PMX 8/4/00

Occidental Permian Ltd.

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

July 17, 2000

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

RE: Expansion of Pressure Maintenance Project
North Hobbs (Grayburg/San Andres) Unit
Hobbs; Grayburg – San Andres Pool
Well No. 111
Letter D, Section 33, 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. 111 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. 111). 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

OXY Occidental Permian Ltd.

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

- 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)

Attachment To Form C-108
Miscellaneous Data

North Hobbs (Grayburg/San Andres) Unit
Well No. 111
Letter D, Section 33, 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 – 1 ea. – only one active water well found within ½-mile radius of No. 111)

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	(H2S)		486.00	16.00	30.38
Carbon Dioxide	(CO2)	Not Analyzed			
Dissovled Oxygen	(O2)	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	(CO3=)		0.00	30.00	0.00
Bicarbonate	(HCO3-)		1,869.66	61.10	30.60
Sulfate	(SO4=)		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 CaCO3			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

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 SOUTH PACHECO
SANTA FE, NEW MEXICO 87505

FORM C-108
Revised 4-1-98

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: July 17, 2000

* 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.

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 CaCO3	300	
Chlorides as Cl	155	
Sulfate as SO4	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

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

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, 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	Pool Code	Pool Name
30-025-12505	31920	HOBBS; GRAYBURG - SAN ANDRES

Property Code	Property Name	Well Number
19520	NORTH HOBBS G/SA UNIT	111

OGRID No.	Operator Name	Elevation
157984	Occidental Permian Limited Partnership	3650

Surface Location

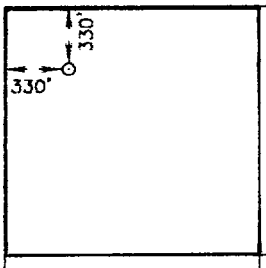
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	33	18 S	38 E		330	NORTH	330	WEST	LEA

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.

Mark Stephens
Signature

Mark Stephens
Printed Name

Business Analyst (SG)
Title

July 14, 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 supervison, and that the same is true and correct to the best of my belief.

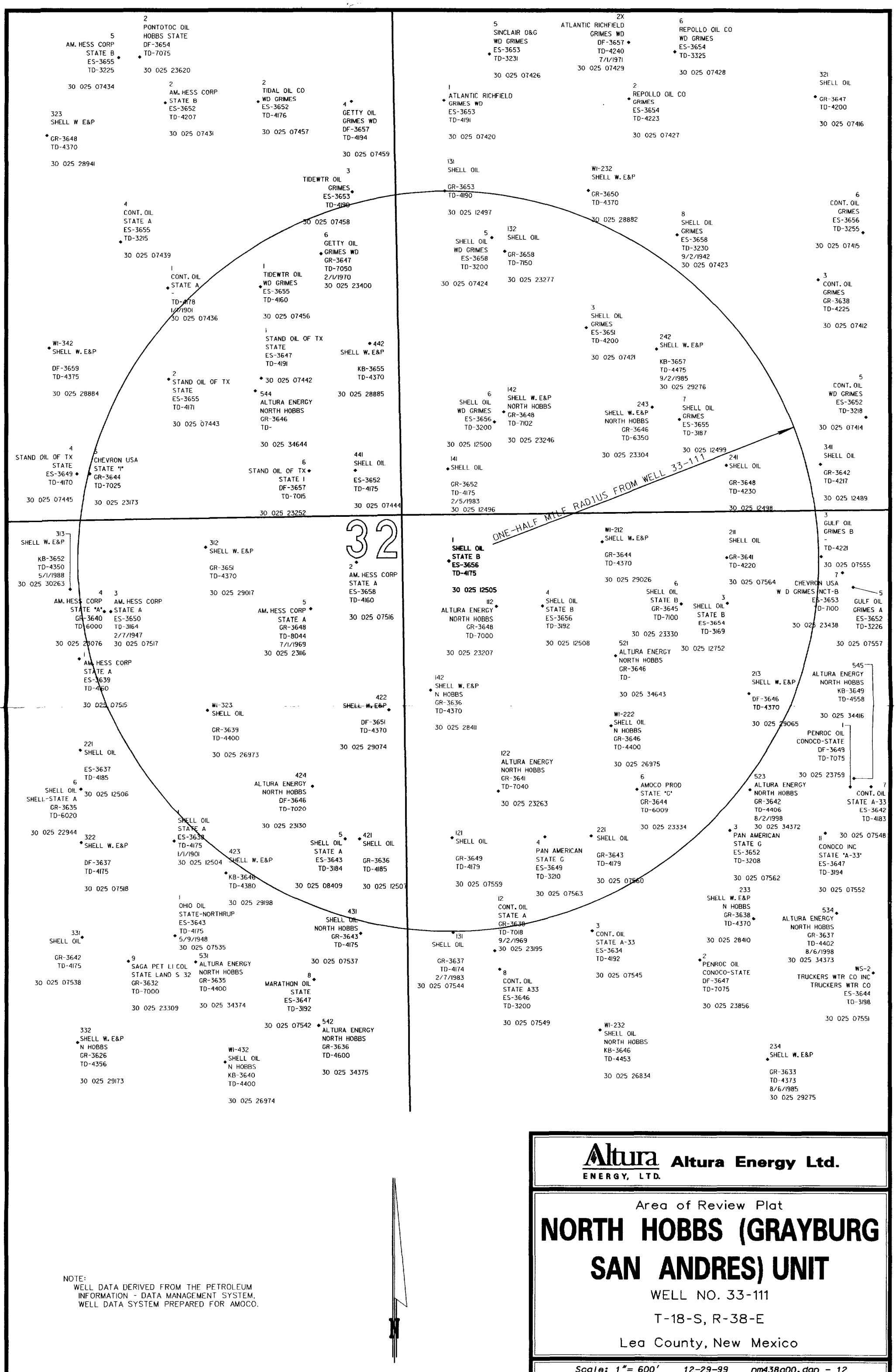
JANUARY 6, 2000
Date Surveyed DC

Signature & Seal of Professional Surveyor

Gary L. Eidson 1/28/2000

00-13-0019

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641
MACON McDONALD 12185



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

Altura Energy Ltd.

Area of Review Plat

NORTH HOBBS (GRAYBURG SAN ANDRES) UNIT

WELL NO. 33-111

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.

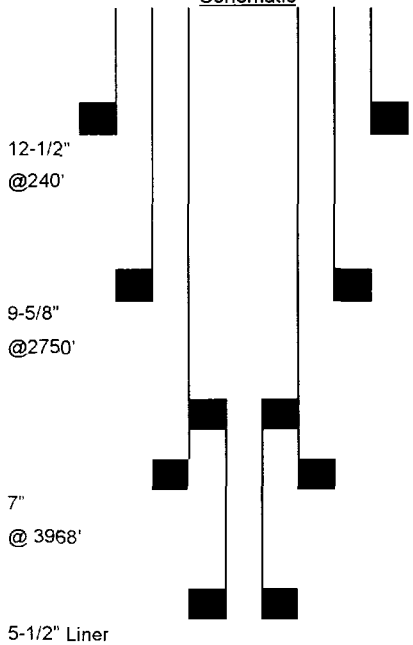
LARGE FORMAT EXHIBIT HAS BEEN REMOVED AND IS LOCATED IN THE NEXT FILE

INJECTION WELL DATA SHEET

Operator	Lease	County
Occidental Permian Limited Partnership	North Hobbs G/SA Unit	Lea

Well No.	Footage Location	Section	Township	Range	Unit Letter
33-111	330' FNL & 330' FWL	33	18-S	38-E	D

Schematic



Tubular Data

Surface Casing
Size 12-1/2" Cemented with 200 sxs.
TOC SURF Determined by CIRC.
Hole size

Intermediate Casing
Size 9-5/8" Cemented with 600 sxs.
TOC SURF Determined by
Hole size

Long string Casing
Size 7" Cemented with 225 sxs.
TOC 2987' Determined by CALC-50% EFFIC
Hole size

Liner
Size 5-1/2" Cemented with 95 sxs.
TOC SURF Determined by CALC-50% EFFIC
Hole size

Total depth 4237'

Injection interval
4100 feet to 4300 feet

Completion type Perforated Casing

Tubing size 2-7/8" lined with Duoline (Fiberglass liner) set in a

Guiberson – Uni VI packer at 4000' feet
(brand and model)

Other Data

1. Name of the injection formation: San Andres

2. Name of field or Pool: Hobbs

3. Is this a new well drilled for injection? Yes [ ] No [X]
If no, for what purpose was the will originally drilled? Producer

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) 2800' with 275 sxs cmt, 4011'-4021' with 275 sxs cmt, 4041'-4070' with 80 sxs cmt, 4130'-4220' with 61 sxs cmt

5. Give the depth to and name of any overlying and/or underlying oil and gas zones (pools) in this area.

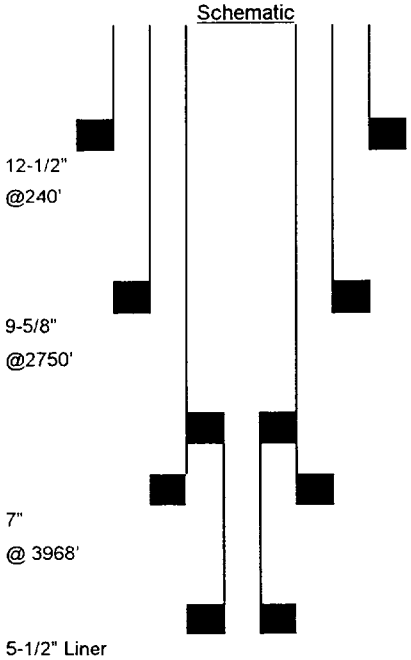
Grayburg – 3270, Glorieta - 5300

INJECTION WELL DATA SHEET

Operator	Lease	County
Occidental Permian Limited Partnership	North Hobbs G/SA Unit	Lea

Well No.	Footage Location	Section	Township	Range	Unit Letter
33-111	330' FNL & 330' FWL	33	18-S	38-E	D

Schematic



Tubular Data

Surface Casing
Size 12-1/2" Cemented with 200 sxs.
TOC SURF Determined by CIRC.
Hole size

Intermediate Casing
Size 9-5/8" Cemented with 600 sxs.
TOC SURF Determined by
Hole size

Long string Casing
Size 7" Cemented with 225 sxs.
TOC 2987' Determined by CALC-50% EFFIC
Hole size

Liner
Size 5-1/2" Cemented with 95 sxs.
TOC SURF Determined by CALC-50% EFFIC
Hole size

Total depth 4237'

Injection interval
4100 feet to 4300 feet

Completion type Perforated Casing

Tubing size 2-7/8" lined with Duoline (Fiberglass liner) set in a

Guiberson – Uni VI packer at 4000' feet
(brand and model)

Other Data

1. Name of the injection formation: San Andres

2. Name of field or Pool: Hobbs

3. Is this a new well drilled for injection? Yes No
If no, for what purpose was the will originally drilled? Producer

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) 2800' with 275 sxs cmt, 4011'-4021' with 275 sxs cmt, 4041'-4070' with 80 sxs cmt, 4130'-4220' with 61 sxs cmt

5. Give the depth to and name of any overlying and/or underlying oil and gas zones (pools) in this area.

Grayburg – 3270, Glorieta - 5300

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTOR

FOR WELL 33111

Well Name Operator	API No.	Sec.	T	R	Un Ltr	Drill Date	Well Type	TD or PBTD	Top Perf	Bot. Perf	Sqz. Perfs	Csg. Size	Hole Size	Depth	No. of Sxs.	TOC
28131	30-025- 12497	28	-18S	-38E	L	9//30	P	4263	4048	4263	3190-3202	12.5	16	238	200	CIRC
Altura											4124-4151	9.625	12	2751	600	CIRC
												7	8.75	3973	225	3086-CBL
												5.5	7.875	3932-4233	100	3932-CBL
28132	30-025- 23277	28	-18S	-38E	L	11//69	P	4257	4019	4255	4144-4146	13.375	17.5	352	200	CIRC
Altura								PBTD			4158-4172	9.625	12	3816	1400	1922
												7	8.75	3611-7143	335	3611
28141	30-025- 12496	28	-18S	-38E	M	9//30	P	4228	4066	4220	4033	12.5	16	236	225	CIRC
Altura								CIBP			4035	9.625	12	2750	475	CIRC
											4038	7	8.75	3960	350	2450
											4040	5	6.5	4228	65	2990
28142	30-025- 23246	28	-18S	-38E	M	10//69	P	4030	3890	3968	NONE	13.375	17.5	372	350	CIRC
Altura								PBTD				9.625	12.25	3787	1400	CIRC**
												7	8.75	3589-7102	720	CIRC
28241	30-025- 12498	28	-18S	-38E	N	9//34	P	4260	4061	4260	4004-4010	12.5	16	256	150	CIRC
Altura											4023-4026	9.625	12	2770	150	3094**
												7	8.75	1800	250	CIRC**
												5.5	7.875	4229	100	3334
28242	30-025- 29276	28	-18S	-38E	N	7//85	I	4423	4213	4347	NONE	13.375	17.5	40	NA	NA
Altura								PBTD				9.625	12	1509	650	CIRC
												7	8.75	4470	1005	CIRC
28243	30-025- 23304	28	-18S	-38E	N	10//69	P	6300	5890	5967	4898	13.375	17.5	348	250	CIRC
Altura								PBTD			4904	9.625	12.25	3805	1400	CIRC**
											4910	7	8.75	3602-6350	500	CIRC
											4918					
											4922					
29441	30-025- 07444	29	-18S	-38E	P	10//30	P	4211	4058	4266	4020-4028	13.375	18	232	150	CIRC**

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTOR

Well Name Operator	API No.	Sec.	T	R	Un Ltr	Drill Date	Well Type	TD or PBTD	Top Perf	Bot. Perf	Sqz. Perfs	Csg. Size	Hole Size	Depth	No. of Sxs.	TOC
Altura								PBTD				9.625	12	2743	1400	CIRC**
												7	8.75	3950	300	3240-CBL
												5	6.5	4172	22	4020
29442	30-025-28885	29	-18S	-38E	P	2//85	I	4237	4065	4210	4031	13.375	17.5	40	NA	CIRC
Altura								CIBP			4036	9.625	12.25	1536	575	CIRC
												7	7.875	4370	1100	CIRC
29544	30-025-34644	29	-18S	-38E	P	7//99	P	4359	4124	4256	NONE	14	18	40	50	CIRC
Altura								PBTD				8.625	12.25	1565	725	CIRC
												5.5	7.875	4400	775	CIRC
32312	30-025-29017	32	-18S	-38E	B	12//84	P	4362	3945	4297	NONE	13.375	17.5	40	NA	NA
Altura								PBTD				8.625	12.25	1519	650	CIRC
												5.5	7.875	4369	1120	CIRC
32323	30-025-26973	32	-18S	-38E	G	12//80	I	4292	4062	4276	4293-4332	16	20	40	40	CIRC
Altura								PBTD				8.625	12.25	1600	1000	CIRC
												5.5	7.875	4400	920	3624-CBL
32421	30-025-07517	32	-18S	-38E	H	8//30	P	4210	4092	4202	4046-4056	12.5	16	245	200	CIRC**
Altura								PBTD			4158-4192	9.625	12	2755	600	CIRC**
											4203-4218	7	8.75	3950	225	2385-CBL
												5.5	7.875	3916-4219	125	CIRC**
32422	30-025-29074	32	-18S	-38E	H	3//85	P	4257	3874	4222	4047-4057	13.375	17.5	40	NA	NA
Altura								PBTD			4090	9.625	12.25	1538	425	CIRC
												7	8.75	4369	570	1470
32424	30-025-23130	32	-18S	-38E	H		P	5210	4128	4244	NONE	13.375	17.5	350	350	CIRC**
Altura								PBTD				8.625	12.25	3790	1300	CIRC**
												5.5	7.875	3580-7015	650	3580**
33121	30-025-07559	33	-18S	-38E	E	8//30	P	4279	4053	4223	NONE	12.5	16	184	NA	NA
Altura												9.625	11.75	2755	NA	NA
												7	8.75	3951	250	2632**
												4.5	6.25	4279	175	2730-CBL

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTOR

Well Name / Operator	API No.	Sec.	T	R	Un Ltr	Drill Date	Well Type	TD or PBTD	Top Perf	Bot. Perf	Sqz. Perfs	Csg. Size	Hole Size	Depth	No. of Sxs.	TOC
33131	30-025- 07544	33	-18S	-38E	L	9//30	P	4243	4050	4238	365	15.5	18	208	373	CIRC
Altura								PBTD			928	9.625	12.25	2750	500	1289
												7	8.75	3953	300	2870-CBL
												5	6.25	3922-4243	100	3057
33142	30-025- 28411	33	-18S	-38E	M	12//83	I	4296	4067	4236	4027	16	20	40	NA	CIRC
Altura								PBTD			4040	8.625	12.25	1540	750	CIRC
											4068-4116	5.5	7.875	4370	910	320-CBL
33211	30-025- 07564	33	-18S	-38E	C	6//34	P	4223	4076	4222	3993-4008	12.5	16	296	150	CIRC**
Altura								PBTD				9.625	12.25	2760	150	3191**
												7	8.75	3930	250	2601**
												5.5	7.875	3884	250	3800-CBL
												5.5	7.875	3887-4226	82	3887**
33212	30-025- 29026	33	-18S	-38E	C	12//84	I	4327	4029	4231	NONE	13.375	17.5	40	40	CIRC
Altura								PBTD				8.625	12.25	1600	875	CIRC
												5.5	7.875	4370	900	CIRC
33213	30-025- 29065	33	-18S	-38E	C	2//85	P	4328	4027	4255	NONE	13.375	17.5	40	NA	NA
Altura								PBTD				8.625	12.25	1551	675	CIRC
												5.5	7.875	4370	775	CIRC
33221	30-025- 07560	33	-18S	-38E	F	9//30	I	4185	4047	4230	606	12.5	16	237	125	CIRC
Altura								CIBP			3145-3146	9.625	11.75	2770	400	CIRC
											4043-4052	7	8.75	4012	275	CIRC
												5	6.25	4242	100	2850-CBL
33222	30-025- 26975	33	-18S	-38E	F	10//80	I	4322	4054	4276	4206-4210	16	20	40	40	CIRC
Altura								CIBP			4214-4218	8.625	12.25	1600	800	CIRC
												5.5	7.875	4400	1100	CIRC
33521	30-025- 34643	33	-18S	-38E	C	9//99	P	4360	4104	4260	NONE	14	18	40	50	CIRC
Altura								PBTD				8.625	12.25	1565	795	CIRC**
												5.5	7.875	4400	1655	4050-CBL

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTOR

Well Name Operator	API No.	Sec.	T	R	Un Ltr	Drill Date	Well Type	TD or PBTD	Top Perf	Bot. Perf	Sqz. Perfs	Csg. Size	Hole Size	Depth	No. of Sxs.	TOC
STATE B #6	30-025- 23330	33	-18S	-38E	C	11//69	P	7062	6639	6931	5948-5956	13.375	17.5	350	300	CIRC
Altura												9.625	12.25	3805	1400	CIRC**
												7	8.75	3609-7062	805	CIRC**
STATE G #6	30-025- 23334	33	-18S	-38E	F	11//69	P	6441	6204	6148	450-452	11.75	17.5	420	540	CIRC
Altura								PBTD			3410-3412	8.625	11	1831	370	1831-TS
											5930-5962	5.5	7.875	6009	400	3500-TS
												4	4.75	5815-7041	75	5815**
St A #4	30-025- 23076	32	-18S	-38E	B	4//69	TA	5325	5375	5966	NA	11.75	15	380	350	CIRC
Collins &								CIBP				8.625	11	3810	590	2400
Ware												5.5	7.875	5998	325	5281**
St A #5	30-025- 23116	32	-18S	-38E	A	6//69	P	6954	6674	6936	NA	11.75	15	385	400	CIRC**
Collins &												8.625	11	3798	590	1099**
Ware												5.5	7.875	7000	501	4772**
St I #5	30-025- 23173	29	-18S	-38E	O	7//69	P	6970	6648	6930	NONE	8.625	12.25	3808	300	3418**
Texland												6.625	8.75	3575	530	CIRC**
												5.5	7.875	7022	NA	NA
WD Grimes #6	30-025- 23400	29	-18S	-38E	I	2//70	P	7018	6631	6984	NONE	13.375	17.5	377	400	CIRC**
Lewis B.								PBTD				9.625	12.25	3847	2300	CIRC**
Burleson												7	8.75	7049	540	3458**
St I #6	30-025- 23252	29	-18S	-38E	P	8//69	P	6986	6652	6929	NA	9.625	12.25	3800	600	1905**
Texland												7	8.75	3549	700	CIRC**
												5.5	7.875	7013	NA	NA
STATE B #3	30-025- 12752	33	-18S	-38E	C	11//47	PA	3169	3158	3166	NONE	8.625	11	428	200	CIRC**
Altura												4.5	7.875	3124	850	CIRC**

** Denotes calculated TOC with 50% efficiency

OFFSET WELLS WITHIN ONE HALF MILE OF PROPOSED INJECTOR

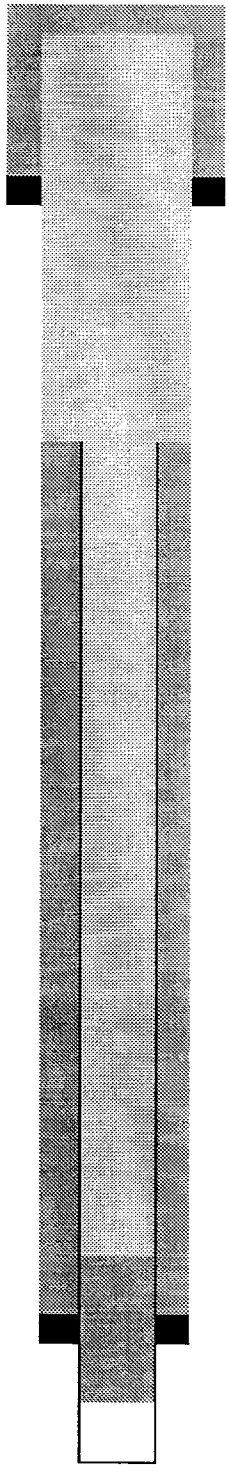
Well Name Operator	API No.	Sec.	T	R	Un Ltr	Drill Date	Well Type	TD or PBTD	Top Perf	Bot. Perf	Sqz. Perfs	Csg. Size	Hole Size	Depth	No. of Sxs.	TOC
STATE B #4	30-025- 12508	33	-18S	-38E	D	12//47	PA	3192	3145	3186	NONE	8.625	11	413	200	CIRC**
Altura												4.5	7.875	3120	850	CIRC**
STATE G #4	30-025- 07563	33	-18S	-38E	E	12//49	PA	3210	3187	3190	NONE	10.75	15	448	400	CIRC
Altura								PBTD				5.5	7.375	5.5	800	CIRC
St A #3	30-025- 07517	32	-18S	-38E	B	1//47	PA	3164	3149	3150	NA	10.75	13.75	221	200	CIRC**
Amerada												7.625	9.875	1570	300	CIRC**
												5.5	6.75	3164	600	CIRC**
WD Grimes #5	30-025- 07424	28	-18S	-38E	L	7//47	PA	3150	3191	3197	NONE	8.625	11	409	195	CIRC**
Shell								CMT				4.5	7.875	1958	600	CIRC**
WD Grimes #6	30-025- 12500	28	-18S	-38E	M	7//47	PA	3090	3155	3161	NONE	8.625	11	411	200	CIRC**
Shell								CMT				5.5	7.875	2778	1400	CIRC**
Grimes #7	30-025- 12499	28	-18S	-38E	N	8//47	PA	3000	3173	7176	NONE	8.625	11	397	200	CIRC**
Shell								CMT				4.5	7.875	1976	850	CIRC**
STATE A #5	30-025- 08409	32	-18S	-38E	H	10//48	PA	2200	NA	NA	NONE	8.625	11	391	200	CIRC**
Shell								CMT				5.5	7.75	3120	800	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

Shell
Unit C, NW/4
Sec 33, T-18S, R-38E

WELL PLUGGED:
3/30/51

Size: 8.625"
Depth: 428'
Hole size: 11"
Cmt: 200 sxs
TOC: Circ.- Calc.
50% efficiency



Spotted 10 sxs plug from 47 to surface.

Shot 4.5" off at 1250'

Hole filled with heavy mud.

Size: 4.5"
Depth: 3124'
Hole size: 7.875"
Cmt: 850 sxs
TOC:

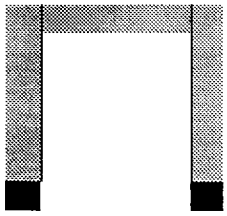
Spot 10 sxs plug from 3135 to 3000'

TD: 3169'

Shell
Unit D, 660 FNL & 990 FWL
Sec 33, T-18S, R-38E

WELL PLUGGED:
6/19/50

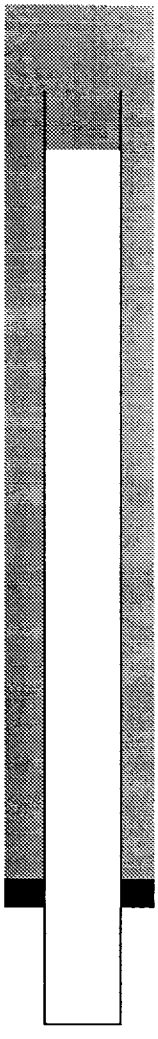
Size: 8.625"
Depth: 413'
Hole size: 11"
Cmt: 200 sxs
TOC: Circ.- Calc.
50% efficiency



Spotted 5 sxs at surface

Spotted 8 sxs from 1225 to 1150'

Shot 4.5" csg off at 1215



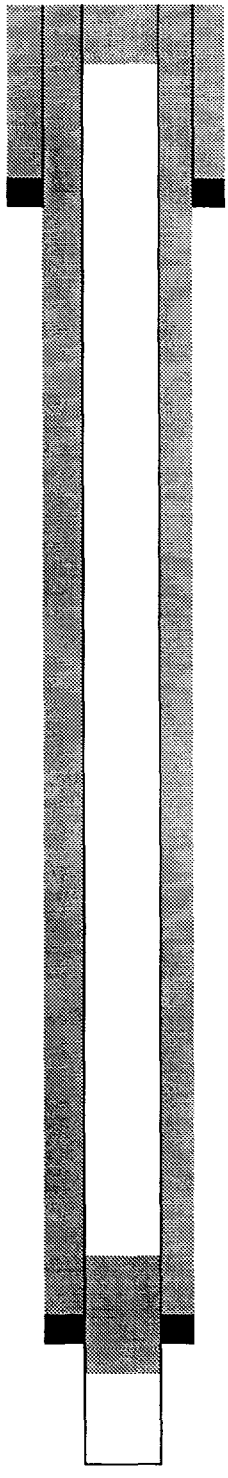
Size: 4.5"
Depth: 3120'
Hole size: 7.875"
Cmt: 850 sxs
TOC:

TD: 3192'

Amoco
Unit E, 2310 FNL & 990 FWL
Sec 33, T-18S, R-38E

WELL PLUGGED:
3/9/71

Size: 10.75"
Depth: 448'
Hole size: 15"
Cmt: 400 sxs
TOC: Circ.



Spotted 10 sxs plug at surface

Size: 5.5"
Depth: 3108'
Hole size: 7.375"
Cmt: 800 sxs
TOC: Circ.

Spotted 25 sxs plug from 3210 to 3108

TD: 3210'

WELL SCHEMATIC:
AMERADA STATE A #3

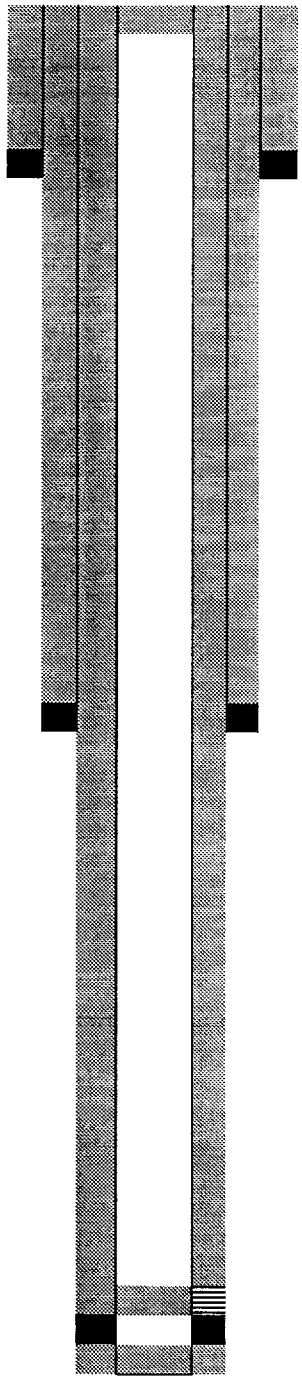
WELL PLUGGED:
4/27/59

10 ¾"
221'
200 SX
TOC:SURF (C)

7 5/8"
1570'
300 SX
TOC:SURF (C)

5 ½"
3170'
600 SX
TOC:CIRC

TD:3164



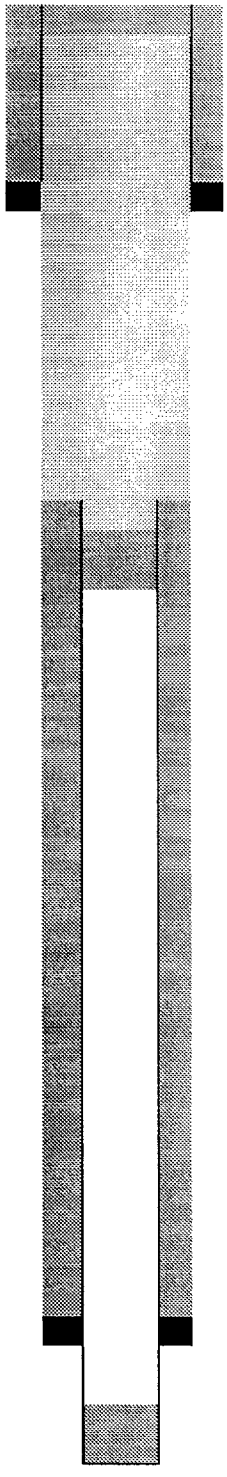
Spot 5 sx cmt plug at surf.

Spot 20 sx cmt plug from 2940' to 3100'.

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:

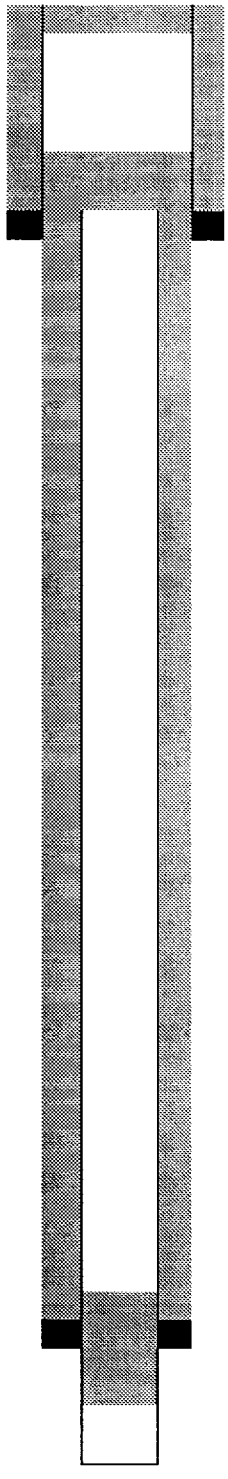
TD: 3200'

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:

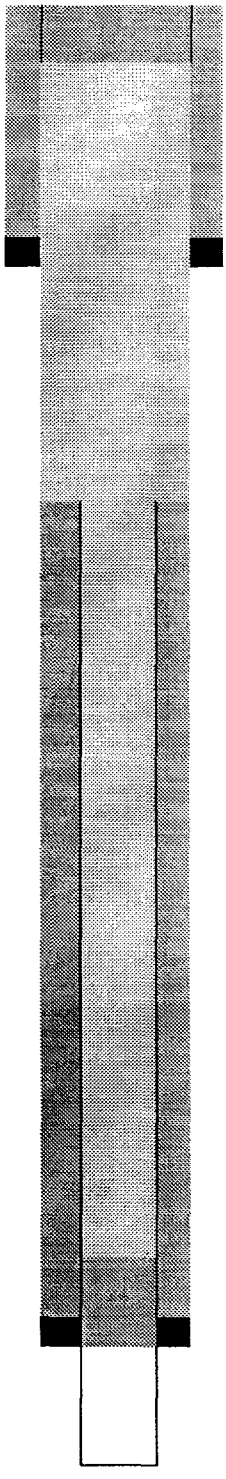
TD: 3200'

Spotted 6 sxs plug 3140-3090'

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:

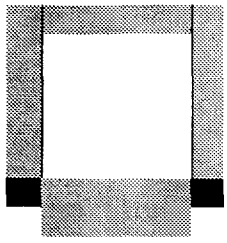
Spotted 10 sxs plug 3120-3000'

TD: 3187

Shell
Unit H, SE/4 of NE/4
Sec 32, T-18S, R-38E

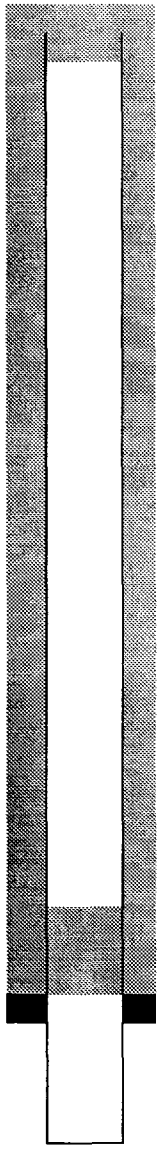
WELL PLUGGED:
10/19/53

Size: 8.625"
Depth: 391'
Hole size: 11"
Cmt: 200 sxs
TOC: Circ.- Calc.
50% efficiency



Spotted 2 sxs plug at surface

Spotted 5 sxs plug from 400 to 384.



Spotted 5 sxs plug from 930-900
Pulled 920' of 5.5 csg.

Size: 5.5"
Depth: 3120'
Hole size: 7.75"
Cmt: 800 sxs
TOC:

Spotted 6 sxs plug from 3100-3060'

TD: 3184'

WELL SCHEMATIC:
STD OF TX- STATE #1

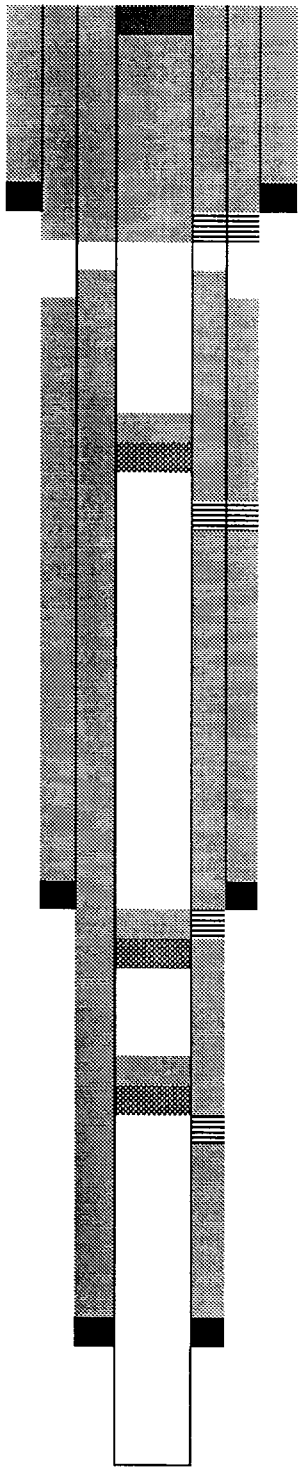
WELL PLUGGED:
11/25/89

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 ½" 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/ ½" plate
And valve wellbore.

Set cicr at 1404'.

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

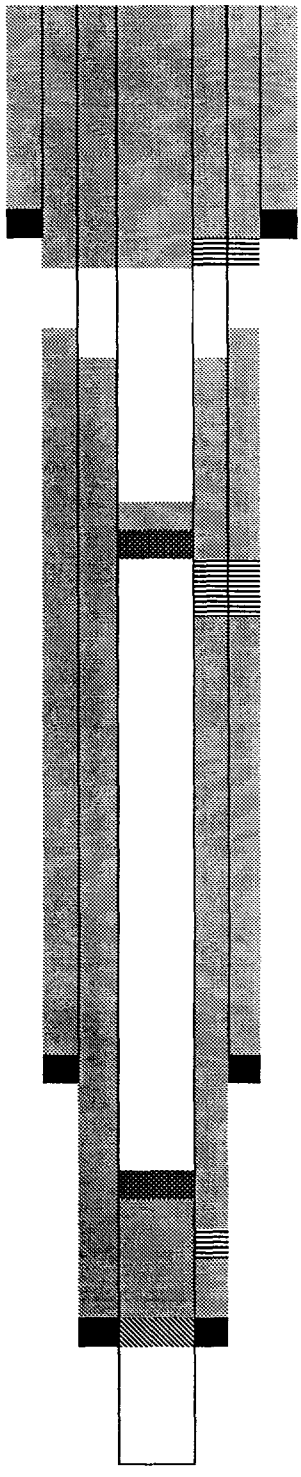
Perfd 6 5/8" csg at 2785'.
Sqzd perfs w/55 sx cmt.
Set cast iron cmt ret at 2681'.
Cap cmt ret w/35' cmt.

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)

Set cicr at 2744'.

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

PBTD: 3072'

WELL SCHEMATIC:
GETTY WD GRIMES #1

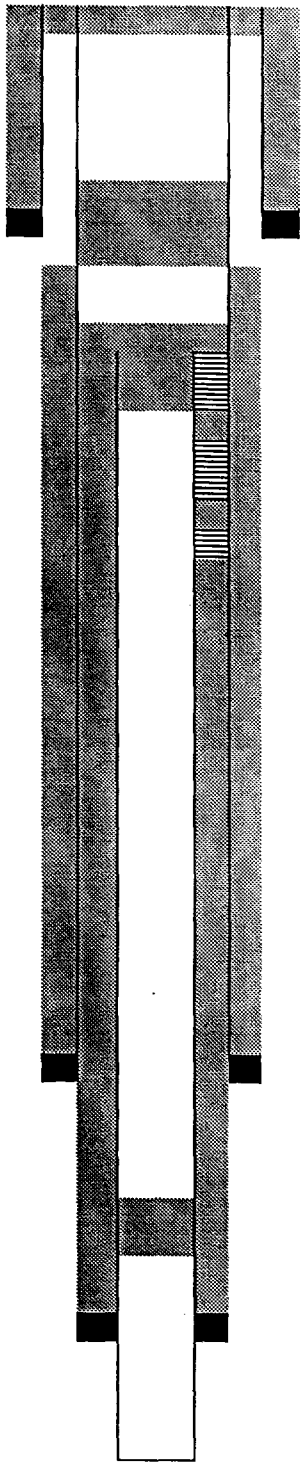
WELL PLUGGED:
7/25/68

12 ½"
236'
200 SX
TOC: SURF (C)

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

7"
3826'
300 SX
TOC: 800 FP

TD:4160'



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'.

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

LIST OF OFFSET OPERATORS & SURFACE OWNERS

North Hobbs (Grayburg/San Andres) Unit
Well No. 111
Letter D, Section 33, T-18-S, R-38-E
Lea County, New Mexico

Offset Operators

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

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

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

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

Surface Owner

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

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:

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

4a. Article Number
P 436 313 654

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: *(Print Name)*

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

6. Signature: *(Addressee or Agent)*
X

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- 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:

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)*

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

6. Signature: *(Addressee or Agent)*
X

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

Jodi Henson

Notary Public.

My Commission expires
October 18, 2000
(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
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

02101173000 02533892

altura
P. O. Box 4294
Houston, TX 77210-4294