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UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Station location map and audio-magnetotelluric
data log for Ruby Valley Known Geothermal
Resource Area, Nevada

ELKO CO-

By

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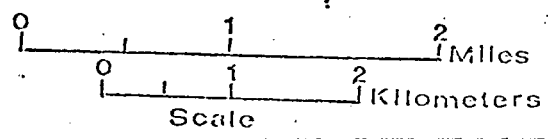
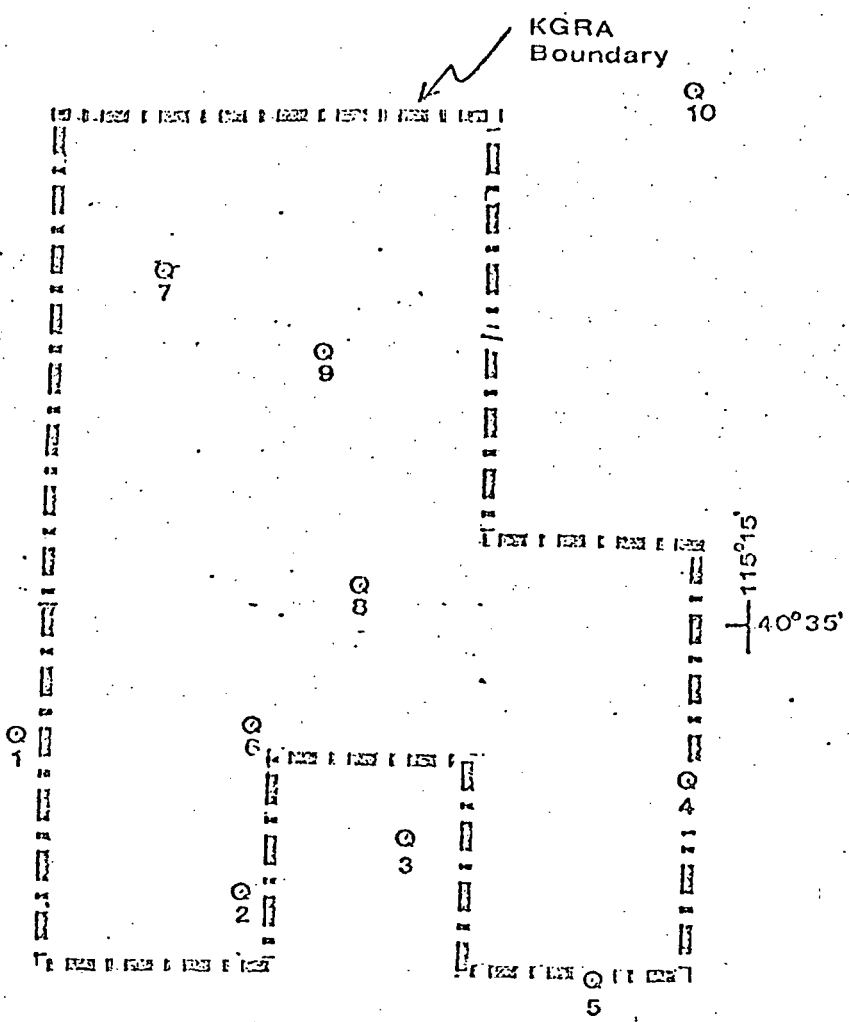
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This report is preliminary and has not been
edited or reviewed for conformity with U.S.
Geological Survey standards and nomenclature.

**UNIVERSITY OF UTAH
RESEARCH INSTITUTE
EARTH SCIENCE LAB.**

Station location
and number

40°35' 115°20'



RUBY VALLEY KGRA
Nevada

AUDIO-MAGNETOTELLURIC
STATION LOCATION MAP

FIGURE 1

①

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	261	258	222	148	181	297	-	12.6	16.0	9.17	4.61	4.05
	N	8	6	6	6	8	8	-	2	4	11	1	1
	Er	24.5	44.6	20.9	22.1	30.1	51.8	-	0.68	3.12	0.46	-	-
1EW	pa	453	350	448	241	190	213	31.3	21.2	4.33	5.78	6.94	0.57
	N	7	9	7	8	8	7	8	3	5	8	1	1
	Er	25.1	15.1	26.3	5.63	6.74	16.8	4.37	0.91	0.84	0.44	-	-
2NS	pa	15.4	23.9	14.0	14.2	34.1	18.0	-	-	-	2.19	6.51	0.13
	N	8	9	7	7	5	5	-	-	-	6	1	1
	Er	1.77	3.97	1.70	2.39	2.76	0.76	-	-	-	0.28	-	-
2EW	pa	11.8	10.7	6.89	9.36	14.7	18.2	-	-	-	1.88	2.18	0.09
	N	8	9	5	6	5	13	-	-	-	7	1	1
	Er	1.54	1.62	0.80	0.78	0.87	3.33	-	-	-	0.07	-	-
3NS	pa	8.46	6.34	15.2	12.3	20.6	17.53	1.68	0.58	0.61	0.55	0.60	0.06
	N	8	7	6	6	10	6	8	12	5	11	1	1
	Er	0.86	1.48	0.91	0.87	0.87	0.80	0.17	0.01	0.02	0.04	-	-
3EW	pa	8.78	4.88	6.50	8.65	19.8	20.3	3.28	2.01	0.98	1.50	0.95	0.11
	N	11	10	11	9	9	7	7	9	7	7	1	1
	Er	1.39	0.58	0.50	0.28	0.42	1.10	0.22	0.08	0.14	0.33	-	-
4NS	pa	17.6	24.8	37.3	19.0	28.6	39.0	7.03	2.15	3.25	2.34	2.58	0.30
	N	9	7	8	9	4	6	6	6	8	8	1	1
	Er	3.15	2.71	5.76	1.66	1.05	2.28	0.17	0.16	0.41	0.25	-	-
4EW	pa	15.6	10.2	3.18	16.4	19.5	26.2	1.82	1.02	2.34	1.91	2.08	0.15
	N	10	6	6	5	5	7	6	5	8	10	1	1
	Er	1.74	1.24	0.23	0.44	0.43	0.87	0.14	0.05	0.72	0.11	-	-

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

②

pa = observed apparent resistivity in ohm-metres

N = number of observations

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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	40.5	69.2	61.1	105.1	79.7	229.1	95.2	139.7	644.6	108.3	70.62	18.6
	N	6	6	10	8	8	8	8	9	8	9	8	2
	Er	4.49	10.7	11.4	18.1	12.9	57.0	15.3	38.1	78.3	7.45	2.87	0.67
5EW	pa	31.7	42.3	53.7	33.7	58.5	74.3	89.2	98.7	78.5	42.9	20.7	18.8
	N	8	10	8	9	8	8	8	9	8	8	8	2
	Er	4.69	9.02	6.44	5.98	9.05	10.9	9.1	16.3	14.7	2.29	2.15	0.58
6NS	pa	9.43	58.8	55.5	61.4	116.8	67.8	19.1	15.1	18.9	7.7	9.5	3.55
	N	6	8	8	8	8	9	8	5	11	11	5	1
	Er	17.4	10.8	15.6	17.6	36.9	5.1	0.76	0.55	2.9	0.65	0.72	-
6EW	pa	80.1	62.6	18.9	57.1	40.0	59.	19.6	32.3	9.08	4.5	5.28	0.68
	N	6	9	8	8	8	9	11	10	12	13	5	1
	Er	5.3	7.8	5.1	15.1	3.6	5.9	1.46	2.4	1.15	0.16	0.49	-
7NS	pa	1346	2526	1131	3464	2071	3302	688	34.0	288.	101.	62.	59.4
	N	8	9	8	8	8	8	8	8	7	7	5	1
	Er	346	845	151	711	375	533	103	45.5	21.8	6.84	3.83	-
7EW	pa	2486	3214	2532	2043	1467	747	99	37.5	8.78	5.41	2.76	0.55
	N	8	6	7	7	8	8	8	7	7	9	5	1
	Er	99.0	452	232	117	254	83.9	5.04	3.15	0.33	0.20	0.10	-
8NS	pa	3.84	3.16	2.97	2.57	4.51	2.84	0.7	-	0.23	0.15	0.17	0.02
	N	8	7	6	7	8	7	8	-	6	8	6	1
	Er	0.2	0.27	0.29	0.28	0.30	0.05	0.02	-	0.01	0.01	0.01	-
8EW	pa	13.8	13.2	11.3	5.11	3.27	3.46	2.51	-	1.60	1.82	2.13	0.110
	N	9	7	7	6	7	8	7	-	6	8	1	1
	Er	1.2	0.97	1.05	0.44	0.15	0.27	0.20	-	0.23	0.09	-	-

③

pa = observed apparent resistivity in ohm-metres

N = number of observations

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"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
915	pa	200	170	162	101	126	158	158	-	-	38.1	64.3	4.78
	N	7	7	9	6	6	6	5	-	-	8	1	1
	Er	12.6	9.43	13.4	6.69	4.82	3.21	9.72	-	-	2.5	-	-
96W	pa	123	103	162	83.3	56.1	103	27.9	-	-	4.59	3.87	1.39
	N	6	7	8	6	7	6	4	-	-	8	1	1
	Er	21.1	8.96	18.7	3.42	3.22	12.1	1.46	-	-	0.11	-	-
1015	pa	11.2	23.3	18.1	13.6	29.6	43.2	9.58	-	28.5	20.8	18.3	4.29
	N	4	4	7	7	4	4	7	-	4	10	1	1
	Er	2.32	4.98	2.79	0.96	3.06	5.73	1.17	-	6.02	1.79	-	-
106W	pa	57.7	35.2	21.3	16.1	41.8	98.7	68.2	-	115	37.3	81.7	51.7
	N	6	5	4	8	7	8	6	-	4	7	1	1
	Er	4.33	12.7	5.53	3.22	6.63	17.36	15.3	-	25.8	3.88	-	-
	pa												
	N												
	Er												
	pa												
	N												
	Er												
	pa												
	N												
	Er												