

01/07/86

MONTHLY PROGRESS REPORT FOR DECEMBER 1985

PROJECT TITLE: Technical Assistance in Geochemistry

PROJECT MANAGER: G. K. Jacobs

PROJECT STAFF: J. T. Bell, J. G. Blencoe, R. M. Gove, G. K. Jacobs,
A. D. Kelmers, J. C. Mailen, R. E. Meyer,
G. D. O'Kelley, and K. L. Von Damm

ACTIVITY NUMBER: ORNL #41 88 54 92 4 (FIN No. B0287)
NRC #50 19 03 01

TECHNICAL HIGHLIGHTS:

Task 1 - Hanford Site Geochemical Technical Assistance

No significant activity to report.

Task 2 - Yucca Mountain Geochemical Technical Assistance

No significant activity to report.

Task 3 - Salt Sites Geochemical Technical Assistance

Karen Von Damm reviewed the report "The geochemistry of Ca, Sr, Ba, and Ra sulfates in some deep brines from the Palo Duro Basin, Texas," by D. Langmuir and D. Melchior, Geochim. Cosmochim. Acta 49, 2423-2432 (1985). The detailed Letter Report (LR-287-20) is attached.

Task 4 - Short-Term Technical Assistance

As requested in the response to our October Monthly Report, we have begun to add the NRC reviews (by W. R. Kelley) of reports related to the salt sites to our data base.

A first draft of the report summarizing the chemistry of plutonium as related to HLW isolation was completed by J. C. Mailen and J. T. Bell. This first draft will be reviewed internally prior to submittal to the NRC Project Manager for review.

Comments were provided to J. Bradbury (NRC/NMSS) on a draft of a technical position on sorption. Our detailed comments were forwarded to the NRC on December 18, 1985. Don Kelmers is presently collating our detailed comments and will provide a summary of these along with some general comments by the end of January.

PROJECT MANAGEMENT:

Nothing to report.

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MEETINGS AND TRIPS:

No activity to report this month.

REPORTS AND PUBLICATIONS:

Letter Report, LR-287-20, "Review of 'The geochemistry of Ca, Sr, Ba, and Ra sulfates in some deep brines from the Palo Duro Basin, Texas,' by D. Langmuir and D. Melchior, Geochim. Cosmochim. Acta 49, 2423-2432 (1985)," by K. L. Von Damm.

PROBLEM AREAS:

None.

COST/BUDGET REPORT:

Expenditures were \$38.7K for December 1985 and \$142.3K for FY 86 to date. A detailed cost/budget report will be sent under separate cover.