

Case Resources, Inc.

P.O. Box 10457
Midland, Texas 79702

November 21, 1988

State of New Mexico
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Re: Application For Authorization
To Inject
N.H. "5A" State #1 Well
Lea County, New Mexico

Gentlemen:

Case Resources, Inc., respectfully requests authority to convert the N.H. "5A" State #1 well to a fluid injection well. In support of this request, an original and one (1) copy the following is attached:

1. List of offset operators and surface owner;
2. Form C-102;
3. Form C-108;
4. Injection Well Data Sheet;
5. Plat identifying all wells and Leases within two miles;
6. Table of Wells within the "area of review";
7. Affidavit of Publication;
8. Receipts showing that the Application to Inject was sent to offset operators and Surface owner;

Your favorable consideration of the application would be greatly appreciated. Should you have any questions regarding the above, do not hesitate to call me at (915) 687-5856.

Very truly yours,



Robert Ebeier

See Surface hands
RE:tg
Enclosures

xc: Division District Office--Hobbs (w/attachments 1 thru 8)
Surface Owner and offset Operators (w/attachments 1 thru 8)

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:
Mobil Producing Texas &
New Mexico, Inc.
P. O. Box 633
Midland, Texas 79702

4. Article Number
P 119 804 846

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Address
X

6. Signature - Agent
X

7. Date of Delivery
22 Nov 88

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

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

(Extra charge) (Extra charge)

1. Article Addressed to:
TCH Ranch, Inc.
5730 66th Street
Lubbock, Texas 79424
Attn: Mr. Mike Field

4. Article Number
P 911 804 842

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Address
X

6. Signature - Agent
X

7. Date of Delivery
11-22-88

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

Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

☐ Show to whom delivered, date, and addressee's address. (Extra charge)

1. Article Addressed to:
Kaiser-Francis Oil Company
P. O. Box 21468
Tulsa, OK 74121-1468

4. Article Number
P 911 804 843

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Address
X

6. Signature - Agent
X

7. Date of Delivery
NOV 25 1988

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

Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

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

3. Article Addressed to:
Texaco, Inc.
P. O. Box 3109
Midland, Texas 79702

4. Article Number
P 911 804 847

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Address
X

6. Signature - Agent
X

7. Date of Delivery
22 Nov 88

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

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

3. Article Addressed to:
M. Brad Bennett, Inc.
P. O. Box 2062
Midland, Texas 79702

4. Article Number
P 911 804 844

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Address
X

6. Signature - Agent
X

7. Date of Delivery
NOV 22 1988

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

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

3. Article Addressed to:
Santa Fe Energy Company
500 West Illinois
Midland, Texas 79701

4. Article Number
P 911 804 841

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Address
X

6. Signature - Agent
X

7. Date of Delivery
11-22-88

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

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

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

3. Article Addressed to:
Exxon Company, U.S.A.
P. O. Box 1600
Midland, Texas 79702

4. Article Number
P 911 804 845

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Address
X

6. Signature - Agent
X

7. Date of Delivery
NOV 23 1988

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

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Case Resources, Inc.
Address: P. O. Box 10457, Midland, Texas 79702
Contact party: Mr. Robert Ebeier Phone: (915) 687-5856
- 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: Robert Ebeier

Title: Vice-President

Signature: 

Date: November 8, 1988

- * 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. When the N.A. "5A" State #1 well was originally

drilled by Santa Fe Energy Company.

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

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.

Case Resources, Inc.
P. O. Box 10457
Midland, Texas 79702

DATA AND ATTACHMENTS FOR FORM C-108:

- III. A. (1) See Injection Well Data Sheet attached;
(2) See Injection Well Data Sheet attached;
(3) Tubing-5,580' of 2 3/8" J-55 Grade Plastic Coated;
(4) Packer-Baker Model A3 Lok-Set coated packer set at 5,560';
- B. (1) Injection Formation: San Andres (Field & Pool N/A);
(2) Injection Interval: 5,610' to 5,670', 5,809' to 5,816', 5,994' to 6,013' (all intervals perforated);
(3) Well drilled to test and evaluate the Wolfcamp;
(4) Wolfcamp perforations 10,176' to 10,192'. A cast iron bridge plug will be set at 9,970'. The said plug will be drilled out in the future and the perforated interval will be used for disposal after nearest Wolfcamp producer is plugged and abandoned;
(5) San Andres (4,400'), Tubb (7,230') and Wolfcamp (9,640');
- V. See the attached plat;
- VI. See the attached Tabulation of Wells;
- VII. (1) Average: Minimum 25 bbls per hour at 600 bbls per day
Maximum 250 " " " " 1200 " " "
(2) Closed System;
(3) Injection Pressure: Average 800# and Maximum 1,200#;
(4) See attached water analysis;
(5) N/A;
- VIII. Injection Zone: San Andres
Top: 4,400'
Thickness: 1,700'
Lithologic Detail: Tan to Brown crystalline dolomite with intercrystalline porosity;
- Aquifer Name: Ogallala
Aquifer Depth: Approximately 112' to 225'
Other Zone(s): None below injection interval.
- IX. Stimulation Process: 5,500 gallons 15% Ne FE acid;
- X. Well logs filed with Division;
- XI. No fresh water wells within one mile;
- XII. Case Resources, Inc., affirms that they have examined available geologic and engineering data and finds no evidence of open faults or any other hydrologic connection between the disposal zone and underground source of drinking water;
- XIII. All offset leasehold operators were notified of this application by certified mail--return receipt requested. Copies of the receipts are attached hereto. Also, a copy of the legal advertisement which was published in Lea County, New Mexico, on October 18, 1988, is attached hereto.

INJECTION WELL DATA

Case Resources, Inc.

N.H. "5A" State

OPERATOR

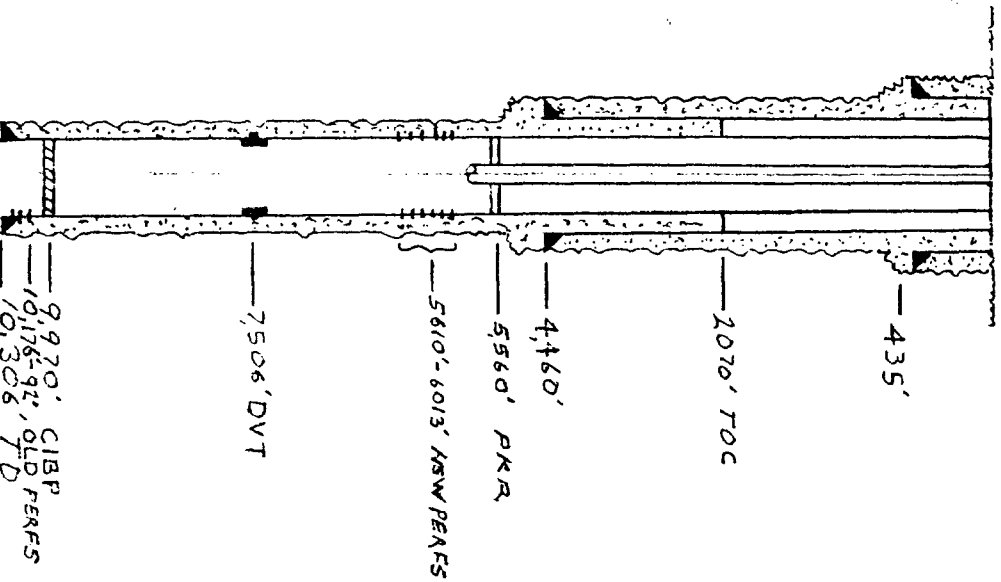
LEASE

1 1,980' FWL & 4,620' FSL of Section 5, T-16-S, R-34-E, Lea County, New Mexico

LEGAL LOCATION

Schematic

Tabular Data



Surface Casing: 435'

Size 13 3/8"

Cemented with 475

sx.

TOC surface

feet determined by circulated

Hole Size

17 1/2"

Intermediate Casing: 4,460'

Size 8 5/8"

Cemented with

3,500

sx.

TOC surface

feet determined by circulated

Hole Size

12 1/4"

Long String: 10,306'

Size 5 1/2"

Cemented with

1,475

sx.

TOC 2,070

feet determined by temp. survey

Hole Size

7 7/8"

Total depth

10,306'

Injection Interval:

5,610

to 6,013

feet

(perforated or ~~open~~, indicate which)

INJECTION WELL DATA SHEET--SIDE 2

Tubing size 2 3/8" lined with Plastic set in a
 (material)
Baker Lok-Set A-3 packer at 5,560 feet
 (brand and model)

Other Data:

1. Name of the injection formation San Andres
2. Name of Field of pool (if applicable) N/A
3. Is the new well drilled for injection? ☐ Yes ☒ No
 If no, for what purpose was the well originally drilled? To test the Wolfcamp
formation--completed as a dry hole.
4. Has the well been perforated in any other zones? List all such perforated intervals
 and give plugging detail (sacks of cement of bridge plug(s) used): Current perforations
are from 10,176' to 10,192'. Cast iron bridge plug to be set at 9,970'. Will be
drilled out at a later date for disposal zone after nearest Wolfcamp well is P&A'd.
5. Give the depth to and name of any overlaying and/or underlying oil or gas zones (pools)
 in this area. Wolfcamp (9,640'), Tubb (7,230') and San Andres (4,400').

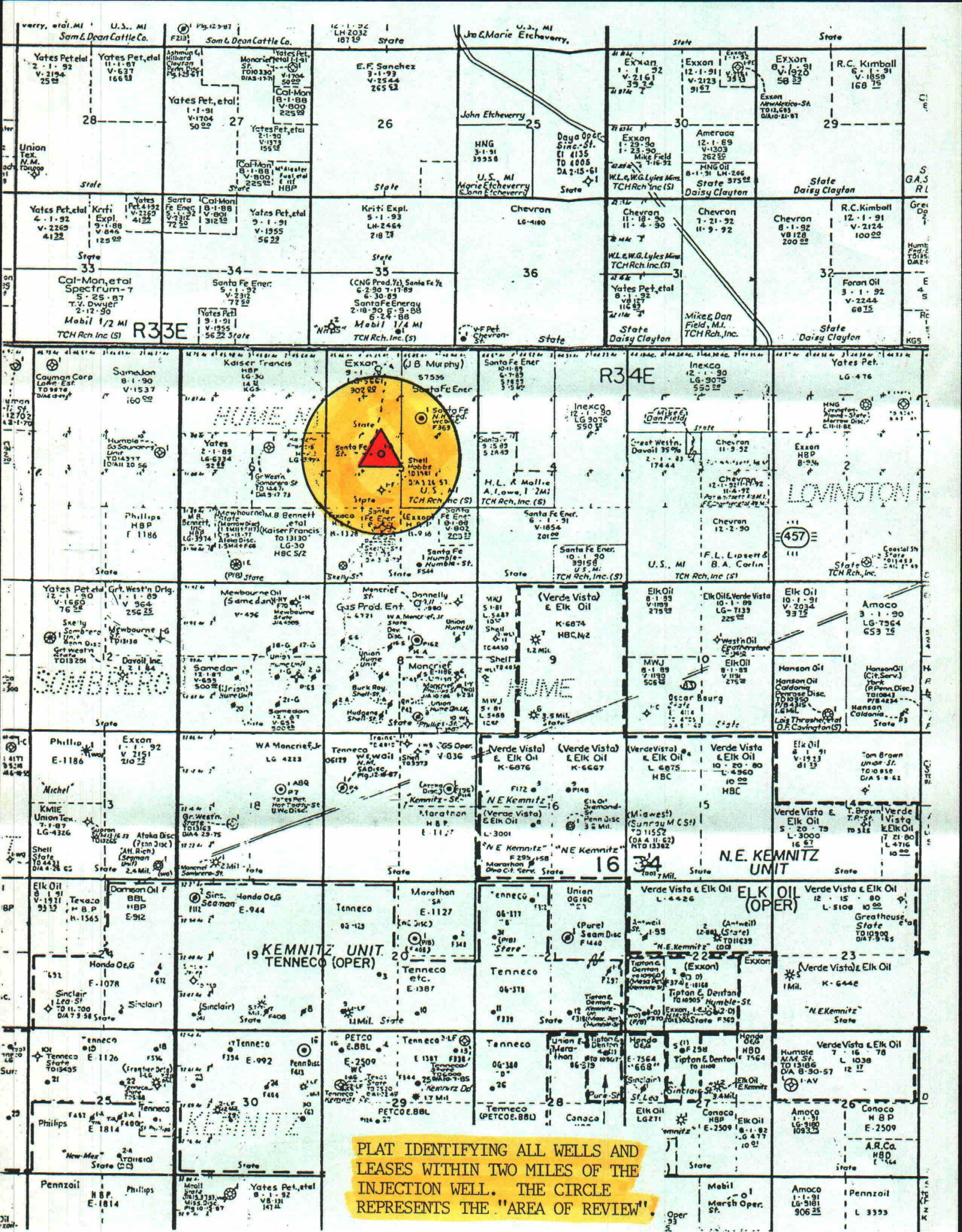


TABLE OF WELLS
WITHIN THE AREA OF REVIEW
(attached to Form C-108)

1. Operator: Santa Fe Energy
Lease Name and Well #: N.H. "5" Federal #1 Well
Location: 2,466' FNL & 1,980' FEL of Section 5,
T-16-S, R-34-E, Lea County, New Mexico.
Date Drilled: 10-16-86
Total Depth: 13,337'
Record of Completion: IPF 670 BO + 9 BW + 600 MCFPD from
perforated interval of 10,176' to 10,192'.
Present Status: Producing.

2. Operator: Santa Fe Energy Operating Partners, L. P.
Lease Name and Well #: Humble-Hume "5A" State #1 Well
Location: 1,874' FSL & 1,874' FWL of Section 5,
T-16-S, R-34-E, Lea County, New Mexico.
Date Drilled: 6-21-88
Total Depth: 10,217'
Record of Completion: Completion not attempted.
Present Status: Plugged and Abandoned (see Form C-103
attached for complete plugging details).

3. Operator: Skelly Oil Company
Lease Name and Well #: Hobbs "F" #1 Well
Location: 3,300' FSL & 1,980' FWL of Section 5,
T-16-S, R-34-E, Lea County, New Mexico.
Date Drilled: 3-9-57
Total Depth: 3,981' (did not drill deep enough to
penetrate the injection interval).
Record of Completion: Completion not attempted.
Present Status: Plugged and Abandoned.

PLUGGING DETAILS ON THE Humble-
Hume "5A" State #1 WELL.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIV (attachment to Tabulation of Wells)
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

API 30-025-30383

5a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER- Dry hole	7. Unit Agreement Name
2. Name of Operator Santa Fe Energy Operating Partners, L.P.	8. Farm or Lease Name Humble Hume 5A State
3. Address of Operator 500 W. Illinois, Suite 500, Midland, TX 79701	9. Well No. 1
4. Location of Well UNIT LETTER S 1974 FEET FROM THE South LINE AND 1874 FEET FROM THE West LINE, SECTION 5 TOWNSHIP 16S RANGE 34E N.M.P.M.	10. Field and Pool, or Wildcat N. Hume Wolfcamp
15. Elevation (Show whether DF, RT, GR, etc.) 4140.0' GR	12. County Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input checked="" type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOBS <input checked="" type="checkbox"/>	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Spud 6-21-88 @ 3:00 PM

Ran 13 3/8", 54.5# K-55 csg & set @ 497'. Cmt w/475 sx Cl C Neat w/2% CaCl₂. Circ 50 sx. Slurry wt 14.8, slurry volume 111. WOC 12 hrs. Test csg to 600 psi for 30 min.

6-28-88

Ran 103 jts 8 5/8" (64 jts 32# S-80 & 39 jts 24# K-55) csg & set @ 4470'. Cmt w/2100 sx pacesetter lite C, 6% gel, 10# salt/sk. Slurry wt 12.7, slurry volume 4263 cu.ft. Followed by 360 sx Cl C neat. Slurry wt 14.8, slurry volume 475 cu.ft. Circ 270 sx to surface. WOC 12 1/4 hrs. Test csg & BOP to 1500 psi.

P&A 7-15-88

Set 50 sx plug @ 9615' to 9515'
Set 50 sx plug @ 7853' to 7753'
Set 50 sx plug @ 6004' to 5904'
Set 50 sx plug @ 4520' to 4420'
Set 50 sx plug @ 1680' to 1580'

Set 10 sx plug @ surface. Weld on dry hole marker. Clean pits. Released rig @ 3:00 PM 7-16-88.

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

SIGNED Billie Hood

TITLE Sr. Production Clerk

DATE 8-8-88

PROVED BY

TITLE

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

Form C-105
Revised 10-1-78

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

API 30-025-3083

5a. Indicate Type of Lease

State ☒ Fee ☐

5. State Oil & Gas Lease No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

1. TYPE OF WELL

OIL WELL ☐

GAS WELL ☐

DRY ☒

OTHER

2. TYPE OF COMPLETION

NEW WELL ☐

WORK OVER ☐

DEEPEN ☐

PLUG BACK ☐

DIFF. RESVR. ☐

OTHER

3. Name of Operator

Santa Fe Energy Operating Partners, L.P.

4. Address of Operator

500 W. Illinois, Suite 500, Midland, TX 79701

5. Location of Well

6. LETTER S LOCATED 1874 FEET FROM THE South LINE AND 1874 FEET FROM

7. West LINE OF SEC. 5 TWP. 16S RGE. 34E NMPM

8. Date Spudded 6-21-88 16. Date T.D. Reached 7-14-88 17. Date Compl. (Ready to Prod.) Dry hole 18. Elevations (DF, RKB, RT, GR, etc.) 4140.0' GR 19. Elev. Casinghead

20. Total Depth 10,217' 21. Plug Back T.D. 22. If Multiple Compl., How Many 23. Intervals Drilled By Rotary Tools All Cable Tools

24. Producing Interval(s), of this completion - Top, Bottom, Name

25. Was Directional Survey Made

26. Type Electric and Other Logs Run Compensated Neutron, Z-Densilog, Dual Induction Gamma Ray, BHC Acoustilog

27. Was Well Cored Yes

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	54.5#	497'	17 1/2	475 sx Cl C Neat	None
8 5/8"	32# & 24#	4470'	11	2100 sx Pacesetter Lite C, 360 sx Cl C Neat	None

LINER RECORD

30. TUBING RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET

31. Perforation Record (Interval, size and number)

None

32. Plugs ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
9615-9515'	50 sx 1680-1580' - 50 sx
7853-7753	50 sx Set 10 sx plug @ surface
6004-5904	50 sx Weld on dry hole marker
4520-4420	50 sx

PRODUCTION

33. Date First Production		34. Production Method (Flowing, gas lift, pumping - Size and type pump)				35. Well Status (Prod. or Shut-in)	
36. Date of Test	37. Hours Tested	38. Choke Size	39. Prod'n. Per Test Period	40. Oil - Bbl.	41. Gas - MCF	42. Water - Bbl.	43. Gas - Oil Ratio
44. Flow Tubing Press.	45. Casing Pressure	46. Calculated 24-hour Rate	47. Oil - Bbl.	48. Gas - MCF	49. Water - Bbl.	50. Oil Gravity - API (Corr.)	

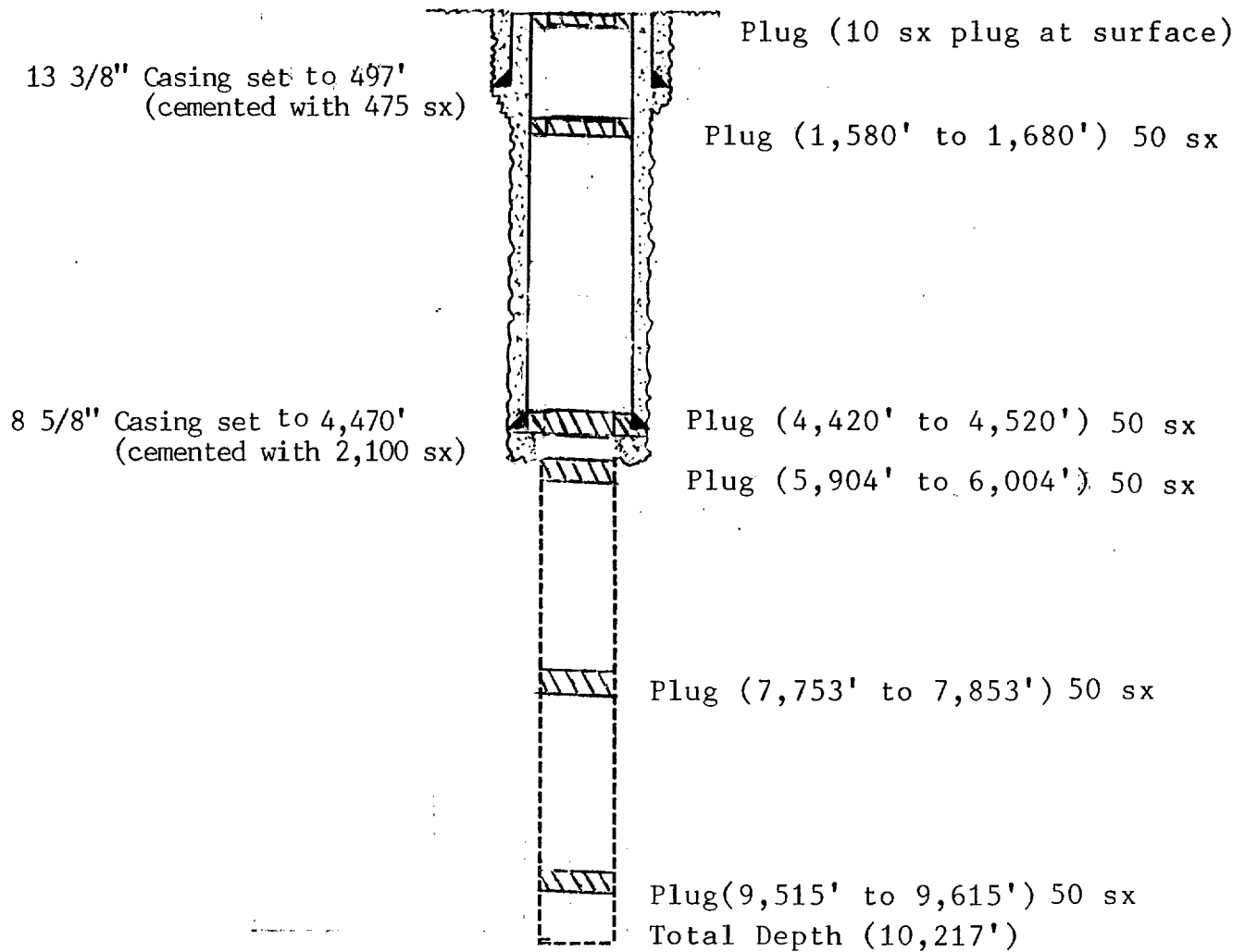
51. Disposition of Gas (Sold, used for fuel, vented, etc.)

Test Witnessed By

52. List of Attachments

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.

Plugging Schematic of the
Humble-Hume "5A" State #1
(attached to Table of Wells)



NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form
Supersedes
Effective

All distances must be from the outer boundaries of the Section

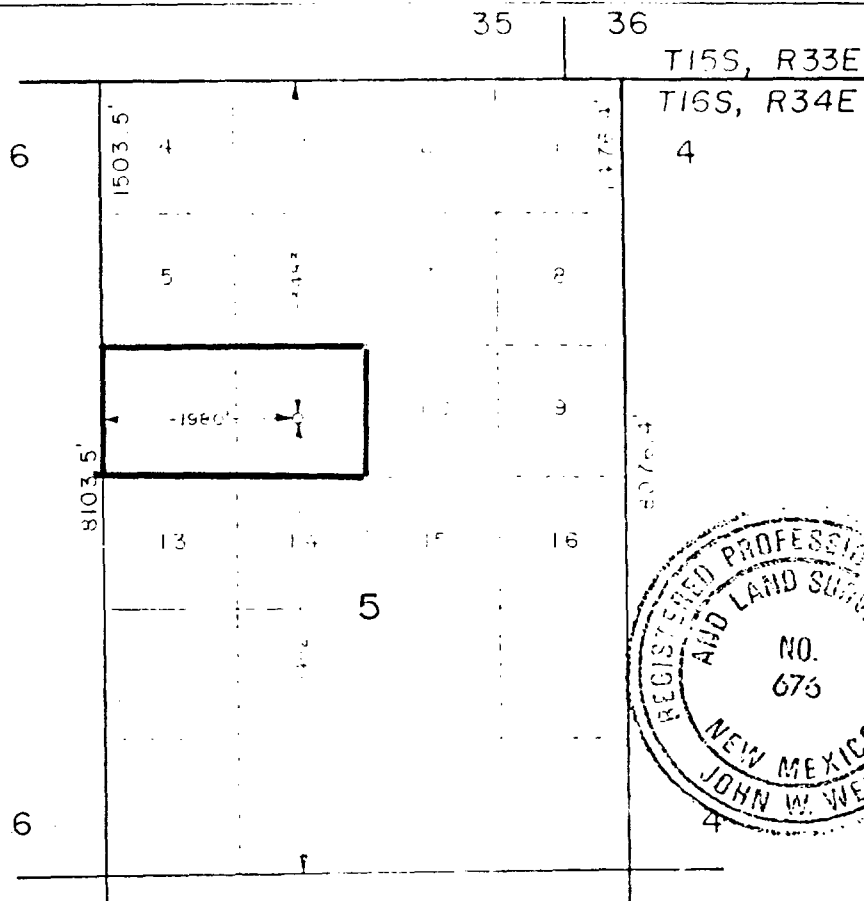
Operator Santa Fe Energy Co.		Lease N. H. 5A State		Well No. 1
Unit Letter F	Section 5	Township 16	Range 34	County Lin
Actual Footage Location of Well: 4620 feet from the West line				
Ground Level Elev. 4151.3	Producing Formation Wolfcamp	Pool North Hume - Wolfcamp	Dedicated Acreage 80	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☒ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated (Use reverse side of this form if necessary.) See Reverse Side

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



CERTIFICATION

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

David Slater

Name
David Slater

Position
Drilling Superintendent

Company
Santa Fe Energy Operating Partners, L.P.

Date
4-27-88

I hereby certify that the well shown on this plat was plotted from notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
April 19, 1988

Registered Professional Engineer and/or Land Surveyor

John W. West
Certificate No. JOHN W. WEST

The original copy of this form is on file in the Division office.

8 9

STATE OF NEW MEXICO LEASE NO. LG-5661

Santa Fe Energy Operating Partners, L.P., et al - 100% WI
State of New Mexico - 12.5% Royalty

P O BOX 1468
MONAHANS, TEXAS 79756
PH. 943-3234 OR 563-1040

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

TO: Mr. Pat Gaume LABORATORY NO. 688334
500 West Illinois, Suite 500, Midland, TX SAMPLE RECEIVED 6-29-88
RESULTS REPORTED 7-7-88

COMPANY Santa Fe Energy Operating LEASE NH 35 #1
FIELD OR POOL Partners, L.P. North Hume
SECTION BLOCK SURVEY COUNTY Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Produced water - taken from NH 35 #1 (wellhead). 6-29-88
NO. 2 Produced water - taken from NH 35 #1 (separator). 6-29-88
NO. 3 Produced water - taken from NH 35 #1 (water tank). 6-29-88
NO. 4

REMARKS: Wolfcamp - Samples taken by Greg Ogden, Martin Water Labs., Inc.

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.1065	1.1069	1.1071	
pH When Sampled				
pH When Received	6.44	6.24	6.30	
Bicarbonate as HCO ₃	171			
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	26,000			
Calcium as Ca	8,720			
Magnesium as Mg	1,021			
Sodium and/or Potassium	46,636			
Sulfate as SO ₄	1,029			
Chloride as Cl	89,484	92,324	93,720	
Iron as Fe	25.2			
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	147,060			
Temperature °F.	79	79	79	
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	0.0			
Resistivity, ohms/m at 77° F.	0.071			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Resistivity, ohms/m @ 77°F. - measured	0.071	0.071	0.070	

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The above determinations were made in the laboratory 48 hours after the samples were taken.

This water is being recorded as Wolfcamp water being produced from this well for a comparison with the water being swabbed from NH 5A State #1 reported on laboratory #688332.

Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that he is Adv. Director of THE LOVINGTON DAILY LEADER, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled
Notice Of Application For
Authorization To Inject

and numbered in the
..... Court of Lea
County, New Mexico, was published in a regular and
entire issue of THE LOVINGTON DAILY LEADER and
not in any supplement thereof, once each week on the
same day of the week, for one (1)

consecutive weeks, beginning with the issue of
October 18, 19 88

and ending with the issue of
October 18, 19 88

And that the cost of publishing said notice is the
sum of \$ 8.82

which sum has been (Paid) (~~Reserved~~) as Court Costs

Joyce Clemens
Subscribed and sworn to before me this 18th

day of October, 19 88

Ms. Jean Serier
Notary Public, Lea County, New Mexico

My Commission Expires Sept. 28, 19 90

LEGAL NOTICE NOTICE OF APPLICATION FOR AUTHORIZATION TO INJECT

Case No. 10-57, M. J. Jones, 79702, is applying for a permit to inject fluid into a subsurface formation. The applicant proposes to inject fluid into the San Andres formation. The proposed fluid disposal well is the Santa Fe Energy Company's N.H. "5A" State #1 well located near FWL & 4620' FSL, Section 33, T46S, R-34-E, Lea County, New Mexico, located approximately thirteen (13) miles west of Lovington, New Mexico. Fluid will be injected into strata in the subsurface depth interval from 4,500 to 5,000 feet. The maximum injection rate and pressures are estimated at 141,000 barrels per day and 600 psi, respectively.

Interested parties must file objections or requests for modification with the Oil Conservation Division, Box 2088, Santa Fe, New Mexico 87401 within 15 days of the date of publication of this notice in the Lovington Daily Leader. For additional information, call (505) 824-1111. Published in the Lovington Daily Leader October 18, 1988.

Case Resources, Inc.
P. O. Box 10457
Midland, Texas 79702

Surface Owner:

TCH Ranch, Inc.
5730 66th Street
Lubbock, Texas 79424
Attn: Mr. Mike Field

Offset Operators/Mineral Owners:

Santa Fe Energy Company
500 West Illinois
Suite 500
Midland, Texas 79701

M. Brad Bennett, Inc.
P. O. Box 2062
Midland, Texas 79702

Texaco Inc.
P. O. Box 3109
Midland, Texas 79702

Mobil Producing Texas
& New Mexico, Inc.
P. O. Box 633
Midland, Texas 79702

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

Kaiser-Francis Oil Company
P. O. Box 21468
Tulsa, Oklahoma 74121-1468

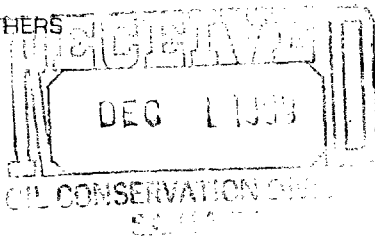


STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

11-30-88

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

GARREY CARRUTHERS
GOVERNOR



OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC	_____
DHC	_____
NSL	_____
NSP	_____
SWD	<input checked="" type="checkbox"/> _____
WFX	_____
PMX	_____

Gentlemen:

I have examined the application for the:

Case Resources Inc. - Santa Fe Energy Oper. Partners L.P. N.H. 5A St.
Operator Lease & Well No. Unit S-T-R #1-K 5-16-34

and my recommendations are as follows:

[Signature]

Yours very truly,

[Signature]
Jerry Sexton
Supervisor, District 1

/ed