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

APPLICATION OF FAE II OPERATING, LLC FOR REINSTATEMENT OF INJECTION AUTHORITY AND AUTHORIZATION TO CONVERT PRODUCING WELLS TO INJECTORS FOR WATERFLOOD OPERATIONS, LEA COUNTY, NEW MEXICO

CASE NO. 22133

HEARING EXHIBITS

Exhibit A	**Self-Affirmed Statement of Stephen Lehrbass**
A-1	Curriculum Vitae of Stephen Lehrbass
A-2	Application & Proposed Notice of Hearing
A-3	Plat of Tracts, Tract Ownership, Pooled Party, Unit Recapitulation
A-4	Area of Review Map
A-5	Application for Authorization to Inject (Form C-108)
A-6	Hearing Notice Letter and Return Receipts
A-7	Affidavit of Publication
Exhibit B	**Self-Affirmed Statement of Jessica LaMarro**
B-1	Type Log of the Seven Rivers-Queen Injection Interval
B-2	Structure Map
B-3	Cross-Section
B-4	Cross-Section
B-5	Produced Water Analysis
Exhibit C	**Self-Affirmed Statement of Huxley Song**
C-1	Production Curve
C-2	Incremental Production and Economic Summary

STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
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APPLICATION OF FAE II OPERATING, LLC FOR REINSTATEMENT OF INJECTION AUTHORITY AND AUTHORIZATION TO CONVERT PRODUCING WELLS TO INJECTORS FOR WATERFLOOD OPERATIONS, LEA COUNTY, NEW MEXICO

CASE NO. 22133

SELF-AFFIRMED STATEMENT OF STEVEN LEHRBASS

1. I am over 18 years of age and am competent to provide this Self-Affirmed Statement. I have personal knowledge of the matters addressed herein. I am the Director of Land at FAE II Operating, LLC ("FAE"). I have not previously testified before the New Mexico Oil Conservation Division ("Division"). A copy of my curriculum vitae is attached as **Exhibit A-1**.

2. I am familiar with the Application in this case and with the land matters pertaining to this Application. Copies of the application and proposed notice are attached as **Exhibit A-2**.

3. FAE did not receive notice of any objections to its Application.

4. FAE's Application seeks an order: (1) reinstating injection authority for its State "A" A/C No. 65, 67, 69 and 71 wells within its Blackbeard North Waterflood Project ("Project") within the Seven Rivers and Queen formations comprised of portions of Sections 5, 7, 8 and 9, Township 22 South, Range 36 East, Lea County, New Mexico; and (2) authorizing FAE to convert its State "A" A/C No. 64, 68, 70 and 72 producing wells to injectors for waterflood operations.

5. On March 14, 1967, the Oil Conservation Commission ("Commission") entered Order No. R-3200 in Case No. 3531. Order No. R-3200 established the Project in the South Eunice pool and authorized the injection of water into the Seven Rivers and Queen formations through six wells located in Sections 5, 8 and 9 of Township 22 South, Range 36 East. On September 15, 1970,

FAE II OPERATING, LLC
Case No. 22133
Exhibit A

the Commission entered Order No. R-3200-A in Case No. 4418. Order No. R-3200-A authorized the substitution of the wells in Order No. R-3200 with six different wells located in Sections 8 and 9 of T22S-R36E. The Division entered Administrative Order No. WFX-518 on September 6, 1983, authorizing the expansion of the Project to include injection operations in the State "A" A/C 2 No. 65, 67, 69, and 71 wells in Sections 8 and 9 of T22S-R36E. On September 11, 1984, the Division entered Administrative Order No. WFX-530 authorizing the expansion of the Project to include injection operations in the State "A" A/C 2 No. 64, 68, 70, and 72 wells in Sections 8 and 9 of T22S-R36E (collectively the "Orders").

6. The approved Project area is comprised of the following described State lands located in Township 22 South, Range 36 East, Lea County, New Mexico:

Section 5: W/2, SE/4
Section 7: E/2, SW/4
Section 8: all
Section 9: N/2, SW/4

7. The following wells ("Wells") authorized under the Orders are located within the South Eunice pool of the Seven Rivers and Queen formations:

Well Name (API: 30-025-)	Location within T22S-R36E	Injection interval
State "A" A/C 2 No. 64 (28273)	Unit A, 1250 FNL & 1250 FEL, Sec. 8	3720'- 3885'
State "A" A/C 2 No. 65 (28274)	Unit E, 1345 FNL & 25 FWL, Sec. 9	3695'- 3875'
State "A" A/C 2 No. 67 (28276)	Unit K, 2615 FSL & 1345 FWL, Sec. 9	3660'- 3850'
State "A" A/C 2 No. 68 (28277)	Unit E, 2570 FNL & 70 FWL, Sec. 9	3695'- 3885'
State "A" A/C 2 No. 69 (28278)	Unit I, 2615 FSL & 1295 FEL, Sec. 8	3700'- 3890'
State "A" A/C 2 No. 70 (28279)	Unit P, 1295 FSL & 1295 FEL, Sec. 8	3725'- 3890'
State "A" A/C 2 No. 71 (28280)	Unit M, 1295 FSL & 25 FWL, Sec. 9	3715'- 3890'
State "A" A/C 2 No. 72 (28281)	Unit K, 1410 FSL & 1440 FWL, Sec. 9	3675'- 3875'

8. The "unitized interval" was defined by Order R-12496-A as the South Eunice pool, which has a depth of 3,269' to 3,983' in the State A A/C 2-39 (API: 3002508858) log.

9. The State "A" A/C 2 No. 64, 68, 70, and 72 wells were initially drilled as producers within the Seven Rivers and Queen formations. The State "A" A/C 2 No. 65, 67, 69, and 71 wells were initially drilled as injectors within the Seven Rivers and Queen formations.

10. FAE acquired the Project in June 2021 and has been designated operator of the Wells.

11. Prior to FAE's acquisition of the Project, production within the Project was maintained, but injection authority for certain Wells expired at various times.

12. FAE proposes to convert its State "A" A/C No. 64, 68, 70 and 72 wells from producers to injectors for waterflood operations and reinstate injection into its State "A" A/C No. 65, 67, 69 and 71 wells for waterflood operations. FAE plans to inject water through a closed system of perforations at depths of 3,599' to 3,950' within the Seven Rivers and Queen formations.

13. **Exhibit A-3** contains a plat of the Unit that identifies the ownership interests by tract and includes the lease numbers.

14. **Exhibit A-4** is a map of the Project that depicts the injection wells and producing wells.

15. **Exhibit A-5** includes a copy of FAE's Application for Authorization to Inject (Form C-108). I am generally familiar with the content provided in the Form C-108.

16. Pages 10-17 of Form C-108 contain location maps depicting the proposed Wells and other wells within the ½ mile radius areas of review that penetrate the proposed injection zone. Pages 18-25 of Form C-108 provide detailed well information for the wells within the areas of review.

17. Page 46 of Form C-108 identifies the affected parties entitled to notice.

18. FAE conducted a diligent, good-faith effort to identify the correct addresses of persons entitled to notice and has complied with the Division's notice requirements.

19. At FAE's direction, notice of the Division's hearing was provided to all affected parties, including the New Mexico State Land Office, at least 20 days prior to the hearing date. A sample of the hearing notice letter and the associated return receipts are attached as **Exhibit A-6**.

20. Notice of the hearing was also published more than ten business days prior to the hearing date. The affidavit of publication is attached as **Exhibit A-7**.

21. The exhibits referenced above were either prepared by me or under my supervision or were compiled from company business records.

22. In my opinion, the granting of FAE's application would serve the interests of conservation, the prevention of waste, and the protection of correlative rights.

23. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm that my testimony in paragraphs 1 through 22 above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date handwritten next to my signature below.

Steven Lehrbass

Sept. 2, 2021
Date

Steven Lehrbass, JD
11757 Katy Freeway, Suite 725
Steven@faenergyus.com
210-262-7117

T-O Land & Minerals, Inc., New Orleans, Louisiana — *April, 2014 - September, 2016*
Field Title Supervisor & Field Head of Legal

- Oversaw and managed a team of approximately 35 landmen in a 48,000+ acre acquisition;
- Provided final field approval of bonus payments after review of full title on over 1,400 unique tracts of land;
- Researched and advised our client with regard to relevant legal, statutory, and regulatory matters;
- Determined curative methods; drafted, reviewed, negotiated, and approved curative instruments; negotiated with landowners' legal counsel concerning title-related matters;
- Coordinated efforts with Leasing Agents & the Leasing Manager.

Landrith, Lehrbass, Suazo, & Goos, L.L.P., Houston, Texas — *September, 2013 - April, 2014*
Partner/Oil & Gas Attorney

- Oversaw and managed the law firm's Oil & Gas/Real Estate Department;
- Conducted in-house and stand-up title examinations in Texas and New Mexico;
- Provided clients with information regarding regulatory concerns associated with the drilling of new wells;
- Negotiated and drafted the terms of Oil & Gas Leases, Assignments of leasehold interests, and title curative;
- Rendered Oil & Gas division order royalty payment audits on behalf of private landowners.

Kilburn Law Firm, P.L.L.C., Houston, Texas — *May, 2012 - September, 2013*
(A Martindale Hubbell AV Preeminent rated Law Firm)
Senior Associate Oil & Gas Attorney

- Drafted original drilling title opinions, supplemental title opinions, and division order title opinions;
- Trusted with drafting numerous trial title opinions for new and/or prospective clients;
- Extensive experience with highly complex tract ownership as well as unitized leasehold interests;
- Trained new attorneys, and reviewed associate and contract attorney title opinions prior to their issuance.

The Law Office of Harry L. Blomquist, III, P.C., San Antonio, Texas — *October, 2011 - May, 2012*
Of Counsel Oil & Gas Attorney

- Drafted original drilling title opinions, supplemental title opinions, and division order title opinions;
- Calculated complex unitized/communitized leasehold interests.

B. R. Allen & Associates, L.L.P., Boerne, Texas — *June, 2011 - October, 2011*
Associate Oil & Gas Attorney

- Conducted stand-up and in-house title review in numerous counties in the Eagle Ford Shale play in the preparation and drafting of original drilling title opinions.

Abstract & Title Resources, Inc., Boerne, Texas — *January, 2011 - June, 2011*
(A subsidiary of B. R. Allen & Associates, L.L.P.)
Oil & Gas Petroleum Landman

- Conducted courthouse research in the preparation of: original and supplemental runsheets; created surface, mineral and leasehold ownership reports; deed plotted tracts; created flowcharts visually depicting the ownership history of tracts of land; and, supervised and managed a team of seven (7) field landmen.

EDUCATION

St. Mary's University, School of Law, San Antonio, Texas — *August 2007 - May 2010*
Juris Doctorate

University of Texas at San Antonio, San Antonio, Texas — *August 2003 - December 2006*
Bachelor of Liberal & Fine Arts in Psychology

FAE II OPERATING, LLC
Case No. 22133
Exhibit A-1

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

APPLICATION OF FAE II OPERATING, LLC FOR REINSTATEMENT OF INJECTION AUTHORITY AND AUTHORIZATION TO CONVERT PRODUCING WELLS TO INJECTORS FOR WATERFLOOD OPERATIONS, LEA COUNTY, NEW MEXICO

Case No. 22133

APPLICATION

Pursuant to 19.15.26.8 NMAC and Oil Conservation Division ("Division") Order No. R-3200, FAE II Operating, LLC ("FAE") (OGRID No. 329326) applies for an order: (1) reinstating injection authority for its State "A" A/C No. 65, 67, 69 and 71 wells within its Blackbeard North Waterflood Project ("Project") within the Seven Rivers and Queen formations comprised of portions of Sections 5, 7, 8 and 9, Township 22 South, Range 36 East, Lea County, New Mexico; and (2) authorizing FAE to convert its State "A" A/C No. 64, 68, 70 and 72 producing wells to injectors for waterflood operations. In support of its Application, FAE states the following.

1. On March 14, 1967, the Oil Conservation Commission ("Commission") entered Order No. R-3200 in Case No. 3531 establishing the Project in the South Eunice pool by injection of water into the Seven Rivers and Queen formations through six wells located in Sections 5, 8 and 9 of Township 22 South, Range 36 East. On September 15, 1970, the Commission entered Order No. R-3200-A in Case No. 4418 authorizing the substitution of the wells in R-3200 with six different wells located in Sections 8 and 9 of T22S-R36E. On September 6, 1983, the Division entered Administrative Order No. WFX-518 authorizing the expansion of the Project to include injection operations in the State "A" A/C 2 No. 65, 67, 69, and 71 wells in Sections 8 and 9 of T22S-R36E. On September 11, 1984, the Division entered Administrative Order No. WFX-530

FAE II OPERATING, LLC
Case No. 22133
Exhibit A-2

authorizing the expansion of the Project to include injection operations in the State "A" A/C 2 No. 64, 68, 70, and 72 wells in Sections 8 and 9 of T22S-R36E (collectively the "Orders").

2. The approved Project area is comprised of the following described State lands located in Township 22 South, Range 36 East, Lea County, New Mexico:

Section 5: W/2, SE/4
Section 7: E/2, SW/4
Section 8: all
Section 9: N/2, SW/4

3. The following wells ("Wells") authorized under the Orders are located within the South Eunice pool of the Seven Rivers and Queen formations:

Well Name (API: 30-025-)	Location within T22S-R36E	Injection interval
State "A" A/C 2 No. 64 (28273)	Unit A, 1250 FNL & 1250 FEL, Sec. 8	3720'- 3885'
State "A" A/C 2 No. 65 (28274)	Unit E, 1345 FNL & 25 FWL, Sec. 9	3695'- 3875'
State "A" A/C 2 No. 67 (28276)	Unit K, 2615 FSL & 1345 FWL, Sec. 9	3660'- 3850'
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State "A" A/C 2 No. 69 (28278)	Unit I, 2615 FSL & 1295 FEL, Sec. 8	3700'- 3890'
State "A" A/C 2 No. 70 (28279)	Unit P, 1295 FSL & 1295 FEL, Sec. 8	3725'- 3890'
State "A" A/C 2 No. 71 (28280)	Unit M, 1295 FSL & 25 FWL, Sec. 9	3715'- 3890'
State "A" A/C 2 No. 72 (28281)	Unit K, 1410 FSL & 1440 FWL, Sec. 9	3675'- 3875'

4. The "unitized interval" was defined by Order R-12496-A as the South Eunice pool, which has a depth of 3,269' to 3,983' in the State A A/C 2-39 (API: 3002508858) log.

5. FAE acquired the Project in June 2021 and has been designated operator of the Wells.

6. Prior to FAE's acquisition of the Project, production within the Project was maintained, but injection authority for certain Wells expired at various times.

7. FAE proposes to convert its State "A" A/C No. 64, 68, 70 and 72 wells from producers to injectors for waterflood operations and reinstate injection into its State "A" A/C No.

65, 67, 69 and 71 wells for waterflood operations. FAE plans to inject water through a closed system of perforations at depths of 3,599' to 3,950' within the Seven Rivers and Queen formations.

8. The proposed average injection pressure through the Wells is expected to be approximately 700 psi. The expected maximum injection pressure will be calculated relative to the depth of the highest perforation, using a factor of 0.2 psi/ft. The proposed Wells will have perforation depths of approximately 3,640' and 3,599' (or 728 psi and 720 psi maximum injection pressure, respectively). Pending results of a step rate test, the maximum injection pressure could potentially be increased to a factor of 0.6 psi/ft (or 2,184 psi at 3,640' and 2,160 psi at 3,599').

9. The proposed average injection rate is expected to be approximately 600 barrels of water per day. The maximum daily injection rate will be 1,000 barrels of water per day or as permitted by the Division.

10. The source of the water to be injected will be produced water from other Seven Rivers and Queen wells within the vicinity of the Project and water transfer lines.

11. Injection will be into the Seven Rivers and Queen formations.

12. FAE's proposed injection operations can be conducted in a safe and responsible manner without causing waste, impairing correlative rights or endangering fresh water, public health or the environment.

13. Granting FAE's application will protect correlative rights and prevent waste.

14. A copy of FAE's C-108 Application for Authorization to Inject is attached as **Exhibit A**.

WHEREFORE, Applicant requests this Application be set for hearing before a duly appointed examiner of the Oil Conservation Division on September 9, 2021, and that after notice and hearing as required by law, the Division enter an Order authorizing FAE to convert its State "A" A/C No. 64, 68, 70 and 72 wells from producers to injectors and reinstating injection authority

for FAE's State "A" A/C No. 65, 67, 69 and 71 wells at the intervals, pressures, volumes and rates indicated.

Respectfully submitted,

HINKLE SHANOR LLP

/s/ Dana S. Hardy

Dana S. Hardy
Michael Rodriguez
P.O. Box 2068
Santa Fe, NM 87504-2068
Phone: (505) 982-4554
Facsimile: (505) 982-8623
dhardy@hinklelawfirm.com
mrodriguez@hinklelawfirm.com
Counsel for FAE II Operating

Application of FAE II Operating, LLC for Reinstatement of Injection Authority and Authorization to Convert Producing Wells to Injectors for Waterflood Operations, Lea County, New Mexico. Applicant applies for an order: (1) reinstating injection authority for its State "A" A/C No. 65, 67, 69 and 71 wells within its Blackbeard North Waterflood Project ("Project") within the Seven Rivers and Queen formations comprised of portions of Sections 5, 7, 8 and 9, Township 22 South, Range 36 East, Lea County, New Mexico; and (2) authorizing FAE to convert its State "A" A/C No. 64, 68, 70 and 72 producing wells to injectors for waterflood operations. The following wells ("Wells") authorized under the Orders are located within the South Eunice pool of the Seven Rivers and Queen formations:

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State "A" A/C 2 No. 67 (28276)	Unit K, 2615 FSL & 1345 FWL, Sec. 9	3660'- 3850'
State "A" A/C 2 No. 68 (28277)	Unit E, 2570 FNL & 70 FWL, Sec. 9	3695'- 3885'
State "A" A/C 2 No. 69 (28278)	Unit I, 2615 FSL & 1295 FEL, Sec. 8	3700'- 3890'
State "A" A/C 2 No. 70 (28279)	Unit P, 1295 FSL & 1295 FEL, Sec. 8	3725'- 3890'
State "A" A/C 2 No. 71 (28280)	Unit M, 1295 FSL & 25 FWL, Sec. 9	3715'- 3890'
State "A" A/C 2 No. 72 (28281)	Unit K, 1410 FSL & 1440 FWL, Sec. 9	3675'- 3875'

Applicant proposes to convert its State "A" A/C No. 64, 68, 70 and 72 wells from producers to injectors for waterflood operations and reinstate injection into its State "A" A/C No. 65, 67, 69 and 71 wells for waterflood operations. FAE plans to inject water through a closed system of perforations at depths of 3,599' to 3,950' within the Seven Rivers and Queen formations. The proposed average injection pressure through the Wells is expected to be approximately 700 psi. The expected maximum injection pressure will be calculated relative to the depth of the highest perforation, using a factor of 0.2 psi/ft. The proposed Wells will have perforation depths of approximately 3,640' and 3,599' (or 728 psi and 720 psi maximum injection pressure, respectively). Pending results of a step rate test, the maximum injection pressure could potentially be increased to a factor of 0.6 psi/ft (or 2,184 psi at 3,640' and 2,160 psi at 3,599'). The proposed average injection rate is expected to be approximately 600 barrels of water per day. The maximum daily injection rate will be 1,000 barrels of water per day or as permitted by the Division. The Unit acreage is located approximately 7.5 miles southwest of Eunice, New Mexico.

Exhibit A-3

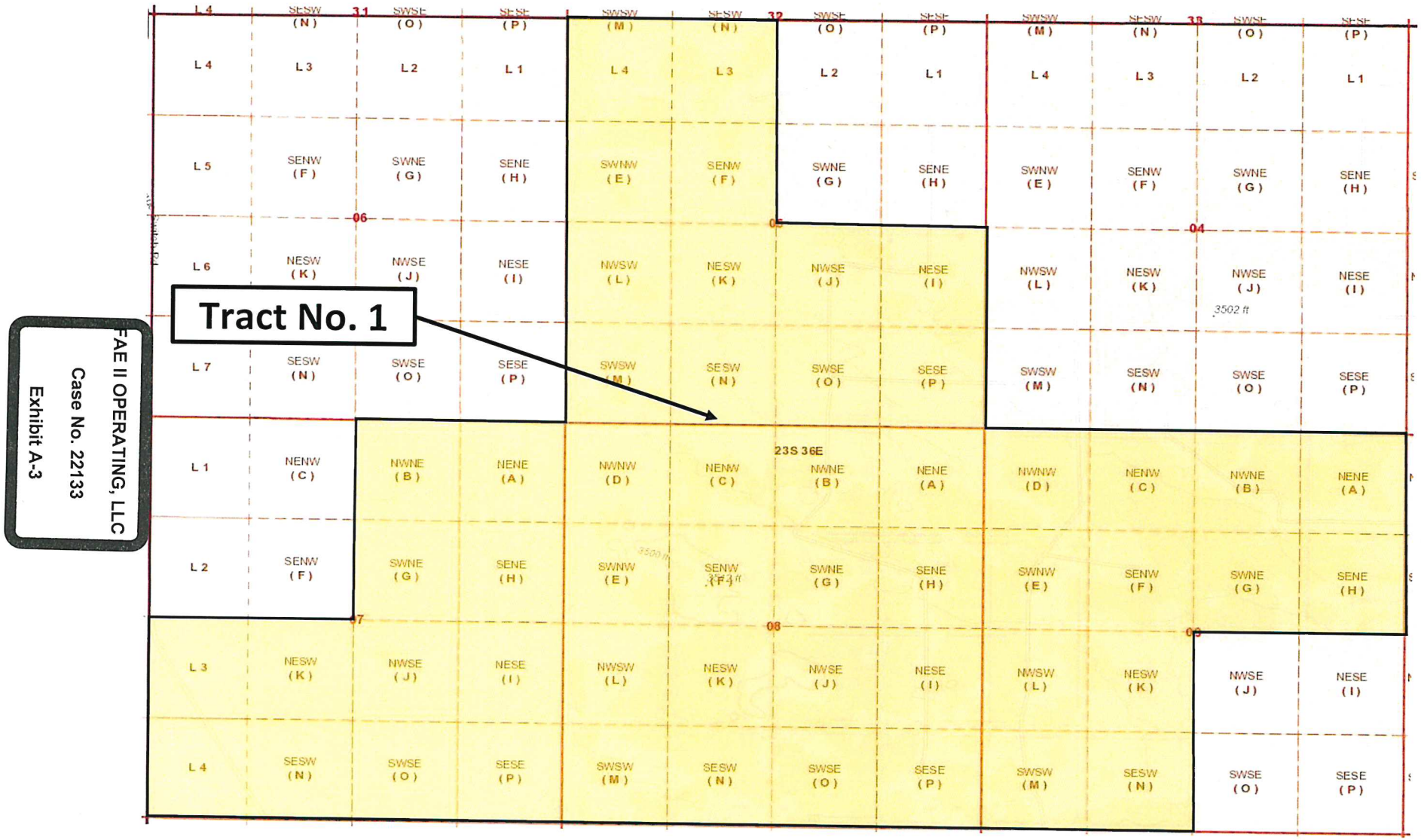
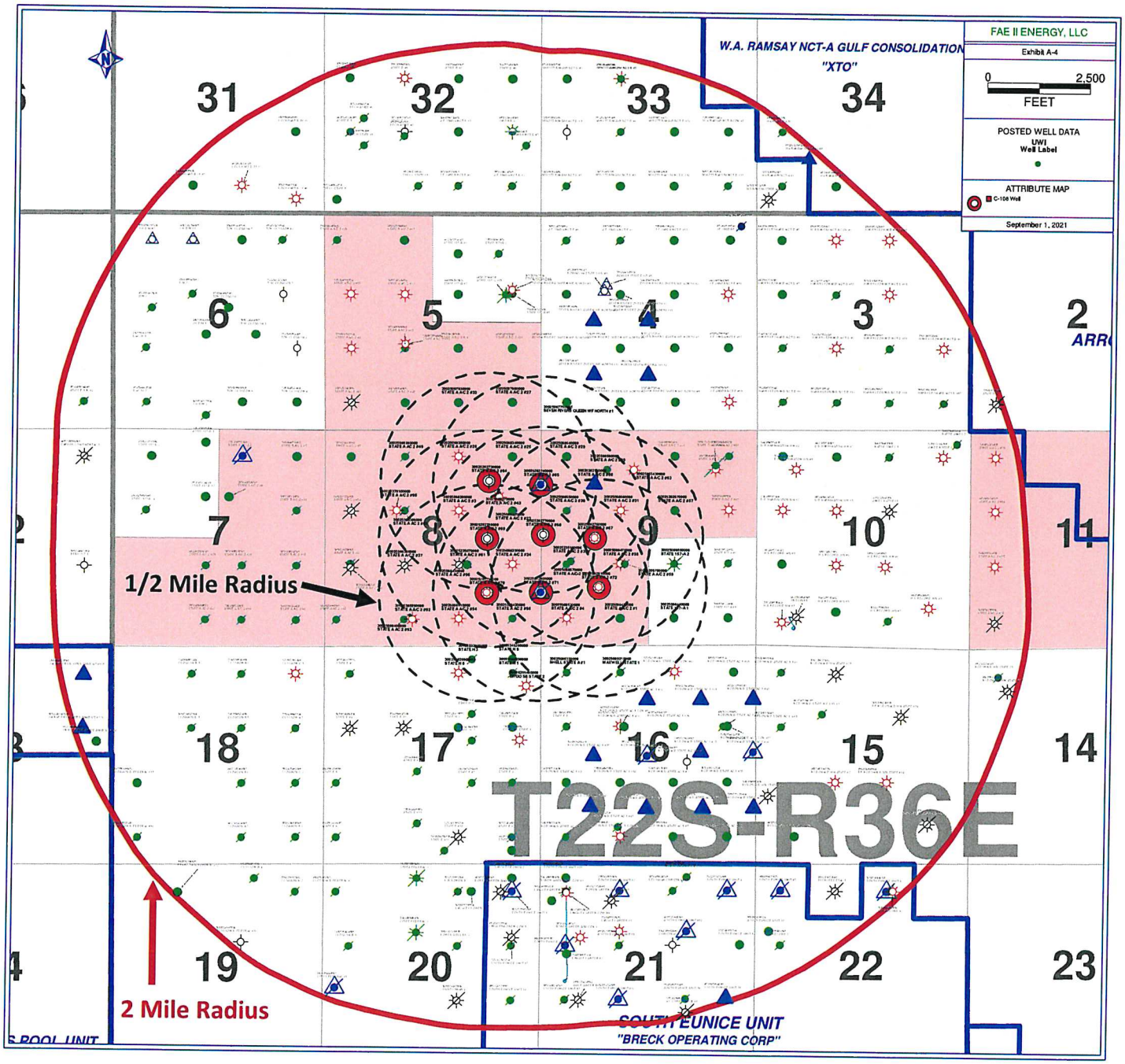

Tract No. 1
FAE II OPERATING, LLC
Case No. 22133
Exhibit A-3
23S 36E
31
32
33
06
05
04
07
08
09
3502 ft

Exhibit A-3

(Continued)

Tract #	Owner Name	Subject Lease	Interest Type	Working Interest	Net Revenue Interest	Section	Township	Range	County	State	Legal Description	Acreage	Depths
1	FAE II, LLC 11757 Katy Freeway, Suite 725 Houston, Texas 77079	State of New Mexico A0-0983-0004	WI	0.95756250	0.78998908	5	22S	36E	Lea	NM	W2 & SE	480.00	Surface to the base of the San Andres Formation
						7	22S	36E	Lea	NM	E2 & SW	480.00	
						8	22S	36E	Lea	NM	All	640.00	
						9	22S	36E	Lea	NM	N2 & SW	480.00	
1	Southwest Royalties, Inc. PO Box 53570 Midland, Texas 75373	State of New Mexico A0-0983-0004	WI	0.04243750	0.03713280	5	22S	36E	Lea	NM	W2 & SE	480.00	Surface to the base of the San Andres Formation
						7	22S	36E	Lea	NM	E2 & SW	480.00	
						8	22S	36E	Lea	NM	All	640.00	
						9	22S	36E	Lea	NM	N2 & SW	480.00	
1	Commissioner of Public Lands PO Box 2308 Santa Fe, New Mexico 75284	State of New Mexico A0-0983-0004	RI	0.00000000	0.12500000	5	22S	36E	Lea	NM	W2 & SE	480.00	Surface to the base of the San Andres Formation
						7	22S	36E	Lea	NM	E2 & SW	480.00	
						8	22S	36E	Lea	NM	All	640.00	
						9	22S	36E	Lea	NM	N2 & SW	480.00	
				1.00000000	**0.95212188**							**2,080.00**	

Blackbeard North Waterflood Project

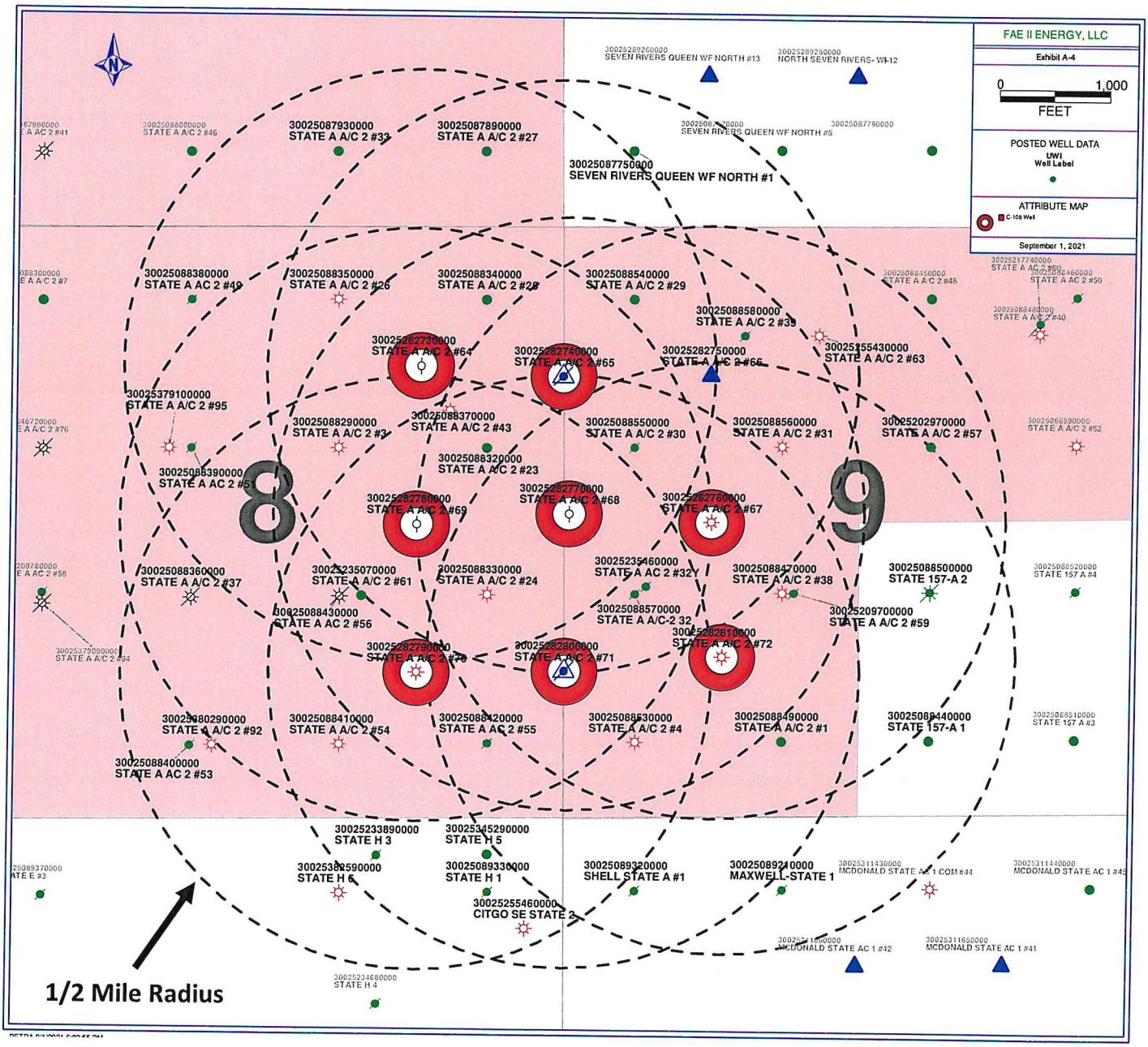


FAE II OPERATING, LLC

Case No. 22133

Exhibit A-4

Blackbeard North Waterflood Project



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: ___X___ Secondary Recovery _____Pressure Maintenance _____Disposal _____Storage
Application qualifies for administrative approval? _____Yes ___X___No

II. OPERATOR: FAE II Operating, LLC

ADDRESS: 11757 Katy Freeway, Suite 725, Houston, TX 77079

CONTACT PARTY: Jessica LaMarro PHONE: (832) 706-0049

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 __X__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 Overlying 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: Jessica LaMarro TITLE: Geologist

SIGNATURE: _____ DATE: 07/26/2021

E-MAIL ADDRESS: Jessica@faenergyus.com

XV. 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

FAE II OPERATING, LLC
Case No. 22133
Exhibit A-5

III. Well Data

INJECTION WELL DATA SHEET

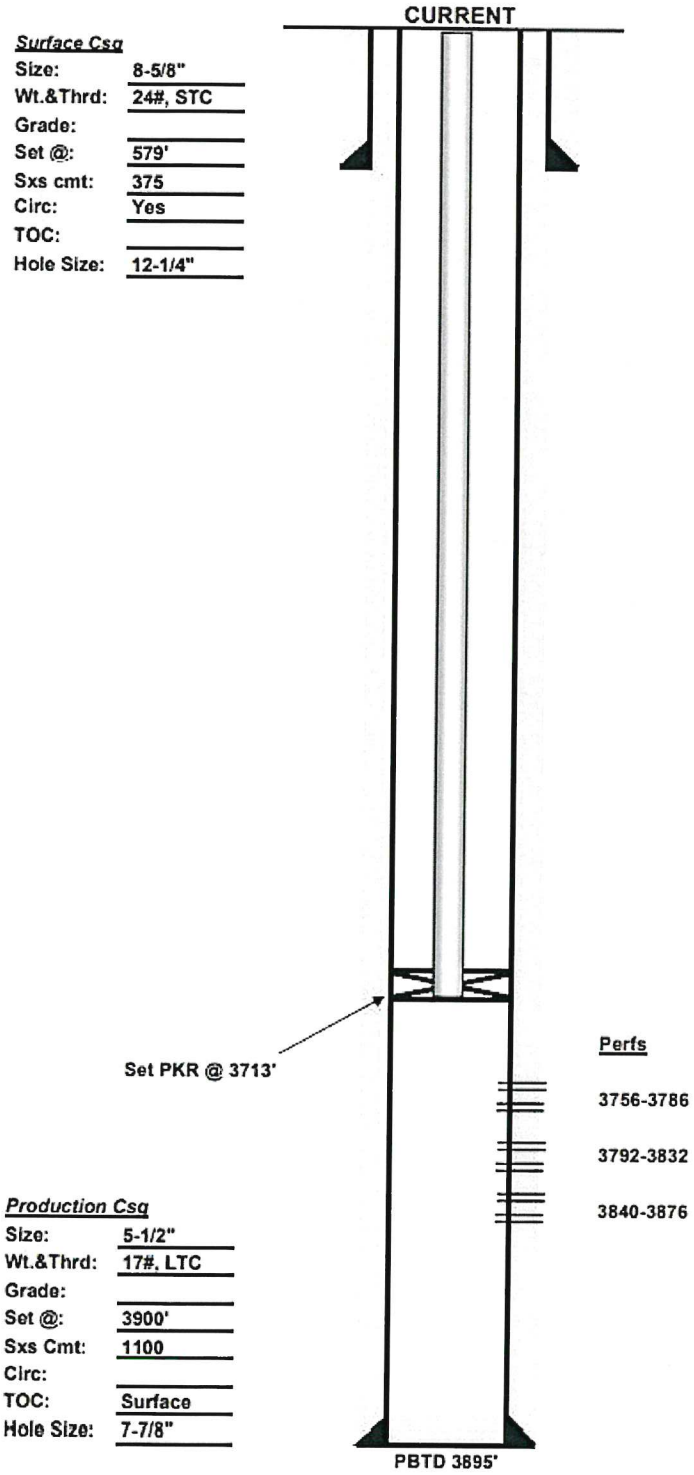
OPERATOR: FAE II OPERATING LLC API: 30-025-28273

WELL NAME & NUMBER: State A A/C 2 #64

WELL LOCATION: **1250 FNL 1250 FEL** | A | 8 | 22S | 36E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

CURRENT WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size:	12-1/4"
Casing Size:	8-5/8"
Depth Set:	579'
Top of Cement:	surface
Cement with	375 sx
Method Determined:	circulated

Production Casing

Hole Size:	7-7/8"
Casing Size:	5-1/2"
Depth Set:	3,900'
Top of Cement:	surface
Cement with	1100 sx
Method Determined:	circulated

Proposed Injection Interval

Queen Inj. Zone
~3,720' to 3,885'
Zone will be Perforated

Tubing

Tubing Size:	2-3/8"
Lining Material:	Cement
Type of Packer:	Onis Perma-Latch
Packer Depth Set:	~3815'

Additional Data

1. NOT a new well.
    1. Originally an oil well.
    2. Converted to an injection well in 1984.
    3. Currently TA'd.
2. Injection Formation: Queen
3. Pool: EUNICE;SEVEN RIVERS-QUEEN, SOUTH
4. Well has NOT been perforated in another zone.
5. Overlying Oil Zone: Seven Rivers
    - Depth of Overlying Zone: 3,322'

   Underlying Oil Zone: Grayburg
    - Depth of Underlying Zone: ±4000'

III. Well Data

INJECTION WELL DATA SHEET

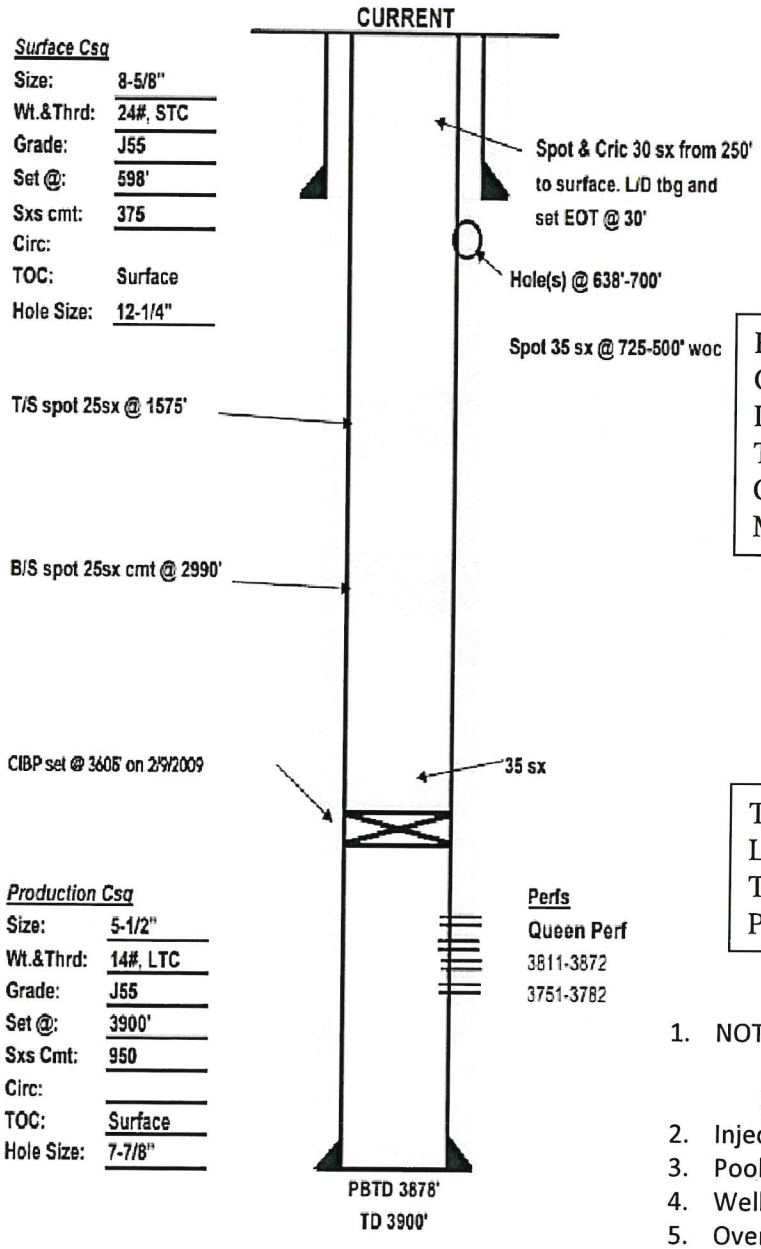
OPERATOR: FAE II OPERATING LLC API: 30-025-28274

WELL NAME & NUMBER: STATE A A/C 2 #065

WELL LOCATION: **1345 FNL & 25 FWL** | E | 9 | 22S | 36E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

CURRENT WELLBORE SCHEMATIC



TD: 3,900

WELL CONSTRUCTION DATA

Surface Casing

Hole Size:	12-1/2"
Casing Size:	8-5/8"
Depth Set:	598'
Top of Cement:	surface
Cement with	375 sx
Method Determined:	circulated

Production Casing

Hole Size:	7-7/8"
Casing Size:	5-1/2"
Depth Set:	3,900'
Top of Cement:	surface
Cement with	950 sx
Method Determined:	circulated

Proposed Injection Interval

Queen Inj. Zone
~3,695' to 3,875'
Zone will be Perforated

Tubing

Tubing Size:	2-3/8"
Lining Material:	Cement
Type of Packer:	Rlse
Packer Depth Set:	~3606'

Additional Data

1. NOT a new well.
    1. Originally an injection well.
    2. Currently plugged.
2. Injection Formation: Queen
3. Pool: EUNICE;SEVEN RIVERS-QUEEN, SOUTH
4. Well has NOT been perforated in another zone.
5. Overlying Oil Zone: Seven Rivers Formation
    - Depth of Overlying Zone: 3,310'

   Underlying Oil Zone: Grayburg
    - Depth of Underlying Zone: ±4000'

III. Well Data

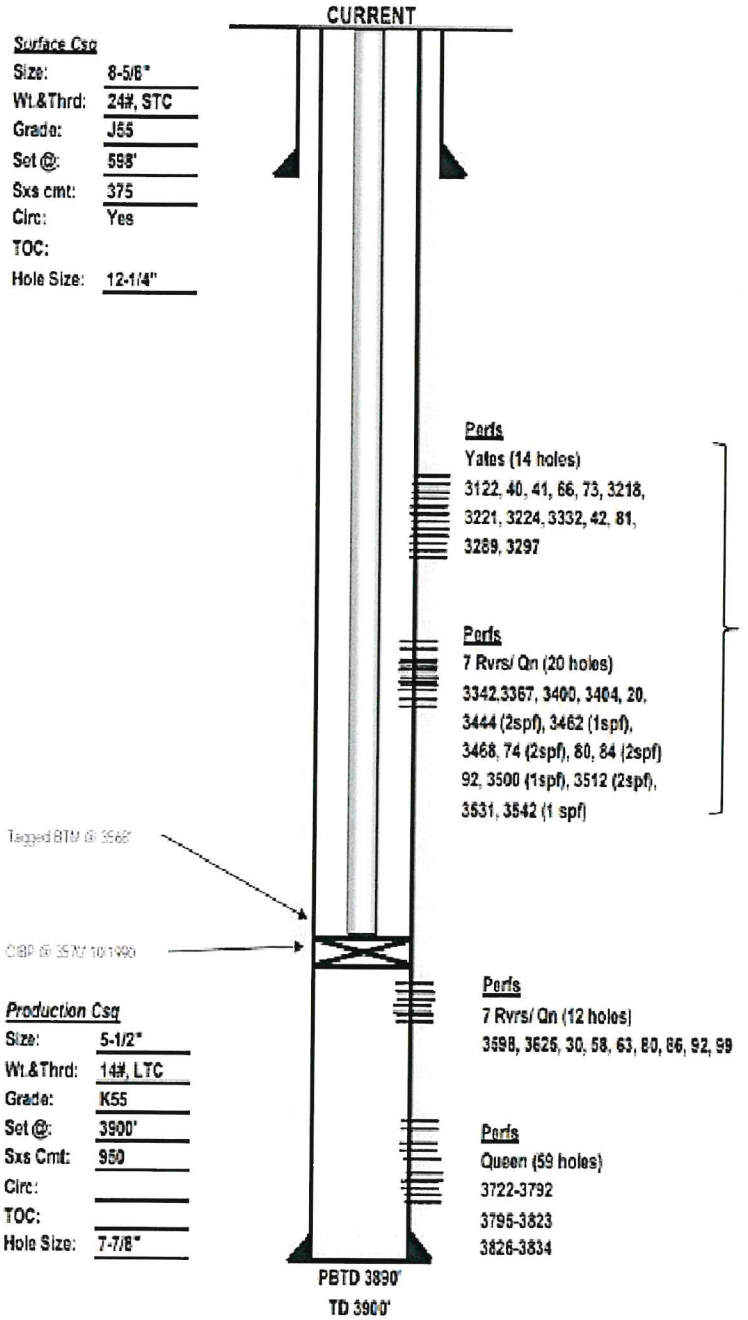
INJECTION WELL DATA SHEET

OPERATOR: FAE II OPERATING LLC API: 30-025-28276

WELL NAME & NUMBER: STATE A A/C 2 #067

WELL LOCATION:	2615 FSL & 1345 FWL	K	9	22S	36E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

CURRENT WELLBORE SCHEMATIC



TD: 3,900

WELL CONSTRUCTION DATA

Surface Casing

Hole Size:	12-1/2"
Casing Size:	8-5/8"
Depth Set:	598'
Top of Cement:	surface
Cement with	375 sx
Method Determined:	circulated

Production Casing

Hole Size:	7-7/8"
Casing Size:	5-1/2"
Depth Set:	3,900'
Top of Cement:	surface
Cement with	950 sx
Method Determined:	circulated

Proposed Injection Interval

Queen Inj. Zone
~3,660' to 3,850'
Zone will be Perforated

Tubing

Tubing Size: 2-7/8"
Lining Material: Cement
Type of Packer: OTIS perma-latch
Packer Depth Set: ~3570'

Additional Data

1. NOT a new well.
    1. Currently a gas well.
2. Injection Formation: Queen
3. Pool: EUNICE;SEVEN RIVERS-QUEEN, SOUTH & JALMAT;TAN-YATES-7 RVRS (GAS)
4. Planned injection interval is plugged with a CIBP and Jalmat perfs are open (see WBD).
5. Overlying Oil Zone: Seven Rivers Formation
    - Depth of Overlying Zone: 3,303'

   Underlying Oil Zone: Grayburg
    - Depth of Underlying Zone: ±4000'

III. Well Data

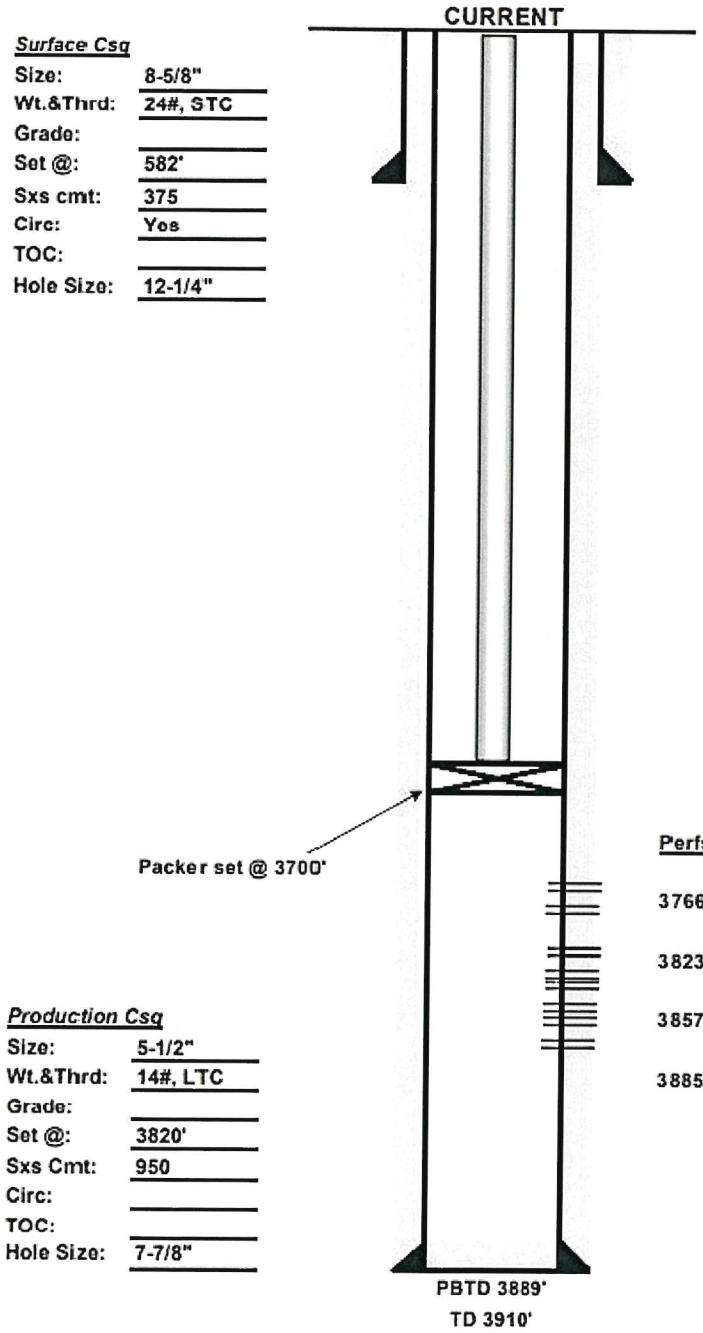
INJECTION WELL DATA SHEET

OPERATOR: FAE II OPERATING LLC API: 30-025-28277

WELL NAME & NUMBER: STATE A A/C 2 #068

WELL LOCATION:	2570 FNL & 70 FWL	E	9	22S	36E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

CURRENT WELLBORE SCHEMATIC



TD: 3,910

WELL CONSTRUCTION DATA

Surface Casing

Hole Size:	12-1/2"
Casing Size:	8-5/8"
Depth Set:	582'
Top of Cement:	surface
Cement with	375 sx
Method Determined:	circulated

Production Casing

Hole Size:	7-7/8"
Casing Size:	5-1/2"
Depth Set:	3,820'
Top of Cement:	surface
Cement with	950 sx
Method Determined:	circulated

Proposed Injection Interval

Queen Inj. Zone
~3,695' to 3,885'
Zone will be Perforated

Tubing

Tubing Size: 2-3/8"
Lining Material: Cement
Type of Packer: OTIS perma-latch
Packer Depth Set: ~3700'

Additional Data

1. NOT a new well.
   1. Originally an oil well.
   2. Converted to an injection well in 1984.
   3. Currently TA'd.
2. Injection Formation: Queen
3. Pool: EUNICE;SEVEN RIVERS-QUEEN, SOUTH
4. Well has NOT been perforated in another zone.
5. Overlying Oil Zone: Seven Rivers Formation
   - Depth of Overlying Zone: 3,318'

   Underlying Oil Zone: Grayburg
   - Depth of Underlying Zone: ±4000'

III. Well Data

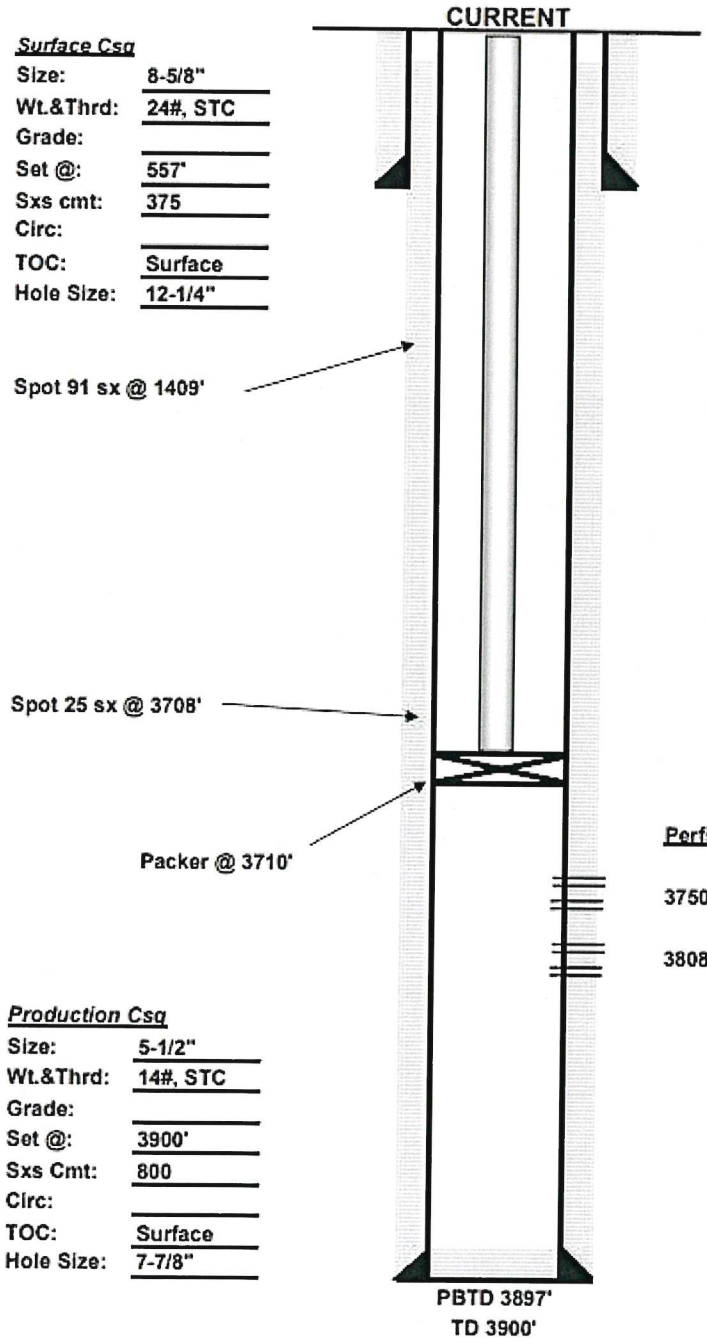
INJECTION WELL DATA SHEET

OPERATOR: FAE II OPERATING LLC API: 30-025-28278

WELL NAME & NUMBER: STATE A A/C 2 #069

WELL LOCATION:	2615 FSL & 1295 FEL	I	8	22S	36E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

CURRENT WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size:	12-1/2"
Casing Size:	8-5/8"
Depth Set:	557'
Top of Cement:	surface
Cement with	375 sx
Method Determined:	circulated

Production Casing

Hole Size:	7-7/8"
Casing Size:	5-1/2"
Depth Set:	3,900'
Top of Cement:	surface
Cement with	800 sx
Method Determined:	circulated

Proposed Injection Interval

Queen Inj. Zone
~3,700' to ~3,890'
Zone will be Perforated

Tubing

Tubing Size:	2-3/8"
Lining Material:	Cement
Type of Packer:	OTIS perma-latch
Packer Depth Set:	~3710'

Additional Data

1. NOT a new well.
    1. Originally an injection well.
    2. Currently TA'd.
2. Injection Formation: Queen
3. Pool: EUNICE;SEVEN RIVERS-QUEEN, SOUTH
4. Well has NOT been perforated in another zone.
5. Overlying Oil Zone: Seven Rivers Formation
    - Depth of Overlying Zone: 3,356'

   Underlying Oil Zone: Grayburg
    - Depth of Underlying Zone: ±4000'

III. Well Data

INJECTION WELL DATA SHEET

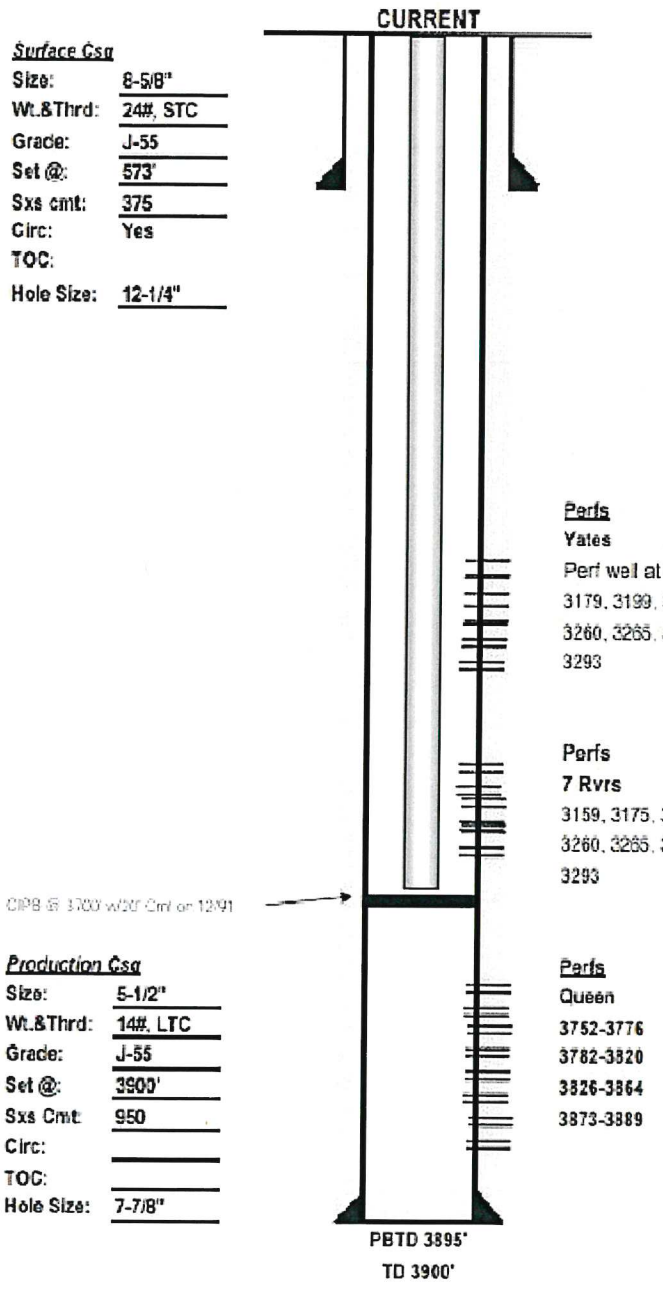
OPERATOR: FAE II OPERATING LLC API: 30-025-28279

WELL NAME & NUMBER: STATE A A/C 2 #070

WELL LOCATION: **1295 FSL & 1295 FEL** P 8 22S 36E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

CURRENT WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size:	12-1/2"
Casing Size:	8-5/8"
Depth Set:	573'
Top of Cement:	surface
Cement with	375 sx
Method Determined:	circulated

Production Casing

Hole Size:	7-7/8"
Casing Size:	5-1/2"
Depth Set:	3,900'
Top of Cement:	surface
Cement with	800 sx
Method Determined:	circulated

Proposed Injection Interval

Queen Inj. Zone
~3,725' to ~3,890'
Zone will be Perforated

Tubing

Tubing Size: 2-3/8"
Lining Material: Cement
Type of Packer: OTIS perma-latch
Packer Depth Set: ~3700'

Additional Data

1. NOT a new well.
    1. Currently a gas well.
2. Injection Formation: Queen
3. Pool: EUNICE;SEVEN RIVERS-QUEEN, SOUTH & JALMAT;TAN-YATES-7 RVRS (GAS)
4. Planned injection interval is plugged with a CIBP and Jalmat perfs are open (see WBD).
5. Overlying Oil Zone: Seven Rivers Formation
    - Depth of Overlying Zone: +3,730'

Underlying Oil Zone: Grayburg
- Depth of Underlying Zone: ±4000'

III. Well Data

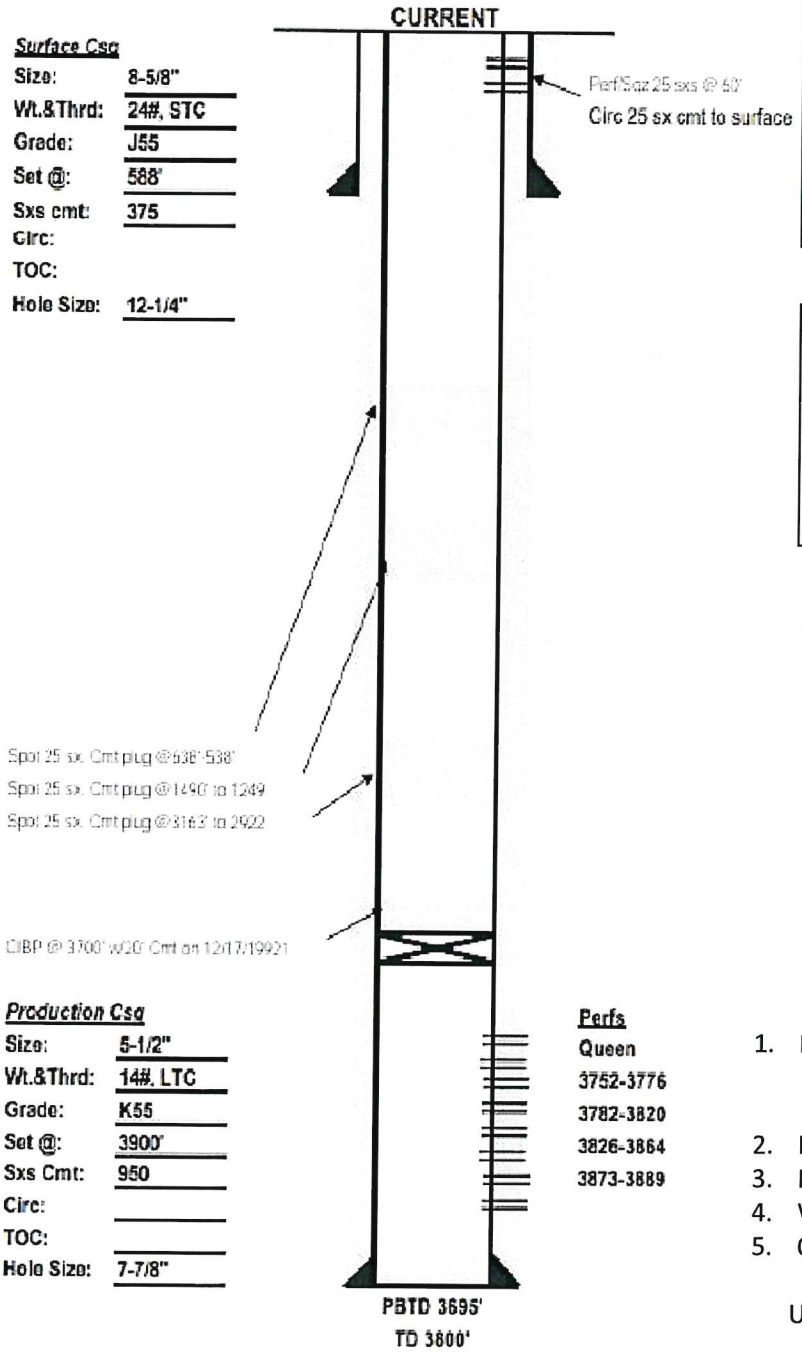
INJECTION WELL DATA SHEET

OPERATOR: FAE II OPERATING LLC API: 30-025-28280

WELL NAME & NUMBER: STATE A A/C 2 #071

WELL LOCATION:	1295 FSL & 25 FWL	M	9	22S	36E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

CURRENT WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size:	12-1/4"
Casing Size:	8-5/8"
Depth Set:	588'
Top of Cement:	surface
Cement with	375 sx
Method Determined:	circulated

Production Casing

Hole Size:	7-7/8"
Casing Size:	5-1/2"
Depth Set:	3,900'
Top of Cement:	surface
Cement with	950 sx
Method Determined:	circulated

Proposed Injection Interval

Queen Inj. Zone
~3,715' to ~3,890'
Zone will be Perforated

Tubing

Tubing Size: 2-3/8"
Lining Material: Cement
Type of Packer: OTIS perma-latch
Packer Depth Set: ~3710'

Additional Data

1. NOT a new well.
    1. Originally an injection well.
    2. Currently plugged.
2. Injection Formation: Queen
3. Pool: EUNICE;SEVEN RIVERS-QUEEN, SOUTH
4. Well has NOT been perforated in another zone.
5. Overlying Oil Zone: Seven Rivers Formation
    - Depth of Overlying Zone: 3,333'

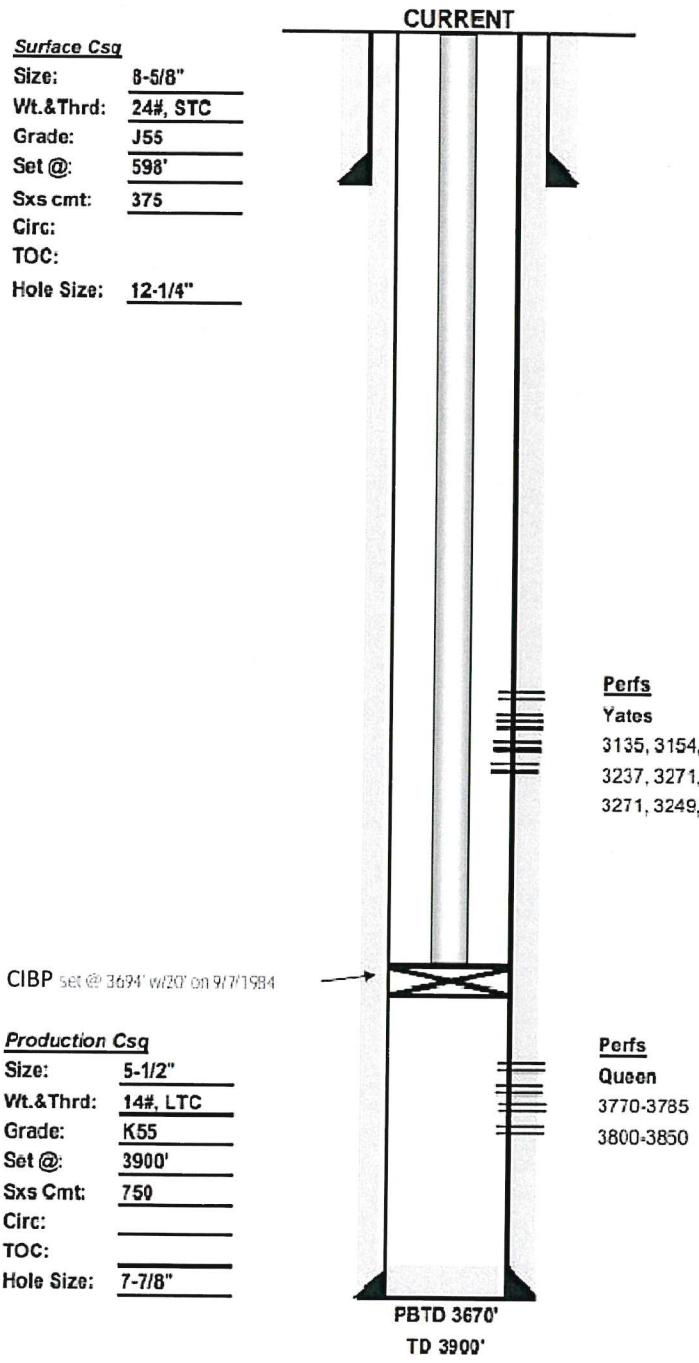
Underlying Oil Zone: Grayburg
- Depth of Underlying Zone: ±4000'

III. Well Data

INJECTION WELL DATA SHEET

OPERATOR: FAE II OPERATING LLC API: 30-025-28281
WELL NAME & NUMBER: STATE A A/C 2 #072
WELL LOCATION: **1410 FSL & 1440 FWL** K 9 22S 36E
FOOTAGE LOCATION | **UNIT** LETTER | SECTION | TOWNSHIP | RANGE

CURRENT WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size:	12-1/4"
Casing Size:	8-5/8"
Depth Set:	598'
Top of Cement:	surface
Cement with	375 sx
Method Determined:	circulated

Production Casing

Hole Size:	7-7/8"
Casing Size:	5-1/2"
Depth Set:	3,900'
Top of Cement:	surface
Cement with	750 sx
Method Determined:	circulated

Proposed Injection Interval

Queen Inj. Zone
~3,675' to ~3,875'
Zone will be Perforated

Tubing

Tubing Size: 2-3/8"
Lining Material: Cement
Type of Packer: OTIS perma-latch
Packer Depth Set: ~3694'

Additional Data

1. NOT a new well.
    1. Originally an oil well.
    2. Converted to an injection well in 1984.
    3. Converted to a gas well in 1990.
2. Injection Formation: Queen
3. Pool: JALMAT;TAN-YATES-7 RVRS (GAS)
4. Planned injection interval is plugged with a CIBP and Jalmat perfs are open (see WBD)..
5. Overlying Oil Zone: Seven Rivers Formation
    - Depth of Overlying Zone: 3,319'

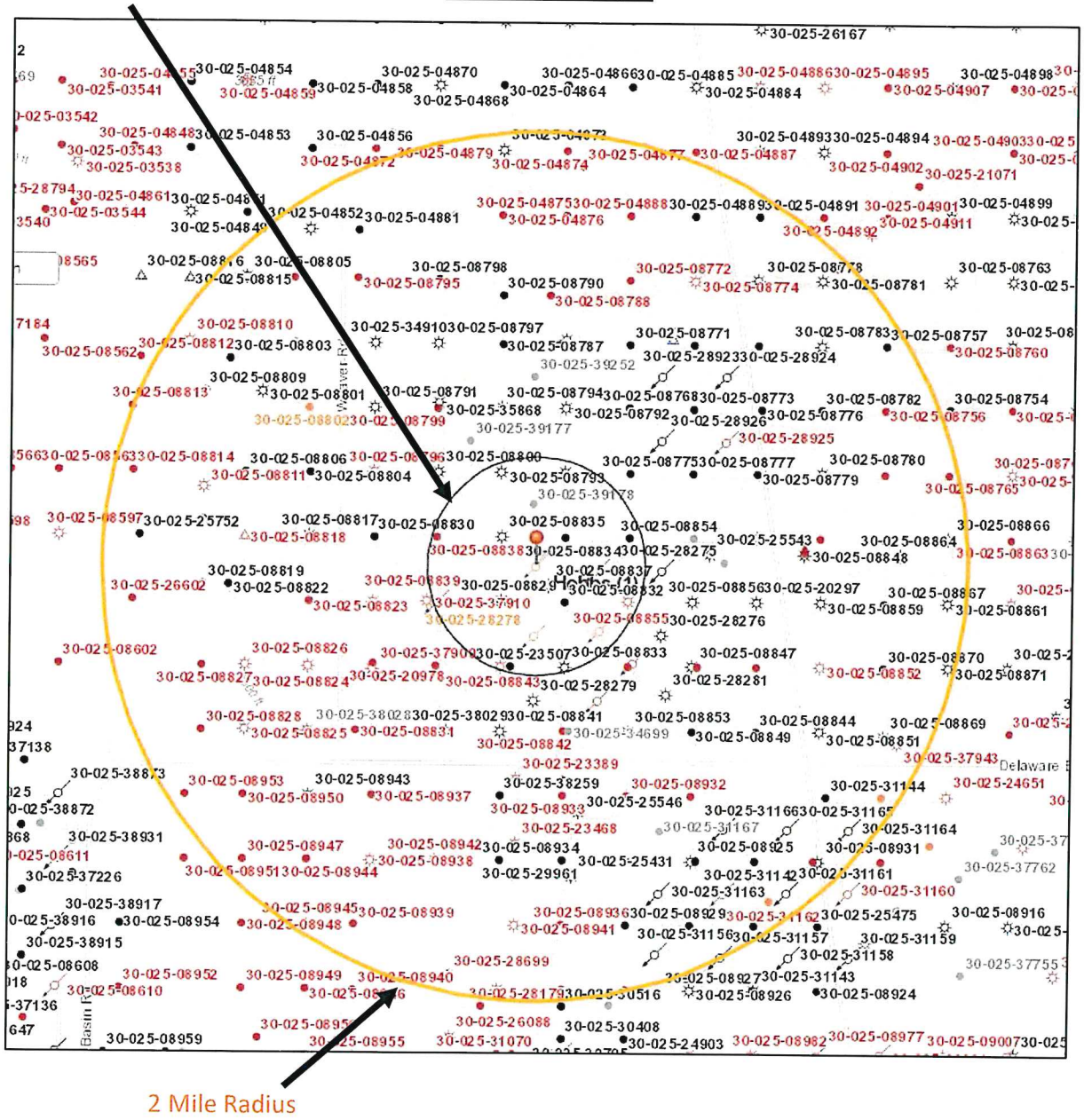
   Underlying Oil Zone: Grayburg
    - Depth of Underlying Zone: ±4000'

V.

Exhibit A1 shows 18 unique well locations within a ½ mile radius of the proposed new drill injector locations, and 185 unique well locations within a 2 mile radius.

State A A/C 2 # 64

API: 30-025-28273

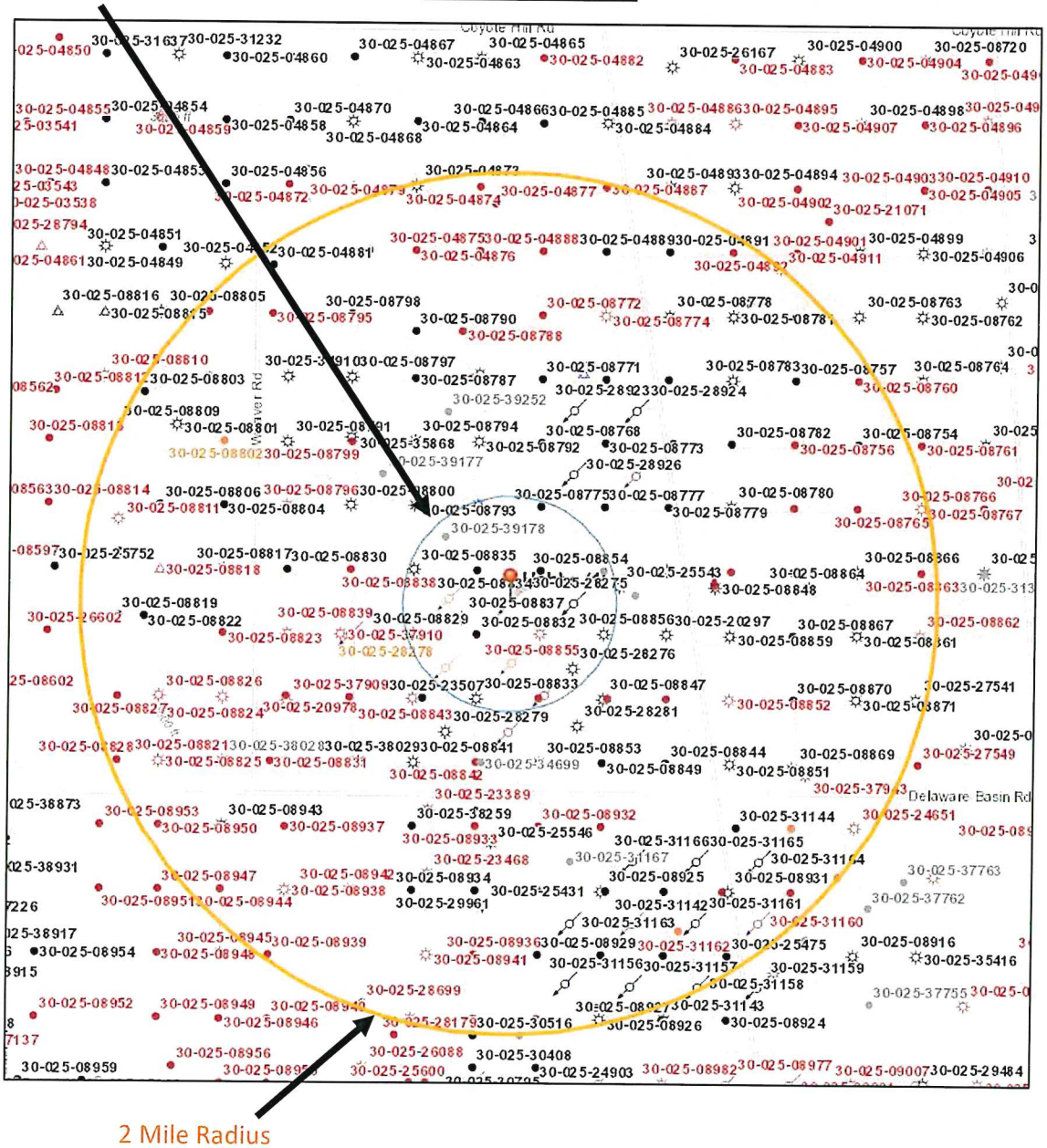


V.

Exhibit A2 shows 21 unique well locations within a ½ mile radius of the proposed new drill injector locations, and 187 unique well locations within a 2 mile radius.

State A A/C 2 # 65

API: 30-025-28274

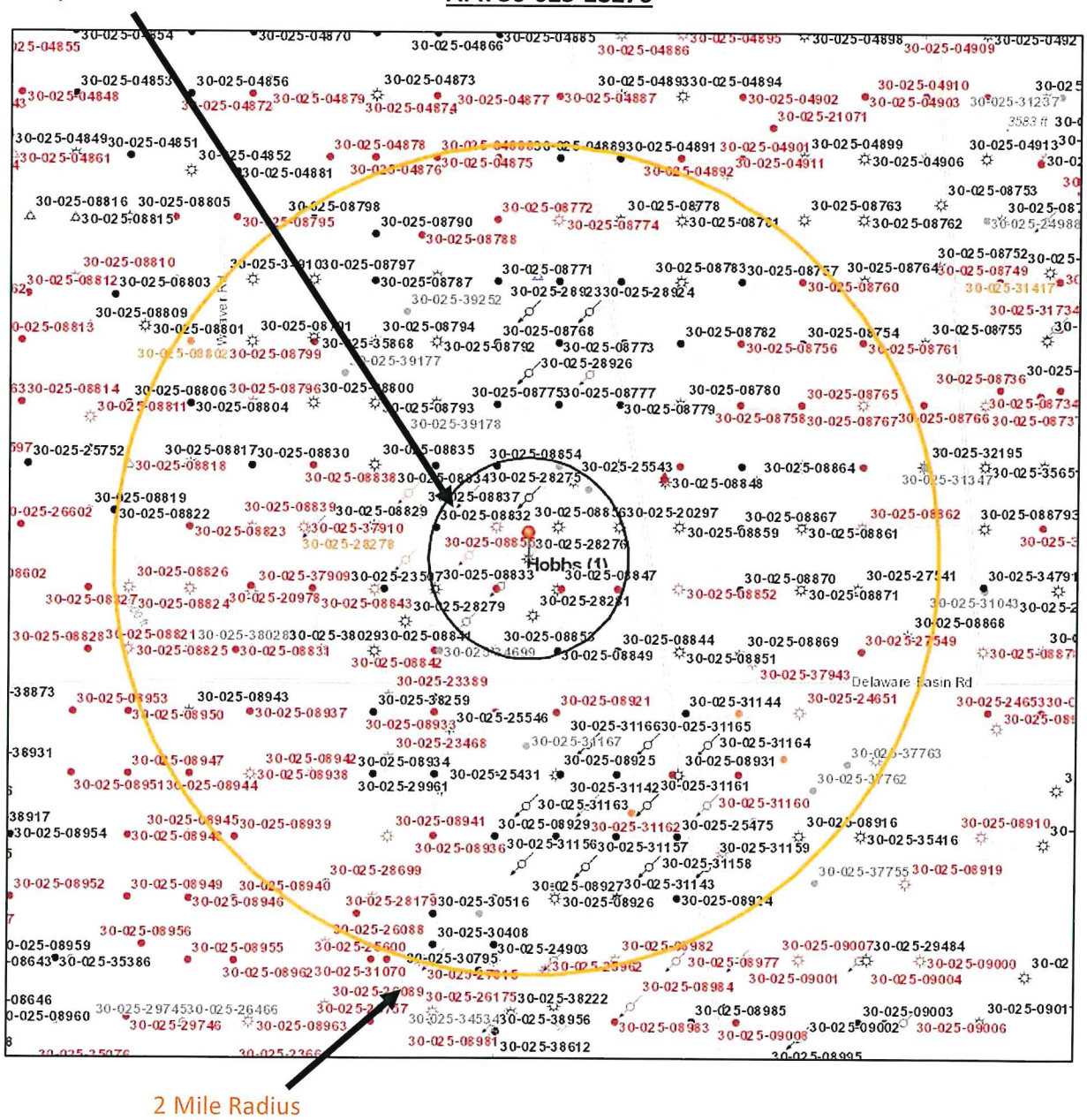


V.

Exhibit A3 shows 23 unique well locations within a ½ mile radius of the proposed new drill injector locations, and 193 unique well locations within a 2 mile radius.

State A A/C 2 # 67

API: 30-025-28276

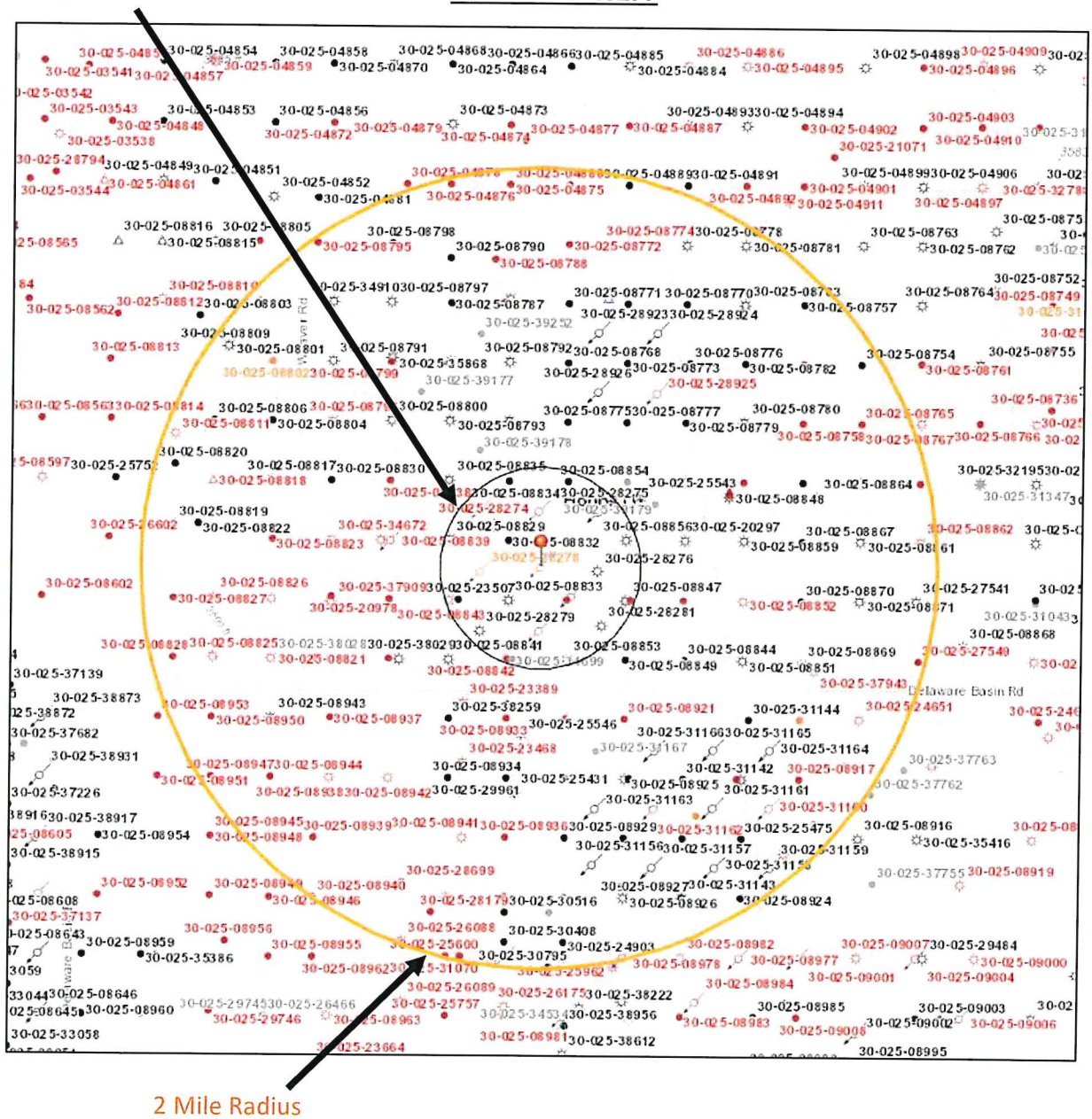


V.

Exhibit A4 shows 27 unique well locations within a ½ mile radius of the proposed new drill injector locations, and 188 unique well locations within a 2 mile radius.

State A A/C 2 # 68

API: 30-025-28277

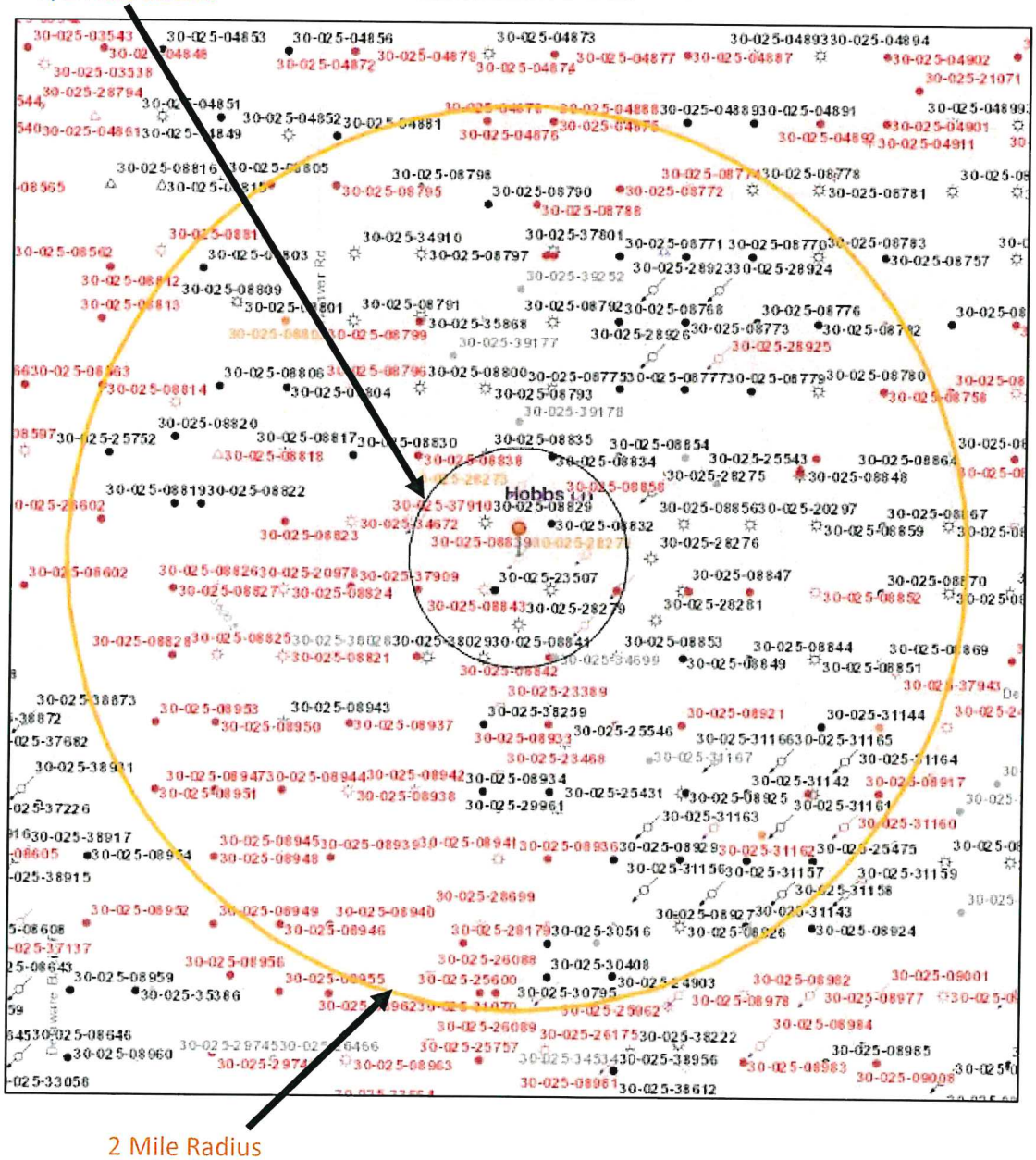


V.

Exhibit A5 shows 22 unique well locations within a ½ mile radius of the proposed new drill injector locations, and 188 unique well locations within a 2 mile radius.

State A A/C 2 # 69

API: 30-025-28278

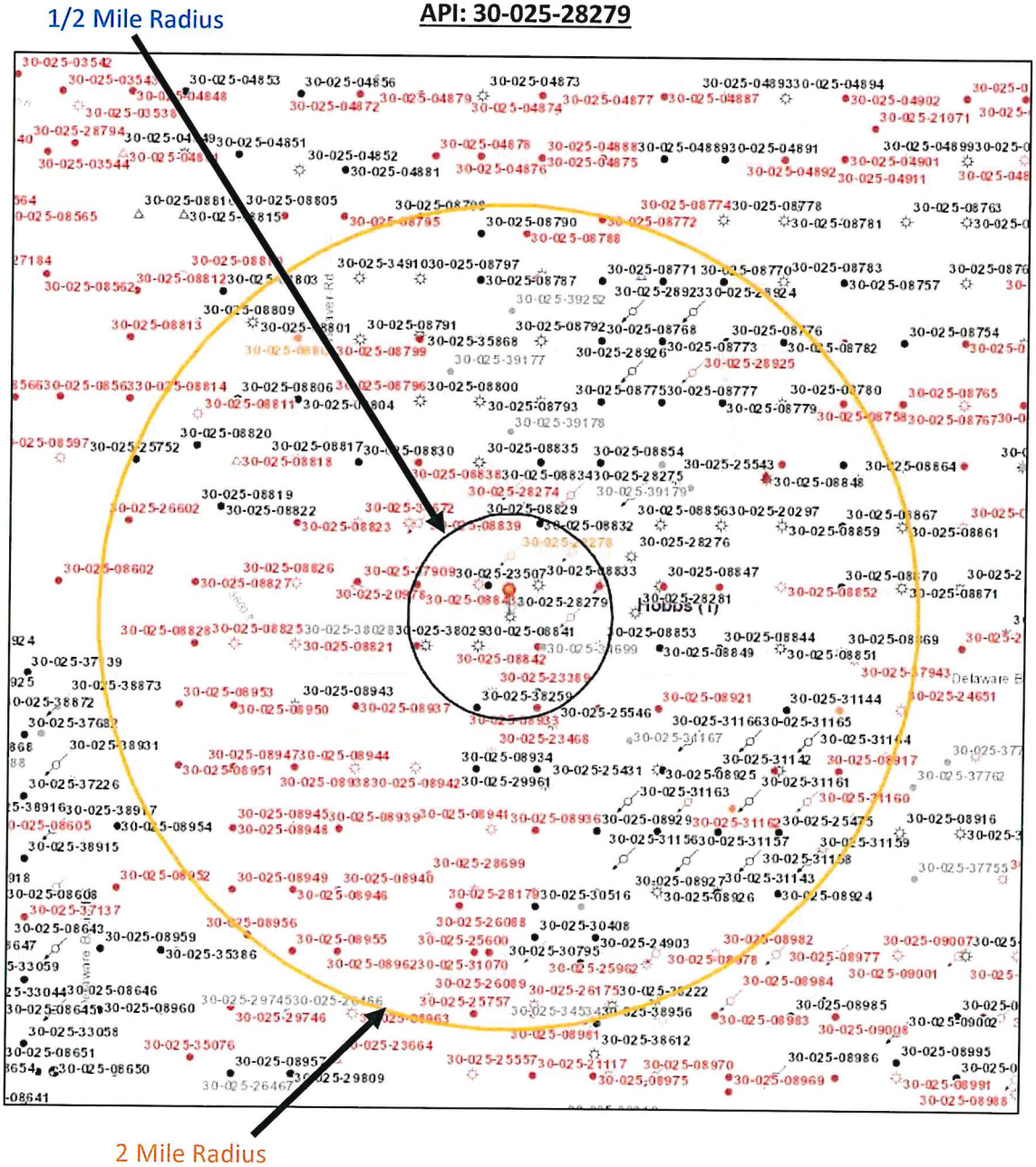


V.

Exhibit A6 shows 22 unique well locations within a ½ mile radius of the proposed new drill injector locations, and 196 unique well locations within a 2 mile radius.

State A A/C 2 # 70

API: 30-025-28279

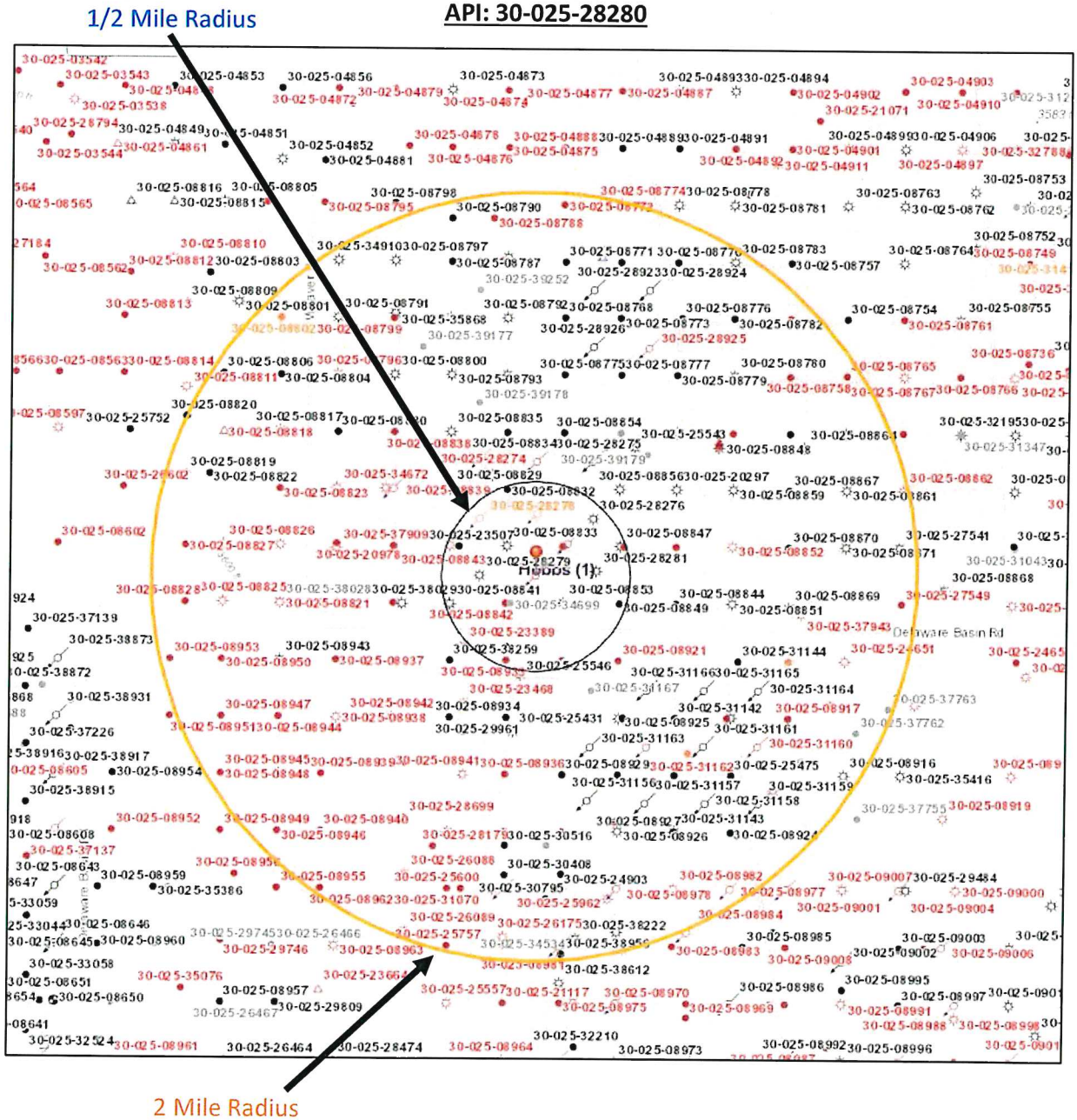


V.

Exhibit A7 shows 23 unique well locations within a ½ mile radius of the proposed new drill injector locations, and 201 unique well locations within a 2 mile radius.

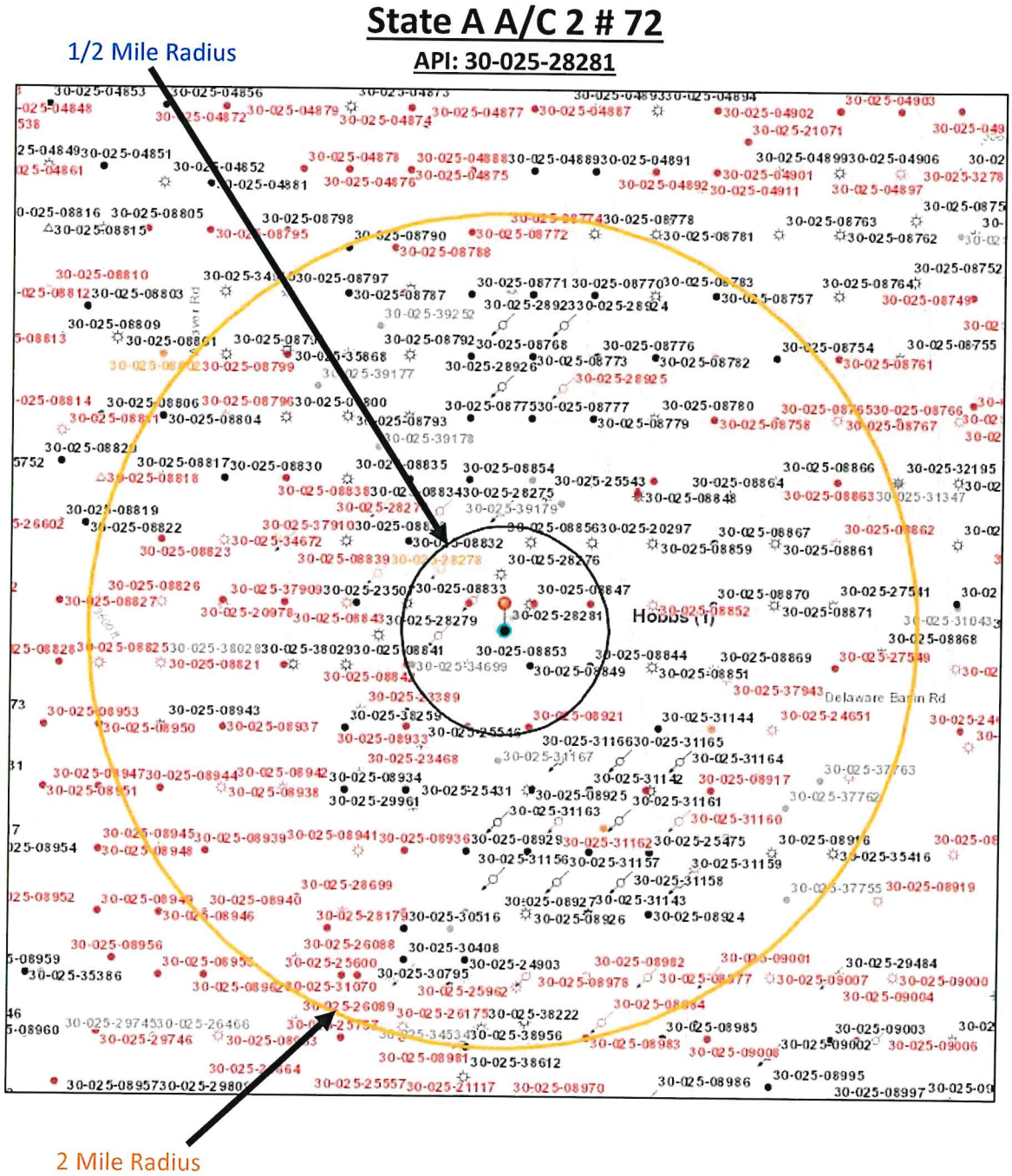
State A A/C 2 # 71

API: 30-025-28280



V.

Exhibit A8 shows 19 unique well locations within a ½ mile radius of the proposed new drill injector locations, and 199 unique well locations within a 2 mile radius.



VI.

Following Exhibit A, the tabulation of the wells with each well's type, construction, date drilled, location, depth, and completion date of wells within a ½ mile radius are displayed in Exhibit B1-B8. The plugged well wellbore diagrams are displayed in Exhibit C1-C17.

Exhibit B1

State A AC 2 #64

UWI/ API	Operator	Well Label	TD	Well Type	Current Zone	Distance in Miles	Distance in Feet From:	SPUD Date	Township Range Section	Footage	Surflat	Surflon	Well Tie	status
3002528273	FAE II OPERATING LLC	STATE A A/C 2 #064	3900	Injection	QUEEN	0	0	1983-08-13	22S 36E 9	1250 FNL 1250 FEL	32.4100224	-103.2824	STATE A A/C 2 #064	Temporary Abandonment (expired)
3002508837	FAE II OPERATING LLC	STATE A A/C 2 #043	3640	Gas	UNKNOWN	0.11	580.8	1957-10-14	22S 36E 8	1650 FNL 990 FEL	32.4089249	-103.28155	STATE A A/C 2 #064	Active
3002508834	FAE II OPERATING LLC	STATE A A/C 2 #025	3850	Oil	QUEEN	0.19	1003.2	1943-01-25	22S 36E 8 NE NE	660 FNL 660 FEL	32.4116483	-103.28049	STATE A A/C 2 #064	Active
3002508832	FAE II OPERATING LLC	STATE A A/C 2 #023	3870	Oil	SEVEN RIVERS / QUEEN	0.21	1108.8	1942-11-02	22S 36E 8	1980 FNL 660 FEL	32.4080201	-103.28048	STATE A A/C 2 #064	Active
3002508835	FAE II OPERATING LLC	STATE A A/C 2 #026	3890	Gas	SEVEN RIVERS / QUEEN	0.21	1108.8	1943-02-09	22S 36E 8 NW NE	660 FNL 1980 FEL	32.4116393	-103.28477	STATE A A/C 2 #064	Active
3002508829	FAE II OPERATING LLC	STATE A A/C 2 #003	3885	Gas	QUEEN	0.23	1214.4	1936-12-17	22S 36E 8	1980 FNL 1980 FEL	32.4080111	-103.28475	STATE A A/C 2 #064	Active
3002539173	MERIT ENERGY COMPANY, LLC	STATE A A/C 2 #096P	4000	Oil	EUNICE, SEVEN RIVERSQUEEN, SOUTH	0.29	1531.2	#N/A	22S 36E 5	11 FSL 1309 FEL	32.4135855	103.28303	STATE A A/C 2 #064	Cancelled
3002528274	FAE II OPERATING LLC	STATE A A/C 2 #065	3900	Injection	QUEEN	0.29	1531.2	1983-09-04	22S 36E 9	1345 FNL 25 FWL	32.4097697	-103.27826	STATE A A/C 2 #064	Plugged (site released)
3002528278	FAE II OPERATING LLC	STATE A A/C 2 #069	3900	Injection	QUEEN	0.32	1689.6	1983-09-08	22S 36E 8	2615 FSL 1295 FEL	32.4061109	-103.28253	STATE A A/C 2 #064	Temporary Abandonment (expired)
3002528277	FAE II OPERATING LLC	STATE A A/C 2 #068	3910	Injection	GRAYBURG	0.42	2217.6	1983-08-08	22S 36E 9	2570 FNL 70 FWL	32.4064023	-103.2781	STATE A A/C 2 #064	Temporary Abandonment (expired)
3002508854	FAE II OPERATING LLC	STATE A A/C 2 #029	3860	Oil	SEVEN RIVERS / QUEEN	0.45	2376	1943-06-05	22S 36E 9 NW NW	660 FNL 660 FWL	32.4116514	-103.27621	STATE A A/C 2 #064	Active
3002508789	FAE II OPERATING LLC	STATE A A/C 2 #027	3872	Gas	UNKNOWN	0.45	2376	1943-03-30	22S 36E 5	660 FSL 660 FEL	32.4153254	-103.28056	STATE A A/C 2 #064	Active
3002508855	PETROHAWK OPERATING CO	STATE A A/C 2 #030	3840	Gas	QUEEN	0.46	2428.8	1945-09-19	22S 36E 9 C SW NW	1980 FNL 660 FWL	32.4080232	-103.2762	STATE A A/C 2 #064	Plugged (site released)
3002508793	FAE II OPERATING LLC	STATE A A/C 2 #033	3890	Gas	QUEEN	0.46	2428.8	1945-12-08	22S 36E 5 SW SE	660 FSL 1980 FEL	32.4153217	-103.28484	STATE A A/C 2 #064	Active
3002508838	CLAYTON WILLIAMS ENERGY INC	STATE A AC 2 #049	3870	Oil	SEVEN RIVERS / QUEEN	0.48	2534.4	1960-09-13	22S 36E 8	660 FNL 1980 FWL	32.4116302	-103.28903	STATE A A/C 2 #064	Plugged (site released)
3002523507	FAE II OPERATING LLC	STATE A A/C 2 #061	3949	Oil	QUEEN	0.48	2534.4	1970-05-14	22S 36E 8	1980 FSL 1780 FEL	32.4043634	-103.28409	STATE A A/C 2 #064	Active
3002508833	FAE II OPERATING LLC	STATE A A/C 2 #024	3889	Gas	SEVEN RIVERS / QUEEN	0.48	2534.4	1942-12-16	22S 36E 8 SE	1980 FSL 660 FEL	32.4043676	-103.28046	STATE A A/C 2 #064	Active
3002508839	SUN EXPLORATION & PRODUCTION CO	PRE-ONGARD WELL #051	3867	Injection	TANSILL / YATES	0.49	2587.2	1960-11-09	22S 36E 8	1980 FNL 1980 FWL	32.4080019	-103.28903	STATE A A/C 2 #064	Plugged (site released)
3002508843	CLAYTON WILLIAMS ENERGY INC	STATE A AC 2 #056	3853	Gas	UNKNOWN	0.49	2587.2	1961-08-06	22S 36E 8	1980 FSL 1980 FEL	32.4043624	-103.28474	STATE A A/C 2 #064	Plugged (site released)

Exhibit B2

State A AC 2 #65

UWI/ API	Operator	Well Label	TD	Well Type	Current Zone	Distance in Miles	Distance in Feet From:	SPUD Date	Township Range Section	Footage	Surflat	Surflon	Well Tie	status
3002528274	FAE II OPERATING LLC	STATE A A/C 2 #065	3900	Injection	QUEEN	0	0	1983-09-04	22S 36E 9	1345 FNL 25 FWL	32.4097697	-103.27826	STATE A A/C 2 #064	Plugged (site released)
3002508855	PETROHAWK OPERATING CO	STATE A A/C 2 #030	3840	Gas	QUEEN	0.2	1056	1945-09-19	22S 36E 9 C SW NW	1980 FNL 660 FWL	32.4080232	-103.2762	STATE A A/C 2 #065	Plugged (site released)
3002508854	FAE II OPERATING LLC	STATE A A/C 2 #029	3860	Oil	SEVEN RIVERS / QUEEN	0.21	1108.8	1943-05-05	22S 36E 9 NW NW	660 FNL 660 FWL	32.4116514	-103.27621	STATE A A/C 2 #065	Active
3002508832	FAE II OPERATING LLC	STATE A A/C 2 #023	3870	Oil	SEVEN RIVERS / QUEEN	0.21	1108.8	1942-11-02	22S 36E 8	1980 FNL 660 FEL	32.4080201	-103.28048	STATE A A/C 2 #065	Active
3002508834	FAE II OPERATING LLC	STATE A A/C 2 #025	3850	Oil	QUEEN	0.22	1161.6	1943-01-25	22S 36E 8 NE NE	660 FNL 660 FEL	32.4116483	-103.28049	STATE A A/C 2 #065	Active
3002508837	FAE II OPERATING LLC	STATE A A/C 2 #043	3640	Gas	UNKNOWN	0.24	1267.2	1957-10-14	22S 36E 8	1650 FNL 990 FEL	32.4089249	-103.28155	STATE A A/C 2 #065	Active
3002528277	FAE II OPERATING LLC	STATE A A/C 2 #068	3910	Injection	GRAYBURG	0.28	1478.4	1983-08-08	22S 36E 9	2570 FNL 70 FWL	32.4064023	-103.2781	STATE A A/C 2 #065	Temporary Abandonment (expired)
3002528273	FAE II OPERATING LLC	STATE A A/C 2 #064	3900	Injection	QUEEN	0.29	1531.2	1983-08-18	22S 36E 8	1250 FNL 1250 FEL	32.4100224	-103.2824	STATE A A/C 2 #065	Temporary Abandonment (expired)
3002528275	FAE II OPERATING LLC	STATE A A/C 2 #066	3900	Injection	GRAYBURG	0.3	1584	1983-08-19	22S 36E 9	1345 FNL 1345 FWL	32.4097669	-103.27399	STATE A A/C 2 #065	Active
3002508858	PETROHAWK OPERATING CO	STATE A A/C 2 #039	11030	Oil	UNKNOWN	0.37	1953.6	1948-02-15	22S 36E 9	990 FNL 1650 FWL	32.4107422	-103.273	STATE A A/C 2 #065	Plugged (site released)
3002528278	FAE II OPERATING LLC	STATE A A/C 2 #069	3900	Injection	QUEEN	0.42	2217.6	1983-09-08	22S 36E 8	2615 FSL 1295 FEL	32.4061109	-103.28253	STATE A A/C 2 #065	Temporary Abandonment (expired)
3002528276	FAE II OPERATING LLC	STATE A A/C 2 #067	3900	Gas	QUEEN	0.42	2217.6	1983-09-14	22S 36E 9 NE SW	2615 FSL 1345 FWL	32.4061185	-103.27397	STATE A A/C 2 #065	Active
3002539178	MERIT ENERGY COMPANY, LLC	STATE A A/C 2 #098F	#N/A	Oil	#N/A	0.43	2270.4	#N/A	22S 36 E 5	11 FSL 1309 FEL	32.41359	-103.28303	STATE A A/C 2 #065	Cancelled
3002523546	TEXAS PACIFIC OIL CO	STATE A AC 2 #032Y	3900	Injection	QUEEN	0.46	2428.8	1970-07-09	22S 36E 9 NE NW SW	2050 FSL 760 FWL	32.4045544	-103.27586	STATE A A/C 2 #065	Plugged (site released)
3002508856	FAE II OPERATING LLC	STATE A A/C 2 #031	3845	Gas	SEVEN RIVERS / QUEEN	0.46	2428.8	1945-11-03	22S 36E 9 C SE NW	1980 FNL 1980 FWL	32.4080203	-103.27192	STATE A A/C 2 #065	Active
3002508857	CLAYTON WILLIAMS ENERGY INC	PRE-ONGARD WELL #032	3842	Oil	SEVEN RIVERS / QUEEN	0.46	2428.8	1945-11-30	22S 36E 9	1980 FSL 660 FWL	32.4043715	-103.27618	STATE A A/C 2 #065	Plugged (site released)
3002528282	SUN EXPLORATION & P	PRE-ONGARD WELL #073	#N/A	Oil	#N/A	0.47	2481.6	#N/A	22S 36 E 9	660 FNL 1980 FWL	32.41171	-103.27231	STATE A A/C 2 #065	Cancelled
3002508833	FAE II OPERATING LLC	STATE A A/C 2 #024	3889	Gas	SEVEN RIVERS / QUEEN	0.47	2481.6	1942-12-16	22S 36E 8 SE	1980 FSL 660 FEL	32.4043676	-103.28046	STATE A A/C 2 #065	Active
3002508829	FAE II OPERATING LLC	STATE A A/C 2 #003	3885	Gas	QUEEN	0.47	2481.6	1936-12-17	22S 36E 8	1980 FNL 1980 FEL	32.4080111	-103.28475	STATE A A/C 2 #065	Active
3002508775	XTO ENERGY INC	SEVEN RIVERS QUEEN WATERFLOOD, NORTH #001	3870	Oil	SEVEN RIVERS / QUEEN	0.47	2481.6	1943-05-26	22S 36E 4	660 FSL 660 FWL	32.4152796	-103.27523	STATE A A/C 2 #065	Active
3002508835	FAE II OPERATING LLC	STATE A A/C 2 #026	3890	Gas	SEVEN RIVERS / QUEEN	0.48	2534.4	1943-02-09	22S 36E 8 NW NE	660 FNL 1980 FEL	32.4116393	-103.28477	STATE A A/C 2 #065	Active
3002508789	FAE II OPERATING LLC	STATE A A/C 2 #027	3872	Gas	UNKNOWN	0.48	2534.4	1943-03-30	22S 36E 5	660 FSL 660 FEL	32.4153254	-103.28056	STATE A A/C 2 #065	Active

Exhibit B3

State A AC 2 #67

UWI/API	Operator	Well Label	TD	Well Type	Current Zone	Distance in Miles	Distance in Feet From:	SPUD Date	Township Range Section	Footage	Surflat	Surflon	Well Tie	status
3002528276	FAE II OPERATING LLC	STATE A A/C 2 #067	3900	Gas	QUEEN	0	0	1983-09-14	22S 36E 9 NE SW	2615 FSL 1345 FWL	32.4061185	-103.27397	STATE A A/C 2 #067	Active
3002523546	TEXAS PACIFIC OIL CO	STATE A AC 2 #032Y	3900	Injection	QUEEN	0.18	950.4	1970-07-09	22S 36E 9 NE NW SW	2050 FSL 760 FWL	32.4045644	-103.27586	STATE A A/C 2 #067	Plugged (site released)
3002508847	FAE II OPERATING LLC	STATE A A/C 2 #038	3845	Gas	UNKNOWN	0.2	1056	1946-11-28	22S 36E 9	1980 FSL 1980 FWL	32.404374	-103.27191	STATE A A/C 2 #067	Active
3002508857	CLAYTON WILLIAMS ENERGY INC	PRE-ONGARD WELL #032	3842	Oil	SEVEN RIVERS / QUEEN	0.21	1108.8	1945-11-30	22S 36E 9	1980 FSL 660 FWL	32.4043715	-103.27618	STATE A A/C 2 #067	Plugged (site released)
3002508856	FAE II OPERATING LLC	STATE A A/C 2 #031	3845	Gas	SEVEN RIVERS / QUEEN	0.21	1108.8	1945-11-03	22S 36E 9 C SE NW	1980 FNL 1980 FWL	32.4080203	-103.27192	STATE A A/C 2 #067	Active
3002520970	PETROHAWK OPERATING CO	STATE A A/C 2 #059	3870	Oil	UNKNOWN	0.22	1161.6	1964-10-09	22S 36E 9	1980 FSL 2080 FWL	32.4043742	-103.27158	STATE A A/C 2 #067	Plugged (site released)
3002508855	PETROHAWK OPERATING CO	STATE A A/C 2 #030	3840	Gas	QUEEN	0.22	1161.6	1945-09-19	22S 36E 9 C SW NW	1980 FNL 660 FWL	32.4080232	-103.2762	STATE A A/C 2 #067	Plugged (site released)
3002528281	FAE II OPERATING LLC	STATE A A/C 2 #072	3900	Gas	QUEEN	0.27	1425.6	1983-08-30	22S 36E 9 NE SW	1410 FSL 1440 FWL	32.4028064	-103.27365	STATE A A/C 2 #067	Active
3002528277	FAE II OPERATING LLC	STATE A A/C 2 #068	3910	Injection	GRAYBURG	0.29	1531.2	1983-08-08	22S 36E 9	2570 FNL 70 FWL	32.4064023	-103.2781	STATE A A/C 2 #067	Temporary Abandonment (expired)
3002528275	FAE II OPERATING LLC	STATE A A/C 2 #066	3900	Injection	GRAYBURG	0.3	1584	1983-08-19	22S 36E 9	1345 FNL 1345 FWL	32.4097669	-103.27399	STATE A A/C 2 #067	Active
3002508858	PETROHAWK OPERATING CO	STATE A A/C 2 #039	11030	Oil	UNKNOWN	0.38	2006.4	1948-02-15	22S 36E 9	990 FNL 1650 FWL	32.4107422	-103.273	STATE A A/C 2 #067	Plugged (site released)
3002528280	FAE II OPERATING LLC	STATE A A/C 2 #071	3900	Injection	QUEEN	0.42	2217.6	1983-09-18	22S 36E 9	1295 FSL 25 FWL	32.4024876	-103.27823	STATE A A/C 2 #067	Plugged (site released)
3002528274	FAE II OPERATING LLC	STATE A A/C 2 #065	3900	Injection	QUEEN	0.42	2217.6	1983-09-04	22S 36E 9	1345 FNL 25 FWL	32.4097697	-103.27826	STATE A A/C 2 #067	Plugged (site released)
3002525543	FAE II OPERATING LLC	STATE A A/C 2 #063	3700	Gas	QUEEN	0.43	2270.4	1977-05-29	22S 36E 9	990 FNL 2310 FWL	32.4107406	-103.27086	STATE A A/C 2 #067	Active
3002539179	FAE II OPERATING LLC	STATE A A/C 2 #099B	4000	Oil	#N/A	0.44	2323.2	#N/A	22S 36E 9	1161 FNL 2630 FEL	32.41033	-103.27023	STATE A A/C 2 #067	Cancelled
3002508850	ATLANTIC RICHFIELD CO THE	PRE-ONGARD WELL #002	3850	Oil	UNKNOWN	0.46	2428.8	1955-03-17	22S 36E 9	1980 FSL 1980 FEL	32.4043763	-103.26763	STATE A A/C 2 #067	Plugged (site released)
3002508849	FAE II OPERATING LLC	STATE A A/C 2 #001	3835	Oil	UNKNOWN	0.46	2428.8	1935-07-02	22S 36E 9	660 FSL 1974 FWL	32.4007458	-103.27191	STATE A A/C 2 #067	Active
3002520297	FAE II OPERATING LLC	STATE A A/C 2 #057	3806	Gas	SEVEN RIVERS / QUEEN	0.46	2428.8	1964-01-21	22S 36E 9 SW NE	1980 FNL 1980 FEL	32.4080174	-103.26765	STATE A A/C 2 #067	Active
3002508853	FAE II OPERATING LLC	STATE A A/C 2 #004	3878	Gas	SEVEN RIVERS / QUEEN	0.47	2481.6	1937-05-31	22S 36E 9	660 FSL 660 FWL	32.4007433	-103.27617	STATE A A/C 2 #067	Active
3002508833	FAE II OPERATING LLC	STATE A A/C 2 #024	3889	Gas	SEVEN RIVERS / QUEEN	0.47	2481.6	1942-12-16	22S 36E 8 SE	1980 FSL 660 FEL	32.4043676	-103.28046	STATE A A/C 2 #067	Active
3002528282	SUN EXPLORATION & P	PRE-ONGARD WELL #073	#N/A	Oil	#N/A	0.47	2481.6	#N/A	22S 36 E 9	660 FNL 1980 FWL	32.41171	-103.27231	STATE A A/C 2 #067	Cancelled
3002508832	FAE II OPERATING LLC	STATE A A/C 2 #023	3870	Oil	SEVEN RIVERS / QUEEN	0.48	2534.4	1942-11-02	22S 36E 8	1980 FNL 660 FEL	32.4080201	-103.28048	STATE A A/C 2 #067	Active
3002508854	FAE II OPERATING LLC	STATE A A/C 2 #029	3850	Oil	SEVEN RIVERS / QUEEN	0.48	2534.4	1943-06-05	22S 36E 9 NW NW	660 FNL 660 FWL	32.4116514	-103.27621	STATE A A/C 2 #067	Active

Exhibit B4

State A AC 2 #68

UWI/ API	Operator	Well Label	TD	Well Type	Current Zone	Distance in Miles	Distance in Feet From:	SPUD Date	Township Range Section	Footage	Surflat	Surflon	Well Tie	status
3002528277	FAE II OPERATING LLC	STATE A A/C 2 #068	3910	Injection	GRAYBURG	0	0	1983-08-08	22S 36E 9	2570 FNL 70 FWL	32.4064023	-103.2781	STATE A A/C 2 #068	Temporary Abandonment (expired)
3002508855	PETROHAWK OPERATING CO	STATE A A/C 2 #030	3840	Gas	QUEEN	0.19	1003.2	1945-09-19	22S 36E 9 C SW NW	1980 FNL 660 FWL	32.4080232	-103.2762	STATE A A/C 2 #068	Plugged (site released)
3002508832	FAE II OPERATING LLC	STATE A A/C 2 #023	3870	Oil	SEVEN RIVERS / QUEEN	0.21	1108.8	1942-11-02	22S 36E 8	1980 FNL 660 FEL	32.4080201	-103.28048	STATE A A/C 2 #068	Active
3002508857	CLAYTON WILLIAMS ENERGY INC	PRE-ONGARD WELL #032	3842	Oil	SEVEN RIVERS / QUEEN	0.21	1108.8	1945-11-30	22S 36E 9	1980 FSL 660 FWL	32.4043715	-103.27618	STATE A A/C 2 #068	Plugged (site released)
3002523546	TEXAS PACIFIC OIL CO	STATE A AC 2 #032Y	3900	Injection	QUEEN	0.22	1161.6	1970-07-09	22S 36E 9 NE NW SW	2050 FSL 760 FWL	32.4045644	-103.27586	STATE A A/C 2 #068	Plugged (site released)
3002508833	FAE II OPERATING LLC	STATE A A/C 2 #024	3889	Gas	SEVEN RIVERS / QUEEN	0.23	1214.4	1942-12-16	22S 36E 8 SE	1980 FSL 660 FEL	32.4043676	-103.28046	STATE A A/C 2 #068	Active
3002528274	FAE II OPERATING LLC	STATE A A/C 2 #065	3900	Injection	QUEEN	0.28	1478.4	1983-09-04	22S 36E 9	1345 FNL 25 FWL	32.4097697	-103.27826	STATE A A/C 2 #068	Plugged (site released)
3002528276	FAE II OPERATING LLC	STATE A A/C 2 #067	3900	Gas	QUEEN	0.29	1531.2	1983-09-14	22S 36E 9 NE SW	2615 FSL 1345 FWL	32.4061185	-103.27397	STATE A A/C 2 #068	Active
3002528278	FAE II OPERATING LLC	STATE A A/C 2 #069	3900	Injection	QUEEN	0.31	1636.8	1983-09-08	22S 36E 8	2615 FSL 1295 FEL	32.4061109	-103.28253	STATE A A/C 2 #068	Temporary Abandonment (expired)
3002508837	FAE II OPERATING LLC	STATE A A/C 2 #043	3640	Gas	UNKNOWN	0.32	1689.6	1957-10-14	22S 36E 8	1650 FNL 990 FEL	32.4089249	-103.28155	STATE A A/C 2 #068	Active
3002528280	FAE II OPERATING LLC	STATE A A/C 2 #071	3900	Injection	QUEEN	0.32	1689.6	1983-09-18	22S 36E 9	1295 FSL 25 FWL	32.4024876	-103.27823	STATE A A/C 2 #068	Plugged (site released)
3002528275	FAE II OPERATING LLC	STATE A A/C 2 #066	3900	Injection	GRAYBURG	0.4	2112	1983-08-19	22S 36E 9	1345 FNL 1345 FWL	32.4097669	-103.27399	STATE A A/C 2 #068	Active
3002528273	FAE II OPERATING LLC	STATE A A/C 2 #064	3900	Injection	QUEEN	0.42	2217.6	1983-08-13	22S 36E 8	1250 FNL 1250 FEL	32.4100224	-103.2824	STATE A A/C 2 #068	Temporary Abandonment (expired)
3002528281	FAE II OPERATING LLC	STATE A A/C 2 #072	3900	Gas	QUEEN	0.43	2270.4	1983-08-30	22S 36E 9 NE SW	1410 FSL 1440 FWL	32.4028064	-103.27365	STATE A A/C 2 #068	Active
3002528279	FAE II OPERATING LLC	STATE A A/C 2 #070	3900	Gas	QUEEN	0.44	2323.2	1983-08-25	22S 36E 8	1295 FSL 1295 FEL	32.4024825	-103.28251	STATE A A/C 2 #068	Active
3002523507	FAE II OPERATING LLC	STATE A A/C 2 #061	3949	Oil	QUEEN	0.45	2376	1970-05-14	22S 36E 8	1980 FSL 1780 FEL	32.4043634	-103.28409	STATE A A/C 2 #068	Active
3002508856	FAE II OPERATING LLC	STATE A A/C 2 #031	3845	Gas	SEVEN RIVERS / QUEEN	0.45	2376	1945-11-03	22S 36E 9 C SE NW	1980 FNL 1980 FWL	32.4080203	-103.27192	STATE A A/C 2 #068	Active
3002508854	FAE II OPERATING LLC	STATE A A/C 2 #029	3860	Oil	SEVEN RIVERS / QUEEN	0.45	2376	1943-06-05	22S 36E 9 NW NW	660 FNL 660 FWL	32.4116514	-103.27621	STATE A A/C 2 #068	Active
3002508847	FAE II OPERATING LLC	STATE A A/C 2 #038	3845	Gas	UNKNOWN	0.46	2428.8	1946-11-28	22S 36E 9	1980 FSL 1980 FWL	32.404374	-103.27191	STATE A A/C 2 #068	Active
3002508834	FAE II OPERATING LLC	STATE A A/C 2 #025	3850	Oil	QUEEN	0.46	2428.8	1943-01-25	22S 36E 8 NE NE	660 FNL 660 FEL	32.4116483	-103.28049	STATE A A/C 2 #068	Active
3002508829	FAE II OPERATING LLC	STATE A A/C 2 #003	3885	Gas	QUEEN	0.48	2534.4	1936-12-17	22S 36E 8	1980 FNL 1980 FEL	32.4080111	-103.28475	STATE A A/C 2 #068	Active
3002520970	PETROHAWK OPERATING CO	STATE A A/C 2 #059	3870	Oil	UNKNOWN	0.48	2534.4	1964-10-09	22S 36E 9	1980 FSL 2080 FWL	32.4043742	-103.27158	STATE A A/C 2 #068	Plugged (site released)
3002508853	FAE II OPERATING LLC	STATE A A/C 2 #004	3878	Gas	SEVEN RIVERS / QUEEN	0.48	2534.4	1937-05-31	22S 36E 9	660 FSL 660 FWL	32.4007433	-103.27617	STATE A A/C 2 #068	Active
3002534699	RAPTOR RESOURCES INC	STATE A A/C 2 #077	3900	Oil	#N/A	0.48	2534.4	#N/A	22S 36E 8	660 FSL 560 FEL	32.4008437	-103.28054	STATE A A/C 2 #068	Cancelled
3002508843	CLAYTON WILLIAMS ENERGY INC	STATE A AC 2 #056	3853	Gas	UNKNOWN	0.49	2587.2	1961-08-06	22S 36E 8	1980 FSL 1980 FEL	32.4043624	-103.28474	STATE A A/C 2 #068	Plugged (site released)
3002508842	CLAYTON WILLIAMS ENERGY INC	STATE A AC 2 #055	3850	Oil	GRAYBURG	0.49	2587.2	1961-03-28	22S 36E 8	660 FSL 660 FEL	32.4007394	-103.28045	STATE A A/C 2 #068	Plugged (site released)
3002508858	PETROHAWK OPERATING CO	STATE A A/C 2 #039	11030	Oil	UNKNOWN	0.5	2640	1948-02-15	22S 36E 9	990 FNL 1650 FWL	32.4107422	-103.273	STATE A A/C 2 #068	Plugged (site released)

Exhibit B5

State A AC 2 #69

UWI/ API	Operator	Well Label	TD	Well Type	Current Zone	Distance in Miles	Distance In Feet From:	SPUD Date	Township Range Section	Footage	Surflat	Surflon	Well Tie	status
3002528278	FAE II OPERATING LLC	STATE A A/C 2 #069	3900	Injection	QUEEN	0	0	1983-09-08	22S 36E 8	2615 FSL 1295 FEL	32.4061109	-103.28253	STATE A A/C 2 #069	Temporary Abandonment (expired)
3002523507	FAE II OPERATING LLC	STATE A A/C 2 #061	3949	Oil	QUEEN	0.18	950.4	1970-05-14	22S 36E 8	1980 FSL 1780 FEL	32.4043634	-103.28409	STATE A A/C 2 #069	Active
3002508833	FAE II OPERATING LLC	STATE A A/C 2 #024	3889	Gas	SEVEN RIVERS / QUEEN	0.2	1056	1942-12-16	22S 36E 8 SE	1980 FSL 660 FEL	32.4043676	-103.28046	STATE A A/C 2 #069	Active
3002508843	CLAYTON WILLIAMS ENERGY INC	STATE A AC 2 #056	3853	Gas	UNKNOWN	0.21	1108.8	1961-08-06	22S 36E 8	1980 FSL 1980 FEL	32.4043624	-103.28474	STATE A A/C 2 #069	Plugged (site released)
3002508832	FAE II OPERATING LLC	STATE A A/C 2 #023	3870	Oil	SEVEN RIVERS / QUEEN	0.21	1108.8	1942-11-02	22S 36E 8	1980 FNL 660 FEL	32.4080201	-103.28048	STATE A A/C 2 #069	Active
3002508829	FAE II OPERATING LLC	STATE A A/C 2 #003	3885	Gas	QUEEN	0.22	1161.6	1936-12-17	22S 36E 8	1980 FNL 1980 FEL	32.4080111	-103.28475	STATE A A/C 2 #069	Active
3002508837	FAE II OPERATING LLC	STATE A A/C 2 #043	3640	Gas	UNKNOWN	0.24	1267.2	1957-10-14	22S 36E 8	1650 FNL 990 FEL	32.4089249	-103.28155	STATE A A/C 2 #069	Active
3002528279	FAE II OPERATING LLC	STATE A A/C 2 #070	3900	Gas	QUEEN	0.3	1584	1983-08-25	22S 36E 8	1295 FSL 1295 FEL	32.4024825	-103.28251	STATE A A/C 2 #069	Active
3002528277	FAE II OPERATING LLC	STATE A A/C 2 #068	3910	Injection	GRAYBURG	0.31	1636.8	1983-08-08	22S 36E 9	2570 FNL 70 FWL	32.4064023	-103.2781	STATE A A/C 2 #069	Temporary Abandonment (expired)
3002528273	FAE II OPERATING LLC	STATE A A/C 2 #064	3900	Injection	QUEEN	0.32	1689.6	1983-08-13	22S 36E 8	1250 FNL 1250 FEL	32.4100224	-103.2824	STATE A A/C 2 #069	Temporary Abandonment (expired)
3002528280	FAE II OPERATING LLC	STATE A A/C 2 #071	3900	Injection	QUEEN	0.42	2217.6	1983-09-18	22S 36E 9	1295 FSL 25 FWL	32.4024876	-103.27823	STATE A A/C 2 #069	Plugged (site released)
3002528274	FAE II OPERATING LLC	STATE A A/C 2 #065	3900	Injection	QUEEN	0.42	2217.6	1983-09-04	22S 36E 9	1345 FNL 25 FWL	32.4097697	-103.27826	STATE A A/C 2 #069	Plugged (site released)
3002508857	CLAYTON WILLIAMS ENERGY INC	PRE-ONGARD WELL #032	3842	Oil	SEVEN RIVERS / QUEEN	0.46	2428.8	1945-11-30	22S 36E 9	1980 FSL 660 FWL	32.4043715	-103.27618	STATE A A/C 2 #069	Plugged (site released)
3002508842	CLAYTON WILLIAMS ENERGY INC	STATE A AC 2 #055	3850	Oil	GRAYBURG	0.46	2428.8	1961-03-28	22S 36E 8	660 FSL 660 FEL	32.4007394	-103.28045	STATE A A/C 2 #069	Plugged (site released)
3002508855	PETROHAWK OPERATING CO	STATE A A/C 2 #030	3840	Gas	QUEEN	0.46	2428.8	1945-09-19	22S 36E 9 C SW NW	1980 FNL 660 FWL	32.4080232	-103.2762	STATE A A/C 2 #069	Plugged (site released)
3002508841	FAE II OPERATING LLC	STATE A A/C 2 #054	3863	Gas	SEVEN RIVERS / QUEEN	0.47	2481.6	1961-02-12	22S 36E 8	660 FSL 1980 FEL	32.4007342	-103.28472	STATE A A/C 2 #069	Active
3002534699	#N/A	STATE A A/C 2 #077	#N/A	Oil	#N/A	0.47	2481.6	#N/A	22S 36E B	660 FSL 560 FEL	32.4008437	-103.28054	STATE A A/C 2 #069	Cancelled
3002508836	PETROHAWK OPERATING CO	STATE A A/C 2 #037	3912	Oil	UNKNOWN	0.47	2481.6	1946-11-11	22S 36E 8	1980 FSL 1980 FWL	32.404357	-103.28902	STATE A A/C 2 #069	Plugged (site released)
3002508834	FAE II OPERATING LLC	STATE A A/C 2 #025	3850	Oil	QUEEN	0.47	2481.6	1943-01-25	22S 36E 8 NE NE	660 FNL 660 FEL	32.4116483	-103.28049	STATE A A/C 2 #069	Active
3002508839	SUN EXPLORATION & PRODUCTION CO	PRE-ONGARD WELL #051	3867	Injection	TANSILL / YATES	0.47	2481.6	1960-11-09	22S 36E 8	1980 FNL 1980 FWL	32.4080019	-103.28903	STATE A A/C 2 #069	Plugged (site released)
3002523546	TEXAS PACIFIC OIL CO	STATE A AC 2 #032Y	3900	Injection	QUEEN	0.48	2534.4	1970-07-09	22S 36E 9 NE NW SW	2050 FSL 760 FWL	32.4045644	-103.27586	STATE A A/C 2 #069	Plugged (site released)
3002508835	FAE II OPERATING LLC	STATE A A/C 2 #026	3890	Gas	SEVEN RIVERS / QUEEN	0.48	2534.4	1943-02-09	22S 36E 8 NW NE	660 FNL 1980 FEL	32.4116393	-103.28477	STATE A A/C 2 #069	Active

Exhibit B6

State A AC 2 #70

UWI/ API	Operator	Well Label	TD	Well Type	Current Zone	Distance in Miles	Distance in Feet From:	SPUD Date	Township Range Section	Footage	Surflat	Surflon	Well Tie	status
3002528279	FAE II OPERATING LLC	STATE A A/C 2 #070	3900	Gas	QUEEN	0	0	1983-08-25	22S 36E 8	1295 FSL 1295 FEL	32.4024825	-103.28251	STATE A A/C 2 #070	Active
3002523507	FAE II OPERATING LLC	STATE A A/C 2 #051	3949	Oil	QUEEN	0.19	1003.2	1970-05-14	22S 36E 8	1980 FSL 1780 FEL	32.4043634	-103.28409	STATE A A/C 2 #070	Active
3002508842	CLAYTON WILLIAMS ENERGY INC	STATE A AC 2 #055	3850	Oil	GRAYBURG	0.2	1056	1961-03-28	22S 36E 8	660 FSL 660 FEL	32.4007394	-103.28045	STATE A A/C 2 #070	Plugged (site released)
3002508833	FAE II OPERATING LLC	STATE A A/C 2 #024	3889	Gas	SEVEN RIVERS / QUEEN	0.21	1108.8	1942-12-16	22S 36E 8 SE	1980 FSL 660 FEL	32.4043676	-103.28046	STATE A A/C 2 #070	Active
3002508841	FAE II OPERATING LLC	STATE A A/C 2 #054	3863	Gas	SEVEN RIVERS / QUEEN	0.21	1108.8	1961-02-12	22S 36E 8	660 FSL 1980 FEL	32.4007342	-103.28472	STATE A A/C 2 #070	Active
3002534699	RAPTOR RESOURCES INC	STATE A A/C 2 #077	3900	Oil	#N/A	0.22	2534.4	#N/A	22S 36E 8	660 FSL 560 FEL	32.4008437	-103.28054	STATE A A/C 2 #068	Cancelled
3002508843	CLAYTON WILLIAMS ENERGY INC	STATE A AC 2 #056	3853	Gas	UNKNOWN	0.22	1161.6	1961-08-06	22S 36E 8	1980 FSL 1980 FEL	32.4043624	-103.28474	STATE A A/C 2 #070	Plugged (site released)
3002528280	FAE II OPERATING LLC	STATE A A/C 2 #071	3900	Injection	QUEEN	0.3	1584	1983-09-18	22S 36E 9	1295 FSL 25 FWL	32.4024876	-103.27823	STATE A A/C 2 #070	Plugged (site released)
3002528278	FAE II OPERATING LLC	STATE A A/C 2 #059	3900	Injection	QUEEN	0.3	1584	1983-09-08	22S 36E 8	2615 FSL 1295 FEL	32.4061109	-103.28253	STATE A A/C 2 #070	Temporary Abandonment (expired)
3002523389	BRECK OPERATING CORP	STATE H #003	3850	Gas	QUEEN	0.37	1953.6	1969-12-19	22S 36E 17	330 FNL 1650 FEL	32.3980143	-103.28364	STATE A A/C 2 #070	Plugged (site released)
3002534529	FAE II OPERATING LLC	STATE H #005	4000	Oil	SEVEN RIVERS	0.39	2059.2	1998-11-19	22S 36E 17 NE NE	330 FNL 660 FEL	32.3980182	-103.28044	STATE A A/C 2 #070	Active
3002538029	FAE II OPERATING LLC	STATE A A/C 2 #092	3812	Gas	SEVEN RIVERS	0.43	2270.4	2006-09-12	22S 36E 8 E2 SE SW	660 FSL 2180 FWL	32.4007297	-103.28836	STATE A A/C 2 #070	Active
3002526277	FAE II OPERATING LLC	STATE A A/C 2 #058	3910	Injection	GRAYBURG	0.44	2323.2	1983-08-08	22S 36E 9	2570 FNL 70 FWL	32.4064023	-103.2781	STATE A A/C 2 #070	Temporary Abandonment (expired)
3002508853	FAE II OPERATING LLC	STATE A A/C 2 #004	3878	Gas	SEVEN RIVERS / QUEEN	0.46	2428.8	1937-05-31	22S 36E 9	660 FSL 660 FWL	32.4007433	-103.27617	STATE A A/C 2 #070	Active
3002508933	HARTMAN DOYLE	STATE H #001	3914	Oil	SEVEN RIVERS / QUEEN	0.46	2428.8	1937-08-14	22S 36E 17	660 FNL 660 FEL	32.3971112	-103.28044	STATE A A/C 2 #070	Plugged (site released)
3002508857	CLAYTON WILLIAMS ENERGY INC	PRE-ONGARD WELL #032	3842	Oil	SEVEN RIVERS / QUEEN	0.46	2428.8	1945-11-30	22S 36E 9	1980 FSL 660 FWL	32.4043715	-103.27618	STATE A A/C 2 #070	Plugged (site released)
3002538259	FAE II OPERATING LLC	STATE H #006	3830	Oil	QUEEN	0.47	2481.6	2007-02-01	22S 36E 8	660 FSL 560 FEL	32.4008437	-103.28054	STATE A A/C 2 #070	Active
3002508840	CLAYTON WILLIAMS ENERGY INC	STATE A AC 2 #053	3886	Oil	SEVEN RIVERS / QUEEN	0.47	2481.6	1961-02-04	22S 36E 8	660 FSL 1980 FWL	32.4007288	-103.28901	STATE A A/C 2 #070	Plugged (site released)
3002508832	FAE II OPERATING LLC	STATE A A/C 2 #023	3870	Oil	SEVEN RIVERS / QUEEN	0.47	2481.6	1942-11-02	22S 36E 8	1980 FNL 660 FEL	32.4080201	-103.28048	STATE A A/C 2 #070	Active
3002508836	PETROHAWK OPERATING CO	STATE A A/C 2 #037	3912	Oil	UNKNOWN	0.48	2534.4	1946-11-11	22S 36E 8	1980 FSL 1980 FWL	32.404357	-103.28902	STATE A A/C 2 #070	Plugged (site released)
3002508829	FAE II OPERATING LLC	STATE A A/C 2 #033	3885	Gas	QUEEN	0.48	2534.4	1936-12-17	22S 36E 8	1980 FNL 1980 FEL	32.4080111	-103.28475	STATE A A/C 2 #070	Active
3002523546	TEXAS PACIFIC OIL CO	STATE A AC 2 #032Y	3900	Injection	QUEEN	0.49	2587.2	1970-07-09	22S 36E 9 NE NW SW	2050 FSL 760 FWL	32.4045644	-103.27586	STATE A A/C 2 #070	Plugged (site released)

Exhibit B7

State A AC 2 #71

UWI/ API	Operator	Well Label	TD	Well Type	Current Zone	Distance in Miles	Distance In Feet From:	SPUD Date	Township Range Section	Footage	Surflat	Surflon	Well Tie	status
3002528280	FAE II OPERATING LLC	STATE A A/C 2 #071	3900	Injection	QUEEN	0	0	1983-09-18	22S 36E 9	1295 FSL 25 FWL	32.4024876	-103.27823	STATE A A/C 2 #071	Plugged (site released)
3002534699	RAPTOR RESOURCES INC	STATE A A/C 2 #077	3900	Oil	#N/A	0.19	1003.2	#N/A	22S 36E 8	660 FSL 560 FEL	32.4008437	-103.2805	STATE A A/C 2 #071	Cancelled
3002508853	FAE II OPERATING LLC	STATE A A/C 2 #004	3878	Gas	SEVEN RIVERS / QUEEN	0.2	1056	1937-05-31	22S 36E 9	660 FSL 660 FWL	32.4007433	-103.27617	STATE A A/C 2 #071	Active
3002508842	CLAYTON WILLIAMS ENERGY INC	STATE A AC 2 #055	3850	Oil	GRAYBURG	0.21	1108.8	1961-03-28	22S 36E 8	660 FSL 660 FEL	32.4007394	-103.28045	STATE A A/C 2 #071	Plugged (site released)
3002508857	CLAYTON WILLIAMS ENERGY INC	PRE-ONGARD WELL #032	3842	Oil	SEVEN RIVERS / QUEEN	0.21	1108.8	1945-11-30	22S 36E 9	1980 FSL 660 FWL	32.4043715	-103.27618	STATE A A/C 2 #071	Plugged (site released)
3002508833	FAE II OPERATING LLC	STATE A A/C 2 #024	3889	Gas	SEVEN RIVERS / QUEEN	0.22	1161.6	1942-12-16	22S 36E 8 SE	1980 FSL 660 FEL	32.4043676	-103.28046	STATE A A/C 2 #071	Active
3002523546	TEXAS PACIFIC OIL CO	STATE A AC 2 #032Y	3900	Injection	QUEEN	0.24	1267.2	1970-07-09	22S 36E 9 NE NW SW	2050 FSL 760 FWL	32.4045644	-103.27586	STATE A A/C 2 #071	Plugged (site released)
3002528279	FAE II OPERATING LLC	STATE A A/C 2 #070	3900	Gas	QUEEN	0.3	1584	1983-08-25	22S 36E 8	1295 FSL 1295 FEL	32.4024825	-103.28251	STATE A A/C 2 #071	Active
3002528281	FAE II OPERATING LLC	STATE A A/C 2 #072	3900	Gas	QUEEN	0.32	1689.6	1983-08-30	22S 36E 9 NE SW	1410 FSL 1440 FWL	32.4028064	-103.27365	STATE A A/C 2 #071	Active
3002528277	FAE II OPERATING LLC	STATE A A/C 2 #068	3910	Injection	GRAYBURG	0.32	1689.6	1983-08-08	22S 36E 9	2570 FNL 70 FWL	32.4064023	-103.2781	STATE A A/C 2 #071	Temporary Abandonment (expired)
3002534529	FAE II OPERATING LLC	STATE H #005	4000	Oil	SEVEN RIVERS	0.4	2112	1998-11-19	22S 36E 17 NE NE	330 FNL 660 FEL	32.3980182	-103.28044	STATE A A/C 2 #071	Active
3002528276	FAE II OPERATING LLC	STATE A A/C 2 #067	3900	Gas	QUEEN	0.42	2217.6	1983-09-14	22S 36E 9 NE SW	2615 FSL 1345 FWL	32.4061185	-103.27397	STATE A A/C 2 #071	Active
3002528278	FAE II OPERATING LLC	STATE A A/C 2 #069	3900	Injection	QUEEN	0.42	2217.6	1983-09-08	22S 36E 8	2615 FSL 1295 FEL	32.4061109	-103.28253	STATE A A/C 2 #071	Temporary Abandonment (expired)
3002523507	FAE II OPERATING LLC	STATE A A/C 2 #061	3949	Oil	QUEEN	0.43	2270.4	1970-05-14	22S 36E 8	1980 FSL 1780 FEL	32.4043634	-103.28409	STATE A A/C 2 #071	Active
3002508849	FAE II OPERATING LLC	STATE A A/C 2 #001	3835	Oil	UNKNOWN	0.46	2428.8	1935-07-02	22S 36E 9	660 FSL 1974 FWL	32.4007458	-103.27191	STATE A A/C 2 #071	Active
3002508932	FINLEY RESOURCES INC	SHELL STATE A #001	3804	Oil	SEVEN RIVERS / QUEEN	0.46	2428.8	1937-02-25	22S 36E 16	660 FNL 660 FWL	32.3971151	-103.27616	STATE A A/C 2 #071	Plugged (site released)
3002508847	FAE II OPERATING LLC	STATE A A/C 2 #038	3845	Gas	UNKNOWN	0.46	2428.8	1946-11-28	22S 36E 9	1980 FSL 1980 FWL	32.404374	-103.27191	STATE A A/C 2 #071	Active
3002508933	HARTMAN DOYLE	STATE H #001	3914	Oil	SEVEN RIVERS / QUEEN	0.47	2481.6	1937-08-14	22S 36E 17	660 FNL 660 FEL	32.3971112	-103.28044	STATE A A/C 2 #071	Plugged (site released)
3002508841	FAE II OPERATING LLC	STATE A A/C 2 #054	3863	Gas	SEVEN RIVERS / QUEEN	0.47	2481.6	1961-02-12	22S 36E 8	660 FSL 1980 FEL	32.4007342	-103.28472	STATE A A/C 2 #071	Active
3002508855	PETROHAWK OPERATING CO	STATE A A/C 2 #030	3840	Gas	QUEEN	0.47	2481.6	1945-09-19	22S 36E 9 C SW NW	1980 FNL 660 FWL	32.4080232	-103.2762	STATE A A/C 2 #071	Plugged (site released)
3002508843	CLAYTON WILLIAMS ENERGY INC	STATE A AC 2 #056	3853	Gas	UNKNOWN	0.48	2534.4	1961-08-06	22S 36E 8	1980 FSL 1980 FEL	32.4043624	-103.28474	STATE A A/C 2 #071	Plugged (site released)
3002508832	FAE II OPERATING LLC	STATE A A/C 2 #023	3870	Oil	SEVEN RIVERS / QUEEN	0.48	2534.4	1942-11-02	22S 36E 8	1980 FNL 660 FEL	32.4080201	-103.28048	STATE A A/C 2 #071	Active
3002520970	PETROHAWK OPERATING CO	STATE A A/C 2 #059	3870	Oil	UNKNOWN	0.49	2587.2	1964-10-09	22S 36E 9	1980 FSL 2080 FWL	32.4043742	-103.27158	STATE A A/C 2 #071	Plugged (site released)

Exhibit B8

State A AC 2 #72

UWI/ API	Operator	Well Label	TD	Well Type	Current Zone	Distance in Miles	Distance in Feet From:	SPUD Date	Township Range Section	Footage	Surflat	Surflon	Well Tie	status
3002528281	FAE II OPERATING LLC	STATE A A/C 2 #072	3900	Gas	QUEEN	0	0	1983-08-30	22S 36E 9 NE SW	1410 FSL 1440 FWL	32.40280644	-103.2736502	STATE A A/C 2 #072	Active
3002508847	FAE II OPERATING LLC	STATE A A/C 2 #038	3845	Gas	UNKNOWN	0.18	950.4	1946-11-28	22S 36E 9	1980 FSL 1980 FWL	32.40437399	-103.2719076	STATE A A/C 2 #072	Active
3002520970	PETROHAWK OPERATING CO	STATE A A/C 2 #059	3870	Oil	UNKNOWN	0.19	1003.2	1964-10-09	22S 36E 9	1980 FSL 2080 FWL	32.40437417	-103.2715836	STATE A A/C 2 #072	Plugged (site released)
3002508849	FAE II OPERATING LLC	STATE A A/C 2 #001	3835	Oil	UNKNOWN	0.21	1108.8	1935-07-02	22S 36E 9	660 FSL 1974 FWL	32.40074576	-103.2719121	STATE A A/C 2 #072	Active
3002523546	TEXAS PACIFIC OIL CO	STATE A AC 2 #032Y	3900	Injection	QUEEN	0.21	1108.8	1970-07-09	22S 36E 9 NE NW SW	2050 FSL 760 FWL	32.40456436	-103.2758608	STATE A A/C 2 #072	Plugged (site released)
3002508857	CLAYTON WILLIAMS ENERGY INC	PRE-ONGARD WELL #032	3842	Oil	SEVEN RIVERS / QUEEN	0.22	1161.6	1945-11-30	22S 36E 9	1980 FSL 660 FWL	32.4043715	-103.2761843	STATE A A/C 2 #072	Plugged (site released)
3002508853	FAE II OPERATING LLC	STATE A A/C 2 #004	3878	Gas	SEVEN RIVERS / QUEEN	0.24	1267.2	1937-05-31	22S 36E 9	660 FSL 660 FWL	32.40074329	-103.2761692	STATE A A/C 2 #072	Active
3002528276	FAE II OPERATING LLC	STATE A A/C 2 #067	3900	Gas	QUEEN	0.27	1425.6	1983-09-14	22S 36E 9 NE SW	2615 FSL 1345 FWL	32.40611853	-103.2739718	STATE A A/C 2 #072	Active
3002528280	FAE II OPERATING LLC	STATE A A/C 2 #071	3900	Injection	QUEEN	0.32	1689.6	1983-09-18	22S 36E 9	1295 FSL 25 FWL	32.4024876	-103.2782337	STATE A A/C 2 #072	Plugged (site released)
3002528277	FAE II OPERATING LLC	STATE A A/C 2 #068	3910	Injection	GRAYBURG	0.43	2270.4	1983-08-08	22S 36E 9	2570 FNL 70 FWL	32.40640231	-103.2781043	STATE A A/C 2 #072	Temporary Abandonment (expired)
3002508850	ATLANTIC RICHFIELD CO THE	PRE-ONGARD WELL #002	3850	Oil	UNKNOWN	0.44	2323.2	1955-03-17	22S 36E 9	1980 FSL 1980 FEL	32.40437634	-103.267632	STATE A A/C 2 #072	Plugged (site released)
3002508856	FAE II OPERATING LLC	STATE A A/C 2 #031	3845	Gas	SEVEN RIVERS / QUEEN	0.44	2323.2	1945-11-03	22S 36E 9 C SE NW	1980 FNL 1980 FWL	32.40802034	-103.2719227	STATE A A/C 2 #072	Active
3002508844	APACHE CORP	STATE 157 A #001	4000	Oil	SEVEN RIVERS / QUEEN	0.45	2376	1936-03-15	22S 36E 9	660 FSL 1980 FEL	32.40074811	-103.2676183	STATE A A/C 2 #072	Active
3002508855	PETROHAWK OPERATING CO	STATE A A/C 2 #030	3840	Gas	QUEEN	0.46	2428.8	1945-09-19	22S 36E 9 C SW NW	1980 FNL 660 FWL	32.40802316	-103.2761995	STATE A A/C 2 #072	Plugged (site released)
3002534699	RAPTOR RESOURCES INC	STATE A A/C 2 #077	3900	Oil	#N/A	0.48	2534.4	#N/A	22S 36E 8	660 FSL 560 FEL	32.40084365	-103.280539	STATE A A/C 2 #072	Cancelled
3002508921	APACHE CORP	MAXWELL STATE #001	3860	Oil	QUEEN	0.48	2534.4	1935-07-01	22S 36E 16 NE NW	660 FNL 1980 FWL	32.39711747	-103.2718824	STATE A A/C 2 #072	Plugged (not released)
3002508833	FAE II OPERATING LLC	STATE A A/C 2 #024	3889	Gas	SEVEN RIVERS / QUEEN	0.49	2587.2	1942-12-16	22S 36E 8 SE	1980 FSL 660 FEL	32.40436764	-103.2804609	STATE A A/C 2 #072	Active
3002508932	FINLEY RESOURCES INC	SHELL STATE A #001	3804	Oil	SEVEN RIVERS / QUEEN	0.5	2640	1937-02-25	22S 36E 16	660 FNL 660 FWL	32.39711506	-103.2761593	STATE A A/C 2 #072	Plugged (site released)
3002508842	CLAYTON WILLIAMS ENERGY INC	STATE A AC 2 #055	3850	Oil	GRAYBURG	0.5	2640	1961-03-28	22S 36E 8	660 FSL 660 FEL	32.40073942	-103.2804456	STATE A A/C 2 #072	Plugged (site released)

VI. Exhibit C1

State A A/C 2 #065

API# 30-025-28274
1345 FNL 25 FWL,
Sec 9, T23S, R36E Lea Co., NM

Well Name: **State A A/C 2 #65** Plantation ID Number: _____ Lease Type: STATE

Location: 1345 FNL, 25 FWL; Unit E Sec: 9 Township: 23S Range: 36E

County: Lea State: NM API: 30-025-28274 Formation: Jalmat, Tansill- Yates- 7 Rivers

CURRENT

Surface Csg
Size: 8-5/8"
Wt.&Thrd: 24#, STC
Grade: J55
Set @: 598'
Sxs cmt: 375
Circ:
TOC: Surface
Hole Size: 12-1/4"

KB: 3571'
DF:
GL: 3559'
Spud Date: 8/14/1983
Compl. Date: 10/7/1983

Spot & Cric 30 sx from 250' to surface. L/D tbg and set EOT @ 30'

Hole(s) @ 638'-700'

Spot 35 sx @ 725-500' woc

T/S spot 25sx @ 1575'

B/S spot 25sx cmt @ 2990'

CIBP set @ 3605' on 2/9/2009

35 sx

Production Csg
Size: 5-1/2"
Wt.&Thrd: 14#, LTC
Grade: J55
Set @: 3900'
Sxs Cmt: 950
Circ:
TOC: Surface
Hole Size: 7-7/8"

Perfs
Queen Perf
3811-3872
3751-3782

PBTD 3878'
TD 3900'

History - Highlights

8/14/1983: Spud well

10/7/1983:
Queen Perf
3811-3872 w/ 60 holes. 1 JSPF w/ 4" OD. Acdz w/ 3000 gals 15% NEFE HCL
3751-3782 w/ 30 holes. 1 JSPF w/ 4" OD. Acdz w/ 1000 gals 15% NEFE HCL
5/1/1985: Casing leak below pkr @ 3623' and 3654'
3/1/1986: CO fill from 3826' to 3878'
7/1/1986: Sqz leak w/ 150sx, held sucessfully. Clean out to 3878'
2/9/2009: CIBP set @ 3605'. Casing test failed. **New leaks from 638' - 700'**
4/27/2009: No success pumping into leak. Approved isolating casing leak with 2 CIBP @ 700' and 598'. **TA well.**

VI. Exhibit C2

State A A/C 2 #056

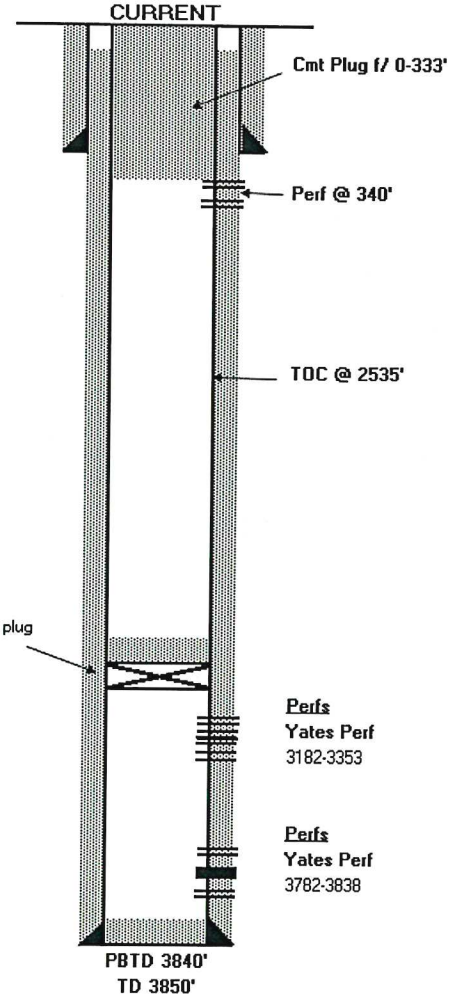
API# 30-025-08843
1980 FSL 1980 FEL,
Sec 8, T22S, R36E Lea Co., NM

Well Name: State A A/C 2 #56 Plantation ID Number:
Location: 1980 FSL, 1980 FEL; Unit J Sec: 8 Township: 22S
County: Lea State: NM API: 30-025-08843

Lease Type: STATE
Range: 36E
Formation: Jalmat, Tansill- Yates- 7 Rivers

CURRENT

Surface Csg
Size: 8-5/8"
Wt.&Thrd: 24#, STC
Grade: J55
Set @: 333'
Sxs cmt: 300
Circ:
TOC:
Hole Size: 12-1/4"



Production Csg
Size: 5-1/2"
Wt.&Thrd: 14#, LTC
Grade:
Set @: 3853'
Sxs Cmt: 300
Circ:
TOC:
Hole Size: 7-7/8"

KB: 3571'
DF:
GL: 3559'
Spud Date: 8/6/1961
Compl. Date: 9/21/1961

History - Highlights

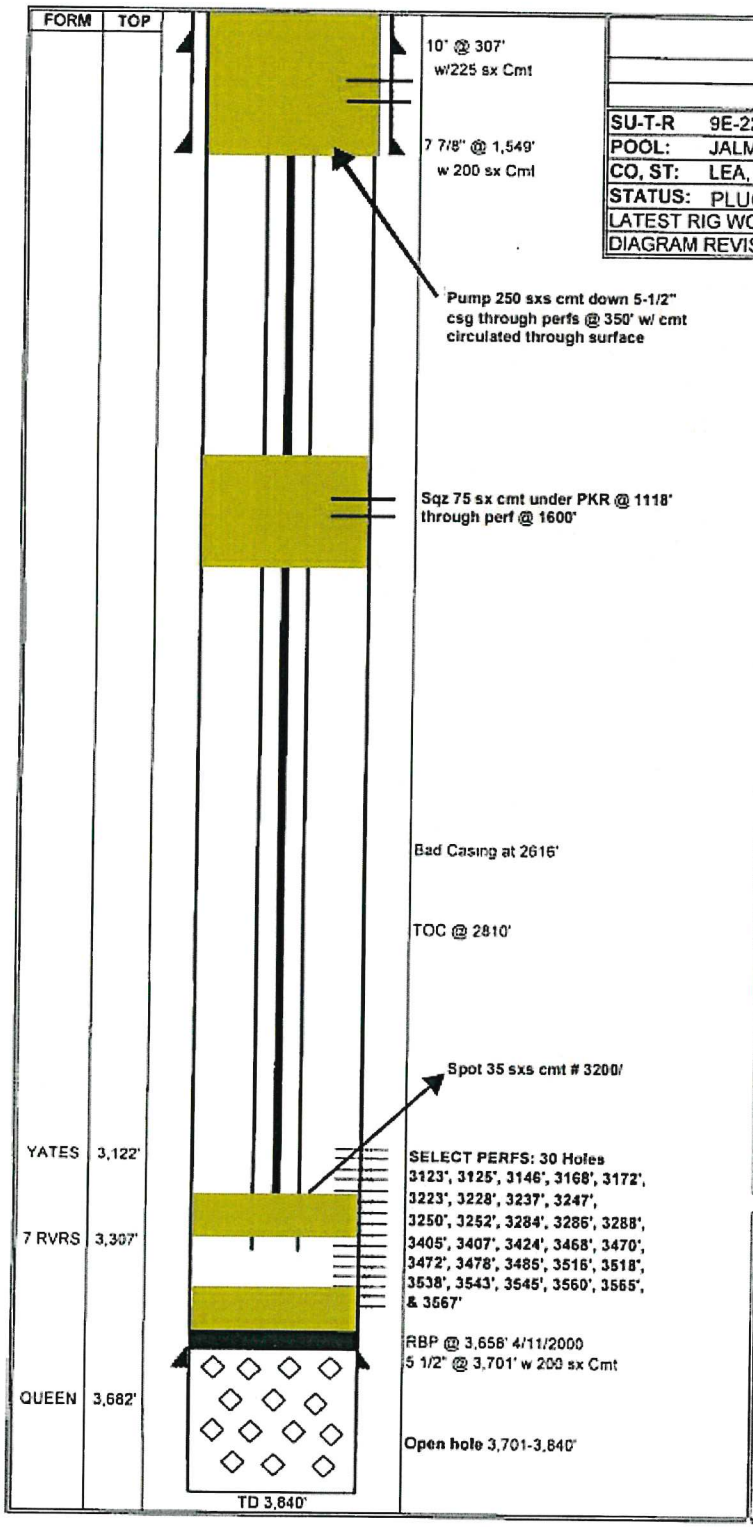
8/6/1961: Spud well

9/1961: Set Ret @ 3706'. Sqz w/ 40 sx
Yates Perf
3782-3838' SOT w/ 2000 gals oil + 2000#s
3182- 3353 SOT w/ 2000 gals oil + 6000#s
1/1990: Replace tbg and put on pump
6/17/1994:
Set CIBP @ 2858' w/ 35' cmt on plug (verbal approval from OCD for deviation from 3150' setting depth)
Circulated hole w/ 10 ppg gelled brine. Perforated 5-1/2" casing @ 350
Circulate cmt down 5-1/2" casing and up the 5-1/2" to 6-5/8" annulus to surface
Cut 5/1/2" and 8-5/8" casing 3' below GL. Set P & A marker

State A A/C 2 #30

VI. Exhibit C3

API# 30-025-08855
1345 FNL 25 FWL,
Sec 9, T23S, R36E Lea Co., NM



AAC-2 #30
CURRENT WELLBORE DIAGRAM
Mission Resources

SU-T-R	9E-22S-36E	API #:	30-025-08855-0000
POOL:	JALMAT;TAN-YATES-7 RVRS (OIL)		
CO, ST:	LEA, NEW MEXICO	LAND TYPE:	STATE
STATUS:	PLUGGED	ACREAGE	40.12
LATEST RIG WORKOVER:		5/9/2001	
DIAGRAM REVISED.		3/23/2009	

LOG ELEVATION	3,563' DF
GROUND ELEVATION	3,553'

CASING				TUBING
Hole	13"	8 3/4"	7 7/8"	
Pipe	10"	7 7/8"	5 1/2"	2 3/8"
Weight	40#	26#	14#	4.7#
Grade				
Thread				
Depth	307'	1,549'	3,701'	3,356'
Mud wt				

P/A History

6/24/2009: Spot 35 sx cmt @ 3200'
6/25/2009: Spot 35 sx cmt w/ 2% CaCl @ 3200'
6/25/2009: Spot 52 sx cmt w/ 2% CaCl @ 2666'
6/25/2009: Sqz 75 sx cmt under PKR @ 1118' through perf @ 1600'
6/26/2009: Pump 130 sx cmt down 5-1/2" csg through perfs @ 350' with cmt circulated to surface. Leave cgs full of cement.

TAN-YATES-7 RVRS ZONE HISTORY

4/11/00 Recompleted from Queen
Perforated select 30 holes 3123'-3565'
Acidized 2400 gal acid
Ran 3-1/2" work tbg, set pkr at 3,014'
Frac w 46,000g G 40# Linear gel foamed to 70 quality w/ 257T CO2 & 15,000# 20/40 sand & 175,000# 12/20 Brady sand
Ran 2-3/8" prod tubing to 3,356'
Ran 2" x 1-1/2" x 12' pump and rods.
IP 0 BOPD 0 BWPD 410 MCFD

OPPORTUNITY

Bottom 120' of 7 Rvrs not perfed. 1/9/04 RSL

QUEEN ZONE HISTORY

09/19/45 Spud **10/12/45** Initial Completion
Pool EUNICE,SEVEN RIVERS-QUEEN, SOUTH
Open hole 3,701-3,840'
Acidized 3000 gal acid
IP 114 BOPD Flowing
12/49 Clean out OH.
4/56 Fraced w/20,000 gal oil & 20,000# sand
Production Prior to w/o = 3 BO, 0 BW
Production After to w/o = 5 BO, 4 BW, 375 MCF
10/15/57 Plug back 10' w/lead wool & pea gravel to shut off water
3/64 Pumping unit installed
4/11/2000 Set RBP @ 3,658'

Pre- Ongard Well #51

VI. Exhibit C4

API# 30-025-08843
1980 FNL 1980 FWL,
Sec 8, T23S, R36E Lea Co., NM

Well Name: PRE-ONGARD WELL #051 Plantation ID Number: _____ Lease Type: STATE

Location: 1980 FNL 1980 FWL; Unit F Sec: 8 Township: 23S Range: 36E

County: Lea State: NM API: 30-025-08843 Formation: Jalmat, Tansill- Yates- 7 Rivers

CURRENT

Surface Csg
Size: 9-5/8"
Wt.&Thrd:
Grade:
Set @: 312'
Sxs cmt: 300
Circ:
TOC:
Hole Size: 13-1/4"

Perf sqz hole @ 260' and sqz across 9-5/8" casing seat

Cmt Plug f/ 0-312'

KB:
DF:
GL: 3595'
Commenced Date: 10/15/1969
Compl. Date: 10/27/1969

History - Highlights

10/15/1969: Well commencement

10/27/1969: Set CIBP @ 3425'
Yates Perf
3192-3200, 3229-3243, 3282-97, 3301-37, 3358-70 w/ 85 holes. Frac'd w/ 15000 gals gelled brine w/ 30000# 10/20 sand
Ran tubing set at 3364', swabbed and placed on production

6/1972: TA'd and shut in due to uneconomical production
9/20/1988: w/ tbg tag cmt plug at 3074' circ hole w/ 10# mud POH LS 2-7/8" tbg
9/21/1988: cut 7" csg @ 370' POH mix & spot 100 sks. Cmt plug from 420' to 134'

Spot Plug at minimum 50' above Yates perfs 3192-3370' and tag

Perfs
Yates Perf
3192-3200
3229-3243'
3282-3297'
3301-3337'
3358-3370'

Production Csg
Size: 7"
Wt.&Thrd:
Grade:
Set @: 3778'
Sxs Cmt: 250
Circ:
TOC:
Hole Size: 8-3/4"

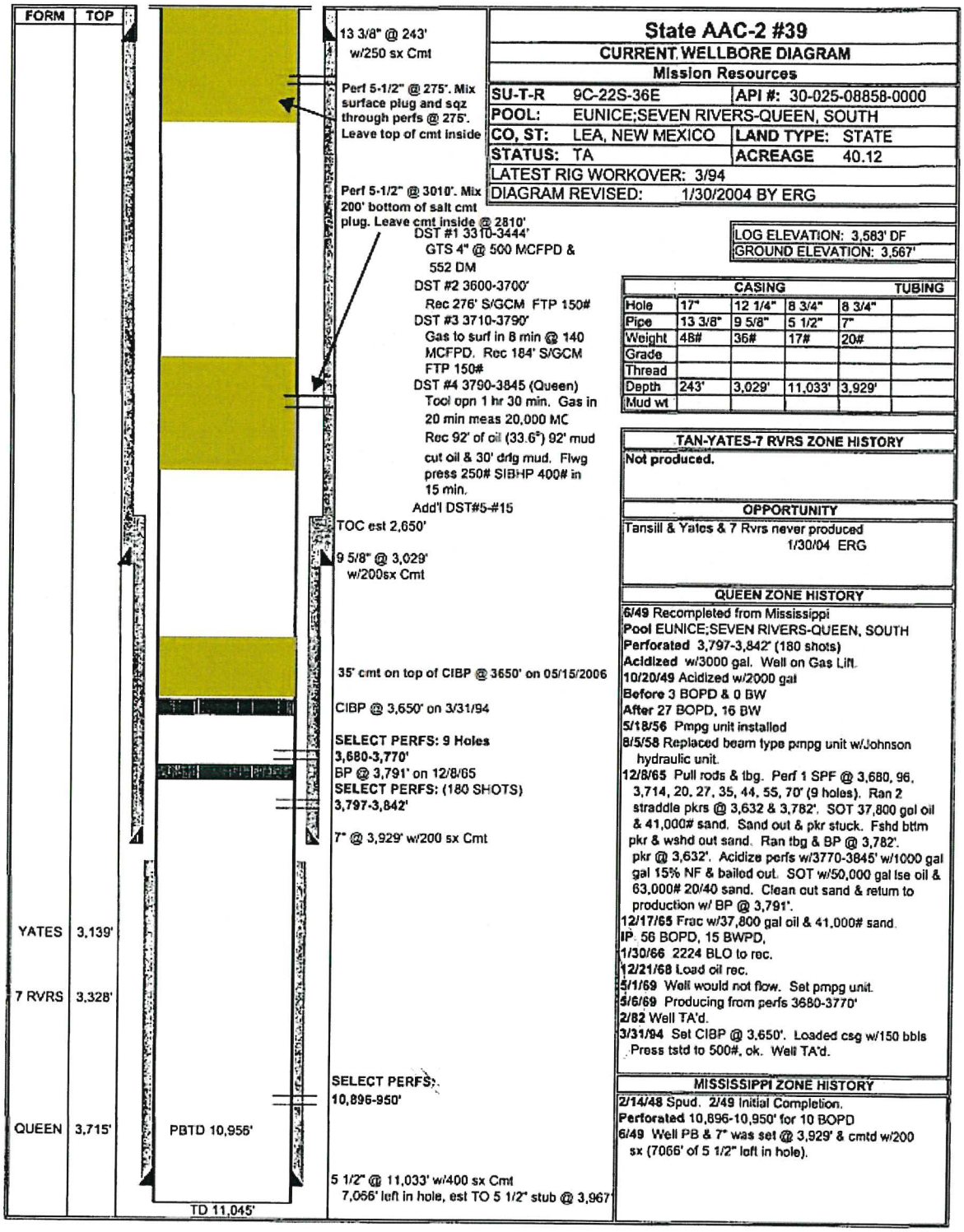
CIBP set @ 3425' on 10/27/1969

PBTD 3425'
TD 3867'

State A A/C 2 #39

VI. Exhibit C5

API# 30-025-08858
990 FNL 1650 FWL,
Sec 9, T22S, R36E Lea Co., NM



State AAC-2 #39

CURRENT WELLBORE DIAGRAM
Mission Resources

SU-T-R	9C-22S-36E	API #:	30-025-08858-0000
POOL:	EUNICE;SEVEN RIVERS-QUEEN, SOUTH		
CO, ST:	LEA, NEW MEXICO	LAND TYPE:	STATE
STATUS:	TA	ACREAGE	40.12
LATEST RIG WORKOVER: 3/94			
DIAGRAM REVISED:	1/30/2004 BY ERG		

LOG ELEVATION: 3,583' DF
GROUND ELEVATION: 3,567'

	CASING				TUBING
Hole	17"	12 1/4"	8 3/4"	8 3/4"	
Pipe	13 3/8"	9 5/8"	5 1/2"	7"	
Weight	48#	36#	17#	20#	
Grade					
Thread					
Depth	243'	3,029'	11,033'	3,929'	
Mud wt					

TAN-YATES-7 RVRS ZONE HISTORY

Not produced.

OPPORTUNITY

Tansill & Yates & 7 Rvrs never produced
1/30/04 ERG

QUEEN ZONE HISTORY

6/49 Recompleted from Mississippi
Pool EUNICE;SEVEN RIVERS-QUEEN, SOUTH
Perforated 3,797-3,842' (180 shots)
Acidized w/3000 gal. Well on Gas Lift.
10/20/49 Acidized w/2000 gal
Before 3 BOPD & 0 BW
After 27 BOPD, 16 BW
5/18/56 Pmpg unit installed
8/5/58 Replaced beam type pmpg unit w/Johnson hydraulic unit.
12/8/65 Pull rods & tbg. Perf 1 SPF @ 3,680, 96, 3,714, 20, 27, 35, 44, 55, 70' (9 holes). Ran 2 straddle pkrs @ 3,632 & 3,782'. SOT 37,800 gal oil & 41,000# sand. Sand out & pkr stuck. Fshd bttm pkr & wshd out sand. Ran tbg & BP @ 3,782'. pkr @ 3,632'. Acidize perfs w/3770-3845' w/1000 gal gal 15% NF & bailed out. SOT w/50,000 gal lse oil & 63,000# 20/40 sand. Clean out sand & return to production w/ BP @ 3,791'.
12/17/65 Frac w/37,800 gal oil & 41,000# sand.
IP. 56 BOPD, 15 BWPD,
1/30/66 2224 BLO to rec.
12/21/68 Load oil rec.
5/1/69 Well would not flow. Set pmpg unit.
5/6/69 Producing from perfs 3680-3770'
2/82 Well TA'd.
3/31/94 Set CIBP @ 3,650'. Loaded csg w/150 bbls Press tstd to 500#, ok. Well TA'd.

MISSISSIPPI ZONE HISTORY

2/14/48 Spud. 2/49 Initial Completion.
Perforated 10,896-10,950' for 10 BOPD
6/49 Well PB & 7" was set @ 3,929' & cmtd w/200 sx (7066' of 5 1/2" left in hole).

State A A/C 2 #32Y

API# 30-025-08857
1980 FSL 660 FWL,
Sec 9, T22S, R36E Lea Co., NM

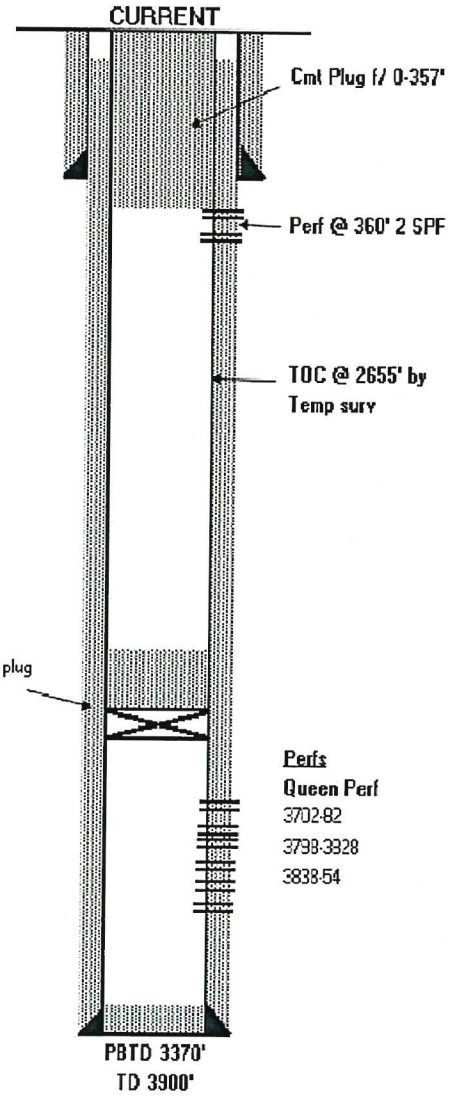
VI. Exhibit C6

Well Name: **State A A/C 2 #32Y** Plantation ID Number: _____
Location: 1980 FSL 660 FWL; Unit L Sec: 9 Township: 22S
County: Lea State: NM API: 30-025-08857

Lease Type: STATE
Range: 36E
Formation: Eunice; 7 Rivers, Queen, South

CURRENT

Surface Csg
Size: 7-5/8"
Wt.&Thrd: 26#
Grade:
Set @: 375'
Sxs cmt: 175
Circ:
TOC:
Hole Size: 11"



Production Csg
Size: 4-1/2"
Wt.&Thrd: 9.5#
Grade:
Set @: 3900'
Sxs Cmt: 300
Circ:
TOC:
Hole Size: 6-3/4"

KB:
DF:
GL: 3560'
Spud Date: 7/9/1970
Compl. Date: 7/28/1970

History - Highlights

7/9/1970: Spud well
Queen Perf
3702, 05, 10, 14, 16, 21, 23, 25, 29, 40, 49, 53, 58, 65, 67, 72, 80, 82
3702-3782 w/ 18 holes. Acdz 2000 gals w/ 15% NE acid

1/1985:
Queen Perf
3838-3854 and Acdz w/ 1500 gal
3798-3828 and Acdz w/ 3000 gal

3/05/1993: set CIBP @ 3650'. Dumped 40' cmt on CIBP

3/17-3/20/1993:
Displaced hole w/ 65 bbls 10 ppg gelled brine from CIBP to surface. Perf 4-1/2" casing at 360', 2 SPF. Pumped 135 sx Class "C" w/ 2% CaCl2 down 4-1/2" casing and up 4-1/2" to 7-5/8" annulus. Cut casing 3' below 3' and install F&A marker

Pre-Ongard Well #32

VI. Exhibit C7

API# 30-025-08857
1980 FSL 660 FWL,
Sec 9, T22S, R36E Lea Co., NM

Well Name: State A A/C 2 #32 **EV Prop #** 45141.001 **Lease Type:** Fee
Location: 1980 FSL 660 FWL; Unit L, 22S-36E-09 **County/State:** Lea/NM
Field/Formation: Eumont (Yates, 7R, Queen) API: 30-025-08857

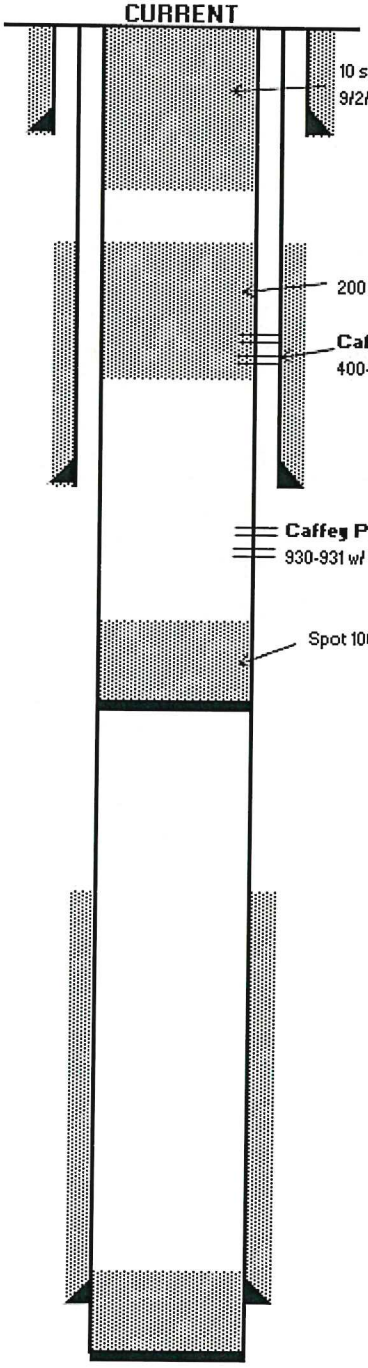
CURRENT

Surface Csg
Size: 8-1/4"
Wt.&Thrd: 28#
Grade:
Set @: 400'
Sxs cmt: 185
Circ:
TOC:
Hole Size: 11"

Intermediate Csg
Size: 7-5/8"
Wt.&Thrd: 26.4#
Grade:
Set @: 1600'
Sxs cmt: 200
Circ:
TOC:
Hole Size: 9-5/8"

Production Csg
Size: 5-1/2"
Wt.&Thrd: 14#
Grade:
Set @: 3800'
Sxs Cmt: 500
Circ:
TOC:
Hole Size: 7-7/8"

KB:
DF:
GL: 3566'
Spud Date: 8/2/1936
Compl. Date: 8/28/1936



VI. Exhibit C8

State A A/C 2 #59

API# 30-025-20970
1980 FSL 2080 FWL,
Sec 9, T22S, R36E Lea Co., NM

Well Name: State A A/C 2 #59 Plantation ID Number: _____ Lease Type: STATE
Location: 1980 FSL, 2080 FWL; Unit Sec: 9 Township: 22S Range: 36E
County: Lea State: NM API: 30-025-20970 Formation: Eunice; 7 Rivers, Queen, South

CURRENT

Surface Csg
Size: 7-5/8"
Wt.&Thrd: 26#, STC
Grade: N-80
Set @: 328'
Sxs cmt: 250 sx
Circ: Yes
TOC:
Hole Size: 11"

Perf @ 378' spot 20 sxs cmt @

Perf @ 690', spot 25 sxs cmt
spot 25 sxs cmt @ 740'
tag plug @ 603'

Perf @ 1600' sqz 25 sxs cmt
tag plug @ 1490'

Well Kicked @ 3066'
Core #1 3700-3746'
Core #2 3746-3793'
Core #3 3793-3842'
Core #4 3842-3870'

CIBP set @ 3760' on 10/28/64
w/ 1 sk cap

Production Csg
Size: 4-1/2"
Wt.&Thrd: 9.5#, LTC
Grade: K-55
Set @: 3870'
Sxs Cmt:
Circ: 300
TOC:
Hole Size: 6-3/4"

Perfs
Queen Perf
3670-3737'

PBTD 3860'
TD 3870'

KB:
DF:
GL: 3576'
Spud Date: 10/9/1964
Compl. Date: 12/4/1964

History - Highlights

10/9/1964: Spud well

10/26/1964: set CIBP @ 3760' & cap w/ 1 sk cmt
Queen Perf
3670, 3680, 3686, 3702, 3716, 3737, 3797, 3822 w/ 8 holes 1 SPI Acdz w/ 1000 gals

5/27/2004:
Set CIBP @ 3600' on tbg and spot sks cmt
Spot 200' plug base of salt 3010'. Get rate in casing leak @ 2510'

8/26/2009: Perf @ 1600' sqz 25 sxs cmt @ 1600' tag plug @ 1490'
8/27/2009: Perf @ 690' Pressure up to 500 PSI held, spot 25 sxs cmt @ 740' tag plug at 603'
8/31/2009: Perf @ 378' Spot 20 sxs cmt @ 404' tag plug @ 165'

VI. Exhibit C9

State A A/C 2 #071

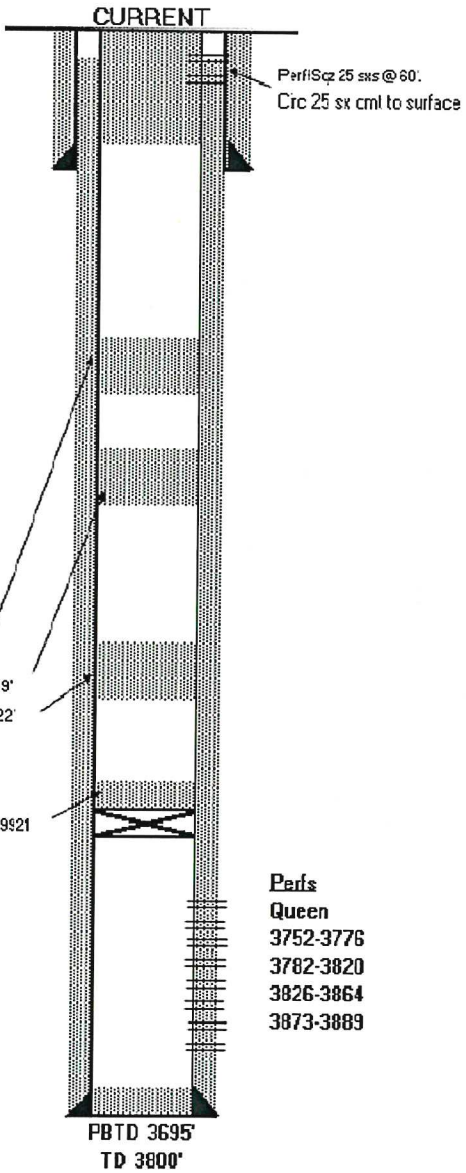
API# 30-025-28280
1295 FSL 25 FWL,
Sec 9, T22S, R36E Lea Co., NM

Well Name: State A A/C 2 #71 Plantation ID Number:
Location: 1295 FSL 25 FWL; Unit M Sec: 9 Township: 22S
County: Lea State: NM API: 30-025-28280

Lease Type STATE
Range: 36E
Formation: Eunice SR Qv, South

CURRENT

Surface Csg
Size: 8-5/8"
Wt.&Thrd: 24#, STC
Grade: J55
Set @: 588'
Sxs cmt: 375
Circ:
TOC:
Hole Size: 12-1/4"



Production Csg
Size: 5-1/2"
Wt.&Thrd: 14#, LTC
Grade: K55
Set @: 3900'
Sxs Cmt: 950
Circ:
TOC:
Hole Size: 7-7/8"

Perfs
Queen
3752-3776
3782-3820
3826-3864
3873-3889

KB:
DF:
GL: 3569'
Spud Date: 9/18/1983
Compl. Date: 10/29/1983

History - Highlights

9/18/1983: Spud well

10/20/1983:
Queen Perf
3847-3877 w 31 holes. 1 JSPFG. Acdz w/1800 gals 15% HCL
3783-3835 w/53 holes. 1 JSPF. Acdz w/ 3000 gals 15% HCL
3763-3775 w/ 13 holes. 1 JSPF. Acdz w/ 750 gals 15% HCL

10/30/1983: Injection string with pkr set @ 3710' and turn to injection

12/17/1992: TA status. RIG w/ CIBP and set @ 3700' w/ 2 sx on top

6/12/2013: most recent passed pressure test

6/4/2015: Spot sxs cmt @ 3163' to 2922'. Spot 25 sxs cmt from 1490' to 1249. Spot 25 sxs from 638' to 394' - tag @ 400'. Perf @ 60' - Circ 25 sx cmt to surface

6/5/2015: RDMO

VI. Exhibit C10

Pre-Ongard Well #002

API# 30-025-08850
1980 FSL 1980 FEL,
Sec 9, T22S, R36E Lea Co., NM

Well Name: **Pre-Ongard #002** Plantation ID Number: _____ Lease Type: STATE

Location: 1980 FSL, 1980 FEL; Unit J Sec: 9 Township: 22S Range: 36E

County: Lea State: NM API: 30-025-08850 Formation: Eunice; 7 Rivers, Queen, South

CURRENT

Surface Csg

Size:	10-3/4"
Wt.&Thrd:	32.75
Grade:	
Set @:	316'
Sxs cmt:	275
Circ:	Yes
TOC:	surface
Hole Size:	17-1/4"

KB: _____
DF: _____
GL: 3551'
Spud Date: 3/17/1955
Compl. Date: 4/4/1955

P&A effective 12/2/1775

Spot 50 sx into perfs @ 3142-3338'. Top of plug at 3080'

Perfs
7 Rivers & Yates Perf
3142-3148 & 3154-3174
3187-3204 & 3220-3226
3242-54 &3264-78
3306-20 &3324-3338'

Production Packer @ 3727'

Spot 10 sx inside 7" csg on top of present 11" cmy plug @ 3651' for total of 60' cmt plug on top of pkr & DR plug @ 3672'

Production Csg

Size:	7"
Wt.&Thrd:	20
Grade:	J-55
Set @:	3849'
Sxs Cmt:	
Circ:	300
TOC:	2520'
Hole Size:	8-3/4"

Perfs
Queen Perf
3712-44
3749-55
3759-74
Acdz w/ 1000 gals of 15%

PBTD 3651'
TD 3850'

VI. Exhibit C11

State A A/C 2 #55

API# 30-025-08842
660 FSL 660 FEL,
Sec 9, T22S, R36E Lea Co., NM

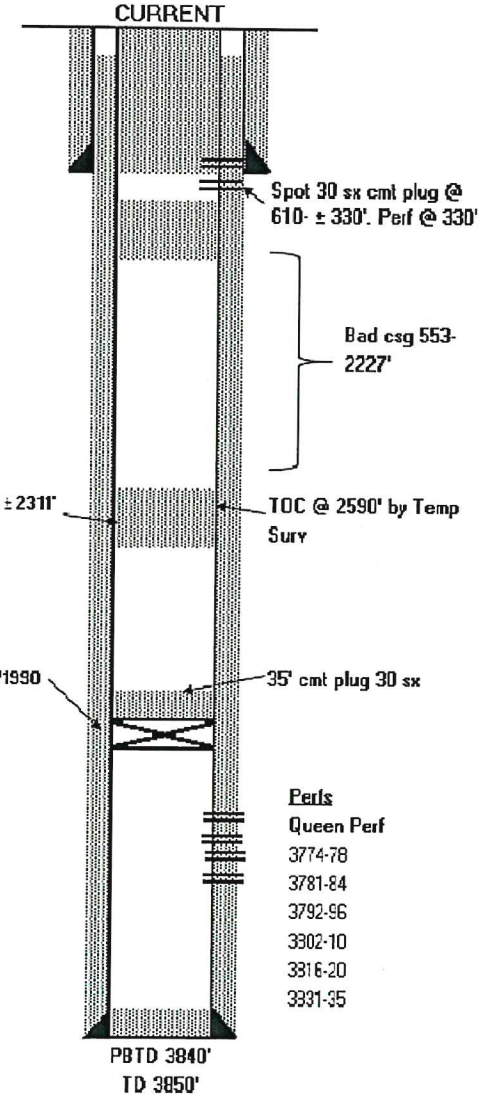
Well Name: State A A/C 2 #55 Plantation ID Number:
Location: 660 FSL 660 FEL; Unit P Sec: 8 Township: 22S
County: Lea State: NM API: 30-025-08842

Lease Type: STATE
Range: 36E
Formation: Eunice; 7 Rivers, Queen, South

KB: 3571'
DF:
GL: 3561'
Spud Date: 3/29/1962
Compl. Date: 4/5/1962

CURRENT

Surface Csg
Size: 8-5/8"
Wt.&Thrd: 24#, STC
Grade: J55
Set @: 322'
Sxs cmt: 300
Circ:
TOC: Surface
Hole Size: 12-1/4"



Production Csg
Size: 5-1/2"
Wt.&Thrd: 14#, LTC
Grade: J55
Set @: 3850'
Sxs Cmt: 250
Circ:
TOC: Surface
Hole Size: 7-7/8"

Perfs
Queen Perf
3774-78
3781-84
3792-96
3802-10
3816-20
3831-35

History - Highlights

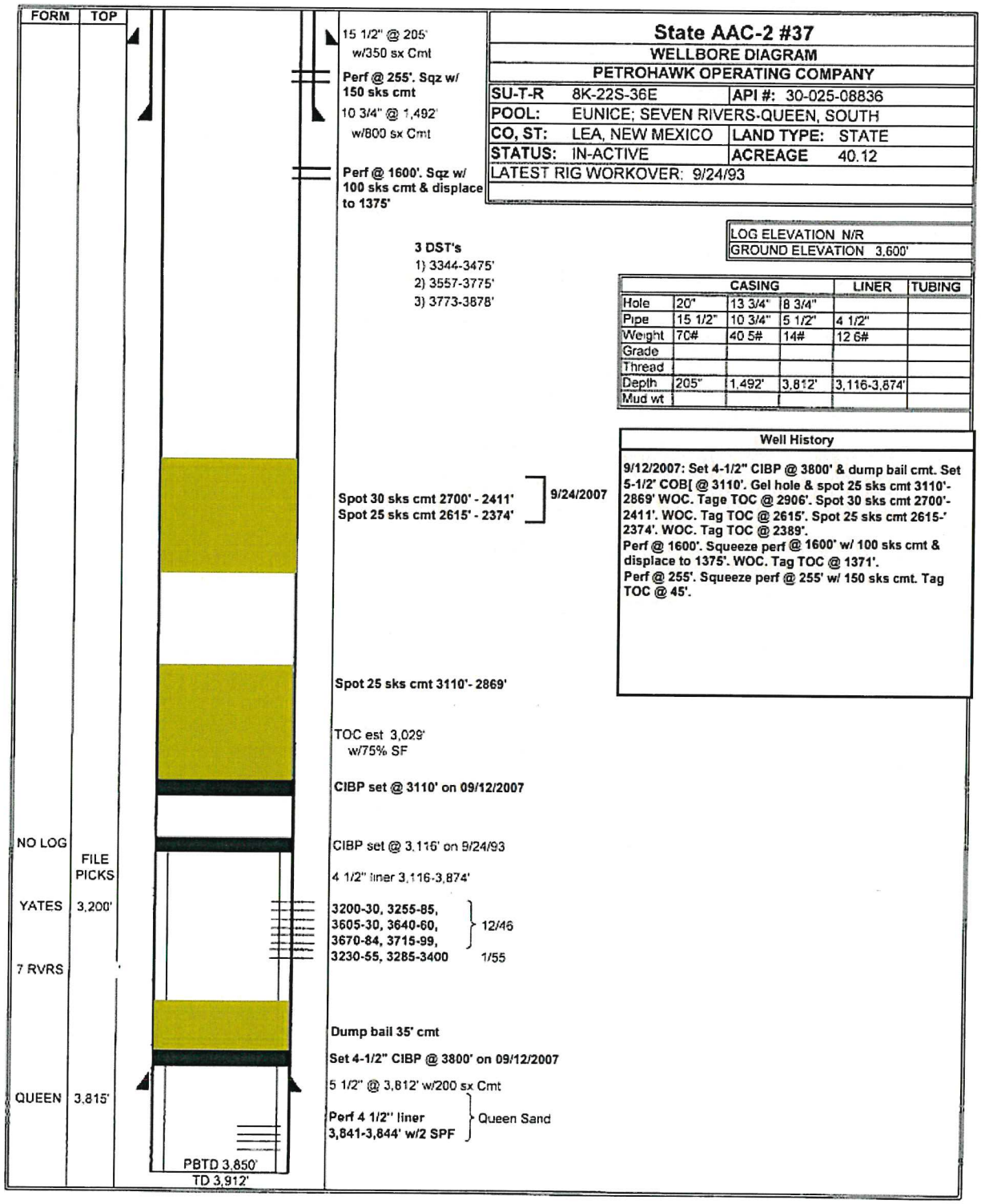
3/29/1962: Spud wel

3/1961:
Queen Perf
3774-78, 3781-84, 3792-96, 3802-10, 3816-20, 3831-35 w/ 140 shots
Vibrofrac 3804-08
9/1970: Convert to w/w
4/1986: Covert to producer
12/7/1990: Set CIBP @ 3710'. Isolate bad casing f/ 553' to 2227'
3/5/1993: P&A
Spot 30 sx on CIBP. Spot 30 sx cement plug 2600- ± 2311'
Spot 30 sx cmt plug 610 - ± 330'. Perf 5-1/2" csg @ 330', 2 SPF

VI. Exhibit C12

State A A/C 2 #37

API# 30-025-08836
1980 FSL 1980 FWL,
Sec 8, T22S, R36E Lea Co., NM



State AAC-2 #37
WELLBORE DIAGRAM
PETROHAWK OPERATING COMPANY

SU-T-R	8K-22S-36E	API #:	30-025-08836
POOL:	EUNICE; SEVEN RIVERS-QUEEN, SOUTH		
CO, ST:	LEA, NEW MEXICO	LAND TYPE:	STATE
STATUS:	IN-ACTIVE	ACREAGE	40.12
LATEST RIG WORKOVER: 9/24/93			

LOG ELEVATION	N/R
GROUND ELEVATION	3,600'

	CASING			LINER	TUBING
Hole	20"	13 3/4"	8 3/4"		
Pipe	15 1/2"	10 3/4"	5 1/2"	4 1/2"	
Weight	70#	40 5#	14#	12 6#	
Grade					
Thread					
Depth	205"	1,492'	3,812'	3,116-3,874'	
Mud wt					

Well History

9/12/2007: Set 4-1/2" CIBP @ 3800' & dump bail cmt. Set 5-1/2' COB[@ 3110'. Gel hole & spot 25 sks cmt 3110'-2869' WOC. Tage TOC @ 2906'. Spot 30 sks cmt 2700'-2411'. WOC. Tag TOC @ 2615'. Spot 25 sks cmt 2615-'2374'. WOC. Tag TOC @ 2389'.
Perf @ 1600'. Squeeze perf @ 1600' w/ 100 sks cmt & displace to 1375'. WOC. Tag TOC @ 1371'.
Perf @ 255'. Squeeze perf @ 255' w/ 150 sks cmt. Tag TOC @ 45'.

VI. Exhibit C13

State H #003

API# 30-025-23389
330 FNL 1650 FEL,
Sec 17, T22S, R36E Lea Co., NM

Well Name: **State H #003** Plantation ID Number: _____ Lease Type: STATE

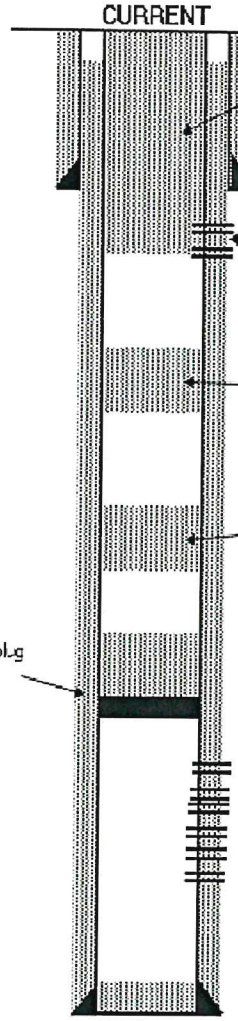
Location: 330 FNL 1650 FEL Unit B Sec: 17 Township: 22S Range: 36E

County: Lea State: NM API: 30-025-23389 Formation: Eunice; 7 Rivers, Queen, South

CURRENT

Surface Csg
Size: 8-5/8"
Wt.&Thrd: 20
Grade:
Set @: 328'
Sxs cmt: 250
Circ: Yes
TOC: Surface
Hole Size: 12-1/2"

KB:
DF:
GL: 3598'
Spud Date: 12/19/1969
Compl. Date: 1/18/1970



Production Csg
Size: 4-1/2"
Wt.&Thrd: 9.5#
Grade:
Set @: 3850'
Sxs Cmt: 300
Circ:
TOC: 2360
Hole Size: 7-7/8"

History - Highlights

12/19/1969: Spud well

1/19/1970:
Queen Perf
3658-3830 w/ 18 holes. Acdz w/ 2500 gals and Frac w/ 40,000 gals wtr + 60000# sd

3/05/1993: set CIBP @ 3657. Dumped 40' cmt on CIBP

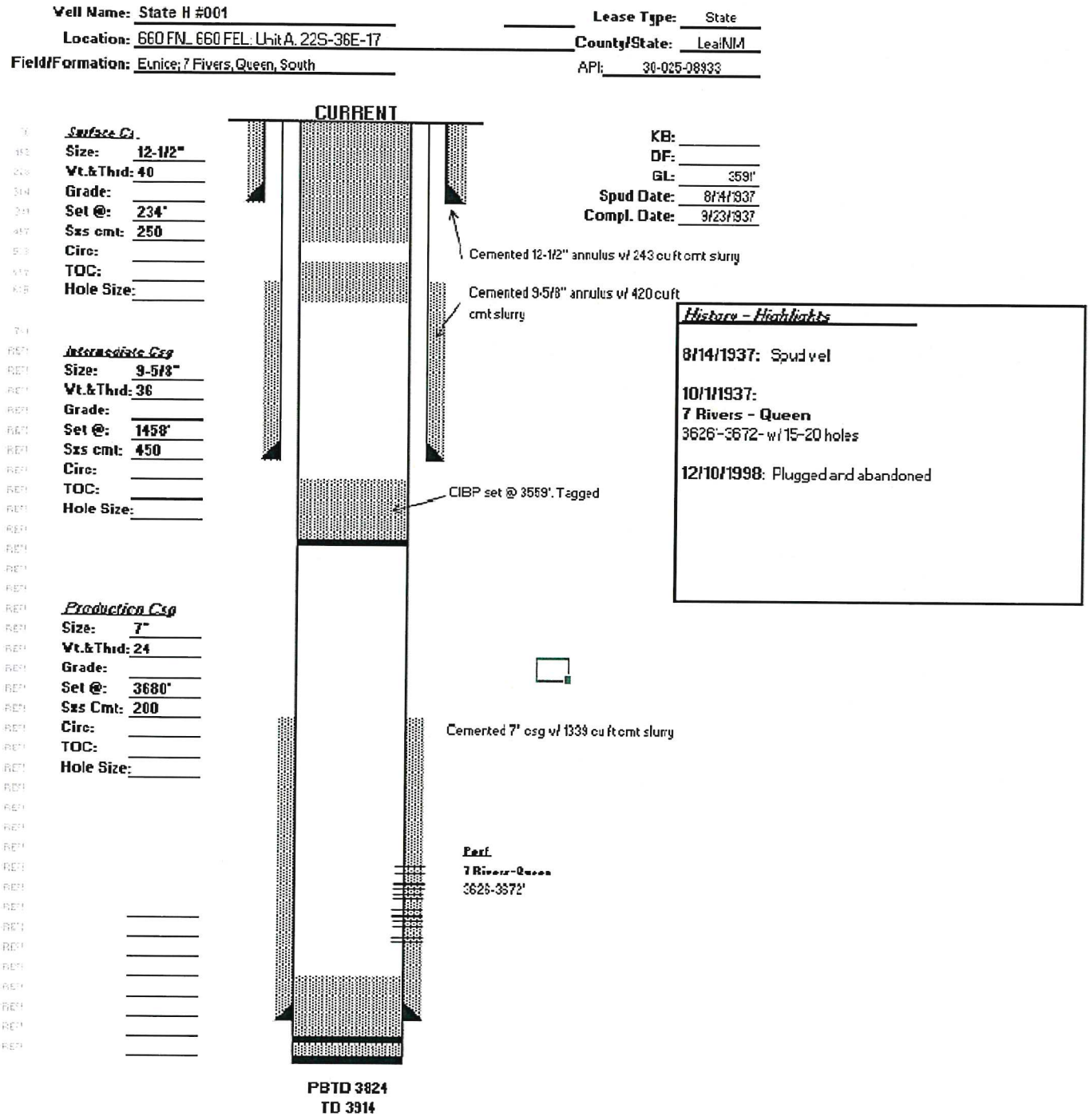
9/15/2003: Perf and sqz 25 sks @ 1440 no tag sqz 25 sks WOC & tag @ 1206'

9/16/2003: Perf and sqz @ 380' w/ 80 sks WOC and tag @ 218'
Spot 10 sks 60- surface

VI. Exhibit C14

State H #001

API# 30-025-08933
660 FNL 660 FEL,
Sec 17, T22S, R36E Lea Co., NM



VI. Exhibit C15

State A A/C 2 #53

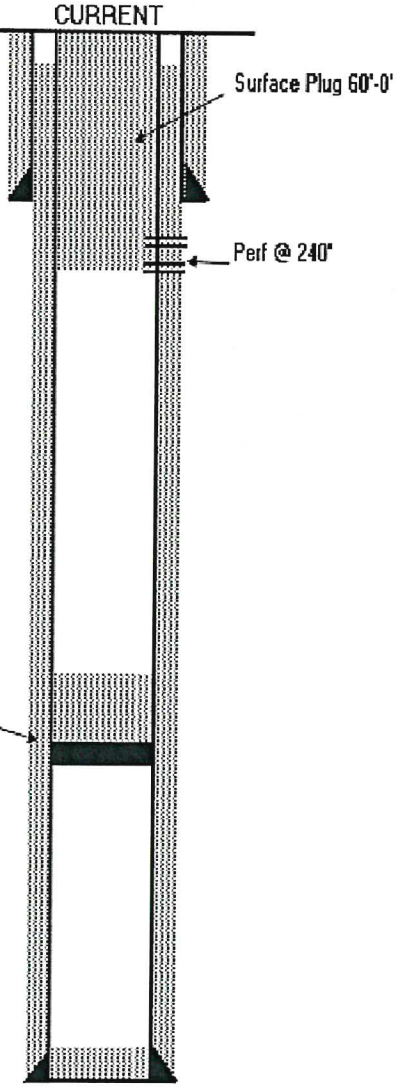
API# 30-025-08840
660 FNL 1980 FWL,
Sec 8, T22S, R36E Lea Co., NM

Well Name: **State A A/C 2 #53** Plantation ID Number:
Location: 660 FNL 1980 FWL; Unit N Sec: 8 Township: 22S
County: Lea State: NM API: 30-025-08840

Lease Type: STATE
Range: 36E
Formation: Eunice; 7 Rivers, Queen, South

CURRENT

Surface Csg
Size: 8-5/8"
Wt.&Thrd: 24#
Grade:
Set @: 330'
Sxs cmt: 300
Circ:
TOC: Surface
Hole Size: 12-1/2"



Production Csg
Size: 5-1/2"
Wt.&Thrd: 14#
Grade:
Set @: 3785'
Sxs Cmt: 250
Circ:
TOC: 2550'
Hole Size: 7-7/8"

KB:
DF:
GL: 3592'
Spud Date: 2/4/1961
Compl. Date: 2/10/1961

History - Highlights

2/4/1961: Spud well

12/07/1991: Set CIBP @@ 3710 w/ 35' cmt on plug

06/17/1994: Circulated hole w/ 10 ppg gelled brine. Perf 5-1/2" csg @ 240'
Circ 120 sx cmt down 5-1/2" csg and up 5-1/2" to 8-5/8" annulus to surface

9/15/2003: Perf and sqz 25 sks @ 1440 no tag sqz 25 sks WOC & tag @ 1206'

9/16/2003: Perf and sqz @ 380 w/ 80 sks WOC and tag @ 218'
Spot 10 sks 60- surface

VI. Exhibit C16

Shell State A #001

API# 30-025-08932
660 FNL 660 FWL,
Sec 16, T22S, R36E Lea Co., NM

Well Name: Shell State A #001
Location: 660 FNL 660 FWL; Unit D. 22S-36E-16
Field/Formation: Eumont (South, 7 Rivers, Queen)
Lease Type: State
County/State: Lea/NM
API: 30-025-08932

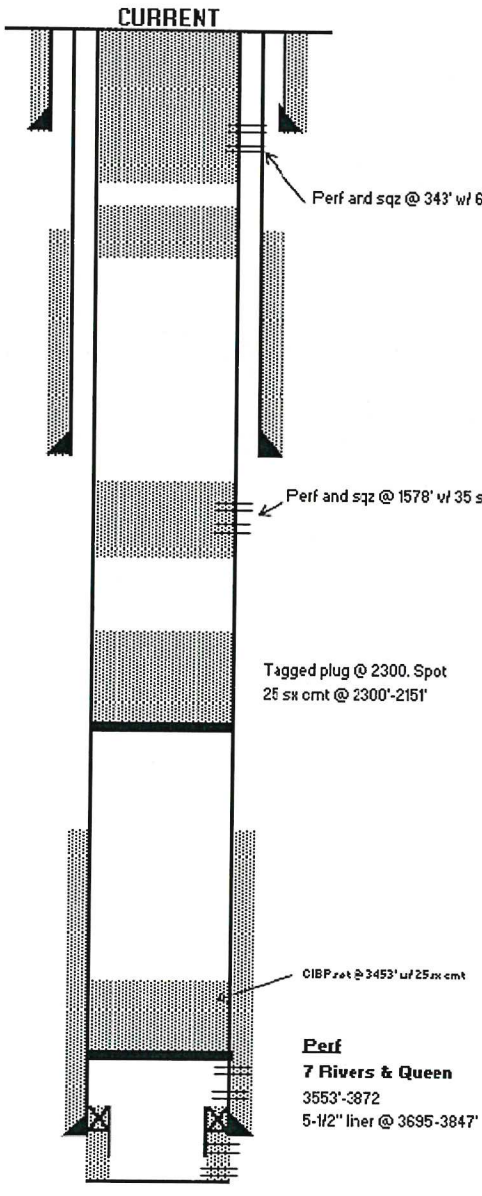
CURRENT

Surface Csg
Size: 12-1/2"
Wt.&Thrd: 40#
Grade:
Set @: 243'
Sxs cmt: 100
Circ:
TOC:
Hole Size: 17-1/2"

Intermediate Csg
Size: 9-5/8"
Wt.&Thrd: 58#
Grade:
Set @: 1478'
Sxs cmt: 450
Circ:
TOC:
Hole Size: 12"

Production Csg
Size: 7"
Wt.&Thrd: 24#
Grade:
Set @: 3475'
Sxs Cmt: 200
Circ:
TOC:
Hole Size: 7-7/8"

KB:
DF:
GL: 3574'
Spud Date: 2/25/1937
Compl. Date: 4/14/1937



PBTD 3628'
TD 3872

History - Highlights

2/25/1937: Spud well
7 Rivers and Queen Perf
3553-3872

11/26/2014: Set packer @ 2000'. Sqz'd 175 sx cmt and displaced to 2550'. WOC

12/01/2014: Tagged plug @ 2300'. Spotted 25 sx cmt @ 2300-2151' Perf'd csg @ 1578'. Set Packer @ 1278'. Sqz'd 50 sx cmt. WOC. No tag.

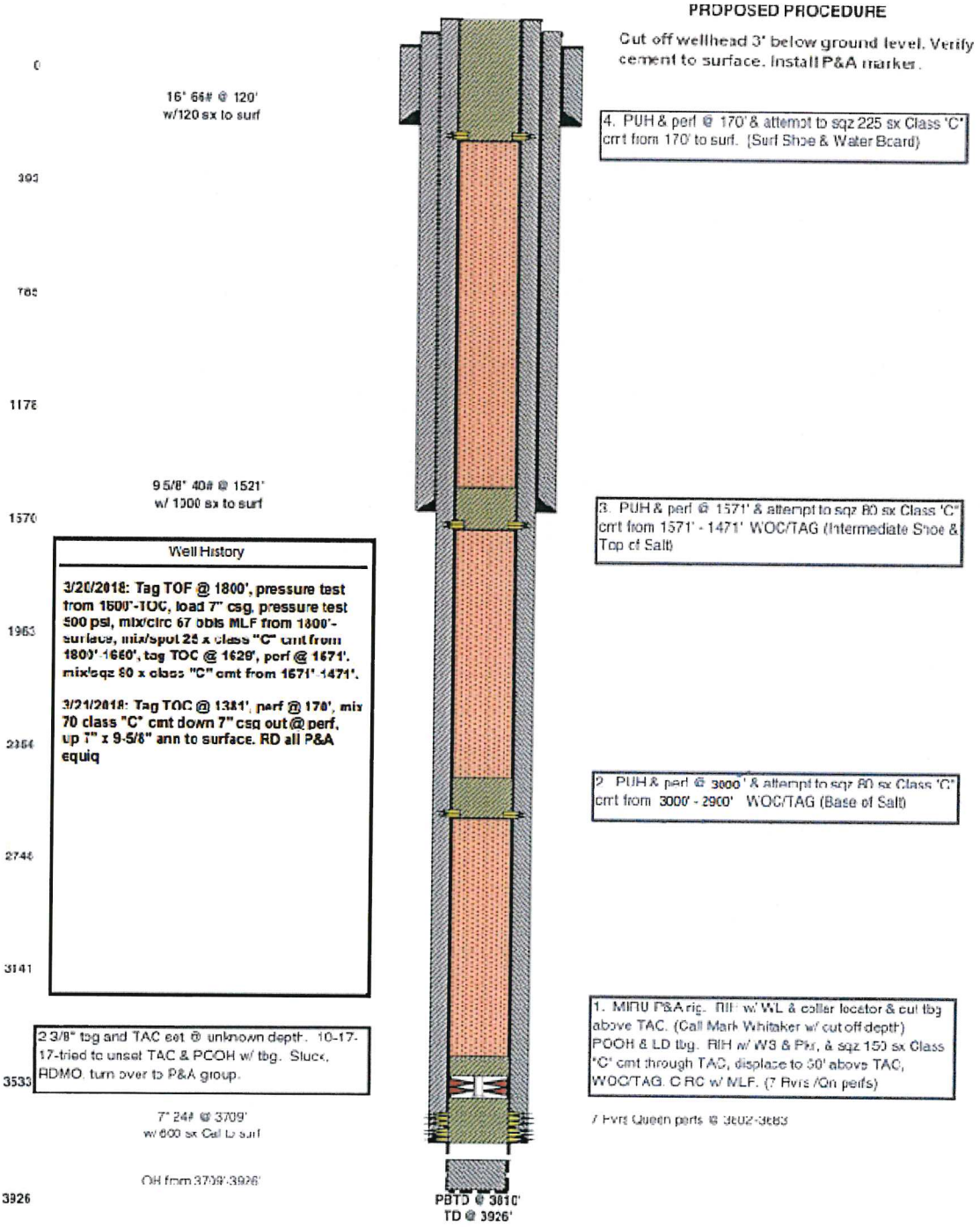
12/02/2014: Tagged plug @ 1470'. Perf'd casing @ 343'. Set packer at 10' and sqz'd 90 sx and circulated to surface

VI. Exhibit C17

Maxwell State #001

API# 30-025-08921
660 FNL 1980 FWL,
Sec 16, T22S, R36E Lea Co., NM

LEASE NAME	Maxwell State
WELL #	1
API #	30-025-08921
COUNTY	LEA, NM



VII. Proposed Injection Operation

1. Average injection rate target will be ~600 bpd. Maximum injection rate will be 1000 bpd. These numbers are based off of typical injection rates in nearby Yates-Seven Rivers-Queen water floods.

2. The system will be a closed system. The injection well will not be made available for commercial disposal purposes.

3. Average injection pressure will be ~700 psi. Maximum injection pressure will be calculated relative to the depth of the highest perforation, using a factor of 0.2 psi/ft. The proposed injector will have perforation depths of approximately 3,640' and 3599' (or 728 psi and 720 psi maximum injection pressure, respectively). Pending results of a step rate test, the maximum injection pressure could potentially be increased to a factor of 0.6 psi/ft (or 2,184 psi at 3,640' and 2160 psi at 3599').

4. The water source will be produced water from nearby wells and water transfer lines.

5. Injection will be into the Seven Rivers – Queen formation, which is immediately productive in the area.

VIII. Geologic Data

The waterflood will be injecting into the Seven Rivers – Queen. The portion that will be injected consists mainly of sandstones interbedded with dolomites and anhydrites. The reservoir quality rocks have porosities ranging from 10% to 20% and averages around 16%. Formation Tops Are:

Formation	Offset Top (STATE A A/C 2 #39) 30-025-08858	Contents
Alluvium	GL	Fresh Water
Rustler	1450	Anhydrite
Salado (top of salt)	1615	Salt
Tansill (base of salt)	2971	Gas, Oil, & Water
Yates	3129	Gas, Oil, & Water
Seven Rivers	3320	Gas, Oil, & Water
SR-Queen Injection Interval	*3599-3950*	*Gas, Oil, & Water*
Queen	3699	*Gas, Oil, & Water*
Grayburg	3983	*Gas, Oil, & Water*
Total Depth	11030	

IX. Proposed Stimulation Program

The injectors will be acidized with 5,000 gal 15% HCl for each set of perforations. Acid in the Seven Rivers – Queen formation is known to break down the perfs and cause injection at lower pressures vs perforating alone. The injectors will not be sand frac'd so there will be better vertical conformance.

X. **Logging and Test Data for Wells**

The STATE A A/C 2 #64, STATE A A/C 2 #65, STATE A A/C 2 #68, STATE A A/C 2 #69, STATE A A/C 2 #71 will be reactivated as an injector. The well logs for this well have been submitted to the NMOCD previously.

The STATE A A/C 2 #67, STATE A A/C 2 #70, and STATE A A/C 2 #72 will be converted from a producer to an injector. The well logs for this well have been submitted to the NMOCD previously.

Test Data for the above mentioned wells is as follows:

STATE A A/C 2 #64
Date: 10-1-1983
Perf Interval: 3840-3876 w/ 37 holes, 4" OD CG.
3792-3832 w/ 41 holes, 4" OD CG.
3756-3788 w/ 33 holes, 4" OD CG.
Method: Acidize w/ 3000 gals 15%
Acidize w/ 2500 gals 15%
Acidize w/ 2000 gals 15%, respectively
Result: 3 bbls oil, 64 bbls water, & 23 mcf gas

STATE A A/C 2 #65
Date: 10-7-1983
Perf Interval: 3811-3872 w/ 60 holes. 1 JSPF w/ 4" OD.
3751-3782 w/ 30 holes. 1 JSPF w/ 4" OD.
Method: Acidize w/ 3000 gals 15%
Acidize w/ 1000 gals 15%, respectively
Result: 2 ½ BPM of water @ 1500 psi

STATE A A/C 2 #67
Date: 10-18-1983
Perf Interval: 3772-3792', 3795-3823', 3826'-3834' w/ 59 holes. 1 JSPF w/ 4" OD.
Method: Acidize w/ 3000 gals 15% NEFE w/ 90 BS
Result: 99 bbls oil, 0 bbls water, 22 mcf on 24/64" ch w/ 120# TPF in 24 hours

Date: 10/1990
Perf Interval: 3122-3297'
Method: Acidize w/ 1400 gals 15% & 28 BS
Frac'd w/ 63500 gal & 165000# 12/20 sand. Screened out. Cleaned out sand & POP
Result: 0 bbls oil, 17 bbls water, 227 mcfd

Date: 1/2005
Perf Interval: 3342'-3542' w/ 20 holes
Method: Acidize and Frac'd w/ 70% foam & 300, 400# Prop
Result: 0 bbls oil, 0 bbls water, 76 mcfd w/ FCP 8 psig

STATE A A/C 2 #68
Date: 9-27-1983
Perf Interval: 3857-3869 w/ 25 holes, 2 JSPF and 4" CSG Gun.
3823-3847 w/ 49 holes, 2 JSPF and 4" CSG Gun.
3766-3808 w/ 43 holes, 1 JSPF and 4" CSG Gun.
Method: Acdz w/ 750 gals 15% NEFE HCL
Acdz w/ 1200 gals 15% NEFE HCL
Acdz w/ 2000 gals 15% NEFE, respectively
Result: 10 bbls oil, 9 bbls water, & 33.4 mcf gas in 24 hours

STATE A A/C 2 #69
Date: 11-14-1983
Perf Interval: 3808-3862 w/ 44 holes. 1 JSPF w/ 4" CG
3750-3802 w/ 53 holes. 1 JSPF w/ 4" CG.
Method: Acidize w/ 2500 gals 15%
Acidize w/ 2500 gals 15%, respectively
Result: 2 ¾ BPM of water @ 1500 psi (100 bbls). Swbd 5 BO + 25 BAW in 5 hours 30 mins

STATE A A/C 2 #70
Date: 11-1-1983
Perf Interval: 3873'-3889' w/ 17 holes, 1 JSPF and 4" CG
3826-3864 w/ 38 holes, 1 JSPF and 4" CG
3782-3820 w/ 39 holes, 1 JSPF and 4" CG
3752-3776 w/ 25 holes, 1 JSPF and 4" CG.
Method: Acidize w/ 1000 gals 15% NEFE HCL
Acidize w/ 2200 gals 15% NEFE
Acidize w/ 2300 gals 15% NEFE
Acidize w/ 1600 gals 15% NEFE HCL, respectively
Pumping 1-1/4" gas lift
Result: 12 bbls oil, 13 bbls water, 25 mcf in 24 hours

Date: 12-22-1991
Perf Interval: 3159'-3293' w/ 11 holes. 3/8" hole w/ 4" CG.
Method: Acidize w/ 1000 gals 15% NEFE
Frac w/ 10500# sd + 14700 gal gel + 9492 gal CO2
Result: 0 bbls oil, 6 bbls water, 75 mcf in 24 hours

STATE A A/C 2 #71
Date: 10-20-1983
Perf Interval: 3847-3877 w/ 31 holes w/ 4" OD.
3783-3835 w/ 53 holes w/ 4" OD.
3763-3875 w/ 13 holes w/ 4" OD.
Method: Acidize w/ 1800 gals 15%
Acidize w/ 3000 gals 15%,
Acidize w/ 750 gals 15%respectively
Result: Inj rate w/ 100 bbls lse water at ½ BPM @ 0 press .

STATE A A/C 2 #72
Date: 3/4/1984
Perf Interval: 3800-3850 w/ 51 holes, 2 JSPF and 4" ODCG.
3770-3785 w/ 14 holes, 2 JSPF and 4" ODCG.
Method: Acdz w/ 3000 gals 15% NEFE HCL
Acdz w/ 750 gals 15% NEFE, respectively
Pumping 1-1/2" gas lift
Result: 8 bbls oil, 196 bbls water, & 12 mcf gas in 24 hours

XI. Chemical Analysis of Fresh Water Wells

According to records from the Office of the State Engineer (Exhibit D1-8a & b) there are between 1 and 6 active water wells within the 1 mile radius around the proposed STATE A A/C 2 #64, STATE A A/C 2 #65, STATE A A/C 2 #67, STATE A A/C 2 #68, STATE A A/C 2 #69, STATE A A/C 2 #70, STATE A A/C 2 #71, and STATE A A/C 2 #72.

FAE II Operating, LLC has obtained water analyses on 2 freshwater wells. The closest water well, the CP 01854 POD1, is +/- 100' from the STATE A A/C 2 #65 , 250' (md) deep and considered a "shallow" water supply. The second well, the CP 01318 POD2, is 0.86 miles from State A A/C 2 #72, 260' (md) deep, and considered a "shallow" water supply. See Exhibits E1- E5.

XII. Based on the available geologic and engineering data, it has been determined that there is no evidence of open faults or any other hydrologic connection between the injection zone and shallow fresh water sources.

XIII. EMPIRE NEW MEXICO, LLC and APACHE CORPORATION are the offset operators. The surface owner is Dasco Cattle Company, LLC

EMPIRE NEW MEXICO, LLC: 2200 S. Utica Place
Suite 150
Tulsa, OK 74114
APACHE CORPORATION: 303 Veterans Airpark Ln
#1000
Midland, TX 79705
DASCO CATTLE COMPANY, LLC: 3410 Rose Rd., Hobbs, NM, 88242, USA
DASCO – STATE LAND OFFIC: 310 Old Santa Fe Trail, Santa Fe, NM 87501

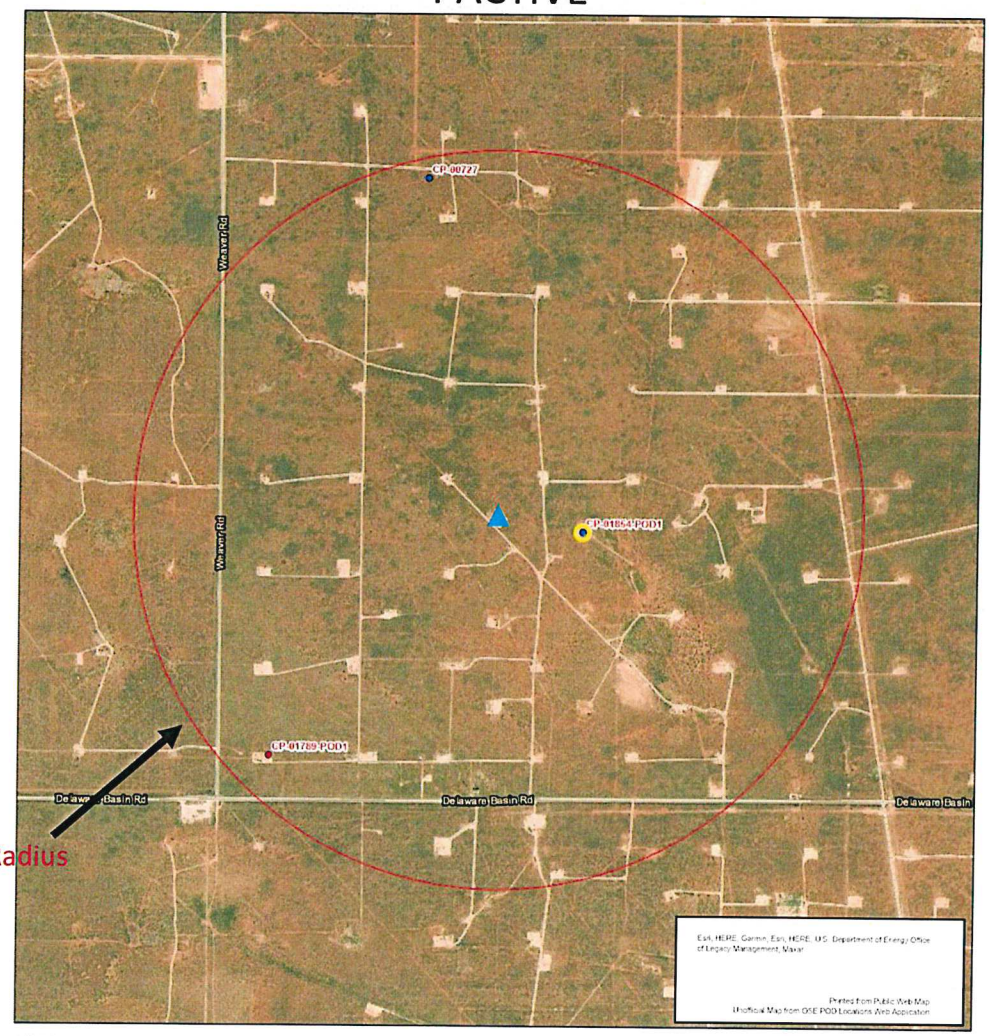
Well: State A A/C 2 #64
Location: Twn 22S Rge 36E Sec 08
Footages: ~*1250 FNL 1250 FEL* ~
County: Lea

XI. Exhibit D1a

Location For Office of the State Engineer:
NAD 1983 UTM Zone 13
Easting (X): 661482.03 mtrs
Northing (Y): 3587191.99 mtrs

Water Wells Within 1 Mile Radius

** 4 ACTIVE **



1 Mile Radius

9/1/2021, 1:37:21 PM
GIS WATERS PODs
Active
Plugged
OSE District Boundary
SiteBoundaries

C-108 Injector

1:18,056
0 0.17 0.35 0.7 mi
0 0.28 0.55 1.1 km

Well: State A A/C 2 #64
Location: Twn 22S Rge 36E Sec 08
Footages: ~*1250 FNL 1250 FEL* ~
County: Lea

XI. Exhibit D1b

Location For Office of the State Engineer:
NAD 1983 UTM Zone 13
Easting (X): 661482.03 mtrs
Northing (Y): 3587191.99 mtrs

Water Wells Within 1 Mile Radius
** 4 ACTIVE **

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number		POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01854 POD1		CP	LE	2	4	2	08	22S	36E	661852	3587145	372	250	190	60
CP 01789 POD1	Water Analysis Available	CP	LE	4	3	3	08	22S	36E	660493	3586147	1438	165		
CP 00727		CP	LE	1	3	2	05	22S	36E	661130	3588673*	1522	267	212	55
CP 00727 CLW475753	O	CP	LE	1	3	2	05	22S	36E	661130	3588673*	1522	228		

Average Depth to Water: **201 feet**
Minimum Depth: **190 feet**
Maximum Depth: **212 feet**

Record Count: 4

UTMNAD83 Radius Search (in meters):

Easting (X): 661482 **Northing (Y):** 3587191.99 **Radius:** 1609.3

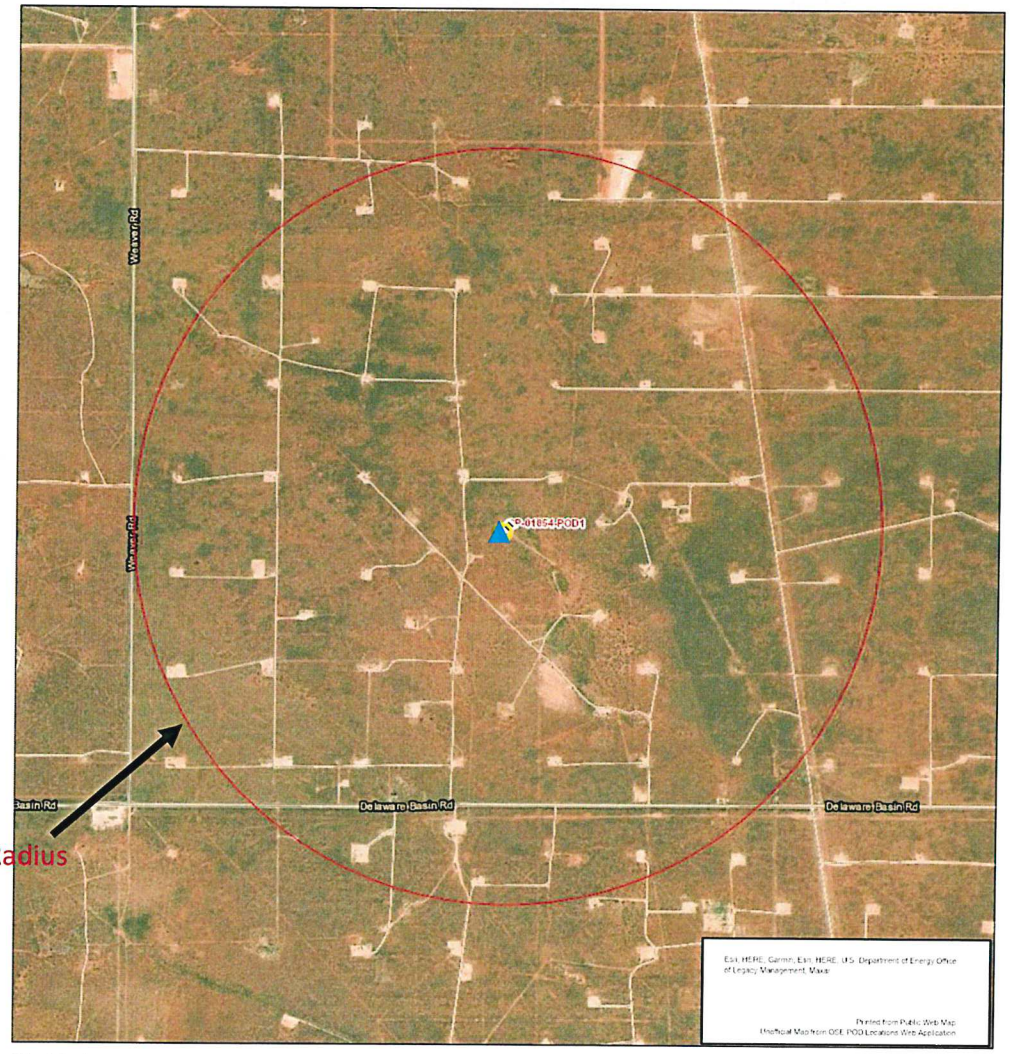
Well: State A A/C 2 #65
Location: Twn 22S Rge 36E Sec 09
Footages: ~*1345 FNL 25 FWL* ~
County: Lea

XI. Exhibit D2a

Location For Office of the State Engineer:
NAD 1983 UTM Zone 13
Easting (X): 661871.85 mtrs
Northing (Y): 3587170.54 mtrs

Water Wells Within 1 Mile Radius

** 1 ACTIVE **



Well: State A A/C 2 #65
Location: Twn 22S Rge 36E Sec 09
Footages: ~*1345 FNL 25 FWL* ~
County: Lea

XI. Exhibit D2b

Location For Office of the State Engineer:
NAD 1983 UTM Zone 13
Easting (X): 661871.85 mtrs
Northing (Y): 3587170.54 mtrs

Water Wells Within 1 Mile Radius

** 1 ACTIVE **

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01854 POD1	CP	LE	2	4	2	08	22S	36E	661852	3587145	31	250	190	60

Water Analysis Available

Average Depth to Water: **190 feet**
Minimum Depth: **190 feet**
Maximum Depth: **190 feet**

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 661871.85 **Northing (Y):** 3587170.54 **Radius:** 1609.3

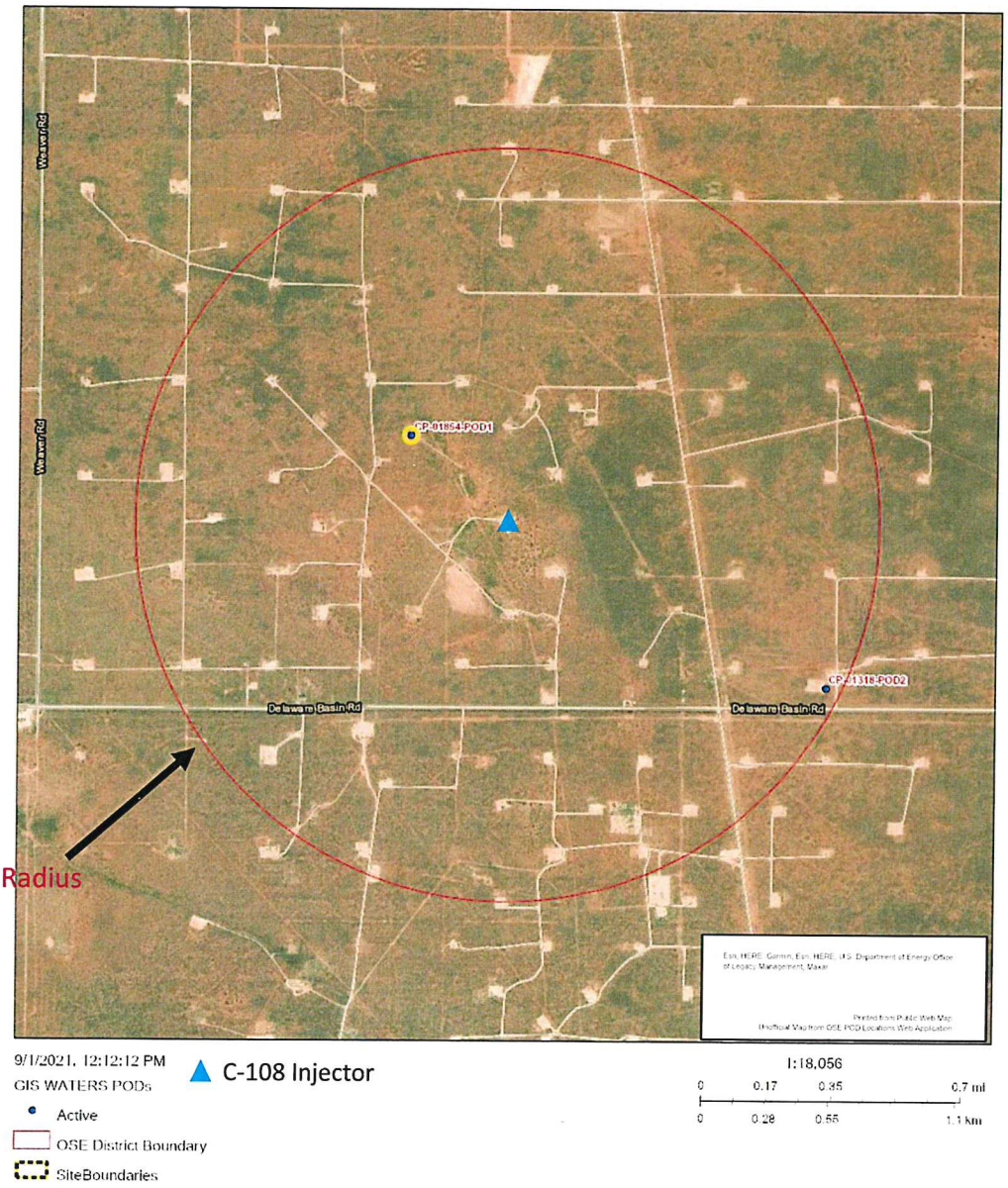
Well: State A A/C 2 #67
Location: Twn 22S Rge 36E Sec 09
Footages: ~*2615 FSL 1345 FWL* ~
County: Lea

XI. Exhibit D3a

Location For Office of the State Engineer:
NAD 1983 UTM Zone 13
Easting (X): 662281.84 mtrs
Northing (Y): 3586773.47 mtrs

Water Wells Within 1 Mile Radius

** 2 ACTIVE **



Well: State A A/C 2 #67
Location: Twn 22S Rge 36E Sec 09
Footages: ~*2615 FSL 1345 FWL* ~
County: Lea

XI. Exhibit D3b

Location For Office of the State Engineer:
NAD 1983 UTM Zone 13
Easting (X): 662281.84 mtrs
Northing (Y): 3586773.47 mtrs

Water Wells Within 1 Mile Radius

** 2 ACTIVE **

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01854 POD1	CP	LE	2	4	2	08	22S	36E	661852	3587145	568	250	190	60
CP 01318 POD2	CP	LE	3	3	3	10	22S	36E	663672	3586106	1541	260	180	80

Water Analysis Available

Average Depth to Water: **185 feet**
Minimum Depth: **180 feet**
Maximum Depth: **190 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

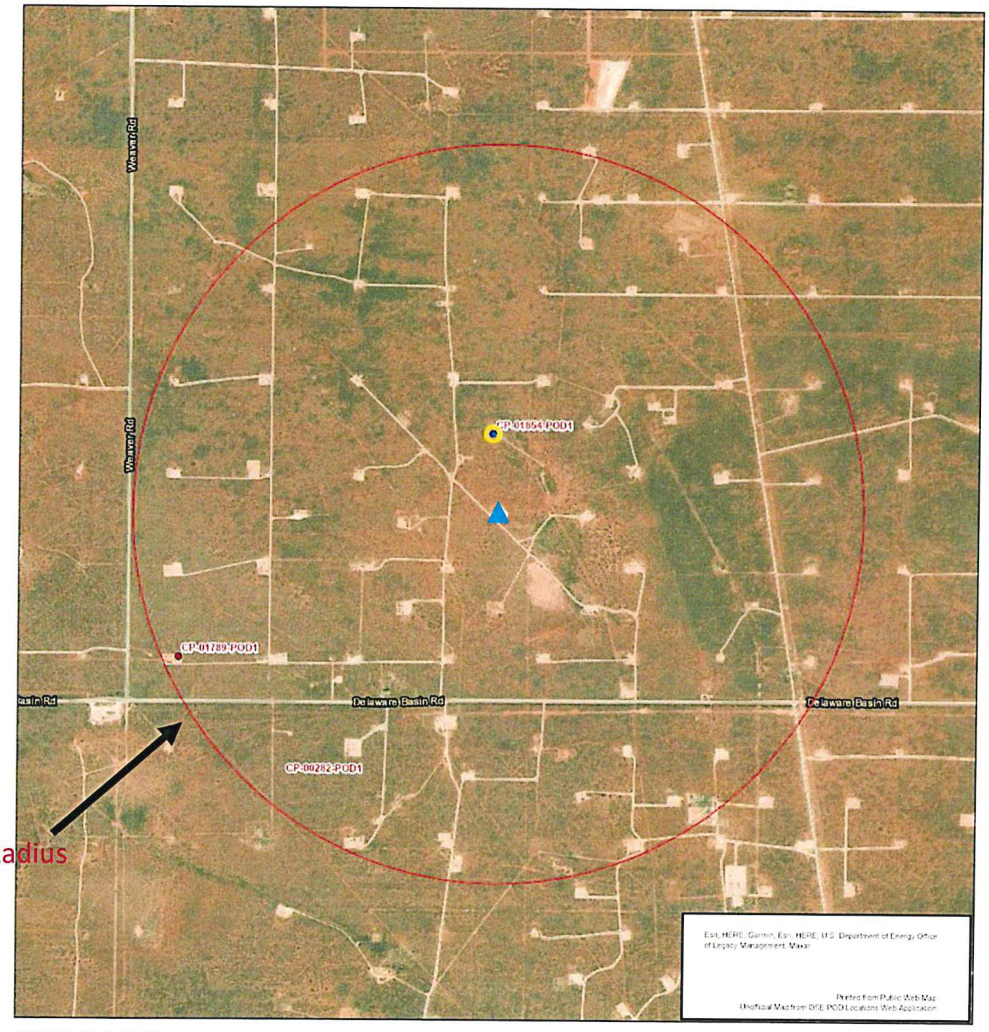
Easting (X): 662281.84 **Northing (Y):** 3586773.47 **Radius:** 1609.3

Well: State A A/C 2 #68
Location: Twn 22S Rge 36E Sec 09
Footages: ~*2570 FNL 70 FWL* ~
County: Lea

XI. Exhibit D4a

Location For Office of the State Engineer:
NAD 1983 UTM Zone 13
Easting (X): 661891.97 mtrs
Northing (Y): 3586797.13 mtrs

Water Wells Within 1 Mile Radius
** 2 ACTIVE **



Well: State A A/C 2 #68
Location: Twn 22S Rge 36E Sec 09
Footages: ~*2570 FNL 70 FWL* ~
County: Lea

XI. Exhibit D4b

Location For Office of the State Engineer:
NAD 1983 UTM Zone 13
Easting (X): 661891.97 mtrs
Northing (Y): 3586797.13 mtrs

Water Wells Within 1 Mile Radius

** 2 ACTIVE **

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number		POD Sub-basin	Code	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01854 POD1		CP		LE	2	4	2	08	22S	36E	661852	3587145	350	250	190	60
CP 01789 POD1	Water Analysis Available	CP		LE	4	3	3	08	22S	36E	660493	3586147	1542	165		

Average Depth to Water: **190 feet**
Minimum Depth: **190 feet**
Maximum Depth: **190 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 661891.97 **Northing (Y):** 3586797.13 **Radius:** 1609.3

Well: State A A/C 2 #69
Location: Twn 22S Rge 36E Sec 08
Footages: ~*2615 FSL 1295 FEL* ~
County: Lea

XI. Exhibit D5a

Location For Office of the State Engineer:
NAD 1983 UTM Zone 13
Easting (X): 661476.75 mtrs
Northing (Y): 3586759.40 mtrs

Water Wells Within 1 Mile Radius

** 4 ACTIVE **

Well: State A A/C 2 #69
Location: Twn 22S Rge 36E Sec 08
Footages: ~*2615 FSL 1295 FEL* ~
County: Lea

XI. Exhibit D5b

Location For Office of the State Engineer:
NAD 1983 UTM Zone 13
Easting (X): 661476.75 mtrs
Northing (Y): 3586759.40 mtrs

Water Wells Within 1 Mile Radius

** 4 ACTIVE **

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number		POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01854 POD1		CP	LE	2	4	2	08	22S	36E	661852	3587145	538	250	190	60
CP 01789 POD1	Water Analysis Available	CP	LE	4	3	3	08	22S	36E	660493	3586147	1158	165		
CP 01529 POD1		CP	LE	4	4	4	07	22S	36E	660160	3586028	1505	295	126	169
CP 01469 POD1		CP	LE	2	2	2	18	22S	36E	660234	3585869	1528	200	140	60

Average Depth to Water: **152 feet**
Minimum Depth: **126 feet**
Maximum Depth: **190 feet**

Record Count: 4

UTMNAD83 Radius Search (in meters):

Easting (X): 661476.75 **Northing (Y):** 3586759.4 **Radius:** 1609.3

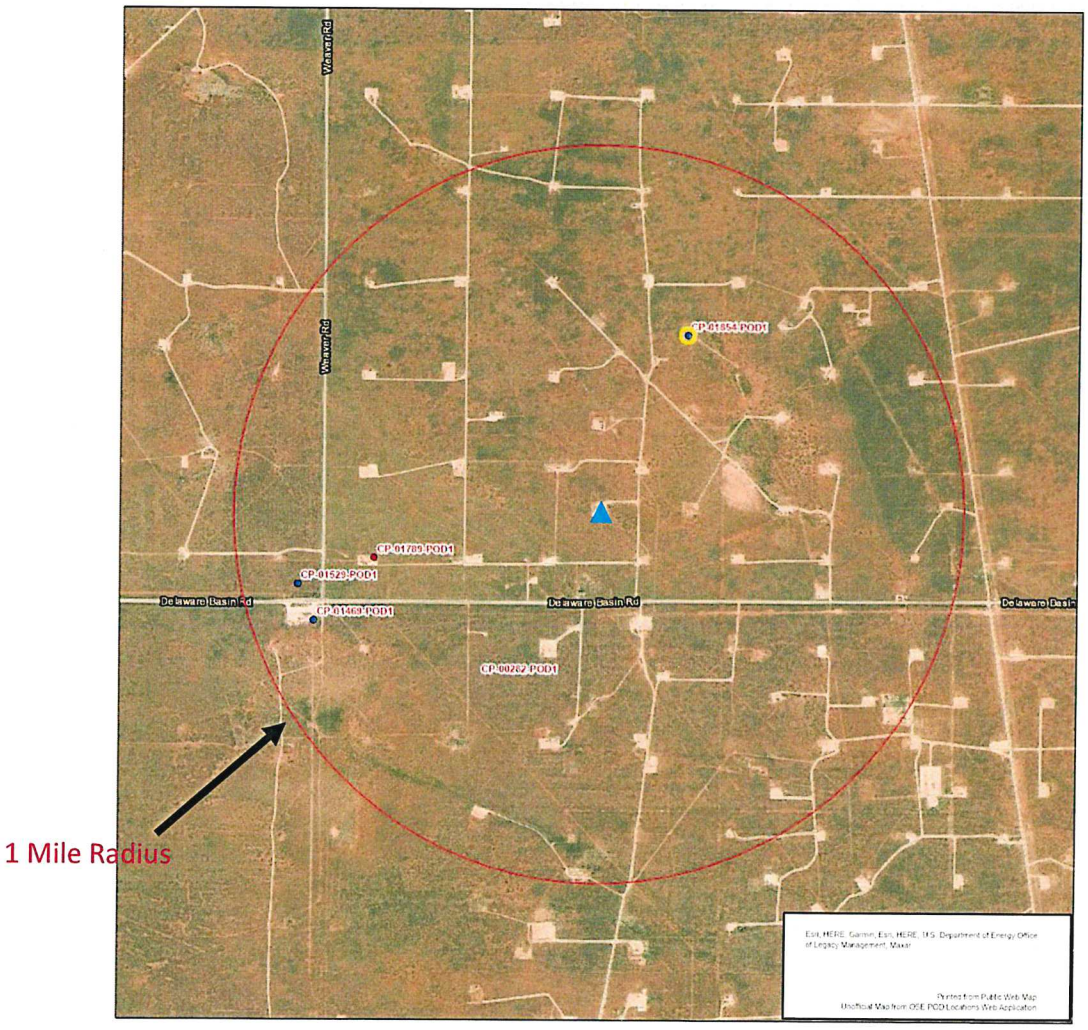
Well: State A A/C 2 #70
Location: Twn 22S Rge 36E Sec 08
Footages: ~*1295 FSL 1295 FEL* ~
County: Lea

XI. Exhibit D6a

Location For Office of the State Engineer:
NAD 1983 UTM Zone 13
Easting (X): 661485.10 mtrs
Northing (Y): 3586356.97 mtrs

Water Wells Within 1 Mile Radius

** 4 ACTIVE **



Well: State A A/C 2 #70
Location: Twn 22S Rge 36E Sec 08
Footages: ~*1295 FSL 1295 FEL* ~
County: Lea

XI. Exhibit D6b

Location For Office of the State Engineer:
NAD 1983 UTM Zone 13
Easting (X): 661485.10 mtrs
Northing (Y): 3586356.97 mtrs

Water Wells Within 1 Mile Radius

** 4 ACTIVE **

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number		POD Sub-basin	Code	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01854 POD1			CP	LE	2	4	2	08	22S	36E	661852	3587145	869	250	190	60
CP 01789 POD1	Water Analysis Available		CP	LE	4	3	3	08	22S	36E	660493	3586147	1013	165		
CP 01469 POD1			CP	LE	2	2	2	18	22S	36E	660234	3585869	1343	200	140	60
CP 01529 POD1			CP	LE	4	4	4	07	22S	36E	660160	3586028	1364	295	126	169

Average Depth to Water: **152 feet**
Minimum Depth: **126 feet**
Maximum Depth: **190 feet**

Record Count: 4

UTMNAD83 Radius Search (in meters):

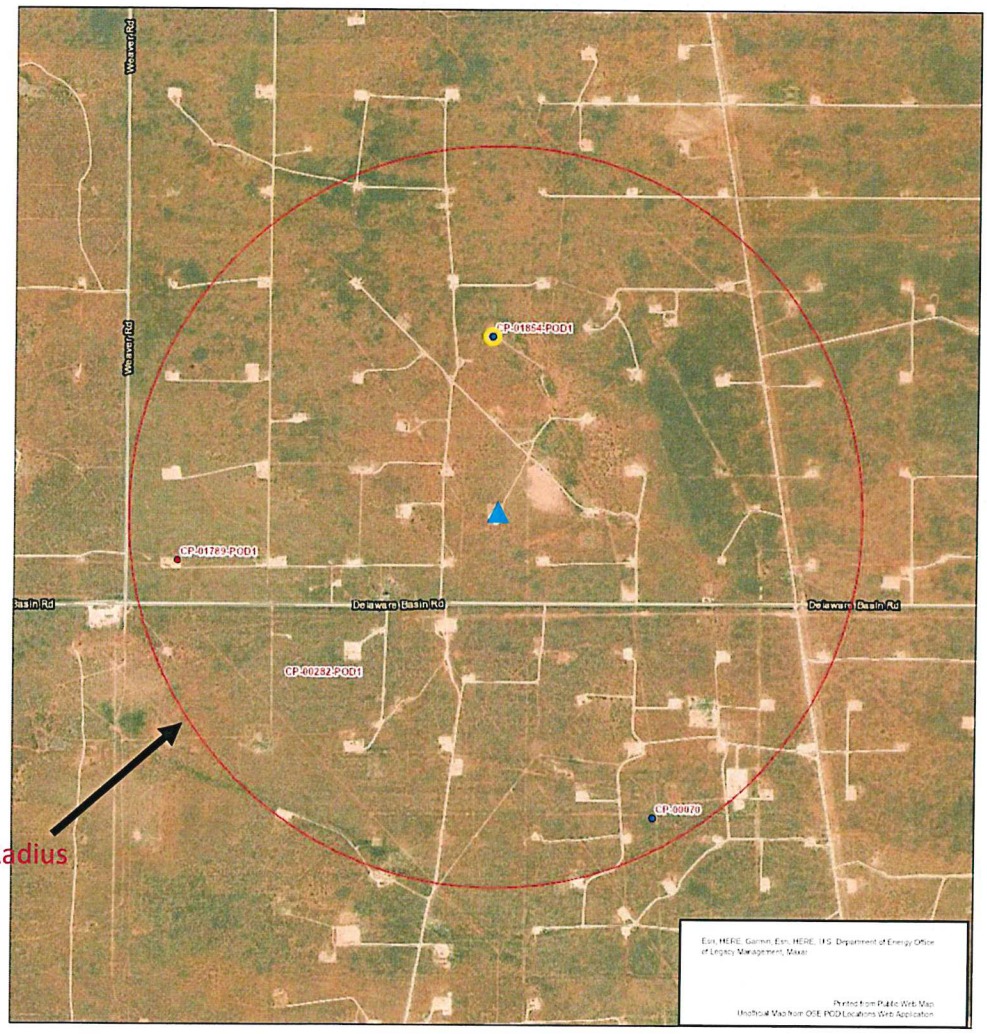
Easting (X): 661485.1 **Northing (Y):** 3586356.97 **Radius:** 1609.3

Well: State A A/C 2 #71
Location: Twn 22S Rge 36E Sec 09
Footages: ~*1295 FSL 25 FWL* ~
County: Lea

XI. Exhibit D7a

Location For Office of the State Engineer:
NAD 1983 UTM
Easting (X): 661886.73 mtrs
Northing (Y): 3586363.43 mtrs

Water Wells Within 1 Mile Radius
** 4 ACTIVE **



Well: State A A/C 2 #71
Location: Twn 22S Rge 36E Sec 09
Footages: ~*1295 FSL 25 FWL* ~
County: Lea

XI. Exhibit D7b

Location For Office of the State Engineer:
NAD 1983 UTM
Easting (X): 661886.73 mtrs
Northing (Y): 3586363.43 mtrs

Water Wells Within 1 Mile Radius

** 4 ACTIVE **

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number		POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01854 POD1		CP	LE	2	4	2	08	22S	36E	661852	3587145	783	250	190	60
CP 01789 POD1	Water Analysis Available	CP	LE	4	3	3	08	22S	36E	660493	3586147	1410	165		
CP 00070		CP	LE	2	2	3	16	22S	36E	662604	3585071*	1478	220	170	50
CP 00070 CLW472929	O	CP	LE	2	2	3	16	22S	36E	662604	3585071*	1478	220	170	50

Average Depth to Water: **176 feet**
Minimum Depth: **170 feet**
Maximum Depth: **190 feet**

Record Count: 4

UTMNAD83 Radius Search (in meters):

Easting (X): 661886.73 **Northing (Y):** 3586363.43 **Radius:** 1609.3

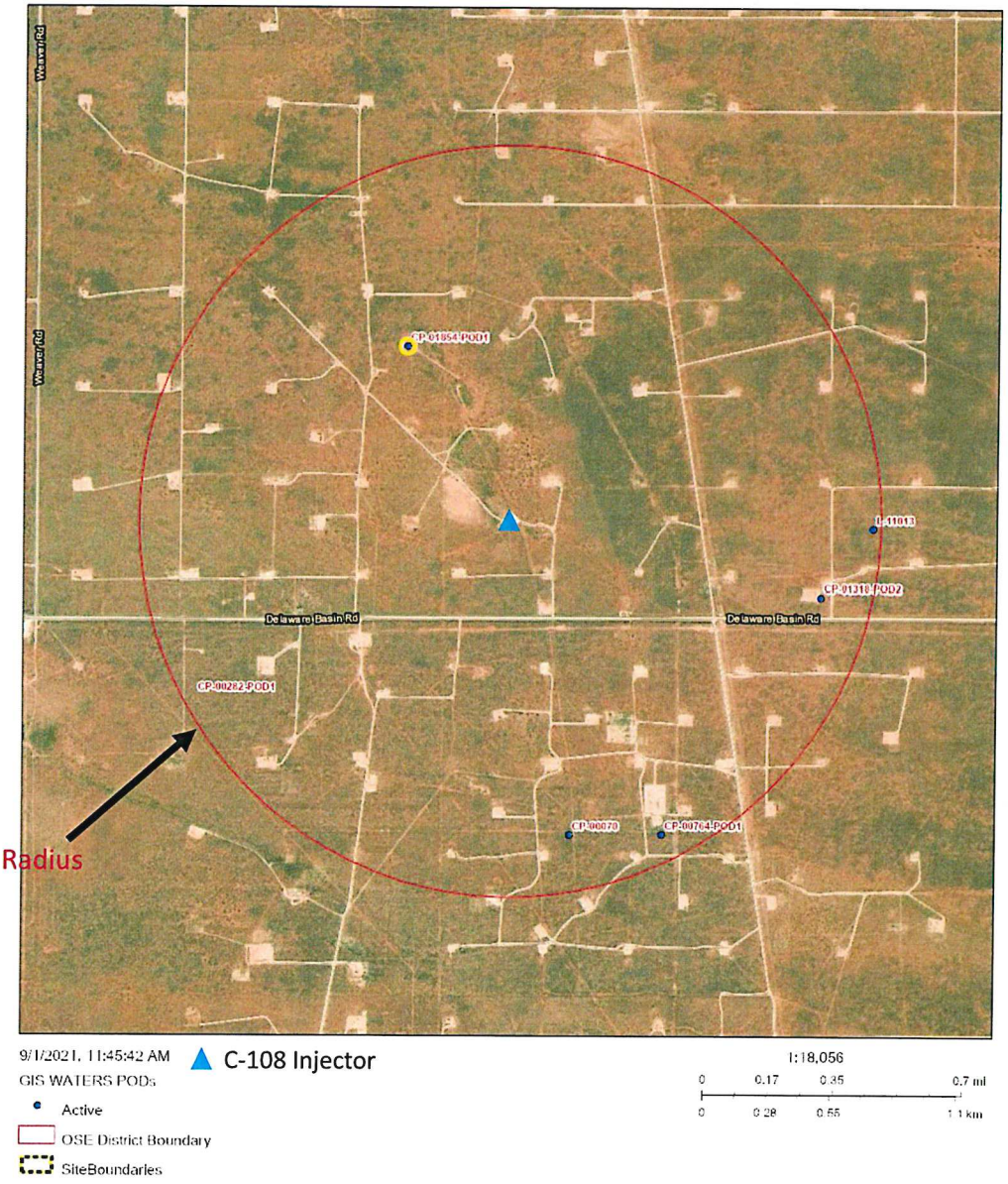
Well: State A A/C 2 #72
Location: Twn 22S Rge 36E Sec 09
Footages: ~*1410 FSL 1440 FWL* ~
County: Lea

XI. Exhibit D8a

Location For Office of the State Engineer:
NAD 1983 UTM Zone 13
Easting (X): 662317.88 mtrs
Northing (Y): 3586405.87 mtrs

Water Wells Within 1 Mile Radius

** 6 ACTIVE **



Well: State A A/C 2 #72
Location: Twn 22S Rge 36E Sec 09
Footages: ~*1410 FSL 1440 FWL* ~
County: Lea

XI. Exhibit D8b

Location For Office of the State Engineer:
NAD 1983 UTM Zone 13
Easting (X): 662317.88 mtrs
Northing (Y): 3586405.87 mtrs

Water Wells Within 1 Mile Radius

** 6 ACTIVE **

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number		POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01854 POD1		CP	LE	2	4	2	08	22S	36E	661852	3587145	874	250	190	60
CP 00070	Water Analysis Available	CP	LE	2	2	3	16	22S	36E	662604	3585071*	1365	220	170	50
CP 00070 CLW472929	Water Analysis Available	CP	LE	2	2	3	16	22S	36E	662604	3585071*	1365	220	170	50
CP 01318 POD2		CP	LE	3	3	3	10	22S	36E	663672	3586106	1386	260	180	80
CP 00764 POD1		CP	LE	2	1	4	16	22S	36E	663006	3585079*	1494	4700	4000	700
L 11013	C	L	LE			3	10	22S	36E	663892	3586402*	1574	222		

Average Depth to Water: **942 feet**
Minimum Depth: **170 feet**
Maximum Depth: **4000 feet**

Record Count: 6

UTMNAD83 Radius Search (in meters):

Easting (X): 662317.88 **Northing (Y):** 3586405.87 **Radius:** 1609.3

XI. Exhibit E1

CP 01854 POD1 X: 661852 Y: 3587145

Imperative Water Analysis Report

IMPERATIVE CHEMICAL PERFORMANCE

SYSTEM IDENTIFICATION

Company: FAE II
Location: Pod 1854
Sample Source: Tank
Account Rep: Junior Garcia

Sample ID#: W-42314
Sample Date: 07-15-2021
Report Date: 07-29-2021

WATER CHEMISTRY

CATIONS		ANIONS	
Calcium(as Ca)	67.82	Chloride(as Cl)	5200
Magnesium(as Mg)	24.54	Sulfate(as SO_4)	16.00
Barium(as Ba)	0.0720	Dissolved CO_2(as CO_2)	10.00
Strontium(as Sr)	1.17	Bicarbonate(as HCO_3)	24.44
Sodium(as Na)	3261	H_2S (as H_2S)	1.70
Potassium(as K)	5.94	Boron(as B)	0.00
Lithium(as Li)	0.0940		
Iron(as Fe)	0.00		
Manganese(as Mn)	0.00		

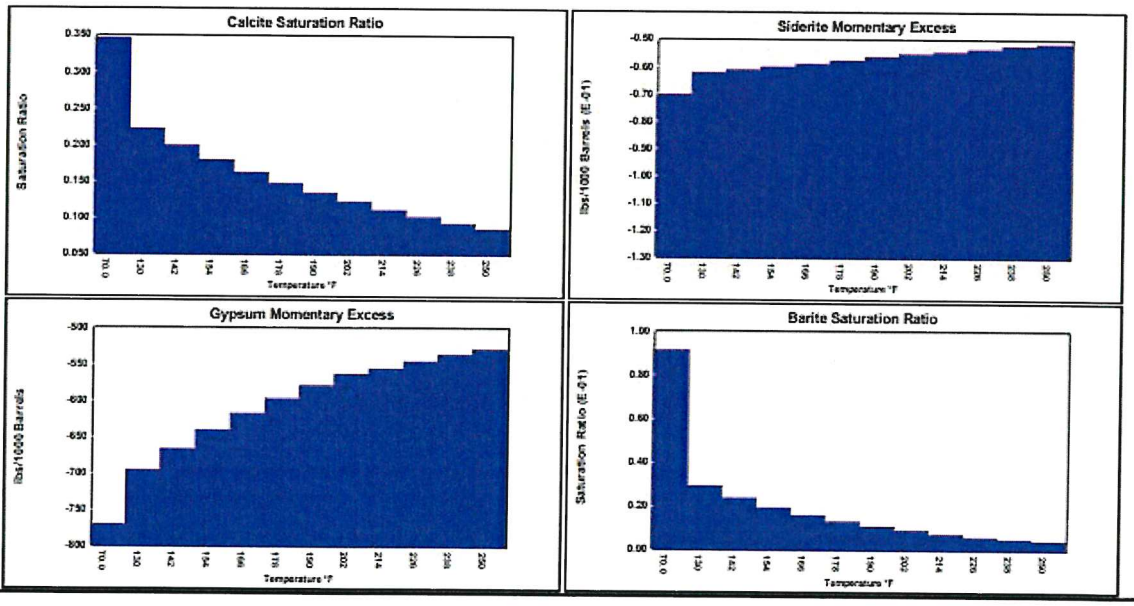
PARAMETERS

Temperature(^{0}F)	77.00	Sample pH	8.30
Conductivity	14254	Sp.Gr.(g/mL)	1.005
Resistivity	70.15	T.D.S.	8629

SCALE AND CORROSION POTENTIAL

Temp. (^{0}F)	Press. (atm)	Calcite $CaCO_3$		Anhydrite $CaSO_4$		Gypsum $CaSO_4*2H_2O$		Barite $BaSO_4$		Celestite $SrSO_4$		Siderite $FeCO_3$		Mackinawite FeS		CO_2 (mpy)	pCO_2 (atm)
70.00	1.000	0.345	-0.510	< 0.001	-898.35	0.00108	-770.02	0.0909	-0.413	< 0.001	-89.12	0.00	-0.0705	0.00	-0.00270	0.00243	< 0.001
130.00	10.000	0.221	-0.403	< 0.001	-708.54	0.00124	-696.00	0.0291	-1.28	0.00102	-82.25	0.00	-0.0624	0.00	-0.0129	0.0112	0.00109
142.00	19.000	0.198	-0.394	0.00109	-655.46	0.00133	-666.75	0.0237	-1.55	0.00103	-81.48	0.00	-0.0614	0.00	-0.0169	0.0114	0.00207
154.00	28.000	0.179	-0.386	0.00127	-600.18	0.00142	-640.74	0.0194	-1.86	0.00104	-80.88	0.00	-0.0603	0.00	-0.0219	0.0127	0.00306
166.00	37.000	0.162	-0.378	0.00151	-544.44	0.00151	-617.68	0.0159	-2.21	0.00104	-80.43	0.00	-0.0591	0.00	-0.0279	0.0137	0.00404
178.00	46.000	0.147	-0.372	0.00182	-489.63	0.00159	-597.33	0.0131	-2.60	0.00104	-80.15	0.00	-0.0579	0.00	-0.0352	0.0132	0.00502
190.00	55.000	0.134	-0.366	0.00222	-436.83	0.00166	-579.50	0.0109	-3.04	0.00103	-80.03	0.00	-0.0566	0.00	-0.0438	0.00707	0.00600
202.00	64.000	0.122	-0.362	0.00275	-386.83	0.00173	-564.01	0.00901	-3.54	0.00102	-80.09	0.00	-0.0554	0.00	-0.0539	0.00624	0.00698
214.00	73.000	0.111	-0.367	0.00338	-343.98	0.00176	-556.74	0.00737	-4.15	< 0.001	-81.16	0.00	-0.0548	0.00	-0.0663	0.00764	0.00797
226.00	82.000	0.101	-0.366	0.00425	-300.78	0.00181	-545.86	0.00614	-4.78	< 0.001	-81.65	0.00	-0.0537	0.00	-0.0799	0.00923	0.00895
238.00	91.000	0.0924	-0.367	0.00540	-261.30	0.00185	-536.91	0.00512	-5.47	< 0.001	-82.33	0.00	-0.0527	0.00	-0.0953	0.0110	0.00993
250.00	100.000	0.0845	-0.370	0.00691	-225.58	0.00188	-529.82	0.00427	-6.24	< 0.001	-83.21	0.00	-0.0517	0.00	-0.113	0.0126	0.0109
		xSAT	Lbs per 1000 Barrels	xSAT	Lbs per 1000 Barrels	xSAT	Lbs per 1000 Barrels	xSAT	Lbs per 1000 Barrels	xSAT	Lbs per 1000 Barrels	xSAT	Lbs per 1000 Barrels	xSAT	Lbs per 1000 Barrels		

Saturation Ratios (xSAT) are the ratio of ion activity to solubility, e.g. $(Ca)(CO_3)/K_{SP}$. pCO_2 (atm) is the partial pressure of CO_2 in the gas phase.
Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.



XI. Exhibit E2

CP 01318 POD2 X: 663672 Y: 3586106

CARDINAL Laboratories

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

Analytical Results For:

FORTY ACRES ENERGY 11777 KATY FREEWAY STE. 305 B HOUSTON TX, 77079	Project: BLACKBEARD AREA Project Number: FRESH WATER Project Manager: JAMES MARTINEZ Fax To:	Reported: 03-Aug-21 14:50

POD 2 - CP-01318

H212024-02 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride*	**24.0**		4.00	mg/L	1	1080304	GM	03-Aug-21	4500-Cl-B	
TDS*	**321**		5.00	mg/L	1	1080213	AC	03-Aug-21	160.1	
Sulfide, total	<0.0100		0.0100	mg/L	1	1080305	AC	03-Aug-21	376.2	A-01

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

XI. Exhibit E3

CARDINAL Laboratories

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

Analytical Results For:

FORTY ACRES ENERGY 11777 KATY FREEWAY STE. 305 B HOUSTON TX, 77079	Project: BLACKBEARD AREA Project Number: FRESH WATER Project Manager: JAMES MARTINEZ Fax To:	Reported: 03-Aug-21 14:50

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1072912 - Filtration										
Blank (1072912-BLK1)				Prepared: 29-Jul-21 Analyzed: 02-Aug-21						
TDS	ND	5.00	mg/L							
LCS (1072912-BS1)				Prepared: 29-Jul-21 Analyzed: 02-Aug-21						
TDS	541		mg/L	500		108	80-120			
Duplicate (1072912-DUP1)	**Source: H211989-06**			Prepared: 29-Jul-21 Analyzed: 02-Aug-21						
TDS	332000	5.00	mg/L		340000			2.61	20	
Batch 1080213 - Filtration										
Blank (1080213-BLK1)				Prepared: 02-Aug-21 Analyzed: 03-Aug-21						
TDS	ND	5.00	mg/L							
LCS (1080213-BS1)				Prepared: 02-Aug-21 Analyzed: 03-Aug-21						
TDS	542		mg/L	500		108	80-120			
Duplicate (1080213-DUP1)	**Source: H212007-04**			Prepared: 02-Aug-21 Analyzed: 03-Aug-21						
TDS	807	5.00	mg/L		789			2.26	20	
Batch 1080304 - General Prep - Wet Chem										
Blank (1080304-BLK1)				Prepared & Analyzed: 03-Aug-21						
Chloride	ND	4.00	mg/L							
LCS (1080304-BS1)				Prepared & Analyzed: 03-Aug-21						
Chloride	104	4.00	mg/L	100		104	80-120			

Cardinal Laboratories

*=Accredited Analyte

XI. Exhibit E4

CARDINAL Laboratories

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

Analytical Results For:

FORTY ACRES ENERGY 11777 KATY FREEWAY STE. 305 B HOUSTON TX, 77079	Project: BLACKBEARD AREA Project Number: FRESH WATER Project Manager: JAMES MARTINEZ Fax To:	Reported: 03-Aug-21 14:50

Inorganic Compounds - Quality Control

Cardinal Laboratories

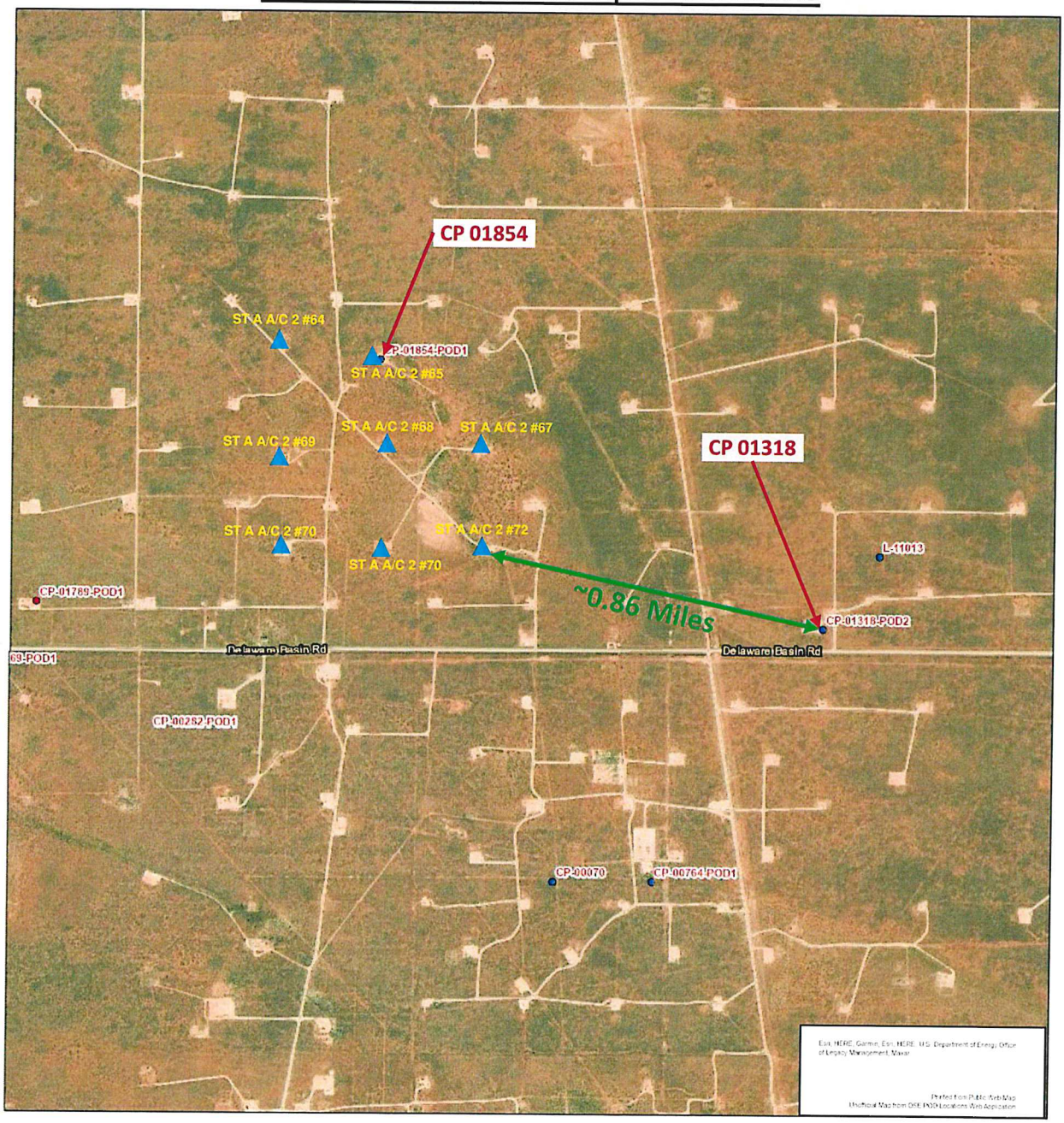
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1080304 - General Prep - Wet Chem										
LCS Dup (1080304-BSD1)				Prepared & Analyzed: 03-Aug-21						
Chloride	104	4.00	mg/L	100		104	80-120	0.00	20	
Batch 1080305 - General Prep - Wet Chem										
Blank (1080305-BLK1)				Prepared & Analyzed: 03-Aug-21						
Sulfide, total	ND	0.0100	mg/L							

Cardinal Laboratories

*=Accredited Analyte

XI. Exhibit E5

Fresh Water Well Sample Locations



HINKLE SHANOR LLP
ATTORNEYS AT LAW
PO BOX 2068
SANTA FE, NEW MEXICO 87504
505-982-4554 (FAX) 505-982-8623

hinklelawfirm.com

WRITER:
Dana S. Hardy, Partner
dhardy@hinklelawfirm.com

August 12, 2021

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

TO ALL INTERESTED PARTIES SUBJECT TO NOTICE

Re: Case No. 22133
Application of FAE II Operating, LLC for Reinstatement of Injection Authority and Authorization to Convert Producing Wells to Injectors for Waterflood Operations, Lea County, New Mexico.

To whom it may concern:

This letter is to advise you that the subject application was filed with the New Mexico Oil Conservation Division. The hearing will be conducted on **September 9, 2021** beginning at 8:15 a.m.

During the COVID-19 Public Health Emergency, state buildings are closed to the public and hearings will be conducted remotely. 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.

Pursuant to Division Rule 19.15.4.13.B, a party who intends to present evidence at the hearing shall file a pre-hearing statement and serve copies on other parties, or the attorneys of parties who are represented by counsel, at least four business days in advance of a scheduled hearing, but in no event later than 5:00 p.m. mountain time, on the Thursday preceding the scheduled hearing date. The statement must be filed at the Division's Santa Fe office or submitted through the OCD E-Permitting system (https://wwwapps.emnrd.state.nm.us/ocd/ocdpermitting/) and should include: the names of the parties and their attorneys, a concise statement of the case, the names of all witnesses the party will call to testify at the hearing, the approximate time the party will need to present its case, and identification of any procedural matters that are to be resolved prior to the hearing.

Please do not hesitate to contact me if you have any questions about this matter.

Sincerely,

/s/ Dana S. Hardy

Dana S. Hardy

FAE II OPERATING, LLC
Case No. 22133
Exhibit A-6

Enclosure

PO BOX 10
ROSWELL, NEW MEXICO 88202
575-622-6510
(FAX) 575-623-9332

PO BOX 2068
SANTA FE, NEW MEXICO 87504
505-982-4554
(FAX) 505-982-8623

7601 JEFFERSON ST NE • SUITE 180
ALBUQUERQUE, NEW MEXICO 87109
505-858-8320
(FAX) 505-858-8321

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- ☐ Return Receipt (electronic) $
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- ☐ Adult Signature Restricted Delivery $

Postage
$

Total Postage and Fees
$

SANTA FE, NM 87501
AUG 12 2021
USPS
Postmark Here

Sent To: Apache Corporation
Street a: 303 Veterans Airpark Ln., #1000
City, Sta: Midland, TX 79705

PS Form 3800, April 2015 PSN 7530-02-000-9047 — See Reverse for Instructions

---

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Apache Corporation
303 Veterans Airpark Ln., #1000
Midland, TX 79705

9590 9402 5712 9346 7884 44

2. Article Number *(Transfer from service label)*
7020 0640 0000 0143 4038

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☑ Agent
☐ Addressee

B. Received by *(Printed Name)* Chan Berry
C. Date of Delivery 8-16-21

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☑ No

3. Service Type
- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☒ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over $500)
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☒ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 — Domestic Return Receipt

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- ☐ Return Receipt (electronic) $
- ☐ Certified Mail Restricted Delivery $
- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage
$

Total Postage and Fees
$

Postmark Here

SANTA FE, NM 87501
AUG 12 2021
USPS

Sent To Dasco Cattle Company, LLC
Street and 3410 Rose Road
Hobbs, NM 88242
City, State

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

---

SENDER: *COMPLETE THIS SECTION*

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- ■ Print your name and address on the reverse so that we can return the card to you.
- ■ Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Dasco Cattle Company, LLC
3410 Rose Road
Hobbs, NM 88242

9590 9402 5712 9346 7884 37

2. Article Number *(Transfer from service label)*
7020 0640 0000 0143 4045

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X NC RT 74 ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* CIG
C. Date of Delivery 8/16/21

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☒ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over $500)
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☒ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

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- ☐ Return Receipt (electronic) $
- ☐ Certified Mail Restricted Delivery $
- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage
$

Total Postage and Fees
$

SANTA FE, NM 87501
AUG 12 2021
USPS

Postmark Here

Sent To
Empire New Mexico, LLC

Street and
200 S. Utica Place, Suite 150
Tulsa, OK 74114

City, State

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

---

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Empire New Mexico, LLC
200 S. Utica Place, Suite 150
Tulsa, OK 74114

9590 9402 5712 9346 7884 20

2. Article Number (Transfer from service label)
7020 0640 0000 0143 4021

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☒ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over $500)
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☒ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

7020 0640 0000 0143 4052

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OFFICIAL USE

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Extra Services & Fees (check box, add fee as appropriate)
- ☐ Return Receipt (hardcopy) $
- ☐ Return Receipt (electronic) $
- ☐ Certified Mail Restricted Delivery $
- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage
$

Total Postage and Fees
$

Postmark Here

SANTA FE NM 87501
AUG 12 2021
USPS

Sent To
NM Commissioner of Public Lands

Street and
P.O. Box 1148
Santa Fe, NM 87504

City, State

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

---

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

NM Commissioner of Public Lands
P.O. Box 1148
Santa Fe, NM 87504

9590 9402 5712 9346 7884 51

2. Article Number (Transfer from service label)
7020 0640 0000 0143 4052

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☒ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over $500)
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☒ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
August 20, 2021
and ending with the issue dated
August 20, 2021.

Publisher

Sworn and subscribed to before me this
20th day of August 2021.

Business Manager

My commission expires
January 29, 2023
(Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of New Mexico
My Commission Expires 1-29-23

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL NOTICE
August 20, 2021

This is to notify all interested parties, including: Apache Corporation, Dasco Cattle Company, LLC, Empire New Mexico, LLC, the New Mexico Commissioner of Public Lands, and their successors and assigns, that the New Mexico Oil Conservation Division will conduct a hearing on an application submitted by FAE II Operating, LLC (Case No. 22133). During the COVID-19 Public Health Emergency, state buildings are closed to the public and hearings will be conducted remotely. The hearing will be conducted on September 9, 2021 beginning at 8:15 a.m. To participate in the electronic hearing, see the instructions posted on the docket for the hearing date: https://www.emnrd.nm.gov/ocd/hearing-info/. Applicant applies for an order: (1) reinstating injection authority for its State "A" A/C No. 65, 67, 69 and 71 wells within its Blackbeard North Waterflood Project ("Project") within the Seven Rivers and Queen formations comprised of portions of Sections 5, 7, 8 and 9, Township 22 South, Range 36 East, Lea County, New Mexico; and (2) authorizing FAE to convert its State "A" A/C No. 64, 68, 70 and 72 producing wells to injectors for waterflood operations. The following wells ("Wells") authorized under the Orders are located within the South Eunice pool of the Seven Rivers and Queen formations:

Well Name (API: 30-025-)	Location within T22S-R36E	Injection interval
State "A" A/C 2 No. 64 (28273)	Unit A, 1250 FNL & 1250 FEL, Sec. 8	3720'- 3885'
State "A" A/C 2 No. 65 (28274)	Unit E, 1345 FNL & 25 FWL, Sec. 9	3695'- 3875'
State "A" A/C 2 No. 67 (28276)	Unit K, 2615 FSL & 1345 FWL, Sec. 9	3660'- 3850'
State "A" A/C 2 No. 68 (28277)	Unit E, 2570 FNL & 70 FWL, Sec. 9	3695'- 3885'
State "A" A/C 2 No. 69 (28278)	Unit I, 2615 FSL & 1295 FEL, Sec. 8	3700'- 3890'
State "A" A/C 2 No. 70 (28279)	Unit P, 1295 FSL & 1295 FEL, Sec. 8	3725'- 3890'
State "A" A/C 2 No. 71 (28280)	Unit M, 1295 FSL & 25 FWL, Sec. 9	3715'- 3890'
State "A" A/C 2 No. 72 (28281)	Unit K, 1410 FSL & 1440 FWL, Sec. 9	3675'- 3875'

Applicant proposes to convert its State "A" A/C No. 64, 68, 70 and 72 wells from producers to injectors for waterflood operations and reinstate injection into its State "A" A/C No. 65, 67, 69 and 71 wells for waterflood operations. FAE plans to inject water through a closed system of perforations at depths of 3,599' to 3,950' within the Seven Rivers and Queen formations. The proposed average injection pressure through the Wells is expected to be approximately 700 psi. The expected maximum injection pressure will be calculated relative to the depth of the highest perforation, using a factor of 0.2 psi/ft. The proposed Wells will have perforation depths of approximately 3,640' and 3,599' (or 728 psi and 720 psi maximum injection pressure, respectively). Pending results of a step rate test, the maximum injection pressure could potentially be increased to a factor of 0.6 psi/ft (or 2,184 psi at 3,640' and 2,160 psi at 3,599'). The proposed average injection rate is expected to be approximately 600 barrels of water per day. The maximum daily injection rate will be 1,000 barrels of water per day or as permitted by the Division. The Unit acreage is located approximately 7.5 miles southwest of Eunice, New Mexico.
#36762

02107475

GILBERT
HINKLE, SHANOR LLP
PO BOX 2068
SANTA FE, NM 87504

00257473

FAE II OPERATING, LLC
Case No. 22133
Exhibit A-7

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

APPLICATION OF FAE II OPERATING, LLC FOR REINSTATEMENT OF INJECTION AUTHORITY AND AUTHORIZATION TO CONVERT PRODUCING WELLS TO INJECTORS FOR WATERFLOOD OPERATIONS, LEA COUNTY, NEW MEXICO

CASE NO. 22133

SELF-AFFIRMED STATEMENT OF JESSICA LAMARRO

1. I am over 18 years of age and am competent to provide this Self-Affirmed Statement. I have personal knowledge of the matters addressed herein. I am employed by FAE II Operating, LLC ("FAE") as a geologist. I am familiar with the Application in this case and with the geology matters pertaining to this Application. I have previously testified before the New Mexico Oil Conservation Division ("Division"), and my credentials as an expert in petroleum geology matters were accepted and made a matter of record.

2. FAE's Application seeks an order: (1) reinstating injection authority for its State "A" A/C No. 65, 67, 69 and 71 wells within its Blackbeard North Waterflood Project ("Project") within the Seven Rivers and Queen formations comprised of portions of Sections 5, 7, 8 and 9, Township 22 South, Range 36 East, Lea County, New Mexico; and (2) authorizing FAE to convert its State "A" A/C No. 64, 68, 70 and 72 producing wells to injectors for waterflood operations.

3. The legal locations and injection intervals of the wells ("Wells") pertaining to this application are as follows:

Well Name (API: 30-025-)	Location within T22S-R36E	Injection interval
State "A" A/C 2 No. 64 (28273)	Unit A, 1250 FNL & 1250 FEL, Sec. 8	3720'- 3885'
State "A" A/C 2 No. 65 (28274)	Unit E, 1345 FNL & 25 FWL, Sec. 9	3695'- 3875'
State "A" A/C 2 No. 67 (28276)	Unit K, 2615 FSL & 1345 FWL, Sec. 9	3660'- 3850'
State "A" A/C 2 No. 68 (28277)	Unit E, 2570 FNL & 70 FWL, Sec. 9	3695'- 3885'
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State "A" A/C 2 No. 70 (28279)	Unit P, 1295 FSL & 1295 FEL, Sec. 8	3725'- 3890'
State "A" A/C 2 No. 71 (28280)	Unit M, 1295 FSL & 25 FWL, Sec. 9	3715'- 3890'
State "A" A/C 2 No. 72 (28281)	Unit K, 1410 FSL & 1440 FWL, Sec. 9	3675'- 3875'

4. The "unitized interval" was defined by Order R-12496-A as the South Eunice pool, which has a depth of 3,269' to 3,983' in the State A A/C 2-39 (API: 3002508858) log.

5. Produced water will be injected into the Seven Rivers and Queen formations found at the drilling depth interval of 3,855' to 4,024' as measured on the electric log called the "Focused Log" ran June 16, 1966 on Texas Pacific Oil Company's STATE A AC 2 #60 (API No. 30-025-21774) for the purpose of increasing the ultimate recovery of oil within the interval underlying the Project area.

6. The productive zone immediately overlying the proposed injection interval is the Seven Rivers formation with its top being at an approximate depth of 3,361' TVD. The productive zone immediately underlying the proposed injection interval is the Grayburg formation at an approximate depth of 4,024' TVD.

7. **Exhibit B-1** contains a type log of the Seven Rivers-Queen injection interval. The interval consists primarily of sandstones interbedded with dolomites and anhydrites. The log shows the interval top at 3630' and which is top sealed by a low porosity/low permeability non-oil bearing Seven Rivers carbonate layer. The bottom of the interval is sealed by a low porosity/low

permeability section of the Grayburg carbonate. There is no fracturing and essentially no vugular porosity fabric evident in cores or on the openhole wireline log data. Productive porosity typically ranges from 10% to 20% and averages around 16% throughout the interval.

8. **Exhibit B-2** contains a structure map of the Unit. The map shows the structural contours near the top of the Seven Rivers-Queen injection interval. The area is relatively flat but has a gentle east to west slope towards the Delaware Basin.

9. **Exhibits B-3 and B-4** contain cross-sections of the target injection interval within the Seven Rivers and Queen formations. The cross-sections demonstrate the injection interval is consistent and continuous across the target interval underlying the Project area. The cross-sections also show all lands within the proposed unit contain porous reservoir rock and therefore, all lands within the proposed unit appear capable of contributing additional secondary recovery reserves.

10. Accordingly, from geologic studies performed over this area, the unit area is well suited for secondary and tertiary recovery operations and the entire Project area should continue to contribute enhanced recovery reserves.

11. There are no faults or other geologic impediments that would impede the efficiency of the Project.

12. Based on my professional training and experience, it is my opinion that the proposed injection operations will not impair any hydrocarbon-bearing zones. It is also my opinion that injection fluids will be confined to the injection interval as a result of the stratigraphic confining layers above and below the injection zone.

13. Pages 47-62 of the Form C-108 identify between 1 and 6 active freshwater wells within a 1-mile radius of the Wells. Pages 63-67 of the Form C-108 contain water analyses for two (2) freshwater wells. The first and closest freshwater well is the CP 01854 POD1 located about

100' from the State A A/C 2 #65. The well depth is 250' MD and is considered a "shallow" water supply. The second well is the CP 01318 POD2 located 0.86 miles from State A A/C 2 #72. The well depth is 260' MD and is also considered a "shallow" water supply.

14. With respect to compatibility, the source of the water to be injected will be produced water from other Seven Rivers and Queen formations wells drilled within the Project area and water transfer lines. **Exhibit B-5** contains a produced water analysis for the FAE II Operating LLC's STATE A A/C 2 #24 (API: 30-025-08833). I do not expect any water compatibility issues to arise from the proposed injection operations.

15. I have examined the available geological and engineering data and have found no evidence of open faults or hydrological connection between the proposed Seven Rivers-Queen injection interval and any underground sources of drinking water.

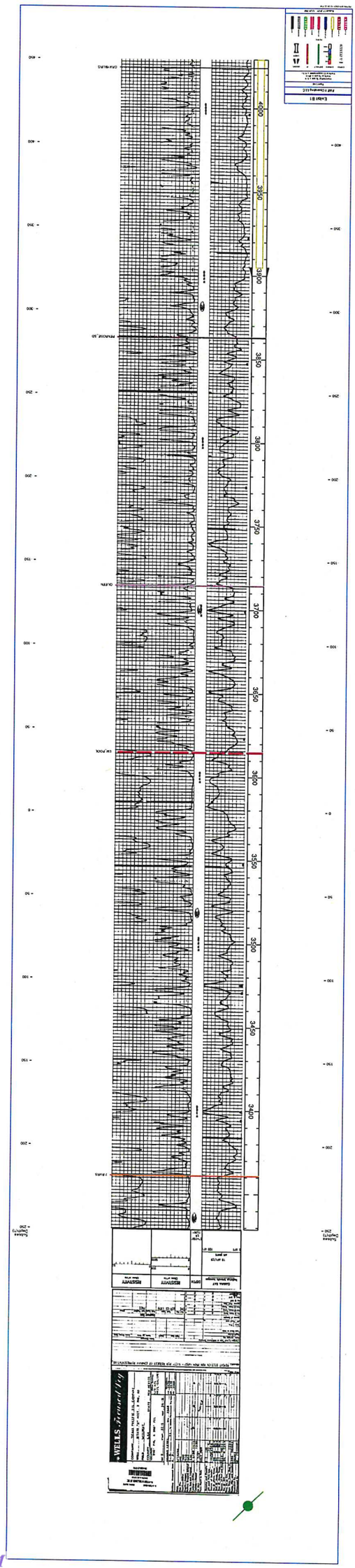
16. The exhibits referenced above were either prepared by me or under my supervision or were compiled from company business records.

17. In my opinion, the granting of FAE's application would serve the interests of conservation, the prevention of waste, and the protection of correlative rights.

18. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm that my testimony in paragraphs 1 through 17 above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date handwritten next to my signature below.

Jessica LaMarro

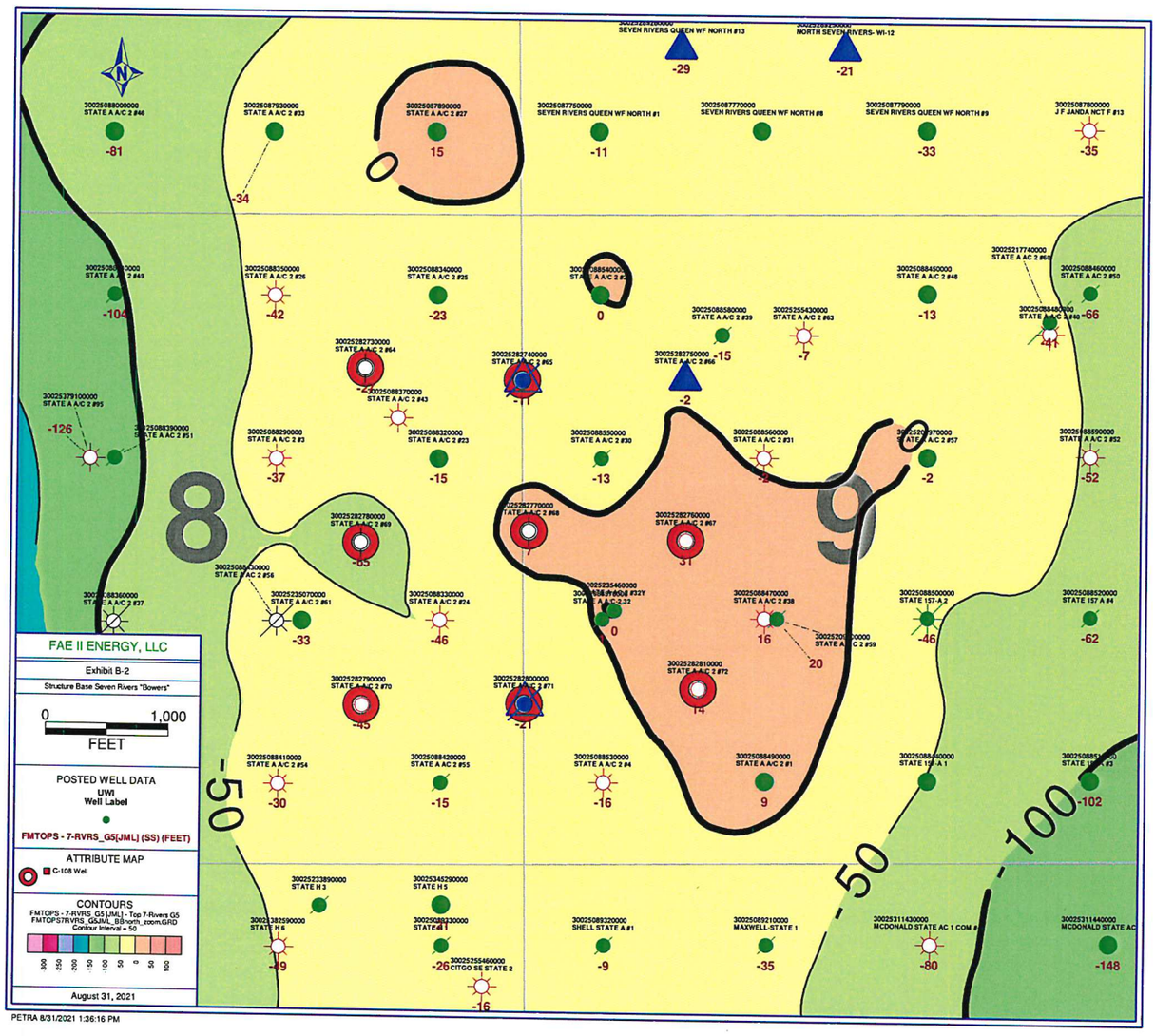
9/3/2021
Date



FAE II OPERATING, LLC

Case No. 22133

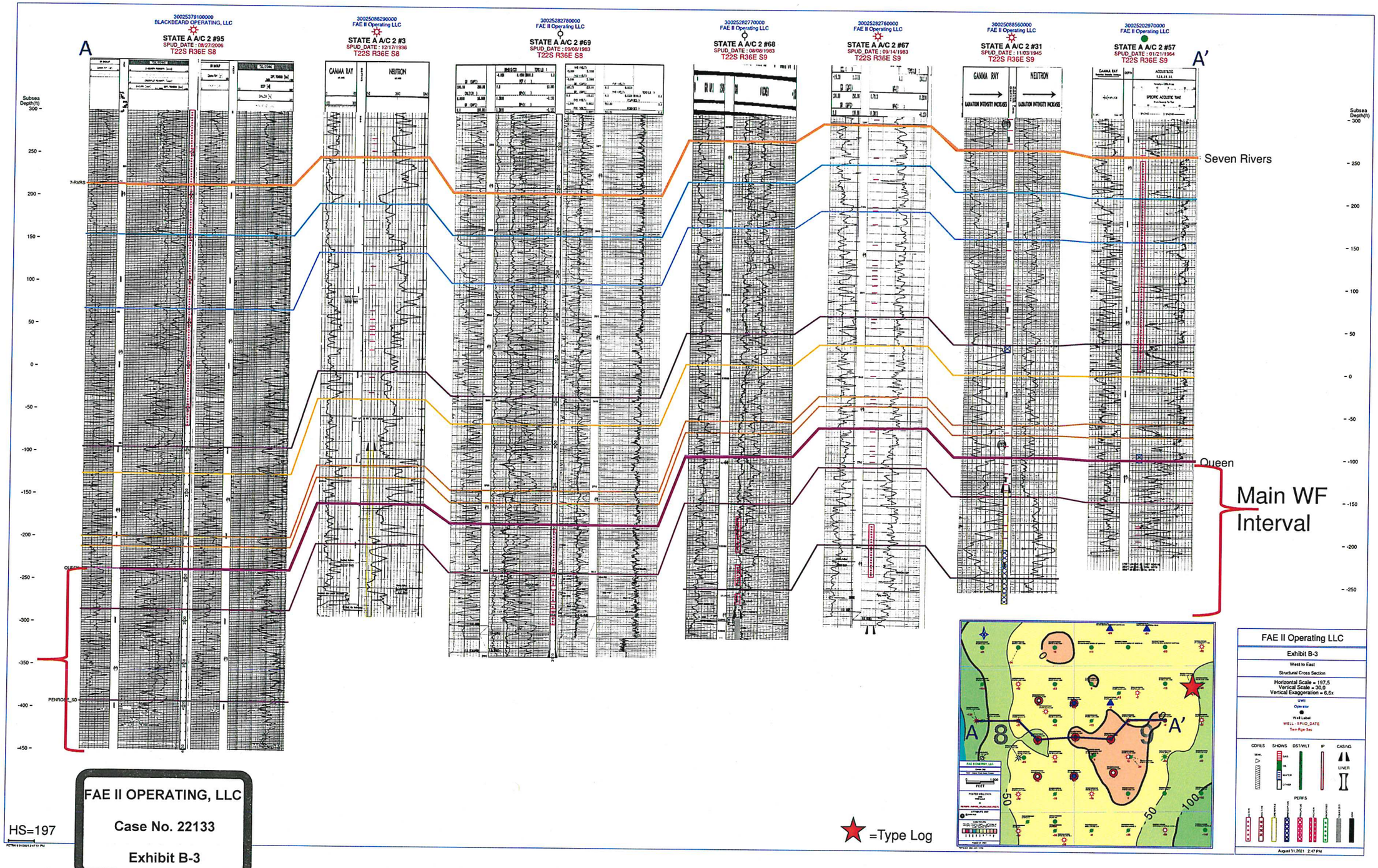
Exhibit B-1



FAE II OPERATING, LLC

Case No. 22133

Exhibit B-2

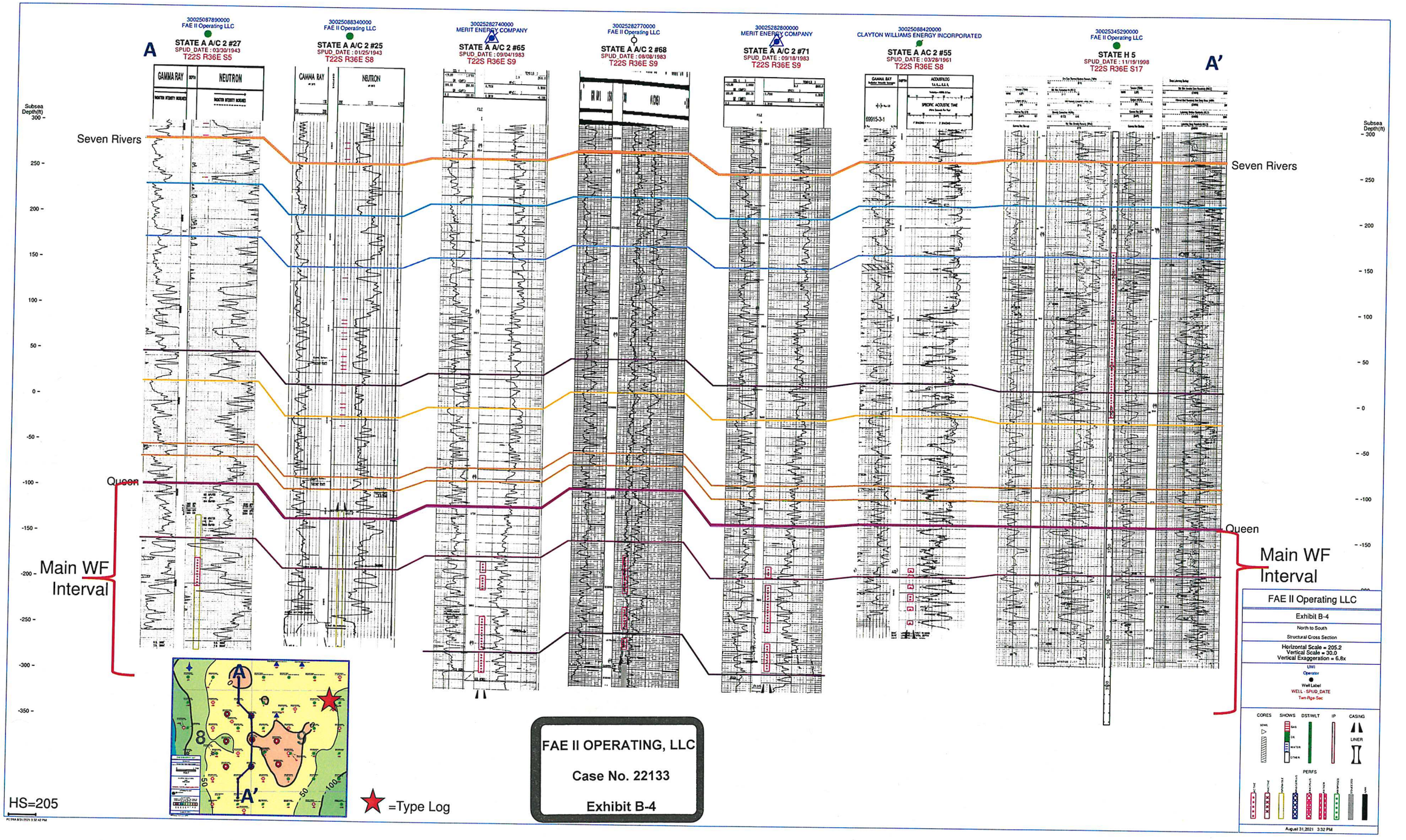


FAE II OPERATING, LLC

Case No. 22133

Exhibit B-3

HS=197



Impact Water Analysis Report

IMPACT CHEMICAL TECHNOLOGIES, INC.

SYSTEM IDENTIFICATION

Company: Blackbeard
Location: State A A/C 2 #4
Sample Source: Wellhead
Salesman: David Garcia

Sample ID#: 93620

Sample Date: 02-15-2018
Report Date: 02-20-2018

WATER CHEMISTRY

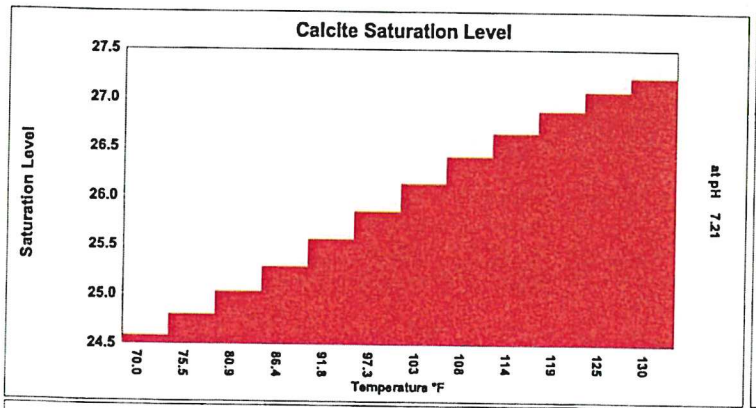
CATIONS		ANIONS	
Calcium(as Ca)	771.10	Chloride(as Cl)	4600
Magnesium(as Mg)	233.10	Sulfate(as SO_4)	0.00
Barium(as Ba)	6.53	Dissolved CO_2(as CO_2)	180.00
Strontium(as Sr)	17.37	Bicarbonate(as HCO_3)	2784
Potassium(as K)	85.82	H_2S (as H_2S)	428.00
Lithium(as Li)	0.31	Boron(as B)	10.76
Iron(as Fe)	4.82		
Manganese(as Mn)	0.43		

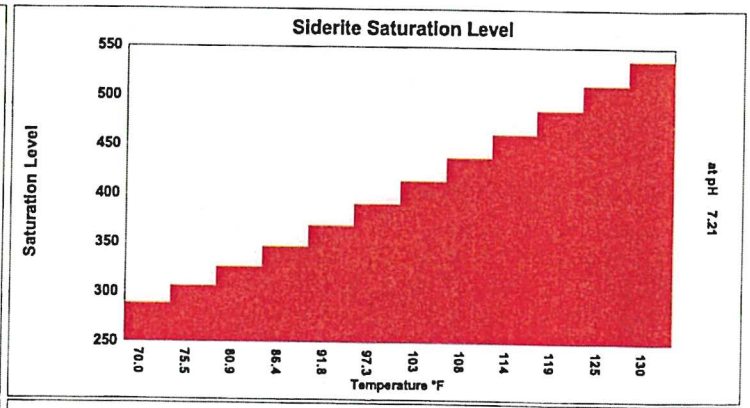
PARAMETERS	
Temperature(°F)	77.00
Sample pH	7.19
Conductivity	13856
T.D.S.	11856
Resistivity	72.17
Sp.Gr.(g/mL)	1.00

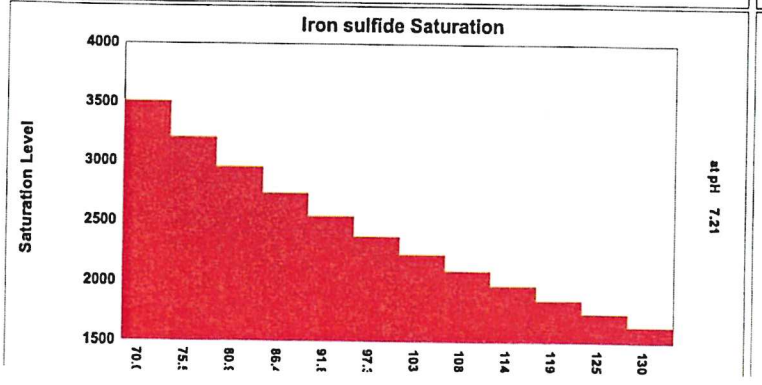
SCALE AND CORROSION POTENTIAL

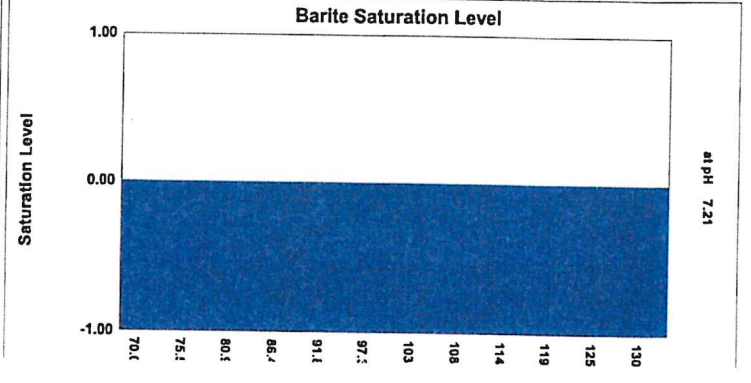
Temp.	Press.	Calcite		Anhydrite		Gypsum		Barite		Celestite		Siderite		Mackawenite		CO_2	pCO_2
(°F)	(atm)	$CaCO_3$		$CaSO_4$		$CaSO_4*2H_2O$		$BaSO_4$		$SrSO_4$		$FeCO_3$		FeS		(mpy)	(atm)
70.00	1.00	24.58	6.44	0.00	-2032	0.00	-1593	0.00	-3.81	0.00	-279.92	288.09	7.65	3504	2.46	0.122	0.280
75.45	10.00	24.79	6.38	0.00	-2042	0.00	-1627	0.00	-4.27	0.00	-282.09	305.98	7.58	3203	2.44	0.204	1.54
80.91	19.00	25.03	6.32	0.00	-2042	0.00	-1658	0.00	-4.74	0.00	-283.46	325.47	7.52	2950	2.43	0.196	2.80
86.36	28.00	25.28	6.27	0.00	-2033	0.00	-1686	0.00	-5.23	0.00	-284.20	346.05	7.47	2732	2.42	0.180	4.06
91.82	37.00	25.56	6.23	0.00	-2015	0.00	-1710	0.00	-5.73	0.00	-284.42	367.72	7.42	2543	2.40	0.168	5.32
97.27	46.00	25.85	6.19	0.00	-1988	0.00	-1732	0.00	-6.23	0.00	-284.23	390.15	7.38	2377	2.39	0.159	6.58
102.73	55.00	26.13	6.16	0.00	-1954	0.00	-1751	0.00	-6.74	0.00	-283.72	413.36	7.34	2229	2.38	0.153	7.84
108.18	64.00	26.41	6.14	0.00	-1916	0.00	-1718	0.00	-7.28	0.00	-283.36	437.18	7.32	2093	2.36	0.138	9.10
113.64	73.00	26.65	6.09	0.00	-1867	0.00	-1675	0.00	-7.82	0.00	-282.57	461.47	7.27	1970	2.35	0.122	10.36
119.09	82.00	26.87	6.06	0.00	-1816	0.00	-1637	0.00	-8.39	0.00	-282.15	486.28	7.23	1852	2.34	0.109	11.62
124.55	91.00	27.07	6.03	0.00	-1759	0.00	-1602	0.00	-8.99	0.00	-281.84	511.52	7.19	1742	2.32	0.0971	12.88
130.00	100.00	27.22	5.99	0.00	-1700	0.00	-1568	0.00	-9.62	0.00	-281.64	536.61	7.15	1636	2.31	0.0867	14.14
		xSAT	mg/L	xSAT	mg/L	xSAT	mg/L	xSAT	mg/L	xSAT	mg/L	xSAT	mg/L	xSAT	mg/L		

Saturation Levels (xSAT) are the ratio of ion activity to solubility, e.g. $\{Ca\}\{CO_3\}/K_{sp}$. pCO_2 (atm) is the partial pressure of CO_2 in the gas phase.
mg/L scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.









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

APPLICATION OF FAE II OPERATING, LLC FOR REINSTATEMENT OF INJECTION AUTHORITY AND AUTHORIZATION TO CONVERT PRODUCING WELLS TO INJECTORS FOR WATERFLOOD OPERATIONS, LEA COUNTY, NEW MEXICO

CASE NO. 22133

SELF-AFFIRMED STATEMENT OF HUXLEY SONG

1. I am over 18 years of age and am competent to provide this Self-Affirmed Statement. I have personal knowledge of the matters addressed herein. I am the Vice President of Engineering for FAE II Operating, LLC ("FAE"). I am familiar with the Application filed by FAE in this case and with the engineering matters pertaining to this Application. I have previously testified before the New Mexico Oil Conservation Division ("Division"), and my credentials as an expert in petroleum engineering matters were accepted and made a matter of record.

2. FAE's Application seeks an order: (1) reinstating injection authority for its State "A" A/C No. 65, 67, 69 and 71 wells within its Blackbeard North Waterflood Project ("Project") within the Seven Rivers and Queen formations comprised of portions of Sections 5, 7, 8 and 9, Township 22 South, Range 36 East, Lea County, New Mexico; and (2) authorizing FAE to convert its State "A" A/C No. 64, 68, 70 and 72 producing wells to injectors for waterflood operations.

FAE II OPERATING, LLC
Case No. 22133
Exhibit C

3. The legal locations and injection intervals of the wells ("Wells") pertaining to this application are as follows:

Well Name (API: 30-025-)	Location within T22S-R36E	Injection interval
State "A" A/C 2 No. 64 (28273)	Unit A, 1250 FNL & 1250 FEL, Sec. 8	3720'- 3885'
State "A" A/C 2 No. 65 (28274)	Unit E, 1345 FNL & 25 FWL, Sec. 9	3695'- 3875'
State "A" A/C 2 No. 67 (28276)	Unit K, 2615 FSL & 1345 FWL, Sec. 9	3660'- 3850'
State "A" A/C 2 No. 68 (28277)	Unit E, 2570 FNL & 70 FWL, Sec. 9	3695'- 3885'
State "A" A/C 2 No. 69 (28278)	Unit I, 2615 FSL & 1295 FEL, Sec. 8	3700'- 3890'
State "A" A/C 2 No. 70 (28279)	Unit P, 1295 FSL & 1295 FEL, Sec. 8	3725'- 3890'
State "A" A/C 2 No. 71 (28280)	Unit M, 1295 FSL & 25 FWL, Sec. 9	3715'- 3890'
State "A" A/C 2 No. 72 (28281)	Unit K, 1410 FSL & 1440 FWL, Sec. 9	3675'- 3875'

4. FAE proposes to reinstate injection authority for its State "A" A/C No. 65, 67, 69 and 71 wells and convert its State "A" A/C No. 64, 68, 70 and 72 producing wells to injectors within the Project and plans to inject water through a closed system of perforations at depths of 3,640' to 3,599' within the Seven Rivers and Queen formations.

5. Specifications and wellbore schematics for the Wells are provided at pages 2-9 of Form C-108. The Wells will be adequately equipped for injection, and the construction of the Wells will protect fresh water and other hydrocarbon-bearing zones.

6. The proposed average injection pressure through the Wells is expected to be approximately 700 psi. The expected maximum injection pressure will be calculated relative to the depth of the highest perforation, using a factor of 0.2 psi/ft. The proposed Wells will have perforation depths of approximately 3,640' and 3,599' (or 728 psi and 720 psi maximum injection pressure, respectively). Pending results of a step rate test, the maximum injection pressure could potentially be increased to a factor of 0.6 psi/ft (or 2,184 psi at 3,640' and 2,160 psi at 3,599').

7. The proposed average injection rate is expected to be approximately 600 barrels of water per day. The maximum daily injection rate will be 1,000 barrels of water per day or as permitted by the Division.

8. FAE proposes to acidize the perforations within its injector Wells with 5,000 gal 15% HCl for each set of perforations. Based on my professional training and experience, it is my professional opinion that acidizing each set of perforations within the Wells will maximize injection rates.

9. **Exhibit C-1** depicts the rate at which production has declined within the Project from approximately 90 bopd after initial waterflood implementation in the 1980s to approximately 10 bopd at present. Based on my professional training and experience, it is my opinion that production will decline even further from the current level of approximately 10 bopd in the absence of additional injection wells.

10. **Exhibit C-2** contains an Incremental Production and Economic Summary of the Project. The exhibit shows an economic comparison of continuing operations under current conditions with no additional injection support as opposed to increasing secondary recovery operations in the Wells within the Project. It is my opinion that commencing injection operations within the Wells would result in an incremental Estimated Ultimate Recovery (EUR) increase of approximately 1,900 Mbbl of oil.

11. It is my opinion that injection operations within the Project are economically and technically feasible and that it is prudent to utilize secondary recovery operations to maximize oil recovery. It is also my opinion that the proposed conversion of FAE's State "A" A/C No. 64, 68, 70 and 72 producers to injectors for waterflood operations is not premature.

12. FAE will run an MIT test prior to commencing injection and will monitor pressure during injection.

13. The exhibits referenced above were either prepared by me or under my supervision or were compiled from company business records.

14. In my opinion, the granting of FAE's application would serve the interests of conservation, the prevention of waste, and the protection of correlative rights.

15. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm that my testimony in paragraphs 1 through 14 above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date handwritten next to my signature below.

HLS

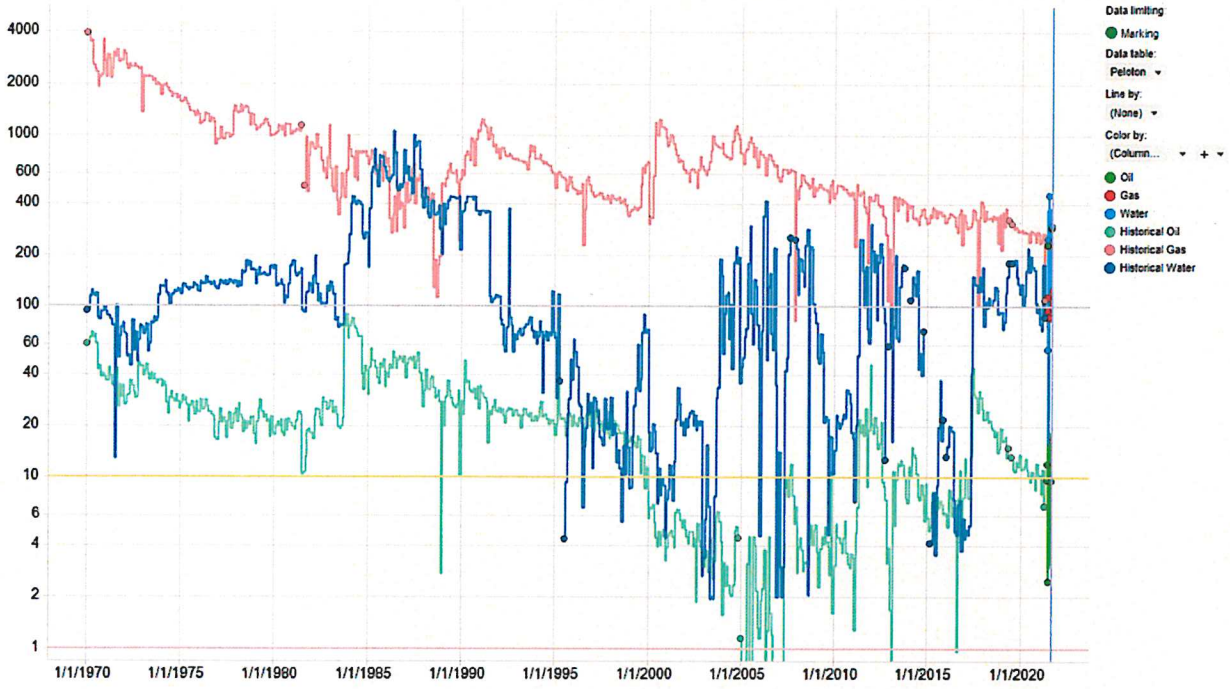
Huxley Song

8/26/21

Date

Exhibit C-1

Historical Production within Project Area



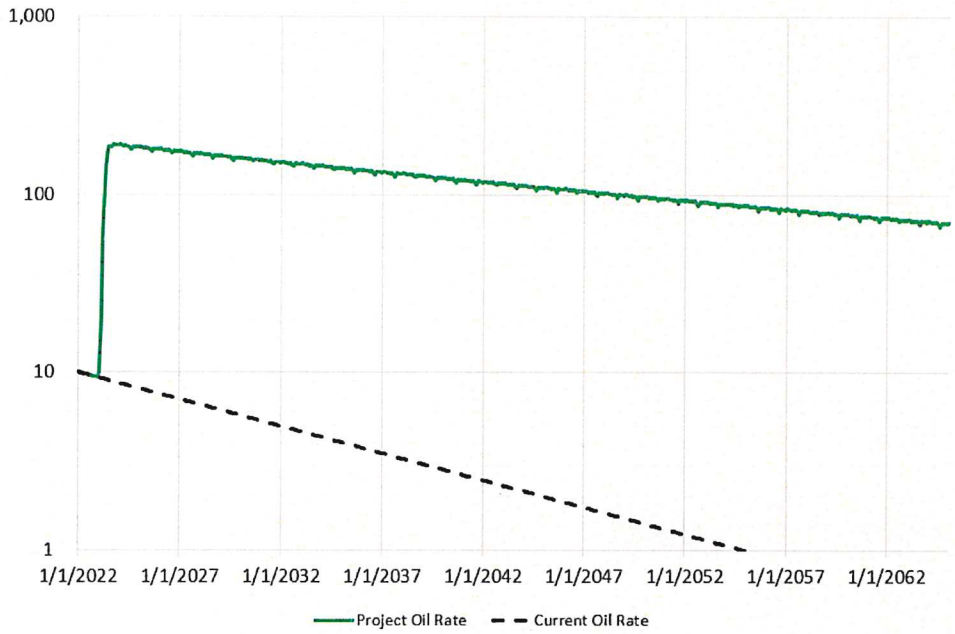
FAE II OPERATING, LLC

Case No. 22133

Exhibit C-1

Exhibit C-2

Production Comparison: Waterflood Reactivation Project vs Current Play Out



Economics of Waterflood Reactivation

	NPV-10 (Including Capital)	Gross Oil Reserves
Waterflood Reactivation	$16.2 million	2.0 million bo
Current Play Out (No Waterflood Reactivation)	$1.5 million	0.1 million bo
Delta (Benefit from Waterflood Reactivation)	$14.7 million	1.9 million bo

FAE II OPERATING, LLC
Case No. 22133
Exhibit C-2