Initial

Application

Part I

Received 11/1/21

This application is placed in file for record. It MAY or MAY NOT have been reviewed to be determined Administratively Complete

H935Q-211030-C-1080

11/1/21

pBL2130553631

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

FORM C-108 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE: XXX Secondary Recovery Pressure Maintenance Disposal Storage Application qualifies for administrative approval? XXXYes 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. WFX-1044
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 604
VII.	Attach data on the proposed operation, including: 30-025-06591
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, 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. 29, 2021
i.	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.

PAGE 1

30-025-06591

I. Purpose is to convert an oil well to a water injection well. The well will inject (6420' - 6650') into the 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) 818-1062

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 B0-1481-0018, aka, "State S"

Lease Size: 2,508.19 acres (see Exhibit A for C-102 and map)

Closest Lease Line: 330'

Lease Area: S2NW4 Section 15, T. 21 S., R. 37 E.

Unit Size: 4,938 acres Closest Unit Line: 990'

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 1951 at 334' in a 17.5" hole and cemented to GL with 350 sacks. Cement circulated.



30-025-06591

Intermediate casing (8.625", 24# & 32#, J-55) was set at 2835' in a 12.25" hole and cemented to GL with 500 sacks.

Production casing (5.5", 15.5#, J-55) was set at 8042' in a 7.875" hole and cemented with 400 sacks to 4550' (CBL). Well was completed open hole from 8022' to 8193' in the Ellenburger.

Well was plugged back (CIBP at 7990') and completed in the Blinebry (5793'-5908') in 1963. Well was plugged back (CIBP at 6800'+135' cement) and completed in the Blinebry, Tubb, and Drinkard (5746'-6673') in 1989. A squeeze job was conducted in 2002. CBL found TOC at 2920'.

A 4.5", 11.6#, J-55 flush joint liner will be run to 6750' and cemented to GL. Liner will be perforated from 6420' to 6650' in the Tubb and Drinkard. 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 ≈6390'. (Top perforation will be 6420'.)
- A. (4) A lock set injection packer will be set at 6390' (≈30' above the top perforation of 6420').
- B. (1) Injection zone will be the Tubb Drinkard interval. The interval is part of the Eunice; Blinebry-Tubb-Drinkard, North Pool. Estimated fracture gradient is ≈0.56 psi per foot.
- B. (2) Injection interval will be 6420' to 6650'. The well is cased.
- B. (3) Well was originally drilled as an Ellenburger oil well.
- B. (4) Will perforate from 6420' to 6650'.



PAGE 3

30-025-06591

- B. (5) Next higher oil or gas zone within the area of review is the Blinebry at 5616' 6091'. Injection interval will be 6420' 6650'. Blinebry is unitized with the Tubb and Drinkard. Next lower oil or gas zone within the area of review is the Abo. Its top is at 6662'.
- 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. een 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 62 existing wells (39 producers \pm 12 injectors \pm 8 P&A \pm 2 SWD \pm 1 BSW) within a half-mile radius, regardless of depth. Exhibit C shows all 841 existing wells (594 oil or gas producing wells \pm 126 injection or disposal wells \pm 67 P & A wells \pm 3 waterflood supply wells \pm 1 brine supply well \pm 50 fresh water wells) within a two-mile radius.

Exhibit D shows and tabulates 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.

- VI. Sixty-two existing wells are within a half-mile. Fifty-three of the wells penetrated the Tubb (top = 6092'). The 53 penetrators include 35 oil or gas wells, 9 water injectors, 7 P&A wells, and 2 SWD wells. Diagrams illustrating the 7 P & A penetrators are in Appendix G.
- 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.



30-025-06591

- 3. Average injection pressure will be ≈1000 psi. Standard maximum injection pressure would be 1284 psi (= 0.2 psi/foot x 6420' (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 ≈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.

	Injection Pump Discharge	San Andres 919-S
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
рН	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/	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
		0

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



30-025-06591

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 ≈ 1 ° to ≈ 2 °. 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 Southwest Royalties' Central Drinkard Unit).

Notable depths are:

Quaternary = 0' Rustler = 1290' Yates = 2590' Queen = 3421'Penrose = 3680'Gravburg = 3749'San Andres = 3932'Glorieta = 5132'Paddock = 5196'Blinebry = 5616' Tubb = 6092'injection interval = 6420' - 6650' Drinkard = 6422'Abo = 6662'McKee = 7670'Ellenburger = 8040' Total Depth = 8193'

State Engineer records (Exhibit I) show four water wells are ≥6633' deep and within 0.71 to 2.00 mile radii. 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



PAGE 6

30-025-06591

water well within 2-miles is 136'. NEDU 604 is 2 miles south of the Ogallala aquifer and 9 miles northeast of the Capitan Reef. 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. via 8 SWD wells.

- IX. The well will be stimulated with acid to clean out scale or fill.
- X. An electric log (SP-resistivity) log is on file with NMOCD.
- XI. Water sample analyses from two water wells are in Exhibit J. Neither well is in the State Engineer's records. One is 1.15 miles northwest in Section 9. The other is 1.75 miles southwest in Section 21. They were the only active water wells within 2 miles that could be found and during October 6 and 21, 2021 field inspections. Two other water wells were found, but both were dry. One was 1.32 miles NNE in Section 10. It was equipped with an electric pump, but the power had been disconnected. The other is a defunct windmill 1.27 miles ENE in Section 14. Both may have produced from the red beds, 100' to 1000' deep.
- XII. Apache (Exhibit K) 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. There are 116 Tubb and 144 Drinkard active 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, -971, and -975.
- XIII. A legal ad (see Exhibit L) was published on September 23, 2021. Notice (this application) has been sent (Exhibit L) to the surface owner (NMSLO), lessees of record (Chevron USA, Occidental Permian, Oxy USA WTP, XTO Holdings), government lessors (BLM, NMSLO), operating rights holders (ConocoPhillips,



APACHE CORPORATION
NORTHEAST DRINKARD UNIT 604
2310' FNL & 990' FWL
SEC. 15, T. 21 S., R. 37 E., LEA COUNTY, NM

PAGE 7

30-025-06591

Penroc, Chevron USA Production, OXY USA WTP, & John Hendrix Corp.) all well operators (Chevron USA, Empire NM, Key, Southwest Royalties, XTO) within the $\frac{1}{2}$ mile area of review.



NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACRESCEDE TACHDA NOITACIDED ESCATION AND ACRESCED TO THE MEXICON OF T



All distances must be from the outer boundaries of the Section. ecse SHELL WESTERN E&P INC. NORTHEAST DRINKARD UNIT 604 Unit Letter Section Townsmip Range 215 37E LEA Actual Footage Location of Weil: 2310 North feet from the Ground Level Elev. Producing Formation FOOL NORTH EUNICE BLINEBRY-TUBB 3446 DRINKARD OIL & GAS 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and rovalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? No If answer is "yes," type of consolidation UNITIZATION If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)_ No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit. eliminating such interests. has been approved by the Commis-CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Position SUPV. REG. Company SHELL WESTERN E&P INC. DEC 1 1987 I hereby certify that the weil location shown on this plat was platted from field under my supervision, and that the same is true and correct to the best of my knowledge and belief. Date Surveyed Redistares Professional Engineer mc/or Land Surreyor Certificate No.

2000

330

560

OPERATOR: APACHE CORPORATION WELL NAME & NUMBER: NORTHEAST DRINKARD UNIT 604 WELL LOCATION: 2310' FNL & 990' FWL 15 21 S 37 E FOOTAGE LOCATION UNIT LETTER **SECTION** TOWNSHIP **RANGE WELLBORE SCHEMATIC** WELL CONSTRUCTION DATA "AS IS" Surface Casing (not to scale) Hole Size: ______ 17.5" Casing Size: _____ 13.375" 6659 Cemented with: _____sx. or _____ (8) 2-3/8" production tbg Top of Cement: SURFACE Method Determined: CIRC. 8.625" 24 & 32# in Intermediate Casing 12.25" hole @ 2835' TOC (500 sx) = GLHole Size: 12.25" Casing Size: 8.625" TOC 2920' Cemented with: 500 sx. saz 200 sx perfs @ 3250' & 3950' Top of Cement: SURFACE Method Determined: ESTIMATED 5.5" 15.5# in **Production Casing** 7.875" hole @ 8042' TOC (400 sx) = 4550'Hole Size: 7.875" Casing Size: 5.5" Cemented with: 400 sx. Blinebry, Tubb, Drinkard perfs 5746' - 6675' Top of Cement: _____4550 ' Method Determined: CBL CIBP @ 6800' + 135' cmt Total Depth: 8193' CIBP @ 7990' Injection Interval open hole Ellenburger 8042' - 8193' TD 8193' 6420' feet to 6650'

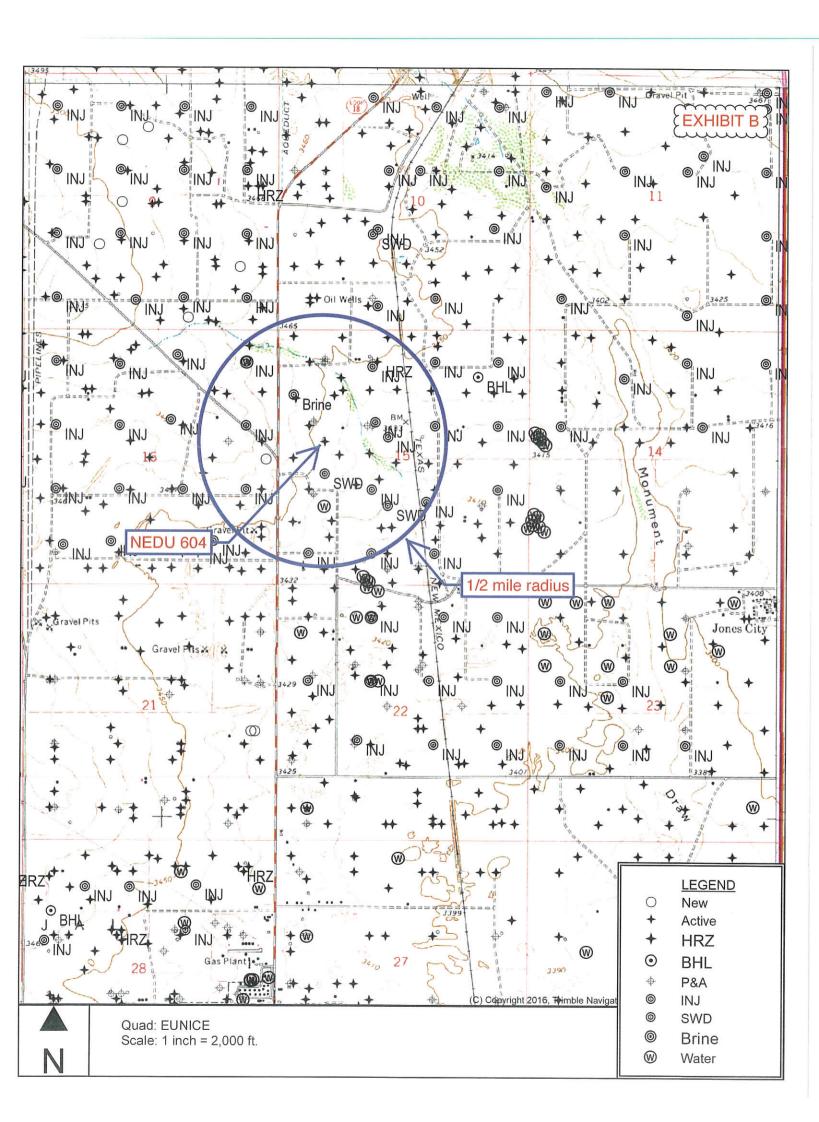
(Perforated or Open Hole; indicate which)

OPERATOR: APACHE CORPORATION WELL NAME & NUMBER: NORTHEAST DRINKARD UNIT 604 WELL LOCATION: 2310' FNL & 990' FWL 15 21 S 37 E UNIT LETTER FOOTAGE LOCATION SECTION **TOWNSHIP RANGE** WELLBORE SCHEMATIC WELL CONSTRUCTION DATA Surface Casing "PROPOSED" (not to scale) Hole Size: _____ 17.5" ____ Casing Size: 13.375" 13.375" 48# in 17.5" hole @ 334' 2.375" IPC injection tbg @ 6420' Cemented with: 350 sx. TOC(350 sx) = GLTop of Cement: SURFACE Method Determined: CIRC. Intermediate Casing 8.625" 24 & 32# in 12.25" hole @ 2835' TOC (500 sx) = GLHole Size: 12.25" Casing Size: 8.625" TOC 2920' Cemented with: 500 sx. sqzd 200 sx perfs @ 3250' & 3950' Top of Cement: SURFACE Method Determined: ESTIMATED run 4.5" FJ GL - 6750' Production Casing cmt to GL 5.5" 15.5# in 7.875" hole @ 8042' TOC (400 sx) = 4550'Hole Size: ______ 7.875" Casing Size: _____ 5.5" injection Cemented with: _____sx. pkr @ 6390' Blinebry, Tubb, Drinkard perfs 5746' - 6675' Top of Cement: ____ 4550 ' Method Determined: CBL perf Tubb & CIBP @ 6800' + 135' cmt Drinkard Total Depth: 8193' 6420' - 6650' CIBP @ 7990' Injection Interval open hole Ellenburger 8042' - 8193' 6420' feet to 6650' TD 8193' (Perforated or Open Hole; indicate which)

...........

INJECTION WELL DATA SHEET

Γu	bing Size: 2-3/8" J-55 4.7# Lining Material:INTERNAL PLASTIC COAT
	pe of Packer: LOCK SET INJECTION
Pa	cker Setting Depth: _≈6390 '
Otl	her Type of Tubing/Casing Seal (if applicable):
	Additional Data
1.	Is this a new well drilled for injection? Yes XXX No
	If no, for what purpose was the well originally drilled? ELLENBURGER OIL WELL
2.	Name of the Injection Formation: _TUBB & DRINKARD
3.	Name of Field or Pool (if applicable): _EUNICE; BLI-TU-DR, NORTH (POOL CODE 22900)
ł.	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
	Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
	OVER: GRAYBURG (3749'), SAN ANDRES (3932'), BLINEBRY (5616')
	UNDER: ABO (6662'), SIMPSON (7553'), McKEE (7670'), ELLENBURGER (8040'

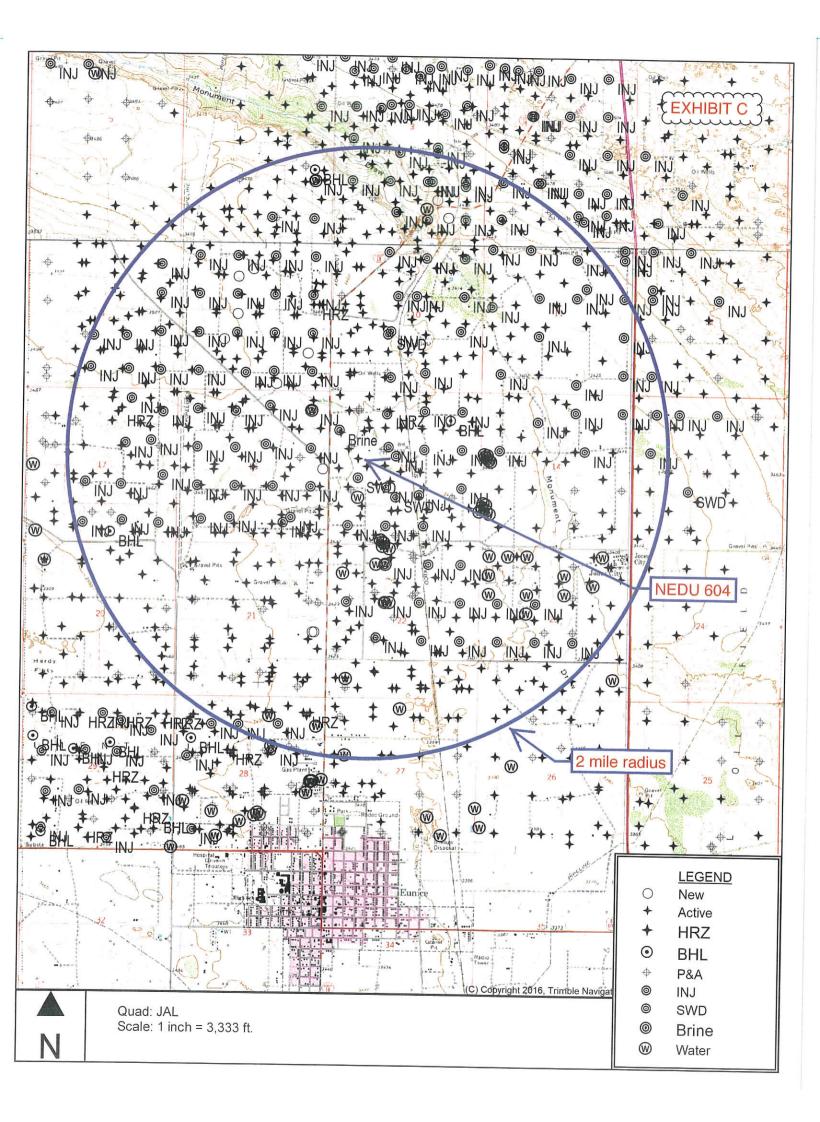


API	OPERATOR	WELL	STATUS	UL-SEC- T21S-R37E	TVD	ZONE @ TD	FEET FROM NEDU 604
3002535271	Apache	NEDU 625	0	E-15	6840	Abo	418
3002509914	Apache	NEDU 602	0	E-15	6669	Drinkard	462
3002509913	Shell	NEDU 603	P&A	E-15	8182	Ellenburger	492
3002509915	Apache	Argo 7	SWD	L-15	8193	Granite Wash	660
3002537238	Apache	NEDU 629	0	L-15	6900	Abo	744
3002506590	Apache	NEDU 608	P&A	F-15	7850	Simpson	956
3002541600	Apache	NEDU 544	0	E-15	6950	Abo	973
3002541275	Apache	NEDU 650	0	F-15	6765	Abo	975
3002509916	Apache	NEDU 701	1	L-15	6654	Drinkard	1047
3002506585	Apache	Cities S State 002	P&A	F-15	6676	Drinkard	1051
3002537223	Apache	NEDU 628	0	E-15	7106	Abo	1084
3002506587	Apache	NEDU 606	1	F-15	8032	Granite Wash	1114
3002506607	Apache	Argo 011	0	K-15	7891	Ellenburger	1116
3002506606	Apache	Argo 010	P&A	L-15	8015	Ellenburger	1117
3002534887	Apache	NEDU 624	0	C-15	6860	Abo	1124
3002533547	Key	State 001	BSW	E-15	2200	Salado	1170
3002506624	SW Royalties	Harry Leonard NCT E 005	0	H-16	8220	Connell	1323
3002506588	Apache	NEDU 610	ı	G-15	7798	Granite Wash	1334
3002541485	SW Royalties	State S 012	0	C-15	4110	San Andres	1361
3002539828	Apache	Argo 014	0	K-15	4403	San Andres	1392
3002509918	Apache	NEDU 703	T	K-15	6645	Drinkard	1409

API	OPERATOR	WELL	STATUS	UL-SEC- T21S-R37E	TVD	ZONE @ TD	FEET FROM NEDU 604
3002541583	Apache	NEDU 661	0	C-15	6963	Abo	1427
3002534657	Apache	NEDU 623	0	K-15	6840	Abo	1565
3002506612	Chevron	State S 005	P&A	D-15	8148	Granite Wash	1646
3002534888	Apache	NEDU 713	0	L-15	6790	Abo	1652
3002506617	Apache	State DA 005	0	I-16	8330	Ellenburger	1654
3002539277	Apache	WBDU 113	0	A-16	6912	Abo	1669
3002506586	Chevron	State S 001	0	D-15	6660	Drinkard	1679
3002506621	Apache	WBDU 056	Ĭ	H-16	6614	Drinkard	1687
3002506614	Apache	NEDU 601	P&A	D-15	8145	Granite Wash	1706
3002537243	Apache	NEDU 721	0	M-15	6850	Abo	1790
3002506613	Apache	NEDU 605	ĺ	C-15	7675	Connell	1840
3002534649	Apache	NEDU 622	0	C-15	6840	Abo	1862
3002506603	Apache	Argo 006	SWD	K-15	7991	Granite Wash	1877
3002506609	Chevron	State S 002	P&A	C-15	6662	Drinkard	1925
3002506619	Apache	WBDU 078	I	I-16	6644	Drinkard	1929
3002506611	SW Royalties	State S 004	0	C-15	7896	Granite Wash	1979
3002539557	Apache	Argo 013	0	M-15	4409	San Andres	1987
3002537834	Chevron	Harry Leonard NCT E 008	P&A	H-16	4300	San Andres	2026
3002541276	Apache	NEDU 726	0	N-15	6879	Abo	2159
3002534886	Apache	NEDU 524	0	C-15	6860	Abo	2177
3002541285	Apache	NEDU 651	0	J-15	6857	Abo	2206

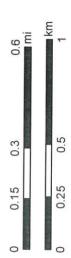
API	OPERATOR	WELL	STATUS	UL-SEC- T21S-R37E	TVD	ZONE @ TD	FEET FROM NEDU 604
3002539963	Apache	WBDU 114	О	P-16	6970	Abo	2212
3002537916	Apache	State DA 013	0	I-16	4398	San Andres	2213
3002536809	Apache	NEDU 526	0	D-15	6900	Abo	2274
3002535272	Apache	NEDU 714	0	N-15	6780	Abo	2276
3002536741	SW Royalties	Harry Leonard NCT E 007	0	H-16	4345	San Andres	2287
3002509912	Apache	NEDU 611	1	G-15	6641	Drinkard	2316
3002506623	Apache	WBDU 057	I	A-16	6699	Drinkard	2336
3002509911	Apache	NEDU 702	Ī	M-15	6646	Drinkard	2337
3002538231	Apache	WBDU 082	0	J-16	6875	Abo	2382
3002539449	Apache	State Land 15 017	0	P-16	4415	San Andres	2384
3002541584	Apache	NEDU 662	0	B-15	6958	Abo	2445
3002506601	Apache	NEDU 707	I	J-15	7670	МсКее	2462
3002506592	Apache	NEDU 706	0	J-15	6629	Drinkard	2497
3002506597	Apache	L G Warlick C 006	0	J-15	7847	Ellenburger	2508
3002509917	Apache	NEDU 704	I	N-15	6630	Drinkard	2521
3002541598	Apache	NEDU 558	0	C-15	6950	Abo	2525
3002525198	SW Royalties	Harry Leonard NCT E 006	0	A-16	6720	Drinkard	2541
3002539119	Apache	WBDU 098	0	B-16	6880	Abo	2554
3002506608	Apache	Argo 012	0	M-15	8035	Ellenburger	2611
3002536786	Apache	State DA 010	0	J-16	4345	San Andres	2633
3002506605	Apache	NEDU 723	0	M-15	8179	Granite Wash	2644

API	OPERATOR	WELL	STATUS	UL-SEC- T21S-R37E	TVD	ZONE @ TD	FEET FROM NEDU 604
3002506604	Apache	Argo 008	0	N-15	8002	Granite Wash	2670



Unit Agreement Boundaries Plugged / Dry / Abandoned Federal Minerals Ownership Oil, Gas and Coal Only Cancelled / Not Drilled Oil and Gas Leases Salt Water Disposal Highway Mileposts Oil and Gas Only Carbon Dioxide **Detailed Roads** Water Storage Other Minerals Miscellaneous Subdivisions All Minerals Coal Only nactive Wells Injection Active Wells Gas U , 10°C , 300°C 0 SWNW SWSW C11 NWN NESE NWSW **WSWS** NWNW 23 0 1/2 mile radius NENE SESE SESE NENE D s/B0-9188-0007 HEAST DRINKARD UNIT Oil, Gas, and Minerals Leases and Wells **G** Warlick NWNE SWSE NIBO-9188-0008 NE SWSE NWS B0-0935-0005 NENW ● ○ 22 ROR SESW NESW SMB0-1481-0018 W Para a para a mana a ma Argo NWNWW NWSWN -ELLISON-LN SWSW NWNW New Mexico State Land Office NEDU 604 B0-0085-0016 NESE NENE SVB0-8105-0004 3E NMNM-090161 MEBRY DREELS RD 21 SWNE SWSE NWNE





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 herein with respect to State Land Office data or data from other sources.

Data pertaining to New Mexico State Trust Lands are provisional and subject to revision, and do not constitute an official record of title. Official records may be reviewed at the New Mexico State Land Office in Santa Fe, New Mexico.

PCOC1 40104 . 40104004

NEDU 604 AREA OF REVIEW LEASES

Aliquot Parts in Area of Review (T. 21 S., R. 37 E.)	Lessor	Lease	Lessee(s) of Record	Well Operators
SESE Sec. 9	BLM	NMNM-090161	Apache & Chevron	Apache
S2SW4 Sec. 10	NMSLO	B0-0935-0005	ХТО	Apache, Empire, XTO
NWNE & N2NW4 Sec. 15	NMSLO	B0-9188-0008	Chevron	Apache, Chevron, SW Royalties
S2NW4 Sec. 15	NMSLO	B0-1481-0018	Оху	Apache, Key
SWNE Sec. 15	NMSLO	B0-9188-0007	Occidental	Apache
W2SE4 Sec. 15	fee	L G Warlick	Apache	Apache
SW4 Sec. 15	fee	Argo	Apache	Apache
NE4 Sec. 16	NMSLO	B0-1732-0001	Chevron	Apache, SW Royalties
N2SE4 Sec. 16	NMSLO	B0-0085-0016	Apache	Apache
SESE Sec. 16	NMSLO	B0-8105-0004	Apache	Apache
			Apr. 2000	

Unit Agreement Boundaries - Plugged / Dry / Abandoned **EXHIBIT E** Federal Minerals Ownership Cancelled / Not Drilled Salt Water Disposal Oil and Gas Leases County Boundaries Oil and Gas Only State Boundary Carbon Dioxide Water Storage Miscellaneous County Seats Subdivisions Override 1 All Minerals Townships Coal Only Inactive Wells Sections Injection **Active Wells** Gas AT208 20 38E 215 2 mile radius Oil, Gas, and Minerals Leases and Wells 35

Override 1

New Mexico State Land Office

pointLayer

pointLayer

Denation 4010 A 100004

Data pertaining to New Mexico State Trust Lands are provisional and subject to revision, and do not constitute an official record of title. Official records may be reviewed at the New Mexico State Land Office in Santa Fe, New Mexico.

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 herein with respect to State Land Office data or data from other sources.

Oil, Gas and Coal Only

Other Minerals

0.5

SPUD	OI	TVD	CURRENT POOL	STATUS	HOLE 0.D.	CASING 0.D.	SET @	CEMENT	T0C	HOW TOC
6/5/01 6840	684	Q	Eunice; Bli-Tu-Dr, N	0	12.25	8.625	1219	460 sx	19	Circ 81 sx
					7.875	5.5	6840	1450 sx	GL	Circ 117 sx
4/11/48 6669	6999		Eunice; Bli-Tu-Dr, N	0	17.25	13.375	280	300 sx	19	Circ
					11.25	8.625	2788	800 sx	2105	N/A
					7.875	5.5	6612	350 sx	4250	Temp survey
2/18/51 8182			Eunice; Bli-Tu-Dr, N	P&A	17.25	13.625	312	325 sx	GL	Circ
					11.75	8.625	2818	500 sx	GL	Circ
					7.875	5.5	8030	400 sx	5115	Temp survey
4/13/51 8193	8193		SWD; San Andres	SWD	17.5	13.375	223	250 sx	- GL	Circ
					11	8.625	2907	1900	19	Circ
					7.875	5.5	8016	779	3280	CBL

S G						λa					, e	
HOW TOC DETERMINED	Circ	CBL		Circ	Circ	Temp survey	Circ	CBL		Circ 96 sx	Log estimate	
T0C	l9	130		GL	GL	4700	19	197		- GL	276	
CEMENT	575 sx	1300 sx		325 sx	500 sx	530 sx	430 sx	1250 sx		465 sx	1300 sx	
SET @	1200	0069		315	2805	7850	1269	6954 MD		1309	6858	
CASING 0.D.	8.625	5.5		13.375	8.625	5.5	8.625	5.5		8.625	5.5	
HOLE 0.D.	12.25	7.875		17.25	11.25	7.875	11	7.875		11	7.875	
STATUS	0			P&A			0			0		
CURRENT POOL	Eunice; Bli-Tu-Dr, N			Eunice; Bli-Tu-Dr, N			Eunice; Bli-Tu-Dr, N			Eunice; Bli-Tu-Dr, N		
ΔΛΤ	0069			7850			6950			6765		=
SPUD	6/25/05			7/9/51			2/9/14			11/7/13		,
WELL	NEDU 629	3002537238	L-15-21S-37E	NEDU 608	3002506590	F-15-21S-37E	NEDU 544	3002541600	E-15-21S-37E	NEDU 650	3002541275	F-15-21S-37E

WELL	SPUD	ΔΛΤ	CURRENT POOL	STATUS	HOLE 0.D.	CASING 0.D.	SET @	CEMENT	T0C	HOW TOC DETERMINED
NEDU 701	10/10/47	6654	Eunice; Bli-Tu-Dr, N	_	17.5	13.375	224	210 sx	GL	Circ 25 sx
3002509916					11	8.625	2875	800 sx	GL	Circ
L-15-21S-37E					7.375	5.5	6652	xs 009	3250	Estimate
Cities S State 002	6/1/48	9299	Eunice; Bli-Tu-Dr, N	P&A	17.25	13.375	297	300 sx	GL	Circ
30-025-06585	2				11.25	8.625	2791	500 sx	675	no report
F-15-21S-37E					6.75	5.5	6585	125 sx	5120	no report
		20.00								
NEDU 628	12/30/05	6975	Eunice; Bli-Tu-Dr, N	0	12.25	8.625	1198	575 sx	GL	Circ 160 sx
3002537223					7.875	5.5	6889	1800 sx	1202	CBL
E-15-21S-37E										
NEDU 606	12/16/50	8032	Eunice; Bli-Tu-Dr, N	_	17.5	13.375	330	350 sx	19	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

WELL	SPUD	TVD	CURRENT POOL	STATUS	HOLE 0.D.	CASING 0.D.	SET @	CEMENT	T0C	HOW TOC
ARGO 011	7/14/51	7891	Penrose Skelly; Grayburg	0	17.5	13.375	228	250 sx	GL	Circ
3002506607					11	8.625	2905	1950 sx	- GL	Circ
K-15-21S-37E					7.875	5.5	7890	800 sx	3025	CBL
ARGO 010	7/19/51	8015	Hare; San Andres	P&A	17.25	13.375	241	250 sx	19	Circ 50 sx
3002506606					11	8.625	2907	1700 sx	-B	Circ 287 sx
L-15-21S-37E					7.875	5.5	2660 -	875 sx	2660	TOL
NEDU 624	4/17/00	6860	Eunice; Bli-Tu-Dr, N	0	12.25	8.625	1213	460 sx	GL	Circ 82 sx
3002534887					7.875	5.5	0989	1400 sx	19	Circ 100 sx
C-15-21S-37E										
Harry Leonard NCT E 005	6/22/52	8220	Penrose Skelly; Grayburg	0	17.25	12.75	268	325 sx	GL	Circ
3002506624					11	8.625	2799	1100 sx	2290	Temp survey
H-16-21S-37E					7.875	5.5	7999	131 sx	5392	Temp survey

WELL	SPUD	ΔΛΤ	CURRENT POOL	STATUS	HOLE 0.D.	CASING 0.D.	SET @	CEMENT	T0C	HOW TOC DETERMINED
NEDU 610	1/10/51	7798	Eunice; Bli-Tu-Dr, N	_	17.25	13.375	222	250 sx	No report	Circ 35 sx
30-025-06588					11	8.625	2925	2000 sx	No report	Circ
G-15-21S-37E					7.875	5.5	7635	500 sx	No report	No report
NEDU 703	2/29/48	6645	Eunice; Bli-Tu-Dr, N	_	17.5	13.375	195	250 sx	19	Circ 15 sx
3002509918					11	8.625	2880	1500 sx	19	Circ
K-15-21S-37E					7.875	5.5	6486	xs 009	2850	Estimated
NEDU 661	2/2/14	6662	Eunice; Bli-Tu-Dr, N	0	11	8.625	1264	440 sx	GL	Circ 134 sx
3002541583					7.875	5.5	6963	1250 sx	GL	Circ 135 sx
C-15-21S-37E										
NEDU 623	8/29/99	6840	Eunice; Bli-Tu-Dr, N	0	12.25	8.625	1283	460 sx	GL	circ 48 sx
3002534657					7.875	5.5	6840	1650 sx	19	circ 102 sx
K-15-21S-37E										

WELL	SPUD	TVD	CURRENT POOL	STATUS	HOLE 0.D.	CASING 0.D.	SET @	CEMENT	TOC	HOW TOC DETERMINED
State S 005	2/13/51	8148	Penrose Skelly; Grayburg	P&A	17.5	13.375	294	300 sx	GL	Circ 110 sx
3002506612					11	8.625	2974	2000 sx	19	Circ
D-15-21S-37E					6.75	5.5	8147	500 sx	2570	no report
NEDU 713	9/25/00	0629	Eunice; Bli-Tu-Dr, N	0	12.25	8.625	1245	460 sx	- GL	Circ 121 sx
3002534888					7.875	5.5	0629	1525 sx	19	Circ 156 sx
L-15-21S-37E										
State DA 005	3/4/52	8330	Penrose Skelly; Grayburg	0	17.5	13.375	258	200 sx	- GL	Circ
3002506617					11	8.625	2820	1500 sx	565	Temp survey
I-16-21S-37E					6.75	5.5	8225	500 sx	3448	Temp survey
WBDU 113	9/12/09	6912	Eunice; Bli-Tu-Dr, N	0	12.25	8.625	1342	650 sx	GL	Circ
3002539277					7.875	5.5	6912	1000 sx	GL	Circ
A-16-21S-37E										

HOW TOC DETERMINED	Circ 10 sx	Calc	CBL	ې	ņ	urvey	U	oort	urvey	xs 6		
HOW	Circ	S 	3	Circ	Circ	Temp survey	Circ	no report	Temp survey	Circ 119 sx	CBL	
TOC	19	GL	3100	GL	GL	2715	GL	160	5380	GL	408	
CEMENT	300 sx	1200 sx	400 sx	300 sx	1300 sx	700 sx	300 sx	1700 sx	350 sx	575 sx	1300 sx	
SET @	293	2797	6625	301	2952	6547	293	2990	2847 -	1275	6850	
CASING 0.D.	13.375	8.625	5.5	13.375	11	7	13.375	8.625	5.5	8.625	5.5	
HOLE 0.D.	17.25	11	7.875	17.5	12.25	8.75	17.5	11	6.75	12.25	7.875	
STATUS	0			_			P&A			0		
CURRENT POOL	Penrose Skelly; Grayburg			Blinebry Oil and Gas			Eunice; Bli-Tu-Dr, N	001		Eunice; Bli-Tu-Dr, N		
TVD	0999			6614			8145			6850		
SPUD	6/25/48			11/24/47			4/21/52			9/16/05		
WELL	State S 001	3002506586	D-15-21S-37E	WBDU 056	3002506621	H-16-21S-37E	NEDU 601	3002506614	D-15-215-37E	NEDU 721	3002537243	M-15-21S-37E

SPUD	TVD	CURRENT POOL	STATUS	HOLE 0.D.	CASING 0.D.	SET @	CEMENT	T0C	HOW TOC DETERMINED
 8/14/51	7675	Eunice; Bli-Tu-Dr, N	_	17.5	13.375	295	300 sx	19	Circ
				11	8.625	2997	2000 sx	GL	Circ
				6.75	5.5	2839 -	350 sx	3840	no report
8/16/99	6840	Eunice; Bli-Tu-Dr, N	0	12.25	8.625	1265	460 sx	19	Circ 107 sx
				7.875	5.5	6840	1675 sx	650	CBL
 2/27/51	7991	SWD; San Andres	SWD	17.5	13.375	225	250	19	Circ
				11	8.625	3100	2000	19	Circ
				7.625	5.5	7790	200	5070	CBL
8/6/48	6662	Eunice; Bli-Tu-Dr, N	P&A	17.5	13.375	294	300 sx	GL	Circ
				11	8.625	2603	1200 sx	GL	Circ
	10			7.375	5.5	6630	500 sx	3750	Calc

WELL	SPUD	TVD	CURRENT POOL	STATUS	HOLE 0.D.	CASING 0.D.	SET @	CEMENT	T0C	HOW TOC DETERMINED
WBDU 078	8/12/47	6644	Eunice; Bli-Tu-Dr, N	0	17.25	13.375	213	200 sx	GL	Circ
3002506619					11	8.625	2807	1550 sx	1350	Temp survey
I-16-21S-37E					7.375	5.5	6644	500 sx	3165	no report
State S 004	11/26/50	7896	Penrose Skelly; Grayburg	0	17.5	13.375	295	300 sx	15	Circ
3002506611					11	8.625	2999	1700 sx	l9	Circ
C-15-21S-37E					6.75	5.5	7895	500 sx	2990	Temp survey
NEDU 726	10/16/13	6839	Eunice; Bli-Tu-Dr, N	0	11	8.625	1300	469 sx	- GL	Circ 112 sx
3002541276					7.875	5.5	6879	1320 sx	- GL	Circ 126 sx
N-15-21S-37E										
NEDU 524	4/1/00	6860	Eunice; Bli-Tu-Dr, N	0	12.25	8.625	1207	460 sx	J5	Circ 120 sx
3002534886					7.875	5.5	0989	1500 sx	19	Circ 148 sx
C-15-21S-37E										

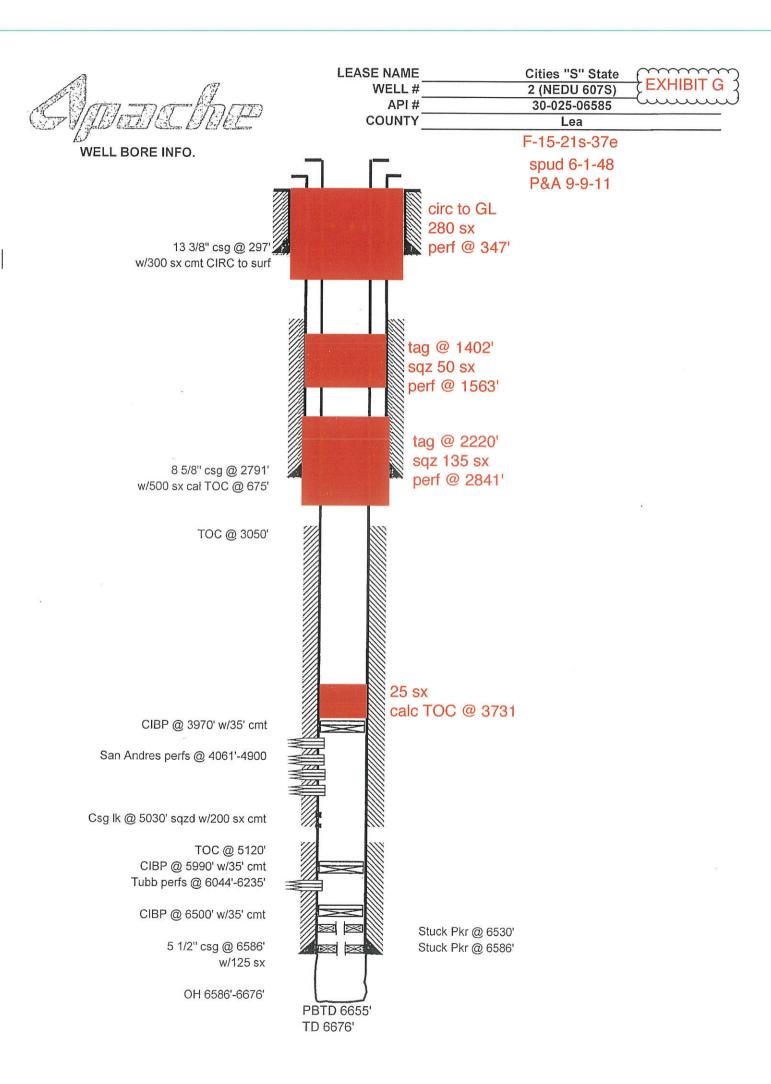
WELL	SPUD	DVT	CURRENT POOL	STATUS	HOLE 0.D.	CASING 0.D.	SET @	CEMENT	TOC	HOW TOC DETERMINED
NEDU 651	11/21/13	6857	Eunice; Bli-Tu-Dr, N	0	11	8.625	1307	460 sx	19	Circ 116 sx
30-025-41285					7.875	5.5	6829	1265 sx	216	Estimated
J-15-21S-37E										
										-
WBDU 114	12/19/10	0269	Eunice; Bli-Tu-Dr, N	0	12.25	8.625	1297	xs 599	GL	Circ 171 sx
3002539963					7.875	5.5	6952	1195 sx	800	CBL
P-16-21S-37E										
NEDU 526	11/27/04	0069	Eunice; Bli-Tu-Dr, N	0	12.25	8.625	1278	575 sx	19	Circ 113 sx
3002536809					7.875	5.5	0069	1100 sx	220	CBL
D-15-21S-37E										
NEDU 714	5/15/01	6780	Eunice; Bli-Tu-Dr, N	0	12.25	8.625	1214	460 sx	l9	Circ 40 sx
3002535272					7.875	5.5	6780	1175 sx	- GL	Circ 102 sx
N-15-21S-37E										

NED	XS				vey	vey			pe			
HOW TOC DETERMINED	Circ 20 sx	Circ	Circ	Circ	Temp survey	Temp survey	Circ	Circ	Estimated	Circ	CBL	
T0C	GL	GL	GL	GL	540	2550	GL	GL	3650	GL	320	
CEMENT	250 sx	1500 sx	1200 sx	300 sx	1300 sx	700 sx	250 sx	800 sx	500 sx	e50 sx	1250 sx	
SET @	228	2897	6546	297	2787	6645	316	2839	6259	1285	6875	
CASING 0.D.	13.375	8.625	5.5	13.375	9.625	7	13.375	8.625	5.5	8.625	5.5	
HOLE 0.D.	17	11	7.875	17.25	12.25	8.75	17.5	11	7.875	12.25	7.875	
STATUS	_			0			0			0		
CURRENT POOL	Eunice; Bli-Tu-Dr, N			Tubb			Eunice; Bli-Tu-Dr, N			Eunice; Bli-Tu-Dr, N		
TVD	6641			6699			6646			6875		
SPUD	8/30/48			11/22/48			6/3/63			4/8/07		
WELL	NEDU 611	30-025-09912	G-15-21S-37E	WBDU 057	3002506623	A-16-21S-37E	NEDU 702	3002509911	M-15-21S-37E	WBDU 082	3002538231	1.16.210.37E

8.625 1263 440 sx GL 5.5 6958 1350 sx 820 13.375 325 250 sx GL 8.625 2852 1200 sx GL 8.625 2852 1200 sx GL 8.625 2852 1155 sx GL 13.375 299 250 sx GL 8.625 2800 1500 sx GL 8.625 2800 1500 sx GL 13.375 303 300 sx GL 13.375 303 300 sx GL 8.625 2797 1200 sx 275 8.625 2797 1200 sx 3230 15.5 7700 575 sx 3230	WELL	SPUD	DVT	CURRENT POOL	STATUS	HOLE 0.D.	CASING O.D.	SET @	CEMENT	TOC 1	HOW TOC
5/5/52 7670 Eunice; Bli-Tu-Dr, N 1 7.875 5.5 6958 1350 sx 820 6/7/48 6629 Eunice; Bli-Tu-Dr, N 1 17.5 13.375 325 250 sx GL 6/7/48 6629 Eunice; Bli-Tu-Dr, N 0 17 13.375 299 250 sx GL 10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL	NEDU 662	1/26/14	8569	Eunice; Bli-Tu-Dr, N	0	12.25	8.625	1263	440 sx	GL	Circ
5/5/52 7670 Eunice; Bli-Tu-Dr, N I 17.5 13.375 325 250 sx GL	30-025-41584					7.875	5.5	6958	1350 sx	820	CBL
5/5/52 7670 Eunice; Bli-Tu-Dr, N 1 17.5 13.375 325 250 sx GL 6/7/48 6629 Eunice; Bli-Tu-Dr, N 0 17 13.375 2892 1200 sx GL 10/29/50 7847 6629 Eunice; Bli-Tu-Dr, N 0 17 13.375 2890 250 sx GL 10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 10/29/50 7847 11 8.655 2797 1200 sx 275	B-15-21S-37E										
6/5/52 7670 Eunice; Bli-Tu-Dr, N 1 17.5 13.375 325 250 sx GL 6/7/48 6629 Eunice; Bli-Tu-Dr, N 0 17 13.375 299 250 sx GL 10/29/50 7847 6629 Eunice; Bli-Tu-Dr, N 0 17 13.375 299 250 sx GL 10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 10/29/50 7847 11 8.625 2797 1200 sx 275 10 11 8.625 2797 1200 sx 373											
11 8.625 2852 1200 sx GL 1	NEDU 707	5/2/2	7670	Eunice; Bli-Tu-Dr, N	_	17.5	13.375	325	250 sx	- GL	Circ
6/7/48 6629 Eunice; Bli-Tu-Dr, N O 17 13.375 299 250 sx GL Cl	30-025-06601					11	8.625	2852	1200 sx	- B	Circ
6/7/48 6629 Eunice; Bli-Tu-Dr, N O 17 13.375 299 250 sx GL GL 11 8.625 2800 1500 sx GL GL 8 5.5 6597 750 sx 2400 10/29/50 7847 Hare; Simpson O 17 13.375 303 300 sx GL ST	J-15-21S-37E					7.875	5.5	7665	1155 sx	19	Circ
6/7/48 6629 Eunice; Bli-Tu-Dr, N 0 17 13.375 299 250 sx GL 10/29/50 1 8 5.5 6597 750 sx 3400 10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 10 8 5.5 7700 575 sx 3230 300 sx GL											
10/29/50 7847 Hare; Simpson 0 11 8.625 2800 1500 sx GL 10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 10 11 8.625 2797 1200 sx 275 275	NEDU 706	6/7/48	6299	Eunice; Bli-Tu-Dr, N	0	17	13.375	299	250 sx	19	Circ
10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx 6.55 6597 750 sx 2400 10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 11 8.625 2797 1200 sx 275 8 5.5 7700 575 sx 3230	30-025-06592					11	8.625	2800	1500 sx	GL	Circ
10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 11 8.625 2797 1200 sx 275 275 8 5.5 7700 575 sx 3230	J-15-21S-37E					∞	5.5	6597	750 sx	2400	Estimated
10/29/50 7847 Hare; Simpson 0 17 13.375 303 300 sx GL 11 8.625 2797 1200 sx 275 8 5.5 7700 575 sx 3230											
11 8.625 2797 1200 sx 275 8 5.5 7700 575 sx 3230	L G Warlick C 006	10/29/50	7847	Hare; Simpson	0	17	13.375	303	300 sx	GL	Circ
8 5.5 7700 575 sx 3230	30-025-06597					11	8.625	2797	1200 sx	275	no report
	J-15-21S-37E					∞	5.5	7700	575 sx	3230	Temp survey

WELL	SPUD	DVT	CURRENT POOL	STATUS	HOLE 0.D.	CASING O.D.	SET @	CEMENT	TOC	HOW TOC
NEDU 704	5/27/63	0899	Eunice; Bli-Tu-Dr, N	_	17.5	13.375	210	250 sx	- GL	Circ 15 sx
3002509917					11	8.625	2883	1500 sx	- GL	Circ 460 sx
N-15-21S-37E					7.875	5.5	0959	1000 sx	2500	Calc
NEDU 558	2/23/14	0569	Eunice; Bli-Tu-Dr, N	0	11	8.625	1275	430 sx	19	Circ 93 sx
3002541598					7.875	5.5	6950	1250 sx	675	CBL
C-15-21S-37E										
Harry Leonard NCT E 006	1/1/76	6720	Penrose Skelly; Grayburg	0	11	8.625	1605	550 sx	GL	Circ
3002525198					7.875	5.5	6720	1050 sx	47	Tagged
A-16-21S-37E										
WBDU 098	6/12/09	0889	Eunice; Bli-Tu-Dr, N	0	12.25	8.625	1313	450 sx	- GL	Circ
3002539119					7.875	5.5	0889	1050 sx	- GL	Circ
B-16-21S-37E										

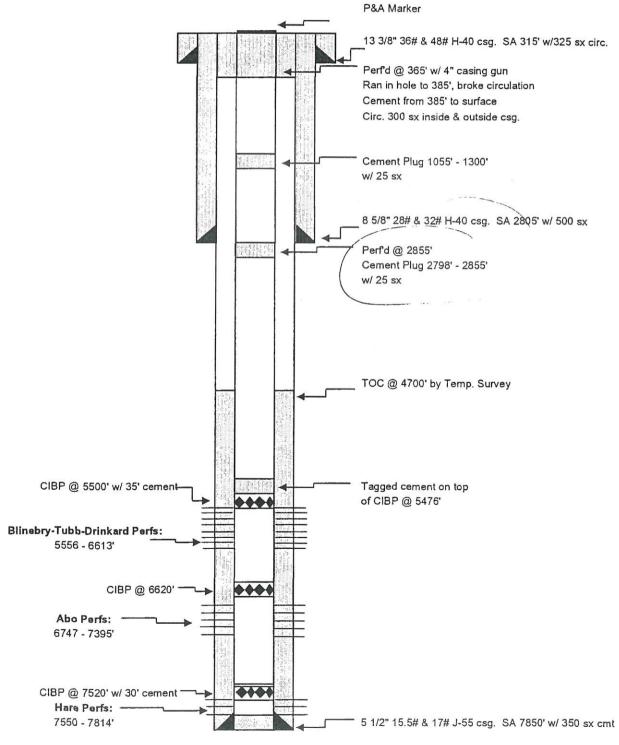
	т	т —	1	т	т	T	T	 т —	т	т
HOW TOC DETERMINED	Circ 60 sx	Circ 300 sx	CBL		Circ	Circ	CBL	Circ	Circ	CBL
TOC	GL	19	3480		79	79	2701	79	79	50
CEMENT	250 sx	1900 sx	xs 006		250 sx	1700 sx	850 sx	300 sx	1800 sx	1220 sx
SET @	227	2882	8033		225	2917	8000	226	2915	8002
CASING 0.D.	13.375	8.625	5.5		13.375	8.625	5.5	13.375	8.625	5.5
HOLE 0.D.	17.5	11	7.875		17.25	11	7.875	17.25	11	7.875
STATUS	0				0			0		
CURRENT POOL	Penrose Skelly; Grayburg				Eunice; Bli-Tu-Dr, N			Paddock	Penrose Skelly; Grayburg	
TVD	8035				8179			8002		
SPUD	8/2/86				5/29/51			7/31/01		
WELL	ARGO 012	3002506608	M-15-21S-37E		NEDU 723	3002506605	M-15-21S-37E	ARGO 008	3002506604	N-15-21S-37E





Northeast Drinkard Unit #608 Eunice N. Blinebry-Tubb-Drinkard (22900) 1980' FNL & 1880' FWL Unit F, Sec 15, T-21S, R-37E Lea County, New Mexico 30-025-06590

spud 7-9-51 P&A 10-5-01



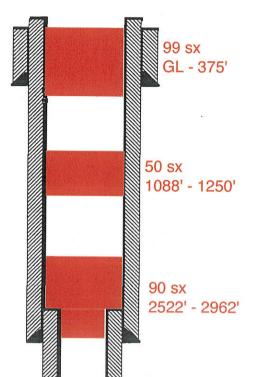
WELL BORE INFO.

EASE NAME		Argo (NEDU 7	12S)
WELL#		10	mmm
API#	-,	30-025-06606	EXHIBIT G
COUNTY		Lea	Turring

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

13 3/8" 48# @ 241' w/250 sx to surf

Casing leak identified & sqzd to surf w/ 33.5 bbls of cmt above 345' in 8 5/8" csg



8 5/8" 32# @ 2907' w/1700 sx to surf

CIBP @ 3960' w/ 35 sx TOC @ 3830' SA perfs @ 4016'-4100'

CIBP @ 6375' w/ 35' cmt
DI perfs @ 6421'-6498'
DI perfs @ 6419'-6481'
CICR @ 6530' w/ 250 sx
Casing leaks @ 6550'-6680'
CICR @ 6680'
Abo perfs @ 6686'-7214'
CIBP @ 7600' w/ 1sx cmt
Hare perfs @ 7647'-7960'

5 1/2" 15.5-17# liner @ 2660'-8912' w/ 875 sx circ TOL

t '

> PBTD @ 3830' TD @ 8012'

CURRENT WELL DATA SHEET

30-025-06609 STATE S #002 [30014]

Field: Penrose Skelly Grayburg Location: 660' FNL & 1980' FEL T-R-S: C-15-21S-37E County: Lea

Cost Center: UCU494100 Refno: FA7713 Lease Type: State

Spud Date: 9/6/1948 Compl Date: 11/8/1948 Current Status: TA

EXHIBIT G

Well Bore: 427875 P&A 5-8-12 State: New Mexico o DF: 3456' Tubing - No Tubing GL: 3447' GL **Formation Tops** 320 sx perf @ 1250' Yates 2687 STATUS HISTORY 11/9/1948 - 4/28/1953 PR **Drinkard Completion Active** San Andres 3965 5/4/1953 PR Re-completion as dual to Blinebry and Tubb 5172 Glorieta 4/8/1964 Blinebry zone disconnected and acreage dedicated to other wells 5/1/64 - 11/1/1987 PR **Tubb** completion only Tubb 6152 9/11/1993 Re-Complete to Penrose Skelly Grayburg 9/1993 - 12/2000 PR **Grayburg completion Active** 12/21/2001 Perf San Andres - Dry zone 2603 1/10/2001 TA 2516' tag Surface Csq. Size: 13 3/8" 36# 25 sx Set @: 294' w/300 sx cmt Hole Size: 17 1/2" perf @ 2787' 3732' Circ: Yes TOC: Surface TOC by: Ciculation TOC 3755' 3765' tag cmt CIBP @ 3994' with 35' of cement on top Intermediate Csq. & CIBP Size: 8 5/8" 32# 3840-3944 Grayburg Sqzd 1/2/2001 Set @: 2603' w/1200 sx cmt 3840' Hole Size: 11" Circ: Yes TOC: Surface TOC 3959' TOC by: Ciculation CIBP @ 3994' with 35' of cement on top 4020 - 4030 San Andres Production Csg TOC 5515' 5550' Size: 5 1/2" 15.5# CIBP @ 5550' with 35' of cement on top Set @: 6630' w/500 sx cmt Hole Size: 7 7/8" TOC: 3750' Circ: TOC by: Calculation 5620-5700 Blinebry open 5795 Tbg cut @ 5795' PBTD: 6436' 6180-6280 Tubb Sqzd 11/18/1993 CIBP @ 6450' with 14' of cement on top TD: 6662' 6683-6926 Drinkard do not see that these perfs were ever squeezed

> Prepared by: T K Moms Date: 8/10/2011

Date: 8/10/2011

12-21-00. MIRU. NDWH NUBOP THEWBIT & CSG SCRAPER OR WS STOP SHI W T24U

12-22-00. THE TO 3850'. THE WIPER & SN ON TBG PSA 3770'. REL PKR SWINGING @ 1880'

12-28-00. THE WICKET RET & SN PMJ 1893 SET RET @ 3740'. PUMP 25 BBLS THRU RET TEST TBG TO 4000#-OK LOAD & TEST BACKSIDE

TO 500=-COK, MIX & PUMP 150 SX CL. C TAIL IN WIN50 SX CL. C NEAT. REV 14 SX TO PIT

12-29.00. THE WIBT & DC'S ON WS STOP BIT @ 3445' RU REV UNIT

12-30-00'. THE WIBG TAG CMT @ 3732'. DRILL CMT TO 3740'. DRILL RET @ 3740' DRILL CMT TO 3762'. PULL BIT TO 3730'

12-2-01. LOWER TOOLS & TAG @ 3762' DRILL CMT FR 3762-3980. FELL THRU. TEST TO 300# LOST 50# LOWER TOOLS & TAG @ 5470'

TEST CSG TO 320# PULL BIT TO 5399'.

1-03-01: PERF SAN ANDRES FORMATION FR 4020-30'.THE WIPKR & SN ON TBG SET PKR @ 3961'.

1-04-01.REL PKR & SET @ 3992'. LOWER TO 4054' SPOT 1 BBL ACID ACR PERFS 4020-30 PULL UP & RESET PKR @ 3992'. ACIDIZE WIZCOO

GALS 15% NEFE HCL. PUMP 50 BBLS 2% KCL WTR DN CSG. OPEN BY PASS ON PKR & REV INTO TBG. TEST CSG TO 300#. RU SWAB FL @ SURF.

SURF,
1-05-01: FL@ 2600' SWAB DRY REL TBG & PKR TIH W/PKR & SN ON TBG. PSA 3992', TEST CSG TO 350#,
1-08-01: ACIDIZE SAN ANDRES PERFS W/2000 GALS 15% NEFE HCL, REL & RESET PKR @ 3998 FL@ SURF, END FL-DRY,
1-09-01: FL@ 1500' SWAB DRY REL PKR, LO TBG & PKR. TIH W/CIBP & SET @ 3994', TA SAN ANDRES TIH W/BAILER & DUMP 35' CMT ON
TOP OF CIBP, TOP OF CMT @ 3959' TIH W/CIBP #2 & SET ABOVE GRAYBURG. SQZ PERFS @ 3790' TIH W/BAILER & DUMP 35' CMT ON TOP
OF CIBP, TOP OF CMT @ 3755'.
1-10-01: TIH W/PROD TBG, TAG CMT @ 3768', CIRC 90 BBLS PKR FLUID TEST & CHART CSG & CIBP TO 33C# FOR NMOCD, NDBOP, NUWH,
RIG DOWN, WELL IS NOW TEMPORARILY ABANDONED (CHARTS ATTACHED)

3-01-01 RAN NEW CHART TO 500# FOR 30 MINUTES AS REQUIRED BY GARY WITH THE NMOCD (CHART ATTACHED)

State S 5 Current Wellbore Diagram



Updated:	10/05/17	By: RW
Lease:	State S	
Field:	Penrose Sk	elly Grayburg
Surf. Loc.:	660' N & 99	0, M
Bot. Loc.:		
County:	Lea	St.: NM
Status:		

5
30-025-06612
15
D
21-S 37-E

spud 2-13-51 P&A 5-8-17

		-				
Surface Ca		i I				
Size:	13 3/8"		確認			cement 110 sx 350' to surface
Wt., Grd.:	48#					
Depth:	294'					perfs 350'
Sxs Cmt:	300'					
Circulate:	yes					
TOC:	surface			MLF	1	1
Hole Size:	17 1/4"					1
Intermedia						cement 55 sx 1250'-1000'
Size:	8 5/8"				136	perf 1250'
Wt., Grd.:	24#		-			
Depth:	2974'					
Sxs Cmt:	2000					
Circulate:	yes			MLF		
TOC:	surface		1			1
Hole Size:	11"					
Production Size: Wt., Grd.: Depth: Sxs Cmt:	5 1/2" 17# 8147' 500'					
Circulate:						
TOC:	2570'					***
Hole Size:	6 3/4"					***************************************
21	CIBP ~3800' pl		**************************************	×××		
	perfs 3841'-385	51'		Distriction of the same of the		***************************************
	CIBP ~6430' pl		=	XXX	=	
	perfs 6464'-664	16.	=	and the second second second	=	***
	CIBP ~6730' pl perfs 6762'-734		=	×××	=	
	CIBP ~7500' pl perfs 7610'-79		-		=	
	perts 7610'-791	18'				



D-15-21s-37e · spud 4-19-52 P&A 10-13-11

TOC behind 8 5/8" @ 160' 13 3/8" @ 293' w/ 300 sx circ to surf

8 5/8" 24/32# @ 2990' w/2000 sx TOC 160'

5 1/2" csg patch @ 2847 w/ 127 bbls cmt to surf

Csg leaks @ 4320'-4350' sqzd w/ 250 sx

Cgs leaks @ 4943'-4974' sqzd w/ 350 sx

Csg leaks @ 5360' sqzd w/ 325 sx

TOC @ 5380' by TS

CIBP @ 5640' w/ 20' cmt

Blinbry Perfs

B-II @ 5679'-5716'

B-III @ 5746'-5821'

B-IV @ 5860'-5930'

B-V @ 5955'-5984'

Tubbs T-I perfs @ 6008'-6087'

Drinkard Perfs

D-I @ 6454'-6498'

D-II @ 6553'-6576'

D-III @ 6581'-6625'

D-IV @ 6640'-6645'

D-IV-V @ 6658'-6686'

D-V 6700'-6704'

CIBP @ 7900' w/2 sx cmt

Ellen perfs @ 7988'-8956'

5 1/2" 15.5/17# @ 8142' w/ 350 sx TOC @ 5380' TS

LEASE NAME Northeast Drinkard Unit

WELL # 601

API # 30-025-06614

COUNTY Lea EXHIBIT G

perf @ 100' circ 50 sx to GL

25 sx plug 200' - 400'

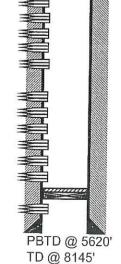
25 sx plug ?? (no tag) - 1306'

25 sx plug ?? (no tag) - 2246'

perf @ 3040' - unable to sqz tbg @ 3090' 40 sx plug 3040' - 2740'

perf @ 4032' - unable to sqz tbg @ 4082' 25 sx plug 3885' - 4032'

50 sx plug 5113' - 5620'



Well:

Northeast Drinkard Unit # 603

Field:

Eunice N. Blinebry-Tubb-Drinkard

Location:

3390' FNL & 760' FWL

Unit E, Sec. 15, T21S, R37E Lea County, New Mexico

API#:

30-025-09913



spud 2-18-51 P&A 11-22-93

Install P&A Marker

CICR @ 750' Perf 5-1/2" casing @ 800'

Perf 5-1/2" casing @ 800'
Cmt to Surface inside & outside casing

17-1/2" Hole 13-3/8" 36# H-40 CSA 312' Cement w / 325 sx Circulated to Surface

CICR @ 2802' (63 sx)
Perf 5-1/2" casing @ 2875'
Cmt sqz 5-1/2" x 8-5/8" annulus (400 sx)
TOC @ 850' (TS)

Blinebry Perfs: 5715-5974 (59 Holes)

3713-3974 (39 110165)

Tubb Perfs: 5993-6080 (23 Holes)

(2000)

Drinkard Perfs: 6466-6682 (58 Holes)

Abo Perfs:

6723-7231 (26 Holes) Cmt sqz w/ 350 sx

CIBP @ 7281' (2 sx)

Hare Perfs:

7742-7938 (596 Holes)

CIBP @ 7950' (2 sx)

Hare Perfs:

7974-90 (108 Holes)

CIBP @ 8010' (1 sx)

Ellenburger Open Hole:

8030-8067

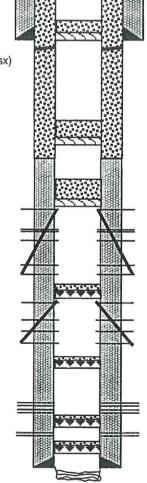
11" Hole 8-5/8" 24# J-55 CSA 2818' Cement w / 500 sx Circulated to Surface

CICR @ 4841' w/ 126' cmt Cmt sqz leak 4934-65 w / 200 sx

CICR @ 5651' w/ 185' cmt Cmt sqz perfs 5715-6682 w / 250 sx

CIBP @ 6696' w/ 35' cmt

7-7/8" Hole 5-1/2" 15.5/17# J-55 CSA 8030' Cement w / 500 sx TOC @ 5115' (Temp Survey)



TD @ 8182'

Elevation: 3451' (GR)





from WFX-784

South Permian Basin Region 10520 West I-20 East Odessa, TX 79765 (915) 498-9191

Lab Team Leader - Shella Hernandez (915) 495-7240

Water Analysis Report by Baker Petrollte

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	l\pem	Cations	mġ/ì	meq/l							
Analysis Date: 10/4	Chiofide.	10086.0	284.49	Sodium:	5799.5	252.26							
Analyst: SHEILA HERNAN	DE: Blcarbonate:	671.0	11.	Magnasium:	439.0	36.11							
TDS (mg/l or g/m3): 2070	Carbonata:	0.0	0.	Calcium:	1099.0	54.84							
	Sulfate	2465.0	51.32	Strontium:	28.0	0.64							
Anion/Cetion Retio; 1.0000	l Phosphate	*		Barlum:	0.1	٥.							
Allow Order Natio,	Borate:			Iron:	0.3	0.01							
	Silicate:			Potassium:	115.0	2.94							
0.1				Aluminum:	*								
Carbon Dioxide: 60 PPM	Hydrogen Sulfide:		90 PPM	Chromium:	1								
Oxygen:	pH at time of sampli	na:	7.5	Copper:									
Comments:		•	7,5	Lead:									
#	, pH at time of analys	is;		Manganese:	33								
	pH used in Calcula	tion:	7.5	Nickel:		¥3							
					in the second								
	1			1									

Condi	tions	Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl											
Temp Gauge Press.			alcite aco ₃	Gypsum CaSO ₄ 2H ₂ 0			ydrite aSO ₄		stite 'SO ₄	Ba Ba	CO ₂ Press		
°F	psl	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	-0.08	0.00	-0.09	0.00	0.07	3.09	0.60	0,00	0.3	
120	a	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.

Lab Tost No . 23748

Apache

EXHIBIT H

Sample Date: 3/10/99

Water Analysis

Listed below please find water analysis report from: NEDU

#919-S

Specific Gravity: 1.009 Total Dissolved Sollds: 13273 pH:

6.49

WFX-774 application indicates this is San Andres source water

Conductivity (µmhos):

lonic Strength: 0.265

Cations:		me/I
Calcium	(Ca++);	608
Magnesium Sodium	(Mg++): (Na+);	244 3909
Iron	(Fc++):	0,00
Dissolved Iron Barium	(Fe++):	0.38
Strontlum	(Sr):	19
Manganese Resistivity:	(Mn++):	0.01
Anions		
Bicarbonate Carbonate	(HCO3-): (CO3-):	562
Hydroxide	(OH-):	0
Sulfate	(SO4-):	1750
Chloride	(CI-):	6200

Carbon Dioxide (CO2):

Hydrogen Sulfide (F12S):

ppm 80,00 408.00

Oxygen

(O2):

Soalo Index (positive value indicates soale tendency) a blank indicate cre not run

AC A	Managador a casa de proposições de la managador dos la propia esta de como de	and marched) a pratter midde	ales some tests wat
	ermine.	CaCO3 SI	CaSO4 SI
86F	30.0C	-0.14	-17.28
104F	40.0C	0.09	-17.28
122F 140F	50.0C	0.35	-17.28
168F	60.0C 70.0C	0.57	-16.80
176F	80.0C	0.87	-15.02
1,01	00.00	1.20	-15.51

Comments:

cc: Jorry White Jay Brown

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

#0240 P.002/010

UNICHEM LAB

MAR. 25'1999 15:26 915 563 0243

APR-05-1999 15:15

3942740

96%

P.02



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

POD

closed)

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

		TOD		92											
DOD Namehou	C- 1-	Sub-	0		Q			m			1			V	Water
POD Number CP 00729 POD1	Code	CP	County LE					Tws 21S	Rng 37E	X 673259	Y 3594711* ∰	DistanceDe 404	epthWellDe 8015	pthWater C	olumn
<u>CP 00554</u>		CP	LE		2	2	16	21S	37E	672744	3595610*	712	80	70	10
CP 01141 POD3		CP	LE				15	21S	37E	673520	3594272	882	40		
CP 01141 POD2		CP	LE				15	21S	37E	673543	3594250	910	40		
<u>CP 01141 POD4</u>		CP	LE				15	21S	37E	673556	3594239	925	45		
<u>CP 01575 POD1</u>		CP	LE	1	2	1	22	21S	37E	673544	3594204	954	40	35	5
CP 01575 POD2		CP	LE	2	2	1	22	21S	37E	673615	3594181	999	35	35	0
<u>CP 00731 POD1</u>		CP	LE		2	1	22	21S	37E	673577	3594015*	1145	8130		
<u>CP 01794 POD2</u>		CP	LE	3	3	1	14	21S	37E	674594	3595204	1340	198		
<u>CP 01794 POD5</u>		CP	LE	3	3	1	14	21S	37E	674606	3595176 🌑	1349	30	22	8
<u>CP 01794 POD3</u>		CP	LE	3	3	1	14	21S	37E	674623	3595163 🍪	1366	34		
<u>CP 01794 POD6</u>		CP	LE	3	3	1	14	21S	37E	674624	3595194	1369	104		
<u>CP 01794 POD1</u>		CP -	LE	3	3	1	14	21S	37E	674646	3595143	1389	34	18	16
<u>CP 01574 POD1</u>		CP	LE	2	4	4	15	21S	37E	674559	3594598 🌑	1400	68	57	11
<u>CP 01794 POD4</u>		CP	LE	3	3	1	14	21S	37E	674662	3595126	1404	28	19	9
<u>CP 01185 POD1</u>		CP	LE		1	3	14	21S	37E	674598	3594689	1407	70		
<u>CP 01110 POD1</u>		CP	LE		1	3	14	21S	37E	674586	3594648	1407	70		
<u>CP 01110 POD2</u>		CP	LE		1	3	14	21S	37E	674586	3594648 🌑	1407	70		
<u>CP 01110 POD3</u>		CP	LE		1	3	14	21S	37E	674586	3594648	1407	70		
<u>CP 01110 POD4</u>		CP	LE		1	3	14	21S	37E	674586	3594648 🌍	1407	20		
<u>CP 01110 POD5</u>		CP	LE		1	3	14	21S	37E	674586	3594648 🍪	1407	20		
<u>CP 01185 POD3</u>		CP	LE		1	3	14	21S	37E	674592	3594620	1424	70		
<u>CP 01185 POD2</u>		CP	LE		1	3	14	215	37E	674623	3594674	1435	70		
CP 01185 POD4		CP	LE		1	3	14	21S	37E	674633	3594610	1465	70		
<u>CP 01574 POD2</u>		CP	LE	1	3	3	14	21S	37E	674666	3594578	1507	68	57	11
<u>CP 00732 POD1</u> 1610		СР	LE		4	1	22	21S	37E	673584	3593613*	1537	6633		
$\frac{\text{CP }00235 \text{ POD3}}{\text{CP }00235 \text{ POD3}} = 1 \text{ m}$	ile	CP	LE	1	1	1	23	21S	37E	674681	3594137*	1727	90	61	29
<u>CP 00235 POD7</u>		CP	LE	3	1	1	23	21S	37E	674681	3593937*	1848	85	65	20

													10/4/2	1, 2:11 PM
													EXHIBI	
<u>CP 00235 POD6</u>	CP	LE		2	1 1	23	3 218	37E	674881	3594137*	1895	85	65	20
<u>CP 00235 POD4</u>	CP	LE		1 .	3 1	23	218	37E	674688	3593735*	1988	100	80	20
<u>CP 00235 POD2</u>	CP	LE		1 :	2 1	23	218	37E	675083	3594144* 🍪	2068	96	65	31
<u>CP 00235 POD1</u>	CP	LE		2	2 1	23	215	37E	675283	3594144* 🎒	2246	81		
<u>CP 00235 POD5</u>	CP	LE		1 4	4 1	23	218	37E	675090	3593742*	2290	90	70	20
CP 00733 POD1	CP	LE		3	3 3	22	218	37E	673196	3592801*	2314	7864		
<u>CP 00240 POD1</u>	CP	LE		4 2	2 1	23	21S	37E	675283	3593944* 🌑	2340			
<u>CP 00241 POD1</u>	CP	LE		4 2	2 1	23	218	37E	675283	3593944* 🌑	2340	79		
<u>CP 00252 POD1</u>	CP	LE	1	4 2	. 4	22	218	37E	674493	3593125*	2342	106	78	28
<u>CP 00286 POD1</u>	CP	LE		2 1	2	10	21S	37E	674019	3597338*	2349	70		
<u>CP 00251 POD1</u>	CP	LE	1	2 3	4	22	21S	37E	674099	3592915*	2355	103		
CP 00235 POD9	CP	LE	3	3 4	- 1	23	21S	37E	675090	3593542*	2415	94	58	36
<u>CP 00239 POD1</u>	CP	LE		1 1	2	23	21S	37E	675485	3594152*	2427	89	61	28
CP 00235 POD8	CP	LE	3	3 1	2	23	21S	37E	675485	3593952*	2513	94	58	36
CP 00236 POD1	CP	LE	3	3 1	2	23	21S	37E	675485	3593952*	2513	83		
<u>CP 00881</u>	CP	LE		4	4	22	21S	37E	674402	3592824*	2561	95	53	42
<u>CP 00235 POD10</u>	CP	LE	1	3	2	23	21S	37E	675492	3593749*	2619	92	60	32
<u>CP 00235 POD11</u>	CP	LE	1	3	2	23	21S	37E	675492	3593749*	2619	97	60	37
CP 00237 POD1	CP	LE	1	3	2	23	21S	37E	675492	3593749*	2619	84		
<u>CP 01636 POD3</u>	CP	LE	2	2	1	27	21S	37E	673782	3592501	2665	96		
<u>CP 01741 POD1</u>	CP	LE	1	3	4	03	21S	37E	673895	3597759	2719	45		
<u>CP 00238 POD1</u>	CP	LE	3	3	2	23	21S	37E	675492	3593549*	2729	81		
<u>CP 00017 POD1</u>	CP	LE	2	1	2	27	21S	37E	674106	3592513*	2737	101		
<u>CP 00562</u>	CP	LE	1	2	2	23	21S	37E	675887	3594159*	2798	136	65	71
<u>CP 00700</u>	CP	LE			2	23	21S	37E	675794	3593851*	2834	75	65	10
<u>CP 00711</u>	CP	LE	4	2	2	28	218	37E	672900	3592291*	2846	100	65	35
CP 00285 POD1	CP	LE	3	1	2	27	218	37E	673906	3592313*	2876	80		
<u>CP 00552</u>	СР	LE		2	4	04	21S	37E	672700	3598022*	2959	90	75	15
<u>CP 00553</u>	СР	LE		2	4	04	218	37E	672700	3598022*	2959	90	75	15
<u>CP 00294 POD1</u>	CP	LE	1	3	I	27	21S	37E	673110	3592096*	3022			
<u>CP 00293 POD1</u>	CP	LE	2	4	1	27	21S	37E	673711	3592104*	3045	80		
<u>CP 00736</u>	CP	LE		3	1	27	21S	37E	673211	3591997*	3118	120	76	44
CP 00249 POD1	CP	LE	2	3	2	27	21S	37E	674113	3592111*	3123	102		
CP 00250 POD1	CP	LE	2	3	2	27	218	37E	674113	3592111*	3123	101		
<u>CP 01636 POD2</u>	CP	LE	2	3	2	28	21S	37E	672430	3592065	3159	108		
<u>CP 00134 POD1</u>	CP	LE	1	1	1	24	21S	37E	676289	3594166*	3177	85		



EXHIBIT I

Average Depth to Water:

58 feet

Minimum Depth:

18 feet

Maximum Depth:

80 feet

Record Count: 64

UTMNAD83 Radius Search (in meters):

Easting (X): 673257

Northing (Y): 3595115

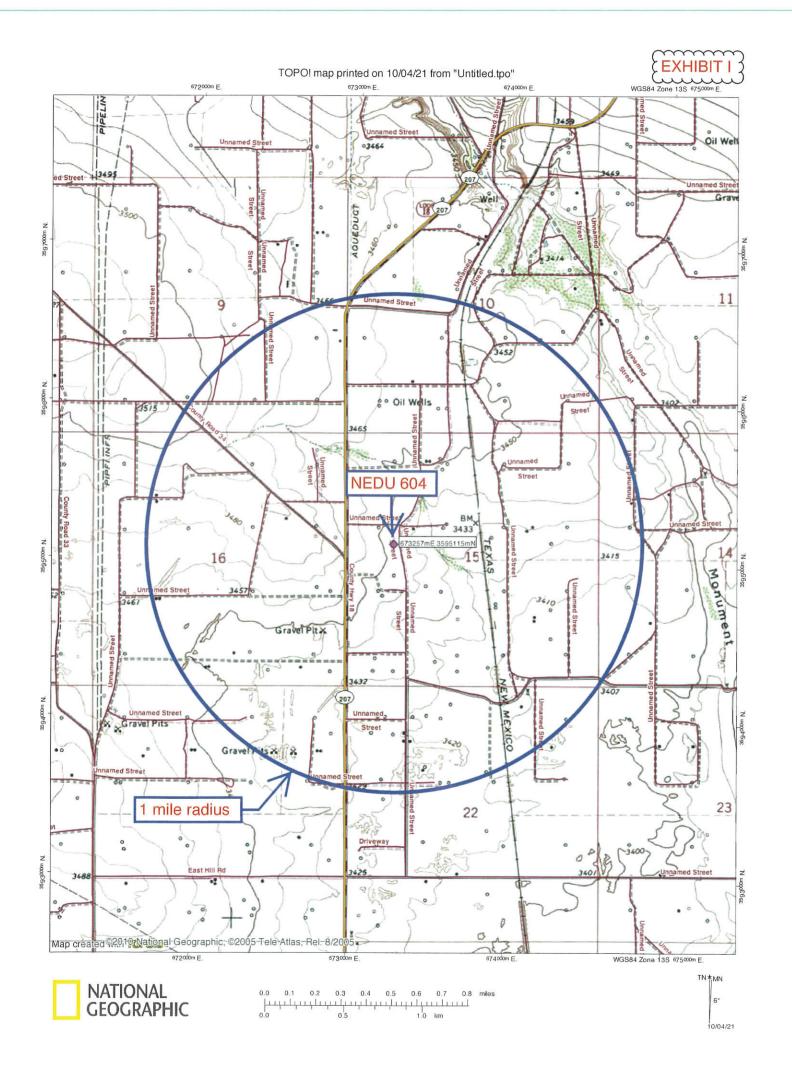
Radius: 3220

*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.

10/4/21 2:10 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER







Date Reported: 10/21/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Permits West

Lab ID:

Client Sample ID: Sec 9 Pond

Project: Sec 9 and Sec 21

Collection Date: 10/6/2021 12:40:00 PM

2110489-001 Matrix: AQUEOUS

Received Date: 10/8/2021 8:03:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 1664B						Analys	t: dms
N-Hexane Extractable Material	ND	10.4		mg/L	1	10/11/2021 5:10:00 PM	M 63187
EPA METHOD 300.0: ANIONS						Analys	t: LRN
Chloride	300	10	*	mg/L	20	10/9/2021 3:47:10 AM	A81916
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analys	t: KS
Total Dissolved Solids	932	20.0	*	mg/L	1	10/15/2021 10:14:00 A	M 63264

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

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 Quanitative 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 Limit

Page 1 of 5



Hall Environmental Analysis Laboratory, Inc.

Date Reported: 10/21/2021

CLIENT: Permits West

Client Sample ID: Sec 21

Project: Sec 9 and Sec 21

Collection Date: 10/6/2021 1:10:00 PM

Lab ID: 2110489-002

Matrix: AQUEOUS Received Date: 10/8/2021 8:03:00 AM

Analyses	Result	RL Qı	ual Units	DF	Date Analyzed	Batch
EPA METHOD 1664B					Analys	t: dms
N-Hexane Extractable Material	ND	9.45	mg/L	1	10/11/2021 5:10:00 PM	1 63187
EPA METHOD 300.0: ANIONS					Analys	t: LRN
Chloride	75	10	mg/L	20	10/9/2021 4:11:59 AM	A81916
SM2540C MOD: TOTAL DISSOLVED SOLIDS					Analys	t: KS
Total Dissolved Solids	495	20.0	mg/L	1	10/15/2021 10:14:00 A	M 63264

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

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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- 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 Limit

QC SUMMARY REPORT



Hall Environmental Analysis Laboratory, Inc.

21-Oct-21

Client:

Permits West

Project:

Sec 9 and Sec 21

Sample ID: MB-63187

SampType: MBLK

TestCode: EPA Method 1664B

Client ID: PBW

Batch ID: 63187

RunNo: 82024

Prep Date: 10/11/2021

Analysis Date: 10/11/2021

SeqNo: 2904273

Units: mg/L

Result

Analyte

N-Hexane Extractable Material

ND 10.0

PQL SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD **RPDLimit** Qual

Sample ID: LCS-63187

SampType: LCS

TestCode: EPA Method 1664B

%REC

91.5

RunNo: 82024

LowLimit

HighLimit

Client ID: LCSW

Batch ID: 63187

SeqNo: 2904274

Analyte

Prep Date: 10/11/2021

Analysis Date: 10/11/2021

Result

36.6

35.6

Units: mg/L

%RPD **RPDLimit**

Qual

Qual

Sample ID: LCSD-63187

N-Hexane Extractable Material

SampType: LCSD

TestCode: EPA Method 1664B

40.00

40.00

SPK value SPK Ref Val

RunNo: 82024

89.0

Client ID: LCSS02

Prep Date: 10/11/2021

Batch ID: 63187

Analysis Date: 10/11/2021

SeqNo: 2904275

Units: mg/L

Analyte N-Hexane Extractable Material Result PQL 10.0

PQL

10.0

SPK value SPK Ref Val %REC LowLimit

0

HighLimit %RPD

RPDLimit 2.77

20

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- POL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits Sample pH Not In Range
- - Reporting Limit

Page 3 of 5

QC SUMMARY REPORT



21-Oct-21

Hall Environmental Analysis Laboratory, Inc.

Client:

Permits West

Project:

Sec 9 and Sec 21

Sample ID: MB

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID: PBW

Batch ID: A81916

RunNo: 81916

Prep Date:

Analysis Date: 10/8/2021

Units: mg/L

Analyte

Result PQL SeqNo: 2899061

HighLimit

%RPD

%RPD

RPDLimit Qual

Chloride

ND 0.50

Sample ID: LCS

SampType: Ics

TestCode: EPA Method 300.0: Anions

Client ID: LCSW

Batch ID: A81916

RunNo: 81916

Prep Date:

Analysis Date: 10/8/2021

SeqNo: 2899062

Units: mg/L

Analyte

Result PQL

SPK value SPK Ref Val %REC

LowLimit HighLimit Qual

5.000

90

110

Chloride

4.9 0.50

0 98.3

SPK value SPK Ref Val %REC LowLimit

RPDLimit

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

E Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 4 of 5

QC SUMMARY REPORT



Hall Environmental Analysis Laboratory, Inc.

Client:

Permits West

Project:

Sec 9 and Sec 21

Sample ID: MB-63264

SampType: MBLK

TestCode: SM2540C MOD: Total Dissolved Solids

Client ID:

PBW

Batch ID: 63264

RunNo: 82074

Prep Date: 10/13/2021 Analyte

Analysis Date: 10/15/2021

SeqNo: 2907245

Units: mg/L

Total Dissolved Solids

PQL

SPK value SPK Ref Val %REC LowLimit

HighLimit %RPD **RPDLimit**

Qual

Sample ID: LCS-63264

ND 20.0

SampType: LCS

TestCode: SM2540C MOD: Total Dissolved Solids

Client ID: LCSW

Batch ID: 63264

RunNo: 82074

Prep Date: 10/13/2021

Analyte

Analysis Date: 10/15/2021

SeqNo: 2907246

Units: mg/L

Total Dissolved Solids

1000

PQL 20.0

SPK value SPK Ref Val %REC 1000 0 100 LowLimit HighLimit %RPD **RPDLimit** Qual

Sample ID: 2110489-001BDUP

SampType: DUP

Result

Result

TestCode: SM2540C MOD: Total Dissolved Solids

120

Client ID: Sec 9 Pond

Batch ID: 63264

RunNo: 82074 SeqNo: 2907256

Units: mg/L

Qual

Analyte Total Dissolved Solids

Prep Date: 10/13/2021

Analysis Date: 10/15/2021

PQL

SPK value SPK Ref Val %REC

LowLimit HighLimit

80

%RPD

RPDLimit

918

20.0

1.51

Qualifiers:

PQL

Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

% Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit Practical Quanitative Limit

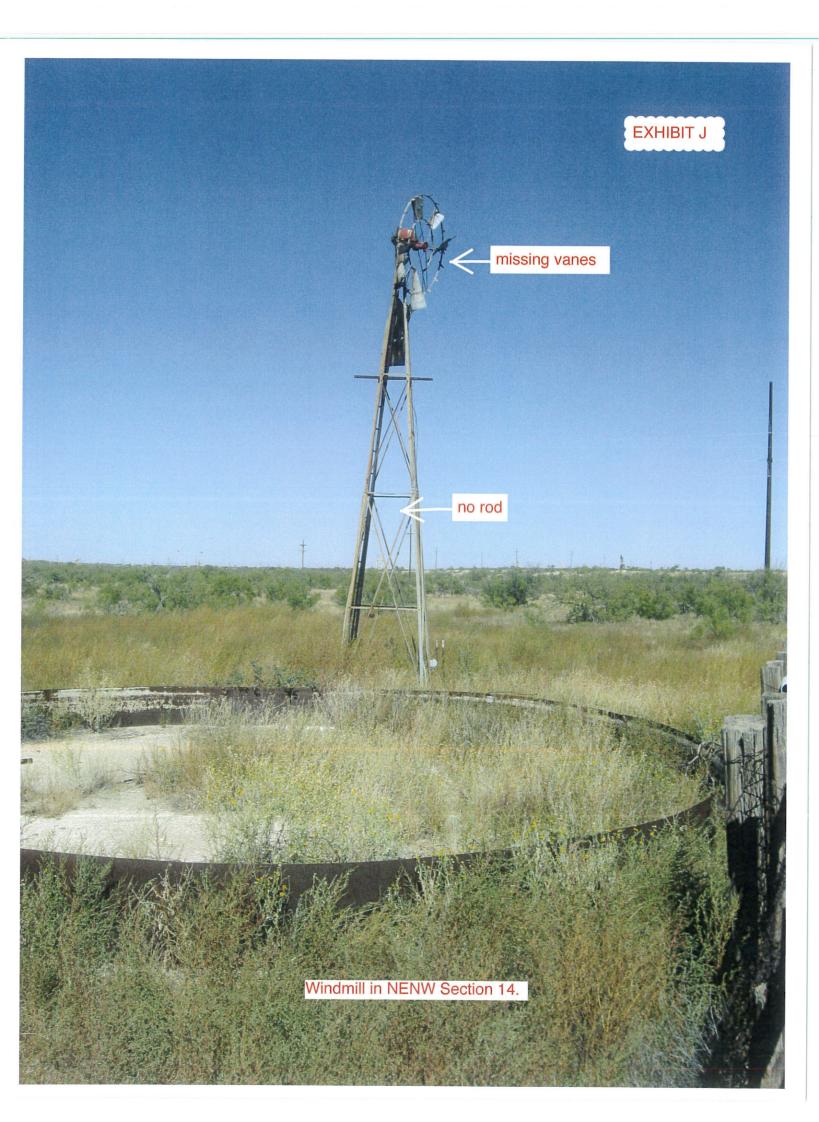
Analyte detected in the associated Method Blank

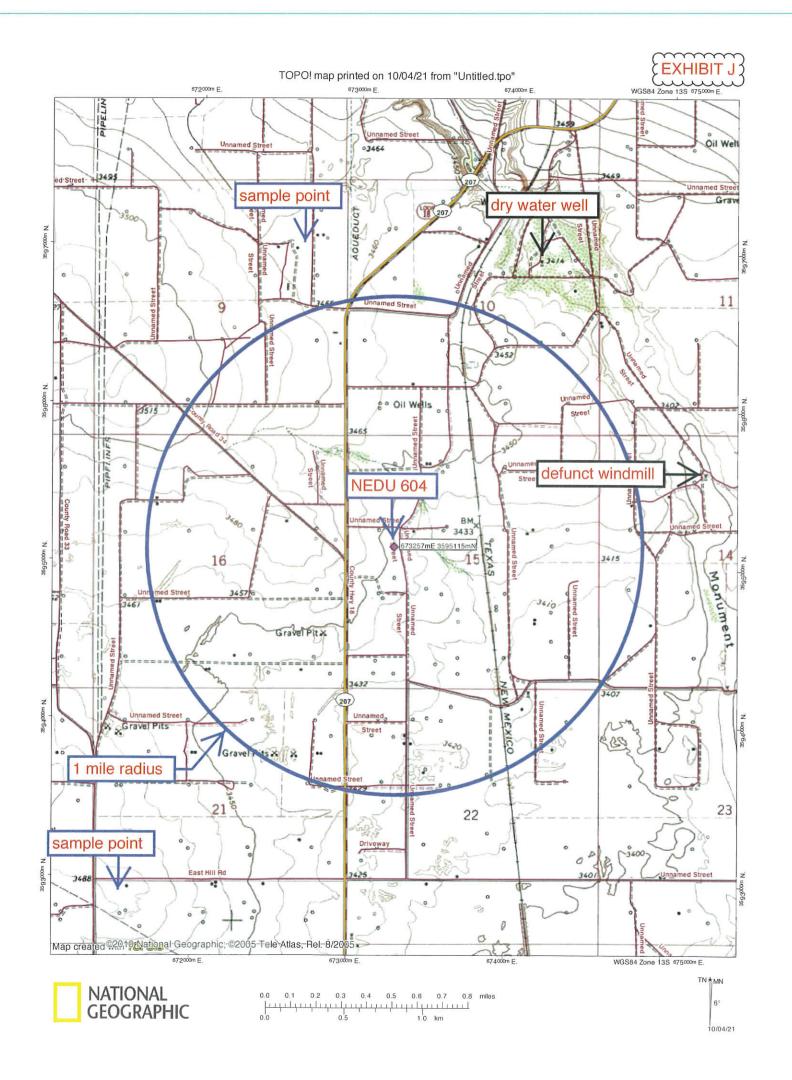
Value above quantitation range

Analyte detected below quantitation limits Sample pH Not In Range

Page 5 of 5











NM Oil Conservation Division 1220 S. St. Francis Dr. Santa Fe, NM 87505

Re: Geology Statement
Apache Corporation
Northeast Drinkard Unit #604
Section 15, T. 21S, R. 37E
Lea County, New Mexico

To whom it may concern:

Publicly available geologic and engineering data related to the proposed well have been thoroughly reviewed, and no evidence for open faults or any other hydrologic connection between the proposed Tubb/Drinkard injection zone and any underground sources of drinking water has been found. Please see the attached seismic risk assessment for additional information.

Sincerely,

Cory Walk Geologist

Coy Walk



Seismic Risk Assessment

Apache Corporation

Northeast Drinkard Unit #604

Section 15, Township 21 South, Range 37 East

Lea County, New Mexico

Cory Walk, M.S.

Con Walk

Geologist

Permits West Inc.

October 28, 2021

Apache Corporation Northeast Drinkard Unit #604

SEISMIC RISK ASSESSMENT PAGE 1



GENERAL INFORMATION

Northeast Drinkard Unit #604 is located in the NW ¼, section 15, T21S, R37E, about 2 miles north of Eunice, NM in the Central Basin Platform of the greater Permian Basin. Apache Corporation proposes to convert this existing oil well to a water injection well. The proposed injection zone is within the Tubb and Drinkard members of the Yeso Formation through a cased hole from 6,420'-6,650' below ground surface. The Tubb and Drinkard are primarily carbonate reservoirs with the Tubb also containing some dolomitic sandstone intervals. This report assesses any potential concerns relating to induced seismicity along deep penetrating Precambrian faults or the connection between the injection zone and known underground potable water sources.

SEISMIC RISK ASSESSMENT

Historical Seismicity

Searching the USGS earthquake catalog resulted in no (0) earthquakes above a magnitude 2.5 within 6 miles (9.7 km) of the proposed injection site since 1970 (Fig 1). According to this dataset, the nearest historical earthquake occurred June 2, 2001 about 10.1 miles (~16.2 km) south and had a magnitude of 3.3.

Basement Faults and Subsurface Conditions

A structure contour map (Fig. 1) of the Precambrian basement shows the Northeast Drinkard Unit #604 is approximately 2.4 miles from the nearest basement-penetrating fault inferred by Ewing et al (1990) and about 62 miles from the nearest surface fault.

Snee and Zoback (2018) state, "In the western part of Eddy County, New Mexico, S_{Hmax} is ~north—south (consistent with the state of stress in the Rio Grande Rift; Zoback and Zoback, 1980) but rotates to ~east-northeast—west-southwest in southern Lea County, New Mexico, and the northernmost parts of Culberson and Reeves counties, Texas." Around the Northeast Drinkard Unit #604 site, Snee and Zoback indicate a S_{Hmax} direction of N075°E and an A_{ϕ} of 0.81, indicating a normal/strike-slip faulting stress regime.

Induced seismicity is a growing concern of deep injection wells. Snee and Zoback (2018) show that due to its orientation, the nearest Precambrian fault has a low probability of slipping (Fig. 2). Also, the proposed injection zone is much shallower in the Tubb and Drinkard members of the Yeso Formation and therefore would not affect the deep Precambrian faults. The vertical (approx. 1500') and horizontal (2.4 miles) separation between the proposed SWD injection zone and any deep Precambrian faults is large enough to infer that there is no immediate concern or potential of induced seismicity as a result from this injection well.

GROUNDWATER SOURCES

Three principal aquifers are used for potable groundwater in southern Lea County; these geologic units include the Triassic Santa Rosa formation, Tertiary Ogallala formation, and Quaternary alluvium. Nicholson and Clebsch (1961) state, "Potable ground water is not available below the Permian and Triassic unconformity but, because this boundary is not easily defined, the top of the Rustler anhydrite formation is



Apache Corporation Northeast Drinkard Unit #604

SEISMIC RISK ASSESSMENT PAGE 2

regarded as the effective lower limit of 'potable' ground water." Around the Northeast Drinkard Unit #604 well, the top of a thick anhydrite unit interpreted to represent the Rustler Formation lies at a depth of \sim 1570 feet bgs.

STRATIGRAPHY

A thick permeability barrier (Rustler Anhydrite and Salado Fm; 1500+ ft thick) exists above the targeted Tubb/Drinkard injection zone. Well data indicates ~4,850 ft of rock separating the top of the injection zone from the previously stated lower limit of potable water at the top of the Rustler anhydrite formation.

CONCLUDING STATEMENT

All available geologic and engineering data evaluated around the Northeast Drinkard Unit #604 well show no potential structural or stratigraphic connection between the Tubb/Drinkard injection zone and any subsurface potable water sources. The shallow injection zone, spatial location and orientation of nearby faults also removes any major concern of inducing seismic activity.



SEISMIC RISK ASSESSMENT PAGE 3

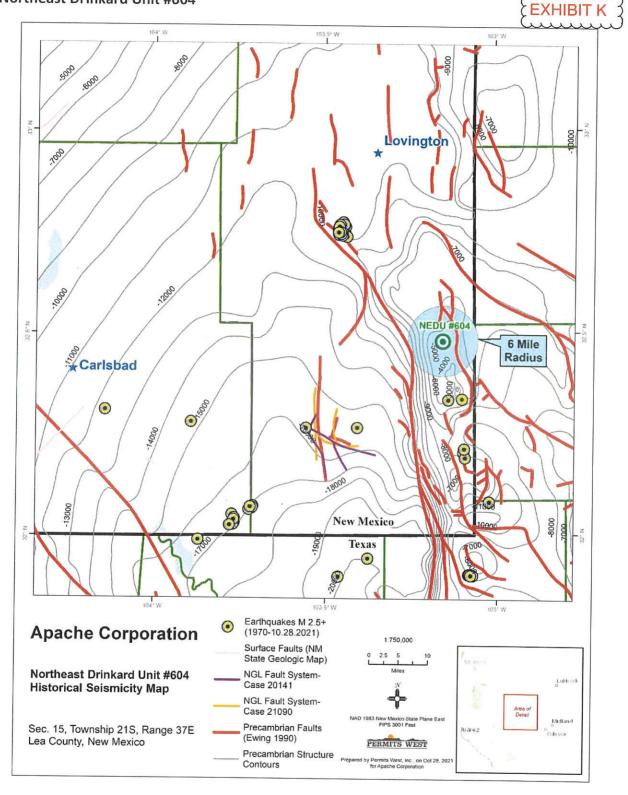


Figure 1. Structural contour map of the Precambrian basement in feet below sea level. Red lines represent the locations of Precambrian basement-penetrating faults (Ewing et al., 1990). The Northeast Drinkard Unit #604 well lies \sim 2.4 miles west of the closest deeply penetrating fault, \sim 62 miles from the nearest surface fault and \sim 10.1 miles from the closest historic earthquake.



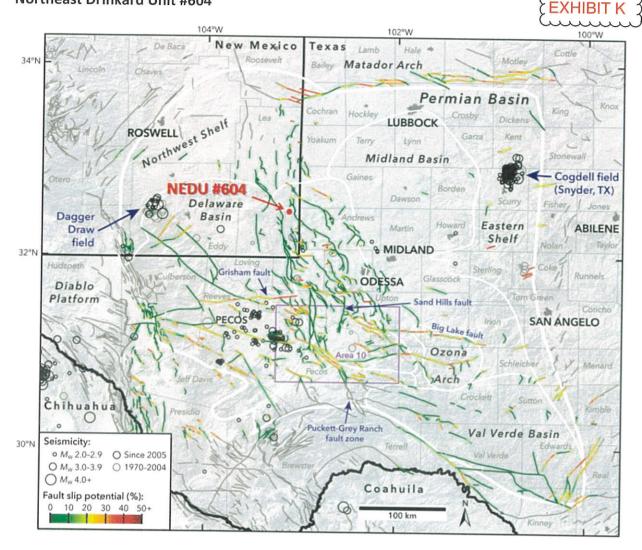


Figure 2. Modified from Snee and Zoback (2018). The nearest deep Precambrian fault lies \sim 2.4 miles east of the proposed SWD well and has a low probability (0%) of slip. Also, the proposed injection zone is much shallower in the Tubb and Drinkard and therefore removes any major concern of inducing seismicity on any known fault.



Apache Corporation Northeast Drinkard Unit #604

SEISMIC RISK ASSESSMENT PAGE 5

References Cited



- Ewing, T. E., 1990, The tectonic map of Texas: Austin, Bureau of Economic Geology, The University of Texas at Austin.
- Geologic Map of New Mexico, New Mexico Bureau of Geology and Mineral Resources, 2003, Scale 1:500,000.
- Nicholson, A., Jr., and Clebsch, A., Jr., 1961, Geology and ground-water conditions in southern Lea County, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Ground-Water Report 6, 123 pp., 2 plates.
- Snee, J.-E.L., Zoback, M.D., 2018, State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity: Leading Edge, v. 37, p. 127–134.



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 September 23, 2021 and ending with the issue dated September 23, 2021.

Publisher

Sworn and subscribed to before me this 23rd day of September 2021.

Business Manager

, My commission expires

January 29, 2023

(Seal)

OFFICIAL SEAL GUSSIE DLACK Notary Public State of New Mexico
My Commission Expires 272

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

EXHIBIT L

LEGALS

LEGAL NOTICE September 23, 2021

Apache Corporation is applying to convert the Northeast Drinkard Unit 604 oil well to a water injection well. The well is at 2310 FNL & 990 FWL, at 2310 FNL & 990 FWL, Sec. 15, T. 21 S., R. 37 E., Lea County, NM. This is 3 miles north of Eunice, NM. Water will be injected at a maximum pressure of maximum pressure of 1,284 psi into the Tubb and Drinkard formations from 6,420' to 6,650'. Maximum injection rate will be 1,000 bwpd. Interested parties must interested parties must file objections or requests for hearing with the NM Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505 or ocd.engineer@state.nm. us within 15 days. NMOCD Engineering Bureau phone is 505
476-3441. 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. #36887

02108485

BRIAN WOOD PERMITS WEST 37 VERANO LOOP

SANTA FE, NM 87508

00258762





October 29, 2021

BLM 620 E. Greene Carlsbad NM 88220

TYPICAL NOTICE

Apache Corporation is planning (see attached application) to convert its Northeast Drinkard Unit 604 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 604 (NMSLO lease)

Proposed Injection Zones: Tubb & Drinkard from 6420' to 6650'

Where: 2310' FNL & 990' FWL 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) 818-1062

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

<u>Submittal Information:</u> 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 NMOCD Enginering Bureau address is 1220 South St. Francis Dr. Santa Fe, NM 87505. Phone number is (505) 476-3441. E-mail address is: ocd.engineer@state.nm.us

Please call me if you have any questions.

Sincerely,

Brian Wood



フィフィ	Bomestic Mail Only
미	OFFICIAL USE
	Extra Services & Fees (check box, add fee as appropriate) Return Receipt (hardcopy) Return Receipt (electronic) Certified Mail Restricted Delivery Adult Signature Required Adult Signature Restricted Delivery \$ Postage Total Postage and Fees ConocoPhillips Co. c/o L. Noel S F. O. Box 2197 Houston TX 77252 Street and Apt. No., or PCApache NEDU 604 City, State, ZiP+4®
ı	PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for last at the second secon

0	
	For delivery information, visit
17 17 17	OF F C A website at www.usps.com°.
m	Extra Services & Form
0000 0	Extra Services & Fees (check box, add fee as appropriate) Return Receipt (nardcopy) Return Receipt (electronic) Certified Mail Restricted Delivery \$ Adult Signature Restricted Delivery \$ Postage
1810	USPS
T	Total Postage and Fees John Hendrix Corp.
	Sent To P. O. Box 3040
П	Midland TX 79702 Street and Apt. No., or POApache NEDU 604
I	City, State, ZIP+4®
	PS Form 3800, April 2015 PSN 7630-02-000-9047 See Reverse for Instructions

U.S. Postal Service™ CERTIFIED MAIL® RECEIP I Domestic Mail Only For delivery information, visit our website at www.u	EXHIBIT L
For delivery information, visit our website at www.u	isps.com®.
Certified Mail Fee Extra Services & Fees (check box, add fee as appropriate) Return Receipt (hardcopy)	S E Postmark 1999
Postage \$ Total Postage and Fees BLM \$ 620 F. Greene	PS
Sent To Carlsbad NM 88220	
Street and Apt. No., or PCApachie NEDU 604 City, State, ZIP-48	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reve	rse for Instructions

무무무	U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only
=	For delivery information, visit our website at www.usps.com®.
	OFFICIAL USE
9+6	Certified Mail Fee
E	\$ Extra Services & Fees (check box, add fee as appropriate) Return Receipt (hardcopy) \$
	Return Receipt (electronic) \$ Postmark
	Certified Mail Restricted Delivery \$ Here
	Adult Signature Restricted Delivery \$ OCT 2 9 2021 0
	Postage 5
1810	Total Postage and Fees Chevron USA Prod. Co.
F	s P. O. Box 1635
	Sent To Houston TX 77251
7020	Street and Apt. No., or PCApache NEDU 604
1-	City, State, ZIP+4*
	PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

	U.S. Postal Service™
	CERTIFIED MAIL® RECEIPT
П	Domestic Mail Only
中日	
-	For delivery information, visit our website at www.usps.com®.
	OFFICIAL USE I
山	Certified Mail Fee
	n not than 1 do
m	Extra Services & Fees (check box, add fee as appropriate)
	Return Receipt (hardcopy) \$
	Return Receipt (electronic) \$ Postmark
	Certified Mail Restricted Delivery \$ Here
	Adult Signature Required \$
	Adult Signature Restricted Delivery \$
1810	Postage 5 0CT 2 9 2021 (2)
	\$ /20/
T	Total Postage and Fees Empire New Mexico LLC
	\$ 2200 S. Utica Place, #150
	Sent To Tulsa OK 74114
	Street and Apt. No., or PoApacine NEDU 604
r-	
	City, State, ZIP+43
	PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions
	PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



48 750	Por delivery information, visit our website at www.usps.com®.
1810 0000 39	SEXTRA Services & Fees (check box, add fee as appropriate) Return Receipt (nardcopy)
~	Street and Apt. No., or PORpasite NEDU 604 City, State, ZIP+48
	PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for instruction

EXHIBIT L

U.S. Postal Service™

For delivery information, visit our web	site at www.usps.com [®]
OFFICIA ertified Mail Fee	LUSE
ktra Services & Fees (check box, add fee as appropriate Return Receipt (hardcopy)	Postmark Plere 2021
stage	
al Postage and Fees Occidental Permian	Ltd. USPS
nt To P. O. Box 4294	
Houston TX 77210	

55	U.S. Postal Service™ CERTIFIED MAIL® REC Domestic Mail Only	
7	For delivery information, visit our website	at www.usps.com®.
	OFFICIAL	. USE
	Certified Mail Fee	
0912	\$	
	Extra Services & Fees (check box, add fee as appropriate)	03.3
-	Return Receipt (hardcopy) \$	1 0 1 5 3 X
	Return Receipt (electronic) \$	Postmark
	Certified Mail Restricted Delivery \$	
	Adult Signature Required \$	0 2021 10
	Adult Signature Restricted Delivery \$	001 29 2021 /2
	Postage	1 1
	\$	(X) 1.1
	Total Postage and Fees NMSLO	100 min
1.1	\$ P. O. Box 1148	11582
-D	Santa Fe NM 87504	And the latest of the latest o
7078	Street and Apt. No., or POA packe NEDU 604	
	City, State, ZIP+4®	
	PS Form 3800, April 2015 PSN 7530-02-000-9047	See Reverse for Instructions



U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only
For delivery information, visit our website at www.usps.com®. OFFICIALUSE Certified Mail Fee
\$ Extra Services & Fees (check box, add fee as appropriate) Return Receipt (hardcopy) S
Sent To Houston TX 77210 USPS Street and Apt. No., or PCApache NEDU 604
City, State, ZIP+4® /1 PS Form 3800, April 2015 PSN 7530-02-000-9047 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
Certified Mail Fee
s A Company of the Co
Extra Services & Fees (check box, add fee as appropriate) Return Receipt (hardcopy) \$
Postura Receipt (electronic) \$ Postmark
Certified Mail Restricted Delivery \$ Here
Adult Signature Required \$
Adult Signature Restricted Delivery \$
Postage
\$ U3:
Total Postage and Fees XTO Energy Inc.
s 6401 Holiday Hill Rdl, Bldg. 5
Sent To Midland TX 79707
Street and Apt. No., or POApache NEDU 604
City, State, ZIP+4®
BS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instruction

L L

L

U.S. Postal Service™ EXHIBIT L CERTIFIED MAIL® RECEIP I Domestic Mail Only
For delivery information, visit our website at www.usps.com®.
OFFICIAL USE Certified Mall Fee \$
The dervices & Fees (check box, edd fee as appropriate)
Return Receipt (electronic) Certified Mail Restricted Delivery Postmark
Adult Signature Restricted Delivery \$ Postage Total Postage and Fees Penroc Oil Core
le o'ii corp.
Sent To P. O. Box 2769
Hobbs NM 88241 Street and Apt. No., or PCApache NEDU 604
City, State, ZIP+4®
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



