

6107387



Aerojet Nuclear Company

Interoffice Correspondence

September 15, 1976

S. G. Spencer
U. P. Depot

RAFT RIVER SUBSIDENCE CHECK - Hals-96-76

As requested a three (3) mile square of elevation points (E.P.) on a quarter ($\frac{1}{4}$) mile grid were set for the purpose of checking subsidence in the area of Geothermal Wells #1 and #2. The first set of levels over the E.P.'s was taken in June 1975, and covered the complete grid, but the level runs were never verified by closures. In November 1975, a second set of levels were run over a one and a half ($1\frac{1}{2}$) mile square portion of the original grid and closed in segments. In September 1976, by your request a third set of levels were run over the same $1\frac{1}{2}$ mile square portion of the grid. In comparing the three (3) level runs there is no indication of any settlement. The differences between the E.P.'s fall well within the \pm error of the level runs.

Error $\pm 0.01'$

Enclosed is a sketch of the area and a list of the elevations taken in June, 1975, November, 1975, and September 1976.

<u>E. P. No.</u>	<u>June, 1975</u>	<u>November, 1975</u>	<u>September 1976</u>
29	4814.56	4814.58	4814.57
30	4840.92	4840.94	4840.93
31	4874.32	4874.35	4874.34
32	4900.58	4900.62	4900.61
33	4914.17	4914.19	4914.18
34	4960.11	4960.13	4960.13
35	4990.50	4990.52	4990.51
44	4957.01	4957.01	4957.01
45	4943.60	4943.61	4943.61
46	4900.32	4900.32	4900.32
47	4876.36	4876.35	4876.35
48	4859.18	4859.19	4859.21
49	4836.70	4836.71	4836.71
50	4793.93	4793.92	4793.91

working to 2nd order

<u>E. P. No.</u>	<u>June, 1975</u>	<u>November, 1975</u>	<u>September 1976</u>
55	4797.09	4797.08	Not found
56	4820.12	4820.10	4820.12
57	4843.77	4843.77	4843.77
58	4864.51	4864.49	4864.47
59	4883.47	4883.45	4883.44
60	4905.37**	4905.29	4905.29
61	4958.87**	4958.73	4958.73
70	4938.45	4938.46	4938.46
71	4891.88	4891.91	4891.91
72	4873.09	4873.10	4873.10
73	4840.56	4840.56	4840.55
74	4827.99	4827.98	Destroyed
75	4814.22	4814.22	4814.22
76	4799.01	4799.02	4799.02
81	4805.53	Not taken	Destroyed
82	4807.37	Not Taken	4807.38
83	4816.59	4816.58	4816.60
84	4822.32	4822.30	4822.32
85	4838.57	4838.55	4838.55
86	4877.41	4877.40	4877.41
87	4908.27	4908.25	4908.27
96	4885.95	4885.92	4885.91***
97	4854.05	4854.04	4854.05
98	4835.09	4835.10	4835.10
99	4825.13	4825.15	4825.15
100	4818.69	4818.69	4818.69
101	4813.77	4813.80	4813.79
102	4808.88	4808.89	4808.88
107	4817.78**	4817.71	4817.69
108	4819.53	4819.50	4819.50
109	4823.89	4823.88	4823.88
110	4828.33	4828.33	4828.34
111	4836.65	4836.64	4836.54****
112	4850.54	4850.54	4850.54
113	4867.93	4867.93	4867.94

** The differences in elevations on these E.P.'s is believed to be due to field procedures and not in settlement.

*** This elevation point may have been disturbed.

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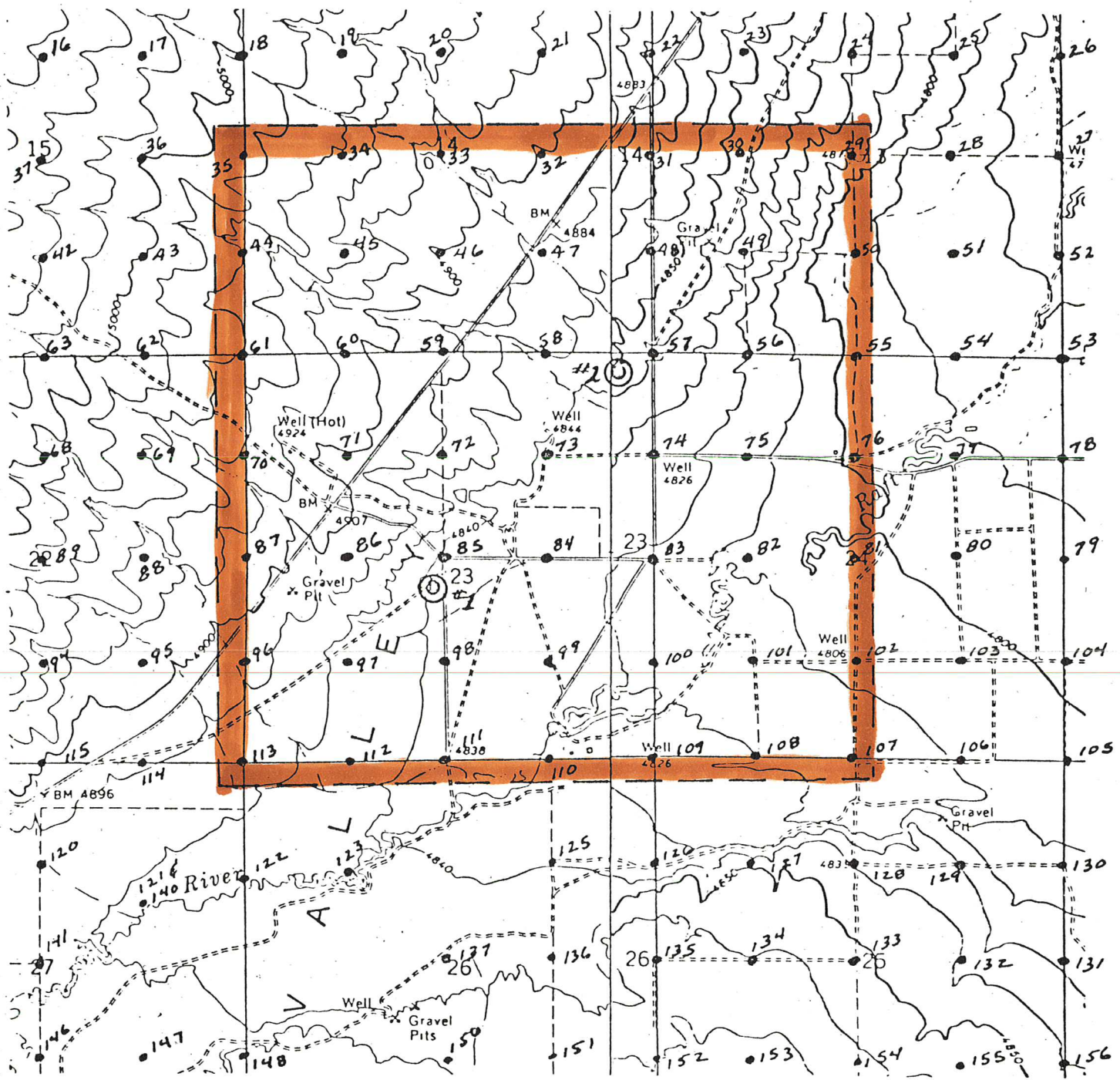
**** Elevation point III (a brass cap at the South Quarter corner of
Section 23 and major control point for Well's # 1 and # 3) has been
hit and bent over altering both it's vertical and horizontal location.



R. R. Halstead, Manager
Facilities Engineering

RRR:ifh

Enclosure as stated



- ⊙ Geothermal Well
- ⁷³ Elevation Points (E.P.)