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jamesbruc@aol.com

September 28, 2010

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

2010 SEP 29 P 12: 54

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 emailed to the Division. Please set this matter for the October 28, 2010 Examiner hearing. Thank you.

Very truly yours.

ames 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 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

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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 BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION DECEMBED OCC

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.

# 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:

- Applicant proposes to convert to injection the following wells located in Eddy 1. 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 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 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:

The Northwest Artesia Unit Agreement, covering the following state of the Port & A P with agreement (a)

lands:

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

Section 29:

SE1/4SE1/4

Section 31:

SE'48E'4 and E'2NE'4

NE1/4, SW1/4, NE1/4SE1/4, and S1/2SE1/4 Section 32:

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

NE¼NE¼

Section 6:

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

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

Section 31:

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

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

Section 32: NW1/4NW1/4

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

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

Section 32: SW1/4NW1/4

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

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

Section 32:

- 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,

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 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 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 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'4SE'4

Section 31: E'2E'2

NWAU

Township 18 South, Range 28 East, N.M.P.M.
Section 6: NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>

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-28É

Location: 990' (FAL 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: 27/8"

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 ¼"

Casing Size: 8 5/8"
Depth Set: 505 feet

Cemented with: 350 sacks
Top of Cement: surface

Method Determined: Circulated

#### Intermediate Casing

<u>Production Casing</u>

Hole Size: 7 7/8" Casing Size: 5 ½"

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: 27/8"

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 1/4"

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: 27/8"

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

Page **7** of **22** 

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: 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: 27/8"

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: 27/8"

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 ¾"

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 ½"

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: 27/8"

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: 27/8"

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 ½"

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: 27/8"

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: 27/8"

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 ½"

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: 27/8"

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:

- 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')
- 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 know 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 o 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 as 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

Ž	No Lease	Well#	Sec 1	N N	RGE	N/S Dir	E/W Dir	Well Type	Status	Spud Date	Sur Hole	Surf Csg Size	SX Cmt	<b>TOC</b>	Prod Hole	Prod Csg Size	SX Cmt	тос	Ð	Completion Date	<u> </u>
н	WILLIAMS A FEDERAL	12	29 1	175 2	28E 5	590 FSL	2185 FWL	ō	Active	9/15/03	12 1/4"	8 5/8"	375	Circ	77/8"	5 1/2"	750	Circ	3,546	11/3/03	>
2	STATE B GAS COM	1	29 1	2 21	28E 1	1980 FSL	1980 FEL	Gas	Active	1/1/2	17 1/2	13.375"	200	Plug	121/4"	9 5/8"	150	Plug	12,431	8/14/53	r —
						_					83/4"	7"	700	Buld							
8	RED LAKE 29 I STATE	1	29 1	175 2	28E 10	1650 FSL	990 FEL	ΙΘ	Active	10/5/04	12 1/4"	8 5/8"	350	۳۵	17/8"	5 1/2"	550	"C"	3,800	3/3/05	7
4	NW STATE PROJUCES	14	29 1	175 2	28E 3	330 FSL	990 FEL	Θ	Active	1/3/00	12 1/4"	8 5/8"	382	"C"	.8/2.2	5 1/2"	700	"C"	3,240	2/1/00	7
2	NW STATE Profess	19	29 1	175 2	28E 9	917 FSL	330 FEL	DiO.	Active	4/7/00	12 1/4"	8 5/8"	350	"כ"	.8/2.2	5 1/2"	550	"c"	3,192	5/2/00	<u> </u>
ڼ	NORTHWEST ARTESIA LIMIT	1/196	29 1	175	28E 3	-330FSL	330 FEL	ō	Active	6/18/63	.8/5-6		-125	Boy	6.1/4	4 1/2"	75	Plug	1,940	6/24/63	
7	DELHI B STATE	1	28 1	175   2	28E 8	300 FSL	800 FWL	ō	Active	3/26/75	17 1/2"	13 3/8"	009	ני	12 1/4"	.8/56	200	ٿ	3,630	4/4/81	<u> </u>
8	DEPTREATED GOOD	2	28 1	175 2	28E 3	330 FSL 9	990 FWL	ō	200	S/29/61	10"	8 5/8"	165	Circ	7 3/4"	4 1/2"	100		6,048	7/28/61	
9/	DELHLSTATE	2	33	175 2	28E 3	330 FNL	990 EWL	Ϊ́O	paggnja	10/4/61	101	8.5/8"	35	Circ	8"	4 1/2"	78		1,970	10/20/61	
10	DEI HI STATE	- <del> </del>	33 1	175	28E 3	330 FNL	330 FWL	ΙΘ	Active	11/20/19	-11	.8/8.8	288	Circ	8/1/	5.1/2"	099	Clrc	2,120	12/5/79	
#	DELHISTATE	4	33 1	175 2	28E -9	969 FNL 3	330 FWI	iö	Active	5/11/5	10	.8/5.8	110	<u>ا</u>	61/4"	4.1/2"	475		2,086	6/30/76	
77	DELHLSTATE	+	33 1	175 2	Z8E 9	990 FNL	990-FWL	llo	Plugged	1/29/57	NA	NA	NA		8	4"	294	Circ	2,250	2/13/57	٠,
12.5	12.5 DELHI A STATE	1	33 1	2 221	28E 9	990 FNL	980 FWL	ijŌ	Active	3/6/60	12 1/4"	8 5/8"	300	Circ	17/8"	4 1/2"	950	:	6,084	3/28/60	$\geq$
13	WASHINGTON 33 STATE	9	33 1	175 2	28E 7	790 FNL 1	1650 FWL	iio	Active	8/8/8	12 1/4"	8 5/8"	325	Circ	17/8"	5 1/2"	760	Circ .	4,000	8/28/98	7
14	EMPIRE ABO UNIT	7	33.	175   2	28E 1(	1650 FNL 9	970 FWL	lio	Active	8/27/98	12 1/4"	8 5/8"	325	Circ	7 7/8"	5 1/2"	810	Circ	3,950 -	86/2/6	7
15	EMPIRE ABO UNIT	29A	33 1	175 2	28E 19	1980 FNL	620 FWL	ΙΘ	Active	4/13/60	11"	8 5/8"	450	Circ	77/8"	4 1/2"	800		6,150	2/9/9	$\nearrow$
16	WASHINGTON 33 STATE	8	33 1	175	28E 2:	2267 FNL 3	330 FWL	ΙΘ	Active	7/30/98	12 1/4"	8 5/8"	325	Circ	.8/2 2	5 1/2"	760	Circ	4,000	9/1/98	<u> </u>
17	NW STATE	20	32 1	175	28E 3	330 FNL	330 FEL	ō	Active	4/14/00	12 1/4"	8 5/8"	350	Circ	7 7/8"	5 1/2"	920	Circ	3,210	5/10/00	<u>,</u>
18	NW STATE	16	32 1	175	28E 3	330 FNL 1	1650 FEL	ē	Active	4/24/00	12 1/4"	8 5/8"	350	Circ	7 7/8"	5 1/2"	009	Circ	3,210	5/16/00	<u>&gt;</u>
19	Enron State	1	32 1	175	28E 5	530 FNL 1	1650 FWL	ē	Active	5/2/01	12 1/4"	8 5/8"	325	Circ	7 7/8"	5 1/2"	006	Circ	4,000	7/1/01	<u> </u>
20	EMPIRE ABO UNIT	26C	32 1	175	28E 9	990 FNL 1	1650 FWL	ō	In-Active	1/18/54	17 1/2"	13 3/8"	550	Circ	17/8"	5 1/2"	200		10,300	5/23/54	
21	NW STATE	4	32   1	175	28E 1:	1140 FNL 2	2277 FEL	ō.	Active	66/9/6	12 1/4"	8 5/8"	350	ູດ"	17/8"	5 1/2"	650	"C"	3,200	10/8/99	7
77	EMPIRE ABO UNIT	27C	32 1	175	28E 9	990 FNL 1	1900 FEL	ō	In-Active	6/5/64	11"	8 5/8"	175	Circ	17/8"	4 1/2"	830		6,148	6/23/64	<u>ک</u>
17	23 NORTHWEST ARTESIA UNIT	8	32 1		28E 9	990 FNI	1650 EEL	\$	Active	6/16/63	8 5/8"	7"	125	cالد دالا	8-1/4"	41/2"	75		1,984	6/25/63	1

# Area of Review Spreadsheet

2	o Lease	Well#	Sec	N	RGE	N/S Dir	E/W Dir	Well	Status	Spud Date	Sur Hole	Surf Csg Size	SX Cmt	ξ	Prod	Prod Csg Size	SX Cmt	<b>TOC</b>	ē	Completion	<u>;                                    </u>
24	4 NW STATE	1	32	175	28E	990 FNL	990 FEL	lio	Active	5/22/99	12 1/4"	85/8"	325	Circ	17/8"	5 1/2"	800	Circ	3,205	6/56/99	<u>ر</u>
2,	S NORTHWEST ARTESIA UNIT	2	32	178	-28E-	-890-FNL	-330 FEL	₽	paggnid	1/21/62	.8/5.6		100	ų Ö	6.1/4"	4.1/2"	130		1,9,1	1/31/62	т
25.	25.5 Empire Abo Unit "E"	28	32	175	28E	1160 FNL	330 FEL	ō	Plugged	11/17/60	11"	8 5/8"	300	Circ	17/8"	5 1/2"	150		6,100	11/27/60	1-
26	26 RAMPO	38	큠	478	78E	2310 FSL	330 FWE	ā	Active	6/16/55	10.	.8/58	38	#	19/22	3.172	30		1,69,1	7/26/55	T
27	7 NW STATE	2	32	175	28E	1709 FNL	385 FEL	io	Active	8/6/99	12 1/4"	.8/5.8	325	ä	17/8"	5 1/2"	750	Circ	2,850	66/8/6	7
7	8 NORTHWEST ARTESIA UNIT	9	35	175	-28E	1980 FNL	330 FEL	\$	Injection	11/1/61	e.	8/5.8	127	Ü	50	4.1/2"	992		1,973	11/24/61	<del>, 1</del>
29	9 EMPIRE ABO UNIT "F"	28	32	175	28E	2310 FNL	330 FEL	ē	Plugged	8/26/60	11"	.8/5.8	300	Circ	17/8"	5 1/2"	150	,	6,176	09/8/6	<u> </u>
93	0 DANCER 32 STATE COM	1	32	175	28E	1728 FNL	916 FEL	Oil	Active	3/17/96	17 1/2"	13 3/8	009	Circ	12 1/4	9 2/8	925	Circ	10,610	5/11/96	. 7
93	0 DANCER 32 STATE COM	1	32	175	28E	1728 FNL	916 FEL	ΙΘ	Active	3/17/96	17 1/2"	13 3/8"	009	ä	8 3/4	5 1/2	. 1300	CBL	10,610	5/11/96	7
31	1 NW STATE	17	32	175	28E	2237 FNL	990 FEL	liO	Active	9/13/01	12 1/4"	8 5/8"	375	Çic	77/8"	5 1/2"	625	Circ	3,225	11/1/01	7
32	2 NW STATE	Э	32	175	28E	1650 FNL	1650 FEL	ĺŌ	Active	8/16/99	12 1/4"	8 5/8"	375	ä	17/8"	5 1/2"	625	Circ	3,205	9/10/99	7
£	S NORTHWEST ARTESIA UNIT		32	175	38E	-1980 FNL 1650 FEL	1650 FEL	10	Active	3/29/62	10"	85/8"	3	ij	50	4 1/2"	17		1,955	4/21/62	
34	4 EMPIRE ABO UNIT "F"	27	32	175	28E	2310 FNL 1650 FEL	1650 FEL	lio	Plugged	9/10/60	11"	8 5/8"	450	Sign	17/8"	5 1/2"	150		6,108	09/22/6	<u> </u>
35	5 NW STATE	18	32	175	28E	2272 FNL	2273 FEL	Б	Active	2/26/02	12 1/4"	8 5/8"	375	O. C.	17/8"	5 1/2"	800	Circ	3,215	5/1/02	7
36	6 AA STATE	1	32	175	28E	2280 FNL 1980 FWL	1980 FWL	ΙΘ	Active	09/0ε/2	11"	8 5/8"	550	ä	17/8"	4 1/2"	1000	920	6,171	8/24/60	7
4	2_SIATE 32	1	35	\$\$	28E	1350 FSL	1650-FEL	ملا	Active	85/1/2	10.3/4"	.8/ <u>\$</u> 8	29	13	18	5 1/2"	150		1,650	3/12/58	
38	8 JEFFERS STATE	1	32	175	28E	2141 FSL	1665 FEL	IIO	Active	1/27/00	12 1/4"	8 5/8"	375	Circ	"8/7 7	5 1/2"	800	Circ	3,220	3/14/00	7
ĝ,	9 State 32	2	25	475	28£	1980 FSL	1980-FEL	<u>all</u>	Active	7/29/59	NA	NA	₹2	\$	.8/56	1.1	88		2,075	8/6/59	<del>                                      </del>
8	0 EMPIRE ABO UNIT "G"	278	32	175	28E	1650 FSL	1961 FEL	lio	Plugged	09/2/9	11"	8 5/8"	450	Circ	"8/7 7	4 1/2,"	0ź8		6,165	6/18/60	7
41	1 NORTHWEST ARTESIA UNIT	7	32	175	28E	2310 FSL	660 FEL	ΙΘ	In-Active	12/17/53	10"	7,	25	77	6 1/4"	4 1/2"	725	Circ	2,500	1/22/54	>
45	2 KERSEY STATE	1	32	175	28E	2018 FSL	330 FEL	≅	Active	5/16/00	12 1/4"	8 5/8"	350	Circ.	17/8"	5 1/2"	006	"د"	4,075	7/14/00	7
43	3 KERSEY STATE	3	32	175	28E	1650 FSL	990 FEL	≅	Active	7/2/7	12 1/4"	8 5/8"	375	"c	17/8"	5 1/2"	950	ູ່	3,950	70/1/8	
44	4 EMPIRE ABO UNIT "G"	28C	32	175	28E	1650 FSL	660 FEL	IIO	Plugged	5/16/00	11"	8 5/8"	009	Ç	17/8"	4 1/2"	850			6/4/60	7
.																					7

No.2 Well Name Legals 30-015- Operator	30-015-	$\vdash$	8	ğ	Status	Compl Date	Œ.	Perfs	Hole Size	Casing Size	Depth Set	Bixs. Crint	န	Method	Comments
1 NW St. #8 1020 FSI 2128 FW I. 32915 SDY A-1420	30815 SIN	B15 SOX Action	Activo	4	4140	٤	3340	7572.7850	43 477	0.5.0	107	Vac	2	ļ	ā
VOS	ACT ACTIVE	SON MONE	ACINE	+	142000	T	3	8007-5767	7 7/0	0.00	9	200	3	ဦ	See Diagram
						T			9/	7/1 0	3307	3	50	ğ	
2 NW 8t. #5 1900 FSL 2146 FWL, K 30781 SDX Active 12/7/1999	30781 SDX Active	781 SDX Active	Active	$\vdash$	127/1996		3190	2464-2674	12 1/4	8 5/8	\$20	380	Sur	ğ	
						T		2802-58	7.7/8	5 1/2	3181	8	Surf	g	
3 Emprie Abo Unit #25 B   2280 FNL 978 FWL, E   01671 BP TA 9/60	01671 BP TA	671 BP TA	T.	+	09/6	T	6013	5830-5920	=	8.5/8	8	425	Surf	1" w/75 co	5930-5937 84274
								5830 - 80	7.7/8	5172	6012	650	1156	Calc 75%	5830 6czd w/250 sx
						T		5611 - 5805		į					CIBP @ 5580 & 6560
4 Empire Abo Unit #26   2280 FNL 1980 FWL F 01657 BP TA 8450	01657 BP TA	657 BP TA	TA	-	8/60		6171	5844 - 82		8.5/8	1007	053	, id	2	
								5926-82		4 1/2	6171	1000	820	Temp Surv	
															CIBP @ 5822' w/35' cmt
5 NW 8tate #18 2272 FNL 2273 FEL. G 31934 SIDX Active 5/02	31934 SDX Active	934 SDX Active	Active	1	20/5	Τ	3215	2472 - 2752	12 1/4	8 5/8	£	375	Sur	80	
									7.7/8	51/2	3208	008	Surf	ğ	
6 NWAU#5 1980 FNL 1650 FEL, G 02312 SDX Active 462	02312 SDX Active	312 SDX Active	Active	1	4462	Τ	1955	1911 - 17	1.	858	507	8	312	C 75%	*Assumed
						П			97.778	4 1/2	<b>255</b>	75	1629	C 75%	
7 Empire Abo Unit #27/3 2310 FNL 1850 FEL G 01663 BP TA 9460	01663 BP TA	963 BP TA	Δ <u>T</u>	+	09/6	Τ.	6100	280.08		858	5003	450	Paris.	i d	K
						П		6041-68		512	6106	170 units +	S.	Reported	
						1	1					150 sx			1
8 NWAU #7 2310 FSL 980 FEL 1 01672 SDX TA 1278	01672 SOX TA	672 SDX TA	¥I.	+	1278	Т	2250	1933 - 63	ę		478	26	380	Calc 75%	
						П		CIBP 1890		4 1/2	2206	725	Surf	ğ	
9 Empire Abo Unit #28C 1650 FSL 680 FEL, 1 01663 BP Active 660	01669 BP Active	869 BP Active	Active		9480	┰	6250	8032 - 72	F	858	1304	02	E	ě	
						П		5753 - 6937		41/2	6250	950	Surf	Š	CIBP 5970
10 Jeffers State #1 2141 FSL 1665 FEL J 30887 SDX Active 327000	30887 SDX Active	887 SDX Active	Active	1	37,000	Т	30.00	2747 - 2852	12 1/4	8.5/8	647	Usy.	ű	Š	OST 7710 Sand 76 av
				H		П		2312 - 2632	7.7/8	5 1/2	3212	98	Pig.	8	
11 State 32 \$1 1350 FSL 1650 FEL J. 01655 Hanson Active 458	01855 Hanson Active	655 Hanson Active	Active	L	4/S8	Т	2100	1919 - 2039	10 3/4	858	516	8	382	Card 75%	
Елевуу	Kengy	Energy	Energy			П			8	5 1/2	2074	ŝ	1267	Cato 75%	
12 State 32 #2 1880 FSL 1980 FEL J. 01656 Harrson Active 8/59	01656 Harson Active	656 Hanson Active	Active	-	828	Т	2038		₽	858	9	S	350		Pulled from 350
Energy	Energy			L		Γ			6	7	20,	200	Sur	Calo 75%	PSTD 1940
						П									OH 1940 - 1704
13 Empire Abo Unit #278 1650 FSL 1961 FEL J 01670 BP Active 6460	. 01670 BP Active	670 BP Active	Active	L	960	Τ	8163	6036 - 6112	=	65/8	980	9	Jun 8	É	CIBP 6030
						П		5810 - 62	7.7/8	4 1/2	6165	Ş	Surf		Sopel TOC 1610 - surf w/425 ex
14 Aspen 32 State Com #1 1370 FSL 1609 FEL J. 324148 Mewhouse P& 10/49/2005	34148 Meadraine PA	148 Mountaine PA	δq	╀	10/19/200	Τ.,	975	91.44	8/5 6/5	807	ω,	2	C		2
CL SUPPLIES OF SECTION	C. SILINGIAN OLIVE	The state of the s	5	+	10 100	,	3	43 477	0.50	200	3	00	٥		See Diagram
						П		8 3/4	82	2000	3	0	د		
15 NWAU #8 (2310 FSL 2105 FWL (K	10818 SOX PA	818 SOX PA	₽d	$\frac{1}{1}$	888	T	2000	1809 - 1908		2 5/2	S.	303	1	768/	Con Discussion
	W	W	5	-	5		2007	0001 - 0001		4 1/2	2002 2002	35	1241	280 /5% 000 /5%	See Cragram
							_								

EXHIBIT VI

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30-015- 01661	Operator BP	Status	Compl Date 3/60	5 808 883	Perfs 5806 - 6068	Hole Size	Cersing Biza 6 5/8 5 1/2	Depth Set 748 6039	8xs. Cmt. 225 450	Surf Surf	Method Girc Sqzd	Continents Sppd 2504 - surf w/800 sx
10785	ğ ğ	Active TA	11/39 5/66	3204	2434 - 2572 1898 - 1927	12 1/4 7 7/8 11	85/8 51/2 85/8	515 3200 489	350 650 100		Oro Oro Calo 75%	
30685	a XQS	Active	4/60	6123	5800 - 6060	12 1/4	8 5/8 5 1/2 8 5/8	728 8125 490	450			Sopol 2492 - surf witeso ex
20043	XX	¥	2967	1967	1922 - 49	7.78	5 1/2 8 5/8 4 1/2	3215 485 1985	950 150		Cat 75% Cad 75% Cad 75%	
01860	26	Active	380	6187	5897 - 5087		85/8 51/2	770 6187	450			8qzd 2622 - surf w/600 sx
01659	<b>5 8 8</b>	Aggive Ag	7,60	2008	5651 - 6118	37.7	8 5/8 4 1/2 6 5/8 5 1/2	2003 779	175 280 280	1111		See Diagram
21539	25	Active	7/175	0229	5690 - 6064	7.78	8 5/8 5 1/2	1000	250	+++	Temp Surv Redin	Redinix to surf   CV @ 4018: Stg 1 680   SN 2 875 chr to surf   SN
01665	XX	Active	35	+++	8	*11 *7.77	8.5/8 5.1/2	485 1802	88		Calc 75% "Assumed Calc 75%	med
21540	æ æ	Active TA	1/60		5714 - 5920 5705 - 6116	7 7/8	8 5/8 4 1/2 8 5/8	885 8215 1007	98 98 98 98	25 Tag		5980 Ø 5055 w/36 pmt
22008	<u>a</u>	Active	<i>TIII</i>	6261	5714 - 6166	7.7/8 11 7.7/8	5 12 8 5/8 5 1/2	6255 600 6370	275	מתן		DV @ 4050 Stg 1 450 EX Stg 2 600 ex TOC Buff . C DV @ 4382 Stg 1 475 Ex Stg 2 1080 ex TOC Stlf . C
01688	ğ	Ā	454	+++	1966 - 2002	=	8 5/8 4 1/2	750	338	88	Carc 75% Orc (ceg r	0eg run & cmt 1974)
10313	XOX &	Active P&A	60/99	3200	2450 - 2813 3903 - 6074	7 7/8	8 5/8 8 5/8	3195	350		8 B	
3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	30777 30734 30734 10313			SDX Active	BP         Active         11/89         3204           SDX         TA         5/66         1980           SDX         TA         5/66         1980           SDX         Active         4/80         6123           SDX         Active         3/67         1/897           SDX         Active         2/80         6/167           SDX         Active         2/80         6/167           BP         Active         3/85         2008           BP         Active         1/75         6/25           BP         Active         1/77         6/16           BP         Active         1/77         6/16           SDX         Active         1/77         6/25           SDX         Active         1/77         6/25           BP         Active         1/77         6/16           SDX         Active         1/77         6/16           SDX         Active         1/77         6/16           SDX         Active         1/109         3200           SDX         Active         1/169         3200	BP         Active         3/60         6083           SDX         Active         11/89         3204           SDX         Active         6/89         3220           SDX         Active         6/89         3220           SDX         Active         6/89         3220           SDX         Active         3/60         6/87           BP         Active         1/75         6220           BP         Active         1/75         6220           BP         Active         1/75         6215           BP         Active         1/75         6215           BP         Active         1/77         6261           BP         Active         1/77         6261           SDX         Active         1/76         6216           SDX         Active         1/78         6146 <td>SDX Active 1159 3204 2434-2572 SDX Active 4160 6123 5600-6660 SDX Active 969 3220 2472-2762 SDX Active 969 3220 2472-2762 SDX Active 969 3220 2472-2762 SDX Active 3550 6187 5697-6964 SDX Active 160 6187 5697-6964 SDX Active 160 6187 6697-6964 SDX Active 160 6187 6697-6964 SDX Active 160 6172 6697-6964 SDX Active 160 6216 6134-56 SDX Active 160 6216 6134-56 SDX Active 160 3200 2450-2613 SDX Active 160 3200 2450-2613</td> <td>SDX Active 1169 3204 2434 2572 12 114  SDX Active 4/80 6123 5806 6089 77/8  SDX Active 2/80 6167 5897 10 17/8  SDX Active 160 6172 6801 617 118  SDX Active 160 6172 6801 617 118  SDX Active 160 617 5897 617 118  SDX Active 160 617 617 6801 617 118  SDX Active 160 617 617 6801 617 118  SDX Active 160 617 617 6801 617 118  SDX Active 160 617 617 618 1118  SDX Active 160 617 617 618 12 114  SDX Active 160 520 110 617 618 12 114  SDX Active 160 520 110 617 618 12 114  SDX Active 160 520 110 118 12 114</td> <td>BP         Archve         3/60         6063         5606 - 6068         5606 - 6068         6 5/12           SDX         Archve         11/69         3204         2434 - 7572         12 1/4         6 5/12           SDX         Archve         11/69         3204         2434 - 7572         17 1/4         6 5/6           SDX         Archve         4/60         61123         5600 - 6060         12 1/4         6 5/6           SDX         Archve         4/60         61123         5600 - 6060         12 1/4         8 5/6           SDX         Archve         3/60         1617         5697 - 5061         17 1/4         8 5/6           SDX         Archve         3/60         6167         5697 - 5061         17         6 5/6           SDX         Archve         3/60         6167         5697 - 5061         17         6 5/6           SDX         Archve         3/60         6167         5697 - 5061         17         6 5/6           SDX         Archve         3/60         2000         1621 - 54         17         6 5/6           SDX         Archve         3/60         6117 - 5665 - 6116         17         77/8         51/2           SDX<!--</td--><td>BP         Arche         3460         6683         5866 - 668         5666 - 668         748         748         656         748         656         748         656         748         656         746         656         746         656         756         656         756         656         756         656         756         776         417         656         756         466         756         776         417         656         756         466         756         776         417         656         776         466         776         466         776         467         657         776         477         776         477         776         477         657         776         477         657         776         477         656         776         476         676         776         477         656         776         477         676         776         477         676         776         477         676         776         477         676         776         477         676         776         477         676         677         677         677         677         677         677         677         677         677         677         677</td><td>BP         Active         390         6805 - 6008         5605 - 6008         784         778         784         778         789         789         789         789         789         887</td><td>BP         Active         390         680         580         78         776         670         780         776         577         670         776         670         776         670</td></td>	SDX Active 1159 3204 2434-2572 SDX Active 4160 6123 5600-6660 SDX Active 969 3220 2472-2762 SDX Active 969 3220 2472-2762 SDX Active 969 3220 2472-2762 SDX Active 3550 6187 5697-6964 SDX Active 160 6187 5697-6964 SDX Active 160 6187 6697-6964 SDX Active 160 6187 6697-6964 SDX Active 160 6172 6697-6964 SDX Active 160 6216 6134-56 SDX Active 160 6216 6134-56 SDX Active 160 3200 2450-2613 SDX Active 160 3200 2450-2613	SDX Active 1169 3204 2434 2572 12 114  SDX Active 4/80 6123 5806 6089 77/8  SDX Active 2/80 6167 5897 10 17/8  SDX Active 160 6172 6801 617 118  SDX Active 160 6172 6801 617 118  SDX Active 160 617 5897 617 118  SDX Active 160 617 617 6801 617 118  SDX Active 160 617 617 6801 617 118  SDX Active 160 617 617 6801 617 118  SDX Active 160 617 617 618 1118  SDX Active 160 617 617 618 12 114  SDX Active 160 520 110 617 618 12 114  SDX Active 160 520 110 617 618 12 114  SDX Active 160 520 110 118 12 114	BP         Archve         3/60         6063         5606 - 6068         5606 - 6068         6 5/12           SDX         Archve         11/69         3204         2434 - 7572         12 1/4         6 5/12           SDX         Archve         11/69         3204         2434 - 7572         17 1/4         6 5/6           SDX         Archve         4/60         61123         5600 - 6060         12 1/4         6 5/6           SDX         Archve         4/60         61123         5600 - 6060         12 1/4         8 5/6           SDX         Archve         3/60         1617         5697 - 5061         17 1/4         8 5/6           SDX         Archve         3/60         6167         5697 - 5061         17         6 5/6           SDX         Archve         3/60         6167         5697 - 5061         17         6 5/6           SDX         Archve         3/60         6167         5697 - 5061         17         6 5/6           SDX         Archve         3/60         2000         1621 - 54         17         6 5/6           SDX         Archve         3/60         6117 - 5665 - 6116         17         77/8         51/2           SDX </td <td>BP         Arche         3460         6683         5866 - 668         5666 - 668         748         748         656         748         656         748         656         748         656         746         656         746         656         756         656         756         656         756         656         756         776         417         656         756         466         756         776         417         656         756         466         756         776         417         656         776         466         776         466         776         467         657         776         477         776         477         776         477         657         776         477         657         776         477         656         776         476         676         776         477         656         776         477         676         776         477         676         776         477         676         776         477         676         776         477         676         776         477         676         677         677         677         677         677         677         677         677         677         677         677</td> <td>BP         Active         390         6805 - 6008         5605 - 6008         784         778         784         778         789         789         789         789         789         887</td> <td>BP         Active         390         680         580         78         776         670         780         776         577         670         776         670         776         670</td>	BP         Arche         3460         6683         5866 - 668         5666 - 668         748         748         656         748         656         748         656         748         656         746         656         746         656         756         656         756         656         756         656         756         776         417         656         756         466         756         776         417         656         756         466         756         776         417         656         776         466         776         466         776         467         657         776         477         776         477         776         477         657         776         477         657         776         477         656         776         476         676         776         477         656         776         477         676         776         477         676         776         477         676         776         477         676         776         477         676         776         477         676         677         677         677         677         677         677         677         677         677         677         677	BP         Active         390         6805 - 6008         5605 - 6008         784         778         784         778         789         789         789         789         789         887	BP         Active         390         680         580         78         776         670         780         776         577         670         776         670         776         670

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	Comments		CIBP 6200	CIBP 5734 W/35' omt		PBTD 7464	Temp Surv 350 ex ant + 250° Pertite	125 ex plug 7800-7555	Sqz to 1800' in 1979 ~ 1325 sx =		CIBP 3700 V	/				•		RBP @ 2884	7	CIBP 6100	See Diagram		Redimit @ surf	DV @ 4012, Stg 1 400 ex	Stg 2 830 ex, TOC Surf. C			
	Method			Reported (	7	Š	Temp Surv	<u>ਦ</u> ਲ	3	Ş		5	S		ğ	ဦ		퉏	7		Reported			ဦ	-	ğ	Reported	
	8		Suf	£		Surf	200	5115		Self.	Surf	Suri	Suf		Surf	Surf	Series	) So		Š	8		8	<b>E</b>		ð	8	
	Exs. Cmf.		98	9 <del>2</del> 2		93		200		325	006	375	529		375	625	88	008		250	06		200			\$	98	
	Depth Set		1247	6319		Ŗ	1963	2505		330	3933	524	3200		90 <b>5</b>	3217	528	4072		1221	1929		535	6250		8	5254 5254	
	Cesting Size		858	4 1/2		13.3/8	8.28	5 1/2		8 5/8	5 1/2	8 5/8	512	i	85/8	51/2	858	5 1/2		85/8	41.22		858	5 1/2		858	5 1/2	
	Hole Stze		+	7.7/8		٠	1	2		12 1/4	7.7/8	12 1/4	7.7/8		12 1/4	7.7/8	12 1/4	7.7/8		÷	7.7/8		11	7.7/8		÷	7.7/8	Ţ
	Perfs		5784 - 6140			7392-97	5747 - 5907			3456 - 3534	3766 - 3822	2464 - 2750			2467 - 2872		2330-2608	3556-3601		6140 - 97	5658 - 5930		5772 - 6260			5662 - 6096		
	£		6319			10300	C18P 5623			4000		3205			3225		4075			6261			6350			6254		Ţ
	Compt Date		6/60			5/54				101		888			11/01		2007			4/60			977			7/60		
	Starturs		TA.			ŢĀ				Active		Active			Active		Active			Active			Active			Active		
	Operator		ď			2				ğ		žĝ			ğ		X			Bb			æ			æ		
API	8. 4.		01668			01673				31530		30684			31933		30888			02605			21736			90920		
	Legals	Sec 12, T178 R28E	960 FSL 660 FEL, P			990 FNL 1650 FWL, C				530 FNL 1650 FWL, D		1650 PNL 1650 FEL G			2237 FNL 990 FEL, H		2018' FSL, 330 FEL, (			330 FNL 2271 FEL, B			670 FNL 1700 FEL B			330 FNL 1941 FWL, C		
	Well Name		Empire Abo Unit #288	1		Empire Abo Unit #26C				Euron State #2		NW State #3			38 NW State #17		Kersey State #1			Empire Abo Unit #27E			Empire Abo Unit #271A			40 EAU 28 E		1
	Hos	L	R					Ĺ	Ĺ	Ŋ		x	L		8		3			8			8			8		J

W State C-108 Data Sheet

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	Commente		Pig 60 5783	Perfs 6024 - 50 sqzd	Sq2d 650 ex @ 2800 🔪	TOC Surf - Circ			>			>				
	Mathod	-	S	g				충	38		ğ	20		ŀ		
	202		Sur	Ser				2	ğ		Seur	Series				_
	Sys Cmt		250	3				320	98		250	98				
	Donth Ref Ave Cont		738	6104				\$	3192		518	3186				_
	Control Bire		858	512				858	51/2		858	5 1/2				
	Hole Stre		E	7.7/8				12 1/2	7.7/8		12 1/4	77/8				
	Perts		2806-50	6024 - 50				2482 - 2802			2444 - 2762					-
	e		8106				_	3210			3166					•
	Compl Date		4/80					11/99			1/00					
	Status		¥					Active			Active					•
	Operator		989					XOS			š					
AH.	8		01644					30760			30849		_			_
	Legals	8ec 31, T178 R28E	1650 FSL 330 FB, 1					735 FSL 330 FEL, P			2310 FSL 270 FEL, 1					
	Well Name		EAU #24					OL# AN			WW State #9					

ķ. '																3		CAL SXX	0/1/2	1	1		しなかられ		100	くるがより	_					•	5002	1	\	ı		
	`	\	<b>&gt;</b>	\				c	1861			7	•	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Tomor	<b>3</b>	ALCO B	۲ ` `	100	- Land	7//	\ \ \ \ \		ノノン	\$ X	Traffic G. S.	_	\ \ \ \ \	1		c 1'	v	(	4 - 5/2 - N	, ' \$	/	1. 18. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	}
Comments		See Diagram				6000 E000	5830 sozd w/250 gx	CIBP @ 5580 & 6550			CIBP @ 5822' w/35' cmt			-Assumed Assumed	200	1000	The second	130	(1)	1			CIBP 5970	CRT 2710 Sqzd 75 sx				Of mat bellied	PRID 1940	OH 1940 - 1704	0000 0010	Sqzd TOC 1610 - surf w/425 sx		See Liagram	7		See Diagram /	
Method		S	ဦ	20	ဦ	4" w75 av	Calc 75%		٤	Temp Surv		S	Ş	C 75%	C 75%		Reported	Z		Se 75%		S	7	ခို	g	Caci 75%	Calc 75%		Calc 75%	1 1		2		1	Ī		Calc 75%	C30 /5%
700		Sur	Sur	Sur	Sur	T O	1.55			920	1	Surf	Sur	312	1629		100			Sec. 380		Sur	Sur	Sur	Surf	ž	1267	755	Surf			Sur	ļ	اد	ر		Sur	1741
Sxs. Cmt.		350	8	350	009	307	650		650	60		375	800	S	75		70 mits	150 80		25		8	820	350	920	S	ŝ	£	200		3,	2 SS		n	0		125	CVL
Depth Set		461	3302	520	3181	68	8012		1007	6171		485	3208	507	1955	1	1003	1	2/0	478		1304	6250	512	3212	516	2074	8	202		000	6.65	Ę	3	3		462	7007
Casing Size		8 5/8	5 1/2	8 5/8	5 1/2	8 5.49	5 12		8.5/8	4 1/2		8 5/8	5 1/2	8 5/8	4112	5	5 208	1	Ó	4 1/2		8 5/8	4 1/2	8 5/8	5112	8 5/8	5 1/2	8 5/8	250		0.00	4 1/2	430	470	7007		8 5/8	71. 4
Hole Size		12 1/4	7.7/8	12 1/4	7.7/8	:	7.7/8			Ī		12 1/4	7.7/8	F	27.7/8					0.		Ŧ		12 1/4	7.7/8	10.34	80	٤	2 60			7 7/8	0/6 67	0 20	9 8 8 8 8			
Perfs		2523-2859		2464-2674	2802-56	5830 5000	5830 - 80	5611 - 5805	5844 . 97	5926-82		2472 - 2752		1911 - 17			2960-90 6041-68			1933 - 63 CIBP 1890		6032 - 72	5753 - 5937	2747 - 2852	2312 - 2632	1919 - 2039					0770	5810 - 82		7/1/2	8 3/4		1898 - 1908	
4		3310		3190		6013	3		6171			3215	$\vdash$	1965			BLO			2250	T	6250		3220		2100		2038	3		$\neg$	2010	9	3	Ť		2003	
Compi Date		1/4/2000		12/7/1999		09/0	8		BJEO	3		5,002		4/62			9/60			12/78		6/60		3/2000		4/58		8/50	3		0000	PAPA	addition.	COUSTAIL			5/66	
Status		Active		Active		5	ξ.		Τ.	4		Active		Active			4			*		Active		Active		Anthon		1000	2			Active		ĭ			×	i
Operator		XOS		XOS		g	à		g	5		XOS		XQS	1		200			Š		æ		XQS		Hanson	Energy	aced of	Fremy			<del>2</del> 6		Mewbourne			XOS	
API #	4	30815		30781		1,010	7000		04657	3		31834		02312			01663			01672		01669		30887		01656	2	9466	3			078/0	977	94.48			10818	+
Legals	Sec 12 T175 R28E	1090 FSL 2126 FWL K		1900 FSL 2146 FWL K		2200 ENI 070 EAR E	ZZOO FINL B/B FWYL E		2280 ENI 1080 EMI G	777		2272 FNL 2273 FEL. G		1980 FNL 1650 FEL G			2310 FNL 1650 FEL, G			2310 FSL 660 FEL, I		1650 FSL 660 FEL, I		2141 FSL 1665 FEL J		1350 ESI 1650 EFI .1		1080 551 4080 551	GOOT SEL SOUTEL S			1650 FSL 1961 FEL, J	1 134 000 104 000	13/UFSL 1609 FEL, J			2310 FSL 2106 FWL, K	
No.# Well Name		1 NW 52 #8		2 NW St #5		Control And Line 405	S Emplie Abo Unit #25 B		A Emirio Abo Line #26			5 NW State #18		6 NWAU#5		<i>(1)</i>	7 Empire Abo Unit #27@	7		8 NWAU#7		9 Empire Abo Unit #28C		10 Jeffers State #1		14 State 20 #1	4	2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2	7		4	13 Empire Abo Unit #27B		14 Aspen 32 State Com #1			15 NWAU #8	

1/4

	\	7	1	Sp-Olen	\	7	- Argorts	\	SH De	\ 	>	Stylen	γ k	7		Skallen	7	<u>\</u>
Comments		Sqzd 2504 - surf w/900 sx			SQZ 2492 - BUCWIB50 8X			Sqz6 2622 - Auf w/800 8x	See Diagram	Sqzd w/825 sx to surf	Temp Surv Redimix to surf DV @ 4018: Sig 1 680 Sig 2 875 circ to surf	*Assumed	CIBP 5980	CIBP @ 5655 w/35' cmt DV @ 4050 Stg 1 450 sx Stg 2 600 sx TOC Surf - C	DV @ 4382 Stg 1 475 sx Stg 2 1080 sx TOC Surf - C	(csg run & cmt 1974)	CIBP 3570	DV @ 2988. Stg 1 635 sx Stg 2 700 sx TOC - Surf - C
Method		25	O O	Calc 75% Calc 75%	5	Calc 75% Calc 75%	Cacl 75% Cacl 75%	ğ	Calc 75% 5	<u>8</u>	Femp Surv	Catc 75% -	Circ (	5 5	5 5	Calc 75% Circ	Calc 75% C	5 5
700	1	Sur	Surf	1219	Surf	Sur	1343	Surf	Surf 1242	Surf	8	280	Surf 75	Surf	Surf	Surf	Surf	Surf
Sxs. Cmt.	į	450	350	100	225	450	005	450 450	125	280	250	25		920	275	335	350	450
Depth Set		609	515 3200	1980	728 6125	3215	1895	770 6187	493	779 6172	1000	1802	985 6215	1007 6255	000	750	511	6330
Casing Size		5 1/2	8 5/8 5 1/2	8 5/8	8 5/8 5 1/2	8 5/8 5 1/2	8 5/8 4 1/2	8 5/8 5 1/2	8 5/8 4 1/2	8 5/8 5 1/2	8 5/8 5 1/2	8 5/8 5 1/2	8 5/8 4 1/2	8 5/8 5 1/2	8 5/8 5 1/2	8 5/8 4 1/2	8 5/8 5 1/2	8 5/8 5 1/2
Hole Size			12 1/4	7.7/8		12 1/4			11 7 7/8	11 7 7/8	7.7/8	•11	11 7.78	12 1/4	7.7/8	1-	12 1/4	7.78
Perfs		5806 - 6068	2434 - 2572	1898 - 1927	5800 - 6060	2472 - 2762	1922 - 49	5897 - 6087	1921 - 54	5651 - 6118	5690 - 6064	ᆼ	6134 - 56 5714 - 5920	5705 - 6116	5714 - 6166	1968 - 2002	3643 - 3819 2514 - 2718	6169 - 6252
TD		283	3204	1980	6123	3220	1997	6187	2006	6172	6220	5088	6215	6221	6261	2102	4104	6330
Compl Date		3/80	11/99	2/68	4/60	66/6	5/67	3/80	99/9	2/60	7/175	3/555	1/60	6/75	דחור	4/54	7/2000	9778
Status		Active	Active	Y.	Active	Active	¥	Active	P&A	Active	Active	Active	Active	Ϋ́	Active	Υ	Active	Active
Operator		86	SDX	SDX	8	xgs	XOS	В	XOS	da	ď	XOS	ď	8	8	xgs	XOS	8
API #		1991	30777	10795	01662	30685	20043	01660	10834	01659	21539	01665	01667	21540	22009	01666	30889	22597
Legals	Sec 32, T175 R28E	1650 FSL 2310 FWL, K	2310 FSL 990 FWL, L	2310 FSL 660 FWL, L	1650 FSL 990 FWL, L	990 FSL 990 FWL, M	990 FSL 760 FWIL, M	660 FSL 660 FWL, M	990 FSL 2030 FWL, N	660 FSL 1980 FWL, N	150 FSL 1400 FWL, N	940 FSL 1650 FEL, O	650 FSL 1951 FEL. O	330 FSL 1450 FEL, O	330 FSL 2481 FEL, O	990 FSL 660 FEL, P	844 FSL 330 FEL, P.	200 FSL 660 FEL, P
No.# Well Name		16 Empire Abo Unit #26B	17 NW State #6	16 NWAU#9	19 Empire Abo Unit #25A	20 NW State #7	21 NWAU#12	22 Empire Abo Unit #25	23 NWAU#13	24 Empire Abo Unit #26A	25 Empire Abo Unit #261	26 NWAU#14	27 Empire Abo Unit #27A	28 Empire Abo Unit #271	29 Empire Abo Unit #272	30 NWAU #15	31 Kersey State #2	32 Empire Abo Unit #281





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Соптепт		CIBP 6200	CIBP 5734 w/35' cmt		CIBP 6180		CIBP 6100	See Diagram	Redimix @ surf	Sto 2 830 sx TOC Surf - C		DV @ 3034 Stg 1 625 ex	Stg 2 775 sx TOC - Surf - C		DV @ 3060 Stg 1 755 sx	Stg 2 1125 SX 1OC - Sun - C	CIBP 6150	DV @ 3007 Stg 1 700 sx	off 2 county loc county				DV @ 3018 Stg 1 650 Ex	Stg 2 900 sx TOC Surf - C				Sqzd,w/1500 sx TOC Surt - Circ		Pkr @ 5783'	Perfs 6024 - 50 sqzd	Sqzd 650 sx @ 2900	TOC Surf - Circ		
Method		Sign	Reported		<u>8</u>	Temp Surv	Ö	Reported		S		2 5 5 5		Circ	Oic		Sig	20		5	Reported	S	<u>5</u>		5	Reported	S			S.C	ğ			88	Sac
100		Sur	150		Surf	9	Surf	89	20	Sur		Sur		Sur	Suf		Surf	Surf		Surf	895	Sur	Surf.		Surf	1275	Surf	Suf		Surf	Suf			Surf	Surf
Sxs. Cmf.		220	920		200	25	750	006	200			PG .		375			9			450	920	400			750	820	370	æ		250	Ş			350	650
Depth Set		1247	6319		1190	6290	1227	6261	535	8350		32 32 32		220	6350		550	6345		755	6254	745	6245		1198	6273	956	6265		738	6104			495	3192
Casing Size		8 5/8	412		8 5/8	4 1/2	8 5/8	41-12	8.5/8	5 1/2		5 1/2		8.5/8	5 1/2		8 5/8	5 1/2		8 5/8	512	8 5/8	5112		8 5/8	5112	8 5/8	5 1/2		85/8	5 172			8 5/8	51/2
Hole Size		-11	7.7/8	+		7 7/8	11	7.7/8	Ξ	7 7/8		7.7/8		Ţ.	7.7/8		1	7.7/8		+	7 7/8	=	7.7/8		1	7.7/8				-	7.7/8		ŀ	12 1/2	7.7/8
Perfs		5784 - 6140			6230 - 85	5850 - 6050	6140 - 97	5658 - 5930	5772 - 6260			07.0020		6130 - 70			6174 - 6204			5662 - 6096		5664 - 6152			6122 - 68	5822 - 5938	6220 - 45			5806 - 50	6024 - 50			2482 - 2602	
2	 	6319			6290		6261		6350			è		6350			6350			6254		6250			6273		6265			6106				3210	
Сотрі Date		6/60			2/60		4/60		4/76			8//8		7778			1/79			7/60		1/79			3/60		12/59			4/60				11/99	
Status		ΑT			Active		Active		Active			₹		Active		İ	ΤĀ			Active		Active			Active		Active			TA				Active	
Operator		8			æ		da da		ďá			à		æ			da da		İ	8		9			æ		2			8				XCS	
API #		01668			02604		02605		21736			22488		22526			22697			02606		22750			00200		01657			01644				30760	
regals	Sec 32, T175 R28E	660 FSL 660 FEL, P		Sec 5, T18S R28E	330 FNL 970 FEL, A		330 FNL 2271 FEL, B		670 FNL 1700 FEL, B			1300 FNL 1595 FEL, B		1300 FNL 2345 FEL. B			1080 FNL 1914 FWL, C			330 FNL 1941 FWL, C		860 FNI 150 PWI D			960 FNI 660 FWI D					Sec 31, T175 R78E	122 1000 10 1000			735 FSI 330 FH P	- 1-2
No.# Well Name		33 Empire Abo Unit #28B	Aspen?		34 Empire Abo Unit #28E		35 Empire Abo Unit #27E		36 Empire Abo Unit #271A			37 Empire Abo Unit #273		38 Embire Abo Unit #272A			39 EAU 261 A			40 EAU 26 E		41 F011251			42 FAIL 25C		43 Familie Aby Ind #760			44 EAL #24				45 NW #10	

	Antobo 15sks. 1/0 to sufface  est. Toc 60  Tag plug 2000  11 hole  11 hole  125 sks, 50-50 POZ Toc cak. Surface 0 75%  report states comment did a  Part 0512 SQZ 70 sk. plug est. Toc 060;	
Tag plug 1080  Tag plug 1080  Tag plug 1080  Restal 11/2006  Tag plug 1080  Restal 1200 Sqt 35 Sk plug  Toc calc. @ 75% 1241  Tops:  Yates - 34  7-A; - GI  Que - 119  Gb - 162  SA Plug from 1800  CIAP 21800  Tag plug 1080	1 hole  85 24 ent.  10 report states comment did no  10 Part 0512 592 70 st. plug est. TOC 060;	
Tag plug 1080  Tag plug 1080  Tag plug 1080  Restal 11/2006  Tag plug 1080  Restal 1200 Sqt 35 Sk plug  Toc calc. @ 75% 1241  Tops:  Yates - 34  7-A; - GI  Que - 119  Gb - 162  SA Plug from 1800  CIAP 21800  Tag plug 1080	1 ag plug 100  11 hole  85 24th ant.  125 ski, 50-50 POZ TOC CAK. Surface @ 75%  report states comment did a  Brf 0512 592 70 sk. plug est. TOC 060;	
Tag plug 1080  Tag plug 1080  Tag plug 1080  Restal 11/2006  Tag plug 1080  Restal 1200 Sqt 35 Sk plug  Toc calc. @ 75% 1241  Tops:  Yates - 34  7-A; - GI  Que - 119  Gb - 162  SA Plug from 1800  CIAP 21800  Tag plug 1080	11 hole  85 24tont.  115 shi, 50-50 POZ TOC CAK. Surface @ 75%  report states comment did a  Bit 0512 502 70 st. plug est. TOC 060;	
Tag plug 1080  Tag plug 1080  Tag plug 1080  Restal 11/2006  Tag plug 1080  Restal 1200 Sqt 35 Sk plug  Toc calc. @ 75% 1241  Tops:  Yates - 34  7-A; - GI  Que - 119  Gb - 162  SA Plug from 1800  CIAP 21800  Tag plug 1080	11 hole  85 24tont.  115 shi, 50-50 POZ TOC CAK. Surface @ 75%  report states comment did a  Bit 0512 502 70 st. plug est. TOC 060;	
# 125 ski, 50-50 POZ TOC CAK. Surface @ 75% illand 1462 - 145 - 11.6# J-55 cmt. w/ 175 ski, 50/50 POZ  Tag plug 1080 - 175 ski, 50/50 POZ  Parf@ 1200 - 597 35 sk plug  Toc cale. @ 75% 1241  Tops:  Jates - 34  7-Ri- 61  Qn - 119  66 - 162  5A Plug From 1800  CIRP @ 1800	85"24" cut.  125 ski, 50-50 POZ TOC CAKE. Surface @ 75%  1462" report states comment did no  Brf Q512 SQZ 70 sk. plug est. TOC @ 60;	
Brf @512 5 82 70 sk plug est. TOC 60.  78 hole  45 = 11.6# J-55 cmt. w/175 sks. 50/50 PO2  Parf@1200 5 82 35 5k plug  Toc calc. @ 95% 1241  Tops =  Vates - 34  7-A's - 61.  9n - 119  6b - 162  5A = 193  25 sk plug from 1800	1 Bit 0512 502 70 st. phy est. TOC 060:	
Brf @512 5 82 70 sk plug est. TOC 60.  78 hole  45 = 11.6# J-55 cmt. w/175 sks. 50/50 PO2  Parf@1200 5 82 35 5k plug  Toc calc. @ 95% 1241  Tops =  Vates - 34  7-A's - 61.  9n - 119  6b - 162  5A = 193  25 sk plug from 1800	1 Bit 0512 502 70 st. phy est. TOC 060:	
78 11.6# J-55 cmt. w/1755ks, 50/50 POZ  Part 1000 592 35 sk play  Toc calc. @ 95% 1241  Tops:  Yates - 34  7-A; - 61.  9n - 119  6b - 162  5A - 193.	The 78 hove	
Tag plug 1080-  ParF@ 1200 592 35 sk plug  Toc calc. @ 75% 1241  Tops:  Vates - 34  7-A; - GI  An - 119  6b - 162  SA 25 sk plug from 1800  CIRP 21800	45= 11.6# J-55 cmt. w/ 175 sks. 50/50 PO:	2
Po A 11/2006  Tag plug 1080  Pavf@1200 592 35 sk plug  Toc sale. @ 75% 1241  Tops:  Vates - 34  7-A; - GI.  Gh - 162  SA - 193  CIRP 31800		
Tag play 1080  Part@ 1200 - 592 35 sk play  Toc cale. @ 75% 1241  Tops:  Vates - 34  7-A; - 61.  9n - 119  6b - 162  SA - 193  CIRP 31800	3 1 1 1	
Tag play 1080  Part@ 1200 - 592 35 sk play  Toc cale. @ 75% 1241  Tops:  Vates - 34  7-A; - 61.  9n - 119  6b - 162  SA - 193.		
Tag play 1080  Part@ 1200 - 592 35 sk play  Toc cale. @ 75% 1241  Tops:  Vates - 34  7-A; - 61.  9n - 119  6b - 162  SA - 193.	P. A. 11/21	00/
7-A's - 61.  9n - 119  6b - 162  5A - 193  CIAP 3 1800		00
7-A's - 61.  9n - 119  6b - 162  5A - 193  CIBP 31800		
7-A's - 61.  9n - 119  6b - 162  5A - 193  CIBP 31800	Tay play 1080	
7-A's - 61.  9n - 119  6b - 162  5A - 193  CIRP 31800	Parf@ 1200 - 5 gt 35 5k plug	
7-A's - 61.  9n - 119  6b - 162  5A - 193  CIBP 31800	TOC CALC. @ 75% 1241	
25 sk plug From 1800 SA 193	Tops.	,
25 sk plug From 1800 SA 193		
25 sk plug From 1800 5A - 193		
25 sk plug From 1800 CIRP 31800	7-83	- 612
25 sk plug From 1800 CIRP 31800	$g_{\alpha}$ -	- 1190
25 sk plug From 1800 CIRP 31800	Y	1620
25 sk plug From 1800		
VICIBE 01800 To some	SA	1938
V 1 CIRP 0 1800 TO NOTE TO SEE		
V = V + CIRP O 1800	25 sk plug From 1800	
1894-1908 Perfs acidized a Fracid	CTRP 31800 To Sent	
1930 - 1934 Perfs acidized a fracd	Light Town of the Control of the Con	
1930 - 1934	1 1894 - 1908 Perfs acidized a fraid	
	1930 - 1934	
	$\mathcal{M}$	
$\mathcal{A}$		
		# 41 # 41 * to

WELL NAME: Northwest Artesia Unit 7/3 FLELD AREA: Artasia \_\_' AGL: CL: \_\_\_\_ ' ZERO: \_\_ KB:3687 ' ORIG. DRLG./COMPL. DATE: CASING PROGRAM: COMMENTS: APT # 30-015-10 834 IZE/WT./GR./CONN. DEPTH SET Toe sunters Ang 84-26-4 cont. w/125 Sts. 5U/SU POZ Part @ 543 597 40 st. plug PaA 10/2006 -73 hole Tag plug 998' sport 25 sk plug - 45 = 11.6# J-55 ent. w/175 sxx, 50/50 POZ From 1300 Part 1243 held 1500# TUC 1242 (calc. ,75% off) Tops : 346 607 1193 1640 1958 25 sk. plug From 1856 CIBP 0 1856 1921-26 acidized + froid

NAME: Aspen 32 State Com # 10N: Sec. 32 T/25 R28E 'J" 1370 F5 669 ' ZERO: ' AGL: ' ORIG. DRLG./COMPL. DATE:	CASING PROGR	ΔМ•
ENTS:	SIZE/WT./GR./CONN.	DEPTH SET
	_	
I		
19 st. suitace 175 hole	play 0-60	
175 hole		
428-138-4	A L	
cm1. m/41	oosk. ocinculated.	
YN MA		
	0	
19 sk. plug 45	70 - 340 B.	A 10/18/2005
)		
· A A		
1 1 125=11		
1 - 3640 = 25	7,07	
Cmt. m/100	140# 10 sks, a circulated	
$\mathcal{A} = \mathcal{A} + \mathcal{A}$		
H H		
2660	,	
41 sk. plug 271	13 - 76/3	
€ 84 = hole		
	_	
4 545. 3412 -	33/4	
	•	
)		
11/ 42 SK. 556	8-0468	
X 33. 33.6	0 - 3 7 0 0	•
	• •	
L// 42 Sts. 70	49-6949-	
	•	
Z// 51 Sts. 8338	- 8238	
)		
·		
42 SXS. 10041	-994/	•
T.D. 10,400		
	•	

WELL NAME: Empiro Abo Unit E	FNL 1900 FEL Eddy Co., N.M.
LOCATION: Sec. 33 T/73 H28E B 990	FAL 1900 FEL Eddy Co., NM
GL:' ZERO:' AGL:'	CASING DROCKAM.
KB: ORIG. DRLG./COMPL. DATE:	CASING PROGRAM: SIZE/WT./GR./CONN. DEPTH SET
COMMENTS:	STEE/NT./GR./COMT.
Aut 60 dein	cl. to sustace
70 m plug @ 30	2 m 35 5H5.
A A A 405 0 SQ1	35 545.
85, 24#	cm. w/175 sti + circulated
Tag Plag @	900
994-	
	<u></u>
	592 m/35 Skr.
73 = holo	
	# cmt ~/820 sus.
)   43 11.6	(M1. ") 020 40)
}     )	`
TUC FET	1428' (75% eff)
$Y \downarrow Y \downarrow Y \downarrow$	·
{/    /:/	0 1
· · · · · · · · · · · · · · · · · · ·	- Po A 3/200
41 Y 1	
25 5KS, Fr	om 3360 -
	a held ax
1/// 3360	J PIPIV V.X.
V	•
<i>Y</i> . <i>Y</i> . <i>Y</i> .	
<u> </u>	
1/1 - 1/3	
Y 1/3	•
25 sxs. Fr	cam 5820 C
\/\/\/\\\\	•
CIBP @ 58	20
{/ 1 1/1	
Parts 590	3-6074
YA = YA	
$Y_{\lambda} = Y_{\lambda}$	
6146	
. 0/70	

WELL NAME: NW State # 8 LOCATION: Sec. 32 TIZS B28 E "N"	FIELD AREA: Arteria - Que Gh-SA
LOCATION: Sec. 32 T175 R28E "N"	1090 FSh 2126 FWh
GL:3668 ZERO: AGL:	•
KB: ORIG. DRLG./COMPL. DATE:	CASING PROGRAM: SIZE/WT./GR./CONN. DEPTH SET
COMMENTS:	STZE/NI./GR./CONN. DEFIN SEI
34 12 tj = hole	
85°J-55 24	#
85°J-55 24	matol.
Y X AL 11 A A	
461-	
<u> </u>	
	·
73=hole	
5; 15:5# J	- 55-
600 Sts. C	irculated
	•
	"Present Condition"
	Tresexi Condition
23 +69.	
<u> </u>	
	•
	·
Y	
Parts 2523".	- 2 <i>0.5.0</i>
PRITS 2523.	- 283 9
// 'Y'	
M M	
3302	

ATION: Sec. 32 TI75 R28E "N	FIELD AREA: Artesia - Qx - Gb-S " 1090 FSh 2126 FWh  CASING PROGRAM:	
3668' ZERO:' AGL:'		
' ORIG. DRLG./COMPL. DATE:		
MENTS:	SIZE/WT./GR./CONN. DEPT	H SI
	_	
MI 1		
12 to - hole		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	21. #	
85 J-55	24	
350 SMS. C	irwated	
	•	
461-		
	·	
	•	
	•	
1 / Tole		
5= 15.5	T-55	
	circulated	
600 383.	CITEDIATED	
Y		
)/	•	
Y		
	•	
Y   I   IV		
	: /	
23 = P.C. +	by.	
$V \cap V \cap V$	•	
(11 11)		
<i> </i>		
	•	
1:11 11 1		
Y 11 11 3		
Y M M S = + = 40.1	RC. Packer D 2450	
( 33 770 1	(C, 100 x 07 0 2 130	
Ports 2523	- 2859	
NH	•	
	•	
$\{1, 1\}$		
$\mathcal{U}$ $\mathcal{U}$		
$\langle A \rangle \langle A \rangle$		
3302		

CATION: Sec. 32 TITS RARE "N"	FIELD AREA: Artesia - Q~ - Gb-SA 1090 FSL 2126 FWL
:3668' ZERO:' AGL:' :' ORIG. DRLG./COMPL. DATE:'	CASING PROGRAM:
MMENTS:	SIZE/WT./GR./CONN. DEPTH SET
12 + hole	
85 J-55 24 350 sss. circ	/ <del>************************************</del>
350 sxs. circ	uatod.
461-	
701	
<i>Y</i>	
7= hole	
5; 15.5#J	-55 - , , , , , , , , , , , , , , , , ,
600 sts. c	irculated
<u>}</u>	Present Condition
27 +69.	
	•
Y	•
	2000
Perfs 2523 -	783 9
	•
<pre>{ ), ' </pre>	
	·
3302	

- SKETCH NOT TO SCALE -

REVISED: 4507

WELL NAME: NW Stato # 8 LOCATION: Sec. 32 TITS RIGE "N"	FIELD AREA: Arteria - Que - Gh-SA
LOCATION: Sec. 32 TITS RIGE "N	" 1090 FSh 2126 FWh
GL:3669' ZERO:' AGL:'	
KB: ' ORIG. DRLG./COMPL. DATE:	CASING PROGRAM:
COMMENTS:	SIZE/WT./GR./CONN. DEPTH SET
124 = hole	
10 2 T-CC	11. 4
350 SM. C.	revicto
	(6179)
461-	
	•
73=hole	
	_
5= 15.5#	T-35
600 373.	circulated
2 = P.C. +6	<i>g</i> .
<i>Y</i>	
	·
[/] [[]	
( X X ) 5 ± A-0-1 P.C	. Packer 02450
Perfs 2523	- 285 9
3302	
3310	

669 ' ZERO:' AGL:			•
ORIG. DRLG./COMPL. DATE:		CASING PROGRAM	
NTS:	SIZE/WT./GR./CO	JNN.	DEPTH S
_			
$\bigcap$			
19 51	surface pluy 0-60 hole		
17	5 hole		
TA LIZE	123 48#		
1 to	-138 48# 1. w/400 Str. & Circulated		
	,		
428	lug 450 - 340	BA	10/18/2005
19 sk. p	1 y 430 - 390		7,000
a e			
124 =	hule		
266	7-95, 40F	,	
M Cmt	hule 5-95 40# m/1100 sks, a circulated		
Y Z			•
d u			
1 <del>77</del> 71			
2660			
41 sk. p	ng 2713 - 2613		
( - 8t)=	hole		
4 543. 3	412 - 3314 -		
)			
7777 42 64	5568-5468		
72 30	33 68 - 3 468		
(		•	
1/1/1 42 sx	5. 7049 - 6949		
[]	, 0, 1,		
1/1/ 51 Sts.	8338 - 8238		
	V 110 - 1010		
}			
7777 43 000	January and the		
10 343.	10041-9941		
, i			

- SKETCH NOT TO SCALE -

REVISED:

_' ZERO:' AGL:' _' ORIG. DRLG./COMPL. DATE:	CASING PR		
	SIZE/WT./GR./CONN.	DEPTH SET	
Aust 0 60 - 155ks est. Tuc 600 Tag plug 0 200	I/O TO SUITACO		
True 1/40 200	, -		
11 hole			
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REVISED: 4/2017

#23

WELL NAME: Northwest Artesia Unit 7/3 FIELD AREA: Artasia LOCATION: Sec. 32 7175 R28F 990 FSL + 2030 FW CL: \_\_\_\_' ZERO: \_\_\_ KB:3687 ' ORIG. DRLG./COMPL. DATE: CASING PROGRAM: COMMENTS: APZ # 30-015 - 10 K3 4 SIZE/WT./GR./CONN. 10 st sertace plug Tag, Ph. 49 @ 160 -125 SXJ. 54/50 POZ Part@543 597 40 sk. plug PaA 10/2006 -73 hole Tag plug 998' sport 25 sk plug from 1300' - 45 - 11.6# 5 -55 ent. w/175 sps, 50/50 POZ Part 1243 hold 1500# TUC 1242 (calc. ,75% off.) 346 607 gn. 1193 66 1640 5 M 195% 25 sk. plug From 1856 CIBP @ 1856 1921-26 acidized froid 1952-54

ELL NAME:	Empir	o Abo Unit , 175 RZ8E "B" 99	= -27FIELD A	REA: Empir	e A60	<del></del>
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- SKETCH NOT TO SCALE -

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