

**Tenneco Oil**

A Tenneco Company

Penthouse  
720 South Colorado Blvd.  
Denver, Colorado 80222  
(303) 758-7130



CERTIFIED MAIL

Return Receipt Requested

April 22, 1980

New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Joe D. Ramey

New Mexico Oil Conservation Division  
1000 Rio Brazos Road  
Aztec, New Mexico 87401

Attention: F. T. Chavez

RE: Application for Unorthodox Location  
Tenneco Schwerdtfeger 1A  
Proposed Dakota Well  
San Juan County, New Mexico

*NSL-1199*  
*Rule 104-F*  
*Rule 3 R-1670*  
*May 19, 1980*  
*Basin-Dakota Gas Pool*  
*Bill Mendoza*

Gentlemen:

Attached in duplicate (to each office) are a well location plat C-102 and an ownership plat for the above captioned Dakota gas well.

The Schwerdtfeger 1A proposed site is 340' FNL, 1120' FWL, Section 21, T27N-R8W, San Juan County, New Mexico. This places the well only 340' from the boundary line of the proration unit. This was the only feasible site so that an archeological site could be avoided.

A copy of this application is being submitted to all offset operators by certified mail with a request that they furnish your Santa Fe office with a waiver of objection.

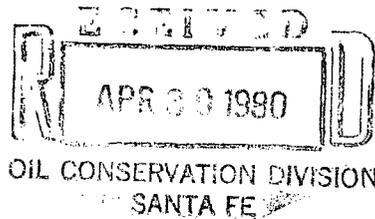
Pursuant to authority of Rule 104-F, we respectfully request your approval of an exemption to the standard well location requirements.

Very truly yours,

TENNECO OIL COMPANY

*J. M. Lacey*  
J. M. Lacey  
Division Production Manager

EMJ:efl  
Enclosures



W A I V E R

\_\_\_\_\_ hereby waives objection to Tenneco Oil Company's application for unorthodox location for their Schwerdtfeger 1A as proposed above.

By: \_\_\_\_\_  
Date: \_\_\_\_\_

All distances must be from the outer boundaries of the Section.

**RECEIVED**  
MAY 22 1980  
OIL CONSERVATION DIVISION  
SANTA FE

Operator <b>TENNECO OIL COMPANY</b>		Lease <b>SCHWERTFEGER</b>	
Unit Letter <b>D</b>	Section <b>21</b>	Township <b>27N</b>	Range <b>8W</b>
County <b>San Juan</b>			

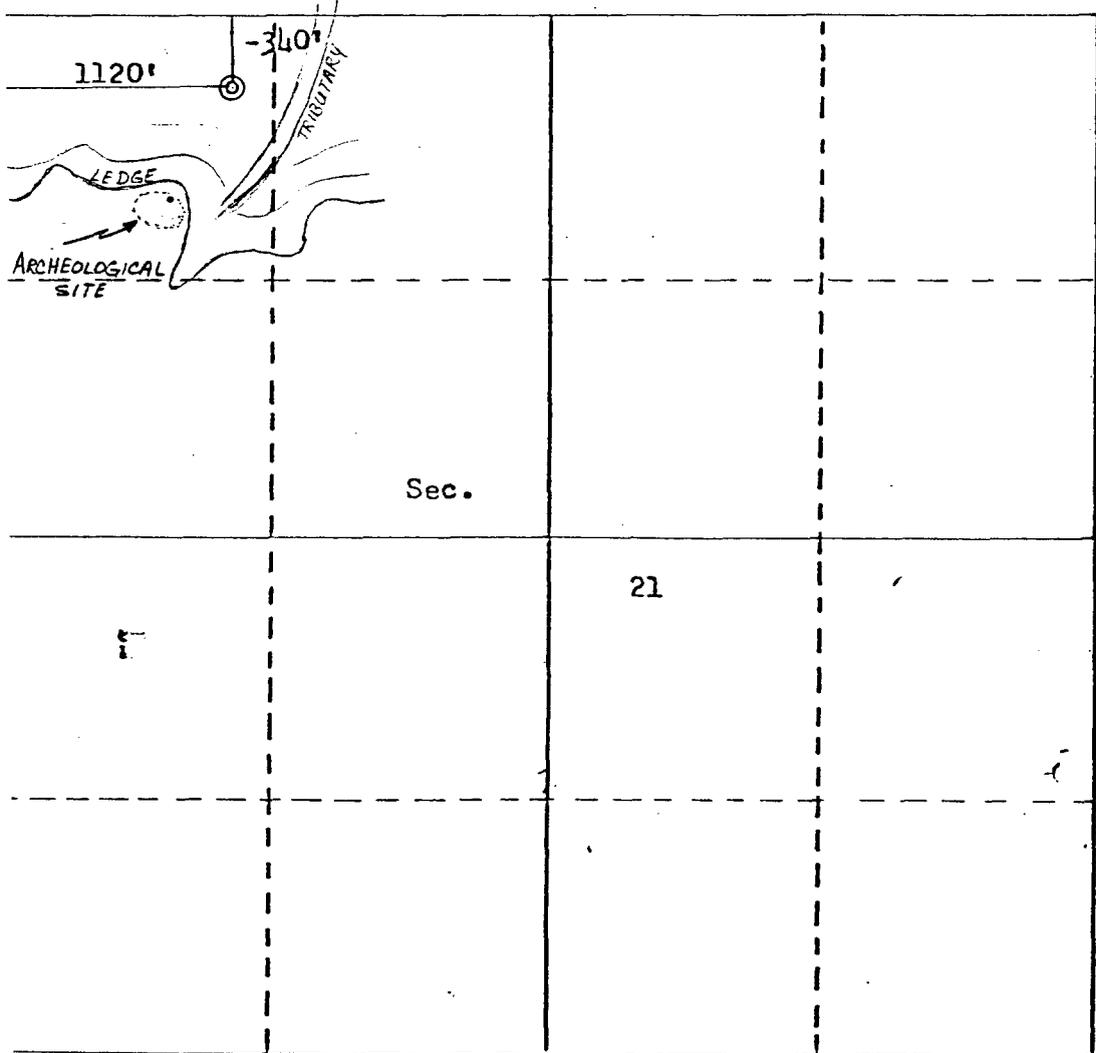
Actual Footage Location of Well:  
**340** feet from the **North** line and **1120** feet from the **West** line  
 Ground Level Elev. **6066** Producing Formation **Mesa Verde** Pool \_\_\_\_\_ Dedicated Acreage: \_\_\_\_\_ Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



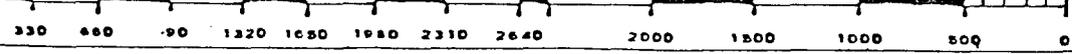
**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name \_\_\_\_\_  
 Position \_\_\_\_\_  
 Company \_\_\_\_\_  
 Date \_\_\_\_\_

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed **February 1, 1980**  
 Registered Professional Engineer and/or Land Surveyor  
*Fred B. Kerr, Jr.*  
**Fred B. Kerr, Jr.**  
 Certificate No. **KERR, JR. 3950**



OIL CONSERVATION COMMISSION  
By  
DISTRICT

RECEIVED  
MAY 15 1980

OIL CONSERVATION DIVISION  
SANTA FE

OIL CONSERVATION COMMISSION  
BOX 2088  
SANTA FE, NEW MEXICO

DATE May 12, 1980

RE: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL x \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

I have examined the application dated May 12, 1980  
for the Sonnew Oil Co. Schwerdtfeger #1A D-21-27N-8W  
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours very truly,

Frank S. Cherry

OIL CONSERVATION COMMISSION  
Alto DISTRICT

OIL CONSERVATION COMMISSION  
BOX 2088  
SANTA FE, NEW MEXICO

DATE April 25, 1980

RE: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL   x   \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

I have examined the application dated April 25, 1980  
for the Sennet Oil Co. Schwendtfege # 1 D-21-27N-8W  
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours very truly,

Frank J. Chavez

APR 25 1980  
OIL CO. N.M. DISTRICT  
SANTA FE



An Archaeological Survey Report for  
19 Gas Well Locations and Their Access Roads  
in San Juan County, New Mexico

for

Tenneco Oil Company

Locations

- |                         |                 |
|-------------------------|-----------------|
| Delhi-Taylor 5-E        | Tapp 3          |
| Delhi-Taylor 6-E        | Storey "D" 2    |
| Delhi-Taylor P.U.D. 1-E | Vandewart 2     |
| Delhi-Taylor P.U.D. 1-E | Jones 4         |
| Florence 117            | Price 2         |
| Johnston "B" 2          | Vandewart 1     |
| Warren Com 1            | Hughes 5        |
| Florence "C" 8-E        | Hughes 6        |
| <u>Schwerdtfeger 1</u>  | Kernaghan "A" 1 |
| Tapp 2                  |                 |

by

Penelope Whitten  
Assistant Archaeologist

Submitted by

Meade F. Kemrer, Ph.D.  
Principal Investigator

NOTE:  
SURVEY REPORTS  
CAN BE FOUND IN  
THE TAPP #2 WELL  
FILE.

DIVISION OF CONSERVATION ARCHAEOLOGY

Contributions to Anthropology Series, No. 196  
San Juan County Archaeological Research Center and Library

August 27, 1979

## Abstract

On August 8, 9, and 21, 1979 the Division of Conservation Archaeology of the San Juan County Archaeological Research Center and Library conducted an archaeological clearance survey of 19 gas well locations and 11 associated access roads for Tenneco Oil Company.

All areas surveyed are administered by the Bureau of Land Management. A possible forked-stick hogan and associated cultural debris (DCA 79-88) was found at the Schwerdtfeger 1 location. Owing to the topographic setting the well cannot be moved to avoid impacting this site. The Division of Conservation Archaeology recommends that the site be tested for evaluative purposes before a decision regarding archaeological clearance is made. A site of ambiguous cultural affiliation previously recorded by the Navajo Tribe as CRMP G-32-16 (DCA 79-87) was located to the north of the Delhi-Taylor P.U.D. 1-E well pad. The southern limits of the site were flagged and the Division of Conservation Archaeology recommends archaeological clearance for this location with the stipulation that pad construction be confined south of the flagged area. A brush windbreak and associated artifacts (DCA 79-90) were situated to the north of Price 2. The site is off the pad area and the Division of Conservation Archaeology recommends archaeological clearance for this location with the stipulation that the site be avoided. A structure, possibly a forked-stick hogan, (DCA 79-89), was found in the northwest corner of Tapp 3. The Division of Conservation Archaeology recommends archaeological clearance for this location with the stipulation that the area around the hogan be fenced.

Various ephemeral cultural manifestations were found in and around Warren Com 1, Florence "C" 8-E, Vandewart 1, and Kernaghams "A" 1. Because these manifestations lack further research potential, The Division of Conservation Archaeology recommends archaeological clearance for these locations. The remainder of the locations contained no cultural resources within the direct or indirect impact zones. Archaeological clearance has therefore been recommended for these locations.

## Introduction

On August 7, 1979, Nancy Hewett, Supervisory Archaeologist and Penelope Whitten, Assistant Archaeologist, of the Division of Conservation Archaeology of the San Juan County Archaeological Research Center and Library surveyed nine well locations and five associated access roads for Tenneco Oil Company, Denver, Colorado. On August 8, 1979 the author surveyed an additional ten well locations and six associated access roads. However, Penelope Whitten felt that the lighting was insufficient to allow for adequate inspection of the last well location and access road visited on this date and requested that she be allowed to examine it again. This was done on August 21st, with Jim Hill present.

The survey was requested by Mr. Don Traywick of Tenneco Oil Company on July 31, 1979. Mr. Traywick administered the project for Tenneco Oil Company and Dr. Meade F. Kemrer, Principal Investigator, administered the project for the Division of Conservation Archaeology. The survey was conducted in San Juan County, New Mexico on lands under the jurisdiction of the Bureau of Land Management.

Legislation enacted by the Congress of the United States requires compliance with laws designed to protect archaeological resources. Laws such as the National Environmental Policy Act of 1969 (PL-852) and Executive Order No. 11593 entitled "Protection and Enhancement of the Cultural Environment" prevent enterprises which might result in the destruction or alteration of cultural resources. Federal and State governments and the professional scientific community have come to realize that the material remains of a prior culture are a limited, non-renewable part of the environment. As such, the State of New Mexico has enacted legislation regulating archaeological resources. The Cultural Properties Act is analogous in content to the National Historic Preservation Act of 1966 (PL 89-665), which provides for preservation of significant archaeological sites.

The Division of Conservation Archaeology conducted the survey under the provisions of Federal Antiquities Act Permit No. 78-NM-107. On August 7, 1979 Mr. Don Traywick of Tenneco Oil Company, Mr. Jim Hill of Allen Construction Company, Mr. Lee Freeman of the U.S.G.S. and Mr. Bob Marler of the Bureau of Land Management were present in the field. On August 8, 1979 Mr. Russell Figors replaced Mr. Bob Marler as the Bureau of Land Management representative, and Messrs. Traywick, Freeman and Hill were present for the inspection.

The dump probably resulted from activities associated with construction and use of the established well pad, and consequently has little research potential.

One Navajo utility sherd and a sparse scatter of fire cracked rock were found off the northern edge of the location. No locus of cultural activity was observed and these isolated artifacts offer little in terms of research potential.

Recommendations: Archaeological clearance is recommended.

### Schwerdtfeger 1

Legal Description: 960' F/NL, 840' F/WL, Section 21, T27N, R8W, N.M.P.M, San Juan County, New Mexico.

Map Source: USGS 15' Gould Pass, New Mexico Quadrangle.

Area Surveyed: 300' X 300' (pad), 30' X 900' (access road), 2.6859 acres.

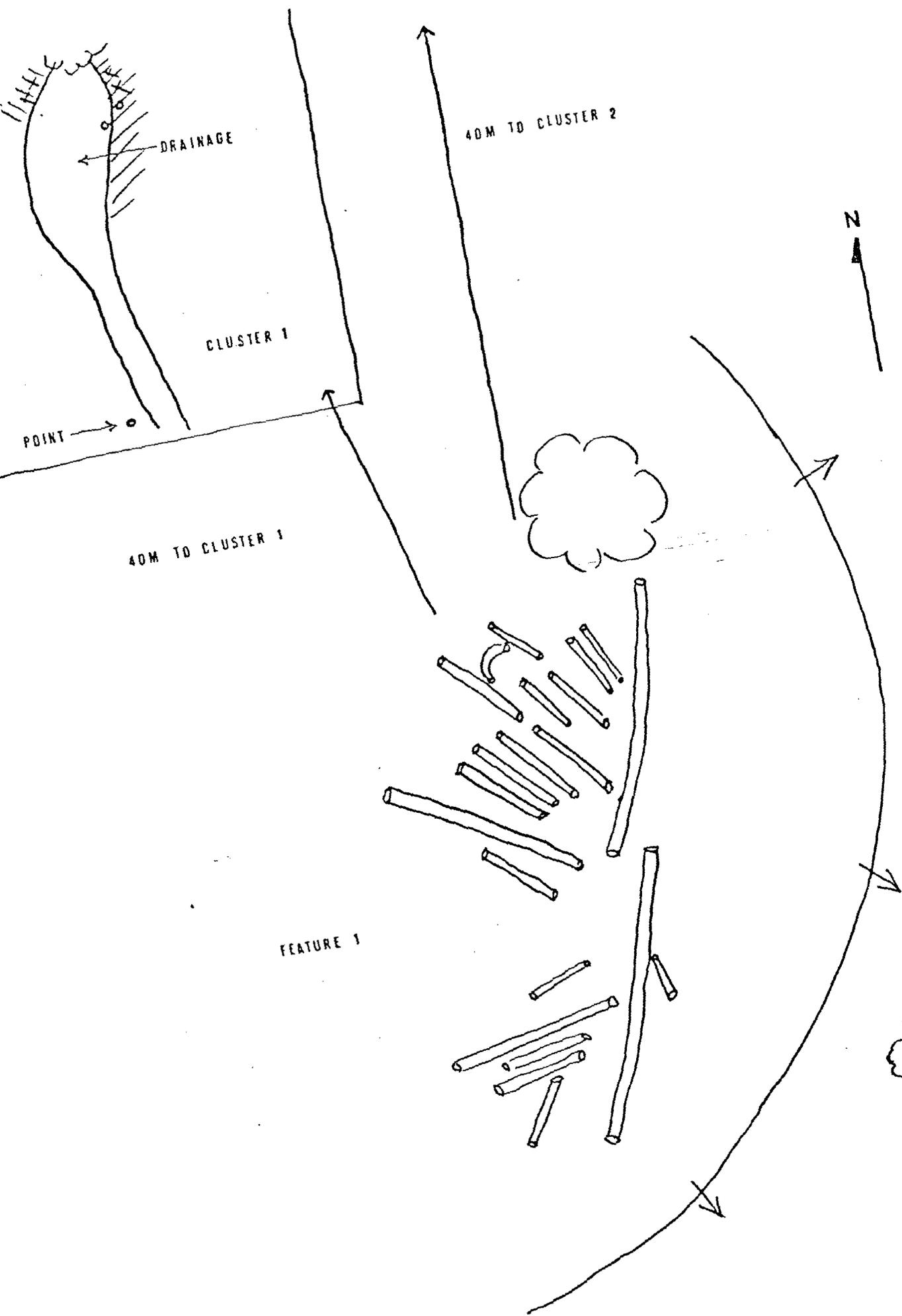
Description: Schwerdtfeger 1 is situated on a narrow east-west running ledge halfway up a sandstone mesa overlooking a small tributary of Largo Canyon. Exposure is to the north. Sandy loam colluvial fill and bedrock detritus cover the ledge. The terrain is broken with few level areas. Drainage is to the northeast.

The survey area is located in pinyon -juniper woodlands. Associated plants include Mormon tea, snakeweed, rabbit brush, prickly pear, mustard, prickly gilia, Indian rice grass, gallets, alkalai sacaton, muhley grass, prairie clover, cliffender bush (Fendlera rupicola), bitterbrush and narrow leaf yucca. Evidence of deer was observed.

Burned out stumps occur in the area and some trees appear to have been struck by lightning.

The access road leaves the southwest corner of an established well location and proceeds westward across steep slopes of 30° - 40° to the proposed pad.

Cultural Resources: DCA 79-88 consists of the remains of what appears to be a forked-stick hogan (feature 1) and two blackened areas with associated artifacts. The site is located in a small



DRAINAGE

40M TO CLUSTER 2

CLUSTER 1

POINT

40M TO CLUSTER 1

FEATURE 1

NOT TO SCALE

TREE

DARKENED SOIL

SHERDS

LITHIC

DCA 79 88

depression between the mesa and the talus slope and is well hidden. No additional cultural material was found on the high points surrounding the site.

The hogan is situated in a relatively flat area on the south side of a juniper tree. The weathered juniper poles, which cover an area 2 meters east-west by 3 meters north-south have fallen inward. Two large poles, oriented north-south form the eastern edge of the structural remains. The hogan lies 30 meters (ca. 100') southwest of the well stake. No artifacts were found in association with this feature.

On a slight slope 40 meters (ca. 130') northwest of the hogan and 25 (ca. 80') northwest of the stake a 1 X 2.2m concentration of darkened soil was found (cluster 1). A shallow sandy drainage passes through this concentration. About 20-15 sherds, probably all to the same Dinetah Utility jar, are located on either side of the drainage and two tertiary flakes, one of petrified wood and one of obsidian were noted. Roughly 6 meters (ca. 20') south of this cluster a tiny point of white chert was found. Approximately 9 meters (ca. 30') to the east of this cluster is a second area of darkened soil (cluster 2). The stain measures roughly 2½ meters north-south and dribbles downslope approximately 3 meters to the east. Associated artifacts consist of a number of small sherds, probably Dinetah Utility, and a banded chert flake, bifacially retouched on one side.

Small burned pieces of sandstone were found in both areas of darkened soil.

**Resource Significance:** The fact that the structural remains appear to represent a fork-stick hogan argues for an assignment of this site to the early period of Navajo use of the Largo area. The presence of Dinetah Utility and the absence of any painted ceramic ware further supports this time placement as does the secluded setting of the site. This is a poorly documented period of Navajo history and it is therefore important that any archaeological sites thought to relate to that period be thoroughly evaluated in terms of their information potential. One phase of this evaluative procedure would involve the collection of dendrochronological samples while a second phase would focus on the accumulation of additional data regarding house construction and associated features and artifacts through testing, photographing and careful mapping.

**Recommendations:** Since the topographic setting of Schwerdtfeger 1 is such that the pad location cannot be moved to avoid impacting

DCA 79-88 it is recommended that the site be tested, mapped and photographed and that dendrochronological samples be taken in order to evaluate its future research potential and to assess the necessity of further mitigation procedures.

## Tapp 2

Legal Description: 1710' F/SL, 975' F/WL, Section 16, T28N, RSW, N.M.P.M., San Juan County, New Mexico.

Map Source: USGS 15', Gould Pass, New Mexico Quadrangle.

Area Surveyed: 300' X 300' (pad), 30' X 800' (access road), 2.6170 acres.

Description: Tapp 2 and the associated access road are located on outcropping bedrock and tan loamy sand colluvial deposits on the first terrace of a sandstone mesa overlooking Jesus Canyon and Carrizo Creek. The main body of the mesa rises to the north. The terrain is dissected by channels running south to the major drainages about a quarter of a mile away. Quantities of petrified wood litter the surface.

The vegetative cover consists of juniper, pinyon, greasewood, rabbit brush, sage, prickly pear, narrow leaf yucca, cholla (Cylindropuntia sp.), bitterbrush, serviceberry, (Amelanchier utahensis), squawbush (Rhus trilobata), some Atriplex sp. and various small composites. Grasses include Indian rice grass, galleta and sporobolus.

Pieces of axe cut wood and burned stumps provide evidence of timbering activity. An animal trail crosses the location and there are vehicular tracks on the south side of the proposed well pad.

The access road enters the pad location from the northwest.

Cultural Resources: A small charcoal stain was found to the southwest of the access road. It is likely that this stain is a consequence of lumbering activity and has no cultural significance.

Recommendations: Archaeological clearance is recommended.



MAILING LIST  
APPLICATION FOR UNORTHODOX LOCATION  
TENNECO - SCHWERDTFEGER 1A  
SAN JUAN COUNTY, NEW MEXICO

El Paso Natural Gas Company  
P.O. Box 1492  
El Paso, Texas 79948

Attn: R. H. Nordhausen

Atlantic Richfield Company  
P.O. Box 2197  
Farmington, New Mexico 82602

Attn: H. W. Schmidt

Great Lakes Chemical Corporation  
P.O. Box 2200  
West Lafayette, Indiana 47906

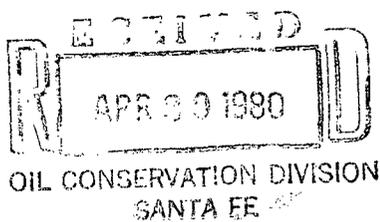
Attn: A. Barbera

New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Attn: J. D. Ramey

New Mexico Oil Conservation Division  
1000 Rio Brazos Road  
Aztec, New Mexico 87401

Attn: F. T. Chavez



OIL CONSERVATION DIVISION

P. O. BOX 20118

SANTA FE, NEW MEXICO 87501

Form C-107  
Revised 10-1-78

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

All distances must be from the corner boundaries of the Section

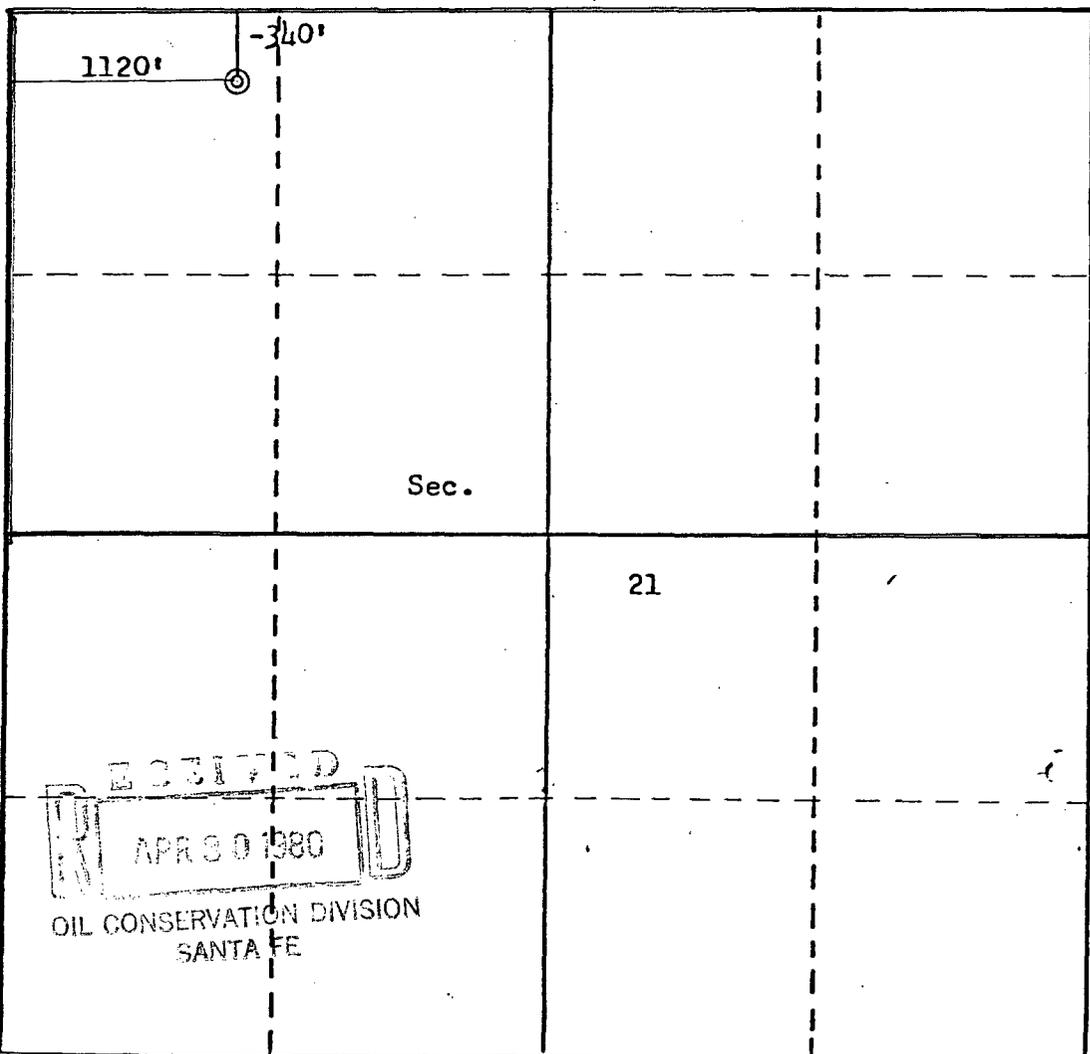
Operator <b>TENNECO OIL COMPANY</b>		Lease <b>SCHWERDTFEGER</b>		Well No. <b>1A</b>
Unit Letter <b>D</b>	Section <b>21</b>	Township <b>27N</b>	Range <b>8W</b>	County <b>San Juan</b>
Actual Footage Location of Well: <b>340</b> feet from the <b>North</b> line and <b>1120</b> feet from the <b>West</b> line				
Ground Level Elev. <b>6066</b>	Producing Formation <b>Mesa Verde</b>		Pool	Dedicated Acreage:  Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

Date \_\_\_\_\_

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

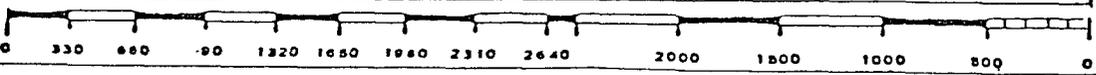
Date Surveyed

February 1, 1980

Registered Professional Engineer and/or Land Surveyor

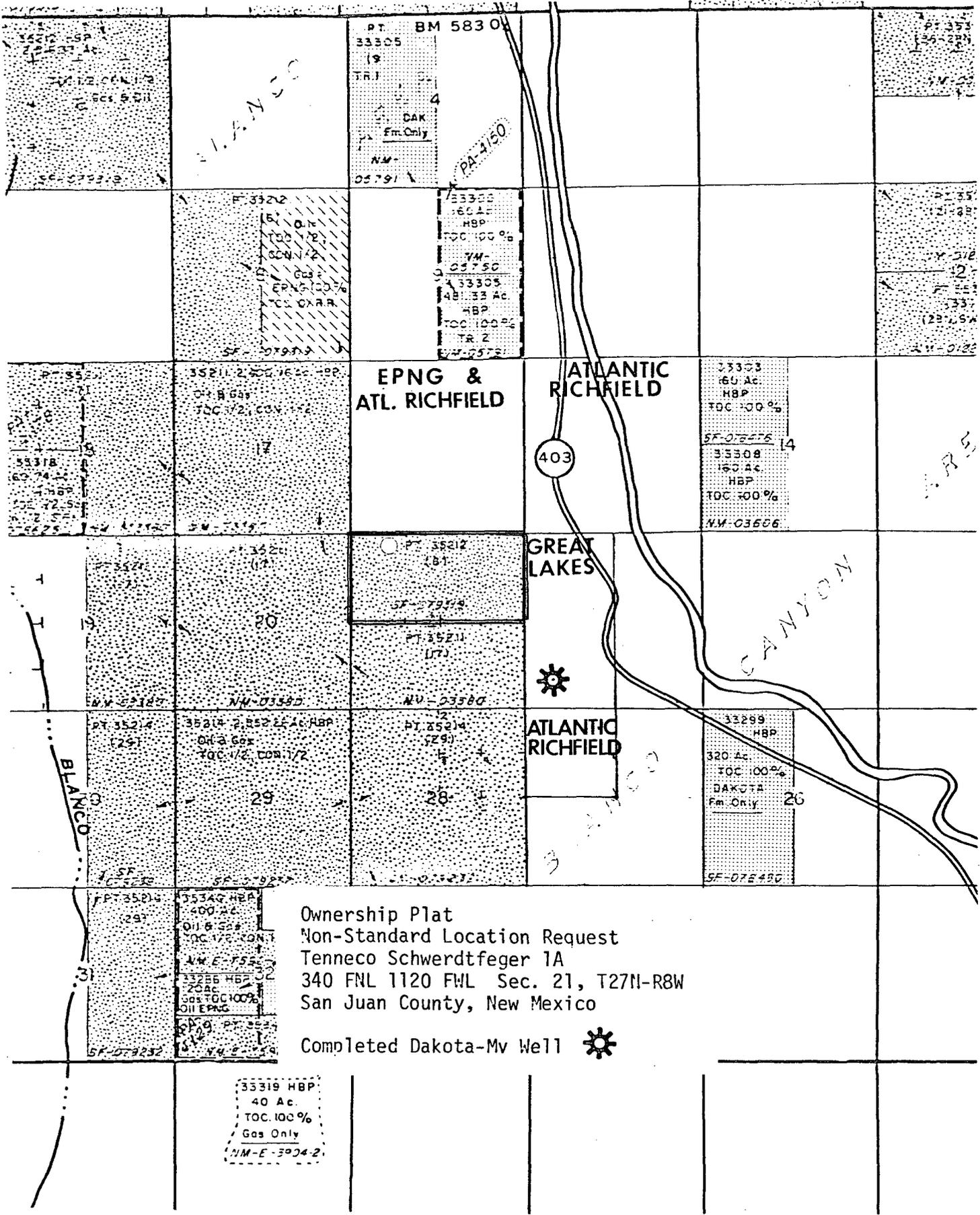
*Fred B. Kerr, Jr.*  
Fred B. Kerr, Jr.

Certificate No. **KERR, JR.**  
**3950**



# R 8 W

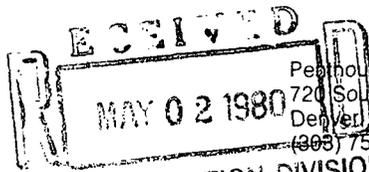
# T 27 N



Ownership Plat  
 Non-Standard Location Request  
 Tenneco Schwerdtfeger 1A  
 340 FNL 1120 FWL Sec. 21, T27N-R8W  
 San Juan County, New Mexico

Completed Dakota-Mv Well 

**Tenneco Oil**  
A Tenneco Company



Peabody  
720 South Colorado Blvd.  
Denver, Colorado 80222  
(303) 758-7130



CERTIFIED MAIL

Return Receipt Requested CONSERVATION DIVISION  
SANTA FE April 22, 1980

RECEIVED

APR 28 1980

E. WILLIAM EIPPER

✓ New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Joe D. Ramey

New Mexico Oil Conservation Division  
1000 Rio Brazos Road  
Aztec, New Mexico 87401

Attention: F. T. Chavez

RE: Application for Unorthodox Location  
Tenneco Schwerdtfeger 1A  
Proposed Dakota Well  
San Juan County, New Mexico

Gentlemen:

Attached in duplicate (to each office) are a well location plat C-102 and an ownership plat for the above captioned Dakota gas well.

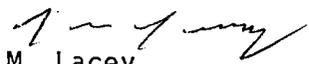
The Schwerdtfeger 1A proposed site is 340' FNL, 1120' FWL, Section 21, T27N-R8W, San Juan County, New Mexico. This places the well only 340' from the boundary line of the proration unit. This was the only feasible site so that an archeological site could be avoided.

A copy of this application is being submitted to all offset operators by certified mail with a request that they furnish your Santa Fe office with a waiver of objection.

Pursuant to authority of Rule 104-F, we respectfully request your approval of an exemption to the standard well location requirements.

Very truly yours,

TENNECO OIL COMPANY

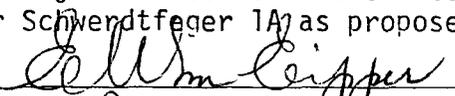
  
J. M. Lacey  
Division Production Manager

EMJ:efl

Enclosures

W A I V E R

GREAT LAKES CHEMICAL CORP. hereby waives objection to Tenneco Oil Company's application for unorthodox location for their Schwerdtfeger 1A as proposed above.

By: 

Date: April 28, 1980



BRUCE KING  
GOVERNOR  
LARRY KEHOE  
SECRETARY

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

May 1, 1980

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-2434

Tenneco Oil  
720 South Colorado Blvd.  
Denver, Colorado 80222

Re: Application for Non-Standard  
Location: Schwerdtfeger 1A-D  
Sec. 21, T-27-N, R-8-W, Basin-  
Dakota Pool, San Juan County

We may not process the subject application for non-standard location until the required information or plats checked below (is)(are) submitted.

- A plat must be submitted clearly showing the ownership of the offsetting leases.
- A statement must be submitted that offset owners have been notified of the application by certified mail.
- A plat must be submitted fully identifying the topography necessitating the non-standard location.  
Also include a copy of the archeologist's report.
- Other:

Very truly yours,

R. L. STAMETS  
Technical Support Chief

RLS/dr

# Tenneco Oil

A Tenneco Company

Penthouse  
720 South Colorado Blvd.  
Denver, Colorado 80222  
(303) 758-7130



CERTIFIED MAIL

Return Receipt Requested

April 22, 1980

RECEIVED

MAY 12 1980

ENGRS. DEPT.

New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

RECEIVED  
MAY 19 1980  
OIL CONSERVATION DIVISION  
SANTA FE

Attention: Joe D. Ramey

New Mexico Oil Conservation Division  
1000 Rio Brazos Road  
Aztec, New Mexico 87401

Attention: F. T. Chavez

RE: Application for Unorthodox Location  
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Proposed Dakota Well  
San Juan County, New Mexico

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Very truly yours,

TENNECO OIL COMPANY

J. M. Lacey  
Division Production Manager

EMJ:efl

Enclosures

### W A I V E R

ATLANTIC RICHFIELD COMPANY hereby waives objection to Tenneco Oil Company's application for unorthodox location for their Schwerdtfeger 1A as proposed above.

By: \_\_\_\_\_

Date: \_\_\_\_\_

*[Signature]*  
May 12/80