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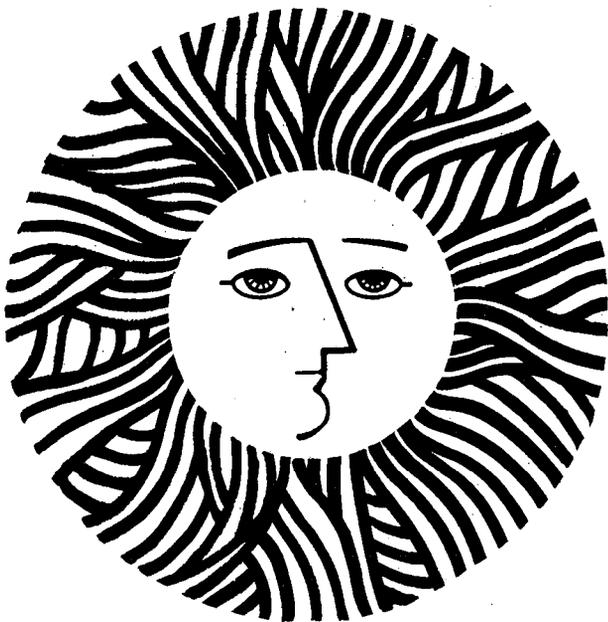
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August 20, 1981

TO: Pat Fair
FROM: Al Hodgson
RE: Monthly Progress Report for July
Distribution of As, Cd, Hg, Pb, Sb, and Se during
Simulated In-Situ Oil Shale Retorting
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TASK 4. LABORATORY PARTITIONING STUDIES

Evaluation of retort experiment LBL-09 continued. Of particular interest was an electron microprobe examination of a thermocouple sheath located in the offgas stream at the exit of the retort. The deposit on this surface contained high concentrations of zinc and sulfur and a measureable concentration of cadmium. Our strategy for the next retort experiment will be to collect fine particulates at the immediate exit of the retort for subsequent elemental analyses.

An electronic data logger-computer combination is being programmed for acquisition and analysis of data from the ZAA gas monitor and the laboratory retort.

TASK 5. FIELD STUDIES

Plans are being formulated to take the Hg gas monitor to lease tract C-a for use during the burn of Rio Blanco Oil Shale Company's retort 1. Our objectives are: (1) to monitor retort offgas during the final weeks of the burn to determine if elevated offgas Hg levels occur during this period, and (2) to evaluate the performance of the gas monitor under commercial retorting conditions.

One member of the staff made a three day reconnaissance and advance preparation visit to the Rio Blanco site in July. Two staff members are currently scheduled to conduct measurements at the site from Sept. 19 through Oct. 13. This schedule may be modified depending on the progress of the burn.

We are also participating in the development of the Oil Shale Task Force's research proposal for the burn of Occidental's retorts 7 and 8 to be initiated in November 1981. Since Occidental is already planning to measure offgas Hg, our proposal is to provide independent measures of Hg for comparative purposes.

PROJECTED WORK

Preparations for the Rio Blanco field trip will receive top priority in August. Analysis of the quality assurance samples will also be completed. Additional laboratory retorting experiments have been postponed due to staff vacations and field trip preparations.

This report was done with support from the Department of Energy. Any conclusions or opinions expressed in this report represent solely those of the author(s) and not necessarily those of The Regents of the University of California, the Lawrence Berkeley Laboratory or the Department of Energy.

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