DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
7/29/2015		PRG	7/30/2015	WFX	DMAMLS 2105643

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]

-WFX
-Apache Corp
873

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

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

West Blinebry
Drinkard Unit 168
30-025-41548

[D] Other: Specify _____

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

Pool
- Eunice; Bli-T-bn, North
22900

[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

RECEIVED OCD
2015 JUL 29 P 2:21

[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	7-29-15
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

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: JULY 29, 2015

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

Side 2

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

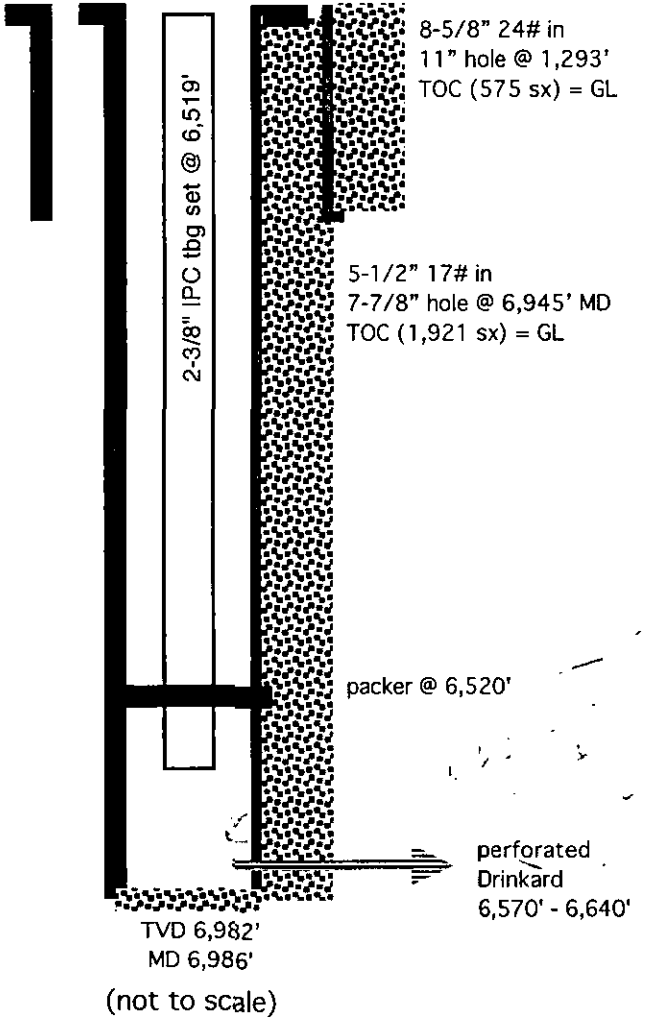
INJECTION WELL DATA SHEET

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: WEST BLINEBRY DRINKARD UNIT 168

WELL LOCATION:	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



(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

6,570' feet to 6,640'

(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: 6,520'

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')

I. Purpose is to use a 6982' TVD (6986' MD) well as a water injection well to increase oil recovery. The well will inject (6570' - 6640') into 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.

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 seven subsequent WFX approvals, WFX-854, WFX-857, WFX-913, WFX-921, WFX-922, WFX-923, and WFX-924. Thirty-three water injectors are now active in the unit. This would be the 34th water injector.

Well was directionally drilled because the preferred SHL is occupied by a Chevron Grayburg well.

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 1,293' 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 6,945' (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.

A. (3) Tubing is 2-3/8", J-55, 4.7#, and internally plastic coated. Setting depth is 6519'. (Disposal interval will be 6570' to 6640'.)

A. (4) A lock set injection packer is set at 6520' (50' above the highest perforation of 6570').

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 6570' 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 was perforated from 6570' to 6640' with 4 shots per foot.

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 6570' 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 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 7 water flood expansions since then. Closest unit boundary is 2125' east. Seven existing injection wells are within a half-mile radius. All are in the unit (see Exhibit B).

V. Exhibit B shows all 55 existing wells (45 oil wells + 7 water injection wells + 1 brine supply well + 2 P & A wells) within a half-mile radius, regardless of depth. Exhibit C shows all 822 existing wells (646 oil or gas producing wells + 88 injection or disposal wells + 61 P & A wells + 26 water wells + 1 brine supply well) 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:

Aliquot Parts in Area of Review (T 21 S, R 37 E)	Lessor(s)	Lease	Lessee(s) of Record	Drinkard operator, if any
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. There are 53 existing wells within a half-mile radius. Thirty-one of the wells penetrated the Drinkard. The penetrators include 24 oil or gas wells and 7 water injection wells. A table abstracting the well construction details and histories of the penetrators are in Exhibit F. The 53 wells and their distances from the 168 well bore are:

API	Operator	Well	Type	Section	TVD	Current Zone	Feet from WBDU 168	
3002506620	Chevron	Harry Leonard NCT E 001	O	16	6670	Penrose Skelly; Grayburg	149	1
3002536613	Apache	State C Tract 12 017	O	16	4386	Penrose Skelly; Grayburg	694	
3002538268	Apache	WBDU 064	O	16	6892	Eunice; BLI-TU-DR, North	785	2
3002538230	Apache	WBDU 081	O	16	6793	Eunice; BLI-TU-DR, North	814	3
3002536725	Apache	State C Tract 12 019	O	16	4350	Penrose Skelly; Grayburg	942	
3002538231	Apache	WBDU 082	O	16	6875	Eunice; BLI-TU-DR, North	988	4
3002539119	Apache	WBDU 098	O	16	6880	Eunice; BLI-TU-DR, North	1072	5
3002506626	Apache	WBDU 059	O	16	7502	Eunice; BLI-TU-DR, North	1088	6
3002536786	Apache	State DA 010	O	16	4345	Penrose Skelly; Grayburg	1106	
3002537834	Chevron	Harry Leonard NCT E 008	P&A	16	4300	Penrose Skelly; Grayburg	1133	
3002506622	Chevron	Harry Leonard NCT E 003	O	16	6710	Penrose Skelly; Grayburg	1211	7
3002536741	Chevron	Harry Leonard NCT E 007	O	16	4345	Penrose Skelly; Grayburg	1261	
3002535708	Apache	State C Tract 12 010	O	16	4200	Penrose Skelly; Grayburg	1269	
3002535765	Apache	State DA 008	O	16	4200	Penrose Skelly; Grayburg	1277	

1/1

3002506618	Apache	WBDU 077	O	16	6250	Eunice; BLI-TU-DR, North	1283	1
3002541547	Apache	WBDU 178	I	16	6955	Eunice; BLI-TU-DR, North	1333	
3002506621	Apache	WBDU 056	O	16	6614	Blinebry Oil & Gas (Oil)	1468	2
3002506628	Apache	WBDU 060	I	16	6699	Eunice; BLI-TU-DR, North	1544	3
3002506627	Stanolind	STATE C TR 12 006	P & A	16	5762	Eunice; BLI-TU-DR, North	1588	
3002535516	Apache	State DA 007	O	16	4200	Penrose Skelly; Grayburg	1590	
3002537202	Apache	State C Tract 12 021	O	16	7300	Wantz; Abo	1639	4
3002537201	Apache	WBDU 079	O	16	7310	Eunice; BLI-TU-DR, North	1674	5
3002536095	Apache	State C Tract 12 013	O	16	4150	Penrose Skelly; Grayburg	1681	
3002506616	Apache	WBDU 076	I	16	6654	Eunice; BLI-TU-DR, North	1719	6
3002535707	Apache	State C Tract 12 009	O	16	4450	Penrose Skelly; Grayburg	1721	
3002536478	Apache	State C Tract 12 015	O	16	4725	Penrose Skelly; Grayburg	1745	
3002506624	Chevron	Harry Leonard NCT E 005	O	16	8220	Penrose Skelly; Grayburg	1823	7
3002536305	Apache	WBDU 062	O	16	6950	Eunice; BLI-TU-DR, North	1869	8
3002542537	Apache	WBDU 164	O	16	7000 plan	Eunice; BLI-TU-DR, North	1914	
3002536614	Apache	State C Tract 12 018	O	16	4350	Penrose Skelly; Grayburg	1914	
3002539277	Apache	WBDU 113	O	16	6912	Eunice; BLI-TU-DR, North	1942	9
3002506619	Apache	WBDU 078	I	16	6644	Eunice; BLI-TU-DR, North	1947	10
3002506623	Apache	WBDU 057	I	16	6699	Tubb (Oil) ; Gas (Pro GAS)	1967	11

11/18

3002538415	Apache	WBDU 084	O	16	6835	Eunice; BLI-TU-DR, North	1989	1
3002538220	Apache	WBDU 080	O	16	6875	Eunice; BLI-TU-DR, North	2009	2
3002538197	Apache	WBDU 051	O	9	6837	Eunice; BLI-TU-DR, North	2046	3
3002537916	Apache	State DA 013	O	16	4398	Penrose Skelly; Grayburg	2098	
3002538198	Apache	WBDU 052	O	9	6870	Eunice; BLI-TU-DR, North	2174	4
3002536787	Apache	State DA 011	O	16	4350	Penrose Skelly; Grayburg	2186	
3002536662	Apache	Hawk Federal B 1 035	O	9	4350	Penrose Skelly; Grayburg	2205	
3002506617	Apache	State DA 005	O	16	8225	Penrose Skelly; Grayburg	2208	5
3002525198	Chevron	Harry Leonard NCT E 006	O	16	6720	Penrose Skelly; Grayburg	2225	6
3002535880	Apache	Hawk Federal B 1 028	O	9	4200	Penrose Skelly; Grayburg	2279	
3002538378	Apache	State Land 15 016	O	16	4135	Penrose Skelly; Grayburg	2315	
3002506625	Apache	WBDU 058	I	16	6660	Eunice; BLI-TU-DR, North	2382	7
3002536618	Apache	State C Tract 12 016	O	16	4350	Penrose Skelly; Grayburg	2452	
3002537535	Apache	WBDU 092	O	16	7284	Eunice; BLI-TU-DR, North	2478	8
3002509906	Apache	WBDU 038	I	9	6770	Eunice; BLI-TU-DR, North	2518	9
3002535515	Apache	State C Tract 12 008	O	16	4450	Penrose Skelly; Grayburg	2527	
3002538267	Apache	WBDU 063	O	16	6845	Eunice; BLI-TU-DR, North	2535	10
3002537238	Apache	NEDU 629	O	15	6900	Eunice; BLI-TU-DR, North	2542	11
3002538414	Apache	WBDU 083	O	16	6850	Eunice; BLI-TU-DR, North	2548	12

12/20

3002533547	Key	State 001	BSW	15	2200	BSW; Salado	2555
3002537223	Apache	NEDU 628	O	15	7106	Eunice; BLI-TU-DR, North	2586
3002539605	Apache	State Land 15 018	O	16	4404	Penrose Skelly; Grayburg	2639
3002542569	Apache	WBDU 188	O	9	7200 plan	Eunice; BLI-TU-DR, North	2650
3002534245	Apache	State DA 006	O	16	4000	Penrose Skelly; Grayburg	2654

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

2. System will be closed. The well will be tied into the existing unit pipeline system. The system consists of a branched injection system with centrifugal injection pumps.

3. Average injection pressure will be ≈1200 psi. Maximum injection pressure will be 1314 psi (=0.2 psi/foot x 6570' (highest perforation)).

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 34,485,359 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 Blinebry, Tubb, and Drinkard currently produce from 118 oil wells in the unit. It is the goal of the project to increase production.

VIII. The Unit is on the north end of a north-northwest to south-southeast trending anticline. It is part of the Penrose Skelly trend and parallels the west edge of the Central Basin Platform. Dips are 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 156 Drinkard injection wells in the state. The West Blinebry Drinkard Unit shares its east border with Apache's Northeast Drinkard Unit. Three other 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 = 6,570' - 6,640'
Abo = 6,655'
TVD = 6,950'
MD = 6,956'

One fresh water well (CP 00554) is within a mile radius. The 80' deep well with an electric pump was dry during January 7, 2014 and June 18, 2015 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. No other water well was found within a mile during the inspections.

A sample (analysis is in Exhibit G) was collected from Mr. Deck's water well, 5885' north in Section 9. His well is not in the State Engineer's database. 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 (192 wells) or disposed (9 wells) into the Blinebry-Tubb-Drinkard, San Andres, Grayburg, Queen, Seven Rivers, and Yates within T. 21 S., R. 37 E.

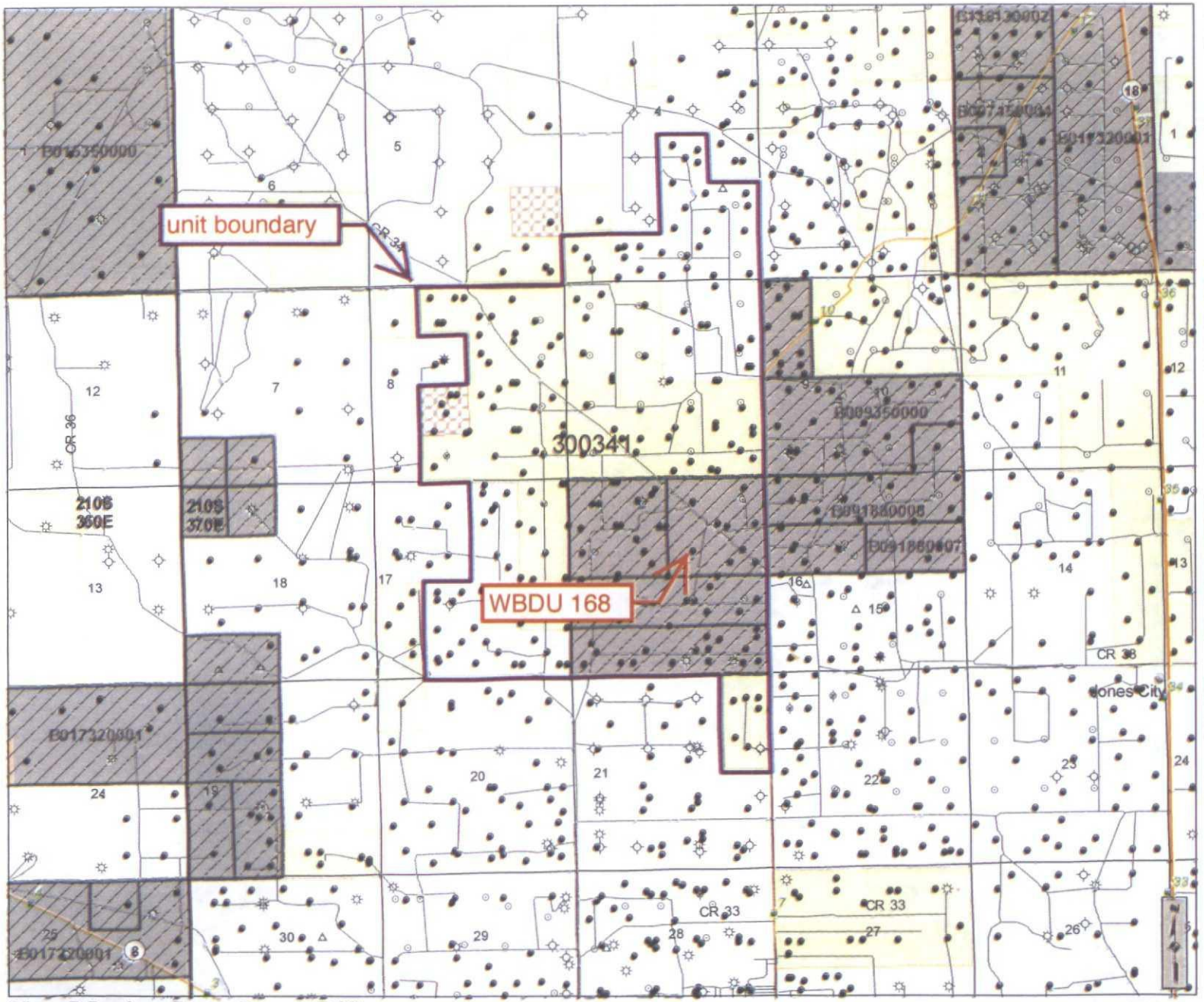
IX. The well was stimulated with 5400 gallons of 15% acid and 2000 pounds of rock salt.

X. Spectral gamma ray, spectral density/compensated neutron, dual laterolog/MSFL, and sonic logs are planned.

XI. No fresh water well is within a mile. An analysis from a well that is 5,885' north is attached (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 >100 miles west and 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, and 924. WFX-923 approved injection into three zones in this well. The deepest previously approved perforation was 6594'. Once the well was drilled, it was determined that the perforations should extend to 6640'.

XIII. A legal ad (see Exhibit I) was published on June 24, 2015. Notice (this application) has been sent (Exhibit J) to the surface owner (NM State Land Office), BLM, the offset Drinkard operators (only Apache), and other lessee or leasehold operating rights holders (Chevron, ConocoPhillips, John H. Hendrix Corp., Oxy USA WTP LP, Penroc Oil Corp.).



Cartographic Features
- County Boundaries
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- SLO District Boundary
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Federal Minerals Ownership
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- Oil, Gas and Coal Only
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State Trust Lands
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- NMOCD Order R-111-P Potash Enclave Outline

NMOCD Oil and Gas Wells
- CO^2
- Gas
- Injection
- Miscellaneous
- Oil
- 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

EXHIBIT A

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

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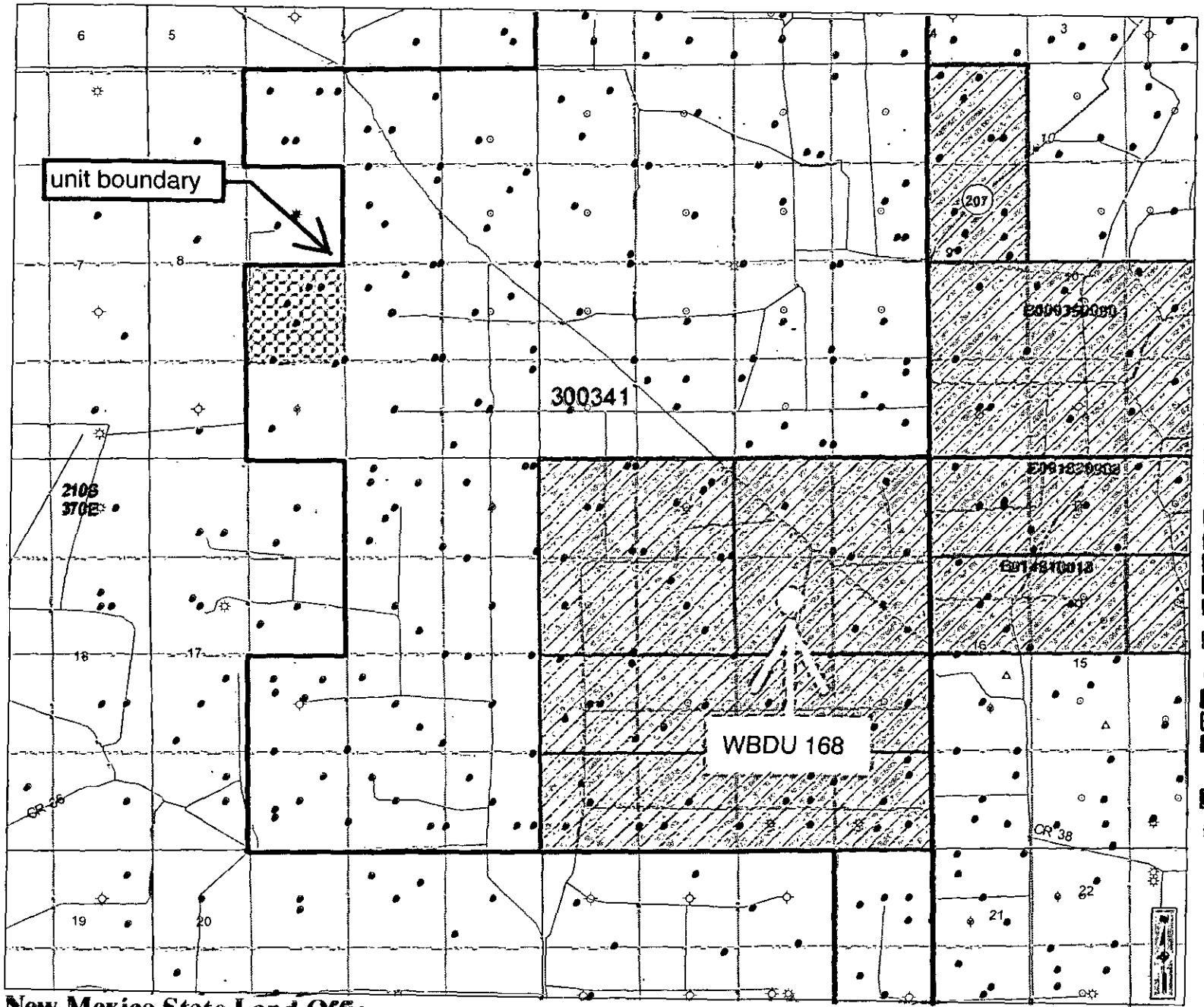

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New Mexico State Land Office
Oil, Gas and Minerals

0 0.05 0.1 0.2 0.3 0.4 Miles

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EXHIBIT A

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

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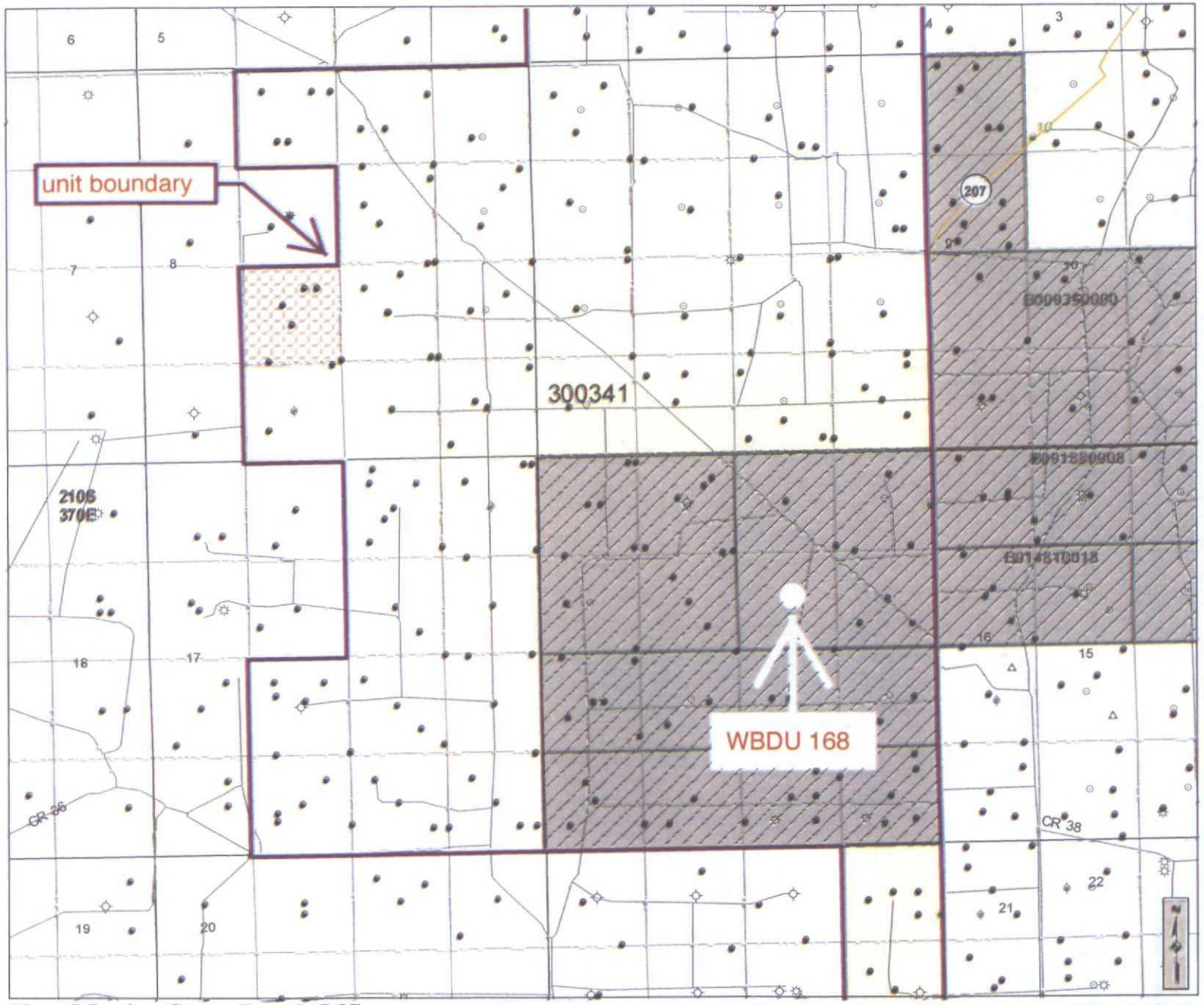

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New Mexico State Land Office
Oil, Gas and Minerals

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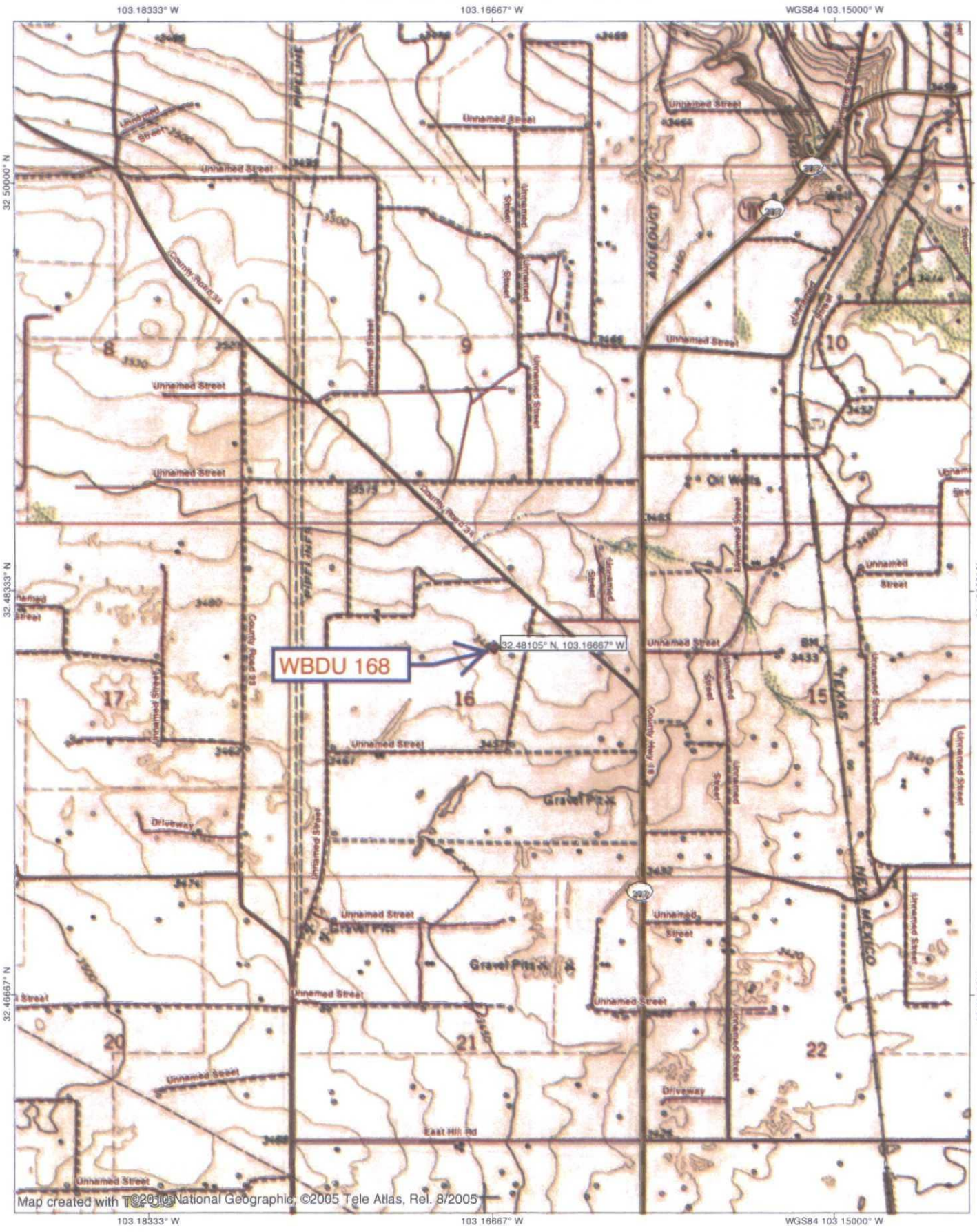
TOPO! map printed on 03/22/14 from "Untitled.tpo"



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.	Operator Name	Elevation
873	APACHE CORPORATION	3482'

Surface Location

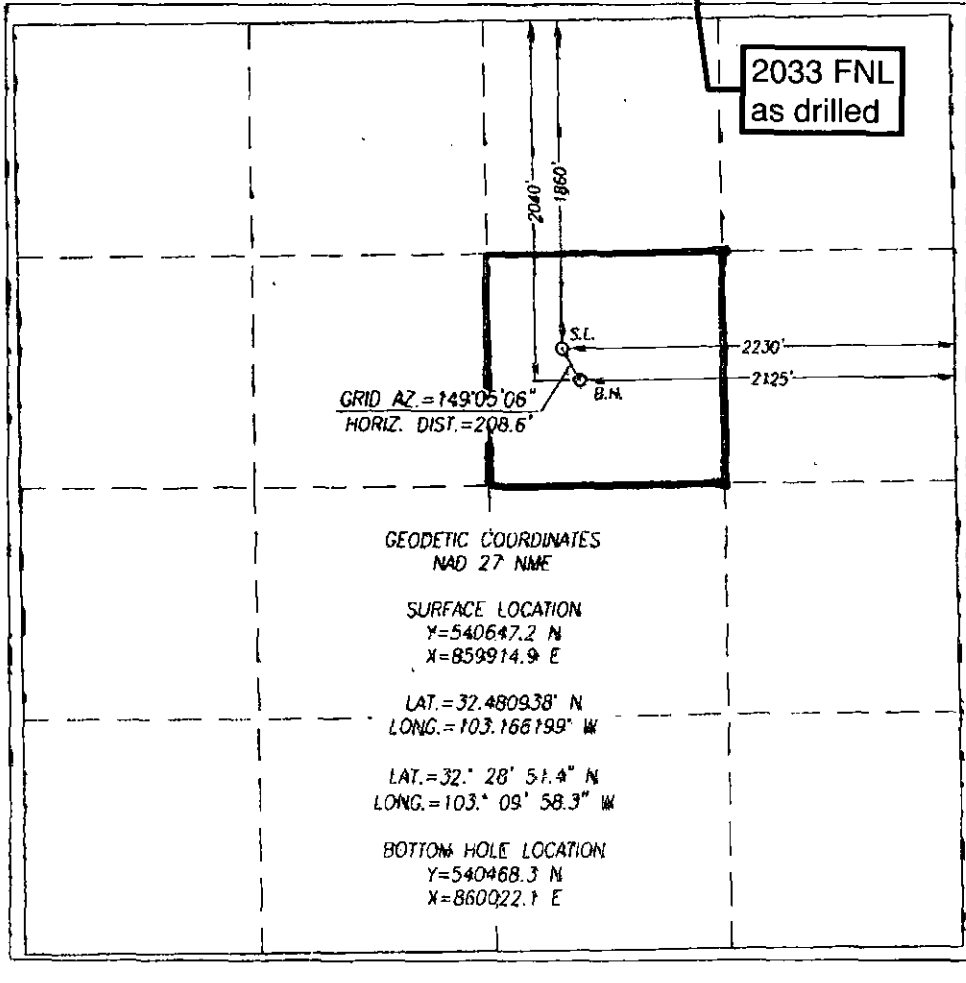
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	16	21-S	37-E		1860	NORTH	2230	EAST	LEA

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 12-12-13
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

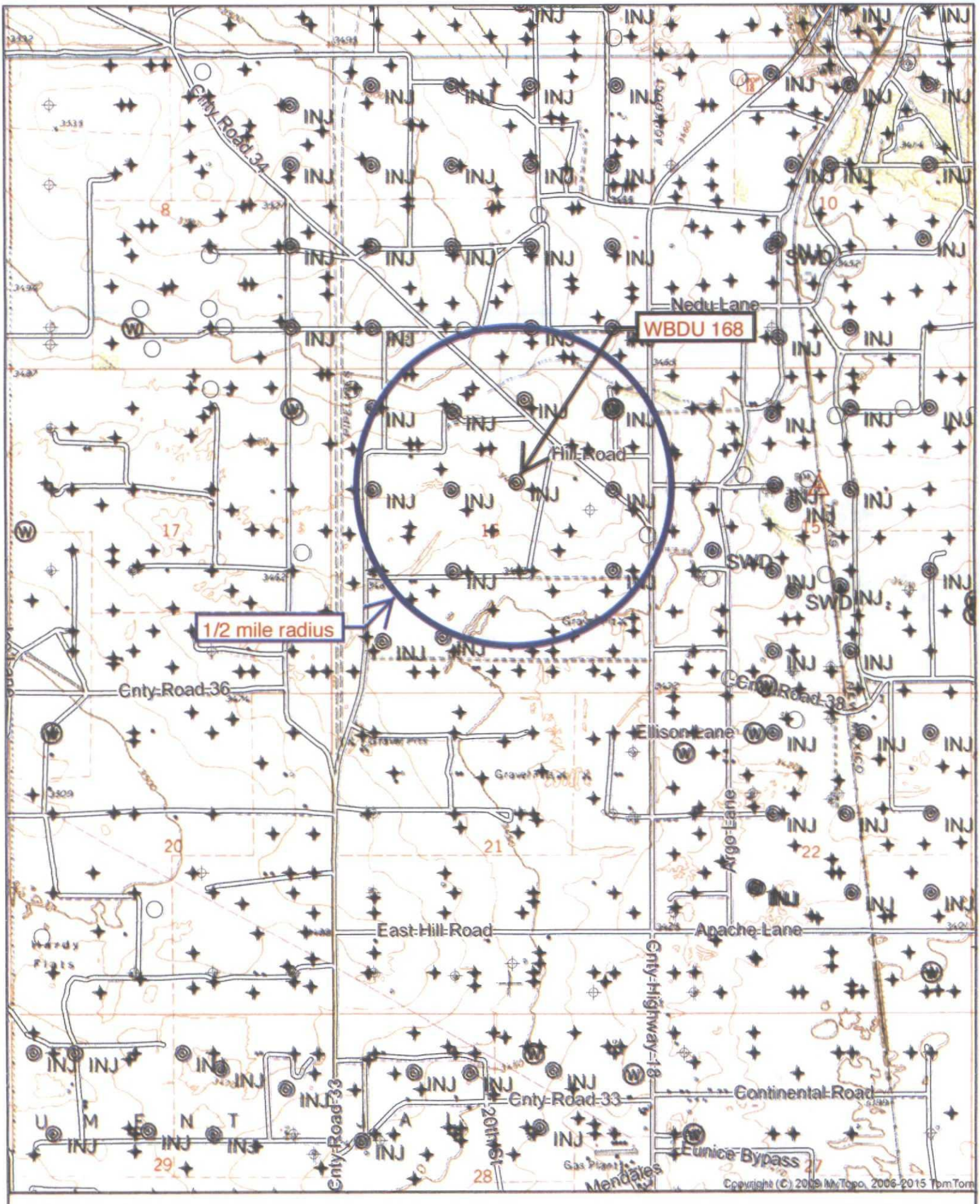
Signature & Seal of Professional Surveyor.

Ronald J. Eidson 02/03/2014

Certificate Number: Gary G. Eidson 12641
Ronald J. Eidson 3239

BKL JWSC W.O.: 13.11.1276

EXHIBIT A



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

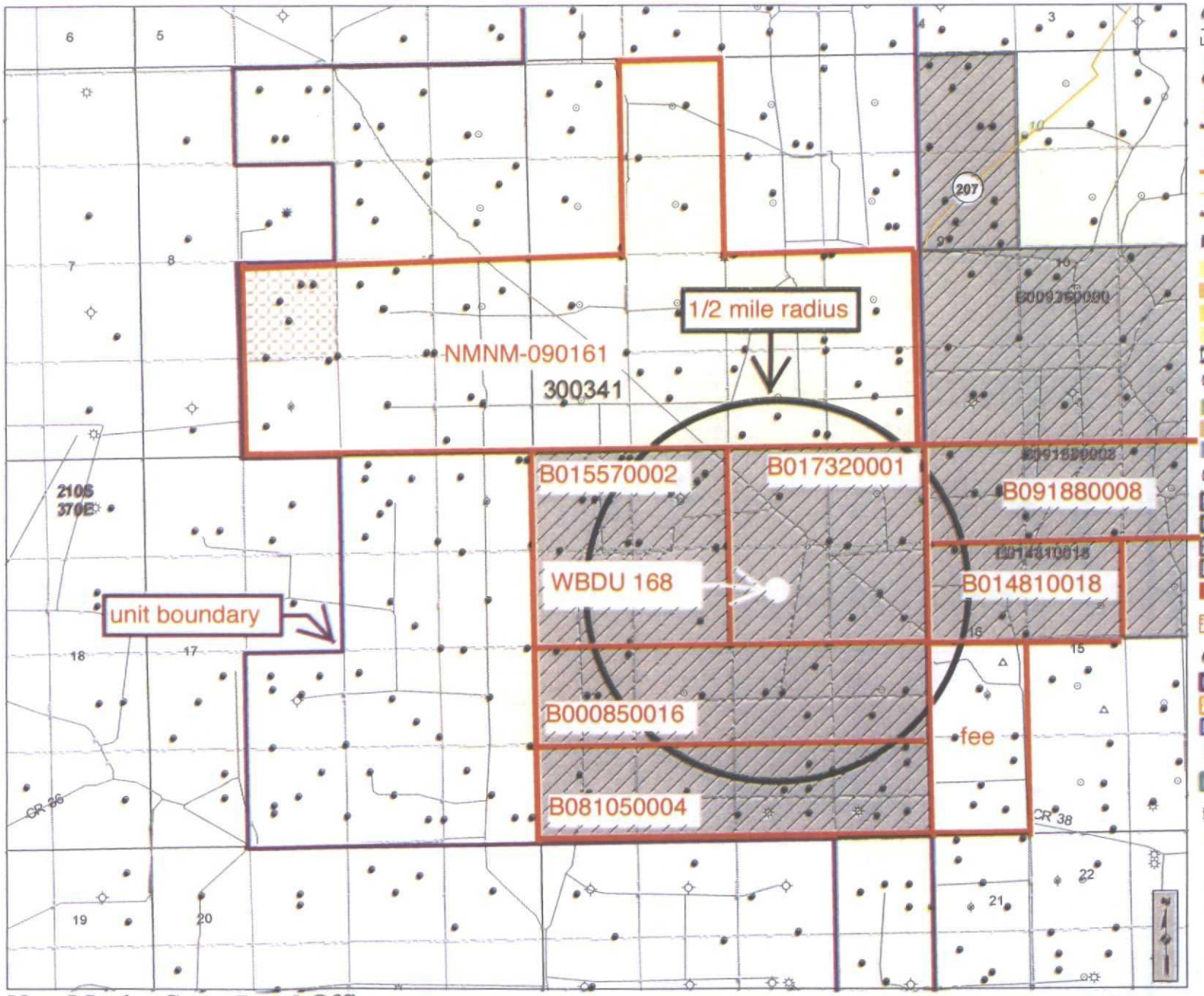
EXHIBIT B

2 mile radius

WBDU 168

Quad: EUNICE
Scale: 1 inch = 2,564 ft.

EXHIBIT C



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New Mexico State Land Office
Oil, Gas and Minerals

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Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

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

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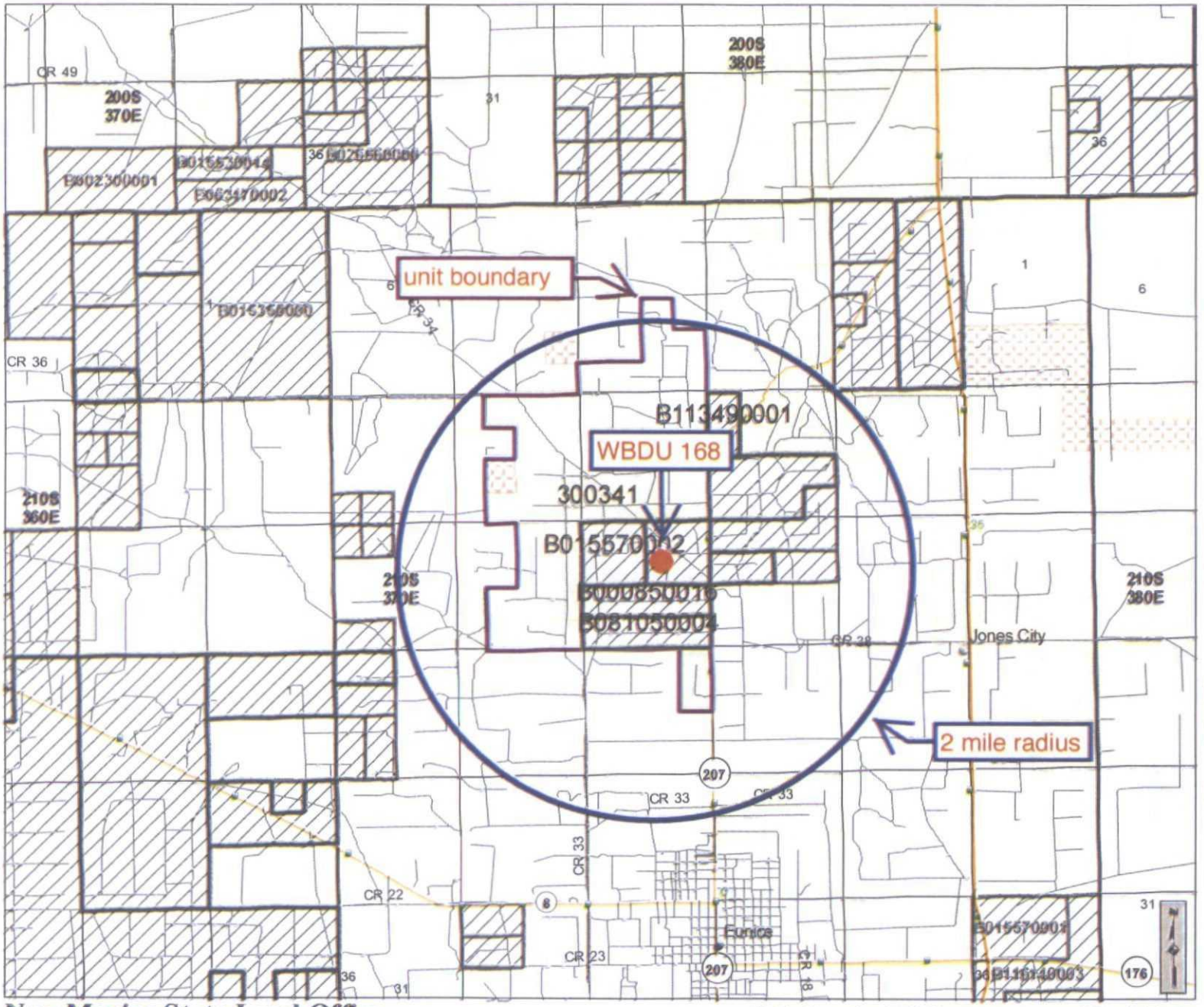
EXHIBIT D

www.nmstatelands.org



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New Mexico State Land Office
Oil, Gas and Minerals

0 0.25 0.5 1 1.5 2 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 E

www.nmstatelands.org

Sorted by distance from WBDU 168 well bore

WELL	SPUD	TD	POOL	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	Oil	17.25	13.375	294	300 sx	GL	circulated
30-025-06620					12.25	9.625	2950	1300 sx	1345	temperature survey
G-16-21s-37e					8.75	7	6610	700 sx	1360	temperature survey
WBDU 064	4/27/07	6892	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1322	575 sx	GL	circulated to surface
30-025-38268					7.875	5.5	6892	1300 sx	280	CBL
F-16-21s-37e										
WBDU 082	4/8/07	6875	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1285	650 sx	GL	circulated to surface
30-025-38231					7.875	5.5	6875	1250 sx	320	CBL
J-16-21s-37e										
K-16-21s-37e										
WBDU 098	6/15/09	6880	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1313	450 sx	GL	circulated to surface
30-025-39119					7.875	5.5	6880	1050 sx	GL	circulated to surface
B-16-21s-37e										
WBDU 059	9/17/47	7502	Eunice; Blinebry-Tubb-Drinkard, North	Oil	17	13.375	316	324 sx	GL	circulated
30-025-06626					12	9.625	2900	500 sx	1325	temperature survey
F-16-21s-37e					8.75	7	6656	700 sx	2800	temperature survey
Harry Leonard NCT E 003	9/10/48	6710	Penrose Skelly; Grayburg	Oil	17.25	13.375	304	300 sx	GL	circulated
30-025-06622					12.25	9.625	2800	1200 sx	GL	circulated
B-16-21s-37e					8.75	7	6649	700 sx	3200	temperature survey
WBDU 077	7/4/47	6250	Eunice; Blinebry-Tubb-Drinkard, North	Gas	17.25	13.375	213	200 sx	580	diagram
30-025-06618					11	8.625	2807	1550 sx	2845	diagram
J-16-21s-37e					7.375	5.5	630	500 sx	no report	no report

Sorted by distance from WBDU 168 well bore

WELL	SPUD	TD	POOL	WELL TYPE	HOLE O.D.	CASING O.D.	SET @	CEMENT	TOC	HOW DETERMINED
WBDU 056	11/24/47	6614	Eunice; Blinebry-Tubb-Drinkard, North	Oil	17.5	13.375	301	300 sx	GL	circulated
30-025-06621					12.25	9.625	2952	1300 sx	GL	no report
H-16-21s-37e					8.75	7	6547	700 sx	2715	temperature survey
WBDU 060	2/22/54	6699	Eunice; Blinebry-Tubb-Drinkard, North	WIW	17.5	13.375	297	300 sx	GL	circulated
30-025-06628					12.25	9.625	2953	1500 sx	GL	circulated
C-16-21s-37e					8.75	7	6694	1000 sx	GL	circulated
C-16-21s-37e										
State C TR 12 6	2/10/48	5762	Eunice; Blinebry-Tubb-Drinkard, North	P & A	17.5	13.375	312	300 sx	GL	circulated
30-025-06627					12	9.625	1385	600 sx	no report	no report
C-16-21s-37e										
State C Tr 12 21	7/26/05	7300	Wantz; Abo	Oil	12.25	8.625	1287	600 sx	GL	circulated 116 sx
30-025-37202					7.875	5.5	7300	1400 sx	390	CBL
C-16-21s-37e										
WBDU 079	6/24/05	7310	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1289	600 sx	GL	circulated 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; Blinebry-Tubb-Drinkard, North	WIW	17.5	13.375	214	200 sx	unknown	diagram
30-025-06616					11	8.625	2815	1250 sx	1325	no report
K-16-21s-37e					7.375	5.5	6654	500 sx	2850	temperature survey
Harry Leonard NCT E 005	11/21/74	8220	Penrose Skelly; Grayburg	Oil	17.25	12.75	268	325 sx	GL	circulated
30-025-06624					11	8.625	2799	1000 sx	2290	temperature survey
H-16-21s-37e					7.875	5.5	7999	131 sx	7540	temperature survey
WBDU 062	7/24/03	6950	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1276	550 sx	GL	circulated 232 sx to pit
30-025-36305					7.875	5.5	6950	1275 sx	GL	circulated 126 sx to pit
D-16-21s-37e										

EXHIBIT F

Sorted by distance from WBDU 168 well bore

WELL	SPUD	TD	POOL	WELL TYPE	HOLE O.D.	CASING O.D.	SET @	CEMENT	TOC	HOW DETERMINED
WBDU 113	9/15/09	6912	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1342	650 sx	GL	circulated to surface
30-025-39277					7.875	5.5	6912	1000 sx	GL	circulated
A-16-21s-37e										
WBDU 078	8/12/47	6644	Eunice; Blinebry-Tubb-Drinkard, North	WIW	17.25	13.375	213	200 sx	GL	circulated
30-025-06619					11	8.625	2807	1550 sx	no report	did not circulate
I-16-21s-37e					7.375	5.5	6644	500 sx	no report	no report
WBDU 057	7/16/63	6699	Eunice; Blinebry-Tubb-Drinkard, North	WIW	17.5	13.375	297	300 sx	GL	circulated
30-025-06623					12.25	9.625	2800	1300 sx	540	temperature survey
A-16-21s-37e					8.75	7	6645	700 sx	2550	temperature survey
WBDU 084	7/3/07	6835	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1265	650 sx	GL	circulated to surface
30-025-38415					7.875	5.5	6835	1400 sx	890	CBL
K-16-21s-37e										
WBDU 080	1/19/07	6875	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1227	575 sx	GL	circulated to surface
30-025-38220					7.875	5.5	6875	1425 sx	225	CBL
L-16-21s-37e										
WBDU 051	3/6/07	6837	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1307	575 sx	GL	circulated
30-025-38197					7.875	5.5	6895	1150 sx	227	CBL
O-9-21s-37e										
WBDU 052	2/2/07	6870	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1296	600 sx	GL	circulated to surface
30-025-38198					7.875	5.5	6870	1500 sx	300	CBL
O-9-21s-37e										
State DA 005	8/8/96	8225	Paddock	Oil	17.5	13.375	258	200 sx	GL	circulated
30-025-06617					11	8.625	2820	1500 sx	565	temperature survey
I-16-21s-37e					6.75	5.5	8225	500 sx	3448	temperature survey

Sorted by distance from WBDU 168 well bore

WELL	SPUD	TD	POOL	WELL TYPE	HOLE O.D.	CASING O.D.	SET @	CEMENT	TOC	HOW DETERMINED
Harry Leonard NCT E 006	1/1/76	6720	Penrose Skelly; Grayburg	Oil	11	8.625	1296	600 sx	GL	circulated
30-025-25198					7.875	5.5	6870	1500 sx	47	tagged
A-16-21s-37e										
WBDU 058	7/19/47	6660	Penrose Skelly; Grayburg	WIW	17.5	13.375	322	300 sx	GL	circulated
30-025-06625					12	9.625	2900	1500 sx	1560	no report
E-16-21s-37e					8.75	7	6660	775 sx	1900	temperature survey
WBDU 092	12/105	7284	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1197	575	GL	circulated
30-025-37535					7.875	5.5	7284	1150	650	CBL
O-16-21s-37e										
WBDU 038	11/4/48	6770	Eunice; Blinebry-Tubb-Drinkard, North	WIW	17	13.375	212	200 sx	GL	circulated to surface
30-025-09906					12.25	9.625	2794	500 sx	1950	temperature survey
O-9-21s-37e					8.75	7	6767	900 sx	2700	temperature survey
WBDU 063	4/5/07	6845	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1286	575 sx	GL	circulated to surface
30-025-38267					7.875	5.5	6845	1600 sx	GL	CBL
D-16-21s-37e										
NEDU 629	6/25/05	6900	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1200	575 sx	GL	circulated
30-025-37238					7.785	5.5	6900	1300 sx	130	CBL
15-21s-37e										
WBDU 083	6/23/07	6850	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1273	575 sx	GL	circulated to surface
30-025-38414					7.875	5.5	6850	1300 sx	186	CBL
L-16-21s-37e										
NEDU 628	12/30/05	7106	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1198	575 sx	GL	circulated 160 sx
30-025-37223					7.875	5.5	7018	1800 sx	1202	CBL
E-16-21s-37e										

Sorted by distance from WBDU 168 well bore

WELL	SPUD	TD	POOL	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	Oil	17.25	13.375	294	300 sx	GL	circulated
30-025-06620					12.25	9.625	2950	1300 sx	1345	temperature survey
G-16-21s-37e					8.75	7	6610	700 sx	1360	temperature survey
WBDU 064	4/27/07	6892	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1322	575 sx	GL	circulated to surface
30-025-38268					7.875	5.5	6892	1300 sx	280	CBL
F-16-21s-37e										
WBDU 082	4/8/07	6875	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1285	650 sx	GL	circulated to surface
30-025-38231					7.875	5.5	6875	1250 sx	320	CBL
J-16-21s-37e										
K-16-21s-37e										
WBDU 098	6/15/09	6880	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1313	450 sx	GL	circulated to surface
30-025-39119					7.875	5.5	6880	1050 sx	GL	circulated to surface
B-16-21s-37e										
WBDU 059	9/17/47	7502	Eunice; Blinebry-Tubb-Drinkard, North	Oil	17	13.375	316	324 sx	GL	circulated
30-025-06626					12	9.625	2900	500 sx	1325	temperature survey
F-16-21s-37e					8.75	7	6656	700 sx	2800	temperature survey
Harry Leonard NCT E 003	9/10/48	6710	Penrose Skelly; Grayburg	Oil	17.25	13.375	304	300 sx	GL	circulated
30-025-06622					12.25	9.625	2800	1200 sx	GL	circulated
B-16-21s-37e					8.75	7	6649	700 sx	3200	temperature survey
WBDU 077	7/4/47	6250	Eunice; Blinebry-Tubb-Drinkard, North	Gas	17.25	13.375	213	200 sx	580	diagram
30-025-06618					11	8.625	2807	1550 sx	2845	diagram
J-16-21s-37e					7.375	5.5	630	500 sx	no report	no report

Sorted by distance from WBDU 168 well bore

WELL	SPUD	TD	POOL	WELL TYPE	HOLE O.D.	CASING O.D.	SET @	CEMENT	TOC	HOW DETERMINED
WBDU 178	11/22/14	6955	Eunice; Blinebry-Tubb-Drinkard, North	WIW	11	8.625	1297	575	GL	circulated 178 sacks
30-025-4547					7.875	5.5	6955	1525	GL	circulated 339 sacks
B-16-21s-37e										
WBDU 056	11/24/47	6614	Eunice; Blinebry-Tubb-Drinkard, North	Oil	17.5	13.375	301	300 sx	GL	circulated
30-025-06621					12.25	9.625	2952	1300 sx	GL	no report
H-16-21s-37e					8.75	7	6547	700 sx	2715	temperature survey
WBDU 060	2/22/54	6699	Eunice; Blinebry-Tubb-Drinkard, North	WIW	17.5	13.375	297	300 sx	GL	circulated
30-025-06628					12.25	9.625	2953	1500 sx	GL	circulated
C-16-21s-37e					8.75	7	6694	1000 sx	GL	circulated
C-16-21s-37e										
State C Tr 12 21	7/26/05	7300	Wantz; Abo	Oil	12.25	8.625	1287	600 sx	GL	circulated 116 sx
30-025-37202					7.875	5.5	7300	1400 sx	390	CBL
C-16-21s-37e										
WBDU 079	6/24/05	7310	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1289	600 sx	GL	circulated 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; Blinebry-Tubb-Drinkard, North	WIW	17.5	13.375	214	200 sx	unknown	diagram
30-025-06616					11	8.625	2815	1250 sx	1325	no report
K-16-21s-37e					7.375	5.5	6654	500 sx	2850	temperature survey
Harry Leonard NCT E 005	11/21/74	8220	Penrose Skelly; Grayburg	Oil	17.25	12.75	268	325 sx	GL	circulated
30-025-06624					11	8.625	2799	1000 sx	2290	temperature survey
H-16-21s-37e					7.875	5.5	7999	131 sx	7540	temperature survey
WBDU 062	7/24/03	6950	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1276	550 sx	GL	circulated 232 sx to pit
30-025-36305					7.875	5.5	6950	1275 sx	GL	circulated 126 sx to pit
D-16-21s-37e										

EXHIBIT F

Sorted by distance from WBDU 168 well bore

WELL	SPUD	TD	POOL	WELL TYPE	HOLE O.D.	CASING O.D.	SET @	CEMENT	TOC	HOW DETERMINED
WBDU 113	9/15/09	6912	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1342	650 sx	GL	circulated to surface
30-025-39277					7.875	5.5	6912	1000 sx	GL	circulated
A-16-21s-37e										
WBDU 078	8/12/47	6644	Eunice; Blinebry-Tubb-Drinkard, North	WIW	17.25	13.375	213	200 sx	GL	circulated
30-025-06619					11	8.625	2807	1550 sx	no report	did not circulate
I-16-21s-37e					7.375	5.5	6644	500 sx	no report	no report
WBDU 057	7/16/63	6699	Eunice; Blinebry-Tubb-Drinkard, North	WIW	17.5	13.375	297	300 sx	GL	circulated
30-025-06623					12.25	9.625	2800	1300 sx	540	temperature survey
A-16-21s-37e					8.75	7	6645	700 sx	2550	temperature survey
WBDU 084	7/3/07	6835	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1265	650 sx	GL	circulated to surface
30-025-38415					7.875	5.5	6835	1400 sx	890	CBL
K-16-21s-37e										
WBDU 080	1/19/07	6875	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1227	575 sx	GL	circulated to surface
30-025-38220					7.875	5.5	6875	1425 sx	225	CBL
L-16-21s-37e										
WBDU 051	3/6/07	6837	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1307	575 sx	GL	circulated
30-025-38197					7.875	5.5	6895	1150 sx	227	CBL
O-9-21s-37e										
WBDU 052	2/2/07	6870	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1296	600 sx	GL	circulated to surface
30-025-38198					7.875	5.5	6870	1500 sx	300	CBL
O-9-21s-37e										
State DA 005	8/8/96	8225	Paddock	Oil	17.5	13.375	258	200 sx	GL	circulated
30-025-06617					11	8.625	2820	1500 sx	565	temperature survey
I-16-21s-37e					6.75	5.5	8225	500 sx	3448	temperature survey

EXHIBIT F

Sorted by distance from WBDU 168 well bore

WELL	SPUD	TD	POOL	WELL TYPE	HOLE O.D.	CASING O.D.	SET @	CEMENT	TOC	HOW DETERMINED
Harry Leonard NCT E 006	1/1/76	6720	Penrose Skelly; Grayburg	Oil	11	8.625	1296	600 sx	GL	circulated
30-025-25198					7.875	5.5	6870	1500 sx	47	tagged
A-16-21s-37e										
WBDU 058	7/19/47	6660	Penrose Skelly; Grayburg	WIW	17.5	13.375	322	300 sx	GL	circulated
30-025-06625					12	9.625	2900	1500 sx	1560	no report
E-16-21s-37e					8.75	7	6660	775 sx	1900	temperature survey
WBDU 092	12/105	7284	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1197	575	GL	circulated
30-025-37535					7.875	5.5	7284	1150	650	CBL
O-16-21s-37e										
WBDU 038	11/4/48	6770	Eunice; Blinebry-Tubb-Drinkard, North	WIW	17	13.375	212	200 sx	GL	circulated to surface
30-025-09906					12.25	9.625	2794	500 sx	1950	temperature survey
O-9-21s-37e					8.75	7	6767	900 sx	2700	temperature survey
WBDU 063	4/5/07	6845	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1286	575 sx	GL	circulated to surface
30-025-38267					7.875	5.5	6845	1600 sx	GL	CBL
D-16-21s-37e										
NEDU 629	6/25/05	6900	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1200	575 sx	GL	circulated
30-025-37238					7.785	5.5	6900	1300 sx	130	CBL
15-21s-37e										
WBDU 083	6/23/07	6850	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1273	575 sx	GL	circulated to surface
30-025-38414					7.875	5.5	6850	1300 sx	186	CBL
L-16-21s-37e										
NEDU 628	12/30/05	7106	Eunice; Blinebry-Tubb-Drinkard, North	Oil	12.25	8.625	1198	575 sx	GL	circulated 160 sx
30-025-37223					7.875	5.5	7018	1800 sx	1202	CBL
E-16-21s-37e										

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	Tws	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		

Average Depth to Water: **70 feet**

Minimum Depth: **70 feet**

Maximum Depth: **70 feet**

monitoring "wells"
no water found

Record Count: 4

UTMNAD83 Radius Search (in meters):

Easting (X): 672270 **Northing (Y):** 3595239 **Radius:** 1610

EXHIBIT G

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

New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

601 meters = 1,832 feet

(R=POD has been replaced and no longer serves this file, C=the file is closed)

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

(quarters are smallest to largest)

(acre ft per annum)

(NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	q q q 64 16 4	Sec	Twn	Rng	X	Y	Distance
CP 00554		STK	3	MILLARD DECK	LE	CP 00554			Shallow	2 2	16	21S	37E	672744	3595610*	601
CP 01141		MON	0	STRAUB CORPORATION	LE	CP 01141 POD5				3 4 3	15	21S	37E	673514	3594253	1587
					LE	CP 01141 POD1				3 4 3	15	21S	37E	673530	3594263	1593
					LE	CP 01141 POD2			Shallow	3 4 3	15	21S	37E	673541	3594250	1609
					LE	CP 01141 POD3			Shallow	3 4 3	15	21S	37E	673541	3594250	1609
					LE	CP 01141 POD4			Shallow	3 4 3	15	21S	37E	673541	3594250	1609

monitoring wells no Well Record & Log filed yet

monitoring wells no water found

Record Count: 6

UTMNAD83 Radius Search (in meters):

Easting (X): 672270 **Northing (Y):** 3595239 **Radius:** 1610

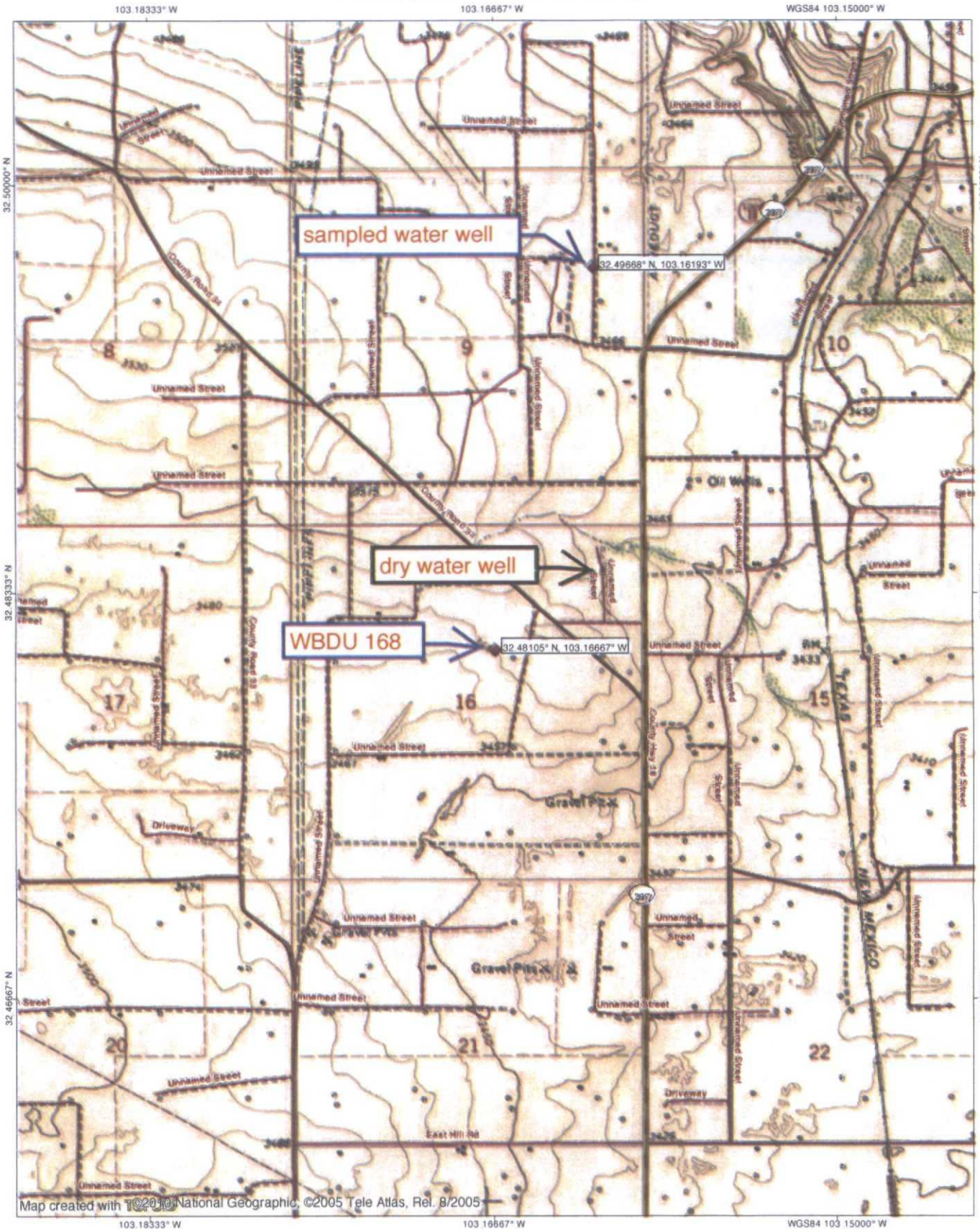
Sorted by: Distance

1609 meters = 5,277 feet

EXHIBIT G

*UTM location was derived from PLSS - see Help

TOPO! map printed on 03/23/14 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 G

TN 7° MN
03/23/14

Analytical Report
Lab Order **1506A89**
Date Reported: **7/9/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Permits West
Client Sample ID: Apache WBDU #2
Project: Apache WBDUSWD
Collection Date: 6/18/2015 9:45:00 AM
Lab ID: 1506A89-002 **Matrix:** AQUEOUS **Received Date:** 6/23/2015 1:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 1664A						Analyst: **MRA**	
N-Hexane Extractable Material	ND	9.8		mg/L	1	6/25/2015 2:00:00 PM	19939
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	18	5.0		mg/L	10	7/8/2015 1:28:10 AM	R27345
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	206	20.0		mg/L	1	6/25/2015 9:14:00 PM	19903

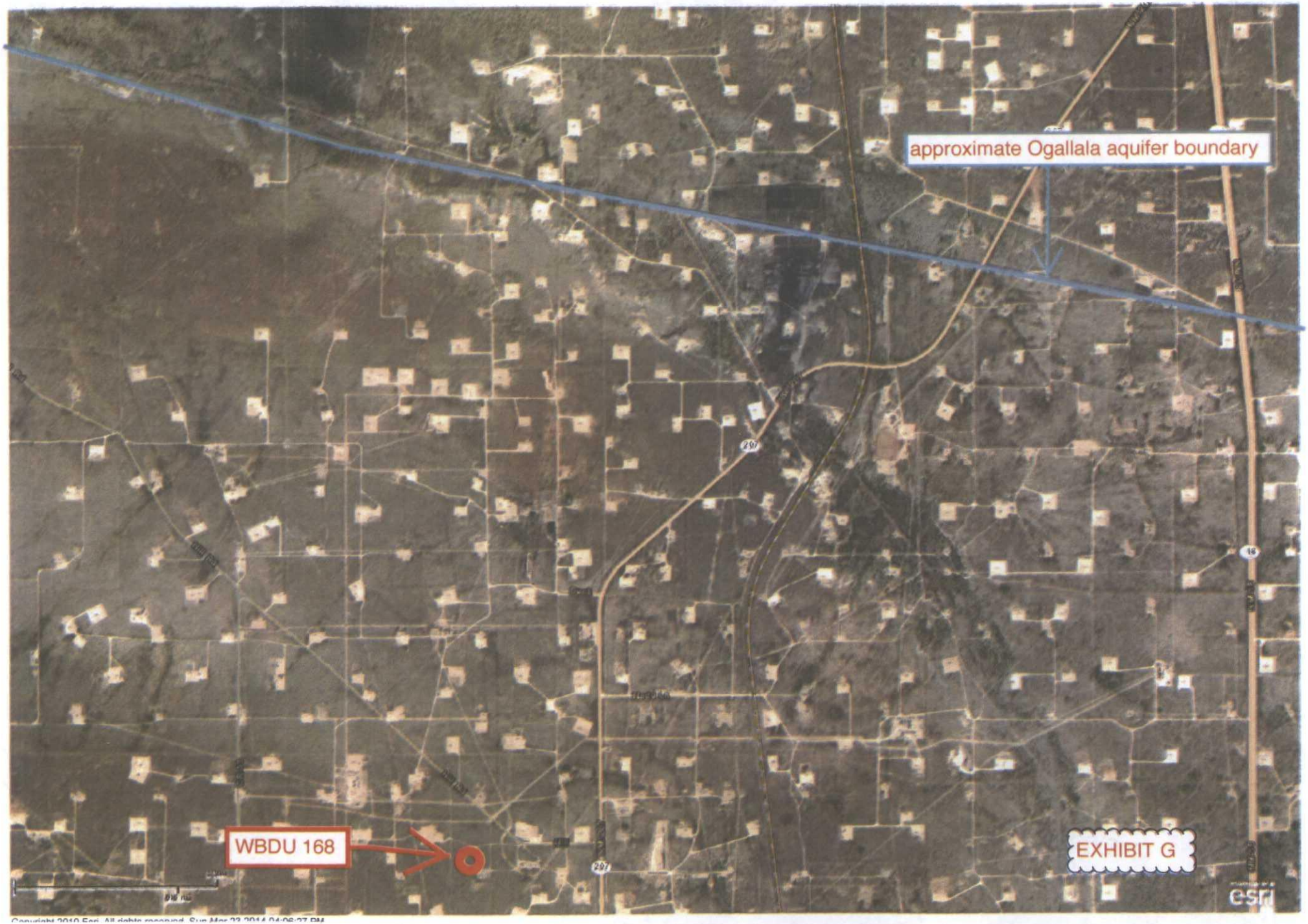
Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

EXHIBIT G

WBDU 168


approximate Ogallala aquifer boundary
WBDU 168
EXHIBIT G
esri

USGS
science for a changing world

Geologic Hazards Science Center

EHP Quaternary Faults

Search for fault: Guadalupe Select a state or region map: Submit

Submit Clear Selected Features

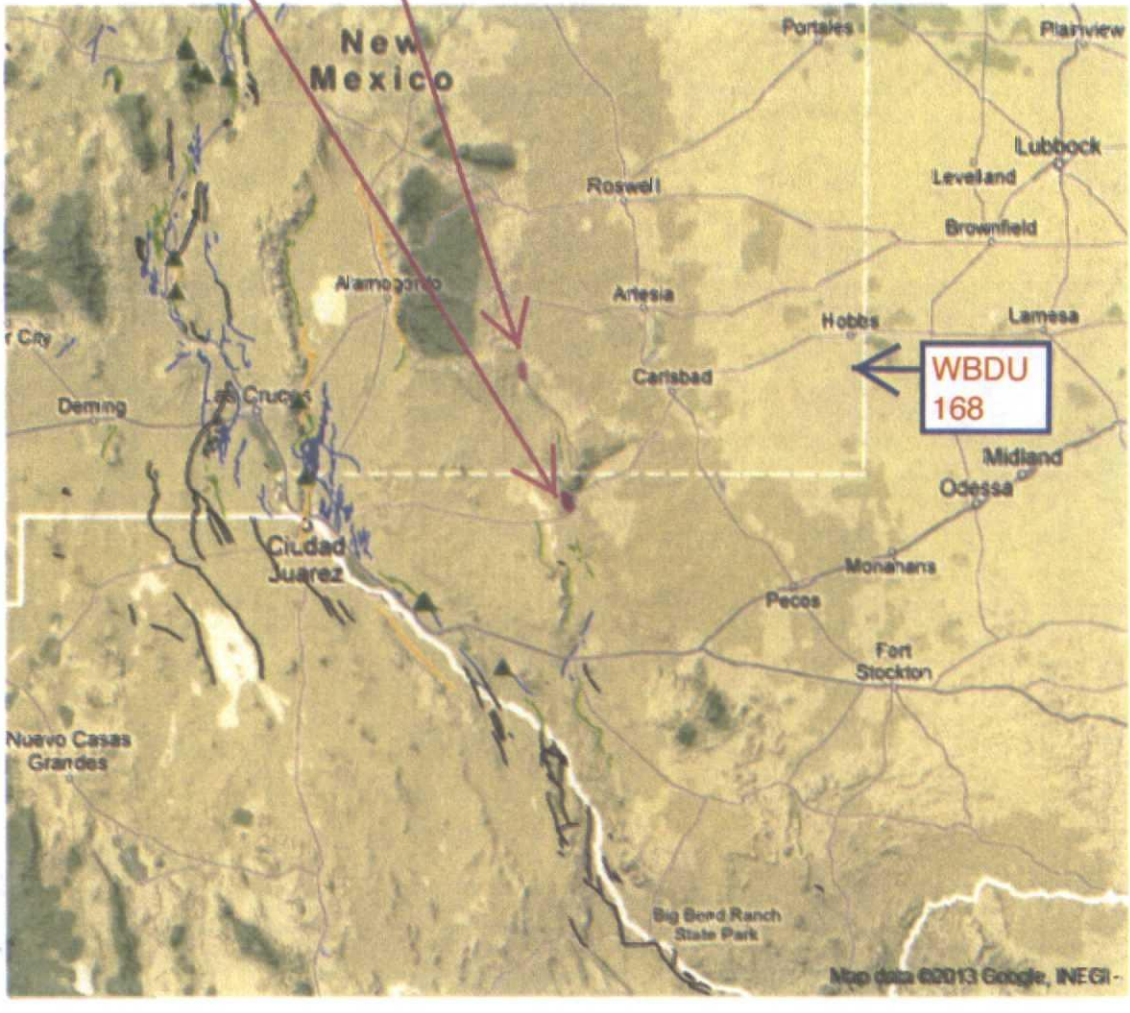


EXHIBIT H

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

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

Beginning with the issue dated
June 24, 2015
and ending with the issue dated
June 24, 2015.

Daniel Russell
Publisher

Sworn and subscribed to before me this
24th day of June 2015.

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

LEGAL NOTICE
June 24, 2015

Apache Corporation is applying to complete the West Blinebry Drinkard Unit 168 well as a water injection well. The well is at (SHL) 1860 FNL & 2230 FEL, Sec. 16, T. 21 S., R. 37 E., Lea County, NM. BHL is 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 = 1,314 psi) from 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.
#30138

02108485

00158372

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

July 29, 2015

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

Apache Corporation is applying (see attached application) to use its West Blinebry Drinkard Unit 168 well as a 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 6,570' 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: 3 air miles north of Eunice, NM
Applicant Name: Apache Corporation (432) 818-1062
Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

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

EXHIBIT J

7015 0640 0000 9161 8002

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT
Domestic Mail Only
For delivery information, visit our website at www.usps.com®
OFFICIAL USE
Certified Mail Fee $
Extra Services & Fees (check box, add fee as appropriate)
☐ Return Receipt (hardcopy) $
☐ Return Receipt (electronic) $
☐ Certified Mail Restricted Delivery $
☐ Adult Signature Required
☐ Adult Signature Restricted Delivery $
Postage $
Total Postage and Fees $
Sent To SLO
Street and Apt. No., or PO Box No.
City, State, ZIP+4® SF
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

PECOS NM JUL 29 2015 87552 Postmark

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS

July 29, 2015

Penroc Oil Corp.
P. O. Box 2769
Hobbs NM 88241

Apache Corporation is applying (see attached application) to use its West Blinebry Drinkard Unit 168 well as a 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 6,570' 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: 3 air miles north of Eunice, NM
Applicant Name: Apache Corporation (432) 818-1062
Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

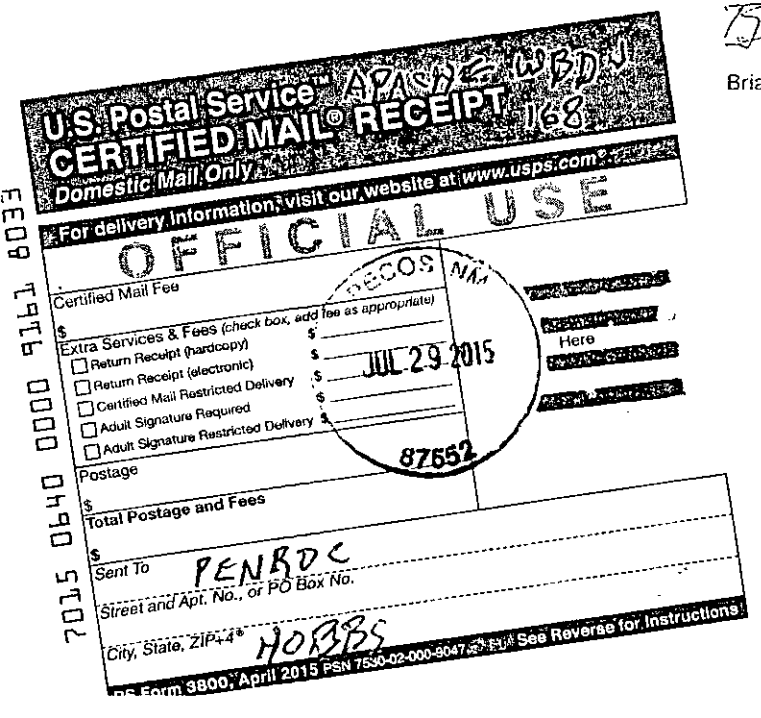
Submittal Information: Application for a water injection well will be filed with the NMOCD. If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. The New Mexico Oil Conservation Division address is 1220 South St. Francis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

Please call me if you have any questions.

Sincerely,

Brian Wood

EXHIBIT J



PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS

July 29, 2015

Oxy USA WTP LP
8 Desta Dr., #6000
Midland TX 79705

Apache Corporation is applying (see attached application) to use its West Blinebry Drinkard Unit 168 well as a 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.

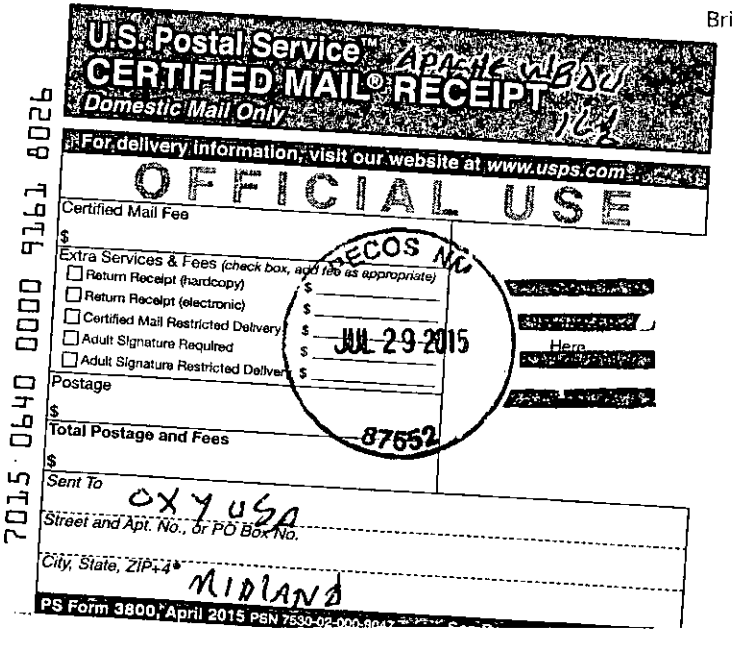
Well Name: West Blinebry Drinkard Unit 168 (state lease) MD = 6,986'
Proposed Injection Zone: Drinkard from 6,570' to 6,640'
Surface Hole Location: 1860' FNL & 2230' FEL Sec. 16, T. 21 S., R. 37 E.
Bottom Hole Location: 2033' FNL & 2125' FEL Sec. 16, T. 21 S., R. 37 E.
Approximate Location: 3 air miles north of Eunice, NM
Applicant Name: Apache Corporation (432) 818-1062
Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

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



PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS

July 29, 2015

John H. Hendrix Corp.
110 N. Marienfeld, Suite 400
Midland TX 79701

Apache Corporation is applying (see attached application) to use its West Blinebry Drinkard Unit 168 well as a 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 6,570' 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: 3 air miles north of Eunice, NM
Applicant Name: Apache Corporation (432) 818-1062
Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

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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City, State, ZIP+4® MIDLAND

7015 0640 0004 9176 8040

EXHIBIT J

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS

July 29, 2015

ConocoPhillips
P. O. Box 7500
Bartlesville OK 74005

Apache Corporation is applying (see attached application) to use its West Blinebry Drinkard Unit 168 well as a 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.

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Brian Wood

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City, State, ZIP+4® BARTLESVILLE
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7015 0640 0004 9176 8040

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS

July 29, 2015

Chevron USA Inc.
P. O. Box 1635
Houston TX 77251

Apache Corporation is applying (see attached application) to use its West Blinebry Drinkard Unit 168 well as a 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.

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Sincerely,

Brian Wood

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EXHIBIT J

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS

July 29, 2015

BLM
620 E. Greene St.
Carlsbad NM 88220

Apache Corporation is applying (see attached application) to use its West Blinebry Drinkard Unit 168 well as a 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.

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Please call me if you have any questions.

Sincerely,

Brian Wood

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STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARINGS CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATION OF APACHE CORPORATION FOR STATUTORY UNITIZATION, LEA COUNTY, NEW MEXICO. Case No. 14125

APPLICATION OF APACHE CORPORATION FOR APPROVAL OF A WATERFLOOD PROJECT AND TO QUALIFY THE PROJECT FOR THE RECOVERED OIL TAX RATE, LEA COUNTY, NEW MEXICO. Case No. 14126

ORDER NO. R-12981

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on May 15, 2008 and May 29, 2008 at Santa Fe, New Mexico, before Examiners Terry G. Warnell, Richard Ezeanyim and David K. Brooks.

NOW, on this 11th day of August, the Division Director, having considered the testimony, the record, and the recommendations of the Examiners,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of these cases and of their subject matter.

(2) Case Nos. 14125 and 14126 were consolidated at the hearing for the purpose of testimony. Because the cases involve the same property and subject matter, a single order is being issued for both cases.

(3) In Case No. 14125, Apache Corporation ("Apache" or "Applicant") seeks: (i) the statutory unitization, pursuant to the "Statutory Unitization Act", Sections 70-7-1 through 70-7-21, as amended, NMSA (1978), for the purpose of instituting secondary recovery operations within the North Eunice Blinebry-Tubb-Drinkard Pool (22900), comprised of 2,480 acres of land, more or less, in Lea County, New Mexico, to henceforth be known as the West Blinebry Drinkard Unit (the "Unit Area"); and (ii)

(27) The project area within the waterflood project, and/or the producing wells within the area eligible for the recovered oil tax rate, may be contracted and reduced dependent upon the evidence presented by the operator of the Unit Area in its demonstration of the occurrence of a positive production response.

IT IS THEREFORE ORDERED THAT:

(1) The application of Apache Corporation ("applicant") for the statutory unitization of 2,480.00 acres of land, more or less, in the North Eunice Blinebry-Tubb-Drinkard Pool (**22900**), in Lea County, New Mexico, to be known as the West Blinebry Drinkard Unit (the "Unit Area"), is hereby approved for statutory unitization pursuant to the Statutory Unitization Act, Sections 70-7-1 through 70-7-21, as amended, NMSA (1978).

(2) The lands herein designated the West Blinebry Drinkard Unit Area shall be operated by Apache Corporation (OGRID No. **873**), and shall comprise the following described 2,480 acres, more or less, of Federal, State and Fee lands in Lea County, New Mexico:

Township 21 South, Range 37 East, N.M.P.M.

Section 4:	Lot 15, S/2 SW/4, and SE/4
Section 8:	E/2, NE/4 NW/4, and E/2 SW/4
Section 9:	All
Section 16:	All
Section 17:	E/2 and E/2 SW/4
Section 21:	E/2 NE/4

Federal lands:	1040 acres	41.94 %
State lands:	640 acres	25.81 %
Fee lands:	800 acres	32.25 %

(3) The Unitized Formation shall comprise that interval underlying the Unit Area occurring from a depth 75 feet above the stratigraphic Blinebry marker down to the top of the Abo formation, as found on the Type Log for the Hawk B-1 Well No. 34 (**API No. 30-025-36344**), located 1,040 feet from the south line and 1,470 feet from the west line of Section 9, Township 21 South, Range 37 East, N.M.P.M., which is that interval correlative to the interval from 5,584-6,690 feet below the surface measured from the derrick floor as shown on the Type Log (attached to the Unit Agreement as Exhibit "C"). The Blinebry marker is defined by the New Mexico Oil Conservation Division as a depth of 5,457 feet below the surface (elevation: 3380 feet; subsea datum -2,077 feet) in the

Exxon State S Well No. 20 (**API No. 30-025-09969**), located in the SW/4 NW/4 of Section 2, Township 22 South, Range 37 East, N.M.P.M.

(4) The Unit Agreement and Unit Operating Agreement for the West Blinebry Drinkard Unit, submitted to the Division at hearing as Exhibit B and C, respectively, are hereby incorporated by reference.

(5) The 27 wells listed on Exhibit "A" (attached to this order) are hereby approved for conversion and use as injection wells. However, before injecting into any of these 27 wells, the operator shall squeeze all perforations above the Blinebry and below the Drinkard and any Tubb perforations.

(6) Applicant, as unit operator, shall notify the Division in writing of its removal or the substitution of any other working interest owner within the Unit Area as unit operator. In the event any entity other than applicant assumes operation of the Unit Area established hereby, such entity shall comply with the terms and provisions of this order.

(7) The Unit Area established hereby shall terminate upon the plugging and abandonment of the last well in the Unit Area completed in the Unitized Formation.

(8) Applicant is hereby authorized to institute waterflood operations within the Unit Area by the injection of water into the Unitized Formation through the 27 wells listed in Exhibit "A" attached to this order.

(9) The waterflood project authorized by this order shall be known as the West Blinebry Drinkard Unit Waterflood Project.

(10) Each well is specifically permitted for injection only within the depth intervals ("permitted injection intervals") specified on Exhibit "A" attached to this order.

(11) Applicant shall take all steps necessary to ensure that the injected water enters only the permitted injection intervals and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(12) Injection into each of the 27 wells listed on Exhibit "A" shall be accomplished through 2-3/8 inch internally plastic-lined tubing installed in a seal bore assembly set within 100 feet of the uppermost injection perforation. The casing-tubing annulus shall be filled with an inert fluid, and a gauge or approved leak detection device shall be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(13) The injection wells or pressurization system shall be equipped with a pressure control device or acceptable substitute that will limit the surface injection pressures to no more than 1,120 psig, or 0.2 psig per foot of depth to the uppermost perforation in the injection well, whichever is less.

(14) The Division Director may administratively authorize a pressure limitation in excess of the above upon a proper showing that such higher pressure will not result in the fracturing of the injection formation or confining strata, AND after notice is provided of such application to all offsetting operators of producing wells within the injection formation and located within one-half mile of the injection wells, and those operators are given 15 days in which to object to the pressure increase.

(15) The Division Director may administratively authorize additional injection wells within the Unit Area as provided in Division Rule 703.F(3).

(16) Prior to commencing injection operations into any of the wells shown on Exhibit "A", the unit operator shall pressure test the casing throughout the interval from the surface down to the proposed packer setting depth to insure the integrity of such casing. The unit operator shall perform remedial cement operations in a manner which will assure that these well bores will not serve as a conduit for migration of injection fluids to the satisfaction of the Division's Hobbs District Office.

(17) The unit operator shall give 72 hours advance notice to the supervisor of the Division's Hobbs District Office of the date and time that (i) the injection equipment will be installed, and (ii) the mechanical integrity pressure test will be conducted on the proposed injections wells, so that these operations may be witnessed by Division personnel.

(18) The unit operator shall immediately notify the supervisor of the Division's Hobbs District Office of any failure of tubing, casing, or packer in any injection well or of any leakage of water, oil, or gas from around any producing or plugged and abandoned well within the project area, and shall promptly take all steps necessary to correct such failure or leakage.

(19) The unit operator shall conduct injection operations in accordance with Division Rule Nos. 701-708, and shall submit monthly progress reports in accordance with Division Rule Nos. 706 and 1115.

(20) The injection authority granted herein for each well shown on Exhibit "A" shall terminate within one year after the date of this order if the unit operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request, may grant an extension if the request is received prior to the end of that year.

(21) Upon receipt of this order, the operator shall identify and notify the Division of all producing wells inside the unit which produce from perforations above or below the unitized interval. The operator shall obtain downhole commingling permits administratively for these wells after proper notice and the opportunity for hearing.

(22) The West Blinebry Drinkard Unit Waterflood Project is hereby certified by the Division as an "Enhanced Oil Recovery Project" pursuant to the Enhanced Oil Recovery Act, NMSA 1978 Section 7-29A-1 as amended. The project area shall comprise the entire Unit Area; provided that the area and/or the producing wells eligible for the recovered oil tax rate, may be contracted and reduced dependent upon the evidence presented by the operator of the Unit Area in its demonstration of the occurrence of a positive production response.

(23) To be eligible for the Enhanced Oil Recovery tax rate, the unit operator shall advise the Division of the date and time water injection commences in the project area, and at such time request the Division to certify the project to the New Mexico Taxation and Revenue Department.

(24) At such time as a positive production response occurs, and within five years from the date the project was certified to the New Mexico Taxation and Revenue Department, the unit operator must apply to the Division for certification of a positive production response. The application shall identify the area benefiting from enhanced oil recovery operations and the specific wells eligible for the Enhanced Oil Recovery tax rate. The Division may review the application administratively or set it for hearing. Based upon the evidence presented, the Division will certify to the New Mexico Taxation and Revenue Department those wells that are eligible for the Enhanced Oil Recovery tax rate.

(25) This order does not relive the unit operator of responsibility should its operations cause any damage or threat of damage to fresh water, human health or the environment; nor does it relieve the operator of responsibility for complying with applicable Division rules or other applicable federal, state, or local laws or regulations.

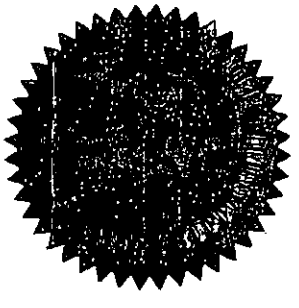
(26) Jurisdiction of this case is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MARK E. FESMIRE, PE
Director

SEAL



State of New Mexico
Energy, Minerals and Natural Resources Department

Administrative Order WFX-923
May 30, 2014

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, Blinebry, Tubb, and Drinkard formations 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	2010 FNL	2125 FEL

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

The approved injection interval for this well is into the Blinebry, Tubb and Drinkard formations from an approximate perforated depth of 5822 feet to a maximum perforated depth of 6594 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 in individual wells 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.

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.

JAMI BAILEY
Director

JB/prg

cc: New Mexico Oil Conservation Division – Hobbs Office
State Land Office – Oil, Gas and Minerals Division
Case File 14126

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: 11-24-2014 New or Old: N (UIC Class II Primacy 03/07/1982)

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

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

BLM 100K Map: JA1 Operator: Apache Corp OGRID: 873 Contact: Brian Woodfin 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)	Stage Tool	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 in	6986 (MD) 6562 (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 6986 (MD) 6562 (TVD) PBTD 6935

NEW TD _____ NEW PBTD _____

NEW Open Hole ◯ or NEW Perfs ✓

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

Proposed Packer Depth 6520 ft

Min. Packer Depth 6470 (100-ft limit

Proposed Max. Surface Press. 1314 psig

Admin. Inj. Press. 1314 (1394) (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 Persor

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 (21) Well List? Y Total No. Wells Penetrating Interval: 19 Horizontals? 0

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

Penetrating Wells: No. P&A Wells 0 Num Repairs? ___ on which well(s)? ___ Diagrams? ___

NOTICE: Newspaper Date 7/24 Mineral Owner NMSLO Surface Owner NMSLO BLM N. Date 7-24

RULE 26.7(A): Identified Tracts? Y Affected Persons: Chevron, ConocoPhillips, John H. Hendrix N. Date 7-24

Permit Conditions: Issues: PSI Limited to 1120 PSI

Add Permit Cond: _____

* R-12981 limits surface psi -> 1120 PSI.

McMillan, Michael, EMNRD

From: Brian Wood <brian@permitswest.com>
Sent: Tuesday, August 18, 2015 3:59 PM
To: McMillan, Michael, EMNRD
Subject: Re: Apache West Blinebry Drinkard Unit Well No. 168

There is no Abo operator in G-16-21s-37e.

Apache has reviewed cross section logs.
Their conclusions are:
1. There is a 10' interval of relatively low permeability/porosity between the Drinkard and Abo that will restrict water flow into the Abo.
2. Water will preferentially distribute to low pressure zones. Since Apache is producing out of the Drinkard in offset wells, then a pressure gradient will form. Injected water will migrate through the Drinkard to the offset Drinkard producers.

Let me know if you need anything else.

On Aug 12, 2015, at 11:19 AM, McMillan, Michael, EMNRD wrote:

> Brian:
> I looked at the WFX for the Apache West Blinebry Drinkard Unit Well No. 168. API 30-025-41548
> Can you tell me who is the operator of the Abo in the spacing unit of the West Blinebry Drinkard Unit Well No. 168?
> Can you tell me how the Abo will not be affected, since the perfs are close to the top of the Abo?
>
> The JackRabbit State #15 was recommended for signature to the Director.
>
> Thank You

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