

UNIVERSITY OF UTAH RESEARCH INSTITUTE

UURI

EARTH SCIENCE LABORATORY
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SALT LAKE CITY, UTAH 84108-1295
TELEPHONE 801-524-3422

March 15, 1990

Harrison Crecraft
Unocal Geothermal Division
3576 Unocal Place
P.O. Box 6854
Santa Rosa, California 95406

Dear Harrison,

Please find enclosed the clay X-ray diffraction report of well A-9 for Alimin Ginting of Unocal Geothermal of Indonesia along with two copies of the same. It was FAXed to Indonesia on March 12th. Thank you for arranging the delivery of the hard copy by courier to Indonesia.

Concerning the dating of the illite-smectites in well A-9, I would recommend Bob Duncan of the University of Oregon, School of Oceanography. His lab dated some illites from one of our projects in Zunil, Guatemala and we found they had the experience and equipment for young ages, and provided good turnaround time (one month) and high quality dates. If you have any more questions about the dating of clays, Joe Moore (801 524-3428) can probably help you. If you would like to know more about the alteration and clay and mineral paragenesis of the rocks in this well, we still have cuttings and could easily have thin-sections made. I'd be interested in doing the petrography of either selected intervals or the entire well and have included a price list of our services for your reference. Please give me a call at (801) 524-3425 if you're interested.

Sincerely,

Susan Lutz

Susan Lutz
Manager,
X-ray Diffraction Lab