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GEOLOGICAL SURVEY.

[Reports - Open file reports]

Audio-magnetotelluric data log, and station
location map for the Randsburg Known
Geothermal Resource Area, California

T14
Cm
Jwanda

By

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MASTER

This report is preliminary and has not been
edited or reviewed for conformity with U.S.
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○ Station location

Fig. #1

AUDIO-MAGNETOTELLURIC STATION LOCATION MAP OF RANDSBURG
KGRA, CALIFORNIA

kandsburg, Calif., KGRA U.S. GEOLOGICAL SURVEY A.M.T. DATA LOG

pa = observed apparent resistivity in ohm-metres

N = number of observations

Er = standard error in ohm metres - = no data

"NOTE" - Telluric line orientation indicated with station numbers.

Sta. No.		FREQUENCY											
		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
1NS	pa	57.9	31.9	54.7	56.9	80.8	65.8	-	-	-	27.6	39.6	8.0
	N	5	4	7	6	6	4	-	-	-	4	1	1
	Er	12.0	7.7	4.7	4.9	7.7	18.9	-	-	-	1.1	-	-
1EW	pa	47.2	33.4	32.7	35.2	40.9	50.6	-	-	-	13.3	32.7	4.4
	N	8	5	7	6	5	5	-	-	-	6	1	1
	Er	7.5	2.9	0.7	2.1	1.8	2.6	-	-	-	0.5	-	-
2NS	pa	174.6	158.0	133.5	131.0	125.8	59.8	-	-	-	59.2	82.2	11.7
	N	8	5	6	6	8	4	-	-	-	6	1	1
	Er	24.6	31.1	15.3	15.2	10.9	9.3	-	-	-	4.9	-	-
2EW	pa	48.3	31.2	22.0	26.6	26.6	16.2	-	-	-	3.8	23.7	45.3
	N	6	6	7	9	9	6	-	-	-	6	1	1
	Er	6.2	7.0	2.4	2.3	1.5	0.5	-	-	-	0.2	-	-
3NS	pa	23.6	43.5	40.2	58.2	43.7	23.1	-	-	-	17.4	15.8	3.7
	N	6	4	8	8	9	5	-	-	-	7	1	1
	Er	1.7	10.4	3.2	4.8	5.2	2.7	-	-	-	1.0	-	-
3EW	pa	14.0	12.3	10.9	10.5	11.1	10.4	-	-	-	2.9	18.0	38.1
	N	7	7	5	5	7	7	-	-	-	7	1	1
	Er	2.1	1.7	0.9	0.7	0.7	0.6	-	-	-	0.1	-	-
4NS	pa	25.1	15.6	20.1	21.1	14.5	5.4	-	-	-	11.6	17.1	2.9
	N	6	10	7	7	7	7	-	-	-	7	1	1
	Er	6.6	2.5	2.5	1.2	1.4	0.5	-	-	-	1.4	-	-
4EW	pa	9.7	10.1	8.9	9.1	9.8	12.6	-	-	-	5.0	12.9	1.4
	N	7	9	7	7	8	7	-	-	-	7	1	1
	Er	1.1	0.9	0.7	0.6	0.5	1.5	-	-	-	0.3	-	-

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

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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	pa	2.2	7.7	7.8	9.4	10.2	5.9	-	-	-	13.5	21.8	3.2
	N	5	6	5	3	6	6	-	-	-	5	1	1
	Er	0.3	0.9	0.8	3.3	0.4	0.3	-	-	-	1.6	-	-
5EW	pa	1.8	4.6	5.2	7.0	8.5	9.0	-	-	-	3.1	18.5	3.1
	N	5	6	7	6	5	7	-	-	-	6	1	1
	Er	0.2	0.4	0.4	0.5	0.5	0.4	-	-	-	0.1	-	-
6NS	pa	281.2	123.7	203.0	208.0	206.7	221.6	-	-	-	52.1	50.5	13.9
	N	6	4	6	5	7	6	-	-	-	5	1	1
	Er	59.8	23.5	24.7	50.8	45.1	55.1	-	-	-	7.4	-	-
6EW	pa	146.9	110.0	124.4	91.8	77.4	342.9	-	-	-	13.6	803	7.3
	N	6	6	5	8	7	7	-	-	-	6	1	1
	Er	13.3	12.8	21.5	9.4	4.0	94.2	-	-	-	0.8	-	-
7NS	pa	14.0	41.9	114.0	44.9	77.7	36.8	-	-	-	38.7	42.3	11.7
	N	5	6	5	9	5	6	-	-	-	6	1	1
	Er	3.1	7.7	17.7	8.1	5.1	5.8	-	-	-	3.1	-	-
7EW	pa	29.1	35.4	39.5	35.7	32.3	57.2	-	-	-	9.5	83.2	2.3
	N	6	10	9	8	7	7	-	-	-	9	1	1
	Er	3.8	4.2	5.4	1.6	2.2	6.6	-	-	-	0.8	-	-
8NS	pa	10.2	8.1	13.3	12.2	30.3	16.2	-	-	-	39.5	82.2	7.9
	N	6	5	7	8	7	7	-	-	-	4	1	1
	Er	0.5	1.9	2.1	2.8	1.6	0.9	-	-	-	7.9	-	-
8EW	pa	13.9	9.4	15.7	16.5	23.3	47.4	-	-	-	20.1	123.4	5.4
	N	6	6	6	7	6	7	-	-	-	8	1	1
	Er	1.8	2.7	3.3	1.4	0.8	5.7	-	-	-	1.8	-	-

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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
9NS	pa	18.9	22.9	28.3	20.9	45.9	24.0	-	-	-	9.2	14.5	2.5
	N	5	5	6	8	6	7	-	-	-	8	1	1
	Er	3.7	2.5	2.5	5.1	3.8	5.2	-	-	-	0.3	-	-
9EW	pa	3.2	3.0	4.6	3.5	28.5	22.0	-	-	-	0.9	6.9	2.6
	N	5	6	7	3	6	3	-	-	-	7	1	1
	Er	0.5	0.4	0.3	0.8	5.9	4.7	-	-	-	0.1	-	-
10NS	pa	10.2	6.4	10.4	11.9	14.9	4.9	-	-	-	9.0	19.4	1.1
	N	7	6	9	5	6	4	-	-	-	6	1	1
	Er	1.6	0.4	0.9	0.6	1.1	0.7	-	-	-	1.2	-	-
10EW	pa	13.8	8.8	8.1	9.0	8.9	17.3	-	-	-	2.9	23.6	0.7
	N	7	6	7	8	6	6	-	-	-	6	1	1
	Er	1.5	1.0	0.6	0.6	0.7	3.9	-	-	-	0.1	-	-
11NS	pa	5.1	7.2	5.7	7.1	7.3	4.2	-	-	-	13.6	21.0	2.6
	N	6	5	6	7	8	6	-	-	-	7	1	1
	Er	0.9	2.6	1.1	0.7	0.1	0.4	-	-	-	1.3	-	-
11EW	pa	9.3	6.7	7.8	8.2	7.2	10.4	-	-	-	2.7	19.8	0.9
	N	5	8	6	6	8	5	-	-	-	7	1	1
	Er	1.7	1.2	0.9	0.8	0.6	2.2	-	-	-	0.3	-	-
12NS	pa	3.9	5.6	7.8	4.8	22.9	14.9	-	-	-	15.4	38.2	0.9
	N	6	6	6	6	7	7	-	-	-	6	1	1
	Er	0.6	0.3	1.1	0.9	3.4	1.7	-	-	-	1.0	-	-
12EW	pa	12.1	11.6	10.1	9.2	25.5	45.3	-	-	-	9.5	7.9	8.9
	N	7	7	6	7	6	7	-	-	-	8	1	1
	Er	1.3	1.8	0.6	1.7	1.3	11.7	-	-	-	0.7	-	-

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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
13NS	pa	12.0	8.2	8.7	10.0	8.9	13.1	-	-	-	9.3	15.2	1.6
	N	5	8	7	6	5	5	-	-	-	7	1	1
	Er	4.0	1.9	2.0	4.0	0.9	0.6	-	-	-	0.8	-	-
13EW	pa	8.7	8.2	7.6	7.0	11.9	23.0	-	-	-	2.7	14.9	0.8
	N	6	7	8	8	6	5	-	-	-	5	1	1
	Er	0.8	1.2	0.6	1.3	1.3	1.6	-	-	-	0.4	-	-
14NS	pa	11.5	8.2	15.8	13.6	15.2	21.5	-	-	-	11.1	30.4	2.6
	N	6	6	8	7	6	6	-	-	-	6	1	1
	Er	2.0	0.4	2.0	1.7	0.9	5.6	-	-	-	0.2	-	-
14EW	pa	4.6	4.9	7.4	8.2	7.9	14.8	-	-	-	2.2	11.3	10.1
	N	6	10	7	8	7	8	-	-	-	6	1	1
	Er	0.6	0.5	0.3	0.7	0.6	1.9	-	-	-	0.2	-	-
15NS	pa	13.7	12.7	23.5	16.3	36.6	31.2	-	-	-	30.6	18.6	7.9
	N	6	4	10	8	7	6	-	-	-	7	1	1
	Er	4.4	3.2	3.3	1.1	3.8	8.3	-	-	-	1.6	-	-
15EW	pa	20.5	21.3	25.0	21.6	26.2	39.7	-	-	-	6.7	16.4	92.0
	N	6	9	8	9	6	6	-	-	-	7	1	1
	Er	1.9	2.4	1.8	1.8	3.1	3.4	-	-	-	0.4	-	-
16NS	pa	3.9	4.6	6.7	9.1	13.5	5.7	-	-	-	10.4	10.9	10.0
	N	6	6	7	6	10	6	-	-	-	8	1	1
	Er	0.5	1.3	1.1	1.9	1.2	1.2	-	-	-	0.8	-	-
16EW	pa	10.0	7.8	12.9	13.8	10.8	12.1	-	-	-	2.6	17.9	0.6
	N	6	8	9	9	9	6	-	-	-	9	1	1
	Er	0.4	0.9	1.6	1.4	0.6	2.0	-	-	-	0.3	-	-

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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
17NS	pa	8.4	13.9	19.3	25.5	34.4	54.0	-	-	-	27.9	38.0	5.1
	N	5	6	5	10	5	5	-	-	-	6	1	1
	Er	1.4	3.9	2.8	2.9	6.8	21.4	-	-	-	1.2	-	-
17EW	pa	12.5	11.3	15.7	18.6	22.9	50.2	-	-	-	6.3	47.8	2.2
	N	6	10	9	10	6	4	-	-	-	5	1	1
	Er	1.4	1.2	1.0	0.9	1.4	14.6	-	-	-	0.4	-	-
18NS	pa	5.7	4.4	10.4	15.4	23.5	11.1	-	-	-	30.5	35.0	5.2
	N	6	8	9	9	8	7	-	-	-	7	1	1
	Er	1.2	0.4	1.1	1.1	1.3	1.2	-	-	-	1.8	-	-
18EW	pa	8.8	7.4	10.5	17.2	27.3	33.1	-	-	-	6.1	29.9	4.1
	N	7	7	11	12	6	9	-	-	-	7	1	1
	Er	1.5	1.3	0.7	0.5	1.1	7.9	-	-	-	0.6	-	-
19NS	pa	4.3	4.3	6.9	7.6	17.4	47.0	-	-	-	13.2	16.5	2.5
	N	6	6	11	10	9	7	-	-	-	6	1	1
	Er	0.4	0.9	0.7	1.0	1.9	16.9	-	-	-	0.7	-	-
19EW	pa	3.9	3.9	6.5	5.6	12.9	10.0	-	-	-	0.7	5.8	0.6
	N	5	11	10	9	6	6	-	-	-	6	1	1
	Er	0.7	0.4	0.4	0.6	1.1	0.8	-	-	-	0.1	-	-
20NS	pa	7.2	3.0	8.4	16.1	33.4	15.7	-	-	-	20.2	35.7	5.1
	N	6	5	9	9	8	6	-	-	-	7	1	1
	Er	1.3	0.2	0.9	3.9	9.8	2.4	-	-	-	1.3	-	-
20EW	pa	8.4	5.7	5.8	8.4	13.6	14.1	-	-	-	3.5	33.4	5.0
	N	8	13	9	10	11	7	-	-	-	6	1	1
	Er	1.5	0.4	0.3	0.8	2.6	1.4	-	-	-	0.3	-	-

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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
21NS	pa	5.3	7.5	8.4	9.7	17.1	10.8	—	—	—	16.3	25.6	7.4
	N	8	6	8	8	6	6	—	—	—	5	1	1
	Er	0.7	1.2	0.5	1.2	1.7	1.4	—	—	—	0.9	—	—
21EW	pa	9.7	8.2	8.1	7.0	11.5	21.4	—	—	—	2.8	16.1	0.8
	N	3	8	7	8	7	4	—	—	—	5	1	1
	Er	1.8	1.1	0.9	0.4	0.9	1.9	—	—	—	0.4	—	—
22NS	pa	13.0	13.8	9.7	13.5	15.5	10.2	—	—	—	19.9	21.7	2.9
	N	6	6	8	6	7	8	—	—	—	9	1	1
	Er	1.9	2.9	0.8	1.2	1.1	1.8	—	—	—	1.3	—	—
22EW	pa	16.7	16.6	10.0	13.1	13.7	11.7	—	—	—	1.5	14.4	0.9
	N	6	6	8	7	7	7	—	—	—	8	1	1
	Er	3.6	2.2	0.9	0.7	0.9	1.3	—	—	—	0.1	—	—
23NS	pa	35.7	35.6	33.7	39.7	28.1	17.7	—	—	—	34.2	49.0	9.4
	N	5	4	7	10	6	5	—	—	—	8	1	1
	Er	6.6	12.6	4.6	4.7	1.3	2.5	—	—	—	2.5	—	—
23EW	pa	119.0	89.2	84.1	66.3	36.3	46.9	—	—	—	8.5	36.5	2.8
	N	6	7	10	8	5	4	—	—	—	6	1	1
	Er	16.4	7.4	7.8	3.6	2.4	2.5	—	—	—	0.6	—	—
24NS	pa	9.2	6.3	8.4	10.0	12.9	—	—	—	—	34.5	49.4	3.3
	N	5	6	7	9	7	—	—	—	—	3	1	1
	Er	2.6	0.8	1.5	1.3	1.5	—	—	—	—	2.3	—	—
24EW	pa	10.2	5.7	6.9	7.6	8.0	131.4	—	—	—	6.6	96.5	31.9
	N	6	7	7	8	7	3	—	—	—	5	1	1
	Er	2.0	0.6	0.5	0.6	0.5	40.5	—	—	—	1.4	—	—

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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
25NS	ρ_a	15.8	21.4	31.4	44.7	49.7	51.7	-	-	-	26.6	32.8	4.5
	N	6	6	9	13	13	4	-	-	-	6	1	1
	Er	2.7	3.1	5.6	3.9	2.8	23.3	-	-	-	2.8	-	-
25EW	ρ_a	25.9	29.5	32.4	48.3	63.5	38.5	-	-	-	7.6	51.9	6.3
	N	6	8	12	12	13	3	-	-	-	7	1	1
	Er	1.6	4.1	3.2	2.5	3.1	5.1	-	-	-	0.7	-	-
	ρ_a												
	N												
	Er												
	ρ_a												
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