

RECEIVED: <u>3/20/2018</u>	REVIEWER:	TYPE: <u>WFX</u>	APP NO: <u>perm180 r537754</u>
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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: East Blinbry Drinkard Unit 43 **API:** 30-025-06573
Pool: Eunice; BLI-TU-DR, North **Pool Code:** 22900

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

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

A. Location – Spacing Unit – Simultaneous Dedication

☐ NSL☐ NSP (PROJECT AREA)☐ NSP (PRORATION UNIT)☐ SD

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

[I] Commingling – Storage – Measurement

☐ DHC☐ CTB☐ PLC☐ PC☐ OLS☐ OLM

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

☒ WFX☐ PMX☐ SWD☐ IPI☐ EOR☐ PPRWFX-980MAR 25 2018 AM 09:19**2) NOTIFICATION REQUIRED TO:** Check those which apply.A. ☒ Offset operators or lease holdersB. ☐ Royalty, overriding royalty owners, revenue ownersC. ☒ Application requires published noticeD. ☐ Notification and/or concurrent approval by SLOE. ☒ Notification and/or concurrent approval by BLMF. ☒ Surface ownerG. ☒ 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

Signature

3-23-18

Date

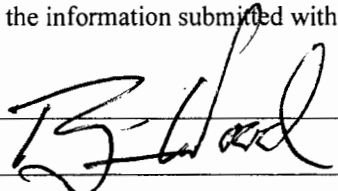
505 466-8120

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-12981
- 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.
EAST BLINEBRY DRINKARD UNIT 43
- VII. Attach data on the proposed operation, including: **30-025-06573**
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: MAR. 12, 2018
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: EAST BLINEBRY DRINKARD UNIT 43

WELL LOCATION: 1980' FNL & 660' FEL

H

14

21 S

37 E

FOOTAGE LOCATION

UNIT LETTER

SECTION

TOWNSHIP

RANGE

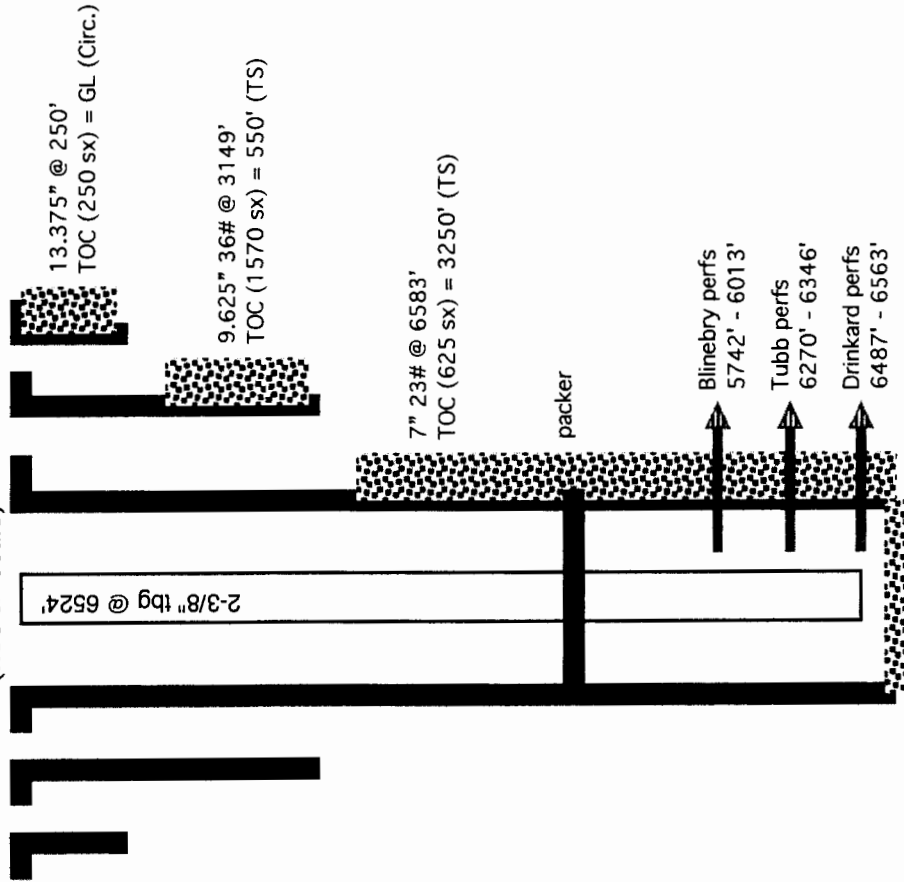
WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

" AS IS"

(not to scale)



Hole Size:	NO REPORT	Casing Size:	13.375"
Cemented with:	250 sx.	or	ft ³
Top of Cement:	SURFACE	Method Determined:	CIRCULATED
<u>Intermediate Casing</u>			
Hole Size:	NO REPORT	Casing Size:	9.625"
Cemented with:	1570 sx.	or	ft ³
Top of Cement:	550'	Method Determined:	TEMP. SURV.
<u>Production Casing</u>			
Hole Size:	NO REPORT	Casing Size:	7"
Cemented with:	625 sx.	or	ft ³
Top of Cement:	3250'	Method Determined:	TEMP. SURV.
Total Depth:	6648'		
<u>Injection Interval</u>			
5599 feet to 6039'			

(Perforated or Open Hole; indicate which)
■■■■■■■■■■

INJECTION WELL DATA SHEET

OPERATOR: APACHE CORPORATIONWELL NAME & NUMBER: EAST BLINEBRY DRINKARD UNIT 43WELL LOCATION: 1980' FNL & 660' FEL

H

FOOTAGE LOCATION

UNIT LETTER

14

SECTION

21 S

TOWNSHIP

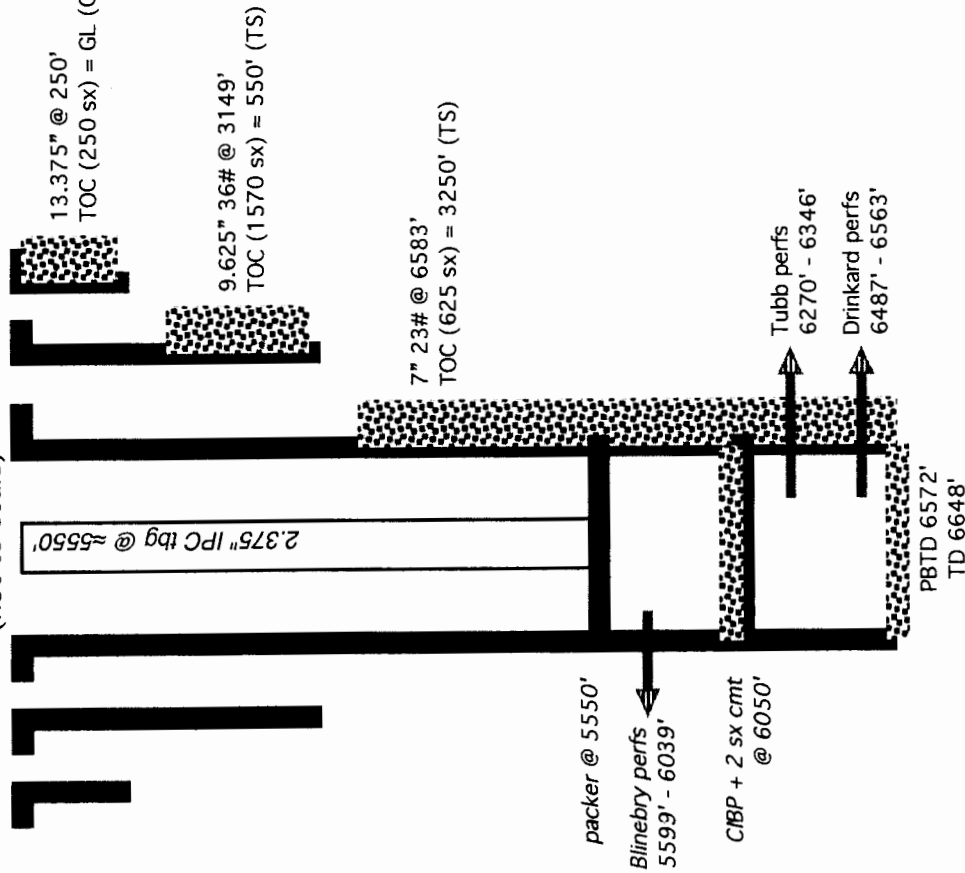
37 E

RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

" PROPOSED "

(not to scale)

Hole Size: NO REPORTCasing Size: 13.375"13.375" @ 250'
TOC (250 sx) = GL (Circ.)Cemented with: 250 sx.or ft³Top of Cement: SURFACEMethod Determined: CIRCULATEDIntermediate CasingHole Size: NO REPORTCasing Size: 9.625"9.625" 36# @ 3149'
TOC (1570 sx) = 550' (TS)Cemented with: 1570 sx.or ft³7" 23# @ 6583'
TOC (625 sx) = 3250' (TS)Top of Cement: 550'Method Determined: TEMP. SURV.Production CasingHole Size: NO REPORTCasing Size: 7"

packer @ 5550'

Cemented with: 625 sx.or ft³CIBP + 2 sx cmt
@ 6050'Top of Cement: 3250'Method Determined: TEMP. SURV.Tubb perfs
6270' - 6346'Total Depth: 6648'Drinkard perfs
6487' - 6563'Injection Interval

5599 feet to 6039'

(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: ≈5550'

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

Additional Data

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

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

2. Name of the Injection Formation: BLINEBRY
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: SEVEN RIVERS (2940'), QUEEN (3505'), GRAYBURG (3840'),

SAN ANDRES (4090')

UNDER: TUBB (6040'), DRINKARD (6476'), ABO (6794')

APACHE CORPORATION
EAST BLINEBRY DRINKARD UNIT 43
1980' FNL & 660' FEL
SEC. 14, T. 21 S., R. 37 E., LEA COUNTY, NM

PAGE 1

30-025-06573

I. Goal is to convert a 6648' deep oil well to a water injection well to increase oil recovery. The well will inject (5599' - 6039') into the Blinebry, which is part of the Eunice; Blinebry-Tubb-Drinkard, North Pool (aka, Eunice; BLI-TU-DR, North and pool code = 22900).

Well and zone are in the East Blinebry Drinkard Unit (Case Numbers 13503 and 13504, Order Numbers R-12394 and R-12395) that was established in 2005 by Apache. There have been seven subsequent WFX approvals (WFX-819, -842, -904, -909, -963, -969, and -977). This is an active water flood. Twenty-four water injectors are now in the Unit. Injection increase to 2100 psi was authorized (IPI-292) in 2008.

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: BLM (NMNM-125057)
Lease Size: 1200 acres (see Exhibit A for maps and C-102)
Closest Lease Line: 660'
Lease Area: E2E2 Section 14, T. 21 S., R. 37 E. et al
Unit Size: 2080 acres BLM Unit #: NMNM-112723X
Closest Unit Line: 933'
Unit Area: T. 21 S., R. 37 E.
Section 1: Lots 11-15, W2SE4, & SW4
Section 11: E2 & NW4
Sections 12: W2 & W2E2
Section 13: W2, W2NW4, & NWSE
Section 14: NE4 & E2SE4

A. (2) Surface casing (13.375") is set at 250' and cemented to GL (circulated) with 250 sacks.

Intermediate casing (9.625", 36#, J-55) is set at 3149' and cemented to 550' (temperature survey) with 1570 sacks.

Production casing (7", 23#, J-55 & N-80) is set at 6583' and cemented to 3250' (temperature survey) with 625 sacks.

A CIBP will be set at $\approx 6055'$ and topped with 2 sacks cement. Mechanical integrity of the casing will be assured by hydraulically pressure testing to 500 psi for 30 minutes.

- A. (3) Tubing will be 2-3/8" J-55 (4.7# IPC or 5.3# fiber lined). Setting depth will be $\approx 5550'$. (Disposal interval will be 5599' - 6039'.)
- A. (4) A lock set injection packer will be set at $\approx 5550'$ ($\approx 50'$ above the highest proposed perforation of 5599').
- B. (1) Injection zone will be the Blinebry carbonate. It is part of the Eunice; Blinebry-Tubb-Drinkard, North Pool. Fracture gradient is ≈ 0.56 psi/ft.
- B. (2) Injection interval will be from 5599' to 6039' in a cased hole. Well has been perforated in the Blinebry (5728' - 6013'), Tubb (6270' - 6346'), and Drinkard (6487' - 6648').
- B. (3) Well was drilled in 1958 as a Blinebry and Drinkard oil well. Tubb was added in 2006.
- B. (4) Well is currently perforated in Blinebry (5742' - 6013'), Tubb (6270' - 6346'), and Drinkard (6487' - 6563'). Tubb and Drinkard will be isolated and well will be perforated in Blinebry from 5599' to 6039' with 2 shots per foot. Shot diameter = 0.40". Perforation and isolation history follows:

Depth	Zone	Action
5728 - 5852	Blinebry	perforated 1958
5728 - 5852	Blinebry	squeezed 1966
5742 - 6013	Blinebry	perforated 1966
6270 - 6346	Tubb	perforated 2006
6533 - 6648	Drinkard	squeezed 1966
6568 - 6648	Drinkard	perforated 1958
6583 - 6648	Drinkard	perforated 1966

- B. (5) Next higher potential oil or gas zone in the area of review is the Grayburg. Its bottom is at 4090'. Injection will occur in the Blinebry. Highest perforation will be 5599'.

Next lower oil or gas zone in the area of review is the Tubb, part of the same Eunice; Blinebry-Tubb-Drinkard, North Pool and same Unit. Tubb top is at 6040'. Deepest perforation will be 6039'.

IV. This is not a horizontal or vertical expansion of an existing injection project. Case files 13503 and 13504 describe the water flood.

V. Exhibit B shows and tabulates all 30 existing wells (21 oil wells + 6 injectors + 3 P&A) within a half-mile radius, regardless of depth. Exhibit C shows all 548 existing wells (360 oil or gas wells + 85 injection or disposal wells + 62 P&A wells + 41 water supply wells) within a two-mile radius.

Exhibit D shows all leases (BLM, fee) within a half-mile radius. Exhibit E shows all lessors (BLM, fee, and state) within a two-mile radius. 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
S2SE4 Sec. 11	BLM	NMNM-125057	Apache, BP, Chevron USA	Apache
SWSW Sec. 12	fee	Chesher	Apache	Apache
N2NW4 Sec. 13	fee	Gulf Bunin	Apache	Apache
S2SNW4, N2SW4, & SWSW Sec. 13	BLM	NMNM-125057	Apache, BP, Chevron USA	Apache
E2E2 Sec. 14	BLM	NMNM-125057	Apache, BP, Chevron USA	Apache
W2NE4 Sec. 14	fee	Smith	Apache	Apache
E2NW4 Sec. 14	fee	Andrews	Apache	Apache
W2SE4 Sec. 14	fee	Naomi Keenum	Chevron USA	Chevron USA
NESW Sec. 14	fee	Eubanks	J R Cone	J R Cone

VI. Thirty existing wells are within a half-mile. All 30 wells penetrated the Blinebry. The penetrators include 21 oil wells, 6 injectors, and 3 P&A wells. A table abstracting the construction details and histories of the penetrators is in Exhibit F. Exhibit G has diagrams of the P&A wells.

- VII. 1. Average injection rate will be \approx 400 bwpd.
Maximum injection rate will be 500 bwpd.
2. System is closed. Well will be tied into the existing unit pipeline system.
3. Average injection pressure will be \approx 2000 psi. Maximum injection pressure will be 2100 psi (IPI-292).
4. Water source will be water pumped from an existing San Andres water supply well. A comparison of nearby analyses and San Andres follows.

No compatibility problems have reported from the 17,047,373 barrels that have been injected in the Unit to date.

	<u>NEDU 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 Unit has 91 oil wells. Project goal is 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 1° to 2°. The injection interval is Leonardian in age, 440' thick, and consists of tan to dark gray shallow marine carbonates, many of which have been dolomitized. Core filling and replacement anhydrite is common in the limestone. Nodular anhydrite is common in the dolomite. Five per cent porosity cut off is used to determine pay zones. Impermeable shale and carbonates vertically confine the interval.

There are 105 Blinebry injection wells in New Mexico. The East Blinebry Drinkard Unit shares its west border with Apache's Northeast Drinkard Unit. Three other similar water floods (West Blinebry Drinkard Unit, Northeast Drinkard Unit, and Warren Blinebry Unit) are within a mile of the East Blinebry Drinkard Unit. The

slightly more distant (2 miles) Central Drinkard Unit has been under water flood since the 1960s.

Formation depths are:

Quaternary = 0'
Rustler = 1360'
Salado = 1450'
Tansill = 2540'
Seven Rivers = 2940'
Queen = 3505'
Grayburg = 3840'
San Andres = 4090'
Glorieta = 5300'
Blinebry = 5599'
injection interval = 5599' - 6039'
Blinebry marker = 5680'
Tubb = 6040'
Drinkard = 6476'
TD = 6648'

According to Office of the State Engineer records (Exhibit H), 19 fresh water wells are within a mile radius. Deepest of the 19 wells is 136'. Two water wells within 3800' were sampled (Exhibit H).

The same records show the deepest water well within 2 miles is 8130'. Three water wells within a 2-mile radius penetrated the Blinebry. All three are oil wells that were plugged back and converted to San Andres water supply wells for Apache water floods. Two are active and one is P&A (30-025-06606). Otherwise, deepest water well within 2-miles is 136'. The three wells and their OSE and NMOCD identifying numbers are:

CP 00729 POD1 = 30-025-06606
CP 00731 POD 1 = 30-025-06742
CP 00732 POD1 = 30-025-06737

There will be >4,000' of vertical separation and hundreds of feet of salt and anhydrite between the bottom of the only likely underground fresh water source

(Quaternary redbeds) and the top of the injection interval. Well is a 1.7 mile south-southwest of the Ogallala aquifer (Exhibit H).

There are 214 active or new injection wells and 8 active disposal wells in either the Blinebry-Tubb-Drinkard, San Andres, Grayburg, Queen, Seven Rivers, or Yates in T. 21 S., R. 37 E.

- IX. The well will be stimulated with acid to clean out scale or fill.
- X. GR-Neutron and SP-Resistivity logs are on file with NMOCD.
- XI. Analyses from two fresh water wells within 3800' are in Exhibit H.
- XII. Apache (Exhibit I) is not aware of any geologic or engineering data that may indicate the injection interval is in hydrologic connection with any underground sources of water. Closest Quaternary faults are \approx 109 miles southwest (Exhibit I). There are 105 Blinebry injection wells in New Mexico. Previously approved water flood expansions in the Unit include WFX-819, -842, -904, -909, -963, -969, and -977.
- XIII. A legal ad (see Exhibit J) was published on February 14, 2018. Notice (this application) has been sent (Exhibit K) to the surface owner (James Bryant), government lessors (BLM), lessees (BP, Chevron USA), and all operators (Chevron USA, J R Cone) within a half-mile regardless of depth.

NEW MEXICO OIL CONSERVATION COMMISSION
Well Location and Acreage Dedication Plat

EXHIBIT A

Section A.

Date May 2, 1958

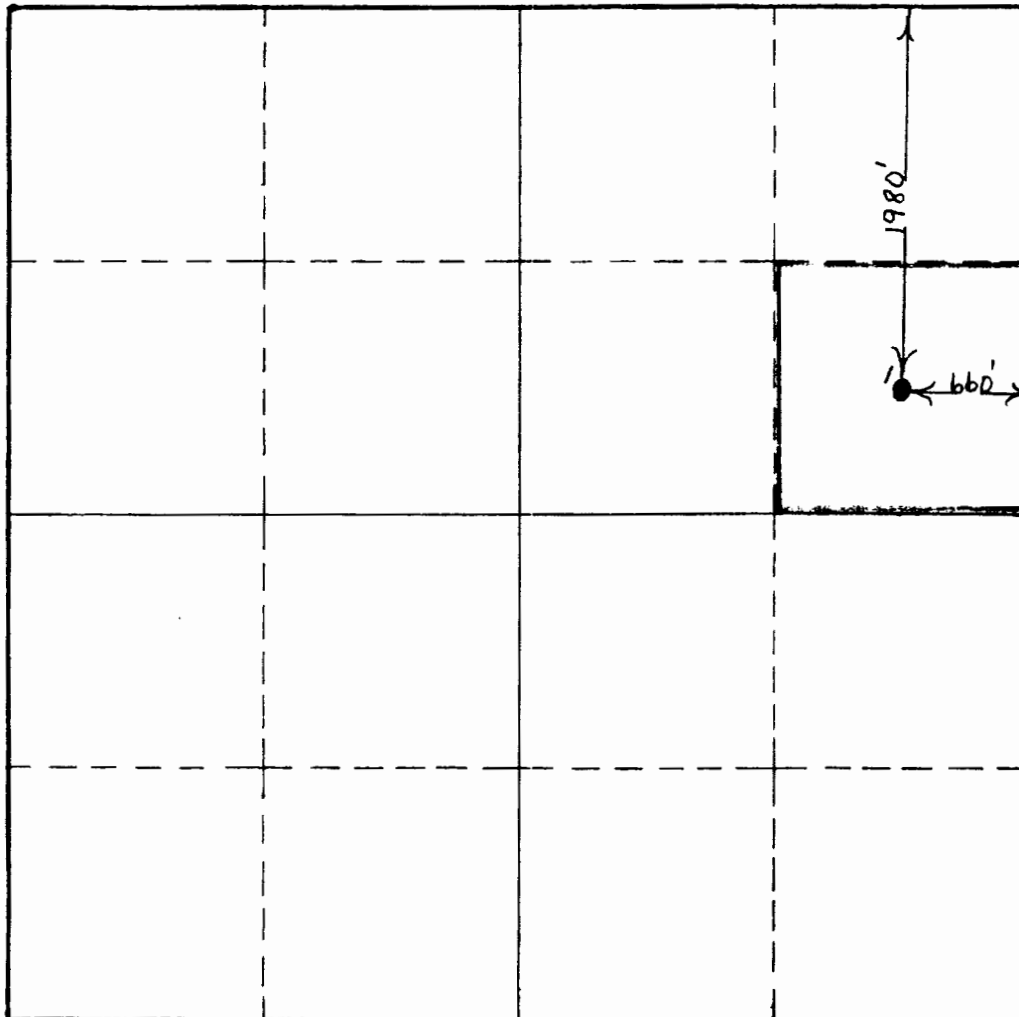
Operator Continental Oil Company Lease Lockhart B-14 NA
Well No. 1 Unit Letter H Section 14 Township 21S Range 37E NMPM
Located 1980 Feet From north Line, 660 Feet From East Line
County Lea G. L. Elevation 3422 Dedicated Acreage 40 Acres
Name of Producing Formation Drinkard Pool Drinkard

1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below?
Yes X No .
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



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

Continental Oil Company
(Operator)
[Signature]
(Representative)

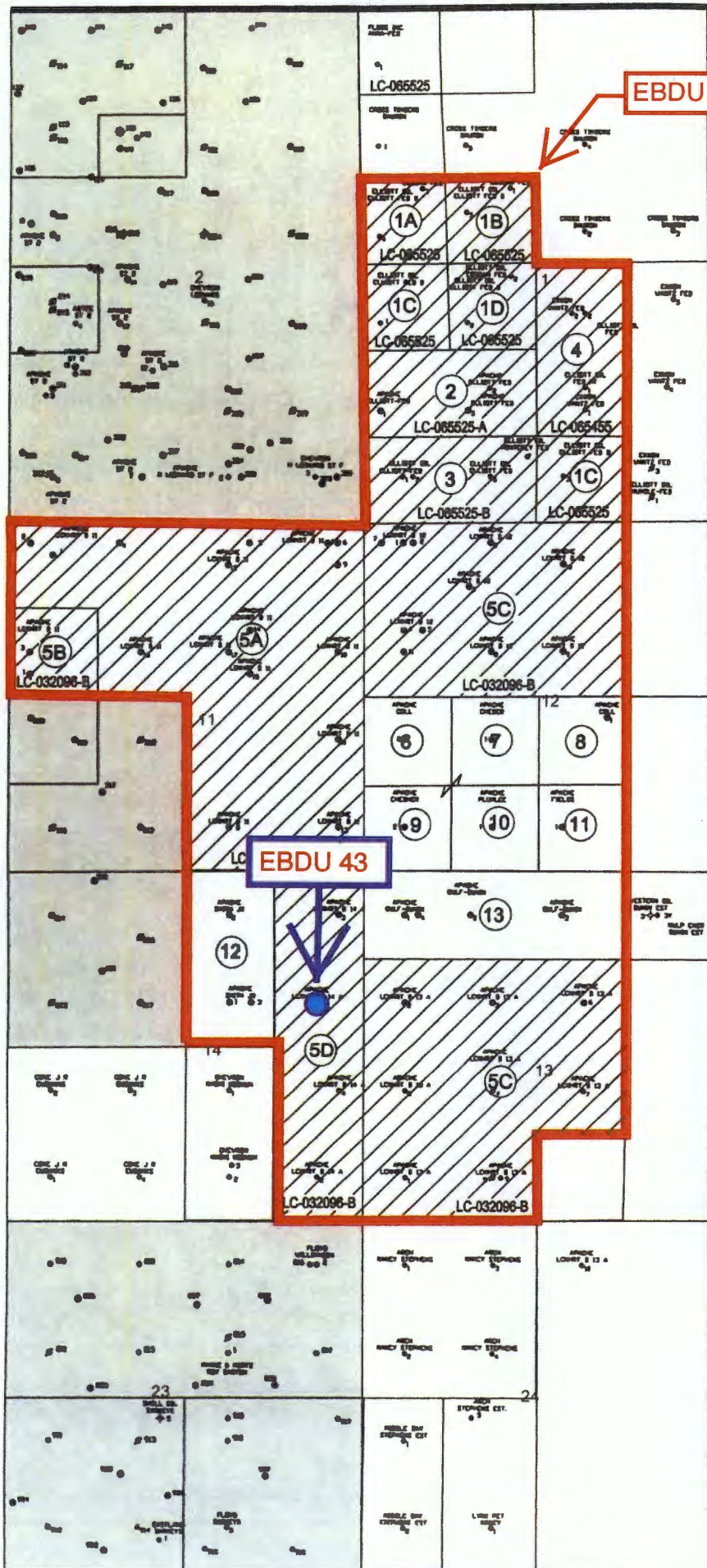
Box 68, Eunice, New Mexico
Address

This is to 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.

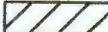
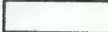
Certificate No.



EAST BLINEBRY DRINKARD UNIT
LEA COUNTY, NEW MEXICO

LEGEND

⑪ UNIT TRACT NUMBER

	ACREAGE	PERCENTAGE
 FEDERAL LANDS	1840.00	78.85
 PATENTED (FEE) LANDS	440.00	21.15
TOTALS	2080.00	100%



SORTED BY DISTANCE FROM EBDU 43

API	OPERATOR	UNIT- SECTION- T21S- R37E	TVD	WELL	WELL TYPE	ZONE	FEET FROM EBDU 43
3002539675	Apache	E-13	7325	EBDU 084	O	Eunice; Bli-Tu-Dr, N	978
3002538280	Apache	I-14	6875	EBDU 061	O	Eunice; Bli-Tu-Dr, N	992
3002506584	Apache	G-14	5850	EBDU 051	O	Eunice; Bli-Tu-Dr, N	995
3002539057	Apache	B-14	6925	EBDU 081	O	Eunice; Bli-Tu-Dr, N	1117
3002538501	Apache	D-13	6950	EBDU 070	O	Eunice; Bli-Tu-Dr, N	1197
3002506582	Apache	G-14	7573	EBDU 049	O	Eunice; Bli-Tu-Dr, N	1326
3002506556	Apache	E-13	6750	EBDU 037	I	Eunice; Bli-Tu-Dr, N	1326
3002506575	Apache	A-14	5900	EBDU 045	I	Eunice; Bli-Tu-Dr, N	1361
3002506576	Apache	I-14	5880	Lockhart B-14 A 004	P&A	Eunice; Bli-Tu-Dr, N	1362
3002539275	Apache	G-14	6905	EBDU 089	O	Eunice; Bli-Tu-Dr, N	1748
3002506563	Apache	D-13	7144	Gulf Bunin 001	P&A	Wantz; Abo	1871
3002506577	Chevron	J-14	7325	Naomi Keenum 001	P&A	Eunice; Bli-Tu-Dr, N	1871
3002506583	Apache	B-14	6631	EBDU 050	O	Eunice; Bli-Tu-Dr, N	1872
3002506562	Apache	L-13	5985	EBDU 041	O	Eunice; Bli-Tu-Dr, N	1873
3002538113	Apache	B-14	6875	EBDU 060	O	Eunice; Bli-Tu-Dr, N	1899
3002539459	Apache	L-13	7000	EBDU 083	O	Eunice; Bli-Tu-Dr, N	2017
3002506568	Apache	D-13	6504	EBDU 055	I	Eunice; Bli-Tu-Dr, N	2018
3002538233	Apache	P-14	6975	EBDU 062	O	Eunice; Bli-Tu-Dr, N	2086
3002538536	Apache	D-13	7000	EBDU 071	O	Eunice; Bli-Tu-Dr, N	2097
3002539674	Apache	A-14	6815	EBDU 080	O	Eunice; Bli-Tu-Dr, N	2153
3002539460	Apache	M-13	6950	EBDU 085	O	Eunice; Bli-Tu-Dr, N	2213
3002539568	Apache	C-13	7534	EBDU 082	O	Eunice; Bli-Tu-Dr, N	2267
3002537724	Apache	F-14	6751	NEDU 630	O	Eunice; Bli-Tu-Dr, N	2309
3002536810	Apache	B-14	8001	EBDU 052	O	Eunice; Bli-Tu-Dr, N	2340
3002506580	Apache	F-14	6613	NEDU 617	O	Eunice; Bli-Tu-Dr, N	2622
3002506574	Apache	P-14	7447	EBDU 044	O	Eunice; Bli-Tu-Dr, N	2641
3002506557	Apache	F-13	6050	EBDU 038	O	Eunice; Bli-Tu-Dr, N	2653
3002506528	Apache	P-11	5900	EBDU 022	I	Eunice; Bli-Tu-Dr, N	2661
3002506478	Apache	O-11	7577	EBDU 017	I	Eunice; Bli-Tu-Dr, N	2665
3002506566	Apache	C-13	6010	EBDU 053	I	Eunice; Bli-Tu-Dr, N	2669

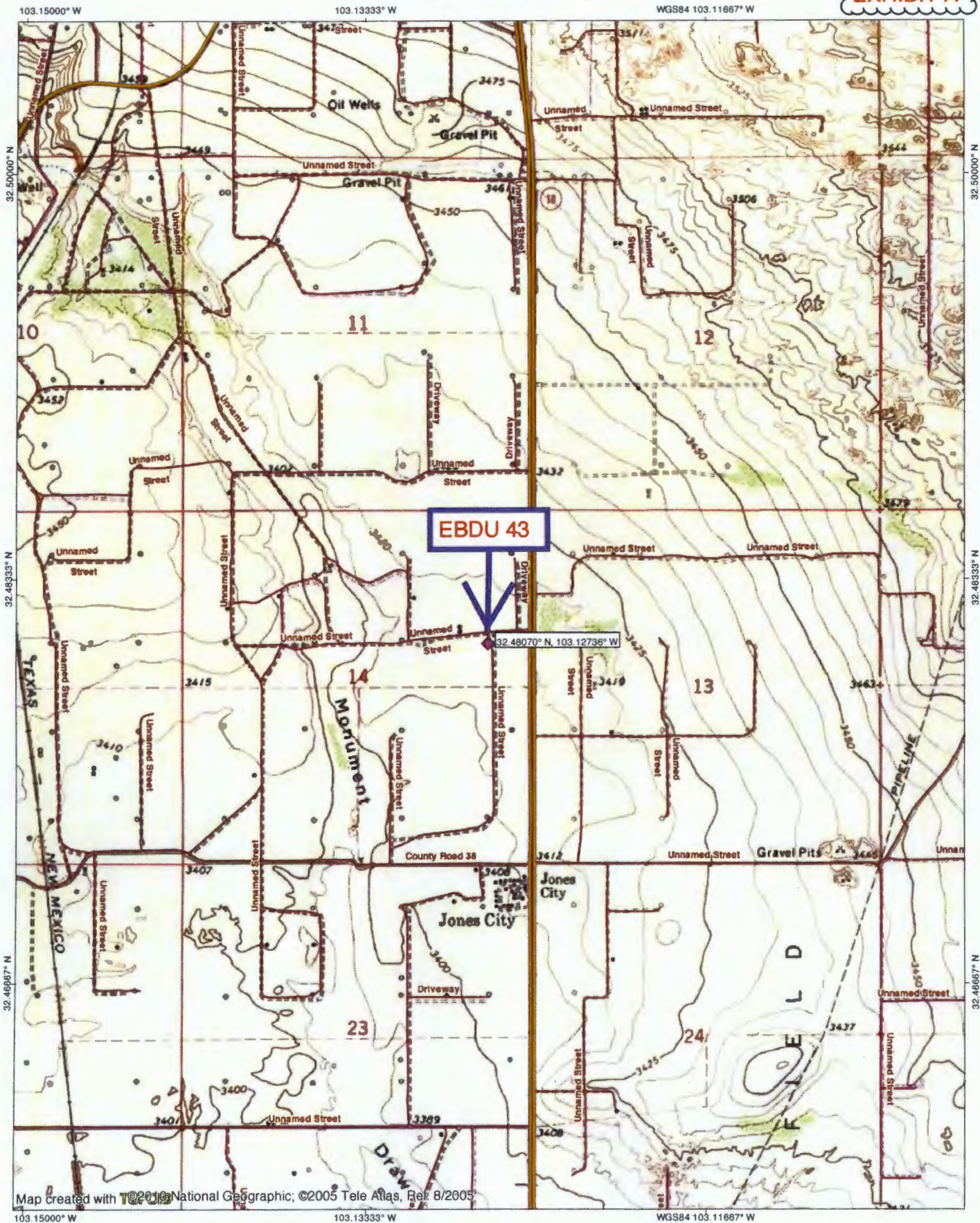
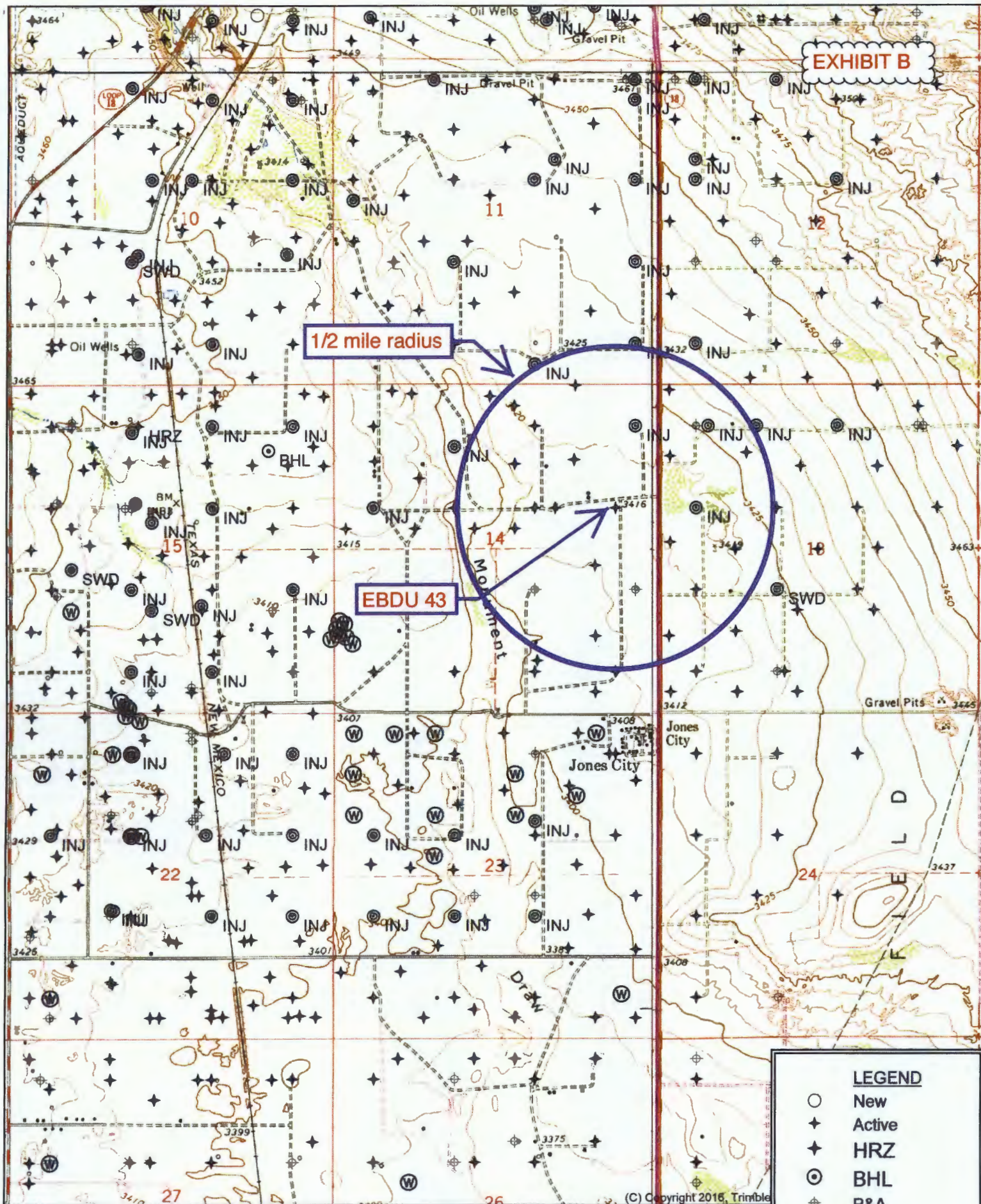


EXHIBIT B



1/2 mile radius

EBDU 43

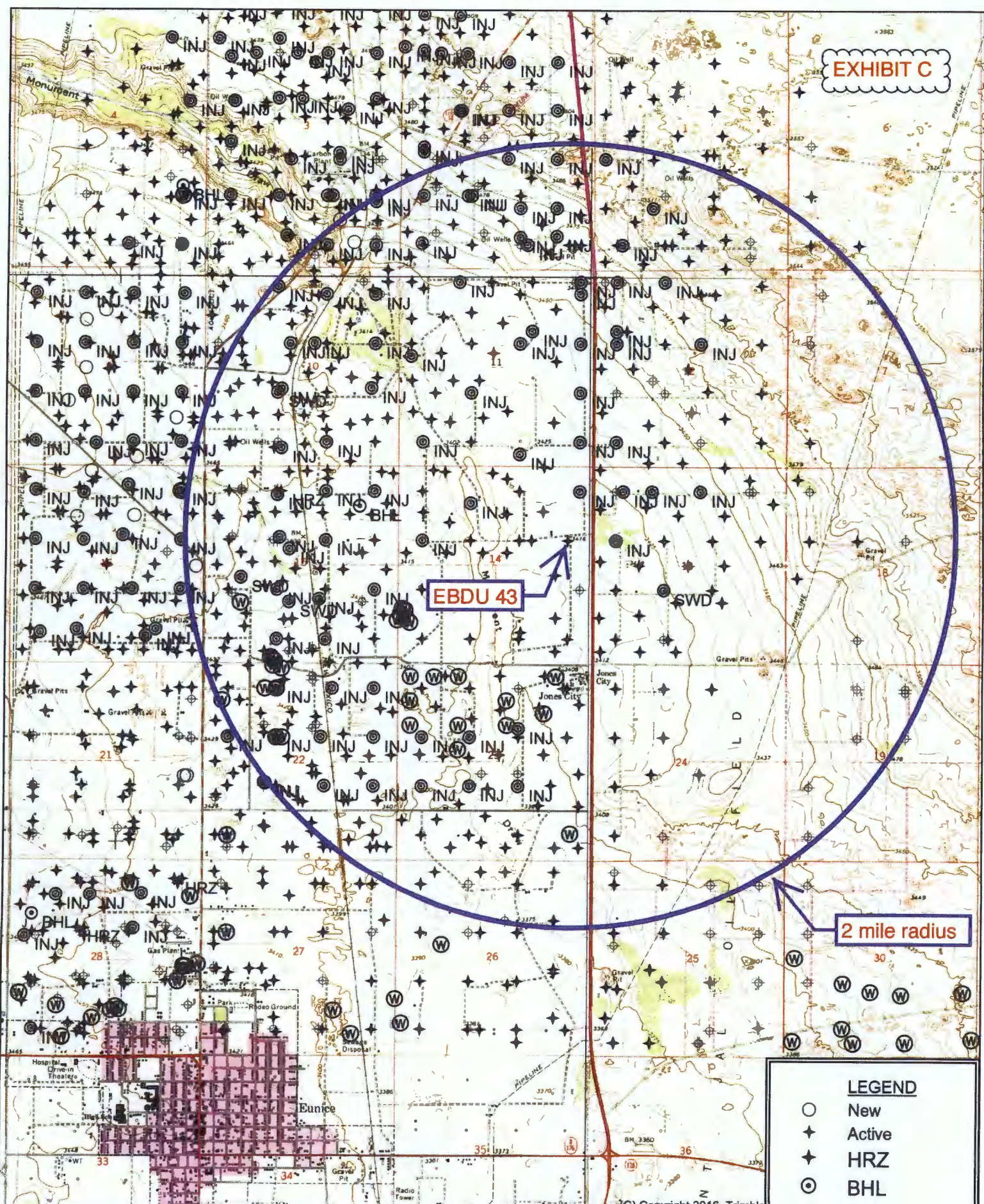
LEGEND

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

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

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EXHIBIT C



EBDU 43

2 mile radius

LEGEND

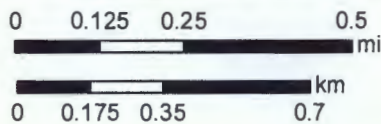
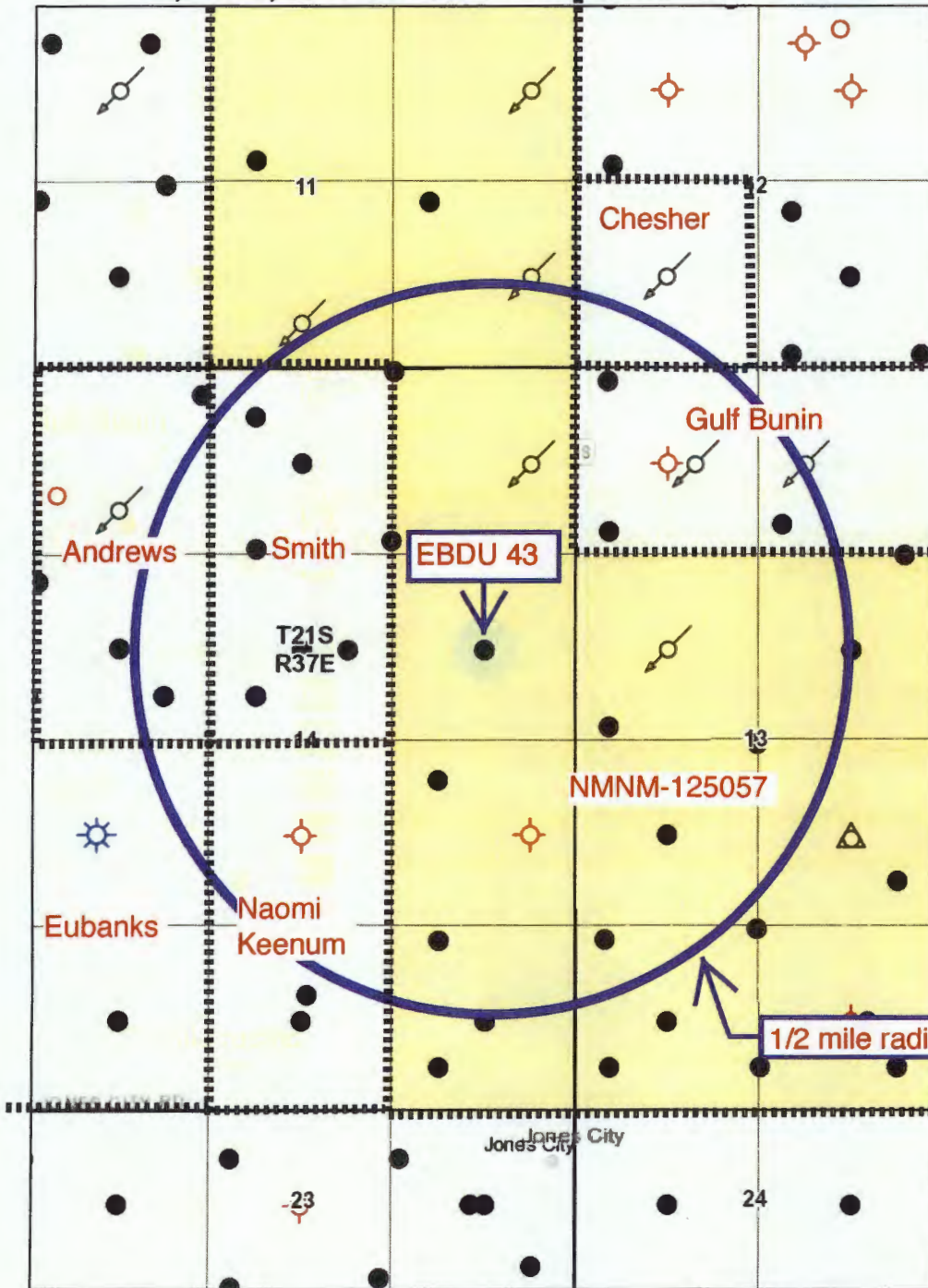
- New
- ★ Active
- ★ HRZ
- ⊙ BHL
- ⊕ P&A
- ⊗ INJ
- ⊗ SWD
- ⊗ Water

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

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Oil, Gas, and Minerals Leases and Wells



- Continental Divide
- - - County Boundaries
- Townships
- Sections
- Subdivisions
- ☼ Carbon Dioxide
- ☼ Gas
- ☼ Injection
- Oil
- △ Salt Water Disposal
- Water Storage
- ⊗ Miscellaneous
- ⊗ Plugged / Dry / Abandoned
- Cancelled / Not Drilled
- ▨ Commercial Leases
- ▨ Minerals Leases
- ▨ Oil and Gas Leases
- ▨ Agricultural Leases
- ▨ Energy Leases
- ▨ Potash District
- All Minerals
- Coal Only
- Oil and Gas Only
- Oil, Gas and Coal Only
- ▨ Other Minerals

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Oil, Gas, and Minerals Leases and Wells

