



Occidental Permian Ltd.

PMX 7/11/00
580 WestLake Park Blvd.
Houston, TX 77079
PO Box 4294
Houston, TX 77210-4294
Phone: 281-552-1000

June 22, 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. 121
Lot 2, Section 30, 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. 121 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. 121). 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



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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: June 22, 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.

Attachment To Form C-108
Miscellaneous Data

North Hobbs (Grayburg/San Andres) Unit
Well No. 121
Lot 2, Section 30, 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 Well 30-121
SAMPLED BY

DATE TAKEN 5/10/00

REMARKS T18S-R38E-Sec.30, Qtr Sec. 1,2,3

Barium as Ba	0
Carbonate alkalinity PPM	0
Bicarbonate alkalinity PPM	224
pH at Lab	7.4
Specific Gravity @ 60°F	1.001
Magnesium as Mg	167
Total Hardness as CaCO ₃	288
Chlorides as Cl	76
Sulfate as SO ₄	110
Iron as Fe	0
Potassium	0.08
Hydrogen Sulfide	0
Rw	8
Total Dissolved Solids	717
Calcium as Ca	121
Nitrate	10.6

Results reported as Parts per Million unless stated

Langelier Saturation Index 0

Analysis by: Rolland Perry
Date: 5/14/00



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 30-121
SAMPLED BY

DATE TAKEN 5/10/00

REMARKS T18S-R38E-Sec 30, Qtr Sec 1,4,2

Barium as Ba	0	
Carbonate alkalinity PPM	0	
Bicarbonate alkalinity PPM	184	
pH at Lab	7.42	
Specific Gravity @ 60°F	1.001	
Magnesium as Mg	128	
Total Hardness as CaCO ₃	220	
Chlorides as Cl	42	
Sulfate as SO ₄	75	
Iron as Fe	0	
Potassium	0.08	
Hydrogen Sulfide	0	
Rw	12.1	23.0 C
Total Dissolved Solids	544	
Calcium as Ca	92	
Nitrate	11	

Results reported as Parts per Million unless stated

Langelier Saturation Index - 0.33

Analysis by: Rolland Perry
Date: 5/14/00

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 30-025-07464	Pool Code 31920	Pool Name HOBBS, GRAYBURG - SAN ANDRES
Property Code 19520	Property Name NORTH HOBBS G/SA UNIT	Well Number 121
OGRID No. 157984	Operator Name Occidental Permian Limited Partnership	Elevation 3659

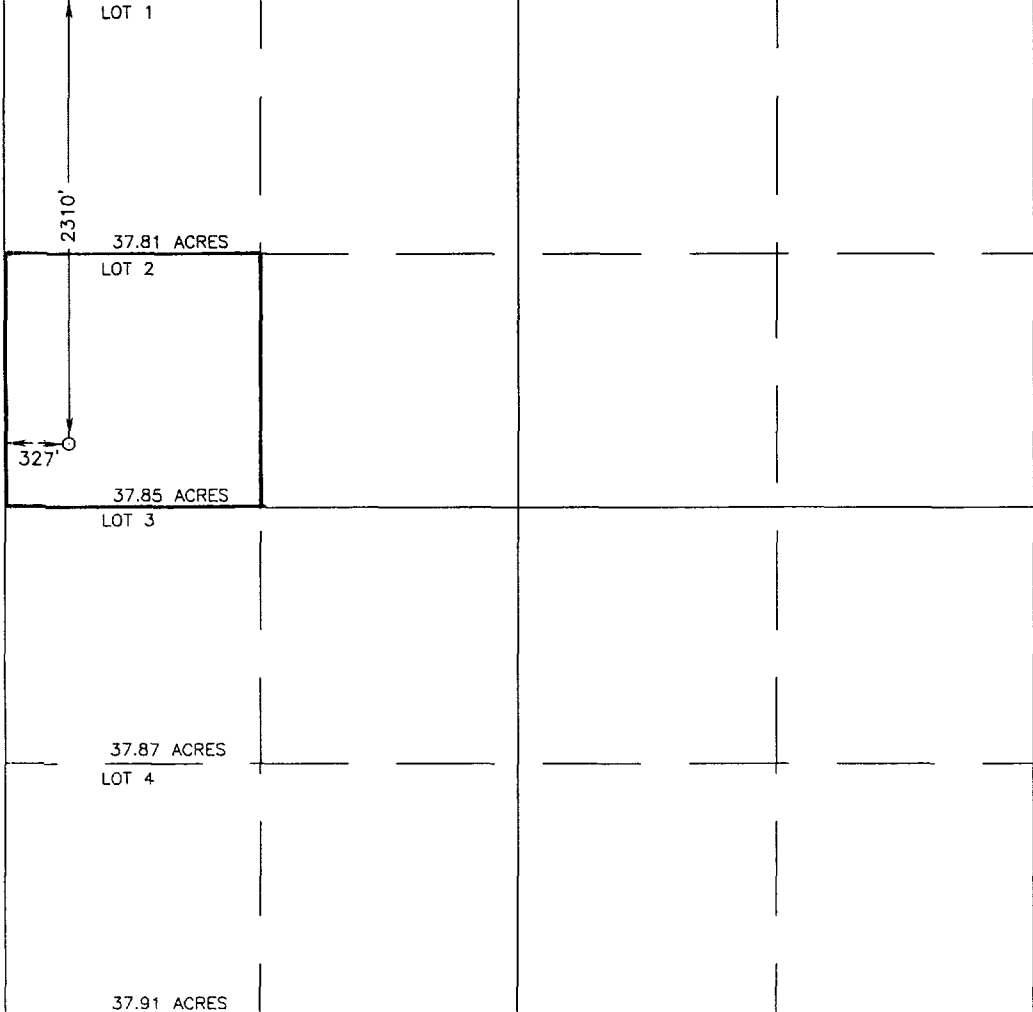
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT 2	30	18 S	38 E		2310	NORTH	327	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

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Mark Stephens</u> Signature Mark Stephens Printed Name Business Analyst (SG) Title June 22, 2000 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>APRIL 6, 2000</p> <p>Date Surveyed Signature & Seal of Professional Surveyor <u>Ronald E. Eidson</u> 4/07/00 80-11-Q433</p> <p>Certificate No. RONALD E. EIDSON 3239 GARY EIDSON 12641 MACON McDONALD 12185</p>
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DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

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1000 Rio Brazos Rd., Aztec, NM 87410

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State of New Mexico
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Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
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P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-07464	Pool Code 31920	Pool Name HOBBS, GRAYBURG - SAN ANDRES
Property Code 19520	Property Name NORTH HOBBS G/SA UNIT	Well Number 121
OGRID No. 157984	Operator Name Occidental Permian Limited Partnership	Elevation 3659

Surface Location

UL or lot No. LOT 2	Section 30	Township 18 S	Range 38 E	Lot Idn	Feet from the 2310	North/South line NORTH	Feet from the 327	East/West line WEST	County LEA
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Bottom Hole Location If Different From Surface

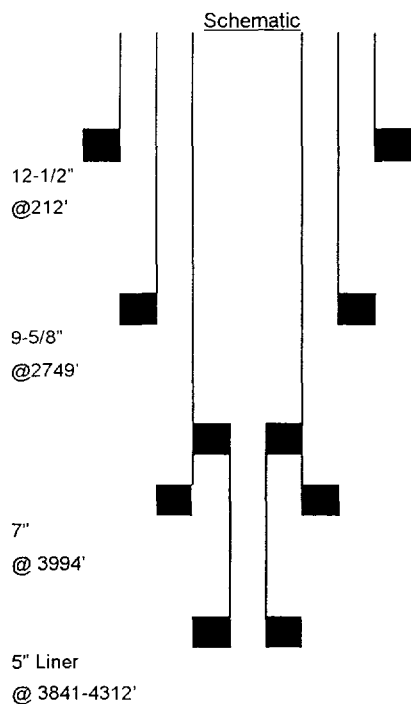
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		Joint or Infill	Consolidation Code	Order No.					

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

<p>LOT 1 37.81 ACRES LOT 2 37.85 ACRES LOT 3 37.87 ACRES LOT 4 37.91 ACRES</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Mark Stephens</u> Signature Mark Stephens Printed Name Business Analyst (SG) Title June 22, 2000 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>APRIL 6, 2000</p> <p>Date Surveyed Signature & Seal of Professional Surveyor Professional Surveyor RONALD E. EIDSON 4/6/00 Certificate No. 3239 RONALD E. EIDSON GARY EIDSON MICOR McDONALD</p>
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INJECTION WELL DATA SHEET

Operator	Occidental Permian Limited Partnership	Lease	North Hobbs G/SA Unit	County	Lea
Well No.	Footage Location	Section	Township	Range	Unit Letter
30-121	2310 FNL & 327 FWL	30	18-S	38-E	E



<u>Surface Casing</u>		<u>Tubular Data</u>	
Size	12-1/2"	Cemented with	200 sxs.
TOC	Circ.	Determined by	Calc. w/ 50% eff.
Hole size	16"		
<u>Intermediate Casing</u>			
Size	9-5/8"	Cemented with	400 sxs.
TOC	1281	Determined by	Calc. w/ 50% eff.
Hole size	11-3/4"		
<u>Long string Casing</u>			
Size	7"	Cemented with	425 sxs.
TOC	2738'	Determined by	CBL
Hole size	8-3/4"		
<u>Liner</u>			
Size	5"	Cemented with	40 sxs.
TOC	3841	Determined by	CBL
Hole size	6-1/8"		
Total depth	4312'		
<u>Injection interval</u>		feet to	feet
4148		4297	

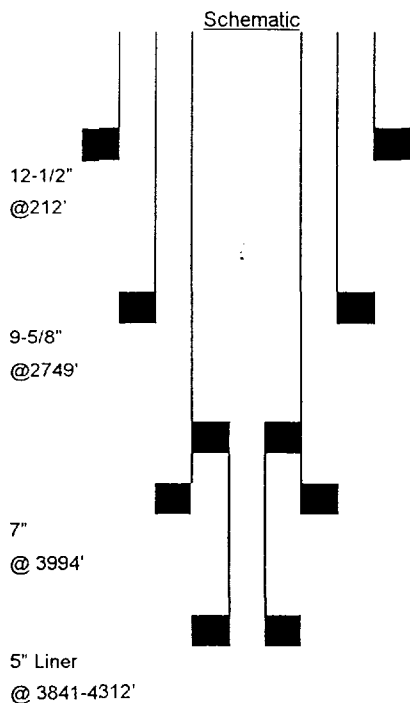
<u>Completion type</u>		<u>Perforated Casing</u>	
Tubing size	2-7/8"	lined with	Duoline (Fiberglass liner) set in a
Guiberson – Uni VI		packer at	4126' feet
(brand and model)			

Other Data

- Name of the injection formation San Andres
- Name of field or Pool Hobbs (Grayburg/San Andres)
- Is this a new well drilled for injection? Yes ☐ No ☒
If no, for what purpose was the well originally drilled? Producer
- 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) 4042-4096, squeezed w/ 200 sxs
- 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	Occidental Permian Limited Partnership	Lease	North Hobbs G/SA Unit	County	Lea
Well No.	Footage Location	Section	Township	Range	Unit Letter
30-121	2310 FNL & 327 FWL	30	18-S	38-E	E



<u>Surface Casing</u>		<u>Tubular Data</u>	
Size	12-1/2"	Cemented with	200 sxs.
TOC	Circ.	Determined by	Calc. w/ 50% eff.
Hole size	16"		
<u>Intermediate Casing</u>			
Size	9-5/8"	Cemented with	400 sxs.
TOC	1281	Determined by	Calc. w/ 50% eff.
Hole size	11-3/4"		
<u>Long string Casing</u>			
Size	7"	Cemented with	425 sxs.
TOC	2738'	Determined by	CBL
Hole size	8-3/4"		
<u>Liner</u>			
Size	5"	Cemented with	40 sxs.
TOC	3841	Determined by	CBL
Hole size	6-1/8"		
Total depth	4312'		

Injection interval
4148 feet to 4297 feet

Completion type Perforated Casing

Tubing size 2-7/8" lined with Duoline (Fiberglass liner) set in a
Guiberson - Uni VI packer at 4126' feet
 (brand and model)

Other Data

- Name of the injection formation San Andres
- Name of field or Pool Hobbs (Grayburg/San Andres)
- Is this a new well drilled for injection? ☐ Yes ☒ No
 If no, for what purpose was the well originally drilled? Producer
- 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) 4042-4096, squeezed w/ 200 sxs
- 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 A HALF MILE OF PROPOSED INJECTOR

FOR WELL 30121																
Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole	Depth	No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size		Sxs.	TOC
HD McKinley #9	30-025- 23221	30	-18S	-38E	G	8/69	TA	6961	5761	6965		13.375	17.5	378	400	CIRC**
Getty Texaco								CIBP				9.625	12.25	3851	1748	CIRC**
St #5	30-025- 07483	30	-18S	-38E	K	2/48	P	3246	3194	3244		7	8.75	6999	650	1933**
Marathon												8.625	11	300	125	CIRC**
												5.5	7	3160	1350	CIRC**
St #6	30-025- 07484	30	-18S	-38E	M	3/48	P	3210	3154	3200		8.625	11	295	125	CIRC**
Marathon												5.5	7	3197	900	CIRC**
St #8	30-025- 07486	30	-18S	-38E	L	4/48	P	3180	3223	3271		8.625	11	295	125	CIRC
Marathon									OH			5.5	7	3173	900	CIRC
Seed St 30 #1	30-025- 22994	30	-18S	-38E	K	2/69	P	45	10-45 OH			7	8.5	10	2	CIRC**
C.E. Seed																
Seed St 30 #2	30-025- 22995	30	-18S	-38E	K	2/69	P	45	10-45 OH			7	8.5	10	2	CIRC**
C.E. Seed																
Seed St 30 #3	30-025- 22996	30	-18S	-38E	K	2/69	P	45	10-45 OH			7	8.5	10	2	CIRC**
C.E. Seed																
Seed St 30 #4	30-025- 22997	30	-18S	-38E	K	2/69	P	45	10-45 OH			7	8.5	10	2	CIRC**
C.E. Seed																
Seed St 30 #5	30-025- 22998	30	-18S	-38E	K	2/69	P	45	10-45 OH			7	8.5	10	2	CIRC**
C.E. Seed																
Seed St 30 #6	30-025- 22319	30	-18S	-38E	K	2/69	P	45	10-45 OH			7	8.5	10	2	CIRC**
C.E. Seed																
Seed St 30 #7	30-025- 22320	30	-18S	-38E	K	2/69	P	45	10-45 OH			7	8.5	10	2	CIRC**
C.E. Seed																
Seed St 30 #8	30-025- 22321	30	-18S	-38E	K	2/69	P	45	10-45 OH			7	8.5	10	2	CIRC**
C.E. Seed																
Seed St 30 #9	30-025- 22322	30	-18S	-38E	K	2/69	P	45	10-45 OH			7	8.5	10	2	CIRC**
C.E. Seed																

** - Denotes calculated TOC with 50% efficiency.

OFFSET WELLS WITHIN A HALF MILE OF PROPOSED INJECTOR

FOR WELL 30121															
Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole	Depth	No. of
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size		Sxs.
25321	30-025- 05505	25 -18S	-37E	-37E	G	12/30	P	4113	3961	4239	NONE	12.5	16	222	200
Altura								PBTD				9	11.75	2750	600
												7	8.5	3937	200
												4.5	6.25	3809-4267	75
															3803
25331	30-025- 05500	25 -18S	-37E	-37E	J	2/58	SI	4108	3932	4052	NONE	8.625	11	365	200
Altura								PBTD				5.5	7.875	4110	1500
25411	30-025- 05503	25 -18S	-37E	-37E	A	4/30	P	4106	3959	4244	NONE	8.25	11.75	2750	600
Altura								(CIBP)				6.25	7.625	3969	200
												4.5 Lnr	5.75	3869-4257	50
															4188
25421	30-025- 05504	25 -18S	-38E	-38E	H	9/30	P	4139	4051	4059	4071	12.5	16	220	175
Altura								PBTD				9	11.75	2763	600
												7	8.5	3932	200
												5.5	7.875	3829-4195	125
															3829
25422	30-025- 26933	25 -18S	-37E	-37E	H	12/81	I	4378	4184	4294	4170-74	16	18	40	40
Altura												8.625	11	1600	850
												5.5	7.875	4510	1000
25431	30-025- 05492	25 -18S	-37E	-37E	I	10/30	I	4045	4010	4038	3977-4010	12.5	18	212	250
Altura								PBTD			4039-4059	9.625	12	2736	650
												7	8.75	3960	300
															1987**
25441	30-025- 05499	25 -18S	-37E	-37E	P	4/55	SI	4188	4024	4137	NONE	8.625	11	331	225
Altura												5.5	6.75	4175	1450
30111	30-025- 07077	30 -18S	-38E	-38E	D	6/30	SI	4245	4042	4070	4081-4092	12.5	16	231	250
Altura								PBTD				9.625	11.75	2755	450
												7	8.75	3851	200
															3141**
30112	30-025- 29063	30 -18S	-38E	-38E	D	3/85	TA	4000	4034	4264		13.375		40	

** - Denotes calculated TOC with 50% efficiency.

OFFSET WELLS WITHIN A HALF MILE OF PROPOSED INJECTOR

FOR WELL 30121																	
Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot	Sqz.	Csg.	Hole	Depth	Sxs.	No. of	
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size				
Altura								CIBP				9.625		1520	250		Circ
												7		4369	675		Circ
30113	30-025-29064	30 -18S	-38E	D	1/85		P	4310	4042	4285		13.375	17.5	55	??		Circ
Altura								CIBP				8.625		1495	620		Circ
												5.5	7.875	4370	990		Circ
30131	30-025-07481	30 -18S	-38E	L	10/30		P	4256	4082	4270	4006-70	9.625	11.75	2751	550		733
Altura								CIBP			4116-40	7	8.75	3900	350		1783
											4182-4200	5	6.25	4207	50		3770 CBL
30141	30-025-07487	30 -18S	-37E	M	10/55		TA	3956	4099	4114	4007-4074	10.75	13.75	354	200		CIRC
Altura								CIBP			4084-4090	5.5	8.75	4247	1400		CIRC
30221	30-025-07462	30 -18S	-38E	F	4/30		P	4279	4072	4208-79		9.625	11.75	2750	535		787
Altura										OH	4023-25	7	8.25	3852	250		1500 CBL
											4081-4104	4.5 Lnr	6.25	3799-4207	125		3799
											4120-28						
30222	30-025-26833	30 -18S	-38E	F	10/80		I	4290	4123	4302	3718	16	20	40	40		Surf
Altura								CIBP			4322-29	8.625	12.25	1570	950		Surf
												5.5	7.875	4349	800		2608 CBL
30231	30-025-07479	30 -18S	-38E	K	7/30		TA	4015	4119	4256	943-955	20	22	215	75		67
Altura											4166-4190	9.625	12.25	2750	400		1589
												7	8.75	3930	550		604
												5	6.25	4200	60		3193-CBL
30232	30-025-26935	30 -18S	-38E	K	12/80		I	4519	4138	4310	4170-78	16	18	40	40		CIRC
Altura											4186-94	8.625	11	1600	875		CIRC
												5.5	7.875	4555	1155		2614 CBL
30233	30-025-28942	30 -18S	-38E	K	2/85		P	4210	4148	4240		13.375		55			
Altura												8.625		1507	620		Circ
												5.5		4383	1070		Circ
												2.375		4060			
30321	30-025-07467	30 -18S	-38E	G	7/30		P	4257	4130	4196	4030-60	9.625	11.75	2755	600		553

** - Denotes calculated TOC with 50% efficiency.

OFFSET WELLS WITHIN A HALF MILE OF PROPOSED INJECTOR

FOR WELL 30121																
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											
Altura																
30331	30-025- 22125	30 -18S	-38E	J	9/30	P	4225	4014	4225	4068-4072	12.5	18	242	225		CIRC
Altura							PBTD			4074-4092	9.625	12	2750	650		CIRC
											7	8.75	3960	300		CIRC
											5.5	7.875	4238	30		3650
Bowers Fed. A #1	30-025- 22124	30 -18S	-38E	J	6/67	PA	42	10-38 OH				6.625	6.75	10	3	CIRC**
ARC Ind.																
HD McKinley #5	30-025- 07465	30 -18S	-38E	F	3/47	PA	3230	3197	3206			7.625	9.875	432	200	CIRC**
Amerada												5.5	6.75	3130	600	CIRC**
HD McKinley #6	30-025- 07466	30 -18S	-38E	C	3/47	PA	3229	3145	3229	NONE		7.625	9.875	416	200	CIRC
Amerada												5.5	6.75	3145	625	CIRC
McKinley #10	30-025- 22173	30 -18S	-38E	F	6/67	PA	37	10-37 OH				5.5	6.75	10	1YD	No data
Amerada																
HD McKinley #9	30-025- 22172	30 -18S	-38E	F	6/67	PA	37	10-37 OH				5.5	6.75	10	1 YD	No data
Amerada															REDIMIX	
NM State A #3	30-025- 05494	25 -18S	-37E	J	11/30	PA	4000	4150	4220	NONE		12.5	18	207	250	CIRC
Humble							CMT					9.625	12	2823	650	CIRC
												7	8.75	4100	350	2012**
NM State A #4	30-025- 05495	25 -18S	-37E	I	8/48	PA	3270	3162	3270	NONE		8.625	11	252	150	CIRC
Humble												5.5	7.875	3188	1325	CIRC
St #4	30-025- 07482	30 -18S	-38E	M	11/30	PA	4215	3758	3850			16	18	260	225	CIRC**
Marathon												9.625	12	2750	500	589**

** - Denotes calculated TOC with 50% efficiency.

OFFSET WELLS WITHIN A HALF MILE OF PROPOSED INJECTOR

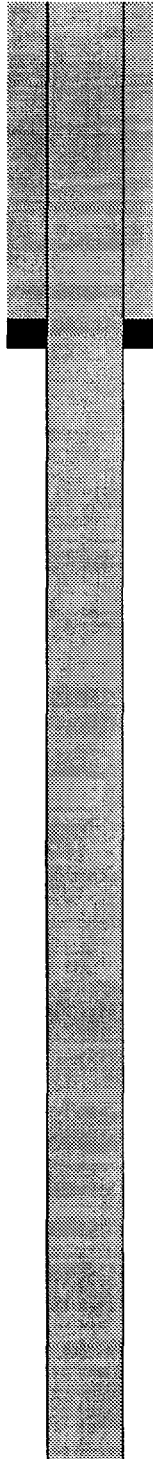
FOR WELL 30121													
Well Name	API No.	Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole
Operator					Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Depth
												7	8.75
													3946
													350
													1307**

** - Denotes calculated TOC with 50% efficiency.

**WELL SCHEMATIC:
ARC IND BOWERS A FED #1**

WELL PLUGGED:
8/19/98

6 5/8"
10'
3 SX
TOC: NA



Csg was pulled out of hole.
Well was filled to the surface
With approximately .75 yards
Of 5 sx Redi-Mix.

TD: 42'

WELL SCHEMATIC:
AMERADA H.D. MCKINLEY #5

7 5/8"
432'
200 SX
TOC: CIRC

Spotted 25 sx cmt plug from
250' to surface.

Displaced hole with 75 bbls
Of 9 1/2 # mud.

5 1/2"
3130'
600 SX
TOC: 2992'

Spotted 25 sx cmt plug from
1850' to 1600'.

TD: 3230'

Spotted 25 sx cmt plug from
3050' to 2800'.

Set CIBP at 3050'.

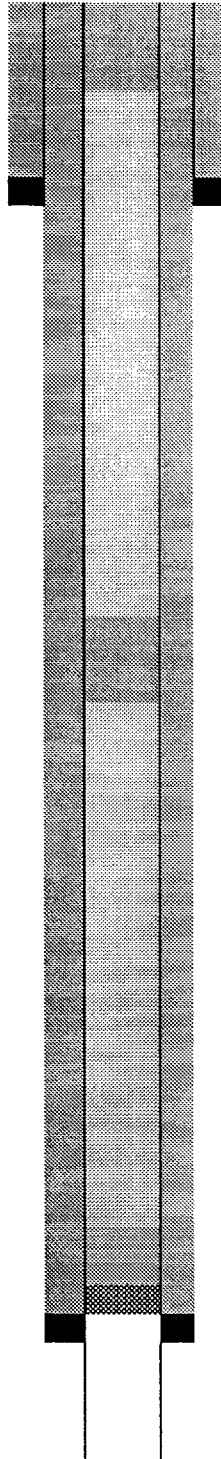
**WELL SCHEMATIC:
AMERADA H.D. MCKINLEY # 6**

WELL PLUGGED:
5/17/93

7 5/8"
416'
200 SX
TOC: CIRC

5 1/2"
3145'
625 SX
TOC: 20' TS

TD: 3229'



Spotted 25 sx cmt plug from
250' to surface.

Displaced hole with 70 bbls
Of 9 1/2 # mud.

Spotted 25 sx cmt plug from
1850' to 1600'.

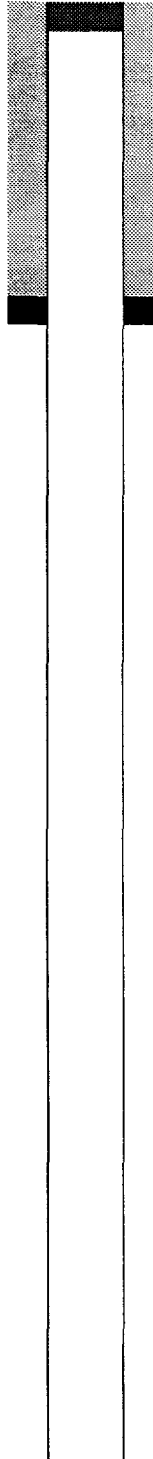
Spotted 25 sx cmt plug from
3100' to 2850'.
Set CIBP at 3100'.

**WELL SCHEMATIC:
AMERADA MCKINLEY #10**

WELL PLUGGED:
8/14/82

5 1/2"
10'
1 yd. Redi-Mix

The pump was pulled from
The well and steel plates
Were welded on top of the
Well.



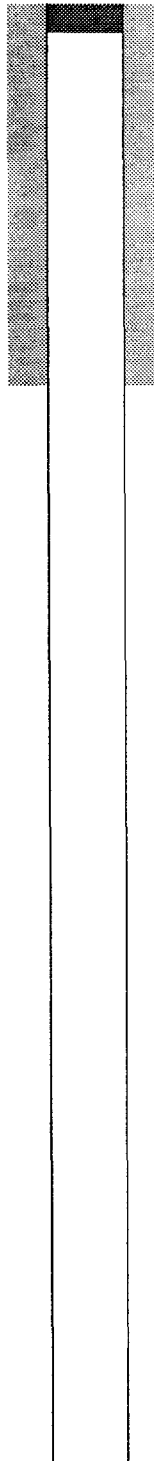
TD: 37'

**WELL SCHEMATIC:
AMERADA MCKINLEY #9**

WELL PLUGGED:
8/14/82

5 1/2"
10'
1 YD REDI-MIX
TOC: NA

The pump was pulled from
Well and steel plates were
Welded on top of well.

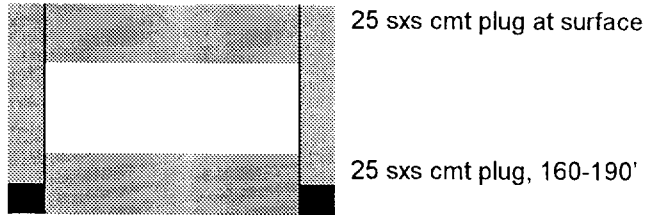


TD: 37'

State "A" #3
Humble Oil
Unit J, 1980 FSL & 1980 FEL
Sec 25, T-18-S, R-37-E

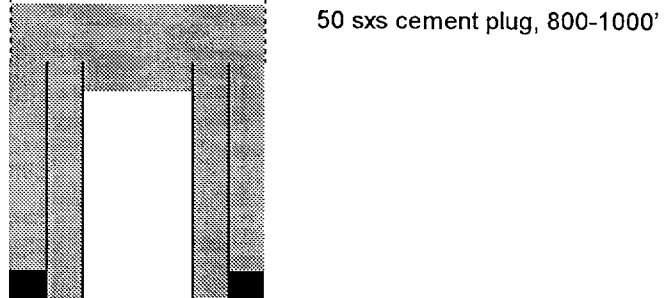
P&A'd: 3/18/47
DATUM:

Size: 12-1/2"
Weight: 50#
Depth: 207'
Hole Size:
Cmt: 250 sxs
TOC:



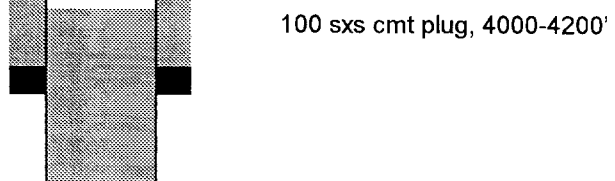
Pulled 1000' feet of 9-5/8" csg.

Size: 9-5/8"
Weight: 36#
Depth: 2823'
Hole Size:
Cmt: 650 sxs
TOC:



Pulled 1000' of 7" casing

Size: 7"
Weight: 26#
Depth: 4100'
Hole Size:
Cmt: 350 sxs
TOC:



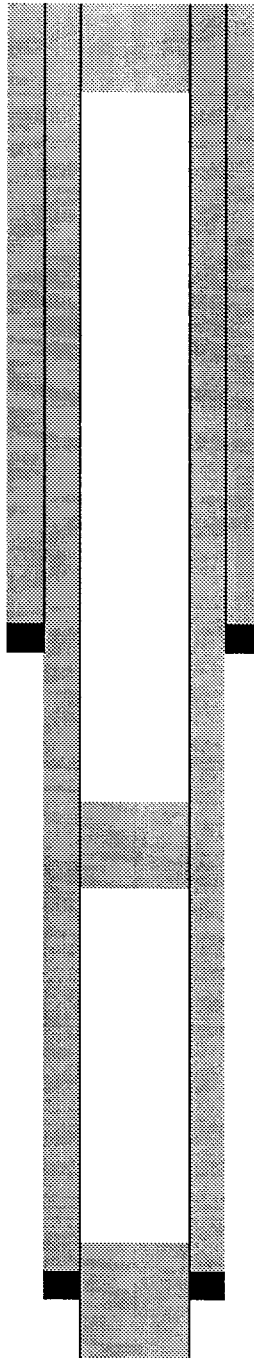
TD: 4220'

State A #4
Humble Oil
Unit I, 330 FEL & 1870 FWL
Sec 25, T-18-S, R-37-E

P&A'd: 8/22/48
DATUM:

Size: 8-5/8"
Weight: 28.5#
Depth: 262'
Hole Size: 9-7/8"
Cmt: 300 sxs
TOC:

Size: 5-1/2"
Weight: 14#
Depth: 3188'
Hole Size: 7-3/4"
Cmt: 1000 sxs
TOC: Circ.



25 sxs cement plug, 0-100'

40 sxs cement plug, 1500-1800'

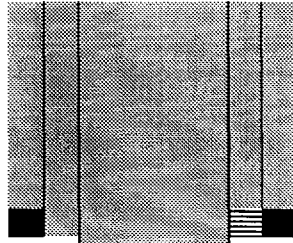
15 sxs cmt plug

TD: 3270'

**WELL SCHEMATIC:
MARATHON STATE #4**

WELL PLUGGED:
3/14/57

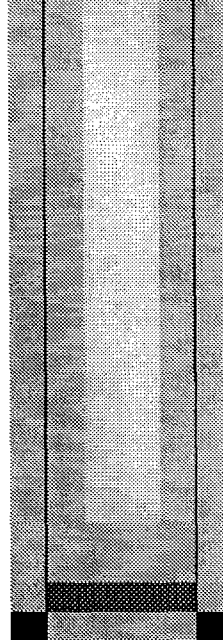
16"
260'
225 SX
TOC: SURF (C)



Perfd 9 5/8" csg at 255'. Circ
300 sx cmt to surf 9 5/8" x
16" csg annulus leaving 255'
Cmt plug in top of 9 5/8" csg
And 16" surf pipe.

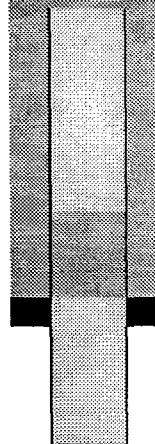
Hole loaded with gel based
Mud.

9 5/8"
2750'
500 SX
TOC: NA



Spotted 125' cmt plug from
2703' to 2578'.
Set cast iron cmt ret in 9 5/8"
Csg at 2703' and sqzd 50 sx
Cmt below cmt ret.

7"
3946'
350 SX
TOC: NA



Cut 7" csg at 3060' and
Pulled same.

TD: 4215'

Spotted 312' cmt plug from
3602' to 3914'.

LIST OF OFFSET OPERATORS & SURFACE OWNERS

North Hobbs (Grayburg/San Andres) Unit
Well No. 121
Lot 2, Section 30, T-18-S, R-38-E
Lea County, New Mexico

Offset Operators

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

Marathon Oil Company
P.O. Box 552
Midland, TX 79702-0552

Charles E. Seed
Houston Ranch
Lovington Hwy.
Hobbs, NM 88240

Texaco E&P Inc.
P.O. Box 3900
Midland, TX 79702

Surface Owners

James K. & Donna Fay Henson
2020 Matts Dr.
Hobbs, NM 88240

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. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Marathon Oil Company P.O. Box 552 Midland, TX 79702-0552		4a. Article Number P 436 313 779	
		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	
5. Received By: (Print Name)		7. Date of Delivery	
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	

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. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Charles E. Seed Houston Ranch Lovington Hwy. Hobbs, NM 88240		4a. Article Number P 436 313 780	
		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	
5. Received By: (Print Name)		7. Date of Delivery	
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	

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		3. Article Addressed to: <div style="text-align: center;"> Texaco E&P Inc. P.O. Box 3900 Midland, TX 79702 </div>	
4a. Article Number <div style="text-align: center;">P 436 313 781</div>		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	
5. Received By: (Print Name)		7. Date of Delivery	
6. Signature: (Addressee or Agent) <div style="text-align: center;">X</div>		8. Addressee's Address (Only if requested and fee is paid)	
PS Form 3811, December 1994		102595-97-B-0179 Domestic Return Receipt	

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		3. Article Addressed to: <div style="text-align: center;"> James K. & Donna Fay Henson 2020 Matts Dr. Hobbs, NM 88240 </div>	
4a. Article Number <div style="text-align: center;">P 436 313 782</div>		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	
5. Received By: (Print Name)		7. Date of Delivery	
6. Signature: (Addressee or Agent) <div style="text-align: center;">X</div>		8. Addressee's Address (Only if requested and fee is paid)	
PS Form 3811, December 1994		102595-97-B-0179 Domestic Return Receipt	

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

February 25 2000
and ending with the issue dated

February 25 2000



Publisher

Sworn and subscribed to before

me this 25th day of

February 2000



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

February 25, 2000

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 Depart-
ment, for approval of the fol-
lowing injection well for the
purpose of secondary recov-
ery:

Pool Name: Hobbs;
Grayburg-San Andres
Lease/Unit Name:
North Hobbs G/SA Unit
Well No. 121

Loc.: 2310' FNL & 330' FWL,
Unit Letter E Sec. 30, T, 18-S,
R-38-E, Lea Co., NM

The injection formation is the
Hobbs; Grayburg - San An-
dres Pool between the inter-
vals of +/- 3700' and +/- 5300'
below the surface of the
ground. Expected maximum
injection rate is 4000 BWPD
and the expected maximum
injection pressure is approxi-
mately 805 psi. Interest par-
ties must file objections or re-
quests for hearing with the Oil
Conservation Division, 2040
S. Pacheco, Santa Fe, NM
87505 within fifteen (15) days.
#17208

02101173000

02535469

Altura

P. O. Box 4294

Houston, TX 77210-4294