

DATE IN 3/25/2014	SUSPENSE	ENGINEER	LOGGED IN 3/25/2014	TYPE WFX	APP NO. PMAM1408444784
----------------------	----------	----------	------------------------	-------------	---------------------------

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]

[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

[D] Other: Specify _____

- WFX
 - Apache Corp
 873

well

West Blinbry
 Drinkard Unit 168
 30-025-41548

[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

Pool
 - Eunice, Blinbry-
 Tubb - Drinkard,
 North

[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

Print or Type Name

Signature

Consultant

Title

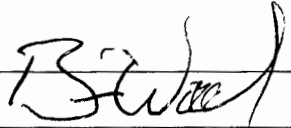
brian@permitswest.com

e-mail Address

3-24-14

Date

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
30-025-41548
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: BRIAN WOOD  TITLE: CONSULTANT
SIGNATURE: _____ DATE: MARCH 24, 2014
E-MAIL ADDRESS: brian@permitswest.com
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: WEST BLINEBRY DRINKARD UNIT 168

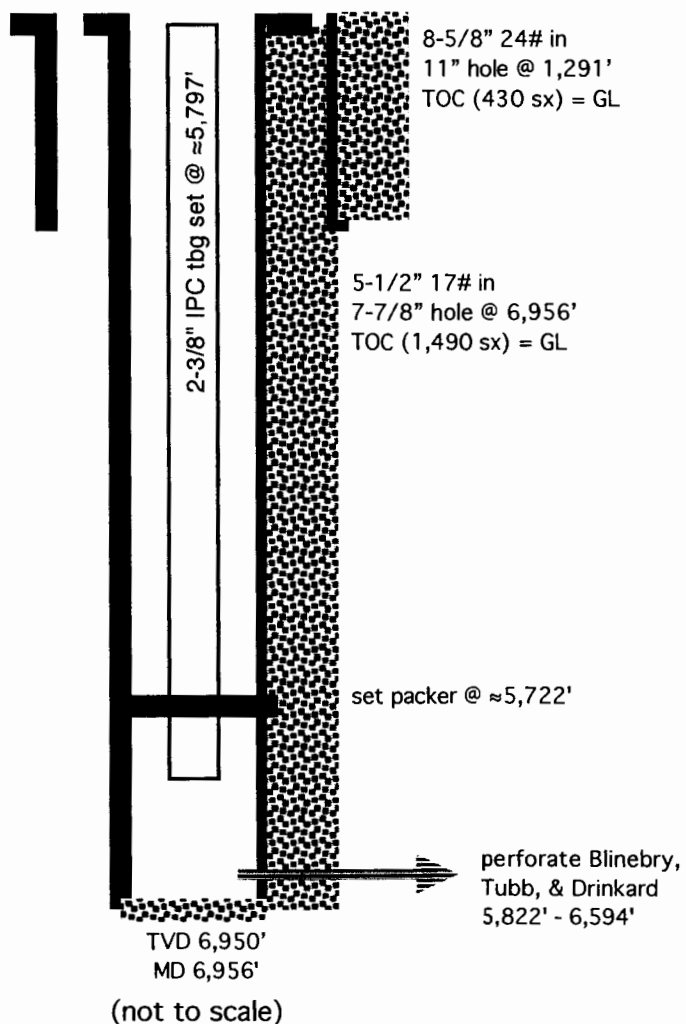
WELL LOCATION:	SHL: 1860' FNL & 2230' FEL	G	16	21 S	37 E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
	BHL: 2040' FNL & 2125' FEL				

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

“Proposed”



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

Cemented with: 430 sx. *or* ft³

Top of Cement: SURFACE Method Determined: VISUAL

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: 1,490 sx. *or* ft³

Top of Cement: **SURFACE** Method Determined: **VISUAL**

Total Depth: 6,950' TVD & 6,956' MD

Injection Interval

5,822' feet to 6,594'

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2-3/8" J-55 4.7# Lining Material: INTERNAL PLASTIC COATType of Packer: LOCK SET INJECTIONPacker Setting Depth: ≈5,722'

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: BLINEBRY, TUBB, & DRINKARD

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

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

NO

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

OVER: GRAYBURG (3,725'), SAN ANDRES (3,985'), PADDOCK (5,350')UNDER: ABO (6,750'), FUSSELMAN (7,250')

APACHE CORPORATION
WEST BLINEBRY DRINKARD UNIT 168
SHL: 1860' FNL & 2230' FEL
BHL: 2040' FNL & 2125' FEL
SEC. 16, T. 21 S., R. 37 E., LEA COUNTY, NM

PAGE 1

30-025-41548

I. Purpose is to drill a 6,950' TVD (6,956' MD) water injection well to increase oil recovery. The well will inject (5,822' - 6,594') into the Blinebry, Tubb, and Drinkard, which are part of the Eunice; Blinebry-Tubb-Drinkard, North Pool (aka, Eunice; BLI-TU-DR, North and pool code = 22900).

The well and zones are part of the West Blinebry Drinkard Unit (Unit Number 300341, Case Numbers 14125 and 14126, both Order Number R-12981) that was established in 2008 by Apache. There have been two subsequent WFX approvals, WFX-854 and WFX-857. This is an active water flood. There are currently 25 active water injectors in the unit.

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

II. Operator: Apache Corporation (OGRID #873)
Operator phone number: (432) 818-1167
Operator address: 303 Veterans Airpark Lane, Suite 3000
Midland, TX 79705
Contact for Application: Brian Wood (Permits West, Inc.)
Phone: (505) 466-8120

III. A. (1) Lease: 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
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

APACHE CORPORATION
WEST BLINEBRY DRINKARD UNIT 168
SHL: 1860' FNL & 2230' FEL
BHL: 2040' FNL & 2125' FEL
SEC. 16, T. 21 S., R. 37 E., LEA COUNTY, NM

PAGE 2

30-025-41548

- A. (2) Surface casing (8-5/8", 24#) will be set at 1,291' in an 11" hole. Cement will be circulated to the surface with 430 sacks.

Production casing (5-1/2", 17#) will be set at 6,956' (MD) in a 7-7/8" hole. Cement will be circulated to the surface with 1,490 sacks.

Mechanical integrity of the casing will be assured by hydraulically pressure testing to 500 psi for 30 minutes.

- A. (3) Tubing specifications are 2-3/8", J-55, 4.7#, and internally plastic coated. Setting depth will be $\approx 5,797'$. (Disposal interval will be 5,822' to 6,594'.)
- A. (4) A lock set injection packer will be set at $\approx 5,722'$ ($\approx 50'$ above the highest proposed perforation of 5,822').
- B. (1) Injection zone will be the Blinebry, Tubb, and Drinkard carbonates. The zones are part of the Eunice; Blinebry-Tubb-Drinkard, North Pool. Estimated fracture gradient is ≈ 0.56 psi per foot.
- B. (2) Injection interval will be 5,822' to 6,594'. The well will be a cased hole. See attached well profile for more perforation information.
- B. (3) The well has not yet been drilled. It will be completed as a water injection well after approval.
- B. (4) The well will be perforated from 5,822' to 6,594' with 2 shots per foot. Shot diameter = 0.40".
- B. (5) Next higher oil or gas zone in the area of review is the Paddock (pool code 49210). Its bottom is at $\approx 5,363'$. Injection will occur in the Blinebry - Drinkard interval. Blinebry top is at $\approx 5,650'$. Injection interval will be 5,822' to 6,594'. The injection interval is part of the Eunice; Blinebry-Tubb-Drinkard, North Pool (pool code 22900).

APACHE CORPORATION
WEST BLINEBRY DRINKARD UNIT 168
SHL: 1860' FNL & 2230' FEL
BHL: 2040' FNL & 2125' FEL
SEC. 16, T. 21 S., R. 37 E., LEA COUNTY, NM

PAGE 3

30-025-41548

The next lower oil or gas zone in the area of review is the Wantz; Abo (pool code 62700). Its top is at $\approx 6,909'$. Deepest perforation in the injection interval will be 6,594'.

IV. This is not a horizontal or vertical expansion of an existing injection project. The case file for the unit approval (R-12981) includes a discussion of the water flood. There have been 2 water flood expansions (WFX-854 & WFX-857) since then. Closest unit boundary is 2,125' east. Six existing injection wells are within a half-mile radius. All six are in the unit (see Exhibit B).

V. Exhibit B shows all 53 existing wells (45 oil wells + 6 water injection wells + 1 brine supply well + 1 P & A well) within a half-mile radius, regardless of depth. Exhibit C shows all 744 existing wells (579 oil or gas producing wells + 75 injection or disposal wells + 57 P & A wells + 32 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. Details on the leases within a half-mile are:

<u>T. 21 S., R. 37 E.</u>	<u>Lessor</u>	<u>Lease</u>	<u>*Operator</u>
S2S2 Sec. 9	BLM	NMNM-090161	Apache
NWNW Sec. 15	NMSLO	B091880008	Apache
SWNW Sec. 15	NMSLO	B014810018	Apache
NWSW Sec. 15	fee	Argo (aka, NEDU)	Apache
NE4 Sec. 16	NMSLO	B017320001	Apache
NW4 Sec. 16	NMSLO	B015570002	Apache
N2S2 Sec. 16	NMSLO	B000850016	Apache
S2SE4 & SESW Sec. 16	NMSLO	B081050004	Apache

*Blinebry, Drinkard, Tubb

Exhibit E shows all lessors (BLM, fee, and state) within a two-mile radius.

APACHE CORPORATION**PAGE 4****WEST BLINEBRY DRINKARD UNIT 168****SHL: 1860' FNL & 2230' FEL****BHL: 2040' FNL & 2125' FEL****SEC. 16, T. 21 S., R. 37 E., LEA COUNTY, NM****30-025-41548**

VI. There are 53 existing wells within a half-mile radius. Thirty-two of the wells penetrated the Blinebry, Tubb, or Drinkard. The penetrators include 25 oil wells, 6 water injection wells, and 1 P & A well. A table abstracting the well construction details and histories of the penetrators are in Exhibit F. A diagram of the P & A well is also in Exhibit F. The 53 wells and their distances from the 168 well bore are:

API	Operator	Well	Type	Section	TVD	Current Zone	Distance (feet)
3002506620	Chevron	Harry Leonard NCT E 001	O	16	6670	Penrose Skelly; Grayburg	149
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
3002538230	Apache	WBDU 081	O	16	6793	Eunice; BLI-TU- DR, North	814
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
3002539119	Apache	WBDU 098	O	16	6880	Eunice; BLI-TU- DR, North	1072
3002506626	Apache	WBDU 059	O	16	7502	Eunice; BLI-TU- DR, North	1088
3002536786	Apache	State DA 010	O	16	4345	Penrose Skelly; Grayburg	1106
3002537834	Chevron	Harry Leonard NCT E 008	O	16	4300	Penrose Skelly; Grayburg	1133
3002506622	Chevron	Harry Leonard NCT E 003	O	16	6710	Penrose Skelly; Grayburg	1211
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

APACHE CORPORATION
WEST BLINEBRY DRINKARD UNIT 168
SHL: 1860' FNL & 2230' FEL
BHL: 2040' FNL & 2125' FEL
SEC. 16, T. 21 S., R. 37 E., LEA COUNTY, NM

PAGE 5

30-025-41548

3002506618	Apache	WBDU 077	O	16	6250	Eunice; BLI-TU-DR, North	1283
3002541547	Apache	WBDU 178	no spud	16	6950	Eunice; BLI-TU-DR, North	1333
3002506621	Apache	WBDU 056	O	16	6614	Bliebry Oil & Gas (Oil)	1468
3002506628	Apache	WBDU 060	I	16	6699	Eunice; BLI-TU-DR, North	1544
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
3002537201	Apache	WBDU 079	O	16	7310	Eunice; BLI-TU-DR, North	1674
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
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
3002536305	Apache	WBDU 062	O	16	6950	Eunice; BLI-TU-DR, North	1869
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
3002506619	Apache	WBDU 078	I	16	6644	Eunice; BLI-TU-DR, North	1947
3002506623	Apache	WBDU 057	I	16	6699	Tubb (Oil) ; Gas (Pro GAS)	1967
3002538415	Apache	WBDU 084	O	16	6835	Eunice; BLI-TU-DR, North	1989

APACHE CORPORATION

PAGE 6

WEST BLINEBRY DRINKARD UNIT 168

SHL: 1860' FNL & 2230' FEL

BHL: 2040' FNL & 2125' FEL

SEC. 16, T. 21 S., R. 37 E., LEA COUNTY, NM

30-025-41548

3002538220	Apache	WBDU 080	O	16	6875	Eunice; BLI-TU-DR, North	2009
3002538197	Apache	WBDU 051	O	9	6837	Eunice; BLI-TU-DR, North	2046
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
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
3002525198	Chevron	Harry Leonard NCT E 006	O	16	6720	Penrose Skelly; Grayburg	2225
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
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
3002509906	Apache	WBDU 038	I	9	6770	Eunice; BLI-TU-DR, North	2518
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
3002537238	Apache	NEDU 629	O	15	6900	Eunice; BLI-TU-DR, North	2542
3002538414	Apache	WBDU 083	O	16	6850	Eunice; BLI-TU-DR, North	2548
3002533547	Key	STATE 001	BSW	15	2200	BSW; Salado	2555

APACHE CORPORATION
 WEST BLINEBRY DRINKARD UNIT 168
 SHL: 1860' FNL & 2230' FEL
 BHL: 2040' FNL & 2125' FEL
 SEC. 16, T. 21 S., R. 37 E., LEA COUNTY, NM

PAGE 7

30-025-41548

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
3002534245	Apache	State DA 006	O	16	4000	Penrose Skelly; Grayburg	2654

- VII. 1. Average injection rate will be \approx 2,500 bwpd.
 Maximum injection rate will be \approx 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 \approx 1,000 psi. Maximum injection pressure will be 1,164 psi ($=0.2$ psi/foot \times 5,822' (highest perforation)).
4. Water source will be water pumped from two existing \approx 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 22,883,768 barrels that have been injected to date in the unit.

	NEDU 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

APACHE CORPORATION
WEST BLINEBRY DRINKARD UNIT 168
SHL: 1860' FNL & 2230' FEL
BHL: 2040' FNL & 2125' FEL
SEC. 16, T. 21 S., R. 37 E., LEA COUNTY, NM

PAGE 8

30-025-41548

Hydrogen Sulfide	90.0 ppm	408.0 ppm
Iron	0.3 mg/l	0.0 mg/l
Magnesium	439.0 mg/l	244.0 mg/l
Manganese	N/A	0.01 mg/l
pH	7.5	6.49
Potassium	115.0 mg/l	N/A
Sodium	5,799.5 mg/l	3,909.0 mg/l
Strontium	28.0 mg/l	19.0 mg/l
Sulfate	2,465.0 mg/l	1,750.0 mg/l
Total Dissolved Solids	20,702.9 mg/l	13,273.0 mg/l

5. The Blinebry, Tubb, and Drinkard currently produce from 112 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 injection interval is Leonardian in age, 772' 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 109 Blinebry injection wells, 129 Tubb injection wells, and 159 Drinkard injection wells in the state. Some of these wells inject into 2 or more zones. 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.

Estimated formation depths are:

Quaternary = 0'
Santa Rosa = 950'
Anhydrite = 1,270'

APACHE CORPORATION
WEST BLINEBRY DRINKARD UNIT 168
SHL: 1860' FNL & 2230' FEL
BHL: 2040' FNL & 2125' FEL
SEC. 16, T. 21 S., R. 37 E., LEA COUNTY, NM

PAGE 9

30-025-41548

Top salt = 1,400'
Base salt = 2,480'
Yates = 2,615'
Seven Rivers = 2,860'
Queen = 3,430'
Grayburg = 3,725'
San Andres = 3,985'
Glorieta = 5,200'
Paddock = 5,350'
Blinebry = 5,650'
Tubb = 6,145'
Drinkard = 6,410'
Abo = 6,750'
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 a January 7, 2014 field inspection. 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; and November 14, 2011. No other water well was found within a mile during the inspection.

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 1,080' of salt and anhydrite between the bottom of the only likely underground fresh water source and the top of the injection interval.

APACHE CORPORATION

PAGE 10

WEST BLINEBRY DRINKARD UNIT 168

SHL: 1860' FNL & 2230' FEL

BHL: 2040' FNL & 2125' FEL

SEC. 16, T. 21 S., R. 37 E., LEA COUNTY, NM

30-025-41548

Produced water is currently being injected (178 wells) or disposed (10 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 acid to clean out scale or fill.

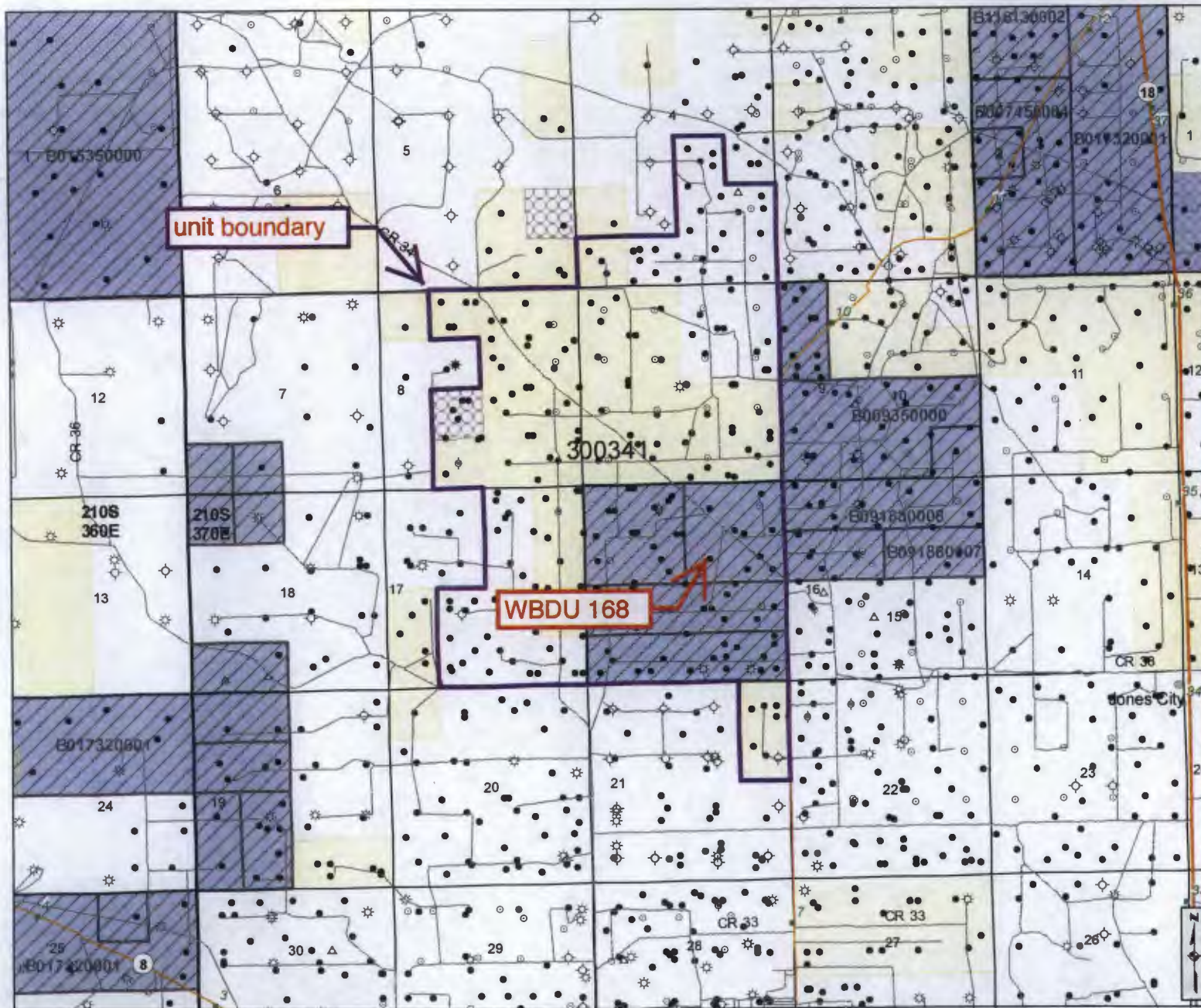
X. Spectral gamma ray, spectral density/compensated neutron, dual laterolog/MSFL, and sonic logs are planned.

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). At least 161 injection or saltwater disposal wells are active in the Blinebry, Tubb, or Drinkard in the New Mexico. Previously approved water flood expansions in the unit include:

WFX-854 (August 28, 2009)
WFX-857 (December 22, 2009)

XIII. A legal ad (see Exhibit I) was published on March 13, 2014. Notice (this application) has been sent (Exhibit J) to the surface owner (NM State Land Office), BLM, the offset Blinebry, Tubb, and 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
- County Seats
- City, Town or Village
- SLO District Offices
- SLO District Boundary
- Hwy Mileposts
- Interstate
- NM Hwy
- Local Road
- Continental Divide

Federal Minerals Ownership

- All Minerals
- Coal Only
- Oil and Gas Only
- Oil, Gas and Coal Only
- Other Minerals

State Trust Lands

- Surface Estate
- Subsurface Estate
- Surface and Subsurface Estate

State Leases

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

Oil and Gas Related Features

- Oil and Gas Unit Boundary
- Participating Areas in Units
- Geologic Regions
- Volcanic Vents
- NMOC Order R-111-P Potash Enclave Outline

NMOC Oil and Gas Wells

- CO₂
- 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

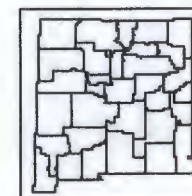
Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

EXHIBIT A

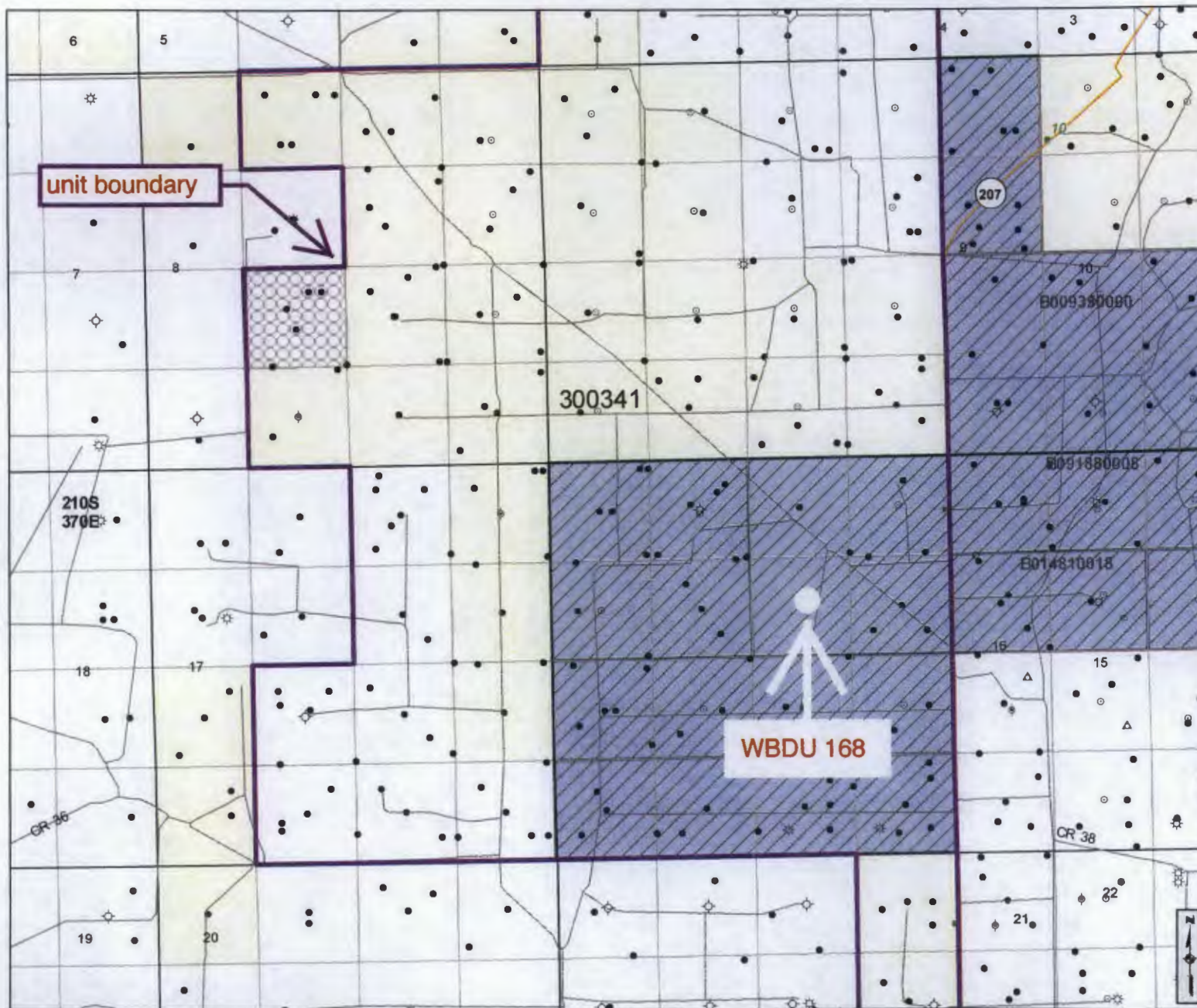
The New Mexico State Land Office assumes no responsibility or liability for, or in connection with, the accuracy, reliability or use of the information provided here, in State Land Office data layers or any other data layer.

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

Created On: 3/22/2014 2:51:13 PM



www.nmstatelands.org



Cartographic Features

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

Federal Minerals Ownership

- All Minerals
- Coal Only
- Oil and Gas Only
- Oil, Gas and Coal Only
- Other Minerals

State Trust Lands

- Surface Estate
- Subsurface Estate
- Surface and Subsurface Estate

State Leases

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

Oil and Gas Related Features

- Oil and Gas Unit Boundary
- Participating Areas in Units
- Geologic Regions
- Volcanic Vents
- NMOCD Order R-111-P Potash Enclave Outline

NMOCD Oil and Gas Wells

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

New Mexico State Land Office

Oil, Gas and Minerals

0 0.050.1 0.2 0.3 0.4
Miles

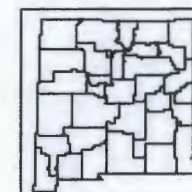
Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

EXHIBIT A

The New Mexico State Land Office assumes no responsibility or liability for, or in connection with, the accuracy, reliability or use of the information provided here, in State Land Office data layers or any other data layer.

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

Created On: 3/22/2014 2:52:40 PM



www.nmstatelands.org

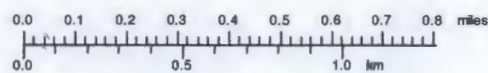


EXHIBIT A

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 Pecos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1230 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 30-025-	Pool Code 22900	Pool Name Eunice, BLI-TU-DR, North
Property Code	Property Name WBDU	Well Number 168W
OGPUD No. 873	Operator Name APACHE CORPORATION	Elevation 3482'

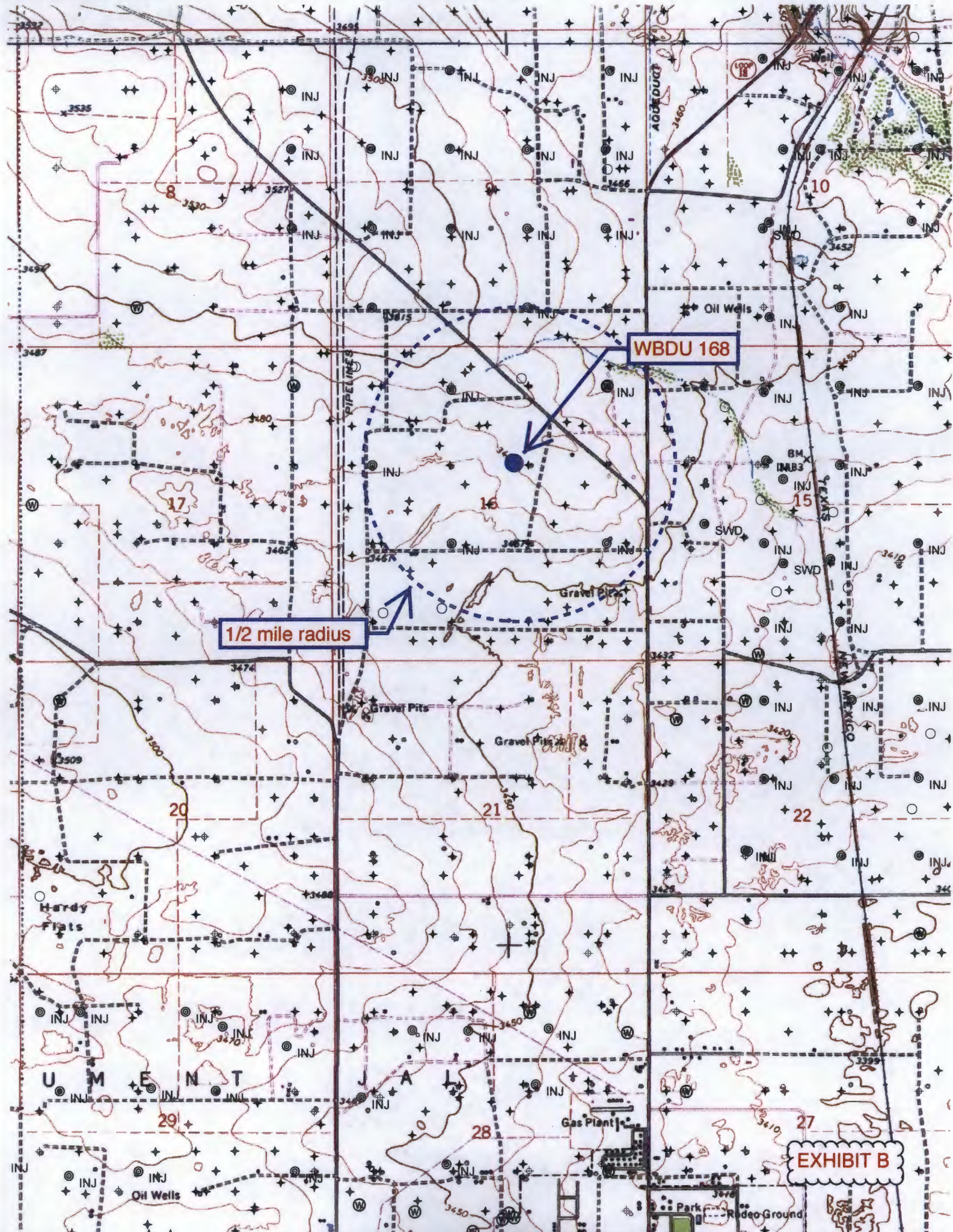
Surface Location									
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	16	21-S	37-E		1860	NORTH	2230	EAST	LEA

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 40	Joint or Infill	Consolidation Code	Order No.						

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

<p>GRID AZ. = 149°05'06" HORIZ. DIST. = 208.6'</p> <p>GEODETIC COORDINATES NAD 27 NME</p> <p>SURFACE LOCATION Y=540647.2 N X=859914.9 E</p> <p>LAT. = 32.480938° N LONG. = 103.166199° W</p> <p>LAT. = 32° 28' 51.4" N LONG. = 103° 09' 58.3" W</p> <p>BOTTOM HOLE LOCATION Y=540468.3 N X=860022.1 E</p>	<p>OPERATOR CERTIFICATION</p> <p>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.</p> <p><i>Michelle Cooper</i> 12-10-13 Signature Date</p> <p><i>Michelle Cooper</i> Printed Name</p> <p><i>michelle.cooper@apachecorp.com</i> E-mail Address</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>NOVEMBER 20, 2013</p> <p>Date of Survey Signature & Seal of Professional Surveyor: <i>Ronald J. Eidson</i> 02/03/2013 Certificate Number 3239 Ronald J. Eidson 3239</p> <p>BKL JWSC W.O. 13.11.1276</p>
---	---

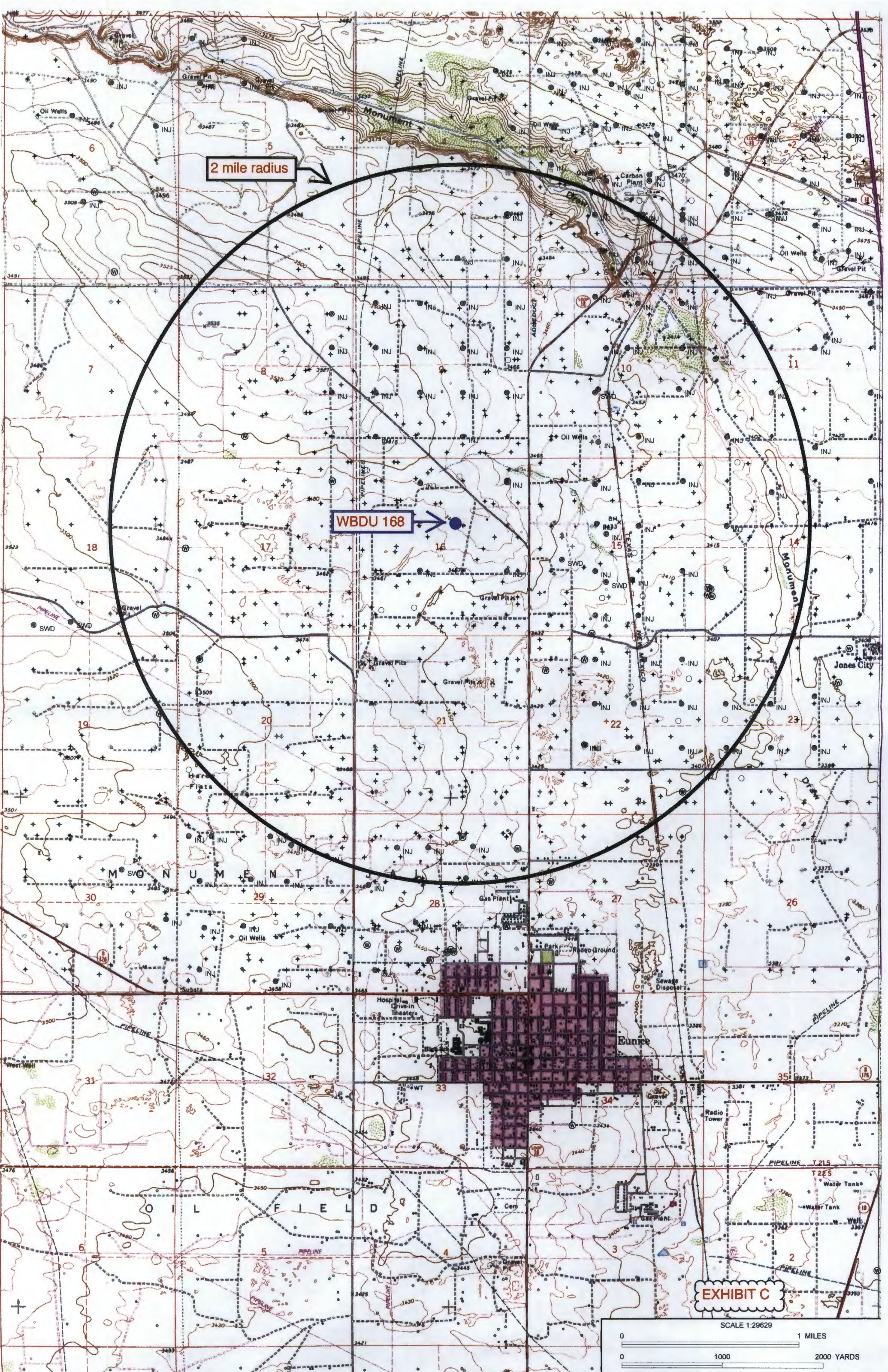
EXHIBIT A



WBDU 168

1/2 mile radius

EXHIBIT B

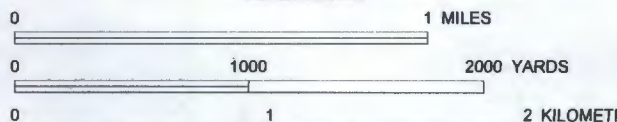


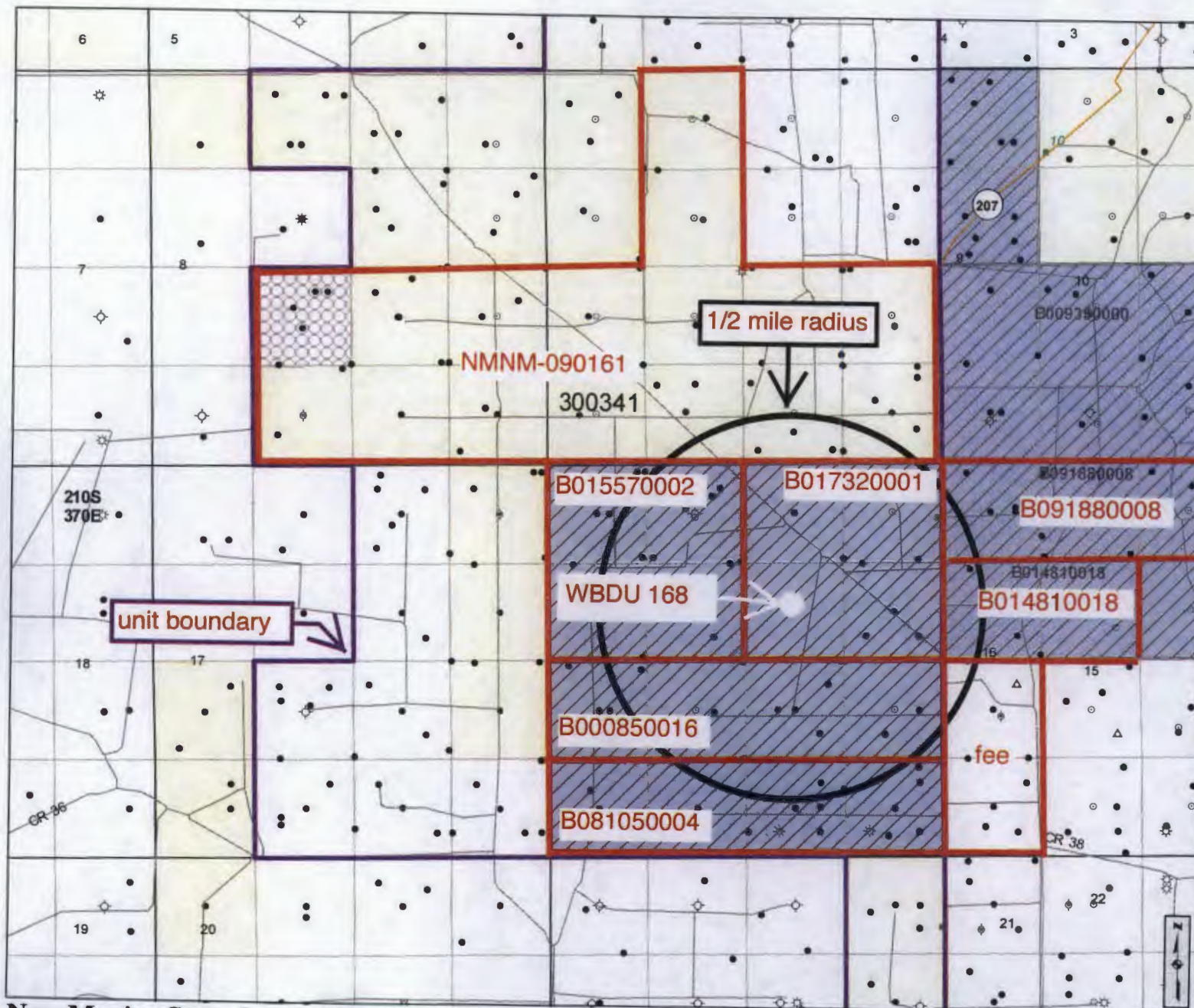
2 mile radius

WBDU 168

EXHIBIT C

SCALE 1:29629





Cartographic Features

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

Federal Minerals Ownership

- All Minerals
- Coal Only
- Oil and Gas Only
- Oil, Gas and Coal Only
- Other Minerals

State Trust Lands

- Surface Estate
- Subsurface Estate
- Surface and Subsurface Estate

State Leases

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

Oil and Gas Related Features

- Oil and Gas Unit Boundary
- Participating Areas in Units
- Geologic Regions
- Volcanic Vents
- NMOCD Order R-111-P
- Potash Enclave Outline

NMOCD Oil and Gas Wells

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

New Mexico State Land Office Oil, Gas and Minerals

0 0.050.1 0.2 0.3 0.4
Miles

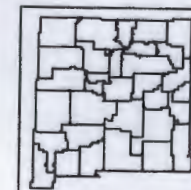
Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

EXHIBIT D

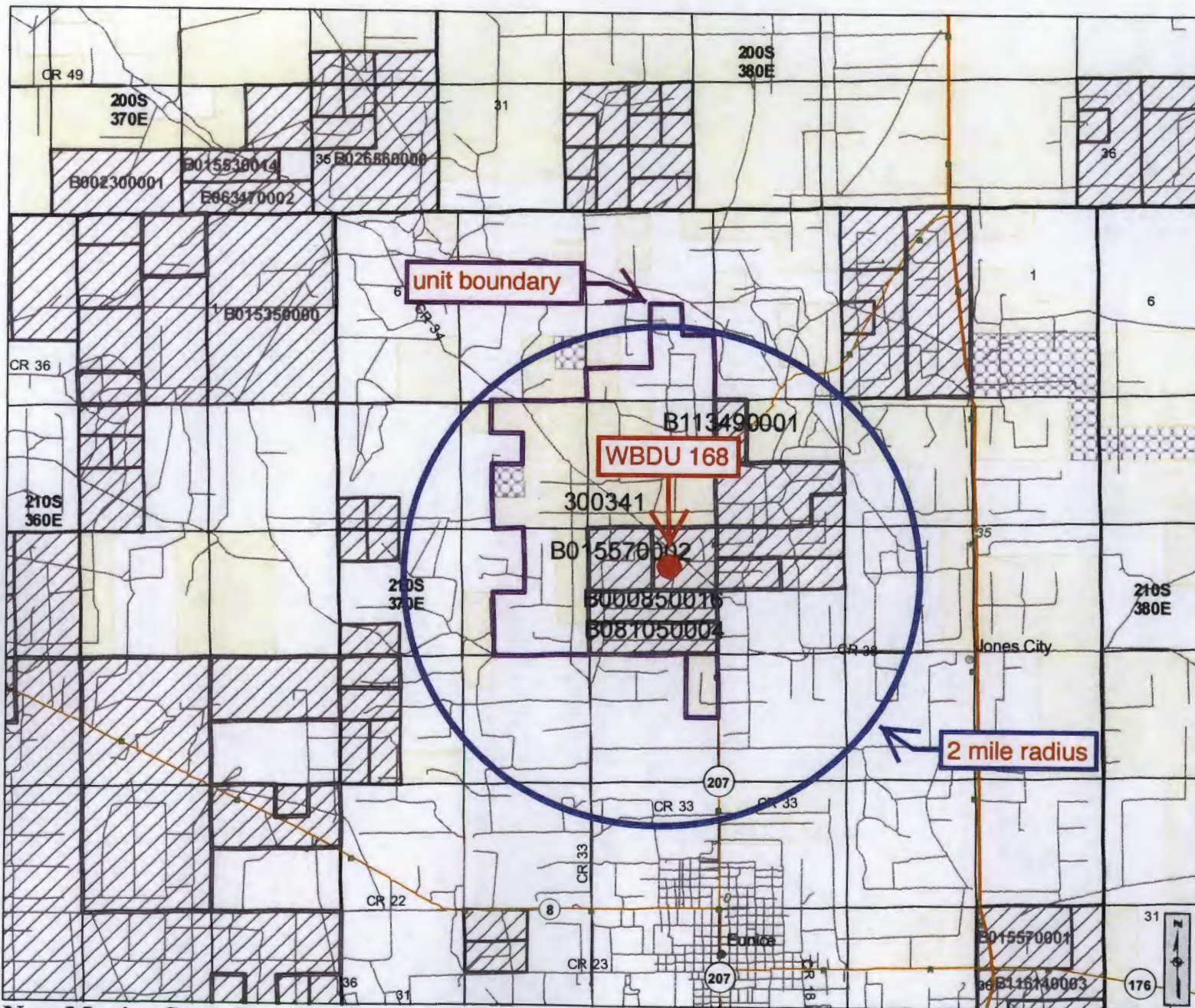
The New Mexico State Land Office assumes no responsibility or liability for, or in connection with, the accuracy, reliability or use of the information provided here, in State Land Office data layers or any other data layer.

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

Created On: 3/22/2014 2:52:40 PM



www.nmstatelands.org



Cartographic Features

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

Federal Minerals Ownership

- All Minerals
- Coal Only
- Oil and Gas Only
- Oil, Gas and Coal Only
- Other Minerals

State Trust Lands

- Surface Estate
- Subsurface Estate
- Surface and Subsurface Estate

State Leases

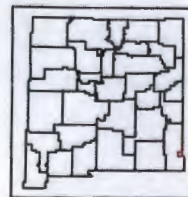
- Oil and Gas Leases
- Agricultural Leases
- Commercial Leases
- Minerals Leases
- Not Available for Oil and Gas Leasing
- Oil and Gas Leasing Influenced by Restriction

Oil and Gas Related Features

- Oil and Gas Unit Boundary
- Participating Areas in Units
- Geologic Regions
- Volcanic Vents
- NMOC Order R-III-P
- Potash Enclave Outline

NMOC Oil and Gas Wells

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



www.nmstatelands.org

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

EXHIBIT E

The New Mexico State Land Office assumes no responsibility or liability for, or in connection with, the accuracy, reliability or use of the information provided here, in State Land Office data layers or any other data layer.

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

Created On: 2/16/2014 1:56:08 PM

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										

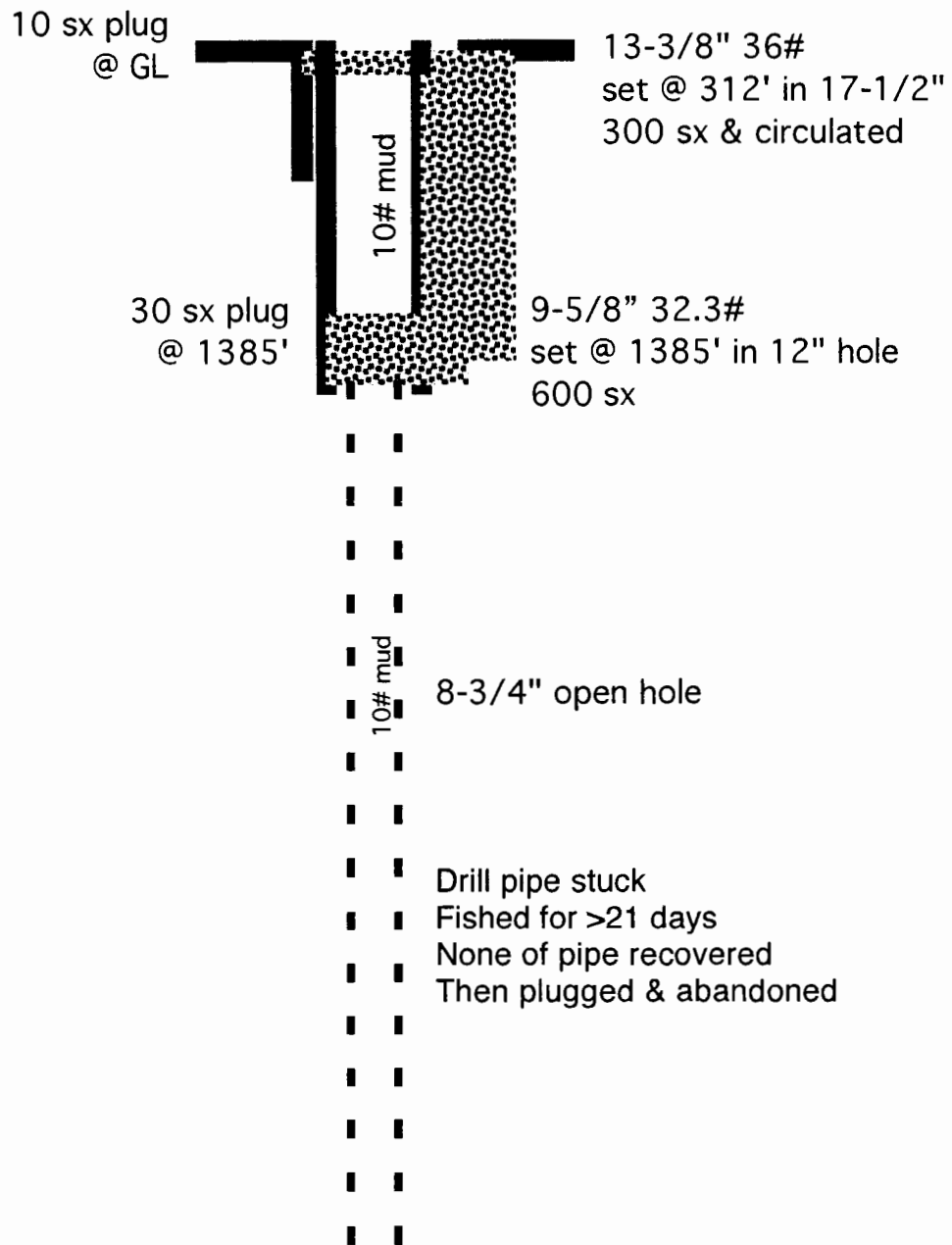
Sorted by distance from WBDU 168 well bore

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										

Stanolind's
State C Tract 12 #6
API 30-025-06627
660 FNL & 1980 FWL 16-21s-37e
Spud: 2-10-48
P & A: 5-3-48



TD 5762'
(not to scale)

EXHIBIT F



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, (quarters are 1=NW 2=NE 3=SW 4=SE)
C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	6416 4	Sec	Tws	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
				monitoring wells no Well Record & Log filed yet	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
				monitoring wells no water found	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

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

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

3/23/14 9:17 AM

Page 1 of 1

ACTIVE & INACTIVE POINTS OF DIVERSION



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	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		

Record Count: 4

UTM NAD83 Radius Search (in meters):

Easting (X): 672270

Northing (Y): 3595239

Radius: 1610

monitoring "wells"
no water found

Average Depth to Water: 70 feet

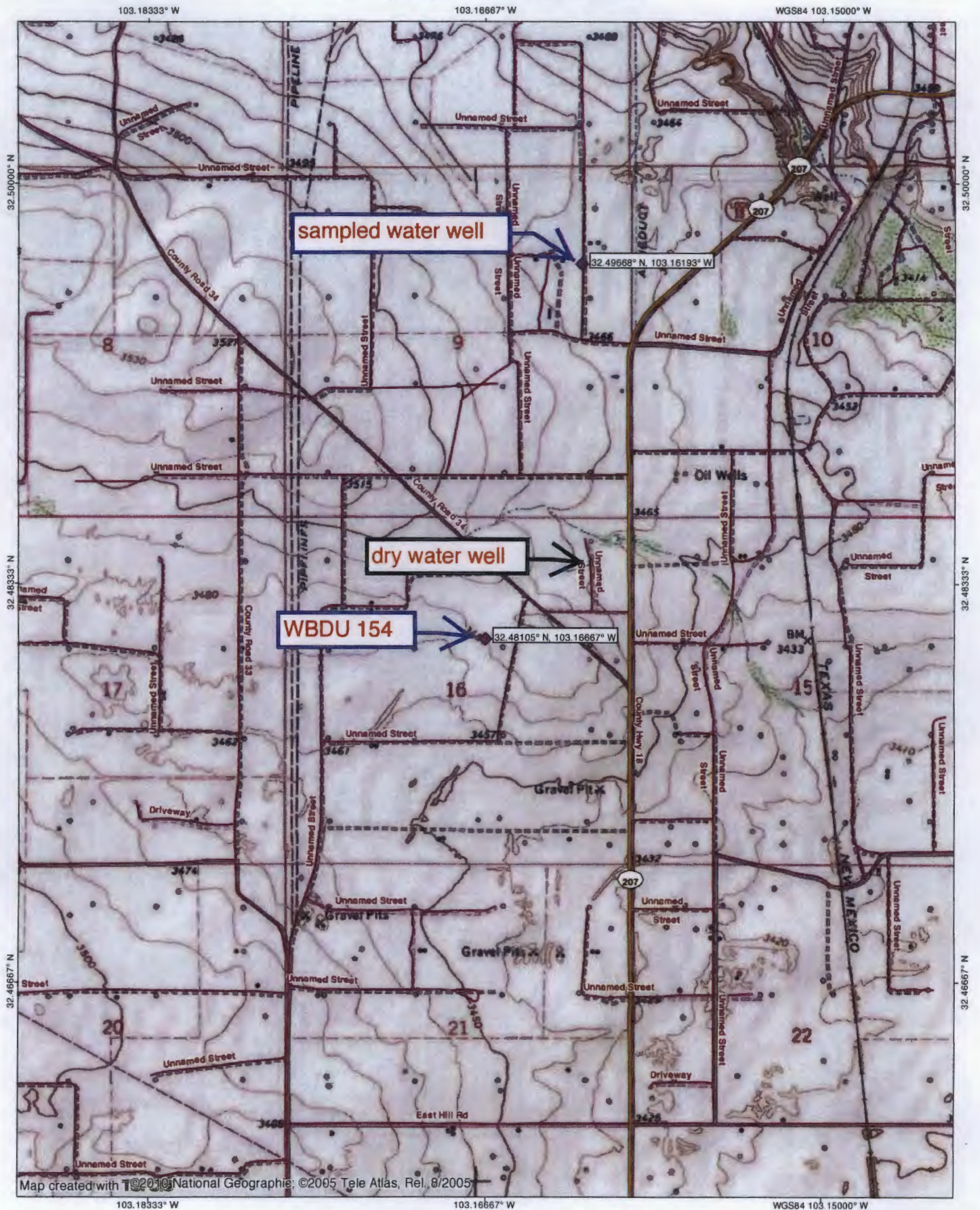
Minimum Depth: 70 feet

Maximum Depth: 70 feet

EXHIBIT G

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



Analytical Report

Lab Order 1401404

Date Reported: 1/20/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Permits West**Client Sample ID:** AP-WBD-NE Sec 9**Project:** Apache SWD Water Samples**Collection Date:** 1/7/2014 12:32:00 PM**Lab ID:** 1401404-001**Matrix:** AQUEOUS**Received Date:** 1/10/2014 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	86	5.0		mg/L	10	1/10/2014 8:49:28 PM	R16037
EPA METHOD 1664A							Analyst: JDC
N-Hexane Extractable Material	ND	5.1		mg/L	1	1/15/2014	11189
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	405	20.0		mg/L	1	1/14/2014 7:27:00 PM	11204

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 greater than 2 for VOA and TOC only.
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

Page 1 of 5

EXHIBIT G

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401404

20-Jan-14

Client: Permits West

Project: Apache SWD Water Samples

Sample ID	MB-11189	SampType:	MBLK	TestCode:	EPA Method 1664A					
Client ID:	PBW	Batch ID:	11189	RunNo:	16085					
Prep Date:	1/13/2014	Analysis Date:	1/15/2014	SeqNo:	463280	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	ND	5.0								

Sample ID	LCS-11189	SampType:	LCS	TestCode:	EPA Method 1664A					
Client ID:	LCSW	Batch ID:	11189	RunNo:	16085					
Prep Date:	1/13/2014	Analysis Date:	1/15/2014	SeqNo:	463281	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	36	5.0	40.00	0	89.5	78	114			

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 greater than 2 for VOA and TOC only. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401404

20-Jan-14

Client: Permits West

Project: Apache SWD Water Samples

Sample ID	A6		SampType:	CCV_6		TestCode:	EPA Method 300.0: Anions				
Client ID:	BatchQC		Batch ID:	R16037		RunNo:	16037				
Prep Date:			Analysis Date:	1/10/2014		SeqNo:	461898		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	12	0.50	12.00	0	101	90	110				

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R16037	RunNo:	16037					
Prep Date:		Analysis Date:	1/10/2014	SeqNo:	461902	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID	LCS-b		SampType:	LCS		TestCode:	EPA Method 300.0: Anions				
Client ID:	LCSW		Batch ID:	R16037		RunNo:	16037				
Prep Date:			Analysis Date:	1/10/2014		SeqNo:	461904		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	4.8	0.50	5.000	0	95.3	90	110				

Sample ID	A4		SampType:	CCV_4		TestCode:	EPA Method 300.0: Anions				
Client ID:	BatchQC		Batch ID:	R16037		RunNo:	16037				
Prep Date:			Analysis Date:	1/10/2014		SeqNo:	461910		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	4.7	0.50	5.000	0	93.3	90	110				

Sample ID	A5		SampType:	CCV_5		TestCode:	EPA Method 300.0: Anions				
Client ID:	BatchQC		Batch ID:	R16037		RunNo:	16037				
Prep Date:			Analysis Date:	1/10/2014		SeqNo:	461922		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	7.9	0.50	8.000	0	98.2	90	110				

Sample ID	A6		SampType: CCV_6		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: R16037		RunNo: 16037					
Prep Date:			Analysis Date: 1/10/2014		SeqNo: 461934		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	12	0.50	12.00	0	102	90	110			

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 greater than 2 for VOA and TOC only. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401404

20-Jan-14

Client: Permits West

Project: Apache SWD Water Samples

Sample ID	A4	SampType:	CCV_4	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	R16037	RunNo:	16037					
Prep Date:		Analysis Date:	1/10/2014	SeqNo:	461946	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	94.4	90	110			

Sample ID	A5	SampType:	CCV_5	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	R16037	RunNo:	16037					
Prep Date:		Analysis Date:	1/10/2014	SeqNo:	461958	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	7.9	0.50	8.000	0	98.6	90	110			

Sample ID	A6	SampType:	CCV_6	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	R16037	RunNo:	16037					
Prep Date:		Analysis Date:	1/11/2014	SeqNo:	461966	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	12	0.50	12.00	0	102	90	110			

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 greater than 2 for VOA and TOC only. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401404

20-Jan-14

Client: Permits West

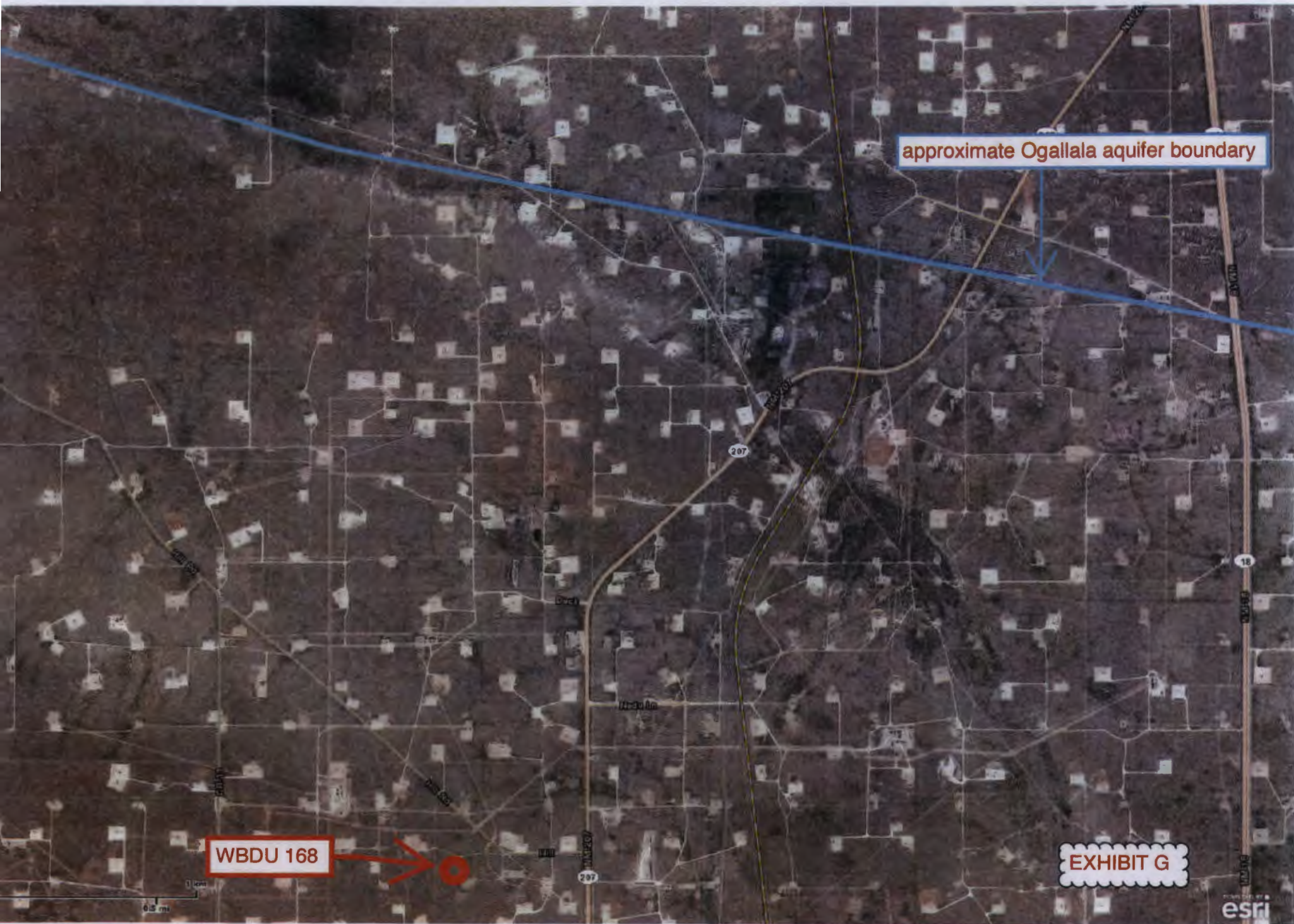
Project: Apache SWD Water Samples

Sample ID: MB-11204	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: PBW	Batch ID: 11204	RunNo: 16069								
Prep Date: 1/13/2014	Analysis Date: 1/14/2014	SeqNo: 462742 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: LCS-11204	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: LCSW	Batch ID: 11204	RunNo: 16069								
Prep Date: 1/13/2014	Analysis Date: 1/14/2014	SeqNo: 462743 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1040	20.0	1000	0	104	80	120			

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 greater than 2 for VOA and TOC only |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |





Geologic Hazards Science Center

EHP Quaternary Faults

Search for fault:

Select a state or region map:

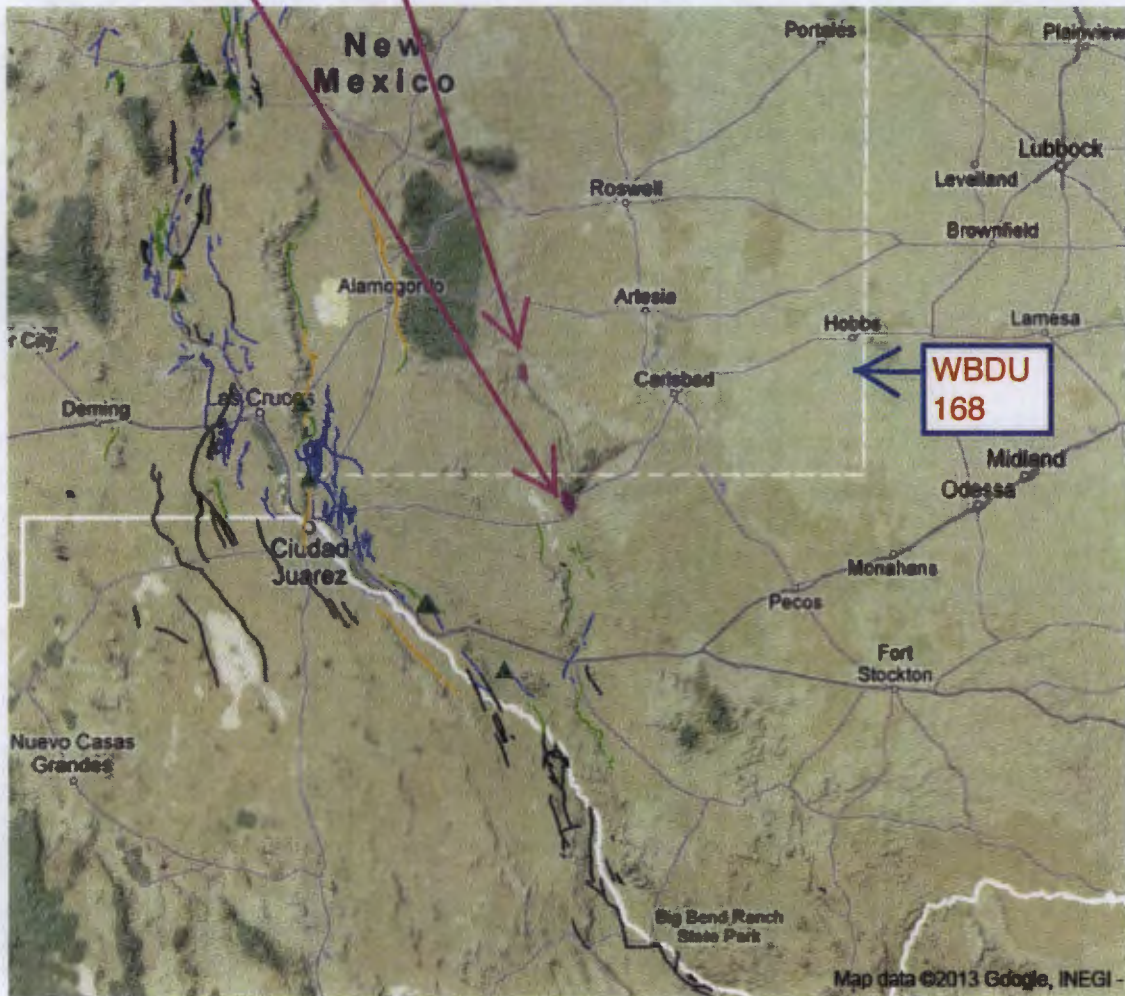


EXHIBIT H

Affidavit of Publication

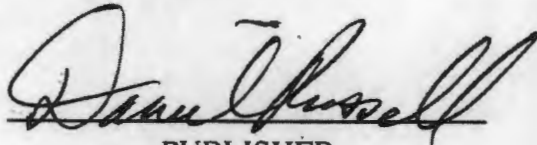
State of New Mexico,
County of Lea.

I, DANIEL RUSSELL
PUBLISHER

of the Hobbs News-Sun, a
newspaper published at Hobbs, New
Mexico, do 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

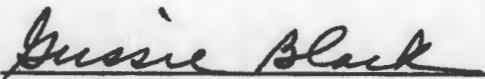
of 1 issue(s).

Beginning with the issue dated
March 13, 2014
and ending with the issue dated
March 13, 2014



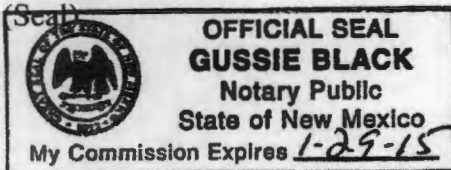
PUBLISHER

Sworn and subscribed to before me
this 13th day of
March, 2014

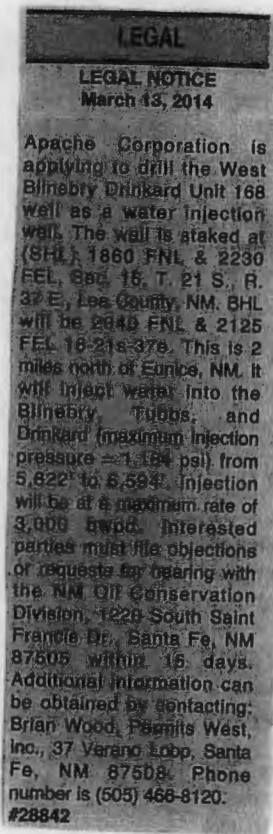


Notary Public

My commission expires
January 29, 2015



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
publication has been made.



02108485

00132403

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

March 24, 2014

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

Apache Corporation is applying (see attached application) to drill 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 = 6,956'
Proposed Injection Zone: Blinebry, Tubb, & Drinkard from 5,822' - 6,594'
Surface Hole Location: 1860' FNL & 2230' FEL Sec. 16, T. 21 S., R. 37 E.
Bottom Hole Location: 2040' 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) 818-1167
Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

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

Please call me if you have any questions.

Sincerely,



Brian Wood

7013 0600 0001 8656 7042

U.S. Postal Service	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage	\$ 1.61
Certified Fee	3.30
Return Receipt Fee (Endorsement Required)	2.70
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.61

Postmark: MAR 24 2014 87552

Sent To: NMSLO

Street, Apt. No., or PO Box No.

City, State, ZIP+4

EXHIBIT J

March 24, 2014

BLM
 620 E. Greene St.
 Carlsbad NM 88220

Apache Corporation is applying (see attached application) to drill 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 = 6,956'
Proposed Injection Zone: Blinebry, Tubb, & Drinkard from 5,822' - 6,594'
Surface Hole Location: 1860' FNL & 2230' FEL Sec. 16, T. 21 S., R. 37 E.
Bottom Hole Location: 2040' 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) 818-1167
Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

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

Please call me if you have any questions.

Sincerely,

Brian Wood

Brian Wood

U.S. Postal Service TM	
CERTIFIED MAIL TM RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage \$	
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.61
Postmark MAR 24 2014 87552	
Sent To BLM	
Street, Apt. No., or PO Box No. Carls	
City, State, ZIP+4	

EXHIBIT J

March 24, 2014

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

Apache Corporation is applying (see attached application) to drill 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 = 6,956'
Proposed Injection Zone: Blinebry, Tubb, & Drinkard from 5,822' - 6,594'
Surface Hole Location: 1860' FNL & 2230' FEL Sec. 16, T. 21 S., R. 37 E.
Bottom Hole Location: 2040' 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) 818-1167
Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

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

Please call me if you have any questions.

Sincerely,

Brian Wood

U.S. Postal Service TM	
CERTIFIED MAIL TM RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage \$	
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$
Postmark MAR 24 2014 87552	
Sent To Chevron	
Street, Apt. No., or PO Box No.	
City, State, ZIP+4	



March 24, 2014

ConocoPhillips
500 Westlake Park Blvd.
Houston TX 77079

Apache Corporation is applying (see attached application) to drill 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 = 6,956'
Proposed Injection Zone: Blinebry, Tubb, & Drinkard from 5,822' - 6,594'
Surface Hole Location: 1860' FNL & 2230' FEL Sec. 16, T. 21 S., R. 37 E.
Bottom Hole Location: 2040' 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) 818-1167
Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

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

Please call me if you have any questions.

Sincerely,

B. Wood

Brian Wood

7013 0600 0001 8656 7072

U.S. Postal Service TM	
CERTIFIED MAIL TM RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage \$	
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees \$	
Postmark Here MAR 24 2014 87552	
Sent To <i>ConocoPhillips</i>	
Street, Apt. No., or PO Box No.	
City, State, ZIP+4	

PS Form 3800, August 2006

EXHIBIT J



March 24, 2014

John H. Hendrix Corp.
P. O. Box 3040
Midland TX 79702

Apache Corporation is applying (see attached application) to drill 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 = 6,956'
Proposed Injection Zone: Blinebry, Tubb, & Drinkard from 5,822' - 6,594'
Surface Hole Location: 1860' FNL & 2230' FEL Sec. 16, T. 21 S., R. 37 E.
Bottom Hole Location: 2040' 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) 818-1167
Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

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

Please call me if you have any questions.

Sincerely,

B. Hendrix

Brian Hendrix

7013 0600 0001 8656 7072

U.S. Postal Service TM	
CERTIFIED MAIL TM RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage \$	
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees \$	
Postmark Here MAR 24 2014 87552	
Sent To <i>Hendrix</i>	
Street, Apt. No., or PO Box No.	
City, State, ZIP+4	

PERMITS WEST .INC.
PROVIDING PERMITS for LAND USERS
17 Vejaro Loop, Santa Fe, New Mexico 87505 (505) 466-8120

March 24, 2014

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

Apache Corporation is applying (see attached application) to drill 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 = 6,956'
Proposed Injection Zone: Blinebry, Tubb, & Drinkard from 5,822' - 6,594'
Surface Hole Location: 1860' FNL & 2230' FEL Sec. 16, T. 21 S., R. 37 E.
Bottom Hole Location: 2040' 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) 818-1167
Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

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

Please call me if you have any questions.

Sincerely,

Brian Wood

Brian Wood

U.S. Postal Service	
CERTIFIED MAIL RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage \$	
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees \$	
Postmark Here MAR 24 2014	
Sent To Oxy	
Street, Apt. No., or PO Box No.	
City, State, ZIP+4	

EXHIBIT J

PERMITS WEST .INC.
PROVIDING PERMITS for LAND USERS
17 Vejaro Loop, Santa Fe, New Mexico 87505 (505) 466-8120

March 24, 2014

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

Apache Corporation is applying (see attached application) to drill 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 = 6,956'
Proposed Injection Zone: Blinebry, Tubb, & Drinkard from 5,822' - 6,594'
Surface Hole Location: 1860' FNL & 2230' FEL Sec. 16, T. 21 S., R. 37 E.
Bottom Hole Location: 2040' 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) 818-1167
Applicant's Address: 303 Veterans Airpark Lane, #3000, Midland, TX 79705

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

Please call me if you have any questions.

Sincerely,

Brian Wood

Brian Wood

U.S. Postal Service	
CERTIFIED MAIL RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage \$	
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees \$	
Postmark Here MAR 24 2014	
Sent To Penroc	
Street, Apt. No., or PO Box No.	
City, State, ZIP+4	



C-108 Review Checklist: Received 03/25/14 Add. Request: Reply Date: Suspended: [Ver 13]

PERMIT TYPE: WFX PMX / SWD Number: 923 Permit Date: 03/30/14 Legacy Permits/Orders: R-12981

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

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

Footages: SHL: 1860 FNL / 2230 FEL
BHL: 2010 FNL / 2125 FEL Lot or Unit G Sec 16 Tsp 215 Rge 3TE County Lea

General Location: North of Ellice (~2 miles) Pool: North Ellice Blueberry - Tubbs Pool No.: 22900

BLM 100K Map: Jal Operator: Apache Corp. OGRID: 873 Contact: Brian Woods / Permits West

COMPLIANCE RULE 5.9: Total Wells: 2907 Inactive: 5 Fincl Assur: Yes Compl. Order? No IS 5.9 OK? Yes Date: 05/30/14

WELL FILE REVIEWED ☒ Current Status: APD / well design

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

Planned Rehab Work to Well: NA new well

Well Construction Details:		Sizes (in)	Setting	Cement	Cement Top and
		Borehole / Pipe	Depths (ft)	(Sx) or Cf	Determination Method
Planned <input checked="" type="checkbox"/> or Existing <u>Surface</u>		<u>11 7/8 / 8 5/8</u>	<u>0 to 1291</u>	<u>430</u>	<u>air to surface</u>
Planned <input type="checkbox"/> or Existing <u>Interm/Prod</u>		<u>11 7/8 / 5 1/2</u>	<u>0 to 6956</u>	<u>None</u>	<u>air to surface</u>
Planned <input type="checkbox"/> or Existing <u>Interm/Prod</u>		<u>-</u>	<u>(MD)</u>	<u>-</u>	<u>-</u>
Planned <input type="checkbox"/> or Existing <u>Prod/Liner</u>		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Planned <input type="checkbox"/> or Existing <u>Liner</u>		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Planned <input checked="" type="checkbox"/> or Existing <u>OH (PERF)</u>		<u>7 7/8 / 5 1/2</u>	<u>5822 to 6594</u>	<u>772</u>	
Injection Stratigraphic Units:		Depths (ft)	Injection or Confining Units	Completion/Operation Details:	
Adjacent Unit: Litho. Struc. Por.				Drilled TD <u>TMD: 6956</u> PBSD <u> </u>	
Confining Unit: Litho. Struc. (Por)				NEW TD <u> </u> NEW PBSD <u> </u>	
Proposed Inj Interval TOP:		<u>5822</u>	<u>Blueberry / Drinkard</u>	NEW Open Hole <input type="checkbox"/> or NEW Perfs <input checked="" type="checkbox"/>	
Proposed Inj Interval BOTTOM:		<u>6594</u>	<u>TUBS</u>	Tubing Size <u>2 3/8</u> in. Inter Coated? <u>Yes</u>	
Confining Unit: Litho. Struc. (Por)			<u>MD</u>	Proposed Packer Depth <u>5722</u> ft	
Adjacent Unit: Litho. Struc. Por.				Min. Packer Depth <u>5722</u> (100-ft limit)	
AOR: Hydrologic and Geologic Information				Proposed Max. Surface Press. <u> </u> psi	
POTASH: R-111-P <u>Noticed? NA</u> BLM Sec Ord <u>66</u> WIPP <u>Noticed? NA</u> SALTSALADO T: <u>1400 B: 2400</u> CLIFF HOUSE <u>NA</u>				Admin. Inj. Press. <u>1120 or 0.2</u> (0.2 psi per ft)	
FRESH WATER: Aquifer <u>Shallow alluvial / Ogallala</u> Max Depth <u>2300</u>				HYDRO AFFIRM STATEMENT By Qualified Person <input checked="" type="checkbox"/>	
NMOSE Basin: <u>Capitan</u> CAPITAN REEF: thru <input type="checkbox"/> ad <input checked="" type="checkbox"/> <u>NA</u> No. Wells within 1-Mile Radius? <u>1 (Drk)</u>				FW Analysis <input checked="" type="checkbox"/>	
Disposal Fluid: Formation Source(s) <u>From Unit / makeup - Freshwater</u>				Analysis? <u>Yes</u> On Lease <input checked="" type="checkbox"/> Operator Only <input type="checkbox"/> or Commercial <input type="checkbox"/>	
Disposal Int: Inject Rate (Avg/Max BWPD): <u>2500/3000</u> Protectable Waters? <u>No</u> Source: <u>Historical</u> System: Closed <input type="checkbox"/> or Open <input checked="" type="checkbox"/>					
HC Potential: Producing Interval? <u>Yes</u> Formerly Producing? <u>Water Flood - Producing</u> Method: Logs/DST/P&A/Other <u> </u> 2-Mile Radius Pool Map <input checked="" type="checkbox"/>					
AOR Wells: 1/2-M Radius Map? <u>Yes</u> Well List? <u>Yes</u> Total No. Wells Penetrating Interval: <u>32</u> Horizontals? <u>No</u>					
Penetrating Wells: No. Active Wells <u>31</u> Num Repairs? <u>0</u> on which well(s)? <u>25 producers / 6 injectors</u> Diagrams? <u>No</u>					
Penetrating Wells: No. P&A Wells <u>1</u> Num Repairs? <u>0</u> on which well(s)? <u> </u> Diagrams? <u>Yes</u>					
NOTICE: Newspaper Date <u>03/15/14</u> Mineral Owner <u>SLO</u> Surface Owner <u>SLO</u> N. Date <u>03/24/14</u>					
RULE 26.7(A): Identified Tracts? <u>Yes</u> Affected Persons: <u>BLM / Chevron / ConocoPhillips / Hendrix Corp</u> N. Date <u>03/24/14</u>					

Permit Conditions: Issues: None

Add Permit Cond: None