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GEOHERMAL BRANCH

INTER-OFFICE MEMORANDUM

SUBJECT: Geochemical Analyses of Hot Wells
Animas, New Mexico (4128A).

DATE: June 10, 1983

TO: H. J. Olson

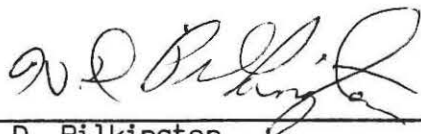
cc: W. Lodder
J. E. Deymonaz
W. M. Dolan

FROM: H. D. Pilkington

In December of 1982, the second well drilled by Dale Burgett was sampled. A comparison of the chemistry of all the hot wells is given in Table I. Production from the shallow geothermal reservoir has not significantly changed the chemical composition of the fluids.

The temperatures from Burgett's second well, on the southwest corner of the new greenhouse, are higher than the other wells and the depth of water production is also somewhat greater. Dale does not report any significant drop in the water levels of any of the wells.

In May of 1983, I visited the property and Dale has completed six (6) new wells. None of the wells were pumping; therefore, I will make another trip to the property in the fall and sample each of the wells.



H. D. Pilkington

HDP/c

Table I. Chemical Analyses of the Hot Wells
Animas, New Mexico

	W90015 SWNES7T25SR19W Hot Well (1975)	W13457 SESWNES7T25SR19W Hot Well (1980)	W13458 SWSWNES7T25SR17W Burgett Well #1	W14751 SWSWNES7T25SR19W Burgett Well #2
TOC	101	98	102	110
Flow (gpm)	--	100	70	70
pH	7.8	8.3	9.0	8.3
Cl	112.0	90.0	89.0	58.0
F	15.0	13.0	12.0	10.0
SO ₄	400.0	490.0	510.0	570.0
HCO ₃	90.0	52.0	46.0	80.0
CO ₃	0.0	0.0	0.0	0.0
SiO ₂	145.0	130.0	150.0	140.0
Na	340.0	290.0	310.0	330.0
K	20.0	21.0	23.0	20.0
Ca	20.0	22.0	22.0	19.0
Mg	0.3	0.6	0.5	1.9
Li	0.5	0.7	0.7	0.7
B	0.4	0.4	0.5	0.4
TDS	1143.2	1109.7	1191.7	1230.0
Ec(k)	---	1562.0	1614.0	1700.0
Tq SiO ₂	151	145	153	149
Tc SiO ₂	135	128	137	133
T Na-K-Ca	175	191	193	178
TNa-K-Ca	165	172	175	166
TNa/Li	98	131	126	122
TLi	131	142	142	142