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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 702 **API:** 30-025-09911
Pool: Eunice; BLI-TU-DR, North **Pool Code:** 22900

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW WFX-975

1) TYPE OF APPLICATION: Check those which apply for [A]

A. Location - Spacing Unit - Simultaneous Dedication

☐ NSL

☐ NSP (PROJECT AREA)

☐ NSP (PRORATION UNIT)

☐ SD

B. Check one only for [I] or [II]

[I] Commingling - Storage - Measurement

☐ DHC

☐ CTB

☐ PLC

☐ PC

☐ OLS

☐ OLM

[II] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☒ WFX

☐ PMX

☐ SWD

☐ IPI

☐ EOR

☐ PPR

2) NOTIFICATION REQUIRED TO: Check those which apply.

A. ☒ Offset operators or lease holders

B. ☐ Royalty, overriding royalty owners, revenue owners

C. ☒ Application requires published notice

D. ☒ Notification and/or concurrent approval by SLO

E. ☒ Notification and/or concurrent approval by BLM

F. ☒ Surface owner

G. ☒ For all of the above, proof of notification or publication is attached, and/or,

H. ☐ No notice required

FOR OCD ONLY

☐ Notice Complete

☐ 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

B. Wood

Signature

11-5-17

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 702
- VII. Attach data on the proposed operation, including: **30-025-09911**
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: OCT. 23, 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 702

WELL LOCATION: 660' FSL & 660' FWL

M

15

21 S

37 E

FOOTAGE LOCATION

UNIT LETTER

SECTION

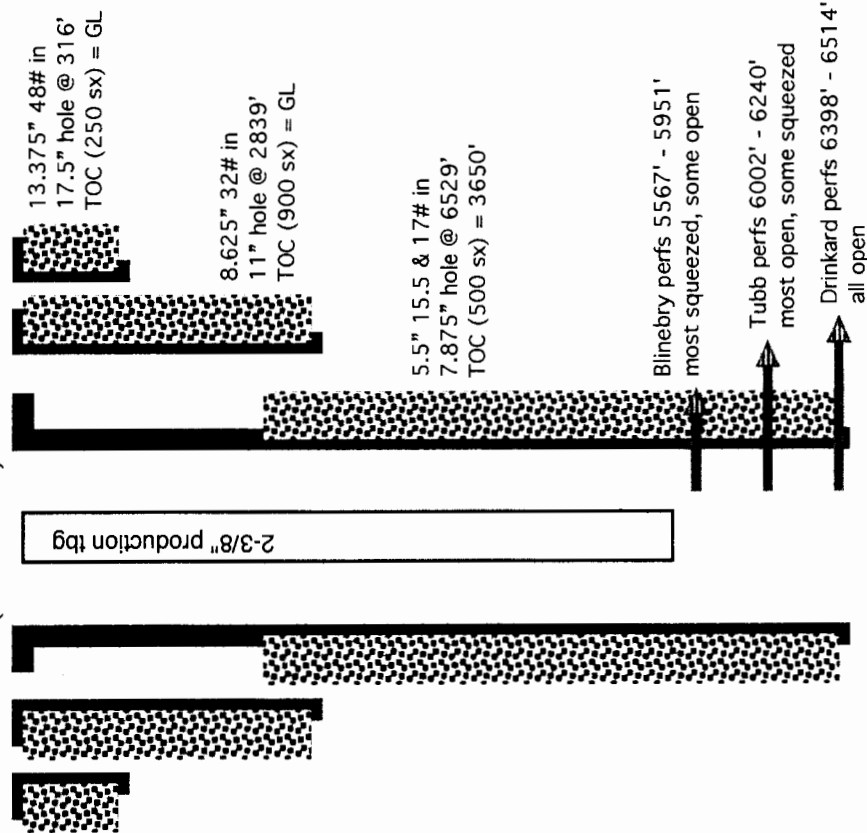
TOWNSHIP

RANGE

WELLBORE SCHEMATIC

"AS IS"

(not to scale)



TD 6646'

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.

Intermediate Casing

Hole Size: 11" Casing Size: 8.625"
 Cemented with: 900 sx. or ft³
 Top of Cement: SURFACE Method Determined: ESTIMATED

Production Casing

Hole Size: 7.875" Casing Size: 5.5"
 Cemented with: 500 sx. or ft³
 Top of Cement: 3650' Method Determined: ESTIMATED
 Total Depth: 6646'

Injection Interval

5702' feet to 6636'

(Perforated or Open Hole; indicate which)

■■■■■■■■■■

INJECTION WELL DATA SHEET

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: NORTHEAST DRINKARD UNIT 702

WELL LOCATION: 660' FSL & 660' FWL

M

15

21 S

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FOOTAGE LOCATION

UNIT LETTER

SECTION

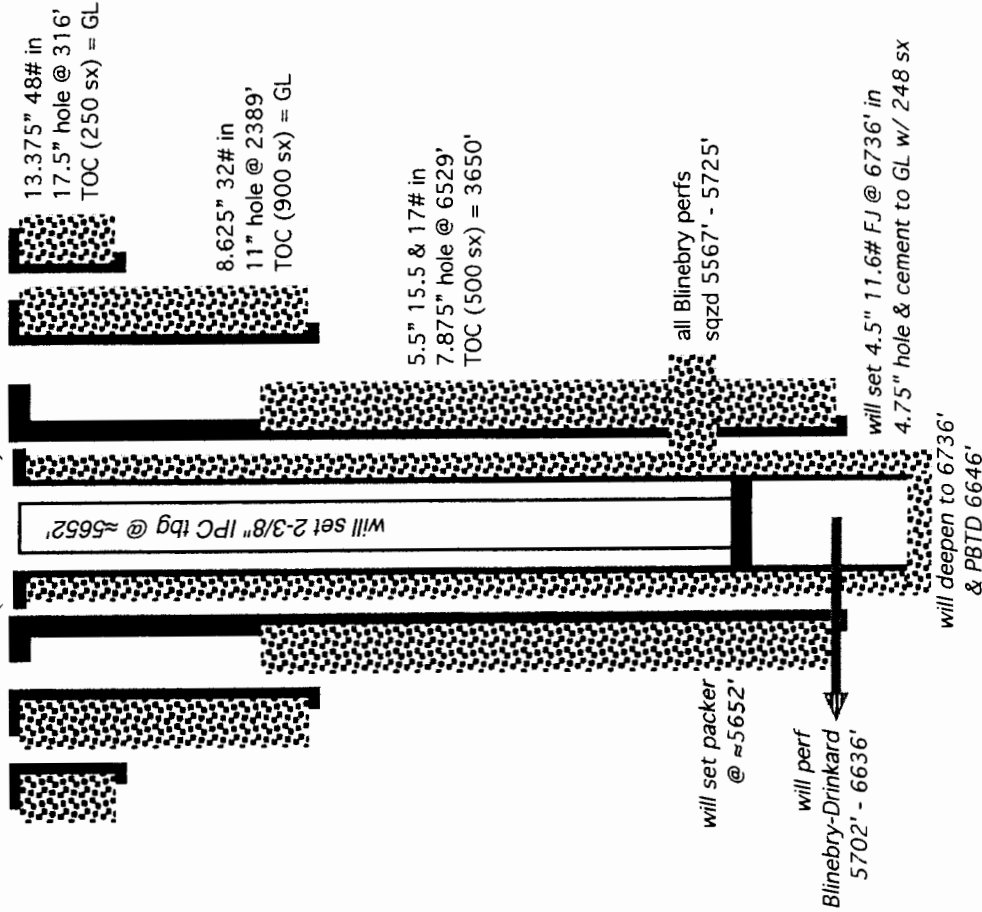
TOWNSHIP

RANGE

WELLBORE SCHEMATIC

PROPOSED

(not to scale)



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.

Intermediate Casing

Hole Size: 11" Casing Size: 8.625"
Cemented with: 900 sx. or ft³
Top of Cement: SURFACE Method Determined: ESTIMATED

Production Casing

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(Perforated or Open Hole; indicate which)

■■■■■■■■■■

INJECTION WELL DATA SHEET

Tubing Size: 2-3/8" J-55 4.7# Lining Material: INTERNAL PLASTIC COAT

Type of Packer: LOCK SET INJECTION

Packer Setting Depth: ≈5652'

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

Additional Data

1. Is this a new well drilled for injection? _____ Yes _____ No XXX

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

2. Name of the Injection Formation: BLINEBRY, TUBB, & DRINKARD

3. 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 (3730'), SAN ANDRES (3970')

UNDER: ABO (6646'), SIMPSON (7300'), MCKEE (7600'), ELLENBURGER (8000')

APACHE CORPORATION
NORTHEAST DRINKARD UNIT 702
660' FSL & 660' FWL
SEC. 15, T. 21 S., R. 37 E., LEA COUNTY, NM

PAGE 1

30-025-09911

I. Purpose is to deepen (from 6646' to 6736') and convert an oil well to a water injection well. The well will inject (5702' - 6636') 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: Fee "Argo"
Lease Size: 160 acres (see Exhibit A for C-102 and map)
Closest Lease Line: 660'
Lease Area: SW4 of Section 15, T. 21 S., R. 37 E.
Unit Size: 4,938 acres
Closest Unit Line: 660'
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", 48#, H-40) was set in 1947 at 316' in a 17.5" hole and cemented to GL with 250 sacks.

Intermediate casing (8.625", 32#, H-40) was set at 2839' in an 11" hole and cemented to GL with 900 sacks.

Production casing (5.5", 15.5# & 17#, J-55) was set at 6529' in a 7.875" hole and cemented with 500 sacks to 3650' (estimated).

A 4.75" hole will be drilled to 6736' and 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 $\approx$ 5652'. (Top perforation will be 5702'.)
- A. (4) A lock set injection packer will be set at $\approx$ 5652' ($\approx$ 50' above the top perforation of 5702').
- 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 5702' to 6636'. The well is and will be cased.
- B. (3) Well was originally drilled as a Drinkard oil well.
- B. (4) Will perforate from 5702' to 6636' with 2 shots per foot at 90°.
- B. (5) Next higher oil or gas zone within the area of review is the Grayburg. Its estimated bottom is at $\approx$ 3965'. Injection will occur in the Blinebry through Drinkard. Blinebry top is at 5509'. Injection interval will be 5702' to 6636'. Next lower oil or gas zone within the area of review is the Abo. Its estimated top is at 6646'.

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.

Sixteen water flood expansions have been approved since then. Closest unit boundary is 660' west. Eight injection wells are within a half-mile radius (see Exhibit B).

V. Exhibit B shows and tabulates all 64 existing wells (46 producers + 8 injectors + 6 P&A + 2 SWD + 2 water supply) within a half-mile radius, regardless of depth. Exhibit C shows all 831 existing wells (597 oil or gas producing wells + 98 injection or disposal wells + 75 P & A wells + 3 waterflood supply wells + 1 brine supply well + 57 fresh water wells) within a two-mile radius.

Exhibit D shows all leases (BLM, fee, and State) 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
S2NW4 Sec. 15	NMSLO	B0-1481-0018	Oxy USA WTP	Apache
SW Sec. 15	fee	Argo	Apache	Apache
W2SE4 Sec. 15	fee	L G Warlick	Apache	Apache
SENE Sec. 16	NMSLO	B0-1732-0001	Chevron USA	Apache
N2SE4 Sec. 16	NMSLO	B0-0085-0016	Apache	Apache
S2SE4 Sec. 16	NMSLO	B0-8105-0004	Apache	Apache
E2NE4 Sec. 21	BLM	NMLC-032591A	Apache, Elliott Hall, & Elliott Industries	Apache
NWNE Sec. 21	Fee	Weatherly	Stephens & Johnson	Stephens & Johnson
NWNE Sec. 22	Fee	O R Eubank	Apache	Apache
NW4 Sec. 22	fee	Argo A	Apache	Apache

VI. Sixty-four existing wells are within a half-mile. Fifty-four of the wells penetrated the Blinebry (top = 5509'). The penetrators include 36 oil or gas

wells, 8 water injectors, 6 P&A wells, 2 SWD wells, and 2 water supply wells for waterfloods. A table abstracting the well construction details and histories of the Blinebry penetrators is in Exhibit F. Diagrams illustrating the P & A penetrators are in Appendix G.

- VII. 1. Average injection rate will be ≈ 1500 bwpd.
Maximum injection rate will be ≈ 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 ≈ 1000 psi. Standard maximum injection pressure would be 1140 psi ($= 0.2$ psi/foot $\times 5702'$ (top perforation)). However, in accordance with IPI-185, Apache requests a maximum injection pressure of 1375 psi.
4. Water source will be water pumped from existing $\approx 4000'$ deep San Andres water supply wells plus produced water from the 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. Complete analyses are in Exhibit H.

	<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 $\approx 2^\circ$. 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

Adjacent to the Northeast Drinkard Unit are three other Drinkard water floods (Apache's West Blinebry Drinkard and East Blinebry Drinkard Units and Chevron's Central Drinkard Unit). The Central Drinkard Unit has been under water flood since the 1960s.

Notable depths are:

Quaternary = 0'
Rustler = 1220'
Yates = 2630'
Grayburg = 3730'
San Andres = 3970'
Glorieta = 5118'
Blinebry = 5509'
Injection interval = 5702' - 6636'

Tubb = 6072'
Drinkard = 6400'
Current Total Depth = 6646'
Abo = 6646'
Proposed Total Depth = 6736'

State Engineer (Exhibit I) shows four water wells are $\geq 6633'$ deep and within a 2-mile radius. All four were oil wells that were plugged back to produce from the San Andres for water floods. San Andres water had a TDS of 13,273 in NEDU 919S (Exhibit H). Excluding those four wells, then the deepest water well within 2-miles is 154'. NEDU 702 is 2-1/2 miles 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 Blinbry within T. 21 S., R. 37 E.

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

X. A gamma ray neutron log is on file. GR/CBL/CCL/CNL log suite will be run.

XI. Water sample analyses from two water wells are in Exhibit I. The Section 15 water well, a hundred yards east, is the only water well within a mile that could be found during an October 3, 2017 field inspection. Visits to eight other locations within a mile did not find any water wells.

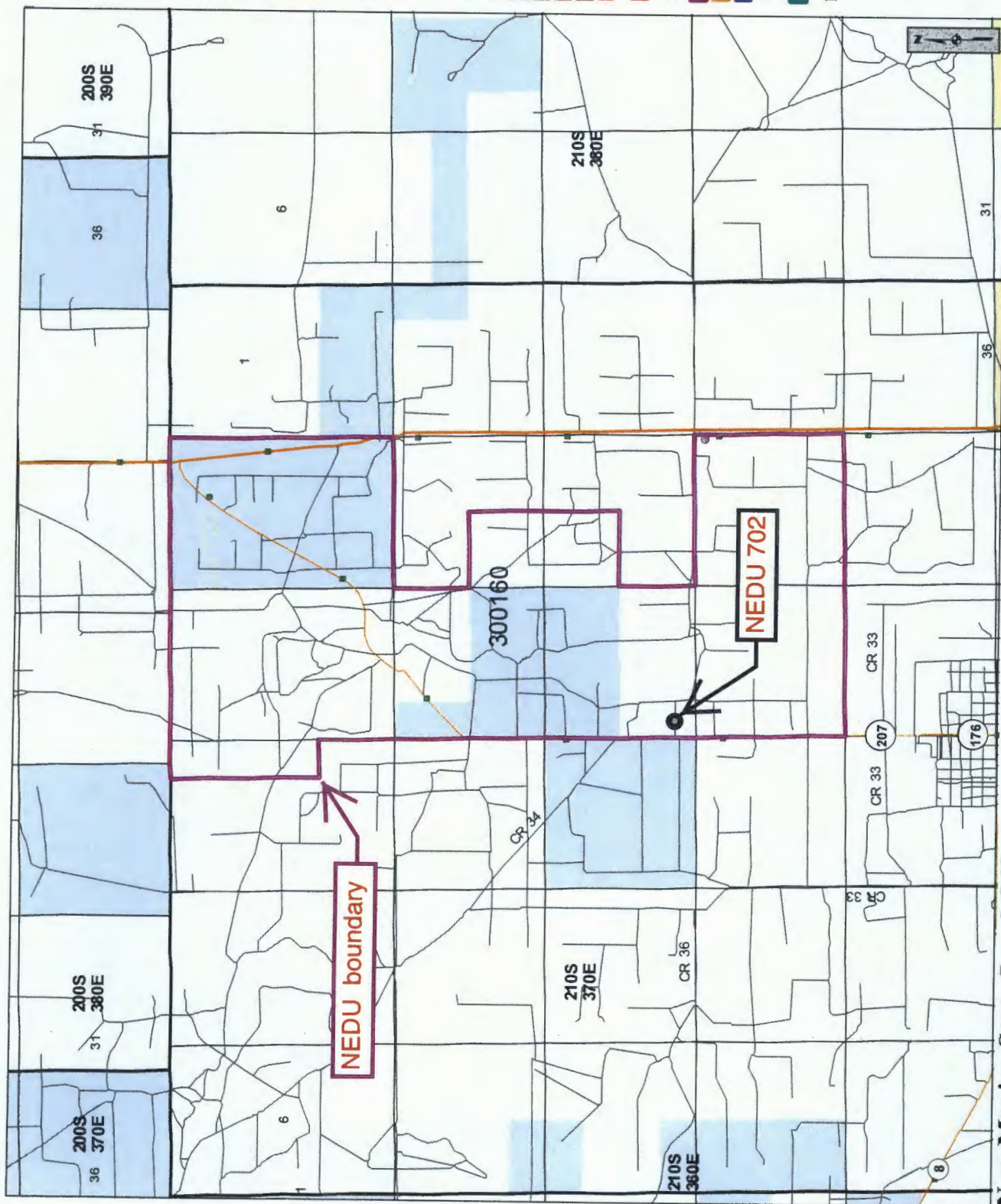
XII. Apache (Exhibit J) is not aware of any geologic or engineering data that may indicate the Blinbry-Drinkard interval is in hydrologic connection with any underground sources of water. Closest Quaternary fault is 108 miles southwest (Exhibit J). There are 106 Blinbry, 124 Tubb, and 152 Drinkard active 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, -911, and -971.

APACHE CORPORATION
NORTHEAST DRINKARD UNIT 702
660' FSL & 660' FWL
SEC. 15, T. 21 S., R. 37 E., LEA COUNTY, NM

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XIII. A legal ad (see Exhibit K) was published on October 4, 2017. Notice (this application) has been sent (Exhibit L) to the lessees of record (Chevron USA Inc., Elliott Hall, Elliott Industries, Oxy USA WTP LP, Stephens & Johnson) with leases in the area of review, government lessors (BLM, NMSLO), all well operators (Chevron, Stephens & Johnson, Vanguard) within the area of review, and the surface owner (Millard Deck Estate 4193).



New Mexico State Land Office Oil, Gas and Minerals

00 120 25 0.5 0.75 1 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
logcc@slo.state.nm.us

Cartographic Features

- County Boundaries
- County Seats
- City, Town or Village
- SLO District Offices
- SLO District Boundary
- Hwy Mileposts
- 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

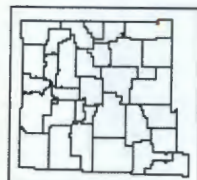
- Oil and Gas Leases
- Agricultural Leases
- Commercial Leases
- Minerals Leases
- Not Available for Oil and Gas Leasing
- Oil and Gas Leasing Influenced by Restriction

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

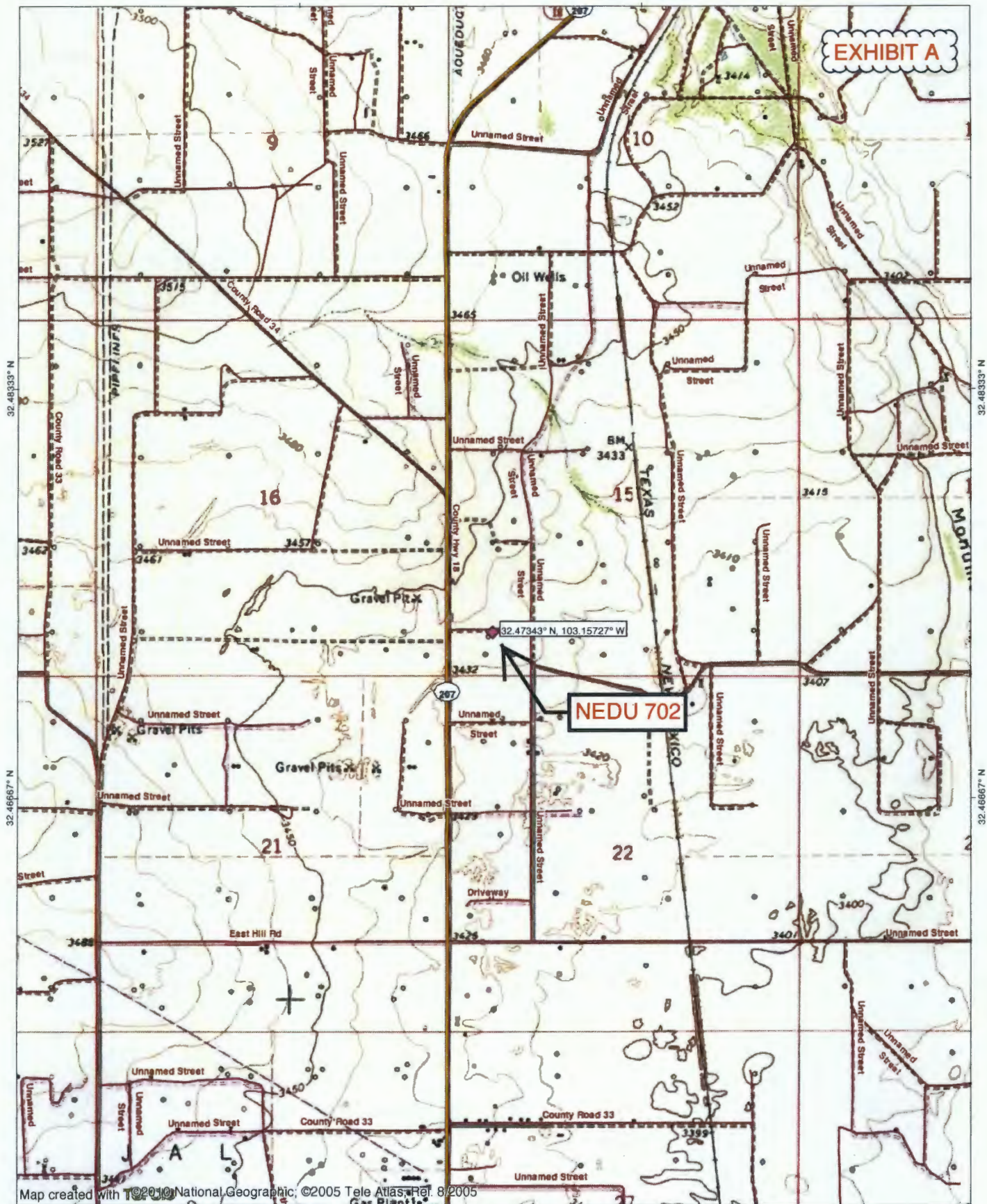


www.nmstatelands.org

EXHIBIT A

Created On: 11/25/2014 4:51:21 PM

EXHIBIT A



Map created with TPO! National Geographic; ©2005 Tele Atlas, Ref. 8/2005

NUMBER OF COPIES RECEIVED	
DISTRIBUTION	
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LAND OFFICE	
TRANSPORTER	OIL
	GAS
PRODUCTION OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

FORM C-128
Revised 5/1/57

SECTION A

Operator Shell Oil Company			Lease Argo			Well No. 1		
Unit Letter M	Section 15	Township 21S	Range 37E	County Lea				
Actual Footage Location of Well: 660 feet from the South line and 660 feet from the West line								
Ground Level Elev. 3434'		Producing Formation Blinberry		Pool Blinberry (0.1)			Dedicated Acreage: 40 Acres	

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES ☒ NO ____ . ("Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1935 Comp.)
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES ____ NO ____ . If answer is "yes," Type of Consolidation _____
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description

SECTION B

CERTIFICATION

I hereby certify that the information in SECTION A above is true and complete to the best of my knowledge and belief.

Name	Original Signed By
R. A. Lowery	R. A. LOWERY
Position	
District Exploitation Engineer	
Company	
Shell Oil Company	
Date	
June 17, 1963	

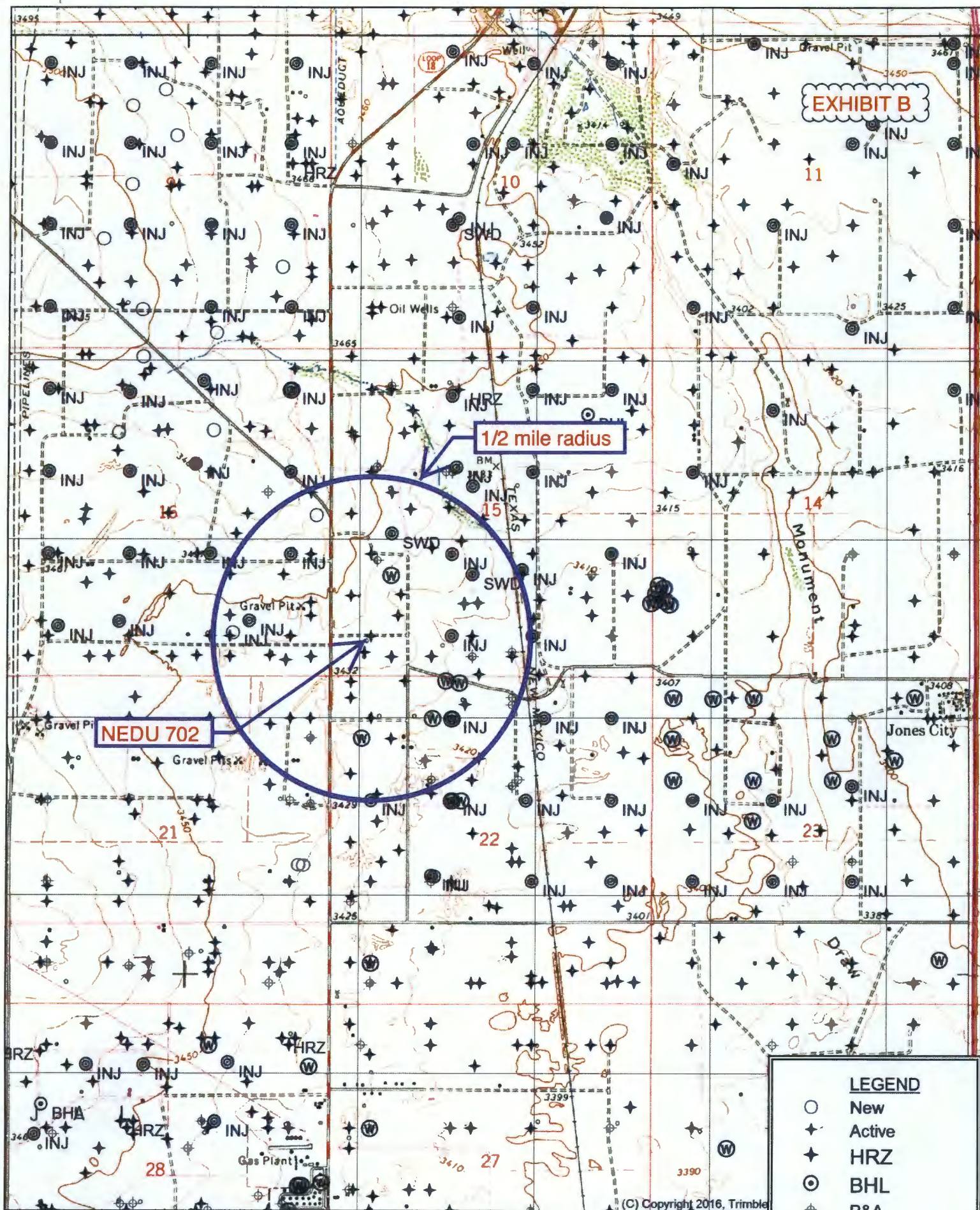
I hereby certify that the well location shown on the plat in SECTION B was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
Registered Professional Engineer and/or Land Surveyor

EXHIBIT A

Certificate No.

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0



NEDU 702

1/2 mile radius

EXHIBIT B

LEGEND

- New
- ✦ Active
- ✦ HRZ
- ⊙ BHL
- ✦ P&A
- ⊙ INJ
- ⊙ SWD
- ⊙ Water

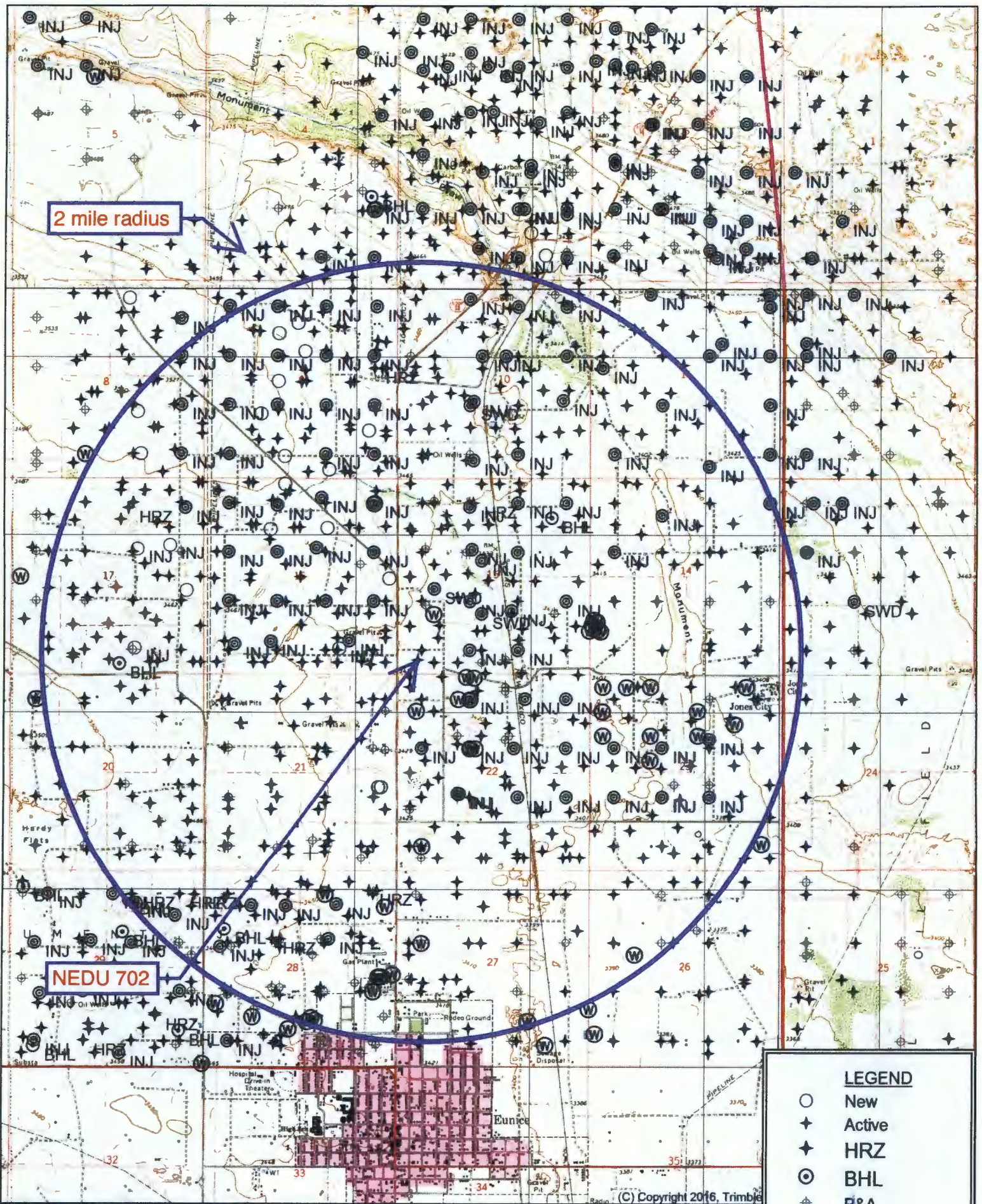
Quad: EUNICE
Scale: 1 inch = 2,000 ft.

(C) Copyright 2016, Trimble

API	OPERATOR	WELL	TYPE	UNIT- SECTION 21S R37E	TVD	ZONE	FEET FROM NEDU 702
3002506608	Apache	Argo 012	O	M-15	8035	Penrose Skelly; Grayburg	283
3002506605	Apache	NEDU 723	O	M-15	8179	Eunice; Bli-Tu-Dr, N	468
3002539557	Apache	Argo 013	O	M-15	4401	Penrose Skelly; Grayburg	566
3002537243	Apache	NEDU 721	O	M-15	6850	Eunice; Bli-Tu-Dr, N	730
3002536806	Apache	NEDU 720	O	D-22	6850	Eunice; Bli-Tu-Dr, N	802
3002534888	Apache	NEDU 713	O	L-15	6790	Eunice; Bli-Tu-Dr, N	827
3002534660	Apache	NEDU 716	O	D-22	6810	Eunice; Bli-Tu-Dr, N	910
3002539686	Apache	Argo A 014	O	D-22	4400	Penrose Skelly; Grayburg	1001
3002539829	Apache	Argo 015	O	N-15	4408	Penrose Skelly; Grayburg	1020
3002506634	Apache	WBDU 090	O	P-16	8261	Eunice; Bli-Tu-Dr, N	1048
3002539449	Apache	State Land 15 017	O	P-16	4415	Penrose Skelly; Grayburg	1084
3002539963	Apache	WBDU 114	O	P-16	6970	Eunice; Bli-Tu-Dr, N	1175
3002506606	Apache	Argo 010	P&A	L-15	8015	Hare; SA (Gas)	1224
3002509916	Apache	NEDU 701	O	L-15	6654	Eunice; Bli-Tu-Dr, N	1320
3002509928	Apache	NEDU 801	O	D-22	6636	Eunice; Bli-Tu-Dr, N	1320
3002509917	Apache	NEDU 704	I	N-15	6630	Eunice; Bli-Tu-Dr, N	1327
3002506633	Apache	WBDU 089	O	P-16	6665	Eunice; Bli-Tu-Dr, N	1327
3002539300	Apache	WBDU 115	O	P-16	7022	Eunice; Bli-Tu-Dr, N	1461
3002541276	Apache	NEDU 726	O	N-15	6860	Eunice; Bli-Tu-Dr, N	1608
3002539151	Apache	Elliott A 010	O	A-21	4410	Penrose Skelly; Grayburg	1621
3002506741	Apache	Argo A 009	W	D-22	8035	Hare; SA (Gas)	1648

3002506617	Apache	State DA 005	O	I-16	8330	Paddock	1654
3002506604	Apache	Argo 008	O	N-15	8002	Paddock	1658
3002506742	Apache	Argo A 010	W	C-22	8130	Hare; SA	1659
3002506740	Apache	Argo A 008	O	D-22	8188	Paddock	1683
3002506602	Apache	NEDU 705	P&A	N-15	8091	Eunice; Bli-Tu-Dr, N	1691
3002537496	Apache	State Land 15 012	G	P-16	4415	Penrose Skelly; Grayburg	1695
3002509915	Apache	Argo 007	S	L-15	8193	Penrose Skelly; Grayburg	1725
3002506607	Apache	Argo 011	O	K-15	7891	Penrose Skelly; Grayburg	1734
3002537916	Apache	State DA 013	O	I-16	4398	Penrose Skelly; Grayburg	1801
3002535272	Apache	NEDU 714	O	N-15	6780	Eunice; Bli-Tu-Dr, N	1827
3002535274	Apache	NEDU 717	O	N-15	6684	Eunice; Bli-Tu-Dr, N	1842
3002506716	Apache	WBDU 095	O	A-21	6630	Eunice; Bli-Tu-Dr, N	1870
3002509918	Apache	NEDU 703W	I	K-15	6645	Eunice; Bli-Tu-Dr, N	1871
3002509929	Apache	NEDU 803	I	C-22	6628	Eunice; Bli-Tu-Dr, N	1871
3002506619	Apache	WBDU 078	I	I-16	6644	Eunice; Bli-Tu-Dr, N	1873
3002506738	Apache	Argo A 006	O	C-22	7907	Paddock	1899
3002506718	Hendrix	Elliott A 003	P&A	A-21	7859	Wantz; Abo	1918
3002506603	Apache	Argo 006	S	K-15	7991	Eunice; Bli-Tu-Dr, N	1931
3002537238	Apache	NEDU 629	O	L-15	6900	Eunice; Bli-Tu-Dr, N	1998
3002537535	Apache	WBDU 092	I	O-16	7284	Eunice; Bli-Tu-Dr, N	2041
3002539828	Apache	Argo 014	O	K-15	4403	Penrose Skelly; Grayburg	2139
3002535271	Apache	NEDU 625	O	E-15	6840	Eunice; Bli-Tu-Dr, N	2139

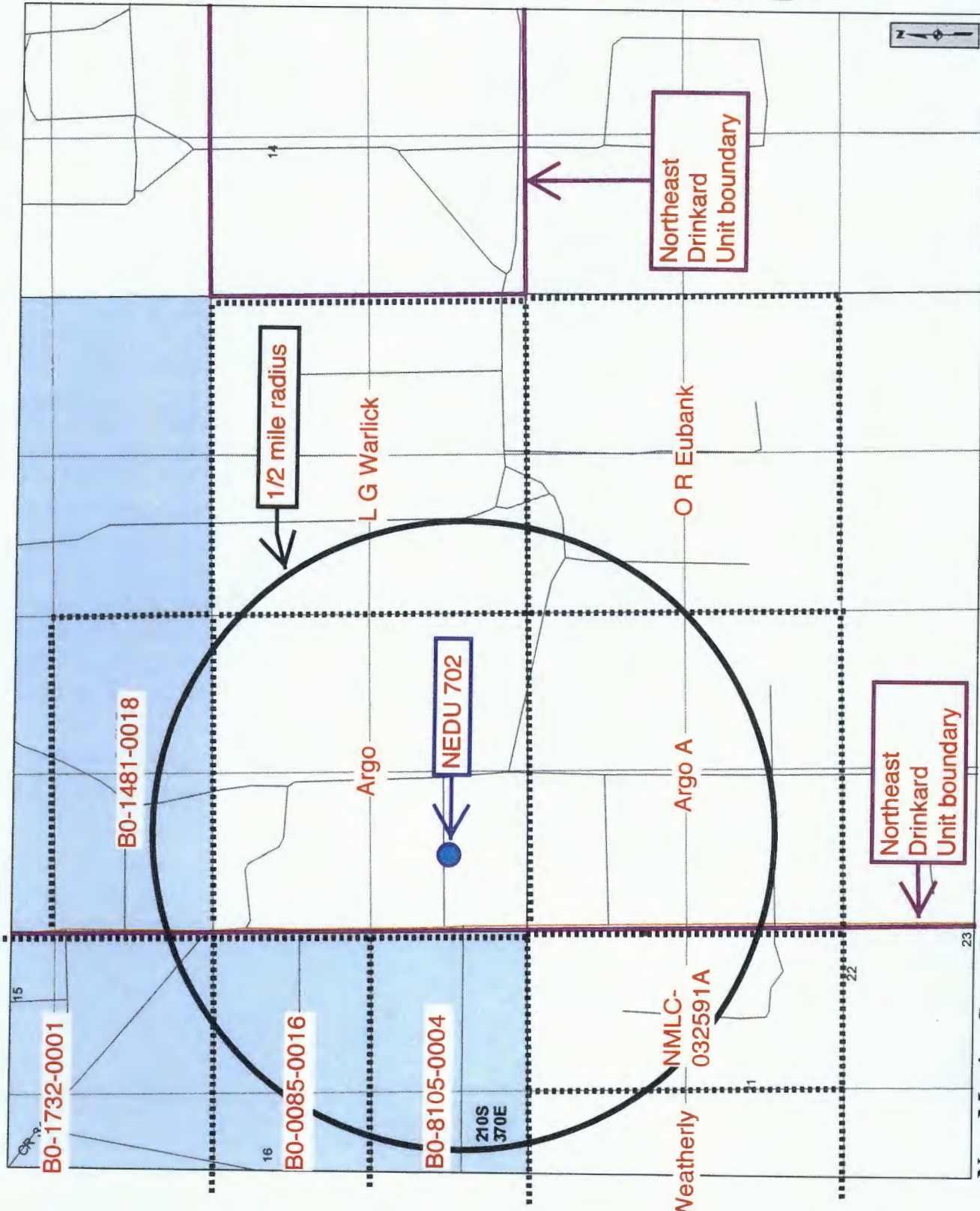
3002539381	Apache	WBDU 127	O	A-21	6878	Eunice; Bli-Tu-Dr, N	2159
3002535275	Apache	NEDU 822	O	F-22	6780	Eunice; Bli-Tu-Dr, N	2196
3002537244	Apache	NEDU 840	O	E-22	6845	Eunice; Bli-Tu-Dr, N	2240
3002506598	Apache	L G Warlick C 007	P&A	O-15	7690	Penrose Skelly; Grayburg	2301
3002506596	Apache	L G Warlick C 005	G	O-15	7850	Brunson; Ellenburger	2310
3002506591	Apache	NEDU 604	O	E-15	8193	Eunice; Bli-Tu-Dr, N	2334
3002539605	Apache	State Land 15 018	O	O-16	4382	Penrose Skelly; Grayburg	2340
3002520311	Apache	WBDU 091	O	O-16	7300	Eunice; Bli-Tu-Dr, N	2344
3002538378	Apache	State Land 15 016	O	O-16	4135	Penrose Skelly; Grayburg	2371
3002543528	Apache	WBDU 179	I	O-16	6876	Plan: Eunice; Bli-Tu- Dr, N	2435
3002541275	Apache	NEDU 650	O	F-15	6858	Eunice; Bli-Tu-Dr, N	2440
3002506731	Vanguard	Eubank 005	G	B-22	7756	Penrose Skelly; Grayburg	2492
3002506743	Apache	NEDU 804	P&A	F-22	8005	Hare; Simpson	2515
3002506624	Chevron	Harry Leonard NCT	O	H-16	8220	Penrose Skelly; Grayburg	2517
3002537201	Apache	WBDU 079	O	J-16	7310	Eunice; Bli-Tu-Dr, N	2526
3002506739	Apache	Argo A 007	O	E-22	8180	Penrose Skelly; Grayburg	2542
3002506733	Vanguard	Eubank 007	P&A	B-22	7630	Paddock	2546
3002506593	Apache	NEDU 708	I	O-15	6634	Eunice; Bli-Tu-Dr, N	2618
3002534657	Apache	NEDU 623	O	K-15	6840	Eunice; Bli-Tu-Dr, N	2624
3002509914	Apache	NEDU 602	O	E-15	6669	Eunice; Bli-Tu-Dr, N	2640
3002506735	Apache	NEDU 802	I	E-22	6629	Eunice; Bli-Tu-Dr, N	2640
3002534654	Apache	NEDU 823	O	C-22	6800	Eunice; Bli-Tu-Dr, N	2649



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

EXHIBIT C

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Land Office Geographic Information Center
 logis@sls.state.nm.us

New Mexico State Land Office
 Oil, Gas and Minerals

0.03 0.075 0.15 0.225 0.3 Miles

Universal Transverse Mercator Projection, Zone 13
 1983 North American Datum

Cartographic Features

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

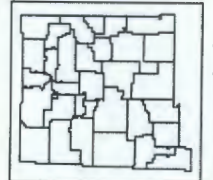
Oil and Gas Related Features

- Oil and Gas Unit Boundary
- Participating Areas in Units
- Geologic Regions
- Volcanic Vents

NMOC D Order R-111-P
 Potash Enclave Outline

NMOC D Oil and Gas Wells

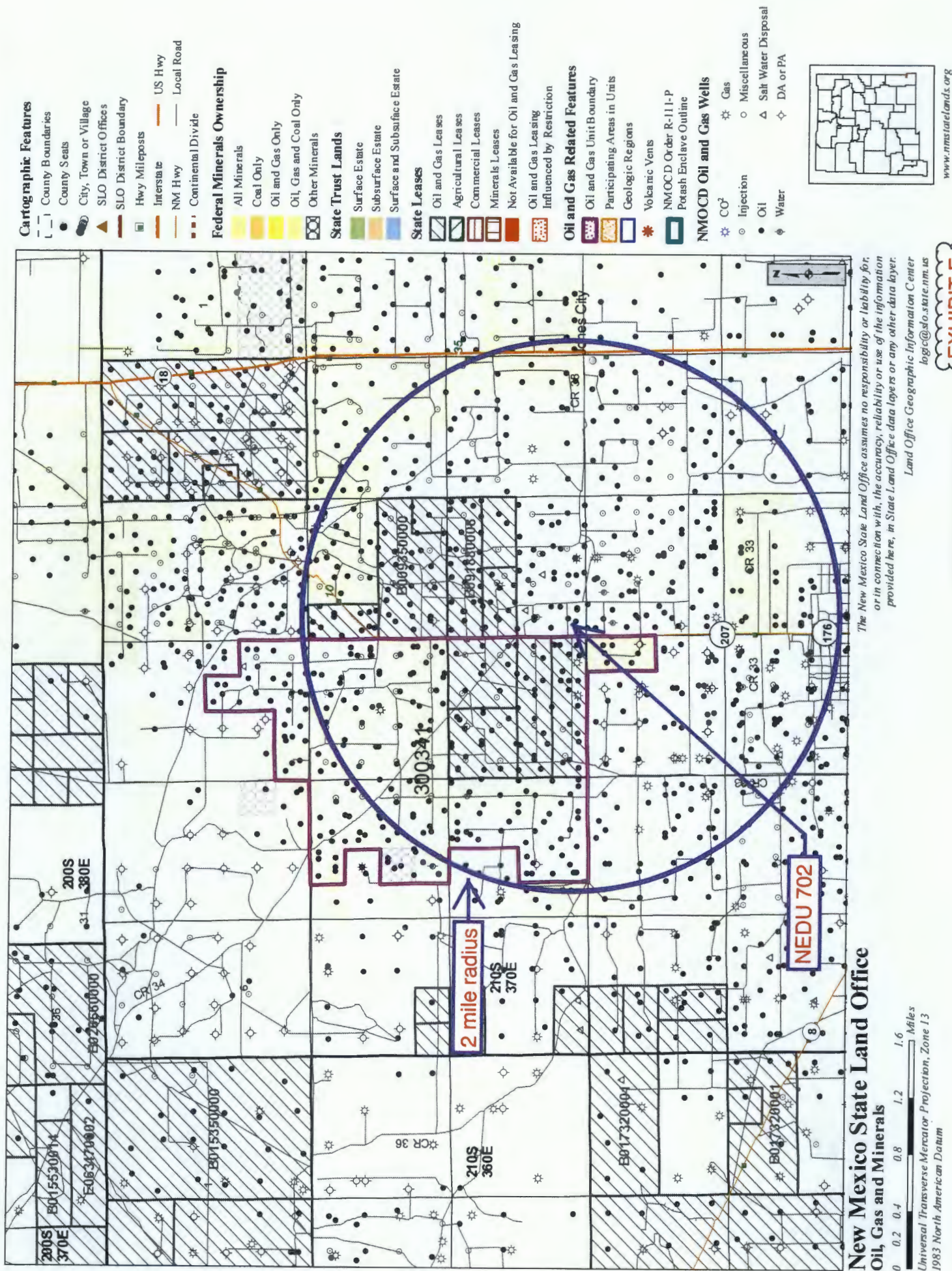
- CO₂
- Gas
- Injection
- Miscellaneous
- Oil
- Salt Water Disposal
- Water
- DA or PA



www.nmstatelands.org

EXHIBIT D

Created On: 1/29/2015 4:16:44 PM



Sorted by distance from NEDU 702

WELL	SPUD	TD	POOL	WELL TYPE	HOLE O.D.	CASING O.D.	SET @	CEMENT	TOC	HOW TOC DETERMINED
Argo 012	8/5/86	8035	Penrose Skelly; Grayburg	O	17.5	13.375	227	250 sx	Surface	Circ 60 sx
30-025-06608					11	8.625	2882	1900 sx	Surface	Circ 300 sx
M-15-21S-37E					7.875	5.5	2662-8033	900 sx	3480	CBL
NEDU 723	5/29/51	8179	Eunice; Bli-Tu-Dr, N	O	17.25	13.375	225	250 sx	Surface	Circ
30-025-06605					11	8.625	2917	1700 sx	Surface	Circ
M-15-21S-37E					7.875	5.5	8000	925 sx	2701	CBL
NEDU 721	9/16/05	6850	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1275	575 sx	Surface	Circ 119 sx
30-025-37243					7.875	5.5	6850	1300 sx	408	CBL
M-15-21S-37E										
NEDU 720	10/16/04	6850	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1195	600 sx	Surface	Circ 130 sx
30-025-36806					7.875	5.5	6850	1150 sx	460	No Report
D-22-21S-37E										

6

EXHIBIT F

Sorted by distance from NEDU 702

[illegible]

[illegible]

Sorted by distance from NEDU 702

[illegible]

Sorted by distance from NEDU 702

[illegible]

Sorted by distance from NEDU 702

[illegible]

Sorted by distance from NEDU 702

[illegible]

EXHIBIT F

Sorted by distance from NEDU 702

[illegible]

EXHIBIT F

Sorted by distance from NEDU 702

[illegible]

Sorted by distance from NEDU 702

NEDU 604	8/28/51	8193	Eunice; Bli-Tu-Dr, N	O		17.25	13.375	336	350 sx	Surface	Circ
30-025-06591						11.25	8.625	2835	500 sx	No report	No report
E-15-21S-37E						7.875	5.5	8042	400 sx	4650	CBL
WBDU 091	9/19/63	7300	Eunice; Bli-Tu-Dr, N	O		17.5	13.375	252	300 sx	Surface	Circ 25 sx
30-025-20311						11	8.625	2990	660 sx	Surface	Circ 100 sx
O-16-21S-37E						7.875	5.5	7298	895 sx	1120	Temp Survey
WBDU 179	3/27/17	6876	Eunice; Bli-Tu-Dr, N	I		11	8.625	1281	575 sx	Surface	Circ 166 sx
30-025-43528						7.875	5.5	6876	1350 sx	Surface	Circ 238 sx
O-16-21S-37E											
NEDU 650	11/7/13	6858	Eunice; Bli-Tu-Dr, N	O		11	8.625	1309	465 sx	Surface	Circ 96 sx
30-025-41275						7.875	5.5	6858	1300 sx	Surface	Circ 100 sx
F-15-21S-37E											

Sorted by distance from NEDU 702

Eubank 005	2/22/50	7756	Penrose Skelly; Grayburg	G	17.25	13.375	294	300 sx	Surface	Circ
30-025-06731					12.25	9.625	2800	1300 sx	1335	Temp Survey
B-22-21S-37E					8.75	7	7644	700 sx	2950	Temp Survey
NEDU 804	11/16/51	8005	Eunice; Bli-Tu-Dr, N	P&A	17.25	13.375	225	250 sx	Surface	Circ 70 sx
30-025-06743					11	8.625	2903	1900 sx	Surface	Circ 40 sx
F-22-21S-37E					7.875	5.5	7843	870 sx	2717	Circ 5 sx
Harry Leonard NCT E 005	6/22/52	8220	Penrose Skelly; Grayburg	O	17.25	12.75	268	325 sx	Surface	Circ
30-025-06624					11	8.625	2799	1100 sx	2290	Temp Survey
H-16-21S-37E					7.875	5.5	7999	131 sx	7540	Temp Survey
WBDU 079	6/24/05	7310	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1289	600 sx	Surface	Circ 92 sx
30-025-37201					7.875	5.5	7310	1600 sx	270	CBL
J-16-21S-37E										

Sorted by distance from NEDU 702

[illegible]

EXHIBIT F

Sorted by distance from NEDU 702

[illegible]

Sorted by distance from NEDU 702

[illegible]



WELL BORE INFO.

13 3/8" 48# @ 305'
w/300 sx CIRC to surf

8 5/8" 32# @ 2802'
w/1300 sx CIRC to surf

TOC @ 2940'

Grayburg perms @ 3730'-3827'

CIBP @ 4218' w/ no cmt

CIBP @ 6009' w/ 4 sx cmt
Tubb perms @ 6033'- 6225'

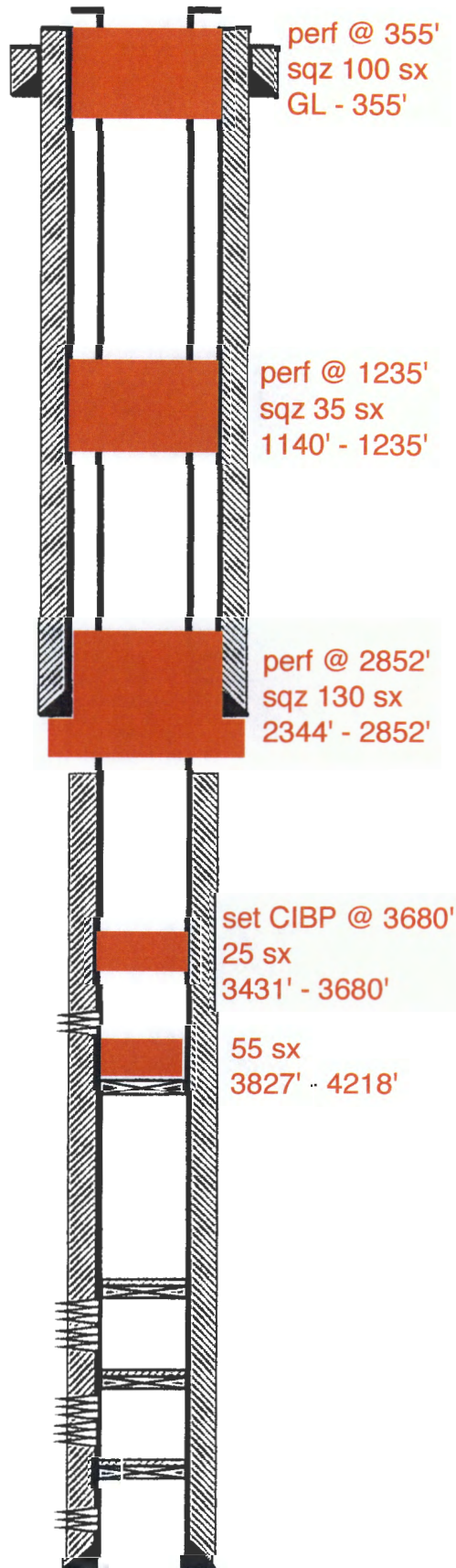
CIBP @ 6365' w/ 2 sx cmt
Drinkard perms @ 6412'-6490'

CIBP @ 6745' w/ 1.5 sx cmt

McKee perms @ 7430'- 7640'
5 1/2" 17# @ 7688'
w/1000 sx TOC @ 2940'

LEASE NAME	L. G. Warlick "C"
WELL #	7
API #	30-025-06598
COUNTY	Lea

O-15-21s-37e
spud 2-1-51
P&A 4-10-12



PBTD @ 4218'
TD @ 7690'

EXHIBIT G



WELL BORE INFO.

LEASE NAME	Northeast Drinkard Unit
WELL #	705
API #	30-025-06602
COUNTY	Lea

N-15-21s-37e
spud 7-27-50
P&A 10-7-11

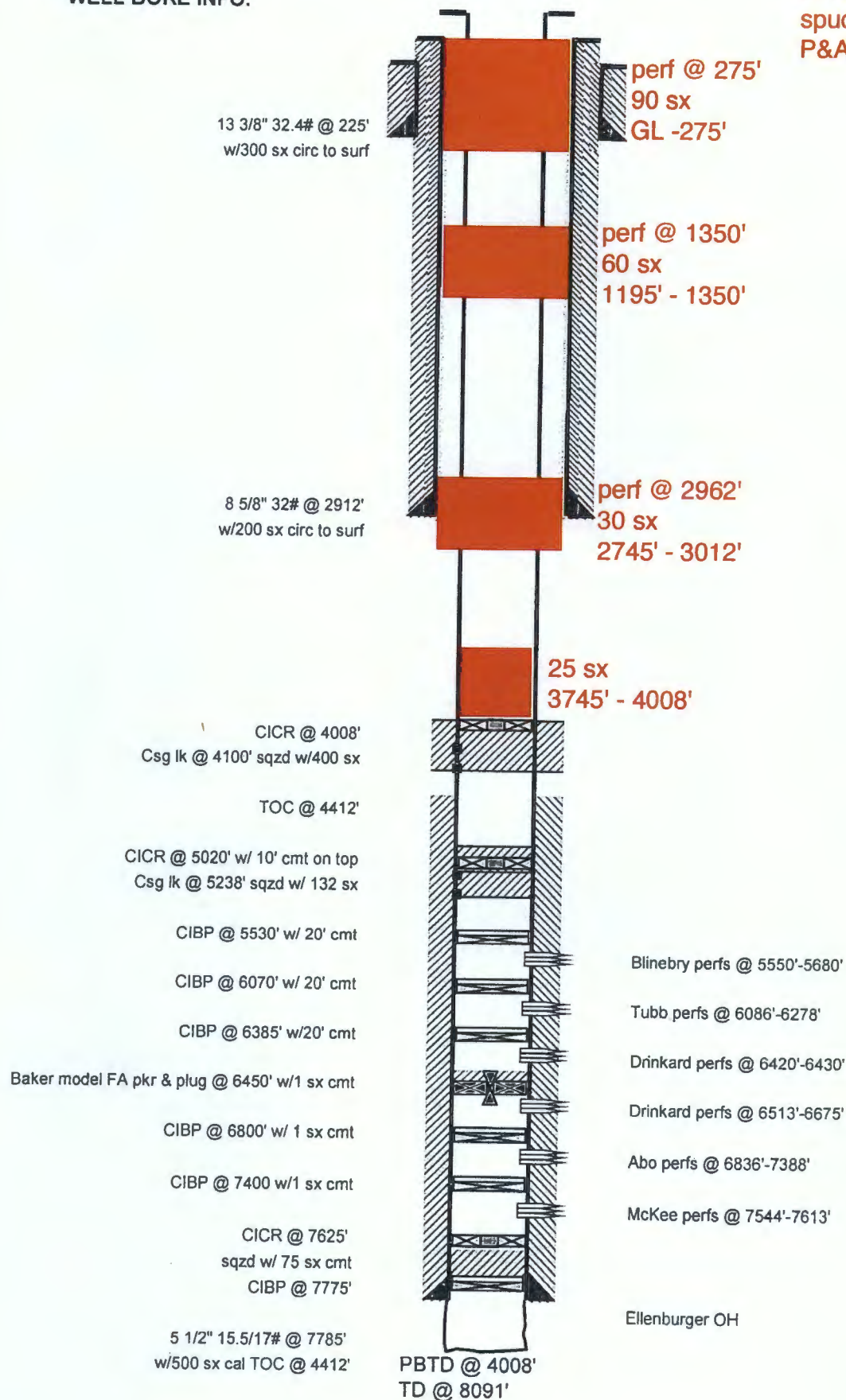


EXHIBIT G



WELL BORE INFO.

LEASE NAME	Argo (NEDU 712S)
WELL #	10
API #	30-025-06606
COUNTY	Lea

L-15-21s-37e
spud 7-19-51
P&A 11-1-11

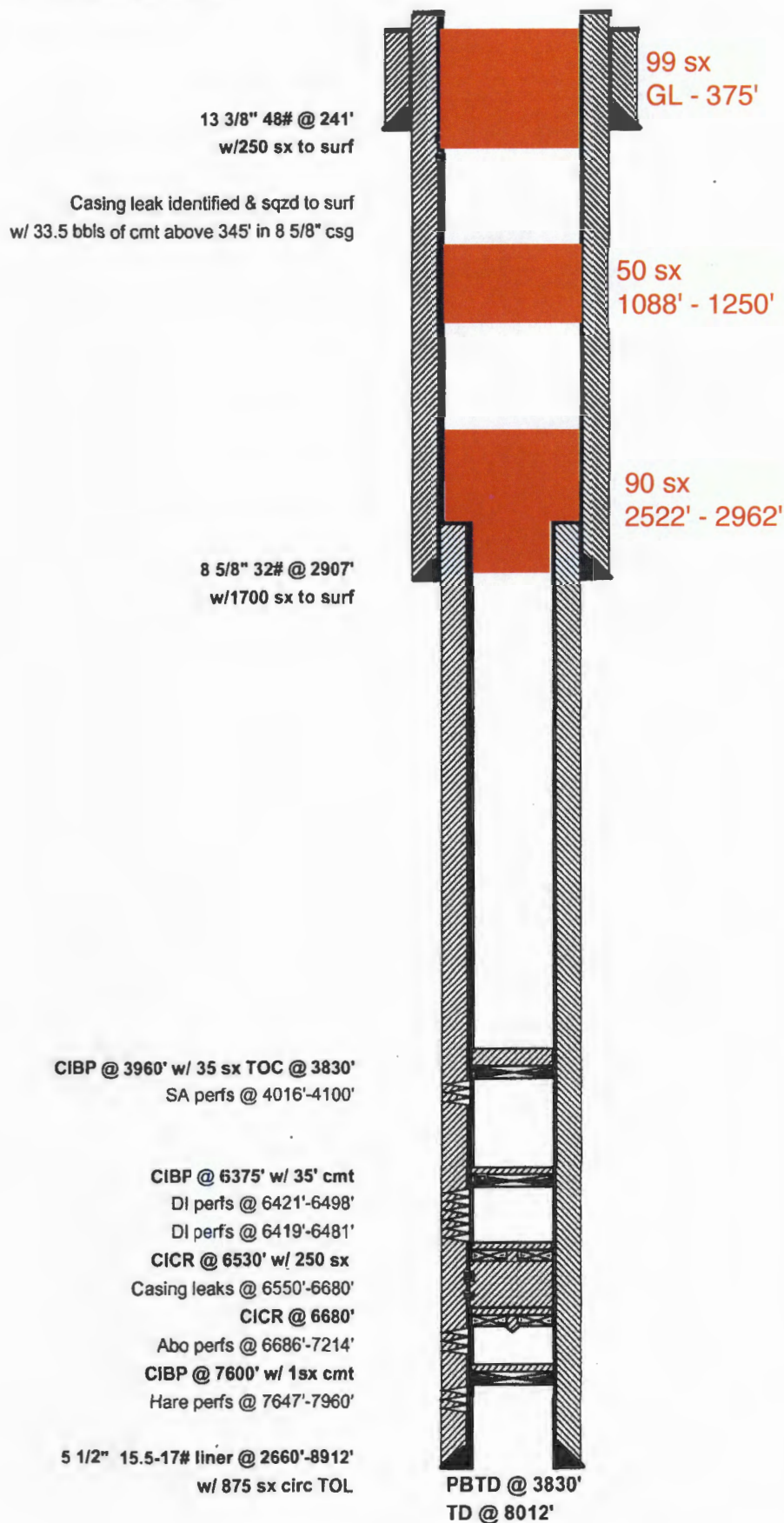


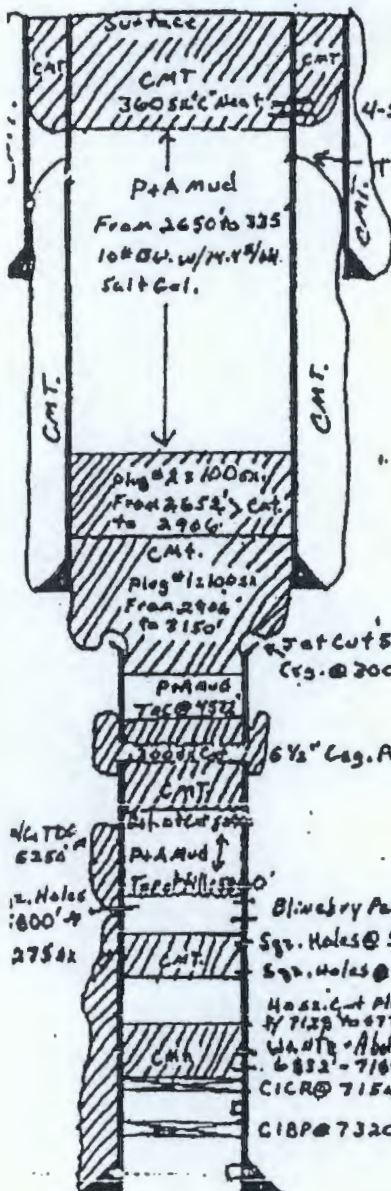
EXHIBIT G

WELL DATA SHEET

spud 1-26-52

LEASE Elliott A WELL NO. 3 FIELD Blinberry DATE 2-5-95LOCATION 980 FEET FROM North LINE AND 330 FEET FROM East LINESECTION 21 TOWNSHIP 21-S RANGE 37-E COUNTY Lea STATE N.M.API Well # 30-025-06718Lease Designation + Serial # NMLC032891A* WH Conn: NONE

GE: 3434'
 KDB to GE 13'
 DF to GE 12'
 4-Sq. Holes @ 335'



13 3/8\" OD 36 lbs.
 Surf. Pipe set @
260' w/ 300 SX
 cmt. Circ? yes

9 5/8\" OD 32-36 lbs.
574C Thd Gr H-404
J-55 Csg set at
2942' w/ 1850 SX
 Cmt. Circ? No
 TOC at None by
 TS

6 1/2\" Csg. Parted @ 4860'

Blinberry Parts 5804' to 5866'

Sq. Holes @ 5880' - 75 SX.

Sq. Holes @ 6087' - 50 SX.

5 1/2\" OD

GR N-80 + J-55,

16.5 + 17\" Csg set @

7841' w/ 395 SX

Cmt. Circ? No

TOC @ 5840 by TS

Date Completed

Initial Formation

FROM:

TO:

Initial Production

BOPD

BWPD

MCFPD

GOR

Completion Data:

Plug & Abandon. Start 2-1-95, End 2-5-95

2-2-95 - Spot 300 SX Class C' cmt. w/ 2% CaCl₂.

from 5096' up to 4572' - Plug Tagged.

2-3-95 - Cut 5 1/2\" Csg @ 3000' + Pull 5 1/2\"

2-4-95 - Spot 40 bbls P+A Mud from 4571' to 2000'.

Spot 100 SX Class C' cmt. w/ 2% CaCl₂ from 3150'

to 2902' - Spot 100 SX 'C' cmt. w/ 2% CaCl₂ from

2902' to 2652' (All Plugs Tagged)

Circ P+A Mud from 2650' to Surface w/ 208

bbls 10% gal B.L. w/ 14.4% Salt Gel.

Test 9 5/8\" Csg. to 500 psi - OK. - Perf 9 5/8\"

Csg. w/ 4 Sq Holes @ 335'.

2-5-95 - Cmt. dn 9 5/8\" Csg. Thru Sq. Holes

@ 335', Up 9 5/8\" X 13 3/8\" Annulus w/ 360 SX Class

'C' Neat Cmt. - leave 9 5/8\" Csg + 13 3/8\" X 9 5/8\"

Annulus Full of Cmt. from 335' to Surface

Subsequent Workover or Reconditioning:

Present Prod.

BOPD

BWPD

MCFPD

GOR

Date

Remarks or Additional Data:

EXHIBIT G

Well Name: **Eubank #7**Unit: **B**Lease Type: **Fee**Location: **450' FNL & 2306' FEL**Sec: **22**Township: **21S**Range: **37E**County: **Lea**State: **NM**API: **30-025-06733**

Formation: _____

B-22-21s-37e**spud 7-24-51****P&A 2-21-14**Surface CsgSize: **13 3/8"**Wt.&Thrd: **48#**

Grade: _____

Set @: **306'**Sxs cmt: **300**Circ: **Yes**TOC: **Surface**Hole Size: **17 1/4"**

perf @ 160' & 356'

sqz 210 sx GL - 356'

KB: **3438**

DF: _____

GL: **3424**

Spud Date: _____

Log Date: **2/26/1958**Intermediate CsgSize: **9 5/8"**Wt.&Thrd: **36#**

Grade: _____

Set @: **2799'**Sxs Cmt: **1400**

Circ: _____

TOC: **445'**Hole Size: **12 1/4"**

perf @ 1350'

sqz 80 sx 1050' - 1350'

perf @ 2850'

sqz 80 sx 2518' - 2850'

set CIBP @ 3870'

25 sx 3664' - 3870'

40 sx 4675' - 5000'

San Andres

3920-26' (16 holes)

3956-82' (26 holes)

3998-4026 (28 holes)

CIBP @ 5000

Paddock/Glorietta

5096-5108' (3 spf, 36 holes)

5166-80' (3 spf, 42 holes)

5234-60' & 80-5312' (2 spf, 116 holes)

PBD @ 5402' (WLM)

CIBP @ 5400' w/ 35' cmt

6392-6618' Drinkard

Production CsgSize: **7"**Wt.&Thrd: **23#**

Grade: _____

Set @: **7629'**Sxs Cmt: **625**

Circ: _____

TOC: **3400'**Hole Size: **8 3/4"**

CIBP @ 6750 w/2 sxs above perfs

6814-7046'

CIBP @ 7375' w/2 sxs cmt Above

perfs 7535-7584'

PBD 6740'

TD 7630'

EXHIBIT G

Northeast Drinkard Unit #804

30-025-06743

F-22-21s-37e
spud 11-16-51
P&A 2-19-04

Sec. 22, T-21S, R-37E

1650' FNL & 1650' FWL

Lea County, New Mexico

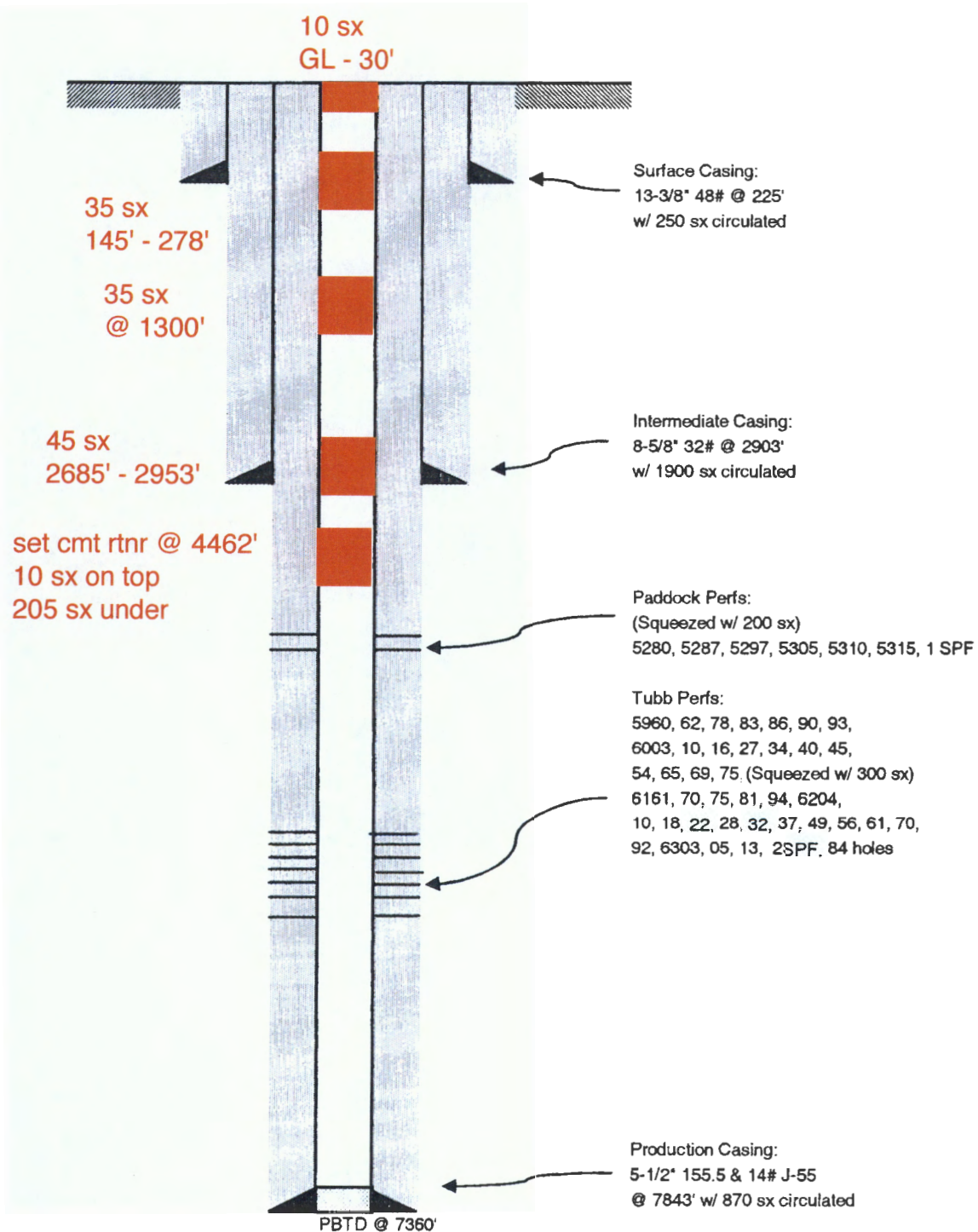


EXHIBIT G



from WFX-784

South Permian Basin Region

10520 West I-20 East

Odessa, TX 79765

(915) 498-9191

Lab Team Leader - Sheila Hernandez

(915) 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	0.54
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
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	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	0.38	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 H

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 (μ mhos):
 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:

Carbon Dioxide	(CO ₂):	80.00
Hydrogen Sulfide	(H ₂ S):	408.00

Oxygen (O₂):

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 Rd. 1298, Midland, TX 79765
 Office: (915) 563-0241 • Fax: (915) 563-0243

0710/200 P 04208

UNICHEM LAB

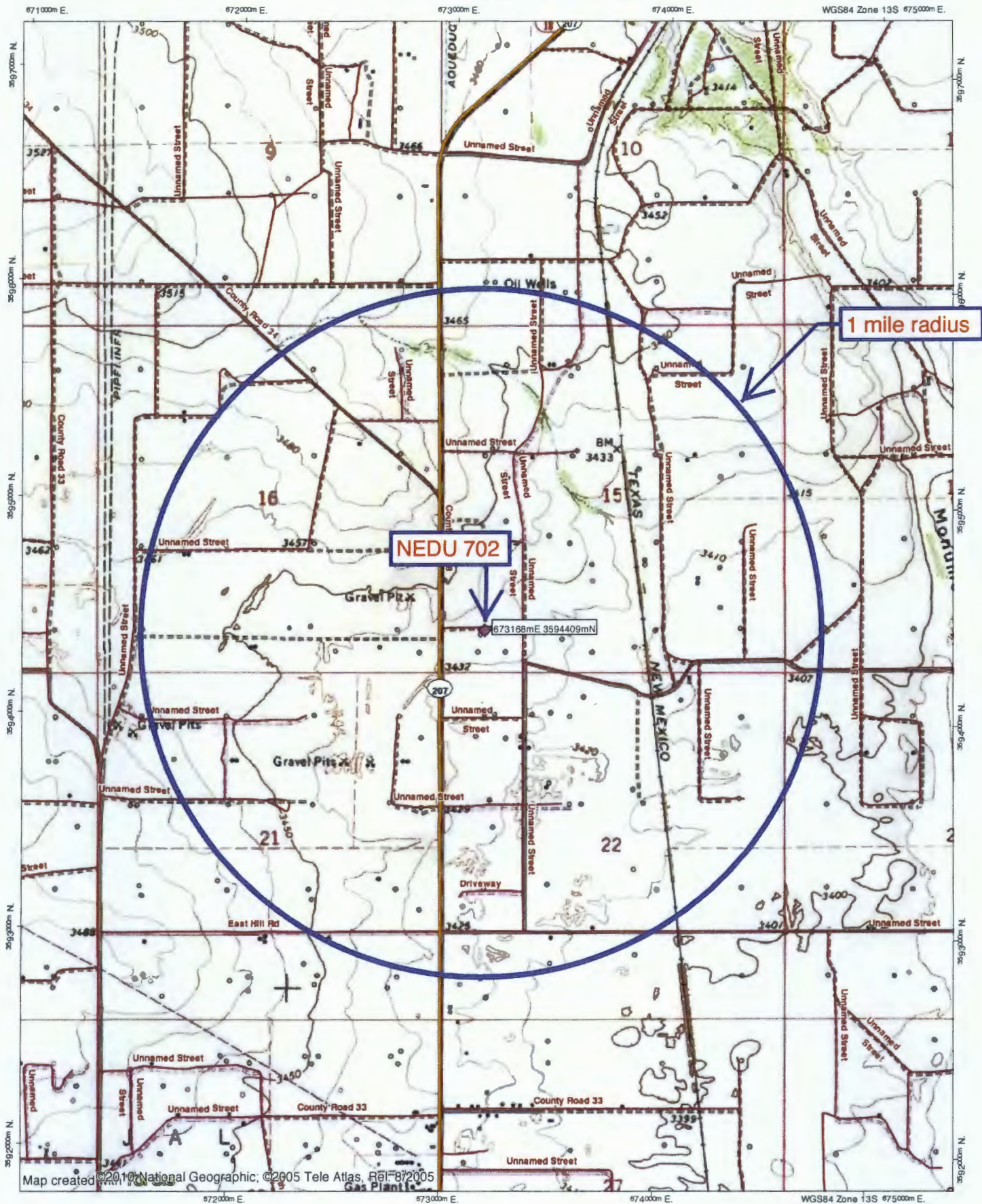
MAR 25 1999 15:26 915 563 0243

APR-05-1999 15:15

3942740

96%

EXHIBIT H



Map created ©2010 National Geographic; ©2005 Tele Atlas, Rel: 8/2005



EXHIBIT I

TN+MN
6.5°
10/01/17



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	Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
CP 00729 POD1	CP	LE		4	1	3	15	21S	37E	673259	3594711*	315	8015		
CP 01141 POD3	CP	LE					15	21S	37E	673520	3594272	377	40		
CP 01141 POD2	CP	LE					15	21S	37E	673543	3594250	407	40		
CP 01141 POD4	CP	LE					15	21S	37E	673556	3594239	423	45		
CP 01575 POD1	CP	LE		1	2	1	22	21S	37E	673544	3594204	428	40	35	5
CP 01575 POD2	CP	LE		2	2	1	22	21S	37E	673615	3594181	501	35	35	0
CP 00731 POD1	CP	LE		2	1	22	21S	37E	673577	3594015*	567	8130			
CP 00732 POD1	CP	LE		4	1	22	21S	37E	673584	3593613*	898	6633			
CP 00554	CP	LE		2	2	16	21S	37E	672744	3595610*	1273	80	70	10	
CP 01574 POD1	CP	LE		2	4	4	15	21S	37E	674559	3594598	1403	68	57	11
CP 01110 POD1	CP	LE		1	3	14	21S	37E	674586	3594648	1437	70			
CP 01110 POD2	CP	LE		1	3	14	21S	37E	674586	3594648	1437	70			
CP 01110 POD3	CP	LE		1	3	14	21S	37E	674586	3594648	1437	70			
CP 01110 POD4	CP	LE		1	3	14	21S	37E	674586	3594648	1437	20			
CP 01110 POD5	CP	LE		1	3	14	21S	37E	674586	3594648	1437	20			
CP 01185 POD3	CP	LE		1	3	14	21S	37E	674592	3594620	1439	70			
CP 01185 POD1	CP	LE		1	3	14	21S	37E	674598	3594689	1457	70			
CP 01185 POD4	CP	LE		1	3	14	21S	37E	674633	3594610	1478	70			
CP 01185 POD2	CP	LE		1	3	14	21S	37E	674623	3594674	1479	70			
CP 01574 POD2	CP	LE		1	3	3	14	21S	37E	674666	3594578	1507	68	57	11
CP 00235 POD3	CP	LE		1	1	1	23	21S	37E	674681	3594137*	1537	90	61	29
CP 00235 POD7	CP	LE		3	1	1	23	21S	37E	674681	3593937*	1584	85	65	20
CP 00733 POD1	CP	LE		3	3	22	21S	37E	673196	3592801*	1608	7864			
CP 00235 POD4	CP	LE		1	3	1	23	21S	37E	674688	3593735*	1662	100	80	20
CP 00235 POD6	CP	LE		2	1	1	23	21S	37E	674881	3594137*	1734	85	65	20
CP 00251 POD1	CP	LE		2	3	4	22	21S	37E	674099	3592915*	1760	103		
CP 00252 POD1	CP	LE		4	2	4	22	21S	37E	674493	3593125*	1845	106	78	28
CP 00235 POD2	CP	LE		1	2	1	23	21S	37E	675083	3594144*	1933	96	65	31

1 mile =
1610 m

R

CP 01001 POD1	CP	LE	2	3	4	27	21S	37E	674108	3591371	3180	72	40	32
CP 00965 POD2	CP	LE	1	3	4	28	21S	37E	672273	3591336	3200	135		

Average Depth to Water: **58 feet**
 Minimum Depth: **35 feet**
 Maximum Depth: **80 feet**

Record Count: 66

UTMAD83 Radius Search (in meters):

Easting (X): 673168

Northing (Y): 3594409

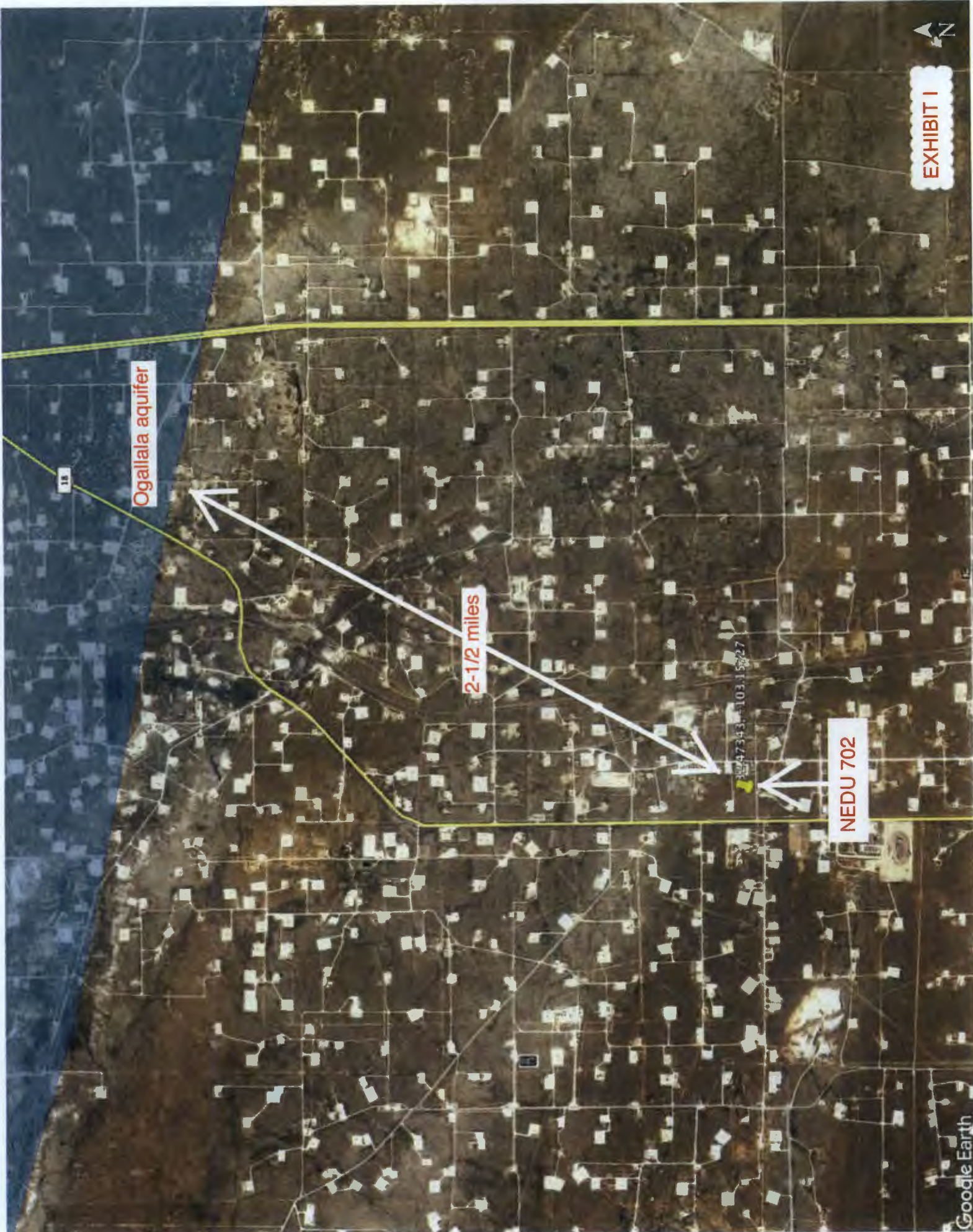
Radius: 3220

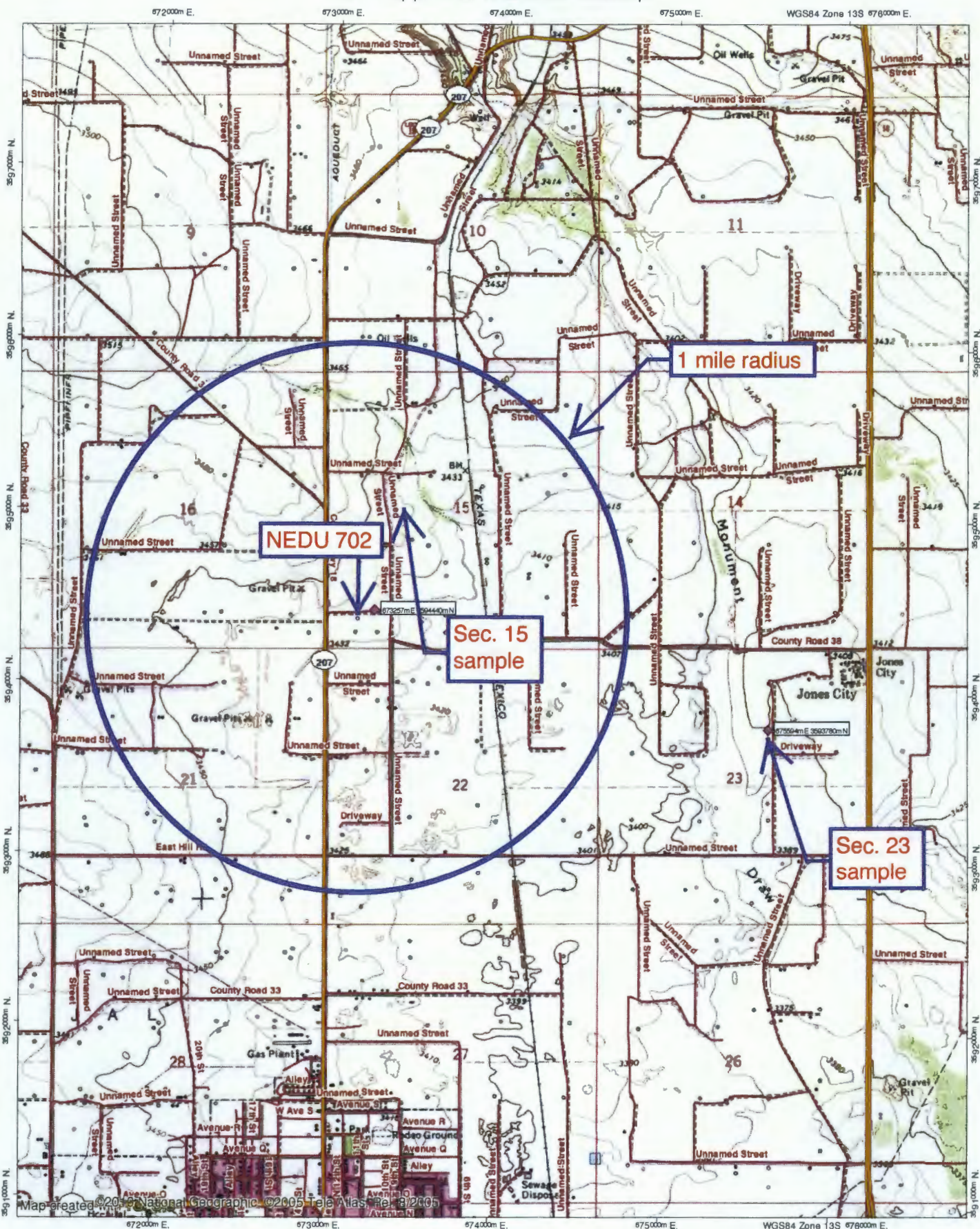
***UTM location was derived from PLSS - see Help**

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.

10/1/17 1:29 PM

WATER COLUMN/ AVERAGE DEPTH TO
WATER





Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1710483

Date Reported: 10/17/2017

CLIENT: Permits West

Project: Apache NEDU 702

Lab ID: 1710483-001

Client Sample ID: Decky Sec 15

Collection Date: 10/3/2017 2:17:00 PM

Received Date: 10/9/2017 2:43:00 PM

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						
Chloride	480	50	*	mg/L	100	10/10/2017 2:21:28 AM
EPA METHOD 1664B						
N-Hexane Extractable Material	ND	10.6		mg/L	1	10/11/2017 2:00:00 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						
Total Dissolved Solids	1400	20.0	*	mg/L	1	10/11/2017 5:50:00 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
	PQL Practical Quantitative Limit	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 ReportLab Order **1710483**Date Reported: **10/17/2017****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Permits West**Client Sample ID:** Section 23 Tank**Project:** Apache NEDU 702**Collection Date:** 10/3/2017 3:31:00 PM**Lab ID:** 1710483-002**Matrix:** AQUEOUS**Received Date:** 10/9/2017 2:43:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	310	50	*	mg/L	100	10/10/2017 2:46:18 AM
EPA METHOD 1664B						Analyst: dbf
N-Hexane Extractable Material	ND	10.2		mg/L	1	10/11/2017 2:00:00 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: KS
Total Dissolved Solids	1090	20.0	*	mg/L	1	10/11/2017 5:50:00 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
	PQL	Practical Quantitative Limit	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#: 1710483

17-Oct-17

Client: Permits West
Project: Apache NEDU 702

Sample ID	MB-34355	SampType:	MBLK	TestCode:	EPA Method 1664B					
Client ID:	PBW	Batch ID:	34355	RunNo:	46269					
Prep Date:	10/11/2017	Analysis Date:	10/11/2017	SeqNo:	1473638	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-34355	SampType:	LCS	TestCode:	EPA Method 1664B					
Client ID:	LCSW	Batch ID:	34355	RunNo:	46269					
Prep Date:	10/11/2017	Analysis Date:	10/11/2017	SeqNo:	1473639	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	36.8	10.0	40.00	0	92.0	78	114			

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
PQL Practical Quantitative Limit
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#: 1710483

17-Oct-17

Client: Permits West
Project: Apache NEDU 702

Sample ID	MB	SampType:	mbk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R46225	RunNo:	46225					
Prep Date:		Analysis Date:	10/9/2017	SeqNo:	1471804	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:	R46225	RunNo:	46225					
Prep Date:		Analysis Date:	10/9/2017	SeqNo:	1471805	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	92.9	90	110			

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
PQL Practical Quantitative Limit
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

Page 4 of 5

EXHIBIT I

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1710483

17-Oct-17

Client: Permits West
Project: Apache NEDU 702

Sample ID	MB-34332	SampType:	MBLK	TestCode:	SM2540C MOD: Total Dissolved Solids					
Client ID:	PBW	Batch ID:	34332	RunNo:	46275					
Prep Date:	10/10/2017	Analysis Date:	10/11/2017	SeqNo:	1473730	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-34332	SampType:	LCS	TestCode:	SM2540C MOD: Total Dissolved Solids					
Client ID:	LCSW	Batch ID:	34332	RunNo:	46275					
Prep Date:	10/10/2017	Analysis Date:	10/11/2017	SeqNo:	1473731	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1030	20.0	1000	0	103	80	120			

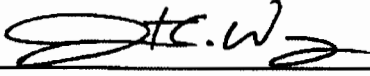
Qualifiers:

* 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
PQL Practical Quantitative Limit
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

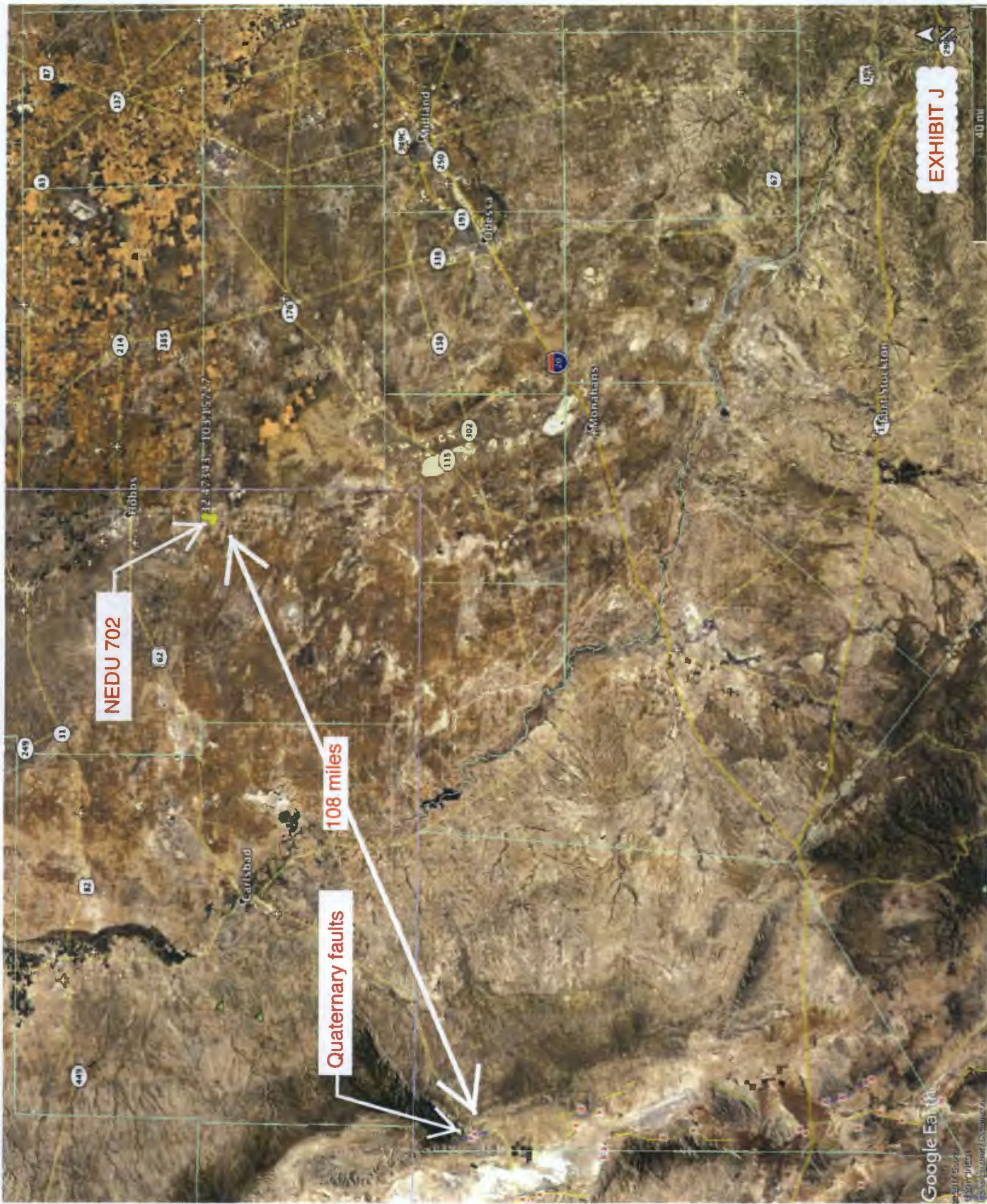
Form C-108
Affirmative Statement
Apache Corporation
Northeast Drinkard Unit
Section 15, T-21-S, R-37-E
Lea County, New Mexico

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

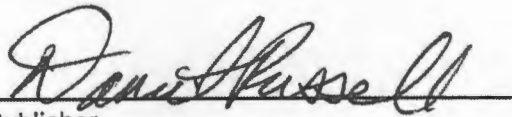


Affidavit of Publication

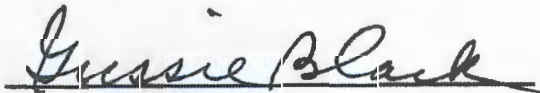
STATE OF NEW MEXICO
COUNTY OF LEA

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).

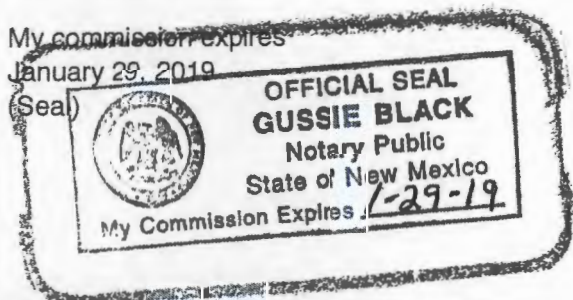
Beginning with the issue dated
October 04, 2017
and ending with the issue dated
October 04, 2017.


Publisher

Sworn and subscribed to before me this
4th day of October 2017.


Business Manager

My commission expires
January 29, 2019
(Seal)



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 October 4, 2017

Apache Corporation is applying to convert the Northeast Drinkard Unit 702 well to a water injection well. The well is at 660 FSL & 660 FWL, 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 = 1,375 psi) from 5,702' to 6,636'. 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. #32129

02108485

00200515

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

EXHIBIT K

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37 Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

October 23, 2017

Millard Deck Estate 4193
1235 North Loop West, Suite 205
Houston TX 77008

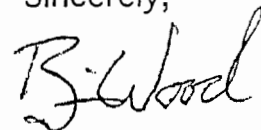
Apache Corporation is planning (see attached application) to deepen and convert its Northeast Drinkard Unit 702 oil well to a water injection well. As required by NM Oil Conservation Division (NMOCD) Rules, I am notifying you of the following proposed water injection well. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Northeast Drinkard Unit 702 (fee lease) TD: from 6646' to 6736
Proposed Injection Zones: Blinebry, Tubb, & Drinkard from 5702' to 6636'
Where: 660' FSL & 660' FWL Sec. 15, T. 21 S., R. 37 E., Lea County, NM
Approximate Location: 3 air miles NNE 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. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr. Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,



Brian Wood

7017 1450 0000 8558 9176

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☐ Return Receipt (electronic) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Required \$
☐ Adult Signature Restricted Delivery \$
Postage \$
Total Postage and Fees \$
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City, State, ZIP+4®

OCT 23 2017
Postmark Here
87552-9998

Millard Deck Estate 4193
1235 North Loop West, Suite 235
Houston TX 77008
Apache NEDU 702

EXHIBIT L

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EXHIBIT L

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
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. Article Addressed to: Millard Deck Estate #193 1235 North Loop West, Suite 235 Houston TX 77008 Apache NEDU 702 9590 9402 2353 6225 9369 41 Article Number (Transfer from service label) 7017 1450 0000 8558 9176		A. Signature X <i>A. Burt</i> ☒ Agent ☐ Addressee B. Received by (Printed Name) <i>Alyssa Demps</i> C. Date of Delivery <i>10/26/17</i> D. Is delivery address different from item 1? ☐ Yes ☒ No If YES, enter delivery address below: 3. Service Type ☐ Adult Signature ☐ Adult Signature Restricted Delivery ☐ Certified Mail® ☐ Certified Mail Restricted Delivery ☐ Collect on Delivery ☐ Collect on Delivery Restricted Delivery ☐ Priority Mail Express® ☐ Registered Mail™ ☐ Registered Mail Restricted Delivery ☐ Return Receipt for Merchandise ☐ Signature Confirmation™ ☐ Signature Confirmation Restricted Delivery	

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

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
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. Article Addressed to: NM State Land Office PO Box 1148 Santa Fe NM 87504 Apache NEDU 702 9590 9402 2353 6225 9369 10 Article Number (Transfer from service label) 7017 1450 0000 8558 9206		A. Signature X <i>[Signature]</i> ☐ Agent ☐ Addressee B. Received by (Printed Name) C. Date of Delivery D. Is delivery address different from item 1? ☐ Yes ☒ No If YES, enter delivery address below: 3. Service Type ☐ Adult Signature ☐ Adult Signature Restricted Delivery ☐ Certified Mail® ☐ Certified Mail Restricted Delivery ☐ Collect on Delivery ☐ Collect on Delivery Restricted Delivery ☐ 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

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
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. Article Addressed to: BLM 620 E. Greene Carlsbad NM 88220 Apache NEDU 702 9590 9402 2353 6225 9370 09 Article Number (Transfer from service label) 7017 1450 0000 8558 9145		A. Signature X <i>[Signature]</i> ☐ Agent ☐ Addressee B. Received by (Printed Name) C. Date of Delivery <i>10/26/17</i> D. Is delivery address different from item 1? ☐ Yes ☒ No If YES, enter delivery address below: 3. Service Type ☐ Adult Signature ☐ Adult Signature Restricted Delivery ☐ Certified Mail® ☐ Certified Mail Restricted Delivery ☐ Collect on Delivery ☐ Collect on Delivery Restricted Delivery ☐ Priority Mail Express® ☐ Registered Mail™ ☐ Registered Mail Restricted Delivery ☐ Return Receipt for Merchandise ☐ Signature Confirmation™ ☐ Signature Confirmation Restricted Delivery	

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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. Article Addressed to: Occidental Permian Ltd. PO Box 4294 Houston TX 77210 Apache NEDU 702 9590 9402 2353 6225 9365 03 Article Number (Transfer from service label) 7017 1450 0000 8558 9213		A. Signature X <i>[Signature]</i> ☐ Agent ☐ Addressee B. Received by (Printed Name) C. Date of Delivery D. Is delivery address different from item 1? ☐ Yes ☒ No If YES, enter delivery address below: 3. Service Type ☐ Adult Signature ☐ Adult Signature Restricted Delivery ☐ Certified Mail® ☐ Certified Mail Restricted Delivery ☐ Collect on Delivery ☐ Collect on Delivery Restricted Delivery ☐ Priority Mail Express® ☐ Registered Mail™ ☐ Registered Mail Restricted Delivery ☐ Return Receipt for Merchandise ☐ Signature Confirmation™ ☐ Signature Confirmation Restricted Delivery	

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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. Article Addressed to: Chevron USA Inc. PO Box 1635 Houston TX 77251 Apache NEDU 702 9590 9402 2353 6225 9369 89 Article Number (Transfer from service label) 7017 1450 0000 8558 9169		A. Signature X <i>[Signature]</i> ☐ Agent ☐ Addressee B. Received by (Printed Name) C. Date of Delivery D. Is delivery address different from item 1? ☐ Yes ☒ No If YES, enter delivery address below: 3. Service Type ☐ Adult Signature ☐ Adult Signature Restricted Delivery ☐ Certified Mail® ☐ Certified Mail Restricted Delivery ☐ Collect on Delivery ☐ Collect on Delivery Restricted Delivery ☐ Priority Mail Express® ☐ Registered Mail™ ☐ Registered Mail Restricted Delivery ☐ Return Receipt for Merchandise ☐ Signature Confirmation™ ☐ Signature Confirmation Restricted Delivery	

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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. Article Addressed to: Oxy USA WTP LP PO Box 4294 Houston TX 77210 Apache NEDU 702 9590 9402 2353 6225 9368 97 Article Number (Transfer from service label) 7017 1450 0000 8558 9220		A. Signature X <i>[Signature]</i> ☐ Agent ☐ Addressee B. Received by (Printed Name) C. Date of Delivery D. Is delivery address different from item 1? ☐ Yes ☒ No If YES, enter delivery address below: 3. Service Type ☐ Adult Signature ☐ Adult Signature Restricted Delivery ☐ Certified Mail® ☐ Certified Mail Restricted Delivery ☐ Collect on Delivery ☐ Collect on Delivery Restricted Delivery ☐ Priority Mail Express® ☐ Registered Mail™ ☐ Registered Mail Restricted Delivery ☐ Return Receipt for Merchandise ☐ Signature Confirmation™ ☐ Signature Confirmation Restricted Delivery	

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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. Article Addressed to: Elliott Hall Co. UT LP PO Box 1231 Ogden UT 84402 Apache NEDU 702 9590 9402 2353 6225 9369 34 Article Number (Transfer from service label) 7017 1450 0000 8558 9183		A. Signature X <i>[Signature]</i> ☐ Agent ☐ Addressee B. Received by (Printed Name) C. Date of Delivery <i>10/27/17</i> D. Is delivery address different from item 1? ☐ Yes ☒ No If YES, enter delivery address below: 3. Service Type ☐ Adult Signature ☐ Adult Signature Restricted Delivery ☐ Certified Mail® ☐ Certified Mail Restricted Delivery ☐ Collect on Delivery ☐ Collect on Delivery Restricted Delivery ☐ Priority Mail Express® ☐ Registered Mail™ ☐ Registered Mail Restricted Delivery ☐ Return Receipt for Merchandise ☐ Signature Confirmation™ ☐ Signature Confirmation Restricted Delivery	

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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. Article Addressed to: Stephens & Johnson Op Co PO Box 2249 Wichita Falls TX 76307 Apache NEDU 702 9590 9402 2353 6225 9370 78 Article Number (Transfer from service label) 7017 1450 0000 8558 9237		A. Signature X <i>[Signature]</i> ☐ Agent ☐ Addressee B. Received by (Printed Name) C. Date of Delivery D. Is delivery address different from item 1? ☐ Yes ☒ No If YES, enter delivery address below: 3. Service Type ☐ Adult Signature ☐ Adult Signature Restricted Delivery ☐ Certified Mail® ☐ Certified Mail Restricted Delivery ☐ Collect on Delivery ☐ Collect on Delivery Restricted Delivery ☐ Priority Mail Express® ☐ Registered Mail™ ☐ Registered Mail Restricted Delivery ☐ Return Receipt for Merchandise ☐ Signature Confirmation™ ☐ Signature Confirmation Restricted Delivery	

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EXHIBIT L



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	Code	Sub-basin	Q Q Q Q				Sec	Tws	Rng	X	Y	DepthWell	DepthWater	Water Column
			64	16	4	4								
<u>CP 00235 POD1</u>	CP	LE	2	2	1	23	21S	37E	675283	3594144*		81		
<u>CP 00235 POD10</u>	CP	LE	1	3	2	23	21S	37E	675492	3593749*		92	60	32
<u>CP 00235 POD11</u>	CP	LE	1	3	2	23	21S	37E	675492	3593749*		97	60	37
<u>CP 00235 POD2</u>	CP	LE	1	2	1	23	21S	37E	675083	3594144*		96	65	31
<u>CP 00235 POD3</u>	CP	LE	1	1	1	23	21S	37E	674681	3594137*		90	61	29
<u>CP 00235 POD4</u>	CP	LE	1	3	1	23	21S	37E	674688	3593735*		100	80	20
<u>CP 00235 POD5</u>	CP	LE	1	4	1	23	21S	37E	675090	3593742*		90	70	20
<u>CP 00235 POD6</u>	CP	LE	2	1	1	23	21S	37E	674881	3594137*		85	65	20
<u>CP 00235 POD7</u>	CP	LE	3	1	1	23	21S	37E	674681	3593937*		85	65	20
<u>CP 00235 POD8</u>	CP	LE	3	1	2	23	21S	37E	675485	3593952*		94	58	36
<u>CP 00235 POD9</u>	CP	LE	3	4	1	23	21S	37E	675090	3593542*		94	58	36
<u>CP 00236 POD1</u>	CP	LE	3	1	2	23	21S	37E	675485	3593952*		83		
<u>CP 00237 POD1</u>	CP	LE	1	3	2	23	21S	37E	675492	3593749*		84		
<u>CP 00238 POD1</u>	CP	LE	3	3	2	23	21S	37E	675492	3593549*		81		
<u>CP 00239 POD1</u>	CP	LE	1	1	2	23	21S	37E	675485	3594152*		89	61	28
<u>CP 00240 POD1</u>	CP	LE	4	2	1	23	21S	37E	675283	3593944*				
<u>CP 00241 POD1</u>	CP	LE	4	2	1	23	21S	37E	675283	3593944*		79		
<u>CP 00251 POD1</u>	CP	LE	2	3	4	22	21S	37E	674099	3592915*		103		
<u>CP 00252 POD1</u>	CP	LE	4	2	4	22	21S	37E	674493	3593125*		106	78	28

<u>CP 00554</u>	CP	LE	2	2	16	21S	37E	672744		3595610*	80	70	10	
<u>CP 00562</u>	CP	LE	1	2	2	23	21S	37E	675887		3594159*	136	65	71
<u>CP 00700</u>	CP	LE		2	23	21S	37E	675794		3593851*	75	65	10	
<u>CP 00729 POD1</u>	CP	LE	4	1	3	15	21S	37E	673259		3594711*	8015		
<u>CP 00731 POD1</u>	CP	LE	2	1	22	21S	37E	673577		3594015*	8130			
<u>CP 00732 POD1</u>	CP	LE	4	1	22	21S	37E	673584		3593613*	6633			
<u>CP 00733 POD1</u>	CP	LE	3	3	22	21S	37E	673196		3592801*	7864			
<u>CP 00881</u>	CP	LE	4	4	22	21S	37E	674402		3592824*	95	53	42	
<u>CP 01110 POD1</u>	CP	LE	1	3	14	21S	37E	674586		3594648	70			
<u>CP 01110 POD2</u>	CP	LE	1	3	14	21S	37E	674586		3594648	70			
<u>CP 01110 POD3</u>	CP	LE	1	3	14	21S	37E	674586		3594648	70			
<u>CP 01110 POD4</u>	CP	LE	1	3	14	21S	37E	674586		3594648	20			
<u>CP 01110 POD5</u>	CP	LE	1	3	14	21S	37E	674586		3594648	20			
<u>CP 01141 POD2</u>	CP	LE			15	21S	37E	673543		3594250	40			
<u>CP 01141 POD3</u>	CP	LE			15	21S	37E	673520		3594272	40			
<u>CP 01141 POD4</u>	CP	LE			15	21S	37E	673556		3594239	45			
<u>CP 01185 POD1</u>	CP	LE	1	3	14	21S	37E	674598		3594689	70			
<u>CP 01185 POD2</u>	CP	LE	1	3	14	21S	37E	674623		3594674	70			
<u>CP 01185 POD3</u>	CP	LE	1	3	14	21S	37E	674592		3594620	70			
<u>CP 01185 POD4</u>	CP	LE	1	3	14	21S	37E	674633		3594610	70			
<u>CP 01222 POD3</u>	CP	LE	2	4	4	23	21S	37E	676036		3592871	60	48	12
<u>CP 01574 POD1</u>	CP	LE	2	4	4	15	21S	37E	674559		3594598	68	57	11
<u>CP 01574 POD2</u>	CP	LE	1	3	3	14	21S	37E	674666		3594578	68	57	11
<u>CP 01575 POD1</u>	CP	LE	1	2	1	22	21S	37E	673544		3594204	40	35	5
<u>CP 01575 POD2</u>	CP	LE	2	2	1	22	21S	37E	673615		3594181	35	35	0

Average Depth to Water:

60 feet

Minimum Depth:

35 feet

Maximum Depth: 80 feet

Record Count: 44

PLSS Search:

Section(s): 14-16, 21-23 Township: 21S Range: 37E

***UTM location was derived from PLSS - see Help**

The data is furnished by the NMOSF/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.

11/20/17 10:29 AM

WATER COLUMN/ AVERAGE DEPTH TO
WATER

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

ORDER TYPE: WFX / PMX / SWD Number: _____ Order Date: _____ Legacy Permits/Orders: R-8541-

Well No. 702 Well Name(s): NED 4

8-08-1947

INTI 103

API: 30-0 25-09911 Spud Date: _____ New or Old: _____ (UIC Class II Primacy 03/07/1982)

Footages 660FSL 660FWL Lot _____ or Unit M Sec 15 Tsp 215 Rge 37E County Lea

General Location: 2 miles N/E4NICE Pool: E4NICE, 13Li-TA-M Pool No.: 2250

BLM 100K Map: JA1 Operator: Apache Corp OGRID: 873 Contact: Brian Wood, Agent

COMPLIANCE RULE 5.9: Total Wells: 2413 Inactive: 1 Fincl Assur: OK Compl. Order?: NA IS 5.9 OK? y Date: 11-22-2017

WELL FILE REVIEWED ☐ Current Status: Active

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

Planned Rehab Work to Well: _____

Well Construction Details		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ___ or Existing ___ Surface	<u>17 1/2" / 13 3/4"</u>	<u>316'</u>	Stage Tool	<u>250</u>	<u>Surfucal / Visgal</u>
Planned ___ or Existing ___ Interm/Prod	<u>11" / 8 5/8"</u>	<u>2835'</u>		<u>800</u>	<u>Surfucal / Visgal</u>
Planned ___ or Existing ___ Interm/Prod	<u>7 7/8" / 5 1/2"</u>	<u>6525'</u>		<u>500</u>	<u>3650 / CALC</u>
Planned ___ or Existing ___ Prod (Liner)	<u>4 3/4" / 4 1/2"</u>				
Planned ___ or Existing ___ Liner					
Planned ___ or Existing ___ OH / PERF	<u>5702'</u>		Inj Length		

Injection Lithostratigraphic Units	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.		<u>Permian</u>	<u>5118</u>
Confining Unit: Litho. Struc. Por.		<u>Br-SWB Th</u>	<u>6005</u>
Proposed Inj Interval TOP:			
Proposed Inj Interval BOTTOM:			
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.			

Completion/Operation Details:	
Drilled TD	<u>6646</u> PBTD _____
NEW TD	<u>6736</u> NEW PBTD <u>6646</u>
NEW Open Hole	☒ or NEW Perfs ☐
Tubing Size	<u>2 7/8</u> in. Inter Coated? <u>y</u>
Proposed Packer Depth	<u>5652</u> ft
Min. Packer Depth	_____ (100-ft limit)
Proposed Max. Surface Press.	<u>1375</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: 1320 B: 2446 NW: Cliff House fm _____

FRESH WATER: Aquifer Quaternary Max Depth 8' HYDRO AFFIRM STATEMENT By Qualified Person ☒

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

Disposal Fluid: Formation Source(s) _____ Analysis? _____ On Lease ☒ Operator Only ☐ or Commercial ☐

Disposal Int: Inject Rate (Avg/Max BWPD): 1.5K/2K Protectable Waters? NA 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? 34 Well List? _____ Total No. Wells Penetrating Interval: 44 Horizontals? _____

Penetrating Wells: No. Active Wells 34 Num Repairs? _____ on which well(s)? _____ Diagrams? _____

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

NOTICE: Newspaper Date October 2017 Mineral Owner Union, BLM Surface Owner Union & BLM N. Date October 26, 2017

RULE 26.7(A): Identified Tracts? y Affected Persons: Chervon, Elliott Hall, Elliott Industries N. Date October 26, 2017

Order Conditions: Issues: Cement Liner to Surface

Add Order Cond: _____