

RECEIVED: 8/28/2017	REVIEWER: M Am	TYPE: WFX	APP. NO: DWAMI 72044974
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

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



ADMINISTRATIVE APPLICATION CHECKLIST

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

Applicant: Apache Corporation	OGRID Number: 873
Well Name: Northeast Drinkard Unit 613	API: 30-025-09919
Pool: Eunice; BLI-TU-DR, North	Pool Code: 22900

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

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

WFX-
 2017 AUG 28 A 9:53
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- 2) **NOTIFICATION REQUIRED TO:** Check those which apply.
- A. Offset operators or lease holders
 B. Royalty, overriding royalty owners, revenue owners
 C. Application requires published notice
 D. Notification and/or concurrent approval by SLO
 E. Notification and/or concurrent approval by BLM
 F. Surface owner
 G. For all of the above, proof of notification or publication is attached, and/or,
 H. No notice required

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

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

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

Brian Wood

 Print or Type Name

 Signature

8-26-17

 Date

505 466-8120

 Phone Number

brian@permitswest.com

 e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. OPERATOR: APACHE CORPORATION
ADDRESS: 303 VETERANS AIRPARK LANE, SUITE 3000, MIDLAND, TX 79705
CONTACT PARTY: BRIAN WOOD (PERMITS WEST, INC.) PHONE: 505 466-8120

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 XXX No
If yes, give the Division order number authorizing the project: R-8541

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.

NORTHEAST DRINKARD UNIT 613
30-025-09919

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

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

IX. Describe the proposed stimulation program, if any.

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

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

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

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

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

NAME: BRIAN WOOD TITLE: CONSULTANT
SIGNATURE:  DATE: AUG. 15, 2017
E-MAIL ADDRESS: brian@permitswest.com

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

III. WELL DATA

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

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

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

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

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

XIV. PROOF OF NOTICE

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

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

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

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

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

INJECTION WELL DATA SHEET

OPERATOR: APACHE CORPORATION

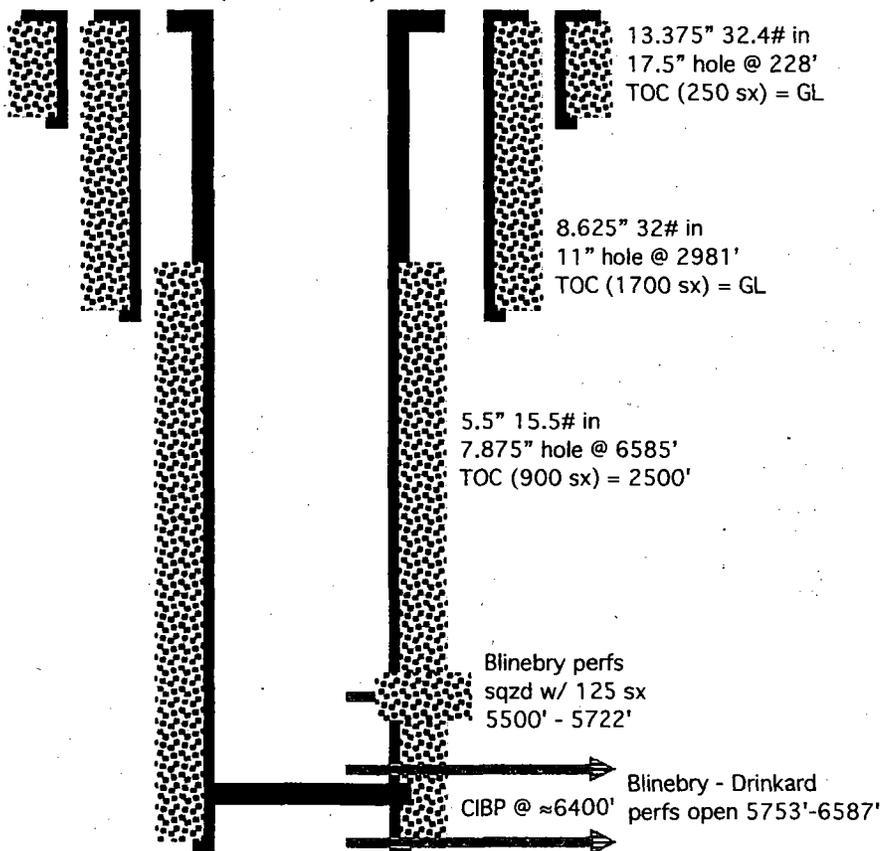
WELL NAME & NUMBER: NORTHEAST DRINKARD UNIT 613

WELL LOCATION: 1980' FNL & 660' FEL H 15 21 S 37 E
 FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

"AS IS"

(not to scale)



TD 6641'

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17.5" Casing Size: 13.375"
 Cemented with: 250 sx. or _____ ft³
 Top of Cement: SURFACE Method Determined: CIRC. 10 SX

Intermediate Casing

Hole Size: 11" Casing Size: 8.625"
 Cemented with: 1700 sx. or _____ ft³
 Top of Cement: SURFACE Method Determined: CIRC. 25 SX

Production Casing

Hole Size: 7.875" Casing Size: 5.5"
 Cemented with: 900 sx. or _____ ft³
 Top of Cement: 2500' Method Determined: NO REPORT
 Total Depth: 6641'

Injection Interval

5701' feet to 6669'

(Perforated or Open Hole; indicate which)

.....

INJECTION WELL DATA SHEET

OPERATOR: APACHE CORPORATION

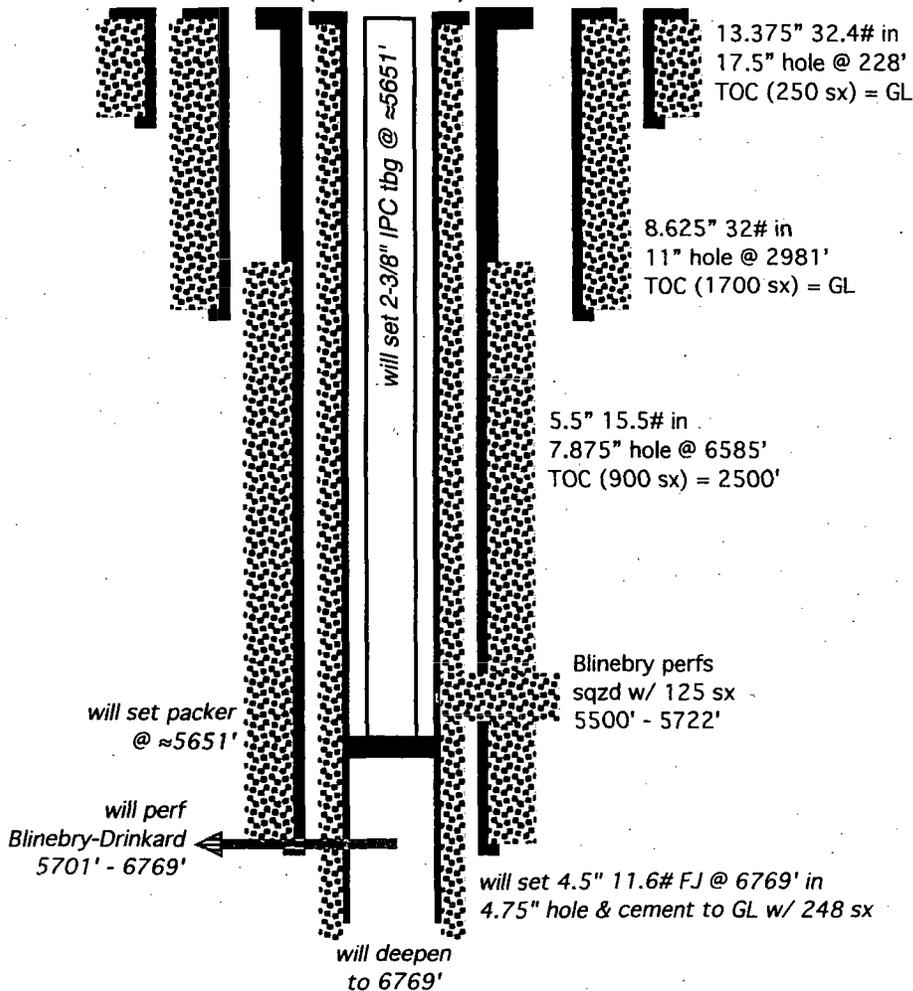
WELL NAME & NUMBER: NORTHEAST DRINKARD UNIT 613

WELL LOCATION: 1980' FNL & 660' FEL H 15 21 S 37 E
 FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC
 PROPOSED

WELL CONSTRUCTION DATA
Surface Casing

(not to scale)



Hole Size: 17.5" Casing Size: 13.375"
 Cemented with: 250 sx. or _____ ft³
 Top of Cement: SURFACE Method Determined: CIRC. 10 SX

Intermediate Casing

Hole Size: 11" Casing Size: 8.625"
 Cemented with: 1700 sx. or _____ ft³
 Top of Cement: SURFACE Method Determined: CIRC. 25 SX

Production Casing

Hole Size: 7.875" Casing Size: 5.5"
 Cemented with: 900 sx. or _____ ft³
 Top of Cement: 2500' Method Determined: NO REPORT

Total Depth: 6641'

Injection Interval

5701' feet to 6669'

(Perforated or Open Hole; indicate which)

.....

INJECTION WELL DATA SHEETTubing Size: 2-3/8" J-55 4.7# Lining Material: INTERNAL PLASTIC COATType of Packer: LOCK SET INJECTIONPacker Setting Depth: ≈5651'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data1. Is this a new well drilled for injection? _____ Yes XXX NoIf no, for what purpose was the well originally drilled? DRINKARD OIL WELL2. Name of the Injection Formation: BLINEBRY, TUBB, & DRINKARD3. Name of Field or Pool (if applicable): EUNICE; BLI-TU-DR, NORTH (POOL CODE 22900)4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. NO

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

OVER: GRAYBURG (3485'), SAN ANDRES (3715')UNDER: ABO (6679'), SIMPSON (7400')

APACHE CORPORATION
NORTHEAST DRINKARD UNIT 613
1980 FNL & 660 FEL
SEC. 15, T. 21 S., R. 37 E., LEA COUNTY, NM

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I. Purpose is to deepen (from 6641' to 6769') and convert an oil well to a water injection well. The well will inject (5701' - 6669') into the Blinebry, Tubb, and Drinkard, which are part of the Eunice; Blinebry-Tubb-Drinkard, North Pool (aka, Eunice; BLI-TU-DR, North and pool code = 22900). The well and zones are part of the Northeast Drinkard Unit (Unit Number 300160, Case Number 9231, Order Number R-8540) that was established in 1987 by Shell. The unit was subsequently operated by Altura, and now, by Apache. It is an active water flood.

II. Operator: Apache Corporation (OGRID #873)
Operator phone number: (432) 818-1167
Operator address: 303 Veterans Airpark Lane, Suite 3000
Midland, TX 79705
Contact for Application: Brian Wood (Permits West, Inc.)
Phone: (505) 466-8120

III. A. (1) Lease: NMSLO B0-9188-0007
Lease Size: 80 acres (see Exhibit A for C-102 and map)
Closest Lease Line: 660'
Lease Area: S2NE4 of Section 15, T. 21 S., R. 37 E.
Unit Size: 4,938 acres
Closest Unit Line: 933'
Unit Area: T. 21 S., R. 37 E.
Section 2: all
Section 3: all
Section 4: Lots 1, 8, 9, & 16
Section 10: all
Section 11: SW4
Section 14: NW4
Section 15, 22, & 23: all

A. (2) Surface casing (13.375", 32.4#) was set in 1948 at 228' in a 17.5" hole and cemented to GL with 250 sacks, of which 10 circulated.

Intermediate casing (8.625", 32#) was set at 2981' in an 11" hole and cemented to GL with 1700 sacks, of which 25 circulated.

Production casing (5.5", 15.5#) was set at 6585 in a 7.875" hole and cemented with 900 sacks to 2500' (estimated).

A 4.75" hole will be drilled to 6769' and a 4.5" 11.6" flush joint casing run. Casing will be cemented to GL with 248 sacks.

Mechanical integrity of the casing will be assured by hydraulically pressure testing to 500 psi for 30 minutes.

- A. (3) Tubing specifications are 2.375", J-55, 4.7#, and internally plastic coated. Setting depth will be \approx 5651'. (Top perforation will be 5701').
- A. (4) A lock set injection packer will be set at \approx 5651' (\approx 50' above the top perforation of 5701').
- B. (1) Injection zone will be the Blinebry - Drinkard interval. The interval is part of the Eunice; Blinebry-Tubb-Drinkard, North Pool. Estimated fracture gradient is \approx 0.56 psi per foot.
- B. (2) Injection interval will be 5601' to 6669'. The well is and will be cased.
- B. (3) Well was originally drilled as a Drinkard oil well. *? OK*
- B. (4) Well will be perforated from 5601' to 6669' with 2 shots per foot. Shot diameter = 0.40".
- B. (5) Next higher oil or gas zone within the area of review is the Grayburg. Its estimated bottom is at 3980'. Injection will occur in the Blinebry through Drinkard. Blinebry top is at 5541'. Injection interval will be 5701' to 6669'. Next lower oil or gas zone within the area of review is the Abo. Its estimated top is at 6679'.

IV. This is not a horizontal or vertical expansion of an existing injection project. The case file for the unit approval (R-8540) includes a discussion of the Drinkard water flood. The water flood (R-8541) was approved at the same time in 1987.

There have been 15 water flood expansions since then. Closest unit boundary is 933' southeast. Eight injection wells are within a half-mile radius, all are in the Unit. Injection wells are in all four cardinal directions (see Exhibit B).

V. Exhibit B shows and tabulates all 43 existing wells (2 P&A + 8 water injectors + 33 producers) within a half-mile radius, regardless of depth. Exhibit C shows all 764 existing wells (539 oil or gas producing wells + 125 injection or disposal wells + 54 P & A wells + 46 water wells) within a two-mile radius.

Exhibit D shows all leases (only State and fee) within a half-mile radius. Exhibit E shows all lessors (BLM, fee, and state) within a two-mile radius. Details on the leases within a half-mile are:

Aliquot Parts in Area of Review (T21S, R37E)	Lessor	Lease	Lessee(s) of Record	Blinebry, Tubb, or Drinkard operator
SWSE Sec. 10	NMSLO	B0-0935-0000	ExxonMobil	Apache
SESE Sec. 10	NMSLO	B0-9188-0008	Chevron USA	Apache
SWSW Sec. 11	fee	J H Nolan	Apache	Apache
E2NW4 Sec. 14	fee	Andrews	Apache	Apache
W2NW4 Sec. 14	fee	Eva Owen	Apache	Apache
N2SW4 & SWSW Sec. 14	fee	Eubanks	J R Con	J R Cone
N2N2 Sec. 15	NMSLO	B0-9188-0008	Chevron USA	Apache
S2NW4 Sec. 15	NMSLO	B0-1481-0018	Oxy USA WTP	Apache
S2NE4 Sec. 15	NMSLO	B0-9188-0007	Occidental Permian	Apache
SE4 Sec. 15	fee	L G Warlick	Apache	Apache
NESW Sec. 15	fee	Argo	Apache	Apache

VI. Forty-three existing wells are within a half-mile. Forty-one of the wells penetrated the Blinebry (top = 5541'). The penetrators include 31 oil wells, 8 water injection wells, and 2 P&A wells. A table abstracting the well construction details and histories of the Blinebry penetrators is in Exhibit F. Diagrams illustrating the P & A penetrators are also in Appendix F.

- VII. 1. Average injection rate will be \approx 1500 bwpd.
 Maximum injection rate will be \approx 2000 bwpd.
2. System will be closed. The well will be tied into the existing Unit pipeline system. The system consists of a branched injection system with centrifugal injection pumps.
3. Average injection pressure will be \approx 1000 psi. Maximum injection pressure will be 1140 psi ($= 0.2$ psi/foot \times 5701' (tops perforation)).
4. Water source will be water pumped from existing \approx 4000' deep San Andres water supply wells plus produced water from Blinebry, Tubb, and Drinkard zones. The source water and produced water are collected in separate skim tanks. The two water streams (source and produced) are commingled in a storage tank before being piped to injection wells. Commingling began in the 1970s. A comparison of analyses from the discharge pump and San Andres follows. The complete analyses are in Exhibit G.

	<u>Injection Pump Discharge</u>	<u>San Andres 919-S</u>
Anion/Cation Ratio	1.0	N/A
Barium	0.1 mg/l	0.38 mg/l
Bicarbonate	671.0 mg/l	562.0 mg/l
Calcium	1,099.0 mg/l	608.0 mg/l
Carbon Dioxide	80.0 ppm	80.0 ppm
Chloride	10,086.0 mg/l	6,200.0 mg/l
Hydrogen Sulfide	90.0 ppm	408.0 ppm
Iron	0.3 mg/l	0.0 mg/l
Magnesium	439.0 mg/l	244.0 mg/l
Manganese	N/A	0.01 mg/l
pH	7.5	6.49
Potassium	115.0 mg/l	N/A
Sodium	5,799.5 mg/l	3,909.0 mg/l
Strontium	28.0 mg/l	19.0 mg/l
Sulfate	2,465.0 mg/l	1,750.0 mg/l
Total Dissolved Solids	20,702.9 mg/l	13,273.0 mg/l

5. The Blinebry, Tubb, and Drinkard currently produce in the Unit. It is the goal of the project to increase production.

VIII. The Unit is on the north end of a north-northwest to south-southeast trending anticline. It is part of the Penrose Skelly trend and parallels the west edge of the Central Basin Platform. Dips are $\approx 1^\circ$ to $\approx 2^\circ$. A core data summary shows:

	Blinebry	Tubb	Drinkard
Porosity (%)	9.79	8.28	11
Permeability (md)	2.45	1.19	2.45
Lithology	dolomite, packstone	sandy dolomite	limestone, packstone, grainstone

There are 106 Blinebry, 124 Tubb, and 152 Drinkard active or new injection wells in the state. Adjacent to the Northeast Drinkard Unit are three other Drinkard water floods (the Apache operated West Blinebry Drinkard and East Blinebry Drinkard Units and the Chevron operated Central Drinkard Unit). The Central Drinkard Unit has been under water flood since the 1960s.

Formation tops are:

- Quaternary = 0'
- Yates = 2525'
- Grayburg = 3485'
- San Andres = 3715'
- Glorieta = 5150'
- Paddock = 5225'
- Blinebry = 5541'
- Injection interval = 5701' - 6669'*
- Tubb = 6103'
- Drinkard = 6446'
- Abo = 6679'
- Total Depth = 6769'

State Engineer (Exhibit H) shows four water wells are $\geq 6633'$ deep. All four were oil wells that were plugged back and now produce from the San Andres for water floods. San Andres water had a TDS of 13,273 in NEDU 919S (Exhibit G).

APACHE CORPORATION
NORTHEAST DRINKARD UNIT 613
1980 FNL & 660 FEL
SEC. 15, T. 21 S., R. 37 E., LEA COUNTY, NM

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Excluding those four wells, then the deepest water well within 2-miles is 136'. NEDU 613 is 9500' southwest of the Ogallala aquifer. No existing underground drinking water sources are below the Drinkard within a mile radius. Produced water has been disposed into two zones (Grayburg and San Andres) above the Blinebry within T. 21 S., R. 37 E.

IX. The well will be stimulated with acid to clean out scale or fill.

X. No logs are currently on file from this 69 year old well. GR/CBL/CCL/CNL logs are planned.

XI. Water sample analyses from four water wells are in Exhibit I. One well is within a mile and the other three are within 1-1/2 miles. The Section 15 water well is the only water well that could be found within a mile during a March 24, 2017 field inspection.

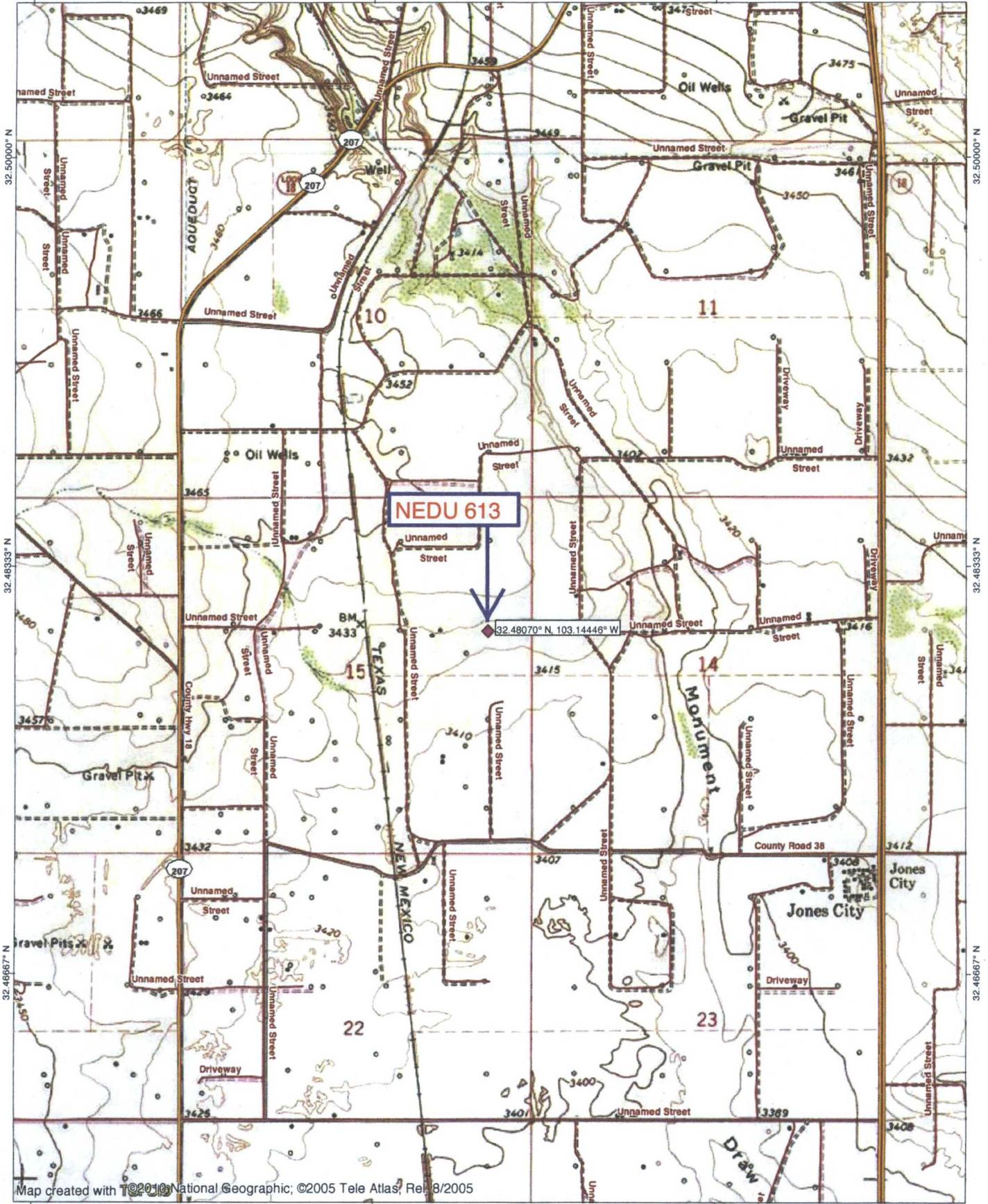
XII. Apache is not aware of any geologic or engineering data that may indicate the Blinebry-Drinkard interval is in hydrologic connection with any underground sources of water. Closest Quaternary fault is 110 miles southwest (Exhibit J). There are 106 Blinebry, 124 Tubb, and 152 Drinkard active or new injectors in the state. Previously approved water flood expansions in the Unit are WFX-583, -674, -722, -740, -752, -759, -774, -784, -881, -882, -896, -906, -907, -910, and -911.

XIII. A legal ad (see Exhibit K) was published on June 29, 2017. Notice (this application) has been sent (Exhibit L) to the surface owner (New Mexico State Land Office), lessees of record with leases in the area of review, and all well operators within the area of review.

103.16667° W

103.15000° W

WGS84 103.13333° W



Map created with ©2010 National Geographic; ©2005 Tele Atlas, Rev. 8/2005

103.16667° W

103.15000° W

WGS84 103.13333° W

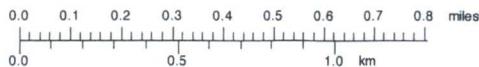


EXHIBIT A

TN+MN

6.5°

08/12/17

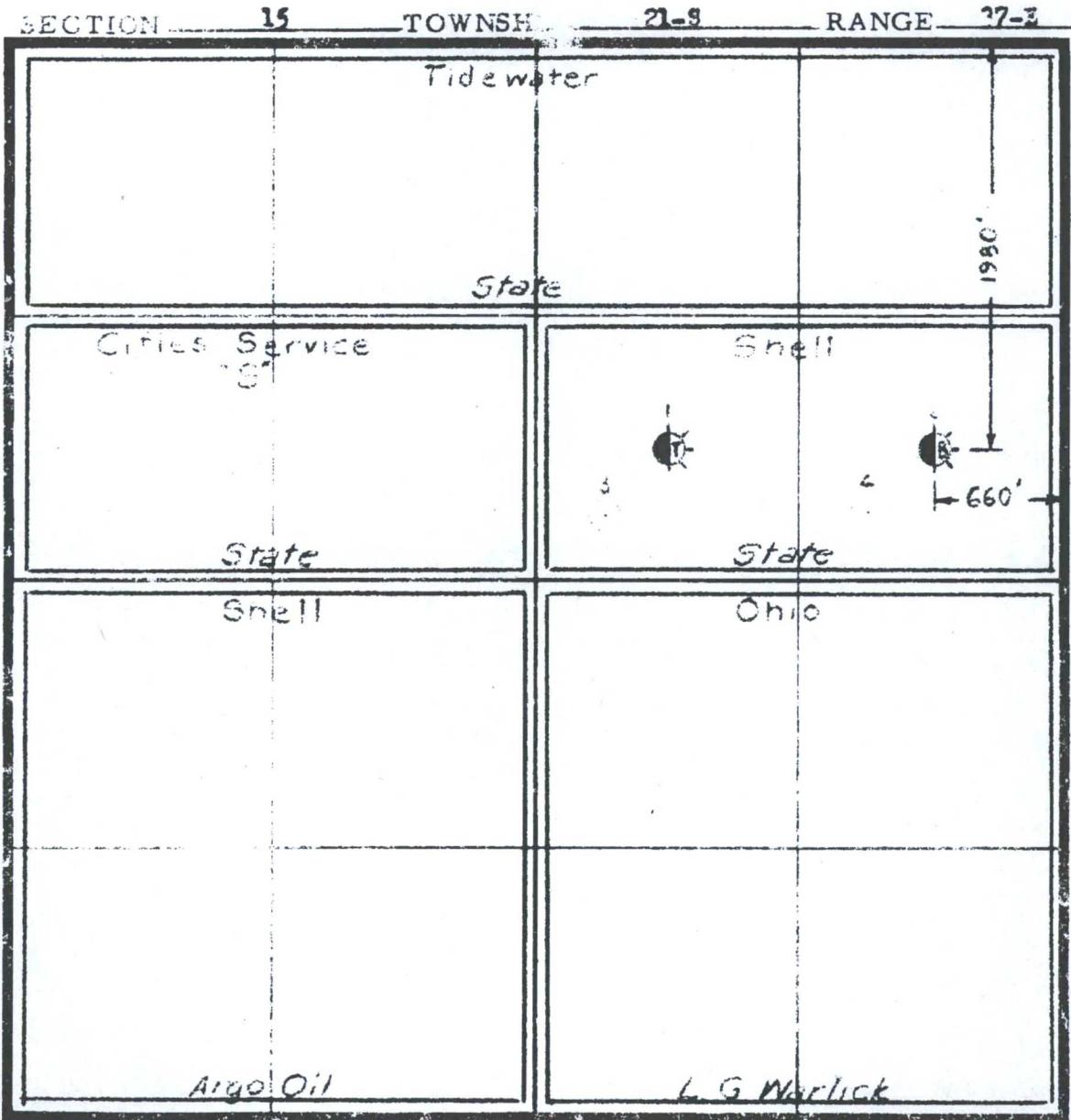
NEW MEXICO
OIL CONSERVATION COMMISSION

Gas Well Flat

Date 10-29-53

Shell Oil Company State 2
Operator Lease Well No.
Name of Producing Formation Blinebry Pool Blinebry

No. Acres Dedicated to the Well 80

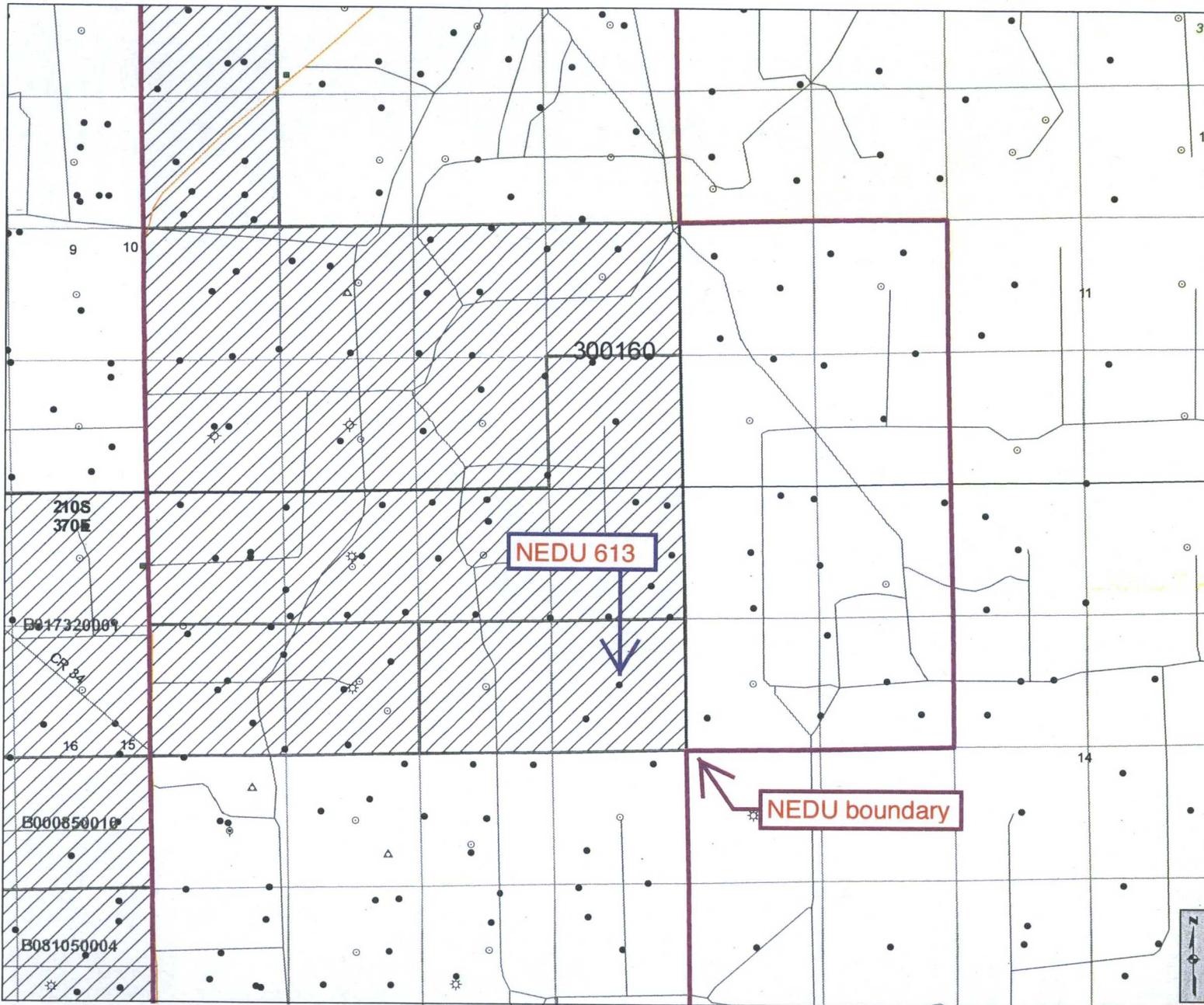


I hereby certify that the information given above is true and complete to the best of my knowledge.

EXHIBIT A

Name J. D. Savage
Position Division Exploitation Engineer
Representing Shell Oil Company
Address Box 1957, Hobbs, New Mexico

B - Blinebry Gas Well
C - Tubb Gas Well



Cartographic Features

- County Boundaries
- County Seats
- City, Town or Village
- SLO District Offices
- SLO District Boundary
- Hwy Mileposts
- Interstate
- US Hwy
- NM Hwy
- Local Road
- Continental Divide

Federal Minerals Ownership

- All Minerals
- Coal Only
- Oil and Gas Only
- Oil, Gas and Coal Only
- Other Minerals

State Trust Lands

- Surface Estate
- Subsurface Estate
- Surface and Subsurface Estate

State Leases

- Oil and Gas Leases
- Agricultural Leases
- Commercial Leases
- Minerals Leases
- Not Available for Oil and Gas Leasing
- Oil and Gas Leasing Influenced by Restriction

Oil and Gas Related Features

- Oil and Gas Unit Boundary
- Participating Areas in Units
- Geologic Regions
- Volcanic Vents
- NMOCD Order R-111-P
- Potash Enclave Outline

NMOCD Oil and Gas Wells

- CO²
- Gas
- Injection
- Miscellaneous
- Oil
- Salt Water Disposal
- Water
- DA or PA

**New Mexico State Land Office
Oil, Gas and Minerals**

0 0.04 0.09 0.18 0.27 0.36
Miles

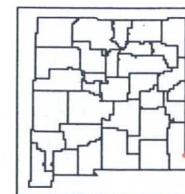
Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

The New Mexico State Land Office assumes no responsibility or liability for, or in connection with, the accuracy, reliability or use of the information provided here, in State Land Office data layers or any other data layer.

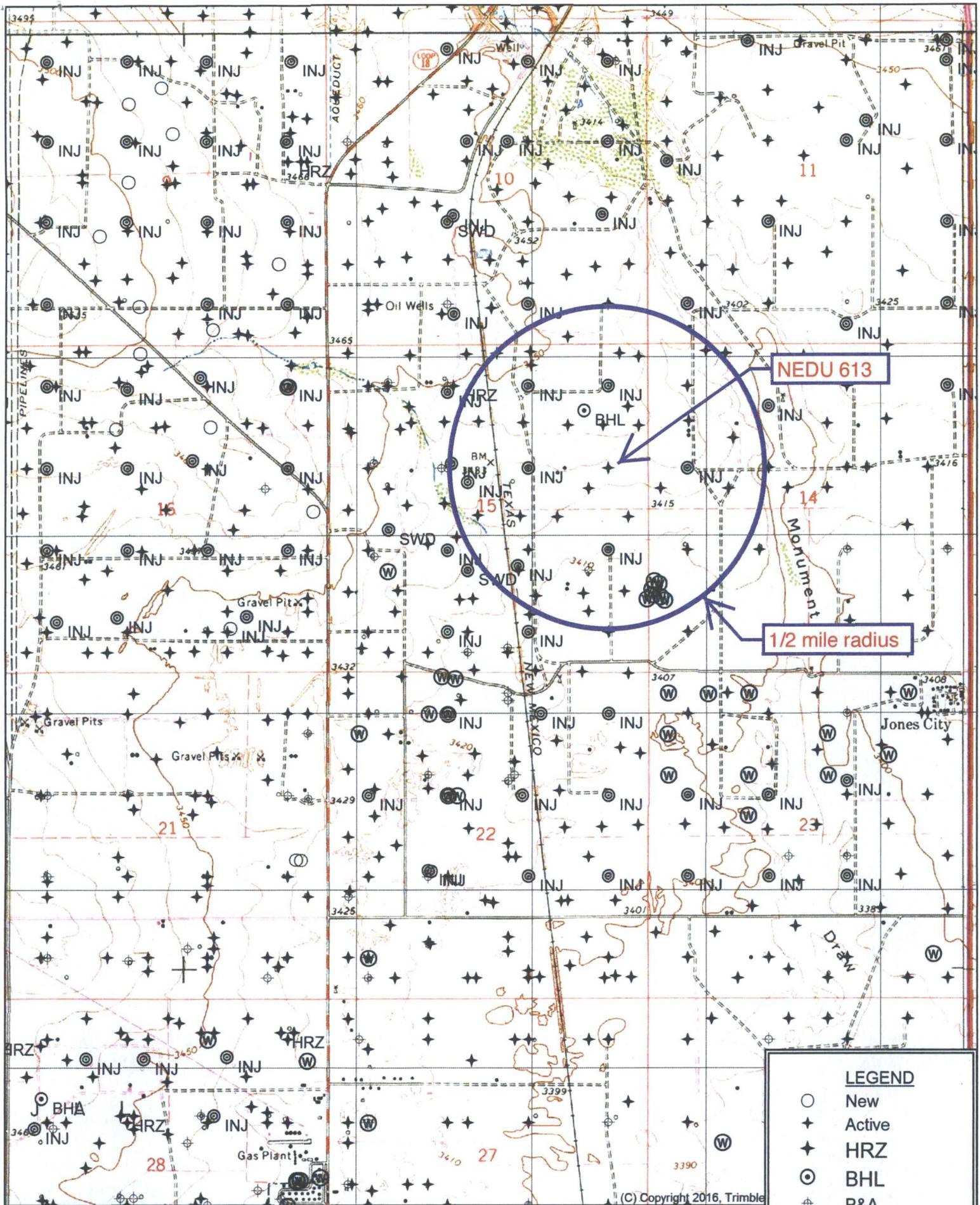
Land Office Geographic Information Center
logic@slo.state.nm.us

Created On: 3/27/2017 3:46:46 PM

EXHIBIT A



www.nmstatelands.org



NEDU 613

1/2 mile radius

LEGEND	
○	New
+	Active
✦	HRZ
⊙	BHL
⊕	P&A
⊗	INJ
⊗	SWD
⊗	Water

Quad: EUNICE
Scale: 1 inch = 2,000 ft.

EXHIBIT B

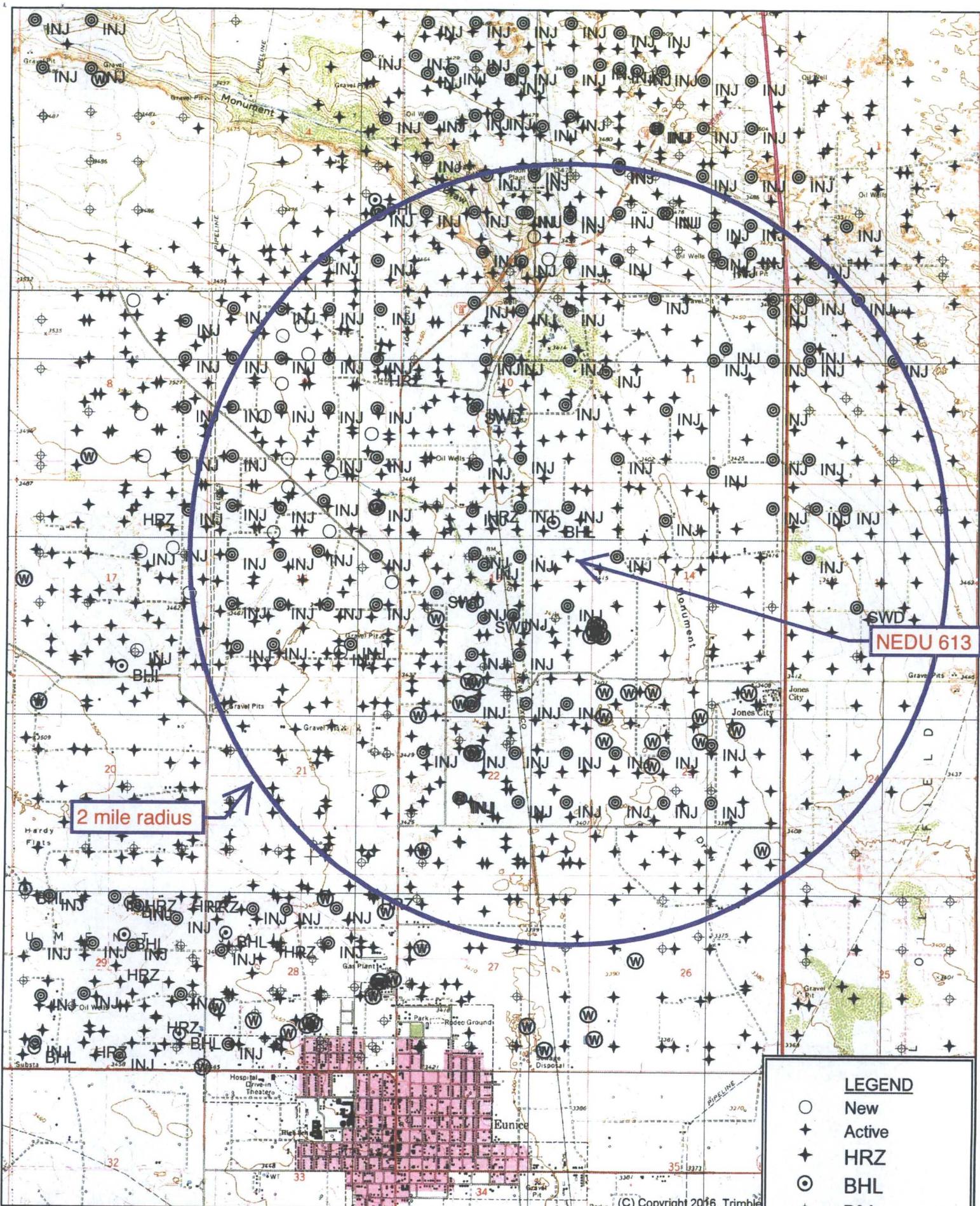
(C) Copyright 2016, Trimble

WELLS IN AREA OF REVIEW

API	WHO	WELL	TYPE	UNIT-SECTION-T21S-R37E	TVD	ZONE	FEET FROM NEDU 613
3002506589	Apache	NEDU 632	O	H-15	7567	Eunice; Bli-Tu-Dr, N	468
3002541585	Apache	NEDU 663	O	A-15	6965	Eunice; Bli-Tu-Dr, N	739
3002539588	Apache	NEDU 634	O	I-15	7002	Eunice; Bli-Tu-Dr, N	830
3002534410	Apache	NEDU 619	O	A-15	6810	Eunice; Bli-Tu-Dr, N	848
3002537029	Apache	NEDU 627	O	E-14	6850	Eunice; Bli-Tu-Dr, N	935
3002534656	Apache	NEDU 618	O	B-15	6820	Eunice; Bli-Tu-Dr, N	964
3002536021	Chevron	State S 011	O	A-15	4010	Penrose Skelly; Grayburg	1044
3002534650	Apache	NEDU 620	O	J-15	6820	Eunice; Bli-Tu-Dr, N	1153
3002506595	Apache	NEDU 709	I	I-15	6622	Eunice; Bli-Tu-Dr, N	1320
3002520567	Apache	NEDU 612	I	A-15	6700	Eunice; Bli-Tu-Dr, N	1320
3002509912	Apache	NEDU 611	I	G-15	6641	Eunice; Bli-Tu-Dr, N	1324
3002506339	Apache	NEDU 615	I	E-14	6643	Eunice; Bli-Tu-Dr, N	1326
3002541618	Apache	NEDU 635	O	D-14	6950	Eunice; Bli-Tu-Dr, N	1563
3002541584	Apache	NEDU 662	O	B-15	6958	Eunice; Bli-Tu-Dr, N	1612
3002541285	Apache	NEDU 651	O	J-15	6857	Eunice; Bli-Tu-Dr, N	1634
3002506599	Marathon	L G Warlick C 008	P&A	I-15	7626	Wantz; Abo	1683
3002534413	Apache	NEDU 519	O	A-15	6780	Eunice; Bli-Tu-Dr, N	1862
3002506592	Apache	NEDU 706	O	J-15	6629	Eunice; Bli-Tu-Dr, N	1871
3002506579	Apache	NEDU 614	O	D-14	7614	Eunice; Bli-Tu-Dr, N	1871
3002506569	J R CONE	Eubanks 002	G	L-14	6622	Drinkard	1872
3002506610	Apache	NEDU 609	I	B-15	7631	Eunice; Bli-Tu-Dr, N	1872

WELLS IN AREA OF REVIEW

3002541601	Apache	NEDU 536	O	A-15	6956	Eunice; Bli-Tu-Dr, N	1899
3002536805	Apache	NEDU 719	O	P-15	6855	Eunice; Bli-Tu-Dr, N	2007
3002536804	Apache	NEDU 626	O	F-14	6850	Eunice; Bli-Tu-Dr, N	2027
3002535273	Apache	NEDU 715	O	P-15	6780	Eunice; Bli-Tu-Dr, N	2061
3002536020	Chevron	State S 010	O	B-15	4010	Penrose Skelly; Grayburg	2086
3002534741	Apache	NEDU 621	O	F-14	6820	Eunice; Bli-Tu-Dr, N	2125
3002506601	Apache	NEDU 707	I	J-15	7670	Eunice; Bli-Tu-Dr, N	2172
3002534602	Apache	NEDU 520	O	O-10	6850	Eunice; Bli-Tu-Dr, N	2215
3002506597	Apache	L G Warlick C 006	O	J-15	7847	Hare; Simpson	2221
3002534649	Apache	NEDU 622	O	C-15	6840	Eunice; Bli-Tu-Dr, N	2229
3002534657	Apache	NEDU 623	O	K-15	6840	Eunice; Bli-Tu-Dr, N	2246
3002506588	Apache	NEDU 610	I	G-15	7798	Eunice; Bli-Tu-Dr, N	2298
3002541587	Apache	NEDU 539	O	B-15	6950	Eunice; Bli-Tu-Dr, N	2310
3002506600	Apache	NEDU 710	O	P-15	7503	Eunice; Bli-Tu-Dr, N	2333
3002541278	Apache	NEDU 727	O	O-15	6873	Eunice; Bli-Tu-Dr, N	2353
3002541168	Apache	NEDU 565	O	D-14	6945	Eunice; Bli-Tu-Dr, N	2525
3002506587	Apache	NEDU 606	I	F-15	8032	Eunice; Bli-Tu-Dr, N	2579
3002534598	Apache	NEDU 522	O	B-15	6845	Eunice; Bli-Tu-Dr, N	2603
3002506585	Apache	Cities S State 002	P&A	F-15	6676	Eunice; Bli-Tu-Dr, N	2619
3002506594	Apache	NEDU 711	O	P-15	6621	Eunice; Bli-Tu-Dr, N	2640
3002520548	Apache	NEDU 508	O	P-10	6710	Eunice; Bli-Tu-Dr, N	2640
3002506580	Apache	NEDU 617	O	F-14	6613	Eunice; Bli-Tu-Dr, N	2653



NEDU 613

2 mile radius

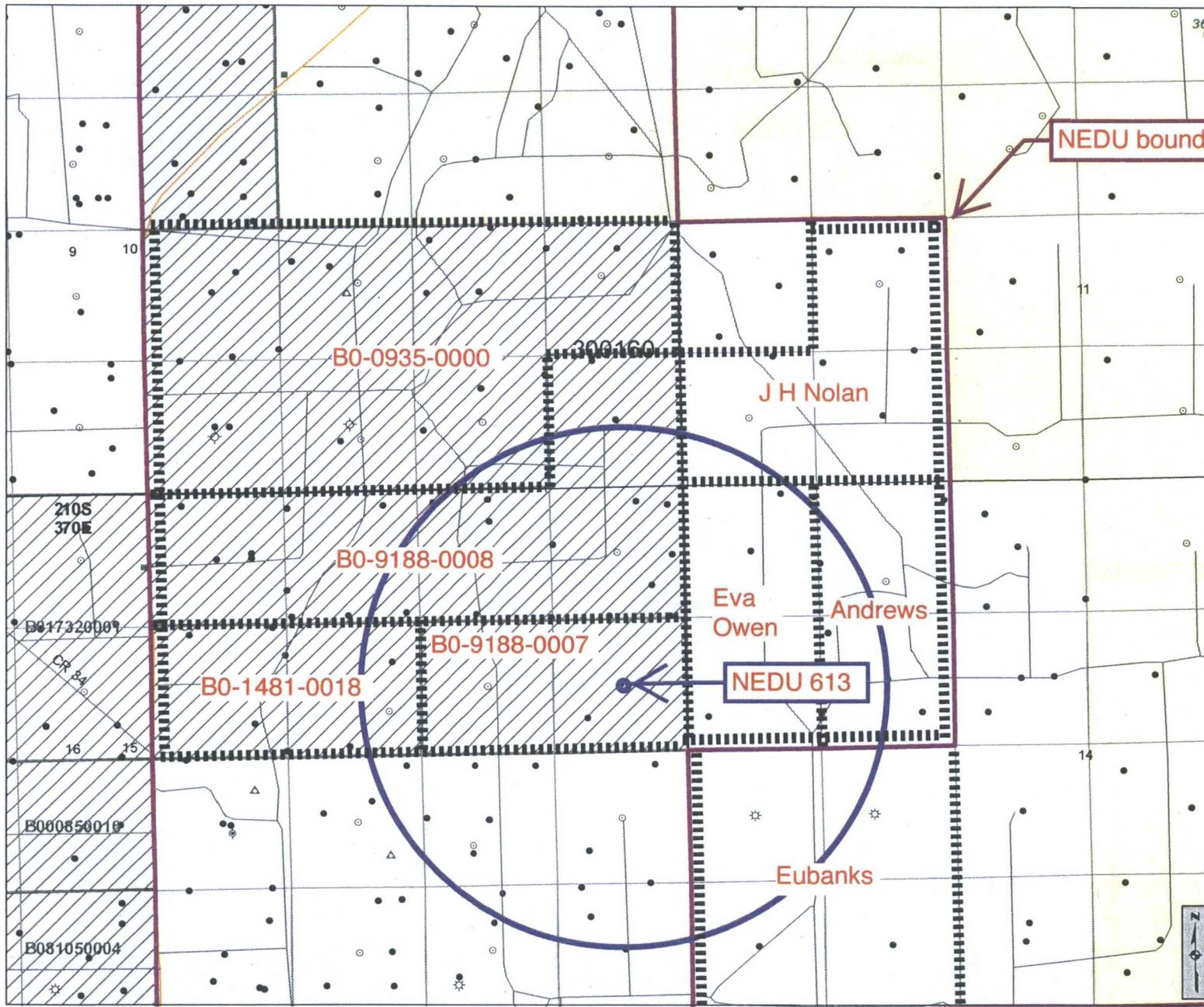
LEGEND	
○	New
✦	Active
✦	HRZ
⊙	BHL
⊕	P&A
⊙	INJ
⊙	SWD
⊙	Water



Quad: EUNICE
Scale: 1 inch = 3,333 ft.

EXHIBIT C

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- Cartographic Features**
- County Boundaries
 - County Seats
 - City, Town or Village
 - SLO District Offices
 - SLO District Boundary
 - Hwy Mileposts
 - Interstate
 - US Hwy
 - NM Hwy
 - Local Road
 - Continental Divide
- Federal Minerals Ownership**
- All Minerals
 - Coal Only
 - Oil and Gas Only
 - Oil, Gas and Coal Only
 - Other Minerals
- State Trust Lands**
- Surface Estate
 - Subsurface Estate
 - Surface and Subsurface Estate
- State Leases**
- Oil and Gas Leases
 - Agricultural Leases
 - Commercial Leases
 - Minerals Leases
 - Not Available for Oil and Gas Leasing
 - Oil and Gas Leasing Influenced by Restriction
- Oil and Gas Related Features**
- Oil and Gas Unit Boundary
 - Participating Areas in Units
 - Geologic Regions
 - Volcanic Vents
 - NMOC Order R-111-P Potash Enclave Outline
- NMOC Oil and Gas Wells**
- CO₂
 - Gas
 - Injection
 - Miscellaneous
 - Oil
 - Salt Water Disposal
 - Water
 - DA or PA

New Mexico State Land Office

Oil, Gas and Minerals

0 0.04 0.09 0.18 0.27 0.36 Miles

Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

The New Mexico State Land Office assumes no responsibility or liability for, or in connection with, the accuracy, reliability or use of the information provided here, in State Land Office data layers or any other data layer.

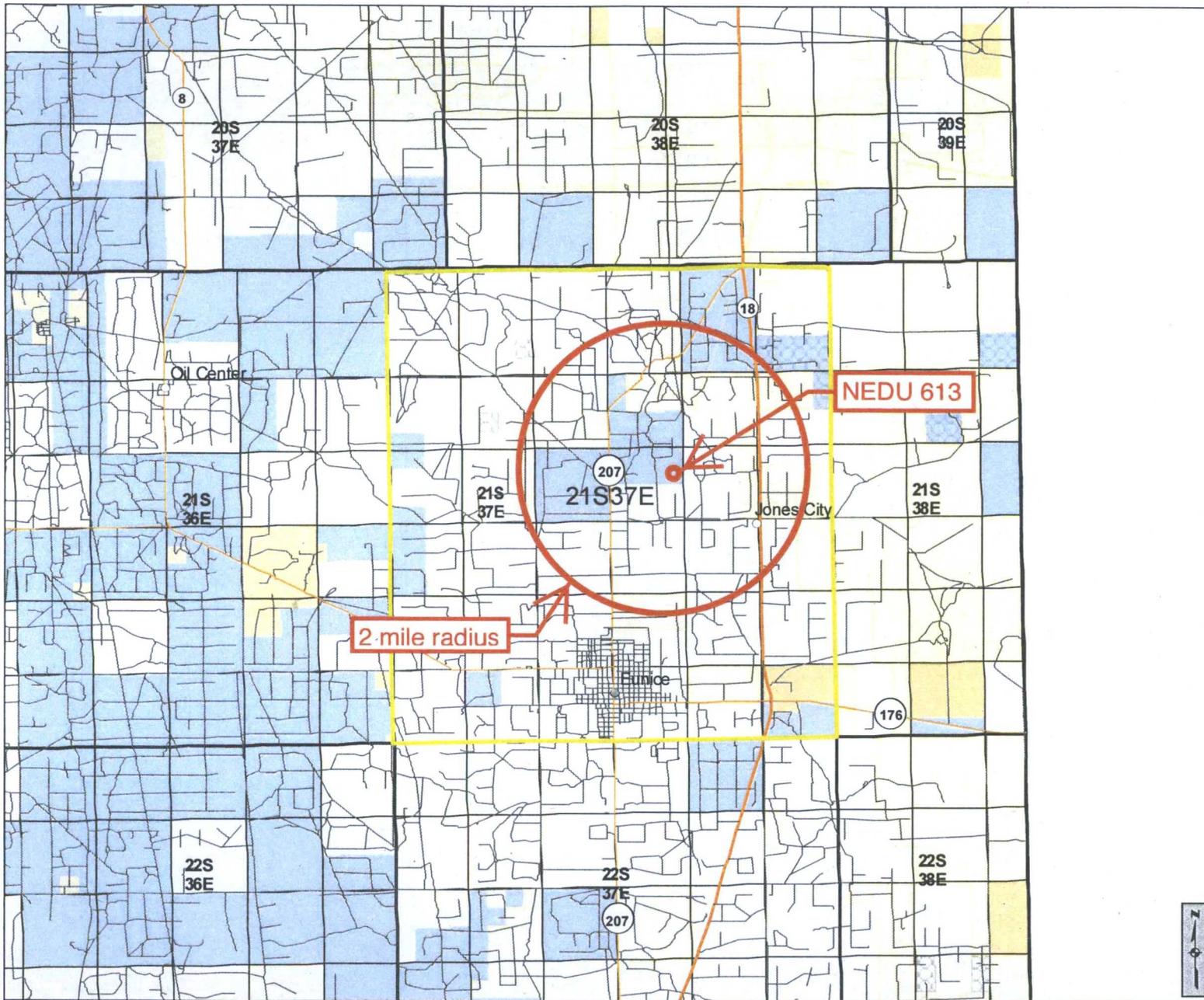
Land Office Geographic Information Center
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EXHIBIT D



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Created On: 3/27/2017 3:46:46 PM



Point Locations

- County Seat
- ▲ SLO District Offices
- City, Town or Village
- ★ Volcanic Vents
- Highway Mileposts

NMOCD Oil and Gas Wells

- Oil
- Injection
- ★ Carbon Dioxide
- Miscellaneous
- ☆ Gas
- ◆ Water
- ◇ DA or PA
- △ Salt Water Disposal

Federal Minerals

- All Minerals
- Coal Only
- Oil and Gas Only
- Oil, Gas and Coal Only
- Other Minerals

State Trust Lands

- Surface Estate
- Subsurface Estate
- Both Estates

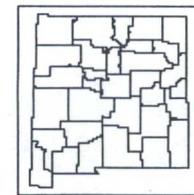
NMSLO Leasing

- Option Agreement
- Commercial Lease
- Minerals Lease
- Oil and Gas Lease
- Agricultural Lease
- Not Available for Oil and Gas Leasing
- Restriction Influences Oil and Gas Leasing

Other Boundaries

- Continental Divide
- State Boundary
- County Boundaries
- Oil and Gas Unit Boundary
- Participating Areas in Units
- Geologic Regions
- Potash Enclave (NMOCD R-111-P)

For detailed legend of the Geologic Map of New Mexico, please see <http://geoinfo.nmt.edu>



www.nmstatelands.org

New Mexico State Land Office

Oil, Gas, and Minerals

0 0.3750.75 1.5 2.25 3 Miles

Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

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logic@slo.state.nm.us

Created On: 1/27/2012 1:30:53 PM



Sorted by distance from NEDU 613

WELL	SPUD	TVD	POOL	WELL TYPE	HOLE O.D.	CASING O.D.	SET @	CEMENT	TOC	HOW TOC DETERMINED
NEDU 632	9/8/51	7567	Wantz; Abo	O	17.5	13.375	241	250 sx	GL	Circ
30-025-06589					11	8.625	2933	1800 sx	GL	Circ 425 sx
H-15-21S-37E					7.875	5.5	7567	1040 sx	2690	TOL
NEDU 663	2/9/14	6965	Eunice; Bli-Tu-Dr, N	O	11	8.625	1267	440 sx	GL	Circ 102 sx
30-025-41585					7.875	5.5	6965	1250 sx	GL	Circ 100 sx
A-15-21S-37E										
NEDU 634	12/22/09	7002	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1312	650 sx	GL	Circ
30-025-39588					7.875	5.5	7002	1150 sx	200	no report
I-15-21S-37E										
NEDU 619	6/18/98	6810	Eunice; Bli-Tu-Dr, N	O	11	8.625	1330	410 sx	GL	Circ 105 sx
30-025-34410					7.875	5.5	3810	1275 sx	GL	Circ 33 sx
A-15-21S-37E										

Sorted by distance from NEDU 613

NEDU 627	1/23/05	6850	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1170	575 sx	GL	Circ 125 sx
30-025-37029					7.875	5.5	6850	1050 sx	200	no report
E-14-21S-37E										
NEDU 618	9/9/99	6820	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1254	460 sx	GL	Circ 110 sx
30-025-34656					7.875	5.5	6820	1525 sx	GL	Circ 100 sx
B-15-21S-37E										
NEDU 620	8/27/99	6820	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1240	460 sx	GL	Circ 104 sx
30-025-34650					7.875	5.5	6820	1525 sx	GL	Circ 145 sx
J-15-21S-37E										
NEDU 709	11/16/48	6622	Eunice; Bli-Tu-Dr, N	I	17	13.375	306	300 sx	GL	Circ
30-025-06595					11	8.625	2802	1500 sx	GL	Circ
I-15-21S-37E					8	5.5	6596	750 sx	1250	no report

Sorted by distance from NEDU 613

NEDU 612	11/22/63	6700	Eunice; Bli-Tu-Dr, N	I	17.5	13.375	342	325 sx	GL	Circ
30-025-20567					12.25	8.625	3007	935 sx	100	Temp survey
A-15-21S-37E					7.875	5.5	6693	1180 sx	GL	Circ
NEDU 611	8/30/48	6641	Eunice; Bli-Tu-Dr, N	I	17	13.375	228	250 sx	GL	Circ 20 sx
30-025-09912					11	8.625	2897	1500 sx	GL	Circ 300 sx
G-15-21S-37E					7.875	5.5	6546	1200 sx	GL	Circ
NEDU 615	8/17/49	6643	Eunice; Bli-Tu-Dr, N	I	17.25	13.375	164	125 sx	GL	Circ
30-025-06339					12.25	9.625	2736	600 sx	1414	Temp survey
E-14-21S-37E					8.75	7	6600	600 sx	3875	Temp survey
NEDU 635	2/28/14	6950	Eunice; Bli-Tu-Dr, N	O	11	8.625	1264	430 sx	GL	Circ 63 sx
30-025-41618					7.875	5.5	6953	1250 sx	GL	Circ 217 sx
D-14-21S-37E										

Sorted by distance from NEDU 613

NEDU 662	1/26/14	6958	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1263	440 sx	GL	Circ 63 sx
30-025-41584					7.875	5.5	6958	1350 sx	820	CBL
B-15-21S-37E										
NEDU 651	11/21/13	6857	Eunice; Bli-Tu-Dr, N	O	11	8.625	1307	460 sx	GL	Circ 116 sx
30-025-41285					7.875	5.5	6859	1265 sx	216	CBL
J-15-21S-37E										
L G Warlick C 008	5/15/90	7626	Wantz; Abo	P&A	17.5	13.375	308	300 sx	GL	Circ
30-025-06599					11	8.625	2803	1300 sx	800	Temp survey
I-15-21S-37E					7.875	5.5	7570	800 sx	2785	Temp survey
NEDU 519	7/2/98	6780	Eunice; Bli-Tu-Dr, N	O	11	8.625	1325	410 sx	GL	Circ 96 sx
30-025-34413					7.875	5.5	6780	1410 sx	GL	Circ 125 sx
A-15-21S-37E										

Sorted by distance from NEDU 613

NEDU 706	6/7/48	6629	Eunice; Bli-Tu-Dr, N	O	17	13.375	299	250 sx	GL	Circ
30-025-06592					11	8.625	2800	1500 sx	GL	Circ
J-15-21S-37E					8	5.5	6597	750 sx	2400	no report
NEDU 614	4/8/50	7614	Eunice; Bli-Tu-Dr, N	O	17.25	13.375	170	150 sx	GL	Circ
30-025-06579					11	8.625	2930	800 sx	1350	Temp survey
D-14-21S-37E					7.875	5.5	7608	875 sx	3152	Temp survey
Eubanks 002	4/18/49	6622	Drinkard	G	16.75	13.375	242	200 sx	GL	Circ
30-025-06569					9.75	8.625	2791	1200 sx	No report	No report.
L-14-21S-37E					7.75	5.5	6567	500 sx	3550	Estimated
NEDU 609	10/3/50	7631	Eunice; Bli-Tu-Dr, N	I	17.5	13.375	294	300 sx	GL	Calc
30-025-06610					11	8.625	3004	2000 sx	GL	Calc
B-15-21S-37E					6.75	5.5	7631	500 sx	3610	Temp survey

Sorted by distance from NEDU 613

NEDU 536	2/20/14	6956		O	12.25	8.625	1270	430 sx	GL	Circ 108 sx
30-025-41601					7.875	5.5	6963	1250 sx	60	CBL
A-15-21S-37E										
NEDU 719	10/3/04	6855	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1238	600 sx	GL	Circ 105 sx
30-025-36805					7.875	5.5	6855	1300 sx	95	No report
P-15-21S-37E										
NEDU 626	10/29/04	6850	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1275	600 sx	GL	Circ 141 sx
30-025-36804					7.875	5.5	6850	1150 sx	137	No report
F-14-21S-37E										
NEDU 715	7/4/01	6780	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	12324	460 sx	GL	Circ 116 sx
30-025-35273					7.875	5.5	6780	1400 sx	GL	Circ 87 sx
P-15-21S-37E										

Sorted by distance from NEDU 613

NEDU 621	6/16/00	6820	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1261	460 sx	GL	Circ 81 sx
30-025-34741					7.875	5.5	6820	1425 sx	GL	Circ 116 sx
F-14-21S-37E										
NEDU 707	5/5/52	7670	Eunice; Bli-Tu-Dr, N	I	17.5	13.375	325	250 sx	GL	Circ
30-025-06601					11	8.625	2852	1200 sx	GL	Circ
J-15-21S-37E					7.875	5.5	7665	1155 sx	GL	Circ
NEDU 520	5/8/99	6850	Eunice; Bli-Tu-Dr, N	O	11	8.625	1210	380 sx	GL	Circ 120 sx to pit
30-025-34602					7.875	5.5	6850	1455 sx	GL	Circ 96 sx to pit
O-10-21S-37E										
L G Warlick C 006	10/29/50	7847	Hare; Simpson	O	17	13.375	303	300 sx	GL	Circ
30-025-06597					11	8.625	2797	1200 sx	275	no report
J-15-21S-37E					8	5.5	7700	575 sx	3230	Temp survey

Sorted by distance from NEDU 613

NEDU 622	8/16/99	6840	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1265	460 sx	GL	Circ 107 sx
30-025-34649					7.875	5.5	6840	1675 sx	650	CBL
C-15-21S-37E										
NEDU 623	8/29/99	6840	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1283	460 sx	GL	Circ 48 sx
30-025-34657					7.875	5.5	6840	1650 sx	GL	Circ 102 sx
K-15-21S-37E										
NEDU 610	1/10/51	7798	Eunice; Bli-Tu-Dr, N	I	17.25	13.375	222	250 sx	GL	Circ 35 sx
30-025-06588					11	8.625	2925	2000 sx	GL	Circ
G-15-21S-37E					7.875	5.5	7635	500 sx	5050	Calc
NEDU 539	2/14/14	6950	Eunice; Bli-Tu-Dr, N	O	11	8.625	1272	430 sx	GL	Circ 48 sx
30-025-41587					7.875	5.5	6950	1250 sx	70	CBL
B-15-21S-37E										

Sorted by distance from NEDU 613

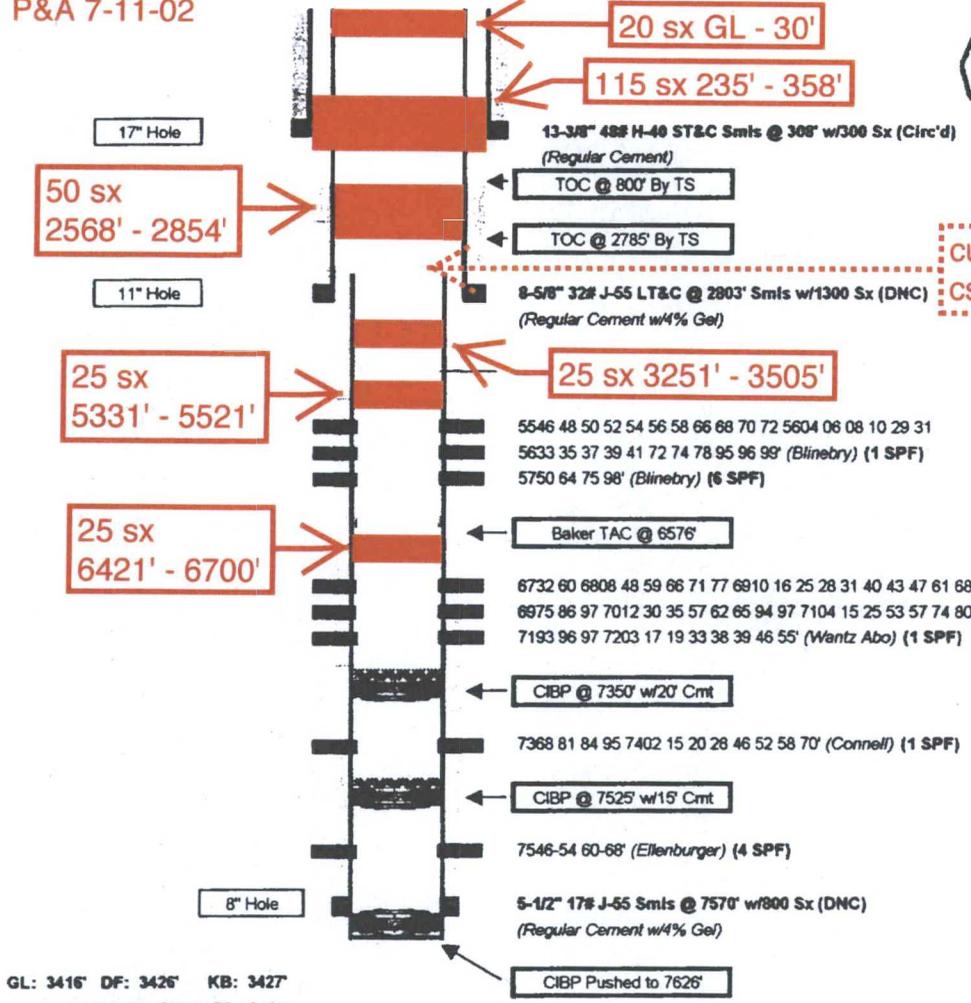
NEDU 710	7/10/51	7503	Eunice; Bli-Tu-Dr, N	O	17	13.375	371	350 sx	GL	Circ
30-025-06600					11	8.625	2900	1400 sx	280	No report
P-15-21S-37E					8	5.5	7465	850 sx	GL	Circ
NEDU 727	10/23/13	6873	Eunice; Bli-Tu-Dr, N	O	11	8.625	1293	465 sx	GL	Circ 112 sx
30-025-41278					7.875	5.5	6875	1320 sx	GL	Circ 194 sx
O-15-21S-37E										
NEDU 565	9/8/13	6945	Eunice; Bli-Tu-Dr, N	O	11	8.625	1285	475 sx	GL	Circ 64 sx
30-025-41168					7.875	5.5	6955	1350 sx	136	CBL
D-14-21S-37E										
NEDU 606	12/16/50	8032	Eunice; Bli-Tu-Dr, N	I	17.5	13.375	330	350 sx	GL	Circ
30-025-06587					11	8.625	2803	500 sx	1115	Calculated
F-15-21S-37E					7.875	5.5	8032	1200 sx	GL	Circ

Sorted by distance from NEDU 613

NEDU 522	6/21/99	6845	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1223	460 sx	GL	Circ 148 sx
30-025-34598					7.875	5.5	6845	1325 sx	GL	Circ 70 sx
B-15-21S-37E										
Cities S State 002	6/1/48	6676	Eunice; Bli-Tu-Dr, N	P&A	17.25	13.375	297	300 sx	GL	Circ
30-025-06585					11.25	8.625	2791	500 sx	675	Calc
F-15-21S-37E					6.75	5.5	6585	125 sx	5120	no report
NEDU 711	7/3/81	6621	Eunice; Bli-Tu-Dr, N	O	17	13.375	302	250 sx	GL	Circ
30-025-06594					11	8.625	2802	1500 sx	100	No report
P-15-21S-37E					8	5.5	6595	750 sx	1000	No report
NEDU 508	2/7/64	6710	Eunice; Bli-Tu-Dr, N	O	17.25	13.375	336	325 sx	GL	Circ
30-025-20548					12.25	8.625	2999	960 sx	GL	Circ 10 sx
P-10-21S-37E					7.875	5.5	6709	1065 sx	GL	To GL, but no circ

Well Name & No.		L.G. WARLICK 'C' NO 8 .efd			DRINKARD		Date: J9/18/01
County	LEA	API	3002506599	State	NEW MEXICO	By	TIM L. CHASE
Spudded	4/20/1951	Comp Drlg	6/6/1951	Location	1650' FSL & 990' FEL, Section 15, Township 21S, Range 37E, UL 'I'		

P&A 7-11-02



cut & pulled 5.5" csg from 2712'

GL: 3416' DF: 3426' KB: 3427'
 PBTD: 7320' TD: 7626'

Well History

Jun '51 Perf'd Ellenburger (4 SPF) @ 7546-54 60-68' (Ellenburger open hole @ 7570-7626'. Turned to prod flwq 629 BOPD.

Aug '60 Set CIBP @ 7500' w/8' cmt cap Perf'd Blinebry (6 SPF) @ 5750 64 75 98'. Acddz same w/1000 gal Spearhead acid. Frac'd same w/30,000 gal lease oil w/44,000# sand Ret to prod flwq 198 BOPD.

Jul '67 Well shut-in due to low productivity

Sep '74 Dug out cellar. Installed 1" piping from 13-3/8" & 8-5/8" bradenhead valves. Checked for leaks (none). Ret to prod.

Apr '82 Perf'd Blinebry (1 SPF) @ 5546 48 50 52 54 56 58 66 68 70 72 5604 06 08 10 29 31 33 35 37 39 41 72 74 78 95 96 99'. Acid-Frac'd all Blinebry perfs 5546-5798' w/15,000 gal KCL water w/12,000# 100 mesh sand & 18,000 gal 28% Hcl. Ret to prod pumping about 20 BOPD from Blinebry.

Aug '89 Sqzd Blinebry perfs 5546-5798' w/350 sx DOC. Pushed CIBP @ 7500 to 7626 Set CIBP @ 7525' w/15' cmt cap Perf'd Connell (aka Simpson) (2 SPF) @ 7368 81 84 95 7402 15 20 28 46 52 58 70'. Acddz same w/3000 gal 15% NeFe. Swabbed dry. Set CIBP @ 7350' w/20' cmt cap to 7320' Shut-in well.

May '90 Re-sqzd Blinebry 5546-5798' w/59 sx Matrix cmt. Perf'd Wantz Abo (1 SPF) @ 6848 59 66 71 77 6910 16 25 28 31 40 47 68 86 97 7035 62 94 7104 25 53 74 80 93 7219'. Acddz same w/450 gal 15% NeFe. Swabbed. Perf'd additional Wantz Abo (1 SPF) @ 6943 61 75 7012 30 57 65 97 7115 57 97 7203 17 33 38 46 55'. Acddz same w/2100 gal 20% NeFe. Acid-Frac'd same w/ 4050 gal 20% Hcl w/31,500 gal SXE Swabbed Ret to prod ppg 304 BOPD + 125 BWPD + 384 MCFPD from Wantz Abo perfs 6848-7255'

Dec '92 Perf'd Wantz Abo (1 SPF) @ 6732 60 6808 7196 7239 46'. Acddz same w/3000 gal 15% NeFe. Frac'd same w/58,800 gal X-L 2% KCL water w/85,000# 20-40 Ottawa sand (screened out) C/O to 7320' w/coiled tbg Ret to prod ppg 0 BOPD + 17 BWPD from Wantz Abo perfs 6732-7255'

Feb '93 Shut well in Tubulars were not pulled

EXHIBIT F



WELL BORE INFO.

LEASE NAME	Cities "S" State
WELL #	2 (NEDU 607S)
API #	30-025-06585
COUNTY	Lea

F-15-21S-37E
 spud 6-1-48
 P&A 9-9-11

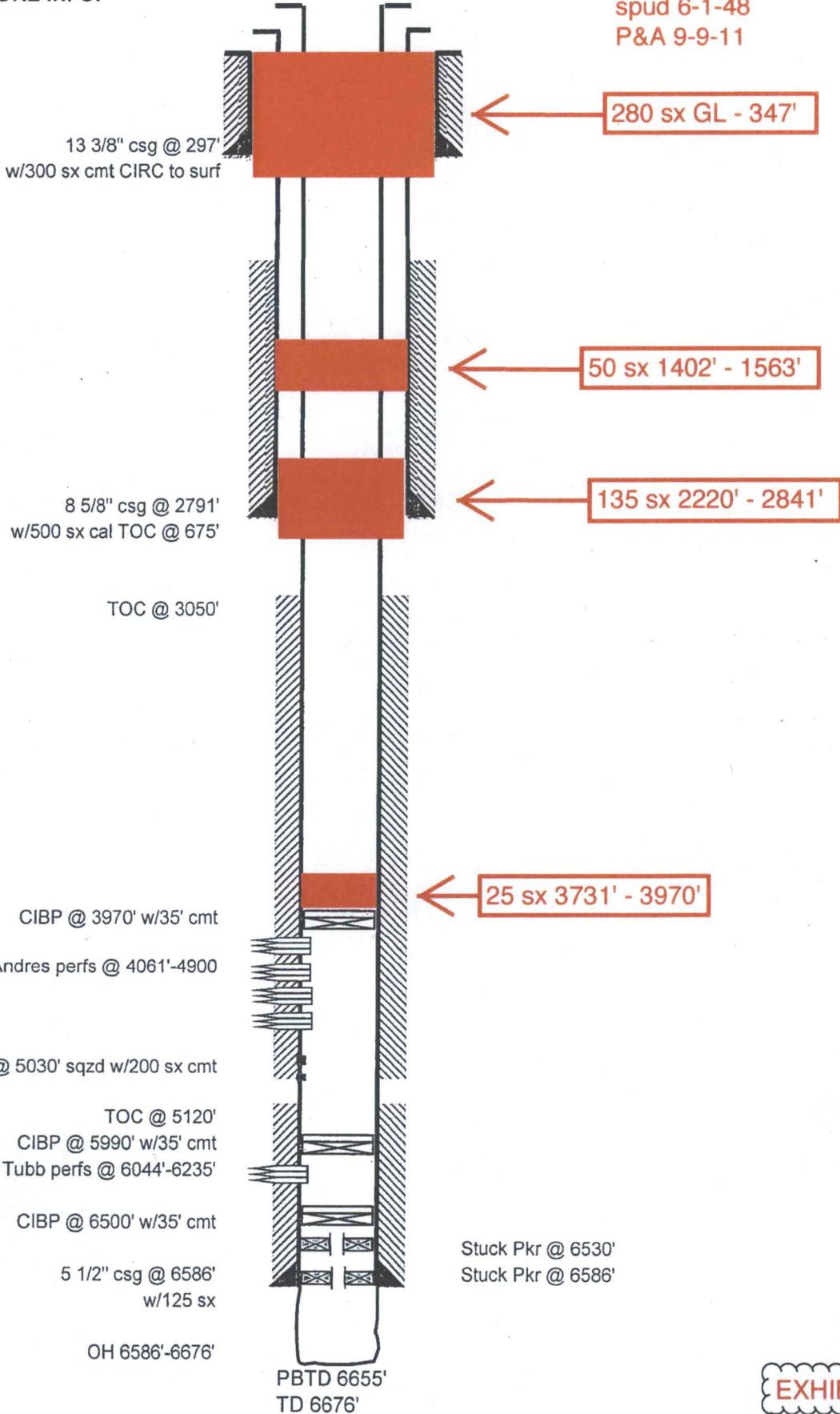


EXHIBIT F



from WFX-784

South Permian Basin Region
 10520 West I-20 East
 Odessa, TX 79765
 (815) 496-8191
 Lab Team Leader - Sheila Hernandez
 (815) 495-7240

Water Analysis Report by Baker Petrolite

Company:	APACHE CORPORATION	Sales RDT:	33102
Region:	PERMIAN BASIN	Account Manager:	MIKE EDWARDS (505) 910-9517
Area:	EUNICE, NM	Sample #:	223099
Lease/Platform:	NORTHEAST DRINKARD UNIT	Analysis ID #:	28971
Entity (or well #):	WATER INJECTION STATION	Analysis Cost	\$40.00
Formation:	UNKNOWN		
Sample Point:	INJECTION PUMP DISCHARGE		

Summary		Analysis of Sample 223099 @ 75 °F					
Sampling Date:	10/3/02	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	10/4/02	Chloride:	10086.0	284.49	Sodium:	5799.5	252.26
Analyst:	SHEILA HERNANDEZ	Bicarbonate:	671.0	11.	Magnesium:	439.0	36.11
TDS (mg/l or g/m3):	20702.9	Carbonate:	0.0	0.	Calcium:	1099.0	54.84
Density (g/cm3, tonne/m3):	1.015	Sulfate:	2465.0	51.32	Strontium:	28.0	0.64
Anion/Cation Ratio:	1.000000	Phosphate:			Barium:	0.1	0.
		Borate:			Iron:	0.3	0.01
		Silicate:			Potassium:	115.0	2.94
Carbon Dioxide:	80 PPM	Hydrogen Sulfide:		90 PPM	Aluminum:		
Oxygen:		pH at time of sampling:		7.5	Chromium:		
Comments:		pH at time of analysis:			Copper:		
		pH used in Calculation:		7.5	Lead:		
					Manganese:		
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
		Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	
°F	psi											psi
80	0	1.18	75.54	-0.08	0.00	-0.14	0.00	0.07	2.75	0.75	0.00	0.21
100	0	1.25	85.15	-0.09	0.00	-0.09	0.00	0.07	3.09	0.60	0.00	0.3
120	0	1.33	95.11	-0.10	0.00	-0.02	0.00	0.09	3.78	0.47	0.00	0.42
140	0	1.41	105.41	-0.10	0.00	0.08	128.07	0.11	4.46	0.36	0.00	0.56

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.
 Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.
 Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

EXHIBIT G

UNICHEM

A Division of B.I. Services Company

Lab Test No. 23748

Apache

Sample Date: 3/10/99

Water Analysis

Listed below please find water analysis report from: NEDU

#919-S

Specific Gravity: 1.009
 Total Dissolved Solids: 13273
 pH: 6.49
 Conductivity (umhos):
 Ionic Strength: 0.265

WFX-774 application indicates this is San Andres source water

Cations:		mg/l	
Calcium	(Ca ⁺⁺):	608	
Magnesium	(Mg ⁺⁺):	244	
Sodium	(Na ⁺):	3909	
Iron	(Fe ⁺⁺):	0.00	
Dissolved Iron	(Fe ⁺⁺):		
Barium	(Ba ⁺⁺):	0.38	
Strontium	(Sr):	19	
Manganese	(Mn ⁺⁺):	0.01	
Resistivity:			
Anions:			
Bicarbonate	(HCO ₃ ⁻):	562	
Carbonate	(CO ₃ ⁻):		
Hydroxide	(OH ⁻):	0	
Sulfate	(SO ₄ ⁻):	1750	
Chloride	(Cl ⁻):	6200	
Gases:		ppm	
Carbon Dioxide	(CO ₂):	80.00	Oxygen (O ₂):
Hydrogen Sulfide	(H ₂ S):	402.00	

Scale Index (positive value indicates scale tendency) a blank indicates some tests were not run

Temperature	CaCO ₃ SI	CaSO ₄ SI
86F 30.0C	-0.14	-17.28
104F 40.0C	0.09	-17.28
122F 50.0C	0.35	-17.28
140F 60.0C	0.57	-16.80
168F 70.0C	0.87	-15.02
176F 80.0C	1.20	-15.51

Comments:

cc: Jerry White
Jay Brown

P.O. Box 61427 • Midland, TX 79711 • 4312 S. County Rtl. 1208, Midland, TX 79765
Office: (915) 563-0241 • Fax: (915) 563-0243

010/200 a 0420 #

UNICHEM LAB

MAN. 25 1999 15:26 915 563 0243

EXHIBIT G

<u>CP 00235 POD5</u>	CP	LE	1	4	1	23	21S	37E	675090	3593742*	1663	90	70	20
<u>CP 00235 POD8</u>	CP	LE	3	1	2	23	21S	37E	675485	3593952*	1708	94	58	36
<u>CP 00236 POD1</u>	CP	LE	3	1	2	23	21S	37E	675485	3593952*	1708	83		
<u>CP 00732 POD1</u>	CP	LE		4	1	22	21S	37E	673584	3593613*	1798	6633		
<u>CP 00235 POD9</u>	CP	LE	3	4	1	23	21S	37E	675090	3593542*	1845	94	58	36
<u>CP 00235 POD10</u>	CP	LE	1	3	2	23	21S	37E	675492	3593749*	1870	92	60	32
<u>CP 00235 POD11</u>	CP	LE	1	3	2	23	21S	37E	675492	3593749*	1870	97	60	37
<u>CP 00237 POD1</u>	CP	LE	1	3	2	23	21S	37E	675492	3593749*	1870	84		
<u>CP 00562</u>	CP	LE	1	2	2	23	21S	37E	675887	3594159*	1870	136	65	71
<u>CP 00700</u>	CP	LE		2	23	21S	37E	675794	3593851*	1995	75	65	10	
<u>CP 00238 POD1</u>	CP	LE	3	3	2	23	21S	37E	675492	3593549*	2032	81		
<u>CP 00252 POD1</u>	CP	LE	4	2	4	22	21S	37E	674493	3593125*	2115	106	78	28
<u>CP 00286 POD1</u>	CP	LE	2	1	2	10	21S	37E	674019	3597338*	2129	70		
<u>CP 00134 POD1</u>	CP	LE	1	1	1	24	21S	37E	676289	3594166*	2207	85		
<u>CP 00251 POD1</u>	CP	LE	2	3	4	22	21S	37E	674099	3592915*	2335	103		
<u>CP 00881</u>	CP	LE		4	4	22	21S	37E	674402	3592824*	2412	95	53	42
<u>CP 00137 POD1</u>	CP	LE	2	2	1	13	21S	37E	676862	3595783*	2563	65		
<u>CP 00733 POD1</u>	CP	LE		3	3	22	21S	37E	673196	3592801*	2698	7864		
<u>CP 00017 POD1</u>	CP	LE	2	1	2	27	21S	37E	674106	3592513*	2734	101		
<u>CP 01222 POD3</u>	CP	LE	2	4	4	23	21S	37E	676036	3592871*	2899	60	48	12
<u>CP 00285 POD1</u>	CP	LE	3	1	2	27	21S	37E	673906	3592313*	2957	80		
<u>CP 00249 POD1</u>	CP	LE	2	3	2	27	21S	37E	674113	3592111*	3134	102		
<u>CP 00250 POD1</u>	CP	LE	2	3	2	27	21S	37E	674113	3592111*	3134	101		
<u>CP 00293 POD1</u>	CP	LE	2	4	1	27	21S	37E	673711	3592104*	3198	80		

Average Depth to Water: 60 feet
 Minimum Depth: 35 feet
 Maximum Depth: 80 feet

Record Count: 52

UTMNAD83 Radius Search (in meters):

Easting (X): 674358

Northing (Y): 3595236

Radius: 3220

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

8/12/17 4:15 PM

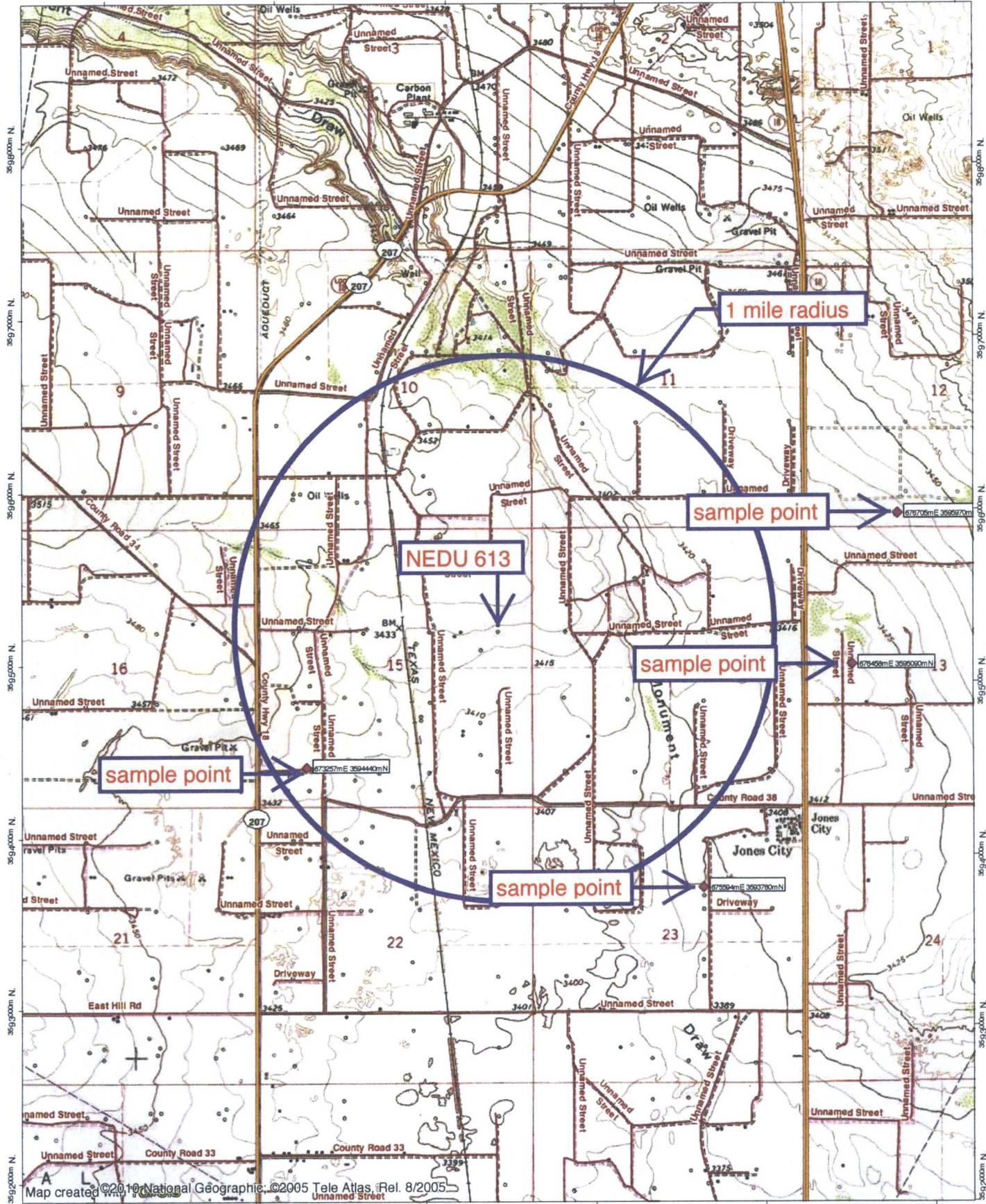
WATER COLUMN/ AVERAGE DEPTH TO WATER





EXHIBIT H

672000m E. 673000m E. 674000m E. 675000m E. 676000m E. WGS84 Zone 13S 677000m E.



Map created by National Geographic, ©2005 Tele Atlas, Rel. 8/2005

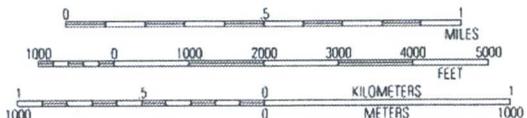


EXHIBIT I

TN AMN
6.5°
08/13/17

Analytical Report

Lab Order 1703D96

Date Reported: 4/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Permits West

Client Sample ID: EDBU Sec 15 Decky

Project: Apache EDBU

Collection Date: 3/23/2017 5:20:00 PM

Lab ID: 1703D96-001

Matrix: AQUEOUS

Received Date: 3/28/2017 2:48:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	760	25	*	mg/L	50	4/4/2017 8:53:46 PM
EPA METHOD 1664B						
N-Hexane Extractable Material	ND	10.1		mg/L	1	3/29/2017
SM2540C MOD: TOTAL DISSOLVED SOLIDS						
Total Dissolved Solids	1880	20.0	*	mg/L	1	3/31/2017 4:08:00 PM

EXHIBIT I

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Permits West

Client Sample ID: EDBU Sec 13 WM

Project: Apache EDBU

Collection Date: 3/24/2017 9:41:00 AM

Lab ID: 1703D96-002

Matrix: AQUEOUS

Received Date: 3/28/2017 2:48:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	330	10	*	mg/L	20	3/30/2017 8:55:56 PM
EPA METHOD 1664B						Analyst: tnc
N-Hexane Extractable Material	ND	9.69		mg/L	1	3/29/2017
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: KS
Total Dissolved Solids	1020	20.0	*	mg/L	1	3/31/2017 4:08:00 PM

EXHIBIT I

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Permits West

Client Sample ID: EDBU Sec 23 Tank

Project: Apache EDBU

Collection Date: 3/24/2017 11:33:00 AM

Lab ID: 1703D96-003

Matrix: AQUEOUS

Received Date: 3/28/2017 2:48:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	490	25	*	mg/L	50	4/4/2017 9:06:11 PM
EPA METHOD 1664B						Analyst: tnc
N-Hexane Extractable Material	ND	10.9		mg/L	1	3/29/2017
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: KS
Total Dissolved Solids	1300	20.0	*	mg/L	1	3/31/2017 4:08:00 PM

EXHIBIT I

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1703D96

Date Reported: 4/6/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Permits West

Client Sample ID: EDBU Sec 12 Tank

Project: Apache EDBU

Collection Date: 3/24/2017 1:16:00 PM

Lab ID: 1703D96-004

Matrix: AQUEOUS

Received Date: 3/28/2017 2:48:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: LGT
Chloride	800	25	*	mg/L	50	4/4/2017 9:18:35 PM
EPA METHOD 1664B						Analyst: tnc
N-Hexane Extractable Material	ND	9.89		mg/L	1	3/29/2017
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: KS
Total Dissolved Solids	2070	20.0	*	mg/L	1	3/31/2017 4:08:00 PM

EXHIBIT I

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1703D96

06-Apr-17

Client: Permits West

Project: Apache EDBU

Sample ID	MB-30955	SampType:	MBLK	TestCode:	EPA Method 1664B					
Client ID:	PBW	Batch ID:	30955	RunNo:	41740					
Prep Date:	3/29/2017	Analysis Date:	3/29/2017	SeqNo:	1310477	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	ND	10.0								

Sample ID	LCS-30955	SampType:	LCS	TestCode:	EPA Method 1664B					
Client ID:	LCSW	Batch ID:	30955	RunNo:	41740					
Prep Date:	3/29/2017	Analysis Date:	3/29/2017	SeqNo:	1310478	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	38.6	10.0	40.00	0	96.5	78	114			

EXHIBIT I

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1703D96

06-Apr-17

Client: Permits West
Project: Apache EDBU

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R41765	RunNo:	41765					
Prep Date:		Analysis Date:	3/30/2017	SeqNo:	1311558	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R41765	RunNo:	41765					
Prep Date:		Analysis Date:	3/30/2017	SeqNo:	1311559	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	96.5	90	110			

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	A41898	RunNo:	41898					
Prep Date:		Analysis Date:	4/4/2017	SeqNo:	1315920	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	A41898	RunNo:	41898					
Prep Date:		Analysis Date:	4/4/2017	SeqNo:	1315921	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	92.1	90	110			

EXHIBIT I

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1703D96

06-Apr-17

Client: Permits West
Project: Apache EDBU

Sample ID	MB-30994	SampType:	MBLK	TestCode:	SM2540C MOD: Total Dissolved Solids					
Client ID:	PBW	Batch ID:	30994	RunNo:	41814					
Prep Date:	3/30/2017	Analysis Date:	3/31/2017	SeqNo:	1312561	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	LCS-30994	SampType:	LCS	TestCode:	SM2540C MOD: Total Dissolved Solids					
Client ID:	LCSW	Batch ID:	30994	RunNo:	41814					
Prep Date:	3/30/2017	Analysis Date:	3/31/2017	SeqNo:	1312562	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	102	80	120			

EXHIBIT I

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

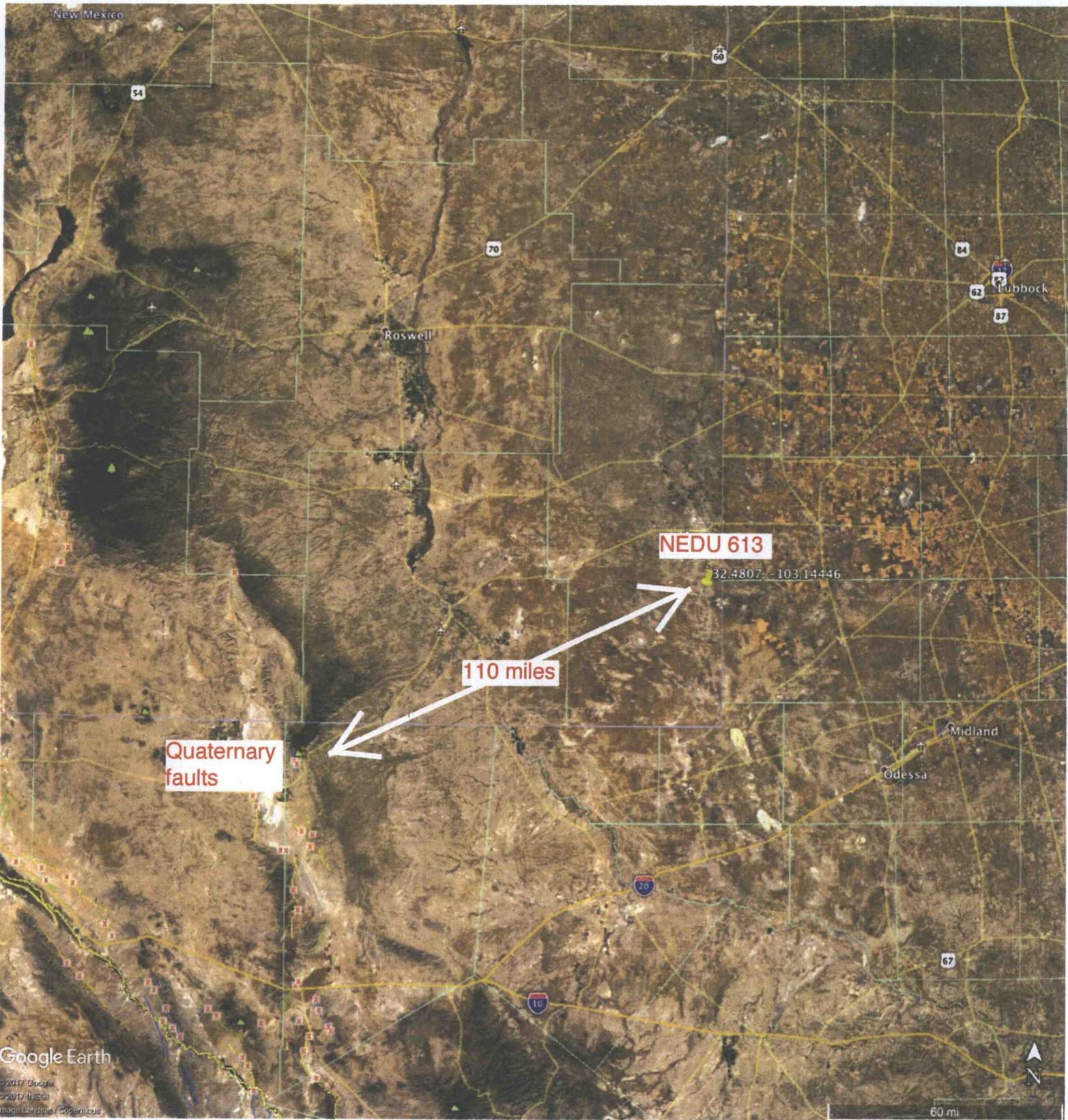


EXHIBIT J



Form C-108
Affirmative Statement
Apache Corporation
Northeast Drinkard Unit
Section 15, T-21-S, R-37-E
Lea County, New Mexico

The extractions from the seismic data show no evidence of faulting at (or above) the Glorieta in this area and surface mapping from the USGS confirms that no faults are known at the surface. In addition, we have no empirical evidence that our injection operations at NEDU are affected by faulting at the Glorieta level, the evaporites, or the surface. Available geologic and engineering data has been examined and no evidence of open faults or hydrological connection between the injection zone and any underground sources of drinking water has been found.

Justin Wagner
Geologist I

8/14/2017

Date

EXHIBIT J

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

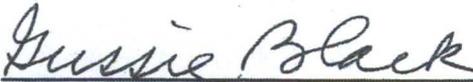
I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
June 29, 2017
and ending with the issue dated
June 29, 2017.

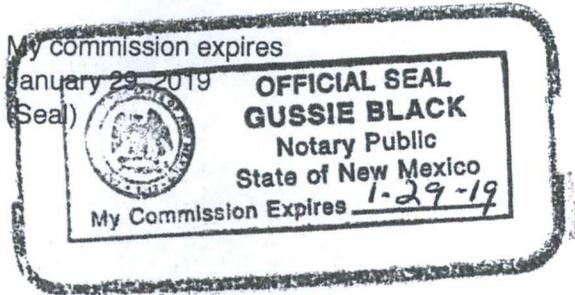


Publisher

Sworn and subscribed to before me this
29th day of June 2017.



Business Manager



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 June 29, 2017

Apache Corporation is applying to convert the Northeast Drinkard Unit 613 well to a water injection well. The well is at 1980 FNL & 660 FEL, Sec. 15, T. 21 S., R. 37 E., Lea County, NM. This is 3 miles NNE of Eunice, NM. It will inject water into the Blinbry, Tubb, and Drinkard (maximum injection pressure = 1,140 psi) from 5,701' to 6,669'. Injection will be at a maximum rate of 2,000 bwpd. Interested parties must file objections or requests for hearing with the NM Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505 within 15 days. Additional information can be obtained by contacting: Brian Wood, Permits West, Inc., 37 Verano Loop, Santa Fe, NM 87508. Phone number is (505) 466-8120. #31891

02108485

00195691

BRIAN WOOD
PERMITS WEST
37 VERANO LOOP
SANTA FE, NM 87508

EXHIBIT K

TYPICAL LETTER

August 15, 2017

NM State Land Office
PO Box 1148
Santa Fe NM 87504

Apache Corporation is applying (see attached application) to deepen and convert its Northeast Drinkard Unit 613 oil well to a water injection well. As required by NM Oil Conservation Division (NMOCD) Rules, I am notifying you of the following proposed water injection well. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Northeast Drinkard Unit 613 (state lease) ID = 6769'

Proposed Injection Zone: Blinebry-Drinkard (from 5701' to 6669')

Location: 1980' FNL & 660' FEL Sec. 15, T. 21 S., R. 37 E., Lea County, NM

Approximate Location: ≈3 air miles north of Eunice, NM

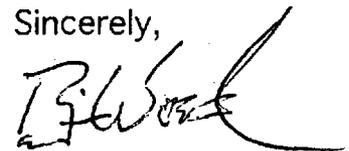
Applicant Name: Apache Corporation (432) 818-1167

Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

Submittal Information: Application for a water injection well will be filed with the NMOCD. If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. NMOCD address is 1220 South St. Francis Dr. Santa Fe, NM 87505. Phone is (505) 476-3440.

Please call me if you have any questions.

Sincerely,



Brian Wood

EXHIBIT L

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Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Sent To: **Chevron-USA Inc.**
 PO Box 1635
 Houston TX 77251
 APC-NEDU 613

Postmark Here: AUG 15 2017

PS Form 3800, July 2014 See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Sent To: **J-R-Gone Operating, LLC**
 PO Box 10217
 Lubbock TX 79408
 APC-NEDU 613

Postmark Here: AUG 1 2017

PS Form 3800, July 2014 See Reverse for Instructions

U.S. Postal Service™
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For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Sent To: **ExxonMobil Corporation**
 PO Box 4388
 Houston TX 77210
 APC-NEDU 613

Postmark Here: AUG 1 2017

PS Form 3800, July 2014 See Reverse for Instructions

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OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Sent To: **Occidental Permian Ltd.**
 PO Box 4294
 Houston TX 77210
 APC-NEDU 613

Postmark Here: AUG 5 2017

PS Form 3800, July 2014 See Reverse for Instructions

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For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Sent To: **NM State Land Office**
 PO Box 1148
 Santa FE NM 87504
 APC-NEDU 613

Postmark Here: AUG 1 2017

PS Form 3800, July 2014 See Reverse for Instructions

EXHIBIT L

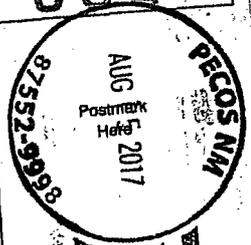
0684 1568 1000 0292 4T02

**U.S. Postal Service
CERTIFIED MAIL® RECEIPT**
Domestic Mail Only

For delivery information, visit our website at www.usps.com®

OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$



Sent To **XTO Energy, Inc.**
PO Box 6501
Englewood CO 80155
APC-NEDU 613

Street & Apt. No.,
 or PO Box No.
 City, State, ZIP+4

PS Form 3800, July 2014

See Reverse for Instructions

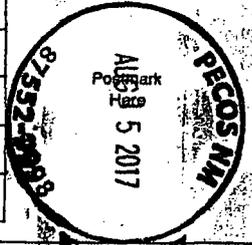
0984 1568 1000 0292 4T02

**U.S. Postal Service
CERTIFIED MAIL® RECEIPT**
Domestic Mail Only

For delivery information, visit our website at www.usps.com®

OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$



Sent To **Oxy USA WTP LP**
PO Box 4294
Houston TX 77210
APC-NEDU 613

Street & Apt. No.,
 or PO Box No.
 City, State, ZIP+4

PS Form 3800, July 2014

See Reverse for Instructions

EXHIBIT L

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> 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. 	A. Signature <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee	
1. Article Addressed to: Chevron USA Inc. 6301 Deauville Blvd. Midland TX 79706 APC NEDU 613 9590 9402 2329 6225 4774 30	B. Received by (Printed Name) C. Date of Delivery	B. Received by (Printed Name) C. Date of Delivery
	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
2. Article Number (Transfer from service label) 7014 2870 0001 8951 4838	3. Service Type <input type="checkbox"/> Adult Signature <input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Certified Mail® <input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Insured Mail <input type="checkbox"/> Registered Mail™ <input type="checkbox"/> Registered Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Signature Confirmation™ <input type="checkbox"/> Signature Confirmation Restricted Delivery	
PS Form 3811, July 2015 PSN 7530-02-000-9053		Domestic Return Receipt

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> 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. 	A. Signature <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee	
1. Article Addressed to: J.R. Cone Operating, LLC PO Box 10217 Lubbock TX 79408 APC NEDU 613 9590 9402 2329 6225 4774 09	B. Received by (Printed Name) C. Date of Delivery	B. Received by (Printed Name) C. Date of Delivery
	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
2. Article Number (Transfer from service label) 7014 2870 0001 8951 4852	3. Service Type <input type="checkbox"/> Adult Signature <input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Certified Mail® <input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Insured Mail <input type="checkbox"/> Registered Mail™ <input type="checkbox"/> Registered Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Signature Confirmation™ <input type="checkbox"/> Signature Confirmation Restricted Delivery	
PS Form 3811, July 2015 PSN 7530-02-000-9053		Domestic Return Receipt

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> 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. 	A. Signature <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee	
1. Article Addressed to: NM State Land Office PO Box 7148 Santa FE NM 87504 APC NEDU 613 9590 9402 2329 6225 4773 93	B. Received by (Printed Name) C. Date of Delivery	B. Received by (Printed Name) C. Date of Delivery
	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
2. Article Number (Transfer from service label) 7014 2870 0001 8951 4869	3. Service Type <input type="checkbox"/> Adult Signature <input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Certified Mail® <input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Insured Mail <input type="checkbox"/> Registered Mail™ <input type="checkbox"/> Registered Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Signature Confirmation™ <input type="checkbox"/> Signature Confirmation Restricted Delivery	
PS Form 3811, July 2015 PSN 7530-02-000-9053		Domestic Return Receipt

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> 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. 	<p>A. Signature <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery</p> <p><i>J. Board</i> 8.22.17</p>
<p>1. Article Addressed to:</p> <p>Occidental Permian Ltd. PO Box 4294 Houston TX 77210</p> <p>APC NEDII 613</p> <p>9590 9402 2329 6225 4773 86</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>2. Article Number (Transfer from service label)</p> <p>7014 2870 0001 8951 4876</p>	<p>3. Service Type <input type="checkbox"/> Priority Mail Express®</p> <p><input type="checkbox"/> Adult Signature <input type="checkbox"/> Registered Mail™</p> <p><input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Registered Mail Restricted Delivery</p> <p><input type="checkbox"/> Certified Mail® <input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Signature Confirmation™</p> <p><input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery</p> <p><input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery</p> <p><input type="checkbox"/> Insured Mail <input type="checkbox"/> Signature Confirmation Restricted Delivery (\$500)</p>
<p>PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt</p>	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> 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. 	<p>A. Signature <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery</p> <p><i>J. Board</i> 8.22.17</p>
<p>1. Article Addressed to:</p> <p>Oxy USA WTP LP PO Box 4294 Houston TX 77210</p> <p>APC NEDII 613</p> <p>9590 9402 2329 6225 4773 79</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>2. Article Number (Transfer from service label)</p> <p>7014 2870 0001 8951 4883</p>	<p>3. Service Type <input type="checkbox"/> Priority Mail Express®</p> <p><input type="checkbox"/> Adult Signature <input type="checkbox"/> Registered Mail™</p> <p><input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Registered Mail Restricted Delivery</p> <p><input type="checkbox"/> Certified Mail® <input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Signature Confirmation™</p> <p><input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery</p> <p><input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery</p> <p><input type="checkbox"/> Insured Mail <input type="checkbox"/> Signature Confirmation Restricted Delivery (\$500)</p>
<p>PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt</p>	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> 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. 	<p>A. Signature <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) C. Date of Delivery</p> <p><i>Guillermo Puente</i> <i>Rose Puente</i></p>
<p>1. Article Addressed to:</p> <p>XTO Energy, Inc. PO Box 6501 Englewood CO 80155</p> <p>APC NEDII 613</p> <p>9590 9402 2329 6225 4773 62</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>2. Article Number (Transfer from service label)</p> <p>7014 2870 0001 8951 4890</p>	<p>3. Service Type <input type="checkbox"/> Priority Mail Express®</p> <p><input type="checkbox"/> Adult Signature <input type="checkbox"/> Registered Mail™</p> <p><input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Registered Mail Restricted Delivery</p> <p><input type="checkbox"/> Certified Mail® <input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Signature Confirmation™</p> <p><input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery</p> <p><input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery</p> <p><input type="checkbox"/> Insured Mail <input type="checkbox"/> Signature Confirmation Restricted Delivery (\$500)</p>
<p>PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt</p>	



C-108 Review Checklist: Received _____ Add. Request: _____ Reply Date: _____ Suspended: _____ [Ver 15]

ORDER TYPE: WFX / PMX / SWD Number: _____ Order Date: _____ Legacy Permits/Orders: 12-8539 540
613 NED4 12-8539

Well No: 30-025-09919 Well Name(s): 1980 FNL

API: 30-0 25-09919 Spud Date: 11/20/1948 New or Old: N (UIC Class II Primacy 03/07/1982)

Footages: 660 FNL Lot _____ or Unit H Sec 15 Tsp 21S Rge 37E County LEC

General Location: 22 miles N/E of here Pool: _____ Pool No.: _____

BLM 100K Map: 5A1 Operator: Apache OGRID: 8TB Contact: Wood's Agent

COMPLIANCE RULE 5.9: Total Wells: 293 Inactive: 3 Fincl Assur: OK Compl. Order? NA IS 5.9 OK? _____ Date: 9-13-2017

WELL FILE REVIEWED Current Status: Active

WELL DIAGRAMS: NEW: Proposed or RE-ENTER: Before Conv. After Conv. Logs in Imaging: NA

Planned Rehab Work to Well: _____

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Type or Cf	Cement Top and Determination Method
Planned ___ or Existing ___ Surface	<u>12 1/8" / 13 7/8"</u>	<u>228</u>		<u>250</u>	<u>SURFACE / VISUAL</u>
Planned ___ or Existing ___ Intern/Prod	<u>11 1/8" / 8 5/8"</u>	<u>2981</u>		<u>1700</u>	<u>SURFACE / VISUAL</u>
Planned ___ or Existing ___ Intern/Prod	<u>7 1/8" / 5 1/2"</u>	<u>6585</u>		<u>900</u>	<u>2500 / CALC</u>
Planned ___ or Existing ___ Prod/Liner	<u>5 1/2" / 4 1/2"</u>	<u>6769</u>		<u>248</u>	<u>SURFACE / VISUAL</u>
Planned ___ or Existing ___ Liner					
Planned ___ or Existing ___ OH / PERF	<u>5701 / 6869</u>				
			<u>Inj Length</u> <u>968</u>		

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops	Completion/Operation Details:
Adjacent Unit: Litho. Struc. Por.	<u>[Redacted]</u>	<u>BL</u>	<u>5541</u>	Drilled TD <u>6641</u> PBDT <u>[Redacted]</u>
Confining Unit: Litho. Struc. Por.		<u>Tb</u>	<u>6103</u>	NEW TD <u>6769</u> NEW PBDT _____
Proposed Inj Interval TOP:		<u>NA</u>	<u>6649</u>	NEW Open Hole <input type="radio"/> or NEW Perfs <input type="radio"/>
Proposed Inj Interval BOTTOM:				Tubing Size <u>2 7/8</u> In. Inter Coated? <input checked="" type="checkbox"/>
Confining Unit: Litho. Struc. Por.				Proposed Packer Depth <u>5651</u> ft
Adjacent Unit: Litho. Struc. Por.	<u>[Redacted]</u>			Min. Packer Depth <u>5601</u> (100-ft limit)
				Proposed Max. Surface Press. <u>1140</u> psi
				Admin. Inj. Press. <u>1140</u> (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P NA Noticed? _____ BLM Sec Ord WIPP Noticed? _____ Salt/Salado T: 140 B: 124 NW: Cliff House fm _____

FRESH WATER: Aquifer 80' Max Depth Quaternary HYDRO AFFIRM STATEMENT By Qualified Person

NMOSE Basin: Capitan CAPITAN REEF: thru adj No. Wells within 1-Mile Radius? 1 FW Analysis Y

Disposal Fluid: Formation Source(s) X Analysis? Y On Lease Operator Only or Commercial

Disposal Int: Inject Rate (Avg/Max BWPD): 1.6/2.0 Protectable Waters? Y Source: _____ System: Closed or Open

HC Potential: Producing Interval? Y Formerly Producing? _____ Method: Logs/DST/P&A/Other _____ 2-Mile Radius Pool Map

AOR Wells: 1/2-M Radius Map? _____ Well List? _____ Total No. Wells Penetrating Interval: _____ Horizontals? _____

Penetrating Wells: No. Active Wells 43 Num Repairs? _____ on which well(s)? _____ Diagrams? _____

Penetrating Wells: No. P&A Wells 2 Num Repairs? _____ on which well(s)? _____ Diagrams? Y

NOTICE: Newspaper Date June 29, 2017 Mineral Owner NMSLO Surface Owner NMSLO N. Date 8-18-2017

RULE 26.7(A): Identified Tracts? _____ Affected Persons: TR Cuneo, OXY, XTO N. Date 8-22-2017

Order Conditions: Issues: Circulate Liner/ Surface

Add Order Cond: _____