

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Station location map and audio-magnetotelluric
data log for Summer Lake Known Geothermal
Resource Area, Oregon

By

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This report is preliminary and has not been
edited or reviewed for conformity with U.S.
Geological Survey standards and nomenclature.

U.S. GEOLOGICAL SURVEY A.M.T. DATA LOG

pa = observed apparent resistivity in ohm-metres

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		FREQUENCY											
Sta. No.		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
1NS	pa	7.8	10.2	4.7	3.1	-	-	-	-	-	8.8	16.5	7.7
	N	6	8	7	8						7	1	1
	Er	1.0	3.3	0.6	0.3						0.8	-	-
1EW	pa	4.8	4.9	3.2	2.7	-	-	-	-	-	8.4	18.1	4.9
	N	4	6	7	7						7	1	1
	Er	1.7	0.8	0.3	0.3						0.4	-	-
2NS	pa	10.0	12.1	17.4	14.7	23.3	17.9	-	-	-	14.2	28.6	3.6
	N	8	7	7	6	6	1				6	1	1
	Er	1.1	2.1	2.2	3.3	1.7					2.5	-	-
2EW	pa	11.3	9.7	15.9	23.7	33.6	15.6	-	-	-	12.6	21.5	2.4
	N	7	6	8	7	6	2				8	1	1
	Er	2.4	0.6	2.2	4.0	2.8	1.5				0.9	-	-
3NS	pa	5.6	3.2	2.3	4.8	9.9	12.4	-	-	-	9.3	20.8	11.7
	N	9	3	6	7	7	7				7	1	1
	Er	1.4	0.6	0.3	0.5	0.6	1.0				1.4	-	-
3EW	pa	4.8	3.3	2.5	4.8	11.4	18.5	-	-	-	7.6	36.4	56.5
	N	6	7	6	8	8	7				7	1	1
	Er	1.4	1.2	0.4	0.2	1.0	2.5				0.3	-	-
4NS	pa	30.8	27.2	22.4	39.0	74.2	113.3	-	-	-	13.4	30.7	2.1
	N	9	6	6	5	6	7				8	1	1
	Er	14.9	4.0	4.5	10.0	13.1	14.0				0.7	-	-
4EW	pa	28.3	27.5	24.1	21.0	24.9	26.7	-	-	-	4.4	6.9	18.2
	N	6	6	6	6	7	6				7	1	1
	Er	9.2	9.0	3.9	4.4	1.1	3.7				0.6	-	-

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Sta. No.		FREQUENCY											
		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
5NS	ρ_a	6.9	13.7	18.6	15.6	26.9	38.7	-	-	-	17.8	3.6	4.9
	N	3	6	6	6	7	7				7	1	1
	Er	0.9	4.5	3.3	2.5	4.7	3.5				2.8	-	-
5EW	ρ_a	13.6	14.0	24.2	18.2	23.8	28.3	-	-	-	9.7	14.2	0.6
	N	6	6	9	7	9	7				8	1	1
	Er	1.6	2.3	3.1	2.5	1.5	2.9				1.6	-	-
6NS	ρ_a	19.8	27.2	28.6	36.0	101.2	-	-	-	-	5.7	13.6	1.0
	N	8	6	4	4	4					4	1	1
	Er	2.3	3.9	2.9	4.2	1.5					0.4	-	-
6EW	ρ_a	25.3	22.9	21.5	59.2	123.3	-	-	-	-	1.3	2.5	6.5
	N	6	6	4	6	6					5	1	1
	Er	4.6	3.9	1.7	6.7	8.7					0.2	-	-
7NS	ρ_a	6.2	5.4	5.6	5.9	9.6	-	-	-	-	8.3	9.7	20.3
	N	8	6	7	6	6					5	1	1
	Er	0.6	0.7	1.0	0.3	0.5					0.3	-	-
7EW	ρ_a	6.5	7.6	4.1	8.4	21.1	-	-	-	-	14.1	24.0	8.9
	N	8	6	6	6	6					6	1	1
	Er	9.2	2.8	0.7	2.5	1.6					0.4	-	-
8NS	ρ_a	9.3	6.3	7.9	5.3	6.9	-	-	-	-	19.0	34.8	15.5
	N	6	4	7	6	7					5	1	1
	Er	2.5	0.7	1.5	0.4	0.4					2.2	-	-
8EW	ρ_a	8.7	4.3	5.0	6.3	9.5	-	-	-	-	7.6	14.9	22.8
	N	6	7	7	7	3					4	1	1
	Er	1.7	0.6	0.5	0.6	0.3					0.1	-	-

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Sta. No.		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
9NS	pa	2.9	4.6	3.4	2.9	4.4	3.8	-	-	-	11.0	9.1	19.6
	N	7	6	6	6	6	6				6	1	1
	Er	0.4	1.0	0.4	0.2	0.1	0.4				0.4	-	-
9EW	pa	6.1	2.5	2.3	2.4	2.9	2.8	-	-	-	7.2	12.3	14.8
	N	7	5	8	6	6	6				6	1	1
	Er	0.7	0.4	0.2	0.5	0.4	0.1				0.2	-	-
10NS	pa	20.7	21.3	19.4	18.6	-	-	-	-	-	3.2	10.5	6.8
	N	6	7	4	5						5	1	1
	Er	3.5	4.4	2.4	2.2						0.3	-	-
10EW	pa	19.4	22.6	13.0	14.1	-	-	-	-	-	1.0	1.6	5.5
	N	8	6	6	6						6	1	1
	Er	3.1	4.5	1.3	3.1						0.1	-	-
11NS	pa	8.8	13.1	9.5	9.2	15.4	22.2	-	-	-	9.9	14.4	6.6
	N	9	6	6	6	6	5				5	1	1
	Er	1.7	2.5	1.6	1.7	1.0	0.5				0.8	-	-
11EW	pa	20.5	11.5	10.7	18.3	23.9	31.2	-	-	-	51.0	56.1	42.8
	N	10	8	7	7	6	5				5	1	1
	Er	2.9	1.3	1.3	1.4	2.4	1.1				3.7	-	-
12NS	pa	3.1	5.7	4.8	6.7	9.4	12.2	-	-	-	8.6	29.8	1.9
	N	7	6	6	6	7	6				5	1	1
	Er	0.3	0.9	0.8	0.1	2.3	0.9				2.2	-	-
12EW	pa	6.9	4.0	4.7	4.5	5.5	4.6	-	-	-	7.4	12.8	7.2
	N	8	6	6	6	5	6				5	1	1
	Er	1.3	0.5	0.7	0.6	0.8	0.5				0.4	-	-

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		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
13NS	pa	10.5	12.6	9.6	8.7	14.5	16.3	-	-	-	4.7	52.0	11.9
	N	6	6	6	6	6	7				4	1	1
	Er	0.9	0.2	0.8	1.7	0.7	1.7				0.4	-	-
13EW	pa	9.6	6.3	6.3	6.2	8.0	14.5	-	-	-	5.4	15.5	13.2
	N	7	6	6	6	6	6				5	1	1
	Er	1.5	1.0	1.0	0.4	0.9	1.2				0.3	-	-
14NS	pa	15.8	-	6.5	9.1	6.9	3.7	-	-	-	3.7	-	4.6
	N	3		6	3	4	5				8		1
	Er	4.4		2.1	2.3	0.3	0.1				0.1		-
14EW	pa	24.2	15.1	12.7	12.6	9.5	6.1	-	-	-	3.5	15.8	101.4
	N	8	5	5	1	5	5				6	1	1
	Er	4.1	1.7	2.3	-	1.6	0.1				0.2	-	-
15NS	pa	60.9	45.8	28.5	23.8	23.0	11.9	-	-	-	1.6	5.6	1.4
	N	3	5	3	4	5	6				6	1	1
	Er	9.7	2.5	12.1	3.0	4.0	0.9				0.1	-	-
15EW	pa	9.5	12.6	13.1	20.4	12.4	8.2	-	-	-	2.3	5.8	2.4
	N	5	4	4	5	6	7				8	1	1
	Er	13.2	2.0	1.8	3.9	3.5	0.6				0.2	-	-
16NS	pa	5.6	7.7	15.4	13.3	25.9	28.7	-	-	-	23.1	52.0	22.7
	N	8	4	5	7	6	7				4	1	1
	Er	1.2	0.8	3.4	0.8	4.2	2.3				2.4	-	-
16EW	pa	9.6	5.9	8.8	9.5	25.4	27.7	-	-	-	3.5	9.9	3.6
	N	5	6	6	6	5	2				3	1	1
	Er	1.1	0.8	1.2	0.5	3.2	9.4				0.1	-	-

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		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
17NS	pa	6.9	9.5	18.0	13.2	9.7	4.1	-	-	-	21.1	24.6	9.0
	N	3	3	5	6	8	7				6	1	1
	Er	1.1	0.9	4.8	2.5	0.5	0.4				3.7	-	-
17EW	pa	5.7	6.7	7.9	6.4	6.4	4.3	-	-	-	15.6	57.1	42.7
	N	4	4	6	6	7	6				8	1	1
	Er	1.6	0.8	1.3	1.3	0.4	0.4				2.3	-	-
18NS	pa	12.0	7.4	18.9	37.2	63.0	48.1	-	-	-	22.8	52.0	17.8
	N	10	3	3	2	5	4				6	1	1
	Er	0.6	2.0	1.1	3.8	7.7	6.6				2.3	-	-
18EW	pa	15.0	16.3	20.4	57.3	52.2	43.1	-	-	-	10.1	28.1	133.5
	N	8	4	5	3	3	1				7	1	1
	Er	2.5	1.8	6.2	14.2	4.5	-				1.5	-	-
19NS	pa	9.9	7.9	17.1	11.6	18.4	18.6	-	-	-	23.4	6.1	25.1
	N	7	3	7	4	4	6				3	1	1
	Er	1.3	0.8	3.1	2.9	6.5	2.9				3.4	-	-
19EW	pa	13.9	7.7	12.1	14.8	29.9	43.5	-	-	-	29.2	41.9	24.8
	N	6	4	6	4	6	6				5	1	1
	Er	1.0	0.9	1.2	5.2	3.4	1.3				3.2	-	-
20NS	pa	7.1	7.4	8.9	9.3	16.9	19.4	-	-	-	55.3	24.8	24.8
	N	5	5	6	9	7	5				7	1	1
	Er	1.6	1.1	1.3	0.7	2.7	1.8				7.6	-	-
20EW	pa	8.5	3.6	6.6	7.3	10.7	13.0	-	-	-	6.5	18.4	12.2
	N	6	5	7	7	6	6				8	1	1
	Er	3.1	0.5	1.1	0.6	0.5	1.4				0.7	-	-

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		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
21NS	ρ_a	21.4	21.7	39.2	23.9	23.8	24.7	-	-	-	1.1	1.2	0.1
	N	7	6	6	6	6	7				6	1	1
	Er	2.1	1.6	7.8	3.9	3.6	2.5				0.02	-	-
21EW	ρ_a	37.8	45.6	51.7	50.6	40.8	19.8	-	-	-	0.9	1.3	0.2
	N	6	6	7	6	7	7				6	1	1
	Er	6.9	4.1	3.8	3.3	2.9	1.7				0.03	-	-
22NS	ρ_a	2.6	2.5	2.9	2.3	4.8	2.6	-	-	-	0.8	2.6	0.5
	N	6	6	6	8	7	3				7	1	1
	Er	0.4	0.4	0.7	0.3	0.2	0.1				0.1	-	-
22EW	ρ_a	3.4	2.8	1.9	2.1	2.7	-	-	-	-	0.8	1.6	0.2
	N	5	6	6	7	7					6	1	1
	Er	0.8	0.4	0.3	0.2	0.2					0.1	-	-
	ρ_a												
	N												
	Er												
	ρ_a												
	N												
	Er												
	ρ_a												
	N												
	Er												
	ρ_a												
	N												
	Er												