PMX 12/23/99
202

Altura
ENERGY LTD.

December 6, 1999

DEC - 8 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. 432
Letter I, 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. 432 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. 432). 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
- A list of Offset Operators and Surface Owners (these parties have been notified of this application by certified mail)

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Altura
ENERGY LTD.

- 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

Bureau of Land Management
Roswell District Office
2909 West Second Street
Roswell, NM 88201

Offset Operators (see attached list)

Surface Owners (see attached list)

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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: 12/6/99

* 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.

Attachment To Form C-108
Miscellaneous Data

North Hobbs (Grayburg/San Andres) Unit
Well No. 432
Letter I, 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

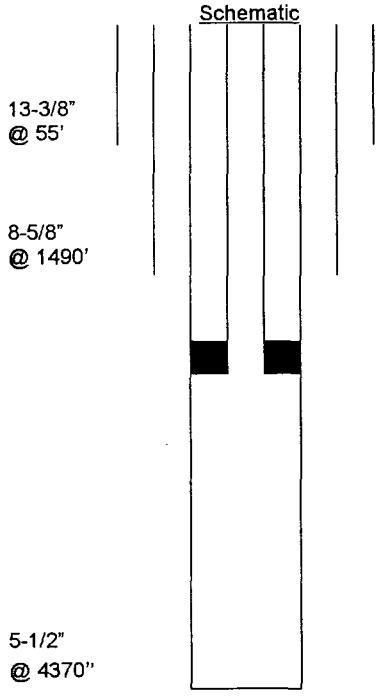
XI. Fresh Water Sample Analysis
(Laboratory Services, Inc. analysis attached – 3 ea.)

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.

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**
30-432	2260 FSL & 180 FEL	30	18-S	38-E	I

Schematic



Tubular Data

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

Intermediate Casing
Size 8-5/8 Cemented with 370 sxs.
TOC Surf Determined by Circ.
Hole size _____

Long string Casing
Size 5-1/2" Cemented with 350 sxs.
TOC Surf Determined by Circ.
Hole size _____

Total depth 4370

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)
None

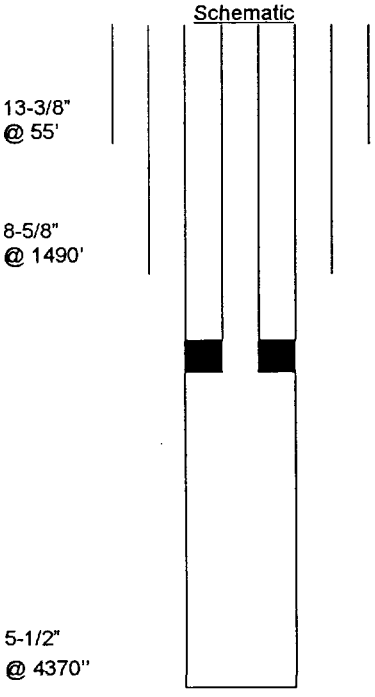
5. Give the depth to and name of any overlying and/or underlying oil and gas zones (pools) in this area.
Grayburg – 3700, Glorieta - 5300

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
30-432	2260 FSL & 180 FEL	30	18-S	38-E	I

Schematic



Tubular Data

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

Intermediate Casing
Size 8-5/8 Cemented with 370 sxs.
TOC Surf Determined by Circ.
Hole size _____

Long string Casing
Size 5-1/2" Cemented with 350 sxs.
TOC Surf Determined by Circ.
Hole size _____

Total depth 4370

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)
None

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

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
30-025-28957	31920	HOBBS; GRAYBURG - SAN ANDRES

Property Code	Property Name	Well Number
19520	NORTH HOBBS G/SA UNIT	432

OGRID No.	Operator Name	Elevation
157984	ALTURA ENERGY LTD.	3648

Surface Location

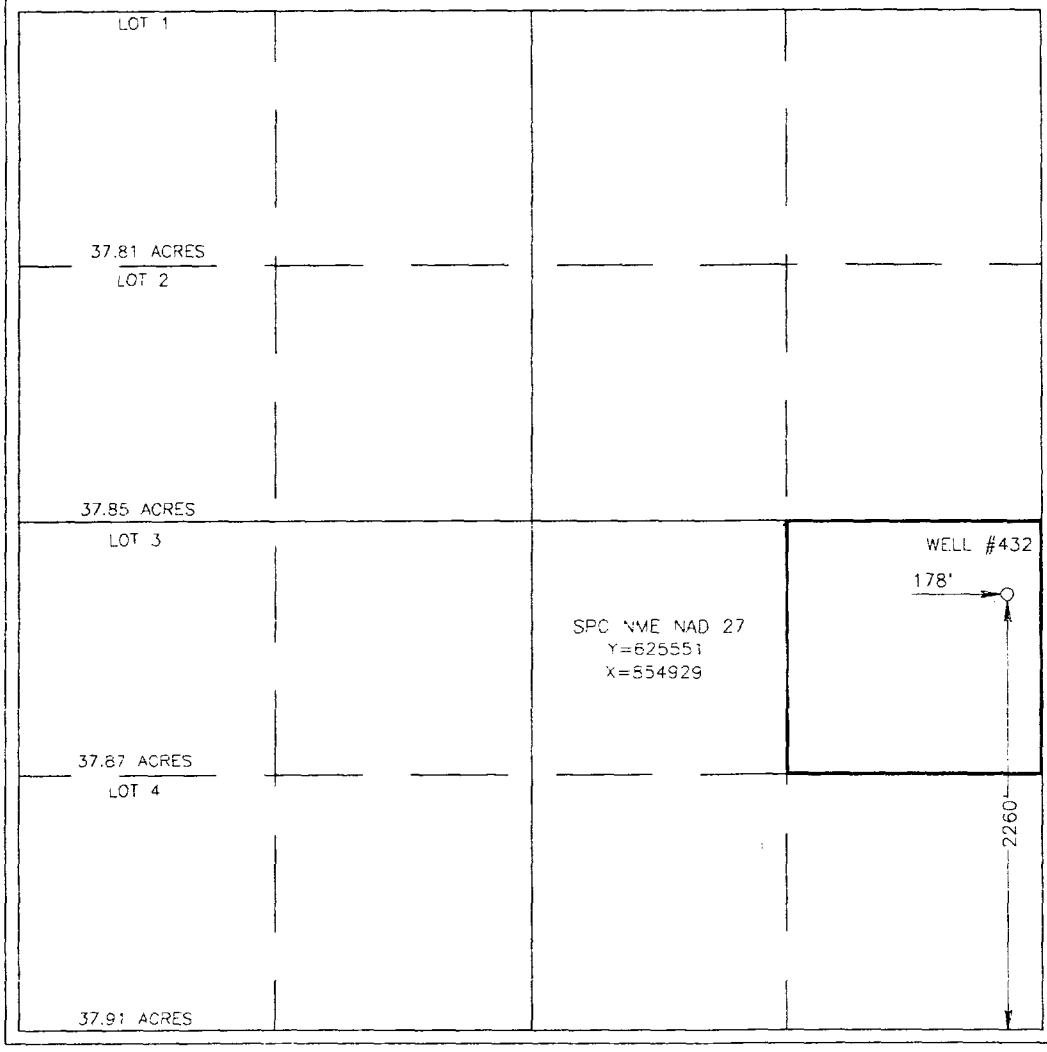
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	30	18 S	38 E		2260	SOUTH	178	EAST	LEA

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

December 6, 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

7-27-99

Certificate No. RONALD J. EIDSON 3239
GARY L. JONES 12641
MACON 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

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
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Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

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30-025-28957	31920	HOBBS; GRAYBURG - SAN ANDRES

Property Code	Property Name	Well Number
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Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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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.

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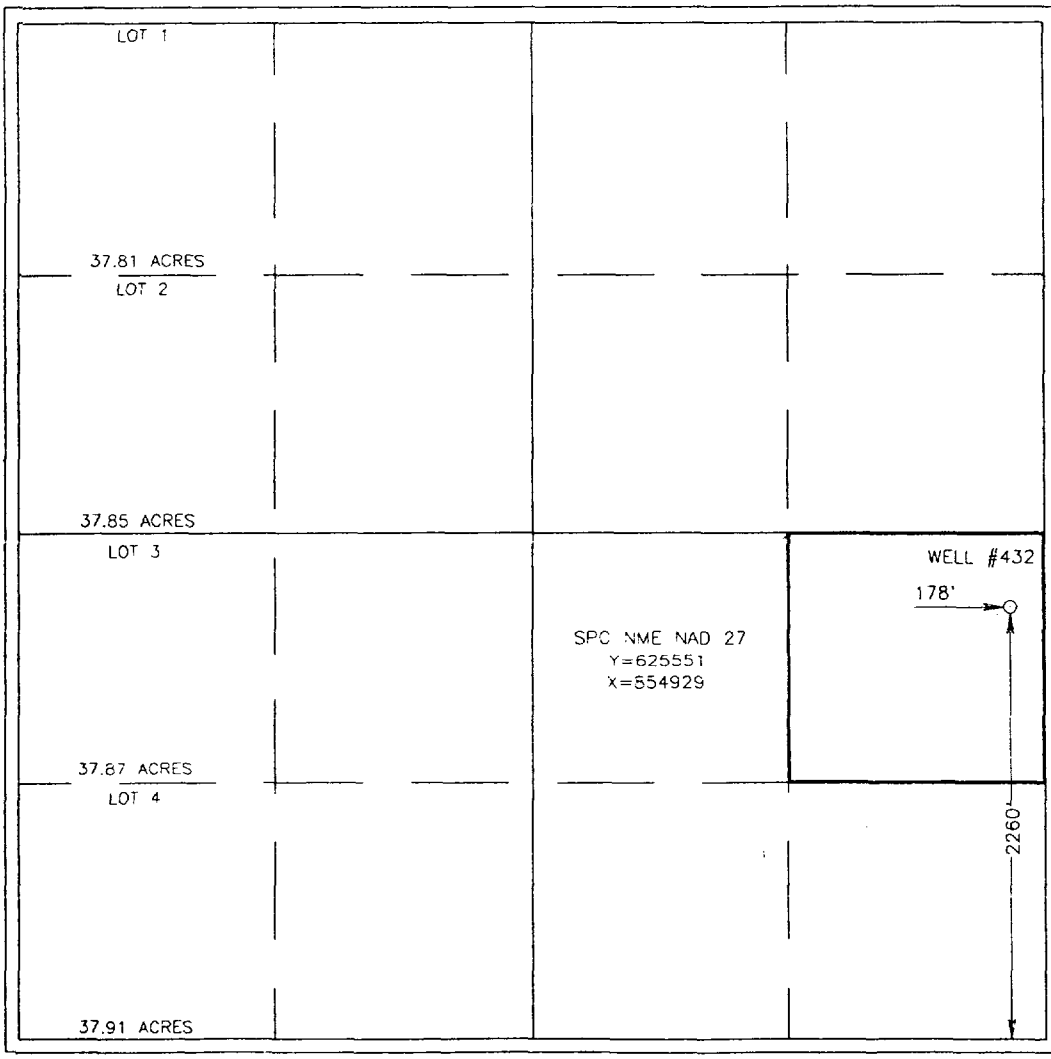

OPERATOR CERTIFICATION

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Mark Stephens
Signature

Mark Stephens
Printed Name

Business Analyst (SG)
Title

December 6, 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

7-27-99

Certificate No.		
	RONALD J. EIDSON	3239
	GARY L. JOSON	12641
	JACK L. McDONALD	12185

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.

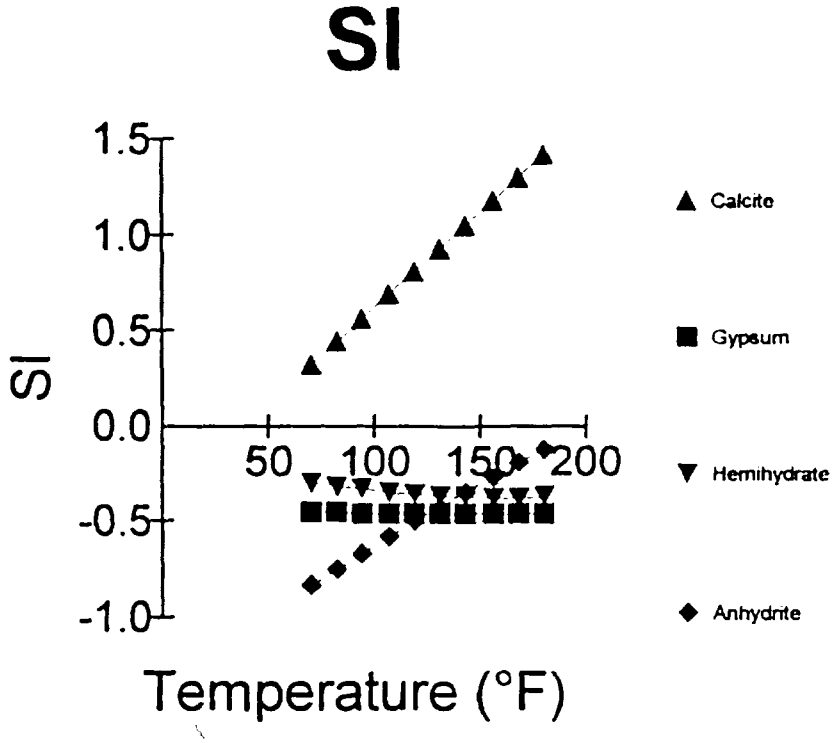
Telephone (505) 393-7726

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 North Hobbs Un. CTB 18S-38E-SEC29
SAMPLED BY David Nelson SW¼, NW¼, NW¼, NW¼

DATE TAKEN 10/12/99
REMARKS

Barium as Ba	0	
Carbonate alkalinity PPM	12	
Bicarbonate alkalinity PPM	212	
pH at Lab	7.48	
Specific Gravity @ 60°F	1.001	
Magnesium as Mg	200	
Total Hardness as CaCO3	344	
Chlorides as Cl	155	
Sulfate as SO4	145	
Iron as Fe	0.1	
Potassium	0.08	
Hydrogen Sulfide	0	
Rw	7	24 C
Total Dissolved Solids	1,045	
Calcium as Ca	144	
Nitrate	14	

Results reported as Parts per Million unless stated

Langelier Saturation Index + 0.03

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 Basin Surveys 18S-38E-Sec 29
SAMPLED BY David Nelson SW'/4, SW'/4, SE'/4

DATE TAKEN 10/12/99
REMARKS

Barium as Ba	0	
Carbonate alkalinity PPM	0	
Bicarbonate alkalinity PPM	256	
pH at Lab	7.44	
Specific Gravity @ 60°F	1.001	
Magnesium as Mg	232	
Total Hardness as CaCO3	400	
Chlorides as Cl	127	
Sulfate as SO4	175	
Iron as Fe	0.01	
Potassium	2	
Hydrogen Sulfide	0	
Rw	8	23 C
Total Dissolved Solids	1,252	
Calcium as Ca	168	
Nitrate	7	

Results reported as Parts per Million unless stated

Langelier Saturation Index - 0.01

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

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:

Exxon Company, U.S.A
Attn: Joint Interest Operations
P.O. Box 4707
Houston, TX 77210-4707

4a. Article Number
P 447 842 834

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.
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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 436 313 766

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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Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
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- 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 436 313 767

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:

Saga Petroleum LLC
415 W. Wall, Suite 835
Midland, TX 79701

4a. Article Number
P 436 313 768

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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- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

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

4a. Article Number
P 436 313 770

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:

Chevron Production Co.
NOJV Mgr.
P.O. Box 1635
Houston, TX 77251

4a. Article Number
P 436 313 771

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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- Complete items 3, 4a, and 4b.
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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:

Conoco Inc.
10 Desta Dr. West
Midland TX 79705

4a. Article Number
P 436 313 772

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:

Rice Operating Company
122 West Taylor
Hobbs, NM 88240

4a. Article Number
P 436 313 773

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

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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:

Grimes Land Company
P.O. Box 5102
Hobbs, NM 88241

4a. Article Number
P 436 313 769

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

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Is your RETURN ADDRESS completed on the reverse side?

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

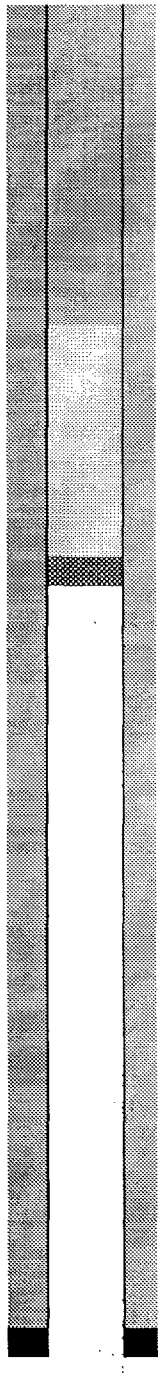
Notice is hereby given of the application of Altura Energy LTD, Attn: Mark Stephens, P.O. Box 4294, Rm. 338-B, Houston, TX 77210-4294 (281/552-1158), to the Oil Conservation Division, New Mexico Energy, Minerals and Natural Resources Department, for approval of the following injection wells for the purpose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

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 A FED #6

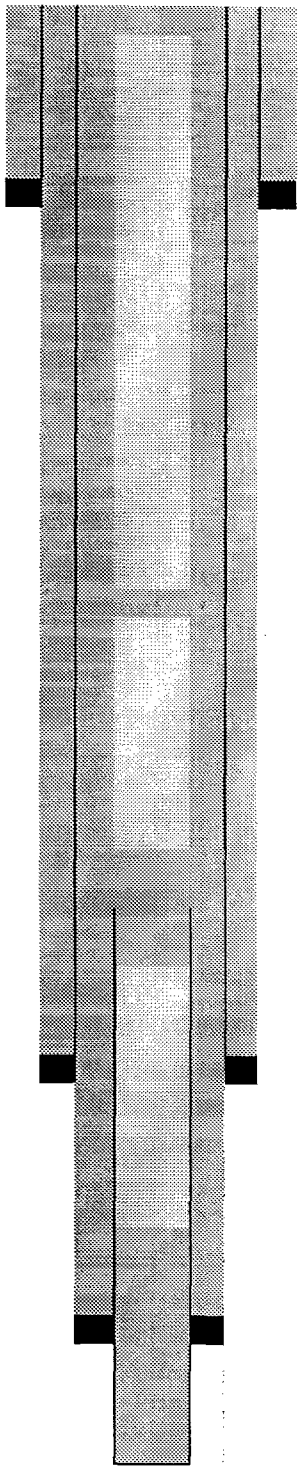
WELL PLUGGED:
5/10/71

12 ½"
217'
200 SX
TOC: NA

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

7"
3147'
120 SX
TOC: 2470 TS

TD: 3190'



Spotted 10 sx cmt plug from 35' to top.

Circulated well bore with 9# Mud.

Spotted 20 sx cmt plug from 1500' to 1400'.

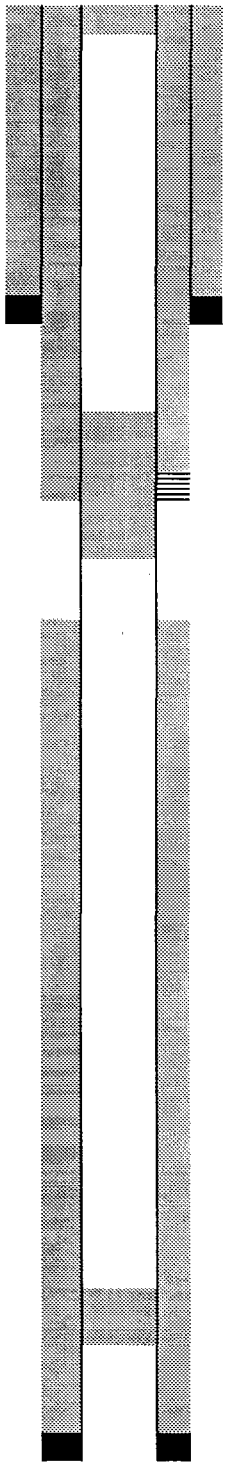
7" csg shot loose at 2435'.
Spotted 50 sx cmt plug from 2485' to 2340'.

Spotted 50 sx cmt plug from 3190' to 2950'.

WELL SCHEMATIC:
EXXON BOWERS A #12

WELL PLUGGED
11/21/80

8 5/8"
222'
100 sxs.
TOC:N.A.



8 5/8 and 5 51/2 csg cut off 7' below GL.. ½ " plate welded on top.
10' cmt plug at surface.

Cmt. Ret. set at 350'

Sqzd. Perfs at 390' with 100 sxs. cmt from 500' to 350'.
Circ. to surface.

5 5/8"
3132'
575 sxs.
TOC: 880' TS

PBTD: 3088'

10 sxs. Cmt plug 3088-2988

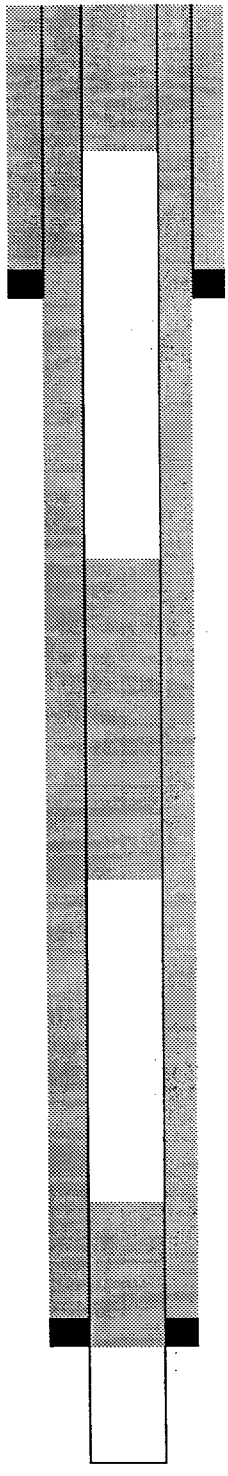
WELL SCHEMATIC: EXXON BOWERS A FED. #13

WELL PLUGGED:
5/10/71

8 5/8"
283'
125 sxs
TOC: SURF (C)

5 ½"
3150'
1350 sxs
TOC:SURF (C)

TD: 3189'



10 sxs cmt plug set from 50' to surf

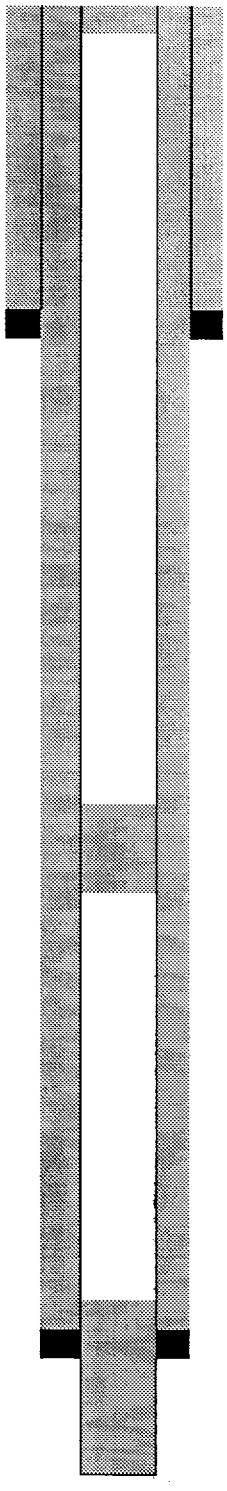
20 sxs cmt plug set from 1500' to 1400'

50 sxs cmt plug set from 3189' to 2800'

WELL SCHEMATIC:
EXXON BOWERS A FED #14

WELL PLUGGED
12/21/70

8 5/8"
496'
400 SXS
TOC: CIRC



Spotted 10 sxs
from 0' – 25'.

Spotted 25 sxs cmt plug from
1400' – 1550'.

5 ½"
3120'
1350 SXS
TOC: CIRC

TD: 3207

Spotted 25 sxs cmt plug
from 3000' – 3207'.

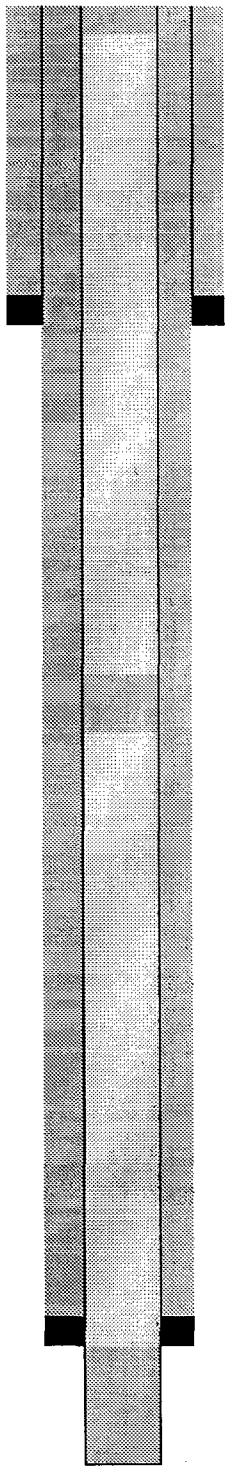
WELL SCHEMATIC:
EXXON BOWERS A FED #16

WELL PLUGGED:
11/27/70

8 5/8 "
262'
150 SXS
TOC: CIRC

5 ½"
3151'
1000 SXS
TOC: CIRC

TD: 3225'



Spotted a 10 sxs cmt plug at surface with marker.

Hole loaded with mud laden fluids.

Spotted a 20 sxs cmt plug from 1400' to 1550'

Spotted a 30 sxs cmt plug from 3050' to 3225'

WELL SCHEMATIC:
EXXON BOWERS A FED #1

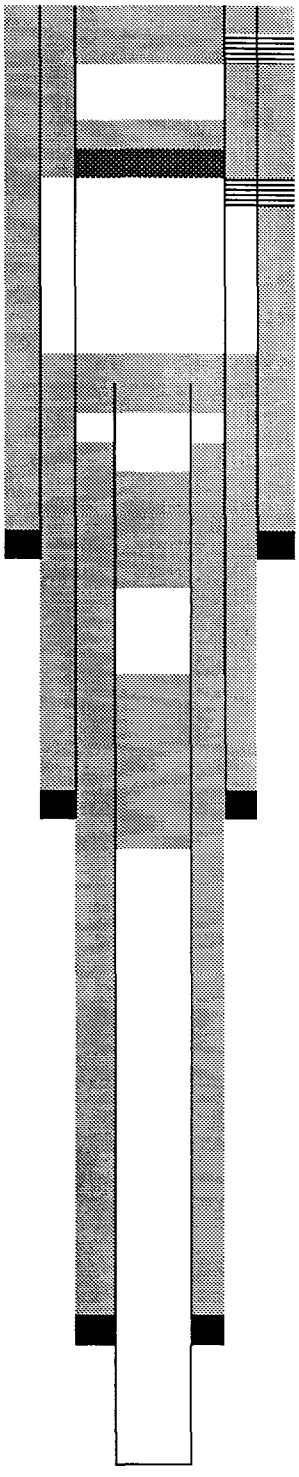
WELL PLUGGED:
11/15/89

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

7"
3962'
528 SX
TOC: NA

4 ½"
6000'
275 SX
TOC: 2200 TS

TD: 6000'



Perf'd 7" & 9 5/8" csg at 280' & sqzd w/100 sx.

Dropped 54' cmt on top of ret

Perf'd 7" and 9 5/8" csg at 1350'. Set cmt ret at 1304'. Sqz'd w/100 sx thru perfs.

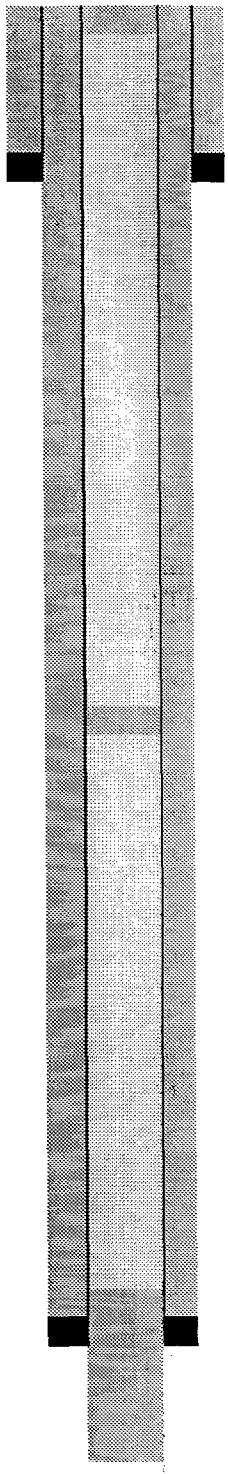
Spotted 25 sx cmt plug from 1911' to 2058'.
Cut 4 ½" csg at 2000' and Pull out of hole.
Spotted 20 sx cmt plug from 2470' to 2800'.

Spotted 40 sx cmt plug from 3430' to 4100'.

WELL SCHEMATIC:
EXXON BOWERS A FED #15

WELL PLUGGED:
11/27/70

8 5/8"
249'
150 SX
TOC: CIRC



Spotted 10 sx cmt plug at Surface.

Hole was loaded with mud Laden fluid.

5 ½"
3158'
1250 SX
TOC: CIRC

Spotted 20 sx cmt plug from 1400' to 1500'.

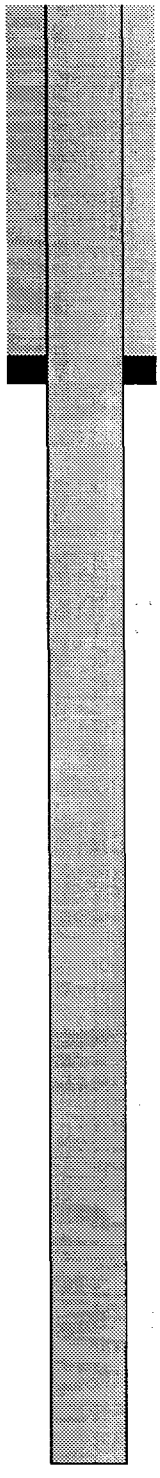
TD: 3218'

Spotted 25 sx cmt plug at 3218'.

WELL SCHEMATIC:
EXXON BOWERS A FED #17

WELL PLUGGED:
11/30/66

7"
12'
6 SX
TOC: CIRC



12' of 7" csg left in hole.

Filled hole with approximately
.75 yards of 5 sx Redi-Mix.

TD: 50'

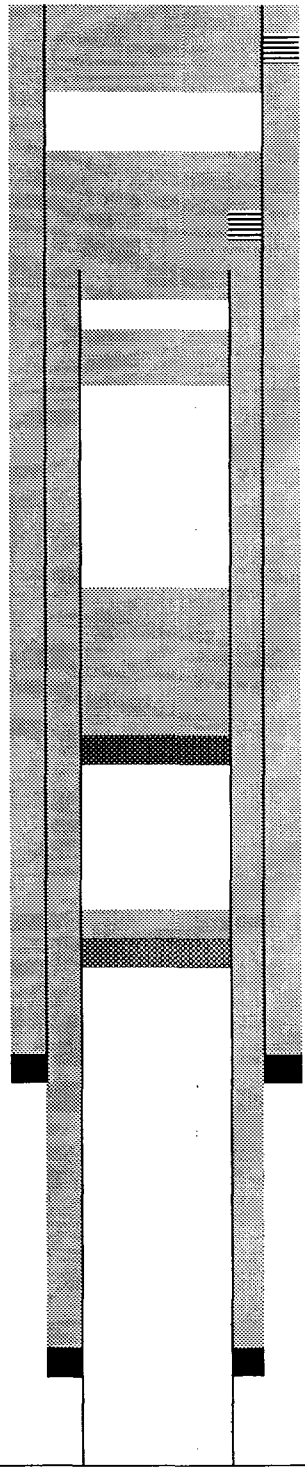
WELL SCHEMATIC:
EXXON BOWERS A FED #30

WELL PLUGGED:
8/4/90

8 5/8"
3836'
500 SX
TOC: 2300' TS

4 ½"
5988'
550 SX
TOC: 2800' TS

TD: 6000'



Perf'd 8 5/8" at 450'. Pumped 211 sx down 8 5/8" thru perfs At 450' and circulate.

Perf'd 8 5/8" csg at 1485'. Cut off 4 ½ csg at 1500'. Spotted 77 sx cmt plug from 1500' to 1385'.

Spotted 15 sx cmt plug from 2711' to 2528'.

Spotted 70 sx cmt plug from 4632' to 3364'.

Cmt. ret. at 4632' – sqz with 25 sx.

CIBP at 5300' w/ 35' cmt cap.

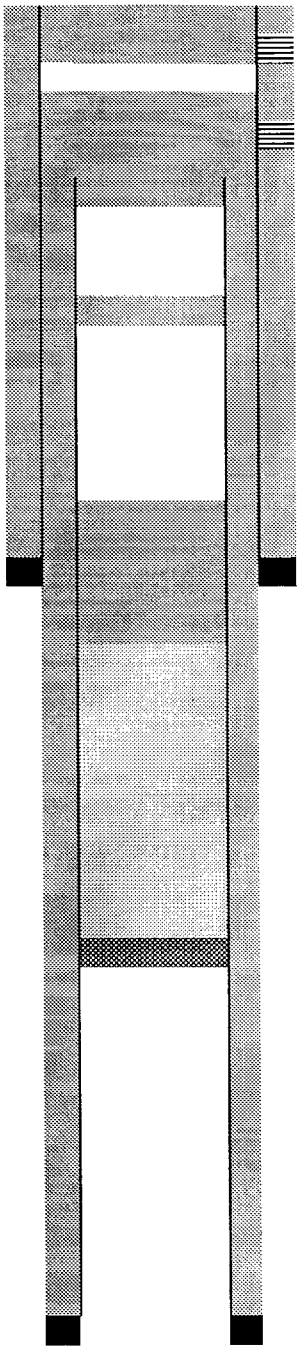
WELL SCHEMATIC:
EXXON BOWERS A FED #31

WELL PLUGGED:
8/30/90

8 5/8"
3836'
500 SX
TOC:1858' CALC

5 ½"
7038'
650 SX
TOC:3125' CALC

TD: 7050'



Perf'd @ 450'. Pump 211 sx
Down 8 5/8" csg to surf.
Spot 77 sx from 1490-1200'
Perf'd at 1485'.
Cut off 5 ½" csg at 1500'.

Spotted 25 sx cmt plug at
2716'.

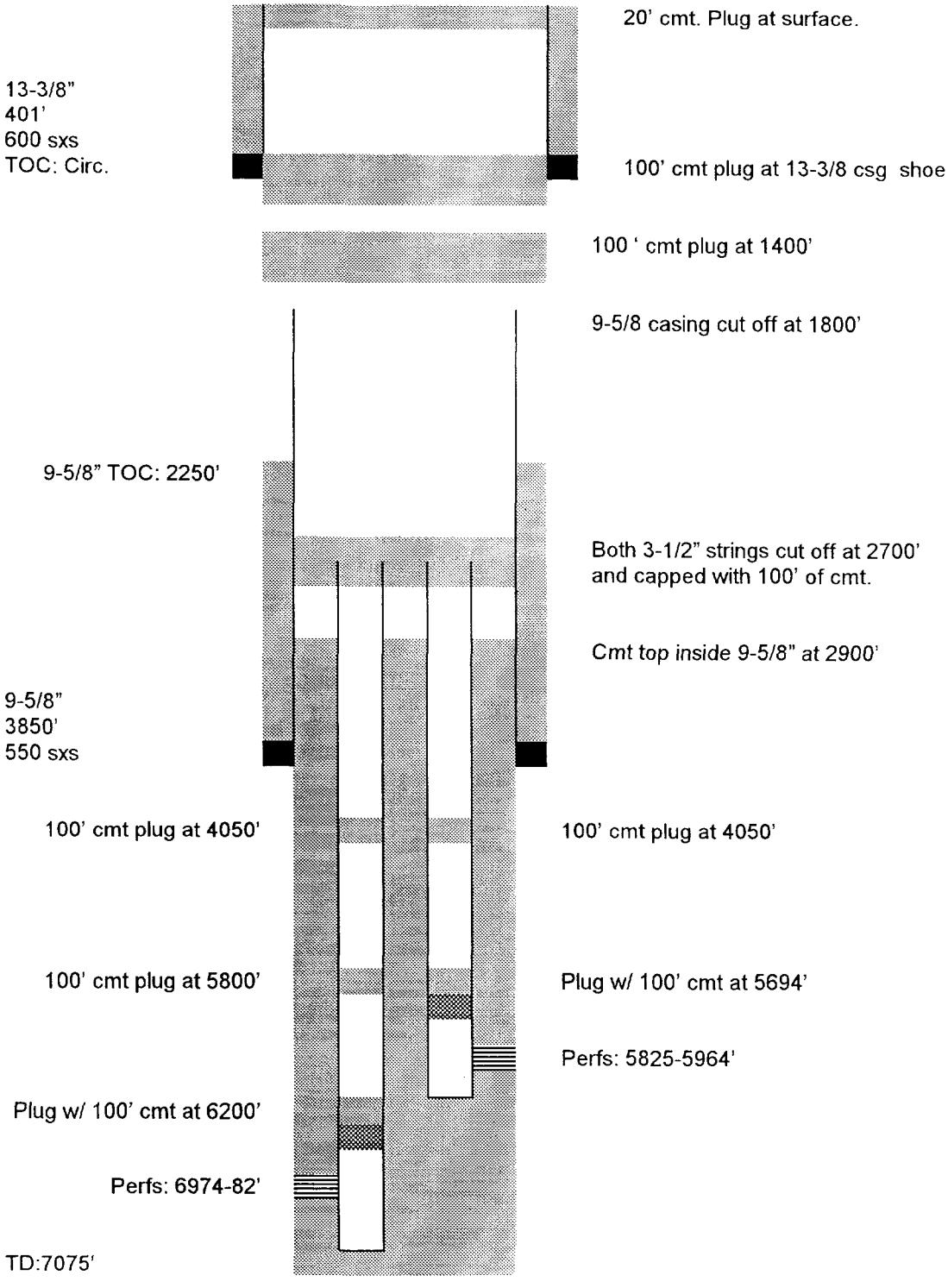
Spot 50 sx cmt from 4100' to
3600'.

Displaced hole with salt gel
Mud.

Tagged CIBP w/35' cmt cap
At 5710'.

WELL SCHEMATIC - Exxon Bowers A Federal #32

Well plugged 9/14/72



10/25/99

WELL SCHEMATIC:
EXXON BOWERS A FED #33

WELL PLUGGED:
10/3/72

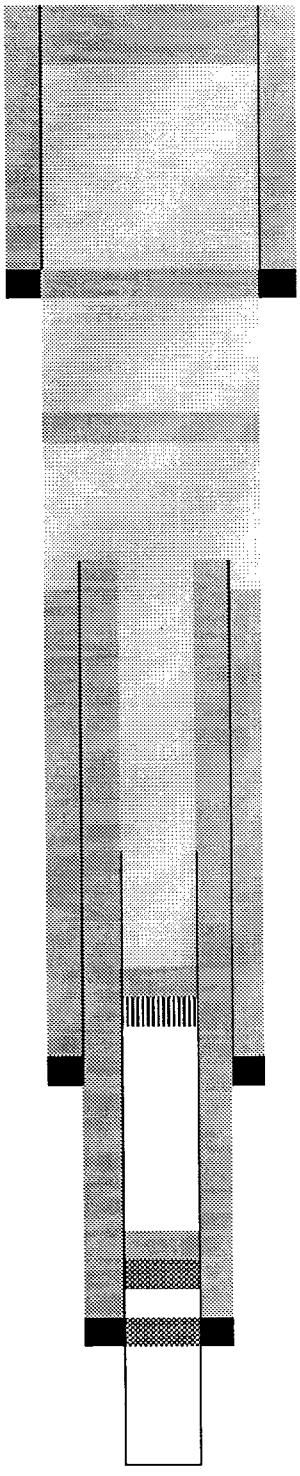
13 3/8"
416'
400 sxs.
TOC: Circ.

9 5/8"
3836'
350 sxs
TCO: 2555' T.S.

CIBP at 3970'

7"
5988'
550 sxs
TOC: 2900' T.S.

TD: 6000'



Spot 20' cmt plug at surf

Spot 100' cmt plug at 416'

Run tbg to 1400' & spot 100' cmt plug

Cut & pull 9 5/8" csg from 1889'

Cut & pull 7" csg from 2560'

Spot 100' cmt on top of CIBP

Set CIBP at 5800' and Capped with cmt.

Set CIBP at 5900'.

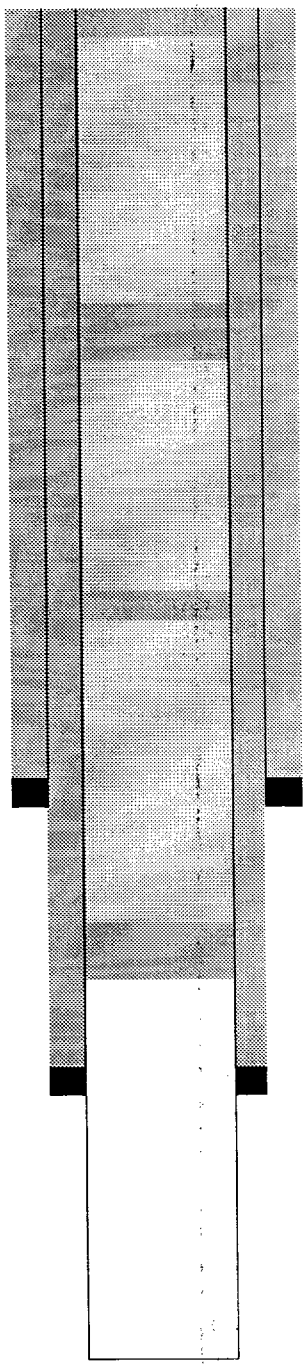
WELL SCHEMATIC:
EXXON BOWERS A FED #9

WELL PLUGGED:
12/3/70

9 5/8"
2736'
650 SX
TOC: SURF (C)

7"
3970'
300 SX
TOC: 2000(C)

TD: 4259'



Spotted 10 sx cmt plug from 0' to 25 '.

Hole was loaded with mud Laden fluids.

Spotted 20 sx cmt plug from 1400' to 1550'.

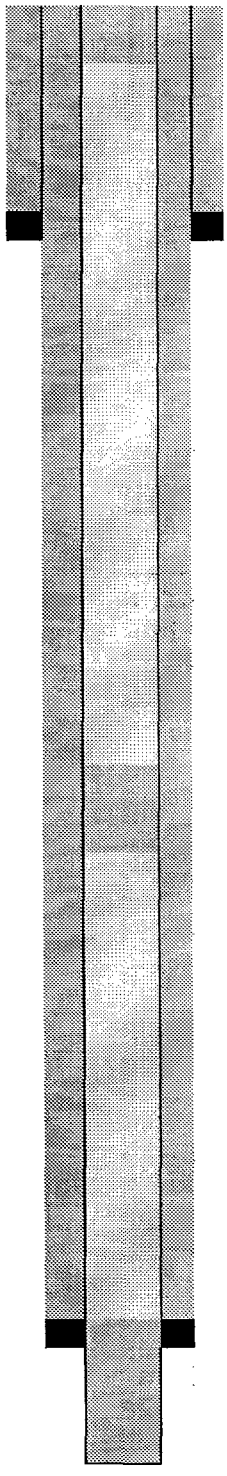
Spotted 40 sx cmt plug from 2300' to 2400'.

Spotted 50 sx cmt plug from 3000' to 3250'.

WELL SCHEMATIC:
EXXON BOWERS AB FED #1

WELL PLUGGED:
11/26/48

8 5/8"
260'
150 SX
TOC: CIRC



Spotted 20 sx cmt plug from 160' to surface.

All intervals between plugs Was filled with mud laden Fluid.

5 ½"
3179'
1050 SX
TOC: CIRC

Spotted 40 sx cmt plug from 1800' to 1480'.

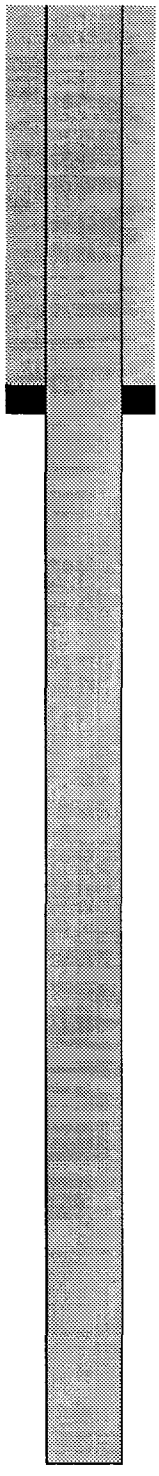
TD: 3238'

Spotted 15 sx cmt plug from 3238' to 3136'.

WELL SCHEMATIC:
EXXON BOWERS A FED #10

WELL PLUGGED:
8/19/98

7"
10'
3 SX
TOC: NA



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

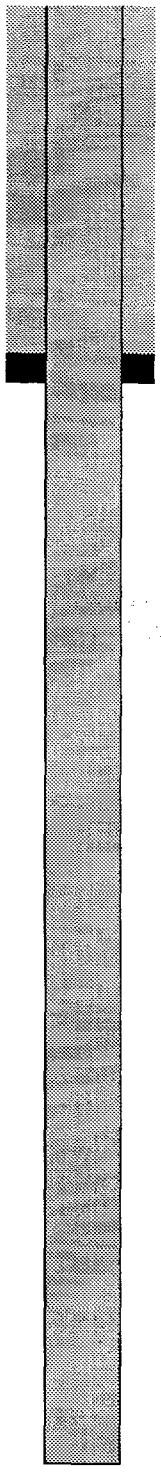
10' to 38' – open hole.

TD: 38'

WELL SCHEMATIC:
EXXON BOWERS A FED #11

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.

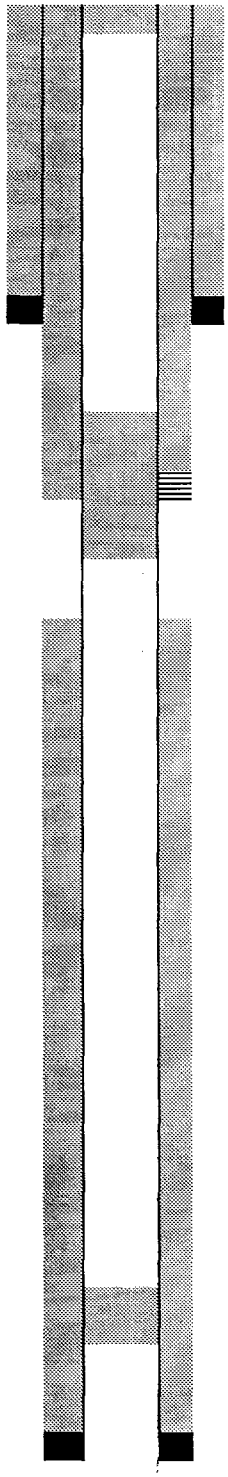
10' to 38' – open hole.

TD: 38'

WELL SCHEMATIC:
EXXON BOWERS A #12

WELL PLUGGED
11/21/80

8 5/8"
222'
100 sxs.
TOC:N.A.



8 5/8 and 5 51/2 csg cut off
7' below GL.. ½ " plate
welded on top.
10' cmt plug at surface.

Cmt. Ret. set at 350'

Sqzd. Perfs at 390' with 100
sxs. cmt from 500' to 350'.
Circ. to surface.

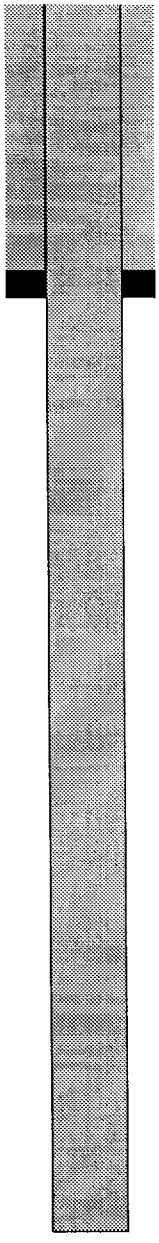
5 5/8"
3132'
575 sxs.
TOC: 880' TS

PBTD: 3088'

10 sxs. Cmt plug 3088-2988

WELL SCHEMATIC:
ARC IND BOWERS A FED #2

WELL PLUGGED:
8/19/98



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

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

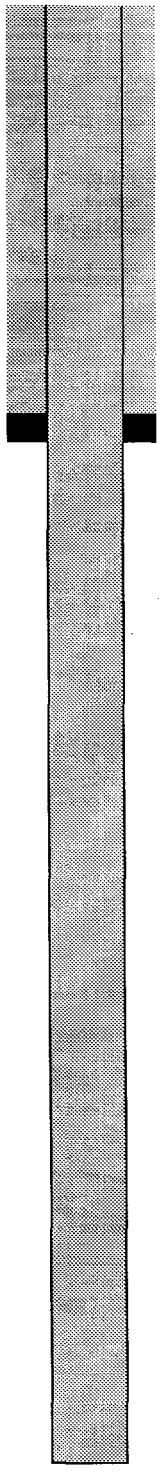
10' to 38' – open hole.

TD: 38'

WELL SCHEMATIC:
ARC IND BOWERS A FED #3

WELL PLUGGED:
8/19/98

7"
10'
3 SX
TOC: NA



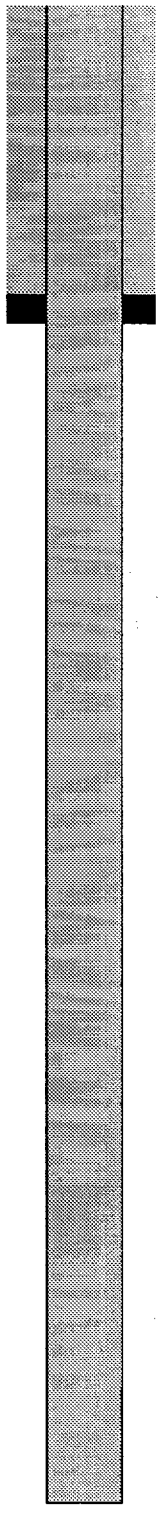
Csg was pulled out of hole.
Well bore was filled with
Approximately .75 yards of
5 sx Redi-Mix.

TD: 38'

WELL SCHEMATIC:
ARC IND. BOWERS A FED #13

WELL PLUGGED:
8/19/98

5 ½"
10'
3 SX
TOC: NA



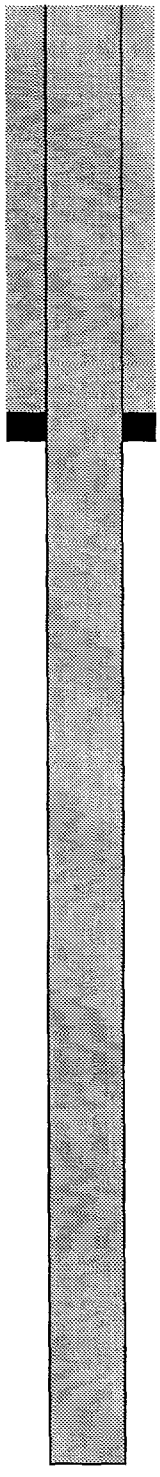
Csg was pulled out of hole.
Well was filled to the surface
With approximately .75 yards
Of 5 sx Redi-Mix.

TD: 45'

WELL SCHEMATIC:
EXXON BOWERS A FED #4

WELL PLUGGED:
8/19/98

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



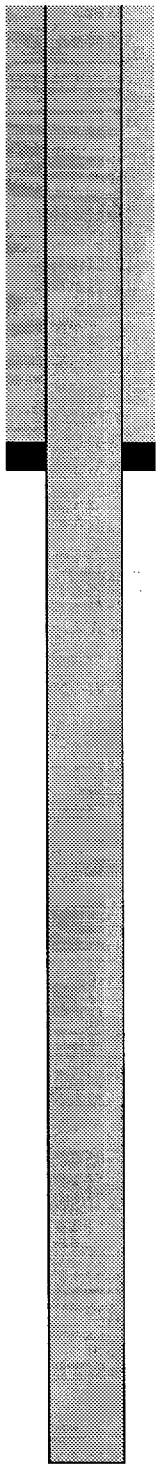
Csg was pulled out of hole.
Well was filled to the surface
With approximately .75 yards
Of 5 sx Redi-Mix.

TD: 38'

WELL SCHEMATIC:
EXXON BOWERS A FED #5

WELL PLUGGED:
8/19/98

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



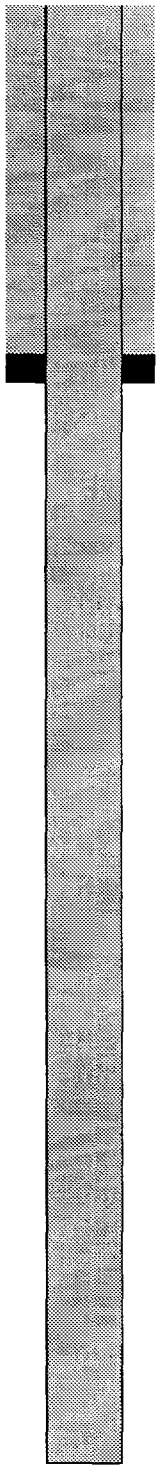
Csg was pulled out of hole.
Well was filled to the surface
With approximately .75 yards
Of 5 sx Redi-Mix.

TD: 38'

WELL SCHEMATIC:
ARC IND BOWERS A FED #6

WELL PLUGGED:
8/19/98

6 ¾"
10'
3 SX
TOC: NA

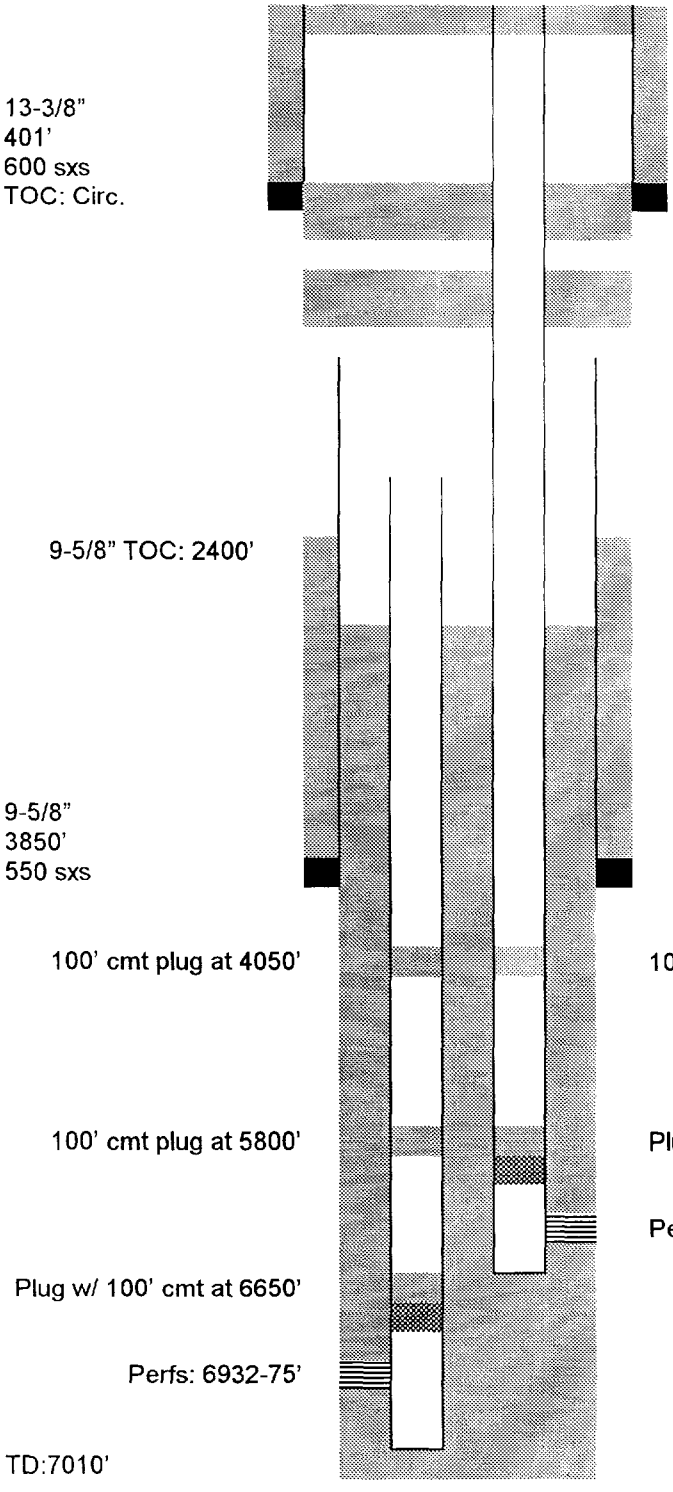


Csg was pulled and well was
Filled with approximately
.75 yards of 5 sx Redi-Mix.

TD: 45'

WELL SCHEMATIC - Exxon Bowers A Federal #34

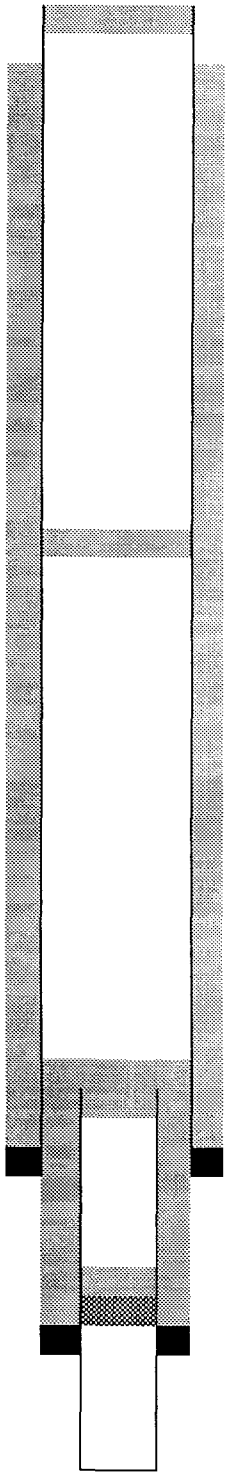
Well plugged 9/26/72



10/25/99

WELL SCHEMATIC:
GETTY HD MCKINLEY #3

WELL PLUGGED:
8/26/75



Laid 10 sx cmt plug in top.

9 5/8"
2755'
600 SX
TOP: 337' CALC

Laid 37 sx cmt plug from
1575' to 1475'.

Ran 2 3/8" tbg to 3000'.
Circulated hole with 123 bbls.
Brine water w/23 sx salt gel.
Pulled tbg.
Shot csg at 2547'. Pulled and
Laid down 84 joints(2555') 7"
Csg. Ran tbg to 2616' and
Laid 28sx cmt plug from
2616' to 2516'.

7"
3166'
100 SX
TOC: 2595' CALC

Set Titan CIBP at 3095'.
Dumped 7 sx cmt on top of
CIBP.

TD: 3199'

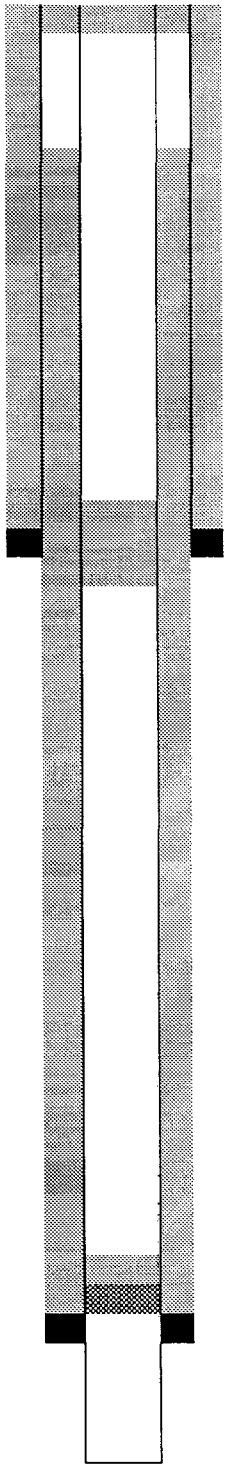
WELL SCHEMATIC:
GETTY HD MCKINLEY #6

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.

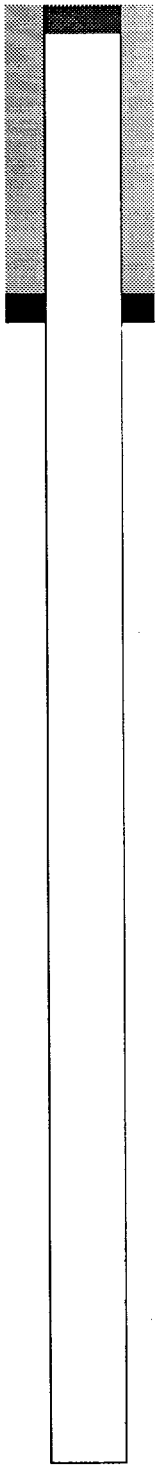
Laid 20 sx cmt plug from 1542' to 1374'.

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

WELL SCHEMATIC:
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:
CONOCO STATE A #5

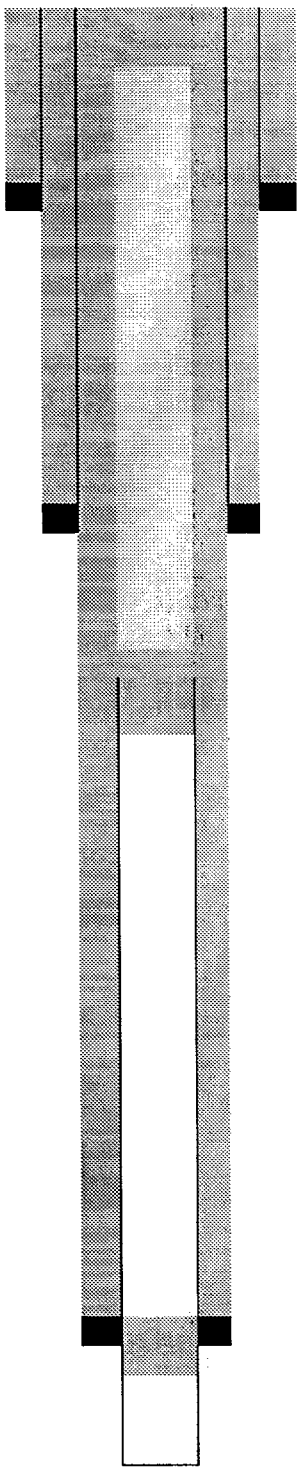
WELL PLUGGED:
1/12/71

10 ¾"
272'
200 SX
TOC: SURF (C)

7 5/8"
999'
425SX
TOC: SURF (C)

5 ½"
3206
450 SX
TOC: NA

PBTD:3168'



Spotted a 10 sx cmt plug
At surface.

Filled well bore with 10# mud

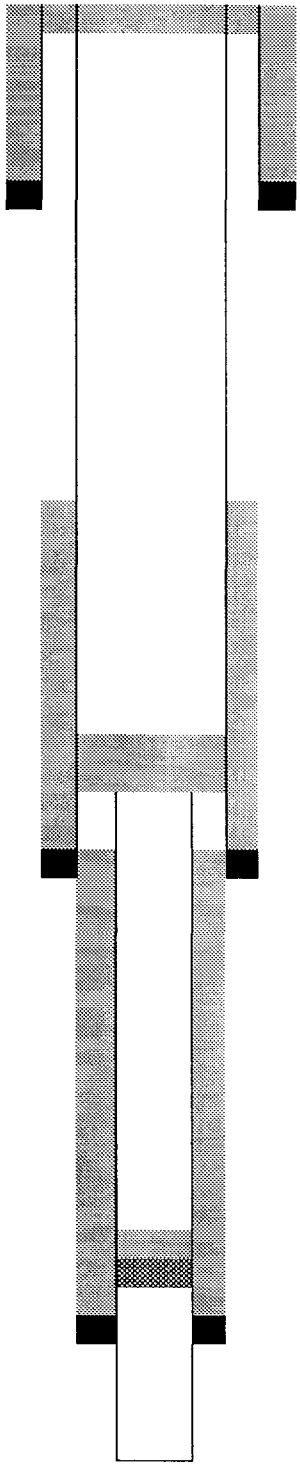
Cut 5 ½" csg at 1570' and
Pulled out of hole. Set a 55
Sx cmt plug in and out of
5 ½" stub.

Spotted 40 sx cmt plug over
Perfs from 3188' to 3168'.

WELL SCHEMATIC:
NE-O-TEX HOBBS STATE #5

WELL PLUGGED:
5/11/73

9 5/8"
364'
200 SX
TOC: SURF



Spotted 10' cmt plug at surf.

7"
3826'
200 SX
TOC: 2250'

Shot and pulled csg at 3744'.
Pumped 255 sx cmt plug
From 3744' to 3644'.

41/2"
5986'
120 SX
TOC: 3800 ' (C)

Set 4 ½" CIBP at 5757' and
Capped with 35' cmt. Est.
TOC is 5722'.

PBTD: 5959'

TD: 5986'

LIST OF OFFSET OPERATORS & SURFACE OWNERS

North Hobbs (Grayburg/San Andres) Unit
Well No. 432
Letter I, 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

Exxon Company, U.S.A.
Attn: Joint Interest Operations
P.O. Box 4707
Houston, TX 77210-4707

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

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

Saga Petroleum LLC
415 W. Wall, Suite 835
Midland, TX 79701

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

Chevron Production Co.
NOJV Mgr.
P.O. Box 1635
Houston, TX 77251

Conoco Inc.
10 Desta Dr. West
Midland, TX 79705

Rice Operating Company
122 West Taylor
Hobbs, NM 88240

Surface Owners

Grimes Land Co.
P.O. Box 5102
Hobbs, NM 88241

Active wells within 1/2 mile radius of proposed 30-432 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
29111	Altura	30-025-	23919	29	-18S	-38E	D	12/01/1971	Prod	4287	4168-4250			13.75		21	2Yds.	
											(OH)			8.625	11	310	150	Circ
														5.5	7.875	3905	300	2440 CBL
29121	Altura	30-025-	07449	29	-18S	-38E	E	3//47	Prod	4275	3924	4275	4070-85	9.625	12.25	2739	650	890
													4110-20	7	8.75	3104	100	2640 CBL
													4130-50	4.5 Lnr	6.25	2900-4201	100	2900
29122	Altura	30-025-	28953	29	-18S	-38E	E	02/06/1985	Inj	4215	4154	4211		13.375		40		Circ
										(CIBP)				8.625		1510	785	Circ
														5.5		4370	435	Circ
29131	Altura	30-025-	07447	29	-18S	-38E	L	10//30	Prod	4130	4050	4210		9.625	12	2750	650	660
										(CIBP)				7	8.75	3976	300	
														5 Lnr	6.125	3870-4220	50	3930
29141	Altura	30-025-	07448	29	-18S	-38E	M	8//30	Prod	3400	4033	4218-58		9.625		2750	650	1000
										(CIBP)		(OH)	3960-4108	7		3960	450	1860
													(OH)	5.5		3941	250	Surf./Circ
29132	Altura	30-025-	26917	29	-18S	-38E	L	12//80	Inj	4372	4030	4265		16	20	40	40	Surf
														8.625	12.25	1595	785	Surf
														5.5	7.875	4510	900	Surf/CBL
29221	Altura	30-025-	07430	29	-18S	-38E	F	9//30	Prod	4267	4118	4176	4154-62	9.625		2704	400	1236
													4175-85	7		3979	500	2753
													4195-4200	4.5 Lnr		3910-4213	50	3910
													4213-67					
29222	Altura	30-025-	26934	29	-18S	-38E	F	4//81	Inj	4465	4175	4265		16	20	40	40	Surf
														8.625	12.25	1605	950	Circ
														5.5	7.875	4510	1050	Surf
29231	Altura	30-025-	07438	29	-18S	-38E	K	10//30	Prod	4255	4106	4220-55		9.625	12.25	2729	600	987
												OH		7	8.75	3953	300	2896
														5		4220	50	

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

Active wells within 1/2 mile radius of proposed 30-432 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
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
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
30333	Altura	30-025-	28955	30	-18S	-38E	J	2//85	Inj	4328	4137	4290		13.375		40		
														8.625		1579	425	Surf
														5.5		4370	500	Circ
30341	Altura	30-025-	24665	30	-18S	-38E	O	3//74	Prod	4202	4042	4276	4104-26	9.625	12.25	1463	500	Circ
													4164-70	5.5	7.875	3956	625	1910 CBL
													4180-96	3.5 Lnr	4.75	3715-4350	125	3715
													4056-69					
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
30431	Altura	30-025-	07474	30	-18S	-38E	I	9//30	Prod	4213	4085	4229	3975-4103	9.625	12	2750	650	
														7	8.75	3975	300	2009 Calc.
														5.5	6.125	3917	600	CBL/Circ

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

Active wells within 1/2 mile radius of proposed 30-432 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
30441	Altura	30-025-	07473	30	-18S	-38E	P	8//30	Prod	4267	4094	4200		9.625	12	2750	650	365
														7	8.75	3970	300	2624 CBL
														5.5 Lnr		3847-4267	50	Circ.
30442	Altura	30-025-	27001	30	-18S	-38E	P	5//81	Inj	4420	4162	4257	4110-16	16		40	40	Circ
													4128-34	8.625	12.25	1606	850	Circ
														5.5	7.875	4510	1075	Circ
30443	Altura	30-025-	28958	30	-18S	-38E	P	1//85	Inj	4185	4094	4247		8.625		1470	425	440
										CIBP				5.5		4370	340	858
30444	Altura	30-025-	28959	30	-18S	-38E	P	4//85	Prod	4145	4106	4270		13.375		40		
										CIBP				9.625		1519	500	Circ
														7		4369	1035	3900
31411	Altura	30-025-	07490	31	-18S	-38E	A	7//30	Prod	4159	4134	3938-4175		9	11.75	2744	600	1868
												OH		7	8.25	3938	200	Surf/CBL
														5 Lnr	6.20	3765-4289	75	3756

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

Active Outside Operated wells within 1/2 mile radius of proposed 30-432 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
Bowers A Fed. #28	30-025-	23022	29	-18S	-38E	M	3//69	Prod	5350	2628	3734	2947	11.75	15	374	300	Circ.
Exxon									CIBP				8.625	11	3850	500	2500 TS
													5.5	7.875	5989	450	3838 'c'
Bowers A Fed. #29	30-025-	23131	29	-18S	-38E	L	5//69	Prod	6000	5831	5889		11.75	15	370	300	Surf 'c'
Exxon													8.625	11	3849	500	1877 'c'
													4.5	7.875	6000	450	5087 'c'
Bowers A Fed. #37	30-025-	26485	30	-18S	-38E	P	10//79	Prod	3918	2637	3556		8.625	12.25	501	400	Circ.
Exxon													5.5	7.625	3910	850	Circ.
Bowers A Fed. #38	30-025-	28580	30	-18S	-38E	I	2//84	Prod	6220	5760	7006		13.38	17.5	1476	1220	Circ.
Exxon									CIBP		OH		10.75	12.25	4491	1650	Circ.
													5.5	7.875	7000	660	4985
Grimes A #1	30-025-	07519	32	-18S	-38E	D	4//30	Prod	3780	3684	3749		9.625	12.25	2735	600	307 'c'
Chevron													7	8.75	3933	200	3264 'c'
													4.5	6.25	4260	70	4031 'c'
HD McKinley #8	30-025-	23151	30	-18S	-38E	H	6//69	Prod	5615	3676	3754		13.375	17.5	360	340	SURF
Getty													8.625	11	3842	1400	SURF
													5.5	7.875	6057	650	3300
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
Hobbs State #1	30-025-	23585	29	-18S	-38E	F	11//70	Prod	7032	6680	6992		12.75	17.5	356	200	Circ.
Marcum Drilling Co.													8.625	11	3795	300	2600
													5.5	7.875	7050	700	3839 cbl
Hobbs SWD F #WD29	30-025-	12802	29	-18S	-38E	F	2//60	Inj	5050	4469	5050		9.625	12.25	450	300	Circ.
Rice Operating Co.											OH		7	8.75	4706	750	Surf 'c'
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							

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

Active Outside Operated wells within 1/2 mile radius of proposed 30-432 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
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 #3	30-025-	22996	30	-18S	-38E	K	2//69	Prod	45	10	45		7	8.5	10	2	No data
C.E. Seed										OH							
Seed St 30 #4	30-025-	22997	30	-18S	-38E	K	2//69	Prod	45	10	45		7	8.5	10	2	No data
C.E. Seed										OH							
Seed St 30 #5	30-025-	22998	30	-18S	-38E	K	2//69	Prod	45	10	45		7	8.5	10	2	No data
C.E. Seed										OH							
St #7	30-025-	07485	30	-18S	-38E	N	4//48	Prod	3252	3171	3252		8.625	11	296	125	Surf 'c'
Saga Pet. LLC										OH			5.5	7	3171	900	Surf 'c'
St A #7	30-025-	22934	29	-18S	-38E	N	1//69	Prod	6050	5823	5941		11.75	15	360	250	Surf 'c'
Conoco													8.625	11	3800	240	3064 'c'
													5.5	7.875	6050	405	4444 'c'
St A #8	30-025-	23048	29	-18S	-38E	K	2//69	Prod	5960	3652	5787	5796-5924	8.625	11	3800	240	2550 TS
Conoco													5.5	7.875	5960	405	2900 TS

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

Plugged wells within 1/2 mile radius of proposed 30-432 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																	
B.A. Bowers #6	30-025-	07475	30	-18S	-38E	I	11//30	PA	3190	3147	3190		12.5	17	217	200	Surf 'c'
Exxon										OH			9.625	11.5	2750	650	Surf 'c'
													7	8.75	3147	120	2470 TS
Bowers A #12	30-025-	07450	29	-18S	-38E	L	4//47	PA	3088	No data	No data		8.625	11	222	100	Surf 'c'
Exxon													5.5	7.875	3132	575	880 TS
Bowers A #13	30-025-	07476	30	-18S	-38E	J	7//47	PA	3189	3148	3189		8.625	11	283	125	Surf 'c'
Exxon										OH			5.5	7.625	3150	1350	Surf 'c'
Bowers A #14	30-025-	07451	29	-18S	-38E	M	8//47	PA	3207	3120	3207		8.625	11	496	400	Circ.
Exxon										OH			5.5	7.625	3120	1350	Circ.
Bowers A #16	30-025-	07478	30	-18S	-38E	O	10//47	PA	3225	3151	3221		8.625	11	262	150	Circ.
Exxon										OH			5.5	7.625	3151	1000	Circ.
Bowers A Fed. #1	30-025-	07471	30	-18S	-38E	I	11//30	PA	6000	5812	5922		9.625	11.5	2750	620	No data
Exxon													7	8.75	3962	528	
													4.5	6.25	6000	275	2200 TS
Bowers A Fed. #15	30-025-	07477	30	-18S	-38E	P	8//47	PA	3218	3158	3218		8.625	11	249	150	Circ.
Exxon										OH			5.5	7.625	3158	1250	Circ.
Bowers A Fed. #17	30-025-	21900	30	-18S	-38E	J	10//66	PA	50	12	50		7	8	12	6	Circ.
Exxon										OH							
Bowers A Fed. #30	30-025-	23144	30	-18S	-38E	P	6//69	PA	6000	5356	5946		8.625	11	3836	500	2300 TS
Exxon													4.5	7.875	5988	550	2800 TS
Bowers A Fed. #31	30-025-	23176	29	-18S	-38E	E	6//69	PA	7050	6075	6991		8.625	11	3836	500	1858 'c'
Exxon													5.5	7.875	7038	650	3125 'c'

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

Plugged wells within 1/2 mile radius of proposed 30-432 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
Bowers A Fed. #32	30-025-	23235	30	-18S	-38E	O	8//69	PA		5825	5964	5887-01	13.375	17.5	385	400	2250
Exxon												6974-82	9.625	11	3850	550	2900
													7	8.75	7053	895	
Bowers A Fed. #33	30-025-	23222	29	-18S	-38E	D	7//69	PA	3970	4144	5953	4256-66	13.375	17	416	400	Surf 'c'
Exxon									CIBP			5939	9.625	12.25	5988	350	
													7	8.75		550	
Bowers A Fed. #9	30-025-	07446	29	-18S	-38E	E	8//30	PA	4259	No data			12.5	17	226	250	Surf 'c'
Exxon													9.625	11	2750	650	Surf 'c'
													7	8.75	3976	300	2002 'c'
Bowers A Fed. #CT19	30-025-	21966	30	-18S	-38E		1//67	PA	30								
Exxon																	
Bowers A Fed. #CT20	30-025-	21967	30	-18S	-38E		1//67	PA	32								
Exxon																	
Bowers A Fed. #CT21	30-025-	21968	30	-18S	-38E		1//67	PA	37								
Exxon																	
Bowers A Fed. #CT22	30-025-	21961	29	-18S	-38E		1//67	PA	32								
Exxon																	
Bowers A Fed. #CT23	30-025-	21962	29	-18S	-38E		1//67	PA	35								
Exxon																	
Bowers A Fed. #CT24	30-025-	21963	29	-18S	-38E		1//67	PA	35								
Exxon																	
Bowers A Fed. #CT25	30-025-	21964	29	-18S	-38E		1//67	PA	35								
Exxon																	
Bowers A Fed. #CT27	30-025-	21970	30	-18S	-38E		1//67	PA	35								
Exxon																	

NO DATA IN STATE RECORDS

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

Plugged wells within 1/2 mile radius of proposed 30-432 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
Bowers A-B #1	30-025-	07453	29	-18S	-38E	D	9//48	PA	3238	3179	3238		8.625	11	260	150	Circ.
Exxon										OH			5.5	7.625	3179	1050	Circ.
Bowers Fed. A #10	30-025-	22147	30	-18S	-38E	J	6//67	PA	38	10	38		7	7.875	10	3	No data
ARC Ind. / EXXON										OH							
Bowers Fed. A #11	30-025-	22148	30	-18S	-38E	J	6//67	PA	38	10	38		6.625	6.75	10	3	No data
ARC Ind. / EXXON										OH							
Bowers Fed. A #12	30-025-	22190	30	-18S	-38E	J	10//67	PA	45	10	45		6.625	6.75	10	3	No data
ARC Ind. / EXXON										OH							
Bowers Fed. A #2	30-025-	22125	30	-18S	-38E	J	6//67	PA	38	10	38		6.625	6.75	10	3	No data
ARC Ind.										OH							
Bowers Fed. A #3	30-025-	22126	30	-18S	-38E	J	6//67	PA	38	10	38		7	7.785	10	3	No data
ARC Ind.										OH							
F.A Bowers #13	30-025-	22277	30	-18S	-38E	J	10//67	PA	45	10	45		5.5	6.75	10	3	No data
ARC Ind.										OH							
F.A Bowers #4	30-025-	22127	30	-18S	-38E	J	7//67	PA	38	10	38		6.625	6.75	10	3	No data
ARC Ind. / EXXON										OH							
F.A Bowers #5	30-025-	22189	30	-18S	-38E	J	7//67	PA	38	10	38		6.625	6.75	10	3	No data
ARC Ind. / EXXON										OH							
F.A Bowers #6	30-025-	22276	30	-18S	-38E	J	10//67	PA	45	10	45		5.5	6.75	10	3	No data
ARC Ind.										OH							
Bowers A Fed. #34	30-025-	23260	30	-18S	-38E	J	8//69	PA	7010	5822	6979	5848-98	9.625	12.25	3850	550	2400
Exxon												6932-75	3.5 B	7.875	6088	895	2600
													3.5 D	7.875	7010	895	2600
H.D. Mckinley #3	30-025-	07461	30	-18S	-38E	H	7//30	PA	3199	3166	3199		9.625	12.25	2755	600	337 'c'
Getty										OH			7	8.25	3166	100	2595 'c'

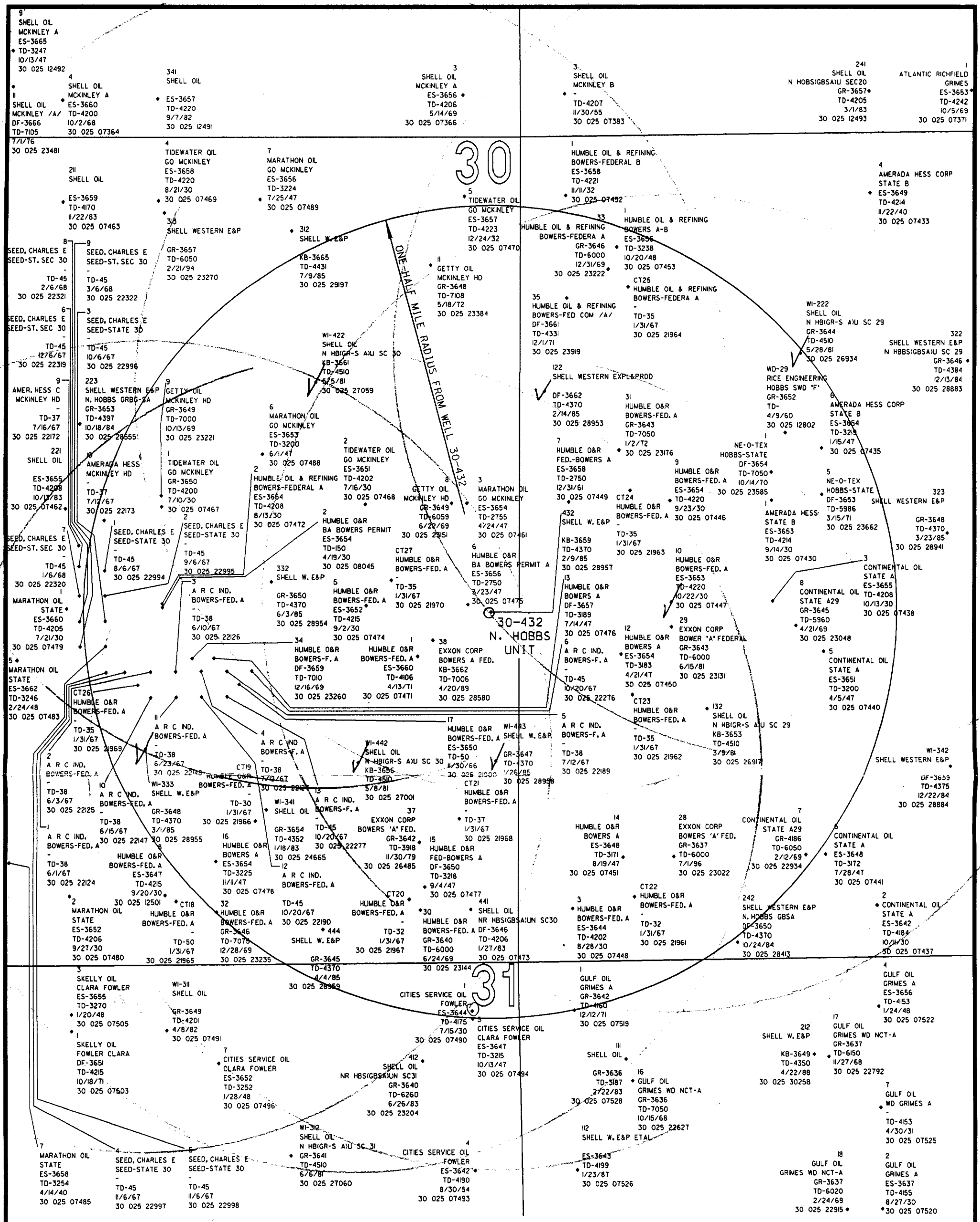
Note: 'c' in TOC column denotes calculated cmt top w/ 50% efficiency.

Plugged wells within 1/2 mile radius of proposed 30-432 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
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'
Hobbs St #5	30-025-	23662	29	-18S	-38E	F	1//71	PA	5986	5813	5879		9.625	12.25	364	200	Surf
Ne-O-Tex													7	8.75	3826	200	2250
													4.5	6.25	5986	120	3800
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																	
St A #5	30-025-	07440	29	-18S	-38E	K	3//47	PA	3200	3168	3188		10.75	13.75	272	200	Surf 'c'
Conoco													7.625	9.875	999	425	Surf 'c'
													5.5	7.875	3206	450	No data

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

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



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

Altura Energy Ltd.

Area of Review Plat

NORTH HOBBS (GRAYBURG SAN ANDRES) UNIT

WELL NO. 30-432

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.