

DATE IN 8/7/01	ENGINEER MS	LOGGED KN	TYPE NSL
[REDACTED]			22048623

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO CONSERVATION DIVISION
Engineering Bureau -

NSL-4632

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

- [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
- [DD-Directional Drilling] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

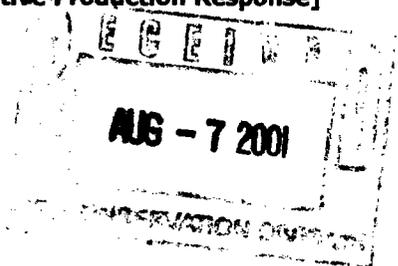
[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Directional Drilling
 NSL NSP DD SD

Check One Only for [B] and [C]

- [B] Commingling - Storage - Measurement
 DHC CTB PLC PC OLS OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR



[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply

- [A] Working, Royalty or Overriding Royalty Interest Owners
- [B] Offset Operators, Leaseholders or Surface Owner
- [C] Application is One Which Requires Published Legal Notice
- [D] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] Waivers are Attached

[3] **INFORMATION / DATA SUBMITTED IS COMPLETE** - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Amy T. Spang
Print or Type Name

Amy T. Spang
Signature

Regulatory Compliance Analyst
Title

8/6/01
Date



ARCO Permian

200 WestLake Park Blvd., Rm. 266
Houston, Texas 77079
Post Office Box 4587
Houston, Texas 77210-4587

August 6, 2001

New Mexico Oil Conservation Division
ATTN: Mike Stogner
1220 S. Francis Drive
Santa Fe, New Mexico 87505

RE: **Amended Drilling Permit: Unorthodox Location
West Brushy State "8", Well No. 1
Brushy Draw (Delaware)
Unit B Section 8, T-26-S, R-29-E
Eddy Co., NM**

Mr. Stogner:

ARCO Permian, as operator, requests approval for the unorthodox location of well no. 1, West Brushy State "8". Our plans are to drill at a location 1219' FNL and 1894' FEL of Section 8, T26S, R29E, Eddy County, New Mexico, into the Brushy Draw (Delaware) pool at a depth of 5,500'.

The original drilling permit was approved at a standard location, but after further analysis, all standard locations would either be located in a flood plain or on steep elevations, which would require the extensive use of explosives in close proximity to El Paso Natural Gas's ruptured line. Supporting data is enclosed which shows all possible alternatives and reasons for this unorthodox application.

At the earliest possible date, please send us our written approval order and fax a copy to 281/366-7062, granting us our unorthodox drill site location.

Thank you for your cooperation and prompt response to our request. If you have any questions, please contact me at 281/366-7655 or by email: amy.t.spang@bp.com. Please send your approval to proceed to my attention at the address listed above.

Yours very truly,

Amy T. Spang
Regulatory Compliance Analyst

xc: Lee Scarborough - WL4/241A
Jeff Robinson - WL4/251
Mike Brock - EUN
Bob Manthei - EUN
Central Files - Records Management Room 0.320/Houston
R/C Files

ARCO Permian
Unorthodox Location
West Brushy State "8" No. 1
Brushy Draw (Delaware)
Unit B, Section 8, T 26S, R 29E
1219' FNL & 1894' FEL
Eddy County, NM

Attachments:

Form C-101: APD (Amended Report)
Form C-102: Well Location and Acreage Dedication Plat
Form C-103: NOI for Amended Form C-101
BOP Schematic
Blowout Prevention Equipment Specifications
Vicinity And Location Verification Maps
Supporting Documentation

State of New Mexico
Energy, Minerals & Natural Resources

Form C-101
Revised March 17, 1999

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. 1st Street, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Submit to appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address ARCO PERMIAN P.O. BOX 1610		² OGRID Number 000990
		³ API Number 30- 015-31815
⁴ Property Code 28090	⁵ Property Name WEST BRUSHY STATE "8"	⁶ Well No. 1

⁷Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
B	8	26S	29E		1219	NORTH	1894	EAST	EDDY

⁸Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
⁹ Proposed Pool 1 BRUSHY DRAW (DELAWARE)					¹⁰ Proposed Pool 2				

¹¹ Work Type Code N	¹² Well Type Code O	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 2894'
¹⁶ Multiple NO	¹⁷ Proposed Depth 5500	¹⁸ Formation DELAWARE	¹⁹ Contractor CAPSTAR DRLG	²⁰ Spud Date 7/01

²¹Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
11	8-5/8	24	580	315	SURF
7-7/8	5-1/2	15.5	5500	800	SURF

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone.

Describe the blowout prevention program, if any. Use additional sheets if necessary.

Subject well planned as a 5500' straight hole.
2000 psi BOPE will be used from 580' to TD.
Need to move location due to topography (data attached).

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Amy T. Spang*

Printed name: **AMY T. SPANG**

Title: **REGULATORY COMPLIANCE ANALYST**

Date: **8/6/01**

Phone: **281/366-7655**

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration Date:

Conditions of Approval:

Attached

State of New Mexico

Energy, Minerals and Natural Resources Department

DISTRICT I
P.O. Box 1880, Hobbs, NM 88241-1880

DISTRICT II
P.O. Drawer 80, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number 30-015-31815	Pool Code	Pool Name Brushy Draw (Delaware)
Property Code 28090	Property Name WEST BRUSHY STATE "8"	Well Number 1
OGRID No. 000990	Operator Name ARCO PERMIAN	Elevation 2894'

Surface Location

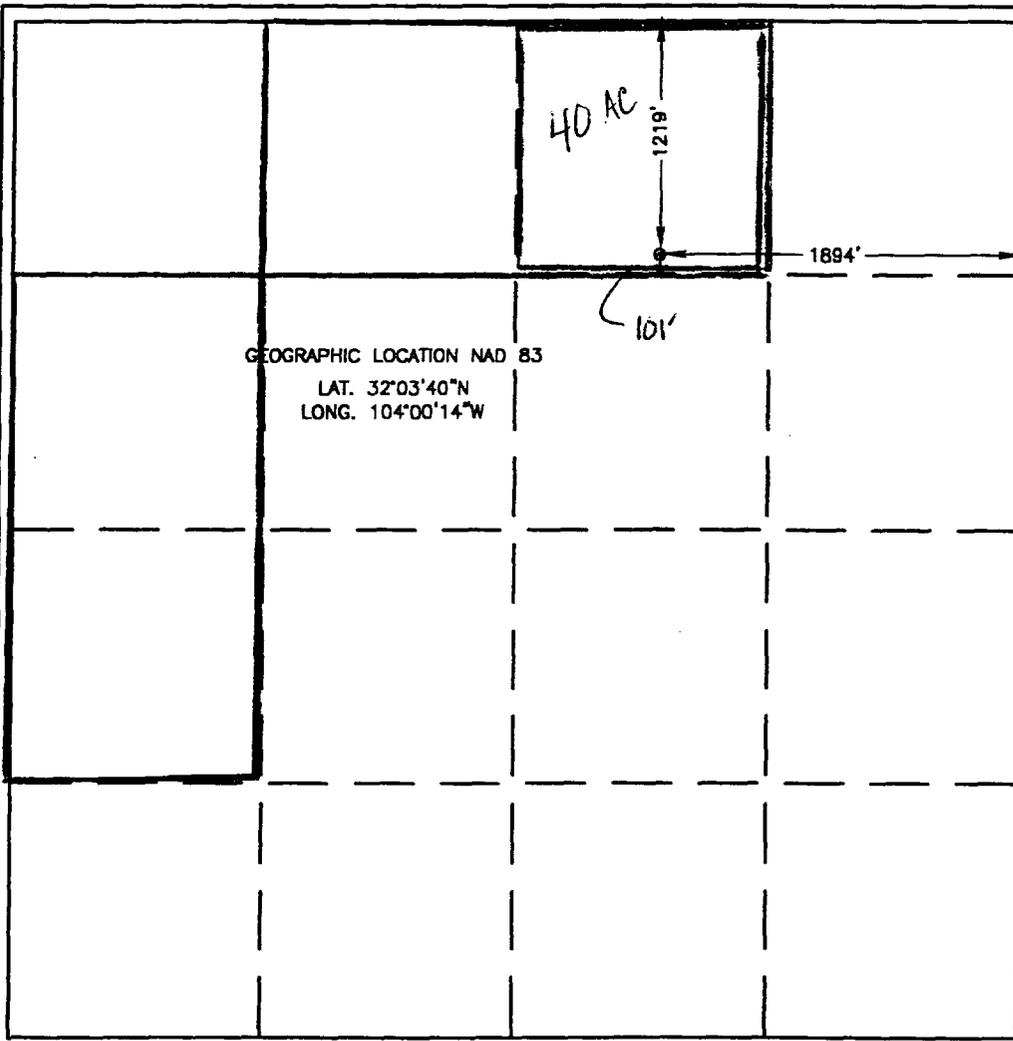
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	8	26-S	29-E		48.1290/219	NORTH	1894	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

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

Amy T. Spang
Signature

Amy T. Spang
Printed Name

Regulatory Compliance Consultant
Title

7/18/01
Date

SURVEYOR CERTIFICATION

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 belief.

JUNE 14, 2001
Date Surveyed

AWB
Signature & Seal of Professional Surveyor

Ronald J. Eidson
Professional Surveyor

01-11-0724
Certificate No.

RONALD J. EIDSON 3239
GARY EIDSON 12641

Submit 3 Copies To Appropriate District Office
 District I
 1625 N. French Dr., Hobbs, NM 87240
 District II
 811 South First, Artesia, NM 87210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised March 25, 1999

OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505

WELL API NO. 30-015-31815
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name: WEST BRUSHY STATE "8"
8. Well No. 1
9. Pool name or Wildcat BRUSHY DRAW (DELAWARE)

SUNDRY NOTICES AND REPORTS ON WELLS
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:
 Oil Well Gas Well Other

2. Name of Operator
ARCO Permian

3. Address of Operator
P.O. Box 1610 Midland, TX 79702

4. Well Location
 Unit Letter **B** : **1219** feet from the **NORTH** line and **1894** feet from the **EAST** line
 Section **8** Township **26S** Range **29E** NMPM County **EDDY**

10. Elevation (Show whether DR, RKB, RT, GR, etc.)
2894' GR

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

Drilling permit was approved on 6/4/01. Need to amend permit to move well location to unorthodox location due to topographical reasons. Supporting documentation is attached along with Form C-101.

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

SIGNATURE *Amy T. Spang* TITLE REGULATORY COMPLIANCE ANALYST DATE 8/6/01

Type or print name AMY T. SPANG Telephone No. 281-366-7655

(This space for State use)

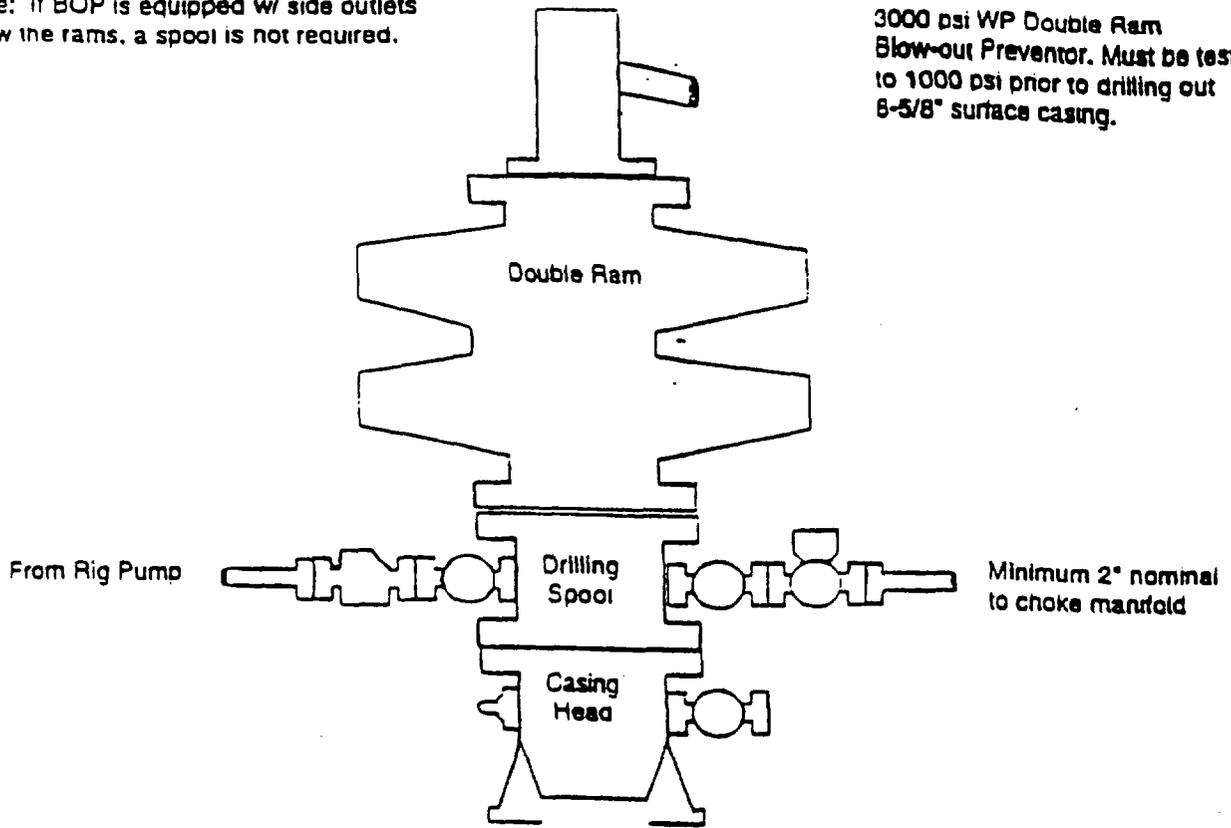
APPROVED BY _____ TITLE _____ DATE _____

Conditions of approval, if any:

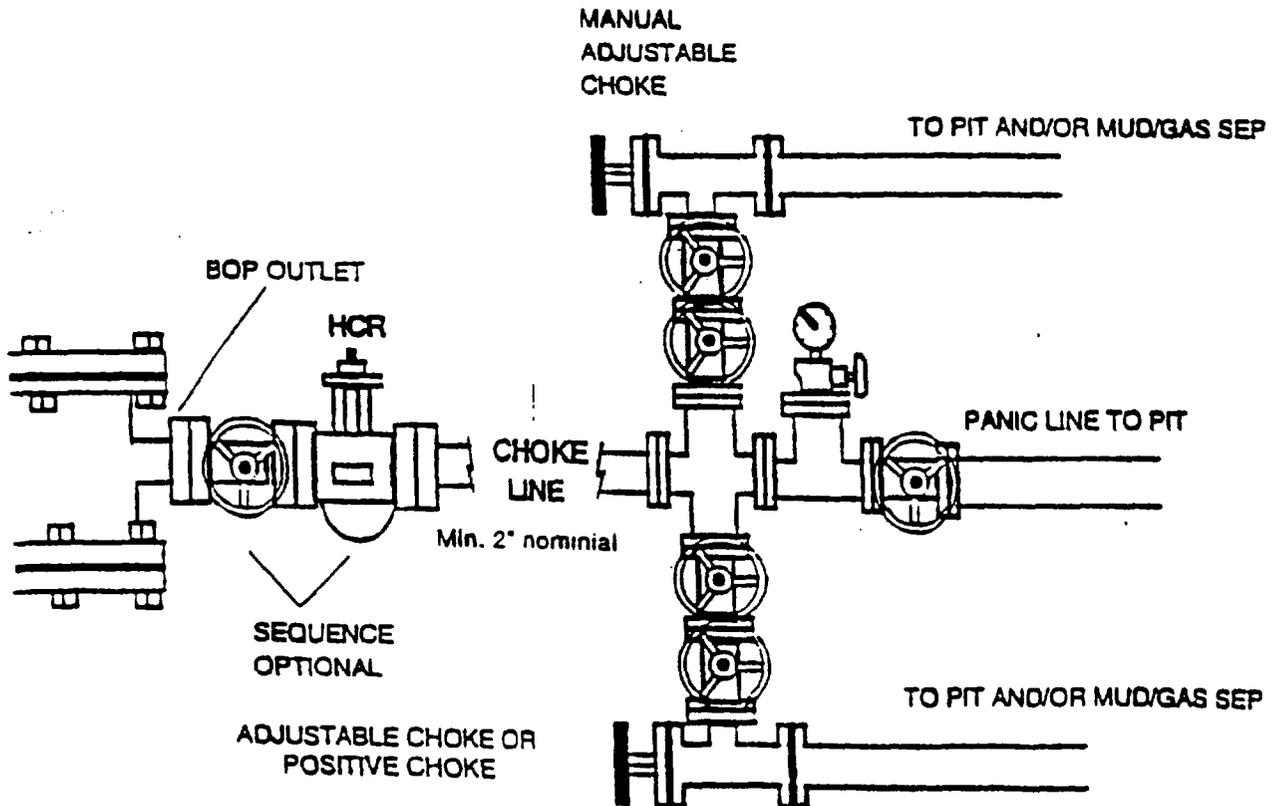
BOP Schematic

*Note: if BOP is equipped w/ side outlets below the rams, a spool is not required.

3000 psi WP Double Ram Blow-out Preventor. Must be tested to 1000 psi prior to drilling out 8-5/8" surface casing.



Choke Manifold Schematic

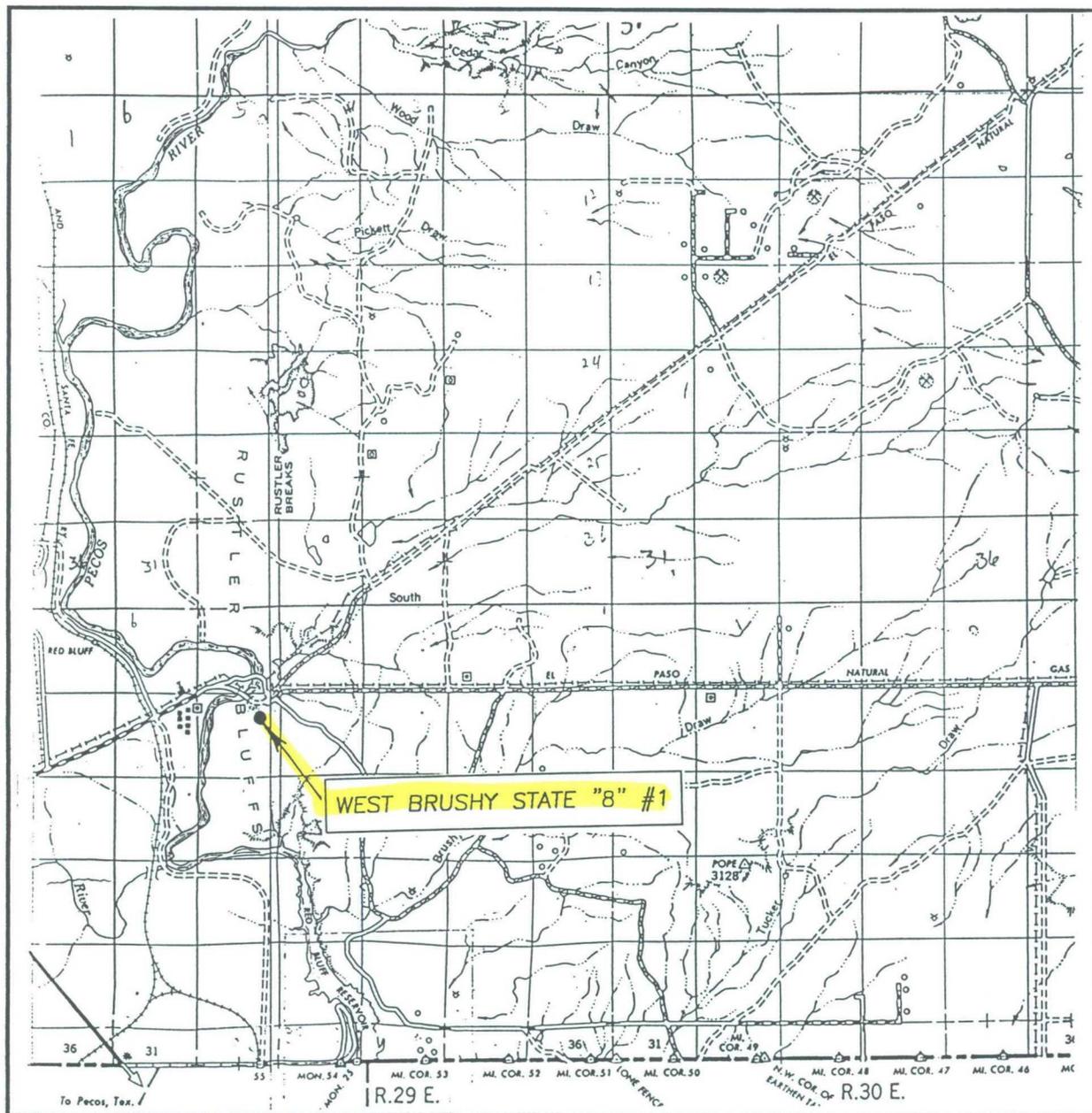


BLOWOUT PREVENTION EQUIPMENT SPECIFICATIONS

1. All BOP equipment shall be fluid and/or mechanically operated.
2. BOP's and all fittings will be in good working condition.
3. Equipment through which the bit must pass shall be at least as large as the casing size being drilled.
4. The nipple above the BOP shall be at least the same size as the last casing set.
5. The upper kelly cock with handle and lower kelly cock shall be rated at the BOP working pressure.
6. A floor safety valve (full opening) or drill string BOP with appropriate pressure ratings shall be available on the rig floor with connections or subs to fit any tool joint in the string.
7. The minimum size choke line shall be 3 inches nominal diameter, with a minimum size for vent lines downstream of chokes of 2 inches nominal, and vent lines which by-pass shall be a minimum of 3 inches nominal and as straight as possible.
8. All valves, fittings and lines between the closing unit and the blowout preventer stack should be of steel construction with rated working pressure at least equal to working pressure rating of the stack. Lines shall be bundled and protected from damage.
9. Minimum size for kill line is 2 inches nominal.
10. Ram type preventers shall be equipped with extension hand wheels or hydraulic locks.

MAPS
(VICINITY MAP AND LOCATION VERIFICATION)

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 8 TWP. 26-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1219' FNL & 1894' FEL

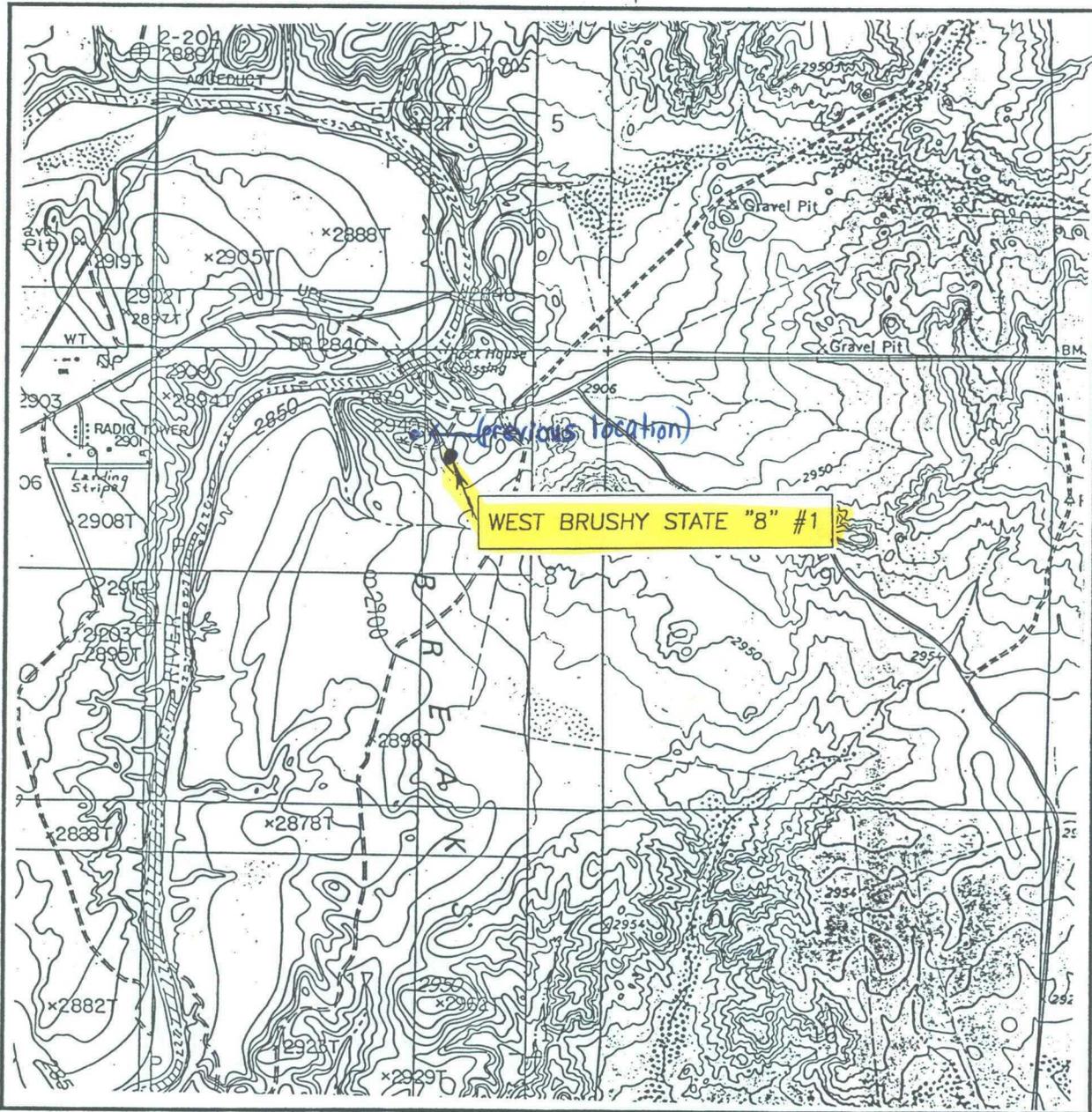
ELEVATION 2894'

OPERATOR ARCO PERMIAN

LEASE WEST BRUSHY STATE "8"

JOHN WEST SURVEYING
 HOBBS, NEW MEXICO
 (505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

SEC. 8 TWP. 26-S RGE. 29-E

RED BLUFF, N.M.

SURVEY _____ N.M.P.M.

COUNTY _____ EDDY

DESCRIPTION 1219' FNL & 1894' FEL

ELEVATION _____ 2894'

OPERATOR _____ ARCO PERMIAN

LEASE _____ WEST BRUSHY STATE "8"

U.S.G.S. TOPOGRAPHIC MAP
RED BLUFF, N.M.

**JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117**

SUPPORTING DOCUMENTATION:

- **REASONS FOR UNORTHODOX LOCATION**
- **TOPOGRAPHICAL MAPS W/ DETAILS**
- **PHOTO #1: UNORTHODOX LOCATION**
- **PHOTO #2: UNORTHODOX LOCATION**
- **MAP OF OFFSET OPERATORS (ALL ARCO PERMIAN)**
- **COPY OF LEASE AGREEMENT**

Introduction

ARCO Permian is requesting approval for the unorthodox location of well no. 1, West Brushy State "8" located at 1219' FNL and 1894' FEL of Section 8, T26S, R29E, Eddy County, New Mexico, into the Brushy Draw (Delaware) pool at a depth of 5,500'.

The original drilling permit for this well was approved at a standard location, but after further analysis, all standard locations would either be located in a flood plain or at high elevations, which would require the extensive use of explosives in close proximity to El Paso Natural Gas's ruptured line.

This report describes each option at a standard location and why an unorthodox location is the only feasible option. Supporting maps and pictures are attached.

Unorthodox Location (Defined) and Regulatory Requirements

The proposed location at 1219' FNL and 1894' FEL of Section 8, T26S, R29E, Eddy County, New Mexico is projected to be drilled as a producing oil well into the Brushy Draw (Delaware) pool. The applicable spacing rules require the well location on a 40 acre spacing unit which a legal subdivision of the U.S. Public Land Surveys and within 330' of any unit boundary.

The projected location for West Brushy State "8", well no. 1, is on a standard 40 acre spacing unit, but it does not meet the set-back requirements of 330' from the unit boundary due to topographical reasons described below. The well is projected at a location that is 101' from the unit boundary, which makes the location unorthodox.

Topographical Reasons for Unorthodox Location

The standard spacing unit for the proposed well location is 40 acres and the orthodox location allows 10 acres after the 330' set-back requirements are met. As shown on the attached map, the Pecos River Flood Plain occupies 70% of the orthodox location. 17% of the orthodox location is topographically unusable without the extensive use of explosives. There is a 22' elevation drop from the center stake to the north edge of pad at 150', and a 37' drop in elevation to the Northwest corner of the pad at 100' x 150'.

The El Paso Natural Gas Pipeline dissects the tract diagonally from the NW corner to the SE corner, which leaves the remaining 13% of the orthodox location within 200' of the gas pipeline. This would leave the edge of the pad only 50' or less from the gas pipeline. The El Paso Natural Gas Pipeline ruptured last summer, and the Northeast corner of this pad was burned from the fire.

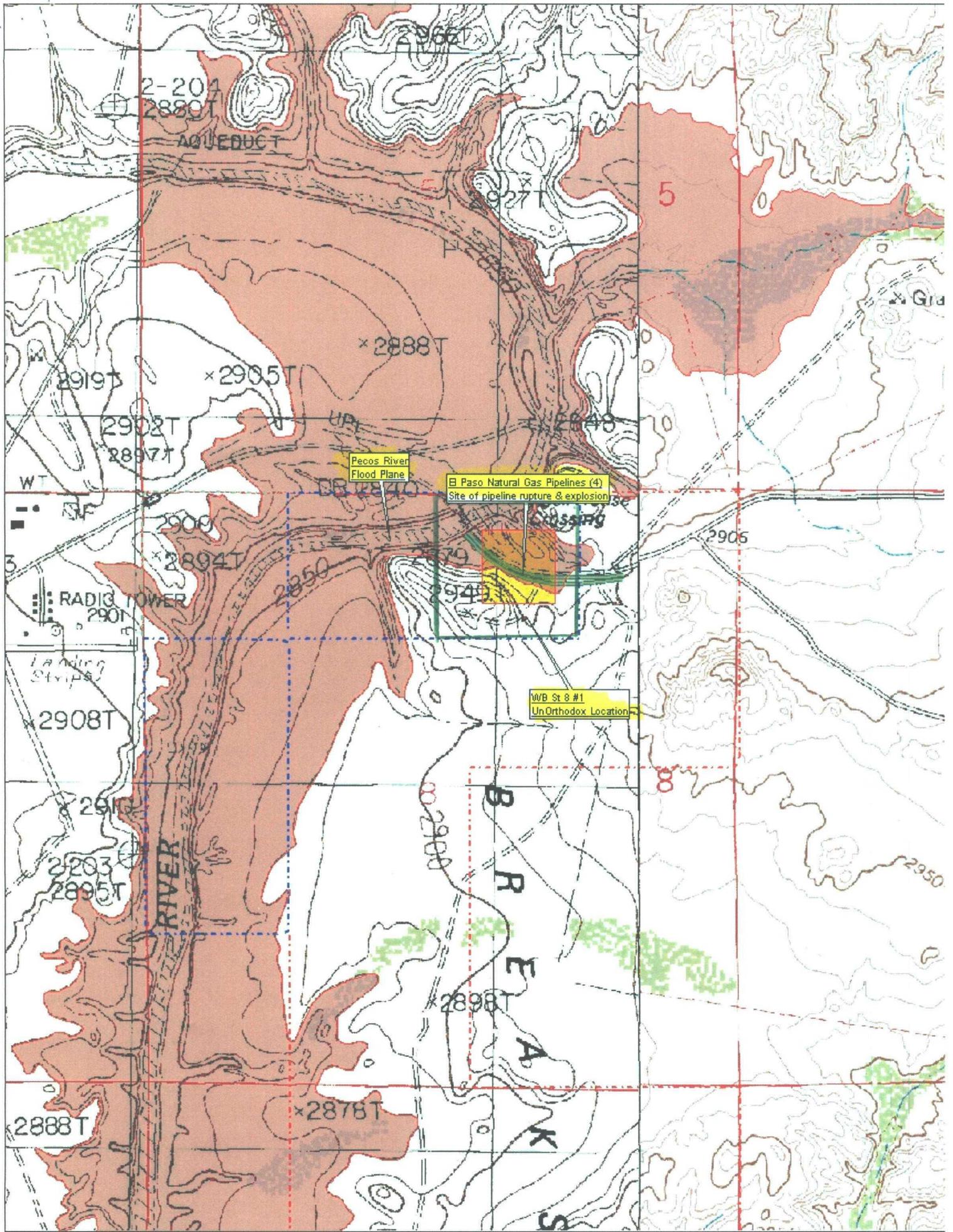
The unorthodox location would not require any blasting, would be 200' from the gas lines, and was unaffected by the line rupture. Photo #1 (attached) is a view from the center stake to the north of the unorthodox location. Photo #2 (attached) is a view from the north 100' stake towards the center stake of the unorthodox location.

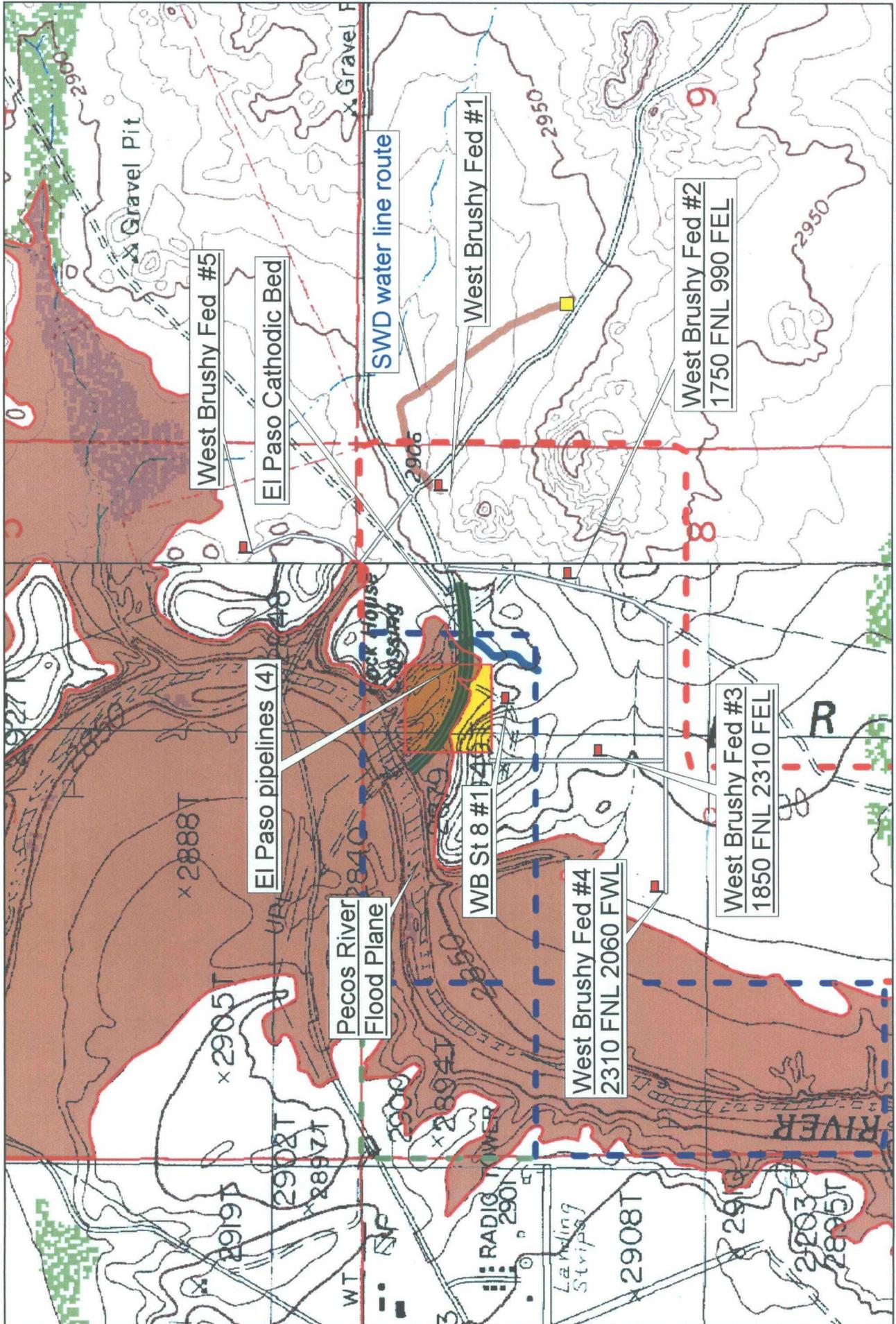
Economic Reasons for Unorthodox Location

Directional drilling was considered so that an orthodox location could be used. Directional drilling would increase drilling and production costs significantly, which would make the project uneconomical. Therefore the unorthodox location is the only alternative from an economic standpoint due to the topographical constraints described above.

Offset Operators and Interest Owners

According to Rule 1207 A(2), all offset operators and interest owners need to be notified of the unorthodox location if ownership is not common. In this case, ARCO Permian is also the offset operator as shown on the attached map. In addition, working interest ownership is common. A copy of the lease agreement is attached along with a map including other active ARCO Permian well locations surrounding the unorthodox location.





Copyright © 2000 DeLorme. TopoTools Advanced Print Kit TE. Scale: 1 : 12,000 Zoom Level: 14-0 Datum: WGS84

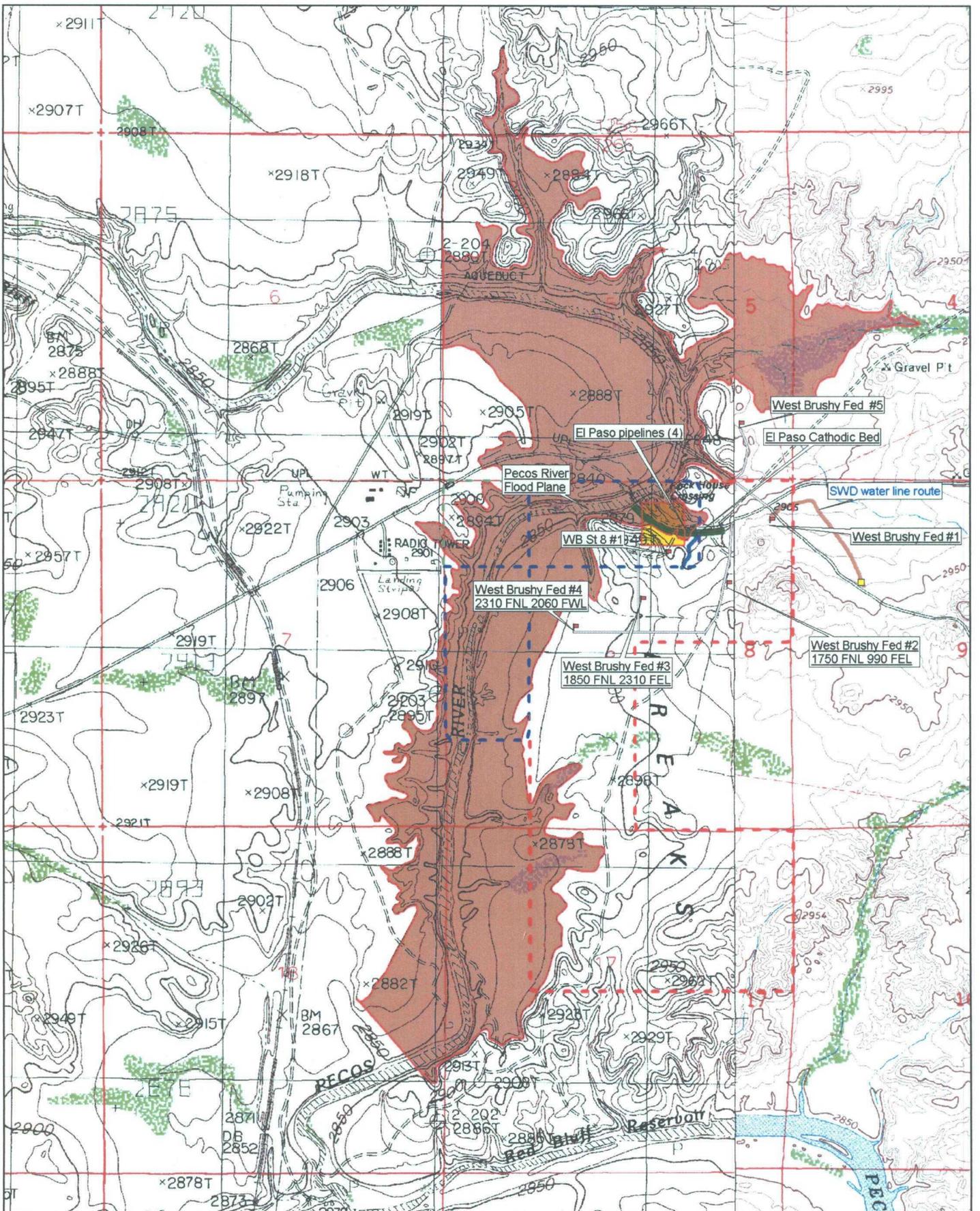




PHOTO # 1: UNORTHODOX LOCATION - VIEW FROM
CENTER STAKE TO NORTH.



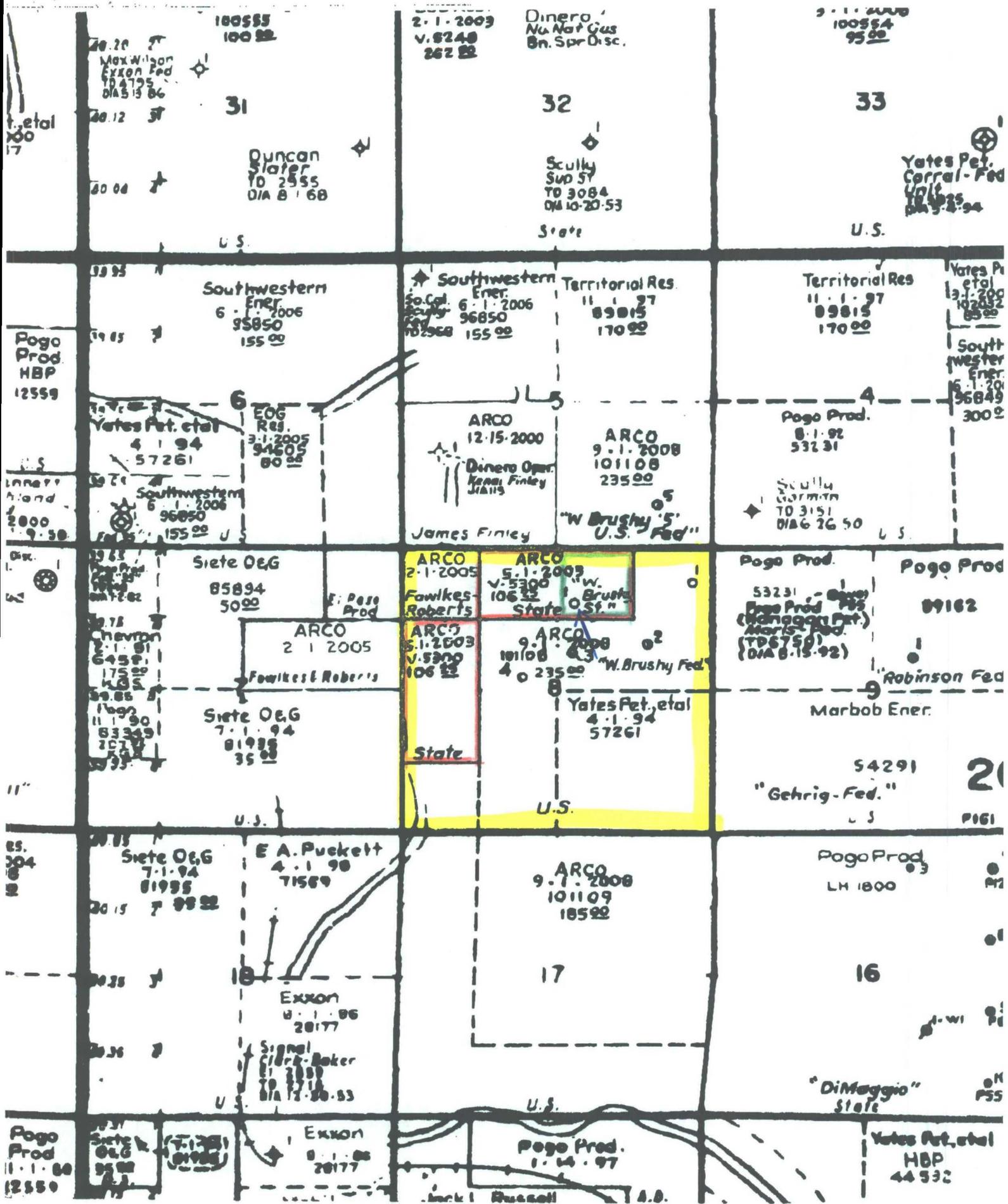
PHOTO # 2: UNORTHODOX LOCATION: VIEW FROM
100' STAKE TOWARDS CENTER STAKE.



Copyright © 2000 DeLorme. TopoTools Advanced Print Kit TE. Scale: 1 : 24,000 Zoom Level: 14-0 Datum: WGS84

2000 ft

West Brushy



etal
100
17

Pogo
Prod.
HBP
12559

Innery
land
2800
9-50

Pogo
Prod.
104
1-2-82

Chevron
2-1-81
6458
175 00

Pogo
11-1-90
83349
257 00

Siete O&G
7-1-94
81935

Exxon
8-1-86
28177

Pogo
Prod.
11-1-84
12559

Siete
O&G
95 00

Yates Pet.
etal
13-1-200
102032
85 00

South
wester
Ener.
16-1-20
36849
300 00

Pogo Prod.
53231 - (Managan Pet.)
(DIA 6-15-92)

Robinson Fed.

20
P161

Pogo Prod.
LH 1800

16

"DiMaggio"
State

Yates Pet. et al
HBP
44 532

4. (a) Undesignated certifies that (1) offeror is a citizen of the United States; an association of such citizens; a municipality; or a corporation organized under the laws of the United States or of any State or Territory; (2) all lands held in interest in the offer are in compliance with 43 CFR 3100 and the leasing authority; (3) offeror's chargeable interests, direct and indirect, in each public domain and acquired lands separately in the same State do not exceed 246,080 acres in oil and gas leases (of which up to 200,000 acres may be in oil and gas options), or 300,000 acres in leases in each leasing District in Alaska of which up to 200,000 acres may be in options; (4) offeror is not in violation of the laws of the State in which the lands covered by this offer are located; (5) offeror is in compliance with qualifications concerning Federal coal lease holdings provided in sec. 2(a)(2)(A) of the Mineral Leasing Act; (6) offeror is in compliance with reclamation requirements for all Federal oil and gas lease holdings as required by sec. 17(g) of the Mineral Leasing Act; and (7) offeror is not in violation of sec. 41 of the Act. (Date) _____

(b) Undesignated agrees that signature to this offer constitutes acceptance of this lease, including all terms, conditions, and stipulations of which offeror has been given notice, and any amendment or separate lease that include any land described in this offer open to leasing at the time this offer was filed that qualified for any lands from this lease. The offeror hereby agrees that this offer cannot be withdrawn, either in whole or in part, unless the withdrawal is received by the proper BLM State Office before this lease, an amendment to this lease, or a separate lease, whichever covers the land described in the withdrawal, has been signed on behalf of the United States.

This offer will be rejected and will afford offeror no priority if it is not properly completed and executed in accordance with the regulations, or if it is not accompanied by the required payments. 18 U.S.C. Sec. 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Delivered to the Bureau of Land Management, Department of the Interior, Washington, D.C. 20250. (Signature of Lessee or Attorney-in-fact) _____

Sec. 1. Rentals—Rentals shall be paid to proper office of lessor in advance of each lease year. Annual rental, _____ percent or fraction thereof are: _____

(a) Noncompetitive lease, \$1.50 for the first 5 years; thereafter \$2.00;
(b) Competitive lease, \$1.50 for the first 5 years; thereafter \$2.00;
(c) Other, see attachment, or _____

as specified in regulations at the time this lease is issued. During existence of this lease, information obtained under this section shall be closed to inspection by the public in accordance with the Freedom of Information Act (5 U.S.C. 552).

If this lease or a portion thereof is committed to an approved cooperative or unit plan which includes a well capable of producing leased resources, and the plan contains a provision for allocation of production, royalties shall be paid on the production allocated to this lease. However, annual rentals shall continue to be due at the rate specified in (a), (b), or (c) for those lands not within a participating area.

Failure to pay annual rental, if due, on or before the anniversary date of this lease (or next official working day if office is closed) shall automatically terminate this lease by operation of law. Rentals may be waived, reduced, or suspended by the Secretary upon a sufficient showing by lessee.

Sec. 2. Royalties—Royalties shall be paid to proper office of lessor. Royalties shall be computed in accordance with regulations on production removed or sold. Royalty rates are:

(a) Noncompetitive lease, 12 1/2%;
(b) Competitive lease, 12 1/2%;
(c) Other, see attachment; or _____

Lessor reserves the right to specify whether royalty is to be paid in value or in kind, and the right to establish reasonable minimum values on products after giving lessee notice and an opportunity to be heard. When paid in value, royalties shall be due and payable on the last day of the month following the month in which production occurred. When paid in kind, production shall be delivered, unless otherwise agreed to by lessor, in merchantable condition on the premises where produced without cost to lessor. Lessee shall not be required to hold such production in storage beyond the last day of the month following the month in which production occurred, nor shall lessee be held liable for loss or destruction of royalty oil or other products in storage from causes beyond the reasonable control of lessee.

Minimum royalty in lieu of rental of not less than the rental which otherwise would be required for that lease year shall be payable at the end of each lease year beginning on or after a discovery in paying quantities. This minimum royalty may be waived, suspended, or reduced, and the above royalty rates may be reduced, for all or portions of this lease if the Secretary determines that such action is necessary to encourage the greatest ultimate recovery of the leased resources, or is otherwise justified.

An interest charge shall be assessed on late royalty payments or underpayments in accordance with the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA) (30 U.S.C. 1701). Lessee shall be liable for royalty payments on oil and gas lost or wasted from a lease site when such loss or waste is due to negligence on the part of the operator, or due to the failure to comply with any rule, regulation, order, or citation issued under FOGRMA or the leasing authority.

Sec. 3. Bonds—A bond shall be filed and maintained for lease operations as required under regulations.

Sec. 4. Diligence, rate of development, optimization, and drainage—Lessee shall exercise reasonable diligence in developing and producing, and shall prevent unnecessary damage to, loss of, or waste of leased resources. Lessor reserves right to specify rates of development and production in the public interest and to require lessee to subscribe to a cooperative or unit plan, within 30 days of notice, if deemed necessary for proper development and operation of area, field, or pool embracing these leased lands. Lessee shall drill and produce wells necessary to protect leased lands from drainage or pay compensatory royalty for drainage in amount determined by lessor.

Sec. 5. Documents, evidence, and inspection—Lessee shall file with proper office of lessor, not later than 30 days after effective date thereof, any contract or evidence of other arrangement for sale or disposal of production. At such times and in such form as lessor may prescribe, lessee shall furnish detailed statements showing amounts and quality of all products removed and sold, proceeds therefrom, and amount used for production purposes or unavoidably lost. Lessee may be required to provide plans and schematic diagrams showing development work and improvements, and reports with respect to parties in interest, expenditures, and depreciation costs. In the form prescribed by lessor, lessee shall keep a daily drilling record, a log, information on well surveys and tests, and a record of subsurface investigations and furnish copies to lessor upon request. Lessee shall keep open at all reasonable times for inspection by any authorized officer of lessor, the leased premises and all wells, improvements, machinery, and fixtures thereon, and all books, accounts, maps, and records relative to operations, surveys, or investigations on or in the leased lands. Lessee shall maintain complete and accurate records, including maps, records, and documentation such as billings, invoices, or similar documents, that support

Sec. 6. Conduct of operations—Lessee shall conduct operations in a manner that minimizes adverse impacts to the land, air, and water, to cultural, biological, visual, and other resources, and to other land uses or users. Lessee shall take reasonable measures deemed necessary by lessor to accomplish the intent of this section. To the extent consistent with lease rights granted, such measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. Lessor reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-way. Such uses shall be conditioned so as to prevent unnecessary or unreasonable interference with rights of lessee.

Prior to disturbing the surface of the leased lands, lessee shall contact lessor to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary. Areas to be disturbed may require inventories or special studies to determine the extent of impacts to other resources. Lessee may be required to complete minor inventories or short term special studies under guidelines provided by lessor. If the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessee shall immediately contact lessor. Lessee shall cease any operations that would result in the destruction of such species or objects.

Sec. 7. Mining operations—To the extent that impacts from mining operations would be substantially different or greater than those associated with normal drilling operations, lessor reserves the right to deny approval of such operations.

Sec. 8. Extraction of helium—Lessor reserves the option of extracting or having extracted helium from gas production in a manner specified and by means provided by lessor at no expense or loss to lessee or owner of the gas. Lessee shall include in any contract of sale of gas the provisions of this section.

Sec. 9. Damages to property—Lessee shall pay lessor for damage to lessor's improvements, and shall save and hold lessor harmless from all claims for damage or harm to persons or property as a result of lease operations.

Sec. 10. Protection of diverse interests and equal opportunity—Lessee shall: pay when due all taxes legally assessed and levied under laws of the State or the United States; accord all employees complete freedom of purchase; pay all wages at least twice each month in lawful money of the United States; maintain a safe working environment in accordance with standard industry practices; and take measures necessary to protect the health and safety of the public.

Lessor reserves the right to ensure that production is sold at reasonable prices and to prevent monopoly. If lessee operates a pipeline, or owns controlling interest in a pipeline or a company operating a pipeline, which may be operated accessible to oil derived from these leased lands, lessee shall comply with section 28 of the Mineral Leasing Act of 1920.

Lessee shall comply with Executive Order No. 11246 of September 24, 1965, as amended, and regulations and relevant orders of the Secretary of Labor issued pursuant thereto. Neither lessor nor lessee's subcontractors shall maintain segregated facilities.

Sec. 11. Transfer of lease interests and relinquishment of lease—As required by regulations, lessee shall file with lessor any assignment or other transfer of an interest in this lease. Lessee may relinquish this lease or any legal subdivision by filing in the proper office a written relinquishment, which shall be effective as of the date of filing, subject to the continued obligation of the lessee and surety to pay all accrued rentals and royalties.

Sec. 12. Delivery of premises—At such time as all or portions of this lease are returned to lessor, lessee shall place affected wells in condition for suspension or abandonment, reclaim the land as specified by lessor and, within a reasonable period of time, remove equipment and improvements not deemed necessary by lessor for preservation of producible wells.

Sec. 13. Proceedings in case of default—If lessee fails to comply with any provisions of this lease, and the noncompliance continues for 30 days after written notice thereof, this lease shall be subject to cancellation unless or until the leasehold contains a well capable of production of oil or gas in paying quantities, or the lease is committed to an approved cooperative or unit plan or communitization agreement which contains a well capable of production of unitized substances in paying quantities. This provision shall not be construed to prevent the exercise by lessor of any other legal and equitable remedy, including waiver of the default. Any such remedy or waiver shall not prevent later cancellation for the same default occurring at any other time. Lessee shall be subject to applicable provisions and penalties of FOGRMA (30 U.S.C. 1701).

Sec. 14. Heirs and successors-in-interest—Each obligation of this lease shall extend to and be binding upon, and every benefit hereof shall inure to the heirs, executors, administrators, successors, beneficiaries, or assignees of the respective parties hereto.

BUREAU OF LAND MANAGEMENT
DEPARTMENT OF THE INTERIOR
WASHINGTON, D.C. 20250

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OFFER TO LEASE AND LEASE FOR OIL AND GAS

Serial No.

NM NM 101108

The undersigned (reverse) offers to lease all or any of the lands in Item 2 that are available for lease pursuant to the Mineral Leasing Act of 1920, as amended and supplemented (30 U.S.C., 18 et seq.), the Mineral Leasing Act for Acquired Lands of 1947, as amended (30 U.S.C. 351-359), the Attorney-General's Opinion of April 2, 1941 (40 Op. Atty. Gen. 41), or the

Name
Street
City, State, Zip Code

ATLANTIC RICHFIELD COMPANY
600 NORTH MARIENFELD
MIDLAND

READ INSTRUCTIONS BEFORE COMPLETING

TX 79701

2. This application/offer/lease is for: (Check only One) PUBLIC DOMAIN LANDS
 Surface managing agency if other than BLM:
 Legal description of land requested:

ACQUIRED LANDS (percent U.S. interest)

*SEE ITEM 2 IN INSTRUCTIONS BELOW PRIOR TO COMPLETING PARCEL NUMBER AND SALE DATE.
Parcel No. _____ Unit/Project _____ *Sale Date (m/d/y) _____

R. Meridian
State _____ County _____

Amount remitted: Filing fee \$ _____ Rental fee \$ _____
Total acres applied for _____
Total \$ _____

DO NOT WRITE BELOW THIS LINE

3. Land included in lease:
SECTION: **26S**
T. **05** R. **29E**
SE: **08**
NENE, S2NE, SENW, E2SW;
Meridian **NMPM**

State **NM** County **EDDY**

Total acres in lease: **400.0000**
Rental retained: **\$600.00**

XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

This lease is issued granting the exclusive right to drill for, mine, extract, remove and dispose of all the oil and gas (except helium) in the lands described in Item 3 together with the right to build and maintain necessary improvements thereupon for the term indicated below, subject to renewal or extension in accordance with the appropriate leasing authority. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Secretary of the Interior's regulations and formal orders in effect as of lease issuance, and to regulations and formal orders hereafter promulgated when not inconsistent with lease rights granted or specific provisions of this lease.

NOTE: This lease is issued to the high bidder pursuant to his/her duly executed bid or nomination form submitted under 43 CFR 3120 and is subject to the provisions of that bid or nomination and those specified on this form.

Type and primary term of lease:
 Noncompetitive lease (ten years)
 Competitive lease (ten years)
 Other _____

THE UNITED STATES OF AMERICA
by *Blaine S. Baez* (Signing Officer)
LAND LAW EXAMINER, FLUIDS ADJUDICATION TEAM
(Title) **AUG 20 1998**
EFFECTIVE DATE OF LEASE **SEP - 1 1998** (Date)

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

08/14/01 11:22:58
OGOMES -TPFW
PAGE NO: 1

Sec : 08 Twp : 26S Rng : 29E Section Type : NORMAL

<p>D 40.00 Fee owned</p>	<p>C 40.00 RR V05300 0000 ATLANTIC RICHFIEL 05/01/03</p>	<p>B 40.00 RR V05300 0000 ATLANTIC RICHFIEL 05/01/03 A</p>	<p>A 40.00 Federal owned A</p>
<p>E 40.00 RR V05300 0000 ATLANTIC RICHFIEL 05/01/03</p>	<p>F 40.00 Federal owned A</p>	<p>G 40.00 Federal owned A</p>	<p>H 40.00 Federal owned A</p>

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06
PF07 BKWD PF08 FWD PF09 PRINT PF10 SDIV PF11 PF12

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

08/14/01 11:23:01
OGOMES -TPFW
PAGE NO: 2

Sec : 08 Twp : 26S Rng : 29E Section Type : NORMAL

L	K	J	I
40.00	40.00	40.00	40.00
RR V05300 0000 ATLANTIC RICHFIEL 05/01/03	Federal owned	Federal owned	Federal owned
M	N	O	P
40.00	40.00	40.00	40.00
Federal owned	Federal owned	Federal owned	Federal owned

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06
PF07 BKWD PF08 FWD PF09 PRINT PF10 SDIV PF11 PF12

CMD : ONGARD 08/14/01 11:23:16
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TPFW

OGRID Idn : 990 API Well No: 30 15 31815 APD Status(A/C/P): A
Opr Name, Addr: ARCO PERMIAN Aprvl/Cncl Date : 06-04-2001
PO BOX 1089
EUNICE,NM 88231

Prop Idn: 28090 WEST BRUSHY 8 STATE Well No: 1

	U/L	Sec	Township	Range	Lot Idn	North/South	East/West
	---	---	-----	-----	-----	-----	-----
Surface Locn :	B	8	26S	29E		FTG 990 F N	FTG 2310 F E
OCD U/L :	B		API County :	15			

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) : F
Lease typ(F/S/P/N/J/U/I): S Ground Level Elevation : 2942

State Lease No: VO 5300 Multiple Comp (S/M/C) : S
Prpsd Depth : 5500 Prpsd Frmtn : BRUSHY DRAW DELAWARE

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

CMD : ONGARD 08/14/01 11:23:35
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TPFW

OGRID Idn : 990 API Well No: 30 15 31867 APD Status(A/C/P): A
Opr Name, Addr: ARCO PERMIAN Aprvl/Cncl Date : 07-03-2001
PO BOX 1089
EUNICE,NM 88231

Prop Idn: 27864 WEST BRUSHY FEDERAL Well No: 3

	U/L	Sec	Township	Range	Lot Idn	North/South	East/West
	---	---	-----	-----	-----	-----	-----
Surface Locn : G	8	26S	29E			FTG 1850 F N	FTG 2310 F E
OCD U/L : G		API	County :	15			

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) : F
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 2903

State Lease No: NM 101108 Multiple Comp (S/M/C) : S
Prpsd Depth : 5500 Prpsd Frmtn : BRUSHY DRAW DELAWARE

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

CMD : ONGARD 08/14/01 11:23:52
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TPFW

OGRID Idn : 990 API Well No: 30 15 31675 APD Status(A/C/P): A
Opr Name, Addr: ARCO PERMIAN Aprvl/Cncl Date : 03-30-2001
PO BOX 1089
EUNICE,NM 88231

Prop Idn: 27864 WEST BRUSHY FEDERAL Well No: 1

	U/L	Sec	Township	Range	Lot Idn	North/South	East/West
	---	---	-----	-----	-----	-----	-----
Surface Locn : A	8	26S	29E			FTG 660 F N	FTG 330 F E
OCD U/L : A		API	County :	15			

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) : F
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 2918

State Lease No: NM 101108 Multiple Comp (S/M/C) : S
Prpsd Depth : 5500 Prpsd Frmtn : BRUSHY DRAW DELAWARE

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

CMD : ONGARD 08/14/01 11:24:10
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TPFW

OGRID Idn : 990 API Well No: 30 15 31866 APD Status(A/C/P): A
Opr Name, Addr: ARCO PERMIAN Aprvl/Cncl Date : 07-03-2001
PO BOX 1089
EUNICE,NM 88231

Prop Idn: 27864 WEST BRUSHY FEDERAL Well No: 2

	U/L	Sec	Township	Range	Lot Idn	North/South	East/West
	---	---	-----	-----	-----	-----	-----
Surface Locn : H	8	26S	29E			FTG 1750 F N	FTG 990 F E
OCD U/L : H		API	County	15			

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) : F
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 2927

State Lease No: NM 101108 Multiple Comp (S/M/C) : S
Prpsd Depth : 5500 Prpsd Frmtn : BRUSHY DRAW DELAWARE

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

CMD : ONGARD 08/14/01 11:24:31
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TPFW

OGRID Idn : 990 API Well No: 30 15 31868 APD Status(A/C/P): A
Opr Name, Addr: ARCO PERMIAN Aprvl/Cncl Date : 07-03-2001
PO BOX 1089
EUNICE,NM 88231

Prop Idn: 27864 WEST BRUSHY FEDERAL Well No: 4

	U/L	Sec	Township	Range	Lot	Idn	North/South	East/West
Surface Locn	: F	8	26S	29E			FTG 2310 F N	FTG 2060 F W
OCD U/L	: F		API County	: 15				

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) : F
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 2892

State Lease No: NM 101108 Multiple Comp (S/M/C) : S
Prpsd Depth : 5500 Prpsd Frmtn : BRUSHY DRAW DELAWARE

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

State of New Mexico
Energy, Minerals & Natural Resources

SP Form C-101
Revised March 17, 1999

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. 1st Street, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Submit to appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address ARCO PERMIAN P.O. BOX 1610		² OGRID Number 000990
⁴ Property Code 28090	⁵ Property Name WEST BRUSHY STATE "8"	³ API Number 30-015-31815
		⁶ Well No. ↓

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
B	8	26S	29E		990	NORTH	2310	EAST	EDDY

⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County

⁹ Proposed Pool 1: BRUSHY DRAW (DELAWARE)

¹⁰ Proposed Pool 2:

¹¹ Work Type Code N	¹² Well Type Code O	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 2942'
¹⁶ Multiple NO	¹⁷ Proposed Depth 5500	¹⁸ Formation DELAWARE	¹⁹ Contractor CAPSTAR DRILG	²⁰ Spud Date 7/01

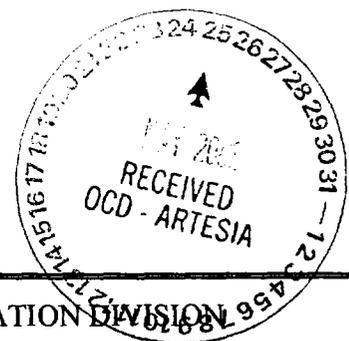
²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
11	8-5/8	24	580	315	SURF
7-7/8	5-1/2	15.5	5500	800	SURF

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Subject well planned as a 5500' straight hole.
2000 psi BOPE will be used from 580' to TD.

NOTIFY OCD SPUD & TIME TO WITNESS CEMENTING OF 8 5/8" CASING STRING



²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Elizabeth A. Caseer*

Printed name: ELIZABETH A. CASEER

Title: REGULATORY COMPLIANCE ANALYST

Date: 5/24/01 Phone: 915/688-5570

Approved by: *Steve W. Brown*

Title: SUPERVISOR, DISTRICT II

Approval Date: JUN 04 2001 Expiration Date: JUN 04 2002

Conditions of Approval:

Attached

DISTRICT I
P.O. Box 1880, Hobbs, NM 88241-1880

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Artesia, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name <i>BRUSHY DRAW (DELAWARE)</i>
Property Code	Property Name WEST BRUSHY STATE "8"	Well Number 1
OGRID No. <i>000990</i>	Operator Name ARCO PERMIAN	Elevation 2942'

Surface Location

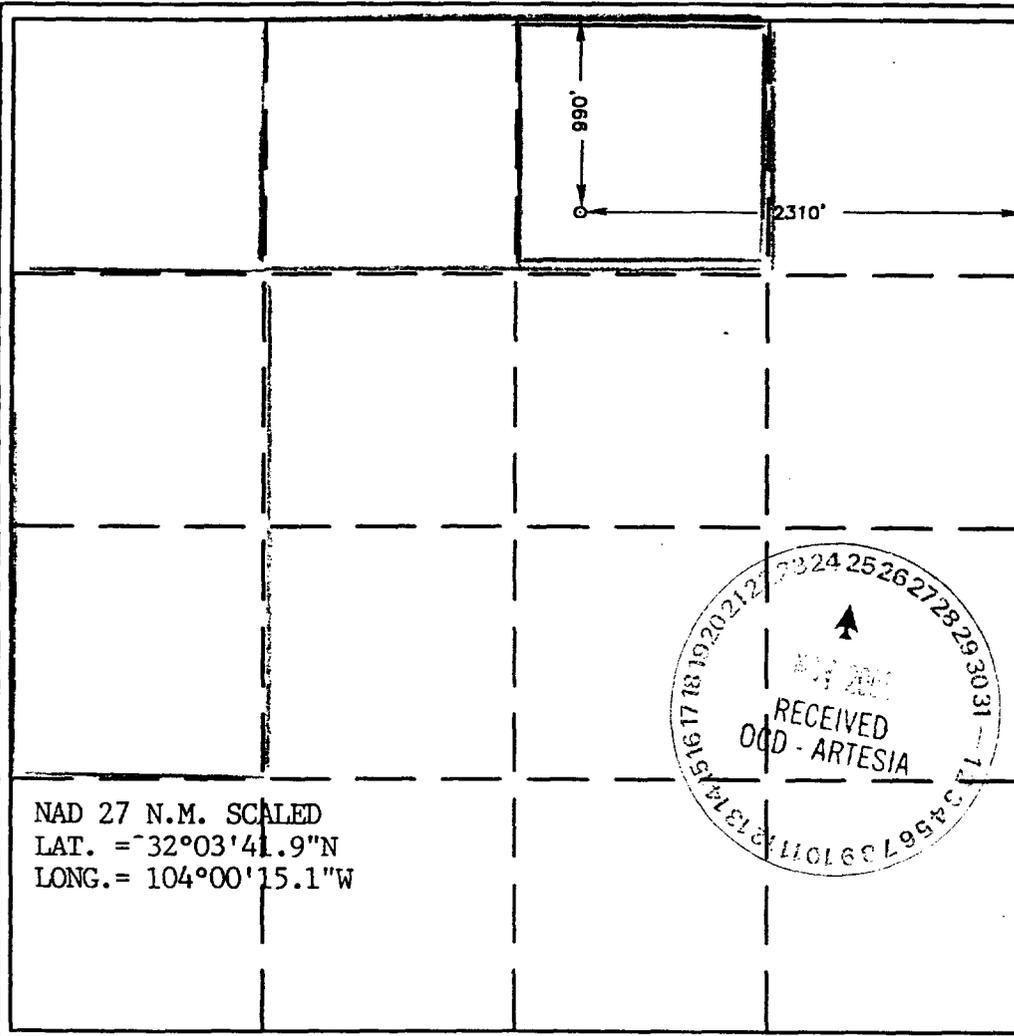
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	8	26-S	29-E		990	NORTH	2310	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres <i>40</i>	Joint or Infill	Consolidation Code	Order No.
------------------------------	-----------------	--------------------	-----------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



NAD 27 N.M. SCALED
LAT. = 32°03'41.9"N
LONG. = 104°00'15.1"W



OPERATOR CERTIFICATION

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

Elizabeth A. Casberg
Signature

Elizabeth A. Casberg
Printed Name

Resident Engineer Analyst
Title

5/24/01
Date

SURVEYOR CERTIFICATION

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 belief.

MAY 08, 2001

Date Surveyed _____ AWB

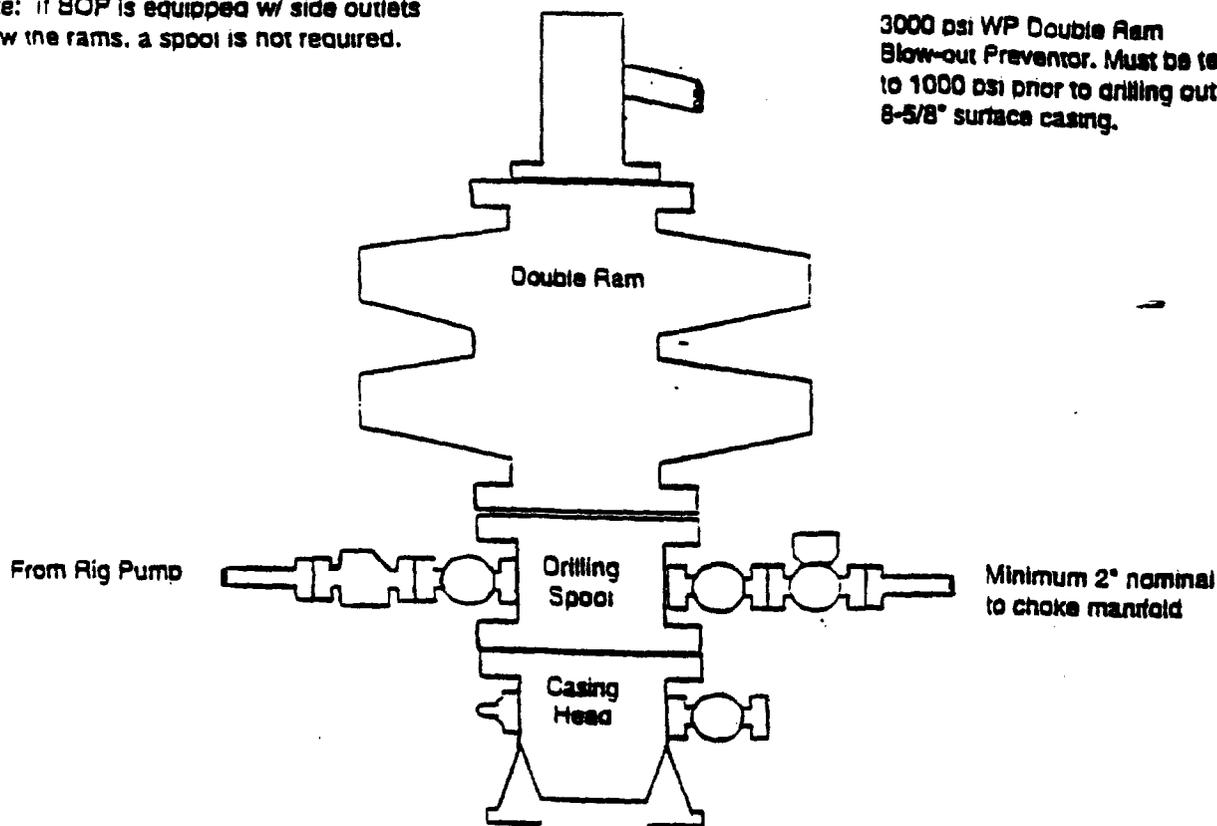
Signature & Seal of Professional Surveyor
Ronald J. Edson 5/11/01

Certificate No. **RONALD J. EDSON 3239**
GARY HEDSON 12641

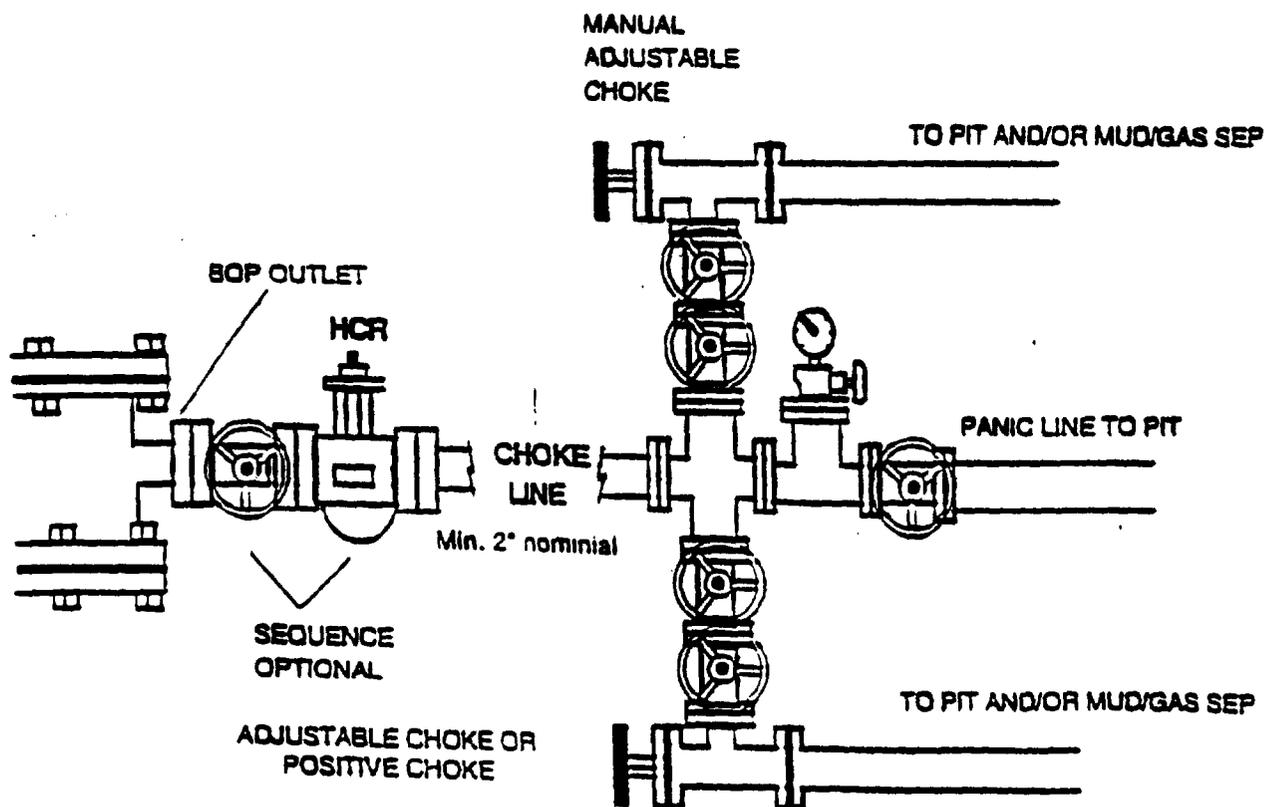
BOP Schematic

*Note: if BOP is equipped w/ side outlets below the rams, a spool is not required.

3000 psi WP Double Ram Blow-out Preventor. Must be tested to 1000 psi prior to drilling out 6-5/8" surface casing.



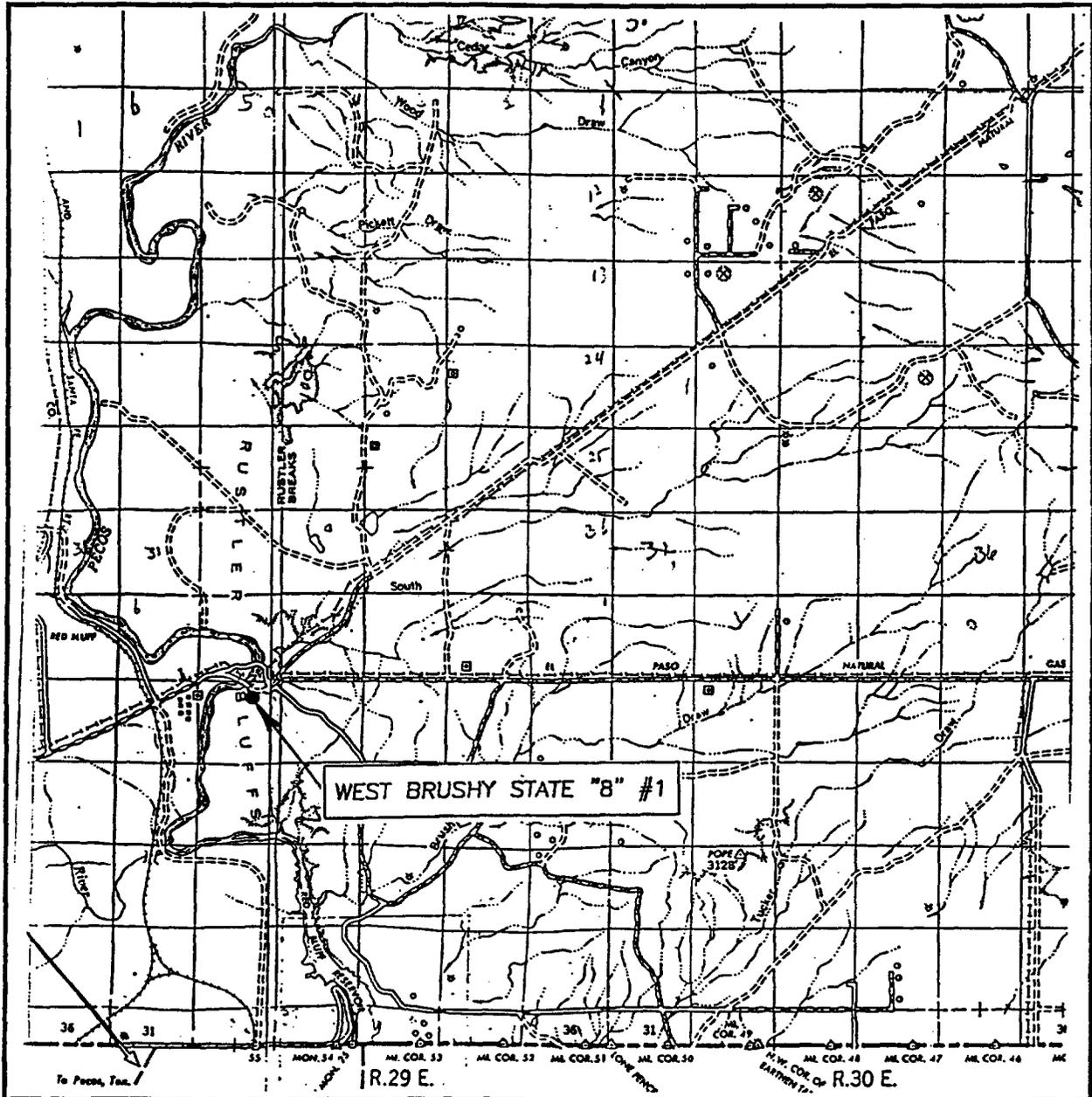
Choke Manifold Schematic



BLOWOUT PREVENTION EQUIPMENT SPECIFICATIONS

1. All BOP equipment shall be fluid and/or mechanically operated.
2. BOP's and all fittings will be in good working condition.
3. Equipment through which the bit must pass shall be at least as large as the casing size being drilled.
4. The nipple above the BOP shall be at least the same size as the last casing set.
5. The upper kelly cock with handle and lower kelly cock shall be rated at the BOP working pressure.
6. A floor safety valve (full opening) or drill string BOP with appropriate pressure ratings shall be available on the rig floor with connections or subs to fit any tool joint in the string.
7. The minimum size choke line shall be 3 inches nominal diameter, with a minimum size for vent lines downstream of chokes of 2 inches nominal, and vent lines which by-pass shall be a minimum of 3 inches nominal and as straight as possible.
8. All valves, fittings and lines between the closing unit and the blowout preventer stack should be of steel construction with rated working pressure at least equal to working pressure rating of the stack. Lines shall be bundled and protected from damage.
9. Minimum size for kill line is 2 inches nominal.
10. Ram type preventers shall be equipped with extension hand wheels or hydraulic locks.

VICINITY MAP

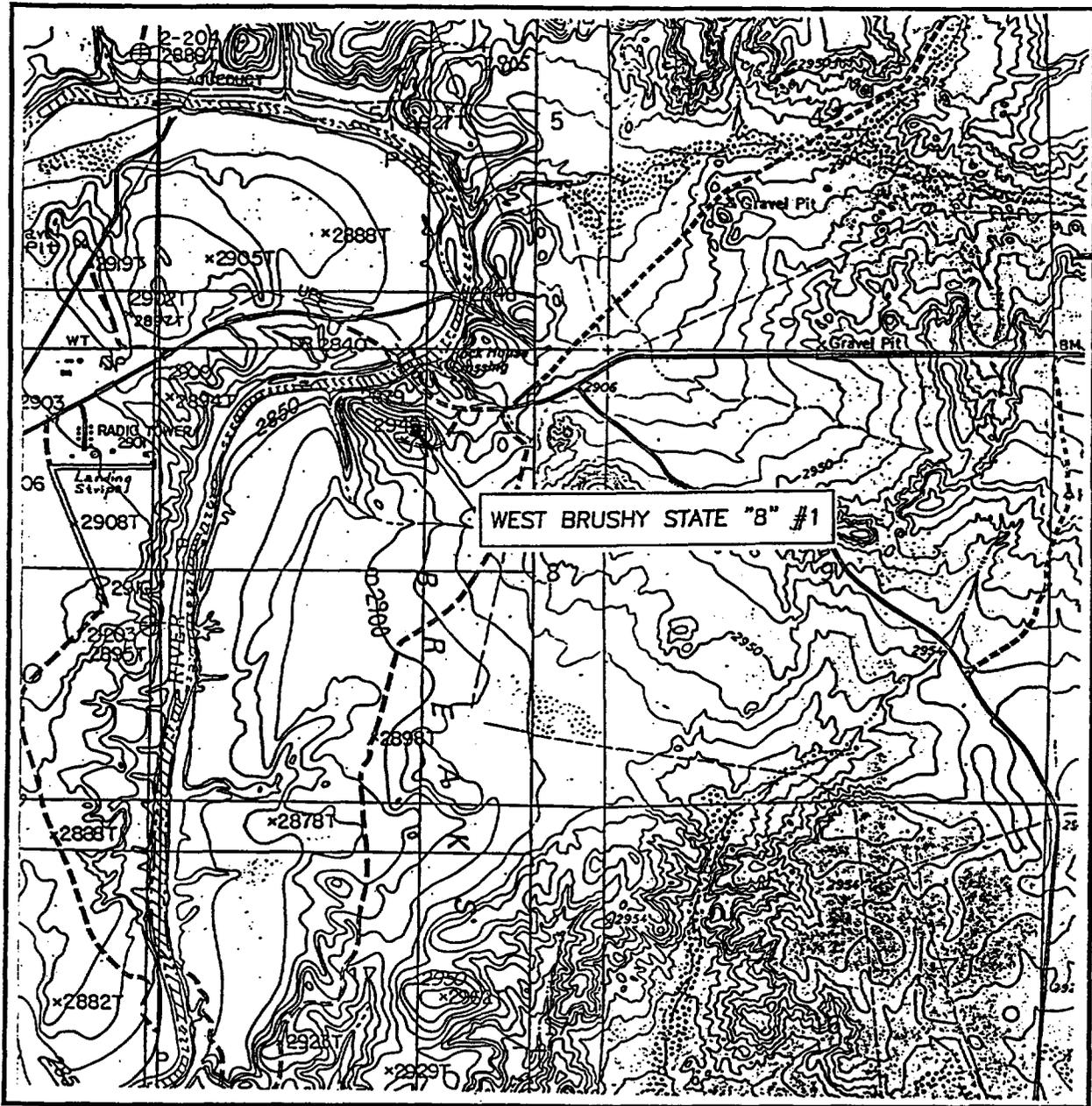


SCALE: 1" = 2 MILES

SEC. 8 TWP. 26-S RGE. 29-E
 SURVEY N.M.P.M.
 COUNTY EDDY
 DESCRIPTION 990' FNL & 2310' FEL
 ELEVATION 2942'
 OPERATOR ARCO PERMIAN
 LEASE WEST BRUSHY STATE "8"

JOHN WEST SURVEYING
 HOBBS, NEW MEXICO
 (505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

SEC. 8 TWP. 26-S RGE. 29-E

RED BLUFF, N.M.

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 990' FNL & 2310' FEL

ELEVATION 2942'

OPERATOR ARCO PERMIAN

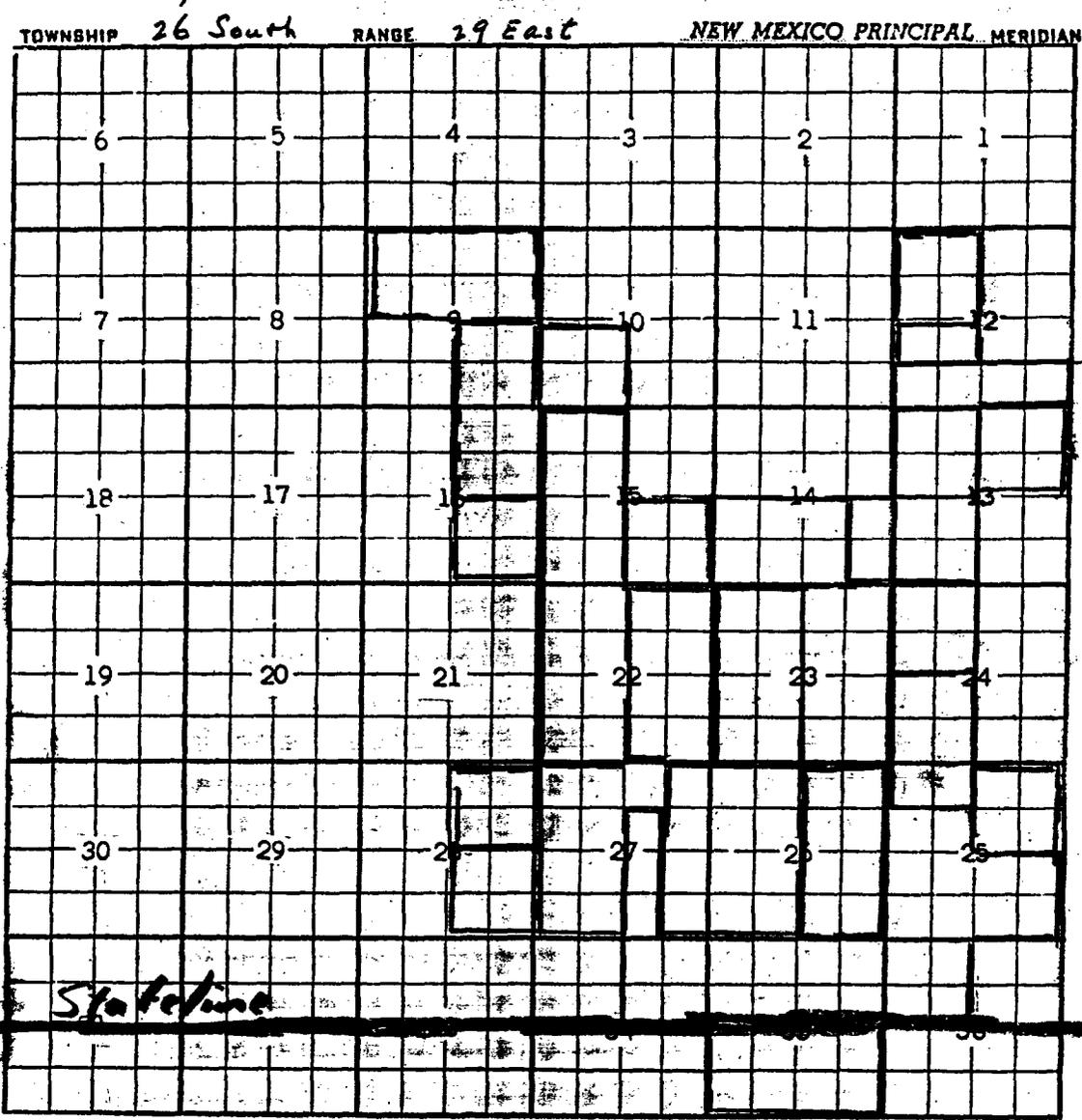
**JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117**

LEASE WEST BRUSHY STATE "8"

U.S.G.S. TOPOGRAPHIC MAP
RED BLUFF, N.M.

8080

County Eddy Pool Brushy Draw - Delaware



Description: SW/4 Sec. 13 (R-1355, 4-1-59)
Ext: NW/4 Sec. 24 (R-1681, 6-1-60) - NW/4 Sec. 13 (R-1720, 8-1-60)
- S/2 S/2 Sec. 12 (R-1942, 5-1-61) - SW/4 Sec. 24: N/2 NW/4 Sec. 25 (R-2062, 10-1-61)
- E/2 S/4 Sec. 14, (R-2393, 1-1-63). Ext: E/2 sec 26 (R-6912, 3-5-82)
Ext: S/2, S/2 NW/4 Sec. 25, SW/4 NE/4, W/2 SE/4 Sec. 27, NE/4 Sec. 34, All Sec. 35, NW/4 Sec. 36
(R-7307, 6-14-83) Ext: E/2 Sec. 23 (R-7322, 8-1-83)
Ext: W/2 Sec. 26, E/2 E/2 Sec. 27 (R-7334, 8-19-83)
Ext: W/2 Sec. 23 (R-7668, 9-21-84) Ext: E/2 Sec. 22 (R-7758, 12-13-84)
Ext: NW/4 NE/4 and W/2 Sec. 27 (R-7875, 4-16-85)
Ext: W/2 Sec. 15, W/2 Sec. 22 (R-8065, 10-31-85)
Ext: N/2 SW/4 Sec. 12 (R-8229, 5-19-86) Ext: NE/4 Sec. 13 (R-8257, 7-8-86)
Ext: NW/4 Sec. 12 (R-8562, 7-4-87) Ext: NE/4 Sec. 25, NE/4 Sec. 28 (R-8627, 4-1-88)
Ext: SE/4 Sec. 28 (R-8747, 9-19-88) Ext: SE/4 Sec. 15 (R-9095, 1-1-90)
Ext: SE/4 Sec. 16 (R-9709, 8-25-92) Ext: SE/4 Sec. 9, NE/4 Sec. 16 (R-9884, 4-26-93)
Ext: N/2 Sec. 9 (R-10042, 12-28-93) Ext: SW/4 Sec. 10 (R-10343, 4-12-95)
Ext: SW/4 and W/2 SE/4 (R-11444, 8-31-00)