DATE IN 10/14/16	SUSPENSE	ENGINEER PRG	LOGGED IN 10/14/16	TYPE WFX	APP NO. pKSC1628849641

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- 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

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

Apache Corporation (873)
WBDU 168
30-025-41548
Drinkard (22900)
WFX-923-

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD WFX

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
X WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] X Offset Operators, Leaseholders or Surface Owner

[C] X Application is One Which Requires Published Legal Notice

[D] X Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] X For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **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		Consultant	10-13-16
Print or Type Name	Signature	Title	Date

brian@permitswest.com
e-mail Address

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? _____ 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 & WFX-923-A

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.

WEST BLINEBRY DRINKARD UNIT 168

VII. Attach data on the proposed operation, including:

30-025-41548

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: B Wood DATE: OCT. 11, 2016

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: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

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.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: APACHE CORPORATION

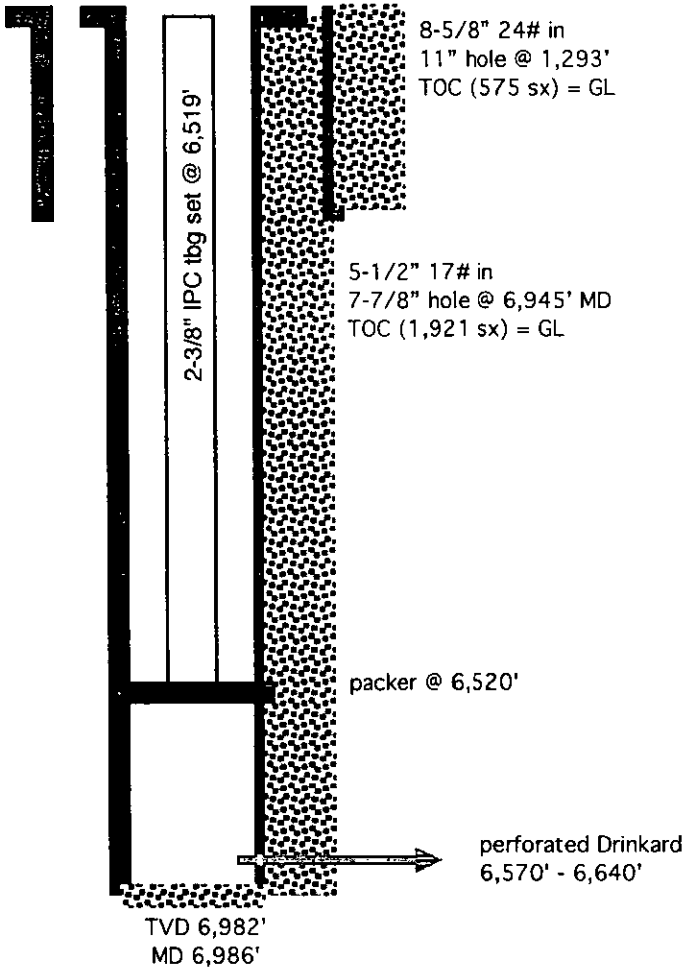
WELL NAME & NUMBER: WEST BLINEBRY DRINKARD UNIT 168

WELL LOCATION:	SHL: 1860' FNL & 2230' FEL	G	16	21 S	37 E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

BHL: 2033' FNL & 2125' FEL

WELLBORE SCHEMATIC

"As Is"



(not to scale)

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 11" Casing Size: 8-5/8"

Cemented with: 575 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATED

168 SX

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft³

Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: 7-7/8" Casing Size: 5-1/2"

Cemented with: 1,921 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATED

270 SX

Total Depth: 6,982' TVD & 6,986' MD

Injection Interval

6,401' feet to 6,640'

(Perforated or Open Hole; indicate which)

Side 1

INJECTION WELL DATA SHEET

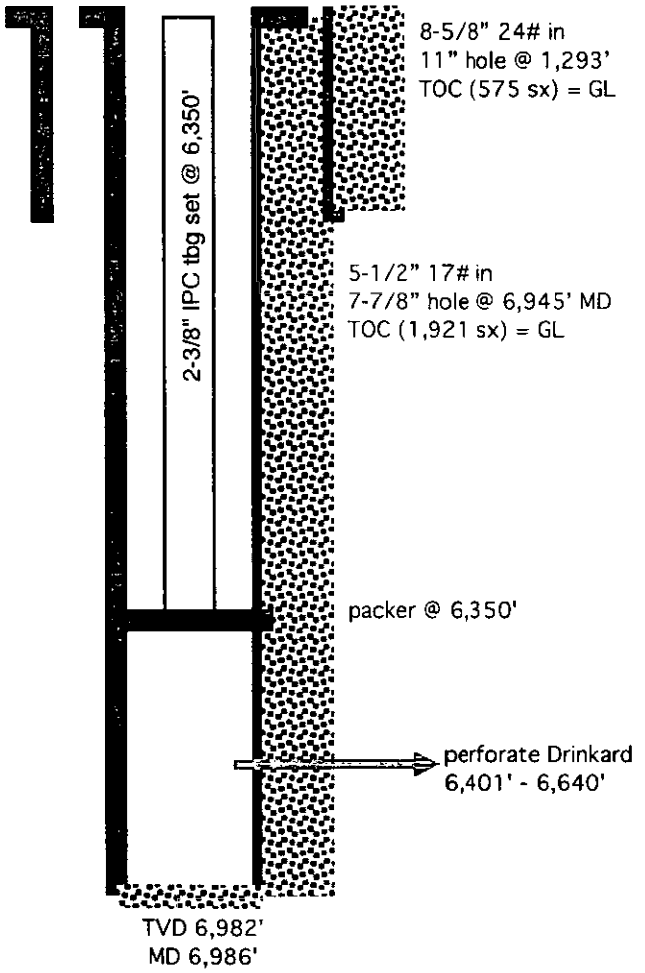
OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: WEST BLINEBRY DRINKARD UNIT 168

WELL LOCATION:	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
	SHL: 1860' FNL & 2230' FEL BHL: 2033' FNL & 2125' FEL	G	16	21 S	37 E

WELLBORE SCHEMATIC

"PROPOSED"



(not to scale)

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 11" Casing Size: 8-5/8"

Cemented with: 575 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATED

168 SX

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft³

Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: 7-7/8" Casing Size: 5-1/2"

Cemented with: 1,921 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATED

270 SX

Total Depth: 6,982' TVD & 6,986' MD

Injection Interval

6,401' feet to 6,640'

(Perforated or Open Hole; indicate which)

Side 2

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: 6,350'

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

Additional Data

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

   If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: DRINKARD

3. Name of Field or Pool (if applicable): EUNICE; BLI-TU-DR, NORTH (POOL CODE 22900)

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. _____

   NO

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

   OVER: GRAYBURG (3,783'), SAN ANDRES (4,092'), PADDOCK (5,215'),
   BLINEBRY (5,583'), & TUBB (5,987')

   UNDER: ABO (6,655'), FUSSELMAN (7,250')

WEST BLINEBRY DRINKARD UNIT 168
SHL: 1860' FNL & 2230' FEL
BHL: 2033' FNL & 2125' FEL
SEC. 16, T. 21 S., R. 37 E., LEA COUNTY, NM 30-025-41548

I. Goal is to increase oil recovery by increasing the injection interval. The 6982' (TVD) well is currently injecting from 6570' to 6640' in the Drinkard, which is part of the Eunice; Blinebry-Tubb-Drinkard, North Pool (aka, Eunice; BLI-TU-DR, North and pool code = 22900).

Injection was originally approved (WFX-923 on May 30, 2014) from 5822' to 6594 in the Blinebry, Drinkard, and Tubb. A second approval (WFX-923-A on August 19, 2015) was from 6570' to 6640', all in the Drinkard. Apache now plans to increase the injection interval by 169' from 6401' to 6640'. This entire interval will all be in the Drinkard.

The well and zone are part of the West Blinebry Drinkard Unit (Case Numbers 14125 and 14126, both Order Number R-12981) that was established in 2008 by Apache. There have been twelve subsequent WFX approvals. WBDU 168 is one of thirty-six active injectors in the unit.

Well was directionally drilled because the preferred SHL is occupied by a Chevron Grayburg well (30-025-06620).

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 B017320001
Lease Size: 8,837.66 acres (see Exhibit A for maps and C-102)
Closest Lease Line: from SHL = 410' & from BHL = 515'
Lease Area: NE4 of Section 16, T. 21 S., R. 37 E. et al
Unit Size: 2,480 acres Unit Number 300341
Closest Unit Line: from SHL = 2230' & from BHL = 2125'
Unit Area: T. 21 S., R. 37 E.
Section 4: Lot 15, S2SW4, & SE4
Section 8: E2, NENW, & E2SW

Sections 9 & 16: all
Section 17: E2 & E2SW4
Section 21: E2NE4

A. (2) Surface casing (8-5/8", 24#) was set at 1293' in an 11" hole with 575 sacks Class C, of which 168 sacks circulated to surface.

Production casing (5-1/2", 17#) was set at 6945' (MD) in a 7-7/8" hole with 1921 sacks Class C, of which 270 sacks circulated to surface.

Mechanical integrity of the casing was assured by hydraulically pressure testing to 2000 psi (surface) and 2500 psi (production) for 30 minutes each in November 2014.

A. (3) Tubing is 2-3/8", J-55, 4.7#, and internally plastic coated. Setting depth is now 6519'. (Disposal interval is now 6570' to 6640'.) Setting depth will be 6350' (51' above highest proposed perforation of 6401').

A. (4) A lock set injection packer is now set at 6520' (50' above the highest perforation of 6570'). Setting depth will be 6350' (51' above highest proposed perforation of 6401').

B. (1) Injection zone will be the Drinkard carbonates. The zone 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 6401' to 6640'. The well is a cased hole. See attached well profile for more perforation information.

B. (3) The well was drilled with the goal of using it as a water injection well.

B. (4) The well is now perforated from 6570' to 6640' with 4 shots per foot. The well will be similarly perforated from 6401' to 6570'.

B. (5) Next higher oil or gas zone in the area of review is the Tubb (pool code 49210). Its bottom is at 6400'. Injection will occur in the Drinkard from 6401' to 6640'. Both zones are part of the Eunice; Blinebry-Tubb-Drinkard, North Pool (pool code 22900) and in the unit.

The next lower oil or gas zone in the area of review is the Wantz; Abo (pool code 62700). Its top is at 6655'. Deepest perforation in the injection interval is and will be 6640'.

IV. This is not a horizontal or vertical expansion of an existing injection project. The case file for the unit approval (R-12981) describes the water flood. There have been 12 water flood expansions since then. Closest unit boundary is 2125' east. Eight existing injection wells are within a half-mile radius. All are in the unit (see Exhibit B).

V. Exhibit B shows all 52 existing wells (41 oil wells + 8 water injection wells + 1 brine supply well + 2 P & A wells) within a half-mile radius from the BHL, regardless of depth. Exhibit C shows all 822 existing wells (623 oil or gas producing wells + 98 injection or disposal wells + 61 P & A wells + 38 water wells + 2 brine supply wells) within a two-mile radius.

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

Aliquot Parts in Area of Review (T21S, R37E)	Lessor	Lease	Lessee(s) of Record	Drinkard Operator
S2S2 Sec. 9	BLM	NMNM-090161	Apache & Chevron	Apache
NWNW Sec. 15*	NMSLO	B0-9188-0008	Chevron	Apache
SWNW Sec. 15*	NMSLO	B0-1481-0018	Oxy USA WTP	Apache
NWSW Sec. 15*	fee	Argo (NEDU)	Apache	Apache
NE4 Sec. 16	NMSLO	B0-1732-0001	Chevron	Apache
NW4 Sec. 16	NMSLO	B0-1557-0002	Apache	Apache
N2S2 Sec. 16	NMSLO	B0-0085-0016	Apache	Apache
S2SE4 & SESW Sec. 16	NMSLO	B0-8105-0004	Apache	Apache
**outside unit*	-	-	-	-

VI. Fifty-two existing and five proposed wells are, or will be, within a half-mile radius of the BHL. Thirty-one of the wells penetrated the Drinkard. All five of the proposed wells will penetrate the Drinkard. The existing penetrators include 23 oil or gas wells and 8 water injection wells. A table abstracting the well construction details and histories of the penetrators are in Exhibit F. The 57 wells and their distances from the 168 BHL are:

API	WHO	WELL	TYPE	21S-37E UNIT-SECTION	TVD	ZONE	FEET FROM WBDU 168 (BHL)
3002506620	Chevron	Harry Leonard NCT E 001	O	G-16	6670	Penrose Skelly; Grayburg	149
3002543126	Apache	WBDU 167	O	B-16	Plan 6900	Eunice; Bli-Tu-Dr, N	758
3002538230	Apache	WBDU 081	O	K-16	6793	Eunice; Bli-Tu-Dr, N	811
3002536613	Apache	State C Tract 12 017	O	C-16	4386	Penrose Skelly; Grayburg	901
3002538231	Apache	WBDU 082	O	J-16	6875	Eunice; Bli-Tu-Dr, N	939
3002536725	Apache	State C Tract 12 019	O	F-16	4350	Penrose Skelly; Grayburg	968

3002538268	Apache	WBDU 064	O	F-16	6892	Eunice; Bli-Tu-Dr, N	1034
3002539119	Apache	WBDU 098	O	B-16	6880	Eunice; Bli-Tu-Dr, N	1092
3002537834	Chevron	Harry Leonard NCT E 008	P&A	H-16	4300	Penrose Skelly; Grayburg	1098
3002536786	Apache	State DA 010	O	J-16	4345	Penrose Skelly; Grayburg	1106
3002506626	Apache	WBDU 059	I	F-16	7502	Eunice; Bli-Tu-Dr, N	1186
3002536741	Chevron	Harry Leonard NCT E 007	O	H-16	4345	Penrose Skelly; Grayburg	1263
3002535765	Apache	State DA 008	O	J-16	4200	Penrose Skelly; Grayburg	1277
3002506618	Apache	WBDU 077	O	J-16	6701	Eunice; Bli-Tu-Dr, N	1283
3002506622	Chevron	Harry Leonard NCT E 003	O	B-16	6710	Penrose Skelly; Grayburg	1373
3002535708	Apache	State C Tract 12 010	O	F-16	4200	Penrose Skelly; Grayburg	1410
3002506621	Apache	WBDU 056	I	H-16	6780	Eunice; Bli-Tu-Dr, N	1468
3002541547	Apache	WBDU 178	I	B-16	6948	Eunice; Bli-Tu-Dr, N	1531
3002543125	Apache	WBDU 166	O	F-16	Plan 6900	Eunice; Bli-Tu-Dr, N	1540
3002535516	Apache	State DA 007	O	K-16	4200	Penrose Skelly; Grayburg	1590
3002537201	Apache	WBDU 079	O	J-16	7310	Eunice; Bli-Tu-Dr, N	1674
3002506616	Apache	WBDU 076	I	K-16	6654	Eunice; Bli-Tu-Dr, N	1719
3002506628	Apache	WBDU 060	I	C-16	6699	Eunice; Bli-Tu-Dr, N	1748
3002506627	Stanolind	State C TR 12 006	P&A	C-16	5762	Blinebry	1793

3002506624	Chevron	*Harry Leonard* NCT E 005	O	H-16	8220	*Penrose Skelly;* Grayburg	1823
3002537202	Apache	State C Tract 12 021	O	C-16	7300	Wantz; Abo	1848
3002542537	Apache	WBDU 164	O	H-16	Plan 7000	Eunice; Bli-Tu-Dr, N	1889
3002536095	Apache	State C Tract 12 013	O	C-16	4150	Penrose Skelly; Grayburg	1889
3002536478	Apache	State C Tract 12 015	O	C-16	4725	Penrose Skelly; Grayburg	1912
3002539277	Apache	WBDU 113	O	A-16	6912	Eunice; Bli-Tu-Dr, N	1916
3002535707	Apache	State C Tract 12 009	O	C-16	4450	Penrose Skelly; Grayburg	1925
3002506619	Apache	WBDU 078	I	I-16	6644	Eunice; Bli-Tu-Dr, N	1947
3002536614	Apache	State C Tract 12 018	O	E-16	4350	Penrose Skelly; Grayburg	1952
3002538415	Apache	WBDU 084	O	K-16	6835	Eunice; Bli-Tu-Dr, N	1963
3002506623	Apache	WBDU 057	I	A-16	6699	Eunice; Bli-Tu-Dr, N	2002
3002536305	Apache	WBDU 062	O	D-16	6950	Eunice; Bli-Tu-Dr, N	2031
3002537916	Apache	State DA 013	O	I-16	4398	Penrose Skelly; Grayburg	2047
3002538220	Apache	WBDU 080	O	L-16	6875	Eunice; Bli-Tu-Dr, N	2054
3002543127	Apache	WBDU 175	O	C-16	Plan 6900	Eunice; Bli-Tu-Dr, N	2167
3002536787	Apache	State DA 011	O	K-16	4350	Penrose Skelly; Grayburg	2186
3002506617	Apache	State DA 005	O	I-16	8225	Penrose Skelly; Grayburg	2208
3002538197	Apache	WBDU 051	O	O-9	6837	Eunice; Bli-Tu-Dr, N	2272

3002538378	Apache	State Land 15 016	O	O-16	4135	Penrose Skelly; Grayburg	2272
3002525198	Chevron	Harry Leonard NCT E 006	O	A-16	6720	Penrose Skelly; Grayburg	2280
3002543222	Apache	WBDU 176	O	O-9	Plan 6850	Eunice; Bli-Tu-Dr, N	2319
3002538198	Apache	WBDU 052	O	O-9	6870	Eunice; Bli-Tu-Dr, N	2322
3002536662	Apache	Hawk Fed B 1 035	O	P-9	4350	Penrose Skelly; Grayburg	2331
3002537535	Apache	WBDU 092	O	O-16	7284	Eunice; Bli-Tu-Dr, N	2432
3002535880	Apache	Hawk Fed B 1 028	O	O-9	4200	Penrose Skelly; Grayburg	2450
3002506625	Apache	WBDU 058	I	E-16	6660	Eunice; Bli-Tu-Dr, N	2484
3002537238	Apache	NEDU 629	O	L-15	6900	Eunice; Bli-Tu-Dr, N	2542
3002538414	Apache	WBDU 083	O	L-16	6850	Eunice; Bli-Tu-Dr, N	2550
3002533547	Key Energy	State 001	M	E-15	2200	BSW-Salado	2555
3002537223	Apache	NEDU 628	O	E-15	6975	Eunice; Bli-Tu-Dr, N	2586
3002539605	Apache	State Land 15 018	O	O-16	4382	Penrose Skelly; Grayburg	2596
3002506632	Apache	WBDU 088	O	O-16	6660	Eunice; Bli-Tu-Dr, N	2599
3002536618	Apache	State C Tract 12 016	O	D-16	4350	Penrose Skelly; Grayburg	2654

VII. 1. Average injection rate will be ≈2,500 bwpd.
Maximum injection rate will be ≈3,000 bwpd.

2. System is closed. The well is tied into the existing unit pipeline system, consisting of a branched injection system with centrifugal injection pumps.

3. Average injection pressure will be ≈1100 psi. Maximum injection pressure will be 1120 psi (see item (13) of Order R-12981).

4. Water source will be water pumped from two existing ≈4,000' deep San Andres water supply wells, plus produced water from Blinebry, Tubb, and Drinkard zones. The source water and produced water are collected in separate skim tanks. The two water streams (source and produced) are commingled in a tank before being piped to the injection wells. A comparison of nearby analyses and San Andres follows. No compatibility problems have reported from the 42,481,611 barrels that have been injected to date in the unit since 2009.

	WBDU 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
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/	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 Drinkard is productive of oil and gas. Twnety-three Drinkard oil wells are within a half-mile radius. It is the goal of the project to increase production from the Drinkard.

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 Drinkard is Leonardian in age, 254' thick, and consists of tan to dark gray shallow marine carbonates, many of which have been dolomitized. Core filling and replacement anhydrite are 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 currently 155 Drinkard injection wells in the state. The West Blinebry Drinkard Unit shares its east border with Apache's Northeast Drinkard Unit. Three similar water floods (East Blinebry Drinkard Units, Central Drinkard Unit, and Warren Blinebry Unit) are within a mile of the West Blinebry Drinkard Unit. The Central Drinkard Unit has been under water flood since the 1960s.

Formation depths are:

Quaternary = 0'
Santa Rosa = 950'*
Rustler = 1,272'
Tansill = 2,490'
Yates = 2,623'
Seven Rivers = 2,879'
Queen = 3,438'
Penrose = 3,539'
Grayburg = 3,738'
San Andres = 4,092'
Glorieta = 5,148'
Paddock = 5,215'
Blinebry = 5,583'
Tubb = 5,987'
Drinkard = 6,401'

Drinkard injection interval = 6,401' - 6,640'
Abo = 6,655'
TVD = 6,950'
MD = 6,956'

Two fresh water wells are within a mile radius. One (CP 00554) is in the State Engineer's database. The 80' deep well with an electric pump was dry during January 7, 2014, June 18, 2015, and July 26, 2016 field inspections. A neighbor, Gary Deck, confirmed the well's lack of water. Mr. Deck owns and lives in Section 9. A Google Earth air photo shows a stock pond 500' northeast of the now dry well that held water on May 27, 2004. The air photos do not show water on July 15, 2004; July 30, 2005; August 14, 2009, August 21, 2011; November 14, 2011; and February 12, 2014.

A sample (analysis is in Exhibit G) was collected from a second water well that is not in the State Engineer's database. That well is ≈0.8 mile southeast in Section 15. Depth is likely in the Quaternary.

The Ogallala is 2-1/3 miles northeast. No existing underground drinking water sources are below the injection interval within a mile radius.

There will be >5,000' of vertical separation and 1,218' of salt and anhydrite between the bottom of the only likely underground fresh water source and the top of the injection interval. Produced water is currently being injected (197 wells) or disposed (8 wells) into the Blinebry-Tubb-Drinkard, San Andres, Grayburg, Queen, Seven Rivers, and Yates within T. 21 S., R. 37 E.

IX. The well will be stimulated with 15% HCl.

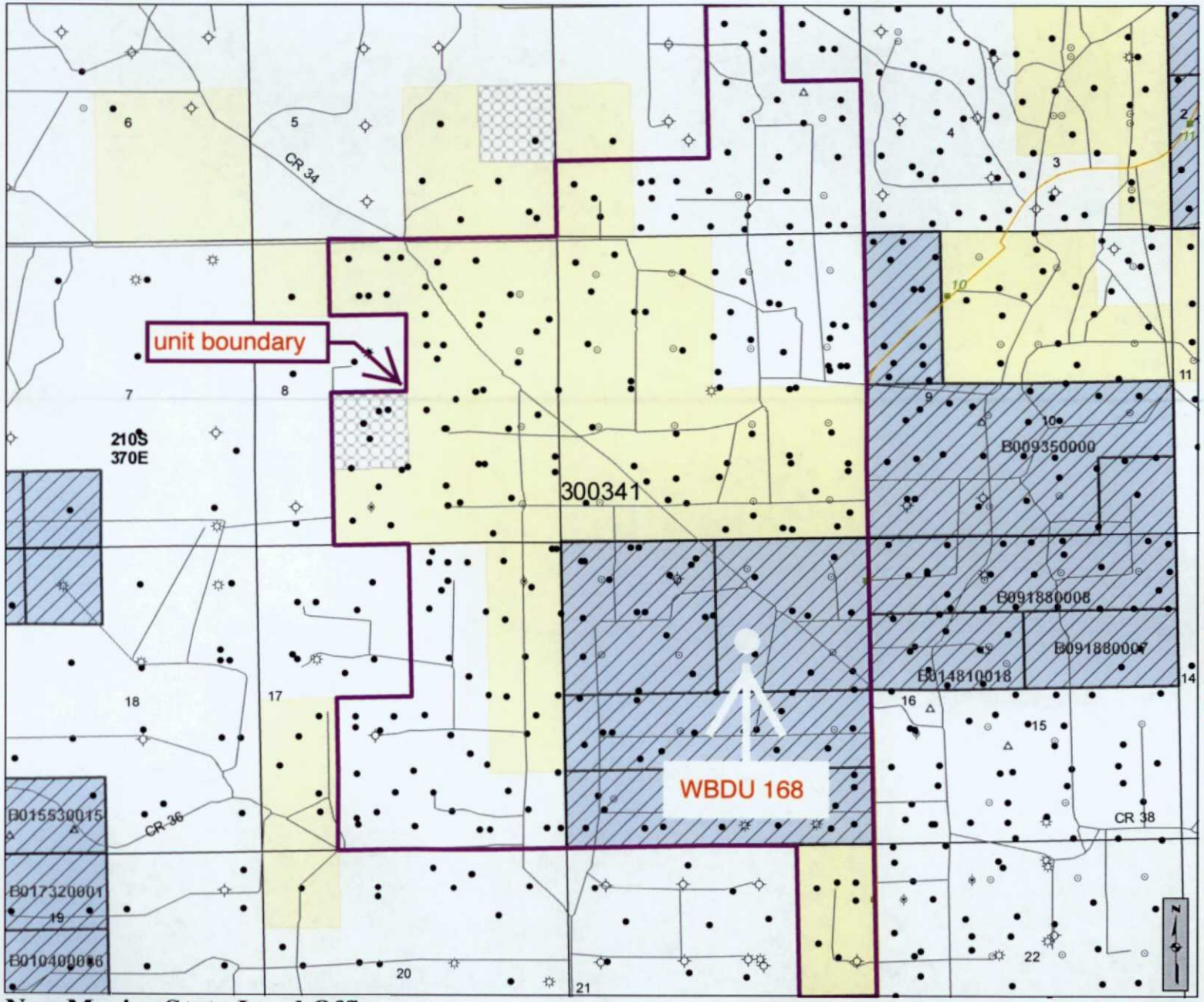
X. Mico laterog/caliper/gamma ray, CNL/caliper/digital spectral, caliper, and digital acoustilog/caliper/gamma ray logs are on file with NMOCD.

XI. One wet fresh water well is within a mile. An analysis from that well (0.8 mile southeast) is in Exhibit G.

XII. Apache 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 >110 miles southwest (Exhibit H). There are 155 active Drinkard injection wells in New Mexico. Previously approved water flood expansions (WFX-) in the unit include 854, 857, 913, 921, 922, 923, 923-A, 924, 948, 952, 954, 955, 958, and 959.

WFX-923 approved injection in three zones in this well (5822' - 6594'). WFX-923-A approved deeper injection (6570' - 6640'), but just in the Drinkard. This application will increase the Drinkard interval (6401' - 6640'). Only perforations to date in the well are 6570' - 6640'.

XIII. A legal ad (Exhibit I) was published on July 15, 2016. Notice (this application) has been sent (Exhibit J) to the surface owner (NM State Land Office), BLM, and other lessee or leasehold operating rights holders (Chevron, ConocoPhillips, John H. Hendrix Corp., Oxy USA WTP LP, Penroc Oil Corp.). Apache is the only offset Drinkard operator.



Cartographic Features

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- County Seats
- City, Town or Village
- SLO District Offices
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NMOCD Oil and Gas Wells

- CO^2
- Gas
- Injection
- Miscellaneous
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- Salt Water Disposal
- Water
- DA or PA

New Mexico State Land Office

Oil, Gas and Minerals

0 0.1 0.2 0.4 0.6 0.8 Miles

Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

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

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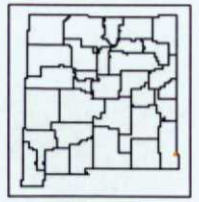
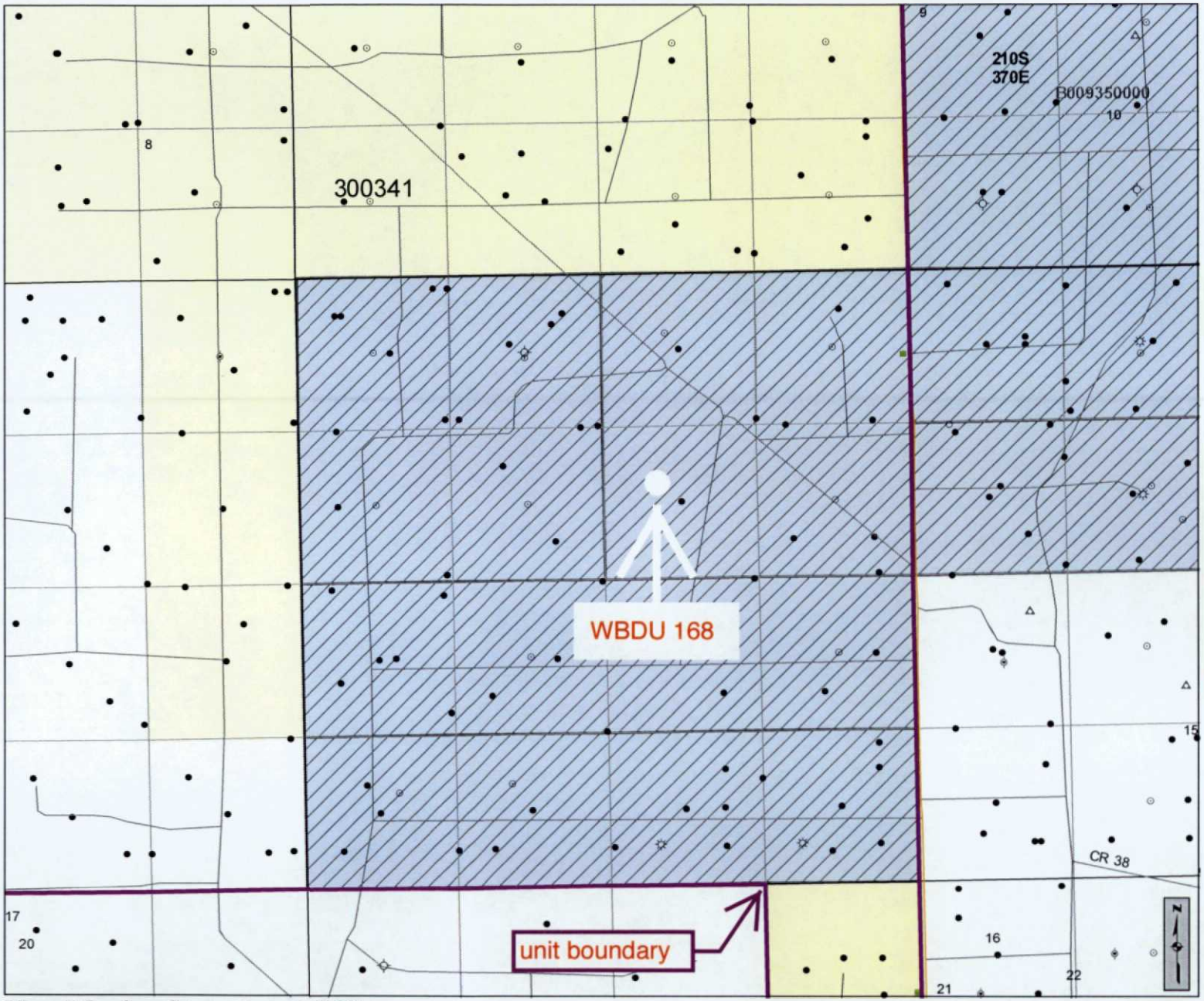
EXHIBIT A



www.nmstatelands.org



Cartographic Features
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New Mexico State Land Office
Oil, Gas and Minerals

0 0.05 0.1 0.2 0.3 0.4 Miles

Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

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

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EXHIBIT A

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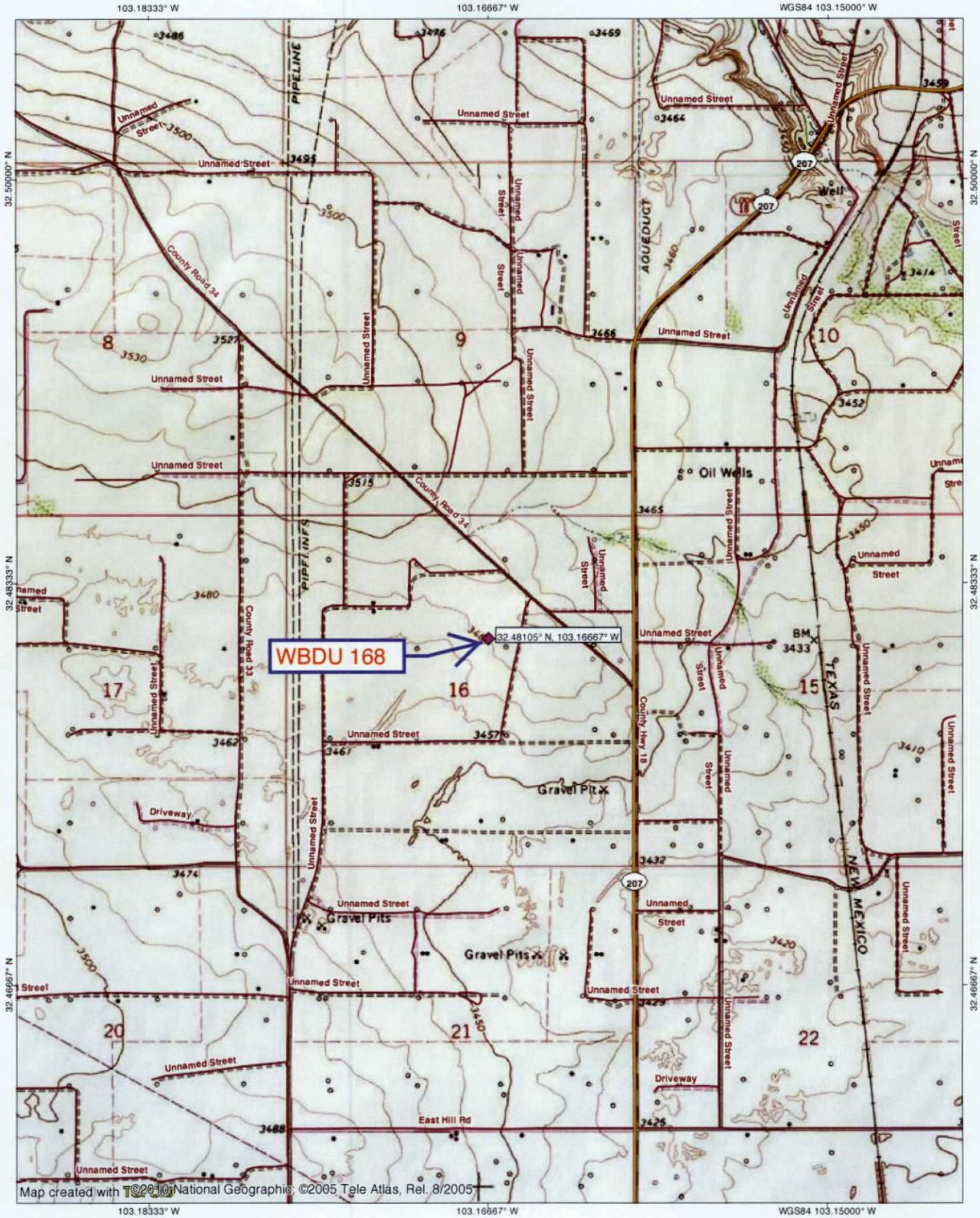
TOPO! map printed on 03/22/14 from "Untitled.tpo"



NATIONAL GEOGRAPHIC

0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 miles
0.0 0.5 1.0 km

EXHIBIT A

TN MN
7°
03/22/14

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-	22900	Eunice, BLI-TU-DR, North

Property Code	Property Name	Well Number
	WBDU	168W
OGRID No. 873	Operator Name APACHE CORPORATION	Elevation 3482'

Surface Location

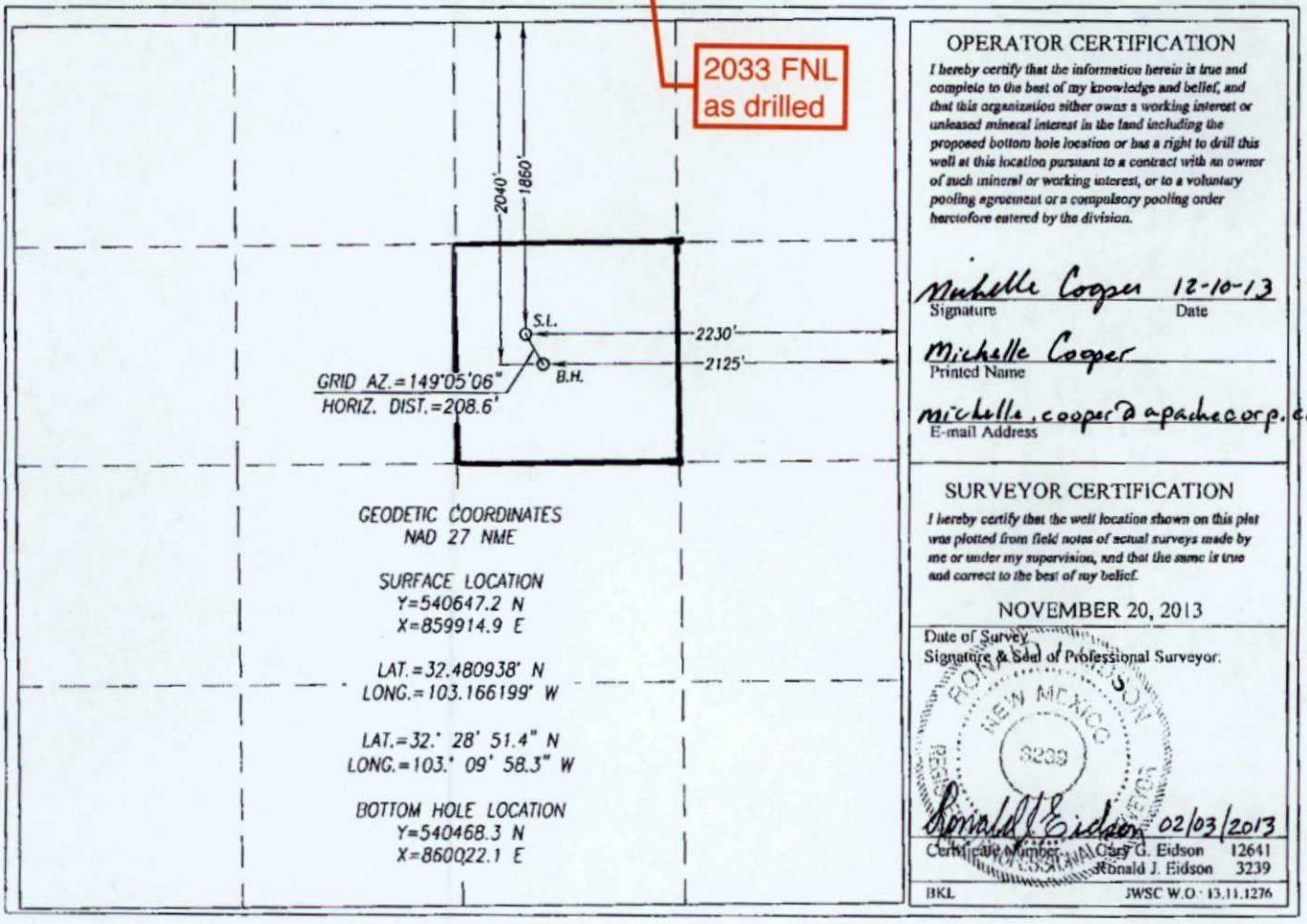
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
G	16	21-S	37-E		1860	NORTH	2230	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
G	16	21-S	37-E		2040	NORTH	2125	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Michelle Cooper 12-10-13
Signature Date

Michelle Cooper
Printed Name

michelle.cooper@apachecorp.com
E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat 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 belief.

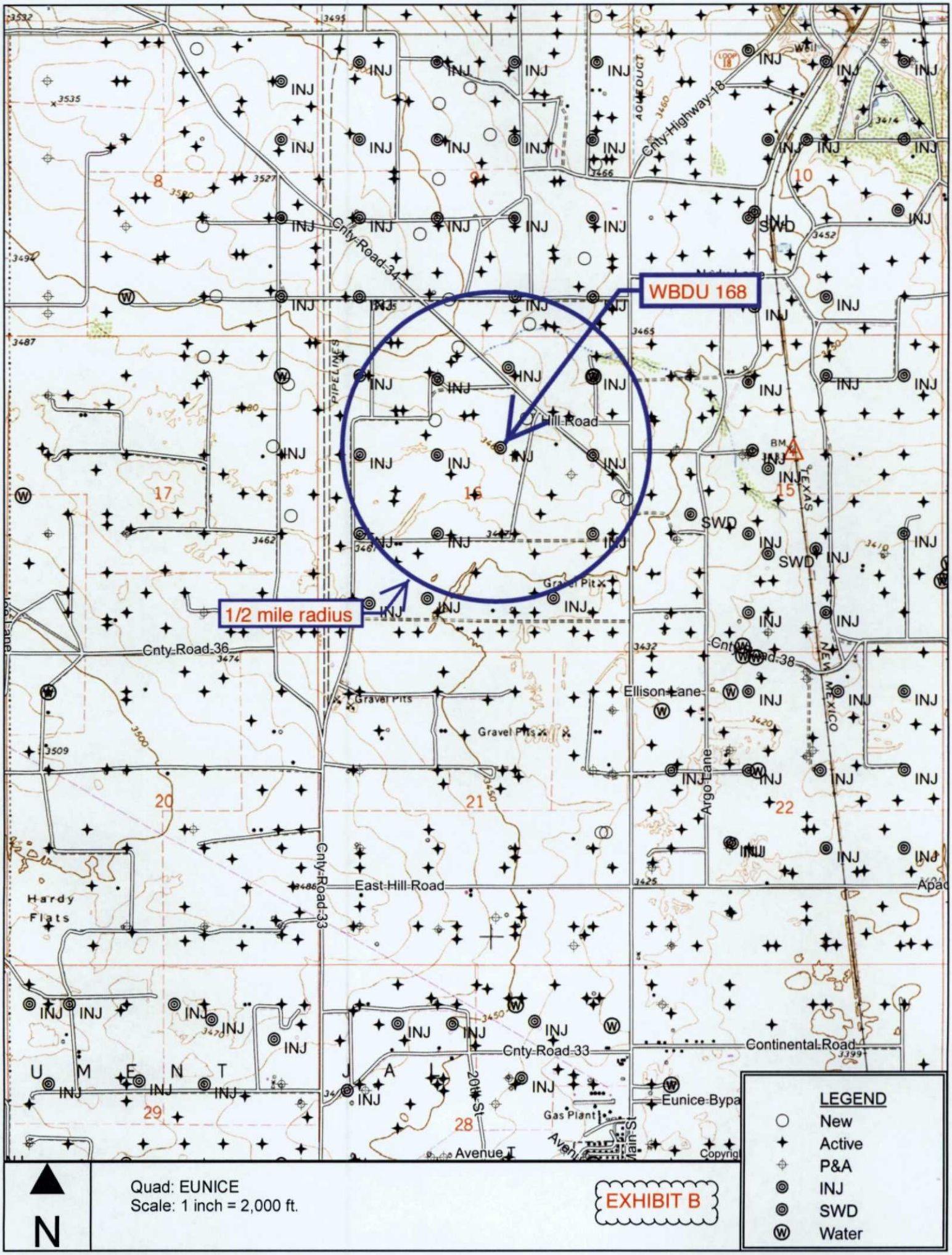
NOVEMBER 20, 2013
Date of Survey

Signature & Seal of Professional Surveyor:

Ronald J. Eidson 02/03/2013
Certificate Number Gary G. Eidson 12641
Ronald J. Eidson 3239

BKL JWSC W.O. 13.11.1276

EXHIBIT A


WBDU 168
1/2 mile radius
Cnty Road 34
Cnty Highway 18
Cnty Road 36
Cnty Road 38
Cnty Road 33
East Hill Road
Hill Road
Ellison Lane
Argo Lane
Continental Road
Eunice Bypa
Avenue J
20th St
Main St
Gravel Pits
Gas Plant
Hardy Flats
PIPELINES
AQUEDUCT
TEXAS
NEW MEXICO
SWD
INJ
BM
8
9
10
15
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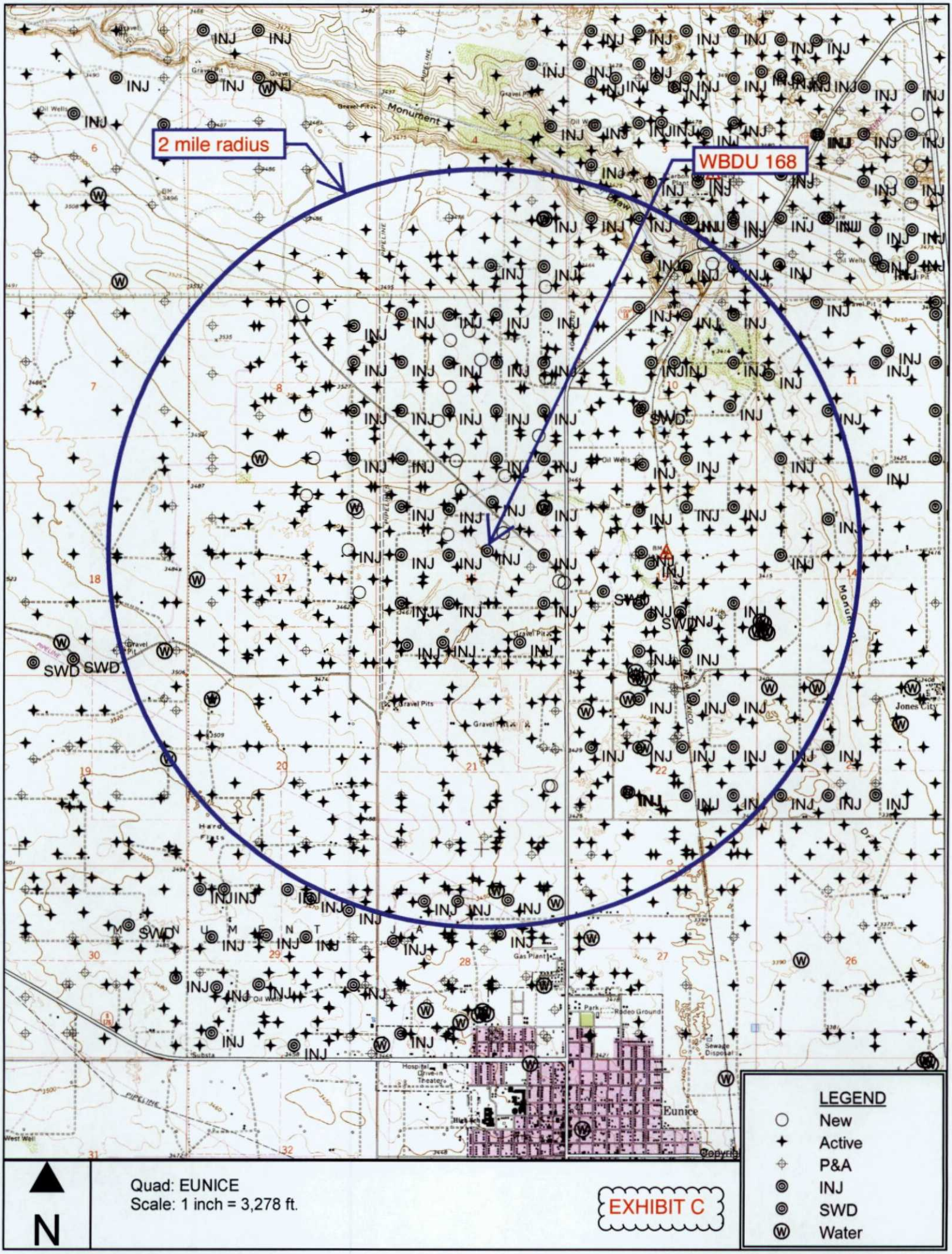
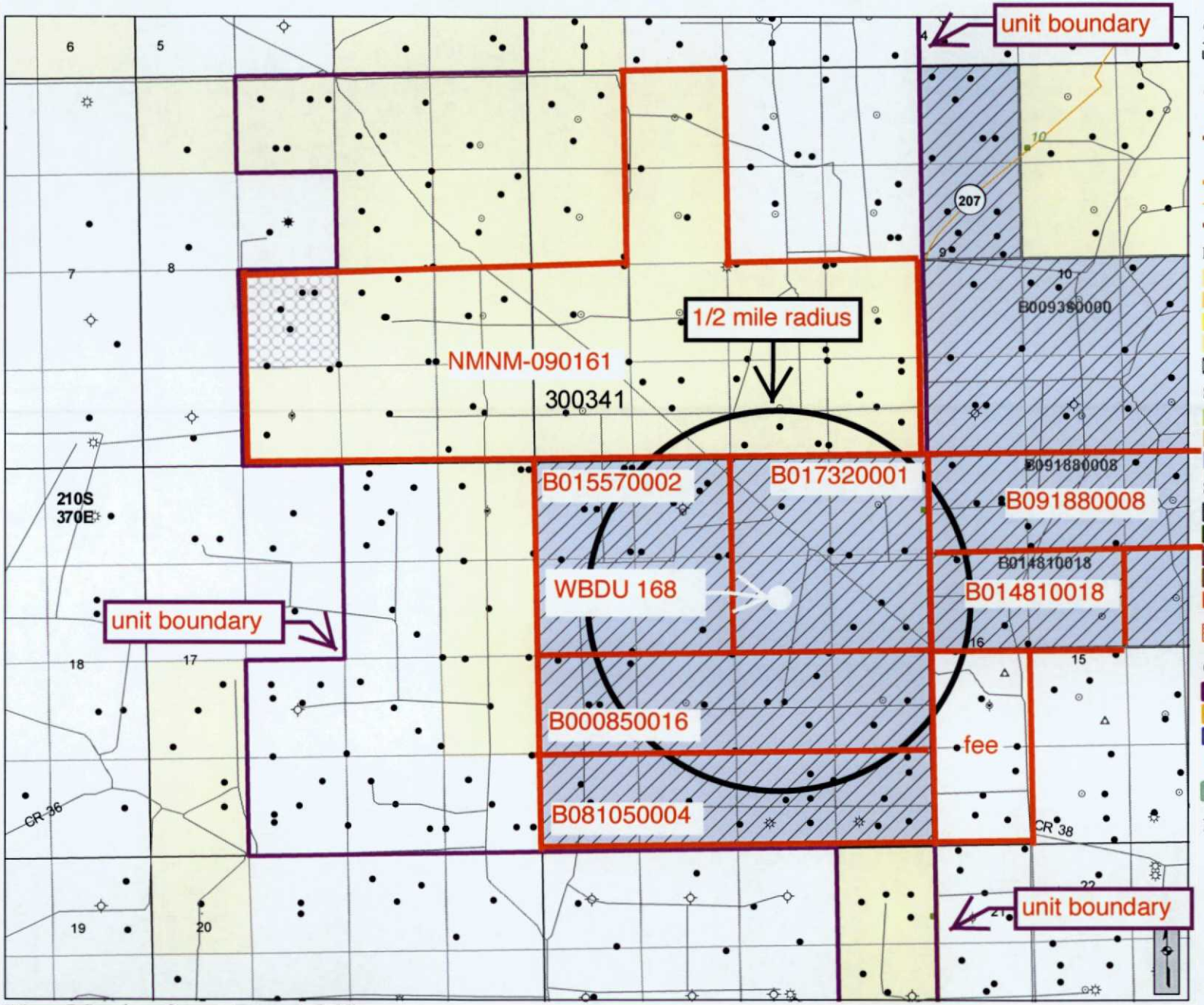
20
21
22
28
29
LEGEND
New
Active
P&A
INJ
SWD
Water
N
Quad: EUNICE
Scale: 1 inch = 2,000 ft.
EXHIBIT B


2 mile radius
WBDU 168
N
Quad: EUNICE
Scale: 1 inch = 3,278 ft.
EXHIBIT C
LEGEND
New
Active
P&A
INJ
SWD
Water



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New Mexico State Land Office
Oil, Gas and Minerals

0 0.05 0.1 0.2 0.3 0.4 Miles

Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

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

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EXHIBIT D

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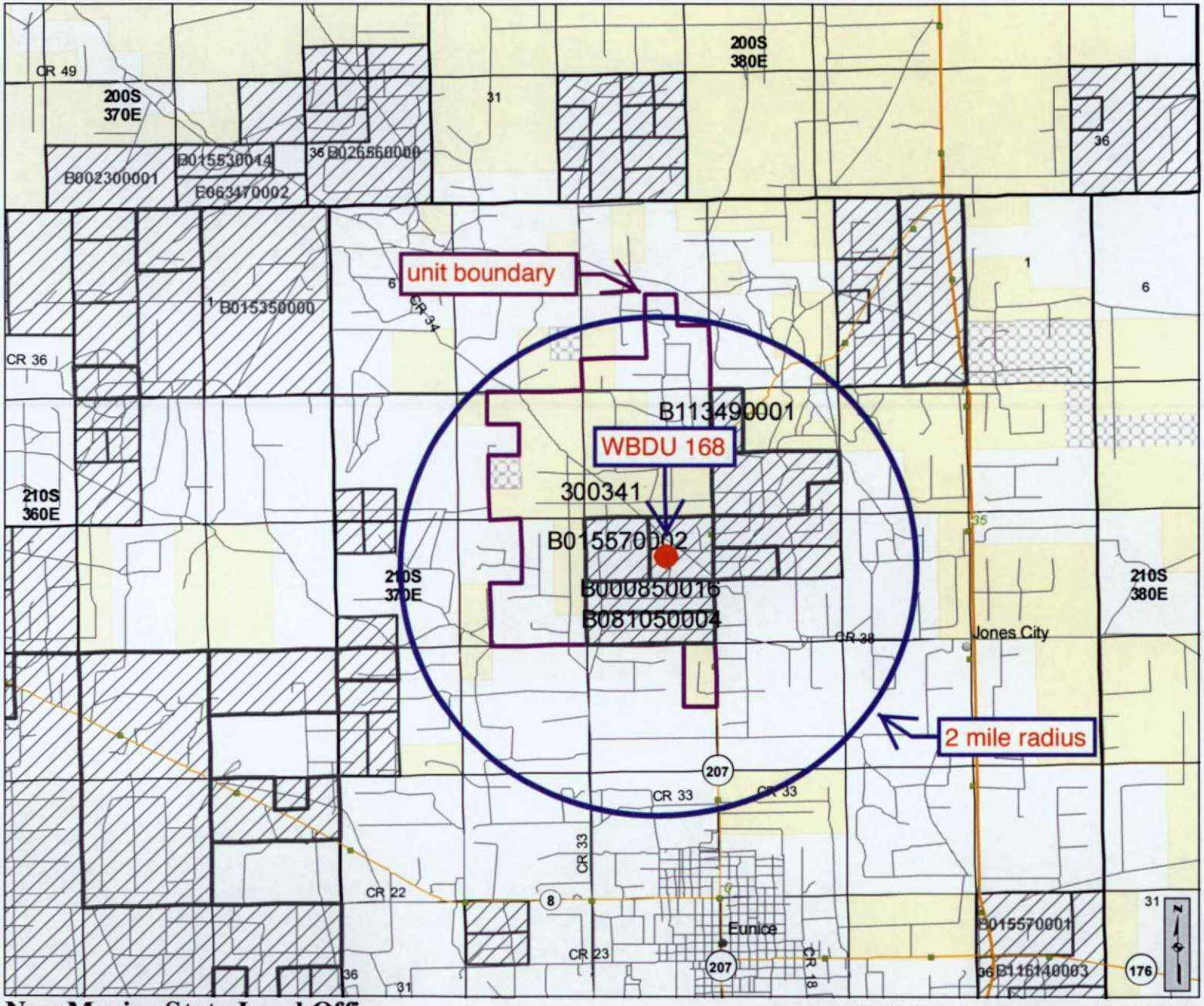

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Oil, Gas and Minerals

0 0.25 0.5 1 1.5 2 Miles

Universal Transverse Mercator Projection, Zone 13
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EXHIBIT E

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Sorted by distance from WBDU 168 BHL

WELL	SPUD	TVD	ZONE	WELL TYPE	HOLE O.D.	CASING O.D.	SET @	CEMENT	TOC	HOW DETERMINED
Harry Leonard NCT E 001	10/4/05	6670	Penrose Skelly; Grayburg	O	17.25	13.325	294	300 sx	Surface	Circ
30-025-06620					12.25	9.625	2950	1300 sx	1345	Temp Survey
G-16-21S-37E					8.75	7	6610	700 sx	1360	Temp Survey
WBDU 167	Plan	6900	Eunice; Bli-Tu-Dr, N	O	11	8.625	1300	450 sx	GL	N/A
30-025-43126					7.875	5.5	6900	900 sx	GL	N/A
B-16-21S-37E										
WBDU 081	2/28/07	6793	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1255	600 sx	Surface	Circ
30-025-38230					7.875	5.5	6793	1200 sx	Surface	CBL
K-16-21S-37E										
WBDU 082	4/8/07	6875	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1285	650 sx	Surface	Circ
30-025-38231					7.875	5.5	6875	1250 sx	320	CBL
J-16-21S-37E										

EXHIBIT F

Sorted by distance from WBDU 168 BHL

WBDU 064	4/27/07	6892	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1322	575 sx	Surface	Circ
30-025-38268					7.875	5.5	6892	1300 sx	280	CBL
F-16-21S-37E										
WBDU 098	6/15/09	6880	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1313	450 sx	Surface	Circ
30-025-39119					7.875	5.5	6880	1050 sx	230	CBL
B-16-21S-37E										
WBDU 059	6/23/83	7502	Eunice; Bli-Tu-Dr, N	I	17.5	13.375	316	325 sx	Surface	Circ
30-025-06626					12.25	9.625	2900	1500 sx	1325	Temp Survey
F-16-21S-37E					8.75	7	6656	700 sx	2800	Temp Survey
WBDU 077	7/4/47	6250	Eunice; Bli-Tu-Dr, N	O	17.25	13.375	213	200 sx	Surface	Circ
30-025-06618					11	8.625	2607	1550 sx	580	Temp Survey
J-16-21S-37E					7.375	5.5	6630	500 sx	2845	Temp Survey

Sorted by distance from WBDU 168 BHL

Harry Leonard NCT E 003	9/10/48	6710	Penrose Skelly; Grayburg	O	17.25	13.325	304	300 sx	Surface	Circ
30-025-06622					12.25	9.625	2800	1200 sx	Surface	Circ
B-16-21S-37E					8.75	7	6649	700 sx	3200	Temp Survey
WBDU 056	11/24/47	6780	Eunice; Bli-Tu-Dr, N	I	17.5	13.375	301	300 sx	Surface	Circ
30-025-06621					12.25	9.625	2952	1300 sx	1370	Temp Survey
H-16-21S-37E					8.75	7	6547	700 sx	2715	Temp Survey
WBDU 178	11/22/14	6948	Eunice; Bli-Tu-Dr, N	I	11	8.625	1297	575 sx	GL	Circ 178 sx
30-025-41547					7.875	5.5	6955	1575 sx	GL	Circ 339 sx
B-16-21S-37E										
WBDU 166	Plan	6900	Eunice; Bli-Tu-Dr, N	O	11	8.625	1300	450 sx	GL	N/A
30-025-43125					7.875	5.5	6900	900 sx	GL	N/A
F-16-21S-37E										

EXHIBIT F

Sorted by distance from WBDU 168 BHL

WBDU 079	6/24/05	7310	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1289	600 sx	Surface	Circ 92 sx
30-025-37201					7.875	5.5	7310	1600 sx	270	CBL
J-16-21S-37E										
WBDU 076	5/14/47	6654	Eunice; Bli-Tu-Dr, N	I	17.5	13.375	214	200 sx	Surface	Circ
30-025-06616					11	8.625	2815	1250 sx	250	no report
K-16-21S-37E					7.875	5.5	6654	500 sx	2650	log
WBDU 060	2/22/54	6699	Eunice; Bli-Tu-Dr, N	I	17.5	13.375	297	300 sx	Surface	Circ
30-025-06628					12.25	9.625	2953	1500 sx	Surface	Circ
C-16-21S-37E					8.75	7	6694	1000 sx	Surface	Circ
Harry Leonard NCT E 005	6/22/52	8220	Penrose Skelly; Grayburg	O	17.25	12.75	268	325 sx	Surface	Circ
30-025-06624					11	8.625	2799	1100 sx	2290	Temp Survey
H-16-21S-37E					7.875	5.5	7999	131 sx	7540	Temp Survey

Sorted by distance from WBDU 168 BHL

State C Tract 12 021	7/26/05	7300	Wantz; Abo	O	12.25	8.625	1287	600 sx	Surface	Circ 116 sx
30-025-37202					7.875	5.5	7300	1400 sx	390	CBL
C-16-21S-37E										
WBDU 164	Plan	7000	Eunice; Bli-Tu-Dr, N	O	11	8.625	1300	715 sx	GL	N/A
30-025-42537					7.875	5.5	7000	950 sx	GL	N/A
H-16-21S-37E										
WBDU 113	9/15/09	6912	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1342	650 sx	Surface	Circ
30-025-39277					7.875	5.5	6912	1000 sx	200	radial bond log
A-16-21S-37E										
WBDU 078	8/12/47	6644	Eunice; Bli-Tu-Dr, N	I	17.25	13.375	213	200 sx	Surface	Circ
30-025-06619					11	8.625	2807	1550 sx	1350	Temp Survey
I-16-21S-37E					7.375	5.5	6644	500 sx	3165	Temp Survey

Sorted by distance from WBDU 168 BHL

WBDU 084	7/3/07	6835	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1265	650 sx	Surface	Circ
30-025-38415					7.875	5.5	6835	1400 sx	890	CBL
K-16-21S-37E										
WBDU 057	7/16/63	6699	Eunice; Bli-Tu-Dr, N	I	17.25	13.375	297	300 sx	Surface	Circ
30-025-06623					12.25	9.625	2800	1300 sx	540	Temp Survey
A-16-21S-37E					8.75	7	6645	700 sx	2550	Temp Survey
WBDU 062	7/24/03	6950	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1132	550 sx	Surface	Circ 232 sx
30-025-36305					7.875	5.5	6950	1275 sx	Surface	Circ 126 sx
D-16-21S-37E										
WBDU 080	1/19/07	6875	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1227	575 sx	Surface	Circ
30-025-38220					7.875	5.5	6875	1425 sx	225	CBL
L-16-21S-37E										

EXHIBIT F

Sorted by distance from WBDU 168 BHL

WBDU 175	Plan	6900	Eunice; Bli-Tu-Dr, N	O	11	8.625	1300	450 sx	GL	N/A
30-025-43127					7.875	5.5	6900	900 sx	GL	N/A
C-16-21S-37E										
State DA 005	8/8/96	8225	Penrose Skelly; Grayburg	O	17.5	13.375	258	200 sx	Surface	Circ
30-025-06617					11	8.625	2820	1500 sx	565	Temp Survey
I-16-21S-37E					7.875	5.5	8225	500 sx	3448	Temp Survey
WBDU 051	3/6/07	6837	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1307	575 sx	surface	Circ
30-025-38197					7.875	5.5	6895	1150 sx	227	CBL
O-9-21S-37E										
Harry Leonard NCT E 006	1/1/76	6720	Penrose Skelly; Grayburg	O	11	8.625	1305	550 sx	Surface	Circ
30-025-25198					7.875	5.5	6720	1050 sx	47	Tagged
A-16-21S-37E										

EXHIBIT F

Sorted by distance from WBDU 168 BHL

WBDU 176	Plan	6850	Plan: Eunice; Bli-Tu-Dr, N	O	N/A	N/A	N/A	N/A	N/A	N/A
30-025-43222										
O-9-21S-37E										
WBDU 052	2/2/07	6870	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1296	600 sx	Surface	Circ
30-025-38198					7.875	5.5	6870	1500 sx	300	CBL
O-9-21S-37E										
WBDU 092	12/1/05	7284	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1197	575 sx	Surface	Circ 171 sx
30-025-37535					7.875	5.5	7284	1150 sx	270	radial bond log
O-16-21S-37E										
WBDU 058	7/5/72	6660	Eunice; Bli-Tu-Dr, N	I	17.5	13.375	326	300 sx	Surface	Circ
30-025-06625					12	9.625	2902	1500 sx	1560	Temp Survey
E-16-21S-37E					8.75	7	6660	270 sx	1900	Temp Survey

EXHIBIT F

Sorted by distance from WBDU 168 BHL

NEDU 629	6/25/05	6900	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1200	575 sx	Surface	Circ
30-025-37238					7.875	5.5	6900	1300 sx	130	CBL
L-15-21S-37E										
WBDU 083	6/23/07	6850	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1273	575 sx	Surface	Circ
30-025-38414					7.875	5.5	6850	1300 sx	186	CBL
L-16-21S-37E										
NEDU 628	12/30/05	6975	Eunice; Bli-Tu-Dr, N	O	12.25	8.625	1198	575 sx	Surface	Circ 160 sx
30-025-37223					7.875	5.5	6889	1800 sx	1202	CBL
E-15-21S-37E										
WBDU 088	5/13/47	6660	Eunice; Bli-Tu-Dr, N	O	17	13.375	215	250 sx	No report	No report
30-025-06632					11	8.625	2866	1600 sx	No report	No report
O-16-21S-37E					7.75	5.5	6659	500 sx	No report	No report

EXHIBIT F

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

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

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

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

(NAD83 UTM in meters)

(In feet)

601 meters = 1,832 feet

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 00554		LE		2	2	16	21S	37E	672744	3595610*	601	80	70	10
CP 01141 POD2		LE	3	4	3	15	21S	37E	673541	3594250	1609	40		
CP 01141 POD3		LE	3	4	3	15	21S	37E	673541	3594250	1609	40		
CP 01141 POD4		LE	3	4	3	15	21S	37E	673541	3594250	1609	45		

monitor well no water found

1610 meters = 5280' (1 mi)

CP 01575 POD1	CP	LE	1	2	1	22	21S	37E	673543	3594200	1642	40	35	5
CP 01575 POD2	CP	LE	2	2	1	22	21S	37E	673610	3594192	1700	35	35	0
CP 01574 POD1	CP	LE	2	4	4	15	21S	37E	674563	3594599	2380	68	57	11
CP 01185 POD1		LE		1	3	14	21S	37E	674598	3594689	2392	70		
CP 01185 POD3		LE		1	3	14	21S	37E	674592	3594620	2403	70		
CP 01185 POD2		LE		1	3	14	21S	37E	674623	3594674	2420	70		
CP 01185 POD4		LE		1	3	14	21S	37E	674633	3594610	2445	70		
CP 01574 POD2	CP	LE	1	3	3	14	21S	37E	674654	3594594	2469	68	57	11
CP 01026 POD1		LE	1	1	3	17	21S	37E	669809	3594958	2476	167	95	72
CP 00895		LE		1	1	20	21S	37E	669957	3593956*	2645	163		
CP 00235 POD3	CP	LE	1	1	1	23	21S	37E	674681	3594137*	2650	90	61	29
CP 00447		LE	2	4	4	18	21S	37E	669647	3594451*	2738	95		
CP 00235 POD7	CP	LE	3	1	1	23	21S	37E	674681	3593937*	2740	85	65	20
CP 00552		LE		2	4	04	21S	37E	672700	3598022*	2816	90	75	15
CP 00553		LE		2	4	04	21S	37E	672700	3598022*	2816	90	75	15
CP 00235 POD6	CP	LE	2	1	1	23	21S	37E	674881	3594137*	2834	85	65	20
CP 00235 POD4	CP	LE	1	3	1	23	21S	37E	674688	3593735*	2847	100	80	20
CP 00676		LE		4	4	18	21S	37E	669548	3594352*	2862	140	106	34
CP 00711		LE	4	2	2	28	21S	37E	672900	3592291*	3014	100	65	35
CP 00235 POD2	CP	LE	1	2	1	23	21S	37E	675083	3594144*	3018	96	65	31
CP 00235 POD5	CP	LE	1	4	1	23	21S	37E	675090	3593742*	3192	90	70	20
CP 00985 POD1		LE	4	4	2	19	21S	37E	669595	3593453	3215	160		

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

EXHIBIT G

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

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

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

(NAD83 UTM in meters)

(In feet)

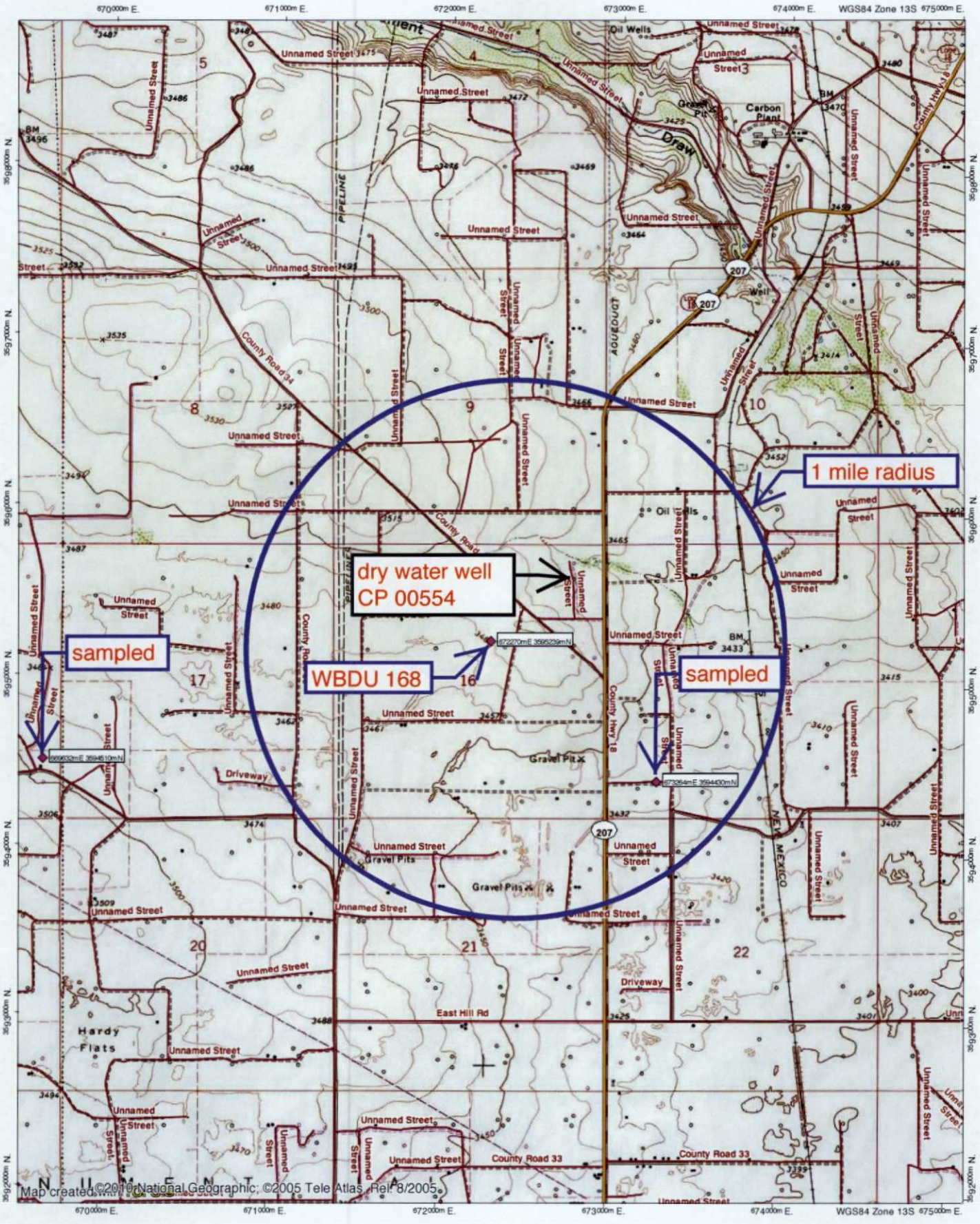
POD Number	POD Sub-basin	County	Q Q Q 64 16 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
									Average Depth to Water:			67 feet
									Minimum Depth:			35 feet
									Maximum Depth:			106 feet

Record Count: 26

UTMNAD83 Radius Search (in meters):

Easting (X): 672270 **Northing (Y):** 3595239 **Radius:** 3220

EXHIBIT G


TOPO! map printed on 10/08/16 from "Untitled.tpo"
1 mile radius
dry water well
CP 00554
WBDU 168
sampled
sampled
Map created ©2016 National Geographic; ©2005 Tele Atlas, Rel. 8/2005
NATIONAL GEOGRAPHIC
EXHIBIT G
10/08/16

actually
SESE Sec. 18

Analytical Report
Lab Order **1607F82**
Date Reported: **8/17/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Permits West
Client Sample ID: Sec 17 Site
Project: Apache WBDU 168 SWD
Collection Date: 7/26/2016 1:20:00 PM
Lab ID: 1607F82-001
Matrix: AQUEOUS
Received Date: 7/29/2016 4:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 1664A						Analyst: **tnc**	
N-Hexane Extractable Material	ND	12		mg/L	1	8/1/2016 10:09:00 AM	26714
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	180	10		mg/L	20	8/1/2016 1:43:44 PM	R36152
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	748	40.0	*D	mg/L	1	8/3/2016 9:02:00 AM	26725

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

Qualifiers:

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

EXHIBIT G

Analytical Report
Lab Order **1607F82**
Date Reported: **8/17/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Permits West
Project: Apache WBDU 168 SWD
Lab ID: 1607F82-002 **Matrix:** AQUEOUS

Client Sample ID: Sec 15 Site
Collection Date: 7/26/2016 5:21:00 PM
Received Date: 7/29/2016 4:00:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 1664A						Analyst: **tnc**	
N-Hexane Extractable Material	ND	10		mg/L	1	8/1/2016 10:09:00 AM	26714
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	510	25	*	mg/L	50	8/11/2016 3:18:04 AM	A36379
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	1400	20.0	*	mg/L	1	8/3/2016 9:02:00 AM	26725

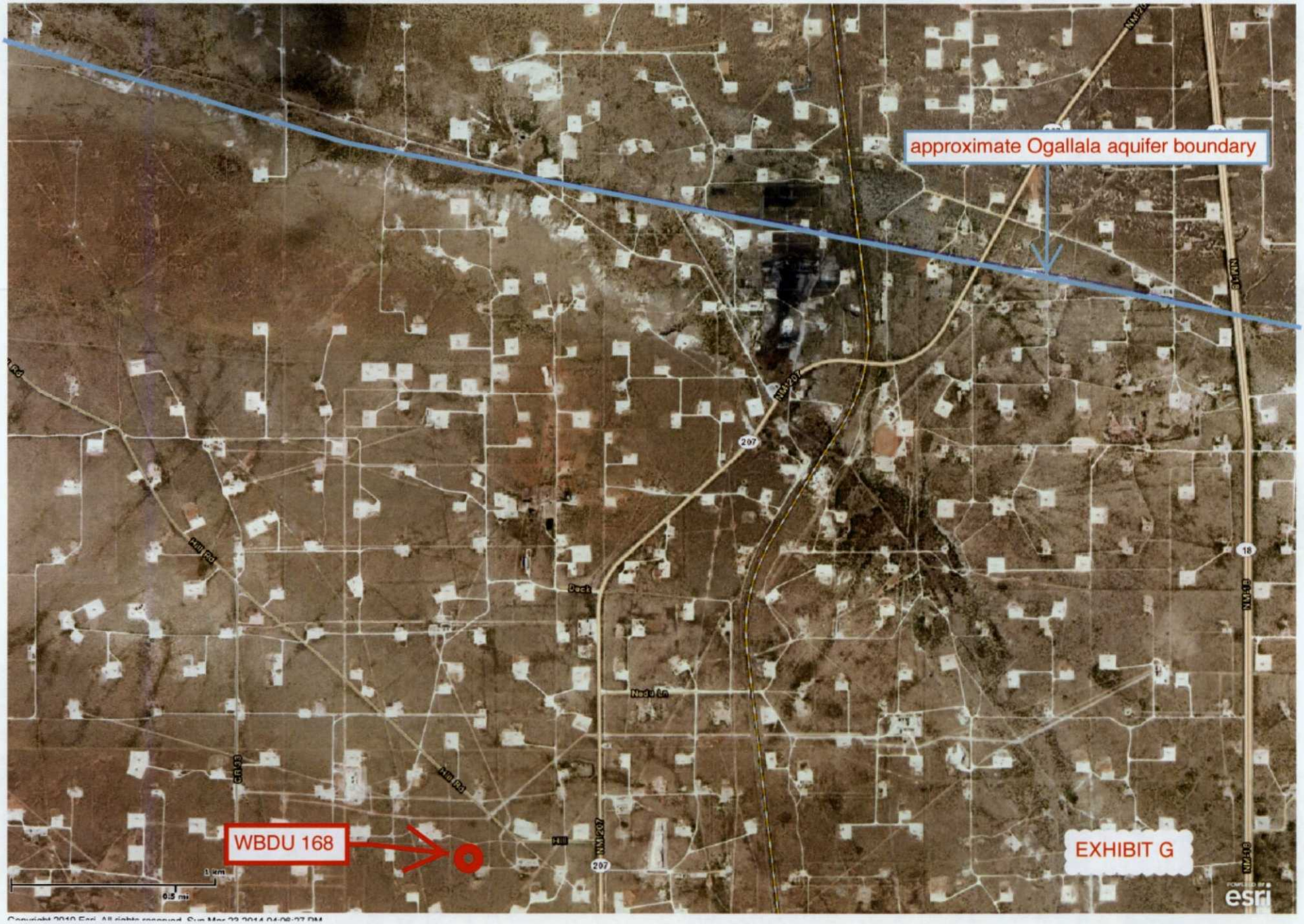
Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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

EXHIBIT G

WBDU 168


approximate Ogallala aquifer boundary
WBDU 168
EXHIBIT G
esri

From: **Oldani, Martin** Martin.Oldani@apachecorp.com
Subject: FW: shallow faulting in the vicinity of WBDU
Date: January 11, 2016 at 4:27 PM
To: brian@permitswest.com
Cc: **Shapot, Bret** Bret.Shapot@apachecorp.com

OM

Brian,

As per Mark's comments below, our G&G staff has taken a look at the potential issue of shallow faulting in the WBDU area and have concluded there is none present across the area and no danger of shallow faulting as a conduit to groundwater contamination.

Regards,

MARTIN J. OLDANI
PERMIAN REGION EXPLORATION & EXPLOITATION MANAGER
Apache *main* (432) 818 1000 | *fax* (432) 818 1982
office 6100A | *direct* (432) 818 1030 | *mobile* (432) 234-1925
martin.oldani@apachecorp.com
APACHE CORPORATION - PERMIAN REGION
303 Veterans Airway Park
Midland, TX 79705

From: Pasley, Mark
Sent: Monday, January 11, 2016 4:48 PM
To: Oldani, Martin <Martin.Oldani@apachecorp.com>
Cc: O'Shay, Justin <Justin.O'Shay@apachecorp.com>; Riley, Brent <Brent.Riley@apachecorp.com>; Shapot, Bret <Bret.Shapot@apachecorp.com>; Piggott, Fiona <fiona.piggott@apachecorp.com>
Subject: shallow faulting in the vicinity of WBDU

Martin:

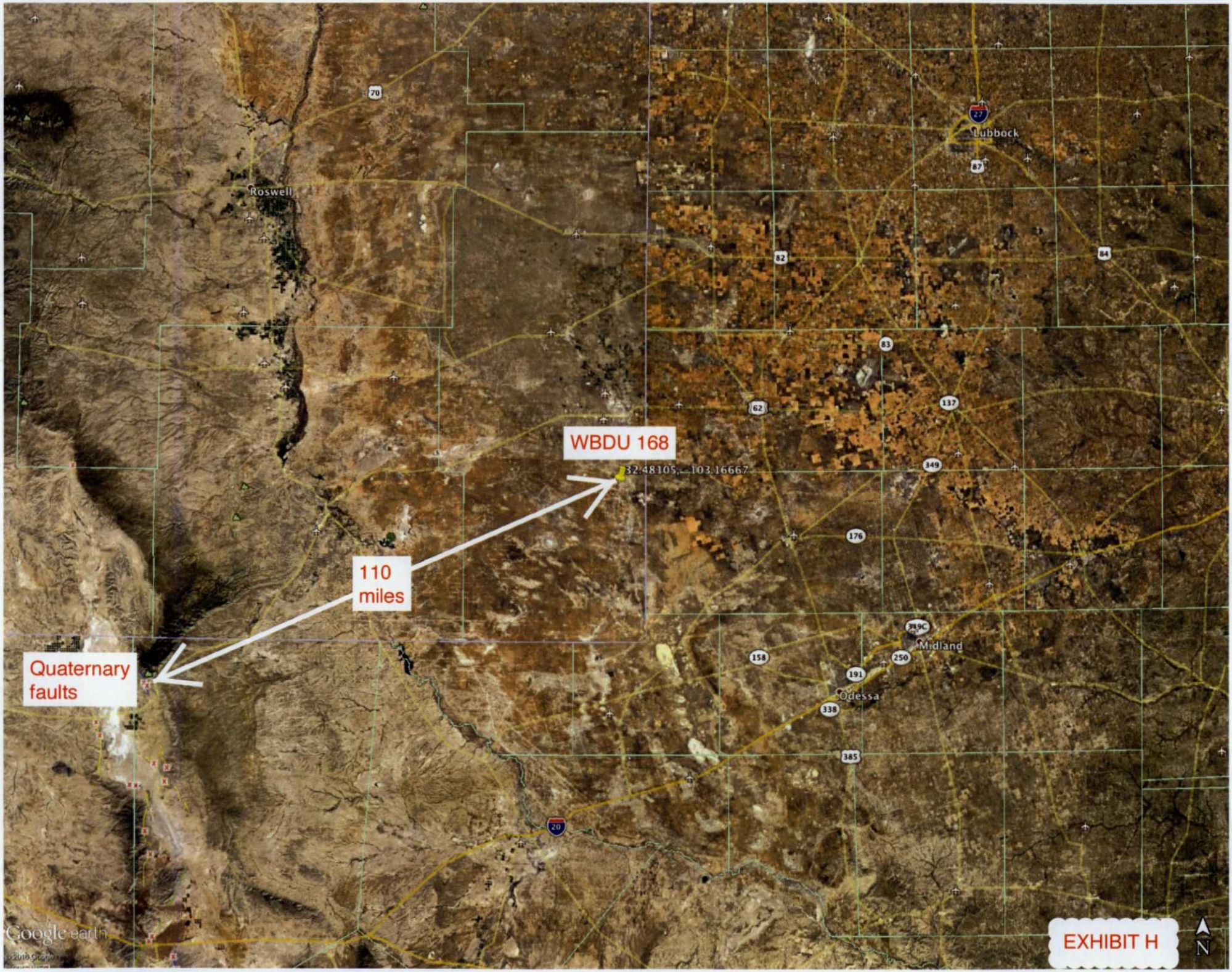
In reference to the meeting this morning where we discussed the possibility of shallow faulting in the WBDU area and its potential impact on the permitting of the injection well(s) into the Drinkard, I submit to you the attached slide set from me and Justin. You will see that we have done several extractions on the seismic data and there is no indication of faulting above the Glorieta which is well above the Drinkard and below the younger evaporites. Also, as we suspected, there are no surface faults mapped in the area – the nearest being more than 50 miles away.

Please contact me or Justin if you have further questions.

Sincerely,

DR. MARK PASLEY
GEOLOGICAL ADVISOR
direct +1 432.818.1835 | *mobile* +1 832.943.9040 | *office* 6112A
APACHE PERMIAN
303 Veterans Airpark Lane
Midland, TX 79705 USA
ApacheCorp.com | LinkedIn | Facebook | Twitter | StockTwits | YouTube

EXHIBIT H


WBDU 168
32.48105, -103.16667
110 miles
Quaternary faults
Roswell
Lubbock
Midland
Odessa
70
27
87
82
84
83
62
137
349
176
349C
158
250
191
338
385
20
Google earth
EXHIBIT H
N

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
July 15, 2016
and ending with the issue dated
July 15, 2016.

Daniel Russell
Publisher

Sworn and subscribed to before me this
15th day of July 2016.

Gussie Black
Business Manager

My commission expires
January 29, 2019
(Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of New Mexico
My Commission Expires 1-29-19

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

LEGALS

LEGAL NOTICE
July 15, 2016

Apache Corporation is applying to increase the West Blinebry Drinkard Unit 168 water injection interval. The well is at (SHL) 1860 FNL & 2230 FEL, Sec. 16, T. 21 S., R. 37 E., Lea County, NM. BHL is at 2033 FNL & 2125 FEL 16-21s-37e. This is 2 miles north of Eunice, NM. It will inject water into the Drinkard (maximum injection pressure = 1,120 psi) from 6,401' to 6,640'. Current interval is 6,570' to 6,640'. Injection will be at a maximum rate of 3,000 bwpd. Interested parties must file objections or requests for hearing with the NM Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505 within 15 days. Additional information can be obtained by contacting: Brian Wood, Permits West, Inc., 37 Verano Loop, Santa Fe, NM 87508. Phone number is (505) 466-8120. #31086

02108485

00178018

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

EXHIBIT I

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

October 11, 2016

NM State Land Office
P. O. Box 1148
Santa Fe, NM 87504

TYPICAL LETTER

Apache Corporation is applying (see attached application) to increase the injection interval of its West Blinebry Drinkard Unit 168 water injection well. As required by NM Oil Conservation Division (NMOCD) Rules, I am notifying you of the following proposed water injection well in Lea County, NM. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: West Blinebry Drinkard Unit 168 (state lease) MD = 6,986'
Proposed Injection Zone: Drinkard from 6,401' to 6,640'
Surface Hole Location: 1860' FNL & 2230' FEL Sec. 16, T. 21 S., R. 37 E.
Bottom Hole Location: 2033' FNL & 2125' FEL Sec. 16, T. 21 S., R. 37 E.
Approximate Location: 2 air miles north of Eunice, NM
Applicant Name: Apache Corporation (432) 818-1062
Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

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

Please call me if you have any questions.

Sincerely,

Brian Wood

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Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 6.88

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OCT 12 2016
87552-9

Sent To: NM State Land Office
Street & Apt. No., or PO Box No.: PO Box 1148
City, State, ZIP+4: Santa Fe NM NM
Apache WBDU 168

See Reverse for Instructions

EXHIBIT J

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Sent To: John H. Hendrix Corp
Street & Apt. No., or PO Box No.: 110 N. Marienfeld, Suite 400
City, State, ZIP+4: Midland TX TX
Apache WBDU 168

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Sent To: Conoco Phillips
Street & Apt. No., or PO Box No.: PO Box 7500
City, State, ZIP+4: Bartlesville OK OK
Apache WBDU 168

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Sent To: BLM
Street & Apt. No., or PO Box No.: 620 E. Greene Street
City, State, ZIP+4: Carlsbad NM NM
Apache WBDU 168

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Sent To: Penroc Oil Corp
Street & Apt. No., or PO Box No.: PO Box 2769
City, State, ZIP+4: Hobbs NM NM
Apache WBDU 168

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Total Postage & Fees	$

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Sent To: Chevron USA Inc.
Street & Apt. No., or PO Box No.: 7301 Deauville
City, State, ZIP+4: Midland TX TX
Apache WBDU 168

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

PECOS NM Postmark Here OCT 12 2016 87552-9998

Sent To: Chevron USA Inc.
Street & Apt. No., or PO Box No.: PO Box 1635
City, State, ZIP+4: Houston TX TX
Apache WBDU 168

PS Form 3800, July 2014 — See Reverse for Instruction

EXHIBIT J

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

PECOS NM
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OCT 12 2016
87552-9998

Sent To: Oxy USA WTP LP
Street & Apt. No., or PO Box No.: PO Box 4294
City, State, ZIP+4: Houston TX TX
Apache WBDU 168

PS Form 3800, July 2014 — See Reverse for Instructions

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

PECOS NM
Postmark Here
OCT 12 2016
87552-9998

Sent To: Oxy USA WTP LP
Street & Apt. No., or PO Box No.: 6 Desta Drive, #6000
City, State, ZIP+4: Midland TX TX
Apache WBDU 168

PS Form 3800, July 2014 — See Reverse for Instructions

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

PECOS NM
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OCT 12 2016
87552-9998

Sent To: Conoco Phillips
Street & Apt. No., or PO Box No.: 550 Westlake Park Blvd
City, State, ZIP+4: Houston TX TX
Apache WBDU 168

PS Form 3800, July 2014 — See Reverse for Instructions

EXHIBIT J

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:

BLM
620 E. Greene Street
Carlsbad NM NM

Apache WBDU 168

9590 9403 0887 5223 6387 55

2. Article Number (Transfer from service label)
7014 2870 0001 8951 3602

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☑ Addressee

B. Received by (Printed Name) C. Date of Delivery
10/17/16

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

3. Service Type
☐ Adult Signature ☐ Priority Mail Express®
☐ Adult Signature Restricted Delivery ☐ Registered Mail™
☐ Certified Mail® ☐ Registered Mail Restricted Delivery
☐ Certified Mail Restricted Delivery ☐ Return Receipt for Merchandise
☐ Collect on Delivery ☐ Signature Confirmation™
☐ Collect on Delivery Restricted Delivery ☐ Signature Confirmation Restricted Delivery
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1. Article Addressed to:

Conoco Phillips
PO Box 7500
Bartlesville OK OK

Apache WBDU 168

9590 9403 0887 5223 6387 93

2. Article Number (Transfer from service label)
7014 2870 0001 8951 3633

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ConocoPhillips ☐ Agent ☐ Addressee

B. Received by (Printed Name) OCT 17 2016 C. Date of Delivery

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

3. Service Type
☐ Adult Signature ☐ Priority Mail Express®
☐ Adult Signature Restricted Delivery ☐ Registered Mail™
☐ Certified Mail® ☐ Registered Mail Restricted Delivery
☐ Certified Mail Restricted Delivery ☐ Return Receipt for Merchandise
☐ Collect on Delivery ☐ Signature Confirmation™
☐ Collect on Delivery Restricted Delivery ☐ Signature Confirmation Restricted Delivery
☐ Insured Mail ☐ Restricted Delivery

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

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1. Article Addressed to:

Chevron USA Inc.
PO Box 1635
Houston TX TX

Apache WBDU 168

9590 9403 0887 5223 6387 62

2. Article Number (Transfer from service label)

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

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

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

3. Service Type
☐ Adult Signature ☐ Priority Mail Express®
☐ Adult Signature Restricted Delivery ☐ Registered Mail™
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☐ Collect on Delivery Restricted Delivery ☐ Signature Confirmation Restricted Delivery

PS Form

Receipt

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1. Article Addressed to:

NM State Land Office
PO Box 1148
Santa Fe NM NM

Apache WBDU 168

9590 9403 0887 5223 6387 48

2. Article Number (Transfer from service label)
7014 2870 0001 8951 3695

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee
USPS SANTA FE NM 87501

B. Received by (Printed Name) C. Date of Delivery
OCT 17 2016

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No
SANTA FE MAIN POST OFFICE

3. Service Type
☐ Adult Signature ☐ Priority Mail Express®
☐ Adult Signature Restricted Delivery ☐ Registered Mail™
☐ Certified Mail® ☐ Registered Mail Restricted Delivery
☐ Certified Mail Restricted Delivery ☐ Return Receipt for Merchandise
☐ Collect on Delivery ☐ Signature Confirmation™
☐ Collect on Delivery Restricted Delivery ☐ Signature Confirmation Restricted Delivery

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

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

1. Article Addressed to:

Chevron USA Inc.
301 Deauville
Idland TX TX

Apache WBDU 168

9590 9403 0887 5223 6387 79

2. Article Number (Transfer from service label)
7014 2870 0001 8951 3626

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☑ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery
C. Laurence 10.17.16

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

3. Service Type
☐ Adult Signature ☐ Priority Mail Express®
☐ Adult Signature Restricted Delivery ☐ Registered Mail™
☐ Certified Mail® ☐ Registered Mail Restricted Delivery
☐ Certified Mail Restricted Delivery ☐ Return Receipt for Merchandise
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☐ Collect on Delivery Restricted Delivery ☐ Signature Confirmation Restricted Delivery
☐ Insured Mail ☐ Restricted Delivery

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

SENDER: COMPLETE THIS SECTION

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- Print your name and address on the reverse so that we can return the card to you.
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1. Article Addressed to:

Oxy USA WTP LP
PO Box 4294
Houston TX TX

Apache WBDU 168

9590 9403 0887 5223 6388 23

2. Article N

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

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

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

3. Service Type
☐ Adult Signature ☐ Priority Mail Express®
☐ Adult Signature Restricted Delivery ☐ Registered Mail™
☐ Certified Mail® ☐ Registered Mail Restricted Delivery
☐ Certified Mail Restricted Delivery ☐ Return Receipt for Merchandise
☐ Collect on Delivery

PS Form

Receipt

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:

Conoco Phillips
550 Westlake Park Blvd
Houston TX TX

Apache WBDU 168

9590 9403 0887 5223 6387 86

2. Article Number (Transfer from service label)
7014 2870 0001 8951 3640

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Tiffanie Webster ☐ Agent ☐ Addressee

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

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

3. Service Type
☐ Adult Signature ☐ Priority Mail Express®
☐ Adult Signature Restricted Delivery ☐ Registered Mail™
☐ Certified Mail® ☐ Registered Mail Restricted Delivery
☐ Certified Mail Restricted Delivery ☐ Return Receipt for Merchandise
☐ Collect on Delivery ☐ Signature Confirmation™
☐ Collect on Delivery Restricted Delivery ☐ Signature Confirmation Restricted Delivery
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PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:

Penroc Oil Corp
PO Box 2769
Hobbs NM NM

Apache WBDU 168

9590 9403 0887 5223 6388 30

2. Article Number (Transfer from service label)
7014 2870 0001 8951 3688

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery
Angel Alexiw 10-17-16

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

3. Service Type
☐ Adult Signature ☐ Priority Mail Express®
☐ Adult Signature Restricted Delivery ☐ Registered Mail™
☐ Certified Mail® ☐ Registered Mail Restricted Delivery
☐ Certified Mail Restricted Delivery ☐ Return Receipt for Merchandise
☐ Collect on Delivery ☐ Signature Confirmation™
☐ Collect on Delivery Restricted Delivery ☐ Signature Confirmation Restricted Delivery

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

C-108 Review Checklist: Received 10-14-2016 Add. Request: 10-31-2016 Reply Date: _____ Suspended: _____ [Ver 15]

ORDER TYPE (WFX) / PMX / SWD Number: 923-13 Order Date: _____ Legacy Permits/Orders: 12981

Well No. 168 Well Name(s): West Blinebry Drinkard Unit

API: 30-0 B: 2033 FNL, 2125 FEL S: 1860 FNL, 2230 FEL Spud Date: 11-20-2014 New or Old: NX (UIC Class II Primacy 03/07/1982)

Footages 30725-41548 Lot ___ or Unit G Sec 16 Tsp 21S Rge 37E County Lea

General Location: 7 3 miles NW Eunice Pool: North Eunice, Bli-Dn-Tu Pool No.: agent Brian Wood

BLM 100K Map: JAL Operator: Apache Corp OGRID: 873 Contact: 22 SW

COMPLIANCE RULE 5.9: Total Wells: 2985 Inactive: 2 Fincl Assur: OK Compl. Order? NA IS 5.9 OK? Y Date: 11-2-2016

WELL FILE REVIEWED Current Status: Active -> Injector

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

Planned Rehab Work to Well: _____

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned __or Existing __ Surface	11" / 8 5/8	1291		430 SX	1243 / Surface
Planned __or Existing __ Interm/Prod	7 7/8 / 5 1/2	6445		7 7/8	6445 / Surface
Planned __or Existing __ Interm/Prod					
Planned __or Existing __ Prod/Liner					
Planned __or Existing __ Liner					
Planned __or Existing __ OH / (PERF)	6401 / 6640		Inj Length 235'		

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.		DR	6401
Confining Unit: Litho. Struc. Por.		Abo	6655
Proposed Inj Interval TOP:			
Proposed Inj Interval BOTTOM:			
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.			

Completion/Operation Details:

Drilled TD 6486 PBTD 6435 X->

NEW TD _____ NEW PBTD Cemented

NEW Open Hole ○ or NEW Perfs ○ by R-12981

Tubing Size 2 7/8 in. Inter Coated? Y

Proposed Packer Depth 6350 ft

Min. Packer Depth 6301 (100-ft limit)

Proposed Max. Surface Press. 1170 psi

Admin. Inj. Press. 1120 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P ___ Noticed? ___ BLM Sec Ord ○ WIPP ○ Noticed? ___ Salt/Salado T: ___ B: ___ NW: Cliff House fm ___

FRESH WATER: Aquifer Quaternary Max Depth Y HYDRO AFFIRM STATEMENT By Qualified Person ○

NMOSE Basin: Capitan CAPITAN REEF: thru ___ adj NA No. Wells within 1-Mile Radius? 2 FW Analysis Y

Disposal Fluid: Formation Source(s) San Andres producing zones Analysis? Y On Lease ○ Operator Only ○ or Commercial ○

Disposal Int: Inject Rate (Avg/Max BWPD): 2.5K/3K Protectable Waters? ___ Source: ___ System: Closed or Open

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

AOR Wells: 1/2-M Radius Map? Y Well List? Y Total No. Wells Penetrating Interval: 52 Horizontals? NA

Penetrating Wells: No. Active Wells 50 Num Repairs? N/A on which well(s)? ___ Diagrams? ___

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

NOTICE: Newspaper Date 7-15-2016 Mineral Owner NMSLO/BLM Surface Owner NMSLO N. Date ___

RULE 26.7(A): Identified Tracts? ___ Affected Persons: Chevron, ConocoPhillips, John H. Hendrix N. Date ___

Order Conditions: Issues: _____

Add Order Cond: _____

C-108 Review Checklist: Received 7/24 Add. Request: 8/12 Reply Date: 8-18 Suspended: ________

PERMIT TYPE: (WFX) / PMX / SWD Number: 923-A Permit Date: ________ Legacy Permits/Orders: ________

Well No. 168 Well Name(s): West Blinebry Drinkard Unit

API : 30-0 25-41548 Spud Date: 1-24-2014 New or Old: N (*UIC Class II Primacy 03/07/1982*)

Footages S: 1860FNL 2230FEL B: 2040FNL 2425FEL Lot ____ or Unit G Sec 16 Tsp 21S Rge 37E County Lea

General Location: 2 3 miles NW Eunice Pool: Eunice; Bli-Dr-Tu, North Pool No.: ________

BLM 100K Map: JAL Operator: Apache Corp OGRID: 873 Contact: Brian Wood, agent

COMPLIANCE RULE 5.9: Total Wells: 3025 Inactive: 1 Fincl Assur: Y Compl. Order? Y IS 5.9 OK? ____ Date: ____

WELL FILE REVIEWED ✓ Current Status: Drilled

WELL DIAGRAMS: NEW: Proposed ✓ or **RE-ENTER:** Before Conv. ◯ After Conv. ◯ Logs in Imaging: ________

Planned Rehab Work to Well: ________

Well Construction Details:	Sizes (In) Borehole / Pipe	Setting Depths (ft)		Cement Sx or Cf	Cement Top and Determination Meth
Planned __ or Existing __ Surface	11/8 5/8	1293	Stage Tool	575	Surface/Visual
Planned __ or Existing __ Interm/Prod					
Planned __ or Existing __ Interm/Prod					
Planned __ or Existing __ Prod/Liner	7 7/8 / 5 1/2	6980(Log) 6982(TVD)		1521	Surface/Visual
Planned __ or Existing __ Liner					
Planned __ or Existing __ OH / (PERF)	6570-6640		Inj Length 70'		

Injection Stratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.		PR	6401
Confining Unit: Litho.. Struc. Por.		Abo	6655
Proposed Inj Interval TOP:	6570		
Proposed Inj Interval BOTTOM:	6640		
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.			

Completion/Operation Details:

Drilled TD 6982(Log) PBTD 6935

NEW TD ________ NEW PBTD ________

NEW Open Hole ◯ or NEW Perfs ◯

Tubing Size 2 3/8 in. Inter Coated? Y

Proposed Packer Depth 6520 ft

Min. Packer Depth 6470 (100-ft limit)

Proposed Max. Surface Press. 1314

Admin. Inj. Press. [illegible] (0.2 psi pe

AOR: Hydrologic and Geologic Information

POTASH: R-111-P ◯ *Noticed?* ____ BLM Sec Ord ◯ WIPP ◯ *Noticed?* ____ SALT/SALADO T: ____ B: ____ CLIFF HOUSE

FRESH WATER: Aquifer Quaternary Max Depth 70 HYDRO AFFIRM STATEMENT By Qualified Person

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

Disposal Fluid: Formation Source(s) San Andres + produced H2O Analysis? Y On Lease ◯ Operator Only ◯ or Commercial ◯

Disposal Int: Inject Rate (Avg/Max BWPD): 2500/3000 Protectable Waters? ____ Source: ________ System: Closed ◯ or Ope

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

AOR Wells: 1/2-M Radius Map? Y Well List? Y Total No. Wells Penetrating Interval: 19 Horizontals? Ø

Penetrating Wells: No. Active Wells 19 Num Repairs? ____ on which well(s)? ________ Diagrams? ____

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

NOTICE: Newspaper Date June 24 Mineral Owner NMSLO Surface Owner NMSLO, BLM N. Date 7-29

RULE 26.7(A): Identified Tracts? Y Affected Persons: Chevron, ConocoPhillips, John H Hendrix N. Date 7-29

Permit Conditions: Issues: PSI Limited to 1120 PSI

Add Permit Cond: ________

* R-12981 Limits surface PSI -> 1120 PSI.

State of New Mexico
Energy, Minerals and Natural Resources Department

Administrative Order WFX-923-A
August 19, 2015

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order R-12981, Apache Corporation (OGRID No. 873) has made application to the Division for permission to add one additional injection well to its West Blinebry-Drinkard Unit (WBDU) Waterflood Project in the North Eunice Blinebry-Tubb-Drinkard Pool (Pool code 22900) in Lea County, New Mexico. This well is being proposed as an injection well into the Unitized interval, within the Drinkard formation of the WBDU.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 19.15.26.8B. NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections remain outstanding. The proposed well is eligible for conversion to injection under the terms of that rule. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Rule 19.15.5.9 NMAC.

The proposed expansion of the above-referenced waterflood project, will prevent waste, is in the best interests of conservation, will not impair correlative rights, and should be approved.

IT IS THEREFORE ORDERED THAT:

Apache Corporation, as operator, is hereby authorized to inject water into the following well for the purpose of secondary recovery through plastic-lined tubing set into a packer:

API No.	Well	Loc	Unit	Sec	Twp	Rng	Footage N/S	Footage E/W
30-025-41548	West Blinebry Drinkard Unit No.168	SHL	G	16	21 S	37 E	1860 FNL	2230 FEL
		BHL	G	16	21 S	37 E	2033 FNL	2125 FEL

*SHL: surface hole location; BHL: bottom hole location

The approved injection interval for this well is into the Drinkard formation from an approximate perforated depth of 6570 feet to a maximum perforated depth of 6640 feet. The approved maximum surface tubing injection pressure shall be **1120 psig or 0.2 psig per foot of depth to the uppermost perforation in the injection well, whichever is less,** as approved in Ordering Paragraph (13) of Division Order No. R-12981 dated August 11, 2008. The operator shall

set the injection packer no more than 100 feet above the shallowest perforation for the permitted injection interval.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected fluid enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing injection and prior to resuming injection each time any injection packer is unseated. All MIT testing procedures and schedules shall follow the requirements in Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on these wells shall be limited as listed above. In addition, the injection well or header system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressures to the maximum allowable pressures for these wells.

Subject to the limitations within the hearing order permitting this project, the Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluids from the approved injection interval. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's District I office of the date and time of the installation of injection equipment and of any MIT test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of injection to the District I office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the District I office of any failure of the tubing, casing or packer in the approved injection well; or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

The injection authority granted under this order is not transferable except upon division approval. The division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein. The subject wells shall be governed by all provisions of Division Order No. R-12981 and associated administrative orders.

This Order supersedes Administrative Order WFX-923, issued on May 30, 2014.

The injection authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into at least one of the subject wells, provided however, the Division, upon written request by the operator received prior to the two-year deadline, may grant an extension thereof for good cause shown.

David R. Catanach

DAVID R. CATANACH
Director

JB/mam

cc: New Mexico Oil Conservation Division – Hobbs Office
State Land Office – Oil, Gas and Minerals Division
Well File – 30-025-41548
Case File 14126