TEC-3

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SUBJECT: NOQUEZ HEAT FLOW AND GRADIENT CONTOUR MAPS

TO: F. DELLECHAIE

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Thermal gradient and heat flow contour maps for the Noquez prospect, Mineral County, Nevada are shown in Figure 1 and 2 respectively. A compilation of the thermal data used to produce the maps is shown in Figure 4.

Six changes in thermal conductivity values were made in data that appeared in Maurath and Teplow, Prospect Assessment, 1981 Reconnaissance Program, February 1, 1982, pp. 34-37; Maurath and Teplow, Noquez Prospect, Temperature Logs, April 16, 1982, pp. 1,2; Teplow, Monthly Report - February 1982, p. 5. The following is a list of the changes with explanation.

Hole No.	Original Estimate of Conductivity T.C.U.	Final Estimate T.C.U.	Reason for Change
A	10	5.5	Conductivity measurement on outcrop sample and drill cuttings.
1	7.7	5.5	Reduced to be consistent with A
3	7.4	5.5	Reduced to be consistent with A
4	10.0	5.5	same lithology as A
1A	5.0	5.5	same lithology as 50
6	3.0	5.5	same lithology as 50
14	2	6.0	Gradient in basalt - not tuff
13	6.0	3.0	Gradient in interflow, basaltic breccia/ not basalt

Figure 4

Noquez Heat Flow Data

Hole No.	Gradient (Interval/ meters) °C/km	Conductivity T.C.U.	Heat Flow H.F.U.	BHT °C	Depth m'
A*	100 (30-110)	5.5	5.5	23.90	110
B	67 (40-98)	3.0	2.0	17.36	98
C	64 (40-79)	3.0	1.9	17.29	79
D	41 (23-38)	5.5	2.2	16.82	38
1*	95 (20-74)	5.5	5.2	19.19	74
3*	103 (60-83)	5.5	5.7	22.61	83
4*	90 (30-74)	5.5	5.0	19.85	74
1A*	104 (65-92)	5.5	5.7	20.03	92
5	erratic gradient				
13	173 (28-34)	3.0	5.2	20.05	34
50	59 (46-96)	5.5	3.2	20.13	110
14	75 (62-68)	6.0	4.5	20.12	90
6*	137 (20-54)	5.5	7.5	22.40	63
8	45 (50-90)	4	1.8	17.11	90
5	90	3.0	2.7	15.32	31.8