

**BEFORE THE OIL CONSERVATION DIVISION  
EXAMINER HEARING AUGUST 3, 2023**

**CASE NO. 23685**

*PINTO 36 #3H WELL*

**EDDY COUNTY, NEW MEXICO**



**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

**APPLICATION OF SPUR ENERGY  
PARTNERS LLC FOR APPROVAL OF A  
PRESSURE MAINTENANCE PROJECT,  
EDDY COUNTY, NEW MEXICO.**

**CASE NO. 23685**

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**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

**APPLICATION OF SPUR ENERGY  
PARTNERS LLC FOR APPROVAL OF A  
PRESSURE MAINTENANCE PROJECT,  
EDDY COUNTY, NEW MEXICO.**

CASE NO. 23685

**APPLICATION**

Spur Energy Partners LLC (“Spur”), through its undersigned attorneys, hereby files this application with the Oil Conservation Division for an order approving a pressure maintenance project in the Yeso formation underlying a project area comprised of all of Section 36, Township 18 South, Range 25 East, and the W/2 W/2 of Section 31, Township 18 South, Range 26 East, NMPM, Eddy County, New Mexico. In support of its application, Spur states:

1. Spur Energy Partners LLC (OGRID No. 328947) is the operator of the following horizontal wells drilled and completed in the Penasco Draw; San Andres, Yeso Pool (Pool Code 50270):

- Pinto 36 State Com 1H (API No. 30-015-39781);
- Pinto 36 State Com 2H (API No. 30-015-39969);
- Pinto 36 State Com 4H (API No. 30-015-40058);
- Pinto 36 State Com 5H (API No. 30-015-39970);
- Pinto 36 State Com 6H (API No. 30-015-39971);
- Pinto 36 State Com 7H (API No. 30-015-39973);
- Pinto 36 State Com 8H (API No. 30-015-41667);
- Pinto 36 State 9H (API No. 30-015-42877);
- Pinto 36 State Com 27H (API No. 30-015-43399);

**BEFORE THE OIL CONSERVATION DIVISION  
Santa Fe, New Mexico  
Exhibit No. A  
Submitted by: Spur Energy Partners, LLC  
Hearing Date: August 3, 2023  
Case No. 23685**

- Pinto 36 State 60H (API No. 30-015-49171);
- Pinto 36 State 70H (API No. 30-015-49172);
- Pinto 36 State 90H (API No. 30-015-49173); and
- Falabella 31 Fee 1H (API No. 30-015-40814).

2. Spur seeks approval to inject produced gas into the **Pinto 36 State Com #003H well** (API No. 30-015-39782) at a total vertical depth of approximately 2,311 feet to approximately 2,673 feet along the horizontal portion of this wellbore. Spur anticipates injection through this well will provide pressure maintenance support for its offsetting wells identified in paragraph 1, above.

3. Spur seeks authority to inject produced gas into the Penasco Draw; San Andres, Yeso Pool at a maximum surface injection pressure of 670 psi with an average surface injection pressure of approximately 470 psi. Spur proposes to inject produced gas at a maximum rate of 10 MMCF per day with an average daily injection rate of approximately 5 MMCF per day.

4. The source of produced gas will be the Penasco Draw; San Andres, Yeso Pool.

5. The project area for this pressure maintenance injection project will comprise all of Section 36, Township 18 South, Range 25 East, and the W/2 W/2 of Section 31, Township 18 South, Range 26 East, NMPM, Eddy County, New Mexico.

6. A copy of the Form C-108 for this injection project is provided with this application as **Attachment A**.

7. A copy of this Application has been provided to all affected parties as required by Division Rules and notice of the hearing on this application will be provided in a newspaper of general circulation in Eddy County.



8. Approval of this pressure maintenance project will result in the production of substantially more hydrocarbons from the project area than would otherwise be produced, will prevent waste, and will not impair correlative rights.

WHEREFORE, Spur Energy Partners LLC requests that this application be set for hearing before an Examiner of the Oil Conservation Division on August 3, 2023, and, after notice and hearing as required by law, the Division approve this application.

Respectfully submitted,

**HOLLAND & HART LLP**

By: 

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**ATTORNEYS FOR SPUR ENERGY PARTNERS LLC**

Case No.: \_\_\_\_\_ **Application of Spur Energy Partners LLC for Approval of a Pressure Maintenance Project, Eddy County, New Mexico.** Applicant in the above-styled cause seeks an order approving a pressure maintenance project in the Yeso formation underlying a project area comprised of all of Section 36, Township 18 South, Range 25 East, and the W/2 W/2 of Section 31, Township 18 South, Range 26 East, NMPM, Eddy County, New Mexico. Produced gas will be injected into the Penasco Draw; San Andres, Yeso Pool (Pool Code 50270) through the **Pinto 36 State Com #003H well** (API No. 30-015-39782) at a total vertical depth of approximately 2,311 feet to approximately 2,673 feet along the horizontal portion of this wellbore. Spur seeks approval to inject at a maximum surface injection pressure of 670 psi with an average surface injection pressure of approximately 470 psi. Spur proposes to inject produced gas at a maximum rate of 10 MMCF per day with an average daily injection rate of approximately 5 MMCF per day. The source of the produced gas will be the Penasco Draw; San Andres, Yeso Pool. The proposed project is located approximately 10 miles south of Artesia, New Mexico.

RECEIVED:	REVIEWER:	TYPE:	APP NO:
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Geological & Engineering Bureau -  
 1220 South St. Francis Drive, Santa Fe, NM 87505



**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: \_\_\_\_\_ OGRID Number: \_\_\_\_\_  
 Well Name: \_\_\_\_\_ API: \_\_\_\_\_  
 Pool: \_\_\_\_\_ Pool Code: \_\_\_\_\_

**SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW**

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]  
 A. Location – Spacing Unit – Simultaneous Dedication  
 NSL       NSP (PROJECT AREA)       NSP (PRORATION UNIT)       SD
- B. Check one only for [ I ] or [ II ]  
 [ I ] Commingling – Storage – Measurement  
 DHC    CTB    PLC    PC    OLS    OLM  
 [ II ] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery  
 WFX    PMX    SWD    IPI    EOR    PPR

- 2) **NOTIFICATION REQUIRED TO:** Check those which apply.  
 A.  Offset operators or lease holders  
 B.  Royalty, overriding royalty owners, revenue owners  
 C.  Application requires published notice  
 D.  Notification and/or concurrent approval by SLO  
 E.  Notification and/or concurrent approval by BLM  
 F.  Surface owner  
 G.  For all of the above, proof of notification or publication is attached, and/or,  
 H.  No notice required

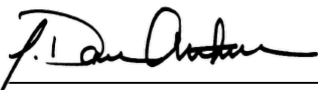
<b>FOR OCD ONLY</b>
<input type="checkbox"/> Notice Complete
<input type="checkbox"/> Application Content Complete

3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

**Note: Statement must be completed by an individual with managerial and/or supervisory capacity.**

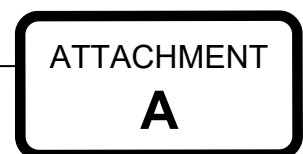
\_\_\_\_\_  
 Print or Type Name

\_\_\_\_\_  
Date

  
 \_\_\_\_\_  
 Signature

\_\_\_\_\_  
Phone Number

\_\_\_\_\_  
e-mail Address



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL  
RESOURCES DEPARTMENT

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

FORM C-108  
Revised June 10, 2003

**APPLICATION FOR AUTHORIZATION TO INJECT**

I. PURPOSE: \_\_\_\_\_ Secondary Recovery  Pressure Maintenance \_\_\_\_\_ Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? \_\_\_\_\_ Yes \_\_\_\_\_ No

II. OPERATOR: Spur Energy Partners LLC

ADDRESS: 9655 Katy Freeway, Suite 500, Houston, TX 77024

CONTACT PARTY: Sarah Chapman PHONE: 832-930-8502

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? \_\_\_\_\_ Yes  No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

\*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

\*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

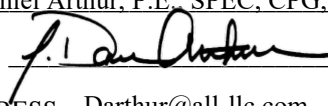
\*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: J. Daniel Arthur, P.E., SPEC, CPG, FGS TITLE: President & Chief Engineer

SIGNATURE:  DATE: 06/06/23

E-MAIL ADDRESS: Darthur@all-llc.com

\* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: \_\_\_\_\_

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

Side 2

### III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Application for Authorization to Inject  
Well Name: Pinto 36 State Com #3H

### III – Well Data *(The Wellbore Diagram is included as Attachment 1)*

A.

#### (1) General Well Information:

Operator: Spur Energy Partners LLC (OGRID No. 328947)  
Lease Name & Well Number: Pinto 36 State Com #3H  
Location Footage Calls: 150 FNL & 2260 FEL  
Legal Location: Unit Letter B, S36 T18S R25E  
Ground Elevation: 3,465'  
Proposed Injection Interval: 2,506' – 6,817' MD (2,311' – 2,673' TVD)  
County: Eddy

#### (2) Casing Information:

Type	Hole Size	Casing Size	Casing Weight	Setting Depth (MD)	Sacks of Cement	Estimated TOC	Method Determined
Surface	12-1/4"	9-5/8"	36.0 lb/ft	1,227'	1530	Surface	Circulation
Production Casing	8-3/4"	7" – 5-1/2"	17. - 26.0 lb/ft	6,817'	1070	Surface	Circulation
Tubing	N/A	2-7/8"	6.5 lb/ft	2,370'	N/A	N/A	N/A

**Note:** Crossover from 7" to 5-1/2" intermediate casing occurs at 1,624'.

#### (3) Tubing Information:

2-7/8" (6.5lbs/ft) J-55 IPC tubing with setting depth of 2,370' MD

(4) **Packer Information:** D&L Oil Tools ASI-X Packer or equivalent packer set at 2,406' MD

B.

(1) **Injection Formation Name:** Paddock member of the Yeso Formation

**Pool Name:** Penasco Draw; Sa-Yeso (ASSOC)

**Pool Code:** 50270

(2) **Injection Interval:** Perforated injection between 2,311' – 2,673' VD (2,506' – 6,817' MD)

(3) **Drilling Purpose:** Recompletion for pressure Maintenance

(4) **Other Perforated Intervals:** No other perforated intervals exist.

(5) **Overlying Oil and Gas Zones:** Below are the approximate formation tops for known oil and gas producing zones in the area.

- San Andres (692')

**Underlying Oil and Gas Zones:** Below are the approximate formation tops for known oil and gas producing zones in the area.

- Wolfcamp (5,700'); Cisco (7,652'); Morrow (9,008')

## V – Well and Lease Maps

A ½-mile well details table with casing and plugging information for each of the plugged penetrating wells, as well as the following maps are included in **Attachment 2**:

- 2-mile Oil & Gas Well Map
- 2-mile Lease Map
- 2-mile Mineral Ownership Map
- 2-mile Surface Ownership map
- Potash Lease Map

## VI – AOR Well List

There are 30 wells within the 1/2-mile AOR, including nine (9) plugged wells that penetrate the proposed injection zone.

A list of the wells within the 1/2-mile AOR, and wellbore diagrams for each of the nine (9) plugged wells that penetrate the injection interval are included in **Attachment 2**.

## VII – Proposed Operation

- (1) **Proposed Maximum Injection Rate:** 10 MMCF/day  
**Proposed Average Injection Rate:** 5 MMCF/day
- (2) A closed system will be used.
- (3) **Proposed Maximum Injection Pressure:** 670 psi (surface)  
**Proposed Average Injection Pressure:** approximately 470 psi (surface)
- (4) **Source Injectate Analysis:** It is expected that the injectate will consist of gas produced from the Paddock member of the Yeso Formation and re-injected into the same formation for the purposes of pressure maintenance **Attachment 3**.

## VIII – Geologic Description

The proposed injection interval includes the Paddock member of the Yeso Formation from 2,311 – 2,673 feet. This formation consists of dolomites and anhydritic dolomites, and some siltstones within the Yeso Formation. These formations are capable of taking gas produced from the subject formation(s) in the area.

The freshwater aquifers are the Artesian & Valley fill with the base of the USDW being located within the Grayburg Formation at approximately 690 feet. Water well depths in the area range from approximately 4.5 - 165 feet below ground surface.

## IX – Proposed & Previous Stimulation Program

Spur does not plan to restimulate the Pinto 36 State Com #3H, however this well was previously stimulated in the following manner:

- Perforated from 2,506' – 6,817'.
- Acidized toe with 5,000 Gal 15% Acid.
- Fracked with 157,975 gallons of water, 1,272,349 gallons of X-linked Gel carrying 1,740,701 lbs of 20/40 brown, 362,700 lbs 30/50, and 42,600# mesh sand.
- Circulated clean to TD with 2" coil TBG.

## **X – Logging and Test Data**

Logs will be submitted to the Division upon completion of the well.

## **XI – Fresh Groundwater Samples**

Based on a review of data from the New Mexico Office of the State Engineer, 25 groundwater wells are located within 1 mile of the proposed SWD location. Two of the water wells located within one mile were previously sampled and analyzed.

A water well map, details of water wells within 1-mile, and any associated water analyses are included in **Attachment 4**.

## **XII – No Hydrologic Connection Statement**

No faulting is present in the area that would provide a hydrologic connection between the injection interval and overlying USDWs. Additionally, the casing program has been designed to ensure there will be no hydrologic connection between the injection interval and overlying USDWs.

## **XIII – Proof of Notice**

A Public Notice was filed with the Carlsbad Argus newspaper and an affidavit is included in **Attachment 5**.

A copy of the application was mailed to the OCD District Office, landowner, and leasehold operators within 1/2-mile of the proposed SWD location. A list of the recipients, as well as delivery confirmations, are included in **Attachment 5**.



# Attachments

**Attachment 1:** Well Details:

- C-102
- Current Wellbore Diagram
- Current Completion Report
- Proposed Wellbore Diagram

**Attachment 2:** Area of Review Information:

- 2-mile Oil & Gas Well Map
- 1/2-mile Well Detail List With Penetrating Well Casing and Plugging Information
- 2-mile Lease Map
- 2-mile Mineral Ownership Map
- 2-mile Surface Ownership Map
- Potash Lease Map

**Attachment 3:** Injectate Analyses

**Attachment 4:** Water Well Map, Well Data, and Water Analysis

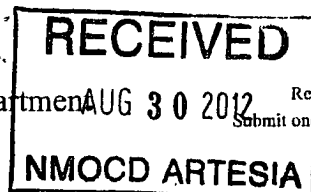
**Attachment 5:** Public Notice Affidavit and Notice of Application Confirmations

**Attachment 1**

- C-102
- Current Wellbore Diagram
- Current Completion Report
- Proposed Wellbore Diagram

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
DISTRICT II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
DISTRICT III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505



Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT As Drilled

API Number 30-015-39782	Pool Code 50270	Pool Name Penasco Draw; San Andres, Yeso
Property Code 38979	Property Name PINTO 36 STATE COM	Well Number 3H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3465'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	36	18-S	25-E		150	NORTH	2260	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	36	18-S	25-E		336	SOUTH	2292	EAST	EDDY

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

**CORNER COORDINATES TABLE**

- Ⓐ - Y=622553.5 N, X=467927.6 E
- Ⓑ - Y=622542.1 N, X=469248.3 E
- Ⓒ - Y=617275.3 N, X=467866.9 E
- Ⓓ - Y=617246.0 N, X=469210.7 E

**GEODETIC COORDINATES**  
NAD 27 NME

**SURFACE LOCATION**  
Y=622400.2 N  
X=468309.2 E

LAT.=32.711033° N  
LONG.=104.436366° W

**BOTTOM HOLE LOCATION**  
Y=617596.0 N  
X=468296.1 E

**OPERATOR CERTIFICATION**

*I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.*

8/27/12  
Signature Date

Brian Maiorino  
Printed Name

bmaiorino@concho.com  
E-mail Address

**SURVEYOR CERTIFICATION**

*I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.*

**OCTOBER 31, 2011**

Date of Survey  
Signature & Seal of Professional Surveyor:

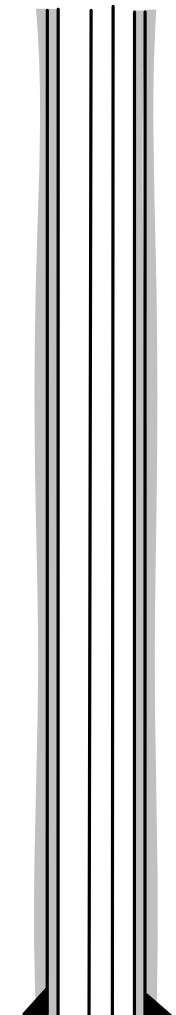
Certificate Number Gary G. Eidson 12641  
Ronald F. Eidson 3239

AF NWSC W.O. 11.11.1922

Eddy, NM  
 API# 30-015-39782

SPUD DATE: 4/20/2012  
 ELEV: 3465' GL, 12' KB

CURRENT WBD



**HOLE SIZE: 12-1/4"**  
**9-5/8" 36# J-55 LTC Csg @ 1,227'**  
 CMT WITH 250 SX C + 300 SX H + 500 SX  
 CLASS C. Temp Survey located TOC @ 220'.  
 Remedial Surface casing cement job with  
 480sx and circulated 33 Sx to Surface.

**HOLE SIZE: 8-3/4"**  
**7" 26# L-80 Csg @ 1624'**  
**5-1/2" 17# L-80 Csg @ 6,817'**  
 CMT WITH 500 SX C , CIRC 110 SX TO SURF FOR 7"  
 CMT 400 SX C LEAD AND 170 SX C TAIL, CIRC 307 SX TO  
 SURF FOR 5-1/2" , TOC AT SURFACE

CROSS OVER FROM 7" TO  
 5-1/2" Csg @ 1,624'

KOP @ 1,725'

TOP PERF @ 2,506'

BOTTOM PERF @ 6,817'

TD (MD) @ 6,917' TD  
 (TVD) @ 2,672.3'

**Tubing Strings**

Tubing Description Tubing - Production	Set Depth (ftKB) 2,459.4	Run Date 7/24/2018
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**Tubing Components**

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Top Connection Type	Len (ft)	Cum Len (ft)	Top (ftKB)	Btm (ftKB)	Incl Max (°)
47	Tubing	2 7/8	2.44	6.50	J-55	8RD		1,522.65	2,459.43	0.0	1,522.7	
1	MARKER SUB	2 7/8	2.44	6.50	J-55	8RD		2.22	936.78	1,522.7	1,524.9	0.36
2	Tubing	2 7/8	2.44	6.50	J-55	8RD		64.88	934.56	1,524.9	1,589.8	0.36
1	NICKEL PLATED TAC	4 3/4	2.44	17.00	K-77	8RD		2.87	869.68	1,589.8	1,592.6	0.23
24	Tubing	2 7/8	2.44	6.50	J-55	8RD		779.60	866.81	1,592.6	2,372.2	61.51
1	Pump Seating Nipple	2 7/8	2.25			8RD		1.10	87.21	2,372.2	2,373.3	61.60
1	SPACER SUB	2 7/8	2.44	6.50	J-55	8RD		4.22	86.11	2,373.3	2,377.5	61.97
1	CAVINS D3405G DEASANDER		3			8RD		17.06	81.89	2,377.5	2,394.6	63.46
2	MUD ANCHOR	3 1/2	2.99	9.30	J-55	8RD		64.08	64.83	2,394.6	2,458.7	69.75
1	Bull Plug	3 1/2				8RD		0.75	0.75	2,458.7	2,459.4	69.83

**Rod Components**

Jts	OD (in)	Grade	Make	Model	Item Des	Top Coupling	Len (ft)	Cum Len (ft)	Top (ftKB)	Btm (ftKB)	Incl Max (°)
1	2 1/2				Rod Pump		20.00	2,360.00	413.0	433.0	1.26
23	7/8	KD			Weatherford FHSM		575.00	2,340.00	433.0	1,008.0	1.40
8	1 3/8	Grade K			American Sinker Bar FHSM		200.00	1,765.00	1,008.0	1,208.0	1.80
61	1	KD			Weatherford SHSM		1,525.00	1,565.00	1,208.0	2,733.0	88.61
3	1	KD			Weatherford SHSM		14.00	40.00	2,733.0	2,747.0	88.74
1	1 1/2	Spraymetal			Don Nan		26.00	26.00	2,747.0	2,773.0	88.99

**COMPLETION JOB**

PERF 2506-6817'  
 ACIDIZED TOE WITH 5000 GAL 15% ACID  
 FRAC W 157,975 GAL WATER, 1,272,349 GALS OF  
 X-LINKED GEL CARRYING 1,740,701 LBS. OF 20/40  
 BROWN + 362,700 LBS. 30/50 SLC + 42,600#  
 MESH. CIRC CLEAN TO TD W 2" COIL TBG

Submit to Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	State of New Mexico Energy, Minerals and Natural Resources  Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	Form C-105 Revised April 3, 2017
		1. WELL API NO. <b>30-015-39782</b>
		2. Type of Lease <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/> FED/INDIAN
		3. State Oil & Gas Lease No.

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

4. Reason for filing: <input checked="" type="checkbox"/> <b>COMPLETION REPORT</b> (Fill in boxes #1 through #31 for State and Fee wells only)  <input type="checkbox"/> <b>C-144 CLOSURE ATTACHMENT</b> (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)	5. Lease Name or Unit Agreement Name PINTO 36 STATE COM  6. Well Number: 3H
---	---

7. Type of Completion:  
 NEW WELL     WORKOVER     DEEPENING     PLUGBACK     DIFFERENT RESERVOIR     OTHER REVISION

8. Name of Operator <b>SPUR ENERGY PARTNERS LLC</b>	9. OGRID <b>328947</b>
--	---------------------------

10. Address of Operator <b>9655 KATY FREEWAY, SUITE 500, HOUSTON, TX 77024</b>	11. Pool name or Wildcat <b>PENASCO DRAW; SA-YESO</b>
---	--

12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
<b>Surface:</b>	B	36	18S	25E		150	NORTH	2260	EAST	EDDY
<b>BH:</b>	O	36	18S	25E		336	NORTH	2292	EAST	EDDY

13. Date Spudded <b>04/12/2012</b>	14. Date T.D. Reached <b>05/07/2012</b>	15. Date Rig Released <b>05/10/2012</b>	16. Date Completed (Ready to Produce) <b>06/14/2012</b>	17. Elevations (DF and RKB, RT, GR, etc.) <b>3465' GR</b>
---------------------------------------	--	--	--	--

18. Total Measured Depth of Well <b>6917'M</b>	19. Plug Back Measured Depth	20. Was Directional Survey Made? <b>YES</b>	21. Type Electric and Other Logs Run <b>HRLA, TDLCDN</b>
---	------------------------------	--	---

22. Producing Interval(s), of this completion - Top, Bottom, Name <b>2506'-6817' YESO</b>	
--	--

**23. CASING RECORD (Report all strings set in well)**

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	1226'	12-1/4"	1050 SXS	0
7"	26#	1624'	8-3/4"	500 SXS	0
5-1/2"	17#	6817'	8-3/4"	570 SXS	0

24. LINER RECORD					25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET

26. Perforation record (interval, size, and number) Perf 2506'-6817' Acidized toe with 5000 gal 15% acid Frac w 157,975 gal water, 1,272,349 gals of x-linked gel carrying 1,740,701 lbs. of 20/40 brown + 362,700 lbs. 30/50 slc + 42,600# mesh. Circ clean to TD w 2" coil tbg	27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL    AMOUNT AND KIND MATERIAL USED 2506'-6817'    57,975 gal water, 1,272,349 gals of x-linked gel carrying 1,740,701 lbs. of 20/40 brown + 362,700 lbs. 30/50 slc + 42,600# mesh. Circ clean to TD w 2" coil tbg
---	--

**28. PRODUCTION**

Date First Production <b>07/04/2012</b>	Production Method ( <i>Flowing, gas lift, pumping - Size and type pump</i> ) <b>PUMPING, ESP</b>	Well Status ( <i>Prod. or Shut-in</i> ) <b>PRODUCING</b>					
Date of Test <b>07/11/2012</b>	Hours Tested <b>24-HOURS</b>	Choke Size <b>N/A</b>	Prod'n For Test Period	Oil - Bbl <b>110</b>	Gas - MCF <b>50</b>	Water - Bbl. <b>400</b>	Gas - Oil Ratio <b>455</b>
Flow Tubing Press. <b>70</b>	Casing Pressure <b>70</b>	Calculated 24-Hour Rate	Oil - Bbl. <b>110</b>	Gas - MCF <b>50</b>	Water - Bbl. <b>400</b>	Oil Gravity - API - ( <i>Corr.</i> ) <b>39.9</b>	

29. Disposition of Gas ( <i>Sold, used for fuel, vented, etc.</i> ) <b>SOLD</b>	30. Test Witnessed By <b>KENT GREENWAY</b>
--	---

31. List Attachments

32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.	33. Rig Release Date:
--	-----------------------

34. If an on-site burial was used at the well, report the exact location of the on-site burial:  
 Latitude \_\_\_\_\_ Longitude \_\_\_\_\_ NAD83

*I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief*

Printed

Signature <i>Sarah Chapman</i>	Name SARAH CHAPMAN	Title REGULATORY DIRECTOR	Date 05/15/2023
E-mail Address SCHAPMAN@SPURENERGY.COM			

# INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

## INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn A"
T. Salt	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt	T. Atoka	T. Fruitland	T. Penn. "C"
T. Yates	T. Miss	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers	T. Devonian	T. Cliff House	T. Leadville
T. Queen	T. Silurian	T. Menefee	T. Madison
T. Grayburg 415'	T. Montoya	T. Point Lookout	T. Elbert
T. San Andres 692'	T. Simpson	T. Mancos	T. McCracken
T. Glorieta 2098'	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock	T. Ellenburger	Base Greenhorn	T. Granite
T. Blinebry	T. Gr. Wash	T. Dakota	
T. Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard	T. Bone Springs	T. Todilto	
T. Abo	T. YESO 2150'	T. Entrada	
T. Wolfcamp	T.	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

### OIL OR GAS SANDS OR ZONES

No. 1, from.....to..... No. 3, from.....to.....  
 No. 2, from.....to..... No. 4, from.....to.....

### IMPORTANT WATER SANDS

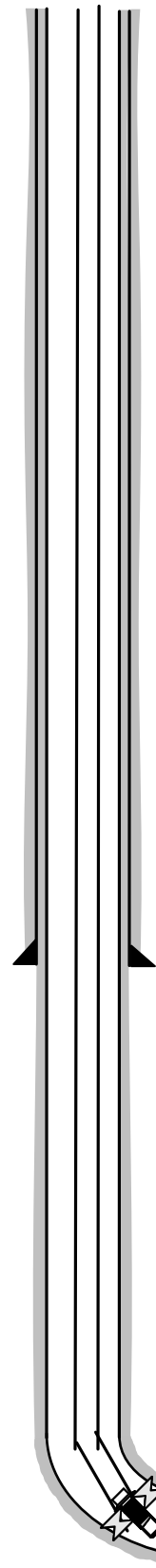
Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....  
 No. 2, from.....to.....feet.....  
 No. 3, from.....to.....feet.....

## LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology	From	To	Thickness In Feet	Lithology

PROPOSED WBD



**HOLE SIZE: 12-1/4"**

**9-5/8" 36# J-55 LTC Csg @ 1,227'**  
CMT WITH 250 SX C + 300 SX H +  
500 SX CLASS C. Temp Survey  
located TOC @ 220'. Remedial  
Surface casing cement job with  
480sx and circulated 33 Sx to  
Surface.

**PROPOSED TBG DETAIL**

+/- 74 JOINTS OF 2-7/8" J55 IPC TBG  
PACKER @ 2406' (64 DEG INCLINATION)

**HOLE SIZE: 8-3/4"**

**7" 26# L-80 Csg @ 1624'**  
**5-1/2" 17# L-80 Csg @ 6,817'**

CMT WITH 500 SX C , CIRC 110 SX TO SURF FOR 7"  
CMT 400 SX C LEAD AND 170 SX C TAIL, CIRC 307 SX TO  
SURF FOR 5-1/2" , TOC AT SURFACE

CROSS OVER FROM 7" TO  
5-1/2" Csg @ 1,624'

KOP @ 1,725'

**COMPLETION JOB**

PERF 2506-6817'  
ACIDIZED TOE WITH 5000 GAL 15% ACID  
FRAC W 157,975 GAL WATER, 1,272,349 GALS OF  
X-LINKED GEL CARRYING 1,740,701 LBS. OF 20/40  
BROWN + 362,700 LBS. 30/50 SLC + 42,600#  
MESH. CIRC CLEAN TO TD W 2" COIL TBG

TOP PERF @ 2,506'

BOTTOM PERF @ 6,817'

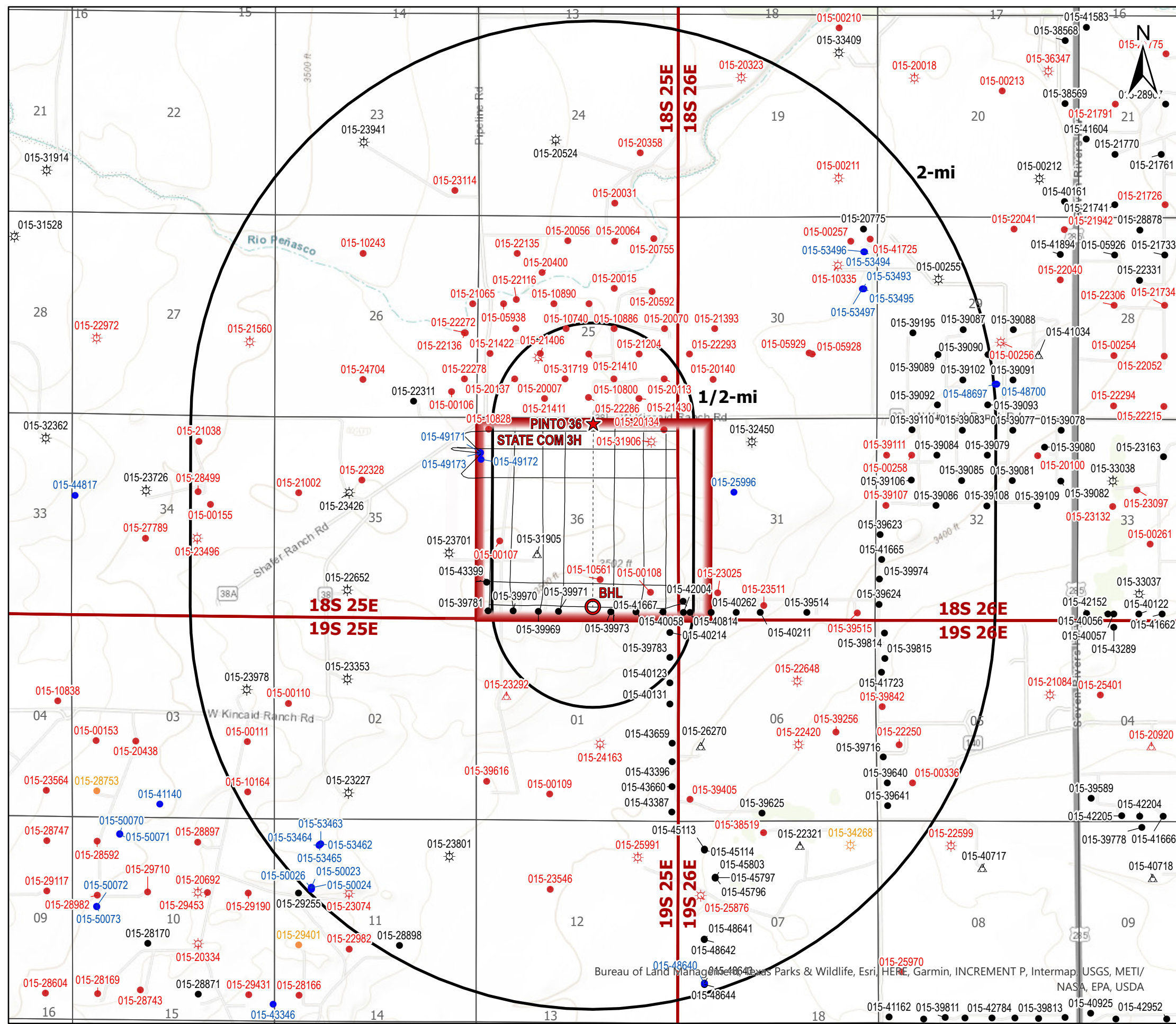
TD (MD) @ 6,917' TD  
(TVD) @ 2,672.3'

**Attachment 2**

Area of Review Information:

- 2-mile Oil & Gas Well Map
- 1/2-mile Well Detail List
- 2-mile Lease Map
- 2-mile Mineral Ownership Map
- 2-mile Surface Ownership Map
- Potash Lease Map





### Legend

- ★ PINTO 36 STATE COM 3H SHL
- PINTO 36 STATE COM 3H BHL
- PINTO 36 STATE COM 3H Lateral
- Affected Wells Deviation Laterals
- Project Area (1)
- ☼ Gas, Active (19)
- ☼ Gas, Plugged (21)
- ☼ Gas, Temporary Abandonment (1)
- Oil, Active (109)
- Oil, New (28)
- Oil, Plugged (110)
- Oil, Temporary Abandonment (2)
- △ Salt Water Disposal, Active (6)
- △ Salt Water Disposal, Plugged (2)

Source Info: NMOCD O&G Wells updated 3/22/2023 (<https://ocd-hub-nm-emnrd.hub.arcgis.com/search>)

<h2>O&amp;G Wells Area of Review</h2>		
<h3>PINTO 36 STATE COM 3H EDDY COUNTY, NEW MEXICO</h3>		
Proj Mgr: Dan Arthur	June 17, 2023	Mapped by: Ben Bockelmann
Prepared for: 	Prepared by: 	

AOR Tabulation for Pinto 36 State COM 3H (Top of Injection Interval: 2,311')							
Well Name	API#	Well Type	Operator	Spud Date	Location (Sec., Tn., Rng.)	Total Vertical Depth (feet)	Penetrate Inj. Zone?
SUBURB AZS STATE #001	30-015-31906	Plugged	EOG RESOURCES INC	9/9/2002	A-36-18S-25E	Plugged (9,340)	Yes
YATES AS FEE COM #006	30-015-31719	Plugged	EOG RESOURCES INC	5/24/2001	K-25-18S-25E	Plugged (9,142)	Yes
YATES AS FEE #003	30-015-21406	Plugged	EOG RESOURCES INC	10/28/1974	K-25-18S-25E	Plugged (1,620)	No
GERARD AW #003	30-015-21410	Plugged	EOG RESOURCES INC	11/13/1974	J-25-18S-25E	Plugged (1,530)	No
GERARD AW #004	30-015-22286	Plugged	EOG RESOURCES INC	9/6/1977	O-25-18S-25E	Plugged (1,550)	No
NIX CURTIS BH #002	30-015-20113	Plugged	EOG RESOURCES INC	12/27/1967	P-25-18S-25E	Plugged (1,705)	No
WILKINSON AZ #002	30-015-20137	Plugged	EOG Y RESOURCES, INC.	8/28/1994	M-25-18S-25E	Plugged (2,450)	Yes
WILKINSON AZ #003	30-015-21411	Plugged	EOG Y RESOURCES, INC.	11/26/1974	N-25-18S-25E	Plugged (2,450)	Yes
WILKINSON AZ #001	30-015-20007	Plugged	EOG Y RESOURCES, INC.	5/19/1967	N-25-18S-25E	Plugged (5,120)	Yes
GERARD AW #001	30-015-10800	Plugged	EOG Y RESOURCES, INC.	6/2/1966	O-25-18S-25E	Plugged (2,648)	Yes
GERARD AW #002	30-015-10886	Plugged	EOG Y RESOURCES, INC.	11/12/1966	J-25-18S-25E	Plugged (2,630)	Yes
YATES AS FEE #001	30-015-10740	Plugged	EOG Y RESOURCES, INC.	2/24/1966	K-25-18S-25E	Plugged (1,859')	No
NIX CURTIS BH #004	30-015-21430	Plugged	EOG Y RESOURCES, INC.	12/4/1974	P-25-18S-25E	Plugged (1,495)	No
NIX CURTIS BH #003	30-015-21204	Plugged	EOG Y RESOURCES, INC.	10/3/1974	I-25-18S-25E	Plugged (1,520)	No
METROPOLIS DISPOSAL #001	30-015-31905	SWD	FRONTIER FIELD SERVICES, LLC	10/14/2004	K-36-18S-25E	10,500	Yes
PRE-ONGARD WELL #002 (Eddy State "AC" #2)	30-015-00108	Plugged	PRE-ONGARD WELL OPERATOR (Gulf Oil Corporation)	3/9/1959	P-36-18S-25E	Plugged (847)	No
PRE-ONGARD WELL #001 (Eddy State "AC" #1)	30-015-00107	Plugged	PRE-ONGARD WELL OPERATOR (Gulf Oil Corporation)	12/28/1958	L-36-18S-25E	Plugged (9,283)	Yes
PRE-ONGARD WELL #001 (Kincaid #1)	30-015-10561	Plugged	PRE-ONGARD WELL OPERATOR (Monsanto Company)	4/30/1965	O-36-18S-25E	Plugged (9,330)	Yes
Pre-Ongard Well #1 (Lowe "BK" State #001)	30-015-20134	Plugged	Pre-Ongard Well Operator (Yates Petroleum Corporation)	4/16/1968	A-36-18S-25E	Plugged (1,590)	No
PINTO 36 STATE COM #005H	30-015-39970	Oil	Spur Energy Partners LLC	7/1/2012	M-36-18S-25E	2,600	Yes
PINTO 36 STATE COM #006H	30-015-39971	Oil	Spur Energy Partners LLC	7/19/2015	N-36-18S-25E	2,568	Yes
PINTO 36 STATE COM #002H	30-015-39969	Oil	Spur Energy Partners LLC	7/20/2012	N-36-18S-25E	2,340	Yes
PINTO 36 STATE COM #007H	30-015-39973	Oil	Spur Energy Partners LLC	1/31/2017	O-36-18S-25E	2,580	Yes
PINTO 36 STATE COM #004H	30-015-40058	Oil	Spur Energy Partners LLC	8/3/2012	P-36-18S-25E	7,335	Yes
PINTO 36 STATE COM #008H	30-015-41667	Oil	Spur Energy Partners LLC	11/28/2015	P-36-18S-25E	2,669	Yes
ARABIAN 6 FEE #010H	30-015-42004	Oil	Spur Energy Partners LLC	3/18/2014	M-31-18S-26E	2,875	Yes
CLYDESDALE 1 FEE #001H	30-015-40214	Oil	Spur Energy Partners LLC	2/26/2013	A-01-19S-25E	2,633	Yes
FALABELLA 31 FEE #001H	30-015-40814	Oil	Spur Energy Partners LLC	7/14/2013	M-31-18S-26E	2,649	Yes
PINTO 36 STATE #009H	30-015-42877	Oil	Spur Energy Partners LLC	1/17/2015	M-31-18S-26E	2,628	Yes
CLYDESDALE 1 FEE #002H	30-015-39783	Oil	Spur Energy Partners LLC	1/21/2014	A-01-19S-25E	2,647	Yes

**Casing Information for Wells Penetrating the Pinto 36 State COM 3H Injection Zone**

Well Name	Surface Casing						Intermediate Casing					
	Set Depth	Casing Size	TOC	TOC Method Determined	Sks of Cement	Hole size	Set Depth	Casing Size	TOC	TOC Method Determined	Sks of Cement	Hole Size
SUBBURB AZS STATE #001	528'	13.375"	Surface	Circulation	600	17.5"	1200'	8.625"	Surface	Circulation	625	12.25"
YATES AS FEE COM #006	396'	13.375"	Surface	Circulation	450	17.5"	1214'	9.625"	Surface	Circulation	965	12.25"
WILKINSON AZ #003	321'	10.75"	Surface	Circulation	175	11.75"	1096'	7"	Surface	Circulation	550	9.5"
GERARD AW #001	1210'	4.5"	Surface	Circulation	155	5.5"	N/A	N/A	N/A	N/A	N/A	N/A
WILKINSON AZ #001	1040'	9.625"	Surface	Circulation	645	12.25"	N/A	N/A	N/A	N/A	N/A	N/A
WILKINSON AZ #002	1044'	8.625"	340'	Unknown*	100	Unknown*	1527'	5.5"	460'	Unknown	180	Unknown
GERARD AW #002	1065'	8.625"	Surface	Circulation	450	11"	N/A	N/A	N/A	N/A	N/A	N/A
METROPOLIS DISPOSAL #001	404'	13.375"	Surface	Circulation	450	17.5"	1203	8.625"	Surface	Circulation	600	12.25"
PRE-ONGARD WELL #001 (Eddy State "AC" #1)	1184'	9.625"	Surface	Circulation	700	11"	N/A	N/A	N/A	N/A	N/A	N/A
PRE-ONGARD WELL #001 (Kincaid #1)	1300'	9.625"	Surface	Circulation	425	12.25"	N/A	N/A	N/A	N/A	N/A	N/A
PINTO 36 STATE COM #005H	1166'	8.625"	Surface	Circulation	1050	12.25"	N/A	N/A	N/A	N/A	N/A	N/A
PINTO 36 STATE COM #006H	1212'	8.625"	Surface	Circulation	1300	11"	N/A	N/A	N/A	N/A	N/A	N/A
PINTO 36 STATE COM #002H	1228'	9.625"	Surface	Circulation	700	12.25"	N/A	N/A	N/A	N/A	N/A	N/A
PINTO 36 STATE COM #007H	1217'	8.625"	Surface	Circulation	625	11"	N/A	N/A	N/A	N/A	N/A	N/A
PINTO 36 STATE COM #004H	1210'	9.625"	Surface	Circulation	1050	12.25"	N/A	N/A	N/A	N/A	N/A	N/A
PINTO 36 STATE COM #008H	1232'	8.625"	Surface	Circulation	1150	11"	N/A	N/A	N/A	N/A	N/A	N/A
ARABIAN 6 FEE #010H	1232'	8.625"	Surface	TS/ Circulation	1850	11"	N/A	N/A	N/A	N/A	N/A	N/A
CLYDESDALE 1 FEE #001H	1235'	8.625"	Surface	Circulation	1300	11"	N/A	N/A	N/A	N/A	N/A	N/A
FALABELLA 31 FEE #001H	1230'	8.625"	Surface	Circulation	1150	11"	N/A	N/A	N/A	N/A	N/A	N/A
PINTO 36 STATE #009H	1266'	8.625"	Surface	Circulation	1000	11"	N/A	N/A	N/A	N/A	N/A	N/A
CLYDESDALE 1 FEE #002H	1194'	8.625"	Surface	TS/ Circulation	1358	11"	N/A	N/A	N/A	N/A	N/A	N/A

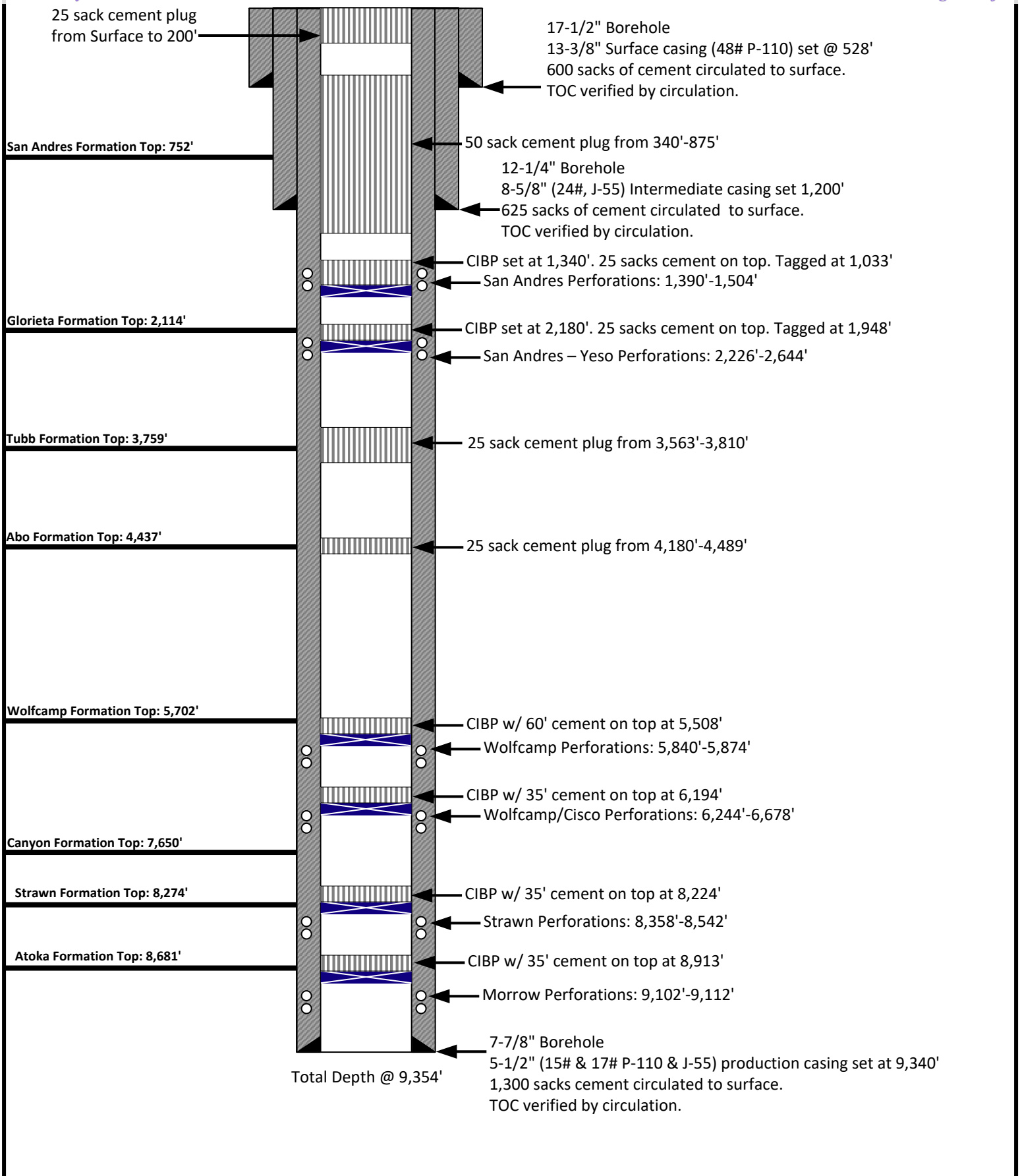
Notes: \* - Data not available from the NMOC database (Well records or Well details).



Well Name	Production Casing , Intermediate II Casing, or Liner						Production Casing II & Liner					
	Set Depth	Casing Size	TOC	TOC Method Determined	Sks of Cement	Hole Size	Set Depth	Casing Size	TOC	TOC Method Determined	Sks of Cement	Hole Size
SUBBURB AZS STATE #001	9340'	5.5"	Surface	Circulation	1300	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
YATES AS FEE COM #006	9200'	5.5"	Surface	Circulation	1310	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
WILKINSON AZ #003	2341'	4.5"	Surface	Circulation	275	6.25"	N/A	N/A	N/A	N/A	N/A	N/A
GERARD AW #001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WILKINSON AZ #001	5117'	7"	Surface	Circulation	900	8.25"	N/A	N/A	N/A	N/A	N/A	N/A
WILKINSON AZ #002	2450'	3.5"	Surface	Circulation	Unknown*	Unknown*	N/A	N/A	N/A	N/A	N/A	N/A
GERARD AW #002	2628'	5.5"	Estimated 116'	Unknown*	450	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
METROPOLIS DISPOSAL #001	9927'	5.5"	1820'	CBL	1600	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
PRE-ONGARD WELL #001(Eddy State "AC" #1)	9270'	5.5"	Unknown*	Unknown*	425	8.75"	N/A	N/A	N/A	N/A	N/A	N/A
PRE-ONGARD WELL #001(Kincaid #1)	9400'	4.5"	Unknown*	Unknown*	300	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
PINTO 36 STATE COM #005H	7234'	5.5"	Surface	Circulation	900	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
PINTO 36 STATE COM #006H	7203'	5.5"	Surface	Circulation	1100	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
PINTO 36 STATE COM #002H	7012'	5.5"	Surface	Circulation	900	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
PINTO 36 STATE COM #007H	7425'	5.5"	Surface	Circulation	1100	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
PINTO 36 STATE COM #004H	7195"	5.5"	Surface	Circulation	400	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
PINTO 36 STATE COM #008H	7387'	5.5"	Surface	Circulation	1100	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
ARABIAN 6 FEE #010H	7387'	5.5"	Surface	Circulation	1500	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
CLYDESDALE 1 FEE #001H	7424'	5.5"	Surface	Circulation	850	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
FALABELLA 31 FEE #001H	7366'	5.5"	Surface	Circulation	800	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
PINTO 36 STATE #009H	7682'	5.5"	Surface	Circulation	1100	7.875"	N/A	N/A	N/A	N/A	N/A	N/A
CLYDESDALE 1 FEE #002H	7398'	5.5"	Surface	Circulation	800	7.875"	N/A	N/A	N/A	N/A	N/A	N/A

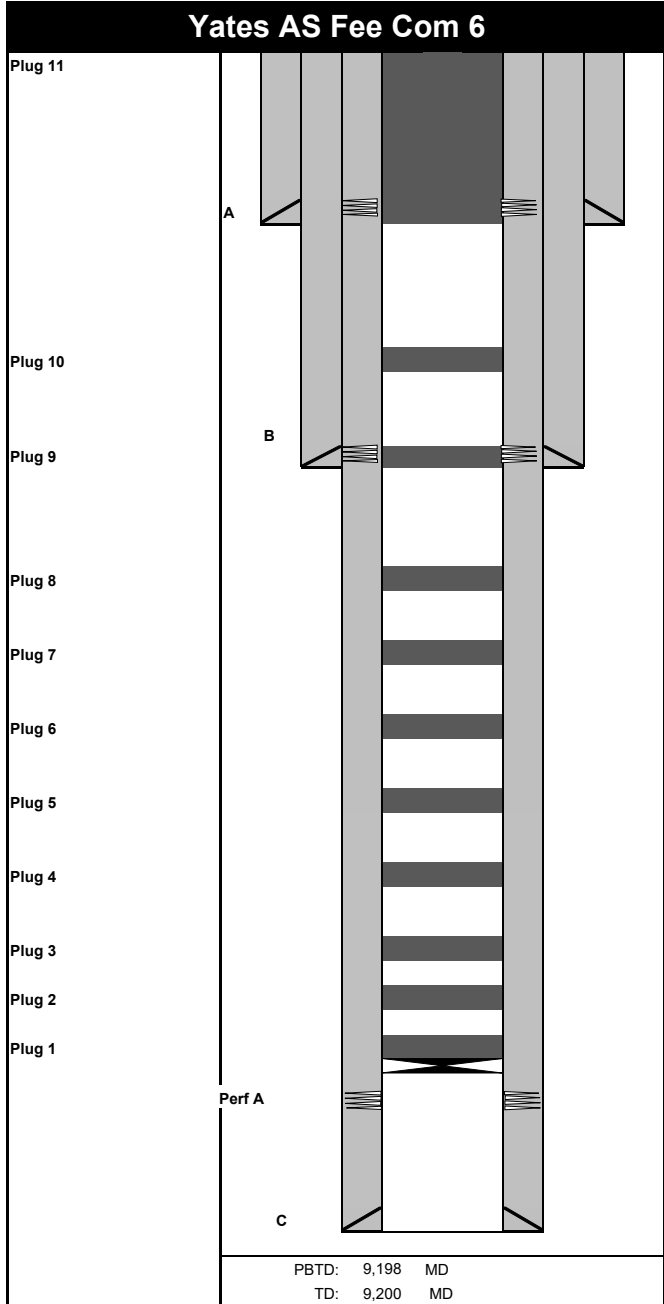
Notes: \* - Data not available from the NMOC database (Well records or Well details).

Well Name	Plugging Information
SUBURB AZS STATE #001	CIBP @ 8,913' with 35' cement on top, 'CIBP @ 8,224' with 35' cement on top, CIBP @ 6,194' with 35' cement on top, 'CIBP @ 5,508' with 60' cement on top, CIBP @ 2,180' with 25 sx, 'CIBP @ 1,340' qurg 25 sx. Plugs set at 4,180' - 4,489' with 25 sx, 3,563 - 3,810' with 25 sx, 340' - 875' with 50 sx, and surface - 200' with 25 sx.
YATES AS FEE COM #006	CIBP set @ 8900'. Plugs set at 8672' - 8900' with 25 sx, 8428' - 8648' with 25 sx, 7992' - 8212' with 25 sx, 7660' - 7740' with 25 sx, 5479' - 5726' with 25 sx, 4083' - 4330' with 25 sx, 3473' - 3720' with 25 sx, 1870' - 2117' with 25 sx,
WILKINSON AZ #003	Cement Squeeze from 495' - 356' with 125 sx, cement plug set at 186' - 12' with 127 sx.
GERARD AW #001	Cement squeeze at 1200' with 100 sx, 101' - 744' with 100 sx, 55' - 101' with 50 sx, 0-55' with 10 sx.
WILKINSON AZ #001	Plugs set at 1616' - 1300' with 25 sx, 1233' - 928' with 50 sx, squeezed 250 sx below 1202', 538' - 650' with 50 sx, 469' - 538' with 50 sx, 0-60' with 10 sx.
WILKINSON AZ #002	Squeezed 100 sx through existing perms @ 1378' - 1440' and tagged cement @ 780'. Cement plug places @ 700' - surface with 30 sx.
GERARD AW #002	CIBP @ 1500'. Plugs set at 1475' - 940' with 50 sx. Perf @ 100' and squeeze 75 sx to surface.
PRE-ONGARD WELL #001 (Eddy State "AC" #1)	CIBP @8950' with 6 sx cmt on top. Cut and pulled 5.5" casing from 7005'. Circulated hole with mud. Plugs set at 7052' - 6952' with 23 sx, 6900' - 6800' with 35 sx, 5750' - 5650 with 35 sx, 4500' - 4400' with 35 sx, 2200' - 2100' with 35 sx, 1250' - 1150' with 36 sx & 50' - 0' with 18 sx.
PRE-ONGARD WELL #001 (Kincaid #1)	Plugs set @ 9316' - 9221', 9004' - 8905', 7794' - 7698', 4444' - 4341', 1365' - 1264', & 716' - 618' with 169 sx cmt. 5sx plug at surface.

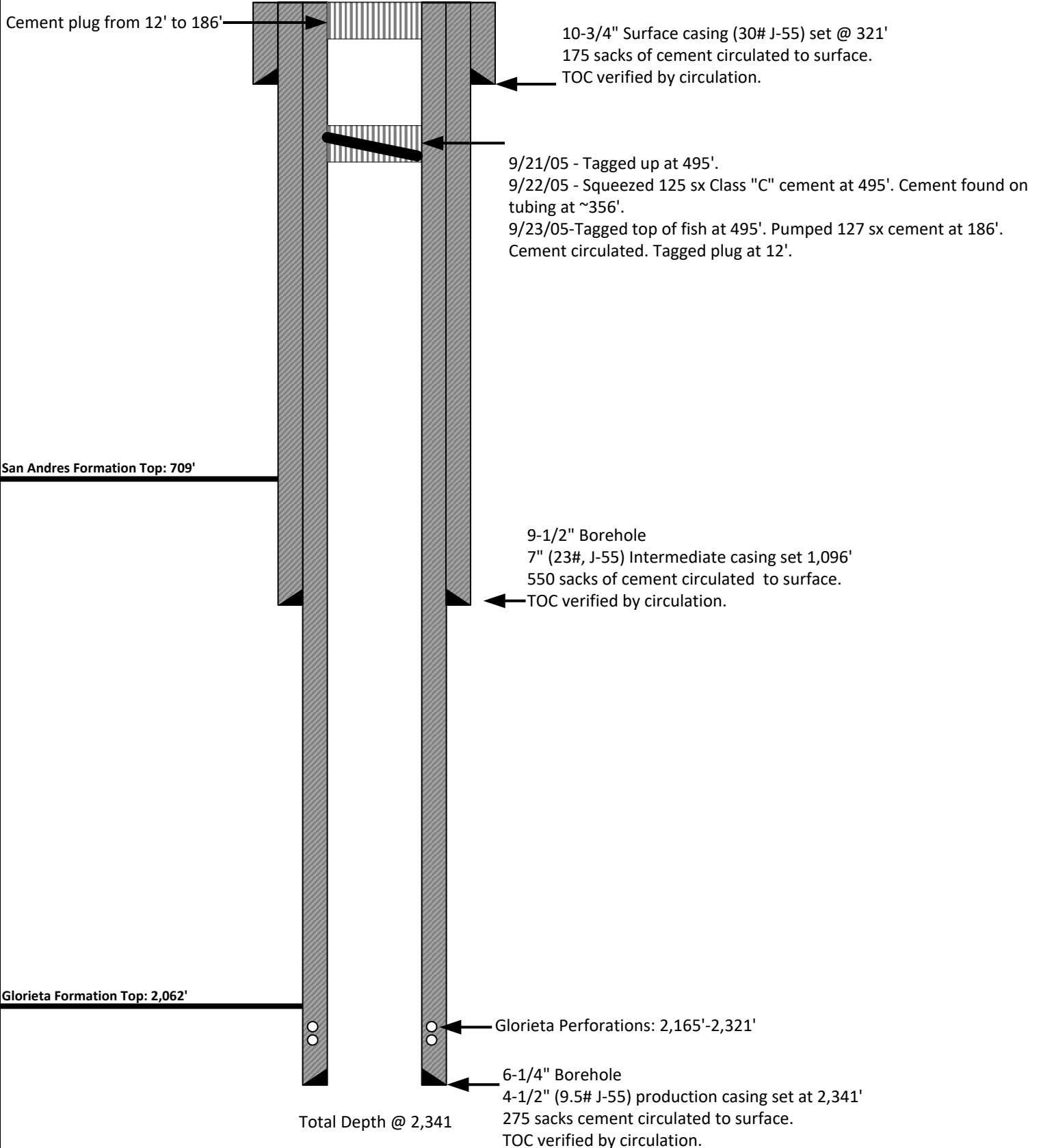




<p>Prepared by:                    Prepared for:  </p>	<p>Drawn by: Joshua Ticknor, P.E.                  Project Manager:                  Nathan Alleman                  Date: 4/27/2023</p>	<p><b>Plugged and Abandoned Wellbore Diagram</b>                  SUBURB AZS STATE #001                  30-015-31906                  660'FNL &amp; 660'FEL                  36-18S-25E                  Eddy County, New Mexico</p>
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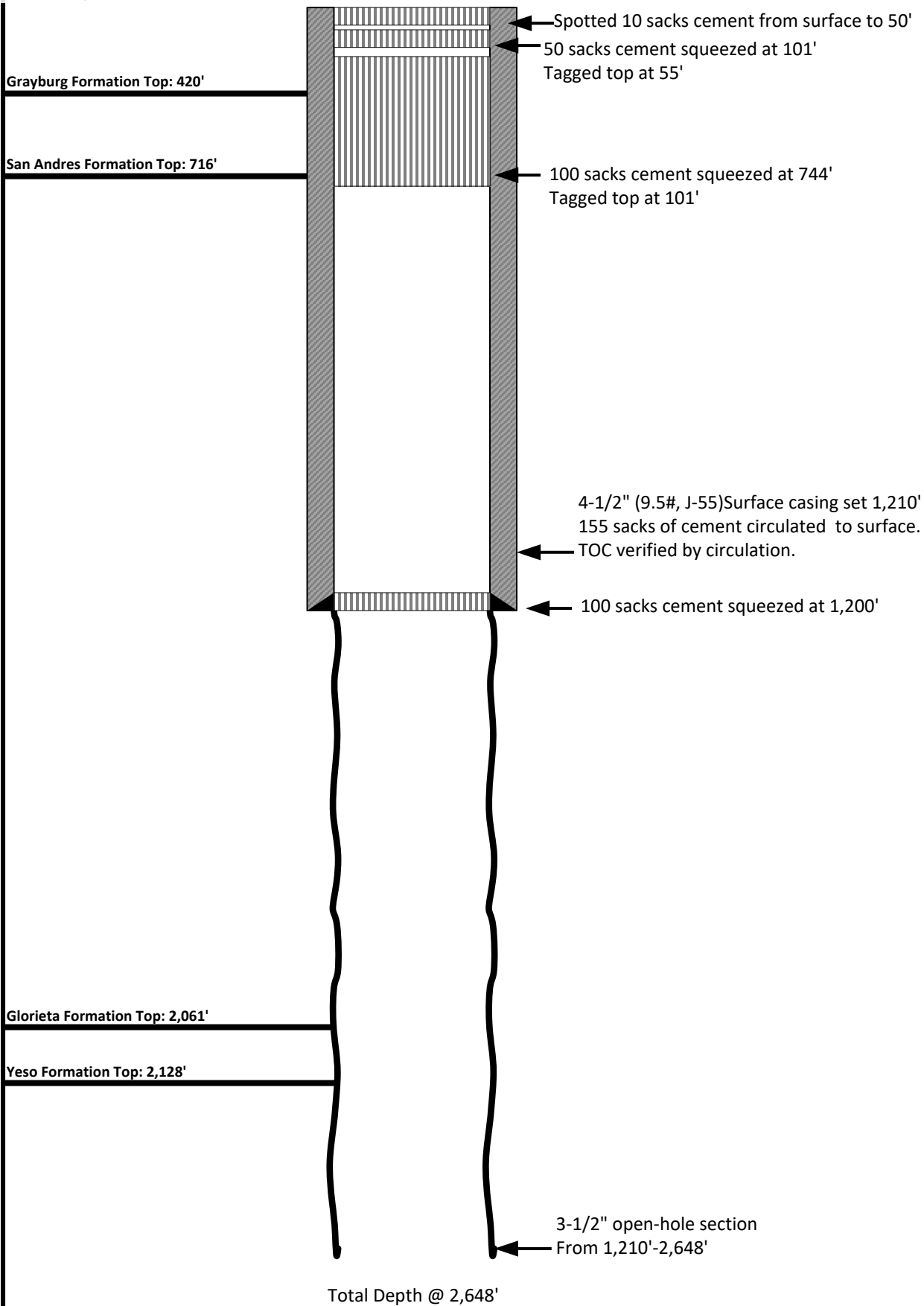
<b>Sec-TWN-RNG: Sec. 25-18S-25E</b>		<b>API: 30-015-31719</b>							
<b>FOOTAGES: 1550'FSL &amp; 1600'FWL</b>		<b>GL: 3464</b>							
		<b>KB:</b>							
<b>CASING DETAIL</b>									
#	HOLE SIZE	SIZE	WGHT	GRADE	Top	Bottom	Sx Cmt	Circ/TOC	TOC Method
A	17 1/2	13 3/8	48	H-40	0	396	450	Surface	Circ
B	12 1/4	9 5/8	36	J-55	0	1,214	965	Surface	Circ
C	7 7/8	5 1/2	15.5/17	J55/P110	0	9,200	1310	Surface	Circ
<b>FORMATION TOPS</b>									
	Formation	Top		Formation	Top				
	San Andres	706		Canyon	7610				
	Glorieta	2067		Strawn	8162				
	Tubb	3670		Atoka	8598				
	Abo	4280		Morrow	8850				
	Wolfcamp	5676		Chester	9135				
<b>Perforation Detail</b>									
	Formation	Top	Bottom	Treatment					
A	Morrow	8,980	9,006	Acidize w/1000 gals 7.5% MSA					
<b>PLUGS</b>									
#	sx	Class	Top	Bottom	Tag	Notes			
1	25	H	8672	8900	Y	CIBP			
2	25	H	8428	8648	N				
3	25	H	7992	8212	N				
4	25	H	7660	7740	N				
5	25	H	5479	5726	N				
6	25	C	4083	4330	N				
7	25	C	3473	3720	N				
8	25	C	1870	2117	N				
9	25	C	984	1314	N	Perforate			
10	25	C	509	756	N				
11	25	C	0	483	N	Perforate			
<b>Prepared by: Hiram C 5/19/21</b>									
PBDT: 9,198 MD					9/20/21				
TD: 9,200 MD									



Prepared by:  
  
 Prepared for:  


Drawn by: Joshua Ticknor, P.E.  
 Project Manager:  
 Nathan Alleman  
 Date: 4/27/2023

**Plugged and Abandoned Wellbore Diagram**  
 WILKINSON AZ #003  
 30-015-21411  
 480'FSL & 1,780'FSL  
 25-18S-25E  
 Eddy County, New Mexico



Prepared by:  
  
 Prepared for:  

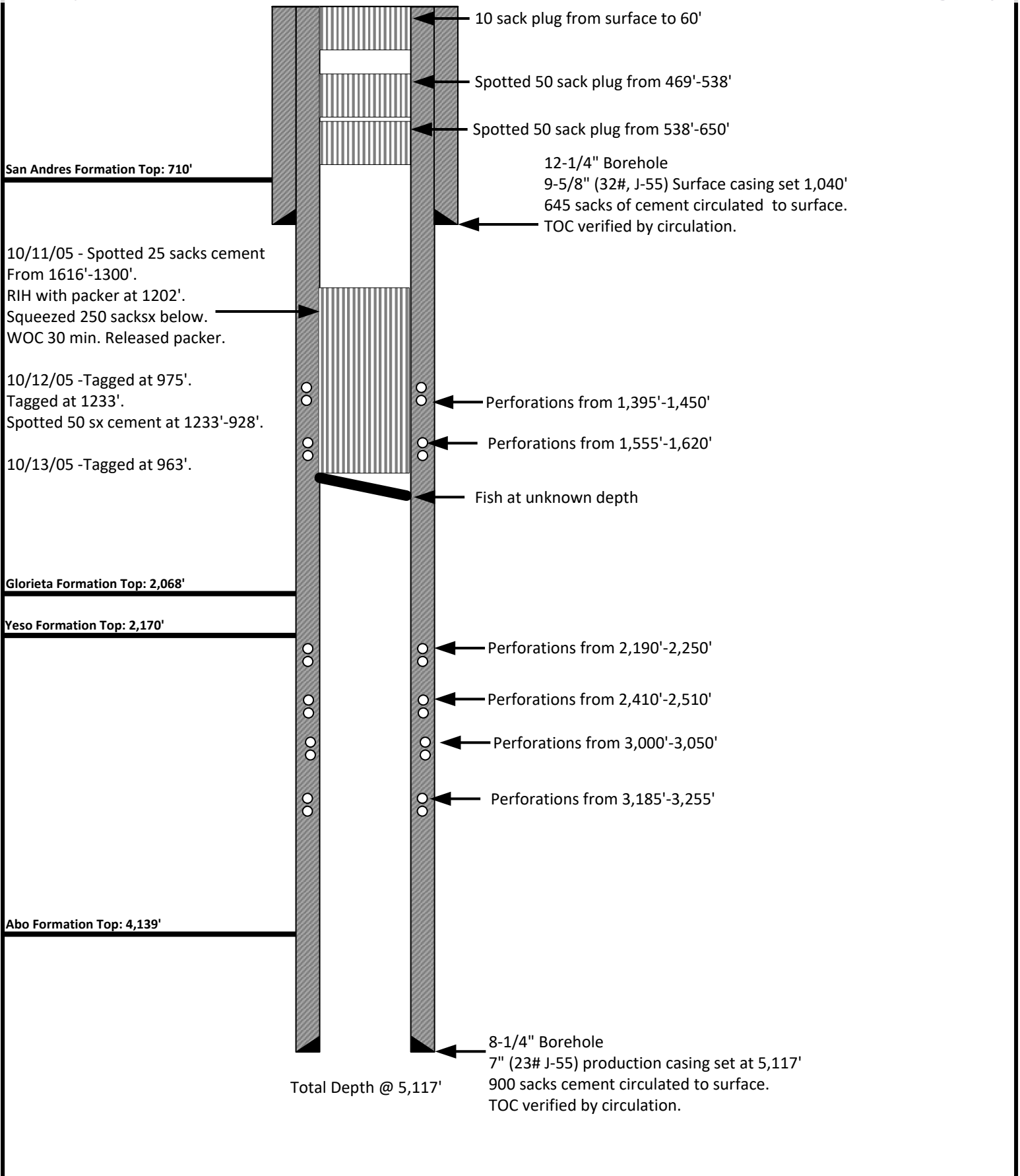

Drawn by: Joshua Ticknor, P.E.

Project Manager:  
Nathan Alleman

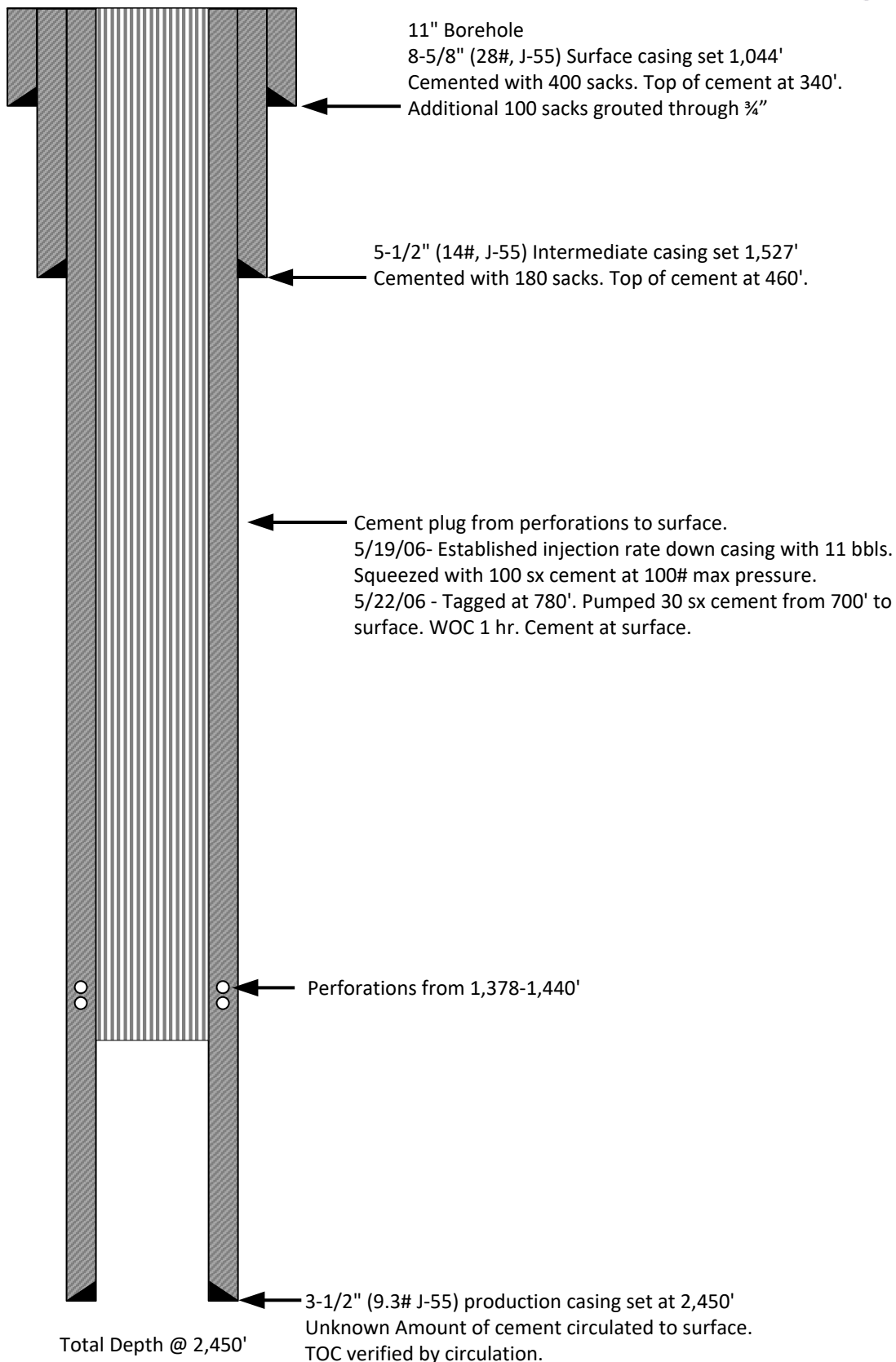
Date: 4/27/2023

**Plugged and Abandoned Wellbore Diagram**  
 GERARD AW #001  
 30-015-10800  
 990' FSL & 1650' FWL  
 25-18S-25E  
 Eddy County, New Mexico





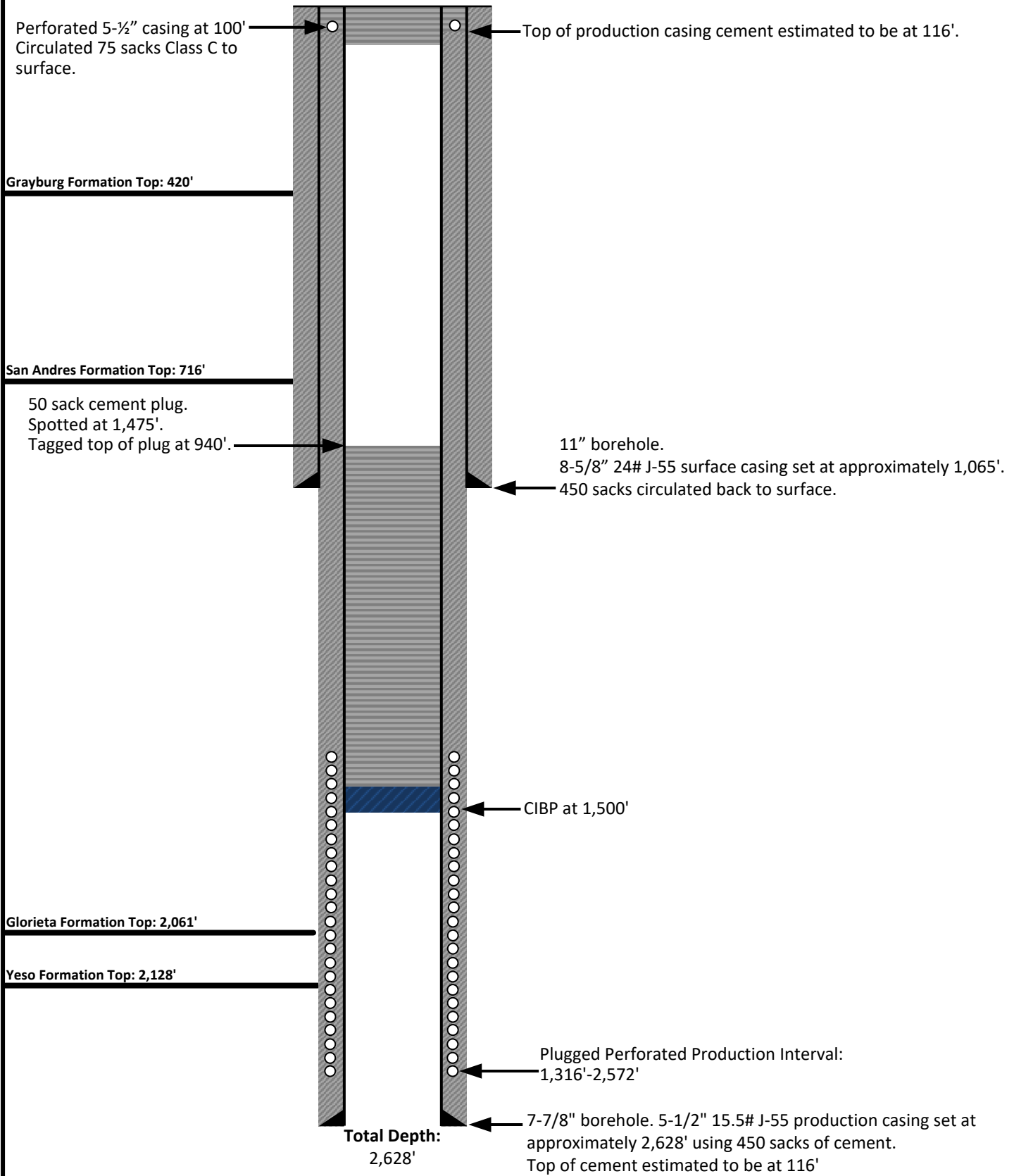
<p>Prepared by:</p> <p><b>ALL CONSULTING</b></p> <p>Prepared for:</p> <p><b>SPUR ENERGY PARTNERS</b></p>	<p>Drawn by: Joshua Ticknor, P.E.</p>	<p><b>Plugged and Abandoned Wellbore Diagram</b></p> <p>WILKINSON AZ #001</p> <p>30-015-20007</p> <p>990'FSL &amp; 2,310'FWL</p> <p>25-18S-25E</p> <p>Eddy County, New Mexico</p>
	<p>Project Manager:</p> <p>Nathan Alleman</p>	
	<p>Date: 4/27/2023</p>	



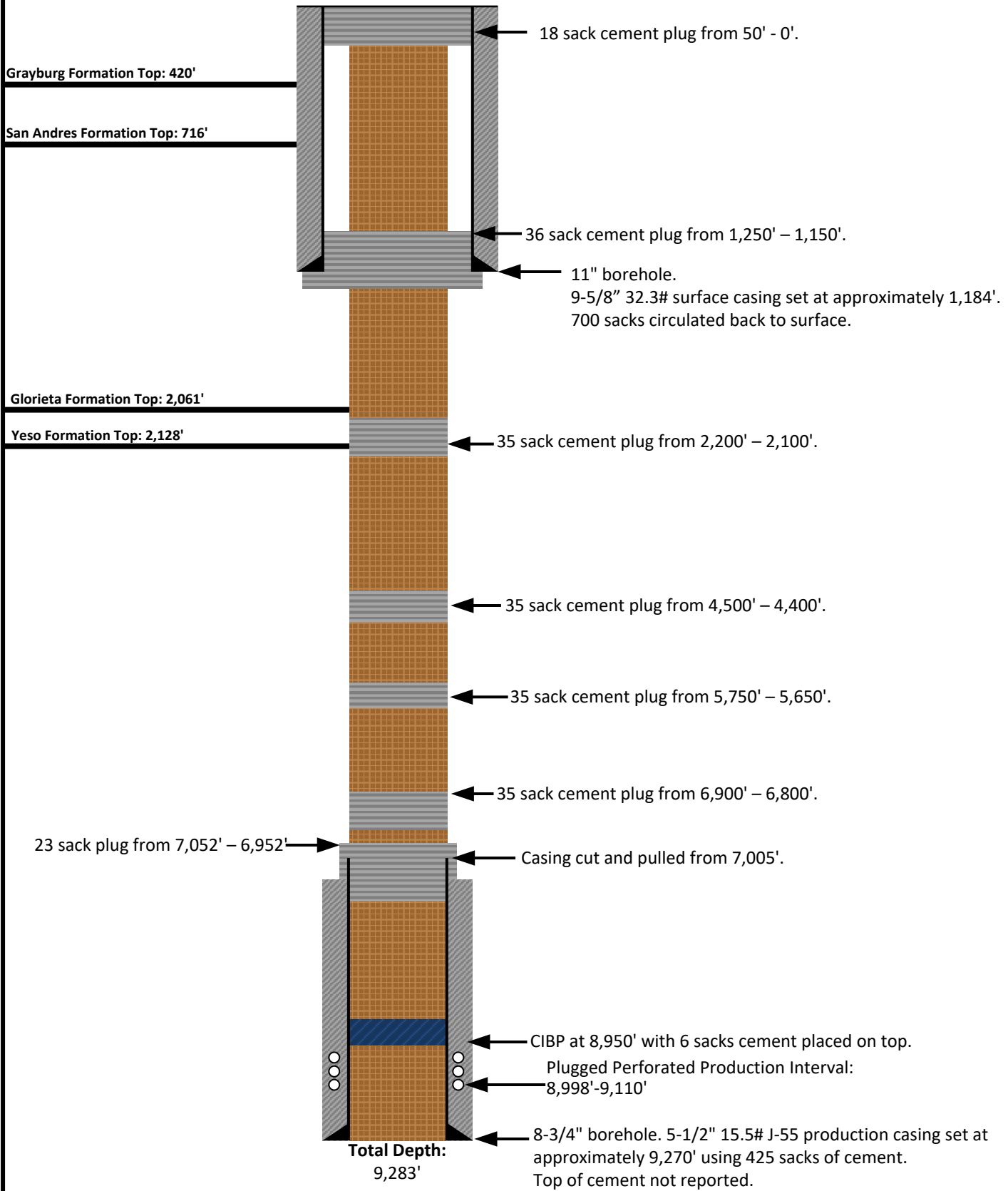
Prepared by:  
**ALLCONSULTING**  
 Prepared for:  
**SPUR ENERGY PARTNERS**

Drawn by: Joshua Ticknor, P.E.  
 Project Manager:  
 Nathan Alleman  
 Date: 4/27/2023

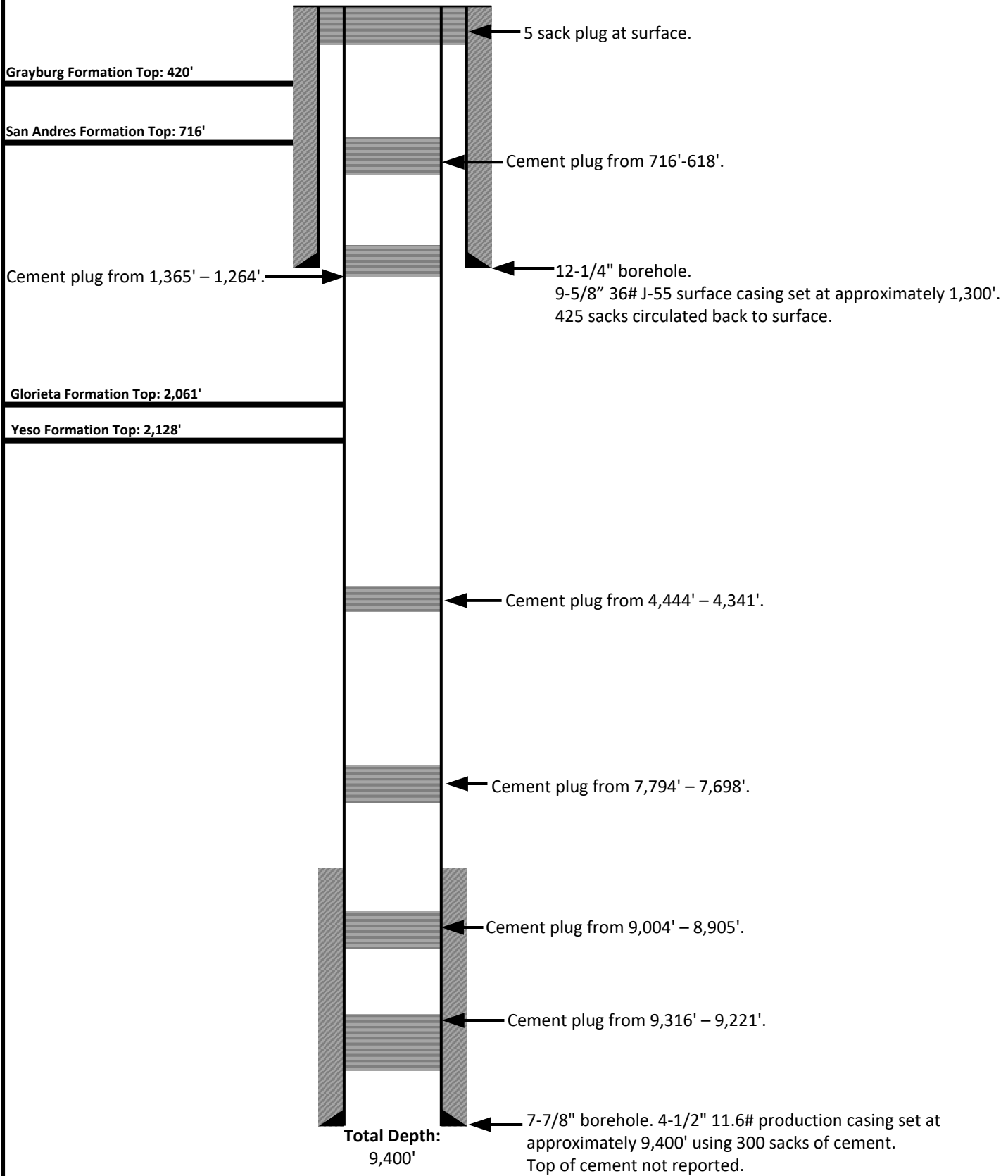
**Plugged and Abandoned Wellbore Diagram**  
 WILKINSON AZ #002  
 30-015-20137  
 990'FSL & 990'FWL  
 25-18S-25E  
 Eddy County, New Mexico



Prepared by: <b>ALL CONSULTING</b> Prepared for: <b>SPUR ENERGY PARTNERS</b>	Drawn by: Joshua Ticknor	<b>Plugged and Abandoned Wellbore Diagram</b> GERARD AW #002 30-015-10886 2310'FSL & 1650'FEL 25-18S-25E Eddy County, New Mexico Spud Date: 11/12/1966 Plugged and Abandoned: 05/09/2002
	Project Manager: Dan Arthur	
	Date: 6/6/2023	

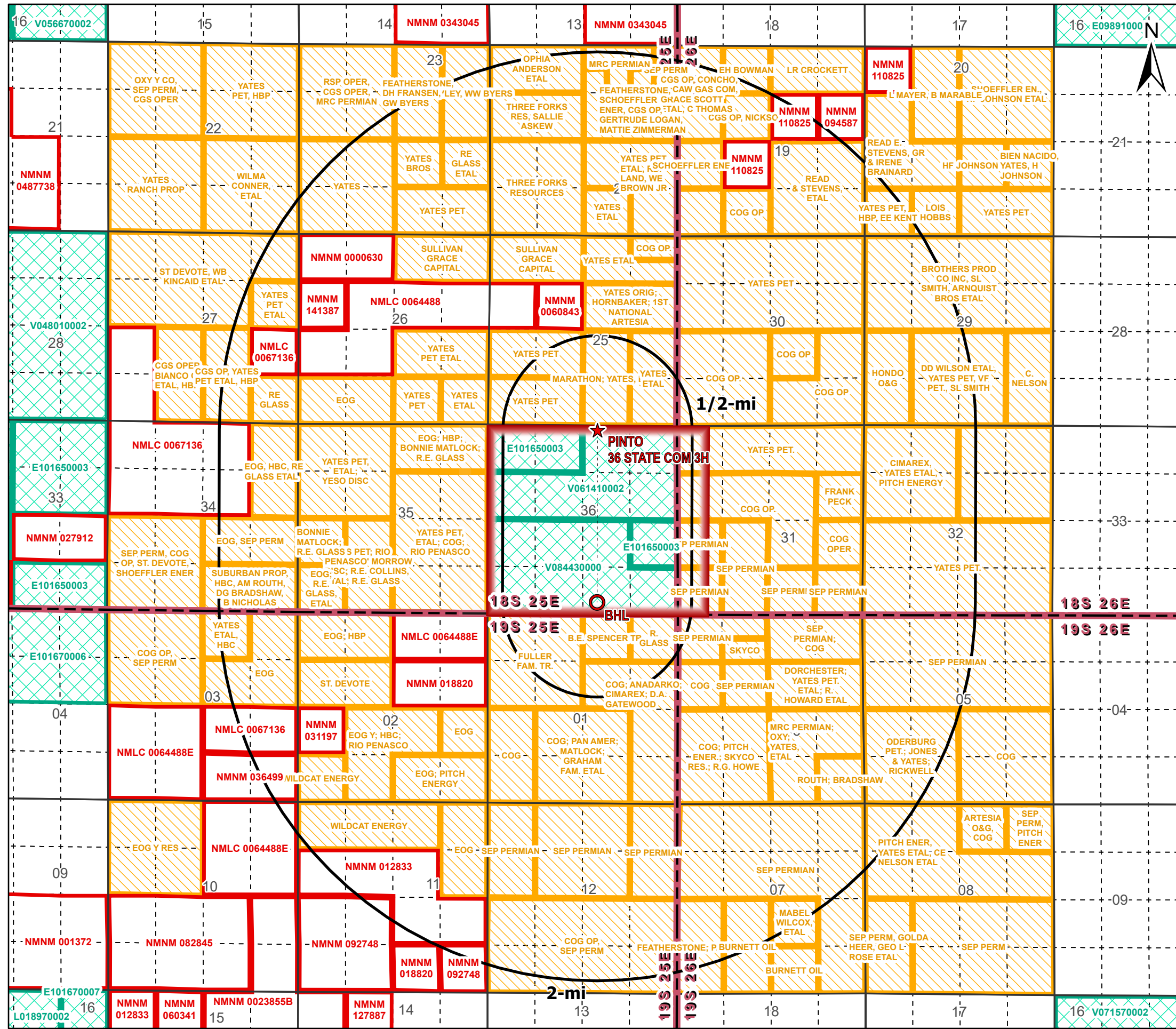


<p>Prepared by:</p> <p><b>ALL CONSULTING</b></p> <p>Prepared for:</p> <p><b>SPUR ENERGY PARTNERS</b></p>	<p>Drawn by: Joshua Ticknor</p>	<p><b>Plugged and Abandoned Wellbore Diagram</b></p> <p>Eddy State "AC" #1</p> <p>30-015-00107</p> <p>1980' FSL &amp; 660' FWL 36-18S-25E</p> <p>Eddy County, New Mexico</p> <p>Spud Date: 12/28/1958</p> <p>Plugged and Abandoned: 4/10/1964</p>
	<p>Project Manager: Dan Arthur</p>	
	<p>Date: 6/6/2023</p>	



<p>Prepared by: <b>ALLCONSULTING</b> Prepared for: <b>SPUR ENERGY PARTNERS</b></p>	<p>Drawn by: Joshua Ticknor</p> <p>Project Manager: Dan Arthur</p> <p>Date: 6/6/2023</p>	<p><b>Plugged and Abandoned Wellbore Diagram</b> Kincaid #1 30-015-10561 990'FSL &amp; 1980'FEL 36-18S-25E Eddy County, New Mexico Spud Date: 04/30/1965 Plugged and Abandoned: 06/09/1965</p>
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### Legend

- ★ PINTO 36 STATE COM 3H SHL (1)
- PINTO 36 STATE COM 3H BHL (1)
- NMSLO Mineral Lessees
- BLM Mineral Lessees
- Private Mineral Lessees
- Project Area (1)

### Affected Parties within 1/2-mile NMOCD O&G Well Operators:

- Spur Energy Partners
- Frontier Field Services

### NMSLO Lessees:

- Silverback New Mexico, LLC
- Chase Oil Corporation

### Private Lessees:

- Yates Petroleum
- Marathon
- COG Operating
- SEP Permian

### Private M.I. Owners

- Fuller Family Trust
- B.E. Spencer Trust
- R. Glass

**Note:** This mineral lease map represents the consolidation of lease data to the best of ALL Consulting's knowledge at the time of this application obtained from NMOCD, NMSLO, BLM, and ownership/lease map from Midland Maps (Enverus).

## Mineral Lease Area of Review

### PINTO 36 STATE COM #3H

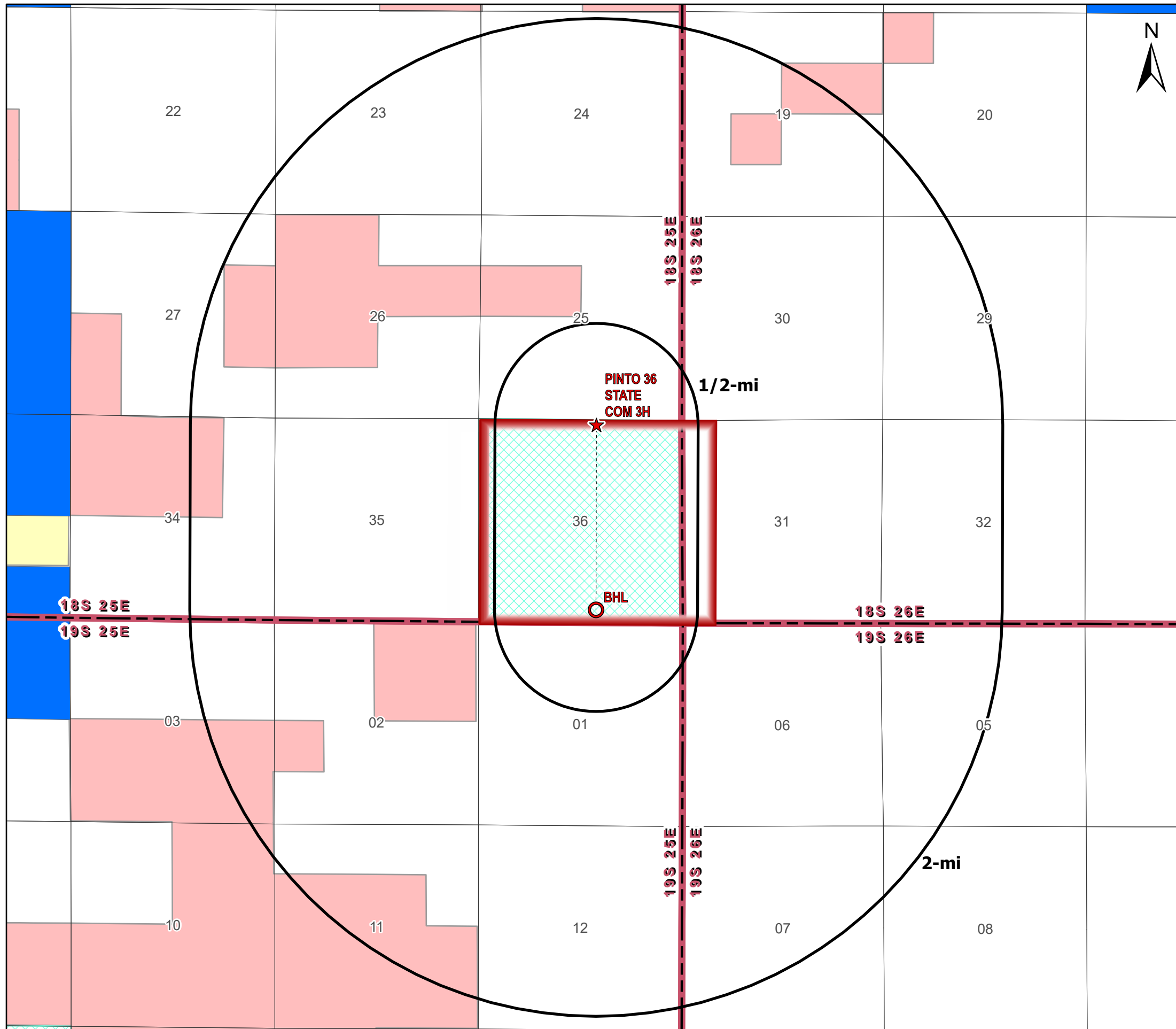
EDDY COUNTY, NEW MEXICO

Proj Mgr: Nate Alleman	June 17, 2023	Mapped by: Ben Bockelmann
---------------------------	---------------	------------------------------

Prepared for:

Prepared by:

Source Info: BLM Mineral Leases (<https://catalog.data.gov/dataset/blm-new-mexico-mineral-ownership>) & NMSLO Ownership (<http://www.nmstatelands.org/maps-gis/gis-data-download/>)



### Legend

- ★ PINTO 36 STATE COM 3H SHL
- PINTO 36 STATE COM 3H BHL
- Project Area
- Private minerals
- Subsurface minerals (NMSLO)
- ▨ Surface and Subsurface minerals (NMSLO)
- All minerals are owned by U.S. (BLM)
- Only oil and gas are owned by the U.S.

## Mineral Ownership Area of Review

### PINTO 36 STATE COM #3H EDDY COUNTY, NEW MEXICO

Proj Mgr:  
Dan Arthur

June 17, 2023

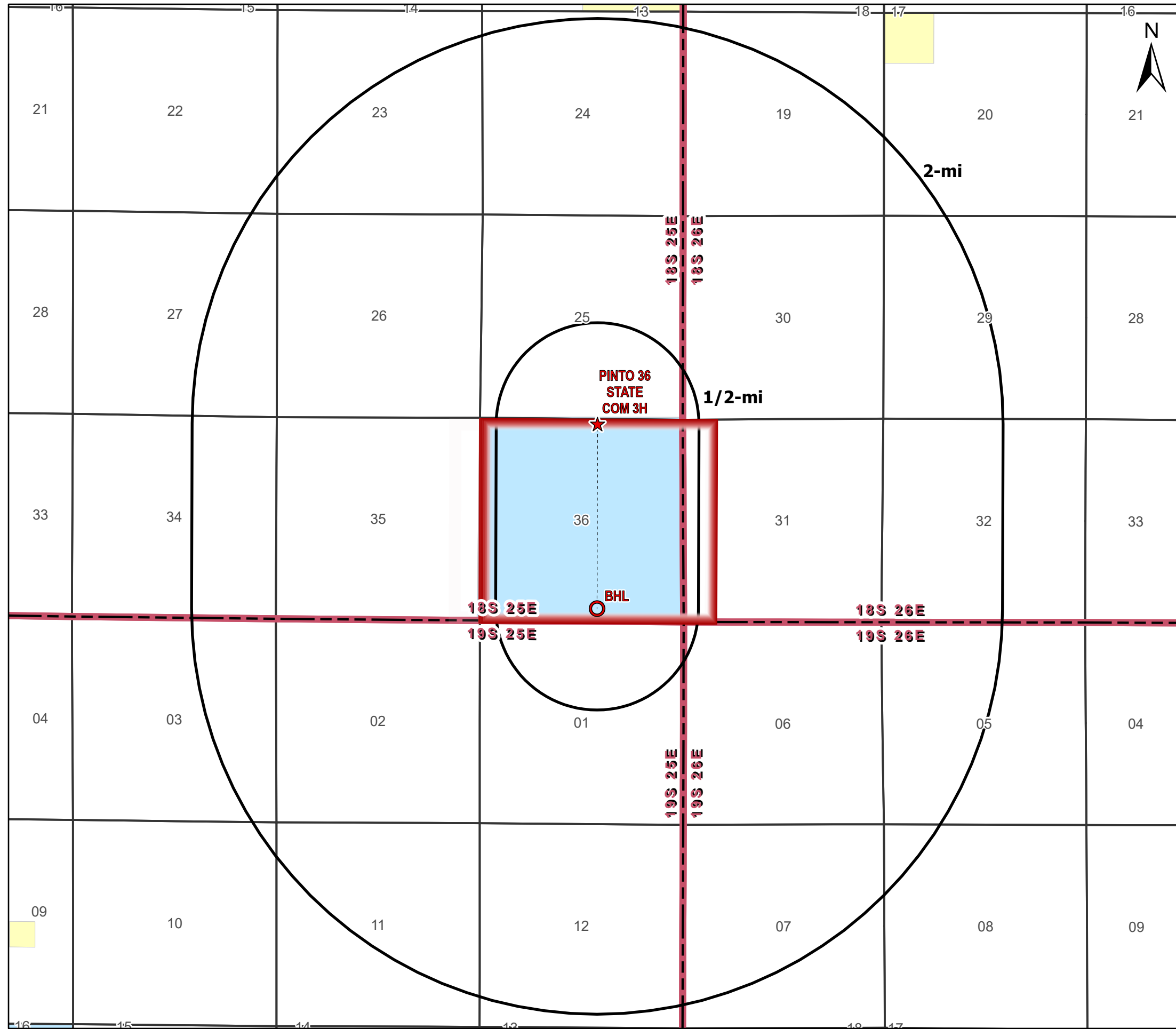
Mapped by:  
Ben Bockelmann

Prepared for:



Prepared by:





### Legend

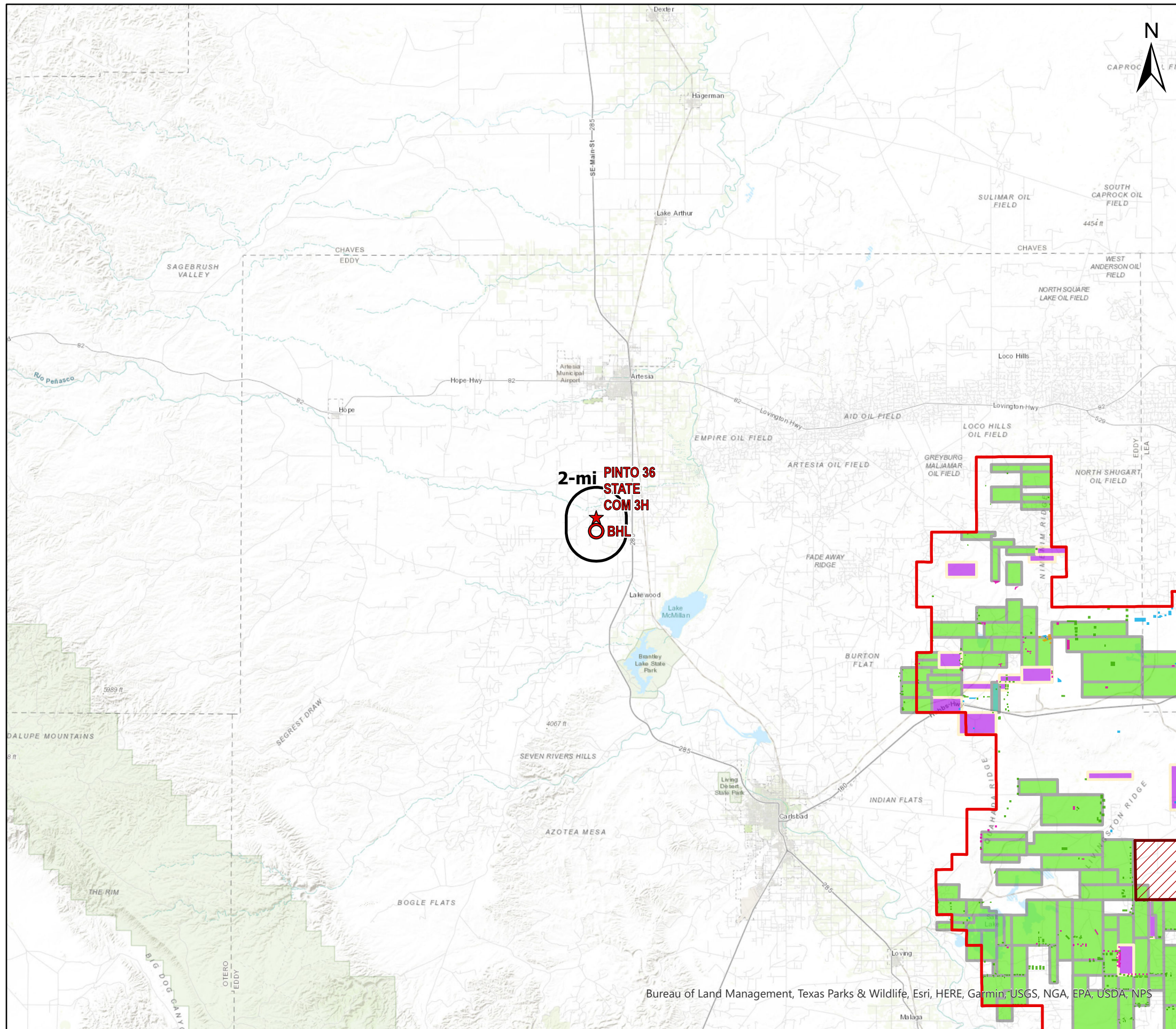
- ★ PINTO 36 STATE COM 3H SHL
- PINTO 36 STATE COM 3H BHL
- Project Area

### Surface Ownership

- BLM
- Private
- State

<b>Surface Ownership Area of Review</b>		
<b>PINTO 36 STATE COM #3H</b> EDDY COUNTY, NEW MEXICO		
Proj Mgr: Dan Arthur	June 17, 2023	Mapped by: Ben Bockelmann
Prepared for: 	Prepared by: 	





**Legend**

- ★ PINTO 36 STATE COM 3H SHL
- PINTO 36 STATE COM 3H BHL
- SOPA 1986 (1)
- ▨ WIPP Facility (1)

**Drill Islands**

**Status, Depth Buffer**

- Approved, Half Mile (212)
- Approved, Quarter Mile (63)
- Nominated, Half Mile (28)
- Nominated, Quarter Mile (6)

**Development Areas**

**Status**

- Approved (87)
- Pending (13)
- Pending NMOCD Order (1)

**Potash AOR**

**PINTO 36 STATE COM 3H**  
EDDY COUNTY, NEW MEXICO

Proj Mgr:  
Dan Arthur

June 06, 2023

Mapped by:  
Ben Bockelmann

Prepared for:



Prepared by:



Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

**Attachment 3**

Injectate Analyses



# GAS VOLUME STATEMENT

December 2022

Meter #: 74822013  
 Name: Pinto 36SC4HCTB Flare  
 Closed Data  
 Artesia-East

<b>Pressure Base:</b>	14.730 psia	<b>Meter Status:</b>	Active	<b>CO2</b>	<b>N2</b>	<b>C1</b>	<b>C2</b>	<b>C3</b>	<b>IC4</b>	<b>NC4</b>	<b>IC5</b>
<b>Temperature Base:</b>	60.00 °F	<b>Contract Hr.:</b>	8 AM	2.278	1.672	64.281	16.351	7.721	1.045	2.409	0.587
<b>Atmos Pressure:</b>	12.890 psi	<b>Full Wellstream:</b>		<b>NC5</b>	<b>neo</b>	<b>C6</b>	<b>C7</b>	<b>C8</b>	<b>C9</b>	<b>C10</b>	
<b>Calc Method:</b>	AGA3-2013	<b>WV Technique:</b>		0.542		1.150	0.000	0.000	0.000	0.000	
<b>Z Method:</b>	AGA-8 Detail (1992)	<b>WV Method:</b>		<b>Ar</b>	<b>CO</b>	<b>H2</b>	<b>O2</b>	<b>He</b>	<b>H2O</b>	<b>H2S</b>	<b>H2S ppm</b>
<b>Tube I.D.:</b>	2.0680 in	<b>HV Cond:</b>	EFM	0.000	0.000	0.000	0.000	0.000	0.000	1.963	
<b>Tap Location:</b>	Upstream	<b>Meter Type:</b>									
<b>Tap Type:</b>	Flange	<b>Interval:</b>	1 Hour								

Day	Differential (In. H2O)	Pressure (psia)	Temp. (°F)	Flow Time (hrs)	Relative Density	Plate (inches)	Volume (Mcf)	Heating Value (Btu/scf)	Energy (MMBtu)	Edited
1	0.26	13.05	45.77	18.73	0.8321	1.2500	13.58	1359.10	18.45	No
2	0.26	13.12	57.20	22.31	0.8321	1.2500	16.21	1359.10	22.03	No
3	0.26	13.21	49.13	21.09	0.8321	1.2500	15.35	1359.10	20.86	No
4	0.26	13.04	55.49	22.06	0.8321	1.2500	15.92	1359.10	21.64	No
5	0.27	13.00	64.42	22.04	0.8321	1.2500	15.87	1359.10	21.56	No
6	0.26	13.05	61.53	22.77	0.8321	1.2500	16.43	1359.10	22.33	No
7	0.26	13.09	49.58	23.19	0.8321	1.2500	16.85	1359.10	22.91	No
8	0.26	13.13	56.63	22.51	0.8321	1.2500	16.38	1359.10	22.27	No
9	0.26	13.06	48.40	22.66	0.8321	1.2500	16.43	1359.10	22.33	No
10	0.26	13.10	52.65	20.42	0.8321	1.2500	14.85	1359.10	20.19	No
11	0.26	13.01	54.06	21.86	0.8321	1.2500	15.80	1359.10	21.48	No
12	0.26	12.92	53.43	23.02	0.8321	1.2500	16.63	1359.10	22.60	No
13	0.26	12.93	47.58	17.51	0.8321	1.2500	12.63	1359.10	17.17	No
14	0.26	12.98	46.63	15.94	0.8321	1.2500	11.53	1359.10	15.66	No
15	0.26	13.00	47.53	16.12	0.8321	1.2500	11.66	1359.10	15.84	No
16	0.26	13.07	43.01	14.78	0.8321	1.2500	10.78	1359.10	14.66	No
17	0.26	13.06	41.73	16.05	0.8321	1.2500	11.69	1359.10	15.89	No
18	0.26	13.03	41.40	14.53	0.8321	1.2500	10.56	1359.10	14.35	No
19	0.26	13.12	52.27	15.99	0.8321	1.2500	11.63	1359.10	15.80	No
20	0.26	13.15	45.22	15.26	0.8321	1.2500	11.08	1359.10	15.06	No
21	0.26	12.99	44.98	20.12	0.8321	1.2500	14.62	1359.10	19.88	No
22	0.26	13.16	30.73	4.38	0.8321	1.2500	3.22	1359.10	4.37	No
23	0.26	13.25	23.45	6.52	0.8321	1.2500	4.87	1359.10	6.62	No
24	0.26	13.18	31.62	12.79	0.8321	1.2500	9.48	1359.10	12.89	No
25	0.26	13.10	43.14	17.05	0.8321	1.2500	12.41	1359.10	16.87	No
26	0.26	13.18	48.98	17.22	0.8321	1.2500	12.53	1359.10	17.03	No
27	0.26	12.95	57.56	21.22	0.8321	1.2500	15.29	1359.10	20.78	No
28	0.26	12.94	54.55	22.25	0.8321	1.2500	16.00	1359.10	21.75	No
29	0.26	13.03	50.68	20.76	0.8321	1.2500	15.00	1359.10	20.39	No
30	0.26	13.00	51.13	21.73	0.8321	1.2500	15.68	1359.10	21.31	No
31	0.26	12.96	60.19	22.84	0.8321	1.2500	16.43	1359.10	22.34	No
<b>Total</b>	0.26	13.05	50.59	575.73	0.8321		417.40		567.29	

**Attachment 4**

Water Well Map and Well Data





**Legend**

- ★ PINTO 36 STATE COM 3H SHL
- PINTO 36 STATE COM 3H BHL
- ▭ Project Area (1)

**OSE PODs**

**Status**

- Active (21)
- Pending (6)
- Unknown (19)

Source Info: NM Office of the State Engineer downloaded on 3/10/2023.  
 (https://geospatialdata-ose.opendata.arcgis.com/)

<b>Water Wells Area of Review</b>		
<b>PINTO 36 STATE COM #3H</b> EDDY COUNTY, NEW MEXICO		
Proj Mgr: Dan Arthur	June 17, 2023	Mapped by: Ben Bockelmann
Prepared for: 	Prepared by: 	



Water Well Sampling Rationale					
Spur Energy Partners LLC - Pinto 36 State Com 3H					
Water Wells	Owner	Available Contact Information	Use	Sampling Required	Notes
RA 05344	Lucid Artesia Company	Kerry Egan Phone: 575-810-6021 Address: 201 S 4th St. Artesia, NM 88210	Commercial	NO	Two water wells within 1-mile have already been sampled.
RA 05344 (1)	Lucid Artesia Company	Kerry Egan Phone: 575-810-6021 Address: 201 S 4th St. Artesia, NM 88210	Commercial	No	Two water wells within 1-mile have already been sampled.
RA 05344 (2)	Lucid Artesia Company	Kerry Egan Phone: 575-810-6021 Address: 201 S 4th St. Artesia, NM 88210	Commercial	No	Two water wells within 1-mile have already been sampled.
RA 13170 POD1	Sylvia Vasquez	806 N. Roselawn Ave Artesia, NM 88210 Home: 575-746-6120 Work: 575-703-5661 Email: sylviasvasquez63@yahoo.com	Domestic and Livestock Watering	No	Two water wells within 1-mile have already been sampled.
RA 03975	New Mexico State Land Office	David Dean Wilson Phone: 575-308-1128 & 575-746-3795 80 West Kincaid Ranch Rd. Artesia, NM 88210	Livestock Watering	No	Two water wells within 1-mile have already been sampled.
RA 07952	Ralph Schafer	80 West Kincaid Ranch Rd. Artesia, NM 88210	Livestock Watering	No	Two water wells within 1-mile have already been sampled.
RA 12548 POD1	Remuda Energy Transportation	Kevin Grinder Phone: 575-746-0320 200 W. Illinois, Suite 200 Midland, TX 79701	Sanitary in conjunction with a commercial use	No	Two water wells within 1-mile have already been sampled.
RA 05233	Agave Energy Company	326 West Quay St. Artesia, NM 88210	Industrial	Yes	Sampling analysis included
RA 08999	Efren Baeza	314 N. 14th Artesia, NM 88210	Domestic One Household	Yes	Sampling analysis included
RA 13120 POD1	EOG Resources, Inc.	Chase Settle Phone: 575-703-6537 105 S. 4th St. Artesia, NM 88210	Monitoring Well	No	Well was drilled for environmental soil borings. Permit was required in case water was encountered. Well was set to be plugged after 72 hrs.
RA 13120 POD2	EOG Resources, Inc.	Chase Settle Phone: 575-703-6537 105 S. 4th St. Artesia, NM 88210	Monitoring Well	No	Well was drilled for environmental soil borings. Permit was required in case water was encountered. Well was set to be plugged after 72 hrs.
RA 13120 POD3	EOG Resources, Inc.	Chase Settle Phone: 575-703-6537 105 S. 4th St. Artesia, NM 88210	Monitoring Well	No	Well was drilled for environmental soil borings. Permit was required in case water was encountered. Well was set to be plugged after 72 hrs.
RA 13120 POD4	EOG Resources, Inc.	Chase Settle Phone: 575-703-6537 105 S. 4th St. Artesia, NM 88210	Monitoring Well	No	Well was drilled for environmental soil borings. Permit was required in case water was encountered. Well was set to be plugged after 72 hrs.
RA 13120 POD5	EOG Resources, Inc.	Chase Settle Phone: 575-703-6537 105 S. 4th St. Artesia, NM 88210	Monitoring Well	No	Well was drilled for environmental soil borings. Permit was required in case water was encountered. Well was set to be plugged after 72 hrs.
RA 13120 POD6	EOG Resources, Inc.	Chase Settle Phone: 575-703-6537 105 S. 4th St. Artesia, NM 88210	Monitoring Well	No	Well was drilled for environmental soil borings. Permit was required in case water was encountered. Well was set to be plugged after 72 hrs.
RA 13121 POD1	EOG Resources, Inc.	Chase Settle Phone: 575-703-6537 105 S. 4th St. Artesia, NM 88210	Monitoring Well	No	Well was drilled for environmental soil borings. Permit was required in case water was encountered. Well was set to be plugged after 72 hrs.
RA 13121 POD2	EOG Resources, Inc.	Chase Settle Phone: 575-703-6537 105 S. 4th St. Artesia, NM 88210	Monitoring Well	No	Well was drilled for environmental soil borings. Permit was required in case water was encountered. Well was set to be plugged after 72 hrs.
RA 13121 POD3	EOG Resources, Inc.	Chase Settle Phone: 575-703-6537 105 S. 4th St. Artesia, NM 88210	Monitoring Well	No	Well was drilled for environmental soil borings. Permit was required in case water was encountered. Well was set to be plugged after 72 hrs.
RA 13121 POD4	EOG Resources, Inc.	Chase Settle Phone: 575-703-6537 105 S. 4th St. Artesia, NM 88210	Monitoring Well	No	Well was drilled for environmental soil borings. Permit was required in case water was encountered. Well was set to be plugged after 72 hrs.
RA-03983	Great Western Drilling Co	P.O. Box 1659 Midlad, TX 79702	OBS	No	Two water wells within 1-mile have already been sampled.

**Water Sampling Results:**  
**RA-08999**



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

PERCUSSION PETROLEUM 919 MILAM , STE 2475 HOUSTON TX, 77002	Project: FRESH WATER WELLS Project Number: SLEEPY SWD Project Manager: JERRY MATHEWS Fax To:	Reported: 30-Jul-18 09:59
---	---	------------------------------

**RA - 08999**  
**H802031-02 (Water)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories**

**Inorganic Compounds**

TDS*	726		5.00	mg/L	1	8072312	AC	30-Jul-18	160.1	
------	-----	--	------	------	---	---------	----	-----------	-------	--

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

PERCUSSION PETROLEUM 919 MILAM , STE 2475 HOUSTON TX, 77002	Project: FRESH WATER WELLS Project Number: NONE GIVEN Project Manager: JERRY MATHEWS Fax To:	Reported: 30-Jul-18 09:59
---	---	------------------------------

**Inorganic Compounds - Quality Control**

**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 8072312 - Filtration</b>										
<b>Blank (8072312-BLK1)</b>										
TDS	ND	5.00	mg/L							Prepared: 23-Jul-18 Analyzed: 24-Jul-18
<b>LCS (8072312-BS1)</b>										
TDS	536	5.00	mg/L	527		102	80-120			Prepared: 23-Jul-18 Analyzed: 24-Jul-18
<b>Duplicate (8072312-DUP1)</b>										
		<b>Source: H801976-03</b>								Prepared: 23-Jul-18 Analyzed: 24-Jul-18
TDS	932	5.00	mg/L		924			0.862	20	

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

**Water Sampling Results:  
RA-05233**

ATTACHMENT C  
Page 1



Petrolite Corporation  
422 West Main Street  
Artesia, NM 88210-2041

**TRETOLITE DIVISION**

(505) 746-3588  
Fax (505) 746-3580

-----  
WATER ANALYSIS REPORT  
-----

Reply to:  
P.O. Box 1140  
Artesia, NM  
88211-7531

Company : YATES PETROLEUM Date : 02/23/96  
Address : ARTESIA, NM Date Sampled : 02/22/96  
Lease : QUEEN Analysis No. : 0226  
Well : WATER WELL  
Sample Pt. : UNKNOWN

ANALYSIS		mg/L		* meq/L
1. pH		7.3		
2. H2S		0 PPM		
3. Specific Gravity		1.005		
4. Total Dissolved Solids		1039.3		
5. Suspended Solids		NR		
6. Dissolved Oxygen		NR		
7. Dissolved CO2		NR		
8. Oil In Water		NR		
9. Phenolphthalein Alkalinity (CaCO3)				
10. Methyl Orange Alkalinity (CaCO3)				
11. Bicarbonate	HCO3	195.0	HCO3	3.2
12. Chloride	Cl	149.0	Cl	4.2
13. Sulfate	SO4	400.0	SO4	8.3
14. Calcium	Ca	146.0	Ca	7.3
15. Magnesium	Mg	51.1	Mg	4.2
16. Sodium (calculated)	Na	97.5	Na	4.2
17. Iron	Fe	0.8		
18. Barium	Ba	0.0		
19. Strontium	Sr	0.0		
20. Total Hardness (CaCO3)		575.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt X meq/L	= mg/L
7   *Ca <----- *HCO3   3	Ca(HCO3)2	81.0	3.2 259
/----->	CaSO4	68.1	4.1 278
4   *Mg -----> *SO4   8	CaCl2	55.5	
<-----/	Mg(HCO3)2	73.2	
4   *Na -----> *Cl   4	MgSO4	60.2	4.2 253
	MgCl2	47.6	
Saturation Values Dist. Water 20 C	NaHCO3	84.0	
CaCO3 13 mg/L	Na2SO4	71.0	0.0 3
CaSO4 * 2H2O 2090 mg/L	NaCl	58.4	4.2 246
BaSO4 2.4 mg/L			

REMARKS:  
----- ANDY MILLER

Petrolite Oilfield Chemicals Group

Respectfully submitted,  
SHAWNA MATTHEWS



ATTACHMENT C  
Page 2

SCALE TENDENCY REPORT  
-----

Company	: YATES PETROLEUM	Date	: 02/23/96
Address	: ARTESIA, NM	Date Sampled	: 02/22/96
Lease	: QUEEN	Analysis No.	: 0226
Well	: WATER WELL	Analyst	: SHAWNA MATTHEWS
Sample Pt.	: UNKNOWN		

STABILITY INDEX CALCULATIONS  
(Stiff-Davis Method)  
CaCO3 Scaling Tendency

S.I. =	0.1	at	60 deg. F	or	16 deg. C
S.I. =	0.2	at	80 deg. F	or	27 deg. C
S.I. =	0.2	at	100 deg. F	or	38 deg. C
S.I. =	0.3	at	120 deg. F	or	49 deg. C
S.I. =	0.4	at	140 deg. F	or	60 deg. C

\*\*\*\*\*

CALCIUM SULFATE SCALING TENDENCY CALCULATIONS  
(Skillman-McDonald-Stiff Method)  
Calcium Sulfate

S =	1212	at	60 deg. F	or	16 deg C
S =	1227	at	80 deg. F	or	27 deg C
S =	1216	at	100 deg. F	or	38 deg C
S =	1207	at	120 deg. F	or	49 deg C
S =	1198	at	140 deg. F	or	60 deg C

Petrolite Oilfield Chemicals Group

Respectfully submitted,  
SHAWNA MATTHEWS

**Attachment 5**

Public Notice Affidavit and Notice of Application Confirmations

**APPLICATION FOR AUTHORIZATION TO INJECT**

NOTICE IS HEREBY GIVEN: That Spur Energy Partners LLC, 9655 Katy Freeway Suite 500, Houston, TX 77024, is filing an application with the New Mexico Oil Conservation Division to inject gas into the Pinto 36 State Com #003H well for the purpose of reservoir pressure maintenance.

WELL NAME AND LOCATION: Pinto 36 State Com #003H  
Located 9.4 miles southwest of Artesia, NM  
NW ¼ NE ¼, Section 36, Township 18S, Range 25E  
150' FNL & 2,260' FEL  
Eddy County, NM

NAME AND DEPTH OF INJECTION ZONE : Paddock Member of the Yeso Formation (2,311' – 2,673')  
EXPECTED MAXIMUM INJECTION RATE: 10 MMCF/day  
EXPECTED MAXIMUM INJECTION PRESSURE: 670 psi (surface)

Objections or requests for hearing must be filed with the New Mexico Oil Conservation Division within fifteen (15) days. Any objection or request for hearing should be mailed to the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505.

Additional information may be obtained by contacting Nate Alleman at 918-382-7581.



# Carlsbad Current Argus.

PART OF THE USA TODAY NETWORK

## Affidavit of Publication

Ad # 0005671702

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### ALL CONSULTING

1718 SOUTH CHEYENNE AVE

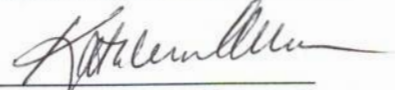
TULSA, OK 74119

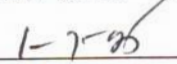
I, a legal clerk of the **Carlsbad Current Argus**, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof in editions dated as follows:

04/20/2023

  
Legal Clerk

Subscribed and sworn before me this April 20, 2023:

  
State of WI, County of Brown  
NOTARY PUBLIC

  
My commission expires

### APPLICATION FOR AUTHORIZATION TO INJECT

NOTICE IS HEREBY GIVEN: That Spur Energy Partners LLC, 9655 Katy Freeway Suite 500, Houston, TX 77024, is filing an application with the New Mexico Oil Conservation Division to inject gas into the Pinto 36 State Com #003H well for the purpose of reservoir pressure maintenance.

WELL NAME AND LOCATION: Pinto 36 State Com #003H  
Located 9.4 miles southwest of Artesia, NM  
NW 1/4 NE 1/4, Section 36, Township 18S, Range 25E  
150' FNL & 2,260' FEL  
Eddy County, NM

NAME AND DEPTH OF INJECTION ZONE:  
Penasco Draw; Sa-Yeso (2,311' - 2,673')  
EXPECTED MAXIMUM INJECTION RATE:  
10 MMCF/day  
EXPECTED MAXIMUM INJECTION PRESSURE:  
462.2 psi (surface)

Objections or requests for hearing must be filed with the New Mexico Oil Conservation Division within fifteen (15) days. Any objection or request for hearing should be mailed to the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505.

Additional information may be obtained by contacting Nate Alleman at 918-382-7581.  
#5671702. Current Argus, April 20, 2023

KATHLEEN ALLEN  
Notary Public  
State of Wisconsin

Ad # 0005671702  
PO #: 5671702  
# of Affidavits 1

This is not an invoice

Pinto 36 State Com #3H- Notice of Application Recipients				
Entity	Address	City	State	Zip Code
<b>Land &amp; Mineral Owner</b>				
Commission of Public Lands - State Land Office	310 Old Santa Fe Trail	Santa Fe	NM	87501
<b>OCD District</b>				
NMOCD District 2	506 W. Texas	Artesia	NM	88210
<b>Leasehold Operators</b>				
Alison Claire Curry Saunders (R. Glass)	P.O. Box 50327	Austin	TX	78763-0327
Alfred Foy Curry, IV (R. Glass)	1016 Alta Loma Circle	San Angelo	TX	76901
Ballard E. Spencer Trust, Inc First National Bank of Artesia C/o Trust Department (B.E. Spencer TR)	P.O. drawer AA	Artesia	NM	88211
Big Surprise LLC (R. Glass)	P.O. Box 22205	Santa Fe	NM	87502
Chase Oil Corporation (CHASE OIL CORPORATION)	P.O. Box 1767	Artesia	NM	88211
COG Operating LLC (COG OP)	600 W. Illinois Ave	Midland	TX	79701
Frontier Field Services, LLC (FRONTIER FIELD SERVICES, LLC)	10077 Grogans Mill Rd. Suite 300	The Woodlands	TX	77380
Fuller Family Trust Donald & Nancy D Fuller, Co-TTees (Fuller Fam Tr.)	P.O. Box 2905	Granite Bay	Ca	95746
Lapaguera LLC (R. Glass)	1501 West 6th St. A2	Austin	TX	78703
Lou Ann Langford (R. Glass)	606 Winsford Road	Bryn Mawr	PA	19010
Marathon Oil Co. (MARATHON)	P.O. Box 552	Midland	TX	79701
Robert Glass Langford (R. Glass)	1173 Isidora Trail	Lockhart	TX	78644
Silverback Operating II, LLC (SILVERBACK NEW MEXICO LLC)	19707 IH10 West, Suite 201	San Antonio	TX	78256
SEP Permian LLC (SEP Permian)	9655 Katy Freeway Suite 500	Houston	TX	77024
Yates Petroleum Corporation (YATES PET, YATES ETAL)	105 South fourth	Artesia	NM	88210
<b>Notes:</b>				
-The table above shows the Entities who were identified as parties of interest requiring notification on either the 1/2-mile well detail list (Attachment 2) or on the 2-mile Mineral Lease Map (Attachment 2). The names listed above in parenthesis, are the abbreviated entity names used on either the 1-mile well detail list (Attachment 2) or on the 2-mile Mineral Lease Map (Attachment 2).				
- R. Glass (Roy E. Glass) has been deceased since February of 1990. As such his decedents who inherited his mineral interest have been notified.				

## Oliver W. Seekins, PMP

### Consultant

#### Education

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B.S., Biochemistry and Molecular Biology, Oklahoma State University, 2016

#### Distinguishing Qualifications

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Mr. Seekins has a Bachelor of Science Degree in Biochemistry and Molecular Biology. Since beginning work with ALL, Mr. Seekins has gained project experience in construction management of oil and gas assets, permitted Salt Water Disposal Wells (SWDs) in New Mexico and Texas, environmental assessments, conducted aerial drone surveys for both oil and gas and environmental projects, conducted formation water testing in Wyoming, conducted water well sampling in New Mexico, Texas, and Ohio, completed Tier II reports for Texas Commission on Environmental Quality (TCEQ), conducted induced seismicity research, performed benchmarking analyses for onshore and offshore spills and discharges, prepared an Operation and Maintenance Plan and Emergency Action Plan in compliance with TCEQ Dam Safety requirements, prepared a Freedom of Information Act (FOIA) request to the Bureau of Safety and Environmental Enforcement (BSEE), assisted in the development of a water procurement strategy for drilling and hydraulic fracturing of wells in southeastern Ohio, and conducted well pad and facility site inspections for client acquisition in New Mexico North Dakota, Ohio, Oklahoma, and Texas.

Prior to his current position, Mr. Seekins worked at an USEPA-certified environmental laboratory as an analytical chemist. Mr. Seekins' work focused on the chemical and microbial analysis of drinking water, wastewater, and industrial waste. Mr. Seekins was also employed as a quality control chemist at the largest Sulfuric acid producing facility in North America, Chemtrade Logistics. In addition to running daily QA/QC samples, he was also tasked with troubleshooting the inductively coupled plasma mass spectrometry (ICP-MS) machine, performing various calibration, and preparing in-house ultra-pure reagents and standards (Low P.P.T.).

#### Relevant Experience

---

The following information is intended to demonstrate Mr. Seekins' experience and qualifications:

For **Anthem Water Solutions, LLC, Blackbuck Resources, Crockett Operating, Deep River Resources, Goodnight Midstream, Lilstream Water Solutions, LLC, Marathon Oil EF., Overflow Energy, Probity SWD, LLC, Select Energy Service, Solaris Water Midstream, LLC, Waterbridge Stateline, LLC, and Vista Disposal Solutions**, Mr. Seekins has assisted in the assembly and submission of multiple Drilling Applications in both Texas and New Mexico (on state and private land), over 100 Injections Application for the New Mexico Oil Conservation Division and multiple injection applications for the Texas Rail Road Commission (RRC). Mr. Seekins' role in the permitting process was as follows:

## Oliver Seekins

- **Area of Review (TX & NM)** – Mr. Seekins assisted in the evaluation of all wells within the state required area of review (AOR) and assembling tables to summarize the review findings. The review consisted of analysis productive formations, well data, well logs, offset operators, and surface owners of wells within the state required radiuses.
- **Drilling Application (C-101) (NM)** – reviewed the proposed drilling programs and compiled the drilling applications for numerous saltwater disposal wells. Mr. Seekins' role was to ensure that the proposed drilling and casing plan followed state regulation, and then to compile and submit the drilling applications in accordance with the New Mexico Oil Conservation Division regulation.
- **Geologic Evaluation (NM &TX)** – Mr. Seekins assisted in the evaluation of faults, seismic activity, and formation characteristics within the area of review. He also constructed documents showing the proximity of faults and most recent seismic activity to the proposed injection well. These documents were used to demonstrate the lack of hydrologic connection between the freshwater formations and the proposed injection zone.
- **Injection Application (C-108) (NM)** - compiled applications in accordance with the New Mexico Oil Conservation Division regulation, including supplemental well information; area of review; well bore diagram; injection formation, source water and freshwater well sampling results; seismicity assessments; operator information; surface, and mineral owner contact information; and public notice affidavits.
- **Public Notice (NM & TX)** – Mr. Seekins created numerous letters to be sent to local newspapers for the purpose of notifying local residents, landowners, and operators of the proposed injection wells in the area. These documents were created to satisfy state requirements.
- **Water Well Analysis (NM)** – Conducted a multiple reviews of state water well records to determine what water wells within an AOR could meet the regulatory requirements for sampling. Mr. Seekins contacted water well owners to confirm the status of each well and obtain permission for sampling (if required). Once complete, he creates a detailed table outlining the water well eligibility for sampling, location, status, and contact information.
- **Water Well Sampling (NM& NM)** – Mr. Seekins has both conducted and coordinated sampling of water well in accordance with state regulations.
- **Surveying (NM & TX)** – Mr. Seekins has assisted in the review of proposed SWD location and coordinated surveying of viable SWD locations. Once the surveys are completed, Mr. Seekins reviews the submitted C-102 plats to ensure that each plat is accurate and complete with state regulations.
- **Task Management** – Mr. Seekins has assisted in the project management by assigning sub-tasks to team members, reviewing completed portions of the project, tracking project progress, communicate problems with the project manager, and preparing project updates for the client.

## Oliver Seekins

- **Application Audit** – Mr. Seekins has assisted in the audit of application completed by either operators or third-party consultants. During the audit Mr. Seekins identifies areas where the application is not administratively complete per NMOCD requirements, presents inconsistent data, or does not comply with New Mexico regulations.
- **Ground Water Determination (GW-1)** – Mr. Seekins compiled well logs, survey information, and W-14 Injections into a non-productive formation application form in order to receive a determination of the depth of usable quality water which must be protected within the proposed well location.
- **Application to Inject into a Non-Productive Formation (W-14) (TX)** - Mr. Seekins compiled multiple applications in accordance with the Texas Railroad Commission regulation, including area of review; historic production reviews; well bore diagrams; groundwater determinations; no-harm letters; seismicity assessments; certificates of notice; and public notice affidavits.
- **Project Management** - Mr. Seekins has led a team of technical staff to complete multiple injection permits in compliance with New Mexico Oil and Gas Division regulations. Additionally, Mr. Seekins project management work has included assigning sub-tasks to team members, reviewing completed portions of the project, tracking project progress, communicate problems with the client, and preparing project updates for the client.
- For **Republic Energy**, Mr. Seekins assisted with the formation water testing in association with a Wyoming SWD Permit. Mr. Seekins collected formation water sampling and conducted onsite analysis until it was confirmed that the formation water samples had stabilized. Once the samples had stabilized, Mr. Seekins collected more formation water samples to be tested at a state-certified lab in association with Republic Energy's SWD permit. In addition to the formation water sampling, Mr. Seekins completed aerial drone surveillance of the 5-mile Area of Review (AOR) around the permitted SWD well. Mr. Seekins also completed aerial drone surveys of multiple proposed facility locations, to assist in determining the feasibility of the proposed locations.

For **Southwind Oil & Gas, LLC**, Mr. Seekins assisted with onsite oversight during the drilling of an SWD well in Louisiana and has assisted in the permitting of SWD wells in Texas. During the drilling of the SWD well, Mr. Seekins was responsible for assisting in the oversight of the drilling of the well, cementing of the well, logging of the well, onsite safety, and demobilization of the well. During the permitting of Southwind's Texas SWD, Mr. Seekins was responsible for assisting in the review of the completed SWD application.

For **Contango** Mr. Seekins assisted with the transfer of wells, facilities, and leases within the New Mexico Oil Conservation Division, Bureau of Land Management, and the New Mexico State Lands Office systems. As part of this transition, Mr. Seekins assisted in the production compliance review of over 580 wells located in New Mexico. In addition to the production compliance support, Mr. Seekins has helped navigate the client's strategic response to violation notifications both from NMSLO and NMOCD. Additionally, Mr. Seekins has provided regulatory assistance to support Contango in the prudent operation of their NM assets, and coordinated with regulator to ensure Contangoes compliance with newly released regulations.



## Oliver Seekins

For **Primexx Energy Partners Ltd., & Halcon Resources**, Mr. Seekins assisted with the construction management of water and gas pipelines, water impoundments, treatment tank batteries, roadways, and a gas plant. During construction management, Mr. Seekins was responsible for ensuring the technical specifications were met, job safety analysis was performed daily, 811 underground clearance calls were placed and cleared, and progress reports were generated daily. The development of this water transfer infrastructure is to facilitate the treatment and movement of limited water resources so drilling and hydraulic fracturing can be performed across this arid environment. In addition to construction management, Mr. Seekins assisted in the preparation of an Operation and Maintenance Plan for a small exempt dam in west Texas. These plans are required by the TCEQ once an exception has been awarded.

For **Layne Water Midstream**, Mr. Seekins assisted with the construction management of an emergency produced water pit, roadways, and facility construction. During construction management Mr. Seekins was responsible for ensuring the technical specifications were met, job safety analysis was performed daily, quality controls tests were run, and progress reports were generated daily. In addition to the construction management, Mr. Seekins assisted in preparation of multiple road crossing and driveway permits associated with the facility. Mr. Seekins also assisted in multiple SPCC site inspection, and preparation of multiple SPCC plans for Layne Water Midstream. During the site inspections, he was responsible for completing an aerial drone survey, catalog on site chemicals, and confirming the storage capacity of both onsite tanks and containments. Once the onsite inspection was complete, Mr. Seekins was responsible for completing the secondary containment calculations for the SPCC plans.

For **Murphy Oil Corporation**, Mr. Seekins obtained, sorted and cross-analyzed National Response Center (NRC) data with FracFocus disclosures from 2015 to 2017 to isolate oil and gas-related incidents reported to the NRC and generate a single data set. He also researched and gathered data regarding onshore oil spills from the Bureau of Safety and Environmental Enforcement (BSEE), Energy Information Administration (EIA) and U.S. Geological Survey (USGS) databases. The data from the BSEE necessitated the preparation of a Freedom of Information Act (FOIA) requesting 5 years of data regarding spills/discharges from offshore oil and gas rigs in the Gulf of Mexico. Mr. Seekins performed analysis on the above-listed data sets to benchmark Murphy's performance against the other top twenty-five producers within the Eagle Ford Shale play and Gulf of Mexico. The benchmarking emphasized materials spilled, causes of spills, size of spills, and normalized the results to barrel of oil equivalent (BOE) produced and International Association of Oil & Gas Producers (IOGP) spill classifications. In addition, Mr. Seekins assisted with the benchmarking analyses of total water volumes used to perform hydraulic fracture treatments in the Eagle Ford Shale for the top twenty-five oil producers. Analyzed datasets obtained from FracFocus were tied to estimated lateral lengths based on Railroad Commission of Texas (RRC) data by API number to generate a water used per linear foot comparison between operators. Mr. Seekins also performed benchmarking analysis on greenhouse gas emissions for the Eagle Ford Shale top twenty-five oil and gas producers. This analysis was performed by obtaining greenhouse gas emissions for the U.S., the Gulf Coast Region and the Gulf of Mexico from the Federal Environmental Protection Agencies (EPA) Green House Gases Tool (FLIGHT), and annual production data in barrels of oil equivalent for the year 2016 from individual producer's 10-K SEC filings. Mr. Seekins performed benchmarking analysis



## Oliver Seekins

on the above-listed two data sets to compare Murphy to other top producers in regard to metric tons of CO<sub>2</sub> per Million BOE produced.

For **Gulfport Energy Corporation**, Mr. Seekins performed construction oversight for multiple well pads to ensure that contractors built the improvements as specified in the plans. Mr. Seekins also supervised water conveyance subcontractors, overseeing the installation of over one hundred miles of new water line and provided summary reports regarding quality control, as well as repair and replacement suggestions. Additionally, Mr. Seekins assisted with the development of a total water strategy, including the planning of water transfer routes, location of environmentally sensitive areas (wetlands and Indiana tree bat protected habitat), and recharge rate studies for selected water sources. He also collected water samples from various public and private sources for baseline site evaluations. Finally, he worked with a small team to conduct on-site safety inspections for drilling, fracturing and flowback sites.

For **Enduro**, Mr. Seekins worked on a small field team to assess over one hundred Bakken well pad sites as part of an environmental assessment effort in support of an acquisition in North Dakota. Following the site inspections, he was responsible for completing the photo log and generating appendices outlining field observations for each site.

For **Pennsylvania General Energy**, Mr. Seekins assisted in the research of induced seismicity events throughout the United States for an expert witness report. He was tasked with identifying the latest available data compiled by state and federal agencies and university studies that address the causes and locations of induced seismic events. He further evaluated their sources and obtained further documentation regarding the analysis of the causes as identified, e.g., saltwater disposal wells, hydraulic fracturing, reservoir storage, and enhanced geothermal systems.

For **Alta Mesa Resources**, Mr. Seekins assisted with the construction management of both fresh and produced water pipelines, earth work for the construction of freshwater impoundments, and liner work for the fresh water impoundments. During construction management, Mr. Seekins was responsible for ensuring the technical specifications were met, job safety analysis was performed daily, 811 underground clearance calls were placed and cleared, and progress reports were generated daily. In addition to construction management, Mr. Seekins assisted in design, construction of design drawing, and research of flanges, actuators, and level transmitters for Alta Mesa's future water line.

For **Cereris Resource Development, Moontower Resources Operating, Moontower Resources SWD, and Flat Creek Resources**, Mr. Seekins assisted in the completion of both initial and annual TIER II reports. Mr. Seekins completed the review of the chemical compounds used onsite, to determine if the reported volumes on site met the requirements for TIER II reporting and reviewed the site facility drawings. He also completed the preparation and the submittal of Tier II reports using the TCEQ Steers system.

For the **Army Corps of Engineers**, Mr. Seekins assisted with the multiple Phase I Environmental Assessments. During the field inspections, Mr. Seekins was responsible for conducting the aerial drone survey, to determine if there were any potential environmental concerns in areas that were inaccessible by either foot or vehicle. He also assisted in the pedestrian investigations including evaluating for known and potential environmental concerns. Once the field investigations were

## **Oliver Seekins**

complete, Mr. Seekins was responsible for both writing and assisting in the writing of multiple Phase I reports.

For **Cimarex Energy**, Mr. Seekins assisted in the inspection of freshwater impoundments. Mr. Seekins was responsible for completing the aerial drone survey and assisting in the pedestrian survey evaluating each impoundment to determine if there were any structural or environmental issues present.

For **Felix Energy**, Mr. Seekins assisted in the writing of both Operation and Maintenance Plans and Emergency Action Plans for a Small High Hazard Dam in west Texas. These plans are required by the Texas Commission on Environmental Quality (TCEQ) once a dam has been classified as a High Hazard. Additionally, Mr. Seekins calculated the storage capacity of each Felix Energy impoundment to determine which facilities would require TCEQ Dam Safety exemptions. Once the facilities were identified, he assisted in the preparation of the required TCEQ Dam Safety exemptions. Mr. Seekins has assisted in the TCEQ Dam Safety yearly inspections.

For **Flat Creek Resources and Celeries Resource Development**, Mr. Seekins assisted in the preparation of multiple SPCC plans. Mr. Seekins was responsible for reviewing the current equipment and storage vessels at each facility, calculating the current secondary containment capacity, and assisting in the preparation of the SPCC plan.

For **Malmstrom Air Force Base**, Mr. Seekins assisted in the review and revision of an SPCC plan. He reviewed the current equipment and storage vessels as compared to what was identified in the plans and confirmed the calculated secondary containment capacity.

For ALL Consulting, Mr. Seekins analyzed frac fluid formulas via FracFocus reports as a member of a small research team tasked to determine variations based on geology, the product produced, and water quality of the target formation. The data generated from these efforts was used in a presentation for the Groundwater Protection Council regarding hydraulic fracturing in various basins across the United States.

## **Short Courses, Continued Education, & Certifications**

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IADC Rigpass Safety Training  
Hydrogen Sulfide Awareness  
Federal Aviation Administration Commercial Drone Pilot License  
Hazardous Waste Site Safety  
40 Hour Hazardous Waste Operations and Emergency Response Training  
8 Hour HAZWOPER Refresher Training  
Project Management Institute – Project Management Professional

## **Professional Societies:**

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Society of Petroleum Engineers  
National Groundwater Association

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## Reed J. Davis, B.S.

### Geophysicist

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#### Education

B.S., Geophysics, University of Tulsa (2018)

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#### Professional Organizations

- American Association of Petroleum Geologists (AAPG)
- American Geophysical Union (AGU)
- Geological Society of America (GSA)
- Geophysical Society of Tulsa (GST)
- Society of Exploration Geophysicists (SEG)
- Seismological Society of America (SSA)

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#### Distinguishing Qualifications

Mr. Davis holds a bachelor's degree in geophysics. Since beginning work with ALL in 2017, Mr. Davis has gained experience in both environmental and petroleum industry applications of geophysics. He has a professional focus on induced seismicity, seismic data acquisition and interpretation, structural interpretation, and technical document preparation. Mr. Davis' effectiveness in his work is based on strictly data-driven technical analysis. He is adept in using programming languages such as Matlab, Mathematica, and Python in addition to modeling tools such as Fault-Slip Potential to assist in data analysis. Mr Davis has evaluated the relationships between faults, seismic events, and injection at over 200 saltwater disposal well locations in New Mexico, Texas, and Oklahoma to identify possible correlations and assisted in the preparation of the associated expert reports. He has testified as an expert on the topic of induced seismicity in the state of New Mexico.

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#### Relevant Experience

The following information is intended to demonstrate Mr. Davis' experience and qualifications:

For **Rev Midstream, Blackbuck Resources, Overflow Energy, Republic Services, Vista Disposal Solutions, Goodnight Midstream, and Trove Energy and Water**, Mr. Davis has prepared more than 50 fault-slip potential models in support of saltwater disposal permit applications in the Delaware Basin of New Mexico and Texas. Mr. Davis utilized geophysical logs, fault data, injection data, and physical reservoir properties to model the induced seismic risk associated with the potential saltwater disposal wells. Many of the modeling results and associated exhibits were presented to the NMOCD and TXRRC at hearing.

Reed Davis, B.S.

For **New Dominion**, Mr. Davis assisted in calculation and analysis of b-values for earthquake sequences across Oklahoma to evaluate the potential of induced seismicity. Mr. Davis also assisted with analysis and characterization of research by opposing expert witnesses, covering topics such as induced seismicity, 3D reservoir modeling, teleseismicity, and pore-pressure perturbation. In addition, Mr. Davis researched and analyzed the characteristics of stress drop, ground motions, and aftershock properties for Oklahoma earthquakes, to investigate potential relationships with induced events. These efforts were used by New Dominion to address concerns of the OCC regarding the potential for wastewater injections to induce earthquakes. Mr. Davis also assisted in research and development of an expert report covering structural damages to homes due to seismic activity in northeast Oklahoma. The report revealed that New Dominion was not responsible for the seismic activity.

For **Crown Energy**, Mr. Davis assisted in analysis and characterization of research by opposing expert witnesses, covering topics such as induced seismicity, 3D reservoir modeling, and pore-pressure perturbation. In addition, Mr. Davis researched and analyzed the characteristics of stress drop, ground motions, and aftershock properties for Oklahoma earthquakes, to investigate potential relationships with induced events. These efforts were used by Crown Energy to address concerns of the OCC regarding the potential for wastewater injections to induce earthquakes.

For **Seneca Resources**, Mr. Davis assisted with the installation of monitoring equipment and the analysis of data from the first active seismic monitoring network installed at a Class II disposal site in Pennsylvania. Mr. Davis was tasked with ensuring the monitoring equipment was properly functioning, the reporting of any abnormal seismic activity was automated, and the training of others on how to monitor the network. Monitoring equipment employed consisted of Institute of Earth Science and Engineering (IESE) Shallow Posthole Seismometer Sensors: Model S31f-2.0, REF TEK RT 130S-01 Broadband Seismic Recorders, and a Trimble REF TEK147A strong motion accelerometer. In addition, Mr. Davis has been responsible for annual reports regarding the status of network maintenance and recorded seismic events. Mr. Davis is also responsible for continuing daily monitoring of the seismic network in place.

For the **Ground Water Protection Council (GWPC)**, Mr. Davis is assisting in the development of an update to the Shale Gas Primer and Potential Induced Seismicity Guide. Mr. Davis is tasked with assessing and characterizing cases of potentially induced seismicity due to wastewater disposal in Oklahoma, Texas, New Mexico, Colorado, Ohio, Pennsylvania, and other states. Mr. Davis is also responsible for comparison of induced seismicity related regulations across various states.

For a **Confidential Client**, Mr. Davis assisted in analysis and research for an expert report covering structural damages to a home due to seismic activity in northeast Oklahoma. The report revealed that the damages to the home were the result of both poor structural integrity prior to the seismic event and the seismic event itself.

For **Marathon Oil** and **Dow Chemical**, Mr. Davis is assisting in the development of an expert report pertaining to a historic oil well drilled in 1931 Marina Del Ray, California which blew out during modern plugging and abandonment operations. Mr. Davis is tasked with evaluating

Reed Davis, B.S.

historic industry and regulatory practices, assessing the plugging and abandonment operations which occurred at the well over time, and technical review of other historic oil wells which utilized similar construction methods.

For **Pennsylvania General Energy**, Mr. Davis assisted with analysis and research for an expert report regarding the viability and safety of a disposal well near central Pennsylvania. The viability and safety research addressed Pennsylvania Department of Environmental Protection (PADEP) concerns associated with the target formations ability to receive the injectate and potential breaches which might result in groundwater contamination from induced seismicity if the injected waste were to reach the crystalline basement. Mr. Davis also assisted in research and analysis of the geologic characteristics of the region, including the potential of an evaporate formation as a fluid seal. This research indicated that the Salina salt group present throughout the region would prevent fluid pressure resulting from injection activity from propagating to the basement rock.

For **Marathon Oil**, Mr. Davis assisted in analysis and research for a geologic assessment of the SCOOP and STACK plays within the Anadarko Basin in Oklahoma for the purpose of locating potential disposal sites. Mr. Davis was tasked with gathering detailed technical resources, such as cross sections, stratigraphic columns, and subsurface topographic maps. This information was used to evaluate potential locations for Class II salt water disposal wells based on the ability of formations to accept injectate, proximity to faults, and depth to the crystalline basement.

For **Blackbuck Resources**, Mr. Davis assisted in geological analysis for injection applications at nineteen proposed saltwater disposal locations within the Delaware Basin in New Mexico and Texas. Mr. Davis was tasked with gathering detailed technical resources, such as geophysical logs and existing drilling reports from nearby disposal and production wells, to evaluate the geology of the region for the purpose of estimating depths to various geologic formations. This information was used to determine the depths of drinking water aquifers, disposal formations, crystalline basement, and develop wellbore designs at the proposed saltwater disposal locations. Mr. Davis also developed seismicity statements for each of these nineteen proposed saltwater disposal locations utilizing fault data, geophysical logs, and regional structure to address NMOCD and TXRRC concerns of potential induced seismicity within the Delaware Basin.

For **Galvanic Energy**, Mr. Davis assisted in the hydrogeological assessment of the Smackover Formation in Arkansas for potential bromine and lithium development. Mr. Davis was tasked with evaluating core porosity and permeability data and summarizing the hydrogeologic conditions present to demonstrate the formation had sufficient qualities for economic extraction of native brines.

For **Waterbridge Operating LLC**, Mr. Davis assisted in geological and geophysical analysis of the Dagger Draw field in southeastern New Mexico to assess potential seismic risk associated with new Saltwater Disposal Wells. Mr. Davis was tasked with gathering detailed technical resources, such as geophysical logs, structural cross sections, fault location data, and seismic event data to integrate into a comprehensive seismic potential analysis for presentation to the NMOCD.



Reed Davis, B.S.

For **Point Energy Partners Petro**, Mr. Davis assisted in geological analysis for injection applications at three proposed saltwater disposal locations within the Delaware Basin in west Texas. Mr. Davis was tasked with gathering detailed technical resources, such as geophysical logs and existing drilling reports from nearby disposal and production wells, to evaluate the geology of the region for the purpose of estimating depths to various geologic formations. This information was used to determine the depths of drinking water aquifers, disposal formations, crystalline basement, and develop wellbore designs at the proposed saltwater disposal locations. Mr. Davis also developed seismicity statements for each of these three proposed saltwater disposal locations utilizing fault data, geophysical logs, and regional structure to address TXRRC concerns of potential induced seismicity within the Delaware Basin.

For **EVX Midstream Partners**, Mr. Davis performed environmental site assessments for the potential acquisition of six saltwater disposal wells within the Eagle Ford shale play in southeast Texas. Mr. Davis was tasked with interviewing site personnel, gathering technical specifications of the equipment present, capturing photographs of the locations, and reviewing electronic site records for evicence of spills, fires, remedial actions, etc. This information was used to compile a comprehensive environmental site assessment report for the client.

For **Cereris Resource Development**, Mr. Davis assisted with tier II reporting of chemicals, oil, and water stored at oil and gas production facilities throughout Texas. Mr. Davis was tasked with submitting applications to acquire RN numbers for unregistered locations, recording presence of oil, water, and chemicals for each location, and determining the volumes of such liquids present to determine which locations required reports.

For **Layne Water Midstream**, Mr. Davis assisted with Construction Management for a produced water gathering facility in west Texas. The project involved planning, design and construction of produced water gathering, treatment, recycling and disposal. The initial phase of the project included construction of a central treatment facility with an advanced water treatment facility, a 70,000 barrel upset impoundment, and conveyance to three separate saltwater disposal wells.

For **FQ Energy Services**, Mr. Davis assisted in analysis and characterization of geology within the Appalachian Basin in West Virginia. Mr. Davis was tasked with gathering technical documents to determine hydrogeological properties of the Oriskany Sandstone formation for the purpose of calculating the Zone of Endangering Influence over a ten-year period at a saltwater disposal facility, for a permit renewal application.

For **Expedition Water Solutions**, Mr. Davis performed a geological assessment and analysis of data provided by Expedition for five potential saltwater disposal facilities located within the Powder River Basin of Wyoming. Mr. Davis analyzed geophysical logs, structural cross sections, subsurface isopach maps, and regional injection trends to assess the potential injection capacity of the Teckla, Teapot, and Minnelusa sandstone reservoirs for each of the five facilities. Mr. Davis provided recommendations for the preferred reservoir at each location and estimates of potential injection volumes.



Reed Davis, B.S.

For **Felix Energy**, Mr. Davis assisted in development of an Operation & Maintenance Plan for a water impoundment dam. The Operation & Maintenance plan covered topics such as regulatory requirements, general dam information, vital dam statistics, emergency action planning, initial and ongoing agency inspections, maintenance, security, and records.

For **Goodnight Midstream**, Mr. Davis assisted in geological analysis for injection applications at thirteen proposed saltwater disposal locations within the Delaware Basin in New Mexico. Mr. Davis was tasked with gathering detailed technical resources, such as geophysical logs and existing drilling reports from nearby disposal and production wells, to evaluate the geology of the region for the purpose of estimating depths to various geologic formations. This information was used to determine the depths of drinking water aquifers, disposal formations, crystalline basement, and develop wellbore designs at the proposed saltwater disposal locations. Mr. Davis also developed seismicity statements for each of these thirteen proposed saltwater disposal locations utilizing fault data, geophysical logs, and regional structure to address NMOCD concerns of potential induced seismicity within the Delaware Basin.

For **Marathon Oil**, Mr. Davis assisted in geological analysis for an injection application at a proposed saltwater disposal location within the Eagle Ford Basin in Texas. Mr. Davis was tasked with gathering detailed technical resources, such as geophysical logs and existing drilling reports from nearby disposal and production wells, to evaluate the geology of the region for the purpose of estimating depths to various geologic formations. This information was used to determine the depths of drinking water aquifers, disposal formations, crystalline basement, and develop wellbore designs at the proposed saltwater disposal location. Mr. Davis also developed a seismicity statement for the proposed saltwater disposal location utilizing fault data, geophysical logs, and regional structure to address TXRRC concerns of potential induced seismicity within the Delaware Basin.

For **Petrobal Omega 1 LLC**, Mr. Davis assisted in geological analysis for an injection application at a proposed saltwater disposal location within the Fort Worth Basin in Texas. Mr. Davis was tasked with gathering detailed technical resources, such as geophysical logs and existing drilling reports from nearby disposal and production wells, to evaluate the geology of the region for the purpose of estimating depths to various geologic formations. This information was used to determine the depths of drinking water aquifers, disposal formations, crystalline basement, and develop wellbore designs at the proposed saltwater disposal location. Mr. Davis also developed a seismicity statement for the proposed saltwater disposal location utilizing fault data, geophysical logs, and regional structure to address TXRRC concerns of potential induced seismicity within the Fort Worth Basin.

For **Republic Services**, Mr. Davis performed fault-slip potential modeling at two potential saltwater disposal well locations within the Fort Worth Basin in Texas. Mr. Davis utilized geophysical logs, fault data, injection data, and physical reservoir properties to model the induced seismic risk associated with the two potential saltwater disposal wells. The modeling results and associated exhibits were used by Republic Services to determine which of the two potential locations would incur the least amount of induced seismic risk.

Reed Davis, B.S.

For **Select Energy**, Mr. Davis assisted in geological analysis for injection applications at twelve proposed saltwater disposal locations within the Delaware Basin in New Mexico. Mr. Davis was tasked with gathering detailed technical resources, such as geophysical logs and existing drilling reports from nearby disposal and production wells, to evaluate the geology of the region for the purpose of estimating depths to various geologic formations. This information was used to determine the depths of drinking water aquifers, disposal formations, crystalline basement, and develop wellbore designs at the twelve proposed saltwater disposal locations. Mr. Davis also developed seismicity statements for the proposed saltwater disposal locations utilizing fault data, geophysical logs, and regional structure to address NMOCD concerns of potential induced seismicity within the Delaware Basin.

For **Spitfire Energy Group LLC**, Mr. Davis developed a technical memorandum in support of a potential saltwater disposal well in Stephens County, Oklahoma. Mr. Davis was tasked with gathering detailed technical resources, such as geophysical logs and existing drilling reports from nearby disposal and production wells, to evaluate the geology of the Teckla sandstone for the purpose of estimating its potential as an injection reservoir.

For **Vista Disposal Solutions**, Mr. Davis assisted in geological analysis for injection applications at eleven proposed saltwater disposal locations within the Delaware Basin in New Mexico. Mr. Davis was tasked with gathering detailed technical resources, such as geophysical logs and existing drilling reports from nearby disposal and production wells, to evaluate the geology of the region for the purpose of estimating depths to various geologic formations. This information was used to determine the depths of drinking water aquifers, disposal formations, crystalline basement, and develop wellbore designs at the eleven proposed saltwater disposal locations. Mr. Davis also developed seismicity statements for the proposed saltwater disposal locations utilizing fault data, geophysical logs, and regional structure to address NMOCD concerns of potential induced seismicity within the Delaware Basin.

For **LilyStream Water Solutions LLC**, Mr. Davis assisted in geological analysis for an injection application at a proposed saltwater disposal location within the Delaware Basin in New Mexico. Mr. Davis was tasked with gathering detailed technical resources, such as geophysical logs and existing drilling reports from nearby disposal and production wells, to evaluate the geology of the region for the purpose of estimating depths to various geologic formations. This information was used to determine the depths of drinking water aquifers, disposal formations, crystalline basement, and develop wellbore designs at the proposed saltwater disposal location.

For **Anthem Water Solutions LLC**, Mr. Davis assisted in geological analysis for injection applications at five proposed saltwater disposal location within the Delaware Basin in New Mexico. Mr. Davis was tasked with gathering detailed technical resources, such as geophysical logs and existing drilling reports from nearby disposal and production wells, to evaluate the geology of the region for the purpose of estimating depths to various geologic formations. This information was used to determine the depths of drinking water aquifers, disposal formations, crystalline basement, and develop wellbore designs at the five proposed saltwater disposal locations.

## Reed Davis, B.S.

For **Probity SWD LLC**, Mr. Davis assisted in geological analysis for injection applications at two proposed saltwater disposal location within the Delaware Basin in New Mexico. Mr. Davis was tasked with gathering detailed technical resources, such as geophysical logs and existing drilling reports from nearby disposal and production wells, to evaluate the geology of the region for the purpose of estimating depths to various geologic formations. This information was used to determine the depths of drinking water aquifers, disposal formations, crystalline basement, and develop wellbore designs at the two proposed saltwater disposal locations.

For **Overflow Energy LLC**, Mr. Davis assisted in geological analysis for revisions to an injection application at a proposed saltwater disposal location within the Delaware Basin in New Mexico. Mr. Davis was tasked with gathering detailed technical resources, such as geophysical logs and existing drilling reports from nearby disposal and production wells, to evaluate the geology of the region for the purpose of estimating depths to various geologic formations. This information was used to determine the depths of drinking water aquifers, disposal formations, crystalline basement, and develop wellbore design revisions at the proposed saltwater disposal location.

## Recent Presentations

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Reed Davis, *"FSP Modeling and Its Use in the Permitting / Protested Hearing Process"*. Presented at the 2020 Ground Water Protection Council Virtual Annual Forum. September 28 – October 1, 2020.

## Short Courses and Continuing Education

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Hydrogen Sulfide Awareness Training  
OSHA 40 Hour HAZWOPER Training  
OSHA 8 Hour HAZWOPER Refresher Training  
Seneca Resources/Highland Field Services EHS Site Orientation  
IADC RigPass Accreditation

**GEORGE A. WATERS, PE**

gwaters@spurenergy.com

6146 Chevy Chase Dr, Houston, TX 77057

(817) 913-5536

**PROFESSIONAL EXPERIENCE****Spur Energy Partners, LLC***Sr. Operations Engineer***Houston, TX***October 2019 – Present***Percussion Petroleum, LLC***Production Engineer***Houston, TX***November 2018 – June 2019*

- Planned and supervised workovers on rod pump (RP), PCP, and ESP wells and optimized artificial lift
  - Created IPRs utilizing ESP PIP to size PCPs and develop initial design. Recommended upsizing pumps to the MANTL 123 which became the standard for future PCP installations. Increased oil production by 50-100% on ESP to PCP conversions while reducing LOE by \$4,000/mo. Made recommendations for continual improvement such as toughcoat rotors, coated pup joints, gas separator selection, and torque anchor placement.
  - Developed rod designs using Rodstar for ESP to RP conversions in horizontal wells and pump upsizing in vertical and slant wells. Increased oil production by 50-100% on several wells.
  - Reviewed nodal analysis and sized a velocity string to replace the ESP on a high-GLR producer resulting in LOE savings of \$4,000/mo. Determined critical velocity and selected plunger lift equipment for future installation.
- Monitored production averaging 8,000 BOED from horizontal and vertical Yeso wells in the Northwest Shelf
  - Remotely monitored PCP wells in XSPOC. Optimized production with regular speed changes resulting in 10-20 BOPD increases or pump efficiency improvements of 5-10%.
  - Remotely monitored ESP wells in ProductionLink and Inspatial and implemented changes with engineers and vendors
  - Remotely monitored RP wells with Genesis POCs and changed VSD settings. Added fluid levels and efficiency calculations to production database to identify optimization opportunities such as tubing lowerings and pump changes.
- Compared specialty tubulars for highly corrosive environments and recommended trialing IPC 1850 with Ryt-wrap. Created chart to show the outperformance of intermetallic tubing versus bare tubing.
- Reviewed directional drilling plans and made well path recommendations to optimize artificial lift designs

**Linn Energy, LLC***Production Engineer II***Houston, TX***August 2014 – May 2018*

- Planned and supervised workovers on gas lift, rod lift, and plunger lift wells, maintaining 27 MMCFED from mature, conventional wells in the Gulf Coast Basin
  - Implemented FBHP/SBHP survey program in Colorado County to evaluate lift conversion. Identified under-producers with high Pls and successfully converted two gas lift wells to rod lift, doubling oil production
  - Identified and ranked plunger lift candidates with foremen to achieve 50-100 MCFD uplift per well
- Made uphole recompletion recommendations for wells in Colorado and Montgomery Counties, adding over 4 MMCFED
  - Streamlined candidate selection by writing macros to cross-reference formation tops from Petra, perforation data from Wellview, and production data from IHS to calculate 90-day IPs for the Wilcox tight gas reservoirs
  - Evaluated drainage risk utilizing a lat/long spreadsheet and cumulative production data
  - High-graded candidates with a mechanical risk score, considering well work history and downhole configuration
  - Created cross-sections and evaluated log quality in Petra
- Analyzed LOE resulting in a recommendation of divestiture candidates to improve free cash flow from \$0.67/Mcfe to \$1.00/Mcfe
- Mentored summer field intern in 2016 and taught rod lift design class to managers and peers

**Berry Petroleum Company***Production Engineer***Midland, TX***May 2012 – August 2014*

- Maintained daily production from over 300 unconventional, vertical Wolfberry wells in the Midland Basin in Ector, Midland, Martin, and Glasscock Counties, averaging 8,000 BOPD, 25 MMCFD, and 10,000 BWPD
- Planned workover operations and communicated with rig supervisors daily on 4-6 rigs
- Designed rods strings using Rodstar and selected downhole equipment for new completions
- Targeted wells with pumping issues and uplift opportunities by evaluating XSPOC data such as runtime and fluid load
- Reviewed well failure histories and made recommendations such as rod string re-design and downhole equipment modifications
- Reduced failure rate from 1.52 f/w/y in 2012 to less than 0.80 f/w/y in 2014

**Helms Oil & Gas, LLC***Drilling Engineering Intern***Midland, TX***May 2011 – August 2011***BEFORE THE OIL CONSERVATION DIVISION****Santa Fe, New Mexico****Exhibit No. D****Submitted by: Spur Energy Partners, LLC****Hearing Date: August 3, 2023****Case No. 23685**

**EDUCATION AND CERTIFICATIONS**

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**Texas Board of Professional Engineers**

PE, Petroleum Engineering Discipline, License 125005

December 2016 – Present

**The University of Texas at Austin**

Bachelor of Science, Petroleum Engineering

Activities: Society of Petroleum Engineers, Pi Epsilon Tau Honor Society, and Kappa Alpha Order

August 2008 – May 2012

**CONTINUING EDUCATION**

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- The R Programming Environment by Johns Hopkins University on Coursera
- Well Master, Fundamentals of Liquid Loading and Application to Plunger Lift Optimization
- Priority Energy Services, Fundamentals of Plunger Lift
- Priority Energy Services, Gas Lift Design
- PetroSkills, Production Geology for Other Disciplines
- Rose & Associates Project Risk Uncertainty & Decision Analysis Course
- ESP Root Cause Failure Analysis
- DeGolyer and MacNaughton, Unconventional Decline Curve Analysis
- Halliburton Landmark, ARIES Software Fundamentals
- PPDC, Spirit Global Energy, Rod Pumping The Wolfberry
- PPDC, Hydraulic Fracturing (Economides)
- PPDC, Basic Well Log Analysis
- PPDC, Basics of Mudlogging

**SKILLS AND SOFTWARE**

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**Engineering Skills:** Workover and recompletion operations, artificial lift design & optimization, remedial operations planning, facility design, LOE analysis, decline curve analysis, volumetric reserves calculations, well log interpretation

**Computer Skills:** Excel, ARIES, Petra, R, Spotfire, DrillingInfo, IHS Enerdeq, Rodstar, XSPOC, CygNet, OFM, VBA, MATLAB, Wellview

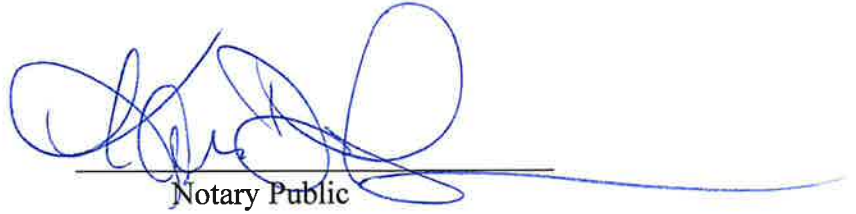
**Other Software:** Experience with WellFlo, PHDwin, Fracpro





SUBSCRIBED AND SWORN to before me this 1st day of August 2023, by Adam G.

Rankin.



Notary Public

My Commission Expires:

06/28/2026

STATE OF NEW MEXICO  
NOTARY PUBLIC  
KARI D PEREZ  
COMMISSION # 1138272  
COMMISSION EXPIRES 06/28/2026



**Adam G. Rankin**  
**Partner**  
**Phone** (505) 988-4421  
**Email** agrankin@hollandhart.com

July 14, 2023

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

**TO: AFFECTED PARTIES**

**Re: Application of Spur Energy Partners LLC for Approval of a Pressure Maintenance Project, Eddy County, New Mexico: *Pinto 36 State Com #003H well (API No. 30-015-39782)***

Ladies and Gentlemen:

This letter is to advise you that Spur Energy Partners LLC has filed the enclosed application with the New Mexico Oil Conservation Division. A hearing has been requested before a Division Examiner on August 3, 2023, and the status of the hearing can be monitored through the Division’s website at <https://www.emnrd.nm.gov/ocd/>.

**Due to the remodeling of the state building where the New Mexico Oil Conservation Division is located, hearings will be conducted remotely beginning at 8:15 a.m. To participate in the electronic hearing, see the instructions posted on the OCD Hearings website: <https://www.emnrd.nm.gov/ocd/hearing-info/>.**

You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date. Parties appearing in cases are required to file a Pre-hearing Statement four business days in advance of a scheduled hearing that complies with the provisions of NMAC 19.15.4.13.B.

If you have any questions about this matter, please contact Sarah Chapman (832) 930-8502 or [schapman@spurenergy.com](mailto:schapman@spurenergy.com).

Sincerely,

Adam G. Rankin  
**ATTORNEY FOR SPUR ENERGY PERMIAN LLC**

T 505.988.4421 F 505.983.6043  
110 North Guadalupe, Suite 1, Santa Fe, NM 87501-1849  
Mail to: P.O. Box 2208, Santa Fe, NM 87504-2208  
[www.hollandhart.com](http://www.hollandhart.com)

Alaska	Montana	Utah
Colorado	Nevada	Washington, D.C.
Idaho	New Mexico	Wyoming

Spur - Pinto 36 #3H Case No. 23685  
Postal Delivery Report

TrackingNo	ToName	DeliveryAddress	City	State	Zip	USPS_Status
9414811898765414070377	Commission of Public Lands - State Land Office	310 Old Santa Fe Trl	Santa Fe	NM	87501-2708	Your item was picked up at a postal facility at 6:53 am on July 20, 2023 in SANTA FE, NM 87501.
9414811898765414070070	Dylan T. Tarter	2909 112th St	Lubbock	TX	79423-6751	Your package will arrive later than expected, but is still on its way. It is currently in transit to the next facility.
9414811898765414070414	Ellis G. Vickers, ESV Enterprises	PO Box 1952	Roswell	NM	88202-1952	Your item was picked up at the post office at 1:56 pm on July 19, 2023 in ROSWELL, NM 88201.
9414811898765414070452	Empire Energy, LLC	PO Box 4168	Roswell	NM	88202-4168	Your item was picked up at the post office at 12:01 pm on July 22, 2023 in ROSWELL, NM 88201.
9414811898765414070469	EOG Resources, Inc.	5509 Champions Dr	Midland	TX	79706-2843	Your item has been delivered to an agent for final delivery in MIDLAND, TX 79701 on July 19, 2023 at 7:55 am.
9414811898765414070421	FLP Trafalgar II, LP ,C/O Legacy Partners Preston Butcher	950 Tower Ln Ste 900	Foster City	CA	94404-2125	Your item was delivered at 8:57 am on July 20, 2023 in SAN MATEO, CA 94402.
9414811898765414070407	Frontier Field Services, LLC	10077 Grogans Mill Rd Ste 300	The Woodlands	TX	77380-1032	Your item was delivered to an individual at the address at 12:04 pm on July 21, 2023 in SPRING, TX 77380.
9414811898765414070490	Fuller Family Trust Donald & Nancy D Fuller, Co-Ttees	PO Box 2905	Granite Bay	CA	95746-2905	Your item was delivered at 10:32 am on July 20, 2023 in GRANITE BAY, CA 95746.
9414811898765414070445	Gatorex Holdings LLC	1320 Clover Ln	Ft Worth	TX	76107-2468	Your item was delivered to an individual at the address at 11:40 am on July 19, 2023 in FORT WORTH, TX 76107.
9414811898765414070438	Justin Nine & Sara Nine	1900 Larkspur Dr	Golden	CO	80401-9114	Your item was delivered to an individual at the address at 3:59 pm on July 21, 2023 in GOLDEN, CO 80401.
9414811898765414070476	Lapaguera LLCR. Glass	1501 W 6th St Apt A2	Austin	TX	78703-5148	Your item was delivered to an individual at the address at 1:08 pm on July 18, 2023 in AUSTIN, TX 78703.
9414811898765414070056	NMOCD District 2	506 W Texas Ave	Artesia	NM	88210-2041	Your item was delivered to the front desk, reception area, or mail room at 8:34 am on July 19, 2023 in ARTESIA, NM 88210.
9414811898765414070513	Lou Ann LangfordR. Glass	606 Winsford Rd	Bryn Mawr	PA	19010-3618	Your item was delivered to an individual at the address at 1:31 pm on July 21, 2023 in BRYN MAWR, PA 19010.
9414811898765414070568	Marathon Oil Co.MARATHON	PO Box 552	Midland	TX	79702-0552	This is a reminder to pick up your item before August 2, 2023 or your item will be returned on August 3, 2023. Please pick up the item at the MIDLAND, TX 79702 Post Office.
9414811898765414070520	Mark K. Nearburg	710 Dragon	Lakeway	TX	78734-4353	Your package will arrive later than expected, but is still on its way. It is currently in transit to the next facility.
9414811898765414070506	Marshall & Winston, Inc	PO Box 50880	Midland	TX	79710-0880	Your item was delivered to an individual at the address at 10:49 am on July 24, 2023 in MIDLAND, TX 79705.
9414811898765414070599	Morris E. Schertz	PO Box 2588	Roswell	NM	88202-2588	Your item was picked up at the post office at 12:54 pm on July 24, 2023 in ROSWELL, NM 88201.
9414811898765414070582	New State Gas, LLC	33530 Tiderunner Ave	Millsboro	DE	19966-7196	Your item was delivered to an individual at the address at 11:33 am on July 19, 2023 in MILLSBORO, DE 19966.
9414811898765414070537	NMOCD District 2	506 W Texas Ave	Artesia	NM	88210-2041	Your item was delivered to the front desk, reception area, or mail room at 8:34 am on July 19, 2023 in ARTESIA, NM 88210.
9414811898765414070575	OXY USA Inc.	PO Box 27570 Room 13 105	Houston	TX	77227-7570	Your item has been delivered to an agent for final delivery in HOUSTON, TX 77227 on July 19, 2023 at 7:51 am.
9414811898765414078212	OXY Y-1 Company	PO Box 841803	Dallas	TX	75284-1803	Your item was picked up at a postal facility at 7:47 pm on July 20, 2023 in DALLAS, TX 75260.
9414811898765414078250	Robert Glass LangfordR. Glass	1173 Isidora Trl	Lockhart	TX	78644-2983	Your item was picked up at the post office at 10:33 am on July 20, 2023 in LOCKHART, TX 78644.
9414811898765414070063	Alfred Foy Curry, IVR. Glass	1016 Alta Loma Cir	San Angelo	TX	76901-4550	Your item was delivered to an individual at the address at 11:17 am on July 20, 2023 in SAN ANGELO, TX 76901.
9414811898765414078267	Roy G. Barton, Jr.	1919 N Turner St	Hobbs	NM	88240-2712	Your item was delivered to an individual at the address at 11:59 am on July 19, 2023 in HOBBS, NM 88240.
9414811898765414078205	Sally Ellis	771 Crescent Dr	Boulder	CO	80303-2712	Your item was delivered to an individual at the address at 4:11 pm on July 17, 2023 in BOULDER, CO 80303.

Spur - Pinto 36 #3H Case No. 23685  
Postal Delivery Report

9414811898765414078298	SEP Permian LLCSEP Permian	9655 Katy Fwy Ste 500	Houston	TX	77024-1385	Your item was delivered to the front desk, reception area, or mail room at 12:47 pm on July 20, 2023 in HOUSTON, TX 77024.
9414811898765414078243	Sharbro Energy, LLC	PO Box 840	Artesia	NM	88211-0840	Your item was picked up at the post office at 10:36 am on July 19, 2023 in ARTESIA, NM 88210.
9414811898765414078281	Silverback New Mexico, LLC	19707 Ih 10 W Ste 201	San Antonio	TX	78257-1748	Your item was delivered to an individual at the address at 11:01 am on July 18, 2023 in SAN ANTONIO, TX 78257.
9414811898765414078236	Thomas M. Beall	PO Box 3098	Midland	TX	79702-3098	Your item was picked up at the post office at 1:15 pm on July 20, 2023 in MIDLAND, TX 79701.
9414811898765414078274	Vladin LLC	PO Box 100	Artesia	NM	88211-0100	Your item was picked up at the post office at 10:11 am on July 20, 2023 in ARTESIA, NM 88210.
9414811898765414078816	Wolfcamp Title LLC	PO Box 2423	Roswell	NM	88201	Your item was picked up at the post office at 9:19 am on July 21, 2023 in ROSWELL, NM 88201.
9414811898765414078854	Yates Petroleum Corporation Yates Pet, Yates ETAL	105 S 4th St	Artesia	NM	88210-2177	Your item arrived at the SANTA FE, NM 87501 post office at 9:33 am on July 25, 2023 and is ready for pickup.
9414811898765414070025	Alison Claire Curry SaundersR. Glass	PO Box 50327	Austin	TX	78763-0327	Your item was delivered at 9:45 am on July 18, 2023 in AUSTIN, TX 78703.
9414811898765414070001	First National Bank of Artesia Ballard E. Spencer Trust, Inc C/o Trust Department B.E. Spencer TR	PO Box Aa	Artesia	NM	88211-7526	Your item was delivered to the front desk, reception area, or mail room at 7:16 am on July 20, 2023 in ARTESIA, NM 88210.
9414811898765414070094	Big Surprise LLCR. Glass	PO Box 22205	Santa Fe	NM	87502-2205	Your item was picked up at the post office at 1:51 pm on July 18, 2023 in SANTA FE, NM 87505.
9414811898765414070049	Chase Oil CorporationCHASE OIL CORPORATION	PO Box 1767	Artesia	NM	88211-1767	Your item was picked up at the post office at 11:12 am on July 19, 2023 in ARTESIA, NM 88210.
9414811898765414070087	COG Operating LLC	600 W Illinois Ave	Midland	TX	79701-4882	Your item has been delivered to an agent for final delivery in MIDLAND, TX 79701 on July 19, 2023 at 7:57 am.
9414811898765414070032	Commission of Public Lands - State Land Office	PO Box 1148	Santa Fe	NM	87504-1148	Your item was picked up at a postal facility at 11:37 am on July 19, 2023 in SANTA FE, NM 87501.