

CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: ARCO PERMIAN Well: WEST RED LAKE '4' FLD No. 1
Contact: GARY SMALLWOOD Title: O/A ENG. Phone: 915-688-5359
DATE IN 10-20-97 RELEASE DATE 11-4-97 DATE OUT 12-12-97

Proposed Injection Application is for: WATERFLOOD Expansion Initial

Original Order: R- Secondary Recovery Pressure Maintenance

SENSITIVE AREAS

SALT WATER DISPOSAL Commercial Well

WIPP Capitan Reef

Data is complete for proposed well(s)? YES Additional Data Req'd _____

AREA of REVIEW WELLS

13 Total # of AOR 1 # of Plugged Wells
YES Tabulation Complete YES Schematics of P & A's
YES Cement Tops Adequate NO AOR Repair Required

INJECTION FORMATION

Injection Formation(s) CRBG-SA Compatible Analysis YES

Source of Water or Injectate AREA PRODUCTION

PROOF of NOTICE

Copy of Legal Notice Information Printed Correctly
 Correct Operators Copies of Certified Mail Receipts
NO Objection Received Set to Hearing _____ Date

NOTES:

APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL? YES

COMMUNICATION WITH CONTACT PERSON:

1st Contact: Telephoned Letter _____ Date _____ Nature of Discussion _____
2nd Contact: Telephoned Letter _____ Date _____ Nature of Discussion _____
3rd Contact: Telephoned Letter _____ Date _____ Nature of Discussion _____

10/20/97 - 11/4/97 - BS - NW - ~~SWD~~ SWD

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

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

OCT 20 1997

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement

- DHC CTB FLC PC OLS OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

- WFX PMX SWD IPI EOR PPR

] 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 further verify that all applicable API Numbers are included. 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.

Gary Smallwood
Print or Type Name

Gary B Smallwood
Signature

O/A Engineer
Title

10/1/97
Date



ARCO Permian
Eddy County, NM
Eddy County, NM

October 2, 1997

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 88505

Attention: Mr. Bill Lemay

**RE: Request for Administrative Approval for
Drill for Injection
Arco Permian
West Red Lake 4 Federal No. 1
Sec. 4- 18S-27E, Eddy Co. NM**

Gentlemen:

Please find attached our Application for Authorization to Inject in the Arco Permian West Red Lake 4 Fed. No. 1. We respectfully request Administrative Approval. Included in our attachment are copies of the Proof of Notice and an Affidavit of Publication and the actual legal notice. Arco Permian intends to drill this well for injection of produced Grayburg / San Andres water.

Our maximum injection pressure request is higher than 0.2 psi per foot of depth to the upper most perforation. Our request is based on the Attached Table 1. Table 1 has been presented by Devon Energy in other applications and accepted as justification for higher injection pressures as evidenced by Administrative Order WFX - 708.

Please call me at 915-688-5359 with any questions.

Sincerely,

Gary B. Smallwood
Gary B. Smallwood
Sr. Engineer

Table 1

<p style="text-align: center;">INJECTION WELLHEAD PRESSURE GRADIENTS</p> <p style="text-align: center;">WEST RED LAKE UNIT</p> <p style="text-align: center;">DEVON ENERGY CORPORATION - OPERATOR</p>
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WEST RED LAKE UNIT WELL NO.	DEPTH TO TOP PERF (FT)	FRAC GRADIENT (PSI/FT)	WELLHEAD PRESSURE GRADIENT (PSI/FT)
18	1690	1.15	0.68
25	1750	1.07	0.60
35	1863	1.09	0.62
50	1644	1.35	0.88
62	1894	1.09	0.62
72	1208	1.20	0.73

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no
- II. Operator: ARCO Permian
Address: 600 N. Marienfeld, Midland, Texas, 79702
Contact party: Gary B. Smallwood Phone: (915)688-5359
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? yes no
If yes, give the Division order number authorizing the project _____.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- * VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- * X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- * XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Gary B. Smallwood Title O/A Engineer

Signature: Gary B. Smallwood Date: 10/1/97

- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

ARCO Permian OPERATOR West Red Lake "4" Federal No. 1 LEASE

660' FWL & 660' FNL WELL NO. FOOTAGE LOCATION 4 SECTION 18S TOWNSHIP 27E RANGE

Schematic

See Attached Well Diagram

Tabular Data

Surface Casing

Size 8-5/8" Cemented with _____ sx.
 TOC Surface feet determined by Circulated
 Hole size 11"

Intermediate Casing

Size _____ Cemented with _____ sx.
 TOC _____ feet determined by _____
 Hole size _____

Long string

Size 5-1/2" Cemented with _____ sx.
 TOC Surface feet determined by Circulated
 Hole size _____

Total depth 3000'

Injection interval - Perforated

1700' feet to 2800' feet
 (perforated or open-hole, indicate which)

Tubing size 2-7/8" lined with IPC (material) set in a

Baker Loc-Set packer at 1650 feet
 (brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres

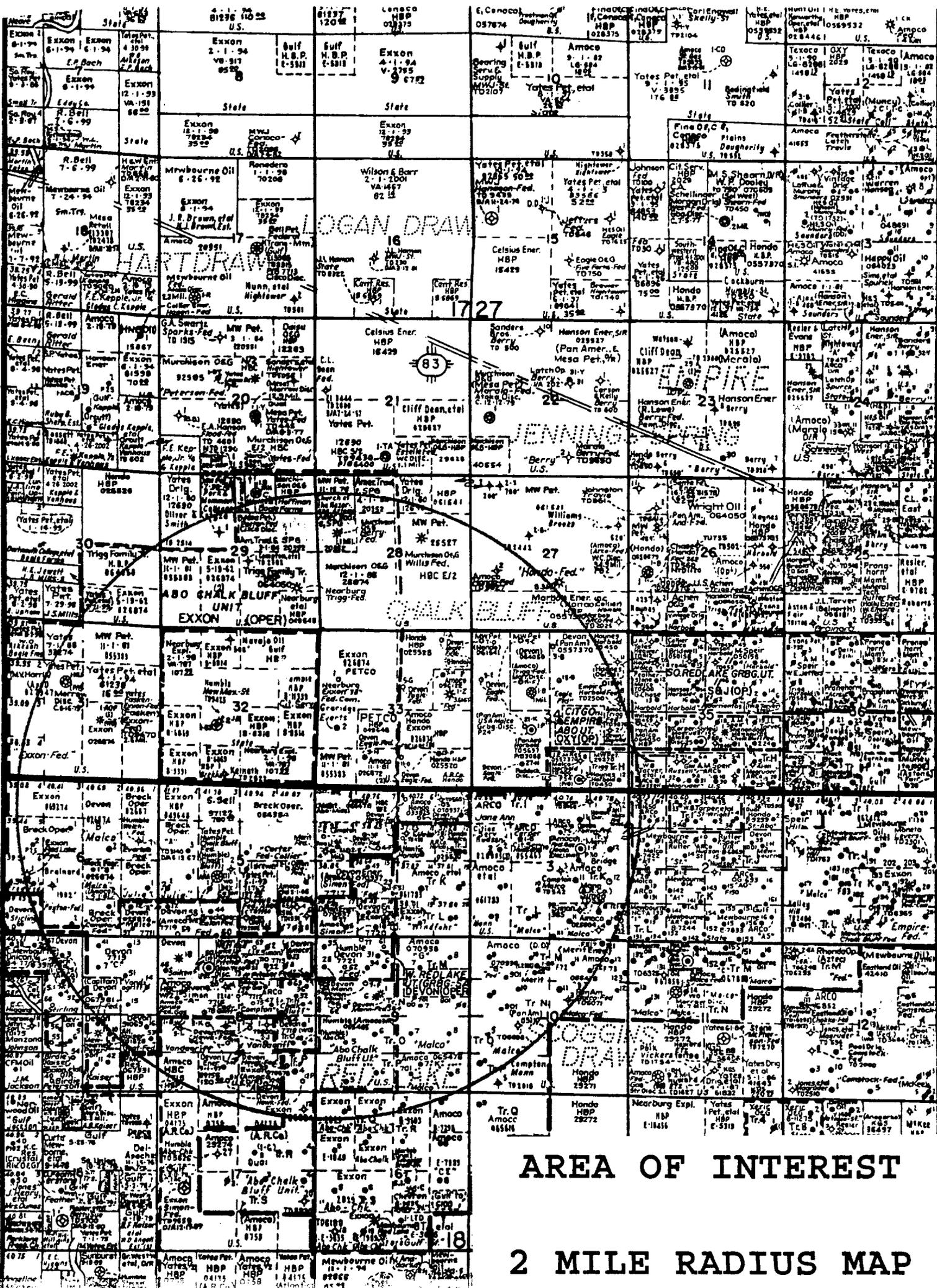
2. Name of Field or Pool (if applicable) Red Lake (Queen - Grayburg - San Andres)

3. Is this a new well drilled for injection? Yes No

If no, for what purpose was the well originally drilled? _____

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Red Lake (O-G-SA, 1750'); Logan Draw (Morrow, 9330'); Empire (Abo, 5500'); Red Lake (Und. Eddy, 2870'); Red Lake (Penn, 9440'); Scoggin Draw (Morrow, 9590'); Chalk Bluff (Wolfcamp, 6220'); Eddy (Und. Gpl, 2740')



AREA OF INTEREST

2 MILE RADIUS MAP

T 17 S

T 18 S

ARCO Permian
West Red Lake "4" Federal No. 1
660' FNL & 660' FWL
Section 4, 18S, 27E
Eddy County, New Mexico

Form C-108
Part VII

Proposed Operation:

1. Plans are to inject 5000 barrels of produced water per day.
2. The injection system will be a closed system.
3. The proposed injection pressure is 1462 psig. Maximum pressure will be 0.86 psi/ft of depth to the top perforation (see attached memo).
4. The injection fluid will be Grayburg/San Andres produced water.
5. Zone of injection produces within 1 mile.

Form C-108
Part VIII
Geological Data

Injection zones are dolomite porosity zones within the San Andres formations at an average depth of \pm 1700'-2800' Specifically they are:

Grayburg
San Andres

Base of near surface aquifer is 500'. No fresh water zones exist below the proposed injection interval.

Part IX
Proposed Stimulation

The zone of injection will be treated with a spearhead acid job and fractured with gelled water and sand if necessary.

Part X
Logging Data

Well logs will be filed when the well is drilled.

Part XI
Fresh Water Analysis

There are no known fresh water wells in the area.

Part XII
Disposal Wells

There is no evidence of fault communication between the shallow aquifers and the zone of injection.

WELLBORE SCHEMATIC

**PETROLEUM CORPORATION
OF TEXAS**

EVARTS-FEDERAL NO. 2

**1980' FSL & 650' FWL (L)
Sec. 33, T-17-S, R-27-E,
Eddy County, NM
API: 30-015-00605
Spudded: 05/29/1960
Completed: 07/01/1960**

KB: 3548'

10 sx. cement plug (60'-surface)

Surface Casing 7" Cmt'd w/185 sx.
Cement Top Calculated @ 151' from Surface
Shoe @ 1025'

4-1/2" Casing cut @ 870.44'

25 sx. cement plug (1100'-1000')

25 sx. cement plug (Total Depth-1653')

Perforations :
Perfs @ 2,000'-2,016'

Production Casing 4-1/2"
Cement w/125 sx, Shoe @ 2051'
Cement Top Calculated @ 1253' from Surface

TD @ 2051'

WELLBORE SCHEMATIC

Intermediate Casing 13-3/8"
Cmt'd w/950 sx.
Cement Calculated to Surface.
Shoe @ 996'

MERIT ENERGY CORP.
FEDERAL BA GAS COM NO. 4
(FEDERAL BA GAS COM NO. 1)

1980' FNL & 760' FWL (E)
Sec. 04, T-18-S, R-27-E,
Eddy County, NM
API: 30-015-23542
Spudded: 12/26/1980
Completed: 02/17/1980
Recompleted: 12/08/82

KB: 3601'

Intermediate Casing 8-5/8"
Cmt'd w/2750 sx.
Cement Calculated to Surface.
Shoe @ 5982'

Wolfcamp Completion:
Perfs @ 6,222'-7550'

P&A plug @ 9265'

Morrow Completion:
Perfs @ 9,586'-9,634'

Production Casing 5-1/2"
Cement w/1075 sx, Shoe @ 9805'
Cement Calculated to 1615'

TD @ 9805'

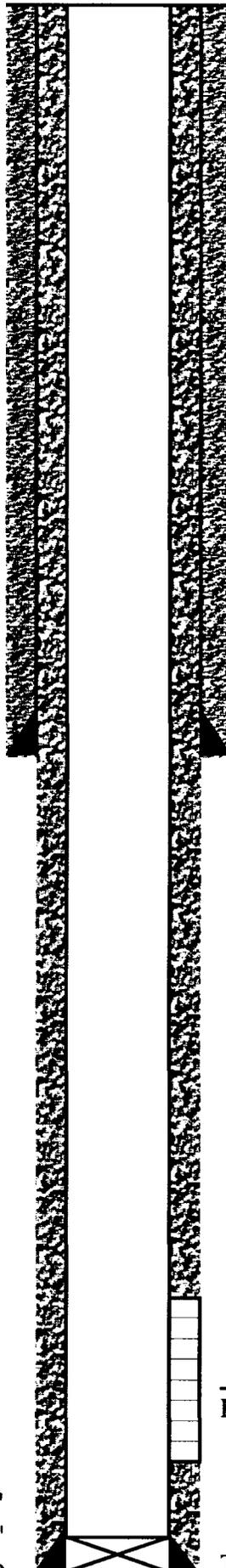
WELLBORE SCHEMATIC

**DEVON ENERGY CORP.
KITE 5I FEDERAL NO. 2**

**1825' FSL & 325' FEL (I)
Sec. 05, T-18-S, R-27-E,
Eddy County, NM
API: 30-015-29067
Spudded: 09/20/1996
Completed: 10/27/1996**

KB: 3517'

Surface Casing 8-5/8"
Cmt'd w/500 sx.
Cement Calculated to Surface.
Shoe @ 1081'



Perforations :
Perfs @ 1,684'-2,123'

Production Casing 5-1/2"
Cement w/450 sx, Shoe @ 2349'
Cement Calculated to Surface

TD @ 2350'

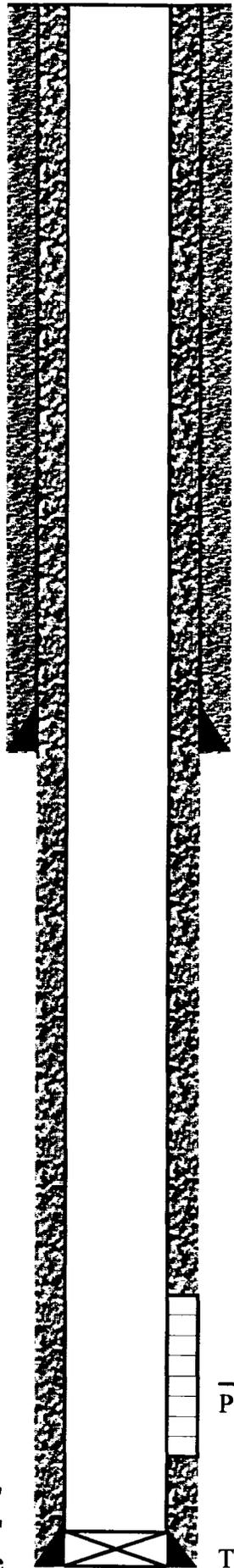
WELLBORE SCHEMATIC

**DEVON ENERGY CORP.
KITE 5I FEDERAL NO. 1**

**1825' FSL & 325' FEL (I)
Sec. 05, T-18-S, R-27-E,
Eddy County, NM
API: 30-015-29023
Spudded: 08/26/1996
Completed: 10/03/1996**

KB: 3508'

Surface Casing 8-5/8"
Cmt'd w/600 sx.
Cement Calculated to Surface.
Shoe @ 1021'



Perforations :
Perfs @ 1,625'-2,110'

Production Casing 5-1/2"
Cement w/525 sx, Shoe @ 2349'
Cement Calculated to Surface

TD @ 2350'

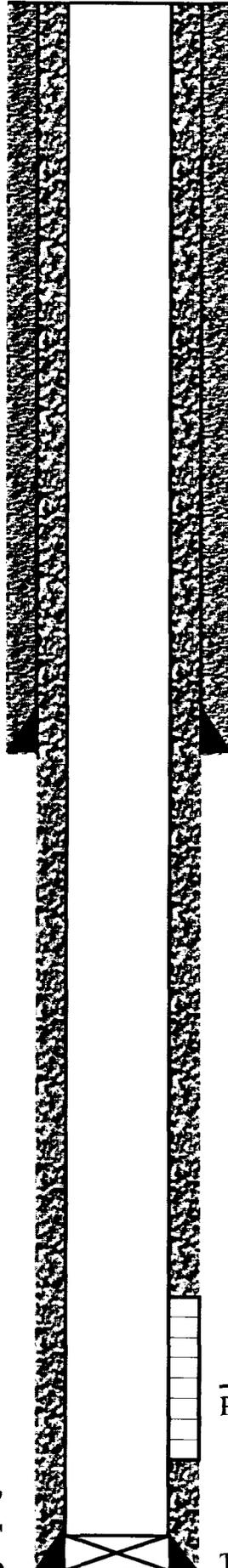
WELLBORE SCHEMATIC

DEVON ENERGY CORP.
WEST RED LAKE UNIT NO. 49

2310' FSL & 1750' FWL (K)
Sec. 04, T-18-S, R-27-E,
Eddy County, NM
API: 30-015-28286
Spudded: 02/10/1995
Completed: 05/07/1995

KB: 3589'

Surface Casing 8 5/8"
Cmt'd w/600 sx.
Cement Calculated to Surface.
Shoe @ 1248'



Production Casing 5-1/2"
Cement w/425 sx, Shoe @ 2329'
Cement Calculated to Surface

Perforations :
Perfs @ 1,414'-2,180'

TD @ 2329'

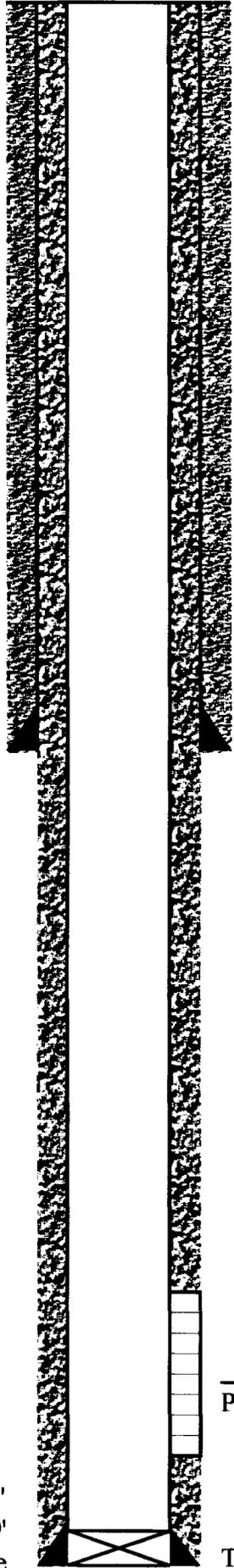
WELLBORE SCHEMATIC

**DEVON ENERGY CORP.
HONDO FEDERAL NO. 6**

**1650' FNL & 1650' FWL (F)
Sec. 04, T-18-S, R-27-E,
Eddy County, NM
API: 30-015-29066
Spudded: 10/12/1996
Completed: 12/04/1996**

KB: 3565'

Surface Casing 8 5/8"
Cmt'd w/ 500 sx.
Cement Calculated to Surface.
Shoe @ 1094'



Perforations :
Perfs @ 1,410'-2,228'

Production Casing 5-1/2"
Cement w/450 sx, Shoe @ 2399'
Cement Calculated to Surface

TD @ 2400'

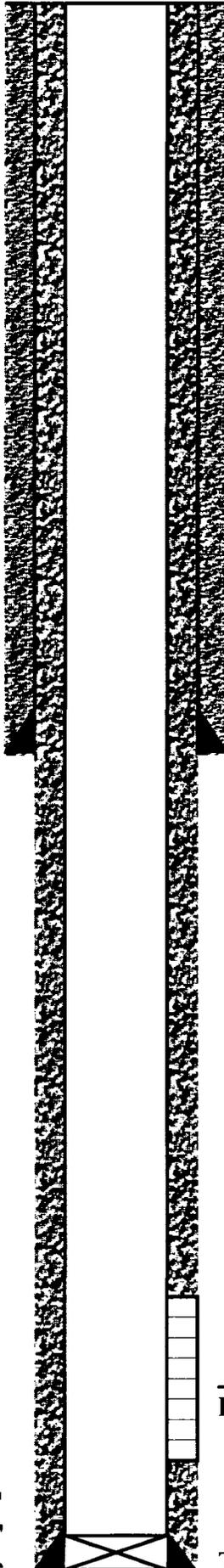
WELLBORE SCHEMATIC

**DEVON ENERGY CORP.
KITE 4F FEDERAL NO. 4**

**2050' FNL & 2500' FWL (F)
Sec. 04, T-18-S, R-27-E,
Eddy County, NM
API: 30-015-29030
Spudded: 09/09/1996
Completed: 10/15/1996**

KB: 3576'

Surface Casing 8 5/8"
Cmt'd w/400 sx.
Cement Calculated to Surface.
Shoe @ 1087'



Production Casing 5-1/2"
Cement w/475 sx, Shoe @ 2399'
Cement Calculated to Surface

Perforations :
Perfs @ 1,730'-2,220'

TD @ 2400'

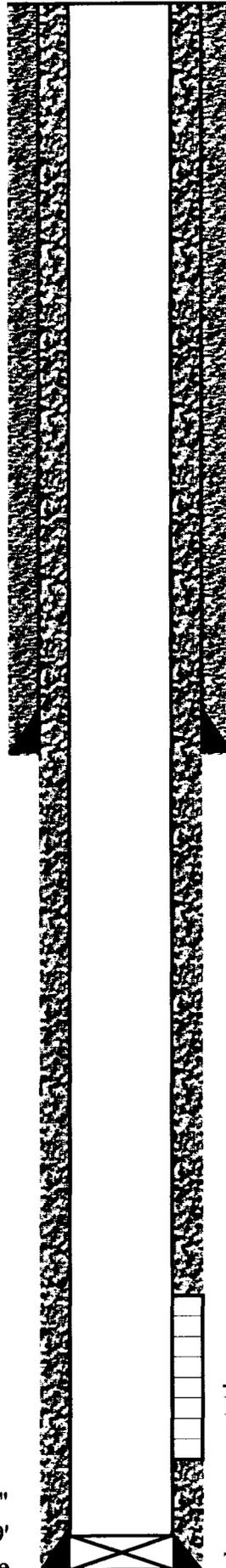
WELLBORE SCHEMATIC

**DEVON ENERGY CORP.
HONDO FEDERAL NO. 6**

**1650' FNL & 2310' FEL (G)
Sec. 04, T-18-S, R-27-E,
Eddy County, NM
API: 30-015-29053
Spudded: 09/15/1996
Completed: 10/14/1996**

KB: 3572'

Surface Casing 8 5/8"
Cmt'd w/ 500 sx.
Cement Calculated to Surface.
Shoe @ 1104'



Perforations :
Perfs @ 1,780'-2,229'

Production Casing 5-1/2"
Cement w/475 sx, Shoe @ 2449'
Cement Calculated to Surface

TD @ 2450'

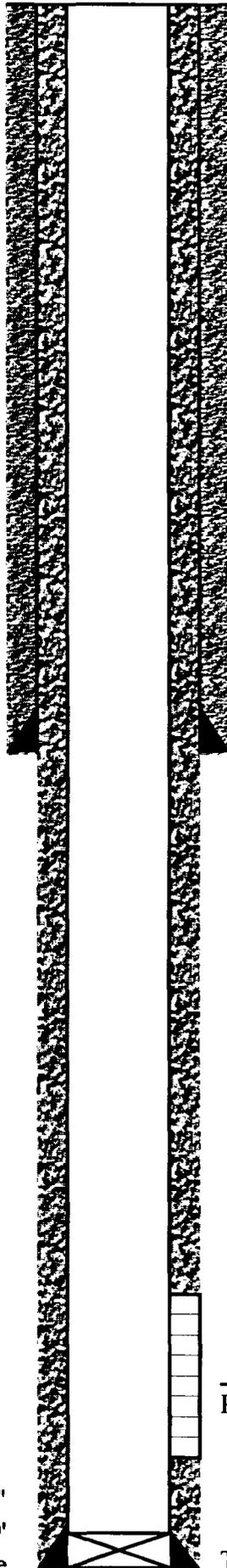
WELLBORE SCHEMATIC

**DEVON ENERGY CORP.
KITE 4E FEDERAL NO. 2**

**2100' FNL & 1090' FWL (E)
Sec. 04, T-18-S, R-27-E,
Eddy County, NM
API: 30-015-29024
Spudded: 09/03/1996
Completed: 10/14/1996**

KB: 3583'

Surface Casing 8 5/8"
Cmt'd w/ 500 sx.
Cement Calculated to Surface.
Shoe @ 1097'



Perforations :
Perfs @ 1,723'-2,220'

Production Casing 5-1/2"
Cement w/500 sx, Shoe @ 2399'
Cement Calculated to Surface

TD @ 2400'

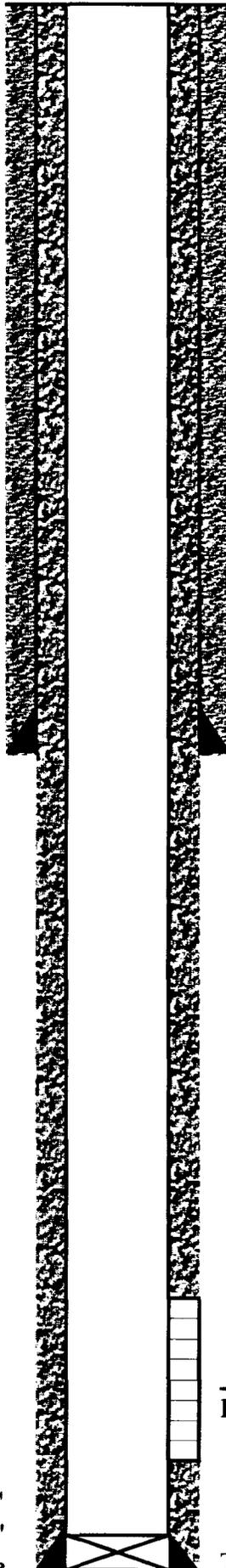
WELLBORE SCHEMATIC

**DEVON ENERGY CORP.
HONDO FEDERAL NO. 4**

**330' FNL & 2210' FEL (B)
Sec. 04, T-18-S, R-27-E,
Eddy County, NM
API: 30-015-29051
Spudded: 10/29/1996
Completed: 12/08/1996**

KB: 3549'

Surface Casing 8 5/8"
Cmt'd w/ 500 sx.
Cement Calculated to Surface.
Shoe @ 1118'



Perforations :
Perfs @ 1,421'-2,196'

Production Casing 5-1/2"
Cement w/575 sx, Shoe @ 2399'
Cement Calculated to Surface

TD @ 2400'

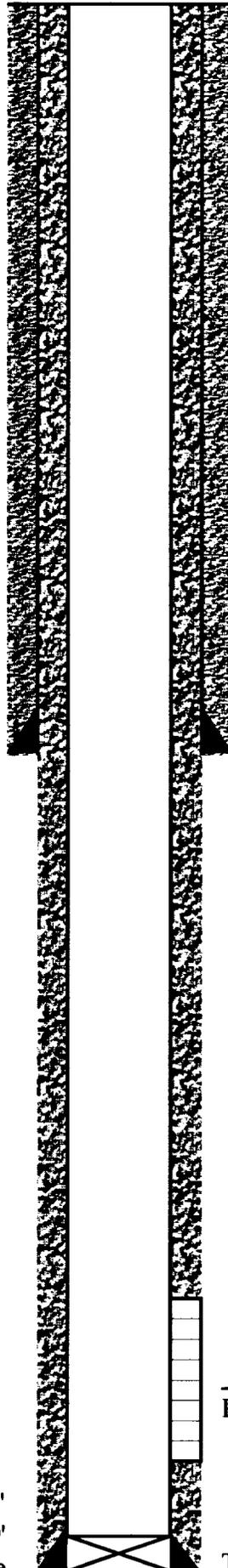
WELLBORE SCHEMATIC

**DEVON ENERGY CORP.
KITE 4E FEDERAL NO. 1**

**1650' FNL & 280' FWL (E)
Sec. 04, T-18-S, R-27-E,
Eddy County, NM
API: 30-015-29087
Spudded: 10/07/1996
Completed: 11/11/1996**

KB: 3578'

Surface Casing 8 5/8"
Cmt'd w/ 500 sx.
Cement Calculated to Surface.
Shoe @ 1097'



Perforations :
Perfs @ 1,416'-2,210'

Production Casing 5-1/2"
Cement w/525 sx, Shoe @ 2499'
Cement Calculated to Surface

TD @ 2500'

WELLBORE SCHEMATIC

**DEVON ENERGY CORP.
EAGLE 33 FEDERAL NO. 9**

XXXX' FSL & XXXX' FEL (N)

Sec. 33, T-17-S, R-27-E,

Eddy County, NM

API: 30-015-29080

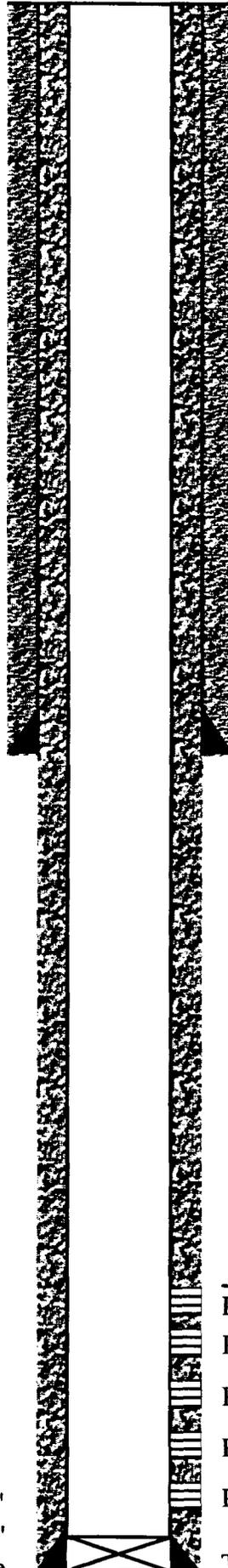
Spudded:

Completed:

KB: XXXX'

GL: XXXX'

Surface Casing 8 5/8"
Cmt'd w/ 650 sx, Circ.
Shoe @ 1059'



Production Casing 5-1/2"
Cement w/450 sx, Shoe @ 2499'
Cement Circulated to Surface

Perforations :

Perfs @ 1,758'-1,886' (2 spf)

Perfs @ 1,953'-2,015' (2 spf)

Perfs @ 2,036'-2,094' (2 spf)

Perfs @ 2,112'-2,162' (2 spf)

Perfs @ 2,178'-2,222' (2 spf)

TD @ 2499'

WELLBORE SCHEMATIC

**DEVON ENERGY CORP.
EAGLE 33 FEDERAL NO. 11**

XXXX' FSL & XXXX' FEL (O)

Sec. 33, T-17-S, R-27-E,

Eddy County, NM

API: 30-015-29081

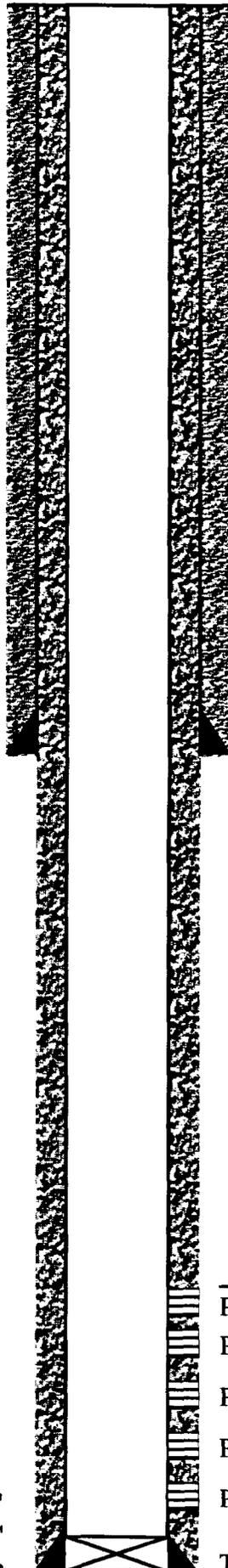
Spudded:

Completed:

KB: XXXX'

GL: XXXX'

Surface Casing 8 5/8"
Cmt'd w/ 650 sx, Circ.
Shoe @ 1072'



Production Casing 5-1/2"
Cement w/550 sx, Shoe @ 2499'
Cement Circulated to Surface

Perforations :

Perfs @ 1,737'-1,875' (2 spf)

Perfs @ 1,933'-2,007' (2 spf)

Perfs @ 2,023'-2,079' (2 spf)

Perfs @ 2,111'-2,143' (2 spf)

Perfs @ 2,162'-2,276' (2 spf)

TD @ 2499'



ARCO Permian
600 N Marienfeld
Midland TX 79701
Post Office Box 1610
Midland TX 79702
Telephone 915 688 5200

October 2, 1997

Merit Energy Co.
12222 Merit Drive Ste. 1500
Dallas, Texas 75251-2217

Attn. Terry Gottberg

Re: West Red Lake 4 Federal No. 1
660 FN&WL Sec 4-18S-27E
Eddy Co. NM

Dear Sir:

Please consider this letter official notification that Arco Permian is in the process of filing an application to complete the above listed drill well as a Grayburg/San Andres injection well. Our records indicate that you are an offset operator. As an offset operator you must be notified by Arco Permian and you must file any objections or requests for hearing of administrative applications with the Oil Conservation Division of New Mexico within fifteen days of receiving this notification. Attached is a copy of the application filed with the New Mexico Oil Conservation.

Please call Gary Smallwood at 915-688-5359 with any questions.

Sincerely,

Gary B. Smallwood
Sr. Engineer



ARCO Permian
600 N Marienfeld
Midland TX 79701
Post Office Box 1610
Midland TX 79702
Telephone 915 688 5200

October 2, 1997

Devon Energy
20 N. Broadway Ste. 1500
Oklahoma City, Oklahoma 73102

Attn. E. L. Buttress Jr.

Re: West Red Lake 4 Federal No. 1
660 FN&WL Sec 4-18S-27E
Eddy Co. NM

Dear Sir:

Please consider this letter official notification that Arco Permian is in the process of filing an application to complete the above listed drill well as a Grayburg/San Andres injection well. Our records indicate that you are an offset operator. As an offset operator you must be notified by Arco Permian and you must file any objections or requests for hearing of administrative applications with the Oil Conservation Division of New Mexico within fifteen days of receiving this notification. Attached is a copy of the application filed with the New Mexico Oil Conservation.

Please call Gary Smallwood at 915-688-5359 with any questions.

Sincerely,

Gary B. Smallwood
Sr. Engineer



ARCO Permian
600 N Marienfeld
Midland TX 79701
Post Office Box 1610
Midland TX 79702
Telephone 915 688 5200

October 2, 1997

United States Department of the Interior
Bureau of Land Management
171 W. 2nd Street
Roswell, New Mexico 88201

Gentlemen,

ARCO Permian proposes to drill and complete for water injection the West Red Lake 4 Federal No. 1. The well is located 660' FN&WL of section 4-18S-27E in Eddy Co., New Mexico. It is our understanding that you are the owner of the surface areage. We are therefore supplying you with this copy of our application seeking administrative approval for conversion of the well to water injection.

Thank you very much for your review in this matter. If you have any questions please call me at 915-688-5359.

Sincerely,

Gary B. Smallwood
Sr. Engineer

Affidavit of Publication

No. 16013

STATE OF NEW MEXICO,

County of Eddy:

Gary D. Scott being duly sworn, says: That he is the Publisher of The Artesia Daily Press, a daily newspaper of general circulation, published in English at Artesia, said county and state, and that the hereto attached Legal Notice

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for 1 consecutive weeks on the same day as follows:

First Publication October 3, 1997

Second Publication _____

Third Publication _____

Fourth Publication _____

Subscribed and sworn to before me this 9th day of October 19 97

Barbara Ann Beans
Notary Public, Eddy County, New Mexico

My Commission expires September 23, 1999

Copy of Publication

LEGAL NOTICE

ARCO Permian proposes to drill the West Red Lake 4 Federal No. 1. The well is located 600' FWL and 660' FNL of section 4-18S-27E in Eddy Co., New Mexico. The zone of injection is the Grayburg/San Andres at 1700-2800'. The maximum expected injection rate and pressure is 5000 BWPD and 1462 psig, respectively. For information contact: Gary B. Smallwood ARCO Permian PO Box 1610 Midland, TX 79702 phone: 915-688-5359

Interested parties must file any objections or requests for hearing with the: Oil Conservation Division PO Box 2088 Santa Fe, New Mexico 87501 Filings must be made within 15 days. Published in the Artesia Daily Press, Artesia, N.M. October 3, 1997.

Legal 16013

Return to G. Smallwood - 23 MEO
P 429 452 894



**Receipt for
Certified Mail**

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to <i>Attn: E.L. Buttress, Jr.</i> <i>Devon Energy</i>	
Street and No. <i>20 N. Broadway, Ste. 1500</i>	
P.O., State and ZIP Code <i>Oklahoma City OK 73102</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$ <i>3.92</i>
Postmark or Date <i>10/02/97</i>	

PS Form 3800, June 1991

West Red Lake 4 Fed. #1

FedEx USA Airbill Tracking Number **1646649723**

From (please print) **10-9-97** Sender's FedEx Account Number **1007-6502-0**

Sender's Name **Cary Swafford** Phone **(915) 688-5359**

Company **ARCO PERMIAN** Dept./Floor/Suite/Room

Address **600 N MARIENFELD/LTS ARCO**

City **MIDLAND** State **TX** Zip **79701**

Your Internal Billing Reference Information (Optional) (first 24 characters will appear on invoice)

To (please print) **Mike Menger Asst. Dist. Mgr. 1** Recipient's Name

United States Department of the Interior Bureau of Land Management Company

Address **1717 W. 9th Street** (to "HOLD" at FedEx location, print FedEx address here) (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes)

City **Roswell** State **NM** Zip **89201**

For HOLD at FedEx Location check here
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 NFW/FedEx First Overnight (Next business morning delivery to select locations) (Higher rate apply)
 *FedEx Letter Rate not available. (The pound FedEx 2Day rate)

4b Express Freight Service Packages over 150 lbs
 FedEx Overnight Freight FedEx 2Day Freight FedEx Express Saver Freight
 (Call for delivery schedule. See back for detailed descriptions of freight products.)

5 Packaging
 FedEx FedEx FedEx FedEx Other
 Envelope Pak Box Tube Pkg.
 (Declared value limit \$500)

6 Special Handling
 Does this shipment contain dangerous goods?
 Dry Ice Yes No Shipper's Declaration (not required) CA Cargo Aircraft Only
 (kg, gsa) (kg, gsa) (kg, gsa) (kg, gsa)

7 Payment
 Sender Recipient Third Party Credit Card Cash/
 Bill (Account no. in section will be billed) (Enter FedEx account no. or Credit Card no. below) Check
American Express

Account No. **3787 33224 01002** Exp. Date **01/98**
 Total Packages **1** Total Weight **0.00** lbs Total Declared Value **00** \$
 Total Charges **00** \$

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Your signature authorizes Federal Express to deliver this shipment without obtaining a signature and agrees to indemnify and hold harmless Federal Express from any resulting claims.



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1. Show to whom delivered, date, and addressee's address. 2. Restricted Delivery (Extra charge)

3. Article Addressed to: Boyle Farms, Ltd. P.O. Box 460 Dexter, NM 88230	4. Article Number P 429 452 893
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input checked="" type="checkbox"/> Return Receipt for Merchandise
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature - Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X <i>KWagon</i>	
7. Date of Delivery 10-3-97	

PS Form 3811, Apr. 1989 U.S.G.P.O. 1989-238-815 DOMESTIC RETURN RECEIPT
West Red Lake 4 Fed. #1

*Return to G. Smallwood - 23 MIO
 P 429 452 891*

*Return to G. Smallwood - 23 MIO
 P 429 452 893*



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

West Red Lake 4 Fed #1

Sent to <i>Attn: Terry Gottberg</i>	
Street and No. <i>Merit Energy Co.</i>	
P.O., State and ZIP Code <i>12222 Merit Dr, Ste. 1500</i>	
Postage <i>Dallas, TX 75251-1117</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$ 3.92
Postmark or Date 10/02/97	

PS Form 3800, June 1991



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

West Red Lake 4 Fed. #1

Sent to <i>Boyle Farms, Ltd.</i>	
Street and No. <i>P.O. Box 460</i>	
P.O., State and ZIP Code <i>Dexter, NM 88230</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$ 3.92
Postmark or Date 10/02/97	

PS Form 3800, June 1991

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge) 2. Restricted Delivery (Extra charge)

3. Article Addressed to: Attn: Terry Gottberg Merit Energy Co. 1222 Merit Dr., Ste. 1500 Dallas, TX 75251-2217	4. Article Number P 429 452 891 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input checked="" type="checkbox"/> Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery 10-6-97	

PS Form 3811, Apr. 1989 West Post Lake #1 U.S.G.P.O. 1989-232-915 DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge) 2. Restricted Delivery (Extra charge)

3. Article Addressed to: Attn: E.L. Buttress, Jr. Devon Energy 20 N. Broadway, Ste. 1500 Oklahoma City, OK 73102	4. Article Number P 429 452 894 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input checked="" type="checkbox"/> Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery 10-6-97	

PS Form 3811, Apr. 1989 West Post Lake #1 U.S.G.P.O. 1989-232-915 DOMESTIC RETURN RECEIPT

MATADOR PETROLEUM CORPORATION

415 W. WALL, SUITE 1101
MIDLAND, TX 79701
(915) 687-5955

October 7, 1997

Chevron USA Production Company
P.O. Box 1150
Midland, TX 79702

RECEIVED

OCT 15 1997

PERMIAN BASIN LAND UNIT
MIDLAND, TX

RE: Lea AP St. #3
Lea County
Sec. 30, T19S, R35E
Application To Inject

Gentlemen:

Please find within a copy of the Application For Authorization To Inject.

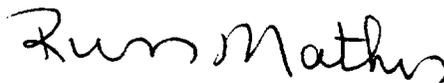
In compliance with the requirements of Form C-108 this application has been sent to you because you are the operator within one-half mile of the injection well.

Please read the application carefully.

If there are no objections to the application please acknowledge below and mail to Matador Petroleum Co. at the above address or you may fax to 915-687-4809. Any objection must be filed with the Oil Conservation Division, 2040 South Pacheco, Santa Fe, NM 87505 within 15 days from the date this application was mailed.

Should you have any questions or comments please do not hesitate to call me in Midland, Texas at 915-687-5955.

Sincerely,



Russ Mathis
Production Manager

Chevron USA Production Co. has no objection to Matador's Application for Authorization to Inject into the AP St. #3 well located in S30, T19S, R35E, Lea Co., NM.


cc: Oil Conservation Division ✓