



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

AMENDED ADMINISTRATIVE ORDER SWD-541

***APPLICATION OF SOUTHWEST ROYALTIES, INC. FOR SALT WATER DISPOSAL,
EDDY COUNTY, NEW MEXICO.***

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), Southwest Royalties, Inc. made application to the New Mexico Oil Conservation Division on November 12, 1993, for permission to complete for salt water disposal its Pogo "36" State Well No. 1 located 2310 feet from the South line and 330 feet from the West line (Unit L) of Section 36, Township 25 South, Range 29 East, NMPM, Eddy County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and
- (4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

The applicant herein, Southwest Royalties, Inc. is hereby authorized to complete its Pogo "36" State Well No. 1 located 2310 feet from the South line and 330 feet from the West line (Unit L) of Section 36, Township 25 South, Range 29 East, NMPM, Eddy County, New Mexico, in such manner as to permit the injection of salt water for disposal purposes into the Cherry Canyon formation at approximately 4170 feet to 4826 through 2 7/8-inch plastic-lined tubing set in a packer located at approximately 4610 feet.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

At some time in the future, the operator may wish to include an additional injection interval extending from approximately 4176 feet to 4270 feet. Should this option be exercised, and prior to re-establishing injection, the operator shall perform cement squeeze operations in a manner acceptable to the supervisor of the Artesia District Office to establish a cement top of at least 3676 feet.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 942 psi. Should the interval extension be implemented, the maximum injection pressure will at that time be reduced to no more than 835 psi.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Cherry Canyon formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Artesia district office of the Division of the date and time of the installation of disposal equipment and of the mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Artesia district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator

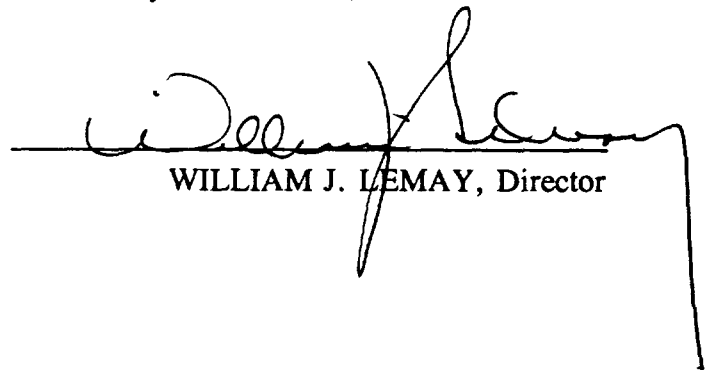
Amended Administrative Order SWD-541
Southwest Royalties, Inc.
December 20, 1993
Page 3

to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall submit monthly reports of the disposal operations in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 20th day of December, 1993.



WILLIAM J. LEMAY, Director

WJL/BES/amg

xc: Oil Conservation Division - Artesia
NM State Land Office - Oil and Gas Division



SOUTHWEST ROYALTIES

OIL CONSERVATION DIVISION
RECEIVED

'93 DE : 20 AM 9 22

SOUTHWEST ROYALTIES, INC.
Southwest Royalties Building
407 N. Big Spring, Midland, TX. 79701-4326
P.O. Box 11390, Midland, TX. 79702-8390
(915) 686-9927, 1-800-433-7945

December 16, 1993

Oil Conservation Commission
PO Box 2088
Santa Fe, New Mexico 87504-2088

Attention: Mr. Ben Stone

Re: Southwest Royalties, Inc.
Pogo 36 State #1 SWD
Administrative Order SWD-541

Dear Mr. Stone,

As discussed in our telephone conversation of December 15, 1993, Southwest Royalties, Inc. requests that the above referenced SWD order be amended. Our bond log of 12/09/93 (enclosed) indicates a TOC of approximately 3990'. Because of this, we propose to open for disposal only the interval from 4710' - 4826'. We feel the cement bond above and below this interval adequately isolates the proposed zone of injection.

If ever we wish to open the zones from 4176' - 4228' and 4242' - 4270', we will perform squeeze cementing operations to insure a cement top of 3676' prior to commencing injection operations as stipulated in Order SWD-541.

Thank you for your consideration in this matter.

Sincerely,

Doug Keathley
Northern Regional Engineer

enclosure

Release 11-29-93 SWD

CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: SOUTHWEST ROYALTIES Well: POGO 36 STATE WELL NO. 1

Contact: ANN RITCHIE Title: REGULATORY AGENT Phone: 915-684-6381

DATE IN 11-12-93 RELEASE DATE 11-29 DATE OUT _____

Proposed Injection Application is for: ☐ WATERFLOOD ☐ Expansion ☐ Initial

Original Order: R- _____ ☐ Secondary Recovery ☐ Pressure Maintenance

SENSITIVE AREAS

☒ SALT WATER DISPOSAL

☐ WIPP ☐ Capitan Reef ☐ Commercial Operation

Data is complete for proposed well(s)? ☐ Additional Data _____

AREA of REVIEW WELLS

3 Total # of AOR 0 # of Plugged Wells

☒ Tabulation Complete ☒ Schematics of P & A's

? Cement Tops Adequate ☐ AOR Repair Required

INJECTION INFORMATION

Injection Formation(s) CHERRY CANYON

Source of Water PRODUCED DELAWARES Compatible ☐

PROOF OF NOTICE

☒ Copy of Legal Notice ☒ Information Printed Correctly

☒ Correct Operators ☒ Copies of Certified Mail Receipts yes

☐ Objection Received ☐ Set to Hearing _____ Date

NOTES: NEED TO DETERMINE & REPAIR IF NECESSARY -

TDC ON SUBJECT WELL

APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL ☐

COMMUNICATION WITH CONTACT PERSON:

1st Contact: <input checked="" type="checkbox"/> Telephoned	<input type="checkbox"/> Letter	<u>11-15-93</u> Date	Nature of Discussion <u>PUBLISHED IN LEA ^{AND} ROSEBUD EDDY COUNTY</u> <u>MY MISTAKE</u>
2nd Contact: <input type="checkbox"/> Telephoned	<input type="checkbox"/> Letter	_____ Date	Nature of Discussion _____
3rd Contact: <input type="checkbox"/> Telephoned	<input type="checkbox"/> Letter	_____ Date	Nature of Discussion _____



SOUTHWEST ROYALTIES

SOUTHWEST ROYALTIES, INC.
Southwest Royalties Building
407 N. Big Spring, Midland, TX. 79701-4326
P.O. Box 11390, Midland, TX. 79702-8390
(915) 686-9927, 1-800-433-7945
FAX (915) 686-0364

November 2, 1993

Oil Conservation Commission
P.O. Drawer DD
Artesia, New Mexico 88210

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

RE: Southwest Royalties, Inc.
Pogo 36 State #1
Sec. 36, T-25-S, R-29-E
Eddy County, New Mexico

Gentlemen:

Please see attached the following documents filed for application to convert the above captioned well to be utilized for salt water disposal:

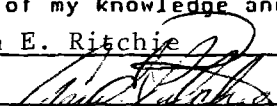
1. C-108
2. Well data
3. Map radius
4. Tabulation of wells radius w/ completion copies & schematics
5. Data on proposed operation
6. Log on file w/Oil Conservation Commission, copy of completion report for Pogo 36 State #1
7. Geologist statement & water analysis
8. Notices as published
9. Offset & surface list & offset map

Please let us know if you will need further documentation for administrative approval.

Yours truly,

Ann E. Ritchie, Regulatory Agent
Southwest Royalties, Inc.

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Southwest Royalties, Inc.
Address: c/o Box 953, Midland, Texas. 79702
Contact party: Ann E. Ritchie Phone: (915) 684-6381
- 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: Ann E. Ritchie Title: Regulatory Agent
Signature:  Date: 11-12-93
- * 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. Completion reports previously filed with Oil Conservation

Division, copies are included in this application.

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

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.

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

- (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.

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:

XIV. PROOF OF NOTICE

- (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.

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.

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.

- (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.

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:

III. WELL DATA

Southwest Royalties, Inc.
Pogo 36 State #1
Sec. 36, T-25-S, R-29-E
Eddy County, New Mexico

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- ☐ Addressee's Address
- ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Yates Petroleum Corp.
105 South 4th Street
Artesia, New Mexico 88210

4a. Article Number
P 156 316 719

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
11-18-91

5. Signature (Addressee)
[Signature]

6. Signature (Agent)
[Signature]

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ★U.S. GPO: 1993-352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
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I also wish to receive the following services (for an extra fee):

- ☐ Addressee's Address
- ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
J.F.G. Enterprises
P.O. Box 100
Artesia, New Mexico 88210

4a. Article Number
P 156 316 738

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
11-15-93

5. Signature (Addressee)
[Signature]

6. Signature (Agent)
[Signature]

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ★U.S. GPO: 1993-352-714 **DOMESTIC RETURN RECEIPT**

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I also wish to receive the following services (for an extra fee):

- ☐ Addressee's Address
- ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Santa Fe Energy
1616 S. Voss Rd., Suite 1000
Houston, Texas 77057

4a. Article Number
P 156 316 737

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
11/15/93

5. Signature (Addressee)
[Signature]

6. Signature (Agent)
[Signature]

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ★U.S. GPO: 1993-352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Southwest Royalties, Inc.
Pogo 36 State #1
Sec. 36, T-25-S, R-29-E
Eddy County, New Mexico

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I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address

2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Phillips Petroleum Co.
Attn: M.A. Blasdel
P.O. Box 1967
Houston, Texas 77251-7367

4a. Article Number

P 156 316 739

4b. Service Type

☐ Registered

☐ Insured

☒ Certified

☐ COD

☐ Express Mail

☐ Return Receipt for Merchandise

7. Date of Delivery

NOV 15 1993

5. Signature (Addressee)

6. Signature (Agent)

J. Guillory

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ★U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

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I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address

2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Exxon Co., U.S.A.
P.O. Box 1600
Midland, Texas 79702-1600

4a. Article Number

P 156 316 740

4b. Service Type

☐ Registered

☐ Insured

☒ Certified

☐ COD

☐ Express Mail

☐ Return Receipt for Merchandise

7. Date of Delivery

NOV 15 1993

5. Signature (Addressee)

6. Signature (Agent)

PS Form 3811, December 1991 ★U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

1. ☐ Addressee's Address

2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Byron (Shot) Paschal
P.O. Box 1847
Pecos, Texas 79772

4a. Article Number

P 156-316-718

4b. Service Type

☐ Registered

☐ Insured

☒ Certified

☐ COD

☐ Express Mail

☐ Return Receipt for Merchandise

7. Date of Delivery

NOV 15 1993

5. Signature (Addressee)

6. Signature (Agent)

PS Form 3811, December 1991 ★U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

Southwest Royalties, Inc.
Pogo 36 State, Well #1
Disposal/Injection Application

*Oil Conservation Division -
Santa Fe*

Offset Operators:

CORRECTION MADE ON 11-15-93

- (1). Yates Petroleum Corp.
c/o Annette Whalley
P.O. Box 747
Kilgore, Texas 75662
- (2). Santa Fe Energy
1616 S. Voss Rd., Suite 1000
Houston, Texas 77057
- (3). JFG Enterprises
P.O. Box 100
Artesia, New Mexico 88210
- (4). Phillips Petroleum Co.
Attn: M.A. Blasdel
P.O. Box 1967
Houston, Texas 77251-7367
- (5). Exxon Co., U.S.A.
P.O. Box 1600
Midland, Texas 79702-1600

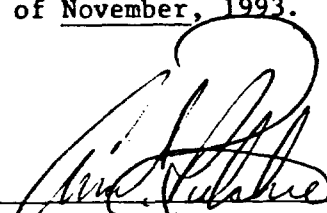
Yates Petroleum Corp. (mailed 11-15-93)
105 South 4th Street
Artesia, New Mexico 88210



Surface Owner: (State Lease)

Byron (Shot) Paschal
P.O. Box 1847
Pecos, Texas 79772

Copies of the Form C-108 and attachments were sent by certified mail to the
above states parties on this the 12th day of November, 1993.


Ann E. Ritchie, Regulatory Agent
Southwest Royalties, Inc.

Southwest Royalties, Inc.

III Well Data

- A. (1) Pogo 36 State, well #1, Section 36-T25S-R29E, Eddy County, New Mexico, being 2310' FSL & 330' FWL of Section 36.
- (2) Casing Detail
- 13-3/8", 54.50#, J-55 casing @ 563' in 17-1/2" hole. Cemented to surface with 595 sx cement.
- 8-5/8", 24# & 32#, K-55 casing @ 3234' in 11" hole. Cemented with 960 sx. TOC by temp survey = 1180'.
- 5-1/2", 15.50#, J-55 casing @ 5971' in 7-7/8" hole. Cemented in two stages with DV tool at 5110'. Cemented 1st stage with 250 sx. Cemented 2nd stage with 636 sx. Calc TOC is above intermediate casing shoe @ 3234'. Bond log will be run before perforating to insure adequate cement.
- (3) Tubing to be used for disposal purposes will be 2-7/8", J-55, 8rd plastic coated tubing set @ 4100'.
- (4) Packer to be utilized will be internally plastic coated Baker Model "A-3" Lok-Set packer set @ 4100'.
- B. (1) The injection formation is the Cherry Canyon formation of the Delaware group.
- (2) The disposal interval is from 4176' to 4228', 4242' to 4270' and from 4715' to 4826' through selected perforations.
- (3) The well was originally drilled as a Getty (Delaware) producing well.
- (4) The current perforations are from 5420' to 5450' and from 5596' to 5690'. Plan to set CIBP at 5380' and cap with 20' cement.
- (5) Depth of the next lower oil or gas zone in the area is the Williamson (Delaware) zone at approximately 5300' and the depth of the next higher oil or gas zone is the Ramsey (Delaware) zone at approximately 3300'.

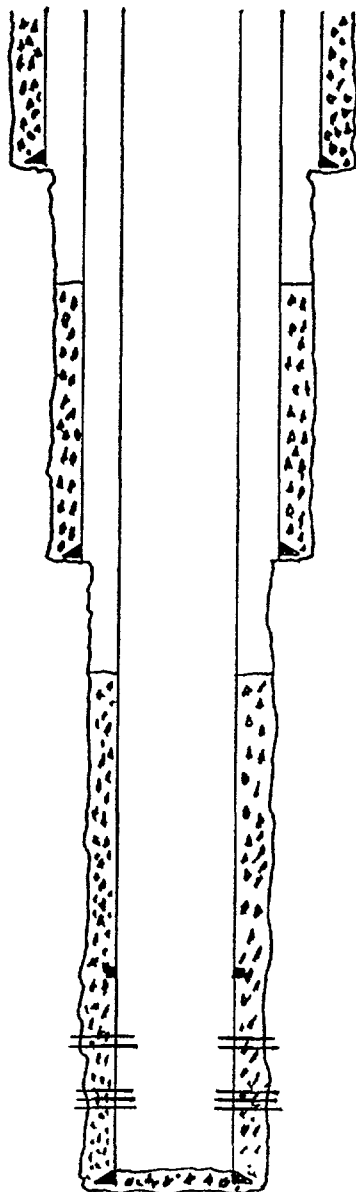
SOUTHWEST ROYALTIES

PROJECT Pogo 36 State #1 SWD

PAGE _____ OF _____

BY _____ DATE 10/29/93

WELLBORE DIAGRAM - PRESENT CONDITION



13-3/8", 54.5# casing in 17-1/2" hole. Cmt. to surface with 595 sx.

TOC @ 1180' (temp survey)

8-5/8", 24# casing in 11" hole. Cmt. with 960 sx

TOC on long string is unknown. Will run cement bond log and verify TOC. If cmt is not adequate for disposal zone isolation, will perforate and squeeze cmt as necessary.

DV tool @ 5110'

Delaware Perfs: 5420' - 5450'
5596' - 5690'

5-1/2", 15.5# casing in 7-7/8" hole. Cmt in two stages with DV tool @ 5110'. 1st stage - 250 sx. 2nd stage - 636 sx.

ATTACHMENT:  WELL DATA (1),(2),(3),(4)

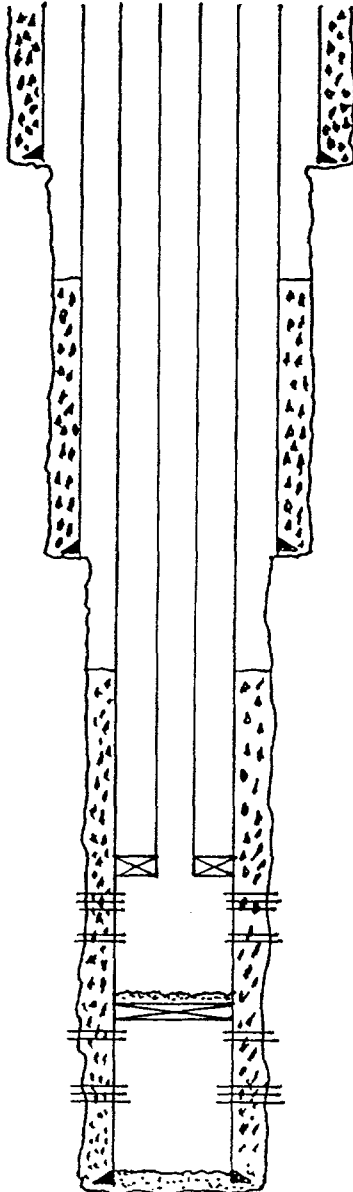
SOUTHWEST ROYALTIES

PROJECT Pogo 36 State #1 SWD

PAGE _____ OF _____

BY _____ DATE _____

WELLBORE DIAGRAM - PROPOSED CONDITION



13-3/8", 54.5# casing in 17-1/2" hole. Cmt. to surface with 595 sx.

TOC @ 1180' (temp survey)

8-5/8", 24# casing in 11" hole. Cmt. with 960 sx

2-7/8" Plastic coated tubing

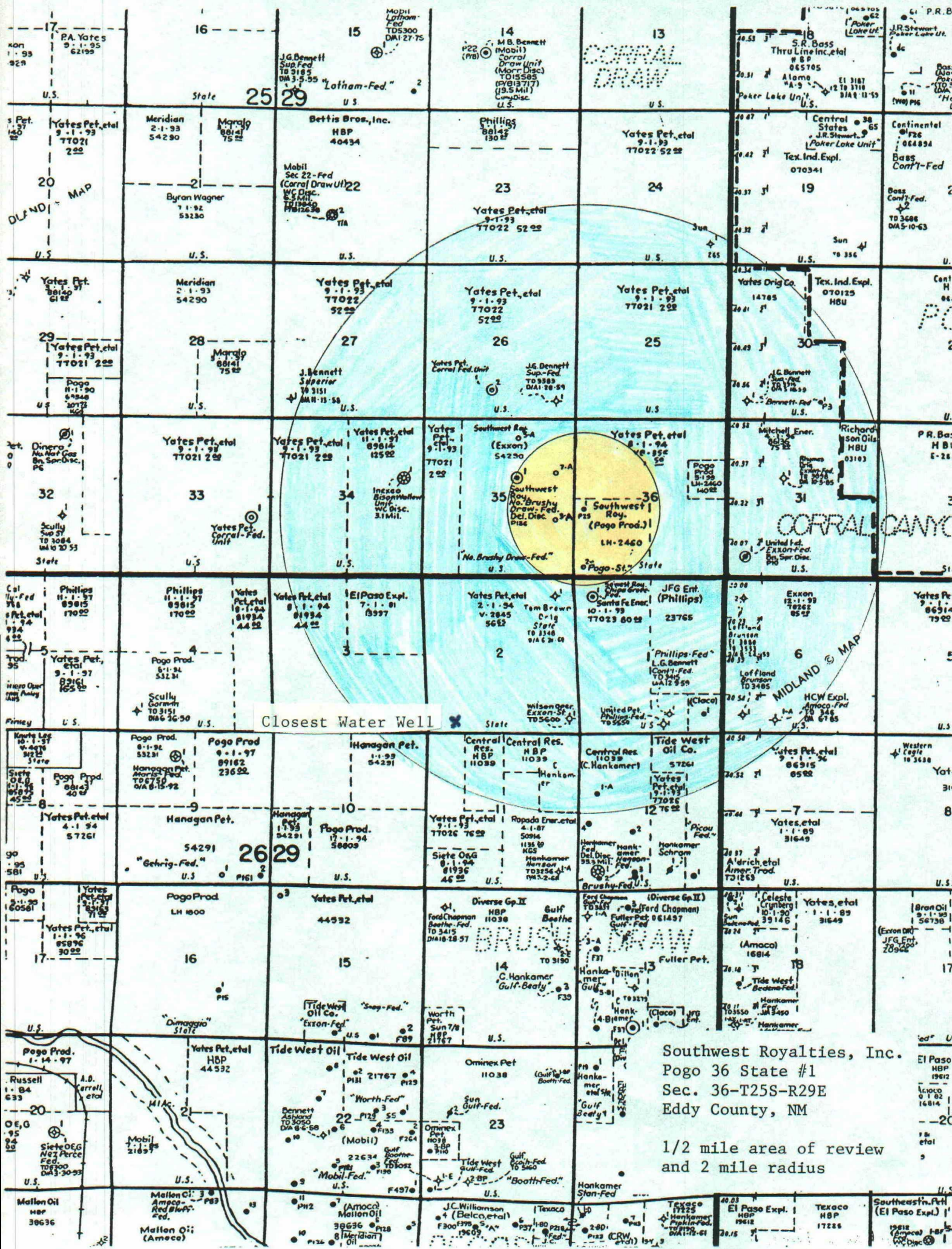
Baker Model A-3 Lok-Set Packer @ 4100'

Proposed Cherry Canyon Perfs: 4176' - 4228'
4242' - 4270'
4715' - 4826'

CIBP @ 5380' W/ 20' cmt cap

5-1/2", 15.5# casing in 7-7/8" hole. Cmt in two stages with DV tool @ 5110'. 1st stage - 250 sx. 2nd stage - 636 sx.

ATTACHMENT: III WELL DATA (1),(2),(3),(4)



VI Wells within a 1/2 mile radius:

- (1) Southwest Royalties, Inc., North Brushy Draw 35, well #1, Sec. 35-T25S-R29E, Eddy County, N.M., 1980' FNL and 1980' FEL, TD 5821', completion report attached, current status: producing.
- (2) Southwest Royalties, Inc., North Brushy Draw A 35, well #3, Sec. 35-T25S-R29E, Eddy County, N.M., 1980' FSL & 660' FEL, TD 5772', completion report attached, current status: producing.
- (3) Southwest Royalties, Inc., Pogo 36 State, well #2, Sec. 36-T25S-R29E, Eddy County, N.M., 330' FSL & 330' FWL, TD 5900', completion report attached, current status: producing.
- (4) Southwest Royalties, Inc., North Brushy Draw A 35, well #7, Sec. 35-T25S-R29E, Eddy County, N.M., 1800' FNL & 660' FEL. Well is staked and permitted, but has not been drilled.

VII Data on proposed operation:

- (1) Proposed average daily rate of injection: 1000 BWPD.
Maximum daily rate of injection: 2500 BWPD.
- (2) System is to be closed, utilizing fiberglass storage tanks.
- (3) Average injection pressure: 800 psi.
Maximum injection pressure: 1500 psi.
- (4) Water to be disposed of is reinjected produced water from a lower member of the same (Delaware) formation, therefore it is compatible with the receiving formation.
- (5) No known analysis of water from this zone in area, however this zone correlates to the same Cherry Canyon zone that is utilized for disposal on the CRW-SWD, Inc., J.C. Williamson Ross Draw Unit, well #9, located 910' FNL & 1980' FWL, Sec. 34-T26S-R30E, Eddy County, N.M. Depth of disposal in this well is 4420' to 4640'.

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

State of New Mexico
Energy, Minerals and Natural Resource

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

Pogo 36 State #2
1980' south of applied
for well #1

Form C-105
Revised 1-1-89

WELL API NO.
30 015 27399
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. LH 2460

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/>		7. Lease Name or Unit Agreement Name Pogo 36 State	
b. Type of Completion: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF RESVR <input type="checkbox"/> OTHER <input type="checkbox"/>		8. Well No. 2	
2. Name of Operator Southwest Royalties, Inc. ✓		9. Pool name or Wildcat Undesignated Delaware	
3. Address of Operator P.O. Box 11390, Midland, Texas 79702 (915) 686-9927 (915) 684-6381			
4. Well Location Unit Letter <u>M</u> : <u>330</u> Feet From The <u>South</u> Line and <u>330</u> Feet From The <u>West</u> Line Section <u>36</u> Township <u>25-S</u> Range <u>29-E</u> NMPM <u>Eddy</u> County			
10. Date Spudded 8-24-93	11. Date T.D. Reached 9-5-93	12. Date Compl. (Ready to Prod.) 9-16-93	13. Elevations (DF& RKB, RT, GR, etc.) GR 3034.9'
14. Elev. Casinghead 3035'			
15. Total Depth 5900'	16. Plug Back T.D. 5855'	17. If Multiple Compl. How Many Zones? n/a	18. Intervals Drilled By Rotary Tools <input checked="" type="checkbox"/> Cable Tools <input type="checkbox"/>
19. Producing Interval(s), of this completion - Top, Bottom, Name 5670' - 5726' Getty Zone (Delaware)			20. Was Directional Survey Made No
21. Type Electric and Other Logs Run CDL/GR/CNL DLL/ML/GR CBL/GR/CCL			22. Was Well Cored No

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.50 #	617'	17-1/2"	600 sx circ to surf	0
8-5/8"	24.0 & 32.0 #	3256'	11"	1350 sx	0
5-1/2"	15.5 #	5900'	7-7/8"	2 stage - DV tool @ 4992'	0
				1st stage - 200 sx	
				2nd stage - 465 sx	

24. LINER RECORD				25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET
n/a						

26. Perforation record (interval, size, and number) 5680' - 5710' .5" holes 61 holes	27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.	
	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
	5680 - 5710'	3000 gals. 7-1/2% NEFE
		Frac w/ 22,500 gals. gel + 70,000 # sd.

PRODUCTION

Date First Production 9-16-93		Production Method (Flowing, gas lift, pumping - Size and type pump) Pumping				Well Status (Prod. or Shut-in) Producing	
Date of Test 9-21-93	Hours Tested 24	Choke Size n/a	Prod'n For Test Period	Oil - Bbl. 30	Gas - MCF 2	Water - Bbl. 154	Gas - Oil Ratio 66
Flow Tubing Press. n/a	Casing Pressure 50	Calculated 24-Hour Rate	Oil - Bbl. 30	Gas - MCF 2	Water - Bbl. 154	Oil Gravity - API - (Corr.) 36	

29. Disposition of Gas (Sold, used for fuel, vented, etc.) Vented and used for fuel.	Test Witnessed By Al Perry
---	-------------------------------

30. List Attachments Open hole logs, Inclination survey, Cased hole logs, C-104
--

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature Ann E. Ritchie Printed Name Ann E. Ritchie Title Regulatory Agent Date 9-24-93

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

T. Anhy _____	T. Canyon _____	T. Ojo Alamo _____	T. Penn. "B" _____
T. Salt _____ 820	T. Strawn _____	T. Kirtland-Fruitland _____	T. Penn. "C" _____
B. Salt _____ 2920	T. Atoka _____	T. Pictured Cliffs _____	T. Penn. "D" _____
T. Yates _____	T. Miss _____	T. Cliff House _____	T. Leadville _____
T. 7 Rivers _____	T. Devonian _____	T. Menefee _____	T. Madison _____
T. Queen _____	T. Silurian _____	T. Point Lookout _____	T. Elbert _____
T. Grayburg _____	T. Montoya _____	T. Mancos _____	T. McCracken _____
T. San Andres _____	T. Simpson _____	T. Gallup _____	T. Ignacio Otzte _____
T. Glorieta _____	T. McKee _____	Base Greenhorn _____	T. Granite _____
T. Paddock _____	T. Ellenburger _____	T. Dakota _____	T. _____
T. Blinebry _____	T. Gr. Wash _____	T. Morrison _____	T. _____
T. Tubb _____	T. Delaware Sand _____ 3215	T. Todilto _____	T. _____
T. Drinkard _____	T. Bone Springs _____	T. Entrada _____	T. _____
T. Abo _____	T. _____	T. Wingate _____	T. _____
T. Wolfcamp _____	T. _____	T. Chinle _____	T. _____
T. Penn _____	T. _____	T. Permian _____	T. _____
T. Cisco (Bough C) _____	T. _____	T. Penn "A" _____	T. _____

OIL OR GAS SANDS OR ZONES

No. 1, from 5670' to 5726' No. 3, from to
No. 2, from 5409' to 5454' No. 4, from to

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
No. 2, from.....to.....feet.....
No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness in Feet	Lithology	From	To	Thickness in Feet	Lithology
0	820	820'	Sand - Anhydrite				
820	3215	2395'	Anhydrite - Salt Evaporite Section				
3215	5900	2685'	Sand / Shale				

PRIVATE & UNITED STA
CONFIDENTIAL
DEPARTMENT OF THE
BUREAU OF LAND MANAGEMENTNorth Brushy Draw A 35 Fed
#3
Approx. 1000' SW of applied
for Pogo 36 State #1FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995
W F
Douglas
Monahan

NM 54290

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/>		2. NAME OF OPERATOR Southwest Royalties, Inc.		3. ADDRESS AND TELEPHONE NO. P.O. Box 11390, Midland, Texas 79702 (915) 684-6381 (915) 686-9927		4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1980' FSL & 660' FEL At top prod. interval reported below As above At total depth As above		5. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A		6. UNIT AGREEMENT NAME N/A		7. FARM OR LEASE NAME, WELL NO. North Brushy Draw "A" 35		8. API WELL NO. Federal #3 30-015-27502		9. FIELD AND POOL, OR WILDCAT Wildcat - Delaware		10. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 35, T-25-S, R-29-E									
11. PERMIT NO. N/A		12. DATE ISSUED 6-25-93		13. COUNTY OR PARISH Eddy		14. STATE New Mexico		15. DATE SPUDDED 7-1-93		16. DATE T.D. REACHED 7-13-93		17. DATE COMPL. (Ready to prod.) 8-1-93		18. ELEVATIONS (OF, BKR, BT, GR, ETC.)* GL 3026'		19. ELEV. CASINGHEAD 3027'		20. TOTAL DEPTH, MD & TVD 5772' TVD & MD		21. PLUG BACK T.D., MD & TVD 5743' MD & TVD		22. IF MULTIPLE COMPL., HOW MANY? N/A		23. INTERVALS DRILLED BY 0 - 5772'		24. ROTARY TOOLS CABLE TOOLS	
25. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 5638' - 5675' Getty Sand (Delaware)		26. TYPE ELECTRIC AND OTHER LOGS RUN DLL/MLL & CDL/CNL/GR Cased hole GR/CBL/CCL Log.		27. WAS WELL CORED No		28. CASING RECORD (Report all strings set in well) CASING SIZE/GRADE 13-3/8" H-40 8-5/8" J-55 5-1/2" K-55 WEIGHT, LB./FT. 48.0 # 32 # & 24 # 15.5 # DEPTH SET (MD) 621' 3225' 5772' MOLE SIZE 17-1/2" 11" 7-7/8" TOP OF CEMENT, CEMENTING RECORD Circ to surface - 600 sx Circ to surface - 1350 sx TOC @ 1880'. Cmt in two stages w/ DV @ 4982' - 635 sx AMOUNT PULLED N/A N/A N/A																					
29. LINER RECORD SIZE N/A TOP (MD) BOTTOM (MD) BACKS CEMENT* SCREEN (MD)		30. TUBING RECORD SIZE 2-7/8" DEPTH SET (MD) 5683' PACKER SET (MD) N/A		31. PERFORATION RECORD (Interval, size and number) 5638' - 5655' 5658' - 5675' 70 .5" holes		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL (MD) 5638 - 5675' 5638 - 5675' AMOUNT AND KIND OF MATERIAL USED 3000 gal 7-1/2% NEFE 32,000 gal fluid + 105,000# sd.																					
33. PRODUCTION DATE FIRST PRODUCTION 8-1-93 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Pumping 1-1/2" x 20' Pump WELL STATUS (Producing or shut-in) Producing		34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Used for fuel & vented		35. TEST WITNESSED BY Al Perry		36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records																					
37. DATE OF TEST 8-2-93		38. HOURS TESTED 24		39. CHOKES SIZE N/A		40. PROD'N. FOR TEST PERIOD OIL—BSL. 193		41. GAS—MCF. 33		42. WATER—BSL. 200		43. GAS-OIL RATIO 170															
44. FLOW. TUBING PRESS. N/A		45. CASING PRESSURE N/A		46. CALCULATED 24-HOUR RATE 193		47. OIL—BSL. 193		48. GAS—MCF. 33		49. WATER—BSL. 200		50. OIL GRAVITY-API (CORR.) 36.0															
39. LIST OF ATTACHMENTS Open hole logs, Inclination survey, Cased hole logs.		40. SIGNED Regulatory Agent		41. DATE 8-3-93		42. TITLE Regulatory Agent		43. DATE 8-3-93		44. SIGNED Regulatory Agent		45. DATE 8-3-93															

*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 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.

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Getty (Delaware)	5564	5698	Oil & Water

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Base Salt	3020'	
Delaware LS	3200'	
Delaware SS	3233'	
Cherry Canyon	4093'	
Manzanita Marker	4274'	
Williamson SS	5262'	
Getty SS	5564'	

SEP 30 1993
PRODUCTION

PRIVATE & UNITED STATES
CONFIDENTIAL DEPARTMENT OF THE
BUREAU OF LAND MANAGEMENTNorth Brushy Draw 35 Fed
#1Approx. 2500' NW to
Pago 36 State #1FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995
SE DESIGNATION AND SERIAL NO.
NM 54290

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL:		OIL WELL <input checked="" type="checkbox"/>	GAR WELL <input type="checkbox"/>	DRY <input type="checkbox"/>	Other _____		
b. TYPE OF COMPLETION:							
NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> FLER BACK <input type="checkbox"/> DIFF. REVR. <input type="checkbox"/> Other _____							
2. NAME OF OPERATOR Southwest Royalties, Inc.							
3. ADDRESS AND TELEPHONE NO. P. O. Box 11390, Midland, Texas 79702 (915) 686-9927							
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1980' FNL & 1980' FEL At top prod. interval reported below as above At total depth as above							
14. PERMIT NO.		DATE ISSUED					
NA							
6. IF INDIAN, ALLOTTEE OR TRIBE NAME		N/A					
7. UNIT AGREEMENT NAME		N/A					
8. FARM OR LEASE NAME, WELL NO.		North Brushy Draw Federal #1					
9. API WELL NO.		30-015-27310					
10. FIELD AND POOL, OR WILDCAT		Wildcat					
11. SEC. T. R. M. OR BLOCK AND SURVEY OR AREA		Sec. 35-T255-R29E					
12. COUNTY OR PARISH		13. STATE					
Eddy		New Mexico					
15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF. RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD			
2-18-93	3-8-93	3-25-93	3032' KB	3020'			
20. TOTAL DEPTH, MD & TVD	21. PLUG BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS		
5821' MD & TVD	5758' MD & TVD	N/A	→	10-5821'			
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 5535-5660' Getty Sand (Delaware) MD & TVD					25. WAS DIRECTIONAL SURVEY MADE NO		
26. TYPE ELECTRIC AND OTHER LOGS RUN DLL/MLL & CDL/CNL/GR, Cased hole GR/CBL/CCL Log					27. WAS WELL CORED NO		
28. CASING RECORD (Report all strings set in well)							
CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED		
13-3/8 J-55	54.50#	600	17-1/2	Circ to surf - 1025 sx	NA		
8-5/8 K-55	24 & 32#	3141	11	TOC 500' - 1900 sx	NA		
5-1/2 K-55	17#	5820	7-7/8	TOC - 3895' - 700 sx	NA		
29. LINER RECORD			30. TUBING RECORD				
SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
NA					2-7/8"	5529'	NA
31. PERFORATION RECORD (Interval, size and number) 5583'-5656' 29 5" holes			32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.				
			DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED		
			5583-5656'		1500 gal 15% NEFE Acid		
			5583-5656'		32,000 gal fluid + 105,000# sd.		
33. PRODUCTION							
DATE FIRST PRODUCTION 3-25-93		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Pumping 1-1/2" X 20' Pump				WELL STATUS (Producing or shut-in) Producing	
DATE OF TEST 3-30-93	HOURS TESTED 24	CHOKE SIZE NA	PROD'N. FOR TEST PERIOD →	OIL—BBL. 136	GAS—MCF. 15	WATER—BBL. 239	GAS-OIL RATIO 110
FLOW. TUBING PRESS. NA	CASING PRESSURE NA	CALCULATED 24-HOUR RATE →	OIL—BBL. 136	GAS—MCF. 15	WATER—BBL. 239	OIL GRAVITY-API (CORR.) 35.3	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Vented						TEST WITNESSED BY Al Perry	
35. LIST OF ATTACHMENTS Open hole logs, Inclination survey, Cased hole logs.							
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records							
SIGNED <u>Doug Keathley</u>		TITLE <u>Engineer</u>		DATE <u>3-30-93</u>			

*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Getty (Delaware)	5535'	5660'	Oil & Water

38.

GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Base Salt	2870'	2870'
Delaware LS	3174'	3174'
Delaware SS	3209'	3209'
Cherry Canyon	4075'	4075'
Manzanita Marker	4259'	4259'
Williamson SS	5254'	5254'
Getty SS	5535'	5535'

VIII Geological Data:

- (1) Proposed disposal zone is the Cherry Canyon zone of the Delaware group. The Cherry Canyon consists primarily of fine to very fine grained sandstones with interbedded siltstones and shales. The Cherry Canyon in this well is approximately 1100' thick, extending from 4126' to 5208'.
- (2) Usable quality water in the area overlying the proposed zone is limited to the Rustler Anhydrites above a depth of 500'. There is no known usable quality water below the proposed zone of disposal.

IX Proposed Stimulation Program:

Planned stimulation will be limited to 3000-10000 gal 7-1/2% NEFE acid with ball sealers.

X Logs and test data:

Logs have been filed with the Oil Conservation Division.

XI Fresh Water Analysis:

Fresh water analysis attached. Location of fresh water is marked on area of review plat.

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-105
Revised 1-1-89

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

WELL API NO.
30-015-27398

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
LH-2460

7. Lease Name or Unit Agreement Name

Pogo 36 State

8. Well No.

1

9. Pool name or Wildcat

Undesignated Delaware

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:
OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER _____

b. Type of Completion:
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR ☐ OTHER _____

2. Name of Operator
Southwest Royalties, Inc.

3. Address of Operator
P.O. Box 11390, Midland, Texas 79702

4. Well Location
Unit Letter L: 2310 Feet From The South Line and 330 Feet From The West Line

Section 36 Township 25-South Range 29-East NMPM Eddy County

10. Date Spudded 4-30-93 11. Date T.D. Reached 5-13-93 12. Date Compl. (Ready to Prod.) 6-2-93 13. Elevations (DF & RKB, RT, GR, etc.) GR 3037.5' 14. Elev. Casinghead 3038

15. Total Depth 5971' 16. Plug Back T.D. 5933' 17. If Multiple Compl. How Many Zones? n/a 18. Intervals Drilled By Rotary Tools Cable Tools X

19. Producing Interval(s), of this completion - Top, Bottom, Name 5666' - 5722' Getty Zone (Delaware) 20. Was Directional Survey Made No

21. Type Electric and Other Logs Run CDL/GR/CNL DLL/ML/GR CBL/GR/CCL 22. Was Well Cored No

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.50 #	563'	17-1/2"	595 sx	0
8-5/8"	24 # & 32 #	3234'	11"	960 sx	0
5-1/2"	15.5 #	5971'	7-7/8"	2 stage - DV tool @ 5110'	0
				1st stage 250 sx	
				2nd stage 636 sx	

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	25. TUBING RECORD	SIZE	DEPTH SET	PACKER SET
n/a					2-7/8"	5752'	n/a	

26. Perforation record (interval, size, and number)

5666' - 5676' .5" 21 holes

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED
5666' - 5676' 1500 gals. 7-1/2% NEFE Acid

28. PRODUCTION

Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)					Well Status (Prod. or Shut-in)	
6-03-93		Pumping					Producing	
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio	
6-12-93	24	n/a		25	0	246	n/a	
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)		
n/a	50		25	0	246	36		

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

n/a No gas made.

Test Witnessed By

Al Perry

30. List Attachments

Open hole logs, Inclination survey, Cased hole logs.

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature

Kate Ellison

Printed Name

Kate Ellison

Title

Agent

Date 6-14-93

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

T. Anhy _____	T. Canyon _____
T. Salt _____	T. Strawn _____
B. Salt _____	T. Atoka _____
T. Yates _____	T. Miss _____
T. 7 Rivers _____	T. Devonian _____
T. Queen _____	T. Silurian _____
T. Grayburg _____	T. Montoya _____
T. San Andres _____	T. Simpson _____
T. Glorieta _____	T. McKee _____
T. Paddock _____	T. Ellenburger _____
T. Blinberry _____	T. Gr. Wash _____
T. Tubb _____	T. Delaware Sand 3266
T. Drinkard _____	T. Bone Springs _____
T. Abo _____	T. _____
T. Wolfcamp _____	T. _____
T. Penn _____	T. _____
T. Cisco (Bough C) _____	T. _____

Northwestern New Mexico

T. Ojo Alamo _____	T. Penn. "B" _____
T. Kirtland-Fruitland _____	T. Penn. "C" _____
T. Pictured Cliffs _____	T. Penn. "D" _____
T. Cliff House _____	T. Leadville _____
T. Menefee _____	T. Madison _____
T. Point Lookout _____	T. Elbert _____
T. Mancos _____	T. McCracken _____
T. Gallup _____	T. Ignacio Otzte _____
Base Greenhorn _____	T. Granite _____
T. Dakota _____	T. _____
T. Morrison _____	T. _____
T. Todilto _____	T. _____
T. Entrada _____	T. _____
T. Wingate _____	T. _____
T. Chinle _____	T. _____
T. Permian _____	T. _____
T. Penn "A" _____	T. _____

OIL OR GAS SANDS OR ZONES

No. 1, from.....5416.....to.....5450.....
No. 2, from.....5596.....to.....5700.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness in Feet	Lithology	From	To	Thickness in Feet	Lithology
0	818	818'	Sand - Anhydrite	Section			
818	3266	2448'	Anhydrite-Salt Evaporite				
3266	5976	2710'	Sand with thin shales				



SOUTHWEST ROYALTIES

SOUTHWEST ROYALTIES, INC.
Southwest Royalties Building
407 N. Big Spring, Midland, TX. 79701-4326
P.O. Box 11390, Midland, TX. 79702-8390
(915) 686-9927, 1-800-433-7945
FAX (915) 686-0364

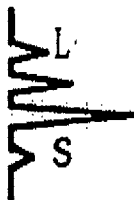
November 1, 1993

Southwest Royalties, Inc.
Pogo 36 State, Well #1
Undesignated, Delaware
Eddy County, New Mexico

In reference to the Pogo 36 State, well #1, located in Section 36,
T-25-S, R-29-E, being 2310 FSL and 330 FWL, Eddy County, New Mexico,
I have examined the 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.

Rich Masterson, Geologist
Southwest Royalties, Inc.

(2 miles to the SSW)



Laboratory Services
1331 Tasker Drive
Hobbs, New Mexico 88240
(505) 397-3713

WATER ANALYSIS

COMPANY Southwest Royalties

SAMPLE El Paso Water Well

SAMPLED BY Al Perry

DATE TAKEN 10/29/93

REMARKS

Nitrate	1.5	
Barium as Ba	5.0	
Carbonate alkalinity PPM	16	
Bicarbonate alkalinity PPM	76	
pH At Lab	8.01	
Specific Gravity @ 60 F	1.000	
Magnesium as Mg	255	
Total Hardness as CaCO ₃	440	
Chlorides as Cl	477	
Sulfate as SO ₄	300	
Iron as Fe	0.1	
Potassium	0.325	
Hydrogen Sulfide	0	
Resistivity Ohms	2.25	@ 21.1° C
Total Dissolved Solids	1.080	
Carbonate as CO ₃ G/L	8.775	
Calcium as CA	185	

Results reported as Parts Per Million Unless Stated.

Langelier Saturation Index + 0.01

Analysis By: Vickie Walker
Date: 10/29/93

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

General Manager

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of _____

one weeks.

Beginning with the issue dated

November 4, 1993

and ending with the issue dated

November 4, 1993



General Manager

Sworn and subscribed to before

me this 4 day of

November, 1993



Notary Public.

My Commission expires
March 15, 1997

(Seal)

**LEGAL NOTICE
November 4, 1993
NOTICE OF
APPLICATION
FOR FLUID DISPOSAL
WELL PERMIT**

Southwest Royalties, Inc.,
c/o P.O. Box 953, Midland,
Texas 79702 is seeking ad-
ministrative approval from
the New Mexico Oil Con-
servation Division to com-

plete our Pogo 36 State,
Well #1 as a disposal well.
The well is located in Sec-
tion 36, Twp.-25-S, Rge.-29-
E, Eddy County, New Mexi-
co. The proposed injection
zone is the Cherry Canyon
formation of the Delaware
Group with perforations be-
tween 4000' and 4900'.
Southwest Royalties, Inc. in-
tends to inject a maximum

of 2500 bbls. of produced
formation water per day at a
maximum injection pressure
of 1500#.

Interested parties must file
objections or request for
hearing with the Oil Conser-
vation Division, P.O. Box
2088, Santa Fe, New Mexi-
co, 87501 within 15 days of
this notice.

This newspaper is duly qualified
to publish legal notices or adver-
tisements within the meaning of
Section 3, Chapter 167, Laws of
1937, and payment of fees for
said publication has been made.

11/2/93

M-14584

Pogo 36 State #1 - Injection notification

TOTAL NET AMOUNT

\$17.92

PLEASE DETACH THIS REMITTANCE ADVICE BEFORE DEPOSITING CHECK

SOUTHWEST ROYALTIES, INC.
OPERATING ACCOUNT
SOUTHWEST ROYALTIES BUILDING
P.O. BOX 11390
MIDLAND, TEXAS 79702-8390
(915) 686-9927
1-800-433-7945



SOUTHWEST ROYALTIES, INC.

NationsBank
NationsBank of Texas, N.A.
Wichita Falls, Texas

CHECK NUMBER
M-14584

DATE Nov 2, 1993

Seventeen dollars and 92/100 AMOUNT

\$17.92

VOID AFTER 90 DAYS

PAY
TO THE
ORDER OF

Hobbs News Sun
Box 860
Hobbs, NM 88240

Deborah A. Brock
Angie Chappell
2 SIGNATURES REQUIRED OVER \$25.000

Southwest Royalties, Inc.

Pogo 36 State, Well #1

Disposal/Injection Application

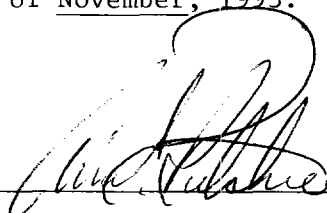
Offset Operators:

- (1). Yates Petroleum Corp.
c/o Annette Whatley
P.O. Box 747
Kilgore, Texas 75662
- (2). Santa Fe Energy
1616 S. Voss Rd., Suite 1000
Houston, Texas 77057
- (3). JFG Enterprises
P.O. Box 100
Artesia, New Mexico 88210
- (4). Phillips Petroleum Co.
Attn: M.A. Blasdel
P.O. Box 1967
Houston, Texas 77251-7367
- (5). Exxon Co., U.S.A.
P.O. Box 1600
Midland, Texas 79702-1600

Surface Owner: (State Lease)

Byron (Shot) Paschal
P.O. Box 1847
Pecos, Texas 79772

Copies of the Form C-108 and attachments were sent by certified mail to the above states parties on this the 12th day of November, 1993.



Ann E. Ritchie, Regulatory Agent
Southwest Royalties, Inc.

