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RECEIVED OCD

2010 SEP 29 P 12:54

September 28, 2010

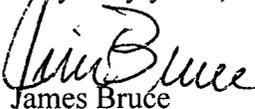
Florene Davidson
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Case 14563

Dear Florene:

Enclosed for filing, on behalf of Lime Rock Resources A, L.P., is an application to approve a waterflood project, together with a proposed advertisement. The advertisement has also been e-mailed to the Division. Please set this matter for the October 28, 2010 Examiner hearing. Thank you.

Very truly yours,


James Bruce

Attorney for Lime Rock Resources A, L.P.

Edge Petroleum Operating Co., Inc. a subsidiary of Mariner Energy
2000 West Sam Houston Parkway, Suite 2000
Houston, Texas 77042

Finney Oil Company
P.O. Box 1569
Artesia, New Mexico 88211

I & W Inc.
P.O. Box 98
Loco Hills, New Mexico 88255

Kersey & Company
P.O. Box 1248
Fredericksburg, Texas 78624

Marbob Energy Corp.
P. O. Box 227
Artesia, New Mexico 88211

Navajo Refining Co., Pipeline Division (Injection Well)
P.O. Box 159
Artesia, New Mexico

Three Rivers Operating
1122 S. Capital of Texas Highway, Suite 325
Austin, Texas 78746

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2000 West Sam Houston Parkway, Suite 2000
Houston, Texas 77042

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P.O. Box 159
Artesia, New Mexico

Three Rivers Operating
1122 S. Capital of Texas Highway, Suite 325
Austin, Texas 78746

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

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2010 SEP 29 P 12: 54

**APPLICATION OF LIME ROCK RESOURCES A, L.P.
FOR APPROVAL OF A WATERFLOOD PROJECT IN
THE SAN ANDRES FORMATION, EDDY COUNTY,
NEW MEXICO.**

Case No. 14563

APPLICATION

Lime Rock Resources A, L.P. applies for an order approving a waterflood project in the San Andres formation for its proposed Northwest State Cooperative Waterflood Project, and in support thereof, states:

1. Applicant proposes to convert to injection the following wells located in Eddy County, New Mexico:

(a) The Northwest 29 State Well No. 14, located 330 feet from the south line and 990 feet from the east line of Section 29, Township 17 South, Range 28 East, N.M.P.M.

(b) The Northwest 31 State Well No. 28, located 973 feet from the north line and 956 feet from the east line of Section 31, Township 17 South, Range 28 East, N.M.P.M.

(c) The Northwest 31 State Well No. 9, located 2310 feet from the north line and 270 feet from the east line of Section 31, Township 17 South, Range 28 East, N.M.P.M.

(d) The Northwest 32 State Well No. 20, located 330 feet from the north line and 330 feet from the east line of Section 32, Township 17 South, Range 28 East, N.M.P.M.

(e) The Northwest 32 State Well No. 1, located 990 feet from the north line and 990 feet from the east line of Section 32, Township 17 South, Range 28 East, N.M.P.M.

(f) The Northwest 32 State Well No. 17, located 2237 feet from the north line and 990 feet from the east line of Section 32, Township 17 South, Range 28 East, N.M.P.M.

(g) The Northwest 32 State Well No. 3, located 1650 feet from the north line and 1650 feet from the east line of Section 32, Township 17 South, Range 28 East, N.M.P.M.

(h) The Northwest 32 State Well No. 6, located 2310 feet from the ^{SOUTH}~~north~~ line and 990 feet from the west line of Section 32, Township 17 South, Range 28 East, N.M.P.M.

(i) The Northwest 32 State Well No. 7, located 990 feet from the ^{SOUTH}~~north~~ line and 990 feet from the west line of Section 32, Township 17 South, Range 28 East, N.M.P.M.

(j) The Northwest 6 State Well No. 15, located 430 feet from the north line and 330 feet from the east line of Section 6, Township 18 South, Range 28 East, N.M.P.M.

A Form C-108 for the project is attached hereto as Exhibit A.

2. Injection will be into the San Andres zone of the Artesia Queen-Grayburg-San Andres Pool, at the approximate depths of 2400-3400 feet subsurface.

3. The waterflood project will be a cooperative project which will benefit the following lands:

- (a) The Northwest Artesia Unit Agreement, covering the following state lands: *Per G.A. to unit agreement*

Township 17 South, Range 28 East, N.M.P.M.

Section 29: SE $\frac{1}{4}$ SE $\frac{1}{4}$ (N) SE
Section 31: SE $\frac{1}{4}$ SE $\frac{1}{4}$ and E $\frac{1}{2}$ NE $\frac{1}{4}$
Section 32: NE $\frac{1}{4}$, SW $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$, and S $\frac{1}{2}$ SE $\frac{1}{4}$

Township 18 South, Range 28 East, N.M.P.M.

Section 6: NE $\frac{1}{4}$ NE $\frac{1}{4}$

- (b) State Lease 647-405 insofar as it covers:

Township 17 South, Range 28 East, N.M.P.M.

Section 31: NE $\frac{1}{4}$ NE $\frac{1}{4}$ NENE (OK)

- (c) State Lease B-5862-21 insofar as it covers:

Township 17 South, Range 28 East, N.M.P.M.

Section 32: NW $\frac{1}{4}$ NW $\frac{1}{4}$

- (d) State Lease E-6942-2 insofar as it covers:

Township 17 South, Range 28 East, N.M.P.M.

Section 32: SW $\frac{1}{4}$ NW $\frac{1}{4}$

- (e) State Lease E-1717-3 insofar as it covers:

Township 17 South, Range 28 East, N.M.P.M.

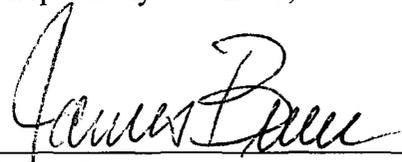
Section 32: NW $\frac{1}{4}$ SE $\frac{1}{4}$

4. Applicant requests that the order entered by the Division contain a provision to administratively approve an expansion of this project.

5. The granting of this application will prevent waste and protect correlative rights.

WHEREFORE, applicant requests that, after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "James Bruce", is written over a horizontal line.

James Bruce
Post Office Box 1056
Santa Fe, New Mexico 87504
(505) 982-2043

Attorney for Lime Rock Resources A, L.P.

PROPOSED ADVERTISEMENT

RECEIVED OCD

Case No. 14563 :

2010 SEP 29 P 12: 54

Application of Lime Rock Resources A, L.P. to institute a cooperative waterflood project in the San Andres formation, Eddy County, New Mexico. Applicant seeks approval to institute a cooperative waterflood project by the injection of produced water into the San Andres formation at the approximate depths of 2400-3400 feet subsurface into the following ten wells:

- (a) The Northwest 29 State Well No. 14, located 330 feet from the south line and 990 feet from the east line of Section 29, Township 17 South, Range 28 East, N.M.P.M.
- (b) The Northwest 31 State Well No. 28, located 973 feet from the north line and 956 feet from the east line of Section 31, Township 17 South, Range 28 East, N.M.P.M.
- (c) The Northwest 31 State Well No. 9, located 2310 feet from the ^{SOUTH} north line and 270 feet from the east line of Section 31, Township 17 South, Range 28 East, N.M.P.M.
- (d) The Northwest 32 State Well No. 20, located 330 feet from the north line and 330 feet from the east line of Section 32, Township 17 South, Range 28 East, N.M.P.M.
- (e) The Northwest 32 State Well No. 1, located 990 feet from the north line and 990 feet from the east line of Section 32, Township 17 South, Range 28 East, N.M.P.M.
- (f) The Northwest 32 State Well No. 17, located 2237 feet from the north line and 990 feet from the east line of Section 32, Township 17 South, Range 28 East, N.M.P.M.
- (g) The Northwest 32 State Well No. 3, located 1650 feet from the north line and 1650 feet from the east line of Section 32, Township 17 South, Range 28 East, N.M.P.M.
- (h) The Northwest 32 State Well No. 6, located 2310 feet from the ^{SOUTH} north line and 990 feet from the west line of Section 32, Township 17 South, Range 28 East, N.M.P.M.
- (i) The Northwest 32 State Well No. 7, located 990 feet from the ^{SOUTH} north line and 990 feet from the west line of Section 32, Township 17 South, Range 28 East, N.M.P.M.
- (j) The Northwest 6 State Well No. 15, located 430 feet from the north line and 330 feet from the east line of Section 6, Township 18 South, Range 28 East, N.M.P.M.

The project area will be a cooperative area encompassing State of New Mexico leases covering the following described acreage:

Township 17 South, Range 28 East, N.M.P.M.

Section 29: SE 1/4 SE 1/4

Section 31: E 1/2 E 1/2

Section 32: NE 1/4, W 1/2 NW 1/4, and S 1/2

NWAU

NWAU OR NE 1/3 E
NE 1/4 NE 1/4 647-407

NWAU

NW 1/4 NW 1/4 in B 5862-21
SW 1/4 NW 1/4 in E 6942-2

NE SW in NWAU
NE 1/4 SE 1/4 SE 1/4 in NWAU
NW SE in E 177-3

info

Township 18 South, Range 28 East, N.M.P.M.

Section 6: NE¹/₄NE¹/₄

— NWAU

The project area is centered approximately 12 miles east-southeast of Artesia, New Mexico.

APPLICATION FOR AUTHORIZATION TO INJECT

Lime Rock Resources, LLC
Eddy County, New Mexico

List of Wells for this Application

Northwest 29 State #14

Section 29, T-17S, R-28E
Location: 330' FSL and 990' FEL
API #: 30-015-30824
Eddy County, New Mexico

Northwest 32 State #20

Section 32, T-17S, R-28E
Location: 330' FNL and 330' FEL
API #: 30-015-30892
Eddy County, New Mexico

Northwest 32 State #1

Section 32, T-17S, R-28E
Location: 990' FNL and 990' FEL
API #: 30-015-30609
Eddy County, New Mexico

Northwest 31 State #28

Section 31, T-17S, R-28E
Location: 973' FNL and 956' FEL
API #: 30-015-30893
Eddy County, New Mexico

Northwest 32 State #17

Section 32, T-17S, R-28E
Location: 2237' FNL and 990' FEL
API #: 30-015-31933
Eddy County, New Mexico

Northwest 32 State #3

Section 32, T-17S, R-28E
Location: 1650' FNL and 1650' FEL
API #: 30-015-30684
Eddy County, New Mexico

Northwest 31 State #9

Section 31, T-17S, R-28E

Location: 2310' FNL and 270' FEL

API #: 30-015-30849

Eddy County, New Mexico

Northwest 32 State #6

Section 32, T-17S, R-28E

Location: 2310' FNL and 990' FWL

API #: 30-015-30777

Eddy County, New Mexico

Northwest 32 State #7

Section 32, T-17S, R-28E

Location: 990' FNL and 990' FWL

API #: 30-015-30685

Eddy County, New Mexico

Northwest 6 State #15

Section 6, T-18S, R-28E

Location: 430' FNL and 330' FEL

API #: 30-015-30785

Eddy County, New Mexico

Requirements per Form C-108

I. Purpose: Lime Rock plans to commence injection into the above listed permitted wells for waterflood purposes.

II. Operator: Lime Rock Resources A, L.P.
1111 Bagby, Ste. 4600
Houston, Texas 77002
Contact Party: Chuck L. Reagan
Phone: (713) 292-9548

III. Well Data:
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:

Well Number:

(1) Well Name & Number; Operator; Well Location by Section, Township and Range; and footage location within the section.

Northwest 29 State #14

Operator: Lime Rock Resources
Section 29, T-17-S, R-28E
Location: 330' FSL and 990' FEL, Unit P
API #: 30-015-30824
Eddy County, New Mexico

Casing strings used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

Surface Casing

Hole Size: 12 ¼"
Casing Size: 8 5/8"
Depth Set: 531 feet
Cemented with: 382 sacks
Top of Cement: surface
Method Determined: Circulated

Intermediate Casing

Production Casing

Hole Size: 7 7/8"
Casing Size: 5 ½"
Cemented with: 700 sacks
Top of Cement: surface
Method Determined: Circulated
Total Depth: 3,235'

INJECTION INTERVAL

San Andres

INJECTION WELL DATA

A description of the tubing to be used including its size, lining material, and setting depth.

Tubing Size: 2 7/8"
Lining Material: TK70ST = 10-20 ml
Type of Packer: Retrievable
Packer Setting Depth: 2,346'
Other Type of Tubing/Casing Seal (if applicable): N/A

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.

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.

Is this a new well drilled for injection? No

If no, for what purpose was the well originally drilled?

The well was originally drilled and completed as a Queen, Grayburg, San Andres producer.

The name of the injection formation and, if applicable, the field or pool name.

San Andres

Field or Pool name:

Artesia (QN-GB-SA)

Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

Perforations: 2436', 51, 65, 68, 79, 87, 2502, 10, 32, 40, 63, 77, 80, 90, 2618, 34, 46, 60, 76, 81, 90, 98, 2703

Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Next lower: Glorieta
 3,321'

Next higher: Grayburg
 1,606'

(2) Well Name & Number; Operator; Well Location by Section, Township and Range; and footage location within the section.

Northwest 32 State #20

Operator: Lime Rock Resources

Section 32, T-17-S, R-28E

Location: 330' FNL and 330' FEL, Unit A

API #: 30-015-30892

Eddy County, New Mexico

Casing strings used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

Surface Casing

Hole Size: 12 1/4"

Casing Size: 8 5/8"

Depth Set: 505 feet

Cemented with: 350 sacks
Top of Cement: surface
Method Determined: Circulated

Intermediate Casing

Production Casing

Hole Size: 7 7/8"
Casing Size: 5 1/2"
Cemented with: 650 sacks
Top of Cement: surface
Method Determined: Circulated
Total Depth: 3,205'

INJECTION WELL DATA

A description of the tubing to be used including its size, lining material, and setting depth.

Tubing Size: 2 7/8"
Lining Material: TK70ST = 10-20 ml
Type of Packer: Retrievable
Packer Setting Depth: 2,377'
Other Type of Tubing/Casing Seal (if applicable): N/A

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.

Is this a new well drilled for injection? No

If no, for what purpose was the well originally drilled?

The well was originally drilled and completed as a Queen, Grayburg, San Andres producer.

The name of the injection formation and, if applicable, the field or pool name.

San Andres

Field or Pool name:

Artesia (QN-GB-SA)

Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

Perforations: 2446', 52, 60, 64, 76, 95, 2508, 10, 21, 32, 34, 42, 62, 73, 2575, 87, 92, 2630, 46, 70, 78, 86, 94, 2704, 10, 20, 29

Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Next lower: Glorieta
 3,339'

Next higher: Grayburg
 1,647'

(3) Well Name & Number; Operator; Well Location by Section, Township and Range; and footage location within the section.

Northwest 32 State #1

Operator: Lime Rock Resources
Section 32, T-17-S, R-28E
Location: 990' FNL and 990' FEL, Unit A
API #: 30-015-30609
Eddy County, New Mexico

Casing strings used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

Surface Casing

Hole Size: 12 ¼"
Casing Size: 8 5/8"
Depth Set: 418 feet
Cemented with: 325 sacks
Top of Cement: surface
Method Determined: Circulated

Intermediate Casing

Production Casing

Hole Size: 7 7/8"
Casing Size: 5 ½"
Cemented with: 800 sacks
Top of Cement: surface
Method Determined: Circulated
Total Depth: 3,197'

Injection Well Data

A description of the tubing to be used including its size, lining material, and setting depth.
Tubing Size: 2 7/8"
Lining Material: TK70ST = 10-20 ml
Type of Packer: Retrievable
Packer Setting Depth: 2,366'
Other Type of Tubing/Casing Seal (if applicable): N/A

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.

Is this a new well drilled for injection? No

If no, for what purpose was the well originally drilled?

The well was originally drilled and completed as a Queen, Grayburg, San Andres producer.

The name of the injection formation and, if applicable, the field or pool name.

San Andres

Field or Pool name:

Artesia (QN-GB-SA)

Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

Perforations: 2456', 58, 70, 72, 74, 83, 86, 92, 2524, 50, 61, 76, 83, 94, 2611, 18, 66, 90, 98, 2706, 12, 20, 23, 29 and 36

Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Next lower: Glorieta
 3,341'

Next higher: Grayburg
 1,650'

(4) Well Name & Number; Operator; Well Location by Section, Township and Range; and footage location within the section.

Northwest 31 State #28

Operator: Lime Rock Resources

Section 31, T-17-S, R-28E

Location: 973' FNL and 959' FEL, Unit A

API #: 30-015-30893

Eddy County, New Mexico

Casing strings used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

Surface Casing

Hole Size: 12 ¼"

Casing Size: 8 5/8"

Depth Set: 452 feet

Cemented with: 325 sacks
Top of Cement: surface
Method Determined: Circulated

Intermediate Casing

Production Casing

Hole Size: 7 7/8"
Casing Size: 5 1/2"
Cemented with: 600 sacks
Top of Cement: surface
Method Determined: Circulated
Total Depth: 2,802'

Injection Well Data

A description of the tubing to be used including its size, lining material, and setting depth.

Tubing Size: 2 7/8"
Lining Material: TK70ST = 10-20 ml
Type of Packer: Retrievable
Packer Setting Depth: 2,196'
Other Type of Tubing/Casing Seal (if applicable): N/A

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.

Is this a new well drilled for injection? No

If no, for what purpose was the well originally drilled?

The well was originally drilled and completed as a Queen, Grayburg, San Andres producer.

The name of the injection formation and, if applicable, the field or pool name.

San Andres

Field or Pool name:

Artesia (QN-GB-SA)

Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

Perforations: 2286, 2304, 28, 30, 36, 40, 46, 52, 62, 68, 80, 2428, 38, 40, 62, 66, 84, 2502, 04, 18, 22, 32, 34, 44, 48

Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Next lower: Glorieta
 3,302'

Next higher: Grayburg
 1,592'

(5) Well Name & Number; Operator; Well Location by Section, Township and Range; and footage location within the section.

Northwest 32 State #17

Operator: Lime Rock Resources
Section 32, T-17-S, R-28E
Location: 2237' FNL and 990' FEL, Unit H
API #: 30-015-31933
Eddy County, New Mexico

Casing strings used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

Surface Casing

Hole Size: 12 ¼"
Casing Size: 8 5/8"
Depth Set: 508 feet
Cemented with: 375 sacks
Top of Cement: surface
Method Determined: Circulated

Intermediate Casing

Production Casing

Hole Size: 7 7/8"
Casing Size: 5 ½"
Cemented with: 625 sacks
Top of Cement: surface
Method Determined: Circulated
Total Depth: 3,225'

Injection Well Data

A description of the tubing to be used including its size, lining material, and setting depth.
Tubing Size: 2 7/8"
Lining Material: TK70ST = 10-20 ml
Type of Packer: Retrievable
Packer Setting Depth: 2,377'
Other Type of Tubing/Casing Seal (if applicable): N/A

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.

Is this a new well drilled for injection? No

If no, for what purpose was the well originally drilled?

The well was originally drilled and completed as a Queen, Grayburg, San Andres producer.

The name of the injection formation and, if applicable, the field or pool name.

San Andres

Field or Pool name:

Artesia (QN-GB-SA)

Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

Perforations: 2467, 72, 84, 96, 2500, 14, 22, 36, 47, 67, 77, 81, 90, 2626, 34, 76, 94, 2723, 25, 40, 47, 55, 66, 78, 2834, 41, 47, 67, 72

Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Next lower: Glorieta
 3,356'

Next higher: Grayburg
 1,636'

(6) Well Name & Number; Operator; Well Location by Section, Township and Range; and footage location within the section.

Northwest 32 State #3

Operator: Lime Rock Resources

Section 32, T-17-S, R-28E

Location: 1650' FNL and 1650' FEL, Unit G

API #: 30-015-30684

Eddy County, New Mexico

Casing strings used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

Surface Casing

Hole Size: 12 ¼"

Casing Size: 8 5/8"

Depth Set: 375 feet

Cemented with: 375 sacks
Top of Cement: surface
Method Determined: Circulated

Intermediate Casing

Production Casing

Hole Size: 7 7/8"
Casing Size: 5 1/2"
Cemented with: 625 sacks
Top of Cement: surface
Method Determined: Circulated
Total Depth: 3,200'

Injection Well Data

A description of the tubing to be used including its size, lining material, and setting depth.

Tubing Size: 2 7/8"
Lining Material: TK70ST = 10-20 ml
Type of Packer: Retrievable
Packer Setting Depth: 2,374'
Other Type of Tubing/Casing Seal (if applicable): N/A

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.

Is this a new well drilled for injection? No

If no, for what purpose was the well originally drilled?

The well was originally drilled and completed as a Queen, Grayburg, San Andres producer.

The name of the injection formation and, if applicable, the field or pool name.

San Andres

Field or Pool name:

Artesia (QN-GB-SA)

Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

Perforations: 2464', 66, 81, 87, 92, 2501, 26, 30, 36, 60, 66, 72, 93, 97, 2622, 28, 62, 81, 2704, 12, 21, 26, 33, 36, 41, 50

Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Next lower: Glorieta
 3,341'

Next higher: Grayburg
 1,620'

(7) Well Name & Number; Operator; Well Location by Section, Township and Range; and footage location within the section.

Northwest 31 State #9

Operator: Lime Rock Resources
Section 31, T-17-S, R-28E
Location: 2310' FSL and 270' FEL, Unit I
API #: 30-015-30849
Eddy County, New Mexico

Casing strings used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

Surface Casing

Hole Size: 12 ¼"
Casing Size: 8 5/8"
Depth Set: 518 feet
Cemented with: 350 sacks
Top of Cement: surface
Method Determined: Circulated

Intermediate Casing

Production Casing

Hole Size: 7 7/8"
Casing Size: 5 ½"
Cemented with: 600 sacks
Top of Cement: surface
Method Determined: Circulated
Total Depth: 3,186'

Injection Well Data

A description of the tubing to be used including its size, lining material, and setting depth.
Tubing Size: 2 7/8"
Lining Material: TK70ST = 10-20 ml
Type of Packer: Retrievable
Packer Setting Depth: 2,354'
Other Type of Tubing/Casing Seal (if applicable): N/A

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.

Is this a new well drilled for injection? No

If no, for what purpose was the well originally drilled?

The well was originally drilled and completed as a Queen, Grayburg, San Andres producer.

The name of the injection formation and, if applicable, the field or pool name.

San Andres

Field or Pool name:

Artesia (QN-GB-SA)

Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

Perforations: 2444', 56, 70, 75, 83, 2514, 31, 36, 46, 69, 97, 2600, 05, 10, 25, 32, 42, 50, 56, 58, 69, 85, 2708, 10, 18, 29, 38, 68, 75, 82

Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Next lower: Glorieta
 3,336'

Next higher: Grayburg
 1,614'

(8) Well Name & Number; Operator; Well Location by Section, Township and Range; and footage location within the section.

Northwest 32 State #6

Operator: Lime Rock Resources

Section 32, T-17-S, R-28E

Location: 2310' FSL and 990' FWL, Unit L

API #: 30-015-30777

Eddy County, New Mexico

Casing strings used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

Surface Casing

Hole Size: 12 ¼"

Casing Size: 8 5/8"

Depth Set: 515 feet

Cemented with: 350 sacks
Top of Cement: surface
Method Determined: Circulated

Intermediate Casing

Production Casing

Hole Size: 7 7/8"
Casing Size: 5 1/2"
Cemented with: 650 sacks
Top of Cement: surface
Method Determined: Circulated
Total Depth: 3,200'

Injection Well Data

A description of the tubing to be used including its size, lining material, and setting depth.

Tubing Size: 2 7/8"
Lining Material: TK70ST = 10-20 ml
Type of Packer: Retrievable
Packer Setting Depth: 2,344'
Other Type of Tubing/Casing Seal (if applicable): N/A

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.

Is this a new well drilled for injection? No

If no, for what purpose was the well originally drilled?

The well was originally drilled and completed as a Queen, Grayburg, San Andres producer.

The name of the injection formation and, if applicable, the field or pool name.

San Andres

Field or Pool name:

Artesia (QN-GB-SA)

Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

Perforations: 2434', 38, 45, 50, 51, 55, 65, 67, 72, 90, 93, 2509, 12, 15, 20, 25, 30, 35, 40, 49, 51, 58, 68, 70 and 72

Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Next lower: Glorieta
 3,331'

Next higher: Grayburg
 1,610'

(9) Well Name & Number; Operator; Well Location by Section, Township and Range; and footage location within the section.

Northwest 32 State #7

Operator: Lime Rock Resources
Section 32, T-17-S, R-28E
Location: 990' FSL and 990' FWL, Unit M
API #: 30-015-30685
Eddy County, New Mexico

Casing strings used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

Surface Casing

Hole Size: 12 ¼"
Casing Size: 8 5/8"
Depth Set: 490 feet
Cemented with: 450 sacks
Top of Cement: surface
Method Determined: Circulated

Intermediate Casing

Production Casing

Hole Size: 7 7/8"
Casing Size: 5 ½"
Cemented with: 650 sacks
Top of Cement: surface
Method Determined: Circulated
Total Depth: 3,215'

Injection Well Data

A description of the tubing to be used including its size, lining material, and setting depth.

Tubing Size: 2 7/8"
Lining Material: TK70ST = 10-20 ml
Type of Packer: Retrievable
Packer Setting Depth: 2,382'
Other Type of Tubing/Casing Seal (if applicable): N/A

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.

Is this a new well drilled for injection? No

If no, for what purpose was the well originally drilled?

The well was originally drilled and completed as a Queen, Grayburg, San Andres producer.

The name of the injection formation and, if applicable, the field or pool name.

San Andres

Field or Pool name:

Artesia (QN-GB-SA)

Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

Perforations: 2472, 76, 80, 91, 96, 2507, 22, 30, 40, 53, 62, 70, 78, 86, 2600, 07, 27, 34, 40, 46, 83, 91, 2703, 14, 31, 39, 49, and 62

Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Next lower: Glorieta
 3,359'

Next higher: Grayburg
 1,650'

(10) Well Name & Number; Operator; Well Location by Section, Township and Range; and footage location within the section.

Northwest 6 State #15

Operator: Lime Rock Resources

Section 6, T-18-S, R-28E

Location: 990' FSL and 990' FWL, Unit A

API #: 30-015-30785

Eddy County, New Mexico

Casing strings used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

Surface Casing

Hole Size: 12 ¼"

Casing Size: 8 5/8"

Depth Set: 501 feet
Cemented with: 350 sacks
Top of Cement: surface
Method Determined: Circulated

Intermediate Casing

Production Casing

Hole Size: 7 7/8"
Casing Size: 5 1/2"
Cemented with: 600 sacks
Top of Cement: surface
Method Determined: Circulated
Total Depth: 3,223'

Injection Well Data

A description of the tubing to be used including its size, lining material, and setting depth.

Tubing Size: 2 7/8"
Lining Material: TK70ST = 10-20 ml
Type of Packer: Retrievable
Packer Setting Depth: 2,471'
Other Type of Tubing/Casing Seal (if applicable): N/A

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.

Is this a new well drilled for injection? No

If no, for what purpose was the well originally drilled?

The well was originally drilled and completed as a Queen, Grayburg, San Andres producer.

The name of the injection formation and, if applicable, the field or pool name.

San Andres

Field or Pool name:

Artesia (QN-GB-SA)

Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

Perforations: 2561, 63, 68, 74, 97, 99, 2610, 18, 20, 29, 52, 57, 64, 80, 96, 98, 2704, 16, 30, 55, 63, 66, 84, and 91

Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Next lower: Glorieta
 3,415'

Next higher: Grayburg
 1,696'

IV. Is this an expansion of an existing project? -Yes

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. See attached maps that identify all wells and leases within two miles of all proposed injection wells with a one-half mile circle drawn around each injection well.

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.

See the enclosed spreadsheet for a tabulation of data for the wells within the area of review. As shown on the enclosed spreadsheet there are 117 wells within the area of review that penetrate the proposed injection zone. Wellbore schematics are included herein for the 34 plugged wells within the area of review.

VII. DATA SHEET - Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
Average – 150 BWPD
Max – 600 BWPD
2. This will be a closed system
3. Proposed average and maximum injection pressure;
a. Proposed average injection pressure: 500 psi.
b. The proposed maximum injection pressure is 1,500 (0.6 psi/ft x 2500')
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water;
Will be disposing of produced water
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).
Injection is NOT for disposal.

VIII. Geological Data

Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth.

The proposed waterflood will inject into a portion of the Permian age San Andres Formation between average depths of 2,400' and 3,400'. This portion of the San Andres is predominately a dolomitic interval with the 400' average gross interval containing porosity ranging from 5 to 10% related to 1) intercrystalline and finely crystalline dolomite and 2.) secondary moldic/vuggy in the dolomitized skeletal wackestones and packstones. The intent of the waterflood is to capture additional oil production from the formation.

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.

In the area of review, fresh water occurs down to a depth of approximately 150 feet. No known fresh water sources are underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

Proposed to perforate, acidize and fracture stimulate.

X. ATTACH APPROPRIATE LOGGING AND TEST DATA ON THE WELLS

The complete well logs for this well are on file with the Oil Conservation Division. Attached for reference is an excerpt of the NW State #20 Triple combo Log.

XI. ANALYSIS OF FRESHWATER WELLS

There are no freshwater wells producing within one mile of the proposed injection well(s).

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.

Geologic and engineering data have been examined and no evidence of open faults or any other hydrological connection between the injection zone and any fresh water aquifer has been found.

XIII. Proof of Notice List

(A.) Surface Owner(s):

Northwest 29 State #14
Commissioner of Public Lands
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

Northwest 32 State #20
John R. Gray, LLC

Northwest 32 State #1
John R. Gray, LLC

Northwest 31 State #28
John R. Gray, LLC

Northwest 32 State #17
John R. Gray, LLC

Northwest 32 State #3
John R. Gray, LLC

Northwest 31 State #9
John R. Gray, LLC

Northwest 32 State #6
John R. Gray, LLC

Northwest 32 State #7
John R. Gray, LLC

Northwest 6 State #15
John R. Gray, LLC

John R. Gray, LLC
P.O. Box 1182
Artesia, New Mexico 88211

(B.) Offset Leasehold Operators within ½ mile of proposed injection well:

BP America Production Company
Attention: Craig Ferguson
501 Westlake Park Blvd.
Houston, Texas 77079

George A. Chase, Jr. and G and C Services
P.O. Box 1618
Artesia, New Mexico 88211

Chesapeake Operating, Inc.
P. O. Box 18496
Oklahoma City, Oklahoma 73154-0496

CFM Oil Company
d/b/a Louis & Judy Fulton
P.O. Box 1176
Artesia, New Mexico 88210

ConocoPhillips Company
Attention: Land Department
P.O. Box 2197
Houston, Texas 77252

Devon Energy Production Co., L.P.
20 North Broadway
Oklahoma City, Oklahoma 73102

Doral Energy Corp.
Attention: Marty Bloodworth
415 W. Wall Street, Suite 500
Midland, Texas 79701

Edge Petroleum Operating Co., Inc. a subsidiary of Mariner Energy
2000 West Sam Houston Parkway, Suite 2000
Houston, Texas 77042

Finney Oil Company
P.O. Box 1569
Artesia, New Mexico 88211

I & W Inc.
P.O. Box 98
Loco Hills, New Mexico 88255

Kersey & Company
P.O. Box 1248
Fredericksburg, Texas 78624

Marbob Energy Corp.
P. O. Box 227
Artesia, New Mexico 88211

Navajo Refining Co., Pipeline Division (Injection Well)
P.O. Box 159
Artesia, New Mexico

Three Rivers Operating
1122 S. Capital of Texas Highway, Suite 325
Austin, Texas 78746

The parties listed above have been sent by certified mail a copy of Form C-108 Application for Injection submitted by Lime Rock Resources. Please see attached

(C.) Affidavit of Publication – N/A

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: _____ TITLE: _____

SIGNATURE: _____ DATE: _____

E-MAIL ADDRESS: _____

PHONE: _____

NAME: _____ TITLE: _____

SIGNATURE: _____ DATE: _____

E-MAIL ADDRESS: _____

PHONE: _____

Area of Review Spreadsheet

No	Lease	Well #	Sec	TWN	RGE	N/S Dir	E/W Dir	Well Type	Status	Spud Date	Sur Hole	Surf Csg Size	SX Cmt	TOC	Prod Hole	Prod Csg Size	SX Cmt	TOC	TD	Completion Date
1	WILLIAMS A FEDERAL	12	29	175	28E	590 FSL	2185 FWL	Oil	Active	9/15/03	12 1/4"	8 5/8"	375	Circ	7 7/8"	5 1/2"	750	Circ	3,546	11/3/03
2	STATE B GAS COM	1	29	175	28E	1980 FSL	1980 FEL	Gas	Active	2/1/71	17 1/2"	13.375"	500	Plug	12 1/4"	9 5/8"	150	Plug	12,431	8/4/53
3	RED LAKE 29 I STATE	1	29	175	28E	1650 FSL	990 FEL	Oil	Active	10/5/04	12 1/4"	8 5/8"	350	"C"	7 7/8"	5 1/2"	550	"C"	3,800	3/3/05
4	NW STATE <i>Producer</i>	14	29	175	28E	330 FSL	990 FEL	Oil	Active	1/3/00	12 1/4"	8 5/8"	382	"C"	7 7/8"	5 1/2"	700	"C"	3,240	2/1/00
5	NW STATE <i>Producer</i>	19	29	175	28E	917 FSL	330 FEL	Oil	Active	4/7/00	12 1/4"	8 5/8"	350	"C"	7 7/8"	5 1/2"	550	"C"	3,192	5/2/00
6	NORTHWEST ARTESIA UNIT	1/196	29	175	28E	330 FSL	330 FEL	Oil	Active	6/18/63	9 5/8"	7"	125	Plug	6 1/4"	4 1/2"	75	Plug	1,940	6/24/63
7	DELHI B STATE	1	28	175	28E	800 FSL	800 FWL	Oil	Active	3/26/75	17 1/2"	13 3/8"	600	"C"	12 1/4"	9 5/8"	500	"C"	3,630	4/4/81
8	DELHI STATE SA-GLOB	2	28	175	28E	330 FSL	990 FWL	Oil	Plugged	5/29/61	10"	8 5/8"	165	Circ	7 3/4"	4 1/2"	100	Circ	6,048	7/28/61
9	DELHI STATE	2	32	175	28E	330 FNL	990 EWL	Oil	Plugged	10/4/61	10"	8 5/8"	35	Circ	8"	4 1/2"	75	Circ	1,920	10/20/61
10	DELHI STATE	5	33	175	28E	330 FNL	330 FWL	Oil	Active	11/20/79	11"	8 5/8"	288	Circ	7 7/8"	5 1/2"	660	Circ	2,120	12/5/79
11	DELHI STATE	4	33	175	28E	969 FNL	330 EWL	Oil	Active	5/11/76	10"	8 5/8"	110	"C"	6 1/4"	4 1/2"	475	"C"	2,088	6/30/76
12	DELHI STATE	1	33	175	28E	990 FNL	990 FWL	Oil	Plugged	1/29/57	NA	NA	NA	Circ	8"	4"	294	Circ	2,250	2/13/57
12.5	DELHI A STATE	1	33	175	28E	990 FNL	980 FWL	Oil	Active	3/6/60	12 1/4"	8 5/8"	300	Circ	7 7/8"	4 1/2"	950	Circ	6,084	3/28/60
13	WASHINGTON 33 STATE	6	33	175	28E	790 FNL	1650 FWL	Oil	Active	8/8/98	12 1/4"	8 5/8"	325	Circ	7 7/8"	5 1/2"	760	Circ	4,000	8/28/98
14	EMPIRE ABO UNIT	7	33	175	28E	1650 FNL	970 FWL	Oil	Active	8/27/98	12 1/4"	8 5/8"	325	Circ	7 7/8"	5 1/2"	810	Circ	3,950	9/5/98
15	EMPIRE ABO UNIT	29A	33	175	28E	1980 FNL	620 FWL	Oil	Active	4/13/60	11"	8 5/8"	450	Circ	7 7/8"	4 1/2"	800	Circ	6,150	5/6/60
16	WASHINGTON 33 STATE	8	33	175	28E	2267 FNL	330 FWL	Oil	Active	7/30/98	12 1/4"	8 5/8"	325	Circ	7 7/8"	5 1/2"	760	Circ	4,000	9/1/98
17	NW STATE	20	32	175	28E	330 FNL	330 FEL	Oil	Active	4/14/00	12 1/4"	8 5/8"	350	Circ	7 7/8"	5 1/2"	650	Circ	3,210	5/10/00
18	NW STATE	16	32	175	28E	330 FNL	1650 FEL	Oil	Active	4/24/00	12 1/4"	8 5/8"	350	Circ	7 7/8"	5 1/2"	600	Circ	3,210	5/16/00
19	Enron State	1	32	175	28E	530 FNL	1650 FWL	Oil	Active	5/2/01	12 1/4"	8 5/8"	325	Circ	7 7/8"	5 1/2"	900	Circ	4,000	7/1/01
20	EMPIRE ABO UNIT	26C	32	175	28E	990 FNL	1650 FWL	Oil	In-Active	1/18/54	17 1/2"	13 3/8"	550	Circ	7 7/8"	5 1/2"	200	Circ	10,300	5/23/54
21	NW STATE	4	32	175	28E	1140 FNL	2277 FEL	Oil	Active	9/6/99	12 1/4"	8 5/8"	350	"C"	7 7/8"	5 1/2"	650	"C"	3,200	10/8/99
22	EMPIRE ABO UNIT	27C	32	175	28E	990 FNL	1900 FEL	Oil	In-Active	6/5/64	11"	8 5/8"	175	Circ	7 7/8"	4 1/2"	830	Circ	6,148	6/23/64
23	NORTHWEST ARTESIA UNIT	3	32	175	28E	990 FNL	1650 FEL	Oil	Active	6/16/63	8 5/8"	7"	125	Circ	6 1/4"	4 1/2"	75	Circ	1,984	6/22/63

Area of Review Spreadsheet

09/14/09

No	Lease	Well #	Sec	TWN	RGE	N/S Dir	E/W Dir	Well Type	Status	Spud Date	Sur Hole	Surf Csg Size	SX Cmt	TOC	Prod Hole	Prod Csg Size	SX Cmt	TOC	TD	Completion Date
24	NW STATE	1	32	17S	28E	990 FNL	990 FEL	Oil	Active	5/22/99	12 1/4"	8 5/8"	325	Circ	7 7/8"	5 1/2"	800	Circ	3,205	6/26/99
25	NORTHWEST ARTESIA UNIT	2	32	17S	28E	890-FNL	330 FEL	Oil	Plugged	1/27/62	9 5/8"	7"	100	Circ	6 1/4"	4 1/2"	150		1,971	1/31/62
25.5	Empire Abo Unit "E"	28	32	17S	28E	1160 FNL	330 FEL	Oil	Plugged	11/17/60	11"	8 5/8"	300	Circ	7 7/8"	5 1/2"	150	Circ	6,100	11/27/60
26	RAMPO	38	31	17S	28E	2310 FSL	330 FWL	Oil	Active	6/16/55	10"	8 5/8"	50	Circ	7 7/8"	5 1/2"	50		1,891	7/26/55
27	NW STATE	2	32	17S	28E	1709 FNL	385 FEL	Oil	Active	8/6/99	12 1/4"	8 5/8"	325	Circ	7 7/8"	5 1/2"	750	Circ	2,850	9/3/99
28	NORTHWEST ARTESIA UNIT	6	32	17S	28E	1980-FNL	330 FEL	Oil	Injection	11/1/61	10"	8 5/8"	75	Circ	8"	4 1/2"	300		1,973	11/24/61
29	EMPIRE ABO UNIT "F"	28	32	17S	28E	2310 FNL	330 FEL	Oil	Plugged	8/26/60	11"	8 5/8"	300	Circ	7 7/8"	5 1/2"	150		6,176	9/8/60
30	DANCER 32 STATE COM	1	32	17S	28E	1728 FNL	916 FEL	Oil	Active	3/17/96	17 1/2"	13 3/8"	600	Circ	12 1/4"	9 5/8"	925	Circ	10,610	5/11/96
30	DANCER 32 STATE COM	1	32	17S	28E	1728 FNL	916 FEL	Oil	Active	3/17/96	17 1/2"	13 3/8"	600	Circ	8 3/4"	5 1/2"	1300	CBL	10,610	5/11/96
31	NW STATE	17	32	17S	28E	2237 FNL	990 FEL	Oil	Active	9/13/01	12 1/4"	8 5/8"	375	Circ	7 7/8"	5 1/2"	625	Circ	3,225	11/1/01
32	NW STATE	3	32	17S	28E	1650 FNL	1650 FEL	Oil	Active	8/16/99	12 1/4"	8 5/8"	375	Circ	7 7/8"	5 1/2"	625	Circ	3,205	9/10/99
33	NORTHWEST ARTESIA UNIT	5	32	17S	28E	1980-FNL	1650 FEL	Oil	Active	3/29/62	10"	8 5/8"	50	Circ	8"	4 1/2"	75		1,955	4/21/62
34	EMPIRE ABO UNIT "F"	27	32	17S	28E	2310 FNL	1650 FEL	Oil	Plugged	9/10/60	11"	8 5/8"	450	Circ	7 7/8"	5 1/2"	150		6,108	9/27/60
35	NW STATE	18	32	17S	28E	2272 FNL	2273 FEL	Oil	Active	2/26/02	12 1/4"	8 5/8"	375	Circ	7 7/8"	5 1/2"	800	Circ	3,215	5/1/02
36	AA STATE	1	32	17S	28E	2280 FNL	1980 FWL	Oil	Active	7/30/60	11"	8 5/8"	550	Circ	7 7/8"	4 1/2"	1000	920	6,171	8/24/60
37	STATE-32	1	32	17S	28E	1350-FSL	1650-FEL	Oil	Active	2/7/58	10 3/4"	8 5/8"	50	Circ	8"	5 1/2"	150		1,650	3/12/58
38	JEFFERS STATE	1	32	17S	28E	2141 FSL	1665 FEL	Oil	Active	1/27/00	12 1/4"	8 5/8"	375	Circ	7 7/8"	5 1/2"	800	Circ	3,220	3/14/00
39	State-32	2	32	17S	28E	1980-FSL	1980-FEL	Oil	Active	7/29/59	NA	NA	NA	NA	9.5/8"	7"	200		2,075	8/6/59
40	EMPIRE ABO UNIT "G"	27B	32	17S	28E	1650 FSL	1961 FEL	Oil	Plugged	6/7/60	11"	8 5/8"	450	Circ	7 7/8"	4 1/2"	850		6,165	6/18/60
41	NORTHWEST ARTESIA UNIT	7	32	17S	28E	2310 FSL	660 FEL	Oil	In-Active	12/17/53	10"	7"	25	??	6 1/4"	4 1/2"	725	Circ	2,500	1/22/54
42	KERSEY STATE	1	32	17S	28E	2018 FSL	330 FEL	Oil	Active	5/16/00	12 1/4"	8 5/8"	350	Circ	7 7/8"	5 1/2"	900	"C"	4,075	7/14/00
43	KERSEY STATE	3	32	17S	28E	1650 FSL	990 FEL	Oil	Active	7/2/07	12 1/4"	8 5/8"	375	"C"	7 7/8"	5 1/2"	950	"C"	3,950	8/7/07
44	EMPIRE ABO UNIT "G"	28C	32	17S	28E	1650 FSL	660 FEL	Oil	Plugged	5/16/00	11"	8 5/8"	600	Circ	7 7/8"	4 1/2"	850		3,975	6/4/60

No.	Well Name	Legals	API #	Operator	Status	Compl Date	TD	Perfs	Hole Size	Casing Size	Depth Set	Sus. Cmt.	TOC	Method	Comments
1	NW State #8	Sec 32, 17/8 R28E 1090 FSL 2126 FWL K	30815	SDX	Active	1/4/2000	3310	2533-2859	12 1/4 7 7/8	8 5/8 5 1/2	461 3302	350 600	Surf Surf	Circ Circ	See Diagram
2	NW State #5	1900 FSL 2146 FWL K	30781	SDX	Active	12/7/1999	3190	2464-2674 2602-56	12 1/4 7 7/8	8 5/8 5 1/2	520 3181	350 600	Surf Surf	Circ Circ	
3	Empire Abo Unit #25 B	2280 FNL 978 FWL E	01691	BP	TA	9/60	6013	5930-5920 5930 - 80	11 7 7/8	8 5/8 5 1/2	890 6012	425 650	Surf 1158	1" w/75 ex Calc 75% CIBP @ 5580 & 6560	
4	Empire Abo Unit #26	2280 FNL 1980 FWL F	01657	BP	TA	9/60	6171	5844 - 82 5926- 82		8 5/8 4 1/2	1007 6171	550 1000	Surf 920	Circ Temp Surv	CIBP @ 5822 w/35 cmt
5	NW State #18	2272 FNL 2273 FEL G	31834	SDX	Active	5/02	3215	2472 - 2752	12 1/4 7 7/8	8 5/8 5 1/2	465 3206	375 600	Surf Surf	Circ Circ	
6	NW State #5	1980 FNL 1650 FEL G	02312	SDX	Active	4/62	1855	1911 - 17	*11 7 7/8	8 5/8 4 1/2	507 1955	50 75	312 1629	G 75% C 75%	*Assumed
7	Empire Abo Unit #27	2310 FNL 1650 FEL G	01663	BP	TA	9/60	6100	5980 - 80 6041 - 68		8 5/8 5 1/2	1003 6108	450 170 units + 150 ex	Surf Surf	Circ Repeated	TOC 24100?
8	NW State #7	2310 FSL 960 FEL L	01672	SDX	TA	12/78	2250	1933 - 63 CIBP 1830	*10	7 4 1/2	478 2206	75 725	389 Surf	Calc 75% Circ	
9	Empire Abo Unit #28C	1650 FSL 960 FEL L	01669	BP	Active	9/60	6250	6032 - 72 5753 - 6637	11	8 5/8 4 1/2	1304 6250	600 850	Surf Surf	Circ Circ	CIBP 6970
10	Jeffers State #1	2141 FSL 1665 FEL J	30887	SDX	Active	3/2000	3220	2747 - 2852 2312 - 2632	12 1/4 7 7/8	8 5/8 5 1/2	512 3212	350 650	Surf Surf	Circ Circ	CRT 2710 Sped 75 ex
11	State 32 #1	1350 FSL 1650 FEL J	01655	Hanson Energy	Active	4/58	*2100	1919 - 2039	10 3/4 8	8 5/8 5 1/2	516 2074	60 150	295 1297	Calc 75% Calc 75%	
12	State 32 #2	1980 FSL 1980 FEL J	01656	Hanson Energy	Active	8/59	2038		10 8	8 5/8 7	490 1704	50 200	350 Surf	Calc 75%	Pulled from 350 PRTD 1940 OH 1940 - 1704
13	Empire Abo Unit #27B	1650 FSL 1981 FEL J	01670	BP	Active	9/60	6163	6036 - 6112 5910 - 62	11 7 7/8	8 5/8 4 1/2	890 6165	450 650	Surf Surf	Circ	CIBP 6020 Sped TOC 1610 - surf w/425 ex
14	Aspen 32 State Com #1	1370 FSL 1609 FEL J	34148	Newbourne	PA	10/19/2005	10400	17 1/2 12 1/4 8 3/4	13 9/8 9 5/8 P&A	428 2660	400 1100	5 5	C C		See Diagram
15	NW State #6	2310 FSL 2105 FWL K	10618	SDX	PA	5/68	2003	1898 - 1908		8 5/8 4 1/2	462 2002	125 175	Surf 1241	Calc 75% Calc 75%	See Diagram

No. #	Well Name	Logbit	API #	Operator	Status	Compil Date	TD	Perfs	Hole Size	Casing Size	Depth Set	8 in. CmtL	TOC	Method	Comments
16	Empire Abo Unit #26B	Sec 32 1173 R28E 1650 FSL 2310 FWL L	01681	BP	Active	3/60	6063	5806 - 6038	7 7/8	8 5/8 5 1/2	7 48 6039	225 450	Surf Surf	Circ	Sqzd 2504 - surf w/800 ex
17	NW State #6	2310 FSL 660 FWL L	30777	SDX	Active	11/99	3204	2434 - 2572	12 1/4 7 7/8	8 5/8 5 1/2	515 3200	350 650	Surf Surf	Circ	
18	NW State #9	2310 FSL 660 FWL L	10785	SDX	TA	5/66	1980	1698 - 1927	11 7 7/8	8 5/8 4 1/2	489 1980	100 175	100 1219	Calc 75% Calc 75%	
19	Empire Abo Unit #25A	1650 FSL 660 FWL L	01682	BP	Active	4/60	6123	5600 - 6060	7 7/8	8 5/8 5 1/2	728 6125	225 450	Surf Surf	Circ	Sqzd 2492 - surf w/850 ex
20	NW State #7	660 FSL 880 FWL M	30685	SDX	Active	9/99	3220	2472 - 2767	12 1/4 7 7/8	8 5/8 5 1/2	490 3215	450 650	Surf Surf	Calc 75% Calc 75%	
21	NW State #12	660 FSL 760 FWL M	20043	SDX	TA	5/67	1987	1922 - 49		8 5/8 4 1/2	495 1985	100 150	106 1343	Calc 75% Calc 75%	
22	Empire Abo Unit #25	660 FSL 660 FWL M	01680	BP	Active	3/60	6187	5697 - 6067		8 5/8 5 1/2	770 6187	450	Surf	Circ	Sqzd 2622 - surf w/800 ex
23	NW State #13	660 FSL 2030 FWL N	10834	SDX	P&A	8/68	2008	1921 - 54	11 7 7/8	8 5/8 4 1/2	493 2003	125 175	Surf Surf	Calc 75% Calc 75%	See Diagram
24	Empire Abo Unit #26A	660 FSL 1880 FWL N	01686	BP	Active	2/60	6172	5651 - 6116	11 7 7/8	8 5/8 5 1/2	779 6172	280 400	Surf Surf	Circ	Sqzd w/825 ex to surf
25	Empire Abo Unit #261	150 FSL 1400 FWL N	21539	BP	Active	7/75	6220	5680 - 6064	11 7 7/8	8 5/8 5 1/2	1000 6222	250	80	Temp Surf	Readmix to surf DV @ 4016. Sg 1 680 Sg 2 875 circ to surf
26	NW State #14	840 FSL 1650 FEL O	01685	SDX	Active	3/55	2089		11 7 7/8	8 5/8 5 1/2	485 1802	50 25	280 1650	Calc 75% Calc 75%	*Assumed
27	Empire Abo Unit #27A	650 FSL 1951 FEL O	01687	BP	Active	1/60	6215	6134 - 56	11 7 7/8	8 5/8 4 1/2	985 6215	600 850	Surf Surf	Circ	CIBP 5980
28	Empire Abo Unit #271	330 FSL 1450 FEL O	21540	BP	TA	6/75	6221	5705 - 6116	12 1/4 7 7/8	8 5/8 5 1/2	1007 6235	550	Surf Surf	Circ	CIBP @ 5655 w/99 cmt DV @ 4650 Sg 1 450 ex Sg 2 600 ex TOC Surf - C
29	Empire Abo Unit #272	330 FSL 2481 FEL O	22009	BP	Active	7/77	6281	5714 - 6106	11 7 7/8	8 5/8 5 1/2	600 6370	275	Surf Surf	Circ	DV @ 4982 Sg 1 476 ex Sg 2 1080 ex TOC Surf - C
30	NW State #15	660 FSL 660 FEL P	01688	SDX	TA	4/54	2102	1869 - 2002	11	8 5/8 4 1/2	750 2100	50 335	555 Surf	Calc 75% Circ	(esg run & cmt 1974)
31	NW State #4	1140 FSL 2277 FEL P	30734	SDX	Active	10/99	3200	2450 - 2813	12 1/4 7 7/8	8 5/8 5 1/2	525 3195	350 650	Surf Surf	Circ	
32	Empire Abo Unit #27C	660 FSL 1900 FEL B	10313	BP	P&A	8/64	6148	3603 - 6074	?	8 5/8 4 1/2	1004 6146	175 820	Surf -1428	Circ	

No.	Well Name	Leases	API #	Operator	Status	Compl Date	TD	Perfs	Hole Size	Casing Size	Depth Set	Exst. Cmtl.	TOC	Method	Comments
33	Empire Abo Unit #28B Aspect?	Sec 32, T17S R28E 660 FSL 660 FEL P	30-015- 01668	BP	TA	6/60	6318	5784 - 6140	11 7 7/8	8 5/8 4 1/2	1247 6319	560 850	Surf Surf	Circ Reported	CIBP 6200 CIBP 5734 w/350 cmt
	Empire Abo Unit #28C	690 FNL 1650 FWL C	01673	BP	TA	5/54	10300 CIBP 5623	7392-97 5747 - 5907	?	13 3/8 8 5/8 5 1/2	554 1669 7506	550 200 200	Surf Temp Surv CBL	Circ	PBTD 7464 350 ex cmt + 250' Perite 125 ex Plug 7800-7555 592 to 1907 in 1978 - 1325 ex
34	Enron State #2	530 FNL 1650 FWL D	31530	SDX	Active	7/01	4020	3459 - 3534 3769 - 3922	12 1/4 7 7/8	8 5/8 5 1/2	390 3933	325 900	Surf Surf	Circ	CIBP 3700 ✓
35	NW State #3	1650 FNL 1650 FEL G	30684	SDX	Active	8/69	3205	2464 - 2750	12 1/4 7 7/8	8 5/8 5 1/2	524 3200	375 625	Surf Surf	Circ	✓
36	NW State #17	2237 FNL 660 FEL H	31833	SDX	Active	11/01	3225	2467 - 2872	12 1/4 7 7/8	8 5/8 5 1/2	508 3217	375 625	Surf Surf	Circ	✓
37	Kensley State #1	2016' FSL 330 FEL I	30688	SDX	Active	7/00	4075	2330-2638 3556-3601	12 1/4 7 7/8	8 5/8 5 1/2	539 4072	350 800	Surf Surf	Circ	RBP @ 2864 ✓
38	Empire Abo Unit #27E	330 FNL 2271 FEL B	02606	BP	Active	4/60	6261	6140 - 87 5659 - 5930	11 7 7/8	8 5/8 4 1/2	1227 6261	750 900	Surf 60	Circ Reported	CIBP 6100 See Diagram ✓
39	Empire Abo Unit #27A	670 FNL 1700 FEL B	21736	BP	Active	4/76	6350	5772 - 6260	11 7 7/8	8 5/8 5 1/2	535 6950	200	Surf	Circ	Redmk @ surf DV @ 4072, Sq 1400 ex Sq 2 890 ex, TOC Surf - C
40	EAU 26 E	330 FNL 1941 FWL C	02606	BP	Active	7/60	6254	5662 - 6066	11 7 7/8	8 5/8 5 1/2	755 6254	450 850	Surf 695	Circ Reported	

No.	Well Name	Leases	API #	Operator	Status	Compl Date	TD	Perfs	Hole Size	Casing Size	Depth Set	Exst. Cmtl.	TOC	Method	Comments
41	EAU #24	Sec 31, T17S R28E 1650 FSL 330 FEL I	30-015- 01644	BP	TA	4/60	6106	5936 - 50 6024 - 50	11 7 7/8	8 5/8 5 1/2	738 6104	250 450	Surf Surf	Circ	RK @ 6763 Perf 6024 - 50 9924 Sq 2 890 ex @ 2860 TOC Surf - C ✓
42	NW #10	735 FSL 330 FEL P	30760	SDX	Active	11/69	3210	2462 - 2802	12 1/2 7 7/8	8 5/8 5 1/2	405 3192	350 660	Surf Surf	Circ	✓
43	NW State #5	2310 FSL 270 FEL I	30849	SDX	Active	1/00	3195	2444 - 2762	17 1/4 7 7/8	8 5/8 5 1/2	518 3186	350 600	Surf Surf	Circ	✓

0/12

No. #	Well Name	Legals	API #	Operator	Status	Compl Data	TD	Perfs	Hole Size	Casing Size	Depth Set	Sxs. Cmt.	TOC	Method	Comments
16	Empire Abo Unit #26B	Sec. 32, 117S R29E 1650 FSL, 2310 FWL, K	01661	BP	Active	3/60	6093	5905 - 6068		8 5/8 5 1/2	7 48 6099	225 450	Surf Surf	Circ	Sgpd 2504 - surf w/800 sx
17	NW State #6	2310 FSL, 960 FWL, L	30777	SDX	Active	11699	3204	2434 - 2572	12 1/4 7 7/8	8 5/8 5 1/2	515 3200	350 650	Surf Surf	Circ Circ	
18	NW State #9	2310 FSL, 660 FWL, L	10795	SDX	TA	5/66	1990	1896 - 1927	11 7 7/8	8 5/8 4 1/2	489 1980	100 175	100 1219	Calc 75% Calc 75%	
19	Empire Abo Unit #25A	1650 FSL, 960 FWL, L	01662	BP	Active	4/60	6123	5900 - 6060		8 5/8 5 1/2	728 6175	225 450	Surf Surf	Circ	Sgpd 2492 - surf w/850 sx
20	NW State #7	960 FSL, 960 FWL, M	30685	SDX	Active	9/69	3220	2472 - 2762	12 1/4 7 7/8	8 5/8 5 1/2	490 3215	450 650	Surf Surf	Calc 75% Calc 75%	
21	NW State #12	960 FSL, 760 FWL, M	20043	SDX	TA	5/67	1997	1922 - 49		8 5/8 4 1/2	495 1895	100 150	106 1343	Calc 75% Calc 75%	
22	Empire Abo Unit #25	660 FSL, 660 FWL, M	01660	BP	Active	3/60	6187	5997 - 6087		8 5/8 5 1/2	770 6187	450 450	Surf Surf	Circ	Sgpd 2622 - surf w/800 sx
23	NW State #13	960 FSL, 2030 FWL, N	10834	SDX	P&A	6/66	2006	1921 - 54	11 7 7/8	8 5/8 4 1/2	493 2003	125 175	Surf 1242	Calc 75% Calc 75%	See Diagram
24	Empire Abo Unit #26A	660 FSL, 1980 FWL, N	01659	BP	Active	2/60	6172	5951 - 6118	11 7 7/8	8 5/8 5 1/2	719 6172	280 400	Surf Surf	Circ	Sgpd w/825 sx to surf
25	Empire Abo Unit #261	150 FSL, 1400 FWL, N	21539	BP	Active	7/75	6220	5690 - 6064	11 7 7/8	8 5/8 5 1/2	1000 6222	250	90	Temp Surf	Redmix to surf DV @ 4018; Sig 1, 680 Sig 2, 875 circ to surf
26	NW State #14	940 FSL, 1650 FEL, O	01665	SDX	Active	3/65	2099	OH	11 7 7/8	8 5/8 5 1/2	485 1802	50 25	290 1650	Calc 75% Calc 75%	*Assumed
27	Empire Abo Unit #27A	650 FSL, 1951 FEL, O	01667	BP	Active	1/60	6215	6134 - 56	11 7 7/8	8 5/8 4 1/2	985 6215	500 850	Surf 75	Circ Reported	CIBP 5980
28	Empire Abo Unit #271	330 FSL, 1450 FEL, O	21540	BP	TA	6/75	6221	5105 - 6116	12 1/4 7 7/8	8 5/8 5 1/2	1007 6255	550	Surf Surf	Circ Circ	CIBP @ 5655 w/35 cmt DV @ 4050 Sig 1, 450 sx Sig 2, 800 sx TOC Surf - C
29	Empire Abo Unit #272	330 FSL, 2481 FEL, O	22009	BP	Active	7/77	6261	5714 - 6186	11 7 7/8	8 5/8 5 1/2	600 6370	275	Surf Surf	Circ Circ	DV @ 4382 Sig 1, 475 sx Sig 2, 1080 sx TOC Surf - C
30	NW State #15	960 FSL, 660 FEL, P	01666	SDX	TA	4/64	2102	1969 - 2002	11	8 5/8 4 1/2	750 2100	50 335	555 Surf	Calc 75% Circ	(csg run & cmt: 1974)
31	Kersey State #2	644 FSL, 330 FEL, P	30889	SDX	Active	7/2000	4104	3643 - 3819	12 1/4 7 7/8	8 5/8 5 1/2	511 4096	350 850	Surf Surf	Calc 75% Circ	CIBP 3570
32	Empire Abo Unit #281	200 FSL, 660 FEL, P	22597	BP	Active	9/78	6330	6189 - 6252	11 7 7/8	8 5/8 5 1/2	600 6330	450	Surf Surf	Circ Circ	DV @ 2988 Sig 1, 635 sx Sig 2, 700 sx TOC - Surf - C

Handwritten checkmarks and initials (S.H. Allen, OK) are present above the table rows.

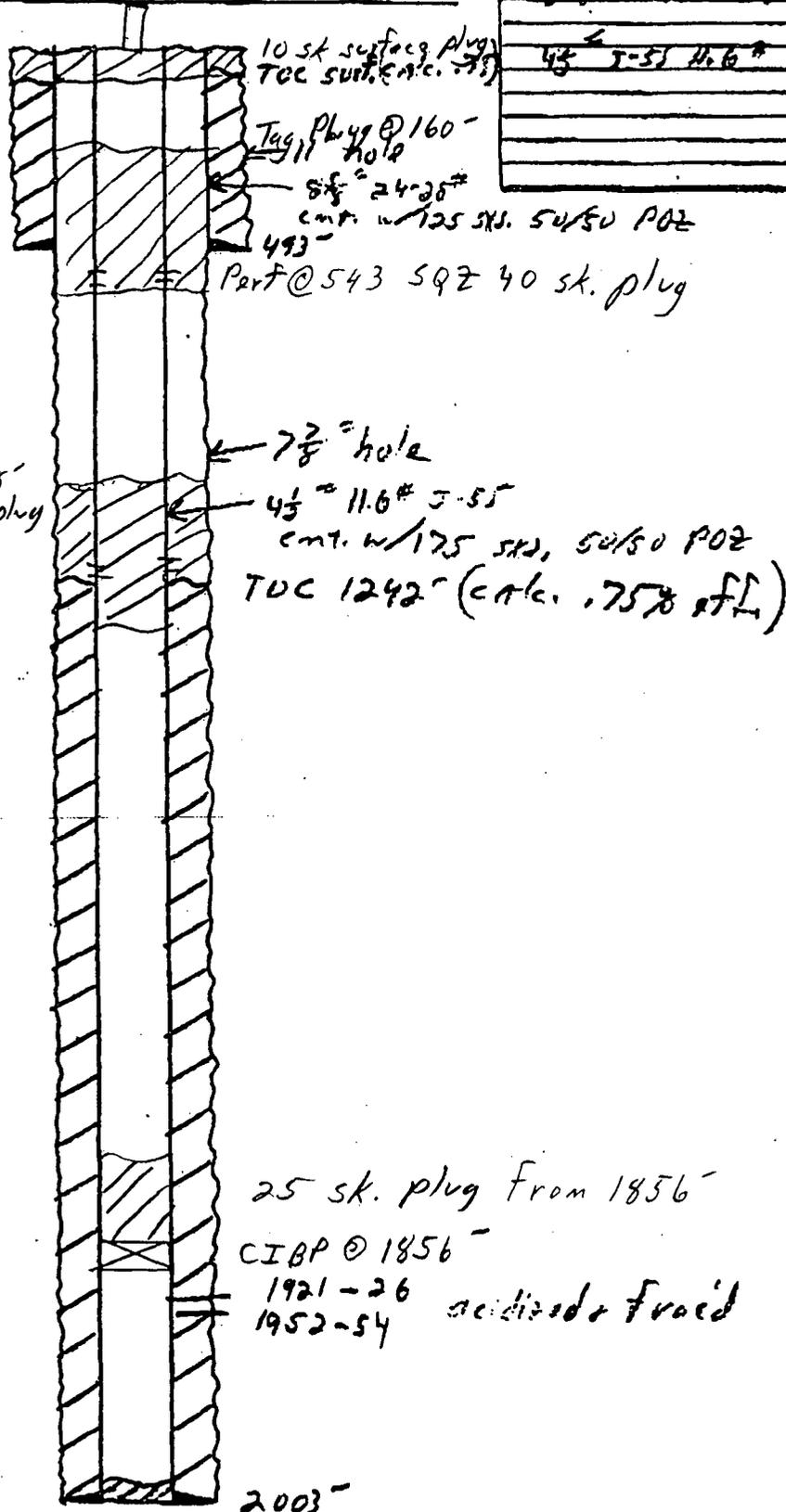
PRY ACT
0/13

No. #	Well Name	Legals	API #	Operator	Status	Compl Date	TD	Perfs	Hole Size	Casing Size	Depth Surf	Exs. Cmt.	TOC	Method	Comments
33	Empire Abo Unit #28B Aspen	Sec 32, T1TS R28E 660 FSL 660 FEL, P	01668	BP	TA	6/60	6319	5784 - 6140	11 7 7/8	8 5/8 4 1/2	1247 6319	550 850	Surf 150	Circ Reported	CIBP 6200 CIBP 5734 w/35 cmt
34	Empire Abo Unit #28E	Sec 5, T18S R28E 330 FNL 970 FEL, A	02604	BP	Active	2/60	6290	6230 - 85 5850 - 6050	11 7 7/8	8 5/8 4 1/2	1190 6290	500 750	Surf 400	Circ Temp. Surf	CIBP 6180
35	Empire Abo Unit #27E	330 FNL 2271 FEL, B	02605	BP	Active	4/60	6261	6140 - 97 5658 - 5630	11 7 7/8	8 5/8 4 1-2	1227 6261	750 900	Surf 60	Circ Reported	CIBP 6100 See Diagram
36	Empire Abo Unit #27A	670 FNL 1700 FEL, B	21736	BP	Active	4/76	6350	5172 - 6260	11 7 7/8	8 5/8 5 1/2	535 6350	200	Surf	Circ	Redmix @ surf DV @ 4012, Sig 1 400 ex Sig 2 830 ex, TOC Surf - C
37	Empire Abo Unit #273	1300 FNL 1556 FEL, B	22488	BP	TA	8/78	6357	6200 - 10	11 7 7/8	8 5/8 5 1/2	550 6351	350	Surf	Circ	CIBP 6170 DV @ 3034 Sig 1 625 ex Sig 2 775 ex, TOC - Surf - C
38	Empire Abo Unit #272A	1300 FNL 2345 FEL, B	22528	BP	Active	7/78	6350	6130 - 70	11 7 7/8	8 5/8 5 1/2	550 6350	375	Surf	Circ	DV @ 3060 Sig 1 755 ex Sig 2 1125 ex, TOC - Surf - C
39	EAU 261 A	1080 FNL 1914 FWL, C	22687	BP	TA	1/79	6350	6174 - 6204	11 7 7/8	8 5/8 5 1/2	550 6345	400	Surf	Circ	CIBP 6150 DV @ 3007 Sig 1 700 ex Sig 2 800 ex, TOC Surf - C
40	EAU 26 E	330 FNL 1841 FWL, C	02606	BP	Active	7/60	6254	5652 - 6096	11 7 7/8	8 5/8 5 1/2	755 6254	450 850	Surf	Circ Reported	
41	EAU 251	660 FNL 150 FWL, D	22750	BP	Active	1/79	6750	5664 - 6152	11 7 7/8	8 5/8 5 1/2	745 6245	400	Surf	Circ	DV @ 3018 Sig 1 650 ex Sig 2 900 ex, TOC Surf - C
42	EAU 25C	660 FNL 660 FWL, D	02607	BP	Active	3/60	6273	6122 - 68 5922 - 5938	11 7 7/8	8 5/8 5 1/2	1198 6273	750 850	Surf	Circ Reported	
43	Empire Abo Unit #26D		01657	BP	Active	12/59	6265	6220 - 45		8 5/8 5 1/2	959 6265	370 150	Surf	Circ	Size w/1500 ex, TOC Surf - Circ
44	EAU #24	Sec 31, T1TS R28E 1650 FSL 330 FEL, I	01644	BP	TA	4/60	6106	5806 - 50 6024 - 50	11 7 7/8	8 5/8 5 1/2	738 6104	250 450	Surf	Circ	Pkr @ 5783 Perfs 6024 - 50 sqzd Sqzd 650 ex @ 2900 TOC Surf - Circ
45	NW #10	735 FSL 330 FEL, P	30760	SDX	Active	11/69	3210	2482 - 2602	12 1/2 7 7/8	8 5/8 5 1/2	495 3192	350 650	Surf	Calc	

WELL NAME: Northwest Artesia Unit #13 FIELD AREA: Artesia
 LOCATION: SEC. 32 T175 R28E 990' FSL & 2030' FWL
 GL: _____ ZERO: _____ AGL: _____
 KB: 3687 ORIG. DRLG./COMPL. DATE: _____
 COMMENTS: APT # 30-015-10834

CASING PROGRAM:

SIZE/WT./GR./CONN.	DEPTH SET
9 5/8" 11.4 lb 24-25# (1966)	498
4 1/2" 11.6# 5-55 (1966)	542



PaA 10/2006

Tag plug @ 998'
 spnt 25 sk plug
 from 1300'
 Part. 1243
 held 1500#

← 7 7/8" hole
 ← 4 1/2" 11.6# 5-55
 cont. w/175 sks, 50/50 P02
 TOC 1242' (calc. .75% stl)

Tops:

yates	346
7-A1	607
Q2	1193
G6	1640
SA	1958

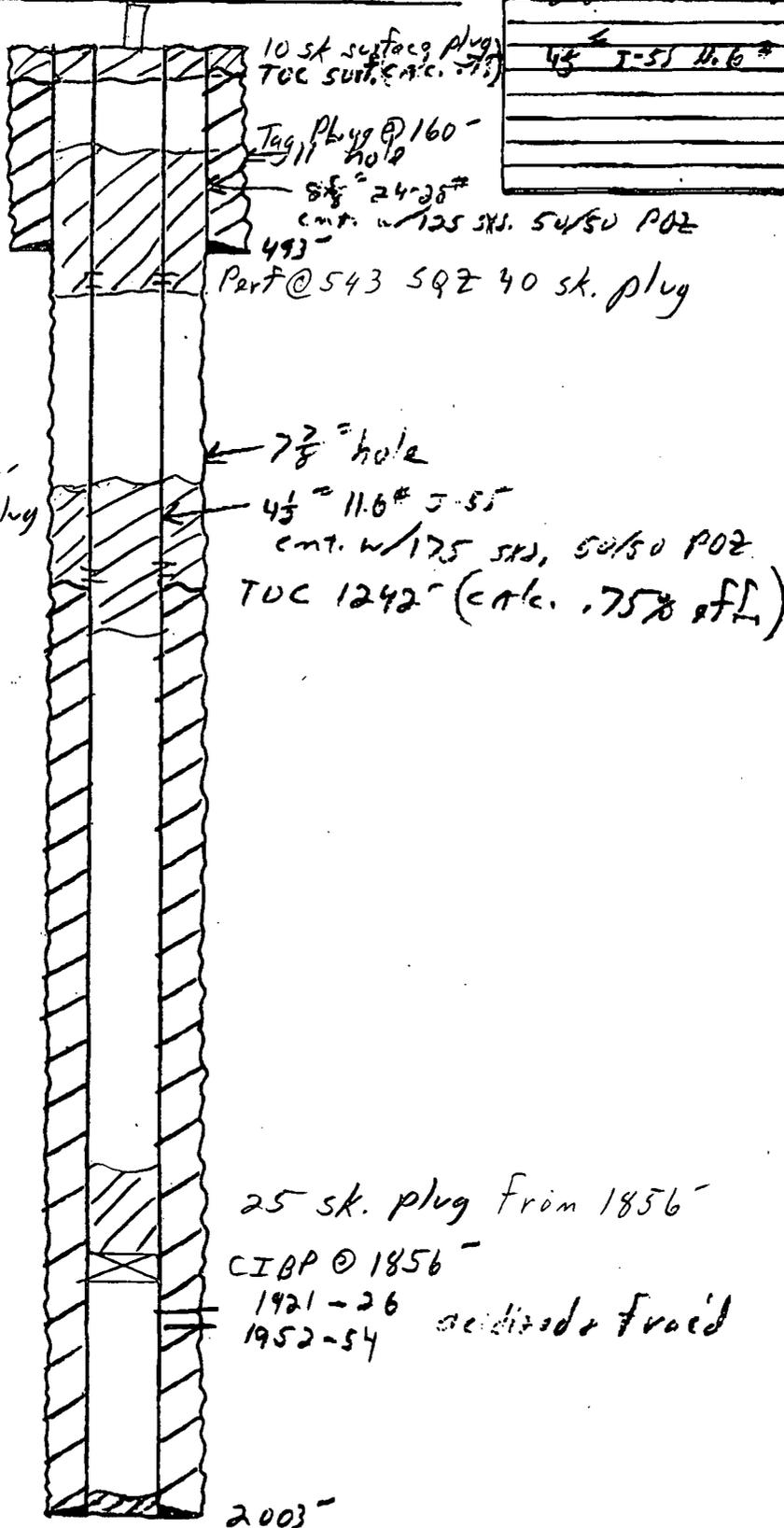
25 sk. plug from 1856'
 CIBP @ 1856'
 1921-26 acidized & froed
 1952-54

2003'

WELL NAME: Northwest Artesia Unit #13 FIELD AREA: Artesia
 LOCATION: SEC. 32 T17S R28E 990' FSL + 2030' FWL
 GL: _____ ZERO: _____ AGL: _____
 KB: 3687 ORIG. DRLG./COMPL. DATE: _____
 COMMENTS: APZ # 30-015-10834

CASING PROGRAM:

SIZE/WT./GR./CONN.	DEPTH SET
8 7/8" H-4U 24-25#	(1966) 498'
4 1/2" J-55 11.6#	(1966) 543'



PaA 10/2006

Tops :

yates	346
7-A1	607
Q2	1193
G6	1640
SA	1958

25 sk. plug from 1856'
 CIBP @ 1856'
 1921-26 acidized & froed
 1952-54

Tag plug @ 998'
 spt 25 sk plug
 from 1300'
 Part 1243
 hold 1500#

7 7/8" hole
 4 1/2" 11.6# J-55
 cont. w/175 sks, 50/50 P02
 TOC 1242' (calc. .75% of L)

2003'

