

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

20-045-22139

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK
 b. TYPE OF WELL
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 Dietrich Exploration Company, Inc.

3. ADDRESS OF OPERATOR
 602 Midland Savings Bldg., 444 17th St., Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface
 790' FSL and 790' FEL
 At proposed prod. zone
 Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 20 miles South of Farmington

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 790'

16. NO. OF ACRES IN LEASE
 320

17. NO. OF ACRES ASSIGNED TO THIS WELL
 160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1060'

19. PROPOSED DEPTH
 1500

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 6140 GR

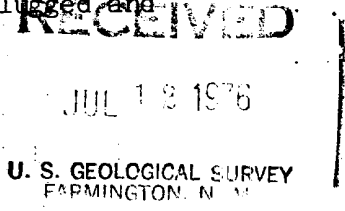
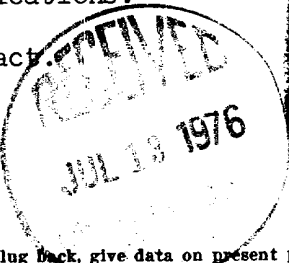
22. APPROX. DATE WORK WILL START*
 7-26-76

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
7 7/8	5 1/2"	15.5	60'	25 sacks
4 3/4"	2 7/8"	6.7	1500'	100 sacks

Move in rotary tools. Set 5 1/2" casing at 60 feet and cement with 25 sacks. Install and test 6" 600 series blow out preventers. Drill 4 3/4" hole to 1500 feet. Run open hole logs to evaluate Picture Cliff formation. If commercial production is indicated 2 7/8" casing will be set at 1500 feet and cement with 100 sacks. If well is non-commercial, same will be plugged and abandoned in accordance with U.S.G.S. specifications.

Gas under this lease is committed to a contract.



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED William T. Jones T. Jones TITLE Agent DATE 7-7-76

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

W. Jones

*See Instructions On Reverse Side

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACERAGE DEDICATION PLAT**

All distances must be from the outer boundaries of the Section

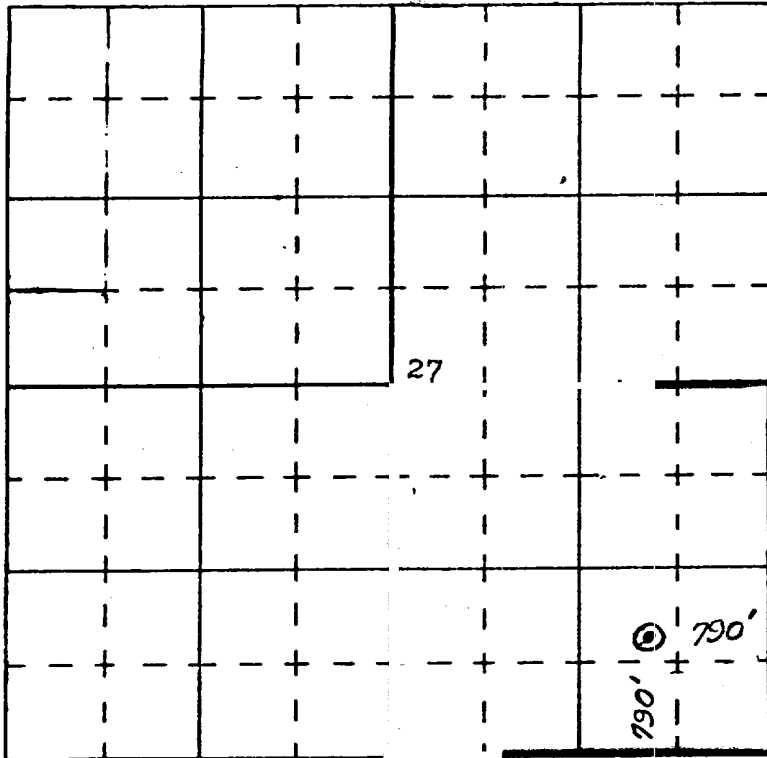
Operator DIETRICH EXPLORATION CO.			Lease FEDERAL		Well No. 3
Unit Letter P	Section 27	Township 27 NORTH	Range 13 WEST	County SAN JUAN	
Actual Footage Location of Well: 790 feet from the SOUTH line and 790 feet from the EAST line					
Ground Level Elev. 6140	Producing Formation Picture Cliff		Pool WAW <i>ext</i>	Dedicated Acreage: 160 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 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.

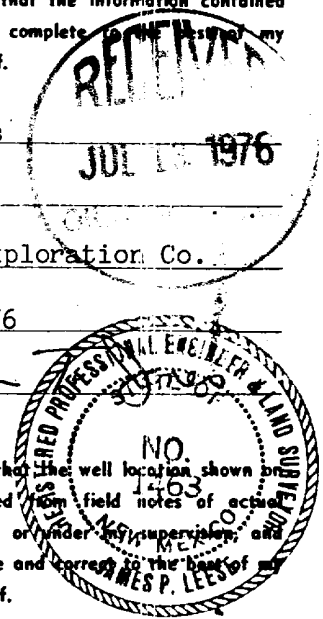
W. T. Jones
Name
Agent
Position
Dietrich Exploration Co.
Company

July 8, 1976
Date
William

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.

24 June 1976
Date Surveyed
James P. Leese
Registered Professional Engineer
and/or Land Surveyor

1463
Certificate No.



Archaeological Clearance Survey Report

for

Dietrich Exploration Co.

Location

Federal No. 3

Submitted by

Dr. J. Loring Haskell
Operations Director and
Principal Investigator
Agency of Conservation Archaeology

Prepared by

Pat Zarnowski

June 25, 1976



Introduction

The Agency of Conservation Archaeology of the San Juan County Museum Association and Eastern New Mexico University recently completed an archaeological clearance survey in the Hugh Lake area to be impacted by the proposed construction of a well and access road by Dietrich Exploitation Company.

The survey project was initiated at the request of Bill Jones of the Three "E" Company on June 22, 1976. It was administered by Mr. Jones and by Dr. J. Loring Haskell, who serves as the principal investigator for the Agency of Conservation Archaeology.

The field work was conducted by Pat Zarnowski of the Agency of Conservation Archaeology on June 23 and June 24, 1976 under provisions of Bureau of Land Management Permit No. 76-NM-023. Other representatives in the field were Bob Moore of the Bureau of Land Management, Ray Swanson of the United States Geological Survey, and Bill Jones of the Three "E" Company.

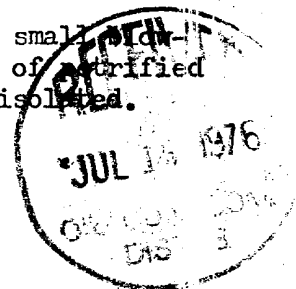
Survey

The requested archaeological survey involved the one well location described below. It is located on land under the control of the Bureau of Land Management. For specific details as to location, please refer to the attached copies of maps and plats and the recommendations section of this report.

The general survey procedure employed was to walk the area of proposed construction and to visually inspect the surface for archaeological material. Any artifact found initiated a further search to determine whether it was an isolated find or was associated with an architectural feature or group of artifacts. Erosional gullies and arroyos were also inspected for evidence of subsurface cultural remains. Floral, faunal, and geological observations were made to briefly describe the environmental situation.

Federal No. 3: The area where this well is to be constructed is on the bluffs south of Farmington and on the west side of Gallegos Canyon. The topography was that of rolling knolls with ridges of sand dunes. The well itself is to be located in a large sand dune blowout area with smaller sand dunes ringing it on the north, south and east. As to vegetation Mormon tea, Ephedra viridis, snakeweed, Gutierrezia sarothrae, and prickly pear cacti, Opuntia sp., were the predominant plants. Purple beardtongue, Penstemon pachyphyllus, was found to be growing in the very sandy areas. Evidence that cattle had been grazing in the area was noted.

Cultural resources: Four lithic waste flakes were found in one small blowout area. Three appeared to be from the same stone and one was of petrified wood. The adjacent areas were inspected, but these seem to be isolated.

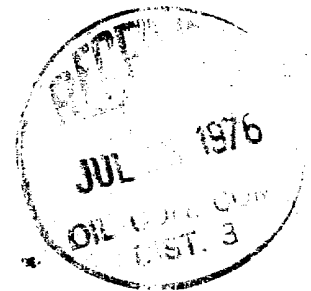


June 25, 1976

Recommendations

Although four lithics were found off the pad area, they were isolated artifacts and cannot be classified as a site. Also the pad for this well is going to be quite small and it is felt that no impact would occur as a result of the construction of this well. Therefore it is recommended that archaeological clearance be granted.

<u>Well</u>	<u>Area</u>	<u>Location</u>	<u>Clearance Status</u>
Federal No. 3	Pad: Approximately 100 feet by 75 feet. Road: 30 feet by approximately 300 feet.	790 feet from the South line and 790 feet from the East line in the Southeast $\frac{1}{4}$ of the Southeast $\frac{1}{4}$ of Section 27, Township 27 North, Range 13 West, San Juan County, New Mexico. Map source: U.S. G.S. Hugh Lake 7.5 minute quadrangle.	Recommended



**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACERAGE DEDICATION PLAT**

All distances must be from the outer boundaries of the Section

Operator DIETRICH EXPLORATION CO.		Lease FEDERAL		Well No. 3
Unit Letter 0	Section 27	Township 27 NORTH	Range 13 WEST	County SAN JUAN
Actual Footage Location of Well: - 790 feet from the SOUTH line and 1850 feet from the EAST line (Note: 790 is written above 1850)				
Ground Level Elev. 6132	Producing Formation	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 consolidated. (Use reverse side of this form if necessary.)

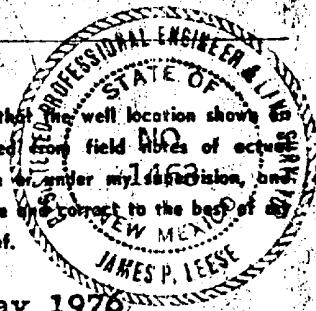
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non standard unit, eliminating such interests, has been approved by the Commission.

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.

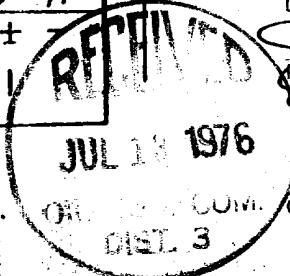
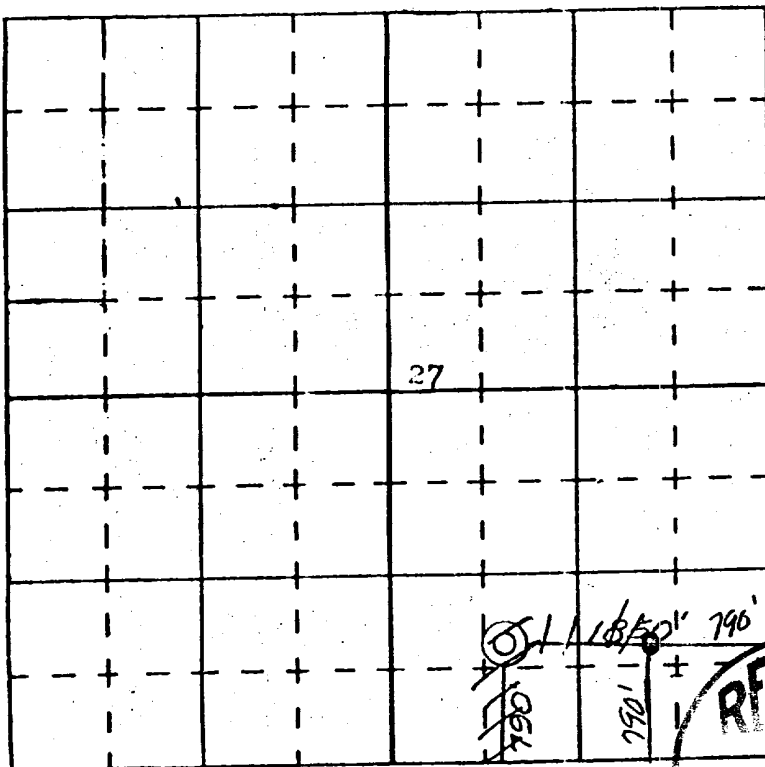


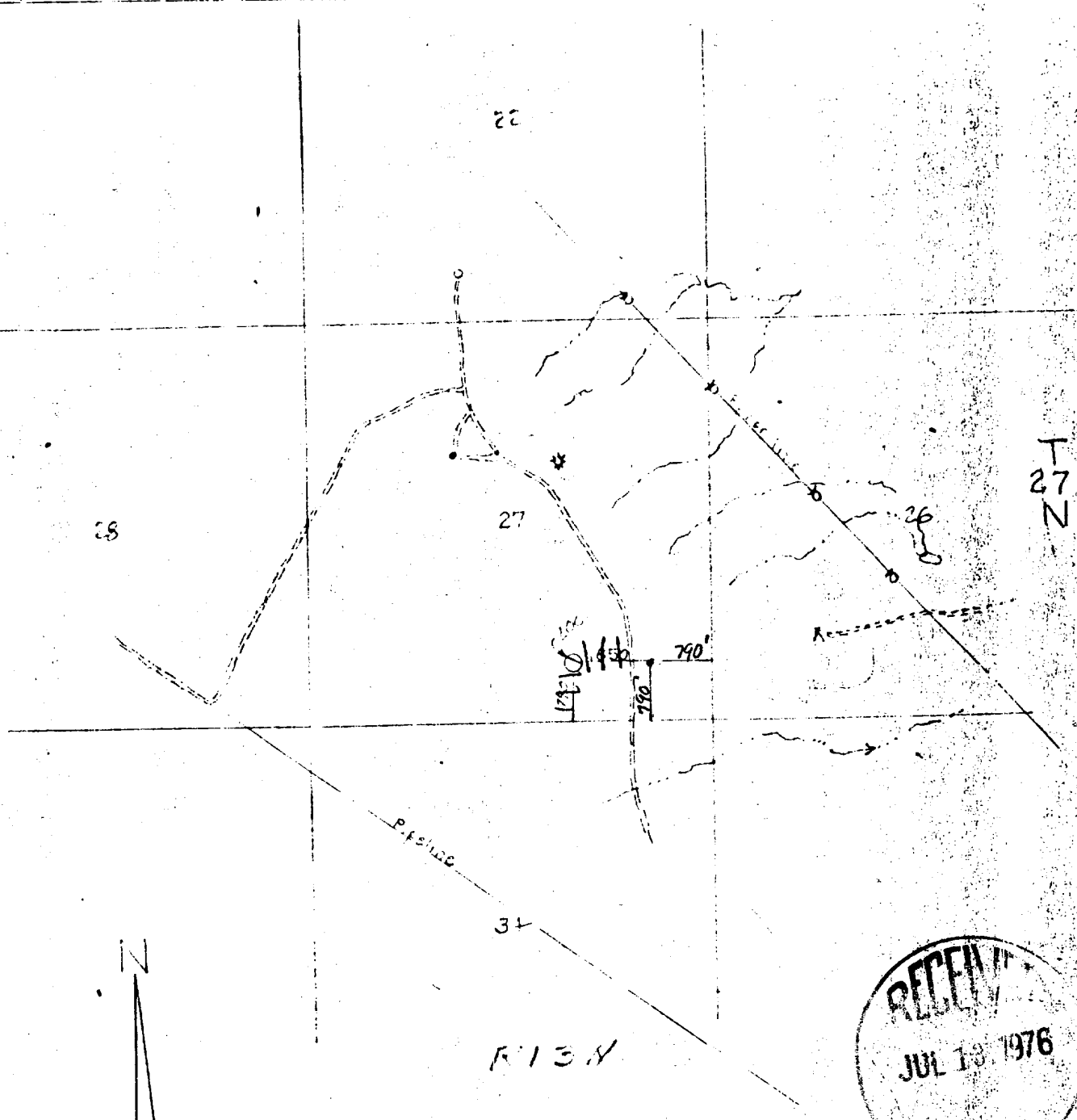
Date Surveyed **28 May 1976**

Registered Professional Engineer and/or Land Surveyor **James P. Leese**

1463

Certificate No. _____

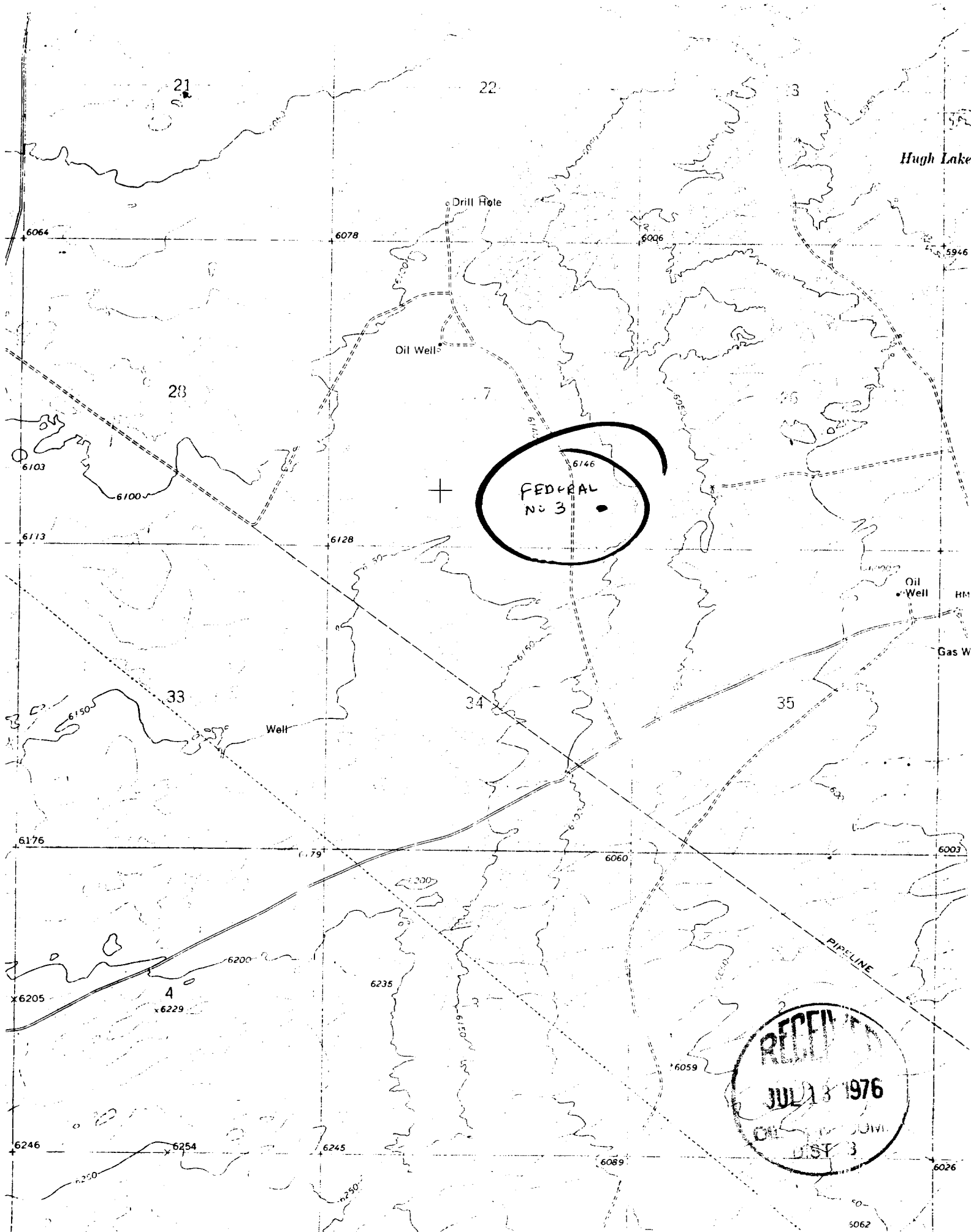




VICINITY MAP FOR
DIETRICH EXPLORATION CO.
showing

Well Location in the ~~SW/4~~ SE/4
Sec 27, T27N, R13W, N.M.P.M.,
San Juan County, New Mexico
Scale 1"=2000' Date 5/25/76

San Juan Engineering Company
Cortez, New Mexico



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DIST 3



AGENCY OF CONSERVATION ARCHAEOLOGY



San Juan County
Museum Association

Eastern New Mexico
University

June 25, 1976

Director
Dr. C. Irvin-Williams

Executive Director
Dr. G. A. Agogino

Operations Director
Dr. J. Loring Haskell

Services
Planning
Archaeological Survey
Excavation
Analysis
Reporting
Research

Laboratories
Laszlo Vertes Laboratory
Ceramic Analysis
Paleo-Botanical Analysis
Kay Irwin Laboratory
Lithic Analysis
Obsidian Hydration Dating
San Juan County Archaeological
Research Center
Ceramic Analysis
Lithic Analysis
Paleo-Botanical Analysis

Anthropological Computer Services
Center

Reporting and Publication Division
Eastern New Mexico University
Contributions in Anthropology-Series

Dietrich Exploration Co.
602 Midland Savings Building
444 17th Street
Denver, Colorado 80202

Gentlemen:

You will find enclosed our report for archaeological survey for your proposed well, Federal No. 3. It has been recommended that archaeological clearance be granted. The Bureau of Land Management will send you final clearance for this. Also enclosed is our bill for this service.

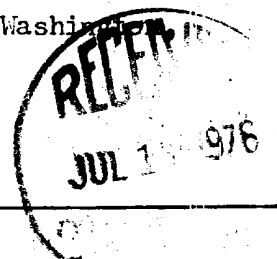
If there are any questions in this regard, please contact our office any time. We appreciate your business and hope you will call on us again when you need archaeological survey work performed.

Very truly yours,

Pat Zarnowski
Agency of Conservation Archaeology

Enc.

cc: Phil Kirk, Bureau of Land Management, Farmington.
Phil McGrath, U.S.G.S., Farmington
Stewart Peckham, State Archaeologist, Santa Fe.
Tom Merlan, State Planning Office, Santa Fe.
J. Loring Haskell, A.C.A., Portales
Charles McKinney, Dept. of Interior, Washington,
D.C.



Offices

San Juan County
Arch. Res. Center
Rte. 3, Box 169
Farmington, New Mexico 87401
(505) 632-2733

Eastern New Mexico University
Portales, New Mexico 88130
(505) 562-2915

233 Chama N. E.
Albuquerque, New Mexico 87108
(505) 265-7164



AGENCY OF CONSERVATION ARCHAEOLOGY



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June 25, 1976

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Koy Irwin Laboratory
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Obsidian Hydration Dating
San Juan County Archaeological
Research Center
Ceramic Analysis
Lithic Analysis
Paleo-Botanical Analysis

This is to bill you for archaeological survey performed
on June 23 and June 24, 1976 for the following location:

Federal No. 3

Fee for two, half days in the field - - -	\$120.00
Fee for half day in the office - - -	60.00
Total	<u>\$180.00</u>

Anthropological Computer Services
Center

Reporting and Publication Division
Eastern New Mexico University
Contributions in Anthropology-Series

Please make check payable to the San Juan County Museum Association



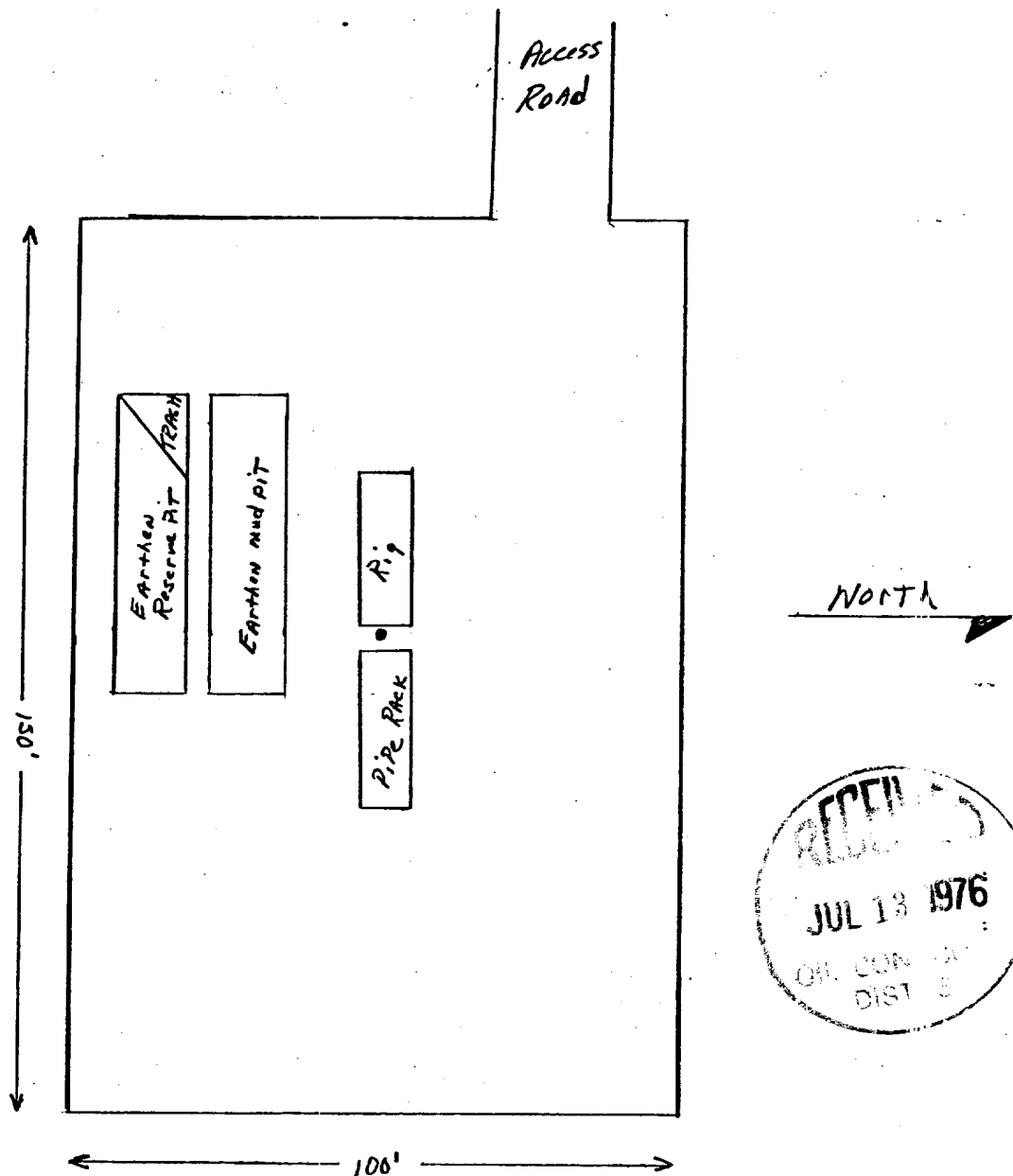
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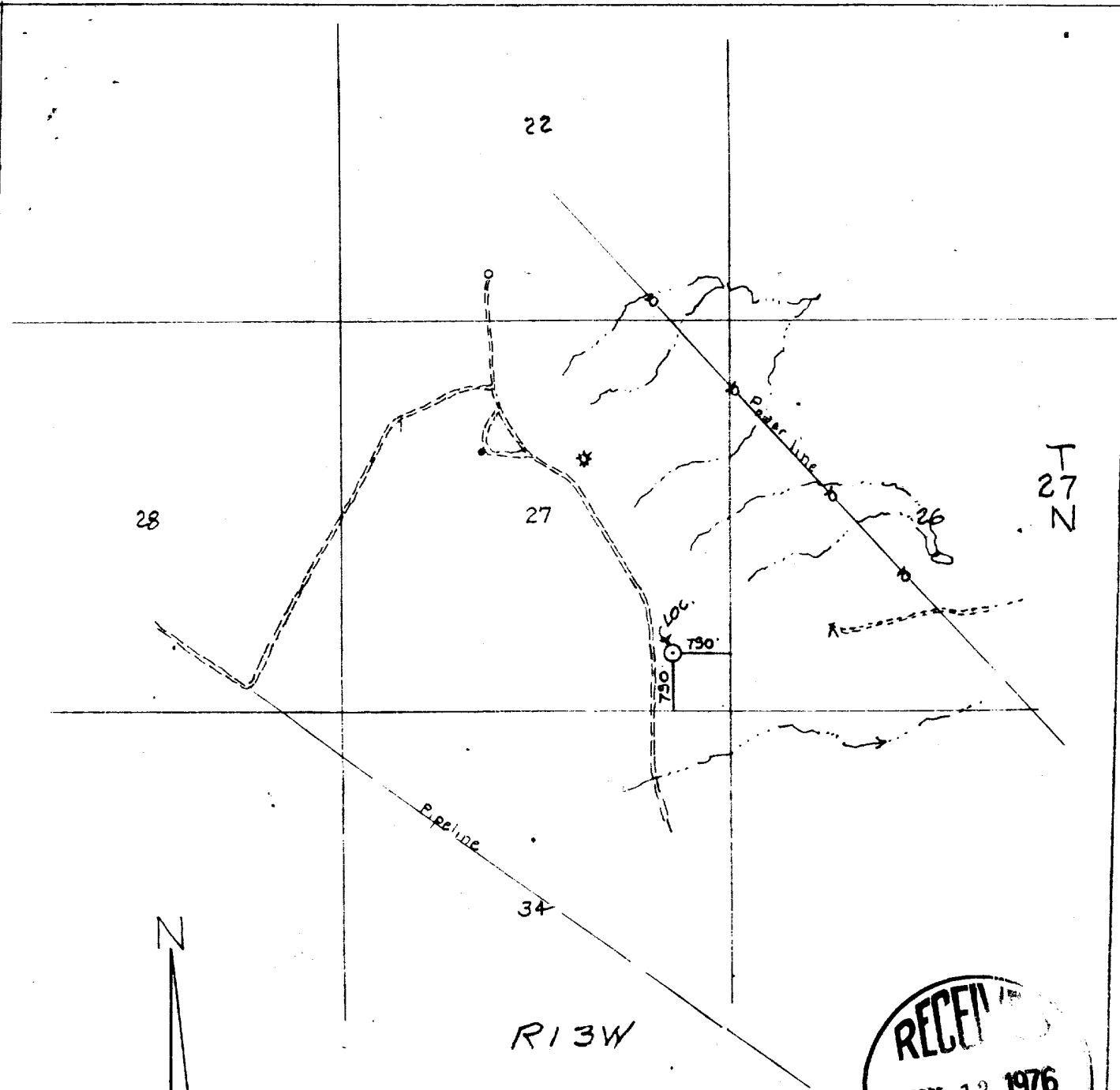
233 Chama N. E.
Albuquerque, New Mexico 87108
(505) 265-7164

Well site PLAT



SCALE 1" = 30'

Dietrich Exploration Co.
Federal No 3
790' FSL. 790' FEL
Sec 27, T27N, R13W
SAN JUAN County, New Mexico



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 3

VICINITY MAP FOR
DIETRICH EXPLORATION CO.
 Showing

Well Location in the SE/4 SE/4
 Sec. 27, T27N, R13W, N.M.P.M.,
 San Juan County, New Mexico
 Scale: 1" = 2000' Date 6/24/76

San Juan Engineering Company
 Farmington, New Mexico

3E COMPANY, INC.

Engineering • Energy • Exploration

P. O. Box 190 -- 505/327-4020

FARMINGTON, NEW MEXICO 87401

July 7, 1976

US Department of Interior
Geological Survey
P.O. Box 949
Farmington, N.M. 87401

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JUL 12 1976

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

Attention: Mr. P. T. McGrath
District Engineer

RE: Development Plan for surface Use
Dietrich Exploration Co., Inc.
Federal #3
790' FSL and 790' FEL
Sec 27- 27N - 13W
WAW Picture Cliff
San Juan County, New Mexico

Gentlemen:

Attached is the "Application for Permit to Drill" (form #9-331C) for the subject well. Attached to the application are the following reports: archaeological report, surveyors plat, drill site plat and vicinity map. The well was originally staked on May 28, 1976, but was restaked on June 24, 1976 due to request by the Bureau of Indian Affairs to move the location from a proposed field under the Navajo Irrigation Project. Mr. Bob Moore of the BLM, Mr. Ray Swanson of the USGS and Ms. Pat Zarnowski of the Agency of Conservation Archaeology have inspected the site.

The development plan for surface use is as follows:

Points 1, 2, 3, 4, 6, & 9 Vicinity map and drill site plat attached.

Point 5 Water for dilling will be trucked from the San Juan River approximately 15 miles to the North.

Point 7 A waste disposal pit will be provided for the garbage and trash. Location shown on drill site plat. Drilling fluids will be contained in reserve pit until such time as evaporation occurs and then pits will be covered.

Point 8 No camps or airstrip.

