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,		Susa Oak P.O. Chem Buil Oak Dear SUBJ	n K. Ridgo Box ical ding Ridgo Ms. ECT:	Whatley e National Laborator X Technology Divisior 4500 N, MS 211 e, TN 37831 Whatley: CONTRACT NO. NRC-5 "TECHNICAL ASSISTA PROGRESS REPORT.	NOV 2 1 198 WM Record File Y BD287 ORN Distribution: (Relurn to WM, 623-SS 60-19-03-01, FIN INCE IN GEOCHEMIS	B4 WM Proj Docket N P LP B-0287, OR STRY, " OCTO	JOBUNTING MRKnapp DJBrooks & RJStarmer COPDR /Q, //, O.LPDR (B,N,S) DR / DR / (B,N,S) DR / DR / (B,N,S) NL NO. 41-37- BER, 1984, MC	r/f / <b>C</b> ) -54-92-4, )NTHLY			
		I ha Base	ve re d on	eviewed the October my review, I have t	monthly progress he following com	s report da ments:	ted November	8, 1984.			
		Task 1 - BWIP Geochemical Technical Assistance									
		0	Prog	gress to date is sat	isfactory.						
		0	Your prei foli	r scoping review of liminary analysis. lowing:	the BWIP draft E For this prelimi	E.A. was fa inary analy	ctored into c sis we focuse	our ed on the			
	-		1.	The overall assump equated to the red analysis in favor condition.	tion that (very lucing capacity o of achieving the	low) reduc of the syst overall "	ing conditior em, biases th guideline" qu	ns can be ne E.A. walifying			
			2.	The assumption tha in their least sol	t redox sensitiv uable state.	ve radionuc	lides enter t	he host rock			
			3.	The assumption tha sorptive state.	t radionuclides	enter the	host rock in	their most			
		Ο	I re info righ cont on n cons topi	eceived the final dr ormation. I am plea of in line with what tains all of the ele ny agenda will be to sider that the publi ical reports.	aft of the topic sed with this pr I had in mind. ments needed for comment on the shed version wil	al report oduct. It I conside a topical draft and l serve as	on BWIP solub s technical o r that this d review. A h get it publis a model for	oility content is lraft igh priority hed. I our other			
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Task 2 - NNWSI Geochemical Technical Assistance

- ° Progress to date is satisfactory.
- <sup>°</sup> The scoping review of the draft NNWSI E.A. was factored into our preliminary analysis. The main points that were focused on were:
  - 1. Inadequate consideration of the effects of precipitation of and later disolution of salts, on groundwater conditions (due to the wetting-drying cycle expected in the vadose zone).
  - 2. Inadequate consideration of the effect of potential changes in groundwater composition on radionculide solubility.
  - 3. Inadequate consideration of non-equilibrium, unsaturated conditions on sorption studies.
- Task 3 Salt Geochemical Technical Assistance
- Progress to date is satisfactory.
- <sup>°</sup> The scoping review of the draft Salt E.A. was factored into our preliminary analysis. The main points that we focused on were:
  - 1. Inadequate consideration/discussion of uncertainties with respect to site specific data.
  - 2. Inadequate consideration/discussion of uncertainties with respect to performance assessments.
  - 3. Inadequate consideration/discussion of uncertainities with respect to redox and pH conditions
  - 4. Inconsistency of data and interpretations and inadequate documentation.
- Task 4 Short-Term Geochemical Technical Assistance
- Progress to date is satisfactory.
- Your review of SNL letter report on colloids was received and has been transmitted to the authors.

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Task 5 - Project Management

- ° Progress to date is satisfactory.
- <sup>°</sup> Attached for your information and distribution to 0287/0290 personnel is Los Alamos document (LA-9987) "Recommendations for Plutonium Colloid Size Determinations."
- The action taken by this letter is considered to be within the scope of the current contract NRC-50-19-03-01/FIN B-0287. No changes to costs or delivery of contracted products is authorized. Please notify me immediately if you believe that this letter would result in changes to costs or delivery of contracted products.

Sincerely,

David J. Brooks Geochemistry Section Geotechnical Branch Division of Waste Management Office of Nulear Material Safety and Safeguards

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IAME	:DJBrooks mt		 	•	 
DATE	:84/11/21		 	•	 