PMX 12/7/99

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Altura
ENERGY LTD.

November 16, 1999

NOV 2 2 1999

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

RE: Expansion of Pressure Maintenance Project
North Hobbs (Grayburg/San Andres) Unit
Hobbs; Grayburg -- San Andres Pool
Well No. 313
Letter B, Section 30, T-18-S, R-38-E
Lea County, NM

Gentlemen:

Altura Energy LTD respectfully requests administrative approval for expansion of the subject pressure maintenance project by converting North Hobbs (G/SA) Unit Well No. 313 from production to water injection. Administrative Order No. R-6199 granted November 30, 1979, authorized Shell Western E&P Inc. (Altura'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. 313). 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
- Schematics of plugged wells that are within the well's Area of Review

W:\MES CTI\29-141.doc

P.O. BOX 4294 • HOUSTON, TX 77210-4294
PHONE 281-552-1000 • FAX 281-552-1200

Altura
ENERGY LTD.

- 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
P.O. Box 1980
Hobbs, NM 88241

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)

W:\MES CTN\29-141.doc

Attachment To Form C-108
Miscellaneous Data

North Hobbs (Grayburg/San Andres) Unit
Well No. 313
Letter B, 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
(Champion Technologies, Inc. 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. Altura Energy LTD 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.

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: Altura Energy LTD

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: 11/16/99

* 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.

Champion Technologies, Inc.
P.O. BOX 2187
HOBBS, NEW MEXICO 88240

Saturation Index Calculations

Champion Technologies, Inc.
(Based on the Tomson-Oddo Model)

Telephone (505) 393-7726

Site Information

Company	Altura
Field	North Hobbs Unit
Point	IPD
Date	4/15/98

Water Analysis (mg/L)

Calcium	1,122
Magnesium	194
Barium	0
Strontium	0
Sodium*	3730
Bicarbonate Alkalinity	1,769
Sulfate	1,726
Chloride	6,000

Appended Data

Dissolved CO2	228 mg/L.
Dissolved O2	N/A PPB
H2S	596 mg/L.
Iron	0.0 mg/L.
Specific Gravity	1.010 value
TDS	14551 mg/L.
Total Hardness	3600 mg/L.
Well head pH	N/A value

* - Calculated Value

Physical Properties

Ionic Strength*	0.29
pH†	6.52
Temperature	86°F
Pressure	100 psia

* - Calculated Value † - Known/Specified Value

Calcite Calculation Information

Calculation Method	*Value*
pH	6.52
Bicarbonate Alkalinity Correction(s)	*Value*
None Used	---

SI & PTB Results

Scale Type	*SI*	*PTB*
Calcite (Calcium Carbonate)	0.48	310.4
Gypsum (Calcium Sulfate)	-0.45	N/A
Hemihydrate (Calcium Sulfate)	-0.32	N/A
Anhydrite (Calcium Sulfate)	-0.72	N/A
Barite (Barium Sulfate)	N/A	N/A
Celestite (Strontium Sulfate)	N/A	N/A

Champion Technologies, Inc.
P.O. BOX 2187
HOBBS, NEW MEXICO 88240

Ranged Data

Champion Technologies, Inc.

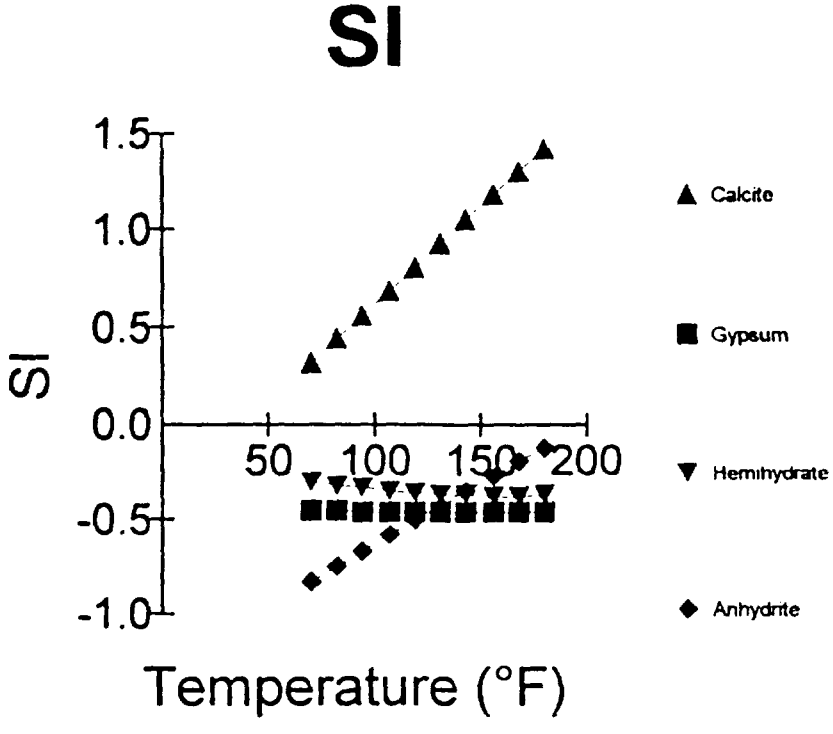
Telephone (505) 393-7726

Site Information

Company	Altura
Field	North Hobbs Unit
Point	IPD
Date	4/15/98

SI Results

Temperature (°F)	*Calcite*	*Gypsum*	*Hemihydrate*	*Anhydrite*
70	0.32	-0.45	-0.30	-0.83
82	0.44	-0.45	-0.32	-0.75
94	0.56	-0.46	-0.33	-0.67
107	0.69	-0.46	-0.35	-0.58
119	0.81	-0.46	-0.36	-0.50
131	0.93	-0.46	-0.37	-0.43
143	1.05	-0.46	-0.37	-0.35
156	1.18	-0.46	-0.38	-0.27
168	1.30	-0.46	-0.38	-0.19
180	1.42	-0.46	-0.37	-0.12



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

Water Analysis

COMPANY Altura Energy Ltd,

SAMPLE 18S-38E-Sec 30 NW1/4, NE1/4,SW1/4,SE1/4,SW1/4
SAMPLED BY David Nelson

DATE TAKEN 10/12/99
REMARKS

Barium as Ba	0	
Carbonate alkalinity PPM	0	
Bicarbonate alkalinity PPM	212	
pH at Lab	7.46	
Specific Gravity @ 60°F	1.001	
Magnesium as Mg	172	
Total Hardness as CaCO3	296	
Chlorides as Cl	85	
Sulfate as SO4	135	
Iron as Fe	0.01	
Potassium	0.1	
Hydrogen Sulfide	0	
Rw	7	23 C
Total Dissolved Solids	922	
Calcium as Ca	124	
Nitrate	7.9	

Results reported as Parts per Million unless stated

Langelier Saturation Index - 0.04

Analysis by: Rolland Perry
Date: 10/19/99

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

Water Analysis

COMPANY Altura Energy Ltd,

SAMPLE 18S-38E-Sec30 NE1/4,SW1/4,SW1/4
SAMPLED BY David Nelson

DATE TAKEN 10/12/99
REMARKS

Barium as Ba	0	
Carbonate alkalinity PPM	0	
Bicarbonate alkalinity PPM	204	
pH at Lab	7.52	
Specific Gravity @ 60°F	1.001	
Magnesium as Mg	125	
Total Hardness as CaCO3	216	
Chlorides as Cl	64	
Sulfate as SO4	55	
Iron as Fe	0.01	
Potassium	0.1	
Hydrogen Sulfide	0	
Rw	9	23 C
Total Dissolved Solids	595	
Calcium as Ca	91	
Nitrate	1.2	

Results reported as Parts per Million unless stated

Langelier Saturation Index - 0.18

Analysis by: Rolland Perry
Date: 10/19/99

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-23270	31920	HOBBS; GRAYBURG - SAN ANDRES

Property Code	Property Name	Well Number
19520	NORTH HOBBS G/SA UNIT	313

OGRID No.	Operator Name	Elevation
157984	ALTURA ENERGY LTD.	3654

Surface Location

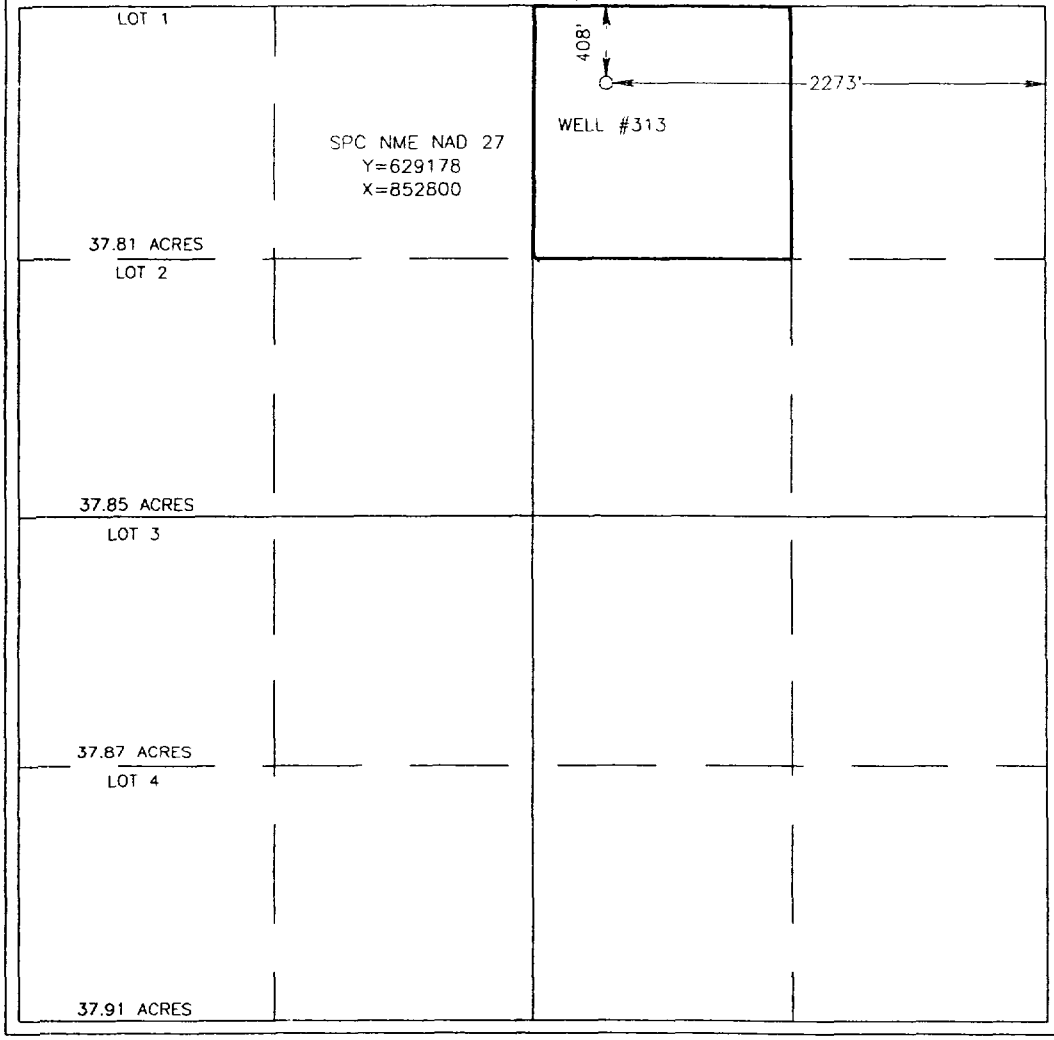
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	30	18 S	38 E		408	NORTH	2273	EAST	LEA

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

November 16, 1999
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.

JULY 20, 1999
Date Surveyed

DMCC

Signature & Seal of Professional Surveyor

RONALD J. EIDSON NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR

12-27-99

99-11-059

Certificate No. RONALD J. EIDSON 3239
GARY L. JONES 12641
GARY L. MCDONALD 12185

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
30-025-23270	31920	HOBBS; GRAYBURG - SAN ANDRES

Property Code	Property Name	Well Number
19520	NORTH HOBBS G/SA UNIT	313

OGRID No.	Operator Name	Elevation
157984	ALTURA ENERGY LTD.	3654

Surface Location

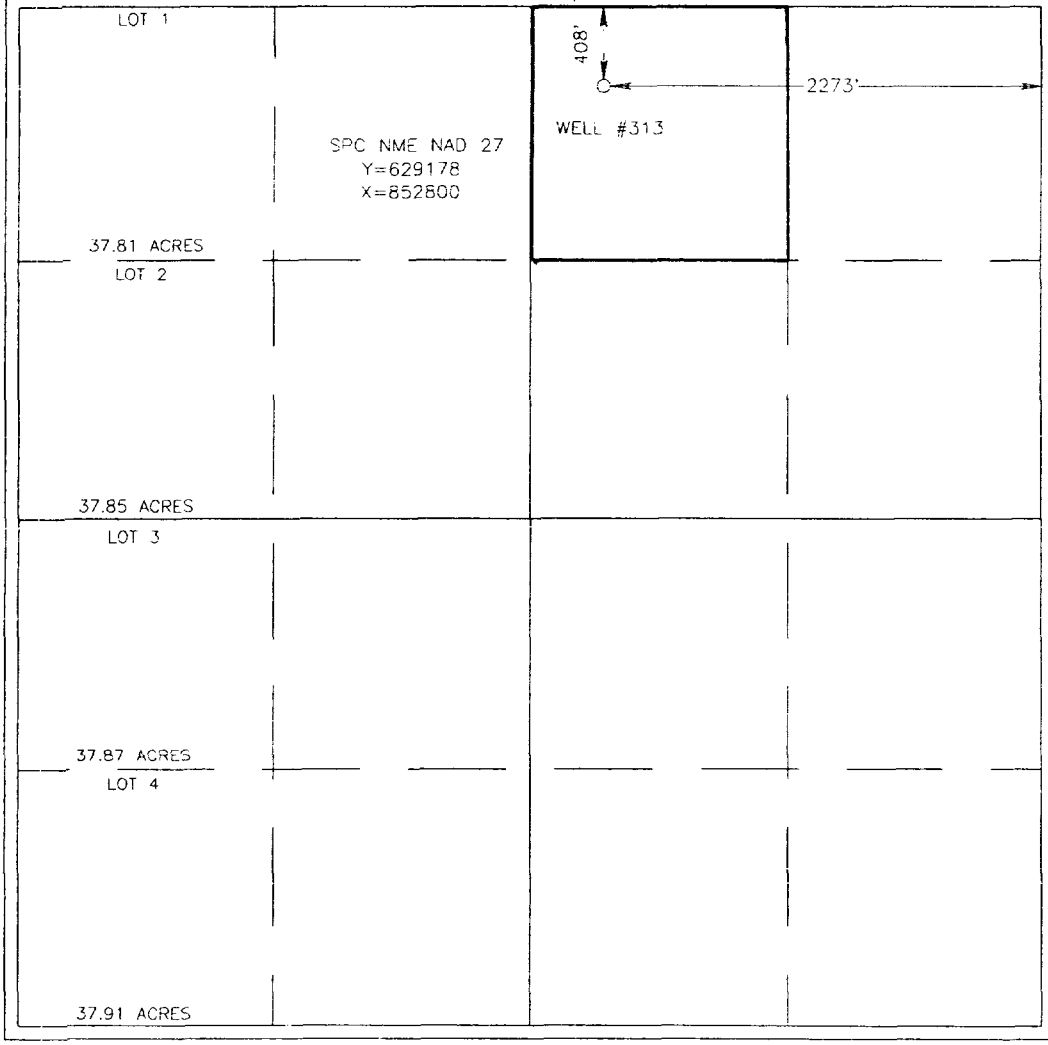
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	30	18 S	38 E		408	NORTH	2273	EAST	LEA

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

November 16, 1999
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.

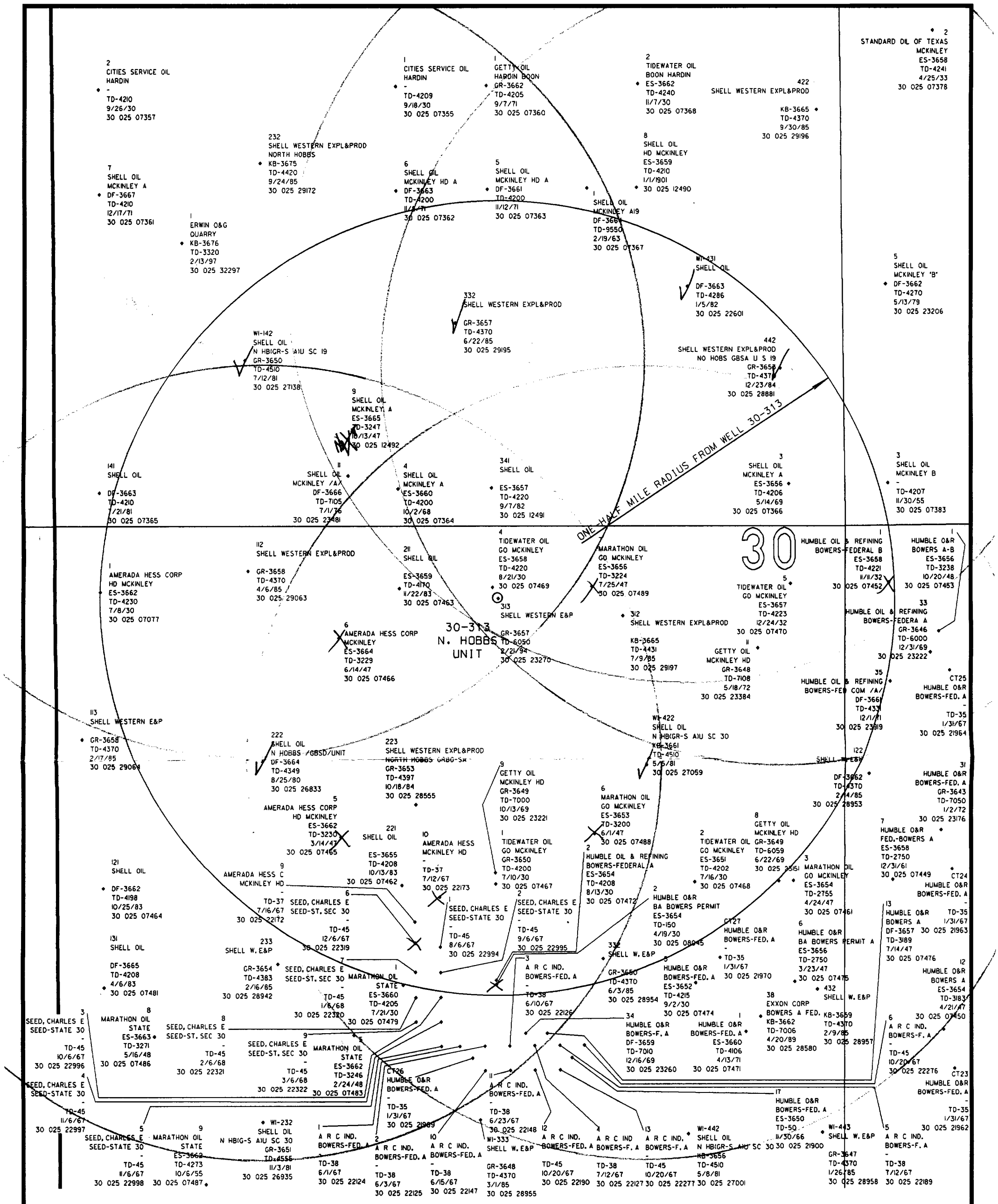
JULY 20, 1999
Date Surveyed DMCC

Signature & Seal of Professional Surveyor

RONALD J. EIDSON
NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR

12-27-99
99-11-0594

Certificate No. RONALD J. EIDSON 3239
GARY L. JONES 12641
GARY L. MCDONALD 12185



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

N

Altura Energy Ltd.

Area of Review Plat

NORTH HOBBS (GRAYBURG SAN ANDRES) UNIT

WELL NO. 30-313

T-18-S, R-38-E

Lea County, New Mexico

Scale: 1"= 600' 07-03-99 nm438a00.dgn - 11
Plat prepared by PJE Drafting, Inc.
For Horizon Survey, Inc.

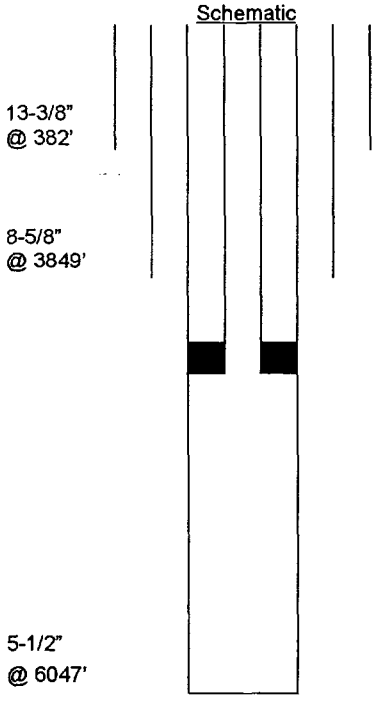
LARGE FORMAT EXHIBIT HAS BEEN REMOVED AND IS LOCATED IN THE NEXT FILE

INJECTION WELL DATA SHEET

Operator	Lease	County
Altura Energy LTD.	North Hobbs G/SA Unit	Lea

Well No.	Footage Location	Section	Township	Range	Unit Letter
30-313	405 FNL & 2272 FEL	30	18-S	38-E	B

Schematic



Tubular Data

Surface Casing
Size 13-3/8 Cemented with 400 sxs.
TOC Surf Determined by Circ.
Hole size

Intermediate Casing
Size 8-5/8 Cemented with 1256 sxs.
TOC 600 Determined by T.S.
Hole size

Long string Casing
Size 5-1/2" Cemented with 570 sxs.
TOC 1500' Determined by T.S.
Hole size

Total depth 6047

Injection interval
4000 feet to 4350 feet

Completion type Perforations

Tubing size 2-7/8" lined with Fiberglass Epoxy set in a

Giberson Uni VI packer at ±3950 feet
(brand and model)

Other Data

1. Name of the injection formation: San Andres

2. Name of field or Pool: Hobbs (Grayburg/San Andres) Pool

3. Is this a new well drilled for injection? Yes [No]
If no, for what purpose was the will originally drilled? San Andres 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)
Blinebry (5851-5951'), capped with CIBP and Cmt at 5750 & 5835

5. Give the depth to and name of any overlying and/or underlying oil and gas zones (pools) in this area.
Grayburg – 3700, Glorieta - 5300

Active wells within 1/2 mile radius of proposed 30-313 conversion

Well Name	Oper	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
19142	Altura	30-025-	27138	19	-18S	-38E	N	07/12/1981	Inj	4437	4170	4270		16		40	40	SURF
														8.625	12.25	1600	875	CIRC
														5.5	7.875	4510	900	3450 CBL
19241	Altura	30-025-	07364	19	-18S	-38E	N	9/ /30	Prod	4244	4128	4232		9.625	12.25	2750	600	
														7	8.75	3975	225	3230 CBL
														5.5 Lnr	6.75	3936-4246	100	3936
19242	Altura	30-025-	23481	19	-18S	-38E	N	05/26/1970	Prod	4186	4114	4179	4192-97	13.375	17.5	360	360	CIRC
													4240-76	9.625	12.25	3794	500	2530
														5.5 Lnr	8.75	3557-7103	950	3630 CBL
19332	Altura	30-025-	29195	19	-18S	-38E	J	06/18/1985	Inj	4316	4184	4232	4064-65	13.375	17.5	40	??	CIRC
													4101-05	9.625	12.25	1510	625	CIRC
														7	8.75	4368	955	CIRC
19341	Altura	30-025-	12491	19	-18S	-38E	O	09/06/1930	Prod	4005	4140	4272		9.625	12.25	2750	600	
										(CIBP)				7	8.75	3975	225	3299 CBL
														5.5 Lnr	6.75	3937-4245	100	3937
19431	Altura	30-025-	22601	19	-18S	-38E	I	7//68	Inj	4281	4197	4266	4151-53	7.875	9.875	277	200	CIRC
													4176-85	4.5	6.25	4285	435	2537 CBL
19441	Altura	30-025-	07366	19	-18S	-38E	P	12//32	Prod	4030	4185	4236		9	12	2775	600	CIRC
										(CIBP)				6.625	8	3982	200	3090 CBL
														5 Lnr	6.25	3949-4241	100	3949
19442	Altura	30-025-	28881	19	-18S	-38E	P	11//84	Inj	4292	4156	4283		13.375	18	50		
														8.625	11	1525	620	Circ
														5.5	7	4369	1320	Circ
30111	Altura	30-025-	07077	30	-18S	-38E	D	7//30	Prod	4200	4042	4227	4081-92	9.625		2755	450	1700
													4120-28	7		3851	200	2836 CBL
													4138-68	4.5 Lnr		3784-4229	220	3784

Note: Calculated TOC's are estimated with 50% efficiency

Active wells within 1/2 mile radius of proposed 30-313 conversion

Well Name	Oper	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
30112	Altura	30-025-	29063	30	-18S	-38E	D	3//85	Prod	4000	4034	4264		13.375		40		
										CIBP				9.625		1520	250	Circ
														7		4369	675	Circ
30211	Altura	30-025-	07463	30	-18S	-38E	C	8//30	Prod	4254	4149	4250	4078	9.625		2647	400	
													4086	6.625		3972	250	3130 CBL
													4100	5 Lnr		3867-4310	100	Circ.
30221	Altura	30-025-	07462	30	-18S	-38E	F	4//30	Prod	4279	4072	4208-79		9.625	11.75	2750	535	787
												OH	4023-25	7	8.25	3852	250	1500 CBL
													4081-4104	4.5 Lnr	6.25	3799-4207	125	3799
													4120-28					
30222	Altura	30-025-	26833	30	-18S	-38E	F	10//80	Inj	4290	4123	4302	3718	16	20	40	40	Surf
										CIBP			4322-29	8.625	12.25	1570	950	Surf
														5.5	7.875	4349	800	2608 CBL
30223	Altura	30-025-	28555	30	-18S	-38E	F	7//84	Prod	4321	4139	4280		16		30		
														8.625		1455	650	Circ
														5.5		4394	250	2496 CBL
30311	Altura	30-025-	07469	30	-18S	-38E	B	8//30	Prod	3950	3998-4121			12.5	16	245	200	Circ
										CIBP	(OH)			9.625	11.75	2753	600	551
														7	8.75	3998	250	3154 CBL
30312	Altura	30-025-	29197	30	-18S	-38E	B	5//85	Prod	4380	4215	4333		13.375		40		
														9.625		1500	650	CIRC
														7		4431	700	CIRC
30321	Altura	30-025-	07467	30	-18S	-38E	G	7//30	Prod	4257	4130	4196	4030-60	9.625	11.75	2755	600	553
														7	8.75	3854	250	2342
														5	7	4200	405	Circ/CBL

Note: Calculated TOC's are estimated with 50% efficiency

Active wells within 1/2 mile radius of proposed 30-313 conversion

Well Name	Oper	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
30331	Altura	30-025-	07472	30	-18S	-38E	J	9//30	Prod	4225	4014	4225	4068-72	9.625	12	2750	650	1000
													4074-92	7	8.75	3960	300	Circ
														5.5	6.125	4238	30	3650 CBL
30332	Altura	30-025-	28954	30	-18S	-38E	J	5//85	Prod	4323	4103	4288		13.375		40		
														9.625		1503	650	Circ
														7		4371	800	Circ
30411	Altura	30-025-	07470	30	-18S	-38E	A	12//32	Prod	4000	4177	4287	4056-4124	9.625	11.75	2756	600	554
														6.625	8.25	4042	250	3210 CBL
														4.5 Lnr	5.75	3883-4300	75	3883
30412	Altura	30-025-	23384	30	-18S	-38E	A	1//70	Prod	4300	4009	4261	4142-4225	13.375	17.5	329	400	Circ
														9.625	12.25	3848	1200	75
														7	8.75	7106	865	Circ
30421	Altura	30-025-	07468	30	-18S	-38E	H	7//30	Prod	4258	4114	4202-58		9.625	11.75	2756	600	554
												OH		7	8.75	3858	250	Circ
														5	6.25	4202	450	Surf/CBL
30422	Altura	30-025-	27059	30	-18S	-38E	H	5//81	Inj	4477	4110	4265	4108-23	16	20	40	40	Surf
														8.625	12.25	1524	850	Circ
														5.5	7.875	4510	1000	2500 CBL

Note: Calculated TOC's are estimated with 50% efficiency

Active Outside Operated wells within 1/2 mile radius of proposed 30-313 conversion

Well Name	API No.		Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole		No. of	
Oper						Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
HD McKinley #9	30-025-	23221	30	-18S	-38E	G	8//69	Prod	6961	5761	6965		13.375	17.5	378	400	Circ.
Getty									CIBP				9.625	12.25	3851	1748	Circ.
													7	8.75	6999	650	2700 TS
Seed St 30 #1	30-025-	22994	30	-18S	-38E	K	2//69	Prod	45	10	45		7	8.5	10	2	No data
C.E. Seed										OH							
Seed St 30 #2	30-025-	22995	30	-18S	-38E	K	2//69	Prod	45	10	45		7	8.5	10	2	No data
C.E. Seed										OH							
Seed St 30 #6	30-025-	22319	30	-18S	-38E	K	2//69	Prod	45	10	45		7	8.5	10	2	No data
C.E. Seed										OH							
Seed St 30 #7	30-025-	22320	30	-18S	-38E	K	2//69	Prod	45	10	45		7	8.5	10	2	No data
C.E. Seed										OH							

Note: 'c' in TOC column denotes calculated cmt top w/ 50% efficiency.

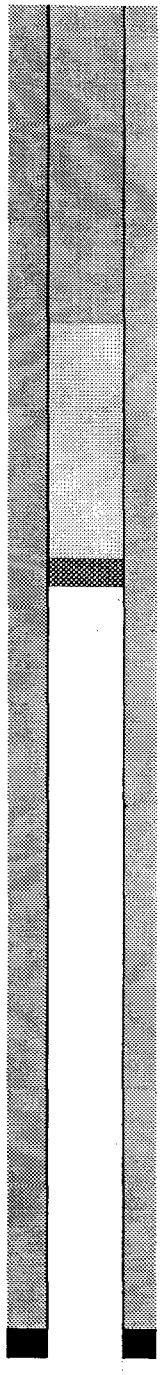
Plugged wells within 1/2 mile radius of proposed 30-313 conversion

Well Name	API No.		Sec.	T	R	Un	Drill	Well	TD or	Top	Bot.	Sqz.	Csg.	Hole		No. of	
Oper						Ltr	Date	Type	PBTD	Perf	Perf	Perfs	Size	Size	Depth	Sxs.	TOC
B.A. Bowers #2	30-025-	08045	30	-18S	-38E	J	5//30	PA	242	No data	No data		12.5		242	225	Surf 'c'
Exxon																	
Bowers Fed. B #1	30-025-	07452	29	-18S	-38E	D	9//32	PA	4239	4181	4239		15.5		235	225	No data
Exxon										OH			9.625	12.25	2716	650	Surf 'c'
													7	8.75	3987	300	2027 'c'
H.D. Mckinley #6	30-025-	07488	30	-18S	-38E	G	6//47	PA	3200	3178	3200		8.625	11	1474	400	Circ.
Getty										OH			5.5	6.875	3178	200	498 'c'
H.D. Mckinley #7	30-025-	07489	30	-18S	-38E	B	7//47	PA	3224	3192	3224		8.625	11	1504	400	Surf 'c'
Getty										OH			5.5	7	3192	200	918 'c'
HD McKinley #5	30-025-	07465	30	-18S	-38E	F	3//47	PA	3230	3197	3206		7.625	9.875	432	200	Circ.
Amerada										OH			5.5	6.75	3130	600	2992
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																	
McKinley #6	30-025-	07466	30	-18S	-38E	C	3//47	PA	3229	3145	3229		7.625	9.875	416	200	Circ.
Amerada										OH			5.5	6.75	3145	625	20 TS
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																	
McKinley A #9	30-025-	12492	19	-18S	-38E	N	8//47	PA	3247	3179	3247		8.625	11	419	200	Circ.
Shell										OH			4.5	7.875	3179	850	1530 TS

Note: 'c' in TOC column denotes calculated cmt top w/ 50% efficiency.

WELL SCHEMATIC:
EXXON BOWERS #2

WELL PLUGGED:
5/12/30



Hole cemented with 40 sxs
From 66' to surface.

Hole mudded from 106'
To 66'.

PBTD: 106'

Plugged back at 106' with ?

12.5"
25 sxs
TOC: SURF(C)

TD: 242'

WELL SCHEMATIC:
EXXON BOWERS B FED #1

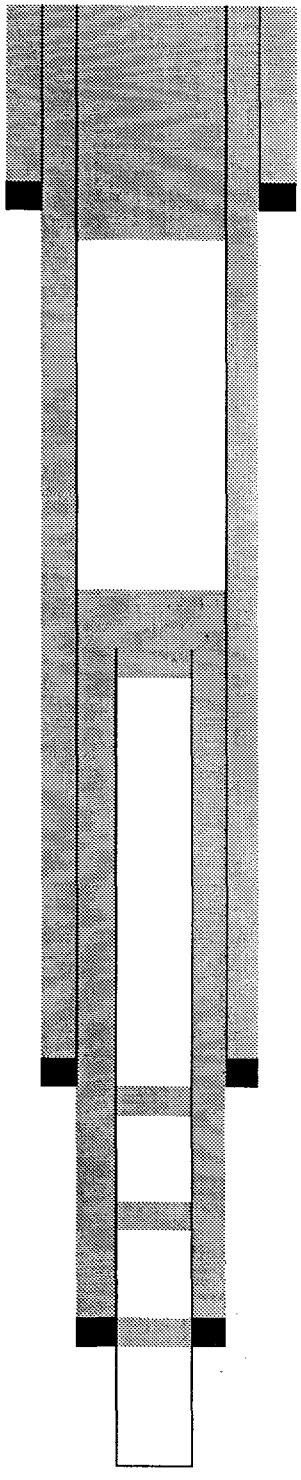
WELL PLUGGED:
12/21/71

15 ½"
235'
225 SX
TOC: NA

9 5/8"
2716'
650 SX
TOC: SURF (C)

7"
3987'
300 SX
TOC: 2027 (C)

TD: 4239



Set 120 sx cmt plug at 250'
And circulate.

Cut off 7" csg. at 1500' and
Pull out of hole. Pump 60 sx
Cmt plug at 1500'.

Set plug at 2800'.

Spotted 25 sx cmt plug at
3355'.

Spotted 28 sx cmt plug at
3970'.

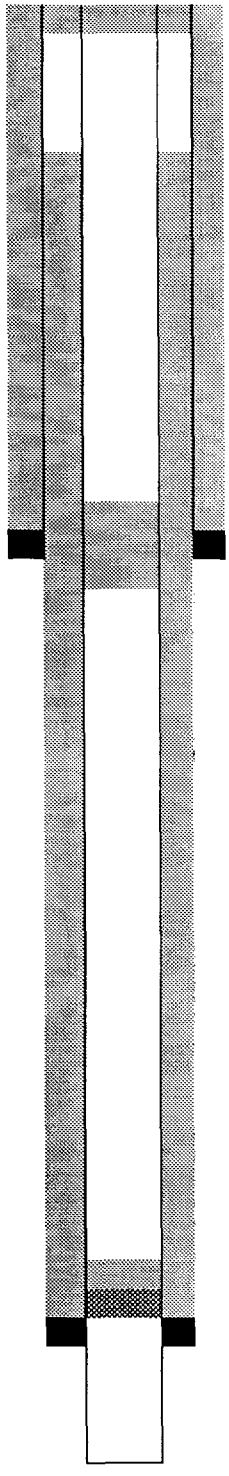
WELL SCHEMATIC:
GETTY HD MCKINLEY #6

WELL PLUGGED:
8/26/75

8 5/8"
1474'
400 SX
TOC: CIRC

5 ½"
3178'
200 SX
TOC: 498 (C)

TD:3200'



Laid 10 sx cmt plug in top.

Laid 20 sx cmt plug from 1542' to 1374'.

Set CIBP at 3100'. Dumped 5 sx cmt on top of CIBP.

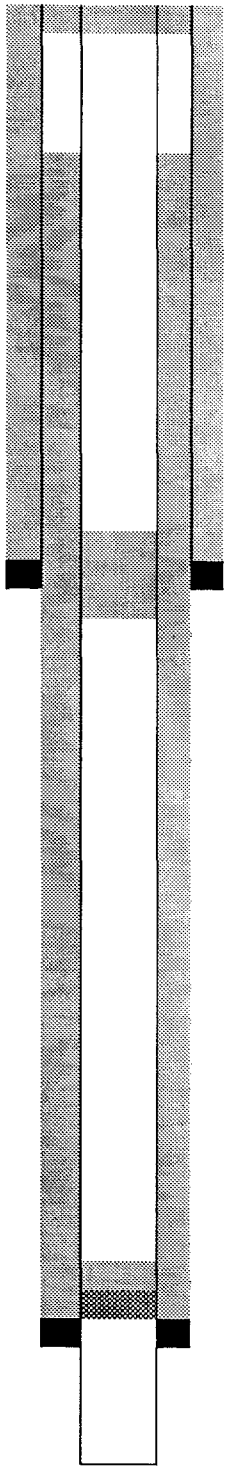
WELL SCHEMATIC:
GETTY HD MCKINLEY #7

WELL PLUGGED:
10/14/75

8 5/8"
1504'
400 SX
TOC: SURF (C)

5 ½"
3192'
200 SX
TOC: 918 (C)

TD:3224'



Laid 10 sx cmt plug in top.

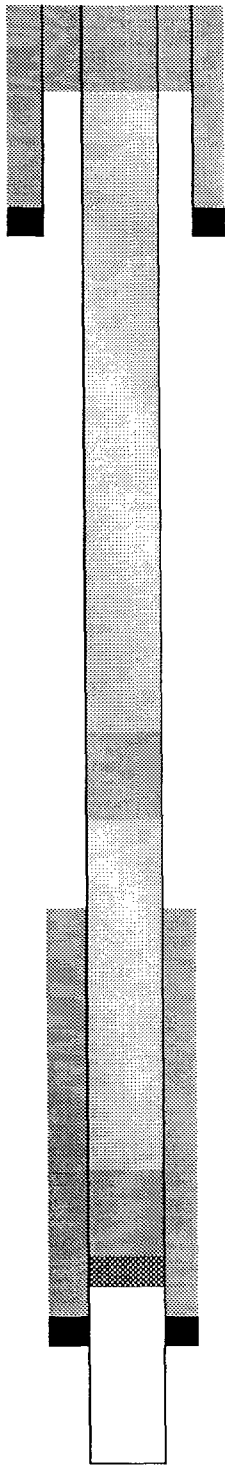
Laid 24 sx cmt plug from 1514' to 1346'.

Laid 5 sx cmt plug on top of CIBP.(38' plug)
Set CIBP at 3100'.

WELL SCHEMATIC:
AMERADA H.D. MCKINLEY #5

WELL PLUGGED:
5/19/93

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 ½"
3130'
600 SX
TOC: 2992'

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

TD: 3230'

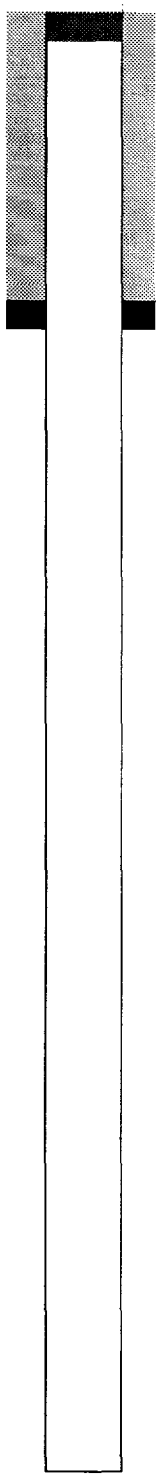
Spotted 25 sx cmt plug from 3050' to 2800'.

Set CIBP at 3050'.

WELL SCHEMATIC:
AMERADA MCKINLEY #10

WELL PLUGGED:
8/14/82

5 ½"
10'
1 yd. Redi-Mix



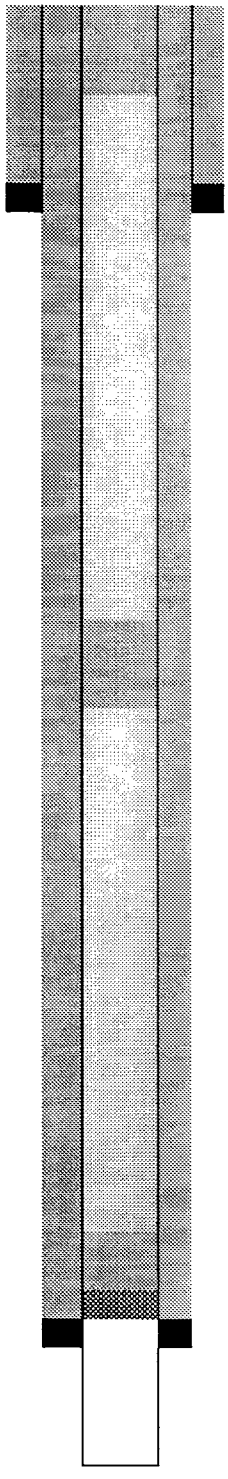
The pump was pulled from
The well and steel plates
Were welded on top of the
Well.

TD: 37'

WELL SCHEMATIC:
AMERADA H.D. MCKINLEY # 6

WELL PLUGGED:
5/17/93

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



Spotted 25 sx cmt plug from 250' to surface.

Displaced hole with 70 bbls Of 9 ½ # mud.

5 ½"
3145'
625 SX
TOC: 20' TS

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

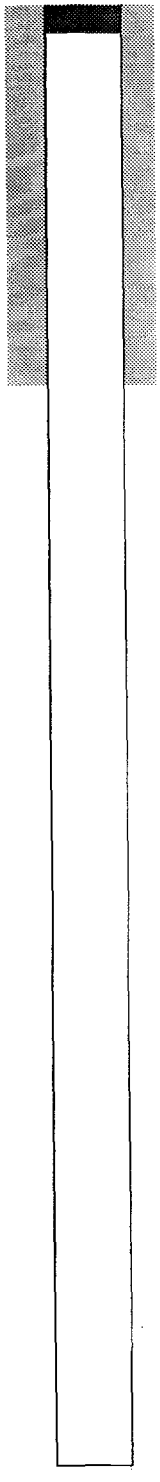
TD: 3229'

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

WELL SCHEMATIC:
AMERADA MCKINLEY #9

WELL PLUGGED:
8/14/82

5 ½"
10'
1 YD REDI-MIX
TOC: NA



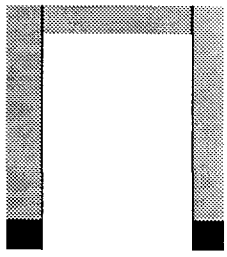
The pump was pulled from Well and steel plates were Welded on top of well.

TD: 37'

WELL SCHEMATIC:
SHELL MCKINLEY A #9

WELL PLUGGED:
5/12/50

8 5/8"
407'
200 sx
TOC: CIRC

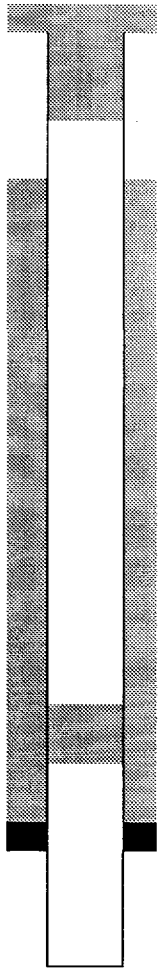


10 sx cmt at surface

Recovered 1147' of 4 ½"
Csg.

Shot csg at 1148'
Spotted 5 sx cmt from 1150'
To 1228'

4 ½"
3179'
850 sx
TOC: 1530' TS



Spotted 10 sx cmt plug from
3023' to 3179'

TD: 3247'

LIST OF OFFSET OPERATORS & SURFACE OWNERS

North Hobbs (Grayburg/San Andres) Unit
Well No. 313
Letter B, Section 30, T-18-S, R-38-E
Lea County, New Mexico

Offset Operators

Altura Energy LTD
P.O. Box 4294
Houston, TX 77210-4294

Getty Oil Company
P.O. Box 797035
Dallas, TX 75379-7035

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

Surface Owners

Leonard E. Stansberry & Sylvia R. Stansberry
3118 Northwest Drive
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:

Getty Oil Company
P.O. Box 797035
Dallas, TX 75379-7035

4a. Article Number
P 447 842 809

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:

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

4a. Article Number
P 447 842 810

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

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- 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:

Leonard E. Stansberry &
Sylvia R. Stansberry
3118 Northwest Drive
Hobbs, NM 88240

4a. Article Number
P 447 842 811

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 2

weeks.

Beginning with the issue dated

September 11 1999

and ending with the issue dated

September 12 1999

Kathi Bearden

Publisher

Sworn and subscribed to before me this 22nd day of

October 1999

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.

02101173000 01535865

Altura Energy LTD
P. O. Box 4294
Houston, TX 77210-4294

LEGAL NOTICE
SEPTEMBER 12, 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 Adres
Lease/Unit Name: North Hobbs G/SA Unit
Well No. 221
Loc.: 2310' FNL & 2310' FWL, Unit Letter F, Sec. 24, T-18-S, R-37-E, Lea Co., NM
Well No. 342
Loc: 145' FSL & 1435' FEL, Unit Letter O, Sec. 24, T-18-S, R-37-E, Lea Co., NM
Well No. 432
Loc.: 2480' FSL & 1280' FEL, Unit Letter I, Sec. 24, T-18-S, R-37-E, Lea Co., NM
Well No. 141
Loc.: 330' FSL & 330' FWL, Unit Letter M, Sec. 29, T-18-S, R-38-E, Lea Co., NM
Well No. 241
Loc.: 330' FSL & 2310' FWL, Unit Letter N, Sec. 29, T-18-S, R-38-E, Lea Co., NM
Well No. 112
Loc.: 200' FNL & 1310' FWL, Unit Letter D, Sec. 30, T-18-S, R-38-E, Lea Co., NM
Well No. 233
Loc.: 2455' FSL & 1480' FWL, Unit Letter K, Sec. 30, T-18-S, R-38-E, LEA Co., NM
Well No. 313
Loc.: 405' FNL & 2272' FEL, Unit Letter B, Sec. 30, T-18-S, R-38-E, Lea Co., NM
Well No. 332
Loc.: 2470' FSL & 1600' FEL, Unit Letter J, Sec. 30, T-18-S, R-38-E, Lea Co., NM
Well No. 412
Loc.: 760' FNL & 550' FEL, Unit Letter A, Sec. 30, T-18-S, R-38-E, Lea Co., NM
Well No. 432
Loc,: 2260' FSL & 180' FEL, Unit Letter I, Sec. 30, 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 infection 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.
#16873

12/7/99

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

11/22/99

GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

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

RE: Proposed:
MC _____
DHC _____
NSL _____
NSP _____
SWD _____
WFX _____
PMX X

Gentlemen:

I have examined the application for the:

Alturra Energy Ltd North Hobbs GB/SA Unit # 313-B
Operator Lease & Well No. Unit S-T-R

30-18s-38e
30-025-23270

and my recommendations are as follows:

OK

Yours very truly,

Chris Williams
Supervisor, District 1

/ed