

1/5/88

BACKGROUND MATERIAL FOR THE INDEPENDENT MAGMA
SITE ASSESSMENT PANEL

Note: The package is intended to provide background material, largely on the chronology of events leading Sandia to select the present Long Valley drill site. The information in Document No. 2 supports UNOCAL's position that a magma body is more likely to exist in the Western Moat of the caldera, since the hottest hydrothermal activity is in that area. Documents with an asterisk are merely information on the magma energy program or results of geophysical studies in the area. Also enclosed is the LBL publication of the "Proceedings of the Symposium on the Long Valley Caldera: A Pre-Drilling Data Review" held in March 1987.

- *1. Magma Energy for Power Generation: An Overview of the DOE Magma Energy Program Activities thru FY 1987 by James Dunn, 1987
2. Results of Deep Drilling in the Western Moat of Long Valley by Gene Suemnicht, 1987
- *3. Gravity and Fault Structures, Long Valley Caldera by S.F. Carle and N.E. Goldstein, October 1987
- *4. Chemical and Isotopic Characteristics of Thermal Fluids in the Long Valley Caldera Lateral Flow System by a "Host of Researchers", October 1987
- *5. A Core Hole in the Southwestern Moat of the Long Valley Caldera: Early Results by a "Host of Researchers", May 1987
- *6. Observation of a Reflection from the Base of a Magma Chamber in Long Valley caldera by John J. Zucca, Paul Kasameyer, and John M. Mills, Jr., October 1987
7. Analysis of Borehole Seismograms from Long Valley: Implications for Caldera Structure by Gregory J. Elbring and John B. Rundle, November 1986
8. Geophysical Evidence for Magma: Long Valley by John B. Rundle, Charles Carrigan, Harry C. Hardee, and William Luth, May 1986
9. Selection of Promising Sites for Magma Energy Experiments by Charles C. Carson, January 1985
- *10. Seismic Imaging in Long Valley by Surface and Borehole Techniques: An Investigation of Active Tectonics by a "Host of Researchers", April 1985

11. Shallow Magma Targets in the Western U.S. by H.C. Hardee, October 1984
- *12. Research Drilling at Inyo Domes, Long Valley Caldera by J. C. Eichelberger and P.C. Lysne, 1984