

106.2  
RL/84/12/07

DEC 17 1984

- 1 -

Distribution:  
WM sf  
WMGT rf  
NMSS rf  
RBrowning  
MBell  
JBunting  
HMiller  
PJustus  
RLee & rf

c2  
See Pocket for  
Enclosure

MEMORANDUM FOR: Robert Johnson  
Repository Projects Branch  
Division of Waste Management, NMSS  
FROM: Richard Lee  
Geotechnical Branch  
Division of Waste Management, NMSS  
SUBJECT: EA PREPARATION ACTIVITIES DUMP

WM Record File  
106.2

WM Project 16  
Docket No. \_\_\_\_\_  
PDR ✓  
LPDR ✓

Distribution:

(Return to WM, 623-SS)

In preparation for the upcoming EA review, the enclosed items constitute a nearly complete listing of my activities. My preparation has focused on the Gulf Coast sites, and the enclosure reflects that; however, many of the items also include activities relevant to both the Paradox and Permian Basin sites. The attachment includes 1) recently received geologic data for the Gulf Coast, Permian Basin, and Paradox Basin sites - all of which have been reviewed; 2) DCC reference reports listing - those containing a check mark have been reviewed in detail, (Note: as many as 20 other documents have also been reviewed which do not appear on this reference list.); 3) trip report - Review of Geophysical Data for the Paradox Basin; 4) trip report - AGU Chapman Conference on Vertical Uplift.

As of this writing, three critical documents have been identified which are not yet available and will be reviewed if they arrive prior to the EAs. With that exception my document review for EA preparation is complete.

Those data and reference items marked X are considered critical items.

Those data and reference items marked ✓ have been reviewed.

131  
Richard Lee  
Geotechnical Branch  
Division of Waste Management, NMSS

Enclosures:  
As stated

B501110299 841217  
PDR WASTE PDR  
WM-16

JFC	: WMGT RL	:	:	:	:	:
NAME	: RLee:dw	:	:	:	:	:
DATE	: 84/12/17	:	:	:	:	:

798

Envelope to 12/17/84  
memo to R. Johnson  
from Richard Lee

GULF DOME DATA

WM BUCKET CONTROL CENTER

3777 Long Beach Boulevard • P.O. Box 7765, Long Beach, California 90807  
Telephone: (213) 595-6611 / (714) 821-7062 • Telex: 656338

October 31, 1984

EW-ONWI-84-7854

WM Record File 106 WM Project 16  
Docket No. \_\_\_\_\_  
PDR   
LPDR

U. S. Nuclear Regulatory Commission  
MS-623-55  
Washington, D.C. 20555

Distribution: Johnson Linsch  
1984  
(Return to WM, 623-55) *af*

Attention: Mr. R. Johnson

Subject: Transmittal of Geologic Data for the Gulf Coast  
Requested by the NRC - Submittal #3  
Southern Region GPM - Salt Program  
BPMD Contract No. E512-05700

Gentlemen:

This letter serves to transmit the third and final planned submittals of data for the Gulf Coast region requested by the Nuclear Regulatory Commission. This submittal includes two complete sets of core photos and indices for Vacherie Dome (item 2 of the NRC request).

Attached to this letter is a brief description of the data set that identifies the content and important characteristics of the data set. A copy of this description is included in the package. Should you have any questions regarding this submittal, please do not hesitate to call.

Sincerely,

THE EARTH TECHNOLOGY CORPORATION

*Kenneth L. Wilson*

Kenneth L. Wilson  
Project Manager

KLW:hp  
Enclosures - Core Photos

cc: Mr. Charles S. Kuntz (w/attachments)  
Dr. Walter Newcomb (w/attachments)

~~8501070150~~

**ATTACHMENT**

**Item 2, CORE PHOTOS**

This data set includes 324 color transparencies of core from DOE Smith et al #1 at Vacherie Dome Louisiana. These photos were taken by LSU personnel and provided to Earth Technology by Dr. Ron Wilcox of LSU/IES. Each of the photos is numbered so that it can be keyed to the enclosed index. The index provides additional information on core footage shown in each slide.

WM DOCKET CONTROL  
CENTER

3777 Long Beach Boulevard • P.O. Box 7765 • Long Beach, California 90807  
Telephone: (213) 595-6611 / (714) 821-7062 • Telex: 656338

'84 OCT 15 P4:25

October 12, 1984

EW-ONWI-84-7770

WM Record File

106

WM Project 11a

Docket No. \_\_\_\_\_

PDR

LPDR \_\_\_\_\_

U.S. Nuclear Regulatory Commission  
MS-623-SS  
Washington, D.C. 20555

Distribution:

R. Johnson

W. R. R.

(Return to WM, 623-SS)

Attention: Mr. R. Johnson

Subject: Transmittal of Geologic Data for the Gulf Coast  
Requested by the NRC - Submittal #2  
Southern Region GPM - Salt Program  
BPMD Contract No. E512-05700

Gentlemen,

This letter serves to transmit the second of three planned submittals of data for the Gulf Coast region requested by the Nuclear Regulatory Commission. This submittal includes two complete sets of: core photos (item 2 of the NRC request) from wells MRIG-9 (Richton) and MCCG-1 (Cypress Creek) and aerial photos (item 5) for Richton, Cypress Creek and Vacherie domes.

The final submittal of Gulf Coast Data will include the requested core photos (item 2) for Vacherie dome. At the present time, the third submittal is planned for late October.

The second submittal was shipped from our Long Beach office via United Parcel Service, and should arrive October 19. The shipment consists of one box and one mailing tube.

~~8501070186~~

Mr. R. Johnson  
EW-ONWI-84-7770

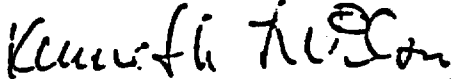
October 12, 1984  
Page 2

Attached to this letter are brief descriptions of each data set that identify: 1) important characteristics of the data and 2) the contents of each set. These same descriptions are included in the packages.

Should you have any questions with regard to this submittal, please do not hesitate to call.

Sincerely,

THE EARTH TECHNOLOGY CORPORATION



Kenneth L. Wilson  
Project Manager

KLW:gn

Attachment A - Core Photos  
Attachment B - Aerial Photos

cc: Mr. Charles S. Kuntz (w/attachments)  
Dr. Walter Newcomb (w/o attachments)

ATTACHMENT A

ITEM 2, CORE PHOTOS

This data set includes 35mm color transparencies of core from MRIG-9 at Richton Dome and MCCG-1 at Cypress Creek Dome.

These photos were taken by Earth Technology personnel at the Hattiesburg field office in April 1982, approximately three years after these holes had been drilled. A placard in each photo identifies the photo number, Earth Technology Corporation project number, date, well name, core run and box numbers, and core footages. Photo numbers are consecutive and continuous. These numbers are 1 to 182 for core from MRIG-9 and 1 to 184 for core from MCCG-1. The handwritten numbers on the slide frame are not continuous (i.e., some numbers are not present) and should be ignored.

We suggest viewing these pictures with core descriptions presented in ONWI - 277 (MRIG-9) and ONWI - 365 (MCCG-1).

Core photos for Vacherie Dome will be submitted at a later date.

ATTACHMENT B

ITEM 5, AERIAL PHOTOS

This data set includes black and white stereo aerial photos that cover an area over and around each of Richton, Vacherie, and Cypress Creek domes.

✓ <sup>a)</sup> Richton Dome. This set of photos includes 120 frames at a scale of 1:6,000 made from color negatives flown in March 1983. <sup>b)</sup> A photo index and a map showing the location of photo centers are also included. These photos were flown for the Gulf Coast Salt Domes Project. Also

✓ <sup>a)</sup> Vacherie Dome. Included are 30 frames at a scale of 1:20,000 from black and white negatives flown in December 1982 and a <sup>b)</sup> photo index. Ground control was not obtained for these reconnaissance photos and, therefore, they should not be used for qualitative purposes such as topographic mapping. These photos were flown for the Gulf Coast Salt Domes Project.

✓ <sup>a)</sup> Cypress Creek. Included are 63 frames at a scale of 1:20,000 from black and white negatives flown in March and April 1970. <sup>b)</sup> A photo index is not available. These photos were obtained through the U.S.D.A. Agricultural Stabilization and Conservation Service in Salt Lake City, Utah.



3777 Long Beach Boulevard • P.O. Box 7765 • Long Beach, California 90807  
Telephone: (213) 595-6611 / (714) 821-7062 • Telex: 656338

X

October 5, 1984

EW-ONWI-84-7710

WM Record File  
106

WM Project 16  
Docket No. \_\_\_\_\_

U.S. Nuclear Regulatory Commission  
MS-623-SS  
Washington, D.C. 20555

Distribution:  
R. Johnson, W. White, E. RACE with enclosure  
Julius White  
(Return to WM, 623-SS) *of*

PDR  *to create*  
LPDR  *into file*

Attention: Mr. R. Johnson

Subject: Transmittal of Geologic Data for the Gulf Coast  
Requested by the NRC - Submittal #1  
Southern Region GPM - Salt Program  
BPMD Contract No. E512-05700

Gentlemen,

This letter serves to transmit the first of three planned submittals of data for the Gulf Coast region requested by the Nuclear Regulatory Commission. This submittal includes two complete sets of: geophysical logs from DOE drilled wells (item 1 of the NCR request), seismic reflection sections (item 3), and gravity data (item 4). Each set includes appropriate data for Richton and Cypress Creek domes in Mississippi and Vacherie Dome in Louisiana.

Subsequent submittals of Gulf Coast Data will include the requested core photos (item 2) and aerial photos (item 5). At the present time, second and third submittals are planned for mid October and late October.

The first submittal was shipped from our Long Beach office via United Parcel Service, Two-Day Air and should arrive October 8. The shipment consists of four boxes and six mailing tubes.

~~8501040187~~

84 OCT 11 AM 1:41  
WM DOCKET CONTROL CENTER

Mr. R. Johnson  
EW-ONWI-84-7710

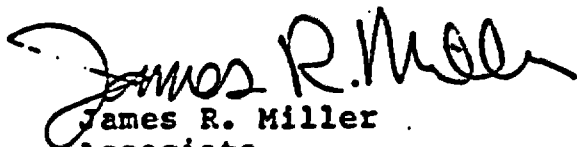
October 5, 1984  
Page 2

Attached to this letter are brief descriptions of each data set that identify: 1) important characteristics of the data and 2) the contents of each set. These same descriptions are included in the packages.

We have attempted to make the data packages self-explanatory; however, should you have any questions, please do not hesitate to call.

Sincerely,

THE EARTH TECHNOLOGY CORPORATION

  
James R. Miller  
Associate

JRM:gn  
Attachment A - Geophysical Logs  
Attachment B - Seismic Reflection Sections  
Attachment C - Gravity Data

cc: Mr. Charles S. Kuntz (w/attachments)  
Dr. Walter Newcomb (w/o attachments)

## ATTACHMENT A

J  
ITEM 1, GEOPHYSICAL LOGS

This data set includes geophysical logs from borings drilled in Mississippi and Louisiana during Area Characterization. For Mississippi, borings in the vicinity of Richton and Cypress Creek domes and regional hydrology holes are included. In Louisiana, this includes borings in the vicinity of Vacherie Dome and regional hydrology holes. A list of borings for which logs are included is presented below.

The logs included in this shipment were identified using lists of logs presented in appropriate well completion reports. The collection of logs is complete with the exception of one log for one hole that is identified on the itemized list. Copies of the tables from these well completion reports are included here as the itemized list of logs.

Of particular note are the following. Only logs from the deepest boring of multi-boring hydrology sites have been included. Logs for the shallow borings (i.e., 100, 200, and 300 series) have been included despite their generally poor quality. Shallow borings at Vacherie Dome were not logged, thus logs are not available.

LIST OF WELLS FOR WHICH LOGS ARE INCLUDED

MISSISSIPPI (Richton & Cypress Creek)

	<u>WELL NAME</u>	<u>ONWI PUBLICATION #</u>
✓	MH-11	
✓	MCCG-1	
✓	MRIG-9	178
✓	MRIH-11	180
✓	MRIG-10	179
✓	MH-8	177
✓	MH-6	175
✓	MH-7	176
✓	MH-5	174
✓	MCCG-2	171
✓	MCCH-3	172
✓	MH-4	173
←	CYPRESS CREEK SHALLOW 100 & 200 SERIES (MCCG)	165
←	RICHTON SHALLOW 200 & 300 SERIES (MRIG)	167

Cypress Creek List  
MCCG # 101-107  
110-115  
118-119  
201-213  
215-233

Richton  
MRIG #  
201-205  
208-213  
215-220  
222-224  
226-230  
232  
301-310

LOUISIANA (Vacherie)

✓	( <u>D.O.E. SMITH #1</u> , V-6, V-7 (V-4, V-5*))	119
✓	LVH-6	182
✓	LH-17	185
✓	LRH-13	184
✓	LH-7	183
✓	LH-2	181
✓	Vacherie SALT Dome Well #4, 5*	-
	do L	119
	7	119

\*Not listed in existing ONWI publications but located on maps in ONWI-119 as WB-12 and B-105, respectively.

ITEM 3, SEISMIC REFLECTION SECTIONS

This data set contains 30 seismic reflection sections. It includes three types of sections from each 10 seismic lines. The lines were recorded at three salt domes: Richton Dome (3 lines), Mississippi, Cypress Creek Dome (3 lines), Mississippi, and Vacherie Dome (4 lines), Louisiana. The three types of sections included are

- o Normal Stacked Time Sections
- o Migrated Time Sections
- o Depth Sections

All the data were recorded using techniques designed to achieve higher resolution than is normally obtained in seismic exploration for oil. Consequently, the depth penetration is relatively shallow. The energy source used at the Mississippi domes was a hydraulic lawn tamper, employed in the MINI-SOSIE technique. Small dynamite charges were used as the energy source at Vacherie Dome.

The labels on the sections describe the parameters used in acquisition and processing.

				TOTAL
<u>Vacherie</u>	LINES 1, 2, 3, 4	}	Normal Migrated Depth	4
				4
				<u>12</u>
<u>RIGHTON</u>	LINES 1.5 - 202.5 42.5 - 141.5 65 - 147.5	}	Normal Migrated Depth	3
				3
				<u>9</u>
<u>Cypress Creek</u>	LINES 1 2 3	}	Normal Migrated Depth	3
				3
				<u>9</u>

TOTAL: 30

ATTACHMENT C

ITEM 4, GRAVITY DATA

C-1

This data set contains gravity data from three salt domes, Richton Dome, Mississippi, Cypress Creek Dome, Mississippi, and Vacherie Dome, Mississippi.

RICHTON DOME

Data from Richton Dome are presented on two maps and one tabulation as follows:

- ✓ o Contour map, with plot of LETCo stations and Bouguer values.
- ✓ o Station Location Map, with plot and identification number of LETCo stations and lines showing nominal distribution of proprietary data.
- ✓ o Tabulation of information about LETCo stations (7 pages)

The contour map is based on two data sets; one measured for the project by Austin Exploration under contract to LETCo, the other proprietary data from Exploration Surveys Inc. (ESI). The latter set is licensed by ESI for Earth Technology use, but not for further dissemination. The purpose of the profile lines on the location map is to permit users of the contour map to see the general degree to which the contours are controlled by data. There are 4095 stations in the ESI data; their average separation along the profiles is about 1/4 mile. The tabulation is copied from, "Gravity Studies of Seven Interior Salt Domes," which was issued by

Attachment C

Item 4, Gravity Data

62

LETCo in 1981. There are 25 stations in the list that are not on the maps. Stations 15, 56, 58, 87, 132, 140, 156, 192, 235, 240, 255, 293, 301, 321, 345 and 356 are deleted because they are coincident with ESI stations. Stations 37, 177, 178, 179, 244, 245, 312, 352 and 353 were deleted because some of the tabulated values do not agree with the Bouguer gravity map in the LETCo report. A datum shift of +32.38 milligals was applied to the tabulated values for use with the ESI data.

✓ CYPRESS CREEK DOME

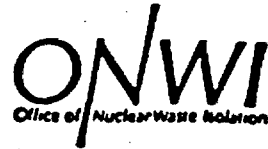
a) ✓ b)  
One Bouguer gravity contour map and one tabulation (3 pages) copied from LETCo's 1981 report, "Gravity Studies of Seven Interior Salt Domes" are included. Earth Technology has no other gravity data pertaining to Cypress Creek dome.

✓ VACHERIE DOME

a) ✓  
The Vacherie Dome gravity data set contains only one residual gravity contour map copied from the 1981 LETCo report. A Bouguer gravity map is not presented in this report. Earth Technology has available 5500 stations of proprietary data licensed for use from Texaco and 236 unreduced gravity meter observations from this area. Processing of these data into useful and transmittable form is pending direction to proceed with studies of Vacherie dome.

PARADOX DATA





BATTELLE Project Management Division  
505 King Avenue  
Columbus, Ohio 43201

WIM Record File  
106

WMI Project 16

Docket No \_\_\_\_\_

PDR

LPDR

Distribution:

R. Johnson

S. Grace

(RETURN to WMI, 623-55)

nb

October 16, 1984

Mr. R. Johnson  
US Nuclear Regulatory Commission  
MS-623-SS  
Washington, DC 20555

Dear Mr. Johnson:

TRANSMITTAL OF GEOPHYSICAL LOGS FROM GD-1

As requested in John Linehan's letter to J. O. Neff, Salt Repository Project Office, received June 15, 1984, geology data are being transmitted for your review.

Enclosed are two partial sets of logs from the GD-1 borehole in the Paradox Basin. The remaining logs are being reproduced and will be sent as soon as they are available.

Attached to this letter is an itemized list of the logs in this package.

Sincerely,

Charles S. Kuntz  
Manager, Geology Section  
Geotechnical Department

CSK/SSN:cr

Enclosure

cc: J. Sherwin, DOE/SRPO (3)  
L. Casey, DOE/SRPO  
D. Dawson, ONWI  
T. Verma, NRC

~~8581070507~~

'84 OCT 17 P2:30

WIM DOCKET CONTROL  
CENTER

NRC Copies

<u>Log Type</u>	<u>Depth Interval (feet)</u>	<u>Company</u>
Density-Neutron Borehole Compensated	<del>2588-5533</del> <del>2486-5533</del>	Birdwell
Density-Neutron Borehole Compensated	5489-6379	Birdwell
✓ Elastic Properties	<del>2492-5526</del> <del>2486-5533</del>	Birdwell
Elastic Properties	5527-6380	Birdwell
Gamma Ray-Temperature	2487-5533	Birdwell
Gamma Ray-Temperature	5489-6379	Birdwell
✓ Induction Electric	5489-6373	Birdwell
✓ 3-D Velocity	2484-5526	Birdwell
✓ 3-D Velocity	5489-6379	Birdwell
✓ Cement Bond with Nuclear	100-2500	Gearhart-Owen
Cement Bond-Gamma Ray-Collar Log	2300-6314	NL McCullough
✓ KUT (Spectral Gamma)	200-2707	NURE
✓ Raw KUT	2580-5476	NURE
✓ Borehole Compensated Sonic	2492-5520	Schlumberger
✓ Borehole Compensated Sonic	5490-6378	Schlumberger
✓ Cement Bond with Variable Density	2300-5478	Schlumberger
✓ Compensated Neutron-Formation Density	2492-5532	Schlumberger
✓ Continuous Dipmeter	2512-5524	Schlumberger
✓ Continuous Dipmeter (Computed)	2512-5524	Schlumberger
✓ Continuous Dipmeter	5490-6371	Schlumberger
✓ Continuous Dipmeter (Computed)	5490-6371	Schlumberger
✓ Dual Laterolog	2492-5530	Schlumberger
Fracture Identification	2492-5533	Schlumberger
✓ Fracture Identification	5490-6379	Schlumberger
✓ Mechanical Properties	2501-5510	Schlumberger
✓ Saraband	2500-5510	Schlumberger

Compensated Acoustic Velocity	505-2715	Welex
Compensated Density-Neutron	421-2706	Welex
Dual Induction Guard	400-2717	Welex
Fluid Travel	844-2550	Welex
Fracture Finder Micro-Seismogram	500-2713	Welex
✓ Rock Properties	500-2710 <sup>2709</sup>	Welex
Sidewall Neutron	457-2717	Welex
Temperature	480-2715	Welex
Computer Analyzed Log	500-2710	Welex

WM DOCKET CONTROL  
CENTER

October 26, 1984

'84 OCT 29 P3:45

FEP-WCC-MS-3459  
17501 - 3122.2

WM Record File

106

WM Project 16

Docket No. \_\_\_\_\_

FDR

LPDR

Mr. R. Johnson  
U.S. Nuclear Regulatory Commission  
MS-623-SS  
Washington, DC 20555

Distribution:

R. Johnson

Linahan

S. Kill

(Return to Wm. 623-SS)

21

Dear Mr. Johnson:

At the request of Battelle Project Management Division, Office of Nuclear Waste Isolation, we are enclosing two sets of airphotos covering the proposed Utah high-level waste sites. The area covered includes the Davis and Lavender Canyon Sites, Shay Graben, and Needles Fault Zone. An airphoto index map and listing of photos is also enclosed. We hope these items prove useful in your review.

Very truly yours,

*Terry A. Grant*

Terry A. Grant  
Project Manager

TAG/sw

Enclosures

xc: S. Nelson (ONWI)  
B. Archer (ONWI)

~~8501070169~~

One Walnut Creek Center  
100 Pringle Avenue  
Walnut Creek, CA 94596  
415-945-3000

# Woodward-Clyde Consultants

October 23, 1984

FBP-WCC-MS-3456  
17501B-2023-3122.2

Mr. R. Johnson  
U.S. Nuclear Regulatory Commission  
MS-623-22  
Washington, DC 20555

Dear Mr. Johnson:

At the request of Battelle Project Management Division, Office of Nuclear Waste Isolation, we are enclosing two sets of borehole the geo-physical logs that were used in the preparation of the draft topical report entitled "Stratigraphic and Structural Configuration of the Navajo (Jurassic) through Quray (Mississippian-Devonian) Formations in the Vicinity of Davis and Lavender Canyons, Southeastern Utah." One set of these logs is on vellum and may be used to make additional blue line copies of the logs, if you desire.

We use a service (MJ Systems) that supplies us with logs of the region and monthly updates of new logs run in the area. All of these logs are supplied on microfiche to us. The paper copies you are receiving have been copied from the microfiche. The number at the top of each log corresponds to the number shown on the attached map. A list of the logs supplied is also attached. We hope the logs prove useful to you in your review.

Very truly yours,

*Terry A. Grant*

Terry A. Grant  
Project Manager

TAG/gh

Enclosures

xc: S. Nelson (ONWI)  
B. Archer (ONWI)

WM Record File

106

WM Project 16

Docket No. \_\_\_\_\_

FOR

FILE

Distribution:

R. Johnson

Linehan

(Return to WIA, 523-SS)

35 rec

8501070124

84 OCT 24 P 3:28

WM DOCKET CONTROL  
CENTER



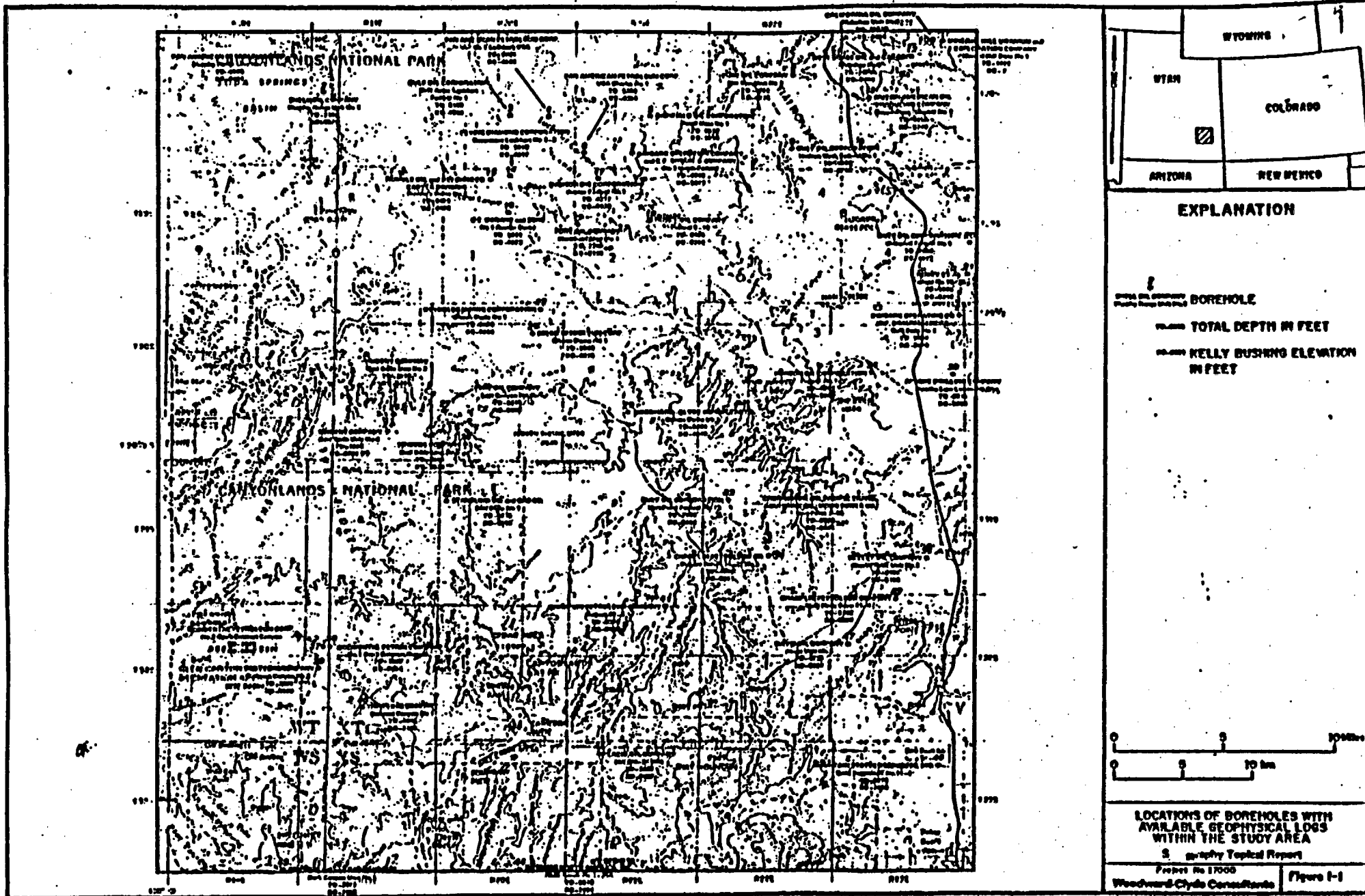
WELLS EXAMINED FOR STRATIGRAPHIC CORRELATION

<u>Well #</u>	<u>WELL NAME</u>	<u>LOG TYPE</u>	<u>LOCATION</u>
1	Pan American Petroleum Corp. Murphy Range Unit #1	Gamma / Sonic	12-28S-18E
2	Shell Oil Co. Murphy Range Unit #1	Gamma / Sonic	18-28S-19E
3	The Gulf Oil Corp. Gulf Aztec Lockhard Federal #1	Gamma / Neutron	22-28S-20E
4	Pan American Petroleum Corp. #1 Lockhard USA	Gamma / Sonic	23-28S-21E
5	Richfield Oil Corp. Hatch Mesa #1	Gamma / Neutron	22-28S-21E
6	Pan American Petroleum Corp. USA Charles #1	Gamma / Sonic	31-28S-21E
7	Kimbark Operating Co. and C. F. Braun & Co. #1 Hatch Federal	Gamma / Sonic	33-28S-21E
8	Pure Oil Company Flat Iron Unit #1	Gamma / Sonic	10-28S-22E
9	The Gulf Oil Corp. Hudson Wash Federal #1	Gamma / Neutron	34-28S-22E
10	California Oil Company Muleshoe Unit #1	Gamma / Sonic	2-28S-23E
11	Mineral Hill Uranium & Exploration Co. Mineral Hill State #1	SP / Resistivity very shallow, limited value	2-28S-23E
12	West Coast Oil & Gas Company Muleshoe #1	Gamma / Resistivity	10-28S-23E
13	British American Oil Producing Co. Government-Lundell #1	Gamma / Sonic	17-28S-23E
14	Flying Diamond Corporation Government Lockhart No. 1-3	Gamma / Density	3-29S-20E
15	The Humble Oil & Refining Co. - Carter Div. Rustler's Dome #1	Gamma / Sonic	4-29S-20E
16	G. E. Kadane & Sons #1 Rustler Dome	Gamma / Sonic	15-29S-20E

<u>Well #</u>	<u>WELL NAME</u>	<u>LOG TYPE</u>	<u>LOCATION</u>
17	Danson Oil Corporation Rector Federal No. 1	Gamma / Density	5-29S-21E
18	Husky Oil Company Federal 6-15	Gamma / Resistivity	15-29S-21E
19	Pure Oil Company Horsehead Unit #1	Gamma / Sonic	18-29S-21E
20	Gulf Oil Corporation Chevron Federal #1	Gamma / Sonic	24-29S-23E
21	Husky et al Federal No. 15-25	Gamma / Sonic	25-29S-23E
22	Reynolds Mining Corporation Gibson Dome #1	Gamma / Neutron	35-29-1/2S-20E
23	Kimbark Operating Co., C.F. Braun & NCRA Gulf State #1	Gamma / Sonic	36-29-1/2S-23E
24	Trident Company Beef Basin #4	Gamma / Neutron	26-30S-19E
25	Trident Company Beef Basin Unit #3	Gamma / Neutron	26-30S-19E
26	Belco Petroleum Corp. Gibson Dome 1-2	Gamma / Density	2-30S-20E
27	Pure Oil Company Lost Canyon #1	Gamma / Sonic	19-30S-20E
28	Trident Company Beef Basin No. 5	Gamma / Neutron	32-30S-20E
29	Woodward-Clyde Consultants Gibson Dome #1	Gamma / Neutron	21-30S-21E
30	Apache Drilling Company Apache-Lion Lisbon #1	Gamma / Neutron	13-30S-23E
31	Hanson Oil Corporation Federal No. 1X	Gamma / Density	17-30S-23E
32	Stanolind Oil & Gas Co. Beef Basin #1	Gamma / Neutron	7-31S-20E
33	The Gulf Oil Corporation Hart Point Federal #1	Gamma / Neutron	8-31S-22E

<u>Well #</u>	<u>WELL NAME</u>	<u>LOG TYPE</u>	<u>LOCATION</u>
34	Champlin Petroleum Company Dugout Ranch 14-22 #2	Gamma / Sonic	22-31S-22E
35	Chorney Oil Co., Pacific Trans., Aquitaine Oil, Mono Power Co. Hart Point 1-22	Gamma / Sonic	22-31S-22E
36	Skelly Oil Company Church Rock Unit #1	Gamma / Sonic	26-31S-23E
37	Occidental Petroleum Corp. #2 Gov't Cataract Canyon	Gamma / Resistivity	7-32S-19E
38	Occidental Petroleum Corp. #1 Gov't Cataract Canyon	Gamma / Neutron	8-32S-19E
39	The Texas Company Cataract Canyon #2	Gamma / Neutron	18-32S-19E
40	The Texas Company Cataract Canyon #1	Gamma / Neutron	28-32S-19E
41	Champlin Petroleum Company Dugout 21-2	Gamma / Induction	2-32S-21E
42	Champlin Petroleum Company #1 Hart Draw 41-4	Gamma / Sonic	4-32S-23E
43	Sinclair Oil & Gas Company Dark Canyon Unit #1	Gamma / Neutron	36-33S-18E
44	Natomas North America, Inc. Redd Ranch #1-34-A	Gamma / Density	34-33S-20E
45	Placid Oil Company No. DU-2 USA	Gamma / Sonic	5-33S-21E
46	Mountain States Resources, Inc. Redd Investment No. 11-1	Gamma / Density	11-33S-23E
47	Davis Oil Company Abajo Unit #1	Gamma / Sonic	7-32S-23E





A larger scale version of this map is available with the DCC copy.

PERMIAN  
PALO DURO BASIN

WM DOCKET CONTROL  
CENTER

'84 NOV 30 P4:10



BATTELLE Project Management Division  
505 King Avenue  
Columbus, Ohio 43201

November 28, 1984

WM Record File

106

WM Project 16

Docket No. \_\_\_\_\_

PDR Davidson

LPDR Kaufman

Distribution:

LINEHAN GRACE

JOHNSON  
(Return to WM, 623-SS)

*Enclos. are located in WM 0*

Mr. Robert Johnson  
U.S. Nuclear Regulatory Commission  
7915 Eastern Avenue  
Silver Springs, Maryland 20910

Dear Mr. Johnson:

TRANSMITTAL OF GEOPHYSICAL LOGS FROM DOE WELLS IN THE PERMIAN BASIN

This letter serves to transmit two complete sets of full scale geophysical logs from DOE wells in the Permian Basin of Texas. This transmittal fulfills the data requested of J. O. Neff (DOE-SRPO) by John Linehan (NRC) for the Permian Basin (refer to letter of June 15, 1984, Enclosure 1).

A detailed inventory of the data enclosed is attached. If you have any questions, please call me at (614) 424-5282 or Mr. Alan Funk at (614) 424-4118.

Sincerely,

Charles S. Kuntz  
Section Manager, Geology  
Geotechnical Department

CSK/ACF:cr

Attachments

cc: J. A. Sherwin, DOE/SRPO (3)  
J. Jones, SRPO  
D. Dawson, ONWI  
T. Verma, NRC

~~8501070166~~

WBS #1.3.3

## INVENTORY OF PAPER COPY WELL LOGS

Well Name: G FRIEMEL  
 State: Tx  
 County: DEAF SMITH  
 Subcontractor: SWEC

Well log title	Logging Contractors	Run No.	Logged Footage	
			Top	Bottom
DUAL INDUCTION - SFL	Schlumberger	1	57	1057
DUAL LATERAL MICRO - SFI	↓	1	1057	2697
PROXIMITY LOG MICROLOG	↓	1	57	1057
COMPENSATED NEUTRON LITHO DENSITY	↓	1	1	1054
		2	1057	2685
TEMPERATURE	↓	1	57	1057
		2	1057	2695
POROSITY COMPENSATED SONIC	↓	1	57	1054
		2	1057	2697
SONIC WAVEFORM VARIABLE DENSITY	↓	1	57	1054
		2	1057	2697
LONG SPACING POROSITY COMPENSATED SONIC	↓	1	1057	2697
" " SONIC WAVE FORM	↓	2	1057	2697
FRACTURE IDENTIFICATION	↓	1	57	1057
		2	1057	2711
4 ARM CONTINUOUS DIPMETER	↓	1	57	1057
" " " "	↓	2	1057	2711
CONTINUOUS DIRECTIONAL	↓	1	57	1057
COMPUTED DIRECTIONAL	↓	1	57	1057
		2	1057	2711
CYBERLOOK COMPUTER PROCESSED	↓	1	57.0	1054.0
		2	1057.0	2697.0
CORIBAND COMPUTER PROCESSED	↓	1	60	1024
" " "	↓	1	1060	2686
		1	11	1057
REPORT FORMATION TESTER (10 TESTS)	↓	2	1233	2684



# INVENTORY OF PAPER COPY WELL LOGS

Well Name: MANSFIELD #1  
 State: TX  
 County: OLEHAM  
 Subcontractor: SWEC

Well log title	Logging Contractors	Run No.	Logged Footage	
			Top	Bottom
DUAL LATERLOG MICRO-SFL	SCHLUMBERGER	1	40	1211
		2	1000	3539
		3	3200	4995
PROXIMITY LOG - MICROLOG COMPENSATED NEUTRON FORMATION DENSITY	↓	1	40	1210
		2	1000	3537
		3	3200	4989
TEMPERATURE	↓	1	40	1212
		2	1216	3540
		3	3200	4995
BOREHOLE COMPENSATED SONIC	↓	1	0	1209
		2	1000	3540
		3	3200	4993
SONIC WAVEFORM VARIABLE DENSITY	↓	1	40	1200
		2	1000	3523
		3	3200	4993
FRACTURE IDENTIFICATION	↓	1	40	1210
		2	1216	3539
		3	3200	4995
4 ARM CONTINUOUS DIAMETER	↓	1	40	1210
		2	1216	3539
		3	3200	4989
CONTINUOUS DIRECTIONAL	↓	1	40	1210
		2	1216	3539
		3	3200	4995
TRUE VERTICAL DEPTH	↓	1	70	1200

# INVENTORY OF PAPER COPY WELL LOGS

Well Name: MANSFIELD #1  
 State: TX  
 County: OLDHAM  
 Subcontractor: SWEC

Well log title	Logging Contractors	Run No.	Logged Footage	
			Top	Bottom
CYBERLOOK COMPUTER PROCESSED	SCHLUMBERGER	1	40	1200
		2	1216	3430
		3	3200	4963
CORIBAND COMPUTER PROCESSED	↓	1	70	1200
" " "		1	1200	3522
" " "		1	3200	4980
" " "		1	50	4895
" " "		1	50	4895
REPEAT FORMATION TESTER (8 TESTS)		1	4527	4850
DUAL SPACING THERMAL NEUTRON DECAY	↓	1	4895	4899
" " " " "		2	38	4895
VARIABLE DENSITY CEMENT BOND		1	486	5130
CEMENT BOND VARIABLE DENSITY	↓	2	4200	4990
MICRO LATEROLOG		1	30	1230
COMPENSATED NEUTRON DENSITY FORMATION		1	40	1209
---	↓	2	1000	3537
		3	3200	4989
		1	0	1209
BORNEO COMPENSATED SONIC	↓	2	1000	3540
---		3	3200	4993
DUAL LATEROLOG MICRO-SFI		1	40	1211
---	↓	2	1000	3539
		3	3200	4995
		ε		

# INVENTORY OF PAPER COPY WELL LOGS

Well Name: Zeck # 1  
 State: Tx  
 County: SWISHER  
 Subcontractor: SWEC

Well log title	Logging Contractors	Run No.	Logged Footage	
			Top	Bottom
DUAL LATERAL LOG MICRO-SFL	SCHLUMBERGER	1	38	1004
		4	1017	5196
		6	5200	7644
DUAL LATERAL LOG MICRO-SFL	↓	2	1019	1139
		3	1020	3085
		5	5000	5763
PROXIMITY LOG MICROLOG	↓	1	29	1025
COMPENSATED NEUTRON LITHO DENSITY		1	38	1025
		4	1017	5194
		6	5200	7642
COMPENSATED NEUTRON	↓	2	1019	1121
		3	1019	3082
		5	5000	5757
TEMPERATURE	↓	1	0	1018
		4	1017	5194
		6	5100	7636
Borehole COMPENSATED SONIC	↓	1	38	1007
		4	1017	5196
		6	5200	7642
SONIC WAVEFORM VARIABLE DENSITY	↓	1	38	1025
		4	1017	5194
		6	5200	7642
FRACTURE IDENTIFICATION	↓	1	29	1025
		4	1017	5194
		6	5200	7644
4 ARM CONTINUOUS DIAMETER	↓	1	29	1025



## INVENTORY OF PAPER COPY WELL LOGS

Well Name: Zeeck #1  
 State: Tx  
 County: SWISHER  
 Subcontractor: SWEC

Well log title	Logging Contractors	Run No.	Logged Footage	
			Top	Bottom
4 ARM CONTINUOUS DIPMETER	SCHLUMBERGER	4	1017	5196
" " " "	↓	6	5200	7644
DIRECTIONAL	↓	1	29	1025
		4	1017	5296
		6	5200	7644
FIELD COMPUTED DIRECTIONAL	↓	1	15	1025
		4	1017	5196
		6	5200	7642
4 ARM CALIPER	↓	2	1019	1139
		3	1019	3099
		5	5000	5776
4 ARM CALIPER	↓	6	1017	5250
CYBERLOOK COMPUTER PROCESSED	↓	1	29	1000
		4	1017	5196
		6	5200	7610
CORIBAND COMPUTER PROCESSED	↓	1	160	1000
↓ ↓ ↓	↓	4	1020	5160
		6	5160	7620
REPEAT FORMATION TESTER (14 TESTS)	↓	6	2936	7645
SYNERGETIC PROGRAM (2 COPIES)	↓	1	-	-
WELL SEISMIC REPORT (2 COPIES)	↓	1	⊖	7408
		1	⊖	7409
WELL SEISMIC MONITOR	↓	6	1017	5296
" " "	↓	7	-	7302
TEMPERATURE (2 COPIES)	↓	1	1	7310
CEMENT BOND VARIABLE DENSITY	↓	1	⊖	7299



# INVENTORY OF PAPER COPY WELL LOGS

Well Name: J FRIEMEL #1  
 State: TX  
 County: DEAF SMITH  
 Subcontractor: SWEC

Well log title	Logging Contractors	Run No.	Logged Footage	
			Top	Bottom
MICRO SEISMOGRAM LOG - CASED HOLE	WELEX	1	4200	8227
" " " " "	WELEX	2	5670	8139
DUAL INDUCTION - SFL	SCHLUMBERGER	1	60	1216
		4	1000	4635
		9	4695	8282
DUAL LATEROLOG	↓	2	1202	1435
		3	1202	2810
DUAL INDUCTION - SFL	↓	5	4698	5908
		6	5700	6529
		7	6300	7774
PROXIMITY LOG MICROLOG	↓	1	60	1213
		9	4695	8282
COMPENSATED NEUTRON LITH DENSITY	↓	1	60	1213
		4	1000	4646
		9	4695	8282
COMPENSATED NEUTRON	↓	2	1202	1432
		3	1202	2820
COMPENSATED NEUTRON	↓	5	4698	5908
		6	5700	6532
TEMPERATURE	↓	1	0	1216
		4	1000	4649
		9	4695	8282
BOREHOLE COMPENSATED SONIC	↓	1	60	1201
		4	1000	4635
		9	4695	8282

# INVENTORY OF PAPER COPY WELL LOGS

Well Name: J FRIEMEL  
 State: Tx  
 County: DEAF SMITH  
 Subcontractor: SWEC

Well log title	Logging Contractors	Run No.	Logged Footage	
			Top	Bottom
SONIC VARIABLE DENSITY WAVEFORM	SCHLUMBERGER	1	60	1201
		4	1000	4635
		9	4695	8282
LONG SPACED SONIC	↓	1	60	1200
		4	1202	4647
		9	4695	8282
LONG SPACED SONIC DIGITIZED WAVEFORM	↓	1	60	1200
		4	1202	4647
		9	4695	8282
FRACTURE IDENTIFICATION	↓	1	60	1216
		3	1201	2824
		4	1202	4650
		9	4695	8282
		4 ARM CONTINUOUS DIPMETER	↓	1
		4	1202	4650
		9	4695	8282
CONTINUOUS DIRECTIONAL	↓	1	60	1213
		4	1202	4650
		8	4693	8283
FIELD DIRECTIONAL	↓	1	60	1213
		4	1202	4650
		9	4693	8283
4 ARM CALIPER	↓	2	1202	1447
		3	1202	2824
		4 ARM CALIPER	↓	5
		6	5700	6532
		7	6300	7774















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October 29, 1984

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5 Grace

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Mr. Robert L. Johnson  
 Division of Waste Management  
 U.S. Nuclear Regulatory Commission  
 Mail Stop 623-SS  
 Washington, DC 20555

X

Dear Bob:

Under separate cover, the Bureau of Economic Geology is sending two sets of color prints of core from the Sawyer (Donley County) and Mansfield (Oldham County) wells. Dr. Jo-Ann Sherwin, DOE Chief of Site Evaluation, SRPO, Columbus, Ohio, requested that you receive the prints. I hope that you find these materials helpful.

Sincerely,

*E. G. Wermund*  
 E. G. Wermund  
 Associate Director

EGW:CC:bk

cc: L. Casey, SRPO  
 J. Jones, SRPO  
 D. Ratcliff, TBEG  
 J. Sherwin, SRPO

850.1070177



BUREAU OF ECONOMIC GEOLOGY  
THE UNIVERSITY OF TEXAS AT AUSTIN

Scott - as requested  
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University Station, Box X • Austin, Texas 78713-7508 • (512) 471-1534 or 471-7700 CENTER

WM DOCKET CONTROL

August 22, 1984

84 AUG 27 P4:05

Mr. Robert L. Johnson  
Division of Waste Management  
U.S. Nuclear Regulatory Commission  
Mail Stop 623-SS  
Washington, DC 20555

Dear Bob:

Under separate cover, the Bureau of Economic Geology is sending materials requested in the letter to me from Dr. Jo-Ann Sherwin, DOE Chief of Site Evaluation, SRPO, Columbus, Ohio. Attached is a detailed listing of those materials as requested. Let me know if the shipment fulfills your needs.

Sincerely,

*E. G. Wermund*  
E. G. Wermund  
Associate Director

EGW:gz  
Attachments

cc: L. Casey, SRPO  
D. Ratcliff, TBEG  
J. Sherwin, SRPO

8410150026

WM Record File	WM Project <u>16</u>
<u>116</u>	Docket No. _____
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in Doc file room  
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Summary Well Reports:

✓ DOE-SWEC #1 Mansfield, Oldham County, Texas

- 1.1 Summary Chart
- 1.2 Well Data Extracted from Publications
- 2.1 Detailed Lithologic Log
- 4.1 Repeat Formation Tester Log
- 4.2 Summary Table of Permeability Analyses of Drill Stem Tests
- 4.5 Drill Stem Test Data and Analyses
- 4.6.1 Pressure Transient Test Data - Zone #1, Wolfcamp Formation
- 4.6.2 Pressure Transient Test Data - Zone #2, Upper Wolfcamp Formation

(Tmff 1d4) ✓ DOE-Gruy Federal #1 Grabbe, Swisher County, Texas

- 1.1 Summary Chart
- 1.2 Well Data Extracted from Publications
- 2.1 Detailed Lithologic Log
- 3.1 Petrographic Descriptions
- 4.1 Repeat Formation Tester Logs

✓ DOE-Gruy Federal #1 Rex White, Randall County, Texas

- 1.1 Summary Chart
- 1.2 Well Data Extracted from Publications
- 2.1 Detailed Lithologic Log
- 3.1 Petrographic Descriptions
- 4.1 Repeat Formation Tester Logs

✓ DOE-SWEC #1 Sawyer, Donley County, Texas

- 1.1 Summary Chart
- 1.2 Well Data Extracted from Publications
- 2.1 Detailed Lithologic Log
- 3.1 Petrographic Descriptions
- 4.2 Summary Table of Permeability Analyses of Drill Stem Tests and Pressure Transient Tests
- 4.3 Method of Analysis of Pressure Transient Tests and Nomenclature
- 4.4 Pressure Transient Test Analyses
- 4.5 Drill Stem Test Data and Analysis
- 4.6.1 Pressure Transient Test Data - Zone #2, Upper Ellenburger
- 4.6.2 Pressure Transient Test Data - Zone #3, Mississippian limestone
- 4.6.3 Pressure Transient Test Data - Zone #4, Pennsylvanian granite wash
- 4.6.4 Pressure Transient Test Data - Zone #5, Wolfcamp carbonate

(Tmff mid) ✓ DOE-SWEC #1 Zeeck, Swisher County, Texas

- Chapter 1. Summary of Well Information
- 4.1 Repeat Formation Tester Log
- 4.2 Summary Table
- 4.3 Drill Stem Test Data and Analyses
- 4.4 Summary Table
- 4.5 Pressure Transient Test Data and Analyses
- 5.0 Geochemical Test Results

✓ DOE-SWEC #1 Harman, Swisher County, Texas  
Chapter 1. Summary of Well Information  
2.1 Detailed Lithologic Log  
4.1 Repeat Formation Tester Log  
4.2 Summary Table  
4.3 Drill-stem Test Data and Analyses  
5.0 Geochemical Test Results

✓ DOE-SWEC #1 Holtzclaw, Randall County, Texas  
Chapter 1. Summary of Well Information  
4.1 Repeat Formation Tester Log  
4.2 Summary Table  
4.3 Drill-stem Test Data and Analyses

✓ DOE-SWEC #1 Detten, Deaf Smith County, Texas  
Chapter 1. Summary of Well Information  
2.1 Detailed Lithologic Log  
4.1 Repeat Formation Tester Log  
4.2 Summary Table  
4.3 Drill-stem Test Data and Analyses  
5.0 Geochemical Test Results

✓ DOE-SWEC #1 J. Friemel, Deaf Smith County, Texas  
Chapter 1. Summary of Well Information  
4.0 Hydrologic Test Results  
4.1 Summary Table  
4.2 Drill-stem Test Data and Analyses  
5.0 Geochemical Test Results

✓ DOE-SWEC #1 G. Friemel, Deaf Smith County, Texas  
Chapter 1. Summary of Well Information  
2.1 Detailed Lithologic Log  
4.1 Repeat Formation Tester Log  
4.2 Summary Table  
4.3 Drill-stem Test Data and Analyses  
4.4 Core Lab Permeability Report  
5.0 Geochemical Test Results

Summary Well Report Supplements:

✓ DOE-SWEC #1 Rex White, Randall County, Texas  
Introduction  
3.1 Petrographic Descriptions  
5.0 Geochemical Test Results

✓ DOE-SWEC #1 Mansfield, Oldham County, Texas  
Introduction  
3.1 Petrographic Descriptions  
5.0 Geochemical Test Results

✓ DOE-SWEC #1 Grabbe, Swisher County, Texas  
Introduction  
5.0 Geochemical Test Results

✓ DOE-SWEC #1 Sawyer, Donley County, Texas  
Introduction  
3.1 Petrographic Descriptions

5.0 Geochemical Test Results

Characterization Status Reports:

- ✓ OF-WTWI-1983-8: Mineral Resources of the Palo Duro Basin and Surrounding Areas, Texas Panhandle (6.1B)
- ✓ OF-WTWI-1984-9: Structural Control of Physiography, Geomorphic Processes, and Lithofacies, Texas Panhandle (3.1.1)
- ✓ OF-WTWI-1984-10: Late Quaternary Paleoclimatology of the Southern High Plains of Texas -- Implications for Disposal of Nuclear Waste (7.2.1) and (7.2.2)
- ✓ OF-WTWI-1984-11: Host Rock Geochemistry of the Palo Duro Basin, Texas (6.1)
- ✓ OF-WTWI-1984-12: Quaternary Faulting in Southeastern Briscoe County, Texas (3.1.2)
- ✓ OF-WTWI-1984-13: Stratigraphy of a Significant Quaternary Alluvial Sequence, Briscoe, Floyd, Hall, and Motley Counties, Texas (3.1.2)



BUREAU OF ECONOMIC GEOLOGY  
THE UNIVERSITY OF TEXAS AT AUSTIN

University Station, Box X • Austin, Texas 78713-7508 • (512) 471-1534 or 471-7721

October 5, 1984

WM Record File

IC 6

WM Project

16

Docket No.

FDR

LPDR

Mr. Robert L. Johnson  
Division of Waste Management  
U.S. Nuclear Regulatory  
Commission  
Mail Stop 623-SS  
Washington, DC 20555

Distribution:

R. Johnson

(Return to WSA 623-SS)

see D-Salt Library for  
enclosure. D-Salt - 180

Dear Bob:

Under separate cover, the Bureau of Economic Geology is sending two sets of color prints of core in the Rex White (Randall County) and Grabbe (Swisher County). Dr. Jo-Ann Sherwin, DOE Chief of Site Evaluation, SRPO, Columbus, Ohio, requested that you receive the prints. I hope that you find these materials helpful.

Sincerely,

*E. G. Wermund*

E. G. Wermund  
Associate Director

EGW:gz

cc: L. Casey, SRPO  
D. Ratcliff, TBEG  
J. Sherwin, SRPO

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# STONE & WEBSTER ENGINEERING CORPORATION

WM DOCKET CONTROL CENTER

245 SUMMER STREET, BOSTON, MASSACHUSETTS



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Docket No. \_\_\_\_\_

DESIGN  
CONSTRUCTION  
REPORTS  
EXAMINATIONS  
CONSULTING  
ENGINEERING

PDR ✓

LPDR ✓

Distribution:

R. Johnson \_\_\_\_\_  
Linehan \_\_\_\_\_  
Grace \_\_\_\_\_

Mr. R. Johnson  
U.S. Nuclear Regulatory Commission  
MS-623-SS  
Washington, DC 20555

October 16, 1984

-J.O.No. 13697.11

## TRANSMITTAL OF GEOLOGIC AND GEOPHYSICAL DATA TO NRC PERMIAN BASIN - GEOLOGIC PROJECT MANAGER

Dr. W. E. Newcomb, Battelle Memorial Institute, Office of Nuclear Waste Isolation (ONWI), has asked that we transmit two complete sets of the following data to you as requested of Jeff Neff (DOE-SRPO) by John Linehan (NRC):  
G. Friemel; J. Friemel; Detton; Zeack; Holtzclaw; E. Harman

- ✓ 1. Core photos for SWEC wells.
- ✓ 2. Seismic reflection data (nonproprietary). Received 1/84
- ✓ 3. Geophysical logs of the Grabbe No. 1 and Rex White No. 1 wells drilled by Gruy Federal, Inc.
- ✓ 4. Air photos for proposed sites in Deaf Smith and Swisher Counties.

Two complete sets of core photos from six (G. Friemel No. 1, Detton No. 1, Zeack No. 1, Holtzclaw No. 1, Harman No. 1 and J. Friemel No. 1) of the eight wells drilled/cored by SWEC are enclosed. The core recovered from the Sawyer No. 1 and Mansfield No. 1 wells was not photographed by SWEC. Mr. A. Funk is also being provided one complete set of photos at this time. These photos are identical to those contained in SWEC Well Completion Reports and/or Core Logs/Photo Reports previously submitted to ONWI.

SWEC ordered the seismic data from the National Geophysical Data Center (NGDC) in Colorado on September 19, 1984. We anticipate receiving these data and transmitting them to NRC/ONWI before the end of October 1984. A complete set of seismic sections (nonproprietary) and associated data was transmitted by SWEC to ONWI in June of 1983. Also, to provide wide distribution of these data to interested parties, reproducible copies were transmitted to NGDC in January 1984.

Geophysical logs were ordered from Petroleum Information (PI) service and are enclosed. However, not all the logs run in the wells are included, as Gruy Federal, Inc., apparently did not release the complete suite to PI. Therefore, in addition to the logs enclosed, Mr. Scot Adams, ONWI, will be transmitting a complete set of full scale logs to you under separate cover. Mr. Adams anticipates this will be done prior to October 31.

~~8501070509~~



October 16, 1984

Black and white air photos (stereo coverage) at a 1:40;000 scale were ordered from ASCS in Salt Lake City, Utah, the week of September 24, 1984. We have been informed by ASCS that deliveries are filled approximately 1 month from the date of the order.

A detailed inventory of the data enclosed is attached. If you have any questions, please call me at (617) 589-2098.



C. A. Foster  
Assistant Project Manager

Enclosure

CAF:ht

INVENTORY OF DATA TRANSMITTED TO NRC BY SWEC

1. Core Photos

<u>Well</u>	<u>Depth (ft)</u>
G. Friemel No. 1 -	1192.0-1312.0
	1727.0-2710.0
Detten No. 1 -	1130.0-1422.0
	1885.0-2804.0
Zeeck No. 1 -	1035.0-1144.0
	1885.0-3102.0
	5309.0-5780.0
	5910.0-6058.0
	7300.0-7387.0
Holtzclaw No. 1 -	1080.0-1401.0
	2304.0-2884.0
Harman No. 1 -	1070.0-1303.0
	1804.0-3049.0
J. Friemel No. 1 -	352.0-1216.0
	1239.0-1464.0
	1846.0-2830.0
	5519.0-6032.0
	6421.0-6537.0
	7768.0-7780.0
	8047.0-8283.0

2. Geophysical Well Logs

<u>Well</u>	<u>Logs</u>
Gruy Federal Grabbe No. 1 -	Dual Induction - SFL (runs 1 & 2)
Gruy Federal Rex White No. 1 -	Dual Laterolog (run 2) Compensated Neutron-Formation Density (run Borehole Compensated Sonic (run 2)

# STONE & WEBSTER ENGINEERING CORPORATION

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Mr. R. Johnson  
U.S. Nuclear Regulatory Commission  
MS-623-SS  
Washington, DC 20555

November 15, 1984  
J.O. No. 13697.11

## TRANSMITTAL OF SEISMIC REFLECTION DATA TO NRC PERMIAN BASIN - GEOLOGIC PROJECT MANAGER

Further to our letter to you of October 16, 1984 (Transmittal of Geologic and Geophysical Data to NRC, Permian Basin - Geologic Project Manager), we are transmitting to you two complete sets of seismic reflection data (nonproprietary).

SWEC ordered the geophysical data from the National Geophysical Data Center (NGDC) in Colorado on September 19, 1984. A detailed inventory of the data enclosed is attached. If you have any questions, please call me at (617) 589-2098.

*SM Washen son*

C. A. Foster  
Assistant Project Manager

LT:sl  
Enclosures

84 NOV 23 AM 1:29

WM DOCKET CONTROL  
CENTER

WM Record File	WM Project <u>16</u>
<u>106</u>	Docket No. _____
	PDR <input checked="" type="checkbox"/>
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<u>R Johnson</u>	<u>same</u>
<u>Washen</u>	<u>DRM</u>
(Return to WM, 623-SS)	<u>C2</u>

*8501070496*

ITEM #	LINE # & DESCRIPTION	S.P. - S.P.	FOLD X	TEXAS PANHANDLE SEISMICS 1GX-0200		WIDTH	LENGTH	SQ. FT
				TRACES: INCH HORIZONTAL SCALE	INCHES: SECOND VERTICAL SCALE			
1	Index Map					17	27	3.19
2	A Coherency Stack	101-2257	2400	20:1	10:1	48	238	79.3
3	B-1 " "	101-722	"	"	"	48	77	25.6
4	B-2 " "	101-390	"	"	"	48	41	13.6
5	B-3 " "	101-673	"	"	"	48	72	24.0
6	C " "	101-246	4800	10:1	"	48	40	13.3
7	C " "	101-391	2400	20:1	"	"	"	"
8	C " "	101-391	"	"	"	"	"	"
9	C-Test Pilot Test	101-200	100	"	"	"	144	48.0
10	C Coherency Stack	101-391	4800	"	"	"	40	13.3
11	D-North " "	101-625	2400	"	"	"	65	21.6
12	D-South " "	101-801	"	"	"	"	83	27.6
13	E " "	101-1538	"	"	"	"	161	53.6
14	F " "	101-1402	"	"	"	"	148	49.3
15	G-1 " "	101-580	"	"	"	"	61	20.3
16	G-2 " "	105-566	"	"	"	"	60	20.0
17	G-3 " "	101-340	"	"	"	"	35	11.6
18	H-1 " "	101-926	"	"	"	"	96	32.0
19	H-2 " "	101-630	"	"	"	"	65	21.6
20	I " "	107-435	"	"	"	"	46	15.3



TEXAS PANHANDLE SEISMICS  
TX-0200

ITEM #	LINE # & DESCRIPTION	S.P. - S.P.	FOLD Z	HORIZONTAL SCALE	VERTICAL SCALE	WIDTH	LENGTH	SQ. FT
✓31	A Coherency Stack	101-2257	2400	40:1	5:1	24	119	19.83
✓32	B-1 " "	101-722	"	"	"	"	37	6.17
✓33	B-2 " "	101-390	"	"	"	"	20	3.33
✓34	B-3 " "	101-673	"	"	"	"	35	5.83
✓35	C " "	101-246	4800	"	"	"	19	3.17
✓36	C " "	101-391	2400	"	"	"	20	3.33
✓37	C " "	" "	"	"	"	"	"	"
✓38	C " "	" "	4800	"	"	"	21	3.50
✓39	D-North " "	101-625	2400	"	"	"	32	5.33
✓40	D-South " "	101-801	"	"	"	"	43	7.17
✓41	E " "	101-1538	"	"	"	"	81	13.50
✓42	F " "	101-1402	"	"	"	"	73	12.17
✓43	G-1 " "	101-580	"	"	"	"	31	5.17
✓44	G-2 " "	105-566	"	"	"	"	"	"
✓45	G-3 " "	101-340	"	"	"	"	17	2.83
✓46	H-1 " "	101-926	"	"	"	"	48	8.00
✓47	H-2 " "	101-630	"	"	"	"	33	5.50
✓48	I " "	107-435	"	"	"	"	23	3.83
✓49	J " "	101-174	4800	20:1	3.75:1	11	"	1.77
✓50	K Final Stack	101-429	2400	40:1	5:1	24	"	3.83



ITEM #	AREA	FILE COPY #	TEXAS PANHANDLE SEISMICS 7GX-0200		FIELD SHOT POINT MAPS	WIDTH	LENGTH	SQ. FT.
			L-S, W.E.C.	SCALE				
59 ✓	S.E. Canton	No Info	Lines 1, 2	No Information	13697 G116F-2	18	15	1.8
60 ✓	Honolulu #1 Powder	1/7	E-k--l-l	1":2000'	13697 G116L	"	18	2.2
61 ✓	Frankfort #1 A. Hayes	2/7	Q-Q-1--M--N	"	" "	"	"	"
62 ✓	SHEC #1 J. Friemel	3/7	-0-	"	" "	"	"	"
63 ✓	" "	4/7	A -0-	"	" "	"	"	"
64 ✓	Frankfort #1 A. Hayes	5/7	Q-1	"	" "	"	"	"
65 ✓	" "	6/6	M-N-Q	"	" "	"	"	"
66 ✓	Frankfort #1 Muse	7/7	P	"	" "	"	"	"
67 ✓	Index Map	1/20	F/ B-1	No Information	13697 G116F-1	"	"	"
68 ✓	" "	2/20	F	" "	" "	"	"	"
69 ✓	" "	3/20	F, A	" "	" "	"	"	"
70 ✓	" "	4/20	A	" "	" "	"	"	"
71 ✓	" "	5/20	A	" "	" "	"	"	"
72 ✓	" "	6/20	E, A	" "	" "	"	"	"
73 ✓	" "	7/20	D, D-North, E	" "	" "	"	"	"
74 ✓	" "	8/20	E	" "	" "	"	"	"
75 ✓	" "	9/20	(wave test & foldback) C, B-3	" "	" "	"	"	"
76 ✓	" "	10/20	B-2, B-3	" "	" "	"	"	"
77 ✓	" "	11/20	B-1, B-2	" "	" "	"	"	"
78 ✓	" "	12/20	E	" "	" "	"	"	"



TEXAS PANHANDLE SEISMICS  
7CX-0200  
L-S.W.E.C. SCALE

FIELD SHOT  
POINT MAPS

WIDTH LENGTH SQ.

ITEM #

AREA

FILE COPY #

L-S.W.E.C.

No. Information

13697 G116F-1

18

18

2.2

79 ✓

Index Map

13/20

A

80 ✓

" "

14/20

D-North

81 ✓

" "

15/20

II-1

82 ✓

" "

16/20

"

83 ✓

" "

17/20

II-1, II-2, II-3

84 ✓

" "

18/20

G

85 ✓

" "

19/20

G, G-3

86 ✓

" "

20/20

G-3

Total Sq. Ft.: 62.63 pg 5&6

ITEM #	LINE #	VELOCITY DETERMINATIONS	WIDTH:	LENGTH	SQ.
✓ 87	Line A	"	36	181	45
88	SWEC B-2	"	34	217	51
✓ 89	SWEC-C	"	"	63	14
✓ 90	SWEC-DN	"	"	70	16
91	SWEC-DS	"	"	138	32
✓ 92	SWEC-E	"	"	106	25
✓ 93	SWEC-F	"	"	132	31
✓ 94	SWEC-G	"	"	89	21
✓ 95	SWEC-G2	"	"	69	16
96	SWEC-G3 1 of 2	"	"	74	17
✓ 97	SWEC-G3 2 of 2	"	"	39	9
✓ 98	H-1	"	"	85	20
✓ 99	H-2	"	"	66	15
✓ 100	SWEC-I	"	"	47	11
✓ 101	SWEC-J	"	"	57	13
✓ 102	J 1 of 1	"	"	57	13
✓ 103	K	"	30	58	12
✓ 104	M	"	"	85	17
✓ 105	N	"	"	55	11

VELOCITY DETERMINATIONS

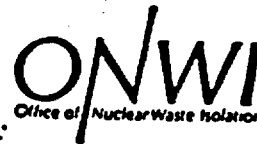
ITEM #	LINE #		WIDTH	LENGTH	SQ.
106	O	"	30	57	11.
107	P	"	"	40	8.3
✓108	Q	"	"	49	10.
✓109	Q-1	"	"	62	12.
✓110	R	"	"	57	11.

TOTAL SQ. FT.: 450.80 Pg. 7 & 8

Total SQ. FT. 1340.79

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'84 NOV 30 P4:10



BATTELLE Project Management Division  
505 King Avenue  
Columbus, Ohio 43201

November 28, 1984

Mr. Robert Johnson  
U.S. Nuclear Regulatory Commission  
7915 Eastern Avenue  
Silver Springs, Maryland 20910

WM Record File

106

WM Project 16

Docket No. \_\_\_\_\_

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LINEHAN GRACE

JOHNSON  
(Return to WM, 623-SS)

*Enclos. are located in WM 1*

Dear Mr. Johnson:

TRANSMITTAL OF GEOPHYSICAL LOGS FROM DOE WELLS IN THE PERMIAN BASIN

This letter serves to transmit two complete sets of full scale geophysical logs from DOE wells in the Permian Basin of Texas. This transmittal fulfills the data requested of J. O. Neff (DOE-SRPO) by John Linehan (NRC) for the Permian Basin (refer to letter of June 15, 1984, Enclosure 1).

A detailed inventory of the data enclosed is attached. If you have any questions, please call me at (614) 424-5282 or Mr. Alan Funk at (614) 424-4118.

Sincerely,

Charles S. Kuntz  
Section Manager, Geology  
Geotechnical Department

CSK/ACF:cr

Attachments

cc: J. A. Sherwin, DOE/SRPO (3)  
J. Jones, SRPO  
D. Dawson, ONWI  
T. Verma, NRC

*8501070166*

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1067

WM Project 16

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JOHNSON

(S. GRACE)

LINEHAN

(S. TRAPP/DBM)

(Return to WM, 623-SS)

SANBORN-R-2711

November 14, 1984

Mr. Robert Johnson  
U.S. Nuclear Regulatory Commission  
MS-623-SS  
Washington, DC 20555

TRANSMITTAL OF AERIAL PHOTOGRAPHS OF PROPOSED SITES IN TEXAS  
PERMIAN BASIN - GEOLOGIC PROJECT MANAGER

This transmittal completes the transfer of data requested of Jeff Neff (DOE-SPRO) by John Linehan (NRC) as listed in our letter to you dated October 16, 1984.

Two sets of black and white photographs provide stereo coverage for proposed sites in Swisher County (48437 178-58-62- & 85-89) and Deaf Smith County (48117 179-199-204, 211-216, & 238-243). The photos are at a scale of approximately 1:40,000. Reference should be made to 7 1/2 minute quadrangle maps of the site areas to locate landmarks shown on the photographs.

If you have any questions regarding this transmittal please call me at (806) 373-3048.

*John H. Peck*

John H. Peck  
Assistant Project Manager - Amarillo

JHP:CLH

Enclosure

~~8501070170~~



## INVENTORY OF PAPER COPY WELL LOGS

Well Name: SAWYER # 1  
 State: TX  
 County: DONLEY  
 Subcontractor: SWEC

Well log title	Logging Contractors	Run No.	Logged Footage	
			Top	Bottom
DUAL INDUCTION - SFL	SCHLUMBERGER	1	63	331
DUAL LATEROLOG	↓	1	330	1577
		2	330	3432
DUAL INDUCTION - SFL	↓	1	3939	4800
PROXIMITY LOG MICROLOG	↓	1	63	335
COMPENSATED NEUTRON FORMATION DENSITY	↓	1	63	334
		2	330	1588
		3	1500	3933
		4	3939	4803
TEMPERATURE SURVEY	↓	1	0	3918
BOREHOLE COMPENSATED SONIC	↓	1	63	333
		2	330	3917
		3	3939	4789
SONIC WAVEFORM VARIABLE DENSITY	↓	1	63	335
SONIC WAVEFORM	↓	2	330	396
VARIABLE DENSITY	↓	2	330	3916
SONIC WAVEFORM VARIABLE DENSITY	↓	3	3939	4786
FRACTURE IDENTIFICATION	↓	1	63	335
		2	330	3920
4 ARM CONTINUOUS DIAMETER	↓	1	63	335
" " " "		3	330	3920
CONTINUOUS DIRECTIONAL	↓	3	330	3920
CORBAND COMPUTER PROCESSED	↓	1	3940	4800
CEMENT BOND VARIABLE DENSITY	↓	1	4744	4753
" " "	↓	2	3780	4762
" " "	↓	3	4120	4304





# INVENTORY OF PAPER COPY WELL LOGS

Well Name: HOLTZCLAW #1  
 State: Tx  
 County: RANDALL  
 Subcontractor: SWEC

Well log title	Logging Contractors	Run No.	Logged Footage	
			Top	Bottom
DUAL LATERAL LOG MICRO-SFL	SCHLUMBERGER	1	55	1681
		2	1562	2876
COMPENSATED NEUTRON LOG DENSITY	↓	1	55	1691
		2	1500	2874
BOREHOLE COMPENSATED SONIC	↓	1	100	1680
		2	1500	2863
SONIC WAVEFORM VARIABLE DENSITY	↓	1	55	1680
		2	1500	2863
LONG SPACING SONIC	↓	1	55	1680
		2	1500	2863
LONG SPACING SONIC DIGITIZED WAVEFORM	↓	1	55	1680
		2	1500	2863
FRACTURE IDENTIFICATION		1	55	1694
		2	1500	2876
REPEAT FORMATION TESTER (22 TESTS)	↓	1	1219	1696
DIGITAL SONIC WAVEFORM		1	200	1690
NATURAL GAMMA RAY SPECTROMETRY	↓	1	55	1661
		2	1400	2842
TEMPERATURE	↓	1	55	1681
		2	1500	2876
4 ARM CONTINUOUS DIAMETER	↓	1	55	1694
		2	1500	2876
DIRECTIONAL LOG	↓	1	55	1694
		2	1500	2876
CYBERLOOK COMPUTER PROCESSED	↓	1	55	1671
		2	1500	2853



## INVENTORY OF PAPER COPY WELL LOGS

Well Name: HARMAN #1  
 State: TX  
 County: SWISHER  
 Subcontractor: SWEC

Well log title	Logging Contractors	Run No.	Logged Footage	
			Top	Bottom
DUAL INDUCTION - SFL	SCHUMBERGER	1	45	1060
		2	1062	3049
PROXIMITY LOG MICROLOG	↓	1	45	1063
COMPENSATED NEUTRON LITHO DENSITY	↓	1	45	1063
		2	1062	3049
TEMPERATURE	↓	1	45	1066
		2	1062	3052
BOREHOLE COMPENSATED SONIC	↓	1	45	1052
		2	1062	3049
SONIC WAVEFORM VARIABLE DENSITY	↓	1	45	1052
		2	1062	3036
FRACTURE IDENTIFICATION	↓	1	45	1063
		2	1062	3050
4 ARM CONTINUOUS DIAMETER	↓	1	45	1063
		2	1062	3050
DIRECTIONAL	↓	1	45	1063
		2	1062	3050
COMPUTED DIRECTIONAL SURVEY	↓	1	45	1063
		2	1062	3050
CYBERLOOK COMPUTER PROCESSED	↓	1	45	1063
		2	1062	3029
CORIBAND COMPUTER PROCESSED	↓	1	60	1058
" " "	↓	1	1062	3034
REPEAT FORMATION TESTER (7 TESTS)	↓	2	⊕	3052
NATURAL GAMMA RAY SPECTROMETRY	↓	1	45	1057
		2	1062	3017



# INVENTORY OF PAPER COPY WELL LOGS

Well Name: DETEN #1  
 State: TX  
 County: DEAF SMITH  
 Subcontractor: SWEC

Well log title	Logging Contractors	Run No.	Logged Footage	
			Top	Bottom
DUAL LATEROLOG	SCHLUMBERGER	1	52	1121
		2	1123	2822
		3	1124	2829
PROXIMITY LOG MICROLOG	↓	1	52	1122
COMPENSATED NEUTRON / CALIPER		2	1123	2317
TEMPERATURE		1	52	1122
		3	1124	2838
BORRHOLE COMPENSATED SONIC	↓	1	52	1114
		3	1124	2828
SONIC WAVEFORM VARIABLE DENSITY	↓	1	52	1110
		3	1124	2836
DEPTH DERIVED SONIC	↓	1	52	1112
		3	1124	2836
DRBHC WAVEFORM	↓	1	52	1110
		3	1124	2836
FRACTURE IDENTIFICATION	↓	1	52	1122
		3	1124	2843
4 ARM CONTINUOUS DIPMETER	↓	1	60	1122
" " " "		3	1124	2843
CONTINUOUS DIRECTIONAL	↓	1	60	1122
		3	1124	2843
COMPUTER DIRECTIONAL	↓	1	60	1122
		3	1124	2843
CYBERLOOK COMPUTER PROCESSED	↓	1	188	1093
		3	1124	2840
CORBAND COMPUTER PROCESSED	↓	1	100	1120



CYPRESS CREEK 6-289

Law Engineering Testing Company, 1982. Gulf Coast Salt Domes Geologic Area Characterization Report, Mississippi Study Area, Vols. VI and VII, ONWI-120, prepared for the Office of Nuclear Waste Isolation, Battelle Memorial Institute, Columbus, OH. X

Law Engineering Testing Company, 1982. Gulf Coast Salt Domes Geologic Area Characterization Report, Volume I, ONWI-117, prepared for Office of Nuclear Waste Isolation, Battelle Memorial Institute, Columbus, OH.

Law Engineering Testing Company, 1982c. Gulf Coast Salt Domes Shallow Borings Report: Cypress Creek Dome, Technical Report, ONWI-165, prepared for Office of Nuclear Waste Isolation, Battelle Memorial Institute, Columbus, OH.

Law Engineering Testing Company, 1982d. Gulf Coast Salt Domes Well Completion Report: Site MCGG-3, ONWI-172, prepared for Office of Nuclear Waste Isolation, Battelle Memorial Institute, Columbus, OH.

Law Engineering Testing Company, 1982. Gulf Coast Salt Domes, Geologic Area Characterization Report, Vol. V, ONWI-119, prepared for the Office of Nuclear Waste Isolation, Battelle Memorial Institute, Columbus, OH. X

Law Engineering Testing Company, 1983a. Petrographic and Geochemical Characteristics of the Cypress Creek Salt Core, ONWI-365, prepared for Office of Nuclear Waste Isolation, Battelle Memorial Institute, Columbus, OH.

Law Engineering Testing Company, 1983b. Geothermal Studies of Seven Interior Salt Domes, ONWI-289, prepared for Office of Nuclear Waste Isolation, Battelle Memorial Institute, Columbus, OH.

Law Engineering Testing Company, 1983. Salt, Caprock, and Sheath Study, ONWI-355, prepared for Office of Nuclear Waste Isolation, Battelle Memorial Institute, Columbus, OH.

Lemire, R. J., and P. R. Tremaine, 1980. "Uranium and Plutonium Equilibria in Aqueous Solutions, to 200 C", Journal of Chemical Engineering, Vol. 25, p. 361.

NRC DIVISION OF WASTE MANAGEMENT  
DOCKET CONTROL CENTER REFERENCE REPORTS

<u>Report #/ Title</u>	<u>Author</u>	<u>Log #</u>	<u>Document Date</u>	<u>Reviewed Date</u>	<u>Micro- fiche</u>
Geophysical Logs from DOE Well - J. Friemel #1		01045	000000		✓
Geophysical Logs from DOE Well - Sawyer #1		01046	000000		✓
Geophysical Logs from DOE Well - Holtzclaw #1		01047	000000		✓
Geophysical Logs from DOE Well - Zeeck #1		01048	000000		✓
Geophysical Logs from DOE Well - Detten #1		01049	000000		✓
Geophysical Logs from DOE Well - Mansfield #1		01050	000000		✓
Geotechnical Profile - Detten #1 - G. Friemel #1 (Sketch 13697-G(B)-29) 8 pages		01064	830508		
Topographic Maps: Texas - 34-36°N x 101-103°W 2° Sheets - 1) Tucumcari, 2) Amarillo, 3) Clovis, 4) Plainview		01091	840000		✓
Deaf Smith 7½' topos: 1) Simms NW, 2) Simms NE, 3) Vega South, 4) Simms, 5) Overstreet Lake, 6) Ford					✓
Swisher 7½' topos: 1) Tulia, 2) Happy, 3) Tule Lake, 4) Tule Lake NW					✓
Draft on Hydrogeologic Investigations Based on Drill-Stem Test Data, Palo Duro Basin Area, Texas & New Mexico		01085	840320		
Quantitative Analysis of Regional Gravity Data - Texas Panhandle Region, The University of Texas at Austin, Bureau of Economic Geology	Goldstein	00613	820000		
Selected Aspects of the Geology of the Palo Duro Basin, Texas Panhandle, Field Trip Guidebook, The University of Texas at Austin, Bureau of Economic Geology	Gustavson	00614	810500		✓
Regional Cross Sections of the Texas Panhandle: Precambrian to MidPermian, The University of Texas at Austin, Bureau of Economic Geology	Handford	00610	810000		✓
The Composition and Stratigraphic Distribution of Materials in the Lower San Andres Salt Unit 4	Hubbard	01051	000000		✓



NRC DIVISION OF WASTE MANAGEMENT  
DOCKET CONTROL CENTER REFERENCE REPORTS

<u>Report #/ Title</u>	<u>Author</u>	<u>Log #</u>	<u>Document Date</u>	<u>Reviewed Date</u>	<u>Micro- fiche</u>
First Status Report on Regional Ground-Water Flow Modeling for the Palo Duro Basin, Texas (Third Draft), by INTERA Environmental Consultants, Inc. (GNWI/E512-02900/TR-13)	INTERA	01084	831200		
Palo Duro Basin Brine Samples (Tables 1-4)	Sewell	01037	840000		
Draft Subregional Characterization Report, Palo Duro and Dalhart Basins, Texas, Report of the Geologic Project Manager-Permian Basin, Phase I July 1980 - February 1981, prepared for Battelle Office of Nuclear Waste Isolation	Stone & Webster	00597	810200		
Pumping Test & Fluid Sampling Report - Mansfield #1 Well - Palo Duro Basin (ONWI/SUB/83/E512-05000-T9)	Stone & Webster	01036	830700		
Thickness of Thick Salt Bed in Lower San Andres Unit 4 in Northern Palo Duro Basin (Sketch 13697-36-A-2)	Stone & Webster	01058	831208		
Inferred Faults in Northern Palo Duro Basin (Sketch 13697-37-C-2)	Stone & Webster	01059	831208		
Zone of Dissolution of Lower San Andres Unit 4 Salt (Sketch 13697-37-D-1)	Stone & Webster	01060	831228		
Wolfcamp Potentiometric Surface after Culling Depressured, Overpressured, & Underpressured Data in Northern Palo Duro Basin (Sketch 13697-37-E-1)	Stone & Webster	01061	831229		
Pennsylvanian Potentiometric Surface After Culling Depressured, Overpressured, & Underpressured Data in Northern Palo Duro Basin (Sketch 13697-37-F-1)	Stone & Webster	01062	831229		
Wolfcamp Potentiometric Surface after Culling Depressured, Overpressured, & Underpressured Data in Palo Duro Basin (Sketch 13697-37-H-2)	Stone & Webster	01063	840223		
Springs and Seeps in the Palo Duro Basin Area, Texas, Draft Report	SWEC	01078	821200		
Characterization Status Report entitled: (332 FJ) Host Rock Geochemistry (6.1), by University of Texas at Austin, Bureau of Economic Geology	Univ. of TX	01077	840314		
332 FI Regional Ground-Water Flow System (5.7), 332 FI Principal Ground-Water Flow Paths (5.7.2), Numerical Modeling of Regional Ground-Water Flow in the Deep-Brine Aquifers of the Palo Duro Basin, Texas Panhandle	Wirojanagud	01039	000000		

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Progress on Radiometric Dating of Wolfcamp Brines Using <sup>4</sup> He and <sup>40</sup> Ar	Zaikowski	01044	000000	40	
BMI/ONWI-5001 Petrographic Report on Clay-Rich Samples From Permian Unit 4 Salt, G. Friemel #1 Well, Palo Duro Basin, Deaf Smith County, Texas: Unanalyzed Data, for ONWI by Bendix Field Engineering Corporation	Fukui	01018	831200		X
BMI/ONWI-518 Major Salt Beds of the Palo Duro and Dalhart Basins, Texas, Technical Report, for ONWI	Stone & Webster	01017	831200		X
BMI/ONWI-526 Winter Sound-Level Characterization of the Deaf Smith County Location in the Palo Duro Basin, Texas, by NUS for ONWI	NUS	01025	840300		X
BMI/ONWI-527 Meteorological and Air Quality Characterization of the Deaf Smith and Swisher County Locations in the Palo Duro Basin, Texas - Technical Report, by NUS Corporation for ONWI	NUS	01028	840300		X
BMI/ONWI-528 Summer Sound-Level Characterization of the Deaf Smith County and Swisher County Locations in the Palo Duro Basin, Texas, by NUS for ONWI	NUS	01026	840300		X
BMI/ONWI-540 Summary of Petrographic and Chemical Data for Palo Duro Basin Samples Examined by Bendix Filed Engineering Corporation, Grand Junction, Colorado as of April 29, 1983 (fiche only)	ONWI	01098	840800		X
BMI/SRP-5002 Well Completion Report - Dissolution Zone Water Wells (PD-8, PD-11, PD-12, PD-13), Palo Duro Basin, Texas: Unanalyzed Data - Technical Report, by Stone & Webster Engineering Corporation (also have version dated 12/83)	Stone & Webster	01029	840400		X
BMI/SRP-5003 Well Completion Report - G. Friemel #1 (PD-5) - Palo Duro Basin	Stone & Webster	01055	840400		X
BMI/SRP-5004 Well Completion Report - Harman #1 (PD-8) Well, Palo Duro Basin, Texas: Unanalyzed Data - Technical Report, by Stone & Webster Engineering Corporation (also have version dated 2/83)	Stone & Webster	01033	840500		X
BMI/SRP-5005 Well Completion Report - Mansfield #1 (PD-4) Well, Palo Duro Basin, Texas: Unanalyzed Data - Technical Report; by Stone & Webster for ONWI	Stone & Webster	01056	840100		X
BMI/SRP-5006 Well Completion Report - Sawyer #1 (PD-3) Well, Palo Duro Basin, Texas: Unanalyzed Data - Technical Report; by Stone & Webster for ONWI (original version dated 1/84 on file)	Stone & Webster	01041	840500		X

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BMI/SRP-5007 Well Completion Report - Holtzclaw #1 (PD-10) - Palo Duro Basin (ONWI/SUB/83/E512-05000-T12)	Stone & Webster	01040	831200		
BMI/SRP-5008 Well Completion Report - Detten #1 - Palo Duro Basin, Report of the Geologic Project Manager - Permian Basin; by Stone & Webster for ONWI (original version dated 11/82 on file)	Stone & Webster	01054	840500		
BMI/SRP-5009 Well Completion Report - Zeeck #1 - Palo Duro Basin, Report of the Geologic Project Manager - Permian Basin; by Stone & Webster for ONWI (original version dated 1/83 on file)	Stone & Webster	01057	840500		
BMI/SRP-5010 Pumping Test & Fluid Sampling Report - Sawyer #1 Well - Palo Duro Basin (ONWI/SUB/83/E512-05000-T5) (original version dated 3/83 on file)	Stone & Webster	01038	840500		
BMI/SRP-5011 Well Completion Report - J. Friemel #1 (PD-9) - Palo Duro Basin (ONWI/SUB/83/E512-05000-T11) (original version dated 12/83 on file)	Stone & Webster	01042	840500		
BMI/SRP-5012 Permeability Data Base - Palo Duro Basin: Texas, Oklahoma, & New Mexico: Unanalyzed Data - Technical Report, by Stone & Webster Engineering Corporation (also have undated rough draft)	Stone & Webster	01030	840500		
BMI/SRP-5013 Listing of Oil and Gas Well Data File (abstract only)		01035	000000		
BMI/SRP-5013 Oil and Gas Well Data File - Palo Duro Basin, Texas and New Mexico: Unanalyzed Data - Technical Report, by Stone & Webster Engineering Corporation	Stone & Webster	01032	840500		X
BMI/SRP-5014 Formation Pressure Data File - Palo Duro Basin, Texas and New Mexico: Unanalyzed Data - Technical Report, by Stone & Webster Engineering Corporation (also have undated report, "Drill-Stem Test Formation Pressure Data Base, same report #)	Stone & Webster	01031	840500		
BMI/SRP-5015 Laboratory Testing of Rock & Salt Samples for Static Moduli, Dynamic Moduli, & Uniaxial & Triaxial Compressive Strength from the Detten #1 (PD-6) Well, G. Friemel #1 (PD-5) Well, Mansfield #1 (PD-4) Well, & Zeeck #1 (PD-7) Well - Palo Duro Basin, Texas: Unanalyzed Data, Technical Report	Stone & Webster	01016	840900		
BMI/SRP-5016 Summary Well Report, DOE-Gruy Federal #1 Rex White: Unanalyzed Data, by Bureau of Economic Geology, The University of Texas at Austin	Univ of TX	01089	840600		
BMI/SRP-5017 Summary Well Report, DOE-Gruy Federal #1 Grabbe: Unanalyzed Data - Technical Report,	Univ of TX	01088	840600		

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by Bureau of Economic Geology, The University of Texas at Austin					
BMI/SRP-5019 Report of Laboratory Testing on Rock Core Samples - Mansfield #1 (PD-4) Well, Palo Duro Basin, Texas: Unanalyzed Data, Technical Report	Stone & Webster	01096	840900		
BMI/SRP-5020 Pumping Test and Fluid Sampling Report - Mansfield #1 (PD-4) Well, Palo Duro Basin, Texas: Unanalyzed Data, Technical Report	Stone & Webster	01092	840700		
BMI/SRP-5021 Laboratory Testing of Rock & Salt Samples for Determination of Specific Gravity & Total Porosity of the Zeeck #1 Well (PD-7), Palo Duro Basin, Texas: Unanalyzed Data - Technical Report	Stone & Webster	01086	840700		
BMI/SRP-5022 Laboratory Testing of Rock & Salt Samples for Determination of Specific Gravity & Total Porosity of the Mansfield #1 Well (PD-4), Palo Duro Basin, Texas: Unanalyzed Data - Technical Report	Stone & Webster	01087	840700		
BMI/SRP-5023 Report of Laboratory Testing on Rock Core Samples - Detten #1 (PD-6) Well, Palo Duro Basin, Texas: Unanalyzed Data - Technical Report	Stone & Webster	01090	840800		
BMI/SRP-5025 Laboratory Index Testing on Rock Core Samples from G. Friemel #1 (PD-5) Well, Palo Duro Basin, Texas: Unanalyzed Data, Technical Report	Stone & Webster	01093	840800		
BMI/SRP-5026 Direct Shear Testing on Rock Core Samples from the Detten #1 (PD-6) Well, Palo Duro Basin, Texas: Unanalyzed Data, Technical Report	Stone & Webster	01094	840800		
BMI/SRP-5027 Direct Shear Testing on Rock Core Samples from Mansfield #1 (PD-4) Well, Palo Duro Basin, Texas: Unanalyzed Data, Technical Report	Stone & Webster	01095	840800		
DOE/CH/10140-1 Area Geological Characterization Report for the Palo Duro and Dalhart Basins, Texas, for DOE	Stone & Webster	01019	830700		X
DOE/CH/10140-2 Permian Basin Location Recommendation Report, for DOE		01022	821100		X
Map MF-1388 Reagor and Others - Seismicity Map of the State of Texas	USGS	01079	820000		
No. 102 Lower Permian Facies of the Palo Duro Basin, Texas: Depositional Systems, Shelf-Margin Evolution, Paleogeography, and Petroleum Potential, The University of Texas at Austin, Bureau of Economic Geology, Report of Investigations No. 102, for DOE	Handford	00606	800000		

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No. 105 Sand-Body Geometry and Depositional Systems, Ogallala Formation, Texas, The University of Texas at Austin, Bureau of Economic Geology, Report of Investigations No. 105, for DOE	Senf	00607	800000		
No. 106 Regional Dissolution of Permian Salt in the Anadarko, Dalhart and Palo Duro Basins of the Texas Panhandle, The University of Texas at Austin, Bureau of Economic Geology, Report of Investigations No. 106, for DOE	Gustavson	00603	800000		
No. 121 San Andres Carbonates in the Texas Panhandle: Sedimentation and Diagenesis Associated with Magnesium-Calcium-Chloride Brines, The University of Texas at Austin, Bureau of Economic Geology, Report of Investigations No. 121, for DOE	Bein	00666	820000		
No. 123 Petroleum Potential of the Palo Duro Basin, Texas Panhandle, The University of Texas at Austin, Bureau of Economic Geology, Report of Investigations No. 123, for DOE	Dutton	00863	820000		
No. 128 Facies And Stratigraphy Of The San Andres Formation, Northern And Northwestern Shelves Of The Midland Basin, Texas And New Mexico, Report Of Investigations No. 128, by Bureau Of Economic Geology, The University Of Texas At Austin, for DOE	Ramondetta	01013	820000		
OF-WTWI-1984-10 Late Quaternary Paleoclimatology of the Southern High Plains of Texas--Implications for Disposal of Nuclear Waste, by Bureau of Economic Geology for DOE	Caran	01081	840000		
OF-WTWI-1984-11 Host Rock Geochemistry of the Palo Duro Basin, Texas, by Bureau of Economic Geology for DOE	Fisher	01083	840000		
OF-WTWI-1984-12 Quaternary Faulting in Southeastern - Briscoe County, Texas, by Bureau of Economic Geology for DOE	Baumgardner	01082	840000		
OF-WTWI-1984-9 Structural Control of Physiography, Geomorphic Processes, & Lithofacies, Texas Panhandle, by Bureau of Economic Geology for DOE	Gustavson	01080	840000		
ONWI-102 Area Environmental Characterization Report of the Dalhart and Palo Duro Basins in the Texas Panhandle, Volume I. Dalhart Basin and Volume II. Palo Duro Basin, prepared by NUS Corp. for ONWI	NUS	01023	820900		
ONWI-27 Environmental Characterization of Bedded Salt Formations and Overlying Areas of the Permian Basin, by NUS Corp. for Battelle/ONWI	NUS	01014	830700		X
ONWI-28 Regional Summary and Recommended Study Areas for the Texas Panhandle Portion of the	NUS Corporation	01020	831200		X

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Permian Basin, Technical Report, for ONWI					
ONWI-292 Draft, Area Geological Characterization Report for the Palo Duro and Dalhart Basins, Texas, Technical Report, prepared for Battelle Office of Nuclear Waste Isolation (Tech review by MPendleton)	Stone & Webster	00617	811200	820316	
ONWI-392 Exploratory Shaft Conceptual Design Report: Permian Basin, Technical Report, by ONWI	Battelle	01015	830700		X
ONWI-461 Socioeconomic Data Base Report for the Permian Basin, by ONWI/Battelle	ONWI	01024	840100		
ONWI-498 Exploratory Shaft Facility Preliminary Designs-Permian Basin, Technical Report, for ONWI by Parsons Brinckerhoff/PB-KBB	Brinckerhoff	01021	830900		X
ONWI-524 Ogallala Aquifer Mapping Program - Topical Report - Revision 1 (ONWI/SUB/83/E512-05000-T16)	Stone & Webster	01034	830000		
ONWI/79/E511-00300-4 Locating Field Confirmation Study Areas for Isolation of Nuclear Waste in the Texas Panhandle, Annual Report, 10/1/78 - 9/30/79, for UCC Office of Waste Isolation	Gustavson	00615	791201		
PNL-SA-11783 The Use of Natural Radionuclides to Predict the Behavior of Radwaste Radionuclides in Far-Field Aquifers	Hubbard	01043	840100		
Report 213 Analytical Study of the Ogallala Aquifer in Deaf Smith County, Texas, by Texas Water Development Board	Wyatt	01027	770500		
TP 83-133 Modeling the Deep Basin Hydrogeology of a Potential High-Level Radwaste Site in Texas - Presented at Association of Engineering Geologists Annual Meeting in San Diego, CA	Smith	01052	831006		
Y/OWI/SUB-4494/1 Evaluation of Permian Salt Deposits in the Texas Panhandle and Western Oklahoma for Underground Storage of Radioactive Wastes, School of Geology and Geophysics, The University of Oklahoma, for UCC Office of Waste Isolation	Johnson	00616	760400		
Y/OWI/SUB-77/16540/5 Plans for Environmental Surveys of Bedded Salt Formations and Overlying Areas of the Permian Basin in Texas, Volume 1, prepared for UCC Office of Waste Isolation	NUS	00611	780600		
79-1 Geology and Geohydrology of the Palo Duro Basin, Texas Panhandle, A Report on the Progress of Nuclear Waste Isolation Feasibility Studies (1978), The University of Texas at Austin, Bureau of Economic Geology, Geological Circular 79-1, for UCC Office of Waste Isolation	Dutton	00600	790000		

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80-10 Petroleum Source Rock Potential and Thermal Maturity, Palo Duro Basin, Texas, The University of Texas at Austin, Bureau of Economic Geology, Geological Circular 80-10, for DOE	Dutton	00599	800000		
80-11 Climatic Controls on Erosion in the Rolling Plains and Along the Caprock Escarpment of the Texas Panhandle, The University of Texas at Austin, Bureau of Economic Geology, Geological Circular 80-11, for DOE	Finley	00601	800000		
80-7 Geology and Geohydrology of the Palo Duro Basin, Texas Panhandle, A Report on the Progress of Nuclear Waste Isolation Feasibility Studies (1979), The University of Texas at Austin, Bureau of Economic Geology, Geological Circular 80-7, for DOE	Gustavson	00604	800000		
80-8 Depositional Systems and Hydrocarbon Resource Potential of the Pennsylvanian System, Palo Duro and Dalhart Basins, Texas Panhandle, The University of Texas at Austin, Bureau of Economic Geology, Geological Circular 80-8, for DOE	Dutton	00598	800000		
80-9 Facies Patterns and Depositional History of a Permian Sabkha Complex: Red Cave Formation, Texas Panhandle, The University of Texas at Austin, Bureau of Economic Geology, Geological Circular 80-9, for DOE	Handford	00605	800000		
81-3 Geology and Geohydrology of the Palo Duro Basin, Texas Panhandle, A Report on the Progress of Nuclear Waste Isolation Feasibility Studies (1980), Annual Report, The University of Texas at Austin, Bureau of Economic Geology, Geological Circular 81-3, for UCC Office of Waste Isolation	Gustavson	00612	810000		
81-4 Impact of Evaporite Dissolution and Collapse on Highways and Other Cultural Features in the Texas Panhandle and Eastern New Mexico, The University of Texas at Austin, Bureau of Economic Geology, Geological Circular 81-4, for DOE	Simpkins	00608	810000		
81-5 Lineament Analysis Based on Landsat Imagery, Texas Panhandle, The University of Texas at Austin, Bureau of Economic Geology, Geological Circular 81-5, for DOE	Finley	00602	810000		
81-8 Tansill, Salado, and Alibates Formations: Upper Permian Evaporite/Carbonate Strata of the Texas Panhandle, The University of Texas at Austin, Bureau of Economic Geology, Geological Circular 81-8, for DOE	McGillis	00609	810000		
83-4 Geology and Geohydrology of the Palo Duro Basin, Texas Panhandle - A Report on the Progress of Nuclear Waste Isolation Feasibility Studies (1982), Annual Report for 10/01/81 to 09/30/82, by Bureau of Economic Geology for DOE	Gustavson	01071	830000		

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USGS ltr to CHeath, DOE (w/cover ltr fm Neff, NWTS) - comparison of geologic and hydrologic characteristics of salt domes and salt beds	DeBuchananne	00013	810501		X
U.S. DOE Transcripts from Public Hearings in Mississippi on Proposed Nomination of Sites for Site Characterization & Recommendations of Issues for Environmental Assessments & Site Characterization Plans, (Vol. 1-3) Richton, MS, (4/28/83) & Jackson, MS, (4/29/83)	DOE	00035	830428		
U.S. DOE Transcripts from Public Hearings in Utah on Proposed Nomination of Sites for Site Characterization & Recommendations of Issues for Environmental Assessments & Site Characterization Plans, (Vol. 1 & 2) Monticello, UT (5/3/1983)	DOE	00036	830503		
U.S. DOE Transcript from Public Hearing in Louisiana on Proposed Nomination of Sites for Site Characterization & Recommendations of Issues for Environmental Assessments & Site Characterization Plans, Minden, Louisiana, (5/10/83) Write-In Comments	DOE	00037	830510		
U.S. DOE Transcripts from Public Hearings in Texas on Proposed Nomination of Sites for Site Characterization & Recommendations of Issues for Environmental Assessments & Site Characterization Plans, (Vol. 1 & 2), Hereford, TX (5/16/83) & Tulia, TX (5/17/83)	DOE	00034	830516		
Planning Base for Wastes to be Received at a Mined Geologic Disposal System in Salt	Goldsmith	00082	840606		
Natural Salt Dissolution Assessment of Seven Potential Nuclear Waste Salt Repositories by Battelle Memorial Institute	Gupta	00072	840300		✓
Draft DOE Document - Expected Nuclear Waste Repository Near-Field, Performance in Three Salt Basins, Part II: Brine Migrations	McCauley	00075	840000		
Draft DOE Document - Expected Nuclear Waste Repository Near-Field, Performance in Three Salt Basins, Part I: Thermal Conditions	McNulty	00074	840200		
Salt Repository Program, FY 1983 Year-End Project Review, Presentation Viewgraphs and Supplementary Data	ONWI	00055	830824		
Summary of Public Meetings on Studies in Utah, held on 11/10-13/81, in Monticello, Blanding, Moab, Salt Lake City, by Utah Nuclear Waste Repository Task Force for DOE	Utah	00028	820800		
	Utah	00032	820800		



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Transcript of Public Meetings on Studies in Utah, held on 11/10-13/81, in Monticello, Blanding, Moab, Salt Lake City, by Utah Nuclear Waste Repository Task Force for DOE					
	Wilson	00014	801021		X
Report of Trip to Asse and Konrad Mines, Federal Republic of Germany, by LBL					
AMETA The Thermomigration of Biphase Vapor-Liquid Droplets in Solids, by Acta Metallurgica, Vol. 20 (pp. 247-255)	Anthony	00090	720200		
AMETA The Thermomigration of Liquid Droplets Through Grain Boundaries in Solids, by ACTA Metallurgica, Vol. 19	Cline	00089	710600		
BMI/ONWI-513 The Salton Sea Geothermal Field, California, as a Near-Field Natural Analog of a Radioactive Waste Repository in Salt, by Univ of CA for ONWI	Elders	00024	831100		X
BMI/ONWI-515 Adjoint Sensitivity Theory for Steady-State Ground-Water Flow, by INTERA Environmental Consultants, Inc. for ONWI	INTERA	00027	831100		
BMI/ONWI-516 Sensitivity/Uncertainty Analysis of a Borehole Scenario Comparing Latin Hypercube Sampling & Deterministic Sensitivity Approaches, by ONWI	Harper	00029	831000		X
BMI/ONWI-519 Response Report from U.S. Department of Energy Hearings on Proposed Salt Site Nominations, by ONWI	ONWI	00025	831100		
BMI/ONWI-521 Conceptual Waste Package Interim Product Specifications and Data Requirements for Disposal of Glass Commercial High-Level Waste Forms in Salt Geologic Repositories, Technical Report	ONWI	00031	831000		X
BMI/ONWI-538 A Study of Thermal-Gradient-Induced Migration of Brine Inclusions in Salt: Final Report, Technical Report by Regents of the University of California for ONWI	Olander	00084	840800		X
BMI/ONWI-541 Preclosure Radiological Calculation to Support Salt Evaluations (fiche only)	ONWI	00095	840800		X
JAPIA Thermal Gradient Migration of Brine Inclusions in Synthetic Alkali Halide Single Crystals, by J. Appl. Phys. Vol. 53 #1 (pp. 669-681)	Olander	00093	820100		
LBL-11829 A Field Assessment of the Use of Borehole Pressure Transients to Measure the Permeability of Fractured Rock Masses (fiche only)		00058	810600		
NUTYB		00091	831200		

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Letters to the Editor - Remarks on "Migration of Brine Inclusions in Salt", by Nuclear Technology Vol. 63 (pp. 507-510)					
NUTYB Migration of Brine Inclusions in Salt, by Nuclear Technology Vol. 56 (pp. 93-101)	Pigford	00092	820100		
NUTYB Radiation Damage Studies on Natural Rock Salt from Various Geological Localities of Interests to the Radioactive Waste Disposal Program, by Nuclear Technology, Volume 60, January, February, March 1983, pg 231-243	Post	00073	830000		
ONWI-19 (FY-84) Salt Repository Project FY 84 Technical Project Plan, Technical Report	ONWI	00094	840800		X
ONWI-200(1) Bibliography of Studies for the Salt Repository Office of the Nuclear Waste Terminal Storage Program, 4/78 - 3/83, Technical Report	ONWI	00056	830900		
ONWI-200(2) Bibliography of Studies for the Salt Repository Project of the National Waste Terminal Storage Program, 4/78 - 9/83	ONWI	00026	831200		X
ONWI-200(3) Bibliography of Studies for the Salt Repository Project Office of the Civilian Radioactive Waste Management Program, 4/78-3/84, by Battelle	ONWI	00081	840600		X
ONWI-224 Creep and Creep Rupture of Rock Salt, by RE/SPEC Inc., for Battelle/ONWI	Carter	00001	830600		X
ONWI-242 Brine Migration Test for Asse Mine, Federal Republic of Germany; Final Test Plan, by Westinghouse for Battelle/ONWI	Westinghouse	00002	830700		X
ONWI-295 Review of Constitutive Laws Used to Describe the Creep of Salt, by RE/SPEC Inc. for Battelle/ONWI	Senseny	00003	830600		X
ONWI-315 Room Stability in Salt Repositories, Technical Report, by RE/SPEC Inc. for ONWI (Tech review by TSeamans)	Fossum	00038	831200	840216	
ONWI-315 Room Stability in Salt Repositories (fiche only)	ONWI	00042	831200		
ONWI-383 Forced Ventilation Analysis of a Commercial High-Level Nuclear Waste Repository in Salt, by RE/SPEC Inc. for Battelle/ONWI	Svalstad	00004	830700		X
ONWI-417 Topical Reports on Louisiana Salt Domes, by Inst. for Environmental Studies, LA State University, for Battelle/ONWI		00005	830900		X

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ONWI-450 Preliminary Constitutive Properties for Salt and Nonsalt Rocks From Four Potential Repository Sites, by RE/SPEC Inc. for ONWI (Tech review by TSeamans)	Pfeifle	00008	830700	830809	X
ONWI-455 Functional Design Criteria for the Exploratory Shaft in Salt, Technical Report	ONWI	00009	830700		X
ONWI-464 Conceptual Waste Package Interim Product Specifications and Data Requirements for Disposal of Borosilicate Glass Defense High-Level Waste Forms in Salt Geologic Repositories	ONWI	00010	830600		
ONWI-483 Results of Repository Conditions Study for Commercial and Defense High-Level Nuclear Waste and Spent Fuel Repositories in Salt (fiche only)	ONWI	00039	830700		
ONWI-490 Waste Package Materials Testing for a Salt Repository: 1982 Status Report (fiche only)	ONWI	00041	830800		
ONWI-62 Proceedings of the National Waste Terminal Storage Program Info Meeting, ONWI, Columbus, OH, 10/30/79 - 11/1/79	ONWI	00015	780000		X
ONWI-9(2) ONWI Technical Progress Report for the Quarter January 1 - March 31, 1979	Patchick	00019	790000		X
ONWI-9(3) ONWI Technical Progress Report for the Quarter April 1 - June 30, 1979	Patchick	00020	790000		X
ONWI-9(4) ONWI Technical Progress Report for the Quarter July 1 - September 30, 1979	Patchick	00021	790000		X
ONWI-9(81-2) Technical Progress Report for the Quarter January 1 - March 31, 1981	ONWI	00049	810101		
ONWI-9(81-3) Technical Progress Report for Quarter, April 1 - June 30, 1981, by Battelle	Carter	00022	810630		
ONWI-9(81-4) Technical Progress Report for the Quarter July 1 - September 30, 1981	ONWI	00048	810701		
ONWI-9(82-1) Technical Progress Report for the Quarter October 1 - December 31, 1981	ONWI	00051	811001		
ONWI-9(82-2) Technical Progress Report for the Quarter January 1 - March 31, 1982	ONWI	00050	820101		
ONWI-9(82-3) Technical Progress Report for the Quarter April 1 - June 30, 1982	ONWI	00052	820401		

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ONWI-9(82-4) Technical Progress Report for the Quarter July 1 - September 30, 1982	ONWI	00053	820701		
ONWI-9(82-4) Technical Progress Report for the Quarter July 1 - September 30, 1982	ONWI	00047	820730		
ONWI-9(83-1) Technical Progress Report for the Quarter 10/1 - 12/31/82	ONWI	00040	821001		X
ONWI-9(83-1) Technical Progress Report for the Quarter October 1 - December 31, 1982	ONWI	00054	821001		
ONWI-9(83-2) Technical Progress Report for the Quarter 1 January-31 March, 1983, by Battelle	ONWI	00018	830331		
ONWI-9(83-3) Technical Progress Report for the Quarter April 1 - June 30, 1983, by ONWI/Battelle	ONWI	00044	840000		X
ONWI-9(83-4) Technical Progress Report for the Quarter July 1 - September 30, 1983	ONWI	00083	830000		X
ORNL-TM-3717 Reactor Chemistry - Radiolysis & Hydrolysis in Salt-Mine-Brines, by ORNL for U.S. Atomic Energy Commission	Jenks	00076	720300		
ORNL-5818 Brine Migration in Salt and Its Implications in the Geologic Disposal of Nuclear Waste, by ORNL for DOE	Jenks	00077	811200		
ORNL-5950 The Effect of Water in Salt Repositories: Final Report, by ORNL for DOE	Baes Jr.	00023	830900		
Report 98 Compilation of Results of Aquifer Tests in Texas, by Texas Water Development Board	Myers	00046	690700		
RHO-BW-SA-322 P Development of High Temperature and Pressure Eh and pH Sensing Instruments, for Rockwell	Danielson	00079	831100		
RHO-BW-ST-62 P EHPH Users Guide, by Rockwell for DOE	Drewes	00078	830500		
SAND79-2226 Salt Block 2 - Description and Results (fiche only)	Hohlfelder	00043	800600		X
SAND79-2423 Mineralogical Aspects of Fluid Migration in the Salt Block II Experiment, by Sandia National Laboratories	Lambert	00080	800000		
UCRL-52918 A Method for Calculating Internal Radiation and Ventilation with the Adinat Heat-Flow		00060	800400		

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Code, April, 1980 (fiche only)					
UCRL-53237 Ryerson et al, Form of Synroc D Addit for SRP High-Level Radioactive Waste (12/81 24X 10F1 UNC AAN82-100035-00) (fiche only)		00059	840000		
Y/OWI/SUB77/16540/8 Appendix A, Comments on Plans for Environmental Surveys of Salt Formations and Overlying Areas in Louisiana, Mississippi, New York, Ohio, Texas, and Utah - Volume 1, prepared by ONWI/Battelle	NUS	00016	780900		
Y/OWI/TM-36/16 Technical Support for GEIS: Radioactive Waste Isolation in Geologic Formations (Volume 16), Repository Preconceptual Design Studies: BPNL Waste Forms in Salt, by Parsons Brinckerhoff Quade & Douglas, Inc. for DOE	Kibbe	00057	780400		
Y/OWI/TM-36/17 Drawings for Repository Preconceptual Design Studies: BPNL Waste Forms in Salt (Volume 17), Supplemental Technical Information in Support of Y/OWI/TM-44, by Parsons Brinckerhoff Quade & Douglas, Inc. for DOE	Kibbe	00070	780400		
Y/OWI/TM-36/4 Technical Support for GEIS: Radioactive Waste Isolation in Geologic Formations, Volume 4, Baseline Rock Properties-Salt, prepared for Office of Waste Isolation	Kibbe	00017	780400		
Y/OWI/TM-36/8 Technical Support for GEIS: Radioactive Waste Isolation in Geologic Formations (Volume 8), Repository Preconceptual Design Studies: Salt, by Parsons Brinckerhoff Quade & Douglas, Inc. for DOE	Kibbe	00069	780400		
Y/OWI/TM-36/9 Drawings for Repository Preconceptual Design Studies: SALT (Volume 9), Supplemental Technical Information in Support of Y/OWI/TM-44, by Parsons Brinckerhoff Quade & Douglas, Inc. for DOE	Kibbe	00071	780400		
569-A Hydrologic Significance of the Lithofacies of the Sparta Sand in Arkansas, Louisiana, Mississippi, and Texas, Geological Survey Paper 569-A	Payne	00045	680000		

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International Salt and Avery Island, Louisiana, illustrated pamphlet by International Salt Company		00437	000000		
Tatum Salt Dome Bibliography, Mississippi		00648	000000		
Interior Salt Domes and Tertiary Stratigraphy of North Louisiana, Guide Book, 1960 Spring Field Trip, 4/1-2/60, Shreveport Geological Society		00418	600401		
Interdepartmental Nuclear Energy Commission, Report on the Feasibilities of Radioactive Waste Disposal in Salt Formations in the Netherlands, and Appendices		00394	790400		
Field Trip in the Vacherie-Rayburn's Area, Graphic Data From Institute for Environmental Studies Reports, Louisiana State University		00419	800123		
Handouts on Mississippi Salt Dome Investigations		00438	800900		
Mid-year Information Seminar of East Texas Waste Isolation Project, Bureau of Economic Geology, The University of Texas at Austin		00445	810000		
Salt Dome, Project Records List for IES-LSU		01195	810701		
Topographic maps:		01203	840000		
Mississippi - Hattiesburg 2° sheet					
Richton 7½' topos - 1) Ovett, 2) Ovett SE, 3) Rhodes, 4) Richton					
Cypress Creek 15' topos - 1) Beaumont, 2) New Augusta					<i>done july 84</i>
Louisiana - Shreveport 2° sheet					
Vacherie 15' topos - 1) Minden, 2) Gibsland, 3) Ringgold, 4) Jamestown					<i>done july 84</i>
Durham		00420	701031		
Field Trip - North Central Louisiana Salt Domes, Gulf Coast Association of Geological Societies 20th Annual Meeting					<i>done 11/5/84</i>
GEI		00422	800000		
State-of-the-Art of Determining the Stability of Salt Dome, prepared for LLNL					<i>X done 11/6/84</i>
Griswold		00425	790920		
Solution Mining in Salt Domes of the Gulf Coast Embayment, by Tecolote Corp., Albuquerque, NM, prepared for ONWI/Battelle					
Hart		00447	800204		

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Memo to M. Bell & L. White, NRC, Trip Report - Avery Island (tour of DOE's salt dome heater testing)					
Survey of Salt Dome Investigations	Hart	00412	810100		
DOE Briefing of EPA on Salt Dome Reference Site Analyses (PNL-2955 report)	Heath	00427	810526		
Status Report on Regional Ground-Water Flow Modeling of the Vacherie Dome, Louisiana - First Draft (ONWI/E512-02900/TR-20 - 410D-00G-02)	INTERA	01198	830400		
First Status Report on Regional & Local Ground-Water Flow Modeling for Richton Dome, Mississippi (Third Draft), by INTERA Environmental Consultants Inc. (ONWI/E512-02900/TR-21)	INTERA	01200	831200		
Dome Salt Brine Migration Experiments at Avery Island, LA, Proceedings NWTS Program Information Meeting, ONWI/Battelle, Columbus	Krause	00429	791030		
Field Trip to Salt Domes in the East Texas Basin, by Bureau of Economic Geology, University of Texas at Austin	Kreitler	00410	800916		
Origin & Diagenesis of Cap Rock, Gyp Hill & Oakwood Salt Domes, Texas, Report of Investigations #131, by Bureau of Economic Geology	Kreitler	01206	830000		X done 12/3/84
Times and Rates of Salt Movement in North Louisiana, Proceedings of a Symposium on Salt Dome Utilization and Environmental Considerations	Kupfer	00439	761122		X done 11/5/84
Problems Associated with Anomalous Zones in Louisiana Salt Stocks, USA, in Fifth Symposium on Salt, Hamburg, West Germany, May-June 1978, Northern Ohio Geological Society, Cleveland, OH, Vol. 1, p. 119-134	Kupfer	00444	780500		X done 6/27/84
Final Draft-Area Characterization, Volume III A - Text, North Louisiana Study Area, Gulf Coast Salt Domes Project, prepared for ONWI/Battelle	Law Eng.	00402	800715		
Final Draft-Area Characterization, Volume III B - Figures, North Louisiana Study Area, Gulf Coast Salt Domes Project, prepared for ONWI/Battelle	Law Eng.	00403	800715		
Second Draft-Area Characterization, Volume 1, Introduction, Background & Summary, Gulf Coast Salt Domes Project, prepared for ONWI/Battelle	Law Eng.	00399	800829		

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Final Draft-Area Characterization, Volume II A - Text, East Texas Study Area, Gulf Coast Salt Domes Project, prepared for ONWI/Battelle	Law Eng.	00400	800829		
Final Draft-Area Characterization, Volume II B - Figures, East Texas Study Area, Gulf Coast Salt Domes Project, prepared for ONWI/Battelle	Law Eng.	00401	800829		
Final Draft-Area Characterization, Volume IV A - Text, Mississippi Study Area, Gulf Coast Salt Domes Project, prepared for ONWI/Battelle	Law Eng.	00404	800829		
Final Draft-Area Characterization, Volume IV B - Figures, Mississippi Study Area, Gulf Coast Salt Domes Project, prepared for ONWI/Battelle	Law Eng.	00405	800829		
Guided Geologic Field Trip for NRC, Gulf Coast Salt Domes Project, prepared for ONWI/Battelle	Law Eng.	00411	800900		
First Draft-Area Characterization, Appendix, East Texas Study Area, Gulf Coast Salt Domes Project, prepared for ONWI/Battelle	Law Eng.	00407	801200		
Final Draft-Area Characterization, Appendix, North Louisiana Study Area, Gulf Coast Salt Domes Project, prepared for ONWI/Battelle	Law Eng.	00406	810200		
Radioactive Waste Management by Burial in Salt Domes, Engineering Mechanics Research Laboratory, The University of Texas at Austin	Ledbetter	00363	750117		
Growth History of the Hainesville Salt Dome, Wood County, Texas, M.S. Thesis, The University of Texas at Austin	Loocke	00364	780500		<i>done 11/6/84</i>
Ltr fm P. MacLean (LBL) to D. Siefken (NRC), Trip report, 8/4-8/80, visit to potash mine in bedded evaporite formation and salt mine in gulf coast dome	MacLean	00388	800815		
Environmental Significance of Salt, AAPG Bull, Vol. 55, No. 6, p. 810-825	Martinez	00440	710600		✓
Salt Dome Utilization and Environmental Considerations, p. 423, in Proceedings of a Symposium held at Louisiana State University, Baton Rouge, LA, 11/2224/76, sponsored by Institute for Environmental Studies	Martinez	00391	761122		✓
A Systems Concept of Space Utilization in Gulf Coast Salt Domes, in M. Bergman, Storage in Excavated Rock Caverns, Rockstore 77, Vol. 1, Pergamon Press, NY	Martinez	00441	780000		



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Salt Dome Caprock - A Record of Geologic Processes, presented at Fifth International Symposium on Salt, Hamburg, West Germany	Martinez	00432	780529		<i>X done 10/11/82</i>
An Assessment Model for Salt Dome Stability - Tectonic and Hydrologic, presented at Fifth International Symposium on Salt, Hamburg, West Germany	Martinez	00433	780529		<i>X done 10/11/82</i>
The Nature and Evolution of Salt Domes and Their Caprock, Geological Pamphlet No. 6, Louisiana Geological Survey, Baton Rouge, LA	Martinez	00417	800700		<i>done 10/11/82</i>
Thermal Migration of Formation Waters in Salt Domes, article fm EOS, Vol. 61, No. 47	Martinez	00443	801118		<i>done 10/11/82</i>
NRC Staff Field Trip Notebook for Gulf Interior Salt Domes Field Trip (collection of pertinent summary & trip material)	NRC	00408	800900		
Ltr fm R. Costanzi, T. Nicholson, E. O'Donnell to I.C. Roberts, NRC, Report on Meetings with Technical Experts Concerning NRC Needs in the Development of a Technical Rule Relative to Deep Burial of High Level Radioactive Waste, 6/48/79	O'Donnell	00375	790802		
Viewgraphs copies shown at 9/80 Gulf Interior Salt Dome Introductory Meeting in Columbus, OH	ONWI	00409	800909		
Ground Water in Louisiana, Water Resources Bulletin No. 1, Department of Conservation, Louisiana Geological Survey	Rollo	00436	600800		
Mississippi State Oil & Gas Board - Monthly Report on Fluids Injected for each month of 1982	Shell Oil Co.	01193	820000		
Conceptual Design Report, Technical Support Information, 2.0 Canistered Waste Facility, Part I, Design Engineer's Work Order Files	Stearns-Roger	00451	000000		
Conceptual Design Report, Technical Support Information, 2.0 Canistered Waste Facility, Part II, Design Engineer's Work Order Files	Stearns-Roger	00452	000000		
Conceptual Design Report, Technical Support Information, Low Level TRU Waste Facility, Part I, Design Engineer's Work Order Reports	Stearns-Roger	00453	000000		
Conceptual Design Report, Technical Support Information, Low Level TRU Waste Facility, Part II, Design Engineer's Work order Reports	Stearns-Roger	00454	000000		

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Conceptual Design Report, Technical Support Information, Low Level TRU Waste Facility, Part III, Design Engineer's Work Order Reports	Stearns-Roger	00455	000000		
Blowouts in Domal Salt, presented at Fifth International Symposium on Salt, Hamburg, West Germany, May-June 1978	Thoms	00431	780529		
Regional Geomorphology, Section on East Gulf Coastal Plain	Thornbury	00450	000000		
Jefferson Island, Louisiana - various articles and notes	various	00448	000000		
Geology and Growth History of Minden Salt Dome, Webster Parish, Louisiana, presented at Geological Society of America, 93rd Annual Meeting, Atlanta, GA	Wells	00435	801117		
BMI/ONWI-520 High-Resolution Seismic Reflection Study - Vacherie Dome, Technical Report, by the Earth Technology Corporation for ONWI	Earth Tech Corp	01207	840600		X
BMI/ONWI-525 Potentiometric-Level Monitoring Program - Mississippi & Louisiana: Annual Status Report for Fiscal Year 1983 - Technical Report, for ONWI	Ertec	01199	840300		X
EW-ONWI-RL 2281 Mississippi Oil & Gas Production Annual Report for 1982, by Mississippi State Oil & Gas Board		01196	820000		
EW-ONWI-RL 290 Salt Water Disposal Wells in Mississippi, Information Series MGS-72-4, by Mississippi Geological Survey	Bicker	01194	720000		
EW-78-C-05-5941/53 An Investigation of the Utility of Gulf Coast Salt Domes for the Storage or Disposal of Radioactive Wastes, Volumes 1 and 2	Martinez	00387	781231		X
E511-02500-A-1 An Investigation of the Utility of Gulf Coast Salt Domes for the Storage or Disposal of Radioactive Wastes, 572 p., prepared for DOE	Martinez	00392	791231		X
IAEA-SM-228/2 Environmental and Artificial Tracers for Investigating Leakages Into Salt Mines, p. 45-63, in Isotope Hydrology, 1978 Proceedings of an International Symposium on Isotope Hydrology, Vol. 1	Zuber	00374	000000		
JGREA Isotope Geochemistry of Water in Gulf Coast Salt Domes, by Journal of Geophysical Research, Vol. 85 #B9 (pp. 4863-4871)	Knauth	00645	800910		

X done  
10/11/84  
6/28/84

X done  
11/5/84

X done  
6/25/84

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X

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Map 65-1 Configuration of the Base of the Fresh-Ground-Water Section in Mississippi, Water Resources Map 65-1, by USGS in coop. w/Mississippi Board of Water Commissioners	Newcome	01154	650900		
No. 0124 Conceptual Design Report, National Waste Terminal Storage Repository No. 1, Special Study No. 1, Operating Phase Cost Sensitivity Analysis	Stearns-Roger	00456	790105		
No. 0125 Conceptual Design Report, National Waste Terminal Storage Repository for Storing Reprocessing Wastes in a Dome Salt Formation, Waste Retrieval from Backfilled Regions	Stearns-Roger	00649	790000		
No. 0127 Conceptual Design Report, National Waste Terminal Storage Repository No. 1, Vol. 1	Stearns-Roger	00650	790124		
No. 0128 Conceptual Design Report, National Waste Terminal Storage Repository No. 1, Volume II, Drawings	Stearns-Roger	00457	790105		
No. 0129 Conceptual Design Report, National Waste Terminal Storage, Repository No. 1, Conceptual Design Descriptions	Stearns-Roger	00458	790117		
No. 0130 Conceptual Design Report, National Waste Terminal Storage Repository No. 1, Conceptual Design Study No. 1, Occupational Exposure and Health Physics Studies	Stearns-Roger	00459	781215		
No. 0131 Conceptual Design Report, National Waste Terminal Storage Repository No. 1, Conceptual Design Study No. 2, Accident Analysis	Stearns-Roger	00460	781215		
No. 0132 Conceptual Design Report, National Waste Terminal Storage Repository No. 1, Conceptual Design Study No. 3, Underground Transport and Placement	Stearns-Roger	00651	790118		
No. 0133 Conceptual Design Report, Conceptual Design Study No. 4, Purchased Power vs. OnSite Power Production	Stearns-Roger	00461	781218		
No. 0134 Conceptual Design Report, Conceptual Design Study No. 5, Supporting Studies for Underground Facility, Part I: Summary	Stearns-Roger	00462	781215		
No. 0138 Conceptual Design Report, Conceptual Design Study No. 6, Thermal Analysis	Stearns-Roger	00463	781215		
OF 80-217 Selected Hydrologic Data From the Vicinity of Rayburns and Vacherie Salt Domes, Northern Louisiana Salt-Dome Basin, USGS (Open-File Report)	Ryals	01157	800700		
OF 80-443	Gandl	00421	800000		

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Results of Water Quality Sampling Near Richton, Cypress Creek, and Lampton Salt Domes, Mississippi, Open-File Report by USGS					
OF 80-590 Potentiometric Map of the Meridian-Upper Wilcox Aquifer in Mississippi, Fall 1979, USGS (Open-File Report)	Wasson	00380	800000		
OF 80-595 A Preliminary Report of the Geohydrology of the Mississippi Salt-Dome Basin, USGS (Open-File Report)	Spiers	01156	800000		
OF 80-597 Potentiometric Map of the Lower Wilcox Aquifer in Mississippi, Fall 1979, USGS (Open-File Report)	Wasson	00382	800000		
OF 80-598 Potentiometric Map of the Winona-Tallahatta Aquifer in Northwestern Mississippi, Fall 1979, USGS (Open-File Report)	Wasson	00379	800000		
OF 82-343 Regional Geohydrology of the Northern Louisiana Salt-Dome Basin, Part I, Conceptual Model and Data Needs, by USGS (Open-File Report)	Ryals	01155	820000		
ONWI-100 Mechanical Behavior of Avery Island Halite: A Preliminary Analysis, by RE/SPEC Inc., prepared for ONWI/Battelle	Carter	00390	800100		X
ONWI-104 Creep of 50-mm Diameter Specimens of Dome Salt from Avery Island, Louisiana, by RE/SPEC, Inc., Rapid City, SD, prepared for ONWI/Battelle	Hansen	00414	800800		X
ONWI-106 Geologic Evaluation of Gulf Coast Salt Domes: Overall Assessment of the Gulf Interior Region, by Law Eng. for ONWI	Law Eng.	00381	811000		
ONWI-106 Geologic Evaluation of Gulf Coast Salt Domes: Overall Assessment of the Gulf Interior Region - Technical Report - October 1981, by Law Engineering Testing Company	ONWI	01191	820205		
ONWI-109 Draft, Evaluation of Area Studies of the U.S. Gulf Coast Salt Dome Basins, by Battelle (Tech review by RJohnson)	ONWI	00464	810331	820830	
ONWI-116 Quasi-static Strength and Deformational Characteristics of Domal Salt from Avery Island, Louisiana, Technical Report, RE/SPEC Inc., prepared for ONWI/Battelle	Hansen	00389	800100		X
ONWI-138 Preliminary Investigation of the Thermal and Structural Influence of Crushed Salt Backfill on Repository Disposal Rooms, Technical Report, by RE/SPEC, Inc., Rapid City, SD, prepared for ONWI/Battelle	Wagner	00415	800800		X

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ONWI-165 Gulf Coast Salt Domes Shallow Borings Report: Cypress Creek Dome, by Law Eng. for ONWI	Law Eng.	01147	820800		
ONWI-167 Gulf Coast Salt Domes Shallow Borings Report: Richton Dome, by Law Eng. for ONWI	Law Eng.	01173	820800		✓
ONWI-169 Evaluation Of Potential Mineral Resources In The Vicinity Of Seven Selected Domes In Texas, Louisiana, And Mississippi, by Law Engineering Testing Company for ONWI	Murray	01114	830600		X done 11/26/84
ONWI-170 Gulf Coast Salt Domes Well Completion Report: Site MCCG-1, by Law Eng. for ONWI	Law Eng.	01175	820800		X done 11/29/84
ONWI-171 Gulf Coast Salt Domes Well Completion Report: Site MCCG-2, by Law Eng. for ONWI	Law Eng.	01176	820800		✓
ONWI-172 Gulf Coast Salt Domes Well Completion Report: Site MCCG-3, by Law Eng. for ONWI	Law Eng.	01177	820800		✓
ONWI-173 Gulf Coast Salt Domes Well Completion Report: Site MH-4, by Law Eng. for ONWI	Law Eng.	01178	820800		✓
ONWI-174 Gulf Coast Salt Domes Well Completion Report: Site MH-5, by Law Eng. for ONWI	Law Eng.	01179	820800		✓
ONWI-175 Gulf Coast Salt Domes Well Completion Report: Site MH-6, by Law Eng. for ONWI	Law Eng.	01180	820800		✓
ONWI-176 Gulf Coast Salt Domes Well Completion Report: Site MH-7, by Law Eng. for ONWI	Law Eng.	01181	820800		✓
ONWI-177 Gulf Coast Salt Domes Well Completion Report: Site MH-8, by Law Eng. for ONWI	Law Eng.	01182	820800		✓
ONWI-178 Gulf Coast Salt Domes Well Completion Report: Site MRIG-9, by Law Eng. for ONWI	Law Eng.	01183	820800		X done 11/25/84, 11/29/84
ONWI-179 Gulf Coast Salt Domes Well Completion Report: Site MRIG-10, by Law Eng. for ONWI	Law Eng.	01184	820800		
ONWI-18 Summary Characterization and Recommendation of Study Areas for the Gulf Interior Region (also copy of Final Draft dtd 5/79), prepared for DOE		00397	801100		X
ONWI-180 Gulf Coast Salt Domes Well Completion Report: Site MRII-II, by Law Eng. for ONWI	Law Eng.	01185	820800		✓
ONWI-181 Gulf Coast Salt Domes Well Completion Report: Site LH-2, by Law Eng. for ONWI	Law Eng.	01186	820800		✓

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ONWI-182 Gulf Coast Salt Domes Well Completion Report: Site LVH-6, by Law Eng. for ONWI	Law Eng.	01187	820800			✓
ONWI-183 Gulf Coast Salt Domes Well Completion Report: Site LH-7, by Law Eng. for ONWI	Law Eng.	01188	820800			✓
ONWI-184 Gulf Coast Salt Domes Well Completion Report: Site LRH-13, by Law Eng. for ONWI	Law Eng.	01189	820800			✓
ONWI-185 Gulf Coast Salt Domes Well Completion Report: Site LH-17, by Law Eng. for ONWI	Law Eng.	01190	820800			✓
ONWI-190(1) Avery Island Heater Tests: Temperature Measurements for the First 300 Days, by RE/SPEC, Inc. for ONWI/Battelle	Van Sambeek	00423	801000		X	✓
ONWI-190(4) Avery Island Brine Migration Tests: Installation, Operation, Data Collection, and Analysis, Technical Report, for ONWI by RE/SPEC Inc.	Krause	01144	831200		X	✓
ONWI-190(5) Avery Island Heater Tests: Measured Data for 1,000 Days of Heating, by Battelle	Sambeek	01139	831000		X	✓
ONWI-192 Environmental Characterization Report for the Louisiana Study Area, Gulf Interior Region, prepared for ONWI/Battelle	Bechtel	00646	801100			done 7/17/84
ONWI-193 Draft Environmental Characterization Report for the Mississippi Study Area, Gulf Interior Region, prepared for ONWI/Battelle	Bechtel	00398	801100			done 7/11/84
ONWI-194 Environmental Characterization Report for the Texas Study Area, Gulf Interior Region, prepared for ONWI/Battelle	Bechtel	00647	801100			
ONWI-216 Thermo/Viscoelastic Simulation of the Site A Heater Test at Avery Island, by ONWI	Wagner	00395	821000			
ONWI-280 Borehole Locations on Seven Interior Salt Domes, prepared by Law Engineering Testing Co. for Battelle/ONWI	Simcox	00722	820800			✓
ONWI-283 Engineering Feasibility Studies for Candidate Salt Domes: National Waste Terminal Storage Repository No. 1, Special Study No. 5, for ONWI/DOE (Tech review by TSeamans)	Stearns-Roger	00818	811200	830212		
ONWI-289 Geothermal Studies Of Seven Interior Salt Domes, by Law Engineering Testing Company for ONWI	Law Eng.	01119	830600			done 8/6/84
ONWI-297	Brandwein	00384	830100			

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Surface Geologic Reconnaissance of Cypress Creek Dome, Perry County, Mississippi, by Law Eng. for ONWI					X ✓
ONWI-298 Surface Geologic Reconnaissance of Richton Dome, Perry County, MS, by Law Eng. for ONWI	Brandwein	00376	830100		X ✓
ONWI-299 Surface Geologic Reconnaissance of Vacherie Dome, Bienville and Webster Parishes, Louisiana, by Law Eng. for ONWI	Brandwein	00371	830100		X ✓
ONWI-329 Exponential-Time Creep Law for Avery Island Salt, by RE/SPEC Inc. for Battelle/ONWI	Mellegard	01120	830600		X
ONWI-355 Salt, Caprock, and Sheath Study, by Law Eng. for ONWI	Karably	00378	830100		X ✓
ONWI-356 Permeability of Selected Sediments in the Vicinity of Five Salt Domes in the Gulf Interior Region, by Law Eng. for ONWI	Slaughter	00377	830200		
ONWI-365 Petrographic and Geochemical Characteristics of the Cypress Creek Salt Core, by Law Engineering Testing Co. for Battelle/ONWI	Law Eng.	01121	830700		X <i>done 7/12/84</i>
ONWI-391 Exploratory Shaft Conceptual Design Report: Gulf Interior Region Salt Domes, by ONWI	ONWI	01113	830700		X <i>done 11/26/84</i>
ONWI-442 Basin Analysis-Richton Dome Area, Mississippi: Annual Status Report For Fiscal Year 1982, by Ertec, Inc. for ONWI	Ertec	01118	830600		X
ONWI-456 Regional Ground-Water Flow Near Richton Dome, Mississippi: Annual Status Report for Fiscal Year 1982, Technical Report, by Ertec Inc. for ONWI	Ertec	01146	831100		X
ONWI-461 Socioeconomic Data Base Report for the Permian Basin, Technical Report 1/84; by NUS Corporation for ONWI	NUS	00446	840100		
ONWI-478 Potentiometric-Level Monitoring Program-Mississippi And Louisiana: Annual Status Report For Fiscal Year 1982, by Ertec, Inc. for ONWI	Ertec	01115	830600		X
ONWI-480 Data Reference And Retrieval System For Richton Dome, Mississippi: Annual Status Report For Fiscal Year 1982 by Ertec, Inc. for UNWI	Ertec	01116	830600		X
ONWI-481 Preliminary Overburden Characterization At Richton Dome, by Ertec, Inc. for ONWI	Ertec	01117	830600		X <i>done 6/27/84</i>

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ONWI-484 Midyear FY 83 Richton Dome Screening and Suitability Review, by Ertec, Inc. for Battelle/ONWI	Ertec	01122	830800		X
ONWI-497 Exploratory Shaft Facility Preliminary Designs- Gulf Interior Region Salt Domes, Technical Report, for ONWI by PB-KBB	Brinckerhoff	01145	830900		X
ONWI-502 First Status Report on Regional and Local Ground-Water Flow Modeling for Richton Dome, Mississippi - Technical Report, by INTERA Environmental Consultants, Inc. for ONWI	INTERA	01192	840300		X
ONWI-67 Regional Environmental Characterization Report for the Gulf Interior Region and Surrounding Territory, prepared for ONWI/Battelle	Bechtel	00396	801100		
ONWI-74 The Suitability of Palestine Salt Dome, Anderson Co., Texas For Disposal of High-Level Radioactive Waste	Patchick	00366	800100		X
ONWI-77 Investigation of Salt Transport in Vertical Boreholes and Brine Invasion into Freshwater Aquifers, Technical Report, by The University of Texas, Austin, prepared for ONWI (Technical Review by L. Lehman)	Knapp	00413	790500	801005	X
ONWI/SUB-79/E512-022 Experimental Plan for In-Situ Synthetic and Natural Brine Movement Studies at Avery Island, Topical Report RSI-0083, by RE/SPEC, Inc., Rapid City, SD, prepared for ONWI/Battelle	Krause	00416	790223		
ONWI/SUB/78/E511-010 Radiation Damage Measurements on Rock Salt and Other Minerals for Waste Disposal Applications, Quarterly Report, 10/1/80 - 12/30/80	Levy	00430	810110		
ONWI/SUB/78/512-0160 Regional Environmental Characterization Report for the Gulf Interior Region and Surrounding Territory, prepared for ONWI, Battelle	Bechtel	00372	781100		
ONWI/79/E511-00100-4 Evaluating the Potential of East Texas Salt Domes for Isolation of Nuclear Wastes, Annual Report, 10/1/78 - 9/30/79	Kreitler	00393	800800		
ORNL/SUB-3706/2 Analysis and Evaluation of the Rock Mechanics Aspects of the Proposed Salt Mine Repository, Summary Progress Report RSI-0005	Gnirk	00351	730928		
ORNL/SUB-3706/7 Analysis and Evaluation of the Rock Mechanics Aspects of the Proposed Salt-Mine Repository Concept III, Summary Progress Report RSI-0012	Gnirk	00352	740928		

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7/10/84



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ORNL/SUB-4112/10 An Investigation of the Utility of Gulf Coast Salt Domes for the Storage or Disposal of Radioactive Wastes	Martinez	00353	750630		
ORNL/SUB-4112/25 An Investigation of the Utility of Gulf Coast Salt Domes for the Storage or Disposal of Radioactive Wastes	Martinez	00354	760930		
ORNL/TM-6809 Thermal Conductivity of Rock Salt From Louisiana Salt Domes	Morgan	00361	790600		
PNL-2955 Reference Site Initial Assessment for a Salt Dome Repository, Volumes 1 and 2 (working document), by Battelle/PNL for ONWI, and letter from M. Bell (NRC) to A. Brandstetter (PNL), dtd 6/2/80, "NRC Staff Comments on PNL-2955"	Harwell	00362	791200	800122	
PNL-3190 Solution Mining in Salt Domes of the Gulf Coast Embayment, by PNL, prepared for ONWI/Battelle	Griswold	00426	810200		
SCIEA Trace Water Content of Salt in Louisiana Salt Domes, Volume 213, pg. 1005-1007 by Science	Science	01201	810828		
UCRL-15252 Conceptual Model for Regional Radionuclide Transport From a Salt Dome Repository, A Technical Memorandum, prepared for LLL (Tech review by EQuinn)	Kier	00385	800530	800821	
USGS-4339-2 Geologic and Hydrologic Summary of Salt Domes in Gulf Coast Region of Texas, Louisiana, Mississippi, and Alabama (Open-File Report)	Anderson	00350	730000		
USGS/WRD-78-104 Geohydrology of the Northern Louisiana Salt-Dome Basin Pertinent to the Storage of Radioactive Wastes, A Progress Report	Hosman	00360	781100		
Y/OWI/SUB-4112/37 An Investigation of the Utility of Gulf Coast Salt Domes for the Storage or Disposal of Radioactive Wastes	Martinez	00386	770930		
Y/OWI/SUB-7242/1 Evaluation of Radar Imagery of the North Louisiana Salt Dome Area	Dellwig	00356	770630		
Y/OWI/SUB-76/99939 Geologic Study of the Interior Salt Domes of Northeast Texas Salt-Dome Basin to Investigate Their Suitability for Possible Storage of Radioactive Waste Material (Netherland, Sewell & Associates, Inc.)		00358	760500		
Y/OWI/SUB-77/16253/1 Geology - Hydrology of Avery Island Salt Dome	Jacoby	00365	770700		

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Y/OWI/SUB-77/16540/1 Plans for Environmental Surveys of Salt Domes and Enclosing Formations and Overlying Areas of the Gulf Interior Basin in Mississippi, Volume 1, prepared for Office of Waste Isolation	NUS	00368	780600		
Y/OWI/SUB-77/16540/6 Plans for Environmental Surveys of Salt Domes and Enclosing Formations and Overlying Areas of the Gulf Interior Basin in Texas, Volume 1, prepared for Office of Waste Isolation	NUS	00370	780600		
Y/OWI/SUB-77/16540/7 Plans for Environmental Surveys of Salt Domes and Enclosing Formations and Overlying Areas of the Gulf Interior Basin in Louisiana, Volume 1, prepared for Office of Waste Isolation	NUS	00369	780600		
Y/OWI/SUB-77/22303/5 Case History Rock Mechanics Examination of the Jefferson Island Salt Mine: II. Laboratory Evaluation of Strength and Creep Deformation Characteristics of Dome Salt Under Confining Pressure, Technical Memorandum Report RSI-0057 (revised and resubmitted on 8/23/78, prepared by RE/SPEC, Inc.	Hansen	00355	770610		
Y/OWI/SUB-77/22303/7 Case History Rock Mechanics Examination of the Jefferson Island Salt Mine: III. Evaluation of Laboratory Specimen Dimensions on the Uniaxial Strength and Deformational Characteristics of Dome Salt, Technical Memorandum Report RSI-0059 (revised & resubmitted 1/5/79)	Stickney	00357	770927		
Y/OWI/SUB-78/42523V Rock Mechanics Data and Information Relating to the Structural Stability of the Avery Island Mine	Jacoby & Co.	00359	780000		
Y/OWI/TM-48 Screening Specifications for Gulf Coast Salt Domes	Brunton	00373	780221		
Y/OWI/TM-55 Avery Island - Dome Salt In Situ Test	Fairchild	00367	780615		
1839-K Ground-Water Resources of the Pascagoula River Basin Mississippi and Alabama, Geological Survey Water-Supply Paper 1839-K	Newcome	01151	670000		
60-75 The Lower Wilcox Aquifer in Mississippi, Water-Resources Investigations 60-75, USGS	Boswell	00383	760200		
71-2 Results of Aquifer Tests in Mississippi, by USGS, Bulletin 71-2	Newcome	01153	710000		
76-7 The Sparta Aquifer System in Mississippi, Water-Resources Investigations 76-7, USGS	Newcome	01159	760300		
76-79	Boswell	00434	760600		

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The Meridian-Upper Wilcox Aquifer in Mississippi, Water-Resources Investigations 76-79, USGS					
77-17 The Cockfield Aquifer in Mississippi, Water-Resources Investigations 77-17, USGS	Spiers	01160	770400		
78-131 The Citronelle Aquifers in Mississippi, Water-Resources Investigations 78-131, USGS	Boswell	01158	790000		
79-28 The Obligocene Aquifer System in Mississippi, Water-Resources Investigations 79-28, USGS	Gandl	00449	790000		
80-1 Quaternary Faulting in East Texas, Geological Circular 80-1, Bureau of Economic Geology, The University of Texas at Austin	Collins	00442	800000		✓
80-5 Studies of the Suitability of Salt Domes in East Texas Basin for Geologic Isolation of Nuclear Wastes, Geological Circular 80-5, Bureau of Economic Geology, The University of Texas at Austin	Kreitler	00428	800000		✓
83-4169 Preliminary Report of the Geohydrology Near Cypress Creek and Richton Salt Domes, Perry County, Mississippi, Water-Resources Investigations Report 83-4169, USGS	Bentley	01152	830000		

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Properties of Salt Important in Radioactive Waste Disposal, The Geological Society of America, Inc., Special Paper 88	Bradshaw	00591	680000		
Chloride Control, Arkansas River Basin, Phase 1 General Design Memorandum No. 32, Volume 4, Appendixes 5 and 6, by U.S. Army Corps of Engineers, Tulsa District	COE	00676	810900		
Arcadia Lake, Deep Fork River, Oklahoma, Design Memorandum No. 9, Supplement No. 1, Embankment and Spillway, prepared by Department of Army, Tulsa District, Corps of Engineers, Oklahoma	COE	00675	820100		
Review of Salt Tectonics in Relation to the Disposal of Radioactive Wastes in Salt Formations, Geological Society of America Bulletin, v. 83, p. 3551-3574, 18 figs.	Gera	00592	721200		
DOE/NWTS-80(2) Geologic Disposal of Radioactive Waste: Program Plan for Field Tests in Salt, prepared by Office of NWTS Integration, Battelle (Tech review by RJohnson, MPendleton, JRhoderick)	NWTS	00584	810400	811009	
KE-78-21-R A National Waste Terminal Storage Repository in a Bedded Salt Formation for Spent Unreprocessed Fuel, Occupational Exposure and Health Physics Studies, prepared for DOE/Oak Ridge	Kaiser Eng.	00574	780900		
KE-78-55-R A National Waste Terminal Storage Repository in a Bedded Salt Formation for Spent Unreprocessed Fuel, Special Study No. 2, Operating Phase Cost Sensitivity Analysis, prepared for DOE/Oak Ridge	Kaiser Eng.	00575	780900		
KE-78-56-R A National Waste Terminal Storage Repository in a Bedded Salt Formation for Spent Unreprocessed Fuel, Special Study No. 3, Waste Retrieval from Backfilled Regions, prepared for DOE/Oak Ridge	Kaiser Eng.	00576	780900		
KE-78-57-RE A National Waste Terminal Storage Repository in a Bedded Salt Formation for Spent Unreprocessed Fuel, Volume 1, Conceptual Design Report, prepared for DOE/Oak Ridge	Kaiser Eng.	00577	781200		
KE-78-58-R A National Waste Terminal Storage Repository in a Bedded Salt Formation for Spent Unreprocessed Fuel, Conceptual Design Description, prepared for DOE/Oak Ridge	Kaiser Eng.	00578	781200		
KE-78-59-R A National Waste Terminal Storage Repository in a Bedded Salt Formation for Spent Unreprocessed Fuel, Basis of Design Document, Conceptual Design Decisions, prepared for DOE/Oak Ridge	Kaiser Eng.	00579	781200		

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NWTS-3371 A National Waste Terminal Storage Repository in a Bedded Salt Formation for Spent Unreprocessed Fuel, Quality Assurance Program for Licensing, prepared for DOE/Oak Ridge	Kaiser Eng.	00572	781200		
NWTS-3372 A National Waste Terminal Storage Repository in a Bedded Salt Formation for Spent Unreprocessed Fuel, Scheduling, prepared for DOE/Oak Ridge	Kaiser Eng.	00573	781200		
ONWI-145 A User's Manual and Guide to SALT3 and SALT4: Two-Dimensional Computer Codes for Analysis of Test-Scale Underground Excavations for the Disposal of Radioactive Waste in Bedded Salt Deposits - Technical Report, by the University of Minnesota for ONWI	Lindner	01022	840200		X
ONWI-208 Thermal Gradient Migration of Brine Inclusions in Salt, Technical Report, prepared by Regents of the University of California for Battelle Office of Nuclear Waste Isolation	Olander	00588	801000		X
ONWI-225 Shaft Placement in a Bedded Salt Repository, by RE/SPEC, Inc., for Battelle/ONWI	Klasi	00867	821000		
ONWI-255 Sealing Considerations for Repository Shafts in Bedded and Dome Salt, Technical Report, prepared for Battelle Office of Nuclear Waste Isolation (Tech review by TSeamans)	D'Appolonia	00583	811200	821216	
ONWI-405 Schematic Designs for Penetration Seals for a Reference Repository in Bedded Salt (Tech review by JRhoderick)	Kelsall	00971	821100	830520	
ONWI-479 Selection & Durability of Seal Materials for a Bedded Salt Repository: Preliminary Studies, by Univ of PA for ONWI (Tech review by JRoderick)	Roy	01021	831100	840130	X
ONWI-85 Thermal Gradient Brine Inclusion Migration in Salt Study, Gas-Liquid Inclusions--Preliminary Model, Topical Report, prepared by University of California for Battelle Office of Nuclear Waste Isolation (Technical Review by M. Knapp)	Olander	00589	791000	800816	
ORNL-TM-4219 Site Selection Factors for the Bedded Salt Pilot Plant, by Staff of ORNL Salt Mine Repository Project	ORNL	00594	730500		
SAND77-1816 Estimates of Relative Areas for the Disposal in Bedded Salt of LWR Wastes from Alternative Fuel Cycles, prepared by Sandia for NRC	Lincoln	00581	780100		X
SAND79-1935J Nuclear Waste Canister Corrosion Studies Pertinent to Geologic Isolation, prepared by Sandia (Technical Review by E. Wick)	Braithwaite	00582	791000	800702	

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SAND81-1585 Sandia HLW Canister/Overpack Studies Applicable for a Salt Repository, prepared by Sandia for DOE (Technical Review by K. Chang)	Molecke	00580	811000	811231	
SAND81-7054 State-of-the-Art Review of Brine Migration Studies in Salt, prepared by Sandia for DOE	Gnirk	00587	810900		
UCID-18102 Fluid Inclusions in Salt - An Annotated Bibliography, prepared by LLL for NRC	Isherwood	00590	790126		
UCID-18122 Preliminary Area Selection Considerations for Radioactive Waste Repositories in Bedded Salt, by LLL for NRC	Wagoner	00595	790612		
UCID-18664 Review of Geochemical Measurement Techniques for a Nuclear Waste Repository in Bedded Salt, prepared by LLL (Technical Review by L. Rossbach)	Knauss	00585	800522	800715	
UCID-18687 New Developments in Measurements Technology Relevant to the Studies of Deep Geological Repositories in Bedded Salt, prepared by LLL	Mao	00586	801022		
UCRL-15141 Review of Geotechnical Measurement Techniques for a Nuclear Waste Repository in Bedded Salt, Nuclear Waste Management Program Siting Criteria, prepared by International Engineering Company, Inc., for LLL		00596	791200		
Y/OWI/SUB-7414/1 Salt Deposits in the United States and Regional Geologic Characteristics Important for Storage of Radioactive Waste, prepared by Earth Resource Associates, Inc., for UCC Office of Waste Isolation	Johnson	00593	780300		
Y/OWI/SUB-77/16504/3 Plans for Environmental Surveys of Bedded Salt Formations and Overlying Areas of the Salina Basin in Ohio, prepared for Ofc. of Waste Isolation, UCC	NUS	01020	771000		
Y/OWI/SUB-77/16540/2 Plans for Environmental Surveys of Bedded Salt Formations and Overlying Areas of the Salina Basin in New York, Volume 1, prepared for Waste Isolation, UCC, Oak Ridge, TN	NUS	00571	780600		

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Site-Specific Environmental Evaluation for Borehole Drilling, Elk Ridge, San Juan County, Utah, Boring Sites ER-1 and ER-2		00635	790800		
Topographic Maps: 37-39°N x 109-111°W OR 36-38°N x 108-110°W - Moab 2° sheet - Davis Canyon 15' topos (& Lavender) - 1) The Needles, 2) Harts Point		01077	840000		
Utah State Engineer, Technical Publication #15 - Water from Bedrock in the Colorado Plateau of Utah, by USGS	Feltis	01030	660000		
The Hydrogeologic Feasibility of Developing Ground-Water Supplies in the Northern Part of Canyonlands National Park & Bridges National Monument, Utah, by Wyoming Water Resources Research Institute, Department of Geology, University of Wyoming	Huntoon	01033	771100		
The Occurrence of Ground Water in the Canyonlands Area of Utah, with Emphasis on Water in the Permian Section, Four Corners Geological Society Guidebook, 9th Field Conference	Huntoon	01032	790000		
Breccia Pipes in the Vicinity of Lockhart Basin, Canyonlands Area, Utah, Four Corners Geological Society Guidebook, 9th Field Conference	Huntoon	01034	790000		
Second Status Report on Regional Ground-Water Flow Modeling for the Paradox Basin, Utah (Second Draft), by INTERA Technologies, Inc. for ONWI (ONWI/E512-02900/TR-32)	INTERA	01066	840400		
Seismic Reflection, Gravity, & Aeromagnetic Studies of Geologic Structure in the Gibson Dome Area, Southeastern Paradox Basin, by Woodward-Clyde Consultants	Kitcho	01064	831200		
Complex Salts and Brines of the Paradox Basin, Second Symposium on Salt, Vol. 1, Geology, Geochemistry Mining, Northern Ohio Geological Society, Cleveland, OH	Mayhew	01028	000000		
Stratigraphic & Structural Configuration of the Navajo (Jurassic) through Ouray (Mississippian-Devonian) Formations in the Vicinity of Davis & Lavender Canyons, Southeastern Utah - Topical Report, by Woodward-Clyde Consultants	McCleary	01063	831200		
Status Report: Geochemical Interactions between Ground Water & Paleozoic Strata, Gibson Dome Area, Southeastern Utah (Topical Report), by Woodward-Clyde Consultants	McCulley	01067	840200		
	Richter	01029	800000		

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Ground Water Resources in the Part of Canyonlands National Park East of the Colorado River and Contiguous Bureau of Land Management Lands, Utah, by Department of Geology, University of Wyoming					
	St. of Utah	00682	820800		
Transcript and Summary of Public Meetings on Studies in Utah, Meetings held 11/10-13/81 in Monticello/Blanding/Moab/Salt Lake City, submitted by the Utah Nuclear Waste Repository Task Force to the DOE					
	Thackston	01065	830900		
Preliminary Hydrologic Budget Studies, Indian Creek Watershed & Vicinity, Western Paradox Basin, Utah, by Woodward-Clyde Consultants					
	Hanshaw	01023	680603		
CHGEA Geochemistry and Hydrodynamics of the Paradox Basin Region, Utah, Colorado, and New Mexico, published in <u>Chemical Geology</u> , 1969, pps. 263-294					
		00634	790800		
DOE-RL-C-10 Site-Specific Environmental Evaluation for Borehole Drilling, Gibson Dome, San Juan County, Utah, Boring Sites GD-1 and GD-2					
	Stewart	01080	820500		✓
Map Map on the Gibson Dome Study Area					
	Bates	01048	550000		✓
Map I-107 Photogeologic Map of the MOAB-11 Quadrangle - Grand County, Utah, Miscellaneous Geologic Investigations Map I-107, by USGS					
	Bates	01049	550000		✓
Map I-116 Photogeologic Map of the MOAB-10 Quadrangle - Grand County, Utah, Miscellaneous Geologic Investigations Map I-116, by USGS					
	Williams	00629	640000		✓
Map I-360 Geology, Structure, and Uranium Deposits of the Moab Quadrangle, Colorado and Utah, Miscellaneous Investigations Series, by USGS					
	Hackman	01044	550000		✓
Map I-6 Photogeologic Map of the Carlisle-14 Quadrangle - San Juan County, Utah, Miscellaneous Geologic Investigations Map I-6, by USGS					
	Haynes	00630	720000		✓
Map I-629 Geology, Structure, and Uranium Deposits of the Cortez Quadrangle, Colorado and Utah, Miscellaneous Investigations Series, by USGS					
	Hinrichs	01060	710000		✓
Map I-669 Geologic Map of the Southeast Quarter of the Hatch Point Quadrangle, San Juan County, Utah, Miscellaneous Geologic Investigations Map I-669, by USGS					
	Hinrichs	01054	710000		✓
Map I-670 Geologic Map of the Southwest Quarter of the Hatch Point Quadrangle, San Juan County, Utah, Miscellaneous Geologic Investigations Map I-670, by USGS					



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Map I-70 Photogeologic Map of the Carlisle-5 Quadrangle - Wayne and San Juan Counties, Utah, Miscellaneous Geologic Investigations Map I-70, by USGS	Sable	01057	550000		✓
Map I-71 Photogeologic Map of the Carlisle-6 Quadrangle - San Juan County, Utah, Miscellaneous Geologic Investigations Map I-71, by USGS	Bates	01045	550000		✓
Map I-72 Photogeologic Map to the Carlisle-7 Quadrangle - San Juan County, Utah, Miscellaneous Geologic Investigations Map I-72, by USGS	Sable	01058	550000		✓
Map I-74 Photogeologic Map of the Carlisle-11 Quadrangle - San Juan County, Utah, Miscellaneous Geologic Investigations Map I-74, by USGS	Platt	01053	550000		✓
Map I-744 Geology, Structure, and Uranium Deposits of the Escalante Quadrangle, Utah and Arizona, Miscellaneous Investigations Series, by USGS	Hackman	00631	730000		✓
Map I-75 Photogeologic Map of the Carlisle-12 Quadrangle - Wayne, San Juan, & Garfield Counties, Utah, Miscellaneous Geologic Investigations Map I-75, by USGS	Platt	01059	550000		✓
Map I-76 Photogeologic Map of the Carlisle-15 Quadrangle - San Juan County, Utah, Miscellaneous Geologic Investigations Map I-76, by USGS	Hackman	01046	550000		✓
Map I-764 Geologic Map of the Durango Quadrangle, Southwestern Colorado, Miscellaneous Investigations, by USGS	Steven	00632	740000		✓
Map I-82 Photogeologic Map of the Elk Ridge-1 Quadrangle - San Juan County, Utah, Miscellaneous Geologic Investigations Map I-82, by USGS	Miller	01052	550600		✓
Map I-83 Photogeologic Map of the MOAB-16 Quadrangle - Grand County, Utah, Miscellaneous Geologic Investigations Map I-83, by USGS	Hemphill	01047	550000		✓
Map MF 142 Preliminary Geologic Map of the Mount Peale 2 SW Quadrangle - San Juan County, Utah, Mineral Investigations Field Studies Map MF 142, by USGS	Weir	01050	580000		✓
Map MF 144 Preliminary Geologic Map of the Mount Peale 3 NW Quadrangle - San Juan County, Utah, Mineral Investigations Field Studies Map MF 144, by USGS	Weir	01051	580000		✓
Map MF 146 Preliminary Geologic Map of the Mount Peale 3 SW Quadrangle - San Juan County, Utah, Mineral Investigations Field Studies Map MF 146, by USGS	Weir	01056	580000		✓

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Map MF-152 Preliminary Geologic Map and Section of the Mount Peale 2 NW Quadrangle - San Juan County, Utah, Mineral Investigations Field Studies Map MF-152, by USGS	Weir	01061	610000		✓
Map OM 171 Stratigraphy and Photogeology of the Southwestern Part of Uinta Basin - Duchesne and Uintah Counties, Utah, Oil and Gas Investigations Map OM 171, by USGS	Ray	01055	560000		✓
Map OM-209 Preliminary Structure Contour Map on Top of Salt in the Paradox Member of the Hermosa Formation in the Salt Anticline Region, Colorado and Utah, Oil and Gas Investigations, USGS	Elston	00636	610000		
OF 52-155 Photogeologic Map, Carlisle-9 & 16, San Juan County, Utah; Compilation of Photogeology & Surface Geology, Colorado Plateau Area, US, Open-File Report by USGS	USGS	01071	520400		✓
OF 72-363 Water Resources of Part of Canyonlands National Park, Southeastern Utah, USGS Open-File Report; for U.S. National Park Service - Salt Lake City, UT	Sumsion	01031	720000		
OF 72-363 Water Resources of Part of Canyonlands National Park, Southeastern Utah, Open-File Report by USGS for U.S. National Park Service, Salt Lake City, UT	Sumsion	01069	720000		
OF 76-303 Geology of the North End of the Salt Valley Anticline, Grand County, Utah, Open-File Report by USGS	Gard	00625	760000		✓
OF 77-761 Subsurface Geology of a Potential Waste Emplacement Site, Salt Valley Anticline, Grand County, Utah, Open-File Report prepared by USGS for U.S. ERDA	Hite	00624	770000		✓
OF 78-900 Landsat Investigations of the Northern Paradox Basin, Utah & Colorado: Implications for Radioactive Waste Emplacement, Part 1. Lineaments & Alignments, Open-File Report by USGS for DOE	Friedman	01072	780000		
OF 79-994 Depositional Environments of the Uranium bearing Cutler Formations, Lisbon Valley, Utah, Open-File Report by USGS	Campbell	01068	790000		✓
OF 80-981 Hole-to-Surface Resistivity Measurements at Salt Valley, Utah, Open-File Report by USGS	Daniels	00627	800000		
OF 81-112 Numerical Study of Attenuation of High Frequency Lg-Waves in the New Madrid Seismic Region, Open-File Report by USGS	Dwyer	01070	810000		
OF 81-36 Numerical Study of Attenuation of High Frequency Lg-Waves in the New Madrid Seismic Region, Open-File Report by USGS	Daniels	01073	800000		

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Geophysical Well-Log Measurements in Three Drill Holes at Salt Valley, Utah, Open-File Report by USGS					
OF 81-36 Geophysical Well Log Measurements in Three Drill Holes at Salt Valley, Utah, Open-File Report (fiche only)	Daniels	01078	810000		X
OF 82-107 Regional Hydrology of the Green River--Moab Area, Northwestern Paradox Basin, Utah, by USGS (Open-File Report)	Rush	01024	821200		
OF 82-400 Magnetometric Resistivity Survey Near Hatch Point & Lockhart Basin, San Juan County, Utah, Open-File Report by USGS	Fitterman	01074	840000		
OF 82-704 Interpretation of Schlumberger DC Resistivity Data from Gibson Dome-Lockhart Basin Study Area, San Juan County, Utah, Open-File Report by USGS	Watts	01075	820000		
OF 83-780 Preliminary Mineralogical and Geochemical Data from the DOE Gibson Dome Corehole #1, San Juan County, Utah, by USGS	Hite	01040	830000		
ONWI-144 Environmental Characterization Report for the Paradox Basin Study Region, Utah Study Areas, prepared for Battelle Office of Nuclear Waste Isolation	Bechtel	00620	820500		
ONWI-265 Draft, Water Sources and Conservation Study for the Paradox Basin, Utah, Technical Report, prepared for Battelle Office of Nuclear Waste Isolation	Bechtel	00623	810100		
ONWI-290 Geologic Characterization Report for the Paradox Basin Study Region, Utah Study Areas, Volume I-Regional Overview, Volume II-Gibson Dome, Volume III-Elk Ridge, Volume IV-Lisbon Valley, Volume V-Appendices, prepared for Battelle Office of Nuclear Waste Isolation	Woodward-Clyde	00633	820100		
ONWI-291 Paradox Area Characterization Summary and Location Recommendation Report, prepared for Battelle/ONWI		00638	820800		
ONWI-301 Paradox Basin Site Characterization Report Preparation Papers, Gibson Dome Location, prepared for Battelle/ONWI (Preliminary draft dtd 12/81 also w/this document in-house)		00637	821100		
ONWI-36 Summary Characterization and Recommendation of Study Areas for the Paradox Basin Study Region, prepared for Battelle Office of Nuclear Waste Isolation	Bechtel	00622	820200		
ONWI-388 Woodward-Clyde	00667	820600			

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<u>Report #/ Title</u>	<u>Author</u>	<u>Log #</u>	<u>Document Date</u>	<u>Reviewed Date</u>	<u>Micro- fiche</u>
Gibson Dome No. 1 Borehole, Gibson Dome Study Area of the Paradox Basin Region, San Juan County, Utah, Volumes I - VI, A Completion Report prepared by Woodward-Clyde Consultants for Battelle/ONWI					
ONWI-390 Exploratory Shaft Conceptual Design Report: Paradox Basin, by ONWI	ONWI	01017	830700		X
ONWI-401 Completion Report for Elk Ridge No. 1 Borehole, Elk Ridge Study Area of the Paradox Basin Region, San Juan County, UT, Topical Report; Volume I; Volume II--Appendix D, Core Photographs; Volume III--Appendix E, Geophysical Logs; by Woodward-Clyde Consultants for Battelle/DOE	Woodward-Clyde	00755	820700		
ONWI-403 E.J. Kubat Borehole Elk Ridge Study Area of the Paradox Basin Region, San Juan County, Utah, by Woodward-Clyde Consultants for ONWI	Woodward-Clyde	00874	820900		
ONWI-404 Southeastern Utah Nuclear Waste Transportation Study, by Battelle/ONWI		00864	821000		X
ONWI-453 Salt Disposal: Paradox Basin, Utah, by Bechtel for ONWI	Bechtel	01018	830400		
ONWI-454 Visual Aesthetics Study: Gibson Dome Area, Paradox Basin, Utah, Technical Report, by Bechtel Group, Inc. for ONWI		01079	840300		X
ONWI-482 Investigation of Potential Alternate Study Areas in the Paradox Basin Region, Utah - Technical Report, by Woodward-Clyde Consultants for ONWI	Grant	01025	840300		
ONWI-485 Stratigraphy, Structure, and Lithofacies Relationships of Devonian Through Permian Sedimentary Rocks: Paradox Basin and Adjacent Areas-Southeastern Utah, Battelle	McCleary	01020	830800		X
ONWI-491 Results of Hydraulic Tests at Gibson Dome #1, Elk Ridge #1, and E.J. Kubat Boreholes, Paradox Basin, Utah - Technical Report, by Woodward-Clyde Consultants for ONWI	Thackston	01026	840300		X
ONWI-492 Seismicity of the Paradox Basin and the Colorado Plateau Interior - Technical Report, by Woodward-Clyde Consultants for ONWI	Wong	01027	840400		X
ONWI-494 Performance Assessment of a Shaft Seals System in a HLW Repository in the Gibson Dome Area, by Battelle/ONWI	Gureghian	01019	830800		X
ONWI-496 Exploratory Shaft Facility Preliminary Designs-Paradox Basin, Technical Report, for ONWI by PB-KBB	Brinckerhoff	01022	830900		X

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ONWI-503 First Status Report on Regional Ground-Water Flow Modeling for the Paradox Basin, Utah - Technical Report, by INTERA Environmental Consultants, Inc. for ONWI	INTERA	01035	840500		X
ONWI-68 Regional Environmental Characterization Report for the Paradox Bedded Salt Region and Surrounding Territory, prepared for Battelle Office of Nuclear Waste Isolation	Bechtel	00619	801100		
ONWI-92 Draft, Overview of the Regional Geology of the Paradox Basin Study Region, prepared for Battelle Office of Nuclear Waste Isolation	WoodwardClyde	00621	801100		
USGS-4339-6 Geologic Appraisal of Paradox Basin Salt Deposits for Waste Emplacement, OpenFile Report by USGS for USAEC (also referenced as Open-File 73-114)	Hite	00626	730000		
UT-060-SJ-2-11 Environmental Assessment of DOE Proposed Location and Baseline Studies in the Paradox Basin, Utah, prepared by the Bureau of Land Management, Moab District/San Juan Resource Area (Technical Review by C. Pflum)		00641	820700	820824	
Y/OWI/SUB-77/16540/4 Plans for Environmental Surveys of Bedded Salt Formations and Overlying Areas of the Paradox Basin in Utah, prepared for UCC Office of Waste Isolation	NUS	00618	780600		
324 Quaternary Stratigraphy of the La Sal Mountains - Utah, Geological Survey Professional Paper 324	Richmond	01041	620000		
453 Geology of the Abajo Mountains Area - San Juan County, Utah, Geological Survey Professional Paper 453	Witkind	01042	640000		
474-B Geology and Uranium Deposits of Elk Ridge and Vicinity - San Juan County, Utah, Geological Survey Professional Paper 474-B	Lewis	01043	650000		
637 Geology of the Salt Anticline Region in Southwestern Colorado, Geological Survey Professional Paper 637, prepared for USAEC	Cater	00628	700000		X
83-4098 Reconnaissance of the Geohydrology of the MOAB-Monticello Area, Western Paradox Basin, Grand & San Juan Counties, UT, Water-Resources Investigations 83-4098; by USGS for DOE	USGS	01021	830000		
83-4217 Regional Hydrology of the Dolores River Basin, Eastern Paradox Basin, Colorado and Utah, USGS-Water-Resources Investigations Report	Weir	01036	830000		
83-4218 Regional Hydrology of the Dolores River Basin, Eastern Paradox Basin, Colorado and Utah, USGS-Water-Resources Investigations Report	Whitfield	01037	830000		

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Regional Hydrology of the Blanding-Durango Area, Southern Paradox Basin, Utah & Colorado, USGS-Water-Resources Investigations Report					

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Origin & Diagenesis of Cap Rock, Gyp Hill & Oakwood Salt Domes, Texas, Report of Investigations #131, by Bureau of Economic Geology	Kreitler	01206	830000		✓
BMI/ONWI-520 High-Resolution Seismic Reflection Study - Vacherie Dome, Technical Report, by the Earth Technology Corporation for ONWI	Earth Tech Corp	01207	840600		X ✓
JGREA Isotope Geochemistry of Water in Gulf Coast Salt Domes, by Journal of Geophysical Research, Vol. 85 #B9 (pp. 4863-4871)	Knauth	00645	800910		

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AMETA The Thermomigration of Biphase Vapor-Liquid Droplets in Solids, by Acta Metallurgica, Vol. 20 (pp. 247-255)	Anthony	00090	720200		
AMETA The Thermomigration of Liquid Droplets Through Grain Boundaries in Solids, by ACTA Metallurgica, Vol. 19	Cline	00089	710600		
BMI/ONWI-541 Preclosure Radiological Calculation to Support Salt Evaluations (fiche only)	ONWI	00095	840800		X
JAPIA Thermal Gradient Migration of Brine Inclusions in Synthetic Alkali Halide Single Crystals, by J. Appl. Phys. Vol. 53 #1 (pp. 669-681)	Olander	00093	820100		
NUTYB Letters to the Editor - Remarks on "Migration of Brine Inclusions in Salt", by Nuclear Technology Vol. 63 (pp. 507-510)		00091	831200		
NUTYB Migration of Brine Inclusions in Salt, by Nuclear Technology Vol. 56 (pp. 93-101)	Pigford	00092	820100		
ONWI-19 (FY-84) Salt Repository Project FY 84 Technical Project Plan, Technical Report	ONWI	00094	840800		X
SAND79-2226 Salt Block 2 - Description and Results (fiche only)	Hohlfelder	00043	800600		X
SAND79-2423 Mineralogical Aspects of Fluid Migration in the Salt Block II Experiment, by Sandia National Laboratories	Lambert	00080	800000		



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Map Map on the Gibson Dome Study Area	Stewart	01080	820500		
ONWI-454 Visual Aesthetics Study: Gibson Dome Area, Paradox Basin, Utah, Technical Report, by Bechtel Group, Inc. for ONWI		01079	840300		X

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BMI/ONWI-540 Summary of Petrographic and Chemical Data for Palo Duro Basin Samples Examined by Bendix Filed Engineering Corporation, Grand Junction, Colorado as of April 29, 1983 (fiche only)	ONWI	01098	840800		X
BMI/SRP-5015 Laboratory Testing of Rock & Salt Samples for Static Moduli, Dynamic Moduli, & Uniaxial & Triaxial Compressive Strength from the Detten #1 (PD-6) Well, G. Friemel #1 (PD-5) Well, Mansfield #1 (PD-4) Well, & Zeeck #1 (PD-7) Well - Palo Duro Basin, Texas: Unanalyzed Data, Technical Report	Stone & Webster	01016	840900		
BMI/SRP-5019 Report of Laboratory Testing on Rock Core Samples - Mansfield #1 (PD-4) Well, Palo Duro Basin, Texas: Unanalyzed Data, Technical Report	Stone & Webster	01096	840900		

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MEMORANDUM FOR: Malcolm R. Knapp, Chief  
Geotechnical Branch  
Division of Waste Management

THRU: Philip S. Justus, Section Leader  
Geology-Geophysics Section  
Geotechnical Branch  
Division of Waste Management

FROM: John S. Trapp  
Geology-Geophysics Section  
Geotechnical Branch  
Division of Waste Management

SUBJECT: TRIP REPORT: NRC REVIEW OF GEOPHYSICAL DATA FOR THE  
PARADOX BASIN

On the 16th, 17th and 18th of October, 1984, Richard Lee, Abou-Bakr Ibrahim, Ben Rice and John Trapp of WMGT, met in the San Francisco offices of Woodward-Clyde Consultants (WCC) to review the data utilized in preparation of the draft report titled "Seismic Reflection, Gravity, and aeromagnetic studies of the Geologic Structure in the Gibson Dome Area, Southwestern Paradox Basin". Representatives of DOE/SRPO, Battelle/ONWI, USGS, Weston Geophysical and NRC Research were also present.

Attached to this memo is a copy of the signed meeting minutes, list of attendees and data review sheets completed during the visit which documents this review.

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John S. Trapp  
Geology-Geophysics Section  
Geotechnical Branch  
Division of Waste Management

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Enclosures:  
As stated

WMGT:dw	:	:	:	:	:	:
JTrapp	:	:	:	:	:	:

**NRC DATA REVIEW OF GEOPHYSICAL DATA FOR THE PARADOX BASIN**  
16 to 18 October, 1984  
Woodward-Clyde Consultant office  
San Francisco, CA

On the 16th, 17th, and 18th of October, 1984 representatives of the NRC geotechnical staff (WMGT) met in the San Francisco office of Woodward-Clyde Consultants to review the data utilized in the preparation of the draft report titled "SEISMIC REFLECTION, GRAVITY AND AEROMAGNETIC STUDIES OF THE GEOLOGIC STRUCTURE IN THE GIBSON DOME AREA, SOUTHWESTERN PARADOX BASIN. As the data used to prepare this report is proprietary, it was the purpose of this meeting to evaluate the quality of the data, how it was collected, processed and analyzed and then to gather insight into how the interpretations presented in the above report were made. As this meeting was to be a data review and not a workshop, questions regarding geologic interpretations were not part of the agenda.

In attendance at this meeting were, in addition to the NRC and Woodward-Clyde Consultants, representatives of the Department of Energy (DOE), Battelle Memorial Institute Office of Nuclear Waste Isolation (ONWI), the US Geologic Survey, as well as Weston Geophysical and Lawrence Livermore Laboratory. A complete attendance list is included as Attachment 1.

On the morning of the 16th, T. Grant, I. Wong and T. Turcotte of WCC presented a brief overview of the procedures utilized in processing, collecting and analyzing the data. For the remainder of the day the NRC and its consultants conducted a general review of all data available. During the 17th the NRC performed a detailed review of selected pieces of data. The results of the NRC review are presented in the three attached data sheets. On the morning of the 18th a discussion was conducted between the NRC staff and consultants regarding all information reviewed.

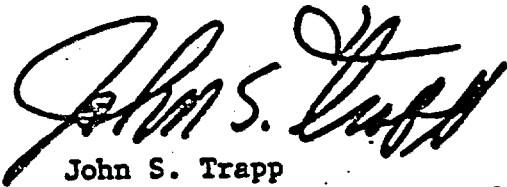
In the afternoon the data review was concluded and results of the review were discussed between the NRC and all attendees.

General observations by the NRC on the data were as follows:

- 1) Some seismic data is of variable quality.
- 2) Seismic data were obtained and processed utilizing standard/routine petroleum industry methodology.
- 3) Future seismic surveys should be of high resolution type designed to provide additional information on the salt and near surface strata.
- 4) The gravity and magnetic data appear to be of good quality.
- 5) The Davis and Lavender Canyon sites are located at the Southwestern edge of the gravity survey. No data are included to the Southwest of the sites.
- 6) If the Paradox Basin is selected for characterization the relationship between gravity and magnetic data and geologic features such as the Northeast trending basement features and circular features as seen on landsat and orthophotos may be the subject of a workshop between the NRC and DOE.

- 7) Future geophysical surveys including proprietary data should be available for submission to the NRC.

The NRC representatives at this data review wish to thank DOE, ONWI, and WCC for the excellent cooperation in conducting this review.



John S. Trapp  
U. S. Nuclear Regulatory Commission  
Division of Waste Management



P. Michael Ferrigan  
U. S. Department of Energy  
Salt Repository Project Office

October 18, 1984

Attachments as stated.

OCTOBER 16, 1984

GEOPHYSICS REVIEW MEETING

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John Trapp	NRC	301-427-4545
Ben Rice	NRC	301-427-4646
Buck Ibrahim	NRC	301-427-4646
Jim Hileman	Battelle	614-454-7534
Vincent Murphy	Weston	617-366-9191
John Imse	Weston	617-366-9191
Richard Lee	NRC	301-427-4526
Tom Turcotte	WCC	415-945-3000
Terry Grant	WCC	415-864-5010
Fred R. Cranwell	WCC	415-864-5010
Albert M. LaSala, JR.	USGS	614-424-5916
Ernst G. Zurflueh	NRC	301-427-4343
Bernard Archer	ONWI	614-424-4863
H. Lawrence McKague	LLNL	814-422-6494
Ivan Wong	WCC	415-864-5010