



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

2/16/01

Lori Wrotenbery
Director
Oil Conservation Division

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

PMX-216

RE: Proposed:

MC _____
DHC _____
NSL _____
NSP _____
SWD _____
WFX X _____
PMX _____

Gentlemen:

I have examined the application for the:

Texaco E & P Inc

Operator _____ Lease & Well No. _____ Unit _____ S-T-R _____

and my recommendations are as follows:

OK - Look @ P&A Warr State A/c #2

Vacuem GB/SA Unit
1-18-34e # 135-G/
235-4
249-F

Yours very truly,

Chris Williams

Chris Williams
Supervisor, District 1



Texaco Exploration and Production Inc
Permian Basin Business Unit
Hobbs Operating Unit

P. O. Box 3109
Midland TX 79702-3019
505 688 4100

June 18, 2001

New Mexico Oil Conservation Division
1220 S. St. Francis
Santa Fe NM 87505
Attention: Mr. David R. Catanach

RE: **Request for Permission to Inject Fluid in a Reservoir Productive of Oil and Gas**

Texaco Exploration and Production Inc
Vacuum Grayburg San Andres Unit Well Nos. 135, 235 and 249
Sec. 1, T18S, R34E
Lea County, New Mexico

Dear Mr. Catanach,

I am sending, attached to this letter, a C-108 application (one original and one copy) for the three subject wells. All surface owners and operators in the review area have been notified. A copy is also being sent to the District office in Hobbs.

Data for virtually all of the review area of the attached application was presented as a part of our request for Tertiary Certification of the Vacuum Grayburg-San Andres Unit. More details are presented in the attached application. The hearing for that application was held on February 8th of this year, with Mr. Mike Stogner presiding. We have not received an order on this yet but Mr. Stogner has informally indicated to us that it is forthcoming. These injection wells for which we now request authority to inject are wells that we have determined to be necessary by additional engineering and economic analyses that have been done since the hearing took place.

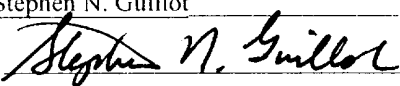
Thank you for your consideration. Please call me at 915-688-4577 if you have questions or concerns.

Yours truly,

Stephen Guillot
Production Engineer

Attachments
Cc: Mr. Chris Williams
Hobbs NMOCD

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Texaco Exploration and Production Inc
ADDRESS: P.O. Box 3109, Midland TX 79702
CONTACT PARTY: Stephen N. Guillot PHONE: 915-688-4577
- 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? X Yes No
If yes, give the Division order number authorizing the project: Currently under administrative review (hearing date 2/8/01)
- 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 geologic data on the injection zone including appropriate lithologic detail, geologic 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 sources 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 sources 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: Stephen N. Guillot TITLE: Production Engineer
SIGNATURE:  DATE: 6-Jun-01
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show date & circumstances of the earlier submittal: Information presented with request for tertiary certification of the the Vacuum-Grayburg-San Andres Unit CO2 flood, for which a hearing was held on 2/8/01
- DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate 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 the 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, 2040 South Pacheco, Santa Fe, New Mexico 87505, 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.

NEW MEXICO OIL CONSERVATION DIVISION -- Form C-108

Application for Water and CO₂ Flood ExpansionUnit Name: Vacuum Grayburg-San Andres Unit (VGSAU) Lea County, New Mexico

VGSAU Well No. 135:	Unit Ltr. G; Surface Location 2535' FNL, 1930' FEL, Section 1, Twp. 18S, Range 34E
VGSAU Well No. 235:	Unit Ltr. H; Surface Location 2610' FNL, 660' FEL, Section 1, Twp. 18S, Range 34E
VGSAU Well No. 249:	Unit Ltr. F; Surface Location 1390' FNL, 2530' FWL, Section 1, Twp. 18S, Range 34E

- III. We are requesting approvals for injection of water and CO₂ into these three wells. A typical schematic for the three wells is attached. These wells will be completed as traditional vertical injection wells. The VGSAU is unitized in the Grayburg and San Andres Formations from 4100' – 4800'. There is no active shallower production in the review area for this proposal. The Yates is the only shallow zone known to be productive of hydrocarbons and did produce in the New Mexico State "O" No. 20 to the northwest which is outside the review area. At about 6100', the Paddock and Glorieta are unitized in the Vacuum Glorieta West Unit. This is the next productive interval below the Grayburg-San Andres.
- V. Two maps are attached: a large scale county map showing lease owners for a 2-mile radius around the proposed wells, with the ½ mile radii around each well shown as the shaded area, and a map showing the 1/2 mile radii for each well in this submittal superimposed on a map showing the review area for our C-108 application for the CO₂ Tertiary Certification hearing which occurred on February 8, 2001.
- VI. A list of all wells in the review area is provided herein. This list includes current status, location data, API numbers and spud dates. Nearly the entire review area was covered by the C-108 application for the Vacuum Grayburg-San Andres Unit CO₂ Injection Project mentioned in part "V" above. Almost all wellbore data pertinent to this application was included in that previous submittal. The attached map shows that the review area for this proposal includes only three wells that were not in the review area of the prior application. Schematics for these three wells (Central Vacuum Unit Well Nos. 111 and 207 and Warn State A/C-2 Well No. 6) are attached. Subsequent to the prior application, VGSAU Well No. 49 has been plugged and abandoned and New Mexico State "L" Well No. 18 was recompleted to the Wolfcamp formation. Schematics are also included for these two wells.
- VII. This data has been submitted under the aforementioned C-108 for the VGSAU CO₂ Tertiary certification. For the subject well, we will request approval to increase surface water injection pressures to as high as 1500 psi, and CO₂ surface injection pressure to as high as 1850 PSI (as requested in the February 8 hearing), following step-rate testing. Initially these pressures will be limited to 820 PSI for water and 1170 PSI for CO₂. At the higher pressures it is anticipated that injection rates could be as high as 2000 barrels of water per day or 5 million cubic feet of CO₂ per day. Average rates are anticipated to be half these maximums. The injection system is closed.
- VIII. This data has been previously submitted under aforementioned C-108 for the VGSAU CO₂ Tertiary certification.
- IX. The three wells will have 5-1/2" casing run to the well's total depth of 4800'. Each will be stimulated with approximately 18,000 gallons of 20% hydrochloric acid pumped at a rate of 5-8 barrels per minute.
- X. This data has been previously submitted under aforementioned C-108 for the VGSAU CO₂ Tertiary certification.
- XI. This data has been previously submitted under aforementioned C-108 for the VGSAU CO₂ Tertiary certification.
- XII. We have extensively examined the geology in this area and have reinjected produced water in this area in many wells. We have no reason to believe that this project will jeopardize groundwater quality.

LIST OF ATTACHMENTS

1. Forms C-101 (Permit to Drill) and C-102 (Well Location and Acreage Dedication Plat) for Vacuum Grayburg-San Andres Unit (VGSAU) Well Nos. 135, 235, and 249.
2. Typical Wellbore Schematic for proposed wells.
3. Large-scale county map showing 2-mile (light blue) and ½-mile (dark blue) circles around the proposed well.
4. A lease map showing the ½-mile radius around the bottomhole locations of the horizontal laterals.
5. List of all wellbores that penetrate the proposed injection zone in the area of review.
6. Five wellbore schematics as explained in section “VI” of the C-108 application.
7. Proof of Notice Summary Section.

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

State of New Mexico
Energy, Minerals & Natural Resources

Form C-101
Revised March 17, 1995

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

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

☐ AMENDED REPORT

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

¹ Operator Name and Address Texaco Exploration & Production 500 N. Loraine Midland, Texas 79702		² OGRID Number 022351
		³ API Number 30-025-35561
⁴ Property Code 11124	⁵ Property Name VACUUM GRAYBURG SAN ANDRES UNIT	⁶ Well No. 135

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
G	1	18-S	34-E		2535'	NORTH	1930'	EAST	LEA

⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
⁹ Proposed Pool 1 VACUUM GRABURG SAN ANDRES					¹⁰ Proposed Pool 2				

¹¹ Work Type Code N	¹² Well Type Code O	¹³ Cable/Rotary ROTARY	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3988'
¹⁶ Multiple NO	¹⁷ Proposed Depth 4800'	¹⁸ Formation SAN ANDRES	¹⁹ Contractor	²⁰ Spud Date 6/10/01

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4"	8 5/8"	24#	1550'	600	CIRCULATE
7 7/8"	5 1/2"	15.5#	4800'	1000	CIRCULATE

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

CEMENTING PROGRAM:

SURFACE CASING: 400 sacks Class C w/4% Gel, 2% CaCl₂ (13.5 PPG, 1.74 CF/S, 9.11 GW/S). F/B 200 SACKS CLASS C w/2% CaCl₂ (14.8 PPG, 1.34 CF/S, 6.31 GW/S).

PRODUCTION CASING: 800 sacks 35/65 Poz Class H w/6% Gel, 5% Salt, 1/4# FC (12.4 PPG, 2.14 CF/S, 11.95 GW/S). F/B 200 sacks 50/50 Poz Class H w/2% Gel, 5% Salt, 1/4# FC (14.2 PPG, 1.35 CF/S, 6.30 GW/S).

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

Signature:

A. Phil Ryan

Printed name: A. Phil Ryan

Title: Commission Coordinator

Date:

5/21/01

Phone:

(915) 688-4606

OIL CONSERVATION DIVISION

Approved by:

GARY WINK

Title:

FIELD MGR.

Approval Date:

Expiration Date:

Conditions of Approval:

Attached ☐

Permit Expires 1 Year From Approval
Date Unless Drilling Underway

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

DISTRICT IV
P. O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994

Instructions on back

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Submit to Appropriate District Office

State Lease-4 copies
Fee Lease-3 copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

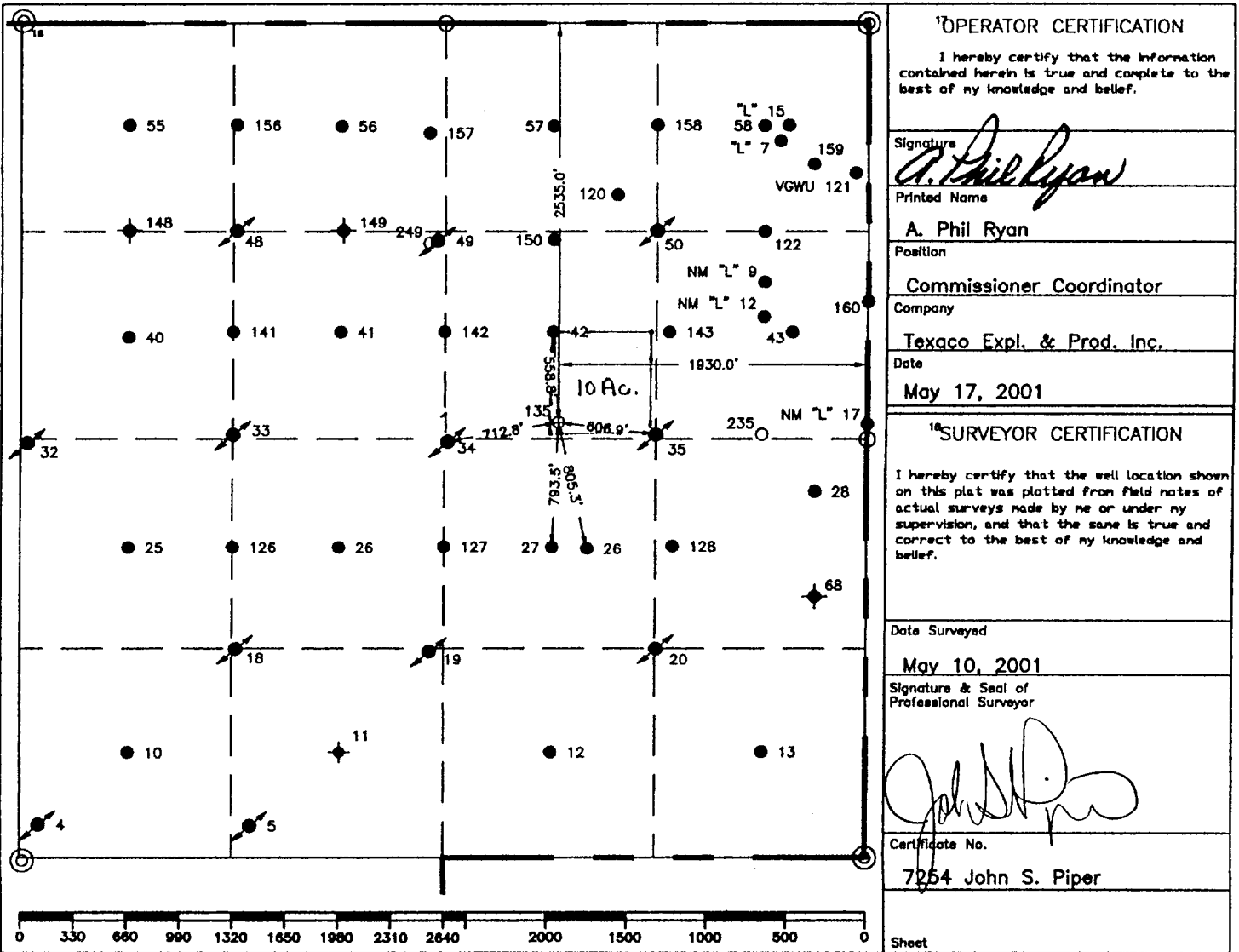
1 API Number		2 Pool Code		3 Pool Name Vacuum Grayburg San Andres					
4 Property Code		5 Property Name Vacuum Grayburg San Andres Unit						6 Well Number 135	
7 OGRID No.		8 Operator Name TEXACO EXPLORATION & PRODUCTION, INC.						9 Elevation 3988'	

10 Surface Location									
UL or lot no. G	Section 1	Township 18-S	Range 34-E	Lot Idn	Feet from the 2535'	North/South line North	Feet from the 1930'	East/West line East	7 County Lea

11 Bottom Hole Location if Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	7 County

12 Dedicated Acres 10		13 Joint or Infill		14 Consolidation Code		15 Order No.			
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION.



○ = Staked Location ● = Producing Well ↗ = Injection Well ∇ = Water Supply Well ◆ = Plugged & Abandon Well
⊙ = Found Section Corner, 2 or 3" Iron Pipe & GLO B.C. ○ = Found 1/4 Section Corner, 1" Iron Pipe & GLO B.C.

ADDITIONAL INFORMATION ON THE LOCATION

State Plane Coordinates			
Northing 647488.60 (1927=647423.62)		Easting 793881.05 (1927=752701.99)	
Latitude 32°46'38.223" (1927=32°46'37.778")		Longitude 103°30'41.939" (1927=103°30'40.151")	
Zone	North American Datum	Combined Grid Factor	Coordinate File
East	1983	0.99979145	Buckeye.cr5
Drawing File VGSAU135.dwg		Field Book Lea County 20, Pg. 49	

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State of New Mexico
Energy, Minerals & Natural Resources

Form C-101
Revised March 17, 1999

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

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

☐ AMENDED REPORT

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

¹ Operator Name and Address Texaco Exploration & Production 500 N. Loraine Midland, Texas 79702		² OGRID Number 022351
⁴ Property Code 11124		³ API Number 30-025-35562
⁵ Property Name VACUUM GRABURG SAN ANDRES UNIT		⁶ Well No. 235

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
H	1	18-S	34-E		2610'	NORTH	660'	EAST	LEA

⁸ Proposed Bottom Hole Location If Different From Surface

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

⁹ Proposed Pool 1

VACUUM GRABURG SAN ANDRES

¹⁰ Proposed Pool 2

¹¹ Work Type Code N	¹² Well Type Code O	¹³ Cable/Rotary ROTARY	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3981'
¹⁶ Multiple NO	¹⁷ Proposed Depth 4800'	¹⁸ Formation SAN ANDRES	¹⁹ Contractor	²⁰ Spud Date 6/10/01

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4"	8 5/8"	24#	1550'	600	CIRCULATE
7 7/8"	5 1/2"	15.5#	4800'	1000	CIRCULATE

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

CEMENTING PROGRAM:

SURFACE CASING: 400 sacks Class C w/4% Gel, 2% CaCl₂ (13.5 PPG, 1.74 CF/S, 9.11 GW/S). F/B 200 SACKS CLASS C w/2% CaCl₂ (14.8 PPG, 1.34 CF/S, 6.31 GW/S).

PRODUCTION CASING: 800 sacks 35/65 Poz Class H w/6% Gel, 5% Salt, 1/4# FC (12.4 PPG, 2.14 CF/S, 11.95 GW/S). F/B 200 sacks 50/50 Poz Class H w/2% Gel, 5% Salt, 1/4# FC (14.2 PPG, 1.35 CF/S, 6.30 GW/S).

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

Signature:

A. Phil Ryan

Printed name: A. Phil Ryan

Title: Commission Coordinator

Date:

5/21/01

Phone:

(915) 688-4606

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration Date:

Conditions of Approval:

Attached ☐

Permit Expires 1 Year From Approval
Date Unless Drilling Underway

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State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 10, 1994

Instructions on back

Submit to Appropriate District Office

State Lease-4 copies
Fee Lease-3 copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number		2 Pool Code		3 Pool Name Vacuum Grayburg San Andres					
4 Property Code		5 Property Name Vacuum Grayburg San Andres Unit						6 Well Number 235	
7 OGRID No.		8 Operator Name TEXACO EXPLORATION & PRODUCTION, INC.						9 Elevation 3981'	
10 Surface Location									
UL or lot no. H	Section 1	Township 18-S	Range 34-E	Lot Idn	Feet from the 2610'	North/South line North	Feet from the 660'	East/West line East	County Lea
11 Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres 10		13 Joint or Infill		14 Consolidation Code		15 Order No.			

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

Legend: ○ = Staked Location ● = Producing Well ✱ = Injection Well ◇ = Water Supply Well ◆ = Plugged & Abandon Well ⊙ = Found Section Corner, 2 or 3" Iron Pipe & GLO B.C. ○ = Found 1/4 Section Corner, 1" Iron Pipe & GLO B.C.	16 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
	Signature <i>A. Phil Ryan</i>	
	Printed Name A. Phil Ryan	
	Position Commissioner Coordinator	
	Company Texaco Expl. & Prod. Inc.	
	Date May 17, 2001	
	17 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
	Date Surveyed May 10, 2001	
	Signature & Seal of Professional Surveyor <i>John S. Piper</i>	
	Certificate No. 7054 John S. Piper	
Sheet		

ADDITIONAL INFORMATION ON THE LOCATION

State Plane Coordinates		
Northing 647430.19 (1927=647365.20)	Easting 795151.83 (1927=753972.77)	
Latitude 32°46'37.548" (1927=32°46'37.102")	Longitude 103°30'27.061" (1927=103°30'25.274")	
Zone North American Datum	Combined Grid Factor	Coordinate File
East 1983	0.99979145	Buckeye.cr5
Drawing File	Field Book	
VGSAU235.dwg	Lea County 20, Pg. 50	

State of New Mexico
Energy, Minerals & Natural Resources

Form C-101
Revised March 17, 1999

District I
1625 N. French Dr., Hobbs, NM 88240
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Oil Conservation Division
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Santa Fe, NM 87505

Submit to appropriate District Office
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⁴ Property Code 11124	⁵ Property Name VACUUM GRAYBURG SAN ANDRES UNIT	³ API Number 30-025-35563
		⁶ Well No. 249

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
F	1	18-S	34-E		1390'	NORTH	2530'	WEST	LEA

⁸ Proposed Bottom Hole Location If Different From Surface

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

⁹ Proposed Pool 1

VACUUM GRABURG SAN ANDRES

¹⁰ Proposed Pool 2

¹¹ Work Type Code N	¹² Well Type Code O	¹³ Cable/Rotary ROTARY	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3991'
¹⁶ Multiple NO	¹⁷ Proposed Depth 4800'	¹⁸ Formation SAN ANDRES	¹⁹ Contractor	²⁰ Spud Date 6/10/01

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4"	8 5/8"	24#	1550'	600	CIRCULATE
7 7/8"	5 1/2"	15.5#	4800'	1000	CIRCULATE

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

CEMENTING PROGRAM:

SURFACE CASING: 400 sacks Class C w/4% Gel, 2% CaCl₂ (13.5 PPG, 1.74 CF/S, 9.11 GW/S). F/B 200 SACKS CLASS C w/2% CaCl₂ (14.8 PPG, 1.34 CF/S, 6.31 GW/S).

PRODUCTION CASING: 800 sacks 35/65 Poz Class H w/6% Gel, 5% Salt, 1/4# FC (12.4 PPG, 2.14 CF/S, 11.95 GW/S). F/B 200 sacks 50/50 Poz Class H w/2% Gel, 5% Salt, 1/4# FC (14.2 PPG, 1.35 CF/S, 6.30 GW/S).

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature: <i>A. Phil Ryan</i>		Approved by: ORIGINAL SIGNED BY	
Printed name: A. Phil Ryan		Title: FIELD REP.	
Title: Commission Coordinator		Approval Date: MAY 24 2001	Expiration Date:
Date: 5/21/01	Phone: (915) 688-4606	Conditions of Approval:	
		Attached ☐	

Permit Expires 1 Year From Approval
Date Unless Drilling Underway

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
DISTRICT IV
P. O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 10, 1994

Instructions on back

Submit to Appropriate District Office

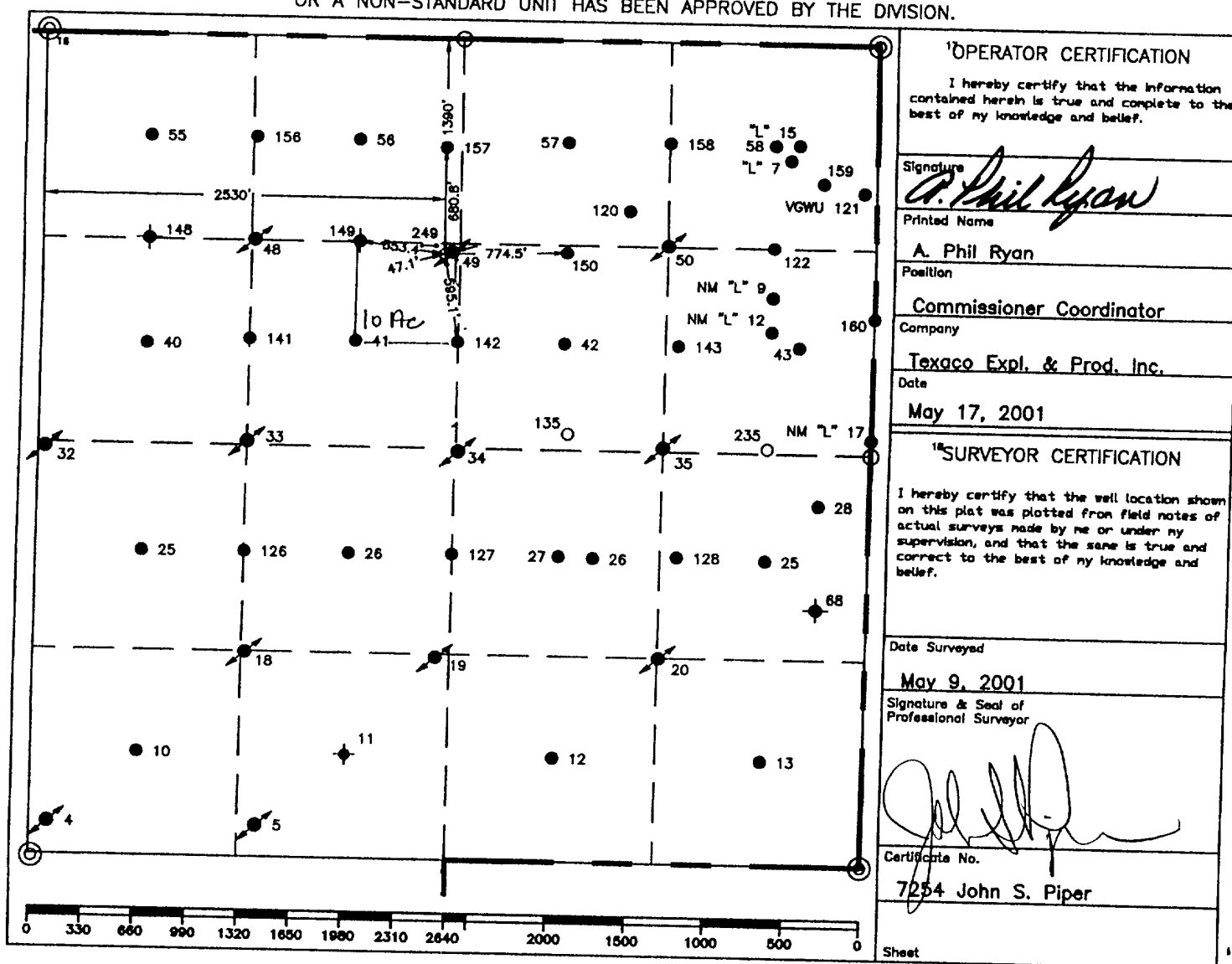
State Lease-4 copies
Fee Lease-3 copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

1 API Number		2 Pool Code		3 Pool Name					
Property Code		4 Property Name		5 Well Number					
		Vacuum Grayburg San Andres Unit		249					
7 OGRID No.		8 Operator Name		9 Elevation					
		TEXACO EXPLORATION & PRODUCTION, INC.		3991'					
10 Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	1	18-S	34-E		1390'	North	2530'	West	Lea
11 Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres		13 Joint or Infill		14 Consolidation Code		15 Order No.			
10									

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

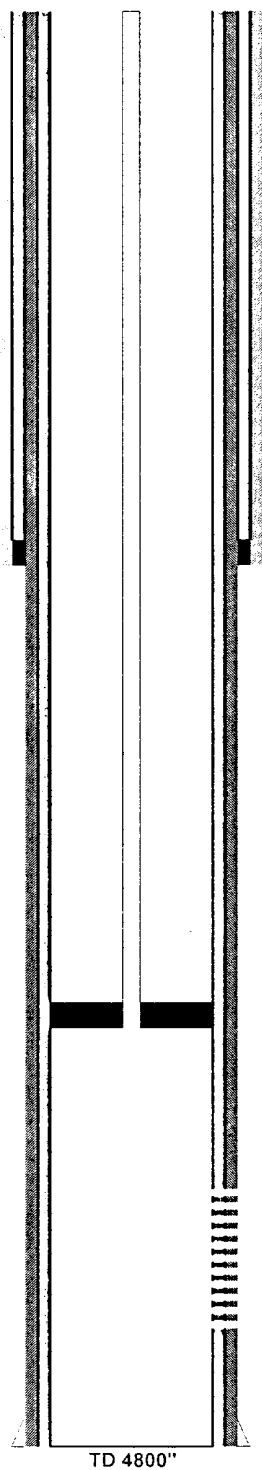


○ = Staked Location ● = Producing Well ↗ = Injection Well ◇ = Water Supply Well ◆ = Plugged & Abandon Well
⊙ = Found Section Corner, 2 or 3" Iron Pipe & GLO B.C. ○ = Found 1/4 Section Corner, 1" Iron Pipe & GLO B.C.

ADDITIONAL INFORMATION ON THE LOCATION

State Plane Coordinates			
Northing 648622.84 (1927=648557.86)		Easting 793050.05 (1927=751871.04)	
Latitude 32°46'49.510" (1927=32°46'49.064")		Longitude 103°30'51.569" (1927=103°30'49.781")	
Zone North American Datum		Combined Grid Factor	
East 1983		0.99979145	
Drawing File		Coordinate File	
VGSAU249.dwg		Buckeye.cr5	
		Field Book	
		Lea County 20, Pg. 51	

Vacuum Grayburg San Andres Unit Nos. 135, 235 and 249
Typical Schematic



Typical	CO2 Injector	VGSAU 135, 235 and 249
API		
Spud	7/1/01 (est.)	
Sec	1	
Twtnshp	18 S	
Range	34 E	
Pool	Vacuum Grayburg-San Andres	

12-1/4" hole

8-5/8" 24#/ft K+Q116-55 Casing @ 1550'
Cemented w/600 sks, plan to circulate to surface

2-7/8" Rice Duoline Fiberglass-lined injection tubing

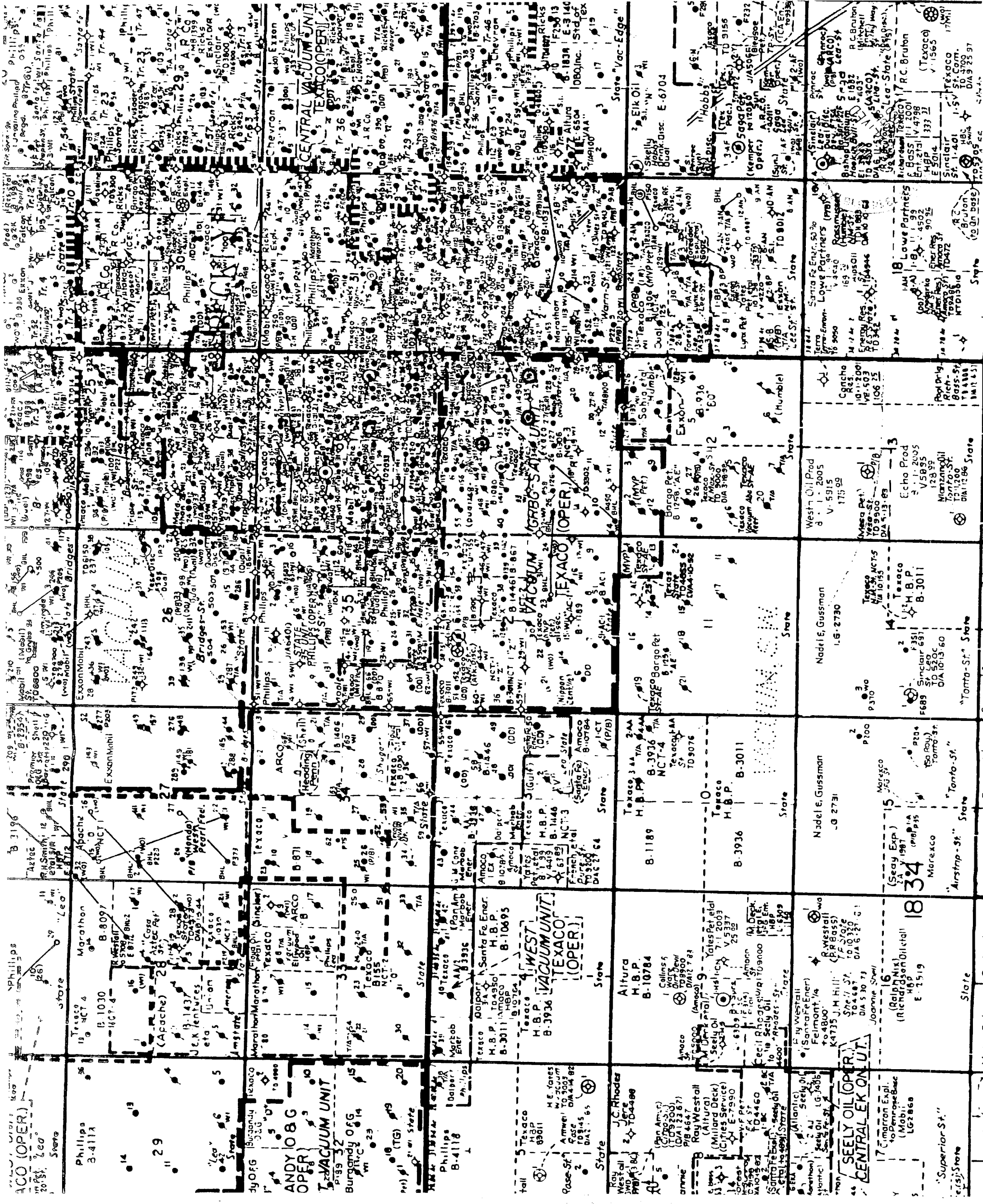
Guiberson G-6 Injection or Baker Lok-Set Packer @ ~4150

7-7/8" Hole

Perforations expected to be between 4150' and 4700'

5-1/2" 15.5 # K-55 Casing to 4800'
Cement w/1000 sks, plan to circulate to surface

TD 4800"



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29
11
State

ANDY OBG
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TEXACO UNIT
Burgandy OFG
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23
State

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B-4118
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State

Texaco
B-3911
State

Altura
H.B.P.
B-10784
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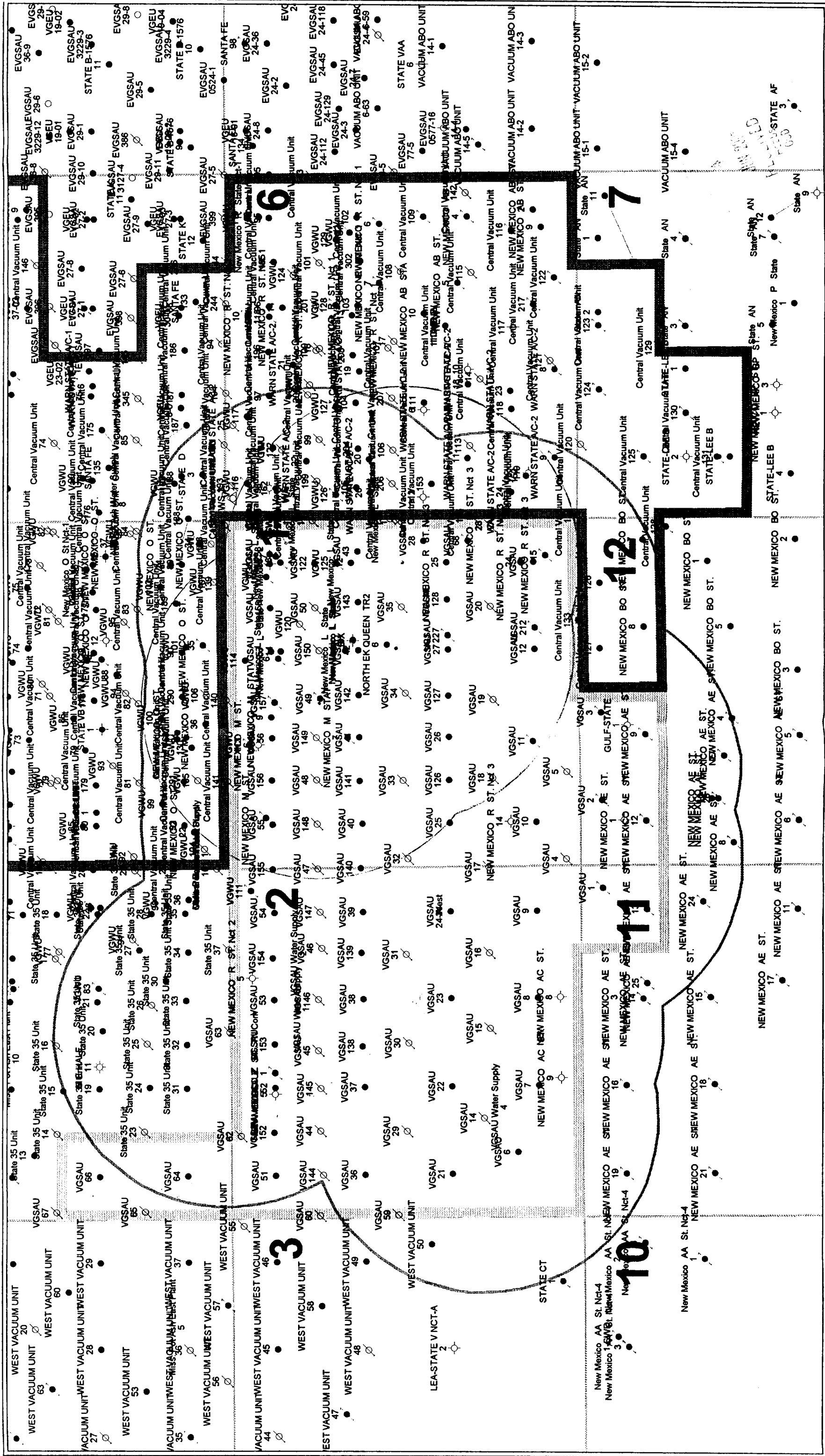
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State



VGSAU CO2 Injection Area of Review

#	API/IC	Lease Name	Well #	Operator	Formation At TD	Status	Total Depth	Location	Spud Date	Footage
1	3002502244	Central Vacuum Unit	90	Texaco E & P Inc.	Grayburg-San Andres	Oil	4710	36 17S 34E	9/6/39	660 FSL 1980 FWL
2	3002502242	Central Vacuum Unit	91	Texaco E & P Inc.	Grayburg-San Andres	PA	4710	36 17S 34E	8/30/38	660 FSL 660 FWL
3	3002502243	Central Vacuum Unit	92	Texaco E & P Inc.	Grayburg-San Andres	Oil	4710	36 17S 34E	10/3/38	660 FSL 1980 FWL
4	3002525733	Central Vacuum Unit	93	Texaco E & P Inc.	Grayburg-San Andres	C-Inj	4800	31 17S 35E	3/31/79	10 FSL 1136 FWL
5	3002503076	Central Vacuum Unit	97	Texaco E & P Inc.	Grayburg-San Andres	Oil	4725	6 18S 35E	5/26/81	660 FNL 1810 FWL
6	3002503075	Central Vacuum Unit	98	Texaco E & P Inc.	Grayburg-San Andres	PA	4675	6 18S 35E	8/21/38	660 FNL 484 FWL
7	3002525710	Central Vacuum Unit	99	Texaco E & P Inc.	Grayburg-San Andres	C-Inj	4800	6 18S 35E	11/29/77	1408 FNL 1211 FWL
8	3002503078	Central Vacuum Unit	104	Texaco E & P Inc.	Grayburg-San Andres	Oil	4726	6 18S 35E	8/28/80	1980 FNL 1728 FWL
9	3002503077	Central Vacuum Unit	105	Texaco E & P Inc.	Grayburg-San Andres	Oil	4705	6 18S 35E	6/30/81	1980 FNL 484 FWL
10	3002525796	Central Vacuum Unit	106	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4800	6 18S 35E	4/24/78	2520 FNL 1040 FWL
11	3002524754	Central Vacuum Unit	111	Texaco E & P Inc.	Grayburg-San Andres	Oil	4720	6 18S 35E	9/1/83	2310 FSL 1750 FWL
12	3002503079	Central Vacuum Unit	112	Texaco E & P Inc.	Grayburg-San Andres	PA	4694	6 18S 35E	2/16/40	2310 FSL 330 FWL
13	3002525798	Central Vacuum Unit	113	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4800	6 18S 35E	7/17/79	1620 FNL 1100 FWL
14	3002503081	Central Vacuum Unit	119	Texaco E & P Inc.	Grayburg-San Andres	PA	4683	6 18S 35E	8/5/44	660 FSL 660 FWL
15	3002525996	Central Vacuum Unit	135	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4800	6 18S 35E	10/3/78	1600 FSL 40 FWL
16	3002525997	Central Vacuum Unit	136	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4800	6 18S 35E	10/24/78	2450 FNL 40 FWL
17	3002525998	Central Vacuum Unit	137	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4800	6 18S 35E	11/7/78	1100 FNL 40 FWL
18	3002525999	Central Vacuum Unit	138	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4800	36 17S 34E	11/28/78	10 FSL 70 FEL
19	3002526078	Central Vacuum Unit	139	Texaco E & P Inc.	Grayburg-San Andres	C-Inj	4844	36 17S 34E	1/6/79	85 FSL 958 FEL
20	3002526000	Central Vacuum Unit	140	Texaco E & P Inc.	Grayburg-San Andres	C-Inj	4800	36 17S 34E	12/15/78	10 FSL 2571 FWL
21	3002526001	Central Vacuum Unit	141	Texaco E & P Inc.	Grayburg-San Andres	C-Inj	4800	36 17S 34E	11/30/78	10 FSL 1310 FWL
22	3002526820	Central Vacuum Unit	152	Texaco E & P Inc.	Grayburg-San Andres	Oil	4750	6 18S 35E	6/13/80	760 FSL 660 FWL
23	3002527194	Central Vacuum Unit	153	Texaco E & P Inc.	Grayburg-San Andres	Oil	4770	6 18S 35E	12/27/80	2196 FSL 525 FWL
24	3002528182	Central Vacuum Unit	162	Texaco E & P Inc.	Grayburg-San Andres	Oil	4800	6 18S 35E	4/6/83	760 FNL 484 FWL
25	3002529765	Central Vacuum Unit	169	Texaco E & P Inc.	Grayburg-San Andres	Oil	4710	36 17S 34E SE SW	11/8/86	760 FSL 1980 FWL
26	3002533330	Central Vacuum Unit	188	Texaco E & P Inc.	Grayburg-San Andres	Oil	4850	36 17S 34E	5/18/96	650 FSL 318 FEL
27	3002533334	Central Vacuum Unit	189	Texaco E & P Inc.	Grayburg-San Andres	Oil	4850	36 17S 34E	4/23/96	751 FSL 1246 FEL
28	3002532800	Central Vacuum Unit	193	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4850	6 18S 35E	3/4/95	101 FNL 534 FWL
29	3002532791	Central Vacuum Unit	197	Texaco E & P Inc.	Grayburg-San Andres	Oil	4850	6 18S 35E	2/2/95	717 FNL 1093 FWL
30	3002532804	Central Vacuum Unit	199	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4850	6 18S 35E	3/8/95	1372 FNL 584 FWL
31	3002532805	Central Vacuum Unit	200	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4850	6 18S 35E	3/18/95	1301 FNL 1875 FWL
32	3002532792	Central Vacuum Unit	204	Texaco E & P Inc.	Grayburg-San Andres	Oil	4850	6 18S 35E	2/5/95	1994 FNL 1073 FWL
33	3002532808	Central Vacuum Unit	206	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4850	6 18S 35E	3/24/95	2509 FNL 536 FWL
34	3002532809	Central Vacuum Unit	207	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4850	6 18S 35E	3/15/95	2500 FNL 1825 FEL
35	3002531197	Central Vacuum Unit	290	Texaco E & P Inc.	Grayburg-San Andres	Oil	4850	36 17S 34E SE SW	5/29/91	670 FSL 2630 FWL
36	3002531195	Central Vacuum Unit	291	Texaco E & P Inc.	Grayburg-San Andres	Oil	4850	36 17S 34E SE SW	6/19/91	660 FSL 1330 FWL
37	3002520514	New Mexico L State	6	Texaco E & P Inc.	Grayburg-San Andres	PA	12255	1 18S 34E NW NE	2/5/71	770 FNL 2090 FEL
38	3002520937	New Mexico L State	7	Texaco E & P Inc.		PA	6750	1 18S 34E	5/12/81	760 FNL 560 FEL
39	3002520938	New Mexico L State	8	Texaco E & P Inc.	Drinkard	PA	6800	1 18S 34E	4/18/64	1980 FNL 1865 FEL
40	3002531592	New Mexico L State	12	Texaco E & P Inc.	Drinkard	Oil	9273	1 18S 34E SE NE	4/21/99	1880 FNL 660 FEL
41	3002532007	New Mexico L State	13	Texaco E & P Inc.	Drinkard	Oil	7990	1 18S 34E SW NE	9/16/93	1780 FNL 1980 FEL
42	3002532008	New Mexico L State	14	Texaco E & P Inc.	Drinkard	Oil	7950	1 18S 34E NW NE	10/4/93	810 FNL 1980 FEL
43	3002532871	New Mexico L State	16	Texaco E & P Inc	Drinkard	W-Inj	8000	1 18S 34E	3/31/95	1310 FNL 10 FEL
44	3002532872	New Mexico L State	17	Texaco E & P Inc	Drinkard	PA	8100	1 18S 34E	8/11/95	2560 FNL 10 FEL
45	3002533301	New Mexico L State	18	Texaco E & P Inc	Wolfcamp	Oil	11500	1 18S 34E SE NE NE	6/2/96	810 FNL 650 FEL
46	3002520940	New Mexico M State	6	Texaco E & P Inc		PA	6800	1 18S 34E	3/16/64	460 FNL 1880 FWL

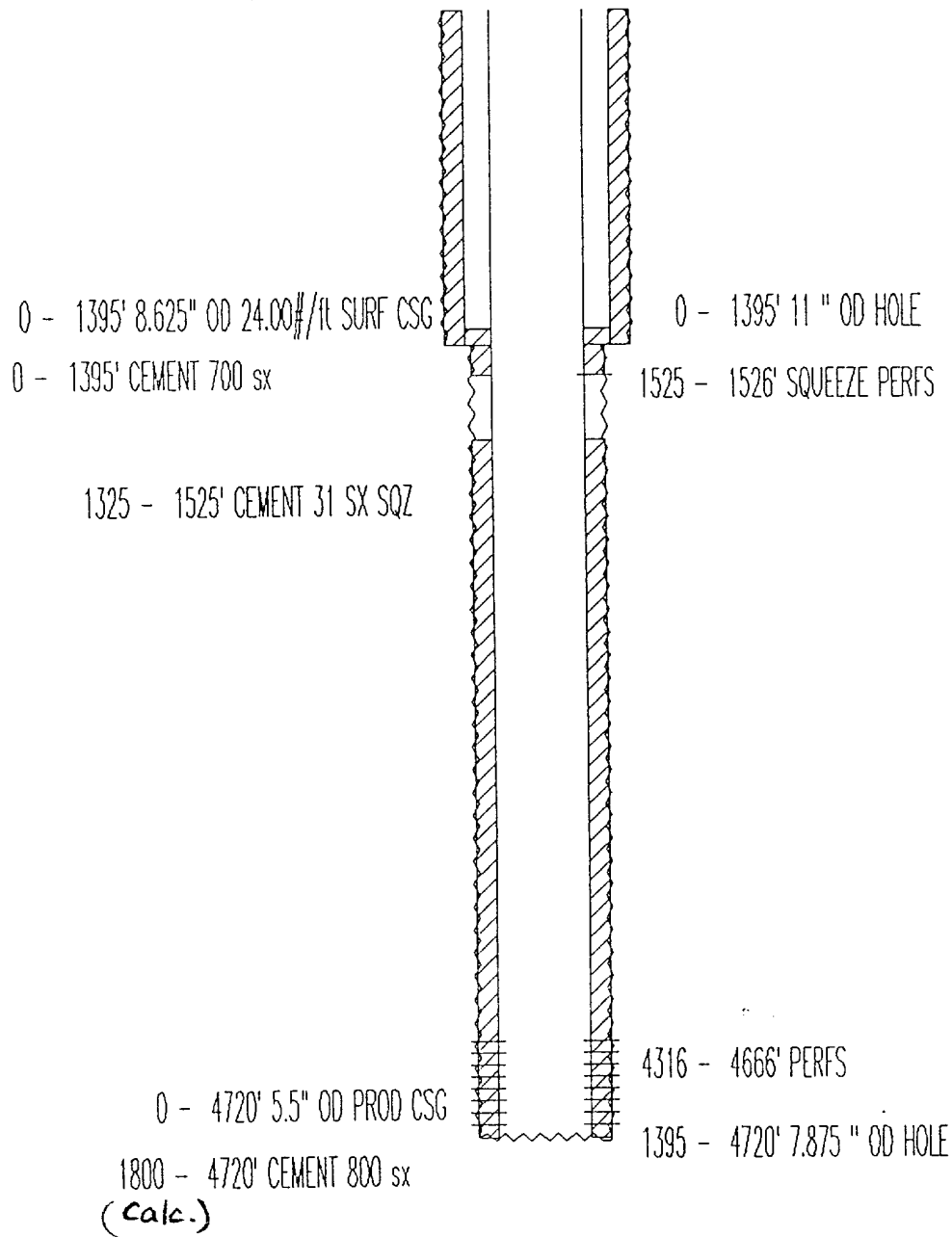
VGSAU CO2 Injection Area of Review

#	API/IC	Lease Name	Well #	Operator	Formation At TD	Status	Total Depth	Location	Spud Date	Footage
47	3002520494	New Mexico M State	7	Texaco E & P Inc.	Drinkard	Oil	12220	1 18S 34E SE NW	4/7/93	1800 FNL 1980 FWL
48	3002532016	New Mexico M State	9	Texaco E & P Inc.	Drinkard	Oil	8100	1 18S 34E NE NW	6/21/99	660 FNL 2310 FWL
49	3002520125	New Mexico O State NCT-1	17	Texaco E & P Inc.	WC prod. (SI)	TAW	12082	36 17S 34E	11/1/94	760 FSL 2080 FWL
50	3002520946	New Mexico O State NCT-1	34	Texaco E & P Inc.		PA	10300	36 17S 34E	11/1/72	860 FSL 660 FEL
51	3002532271	New Mexico O State NCT-1	24	Texaco E & P Inc.	Blnbry-Drnkld prod. (SI)	PA	8000	36 17S 34E SE SE	8/1/96	380 FSL 330 FEL
52	3002532339	New Mexico O State NCT-1	36	Texaco E & P Inc.	Blnebry-Drnkld prod.	Oil	8100	36 17S 34E SW SE	8/24/96	330 FSL 2210 FWL
53	3002520950	New Mexico R State NCT-3	15	Texaco E & P Inc.		PA	10200	1 18S 34E	2/28/64	487 FSL 560 FEL
54	3002529925	New Mexico R State NCT-3	24	Texaco E & P Inc.	Drinkard	Oil	11994	1 18S 34E SE SE	6/8/87	860 FSL 660 FEL
55	3002531930	New Mexico R State NCT-3	25	Texaco E & P Inc.	Drinkard	Oil	8000	1 18S 34E NE SE	4/1/93	1980 FSL 660 FEL
56	3002532005	New Mexico R State NCT-3	28	Texaco E & P Inc.	Drinkard	W-Inj	8100	1 18S 34E	9/22/95	1310 FSL 110 FEL
57	3002530476	Vacuum Glorieta West Unit	100	Texaco E & P Inc.	Drinkard	Oil	6270	36 17S 34E SE SW	3/30/89	990 FSL 2310 FWL
58	3002520237	Vacuum Glorieta West Unit	101	Texaco E & P Inc.	Glorieta/Paddock	PA	6800	36 17S 34E	1/1/72	600 FSL 1900 FEL
59	3002531858	Vacuum Glorieta West Unit	104	Texaco E & P Inc.	Glorieta/Paddock	W-Inj	6245	36 17S 34E SW SW	3/22/93	361 FSL 300 FWL
60	3002531880	Vacuum Glorieta West Unit	105	Texaco E & P Inc.	Glorieta/Paddock	W-Inj	6231	36 17S 34E SE SW	4/24/93	453 FSL 1340 FWL
61	3002531874	Vacuum Glorieta West Unit	106	Texaco E & P Inc.	Glorieta/Paddock	W-Inj	6280	36 17S 34E SW SE	5/5/93	310 FSL 2630 FEL
62	3002531884	Vacuum Glorieta West Unit	107	Texaco E & P Inc.	Glorieta/Paddock	W-Inj	6390	36 17S 34E SE SE	5/14/93	183 FSL 931 FEL
63	3002520515	Vacuum Glorieta West Unit	112	Texaco E & P Inc.	Glorieta/Paddock	PA	12215	1 18S 34E	1/1/68	560 FNL 760 FWL
64	3002521107	Vacuum Glorieta West Unit	113	Texaco E & P Inc.	Glorieta/Paddock	PA	6250	1 18S 34E	7/3/95	330 FNL 1880 FEL
65	3002531132	Vacuum Glorieta West Unit	114	Texaco E & P Inc.	Glorieta/Paddock	Oil	7471	1 18S 34E NW NE	11/15/97	280 FNL 2080 FEL
66	3002531131	Vacuum Glorieta West Unit	115	Texaco E & P Inc.	Glorieta/Paddock	Oil	7459	1 18S 34E NE NE	12/6/97	604 FNL 856 FEL
67	3002520753	Vacuum Glorieta West Unit	116	Texaco E & P Inc.	Glorieta/Paddock	Oil	6507	6 18S 35E NW NW NW	10/3/99	330 FNL 560 FWL
68	3002531859	Vacuum Glorieta West Unit	120	Texaco E & P Inc.	Glorieta/Paddock	W-Inj	6321	1 18S 34E NW NE	6/30/93	1102 FNL 1575 FEL
69	3002531876	Vacuum Glorieta West Unit	121	Texaco E & P Inc.	Glorieta/Paddock	W-Inj		1 18S 34E SE NE NE	/ /	964 FNL 90 FEL
70	3002531877	Vacuum Glorieta West Unit	122	Texaco E & P Inc.	Glorieta/Paddock	W-Inj	6373	6 18S 35E NW NW	8/21/93	845 FNL 1061 FWL
71	3002520939	Vacuum Glorieta West Unit	125	Texaco E & P Inc.	Glorieta/Paddock	PA	6850	1 18S 34E	10/21/64	1660 FNL 660 FEL
72	3002521031	Vacuum Glorieta West Unit	126	Texaco E & P Inc.	Glorieta/Paddock	Oil		6 18S 35E	11/15/99	1660 FNL 380 FWL
73	3002521292	Vacuum Glorieta West Unit	127	Texaco E & P Inc.	Glorieta/Paddock	Oil	6853	6 18S 35E NW SE NW	/ /	1650 FNL 1650 FWL
74	3002520046	Vacuum Glorieta West Unit	130	Texaco E & P Inc.	Glorieta/Paddock	PA		36 17S 34E	2/23/82	519 FSL 1839 FWL
75	3002532338	Vacuum Glorieta West Unit	133	Texaco E & P Inc.	Glorieta/Paddock	Oil	4698	1 18S 34E	/ /	355 FSL 1875 FEL
76	3002502257	Vacuum Grayburg San Andres Unit	11	Texaco E & P Inc.	Grayburg-San Andres	Oil	4698	1 18S 34E	6/12/41	660 FSL 1980 FWL
77	3002502259	Vacuum Grayburg San Andres Unit	12	Texaco E & P Inc.	Grayburg-San Andres	Oil	4690	1 18S 34E	8/31/43	660 FSL 1980 FEL
78	3002502260	Vacuum Grayburg San Andres Unit	13	Texaco E & P Inc.	Grayburg-San Andres	Oil	4680	1 18S 34E	10/12/43	660 FSL 660 FEL
79	3002524317	Vacuum Grayburg San Andres Unit	18	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4800	1 18S 34E	12/28/72	1330 FSL 1330 FWL
80	3002524331	Vacuum Grayburg San Andres Unit	19	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4735	1 18S 34E	2/6/73	1310 FSL 2540 FWL
81	3002524360	Vacuum Grayburg San Andres Unit	20	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4800	1 18S 34E	3/5/73	1330 FSL 1330 FEL
82	3002502256	Vacuum Grayburg San Andres Unit	25	Texaco E & P Inc.	Grayburg-San Andres	Oil	4710	1 18S 34E	8/16/40	1980 FSL 660 FWL
83	3002502255	Vacuum Grayburg San Andres Unit	26	Texaco E & P Inc.	Grayburg-San Andres	Oil	4710	1 18S 34E	6/7/40	1980 FSL 1980 FWL
84	3002502254	Vacuum Grayburg San Andres Unit	27	Texaco E & P Inc.	Grayburg-San Andres	Oil	4710	1 18S 34E	5/13/40	1980 FSL 1980 FEL
85	3002502253	Vacuum Grayburg San Andres Unit	28	Texaco E & P Inc.	Grayburg-San Andres	Oil	4710	1 18S 34E	4/14/40	2310 FSL 330 FEL
86	3002524330	Vacuum Grayburg San Andres Unit	32	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4800	1 18S 34E	1/9/73	2630 FSL 30 FWL
87	3002524323	Vacuum Grayburg San Andres Unit	33	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4800	1 18S 34E	4/18/96	2630 FSL 1310 FWL
88	3002524312	Vacuum Grayburg San Andres Unit	34	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4800	1 18S 34E	12/5/72	2630 FSL 2630 FEL
89	3002524361	Vacuum Grayburg San Andres Unit	35	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4800	1 18S 34E	5/20/96	2630 FNL 1330 FEL
90	3002502252	Vacuum Grayburg San Andres Unit	40	Texaco E & P Inc.	Grayburg-San Andres	Oil	4710	1 18S 34E	6/7/40	1980 FNL 660 FWL
91	3002502249	Vacuum Grayburg San Andres Unit	41	Texaco E & P Inc.	Grayburg-San Andres	Oil	4710	1 18S 34E	4/16/99	1980 FNL 1980 FWL
92	3002502245	Vacuum Grayburg San Andres Unit	42	Texaco E & P Inc.	Grayburg-San Andres	Oil	4690	1 18S 34E	2/1/83	1980 FNL 1980 FEL

VGSAU CO2 Injection Area of Review

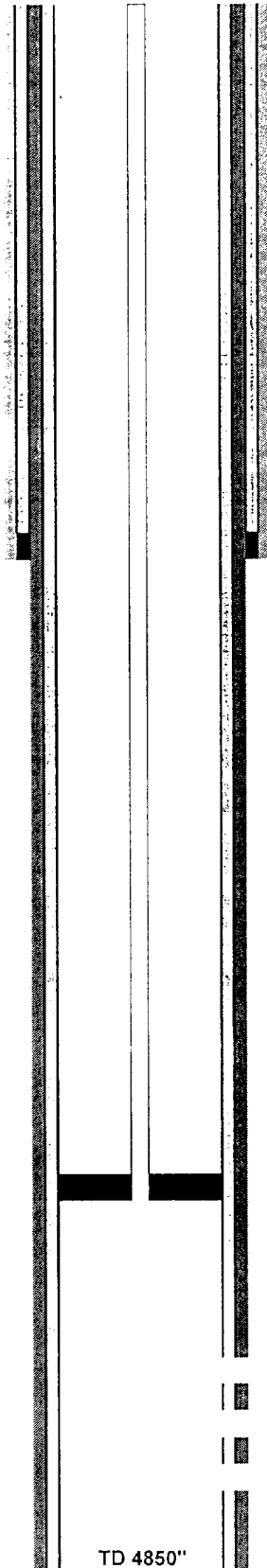
#	API/IC	Lease Name	Well #	Operator	Formation At TD	Status	Total Depth	Location	Spud Date	Footage
93	3002502247	Vacuum Grayburg San Andres Unit	43	Texaco E & P Inc	Grayburg-San Andres	Oil	4710	1 18S 34E	9/30/38	1980 FNL 484 FEL
94	3002524365	Vacuum Grayburg San Andres Unit	47	Texaco E & P Inc	Grayburg-San Andres	W-Inj	4800	2 18S 34E	3/24/73	1330 FNL 10 FEL
95	3002524322	Vacuum Grayburg San Andres Unit	48	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4800	1 18S 34E	1/23/73	1330 FNL 1330 FWL
96	3002524329	Vacuum Grayburg San Andres Unit	49	Texaco E & P Inc.	Grayburg-San Andres	PA	4800	1 18S 34E	2/3/73	1390 FNL 2580 FWL
97	3002524366	Vacuum Grayburg San Andres Unit	50	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	4800	1 18S 34E	4/9/96	1330 FNL 1330 FEL
98	3002502250	Vacuum Grayburg San Andres Unit	55	Texaco E & P Inc.	Grayburg-San Andres	Oil	4710	1 18S 34E	10/9/39	660 FNL 660 FWL
99	3002502251	Vacuum Grayburg San Andres Unit	56	Texaco E & P Inc.	Grayburg-San Andres	Oil	4710	1 18S 34E	3/17/40	660 FNL 1980 FWL
100	3002502248	Vacuum Grayburg San Andres Unit	57	Texaco E & P Inc.	Grayburg-San Andres	Oil	4710	1 18S 34E	1/13/40	660 FNL 1980 FEL
101	3002502246	Vacuum Grayburg San Andres Unit	58	Texaco E & P Inc.	Grayburg-San Andres	PA	4710	1 18S 34E	10/18/38	660 FNL 660 FEL
102	3002521110	Vacuum Grayburg San Andres Unit	68	Texaco E & P Inc.	Grayburg-San Andres	PA	8800	1 18S 34E	1/1/72	1655 FSL 330 FEL
103	3002530721	Vacuum Grayburg San Andres Unit	122	Texaco E & P Inc.	Grayburg-San Andres	Oil	5000	1 18S 34E SE NE	3/23/98	1336 FNL 660 FEL
104	3002532026	Vacuum Grayburg San Andres Unit	126	Texaco E & P Inc.	Grayburg-San Andres	Oil	4900	1 18S 34E NW SW	7/13/93	1980 FSL 1308 FWL
105	3002532027	Vacuum Grayburg San Andres Unit	127	Texaco E & P Inc.	Grayburg-San Andres	Oil	4900	1 18S 34E NE SW	7/24/93	1980 FSL 2625 FWL
106	3002532028	Vacuum Grayburg San Andres Unit	128	Texaco E & P Inc.	Grayburg-San Andres	Oil	4900	1 18S 34E NE SE	6/15/95	1980 FSL 1220 FEL
107	3002530756	Vacuum Grayburg San Andres Unit	140	Texaco E & P Inc.	Grayburg-San Andres	Oil	5000	2 18S 34E SE NE	6/23/95	1980 FNL 10 FEL
108	3002530797	Vacuum Grayburg San Andres Unit	141	Texaco E & P Inc.	Grayburg-San Andres	Oil	6004	1 18S 34E SW NW	4/7/90	1980 FNL 1309 FWL
109	3002530843	Vacuum Grayburg San Andres Unit	142	Texaco E & P Inc.	Grayburg-San Andres	Oil	5000	1 18S 34E SE NW	9/6/90	1980 FNL 2628 FWL
110	3002530844	Vacuum Grayburg San Andres Unit	143	Texaco E & P Inc.	Grayburg-San Andres	Oil	5000	1 18S 34E SE NE	8/21/90	1980 FNL 1250 FEL
111	3002530799	Vacuum Grayburg San Andres Unit	148	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	5000	1 18S 34E SW NW	5/14/90	1330 FNL 660 FWL
112	3002530847	Vacuum Grayburg San Andres Unit	149	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	5000	1 18S 34E SE NW	9/21/90	1330 FNL 1980 FWL
113	3002530917	Vacuum Grayburg San Andres Unit	150	Texaco E & P Inc.	Grayburg-San Andres	W-Inj	5000	1 18S 34E SW NE	8/3/90	1390 FNL 1980 FEL
114	3002530800	Vacuum Grayburg San Andres Unit	155	Texaco E & P Inc.	Grayburg-San Andres	Oil	5000	2 18S 34E NE NE	5/6/90	660 FNL 10 FEL
115	3002530851	Vacuum Grayburg San Andres Unit	156	Texaco E & P Inc.	Grayburg-San Andres	Oil	5000	1 18S 34E NE NW	10/9/90	660 FNL 1330 FWL
116	3002530717	Vacuum Grayburg San Andres Unit	157	Texaco E & P Inc.	Grayburg-San Andres	Oil	5000	1 18S 34E NE NW	6/27/90	710 FNL 2530 FWL
117	3002530718	Vacuum Grayburg San Andres Unit	158	Texaco E & P Inc.	Grayburg-San Andres	Oil	5000	1 18S 34E NW NE	6/11/90	660 FNL 1330 FEL
118	3002533464	Vacuum Grayburg San Andres Unit	159	Texaco E & P Inc.	Grayburg-San Andres	Oil	4850	1 18S 34E	6/16/96	907 FNL 350 FEL
119	3002532004	Vacuum Grayburg San Andres Unit	212	Texaco E & P Inc.	Grayburg-San Andres	Oil	8900	1 18S 34E SW SE	9/5/97	660 FSL 1650 FEL
120	3002531993	Vacuum Grayburg San Andres Unit	227	Texaco E & P Inc.	Grayburg-San Andres	Oil	8000	1 18S 34E NW SE	3/31/99	1980 FSL 1755 FEL
121	3002532009	Vacuum Grayburg San Andres Unit	258	Texaco E & P Inc.	Grayburg-San Andres	Oil	7950	1 18S 34E NE NE	5/3/99	660 FNL 510 FEL
122	3002503080	Warn State A/C-2	6	Marathon Oil Company	Grayburg-San Andres	PA	4690	6 18S 35E	3/29/40	2310 FSL 1650 FWL
123	3002520031	Warn State A/C-2	11	Marathon Oil Company	Abo	Oil	8799	6 18S 35E NW SW	10/6/92	1650 FSL 910 FWL
124	3002531934	Warn State A/C-2	20	Marathon Oil Company	Abo	Oil	8166	6 18S 35E SW NW	5/15/93	2160 FNL 910 FWL
125	3002532034	Warn State A/C-2	22	Marathon Oil Company	Abo	Oil	8138	6 18S 35E NW NW	7/15/93	1219 FNL 890 FWL
126	3002532189	Warn State A/C-2	24	Marathon Oil Company	Abo	Oil	8170	6 18S 35E SW SW	8/26/93	990 FSL 400 FWL
127	3002533541	Warn State A/C-2	26	Marathon Oil Company	Lower Morrow	Oil	11500	6 18S 35E	9/16/98	2180 FNL 400 FWL

TEXACO E&P INC.
CENTRAL VACUUM U. No. 111
API# 3002524754



2310 FSL & 1750 FWL
SEC 6, TWN 18 S, RANGE 35 E
ELEVATION: 3979 GR
COMPLETION DATE: 06-07-74

COMPLETION INTERVAL: 4447 - 4604 (SADR)
Former Marathon Worn State A/C-2 #17



Well Number:	207	CO2 Injector
API		
Spud	3/15/95	GL = 3979'
Sec	6	
Twonshp	18 S	
Range	35 E	
	2500'	FNL
	1825'	FWL
Unit	F	
Pool	Vacuum Grayburg-San Andres	

11" hole

8-5/8" 24#/ft J-55 Casing @ 1520'
Cemented w/ 525 sks, circulated 93 sacks to surface

2-3/8" cement-lined tubing

5-1/2" 15.5 # Casing to 4850'
Cemented w/ 912 sks, circulated 145 sacks to surface

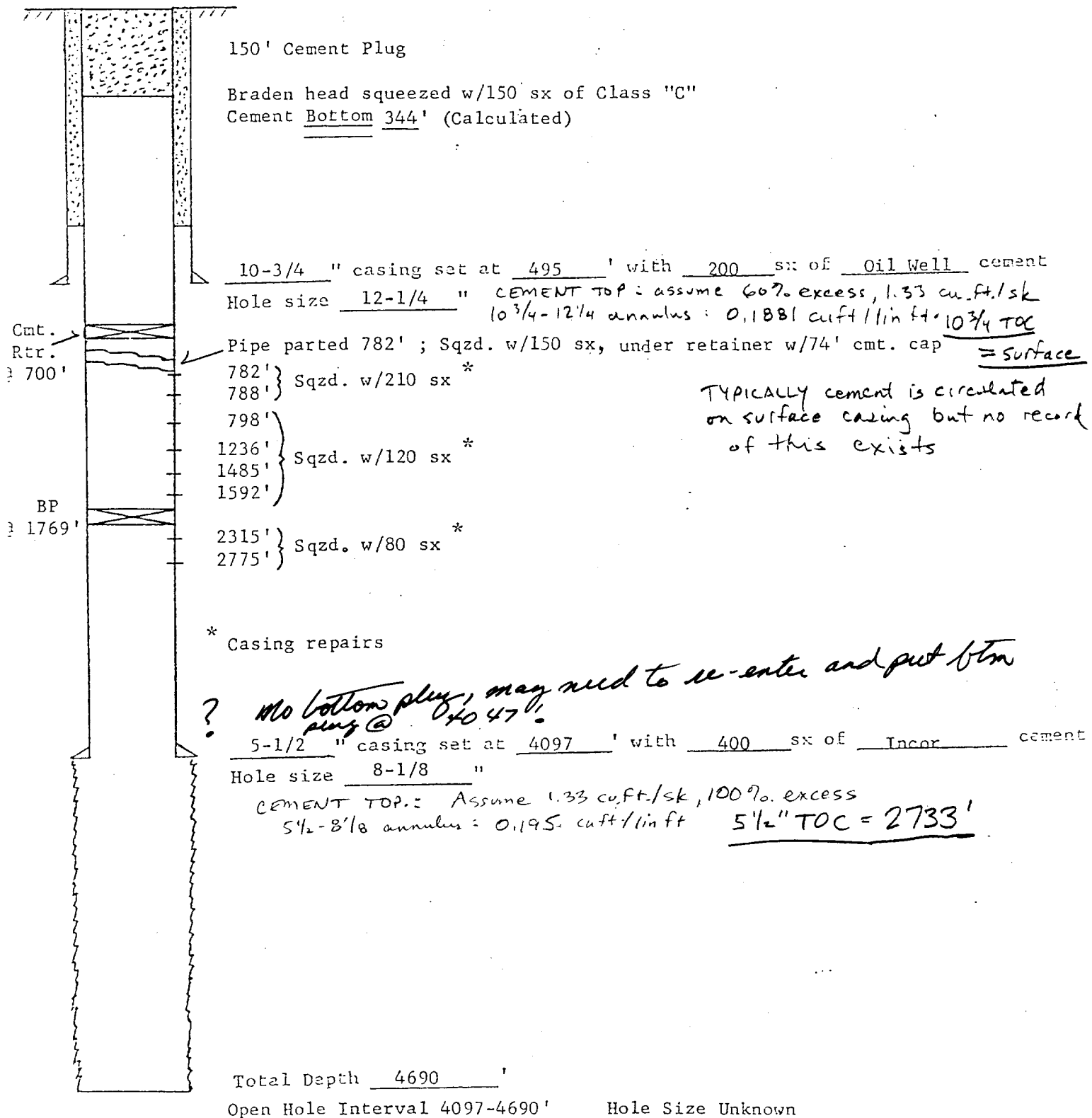
7-7/8" Hole

Baker AD-1 Packer @ 4202'

Perfs from 4256'-4676'

TD 4850"

STATUS : PLUGGED & ABANDONED



TEXACO INC
VACUUM GRBG-SADR UN NO. W149
API# 30025243290000

P&A

0 - 358' Cement 300 sx circulated
0 - 358' 8.625" OD Surface Casing
0 - 358' 11" OD Openhole

TOP of cement plug 1010'
60 sks (cl.c) cement
squeezed into perfs @ 1300'

SQUEEZE PERFS @ 1300'

35 sk (cl.c) cement
plug 2100-2465

SQUEEZE PERFS
@ 2400'

HOLD 2500 PSI
NMOC notified

1111 - 4800' Cement 500 sx, TOC (CBL)

TOP of cement plug 3835'
(pumped plug of 175 sks
class C below packer
set @ 3686')

0 - 4800' 4.5" OD Production Casing

SQUEEZE PERFS @ 425'
130 sks cl.c. squeezed through
around to surface up bradenhead.
cement to surface inside casing

1390 FNL & 2580 FNL
SEC 1, TWN 18 S, RANGE 34 E
ELEVATION: 3991 GR
COMPLETION DATE: 02-16-73

COMPLETED AS INJECTOR 4373-4731
TRT: 6000 GAL 20% NEA
INITIAL RATE 500 BWPD @ 0 PSI

Updated 6/01

4065 - 4067' Squeeze Perfs TEST FOR CHANNEL, 150 SX
Perfed casing @ 4200'

4284 - 4360' Perfs 1 SPF, 2/86

4373 - 4731' Perfs

358 - 4800' 7.875" OD Openhole

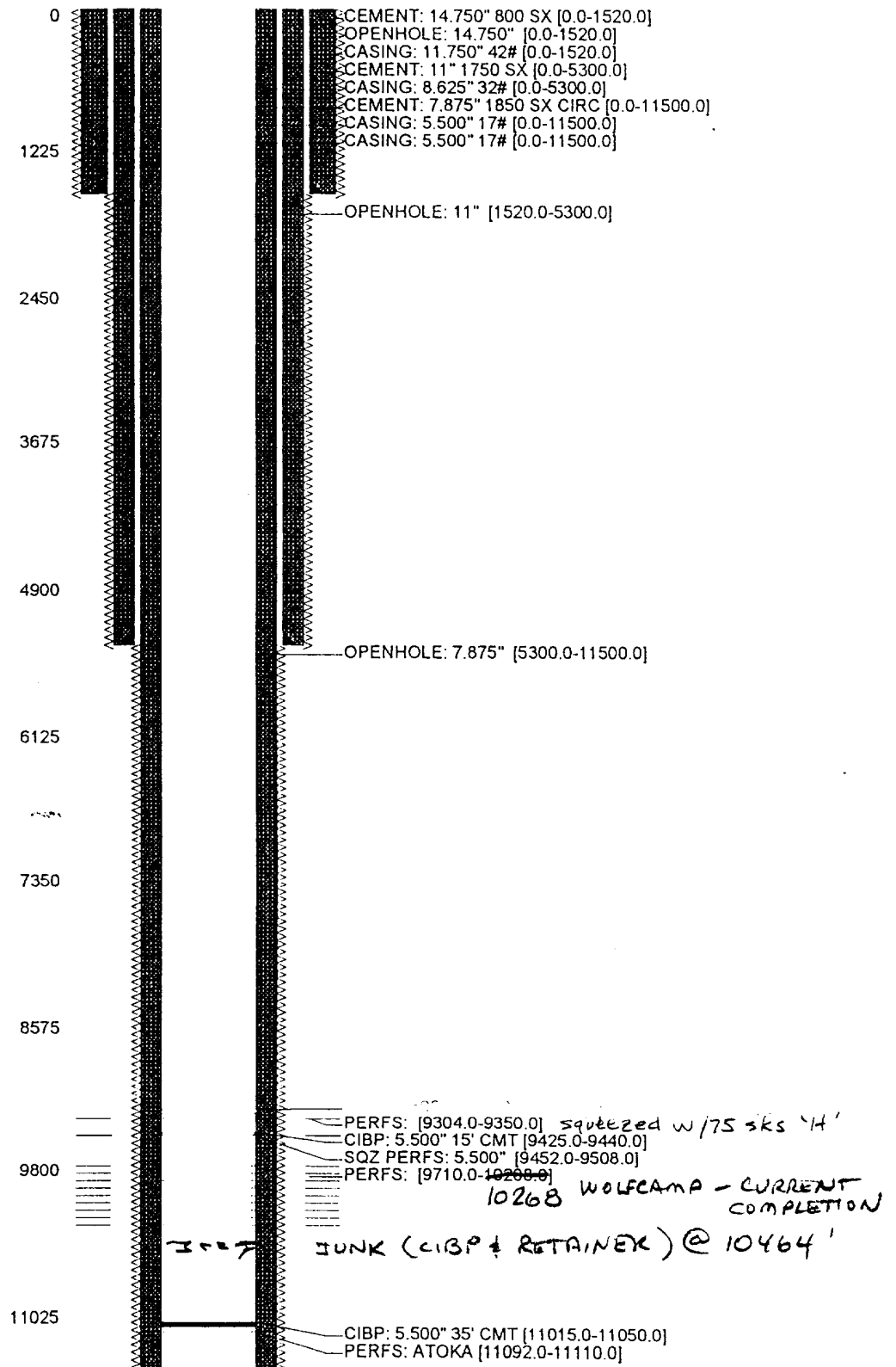
KB ELEV: 4001'

PBTD: 4778'

TD: 4800'

NEW MEXICO L ST NO. 18

Name: 18 ID: 30025333010009 Type: Well Date: 6/28/00



Notices to Offset Operators and Landowners

OPERATOR OR LANDOWNER	TITLE	ADDRESS
Marathon Oil Company	Joint Interest Supv.	P.O. Box 552, Midland TX 79702
Roy Pearce, Jr. Trust	Land Owner	1717 W. Jackson, Pecos TX 79772
Giles M. Lee	Land Owner	West St. Rte. Box 478, Lovington NM 88260
NM State Land Office	Land Owner	3830 N. Grimes -- C, Hobbs NM 88240
NM State Land Office (attn: Mr. Pete Martinez)	Land Owner	P.O. Box 1148, Santa Fe NM 87504-1148

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
NEW MEXICO STATE LAND OFFICE
3830 N. GRIMES
HOBBS, NEW MEXICO 88240

2. Article Number (Copy from service label)
7000 0520 0024 4316 1179
PS Form 3811, July 1999
Domestic Return Receipt

A. Received by (Please Print Clearly)
Myra Martinez
B. Date of Delivery
6/11/99
C. Signature
Myra Martinez
D. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.
4. Restricted Delivery? (Extra Fee) ☐ Yes

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Roy Pearce, Jr., Trust
1717 W. Jackson
Pecos, TX 79772

2. Article Number (Copy from service label)
7099 3220 0006 1571 1748
PS Form 3811, July 1999
Domestic Return Receipt

A. Received by (Please Print Clearly)
B. Date of Delivery
6-9-01
C. Signature
D. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.
4. Restricted Delivery? (Extra Fee) ☐ Yes

102595-00-M-095

COMPLETE THIS SECTION ON DELIVERY

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
GILES M. LEE
WEST STAR ROUTE BOX 478
LOVINGTON, NM 88260

2. Article Number (Copy from service label)
7099 3220 0006 1571 1595
PS Form 3811, July 1999
Domestic Return Receipt

A. Received by (Please Print Clearly)
B. Date of Delivery
C. Signature
D. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.
4. Restricted Delivery? (Extra Fee) ☐ Yes

102595-00-M-0952

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- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
NEW MEXICO STATE LAND OFFICE
ATTN: Mr. Pete Martinez
P. O. Box 1148
Santa Fe, New Mexico 87504-1148

2. Article Number (Copy from service label)
7000 0520 0024 4316 1186
PS Form 3811, July 1999
Domestic Return Receipt

A. Received by (Please Print Clearly)
B. Date of Delivery
C. Signature
D. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.
4. Restricted Delivery? (Extra Fee) ☐ Yes

102595-00-M-095

COMPLETE THIS SECTION ON DELIVERY

SENDER: COMPLETE THIS SECTION

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
MARATHON OIL COMPANY
JOINT INTEREST
P. O. BOX 552
MIDLAND, TEXAS 79702

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly)
B. Date of Delivery
C. Signature
D. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.
4. Restricted Delivery? (Extra Fee) ☐ Yes

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a
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

June 3 2001
and ending with the issue dated

June 3 2001

Kathi Bearden

Publisher

Sworn and subscribed to before

me this 4th day of

June 2001

Jodi Benson

Notary Public.

My Commission expires
October 18, 2004
(Seal)

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.

LEGAL NOTICE

June 3, 2001

Texaco Exploration and Production Inc is applying for permis-
sion to drill and complete three injection wells, Vacuum Gray-
burg-San Andres Unit Well Nos. 135, 235 and 249. These
wells will be located in Section 1 of T18S R34E, Lea County,
and are intended for the purpose of injecting water and carbon
dioxide to improve oil recovery from the portion of the Gray-
burg and San Andres formations that lies between 4100 and
4800 feet below the surface. Anticipated injection rate for each
well will be 2000 barrels of water per day at a surface injection
pressure of 820 pounds per square inch, or 5 million cubic feet
of carbon dioxide per day at a surface injection pressure of
1170 pounds per square inch.

Interested parties must file objections or requests for hearings
with the Oil Conservation Division, 1220 S. St. Francis Dr.,
Santa Fe, New Mexico 87504, within 15 days. For information
contact:

Texaco Exploration and Production Inc.
P.O. Box 3109
Midland, Tx 79702-3109
Contact Party: Steve Guillot
Contact Phone: 915-688-4577

#18218

02104895000 67500309
Texaco Exploration and Product
P.O. Box 3109
MIDLAND, TX 79702-3109