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UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Audio-magnetotelluric data log and station
location map for Baltazor Known Geothermal
Resource Area, Nevada

Humboldt Co.

By

Carl L. Long and Mike Senterfit

Open-File Report 77-65B
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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.

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Baltazor, Nevada
1977

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
1 N S	pa	739.	429.	229.	232.	229.	65.2	-	-	-	5.13	15.0	2.83
	N	6	5	5	5	5	6				6	1	1
	Er	100.	75.2	14.7	35.7	20.9	3.31				0.53	-	-
1 E W	pa	550.	437.	332.	113.	169	42.9	-	-	-	1.54	5.36	1.0
	N	4	5	5	5	5	6				6	1	1
	Er	35.7	85.3	27.9	37.0	38.7	0.81				0.08	-	-
2 N S	pa	206.	184.	141.	61.9	35.1	8.05	-	-	-	18.4	47.5	12.7
	N	6	6	5	5	6	7				7	1	1
	Er	23.7	22.8	11.5	2.71	2.87	0.26				0.74	-	-
2 E W	pa	64.4	52.0	50.7	38.1	36.9	14.2	-	-	-	5.66	9.89	1.28
	N	7	6	5	5	6	7				6	1	1
	Er	3.50	10.0	2.32	4.27	2.68	0.81				0.13	-	-
3 N S	pa	160.	113.	91.7	115.	97.2	13.6	-	-	-	4.94	37.5	3.79
	N	6	5	3	6	6	7				6	1	1
	Er	48.9	48.7	2.40	17.5	10.2	0.40				0.27	-	-
3 E W	pa	55.7	48.4	38.2	33.8	28.6	11.3	-	-	-	5.26	12.3	2.75
	N	6	4	5	5	5	6				6	1	1
	Er	8.7	6.6	13.1	3.6	5.7	0.76				0.40	-	-
4 N S	pa	-	45.3	68.1	39.3	36.9	16.2	16.0	-	-	13.0	35.2	3.91
	N		5	6	6	6	6	3			6	1	1
	Er		7.07	1.54	2.23	0.99	0.96	0.80			0.55	-	-
4 E W	pa	20.7	18.3	27.6	21.8	33.3	20.6	-	-	-	27.9	61.5	8.09
	N	6	4	6	6	7	6				6	1	1
	Er	4.08	4.64	1.61	3.78	1.77	1.29				1.65	-	-

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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
5 ^N _S	ρ_a	53.0	68.0	42.0	30.8	39.5	11.2	-	-	-	33.4	61.3	33.3
	N	6	5	6	7	6	10.				6	1	1
	Er	3.3	14.5	2.3	1.6	1.1	0.66				1.34	-	-
5 ^E _W	ρ_a	14.8	22.9	21.1	15.8	14.3	15.9	-	-	-	30.0	33.3	37.9
	N	6	5	8	6	4	6				6	1	1
	Er	0.8	1.1	1.3	0.8	0.2	0.97				0.69	-	-
6 ^N _S	ρ_a	47.7	57.8	66.6	38.6	76.1	20.7	-	-	-	78.8	132.	43.5
	N	6	6	6	7	6	7				7	1	1
	Er	9.17	10.3	2.82	3.26	2.17	0.65				2.07	-	-
6 ^E _W	ρ_a	17.4	16.99	32.5	19.6	36.9	21.4	-	-	-	49.3	91.2	54.6
	N	6	6	5	6	6	6				6	1	1
	Er	2.28	4.61	5.22	1.52	4.66	0.91				1.91	-	-
7 ^N _S	ρ_a	88.3	56.8	48.1	39.1	47.8	16.8	-	-	-	12.9	42.7	6.33
	N	6	6	6	8	6	6				6	1	1
	Er	13.7	6.6	9.4	1.8	6.2	0.67				0.72	-	-
7 ^E _W	ρ_a	43.9	27.1	28.0	26.7	47.5	27.5	-	-	-	15.3	39.2	2.69
	N	5	6	6	5	6	6				6	1	1
	Er	4.1	2.6	3.4	3.1	2.9	2.32				1.50	-	-
8 ^N _S	ρ_a	-	24.9	20.1	20.6	19.8	4.54	-	-	-	26.4	16.2	31.0
	N		6	6	6	6	7				6	1	1
	Er		4.07	1.79	1.01	1.83	0.25				0.72	-	-
8 ^E _W	ρ_a	7.07	8.24	9.99	8.22	19.5	10.9	-	-	-	16.1	21.4	23.6
	N	6	7	6	6	6	6				7	1	1
	Er	1.46	0.50	0.81	0.34	1.26	0.65				0.74	-	-

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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
9 ^N _S	pa	22.7	53.4	36.5	38.2	73.1	-	-	-	-	19.7	33.5	21.6
	N	5	6	6	7	6					6	1	1
	Er	1.0	13.1	3.6	2.0	8.6					0.62	-	-
9 ^E _W	pa	6.1	6.8	11.4	6.3	12.4	10.0	-	-	-	19.9	39.9	32.2
	N	5	6	6	6	6	7				6	1	1
	Er	0.7	0.4	1.1	0.5	0.4	0.27				0.89	-	-
10 ^N _S	pa	21.9	24.7	24.2	25.7	49.3	17.0	-	-	-	7.49	12.0	21.4
	N	6	5	7	6	6	1				6	5	1
	Er	1.32	5.07	1.26	3.39	4.09	-				0.17	0.73	-
10 ^E _W	pa	11.2	10.1	16.1	15.1	27.3	20.5	-	-	-	12.4	17.2	16.8
	N	6	6	6	5	6	1				6	1	1
	Er	1.05	1.03	1.61	0.99	1.99	-				0.52	-	-
11 ^N _S	pa	144.	154.	168.	159.	-	-	-	-	-	-	36.4	6.0
	N	6	6	5	6							1	1
	Er	11.1	4.3	17.7	9.3							-	-
11 ^E _W	pa	144.	246.	145.	120.	-	-	-	-	-	3.9	28.1	8.9
	N	4	5	6	5						3	1	1
	Er	20.8	49.3	34.7	3.4						0.50	-	-
12 ^N _S	pa	1.19	-	8.96	1.81	1.97	1.05	-	-	-	3.31	1.77	2.15
	N	6		6	6	6	6				7	1	1
	Er	0.18		0.75	0.26	0.12	0.06				0.28	-	-
12 ^E _W	pa	3.62	3.02	5.01	1.77	3.25	2.80	-	-	-	19.6	113.	136.
	N	6	6	6	6	6	6				6	4	1
	Er	0.87	0.70	0.42	0.25	0.40	0.20				1.02	7.19	-

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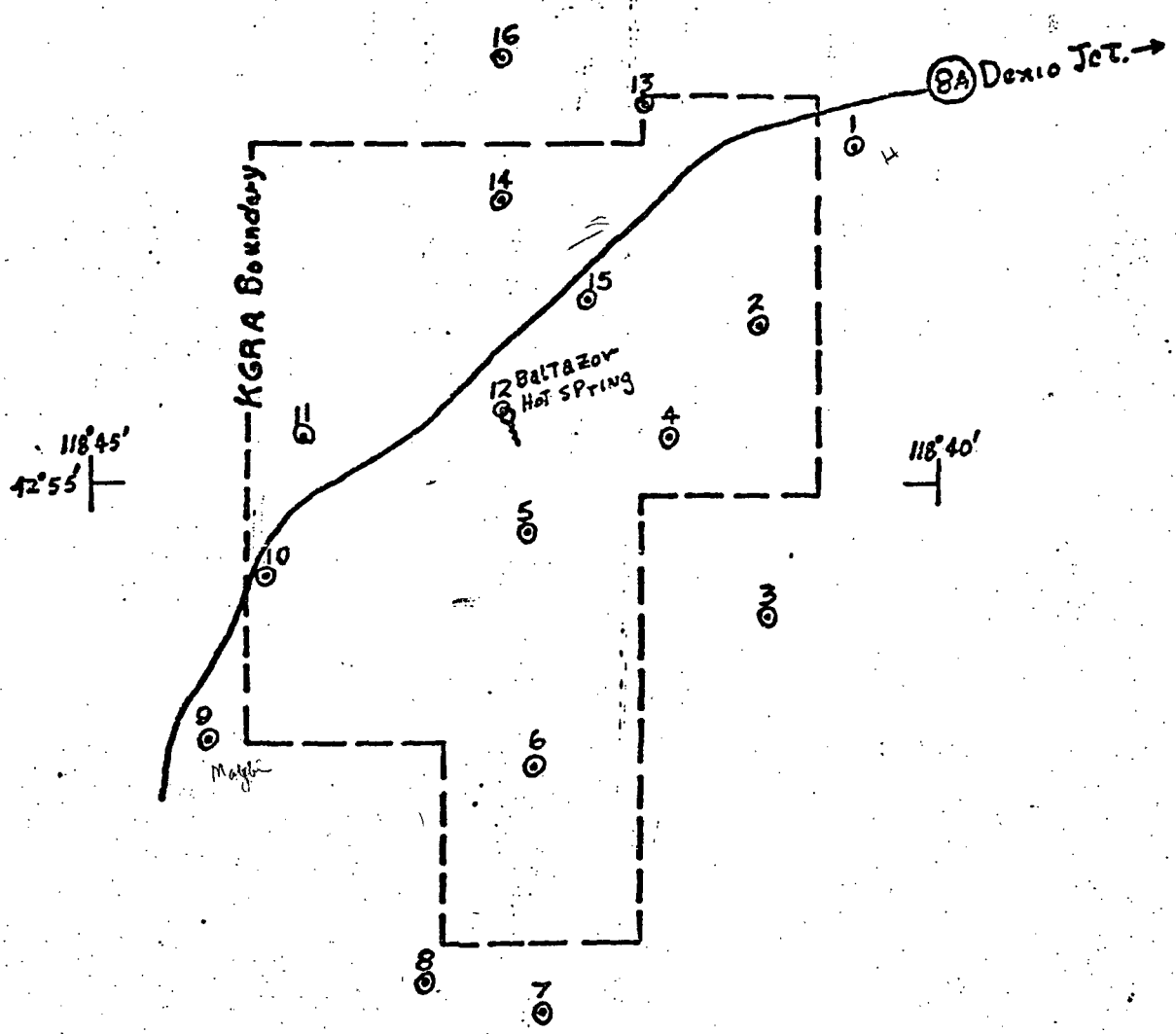
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Sta. No.		FREQUENCY											
		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
13 ^N _S	pa	96.2	39.7	14.5	18.7	19.3	8.83	-	-	-	8.39	98.4	38.2
	N	7	3	4	6	6	7				6	1	1
	Er	2.75	5.18	2.7	2.4	1.0	0.24				0.31	-	-
13 ^E _W	pa	32.7	15.7	10.6	5.3	13.8	16.7	-	-	-	21.9	56.2	42.8
	N	6	6	4	4	6	6				6	1	1
	Er	5.34	1.4	2.0	0.2	0.30	0.99				0.42	-	-
14 ^N _S	pa	15.1	28.4	6.08	5.20	9.86	4.93	-	-	-	24.4	91.4	16.5
	N	6	5	6	6	8	6				6	1	1
	Er	1.55	2.39	0.41	0.32	0.85	0.30				1.66	-	-
14 ^E _W	pa	17.6	15.4	8.58	4.71	8.92	12.5	-	-	-	14.6	32.0	2.92
	N	6	6	5	7	7	6				6	1	1
	Er	1.59	2.33	0.53	0.16	0.18	0.93				0.69	-	-
15 ^N _S	pa	1.5	-	3.0	11.4	6.0	1.64	-	-	-	51.2	28.0	60.7
	N	6		2	6	6	3				6	1	1
	Er	0.40		1.1	0.90	0.20	0.05				0.63	-	-
15 ^E _W	pa	0.8	0.6	0.5	10.2	10.6	2.46	-	-	-	27.4	43.2	35.8
	N	5	2	2	6	7	4				6	1	1
	Er	0.10	0.10	0.20	1.6	2.1	0.30				1.06	-	-
16 ^N _S	pa	76.2	156.	41.3	26.4	23.2	8.10	-	-	-	20.1	80.9	14.1
	N	6	6	6	6	6	6				6	1	1
	Er	13.4	19.6	4.02	2.53	1.50	0.34				1.02	-	-
16 ^E _W	pa	291.	468.	435.	133.	196.	30.2	-	-	-	15.5	35.5	16.8
	N	6	7	6	6	6	6				6	1	1
	Er	35.2	62.0	55.2	14.9	21.3	1.16				0.57	-	-



Audio-magnetotelluric station Location map for Baltazor Hot Springs KGRA, Nevada.

