

WM sf  
WMGT rf  
NMSS rf  
RBrowning  
MBell  
MKnapp  
MFliegel  
FRöss & rf  
JPohle  
PDR  
LPDR (B N S)  
EDavis, PPAS

NOV 12 1985

~~426.1/D1020/SR/85/11/12~~

- 1 -

Dr. Roy E. Williams  
Williams and Associates, Inc.  
P.O. Box 48  
Viola, ID 83872

Dear Dr. Williams:

As discussed by telephone, an NRC/SRP workshop on structure and tectonics of the Palo Duro Basin will be held in Columbus, Ohio on November 19-21, 1985. Roy Williams and Jeff Brown of your staff are required to attend under Subtask 3.2 of contract NRC-02-85-008.

You will not be participating as a supporting contractor. Your attendance should be oriented toward assuring that current interpretations of the structural configuration of the basin will be adequately accounted for in hydrogeologic conceptual models and testing plans.

Attached for your information is the workshop agenda which also describes the objective for the workshop.

The action taken by this letter is considered to be within the scope of the current contract NRC-02-85-008. No changes to cost or delivery of contracted services and products are authorized. Please notify me immediately if you believe that this letter would result in changes to cost or delivery of contracted products.

Sincerely,  
*151*

Jeffrey A. Pohle, Project Officer  
Hydrology Section  
Geotechnical Branch  
Division of Waste Management

Enclosure:  
As stated

cc: Barry Bromberg, ACB

WM-RES  
WM Record File  
D1020  
W+A

WM Project *10, 11, 16*  
Docket No. \_\_\_\_\_

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Distribution:

(Return to WM, 623-SS)

*SAC*

FC	WMGT	WMGT				
NAME	<i>FR</i> FRoss:d1	JPohle				
DATE	85/11/12	85/11/12				<i>2568</i>

Agenda  
Joint NRC/SRP Workshop  
November 19-21, 1985, Columbus, Ohio

STRUCTURE AND TECTONICS OF THE PALO DURO BASIN

**Objective:** Participants at this workshop will obtain an understanding of the current state of knowledge of the structural features of the Palo Duro Basin. The focus will be on evaluating the present structural configuration of the basin and its tectonic history and setting. Current seismicity and active tectonic processes in the region will not be discussed.

The data base from which structural interpretations have been made will be examined. The workshop will identify areas where contractor interpretations of existing data differ, and consider methods to resolve those differences.

November 19, 1985

8:30 - 10:00    OVERVIEW OF THE PALO DURO BASIN

- Current basis for definition and tectonic history.

J. Peck (SWEC)

10:00 - 12:00    DESCRIPTION OF DATA USED IN SRP'S  
STRUCTURAL STUDIES

- Seismic Lines. Includes: location of DOE-run and purchased lines, the quality of the data (resolution at depths of interest), the rationale for selection of specific lines, and the proprietary status of the information.

TBD (G.J. Long)  
E. Washer (SWEC)

- Types of processing of seismic information, including reasons for selecting specific processing techniques.

TBD (G.J. Long)  
R. Budnik (TBEG)

- Other geophysical data used to define structures.

M. Ferrigan (SRPO)

12:00 - 1:00    --- LUNCH ---

1:00 - 5:00    - Non-DOE wells. Includes: number and location of wells, lithologic and geophysical logs available, quality of the data, rationale for selection of wells to be included in the data base, and availability of the data for review by third parties.

P. Murphy (SWEC)  
E. Washer (SWEC)

- Summary of the borehole database. E. Washer (SWEC)  
P. Murphy (SWEC)
- DOE Wells. Includes: lithologic logs and geophysical logs available, stratigraphic correlations made, and application of well information to other studies (e.g. use of sonic logs to establish parameters for seismic processing). P. Murphy (SWEC)
- QA procedures for data collection/interpretation of borehole information. A. Foster (SWEC)  
E. Washer (SWEC)  
TBD (TBEG)
- Remote-sensed Imagery. Includes: types of imagery analyzed, application of remote-sensing to structural interpretation (e.g. lineament analysis), and "ground checking" of interpreted features. E. Collins (TBEG)  
TBD (SWEC)
- Surficial Geologic Analysis. Includes: field mapping, joint/fracture analysis, relation of mapped features to regional structures, (including recent interpretations of Pleistocene units). J. Peck (SWEC)  
E. Collins (TBEG)  
T. Gustavson (TBEG)

November 20, 1985

8:30 - 11:00 SYNTHESIS OF DATA

- Stratigraphic Correlations. Includes: development of structure contour maps of major units (including younger units such as the Dockum), development of isopach maps, and the types of data utilized in these studies. P. Murphy (SWEC)  
T. Gustavson (TBEG)
- Detailed Correlations. This will be a brief synopsis of material presented at the August 5-9 workshop in Austin. T. Gustavson (TBEG)

11:00 - 12:00 PARTS OF THE AVAILABLE DATA BASE NOT UTILIZED AND RATIONALE FOR EXCLUSION

- Summary of all available borehole and proprietary geophysical data and selection criteria for access by the program. E. Washer (SWEC)  
TBD (G.J. Long)

- Summary of available literature sources for structural interpretations of the Palo Duro Basin.

E. Washer (SWEC)  
E. Bingler (TBEG)

12:00 - 1:00

--- LUNCH ---

1:00 - 5:00

**INTERPRETATIONS OF THE STRUCTURAL GEOLOGY DATA BASE**

- Methods/Procedures for interpreting seismic data.

TBD (G.J. Long)  
R. Budnik (TBEG)

Extent to which available data (bore-hole stratigraphic information, surface mapping, seismic information published studies) has been integrated into a structural interpretation.

R. Budnik (TBEG)  
T. Gustavson (TBEG)  
P. Murphy (SWEC)  
J. Peck (SWEC)

- Effects of differing data interpretations or different data bases on structure/tectonic evaluations of the Palo Duro Basin.

TBD (TBEG)  
TBD (SWEC)

November 21, 1985

8:30 - end

**SUMMARY AND CONCLUSIONS**

- General types of additional studies necessary to resolve differing structural interpretations/hypotheses.
- Meeting summary and agreements.

All

SRPO, NRC

EXPECTED ATTENDEES

SRPO

J. Sherwin  
T. Baillieu  
M. Ferrigan  
A. Avel

ONWI

W. Newcomb  
J. Hileman  
A. Funk  
D. Ballman  
O. Swanson  
C. Kuntz

SWEC

J. Peck  
E. Washer  
A. Foster  
D. Pierce  
P. Murphy  
TBD (G.J. Long)

TBEG

E. Bingler  
J. Raney  
T. Gustavson  
R. Budnik  
E. Collins

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