| | | (190 | for ci | ket l |
|------------|-------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------|
| | WM DOCKET COL CENTER | Department of Energy NTRONevadà Operations Office P. O. Box 14100 Las Vegas, NV 89114-4100 | WM-Record File 102.2 Distribution: | WM Project Docket No PDR LPDR |
| KEDTES GEV | *83 SEP 12 | | SCOPLAN | |
| | | | (Return to WM, 623-SS) | (3 |

AUG 2 5 1983 - ~ '

L. D. Ramspott, LLNL, Livermore, CA W. W. Dudley, Jr., USGS, Denver, CO D. T. Oakley, LANL, Los Alamos, NM T. O. Hunter, SNL, 6310, Albq., NM A. R. Hakl, W. Mercury, NV M. E. Spaeth, SAI, Las Vegas, NV

1

TENTATIVE DATES FOR WORKSHOPS BETWEEN NRC'S NNWSI

The earlier memo dated August 18, 1983, entitled "Workshop with NRC" was in error. The enclosure had incorrect dates listed. The correct dates, topics, and lead persons are shown below.

| Tentative Date | Topic | NNWSI Lead Role |
|-------------------|----------------------------------------------------------------------------------|--------------------------------------|
| Sept. 20-21 | Hydrogeology (Denver) | W. Dudley (USGS) |
| Sept. 26-27 | Performance Assessment (Albuquerque) | L. Tyler & W. Dudley (SNL) (USGS) |
| Oct. 4-6 | Geology & Geologic Stability (Denver, Oct. 4 & 5) (Yucca Mountain, Oct. 6) | W. Dudley (USGS) |
| Ocť. 18-19 | Waste Package (Livermore) | L. Ramspott (LLNL) |
| Oct. 26-27 | Geochemistry (Los Alamos) | D. Oakley (LANL) |
| Nov. 8-9 | Repository Design (Albuquerque) | L. Scully (SNL) |
| Dec. 7 | Quality Assurance (Silver Spring) | M. Spaeth (SAI) |

Donald L. Vieth, Director Waste Management Project Office

WMPO:MBB-609

Enclosure: As stated

ORIGINAL NOT REC'D

8312010086 830825 PDR WASTE WM-11 PD PDR

1022/1/190" 00074

Multiple Addressees

1

-2-

AUG 2 5 1983

cc: Robert Loux, Jr., Carson City, NV Carl Johnson, Carson City, NV NNWSI Project File



Department of Energy Nevada Operations Office P. O. Box 14100 Las Vegas, NV 89114-4100.

AUG 1 9 1277

J. W. Bennett, Dir., Geologic Repository Division (S-10) GTN

PROJECT IMPLEMENTATION OF SWG RECOMMENDATION ON ACCESS TO INFORMATION

As requested in your memo of July 26, 1983, we have reviewed the draft action memorandum prepared by Jeff Neff regarding the recommendation of the State Working Group. In response to your specific questions, it will cause problems for NNWSI and, therefore, in our opinion, it is not suitable for uniform application across the NWTS Program.

The major concern is the ability to give the states geotechnical data regarding site characterization at any early point after its acquisition, but before its analysis and review; U.S. Geological Survey (USGS) is the organization responsible for site characterization for the NNWSI Project. They have a strong sense of responsibility in terms of the work they do and are intent on making sure the data are accurate before they are released. They have a strong tradition in this regard and guard it jealously. Until a top level agreement is reached between DOE and USGS on this matter, I do not believe that I should be put in a situation that I cannot effectively control and implement for the Department. I, therefore, must oppose this provision until there is a formal agreement between DOE and USGS to support this proposal.

As it now stands, the USGS has only a minimal management and support structure in Denver to comply with the proposed procedure for providing raw data within 30 days of collection. This can be done with existing personnel only at the expense of the management functions that they are now performing in directing the site characterization activities for the NNWSI Project. Before making any decision here, you should carefully look at the limited management structure USGS has for supporting the NNWSI Project in the direction of the technical program.

Remember the limited number of good people that I have had to support the siting guideline activites and the decision methodology development. Think of what it is going to be like when these people cannot support the national effort when they are sending raw data to the states. J. W. Bennett

If you have any further questions, I will be happy to discuss them in greater depth.

-2-

Donald L. Vieth, Director Waste Management Project Office

WMPO:DLV-582

-

. د

cc w/encl: W. W. Dudley, Jr., USGS, Denver, CO NNWSI Project File

U.S. DEARTMENT OF ENERGY

DATE: JUL 2 6 1983

memorandum

REPLY TO ATTN OF: S-10

• DOE 1 1325.3

"ስ 79ነ

SUBJECT Project Implementation of SWG Recommendations on Access to Information

. 4

TO: Donald L. Vieth, NV

Attached is a draft action memorandum from Jeff Neff to Bill Bennett identifying how the NWTS Program Office (NPO) would propose satisfying the State Working Group on High-Level Radioactive Waste Management recommendations to Morgan on State access to information (letter attached). Recall that Morgan in his letter of March 14, 1983, (letter attached) stated the Department's intent to establish procedures for data transmittal as an integral part of the consultation process formalized by the Act. The approach identified in this action memorandum is also intended to satisfy the NRC request for access to raw data from the Salt Project.

Please review the approach being proposed by NPO to ensure it will not cause any problems for NNWSI, and to determine if it is suitable for uniform application across the NWTS Program. I would appreciate your input by August 5, 1983.

1re

James J. Fiore, Team Leader Nevada Repository Team Geologic Repository Division Nuclear Waste Policy Act Project Office

2 Attachments

cc: B. Bennett, S-10 R. Stein, S-10

ACTION 94 AVIO INFO. R.F. NAC. NA & C A..iD



Department of Energy Washington, D.C. 20585

RAR 1 4 1383

Mr. John H. Gervers Technical Advisor 800 North Star Route Questa, New Mexico 87556

Dear Kr. Gervers:

Thank you for your letter of February 16, 1983, concerning the Department of Energy's (DDE) Guidelines on Siting Nuclear Waste Repositories and State access to information. Your comments will certainly be considered and specifically addressed in our review of the Guidelines and in the development of specific State agreements on consultation and cooperation. I would like to take this opportunity, however, to address some of the issues you raised since they will have an important bearing on the successful conduct of the nuclear waste program.

Both Secretary Hodel and I are committed to strengthen consultation and cooperation between DOE and the States. Although the Nuclear Waste Policy Act lays out many important deadlines and schedules which the DOE seeks to meet, this will be predicated on our ability to work in an open, cooperative manner with the States, other agencies and other affected parties so that the institutional process envisaged by Congress can be fully satisfied. We will not let schedules arbitrarily restrict our ability to discuss and resolve important issues.

As you know, hearings on the Guidelines are being held in early March and comments have been requested by April 7, 1983. In addition, each State with an identified potentially acceptable repository site has been offered the opportunity of special hearings on the Guidelines if they desire. Although we would like to receive comments by April 7, this will just be the initial step in the process of working with the States and other commentors and interested parties to discuss and successfully resolve issues. Consequently, we do not believe an extension of the initial comment period is necessary and will welcome and consider comments from the States.

With regard to the timing of the Guidelines, Environmental Assessments, site characterization reports and their necessary hearings, we plan to conduct hearings and issue drafts as early as possible to provide an opportunity for initial reviews and comment. We fully recognize, however, that the Environmental Assessments and Site Characterization Reports must be based upon the Final Guidelines.

It is my desire to establish a process by which data is transmitted to the DDE and to the States at the same time. This will allow concurrent review by both parties. This, of course, means that unprocessed and/or preliminary data would be released to the States prior to the DDE's review and subsequent disposition. Accordingly, it is important to recognize that a

consultation process should be established between the States and the DOE on how this data should be processed before it's released. This in no way infer's any control of data, because we believe that prompt disclosure of any information, even preliminary in nature, is an absolute necessity to ensure system credibility. <u>We will be discussing the specific procedures</u> with each of the States involved during the consultation and cooperation process.

Once again, thank you for your comments and suggestions. Each will be specifically considered in the implementation of the Guidelines and the Geologic Siting Program. J. William Bennett, Director, Geologic Repository Division, will be contacting you on this process. Please call me if you have any additional concerns. My staff and I look forward to working with you and the State Working Group on these issues.

.....

Nº COT

. .

101001270

Sincerely,

Robert L. Morgan

Project Director Nuclear Waste Policy Act Project Office

to Varine for Vieth

J. William Bennett, Director Geological Repository Nuclear Waste Policy Act

1. 2014

Project Office

1

Sec. 12 3.

Dear Mr. Bennett:

ACTION: IMPLEMENT STATE WORKING GROUP RECOMMENDATIONS ON STATE ACCESS TO INFORMATION

<u>PROBLEM</u>: The State Working Group on High-Level Radioactive Waste Management contends that technical data are not being provided to state review bodies at an early enough stage in the DOE decision process.

<u>BACKGROUND</u>: On February 16, 1983 following the January 7, 1983 passage of the Nuclear Waste Policy Act of 1982 the State Working Group on High-Level Radioactive Waste Management submitted to R. Morgan their recommendations on state access to information. R. Morgan's March 14, 1983 response to the State Working Group's corresponding secretary Gervers stated the Department's intent to establish procedures for data transmittal as an integral part of the consultation process formalized by the Act. The Act clearly provides the framework for implementing a more uniform approach to data publication and with this objective we have reviewed our existing procedures to identify improvements which would result in direct responsiveness to the State Working Group's recommendations. I therefore request your approval of our recommendations in this letter to implement the specific State Working Group's recommendations reiterated here:



Redailed Loop 1

金钱运到14次,五

17 45.57 13



- Lay out the decision process for selection of sites for characterization and for repository construction, including documents required for the evaluation and comparative analysis of sites.
- Provide flow charts indicating major milestones, decision points, and document schedules for the site qualification process.
- Notify states in advance of forthcoming draft or final documents and send documents promptly for state review.
- 4) Inform states simultaneously with contractors of all requests for proposals, contracts and subcontracts issued for repository siting activities within their boundaries, and provide copies of the proposed scope of work and a listing of deliverables within a reasonable period of time.
- Discuss with states the expected contents and conclusions of draft contractor reports.
- 6) Discuss with states the documents they might wish to see in draft form, and provide access to reports (including draft contractor reports) which are of particular value to the state's review process.



- مرجعها الم
- 7) Provide access to raw data requested by states prior to evaluation by contractors (e.g., well drilling logs).
- 8) Include provisions in state/federal agreements which guarantee access to information in the manner proposed above.

DISCUSSION:

SWG Recommendation #1

The Act clearly specifies in Section 112(a) that the decision process for selection of sites be conducted according to guidelines. These guidelines are being developed with input of the states including a formal hearing process. Therefore the final guidelines and associated interactions with the states will provide the best definition of the decision process to the states.

SWG Recommendation #2

È

As soon as the guidelines called for by the Act are finalized the projects can define their master schedules for the first time. These master schedules will provide the information requested by the SWG recommendation #2. These master schedules will be supplemented within 15 months of the enactment of the Act with the Mission Plan as required by Section 301 of Title III of the Act.



The Mission Plan will be in the informational basis sufficient to permit informed decisions to be made including the schedule and its rationale. The ONWI Project Plan (ONWI-19) will also be revised and issued to reflect the master schedule a few months after the master schedule is issued. Therefore we suggest that the best implementation of the SWG Recommendation #2 is to provide the states the master schedules for the projects, the Mission plan and project specific project plans (e.g., ONWI-19 for salt).

SWG Recommendation #3, #5 and #6

The DOE has provided draft reports to the states for comment routinely in the past particularly for the main programmatic documents. Since this is the current practice and we infer from the repetition of this request that the states are not fully satisfied that they see enough of the reports of interest to them at the draft stage. The issue then appears to be one of selection of which reports are appropriate to send to the states at what stage. We feel we can best address these SWG recommendations by <u>producing key reports indexes</u> and discussing them at <u>monthly meetings</u> with the states and NRC. This would allow the states and NRC to discuss with DOE what reports are in the system so that specific reports can be requested and discussion can take place on a report by report basis of when the most appropriate time for comments would be. We therefore propose publishing the following report indexes:

Re Expected contents + conclusions of tract contractor reports -ONWI does not always know just when conclusions a contractor will reach united The report is written, and or receipted, etc. Autricipated results may be more apprendicte for descention.

-4-

 draft reports by WBS and report generator with abstract and production schedule.

2) final reports by WBS with abstract.

We have the capability to produce various indexes through the use of our RIS (see attached description). The most useful format of the indexes could be worked out with the NRC and states at the monthly meetings and an agenda item each month could be updated to the indexes and re-evaluation of what reports should be transmitted when. (See attached proposed standard agenda for monthly meeting with states).

SWG Recommendation #4

This recommendation can be implemented by a directive by DOE to contractors and subcontractors to mail announcements of RFPs to the appropriate contracts. This will only be effective if contacts to address the announcements to can be established as constant for a long period of time. We propose to work with the states to establish a focal point to data and announcement delivery so that changing distribution within the states and NRC has minimal impact on document and announcement receipt.

The RFP announcements can then be consolidated into a log which is updated monthly to include who wins the proposal and what the SOW and deliverables are defined as a contract award.



-5-

SWG Recommendation #7

Implementation of this recommendation could also be facilitated by the creation of an index of raw data by salt basin. The individual decisions of which data should be put in topical reports, which in monthly status reports could then be reviewed and influenced by an expression of interest on the part of the states or NRC.

SWG Recommendation #8

The state/federal agreements required by the Act are being negotiated now and these SWG recommendations are being addressed.

CONCLUSIONS:

We feel we can be responsive by implementing the SWG recommendations through a combination of following the steps defined by the Act (e.g. preparation of guidelines, EA's, Mission plan, schedules), development of a variety of indexes to help the states and NRC focus their resources and questions as well as acquaint them with what is available, monthly meetings to review updates to indexes and check on data transmittals.

RECOMMENDATIONS:

1) Finalize guidelines

-6-



- 2) Issue master schedule
- 3) Develop indexes to draft and final reports
- 4) Direct contractors and subcontractors to notify states and NRC of RFP's and awards with SOW's and milestones
- 5) Monthly meetings with states and NRC to provide updates to indexes and communicate state requests
- 6) Modify procedures for raw data documentation to assure publication and distribution to the states and NRC prior to analysis either through topical reports or monthly status reports as appropriate to the category of data collected.

J.O. Neff Program Manager NWTS Program Office

-7-

| Approved: | | |
|--------------|-----------------------------|---------|
| Disapproved: | | |
| Date: | | |
| | | • |
| Concurrence: | | |
| C. George | <u>R. Stein</u> J. Frank | M. Frei |

,

NPO:JON:LAC:kgh

ST# 350-83

.

DRAFT

HANDBOOK

٢.

FOR

PROVIDING UNANALYZED

DATA TO

INTERESTED PARTIES

.

U.S.DOE/NPO June 1983



CONTENTS

.

,

*...

•

| 1. | INTRODUCTION |
|----|--------------------------------------------------|
| 2. | TYPES OF INFORMATION/DATA TO BE PROVIDED |
| 3. | INDEXES TO DATA TYPES |
| 4. | HOW TO ACCESS INFORMATION ABOUT THE SALT PROJECT |
| 5. | PROCEDURES FOR PROVIDING INFORMATION/DATA |
| 6. | CURRENT INDEX SHEETS |

INTRODUCTION

This Handbook has been designed to provide a source of information, in one cover, on the U.S. Department of Energy's (DOE) project to make unanalyzed data from the Salt Project more easily available. The Handbook, which is in loose leaf form for easy updating, contains a description of the Salt Project, the types of information and data being generated, DOE's procedures for making data available, and the procedure for requesting data.

The last section of the Handbook is the Index in which the user can find a description of each data type being generated, whether it be a well log, a draft report, a photograph, or some other item soon to be released. The index sheet describes the data, its originator, the expected date of availability, the review process, whether it will be included in a future report, and directions for requesting it. The user is urged to file new index sheets in the Handbook so that his/her copy remains current.

The Handbook is maintained and updated by the U.S. DOE/NPO. Questions and comments should be sent to:

> U.S. DOE/NPO Attn: Document Control 505 King Avenue Columbus, OH 43201

June 17, 1983

TYPES OF INFORMATION/DATA TO BE PROVIDED

DRAFT

The National Waste Terminal Storage Program (NWTS) was established in 1976 with the objective of developing a system for the permanent isolation of nuclear wastes. The Salt Project, managed by DOE/NPO, is part of the NWTS, Through the NWTS, the Department of Energy will provide facilities to permanently dispose of high-level waste in a manner that will ensure public health and safety and that will be environmentally acceptable. The program has placed principal emphasis on developing deep, underground repositories, with efforts targeted toward having the first facility operational between 1998 and 2006.

To reach this objective, an extensive program has been developed to find sites that would be suitable for a repository. The Salt Project has the mission to find suitable sites in the Gulf Coast, the Permian Basin in Texas, and the Paradox Basin in Utah. As work progresses toward the selection of specific sites, the DOE provides unanalyzed, raw data to the States and the NRC, as well as other interested utilities, e.g., USGS, DOE prime contractors, and others, to enable them to study and evaluate the information concurrently with DOE. The general types of information and data are described in this section of the Handbook.

Data Types

Both unanalyzed, raw data and analyzed or processed data are made available. These classes are defined as:

o, Unanalyzed, raw data are unprocessed and preliminary in nature; they have not been evaluated, approved, or signed off by the Office of Nuclear Waste Isolation (ONWI) or DOE. Examples are data from sensors/recorders, well logs, seismic charts, samples, and test results.

- DRAFT
- o Processed data are reviewed, evaluated, analyzed, approved, and signed off by ONWI and/ or DOE. Examples are reports (drafts for public comment and final reports) records, and memoranda.

Many different types of information/data are produced by the Salt Project. The following are listed to indicate some of the kinds of data which can be classified as unanalyzed and for which we have identified procedures for publication and distribution within 30-45 days of generation:

a) Chemical analyses results

b) Age dating of samples

c) Geophysical logs

d) Geochemical analyses of water and rock samples

e) Petrographic description of rocks

f) Earthquake monitoring data

g) Core photographs and descriptive logs

h) Air photographs

i) Environmental data

j) Socioeconomic data

k) Ogallala well data (Permian Basin)

1) Hyrologic model (Gulf Coast)

m) Basin analysis report (geophysical and seismic data)- (Gulf Coast)

n) Seismic survey (raw data and report) for Louisiana

o) Reports (various) for Gulf Coast, Permian and Paradox Basins

In addition to the Basin-specific types listed above, procedures.

have been implemented (see Procedure #6) for Requests for Proposal (RFP), Request for Quote (RFQ), and the Invitations for Bid (IFB) to be provided to all users as the contractors and subcontractors release them. Likewise, the Statement of Work (SOW) and list of contract deliverables for

each contract issued by contractors and subcontractors will be made available to the NRC and the States.

INDEX TO DATA TYPES

The final section of the Handbook is the Index to data types. An index sheet has been developed to describe the various types. A' sheet will be prepared as the item becomes available and distributed as a way to alert all users to future releases of data. A sample sheet is given on the following page to indicate the kinds of information that will be provided for each item, if applicable.

DRAFT

The index sheet also provides a mechanism to request a copy of the item. By checking the appropriate box and returning a copy of the form with address and signature, the user will receive a copy when distribution is made.

| U.S.DOE/NPO | | | | | TO PROVIDE THE SALT PRO | |
|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Work in I | Progress | | Tyţ | e of Data | : <u></u> | |
| Final Pro | oduct/Report | t | WBS | ; # | | |
| Basin: | _ Gulf Coast _ Paradox _ Permian | t. | Title/Des | cription | | |
| Abstract/Sur | mary: | | ····· | | | |
| | | · | | | <u> </u> | |
| | | | | | Other | |
| Status: | In process | Plar | inea i | ubrisheu | | |
| | | | | | 0 uner | |
| Expected Da | te of Availa | ability:_ | <u></u> | | | • |
| Expected Da | te of Availa iew:ONI | ability:_ VI-Interr | na] D(| DE/NPO | _ Technical | Peer Group |
| Expected Da Planned Rev | te of Availa iew: ONI Sol | ability:_ WI-Intern Nicited (| nal Di Comments (| DE/NPO on Final (| _ Technical Report Ot | Peer Group her |
| Expected Da Planned Rev | te of Availa iew: ONI Sol | ability:_ WI-Intern Nicited (| nal Di Comments (| DE/NPO on Final (| _ Technical | Peer Group her |
| Expected Dar Planned Rev To be inclue Procedure for Subcom | te of Availa iew:ONI Sol ded in repon or Dissemina ntractor Da | Ability:_ VI-Interr Licited C rt: (Titl Ation to ta Report | nalD Comments (le) Interest tONWI | DE/NPO on Final 1 ed Parties Report | _ Technical Report Ot | Peer Group her ical Memora t |
| Expected Dar Planned Rev To be inclue Procedure for Subcom | te of Availa iew:ONI Sol ded in repon or Dissemina ntractor Da Contractor | Ability:_ VI-Interr Licited C rt: (Titl ation to ta Report Report.(| nalD Comments (le) Interest tONWI (e.g., TB | DE/NPO on Final 1 ed Parties Report EG Well Co | _ Technical Report Ot s: Techn DOE Repor ompletion Re | Peer Group her ical Memora t |
| Expected Dar Planned Rev To be includ Procedure for Subcor Formal Date Dissem | te of Availa iew:ONI Sol ded in report or Dissemina ntractor Da Contractor ination is I of Data: | Ability:_ VI-Interr Licited C rt: (Titl Ation to ta Report Report.(Planned:_ | nalD Comments (le) Interest tONWI (e.g., TB (e.g., TB | DE/NPO on Final f ed Parties Report EG Well Co ERTEC | _ Technical Report Ot s: Techn DOE Repor ompletion Re USGS | Peer Group her ical Memora t port) Ot ORNL |
| Expected Dar Planned Rev To be includ Procedure for Subcon Formal Date Dissem | te of Availa iew:ONI Sol ded in report or Dissemina ntractor Da Contractor ination is I of Data: | Ability:_ VI-Interr Licited C rt: (Titl Ation to ta Report.(Planned:_ | d-Clyde Webster | DE/NPO on Final f ed Parties Report EG Well Co ERTEC TBEG | _ Technical Report Ot s: Techn DOE Repor ompletion Re USGS ONWI | Peer Group her ical Memora t port) Ot ORNL PNL |
| Expected Dar Planned Rev To be includ Procedure for Subcor Formal Date Dissem | te of Availa iew:ONI Sol ded in report or Dissemina ntractor Da Contractor ination is I of Data: | Ability:_ VI-Interr Licited C rt: (Titl Ation to ta Report.(Planned:_ | d-Clyde Webster | DE/NPO on Final f ed Parties Report EG Well Co ERTEC TBEG | _ Technical Report Ot s: Techn DOE Repor ompletion Re USGS | Peer Group her ical Memora t port) Ot ORNL PNL |
| Expected Dar Planned Rev To be includ Procedure for Subcor Formal Date Dissem | te of Availa iew:ONI Sol ded in report or Dissemina ntractor Da Contractor ination is 1 of Data: if you wish | Ability:_ VI-Interr Licited C rt: (Titl Ation to ta Report Report.(Planned:_ Planned: | d-Clyde Webster | DE/NPO on Final 1 ed Parties Report EG Well Co ERTEC TBEG NUS | _ Technical Report Ot s: Techn DOE Repor ompletion Re USGS ONWI | Peer Group her ical Memora t port) Ot ORNL PNL |
| Expected Dar Planned Rev To be includ Procedure for Subcon Formal Date Dissem Originator Check here | te of Availa iew: ONI Sol ded in report or Dissemina ntractor Data Contractor ination is 1 of Data: if you wish opy of this | Ability:_ VI-Interr Licited C rt: (Titl Ation to ta Report Report.(Planned:_ Planned: | d-Clyde Webster | DE/NPO on Final M ed Parties Report EG Well Co EG TBEG NUS Ret | _ Technical Report Ot s: Techn DOE Repor ompletion Re USGS ONWI Other_ urn to: U.S. DOE/NPC | Peer Group her ical Memora t port) Ot ORNL ORNL PNL |
| Expected Dar Planned Rev To be includ Procedure for Subcor Formal Date Dissem Originator Check here receive a c | te of Availa iew:ONI Sol ded in report or Dissemina ntractor Data Contractor ination is 1 of Data: if you wish opy of this No | Ability:_ VI-Interr Licited C rt: (Titl ation to ta Report Report.(Planned:_ _ Woodward _Stone & _Bendix - to | d-Clyde Webster | DE/NPO on Final f ed Parties Report EG Well Co Ret | _ Technical Report Ot s: Techn DOE Repor ompletion Re USGS USGS ONWI Other urn to: | Peer Group her ical Memora t port) Ot ORNL ORNL PNL |

-

•

.

.•

URAF

HOW TO ACCESS INFORMATION ABOUT THE SALT PROJECT

Access

Access to both unanalyzed, raw data and processed data is provided by DOE in the following ways:

- 1) Unanalyzed, raw data -- the NRC or the Governor or Legislature of the State in which potential sites are located submit a written request to the Manager, DOE/NPO. The request should designate the name and address of the person to receive the data. This state representative will receive the Handbook and its updates. Additional copies of the Handbook will be provided upon request.
- 2) Processed/analyzed data -- the name and address of individual(s) or organizations who wish to receive this data (usually final reports) should be sent to the Manager, DOE/NPO to be added to the applicable mailing lists.
- 3) RFP's, RFQ's, IFB'S, Contracts (Statement of work and list of deliverables) -- the name and address of individual(s) or organizations who wish to receive copies of these documents should be sent to DOE/NPO for addition to mailing lists.
- 4) Access to computerized information system --the Governor's representative (and NRC representative) should contact the Manager, DOE/NPO to arrange to visit NPO to be briefed on the contents and potential for producing indexes tailored to the users's specific needs or interests.

5) Bimonthly meetings with Salt State Representatives and the NRC will be held at NPO offices in Columbus, Ohio. These two-day meetings will provide status reports on program activities, schedules and plans, current and proposed field activities, the availability of new data and reports, and other topics as appropriate. The proposed agendas for these meetings would be sent to State representatives and the NRC in advance for comment and additions.

Response

State (or NRC) representatives shall be the contact with NPO for providing responses, reviews, or comments on the data and other documents they receive as part of this program. This representative will serve as the central point for all responses from the State or NRC and will collect and coordinate the responses of others and forward these to NPO. Such coordination is felt to be essential to assure that the flow of information between the various organizations is efficient and controlled.

URAFI

PROCEDURES FOR PROVIDING DATA/INFORMATION

The following procedures have been designed to expedite the flow of data and other information between DOE, ONWI, their contractors or subcontractors as the case may be, and the States/NRC. It is probable that these procedures will not provide for all future contingencies; new and revised procedures will be issues as required and copies sent to all Handbook holders.

The following procedures are provided in this section:

Procedure No.

Topic Addressed

| 1 | Providing Raw Data within 30 Days of Collection |
|---|----------------------------------------------------------------------------------------------|
| 2 | Providing Access to Raw Data at Drill Site |
| 3 | Providing Access to Computer-Based Information Systems Indexes |
| 4 | Handling State Comments or Input |
| 5 | Providing Processed Data |
| 6 | Providing RFP's, RFO's, IFB's, or the Contract Statement of Work and List of Deliverables |
| 7 | Updating the Index (for this Handbook) |

PROCEDURE FOR PROVIDING RAW DATA ** WITHIN 30 DAYS OF COLLECTION

POLICY Access to raw, unprocessed data shall be provided to the DOE and the states as rapidly as possible after collection, and at the request of DOE/NPO.

BACKGROUND Subcontractors will be instructed to collect data in a form INFORMATION compatible with early QA review and release. Every effort will be made to provide the data requested by the states in a timely manner.

PROCEDURE

Managers

ONWI and The ONWI and subcontractor technical project managers who Subcontractor obtain the data shall perform the following actions before Project release to the states and the DOE:

1. Verify the data to assure nothing is missing.

- 2. Confirm quality via a QA review.
- 3. Assure that nothing is obviously invalid.
- 4. Refrain from altering the data in any way.

A&IS

Data packages shall be prepared at ONWI by making a copy for DOE/NPO and one for the state to fulfill the request. A third copy shall be maintained by the A&IS Department. The data items shall be marked with the appropriate caveat to indicate their status: "RAW DATA", "NOT ANALYZED DATA", and a transmittal form prepared and signed off. Data packages shall be shipped by registered mail, as appropriate, to the designated state and DOE/NPO representatives.

Transmittal forms and receipts shall be logged and controlled by Administrative & Information Services (A&IS).

> ** Types of data: well logs results of tests

PROCEDURE FOR PROVIDING ACCESS TO RAW DATA AT DRILL SITE

POLICY Access to raw data shall be provided at the drill site to state representatives who are observers, when DOE/NPO so directs.

BACKGROUND Prior experience at the WIPP Project in which state I representatives were present at the drilling of the last two INFORMATION holes may be indicative of the kind of future activities ONWI can expect. This procedure addresses such a contingency.

PROCEDURE

Project Manager

ONWI Technical When state representatives are to be on-site as observers, the ONWI and subcontractor cognizant technical project managers and QA specialists shall be present to inspect the data and/or logs, charts, or other material, and confirm its quality before it is made available to the States. Subcontractor sign-off is required to indicate data were collected under QA control.

> If the ONWI technical project manager releases data to a state representative, he/she shall attach a caveat such as "RAW DATA", "NOT ANALYZED DATA" or another appropriate warning as to the status and condition of the data.

> ONWI project manager shall attach a release form which describes the data and is signed off by the ONWI technical project manager and the DOE/NPO representative.

A&IS

The release form is forwarded by the ONWI technical project manager to Administrative & Information Services Department for control and storage.

PROCEDURE FOR PROVIDING ACCESS TO COMPUTER-BASED INFORMATION SYSTEMS INDEXES

POLICY Access to computer-generated indexes will be made available to the NRC and the States

BACKGROUND INFORMATION ONWI has developed and maintained computer-based information systems, e.g., the Records & Information System (RIS), the SCP database, and others which contain <u>references</u> to correspondence, references and abstracts for technical reports, and extracts of the SCP. These information systems can be used to generate specialized indexes to facilitate data searches, e.g., index of final reports by WBS, index of subcontractor reports, and subject bibliographies.

PROCEDURE The requester contacts DOE/NPO Document Control Office and requests the index wanted.

ONWI The request is forwarded by DOE/NPO to ONWI where the search is performed and the index prepared.

DOE/NPO

Results of the search in the form of a computer print-out are provided to DOE/NPO Document Control Office for shipment to the requester.

PROCEDURE FOR HANDLING STATE COMMENTS** OR INPUT

POLICY State comments or input shall be incorporated in the decision process and in documents as appropriate.

BACKGROUND State and public comments on key ONWI documents have been INFORMATION solicited as standard procedure during the past five years. This formal procedure establishes the policy for handling comments for the future.

PROCEDURE

••••

States provide their comments in writing to DOE/NPO. The manager, NPO, transmits comments/input to the ONWI project office manager.

ONWIONWI project managers/work package managers review comments/Projectinput and incorporate the information in the document asManagerappropriate.

Written comments are published as an appendix to the final document or a letter response is provided to the commenter via NPO with an explanation of how the comments were/were not used.

** State comments on draft documents sent to them for review and comment.

PROCEDURE FOR PROVIDING PROCESSED DATA

POLICY ONWI shall provide processed data (draft ONWI/subcontractor reports, final reports, program plans, RFP/contract statement of work and list of deliverables) as they are released to DOE for transmittal to the states.

BACKGROUND During the past five years, ONWI has provided final reports, INFORMATION program plans, draft reports for state review and comment through DOE/NPO. This procedure formalizes the existing process.

PROCEDURE

.

The ONWI project office manager shall transmit processed data to DOE and the states as follows:

- Notification shall be made in advance of forthcoming draft documents for review and final reports. NPO shall be notified by ONWI and they, in turn, shall notify the states.
- 2. Draft documents for review will be sent promptly and by express mail.
- 3. Discussion will be held with the states to discuss which documents they might want to see in draft and make them available.
- 4. Comments or input from the states on draft documents provided to ONWI project office manager by DOE/NPO for incorporation in final reports as appropriate.
- 5. ONWI shall maintain up-to-date mailing lists for each of the affected states, and distribute new documents in accordance with them.

PROVIDING RFP's, RFQ's, IFB's, CONTRACT STATEMENT OF WORK AND ' LIST OF DELIVERABLES

POLICY ONWI, DOE and their respective subcontractors, DOE Prime Contractors and the DOE Integrated Contractors shall provide dopies of RFP's, RFQ's, IFB's, and the SOW and List of Contract Deliverables to the State Representatives when the resulting contract documents are made available to potential contractors and, in the latter case, to the successful proposers/bidders.

- BACKGROUND The States require access to information concerning INFORMATION future action within their boundaries in regard to the Salt Project so that they are aware of what work is planned and who will be conducting the work, once contracts are let. This procedure addresses that requirement.
- PROCEDURE The BPMD Contracts & Procurement Department, and the DOE/NPO Contracting Officer will arrange to provide copies of RFP's, RFO's, IFB's, and the SOW and List of Deliverables to the State Representatives listed on the following page.

ONWI Subcontractors Subcontractors The BPMD Contracts & Procurement Department will provide copies of the subject documents for its subcontracts and will instruct its subcontractors to do likewise for all procurements they initiate. The subcontractors will send copies to BPMD C&P for transmittal through DOE/NPO to the State Representatives

DOE/NPO The DOE/NPO Contracting Officer will direct the issuance of the subject documents for its procurements and will instruct the DOE Primes and Integrated Contractors to do likewise through DOE/NPO.

STATE CONTACTS FOR TEXAS, UTAH, MISSISSIPPI, AND LOUISIANA

<u>Louisiana</u>

Dr. L. Hall Bohlinger Office of Environmental Affairs Louisiana Department of Natural Resources P.O. Box 44066 Baton Rouge, Louisiana 70804

PH: 504-342-1265

<u>Mississippi</u>

Ronald Forsythe Nuclear Waste Program Manager Department of Energy and Transportation Board 214 Watkins Building 510 George Street Jackson, Mississippi 39202

PH: 601-961-4733

Texas

Steve Frishman, Director Nuclear Waste Projects Office Sam Houston Office Building, Room 204 200 East 14th Street Austin, TX 78711 PH: (512) 475-4444

Utah

Gary Tomsic Deputy Director Department of Community and Economic Development Room 6290 State Office Building Salt Lake City, Utah 84114

PH: 801-533-5396

PROCEDURE FOR UPDATING THE INDEX

POLICY ONWI shall make regular updates to the Index to this Handbook to assure that changes in status for each product or report are recorded and new data/information are reported.

BACKGROUND As work proceeds in each Salt State, there is a need INFORMATION to continuously update the index to reflect progress in current work and to report on newly initiated work.

PROCEDUREONWI Salt Basin Managers will provide periodic status
reports on work that is in progress and initiate index
sheets for new work. These reports shall be forwarded
project
ManagerONWI Salt Basin Managers will provide periodic status
reports on work that is in progress and initiate index
sheets for new work. These reports shall be forwarded
to the Administrative & Information Services (A&IS) for
inclusion in the Index.

A&IS The Index will be updated and a package of new Index sheets will be forwarded to the Handbook users every 30 days.

Users

The users should place the new edition of the Index in their Handbooks and discard the old index sheets.

۰.

DRAFT

CURRENT INDEX SHEETS

The following index sheets describe the data/information which is currently being produced by the Salt Program. As these data items become available, they will be released to users of the Handbook. New sheets will be prepared and distributed to holders of the Handbook as the data or information is generated.

| | | | PROVIDE INF SALT PROJE | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| ⊥ Work in Progress Final Product/Rep | | e of Data: <u>/</u> #/. <i>3.3.</i> | | lized |
| Basin:Gulf Co Paradox Permian | ast Title/Des | cription: <u>//</u> /s | iero seix | ie |
| Abstract/Summary: // | deta is a | istei. ollecto | d nen | tircus (y the y |
| Status: 🖌 In proce | ss Planned P | ublished _ | _ Other | |
| Expected Date of Ava | ilability: Once p | er mon | 73 | |
| Planned Review: | ONWI-Internal DO Solicited Comments o | E/NPO'T | echnical Peo ort Other | er Group r <u>X</u> |
| | | | | |
| To be included in re $\alpha \neq f_{\perp is}$ find Procedure for Dissem X Subcontractor | port: (Title) <u>- 6</u> | ed Parties: Report | Technic DOE Report | al Mémorand |
| To be included in re $\alpha \neq f_{\perp,s} = f_{\perp,s}$ Procedure for Dissem \sum Subcontractor Formal Contract | port: (Title) <u> </u> | ed Parties: Report EG Well Comp | Technic DOE Report Detion Repo | al Mémorand |
| To be included in re $\alpha \neq f_{\perp is}$ find Procedure for Dissem X Subcontractor | port: (Title) <u>6</u> ination to Intereste Data Report <u>ONWI</u> cor Report.(e.g., TBE is Planned: <u>6</u> | ed Parties: Report EG Well Comp | Technic DOE Report Detion Repo | al Mémorand |
| To be included in re $\alpha \neq f_{L,s} = f_{i-s}$ Procedure for Dissem \sum Subcontractor Formal Contract Date Dissemination i | port: (Title) <u>6</u> ination to Intereste Data Report <u>ONWI</u> cor Report.(e.g., TBE is Planned: <u>6</u> | ed Parties: Report EG Well Comp ERTEC | Technic Technic DOE Report Detion Repo USGS ONWI | al Memorand rt) Othe ORNL PNL |
| To be included in re $\alpha \neq f_{L,s} = f_{L,s}$ Procedure for Dissem \sum Subcontractor Formal Contract Date Dissemination i | port: (Title) <u>6</u> ination to Intereste Data Report <u>ONWI</u> cor Report.(e.g., TBE is Planned: <u><u>6</u> <u>W</u>oodward-Clyde</u> | ed Parties: Report EG Well Comp ERTEC | Technic Technic DOE Report Detion Repo | al Memorand rt) Othe ORNL PNL |
| To be included in re $\alpha \neq f_{\perp,s} = f_{\perp,s}$ Procedure for Dissem \sum Subcontractor Formal Contract Date Dissemination i | port: (Title) <u>6</u> ination to Intereste Data Report <u>ONWI</u> for Report.(e.g., TBE Stone & Webster Bendix -GJ ish to | ed Parties: Report EG Well Comp ERTEC TBEG | <pre>Technic Technic DOE Report letion Repo USGS USGS ONWI Other</pre> | al Memorand rt) Othe ORNL PNL |
| To be included in re <u>α + fL; s - f;</u> Procedure for Dissem <u>X</u> Subcontractor Formal Contract Date Dissemination i Originator of Data: Check here if you w | port: (Title) <u>6</u> ination to Intereste Data Report <u>ONWI</u> for Report.(e.g., TBE Stone & Webster Bendix -GJ ish to | ed Parties: Report EG Well Comp ERTEC TBEG NUS Return U.S | Technic DOE Report DOE Report Detion Repo USGS USGS ONWI Other h to: S. DOE/NPO | al Memorand rt)Othe ORNL PNL |
| To be included in re <u>a f f f is</u> Procedure for Dissem X Subcontractor Formal Contract Date Dissemination i Originator of Data: Check here if you we receive a copy of the | port: (Title) <u> </u> | ed Parties: Report EG Well Comp ERTEC TBEG NUS Return U.S At 50 | Technic DOE Report DOE Report Detion Repo USGS ONWI Other h to: | al Memorand rt) Othe ORNL PNL PNL |
| To be included in re <u>a f f f is</u> Procedure for Dissem <u>X</u> Subcontractor Formal Contract Date Dissemination is Originator of Data: Check here if you we receive a copy of th YesNo Name: | port: (Title) <u> </u> | ed Parties: Report EG Well Comp ERTEC TBEG NUS Return U.S At 50 | Technic DOE Report DOE Report Detion Repo USGS ONWI Other h to: S. DOE/NPO tn: Documen 5 King Avenu | al Memorand rt) Othe ORNL PNL PNL |
| To be included in re <u>a f f f is field</u> Procedure for Dissem <u>X</u> Subcontractor Formal Contract Date Dissemination is Originator of Data: Check here if you we receive a copy of th YesNo Name: | port: (Title) <u> </u> | ed Parties: Report EG Well Comp ERTEC TBEG NUS Return U.S At 50 | Technic DOE Report DOE Report Detion Repo USGS ONWI Other h to: S. DOE/NPO tn: Documen 5 King Avenu | al Memorand rt) Othe ORNL PNL PNL |
| To be included in re <u>a f f f is</u> Procedure for Dissem <u>X</u> Subcontractor Formal Contract Date Dissemination is Originator of Data: Check here if you we receive a copy of th YesNo Name: | port: (Title) <u> </u> | ed Parties: Report EG Well Comp ERTEC TBEG NUS Return U.S At 50 | Technic DOE Report DOE Report Detion Repo USGS ONWI Other h to: S. DOE/NPO tn: Documen 5 King Avenu | al Memorand rt) Othe ORNL PNL PNL |

•

.

•

۰,

.

•

•

| U.S.DDE/NPO PROGRAM TO PROVIDE INFORMATION/ DATA ON THE SALT PROJECT X Work in Progress Type of Data: <u>Denst Report</u> | | INDEX SHEET | | | <i>D</i> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------------|----------------------|
| Final Product/Report WBS # ### 1,3,4 Basin: Gulf Coast Title/Description: Straticraphy Topical | U.S.DOE/NPO | | | | |
| | <u>x</u> Work in Progress | Тур | e of Data:_ | DRAFT REP | ort |
| <u>k Permian</u> <u>Abstract/Summary: This cepe-t will provide deta on importan</u> <u>etait graphic and ctructural features in The</u> <u>uir in true for the Daris Componential Peer Group</u> <u>Solicited Comments on Final Report</u> <u>Other</u> <u>Solicited Comments on Final Report</u> <u>Other</u> <u>Solicited Comments on Final Report</u> <u>Componential Componential Peer Group</u> <u>Field tiens hips in The Uir of The Oraci Components</u> Procedure for Dissemination to Interested Parties: <u>Technical Memorand</u> <u>Subcontractor Data Report <u>XONNI Report</u> <u>DOE Report</u> <u>Formal Contractor Report, (e.g., TBEG Well Completion Report)</u> <u>Othe</u> <u>Date Dissemination is Planned: <u>for for X</u> <u>Stone & Webster</u> <u>TBEG</u> <u>ONNI</u> <u>PNL</u> <u>Bendix -GJ</u> <u>NUS</u> <u>Other</u> <u>Check here if you wish to</u> <u>receive a copy of this item:</u> <u>Return to:</u> <u>Yes</u> <u>No</u> <u>Name:</u> <u>Stone Component</u> <u>SoloE/NPO</u> <u>Attris Document Control Co</u></u></u> | Final Product/Re | | | | |
| statisgraphic and structural features in The wiscinity of the Daris Cane on Site. Status: X In process Planned Published Other Expected Date of Availability: $$/1/83$ Planned Review: X ONWI-Internal X DOE/NPO Technical Peer Group Solicited Comments on Final Report To be included in report: (Title) $$T_{vac}t_{u-1} (a_{u-1} d St_{u-1} t_{u-1} f_{u-1} f$ | 🔀 Parado | X Roomt | | Stvaticrap | ky Topical |
| wiring of the Daris Camp on Site. Status: X In processPlannedPublishedOther | | | _ | | • |
| Expected Date of Availability: $\frac{8/1/83}{2}$ Planned Review: \swarrow ONWI-Internal \bigotimes DOE/NPO Technical Peer Group Solicited Comments on Final Report Other To be included in report: (Title) $\frac{57c_c t_c - 1}{a_n d} \frac{57c_c t_i - 1}{a_n d} 57$ | | | | | |
| Planned Review: <u>L</u> ONWI-Internal <u>L</u> DDE/NPO Technical Peer Group | Status: <u>X</u> In proc | essPlannedF | ublished _ | _ Other | |
| Planned Review: <u>L</u> ONWI-Internal <u>L</u> DDE/NPO Technical Peer Group | Expected Date of Av | ailability: 8/1/83 | , | | |
| Kelationships The Uncinity of The Decis Canyon Sector Procedure for Dissemination to Interested Parties: | | | | | |
| Procedure for Dissemination to Interested Parties:Technical Memorand Subcontractor Data Report X_ONWI ReportDOE Report Formal Contractor Report,(e.g., TBEG Well Completion Report)Othe Date Dissemination is Planned: Date Dissemination is Planned: | To be included in r <u><i>fielations hips</i></u> | eport: (Title) <u>STru</u> is The Vicini | tural an | d Strati | anaphic Canyon S. |
| Originator of Data: <u>X</u> Woodward-ClydeERTECUSGSORNL Stone & WebsterTBEGONWIPNL Bendix -GJNUSOther Check here if you wish to receive a copy of this item: Return to: YesNo U.S. DOE/NPO Attn: Document Control C S05 King Avenue | Procedure for Disse | mination to Interest | ed Parties: Report | Technic DOE Report | al Memorand |
| | | tor Report, (e.g., TBI | G Well Com | | ort) Othe |
| Bendix -GJNUSOther Check here if you wish to receive a copy of this item: Return to: YesNo U.S. DOE/NPO Attn: Document Control C Name:SO5 King Avenue | Formal Contrac | | | | ort) Othe |
| receive a copy of this item: Return to: YesNo U.S. DOE/NPO Name:No Attn: Document Control C 505 King Avenue | Formal Contrac | 9 is Planned: <u>+0/90</u> / | 83 | | |
| Yes No U.S. DOE/NPO Attn: Document Control O Name: 505 King Avenue | Formal Contrac | is Planned: <u>+0/3t/</u> <u>X</u> Woodward-Clyde Stone & Webster | \$ 3 ERTEC TBEG | USGS ONWI | ORNL PNL |
| | Formal Contrac Date Dissemination Originator of Data: Check here if you w | is Planned: <u>fef 3t</u> <u>X</u> Woodward-Clyde Stone & Webster Bendix -GJ vish to | \$3 ERTEC TBEG NUS | USGS ONWI Other | ORNL PNL |
| | Formal Contrac Date Dissemination Originator of Data: Check here if you w receive a copy of t YesNo | is Planned: <u>40/37</u> <u>X</u> Woodward-Clyde Stone & Webster Bendix -GJ wish to this item: | 多 了 ERTEC TBEG NUS Retur U. At | USGS ONWI Other n to: S. DOE/NPO tn: Docume | ORNL PNL ORNL |

-

• •

•

.

.

L

.

.

.

| | SHEET Or |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| U.S.DOE/NPO | PROGRAM TO PROVIDE INFORMATION/ DATA ON THE SALT PROJECT |
| X Work in Progress . Final Product/Report | Type of Data: <u>Dreft Report</u> WBS # <u>1,3,3,4</u> |
| | Summary Report |
| Abstract/Summary: <u>The perfort</u> Testing in the ER-1, and I Tests in the GD-1 bouch | Kubat bore boles and long-term bylage le. The long-term results will be |
| | to of the short-term and laberatory |
| Status: <u>X</u> In process Planr | |
| Expected Date of Availability: | • |
| Mar 1 - 1 - 9 - 1 - 1 - 1 | \ // /+ / / / / T + + |
| <u>bibron Proce dia 1 Elk k</u> Procedure for Dissemination to 2 Subcontractor Data Report | e) <u>Kcrults of Hudecalic Tests at</u> <i>idge Mi. 1, and E. T. Kubat Bosochold</i> Interested Parties: Technical Memorandum <u>XONWI Report</u> DOE Report e.g., TBEG Well Completion Report) Other: |
| <u>bibsen Prime Minit Elk K</u> Procedure for Dissemination to 2 Subcontractor Data Report Formal Contractor Report.(6 | Interested Parties: Technical Memorandum XONWI Report DOE Report e.g., TBEG Well Completion Report) Other: |
| <u>bibsen</u> <u>Prime</u> <u>Mail</u> <u>Elk K</u> Procedure for Dissemination to 2 <u>Subcontractor Data Report</u> <u>Formal Contractor Report</u> , (Date Dissemination is Planned: <u>Originator of Data: X Woodward</u> <u>Stone & 1</u> | Interested Parties: Technical Memorandum XONWI Report DOE Report e.g., TBEG Well Completion Report) Other: $\frac{7}{30}/83$ |

• •

7

1

•

•

e

۰.

.

.

.

· ·

.

| Final Product/Report WBS | pe of Data: <u>DrAFT</u> <u>Report</u> 5 # 1,3,3.4 |
|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| lacin: Gulf Coact Titlo/Do | |
| <u>X Paradox</u> Permian <u>Rep</u> | scription: Water Balance Topical |
| Abstract/Summary: This report wi of a preliminary water for the hydrologic system | Il present the result's balance colculation in the study area. |
| Status: \underline{X} In processPlanned | • |
| Expected Date of Availability: 7/25/ | 83 |
| Planned Review: \swarrow ONWI-Internal \bigstar D | OE/NPOTechnical Peer Group on Final ReportOther |
| To be included in report: (Title) <u>Pre</u> Calculations for the Gibson | lin in any water balance |
| Procedure for Dissemination to Interest Subcontractor Data ReportONWI Formal Contractor Report,(e.g., TB | ed Parties:Technical Memorandum ReportDOE Report |
| Date Dissemination is Planned: $\frac{4}{7}$ | \$ / \$ 3 |
| γ Driginator of Data: <u>χ</u> Woodward-Clyde | / |
| | TBEGONWIPNL |
| Bendix -GJ | |
| Check here if you wish to | |
| receive a copy of this item: | Return to: |
| Yes No | U.S. DOE/NPO Attn: Document Control Offic |
| Name:Address: | 505 King Avenue - Columbus, OH 43201 |
| | |

• •

.

.....

•

•

.

.

-

| X Work in Progress Type of Data: $Draft Report$ Final Product/Report WBS # _1, 3, 3, 44 Basin: Gulf Coast Title/Description: Marble Carrow X Paradox TopicAl Report Permian TopicAl Report Abstract/Summary: The comparison of the chemical report The March Coarces foring 5 and The precibility The March Coarces prings Status: K In process Planned Review: NoWI-Internal X DOE/NPO Solicited Comments on Final Report Other Solicited Comments on Final Report Other Subcontractor Data Report XONWI Report DDE Report Subcontractor Data: XWoodward-Clyde | Nork in Progress Type of Data: $DrAFT Report$ in: Gulf Coast Title/Description: $Maelle Canyou X Paradox TopicAl Report in: Gulf Coast Title/Description: Maelle Canyou X Paradox TopicAl Report in: Gulf Coast Title/Description: Maelle Canyou X Paradox TopicAl Report in: Gulf Coast Title/Description: Maelle Canyou x Paradox TopicAl Report in: Gulf Coast Title/Description: Maelle Canyou x Permian TopicAl Report in: Gulf Coast Title/Description: Maelle Canyou x Permian TopicAl Report in: Gulf Coast Trepresent x Permian Permission tract/Summary: This Permission ita: X In process Planed tract/Sumary: The Lead of Mailability: The Second Other ected Date of Availability: The Second Description: Description: Solicited Comments on Final Report Othe$ | INDEX SH | PROGRAM TO PROVIDE INFORMATION |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Basin: | in:Gulf Coast | | Type of Data: DrAFT Report |
| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $ | X Paradox TopicAl Report Permian | Final Product/Report | WBS #_/, 7, 9. 4 |
| The Minute Company of the precisive of the | <pre>e Martele Courses = spring 5 and TL = precibility </pre> | X Paradox | |
| The Minute Company of the precisive of the | <pre>e Martele Courses = spring 5 and The precibility</pre> | Abstract/Summary: <u>This he for</u> | t will discuss the chemistry of |
| The formation of the forma | Image: spring: spread fischage prints Image: spread field tus: X In processPlannedPublishedOther ected Date of Availability:7/15/83 nned Review: X ONWI-Internal X DOE/NPOTechnical Peer Group Solicited Comments on Final Report be included in report: (Title) scale of Availability: scale of Availability: scale of Availability: | The Markle Ceneras | prings and the precibility |
| Status: X In process Planned Published Other Expected Date of Availability: | tus: <u>X</u> In processPlannedPublishedOther ected Date of Availability: <u>7/15/83</u> nned Review: <u>X</u> ONWI-Internal <u>X</u> DOE/NPOTechnical Peer Group Solicited Comments on Final ReportOther be included in report: (Title) <u>Kesselfs</u> <u>frequentions</u> <u>cedure for Dissemination to Interested Parties:frequentions</u> <u>cedure for Dissemination to Interested Parties:frequentions</u> <u>Subcontractor Data Report X</u> ONWI Report DOE Report Formal Contractor Report.(e.g., TBEG Well Completion Report) Other: <u></u> | that these springs in | eprecent discharge paints |
| Expected Date of Availability: 7/15/83 Planned Review: X ONWI-Internal X DOE/NPO Technical Peer Group Solicited Comments on Final Report Other To be included in report: (Title) <u>Kaca / f geacherniaa</u> <u>analy cis of Willer Kie Carpens Springs terminate</u> <u>analy cis of Willer Kie Carpens Springs terminate</u> <u>subcontractor Data Report XONWI Report</u> DOE Report Formal Contractor Report.(e.g., TBEG Well Completion Report) Other Date Dissemination is Planned: <u>7/15/83</u> Originator of Data: XWoodward-Clyde ERTECUSGS ORNL Stone & Webster TBEGONWI PNL Bendix -GJ NUS Other Check here if you wish to receive a copy of this item: Return to: Yes No U.S. DOE/NPO Attn: Document Control O SO5 King Avenue Stone Xeenue | ected Date of Availability: 7/15/83 nned Review: X ONWI-Internal X DOE/NPO Technical Peer Group | | |
| Planned Review: X ONWI-Internal X DOE/NPO Technical Peer Group Solicited Comments on Final Report Other | nned Review: X ONWI-Internal X DOE/NPOTechnical Peer Group Solicited Comments on Final ReportOther | | |
| Procedure for Dissemination to Interested Parties: Technical Memorandu | cedure for Dissemination to Interested Parties: Technical Memorandum | Solicited Cor To be included in report: (Title | mments on Final Report _ Other |
| Originator of Data: XWoodward-ClydeERTECUSGSORNL Stone & WebsterTBEGONWIPNL Bendix -GJNUSOther Check here if you wish to receive a copy of this item: Return to: YesNo Return to: YesNo U.S. DOE/NPO Attn: Document Control O S05 King Avenue | ginator of Data: XWoodward-ClydeERTECUSGSORNL Stone & WebsterTBEGONWIPNL Bendix -GJNUSOther eck here if you wish to ceive a copy of this item: Return to: YesNo U.S. DOE/NPO Attn: Document Control Offi 505 King Avenue | Procedure for Dissemination to In | nterested Parties: Technical Memorandum DOE Report |
| Originator of Data: XWoodward-ClydeERTECUSGSORNL Stone & WebsterTBEGONWIPNL Bendix -GJNUSOther Check here if you wish to receive a copy of this item: Return to: YesNo Return to: YesNo U.S. DOE/NPO Attn: Document Control O S05 King Avenue | ginator of Data: XWoodward-ClydeERTECUSGSORNL Stone & WebsterTBEGONWIPNL Bendix -GJNUSOther eck here if you wish to ceive a copy of this item: Return to: YesNo U.S. DOE/NPO Attn: Document Control Offi 505 King Avenue | • | |
| | Stone & WebsterTBEGONWIPNL Bendix -GJNUSOther eck here if you wish to ceive a copy of this item: Return to: YesNo U.S. DOE/NPO Attn: Document Control Offi 505 King Avenue | Date Dissemination is Planned: | \$115/83 |
| Check here if you wish to receive a copy of this item: Yes No Name: U.S. DOE/NPO Attn: Document Control O 505 King Avenue | eck here if you wish to ceive a copy of this item: Return to: Yes No une: Solution Solution Solution Solution< | | |
| receive a copy of this item: Return to: YesNo U.S. DOE/NPO Name: 505 King Avenue | <pre>ceive a copy of this item: Return to: YesNo U.S. DOE/NPO ne: 505 King Avenue Attn: Document Control Offi 505 King Avenue 505 K</pre> | Originator of Data: XWoodward- | ClydeERTECUSGSORNL |
| YesNo U.S. DOE/NPO Name: SO5 King Avenue | Yes No U.S. DOE/NPO Attn: Document Control Offi 505 King Avenue | Originator of Data: <u>X</u> Woodward- Stone & W | ClydeERTECUSGSORNL NebsterTBEGONWI PNL |
| Name: 505 King Avenue | ne: 505 King Avenue | Originator of Data: <u>X</u> Woodward- Stone & W Bendix -G Check here if you wish to | ClydeERTECUSGSORNL NebsterTBEGONWI PNL GJNUSOther |
| Address: Columbus, OH 43201 | iress: Columbus, OH 43201 | Originator of Data: <u>X</u> Woodward- Stone & W Bendix -G Check here if you wish to receive a copy of this item: | ClydeERTECUSGSORNL NebsterTBEGONWI PNL GJNUSOther Return to: U.S. DOE/NPO |
| | | Originator of Data: <u>X</u> Woodward- Stone & W Bendix -G Check here if you wish to receive a copy of this item: YesNo | ClydeERTECUSGSORNL NebsterTBEGONWIPNL GJNUSOther Return to: U.S. DOE/NPO Attn: Document Control Offi 505 King Avenue |

3

.

`• ·

•

.

.

•

.

.....

•

| INDEX SHEET | H |
|--------------------------------------------------------|-------------------------------------------------------------------------------------|
| U.S.DOE/NPO | PROGRAM TO PROVIDE INFORMATION/ DATA ON THE SALT PROJECT |
| <u>X</u> Work in Progress Final Product/Report | Type of Data: <u>Draft Report</u> WBS # <u>1.3,3,44</u> |
| Basin:Gulf Coast Title/ ParadoxR PermianR | Description: <u>Geophysics</u> Topical |
| at the interpretation . | will present the results Feeismic reflection lin aeromagne tic survey |
| Punchasal for The Po | -adex Basin NWTS Progra |
| Status: X In processPlanned | |
| Expected Date of Availability:7/ | 29/83 |
| | ested Parties: Technical Memorandum |
| Date Dissemination is Planned: $g/$ | 29/83 |
| Originator of Data: <u>X</u> Woodward-Clyde | |
| Stone & Webste | erTBEGONWI PNL |
| Bendix -GJ | |
| Check here if you wish to receive a copy of this item: | Return to: |
| YesNo Name: Address: | U.S. DOE/NPO Attn: Document Control Off 505 King Avenue Columbus, OH 43201 |
| | |

.

•

•

•

·

.

.

| U.S.DOE/NPO | PROGRAM TO PROVIDE INFORMATION |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>X</u> Work in Progress Final Product/Report | Type of Data: <u>Draft Report</u> WBS # 1, 3, 3, 4 |
| Basin:Gulf CoastT Y Paradox Permian | e/Description: Lithufacies Topical Report |
| Abstract/Summary: The report pre | there - diene sien al model for |
| St. dy conducted to for duce a | There-diene-siend medel at ? |
| | cies and thickness changes that |
| within the Devenien through | Permian strata in the study. |
| Status: X In process Planned | Published Other |
| Expected Date of Availability: 5 | /31/83 |
| | ents on Final ReportOther |
| Solicited Comme To be included in report: (Title) Procedure for Dissemination to Inte Subcontractor Data Report | ents on Final ReportOther erested Parties:Technical Memorand |
| Solicited Comme To be included in report: (Title) Procedure for Dissemination to Inte Subcontractor Data Report X Formal Contractor Report.(e.g. | ents on Final ReportOther erested Parties:Technical Memorand ONWI ReportDOE Report |
| Solicited Comme To be included in report: (Title) Procedure for Dissemination to Inte Subcontractor Data Report X Formal Contractor Report.(e.g. | ents on Final ReportOther erested Parties:Technical Memorand ONWI ReportDOE Report ., TBEG Well Completion Report)Othe |
| Solicited Comme To be included in report: (Title) Procedure for Dissemination to Inte Subcontractor Data Report X Formal Contractor Report.(e.g. Date Dissemination is Planned: Originator of Data: XWoodward-Cly | ents on Final ReportOther erested Parties:Technical Memorand ONWI ReportDOE Report ., TBEG Well Completion Report)Othe |
| Solicited Comme To be included in report: (Title) Procedure for Dissemination to Inte Subcontractor Data Report X Formal Contractor Report.(e.g. Date Dissemination is Planned: Originator of Data: XWoodward-Cly | erested Parties: Technical Memorand ONWI Report DOE Report , TBEG Well Completion Report) Othe 30 30 30 30 30 30 30 30 30 30 30 30 30 |
| Solicited Comme To be included in report: (Title) Procedure for Dissemination to Inte Subcontractor Data Report X Formal Contractor Report,(e.g. Date Dissemination is Planned: Originator of Data: X Woodward-Cly Stone & Webs | erested Parties: Technical Memorand ONWI Report DOE Report , TBEG Well Completion Report) Othe 30 30 30 30 30 30 30 30 30 30 30 30 30 |
| Solicited Comme To be included in report: (Title) Procedure for Dissemination to Inte Subcontractor Data Report X Formal Contractor Report, (e.g. Date Dissemination is Planned: Originator of Data: X_Woodward-Cly Stone & Webs Stone & Webs Stone & Webs Stone & Webs Stone & Webs | ents on Final ReportOther erested Parties:Technical Memorand ONWI ReportDOE Report ., TBEG Well Completion Report)Othe ., TBEG Well Completion Report)Othe ., TBEG Well Completion Report)Othe ., TBEGONWIPNL sterTBEGONWIPNL NUSOther Return to: U.S. DOE/NPO |
| Solicited Comme To be included in report: (Title) Procedure for Dissemination to Inte Subcontractor Data Report X Formal Contractor Report, (e.g. Date Dissemination is Planned: Date Dissemination is Planned: Originator of Data: X Woodward-Cly Stone & Webs Stone & Webs | ents on Final ReportOther erested Parties:Technical Memorand ONWI ReportDOE Report , TBEG Well Completion Report)Othe , TBEG Well Completion Report)Othe , TBEG Well Completion Report)Othe , TBEGONWIPNL sterTBEGONWIPNL NUSOther Return to: U.S. DOE/NPO Attn: Document Control (505 King Avenue |
| Solicited Comme To be included in report: (Title) Procedure for Dissemination to Inte Subcontractor Data Report X Formal Contractor Report, (e.g. Date Dissemination is Planned: Originator of Data: X Woodward-Cly Stone & Webs Stone & Webs | ents on Final ReportOther erested Parties:Technical Memorand ONWI ReportDOE Report , TBEG Well Completion Report)Othe , TBEG Well Completion Report)Othe , TBEG Well Completion Report)Othe , TBEGONWIPNL NUSOther Return to: U.S. DOE/NPO Attn: Document Control (|

9

.

•

.

.

۰.

٠

.

•

:

| U.S.DOE/NPO | INDEX SHEET | | D PROVIDE INF HE SALT PROJE | |
|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <u>X</u> Work in Progress Final Product/Rep | | pe of Data:_ S # | Draft Repor | <i>T</i> |
| Basin: Gulf Co Parado; Permia; | ע <i>י</i> ע | scription: | <u>Scismology</u> | Tupical |
| of seignalogy | his report us, a studies a ding the open | f the | Prodar | Basin |
| | ie ne tur | , | · · · · | |
| | ess Planned ailability: <u>6/15/8</u> | | Other | <u></u> |
| | ONWI-Internal (n | OE/NPO | Technical Pee | er Group |
| Planned Review: X To be included in r | ONWI-Internal LD Solicited Comments eport: (Title) <u>Seis</u> <u>Crecede Pla</u> | on Final Re | port _ Other <u>fthe Pa</u> | <u> </u> |
| Planned Review: <u>X</u> To be included in r <u>Basin and Ma</u> Procedure for Disse Subcontractor | Solicited Comments eport: (Title) <u></u> | on Final Report | port Other <u>Fthe Pa</u> <u>Enterion</u> Technica DOE Report | A Memorandum |
| Planned Review: X To be included in re <u>Basin and Ma</u> Procedure for Disser Subcontractor Formal Contrac | Solicited Comments eport: (Title) <u>Seis</u> <u>Creense</u> <u>Pla</u> mination to Interest Data Report <u>X</u> ONWI tor Report.(e.g., TB is Planned: <u>7</u> <u>8</u> /157 | on Final Rep <u>m</u> , <u>c</u> , <u>f</u> <u>fe</u> <u>c</u> <u>fe</u> <u>fe</u> <u>c</u> <u>fe</u> <u>fe</u> <u>c</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> | port Other <u>f the fa</u> <u>F the fa</u> <u>Technica</u> DOE Report pletion Report | A Memorandum |
| Planned Review: X To be included in re <u>Basin and Ma</u> Procedure for Disser Subcontractor Formal Contrac | Solicited Comments eport: (Title) <u>Sois</u> <u>Constants</u> mination to Interest Data Report <u>X</u> ONWI tor Report.(e.g., TB is Planned: <u>7</u> 8 /157 <u>X</u> Woodward-Clyde | on Final Rep <u>m</u> , <u>c</u> , <u>f</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> | port Other <u>f the fa</u> <u>F the fa</u> <u>Technica</u> DOE Report pletion Report USGS | Al Memorandum rt)Other: ORNL |
| Planned Review: X To be included in re <u>Basin and Ma</u> Procedure for Disser Subcontractor Formal Contrac | Solicited Comments eport: (Title) <u>Seis</u> <u>Creense</u> <u>Pla</u> mination to Interest Data Report <u>X</u> ONWI tor Report.(e.g., TB is Planned: <u>7</u> <u>8</u> /157 | on Final Rep <u>m</u> , <u>c</u> , <u>f</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>c</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> <u>fe</u> | port Other <u>f the fa</u> <u>F the fa</u> <u>Technica</u> DOE Report pletion Report USGS | Al Memorandum rt)Other: ORNL |
| Planned Review: X To be included in re <u>Basin and Ma</u> Procedure for Disser Subcontractor Formal Contrac | Solicited Comments eport: (Title) <u>Seig</u> <u>Create</u> <u>Pla</u> mination to Interest Data Report <u>X</u> ONWI tor Report.(e.g., TB is Planned: <u>7</u> <u>8</u> /157 <u>X</u> Woodward-Clyde <u>Stone & Webster</u> <u>Bendix -GJ</u> ish to | on Final Rep <u></u> | port Other <u>f the fa</u> <u>F the fa</u> <u>F the fa</u> <u>Technica</u> DOE Report pletion Report USGS ONWI | Al Memorandum rt)Other: ORNL |

.....

.....

| | INDEX SHEET | | | 17 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| U.S.DOE/NPO | | | PROVIDE INFORMATION E SALT PROJECT | v – |
| X Work in Progress | ту | vpe of Data: | Dreft Report 3, 4 | |
| Final Product/Repo | we | 3S # | 7, 4 | |
| Basin:Gulf Coa Paradox Permian | st Title/De | escription: | SALT VALLEY ACR | |
| Abstract/Summary: 1 chance teriza Astudy anea | This report is tica report in Seathe | E a que - Fir i acter li | the Salt Va Tab. | <u>, ic</u> 11 - y |
| Status: X In proces | | | Other | |
| Expected Date of Avai | | | | |
| | Solicited Comments | on Final Re | oortOther | |
| To be included in rep for the Paradex Reci- Procedure for Dissem Subcontractor 1 | Solicited Comments Sort: (Title) <u>Gec</u> Stady Fegues 1 ination to Interes Data Report <u>K</u> ONW | on Final Re <u> coic Change</u> It h Staly ted Parties: I Report | oortOther <u>cte_:zation Repr</u> <u>Acces Ucl. III Sull</u> Technical Memor | <u>- †</u> † <i>Uz11</i> randum |
| To be included in rep for the Paradex Reci- Procedure for Dissem Subcontractor 1 | Solicited Comments Sort: (Title) <u>Gec</u> Stady freques ination to Interes Data Report <u>(</u> ONW or Report, (e.g., T | on Final Re <u> coic Change</u> It h Staly ted Parties: I Report | portOther <u>cte_:zetia</u> <u>Repr</u> <u>Reas Ucl.IIT Sull</u> Technical Memor DOE Report | <u>- †</u> † <i>Uz11</i> randum |
| To be included in rep for the Paradex Reci- Procedure for Dissem Subcontractor I Formal Contractor | Solicited Comments Sort: (Title) <u>Gec</u> <i>Stady freques</i> ination to Interes Data Report <u>K</u> ONW or Report.(e.g., The s Planned: <u>8</u> | on Final Rep <i>caic Chara</i> <i>It & St. J.</i> ted Parties: I Report BEG Well Com | portOther <u>cte_:zetia</u> <u>Repr</u> <u>Reas Ucl.IIT Sull</u> Technical Memor DOE Report | <u>- †</u> † <i>Uz11</i> randum |
| To be included in rep for the Paradex Reci- Procedure for Dissem Subcontractor I Formal Contractor Date Dissemination is | Solicited Comments Sort: (Title) <u>Gec</u> <i>Stady freques</i> ination to Interes Data Report <u>K</u> ONW or Report.(e.g., The s Planned: <u>8</u> | on Final Re <u>agic Chara</u> <u>it h Stal</u> ted Parties: I Report BEG Well Com <u></u> <u></u> <u></u> ERTEC | portOther <u>cte_:zctizc Repr</u> <u>Acces Unl III Sull</u> Technical Memor DOE Report pletion Report)O | <u>- †</u> † <i>Uz11</i> randum |
| To be included in rep for the Paradex Reci- Procedure for Dissem Subcontractor I Formal Contractor Date Dissemination is | Solicited Comments Sort: (Title) <u>Gec</u> <i>Study fieques</i> ination to Interes Data Report <u>K</u> ONW or Report,(e.g., T S Planned: <u></u> <u>X</u> Woodward-Clyde | on Final Re <u>agic Class</u> <u>if 6 Stal</u> ted Parties: I Report BEG Well Com <u></u> <u></u> ERTEC TBEG | DortOther <u>ctc.:zction</u> <u>Repr</u> <u>A</u> | <u>- +</u> + <i>U_2 </i> randum |
| To be included in rep for the local for Dissem | Solicited Comments Sort: (Title) <u>Gec</u> <i>Stady feque</i> ination to Interes Data Report <u>M</u> ONW or Report.(e.g., The Solicited Comments <u>X</u> Woodward-Clyde <u>Stone & Webster</u> <u>Bendix -GJ</u> Sh to | on Final Rep <u>on Final Rep</u> <u>ted Parties:</u> I Report BEG Well Com <u></u> <u></u> ERTEC _ | DortOther <u>cte_:zetis.</u> <u>Repr</u> <u>Resected III Sull</u> Technical Memor DOE Report DOE Report pletion Report)O USGSORNL ONWIPNL Other | <u>- †</u> † <i>Uz11</i> randum |
| To be included in rep <u>for the localex for</u> Procedure for Dissem Subcontractor I Formal Contractor Date Dissemination in Originator of Data: Check here if you wi receive a copy of th | Solicited Comments Sort: (Title) <u>Gec</u> <i>Stady feque</i> ination to Interes Data Report <u>M</u> ONW or Report.(e.g., The Solicited Comments <u>X</u> Woodward-Clyde <u>Stone & Webster</u> <u>Bendix -GJ</u> Sh to | on Final Rep <i>concenter</i> <i>ted Parties:</i> I Report BEG Well Com <i>LERTEC</i> Retur | portOther <u>cfe_:zcf;zc Repr</u> <u>Acc Vol. IIT Sull</u> Technical Memor DOE Report pletion Report)O USGSORNL ONWIPNL Other n to: | <u>- +</u> + <i>U_2 </i> randum |
| To be included in rep for the local for Dissem | Solicited Comments Sort: (Title) <u>Gec</u> <i>Stady freques</i> ination to Interes Data Report <u>MONW</u> or Report.(e.g., The S Planned: <u>B</u> <u>X</u> Woodward-Clyde <u>Stone & Webster</u> Bendix -GJ sh to is item: | on Final Re <u>a c Chara</u> <u>t c Stal</u> <u>ted Parties:</u> I Report BEG Well Com <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> RETEC <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> | portOther <u>ctc_:zctizckept</u> <u>Accs Ucl JT 5.11</u> Technical Memor DOE Report pletion Report)O USGSORNL ONWIPNL Other n to: S. DOE/NPO tn: Document Control | <u>-</u> |
| To be included in rep <u>for the Pacedox Reci</u> Procedure for Dissem Subcontractor I Subcontractor I Formal Contractor Date Dissemination is Originator of Data: Check here if you wi receive a copy of th YesNo Name: | Solicited Comments Sort: (Title) <u>Gec</u> <i>Stady feques</i> ination to Interess Data Report <u>M</u> ONW or Report.(e.g., The s Planned: <u><u>S</u> <u>X</u> Woodward-Clyde <u>Stone & Webster</u> <u>Bendix</u> -GJ sh to is item:</u> | on Final Re <u>a</u> , <u>c</u> <u>C</u> <u>a</u> , <u>c</u> <u>c</u> <u>c</u> <u>c</u> <u>c</u> <u>c</u> <u>c</u> <u>c</u> | portOther <u>cfe:zcfizeRepr</u> <u>AeggUrl_JTSull</u> Technical Memor DOE Report pletion Report)O USGSORNL ONWIPNL Other n to: S. DOE/NPO tn: Document Control 5 King Avenue | <u>-</u> |
| To be included in rep for the local for Dissem | Solicited Comments Sort: (Title) <u>Gec</u> <i>Stady feques</i> ination to Interess Data Report <u>M</u> ONW or Report.(e.g., The s Planned: <u><u>S</u> <u>X</u> Woodward-Clyde <u>Stone & Webster</u> <u>Bendix</u> -GJ sh to is item:</u> | on Final Re <u>a</u> , <u>c</u> <u>C</u> <u>a</u> , <u>c</u> <u>c</u> <u>c</u> <u>c</u> <u>c</u> <u>c</u> <u>c</u> <u>c</u> | portOther <u>ctc_:zctizckept</u> <u>Accs Ucl JT 5.11</u> Technical Memor DOE Report pletion Report)O USGSORNL ONWIPNL Other n to: S. DOE/NPO tn: Document Control | <u>-</u> |

.

۰.

¥ .

.

·· .

:

.....

۰.

.

•

| U.S.DOE/N | P0 | INDEX SHEET | | | PROVIDE IN SALT PROJ | |
|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| | n Progress Product/Report | | Type of D WBS # | ata: 13_3 | Diast Rej | cort |
| Basin: | Gulf Coast Paradox Permian | | /Descripti Report | on:4 | Duaterna | <u>y Topica</u> |
| Abstract/ Quaters of The | Summary: <u>76:5</u> any investi Pocalex Bo | gations a cin Au | enducts | and s | erize | the public tion R |
| Status: | χ In process | Planned | Publist | ned | . Other | |
| Expected | Date of Availab | ility: <u>7/</u> | 1/83 | - | | |
| Planned R | eview: X ONWI | -Internal | | | | |
| | luded in report | · (Title) & | | An | . J. Sum | mary |
| To be inc $c \neq Q_{4}$ | eter nany J | westig of | esalls ilus i | - <i>tl</i> | e Parus | lex Bu |
| <u>ef</u> Qu Procedure Sub | for Dissemination for Dissemination contractor Data | ion to Inter Report A 0 | rested Part | ties: t _ [| <u> </u> | al Memor |
| ef Que Procedure Sub Form | for Disseminat | ion to Inter Report $\cancel{0}$ eport, (e.g., | rested Part | ties: t _ [| <u> </u> | al Memor |
| eff Que Procedure Sub Form Date Diss | for Dissemination contractor Data mal Contractor R | ion to Inter Report $\cancel{0}$ eport, (e.g., anned: $\cancel{9}$ | ested Part NWI Report TBEG Well | ties: t [Comp] | <u> </u> | al Memor |
| ef Qu Procedure Sub Form Date Diss | for Disseminat contractor Data al Contractor R emination is Pl or of Data: <u>X</u> W | ion to Inter Report $\cancel{0}$ eport, (e.g., anned: $\cancel{9}$ | ested Part NWI Report TBEG Well | ties: t [Comp] | Technic Technic DOE Report letion Repo | al Memor |
| ef Qu Procedure Sub Form Date Diss | for Dissemination contractor Data mal Contractor R cemination is Pl or of Data: <u>X</u> W S | ion to Inter Report & O eport, (e.g., anned: oodward-Clyo | ested Part NWI Report TBEG Wel ///// /// / / / / / / / / / / / / / | ties: tf Compi | Technic Technic DOE Report letion Repo USGS | al Memor |
| cf Que Procedure Sub Form Date Diss Originato Check her | for Dissemination contractor Data mal Contractor R mination is Pl or of Data: XW S B re if you wish t | ion to Inter Report A O eport, (e.g., anned: oodward-Clyo tone & Webst endix -GJ 0 | ested Part NWI Report TBEG Wel ///// //// / //// / / / / / / / / / | ties: tf Compi | Technic DOE Report Letion Report USGS ONWI Other | cal Memor ort) C |
| c F Que Procedure Sub Form Date Diss Originato Check her receive a | for Dissemination contractor Data mal Contractor R mination is Pl or of Data: XW S B | ion to Inter Report A O eport, (e.g., anned: oodward-Clyo tone & Webst endix -GJ 0 | ested Part NWI Report TBEG Wel ///// //// / //// / / / / / / / / / | ties: t[Compi Compi FEC EG S Return U.S | Technic DOE Report Letion Report USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS USGS | al Memor |
| cf Que Procedure Sub Form Date Diss Originato Check her receive a Yes | for Dissemination contractor Data mal Contractor R mination is Pl or of Data: XW S B re if you wish t copy of this i | ion to Inter Report & O eport, (e.g., anned: oodward-Clyo tone & Webst endix -GJ o tem: | ested Part NWI Report TBEG Wel ///// //// / //// / / / / / / / / / | ties: t[Comp] Comp] TEC EG S Return U.S Att | Technic DOE Report Letion Report USGS USGS ONWI Other to: | al Memor ort) C ORNL PNL |

•

.

......

•

.....

| | INDEX SHEET | | · · · · · · · · · · · · · · · · · · · | Ĺ | PRAL |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------|--------------|
| U.S.DOE/NPO | | PROGRAM TO DATA ON TH | PROVIDE II | | - <u>1</u> |
| ⊥ Work in Progress | | Type of Data: WBS # | Draft Re | port | |
| Final Product/Rep | port | WBS #_ <u>1,3,5</u> | 4' | , | |
| Basin:Gulf Co <u>x</u> Paradox Permiar | < <u>-</u> | Description: <u>1</u> Topical Repor | | Study are | <u>es</u> |
| Abstract/Summary: <u>7</u> 2 | is frepart co | atoins a v | e-evelue | tion of | <u>74</u> e |
| Para dex Besie | Region t. d | etermine | :fony | Partso | £ |
| the Basi's the | | | | | |
| might be suitely | le fina men | c de trilero | lention a | ele nue | <u> </u> - |
| Status: <u>A</u> In proc | • | | Other | | |
| Expected Date of Ava | | • | | | |
| Planned Review: 🕺 | ONWI-Internal 📈 | DOE/NPO 1 | Technical P | eer Group | |
| | Solicited Comment | | | | |
| | Solicited Comment eport: (Title) <u>J</u> | s on Final Rep | oort Oth | er | un te |
| To be included in r | eport: (Title) <u>I</u> | es on Final Rep continetion | port Oth | er | <u>u, te</u> |
| To be included in re <u>Stady Areas In</u> Procedure for Disse | eport: (Title) <u>In</u> <u>+6. Panadrx</u> mination to Intere | ested Parties: | port Oth <u> </u> | er tis (<u>Alte</u> cal Memoral | |
| To be included in re <u>Glady Arcas In</u> Procedure for Disse Subcontractor | eport: (Title) <u>In</u> <u>+4. Paradex</u> mination to Intere Data Report <u>N</u> OM | ested Parties: | Dort Oth <u>f fe ten</u> <u>g is 5</u> Techni DOE Report | er Lie (<u>Alte</u> cal Memoral | ndum |
| To be included in re <u>Glady Arcas In</u> Procedure for Disse Subcontractor | eport: (Title) <u>In</u> <u>+6. Panadrx</u> mination to Intere | ested Parties: | Dort Oth <u>f fe ten</u> <u>g is 5</u> Techni DOE Report | er Lie (<u>Alte</u> cal Memoral | ndum |
| To be included in re <u>Glady Arcas In</u> Procedure for Disse Subcontractor | eport: (Title) \underline{I}_{n} <u>+1.</u> <u>Paradrx</u> mination to Intere Data Report <u>N</u> ON tor Report, (e.g., | ested Parties: WI Report TBEG Well Com | Dort Oth <u>f fe ten</u> <u>g is 5</u> Techni DOE Report | er Lie (<u>Alte</u> cal Memoral | ndum |
| To be included in re <u>Glody Areas In</u> Procedure for Disser Subcontractor Formal Contrac | eport: (Title) $\underline{f_n}$ $\underline{f_n}$ $\underline{f_n}$ mination to Intere Data Report \underline{M} ON tor Report, (e.g., is Planned: $\underline{f_n}$ | ts on Final Rep $\frac{1}{B_{c} < \frac{1}{2}}$ ested Parties: WI Report TBEG Well Comp $\frac{1}{2}$ | Dort Oth <u>f fe ten</u> <u>g is 5</u> Techni DOE Report | er Lie (<u>Alte</u> cal Memoral | ndum |
| To be included in re <u>Formal Contractor</u> Date Dissemination | eport: (Title) <u>In</u> <u>+1.</u> <u>Panadax</u> mination to Intere Data Report <u>MON</u> tor Report.(e.g., is Planned: <u>6</u> <u>X</u> Woodward-Clyde Stone & Webste | cs on Final Rep <u>Bested Parties:</u> WI Report TBEG Well Comp <u>Constant</u> <u>Constant</u> <u>ERTEC</u> ERTEC ERTEC ERTEC | Dort Oth Techni DOE Report pletion Rep USGS ONWI | er La (Alte cal Memoral port) Oth | ndum |
| To be included in re <u>Formal Contractor</u> Date Dissemination | eport: (Title) <u>In</u> <u>+1.</u> <u>Paradex</u> mination to Intere Data Report <u>M</u> ON tor Report, (e.g., is Planned: <u>6</u> 1 /2 <u>X</u> Woodward-Clyde | es on Final Rep <u>Basic</u> Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basic Basi | Dort Oth Techni DOE Report pletion Rep USGS | er <u>fie (AHte</u> cal Memoran cal Memoran port) Oth ORNL | ndum |
| To be included in re <u>for a Arcas In</u> Procedure for Disses Subcontractor Formal Contrac Date Dissemination Originator of Data: Check here if you w | eport: (Title) <u>In</u> <u>+1.</u> <u>Panadax</u> mination to Intere Data Report <u>MON</u> tor Report, (e.g., <u>X</u> Woodward-Clyde <u>Stone & Webste</u> Bendix -GJ | es on Final Rep <u>Basic</u> Ested Parties: WI Report TBEG Well Comp <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u>Carton</u> <u></u> | Dort Oth Techni DOE Report pletion Rep USGS USGS ONWI Other | er <u>fie (AHte</u> cal Memoran cal Memoran port) Oth ORNL | ndum |
| To be included in re <u>for Arcas In</u> Procedure for Disser Subcontractor Formal Contrac Date Dissemination Originator of Data: Check here if you w receive a copy of t | eport: (Title) <u>In</u> <u>+1.</u> <u>Panadax</u> mination to Intere Data Report <u>MON</u> tor Report, (e.g., <u>X</u> Woodward-Clyde <u>Stone & Webste</u> Bendix -GJ | es on Final Rep <u>Basic</u> ested Parties: WI Report TBEG Well Comp <u>Carton</u> <u>Carton</u> <u>ERTEC</u> erTBEG NUS Retur | Dort Oth Techni DOE Report pletion Rep USGS USGS ONWI Other | er <u>fie (AHte</u> cal Memoran cal Memoran port) Oth ORNL | ndum |
| To be included in re <u>for a Arcas In</u> Procedure for Disses Subcontractor Formal Contrac Date Dissemination Originator of Data: Check here if you w | eport: (Title) <u>I</u> , <u>+1</u> , <u>Paradrx</u> mination to Intere Data Report <u>MON</u> tor Report, (e.g., <u>X</u> Woodward-Clyde <u>Stone & Webste</u> Bendix -GJ rish to his item: | cs on Final Rep cs on Final Rep cs ted Parties: WI Report TBEG Well Comp C ERTEC erTBEG NUS Retur U. At | Dort Oth Techni DOE Report pletion Rep USGS Other n to: | er cal Memoral port) Oth ORNL PNL ent Control | ndum her: |

·

| J.S.DOE/NPO | INULA SHELL | PROGRAM TO I DATA ON THE | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| X Work in Progress Final Product/Rep | Typ Dort WBS | be of Data: #/, 3, 3 | Draft Repo 4 | <i>л</i> |
| Basin: Gulf Co Paradox Permian | K Ton | scription: <u>H</u> Ical Rejort | | Modeline |
| results of th | his report will enumerical in the study | medili | <u>sum</u> <u>g</u> <u>e</u> f to | be hydre. |
| Status: <u>X</u> In proc | ess Planned | Published | Other | · |
| Expected Date of Av | ailability: <u>9/30/8</u> | 3 | _ | |
| | | | | |
| | CONWI-Internal <u>K</u> D Solicited Comments | | | |
| To be included in r | Solicited Comments eport: (Title) <u>Rer</u> | on Final Repo | ort Other | - I mode |
| To be included in r <u>ff the hydrolog</u> Procedure for Disse Subcontractor | Solicited Comments | on Final Repo <u>a / ts c f</u> <u>is the fail</u> ed Parties: Report | ort Other <u>Diam cais</u> <u>bsc_ Pam</u> <u></u> Technici DOE Report | e l'a de l' e Area de al Memorand |
| To be included in r <u>ffle hydrolog</u> Procedure for Disse <u>Subcontractor</u> Formal Contrac | Solicited Comments eport: (Title) \underline{Reg} \underline{f} \underline{f} | on Final Repo <u>a 175 cf</u> <u>i the Gi</u> ed Parties: Report EG Well Comp | ort Other <u>Diam cais</u> <u>bsc_ Pam</u> <u></u> Technici DOE Report | e l'a de l' e Area de al Memorand |
| To be included in r <u>ffle</u> <u>hydrolog</u> Procedure for Disse <u>Subcontractor</u> Formal Contrac Date Dissemination | Solicited Comments eport: (Title) <u>Res</u> <u>ic flow system</u> mination to Interest Data Report <u>C</u> ONWI | on Final Repo $a / f_s = c + \frac{1}{2}$ $a / f_s = c + \frac{1}{2}$ | ort Other <u>Diamagna</u> <u>bsc_Pen</u> Technici DOE Report Netion Repo | al Memorand |
| To be included in r <u>ffle</u> <u>hydrolog</u> Procedure for Disse <u>Subcontractor</u> Formal Contrac Date Dissemination | Solicited Comments eport: (Title) <u>Reg</u> <u>ic</u> <u>fl, system</u> mination to Interest Data Report <u>X</u> ONWI tor Report.(e.g., TE is Planned: <u></u> <u>Moodward-Clyde</u> <u>Stone & Webster</u> | on Final Repo $\frac{f_s}{f_s} = \frac{f_s}{f_s} = \frac{f_s}{f_s}$ red Parties: Report Report EG Well Comp $\frac{30}{33}$ ERTEC TBEG | ort Other <u>num const</u> <u>losca Decas</u> Technica DOE Report letion Repo USGS ONWI | |
| To be included in r <u>ffle</u> <u>hydrolog</u> Procedure for Disse <u>Subcontractor</u> Formal Contrac Date Dissemination | Solicited Comments eport: (Title) <u>Reg</u> <u>ic flow system</u> mination to Interest Data Report <u>CONWI</u> tor Report.(e.g., TE is Planned: <u></u> <u>X</u> Woodward-Clyde | on Final Repo $\frac{f_s}{f_s} = \frac{f_s}{f_s} = \frac{f_s}{f_s}$ red Parties: Report Report EG Well Comp $\frac{30}{33}$ ERTEC TBEG | ort Other <u>num const</u> <u>losca Decas</u> Technica DOE Report letion Repo USGS ONWI | |
| To be included in r <u>ffle</u> <u>hydrolog</u> Procedure for Disse <u>Subcontractor</u> Formal Contrac Date Dissemination | Solicited Comments eport: (Title) <u>Reg</u> <u>ic</u> <u>fl, system</u> mination to Interest Data Report <u>X</u> ONWI tor Report.(e.g., TE is Planned: <u>M</u> <u>X</u> Woodward-Clyde <u>Stone & Webster</u> <u>Bendix</u> -GJ wish to | on Final Repo $\frac{f_s}{f_s} = \frac{f_s}{f_s} = \frac{f_s}{f_s}$ red Parties: Report Report EG Well Comp $\frac{30}{33}$ ERTEC TBEG | ort Other <u>num cris</u> <u>bsc Dres</u> Technica DOE Report letion Repo USGS ONWI Other | al Memorand rt)Othe ORNL ONL |
| To be included in r <u>ff He hydrolog</u> Procedure for Disse Subcontractor Formal Contractor Date Dissemination Originator of Data: Check here if you w | Solicited Comments eport: (Title) <u>Reg</u> <u>ic</u> <u>fl, system</u> mination to Interest Data Report <u>X</u> ONWI tor Report.(e.g., TE is Planned: <u>M</u> <u>X</u> Woodward-Clyde <u>Stone & Webster</u> <u>Bendix</u> -GJ wish to | on Final Report | ort Other <u>ncm < c</u> <u>bsc Dem</u> Technica DOE Report letion Repo USGS ONWI Other to: DOE/NPO | |
| To be included in r <u>ff to hydrolog</u> Procedure for Disse Subcontractor Formal Contractor Date Dissemination Originator of Data: Check here if you you have receive a copy of the second s | Solicited Comments eport: (Title) <u>Reg</u> <u>ic</u> <u>fl, system</u> mination to Interest Data Report <u>X</u> _ONWI tor Report.(e.g., TE is Planned: <u></u> <u>X</u> Woodward-Clyde Stone & Webster Bendix -GJ wish to this item: | on Final Report <u>t</u> <u>t</u> <u>t</u> <u>t</u> <u>t</u> <u>t</u> <u>t</u> <u>t</u> | ort Other <u>ncm <</u> <u>bsc Dem</u> Technica DOE Report letion Repo USGS ONWI Other to: | al Memorand rt) Othe ORNL ORNL PNL |

• •

•

.....

•

.

•

| X Work in Progress Type of Data: | $\frac{4}{0ck} / Welen$ $\frac{1}{\sqrt{2}}$ $\frac{1}{\sqrt{2}} = \frac{1}{\sqrt{2}} \frac{1}{$ |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Abstract/Summary: This report will integrate</u> <u>Abstract/Summary: This report will integrate</u> <u>And water chemistry in formation fractor fraction</u> <u>area in to a concepteal model of</u> <u>interaction</u> Status: <u>X</u> In process <u>Planned Published</u> Expected Date of Availability: <u>9/30/83</u> Planned Review: <u>X</u> ONWI-Internal <u>X</u> DOE/NPO <u>To</u> <u>Solicited Comments on Final Report</u> To be included in report: (Title) <u>Concepteal</u> <u>ULtor interactions in a gratice of</u> Procedure for Dissemination to Interested Parties: <u>Subcontractor Data Report <u>X</u>ONWI Report <u></u></u> | mineral opinion for the Cibs of the ci |
| <u>And water chemistics in formation to</u> <u>area is to a conceptual model of</u> <u>interaction</u> Status: <u>Y</u> In process <u>Planned Published</u> Expected Date of Availability: <u>9/30/83</u> Planned Review: <u>X</u> ONWI-Internal <u>X</u> DOE/NPO <u>To</u> <u>Solicited Comments on Final Reputed</u> To be included in report: (Title) <u>Conceptual</u> <u>Witer interactions in a protection of To</u> Procedure for Dissemination to Interested Parties: <u>Subcontractor Data Report <u>X</u>ONWI Report <u></u></u> | $\frac{f_{c}}{c_{oc}} + \frac{f_{c}}{c_{oc}} + \frac{f_{c}}{c_$ |
| <u>in Terraction</u> Status: <u>Y</u> In process <u>Planned</u> <u>Published</u> Expected Date of Availability: <u>9/30/83</u> Planned Review: <u>X</u> ONWI-Internal <u>X</u> DOE/NPO <u>To</u> <u>Solicited Comments on Final Report</u> To be included in report: (Title) <u>Conceptual</u> <u>W.tor</u> in to conceptual <u>Procedure for Dissemination to Interested Parties:</u> <u>Subcontractor Data Report</u> <u>X</u> ONWI Report <u></u> | Other echnical Peer Gr ortOther $M_c \int_c \int_c f' K_c$ |
| Expected Date of Availability: <u>9/30/83</u> Planned Review: <u>X</u> ONWI-Internal <u>X</u> DOE/NPO <u>To</u> <u>Solicited Comments on Final Reported Comments on Final Reported Comments on Final Reported Comments on Final Reported Concepted Automatic Concepted Automatic Concepted Automatic Concepted Comments on Final Report <u>Final Concepted Automatic Concepted Automatic Concepted Automatic Concepted Automatic Concepted C</u></u> | echnical Peer Gr $DrtOther M_c \int_C \int_C \int_C K_c$ |
| Planned Review: \times ONWI-Internal \times DOE/NPO Solicited Comments on Final Reputed To be included in report: (Title) <u>Concepted</u> <u>W.to. in toractions in a grantice of The</u> Procedure for Dissemination to Interested Parties: Subcontractor Data Report <u>K</u> ONWI Report | Medelof R |
| Solicited Comments on Final Repu To be included in report: (Title) <u>Concepted</u> <u>W.tor in Toractions in a protection of To</u> Procedure for Dissemination to Interested Parties: Subcontractor Data Report <u>K</u> ONWI Report | Medelof R |
| <u>We too in to cactions in a grantice of Te</u> Procedure for Dissemination to Interested Parties: | Midelef R |
| Subcontractor Data Report ONWI Report | e Paradok D |
| | DOE Report |
| Date Dissemination is Planned: 10/30/83 | _ |
| Originator of Data: X Woodward-ClydeERTEC | USGSO |
| Stone & WebsterTBEG | |
| Bendix -GJNUS | Other |
| Check here if you wish to receive a copy of this item: Return | to: |
| | . DOE/NPO |
| Name: 505 | |
| Address:Co | n: Document Co King Avenue umbus, OH 4320 |

9

... •

•

¢ ...*

.... ч.

• •

•

•

4



USGS-OFR-83-141

USGS-OFR-83-141

and the second secon

an an taon an t

. . . .

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

. .

Geohydrologic and Drill-Hole Data for Test Well USW H-1,

Adjacent to Nevada Test Site, Nye County, Nevada

Open-File Report 83-141

1983

Prepared by the U.S. Geological Survey

for the

Nevada Operations Office U.S. Department of Energy (Interagency Agreement DE-AI08-78ET44802)

j.

GEOLOGIC CHARACTER OF TUFFS IN THE UNSATURATED ZONE AT YUCCA MOUNTAIN, SOUTHERN NEVADA

Robert B. Scott Richard W. Spengler Sharon Diehl U.S. Geological Survey, MS 954 Denver Federal Center Denver, CO 80225 A. R. Lappin Sandia National Laboratories Box 5800 Albuquerque, NM 87185 Michael P. Chornack Fenix & Scisson Box 498 Mercury, NV 89023

ABSTRACT

At Yucca Mountain, a potential site for a high-level nuclear waste repository on the Nevada Test Site in southern Nevada, evaluation of the geologic setting and rock physical properties, along with previous regional hydrologic studies, has provided background that can be used for construction of a preliminary conceptual hydrologic model of the unsaturated zone.

The 500-m-thick unsaturated portion of Yucca Mountain consists of alternating layers of two contrasting types of tuff. One type consists of highly fractured, densely welded, relatively nonporous but highly transmissive ash-flow tuffs. The other type consists of relatively unfractured, nonwelded, highly porous but relatively nontransmissive, argillic and zeolitic bedded tuffs and ash-flow tuffs. The contrast between these two sets of distinctive physical properties results in a stratified sequence best described as "physical-property stratigraphy" as opposed to traditional petrologic stratigraphy of volcanic rocks.

Superimposed on this layering are two sets of faults and fractures: one strikes north-northwest (N. 15° W. to N.

TWO-DIMENSIONAL, STEADY-STATE MODEL OF GROUND-WATER FLOW,

ايري و د د.

-

NEVADA TEST SITE AND VICINITY, NEVADA-CALIFORNIA

U.S. GEOLOGICAL SURVEY

WATER-RESOURCES INVESTIGATIONS 82-4085

Prepared in cooperation with the

U.S. DEPARTMENT OF ENERGY

2ⁱⁿ