



## Department of Energy

Salt Repository Project Office  
110 North 25 Mile Avenue  
Hereford, Texas 79045

September 16, 1987

Mr. John J. Linehan, Section Leader  
Projects Section  
Division of Waste Management, MS 623-SS  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Linehan:

SUBJECT: NRC REQUEST FOR DATA REVIEW (SRPO CORE), OCTOBER 20-22, 1987, AT TBEG (AUSTIN, TEXAS)

- References: 1) Letter, Linehan to Neff, dated June 26, 1987, requesting a July 21 - July 23 data review at the Texas Bureau of Economic Geology, dated June 26, 1987.  
2) Letter, Neff to Linehan, dated July 6, 1987, indicating that SRPO will be unable to hold data review on requested dates.

This letter confirms recent telephone discussions between Dan Gillen of NRC and Susan Heston of DOE (SRPO), regarding the scheduling of an NRC visit to the Bureau of Economic Geology on October 20, 21, and 22, 1987, to view sections of core previously recovered as part of our Palo Duro Basin studies.

SRPO currently intends to schedule this data review for October 20-22, in Austin, Texas; however, in view of the recent decision to publish the draft SRP Site Characterization Plan in January 1988, we note that both the scope and the dates of the data review may change if it begins to impact SRPO's ability to meet the schedule for SCP publication. A description of what we now believe we can provide for this core review is given below and on Enclosures 1 and 2.

Based on your letter of June 26, 1987 (referenced above), we understand that the purpose of this data review is to provide new NRC staff and contractors an opportunity to view the core and gather information; it is not a technical meeting to resolve specific concerns, nor is it a presentation or review of planned site characterization studies involving core. Accordingly, no formal presentations will be made by SRPO and its contractors, other than an introductory presentation of the Palo Duro Basin stratigraphic section and program core lithology, and an orientation session on the project Quality Assurance procedures for examination of core.



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Celebrating the U.S. Constitution Bicentennial — 1787-1987

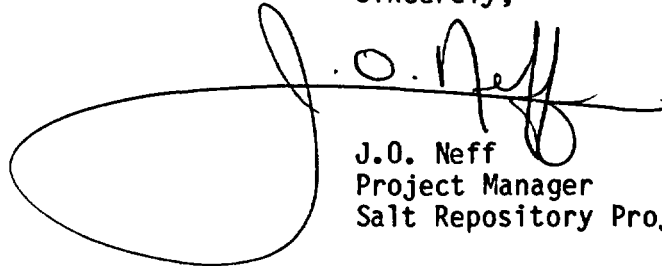
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An inventory of the core and other requested materials that can be made available during this review is given on Enclosure 1. The data review also will include a tour of the core storage facility, as requested.

Project contractors will be available during the review to respond informally to questions regarding the core and its analysis. Interpretations presented will be limited to those explicitly applicable to the core. The technical contractors that we currently plan to have available, and their areas of expertise, are included in Enclosure 2. Since some of these individuals may be unavailable at the time of the review due to SCP responsibilities, this list should be considered preliminary.

Please contact Mohammed Mozumder if you have any questions concerning the technical content of this core review. Questions concerning logistics should be directed to Susan Heston. Either may be reached at (806) 374-2320.

Sincerely,



J.O. Neff  
Project Manager  
Salt Repository Project Office

SRPO:SLH:max:1265SG

Enclosures:

1. Materials for Core Review
2. SRPO/Contractor Attendees

cc: G. Appel, SRPO, w/encl.  
R. Lahoti, SRPO, w/o encl.  
T. Taylor, SRPO, w/o encl.  
M. Mozumder, SRPO, w/encl.  
J. Ellenberger, SRPO, w/encl.  
K. Wu, SRPO, w/encl.  
L. McClain, SRPO, w/encl.  
J. Knight, RW-24, w/encl.  
O. Thompson, RW-242, w/encl.  
D. Gillen, NRC, w/encl.  
R. Helgerson, ONWI, w/encl.  
J. Sulima, ONWI, w/encl.  
M. Milling, TBEG, w/encl.  
M. Abashian, ONWI, w/encl.  
D. Smith, TX, w/encl.  
P. Niedzilski-Eichner, WDIC, w/encl.

256-87-RC

## ENCLOSURE 1

## AVAILABLE CORE, LOGS, AND OTHER MATERIALS

CORE

Borehole Name	Core Interval Depth (ft.)	Comment
<u>J. Friemel</u>	394-600 1000-1216 1239-1464 1846-2830 5519-5909 6421-6537 7768-7780 8047-8283	Core recovery was excellent below 1846 ft. Above that, recovery in the softer sediments was moderate to very good.
<u>G. Friemel</u>	1210-1312 2400-2700	Core recovery was excellent below 2400 ft. Above that, core recovery in the softer sediments was moderate. A 10 foot measuring discrepancy was noted in the upper section.
<u>Grabbe #1</u>	30-90	
<u>Mansfield</u>	1540-1820	Core recovery was excellent.
<u>Sawyer</u>	2850-3100	Core recovery was excellent.
<u>Zeeck</u>	2700-3100 5308-5500 7300-7387	Core problems around 2871 ft. due to flooding of pits by a rain storm. A short core loss occurred and the recovered ore was washed or eroded. 5300-5308 ft. was drilled; core recovery from 5308-5500 was moderate to excellent. 7300-7387 ft. some core extrusion problems occurred and some handling damage was noted.

ENCLOSURE 1

AVAILABLE GEOPHYSICAL & OTHER LOGS

Borehole Name	Log Types	Available Depths (ft.)
<u>J. Friemel</u>	dual induction - SFL	60-4635; 4695-8282
	dual laterolog	1202-2810
	proximity log micro	60-8282
	comp. neutron litho density	60-4646; 4695-8282
	comp. neutron temperature	1202-2820; 4698-6532 0-8282
	b.h. comp. sonic	60-4635; 4695-8282
	sonic var. density waveform	60-4635; 4695-8282
	long spaced sonic	60-4647; 4695-8282
	long spaced sonic digit. waveform	60-4647; 4695-8282
	fracture ID	60-4650; 4695-8282
	4 arm cont. dipmeter	60-4650; 4695-8282
	contin. directional	60-4650; 4693-8283
	field directional	60-4650; 4693-8283
	4 arm caliper	1202-2824; 4698-7774
	CYBERLOOK	60-4600; 4695-8282
	CORIBAND	75-4630; 4700-8260
	natural gamma	60-4646; 4695-8283
	syner. geogram	
	well seismic report	0-8232
	cement evaluation	4400-5950
VOLAN	600-900; 1250-1950; 2700-3200; 5500-6100	
<u>G. Friemel</u>	dual laterolog	1057-2697
	comp. neutron lith. density	1057-2685
	temperature	1057-2695
	b.h. comp. sonic	1057-2697
	sonic waveform var. density	1057-2697

G. Friemel (cont.)	long sp b.h. comp. sonic	1057-2697
	long sp sonic waveform	1057-2697
	fracture ID	1057-2711
	4 arm cont. dipmeter	1057-2711
	computed directional	1057-2711
	CYBERLOOK	1057-2697
	CORIBAND	1060-2686
	repeat fm. tester (10 tests)	1233-2684
	natural gamma	1057-2704
	well seismic report	338-2666
	syn. geogram	

Grabbe #1 no logs available from 30-89 ft.

<u>Mansfield</u>	dual laterolog	1000-3539
	comp. neutron fm. density	1000-3537
	temperature	1216-3540
	b.h. comp. sonic	1000-3540
	sonic var. waveform density	1000-3523
	fracture ID	1216-3539
	4 arm cont. dipmeter	1216-3539
	cont. directional	1216-3539
	CYBERLOOK	1216-3430
	CORIBAND	1200-3522
	dual sp thermal neutron	38-4895
	var. density cement	486-5130

<u>Sawyer</u>	dual laterolog	330-3432
	comp. neutron fm. density	1500-3933
	temperature	0-3918
	b.h. comp. sonic	330-3917
	sonic waveform var. density	330-3916
	fracture ID	330-3920
	4 arm cont. dipmeter	330-3920
	cont. directional	330-3920

<u>Zeeck</u>	dual laterolog	1017-7644
	comp. neutron litho density	1017-7642
	comp. neutron	1019-5757
	temperature	1017-7642
	b.h. comp. sonic	1017-7642
	sonic waveform var. density	1017-7642

Zeeck	fracture ID	1017-7644
(cont.)	4 arm cont. dipmeter	1017-7644
	cont. directional	1017-7644
	field comp. directional	1017-7642
	4 arm caliper	1017-5350
	CYBERLOOK	1017-7610
	CORIBAND	1020-7620
	repeat fm. tester	2936-7645
	(14 tests)	
	syn. geogram	
	well seismic report	0-7428
	well seismic monitor	1017-7302
	cement bond (several)	0-7399
	natural gamma	1017-7630

Black #1

Logs run in this hole were included in BMI-SRP-5037, an additional copy of which was transmitted to NRC on 7-17-87. However, these logs also can be made available for the core data review if necessary.

Hudson Taylor #1

b.h. comp. sonic	1243-8969
simul. dual laterolog	1243-4445; 4460-8993
computer processed	4460-8950
lithologic/gas analysis	1200-9000
simul. comp. neutron	1243-4457
litho.	
comp. neutron lithodens.	1243-4457
CYBERLOOK	4460-8950
dual induction	4460-8993
dual laterolog	1243-4445

ENCLOSURE 1

LSA - 4 THIN SECTIONS

The Salt Repository Project has had LSA-4 thin sections prepared by more than one contractor. A list of the thin sections available for the data review is being compiled and will be transmitted prior to the data review.

ENCLOSURE 2

SRP ATTENDEES LIST, CORE DATA REVIEW, OCTOBER 20-22, 1987,  
BUREAU OF ECONOMIC GEOLOGY, AUSTIN, TEXAS

(preliminary)

S. Heston (SRPO)	Licensing
M. Mozumder (SRPO)	Geology
J. Ellenberger (SRPO)	TBEG Management
S. Hovorka (TBEG)	Stratigraphy and Geochemistry, Repository Horizon Evaporites
T. Gustavson (TBEG)	Stratigraphy and Geomorphology, Ogallala Formation
S. Fisher (TBEG)	Geochemistry; Clastic Diagenesis
TBD (TBEG)	Hydrology
B. Kaiser (TBEG)	Geochemistry; Adsorption
TBD (TBEG)	Quality Assurance
TBD (ONWI)	Geology/Program Management
TBD (SWEC)	Geology
TBD	Rock Mechanics
TBD	LSA-4 Thin Section Petrography



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