85.25	31.5	1.7
780.0	2558.4	29.752	85.55	17.0	0.9
790.0	2591.2	30.007	86.01	25.5	1.4
800.0	2624.0	30.293	86.53	28.6	1.6
810.0	2656.8	30.456	86.82	16.3	0.9
820.0	2689.6	30.648	87.17	19.2	1.1
830.0	2722.4	30.868	87.56	22.0	1.2
840.0	2755.2	31.064	87.92	19.6	1.1
847.0	2778.2	31.208	88.17	20.6	1.1


TEMPERATURE, DEG C
0
10
20
30
40
DEPTH, METERS
0
250
500
750
1000
1250
12N/ 1W-17ADA
3/19/73

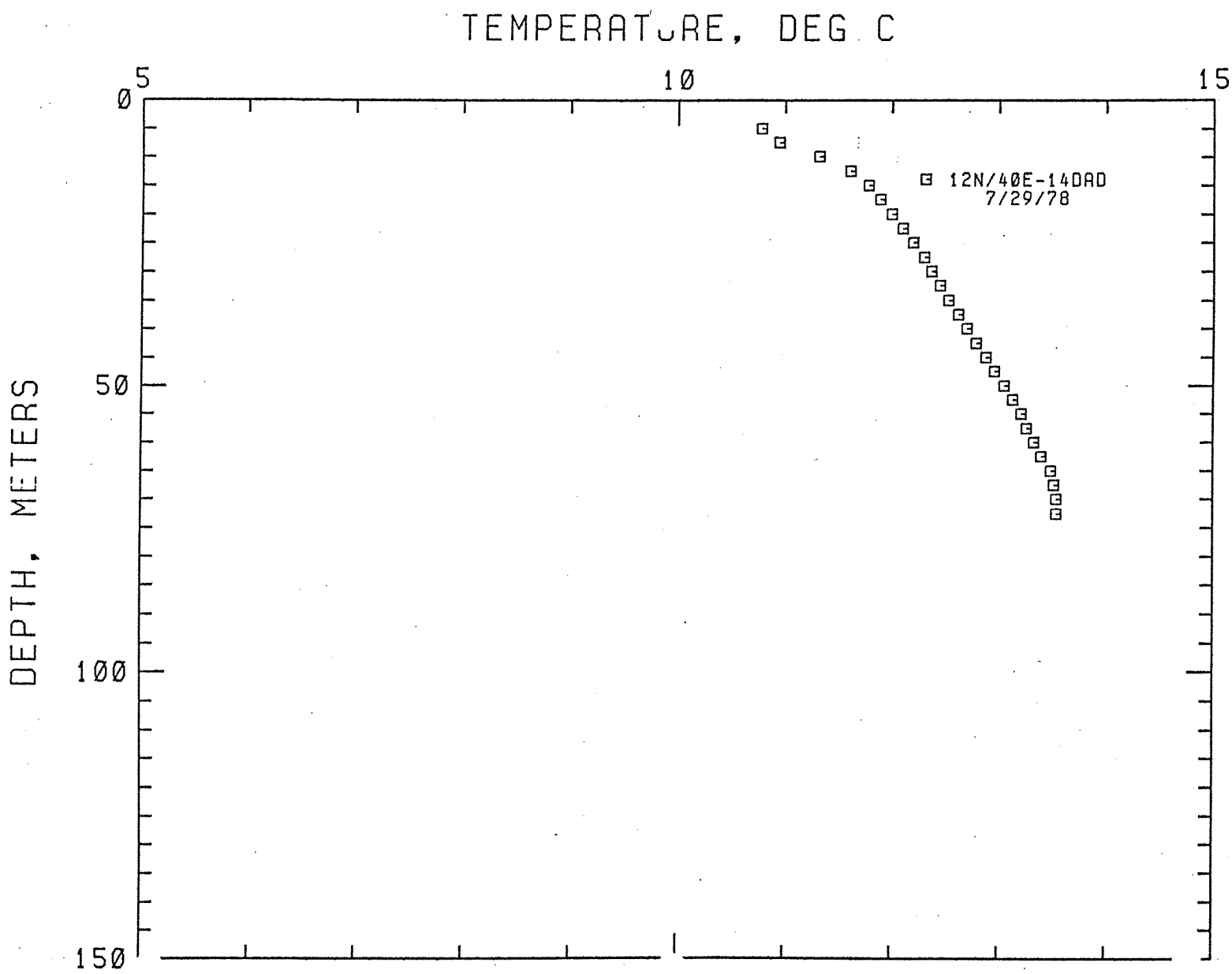
LOCATION: HOQUIAM AMS, WASHINGTON
12N/ 1W-17BAD
HOLE NAME: SU-10
DATE MEASURED: 3/19/73

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	10.246	50.44	0.0	0.0
30.0	98.4	10.049	50.09	-19.7	-1.1
40.0	131.2	9.916	49.85	-13.3	-0.7
50.0	164.0	10.110	50.20	19.4	1.1
60.0	196.8	10.269	50.48	15.9	0.9
70.0	229.6	10.428	50.77	15.9	0.9
80.0	262.4	10.638	51.15	21.0	1.2
90.0	295.2	10.816	51.47	17.8	1.0
100.0	328.0	11.137	52.05	32.1	1.8
110.0	360.8	11.480	52.66	34.3	1.9
120.0	393.6	11.810	53.26	33.0	1.8
130.0	426.4	12.194	53.95	38.4	2.1
140.0	459.2	12.576	54.64	38.2	2.1
150.0	492.0	12.905	55.23	32.9	1.8
160.0	524.8	13.304	55.95	39.9	2.2
170.0	557.6	13.595	56.47	29.1	1.6
180.0	590.4	13.921	57.06	32.6	1.8
190.0	623.2	14.216	57.59	29.5	1.6
200.0	656.0	14.544	58.18	32.8	1.8
210.0	688.8	14.912	58.84	36.8	2.0
220.0	721.6	15.338	59.61	42.6	2.3
230.0	754.4	15.723	60.30	38.5	2.1
240.0	787.2	16.091	60.96	36.8	2.0
250.0	820.0	16.453	61.62	36.2	2.0
260.0	852.8	16.813	62.26	36.0	2.0
270.0	885.6	17.193	62.95	38.0	2.1
280.0	918.4	17.522	63.54	32.9	1.8
290.0	951.2	17.893	64.21	37.1	2.0
300.0	984.0	18.165	64.70	27.2	1.5
310.0	1016.8	18.458	65.22	29.3	1.6
320.0	1049.6	18.696	65.65	23.8	1.3
330.0	1082.4	18.915	66.05	21.9	1.2
340.0	1115.2	19.400	66.92	48.5	2.7
348.0	1141.4	19.830	67.69	53.8	2.9


TEMPERATURE, DEG C
5
10
15
20
25
0
100
200
300
400
500
600
DEPTH, METERS
12N/ 1W-17BAD
3/19/73

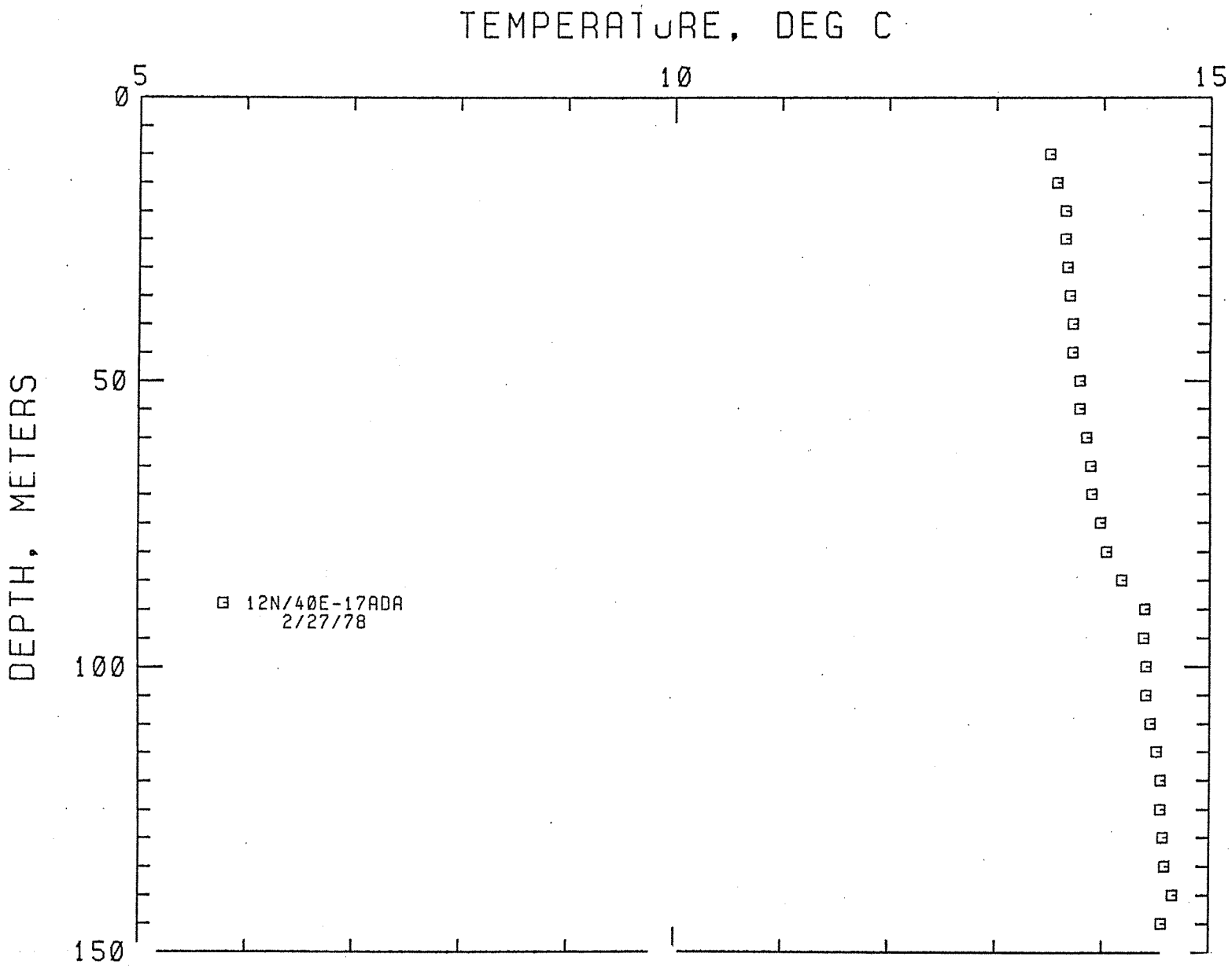
LOCATION: PULLMAN AMS, WASHINGTON
12N/40E-14DAD
HOLE NAME: SCOTT-WW
DATE MEASURED: 7/29/78

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	10.780	51.40	0.0	0.0
7.5	24.6	10.950	51.71	68.0	3.7
10.0	32.8	11.320	52.38	148.0	8.1
12.5	41.0	11.610	52.90	116.0	6.4
15.0	49.2	11.780	53.20	68.0	3.7
17.5	57.4	11.890	53.40	44.0	2.4
20.0	65.6	12.000	53.60	44.0	2.4
22.5	73.8	12.100	53.78	40.0	2.2
25.0	82.0	12.200	53.96	40.0	2.2
27.5	90.2	12.300	54.14	40.0	2.2
30.0	98.4	12.370	54.27	28.0	1.5
32.5	106.6	12.450	54.41	32.0	1.8
35.0	114.8	12.530	54.55	32.0	1.8
37.5	123.0	12.620	54.72	36.0	2.0
40.0	131.2	12.700	54.86	32.0	1.8
42.5	139.4	12.790	55.02	36.0	2.0
45.0	147.6	12.880	55.18	36.0	2.0
47.5	155.8	12.960	55.33	32.0	1.8
50.0	164.0	13.050	55.49	36.0	2.0
52.5	172.2	13.130	55.63	32.0	1.8
55.0	180.4	13.210	55.78	32.0	1.8
57.5	188.6	13.260	55.87	20.0	1.1
60.0	196.8	13.330	55.99	28.0	1.5
62.5	205.0	13.400	56.12	28.0	1.5
65.0	213.2	13.490	56.28	36.0	2.0
67.5	221.4	13.520	56.34	12.0	0.7
70.0	229.6	13.540	56.37	8.0	0.4
72.5	237.8	13.540	56.37	0.0	0.0


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
12N/40E-14DAD
7/29/78

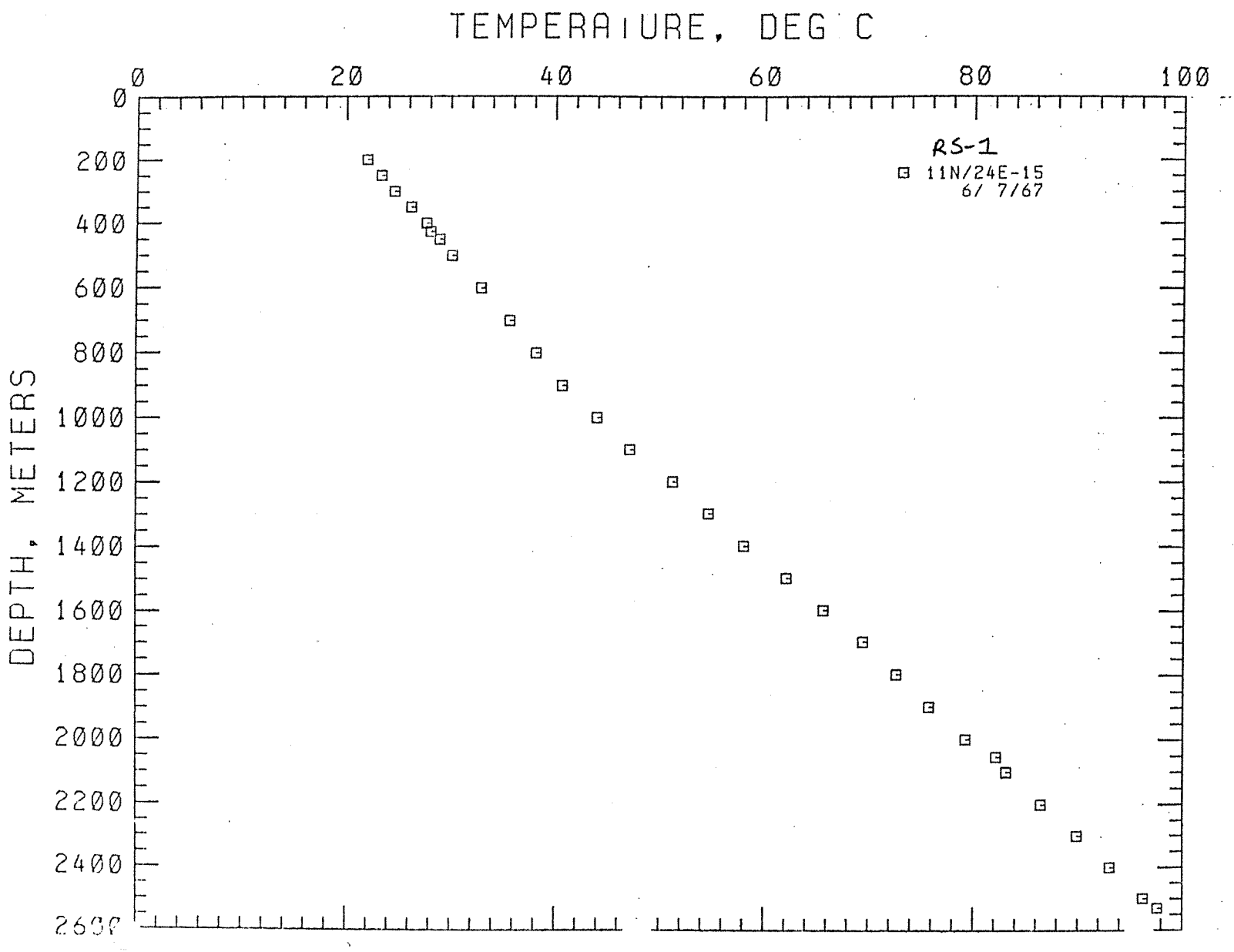
LOCATION: PULLMAN AMS, WASH
12N/40E-17ADA
HOLE NAME: DODGEJCT
DATE MEASURED: 2/27/78

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	13.500	56.30	0.0	0.0
15.0	49.2	13.570	56.43	14.0	0.8
20.0	65.6	13.650	56.57	16.0	0.9
25.0	82.0	13.650	56.57	0.0	0.0
30.0	98.4	13.670	56.61	4.0	0.2
35.0	114.8	13.690	56.64	4.0	0.2
40.0	131.2	13.720	56.70	6.0	0.3
45.0	147.6	13.720	56.70	0.0	0.0
50.0	164.0	13.790	56.82	14.0	0.8
55.0	180.4	13.790	56.82	0.0	0.0
60.0	196.8	13.850	56.93	12.0	0.7
65.0	213.2	13.890	57.00	8.0	0.4
70.0	229.6	13.900	57.02	2.0	0.1
75.0	246.0	13.980	57.16	16.0	0.9
80.0	262.4	14.040	57.27	12.0	0.7
85.0	278.8	14.180	57.52	28.0	1.5
90.0	295.2	14.400	57.92	44.0	2.4
95.0	311.6	14.390	57.90	-2.0	-0.1
100.0	328.0	14.410	57.94	4.0	0.2
105.0	344.4	14.410	57.94	0.0	0.0
110.0	360.8	14.450	58.01	8.0	0.4
115.0	377.2	14.510	58.12	12.0	0.7
120.0	393.6	14.550	58.19	8.0	0.4
125.0	410.0	14.550	58.19	0.0	0.0
130.0	426.4	14.570	58.23	4.0	0.2
135.0	442.8	14.590	58.26	4.0	0.2
140.0	459.2	14.660	58.39	14.0	0.8
145.0	475.6	14.560	58.21	-20.0	-1.1
150.0	492.0	14.710	58.48	30.0	1.6


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
12N/40E-17ADA
2/27/78

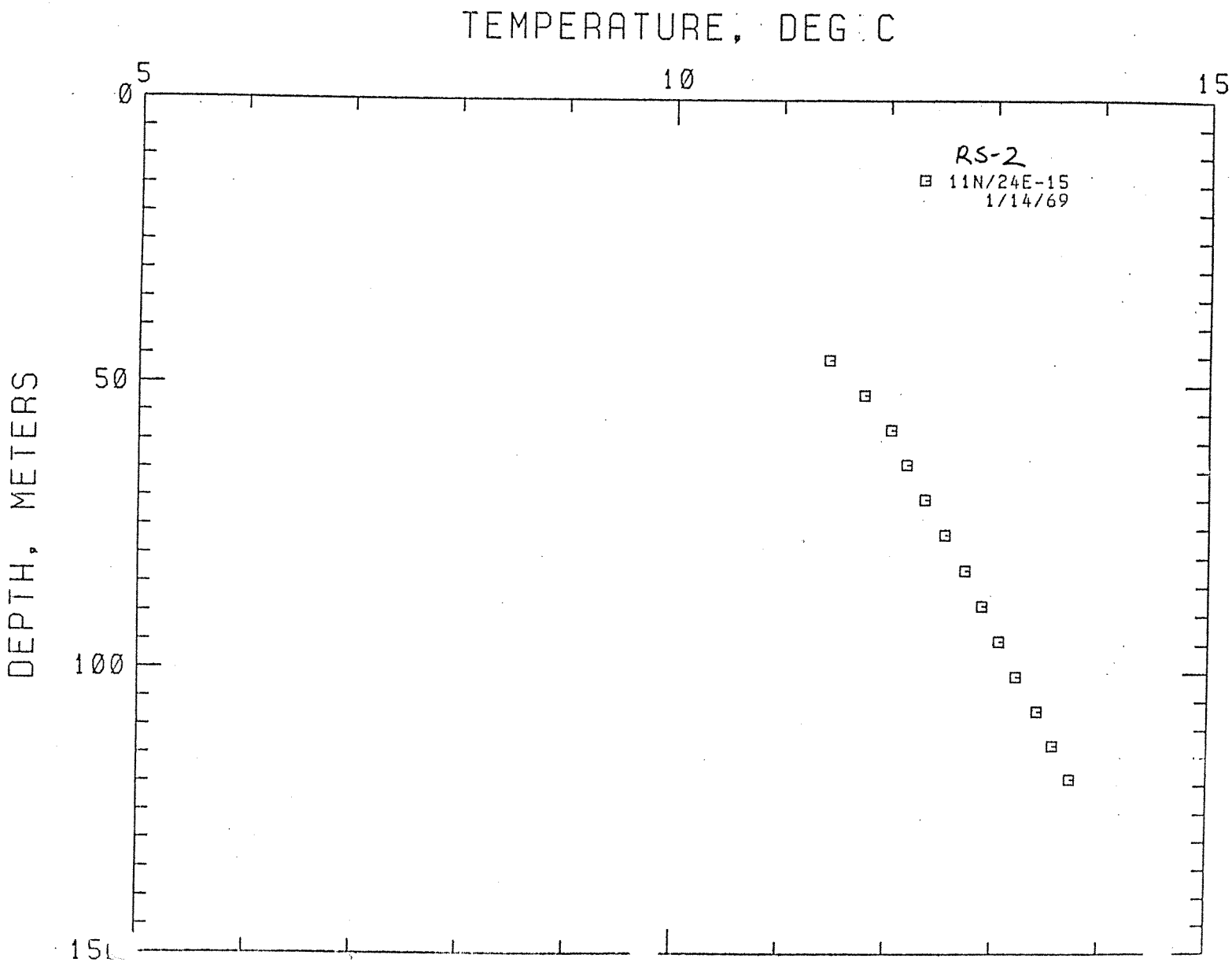
LOCATION: WALLA WALLA AMS, WASH
11N/24E-15
HOLE NAME: RS-1
DATE MEASURED: 6/ 7/67

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
200.0	656.0	22.014	71.63	0.0	0.0
250.0	820.0	23.360	74.05	26.9	1.5
300.0	984.0	24.623	76.32	25.3	1.4
350.0	1148.0	26.237	79.23	32.3	1.8
400.0	1312.0	27.689	81.84	29.0	1.6
425.0	1394.0	28.118	82.61	17.2	0.9
450.0	1476.0	28.947	84.10	33.2	1.8
500.0	1640.0	30.155	86.28	24.2	1.3
600.0	1968.0	32.978	91.36	28.2	1.5
700.0	2296.0	35.731	96.32	27.5	1.5
800.0	2624.0	38.212	100.78	24.8	1.4
900.0	2952.0	40.729	105.31	25.2	1.4
1000.0	3280.0	44.058	111.30	33.3	1.8
1100.0	3608.0	47.185	116.93	31.3	1.7
1200.0	3936.0	51.293	124.33	41.1	2.3
1300.0	4264.0	54.765	130.58	34.7	1.9
1400.0	4592.0	58.126	136.63	33.6	1.8
1500.0	4920.0	62.165	143.90	40.4	2.2
1600.0	5248.0	65.718	150.29	35.5	1.9
1700.0	5576.0	69.463	157.03	37.4	2.1
1800.0	5904.0	72.680	162.82	32.2	1.8
1900.0	6232.0	75.845	168.52	31.7	1.7
2000.0	6560.0	79.297	174.73	34.5	1.9
2054.0	6737.1	82.220	180.00	54.1	3.0
2100.0	6888.0	83.181	181.73	20.9	1.1
2200.0	7216.0	86.525	187.75	33.4	1.8
2300.0	7544.0	89.922	193.86	34.0	1.9
2400.0	7872.0	93.067	199.52	31.5	1.7
2531.3	8302.7	97.660	207.79	35.0	1.9
2500.0	8200.0	96.288	205.32	43.8	2.4


TEMPERATURE, DEG C
0
20
40
60
80
100
DEPTH, METERS
0
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
RS-1
11N/24E-15
6/ 7/67

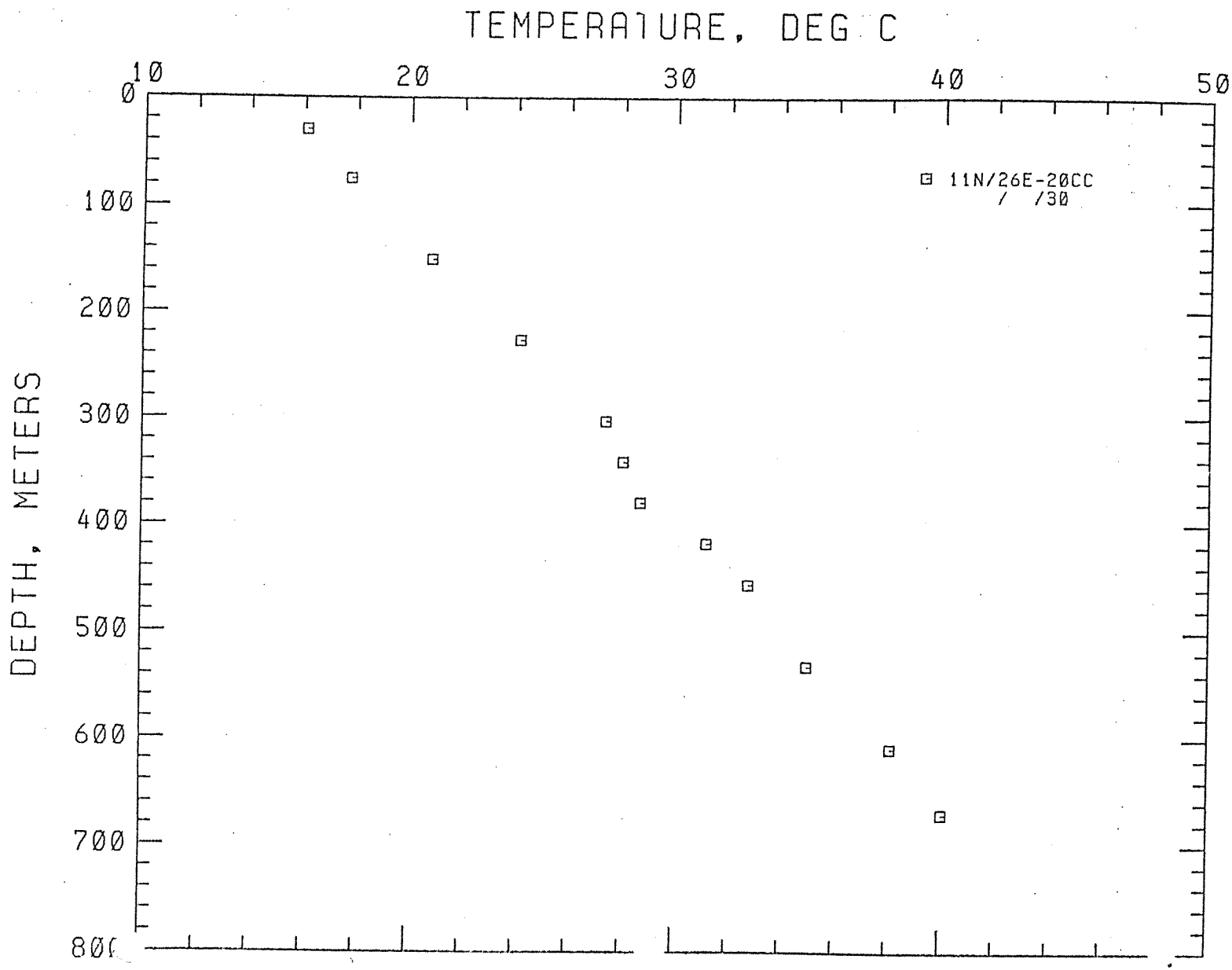
LOCATION: WALLA WALLA AMS, WASH
11N/24E-15
HOLE NAME: RS-2
DATE MEASURED: 1/14/69

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
45.7	150.0	11.450	52.61	0.0	0.0
51.8	170.0	11.781	53.21	54.3	3.0
57.9	189.9	12.034	53.66	41.5	2.3
64.0	210.0	12.185	53.93	24.8	1.4
70.1	229.9	12.354	54.24	27.8	1.5
76.2	249.9	12.542	54.58	30.8	1.7
82.3	269.9	12.731	54.92	31.0	1.7
88.4	289.9	12.891	55.20	26.3	1.4
94.5	309.9	13.053	55.50	26.6	1.5
100.6	329.9	13.213	55.78	26.3	1.4
106.7	349.9	13.410	56.14	32.3	1.8
112.8	369.9	13.558	56.40	24.3	1.3
118.9	389.9	13.723	56.70	27.1	1.5


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
RS-2
11N/24E-15
1/14/69

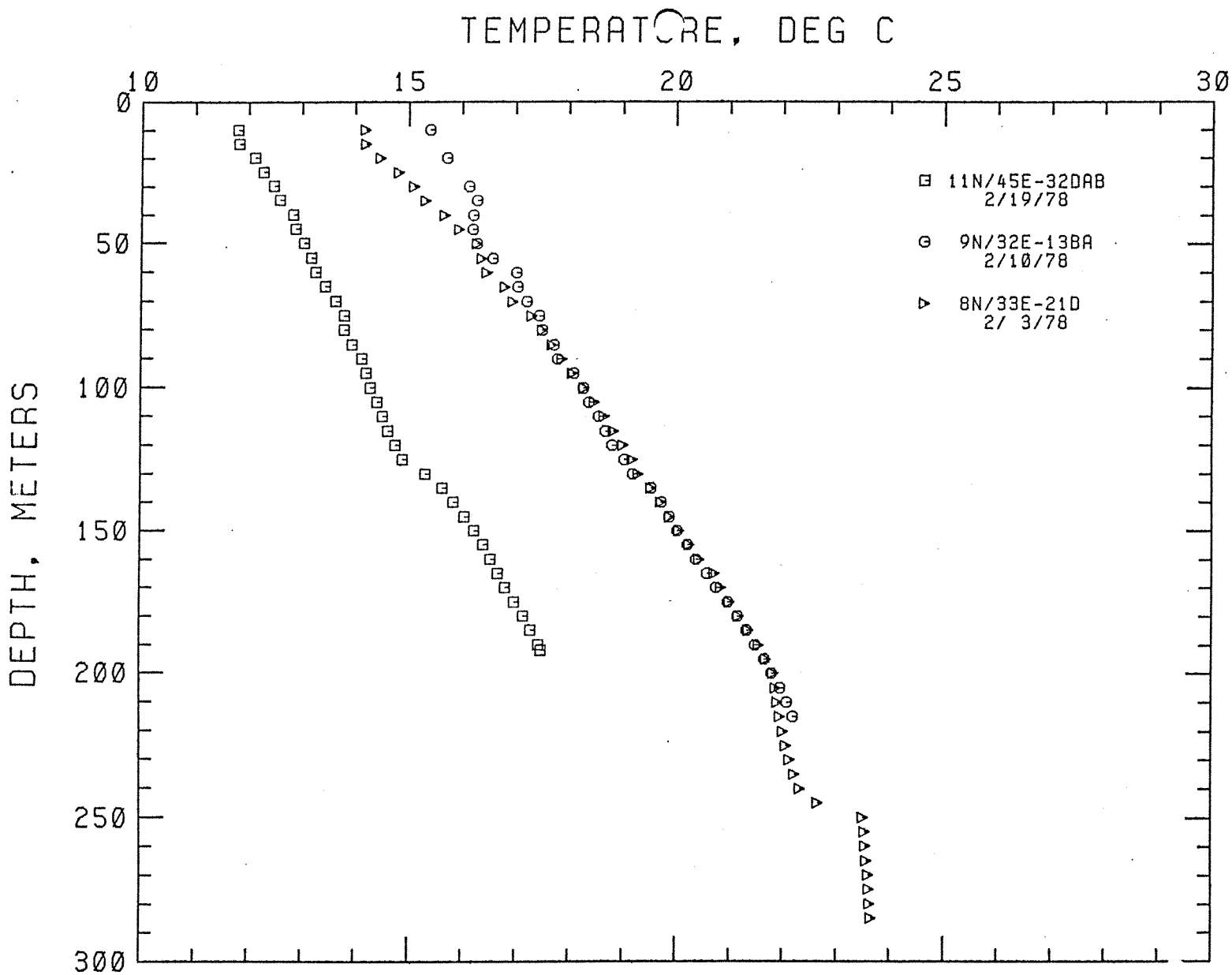
LOCATION: WALLA WALLA AMS, WASH
11N/26E-20CC
HOLE NAME: VO-SOC 1
DATE MEASURED: 0/ 0/30

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
30.5	100.0	16.110	61.00	0.0	0.0
76.2	249.9	17.780	64.00	36.5	2.0
152.4	499.9	20.830	69.49	40.0	2.2
228.6	749.8	24.170	75.51	43.8	2.4
304.8	999.7	27.390	81.30	42.3	2.3
342.9	1124.7	28.060	82.51	17.6	1.0
381.0	1249.7	28.720	83.70	17.3	1.0
419.1	1374.6	31.220	88.20	65.6	3.6
457.2	1499.6	32.780	91.00	40.9	2.2
533.4	1749.6	35.000	95.00	29.1	1.6
609.6	1999.5	38.170	100.71	41.6	2.3
670.6	2199.4	40.110	104.20	31.8	1.7


TEMPERATURE, DEG C
10
20
30
40
50
0
100
200
300
400
500
600
700
800
DEPTH, METERS
11N/26E-20CC
/ /30

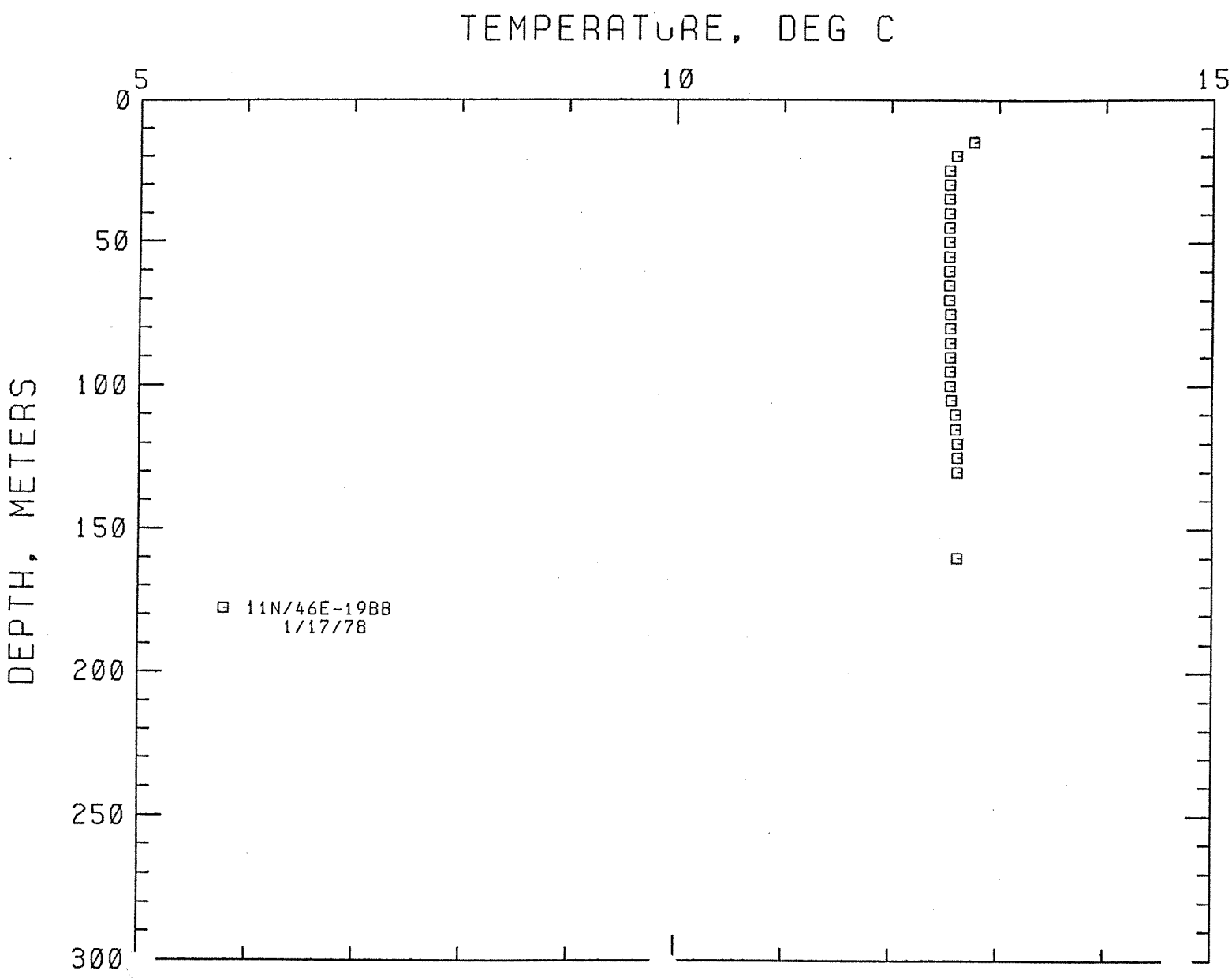
LOCATION: PULLMAN AMS, WASH
11N/45E-32DAB
HOLE NAME: SILCOTWW
DATE MEASURED: 2/19/78

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	11.800	53.24	0.0	0.0
15.0	49.2	11.830	53.29	6.0	0.3
20.0	65.6	12.130	53.83	60.0	3.3
25.0	82.0	12.290	54.12	32.0	1.8
30.0	98.4	12.480	54.46	38.0	2.1
35.0	114.8	12.590	54.66	22.0	1.2
40.0	131.2	12.850	55.13	52.0	2.9
45.0	147.6	12.890	55.20	8.0	0.4
50.0	164.0	13.050	55.49	32.0	1.8
55.0	180.4	13.190	55.74	28.0	1.5
60.0	196.8	13.270	55.89	16.0	0.9
65.0	213.2	13.450	56.21	36.0	2.0
70.0	229.6	13.640	56.55	38.0	2.1
75.0	246.0	13.800	56.84	32.0	1.8
80.0	262.4	13.810	56.86	2.0	0.1
85.0	278.8	13.950	57.11	28.0	1.5
90.0	295.2	14.140	57.45	38.0	2.1
95.0	311.6	14.220	57.60	16.0	0.9
100.0	328.0	14.300	57.74	16.0	0.9
105.0	344.4	14.420	57.96	24.0	1.3
110.0	360.8	14.530	58.15	22.0	1.2
115.0	377.2	14.630	58.33	20.0	1.1
120.0	393.6	14.760	58.57	26.0	1.4
125.0	410.0	14.900	58.82	28.0	1.5
130.0	426.4	15.320	59.58	84.0	4.6
135.0	442.8	15.650	60.17	66.0	3.6
140.0	459.2	15.850	60.53	40.0	2.2
145.0	475.6	16.060	60.91	42.0	2.3
150.0	492.0	16.240	61.23	36.0	2.0
155.0	508.4	16.410	61.54	34.0	1.9
160.0	524.8	16.550	61.79	28.0	1.5
165.0	541.2	16.690	62.04	28.0	1.5
170.0	557.6	16.820	62.28	26.0	1.4
175.0	574.0	16.990	62.58	34.0	1.9
180.0	590.4	17.160	62.89	34.0	1.9
185.0	606.8	17.300	63.14	28.0	1.5
190.0	623.2	17.450	63.41	30.0	1.6
192.0	629.8	17.500	63.50	25.0	1.4


TEMPERATURE, DEG C
10
15
20
25
30
0
50
100
150
200
250
300
DEPTH, METERS
11N/45E-32DAB
2/19/78
9N/32E-13BA
2/10/78
8N/33E-21D
2/ 3/78

LOCATION: PULLMAN AMS, WASH
11N/46E-19BB
HOLE NAME: PTWLMAWW
DATE MEASURED: 1/17/78

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
15.0	49.2	12.770	54.99	0.0	0.0
20.0	65.6	12.610	54.70	-32.0	-1.8
25.0	82.0	12.550	54.59	-12.0	-0.7
30.0	98.4	12.550	54.59	0.0	0.0
35.0	114.8	12.550	54.59	0.0	0.0
40.0	131.2	12.550	54.59	0.0	0.0
45.0	147.6	12.550	54.59	0.0	0.0
50.0	164.0	12.550	54.59	0.0	0.0
55.0	180.4	12.550	54.59	0.0	0.0
60.0	196.8	12.550	54.59	0.0	0.0
65.0	213.2	12.550	54.59	0.0	0.0
70.0	229.6	12.550	54.59	0.0	0.0
75.0	246.0	12.560	54.61	2.0	0.1
80.0	262.4	12.560	54.61	0.0	0.0
85.0	278.8	12.560	54.61	0.0	0.0
90.0	295.2	12.560	54.61	0.0	0.0
95.0	311.6	12.560	54.61	0.0	0.0
100.0	328.0	12.560	54.61	0.0	0.0
105.0	344.4	12.570	54.63	2.0	0.1
110.0	360.8	12.610	54.70	8.0	0.4
115.0	377.2	12.610	54.70	0.0	0.0
120.0	393.6	12.630	54.73	4.0	0.2
125.0	410.0	12.630	54.73	0.0	0.0
130.0	426.4	12.630	54.73	0.0	0.0
160.0	524.8	12.630	54.73	0.0	0.0

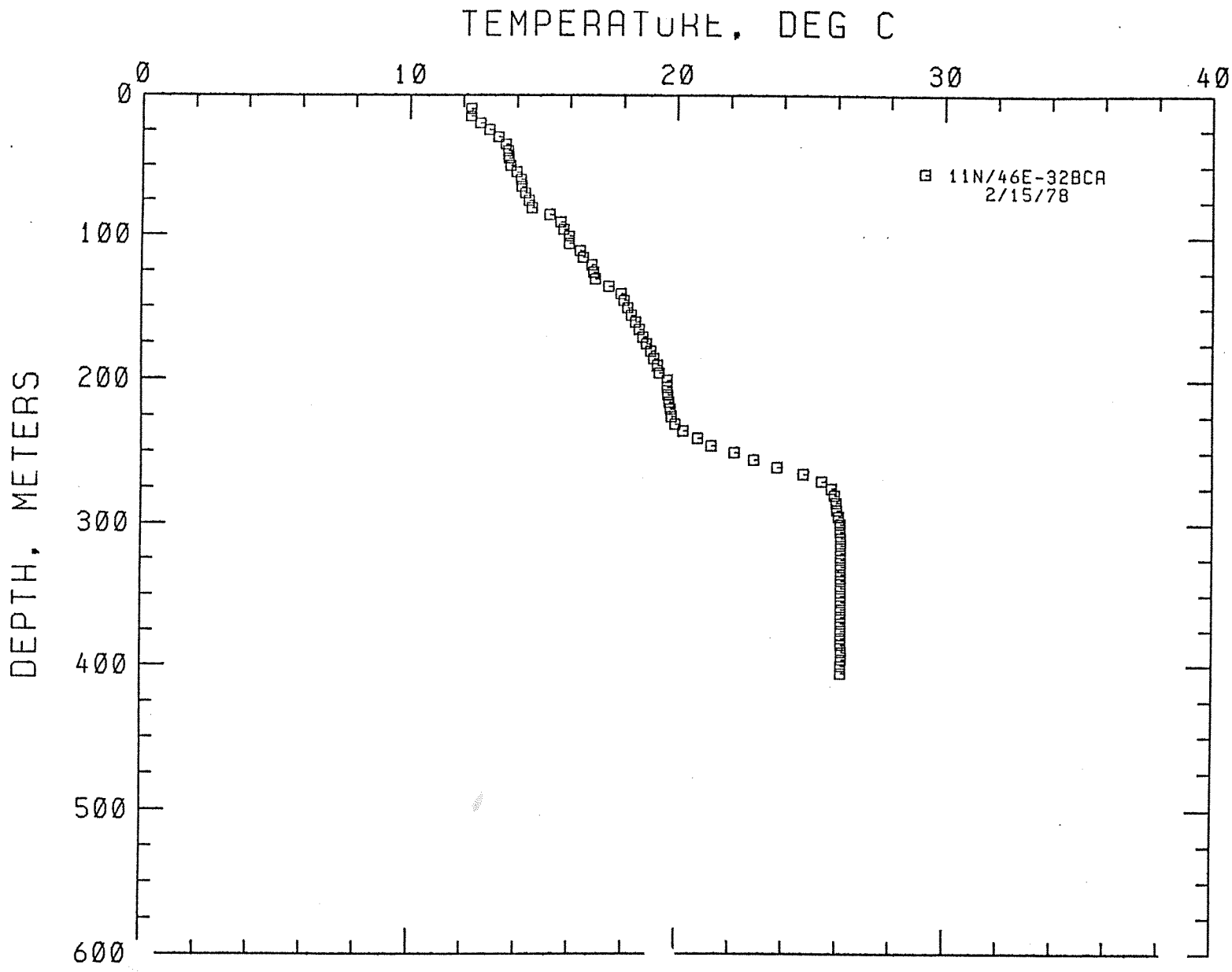

TEMPERATURE, DEG C
5
10
15
0
50
100
150
200
250
300
DEPTH, METERS
11N/46E-19BB
1/17/78

LOCATION: PULLMAN AMS, WASH
11N/46E-32BCA
HOLE NAME: WWPC7-WW
DATE MEASURED: 2/15/78

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	12.290	54.12	0.0	0.0
15.0	49.2	12.290	54.12	0.0	0.0
20.0	65.6	12.650	54.77	72.0	4.0
25.0	82.0	12.990	55.38	68.0	3.7
30.0	98.4	13.320	55.98	66.0	3.6
35.0	114.8	13.610	56.50	58.0	3.2
40.0	131.2	13.690	56.64	16.0	0.9
45.0	147.6	13.710	56.68	4.0	0.2
50.0	164.0	13.780	56.80	14.0	0.8
55.0	180.4	14.020	57.24	48.0	2.6
60.0	196.8	14.160	57.49	28.0	1.5
65.0	213.2	14.200	57.56	8.0	0.4
70.0	229.6	14.330	57.79	26.0	1.4
75.0	246.0	14.460	58.03	26.0	1.4
80.0	262.4	14.590	58.26	26.0	1.4
85.0	278.8	15.250	59.45	132.0	7.2
90.0	295.2	15.660	60.19	82.0	4.5
95.0	311.6	15.770	60.39	22.0	1.2
100.0	328.0	15.980	60.76	42.0	2.3
105.0	344.4	15.970	60.75	-2.0	-0.1
110.0	360.8	16.390	61.50	84.0	4.6
115.0	377.2	16.510	61.72	24.0	1.3
120.0	393.6	16.820	62.28	62.0	3.4
125.0	410.0	16.880	62.38	12.0	0.7
130.0	426.4	16.960	62.53	16.0	0.9
135.0	442.8	17.470	63.45	102.0	5.6
140.0	459.2	17.930	64.27	92.0	5.0
145.0	475.6	18.040	64.47	22.0	1.2
150.0	492.0	18.160	64.69	24.0	1.3
155.0	508.4	18.300	64.94	28.0	1.5
160.0	524.8	18.460	65.23	32.0	1.8
165.0	541.2	18.600	65.48	28.0	1.5
170.0	557.6	18.750	65.75	30.0	1.6
175.0	574.0	18.890	66.00	28.0	1.5
180.0	590.4	19.030	66.25	28.0	1.5
185.0	606.8	19.160	66.49	26.0	1.4
190.0	623.2	19.280	66.70	24.0	1.3
195.0	639.6	19.370	66.87	18.0	1.0
200.0	656.0	19.650	67.37	56.0	3.1
205.0	672.4	19.660	67.39	2.0	0.1
210.0	688.8	19.680	67.42	4.0	0.2
215.0	705.2	19.720	67.50	8.0	0.4

LOCATION: PULLMAN AMS, WASH
11N/46E-32BCA
HOLE NAME: WWPC7-WW
DATE MEASURED: 2/15/78

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
220.0	721.6	19.760	67.57	8.0	0.4
225.0	738.0	19.820	67.68	12.0	0.7
230.0	754.4	19.950	67.91	26.0	1.4
235.0	770.8	20.250	68.45	60.0	3.3
240.0	787.2	20.810	69.46	112.0	6.1
245.0	803.6	21.300	70.34	98.0	5.4
250.0	820.0	22.170	71.91	174.0	9.5
255.0	836.4	22.900	73.22	146.0	8.0
260.0	852.8	23.780	74.80	176.0	9.7
265.0	869.2	24.750	76.55	194.0	10.6
270.0	885.6	25.440	77.79	138.0	7.6
275.0	902.0	25.800	78.44	72.0	4.0
280.0	918.4	25.930	78.67	26.0	1.4
285.0	934.8	25.980	78.76	10.0	0.5
290.0	951.2	26.010	78.82	6.0	0.3
295.0	967.6	26.080	78.94	14.0	0.8
300.0	984.0	26.140	79.05	12.0	0.7
305.0	1000.4	26.150	79.07	2.0	0.1
310.0	1016.8	26.160	79.09	2.0	0.1
315.0	1033.2	26.160	79.09	0.0	0.0
320.0	1049.6	26.160	79.09	0.0	0.0
325.0	1066.0	26.160	79.09	0.0	0.0
330.0	1082.4	26.170	79.11	2.0	0.1
335.0	1098.8	26.170	79.11	0.0	0.0
340.0	1115.2	26.170	79.11	0.0	0.0
345.0	1131.6	26.170	79.11	0.0	0.0
350.0	1148.0	26.170	79.11	0.0	0.0
355.0	1164.4	26.180	79.12	2.0	0.1
360.0	1180.8	26.180	79.12	0.0	0.0
365.0	1197.2	26.180	79.12	0.0	0.0
370.0	1213.6	26.180	79.12	0.0	0.0
375.0	1230.0	26.180	79.12	0.0	0.0
380.0	1246.4	26.180	79.12	0.0	0.0
385.0	1262.8	26.180	79.12	0.0	0.0
390.0	1279.2	26.190	79.14	2.0	0.1
395.0	1295.6	26.190	79.14	0.0	0.0
400.0	1312.0	26.180	79.12	-2.0	-0.1
405.0	1328.4	26.170	79.11	-2.0	-0.1


TEMPERATURE, DEG C
0
10
20
30
40
DEPTH, METERS
0
100
200
300
400
500
600
11N/46E-32BCA
2/15/78

LOCATION: HOQUIAM AMS, WASHINGTON
10N/ 6E- 8DDA
HOLE NAME: DDH-9
DATE MEASURED: 10/31/71

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
50.0	164.0	4.620	40.32	0.0	0.0
55.0	180.4	4.800	40.64	36.0	2.0
60.0	196.8	4.900	40.82	20.0	1.1
65.0	213.2	4.980	40.96	16.0	0.9
70.0	229.6	5.140	41.25	32.0	1.8
75.0	246.0	5.470	41.85	66.0	3.6
80.0	262.4	5.360	41.65	-22.0	-1.2
85.0	278.8	4.880	40.78	-96.0	-5.3
90.0	295.2	4.990	40.98	22.0	1.2
95.0	311.6	4.870	40.77	-24.0	-1.3
100.0	328.0	4.940	40.89	14.0	0.8
105.0	344.4	4.990	40.98	10.0	0.5
110.0	360.8	5.060	41.11	14.0	0.8
115.0	377.2	5.110	41.20	10.0	0.5
120.0	393.6	5.170	41.31	12.0	0.7
125.0	410.0	5.210	41.38	8.0	0.4
130.0	426.4	5.250	41.45	8.0	0.4
135.0	442.8	5.330	41.59	16.0	0.9
140.0	459.2	5.590	42.06	52.0	2.9
145.0	475.6	5.620	42.12	6.0	0.3
150.0	492.0	5.680	42.22	12.0	0.7
155.0	508.4	5.670	42.21	-2.0	-0.1
160.0	524.8	5.690	42.24	4.0	0.2
165.0	541.2	5.710	42.28	4.0	0.2
170.0	557.6	5.700	42.26	-2.0	-0.1
175.0	574.0	5.710	42.28	2.0	0.1
180.0	590.4	5.730	42.31	4.0	0.2
185.0	606.8	5.770	42.39	8.0	0.4
190.0	623.2	5.820	42.48	10.0	0.5
195.0	639.6	5.850	42.53	6.0	0.3
200.0	656.0	5.870	42.57	4.0	0.2
205.0	672.4	5.900	42.62	6.0	0.3
210.0	688.8	5.950	42.71	10.0	0.5
215.0	705.2	6.010	42.82	12.0	0.7
220.0	721.6	6.040	42.87	6.0	0.3
225.0	738.0	6.060	42.91	4.0	0.2
230.0	754.4	6.080	42.94	4.0	0.2
235.0	770.8	6.110	43.00	6.0	0.3
240.0	787.2	6.130	43.03	4.0	0.2
245.0	803.6	6.190	43.14	12.0	0.7
250.0	820.0	6.230	43.21	8.0	0.4

LOCATION: HOQUIAM AMS, WASHINGTON
10N/ 6E- 8DDA
HOLE NAME: DDH-9
DATE MEASURED: 10/31/71

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
255.0	836.4	6.290	43.32	12.0	0.7
260.0	852.8	6.270	43.29	-4.0	-0.2
265.0	869.2	6.441	43.59	34.2	1.9
270.0	885.6	6.507	43.71	13.2	0.7

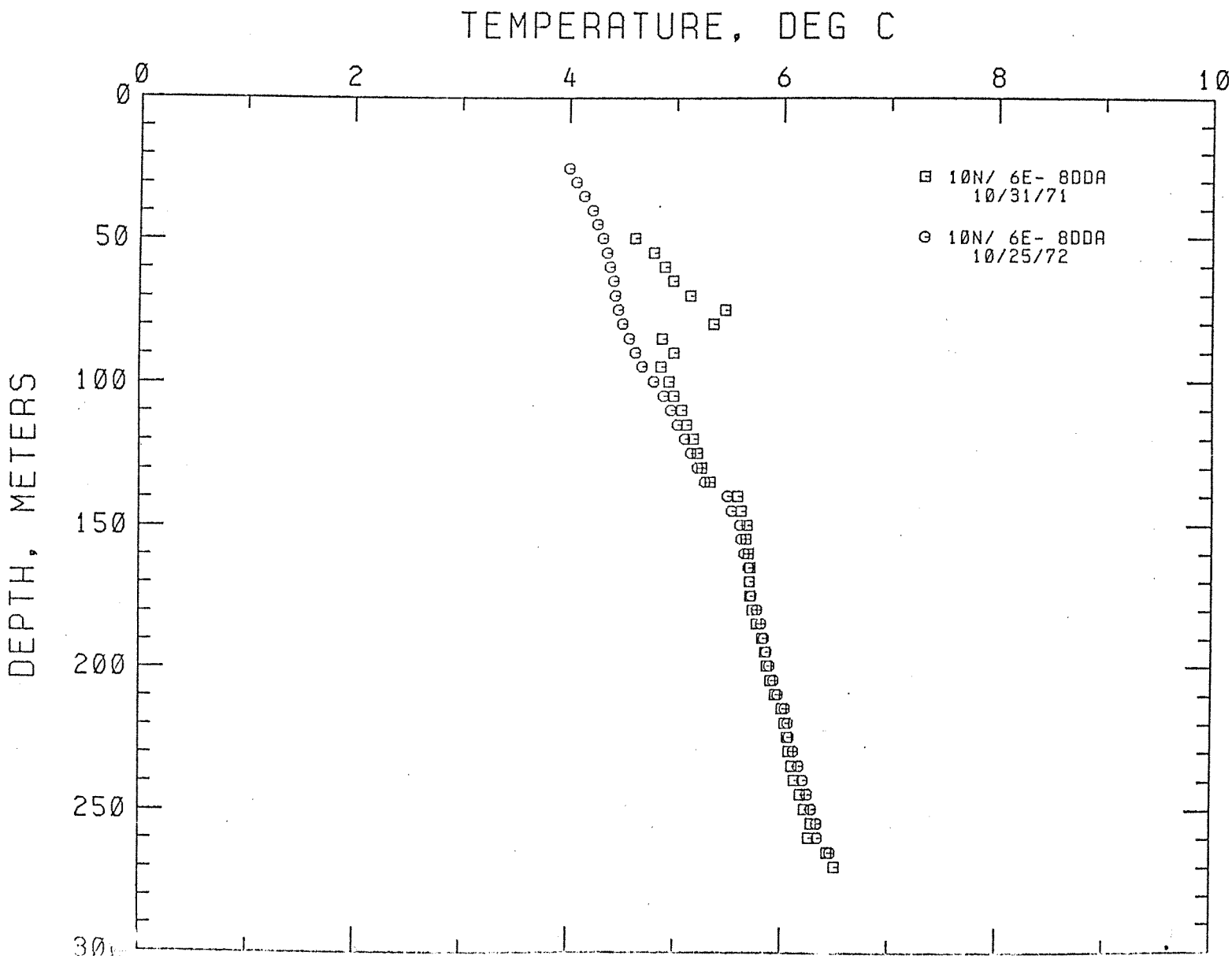
LOCATION: HOQUIAM AMS, WASH
10N/ 6E- 8DDA
HOLE NAME: DDH-9
DATE MEASURED: 10/25/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
25.0	82.0	4.000	39.20	0.0	0.0
30.0	98.4	4.070	39.33	14.0	0.8
35.0	114.8	4.140	39.45	14.0	0.8
40.0	131.2	4.220	39.60	16.0	0.9
45.0	147.6	4.270	39.69	10.0	0.5
50.0	164.0	4.320	39.78	10.0	0.5
55.0	180.4	4.360	39.85	8.0	0.4
60.0	196.8	4.390	39.90	6.0	0.3
65.0	213.2	4.420	39.96	6.0	0.3
70.0	229.6	4.440	39.99	4.0	0.2
75.0	246.0	4.470	40.05	6.0	0.3
80.0	262.4	4.510	40.12	8.0	0.4
85.0	278.8	4.570	40.23	12.0	0.7
90.0	295.2	4.630	40.33	12.0	0.7
95.0	311.6	4.690	40.44	12.0	0.7
100.0	328.0	4.800	40.64	22.0	1.2
105.0	344.4	4.890	40.80	18.0	1.0
110.0	360.8	4.960	40.93	14.0	0.8
115.0	377.2	5.020	41.04	12.0	0.7
120.0	393.6	5.090	41.16	14.0	0.8
125.0	410.0	5.150	41.27	12.0	0.7
130.0	426.4	5.210	41.38	12.0	0.7
135.0	442.8	5.280	41.50	14.0	0.8
140.0	459.2	5.490	41.88	42.0	2.3
145.0	475.6	5.530	41.95	8.0	0.4
150.0	492.0	5.610	42.10	16.0	0.9
155.0	508.4	5.620	42.12	2.0	0.1
160.0	524.8	5.650	42.17	6.0	0.3
165.0	541.2	5.690	42.24	8.0	0.4
170.0	557.6	5.700	42.26	2.0	0.1
175.0	574.0	5.720	42.30	4.0	0.2
180.0	590.4	5.770	42.39	10.0	0.5
185.0	606.8	5.810	42.46	8.0	0.4
190.0	623.2	5.840	42.51	6.0	0.3
195.0	639.6	5.860	42.55	4.0	0.2
200.0	656.0	5.890	42.60	6.0	0.3
205.0	672.4	5.930	42.67	8.0	0.4
210.0	688.8	5.970	42.75	8.0	0.4
215.0	705.2	6.040	42.87	14.0	0.8
220.0	721.6	6.070	42.93	6.0	0.3
225.0	738.0	6.080	42.94	2.0	0.1

LOCATION: HOQUIAM AMS, WASH
10N/ 6E- 8DDA

HOLE NAME: DDH-9
DATE MEASURED: 10/25/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
230.0	754.4	6.120	43.02	8.0	0.4
235.0	770.8	6.170	43.11	10.0	0.5
240.0	787.2	6.210	43.18	8.0	0.4
245.0	803.6	6.250	43.25	8.0	0.4
250.0	820.0	6.290	43.32	8.0	0.4
255.0	836.4	6.340	43.41	10.0	0.5
260.0	852.8	6.350	43.43	2.0	0.1
265.0	869.2	6.470	43.65	24.0	1.3

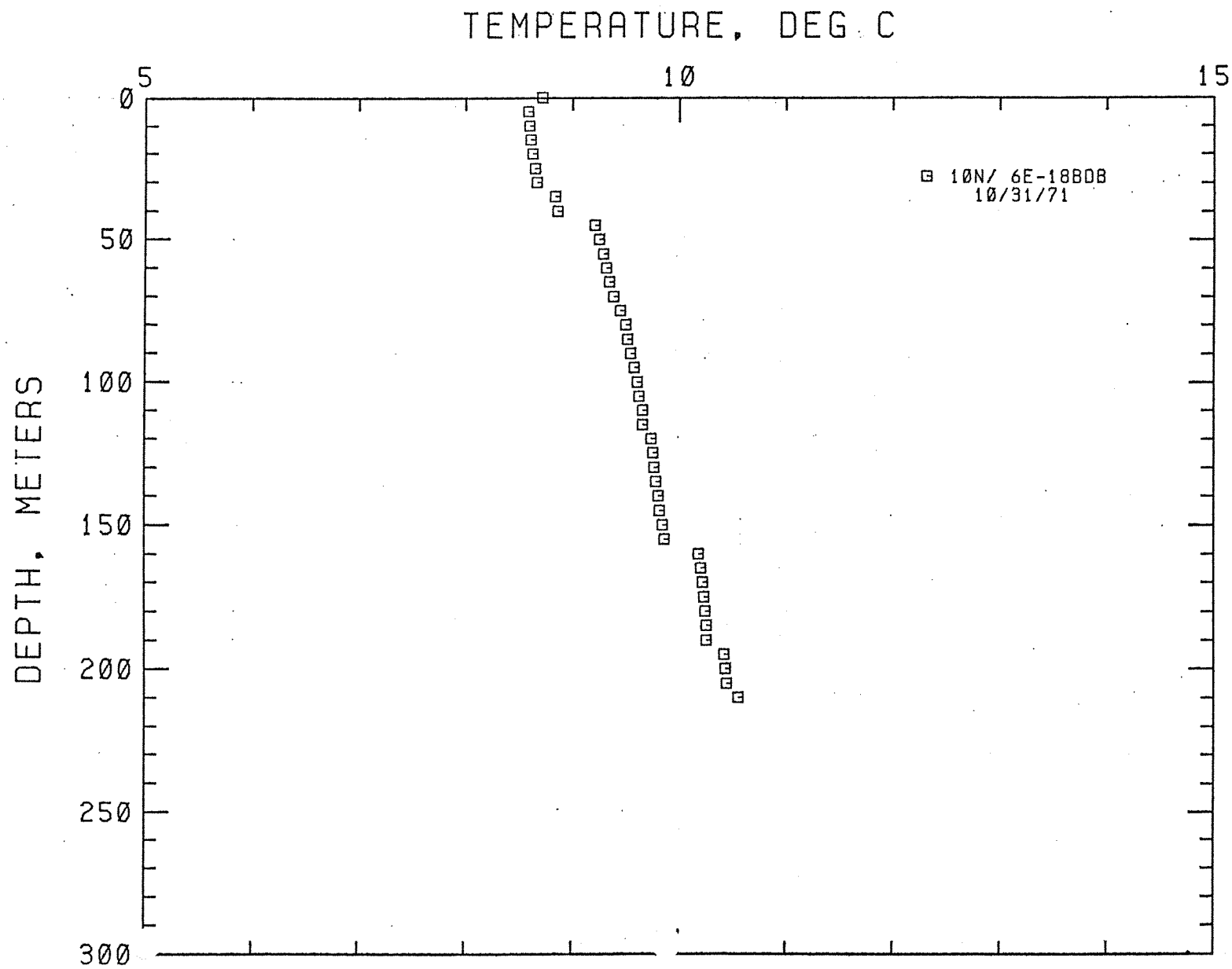

TEMPERATURE, DEG C
0
2
4
6
8
10
DEPTH, METERS
0
50
100
150
200
250
300
10N/ 6E- 8DDA
10/31/71
10N/ 6E- 8DDA
10/25/72

LOCATION: HOQUIAM AMS, WASHINGTON
10N/ 6E-18BDB
HOLE NAME: DDH-1
DATE MEASURED: 10/31/71

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	8.720	47.70	0.0	0.0
5.0	16.4	8.590	47.46	-26.0	-1.4
10.0	32.8	8.600	47.48	2.0	0.1
15.0	49.2	8.610	47.50	2.0	0.1
20.0	65.6	8.630	47.53	4.0	0.2
25.0	82.0	8.650	47.57	4.0	0.2
30.0	98.4	8.670	47.61	4.0	0.2
35.0	114.8	8.840	47.91	34.0	1.9
40.0	131.2	8.860	47.95	4.0	0.2
45.0	147.6	9.210	48.58	70.0	3.8
50.0	164.0	9.250	48.65	8.0	0.4
55.0	180.4	9.290	48.72	8.0	0.4
60.0	196.8	9.320	48.78	6.0	0.3
65.0	213.2	9.350	48.83	6.0	0.3
70.0	229.6	9.390	48.90	8.0	0.4
75.0	246.0	9.450	49.01	12.0	0.7
80.0	262.4	9.500	49.10	10.0	0.5
85.0	278.8	9.520	49.14	4.0	0.2
90.0	295.2	9.550	49.19	6.0	0.3
95.0	311.6	9.580	49.24	6.0	0.3
100.0	328.0	9.610	49.30	6.0	0.3
105.0	344.4	9.630	49.33	4.0	0.2
110.0	360.8	9.660	49.39	6.0	0.3
115.0	377.2	9.660	49.39	0.0	0.0
120.0	393.6	9.740	49.53	16.0	0.9
125.0	410.0	9.760	49.57	4.0	0.2
130.0	426.4	9.770	49.59	2.0	0.1
135.0	442.8	9.790	49.62	4.0	0.2
140.0	459.2	9.810	49.66	4.0	0.2
145.0	475.6	9.820	49.68	2.0	0.1
150.0	492.0	9.850	49.73	6.0	0.3
155.0	508.4	9.870	49.77	4.0	0.2
160.0	524.8	10.190	50.34	64.0	3.5
165.0	541.2	10.210	50.38	4.0	0.2
170.0	557.6	10.230	50.41	4.0	0.2
175.0	574.0	10.240	50.43	2.0	0.1
180.0	590.4	10.250	50.45	2.0	0.1
185.0	606.8	10.260	50.47	2.0	0.1
190.0	623.2	10.260	50.47	0.0	0.0
195.0	639.6	10.430	50.77	34.0	1.9
200.0	656.0	10.440	50.79	2.0	0.1
205.0	672.4	10.450	50.81	2.0	0.1

LOCATION: HOQUIAM AMS, WASHINGTON
10N/ 6E-18BDB
HOLE NAME: DDH-1
DATE MEASURED: 10/31/71

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
210.0	688.8	10.560	51.01	22.0	1.2

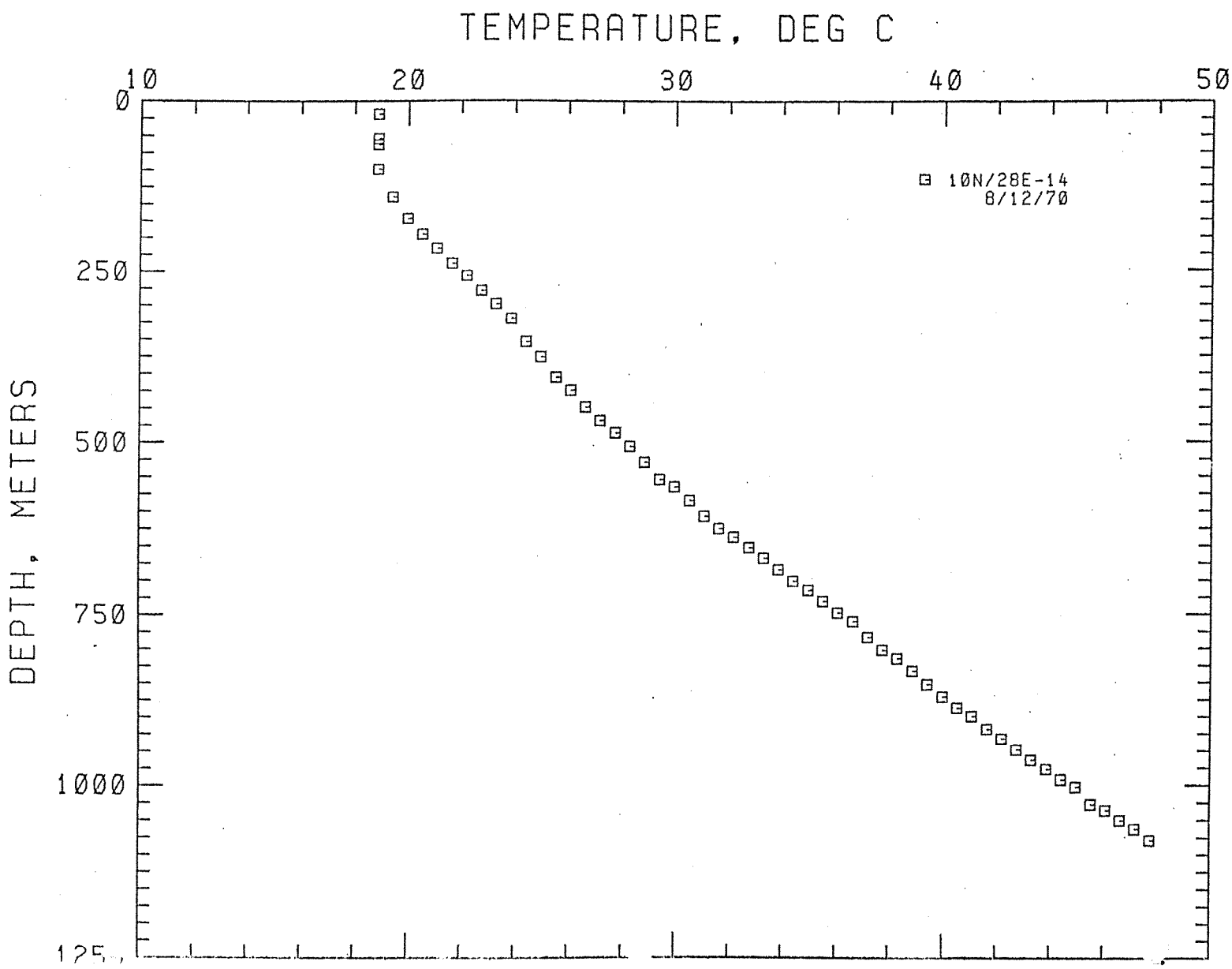

TEMPERATURE, DEG C
5
10
15
0
50
100
150
200
250
300
DEPTH, METERS
10N/ 6E-18BDB
10/31/71

LOCATION: WALLA WALLA AMS, WASH
10N/28E-14
HOLE NAME: DH-3
DATE MEASURED: 8/12/70

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
19.8	65.0	18.890	66.00	0.0	0.0
55.8	183.0	18.890	66.00	0.0	0.0
64.3	210.9	18.890	66.00	0.0	0.0
100.6	329.9	18.890	66.00	0.0	0.0
141.7	464.9	19.440	66.99	13.4	0.7
173.7	569.9	20.000	68.00	17.5	1.0
197.2	646.8	20.560	69.01	23.9	1.3
218.2	715.8	21.110	70.00	26.2	1.4
240.2	787.8	21.670	71.01	25.5	1.4
257.9	845.8	22.220	72.00	31.1	1.7
280.7	920.8	22.780	73.00	24.5	1.3
299.6	982.8	23.330	73.99	29.1	1.6
321.6	1054.7	23.890	75.00	25.5	1.4
355.7	1166.7	24.440	75.99	16.1	0.9
377.9	1239.7	25.000	77.00	25.2	1.4
407.2	1335.6	25.560	78.01	19.1	1.1
425.8	1396.7	26.110	79.00	29.6	1.6
450.2	1476.6	26.670	80.01	23.0	1.3
469.4	1539.6	27.220	81.00	28.6	1.6
487.7	1599.6	27.780	82.00	30.6	1.7
507.5	1664.6	28.330	82.99	27.8	1.5
530.4	1739.5	28.890	84.00	24.5	1.3
555.0	1820.5	29.440	84.99	22.3	1.2
566.3	1857.5	30.000	86.00	49.6	2.7
585.8	1921.5	30.560	87.01	28.7	1.6
608.4	1995.5	31.110	88.00	24.4	1.3
626.1	2053.5	31.670	89.01	31.7	1.7
637.9	2092.5	32.220	90.00	46.3	2.5
653.8	2144.5	32.780	91.00	35.3	1.9
668.7	2193.4	33.330	91.99	36.8	2.0
685.8	2249.4	33.890	93.00	32.8	1.8
702.3	2303.4	34.440	93.99	33.4	1.8
716.3	2349.4	35.000	95.00	39.9	2.2
732.4	2402.4	35.560	96.01	34.7	1.9
749.5	2458.4	36.110	97.00	32.2	1.8
762.0	2499.4	36.670	98.01	44.8	2.5
784.6	2573.4	37.220	99.00	24.4	1.3
803.1	2634.3	37.780	100.00	30.1	1.7
816.3	2677.3	38.330	100.99	42.0	2.3
834.2	2736.3	38.890	102.00	31.1	1.7
853.4	2799.3	39.440	102.99	28.6	1.6

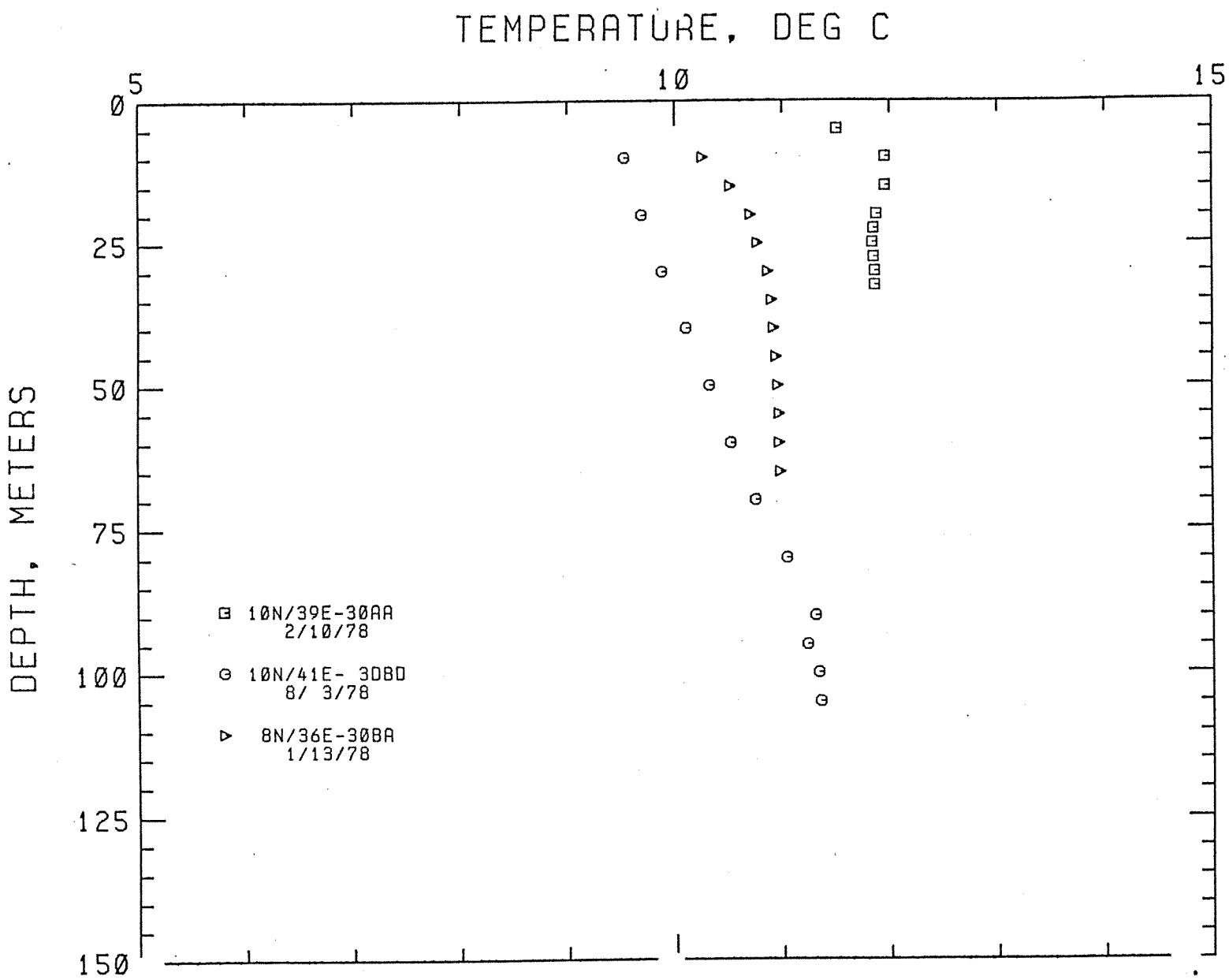
LOCATION: WALLA WALLA AMS, WASH
10N/28E-14
HOLE NAME: DH-3
DATE MEASURED: 8/12/70

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
871.7	2859.3	40.000	104.00	30.6	1.7
887.6	2911.3	40.560	105.01	35.3	1.9
900.1	2952.3	41.110	106.00	44.0	2.4
918.7	3013.2	41.670	107.01	30.1	1.7
933.3	3061.2	42.220	108.00	37.6	2.1
949.1	3113.2	42.780	109.00	35.3	1.9
964.7	3164.2	43.330	109.99	35.4	1.9
978.1	3208.2	43.890	111.00	41.8	2.3
992.4	3255.2	44.440	111.99	38.4	2.1
1003.7	3292.2	45.000	113.00	49.6	2.7
1028.7	3374.1	45.560	114.01	22.4	1.2
1036.3	3399.1	46.110	115.00	72.2	4.0
1050.6	3446.1	46.670	116.01	39.1	2.1
1063.1	3487.1	47.220	117.00	44.0	2.4
1079.9	3542.1	47.780	118.00	33.4	1.8


TEMPERATURE, DEG C
10
20
30
40
50
0
250
500
750
1000
125
DEPTH, METERS
10N/28E-14
8/12/70

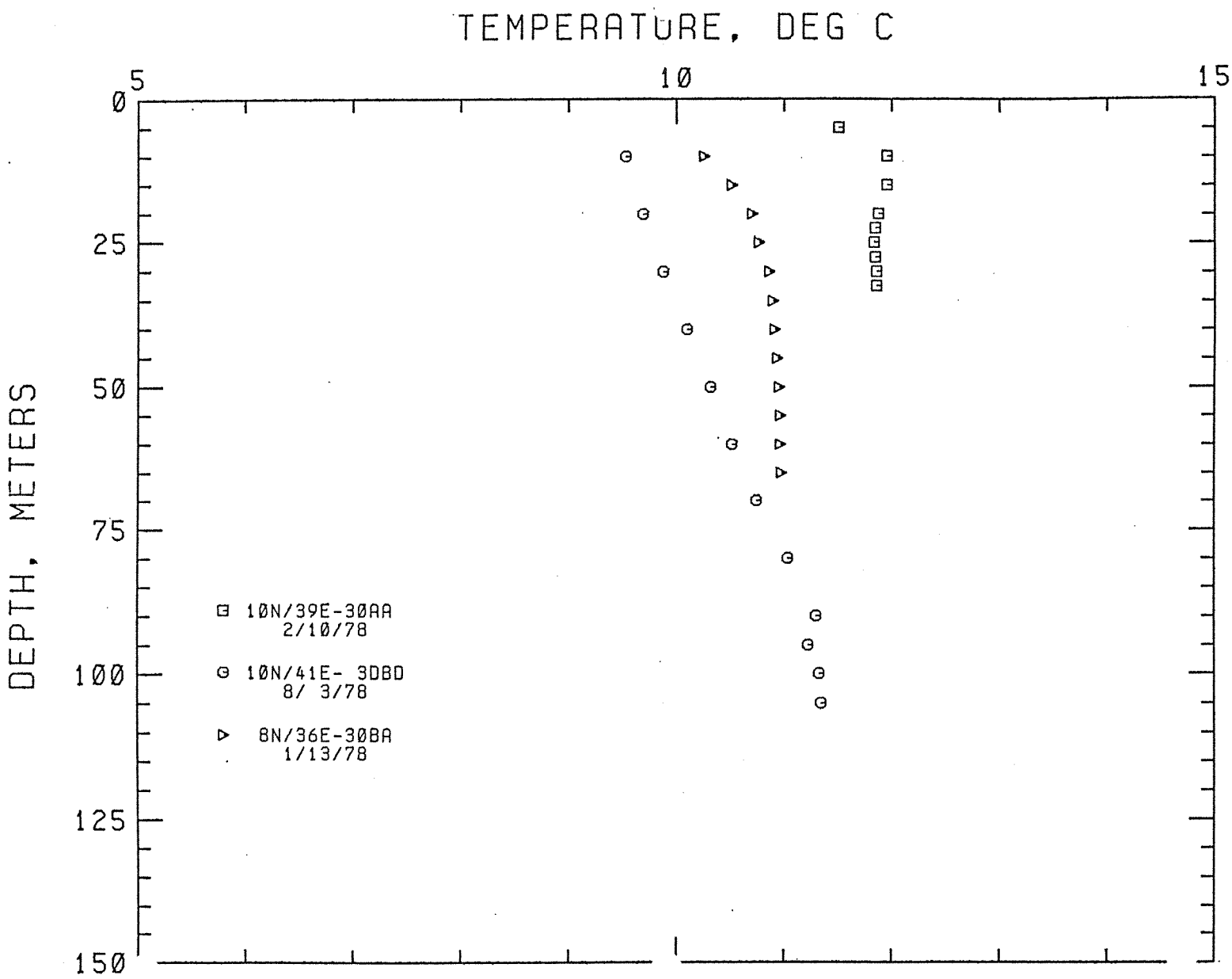
LOCATION: PULLMAN AMS, WASH
10N/39E-30AA
HOLE NAME: WARNERWW
DATE MEASURED: 2/10/78

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	11.510	52.72	0.0	0.0
10.0	32.8	11.960	53.53	90.0	4.9
15.0	49.2	11.960	53.53	0.0	0.0
20.0	65.6	11.880	53.38	-16.0	-0.9
22.5	73.8	11.850	53.33	-12.0	-0.7
25.0	82.0	11.840	53.31	-4.0	-0.2
27.5	90.2	11.850	53.33	4.0	0.2
30.0	98.4	11.860	53.35	4.0	0.2
32.5	106.6	11.860	53.35	0.0	0.0


TEMPERATURE, DEG C
5
10
15
0
25
50
75
100
125
150
DEPTH, METERS
10N/39E-30AA
2/10/78
10N/41E- 3DBD
8/ 3/78
8N/36E-30BA
1/13/78

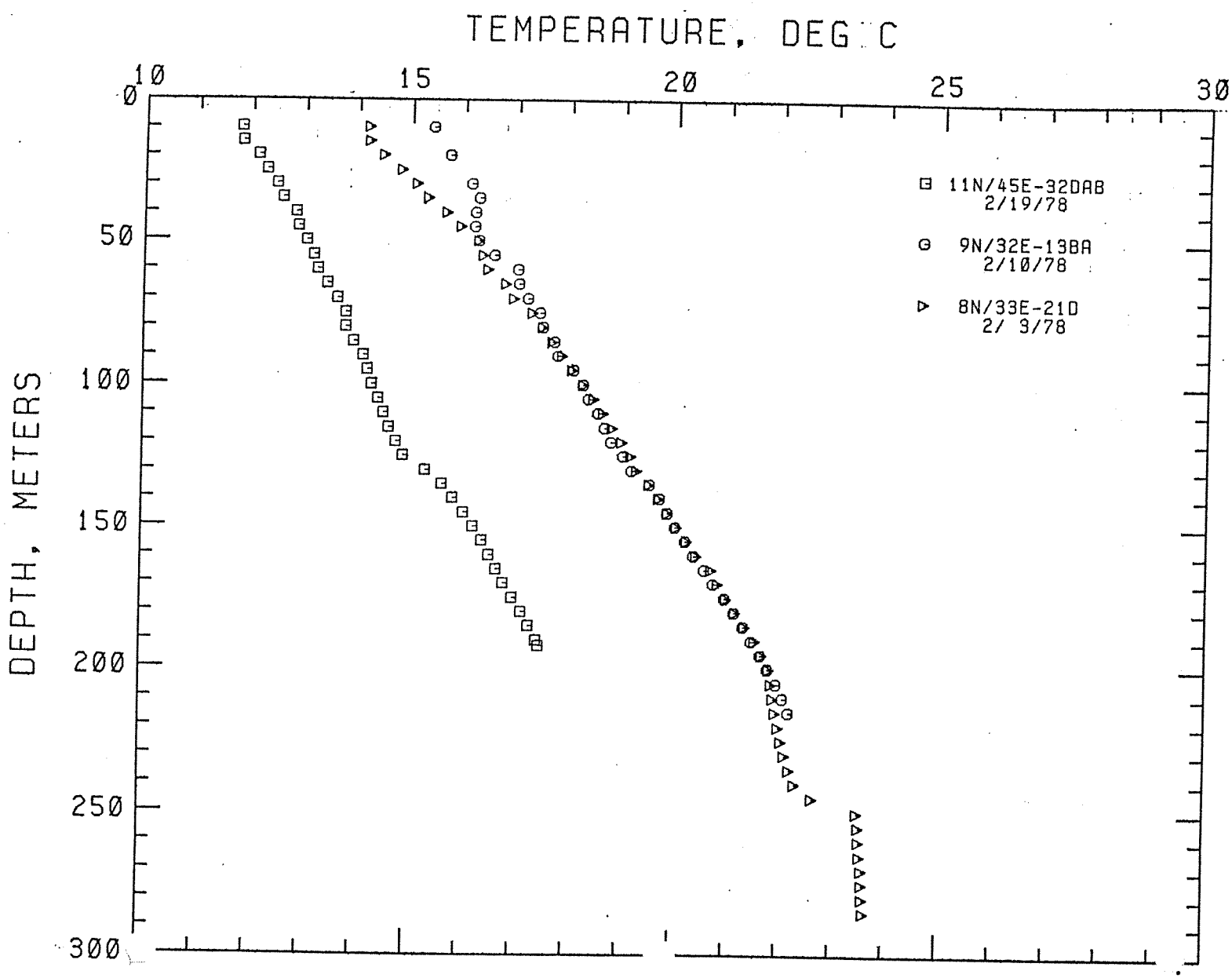
LOCATION: PULLMAN AMS, WASHINGTON
10N/41E- 3DBD
HOLE NAME: NEIBLEWW
DATE MEASURED: 8/ 3/78

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	9.530	49.15	0.0	0.0
20.0	65.6	9.690	49.44	16.0	0.9
30.0	98.4	9.880	49.78	19.0	1.0
40.0	131.2	10.100	50.18	22.0	1.2
50.0	164.0	10.320	50.58	22.0	1.2
60.0	196.8	10.520	50.94	20.0	1.1
70.0	229.6	10.750	51.35	23.0	1.3
80.0	262.4	11.040	51.87	29.0	1.6
90.0	295.2	11.300	52.34	26.0	1.4
95.0	311.6	11.230	52.21	-14.0	-0.8
100.0	328.0	11.330	52.39	20.0	1.1
105.0	344.4	11.350	52.43	4.0	0.2


TEMPERATURE, DEG C
5
10
15
0
25
50
75
100
125
150
DEPTH, METERS
10N/39E-30AA
2/10/78
10N/41E- 3DBD
8/ 3/78
8N/36E-30BA
1/13/78

LOCATION: WALLA WALLA AMS, WASH
9N/32E-13BA
HOLE NAME: POWER-WW
DATE MEASURED: 2/10/78

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	15.410	59.74	0.0	0.0
20.0	65.6	15.730	60.31	32.0	1.8
30.0	98.4	16.140	61.05	41.0	2.3
35.0	114.8	16.280	61.30	28.0	1.5
40.0	131.2	16.220	61.20	-12.0	-0.7
45.0	147.6	16.210	61.18	-2.0	-0.1
50.0	164.0	16.280	61.30	14.0	0.8
55.0	180.4	16.580	61.84	60.0	3.3
60.0	196.8	17.030	62.65	90.0	4.9
65.0	213.2	17.050	62.69	4.0	0.2
70.0	229.6	17.220	63.00	34.0	1.9
75.0	246.0	17.450	63.41	46.0	2.5
80.0	262.4	17.510	63.52	12.0	0.7
85.0	278.8	17.720	63.90	42.0	2.3
90.0	295.2	17.790	64.02	14.0	0.8
95.0	311.6	18.090	64.56	60.0	3.3
100.0	328.0	18.270	64.89	36.0	2.0
105.0	344.4	18.380	65.08	22.0	1.2
110.0	360.8	18.560	65.41	36.0	2.0
115.0	377.2	18.690	65.64	26.0	1.4
120.0	393.6	18.810	65.86	24.0	1.3
125.0	410.0	19.040	66.27	46.0	2.5
130.0	426.4	19.200	66.56	32.0	1.8
135.0	442.8	19.540	67.17	68.0	3.7
140.0	459.2	19.740	67.53	40.0	2.2
145.0	475.6	19.880	67.78	28.0	1.5
150.0	492.0	20.040	68.07	32.0	1.8
155.0	508.4	20.230	68.41	38.0	2.1
160.0	524.8	20.390	68.70	32.0	1.8
165.0	541.2	20.590	69.06	40.0	2.2
170.0	557.6	20.770	69.39	36.0	2.0
175.0	574.0	20.980	69.76	42.0	2.3
180.0	590.4	21.160	70.09	36.0	2.0
185.0	606.8	21.340	70.41	36.0	2.0
190.0	623.2	21.500	70.70	32.0	1.8
195.0	639.6	21.670	71.01	34.0	1.9
200.0	656.0	21.800	71.24	26.0	1.4
205.0	672.4	21.960	71.53	32.0	1.8
210.0	688.8	22.090	71.76	26.0	1.4
215.0	705.2	22.200	71.96	22.0	1.2

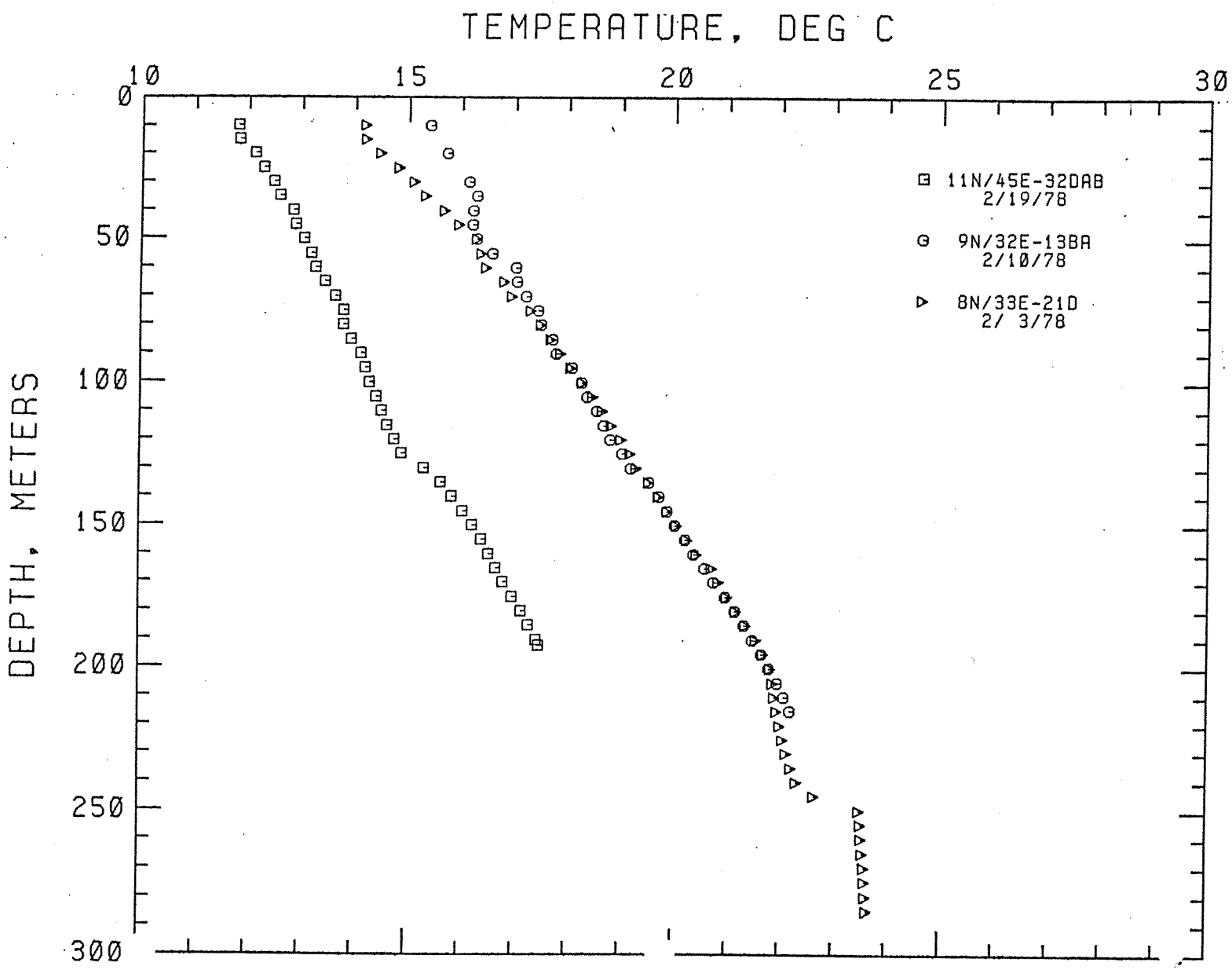

TEMPERATURE, DEG C
10
15
20
25
30
0
50
100
150
200
250
300
DEPTH, METERS
11N/45E-32DAB
2/19/78
9N/32E-13BA
2/10/78
8N/33E-21D
2/ 3/78

LOCATION: WALLA WALLA AMS, WASH
8N/33E-21D
HOLE NAME: GLUCK-WW
DATE MEASURED: 2/ 3/78

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	14.190	57.54	0.0	0.0
15.0	49.2	14.210	57.58	4.0	0.2
20.0	65.6	14.480	58.06	54.0	3.0
25.0	82.0	14.820	58.68	68.0	3.7
30.0	98.4	15.110	59.20	58.0	3.2
35.0	114.8	15.320	59.58	42.0	2.3
40.0	131.2	15.680	60.22	72.0	4.0
45.0	147.6	15.950	60.71	54.0	3.0
50.0	164.0	16.280	61.30	66.0	3.6
55.0	180.4	16.380	61.48	20.0	1.1
60.0	196.8	16.470	61.65	18.0	1.0
65.0	213.2	16.810	62.26	68.0	3.7
70.0	229.6	16.960	62.53	30.0	1.6
75.0	246.0	17.310	63.16	70.0	3.8
80.0	262.4	17.510	63.52	40.0	2.2
85.0	278.8	17.690	63.84	36.0	2.0
90.0	295.2	17.870	64.17	36.0	2.0
95.0	311.6	18.070	64.53	40.0	2.2
100.0	328.0	18.280	64.90	42.0	2.3
105.0	344.4	18.480	65.26	40.0	2.2
110.0	360.8	18.660	65.59	36.0	2.0
115.0	377.2	18.830	65.89	34.0	1.9
120.0	393.6	19.020	66.24	38.0	2.1
125.0	410.0	19.190	66.54	34.0	1.9
130.0	426.4	19.300	66.74	22.0	1.2
135.0	442.8	19.540	67.17	48.0	2.6
140.0	459.2	19.720	67.50	36.0	2.0
145.0	475.6	19.900	67.82	36.0	2.0
150.0	492.0	20.070	68.13	34.0	1.9
155.0	508.4	20.260	68.47	38.0	2.1
160.0	524.8	20.440	68.79	36.0	2.0
165.0	541.2	20.730	69.31	58.0	3.2
170.0	557.6	20.860	69.55	26.0	1.4
175.0	574.0	21.020	69.84	32.0	1.8
180.0	590.4	21.190	70.14	34.0	1.9
185.0	606.8	21.370	70.47	36.0	2.0
190.0	623.2	21.570	70.83	40.0	2.2
195.0	639.6	21.700	71.06	26.0	1.4
200.0	656.0	21.840	71.31	28.0	1.5
205.0	672.4	21.880	71.38	8.0	0.4
210.0	688.8	21.920	71.46	8.0	0.4
215.0	705.2	21.960	71.53	8.0	0.4

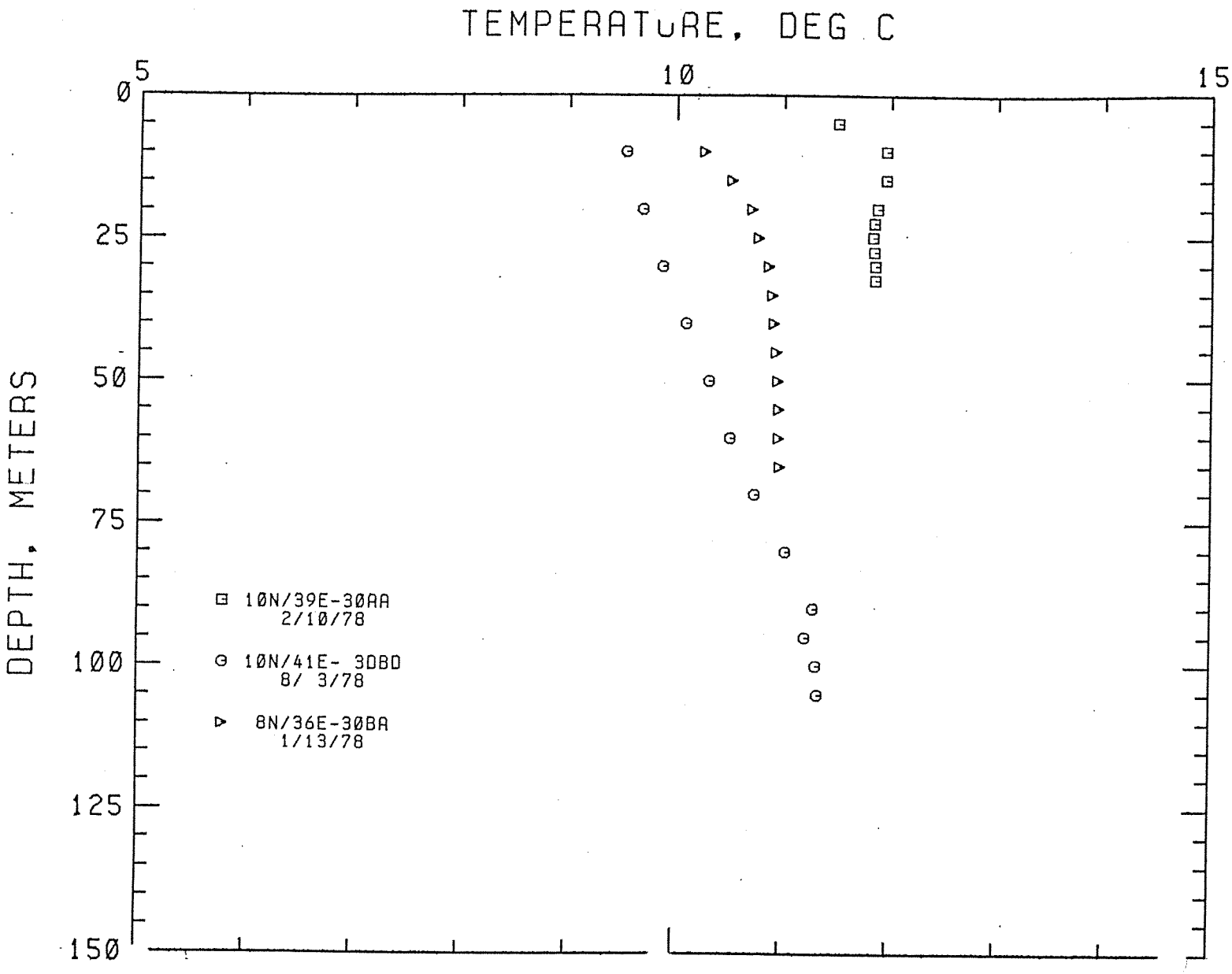
LOCATION: WALLA WALLA AMS, WASH
8N/33E-21D
HOLE NAME: GLUCK-WW
DATE MEASURED: 2/ 3/78

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
220.0	721.6	22.020	71.64	12.0	0.7
225.0	738.0	22.080	71.74	12.0	0.7
230.0	754.4	22.150	71.87	14.0	0.8
235.0	770.8	22.240	72.03	18.0	1.0
240.0	787.2	22.340	72.21	20.0	1.1
245.0	803.6	22.680	72.82	68.0	3.7
250.0	820.0	23.520	74.34	168.0	9.2
255.0	836.4	23.550	74.39	6.0	0.3
260.0	852.8	23.560	74.41	2.0	0.1
265.0	869.2	23.590	74.46	6.0	0.3
270.0	885.6	23.620	74.52	6.0	0.3
275.0	902.0	23.630	74.53	2.0	0.1
280.0	918.4	23.650	74.57	4.0	0.2
285.0	934.8	23.670	74.61	4.0	0.2


TEMPERATURE, DEG C
10
15
20
25
30
0
50
100
150
200
250
300
DEPTH, METERS
11N/45E-32DAB
2/19/78
9N/32E-13BA
2/10/78
8N/33E-21D
2/ 3/78

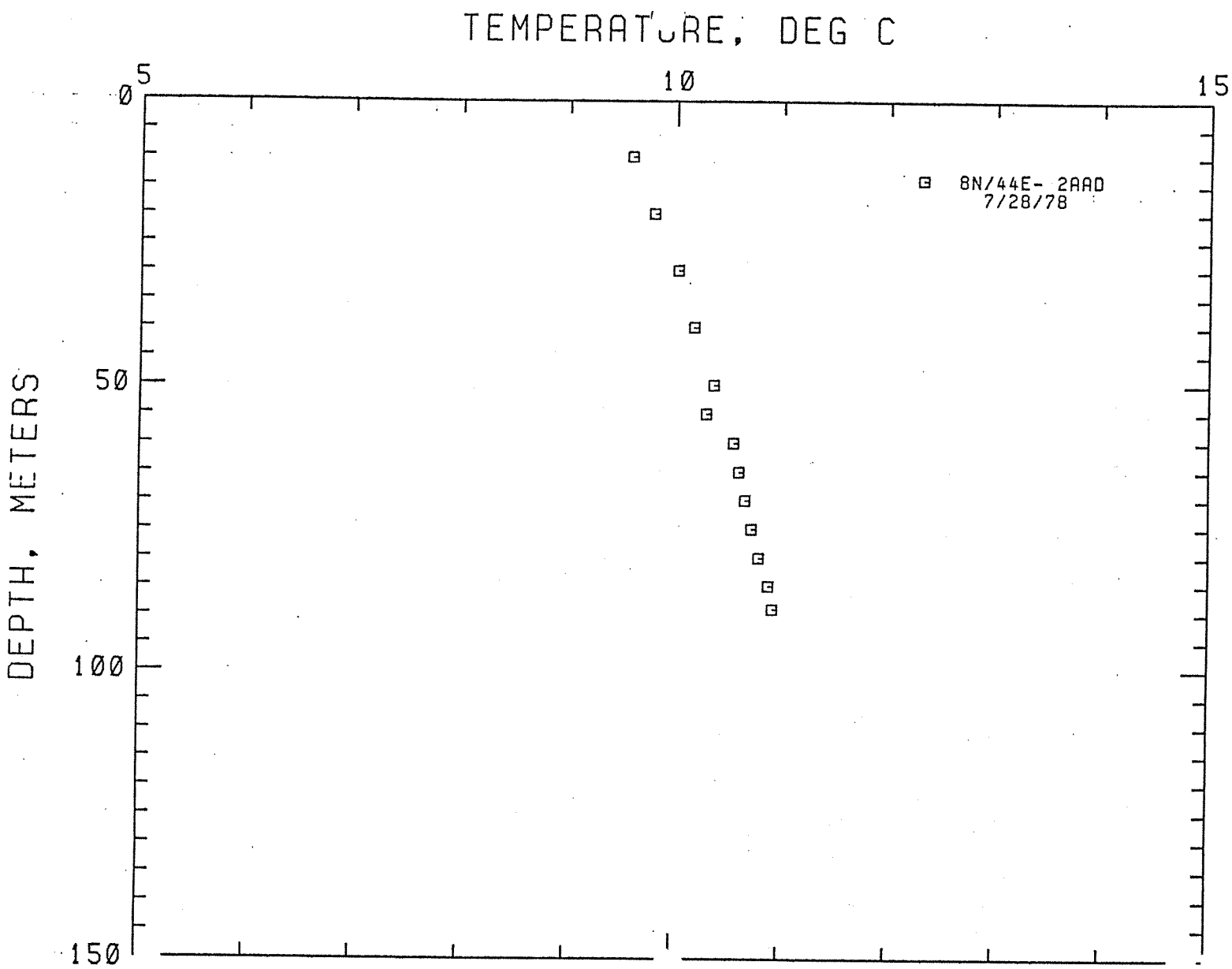
LOCATION: WALLA WALLA AMS, WASH
8N/36E-30BA
HOLE NAME: VANAUSWW
DATE MEASURED: 1/13/78

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	10.260	50.47	0.0	0.0
15.0	49.2	10.520	50.94	52.0	2.9
20.0	65.6	10.710	51.28	38.0	2.1
25.0	82.0	10.770	51.39	12.0	0.7
30.0	98.4	10.870	51.57	20.0	1.1
35.0	114.8	10.900	51.62	6.0	0.3
40.0	131.2	10.920	51.66	4.0	0.2
45.0	147.6	10.940	51.69	4.0	0.2
50.0	164.0	10.960	51.73	4.0	0.2
55.0	180.4	10.970	51.75	2.0	0.1
60.0	196.8	10.970	51.75	0.0	0.0
65.0	213.2	10.980	51.76	2.0	0.1


TEMPERATURE, DEG C
5
10
15
0
25
50
75
100
125
150
DEPTH, METERS
10N/39E-30AA
2/10/78
10N/41E- 3DBD
8/ 3/78
8N/36E-30BA
1/13/78

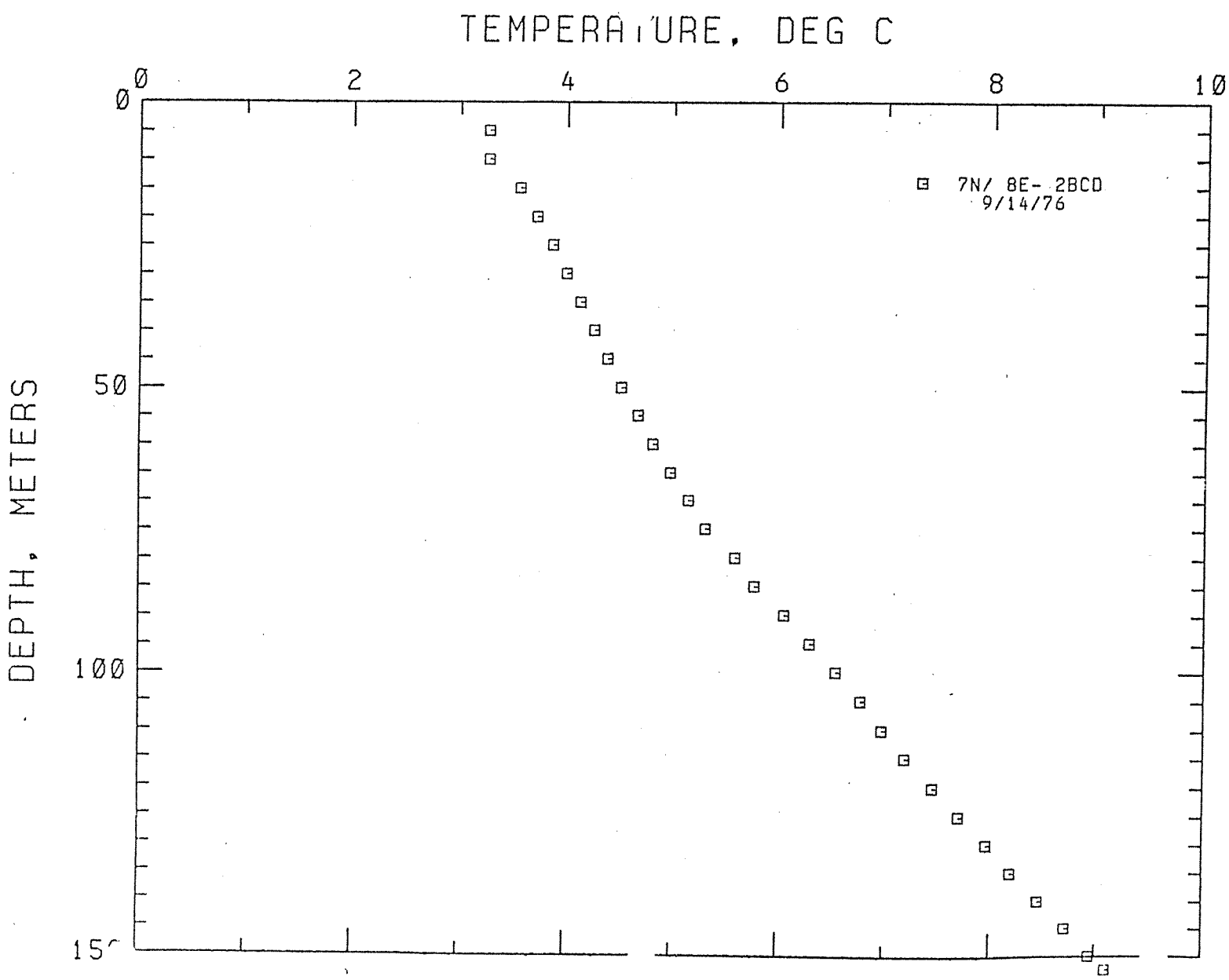
LOCATION: PULLMAN AMS, WASHINGTON
8N/44E- 2AAD
HOLE NAME: REEVESWW
DATE MEASURED: 7/28/78

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	9.590	49.26	0.0	0.0
20.0	65.6	9.800	49.64	21.0	1.2
30.0	98.4	10.030	50.05	23.0	1.3
40.0	131.2	10.180	50.32	15.0	0.8
50.0	164.0	10.370	50.67	19.0	1.0
55.0	180.4	10.300	50.54	-14.0	-0.8
60.0	196.8	10.560	51.01	52.0	2.9
65.0	213.2	10.610	51.10	10.0	0.5
70.0	229.6	10.670	51.21	12.0	0.7
75.0	246.0	10.730	51.31	12.0	0.7
80.0	262.4	10.800	51.44	14.0	0.8
85.0	278.8	10.890	51.60	18.0	1.0
89.0	291.9	10.930	51.67	10.0	0.5


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
8N/44E- 2AAD
7/28/78

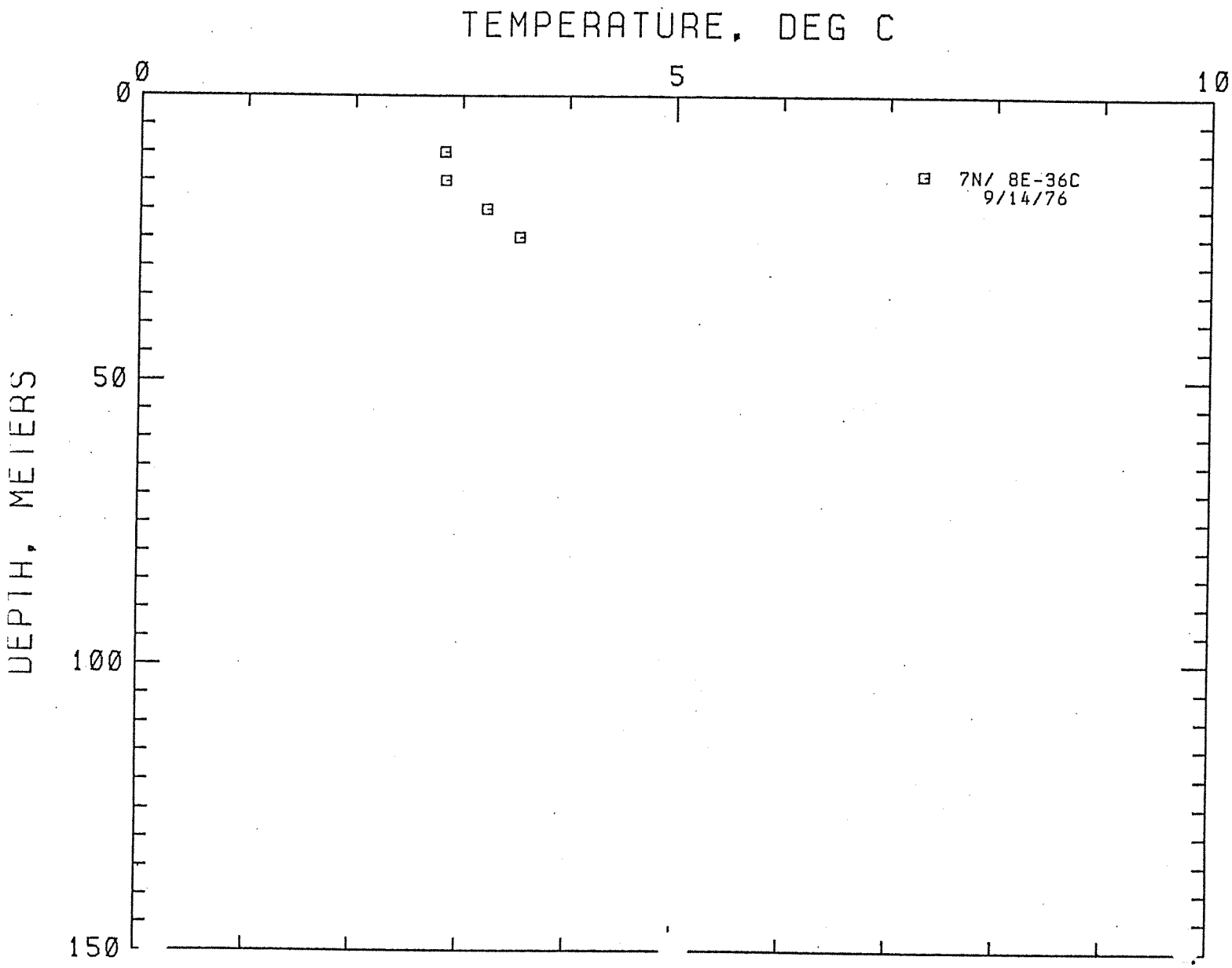
LOCATION: YAKIMA AMS, WASHINGTON
7N/ 8E- 2BCD
HOLE NAME: DGER-4
DATE MEASURED: 9/14/76

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	3.270	37.89	0.0	0.0
10.0	32.8	3.270	37.89	0.0	0.0
15.0	49.2	3.560	38.41	58.0	3.2
20.0	65.6	3.720	38.70	32.0	1.8
25.0	82.0	3.870	38.97	30.0	1.6
30.0	98.4	4.000	39.20	26.0	1.4
35.0	114.8	4.130	39.43	26.0	1.4
40.0	131.2	4.260	39.67	26.0	1.4
45.0	147.6	4.390	39.90	26.0	1.4
50.0	164.0	4.520	40.14	26.0	1.4
55.0	180.4	4.680	40.42	32.0	1.8
60.0	196.8	4.820	40.68	28.0	1.5
65.0	213.2	4.990	40.98	34.0	1.9
70.0	229.6	5.160	41.29	34.0	1.9
75.0	246.0	5.320	41.58	32.0	1.8
80.0	262.4	5.600	42.08	56.0	3.1
85.0	278.8	5.780	42.40	36.0	2.0
90.0	295.2	6.060	42.91	56.0	3.1
95.0	311.6	6.300	43.34	48.0	2.6
100.0	328.0	6.550	43.79	50.0	2.7
105.0	344.4	6.780	44.20	46.0	2.5
110.0	360.8	6.980	44.56	40.0	2.2
115.0	377.2	7.200	44.96	44.0	2.4
120.0	393.6	7.460	45.43	52.0	2.9
125.0	410.0	7.710	45.88	50.0	2.7
130.0	426.4	7.970	46.35	52.0	2.9
135.0	442.8	8.200	46.76	46.0	2.5
140.0	459.2	8.460	47.23	52.0	2.9
145.0	475.6	8.720	47.70	52.0	2.9
150.0	492.0	8.950	48.11	46.0	2.5
152.5	500.2	9.100	48.38	60.0	3.3


TEMPERATURE, DEG C
0
2
4
6
8
10
DEPTH, METERS
0
50
100
7N/ 8E- 2BCD
9/14/76

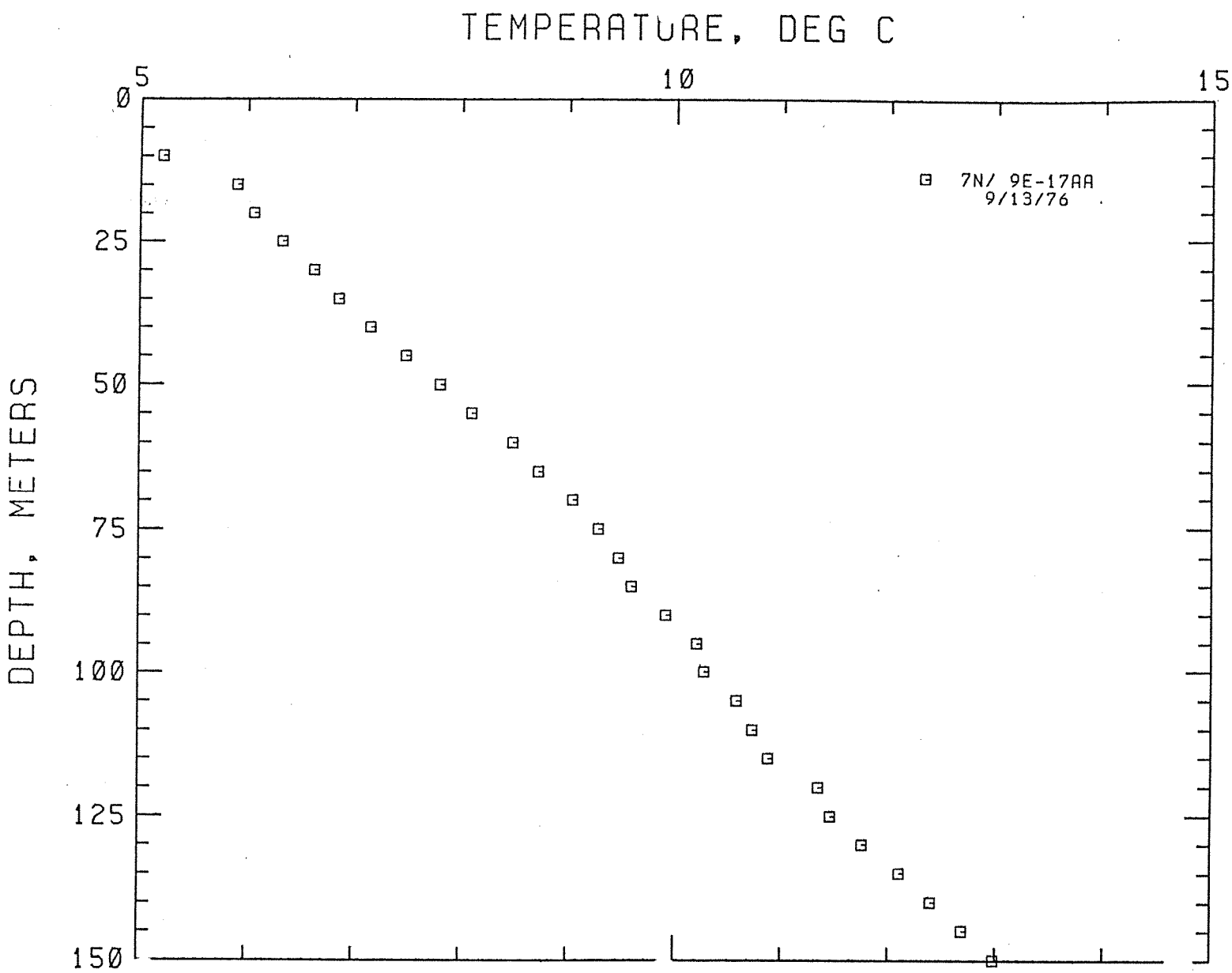
LOCATION: YAKIMA AMS, WASHINGTON
7N/ 8E-36C
HOLE NAME: DGER-7
DATE MEASURED: 9/14/76

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	2.840	37.11	0.0	0.0
15.0	49.2	2.850	37.13	2.0	0.1
20.0	65.6	3.240	37.83	78.0	4.3
25.0	82.0	3.550	38.39	62.0	3.4


TEMPERATURE, DEG C
0
5
10
DEPTH, METERS
0
50
100
150
7N/ 8E-36C
9/14/76

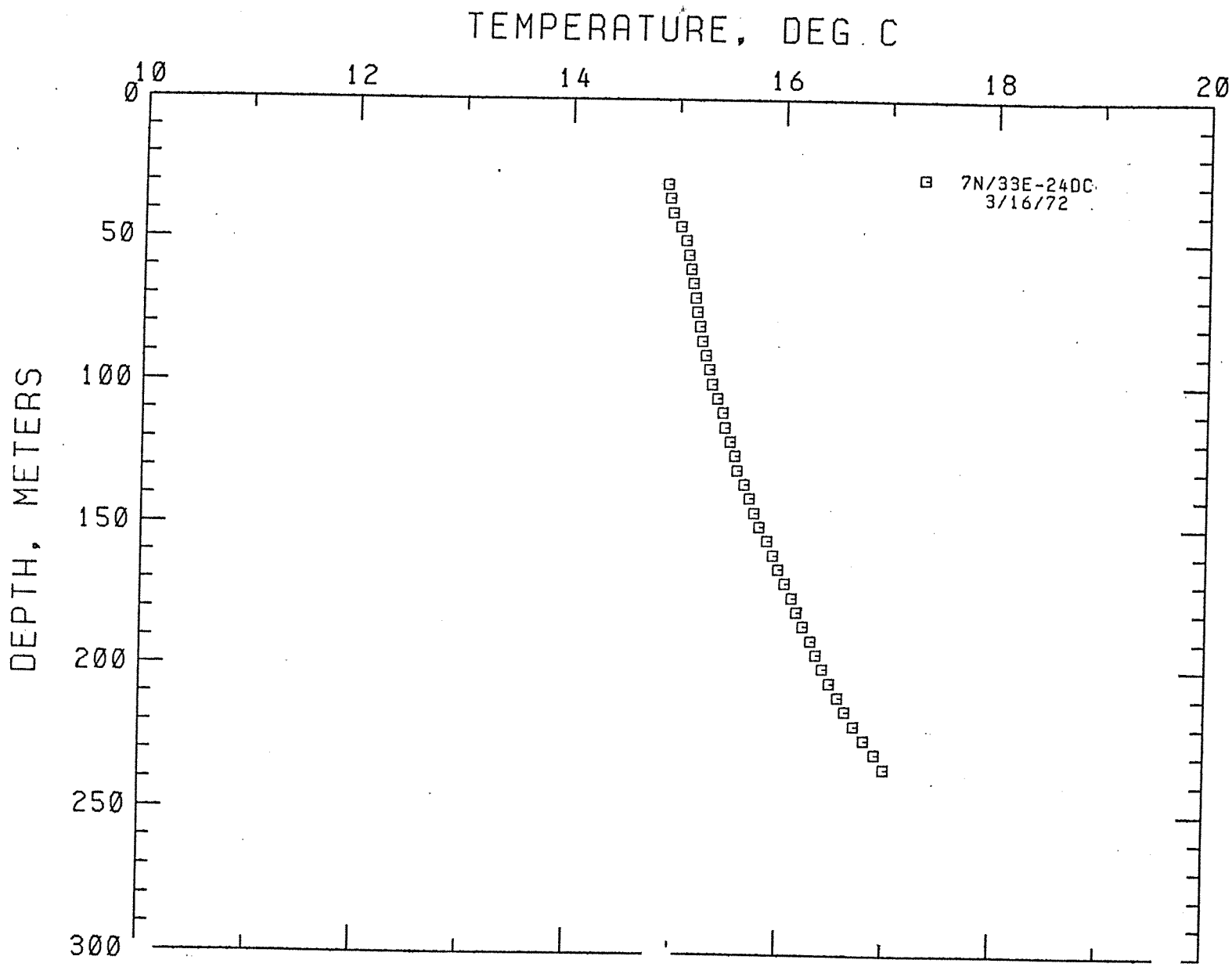
LOCATION: YAKIMA AMS, WASHINGTON
7N/ 9E-17AA
HOLE NAME: DGER-3
DATE MEASURED: 9/13/76

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	5.210	41.38	0.0	0.0
15.0	49.2	5.900	42.62	138.0	7.6
20.0	65.6	6.060	42.91	32.0	1.8
25.0	82.0	6.330	43.39	54.0	3.0
30.0	98.4	6.630	43.93	60.0	3.3
35.0	114.8	6.860	44.35	46.0	2.5
40.0	131.2	7.160	44.89	60.0	3.3
45.0	147.6	7.490	45.48	66.0	3.6
50.0	164.0	7.810	46.06	64.0	3.5
55.0	180.4	8.110	46.60	60.0	3.3
60.0	196.8	8.490	47.28	76.0	4.2
65.0	213.2	8.730	47.71	48.0	2.6
70.0	229.6	9.050	48.29	64.0	3.5
75.0	246.0	9.290	48.72	48.0	2.6
80.0	262.4	9.480	49.06	38.0	2.1
85.0	278.8	9.600	49.28	24.0	1.3
90.0	295.2	9.920	49.86	64.0	3.5
95.0	311.6	10.210	50.38	58.0	3.2
100.0	328.0	10.280	50.50	14.0	0.8
105.0	344.4	10.580	51.04	60.0	3.3
110.0	360.8	10.730	51.31	30.0	1.6
115.0	377.2	10.880	51.58	30.0	1.6
120.0	393.6	11.350	52.43	94.0	5.2
125.0	410.0	11.460	52.63	22.0	1.2
130.0	426.4	11.760	53.17	60.0	3.3
135.0	442.8	12.110	53.80	70.0	3.8
140.0	459.2	12.400	54.32	58.0	3.2
145.0	475.6	12.690	54.84	58.0	3.2
150.0	492.0	12.980	55.36	58.0	3.2


TEMPERATURE, DEG C
5
10
15
0
25
50
75
100
125
150
DEPTH, METERS
7N/ 9E-17AA
9/13/76

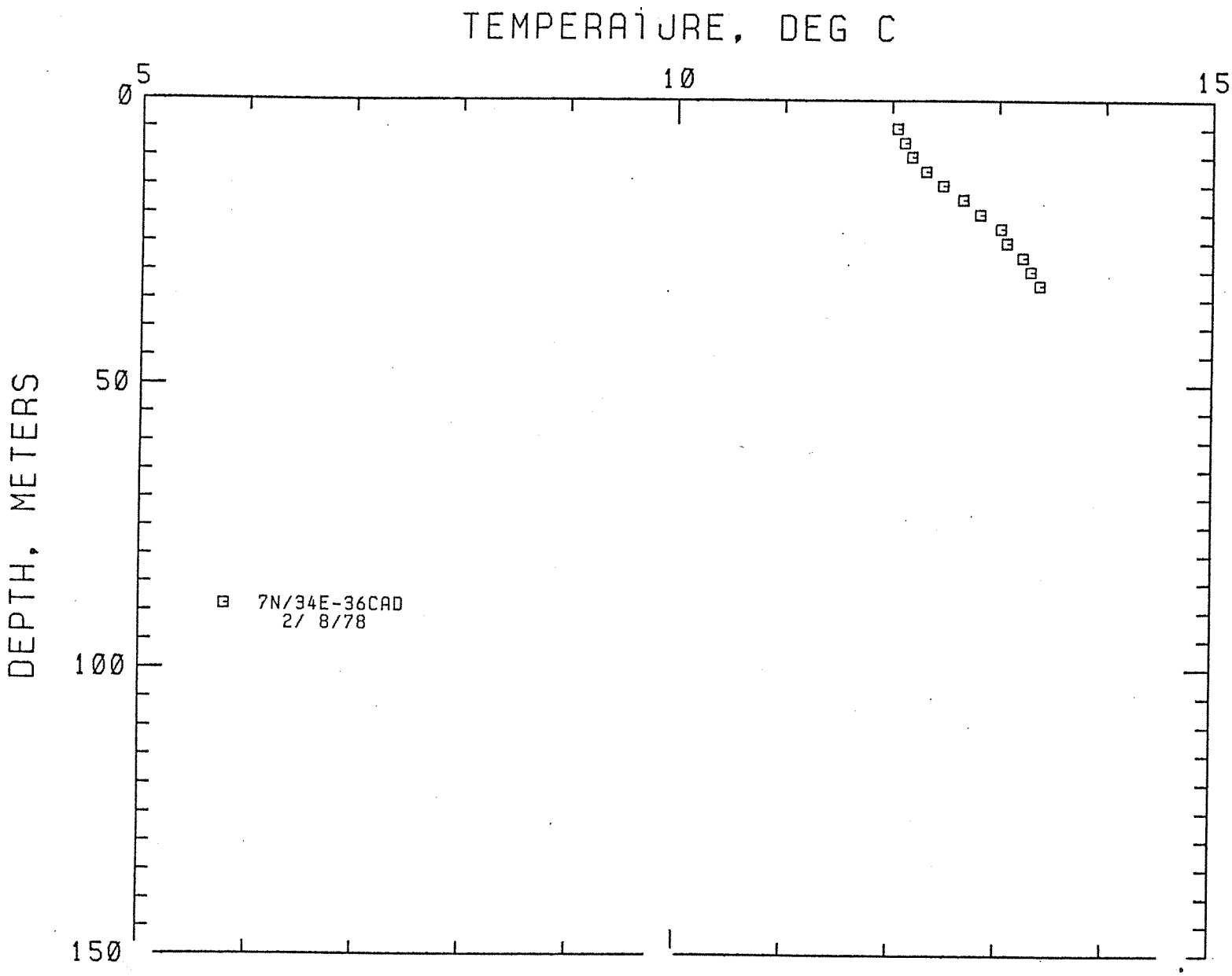
LOCATION: WALLA WALLA AMS,WASH
7N/33E-24DC
HOLE NAME: MT-WW
DATE MEASURED: 3/16/72

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	14.904	58.83	0.0	0.0
35.0	114.8	14.928	58.87	4.8	0.3
40.0	131.2	14.953	58.92	5.0	0.3
45.0	147.6	15.031	59.06	15.6	0.9
50.0	164.0	15.081	59.15	10.0	0.5
55.0	180.4	15.110	59.20	5.8	0.3
60.0	196.8	15.131	59.24	4.2	0.2
65.0	213.2	15.153	59.28	4.4	0.2
70.0	229.6	15.176	59.32	4.6	0.3
75.0	246.0	15.194	59.35	3.6	0.2
80.0	262.4	15.223	59.40	5.8	0.3
85.0	278.8	15.243	59.44	4.0	0.2
90.0	295.2	15.279	59.50	7.2	0.4
95.0	311.6	15.312	59.56	6.6	0.4
100.0	328.0	15.345	59.62	6.6	0.4
105.0	344.4	15.396	59.71	10.2	0.6
110.0	360.8	15.448	59.81	10.4	0.6
115.0	377.2	15.468	59.84	4.0	0.2
120.0	393.6	15.521	59.94	10.6	0.6
125.0	410.0	15.563	60.01	8.4	0.5
130.0	426.4	15.589	60.06	5.2	0.3
135.0	442.8	15.656	60.18	13.4	0.7
140.0	459.2	15.706	60.27	10.0	0.5
145.0	475.6	15.756	60.36	10.0	0.5
150.0	492.0	15.806	60.45	10.0	0.5
155.0	508.4	15.878	60.58	14.4	0.8
160.0	524.8	15.936	60.68	11.6	0.6
165.0	541.2	15.991	60.78	11.0	0.6
170.0	557.6	16.054	60.90	12.6	0.7
175.0	574.0	16.118	61.01	12.8	0.7
180.0	590.4	16.168	61.10	10.0	0.5
185.0	606.8	16.230	61.21	12.4	0.7
190.0	623.2	16.301	61.34	14.2	0.8
195.0	639.6	16.357	61.44	11.2	0.6
200.0	656.0	16.418	61.55	12.2	0.7
205.0	672.4	16.488	61.68	14.0	0.8
210.0	688.8	16.563	61.81	15.0	0.8
215.0	705.2	16.637	61.95	14.8	0.8
220.0	721.6	16.720	62.10	16.6	0.9
225.0	738.0	16.817	62.27	19.4	1.1
230.0	754.4	16.922	62.46	21.0	1.2
235.0	770.8	17.007	62.61	17.0	0.9


TEMPERATURE, DEG.C
10
12
14
16
18
20
0
50
100
150
200
250
300
DEPTH, METERS
7N/33E-24DC
3/16/72

LOCATION: WALLA WALLA AMS, WASH
7N/34E-36CAD
HOLE NAME: STILERWW
DATE MEASURED: 2/ 8/78

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	12.050	53.69	0.0	0.0
7.5	24.6	12.120	53.82	28.0	1.5
10.0	32.8	12.190	53.94	28.0	1.5
12.5	41.0	12.320	54.18	52.0	2.9
15.0	49.2	12.480	54.46	64.0	3.5
17.5	57.4	12.670	54.81	76.0	4.2
20.0	65.6	12.830	55.09	64.0	3.5
22.5	73.8	13.020	55.44	76.0	4.2
25.0	82.0	13.080	55.54	24.0	1.3
27.5	90.2	13.230	55.81	60.0	3.3
30.0	98.4	13.300	55.94	28.0	1.5
32.5	106.6	13.390	56.10	36.0	2.0

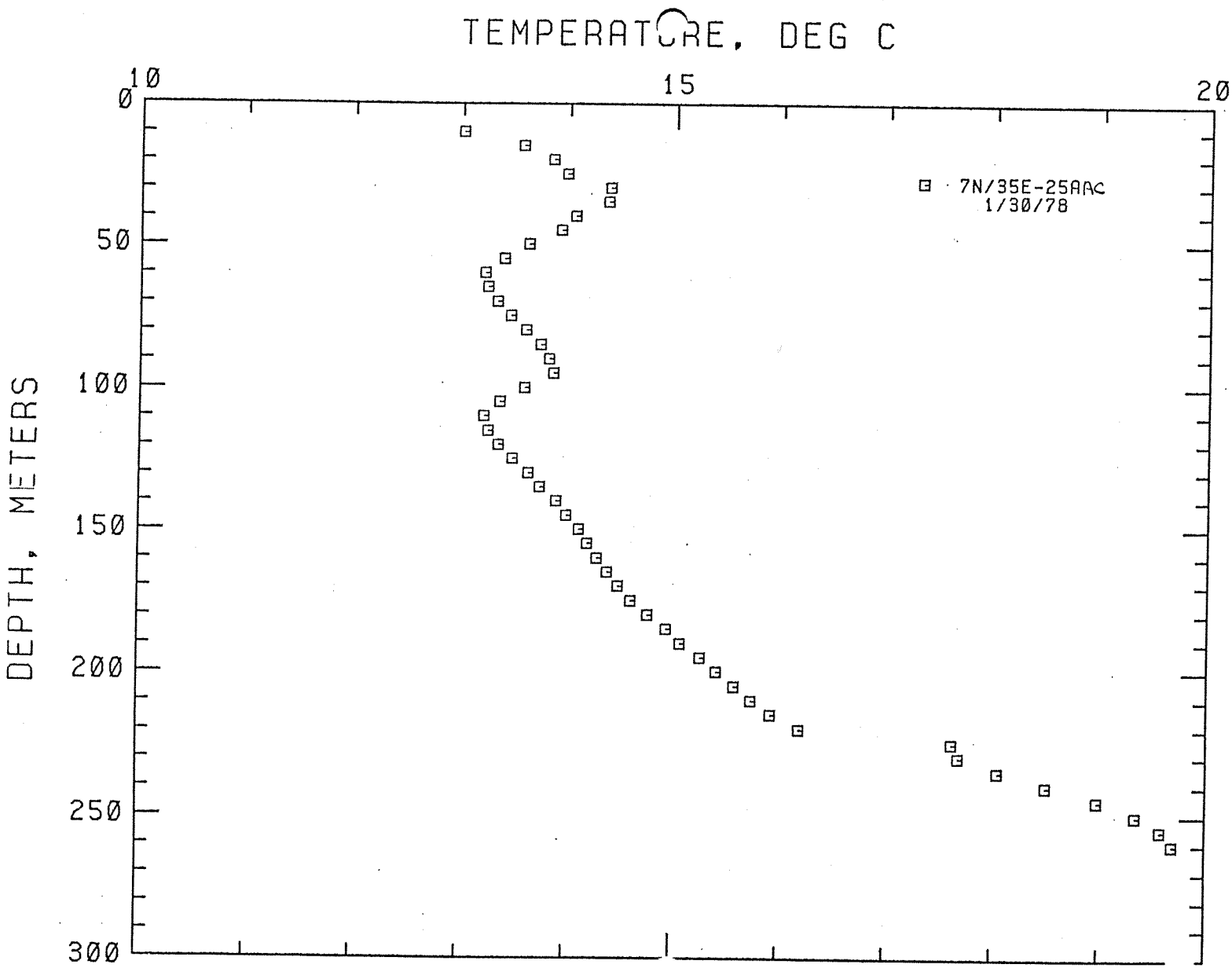

TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
7N/34E-36CAD
2/ 8/78

LOCATION: WALLA WALLA AMS, WASH
7N/35E-25A1AC
HOLE NAME: ARTID8WW
DATE MEASURED: 1/30/78

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	13.010	55.42	0.0	0.0
15.0	49.2	13.570	56.43	112.0	6.1
20.0	65.6	13.850	56.93	56.0	3.1
25.0	82.0	13.980	57.16	26.0	1.4
30.0	98.4	14.390	57.90	82.0	4.5
35.0	114.8	14.370	57.87	-4.0	-0.2
40.0	131.2	14.060	57.31	-62.0	-3.4
45.0	147.6	13.930	57.07	-26.0	-1.4
50.0	164.0	13.630	56.53	-60.0	-3.3
55.0	180.4	13.400	56.12	-46.0	-2.5
60.0	196.8	13.220	55.80	-36.0	-2.0
65.0	213.2	13.250	55.85	6.0	0.3
70.0	229.6	13.340	56.01	18.0	1.0
75.0	246.0	13.470	56.25	26.0	1.4
80.0	262.4	13.610	56.50	28.0	1.5
85.0	278.8	13.750	56.75	28.0	1.5
90.0	295.2	13.830	56.89	16.0	0.9
95.0	311.6	13.870	56.97	8.0	0.4
100.0	328.0	13.600	56.48	-54.0	-3.0
105.0	344.4	13.370	56.07	-46.0	-2.5
110.0	360.8	13.220	55.80	-30.0	-1.6
115.0	377.2	13.260	55.87	8.0	0.4
120.0	393.6	13.360	56.05	20.0	1.1
125.0	410.0	13.490	56.28	26.0	1.4
130.0	426.4	13.640	56.55	30.0	1.6
135.0	442.8	13.750	56.75	22.0	1.2
140.0	459.2	13.900	57.02	30.0	1.6
145.0	475.6	14.000	57.20	20.0	1.1
150.0	492.0	14.120	57.42	24.0	1.3
155.0	508.4	14.200	57.56	16.0	0.9
160.0	524.8	14.290	57.72	18.0	1.0
165.0	541.2	14.390	57.90	20.0	1.1
170.0	557.6	14.490	58.08	20.0	1.1
175.0	574.0	14.610	58.30	24.0	1.3
180.0	590.4	14.770	58.59	32.0	1.8
185.0	606.8	14.950	58.91	36.0	2.0
190.0	623.2	15.080	59.14	26.0	1.4
195.0	639.6	15.270	59.49	38.0	2.1
200.0	656.0	15.420	59.76	30.0	1.6
205.0	672.4	15.590	60.06	34.0	1.9
210.0	688.8	15.750	60.35	32.0	1.8

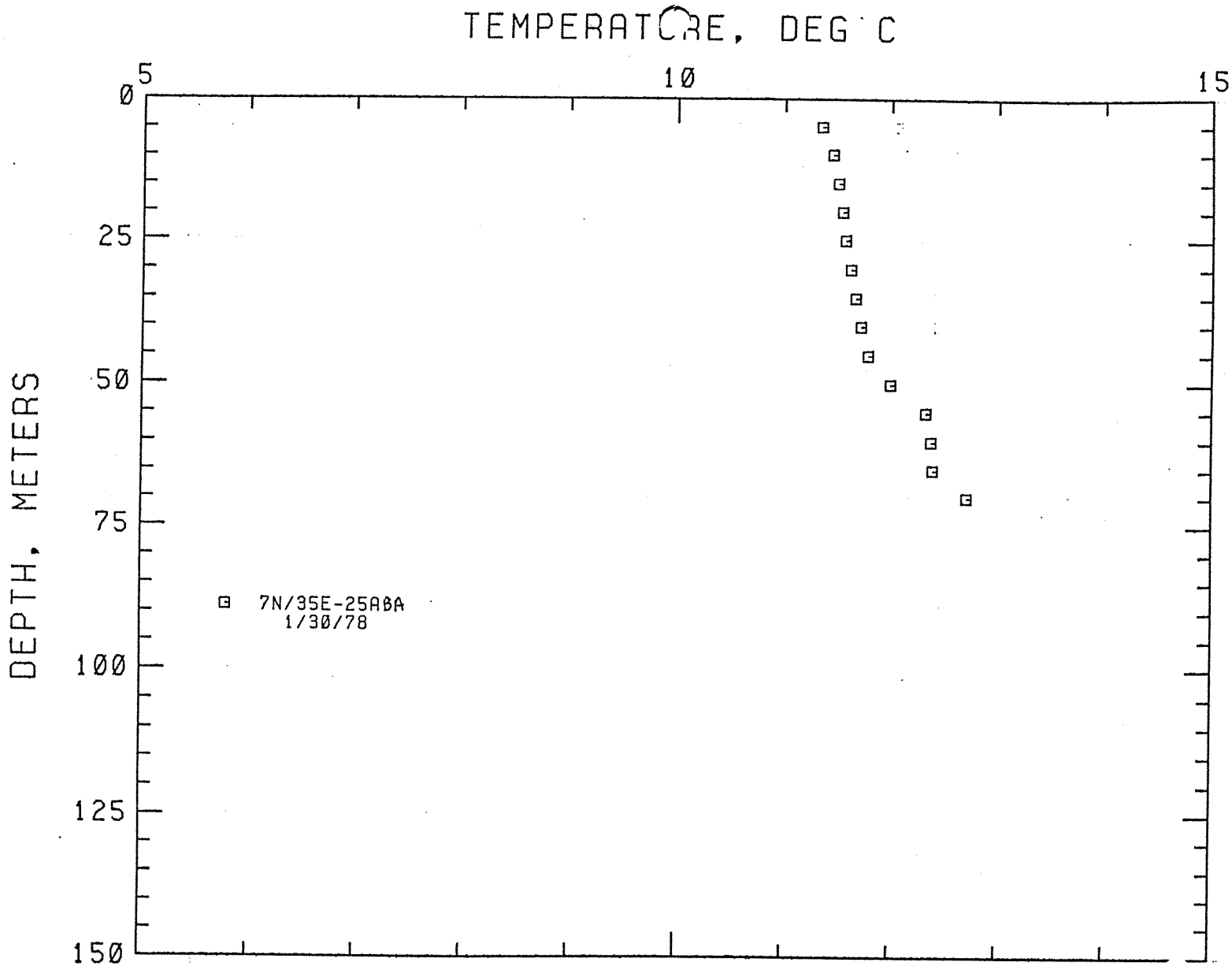
LOCATION: WALLA WALLA AMS, WASH
7N/35E-25AAC
HOLE NAME: ARTID8WW
DATE MEASURED: 1/30/78

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
215.0	705.2	15.930	60.67	36.0	2.0
220.0	721.6	16.200	61.16	54.0	3.0
225.0	738.0	17.630	63.73	286.0	15.7
230.0	754.4	17.690	63.84	12.0	0.7
235.0	770.8	18.060	64.51	74.0	4.1
240.0	787.2	18.510	65.32	90.0	4.9
245.0	803.6	18.990	66.18	96.0	5.3
250.0	820.0	19.350	66.83	72.0	4.0
255.0	836.4	19.580	67.24	46.0	2.5
260.0	852.8	19.700	67.46	24.0	1.3


TEMPERATURE, DEG C
10
15
20
0
50
100
150
200
250
300
DEPTH, METERS
7N/35E-25AAC
1/30/78

LOCATION: WALLA WALLA AMS, WASH
7N/35E-25ABA
HOLE NAME: GUG-WW
DATE MEASURED: 1/30/78

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	11.350	52.43	0.0	0.0
10.0	32.8	11.450	52.61	20.0	1.1
15.0	49.2	11.500	52.70	10.0	0.5
20.0	65.6	11.540	52.77	8.0	0.4
25.0	82.0	11.570	52.83	6.0	0.3
30.0	98.4	11.620	52.92	10.0	0.5
35.0	114.8	11.670	53.01	10.0	0.5
40.0	131.2	11.720	53.10	10.0	0.5
45.0	147.6	11.790	53.22	14.0	0.8
50.0	164.0	12.000	53.60	42.0	2.3
55.0	180.4	12.330	54.19	66.0	3.6
60.0	196.8	12.380	54.28	10.0	0.5
65.0	213.2	12.400	54.32	4.0	0.2
70.0	229.6	12.720	54.90	64.0	3.5


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
25
50
75
100
125
150
7N/35E-25ABA
1/30/78

LOCATION: WALLA WALLA AMS, WASH
7N/35E-35AA
HOLE NAME: WWCOLLWW
DATE MEASURED: 1/30/78

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	17.820	64.08	0.0	0.0
15.0	49.2	17.570	63.63	-50.0	-2.7
20.0	65.6	17.450	63.41	-24.0	-1.3
25.0	82.0	16.650	61.97	-160.0	-8.8
30.0	98.4	16.580	61.84	-14.0	-0.8
35.0	114.8	16.680	62.02	20.0	1.1
40.0	131.2	16.810	62.26	26.0	1.4
45.0	147.6	16.910	62.44	20.0	1.1
50.0	164.0	17.160	62.89	50.0	2.7
55.0	180.4	17.370	63.27	42.0	2.3
60.0	196.8	17.490	63.48	24.0	1.3
65.0	213.2	17.640	63.75	30.0	1.6
70.0	229.6	17.840	64.11	40.0	2.2
75.0	246.0	17.970	64.35	26.0	1.4
80.0	262.4	18.100	64.58	26.0	1.4
85.0	278.8	18.200	64.76	20.0	1.1
90.0	295.2	18.200	64.76	0.0	0.0
95.0	311.6	17.490	63.48	-142.0	-7.8
100.0	328.0	18.070	64.53	116.0	6.4
105.0	344.4	18.200	64.76	26.0	1.4
110.0	360.8	18.330	64.99	26.0	1.4
115.0	377.2	18.460	65.23	26.0	1.4
120.0	393.6	18.590	65.46	26.0	1.4
125.0	410.0	18.770	65.79	36.0	2.0
130.0	426.4	18.860	65.95	18.0	1.0
135.0	442.8	19.050	66.29	38.0	2.1
140.0	459.2	19.170	66.51	24.0	1.3
145.0	475.6	19.300	66.74	26.0	1.4
150.0	492.0	19.460	67.03	32.0	1.8
155.0	508.4	19.580	67.24	24.0	1.3
160.0	524.8	19.700	67.46	24.0	1.3
165.0	541.2	19.820	67.68	24.0	1.3
170.0	557.6	19.930	67.87	22.0	1.2
175.0	574.0	20.000	68.00	14.0	0.8
180.0	590.4	20.370	68.67	74.0	4.1
185.0	606.8	20.370	68.67	0.0	0.0
190.0	623.2	20.400	68.72	6.0	0.3
195.0	639.6	20.460	68.83	12.0	0.7
200.0	656.0	20.460	68.83	0.0	0.0
205.0	672.4	20.460	68.83	0.0	0.0
210.0	688.8	20.460	68.83	0.0	0.0

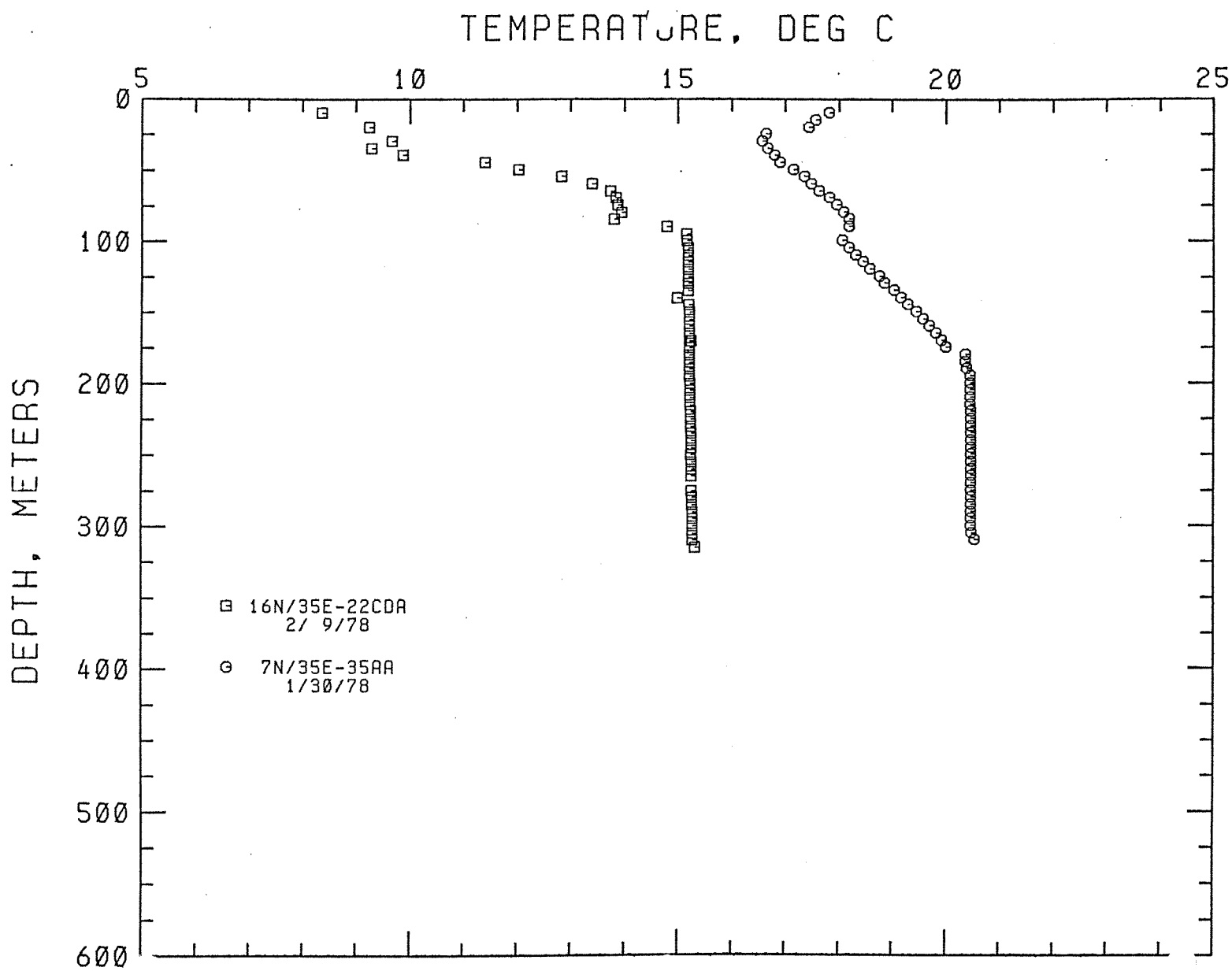
LOCATION: WALLA WALLA AMS, WASH

7N/35E-35AA

HOLE NAME: WWCOLLWW

DATE MEASURED: 1/30/78

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
215.0	705.2	20.460	68.83	0.0	0.0
220.0	721.6	20.470	68.85	2.0	0.1
225.0	738.0	20.470	68.85	0.0	0.0
230.0	754.4	20.470	68.85	0.0	0.0
235.0	770.8	20.470	68.85	0.0	0.0
240.0	787.2	20.470	68.85	0.0	0.0
245.0	803.6	20.470	68.85	0.0	0.0
250.0	820.0	20.470	68.85	0.0	0.0
255.0	836.4	20.470	68.85	0.0	0.0
260.0	852.8	20.470	68.85	0.0	0.0
265.0	869.2	20.480	68.86	2.0	0.1
270.0	885.6	20.480	68.86	0.0	0.0
275.0	902.0	20.480	68.86	0.0	0.0
280.0	918.4	20.480	68.86	0.0	0.0
285.0	934.8	20.480	68.86	0.0	0.0
290.0	951.2	20.480	68.86	0.0	0.0
295.0	967.6	20.480	68.86	0.0	0.0
300.0	984.0	20.480	68.86	0.0	0.0
305.0	1000.4	20.490	68.88	2.0	0.1
310.0	1016.8	20.540	68.97	10.0	0.5

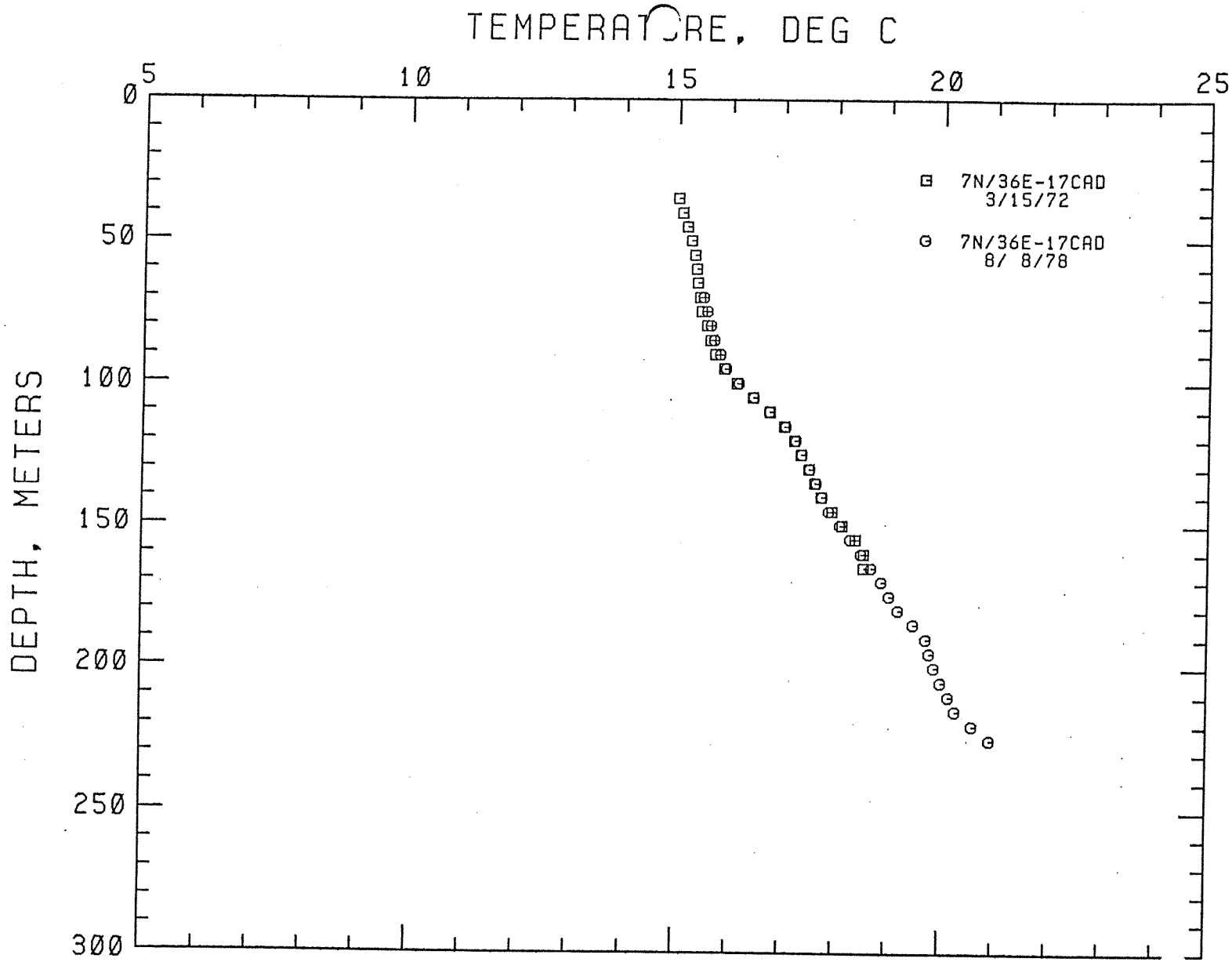

TEMPERATURE, DEG C
5
10
15
20
25
0
100
200
300
400
500
600
DEPTH, METERS
16N/35E-22CDA
2/ 9/78
7N/35E-35AA
1/30/78

LOCATION: WALLA WALLA AMS, WASH
7N/36E-17CAD
HOLE NAME: WWGC-WW
DATE MEASURED: 3/15/72

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	14.998	59.00	0.0	0.0
40.0	131.2	15.079	59.14	16.2	0.9
45.0	147.6	15.171	59.31	18.4	1.0
50.0	164.0	15.253	59.46	16.4	0.9
55.0	180.4	15.318	59.57	13.0	0.7
60.0	196.8	15.355	59.64	7.4	0.4
65.0	213.2	15.380	59.68	5.0	0.3
70.0	229.6	15.424	59.76	8.8	0.5
75.0	246.0	15.462	59.83	7.6	0.4
80.0	262.4	15.565	60.02	20.6	1.1
85.0	278.8	15.632	60.14	13.4	0.7
90.0	295.2	15.724	60.30	18.4	1.0
95.0	311.6	15.886	60.59	32.4	1.8
100.0	328.0	16.127	61.03	48.2	2.6
105.0	344.4	16.437	61.59	62.0	3.4
110.0	360.8	16.756	62.16	63.8	3.5
115.0	377.2	17.040	62.67	56.8	3.1
120.0	393.6	17.232	63.02	38.4	2.1
125.0	410.0	17.359	63.25	25.4	1.4
130.0	426.4	17.504	63.51	29.0	1.6
135.0	442.8	17.617	63.71	22.6	1.2
140.0	459.2	17.742	63.94	25.0	1.4
145.0	475.6	17.943	64.30	40.2	2.2
150.0	492.0	18.147	64.66	40.8	2.2
155.0	508.4	18.389	65.10	48.4	2.7
160.0	524.8	18.552	65.39	32.6	1.8
165.0	541.2	18.559	65.41	1.4	0.1

LOCATION: WALLA WALLA AMS, WASH
7N/36E-17CAD
HOLE NAME: WWGC-WW
DATE MEASURED: 8/ 8/78

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
70.0	229.6	15.490	59.88	0.0	0.0
75.0	246.0	15.560	60.01	14.0	0.8
80.0	262.4	15.630	60.13	14.0	0.8
85.0	278.8	15.700	60.26	14.0	0.8
90.0	295.2	15.810	60.46	22.0	1.2
95.0	311.6	15.920	60.66	22.0	1.2
100.0	328.0	16.170	61.11	50.0	2.7
105.0	344.4	16.450	61.61	56.0	3.1
110.0	360.8	16.750	62.15	60.0	3.3
115.0	377.2	17.060	62.71	62.0	3.4
120.0	393.6	17.250	63.05	38.0	2.1
125.0	410.0	17.370	63.27	24.0	1.3
130.0	426.4	17.510	63.52	28.0	1.5
135.0	442.8	17.640	63.75	26.0	1.4
140.0	459.2	17.760	63.97	24.0	1.3
145.0	475.6	17.880	64.18	24.0	1.3
150.0	492.0	18.100	64.58	44.0	2.4
155.0	508.4	18.290	64.92	38.0	2.1
160.0	524.8	18.500	65.30	42.0	2.3
165.0	541.2	18.690	65.64	38.0	2.1
170.0	557.6	18.880	65.98	38.0	2.1
175.0	574.0	19.030	66.25	30.0	1.6
180.0	590.4	19.200	66.56	34.0	1.9
185.0	606.8	19.490	67.08	58.0	3.2
190.0	623.2	19.730	67.51	48.0	2.6
195.0	639.6	19.800	67.64	14.0	0.8
200.0	656.0	19.890	67.80	18.0	1.0
205.0	672.4	20.020	68.04	26.0	1.4
210.0	688.8	20.160	68.29	28.0	1.5
215.0	705.2	20.290	68.52	26.0	1.4
220.0	721.6	20.610	69.10	64.0	3.5
225.0	738.0	20.940	69.69	66.0	3.6


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
7N/36E-17CAD
3/15/72
7N/36E-17CAD
8/ 8/78

LOCATION: WALLA WALLA AMS, WASH
7N/36E-19BD
HOLE NAME: DKFF-WW
DATE MEASURED: 3/15/72

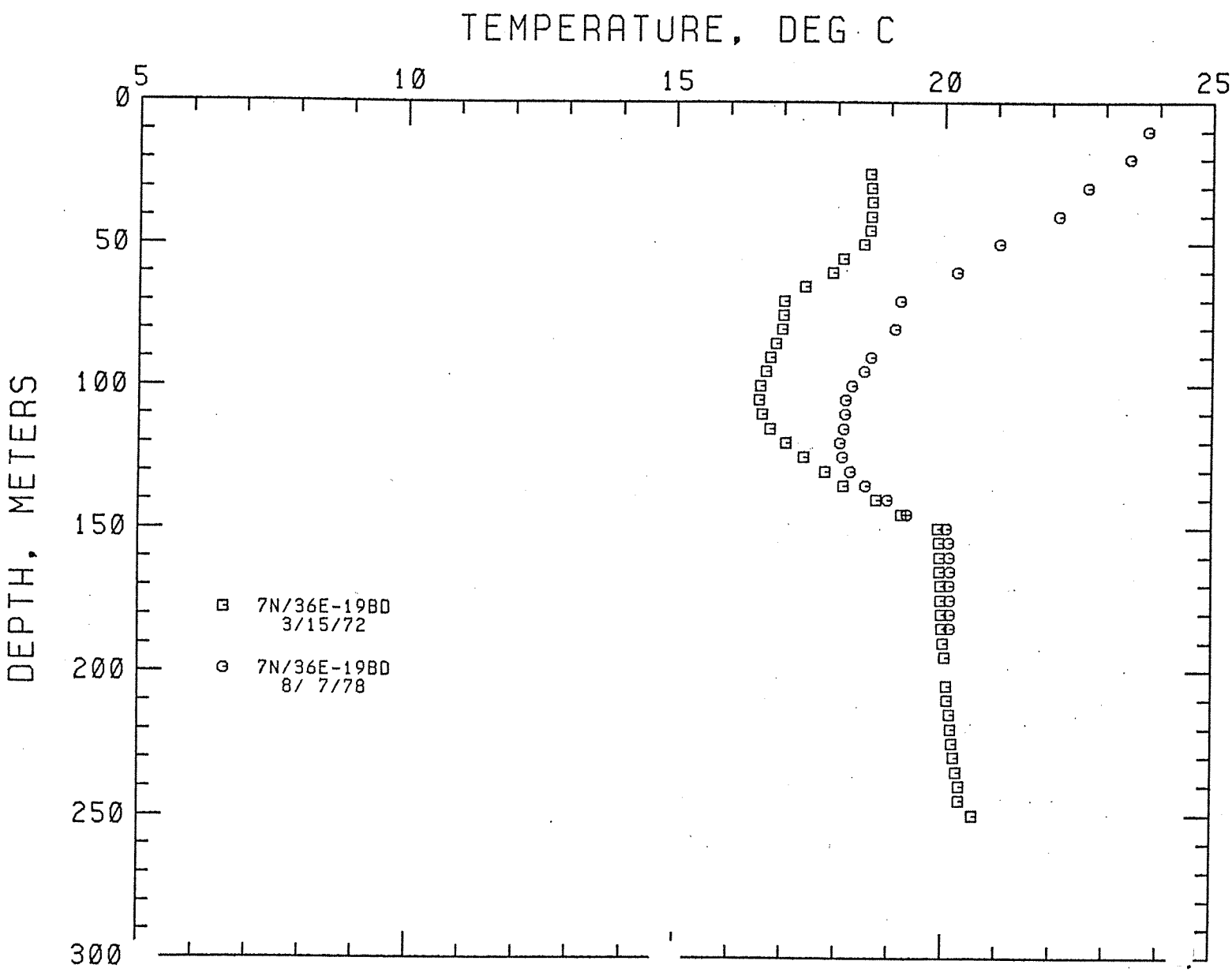
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
25.0	82.0	18.619	65.51	0.0	0.0
30.0	98.4	18.646	65.56	5.4	0.3
35.0	114.8	18.652	65.57	1.2	0.1
40.0	131.2	18.644	65.56	-1.6	-0.1
45.0	147.6	18.627	65.53	-3.4	-0.2
50.0	164.0	18.509	65.32	-23.6	-1.3
55.0	180.4	18.124	64.62	-77.0	-4.2
60.0	196.8	17.928	64.27	-39.2	-2.2
65.0	213.2	17.416	63.35	-102.4	-5.6
70.0	229.6	17.018	62.63	-79.6	-4.4
75.0	246.0	17.016	62.63	-0.4	-0.0
80.0	262.4	16.994	62.59	-4.4	-0.2
85.0	278.8	16.876	62.38	-23.6	-1.3
90.0	295.2	16.766	62.18	-22.0	-1.2
95.0	311.6	16.686	62.03	-16.0	-0.9
100.0	328.0	16.588	61.86	-19.6	-1.1
105.0	344.4	16.571	61.83	-3.4	-0.2
110.0	360.8	16.622	61.92	10.2	0.6
115.0	377.2	16.768	62.18	29.2	1.6
120.0	393.6	17.063	62.71	59.0	3.2
125.0	410.0	17.401	63.32	67.6	3.7
130.0	426.4	17.795	64.03	78.8	4.3
135.0	442.8	18.144	64.66	69.8	3.8
140.0	459.2	18.759	65.77	123.0	6.8
145.0	475.6	19.234	66.62	95.0	5.2
150.0	492.0	19.916	67.85	136.4	7.5
155.0	508.4	19.935	67.88	3.8	0.2
160.0	524.8	19.949	67.91	2.8	0.2
165.0	541.2	19.952	67.91	0.6	0.0
170.0	557.6	19.972	67.95	4.0	0.2
175.0	574.0	19.972	67.95	0.0	0.0
180.0	590.4	19.982	67.97	2.0	0.1
185.0	606.8	19.995	67.99	2.6	0.1
190.0	623.2	20.012	68.02	3.4	0.2
195.0	639.6	20.048	68.09	7.2	0.4
205.0	672.4	20.084	68.15	3.6	0.2
210.0	688.8	20.092	68.17	1.6	0.1
215.0	705.2	20.139	68.25	9.4	0.5
220.0	721.6	20.171	68.31	6.4	0.4
225.0	738.0	20.191	68.34	4.0	0.2
230.0	754.4	20.218	68.39	5.4	0.3

LOCATION: WALLA WALLA AMS, WASH
7N/36E-19BD
HOLE NAME: DKFF-WW
DATE MEASURED: 3/15/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT.
235.0	770.8	20.272	68.49	10.8	0.6
240.0	787.2	20.324	68.58	10.4	0.6
245.0	803.6	20.325	68.58	0.2	0.0
250.0	820.0	20.578	69.04	50.6	2.8

LOCATION: WALLA WALLA AMS, WASH
7N/36E-19BD
HOLE NAME: DKFF-WW
DATE MEASURED: 8/ 7/78

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	23.790	74.82	0.0	0.0
20.0	65.6	23.460	74.23	-33.0	-1.8
30.0	98.4	22.680	72.82	-78.0	-4.3
40.0	131.2	22.140	71.85	-54.0	-3.0
50.0	164.0	21.040	69.87	-110.0	-6.0
60.0	196.8	20.250	68.45	-79.0	-4.3
70.0	229.6	19.190	66.54	-106.0	-5.8
80.0	262.4	19.090	66.36	-10.0	-0.5
90.0	295.2	18.640	65.55	-45.0	-2.5
95.0	311.6	18.520	65.34	-24.0	-1.3
100.0	328.0	18.290	64.92	-46.0	-2.5
105.0	344.4	18.180	64.72	-22.0	-1.2
110.0	360.8	18.170	64.71	-2.0	-0.1
115.0	377.2	18.140	64.65	-6.0	-0.3
120.0	393.6	18.070	64.53	-14.0	-0.8
125.0	410.0	18.120	64.62	10.0	0.5
130.0	426.4	18.270	64.89	30.0	1.6
135.0	442.8	18.550	65.39	56.0	3.1
140.0	459.2	18.970	66.15	84.0	4.6
145.0	475.6	19.330	66.79	72.0	4.0
150.0	492.0	20.070	68.13	148.0	8.1
155.0	508.4	20.120	68.22	10.0	0.5
160.0	524.8	20.130	68.23	2.0	0.1
165.0	541.2	20.140	68.25	2.0	0.1
170.0	557.6	20.130	68.23	-2.0	-0.1
175.0	574.0	20.140	68.25	2.0	0.1
180.0	590.4	20.140	68.25	0.0	0.0
185.0	606.8	20.140	68.25	0.0	0.0


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
7N/36E-19BD
3/15/72
7N/36E-19BD
8/ 7/78

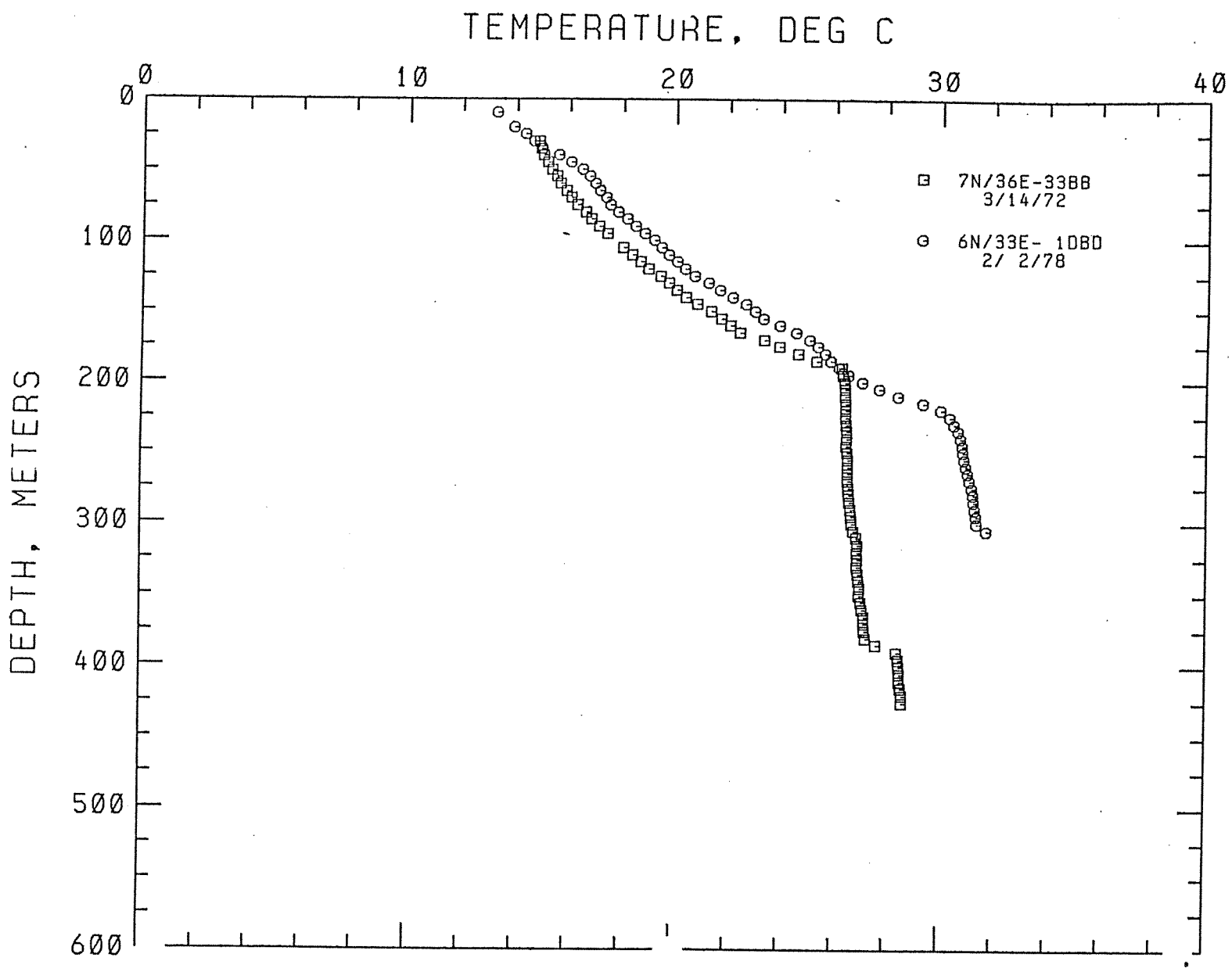
LOCATION: WALLA WALLA AMS, WASH
7N/36E-33BB
HOLE NAME: WW-7
DATE MEASURED: 3/14/72

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	14.855	58.74	0.0	0.0
35.0	114.8	14.930	58.87	15.0	0.8
40.0	131.2	15.027	59.05	19.4	1.1
45.0	147.6	15.180	59.32	30.6	1.7
50.0	164.0	15.348	59.63	33.6	1.8
55.0	180.4	15.513	59.92	33.0	1.8
60.0	196.8	15.665	60.20	30.4	1.7
65.0	213.2	15.893	60.61	45.6	2.5
70.0	229.6	16.078	60.94	37.0	2.0
75.0	246.0	16.296	61.33	43.6	2.4
80.0	262.4	16.621	61.92	65.0	3.6
85.0	278.8	16.823	62.28	40.4	2.2
90.0	295.2	17.126	62.83	60.6	3.3
95.0	311.6	17.432	63.38	61.2	3.4
105.0	344.4	18.023	64.44	59.1	3.2
110.0	360.8	18.387	65.10	72.8	4.0
115.0	377.2	18.699	65.66	62.4	3.4
120.0	393.6	18.988	66.18	57.8	3.2
125.0	410.0	19.441	66.99	90.6	5.0
130.0	426.4	19.768	67.58	65.4	3.6
135.0	442.8	20.072	68.13	60.8	3.3
140.0	459.2	20.411	68.74	67.8	3.7
145.0	475.6	20.849	69.53	87.6	4.8
150.0	492.0	21.365	70.46	103.2	5.7
155.0	508.4	21.754	71.16	77.8	4.3
160.0	524.8	22.103	71.79	69.8	3.8
165.0	541.2	22.458	72.42	71.0	3.9
170.0	557.6	23.384	74.09	185.2	10.2
175.0	574.0	23.963	75.13	115.8	6.4
180.0	590.4	24.672	76.41	141.8	7.8
185.0	606.8	25.342	77.62	134.0	7.4
190.0	623.2	26.313	79.36	194.2	10.7
195.0	639.6	26.361	79.45	9.6	0.5
200.0	656.0	26.430	79.57	13.8	0.8
205.0	672.4	26.441	79.59	2.2	0.1
210.0	688.8	26.454	79.62	2.6	0.1
215.0	705.2	26.458	79.62	0.8	0.0
220.0	721.6	26.478	79.66	4.0	0.2
225.0	738.0	26.460	79.63	-3.6	-0.2
230.0	754.4	26.483	79.67	4.6	0.3
235.0	770.8	26.506	79.71	4.6	0.3
240.0	787.2	26.519	79.73	2.6	0.1

LOCATION: WALLA WALLA AMS, WASH
7N/36E-33BB

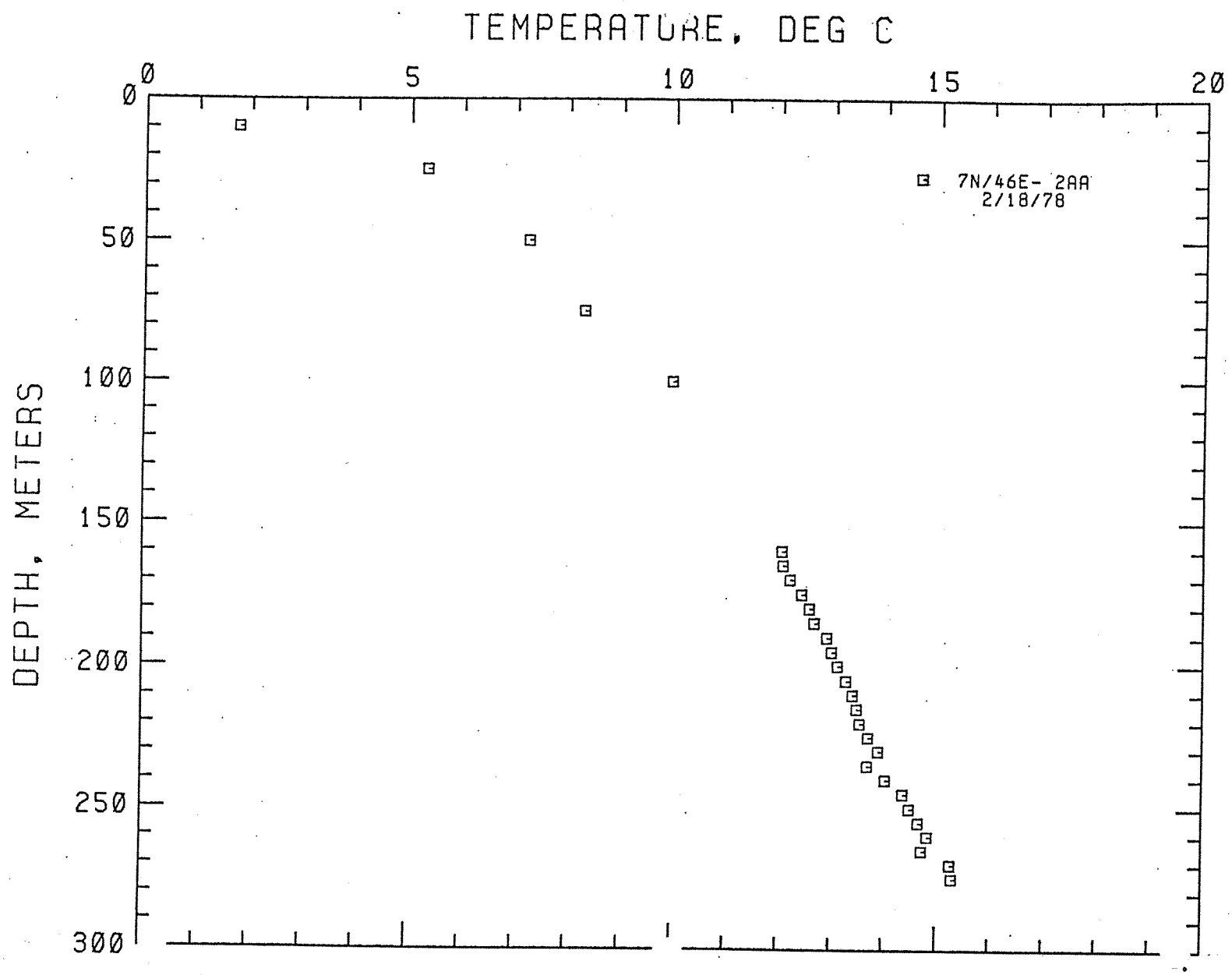
HOLE NAME: WW-7
DATE MEASURED: 3/14/72

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
245.0	803.6	26.497	79.69	-4.4	-0.2
250.0	820.0	26.537	79.77	8.0	0.4
255.0	836.4	26.557	79.80	4.0	0.2
260.0	852.8	26.567	79.82	2.0	0.1
265.0	869.2	26.558	79.80	-1.8	-0.1
270.0	885.6	26.554	79.80	-0.8	-0.0
275.0	902.0	26.573	79.83	3.8	0.2
280.0	918.4	26.596	79.87	4.6	0.3
285.0	934.8	26.630	79.93	6.8	0.4
290.0	951.2	26.674	80.01	8.8	0.5
295.0	967.6	26.691	80.04	3.4	0.2
300.0	984.0	26.720	80.10	5.8	0.3
305.0	1000.4	26.778	80.20	11.6	0.6
310.0	1016.8	26.899	80.42	24.2	1.3
315.0	1033.2	26.939	80.49	8.0	0.4
320.0	1049.6	26.933	80.48	-1.2	-0.1
325.0	1066.0	26.942	80.50	1.8	0.1
330.0	1082.4	26.937	80.49	-1.0	-0.1
335.0	1098.8	26.975	80.56	7.6	0.4
340.0	1115.2	26.999	80.60	4.8	0.3
345.0	1131.6	27.039	80.67	8.0	0.4
350.0	1148.0	27.020	80.64	-3.8	-0.2
355.0	1164.4	27.080	80.74	12.0	0.7
360.0	1180.8	27.130	80.83	10.0	0.5
365.0	1197.2	27.199	80.96	13.8	0.8
370.0	1213.6	27.193	80.95	-1.2	-0.1
375.0	1230.0	27.232	81.02	7.8	0.4
380.0	1246.4	27.262	81.07	6.0	0.3
385.0	1262.8	27.657	81.78	79.0	4.3
390.0	1279.2	28.431	83.18	154.8	8.5
395.0	1295.6	28.494	83.29	12.6	0.7
400.0	1312.0	28.520	83.34	5.2	0.3
405.0	1328.4	28.539	83.37	3.8	0.2
410.0	1344.8	28.553	83.40	2.8	0.2
415.0	1361.2	28.592	83.47	7.8	0.4
420.0	1377.6	28.633	83.54	8.2	0.5
425.0	1394.0	28.644	83.56	2.2	0.1


TEMPERATURE, DEG C
0
10
20
30
40
DEPTH, METERS
0
100
200
300
400
500
600
7N/36E-33BB
3/14/72
6N/33E- 1DBD
2/ 2/78

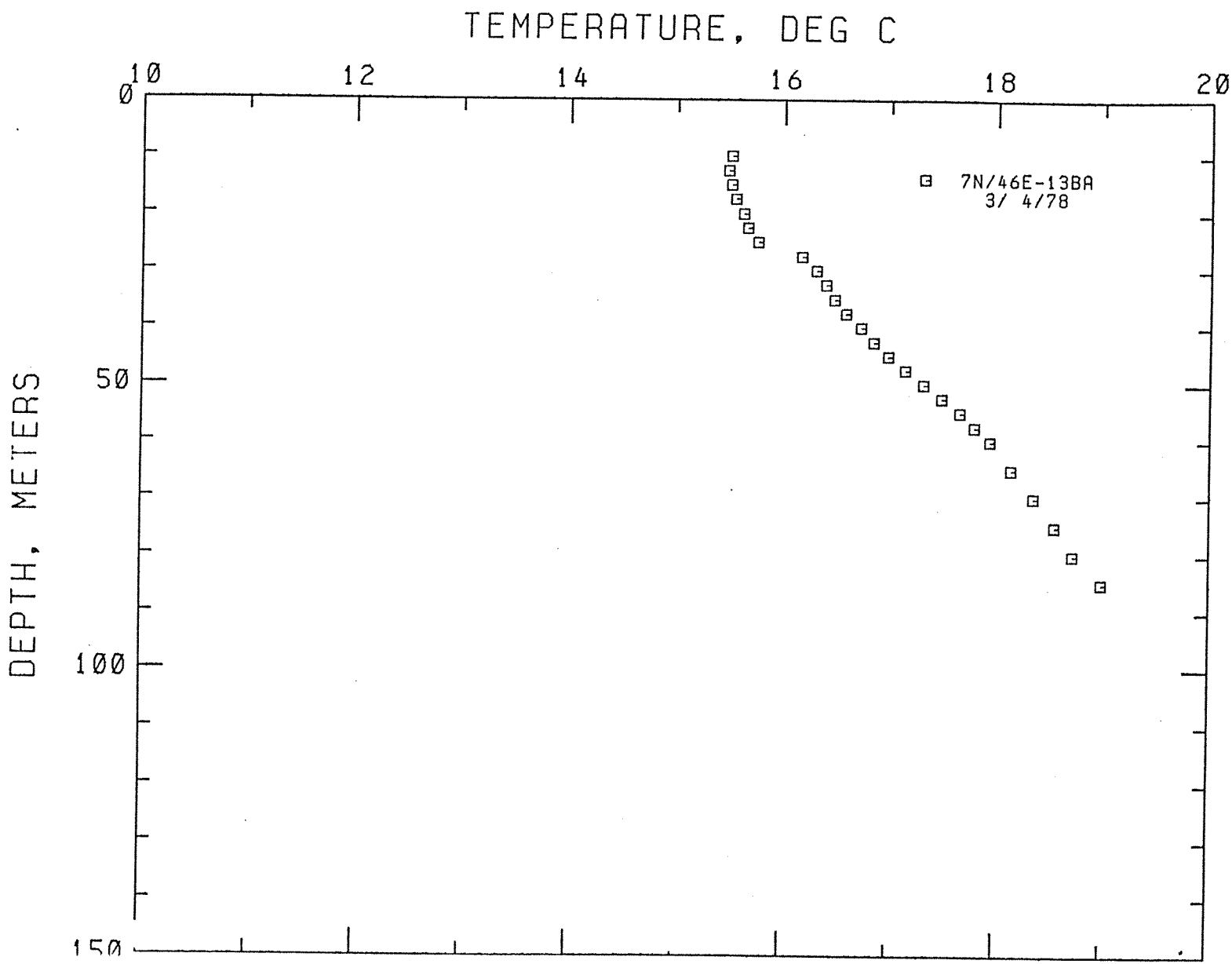
LOCATION: PULLMAN AMS, WASH
7N/46E- 2AA
HOLE NAME: DODD-WW
DATE MEASURED: 2/18/78

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	1.760	35.17	0.0	0.0
25.0	82.0	5.310	41.56	236.7	13.0
50.0	164.0	7.250	45.05	77.6	4.3
75.0	246.0	8.310	46.96	42.4	2.3
100.0	328.0	9.980	49.96	66.8	3.7
160.0	524.8	12.070	53.73	34.8	1.9
165.0	541.2	12.090	53.76	4.0	0.2
170.0	557.6	12.230	54.01	28.0	1.5
175.0	574.0	12.450	54.41	44.0	2.4
180.0	590.4	12.590	54.66	28.0	1.5
185.0	606.8	12.690	54.84	20.0	1.1
190.0	623.2	12.920	55.26	46.0	2.5
195.0	639.6	13.020	55.44	20.0	1.1
200.0	656.0	13.130	55.63	22.0	1.2
205.0	672.4	13.290	55.92	32.0	1.8
210.0	688.8	13.420	56.16	26.0	1.4
215.0	705.2	13.500	56.30	16.0	0.9
220.0	721.6	13.550	56.39	10.0	0.5
225.0	738.0	13.710	56.68	32.0	1.8
230.0	754.4	13.910	57.04	40.0	2.2
235.0	770.8	13.700	56.66	-42.0	-2.3
240.0	787.2	14.040	57.27	68.0	3.7
245.0	803.6	14.380	57.88	68.0	3.7
250.0	820.0	14.500	58.10	24.0	1.3
255.0	836.4	14.670	58.41	34.0	1.9
260.0	852.8	14.840	58.71	34.0	1.9
265.0	869.2	14.740	58.53	-20.0	-1.1
270.0	885.6	15.280	59.50	108.0	5.9
275.0	902.0	15.310	59.56	6.0	0.3


TEMPERATURE, DEG C
0
5
10
15
20
DEPTH, METERS
0
50
100
150
200
250
300
7N/46E- 2AA
2/18/78

LOCATION: PULLMAN AMS, WASH
7N/46E-13BA
HOLE NAME: HELBAR
DATE MEASURED: 3/ 4/78

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	15.510	59.92	0.0	0.0
12.5	41.0	15.480	59.86	-12.0	-0.7
15.0	49.2	15.510	59.92	12.0	0.7
17.5	57.4	15.550	59.99	16.0	0.9
20.0	65.6	15.620	60.12	28.0	1.5
22.5	73.8	15.660	60.19	16.0	0.9
25.0	82.0	15.760	60.37	40.0	2.2
27.5	90.2	16.170	61.11	164.0	9.0
30.0	98.4	16.310	61.36	56.0	3.1
32.5	106.6	16.400	61.52	36.0	2.0
35.0	114.8	16.480	61.66	32.0	1.8
37.5	123.0	16.590	61.86	44.0	2.4
40.0	131.2	16.730	62.11	56.0	3.1
42.5	139.4	16.850	62.33	48.0	2.6
45.0	147.6	16.990	62.58	56.0	3.1
47.5	155.8	17.150	62.87	64.0	3.5
50.0	164.0	17.320	63.18	68.0	3.7
52.5	172.2	17.490	63.48	68.0	3.7
55.0	180.4	17.660	63.79	68.0	3.7
57.5	188.6	17.800	64.04	56.0	3.1
60.0	196.8	17.950	64.31	60.0	3.3
65.0	213.2	18.150	64.67	40.0	2.2
70.0	229.6	18.360	65.05	42.0	2.3
75.0	246.0	18.560	65.41	40.0	2.2
80.0	262.4	18.730	65.71	34.0	1.9
85.0	278.8	19.000	66.20	54.0	3.0

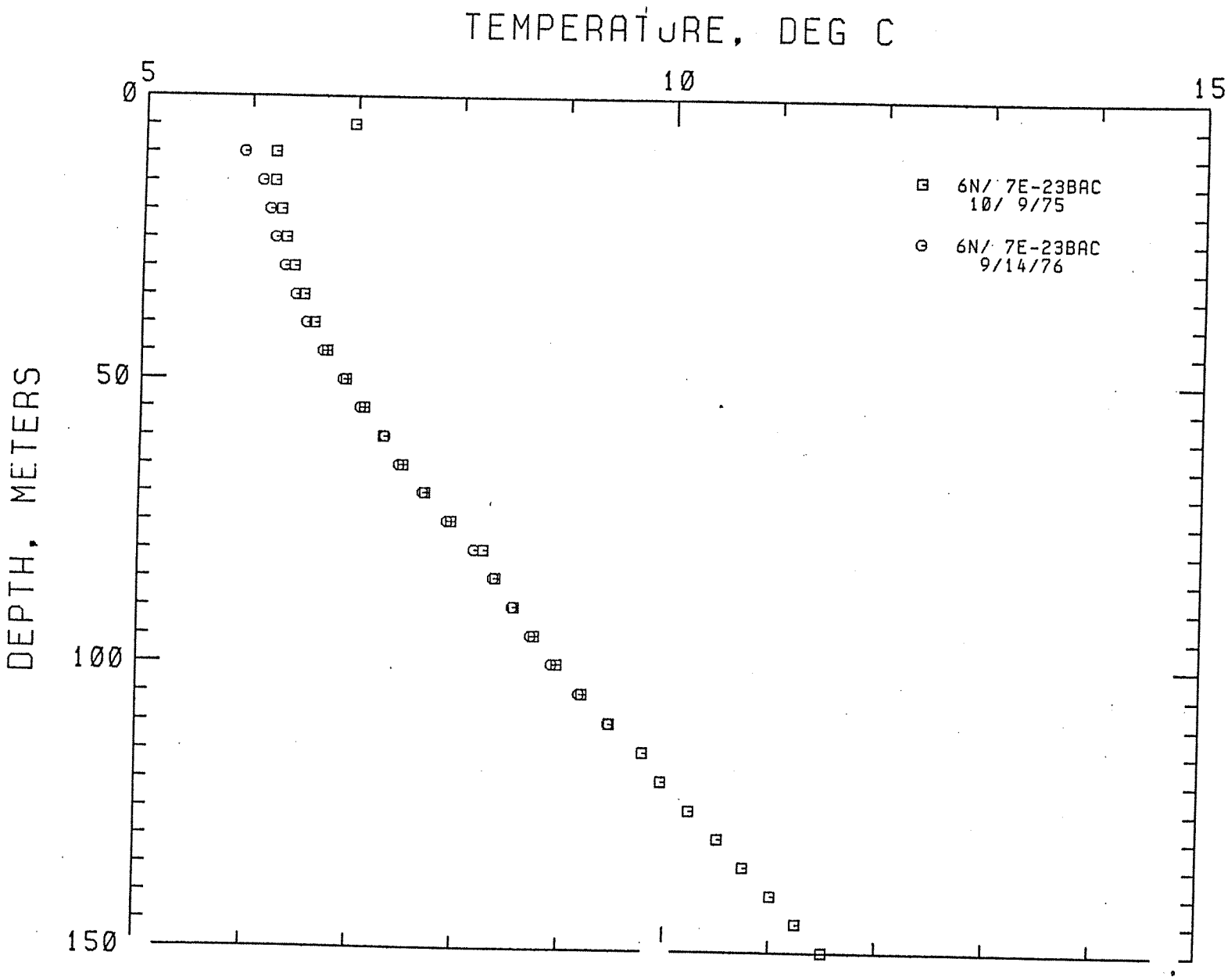

TEMPERATURE, DEG C
10
12
14
16
18
20
0
50
100
150
DEPTH, METERS
7N/46E-13BA
3/ 4/78

LOCATION: THE DALLES AMS, WASH
6N/ 7E-23BAC
HOLE NAME: DGER-5
DATE MEASURED: 10/ 9/75

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	6.970	44.55	0.0	0.0
10.0	32.8	6.230	43.21	-148.0	-8.1
15.0	49.2	6.230	43.21	0.0	0.0
20.0	65.6	6.290	43.32	12.0	0.7
25.0	82.0	6.340	43.41	10.0	0.5
30.0	98.4	6.420	43.56	16.0	0.9
35.0	114.8	6.520	43.74	20.0	1.1
40.0	131.2	6.620	43.92	20.0	1.1
45.0	147.6	6.750	44.15	26.0	1.4
50.0	164.0	6.930	44.47	36.0	2.0
55.0	180.4	7.110	44.80	36.0	2.0
60.0	196.8	7.290	45.12	36.0	2.0
65.0	213.2	7.480	45.46	38.0	2.1
70.0	229.6	7.690	45.84	42.0	2.3
75.0	246.0	7.940	46.29	50.0	2.7
80.0	262.4	8.250	46.85	62.0	3.4
85.0	278.8	8.370	47.07	24.0	1.3
90.0	295.2	8.550	47.39	36.0	2.0
95.0	311.6	8.740	47.73	38.0	2.1
100.0	328.0	8.960	48.13	44.0	2.4
105.0	344.4	9.200	48.56	48.0	2.6
110.0	360.8	9.460	49.03	52.0	2.9
115.0	377.2	9.780	49.60	64.0	3.5
120.0	393.6	9.960	49.93	36.0	2.0
125.0	410.0	10.230	50.41	54.0	3.0
130.0	426.4	10.500	50.90	54.0	3.0
135.0	442.8	10.750	51.35	50.0	2.7
140.0	459.2	11.010	51.82	52.0	2.9
145.0	475.6	11.250	52.25	48.0	2.6
150.0	492.0	11.500	52.70	50.0	2.7

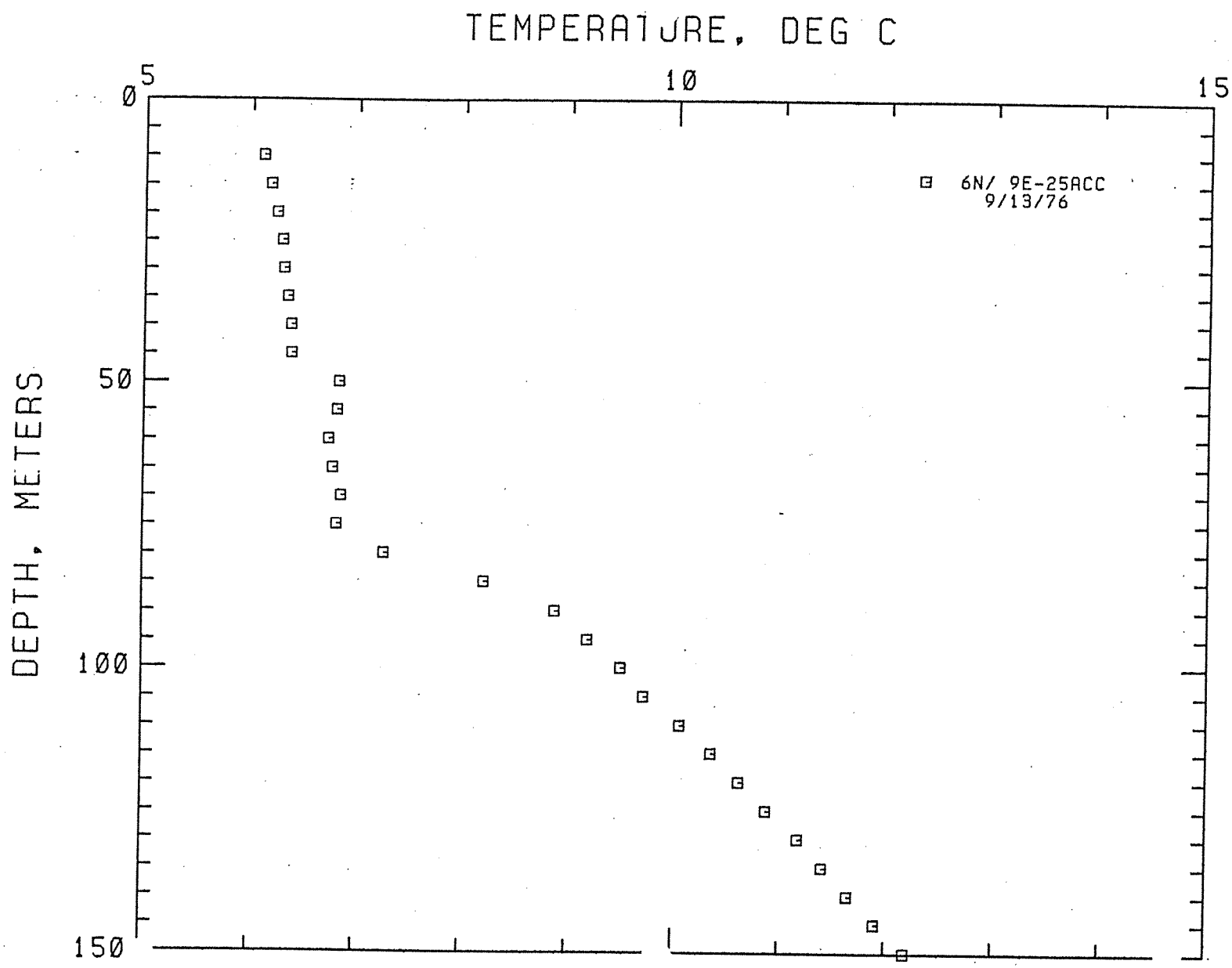
LOCATION: THE DALLES AMS, WASH
6N/ 7E-23BAC
HOLE NAME: DGER-5
DATE MEASURED: 9/14/76

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	5.930	42.67	0.0	0.0
15.0	49.2	6.110	43.00	36.0	2.0
20.0	65.6	6.180	43.12	14.0	0.8
25.0	82.0	6.240	43.23	12.0	0.7
30.0	98.4	6.330	43.39	18.0	1.0
35.0	114.8	6.440	43.59	22.0	1.2
40.0	131.2	6.550	43.79	22.0	1.2
45.0	147.6	6.710	44.08	32.0	1.8
50.0	164.0	6.900	44.42	38.0	2.1
55.0	180.4	7.070	44.73	34.0	1.9
60.0	196.8	7.300	45.14	46.0	2.5
65.0	213.2	7.440	45.39	28.0	1.5
70.0	229.6	7.670	45.81	46.0	2.5
75.0	246.0	7.900	46.22	46.0	2.5
80.0	262.4	8.160	46.69	52.0	2.9
85.0	278.8	8.350	47.03	38.0	2.1
90.0	295.2	8.530	47.35	36.0	2.0
95.0	311.6	8.710	47.68	36.0	2.0
100.0	328.0	8.910	48.04	40.0	2.2
105.0	344.4	9.170	48.51	52.0	2.9
110.0	360.8	9.450	49.01	56.0	3.1


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
6N/ 7E-23BAC
10/ 9/75
6N/ 7E-23BAC
9/14/76

LOCATION: THE DALLES AMS, WASH
6N/ 9E-25ACC
HOLE NAME: DGER-2
DATE MEASURED: 9/13/76

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	6.110	43.00	0.0	0.0
15.0	49.2	6.180	43.12	14.0	0.8
20.0	65.6	6.240	43.23	12.0	0.7
25.0	82.0	6.290	43.32	10.0	0.5
30.0	98.4	6.310	43.36	4.0	0.2
35.0	114.8	6.350	43.43	8.0	0.4
40.0	131.2	6.380	43.48	6.0	0.3
45.0	147.6	6.390	43.50	2.0	0.1
50.0	164.0	6.840	44.31	90.0	4.9
55.0	180.4	6.820	44.28	-4.0	-0.2
60.0	196.8	6.740	44.13	-16.0	-0.9
65.0	213.2	6.780	44.20	8.0	0.4
70.0	229.6	6.860	44.35	16.0	0.9
75.0	246.0	6.820	44.28	-8.0	-0.4
80.0	262.4	7.270	45.09	90.0	4.9
85.0	278.8	8.210	46.78	188.0	10.3
90.0	295.2	8.880	47.98	134.0	7.4
95.0	311.6	9.190	48.54	62.0	3.4
100.0	328.0	9.500	49.10	62.0	3.4
105.0	344.4	9.720	49.50	44.0	2.4
110.0	360.8	10.060	50.11	68.0	3.7
115.0	377.2	10.360	50.65	60.0	3.3
120.0	393.6	10.620	51.12	52.0	2.9
125.0	410.0	10.880	51.58	52.0	2.9
130.0	426.4	11.180	52.12	60.0	3.3
135.0	442.8	11.410	52.54	46.0	2.5
140.0	459.2	11.650	52.97	48.0	2.6
145.0	475.6	11.910	53.44	52.0	2.9
150.0	492.0	12.190	53.94	56.0	3.1

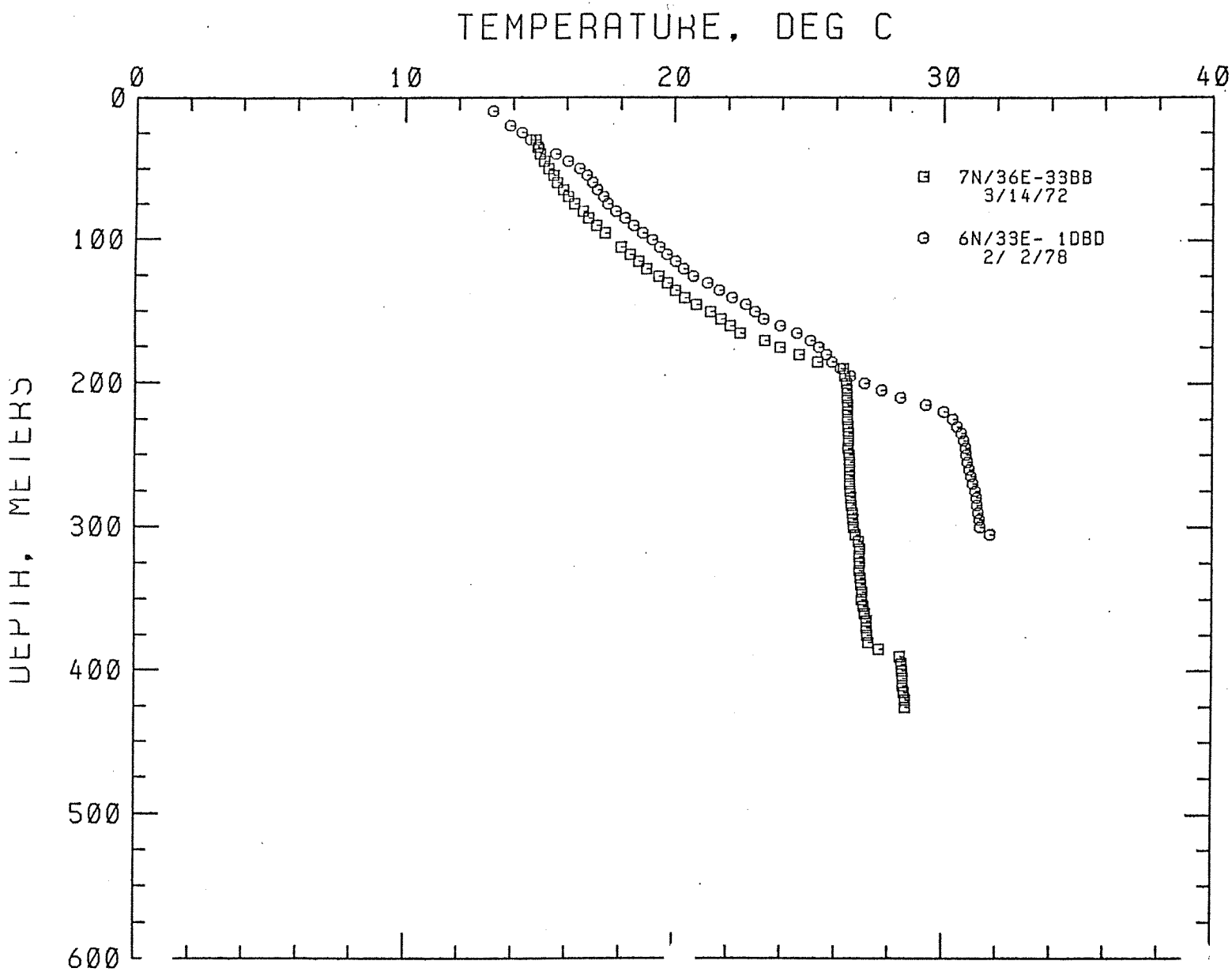

TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
6N/ 9E-25ACC
9/13/76

LOCATION: WALLA WALLA AMS, WASH
6N/33E- 1DBD
HOLE NAME: BRNAMWW
DATE MEASURED: 2/ 2/78

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	13.260	55.87	0.0	0.0
20.0	65.6	13.890	57.00	63.0	3.5
25.0	82.0	14.330	57.79	88.0	4.8
30.0	98.4	14.640	58.35	62.0	3.4
35.0	114.8	14.980	58.96	68.0	3.7
40.0	131.2	15.580	60.04	120.0	6.6
45.0	147.6	16.050	60.89	94.0	5.2
50.0	164.0	16.470	61.65	84.0	4.6
55.0	180.4	16.750	62.15	56.0	3.1
60.0	196.8	16.960	62.53	42.0	2.3
65.0	213.2	17.140	62.85	36.0	2.0
70.0	229.6	17.370	63.27	46.0	2.5
75.0	246.0	17.540	63.57	34.0	1.9
80.0	262.4	17.820	64.08	56.0	3.1
85.0	278.8	18.180	64.72	72.0	4.0
90.0	295.2	18.480	65.26	60.0	3.3
95.0	311.6	18.840	65.91	72.0	4.0
100.0	328.0	19.190	66.54	70.0	3.8
105.0	344.4	19.480	67.06	58.0	3.2
110.0	360.8	19.750	67.55	54.0	3.0
115.0	377.2	20.060	68.11	62.0	3.4
120.0	393.6	20.360	68.65	60.0	3.3
125.0	410.0	20.730	69.31	74.0	4.1
130.0	426.4	21.260	70.27	106.0	5.8
135.0	442.8	21.700	71.06	88.0	4.8
140.0	459.2	22.180	71.92	96.0	5.3
145.0	475.6	22.680	72.82	100.0	5.5
150.0	492.0	23.020	73.44	68.0	3.7
155.0	508.4	23.340	74.01	64.0	3.5
160.0	524.8	23.950	75.11	122.0	6.7
165.0	541.2	24.580	76.24	126.0	6.9
170.0	557.6	25.070	77.13	98.0	5.4
175.0	574.0	25.390	77.70	64.0	3.5
180.0	590.4	25.660	78.19	54.0	3.0
185.0	606.8	25.880	78.58	44.0	2.4
190.0	623.2	26.190	79.14	62.0	3.4
195.0	639.6	26.560	79.81	74.0	4.1
200.0	656.0	27.080	80.74	104.0	5.7
205.0	672.4	27.730	81.91	130.0	7.1
210.0	688.8	28.430	83.17	140.0	7.7
215.0	705.2	29.380	84.88	190.0	10.4
220.0	721.6	30.040	86.07	132.0	7.2

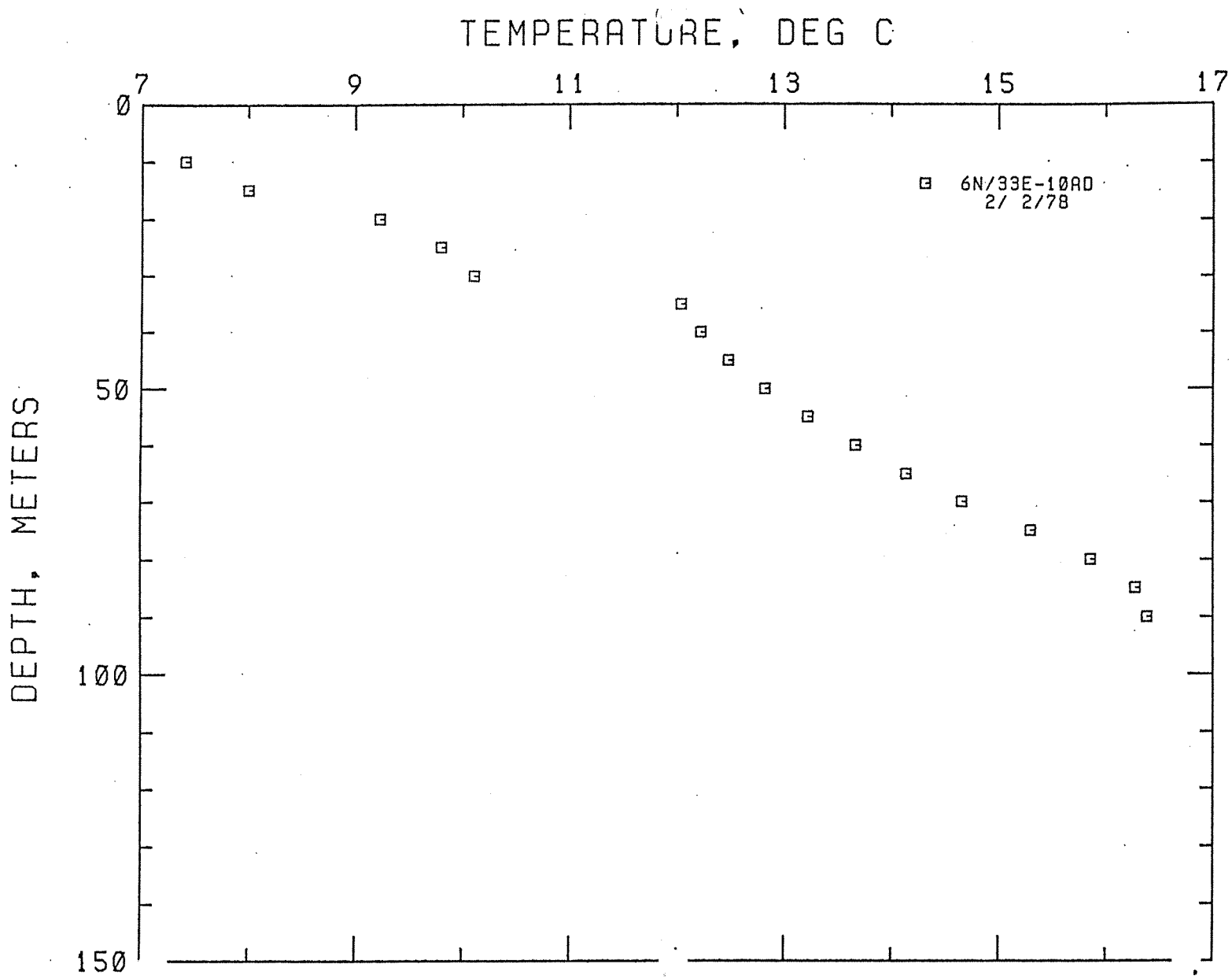
LOCATION: WALLA WALLA AMS, WASH
6N/33E- 1DBD
HOLE NAME: BRNAMWW
DATE MEASURED: 2/ 2/78

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
225.0	738.0	30.370	86.67	66.0	3.6
230.0	754.4	30.530	86.95	32.0	1.8
235.0	770.8	30.700	87.26	34.0	1.9
240.0	787.2	30.780	87.40	16.0	0.9
245.0	803.6	30.860	87.55	16.0	0.9
250.0	820.0	30.890	87.60	6.0	0.3
255.0	836.4	30.930	87.67	8.0	0.4
260.0	852.8	30.990	87.78	12.0	0.7
265.0	869.2	31.060	87.91	14.0	0.8
270.0	885.6	31.140	88.05	16.0	0.9
275.0	902.0	31.220	88.20	16.0	0.9
280.0	918.4	31.270	88.29	10.0	0.5
285.0	934.8	31.300	88.34	6.0	0.3
290.0	951.2	31.330	88.39	6.0	0.3
295.0	967.6	31.380	88.48	10.0	0.5
300.0	984.0	31.400	88.52	4.0	0.2
305.0	1000.4	31.780	89.20	76.0	4.2


TEMPERATURE, DEG C
0
10
20
30
40
DEPTH, METERS
0
100
200
300
400
500
600
7N/36E-33BB
3/14/72
6N/33E- 1DBD
2/ 2/78

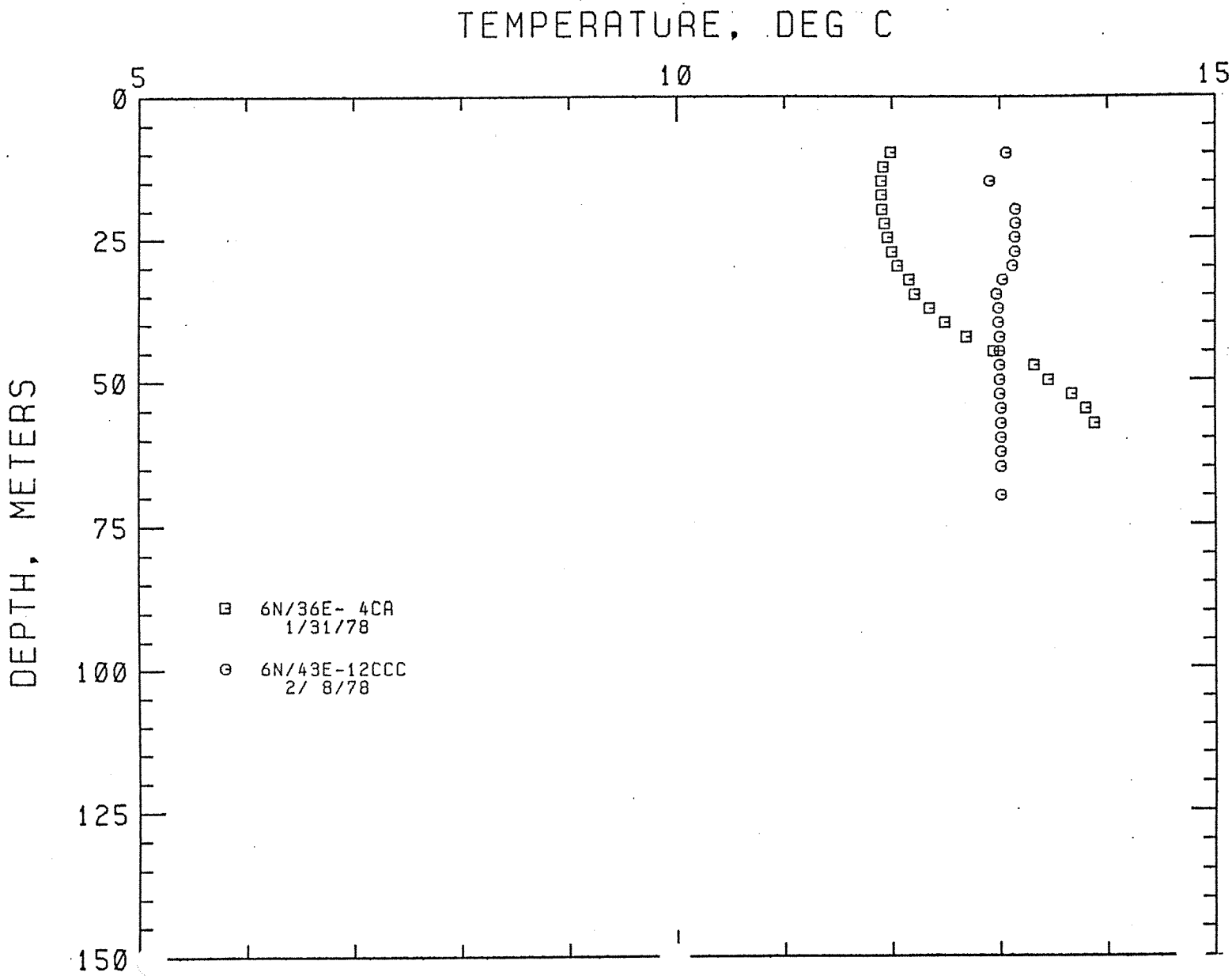
LOCATION: WALLA WALLA AMS, WASH
6N/33E-10AD
HOLE NAME: GARDNAWW
DATE MEASURED: 2/ 2/78

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	7.410	45.34	0.0	0.0
15.0	49.2	8.000	46.40	118.0	6.5
20.0	65.6	9.230	48.61	246.0	13.5
25.0	82.0	9.800	49.64	114.0	6.3
30.0	98.4	10.110	50.20	62.0	3.4
35.0	114.8	12.040	53.67	386.0	21.2
40.0	131.2	12.220	54.00	36.0	2.0
45.0	147.6	12.480	54.46	52.0	2.9
50.0	164.0	12.820	55.08	68.0	3.7
55.0	180.4	13.220	55.80	80.0	4.4
60.0	196.8	13.670	56.61	90.0	4.9
65.0	213.2	14.140	57.45	94.0	5.2
70.0	229.6	14.660	58.39	104.0	5.7
75.0	246.0	15.300	59.54	128.0	7.0
80.0	262.4	15.860	60.55	112.0	6.1
85.0	278.8	16.280	61.30	84.0	4.6
90.0	295.2	16.390	61.50	22.0	1.2


TEMPERATURE, DEG C
7
9
11
13
15
17
0
50
100
150
DEPTH, METERS
6N/33E-10AD
2/ 2/78

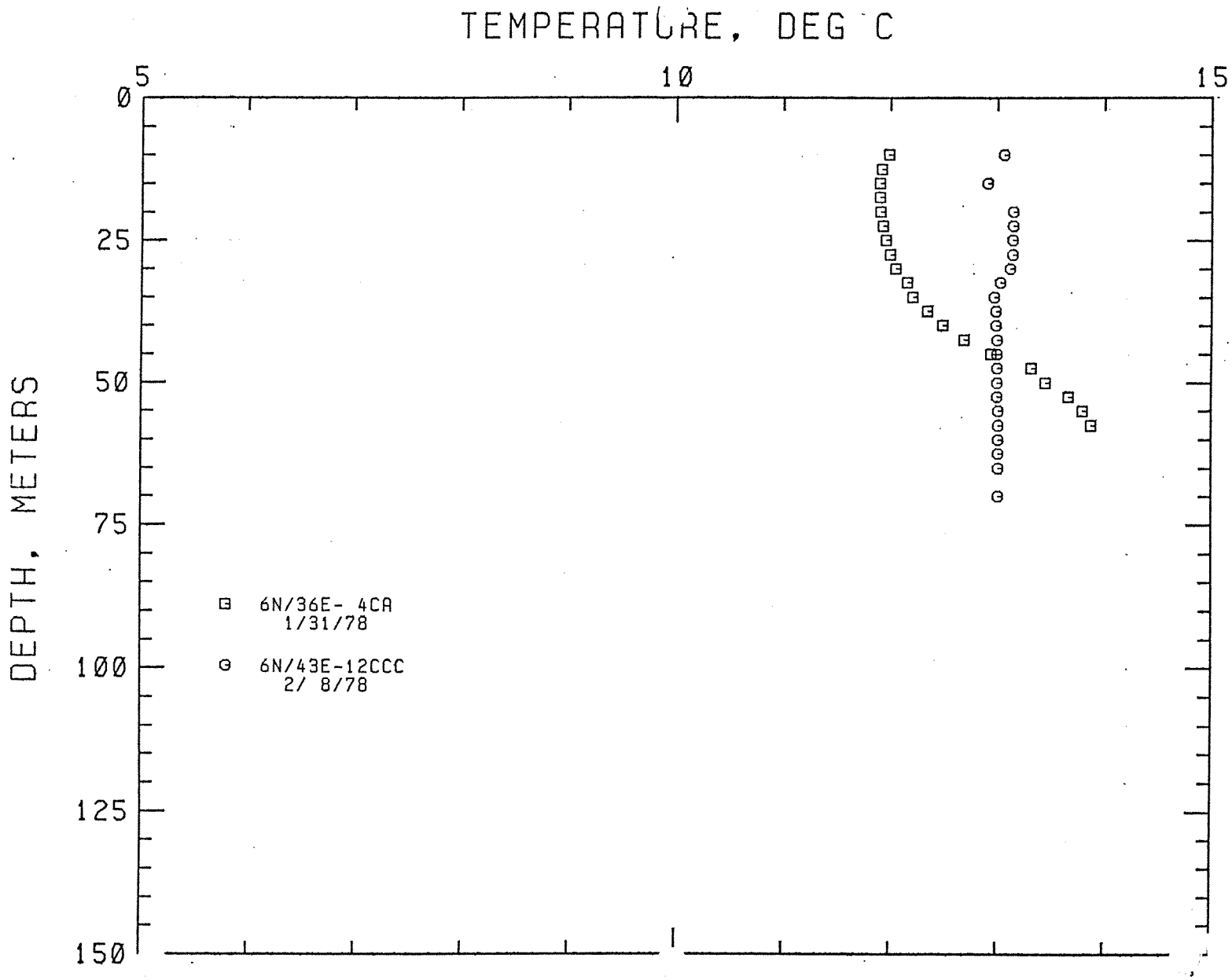
LOCATION: WALLA WALLA AMS, WASH
6N/36E- 4CA
HOLE NAME: HILLRDWW
DATE MEASURED: 1/31/78

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	11.990	53.58	0.0	0.0
12.5	41.0	11.920	53.46	-28.0	-1.5
15.0	49.2	11.900	53.42	-8.0	-0.4
17.5	57.4	11.900	53.42	0.0	0.0
20.0	65.6	11.910	53.44	4.0	0.2
22.5	73.8	11.930	53.47	8.0	0.4
25.0	82.0	11.960	53.53	12.0	0.7
27.5	90.2	12.000	53.60	16.0	0.9
30.0	98.4	12.050	53.69	20.0	1.1
32.5	106.6	12.160	53.89	44.0	2.4
35.0	114.8	12.210	53.98	20.0	1.1
37.5	123.0	12.350	54.23	56.0	3.1
40.0	131.2	12.490	54.48	56.0	3.1
42.5	139.4	12.690	54.84	80.0	4.4
45.0	147.6	12.940	55.29	100.0	5.5
47.5	155.8	13.320	55.98	152.0	8.3
50.0	164.0	13.450	56.21	52.0	2.9
52.5	172.2	13.670	56.61	88.0	4.8
55.0	180.4	13.800	56.84	52.0	2.9
57.5	188.6	13.880	56.98	32.0	1.8


TEMPERATURE, DEG C
5
10
15
DEPTH, METERS
0
25
50
75
100
125
150
6N/36E- 4CA
1/31/78
6N/43E-12CCC
2/ 8/78

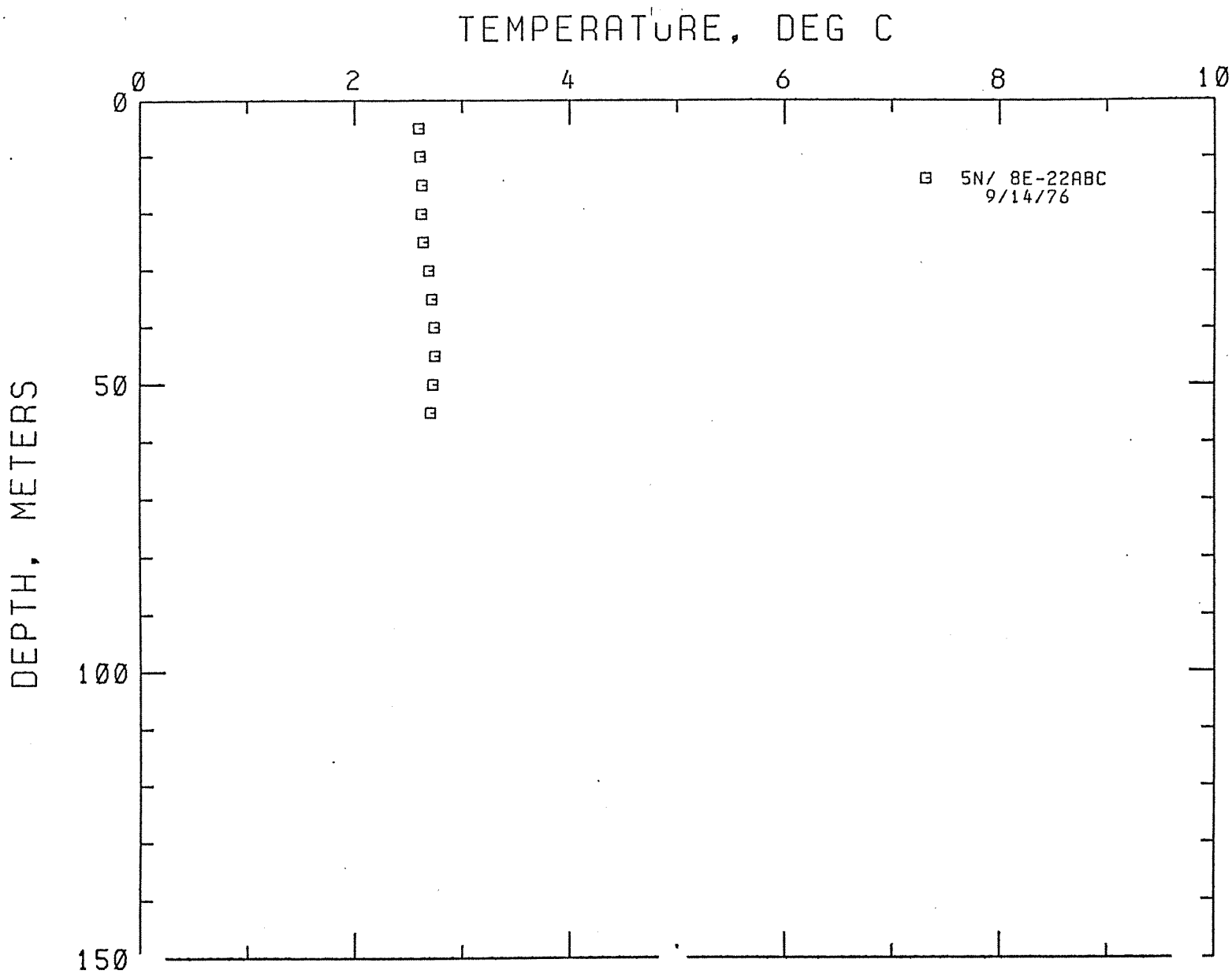
LOCATION: WALLA WALLA AMS, WASH
6N/43E-12CCC
HOLE NAME: FROG-WW
DATE MEASURED: 2/ 8/78

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	13.060	55.51	0.0	0.0
15.0	49.2	12.910	55.24	-30.0	-1.6
20.0	65.6	13.150	55.67	48.0	2.6
22.5	73.8	13.150	55.67	0.0	0.0
25.0	82.0	13.140	55.65	-4.0	-0.2
27.5	90.2	13.140	55.65	0.0	0.0
30.0	98.4	13.120	55.62	-8.0	-0.4
32.5	106.6	13.030	55.45	-36.0	-2.0
35.0	114.8	12.970	55.35	-24.0	-1.3
37.5	123.0	12.990	55.38	8.0	0.4
40.0	131.2	12.990	55.38	0.0	0.0
42.5	139.4	13.000	55.40	4.0	0.2
45.0	147.6	13.000	55.40	0.0	0.0
47.5	155.8	13.000	55.40	0.0	0.0
50.0	164.0	13.000	55.40	0.0	0.0
52.5	172.2	13.000	55.40	0.0	0.0
55.0	180.4	13.010	55.42	4.0	0.2
57.5	188.6	13.010	55.42	0.0	0.0
60.0	196.8	13.010	55.42	0.0	0.0
62.5	205.0	13.010	55.42	0.0	0.0
65.0	213.2	13.010	55.42	0.0	0.0
70.0	229.6	13.010	55.42	0.0	0.0


TEMPERATURE, DEG C
5
10
15
0
25
50
75
100
125
150
DEPTH, METERS
6N/36E- 4CA
1/31/78
6N/43E-12CCC
2/ 8/78

LOCATION: THE DALLES AMS, OREGON
5N/ 8E-22ABC
HOLE NAME: DGER-6
DATE MEASURED: 9/14/76

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	2.600	36.68	0.0	0.0
10.0	32.8	2.610	36.70	2.0	0.1
15.0	49.2	2.630	36.73	4.0	0.2
20.0	65.6	2.620	36.72	-2.0	-0.1
25.0	82.0	2.640	36.75	4.0	0.2
30.0	98.4	2.690	36.84	10.0	0.5
35.0	114.8	2.720	36.90	6.0	0.3
40.0	131.2	2.740	36.93	4.0	0.2
45.0	147.6	2.750	36.95	2.0	0.1
50.0	164.0	2.730	36.91	-4.0	-0.2
55.0	180.4	2.710	36.88	-4.0	-0.2

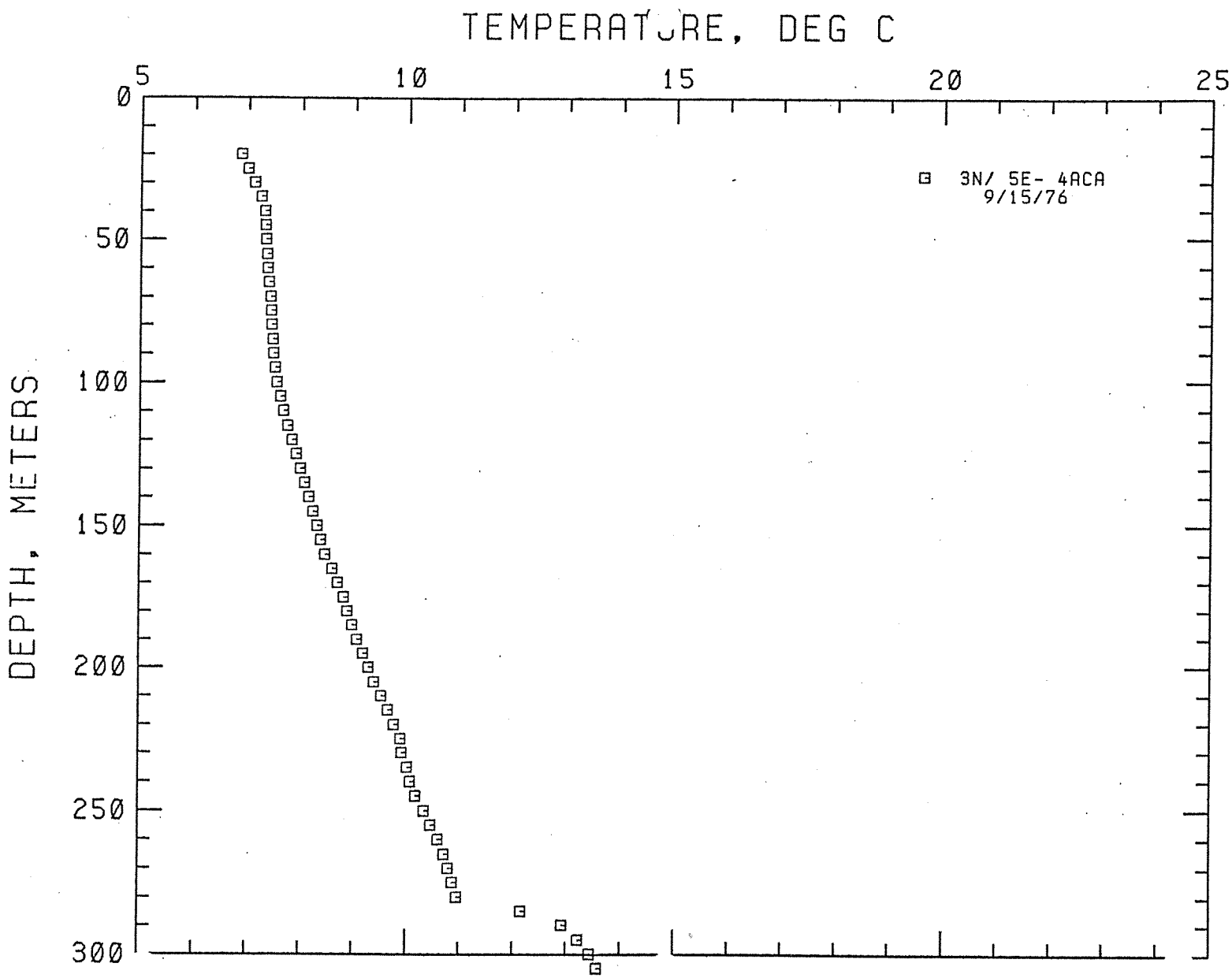

TEMPERATURE, DEG C
0
2
4
6
8
10
DEPTH, METERS
0
50
100
150
5N/ 8E-22ABC
9/14/76

LOCATION: VANCOUVER AMS, WASH
3N/ 5E- 4ACA
HOLE NAME: SS-21
DATE MEASURED: 9/15/76

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	6.870	44.37	0.0	0.0
25.0	82.0	7.000	44.60	26.0	1.4
30.0	98.4	7.120	44.82	24.0	1.3
35.0	114.8	7.250	45.05	26.0	1.4
40.0	131.2	7.320	45.18	14.0	0.8
45.0	147.6	7.330	45.19	2.0	0.1
50.0	164.0	7.340	45.21	2.0	0.1
55.0	180.4	7.370	45.27	6.0	0.3
60.0	196.8	7.380	45.28	2.0	0.1
65.0	213.2	7.400	45.32	4.0	0.2
70.0	229.6	7.430	45.37	6.0	0.3
75.0	246.0	7.450	45.41	4.0	0.2
80.0	262.4	7.460	45.43	2.0	0.1
85.0	278.8	7.480	45.46	4.0	0.2
90.0	295.2	7.490	45.48	2.0	0.1
95.0	311.6	7.520	45.54	6.0	0.3
100.0	328.0	7.560	45.61	8.0	0.4
105.0	344.4	7.630	45.73	14.0	0.8
110.0	360.8	7.680	45.82	10.0	0.5
115.0	377.2	7.760	45.97	16.0	0.9
120.0	393.6	7.840	46.11	16.0	0.9
125.0	410.0	7.930	46.27	18.0	1.0
130.0	426.4	8.000	46.40	14.0	0.8
135.0	442.8	8.080	46.54	16.0	0.9
140.0	459.2	8.170	46.71	18.0	1.0
145.0	475.6	8.250	46.85	16.0	0.9
150.0	492.0	8.330	46.99	16.0	0.9
155.0	508.4	8.390	47.10	12.0	0.7
160.0	524.8	8.470	47.25	16.0	0.9
165.0	541.2	8.610	47.50	28.0	1.5
170.0	557.6	8.710	47.68	20.0	1.1
175.0	574.0	8.830	47.89	24.0	1.3
180.0	590.4	8.900	48.02	14.0	0.8
185.0	606.8	8.990	48.18	18.0	1.0
190.0	623.2	9.080	48.34	18.0	1.0
195.0	639.6	9.190	48.54	22.0	1.2
200.0	656.0	9.300	48.74	22.0	1.2
205.0	672.4	9.400	48.92	20.0	1.1
210.0	688.8	9.540	49.17	28.0	1.5
215.0	705.2	9.660	49.39	24.0	1.3
220.0	721.6	9.780	49.60	24.0	1.3

LOCATION: VANCOUVER AMS, WASH
3N/ 5E- 4ACA
HOLE NAME: SS-21
DATE MEASURED: 9/15/76

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
225.0	738.0	9.900	49.82	24.0	1.3
230.0	754.4	9.930	49.87	6.0	0.3
235.0	770.8	10.030	50.05	20.0	1.1
240.0	787.2	10.080	50.14	10.0	0.5
245.0	803.6	10.190	50.34	22.0	1.2
250.0	820.0	10.350	50.63	32.0	1.8
255.0	836.4	10.470	50.85	24.0	1.3
260.0	852.8	10.610	51.10	28.0	1.5
265.0	869.2	10.730	51.31	24.0	1.3
270.0	885.6	10.800	51.44	14.0	0.8
275.0	902.0	10.890	51.60	18.0	1.0
280.0	918.4	10.970	51.75	16.0	0.9
285.0	934.8	12.170	53.91	240.0	13.2
290.0	951.2	12.930	55.27	152.0	8.3
295.0	967.6	13.230	55.81	60.0	3.3
300.0	984.0	13.440	56.19	42.0	2.3
305.0	1000.4	13.580	56.44	28.0	1.5


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
3N/ 5E- 4ACA
9/15/76

LOCATION: VANCOUVER AMS., WASH
3N/ 5E- 4ACB
HOLE NAME: SS-23
DATE MEASURED: 9/15/76

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
15.0	49.2	6.880	44.38	0.0	0.0
20.0	65.6	6.990	44.58	22.0	1.2
25.0	82.0	7.080	44.74	18.0	1.0
30.0	98.4	7.130	44.83	10.0	0.5
35.0	114.8	7.190	44.94	12.0	0.7
40.0	131.2	7.280	45.10	18.0	1.0
45.0	147.6	7.360	45.25	16.0	0.9
50.0	164.0	7.420	45.36	12.0	0.7
55.0	180.4	7.490	45.48	14.0	0.8
60.0	196.8	7.570	45.63	16.0	0.9
65.0	213.2	7.650	45.77	16.0	0.9
70.0	229.6	7.720	45.90	14.0	0.8
75.0	246.0	7.810	46.06	18.0	1.0
80.0	262.4	7.910	46.24	20.0	1.1
85.0	278.8	7.990	46.38	16.0	0.9
90.0	295.2	8.150	46.67	32.0	1.8
95.0	311.6	8.230	46.81	16.0	0.9
100.0	328.0	8.300	46.94	14.0	0.8
105.0	344.4	8.360	47.05	12.0	0.7
110.0	360.8	8.430	47.17	14.0	0.8
115.0	377.2	8.510	47.32	16.0	0.9
120.0	393.6	8.590	47.46	16.0	0.9
125.0	410.0	8.680	47.62	18.0	1.0
130.0	426.4	8.770	47.79	18.0	1.0
135.0	442.8	8.880	47.98	22.0	1.2
140.0	459.2	8.960	48.13	16.0	0.9
145.0	475.6	9.070	48.33	22.0	1.2
150.0	492.0	9.160	48.49	18.0	1.0
155.0	508.4	9.280	48.70	24.0	1.3
160.0	524.8	9.380	48.88	20.0	1.1
165.0	541.2	9.500	49.10	24.0	1.3
170.0	557.6	9.610	49.30	22.0	1.2
175.0	574.0	9.740	49.53	26.0	1.4
180.0	590.4	9.850	49.73	22.0	1.2
185.0	606.8	9.970	49.95	24.0	1.3
190.0	623.2	10.080	50.14	22.0	1.2
195.0	639.6	10.210	50.38	26.0	1.4
200.0	656.0	10.330	50.59	24.0	1.3
205.0	672.4	10.440	50.79	22.0	1.2
210.0	688.8	10.590	51.06	30.0	1.6
215.0	705.2	10.720	51.30	26.0	1.4
220.0	721.6	10.840	51.51	24.0	1.3

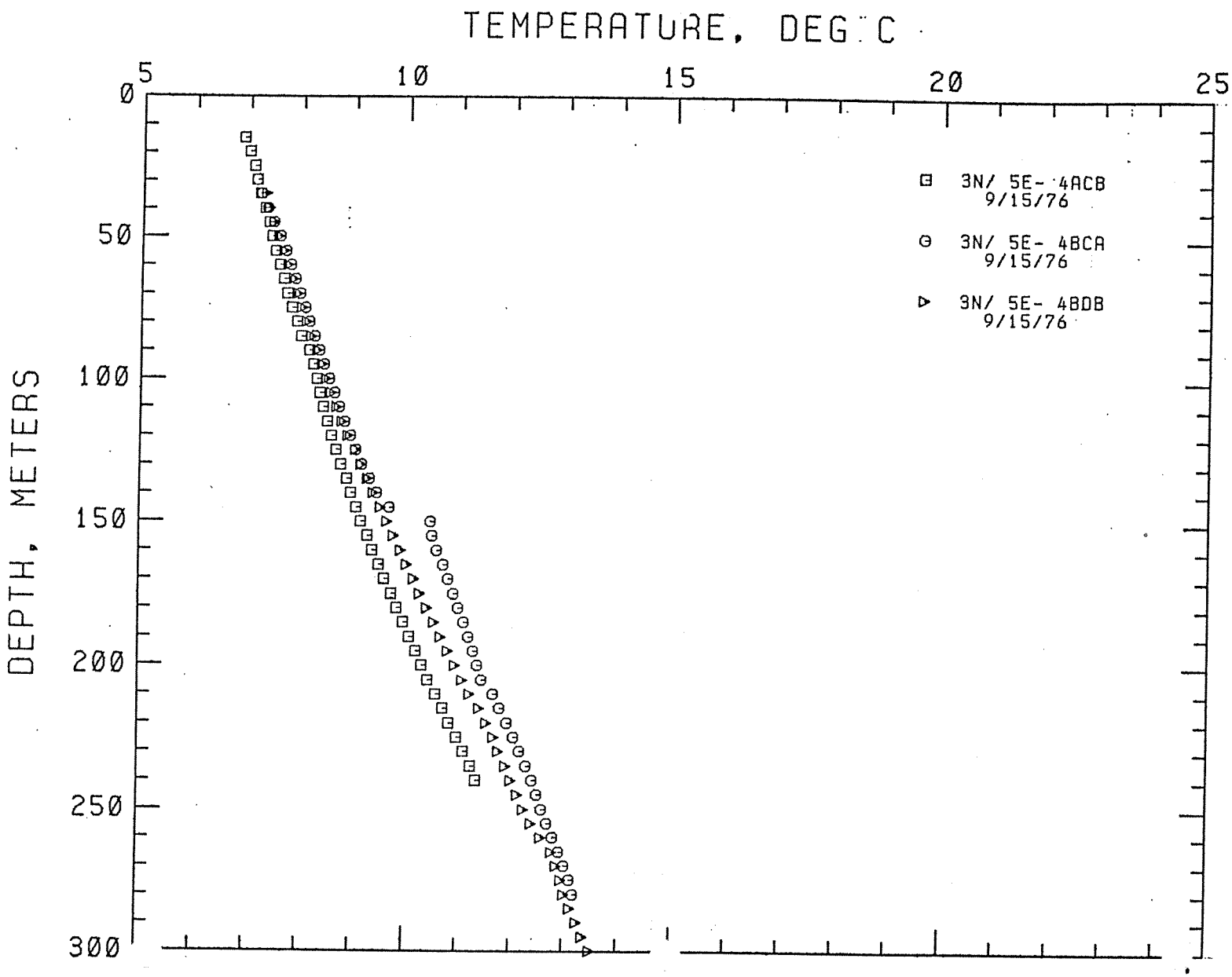
LOCATION: VANCOUVER AMS, WASH

3N/ 5E- 4ACB

HOLE NAME: SS-23

DATE MEASURED: 9/15/76

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
225.0	738.0	10.990	51.78	30.0	1.6
230.0	754.4	11.110	52.00	24.0	1.3
235.0	770.8	11.250	52.25	28.0	1.5
240.0	787.2	11.350	52.43	20.0	1.1


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
3N/ 5E- 4ACB
9/15/76
3N/ 5E- 4BCA
9/15/76
3N/ 5E- 4BDB
9/15/76

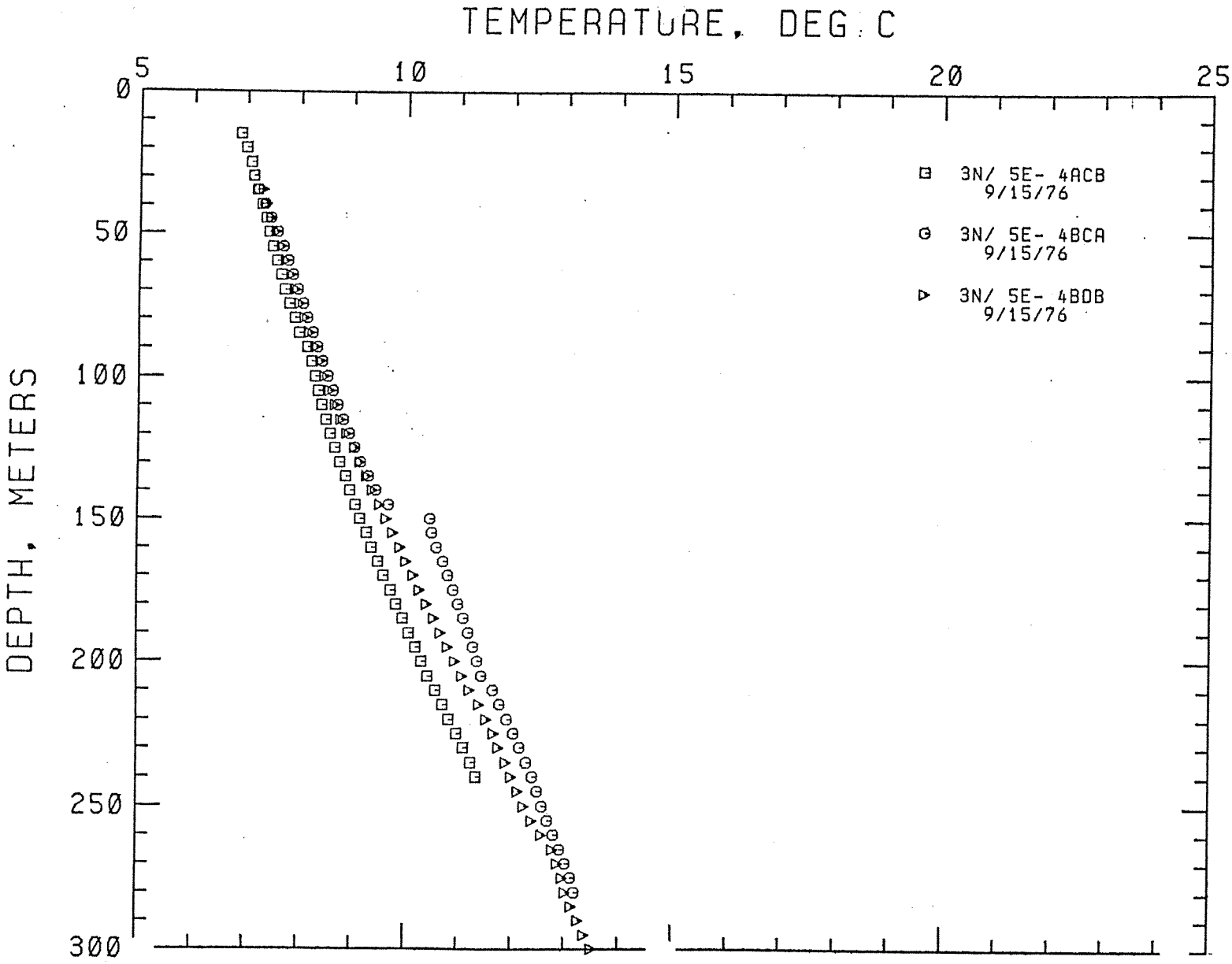
LOCATION: VANCOUVER AMS, WASH
3N/ 5E- 4BCA
HOLE NAME: SS-18
DATE MEASURED: 9/15/76

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	7.120	44.82	0.0	0.0
35.0	114.8	7.220	45.00	20.0	1.1
40.0	131.2	7.330	45.19	22.0	1.2
45.0	147.6	7.450	45.41	24.0	1.3
50.0	164.0	7.570	45.63	24.0	1.3
55.0	180.4	7.680	45.82	22.0	1.2
60.0	196.8	7.780	46.00	20.0	1.1
65.0	213.2	7.870	46.17	18.0	1.0
70.0	229.6	7.960	46.33	18.0	1.0
75.0	246.0	8.060	46.51	20.0	1.1
80.0	262.4	8.140	46.65	16.0	0.9
85.0	278.8	8.250	46.85	22.0	1.2
90.0	295.2	8.340	47.01	18.0	1.0
95.0	311.6	8.430	47.17	18.0	1.0
100.0	328.0	8.530	47.35	20.0	1.1
105.0	344.4	8.630	47.53	20.0	1.1
110.0	360.8	8.730	47.71	20.0	1.1
115.0	377.2	8.830	47.89	20.0	1.1
120.0	393.6	8.940	48.09	22.0	1.2
125.0	410.0	9.050	48.29	22.0	1.2
130.0	426.4	9.160	48.49	22.0	1.2
135.0	442.8	9.310	48.76	30.0	1.6
140.0	459.2	9.450	49.01	28.0	1.5
145.0	475.6	9.690	49.44	48.0	2.6
150.0	492.0	10.460	50.83	154.0	8.5
155.0	508.4	10.500	50.90	8.0	0.4
160.0	524.8	10.590	51.06	18.0	1.0
165.0	541.2	10.710	51.28	24.0	1.3
170.0	557.6	10.800	51.44	18.0	1.0
175.0	574.0	10.910	51.64	22.0	1.2
180.0	590.4	11.000	51.80	18.0	1.0
185.0	606.8	11.100	51.98	20.0	1.1
190.0	623.2	11.190	52.14	18.0	1.0
195.0	639.6	11.280	52.30	18.0	1.0
200.0	656.0	11.360	52.45	16.0	0.9
205.0	672.4	11.440	52.59	16.0	0.9
210.0	688.8	11.660	52.99	44.0	2.4
215.0	705.2	11.790	53.22	26.0	1.4
220.0	721.6	11.920	53.46	26.0	1.4
225.0	738.0	12.050	53.69	26.0	1.4
230.0	754.4	12.160	53.89	22.0	1.2
235.0	770.8	12.290	54.12	26.0	1.4

LOCATION: VANCOUVER AMS, WASH
3N/ 5E- 4BCA

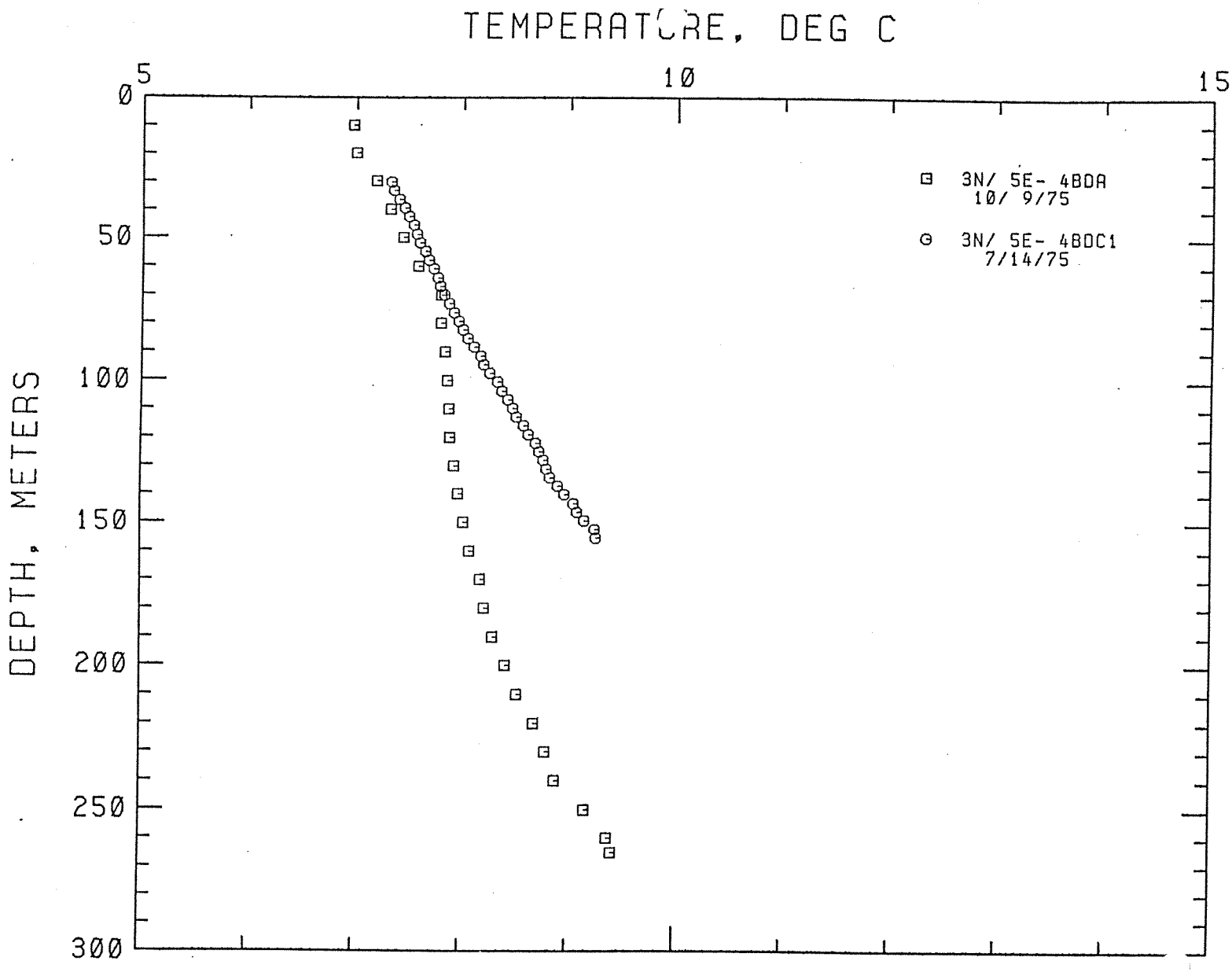
HOLE NAME: SS-18
DATE MEASURED: 9/15/76

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
240.0	787.2	12.410	54.34	24.0	1.3
245.0	803.6	12.500	54.50	18.0	1.0
250.0	820.0	12.590	54.66	18.0	1.0
255.0	836.4	12.690	54.84	20.0	1.1
260.0	852.8	12.810	55.06	24.0	1.3
265.0	869.2	12.920	55.26	22.0	1.2
270.0	885.6	13.020	55.44	20.0	1.1
275.0	902.0	13.120	55.62	20.0	1.1
280.0	918.4	13.190	55.74	14.0	0.8


TEMPERATURE, DEG.C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
3N/ 5E- 4ACB
9/15/76
3N/ 5E- 4BCA
9/15/76
3N/ 5E- 4BDB
9/15/76

LOCATION: VANCOUVER AMS, WASH
3N/ 5E- 4BDA
HOLE NAME: SS-8
DATE MEASURED: 10/ 9/75

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	6.970	44.55	0.0	0.0
20.0	65.6	7.000	44.60	3.0	0.2
30.0	98.4	7.190	44.94	19.0	1.0
40.0	131.2	7.320	45.18	13.0	0.7
50.0	164.0	7.440	45.39	12.0	0.7
60.0	196.8	7.580	45.64	14.0	0.8
70.0	229.6	7.800	46.04	22.0	1.2
80.0	262.4	7.800	46.04	0.0	0.0
90.0	295.2	7.840	46.11	4.0	0.2
100.0	328.0	7.860	46.15	2.0	0.1
110.0	360.8	7.880	46.18	2.0	0.1
120.0	393.6	7.890	46.20	1.0	0.1
130.0	426.4	7.930	46.27	4.0	0.2
140.0	459.2	7.970	46.35	4.0	0.2
150.0	492.0	8.020	46.44	5.0	0.3
160.0	524.8	8.080	46.54	6.0	0.3
170.0	557.6	8.180	46.72	10.0	0.5
180.0	590.4	8.220	46.80	4.0	0.2
190.0	623.2	8.300	46.94	8.0	0.4
200.0	656.0	8.420	47.16	12.0	0.7
210.0	688.8	8.530	47.35	11.0	0.6
220.0	721.6	8.690	47.64	16.0	0.9
230.0	754.4	8.800	47.84	11.0	0.6
240.0	787.2	8.890	48.00	9.0	0.5
250.0	820.0	9.170	48.51	28.0	1.5
260.0	852.8	9.380	48.88	21.0	1.2
265.0	869.2	9.420	48.96	8.0	0.4


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
200
250
300
3N/ 5E- 4BDA
10/ 9/75
3N/ 5E- 4BDC1
7/14/75

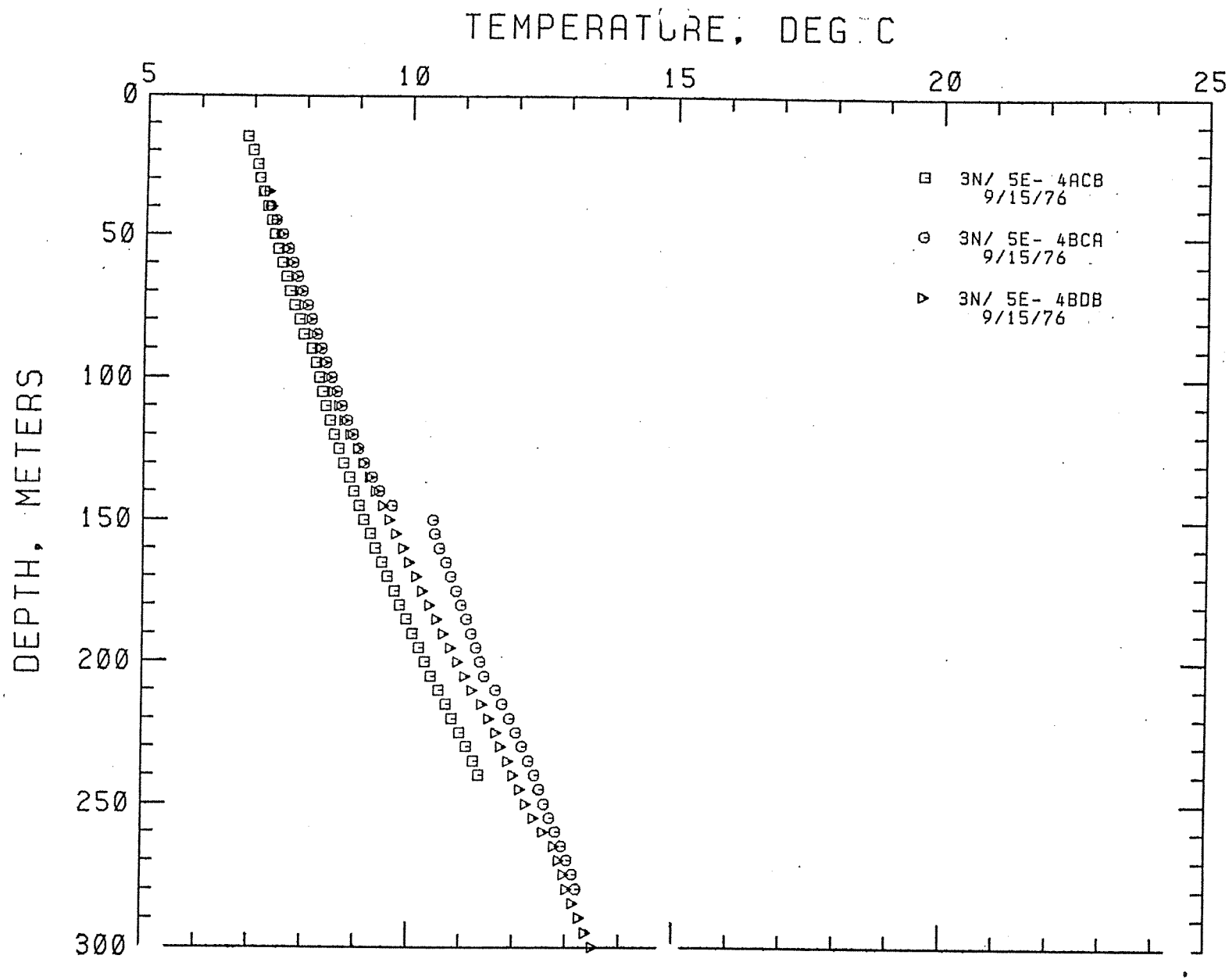
LOCATION: VANCOUVER AMS, WASH
3N/ 5E- 4BDB
HOLE NAME: SS-20
DATE MEASURED: 9/15/76

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	7.310	45.16	0.0	0.0
40.0	131.2	7.370	45.27	12.0	0.7
45.0	147.6	7.460	45.43	18.0	1.0
50.0	164.0	7.550	45.59	18.0	1.0
55.0	180.4	7.650	45.77	20.0	1.1
60.0	196.8	7.730	45.91	16.0	0.9
65.0	213.2	7.830	46.09	20.0	1.1
70.0	229.6	7.920	46.26	18.0	1.0
75.0	246.0	8.010	46.42	18.0	1.0
80.0	262.4	8.100	46.58	18.0	1.0
85.0	278.8	8.190	46.74	18.0	1.0
90.0	295.2	8.300	46.94	22.0	1.2
95.0	311.6	8.390	47.10	18.0	1.0
100.0	328.0	8.470	47.25	16.0	0.9
105.0	344.4	8.580	47.44	22.0	1.2
110.0	360.8	8.680	47.62	20.0	1.1
115.0	377.2	8.780	47.80	20.0	1.1
120.0	393.6	8.900	48.02	24.0	1.3
125.0	410.0	9.040	48.27	28.0	1.5
130.0	426.4	9.150	48.47	22.0	1.2
135.0	442.8	9.270	48.69	24.0	1.3
140.0	459.2	9.390	48.90	24.0	1.3
145.0	475.6	9.520	49.14	26.0	1.4
150.0	492.0	9.650	49.37	26.0	1.4
155.0	508.4	9.780	49.60	26.0	1.4
160.0	524.8	9.910	49.84	26.0	1.4
165.0	541.2	10.030	50.05	24.0	1.3
170.0	557.6	10.160	50.29	26.0	1.4
175.0	574.0	10.280	50.50	24.0	1.3
180.0	590.4	10.420	50.76	28.0	1.5
185.0	606.8	10.550	50.99	26.0	1.4
190.0	623.2	10.680	51.22	26.0	1.4
195.0	639.6	10.820	51.48	28.0	1.5
200.0	656.0	10.950	51.71	26.0	1.4
205.0	672.4	11.090	51.96	28.0	1.5
210.0	688.8	11.230	52.21	28.0	1.5
215.0	705.2	11.410	52.54	36.0	2.0
220.0	721.6	11.550	52.79	28.0	1.5
225.0	738.0	11.680	53.02	26.0	1.4
230.0	754.4	11.780	53.20	20.0	1.1
235.0	770.8	11.910	53.44	26.0	1.4
240.0	787.2	12.020	53.64	22.0	1.2

LOCATION: VANCOUVER AMS, WASH
3N/ 5E- 4BDB

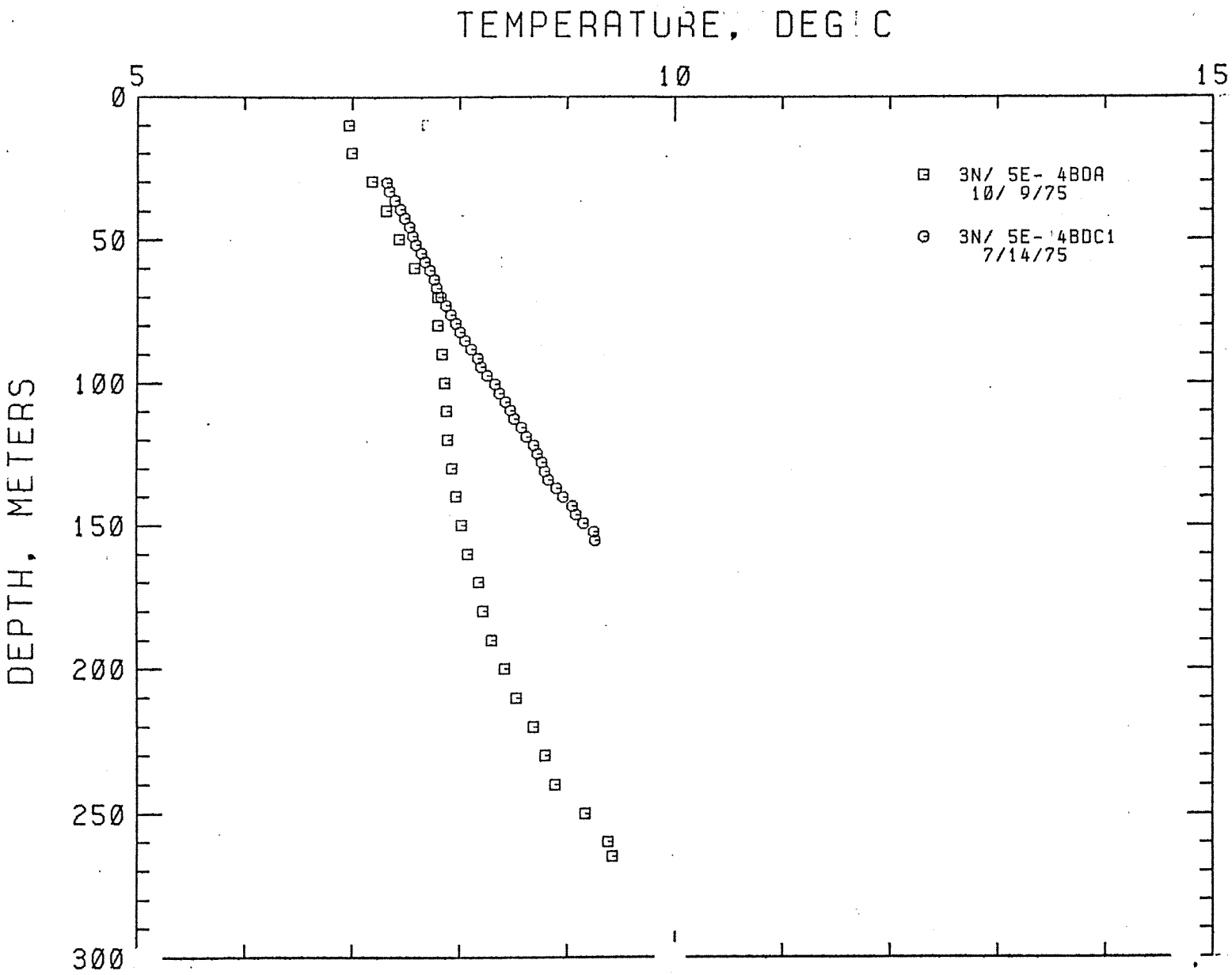
HOLE NAME: SS-20
DATE MEASURED: 9/15/76

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
245.0	803.6	12.140	53.85	24.0	1.3
250.0	820.0	12.260	54.07	24.0	1.3
255.0	836.4	12.400	54.32	28.0	1.5
260.0	852.8	12.590	54.66	38.0	2.1
265.0	869.2	12.790	55.02	40.0	2.2
270.0	885.6	12.890	55.20	20.0	1.1
275.0	902.0	12.980	55.36	18.0	1.0
280.0	918.4	13.030	55.45	10.0	0.5
285.0	934.8	13.150	55.67	24.0	1.3
290.0	951.2	13.270	55.89	24.0	1.3
295.0	967.6	13.390	56.10	24.0	1.3
300.0	984.0	13.520	56.34	26.0	1.4


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
3N/ 5E- 4ACB
9/15/76
3N/ 5E- 4BCA
9/15/76
3N/ 5E- 4BDB
9/15/76

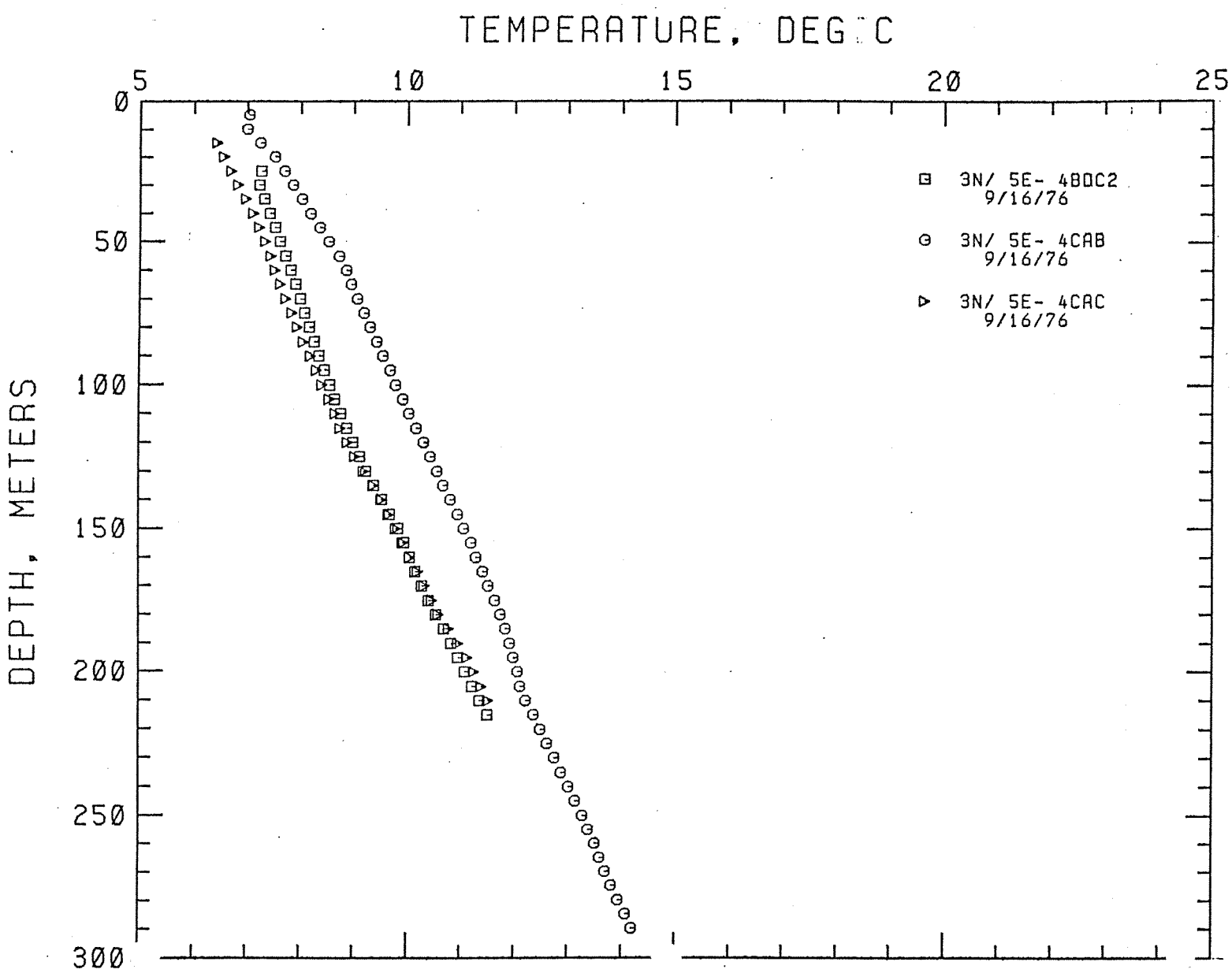
LOCATION: VANCOUVER AMS, WASH
3N/ 5E- 4BDC1
HOLE NAME: SS-4
DATE MEASURED: 7/14/75

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
30.5	100.0	7.327	45.19	0.0	0.0
33.5	110.0	7.351	45.23	7.9	0.4
36.6	120.0	7.399	45.32	15.7	0.9
39.6	130.0	7.450	45.41	16.8	0.9
42.7	140.0	7.490	45.48	13.1	0.7
45.7	150.0	7.538	45.57	15.7	0.9
48.8	160.0	7.566	45.62	9.2	0.5
51.8	170.0	7.597	45.67	10.2	0.6
54.9	179.9	7.643	45.76	15.1	0.8
57.9	189.9	7.680	45.82	12.1	0.7
61.0	199.9	7.725	45.90	14.8	0.8
64.0	210.0	7.763	45.97	12.5	0.7
67.1	220.0	7.791	46.02	9.2	0.5
70.1	229.9	7.830	46.09	12.8	0.7
73.1	239.9	7.872	46.17	13.8	0.8
76.2	249.9	7.920	46.26	15.7	0.9
79.3	259.9	7.963	46.33	14.1	0.8
82.3	269.9	8.007	46.41	14.4	0.8
85.3	279.9	8.051	46.49	14.5	0.8
88.4	289.9	8.106	46.59	18.0	1.0
91.4	299.9	8.173	46.71	22.0	1.2
94.5	309.9	8.200	46.76	8.9	0.5
97.5	319.9	8.255	46.86	18.0	1.0
100.6	329.9	8.329	46.99	24.3	1.3
103.6	339.9	8.371	47.07	13.8	0.8
106.7	349.9	8.426	47.17	18.0	1.0
109.7	359.9	8.475	47.26	16.1	0.9
112.8	369.9	8.510	47.32	11.5	0.6
115.8	379.9	8.576	47.44	21.7	1.2
118.9	389.9	8.624	47.52	15.7	0.9
121.9	399.9	8.689	47.64	21.3	1.2
125.0	409.9	8.724	47.70	11.5	0.6
128.0	419.9	8.763	47.77	12.8	0.7
131.1	429.9	8.797	47.83	11.2	0.6
134.1	439.9	8.829	47.89	10.5	0.6
137.2	449.9	8.900	48.02	23.3	1.3
140.2	459.9	8.967	48.14	22.0	1.2
143.3	469.9	9.049	48.29	26.9	1.5
146.3	479.9	9.088	48.36	12.8	0.7
149.4	489.9	9.154	48.48	21.6	1.2
152.4	499.9	9.252	48.65	32.1	1.8
155.4	509.9	9.263	48.67	3.6	0.2


TEMPERATURE, DEG C
5
10
15
0
50
100
150
200
250
300
DEPTH, METERS
3N/ 5E- 4BDA
10/ 9/75
3N/ 5E- 4BDC1
7/14/75

LOCATION: VANCOUVER AMS, WASH
3N/ 5E- 4BDC2
HOLE NAME: SS-22
DATE MEASURED: 9/16/76

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
25.0	82.0	7.260	45.07	0.0	0.0
30.0	98.4	7.230	45.01	-6.0	-0.3
35.0	114.8	7.320	45.18	18.0	1.0
40.0	131.2	7.420	45.36	20.0	1.1
45.0	147.6	7.520	45.54	20.0	1.1
50.0	164.0	7.620	45.72	20.0	1.1
55.0	180.4	7.720	45.90	20.0	1.1
60.0	196.8	7.820	46.08	20.0	1.1
65.0	213.2	7.910	46.24	18.0	1.0
70.0	229.6	8.000	46.40	18.0	1.0
75.0	246.0	8.090	46.56	18.0	1.0
80.0	262.4	8.180	46.72	18.0	1.0
85.0	278.8	8.270	46.89	18.0	1.0
90.0	295.2	8.360	47.05	18.0	1.0
95.0	311.6	8.460	47.23	20.0	1.1
100.0	328.0	8.560	47.41	20.0	1.1
105.0	344.4	8.660	47.59	20.0	1.1
110.0	360.8	8.770	47.79	22.0	1.2
115.0	377.2	8.890	48.00	24.0	1.3
120.0	393.6	9.000	48.20	22.0	1.2
125.0	410.0	9.120	48.42	24.0	1.3
130.0	426.4	9.240	48.63	24.0	1.3
135.0	442.8	9.390	48.90	30.0	1.6
140.0	459.2	9.540	49.17	30.0	1.6
145.0	475.6	9.680	49.42	28.0	1.5
150.0	492.0	9.850	49.73	34.0	1.9
155.0	508.4	9.960	49.93	22.0	1.2
160.0	524.8	10.060	50.11	20.0	1.1
165.0	541.2	10.170	50.31	22.0	1.2
170.0	557.6	10.290	50.52	24.0	1.3
175.0	574.0	10.420	50.76	26.0	1.4
180.0	590.4	10.550	50.99	26.0	1.4
185.0	606.8	10.700	51.26	30.0	1.6
190.0	623.2	10.840	51.51	28.0	1.5
195.0	639.6	10.970	51.75	26.0	1.4
200.0	656.0	11.090	51.96	24.0	1.3
205.0	672.4	11.230	52.21	28.0	1.5
210.0	688.8	11.360	52.45	26.0	1.4
215.0	705.2	11.510	52.72	30.0	1.6


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
3N/ 5E- 4BDC2
9/16/76
3N/ 5E- 4CAB
9/16/76
3N/ 5E- 4CAC
9/16/76

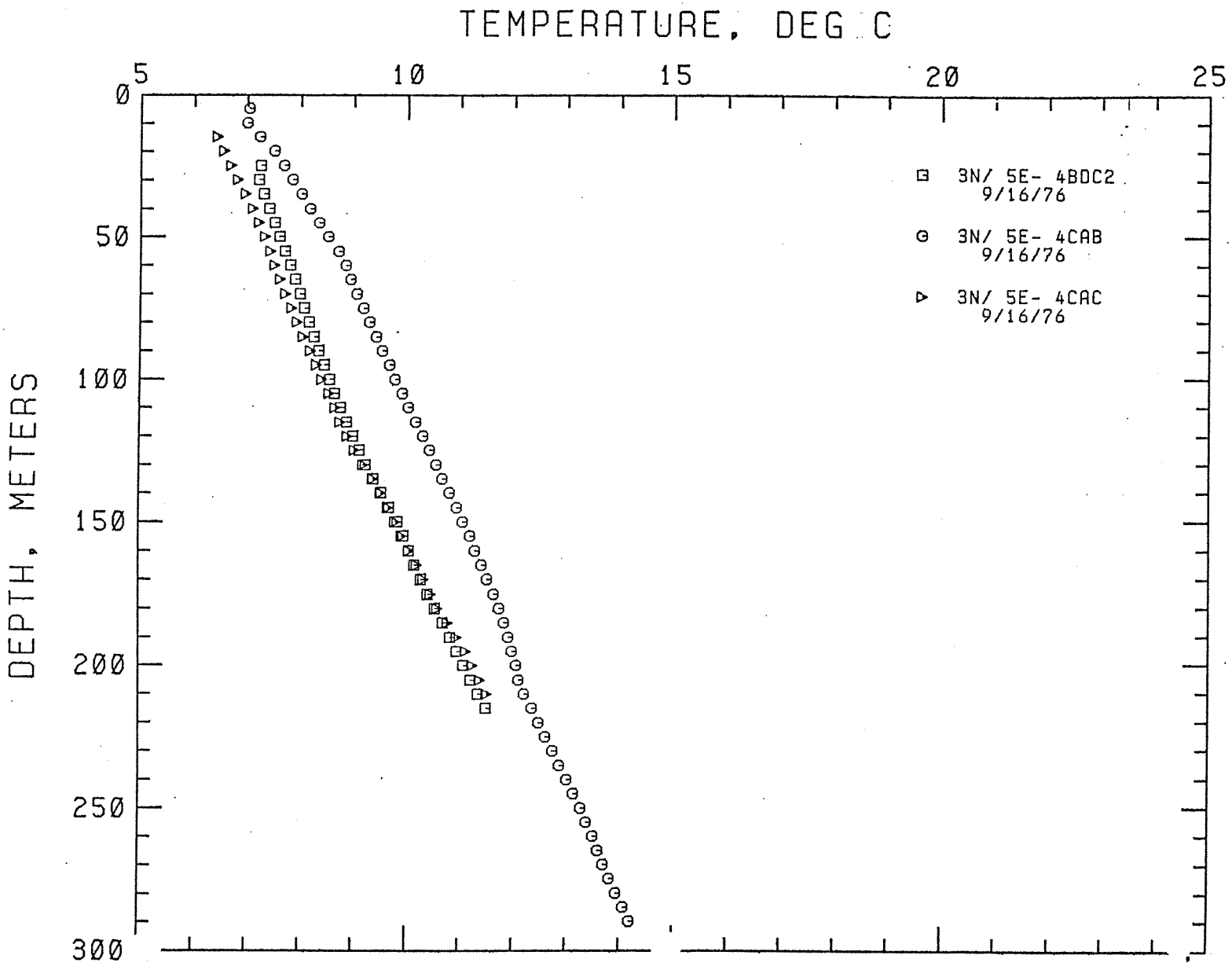
LOCATION: VANCOUVER AMS, WASH
3N/ 5E- 4CAB
HOLE NAME: SS-3
DATE MEASURED: 9/16/76

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	7.030	44.65	0.0	0.0
10.0	32.8	7.000	44.60	-6.0	-0.3
15.0	49.2	7.240	45.03	48.0	2.6
20.0	65.6	7.510	45.52	54.0	3.0
25.0	82.0	7.700	45.86	38.0	2.1
30.0	98.4	7.860	46.15	32.0	1.8
35.0	114.8	8.030	46.45	34.0	1.9
40.0	131.2	8.190	46.74	32.0	1.8
45.0	147.6	8.360	47.05	34.0	1.9
50.0	164.0	8.530	47.35	34.0	1.9
55.0	180.4	8.730	47.71	40.0	2.2
60.0	196.8	8.860	47.95	26.0	1.4
65.0	213.2	8.950	48.11	18.0	1.0
70.0	229.6	9.070	48.33	24.0	1.3
75.0	246.0	9.190	48.54	24.0	1.3
80.0	262.4	9.310	48.76	24.0	1.3
85.0	278.8	9.430	48.97	24.0	1.3
90.0	295.2	9.550	49.19	24.0	1.3
95.0	311.6	9.680	49.42	26.0	1.4
100.0	328.0	9.790	49.62	22.0	1.2
105.0	344.4	9.930	49.87	28.0	1.5
110.0	360.8	10.040	50.07	22.0	1.2
115.0	377.2	10.180	50.32	28.0	1.5
120.0	393.6	10.310	50.56	26.0	1.4
125.0	410.0	10.440	50.79	26.0	1.4
130.0	426.4	10.560	51.01	24.0	1.3
135.0	442.8	10.680	51.22	24.0	1.3
140.0	459.2	10.820	51.48	28.0	1.5
145.0	475.6	10.950	51.71	26.0	1.4
150.0	492.0	11.070	51.93	24.0	1.3
155.0	508.4	11.200	52.16	26.0	1.4
160.0	524.8	11.300	52.34	20.0	1.1
165.0	541.2	11.420	52.56	24.0	1.3
170.0	557.6	11.530	52.75	22.0	1.2
175.0	574.0	11.650	52.97	24.0	1.3
180.0	590.4	11.750	53.15	20.0	1.1
185.0	606.8	11.840	53.31	18.0	1.0
190.0	623.2	11.920	53.46	16.0	0.9
195.0	639.6	11.990	53.58	14.0	0.8
200.0	656.0	12.070	53.73	16.0	0.9
205.0	672.4	12.120	53.82	10.0	0.5
210.0	688.8	12.220	54.00	20.0	1.1

LOCATION: VANCOUVER AMS, WASH
3N/ 5E- 4CAB

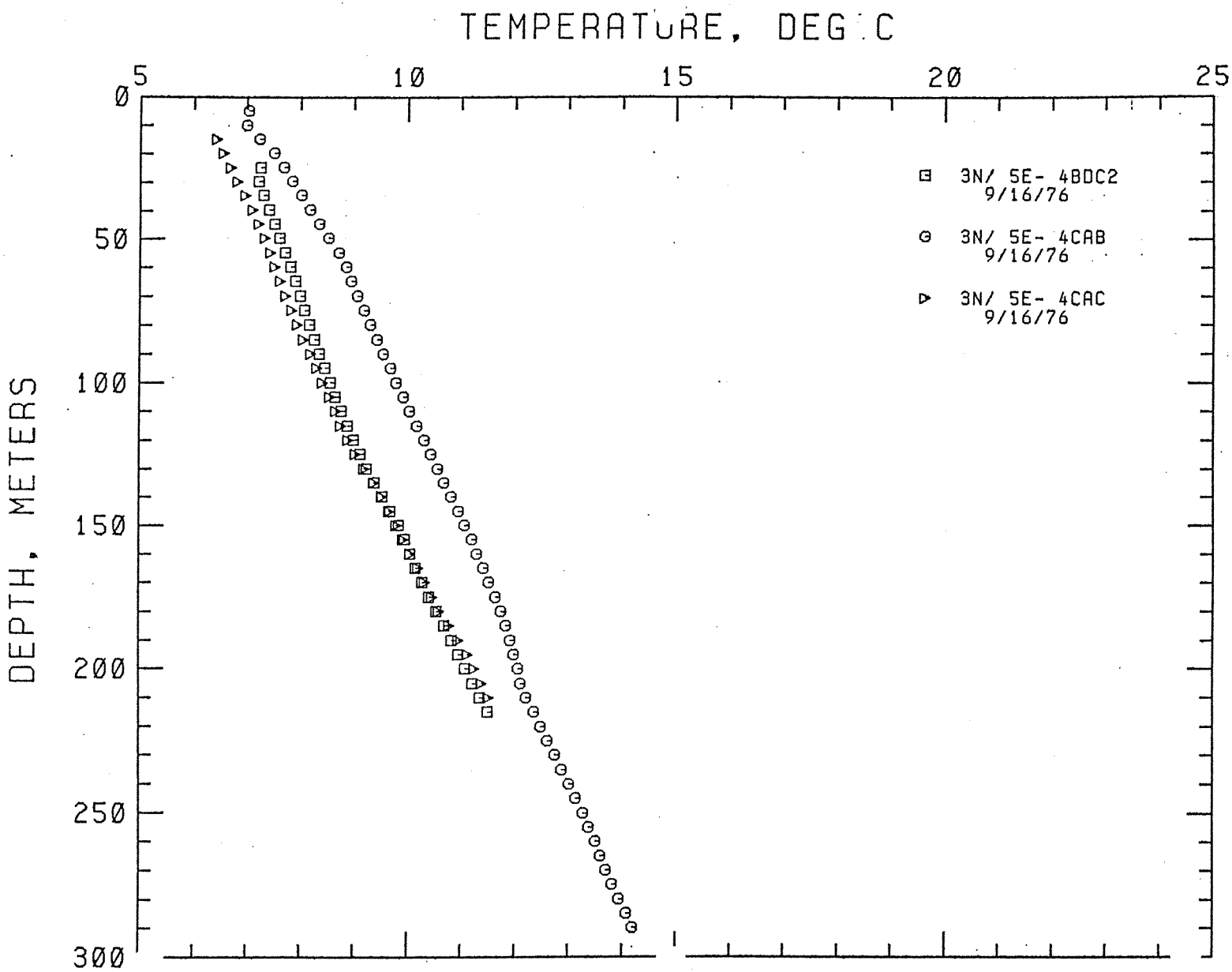
HOLE NAME: SS-3
DATE MEASURED: 9/16/76

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
215.0	705.2	12.370	54.27	30.0	1.6
220.0	721.6	12.500	54.50	26.0	1.4
225.0	738.0	12.620	54.72	24.0	1.3
230.0	754.4	12.760	54.97	28.0	1.5
235.0	770.8	12.890	55.20	26.0	1.4
240.0	787.2	13.020	55.44	26.0	1.4
245.0	803.6	13.150	55.67	26.0	1.4
250.0	820.0	13.280	55.90	26.0	1.4
255.0	836.4	13.390	56.10	22.0	1.2
260.0	852.8	13.510	56.32	24.0	1.3
265.0	869.2	13.600	56.48	18.0	1.0
270.0	885.6	13.710	56.68	22.0	1.2
275.0	902.0	13.820	56.88	22.0	1.2
280.0	918.4	13.950	57.11	26.0	1.4
285.0	934.8	14.080	57.34	26.0	1.4
290.0	951.2	14.200	57.56	24.0	1.3


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
3N/ 5E- 4BDC2
9/16/76
3N/ 5E- 4CAB
9/16/76
3N/ 5E- 4CAC
9/16/76

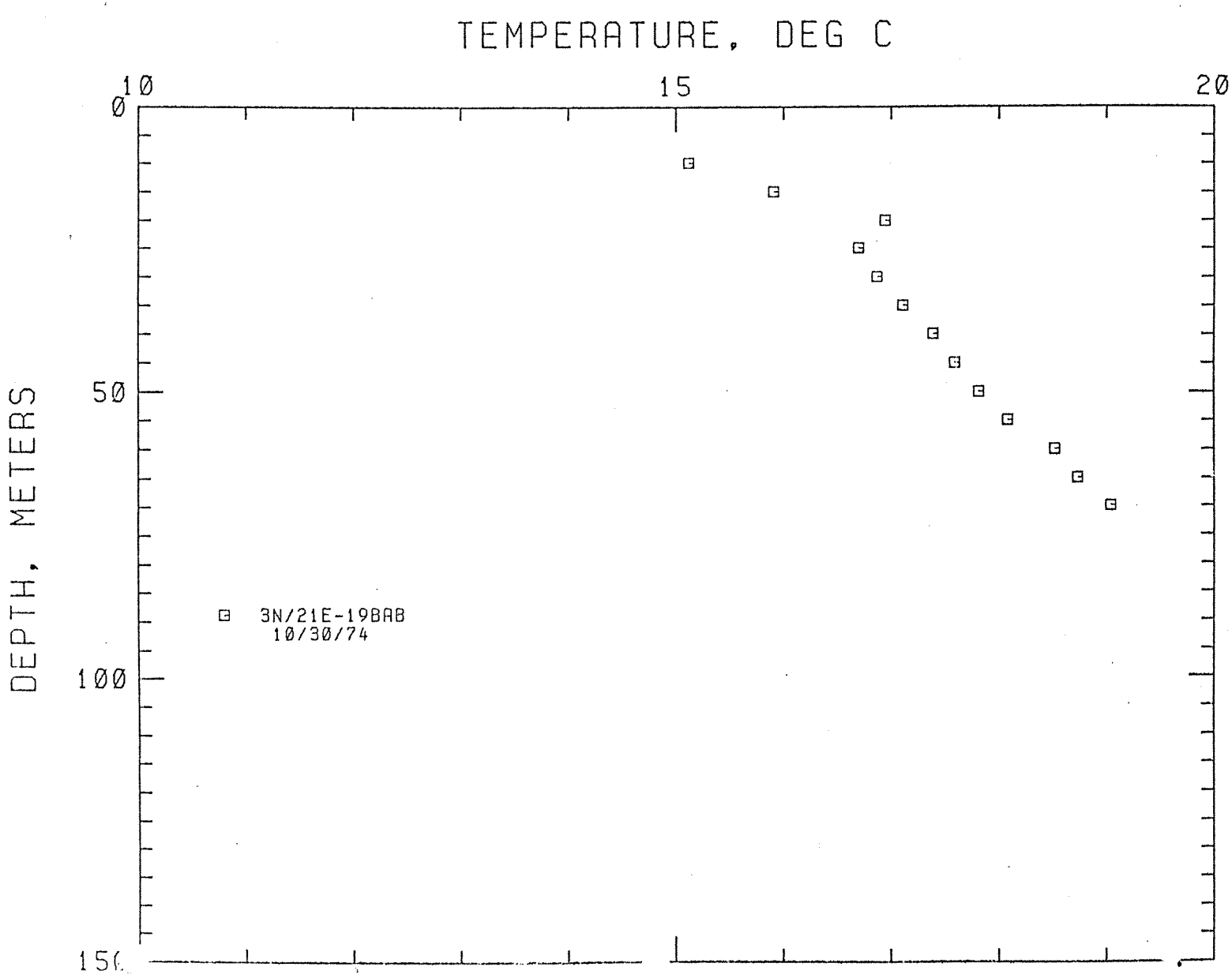
LOCATION: VANCOUVER AMS, WASH
3N/ 5E- 4CAC
HOLE NAME: SS-6
DATE MEASURED: 9/16/76

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
15.0	49.2	6.440	43.59	0.0	0.0
20.0	65.6	6.570	43.83	26.0	1.4
25.0	82.0	6.700	44.06	26.0	1.4
30.0	98.4	6.830	44.29	26.0	1.4
35.0	114.8	6.980	44.56	30.0	1.6
40.0	131.2	7.110	44.80	26.0	1.4
45.0	147.6	7.230	45.01	24.0	1.3
50.0	164.0	7.340	45.21	22.0	1.2
55.0	180.4	7.450	45.41	22.0	1.2
60.0	196.8	7.530	45.55	16.0	0.9
65.0	213.2	7.630	45.73	20.0	1.1
70.0	229.6	7.730	45.91	20.0	1.1
75.0	246.0	7.840	46.11	22.0	1.2
80.0	262.4	7.950	46.31	22.0	1.2
85.0	278.8	8.060	46.51	22.0	1.2
90.0	295.2	8.200	46.76	28.0	1.5
95.0	311.6	8.310	46.96	22.0	1.2
100.0	328.0	8.420	47.16	22.0	1.2
105.0	344.4	8.550	47.39	26.0	1.4
110.0	360.8	8.670	47.61	24.0	1.3
115.0	377.2	8.760	47.77	18.0	1.0
120.0	393.6	8.900	48.02	28.0	1.5
125.0	410.0	9.030	48.25	26.0	1.4
130.0	426.4	9.190	48.54	32.0	1.8
135.0	442.8	9.380	48.88	38.0	2.1
140.0	459.2	9.520	49.14	28.0	1.5
145.0	475.6	9.660	49.39	28.0	1.5
150.0	492.0	9.800	49.64	28.0	1.5
155.0	508.4	9.930	49.87	26.0	1.4
160.0	524.8	10.060	50.11	26.0	1.4
165.0	541.2	10.210	50.38	30.0	1.6
170.0	557.6	10.340	50.61	26.0	1.4
175.0	574.0	10.470	50.85	26.0	1.4
180.0	590.4	10.600	51.08	26.0	1.4
185.0	606.8	10.790	51.42	38.0	2.1
190.0	623.2	10.970	51.75	36.0	2.0
195.0	639.6	11.140	52.05	34.0	1.9
200.0	656.0	11.260	52.27	24.0	1.3
205.0	672.4	11.400	52.52	28.0	1.5
210.0	688.8	11.520	52.74	24.0	1.3


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
3N/ 5E- 4BDC2
9/16/76
3N/ 5E- 4CAB
9/16/76
3N/ 5E- 4CAC
9/16/76

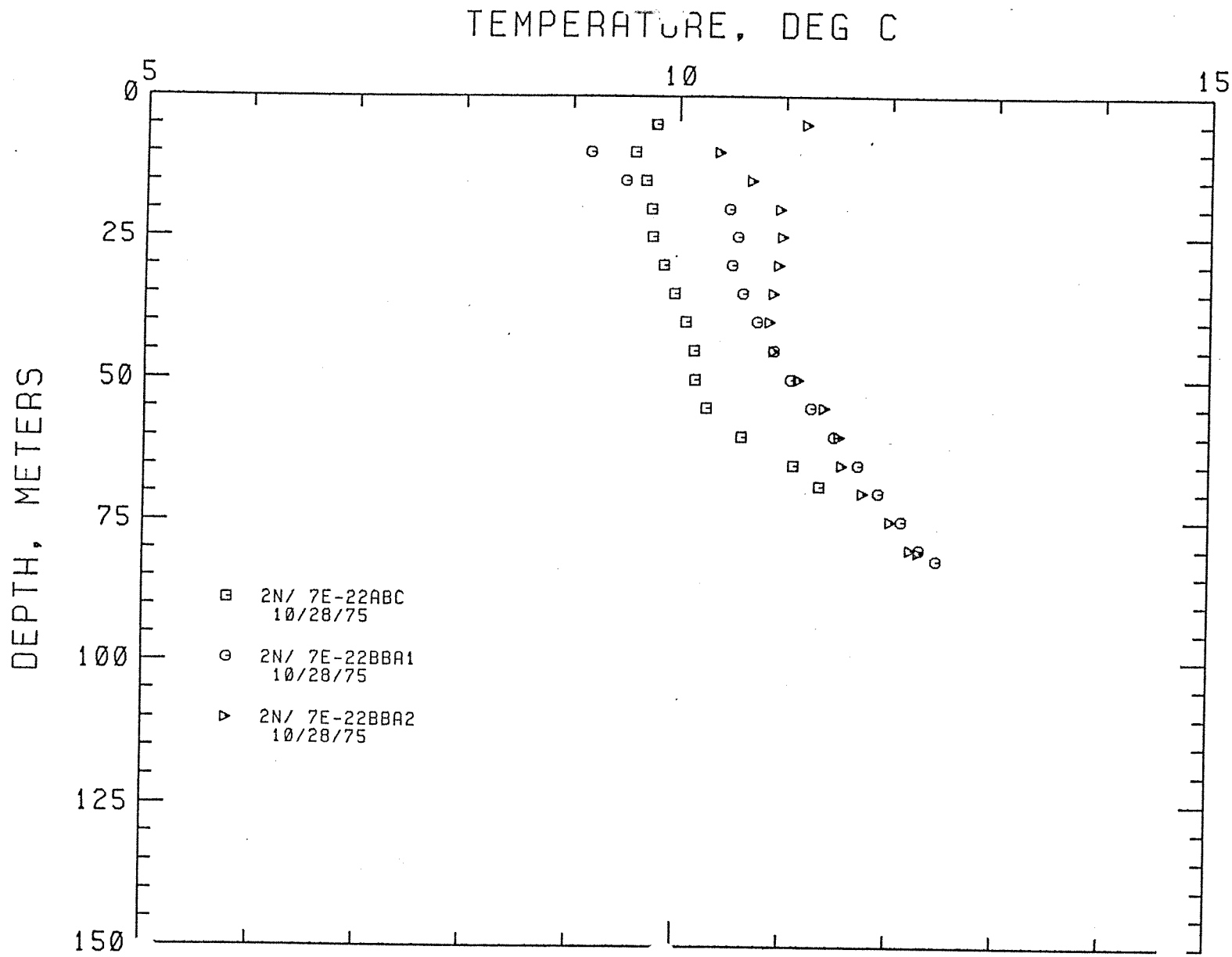
LOCATION: THE DALLES AMS, WASH
3N/21E-19BAB
HOLE NAME: RB-1
DATE MEASURED: 10/30/74

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	15.120	59.22	0.0	0.0
15.0	49.2	15.910	60.64	158.0	8.7
20.0	65.6	16.940	62.49	206.0	11.3
25.0	82.0	16.700	62.06	-48.0	-2.6
30.0	98.4	16.870	62.37	34.0	1.9
35.0	114.8	17.110	62.80	48.0	2.6
40.0	131.2	17.390	63.30	56.0	3.1
45.0	147.6	17.590	63.66	40.0	2.2
50.0	164.0	17.810	64.06	44.0	2.4
55.0	180.4	18.080	64.54	54.0	3.0
60.0	196.8	18.520	65.34	88.0	4.8
65.0	213.2	18.730	65.71	42.0	2.3
70.0	229.6	19.040	66.27	62.0	3.4


TEMPERATURE, DEG C
10
15
20
0
50
100
150
DEPTH, METERS
3N/21E-19BAB
10/30/74

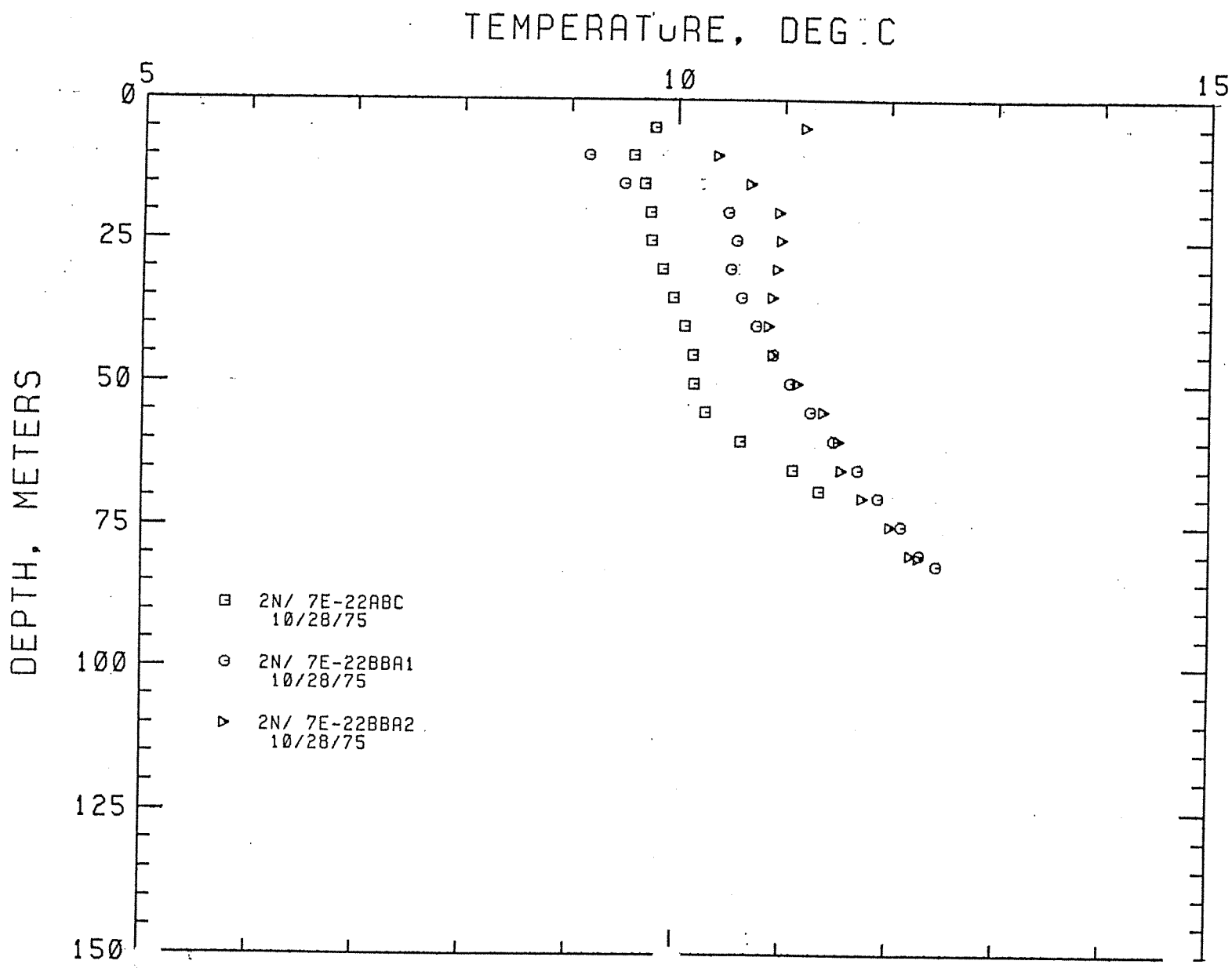
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22ABC
HOLE NAME: DH-1083
DATE MEASURED: 10/28/75

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	9.780	49.60	0.0	0.0
10.0	32.8	9.590	49.26	-38.0	-2.1
15.0	49.2	9.690	49.44	20.0	1.1
20.0	65.6	9.750	49.55	12.0	0.7
25.0	82.0	9.760	49.57	2.0	0.1
30.0	98.4	9.870	49.77	22.0	1.2
35.0	114.8	9.970	49.95	20.0	1.1
40.0	131.2	10.080	50.14	22.0	1.2
45.0	147.6	10.160	50.29	16.0	0.9
50.0	164.0	10.170	50.31	2.0	0.1
55.0	180.4	10.280	50.50	22.0	1.2
60.0	196.8	10.610	51.10	66.0	3.6
65.0	213.2	11.100	51.98	98.0	5.4
68.8	225.7	11.350	52.43	65.8	3.6


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
25
50
75
100
125
150
2N/ 7E-22ABC
10/28/75
2N/ 7E-22BBA1
10/28/75
2N/ 7E-22BBA2
10/28/75

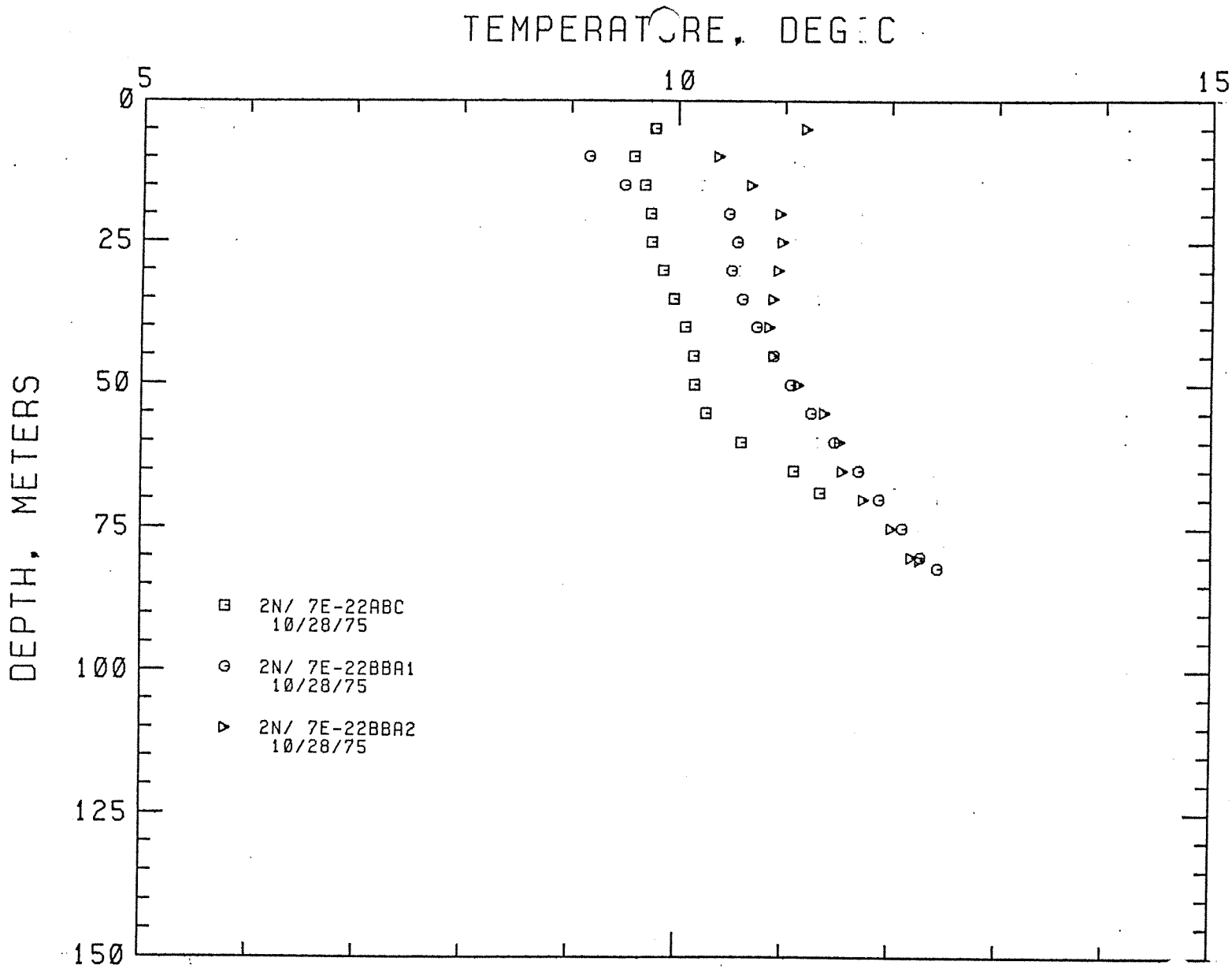
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBA1
HOLE NAME: DH-1201
DATE MEASURED: 10/28/75

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	9.790	49.62	0.0	0.0
10.0	32.8	9.170	48.51	-124.0	-6.8
15.0	49.2	9.500	49.10	66.0	3.6
20.0	65.6	10.480	50.86	196.0	10.8
25.0	82.0	10.560	51.01	16.0	0.9
30.0	98.4	10.510	50.92	-10.0	-0.5
35.0	114.8	10.610	51.10	20.0	1.1
40.0	131.2	10.750	51.35	28.0	1.5
45.0	147.6	10.910	51.64	32.0	1.8
50.0	164.0	11.070	51.93	32.0	1.8
55.0	180.4	11.260	52.27	38.0	2.1
60.0	196.8	11.480	52.66	44.0	2.4
65.0	213.2	11.710	53.08	46.0	2.5
70.0	229.6	11.900	53.42	38.0	2.1
75.0	246.0	12.120	53.82	44.0	2.4
80.0	262.4	12.290	54.12	34.0	1.9
82.0	269.0	12.450	54.41	80.0	4.4


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
25
50
75
100
125
150
2N/ 7E-22ABC
10/28/75
2N/ 7E-22BBA1
10/28/75
2N/ 7E-22BBA2
10/28/75

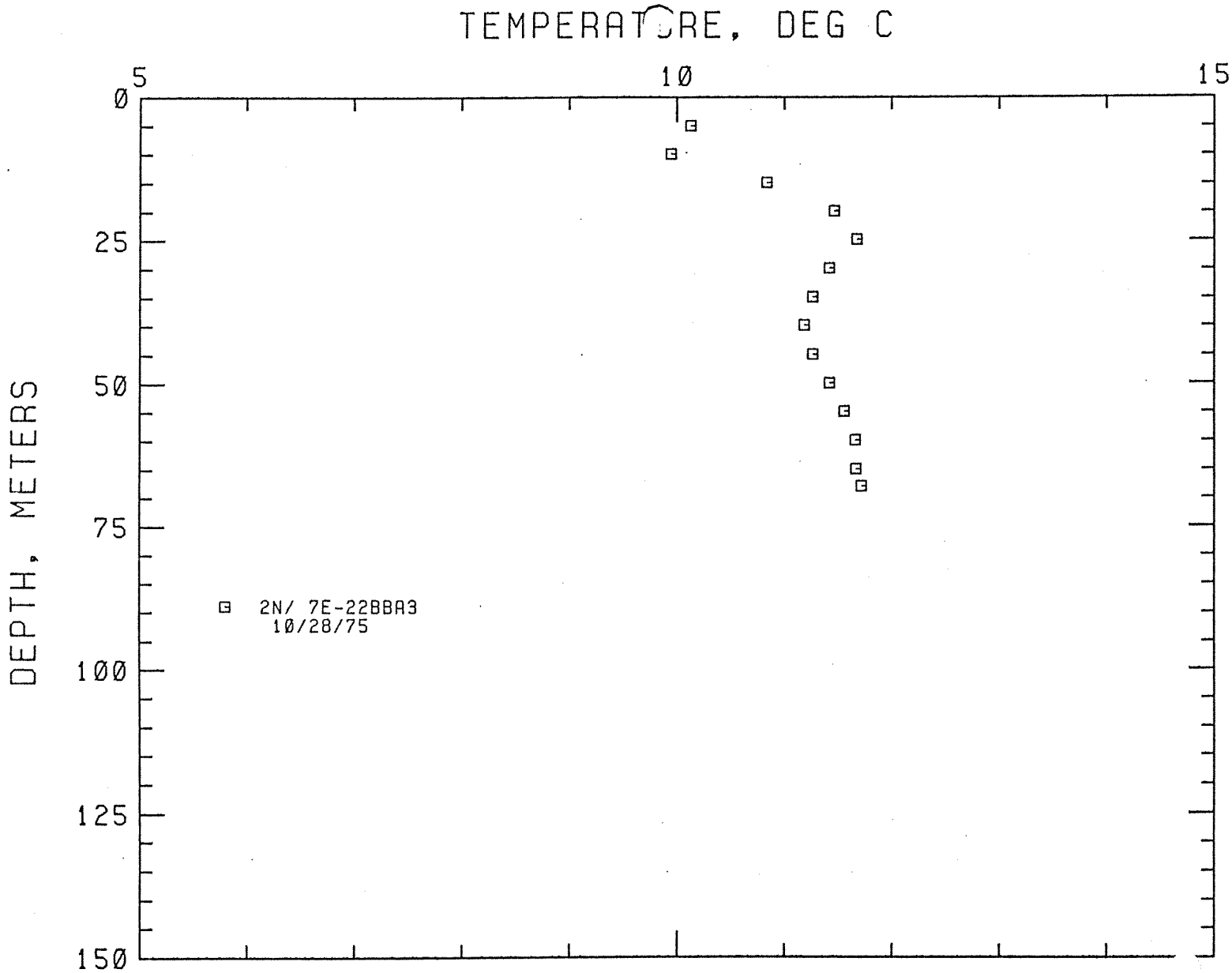
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBA2
HOLE NAME: DH-1203
DATE MEASURED: 10/28/75

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	11.200	52.16	0.0	0.0
10.0	32.8	10.380	50.68	-164.0	-9.0
15.0	49.2	10.690	51.24	62.0	3.4
20.0	65.6	10.960	51.73	54.0	3.0
25.0	82.0	10.980	51.76	4.0	0.2
30.0	98.4	10.950	51.71	-6.0	-0.3
35.0	114.8	10.900	51.62	-10.0	-0.5
40.0	131.2	10.870	51.57	-6.0	-0.3
45.0	147.6	10.910	51.64	8.0	0.4
50.0	164.0	11.140	52.05	46.0	2.5
55.0	180.4	11.390	52.50	50.0	2.7
60.0	196.8	11.530	52.75	28.0	1.5
65.0	213.2	11.560	52.81	6.0	0.3
70.0	229.6	11.760	53.17	40.0	2.2
75.0	246.0	12.020	53.64	52.0	2.9
80.0	262.4	12.210	53.98	38.0	2.1
80.5	264.0	12.290	54.12	160.0	8.8


TEMPERATURE, DEG C
5
10
15
0
25
50
75
100
125
150
DEPTH, METERS
2N/ 7E-22ABC
10/28/75
2N/ 7E-22BBA1
10/28/75
2N/ 7E-22BBA2
10/28/75

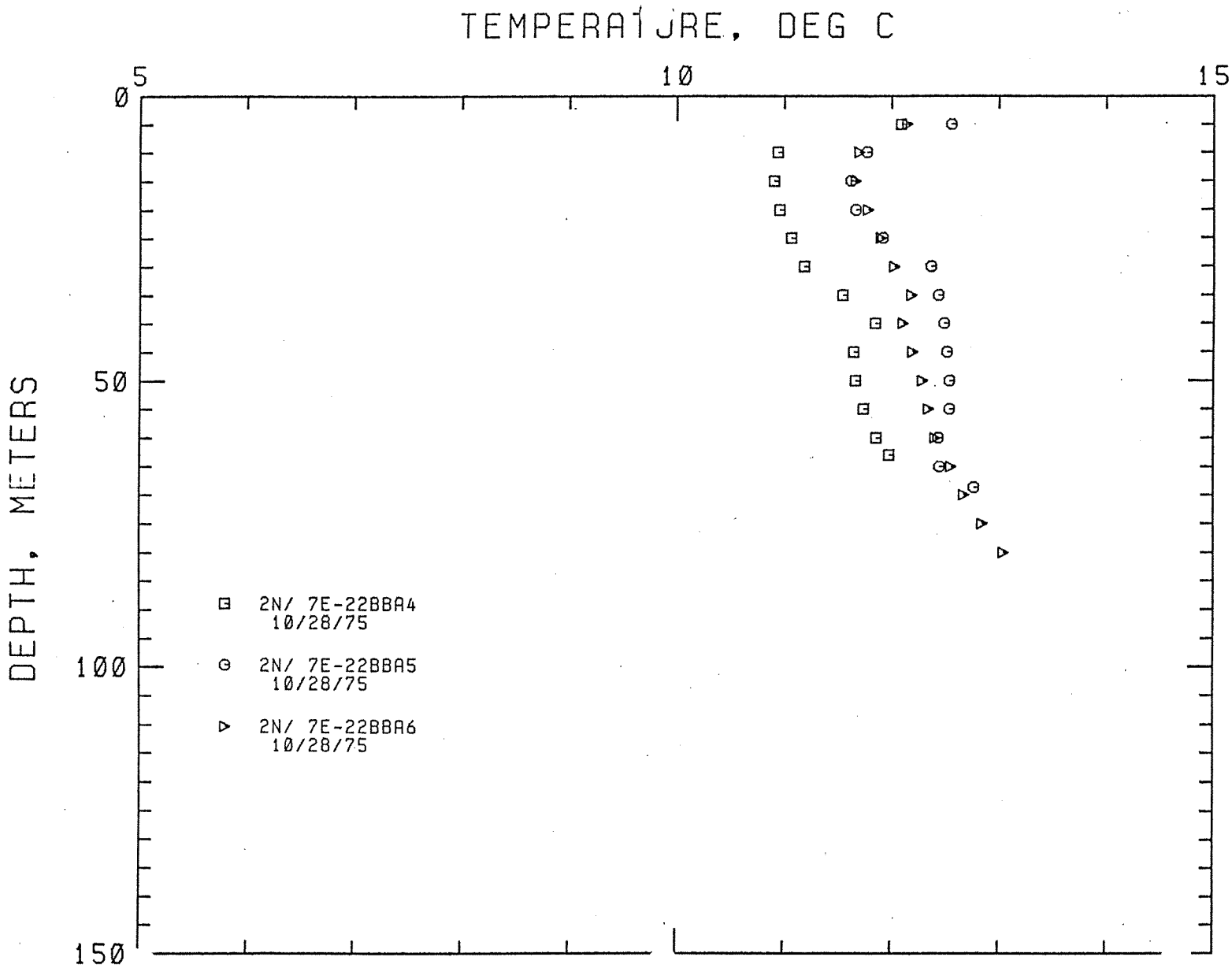
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBA3
HOLE NAME: DH-1204
DATE MEASURED: 10/28/75

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	10.130	50.23	0.0	0.0
10.0	32.8	9.950	49.91	-36.0	-2.0
15.0	49.2	10.840	51.51	178.0	9.8
20.0	65.6	11.470	52.65	126.0	6.9
25.0	82.0	11.680	53.02	42.0	2.3
30.0	98.4	11.420	52.56	-52.0	-2.9
35.0	114.8	11.270	52.29	-30.0	-1.6
40.0	131.2	11.190	52.14	-16.0	-0.9
45.0	147.6	11.270	52.29	16.0	0.9
50.0	164.0	11.420	52.56	30.0	1.6
55.0	180.4	11.560	52.81	28.0	1.5
60.0	196.8	11.660	52.99	20.0	1.1
65.0	213.2	11.670	53.01	2.0	0.1
68.0	223.0	11.720	53.10	16.7	0.9


TEMPERATURE, DEG C
5
10
15
0
25
50
75
100
125
150
DEPTH, METERS
2N/ 7E-22BBA3
10/28/75

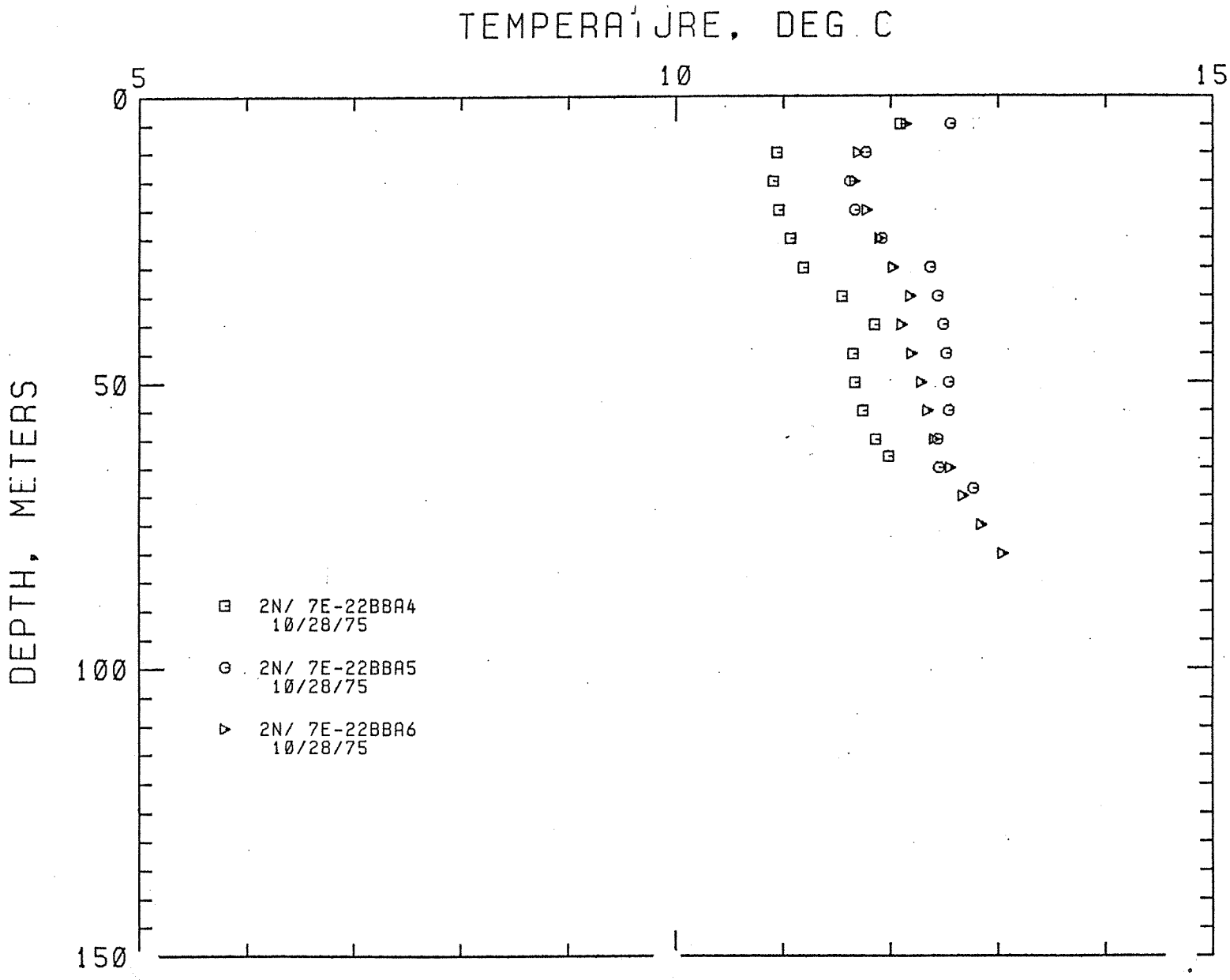
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBA4.
HOLE NAME: DH-1209
DATE MEASURED: 10/28/75

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	12.090	53.76	0.0	0.0
10.0	32.8	10.940	51.69	-230.0	-12.6
15.0	49.2	10.910	51.64	-6.0	-0.3
20.0	65.6	10.960	51.73	10.0	0.5
25.0	82.0	11.070	51.93	22.0	1.2
30.0	98.4	11.190	52.14	24.0	1.3
35.0	114.8	11.550	52.79	72.0	4.0
40.0	131.2	11.850	53.33	60.0	3.3
45.0	147.6	11.650	52.97	-40.0	-2.2
50.0	164.0	11.670	53.01	4.0	0.2
55.0	180.4	11.740	53.13	14.0	0.8
60.0	196.8	11.860	53.35	24.0	1.3
63.0	206.6	11.980	53.56	40.0	2.2


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
2N/ 7E-22BBA4
10/28/75
2N/ 7E-22BBA5
10/28/75
2N/ 7E-22BBA6
10/28/75

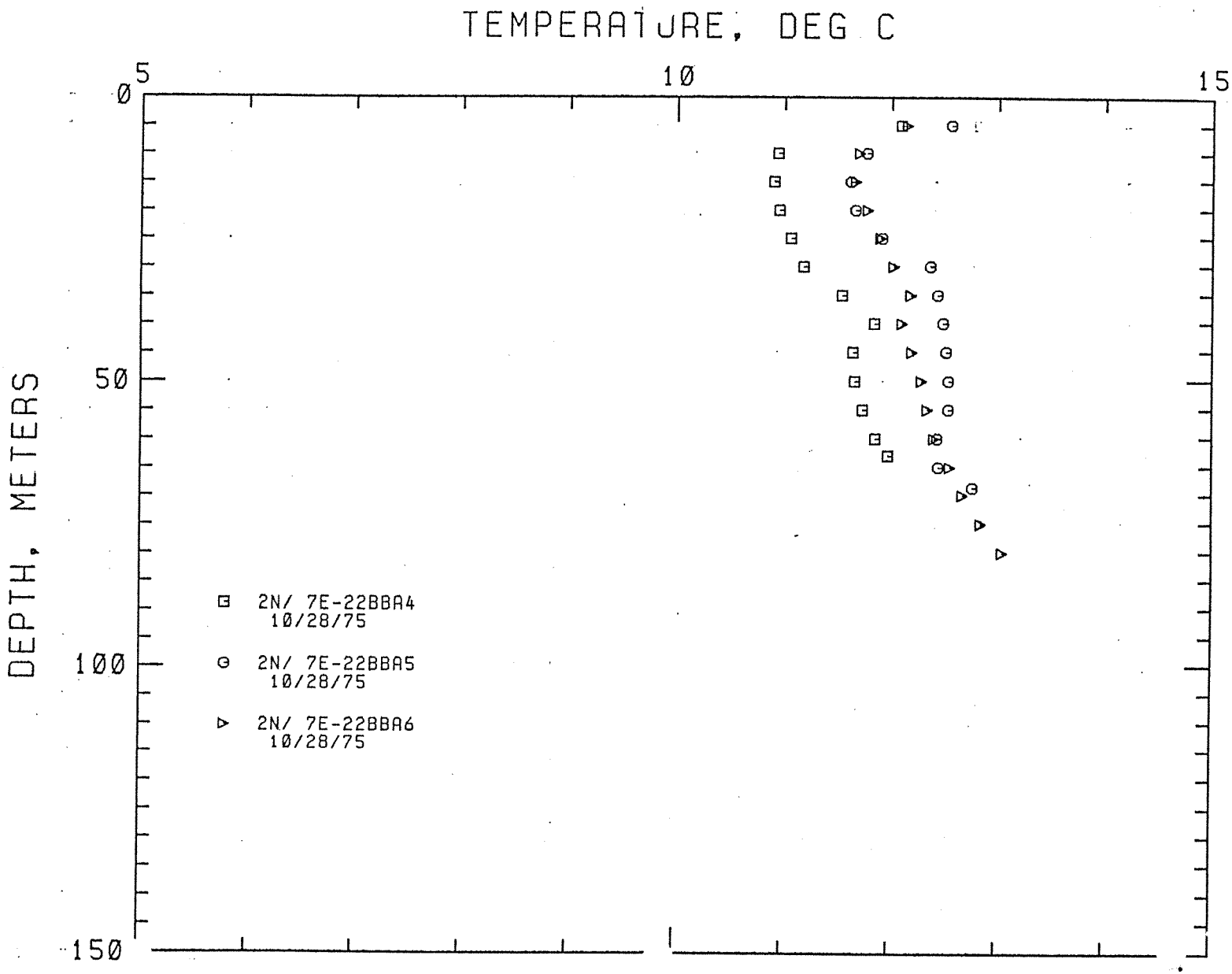
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBA5
HOLE NAME: DH-1210
DATE MEASURED: 10/28/75

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	12.560	54.61	0.0	0.0
10.0	32.8	11.770	53.19	-158.0	-8.7
15.0	49.2	11.620	52.92	-30.0	-1.6
20.0	65.6	11.670	53.01	10.0	0.5
25.0	82.0	11.920	53.46	50.0	2.7
30.0	98.4	12.370	54.27	90.0	4.9
35.0	114.8	12.440	54.39	14.0	0.8
40.0	131.2	12.490	54.48	10.0	0.5
45.0	147.6	12.520	54.54	6.0	0.3
50.0	164.0	12.540	54.57	4.0	0.2
55.0	180.4	12.540	54.57	0.0	0.0
60.0	196.8	12.440	54.39	-20.0	-1.1
65.0	213.2	12.450	54.41	2.0	0.1
68.7	225.3	12.770	54.99	86.5	4.7


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
2N/ 7E-22BBA4
10/28/75
2N/ 7E-22BBA5
10/28/75
2N/ 7E-22BBA6
10/28/75

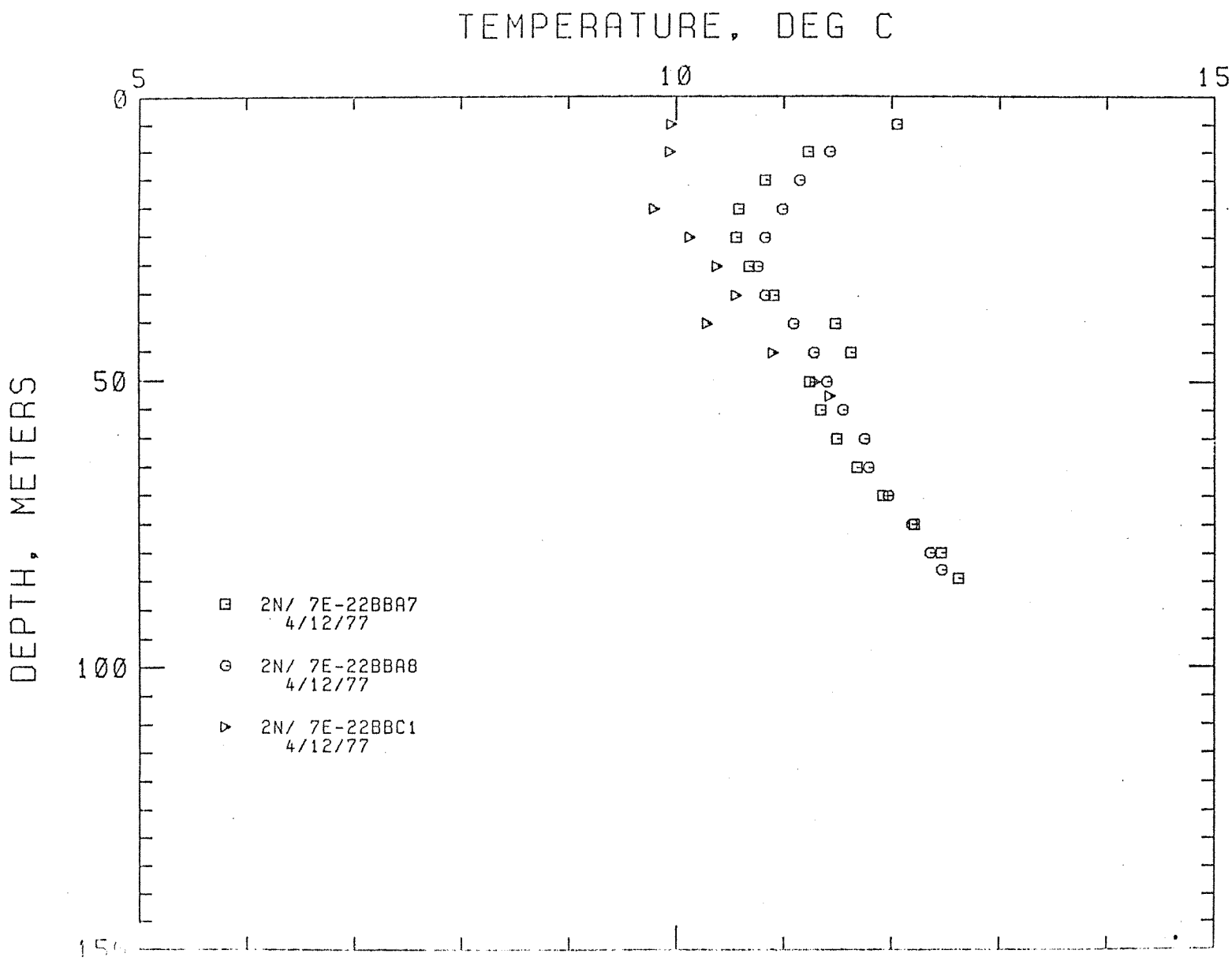
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBA6
HOLE NAME: DH-1029
DATE MEASURED: 10/28/75

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	12.150	53.87	0.0	0.0
10.0	32.8	11.700	53.06	-90.0	-4.9
15.0	49.2	11.670	53.01	-6.0	-0.3
20.0	65.6	11.780	53.20	22.0	1.2
25.0	82.0	11.900	53.42	24.0	1.3
30.0	98.4	12.030	53.65	26.0	1.4
35.0	114.8	12.190	53.94	32.0	1.8
40.0	131.2	12.110	53.80	-16.0	-0.9
45.0	147.6	12.200	53.96	18.0	1.0
50.0	164.0	12.290	54.12	18.0	1.0
55.0	180.4	12.350	54.23	12.0	0.7
60.0	196.8	12.410	54.34	12.0	0.7
65.0	213.2	12.560	54.61	30.0	1.6
70.0	229.6	12.680	54.82	24.0	1.3
75.0	246.0	12.850	55.13	34.0	1.9
80.0	262.4	13.050	55.49	40.0	2.2


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
2N/ 7E-22BBA4
10/28/75
2N/ 7E-22BBA5
10/28/75
2N/ 7E-22BBA6
10/28/75

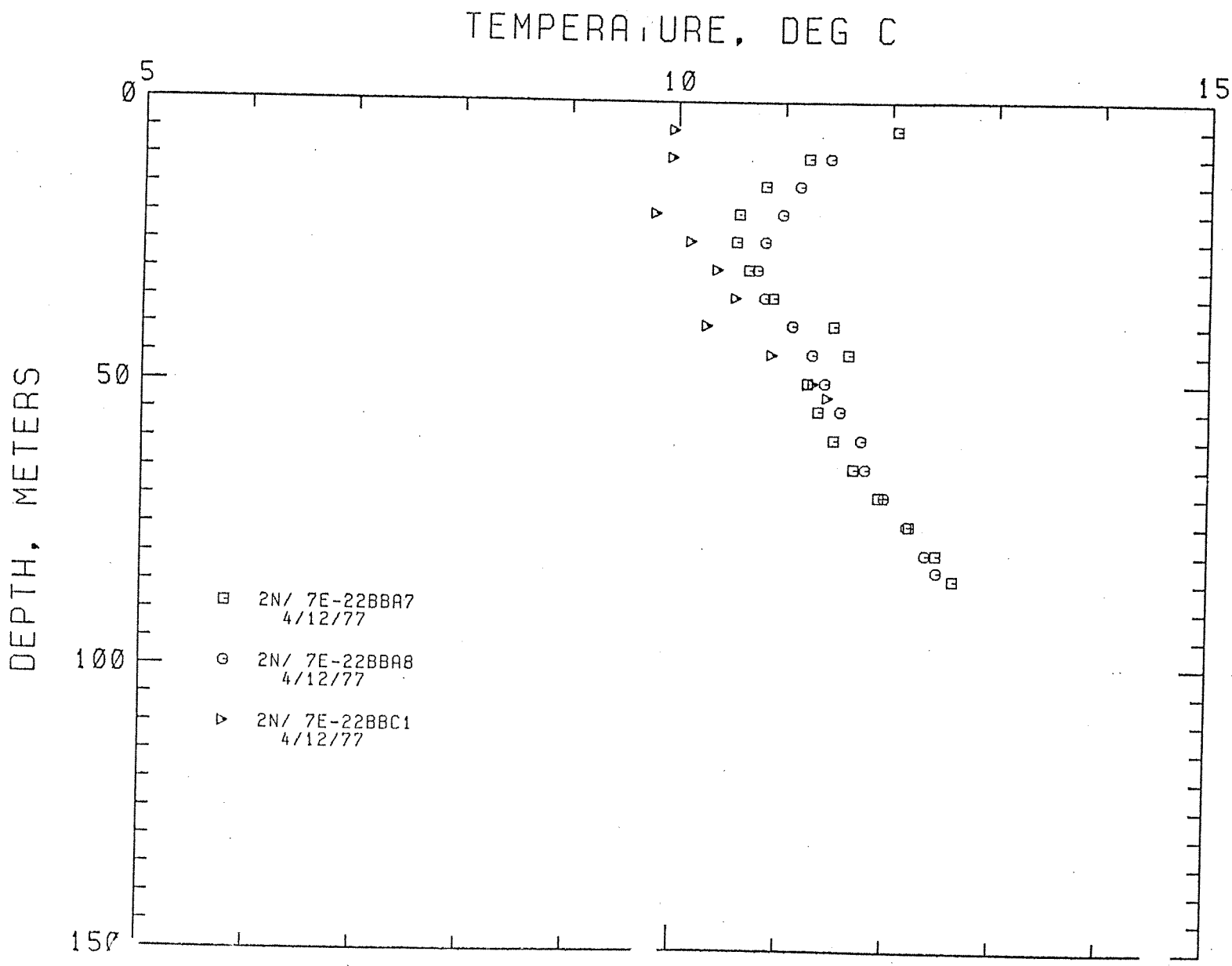
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBA7
HOLE NAME: USCE1440
DATE MEASURED: 4/12/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	12.050	53.69	0.0	0.0
10.0	32.8	11.230	52.21	-164.0	-9.0
15.0	49.2	10.830	51.49	-80.0	-4.4
20.0	65.6	10.580	51.04	-50.0	-2.7
25.0	82.0	10.560	51.01	-4.0	-0.2
30.0	98.4	10.680	51.22	24.0	1.3
35.0	114.8	10.910	51.64	46.0	2.5
40.0	131.2	11.480	52.66	114.0	6.3
45.0	147.6	11.620	52.92	28.0	1.5
50.0	164.0	11.240	52.23	-76.0	-4.2
55.0	180.4	11.340	52.41	20.0	1.1
60.0	196.8	11.490	52.68	30.0	1.6
65.0	213.2	11.680	53.02	38.0	2.1
70.0	229.6	11.920	53.46	48.0	2.6
75.0	246.0	12.210	53.98	58.0	3.2
80.0	262.4	12.460	54.43	50.0	2.7
84.5	277.2	12.620	54.72	35.6	2.0


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
2N/ 7E-22BBA7
4/12/77
2N/ 7E-22BBA8
4/12/77
2N/ 7E-22BBC1
4/12/77

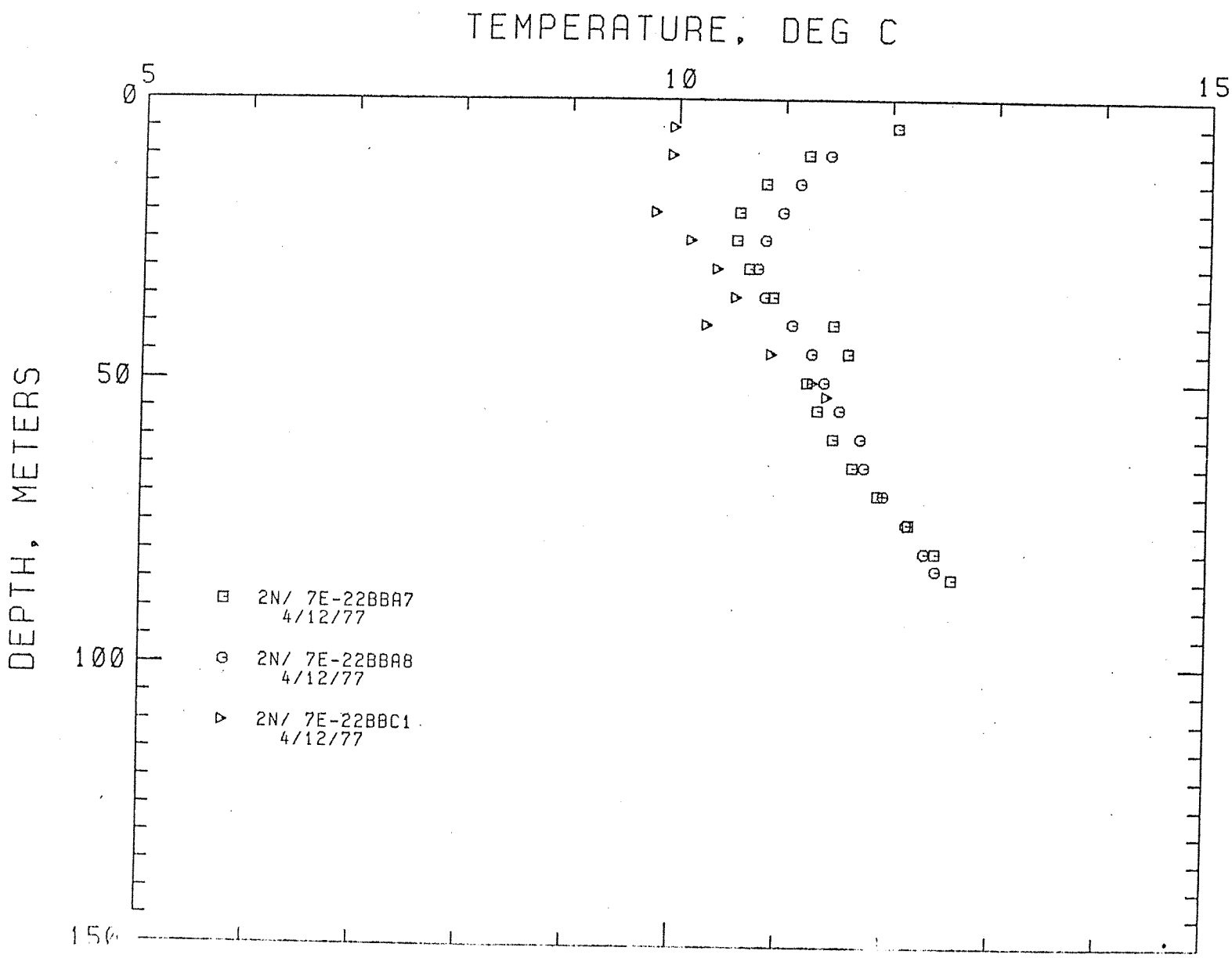
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBA8
HOLE NAME: USCE1329
DATE MEASURED: 4/12/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	12.050	53.69	0.0	0.0
10.0	32.8	11.430	52.57	-124.0	-6.8
15.0	49.2	11.150	52.07	-56.0	-3.1
20.0	65.6	10.990	51.78	-32.0	-1.8
25.0	82.0	10.830	51.49	-32.0	-1.8
30.0	98.4	10.760	51.37	-14.0	-0.8
35.0	114.8	10.830	51.49	14.0	0.8
40.0	131.2	11.090	51.96	52.0	2.9
45.0	147.6	11.280	52.30	38.0	2.1
50.0	164.0	11.400	52.52	24.0	1.3
55.0	180.4	11.550	52.79	30.0	1.6
60.0	196.8	11.750	53.15	40.0	2.2
65.0	213.2	11.790	53.22	8.0	0.4
70.0	229.6	11.970	53.55	36.0	2.0
75.0	246.0	12.190	53.94	44.0	2.4
80.0	262.4	12.360	54.25	34.0	1.9
83.0	272.2	12.470	54.45	36.7	2.0


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
2N/ 7E-22BBA7
4/12/77
2N/ 7E-22BBA8
4/12/77
2N/ 7E-22BBC1
4/12/77

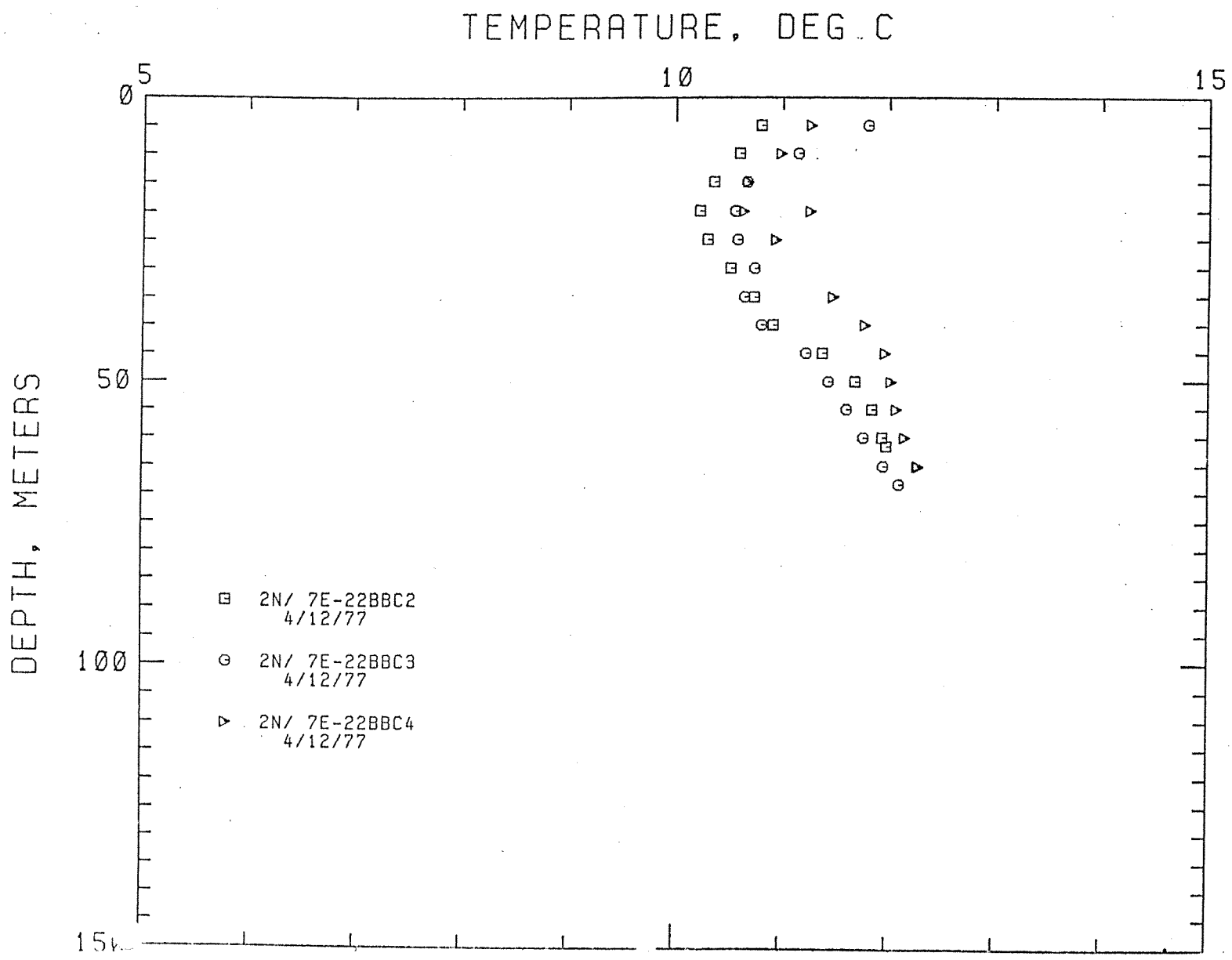
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBC1
HOLE NAME: USCE1462
DATE MEASURED: 4/12/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	9.960	49.93	0.0	0.0
10.0	32.8	9.950	49.91	-2.0	-0.1
20.0	65.6	9.800	49.64	-15.0	-0.8
25.0	82.0	10.130	50.23	66.0	3.6
30.0	98.4	10.380	50.68	50.0	2.7
35.0	114.8	10.560	51.01	36.0	2.0
40.0	131.2	10.290	50.52	-54.0	-3.0
45.0	147.6	10.900	51.62	122.0	6.7
50.0	164.0	11.290	52.32	78.0	4.3
52.5	172.2	11.430	52.57	56.0	3.1


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
2N/ 7E-22BBA7
4/12/77
2N/ 7E-22BBA8
4/12/77
2N/ 7E-22BBC1
4/12/77

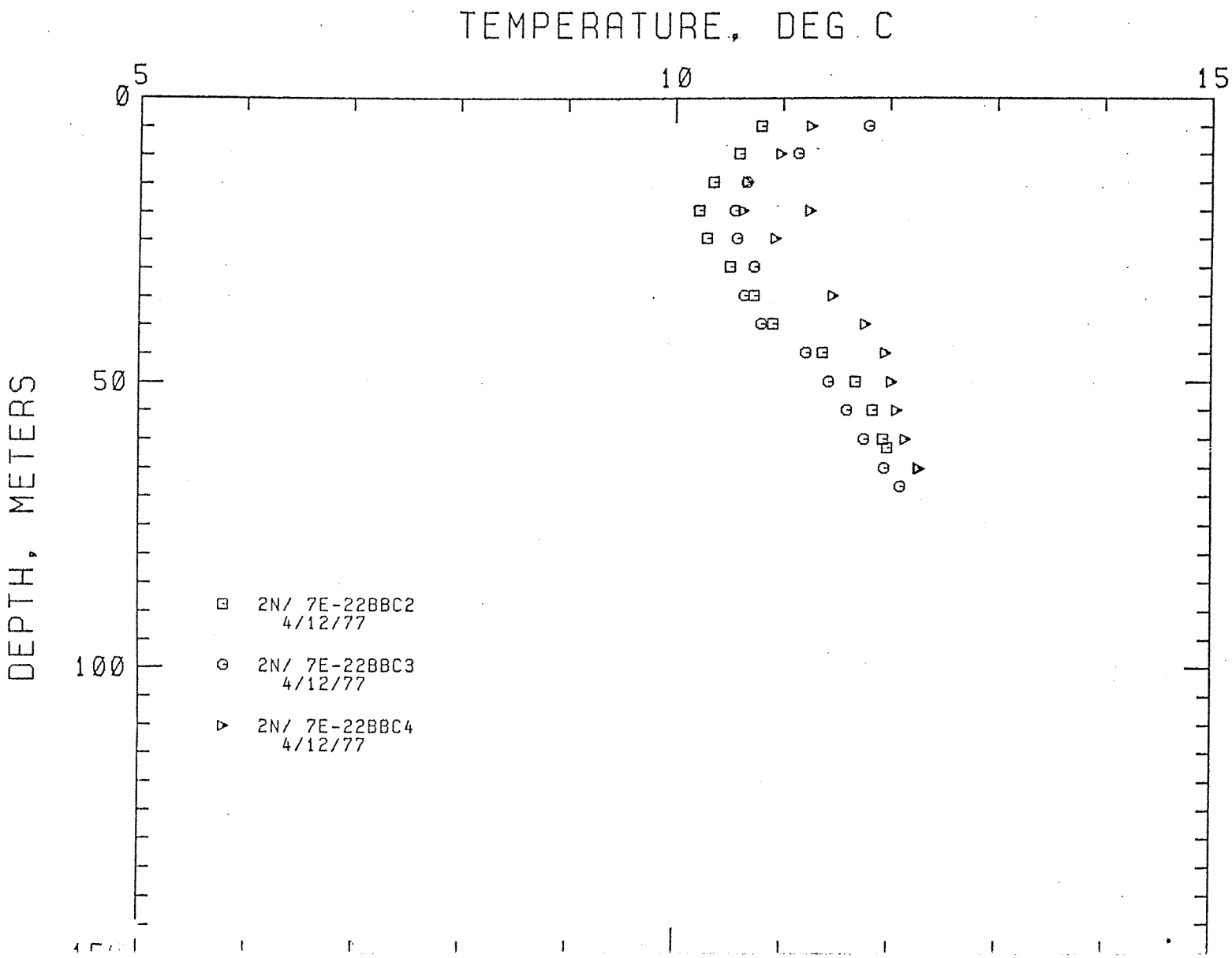
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBC2
HOLE NAME: USCE1465
DATE MEASURED: 4/12/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	10.800	51.44	0.0	0.0
10.0	32.8	10.600	51.08	-40.0	-2.2
15.0	49.2	10.360	50.65	-48.0	-2.6
20.0	65.6	10.230	50.41	-26.0	-1.4
25.0	82.0	10.300	50.54	14.0	0.8
30.0	98.4	10.520	50.94	44.0	2.4
35.0	114.8	10.740	51.33	44.0	2.4
40.0	131.2	10.920	51.66	36.0	2.0
45.0	147.6	11.380	52.48	92.0	5.0
50.0	164.0	11.690	53.04	62.0	3.4
55.0	180.4	11.850	53.33	32.0	1.8
60.0	196.8	11.950	53.51	20.0	1.1
61.5	201.7	11.990	53.58	26.7	1.5


TEMPERATURE, DEG.C
0
5
10
15
DEPTH, METERS
50
100
150
2N/ 7E-22BBC2
4/12/77
2N/ 7E-22BBC3
4/12/77
2N/ 7E-22BBC4
4/12/77

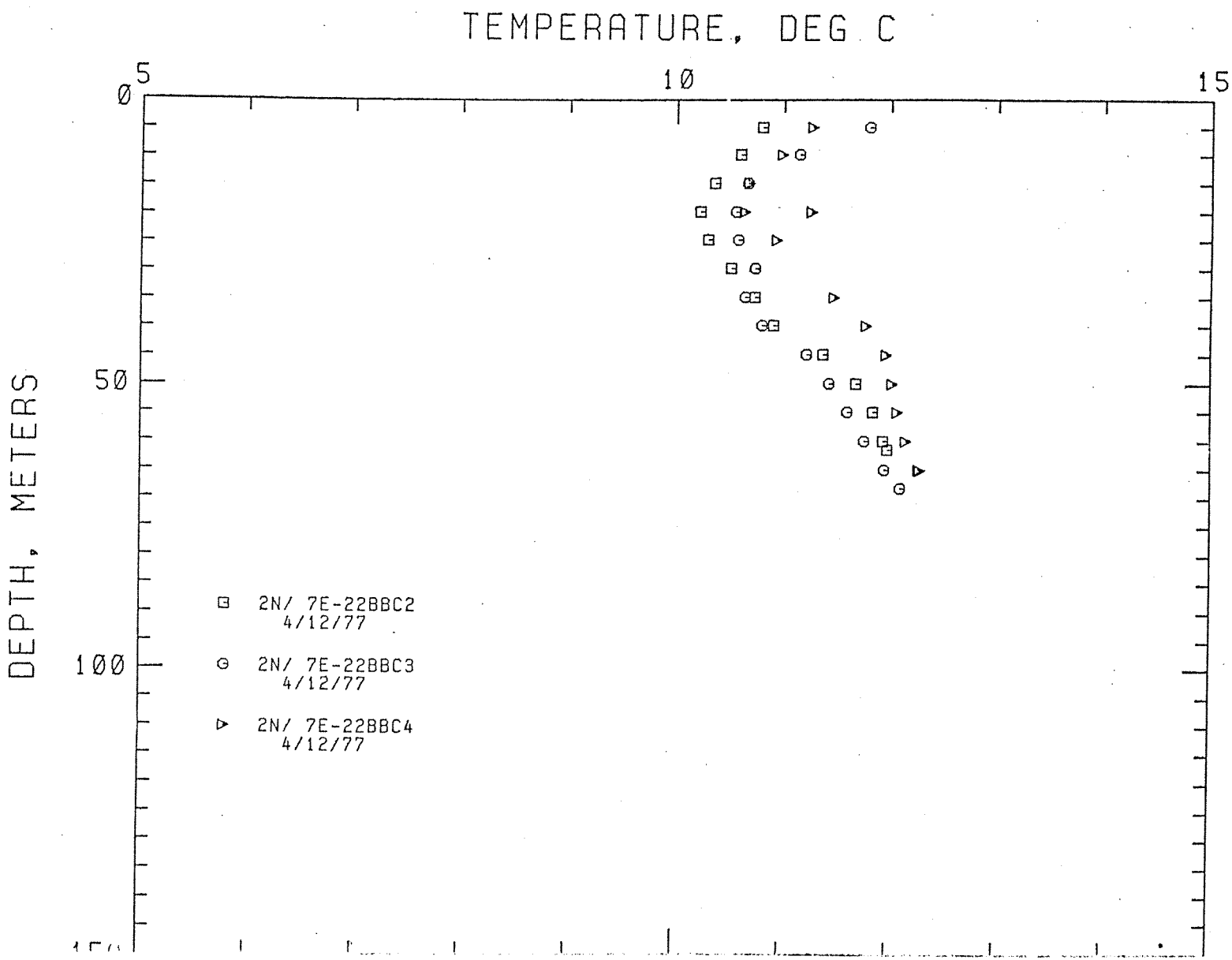
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBC3
HOLE NAME: USCE1378
DATE MEASURED: 4/12/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	11.800	53.24	0.0	0.0
10.0	32.8	11.150	52.07	-130.0	-7.1
15.0	49.2	10.670	51.21	-96.0	-5.3
20.0	65.6	10.560	51.01	-22.0	-1.2
25.0	82.0	10.580	51.04	4.0	0.2
30.0	98.4	10.740	51.33	32.0	1.8
35.0	114.8	10.650	51.17	-18.0	-1.0
40.0	131.2	10.810	51.46	32.0	1.8
45.0	147.6	11.230	52.21	84.0	4.6
50.0	164.0	11.440	52.59	42.0	2.3
55.0	180.4	11.610	52.90	34.0	1.9
60.0	196.8	11.770	53.19	32.0	1.8
65.0	213.2	11.960	53.53	38.0	2.1
68.3	224.0	12.110	53.80	45.5	2.5


TEMPERATURE, DEG C
5
10
15
0
50
100
DEPTH, METERS
2N/ 7E-22BBC2
4/12/77
2N/ 7E-22BBC3
4/12/77
2N/ 7E-22BBC4
4/12/77

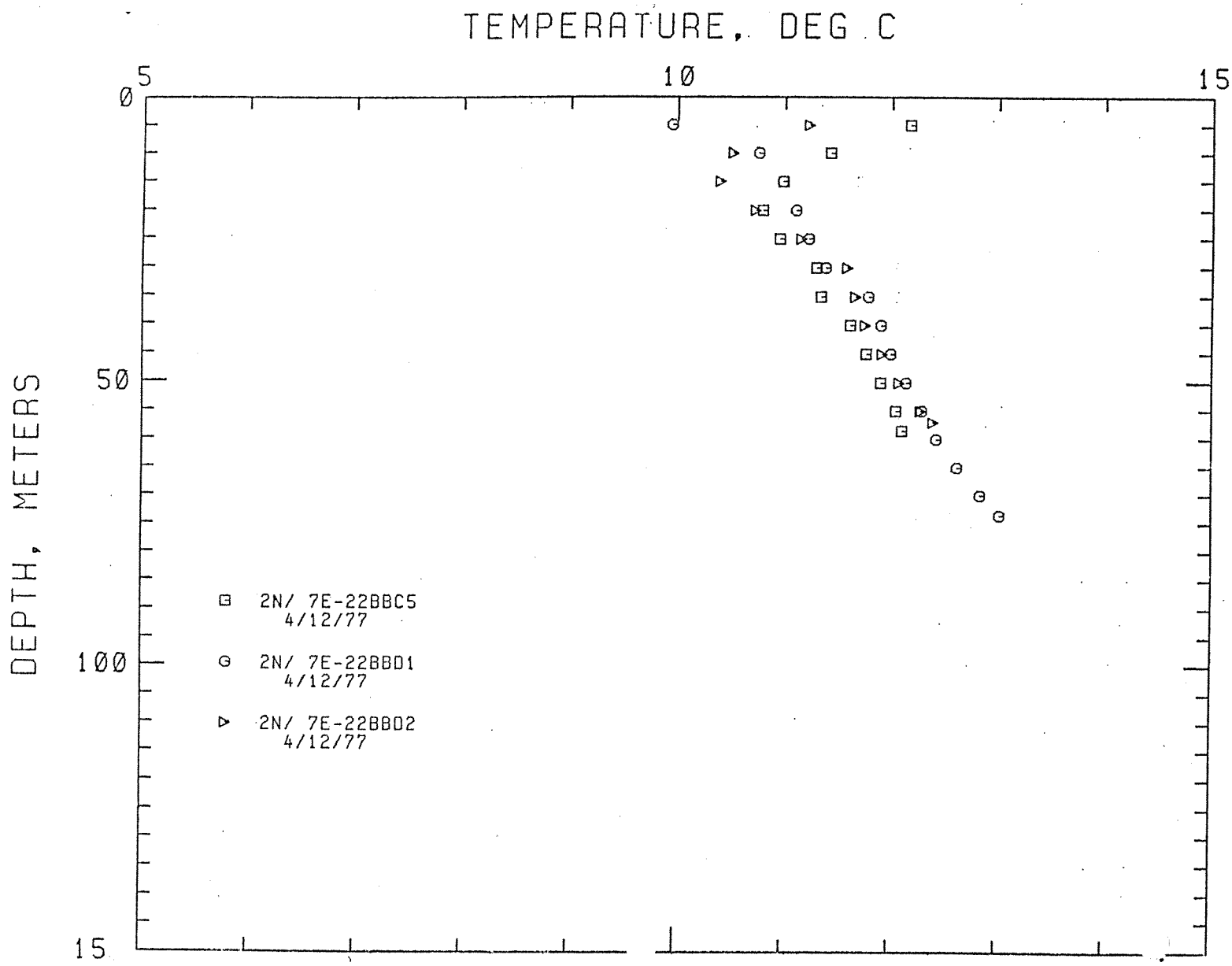
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBC4
HOLE NAME: USCE1455
DATE MEASURED: 4/12/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	11.270	52.29	0.0	0.0
10.0	32.8	10.990	51.78	-56.0	-3.1
15.0	49.2	10.680	51.22	-62.0	-3.4
20.0	65.6	10.640	51.15	-8.0	-0.4
25.0	82.0	10.940	51.69	60.0	3.3
20.0	65.6	11.260	52.27	-64.0	-3.5
35.0	114.8	11.480	52.66	14.7	0.8
40.0	131.2	11.780	53.20	60.0	3.3
45.0	147.6	11.970	53.55	38.0	2.1
50.0	164.0	12.030	53.65	12.0	0.7
55.0	180.4	12.080	53.74	10.0	0.5
60.0	196.8	12.160	53.89	16.0	0.9
65.0	213.2	12.280	54.10	24.0	1.3
65.1	213.5	12.290	54.12	100.0	5.5


TEMPERATURE, DEG C
5
10
15
0
50
100
DEPTH, METERS
2N/ 7E-22BBC2
4/12/77
2N/ 7E-22BBC3
4/12/77
2N/ 7E-22BBC4
4/12/77

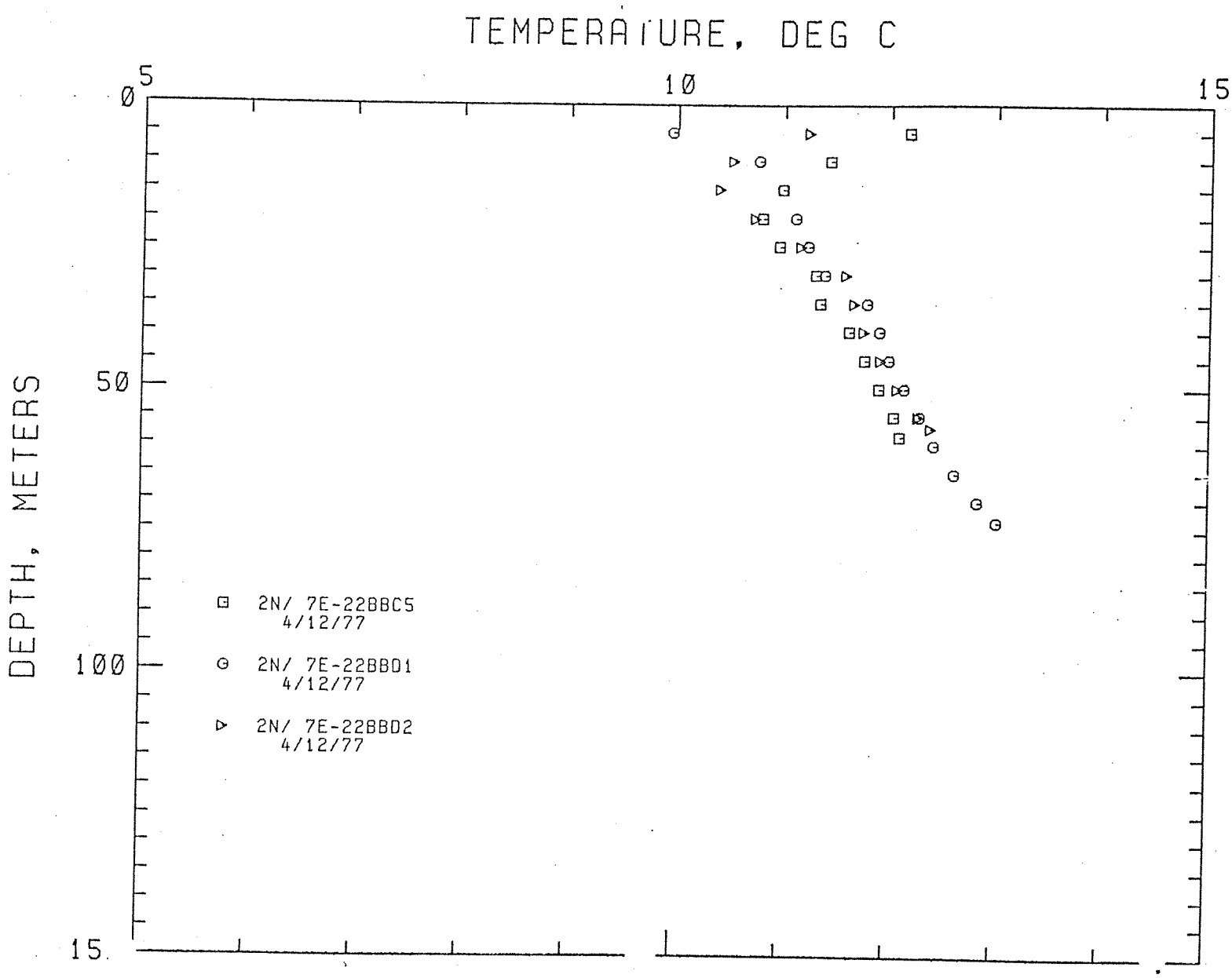
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBC5
HOLE NAME: USCE1371
DATE MEASURED: 4/12/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	12.170	53.91	0.0	0.0
10.0	32.8	11.430	52.57	-148.0	-8.1
15.0	49.2	10.990	51.78	-88.0	-4.8
20.0	65.6	10.800	51.44	-38.0	-2.1
25.0	82.0	10.960	51.73	32.0	1.8
30.0	98.4	11.300	52.34	68.0	3.7
35.0	114.8	11.350	52.43	10.0	0.5
40.0	131.2	11.620	52.92	54.0	3.0
45.0	147.6	11.770	53.19	30.0	1.6
50.0	164.0	11.910	53.44	28.0	1.5
55.0	180.4	12.050	53.69	28.0	1.5
58.5	191.9	12.110	53.80	17.1	0.9


TEMPERATURE, DEG C
5
10
15
0
50
100
15
DEPTH, METERS
2N/ 7E-22BBC5
4/12/77
2N/ 7E-22BBD1
4/12/77
2N/ 7E-22BBD2
4/12/77

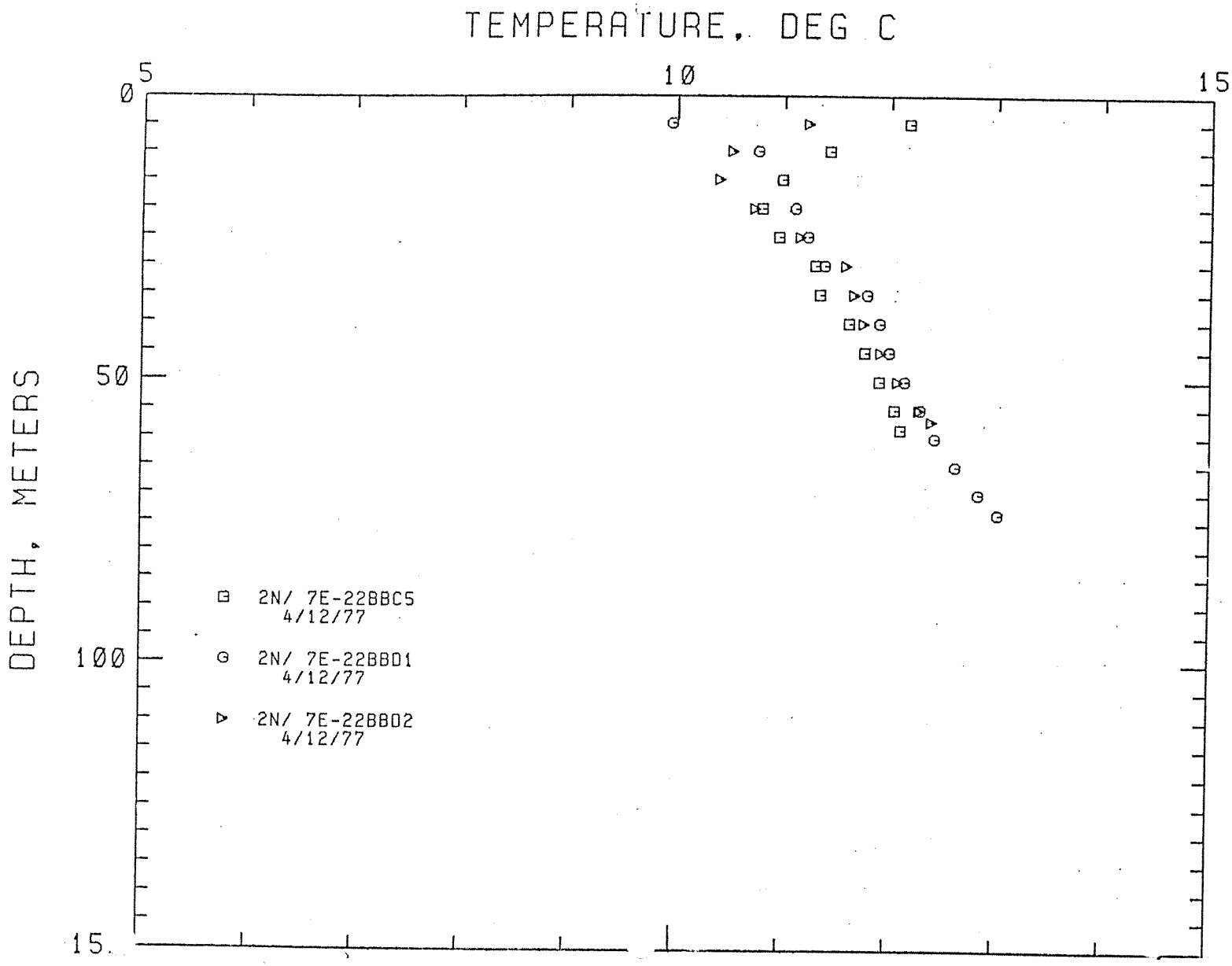
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBD1
HOLE NAME: USCE1385
DATE MEASURED: 4/12/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	9.950	49.91	0.0	0.0
10.0	32.8	10.760	51.37	162.0	8.9
15.0	49.2	10.980	51.76	44.0	2.4
20.0	65.6	11.110	52.00	26.0	1.4
25.0	82.0	11.230	52.21	24.0	1.3
30.0	98.4	11.390	52.50	32.0	1.8
35.0	114.8	11.790	53.22	80.0	4.4
40.0	131.2	11.910	53.44	24.0	1.3
45.0	147.6	12.000	53.60	18.0	1.0
50.0	164.0	12.140	53.85	28.0	1.5
55.0	180.4	12.290	54.12	30.0	1.6
60.0	196.8	12.430	54.37	28.0	1.5
65.0	213.2	12.620	54.72	38.0	2.1
70.0	229.6	12.840	55.11	44.0	2.4
73.5	241.1	13.020	55.44	51.4	2.8


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
15
2N/ 7E-22BBC5
4/12/77
2N/ 7E-22BBD1
4/12/77
2N/ 7E-22BBD2
4/12/77

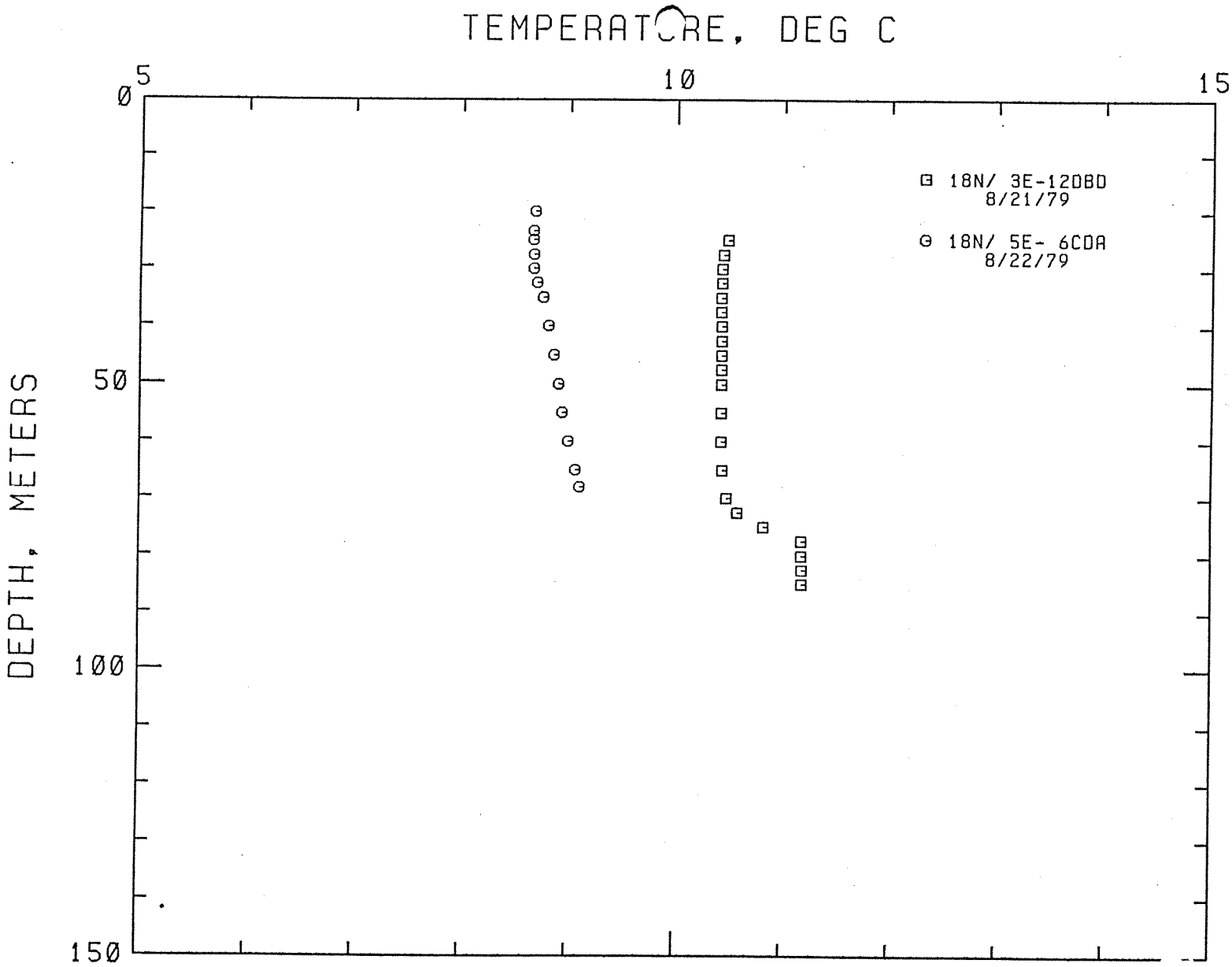
LOCATION: THE DALLES AMS, WASH
2N/ 7E-22BBD2
HOLE NAME: USCE1475
DATE MEASURED: 4/12/77

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	11.230	52.21	0.0	0.0
10.0	32.8	10.520	50.94	-142.0	-7.8
15.0	49.2	10.400	50.72	-24.0	-1.3
20.0	65.6	10.730	51.31	66.0	3.6
25.0	82.0	11.160	52.09	86.0	4.7
30.0	98.4	11.590	52.86	86.0	4.7
35.0	114.8	11.670	53.01	16.0	0.9
40.0	131.2	11.760	53.17	18.0	1.0
45.0	147.6	11.920	53.46	32.0	1.8
50.0	164.0	12.080	53.74	32.0	1.8
55.0	180.4	12.280	54.10	40.0	2.2
57.0	187.0	12.400	54.32	60.0	3.3


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
15.
2N/ 7E-22BBC5
4/12/77
2N/ 7E-22BBD1
4/12/77
2N/ 7E-22BBD2
4/12/77

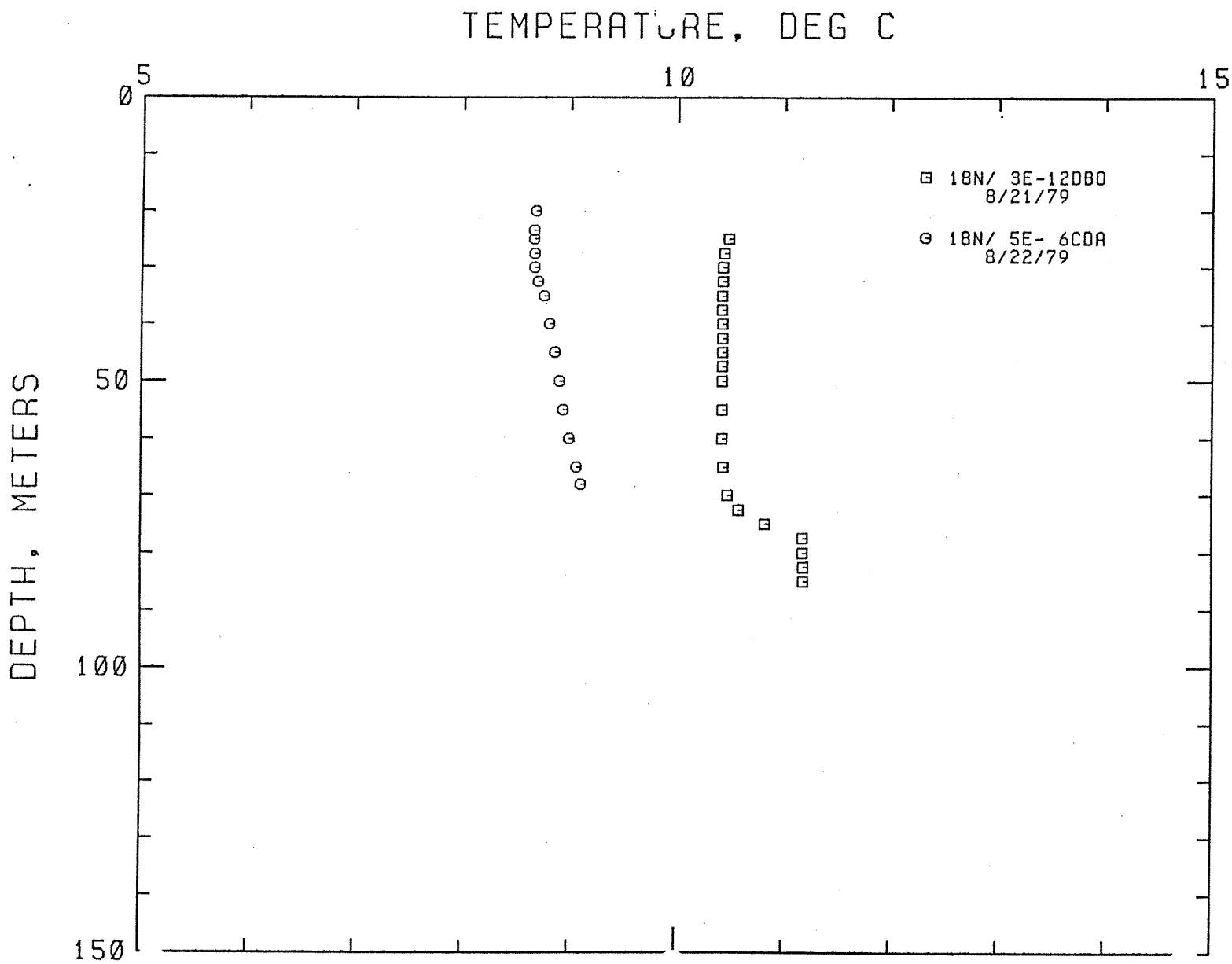
LOCATION: SEATTLE AMS, WASHINGTON
18N/ 3E-12DBD
HOLE NAME: BETHL HS
DATE MEASURED: 8/21/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
25.0	82.0	10.480	50.86	0.0	0.0
27.5	90.2	10.440	50.79	-16.0	-0.9
30.0	98.4	10.430	50.77	-4.0	-0.2
32.5	106.6	10.430	50.77	0.0	0.0
35.0	114.8	10.420	50.76	-4.0	-0.2
37.5	123.0	10.420	50.76	0.0	0.0
40.0	131.2	10.430	50.77	4.0	0.2
42.5	139.4	10.430	50.77	0.0	0.0
45.0	147.6	10.430	50.77	0.0	0.0
47.5	155.8	10.430	50.77	0.0	0.0
50.0	164.0	10.430	50.77	0.0	0.0
55.0	180.4	10.430	50.77	0.0	0.0
60.0	196.8	10.430	50.77	0.0	0.0
65.0	213.2	10.440	50.79	2.0	0.1
70.0	229.6	10.480	50.86	8.0	0.4
72.5	237.8	10.580	51.04	40.0	2.2
75.0	246.0	10.830	51.49	100.0	5.5
77.5	254.2	11.180	52.12	140.0	7.7
80.0	262.4	11.180	52.12	0.0	0.0
82.5	270.6	11.190	52.14	4.0	0.2
85.0	278.8	11.190	52.14	0.0	0.0


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
18N/ 3E-12DBD
8/21/79
18N/ 5E- 6CDA
8/22/79

LOCATION: SEATTLE AMS, WASH
18N/ 5E- 6CDA
HOLE NAME: BENJAMIN
DATE MEASURED: 8/22/79

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	8.680	47.62	0.0	0.0
23.5	77.1	8.660	47.59	-5.7	-0.3
25.0	82.0	8.660	47.59	0.0	0.0
27.5	90.2	8.670	47.61	4.0	0.2
30.0	98.4	8.670	47.61	0.0	0.0
32.5	106.6	8.700	47.66	12.0	0.7
35.0	114.8	8.760	47.77	24.0	1.3
40.0	131.2	8.810	47.86	10.0	0.5
45.0	147.6	8.860	47.95	10.0	0.5
50.0	164.0	8.910	48.04	10.0	0.5
55.0	180.4	8.940	48.09	6.0	0.3
60.0	196.8	9.000	48.20	12.0	0.7
65.0	213.2	9.070	48.33	14.0	0.8
68.0	223.0	9.110	48.40	13.3	0.7

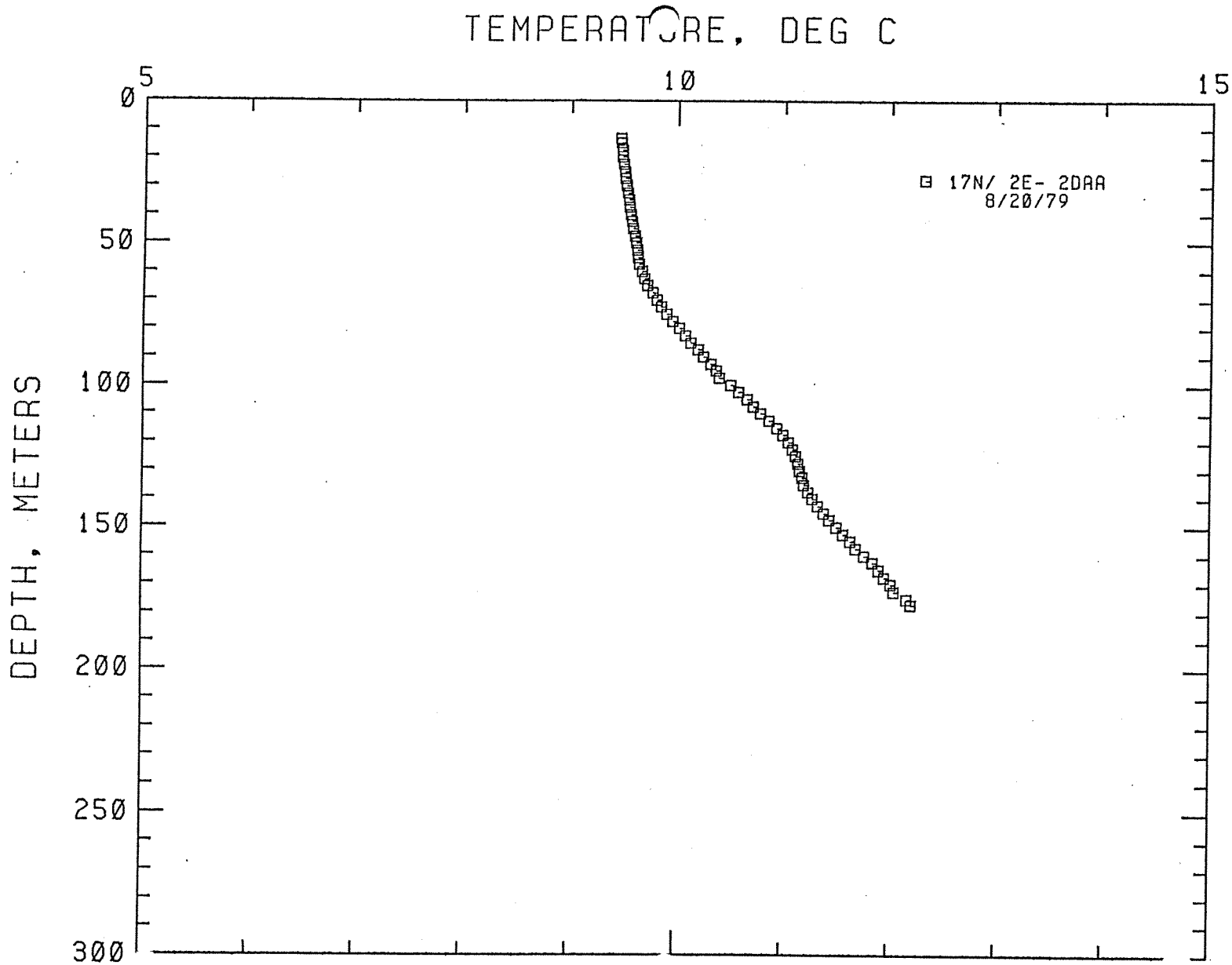

TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
18N/ 3E-12DBD
8/21/79
18N/ 5E- 6CDA
8/22/79

LOCATION: HOQUIAM AMS, WASH
17N/ 2E- 2DAA
HOLE NAME: MILLER
DATE MEASURED: 8/20/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
13.5	44.3	9.460	49.03	0.0	0.0
15.0	49.2	9.470	49.05	6.7	0.4
17.5	57.4	9.480	49.06	4.0	0.2
20.0	65.6	9.480	49.06	0.0	0.0
22.5	73.8	9.490	49.08	4.0	0.2
25.0	82.0	9.500	49.10	4.0	0.2
27.5	90.2	9.510	49.12	4.0	0.2
30.0	98.4	9.520	49.14	4.0	0.2
32.5	106.6	9.530	49.15	4.0	0.2
35.0	114.8	9.540	49.17	4.0	0.2
37.5	123.0	9.550	49.19	4.0	0.2
40.0	131.2	9.560	49.21	4.0	0.2
42.5	139.4	9.570	49.23	4.0	0.2
45.0	147.6	9.580	49.24	4.0	0.2
47.5	155.8	9.600	49.28	8.0	0.4
50.0	164.0	9.610	49.30	4.0	0.2
52.5	172.2	9.620	49.32	4.0	0.2
55.0	180.4	9.630	49.33	4.0	0.2
57.5	188.6	9.640	49.35	4.0	0.2
60.0	196.8	9.670	49.41	12.0	0.7
62.5	205.0	9.690	49.44	8.0	0.4
65.0	213.2	9.720	49.50	12.0	0.7
67.5	221.4	9.770	49.59	20.0	1.1
70.0	229.6	9.810	49.66	16.0	0.9
72.5	237.8	9.850	49.73	16.0	0.9
75.0	246.0	9.900	49.82	20.0	1.1
77.5	254.2	9.960	49.93	24.0	1.3
80.0	262.4	10.020	50.04	24.0	1.3
82.5	270.6	10.080	50.14	24.0	1.3
85.0	278.8	10.130	50.23	20.0	1.1
87.5	287.0	10.200	50.36	28.0	1.5
90.0	295.2	10.250	50.45	20.0	1.1
92.5	303.4	10.320	50.58	28.0	1.5
95.0	311.6	10.370	50.67	20.0	1.1
97.5	319.8	10.400	50.72	12.0	0.7
100.0	328.0	10.510	50.92	44.0	2.4
102.5	336.2	10.580	51.04	28.0	1.5
105.0	344.4	10.660	51.19	32.0	1.8
107.5	352.6	10.720	51.30	24.0	1.3
110.0	360.8	10.790	51.42	28.0	1.5
112.5	369.0	10.870	51.57	32.0	1.8
115.0	377.2	10.940	51.69	28.0	1.5

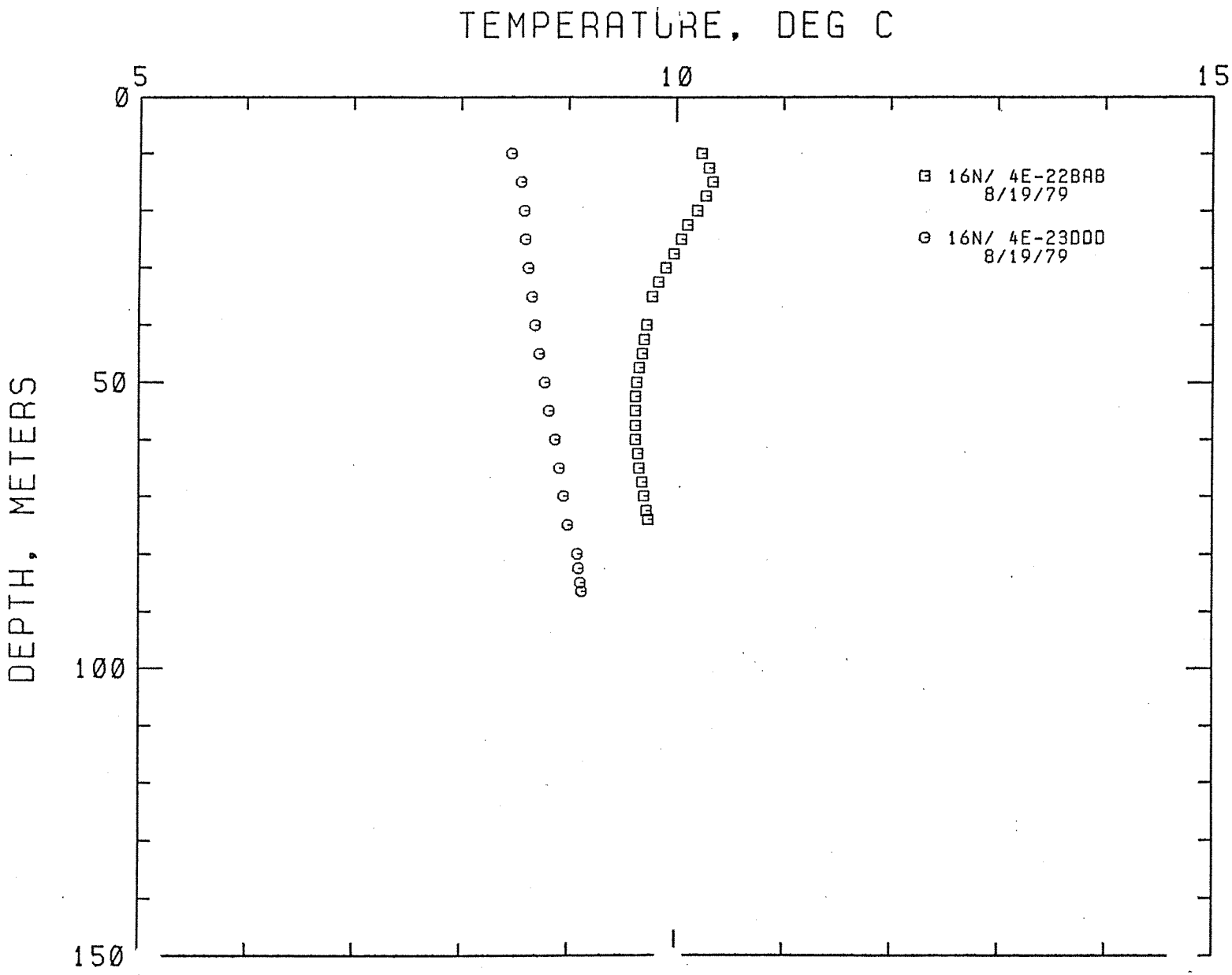
LOCATION: HOQUIAM AMS, WASH
17N/ 2E- 2DAA
HOLE NAME: MILLER
DATE MEASURED: 8/20/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
117.5	385.4	11.000	51.80	24.0	1.3
120.0	393.6	11.050	51.89	20.0	1.1
122.5	401.8	11.090	51.96	16.0	0.9
125.0	410.0	11.120	52.02	12.0	0.7
127.5	418.2	11.140	52.05	8.0	0.4
130.0	426.4	11.160	52.09	8.0	0.4
132.5	434.6	11.180	52.12	8.0	0.4
135.0	442.8	11.200	52.16	8.0	0.4
137.5	451.0	11.240	52.23	16.0	0.9
140.0	459.2	11.280	52.30	16.0	0.9
142.5	467.4	11.330	52.39	20.0	1.1
145.0	475.6	11.390	52.50	24.0	1.3
147.5	483.8	11.440	52.59	20.0	1.1
150.0	492.0	11.510	52.72	28.0	1.5
152.5	500.2	11.570	52.83	24.0	1.3
155.0	508.4	11.640	52.95	28.0	1.5
157.5	516.6	11.690	53.04	20.0	1.1
160.0	524.8	11.770	53.19	32.0	1.8
162.5	533.0	11.850	53.33	32.0	1.8
165.0	541.2	11.910	53.44	24.0	1.3
167.5	549.4	11.960	53.53	20.0	1.1
170.0	557.6	12.020	53.64	24.0	1.3
172.5	565.8	12.050	53.69	12.0	0.7
175.0	574.0	12.170	53.91	48.0	2.6
177.0	580.6	12.210	53.98	20.0	1.1


TEMPERATURE, DEG C
5
10
15
0
50
100
150
200
250
300
DEPTH, METERS
17N/ 2E- 2DAA
8/20/79

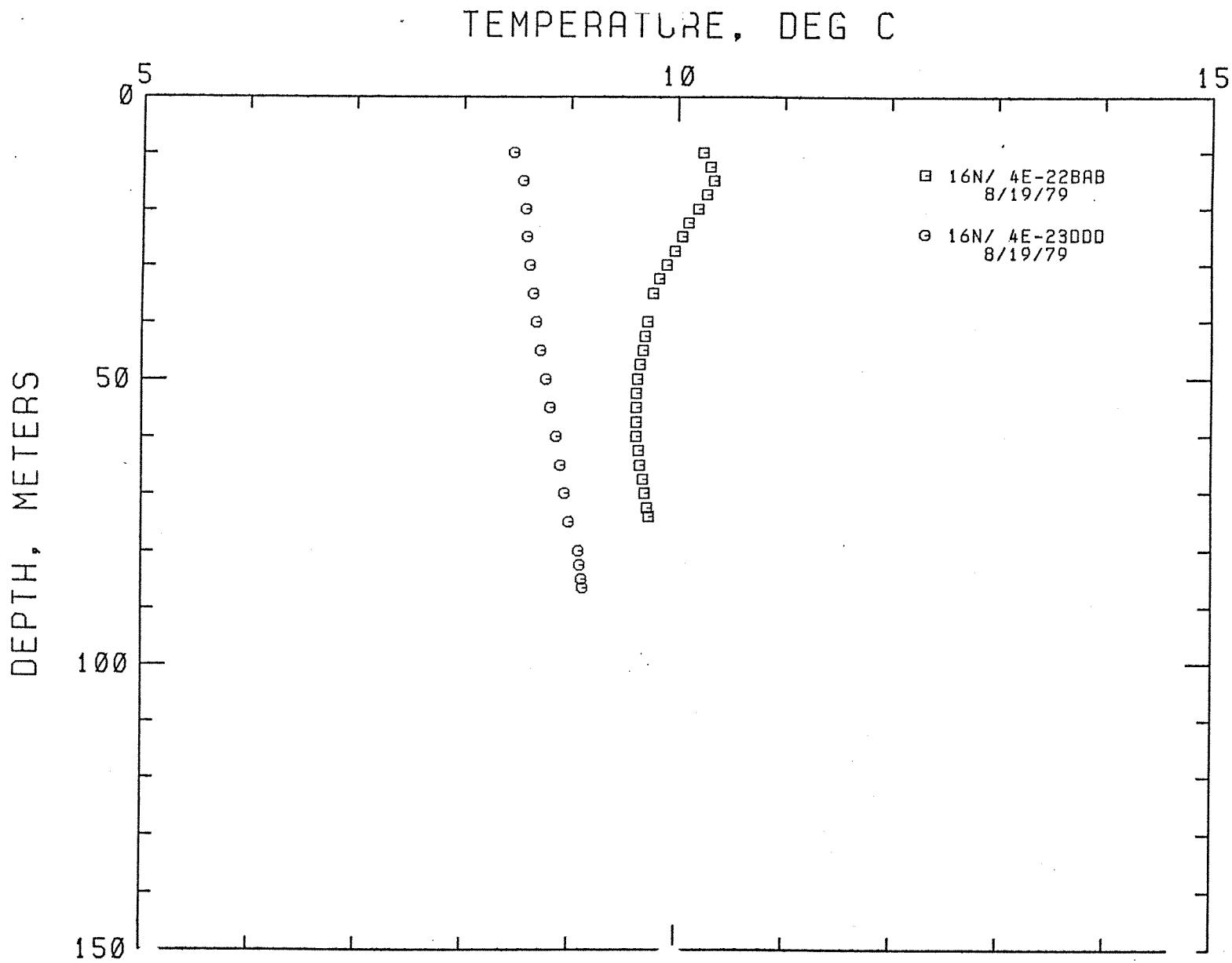
LOCATION: HOQUIAM AMS, WASHINGTON
16N/ 4E-22BAB .
HOLE NAME: DN SMITH
DATE MEASURED: 8/19/79

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	10.240	50.43	0.0	0.0
12.5	41.0	10.310	50.56	28.0	1.5
15.0	49.2	10.340	50.61	12.0	0.7
17.5	57.4	10.280	50.50	-24.0	-1.3
20.0	65.6	10.200	50.36	-32.0	-1.8
22.5	73.8	10.110	50.20	-36.0	-2.0
25.0	82.0	10.050	50.09	-24.0	-1.3
27.5	90.2	9.980	49.96	-28.0	-1.5
30.0	98.4	9.910	49.84	-28.0	-1.5
32.5	106.6	9.840	49.71	-28.0	-1.5
35.0	114.8	9.780	49.60	-24.0	-1.3
40.0	131.2	9.730	49.51	-10.0	-0.5
42.5	139.4	9.710	49.48	-8.0	-0.4
45.0	147.6	9.690	49.44	-8.0	-0.4
47.5	155.8	9.660	49.39	-12.0	-0.7
50.0	164.0	9.640	49.35	-8.0	-0.4
52.5	172.2	9.630	49.33	-4.0	-0.2
55.0	180.4	9.630	49.33	0.0	0.0
57.5	188.6	9.630	49.33	0.0	0.0
60.0	196.8	9.630	49.33	0.0	0.0
62.5	205.0	9.650	49.37	8.0	0.4
65.0	213.2	9.660	49.39	4.0	0.2
67.5	221.4	9.690	49.44	12.0	0.7
70.0	229.6	9.710	49.48	8.0	0.4
72.5	237.8	9.730	49.51	8.0	0.4
74.0	242.7	9.750	49.55	13.3	0.7


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
16N/ 4E-22BAB
8/19/79
16N/ 4E-23DDD
8/19/79

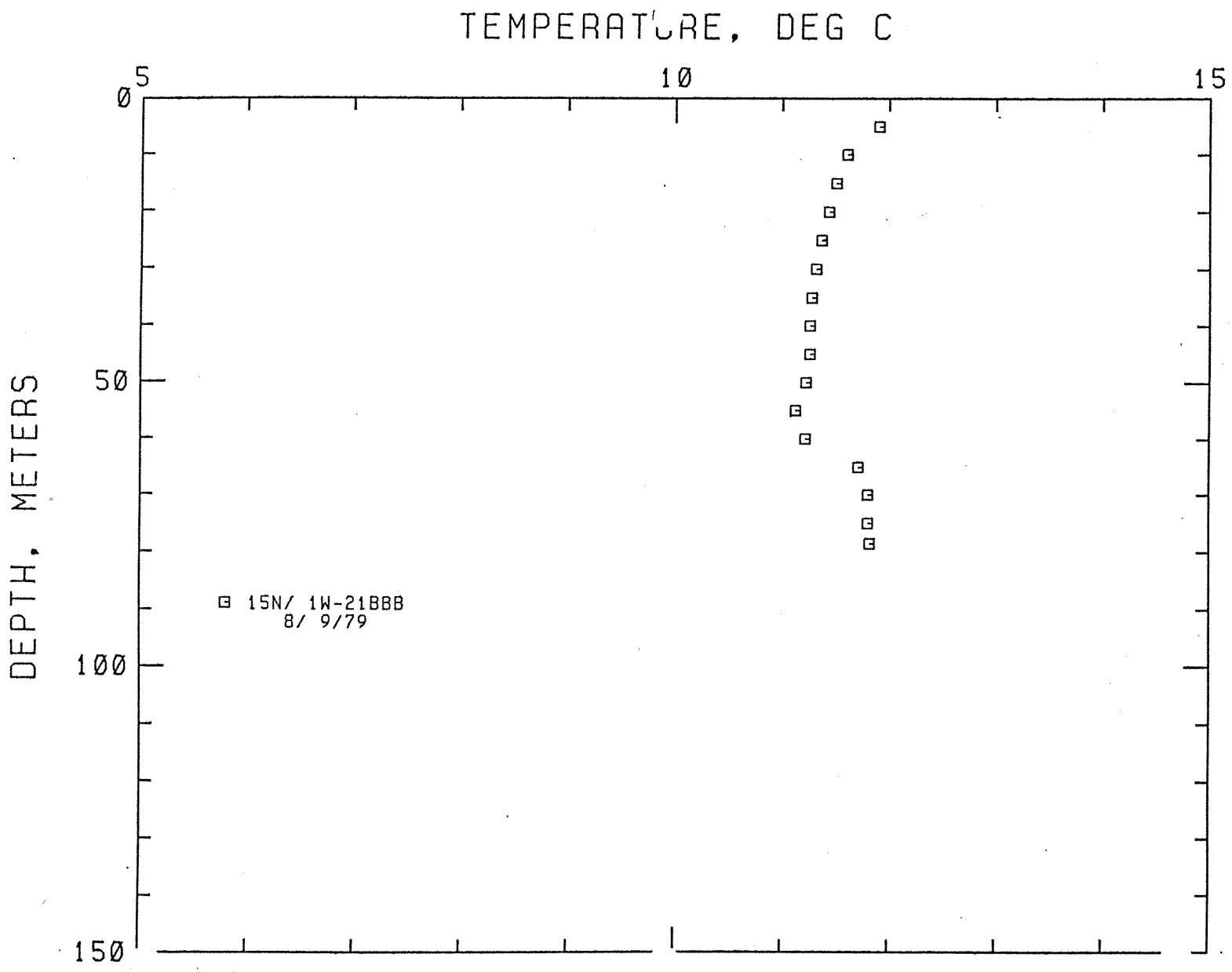
LOCATION: HOQUIAM AMS, WASH
16N/ 4E-23DDD
HOLE NAME: ANDERSON
DATE MEASURED: 8/19/79

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	8.470	47.25	0.0	0.0
15.0	49.2	8.560	47.41	18.0	1.0
20.0	65.6	8.590	47.46	6.0	0.3
25.0	82.0	8.600	47.48	2.0	0.1
30.0	98.4	8.630	47.53	6.0	0.3
35.0	114.8	8.660	47.59	6.0	0.3
40.0	131.2	8.690	47.64	6.0	0.3
45.0	147.6	8.730	47.71	8.0	0.4
50.0	164.0	8.780	47.80	10.0	0.5
55.0	180.4	8.820	47.88	8.0	0.4
60.0	196.8	8.880	47.98	12.0	0.7
65.0	213.2	8.920	48.06	8.0	0.4
70.0	229.6	8.960	48.13	8.0	0.4
75.0	246.0	9.000	48.20	8.0	0.4
80.0	262.4	9.090	48.36	18.0	1.0
82.5	270.6	9.100	48.38	4.0	0.2
85.0	278.8	9.120	48.42	8.0	0.4
86.5	283.7	9.130	48.43	6.7	0.4


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
16N/ 4E-22BAB
8/19/79
16N/ 4E-23DDD
8/19/79

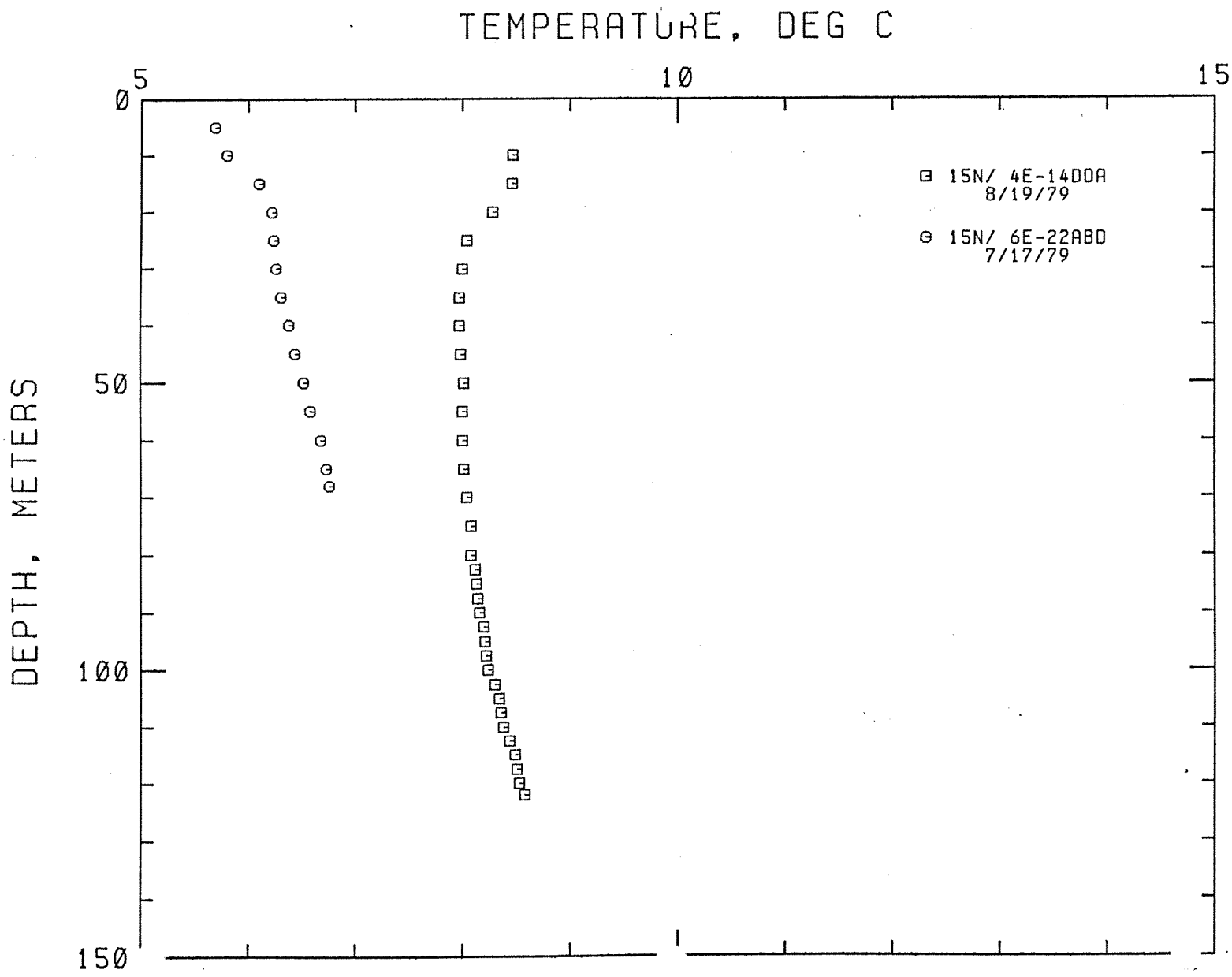
LOCATION: HOQUIAM AMS, WASH
15N/ 1W-21BBB
HOLE NAME: RDH-1
DATE MEASURED: 8/ 9/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	11.910	53.44	0.0	0.0
10.0	32.8	11.610	52.90	-60.0	-3.3
15.0	49.2	11.510	52.72	-20.0	-1.1
20.0	65.6	11.440	52.59	-14.0	-0.8
25.0	82.0	11.370	52.47	-14.0	-0.8
30.0	98.4	11.320	52.38	-10.0	-0.5
35.0	114.8	11.280	52.30	-8.0	-0.4
40.0	131.2	11.260	52.27	-4.0	-0.2
45.0	147.6	11.260	52.27	0.0	0.0
50.0	164.0	11.230	52.21	-6.0	-0.3
55.0	180.4	11.130	52.03	-20.0	-1.1
60.0	196.8	11.220	52.20	18.0	1.0
65.0	213.2	11.720	53.10	100.0	5.5
70.0	229.6	11.810	53.26	18.0	1.0
75.0	246.0	11.810	53.26	0.0	0.0
78.5	257.5	11.830	53.29	5.7	0.3


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
15N/ 1W-21BBB
8/ 9/79

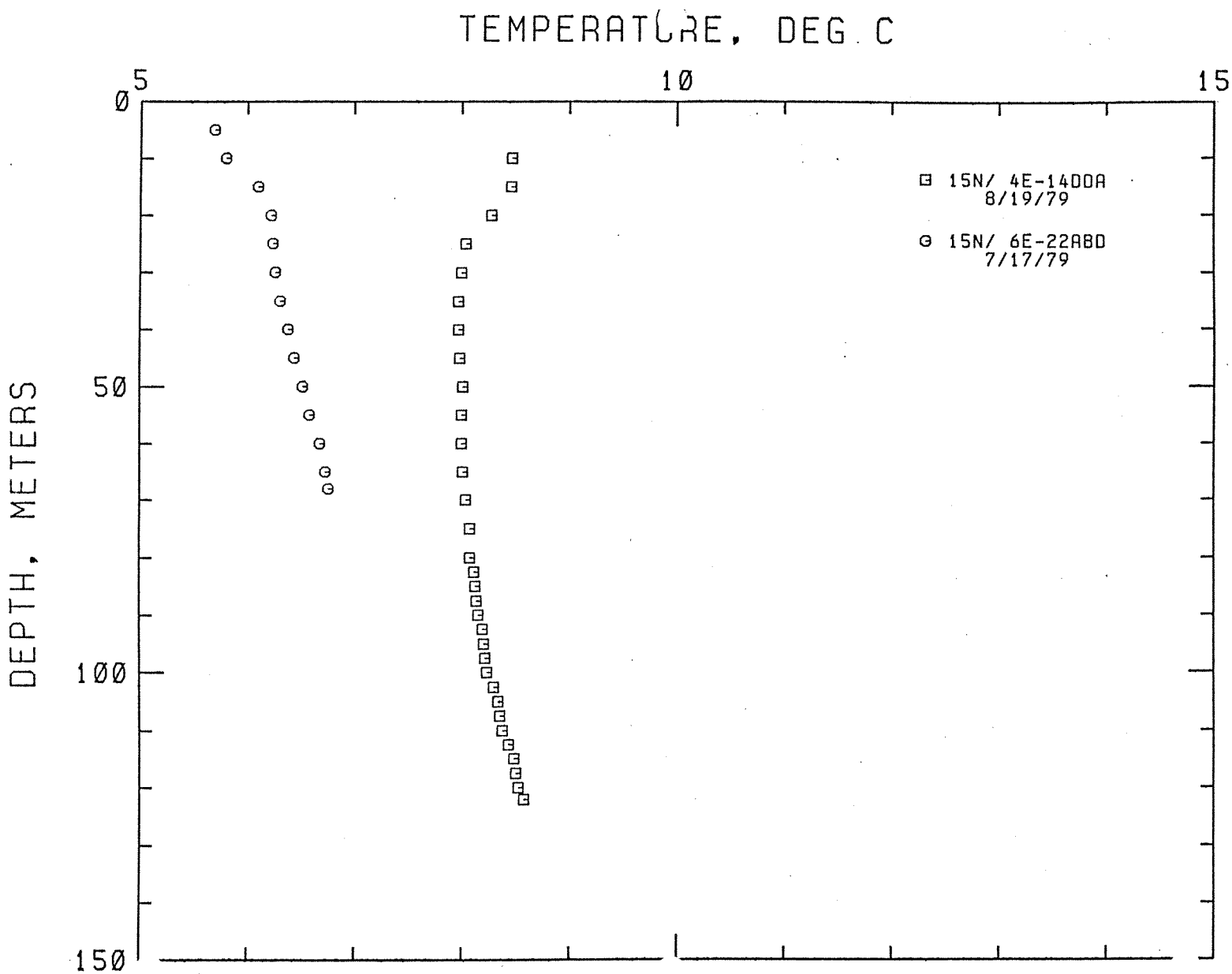
LOCATION: HOQUIAM AMS, WASH
15N/ 4E-14DDA
HOLE NAME: B LNDSEY
DATE MEASURED: 8/19/79

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	8.470	47.25	0.0	0.0
15.0	49.2	8.460	47.23	-2.0	-0.1
20.0	65.6	8.280	46.90	-36.0	-2.0
25.0	82.0	8.040	46.47	-48.0	-2.6
30.0	98.4	8.000	46.40	-8.0	-0.4
35.0	114.8	7.970	46.35	-6.0	-0.3
40.0	131.2	7.970	46.35	0.0	0.0
45.0	147.6	7.980	46.36	2.0	0.1
50.0	164.0	8.010	46.42	6.0	0.3
55.0	180.4	8.000	46.40	-2.0	-0.1
60.0	196.8	8.000	46.40	0.0	0.0
65.0	213.2	8.010	46.42	2.0	0.1
70.0	229.6	8.040	46.47	6.0	0.3
75.0	246.0	8.080	46.54	8.0	0.4
80.0	262.4	8.080	46.54	0.0	0.0
82.5	270.6	8.120	46.62	16.0	0.9
85.0	278.8	8.130	46.63	4.0	0.2
87.5	287.0	8.140	46.65	4.0	0.2
90.0	295.2	8.160	46.69	8.0	0.4
92.5	303.4	8.200	46.76	16.0	0.9
95.0	311.6	8.210	46.78	4.0	0.2
97.5	319.8	8.220	46.80	4.0	0.2
100.0	328.0	8.240	46.83	8.0	0.4
102.5	336.2	8.300	46.94	24.0	1.3
105.0	344.4	8.340	47.01	16.0	0.9
107.5	352.6	8.360	47.05	8.0	0.4
110.0	360.8	8.380	47.08	8.0	0.4
112.5	369.0	8.440	47.19	24.0	1.3
115.0	377.2	8.490	47.28	20.0	1.1
117.5	385.4	8.510	47.32	8.0	0.4
120.0	393.6	8.530	47.35	8.0	0.4
122.0	400.2	8.580	47.44	25.0	1.4


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
15N/ 4E-14DDA
8/19/79
15N/ 6E-22ABD
7/17/79

LOCATION: HOQUIAM AMS, WASH
15N/ 6E-22ABD
HOLE NAME: ASHFRD-1
DATE MEASURED: 7/17/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	5.690	42.24	0.0	0.0
10.0	32.8	5.800	42.44	22.0	1.2
15.0	49.2	6.100	42.98	60.0	3.3
20.0	65.6	6.220	43.20	24.0	1.3
25.0	82.0	6.240	43.23	4.0	0.2
30.0	98.4	6.260	43.27	4.0	0.2
35.0	114.8	6.310	43.36	10.0	0.5
40.0	131.2	6.380	43.48	14.0	0.8
45.0	147.6	6.440	43.59	12.0	0.7
50.0	164.0	6.520	43.74	16.0	0.9
55.0	180.4	6.580	43.84	12.0	0.7
60.0	196.8	6.680	44.02	20.0	1.1
65.0	213.2	6.730	44.11	10.0	0.5
68.0	223.0	6.760	44.17	10.0	0.5

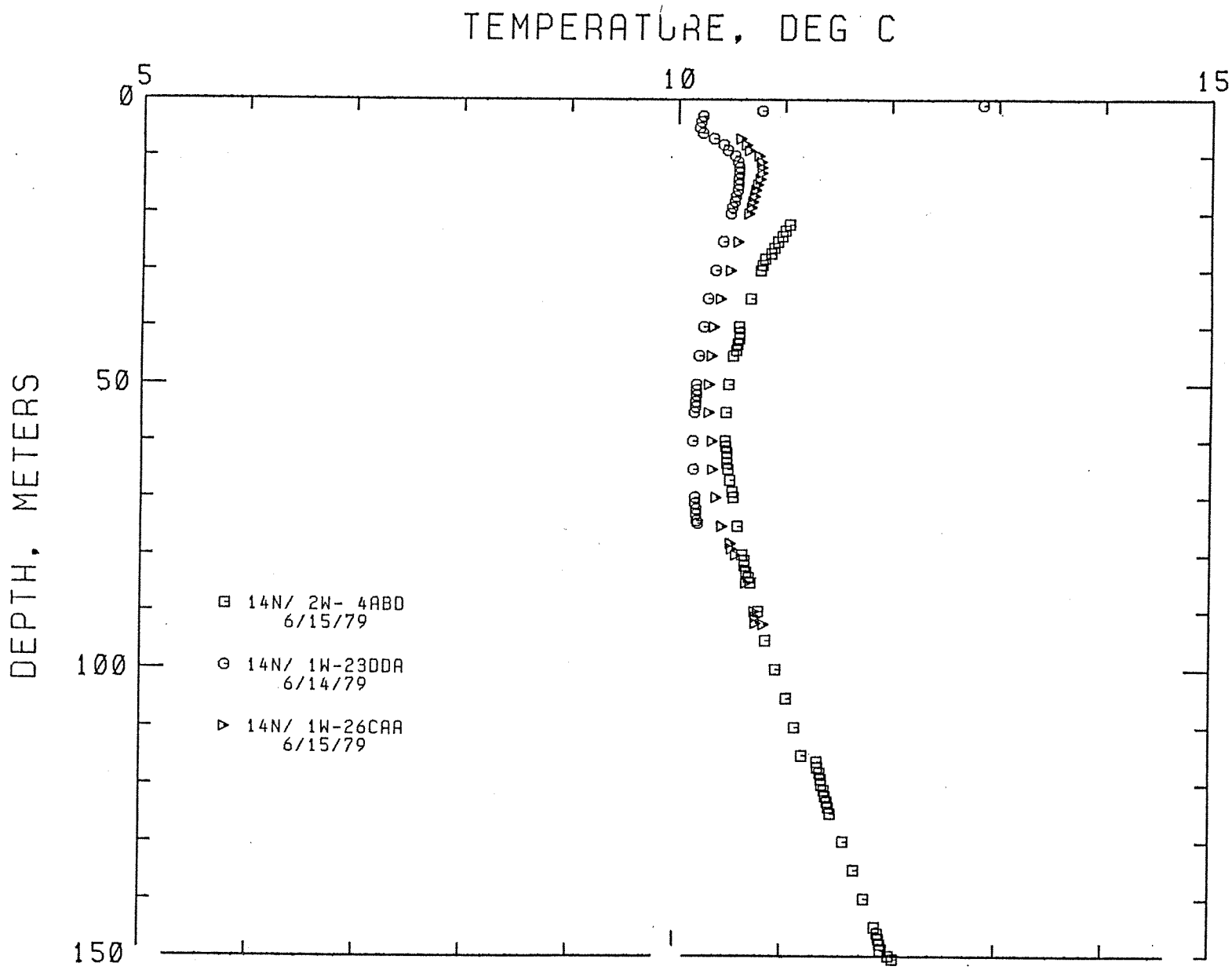

TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
15N/ 4E-14DDA
8/19/79
15N/ 6E-22ABD
7/17/79

LOCATION: HOQUIAM AMS, WASH
14N/ 2W- 4ABD
HOLE NAME: THOMAS
DATE MEASURED: 6/15/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
22.0	72.2	11.050	51.89	0.0	0.0
23.0	75.4	11.010	51.82	-40.0	-2.2
24.0	78.7	10.980	51.76	-30.0	-1.6
25.0	82.0	10.940	51.69	-40.0	-2.2
26.0	85.3	10.910	51.64	-30.0	-1.6
27.0	88.6	10.880	51.58	-30.0	-1.6
28.0	91.8	10.820	51.48	-60.0	-3.3
29.0	95.1	10.800	51.44	-20.0	-1.1
30.0	98.4	10.780	51.40	-20.0	-1.1
35.0	114.8	10.690	51.24	-18.0	-1.0
40.0	131.2	10.580	51.04	-22.0	-1.2
41.0	134.5	10.590	51.06	10.0	0.5
42.0	137.8	10.590	51.06	0.0	0.0
43.0	141.0	10.570	51.03	-20.0	-1.1
44.0	144.3	10.560	51.01	-10.0	-0.5
45.0	147.6	10.530	50.95	-30.0	-1.6
50.0	164.0	10.490	50.88	-8.0	-0.4
55.0	180.4	10.470	50.85	-4.0	-0.2
60.0	196.8	10.460	50.83	-2.0	-0.1
61.0	200.1	10.470	50.85	10.0	0.5
62.0	203.4	10.480	50.86	10.0	0.5
63.0	206.6	10.480	50.86	0.0	0.0
64.0	209.9	10.480	50.86	0.0	0.0
65.0	213.2	10.490	50.88	10.0	0.5
67.0	219.8	10.510	50.92	10.0	0.5
69.0	226.3	10.530	50.95	10.0	0.5
70.0	229.6	10.540	50.97	10.0	0.5
75.0	246.0	10.580	51.04	8.0	0.4
80.0	262.4	10.630	51.13	10.0	0.5
81.0	265.7	10.650	51.17	20.0	1.1
82.0	269.0	10.650	51.17	0.0	0.0
83.0	272.2	10.670	51.21	20.0	1.1
84.0	275.5	10.690	51.24	20.0	1.1
85.0	278.8	10.710	51.28	20.0	1.1
90.0	295.2	10.780	51.40	14.0	0.8
95.0	311.6	10.850	51.53	14.0	0.8
100.0	328.0	10.950	51.71	20.0	1.1
105.0	344.4	11.050	51.89	20.0	1.1
110.0	360.8	11.130	52.03	16.0	0.9
115.0	377.2	11.200	52.16	14.0	0.8
116.0	380.5	11.340	52.41	140.0	7.7
117.0	383.8	11.350	52.43	10.0	0.5

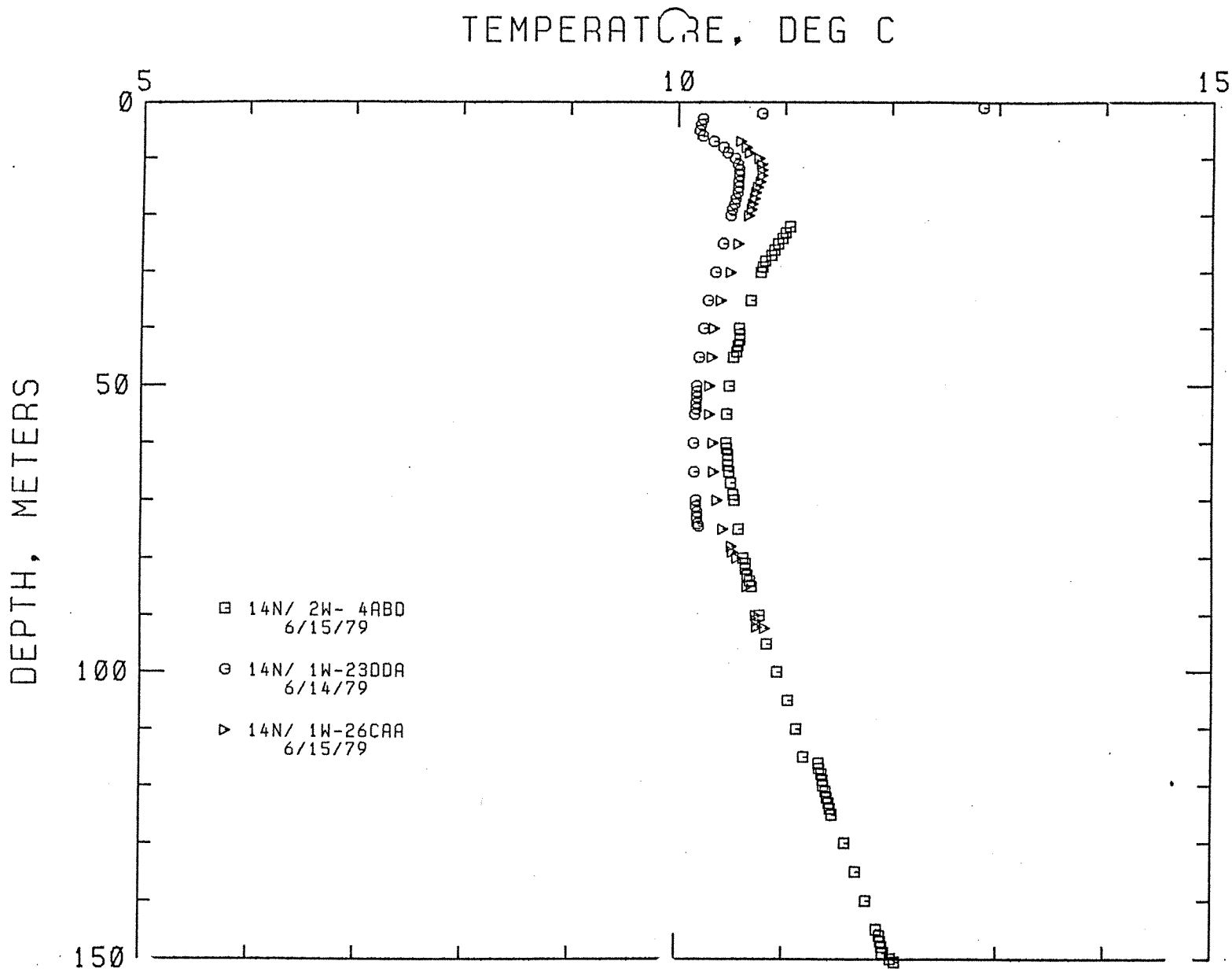
LOCATION: HOQUIAM AMS, WASH
14N/ 2W- 4ABD
HOLE NAME: THOMAS
DATE MEASURED: 6/15/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
118.0	387.0	11.370	52.47	20.0	1.1
119.0	390.3	11.380	52.48	10.0	0.5
120.0	393.6	11.390	52.50	10.0	0.5
121.0	396.9	11.410	52.54	20.0	1.1
122.0	400.2	11.420	52.56	10.0	0.5
123.0	403.4	11.440	52.59	20.0	1.1
124.0	406.7	11.450	52.61	10.0	0.5
125.0	410.0	11.470	52.65	20.0	1.1
130.0	426.4	11.590	52.86	24.0	1.3
135.0	442.8	11.690	53.04	20.0	1.1
140.0	459.2	11.790	53.22	20.0	1.1
145.0	475.6	11.890	53.40	20.0	1.1
146.0	478.9	11.920	53.46	30.0	1.6
147.0	482.2	11.930	53.47	10.0	0.5
148.0	485.4	11.940	53.49	10.0	0.5
149.0	488.7	11.950	53.51	10.0	0.5
150.0	492.0	12.020	53.64	70.0	3.8
150.5	493.6	12.060	53.71	80.0	4.4


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
14N/ 2W- 4ABD
6/15/79
14N/ 1W-23DDA
6/14/79
14N/ 1W-26CAA
6/15/79

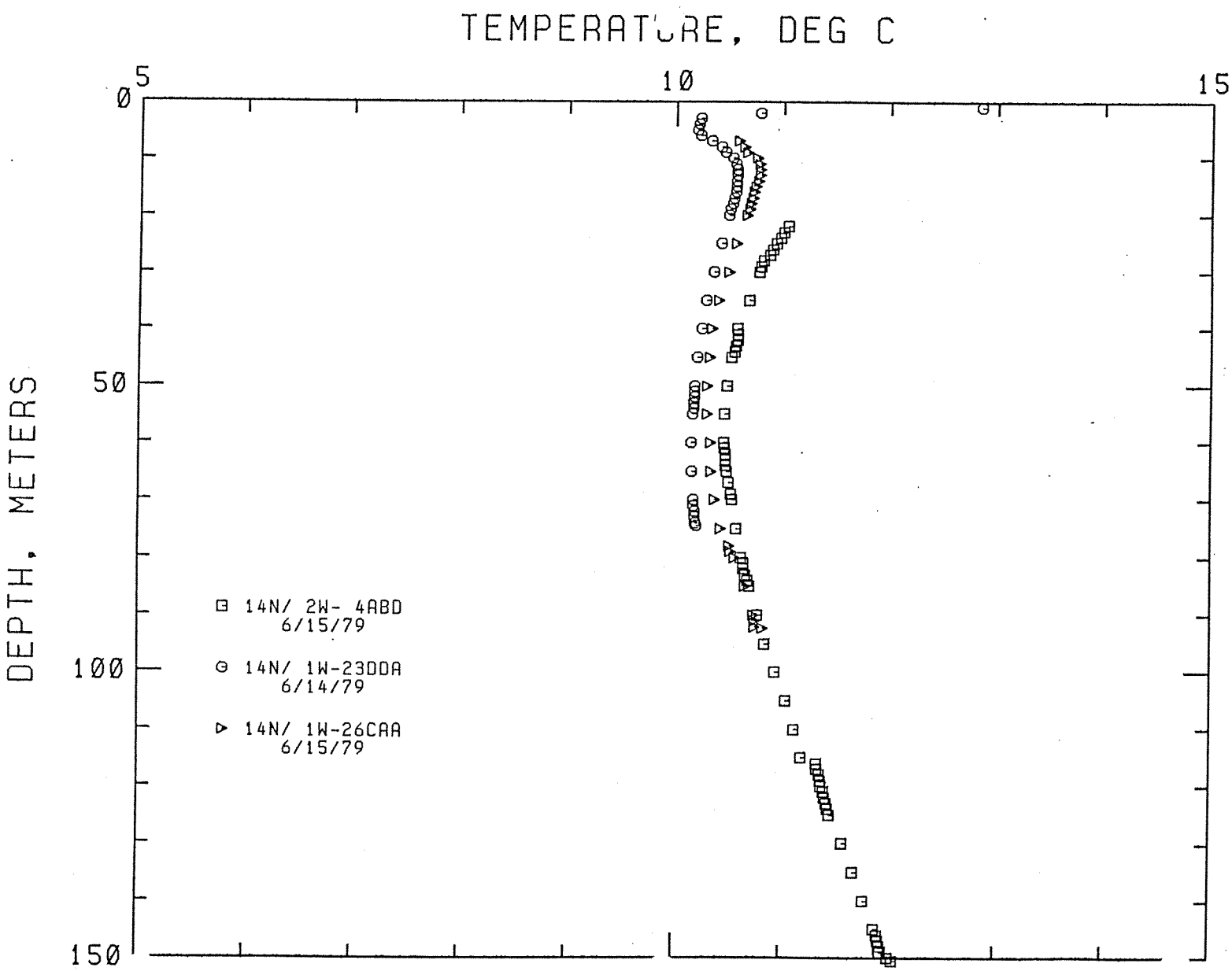
LOCATION: HOQUIAM AMS, WASH
14N/ 1W-23DDA
HOLE NAME: AGNEW
DATE MEASURED: 6/14/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
1.0	3.3	12.850	55.13	0.0	0.0
2.0	6.6	10.780	51.40	-2070.0	-113.6
3.0	9.8	10.230	50.41	-550.0	-30.2
4.0	13.1	10.210	50.38	-20.0	-1.1
5.0	16.4	10.200	50.36	-10.0	-0.5
6.0	19.7	10.230	50.41	30.0	1.6
7.0	23.0	10.330	50.59	100.0	5.5
8.0	26.2	10.420	50.76	90.0	4.9
9.0	29.5	10.460	50.83	40.0	2.2
10.0	32.8	10.530	50.95	70.0	3.8
11.0	36.1	10.560	51.01	30.0	1.6
12.0	39.4	10.570	51.03	10.0	0.5
13.0	42.6	10.570	51.03	0.0	0.0
14.0	45.9	10.565	51.02	-5.0	-0.3
15.0	49.2	10.565	51.02	0.0	0.0
16.0	52.5	10.560	51.01	-5.0	-0.3
17.0	55.8	10.540	50.97	-20.0	-1.1
18.0	59.0	10.530	50.95	-10.0	-0.5
19.0	62.3	10.510	50.92	-20.0	-1.1
20.0	65.6	10.495	50.89	-15.0	-0.8
25.0	82.0	10.430	50.77	-13.0	-0.7
30.0	98.4	10.360	50.65	-14.0	-0.8
35.0	114.8	10.290	50.52	-14.0	-0.8
40.0	131.2	10.250	50.45	-8.0	-0.4
45.0	147.6	10.210	50.38	-8.0	-0.4
50.0	164.0	10.190	50.34	-4.0	-0.2
51.0	167.3	10.190	50.34	0.0	0.0
52.0	170.6	10.190	50.34	0.0	0.0
53.0	173.8	10.180	50.32	-10.0	-0.5
54.0	177.1	10.180	50.32	0.0	0.0
55.0	180.4	10.170	50.31	-10.0	-0.5
60.0	196.8	10.160	50.29	-2.0	-0.1
65.0	213.2	10.165	50.30	1.0	0.1
70.0	229.6	10.180	50.32	3.0	0.2
71.0	232.9	10.180	50.32	0.0	0.0
72.0	236.2	10.195	50.35	15.0	0.8
73.0	239.4	10.195	50.35	0.0	0.0
74.0	242.7	10.200	50.36	5.0	0.3
74.5	244.4	10.210	50.38	20.0	1.1


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
14N/ 2W- 4ABD
6/15/79
14N/ 1W-23DDA
6/14/79
14N/ 1W-26CAA
6/15/79

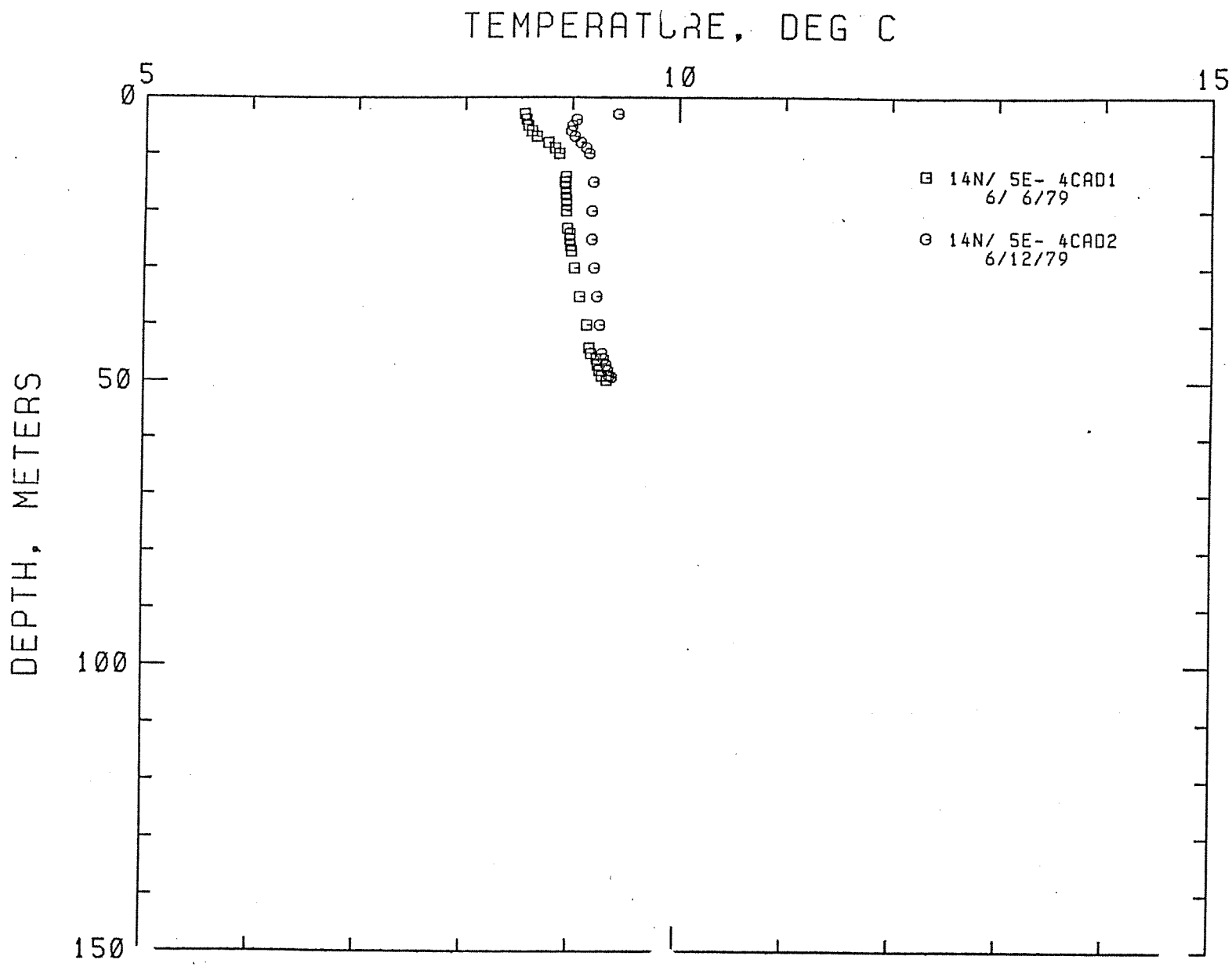
LOCATION: HOQUIAM AMS, WASH
14N/ 1W-26CAA
HOLE NAME: REYNOLDS
DATE MEASURED: 6/15/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
7.0	23.0	10.590	51.06	0.0	0.0
8.0	26.2	10.640	51.15	50.0	2.7
9.0	29.5	10.670	51.21	30.0	1.6
10.0	32.8	10.760	51.37	90.0	4.9
11.0	36.1	10.780	51.40	20.0	1.1
12.0	39.4	10.790	51.42	10.0	0.5
13.0	42.6	10.790	51.42	0.0	0.0
14.0	45.9	10.770	51.39	-20.0	-1.1
15.0	49.2	10.750	51.35	-20.0	-1.1
16.0	52.5	10.730	51.31	-20.0	-1.1
17.0	55.8	10.720	51.30	-10.0	-0.5
18.0	59.0	10.700	51.26	-20.0	-1.1
19.0	62.3	10.690	51.24	-10.0	-0.5
20.0	65.6	10.670	51.21	-20.0	-1.1
25.0	82.0	10.570	51.03	-20.0	-1.1
30.0	98.4	10.500	50.90	-14.0	-0.8
35.0	114.8	10.410	50.74	-18.0	-1.0
40.0	131.2	10.350	50.63	-12.0	-0.7
45.0	147.6	10.330	50.59	-4.0	-0.2
50.0	164.0	10.310	50.56	-4.0	-0.2
55.0	180.4	10.310	50.56	0.0	0.0
60.0	196.8	10.340	50.61	6.0	0.3
65.0	213.2	10.350	50.63	2.0	0.1
70.0	229.6	10.380	50.68	6.0	0.3
75.0	246.0	10.440	50.79	12.0	0.7
78.0	255.8	10.520	50.94	26.7	1.5
79.0	259.1	10.530	50.95	10.0	0.5
80.0	262.4	10.570	51.03	40.0	2.2
85.0	278.8	10.670	51.21	20.0	1.1
90.0	295.2	10.750	51.35	16.0	0.9
91.0	298.5	10.760	51.37	10.0	0.5
92.0	301.8	10.760	51.37	0.0	0.0
92.3	302.7	10.835	51.50	250.0	13.7


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
14N/ 2W- 4ABD
6/15/79
14N/ 1W-23DDA
6/14/79
14N/ 1W-26CAA
6/15/79

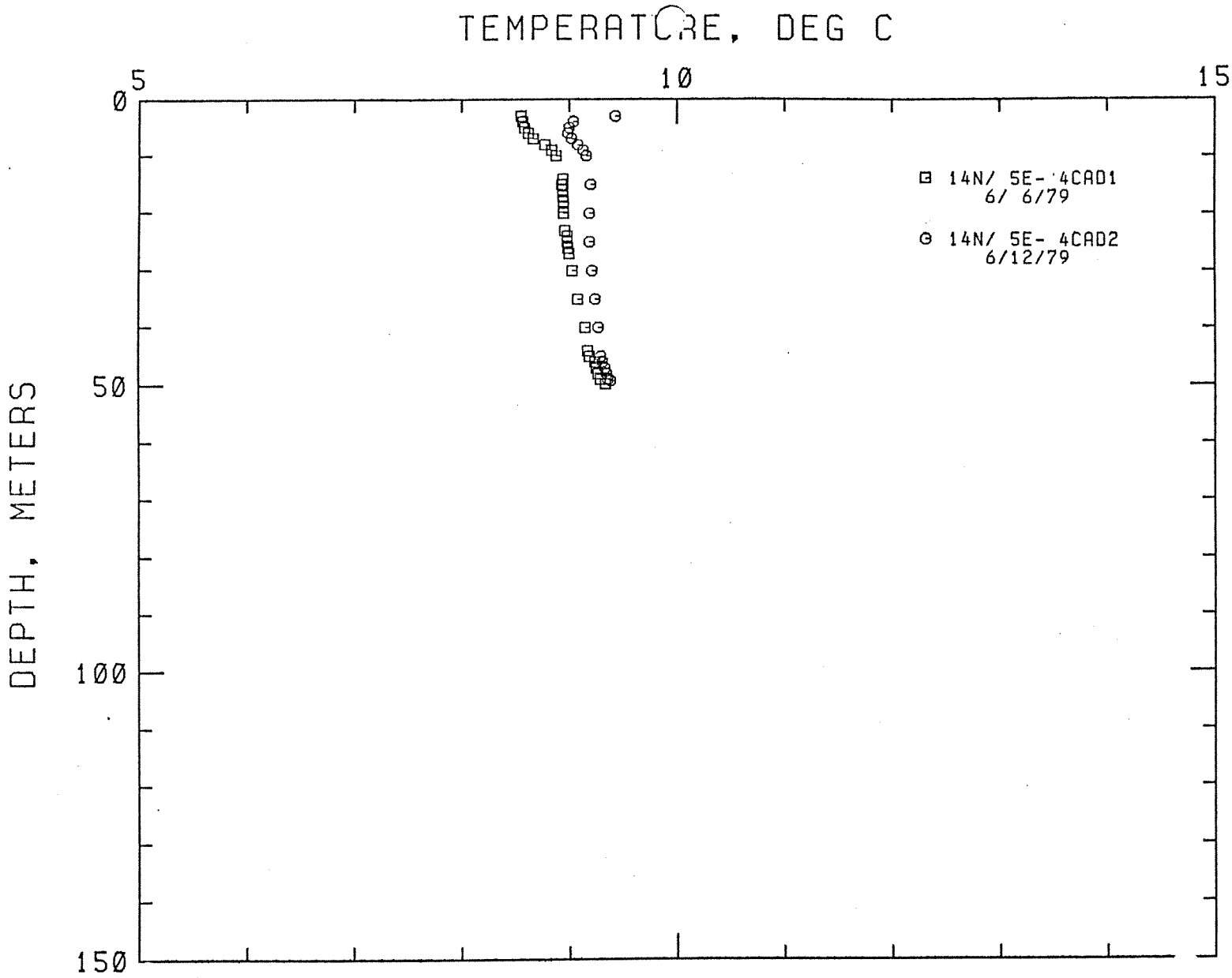
LOCATION: HOQUIAM AMS, WASH
14N/ 5E- 4CAD1
HOLE NAME: MOUNCE
DATE MEASURED: 6/ 6/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
3.0	9.8	8.555	47.40	0.0	0.0
4.0	13.1	8.570	47.43	15.0	0.8
5.0	16.4	8.590	47.46	20.0	1.1
6.0	19.7	8.620	47.52	30.0	1.6
7.0	23.0	8.670	47.61	50.0	2.7
8.0	26.2	8.775	47.79	105.0	5.8
9.0	29.5	8.840	47.91	65.0	3.6
10.0	32.8	8.880	47.98	40.0	2.2
15.0	49.2	8.930	48.07	10.0	0.5
14.0	45.9	8.940	48.09	-10.0	-0.5
15.0	49.2	8.940	48.09	0.0	0.0
16.0	52.5	8.940	48.09	0.0	0.0
17.0	55.8	8.940	48.09	0.0	0.0
18.0	59.0	8.950	48.11	10.0	0.5
19.0	62.3	8.950	48.11	0.0	0.0
20.0	65.6	8.950	48.11	0.0	0.0
23.0	75.4	8.960	48.13	3.3	0.2
24.0	78.7	8.980	48.16	20.0	1.1
25.0	82.0	8.980	48.16	0.0	0.0
26.0	85.3	8.990	48.18	10.0	0.5
27.0	88.6	9.000	48.20	10.0	0.5
30.0	98.4	9.030	48.25	10.0	0.5
35.0	114.8	9.080	48.34	10.0	0.5
40.0	131.2	9.150	48.47	14.0	0.8
44.0	144.3	9.170	48.51	5.0	0.3
45.0	147.6	9.190	48.54	20.0	1.1
46.0	150.9	9.240	48.63	50.0	2.7
47.0	154.2	9.250	48.65	10.0	0.5
48.0	157.4	9.270	48.69	20.0	1.1
49.0	160.7	9.290	48.72	20.0	1.1
49.7	163.0	9.335	48.80	64.3	3.5


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
14N/ 5E- 4CAD1
6/ 6/79
14N/ 5E- 4CAD2
6/12/79

LOCATION: HOQUIAM AMS, WASH
14N/ 5E- 4CAD2
HOLE NAME: PENNGTON
DATE MEASURED: 6/12/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
3.0	9.8	9.430	48.97	0.0	0.0
4.0	13.1	9.040	48.27	-390.0	-21.4
5.0	16.4	9.000	48.20	-40.0	-2.2
6.0	19.7	8.990	48.18	-10.0	-0.5
7.0	23.0	9.020	48.24	30.0	1.6
8.0	26.2	9.080	48.34	60.0	3.3
9.0	29.5	9.130	48.43	50.0	2.7
10.0	32.8	9.160	48.49	30.0	1.6
15.0	49.2	9.200	48.56	8.0	0.4
20.0	65.6	9.190	48.54	-2.0	-0.1
25.0	82.0	9.190	48.54	0.0	0.0
30.0	98.4	9.210	48.58	4.0	0.2
35.0	114.8	9.240	48.63	6.0	0.3
40.0	131.2	9.270	48.69	6.0	0.3
45.0	147.6	9.290	48.72	4.0	0.2
46.0	150.9	9.310	48.76	20.0	1.1
47.0	154.2	9.330	48.79	20.0	1.1
48.0	157.4	9.350	48.83	20.0	1.1
49.0	160.7	9.360	48.85	10.0	0.5
49.2	161.4	9.380	48.88	100.0	5.5


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
14N/ 5E- 4CAD1
6/ 6/79
14N/ 5E- 4CAD2
6/12/79

LOCATION: YAKIMA AMS, WASH
14N/ 8E- 6BCC
HOLE NAME: RDH-LONG
DATE MEASURED: 8/ 2/79

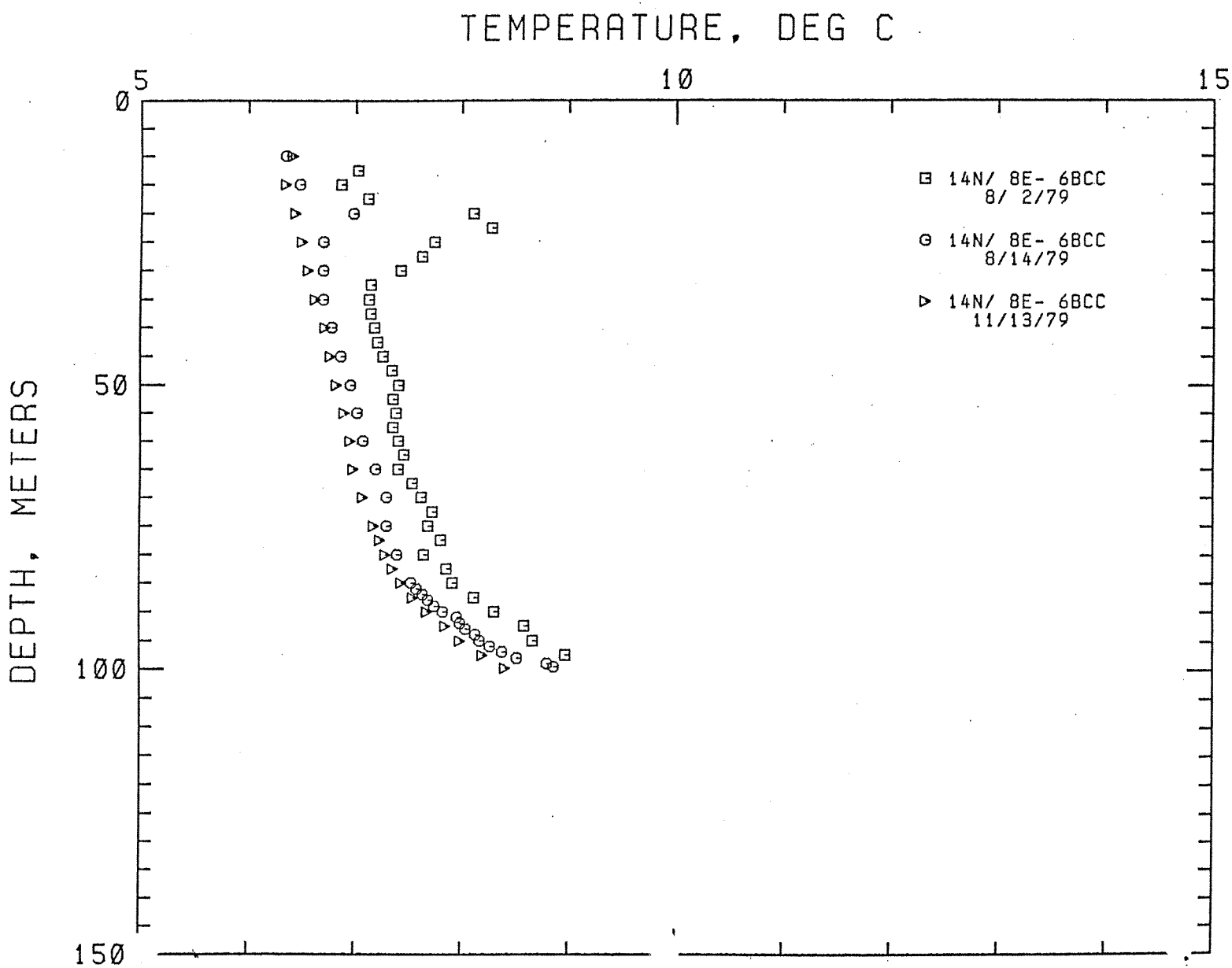
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
12.5	41.0	7.020	44.64	0.0	0.0
15.0	49.2	6.870	44.37	-60.0	-3.3
17.5	57.4	7.120	44.82	100.0	5.5
20.0	65.6	8.110	46.60	396.0	21.7
22.5	73.8	8.280	46.90	68.0	3.7
25.0	82.0	7.740	45.93	-216.0	-11.9
27.5	90.2	7.630	45.73	-44.0	-2.4
30.0	98.4	7.430	45.37	-80.0	-4.4
32.5	106.6	7.150	44.87	-112.0	-6.1
35.0	114.8	7.130	44.83	-8.0	-0.4
37.5	123.0	7.150	44.87	8.0	0.4
40.0	131.2	7.180	44.92	12.0	0.7
42.5	139.4	7.210	44.98	12.0	0.7
45.0	147.6	7.260	45.07	20.0	1.1
47.5	155.8	7.350	45.23	36.0	2.0
50.0	164.0	7.410	45.34	24.0	1.3
52.5	172.2	7.360	45.25	-20.0	-1.1
55.0	180.4	7.390	45.30	12.0	0.7
57.5	188.6	7.360	45.25	-12.0	-0.7
60.0	196.8	7.410	45.34	20.0	1.1
62.5	205.0	7.460	45.43	20.0	1.1
65.0	213.2	7.410	45.34	-20.0	-1.1
67.5	221.4	7.540	45.57	52.0	2.9
70.0	229.6	7.630	45.73	36.0	2.0
72.5	237.8	7.730	45.91	40.0	2.2
75.0	246.0	7.690	45.84	-16.0	-0.9
77.5	254.2	7.810	46.06	48.0	2.6
80.0	262.4	7.650	45.77	-64.0	-3.5
82.5	270.6	7.860	46.15	84.0	4.6
85.0	278.8	7.920	46.26	24.0	1.3
87.5	287.0	8.120	46.62	80.0	4.4
90.0	295.2	8.310	46.96	76.0	4.2
92.5	303.4	8.590	47.46	112.0	6.1
95.0	311.6	8.670	47.61	32.0	1.8
97.5	319.8	8.970	48.15	120.0	6.6

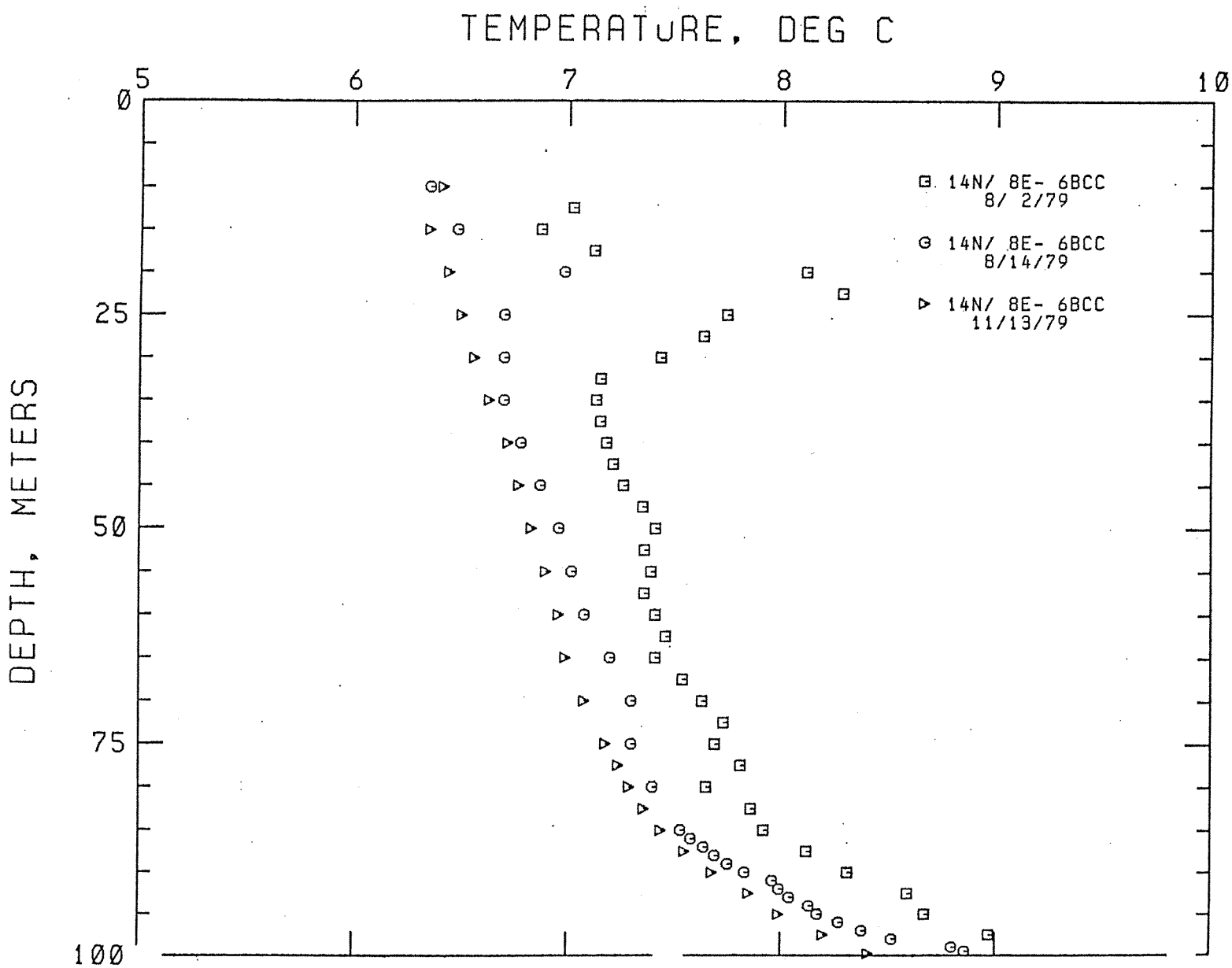
LOCATION: YAKIMA AMS, WASH
14N/ 8E- 6BCC
HOLE NAME: RDH-LONG
DATE MEASURED: 8/14/79

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	6.350	43.43	0.0	0.0
15.0	49.2	6.480	43.66	26.0	1.4
20.0	65.6	6.980	44.56	100.0	5.5
25.0	82.0	6.700	44.06	-56.0	-3.1
30.0	98.4	6.700	44.06	0.0	0.0
35.0	114.8	6.700	44.06	0.0	0.0
40.0	131.2	6.780	44.20	16.0	0.9
45.0	147.6	6.870	44.37	18.0	1.0
50.0	164.0	6.960	44.53	18.0	1.0
55.0	180.4	7.020	44.64	12.0	0.7
60.0	196.8	7.080	44.74	12.0	0.7
65.0	213.2	7.200	44.96	24.0	1.3
70.0	229.6	7.300	45.14	20.0	1.1
75.0	246.0	7.300	45.14	0.0	0.0
80.0	262.4	7.400	45.32	20.0	1.1
85.0	278.8	7.530	45.55	26.0	1.4
86.0	282.1	7.580	45.64	50.0	2.7
87.0	285.4	7.640	45.75	60.0	3.3
88.0	288.6	7.690	45.84	50.0	2.7
89.0	291.9	7.750	45.95	60.0	3.3
90.0	295.2	7.830	46.09	80.0	4.4
91.0	298.5	7.960	46.33	130.0	7.1
92.0	301.8	7.990	46.38	30.0	1.6
93.0	305.0	8.040	46.47	50.0	2.7
94.0	308.3	8.130	46.63	90.0	4.9
95.0	311.6	8.170	46.71	40.0	2.2
96.0	314.9	8.270	46.89	100.0	5.5
97.0	318.2	8.380	47.08	110.0	6.0
98.0	321.4	8.520	47.34	140.0	7.7
99.0	324.7	8.800	47.84	280.0	15.4
99.5	326.4	8.860	47.95	120.0	6.6

LOCATION: YAKIMA AMS, WASH
14N/ 8E- 6BCC
HOLE NAME: RDH-LONG
DATE MEASURED: 11/13/79

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	6.410	43.54	0.0	0.0
15.0	49.2	6.350	43.43	-12.0	-0.7
20.0	65.6	6.440	43.59	18.0	1.0
25.0	82.0	6.500	43.70	12.0	0.7
30.0	98.4	6.560	43.81	12.0	0.7
35.0	114.8	6.630	43.93	14.0	0.8
40.0	131.2	6.720	44.10	18.0	1.0
45.0	147.6	6.770	44.19	10.0	0.5
50.0	164.0	6.830	44.29	12.0	0.7
55.0	180.4	6.900	44.42	14.0	0.8
60.0	196.8	6.960	44.53	12.0	0.7
65.0	213.2	6.990	44.58	6.0	0.3
70.0	229.6	7.080	44.74	18.0	1.0
75.0	246.0	7.180	44.92	20.0	1.1
80.0	262.4	7.290	45.12	22.0	1.2
85.0	278.8	7.440	45.39	30.0	1.6
90.0	295.2	7.680	45.82	48.0	2.6
95.0	311.6	7.990	46.38	62.0	3.4
99.8	327.3	8.410	47.14	87.5	4.8
97.5	319.8	8.200	46.76	91.3	5.0
92.5	303.4	7.850	46.13	70.0	3.8
87.5	287.0	7.550	45.59	60.0	3.3
82.5	270.6	7.360	45.25	38.0	2.1
77.5	254.2	7.240	45.03	24.0	1.3


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
14N/ 8E- 6BCC
8/ 2/79
14N/ 8E- 6BCC
8/14/79
14N/ 8E- 6BCC
11/13/79


TEMPERATURE, DEG C
5
6
7
8
9
10
0
25
50
75
100
DEPTH, METERS
14N/ 8E- 6BCC
8/ 2/79
14N/ 8E- 6BCC
8/14/79
14N/ 8E- 6BCC
11/13/79

LOCATION: YAKIMA AMS, WASH
14N/10E- 8DCB
HOLE NAME: RDH-OHNP
DATE MEASURED: 8/27/79

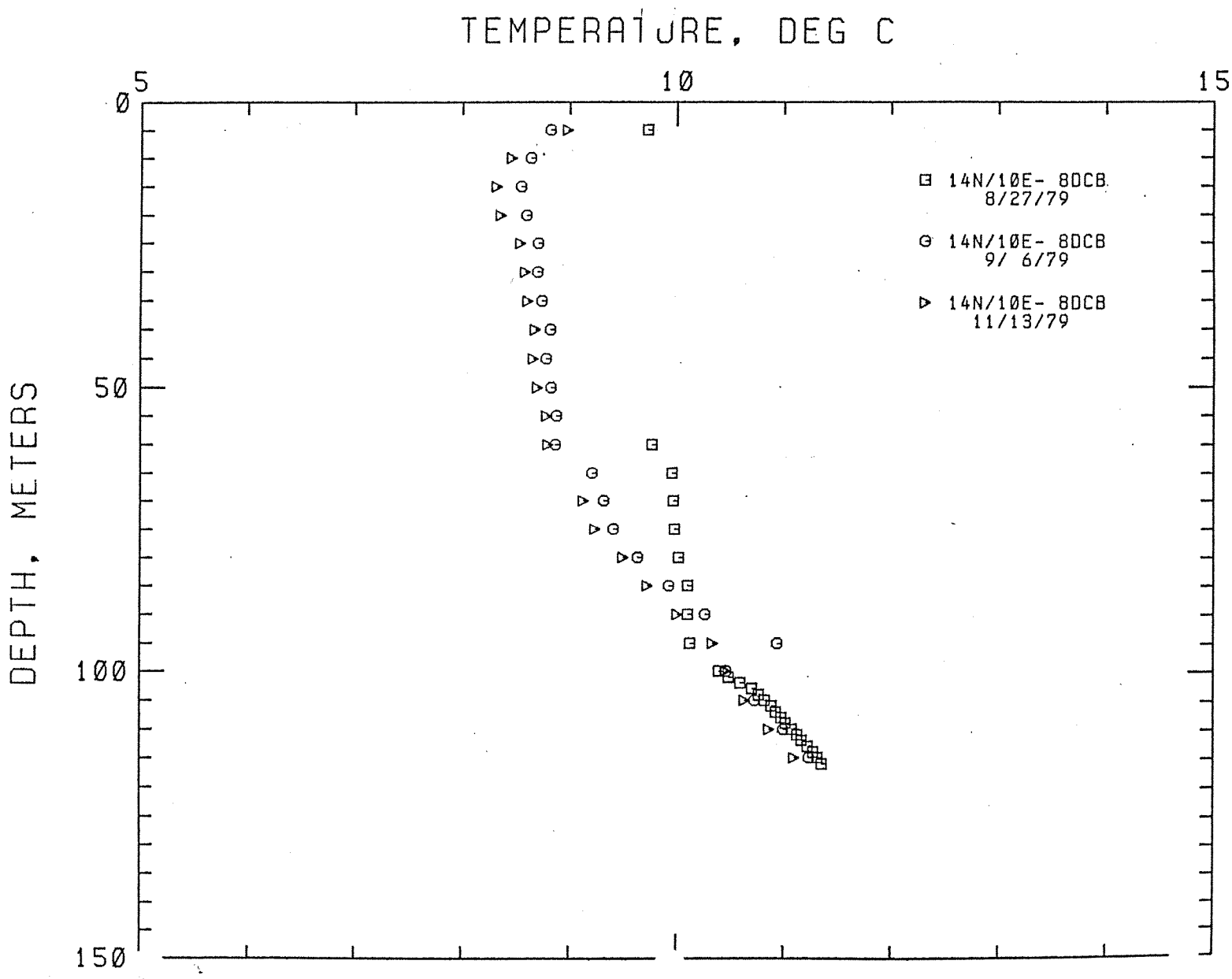
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	9.730	49.51	0.0	0.0
60.0	196.8	9.770	49.59	0.7	0.0
65.0	213.2	9.960	49.93	38.0	2.1
70.0	229.6	9.970	49.95	2.0	0.1
75.0	246.0	9.980	49.96	2.0	0.1
80.0	262.4	10.020	50.04	8.0	0.4
85.0	278.8	10.110	50.20	18.0	1.0
90.0	295.2	10.110	50.20	0.0	0.0
95.0	311.6	10.130	50.23	4.0	0.2
100.0	328.0	10.400	50.72	54.0	3.0
101.0	331.3	10.490	50.88	90.0	4.9
102.0	334.6	10.600	51.08	110.0	6.0
103.0	337.8	10.710	51.28	110.0	6.0
104.0	341.1	10.770	51.39	60.0	3.3
105.0	344.4	10.830	51.49	60.0	3.3
106.0	347.7	10.890	51.60	60.0	3.3
107.0	351.0	10.930	51.67	40.0	2.2
108.0	354.2	10.980	51.76	50.0	2.7
109.0	357.5	11.020	51.84	40.0	2.2
110.0	360.8	11.080	51.94	60.0	3.3
111.0	364.1	11.130	52.03	50.0	2.7
112.0	367.4	11.170	52.11	40.0	2.2
113.0	370.6	11.230	52.21	60.0	3.3
114.0	373.9	11.280	52.30	50.0	2.7
115.0	377.2	11.320	52.38	40.0	2.2
116.0	380.5	11.360	52.45	40.0	2.2

LOCATION: YAKIMA AMS, WASH
14N/10E- 8DCB
HOLE NAME: RDH-OHNP
DATE MEASURED: 9/ 6/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	8.820	47.88	0.0	0.0
10.0	32.8	8.640	47.55	-36.0	-2.0
15.0	49.2	8.550	47.39	-18.0	-1.0
20.0	65.6	8.600	47.48	10.0	0.5
25.0	82.0	8.710	47.68	22.0	1.2
30.0	98.4	8.700	47.66	-2.0	-0.1
35.0	114.8	8.740	47.73	8.0	0.4
40.0	131.2	8.820	47.88	16.0	0.9
45.0	147.6	8.780	47.80	-8.0	-0.4
50.0	164.0	8.830	47.89	10.0	0.5
55.0	180.4	8.880	47.98	10.0	0.5
60.0	196.8	8.870	47.97	-2.0	-0.1
65.0	213.2	9.210	48.58	68.0	3.7
70.0	229.6	9.320	48.78	22.0	1.2
75.0	246.0	9.410	48.94	18.0	1.0
80.0	262.4	9.640	49.35	46.0	2.5
85.0	278.8	9.930	49.87	58.0	3.2
90.0	295.2	10.270	50.49	68.0	3.7
95.0	311.6	10.940	51.69	134.0	7.4
100.0	328.0	10.470	50.85	-94.0	-5.2
105.0	344.4	10.730	51.31	52.0	2.9
110.0	360.8	11.000	51.80	54.0	3.0
115.0	377.2	11.240	52.23	48.0	2.6

LOCATION: YAKIMA AMS, WASH
14N/10E- 8DCB
HOLE NAME: RDH-OHNP
DATE MEASURED: 11/13/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	8.980	48.16	0.0	0.0
10.0	32.8	8.460	47.23	-104.0	-5.7
15.0	49.2	8.320	46.98	-28.0	-1.5
20.0	65.6	8.360	47.05	8.0	0.4
25.0	82.0	8.540	47.37	36.0	2.0
30.0	98.4	8.590	47.46	10.0	0.5
35.0	114.8	8.610	47.50	4.0	0.2
40.0	131.2	8.680	47.62	14.0	0.8
45.0	147.6	8.660	47.59	-4.0	-0.2
50.0	164.0	8.700	47.66	8.0	0.4
55.0	180.4	8.790	47.82	18.0	1.0
60.0	196.8	8.800	47.84	2.0	0.1
65.0	213.2	9.000	48.20	40.0	2.2
70.0	229.6	9.130	48.43	26.0	1.4
75.0	246.0	9.240	48.63	22.0	1.2
80.0	262.4	9.500	49.10	52.0	2.9
85.0	278.8	9.730	49.51	46.0	2.5
90.0	295.2	10.010	50.02	56.0	3.1
95.0	311.6	10.340	50.61	66.0	3.6
100.0	328.0	10.460	50.83	24.0	1.3
105.0	344.4	10.640	51.15	36.0	2.0
110.0	360.8	10.870	51.57	46.0	2.5
115.0	377.2	11.100	51.98	46.0	2.5

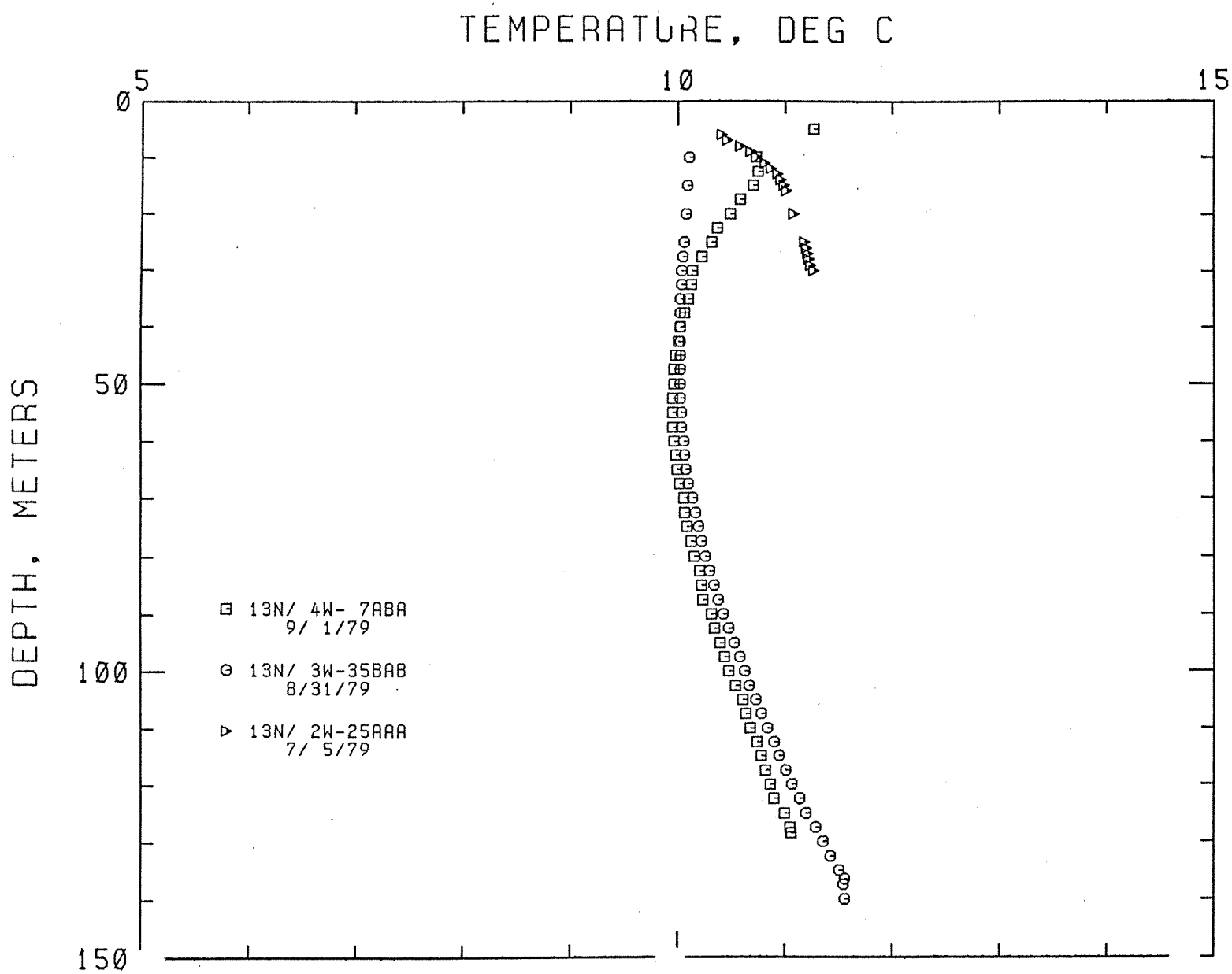

TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
14N/10E- 8DCB
8/27/79
14N/10E- 8DCB
9/ 6/79
14N/10E- 8DCB
11/13/79

LOCATION: HOQUIAM AMS, WASH
13N/ 4W- 7ABA
HOLE NAME: ARNOLD
DATE MEASURED: 9/ 1/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	11.270	52.29	0.0	0.0
10.0	32.8	10.730	51.31	-108.0	-5.9
12.5	41.0	10.750	51.35	8.0	0.4
15.0	49.2	10.700	51.26	-20.0	-1.1
17.5	57.4	10.580	51.04	-48.0	-2.6
20.0	65.6	10.490	50.88	-36.0	-2.0
22.5	73.8	10.370	50.67	-48.0	-2.6
25.0	82.0	10.320	50.58	-20.0	-1.1
27.5	90.2	10.230	50.41	-36.0	-2.0
30.0	98.4	10.140	50.25	-36.0	-2.0
32.5	106.6	10.130	50.23	-4.0	-0.2
35.0	114.8	10.100	50.18	-12.0	-0.7
37.5	123.0	10.070	50.13	-12.0	-0.7
40.0	131.2	10.030	50.05	-16.0	-0.9
42.5	139.4	10.010	50.02	-8.0	-0.4
45.0	147.6	9.990	49.98	-8.0	-0.4
47.5	155.8	9.970	49.95	-8.0	-0.4
50.0	164.0	9.970	49.95	0.0	0.0
52.5	172.2	9.960	49.93	-4.0	-0.2
55.0	180.4	9.960	49.93	0.0	0.0
57.5	188.6	9.960	49.93	0.0	0.0
60.0	196.8	9.970	49.95	4.0	0.2
62.5	205.0	9.990	49.98	8.0	0.4
65.0	213.2	10.000	50.00	4.0	0.2
67.5	221.4	10.020	50.04	8.0	0.4
70.0	229.6	10.060	50.11	16.0	0.9
72.5	237.8	10.070	50.13	4.0	0.2
75.0	246.0	10.090	50.16	8.0	0.4
77.5	254.2	10.130	50.23	16.0	0.9
80.0	262.4	10.160	50.29	12.0	0.7
82.5	270.6	10.210	50.38	20.0	1.1
85.0	278.8	10.230	50.41	8.0	0.4
87.5	287.0	10.240	50.43	4.0	0.2
90.0	295.2	10.320	50.58	32.0	1.8
92.5	303.4	10.350	50.63	12.0	0.7
95.0	311.6	10.400	50.72	20.0	1.1
97.5	319.8	10.440	50.79	16.0	0.9
100.0	328.0	10.480	50.86	16.0	0.9
102.5	336.2	10.540	50.97	24.0	1.3
105.0	344.4	10.610	51.10	28.0	1.5
107.5	352.6	10.640	51.15	12.0	0.7
110.0	360.8	10.680	51.22	16.0	0.9

LOCATION: HOQUIAM AMS, WASH
13N/ 4W- 7ABA
HOLE NAME: ARNOLD
DATE MEASURED: 9/ 1/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
112.5	369.0	10.740	51.33	24.0	1.3
115.0	377.2	10.780	51.40	16.0	0.9
117.5	385.4	10.820	51.48	16.0	0.9
120.0	393.6	10.870	51.57	20.0	1.1
122.5	401.8	10.900	51.62	12.0	0.7
125.0	410.0	11.000	51.80	40.0	2.2
127.5	418.2	11.050	51.89	20.0	1.1
128.5	421.5	11.060	51.91	10.0	0.5

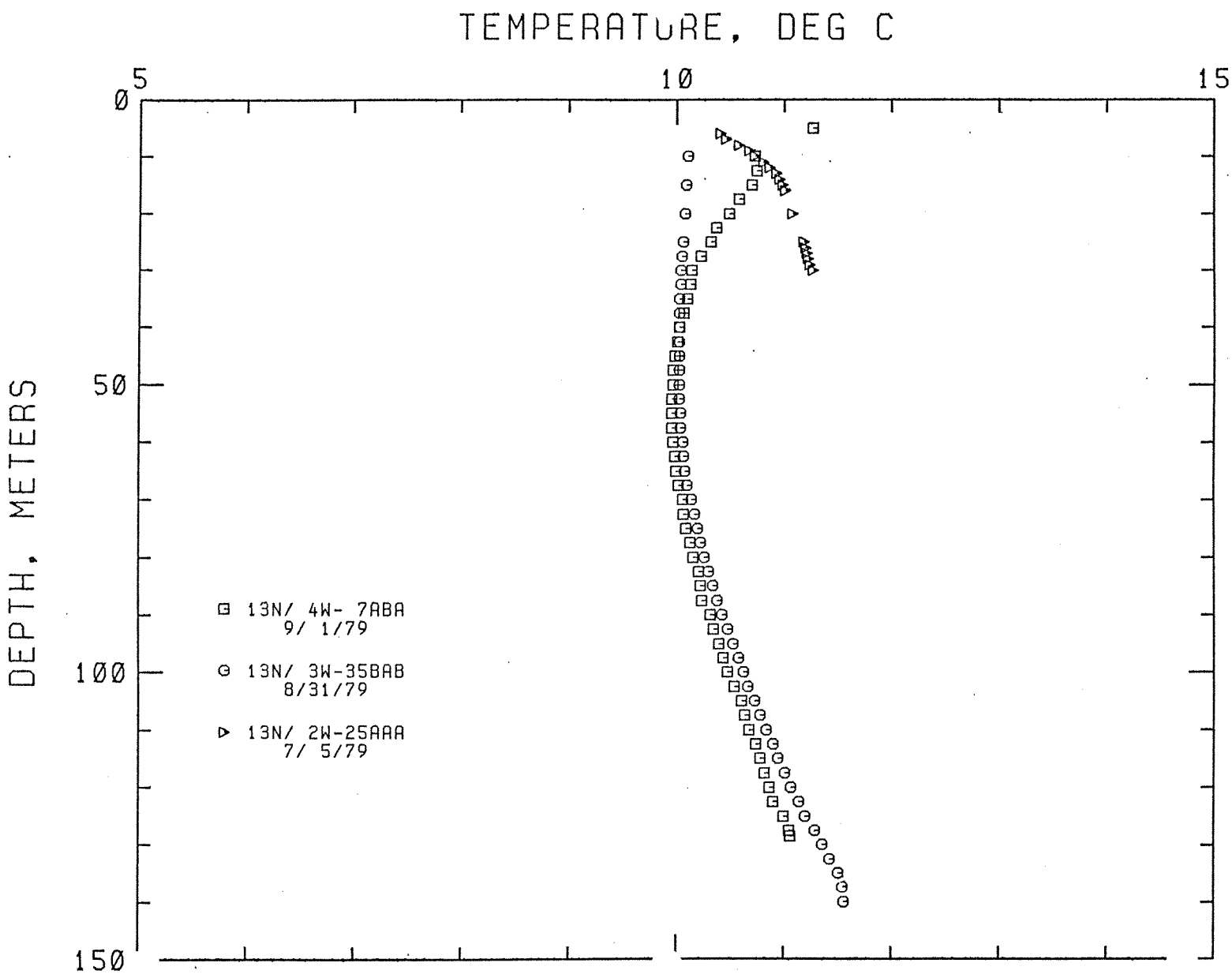

TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
13N/ 4W- 7ABA
9/ 1/79
13N/ 3W-35BAB
8/31/79
13N/ 2W-25AAA
7/ 5/79

LOCATION: HOQUIAM AMS, WASH
13N/ 3W-35BAB
HOLE NAME: MOHORIC
DATE MEASURED: 8/31/79

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	10.110	50.20	0.0	0.0
15.0	49.2	10.090	50.16	-4.0	-0.2
20.0	65.6	10.080	50.14	-2.0	-0.1
25.0	82.0	10.060	50.11	-4.0	-0.2
27.5	90.2	10.050	50.09	-4.0	-0.2
30.0	98.4	10.040	50.07	-4.0	-0.2
32.5	106.6	10.040	50.07	0.0	0.0
35.0	114.8	10.030	50.05	-4.0	-0.2
37.5	123.0	10.030	50.05	0.0	0.0
40.0	131.2	10.030	50.05	0.0	0.0
42.5	139.4	10.030	50.05	0.0	0.0
45.0	147.6	10.030	50.05	0.0	0.0
47.5	155.8	10.030	50.05	0.0	0.0
50.0	164.0	10.030	50.05	0.0	0.0
52.5	172.2	10.030	50.05	0.0	0.0
55.0	180.4	10.040	50.07	4.0	0.2
57.5	188.6	10.040	50.07	0.0	0.0
60.0	196.8	10.060	50.11	8.0	0.4
62.5	205.0	10.070	50.13	4.0	0.2
65.0	213.2	10.080	50.14	4.0	0.2
67.5	221.4	10.100	50.18	8.0	0.4
70.0	229.6	10.140	50.25	16.0	0.9
72.5	237.8	10.170	50.31	12.0	0.7
75.0	246.0	10.200	50.36	12.0	0.7
77.5	254.2	10.230	50.41	12.0	0.7
80.0	262.4	10.260	50.47	12.0	0.7
82.5	270.6	10.300	50.54	16.0	0.9
85.0	278.8	10.340	50.61	16.0	0.9
87.5	287.0	10.380	50.68	16.0	0.9
90.0	295.2	10.430	50.77	20.0	1.1
92.5	303.4	10.480	50.86	20.0	1.1
95.0	311.6	10.530	50.95	20.0	1.1
97.5	319.8	10.580	51.04	20.0	1.1
100.0	328.0	10.630	51.13	20.0	1.1
102.5	336.2	10.670	51.21	16.0	0.9
105.0	344.4	10.730	51.31	24.0	1.3
107.5	352.6	10.780	51.40	20.0	1.1
110.0	360.8	10.840	51.51	24.0	1.3
112.5	369.0	10.900	51.62	24.0	1.3
115.0	377.2	10.950	51.71	20.0	1.1
117.5	385.4	11.010	51.82	24.0	1.3
120.0	393.6	11.070	51.93	24.0	1.3

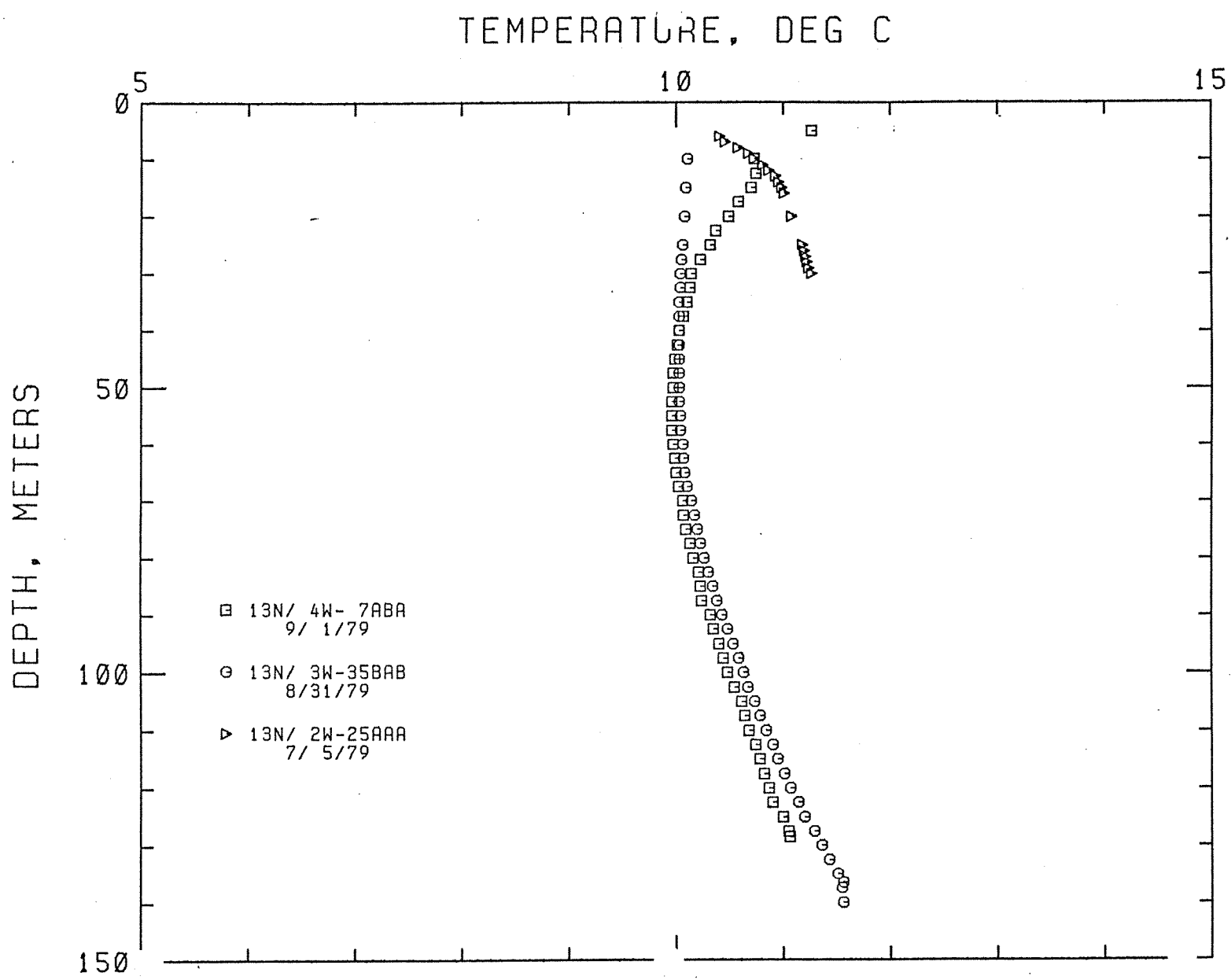
LOCATION: HOQUIAM AMS, WASH
13N/ 3W-35BAB
HOLE NAME: MOHORIC
DATE MEASURED: 8/31/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
122.5	401.8	11.140	52.05	28.0	1.5
125.0	410.0	11.200	52.16	24.0	1.3
127.5	418.2	11.290	52.32	36.0	2.0
130.0	426.4	11.360	52.45	28.0	1.5
132.5	434.6	11.430	52.57	28.0	1.5
135.0	442.8	11.510	52.72	32.0	1.8
137.5	451.0	11.550	52.79	16.0	0.9
140.0	459.2	11.560	52.81	4.0	0.2


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
13N/ 4W- 7ABA
9/ 1/79
13N/ 3W-35BAB
8/31/79
13N/ 2W-25AAA
7/ 5/79

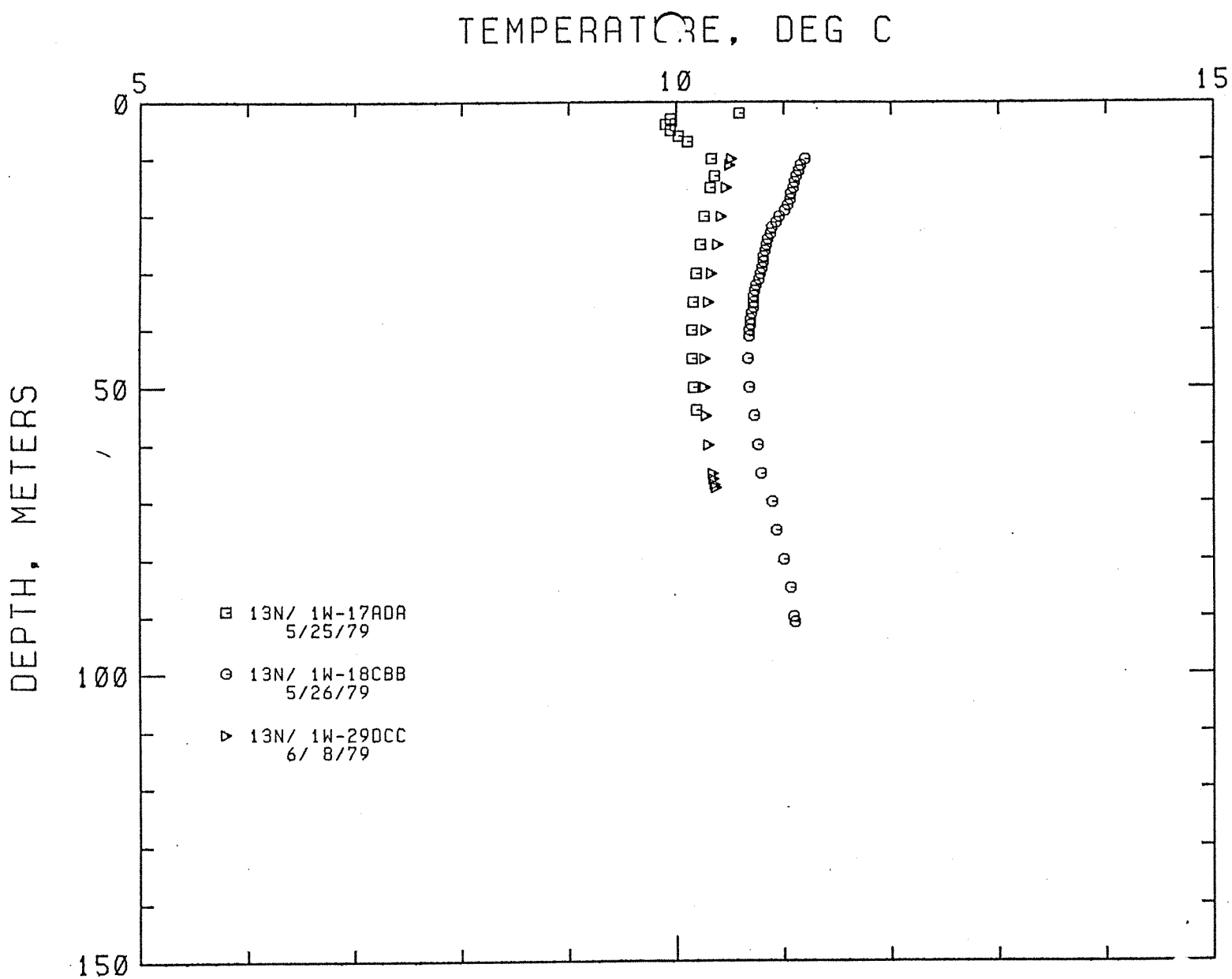
LOCATION: HOQUIAM AMS, WASH
13N/ 2W-25AAA
HOLE NAME: DRUCKMAN
DATE MEASURED: 7/ 5/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
6.0	19.7	10.410	50.74	0.0	0.0
7.0	23.0	10.460	50.83	50.0	2.7
8.0	26.2	10.580	51.04	120.0	6.6
9.0	29.5	10.680	51.22	100.0	5.5
10.0	32.8	10.730	51.31	50.0	2.7
11.0	36.1	10.810	51.46	80.0	4.4
12.0	39.4	10.870	51.57	60.0	3.3
13.0	42.6	10.930	51.67	60.0	3.3
14.0	45.9	10.960	51.73	30.0	1.6
15.0	49.2	10.990	51.78	30.0	1.6
16.0	52.5	11.010	51.82	20.0	1.1
20.0	65.6	11.080	51.94	17.5	1.0
25.0	82.0	11.180	52.12	20.0	1.1
26.0	85.3	11.200	52.16	20.0	1.1
27.0	88.6	11.210	52.18	10.0	0.5
28.0	91.8	11.220	52.20	10.0	0.5
29.0	95.1	11.240	52.23	20.0	1.1
30.0	98.4	11.270	52.29	30.0	1.6


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
13N/ 4W- 7ABA
9/ 1/79
13N/ 3W-35BAB
8/31/79
13N/ 2W-25AAA
7/ 5/79

LOCATION: HOQUIAM AMS, WASH
13N/ 1W-17ADA
HOLE NAME: ANDERSON
DATE MEASURED: 5/25/79

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	10.590	51.06	0.0	0.0
3.0	9.8	9.950	49.91	-640.0	-35.1
4.0	13.1	9.900	49.82	-50.0	-2.7
5.0	16.4	9.950	49.91	50.0	2.7
6.0	19.7	10.020	50.04	70.0	3.8
7.0	23.0	10.110	50.20	90.0	4.9
10.0	32.8	10.330	50.59	73.3	4.0
13.0	42.6	10.360	50.65	10.0	0.5
15.0	49.2	10.320	50.58	-20.0	-1.1
20.0	65.6	10.260	50.47	-12.0	-0.7
25.0	82.0	10.230	50.41	-6.0	-0.3
30.0	98.4	10.190	50.34	-8.0	-0.4
35.0	114.8	10.160	50.29	-6.0	-0.3
40.0	131.2	10.150	50.27	-2.0	-0.1
45.0	147.6	10.150	50.27	0.0	0.0
50.0	164.0	10.160	50.29	2.0	0.1
54.0	177.1	10.190	50.34	7.5	0.4

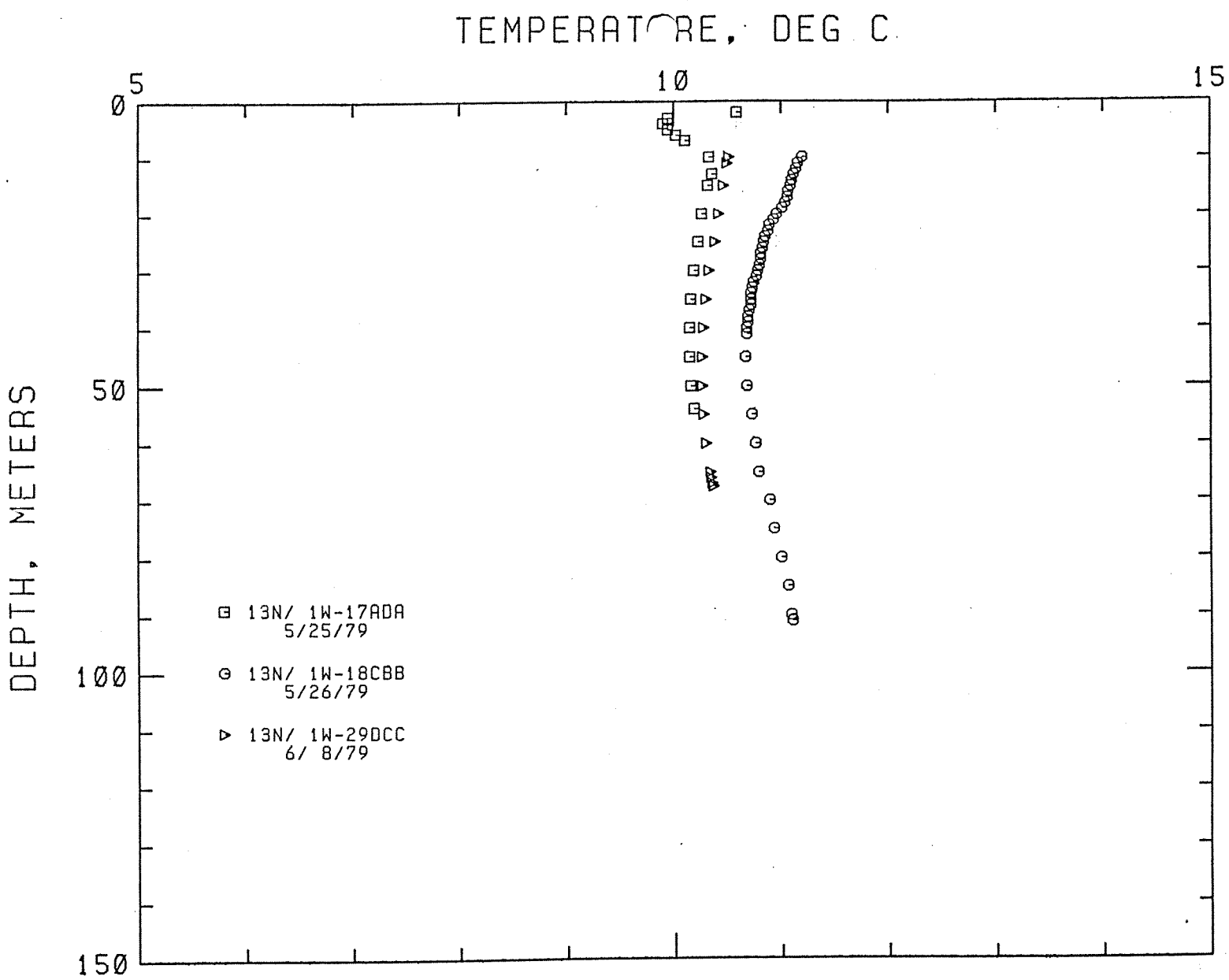

TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
13N/ 1W-17ADA
5/25/79
13N/ 1W-18CBB
5/26/79
13N/ 1W-29DCC
6/ 8/79

LOCATION: HOQUIAM AMS, WASH
13N/ 1W-18CBB
HOLE NAME: OLSON
DATE MEASURED: 5/26/79

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	11.200	52.16	0.0	0.0
11.0	36.1	11.160	52.09	-40.0	-2.2
12.0	39.4	11.140	52.05	-20.0	-1.1
13.0	42.6	11.120	52.02	-20.0	-1.1
14.0	45.9	11.100	51.98	-20.0	-1.1
15.0	49.2	11.090	51.96	-10.0	-0.5
16.0	52.5	11.070	51.93	-20.0	-1.1
17.0	55.8	11.060	51.91	-10.0	-0.5
18.0	59.0	11.040	51.87	-20.0	-1.1
19.0	62.3	11.010	51.82	-30.0	-1.6
20.0	65.6	10.960	51.73	-50.0	-2.7
21.0	68.9	10.930	51.67	-30.0	-1.6
22.0	72.2	10.890	51.60	-40.0	-2.2
23.0	75.4	10.880	51.58	-10.0	-0.5
24.0	78.7	10.850	51.53	-30.0	-1.6
25.0	82.0	10.840	51.51	-10.0	-0.5
26.0	85.3	10.830	51.49	-10.0	-0.5
27.0	88.6	10.810	51.46	-20.0	-1.1
28.0	91.8	10.810	51.46	0.0	0.0
29.0	95.1	10.800	51.44	-10.0	-0.5
30.0	98.4	10.780	51.40	-20.0	-1.1
31.0	101.7	10.770	51.39	-10.0	-0.5
32.0	105.0	10.740	51.33	-30.0	-1.6
33.0	108.2	10.730	51.31	-10.0	-0.5
34.0	111.5	10.720	51.30	-10.0	-0.5
35.0	114.8	10.720	51.30	0.0	0.0
36.0	118.1	10.720	51.30	0.0	0.0
37.0	121.4	10.700	51.26	-20.0	-1.1
38.0	124.6	10.690	51.24	-10.0	-0.5
39.0	127.9	10.690	51.24	0.0	0.0
40.0	131.2	10.680	51.22	-10.0	-0.5
41.0	134.5	10.680	51.22	0.0	0.0
45.0	147.6	10.670	51.21	-2.5	-0.1
50.0	164.0	10.680	51.22	2.0	0.1
55.0	180.4	10.725	51.31	9.0	0.5
60.0	196.8	10.760	51.37	7.0	0.4
65.0	213.2	10.790	51.42	6.0	0.3
70.0	229.6	10.890	51.60	20.0	1.1
75.0	246.0	10.930	51.67	8.0	0.4
80.0	262.4	11.000	51.80	14.0	0.8
85.0	278.8	11.060	51.91	12.0	0.7
90.0	295.2	11.090	51.96	6.0	0.3

LOCATION: HOQUIAM AMS, WASH
13N/ 1W-18CBB
HOLE NAME: OLSON
DATE MEASURED: 5/26/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
91.0	298.5	11.100	51.98	10.0	0.5

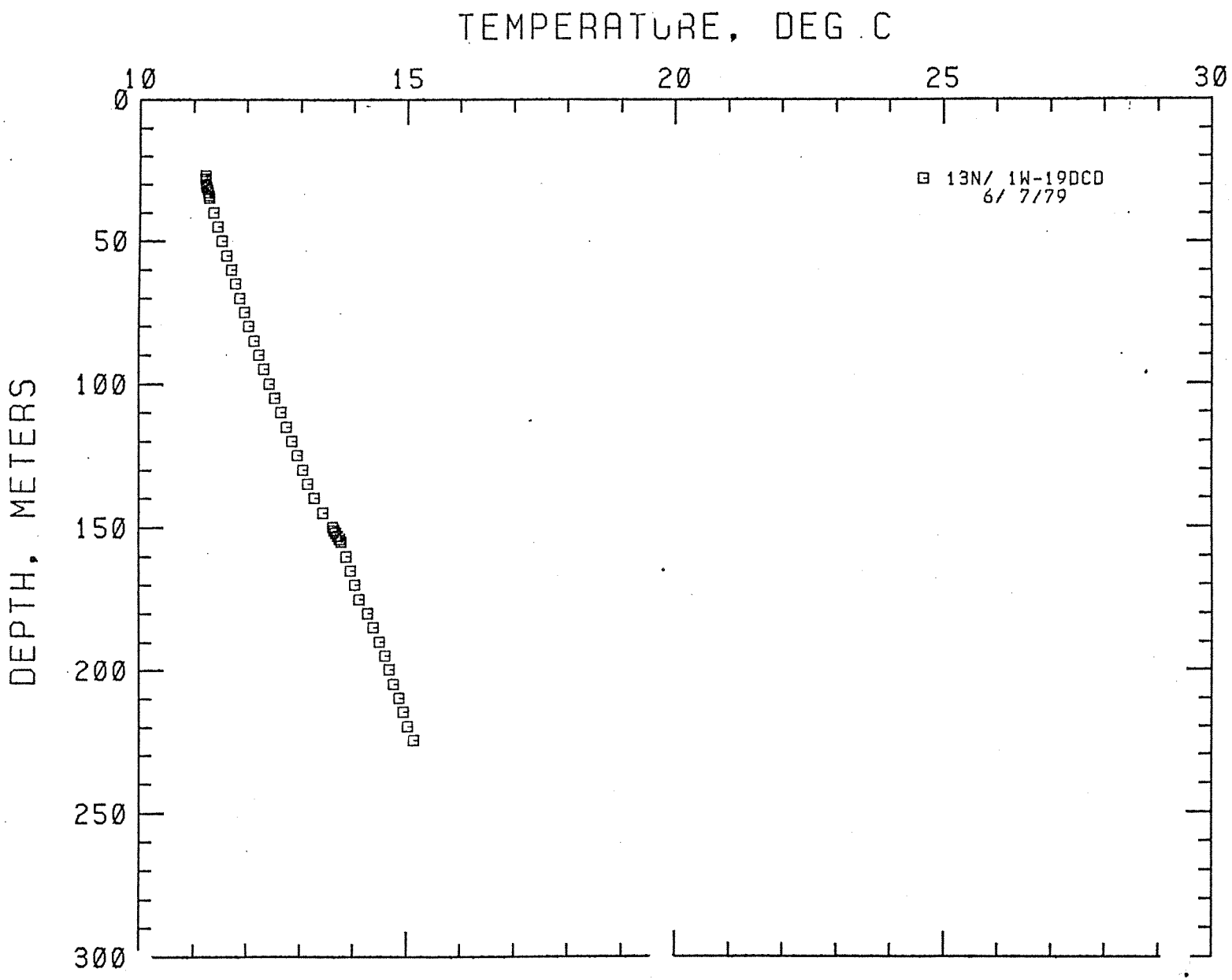

TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
13N/ 1W-17ADA
5/25/79
13N/ 1W-18CBB
5/26/79
13N/ 1W-29DCC
6/ 8/79

LOCATION: HOQUIAM AMS, WASH
13N/ 1W-19DCD
HOLE NAME: SUNDWN 1
DATE MEASURED: 6/ 7/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
27.0	88.6	11.230	52.21	0.0	0.0
28.0	91.8	11.220	52.20	-10.0	-0.5
29.0	95.1	11.230	52.21	10.0	0.5
30.0	98.4	11.230	52.21	0.0	0.0
31.0	101.7	11.250	52.25	20.0	1.1
32.0	105.0	11.270	52.29	20.0	1.1
33.0	108.2	11.280	52.30	10.0	0.5
34.0	111.5	11.290	52.32	10.0	0.5
35.0	114.8	11.300	52.34	10.0	0.5
40.0	131.2	11.380	52.48	16.0	0.9
45.0	147.6	11.460	52.63	16.0	0.9
50.0	164.0	11.540	52.77	16.0	0.9
55.0	180.4	11.630	52.93	18.0	1.0
60.0	196.8	11.720	53.10	18.0	1.0
65.0	213.2	11.800	53.24	16.0	0.9
70.0	229.6	11.890	53.40	18.0	1.0
75.0	246.0	11.975	53.56	17.0	0.9
80.0	262.4	12.060	53.71	17.0	0.9
85.0	278.8	12.160	53.89	20.0	1.1
90.0	295.2	12.250	54.05	18.0	1.0
95.0	311.6	12.340	54.21	18.0	1.0
100.0	328.0	12.450	54.41	22.0	1.2
105.0	344.4	12.550	54.59	20.0	1.1
110.0	360.8	12.660	54.79	22.0	1.2
115.0	377.2	12.770	54.99	22.0	1.2
120.0	393.6	12.870	55.17	20.0	1.1
125.0	410.0	12.970	55.35	20.0	1.1
130.0	426.4	13.070	55.53	20.0	1.1
135.0	442.8	13.160	55.69	18.0	1.0
140.0	459.2	13.290	55.92	26.0	1.4
145.0	475.6	13.450	56.21	32.0	1.8
150.0	492.0	13.630	56.53	36.0	2.0
151.0	495.3	13.660	56.59	30.0	1.6
152.0	498.6	13.690	56.64	30.0	1.6
153.0	501.8	13.720	56.70	30.0	1.6
154.0	505.1	13.760	56.77	40.0	2.2
155.0	508.4	13.790	56.82	30.0	1.6
160.0	524.8	13.880	56.98	18.0	1.0
165.0	541.2	13.960	57.13	16.0	0.9
170.0	557.6	14.050	57.29	18.0	1.0
175.0	574.0	14.130	57.43	16.0	0.9
180.0	590.4	14.290	57.72	32.0	1.8

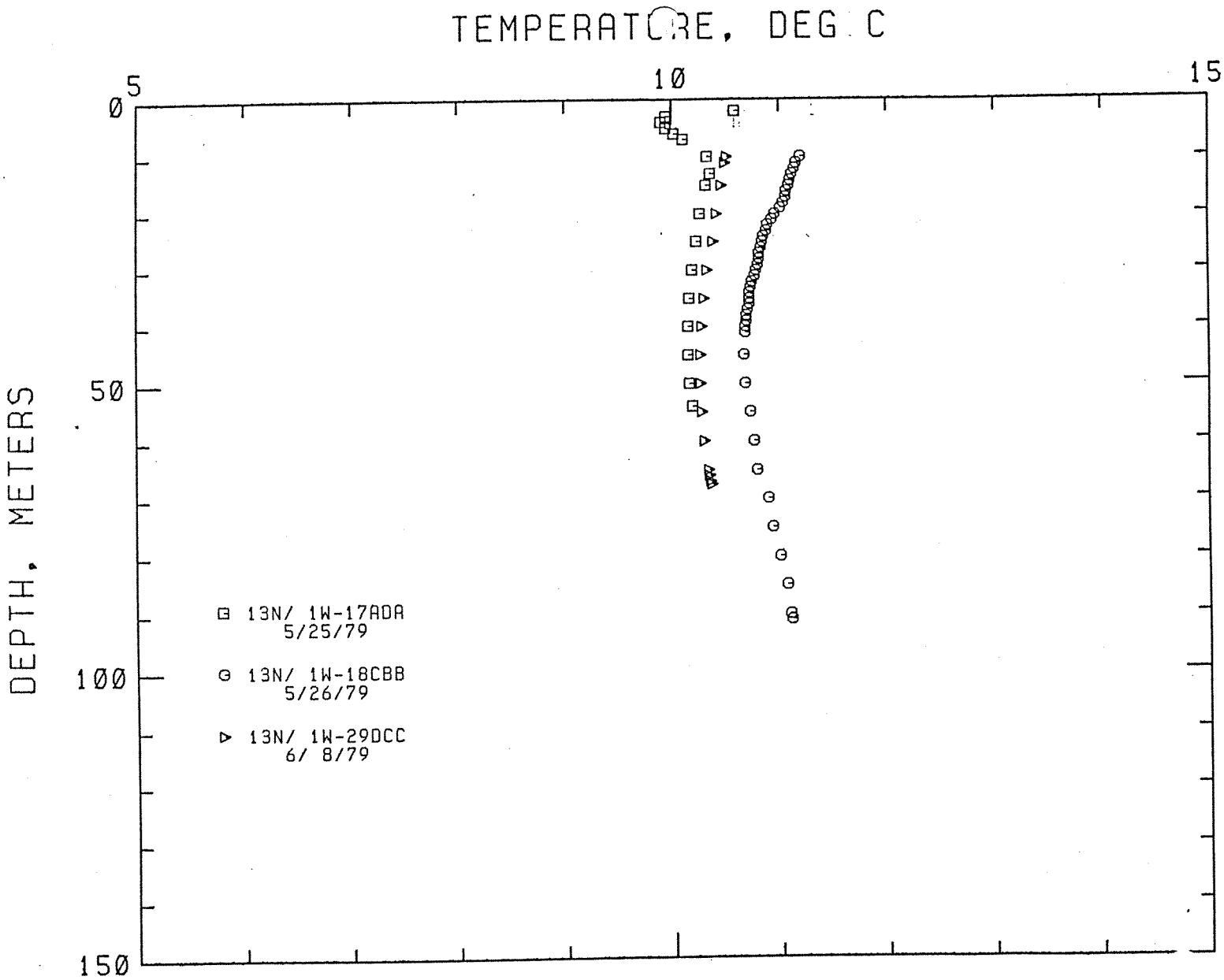
LOCATION: HOQUIAM AMS, WASH
13N/ 1W-19DCD
HOLE NAME: SUNDWN 1
DATE MEASURED: 6/ 7/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
185.0	606.8	14.390	57.90	20.0	1.1
190.0	623.2	14.500	58.10	22.0	1.2
195.0	639.6	14.600	58.28	20.0	1.1
200.0	656.0	14.680	58.42	16.0	0.9
205.0	672.4	14.770	58.59	18.0	1.0
210.0	688.8	14.870	58.77	20.0	1.1
215.0	705.2	14.950	58.91	16.0	0.9
220.0	721.6	15.030	59.05	16.0	0.9
225.0	738.0	15.140	59.25	22.0	1.2


TEMPERATURE, DEG C
10
15
20
25
30
0
50
100
150
200
250
300
DEPTH, METERS
13N/ 1W-19DCD
6/ 7/79

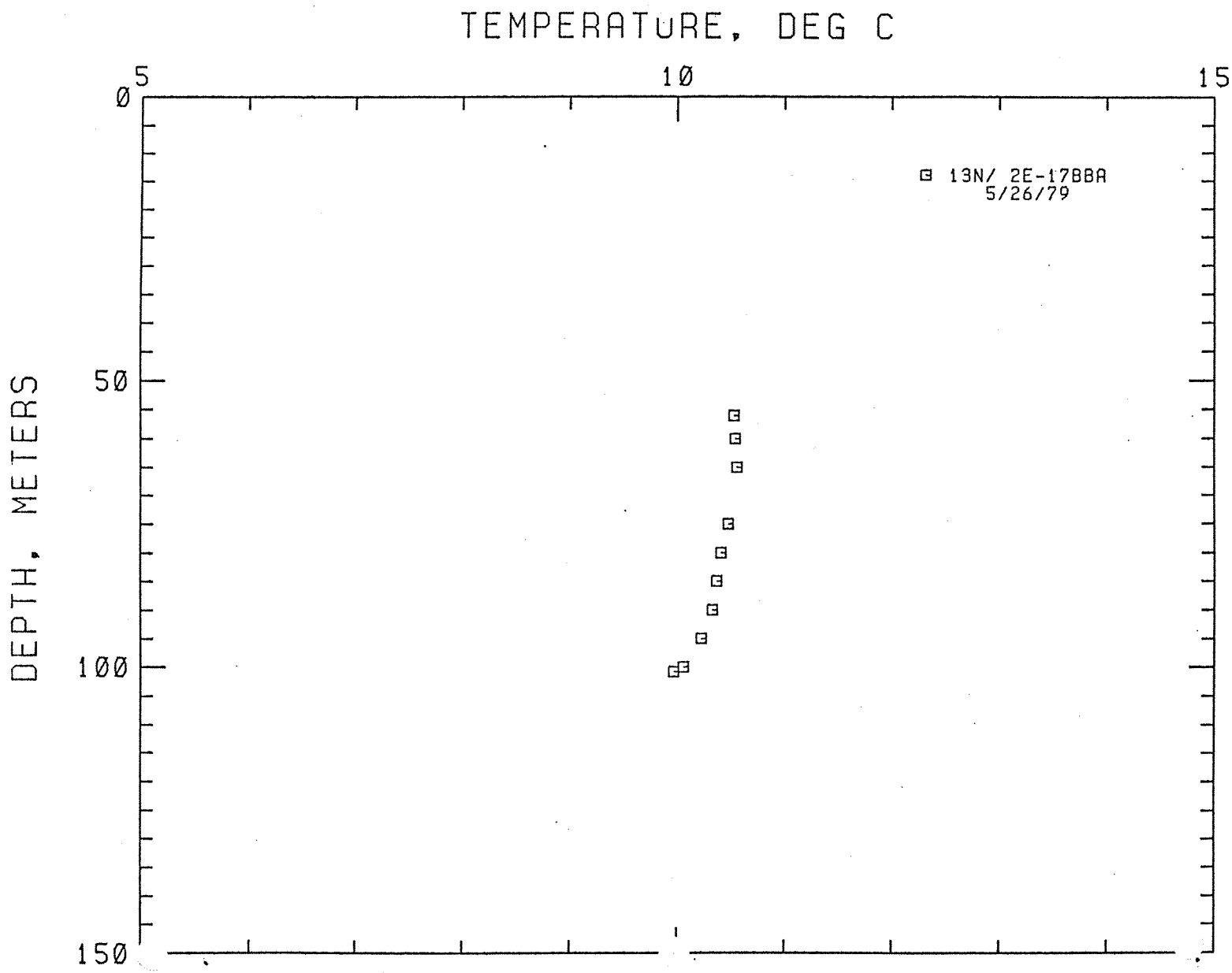
LOCATION: HOQUIAM AMS, WASH
13N/ 1W-29DCC
HOLE NAME: WULZ
DATE MEASURED: 6/ 8/79

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	10.520	50.94	0.0	0.0
11.0	36.1	10.500	50.90	-20.0	-1.1
15.0	49.2	10.470	50.85	-7.5	-0.4
20.0	65.6	10.420	50.76	-10.0	-0.5
25.0	82.0	10.390	50.70	-6.0	-0.3
30.0	98.4	10.330	50.59	-12.0	-0.7
35.0	114.8	10.300	50.54	-6.0	-0.3
40.0	131.2	10.280	50.50	-4.0	-0.2
45.0	147.6	10.270	50.49	-2.0	-0.1
50.0	164.0	10.270	50.49	0.0	0.0
55.0	180.4	10.280	50.50	2.0	0.1
60.0	196.8	10.300	50.54	4.0	0.2
65.0	213.2	10.340	50.61	8.0	0.4
66.0	216.5	10.350	50.63	10.0	0.5
67.0	219.8	10.360	50.65	10.0	0.5
67.5	221.4	10.370	50.67	20.0	1.1


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
13N/ 1W-17ADA
5/25/79
13N/ 1W-18CBB
5/26/79
13N/ 1W-29DCC
6/ 8/79

LOCATION: HOQUIAM AMS, WASH
13N/ 2E-17BBA
HOLE NAME: STANSELL
DATE MEASURED: 5/26/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
56.0	183.7	10.530	50.95	0.0	0.0
60.0	196.8	10.540	50.97	2.5	0.1
65.0	213.2	10.560	51.01	4.0	0.2
75.0	246.0	10.480	50.86	-8.0	-0.4
80.0	262.4	10.410	50.74	-14.0	-0.8
85.0	278.8	10.370	50.67	-8.0	-0.4
90.0	295.2	10.330	50.59	-8.0	-0.4
95.0	311.6	10.230	50.41	-20.0	-1.1
100.0	328.0	10.060	50.11	-34.0	-1.9
100.8	330.6	9.970	49.95	-112.5	-6.2

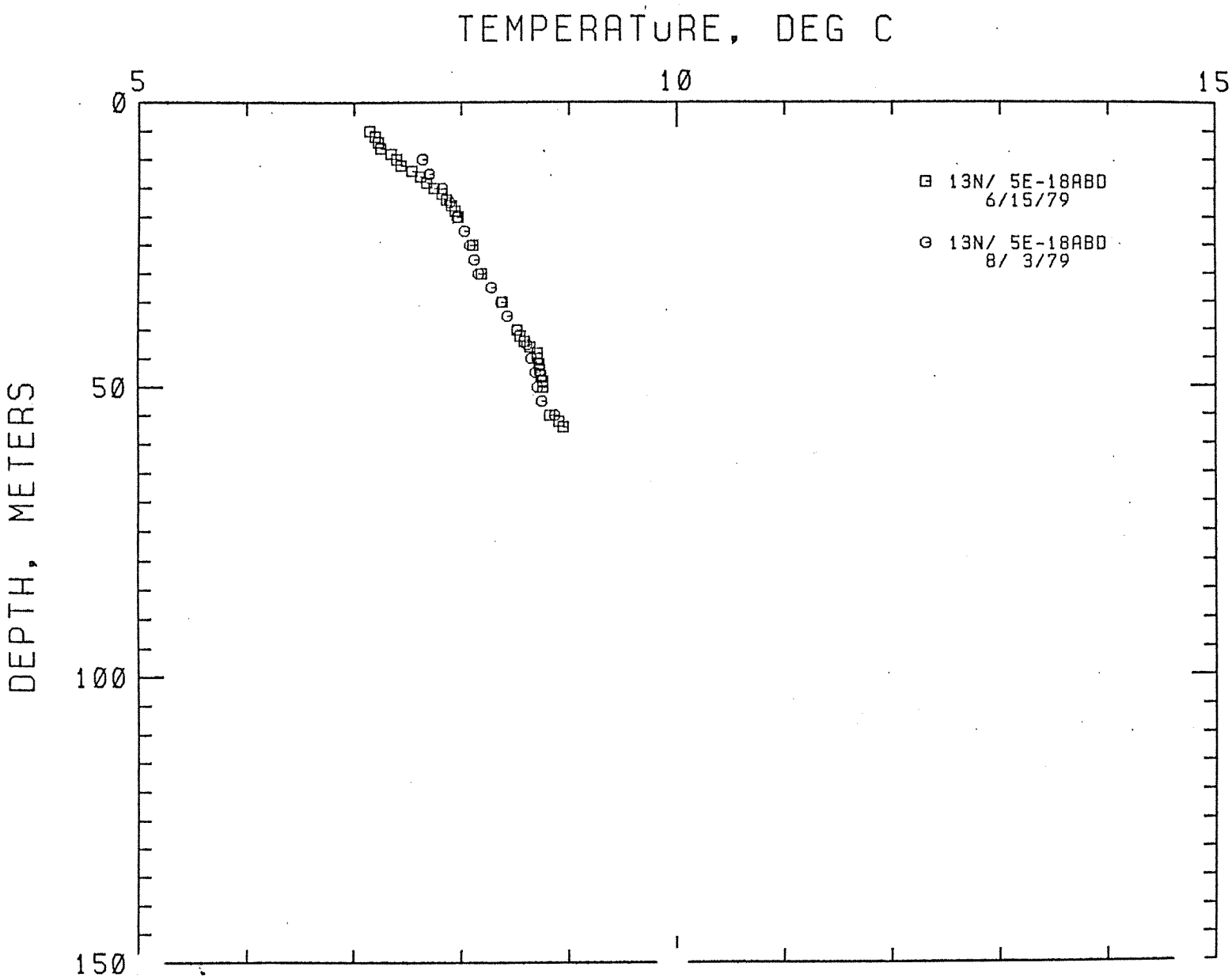

TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
13N/ 2E-17BBA
5/26/79

LOCATION: HOQUIAM AMS, WASH
13N/ 5E-18ABD
HOLE NAME: ROM 1
DATE MEASURED: 6/15/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	7.150	44.87	0.0	0.0
6.0	19.7	7.200	44.96	50.0	2.7
7.0	23.0	7.230	45.01	30.0	1.6
8.0	26.2	7.250	45.05	20.0	1.1
9.0	29.5	7.350	45.23	100.0	5.5
10.0	32.8	7.400	45.32	50.0	2.7
11.0	36.1	7.440	45.39	40.0	2.2
12.0	39.4	7.540	45.57	100.0	5.5
13.0	42.6	7.620	45.72	80.0	4.4
14.0	45.9	7.680	45.82	60.0	3.3
15.0	49.2	7.750	45.95	70.0	3.8
16.0	52.5	7.820	46.08	70.0	3.8
17.0	55.8	7.860	46.15	40.0	2.2
18.0	59.0	7.910	46.24	50.0	2.7
19.0	62.3	7.940	46.29	30.0	1.6
20.0	65.6	7.970	46.35	30.0	1.6
25.0	82.0	8.110	46.60	28.0	1.5
30.0	98.4	8.190	46.74	16.0	0.9
35.0	114.8	8.380	47.08	38.0	2.1
40.0	131.2	8.520	47.34	28.0	1.5
41.0	134.5	8.550	47.39	30.0	1.6
42.0	137.8	8.590	47.46	40.0	2.2
43.0	141.0	8.640	47.55	50.0	2.7
44.0	144.3	8.710	47.68	70.0	3.8
45.0	147.6	8.710	47.68	0.0	0.0
46.0	150.9	8.725	47.71	15.0	0.8
47.0	154.2	8.730	47.71	5.0	0.3
48.0	157.4	8.740	47.73	10.0	0.5
49.0	160.7	8.760	47.77	20.0	1.1
50.0	164.0	8.760	47.77	0.0	0.0
55.0	180.4	8.825	47.88	13.0	0.7
56.0	183.7	8.910	48.04	85.0	4.7
57.0	187.0	8.950	48.11	40.0	2.2

LOCATION: HOQUIAM AMS, WASH
13N/ 5E-18ABD
HOLE NAME: ROM 1
DATE MEASURED: 8/ 3/79

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	7.640	45.75	0.0	0.0
12.5	41.0	7.700	45.86	24.0	1.3
15.0	49.2	7.820	46.08	48.0	2.6
17.5	57.4	7.890	46.20	28.0	1.5
20.0	65.6	7.960	46.33	28.0	1.5
22.5	73.8	8.030	46.45	28.0	1.5
25.0	82.0	8.080	46.54	20.0	1.1
27.5	90.2	8.120	46.62	16.0	0.9
30.0	98.4	8.160	46.69	16.0	0.9
32.5	106.6	8.280	46.90	48.0	2.6
35.0	114.8	8.370	47.07	36.0	2.0
37.5	123.0	8.430	47.17	24.0	1.3
40.0	131.2	8.520	47.34	36.0	2.0
42.5	139.4	8.610	47.50	36.0	2.0
45.0	147.6	8.650	47.57	16.0	0.9
47.5	155.8	8.690	47.64	16.0	0.9
50.0	164.0	8.710	47.68	8.0	0.4
52.5	172.2	8.750	47.75	16.0	0.9
55.0	180.4	8.870	47.97	48.0	2.6


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
13N/ 5E-18ABD
6/15/79
13N/ 5E-18ABD
8/ 3/79

LOCATION: YAKIMA AMS, WASHINGTON
13N/ 9E-16BCA
HOLE NAME: RDH-PKWD
DATE MEASURED: 9/ 4/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	8.020	46.44	0.0	0.0
8.0	26.2	7.500	45.50	-173.3	-9.5
9.0	29.5	7.590	45.66	90.0	4.9
10.0	32.8	7.680	45.82	90.0	4.9
12.0	39.4	7.800	46.04	60.0	3.3
14.0	45.9	7.870	46.17	35.0	1.9
15.0	49.2	7.890	46.20	20.0	1.1
20.0	65.6	8.020	46.44	26.0	1.4
21.0	68.9	8.030	46.45	10.0	0.5
22.0	72.2	8.070	46.53	40.0	2.2
23.0	75.4	8.250	46.85	180.0	9.9
24.0	78.7	8.360	47.05	110.0	6.0
25.0	82.0	8.390	47.10	30.0	1.6
27.0	88.6	8.590	47.46	100.0	5.5
30.0	98.4	8.970	48.15	126.7	7.0
31.0	101.7	9.160	48.49	190.0	10.4
32.0	105.0	9.210	48.58	50.0	2.7
33.0	108.2	9.040	48.27	-170.0	-9.3
34.0	111.5	8.930	48.07	-110.0	-6.0
35.0	114.8	8.940	48.09	10.0	0.5
40.0	131.2	9.220	48.60	56.0	3.1
41.0	134.5	9.280	48.70	60.0	3.3
42.0	137.8	9.210	48.58	-70.0	-3.8
44.0	144.3	9.320	48.78	55.0	3.0
45.0	147.6	9.390	48.90	70.0	3.8
47.0	154.2	9.500	49.10	55.0	3.0
48.0	157.4	9.540	49.17	40.0	2.2
49.0	160.7	9.550	49.19	10.0	0.5
50.0	164.0	9.610	49.30	60.0	3.3
52.0	170.6	9.730	49.51	60.0	3.3
53.0	173.8	9.810	49.66	80.0	4.4
55.0	180.4	9.850	49.73	20.0	1.1
60.0	196.8	10.060	50.11	42.0	2.3
61.0	200.1	10.050	50.09	-10.0	-0.5
62.0	203.4	10.100	50.18	50.0	2.7
65.0	213.2	10.210	50.38	36.7	2.0
70.0	229.6	10.410	50.74	40.0	2.2
75.0	246.0	10.620	51.12	42.0	2.3
78.0	255.8	10.780	51.40	53.3	2.9
80.0	262.4	10.910	51.64	65.0	3.6
84.0	275.5	11.480	52.66	142.5	7.8

LOCATION: YAKIMA AMS, WASHINGTON
13N/ 9E-16BCA
HOLE NAME: RDH-PKWD
DATE MEASURED: 9/ 4/79

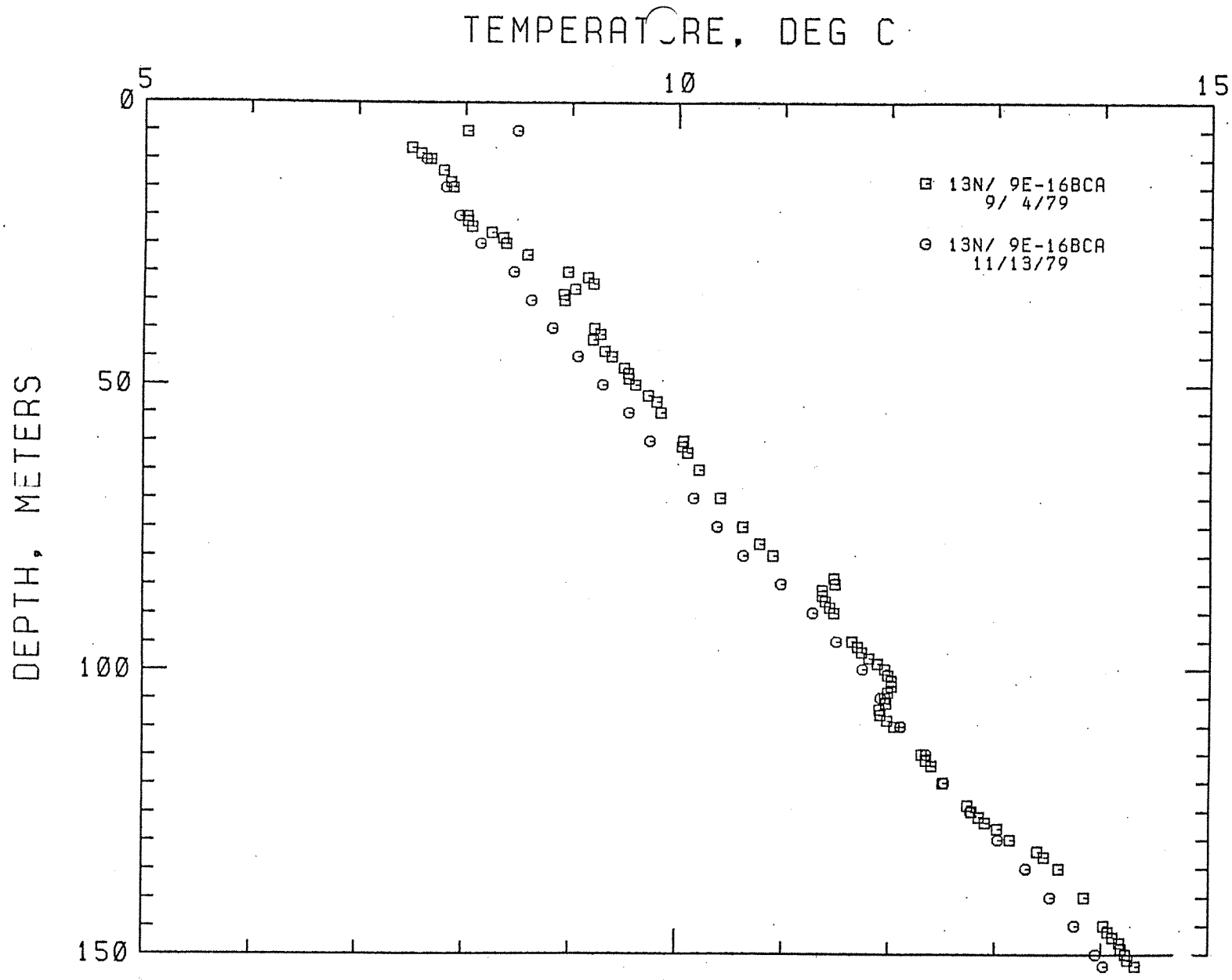
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
85.0	278.8	11.490	52.68	10.0	0.5
86.0	282.1	11.370	52.47	-120.0	-6.6
87.0	285.4	11.370	52.47	0.0	0.0
88.0	288.6	11.400	52.52	30.0	1.6
89.0	291.9	11.440	52.59	40.0	2.2
90.0	295.2	11.480	52.66	40.0	2.2
95.0	311.6	11.650	52.97	34.0	1.9
96.0	314.9	11.700	53.06	50.0	2.7
97.0	318.2	11.740	53.13	40.0	2.2
98.0	321.4	11.810	53.26	70.0	3.8
99.0	324.7	11.890	53.40	80.0	4.4
100.0	328.0	11.960	53.53	70.0	3.8
101.0	331.3	11.990	53.58	30.0	1.6
102.0	334.6	12.020	53.64	30.0	1.6
103.0	337.8	12.020	53.64	0.0	0.0
104.0	341.1	11.990	53.58	-30.0	-1.6
105.0	344.4	11.960	53.53	-30.0	-1.6
106.0	347.7	11.970	53.55	10.0	0.5
107.0	351.0	11.910	53.44	-60.0	-3.3
108.0	354.2	11.920	53.46	10.0	0.5
109.0	357.5	11.980	53.56	60.0	3.3
110.0	360.8	12.050	53.69	70.0	3.8
115.0	377.2	12.310	54.16	52.0	2.9
116.0	380.5	12.350	54.23	40.0	2.2
117.0	383.8	12.400	54.32	50.0	2.7
120.0	393.6	12.510	54.52	36.7	2.0
124.0	406.7	12.740	54.93	57.5	3.2
125.0	410.0	12.780	55.00	40.0	2.2
126.0	413.3	12.850	55.13	70.0	3.8
127.0	416.6	12.910	55.24	60.0	3.3
128.0	419.8	13.020	55.44	110.0	6.0
130.0	426.4	13.140	55.65	60.0	3.3
132.0	433.0	13.400	56.12	130.0	7.1
133.0	436.2	13.460	56.23	60.0	3.3
135.0	442.8	13.600	56.48	70.0	3.8
140.0	459.2	13.840	56.91	48.0	2.6
145.0	475.6	14.020	57.24	36.0	2.0
146.0	478.9	14.060	57.31	40.0	2.2
147.0	482.2	14.110	57.40	50.0	2.7
148.0	485.4	14.170	57.51	60.0	3.3
149.0	488.7	14.190	57.54	20.0	1.1

LOCATION: YAKIMA AMS, WASHINGTON
13N/ 9E-16BCA
HOLE NAME: RDH-PKWD
DATE MEASURED: 9/ 4/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
150.0	492.0	14.230	57.61	40.0	2.2
151.0	495.3	14.250	57.65	20.0	1.1
152.0	498.6	14.320	57.78	70.0	3.8

LOCATION: YAKIMA AMS, WASHINGTON
13N/ 9E-16BCA
HOLE NAME: RDH-PKWD
DATE MEASURED: 11/13/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	8.490	47.28	0.0	0.0
10.0	32.8	7.640	45.75	-170.0	-9.3
15.0	49.2	7.820	46.08	36.0	2.0
20.0	65.6	7.950	46.31	26.0	1.4
25.0	82.0	8.150	46.67	40.0	2.2
30.0	98.4	8.460	47.23	62.0	3.4
35.0	114.8	8.630	47.53	34.0	1.9
40.0	131.2	8.830	47.89	40.0	2.2
45.0	147.6	9.070	48.33	48.0	2.6
50.0	164.0	9.300	48.74	46.0	2.5
55.0	180.4	9.550	49.19	50.0	2.7
60.0	196.8	9.750	49.55	40.0	2.2
70.0	229.6	10.160	50.29	41.0	2.2
75.0	246.0	10.380	50.68	44.0	2.4
80.0	262.4	10.630	51.13	50.0	2.7
85.0	278.8	10.980	51.76	70.0	3.8
90.0	295.2	11.280	52.30	60.0	3.3
95.0	311.6	11.500	52.70	44.0	2.4
100.0	328.0	11.750	53.15	50.0	2.7
105.0	344.4	11.920	53.46	34.0	1.9
110.0	360.8	12.110	53.80	38.0	2.1
115.0	377.2	12.350	54.23	48.0	2.6
120.0	393.6	12.520	54.54	34.0	1.9
125.0	410.0	12.770	54.99	50.0	2.7
130.0	426.4	13.030	55.45	52.0	2.9
135.0	442.8	13.290	55.92	52.0	2.9
140.0	459.2	13.520	56.34	46.0	2.5
145.0	475.6	13.750	56.75	46.0	2.5
150.0	492.0	13.950	57.11	40.0	2.2
152.0	498.6	14.020	57.24	35.0	1.9


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
13N/ 9E-16BCA
9/ 4/79
13N/ 9E-16BCA
11/13/79

LOCATION: YAKIMA AMS, WASH
13N/11E- 2DC
HOLE NAME: RDH-WTPS
DATE MEASURED: 8/27/79

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	11.760	53.17	0.0	0.0
3.0	9.8	9.360	48.85	-2400.0	-131.7
4.0	13.1	7.810	46.06	-1550.0	-85.1
5.0	16.4	6.410	43.54	-1400.0	-76.8
6.0	19.7	5.880	42.58	-530.0	-29.1
7.0	23.0	5.850	42.53	-30.0	-1.6
8.0	26.2	5.610	42.10	-240.0	-13.2
9.0	29.5	5.070	41.13	-540.0	-29.6
10.0	32.8	4.960	40.93	-110.0	-6.0
11.0	36.1	5.000	41.00	40.0	2.2
12.0	39.4	5.050	41.09	50.0	2.7
13.0	42.6	5.150	41.27	100.0	5.5
15.0	49.2	5.200	41.36	25.0	1.4
16.0	52.5	5.250	41.45	50.0	2.7
17.0	55.8	5.280	41.50	30.0	1.6
18.0	59.0	5.320	41.58	40.0	2.2
19.0	62.3	5.350	41.63	30.0	1.6
20.0	65.6	5.360	41.65	10.0	0.5
22.0	72.2	5.410	41.74	25.0	1.4
25.0	82.0	5.530	41.95	40.0	2.2
30.0	98.4	5.780	42.40	50.0	2.7
33.0	108.2	5.860	42.55	26.7	1.5
35.0	114.8	5.960	42.73	50.0	2.7
36.0	118.1	6.000	42.80	40.0	2.2
39.0	127.9	6.130	43.03	43.3	2.4
40.0	131.2	6.170	43.11	40.0	2.2
41.0	134.5	6.210	43.18	40.0	2.2
42.0	137.8	6.270	43.29	60.0	3.3
43.0	141.0	6.310	43.36	40.0	2.2
44.0	144.3	6.380	43.48	70.0	3.8
45.0	147.6	6.410	43.54	30.0	1.6
46.0	150.9	6.460	43.63	50.0	2.7
50.0	164.0	6.660	43.99	50.0	2.7
52.0	170.6	6.780	44.20	60.0	3.3
53.0	173.8	6.810	44.26	30.0	1.6
55.0	180.4	6.870	44.37	30.0	1.6
57.0	187.0	7.000	44.60	65.0	3.6
60.0	196.8	7.200	44.96	66.7	3.7
61.0	200.1	7.280	45.10	80.0	4.4
62.0	203.4	7.370	45.27	90.0	4.9
63.0	206.6	7.450	45.41	80.0	4.4
64.0	209.9	7.490	45.48	40.0	2.2

LOCATION: YAKIMA AMS, WASH
13N/11E- 2DC
HOLE NAME: RDH-WTPS
DATE MEASURED: 8/27/79

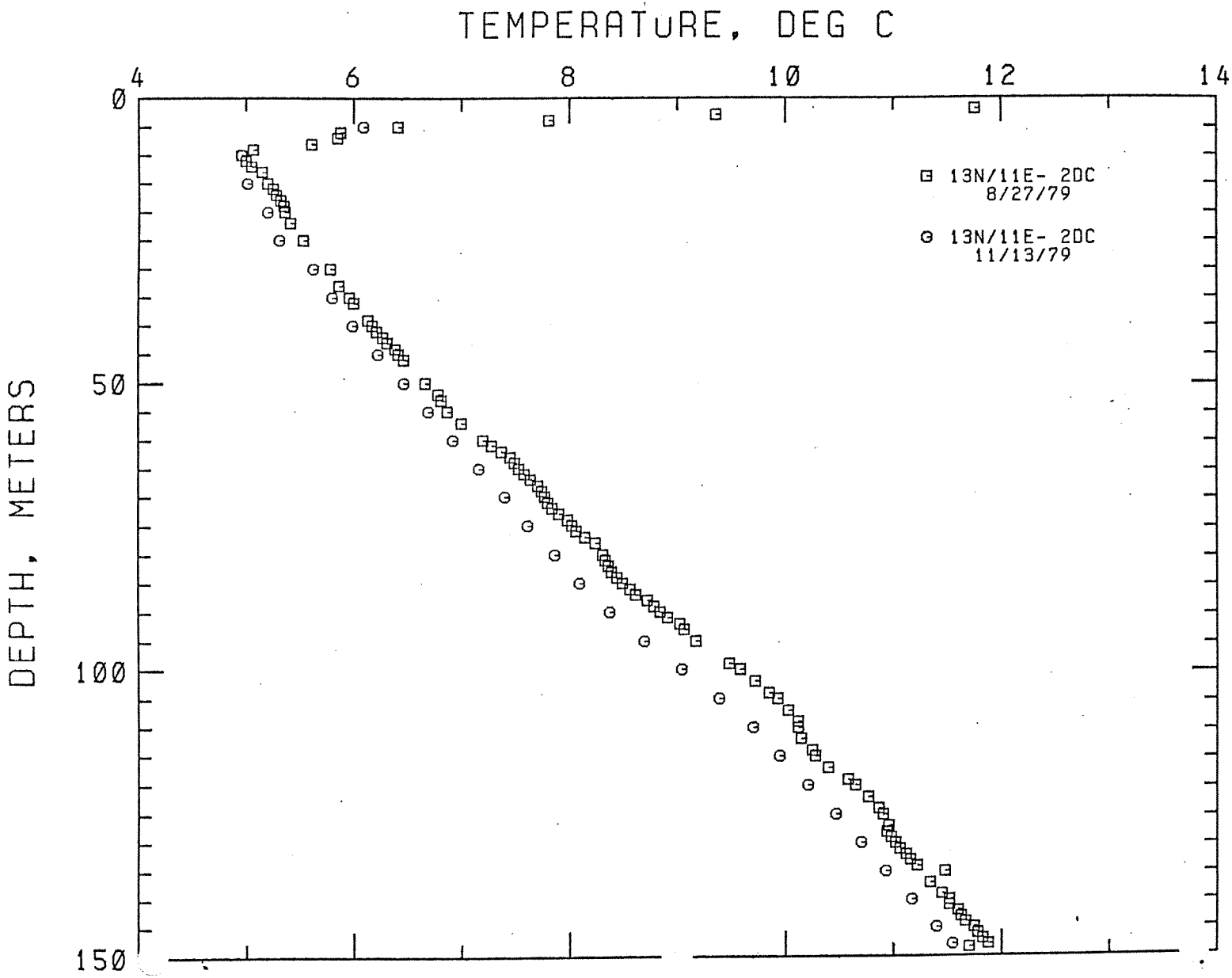
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
65.0	213.2	7.530	45.55	40.0	2.2
66.0	216.5	7.580	45.64	50.0	2.7
67.0	219.8	7.640	45.75	60.0	3.3
68.0	223.0	7.710	45.88	70.0	3.8
69.0	226.3	7.740	45.93	30.0	1.6
70.0	229.6	7.770	45.99	30.0	1.6
71.0	232.9	7.800	46.04	30.0	1.6
72.0	236.2	7.840	46.11	40.0	2.2
73.0	239.4	7.900	46.22	60.0	3.3
74.0	242.7	7.980	46.36	80.0	4.4
75.0	246.0	8.020	46.44	40.0	2.2
76.0	249.3	8.060	46.51	40.0	2.2
77.0	252.6	8.140	46.65	80.0	4.4
78.0	255.8	8.240	46.83	100.0	5.5
80.0	262.4	8.310	46.96	35.0	1.9
81.0	265.7	8.330	46.99	20.0	1.1
82.0	269.0	8.360	47.05	30.0	1.6
83.0	272.2	8.390	47.10	30.0	1.6
84.0	275.5	8.440	47.19	50.0	2.7
85.0	278.8	8.490	47.28	50.0	2.7
86.0	282.1	8.560	47.41	70.0	3.8
87.0	285.4	8.610	47.50	50.0	2.7
88.0	288.6	8.720	47.70	110.0	6.0
89.0	291.9	8.780	47.80	60.0	3.3
90.0	295.2	8.840	47.91	60.0	3.3
91.0	298.5	8.910	48.04	70.0	3.8
92.0	301.8	9.020	48.24	110.0	6.0
93.0	305.0	9.060	48.31	40.0	2.2
95.0	311.6	9.170	48.51	55.0	3.0
97.0	318.2	9.320	48.78	75.0	4.1
99.0	324.7	9.480	49.06	80.0	4.4
100.0	328.0	9.580	49.24	100.0	5.5
102.0	334.6	9.720	49.50	70.0	3.8
104.0	341.1	9.850	49.73	65.0	3.6
105.0	344.4	9.930	49.87	80.0	4.4
107.0	351.0	10.030	50.05	50.0	2.7
109.0	357.5	10.120	50.22	45.0	2.5
110.0	360.8	10.120	50.22	0.0	0.0
112.0	367.4	10.150	50.27	15.0	0.8
114.0	373.9	10.250	50.45	50.0	2.7
115.0	377.2	10.280	50.50	30.0	1.6
117.0	383.8	10.400	50.72	60.0	3.3

LOCATION: YAKIMA AMS, WASH
13N/11E- 2DC
HOLE NAME: RDH-WTPS
DATE MEASURED: 8/27/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
119.0	390.3	10.580	51.04	90.0	4.9
120.0	393.6	10.650	51.17	70.0	3.8
122.0	400.2	10.770	51.39	60.0	3.3
124.0	406.7	10.870	51.57	50.0	2.7
125.0	410.0	10.910	51.64	40.0	2.2
127.0	416.6	10.960	51.73	25.0	1.4
128.0	419.8	10.940	51.69	-20.0	-1.1
129.0	423.1	10.980	51.76	40.0	2.2
130.0	426.4	11.020	51.84	40.0	2.2
131.0	429.7	11.060	51.91	40.0	2.2
132.0	433.0	11.120	52.02	60.0	3.3
133.0	436.2	11.160	52.09	40.0	2.2
134.0	439.5	11.220	52.20	60.0	3.3
135.0	442.8	11.480	52.66	260.0	14.3
137.0	449.4	11.340	52.41	-70.0	-3.8
139.0	455.9	11.450	52.61	55.0	3.0
140.0	459.2	11.520	52.74	70.0	3.8
141.0	462.5	11.520	52.74	0.0	0.0
142.0	465.8	11.600	52.88	80.0	4.4
143.0	469.0	11.630	52.93	30.0	1.6
144.0	472.3	11.670	53.01	40.0	2.2
145.0	475.6	11.750	53.15	80.0	4.4
146.0	478.9	11.780	53.20	30.0	1.6
147.0	482.2	11.830	53.29	50.0	2.7
148.0	485.4	11.880	53.38	50.0	2.7
148.5	487.1	11.700	53.06	-360.0	-19.8

LOCATION: YAKIMA AMS, WASH
13N/11E- 2DC
HOLE NAME: RDH-WTPS
DATE MEASURED: .11/13/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	6.090	42.96	0.0	0.0
10.0	32.8	4.960	40.93	-226.0	-12.4
15.0	49.2	5.010	41.02	10.0	0.5
20.0	65.6	5.200	41.36	38.0	2.1
25.0	82.0	5.310	41.56	22.0	1.2
30.0	98.4	5.620	42.12	62.0	3.4
35.0	114.8	5.800	42.44	36.0	2.0
40.0	131.2	5.990	42.78	38.0	2.1
45.0	147.6	6.220	43.20	46.0	2.5
50.0	164.0	6.460	43.63	48.0	2.6
55.0	180.4	6.690	44.04	46.0	2.5
60.0	196.8	6.920	44.46	46.0	2.5
65.0	213.2	7.160	44.89	48.0	2.6
70.0	229.6	7.400	45.32	48.0	2.6
75.0	246.0	7.610	45.70	42.0	2.3
80.0	262.4	7.860	46.15	50.0	2.7
85.0	278.8	8.090	46.56	46.0	2.5
90.0	295.2	8.370	47.07	56.0	3.1
95.0	311.6	8.690	47.64	64.0	3.5
100.0	328.0	9.040	48.27	70.0	3.8
105.0	344.4	9.390	48.90	70.0	3.8
110.0	360.8	9.700	49.46	62.0	3.4
115.0	377.2	9.950	49.91	50.0	2.7
120.0	393.6	10.210	50.38	52.0	2.9
125.0	410.0	10.470	50.85	52.0	2.9
130.0	426.4	10.700	51.26	46.0	2.5
135.0	442.8	10.930	51.67	46.0	2.5
140.0	459.2	11.170	52.11	48.0	2.6
145.0	475.6	11.400	52.52	46.0	2.5
148.0	485.4	11.550	52.79	50.0	2.7


TEMPERATURE, DEG C
4
6
8
10
12
14
0
50
100
150
DEPTH, METERS
13N/11E- 2DC
8/27/79
13N/11E- 2DC
11/13/79

LOCATION: HOQUIAM AMS, WASH
12N/ 1E-12DCB
HOLE NAME: TALBOTT
DATE MEASURED: 6/ 4/79

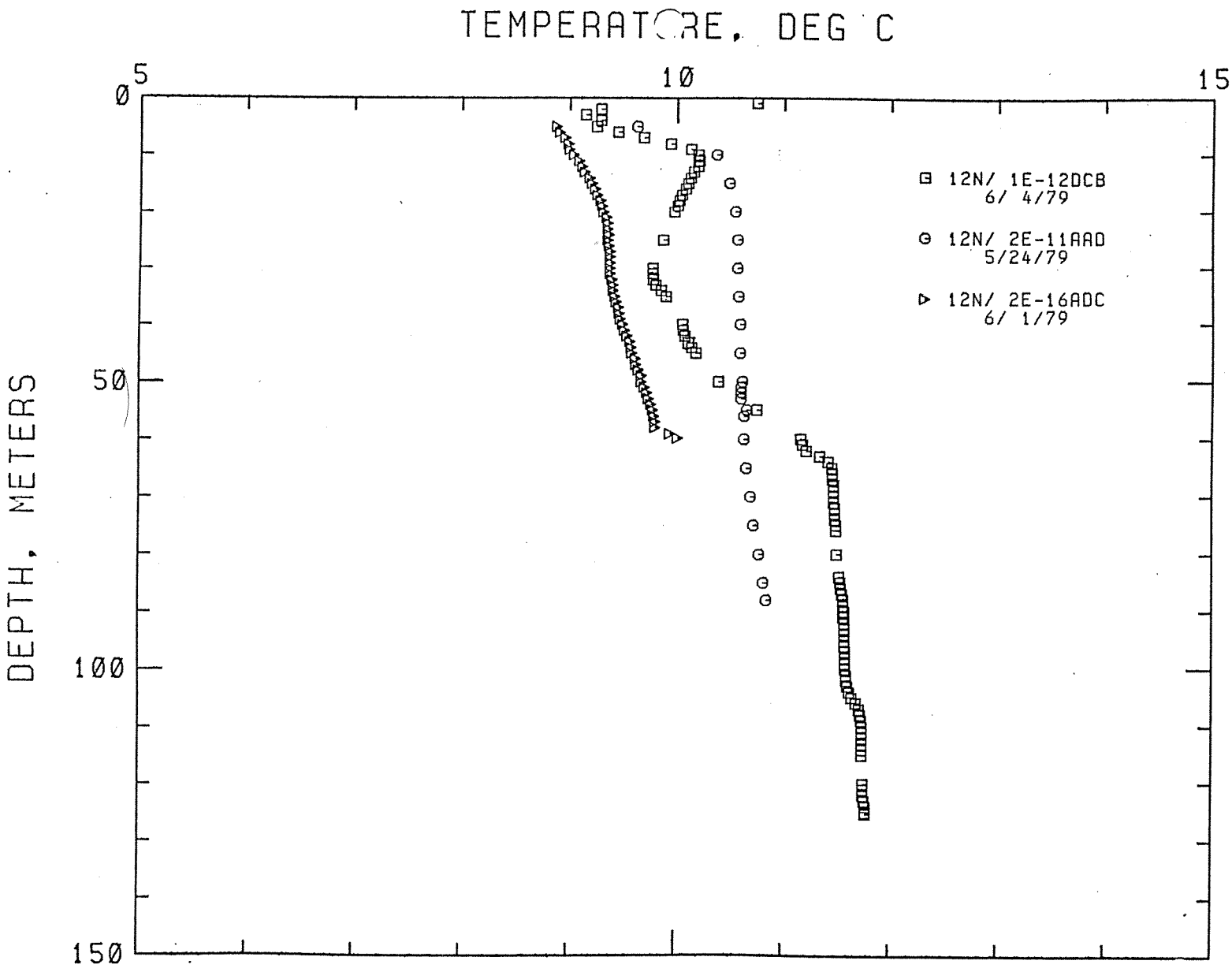
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
1.0	3.3	10.750	51.35	0.0	0.0
2.0	6.6	9.290	48.72	-1460.0	-80.1
3.0	9.8	9.150	48.47	-140.0	-7.7
4.0	13.1	9.290	48.72	140.0	7.7
5.0	16.4	9.250	48.65	-40.0	-2.2
6.0	19.7	9.450	49.01	200.0	11.0
7.0	23.0	9.690	49.44	240.0	13.2
8.0	26.2	9.940	49.89	250.0	13.7
9.0	29.5	10.130	50.23	190.0	10.4
10.0	32.8	10.200	50.36	70.0	3.8
11.0	36.1	10.210	50.38	10.0	0.5
12.0	39.4	10.200	50.36	-10.0	-0.5
13.0	42.6	10.160	50.29	-40.0	-2.2
14.0	45.9	10.130	50.23	-30.0	-1.6
15.0	49.2	10.110	50.20	-20.0	-1.1
16.0	52.5	10.085	50.15	-25.0	-1.4
17.0	55.8	10.050	50.09	-35.0	-1.9
18.0	59.0	10.030	50.05	-20.0	-1.1
19.0	62.3	10.010	50.02	-20.0	-1.1
20.0	65.6	9.980	49.96	-30.0	-1.6
25.0	82.0	9.880	49.78	-20.0	-1.1
30.0	98.4	9.780	49.60	-20.0	-1.1
31.0	101.7	9.780	49.60	0.0	0.0
32.0	105.0	9.790	49.62	10.0	0.5
33.0	108.2	9.810	49.66	20.0	1.1
34.0	111.5	9.860	49.75	50.0	2.7
35.0	114.8	9.910	49.84	50.0	2.7
40.0	131.2	10.060	50.11	30.0	1.6
41.0	134.5	10.070	50.13	10.0	0.5
42.0	137.8	10.085	50.15	15.0	0.8
4 .0	160.7	10.120	50.22	5.0	0.3
44.0	144.3	10.150	50.27	-6.0	-0.3
45.0	147.6	10.190	50.34	40.0	2.2
50.0	164.0	10.400	50.72	42.0	2.3
55.0	180.4	10.760	51.37	72.0	4.0
60.0	196.8	11.170	52.11	82.0	4.5
61.0	200.1	11.190	52.14	20.0	1.1
62.0	203.4	11.220	52.20	30.0	1.6
63.0	206.6	11.350	52.43	130.0	7.1
64.0	209.9	11.430	52.57	80.0	4.4
65.0	213.2	11.460	52.63	30.0	1.6
66.0	216.5	11.470	52.65	10.0	0.5

LOCATION: HOQUIAM AMS, WASH
12N/ 1E-12DCB
HOLE NAME: TALBOTT
DATE MEASURED: 6/ 4/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
67.0	219.8	11.470	52.65	0.0	0.0
68.0	223.0	11.480	52.66	10.0	0.5
69.0	226.3	11.480	52.66	0.0	0.0
70.0	229.6	11.480	52.66	0.0	0.0
71.0	232.9	11.480	52.66	0.0	0.0
72.0	236.2	11.490	52.68	10.0	0.5
73.0	239.4	11.490	52.68	0.0	0.0
74.0	242.7	11.490	52.68	0.0	0.0
75.0	246.0	11.500	52.70	10.0	0.5
76.0	249.3	11.500	52.70	0.0	0.0
80.0	262.4	11.510	52.72	2.5	0.1
84.0	275.5	11.530	52.75	5.0	0.3
85.0	278.8	11.540	52.77	10.0	0.5
86.0	282.1	11.550	52.79	10.0	0.5
87.0	285.4	11.560	52.81	10.0	0.5
88.0	288.6	11.570	52.83	10.0	0.5
89.0	291.9	11.570	52.83	0.0	0.0
90.0	295.2	11.580	52.84	10.0	0.5
91.0	298.5	11.570	52.83	-10.0	-0.5
92.0	301.8	11.580	52.84	10.0	0.5
93.0	305.0	11.580	52.84	0.0	0.0
94.0	308.3	11.580	52.84	0.0	0.0
95.0	311.6	11.580	52.84	0.0	0.0
96.0	314.9	11.585	52.85	5.0	0.3
97.0	318.2	11.590	52.86	5.0	0.3
98.0	321.4	11.590	52.86	0.0	0.0
99.0	324.7	11.590	52.86	0.0	0.0
100.0	328.0	11.590	52.86	0.0	0.0
101.0	331.3	11.600	52.88	10.0	0.5
102.0	334.6	11.600	52.88	0.0	0.0
103.0	337.8	11.610	52.90	10.0	0.5
104.0	341.1	11.630	52.93	20.0	1.1
105.0	344.4	11.650	52.97	20.0	1.1
106.0	347.7	11.690	53.04	40.0	2.2
107.0	351.0	11.720	53.10	30.0	1.6
108.0	354.2	11.730	53.11	10.0	0.5
109.0	357.5	11.740	53.13	10.0	0.5
110.0	360.8	11.750	53.15	10.0	0.5
111.0	364.1	11.750	53.15	0.0	0.0
112.0	367.4	11.750	53.15	0.0	0.0
113.0	370.6	11.750	53.15	0.0	0.0
114.0	373.9	11.750	53.15	0.0	0.0

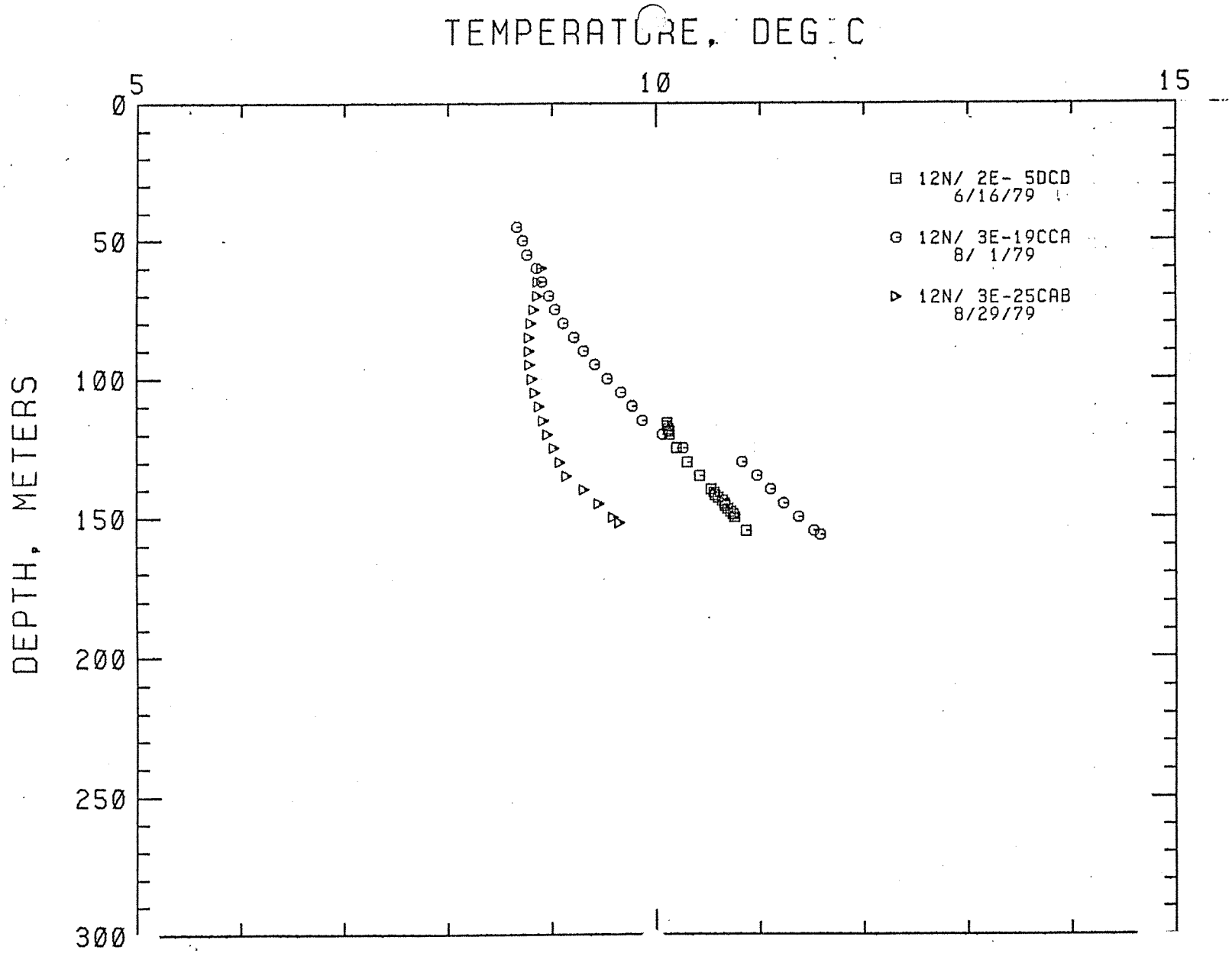
LOCATION: HOQUIAM AMS, WASH
12N/ 1E-12DCB
HOLE NAME: TALBOTT
DATE MEASURED: 6/ 4/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
115.0	377.2	11.750	53.15	0.0	0.0
120.0	393.6	11.760	53.17	2.0	0.1
121.0	396.9	11.760	53.17	0.0	0.0
122.0	400.2	11.760	53.17	0.0	0.0
123.0	403.4	11.770	53.19	10.0	0.5
124.0	406.7	11.780	53.20	10.0	0.5
125.0	410.0	11.780	53.20	0.0	0.0
125.3	411.0	11.780	53.20	0.0	0.0


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
12N/ 1E-12DCB
6/ 4/79
12N/ 2E-11AAD
5/24/79
12N/ 2E-16ADC
6/ 1/79

LOCATION: HOQUIAM AMS, WASH
12N/ 2E- 5DCD
HOLE NAME: PLANT
DATE MEASURED: 6/16/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
116.0	380.5	10.110	50.20	0.0	0.0
117.0	383.8	10.110	50.20	0.0	0.0
118.0	387.0	10.120	50.22	10.0	0.5
119.0	390.3	10.130	50.23	10.0	0.5
120.0	393.6	10.130	50.23	0.0	0.0
125.0	410.0	10.200	50.36	14.0	0.8
130.0	426.4	10.300	50.54	20.0	1.1
135.0	442.8	10.420	50.76	24.0	1.3
140.0	459.2	10.530	50.95	22.0	1.2
141.0	462.5	10.560	51.01	30.0	1.6
142.0	465.8	10.570	51.03	10.0	0.5
143.0	469.0	10.600	51.08	30.0	1.6
144.0	472.3	10.640	51.15	40.0	2.2
145.0	475.6	10.660	51.19	20.0	1.1
146.0	478.9	10.670	51.21	10.0	0.5
147.0	482.2	10.690	51.24	20.0	1.1
148.0	485.4	10.720	51.30	30.0	1.6
149.0	488.7	10.740	51.33	20.0	1.1
150.0	492.0	10.760	51.37	20.0	1.1
155.0	508.4	10.870	51.57	22.0	1.2


TEMPERATURE, DEG C
5
10
15
0
50
100
150
200
250
300
DEPTH, METERS
12N/ 2E- 5DCD
6/16/79
12N/ 3E-19CCA
8/ 1/79
12N/ 3E-25CAB
8/29/79

LOCATION: HOQUIAM AMS, WASH
12N/ 2E- 9DAD
HOLE NAME: LCMPK 3
DATE MEASURED: 6/23/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
9.0	29.5	9.440	48.99	0.0	0.0
10.0	32.8	9.440	48.99	0.0	0.0
11.0	36.1	9.440	48.99	0.0	0.0
12.0	39.4	9.440	48.99	0.0	0.0
13.0	42.6	9.440	48.99	0.0	0.0
14.0	45.9	9.440	48.99	0.0	0.0
15.0	49.2	9.450	49.01	10.0	0.5
20.0	65.6	9.490	49.08	8.0	0.4
25.0	82.0	9.540	49.17	10.0	0.5
30.0	98.4	9.590	49.26	10.0	0.5
35.0	114.8	9.640	49.35	10.0	0.5
40.0	131.2	9.710	49.48	14.0	0.8
45.0	147.6	9.770	49.59	12.0	0.7
50.0	164.0	9.820	49.68	10.0	0.5
55.0	180.4	9.900	49.82	16.0	0.9
60.0	196.8	9.960	49.93	12.0	0.7
65.0	213.2	10.170	50.31	42.0	2.3
70.0	229.6	10.210	50.38	8.0	0.4
75.0	246.0	10.300	50.54	18.0	1.0
80.0	262.4	10.460	50.83	32.0	1.8
85.0	278.8	10.580	51.04	24.0	1.3
90.0	295.2	10.690	51.24	22.0	1.2
95.0	311.6	10.740	51.33	10.0	0.5
100.0	328.0	10.810	51.46	14.0	0.8
105.0	344.4	10.960	51.73	30.0	1.6
110.0	360.8	11.080	51.94	24.0	1.3
115.0	377.2	11.200	52.16	24.0	1.3
120.0	393.6	11.330	52.39	26.0	1.4
125.0	410.0	11.440	52.59	22.0	1.2
130.0	426.4	11.590	52.86	30.0	1.6
135.0	442.8	11.670	53.01	16.0	0.9
140.0	459.2	11.800	53.24	26.0	1.4
145.0	475.6	11.920	53.46	24.0	1.3
150.0	492.0	12.020	53.64	20.0	1.1
155.0	508.4	12.100	53.78	16.0	0.9
160.0	524.8	12.180	53.92	16.0	0.9
165.0	541.2	12.260	54.07	16.0	0.9
170.0	557.6	12.290	54.12	6.0	0.3
175.0	574.0	12.680	54.82	78.0	4.3
180.0	590.4	12.810	55.06	26.0	1.4
185.0	606.8	13.000	55.40	38.0	2.1
190.0	623.2	13.110	55.60	22.0	1.2

LOCATION: HOQUIAM AMS, WASH
12N/ 2E- 9DAD

HOLE NAME: LCMPK 3
DATE MEASURED: 6/23/79

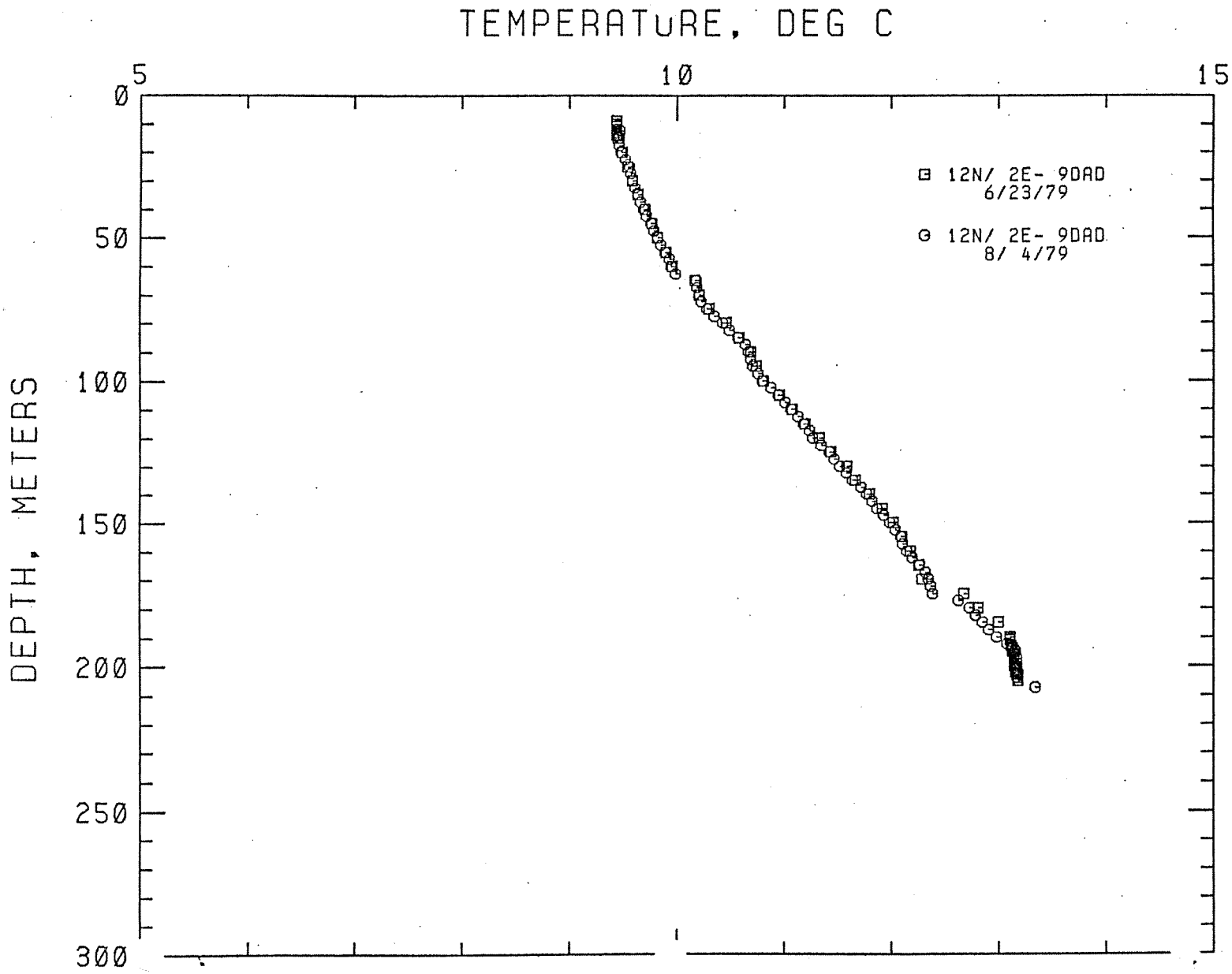
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
191.0	626.5	13.110	55.60	0.0	0.0
193.0	633.0	13.120	55.62	5.0	0.3
194.0	636.3	13.130	55.63	10.0	0.5
195.0	639.6	13.130	55.63	0.0	0.0
196.0	642.9	13.150	55.67	20.0	1.1
197.0	646.2	13.150	55.67	0.0	0.0
198.0	649.4	13.150	55.67	0.0	0.0
199.0	652.7	13.150	55.67	0.0	0.0
200.0	656.0	13.150	55.67	0.0	0.0
201.0	659.3	13.160	55.69	10.0	0.5
202.0	662.6	13.160	55.69	0.0	0.0
203.0	665.8	13.170	55.71	10.0	0.5
204.0	669.1	13.180	55.72	10.0	0.5
205.0	672.4	13.180	55.72	0.0	0.0

LOCATION: HOQUIAM AMS, WASH
12N/ 2E- 9DAD
HOLE NAME: LCMPK 3
DATE MEASURED: 8/ 4/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
12.5	41.0	9.470	49.05	0.0	0.0
15.0	49.2	9.460	49.03	-4.0	-0.2
17.5	57.4	9.460	49.03	0.0	0.0
20.0	65.6	9.480	49.06	8.0	0.4
22.5	73.8	9.520	49.14	16.0	0.9
25.0	82.0	9.560	49.21	16.0	0.9
27.5	90.2	9.570	49.23	4.0	0.2
30.0	98.4	9.590	49.26	8.0	0.4
32.5	106.6	9.610	49.30	8.0	0.4
35.0	114.8	9.640	49.35	12.0	0.7
37.5	123.0	9.660	49.39	8.0	0.4
40.0	131.2	9.690	49.44	12.0	0.7
42.5	139.4	9.720	49.50	12.0	0.7
45.0	147.6	9.760	49.57	16.0	0.9
47.5	155.8	9.790	49.62	12.0	0.7
50.0	164.0	9.820	49.68	12.0	0.7
52.5	172.2	9.850	49.73	12.0	0.7
55.0	180.4	9.890	49.80	16.0	0.9
57.5	188.6	9.930	49.87	16.0	0.9
60.0	196.8	9.950	49.91	8.0	0.4
62.5	205.0	9.990	49.98	16.0	0.9
65.0	213.2	10.180	50.32	76.0	4.2
67.5	221.4	10.190	50.34	4.0	0.2
70.0	229.6	10.210	50.38	8.0	0.4
72.5	237.8	10.230	50.41	8.0	0.4
75.0	246.0	10.280	50.50	20.0	1.1
77.5	254.2	10.350	50.63	28.0	1.5
80.0	262.4	10.430	50.77	32.0	1.8
82.5	270.6	10.490	50.88	24.0	1.3
85.0	278.8	10.570	51.03	32.0	1.8
87.5	287.0	10.640	51.15	28.0	1.5
90.0	295.2	10.670	51.21	12.0	0.7
92.5	303.4	10.690	51.24	8.0	0.4
95.0	311.6	10.710	51.28	8.0	0.4
97.5	319.8	10.760	51.37	20.0	1.1
100.0	328.0	10.800	51.44	16.0	0.9
102.5	336.2	10.880	51.58	32.0	1.8
105.0	344.4	10.950	51.71	28.0	1.5
107.5	352.6	11.010	51.82	24.0	1.3
110.0	360.8	11.070	51.93	24.0	1.3
112.5	369.0	11.130	52.03	24.0	1.3

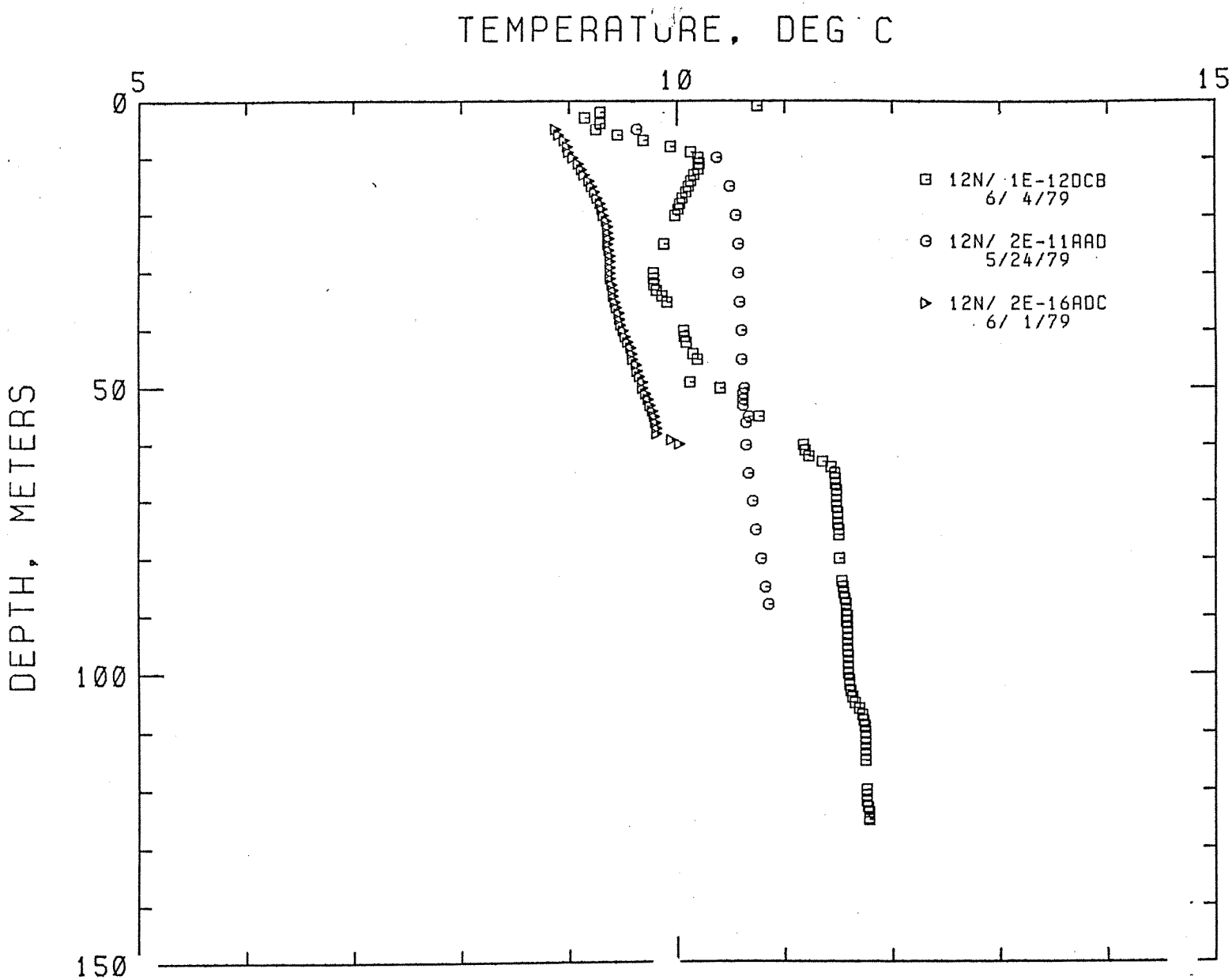
LOCATION: HOQUIAM AMS, WASH
12N/ 2E- 9DAD
HOLE NAME: LCMPK 3
DATE MEASURED: 8/ 4/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
115.0	377.2	11.180	52.12	20.0	1.1
117.5	385.4	11.240	52.23	24.0	1.3
120.0	393.6	11.270	52.29	12.0	0.7
122.5	401.8	11.350	52.43	32.0	1.8
125.0	410.0	11.420	52.56	28.0	1.5
127.5	418.2	11.470	52.65	20.0	1.1
130.0	426.4	11.520	52.74	20.0	1.1
132.5	434.6	11.580	52.84	24.0	1.3
135.0	442.8	11.640	52.95	24.0	1.3
137.5	451.0	11.720	53.10	32.0	1.8
140.0	459.2	11.770	53.19	20.0	1.1
142.5	467.4	11.820	53.28	20.0	1.1
145.0	475.6	11.870	53.37	20.0	1.1
147.5	483.8	11.930	53.47	24.0	1.3
150.0	492.0	11.990	53.58	24.0	1.3
152.5	500.2	12.040	53.67	20.0	1.1
155.0	508.4	12.090	53.76	20.0	1.1
157.5	516.6	12.110	53.80	8.0	0.4
160.0	524.8	12.150	53.87	16.0	0.9
162.5	533.0	12.200	53.96	20.0	1.1
165.0	541.2	12.270	54.09	28.0	1.5
167.5	549.4	12.320	54.18	20.0	1.1
170.0	557.6	12.350	54.23	12.0	0.7
172.5	565.8	12.370	54.27	8.0	0.4
175.0	574.0	12.390	54.30	8.0	0.4
177.5	582.2	12.630	54.73	96.0	5.3
180.0	590.4	12.730	54.91	40.0	2.2
182.5	598.6	12.790	55.02	24.0	1.3
185.0	606.8	12.850	55.13	24.0	1.3
187.5	615.0	12.910	55.24	24.0	1.3
190.0	623.2	12.980	55.36	28.0	1.5
192.5	631.4	13.080	55.54	40.0	2.2
195.0	639.6	13.160	55.69	32.0	1.8
197.5	647.8	13.170	55.71	4.0	0.2
200.0	656.0	13.170	55.71	0.0	0.0
202.5	664.2	13.180	55.72	4.0	0.2
205.0	672.4	13.180	55.72	0.0	0.0
207.5	680.6	13.340	56.01	64.0	3.5


TEMPERATURE, DEG C
5
10
15
0
50
100
150
200
250
300
DEPTH, METERS
12N/ 2E- 9DAD
6/23/79
12N/ 2E- 9DAD
8/ 4/79

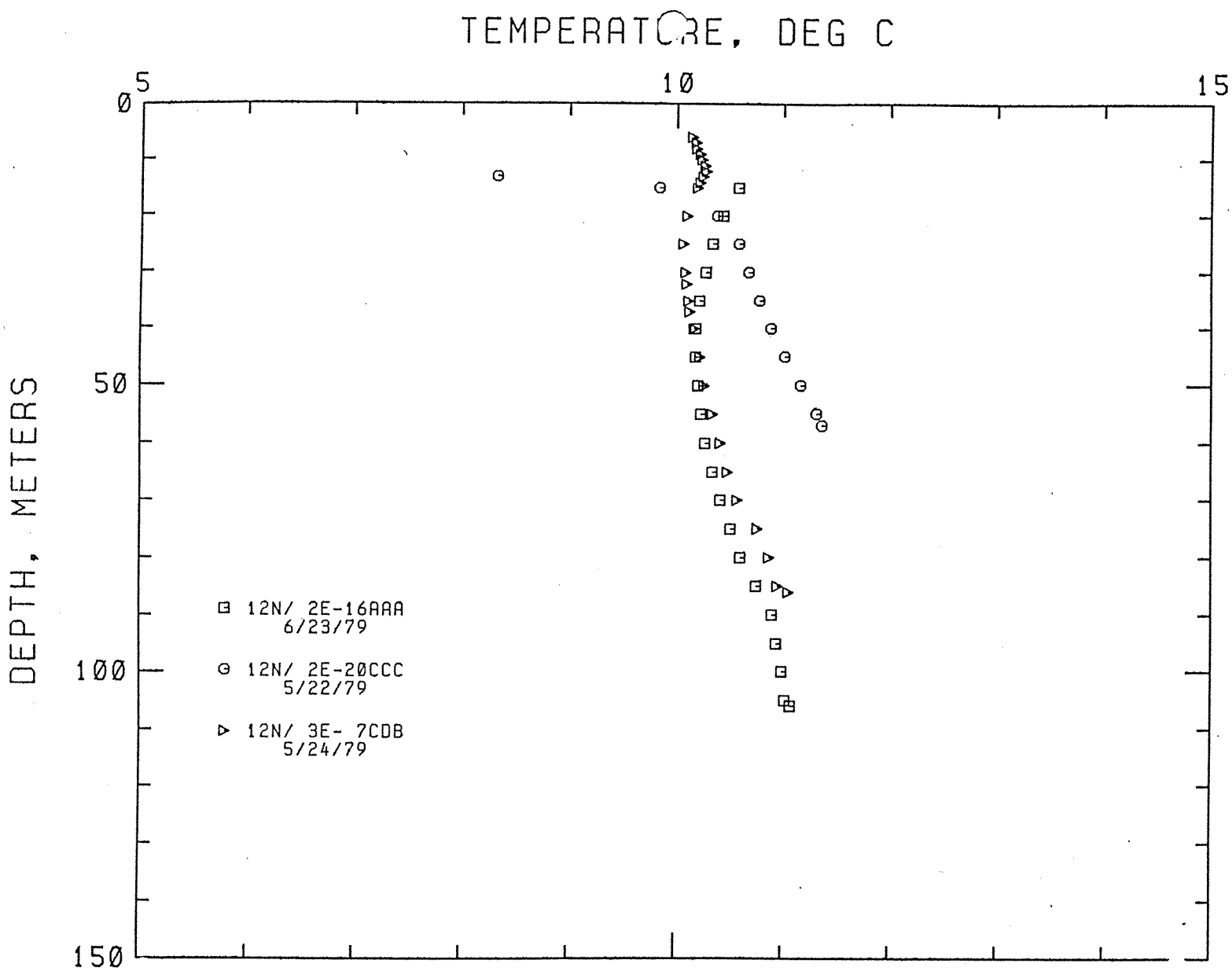
LOCATION: HOQUIAM AMS, WASH
12N/ 2E-11AAD
HOLE NAME: HADDALER
DATE MEASURED: 5/24/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	9.630	49.33	0.0	0.0
10.0	32.8	10.370	50.67	148.0	8.1
15.0	49.2	10.490	50.88	24.0	1.3
20.0	65.6	10.550	50.99	12.0	0.7
25.0	82.0	10.570	51.03	4.0	0.2
30.0	98.4	10.570	51.03	0.0	0.0
35.0	114.8	10.580	51.04	2.0	0.1
40.0	131.2	10.600	51.08	4.0	0.2
45.0	147.6	10.600	51.08	0.0	0.0
50.0	164.0	10.620	51.12	4.0	0.2
51.0	167.3	10.610	51.10	-10.0	-0.5
52.0	170.6	10.610	51.10	0.0	0.0
53.0	173.8	10.610	51.10	0.0	0.0
55.0	180.4	10.660	51.19	25.0	1.4
56.0	183.7	10.640	51.15	-20.0	-1.1
60.0	196.8	10.640	51.15	0.0	0.0
65.0	213.2	10.660	51.19	4.0	0.2
70.0	229.6	10.700	51.26	8.0	0.4
75.0	246.0	10.730	51.31	6.0	0.3
80.0	262.4	10.780	51.40	10.0	0.5
85.0	278.8	10.820	51.48	8.0	0.4
88.0	288.6	10.850	51.53	10.0	0.5


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
12N/ 1E-12DCB
6/ 4/79
12N/ 2E-11AAD
5/24/79
12N/ 2E-16ADC
6/ 1/79

LOCATION: HOQUIAM AMS, WASH
12N/ 2E-16AAA
HOLE NAME: LKSDCM 1
DATE MEASURED: 6/23/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
15.0	49.2	10.580	51.04	0.0	0.0
20.0	65.6	10.440	50.79	-28.0	-1.5
25.0	82.0	10.340	50.61	-20.0	-1.1
30.0	98.4	10.280	50.50	-12.0	-0.7
35.0	114.8	10.220	50.40	-12.0	-0.7
40.0	131.2	10.190	50.34	-6.0	-0.3
45.0	147.6	10.190	50.34	0.0	0.0
50.0	164.0	10.210	50.38	4.0	0.2
55.0	180.4	10.240	50.43	6.0	0.3
60.0	196.8	10.280	50.50	8.0	0.4
65.0	213.2	10.350	50.63	14.0	0.8
70.0	229.6	10.420	50.76	14.0	0.8
75.0	246.0	10.520	50.94	20.0	1.1
80.0	262.4	10.610	51.10	18.0	1.0
85.0	278.8	10.760	51.37	30.0	1.6
90.0	295.2	10.910	51.64	30.0	1.6
95.0	311.6	10.950	51.71	8.0	0.4
100.0	328.0	11.000	51.80	10.0	0.5
105.0	344.4	11.030	51.85	6.0	0.3
106.0	347.7	11.080	51.94	50.0	2.7


TEMPERATURE, DEG C
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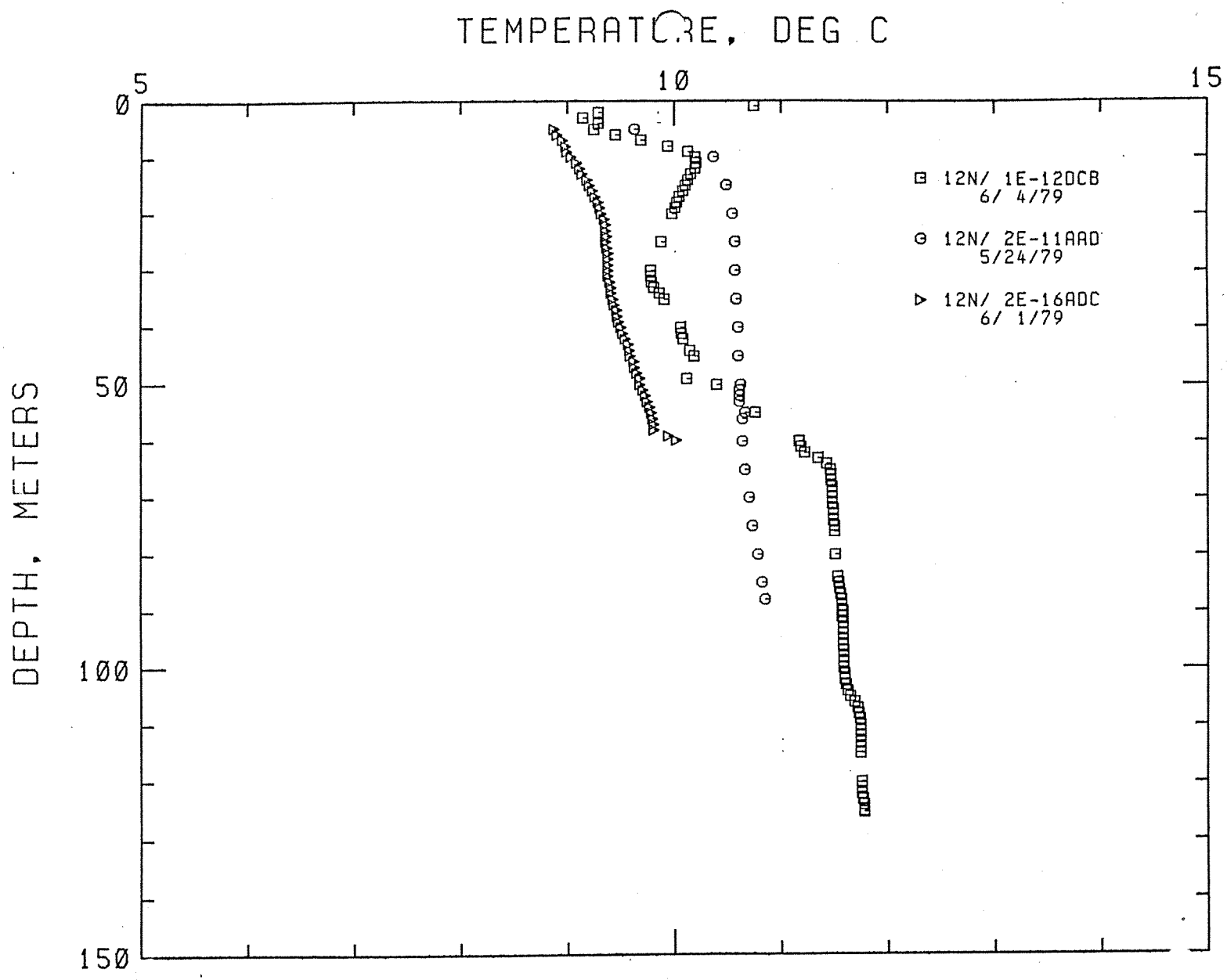
10
15
0
50
100
150
DEPTH, METERS
12N/ 2E-16AAA
6/23/79
12N/ 2E-20CCC
5/22/79
12N/ 3E- 7CDB
5/24/79

LOCATION: HOQUIAM AMS, WASH
12N/ 2E-16ADC
HOLE NAME: LCMPK 2
DATE MEASURED: 6/ 1/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	8.880	47.98	0.0	0.0
6.0	19.7	8.910	48.04	30.0	1.6
7.0	23.0	8.960	48.13	50.0	2.7
8.0	26.2	8.990	48.18	30.0	1.6
9.0	29.5	9.000	48.20	10.0	0.5
10.0	32.8	9.040	48.27	40.0	2.2
11.0	36.1	9.090	48.36	50.0	2.7
12.0	39.4	9.120	48.42	30.0	1.6
13.0	42.6	9.140	48.45	20.0	1.1
14.0	45.9	9.190	48.54	50.0	2.7
15.0	49.2	9.210	48.58	20.0	1.1
16.0	52.5	9.240	48.63	30.0	1.6
17.0	55.8	9.260	48.67	20.0	1.1
18.0	59.0	9.290	48.72	30.0	1.6
19.0	62.3	9.310	48.76	20.0	1.1
20.0	65.6	9.320	48.78	10.0	0.5
21.0	68.9	9.350	48.83	30.0	1.6
22.0	72.2	9.360	48.85	10.0	0.5
23.0	75.4	9.360	48.85	0.0	0.0
24.0	78.7	9.370	48.87	10.0	0.5
25.0	82.0	9.360	48.85	-10.0	-0.5
26.0	85.3	9.370	48.87	10.0	0.5
27.0	88.6	9.380	48.88	10.0	0.5
28.0	91.8	9.380	48.88	0.0	0.0
29.0	95.1	9.380	48.88	0.0	0.0
30.0	98.4	9.380	48.88	0.0	0.0
31.0	101.7	9.380	48.88	0.0	0.0
32.0	105.0	9.400	48.92	20.0	1.1
33.0	108.2	9.410	48.94	10.0	0.5
34.0	111.5	9.410	48.94	0.0	0.0
35.0	114.8	9.430	48.97	20.0	1.1
36.0	118.1	9.440	48.99	10.0	0.5
37.0	121.4	9.460	49.03	20.0	1.1
38.0	124.6	9.470	49.05	10.0	0.5
39.0	127.9	9.480	49.06	10.0	0.5
40.0	131.2	9.500	49.10	20.0	1.1
41.0	134.5	9.520	49.14	20.0	1.1
42.0	137.8	9.545	49.18	25.0	1.4
43.0	141.0	9.570	49.23	25.0	1.4
44.0	144.3	9.580	49.24	10.0	0.5
45.0	147.6	9.590	49.26	10.0	0.5
46.0	150.9	9.620	49.32	30.0	1.6

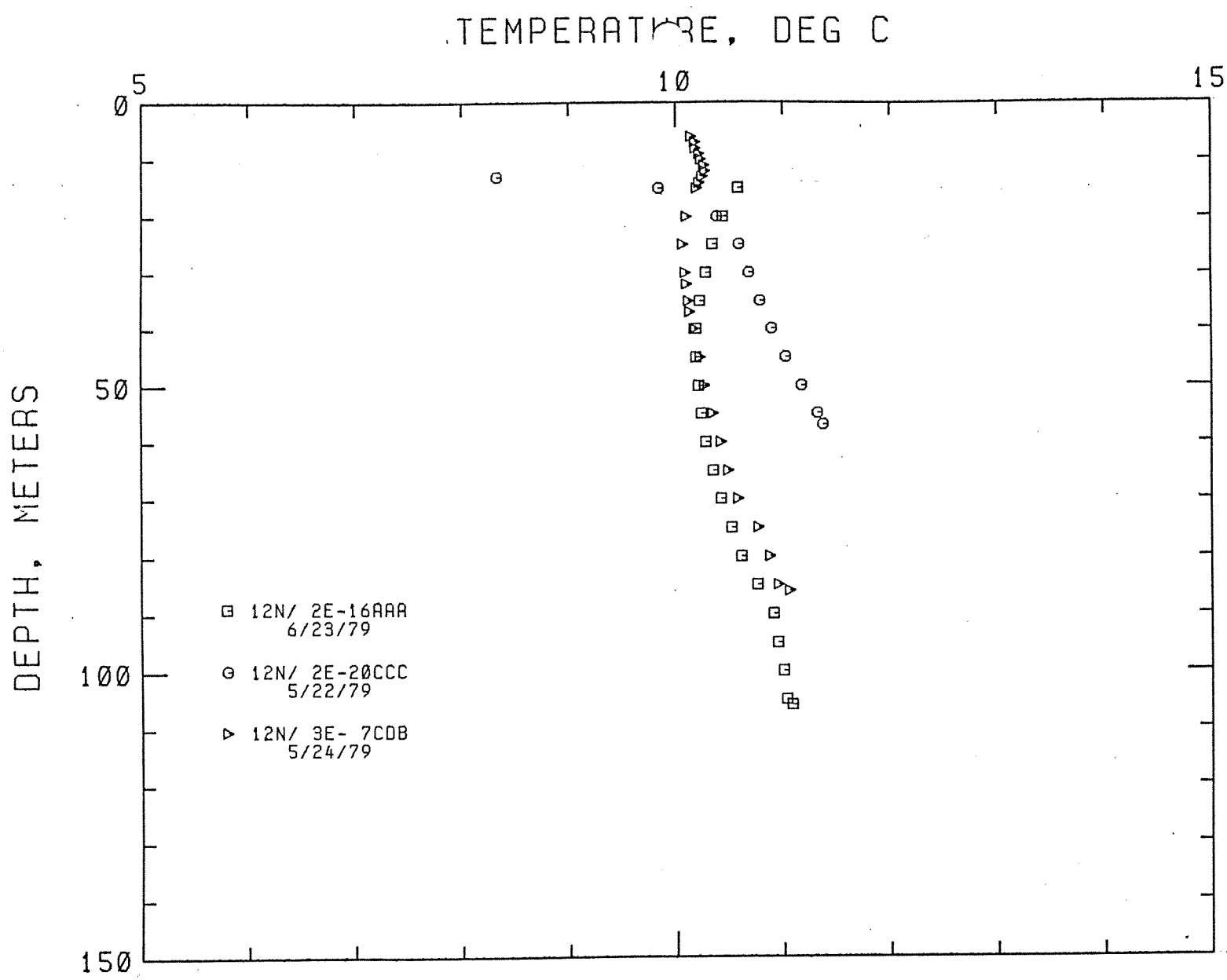
LOCATION: HOQUIAM AMS, WASH
12N/ 2E-16ADC
HOLE NAME: LCMPK 2
DATE MEASURED: 6/ 1/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
47.0	154.2	9.630	49.33	10.0	0.5
48.0	157.4	9.650	49.37	20.0	1.1
49.0	160.7	9.680	49.42	30.0	1.6
50.0	164.0	9.680	49.42	0.0	0.0
51.0	167.3	9.710	49.48	30.0	1.6
52.0	170.6	9.730	49.51	20.0	1.1
53.0	173.8	9.750	49.55	20.0	1.1
54.0	177.1	9.770	49.59	20.0	1.1
55.0	180.4	9.790	49.62	20.0	1.1
56.0	183.7	9.800	49.64	10.0	0.5
57.0	187.0	9.810	49.66	10.0	0.5
58.0	190.2	9.810	49.66	0.0	0.0
59.0	193.5	9.950	49.91	140.0	7.7
59.8	196.1	10.020	50.04	87.5	4.8


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
12N/ 1E-12DCB
6/ 4/79
12N/ 2E-11AAD
5/24/79
12N/ 2E-16ADC
6/ 1/79

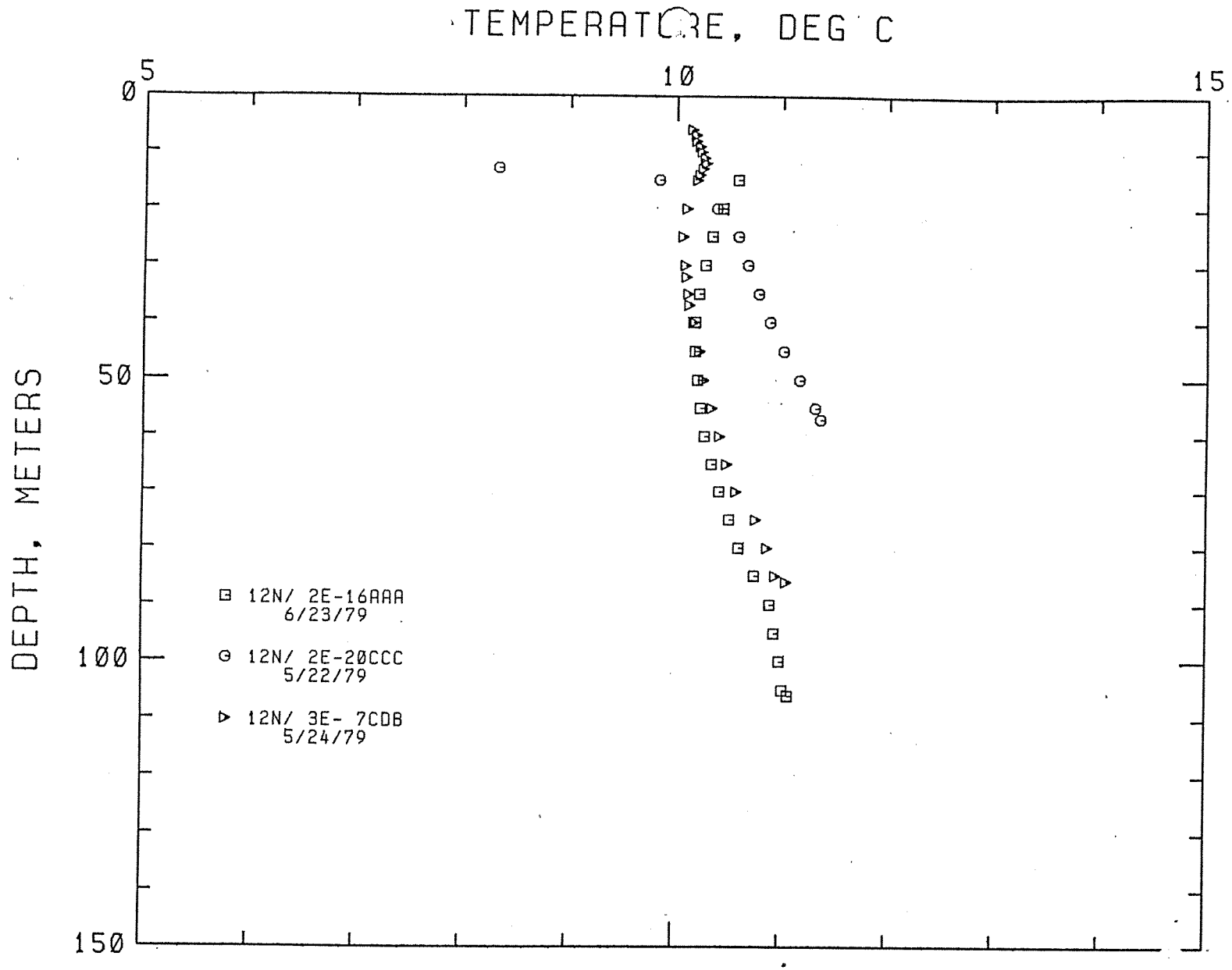
LOCATION: HOQUIAM AMS, WASH
12N/ 2E-20CCC
HOLE NAME: MFPKFS 1
DATE MEASURED: 5/22/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
13.0	42.6	8.330	46.99	0.0	0.0
15.0	49.2	9.840	49.71	755.0	41.4
20.0	65.6	10.380	50.68	108.0	5.9
25.0	82.0	10.590	51.06	42.0	2.3
30.0	98.4	10.680	51.22	18.0	1.0
35.0	114.8	10.780	51.40	20.0	1.1
40.0	131.2	10.890	51.60	22.0	1.2
45.0	147.6	11.020	51.84	26.0	1.4
50.0	164.0	11.170	52.11	30.0	1.6
55.0	180.4	11.320	52.38	30.0	1.6
57.0	187.0	11.370	52.47	25.0	1.4


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
12N/ 2E-16AAA
6/23/79
12N/ 2E-20CCC
5/22/79
12N/ 3E- 7CDB
5/24/79

LOCATION: HOQUIAM AMS, WASH
12N/ 3E- 7CDB
HOLE NAME: GOODWIN
DATE MEASURED: 5/24/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
6.0	19.7	10.150	50.27	0.0	0.0
7.0	23.0	10.180	50.32	30.0	1.6
8.0	26.2	10.190	50.34	10.0	0.5
9.0	29.5	10.220	50.40	30.0	1.6
10.0	32.8	10.240	50.43	20.0	1.1
11.0	36.1	10.270	50.49	30.0	1.6
12.0	39.4	10.280	50.50	10.0	0.5
13.0	42.6	10.250	50.45	-30.0	-1.6
14.0	45.9	10.220	50.40	-30.0	-1.6
15.0	49.2	10.200	50.36	-20.0	-1.1
20.0	65.6	10.100	50.18	-20.0	-1.1
25.0	82.0	10.070	50.13	-6.0	-0.3
30.0	98.4	10.090	50.16	4.0	0.2
32.0	105.0	10.100	50.18	5.0	0.3
35.0	114.8	10.120	50.22	6.7	0.4
37.0	121.4	10.130	50.23	5.0	0.3
40.0	131.2	10.170	50.31	13.3	0.7
45.0	147.6	10.230	50.41	12.0	0.7
50.0	164.0	10.270	50.49	8.0	0.4
55.0	180.4	10.350	50.63	16.0	0.9
60.0	196.8	10.420	50.76	14.0	0.8
65.0	213.2	10.490	50.88	14.0	0.8
70.0	229.6	10.580	51.04	18.0	1.0
75.0	246.0	10.770	51.39	38.0	2.1
80.0	262.4	10.880	51.58	22.0	1.2
85.0	278.8	10.960	51.73	16.0	0.9
86.0	282.1	11.060	51.91	100.0	5.5


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
12N/ 2E-16AAA
6/23/79
12N/ 2E-20CCC
5/22/79
12N/ 3E- 7CDB
5/24/79

LOCATION: HOQUIAM AMS, WASH
12N/ 3E-17DCB
HOLE NAME: AUST
DATE MEASURED: 7/ 4/75

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
22.0	72.2	10.130	50.23	0.0	0.0
23.0	75.4	10.130	50.23	0.0	0.0
24.0	78.7	10.140	50.25	10.0	0.5
25.0	82.0	10.150	50.27	10.0	0.5
26.0	85.3	10.150	50.27	0.0	0.0
27.0	88.6	10.160	50.29	10.0	0.5
28.0	91.8	10.170	50.31	10.0	0.5
29.0	95.1	10.180	50.32	10.0	0.5
30.0	98.4	10.190	50.34	10.0	0.5
31.0	101.7	10.190	50.34	0.0	0.0
32.0	105.0	10.200	50.36	10.0	0.5
33.0	108.2	10.210	50.38	10.0	0.5
34.0	111.5	10.220	50.40	10.0	0.5
35.0	114.8	10.220	50.40	0.0	0.0
40.0	131.2	10.240	50.43	4.0	0.2
45.0	147.6	10.270	50.49	6.0	0.3
50.0	164.0	10.300	50.54	6.0	0.3
51.0	167.3	10.290	50.52	-10.0	-0.5
52.0	170.6	10.310	50.56	20.0	1.1
53.0	173.8	10.310	50.56	0.0	0.0
54.0	177.1	10.320	50.58	10.0	0.5
55.0	180.4	10.320	50.58	0.0	0.0
60.0	196.8	10.360	50.65	8.0	0.4
65.0	213.2	10.410	50.74	10.0	0.5
70.0	229.6	10.440	50.79	6.0	0.3
75.0	246.0	10.480	50.86	8.0	0.4
80.0	262.4	10.550	50.99	14.0	0.8
85.0	278.8	10.620	51.12	14.0	0.8
90.0	295.2	10.690	51.24	14.0	0.8
95.0	311.6	10.770	51.39	16.0	0.9
100.0	328.0	10.830	51.49	12.0	0.7
105.0	344.4	10.940	51.69	22.0	1.2
110.0	328.0	11.040	51.87	-20.0	-1.1
115.0	377.2	11.180	52.12	9.3	0.5
120.0	393.6	11.250	52.25	14.0	0.8
125.0	410.0	11.390	52.50	28.0	1.5
126.0	413.3	11.430	52.57	40.0	2.2
127.0	416.6	11.430	52.57	0.0	0.0
128.0	419.8	11.470	52.65	40.0	2.2
129.0	423.1	11.480	52.66	10.0	0.5
130.0	426.4	11.520	52.74	40.0	2.2
131.0	429.7	11.540	52.77	20.0	1.1

LOCATION: HOQUIAM AMS, WASH
12N/ 3E-17DCB

HOLE NAME: AUST

DATE MEASURED: 7/ 4/79

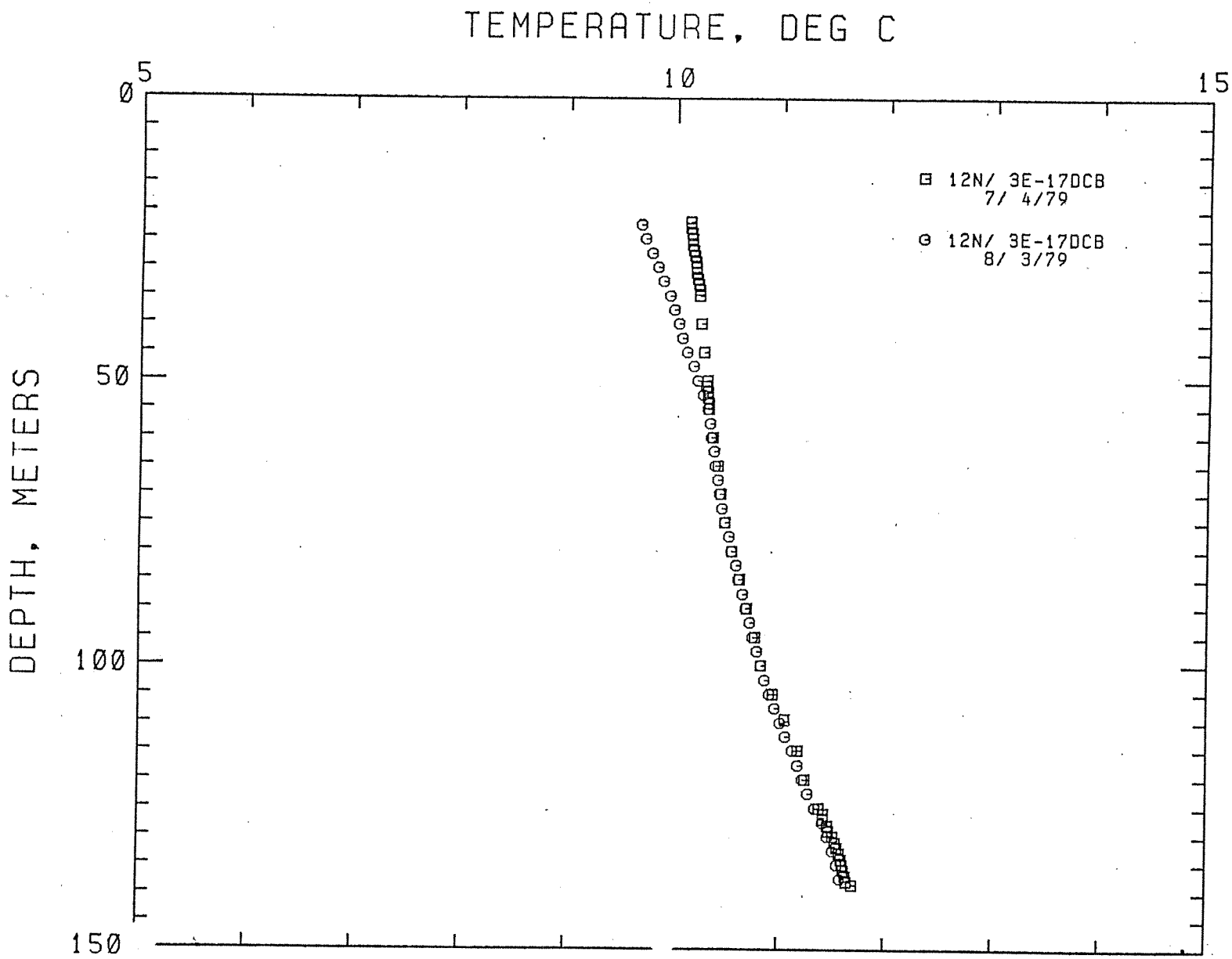
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
132.0	433.0	11.560	52.81	20.0	1.1
133.0	436.2	11.580	52.84	20.0	1.1
134.0	439.5	11.600	52.88	20.0	1.1
135.0	442.8	11.610	52.90	10.0	0.5
136.0	446.1	11.620	52.92	10.0	0.5
137.0	449.4	11.640	52.95	20.0	1.1
138.0	452.6	11.650	52.97	10.0	0.5
138.5	454.3	11.700	53.06	100.0	5.5

LOCATION: HOQUIAM AMS, WASH
12N/ 3E-17DCB
HOLE NAME: AUST
DATE MEASURED: 8/ 3/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
22.5	73.8	9.670	49.41	0.0	0.0
25.0	82.0	9.710	49.48	16.0	0.9
27.5	90.2	9.770	49.59	24.0	1.3
30.0	98.4	9.830	49.69	24.0	1.3
32.5	106.6	9.880	49.78	20.0	1.1
35.0	114.8	9.940	49.89	24.0	1.3
37.5	123.0	9.980	49.96	16.0	0.9
40.0	131.2	10.030	50.05	20.0	1.1
42.5	139.4	10.060	50.11	12.0	0.7
45.0	147.6	10.110	50.20	20.0	1.1
47.5	155.8	10.170	50.31	24.0	1.3
50.0	164.0	10.210	50.38	16.0	0.9
52.5	172.2	10.260	50.47	20.0	1.1
55.0	180.4	10.310	50.56	20.0	1.1
57.5	188.6	10.330	50.59	8.0	0.4
60.0	196.8	10.340	50.61	4.0	0.2
62.5	205.0	10.370	50.67	12.0	0.7
65.0	213.2	10.380	50.68	4.0	0.2
67.5	221.4	10.410	50.74	12.0	0.7
70.0	229.6	10.430	50.77	8.0	0.4
72.5	237.8	10.450	50.81	8.0	0.4
75.0	246.0	10.480	50.86	12.0	0.7
77.5	254.2	10.520	50.94	16.0	0.9
80.0	262.4	10.540	50.97	8.0	0.4
82.5	270.6	10.590	51.06	20.0	1.1
85.0	278.8	10.610	51.10	8.0	0.4
87.5	287.0	10.650	51.17	16.0	0.9
90.0	295.2	10.680	51.22	12.0	0.7
92.5	303.4	10.720	51.30	16.0	0.9
95.0	311.6	10.750	51.35	12.0	0.7
97.5	319.8	10.790	51.42	16.0	0.9
100.0	328.0	10.830	51.49	16.0	0.9
102.5	336.2	10.860	51.55	12.0	0.7
105.0	344.4	10.910	51.64	20.0	1.1
107.5	352.6	10.960	51.73	20.0	1.1
110.0	360.8	11.010	51.82	20.0	1.1
112.5	369.0	11.060	51.91	20.0	1.1
115.0	377.2	11.130	52.03	28.0	1.5
117.5	385.4	11.180	52.12	20.0	1.1
120.0	393.6	11.230	52.21	20.0	1.1
122.5	401.8	11.280	52.30	20.0	1.1

LOCATION: HOQUIAM AMS, WASH
12N/ 3E-17DCB
HOLE NAME: AUST
DATE MEASURED: 8/ 3/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
125.0	410.0	11.350	52.43	28.0	1.5
127.5	418.2	11.420	52.56	28.0	1.5
130.0	426.4	11.470	52.65	20.0	1.1
132.5	434.6	11.520	52.74	20.0	1.1
135.0	442.8	11.560	52.81	16.0	0.9
137.5	451.0	11.590	52.86	12.0	0.7


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
12N/ 3E-17DCB
7/ 4/79
12N/ 3E-17DCB
8/ 3/79

LOCATION: HOQUIAM AMS, WASH
12N/ 3E-19CBD
HOLE NAME: MOSSRK-1
DATE MEASURED: 8/ 1/79

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	13.340	56.01	0.0	0.0
25.0	82.0	12.800	55.04	-108.0	-5.9
30.0	98.4	12.280	54.10	-104.0	-5.7
35.0	114.8	11.110	52.00	-234.0	-12.8
40.0	131.2	10.710	51.28	-80.0	-4.4
45.0	147.6	10.160	50.29	-110.0	-6.0
50.0	164.0	10.080	50.14	-16.0	-0.9
55.0	180.4	10.100	50.18	4.0	0.2
60.0	196.8	10.110	50.20	2.0	0.1
65.0	213.2	10.070	50.13	-8.0	-0.4
70.0	229.6	10.110	50.20	8.0	0.4
75.0	246.0	10.140	50.25	6.0	0.3
80.0	262.4	10.220	50.40	16.0	0.9
85.0	278.8	10.410	50.74	38.0	2.1
90.0	295.2	10.470	50.85	12.0	0.7
95.0	311.6	10.590	51.06	24.0	1.3
100.0	328.0	10.670	51.21	16.0	0.9
105.0	344.4	10.820	51.48	30.0	1.6
110.0	360.8	10.930	51.67	22.0	1.2
115.0	377.2	11.100	51.98	34.0	1.9
120.0	393.6	11.190	52.14	18.0	1.0
125.0	410.0	11.280	52.30	18.0	1.0
130.0	426.4	11.360	52.45	16.0	0.9
135.0	442.8	11.440	52.59	16.0	0.9
140.0	459.2	11.600	52.88	32.0	1.8
145.0	475.6	11.680	53.02	16.0	0.9
150.0	492.0	12.150	53.87	94.0	5.2
155.0	508.4	12.280	54.10	26.0	1.4
160.0	524.8	12.400	54.32	24.0	1.3
165.0	541.2	12.530	54.55	26.0	1.4
170.0	557.6	12.690	54.84	32.0	1.8
175.0	574.0	12.830	55.09	28.0	1.5
180.0	590.4	12.960	55.33	26.0	1.4
185.0	606.8	13.100	55.58	28.0	1.5
190.0	623.2	13.220	55.80	24.0	1.3
195.0	639.6	13.350	56.03	26.0	1.4
200.0	656.0	13.450	56.21	20.0	1.1
205.0	672.4	13.580	56.44	26.0	1.4
210.0	688.8	13.720	56.70	28.0	1.5
215.0	705.2	13.860	56.95	28.0	1.5
220.0	721.6	13.990	57.18	26.0	1.4
225.0	738.0	14.120	57.42	26.0	1.4

LOCATION: HOQUIAM AMS, WASH

12N/ 3E-19CBD

HOLE NAME: MOSSRK-1

DATE MEASURED: 8/ 1/79

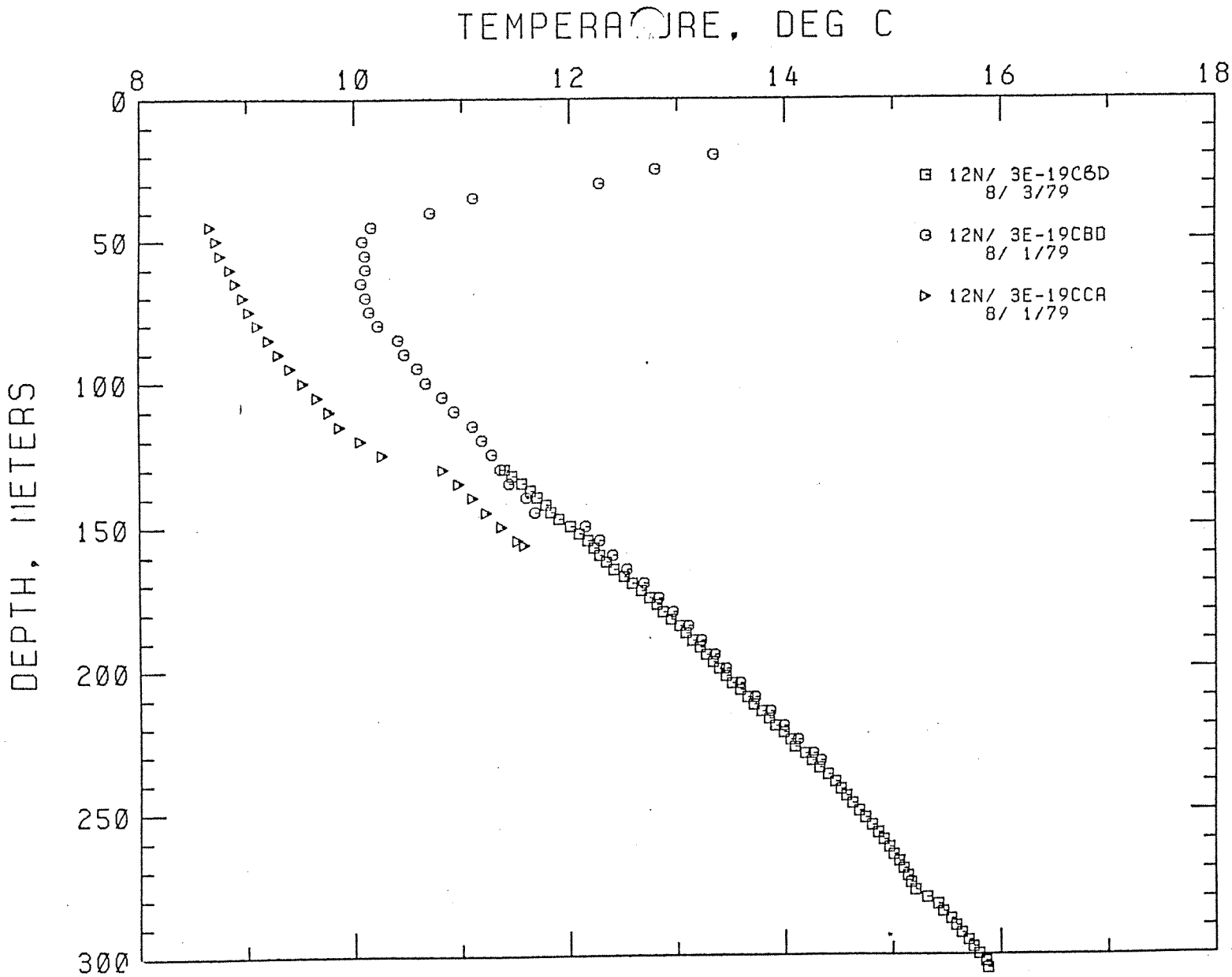
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
230.0	754.4	14.260	57.67	28.0	1.5
232.5	762.6	14.330	57.79	28.0	1.5

LOCATION: HOQUIAM AMS, WASH.
12N/ 3E-19CØD
HOLE NAME: MOSSRK-1
DATE MEASURED: 8/ 3/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
130.0	426.4	11.400	52.52	0.0	0.0
132.5	434.6	11.470	52.65	28.0	1.5
135.0	442.8	11.560	52.81	36.0	2.0
137.5	451.0	11.640	52.95	32.0	1.8
140.0	459.2	11.700	53.06	24.0	1.3
142.5	467.4	11.780	53.20	32.0	1.8
145.0	475.6	11.830	53.29	20.0	1.1
147.5	483.8	11.900	53.42	28.0	1.5
150.0	492.0	12.010	53.62	44.0	2.4
152.5	500.2	12.090	53.76	32.0	1.8
155.0	508.4	12.170	53.91	32.0	1.8
157.5	516.6	12.230	54.01	24.0	1.3
160.0	524.8	12.280	54.10	20.0	1.1
162.5	533.0	12.340	54.21	24.0	1.3
165.0	541.2	12.410	54.34	28.0	1.5
167.5	549.4	12.510	54.52	40.0	2.2
170.0	557.6	12.580	54.64	28.0	1.5
172.5	565.8	12.670	54.81	36.0	2.0
175.0	574.0	12.740	54.93	28.0	1.5
177.5	582.2	12.810	55.06	28.0	1.5
180.0	590.4	12.870	55.17	24.0	1.3
182.5	598.6	12.940	55.29	28.0	1.5
185.0	606.8	13.020	55.44	32.0	1.8
187.5	615.0	13.080	55.54	24.0	1.3
190.0	623.2	13.140	55.65	24.0	1.3
192.5	631.4	13.210	55.78	28.0	1.5
195.0	639.6	13.270	55.89	24.0	1.3
197.5	647.8	13.330	55.99	24.0	1.3
200.0	656.0	13.390	56.10	24.0	1.3
202.5	664.2	13.450	56.21	24.0	1.3
205.0	672.4	13.510	56.32	24.0	1.3
207.5	680.6	13.580	56.44	28.0	1.5
210.0	688.8	13.650	56.57	28.0	1.5
212.5	697.0	13.710	56.68	24.0	1.3
215.0	705.2	13.780	56.80	28.0	1.5
217.5	713.4	13.850	56.93	28.0	1.5
220.0	721.6	13.910	57.04	24.0	1.3
222.5	729.8	13.990	57.18	32.0	1.8
225.0	738.0	14.050	57.29	24.0	1.3
227.5	746.2	14.090	57.36	16.0	0.9
230.0	754.4	14.190	57.54	40.0	2.2

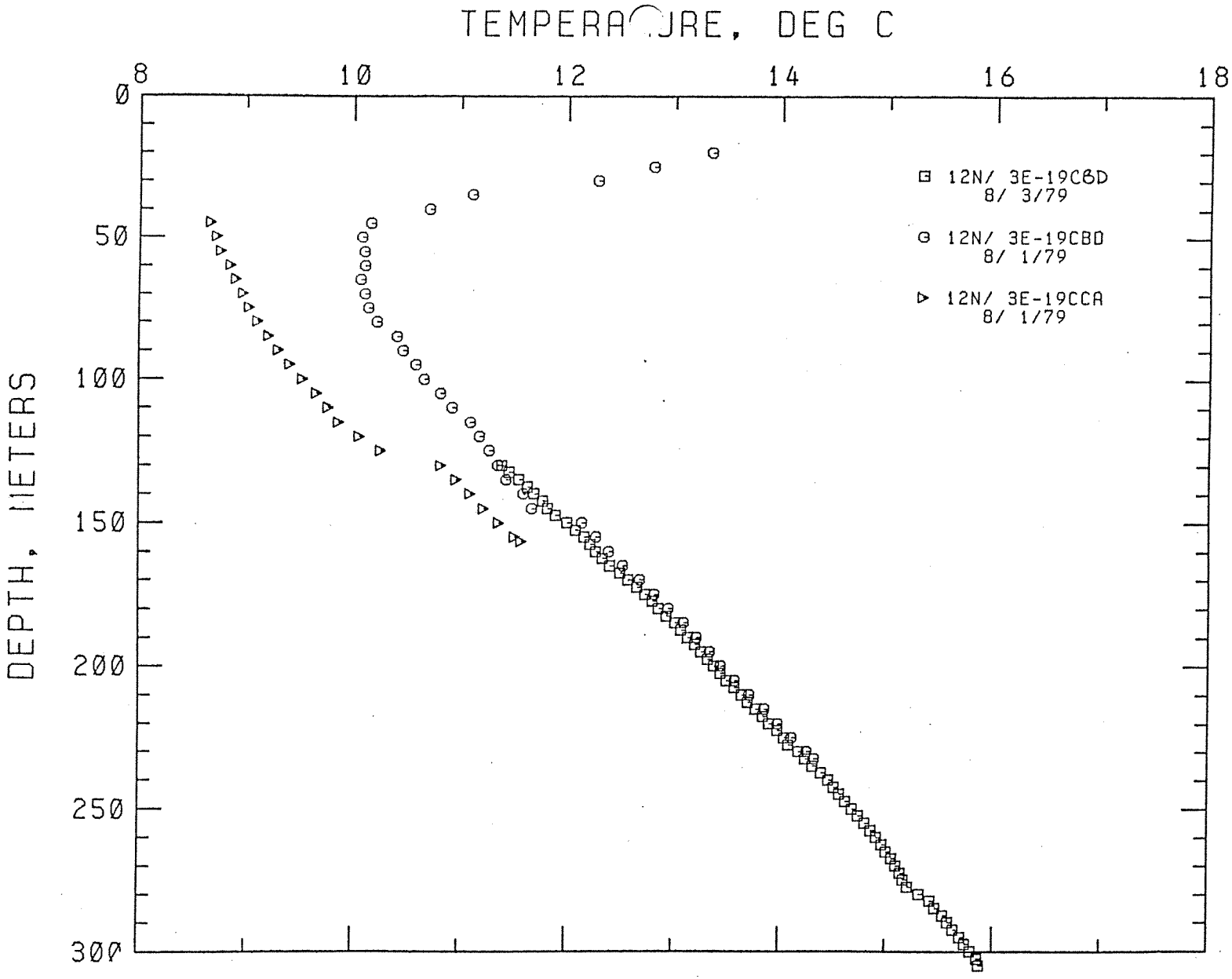
LOCATION: HOQUIAM AMS, WASH.
12N/ 3E-19CBD
HOLE NAME: MOSSRK-1
DATE MEASURED: 8/ 3/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
232.5	762.6	14.250	57.65	24.0	1.3
235.0	770.8	14.320	57.78	28.0	1.5
237.5	779.0	14.400	57.92	32.0	1.8
240.0	787.2	14.470	58.05	28.0	1.5
242.5	795.4	14.520	58.14	20.0	1.1
245.0	803.6	14.570	58.23	20.0	1.1
247.5	811.8	14.630	58.33	24.0	1.3
250.0	820.0	14.690	58.44	24.0	1.3
252.5	828.2	14.750	58.55	24.0	1.3
255.0	836.4	14.810	58.66	24.0	1.3
257.5	844.6	14.870	58.77	24.0	1.3
260.0	852.8	14.920	58.86	20.0	1.1
262.5	861.0	14.970	58.95	20.0	1.1
265.0	869.2	15.010	59.02	16.0	0.9
267.5	877.4	15.060	59.11	20.0	1.1
270.0	885.6	15.100	59.18	16.0	0.9
272.5	893.8	15.140	59.25	16.0	0.9
275.0	902.0	15.170	59.31	12.0	0.7
277.5	910.2	15.210	59.38	16.0	0.9
280.0	918.4	15.320	59.58	44.0	2.4
282.5	926.6	15.420	59.76	40.0	2.2
285.0	934.8	15.470	59.85	20.0	1.1
287.5	943.0	15.540	59.97	28.0	1.5
290.0	951.2	15.590	60.06	20.0	1.1
292.5	959.4	15.640	60.15	20.0	1.1
295.0	967.6	15.700	60.26	24.0	1.3
297.5	975.8	15.750	60.35	20.0	1.1
300.0	984.0	15.800	60.44	20.0	1.1
302.5	992.2	15.860	60.55	24.0	1.3
305.0	1000.4	15.880	60.58	8.0	0.4


TEMPERATURE, DEG C
8
10
12
14
16
18
0
50
100
150
200
250
300
DEPTH, METERS
12N/ 3E-19CBD
8/ 3/79
12N/ 3E-19CBD
8/ 1/79
12N/ 3E-19CCA
8/ 1/79

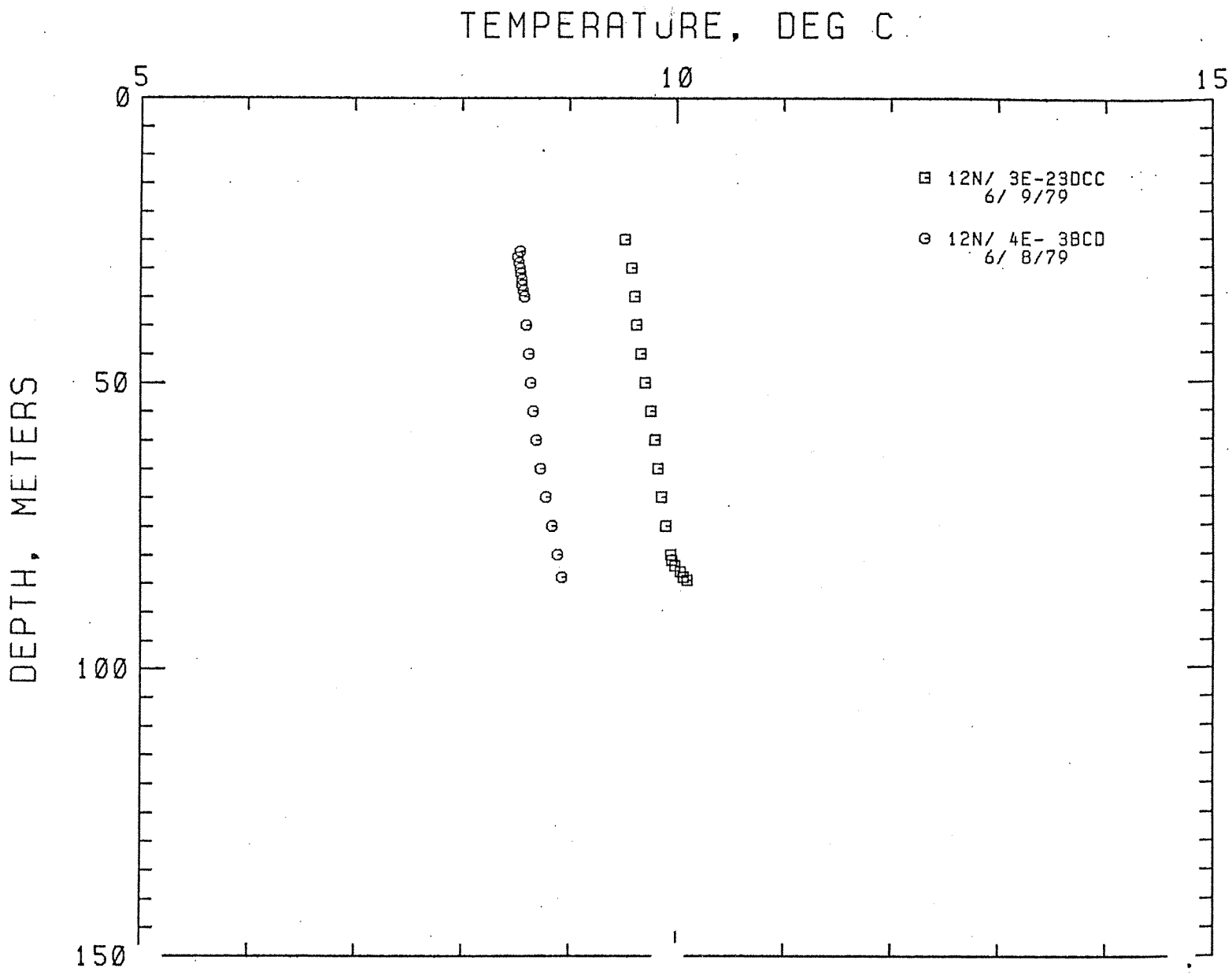
LOCATION: HOQUIAM AMS, WASH
12N/ 3E-19CCA
HOLE NAME: MOSSRK-2
DATE MEASURED: 8/ 1/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
45.0	147.6	8.660	47.59	0.0	0.0
50.0	164.0	8.720	47.70	12.0	0.7
55.0	180.4	8.760	47.77	8.0	0.4
60.0	196.8	8.850	47.93	18.0	1.0
65.0	213.2	8.900	48.02	10.0	0.5
70.0	229.6	8.970	48.15	14.0	0.8
75.0	246.0	9.030	48.25	12.0	0.7
80.0	262.4	9.110	48.40	16.0	0.9
85.0	278.8	9.210	48.58	20.0	1.1
90.0	295.2	9.300	48.74	18.0	1.0
95.0	311.6	9.410	48.94	22.0	1.2
100.0	328.0	9.530	49.15	24.0	1.3
105.0	344.4	9.660	49.39	26.0	1.4
110.0	360.8	9.770	49.59	22.0	1.2
115.0	377.2	9.870	49.77	20.0	1.1
120.0	393.6	10.060	50.11	38.0	2.1
125.0	410.0	10.260	50.47	40.0	2.2
130.0	426.4	10.830	51.49	114.0	6.3
135.0	442.8	10.970	51.75	28.0	1.5
140.0	459.2	11.100	51.98	26.0	1.4
145.0	475.6	11.230	52.21	26.0	1.4
150.0	492.0	11.370	52.47	28.0	1.5
155.0	508.4	11.520	52.74	30.0	1.6
156.5	513.3	11.580	52.84	40.0	2.2


TEMPERATURE, DEG C
8
10
12
14
16
18
0
50
100
150
200
250
300
DEPTH, METERS
12N/ 3E-19CBD
8/ 3/79
12N/ 3E-19CBD
8/ 1/79
12N/ 3E-19CCA
8/ 1/79

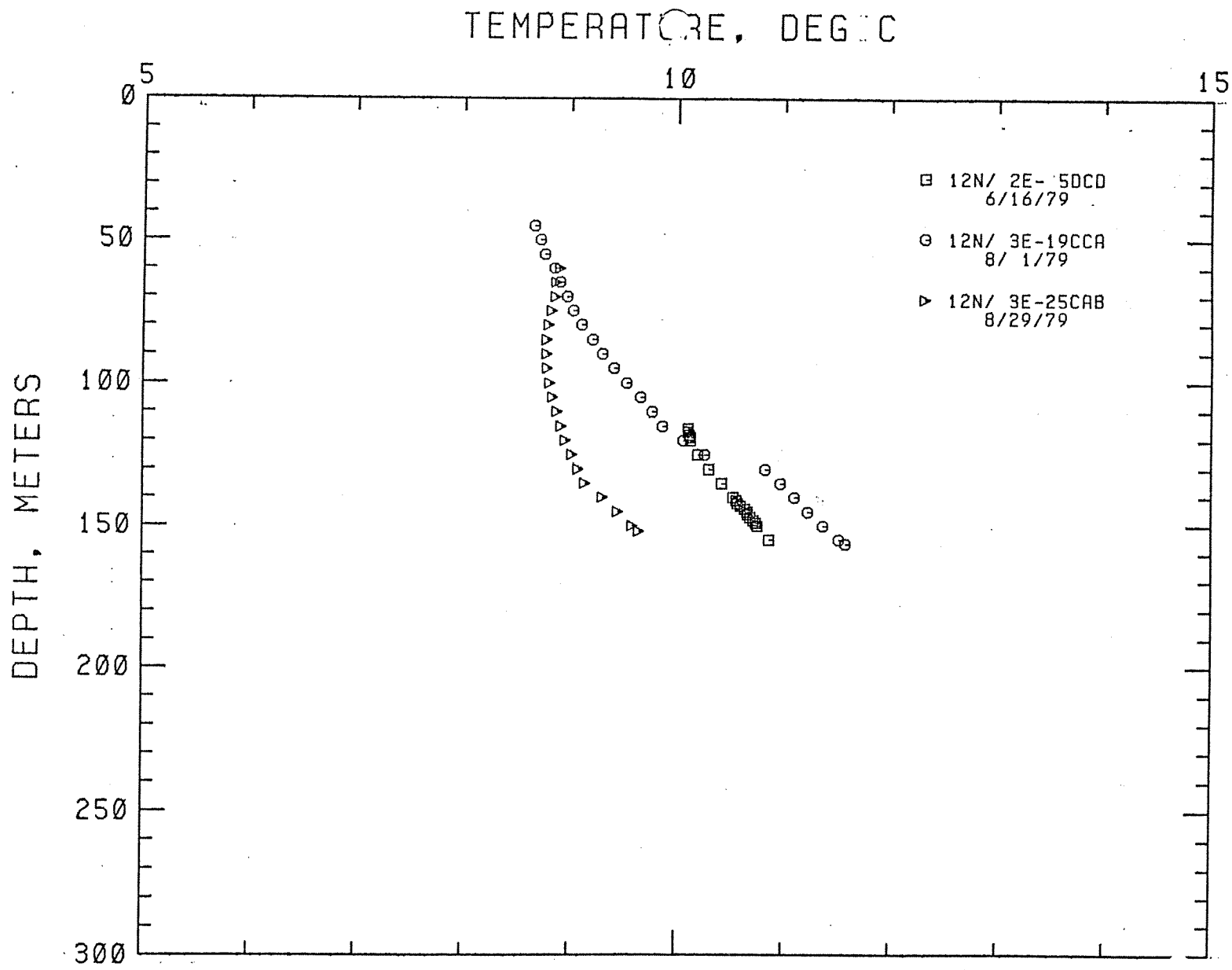
LOCATION: HOQUIAM AMS, WASH
12N/ 3E-23DCC
HOLE NAME: MARCHANT
DATE MEASURED: 6/ 9/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
25.0	82.0	9.520	49.14	0.0	0.0
30.0	98.4	9.580	49.24	12.0	0.7
35.0	114.8	9.610	49.30	6.0	0.3
40.0	131.2	9.630	49.33	4.0	0.2
45.0	147.6	9.670	49.41	8.0	0.4
50.0	164.0	9.710	49.48	8.0	0.4
55.0	180.4	9.760	49.57	10.0	0.5
60.0	196.8	9.800	49.64	8.0	0.4
65.0	213.2	9.830	49.69	6.0	0.3
70.0	229.6	9.860	49.75	6.0	0.3
75.0	246.0	9.900	49.82	8.0	0.4
80.0	262.4	9.950	49.91	10.0	0.5
81.0	265.7	9.960	49.93	10.0	0.5
82.0	269.0	9.990	49.98	30.0	1.6
83.0	272.2	10.040	50.07	50.0	2.7
84.0	275.5	10.070	50.13	30.0	1.6
84.5	277.2	10.100	50.18	60.0	3.3


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
12N/ 3E-23DCC
6/ 9/79
12N/ 4E- 3BCD
6/ 8/79

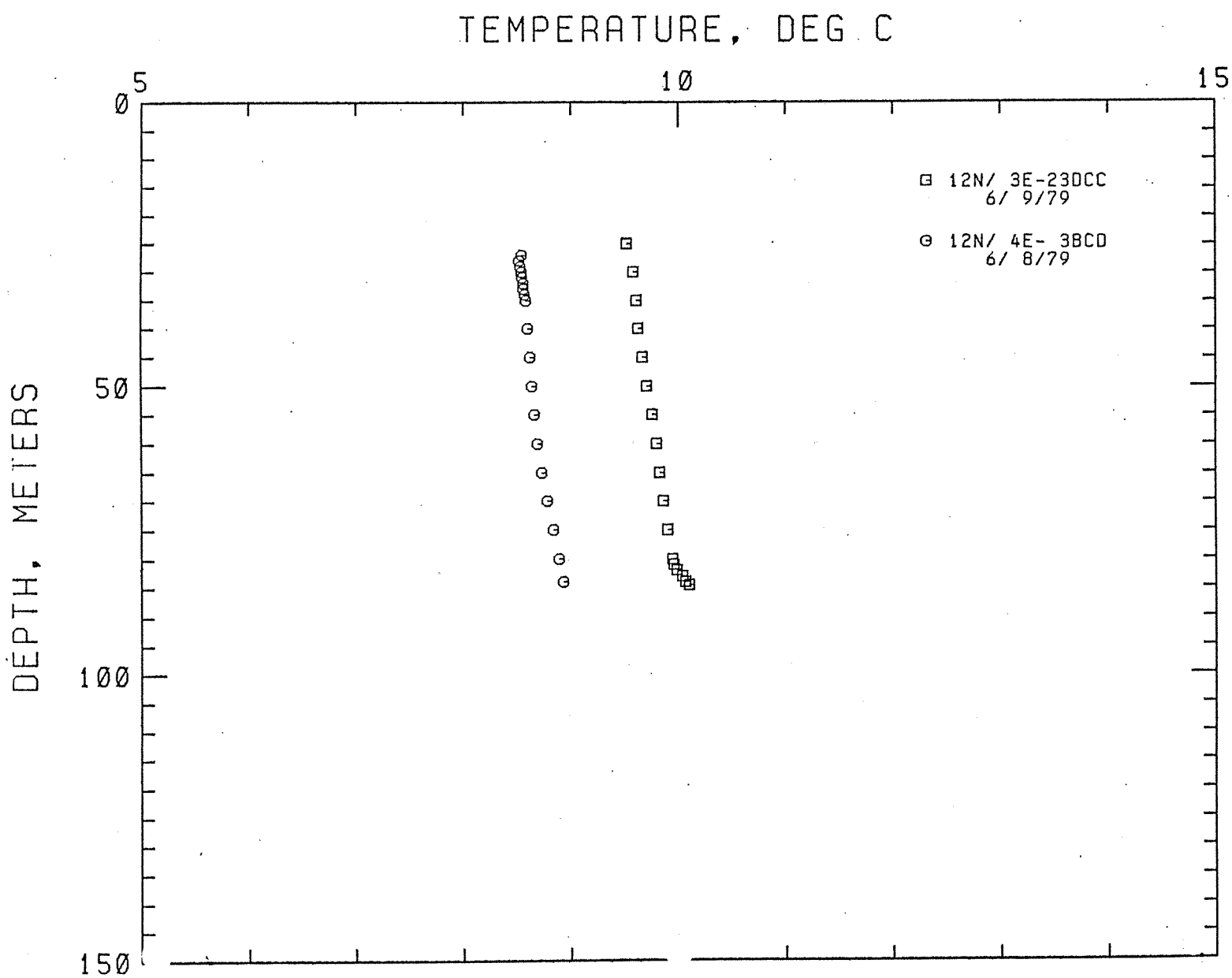
LOCATION: HOQUIAM AMS, WASH
12N/ 3E-25CAB
HOLE NAME: CHURCH-2
DATE MEASURED: 8/29/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
60.0	196.8	8.900	48.02	0.0	0.0
65.0	213.2	8.870	47.97	-6.0	-0.3
70.0	229.6	8.860	47.95	-2.0	-0.1
75.0	246.0	8.830	47.89	-6.0	-0.3
80.0	262.4	8.800	47.84	-6.0	-0.3
85.0	278.8	8.780	47.80	-4.0	-0.2
90.0	295.2	8.780	47.80	0.0	0.0
95.0	311.6	8.790	47.82	2.0	0.1
100.0	328.0	8.810	47.86	4.0	0.2
105.0	344.4	8.840	47.91	6.0	0.3
110.0	360.8	8.880	47.98	8.0	0.4
115.0	377.2	8.920	48.06	8.0	0.4
120.0	393.6	8.960	48.13	8.0	0.4
125.0	410.0	9.020	48.24	12.0	0.7
130.0	426.4	9.080	48.34	12.0	0.7
135.0	442.8	9.140	48.45	12.0	0.7
140.0	459.2	9.310	48.76	34.0	1.9
145.0	475.6	9.450	49.01	28.0	1.5
150.0	492.0	9.590	49.26	28.0	1.5
152.0	498.6	9.650	49.37	30.0	1.6


TEMPERATURE, DEG C
5
10
15
0
50
100
150
200
250
300
DEPTH, METERS
12N/ 2E- 5DCD
6/16/79
12N/ 3E-19CCA
8/ 1/79
12N/ 3E-25CAB
8/29/79

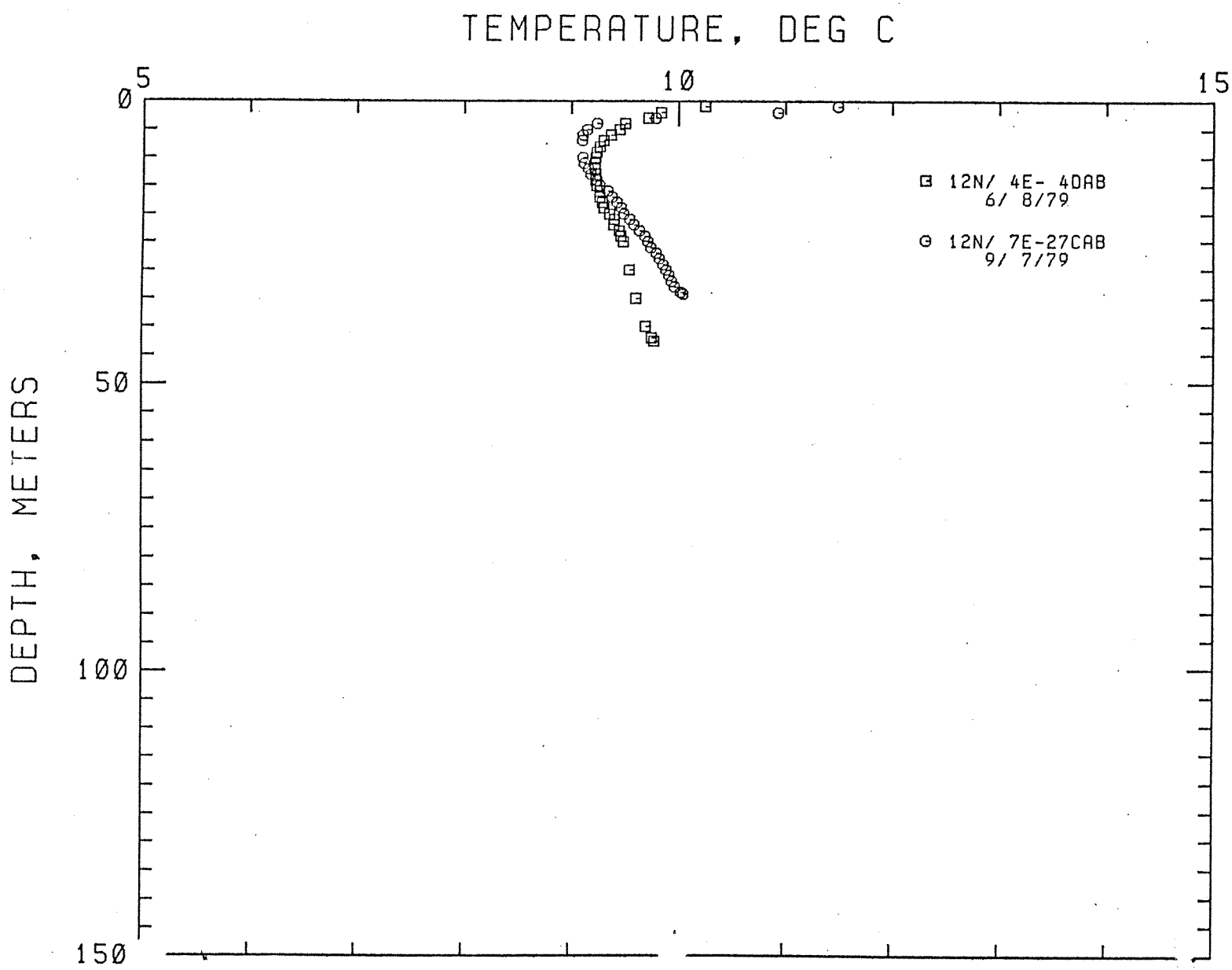
LOCATION: HOQUIAM AMS, WASH
12N/ 4E- 3BCD
HOLE NAME: WARK
DATE MEASURED: 6/ 8/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
27.0	88.6	8.540	47.37	0.0	0.0
28.0	91.8	8.520	47.34	-20.0	-1.1
29.0	95.1	8.530	47.35	10.0	0.5
30.0	98.4	8.540	47.37	10.0	0.5
31.0	101.7	8.550	47.39	10.0	0.5
32.0	105.0	8.555	47.40	5.0	0.3
33.0	108.2	8.560	47.41	5.0	0.3
34.0	111.5	8.570	47.43	10.0	0.5
35.0	114.8	8.580	47.44	10.0	0.5
40.0	131.2	8.600	47.48	4.0	0.2
45.0	147.6	8.620	47.52	4.0	0.2
50.0	164.0	8.640	47.55	4.0	0.2
55.0	180.4	8.660	47.59	4.0	0.2
60.0	196.8	8.690	47.64	6.0	0.3
65.0	213.2	8.730	47.71	8.0	0.4
70.0	229.6	8.780	47.80	10.0	0.5
75.0	246.0	8.840	47.91	12.0	0.7
80.0	262.4	8.890	48.00	10.0	0.5
84.0	275.5	8.930	48.07	10.0	0.5


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
12N/ 3E-23DCC
6/ 9/79
12N/ 4E- 3BCD
6/ 8/79

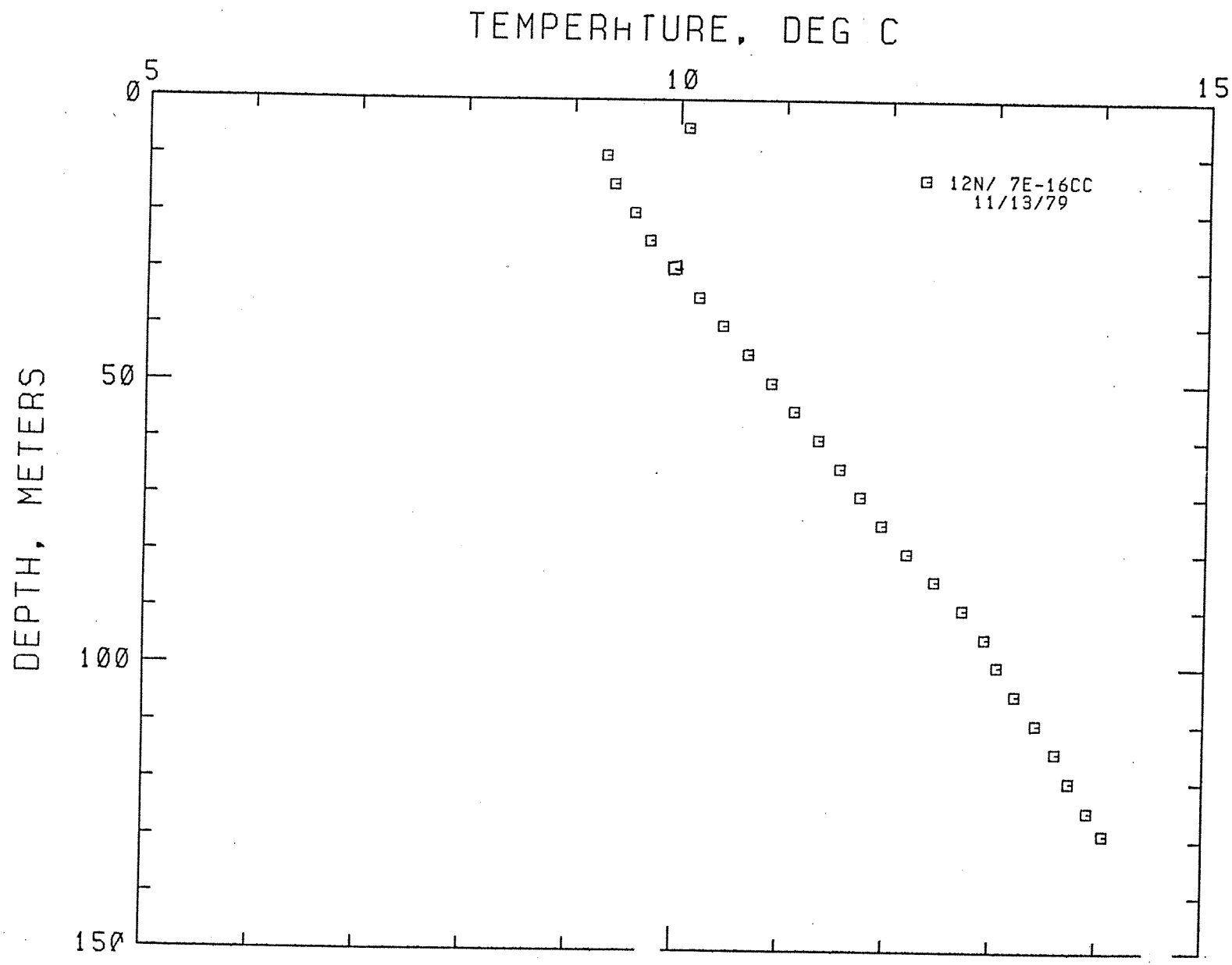
LOCATION: HOQUIAM AMS, WASH
12N/ 4E- 4DAB
HOLE NAME: BISHOP
DATE MEASURED: 6/ 8/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
1.0	3.3	10.250	50.45	0.0	0.0
2.0	6.6	9.840	49.71	-410.0	-22.5
3.0	9.8	9.720	49.50	-120.0	-6.6
4.0	13.1	9.500	49.10	-220.0	-12.1
5.0	16.4	9.450	49.01	-50.0	-2.7
6.0	19.7	9.370	48.87	-80.0	-4.4
7.0	23.0	9.300	48.74	-70.0	-3.8
8.0	26.2	9.270	48.69	-30.0	-1.6
9.0	29.5	9.240	48.63	-30.0	-1.6
10.0	32.8	9.230	48.61	-10.0	-0.5
11.0	36.1	9.220	48.60	-10.0	-0.5
12.0	39.4	9.220	48.60	0.0	0.0
13.0	42.6	9.230	48.61	10.0	0.5
14.0	45.9	9.230	48.61	0.0	0.0
15.0	49.2	9.240	48.63	10.0	0.5
16.0	52.5	9.270	48.69	30.0	1.6
17.0	55.8	9.270	48.69	0.0	0.0
18.0	59.0	9.290	48.72	20.0	1.1
19.0	62.3	9.310	48.76	20.0	1.1
20.0	65.6	9.360	48.85	50.0	2.7
21.0	68.9	9.405	48.93	45.0	2.5
22.0	72.2	9.400	48.92	-5.0	-0.3
23.0	75.4	9.450	49.01	50.0	2.7
24.0	78.7	9.470	49.05	20.0	1.1
25.0	82.0	9.490	49.08	20.0	1.1
30.0	98.4	9.550	49.19	12.0	0.7
35.0	114.8	9.610	49.30	12.0	0.7
40.0	131.2	9.700	49.46	18.0	1.0
42.0	137.8	9.760	49.57	30.0	1.6
42.5	139.4	9.780	49.60	40.0	2.2


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
12N/ 4E- 4DAB
6/ 8/79
12N/ 7E-27CAB
9/ 7/79

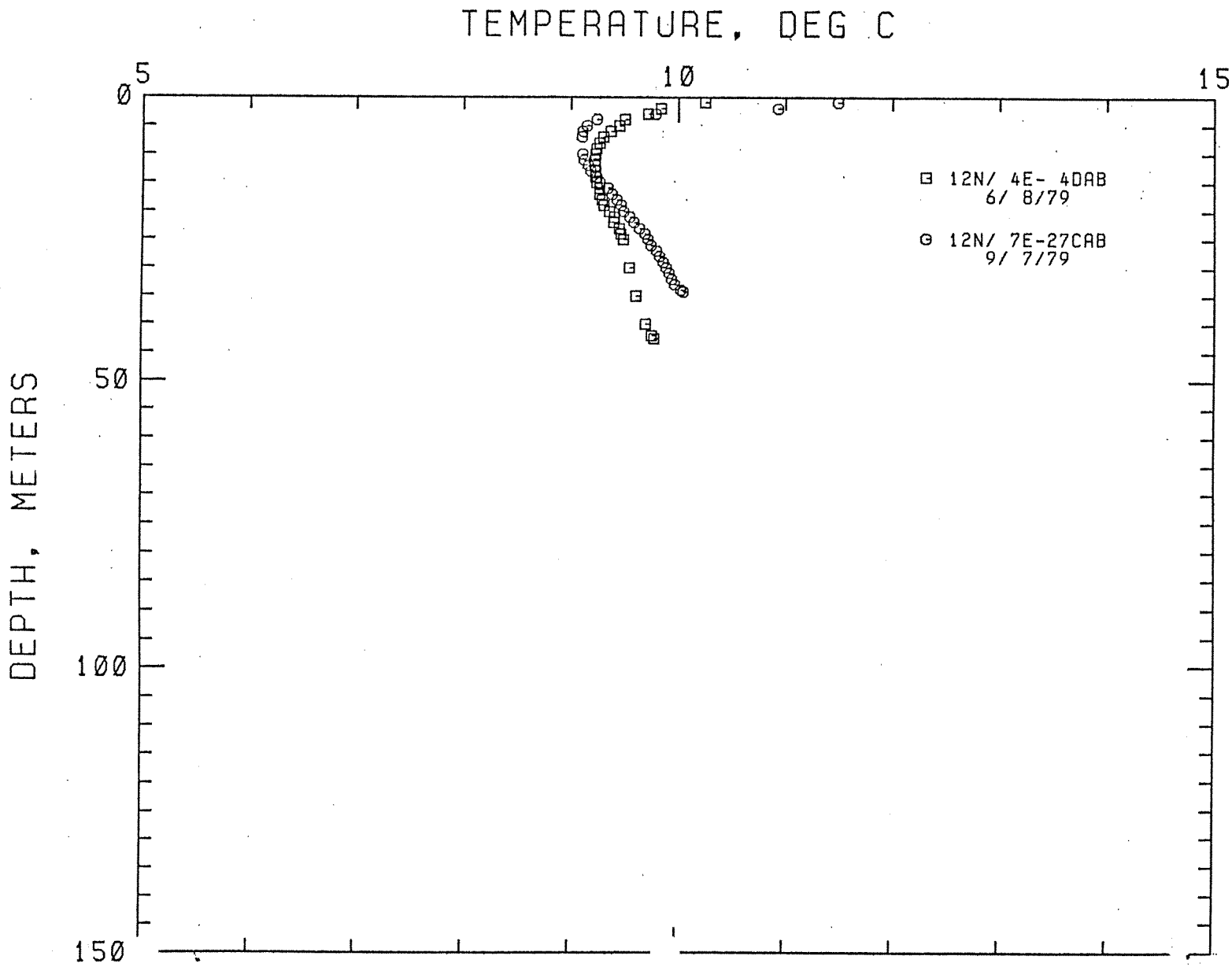
LOCATION: YAKIMA AMS, WASH.
12N/ 7E-16CC
HOLE NAME: RDH-RAND
DATE MEASURED: 11/13/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	10.080	50.14	0.0	0.0
10.0	32.8	9.310	48.76	-154.0	-8.5
15.0	49.2	9.390	48.90	16.0	0.9
20.0	65.6	9.580	49.24	38.0	2.1
25.0 <30.00	82.0	9.730 <9.99	49.51	30.0	1.6
35.0	114.8	10.200	50.36	47.0	2.6
40.0	131.2	10.430	50.77	46.0	2.5
45.0	147.6	10.670	51.21	48.0	2.6
50.0	164.0	10.890	51.60	44.0	2.4
55.0	180.4	11.110	52.00	44.0	2.4
60.0	196.8	11.340	52.41	46.0	2.5
65.0	213.2	11.550	52.79	42.0	2.3
70.0	229.6	11.740	53.13	38.0	2.1
75.0	246.0	11.950	53.51	42.0	2.3
80.0	262.4	12.190	53.94	48.0	2.6
85.0	278.8	12.450	54.41	52.0	2.9
90.0	295.2	12.720	54.90	54.0	3.0
95.0	311.6	12.930	55.27	42.0	2.3
100.0	328.0	13.050	55.49	24.0	1.3
105.0	344.4	13.220	55.80	34.0	1.9
110.0	360.8	13.420	56.16	40.0	2.2
115.0	377.2	13.610	56.50	38.0	2.1
120.0	393.6	13.740	56.73	26.0	1.4
125.0	410.0	13.920	57.06	36.0	2.0
129.0	423.1	14.070	57.33	37.5	2.1


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
12N/ 7E-16CC
11/13/79

LOCATION: YAKIMA AMS, WASHINGTON
12N/ 7E-27CAB
HOLE NAME: POL-RAN1
DATE MEASURED: 9/ 7/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
1.0	3.3	11.490	52.68	0.0	0.0
2.0	6.6	10.930	51.67	-560.0	-30.7
3.0	9.8	9.790	49.62	-1140.0	-62.6
4.0	13.1	9.240	48.63	-550.0	-30.2
5.0	16.4	9.150	48.47	-90.0	-4.9
6.0	19.7	9.110	48.40	-40.0	-2.2
7.0	23.0	9.100	48.38	-10.0	-0.5
10.0	32.8	9.110	48.40	3.3	0.2
11.0	36.1	9.120	48.42	10.0	0.5
12.0	39.4	9.160	48.49	40.0	2.2
13.0	42.6	9.180	48.52	20.0	1.1
14.0	45.9	9.240	48.63	60.0	3.3
15.0	49.2	9.270	48.69	30.0	1.6
16.0	52.5	9.340	48.81	70.0	3.8
17.0	55.8	9.380	48.88	40.0	2.2
18.0	59.0	9.430	48.97	50.0	2.7
19.0	62.3	9.470	49.05	40.0	2.2
20.0	65.6	9.490	49.08	20.0	1.1
21.0	68.9	9.550	49.19	60.0	3.3
22.0	72.2	9.590	49.26	40.0	2.2
23.0	75.4	9.640	49.35	50.0	2.7
24.0	78.7	9.690	49.44	50.0	2.7
25.0	82.0	9.720	49.50	30.0	1.6
26.0	85.3	9.750	49.55	30.0	1.6
27.0	88.6	9.800	49.64	50.0	2.7
28.0	91.8	9.830	49.69	30.0	1.6
29.0	95.1	9.860	49.75	30.0	1.6
30.0	98.4	9.890	49.80	30.0	1.6
31.0	101.7	9.920	49.86	30.0	1.6
32.0	105.0	9.940	49.89	20.0	1.1
33.0	108.2	9.970	49.95	30.0	1.6
34.0	111.5	10.030	50.05	60.0	3.3
34.3	112.5	10.050	50.09	66.7	3.7

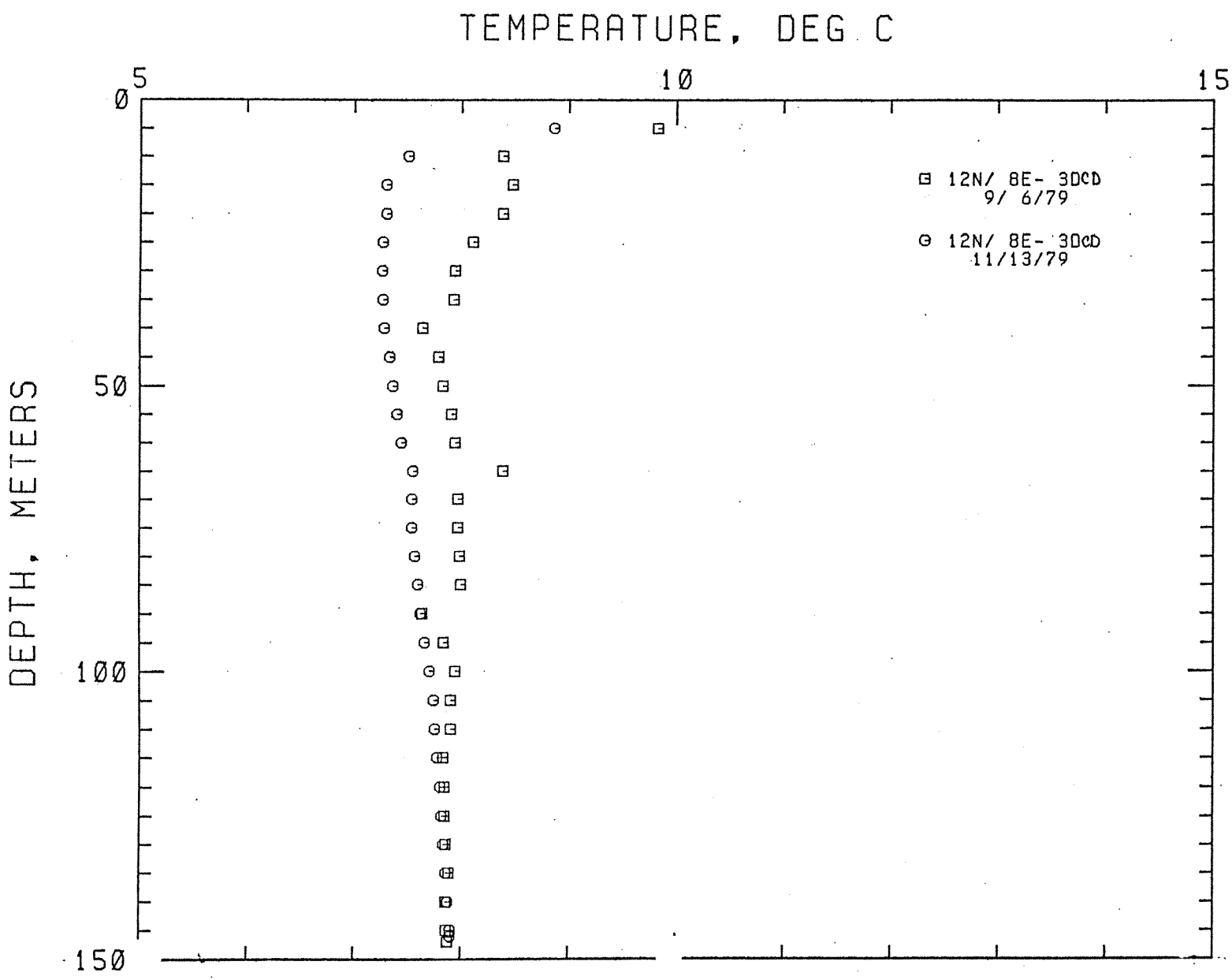

TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
12N/ 4E- 4DAB
6/ 8/79
12N/ 7E-27CAB
9/ 7/79

LOCATION: YAKIMA AMS, WASHINGTON
12N/ 8E- 3DCD
HOLE NAME: RDH-DVSM
DATE MEASURED: 9/ 6/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	9.830	49.69	0.0	0.0
10.0	32.8	8.390	47.10	-288.0	-15.8
15.0	49.2	8.480	47.26	18.0	1.0
20.0	65.6	8.390	47.10	-18.0	-1.0
25.0	82.0	8.110	46.60	-56.0	-3.1
30.0	98.4	7.940	46.29	-34.0	-1.9
35.0	114.8	7.930	46.27	-2.0	-0.1
40.0	131.2	7.640	45.75	-58.0	-3.2
45.0	147.6	7.790	46.02	30.0	1.6
50.0	164.0	7.830	46.09	8.0	0.4
55.0	180.4	7.910	46.24	16.0	0.9
60.0	196.8	7.940	46.29	6.0	0.3
65.0	213.2	8.390	47.10	90.0	4.9
70.0	229.6	7.970	46.35	-84.0	-4.6
75.0	246.0	7.970	46.35	0.0	0.0
80.0	262.4	7.990	46.38	4.0	0.2
85.0	278.8	8.000	46.40	2.0	0.1
90.0	295.2	7.640	45.75	-72.0	-4.0
95.0	311.6	7.840	46.11	40.0	2.2
100.0	328.0	7.950	46.31	22.0	1.2
105.0	344.4	7.910	46.24	-8.0	-0.4
110.0	360.8	7.910	46.24	0.0	0.0
115.0	377.2	7.840	46.11	-14.0	-0.8
120.0	393.6	7.850	46.13	2.0	0.1
125.0	410.0	7.850	46.13	0.0	0.0
130.0	426.4	7.860	46.15	2.0	0.1
135.0	442.8	7.890	46.20	6.0	0.3
140.0	459.2	7.860	46.15	-6.0	-0.3
145.0	475.6	7.870	46.17	2.0	0.1
147.0	482.2	7.880	46.18	5.0	0.3

LOCATION: YAKIMA AMS, WASHINGTON
12N/ 8E- 3DCD
HOLE NAME: RDH-DVSM
DATE MEASURED: 11/13/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	8.860	47.95	0.0	0.0
10.0	32.8	7.510	45.52	-270.0	-14.8
15.0	49.2	7.300	45.14	-42.0	-2.3
20.0	65.6	7.300	45.14	0.0	0.0
25.0	82.0	7.270	45.09	-6.0	-0.3
30.0	98.4	7.260	45.07	-2.0	-0.1
35.0	114.8	7.270	45.09	2.0	0.1
40.0	131.2	7.280	45.10	2.0	0.1
45.0	147.6	7.330	45.19	10.0	0.5
50.0	164.0	7.360	45.25	6.0	0.3
55.0	180.4	7.400	45.32	8.0	0.4
60.0	196.8	7.440	45.39	8.0	0.4
65.0	213.2	7.550	45.59	22.0	1.2
70.0	229.6	7.540	45.57	-2.0	-0.1
75.0	246.0	7.540	45.57	0.0	0.0
80.0	262.4	7.570	45.63	6.0	0.3
85.0	278.8	7.600	45.68	6.0	0.3
90.0	295.2	7.620	45.72	4.0	0.2
95.0	311.6	7.660	45.79	8.0	0.4
100.0	328.0	7.710	45.88	10.0	0.5
105.0	344.4	7.750	45.95	8.0	0.4
110.0	360.8	7.760	45.97	2.0	0.1
115.0	377.2	7.780	46.00	4.0	0.2
120.0	393.6	7.810	46.06	6.0	0.3
125.0	410.0	7.820	46.08	2.0	0.1
130.0	426.4	7.840	46.11	4.0	0.2
135.0	442.8	7.860	46.15	4.0	0.2
140.0	459.2	7.880	46.18	4.0	0.2
145.0	475.6	7.900	46.22	4.0	0.2
146.0	478.9	7.900	46.22	0.0	0.0

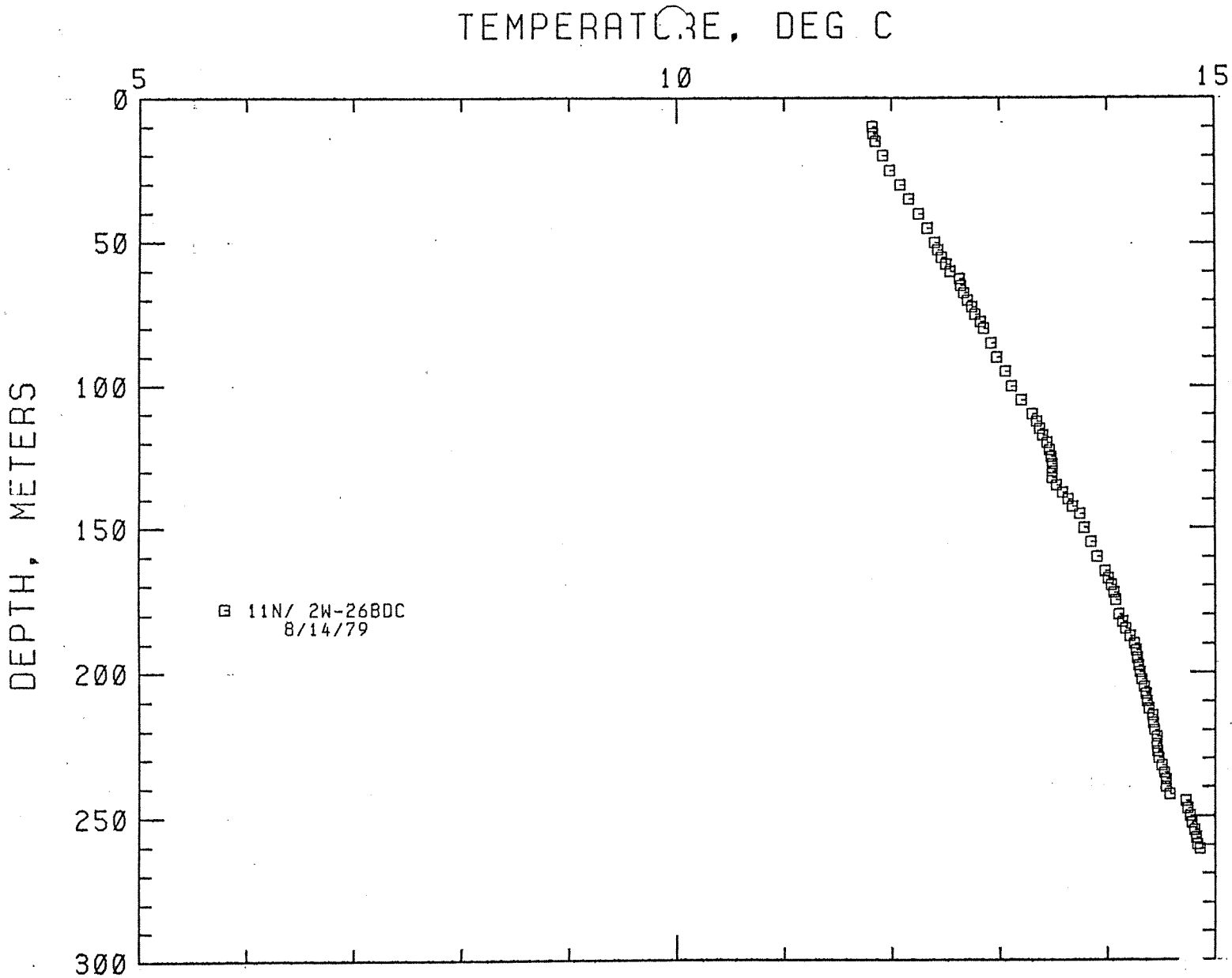

TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
12N/ 8E- 3DCD
9/ 6/79
12N/ 8E- 3DCD
11/13/79

LOCATION: HOQUIAM AMS, WASH
11N/ 2W-26BDC
HOLE NAME: WALLACE
DATE MEASURED: 8/14/79

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	11.820	53.28	0.0	0.0
12.5	41.0	11.830	53.29	4.0	0.2
15.0	49.2	11.850	53.33	8.0	0.4
20.0	65.6	11.920	53.46	14.0	0.8
25.0	82.0	11.980	53.56	12.0	0.7
30.0	98.4	12.080	53.74	20.0	1.1
35.0	114.8	12.160	53.89	16.0	0.9
40.0	131.2	12.250	54.05	18.0	1.0
45.0	147.6	12.330	54.19	16.0	0.9
50.0	164.0	12.400	54.32	14.0	0.8
52.5	172.2	12.430	54.37	12.0	0.7
55.0	180.4	12.460	54.43	12.0	0.7
57.5	188.6	12.500	54.50	16.0	0.9
60.0	196.8	12.540	54.57	16.0	0.9
62.5	205.0	12.630	54.73	36.0	2.0
65.0	213.2	12.640	54.75	4.0	0.2
67.5	221.4	12.670	54.81	12.0	0.7
70.0	229.6	12.700	54.86	12.0	0.7
72.5	237.8	12.740	54.93	16.0	0.9
75.0	246.0	12.770	54.99	12.0	0.7
77.5	254.2	12.820	55.08	20.0	1.1
80.0	262.4	12.850	55.13	12.0	0.7
85.0	278.8	12.920	55.26	14.0	0.8
90.0	295.2	12.970	55.35	10.0	0.5
95.0	311.6	13.050	55.49	16.0	0.9
100.0	328.0	13.110	55.60	12.0	0.7
105.0	344.4	13.200	55.76	18.0	1.0
110.0	360.8	13.300	55.94	20.0	1.1
112.5	369.0	13.340	56.01	16.0	0.9
115.0	377.2	13.370	56.07	12.0	0.7
117.5	385.4	13.400	56.12	12.0	0.7
120.0	393.6	13.440	56.19	16.0	0.9
122.5	401.8	13.460	56.23	8.0	0.4
125.0	410.0	13.480	56.26	8.0	0.4
127.5	418.2	13.490	56.28	4.0	0.2
130.0	426.4	13.490	56.28	0.0	0.0
132.5	434.6	13.490	56.28	0.0	0.0
135.0	442.8	13.530	56.35	16.0	0.9
137.5	451.0	13.590	56.46	24.0	1.3
140.0	459.2	13.640	56.55	20.0	1.1
142.5	467.4	13.680	56.62	16.0	0.9
145.0	475.6	13.750	56.75	28.0	1.5

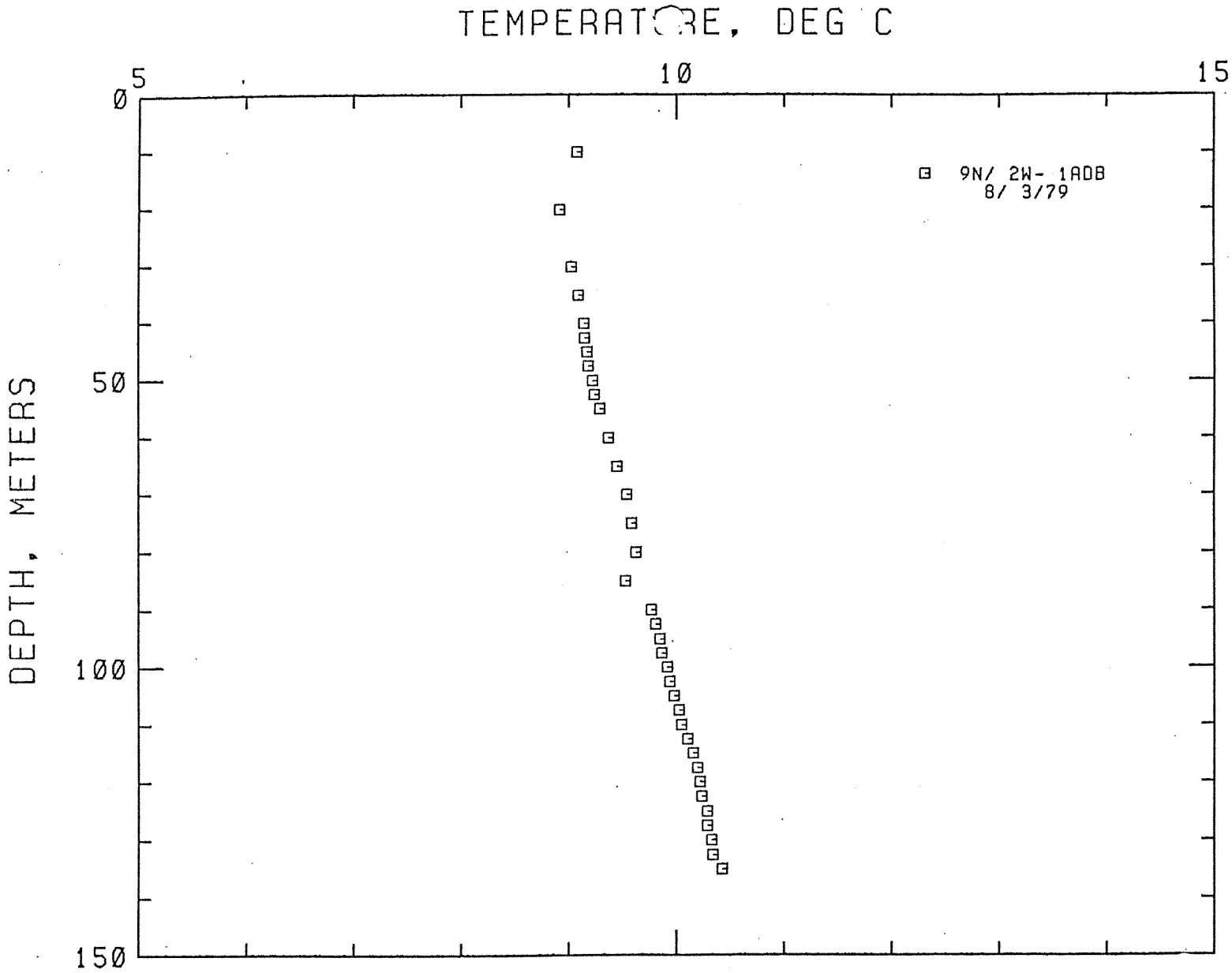
LOCATION: HOQUIAM AMS, WASH
11N/ 2W-26BDC
HOLE NAME: WALLACE
DATE MEASURED: 8/14/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
150.0	492.0	13.790	56.82	8.0	0.4
155.0	508.4	13.850	56.93	12.0	0.7
160.0	524.8	13.910	57.04	12.0	0.7
165.0	541.2	13.980	57.16	14.0	0.8
167.5	549.4	14.010	57.22	12.0	0.7
170.0	557.6	14.040	57.27	12.0	0.7
172.5	565.8	14.060	57.31	8.0	0.4
175.0	574.0	14.080	57.34	8.0	0.4
180.0	590.4	14.110	57.40	6.0	0.3
182.5	598.6	14.140	57.45	12.0	0.7
185.0	606.8	14.170	57.51	12.0	0.7
187.5	615.0	14.210	57.58	16.0	0.9
190.0	623.2	14.250	57.65	16.0	0.9
192.5	631.4	14.270	57.69	8.0	0.4
195.0	639.6	14.280	57.70	4.0	0.2
197.5	647.8	14.290	57.72	4.0	0.2
200.0	656.0	14.300	57.74	4.0	0.2
202.5	664.2	14.320	57.78	8.0	0.4
205.0	672.4	14.340	57.81	8.0	0.4
207.5	680.6	14.360	57.85	8.0	0.4
210.0	688.8	14.370	57.87	4.0	0.2
212.5	697.0	14.390	57.90	8.0	0.4
215.0	705.2	14.420	57.96	12.0	0.7
217.5	713.4	14.430	57.97	4.0	0.2
220.0	721.6	14.440	57.99	4.0	0.2
222.5	729.8	14.460	58.03	8.0	0.4
225.0	738.0	14.460	58.03	0.0	0.0
227.5	746.2	14.470	58.05	4.0	0.2
230.0	754.4	14.480	58.06	4.0	0.2
232.5	762.6	14.510	58.12	12.0	0.7
235.0	770.8	14.530	58.15	8.0	0.4
237.5	779.0	14.550	58.19	8.0	0.4
240.0	787.2	14.550	58.19	0.0	0.0
242.5	795.4	14.580	58.24	12.0	0.7
245.0	803.6	14.730	58.51	60.0	3.3
247.5	811.8	14.750	58.55	8.0	0.4
250.0	820.0	14.770	58.59	8.0	0.4
252.5	828.2	14.790	58.62	8.0	0.4
255.0	836.4	14.810	58.66	8.0	0.4
257.5	844.6	14.830	58.69	8.0	0.4
260.0	852.8	14.840	58.71	4.0	0.2
261.5	857.7	14.860	58.75	13.3	0.7


TEMPERATURE, DEG C
5
10
15
0
50
100
150
200
250
300
DEPTH, METERS
11N/ 2W-26BDC
8/14/79

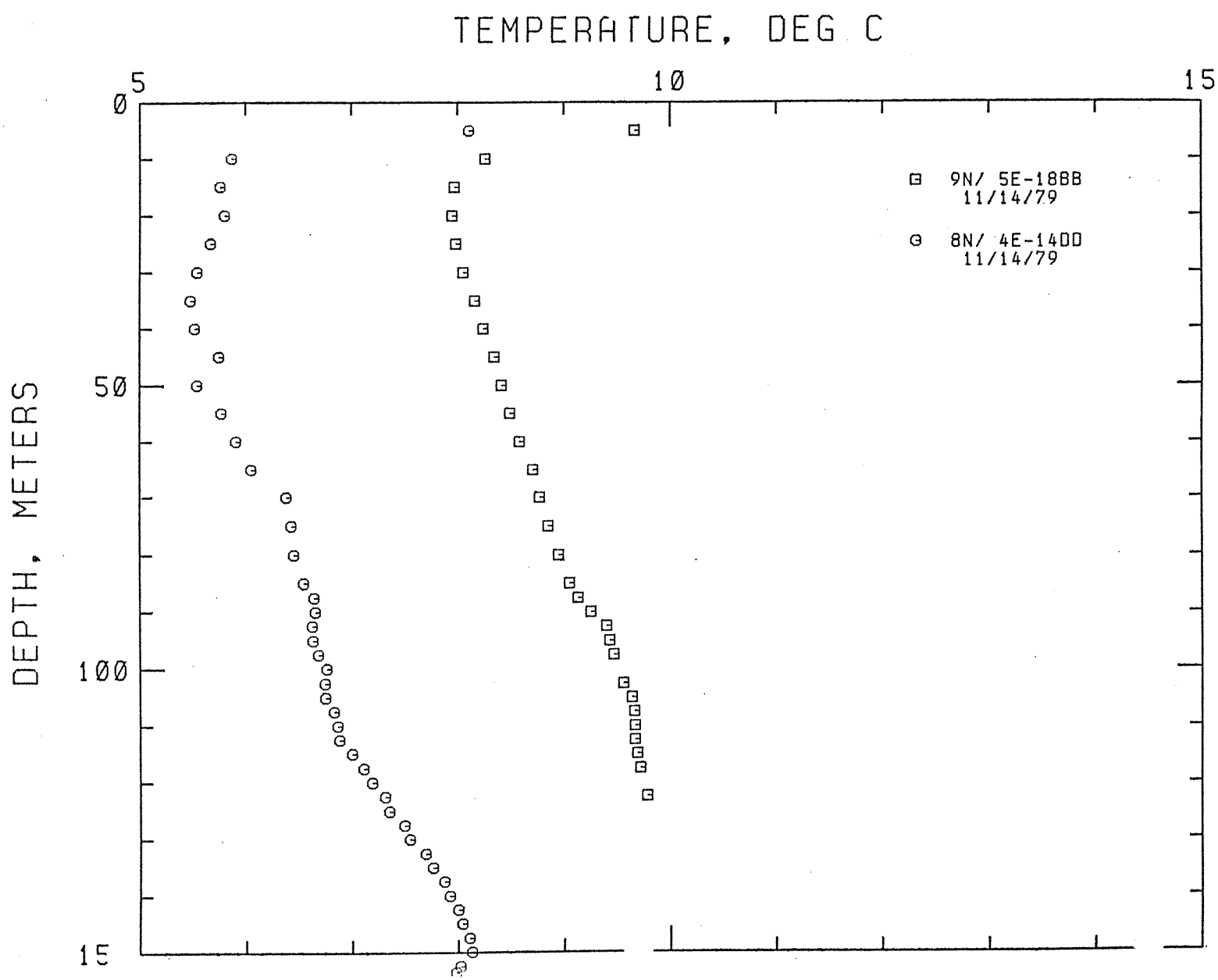
LOCATION: HOQUIAM AMS, WASH
9N/ 2W- 1ADB
HOLE NAME: MOCK
DATE MEASURED: 8/ 3/79

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	9.080	48.34	0.0	0.0
20.0	65.6	8.920	48.06	-16.0	-0.9
30.0	98.4	9.030	48.25	11.0	0.6
35.0	114.8	9.090	48.36	12.0	0.7
40.0	131.2	9.140	48.45	10.0	0.5
42.5	139.4	9.150	48.47	4.0	0.2
45.0	147.6	9.170	48.51	8.0	0.4
47.5	155.8	9.180	48.52	4.0	0.2
50.0	164.0	9.220	48.60	16.0	0.9
52.5	172.2	9.240	48.63	8.0	0.4
55.0	180.4	9.290	48.72	20.0	1.1
60.0	196.8	9.370	48.87	16.0	0.9
65.0	213.2	9.450	49.01	16.0	0.9
70.0	229.6	9.540	49.17	18.0	1.0
75.0	246.0	9.590	49.26	10.0	0.5
80.0	262.4	9.630	49.33	8.0	0.4
85.0	278.8	9.530	49.15	-20.0	-1.1
90.0	295.2	9.770	49.59	48.0	2.6
92.5	303.4	9.810	49.66	16.0	0.9
95.0	311.6	9.850	49.73	16.0	0.9
97.5	319.8	9.870	49.77	8.0	0.4
100.0	328.0	9.920	49.86	20.0	1.1
102.5	336.2	9.940	49.89	8.0	0.4
105.0	344.4	9.980	49.96	16.0	0.9
107.5	352.6	10.030	50.05	20.0	1.1
110.0	360.8	10.050	50.09	8.0	0.4
112.5	369.0	10.110	50.20	24.0	1.3
115.0	377.2	10.160	50.29	20.0	1.1
117.5	385.4	10.200	50.36	16.0	0.9
120.0	393.6	10.220	50.40	8.0	0.4
122.5	401.8	10.240	50.43	8.0	0.4
125.0	410.0	10.290	50.52	20.0	1.1
127.5	418.2	10.290	50.52	0.0	0.0
130.0	426.4	10.330	50.59	16.0	0.9
132.5	434.6	10.340	50.61	4.0	0.2
135.0	442.8	10.430	50.77	36.0	2.0


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
9N/ 2W- 1ADB
8/ 3/79

LOCATION: HOQUIAM AMS, WASH.
9N/ 5E-18BB
HOLE NAME: RDH-STH1
DATE MEASURED: 11/14/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	9.670	49.41	0.0	0.0
10.0	32.8	8.260	46.87	-282.0	-15.5
15.0	49.2	7.970	46.35	-58.0	-3.2
20.0	65.6	7.950	46.31	-4.0	-0.2
25.0	82.0	7.980	46.36	6.0	0.3
30.0	98.4	8.050	46.49	14.0	0.8
35.0	114.8	8.160	46.69	22.0	1.2
40.0	131.2	8.240	46.83	16.0	0.9
45.0	147.6	8.340	47.01	20.0	1.1
50.0	164.0	8.410	47.14	14.0	0.8
55.0	180.4	8.490	47.28	16.0	0.9
60.0	196.8	8.580	47.44	18.0	1.0
65.0	213.2	8.710	47.68	26.0	1.4
70.0	229.6	8.770	47.79	12.0	0.7
75.0	246.0	8.850	47.93	16.0	0.9
80.0	262.4	8.950	48.11	20.0	1.1
85.0	278.8	9.050	48.29	20.0	1.1
87.5	287.0	9.130	48.43	32.0	1.8
90.0	295.2	9.250	48.65	48.0	2.6
92.5	303.4	9.400	48.92	60.0	3.3
95.0	311.6	9.430	48.97	12.0	0.7
97.5	319.8	9.470	49.05	16.0	0.9
102.5	336.2	9.560	49.21	18.0	1.0
105.0	344.4	9.640	49.35	32.0	1.8
107.5	352.6	9.660	49.39	8.0	0.4
110.0	360.8	9.670	49.41	4.0	0.2
112.5	369.0	9.670	49.41	0.0	0.0
115.0	377.2	9.690	49.44	8.0	0.4
117.5	385.4	9.720	49.50	12.0	0.7
122.5	401.8	9.780	49.60	12.0	0.7

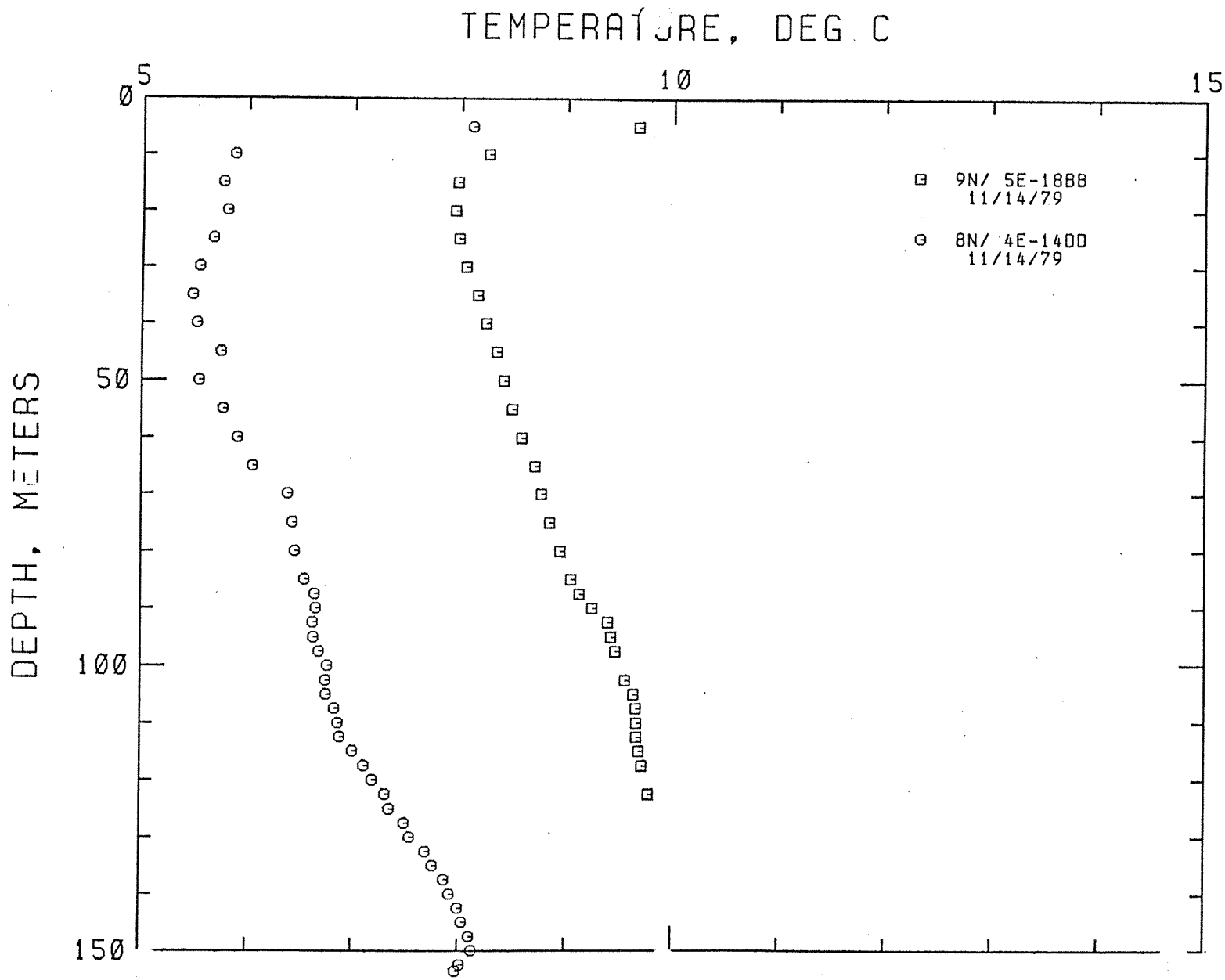

TEMPERATURE, DEG C
5
10
15
0
50
100
15
DEPTH, METERS
9N/ 5E-18BB
11/14/79
8N/ 4E-14DD
11/14/79

LOCATION: HOQUIAM AMS, WASH.
8N/ 4E-14DD
HOLE NAME: RDH-STH2
DATE MEASURED: 11/14/79

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	5.870	42.57	0.0	0.0
5.0	16.4	8.110	46.60	-448.0	-24.6
15.0	49.2	5.760	42.37	-235.0	-12.9
20.0	65.6	5.800	42.44	8.0	0.4
25.0	82.0	5.670	42.21	-26.0	-1.4
30.0	98.4	5.540	41.97	-26.0	-1.4
35.0	114.8	5.480	41.86	-12.0	-0.7
40.0	131.2	5.520	41.94	8.0	0.4
45.0	147.6	5.750	42.35	46.0	2.5
50.0	164.0	5.540	41.97	-42.0	-2.3
55.0	180.4	5.770	42.39	46.0	2.5
60.0	196.8	5.910	42.64	28.0	1.5
65.0	213.2	6.050	42.89	28.0	1.5
70.0	229.6	6.380	43.48	66.0	3.6
75.0	246.0	6.430	43.57	10.0	0.5
80.0	262.4	6.450	43.61	4.0	0.2
85.0	278.8	6.540	43.77	18.0	1.0
87.5	287.0	6.640	43.95	40.0	2.2
90.0	295.2	6.650	43.97	4.0	0.2
92.5	303.4	6.620	43.92	-12.0	-0.7
95.0	311.6	6.630	43.93	4.0	0.2
97.5	319.8	6.680	44.02	20.0	1.1
100.0	328.0	6.760	44.17	32.0	1.8
102.5	336.2	6.740	44.13	-8.0	-0.4
105.0	344.4	6.750	44.15	4.0	0.2
107.5	352.6	6.830	44.29	32.0	1.8
110.0	360.8	6.860	44.35	12.0	0.7
112.5	369.0	6.880	44.38	8.0	0.4
115.0	377.2	7.000	44.60	48.0	2.6
117.5	385.4	7.110	44.80	44.0	2.4
120.0	393.6	7.190	44.94	32.0	1.8
122.5	401.8	7.310	45.16	48.0	2.6
125.0	410.0	7.350	45.23	16.0	0.9
127.5	418.2	7.490	45.48	56.0	3.1
130.0	426.4	7.540	45.57	20.0	1.1
132.5	434.6	7.690	45.84	60.0	3.3
135.0	442.8	7.760	45.97	28.0	1.5
137.5	451.0	7.870	46.17	44.0	2.4
140.0	459.2	7.920	46.26	20.0	1.1
142.5	467.4	8.000	46.40	32.0	1.8
145.0	475.6	8.040	46.47	16.0	0.9

LOCATION: HOQUIAM AMS, WASH.
8N/ 4E-14DD
HOLE NAME: RDH-STH2
DATE MEASURED: 11/14/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
147.5	483.8	8.110	46.60	28.0	1.5
150.0	492.0	8.130	46.63	8.0	0.4
152.5	500.2	8.020	46.44	-44.0	-2.4
153.5	503.5	7.980	46.36	-40.0	-2.2

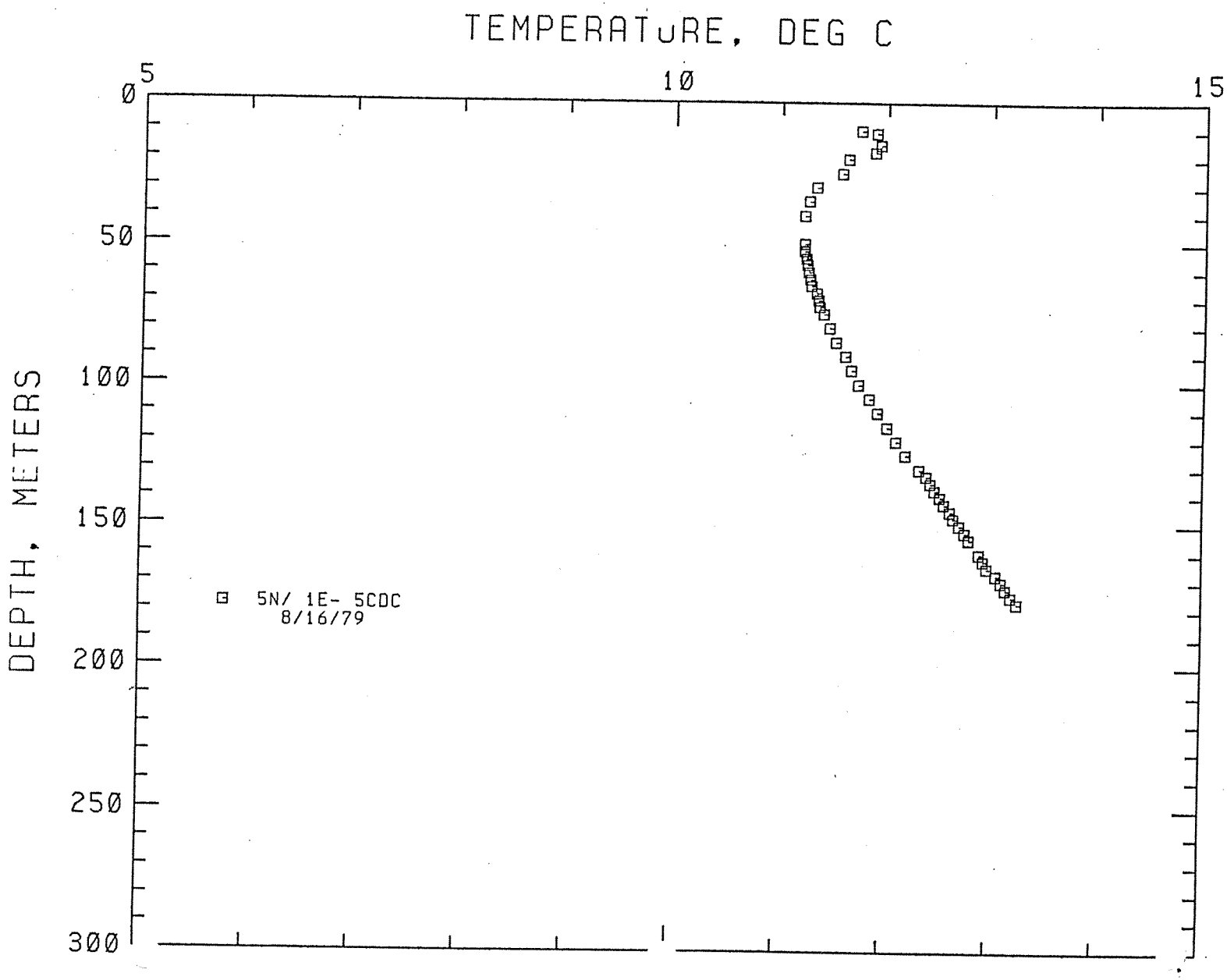

TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
9N/ 5E-18BB
11/14/79
8N/ 4E-14DD
11/14/79

LOCATION: VANCOUVER AMS, WASH
5N/ 1E- 5CDC
HOLE NAME: EPPERSON
DATE MEASURED: 8/16/79

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	11.750	53.15	0.0	0.0
11.0	36.1	11.890	53.40	140.0	7.7
15.0	49.2	11.930	53.47	10.0	0.5
17.5	57.4	11.880	53.38	-20.0	-1.1
20.0	65.6	11.630	52.93	-100.0	-5.5
25.0	82.0	11.570	52.83	-12.0	-0.7
30.0	98.4	11.330	52.39	-48.0	-2.6
35.0	114.8	11.260	52.27	-14.0	-0.8
40.0	131.2	11.220	52.20	-8.0	-0.4
50.0	164.0	11.220	52.20	0.0	0.0
52.5	172.2	11.220	52.20	0.0	0.0
55.0	180.4	11.240	52.23	8.0	0.4
57.5	188.6	11.250	52.25	4.0	0.2
60.0	196.8	11.260	52.27	4.0	0.2
62.5	205.0	11.280	52.30	8.0	0.4
65.0	213.2	11.290	52.32	4.0	0.2
67.5	221.4	11.340	52.41	20.0	1.1
70.0	229.6	11.360	52.45	8.0	0.4
72.5	237.8	11.370	52.47	4.0	0.2
75.0	246.0	11.410	52.54	16.0	0.9
80.0	262.4	11.470	52.65	12.0	0.7
85.0	278.8	11.530	52.75	12.0	0.7
90.0	295.2	11.620	52.92	18.0	1.0
95.0	311.6	11.680	53.02	12.0	0.7
100.0	328.0	11.750	53.15	14.0	0.8
105.0	344.4	11.850	53.33	20.0	1.1
110.0	360.8	11.930	53.47	16.0	0.9
115.0	377.2	12.020	53.64	18.0	1.0
120.0	393.6	12.110	53.80	18.0	1.0
125.0	410.0	12.200	53.96	18.0	1.0
130.0	426.4	12.330	54.19	26.0	1.4
132.5	434.6	12.400	54.32	28.0	1.5
135.0	442.8	12.440	54.39	16.0	0.9
137.5	451.0	12.480	54.46	16.0	0.9
140.0	459.2	12.530	54.55	20.0	1.1
142.5	467.4	12.570	54.63	16.0	0.9
145.0	475.6	12.630	54.73	24.0	1.3
147.5	483.8	12.660	54.79	12.0	0.7
150.0	492.0	12.720	54.90	24.0	1.3
152.5	500.2	12.770	54.99	20.0	1.1
155.0	508.4	12.810	55.06	16.0	0.9

LOCATION: VANCOUVER AMS, WASH
5N/ 1E- 5CDC
HOLE NAME: EPPERSON
DATE MEASURED: 8/16/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
160.0	524.8	12.910	55.24	20.0	1.1
162.5	533.0	12.950	55.31	16.0	0.9
165.0	541.2	12.980	55.36	12.0	0.7
167.5	549.4	13.070	55.53	36.0	2.0
170.0	557.6	13.120	55.62	20.0	1.1
172.5	565.8	13.160	55.69	16.0	0.9
175.0	574.0	13.210	55.78	20.0	1.1
177.5	582.2	13.270	55.89	24.0	1.3

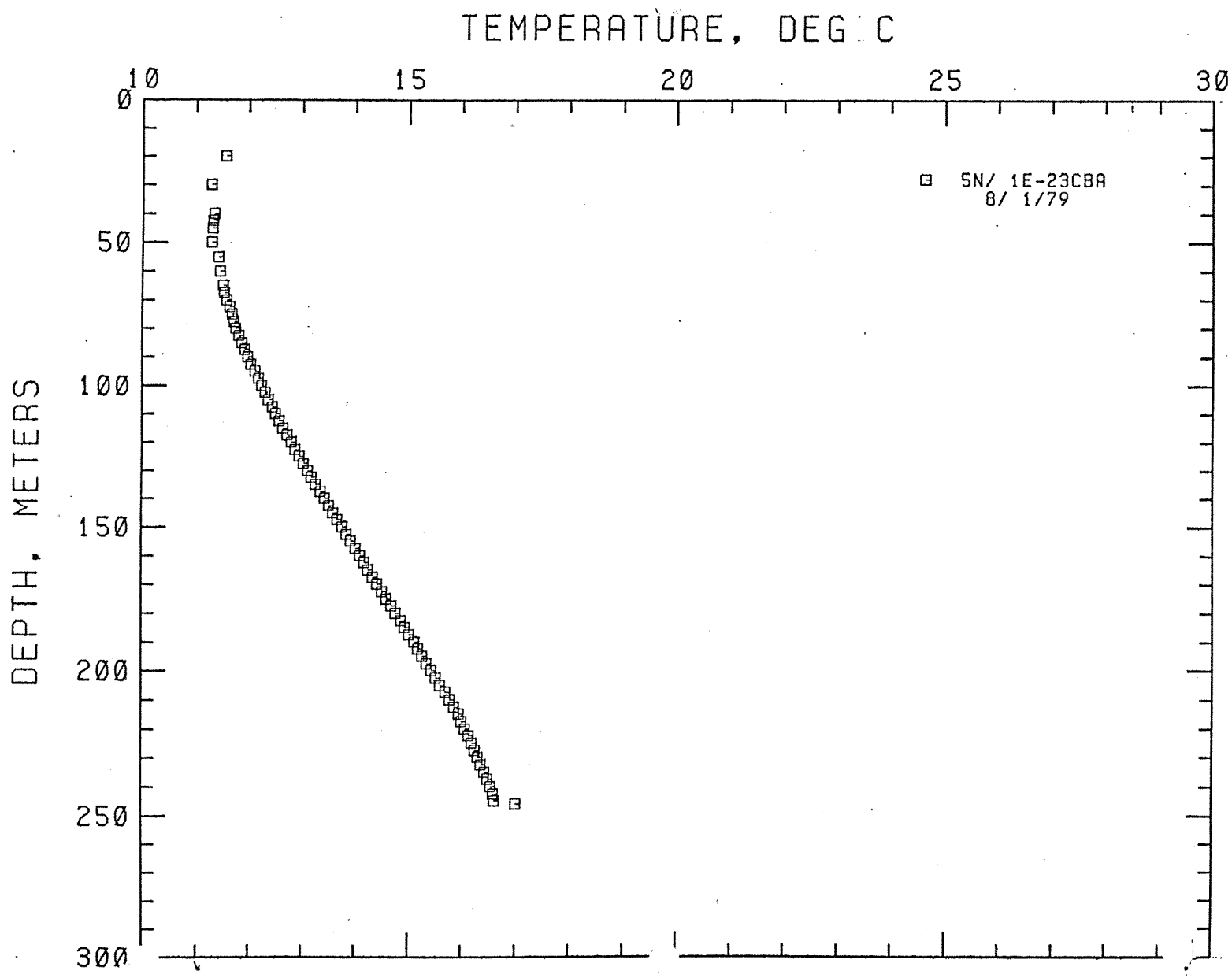

TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
200
250
300
5N/ 1E- 5CDC
8/16/79

LOCATION: VANCOUVER AMS, WASH
SN/ 1E-23CBA
HOLE NAME: GRIMM
DATE MEASURED: 8/ 1/79

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	11.560	52.81	0.0	0.0
30.0	98.4	11.290	52.32	-27.0	-1.5
40.0	131.2	11.350	52.43	6.0	0.3
42.5	139.4	11.320	52.38	-12.0	-0.7
45.0	147.6	11.310	52.36	-4.0	-0.2
50.0	164.0	11.300	52.34	-2.0	-0.1
55.0	180.4	11.430	52.57	26.0	1.4
60.0	196.8	11.460	52.63	6.0	0.3
65.0	213.2	11.520	52.74	12.0	0.7
67.5	221.4	11.540	52.77	8.0	0.4
70.0	229.6	11.590	52.86	20.0	1.1
72.5	237.8	11.640	52.95	20.0	1.1
75.0	246.0	11.690	53.04	20.0	1.1
77.5	254.2	11.720	53.10	12.0	0.7
80.0	262.4	11.760	53.17	16.0	0.9
82.5	270.6	11.820	53.28	24.0	1.3
85.0	278.8	11.870	53.37	20.0	1.1
87.5	287.0	11.930	53.47	24.0	1.3
90.0	295.2	11.990	53.58	24.0	1.3
92.5	303.4	12.040	53.67	20.0	1.1
95.0	311.6	12.130	53.83	36.0	2.0
97.5	319.8	12.190	53.94	24.0	1.3
100.0	328.0	12.250	54.05	24.0	1.3
102.5	336.2	12.320	54.18	28.0	1.5
105.0	344.4	12.380	54.28	24.0	1.3
107.5	352.6	12.460	54.43	32.0	1.8
110.0	360.8	12.510	54.52	20.0	1.1
112.5	369.0	12.580	54.64	28.0	1.5
115.0	377.2	12.650	54.77	28.0	1.5
117.5	385.4	12.730	54.91	32.0	1.8
120.0	393.6	12.810	55.06	32.0	1.8
122.5	401.8	12.880	55.18	28.0	1.5
125.0	410.0	12.960	55.33	32.0	1.8
127.5	418.2	13.040	55.47	32.0	1.8
130.0	426.4	13.120	55.62	32.0	1.8
132.5	434.6	13.190	55.74	28.0	1.5
135.0	442.8	13.270	55.89	32.0	1.8
137.5	451.0	13.360	56.05	36.0	2.0
140.0	459.2	13.440	56.19	32.0	1.8
142.5	467.4	13.520	56.34	32.0	1.8
145.0	475.6	13.600	56.48	32.0	1.8
147.5	483.8	13.680	56.62	32.0	1.8

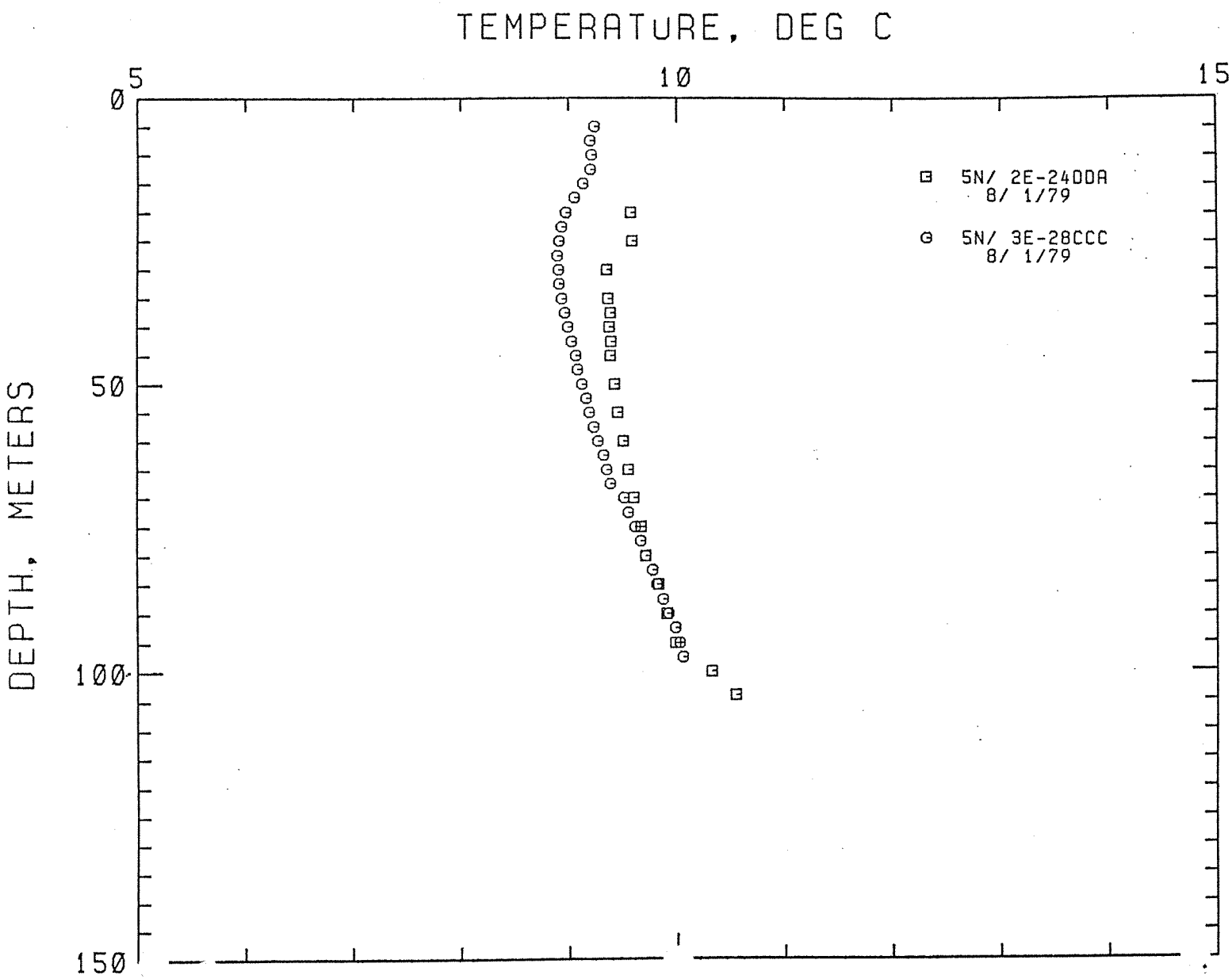
LOCATION: VANCOUVER AMS, WASH
5N/ 1E-23CBA
HOLE NAME: GRIMM
DATE MEASURED: 8/ 1/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
150.0	492.0	13.770	56.79	36.0	2.0
152.5	500.2	13.850	56.93	32.0	1.8
155.0	508.4	13.930	57.07	32.0	1.8
157.5	516.6	14.020	57.24	36.0	2.0
160.0	524.8	14.100	57.38	32.0	1.8
162.5	533.0	14.180	57.52	32.0	1.8
165.0	541.2	14.250	57.65	28.0	1.5
167.5	549.4	14.340	57.81	36.0	2.0
170.0	557.6	14.420	57.96	32.0	1.8
172.5	565.8	14.510	58.12	36.0	2.0
175.0	574.0	14.590	58.26	32.0	1.8
177.5	582.2	14.680	58.42	36.0	2.0
180.0	590.4	14.770	58.59	36.0	2.0
182.5	598.6	14.870	58.77	40.0	2.2
185.0	606.8	14.940	58.89	28.0	1.5
187.5	615.0	15.020	59.04	32.0	1.8
190.0	623.2	15.120	59.22	40.0	2.2
192.5	631.4	15.190	59.34	28.0	1.5
195.0	639.6	15.270	59.49	32.0	1.8
197.5	647.8	15.350	59.63	32.0	1.8
200.0	656.0	15.440	59.79	36.0	2.0
202.5	664.2	15.520	59.94	32.0	1.8
205.0	672.4	15.600	60.08	32.0	1.8
207.5	680.6	15.700	60.26	40.0	2.2
210.0	688.8	15.780	60.40	32.0	1.8
212.5	697.0	15.860	60.55	32.0	1.8
215.0	705.2	15.950	60.71	36.0	2.0
217.5	713.4	16.000	60.80	20.0	1.1
220.0	721.6	16.070	60.93	28.0	1.5
222.5	729.8	16.140	61.05	28.0	1.5
225.0	738.0	16.190	61.14	20.0	1.1
227.5	746.2	16.250	61.25	24.0	1.3
230.0	754.4	16.310	61.36	24.0	1.3
232.5	762.6	16.370	61.47	24.0	1.3
235.0	770.8	16.430	61.57	24.0	1.3
237.5	779.0	16.490	61.68	24.0	1.3
240.0	787.2	16.550	61.79	24.0	1.3
242.5	795.4	16.590	61.86	16.0	0.9
245.0	803.6	16.620	61.92	12.0	0.7
246.0	806.9	17.020	62.64	400.0	22.0


TEMPERATURE, DEG C
10
15
20
25
30
0
50
100
150
200
250
300
DEPTH, METERS
5N/ 1E-23CBA
8/ 1/79

LOCATION: VANCOUVER AMS, WASH
5N/ 2E-24DDA
HOLE NAME: WALLAM
DATE MEASURED: 8/ 1/79

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	9.570	49.23	0.0	0.0
25.0	82.0	9.580	49.24	2.0	0.1
30.0	98.4	9.350	48.83	-46.0	-2.5
35.0	114.8	9.360	48.85	2.0	0.1
37.5	123.0	9.380	48.88	8.0	0.4
40.0	131.2	9.370	48.87	-4.0	-0.2
42.5	139.4	9.390	48.90	8.0	0.4
45.0	147.6	9.380	48.88	-4.0	-0.2
50.0	164.0	9.420	48.96	8.0	0.4
55.0	180.4	9.450	49.01	6.0	0.3
60.0	196.8	9.500	49.10	10.0	0.5
65.0	213.2	9.550	49.19	10.0	0.5
70.0	229.6	9.600	49.28	10.0	0.5
75.0	246.0	9.670	49.41	14.0	0.8
80.0	262.4	9.710	49.48	8.0	0.4
85.0	278.8	9.830	49.69	24.0	1.3
90.0	295.2	9.900	49.82	14.0	0.8
95.0	311.6	9.980	49.96	16.0	0.9
100.0	328.0	10.320	50.58	68.0	3.7
104.0	341.1	10.540	50.97	55.0	3.0


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
5N/ 2E-24DDA
8/ 1/79
5N/ 3E-28CCC
8/ 1/79

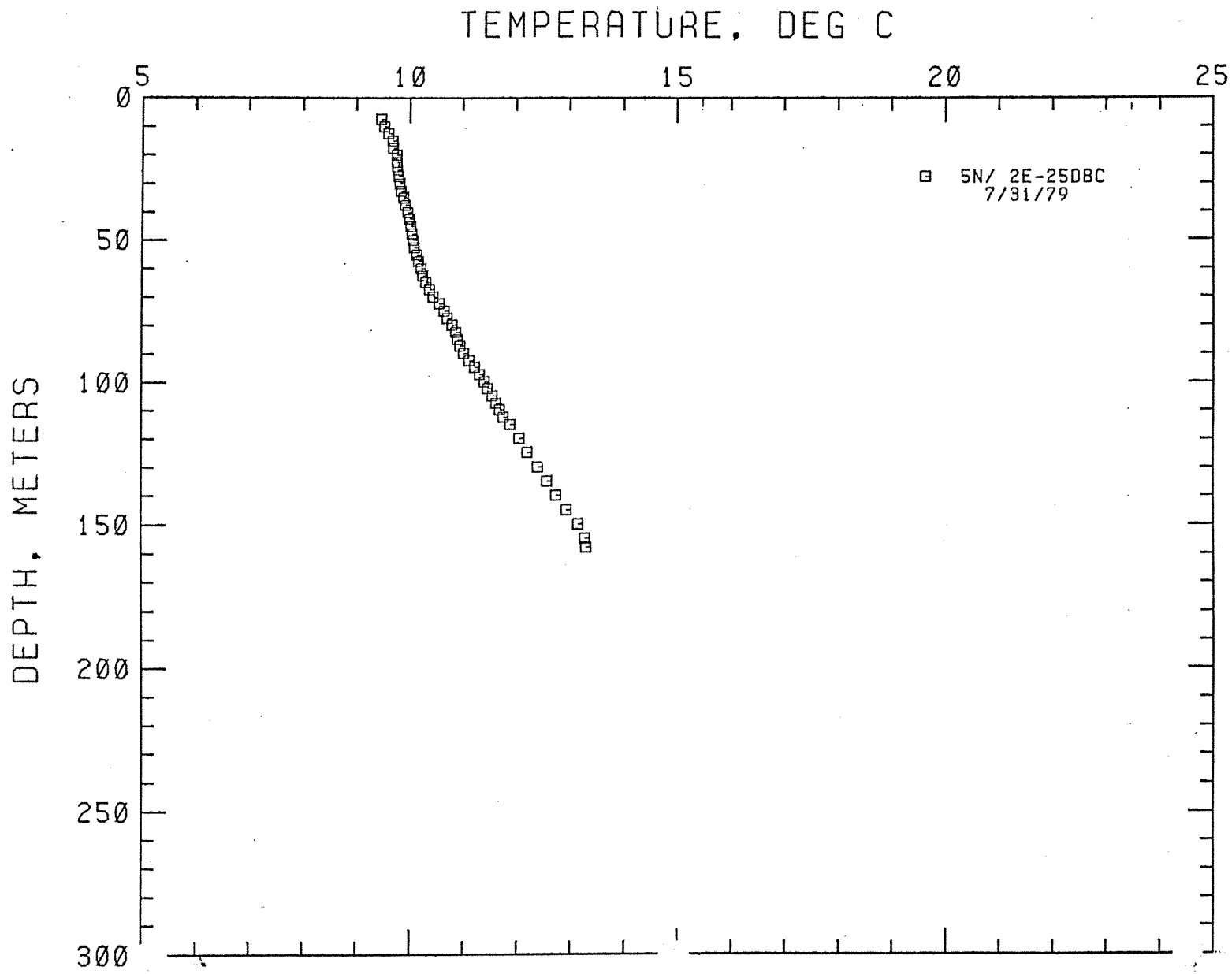
LOCATION: VANCOUVER AMS, WASH
5N/ 2E-25DBC
HOLE NAME: HAGEDORN
DATE MEASURED: 7/31/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
7.5	24.6	9.470	49.05	0.0	0.0
10.0	32.8	9.530	49.15	24.0	1.3
12.5	41.0	9.600	49.28	28.0	1.5
15.0	49.2	9.690	49.44	36.0	2.0
17.5	57.4	9.700	49.46	4.0	0.2
20.0	65.6	9.760	49.57	24.0	1.3
22.5	73.8	9.770	49.59	4.0	0.2
25.0	82.0	9.780	49.60	4.0	0.2
27.5	90.2	9.800	49.64	8.0	0.4
30.0	98.4	9.820	49.68	8.0	0.4
32.5	106.6	9.850	49.73	12.0	0.7
35.0	114.8	9.890	49.80	16.0	0.9
37.5	123.0	9.930	49.87	16.0	0.9
40.0	131.2	9.970	49.95	16.0	0.9
42.5	139.4	10.000	50.00	12.0	0.7
45.0	147.6	10.030	50.05	12.0	0.7
47.5	155.8	10.050	50.09	8.0	0.4
50.0	164.0	10.070	50.13	8.0	0.4
52.5	172.2	10.100	50.18	12.0	0.7
55.0	180.4	10.140	50.25	16.0	0.9
57.5	188.6	10.180	50.32	16.0	0.9
60.0	196.8	10.220	50.40	16.0	0.9
62.5	205.0	10.260	50.47	16.0	0.9
65.0	213.2	10.310	50.56	20.0	1.1
67.5	221.4	10.380	50.68	28.0	1.5
70.0	229.6	10.450	50.81	28.0	1.5
72.5	237.8	10.560	51.01	44.0	2.4
75.0	246.0	10.660	51.19	40.0	2.2
77.5	254.2	10.710	51.28	20.0	1.1
80.0	262.4	10.810	51.46	40.0	2.2
82.5	270.6	10.870	51.57	24.0	1.3
85.0	278.8	10.910	51.64	16.0	0.9
87.5	287.0	10.950	51.71	16.0	0.9
90.0	295.2	11.020	51.84	28.0	1.5
92.5	303.4	11.120	52.02	40.0	2.2
95.0	311.6	11.230	52.21	44.0	2.4
97.5	319.8	11.320	52.38	36.0	2.0
100.0	328.0	11.410	52.54	36.0	2.0
102.5	336.2	11.470	52.65	24.0	1.3
105.0	344.4	11.560	52.81	36.0	2.0
107.5	352.6	11.630	52.93	28.0	1.5
110.0	360.8	11.700	53.06	28.0	1.5

LOCATION: VANCOUVER AMS, WASH
5N/ 2E-25DBC

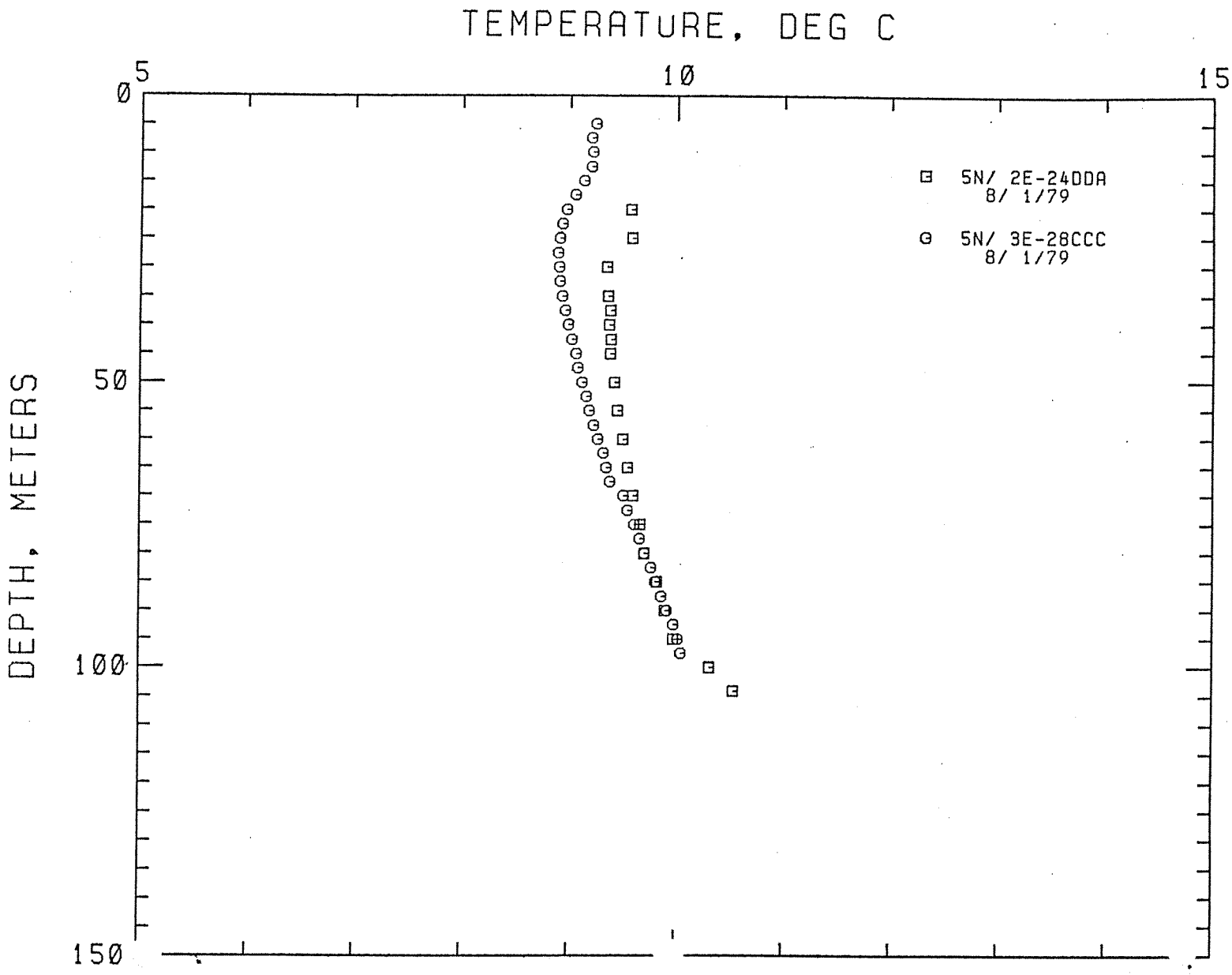
HOLE NAME: HAGEDORN
DATE MEASURED: 7/31/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
112.5	369.0	11.770	53.19	28.0	1.5
115.0	377.2	11.890	53.40	48.0	2.6
120.0	393.6	12.060	53.71	34.0	1.9
125.0	410.0	12.210	53.98	30.0	1.6
130.0	426.4	12.410	54.34	40.0	2.2
135.0	442.8	12.580	54.64	34.0	1.9
140.0	459.2	12.750	54.95	34.0	1.9
145.0	475.6	12.940	55.29	38.0	2.1
150.0	492.0	13.160	55.69	44.0	2.4
155.0	508.4	13.280	55.90	24.0	1.3
158.0	518.2	13.310	55.96	10.0	0.5


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
5N/ 2E-25DBC
7/31/79

LOCATION: VANCOUVER AMS, WASH
5N/ 3E-28CCC
HOLE NAME: DREW
DATE MEASURED: 8/ 1/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	9.240	48.63	0.0	0.0
7.5	24.6	9.200	48.56	-16.0	-0.9
10.0	32.8	9.210	48.58	4.0	0.2
12.5	41.0	9.200	48.56	-4.0	-0.2
15.0	49.2	9.130	48.43	-28.0	-1.5
17.5	57.4	9.050	48.29	-32.0	-1.8
20.0	65.6	8.970	48.15	-32.0	-1.8
22.5	73.8	8.930	48.07	-16.0	-0.9
25.0	82.0	8.910	48.04	-8.0	-0.4
27.5	90.2	8.890	48.00	-8.0	-0.4
30.0	98.4	8.900	48.02	4.0	0.2
32.5	106.6	8.910	48.04	4.0	0.2
35.0	114.8	8.930	48.07	8.0	0.4
37.5	123.0	8.960	48.13	12.0	0.7
40.0	131.2	8.990	48.18	12.0	0.7
42.5	139.4	9.020	48.24	12.0	0.7
45.0	147.6	9.060	48.31	16.0	0.9
47.5	155.8	9.080	48.34	8.0	0.4
50.0	164.0	9.120	48.42	16.0	0.9
52.5	172.2	9.160	48.49	16.0	0.9
55.0	180.4	9.190	48.54	12.0	0.7
57.5	188.6	9.230	48.61	16.0	0.9
60.0	196.8	9.270	48.69	16.0	0.9
62.5	205.0	9.320	48.78	20.0	1.1
65.0	213.2	9.350	48.83	12.0	0.7
67.5	221.4	9.380	48.88	12.0	0.7
70.0	229.6	9.510	49.12	52.0	2.9
72.5	237.8	9.550	49.19	16.0	0.9
75.0	246.0	9.610	49.30	24.0	1.3
77.5	254.2	9.660	49.39	20.0	1.1
80.0	262.4	9.710	49.48	20.0	1.1
82.5	270.6	9.770	49.59	24.0	1.3
85.0	278.8	9.810	49.66	16.0	0.9
87.5	287.0	9.870	49.77	24.0	1.3
90.0	295.2	9.920	49.86	20.0	1.1
92.5	303.4	9.980	49.96	24.0	1.3
95.0	311.6	10.020	50.04	16.0	0.9
97.5	319.8	10.050	50.09	12.0	0.7

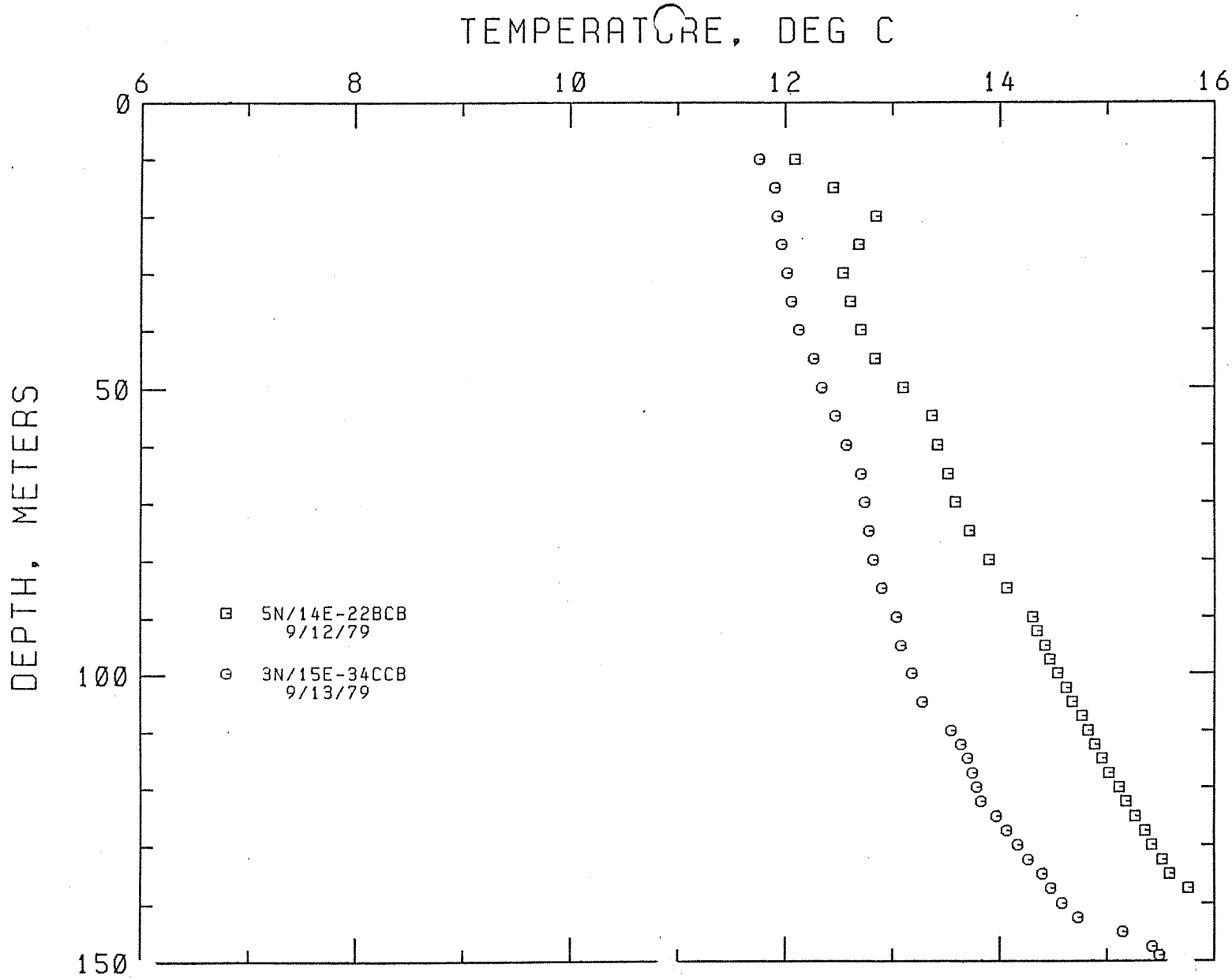

TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
5N/ 2E-24DDA
8/ 1/79
5N/ 3E-28CCC
8/ 1/79

LOCATION: VANCOUVER AMS, WASH
5N/ 3E-28CCC
HOLE NAME: DREW
DATE MEASURED: 8/ 1/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	9.240	48.63	0.0	0.0
7.5	24.6	9.200	48.56	-16.0	-0.9
10.0	32.8	9.210	48.58	4.0	0.2
12.5	41.0	9.200	48.56	-4.0	-0.2
15.0	49.2	9.130	48.43	-28.0	-1.5
17.5	57.4	9.050	48.29	-32.0	-1.8
20.0	65.6	8.970	48.15	-32.0	-1.8
22.5	73.8	8.930	48.07	-16.0	-0.9
25.0	82.0	8.910	48.04	-8.0	-0.4
27.5	90.2	8.890	48.00	-8.0	-0.4
30.0	98.4	8.900	48.02	4.0	0.2
32.5	106.6	8.910	48.04	4.0	0.2
35.0	114.8	8.930	48.07	8.0	0.4
37.5	123.0	8.960	48.13	12.0	0.7
40.0	131.2	8.990	48.18	12.0	0.7
42.5	139.4	9.020	48.24	12.0	0.7
45.0	147.6	9.060	48.31	16.0	0.9
47.5	155.8	9.080	48.34	8.0	0.4
50.0	164.0	9.120	48.42	16.0	0.9
52.5	172.2	9.160	48.49	16.0	0.9
55.0	180.4	9.190	48.54	12.0	0.7
57.5	188.6	9.230	48.61	16.0	0.9
60.0	196.8	9.270	48.69	16.0	0.9
62.5	205.0	9.320	48.78	20.0	1.1
65.0	213.2	9.350	48.83	12.0	0.7
67.5	221.4	9.380	48.88	12.0	0.7
70.0	229.6	9.510	49.12	52.0	2.9
72.5	237.8	9.550	49.19	16.0	0.9
75.0	246.0	9.610	49.30	24.0	1.3
77.5	254.2	9.660	49.39	20.0	1.1
80.0	262.4	9.710	49.48	20.0	1.1
82.5	270.6	9.770	49.59	24.0	1.3
85.0	278.8	9.810	49.66	16.0	0.9
87.5	287.0	9.870	49.77	24.0	1.3
90.0	295.2	9.920	49.86	20.0	1.1
92.5	303.4	9.980	49.96	24.0	1.3
95.0	311.6	10.020	50.04	16.0	0.9
97.5	319.8	10.050	50.09	12.0	0.7

LOCATION: THE DALLES AMS, WASH
5N/14E-22BCB
HOLE NAME: URBAN
DATE MEASURED: 9/12/79

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	12.090	53.76	0.0	0.0
15.0	49.2	12.450	54.41	72.0	4.0
20.0	65.6	12.850	55.13	80.0	4.4
25.0	82.0	12.690	54.84	-32.0	-1.8
30.0	98.4	12.540	54.57	-30.0	-1.6
35.0	114.8	12.610	54.70	14.0	0.8
40.0	131.2	12.710	54.88	20.0	1.1
45.0	147.6	12.840	55.11	26.0	1.4
50.0	164.0	13.100	55.58	52.0	2.9
55.0	180.4	13.370	56.07	54.0	3.0
60.0	196.8	13.420	56.16	10.0	0.5
65.0	213.2	13.520	56.34	20.0	1.1
70.0	229.6	13.590	56.46	14.0	0.8
75.0	246.0	13.720	56.70	26.0	1.4
80.0	262.4	13.900	57.02	36.0	2.0
85.0	278.8	14.070	57.33	34.0	1.9
90.0	295.2	14.310	57.76	48.0	2.6
92.5	303.4	14.350	57.83	16.0	0.9
95.0	311.6	14.420	57.96	28.0	1.5
97.5	319.8	14.470	58.05	20.0	1.1
100.0	328.0	14.540	58.17	28.0	1.5
102.5	336.2	14.620	58.32	32.0	1.8
105.0	344.4	14.680	58.42	24.0	1.3
107.5	352.6	14.770	58.59	36.0	2.0
110.0	360.8	14.830	58.69	24.0	1.3
112.5	369.0	14.890	58.80	24.0	1.3
115.0	377.2	14.960	58.93	28.0	1.5
117.5	385.4	15.020	59.04	24.0	1.3
120.0	393.6	15.120	59.22	40.0	2.2
122.5	401.8	15.180	59.32	24.0	1.3
125.0	410.0	15.270	59.49	36.0	2.0
127.5	418.2	15.360	59.65	36.0	2.0
130.0	426.4	15.420	59.76	24.0	1.3
132.5	434.6	15.520	59.94	40.0	2.2
135.0	442.8	15.590	60.06	28.0	1.5
137.5	451.0	15.760	60.37	68.0	3.7


TEMPERATURE, DEG C
6
8
10
12
14
16
0
50
100
150
DEPTH, METERS
5N/14E-22BCB
9/12/79
3N/15E-34CCB
9/13/79

LOCATION: VANCOUVER AMS, WASH
4N/ 1E-21ACD
HOLE NAME: KING
DATE MEASURED: 7/29/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
75.0	246.0	11.810	53.26	0.0	0.0
77.5	254.2	11.820	53.28	4.0	0.2
80.0	262.4	11.870	53.37	20.0	1.1
82.5	270.6	11.900	53.42	12.0	0.7
85.0	278.8	11.900	53.42	0.0	0.0
87.5	287.0	11.920	53.46	8.0	0.4
90.0	295.2	11.740	53.13	-72.0	-4.0
92.5	303.4	11.670	53.01	-28.0	-1.5
95.0	311.6	11.650	52.97	-8.0	-0.4
97.5	319.8	11.640	52.95	-4.0	-0.2
100.0	328.0	11.650	52.97	4.0	0.2
102.5	336.2	11.680	53.02	12.0	0.7
105.0	344.4	11.700	53.06	8.0	0.4
107.5	352.6	11.760	53.17	24.0	1.3
110.0	360.8	11.810	53.26	20.0	1.1
112.5	369.0	11.850	53.33	16.0	0.9
115.0	377.2	11.880	53.38	12.0	0.7
117.5	385.4	11.960	53.53	32.0	1.8
120.0	393.6	12.010	53.62	20.0	1.1
122.5	401.8	12.060	53.71	20.0	1.1
125.0	410.0	12.100	53.78	16.0	0.9
127.5	418.2	12.130	53.83	12.0	0.7
130.0	426.4	12.150	53.87	8.0	0.4
132.5	434.6	12.180	53.92	12.0	0.7
135.0	442.8	12.210	53.98	12.0	0.7
137.5	451.0	12.240	54.03	12.0	0.7
140.0	459.2	12.270	54.09	12.0	0.7
142.5	467.4	12.320	54.18	20.0	1.1
145.0	475.6	12.360	54.25	16.0	0.9
147.5	483.8	12.410	54.34	20.0	1.1
150.0	492.0	12.460	54.43	20.0	1.1
152.5	500.2	12.510	54.52	20.0	1.1
155.0	508.4	12.570	54.63	24.0	1.3
157.5	516.6	12.630	54.73	24.0	1.3
160.0	524.8	12.690	54.84	24.0	1.3
162.5	533.0	12.760	54.97	28.0	1.5
165.0	541.2	12.800	55.04	16.0	0.9
167.5	549.4	12.860	55.15	24.0	1.3
170.0	557.6	12.920	55.26	24.0	1.3
172.5	565.8	12.990	55.38	28.0	1.5
175.0	574.0	13.050	55.49	24.0	1.3

LOCATION: VANCOUVER AMS, WASH
4N/ 1E-21ACD
HOLE NAME: KING
DATE MEASURED: 7/29/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
177.5	582.2	13.130	55.63	32.0	1.8
180.0	590.4	13.190	55.74	24.0	1.3
182.5	598.6	13.260	55.87	28.0	1.5
185.0	606.8	13.320	55.98	24.0	1.3
187.5	615.0	13.360	56.05	16.0	0.9
190.0	623.2	13.410	56.14	20.0	1.1
192.5	631.4	13.460	56.23	20.0	1.1
195.0	639.6	13.510	56.32	20.0	1.1
197.5	647.8	13.560	56.41	20.0	1.1
200.0	656.0	13.620	56.52	24.0	1.3
202.5	664.2	13.700	56.66	32.0	1.8
205.0	672.4	13.760	56.77	24.0	1.3
207.5	680.6	13.830	56.89	28.0	1.5
210.0	688.8	13.910	57.04	32.0	1.8
212.5	697.0	13.980	57.16	28.0	1.5
215.0	705.2	14.040	57.27	24.0	1.3
217.5	713.4	14.100	57.38	24.0	1.3
220.0	721.6	14.170	57.51	28.0	1.5
222.5	729.8	14.230	57.61	24.0	1.3
225.0	738.0	14.290	57.72	24.0	1.3
227.5	746.2	14.360	57.85	28.0	1.5
230.0	754.4	14.420	57.96	24.0	1.3
232.5	762.6	14.480	58.06	24.0	1.3
235.0	770.8	14.510	58.12	12.0	0.7

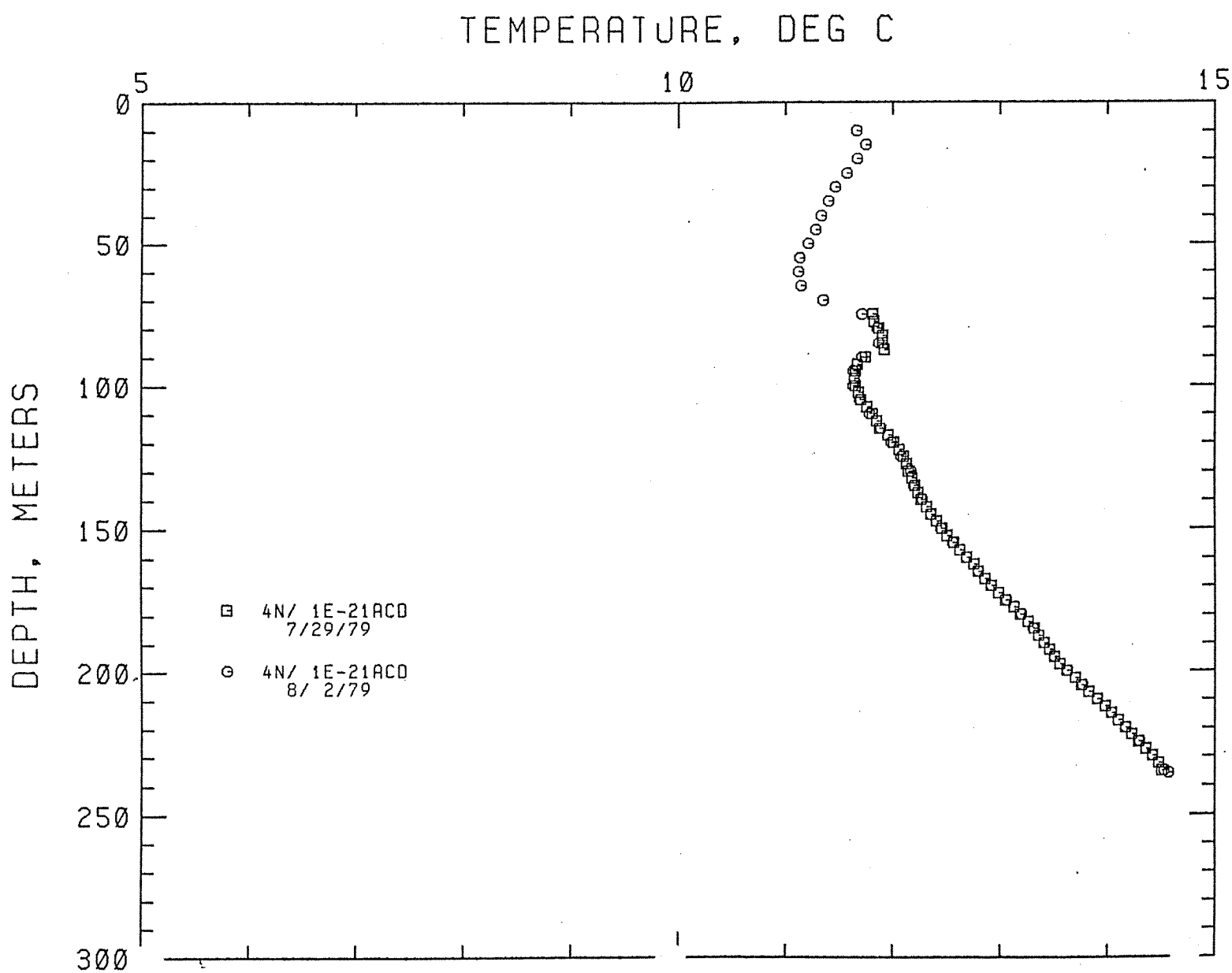
LOCATION: VANCOUVER AMS, WASH
4N/ 1E-21ACD
HOLE NAME: KING
DATE MEASURED: 8/ 2/79

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	11.660	52.99	0.0	0.0
15.0	49.2	11.750	53.15	18.0	1.0
20.0	65.6	11.670	53.01	-16.0	-0.9
25.0	82.0	11.570	52.83	-20.0	-1.1
30.0	98.4	11.460	52.63	-22.0	-1.2
35.0	114.8	11.400	52.52	-12.0	-0.7
40.0	131.2	11.330	52.39	-14.0	-0.8
45.0	147.6	11.280	52.30	-10.0	-0.5
50.0	164.0	11.210	52.18	-14.0	-0.8
55.0	180.4	11.130	52.03	-16.0	-0.9
60.0	196.8	11.120	52.02	-2.0	-0.1
65.0	213.2	11.140	52.05	4.0	0.2
70.0	229.6	11.350	52.43	42.0	2.3
75.0	246.0	11.710	53.08	72.0	4.0
80.0	262.4	11.850	53.33	28.0	1.5
85.0	278.8	11.870	53.37	4.0	0.2
90.0	295.2	11.710	53.08	-32.0	-1.8
95.0	311.6	11.630	52.93	-16.0	-0.9
100.0	328.0	11.630	52.93	0.0	0.0
105.0	344.4	11.690	53.04	12.0	0.7
110.0	360.8	11.780	53.20	18.0	1.0
115.0	377.2	11.890	53.40	22.0	1.2
120.0	393.6	11.990	53.58	20.0	1.1
125.0	410.0	12.080	53.74	18.0	1.0
130.0	426.4	12.170	53.91	18.0	1.0
135.0	442.8	12.200	53.96	6.0	0.3
140.0	459.2	12.280	54.10	16.0	0.9
145.0	475.6	12.360	54.25	16.0	0.9
150.0	492.0	12.450	54.41	18.0	1.0
155.0	508.4	12.560	54.61	22.0	1.2
160.0	524.8	12.690	54.84	26.0	1.4
165.0	541.2	12.800	55.04	22.0	1.2
170.0	557.6	12.920	55.26	24.0	1.3
175.0	574.0	13.060	55.51	28.0	1.5
180.0	590.4	13.200	55.76	28.0	1.5
185.0	606.8	13.310	55.96	22.0	1.2
190.0	623.2	13.410	56.14	20.0	1.1
195.0	639.6	13.510	56.32	20.0	1.1
200.0	656.0	13.630	56.53	24.0	1.3
205.0	672.4	13.770	56.79	28.0	1.5
210.0	688.8	13.910	57.04	28.0	1.5
215.0	705.2	14.040	57.27	26.0	1.4

LOCATION: VANCOUVER AMS, WASH
4N/ 1E-21ACD

HOLE NAME: KING
DATE MEASURED: 8/ 2/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
220.0	721.6	14.170	57.51	26.0	1.4
225.0	738.0	14.300	57.74	26.0	1.4
230.0	754.4	14.420	57.96	24.0	1.3
235.0	770.8	14.530	58.15	22.0	1.2
236.0	774.1	14.570	58.23	40.0	2.2

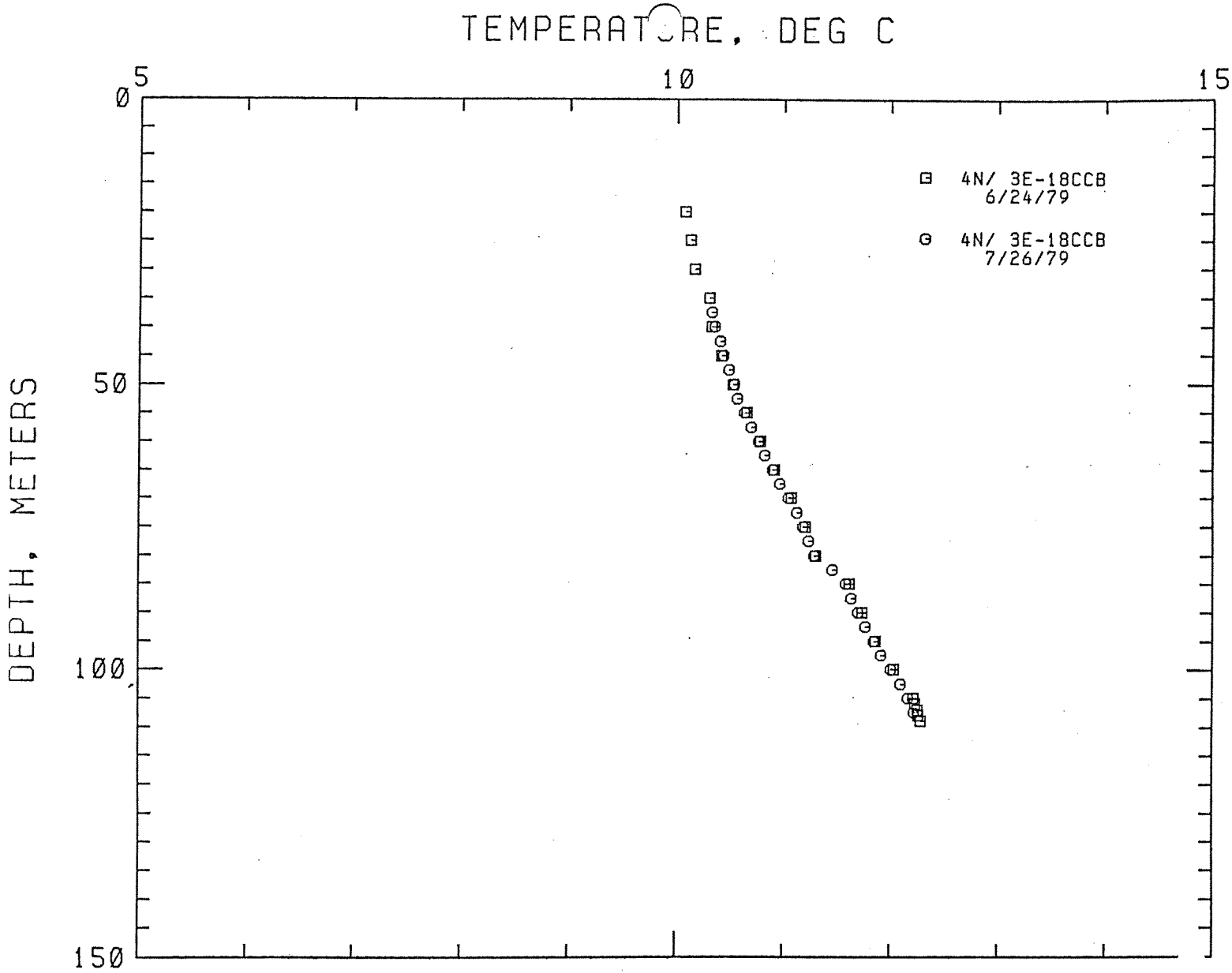

TEMPERATURE, DEG C
5
10
15
0
50
100
150
200
250
300
DEPTH, METERS
4N/ 1E-21ACD
7/29/79
4N/ 1E-21ACD
8/ 2/79

LOCATION: VANCOUVER AMS, WASH
4N/ 3E-18CCB
HOLE NAME: HOARSH
DATE MEASURED: 6/24/79

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	10.080	50.14	0.0	0.0
25.0	82.0	10.130	50.23	10.0	0.5
30.0	98.4	10.170	50.31	8.0	0.4
35.0	114.8	10.310	50.56	28.0	1.5
40.0	131.2	10.330	50.59	4.0	0.2
45.0	147.6	10.420	50.76	18.0	1.0
50.0	164.0	10.530	50.95	22.0	1.2
55.0	180.4	10.660	51.19	26.0	1.4
60.0	196.8	10.790	51.42	26.0	1.4
65.0	213.2	10.920	51.66	26.0	1.4
70.0	229.6	11.080	51.94	32.0	1.8
75.0	246.0	11.210	52.18	26.0	1.4
80.0	262.4	11.310	52.36	20.0	1.1
85.0	278.8	11.620	52.92	62.0	3.4
90.0	295.2	11.740	53.13	24.0	1.3
95.0	311.6	11.870	53.37	26.0	1.4
100.0	328.0	12.040	53.67	34.0	1.9
105.0	344.4	12.220	54.00	36.0	2.0
106.0	347.7	12.240	54.03	20.0	1.1
107.0	351.0	12.260	54.07	20.0	1.1
108.0	354.2	12.270	54.09	10.0	0.5
109.0	357.5	12.290	54.12	20.0	1.1

LOCATION: VANCOUVER AMS, WASH
4N/ 3E-18CCB
HOLE NAME: HOARSH
DATE MEASURED: 7/26/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
37.5	123.0	10.330	50.59	0.0	0.0
40.0	131.2	10.360	50.65	12.0	0.7
42.5	139.4	10.410	50.74	20.0	1.1
45.0	147.6	10.440	50.79	12.0	0.7
47.5	155.8	10.490	50.88	20.0	1.1
50.0	164.0	10.540	50.97	20.0	1.1
52.5	172.2	10.570	51.03	12.0	0.7
55.0	180.4	10.640	51.15	28.0	1.5
57.5	188.6	10.700	51.26	24.0	1.3
60.0	196.8	10.770	51.39	28.0	1.5
62.5	205.0	10.830	51.49	24.0	1.3
65.0	213.2	10.900	51.62	28.0	1.5
67.5	221.4	10.970	51.75	28.0	1.5
70.0	229.6	11.050	51.89	32.0	1.8
72.5	237.8	11.130	52.03	32.0	1.8
75.0	246.0	11.190	52.14	24.0	1.3
77.5	254.2	11.240	52.23	20.0	1.1
80.0	262.4	11.290	52.32	20.0	1.1
82.5	270.6	11.460	52.63	68.0	3.7
85.0	278.8	11.590	52.86	52.0	2.9
87.5	287.0	11.640	52.95	20.0	1.1
90.0	295.2	11.700	53.06	24.0	1.3
92.5	303.4	11.770	53.19	28.0	1.5
95.0	311.6	11.850	53.33	32.0	1.8
97.5	319.8	11.920	53.46	28.0	1.5
100.0	328.0	12.010	53.62	36.0	2.0
102.5	336.2	12.100	53.78	36.0	2.0
105.0	344.4	12.170	53.91	28.0	1.5
107.5	352.6	12.230	54.01	24.0	1.3

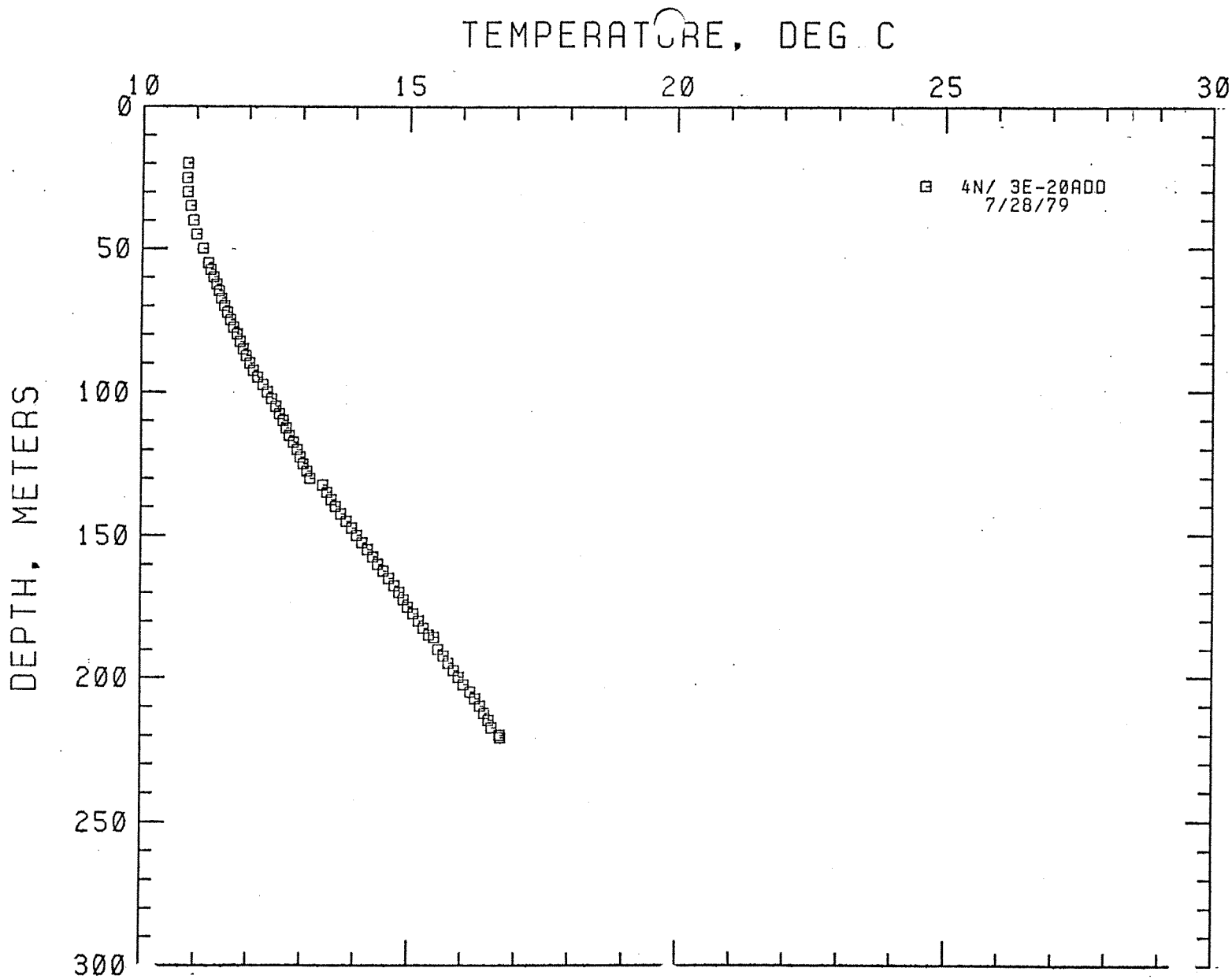

TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
4N/ 3E-18CCB
6/24/79
4N/ 3E-18CCB
7/26/79

LOCATION: VANCOUVER AMS, WASH
4N/ 3E-20ADD
HOLE NAME: WINSTON
DATE MEASURED: 7/28/79

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	10.850	51.53	0.0	0.0
25.0	82.0	10.830	51.49	-4.0	-0.2
30.0	98.4	10.850	51.53	4.0	0.2
35.0	114.8	10.900	51.62	10.0	0.5
40.0	131.2	10.960	51.73	12.0	0.7
45.0	147.6	11.020	51.84	12.0	0.7
50.0	164.0	11.140	52.05	24.0	1.3
55.0	180.4	11.250	52.25	22.0	1.2
57.5	188.6	11.290	52.32	16.0	0.9
60.0	196.8	11.350	52.43	24.0	1.3
62.5	205.0	11.400	52.52	20.0	1.1
65.0	213.2	11.450	52.61	20.0	1.1
67.5	221.4	11.500	52.70	20.0	1.1
70.0	229.6	11.550	52.79	20.0	1.1
72.5	237.8	11.610	52.90	24.0	1.3
75.0	246.0	11.670	53.01	24.0	1.3
77.5	254.2	11.730	53.11	24.0	1.3
80.0	262.4	11.790	53.22	24.0	1.3
82.5	270.6	11.850	53.33	24.0	1.3
85.0	278.8	11.910	53.44	24.0	1.3
87.5	287.0	11.970	53.55	24.0	1.3
90.0	295.2	12.030	53.65	24.0	1.3
92.5	303.4	12.100	53.78	28.0	1.5
95.0	311.6	12.180	53.92	32.0	1.8
97.5	319.8	12.280	54.10	40.0	2.2
100.0	328.0	12.370	54.27	36.0	2.0
102.5	336.2	12.450	54.41	32.0	1.8
105.0	344.4	12.520	54.54	28.0	1.5
107.5	352.6	12.590	54.66	28.0	1.5
110.0	360.8	12.660	54.79	28.0	1.5
112.5	369.0	12.720	54.90	24.0	1.3
115.0	377.2	12.780	55.00	24.0	1.3
117.5	385.4	12.860	55.15	32.0	1.8
120.0	393.6	12.920	55.26	24.0	1.3
122.5	401.8	12.980	55.36	24.0	1.3
125.0	410.0	13.040	55.47	24.0	1.3
127.5	418.2	13.110	55.60	28.0	1.5
130.0	426.4	13.170	55.71	24.0	1.3
132.5	434.6	13.400	56.12	92.0	5.0
135.0	442.8	13.480	56.26	32.0	1.8
137.5	451.0	13.560	56.41	32.0	1.8
140.0	459.2	13.650	56.57	36.0	2.0

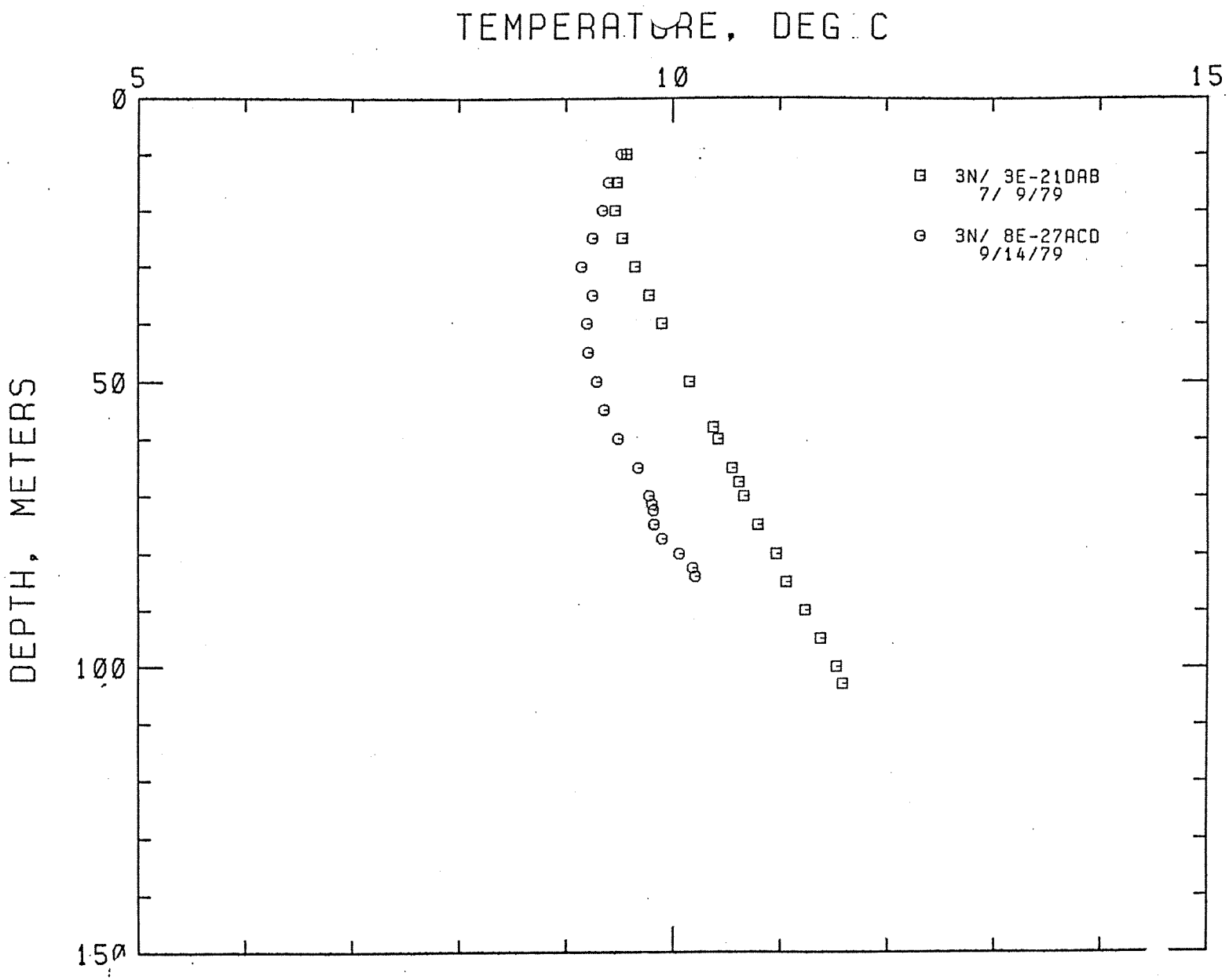
LOCATION: VANCOUVER AMS, WASH
4N/ 3E-20ADD
HOLE NAME: WINSTON
DATE MEASURED: 7/28/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
142.5	467.4	13.750	56.75	40.0	2.2
145.0	475.6	13.850	56.93	40.0	2.2
147.5	483.8	13.950	57.11	40.0	2.2
150.0	492.0	14.050	57.29	40.0	2.2
152.5	500.2	14.150	57.47	40.0	2.2
155.0	508.4	14.250	57.65	40.0	2.2
157.5	516.6	14.350	57.83	40.0	2.2
160.0	524.8	14.450	58.01	40.0	2.2
162.5	533.0	14.550	58.19	40.0	2.2
165.0	541.2	14.650	58.37	40.0	2.2
167.5	549.4	14.750	58.55	40.0	2.2
170.0	557.6	14.840	58.71	36.0	2.0
172.5	565.8	14.920	58.86	32.0	1.8
175.0	574.0	15.010	59.02	36.0	2.0
177.5	582.2	15.110	59.20	40.0	2.2
180.0	590.4	15.210	59.38	40.0	2.2
182.5	598.6	15.300	59.54	36.0	2.0
185.0	606.8	15.400	59.72	40.0	2.2
185.7	609.1	15.500	59.90	142.9	7.8
190.0	623.2	15.580	60.04	18.6	1.0
192.5	631.4	15.680	60.22	40.0	2.2
195.0	639.6	15.770	60.39	36.0	2.0
197.5	647.8	15.870	60.57	40.0	2.2
200.0	656.0	15.960	60.73	36.0	2.0
202.5	664.2	16.060	60.91	40.0	2.2
205.0	672.4	16.180	61.12	48.0	2.6
207.5	680.6	16.270	61.29	36.0	2.0
210.0	688.8	16.370	61.47	40.0	2.2
212.5	697.0	16.450	61.61	32.0	1.8
215.0	705.2	16.520	61.74	28.0	1.5
217.5	713.4	16.580	61.84	24.0	1.3
220.0	721.6	16.730	62.11	60.0	3.3
221.0	724.9	16.740	62.13	10.0	0.5


TEMPERATURE, DEG C
10
15
20
25
30
0
50
100
150
200
250
300
DEPTH, METERS
4N/ 3E-20ADD
7/28/79

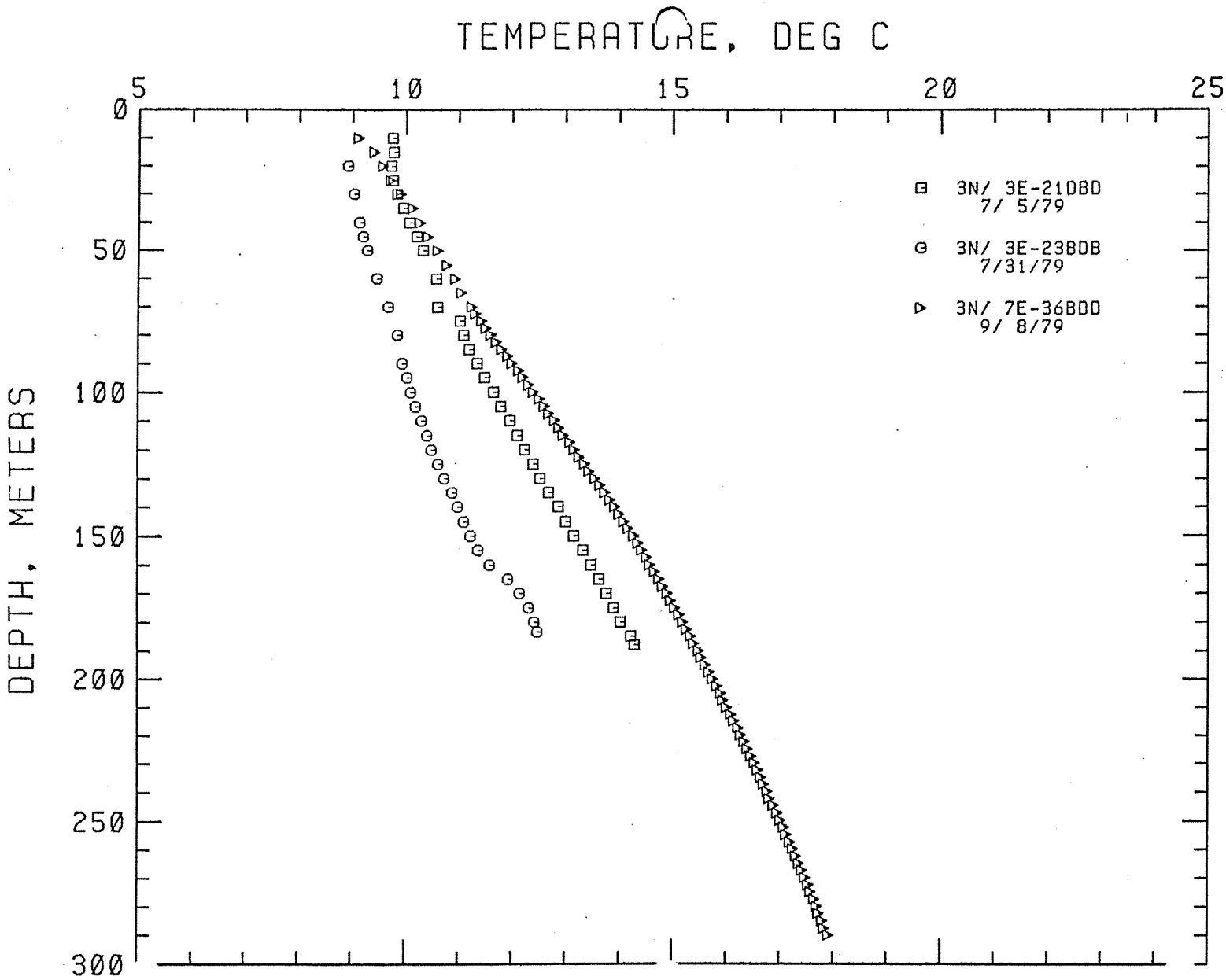
LOCATION: VANCOUVER AMS, WASH
3N/ 3E-21DAB
HOLE NAME: ZINTZ
DATE MEASURED: 7/ 9/79

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	9.570	49.23	0.0	0.0
15.0	49.2	9.480	49.06	-18.0	-1.0
20.0	65.6	9.460	49.03	-4.0	-0.2
25.0	82.0	9.530	49.15	14.0	0.8
30.0	98.4	9.650	49.37	24.0	1.3
35.0	114.8	9.780	49.60	26.0	1.4
40.0	131.2	9.900	49.82	24.0	1.3
50.0	164.0	10.160	50.29	26.0	1.4
58.0	190.2	10.380	50.68	27.5	1.5
60.0	196.8	10.430	50.77	25.0	1.4
65.0	213.2	10.560	51.01	26.0	1.4
67.5	221.4	10.620	51.12	24.0	1.3
70.0	229.6	10.670	51.21	20.0	1.1
75.0	246.0	10.800	51.44	26.0	1.4
80.0	262.4	10.970	51.75	34.0	1.9
85.0	278.8	11.060	51.91	18.0	1.0
90.0	295.2	11.240	52.23	36.0	2.0
95.0	311.6	11.380	52.48	28.0	1.5
100.0	328.0	11.530	52.75	30.0	1.6
103.0	337.8	11.590	52.86	20.0	1.1


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
3N/ 3E-21DAB
7/ 9/79
3N/ 8E-27ACD
9/14/79

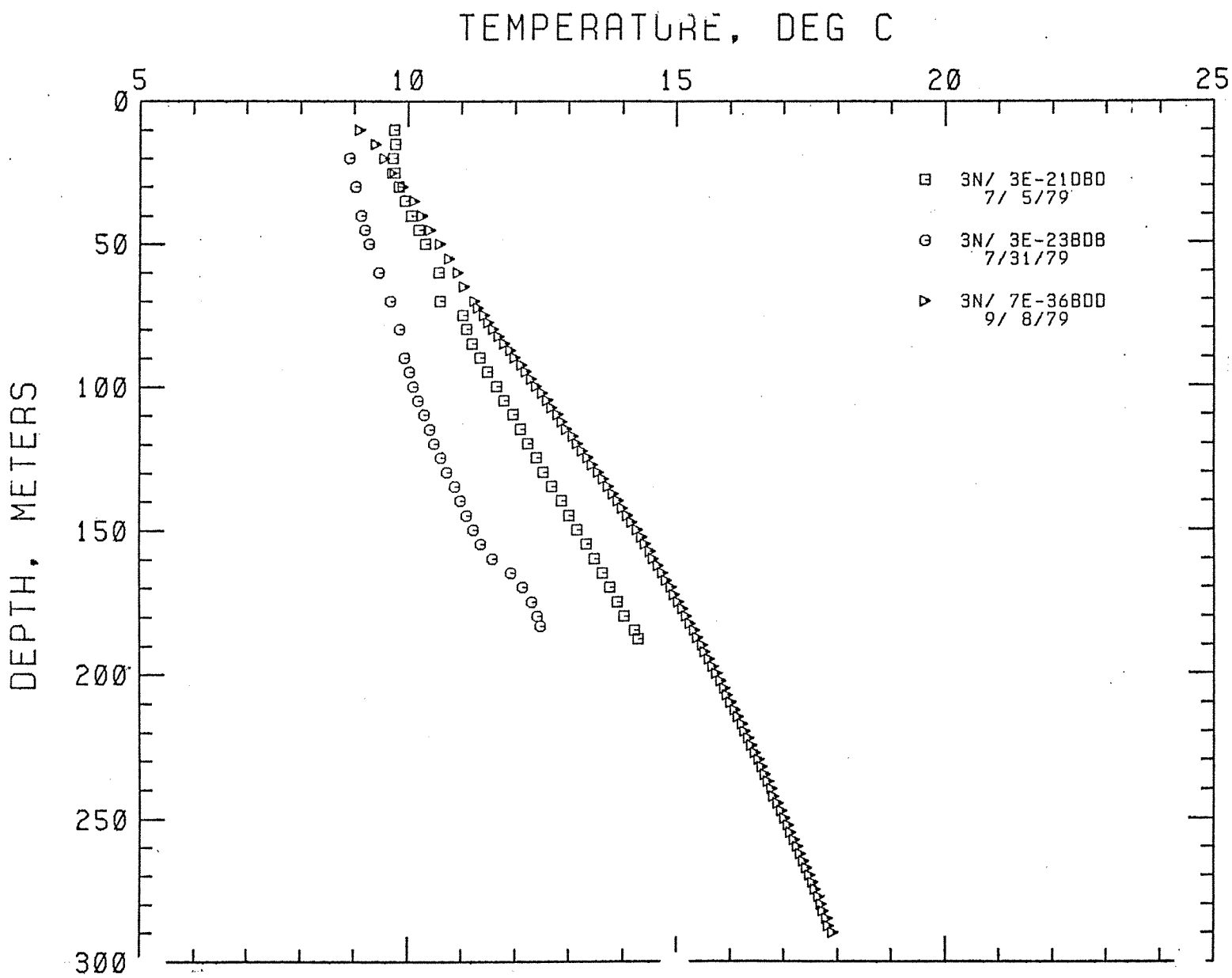
LOCATION: VANCOUVER AMS, WASH
3N/ 3E-21DBD
HOLE NAME: BOTTMLLR
DATE MEASURED: 7/ 5/79

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	9.750	49.55	0.0	0.0
15.0	49.2	9.780	49.60	6.0	0.3
20.0	65.6	9.730	49.51	-10.0	-0.5
25.0	82.0	9.760	49.57	6.0	0.3
30.0	98.4	9.850	49.73	18.0	1.0
35.0	114.8	9.960	49.93	22.0	1.2
40.0	131.2	10.070	50.13	22.0	1.2
45.0	147.6	10.210	50.38	28.0	1.5
50.0	164.0	10.340	50.61	26.0	1.4
60.0	196.8	10.590	51.06	25.0	1.4
70.0	229.6	10.610	51.10	2.0	0.1
75.0	246.0	11.030	51.85	84.0	4.6
80.0	262.4	11.100	51.98	14.0	0.8
85.0	278.8	11.210	52.18	22.0	1.2
90.0	295.2	11.350	52.43	28.0	1.5
95.0	311.6	11.490	52.68	28.0	1.5
100.0	328.0	11.660	52.99	34.0	1.9
105.0	344.4	11.800	53.24	28.0	1.5
110.0	360.8	11.970	53.55	34.0	1.9
115.0	377.2	12.110	53.80	28.0	1.5
120.0	393.6	12.240	54.03	26.0	1.4
125.0	410.0	12.410	54.34	34.0	1.9
130.0	426.4	12.530	54.55	24.0	1.3
135.0	442.8	12.690	54.84	32.0	1.8
140.0	459.2	12.870	55.17	36.0	2.0
145.0	475.6	13.010	55.42	28.0	1.5
150.0	492.0	13.160	55.69	30.0	1.6
155.0	508.4	13.330	55.99	34.0	1.9
160.0	524.8	13.480	56.26	30.0	1.6
165.0	541.2	13.630	56.53	30.0	1.6
170.0	557.6	13.770	56.79	28.0	1.5
175.0	574.0	13.900	57.02	26.0	1.4
180.0	590.4	14.030	57.25	26.0	1.4
185.0	606.8	14.220	57.60	38.0	2.1
188.0	616.6	14.290	57.72	23.3	1.3


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
3N/ 3E-21DBD
7/ 5/79
3N/ 3E-23BDB
7/31/79
3N/ 7E-36BDD
9/ 8/79

LOCATION: VANCOUVER AMS, WASH
3N/ 3E-23BDB
HOLE NAME: PLEW
DATE MEASURED: 7/31/79

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	8.920	48.06	0.0	0.0
30.0	98.4	9.030	48.25	11.0	0.6
40.0	131.2	9.140	48.45	11.0	0.6
45.0	147.6	9.210	48.58	14.0	0.8
50.0	164.0	9.290	48.72	16.0	0.9
60.0	196.8	9.470	49.05	18.0	1.0
70.0	229.6	9.680	49.42	21.0	1.2
80.0	262.4	9.860	49.75	18.0	1.0
90.0	295.2	9.950	49.91	9.0	0.5
95.0	311.6	10.040	50.07	18.0	1.0
100.0	328.0	10.110	50.20	14.0	0.8
105.0	344.4	10.200	50.36	18.0	1.0
110.0	360.8	10.310	50.56	22.0	1.2
115.0	377.2	10.420	50.76	22.0	1.2
120.0	393.6	10.500	50.90	16.0	0.9
125.0	410.0	10.620	51.12	24.0	1.3
130.0	426.4	10.740	51.33	24.0	1.3
135.0	442.8	10.880	51.58	28.0	1.5
140.0	459.2	10.990	51.78	22.0	1.2
145.0	475.6	11.100	51.98	22.0	1.2
150.0	492.0	11.230	52.21	26.0	1.4
155.0	508.4	11.370	52.47	28.0	1.5
160.0	524.8	11.580	52.84	42.0	2.3
165.0	541.2	11.920	53.46	68.0	3.7
170.0	557.6	12.140	53.85	44.0	2.4
175.0	574.0	12.310	54.16	34.0	1.9
180.0	590.4	12.420	54.36	22.0	1.2
183.5	601.9	12.470	54.45	14.3	0.8


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
3N/ 3E-21DBD
7/ 5/79
3N/ 3E-23BDB
7/31/79
3N/ 7E-36BDD
9/ 8/79

LOCATION: THE DALLES AMS, WASH
3N/ 7E-36BDD
HOLE NAME: NIX
DATE MEASURED: 9/ 8/79

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	9.110	48.40	0.0	0.0
15.0	49.2	9.410	48.94	60.0	3.3
20.0	65.6	9.570	49.23	32.0	1.8
25.0	82.0	9.720	49.50	30.0	1.6
30.0	98.4	9.910	49.84	38.0	2.1
35.0	114.8	10.130	50.23	44.0	2.4
40.0	131.2	10.280	50.50	30.0	1.6
45.0	147.6	10.430	50.77	30.0	1.6
50.0	164.0	10.610	51.10	36.0	2.0
55.0	180.4	10.780	51.40	34.0	1.9
60.0	196.8	10.940	51.69	32.0	1.8
65.0	213.2	11.060	51.91	24.0	1.3
70.0	229.6	11.250	52.25	38.0	2.1
72.5	237.8	11.320	52.38	28.0	1.5
75.0	246.0	11.430	52.57	44.0	2.4
77.5	254.2	11.510	52.72	32.0	1.8
80.0	262.4	11.610	52.90	40.0	2.2
82.5	270.6	11.710	53.08	40.0	2.2
85.0	278.8	11.810	53.26	40.0	2.2
87.5	287.0	11.920	53.46	44.0	2.4
90.0	295.2	12.010	53.62	36.0	2.0
92.5	303.4	12.130	53.83	48.0	2.6
95.0	311.6	12.210	53.98	32.0	1.8
97.5	319.8	12.310	54.16	40.0	2.2
100.0	328.0	12.410	54.34	40.0	2.2
102.5	336.2	12.520	54.54	44.0	2.4
105.0	344.4	12.610	54.70	36.0	2.0
107.5	352.6	12.690	54.84	32.0	1.8
110.0	360.8	12.810	55.06	48.0	2.6
112.5	369.0	12.890	55.20	32.0	1.8
115.0	377.2	12.970	55.35	32.0	1.8
117.5	385.4	13.090	55.56	48.0	2.6
120.0	393.6	13.170	55.71	32.0	1.8
122.5	401.8	13.260	55.87	36.0	2.0
125.0	410.0	13.360	56.05	40.0	2.2
127.5	418.2	13.450	56.21	36.0	2.0
130.0	426.4	13.560	56.41	44.0	2.4
132.5	434.6	13.650	56.57	36.0	2.0
135.0	442.8	13.740	56.73	36.0	2.0
137.5	451.0	13.830	56.89	36.0	2.0
140.0	459.2	13.930	57.07	40.0	2.2
142.5	467.4	14.010	57.22	32.0	1.8

LOCATION: THE DALLES AMS, WASH
3N/ 7E-36BDD

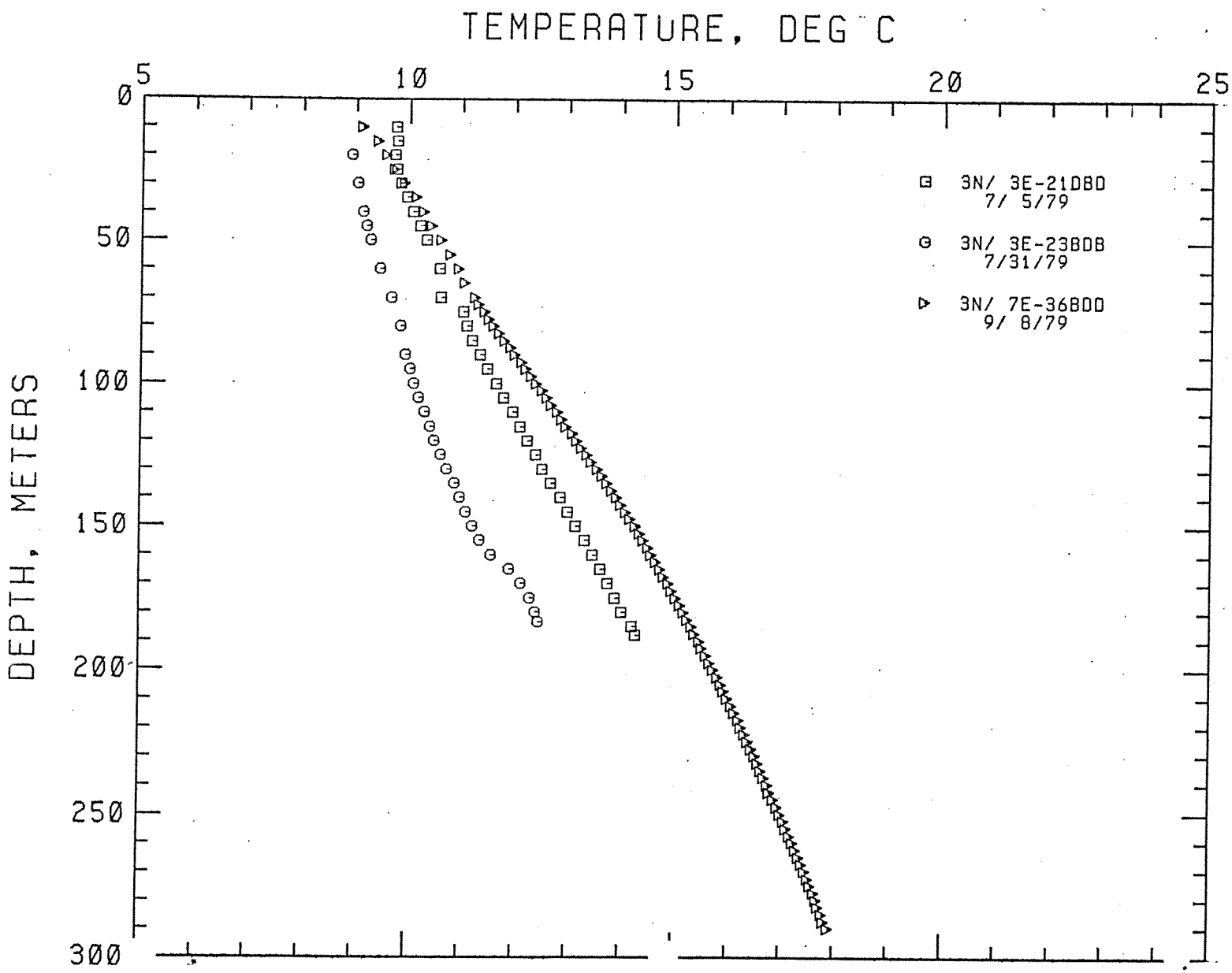
HOLE NAME: NIX
DATE MEASURED: 9/ 8/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
145.0	475.6	14.100	57.38	36.0	2.0
147.5	483.8	14.180	57.52	32.0	1.8
150.0	492.0	14.280	57.70	40.0	2.2
152.5	500.2	14.360	57.85	32.0	1.8
155.0	508.4	14.430	57.97	28.0	1.5
157.5	516.6	14.520	58.14	36.0	2.0
160.0	524.8	14.580	58.24	24.0	1.3
162.5	533.0	14.670	58.41	36.0	2.0
165.0	541.2	14.750	58.55	32.0	1.8
167.5	549.4	14.820	58.68	28.0	1.5
170.0	557.6	14.910	58.84	36.0	2.0
172.5	565.8	14.970	58.95	24.0	1.3
175.0	574.0	15.050	59.09	32.0	1.8
177.5	582.2	15.120	59.22	28.0	1.5
180.0	590.4	15.190	59.34	28.0	1.5
182.5	598.6	15.260	59.47	28.0	1.5
185.0	606.8	15.340	59.61	32.0	1.8
187.5	615.0	15.400	59.72	24.0	1.3
190.0	623.2	15.490	59.88	36.0	2.0
192.5	631.4	15.540	59.97	20.0	1.1
195.0	639.6	15.620	60.12	32.0	1.8
197.5	647.8	15.690	60.24	28.0	1.5
200.0	656.0	15.750	60.35	24.0	1.3
202.5	664.2	15.830	60.49	32.0	1.8
205.0	672.4	15.900	60.62	28.0	1.5
207.5	680.6	15.950	60.71	20.0	1.1
210.0	688.8	16.020	60.84	28.0	1.5
212.5	697.0	16.100	60.98	32.0	1.8
215.0	705.2	16.150	61.07	20.0	1.1
217.5	713.4	16.230	61.21	32.0	1.8
220.0	721.6	16.280	61.30	20.0	1.1
222.5	729.8	16.350	61.43	28.0	1.5
225.0	738.0	16.410	61.54	24.0	1.3
227.5	746.2	16.480	61.66	28.0	1.5
230.0	754.4	16.540	61.77	24.0	1.3
232.5	762.6	16.600	61.88	24.0	1.3
235.0	770.8	16.660	61.99	24.0	1.3
237.5	779.0	16.710	62.08	20.0	1.1
240.0	787.2	16.780	62.20	28.0	1.5
242.5	795.4	16.820	62.28	16.0	0.9
245.0	803.6	16.900	62.42	32.0	1.8
247.5	811.8	16.960	62.53	24.0	1.3

LOCATION: THE DALLES AMS, WASH
3N/ 7E-36BDD

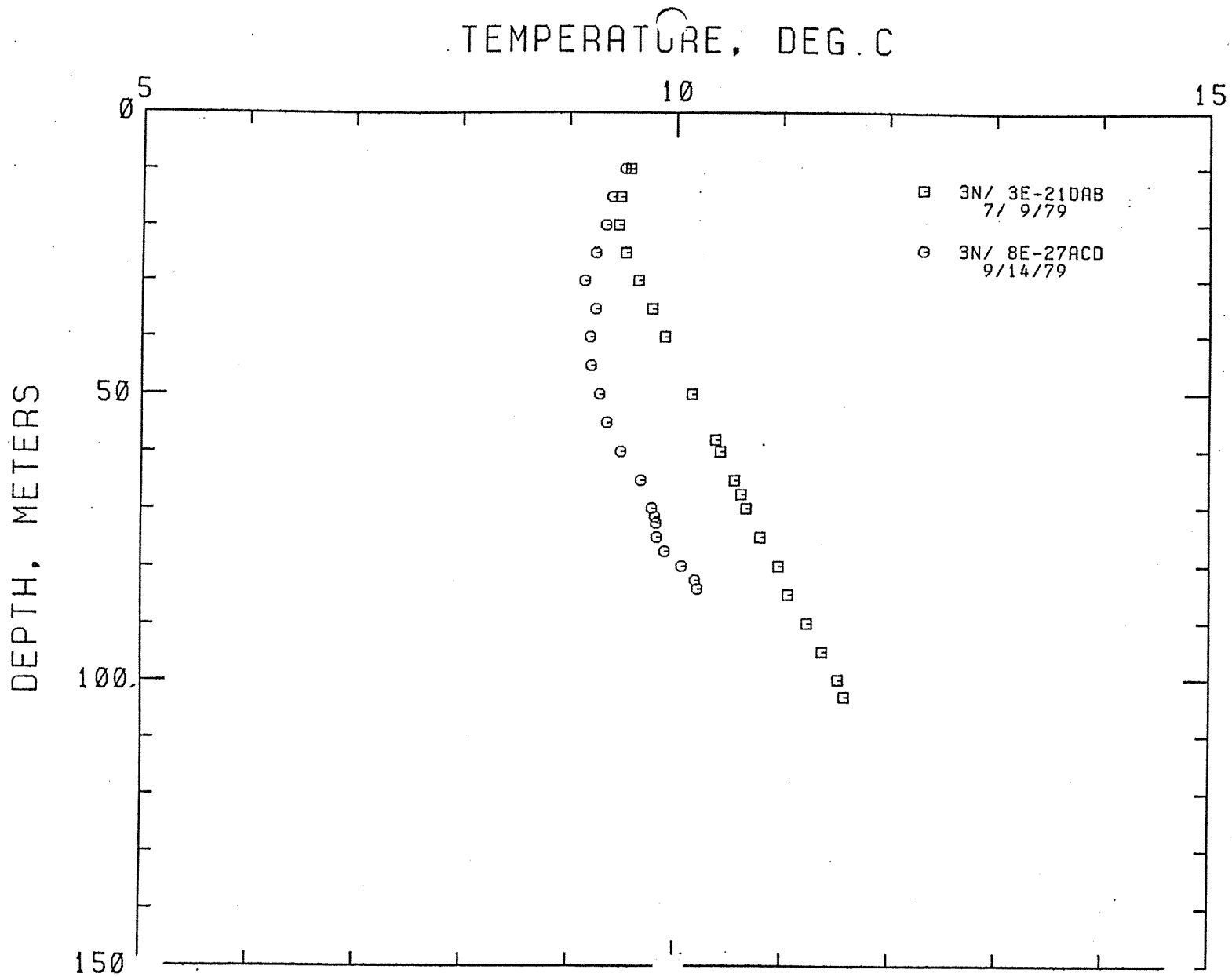
HOLE NAME: NIX
DATE MEASURED: 9/ 8/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
250.0	820.0	17.020	62.64	24.0	1.3
252.5	828.2	17.090	62.76	28.0	1.5
255.0	836.4	17.140	62.85	20.0	1.1
257.5	844.6	17.200	62.96	24.0	1.3
260.0	852.8	17.260	63.07	24.0	1.3
262.5	861.0	17.320	63.18	24.0	1.3
265.0	869.2	17.380	63.28	24.0	1.3
267.5	877.4	17.430	63.37	20.0	1.1
270.0	885.6	17.490	63.48	24.0	1.3
272.5	893.8	17.550	63.59	24.0	1.3
275.0	902.0	17.590	63.66	16.0	0.9
277.5	910.2	17.660	63.79	28.0	1.5
280.0	918.4	17.710	63.88	20.0	1.1
282.5	926.6	17.740	63.93	12.0	0.7
285.0	934.8	17.810	64.06	28.0	1.5
287.5	943.0	17.850	64.13	16.0	0.9
290.0	951.2	17.930	64.27	32.0	1.8


TEMPERATURE, DEG C
5
10
15
20
25
0
50
100
150
200
250
300
DEPTH, METERS
3N/ 3E-21DBD
7/ 5/79
3N/ 3E-23BDB
7/31/79
3N/ 7E-36BDD
9/ 8/79

LOCATION: THE DALLES AMS, WASH
3N/ 8E-27ACD
HOLE NAME: CALLAHAN
DATE MEASURED: 9/14/79

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	9.520	49.14	0.0	0.0
15.0	49.2	9.400	48.92	-24.0	-1.3
20.0	65.6	9.340	48.81	-12.0	-0.7
25.0	82.0	9.250	48.65	-18.0	-1.0
30.0	98.4	9.150	48.47	-20.0	-1.1
35.0	114.8	9.250	48.65	20.0	1.1
40.0	131.2	9.200	48.56	-10.0	-0.5
45.0	147.6	9.210	48.58	2.0	0.1
50.0	164.0	9.290	48.72	16.0	0.9
55.0	180.4	9.360	48.85	14.0	0.8
60.0	196.8	9.490	49.08	26.0	1.4
65.0	213.2	9.680	49.42	38.0	2.1
70.0	229.6	9.780	49.60	20.0	1.1
71.5	234.5	9.810	49.66	20.0	1.1
72.5	237.8	9.820	49.68	10.0	0.5
75.0	246.0	9.830	49.69	4.0	0.2
77.5	254.2	9.900	49.82	28.0	1.5
80.0	262.4	10.060	50.11	64.0	3.5
82.5	270.6	10.190	50.34	52.0	2.9
84.0	275.5	10.210	50.38	13.3	0.7

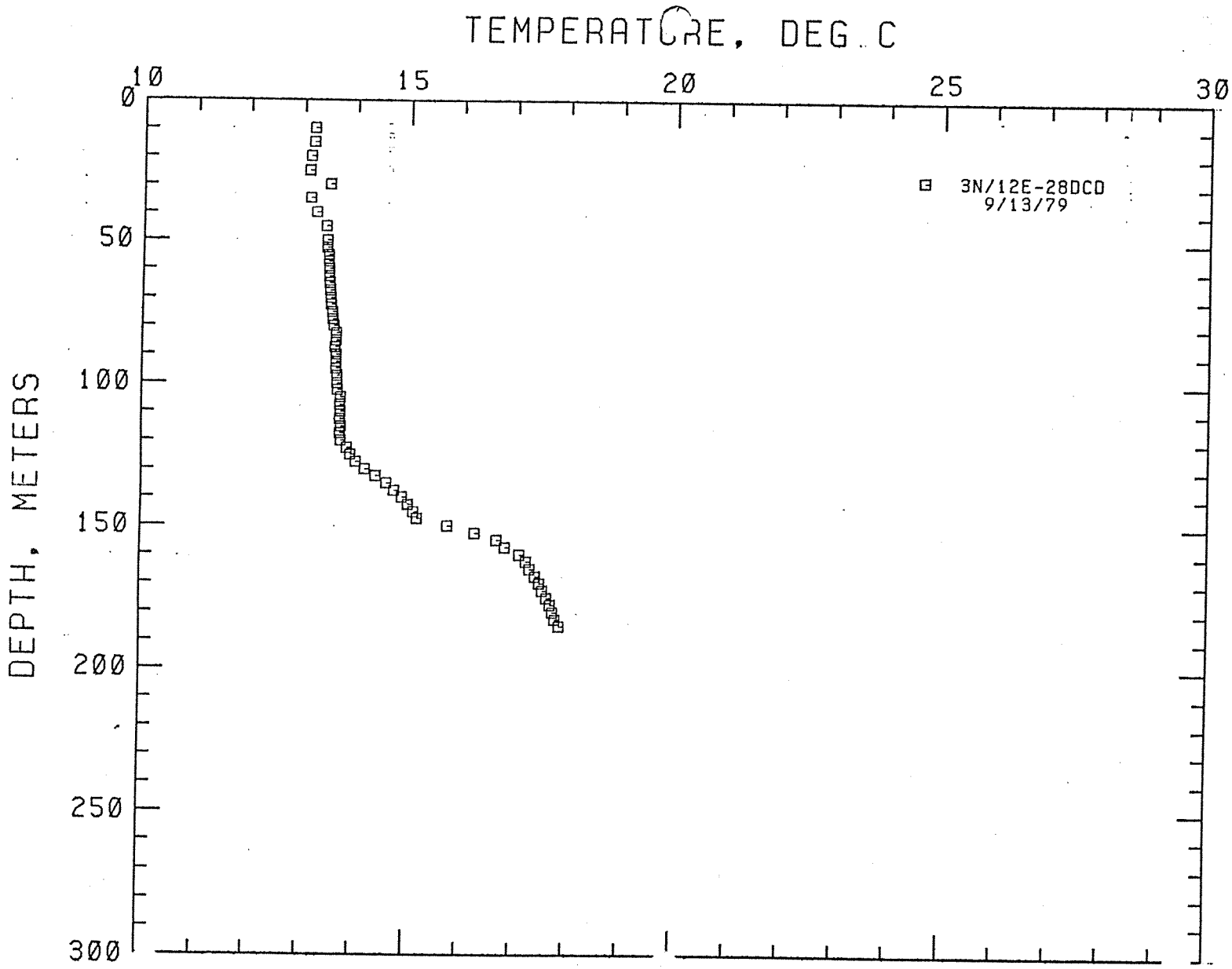

TEMPERATURE, DEG.C
5
10
15
0
50
100
150
DEPTH, METERS
3N/ 3E-21DAB
7/ 9/79
3N/ 8E-27ACD
9/14/79

LOCATION: THE DALLES AMS, WASH
3N/12E-28DCD
HOLE NAME: BRADLEY
DATE MEASURED: 9/13/79

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	13.200	55.76	0.0	0.0
15.0	49.2	13.190	55.74	-2.0	-0.1
20.0	65.6	13.130	55.63	-12.0	-0.7
25.0	82.0	13.110	55.60	-4.0	-0.2
30.0	98.4	13.500	56.30	78.0	4.3
35.0	114.8	13.130	55.63	-74.0	-4.1
40.0	131.2	13.250	55.85	24.0	1.3
45.0	147.6	13.430	56.17	36.0	2.0
50.0	164.0	13.450	56.21	4.0	0.2
52.5	172.2	13.450	56.21	0.0	0.0
55.0	180.4	13.480	56.26	12.0	0.7
57.5	188.6	13.480	56.26	0.0	0.0
60.0	196.8	13.500	56.30	8.0	0.4
62.5	205.0	13.500	56.30	0.0	0.0
65.0	213.2	13.510	56.32	4.0	0.2
67.5	221.4	13.520	56.34	4.0	0.2
70.0	229.6	13.530	56.35	4.0	0.2
72.5	237.8	13.540	56.37	4.0	0.2
75.0	246.0	13.560	56.41	8.0	0.4
77.5	254.2	13.580	56.44	8.0	0.4
80.0	262.4	13.600	56.48	8.0	0.4
82.5	270.6	13.640	56.55	16.0	0.9
85.0	278.8	13.640	56.55	0.0	0.0
87.5	287.0	13.620	56.52	-8.0	-0.4
90.0	295.2	13.650	56.57	12.0	0.7
92.5	303.4	13.650	56.57	0.0	0.0
95.0	311.6	13.650	56.57	0.0	0.0
97.5	319.8	13.670	56.61	8.0	0.4
100.0	328.0	13.670	56.61	0.0	0.0
102.5	336.2	13.680	56.62	4.0	0.2
105.0	344.4	13.740	56.73	24.0	1.3
107.5	352.6	13.730	56.71	-4.0	-0.2
110.0	360.8	13.740	56.73	4.0	0.2
112.5	369.0	13.720	56.70	-8.0	-0.4
115.0	377.2	13.750	56.75	12.0	0.7
117.5	385.4	13.730	56.71	-8.0	-0.4
120.0	393.6	13.750	56.75	8.0	0.4
122.5	401.8	13.860	56.95	44.0	2.4
125.0	410.0	13.930	57.07	28.0	1.5
127.5	418.2	14.030	57.25	40.0	2.2
130.0	426.4	14.210	57.58	72.0	4.0
132.5	434.6	14.410	57.94	80.0	4.4

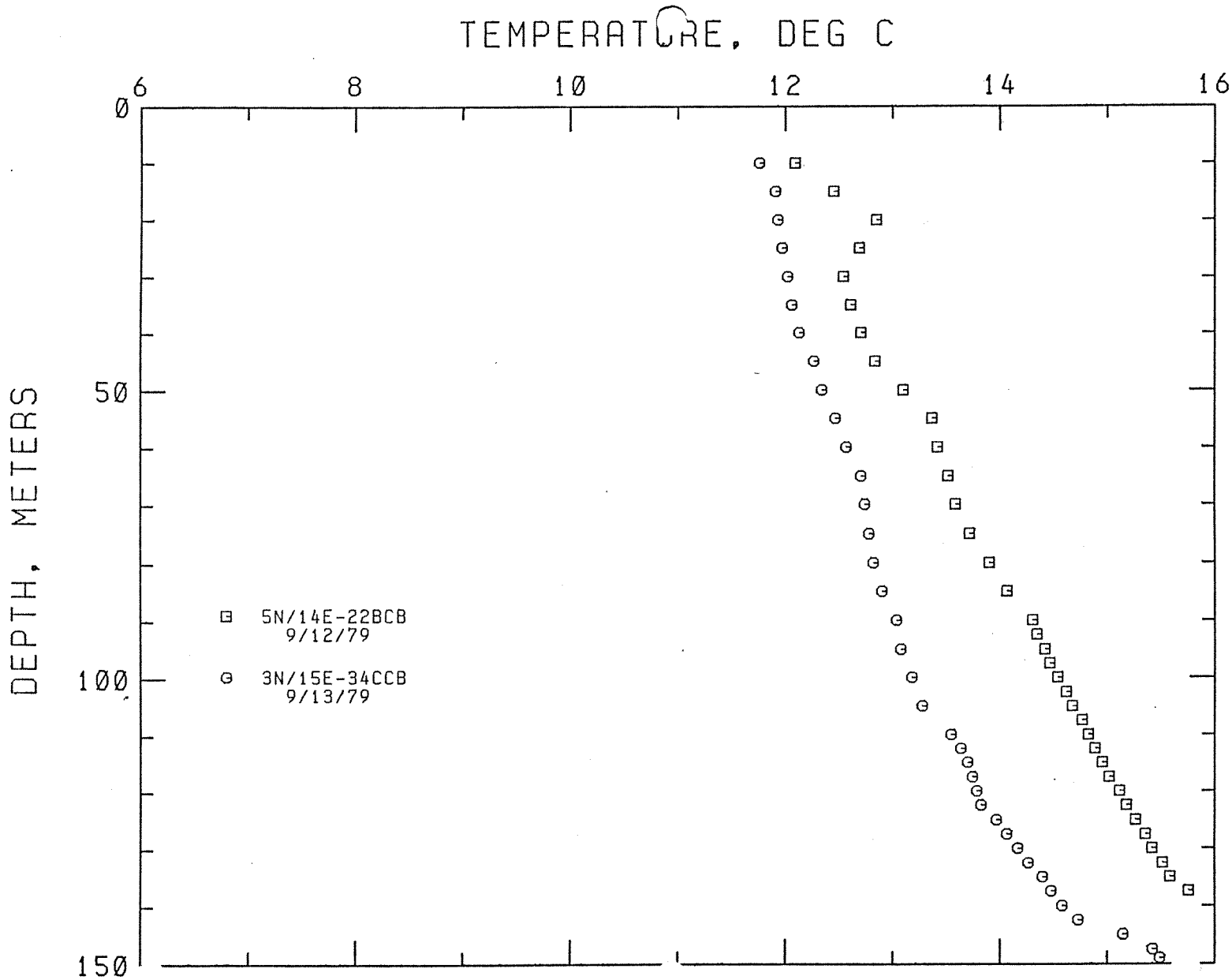
LOCATION: THE DALLES AMS, WASH
3N/12E-28DCD
HOLE NAME: BRADLEY
DATE MEASURED: 9/13/79

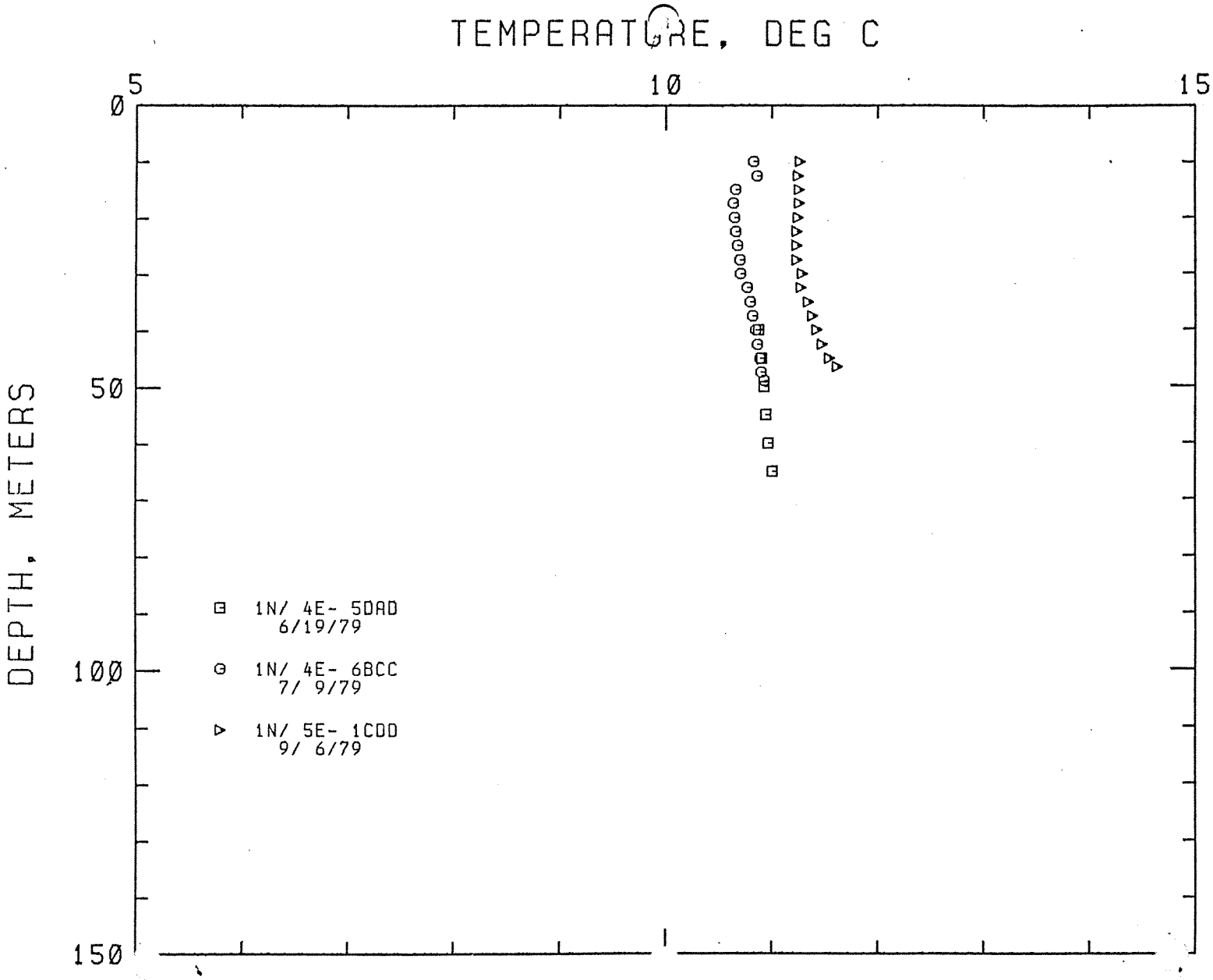
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
135.0	442.8	14.620	58.32	84.0	4.6
137.5	451.0	14.760	58.57	56.0	3.1
140.0	459.2	14.910	58.84	60.0	3.3
142.5	467.4	15.030	59.05	48.0	2.6
145.0	475.6	15.130	59.23	40.0	2.2
147.5	483.8	15.200	59.36	28.0	1.5
150.0	492.0	15.770	60.39	228.0	12.5
152.5	500.2	16.280	61.30	204.0	11.2
155.0	508.4	16.700	62.06	168.0	9.2
157.5	516.6	16.860	62.35	64.0	3.5
160.0	524.8	17.130	62.83	108.0	5.9
162.5	533.0	17.260	63.07	52.0	2.9
165.0	541.2	17.320	63.18	24.0	1.3
167.5	549.4	17.430	63.37	44.0	2.4
170.0	557.6	17.510	63.52	32.0	1.8
172.5	565.8	17.570	63.63	24.0	1.3
175.0	574.0	17.640	63.75	28.0	1.5
177.5	582.2	17.710	63.88	28.0	1.5
180.0	590.4	17.760	63.97	20.0	1.1
182.5	598.6	17.810	64.06	20.0	1.1
185.0	606.8	17.890	64.20	32.0	1.8


TEMPERATURE, DEG.C
10
15
20
25
30
0
50
100
150
200
250
300
DEPTH, METERS
3N/12E-28DCD
9/13/79

LOCATION: THE DALLES AMS, WASH
3N/15E-34CCB
HOLE NAME: JAEKEL
DATE MEASURED: 9/13/79

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	11.760	53.17	0.0	0.0
15.0	49.2	11.910	53.44	30.0	1.6
20.0	65.6	11.930	53.47	4.0	0.2
25.0	82.0	11.970	53.55	8.0	0.4
30.0	98.4	12.020	53.64	10.0	0.5
35.0	114.8	12.060	53.71	8.0	0.4
40.0	131.2	12.130	53.83	14.0	0.8
45.0	147.6	12.270	54.09	28.0	1.5
50.0	164.0	12.340	54.21	14.0	0.8
55.0	180.4	12.470	54.45	26.0	1.4
60.0	196.8	12.570	54.63	20.0	1.1
65.0	213.2	12.710	54.88	28.0	1.5
70.0	229.6	12.740	54.93	6.0	0.3
75.0	246.0	12.780	55.00	8.0	0.4
80.0	262.4	12.820	55.08	8.0	0.4
85.0	278.8	12.900	55.22	16.0	0.9
90.0	295.2	13.040	55.47	28.0	1.5
95.0	311.6	13.080	55.54	8.0	0.4
100.0	328.0	13.180	55.72	20.0	1.1
105.0	344.4	13.280	55.90	20.0	1.1
110.0	360.8	13.550	56.39	54.0	3.0
112.5	369.0	13.640	56.55	36.0	2.0
115.0	377.2	13.700	56.66	24.0	1.3
117.5	385.4	13.750	56.75	20.0	1.1
120.0	393.6	13.790	56.82	16.0	0.9
122.5	401.8	13.830	56.89	16.0	0.9
125.0	410.0	13.970	57.15	56.0	3.1
127.5	418.2	14.070	57.33	40.0	2.2
130.0	426.4	14.170	57.51	40.0	2.2
132.5	434.6	14.270	57.69	40.0	2.2
135.0	442.8	14.400	57.92	52.0	2.9
137.5	451.0	14.480	58.06	32.0	1.8
140.0	459.2	14.580	58.24	40.0	2.2
142.5	467.4	14.730	58.51	60.0	3.3
145.0	475.6	15.150	59.27	168.0	9.2
147.5	483.8	15.420	59.76	108.0	5.9
149.0	488.7	15.490	59.88	46.7	2.6


TEMPERATURE, DEG C
6
8
10
12
14
16
0
50
100
150
DEPTH, METERS
5N/14E-22BCB
9/12/79
3N/15E-34CCB
9/13/79

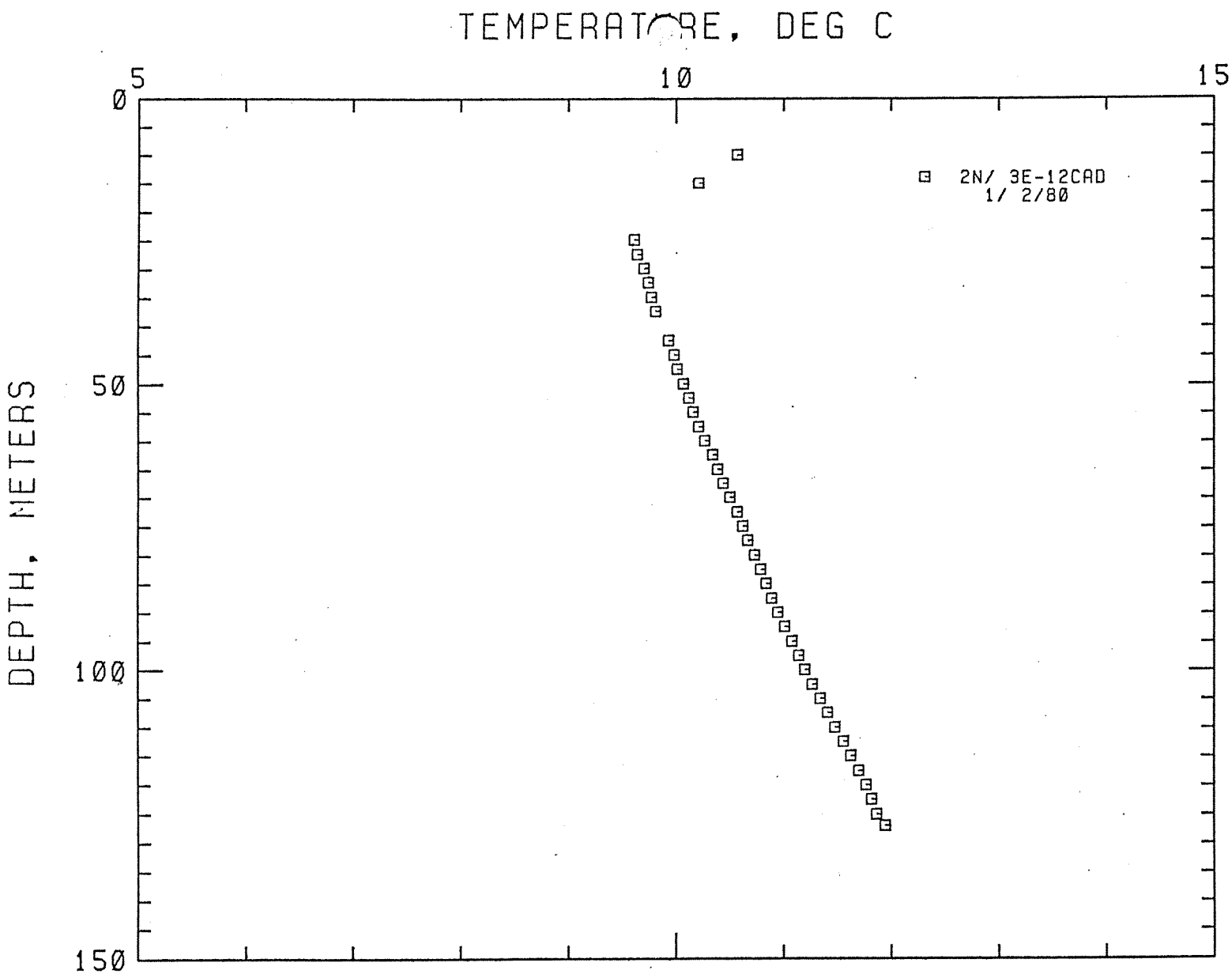

TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
1N/ 4E- 5DAD
6/19/79
1N/ 4E- 6BCC
7/ 9/79
1N/ 5E- 1CDD
9/ 6/79

LOCATION: VANCOUVER AMS, WASH.
2N/ 3E-12CAD
HOLE NAME: VALDESE
DATE MEASURED: 1/ 2/80

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	10.570	51.03	0.0	0.0
15.0	49.2	10.210	50.38	-72.0	-4.0
25.0	82.0	9.610	49.30	-60.0	-3.3
27.5	90.2	9.640	49.35	12.0	0.7
30.0	98.4	9.700	49.46	24.0	1.3
32.5	106.6	9.740	49.53	16.0	0.9
35.0	114.8	9.770	49.59	12.0	0.7
37.5	123.0	9.810	49.66	16.0	0.9
42.5	139.4	9.930	49.87	24.0	1.3
45.0	147.6	9.980	49.96	20.0	1.1
47.5	155.8	10.010	50.02	12.0	0.7
50.0	164.0	10.070	50.13	24.0	1.3
52.5	172.2	10.120	50.22	20.0	1.1
55.0	180.4	10.160	50.29	16.0	0.9
57.5	188.6	10.210	50.38	20.0	1.1
60.0	196.8	10.270	50.49	24.0	1.3
62.5	205.0	10.340	50.61	28.0	1.5
65.0	213.2	10.390	50.70	20.0	1.1
67.5	221.4	10.440	50.79	20.0	1.1
70.0	229.6	10.500	50.90	24.0	1.3
72.5	237.8	10.570	51.03	28.0	1.5
75.0	246.0	10.620	51.12	20.0	1.1
77.5	254.2	10.670	51.21	20.0	1.1
80.0	262.4	10.730	51.31	24.0	1.3
82.5	270.6	10.790	51.42	24.0	1.3
85.0	278.8	10.840	51.51	20.0	1.1
87.5	287.0	10.890	51.60	20.0	1.1
90.0	295.2	10.950	51.71	24.0	1.3
92.5	303.4	11.010	51.82	24.0	1.3
95.0	311.6	11.080	51.94	28.0	1.5
97.5	319.8	11.140	52.05	24.0	1.3
100.0	328.0	11.200	52.16	24.0	1.3
102.5	336.2	11.270	52.29	28.0	1.5
105.0	344.4	11.340	52.41	28.0	1.5
107.5	352.6	11.410	52.54	28.0	1.5
110.0	360.8	11.480	52.66	28.0	1.5
112.5	369.0	11.560	52.81	32.0	1.8
115.0	377.2	11.630	52.93	28.0	1.5
117.5	385.4	11.700	53.06	28.0	1.5
120.0	393.6	11.770	53.19	28.0	1.5
122.5	401.8	11.820	53.28	20.0	1.1

LOCATION: VANCOUVER AMS, WASH.
2N/ 3E-12CAD
HOLE NAME: VALDESE
DATE MEASURED: 1/ 2/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
125.0	410.0	11.870	53.37	20.0	1.1
127.0	416.6	11.950	53.51	40.0	2.2


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
2N/ 3E-12CAD
1/ 2/80

LOCATION: VANCOUVER AMS, WASH
2N/ 3E-21DC
HOLE NAME: RDH-CAM2
DATE MEASURED: 12/12/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	9.900	49.82	0.0	0.0
10.0	32.8	9.660	49.39	-48.0	-2.6
15.0	49.2	9.960	49.93	60.0	3.3
20.0	65.6	10.320	50.58	72.0	4.0
25.0	82.0	10.450	50.81	26.0	1.4
30.0	98.4	11.430	52.57	196.0	10.8
35.0	114.8	10.590	51.06	-168.0	-9.2
40.0	131.2	11.080	51.94	98.0	5.4
45.0	147.6	11.200	52.16	24.0	1.3
50.0	164.0	11.640	52.95	88.0	4.8
55.0	180.4	12.070	53.73	86.0	4.7
60.0	196.8	12.160	53.89	18.0	1.0
65.0	213.2	12.770	54.99	122.0	6.7
70.0	229.6	13.110	55.60	68.0	3.7
72.0	236.2	12.680	54.82	-215.0	-11.8

LOCATION: VANCOUVER AMS, WASH
2N/ 3E-21DC
HOLE NAME: RDH-CAM2
DATE MEASURED: 12/19/79

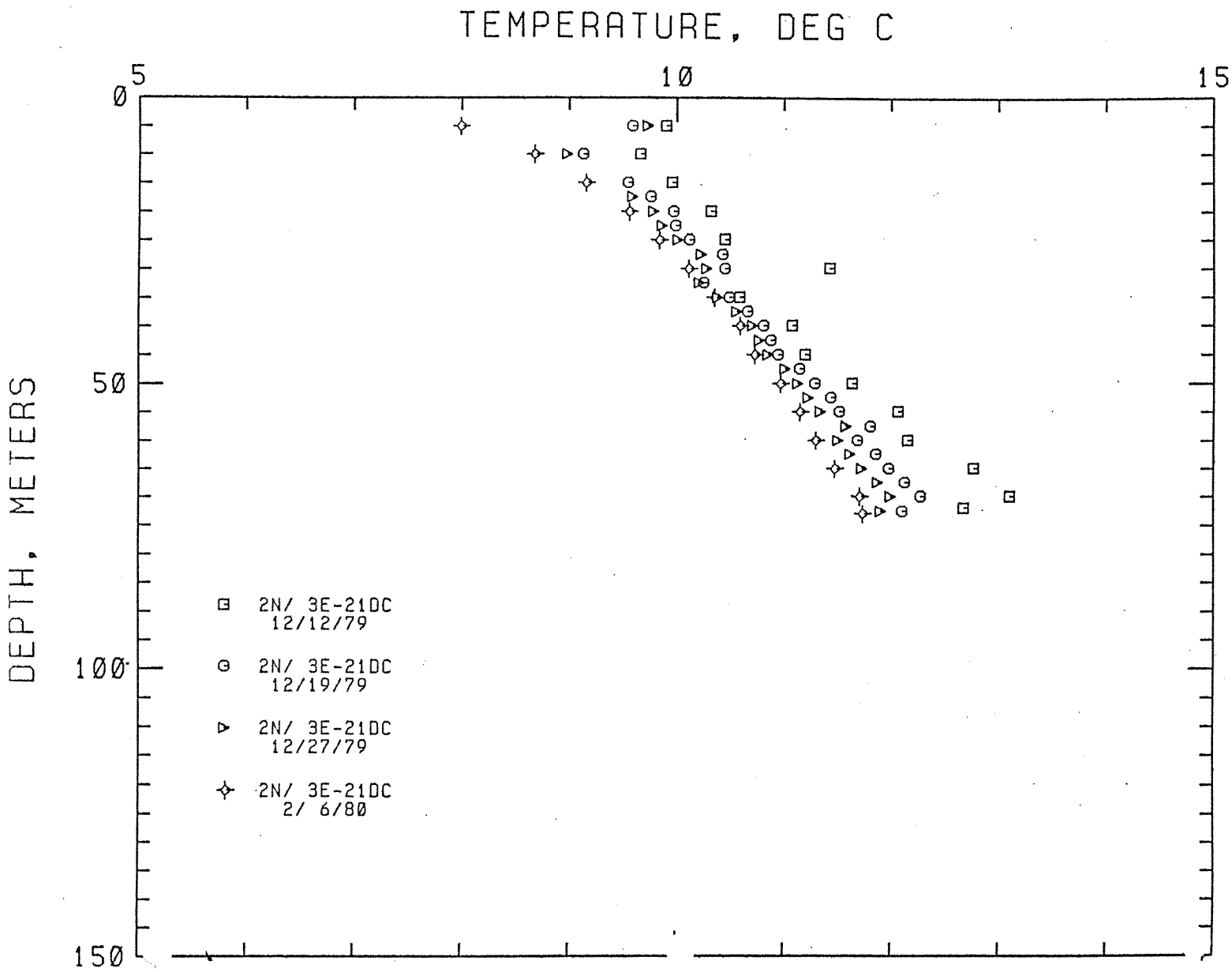
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	9.590	49.26	0.0	0.0
10.0	32.8	9.130	48.43	-92.0	-5.0
15.0	49.2	9.550	49.19	84.0	4.6
17.5	57.4	9.760	49.57	84.0	4.6
20.0	65.6	9.970	49.95	84.0	4.6
22.5	73.8	9.990	49.98	8.0	0.4
25.0	82.0	10.120	50.22	52.0	2.9
27.5	90.2	10.430	50.77	124.0	6.8
30.0	98.4	10.450	50.81	8.0	0.4
32.5	106.6	10.250	50.45	-80.0	-4.4
35.0	114.8	10.490	50.88	96.0	5.3
37.5	123.0	10.660	51.19	68.0	3.7
40.0	131.2	10.810	51.46	60.0	3.3
42.5	139.4	10.880	51.58	28.0	1.5
45.0	147.6	10.950	51.71	28.0	1.5
47.5	155.8	11.150	52.07	80.0	4.4
50.0	164.0	11.290	52.32	56.0	3.1
52.5	172.2	11.440	52.59	60.0	3.3
55.0	180.4	11.520	52.74	32.0	1.8
57.5	188.6	11.810	53.26	116.0	6.4
60.0	196.8	11.690	53.04	-48.0	-2.6
62.5	205.0	11.860	53.35	68.0	3.7
65.0	213.2	11.980	53.56	48.0	2.6
67.5	221.4	12.130	53.83	60.0	3.3
70.0	229.6	12.280	54.10	60.0	3.3
72.5	237.8	12.110	53.80	-68.0	-3.7

LOCATION: VANCOUVER AMS, WASH
2N/ 3E-21DC
HOLE NAME: RDH-CAM2
DATE MEASURED: 12/27/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	9.730	49.51	0.0	0.0
10.0	32.8	8.980	48.16	-150.0	-8.2
17.5	57.4	9.590	49.26	81.3	4.5
20.0	65.6	9.780	49.60	76.0	4.2
22.5	73.8	9.860	49.75	32.0	1.8
25.0	82.0	10.010	50.02	60.0	3.3
27.5	90.2	10.230	50.41	88.0	4.8
30.0	98.4	10.280	50.50	20.0	1.1
32.5	106.6	10.210	50.38	-28.0	-1.5
35.0	114.8	10.380	50.68	68.0	3.7
37.5	123.0	10.560	51.01	72.0	4.0
40.0	131.2	10.710	51.28	60.0	3.3
42.5	139.4	10.770	51.39	24.0	1.3
45.0	147.6	10.850	51.53	32.0	1.8
47.5	155.8	11.010	51.82	64.0	3.5
50.0	164.0	11.130	52.03	48.0	2.6
52.5	172.2	11.230	52.21	40.0	2.2
55.0	180.4	11.340	52.41	44.0	2.4
57.5	188.6	11.580	52.84	96.0	5.3
60.0	196.8	11.510	52.72	-28.0	-1.5
62.5	205.0	11.620	52.92	44.0	2.4
65.0	213.2	11.730	53.11	44.0	2.4
67.5	221.4	11.880	53.38	60.0	3.3
70.0	229.6	12.000	53.60	48.0	2.6
72.5	237.8	11.910	53.44	-36.0	-2.0

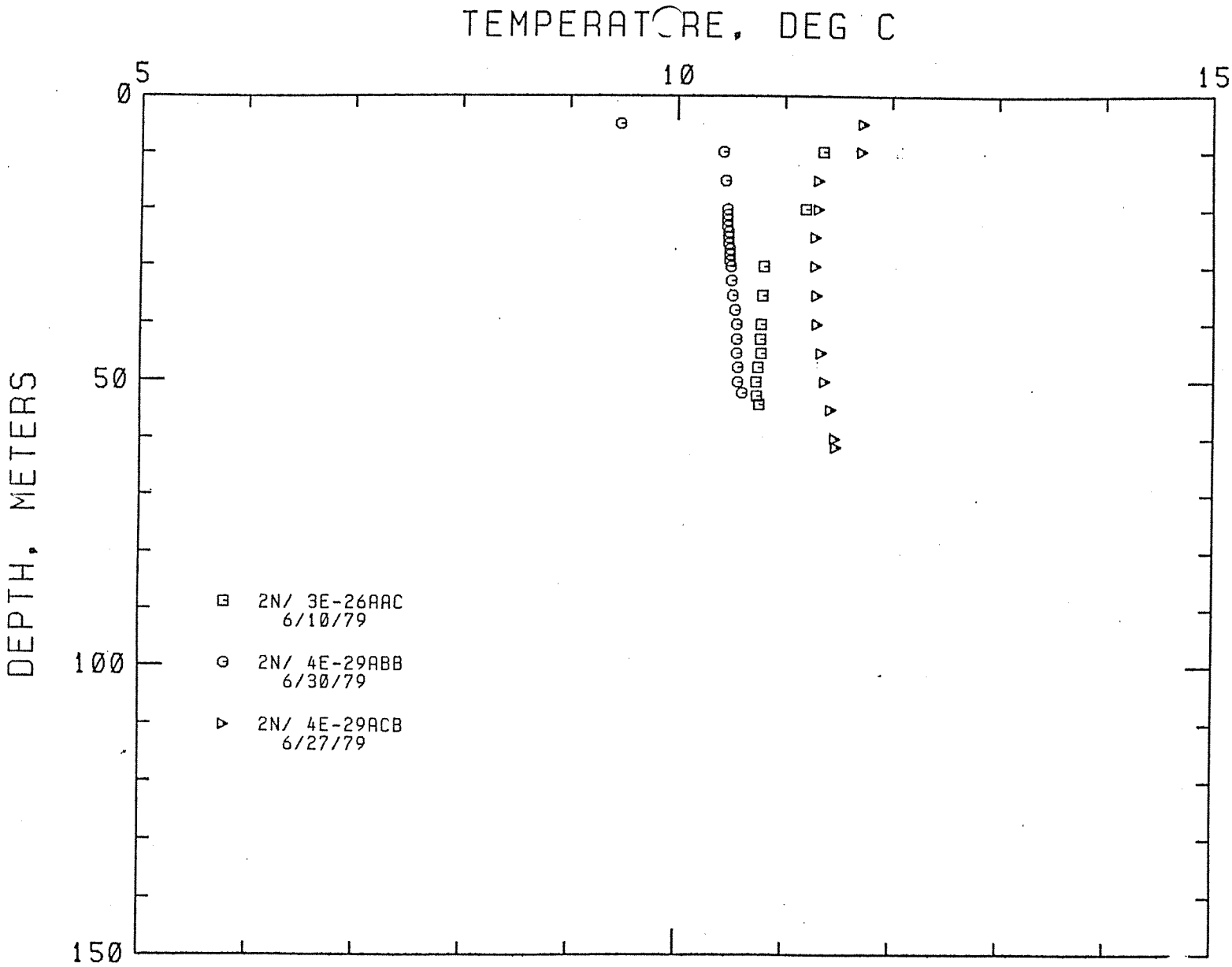
LOCATION: VANCOUVER AMS, WASH
2N/ 3E-21DC
HOLE NAME: RDH-CAM2
DATE MEASURED: 2/ 6/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	7.980	46.36	0.0	0.0
10.0	32.8	8.670	47.61	138.0	7.6
15.0	49.2	9.150	48.47	96.0	5.3
20.0	65.6	9.550	49.19	80.0	4.4
25.0	82.0	9.830	49.69	56.0	3.1
30.0	98.4	10.100	50.18	54.0	3.0
35.0	114.8	10.340	50.61	48.0	2.6
40.0	131.2	10.580	51.04	48.0	2.6
45.0	147.6	10.720	51.30	28.0	1.5
50.0	164.0	10.960	51.73	48.0	2.6
55.0	180.4	11.140	52.05	36.0	2.0
60.0	196.8	11.290	52.32	30.0	1.6
65.0	213.2	11.470	52.65	36.0	2.0
70.0	229.6	11.700	53.06	46.0	2.5
73.0	239.4	11.730	53.11	10.0	0.5


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
2N/ 3E-21DC
12/12/79
2N/ 3E-21DC
12/19/79
2N/ 3E-21DC
12/27/79
2N/ 3E-21DC
2/ 6/80

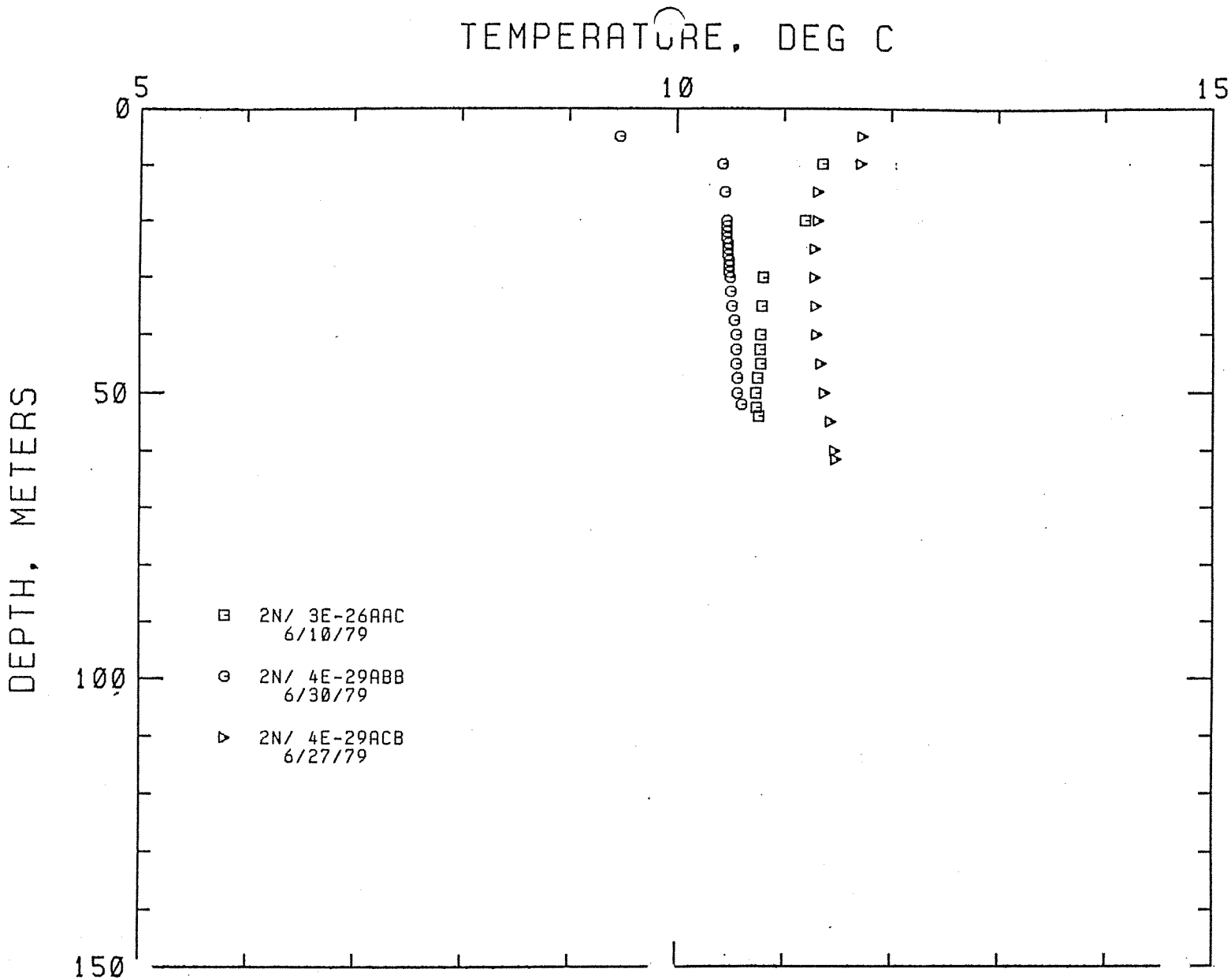
LOCATION: VANCOUVER AMS, WASH
2N/ 3E-26AAC
HOLE NAME: FRENCH
DATE MEASURED: 6/10/79

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	11.360	52.45	0.0	0.0
20.0	65.6	11.200	52.16	-16.0	-0.9
30.0	98.4	10.810	51.46	-39.0	-2.1
35.0	114.8	10.800	51.44	-2.0	-0.1
40.0	131.2	10.790	51.42	-2.0	-0.1
42.5	139.4	10.780	51.40	-4.0	-0.2
45.0	147.6	10.790	51.42	4.0	0.2
47.5	155.8	10.760	51.37	-12.0	-0.7
50.0	164.0	10.740	51.33	-8.0	-0.4
52.5	172.2	10.750	51.35	4.0	0.2
54.0	177.1	10.770	51.39	13.3	0.7


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
2N/ 3E-26AAC
6/10/79
2N/ 4E-29ABB
6/30/79
2N/ 4E-29ACB
6/27/79

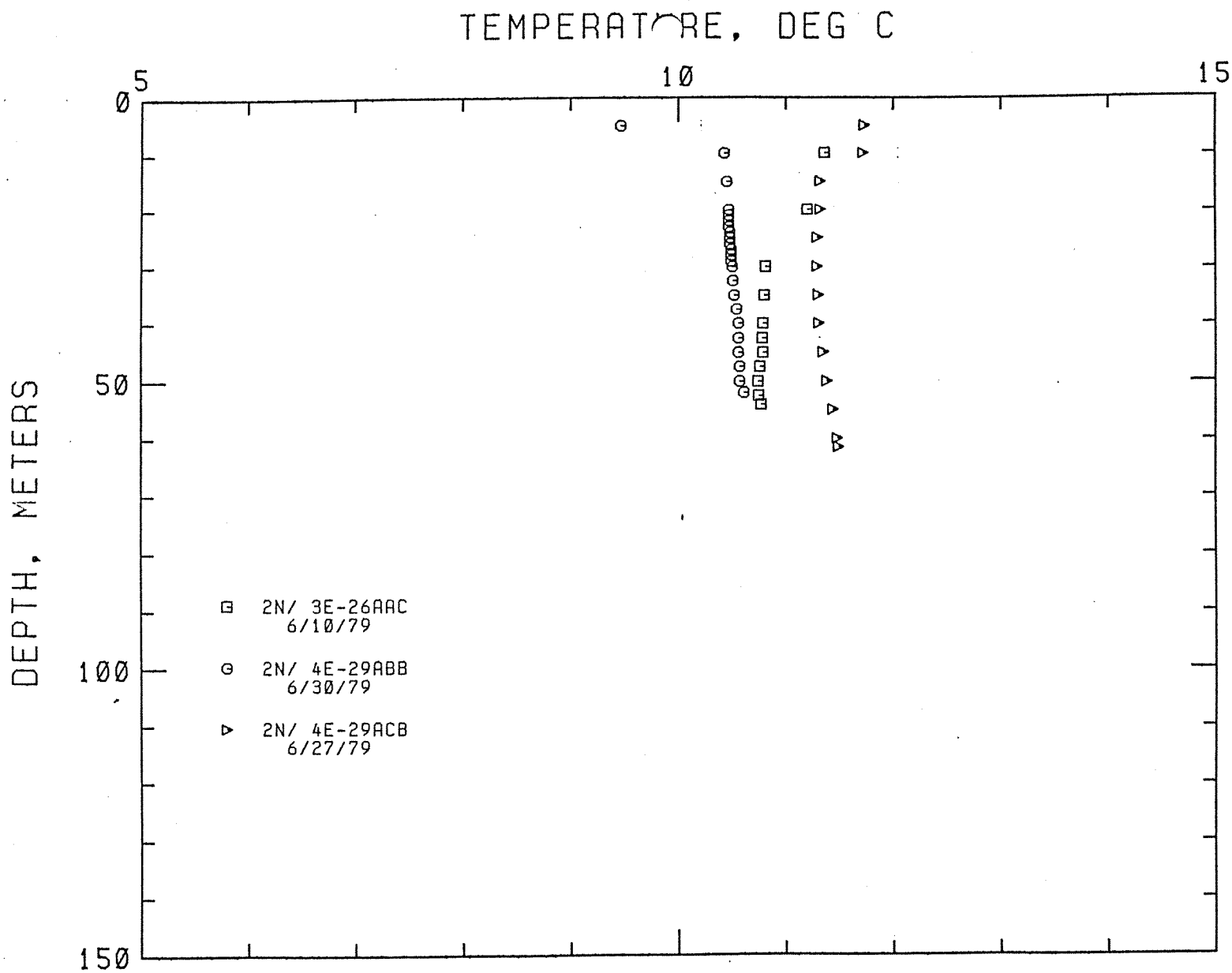
LOCATION: VANCOUVER AMS, WASH
2N/ 4E-29ABB
HOLE NAME: WITTERS
DATE MEASURED: 6/30/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	9.470	49.05	0.0	0.0
10.0	32.8	10.430	50.77	192.0	10.5
15.0	49.2	10.450	50.81	4.0	0.2
20.0	65.6	10.470	50.85	4.0	0.2
21.0	68.9	10.470	50.85	0.0	0.0
22.0	72.2	10.470	50.85	0.0	0.0
23.0	75.4	10.470	50.85	0.0	0.0
24.0	78.7	10.480	50.86	10.0	0.5
25.0	82.0	10.480	50.86	0.0	0.0
26.0	85.3	10.480	50.86	0.0	0.0
27.0	88.6	10.490	50.88	10.0	0.5
28.0	91.8	10.490	50.88	0.0	0.0
29.0	95.1	10.490	50.88	0.0	0.0
30.0	98.4	10.500	50.90	10.0	0.5
32.5	106.6	10.510	50.92	4.0	0.2
35.0	114.8	10.520	50.94	4.0	0.2
37.5	123.0	10.540	50.97	8.0	0.4
40.0	131.2	10.560	51.01	8.0	0.4
42.5	139.4	10.560	51.01	0.0	0.0
45.0	147.6	10.560	51.01	0.0	0.0
47.5	155.8	10.570	51.03	4.0	0.2
50.0	164.0	10.570	51.03	0.0	0.0
52.0	170.6	10.610	51.10	20.0	1.1


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
2N/ 3E-26AAC
6/10/79
2N/ 4E-29ABB
6/30/79
2N/ 4E-29ACB
6/27/79

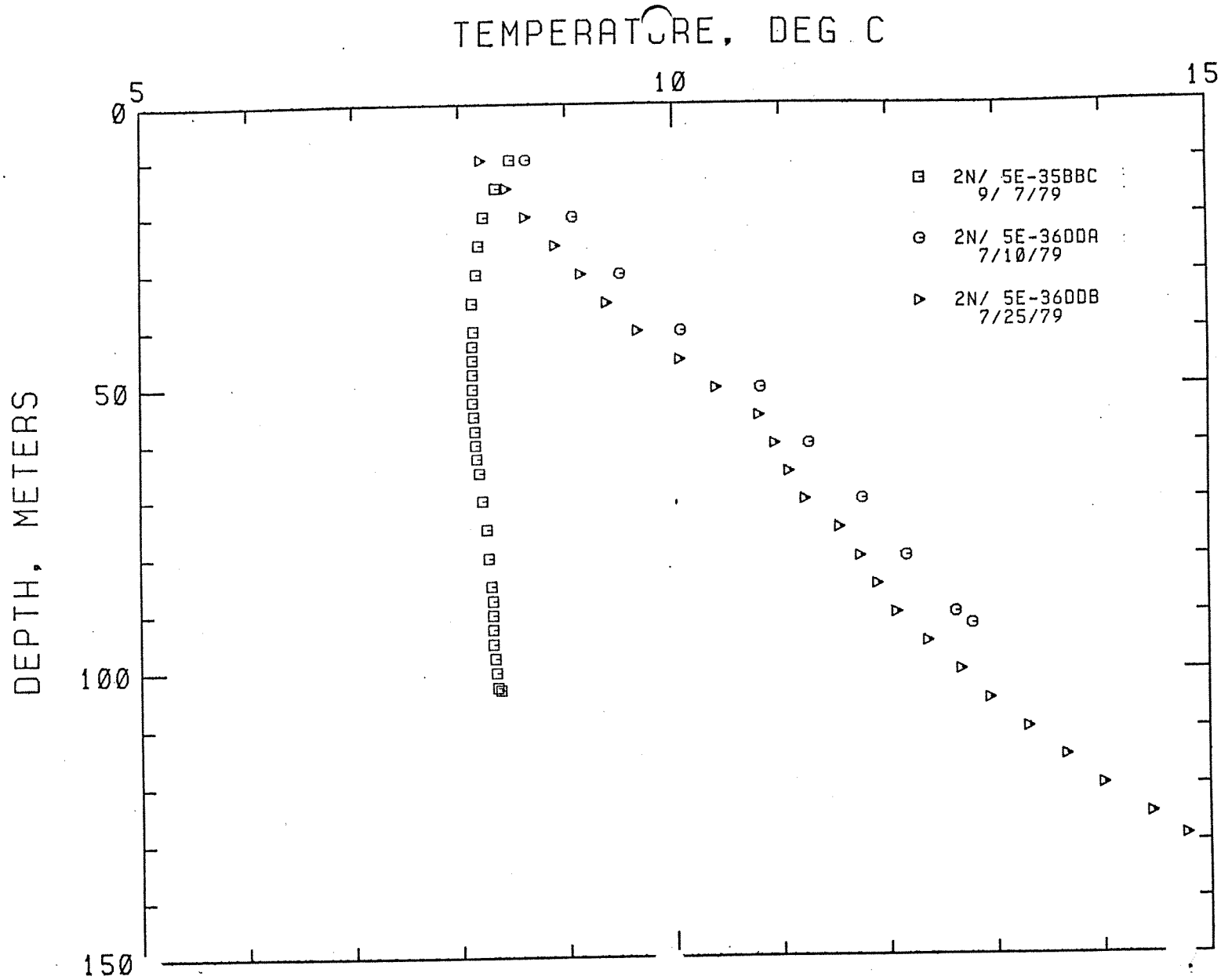
LOCATION: VANCOUVER AMS, WASH
2N/ 4E-29ACB
HOLE NAME: WILLIAMS
DATE MEASURED: 6/27/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	11.730	53.11	0.0	0.0
10.0	32.8	11.720	53.10	-2.0	-0.1
15.0	49.2	11.320	52.38	-80.0	-4.4
20.0	65.6	11.320	52.38	0.0	0.0
25.0	82.0	11.290	52.32	-6.0	-0.3
30.0	98.4	11.290	52.32	0.0	0.0
35.0	114.8	11.300	52.34	2.0	0.1
40.0	131.2	11.310	52.36	2.0	0.1
45.0	147.6	11.350	52.43	8.0	0.4
50.0	164.0	11.380	52.48	6.0	0.3
55.0	180.4	11.440	52.59	12.0	0.7
60.0	196.8	11.480	52.66	8.0	0.4
61.5	201.7	11.490	52.68	6.7	0.4


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
2N/ 3E-26AAC
6/10/79
2N/ 4E-29ABB
6/30/79
2N/ 4E-29ACB
6/27/79

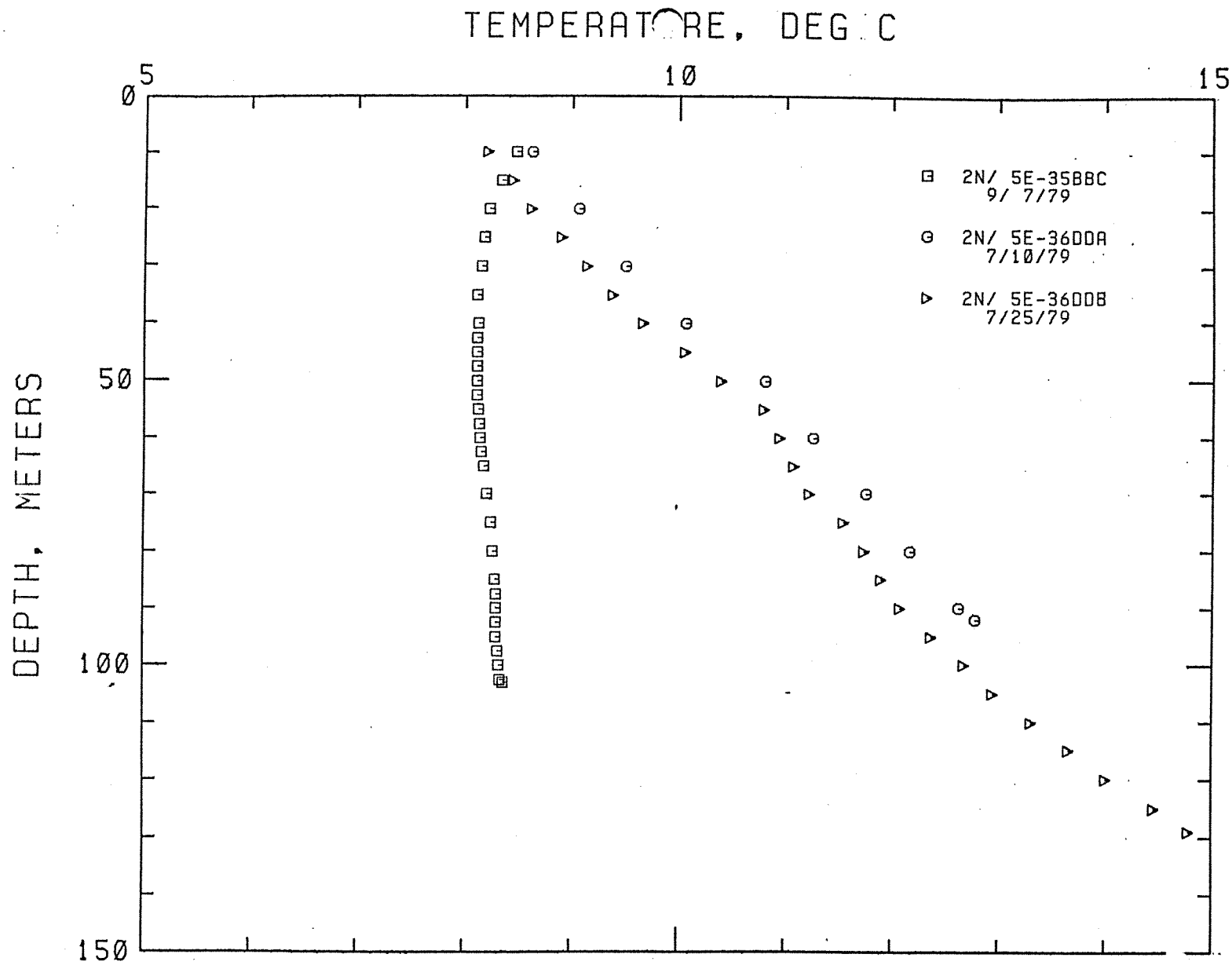
LOCATION: VANCOUVER AMS, WASH
2N/ 5E-35BBC
HOLE NAME: RICHARDS
DATE MEASURED: 9/ 7/79

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	8.480	47.26	0.0	0.0
15.0	49.2	8.340	47.01	-28.0	-1.5
20.0	65.6	8.230	46.81	-22.0	-1.2
25.0	82.0	8.180	46.72	-10.0	-0.5
30.0	98.4	8.160	46.69	-4.0	-0.2
35.0	114.8	8.120	46.62	-8.0	-0.4
40.0	131.2	8.130	46.63	2.0	0.1
42.5	139.4	8.120	46.62	-4.0	-0.2
45.0	147.6	8.120	46.62	0.0	0.0
47.5	155.8	8.120	46.62	0.0	0.0
50.0	164.0	8.120	46.62	0.0	0.0
52.5	172.2	8.120	46.62	0.0	0.0
55.0	180.4	8.130	46.63	4.0	0.2
57.5	188.6	8.140	46.65	4.0	0.2
60.0	196.8	8.150	46.67	4.0	0.2
62.5	205.0	8.160	46.69	4.0	0.2
65.0	213.2	8.180	46.72	8.0	0.4
70.0	229.6	8.210	46.78	6.0	0.3
75.0	246.0	8.250	46.85	8.0	0.4
80.0	262.4	8.270	46.89	4.0	0.2
85.0	278.8	8.290	46.92	4.0	0.2
87.5	287.0	8.300	46.94	4.0	0.2
90.0	295.2	8.300	46.94	0.0	0.0
92.5	303.4	8.300	46.94	0.0	0.0
95.0	311.6	8.300	46.94	0.0	0.0
97.5	319.8	8.320	46.98	8.0	0.4
100.0	328.0	8.330	46.99	4.0	0.2
102.5	336.2	8.340	47.01	4.0	0.2
103.0	337.8	8.370	47.07	60.0	3.3


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
2N/ 5E-35BBC
9/ 7/79
2N/ 5E-36DDA
7/10/79
2N/ 5E-36DDB
7/25/79

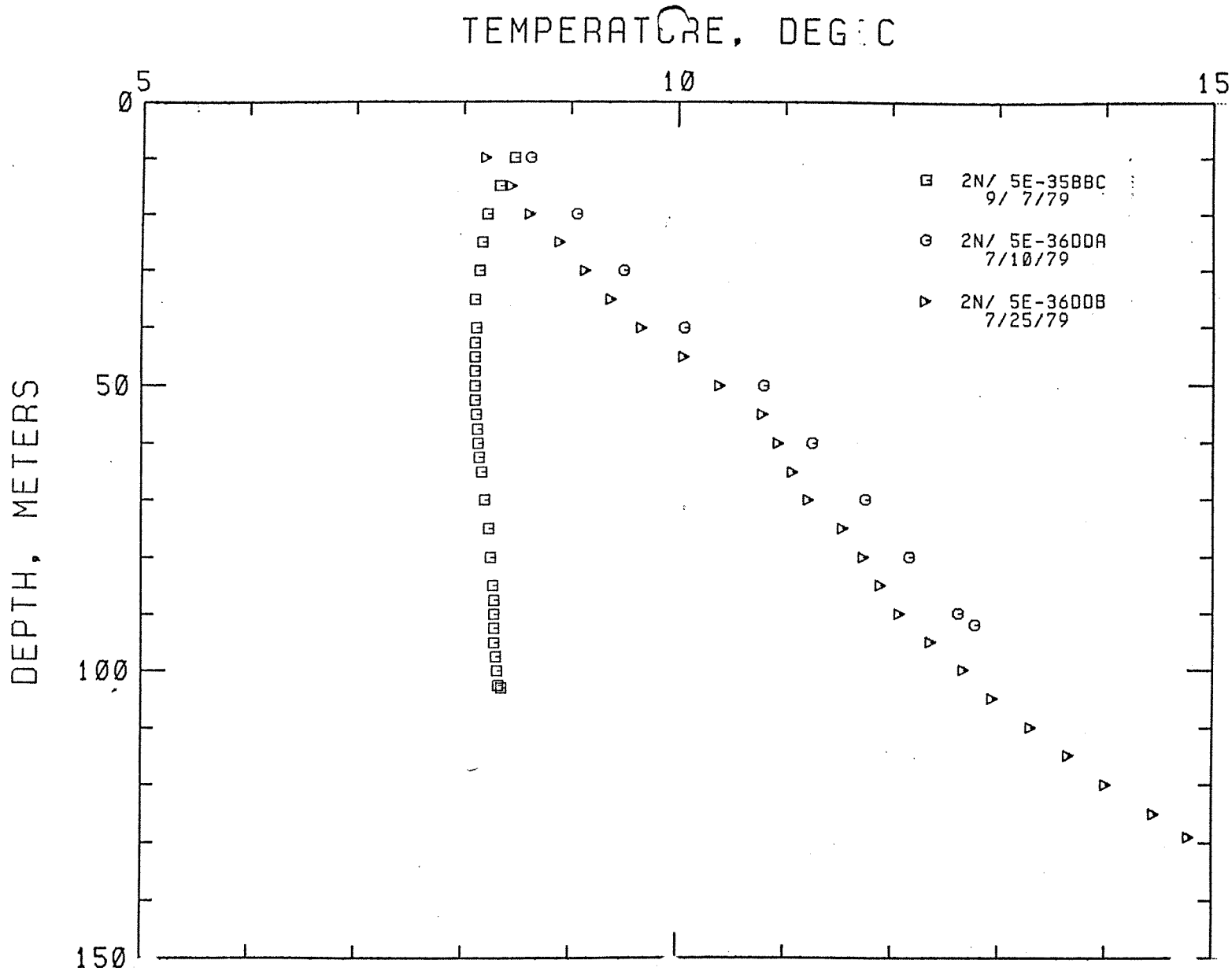
LOCATION: VANCOUVER AMS, WASH
2N/ 5E-36DDA
HOLE NAME: GROSS
DATE MEASURED: 7/10/79

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	8.630	47.53	0.0	0.0
20.0	65.6	9.060	48.31	43.0	2.4
30.0	98.4	9.500	49.10	44.0	2.4
40.0	131.2	10.070	50.13	57.0	3.1
50.0	164.0	10.810	51.46	74.0	4.1
60.0	196.8	11.260	52.27	45.0	2.5
70.0	229.6	11.760	53.17	50.0	2.7
80.0	262.4	12.170	53.91	41.0	2.3
90.0	295.2	12.630	54.73	46.0	2.5
92.0	301.8	12.780	55.00	75.0	4.1


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
2N/ 5E-35BBC
9/ 7/79
2N/ 5E-36DDA
7/10/79
2N/ 5E-36DDB
7/25/79

LOCATION: VANCOUVER AMS, WASH
2N/ 5E-36DDB
HOLE NAME: PATTEN
DATE MEASURED: 7/25/79

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	8.210	46.78	0.0	0.0
15.0	49.2	8.450	47.21	48.0	2.6
20.0	65.6	8.620	47.52	34.0	1.9
25.0	82.0	8.900	48.02	56.0	3.1
30.0	98.4	9.140	48.45	48.0	2.6
35.0	114.8	9.380	48.88	48.0	2.6
40.0	131.2	9.670	49.41	58.0	3.2
45.0	147.6	10.060	50.11	78.0	4.3
50.0	164.0	10.400	50.72	68.0	3.7
55.0	180.4	10.800	51.44	80.0	4.4
60.0	196.8	10.950	51.71	30.0	1.6
65.0	213.2	11.080	51.94	26.0	1.4
70.0	229.6	11.230	52.21	30.0	1.6
75.0	246.0	11.550	52.79	64.0	3.5
80.0	262.4	11.740	53.13	38.0	2.1
85.0	278.8	11.900	53.42	32.0	1.8
90.0	295.2	12.080	53.74	36.0	2.0
95.0	311.6	12.370	54.27	58.0	3.2
100.0	328.0	12.680	54.82	62.0	3.4
105.0	344.4	12.950	55.31	54.0	3.0
110.0	360.8	13.310	55.96	72.0	4.0
115.0	377.2	13.660	56.59	70.0	3.8
120.0	393.6	14.010	57.22	70.0	3.8
125.0	410.0	14.460	58.03	90.0	4.9
129.0	423.1	14.790	58.62	82.5	4.5


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
2N/ 5E-35BBC
9/ 7/79
2N/ 5E-36DDA
7/10/79
2N/ 5E-36DDB
7/25/79

LOCATION: VANCOUVER AMS, WASH
1N/ 3E- 2DB
HOLE NAME: RDH-CAM1
DATE MEASURED: 12/19/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	12.240	54.03	0.0	0.0
10.0	32.8	11.600	52.88	-128.0	-7.0
15.0	49.2	11.360	52.45	-48.0	-2.6
20.0	65.6	11.360	52.45	0.0	0.0
25.0	82.0	11.360	52.45	0.0	0.0
30.0	98.4	11.360	52.45	0.0	0.0
35.0	114.8	11.400	52.52	8.0	0.4
40.0	131.2	11.460	52.63	12.0	0.7
45.0	147.6	11.580	52.84	24.0	1.3
50.0	164.0	11.700	53.06	24.0	1.3
55.0	180.4	11.900	53.42	40.0	2.2
60.0	196.8	12.050	53.69	30.0	1.6
65.0	213.2	12.230	54.01	36.0	2.0
70.0	229.6	12.400	54.32	34.0	1.9
75.0	246.0	12.470	54.45	14.0	0.8
80.0	262.4	12.700	54.86	46.0	2.5
85.0	278.8	12.860	55.15	32.0	1.8
90.0	295.2	13.020	55.44	32.0	1.8
95.0	311.6	13.130	55.63	22.0	1.2
100.0	328.0	13.250	55.85	24.0	1.3
105.0	344.4	13.340	56.01	18.0	1.0
110.0	360.8	13.570	56.43	46.0	2.5
115.0	377.2	13.770	56.79	40.0	2.2
120.0	393.6	13.930	57.07	32.0	1.8
125.0	410.0	13.830	56.89	-20.0	-1.1
130.0	426.4	13.980	57.16	30.0	1.6
135.0	442.8	14.130	57.43	30.0	1.6
140.0	459.2	14.350	57.83	44.0	2.4
145.0	475.6	14.510	58.12	32.0	1.8
150.0	492.0	14.530	58.15	4.0	0.2
151.0	495.3	14.430	57.97	-100.0	-5.5

LOCATION: VANCOUVER AMS, WASH
1N/ 3E- 2DB
HOLE NAME: RDH-CAM1
DATE MEASURED: 12/27/79

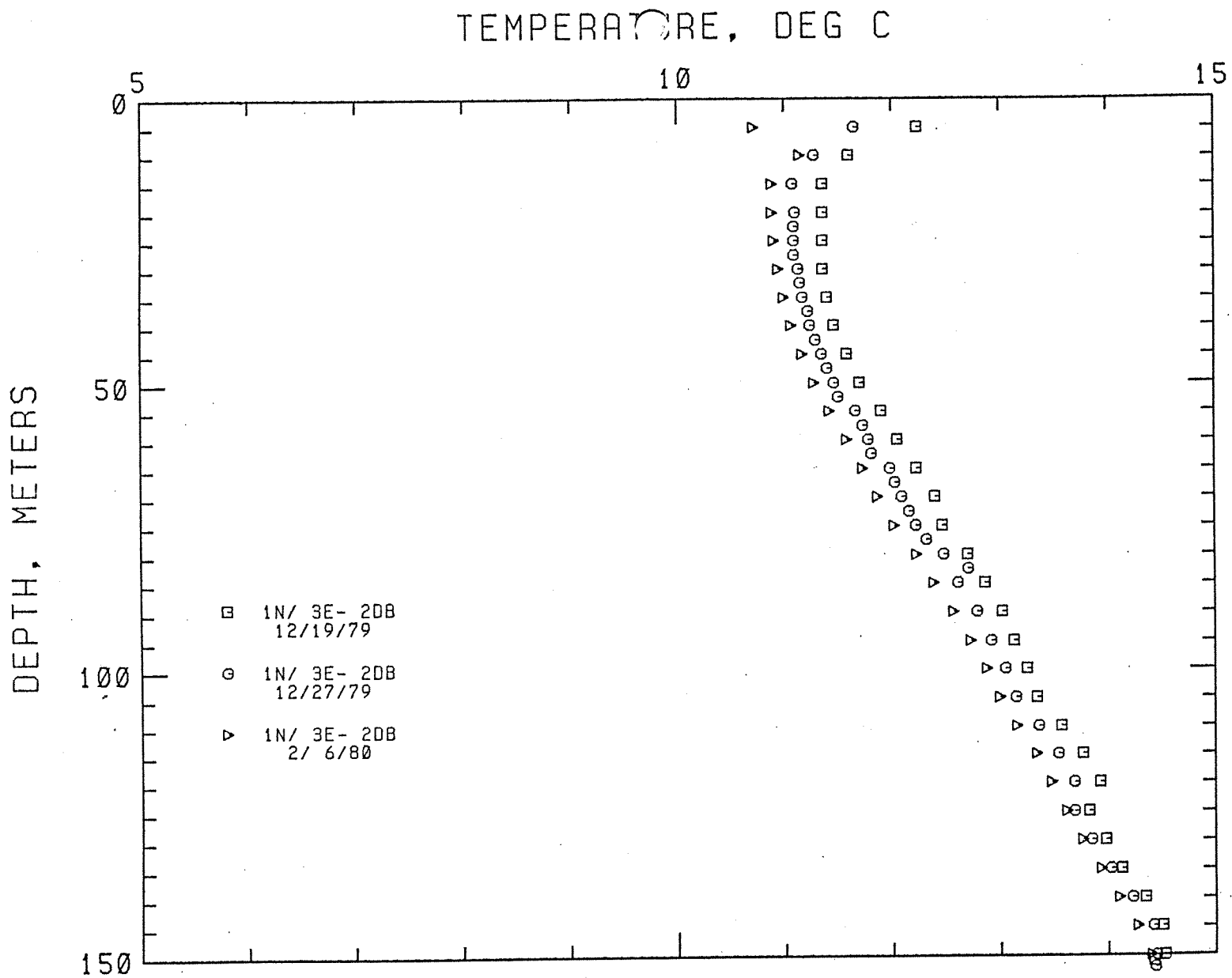
DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	11.650	52.97	0.0	0.0
10.0	32.8	11.280	52.30	-74.0	-4.1
15.0	49.2	11.080	51.94	-40.0	-2.2
20.0	65.6	11.100	51.98	4.0	0.2
22.5	73.8	11.090	51.96	-4.0	-0.2
25.0	82.0	11.090	51.96	0.0	0.0
27.5	90.2	11.090	51.96	0.0	0.0
30.0	98.4	11.130	52.03	16.0	0.9
32.5	106.6	11.150	52.07	8.0	0.4
35.0	114.8	11.170	52.11	8.0	0.4
37.5	123.0	11.220	52.20	20.0	1.1
40.0	131.2	11.240	52.23	8.0	0.4
42.5	139.4	11.290	52.32	20.0	1.1
45.0	147.6	11.350	52.43	24.0	1.3
47.5	155.8	11.400	52.52	20.0	1.1
50.0	164.0	11.460	52.63	24.0	1.3
52.5	172.2	11.500	52.70	16.0	0.9
55.0	180.4	11.660	52.99	64.0	3.5
57.5	188.6	11.730	53.11	28.0	1.5
60.0	196.8	11.780	53.20	20.0	1.1
62.5	205.0	11.810	53.26	12.0	0.7
65.0	213.2	11.980	53.56	68.0	3.7
67.5	221.4	12.030	53.65	20.0	1.1
70.0	229.6	12.090	53.76	24.0	1.3
72.5	237.8	12.160	53.89	28.0	1.5
75.0	246.0	12.220	54.00	24.0	1.3
77.5	254.2	12.320	54.18	40.0	2.2
80.0	262.4	12.480	54.46	64.0	3.5
82.5	270.6	12.710	54.88	92.0	5.0
85.0	278.8	12.610	54.70	-40.0	-2.2
90.0	295.2	12.790	55.02	36.0	2.0
95.0	311.6	12.920	55.26	26.0	1.4
100.0	328.0	13.050	55.49	26.0	1.4
105.0	344.4	13.150	55.67	20.0	1.1
110.0	360.8	13.360	56.05	42.0	2.3
115.0	377.2	13.540	56.37	36.0	2.0
120.0	393.6	13.690	56.64	30.0	1.6
125.0	410.0	13.690	56.64	0.0	0.0
130.0	426.4	13.850	56.93	32.0	1.8
135.0	442.8	14.030	57.25	36.0	2.0
140.0	459.2	14.230	57.61	40.0	2.2

LOCATION: VANCOUVER AMS, WASH
1N/ 3E- 2DB
HOLE NAME: RDH-CAM1
DATE MEASURED: 12/27/79

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
145.0	475.6	14.420	57.96	38.0	2.1
150.0	492.0	14.450	58.01	6.0	0.3
152.0	498.6	14.440	57.99	-5.0	-0.3

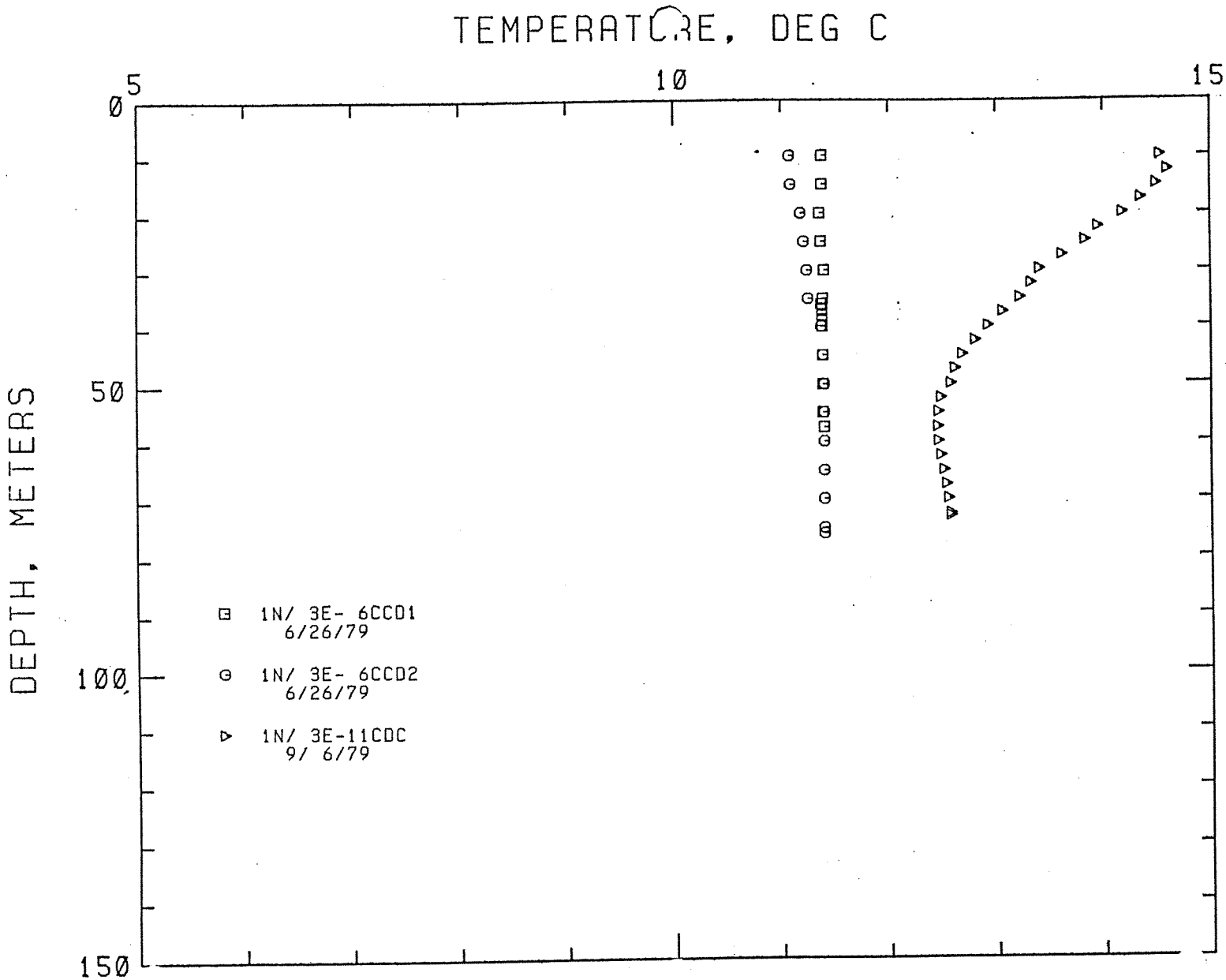
LOCATION: VANCOUVER AMS, WASH
1N/ 3E- 2DB
HOLE NAME: RDH-CAM1
DATE MEASURED: 2/ 6/80

DEPTH METERS	DEPTH FEET	TEMPERATURE DEG C	TEMPERATURE DEG F	GEOTHERMAL GRADIENT DEG C/KM	GEOTHERMAL GRADIENT DEG F/100 FT
5.0	16.4	10.720	51.30	0.0	0.0
10.0	32.8	11.150	52.07	86.0	4.7
15.0	49.2	10.890	51.60	-52.0	-2.9
20.0	65.6	10.890	51.60	0.0	0.0
25.0	82.0	10.910	51.64	4.0	0.2
30.0	98.4	10.950	51.71	8.0	0.4
35.0	114.8	11.000	51.80	10.0	0.5
40.0	131.2	11.070	51.93	14.0	0.8
45.0	147.6	11.170	52.11	20.0	1.1
50.0	164.0	11.280	52.30	22.0	1.2
55.0	180.4	11.420	52.56	28.0	1.5
60.0	196.8	11.580	52.84	32.0	1.8
65.0	213.2	11.730	53.11	30.0	1.6
70.0	229.6	11.870	53.37	28.0	1.5
75.0	246.0	12.020	53.64	30.0	1.6
80.0	262.4	12.230	54.01	42.0	2.3
85.0	278.8	12.390	54.30	32.0	1.8
90.0	295.2	12.570	54.63	36.0	2.0
95.0	311.6	12.730	54.91	32.0	1.8
100.0	328.0	12.880	55.18	30.0	1.6
105.0	344.4	13.000	55.40	24.0	1.3
110.0	360.8	13.160	55.69	32.0	1.8
115.0	377.2	13.340	56.01	36.0	2.0
120.0	393.6	13.480	56.26	28.0	1.5
125.0	410.0	13.620	56.52	28.0	1.5
130.0	426.4	13.770	56.79	30.0	1.6
135.0	442.8	13.940	57.09	34.0	1.9
140.0	459.2	14.110	57.40	34.0	1.9
145.0	475.6	14.280	57.70	34.0	1.9
150.0	492.0	14.410	57.94	26.0	1.4


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
1N/ 3E- 2DB
12/19/79
1N/ 3E- 2DB
12/27/79
1N/ 3E- 2DB
2/ 6/80

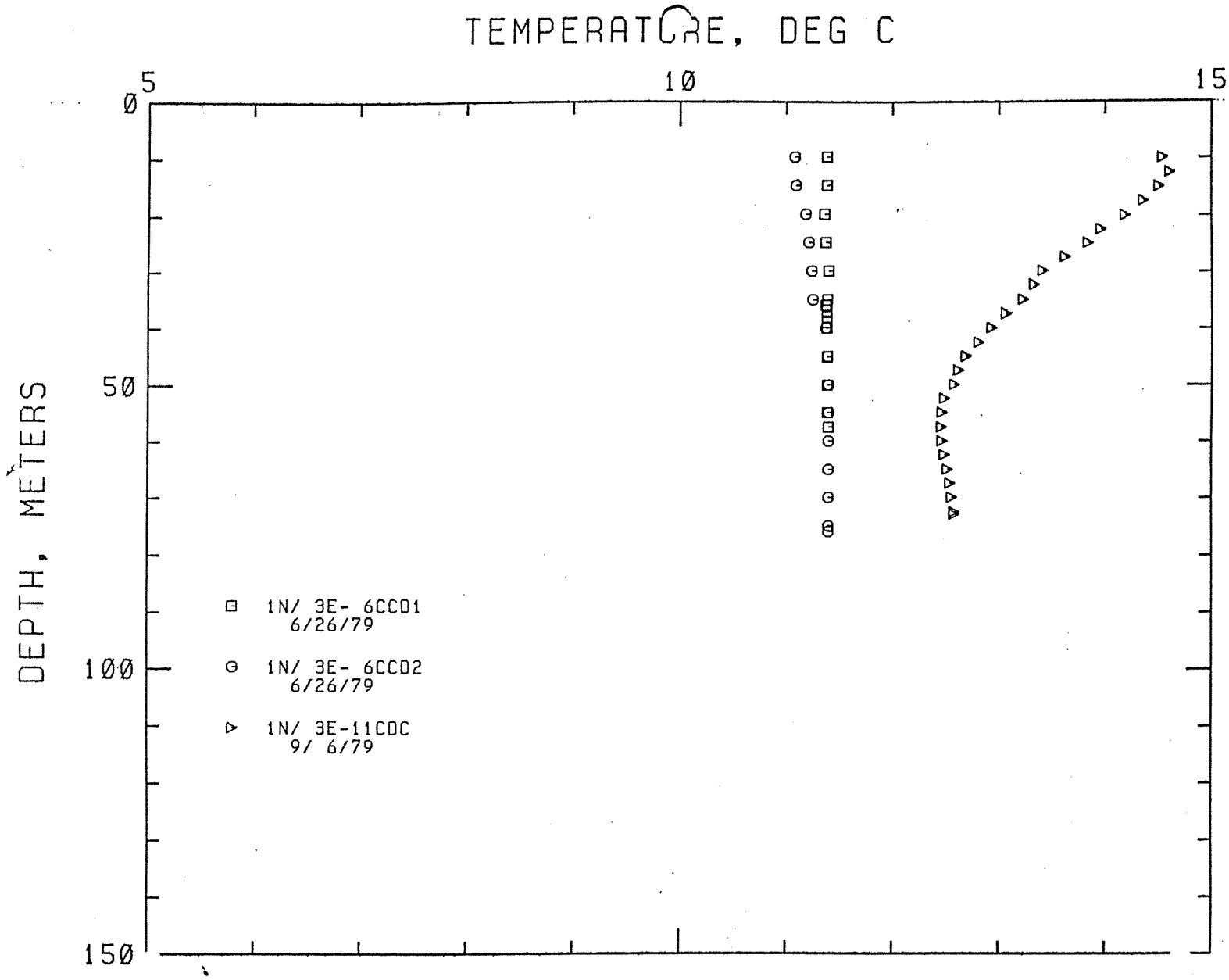
LOCATION: VANCOUVER AMS, WASH
1N/ 3E- 6CCD1
HOLE NAME: NIELSN 1
DATE MEASURED: 6/26/79

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	11.380	52.48	0.0	0.0
15.0	49.2	11.380	52.48	0.0	0.0
20.0	65.6	11.360	52.45	-4.0	-0.2
25.0	82.0	11.370	52.47	2.0	0.1
30.0	98.4	11.400	52.52	6.0	0.3
35.0	114.8	11.390	52.50	-2.0	-0.1
36.0	118.1	11.370	52.47	-20.0	-1.1
37.0	121.4	11.380	52.48	10.0	0.5
38.0	124.6	11.380	52.48	0.0	0.0
39.0	127.9	11.380	52.48	0.0	0.0
40.0	131.2	11.380	52.48	0.0	0.0
45.0	147.6	11.390	52.50	2.0	0.1
50.0	164.0	11.390	52.50	0.0	0.0
55.0	180.4	11.390	52.50	0.0	0.0
57.5	188.6	11.400	52.52	4.0	0.2


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
1N/ 3E- 6CCD1
6/26/79
1N/ 3E- 6CCD2
6/26/79
1N/ 3E-11CDC
9/ 6/79

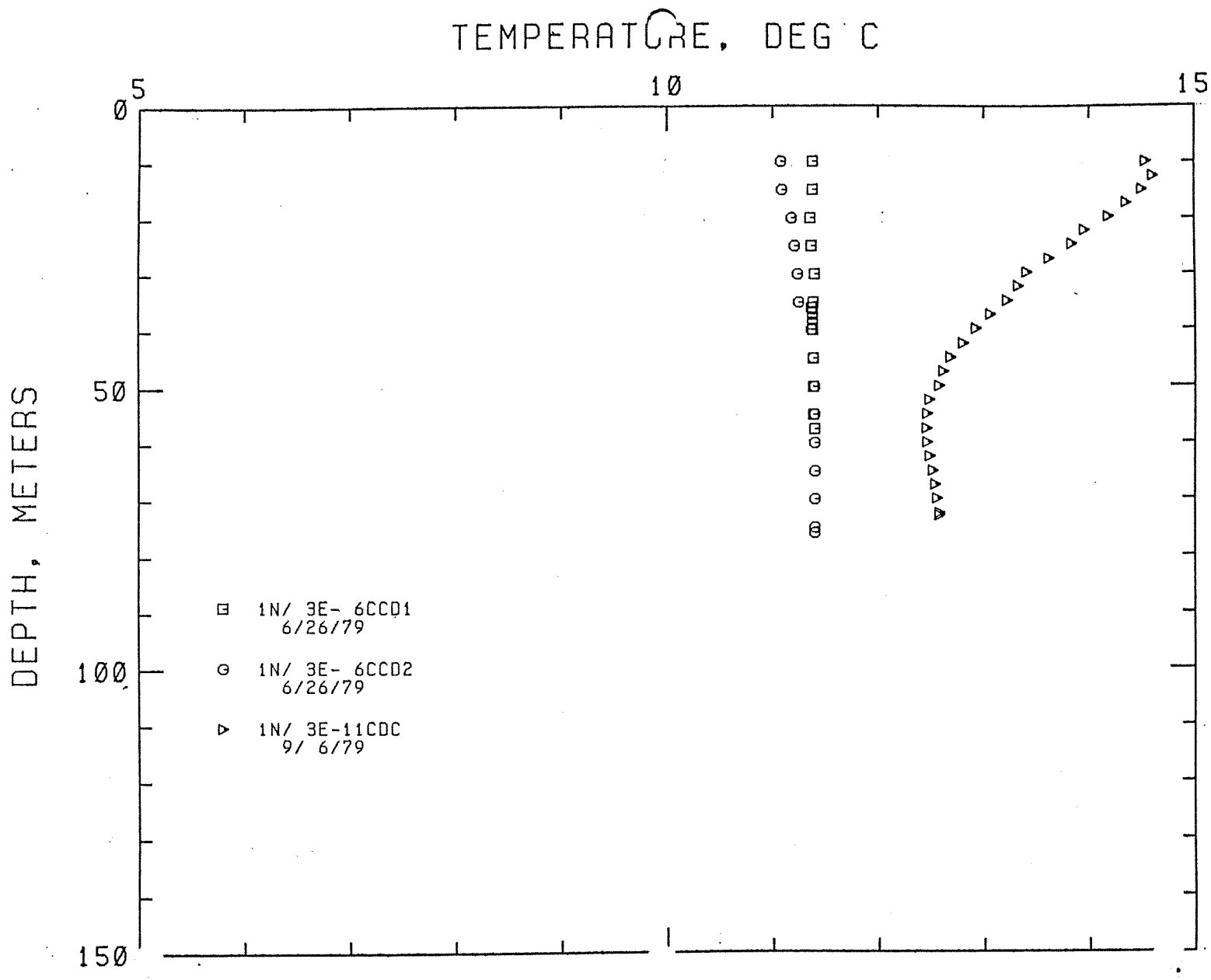
LOCATION: VANCOUVER AMS, WASH
1N/ 3E- 6CCD2
HOLE NAME: NIELSN 2
DATE MEASURED: 6/26/79

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	11.080	51.94	0.0	0.0
15.0	49.2	11.090	51.96	2.0	0.1
20.0	65.6	11.180	52.12	18.0	1.0
25.0	82.0	11.210	52.18	6.0	0.3
30.0	98.4	11.240	52.23	6.0	0.3
35.0	114.8	11.250	52.25	2.0	0.1
40.0	131.2	11.370	52.47	24.0	1.3
45.0	147.6	11.390	52.50	4.0	0.2
50.0	164.0	11.400	52.52	2.0	0.1
55.0	180.4	11.400	52.52	0.0	0.0
60.0	196.8	11.400	52.52	0.0	0.0
65.0	213.2	11.400	52.52	0.0	0.0
70.0	229.6	11.400	52.52	0.0	0.0
75.0	246.0	11.400	52.52	0.0	0.0
76.0	249.3	11.400	52.52	0.0	0.0


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
1N/ 3E- 6CCD1
6/26/79
1N/ 3E- 6CCD2
6/26/79
1N/ 3E-11CDC
9/ 6/79

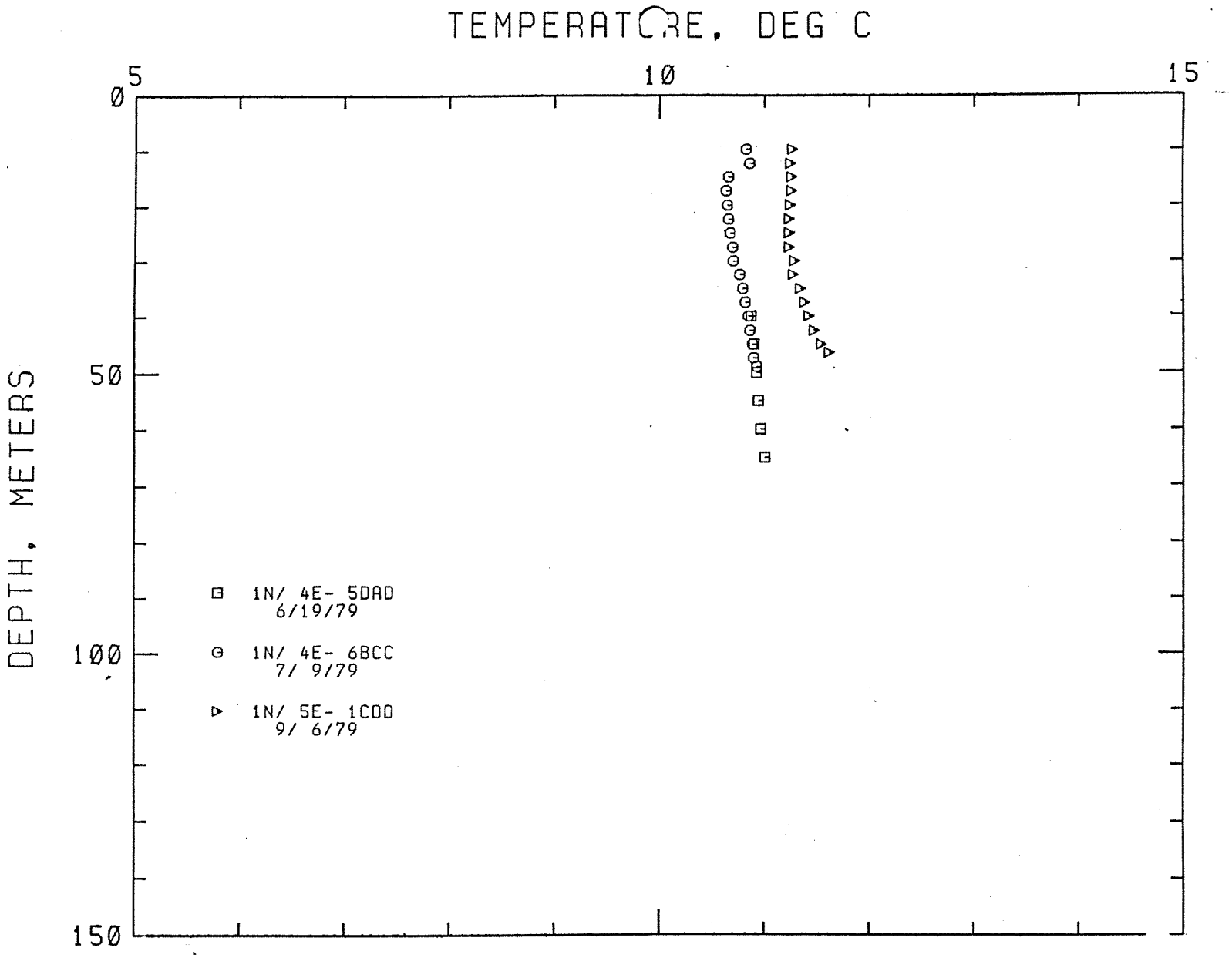
LOCATION: VANCOUVER AMS, WASH
1N/ 3E-11CDC
HOLE NAME: CRWN ZLL
DATE MEASURED: 9/ 6/79

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	14.540	58.17	0.0	0.0
12.5	41.0	14.610	58.30	28.0	1.5
15.0	49.2	14.510	58.12	-40.0	-2.2
17.5	57.4	14.360	57.85	-60.0	-3.3
20.0	65.6	14.190	57.54	-68.0	-3.7
22.5	73.8	13.960	57.13	-92.0	-5.0
25.0	82.0	13.840	56.91	-48.0	-2.6
27.5	90.2	13.620	56.52	-88.0	-4.8
30.0	98.4	13.410	56.14	-84.0	-4.6
32.5	106.6	13.330	55.99	-32.0	-1.8
35.0	114.8	13.230	55.81	-40.0	-2.2
37.5	123.0	13.070	55.53	-64.0	-3.5
40.0	131.2	12.930	55.27	-56.0	-3.1
42.5	139.4	12.810	55.06	-48.0	-2.6
45.0	147.6	12.690	54.84	-48.0	-2.6
47.5	155.8	12.620	54.72	-28.0	-1.5
50.0	164.0	12.580	54.64	-16.0	-0.9
52.5	172.2	12.490	54.48	-36.0	-2.0
55.0	180.4	12.470	54.45	-8.0	-0.4
57.5	188.6	12.460	54.43	-4.0	-0.2
60.0	196.8	12.470	54.45	4.0	0.2
62.5	205.0	12.490	54.48	8.0	0.4
65.0	213.2	12.520	54.54	12.0	0.7
67.5	221.4	12.540	54.57	8.0	0.4
70.0	229.6	12.560	54.61	8.0	0.4
72.5	237.8	12.580	54.64	8.0	0.4
73.0	239.4	12.580	54.64	0.0	0.0


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
1N/ 3E- 6CCD1
6/26/79
1N/ 3E- 6CCD2
6/26/79
1N/ 3E-11CDC
9/ 6/79

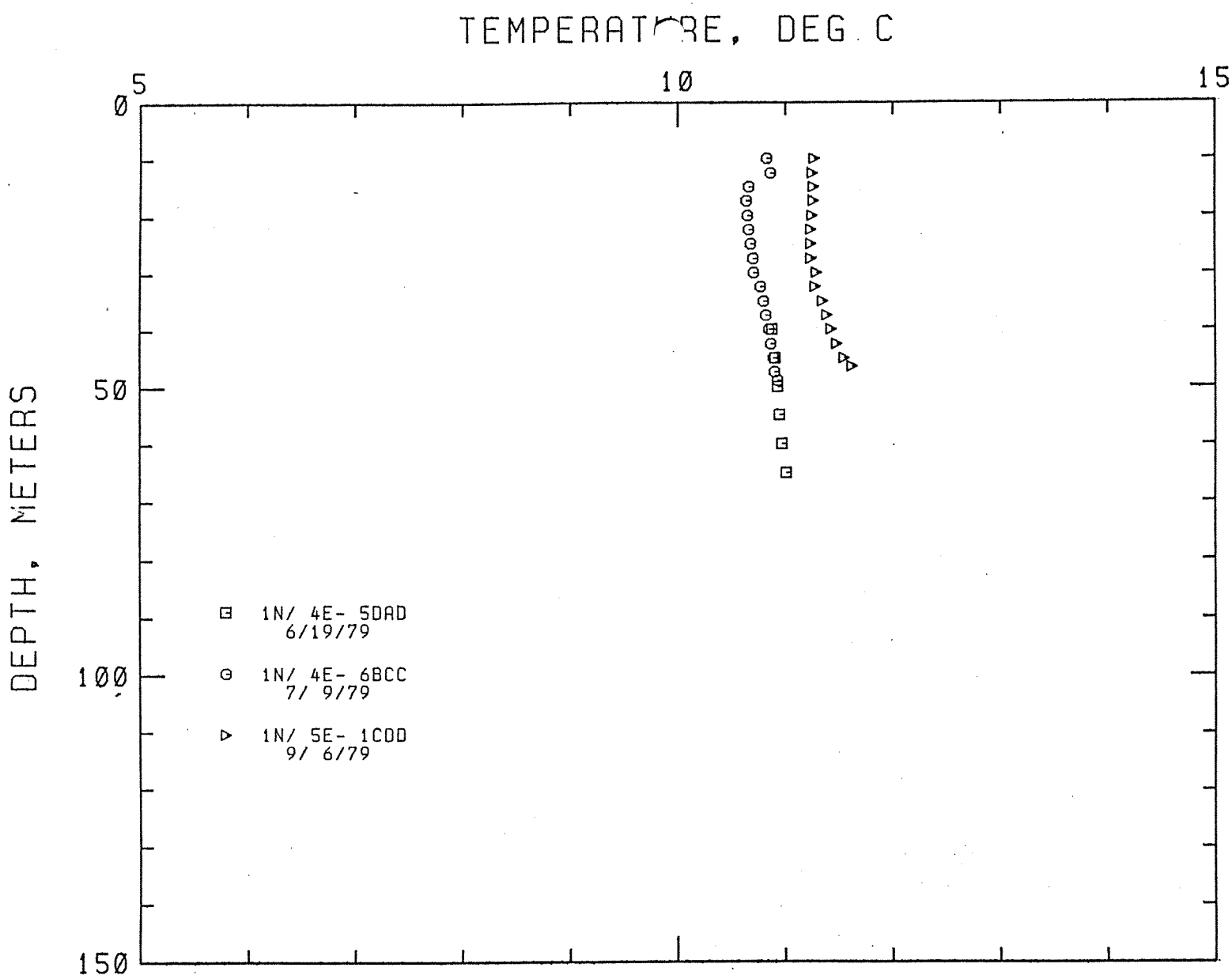
LOCATION: VANCOUVER AMS, WASH
1N/ 4E- 5DAD
HOLE NAME: HATTON
DATE MEASURED: 6/19/79

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	10.880	51.58	0.0	0.0
45.0	147.6	10.910	51.64	6.0	0.3
50.0	164.0	10.930	51.67	4.0	0.2
55.0	180.4	10.950	51.71	4.0	0.2
60.0	196.8	10.970	51.75	4.0	0.2
65.0	213.2	11.010	51.82	8.0	0.4


TEMPERATURE, DEG C
0
5
10
15
DEPTH, METERS
50
100
150
1N/ 4E- 5DAD
6/19/79
1N/ 4E- 6BCC
7/ 9/79
1N/ 5E- 1CDD
9/ 6/79

LOCATION: VANCOUVER AMS, WASH
1N/ 4E- 6BCC
HOLE NAME: ZIMMER
DATE MEASURED: 7/ 9/79

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	10.830	51.49	0.0	0.0
12.5	41.0	10.860	51.55	12.0	0.7
15.0	49.2	10.660	51.19	-80.0	-4.4
17.5	57.4	10.640	51.15	-8.0	-0.4
20.0	65.6	10.650	51.17	4.0	0.2
22.5	73.8	10.660	51.19	4.0	0.2
25.0	82.0	10.680	51.22	8.0	0.4
27.5	90.2	10.700	51.26	8.0	0.4
30.0	98.4	10.710	51.28	4.0	0.2
32.5	106.6	10.770	51.39	24.0	1.3
35.0	114.8	10.800	51.44	12.0	0.7
37.5	123.0	10.820	51.48	8.0	0.4
40.0	131.2	10.850	51.53	12.0	0.7
42.5	139.4	10.870	51.57	8.0	0.4
45.0	147.6	10.890	51.60	8.0	0.4
47.5	155.8	10.900	51.62	4.0	0.2
49.0	160.7	10.930	51.67	20.0	1.1


TEMPERATURE, DEG C
5
10
15
0
50
100
150
DEPTH, METERS
1N/ 4E- 5DAD
6/19/79
1N/ 4E- 6BCC
7/ 9/79
1N/ 5E- 1CDD
9/ 6/79

LOCATION: VANCOUVER AMS, WASH
1N/ 5E- 1CDD
HOLE NAME: SKM CS 1
DATE MEASURED: 9/ 6/79

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	11.270	52.29	0.0	0.0
12.5	41.0	11.250	52.25	-8.0	-0.4
15.0	49.2	11.260	52.27	4.0	0.2
17.5	57.4	11.260	52.27	0.0	0.0
20.0	65.6	11.250	52.25	-4.0	-0.2
22.5	73.8	11.240	52.23	-4.0	-0.2
25.0	82.0	11.240	52.23	0.0	0.0
27.5	90.2	11.240	52.23	0.0	0.0
30.0	98.4	11.290	52.32	20.0	1.1
32.5	106.6	11.280	52.30	-4.0	-0.2
35.0	114.8	11.350	52.43	28.0	1.5
37.5	123.0	11.390	52.50	16.0	0.9
40.0	131.2	11.430	52.57	16.0	0.9
42.5	139.4	11.480	52.66	20.0	1.1
45.0	147.6	11.550	52.79	28.0	1.5
46.5	152.5	11.620	52.92	46.7	2.6