

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: R-4442-A
- 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: Stephen N. Guillot DATE: 11-Oct-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 at 2/8/01 tertiary certification hearing for Vacuum-Grayburg-San Andres Unit (Approved by Order R-4442-A), some data also submitted for approval of Order PMX-216.
- 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. 133: Unit Ltr. E; Surface Location 2590' FNL, 1270' FWL, Section 1, Twp. 18S, Range 34E**

- III. We are requesting approvals for injection of water and CO₂ into this well. A wellbore schematic is attached. This well will be completed as a traditional vertical injection well. 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 well, with the 1/2 mile radius around the proposed well shown as a darker blue shaded area, and a map showing the 1/2 mile radius for the proposed well in this submittal superimposed on a map showing the review area for our C-108 application for the CO₂ Tertiary Certification hearing, which was held on February 8, 2001 (Order No. 4442-A).
- 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. The entire review area for this proposal was covered by the C-108 application for the Vacuum Grayburg-San Andres Unit CO₂ Injection Project mentioned in part "V" above. All wellbore data pertinent to this application was included in that previous submittal, except for three new wells drilled, one well recompleted to SWD, and two wells plugged and abandoned since that time. The three wells drilled since then are VGSAU Nos. 135, 235 and 249. The N.M. State "Z" NCT-1 No. 1 was recompleted to salt water disposal in the lower San Andres formation in accordance with Order SWD-776. VGSAU Well Nos. 33 and 49 have been plugged and abandoned subsequent to the prior application. Schematics are also included herein for these six wells. The proposed well is needed to replace VGSAU No. 33, which was an injection well located 57 feet away from the location of the proposed well.
- 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 provided for in Order R-4442-A), following step-rate testing. Initially these pressures will be limited to 850 PSI for water and 1200 PSI for CO₂. At the higher pressures it is anticipated that sustained 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 a depth of 4250'. Injection will take place into an open hole interval below the casing depth of 4250'. The bottom of this open hole interval may be as deep as 4800' below surface. The open hole 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. This well is not a disposal well. 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.

RECEIVED
Hobbs
CCD

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 No. 133.**
2. **Proposed Wellbore Schematic for VGSAU No. 133.**
3. **Large-scale county map showing 2-mile (light blue) and ½-mile (dark blue) radii around the proposed well.**
4. **A lease map showing the ½-mile radius around the locations of the proposed well, and showing the review area associated with Order No. R-4442-A.**
5. **List of all wellbores that penetrate the proposed injection zone in the area of review.**
6. **Six 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

Energy, Minerals & Natural Resources

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
		³ API Number 30-025-35686
⁴ Property Code 11124	⁵ Property Name VACUUM GRAYBURG SAN ANDRES UNIT	⁶ Well No. 133

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
E	1	18-S	34-E		2590'	NORTH	1270'	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 INJ	¹³ Cable/Rotary ROTARY	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3992'
¹⁶ Multiple NO	¹⁷ Proposed Depth 4800'	¹⁸ Formation SAN ANDRES	¹⁹ Contractor	²⁰ Spud Date 9/20/01

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).

NOTE: THIS IS A REPLACEMENT INJECTION WELL. THE WELL IS IN A PROJECT AREA.

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: <i>Paul Kautz</i> Orig. Signed by	
Printed name: A. Phil Ryan		Title: Geologist	
Title: Commission Coordinator		Approval Date: SEP 06 2001	Expiration Date:
Date: 9/4/01	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

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

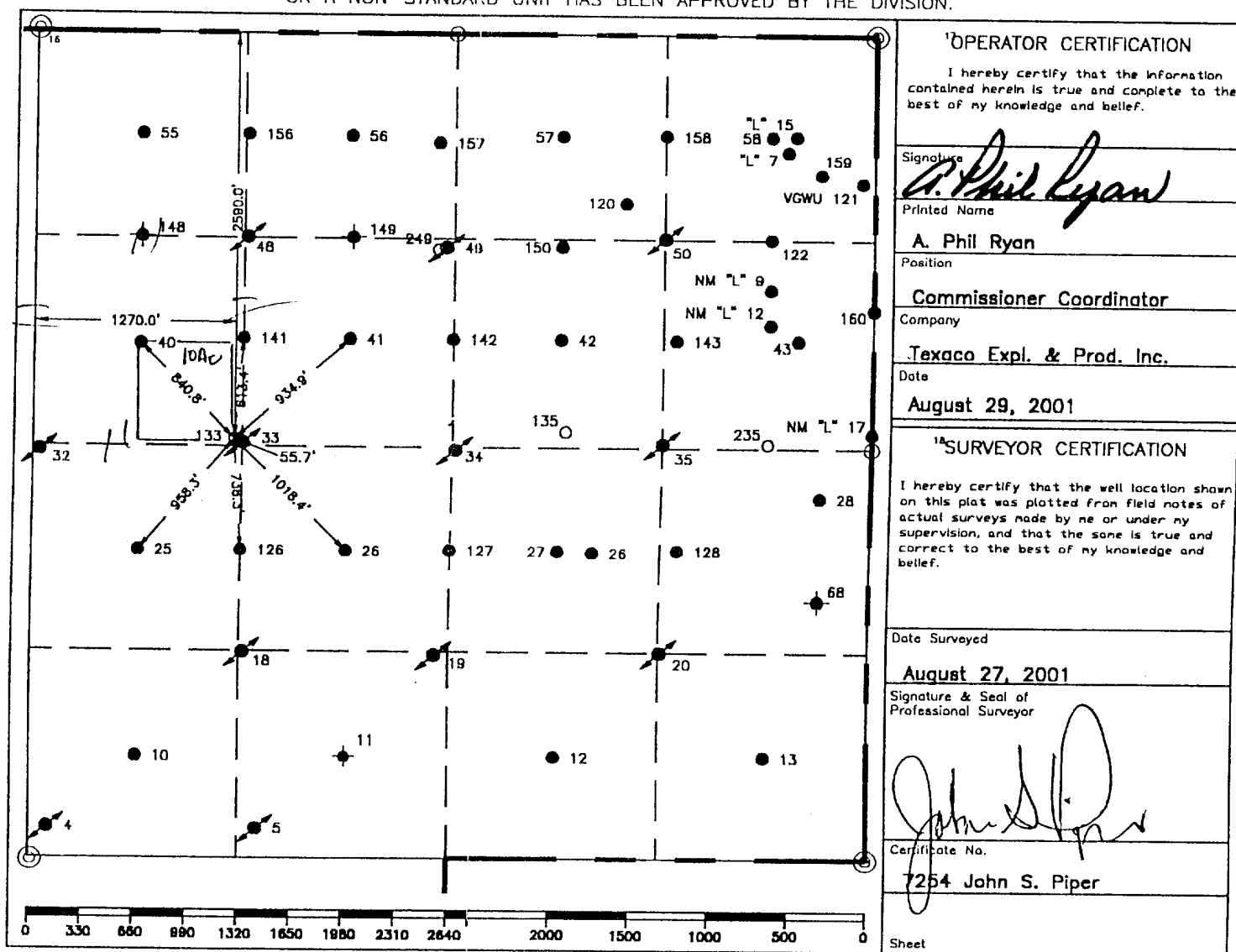
State Lease-4 copies
Fee Lease-3 copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

1 API Number 30-0225-35686		2 Pool Code 62180		3 Pool Name Vacuum Grayburg San Andres					
Property Code 1124		5 Property Name Vacuum Grayburg San Andres Unit			6 Well Number 133				
OCRID No. 22351		8 Operator Name TEXACO EXPLORATION & PRODUCTION, INC.			9 Elevation 3992'				
10 Surface Location									
UL or lot no. E	Section 1	Township 18-S	Range 34-E	Lot Idn	Feet from the 2590'	North/South line North	Feet from the 1270'	East/West line West	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 40		13 Joint or Infill		14 Consolidation Code		15 Order No.			

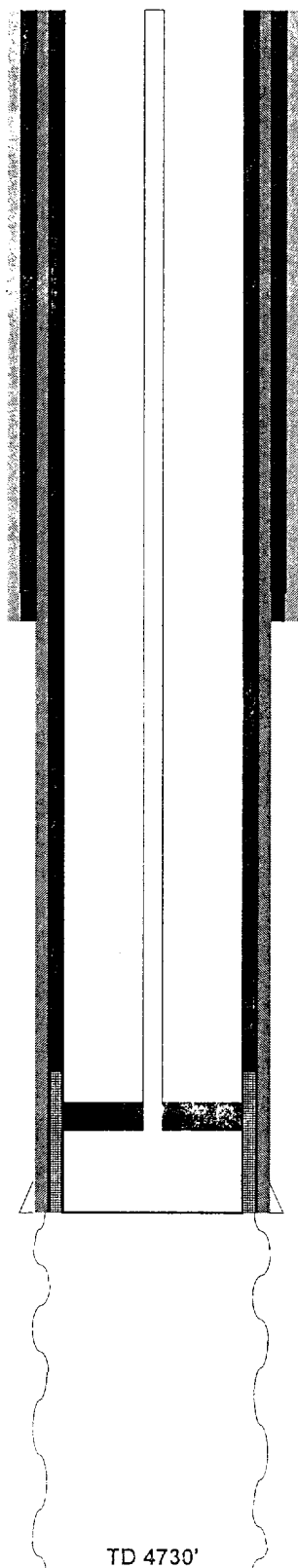
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION.



○ = 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 647406.47 (1927=647341.53)		Easting 791807.10 (1927=750628.06)	
Latitude 32°46'37.570" (1927=32°46'37.125")		Longitude 103°31'06.236" (1927=103°31'04.448")	
Zone	North American Datum	Combined Grid Factor	Coordinate File
East	1983	0.99979145	Buckeye.cr5
Drawing File		Field Book	
VGSAU133.dwg		Lea County 20, Pg. 57	



Proposed	CO2 Injector	VGSAU 133
API	3002535686	
Spud	11/1/01 (est.)	
Sec	1	
Twnsdp	18 S	
Range	34 E	
Pool	Vacuum Grayburg-San Andres	

12-1/4" hole

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

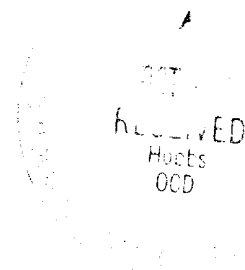
2-7/8" Rice Duoline Fiberglass-lined injection tubing

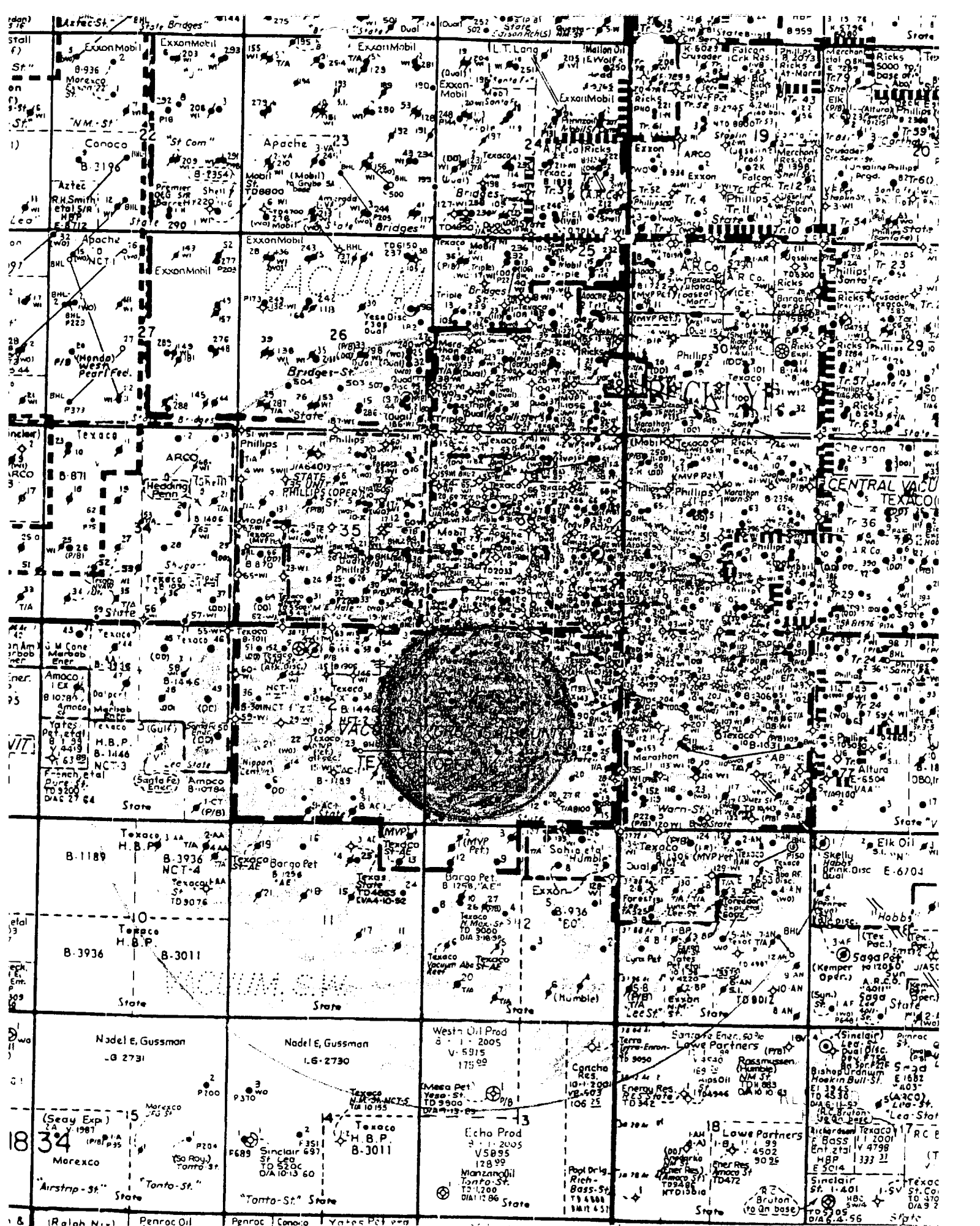
Guiberson G-6 Injection or Baker Lok-Set Packer @ ~4200

5-1/2" 15.5 # K-55 Casing to 4250', cement w/ 1000 sks, plan to circ.
Bottom 2 joints of casing will be Incoloy 826 instead of K-55

7-7/8" Hole to 4730'

TD 4730'





VGSAU No. 133 Area of Review

#	API/C	Lease Name	Well #	Current Status	Total		Completion Date	Location	Footage
					Depth	Footage			
1	3002526001	Central Vacuum Unit	141	G-SA Injector	4800		1/18/79	36 17S 34E	10 FSL 1310 FWL
2	3002520514	New Mexico L State	6	P&A	12255		2/9/71	1 18S 34E NW NE	770 FNL 2090 FEL
3	3002520938	New Mexico L State	8	P&A	6800		6/6/64	1 18S 34E	1980 FNL 1865 FEL
4	3002532007	New Mexico L State	13	Drinkard Producer	7990		10/28/93	1 18S 34E SW NE	1780 FNL 1980 FEL
5	3002532008	New Mexico L State	14	Drinkard Producer	7950		11/5/93	1 18S 34E NW NE	810 FNL 1980 FEL
6	3002532872	New Mexico L State	17	P&A	8100		10/17/95	1 18S 34E	2560 FNL 10 FEL
7	3002520940	New Mexico M State	6	P&A	6800		12/22/64	1 18S 34E	460 FNL 1880 FWL
8	3002520494	New Mexico M State	7	Drinkard Producer	12220		5/25/93	1 18S 34E SE NW	1800 FNL 1980 FWL
9	3002532016	New Mexico M State	9	Drinkard Producer	8100		8/16/99	1 18S 34E NE NW	660 FNL 2310 FWL
10	3002529988	New Mexico Z State NCT-1	1	Lower SA disposal	12200		1/25/01	2 18S 34E NE NW	660 FNL 2200 FWL
11	3002520515	Vacuum Glorieta West Unit	112	P&A	12215		3/25/68	1 18S 34E	560 FNL 760 FWL
12	3002521107	Vacuum Glorieta West Unit	113	P&A	6250		7/27/95	1 18S 34E	330 FNL 1880 FEL
13	3002524333	Vacuum Grayburg San Andres Unit	5	G-SA Injector	4800		2/20/73	1 18S 34E	210 FSL 1420 FWL
14	3002502258	Vacuum Grayburg San Andres Unit	10	G-SA Producer	4710		8/15/41	1 18S 34E	660 FSL 660 FWL
15	3002502257	Vacuum Grayburg San Andres Unit	11	G-SA Producer	4698		7/11/41	1 18S 34E	660 FSL 1980 FWL
16	3002524316	Vacuum Grayburg San Andres Unit	17	G-SA Injector	4800		1/14/73	2 18S 34E	1400 FSL 10 FEL
17	3002524317	Vacuum Grayburg San Andres Unit	18	G-SA Injector	4800		1/18/73	1 18S 34E	1330 FSL 1330 FWL
18	3002524331	Vacuum Grayburg San Andres Unit	19	G-SA Injector	4735		3/1/73	1 18S 34E	1310 FSL 2540 FWL
19	3002502271	Vacuum Grayburg San Andres Unit	24	G-SA Producer	4710		10/7/40	2 18S 34E C NE SE	1980 FSL 660 FEL
20	3002502256	Vacuum Grayburg San Andres Unit	25	G-SA Producer	4710		9/10/40	1 18S 34E	1980 FSL 660 FWL
21	3002502255	Vacuum Grayburg San Andres Unit	26	G-SA Producer	4710		7/8/40	1 18S 34E	1980 FSL 1980 FWL
22	3002502254	Vacuum Grayburg San Andres Unit	27	G-SA Producer	4710		6/6/40	1 18S 34E	1980 FSL 1980 FEL
23	3002524314	Vacuum Grayburg San Andres Unit	31	G-SA Injector	4750		1/14/73	2 18S 34E	2630 FSL 1330 FEL
24	3002524330	Vacuum Grayburg San Andres Unit	32	G-SA Injector	4800		1/28/73	1 18S 34E	2630 FSL 30 FWL
25	3002524323	Vacuum Grayburg San Andres Unit	33	P&A	4800		5/10/96	1 18S 34E	2630 FNL 1310 FWL
26	3002524312	Vacuum Grayburg San Andres Unit	34	G-SA Injector	4800		1/4/73	1 18S 34E	2630 FSL 2630 FEL
27	3002524361	Vacuum Grayburg San Andres Unit	35	G-SA Injector	4800		7/3/96	1 18S 34E	2630 FNL 1330 FEL
28	3002502264	Vacuum Grayburg San Andres Unit	39	G-SA Producer	4710		8/5/40	2 18S 34E	1980 FNL 660 FEL
29	3002502252	Vacuum Grayburg San Andres Unit	40	G-SA Producer	4710		7/12/40	1 18S 34E	1980 FNL 660 FWL
30	3002502249	Vacuum Grayburg San Andres Unit	41	G-SA Producer	4710		5/10/99	1 18S 34E	1980 FNL 1980 FWL
31	3002502245	Vacuum Grayburg San Andres Unit	42	G-SA Producer	4690		2/6/83	1 18S 34E	1980 FNL 1980 FEL
32	3002524365	Vacuum Grayburg San Andres Unit	47	G-SA Injector	4800		4/4/73	2 18S 34E	1330 FNL 10 FEL
33	3002524322	Vacuum Grayburg San Andres Unit	48	G-SA Injector	4800		2/8/73	1 18S 34E	1330 FNL 1330 FWL
34	3002524329	Vacuum Grayburg San Andres Unit	49	P&A	4800		2/16/73	1 18S 34E	1390 FNL 2580 FWL
35	3002502250	Vacuum Grayburg San Andres Unit	55	G-SA Producer	4710		11/7/39	1 18S 34E	660 FNL 660 FWL
36	3002502251	Vacuum Grayburg San Andres Unit	56	G-SA Producer	4710		4/22/40	1 18S 34E	660 FNL 1980 FWL
37	3002532026	Vacuum Grayburg San Andres Unit	126	G-SA Producer	4900		8/23/93	1 18S 34E NW SW	1980 FSL 1308 FWL

VGSAU No. 133 Area of Review

#	API/IC	Lease Name	Well #	Current Status	Total		Completion Date	Location	Footage
					Depth	Footage			
38	30025332027	Vacuum Grayburg San Andres Unit	127	G-SA Producer	4900		9/29/93	1 18S 34E NE SW	1980 FSL 2625 FWL
39	30025335561	Vacuum Grayburg San Andres Unit	135	G-SA Injector	4800		7/16/01	1 18S 34E NE SW	2535 FNL 1930 FEL
40	30025330755	Vacuum Grayburg San Andres Unit	139	G-SA Producer	5000		12/7/94	2 18S 34E SE NE	1980 FNL 1282 FEL
41	30025330756	Vacuum Grayburg San Andres Unit	140	G-SA Producer	5000		8/16/95	2 18S 34E SE NE	1980 FNL 10 FEL
42	30025330797	Vacuum Grayburg San Andres Unit	141	G-SA Producer	6004		6/16/90	1 18S 34E SW NW	1980 FNL 1309 FWL
43	30025330843	Vacuum Grayburg San Andres Unit	142	G-SA Producer	5000		10/27/90	1 18S 34E SE NW	1980 FNL 2628 FWL
44	30025330798	Vacuum Grayburg San Andres Unit	147	G-SA Injector	4900		9/19/93	2 18S 34E SE NE	1360 FNL 660 FEL
45	30025330799	Vacuum Grayburg San Andres Unit	148	G-SA Injector	5000		6/23/90	1 18S 34E SW NW	1330 FNL 660 FWL
46	30025330847	Vacuum Grayburg San Andres Unit	149	G-SA Injector	5000		10/24/90	1 18S 34E SE NW	1330 FNL 1980 FWL
47	30025330917	Vacuum Grayburg San Andres Unit	150	G-SA Injector	5000		9/6/90	1 18S 34E SW NE	1390 FNL 1980 FEL
48	30025330800	Vacuum Grayburg San Andres Unit	155	G-SA Producer	5000		6/24/90	2 18S 34E NE NE	660 FNL 10 FEL
49	30025330851	Vacuum Grayburg San Andres Unit	156	G-SA Producer	5000		11/9/90	1 18S 34E NE NW	660 FNL 1330 FWL
50	30025330717	Vacuum Grayburg San Andres Unit	157	G-SA Producer	5000		8/20/90	1 18S 34E NE NW	710 FNL 2530 FWL
51	30025331993	Vacuum Grayburg San Andres Unit	227	G-SA Producer	8000		5/10/99	1 18S 34E NW SE	1980 FSL 1755 FEL
52	30025335562	Vacuum Grayburg San Andres Unit	235	G-SA Injector	4800		06/22/01	1 18S 34E NE SW	2610 FNL 660' FEL
53	30025335563	Vacuum Grayburg San Andres Unit	249	G-SA Injector	4800		07/03/01	1 18S 34E NE SW	1390 FNL 2530 FWL

TEXACO
NM Z STATE TN COM NO. 1 a.k.a. N.M. St. "Z" NCT-1 #1
30025299880000

- 0 - 413' Cement 900 sx
- 0 - 413' 24" OD Openhole
- 0 - 413' 20" OD Surface Casing
- 413 - 1581' 18.5" OD Openhole
- 0 - 1581' 16" OD Intermediate Casing
- 400 - 1581' Cement 1250 sx (TEMP)
- 1300 - 5237' Cement 3500 sx (TEMP)

1581 - 5237' 12.25" OD Openhole

2-3/8" Dvolute tubing
Packer @ 4852'

Perfs 4894-5080 (current)
(Lower San Andres - disposal)
CIBP @ 5505'

0 - 5237' 9.625" OD Intermediate Casing
CIBP @ 5980'
Perfs 6030-6110 (open - Glorieta)
Perfs 7578-7770 (Drinkard)
sgzd w/1000 sks

0 - 12200' Cement 3150 sx
(circ.)
5237 - 12200' 8.75" OD Openhole
CIBP @ 7528'
+35' CMT TO 7493'

CIBP @ 9924 +35' cmt (9889)
Perfs 9974-10630 (Wolfcamp)

10764 - 10946' Abandoned Perfs

11528 - 11670' Abandoned Perfs

11860 - 11884' Abandoned Perfs

0 - 12200' 5.5" OD Production Casing TD: 12200'

660 FNL & 2200 FNL
SEC 2, TWN 18S, RGE 34E
ELEVATION: 4036 KB
COMPLETION DATE: 10-14-87
+++
COMPLETION INTERVAL: 11,860 - 11884 (ATOK)
IP: 114 BOPD, 46 MCFD, 0 BHPD (FLOWING)
+++
CURRENT STATUS: TEMPORARILY ABANDONED

CIBP @ 8500' +35' CMT TO 8465'
Perfs 8550-8886 (Abo)
CIBP @ 9272 +35' CMT TO 9237'
Perfs 9284-9500 (Abo)

10680 - 10715' CIBP (30' CMT CAP)

11435 - 11475' CIBP (35' CMT CAP)

11685 - 11725' Retainer (35' CMT CAP)

RECEIVED
FEB 10
1988

TEXACO INC
VACUUM GRBG-SADR UN NO. W133
API# 30025243230000

P&A schematic

0 - 361' Cement 300 sx
Squeeze w/50 sks 0-50' (circulated)
6 Squeeze perfs @ 50'
0 - 361' 8.625" OD Surface Casing

6 sqz perfs @ 410'.
Squeeze w/75 sks 212'-410'

6 sqz perfs @ 1400'
Squeeze w/50 sks 1135'-1400'

0 - 4800' Cement 650 sx
(circulated)
25 sks CEMENT PLUG
2600-2800

(50 sks)
CEMENT PLUG
3600-4198

(could not squeeze)
Cement Retainer @ 4198'
RBP @ 4200'
Could not fish

0 - 4800' 4.5" OD Production Casing

285 - 380' Damage CSNG LEAK, SQZ 775 SX

0 - 361' 11" OD Openhole

385 - 385' Squeeze Perfs 200 SX

1480 - 1480' Squeeze Perfs 550 SX

2630 FNL & 1310 FWL
SEC 1, TWN 18 S, RANGE 34 E
ELEVATION: 3991 GR
COMPLETION DATE: 02-05-73

COMPLETED AS INJECTOR 4435-4722
TRT: 6000 GAL 20%

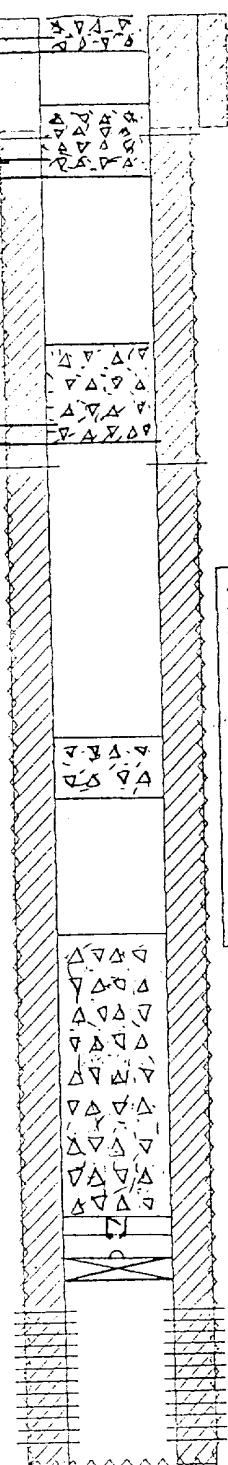
Updated 3/92 10/01

4274 - 4475' Perfs 9/90, 2SPF 40 HOLES

4435 - 4722' Perfs

361 - 4800' 7.875" OD Openhole

KB ELEV: 4004'
PBTD: 4790'
TD: 4800'



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
Ported casing @ 4200'

4284 - 4360' Perfs 1 SPF, 2/86

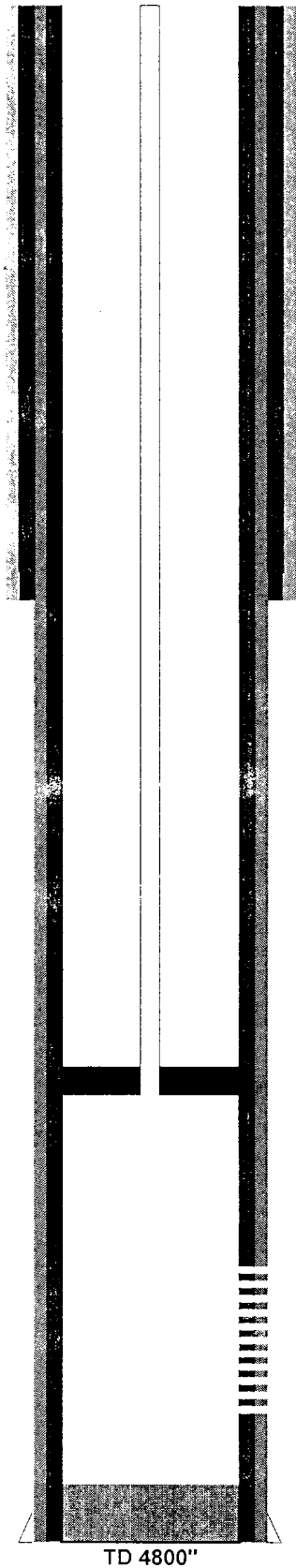
4373 - 4731' Perfs

358 - 4800' 7.875" OD Openhole

KB ELEV: 4001'

PBTD: 4778'

TD: 4800'



Typical	CO2 Injector	VGSAU 135
API	3002535561	
Spud	7/16/01	
Sec	1	
Twonshp	18 S	
Range	34 E	
Pool	Vacuum Grayburg-San Andres	
KB elevation	4000'	

12-1/4" hole

8-5/8" 24#/ft K-55 Casing @ 1538'
Cemented w/700 sks, circulated to surface

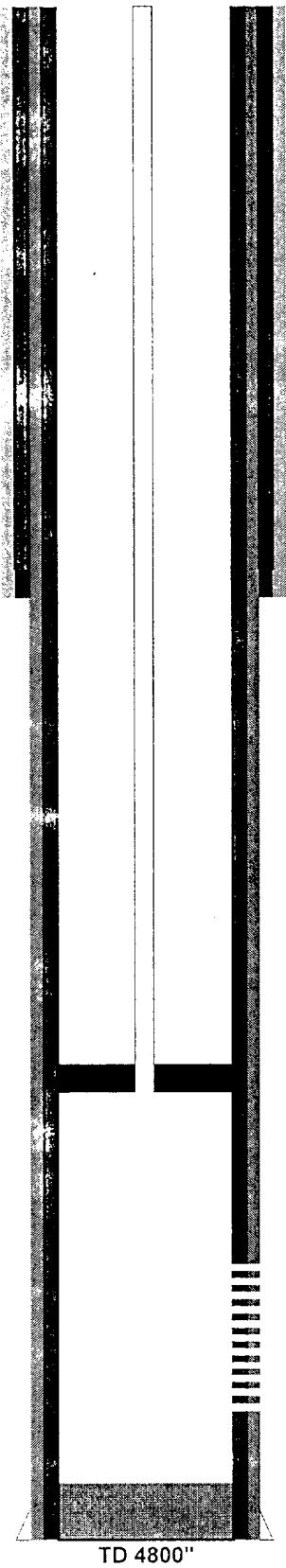
2-7/8" Rice Duoline Fiberglass-lined injection tubing

Baker Lok-Set Packer @ 4261'

7-7/8" Hole
Perforations 4300' - 4679'

PBTD @ 4723'
5-1/2" 15.5 # K-55 Casing to 4800'
Cement w/950 sks 35/65 Poz H, circulated to surface

TD 4800"



Typical	CO2 Injector	VGSAU 235
API	3002535562	
Spud	6/22/01	
Sec	1	
Twonshp	18 S	
Range	34 E	
Pool	Vacuum Grayburg-San Andres	
KB elevation	3994'	

12-1/4" hole

8-5/8" 24#/ft K-55 Casing @ 1550'
Cemented w/700 sks, circulated to surface

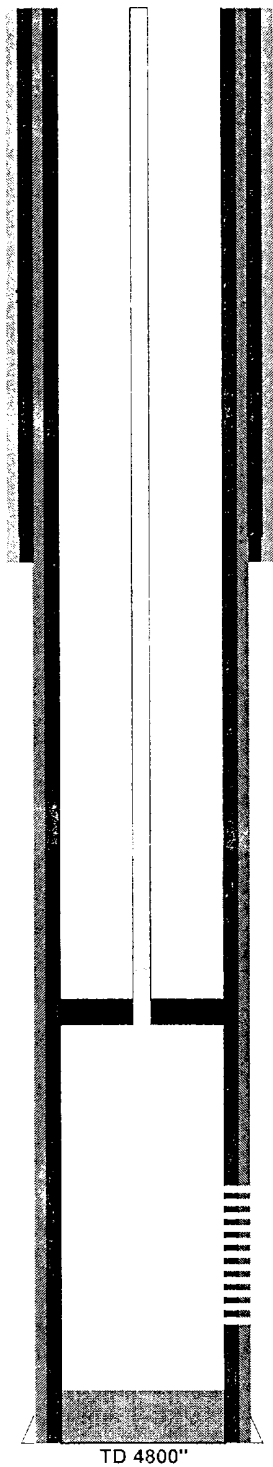
2-7/8" Rice Duoline Fiberglass-lined injection tubing

Baker Lok-Set Packer @ 4460'

7-7/8" Hole
Perforations 4516' - 4712'

PBTD @ 4750'
5-1/2" 15.5 # K-55 Casing to 4800'
Cement w/950 sks 35/65 Poz H, circulated to surface

TD 4800"



Typical	CO2 Injector	VGSAU 249
API	3002535563	
Spud	7/3/01	
Sec	1	
Twonshp	18 S	
Range	34 E	
Pool	Vacuum Grayburg-San Andres	
KB elevation	4004'	

12-1/4" hole

8-5/8" 24#/ft K-55 Casing @ 1525'
Cemented w/700 sks, circulated to surface

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

Baker Lok-Set Packer @ 4264'

7-7/8" Hole
Perforations 4292'- 4714'

PBD @ 4762'
5-1/2" 15.5 # K-55 Casing to 4800'
Cement w/950 sks, circulated to surface

Notices to Offset Operators and Landowners

OPERATOR OR LANDOWNER	TITLE	ADDRESS
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
New Mexico State Land Office (attn: Mr. Pete Martinez)	Land Owner	P.O. Box 1148, Santa Fe NM 87504-1148

TEXACO EXPLORATION AND PRODUCTION INC OPERATES ALL WELLS WITHIN ½ MILE OF THE PROPOSED WELL.

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

Postage \$
Certified Fee
Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees \$

Sent To **GILES M. LEE**
Street, Apt. No., or PO Box No.
WEST ST. RTE. BOX 478
City, State, ZIP+4
LOVINGTON NM 88260

PS Form 3800, May 2000 See Reverse for Instructions

MIDLAND, TX DOWNTOWN STATION
Postmark Here
OCT 12 2001
USPS

76892 4542 4000 0521 0002

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

Postage \$
Certified Fee
Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees \$

Sent To **ROY PEARCE, JR. TRUST**
Street, Apt. No., or PO Box No.
1717 W. JACKSON
City, State, ZIP+4
PECOS TX 79772

PS Form 3800, May 2000 See Reverse for Instructions

MIDLAND, TX DOWNTOWN STATION
Postmark Here
OCT 12 2001
USPS

5592 4542 4000 0521 0002

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 St. Rte. Box 478
Lovington NM 88260

2. Article Number (Copy from service label)
PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery
Giles M. Lee

C. Signature ☒ Agent ☐ Addressee
X

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

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:
Roy Pearce, Jr. Trust
1717 W. Jackson
Pecos TX 79772

2. Article Number (Copy from service label)
PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery
Roy Pearce, Jr. Trust **10-15**

C. Signature ☒ Agent ☐ Addressee
X

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

7000 1530 0004 2454 7671

U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)	
[Redacted]	
Postage	\$ [Redacted]
Certified Fee	[Redacted]
Return Receipt Fee (Endorsement Required)	[Redacted]
Restricted Delivery Fee (Endorsement Required)	[Redacted]
Total Postage & Fees	\$ [Redacted]



Sent To	
Mr. Pete Martinez, N.M. State Land Office	
Street, Apt. No., or PO Box No.	
P.O. Box 1148	
City, State, ZIP+4	
Santa Fe NM	87504-1108

PS Form 3800, May 2000 See Reverse for Instructions

A return receipt postcard was never received for this mail to the State Land Office. However, Mr. Pete Martinez did confirm on Friday October 19, 2001 (verbally) that he had received it.

Stephen Guiller
10/23/2001

State of New Mexico,
County of Lea.

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

October 12 2001
and ending with the issue dated

October 12 2001

Kathi Bender

Publisher

Sworn and subscribed to before
me this 12th day of

October 2001

Jodi Benson

Notary Public.

My Commission expires
October 18, 2004
(Seal)

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

LEGAL NOTICE

October 12, 2001

Texaco Exploration and Production Inc is applying for permission to drill and complete Vacuum Grayburg-San Andres Unit Well No. 133 as an injection well. This well will be drilled 2610' from the north line and 1270' from the west line of Section 1, Township 18S, Range 34E, Lea County. It is intended for the purpose of injecting water and carbon dioxide to improve oil recovery from the portions of the Grayburg and San Andres formations that lie between 4250 and 4800 feet below the surface. Anticipated injection rate for No. 133 will be 2000 barrels of water per day at a surface injection pressure of 850 pounds per square inch, or 5 million cubic feet of carbon dioxide per day at a surface injection pressure of 1200 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
#18483

#18483

02104895000 02550901
Texaco Exploration and Product
P.O. Box 3109
MIDLAND, TX 79702-3109

