

GEOHERMAL BRANCH

INTER-OFFICE MEMORANDUM

SUBJECT: Thermal Conductivity Measurements - Deeth Area, NV DATE: December 15, 1980

TO: J. E. Deymonaz

FROM: H. D. Pilkington

The following thermal conductivity measurements have been received from Microgeophysics for the cuttings of phase I drilling at Deeth:

| <u>Hole #</u> | <u>Depth (ft.)</u> | <u>Bulk Conductivity</u> | <u>Calculated In Situ K</u> |
|---------------|--------------------|--------------------------|-----------------------------|
| 1030-4 | 60-70 | 7.42 | 4.73 |
| | 100-110 | 10.77 | 6.08 |
| | 200-210 | 3.71 | 2.82 |
| 1030-6 | 60-70 | 8.74 | 5.14 |
| | 140-150 | 6.91 | 4.21 |
| 1030-8 | 140-150 | 7.21 | 2.98* |
| 1030-9 | 140-150 | 8.11 | 5.41* |
| 1030-10 | 200-210 | 6.01 | 4.24 |
| 1030-11 | 140-150 | 14.87 | 12.31 |
| | 290-300 | 17.12 | 14.01 |
| 1030-12 | 310-320 | 4.34 | 2.58* |
| 1030-13 | 290-300 | 12.91 | 7.57* |
| 1030-15 | 140-150 | 6.19 | 3.96 |
| | 270-280 | 10.77 | 6.08 |
| 1030-18 | 70-80 | 9.43 | 6.44 |
| | 270-280 | 5.45 | 2.64* |

Thermal Conductivity Measurements - Deeth Area, NV
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Page Two

In general the bulk conductivity measurements appear to be reasonable and are probably the values we should use. The estimated On situ conductivities values, especially those *, are much too low because of the high porosity values assumed by Diane Westfahl (see enclosed data sheets).



H. D. Pilkington

Encl: 1

HDP/cjb