

WM-RES
WM Recor
B-0290
ORNL

WM Project 10, 11, 16
Docket No. _____
PDR
LPDR B, N, S

DEC 27 1984

426.1/B0290/JWB/84/12/26/0

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Distribution: _____

(Return to WM, 623-SS) L 3

Ms. Susan K. Whatley
Oak Ridge National Laboratory
Post Office Box X
Chemical Technology Division
Building 4500N, MS 211
Oak Ridge, TN 37831

DISTRIBUTION: WM-41155
WM 426.1 s/f NMSS r/f
WMGT r/f JWBradbury & r/f
JStarmer MKnapp
MJBell JOBunting
REBrowning

Dear Ms. Whatley:

SUBJECT: REVIEW OF NOVEMBER MONTHLY PROGRESS REPORT FOR B0290 "LABORATORY EVALUATION OF DOE RADIONUCLIDE SOLUBILITY DATA AND SELECTED RETARDATION PARAMETERS, EXPERIMENTAL STRATEGIES, LABORATORY TECHNIQUES, AND PROCEDURES"

I have reviewed the November, 1984 Monthly Progress Report dated December 7, 1984 for the subject contract. Based on my review, progress to date is satisfactory.

I am glad to see that you are reporting the sorption capacity of the solid along with sorption ratios. The sorption capacity can be a useful parameter. When radionuclide concentrations in the liquid are much greater than those on the solid, it makes more sense to report a nonzero sorption capacity than a zero Rs value, which is just a consequence of the experimental method used. The sorption capacity, in conjunction with liquid compositions, can then be used to calculate reasonable retardation factors.

Early in January, 1984 I plan to call you and Don Kelmers to discuss possible new tacks the contract might take. I am particularly concerned that valuable information which could improve the applicability of the results to performance assessment calculations and strengthen our arguments on comparisons of our experiments with those of the DOE may be lost by not determining the chemical compositions of the liquids at the end of the experiments. Consequently, the data generated by the experimental portion of the project have extremely limited application to the geochemical modeling portion of the project.

The action taken by this letter is considered to be within the scope of the current contract FIN B-0290. No change to cost or delivery of contract

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PDR WMRES EXIORNL
B-0290 PDR

OFFICE :	WMGT	jwb :	WMGT	:	:	:	:
NAME :	JWBradbury	JStarmer	:	:	:	:	:
DATE :	84/12/26	84/12/	:	:	:	:	:

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products is authorized. Please notify me immediately if you believe this letter would result in changes to costs or delivery of contract products.

Sincerely,

Original Signed By
John W. Bradbury
Geochemistry Section
Geotechnical Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

OFFICE :	WMGT	JWB	jmwb	:	WMGT	:	:	:	:	:
NAME :	JWBradbury	:	JStamper	:	:	:	:	:	:	:
DATE :	84/12/26	:	84/12/	:	:	:	:	:	:	: