



580 WestLake Park Blvd.
Houston, TX 77079
PO Box 4294
Houston, TX 77210-4294
Phone: 281-552-1000

July 11, 2000

State of New Mexico
Energy, Minerals & Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, NM 87505

JUL 20

RE: Expansion of Pressure Maintenance Project
North Hobbs (Grayburg/San Andres) Unit
Hobbs; Grayburg – San Andres Pool
Well No. 131
Letter L, Section 28, T-18-S, R-38-E
Lea County, NM

Gentlemen:

Occidental Permian Limited Partnership respectfully requests administrative approval for expansion of the subject pressure maintenance project by converting North Hobbs (G/SA) Unit Well No. 131 from production to water injection. Administrative Order No. R-6199 granted November 30, 1979, authorized Shell Western E&P Inc. (Occidental Permian Limited Partnership's predecessor) to conduct the North Hobbs (G/SA) Unit pressure maintenance project within the Hobbs; Grayburg – San Andres Pool.

The following data is submitted in support of this request:

- Form C-108 with miscellaneous data attached
- Form C-102
- A map reflecting the location of the proposed injection well (No. 131). The map identifies all wells located within a two-mile radius of the proposed injector and has a one-half mile radius circle drawn around the proposed injection well which identifies the well's Area of Review.
- An injection well data sheet
- A tabulation of data on all wells of public record within the well's Area of Review



Occidental Permian Ltd.

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- Schematics of plugged wells of public record within the well's Area of Review
- A list of Offset Operators and Surface Owners (these parties have been notified of this application by certified mail)
- An Affidavit of Publication and copy of the legal advertisement that was published in the county in which the well is located.

Your favorable consideration of our request will be appreciated. If you have any questions of a technical nature, please call David Nelson at (505) 397-8211. Otherwise, please call me at (281) 552-1158.

Very truly yours,

Mark Stephens

Mark Stephens
Business Analyst (SG)

CC: Oil Conservation Division
Hobbs District Office
1625 N. French Drive
Hobbs, NM 88240

State of New Mexico
Commissioner of Public Lands
P.O. Box 1148
Santa Fe, NM 87504-1148

Offset Operators (see attached list)

Surface Owners (see attached list)

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery X Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Occidental Permian Limited Partnership
ADDRESS: P.O. Box 4294, Houston, TX 77210-4294
CONTACT PARTY: Mark Stephens, Rm. 338-B, WL2 PHONE: (281) 552-1158
- 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-6199 (11/30/79)
- 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: Mark Stephens TITLE: Business Analyst (SG)
SIGNATURE: Mark Stephens DATE: 7/11/00
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: Hearing October 3, 1979; Case No. 6653, Order No. R-6199

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.

Attachment To Form C-108
Miscellaneous Data

North Hobbs (Grayburg/San Andres) Unit
Well No. 131
Letter L, Section 28, T-18-S, R-38-E
Lea County, New Mexico

III. Well Data

- B.(5) Next higher oil zone -- Grayburg @ +/- 3700'
Next lower oil zone -- Glorieta @ +/- 5300'

VII. Proposed Operation

1. Average Injection Rate 1500 BWPD
Maximum Injection Rate 4000 BWPD
2. Closed Injection System
3. Average Injection Pressure 500 PSIG
Maximum Injection Pressure 805 PSIG (approx.)
(will not exceed 0.2 psi/ft. to top perforation)
4. Source Water – San Andres Produced Water
(Mitchell Analytical Laboratory analysis attached)

IX. Stimulation Program

Acid treatment of unitized perforations will be performed during conversion work

XI. Fresh Water Sample Analysis

(Laboratory Services, Inc. analysis attached – 2 ea.)

- XII. Occidental Permian Limited Partnership affirms that available geologic and engineering data has been examined resulting in the finding of no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

MITCHELL ANALYTICAL LABORATORY

2638 Faudree
Odessa, Texas 79765-8538
561-5579

Water Analysis

Company.... Nalco/Exxon Energy Chemicals
Well # WIS DISCHARGE PUMP
Lease..... ALTURA NHU
Location...
Date Run... 11/08/1999
Lab Ref #.. 99-NOV-N05126

Sample Temp... 70.0
Date Sampled.. 11/05/1999
Sampled by.... Mike Athey
Employee # ... 27-008
Analyzed by... DANIEL

Dissolved Gasses

		Mg/L	Eq. Wt.	MEq/L
Hydrogen Sulfide	(H ₂ S)	486.00	16.00	30.38
Carbon Dioxide	(CO ₂)	Not Analyzed		
Dissovled Oxygen	(O ₂)	Not Analyzed		

Cations

Calcium	(Ca++)	804.00	20.10	40.00
Magnesium	(Mg++)	195.20	12.20	16.00
Sodium	(Na+)	3,459.66	23.00	150.42
Barium	(Ba++)	Not Analyzed		
Manganese	(Mn++)	Not Analyzed		

Anions

Hydroxyl	(OH-)	Not Analyzed		
Carbonate	(CO ₃ =)	0.00	30.00	0.00
Bicarbonate	(HCO ₃ -)	1,869.66	61.10	30.60
Sulfate	(SO ₄ =)	1,700.00	48.80	34.84
Chloride	(Cl-)	5,005.50	35.50	141.00
Total Iron	(Fe)	0.30	18.60	0.02
Total Dissolved Solids		13,520.32		
Total Hardness As CaCO ₃		2,810.32		
Conductivity MICROMHOS/CM		23,500		

pH 6.500 Specific Gravity 60/60 F. 1.009

CaSO₄ Solubility @ 80 F. 46.63 MEq/L, CaSO₄ scale is unlikely

CaCO₃ Scale Index

70.0	0.190
80.0	0.310
90.0	0.530
100.0	0.530
110.0	0.790
120.0	0.790
130.0	1.090
140.0	1.090
150.0	1.370

Nalco/Exxon Energy Chemicals

**Laboratory Services, Inc.**

4016 Fiesta Drive
Hobbs, New Mexico 88240
Telephone: (505) 397-3713

Water Analysis

COMPANY Altura Energy Ltd,

SAMPLE Fresh Water Well For Wells 33111 & 28131
SAMPLED BY

DATE TAKEN 5/9/00

REMARKS T18S-R38E-Sec 29, Qtr Sec. 4,2,1

Barium as Ba	0	
Carbonate alkalinity PPM	40	
Bicarbonate alkalinity PPM	216	
pH at Lab	7.63	
Specific Gravity @ 60°F	1	
Magnesium as Mg	174	
Total Hardness as CaCO ₃	300	
Chlorides as Cl	155	
Sulfate as SO ₄	115	
Iron as Fe	0.1	
Potassium	0.09	
Hydrogen Sulfide	0	
Rw	9.4	@ 25° C
Total Dissolved Solids	850	
Calcium as Ca	126	
Nitrate	7.5	

Results reported as Parts per Million unless stated

Langelier Saturation Index 0.05

Analysis by: Vickie Walker
Date: 6/6/00

**Laboratory Services, Inc.**

4016 Fiesta Drive
Hobbs, New Mexico 88240
Telephone: (505) 397-3713

Water Analysis

COMPANY Altura Energy Ltd,

SAMPLE Fresh Water Well For Well 28131
SAMPLED BY

DATE TAKEN 6/1/00

REMARKS T18S-R38E-Sec 28, Qtr Sec. 1,1,1

Barium as Ba	0	
Carbonate alkalinity PPM	0	
Bicarbonate alkalinity PPM	204	
pH at Lab	7.1	
Specific Gravity @ 60°F	1	
Magnesium as Mg	158	
Total Hardness as CaCO ₃	272	
Chlorides as Cl	127	
Sulfate as SO ₄	110	
Iron as Fe	0	
Potassium	0.07	
Hydrogen Sulfide	0	
Rw	9.5	@ 25° C
Total Dissolved Solids	730	
Calcium as Ca	114	
Nitrate	7.9	

Results reported as Parts per Million unless stated

Langelier Saturation Index + 0.55

Analysis by: Vickie Walker
Date: 6/5/00

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer 22, Aramita, NM 88211-0719

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-12497	Pool Code 31920	Pool Name HOBBS; GRAYBURG - SAN ANDRES
Property Code 19520	Property Name NORTH HOBBS G/SA UNIT	Well Number 131
OGRID No. 157984	Operator Name Occidental Permian Limited Partnership	Elevation 3647


Surface Location

UL or lot No. L	Section 28	Township 18 S	Range 38 E	Lot Idn	Feet from the 2310	North/South line SOUTH	Feet from the 330	East/West line WEST	County LEA
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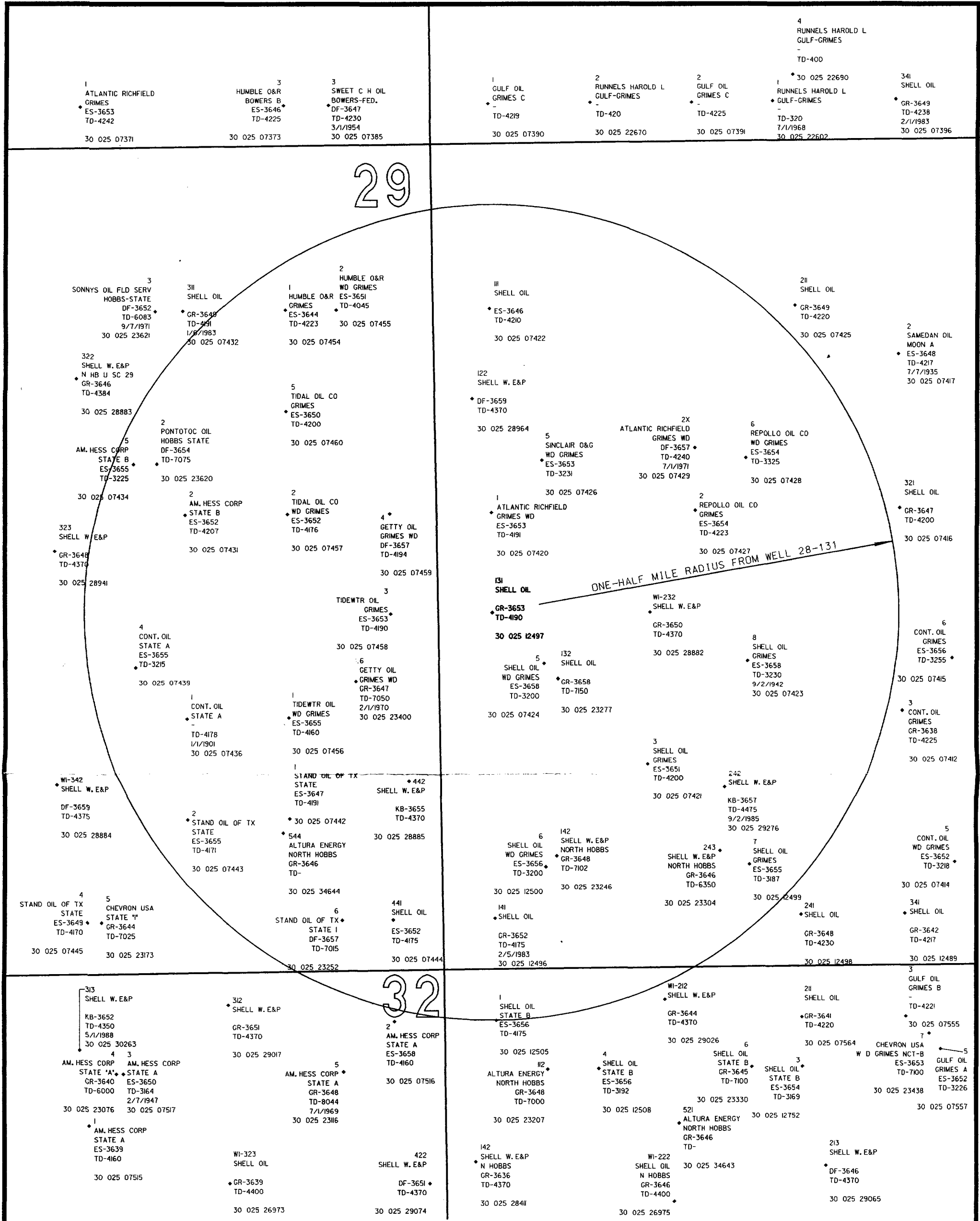
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		Joint or Infill	Consolidation Code	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

					OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. <u>Mark Stephens</u> Signature Mark Stephens Printed Name Business Analyst (SG) Title July 11, 2000 Date	
					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 belief. JANUARY 6, 2000 Date Surveyed Signature & Seal of Professional Surveyor <u>Barry Skidmore 1/28/2000</u> 00-13-0019 Certificate No. RONALD L. EIDSON 3239 GARY EIDSON 12641 MACON McDONALD 12185	

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE



NOTE:
WELL DATA DERIVED FROM THE PETROLEUM
INFORMATION - DATA MANAGEMENT SYSTEM,
WELL DATA SYSTEM PREPARED FOR AMOCO.

Altura **Altura Energy Ltd.**
ENERGY, LTD.

Area of Review Plat
**NORTH HOBBS (GRAYBURG
SAN ANDRES) UNIT**
WELL NO. 28-131
T-18-S, R-38-E
Lea County, New Mexico

Scale: 1"= 600' 12-29-99 nm438a00.dgn - 12
Plat prepared by PJE Drafting, Inc.
For Horizon Survey, Inc.

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTOR

Well Name	API No.	Sec.	T	R	Un	Drill Date	Well Type	TD or PBTD	Top Perf	Bot. Perf	Sqz. Perfs	Csg. Size	Hole Size	Depth	No. of Sxs.	TOC
Operator					Ltr											
Grimes #5	30-025-07460	29 -18S	-38E	H	12//30	PA	4200	3215	4196		NONE	12.5	17.5	214	250	CIRC**
Tidewater												9.625	12.25	2715	600	277**
												7	8.75	3911	400	595**
St A #4	30-025-07439	29 -18S	-38E	J	2//47	PA	3215	3167	3194		NA	10.75	15	200	250	CIRC**
Conoco												5.5	7.875	3200	600	CIRC**
St #1	30-025-07442	29 -18S	-38E	P	8//30	PA	4191	3150	4191		NA	13.375	17.5	217	200	CIRC**
Std of Tx									OH			9	12.25	2735	500	1473**
												6.625	7.875	3907	174	2374**
St #2	30-025-07443	29 -18S	-38E	O	9//30	PA	4171	3155	4156		NA	13	17.5	225	150	CIRC**
Std of Tx												9.625	12.25	2810	725	CIRC**
												7	8.75	3951	300	1973**
WD Grimes #1	30-025-07456	29 -18S	-38E	I	8//30	PA	4160	3168	3189		3259-61	12.5	17.5	236	200	CIRC**
Tidewater											3049-50	9.625	12.25	2712	600	273**
												6.625	8.75	3826	300	2404**

** Denotes calculated TOC with 50 % efficiency

Repollo/Sinclair
Unit F
Sec 28, T-18S, R-38E

WELL PLUGGED:
4/18/59

Size: 15.5"
Depth: 238'
Hole size: 18"
Cmt: 200 sxs
TOC: Circ.- Calc.
50% efficiency

Spotted 25 sxs plug at surface.

Size: 10-3/4"
Depth: 2710'
Hole size: 12.25"
Cmt: 700 sxs
TOC: Circ.- Calc.
50% efficiency

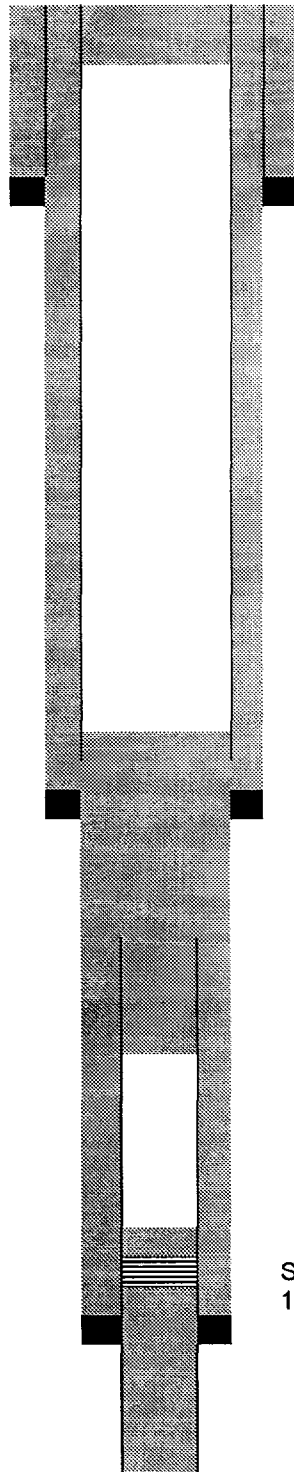
Spotted 300 sxs plug from 3100 to 2350'

Shot off 6-5/8 csg at 2958'

Size: 6-5/8"
Depth: 3974
Hole size:
Cmt: 250 sxs
TOC:

Set Cmt Ret. At 3825' and squeezed OH with
100 sxs. Dumped 5 sxs on top of retainer.

TD: 4268'



W. D. SINCLAIR
Repollo/Sinclair
Unit F, NW/4
Sec 28, T-18S, R-38E

WELL PLUGGED:
11/27/47

Size: 9.625"
Depth: 441'
Hole size: 13"
Cmt: 300 sxs
TOC: Circ.- Calc.
50% efficiency

Spotted 15 sxs plug at surface

Spotted 35 sxs at 500'

Hole full of heavy mud.

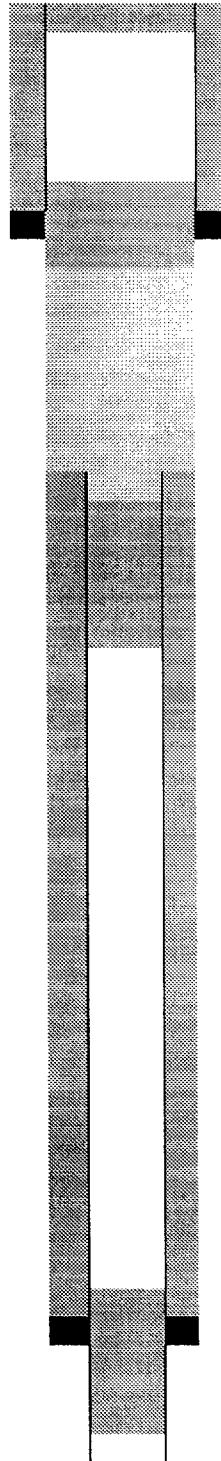
Cut off 7" at 1285 and pulled

Spotted 20 sxs plug at 1650'

Size: 7"
Depth: 3185'
Hole size: 9"
Cmt: 800 sxs
TOC:

TD: 3325'

Spotted 30 sxs plug from 3310'



W.D. GAMES #3
Sinclair Oil and Gas Co.
Unit E, NW/4
Sec 28, T-18S, R-38E

WELL PLUGGED:
8/24/50

Size: 9.625"
Depth: 441'
Hole size: 13"
Cmt: 300 sxs
TOC: Circ.

Spotted 10 sxs at surface

Filled hole with heavy mud.

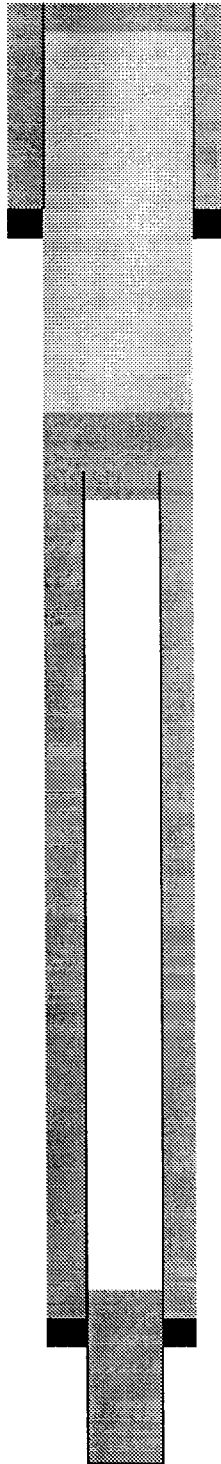
Spotted 20 sxs at 1342'

Shot 7" csg off at 1342'

Size: 7"
Depth: 3185'
Hole size:
Cmt:
TOC:

Spotted 25 sxs at 3222'

TD: 3222'



Oilfield #18
Shell Oil Co.
Unit L, NW/4 of SW/4
Sec 28, T-18S, R-38E

WELL PLUGGED:
10/3/53

Size: 8.625"
Depth: 402'
Hole size: 11"
Cmt: 200 sxs
TOC: Circ.- Calc.
50% efficiency

Spotted 3 sxs plug at surface.

Spotted 6 sxs plug at 430'

Hole full of heavy mud.

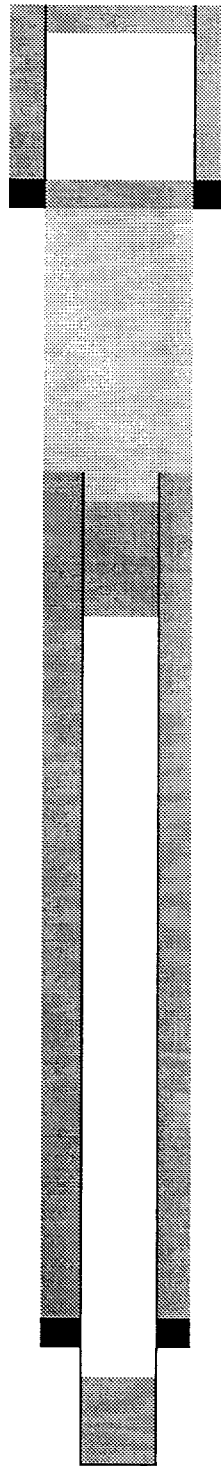
Shot and pulled 1060' of 4.5" csg.

Spotted plug from 1320 to 1260

Size: 4.5"
Depth: 2108'
Hole size: 7.875"
Cmt: 850 sxs
TOC:

TD: 3230'

Spotted 6 sxs plug from 3180-3120'



Shell Oil Co.
Unit L, NW/4 of SW/4
Sec 28, T-18S, R-38E

WELL PLUGGED:
12/15/53

Size: 8.625"
Depth: 409'
Hole size: 11"
Cmt: 195 sxs
TOC: Circ.- Calc.
50% efficiency

Spotted 3 sxs plug at surface.

Hole filled with heavy mud.

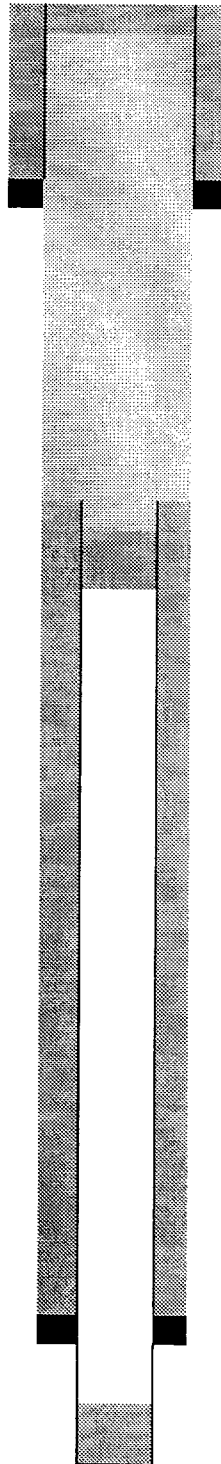
Shot and pulled 4.5" from 1200'

Spotted 10 sxs plug at 1230'

Size: 4.5"
Depth: 1958'
Hole size: 7.875"
Cmt: 600 sxs
TOC:

TD: 3200'

Spotted 10 sxs plug at 3150'



Shell Oil Co.
Unit M, SW/4 of SW/4
Sec 28, T-18S, R-38E

WELL PLUGGED:
10/24/53

Size: 8.625"
Depth: 411'
Hole size: 11"
Cmt: 200 sxs
TOC: Circ.- Calc.
50% efficiency

Spotted 5 sxs plug from 16' to surface

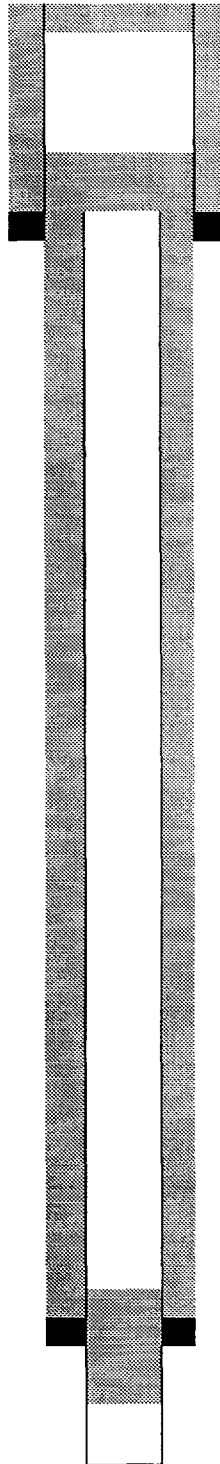
Spotted 5 sxs plug from 370-329'

Pulled 360' of 5.5" csg.

Size: 5.5"
Depth: 2778'
Hole size: 7.875"
Cmt: 1400 sxs
TOC:

TD: 3200'

Spotted 6 sxs plug 3140-3090'



Grilles n.
Shell Oil Co.
Unit N
Sec 28, T-18S, R-38E

WELL PLUGGED:
3/27/51

Size: 8.625"
Depth: 397'
Hole size: 11"
Cmt: 200 sxs
TOC: Circ.- Calc.
50% efficiency

Spotted 10 sxs plug 60' to surface.

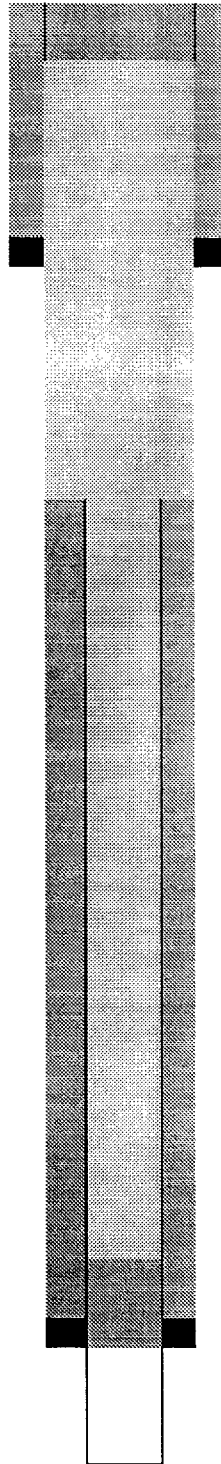
Hole full of heavy mud.

Shot 4.5 csg off at 1150'

Size: 4.5"
Depth: 3126'
Hole size: 7.875"
Cmt: 850 sxs
TOC:

Spotted 10 sxs plug 3120-3000'

TD: 3187



Humble Oil & Refining Co.
Unit A, NE/4 of NE/4
Sec 29, T-18S, R-38E

WELL PLUGGED:
3/23/48

Size: 8.625"
Depth: 242'
Hole size: 11"
Cmt: 150 sxs
TOC: Circ.- Calc.
50% efficiency

Spotted 25 sxs plug from 70 to surface

Spotted 50 sxs from 300 to 111'

Hole filled with heavy mud.

Spotted 50 sxs plug from 1300 to 1120'

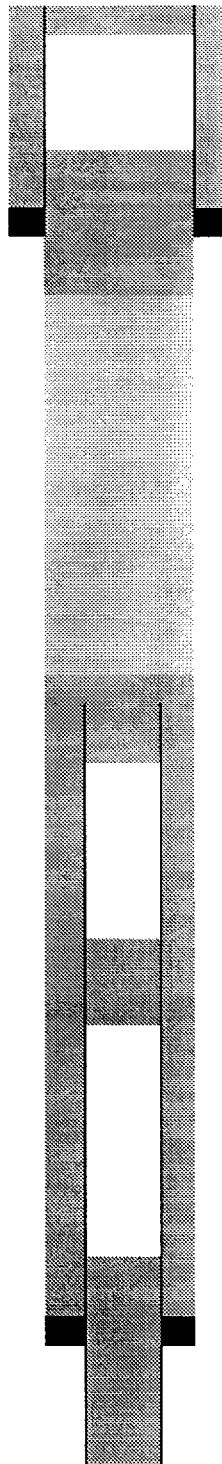
Cut and pulled 1263' of 5.5" csg.

Spotted 36 sxs plug from 3496 to 3160'

Size: 5.5"
Depth: 3205'
Hole size: 7.375"
Cmt.: 450 sxs
TOC:

Spotted 32 sxs plug from 4045 to 3780'

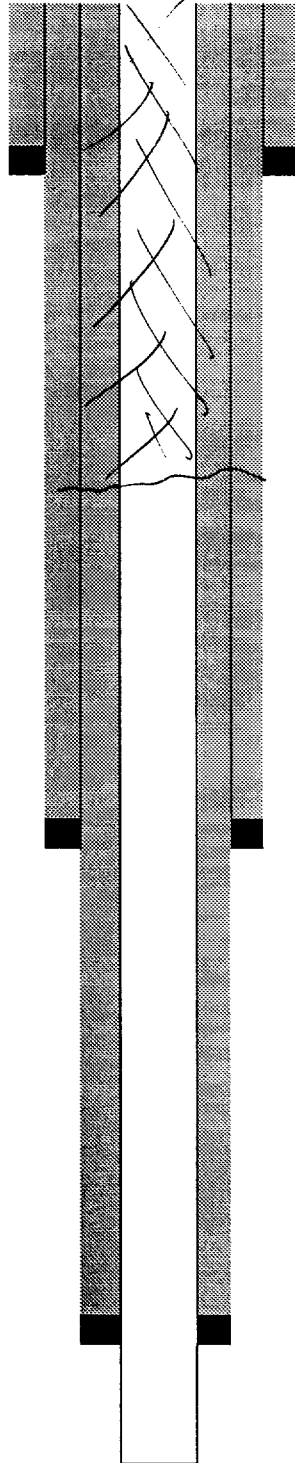
TD: 4045'



W.D. CHARTER
Tidewater Oil Co.
Unit H, 990 FEL & 2310 FNL
Sec 29, T-18S, R-38E

WELL PLUGGED:
2/18/82

Size: 15.5"
Depth: 218'
Hole size: 17.5"
Cmt: 200 sxs
TOC: Circ. - Calc.
50% efficiency



cut of 9 5/8" @ 1200' TO PBD 1361'
PUMPED 1535 sxs CMT, CIRC.

Size: 9.625"
Depth: 2754'
Hole size: 12.25"
Cmt: 600 sxs
TOC: 336' - Calc.
50% efficiency

Size: 7"
Depth: 3911'
Hole size: 8.75"
Cmt: 300 sxs
TOC: 1867' - Calc.
50% efficiency

TD:

Tidewater Oil Co.
Unit H, 1650 FNL & 990 FEL
Sec. 29, T-18S, R-38E

WELL PLUGGED:
3/17/81

Size: 12.5"
Depth: 214'
Hole Size: 17.5"
Cmt: 250 sxs
TOC: Circ. – Calc.
50% efficiency

Spotted 500 sxs at 400'

Spotted 100 sxs at 1249'

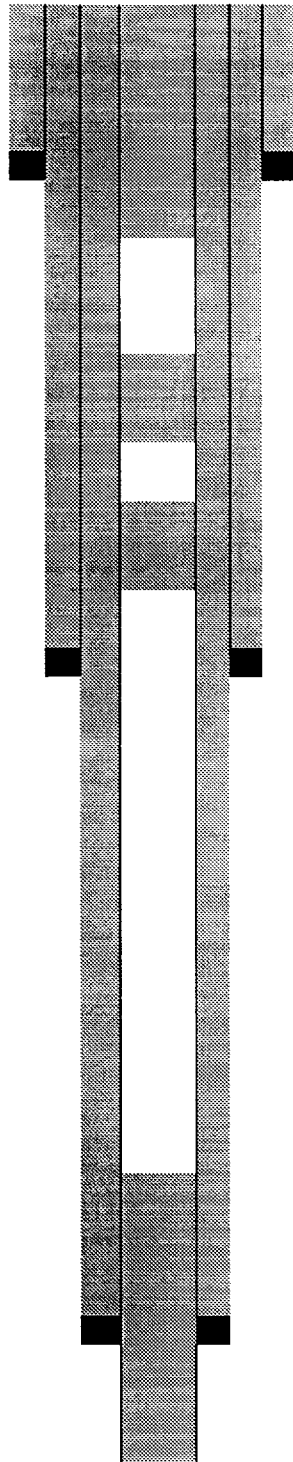
Size: 9.625"
Depth: 2715'
Hole Size: 12.25"
Cmt: 600 sxs
TOC: 277' – Calc.
50% efficiency

Spotted 100 sxs at 1800'

Size: 7"
Depth: 3911'
Hole size: 8.75"
Cmt: 400 sxs
TOC: 595' – Calc.
50% efficiency

Spotted 100 sxs at 4107'

TD: 4200'



**WELL SCHEMATIC:
CONOCO STATE A #4**

WELL PLUGGED:
1/12/71

10 ¾"
200'
250 SX
TOC: SURF (C)

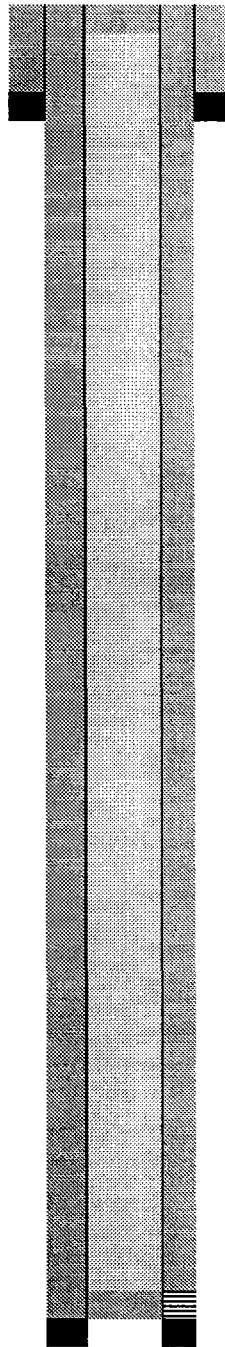
Spotted a 10 sx cmt plug at
Surface.

Filled well bore with 10# mud.

5 ½"
3215'
600 SX
TOC: SURF (C)

TD: 3215'

Set a 40 sx cmt plug over
Perfs from 3164' to 3197'.



**WELL SCHEMATIC:
STD OF TX- STATE #1**

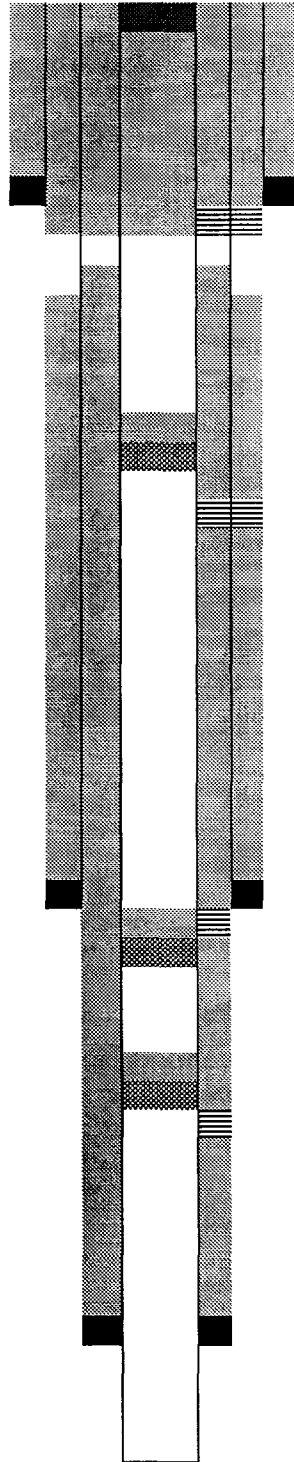
WELL PLUGGED:
11/25/89

13 3/8"
217'
200 SX
TOC: SURF (C)

9"
2735'
500 SX
TOC: 1220 (C)

6 5/8"
3907'
357 SX
TOC: SURF

TD: 4191'



Weld 1/2" plate on top.

Perf 6 5/8" and 9" at 267'.
Pumped 170 sx cmt down
Prod csg, circ cmt out
Intermediate and surf csg
Annuli. Cut off 6 5/8" csg 3'
Below GL. Cap w/ 1/2" plate
And valve wellbore.

Set cicr at 1404'.

Perf 6 5/8" and 9" at 1500'.
Sqzd perfs w/200 sx cmt.

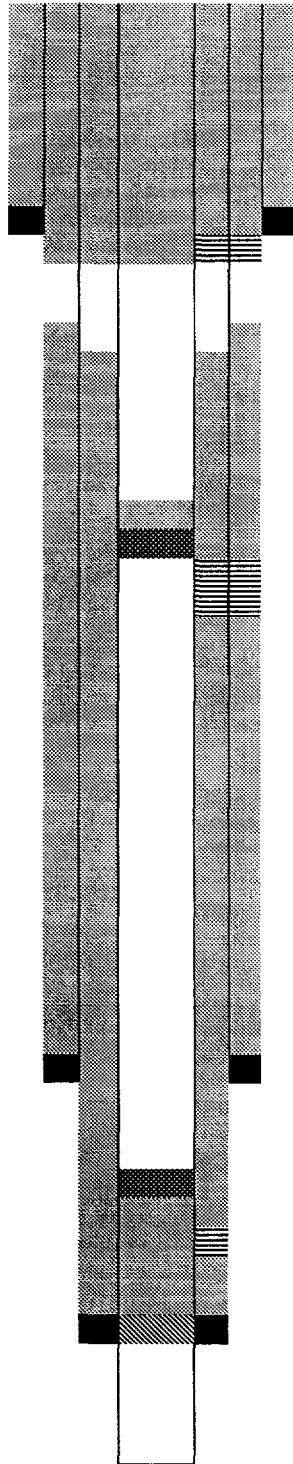
Perfd 6 5/8" csg at 2785'.
Sqzd perfs w/55 sx cmt.
Set cast iron cmt ret at 2681'.
Cap cmt ret w/35' cmt.

Capped CICR w/35' cmt to
3000'.
Set cast iron cmt ret at 3060'
Sqzd perfs w/106 sx to 3000'
Perfs at 3138' to 3241'

**WELL SCHEMATIC:
CHEVRON STATE #2**

WELL PLUGGED:
12/5/89

13"
225'
150 sx
TOC: NA



Sqzd perfs at 292' with 220
sx. Circ to surface

9 5/8"
2810'
725 sx
TOC:

Set cicr at 1404' and capped
With cmt.
Perf'd at 1500'.
Sqzd perfs at 1500' with 300
sx

7"
3951'
300 sx
TOC: 1240 (C)

PBTD: 3072'

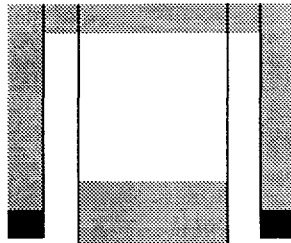
Set cicr at 2744'.

Perfs sqzd at 2852', sqzd
With 55 sx.
Dumped 35' cmt onto CIBP.
CIBP at 3072'

**WELL SCHEMATIC:
TIDEWATER WD GRIMES #1**

WELL PLUGGED:
7/25/68

12 ½"
236'
200 SX
TOC: SURF (C)



Laid 10 sx plug at surface.

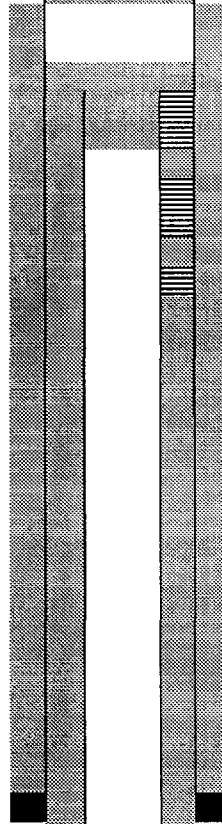
Laid 25 sx cmt at bottom of
12 ½" csg.

Laid 25 sx over 7" stub.
Shot at 787' and pulled.
Shot at 899'.

Shot at 1044'.
Shot at 1193'.

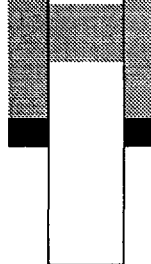
Shot at 1404'.

9 5/8"
2712'
600 SX
TOC: 273 (C)



7"
3826'
300 SX
TOC: 800 FP

TD:4160'



Spotted 25 sx cmt plug from
3599' to 3467'.

LIST OF OFFSET OPERATORS & SURFACE OWNERS

North Hobbs (Grayburg/San Andres) Unit
Well No. 131
Letter L, Section 28, T-18-S, R-38-E
Lea County, New Mexico

Offset Operators

Occidental Permian Limited Partnership
P.O. Box 4294
Houston, TX 77210-4294

Marcum Drilling Company
P.O. Box 3699
Midland, TX 79707

Collins & Ware, Inc.
508 W. Wall, Suite 1200
Midland, TX 79701

Lewis B. Burleson, Inc.
P.O. Box 2479
Midland, TX 79702

Texland Petroleum-Hobbs, LLC
500 Throckmorton, Suite 3100
Ft. Worth, TX 76102-3818

Surface Owner

Grimes Land Company
P.O. Box 5102
Hobbs, NM 88240

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

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

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

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

Consult postmaster for fee.

3. Article Addressed to:

Marcum Drilling Company
P.O. Box 3699
Midland, TX 79707

4a. Article Number

P 436 313 651

4b. Service Type

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

7. Date of Delivery

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

X

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

PS Form 3811, December 1994

102595-97-B-0179

Domestic Return Receipt

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

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

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

Consult postmaster for fee.

3. Article Addressed to:

Collins & Ware, Inc.
508 W. Wall, Suite 1200
Midland, TX 79701

4a. Article Number

P 436 313 652

4b. Service Type

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

7. Date of Delivery

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

X

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

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

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

Consult postmaster for fee.

3. Article Addressed to:

Lewis B. Burleson, Inc.
P.O. Box 2479
Midland, TX 79702

4a. Article Number

P 436 313 653

4b. Service Type

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

7. Date of Delivery

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

X

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

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

Consult postmaster for fee.

3. Article Addressed to:

Texland Petroleum-Hobbs, LLC
500 Throckmorton, Suite 3100
Ft. Worth, TX 76102-3818

4a. Article Number

P 436 313 654

4b. Service Type

- | | |
|--|---|
| <input type="checkbox"/> Registered | <input checked="" type="checkbox"/> Certified |
| <input type="checkbox"/> Express Mail | <input type="checkbox"/> Insured |
| <input checked="" type="checkbox"/> Return Receipt for Merchandise | <input type="checkbox"/> COD |

7. Date of Delivery

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

X

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

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

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

Consult postmaster for fee.

3. Article Addressed to:

Grimes Land Company
P.O. Box 5102
Hobbs, NM 88240

4a. Article Number

P 436 313 655

4b. Service Type

- | | |
|--|---|
| <input type="checkbox"/> Registered | <input checked="" type="checkbox"/> Certified |
| <input type="checkbox"/> Express Mail | <input type="checkbox"/> Insured |
| <input checked="" type="checkbox"/> Return Receipt for Merchandise | <input type="checkbox"/> COD |

7. Date of Delivery

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

X

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

PS Form 3811, December 1994

102595-97-B-0179

Domestic Return Receipt

Thank you for using Return Receipt Service.

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

December 31 1999
and ending with the issue dated

December 31 1999

Kathi Bearden
Publisher

Sworn and subscribed to before

me this 3rd day of

January 2000

Godi Benson
Notary Public.

My Commission expires
October 18, 2000
(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

December 31, 1999

Notice is hereby given of the application of Altura Energy LTD, Attn: Mark Stephens, P.O. Box 4294, Rm. 338-B, Houston, TX 77210-4294 (281/552-1158), to the Oil Conservation Division, New Mexico Energy, Minerals and Natural Resources Department, for approval of the following injection wells for the purpose of secondary recovery:

Pool Name: Hobbs; Grayburg-San Andres
Lease/Unit Name: North Hobbs G/SA Unit
Well No. 231
Loc.: 2310' FSL & 2310' FWL, Unit Letter K, Sec. 19, T-18-S, R-38-E, Lea Co., NM
Well No. 422
Loc.: 2310' FNL & 330' FWL, Unit Letter H, Sec. 24, T-18-S, R-37-E, Lea Co., NM
Well No. 431
Loc.: 2310' FSL & 330' FEL, Unit Letter I, Sec. 25, T-18-S, R-37-E, Lea Co., NM
Well No. 131
Loc.: 2310' FSL & 330' FWL, Unit Letter L, Sec. 28, T-18-S, R-38-E, Lea Co., NM
Well No. 332
Loc.: 2470' FNL & 1800' FEL, Unit Letter G, Sec. 28, T-18-S, R-38-E, Lea Co., NM
Well No. 231
Loc.: 2310' FSL & 1650' FWL, Unit Letter K, Sec. 29, T-18-S, R-38-E, Lea Co., NM
Well No. 321
Loc.: 2310' FNL & 1650' FEL, Unit Letter G, Sec. 29, T-18-S, R-38-E, Lea Co., NM
Well No. 223
Loc.: 1770' FNL & 2405' FWL, Unit Letter F, Sec. 30, T-18-S, R-38-E, Lea Co., NM
Well No. 411
Loc.: 330' FNL & 3300' FEL, Unit Letter A, Sec. 30, T-18-S, R-38-E, Lea Co., NM
Well No. 211
Loc.: 440' FNL & 2310' FWL, Unit Letter C, Sec. 31, T-18-S, R-38-E, Lea Co., NM
Well No. 144
Loc.: 765' FSL & 1175' FWL, Unit Letter M, Sec. 32, T-18-S, R-38-E, Lea Co., NM
Well No. 312
Loc.: 210' FNL & 1400' FEL, Unit Letter B, Sec. 32, T-18-S, R-38-E, Lea Co., NM
Well No. 431
Loc.: 2310' FSL & 330' FEL, Unit Letter I, Sec. 32, T-18-S, R-38-E, Lea Co., NM
Well No. 111
Loc.: 330' FNL & 330' FWL, Unit Letter D, Sec. 33, T-18-S, R-38-E, Lea Co., NM
Well No. 211
Loc.: 330' FNL & 2310' FWL, Unit Letter C, Sec. 33, T-18-S, R-38-E, Lea Co., NM

The injection formation is the Hobbs; Grayburg - San Andres Pool between the intervals of +/- 3700' and +/- 5300' below the surface of the ground. Expected maximum injection rate is 4000 BWPD and the expected maximum injection pressure is approximately 805 psi. Interested parties must file objections or requests for hearing with the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, NM 87505 within fifteen (15) days.
#17073

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02533892

altura

P. O. Box 4294

Houston, TX 77210-4294