

August 20, 1988  
Congo 311 Feet here  
E/2 Sec 31  
Papua New  
Set to be in  
8-22-88  
WF Pined

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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: 16 PRAGER 11390 MIDLAND, TX 79702  
Contact party: JAMES BLUNT Phone: 1-800-433-7995

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 R-3229 + R-3053

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 hydrologic 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: JAMES BLUNT Title: AREA SUPERVISOR

Signature: James Blunt Date: 5-6-98

\* 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.

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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

South West Royalties, Inc.

GONZALES "31" FEDERAL

OPERATOR

LEASE

6 Y

1980' FSL: 860' FEL

31

T-9-S

R-33-E

WELL NO.

FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

SchematicTabular DataSurface CasingSize 8 5/8 " Cemented with 675 ex.TOC Surface feet determined by VisualHole size 12 1/4"Intermediate Casing

Size \_\_\_\_\_ " Cemented with \_\_\_\_\_ ex.

TOC \_\_\_\_\_ feet determined by \_\_\_\_\_

Hole size \_\_\_\_\_

Long stringSize 5 1/2 " Cemented with 1560 ex.TOC 2150' feet determined by CBLHole size 7 7/8"Total depth 4317'Injection interval4239' feet to 4282 feet  
(perforated) or open-hole, indicate which)

8 5/8" - 24" Csg. c 1721'

CBL TOC c 2150'

5 1/2" x 2 3/8" AD-1 pkr. c 4150'

4239'

4282'

5 1/2" - 15.5" Csg. c 4317'

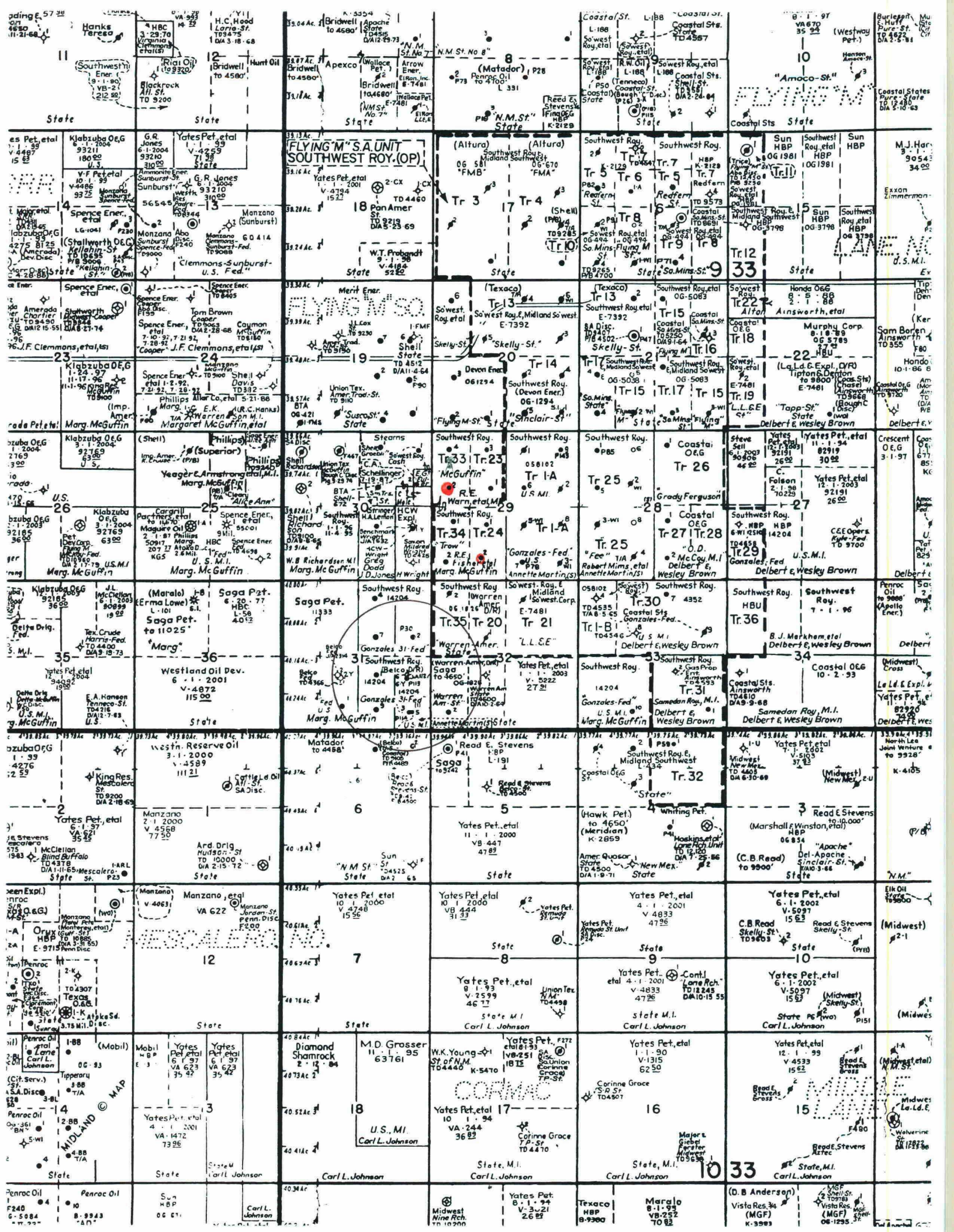
Tubing size 2 3/8" 4.7 #/ft lined with Internal Plastic coating set in a  
Baker Model AD-1 (Tension) (material)  
 (brand and model) packer at 4150' feet

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation San Andres
- Name of Field or Pool (if applicable) Flying M. (SA)
- Is this a new well drilled for injection? ☐ Yes ☒ No  
 If no, for what purpose was the well originally drilled? Oil production
- 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
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. All wells within the Flying M. unit are San Andres producers or injectors. The ABO formation c a depth of 8600' is productive in the area.





Wells in Area of Review  
Application for Authorization to Inject  
Southwest Royalties, Inc.

**Gonzales 31 Fed #1**

Location: 1980' FSL & 1980' FEL

Type: Oil

Sec 31, T9S, R33E

Date Drilled: 12/71

Total Depth: 4320'

Casing Record:

Size	Depth	Sacks Cement
8 5/8"	364'	250
4 1/2"	4320'	200

Completion:

12/71 Perforated 4214-80'.

9/66 Acidized well w/4000 gal acid. Put well on pump.

**Gonzales 31 Fed #2**

Location: 1980' FNL & 660' FEL

Type: Oil

Sec 31, T9S, R33E

Date Drilled: 12/71

Total Depth: 4370'

Casing Record:

Size	Depth	Sacks Cement
8 5/8"	371'	250
4 1/2"	4370'	200

Completion:

1/72 Perforated 4261-94'.

1/72 Acidized well w/5000 gal acid. Put well on pump.

**Gonzales 31 Fed #3**

Location: 660' FSL & 760' FEL

Type: Oil

Sec 31, T9S, R33E

Date Drilled: 2/72

Total Depth: 4356'

Casing Record:

Size	Depth	Sacks Cement
8 5/8"	368'	250
4 1/2"	4356'	200

Completion:

2/72 Perforated 4235-67'.

2/72 Acidized well w/5000 gal acid. Put well on pump.



Wells in Area of Review  
Application for Authorization to Inject  
Southwest Royalties, Inc.

**Gonzales 31 Fed #5** (originally Belco's U.S. Coastal #1)

Location: 660' FSL & 660' FEL

Type: Oil

Sec 31, T9S, R33E

Date Drilled: 10/71

Total Depth: 9100'

Casing Record:

Size	Depth	Sacks Cement
12 3/4"	378'	375
8 5/8"	3560'	400
5 1/2"	9100' cut off @ 4550'	200
5 1/2"	4489'	250

Completion:

11/71	Perforated 9001-19'. Acidized w/3000 gal acid. Put well on pump.
3/73	Set CIBP @ 8900' w/40' cmt on top. Cut 5 1/2" csg @ 4550'. Set 25 sx plug from 4566-4489'. Set 5 1/2" csg @ 4489' & cmted w/250 sx.
3/73	Perforated 4239-70'. Acidized w/3000 gal acid. Put well on pump.

**Gonzales 31 Fed #7**

Location: 1980' FNL & 1980' FEL

Type: Oil

Sec 31, T9S, R33E

Date Drilled: 3/81

Total Depth: 4311'

Casing Record:

Size	Depth	Sacks Cement
8 5/8"	1716'	200
5 1/2"	4311'	200

Completion:

4/81	Perforated 4232-66'.
4/81	Acidized well w/4500 gal acid. Put well on pump.

Wells in Area of Review  
Application for Authorization to Inject  
Southwest Royalties, Inc.

**Gonzales 31 Fed #9**

Location: 760' FSL & 1980' FEL

Type: Oil

Sec 31, T9S, R33E

Date Drilled: 10/82

Total Depth: 4300'

Casing Record:

Size	Depth	Sacks Cement
8 5/8"	401'	250
5 1/2"	4300'	1420

Completion:

11/82      Perforated 4196-4260'.

11/82      Acidized well w/9000 gal acid. Put well on pump.

**Warren American #2**

Location: 660' FSL & 660' FWL

Type: Oil

Sec 32, T9S, R33E

Date Drilled: 1/80

Total Depth: 4550'

Casing Record:

Size	Depth	Sacks Cement
9 5/8"	379'	400
5 1/2"	4550'	350

Completion:

2/80      Perf 4294-4329'.

2/80      Acidized w/3000 gal acid. Put well on pump.



# SOUTHWEST ROYALTIES

PROJECT FEDERAL 31 #2Y  
1909' FSL + 2051' FWL

PAGE \_\_\_\_\_ OF \_\_\_\_\_  
BY \_\_\_\_\_ DATE \_\_\_\_\_

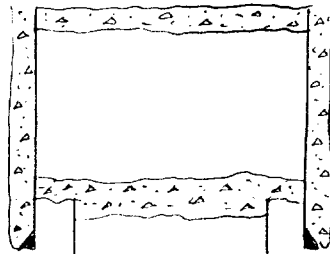
SEC 31, T9S, R33E

P+A'd 10/91

50 sx SURF PLUG

50 sx PLUG @ 1319-1474'

5 1/2" CUT @ 1415'



8 5/8" @ 1580' CMTD w/900 sx

40 sx PLUG 3990-4280'

PERFS: 4206-28'

5 1/2" @ 4366' CMTD w/550 sx

TD: 4366'

# SOUTHWEST ROYALTIES

PROJECT STATE 32 #1  
1980' FSL + 1980'

PAGE \_\_\_\_\_ OF \_\_\_\_\_  
BY \_\_\_\_\_ DATE \_\_\_\_\_

SEC 32, T9S, R33E

D+A'd 10/64

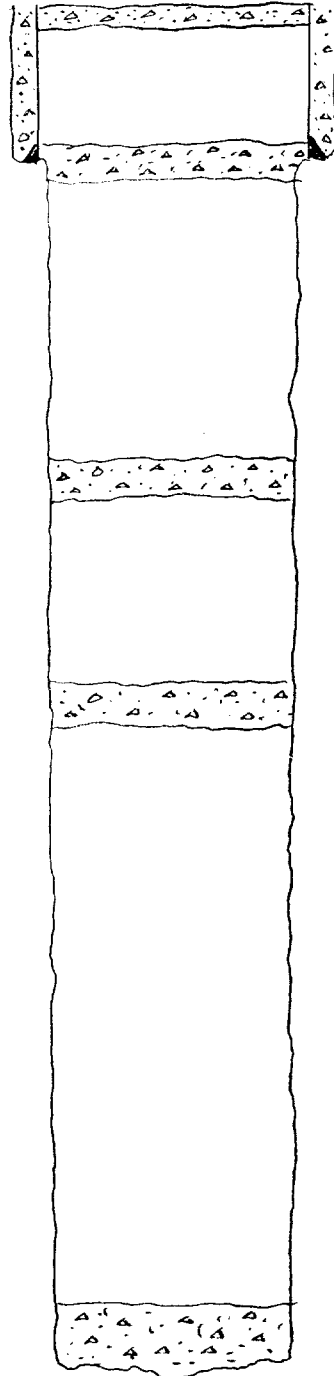
10 sx SURF PLUG

15 sx PLUG @ 260'

15 sx PLUG @ 1800'

25 sx PLUG @ 2500'

50 sx PLUG @ 4600'



8 5/8" @ 254' CMTD w/175sx

TD: 4600'

VII. Proposed Operation

This well will be used to inject produced water from other wells in the Flying M (SA) Field via a closed system. The anticipated average injection rate and pressure is 500 BWPD @ 800 psi. The anticipated maximum rate and pressure is 1000 BWPD @ 2100 psi.

VIII. Geological Data

The produced water will be injected into the San Andres formation from 4239' to 4282'. The San Andres consists of dolomite.

The source of underground drinking water in the area is the Ogallala formation (base 400').

VIII. Proposed Stimulation

We will clean out the wellbore to PBTD. Set Model AD-1 packer at 4150' and acidize with 2000 gal 20% NEFE acid.

XII. I have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the injection zone and any underground source of drinking water.



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
SOUTHWEST ROYALTIES, INC.  
ATTN: JAMES BLOUNT  
P.O. BOX 11390  
MIDLAND, TX 79702-8390  
FAX TO:

Receiving Date: 04/24/98  
Reporting Date: 04/30/98  
Project Number: NOT GIVEN  
Project Name: NOT GIVEN  
Project Location: 14 MILES W. OF CROSSROADS, NM

Sampling Date: NOT GIVEN  
Sample Type: GROUNDWATER  
Sample Condition: COOL & INTACT  
Sample Received By: JS  
Analyzed By: AH

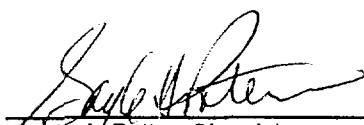
03/2 N. NW/4, SEC 29, T 9 S, R 33 E

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K Conductivity (mg/L) (u mhos/cm)	T-Alkalinity (mgCaCO <sub>3</sub> /L)
ANALYSIS DATE:		04/30/98	04/28/98	04/28/98	04/28/98	04/28/98
H3606-1	WINDMILL H2O	234	776	175	10.1	6208
Quality Control		NR	42	53	NR	1445
True Value QC		NR	50	50	NR	1413
% Accuracy		NR	84	106	NR	102
Relative Percent Difference		NR	16.0	6.0	NR	0.3

METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
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	Cl <sup>-</sup> (mg/L)	SO <sub>4</sub> (mg/L)	CO <sub>3</sub> (mg/L)	HCO <sub>3</sub> (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:	04/30/98	04/28/98	04/28/98	04/28/98	04/28/98	04/28/98
H3606-1	WINDMILL H2O	1185	1342	0	142	7.70
						4500
Quality Control	476	50.2	NR	NR	6.95	NR
True Value QC	500	50.0	NR	NR	7.00	NR
% Accuracy	95	100	NR	NR	99.3	NR
Relative Percent Difference	0.8	0.3	NR	NR	0.8	0.8

METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1
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Gayle A. Potter, Chemist

04/30/98  
Date

**SURFACE OWNER**

**1864 – GONZAES FED 31**

**E/2 SECTION 31-9S-33E  
LEA CO., NM**

**ANNETTE O. MARTIN TRUST  
8516 STONE HARBOR CT  
LAS VEGAS, NV 89128**

**1865 – FLYING “M” 34-2**

**“ “ “**

**SWSW SECTION 29-9S-33E  
LEA CO., NM**

**1869 – MCGUFFIN #2**

**SWNW SECTION 29-9S-33E  
LEA CO., NM**

**MARGART MCGUFFIN  
BOX 344  
CAPROCK, NM 88213**

1865

**Flying M SWD/Injection Prospect****OFFSET OPERATORS REPORT**

Based on a cursory review of the records of Lea County, New Mexico and the Oil Conservation Division

**ELLIS & ELLIS**  
P. O. Box 2522  
Midland, Texas 79702  
Telephone: 915-685-3863  
Fax: 915-685-0955

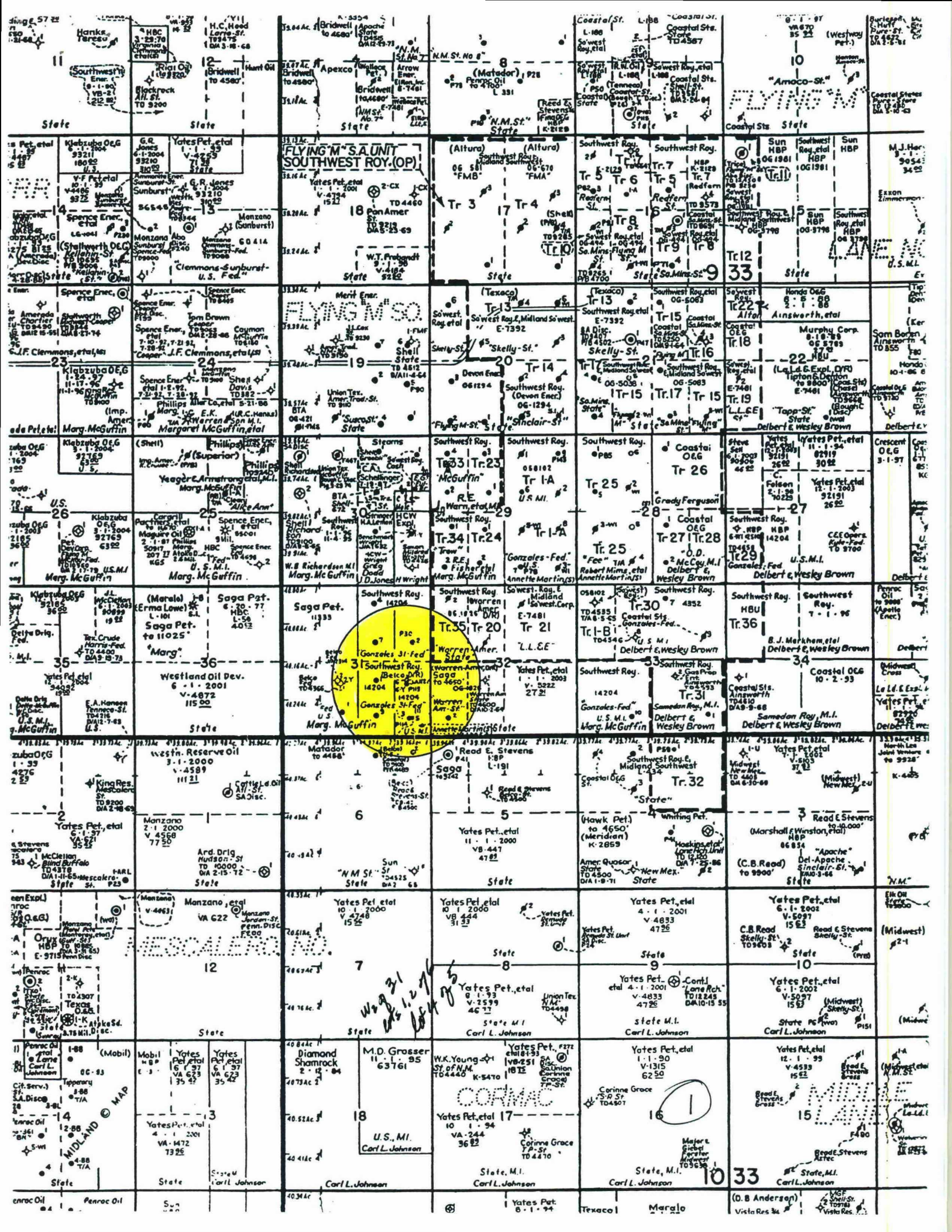
*Donzalor*  
31-6

April 24, 1998

Lands offsetting Proposed Injection well located in the E/2 SE/4 of Section 31, T-9-S, R-33-E, NMPM, Lea County, New Mexico, and not operated by Southwest Royalties (Plat attached).

Land	Operator	Comments
SW/4 of Section 32, T9S, R33E, NMPM, Lea County, NM	Saga Petroleum Limited Liability Company of Colorado 415 W. Wall, Suite 835 Midland, Texas 79701	
Lot 4 and the SW/4 NW/4 of Section 5, T10S, R33E, NMPM, Lea County, NM	Saga Petroleum Limited Liability Company of Colorado 415 W. Wall, Suite 835 Midland, Texas 79701	
Lots 1, 2 and 3, Section 6, T10S, R33E, NMPM, Lea County, NM	Matador Operating Co. Matador Petroleum Corporation Suite 158, Pecan Creek 8340 Meadow Road Dallas, Texas 75231	Matador Operating Co. is the operator indicated on Oil Conservation District records while the county records reflect Matador Petroleum Corporation.
W/2 of Section 31, T9S, R33E, NMPM, Lea County, NM	Saga Petroleum Limited Liability Company of Colorado 415 W. Wall, Suite 835 Midland, Texas 79701	







AFFIDAVIT OF PUBLICATION

State of New Mexico,  
County of Lea.

I, KATHI BEARDEN

Publisher

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.

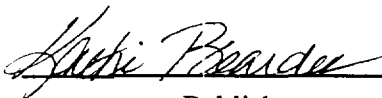
of 1  
\_\_\_\_\_ weeks.

Beginning with the issue dated

April 23 1998

and ending with the issue dated

April 23 1998



Publisher

Sworn and subscribed to before

me this 23rd day of

April 1998



Notary Public.

My Commission expires  
October 18, 2000  
(Seal)

LEGAL NOTICE

April 23, 1998

Southwest Royalties, Inc., intends to convert to water injection  
(3) wells in the Flying "M" (SA) Field. The wells involved are as  
follows:

Flying "M" (SA) Unit Tract 34 Well #2, located 660' FSL & 660'  
FWL of Section 29, T-9-S, R-33-E, Unit Letter M, in Lea Coun-  
ty, New Mexico. Injection will be to provide pressure mainte-  
nance in the San Andres formation from 4333' - 4381' at a  
maximum rate and pressure of 1200 BWPD and 2100 PSI.

McGuffin #2, located 1980 FNL & 660 FWL of section 29, T-9-  
S, R-33-E, Unit Letter E, in Lea County, New Mexico. Injection  
will be to provide pressure maintenance in the San Andres for-  
mation from 4340-64' at a maximum rate and pressure of 1200  
BWPD and 2100 PSI.

Gonzales 31 Federal #6Y, located 1980 FSL & 860 FEL or  
Section 31, T-9-S, R-33-E, Unit Letter I, in Lea County, New  
Mexico. Injection will be to provide pressure maintenance in  
the San Andres formation from 4239-4282' at a maximum rate  
and pressure of 1200 BWPD and 2100 PSI.

Interested parties must file objections or requests for hearings  
within 15 days to the following:

Oil Conservation Division

P.O. Box 2088

Santa Fe, NM 87501

If you have any questions concerning this application, please  
contact the following:

Southwest Royalties, Inc.

P.O. Box 11390

Midland, Tx 79702

Attention: Jim Blount

#15879

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.

01101469000 02515156  
Southwest Royalties, Inc.  
P.O. Box 11390  
a/c# 476043  
Midland, TX 79702

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- 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):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

ANNETTE O. MARTIN TRUST  
8516 STONE HARBOR CT.  
LAS VEGAS, NV 89128

4a. Article Number

**P329365308**

4b. Service Type

- ☐ Registered ☒ Certified  
☐ Express Mail ☐ Insured  
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

**5/11/98**

5. Received By: (Print Name)

**X Annette O Martin**

6. Signature: (Addressee or Agent)

**X**

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

PS Form **3811**, December 1994

102595-97-B-0179

Domestic Return Receipt

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

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- 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):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

SAGA PETROLEUM  
415 S. WALL, STE. 835  
MIDLAND, TX 79701

4a. Article Number

**P329365309**

4b. Service Type

- ☐ Registered ☒ Certified  
☐ Express Mail ☐ Insured  
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

**5-7-98**

5. Received By: (Print Name)

**Joan Marchbanks**

6. Signature: (Addressee or Agent)

**X Joan Marchbanks**

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

PS Form **3811**, December 1994

102595-97-B-0179

Domestic Return Receipt

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

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- 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):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

MATADOR PETROLEUM CORP.  
415 W. WALL ST. STE. 1101  
MIDLAND, TX 79701

4a. Article Number

**P329365310**

4b. Service Type

- ☐ Registered ☒ Certified  
☐ Express Mail ☐ Insured  
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

**5-8-98**

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

**X Cherry Cooker**

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

PS Form **3811**, December 1994

102595-97-B-0179

Domestic Return Receipt

Thank you for using Return Receipt Service.