



**BOPCO, L. P.**  
6 DESTA DRIVE, SUITE 3700 (79705)  
P. O. BOX 2760  
MIDLAND, TEXAS 79702

(432) 683-2277

FAX (432) 687-0329

November 2, 2012

**Re: Notice of Application for Authorization  
to Complete this well as a SWD Well  
PLU Pierce Canyon 3 Federal SWD #1  
Eddy County, New Mexico  
File: 100-WF: PLUPC3FedSWD1.C108**

Oil Conservation Division  
Attention: William Jones  
1220 S. St. Francis  
Santa Fe, New Mexico 87505

Mr. Jones:

Enclosed please find BOPCO, L.P.'s **Application for Authorization to Drill and Complete** this well for disposal purposes only into the PLU Pierce Canyon 3 Federal SWD, #1 Located in Section 3, T25S, R30E, Eddy County, New Mexico.

The subject well is on Federal land and a complete copy of the application has been sent to the BLM's Carlsbad office via Certified Mail, Cert #7160-3901-9846-4644-7959. Please find a copy of the notice attached. I will provide a copy of the signed receipt card when it returns.

If additional information is required, please contact Emma Z. Galindo at the letterhead address, phone number or via email at [ezgalindo@basspet.com](mailto:ezgalindo@basspet.com).

Sincerely,



Emma Z. Galindo  
Engineering Assistant

ezg  
Attachments

CC: BLM

RECEIVED  
2012 10 31 5 12 07

**APPLICATION FOR AUTHORIZATION TO INJECT**

I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance  X  Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval?  X  Yes \_\_\_\_\_ No

II. OPERATOR: BOPCO, L.P.

ADDRESS: P O Box 2760, Midland, TX 79702

CONTACT PARTY: Emma Z. Galindo PHONE: (432)683-2277

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  X  No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_

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.

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).

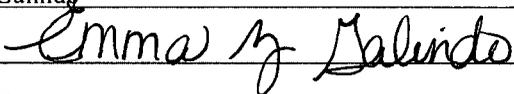
\*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

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: Emma Z. Galindo TITLE: Engineering Assistant

SIGNATURE:  DATE: 10/31/2012

E-MAIL ADDRESS: ezgalindo@basspet.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: *Attached*

- (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.

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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.

III. Well Data

A. 1) Lease name: **PLU Pierce Canyon 3 Federal SWD**  
 Well #: **1**  
 Section: **3**  
 Township: **T25S**  
 Range: **30E**  
 Footage: **814' FNL & 1630' FEL**

2) Casing Info:

Casing size	Set depth	Sacks cmt	Hole size	TOC	Method
30", 157.68#, X52, PE	120		36"	Surface	Circulated
20, 133#, J-55, BTC	1336	2,690	26"	Surface	Circulated
13-3/8", 68#, HC80, BTC	4,000	2,985	17-1/2"	Surface	Circulated
9-5/8", 53.50#, L-80, LT&C	7,500	965	12-1/4"	Surface	Circulated
9-5/8", 53.50#, HCL-80, LT&C *	11,289	940	12-1/4"	Surface	Circulated
7-5/8", 39#, P-110, Ultra FJ	11,089-14,500	450	8-1/2"	TO T.O.L.	Circulated
7-5/8", 42.80#, P-110, Ultra FJ	14,500-16,500		8-1/2"		

\*\*DV Tool @ 5,500'

3) Tubing to be used (size, lining material, setting depth):  
**4-1/2" 12.75#, L-80, RTS-8 IPC tbg set @16,450'.**

4) Name, model, and depth of packer to be used:  
**4-1/2" Baker FA Nickel Plated EXT/INT PC Pkr set @ 16,450'.**

B. 1) Name of the injection formation and, if applicable, the field or pool name:  
**Devonian**

2) The injection interval and whether it is perforated or open hole:  
**Open hole from 16,471 - 18,275 O.H.**

3) State if the well was drilled for injection or, if not, the original purpose of the well:  
**Newly drilled well for injection.**

4) Give the depths of any other perforated intervals and detail on the sacks of cement or BPs used to seal off such perforations:  
**NA**

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:  
**Higher: Bone Spring - 7,736' Lower: None**

### C-108 DATA

- 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 wells type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

**There are not wells that penetrate the proposed injection zone.**

- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected: **30,000 average, 35,000 maximum BWPD**
  2. Whether the system is open or closed: **closed**
  3. Proposed average and maximum injection pressure: **3,294 psi average, 2,000 psi maximum**
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water: Produce water will come from the Delaware formation.
  5. If injection is for disposal purposes into a zone not productive of oil & gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water: N/A

- 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 TDS 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:

**Lithologic Detail: Carbonate**  
**Geological Name: Devonian**  
**Thickness: 1804'**  
**Depth: 16,471 - 18,275'**

**The Rustler Formation is a known source of fresh water throughout this geographic area. Average depth of Rustler is 148-540'. No sources of fresh water are known to exist below the proposed disposal zone.**

- IX. Describe the proposed stimulation program, if any:  
**The open hole section from 16,500-18,275' will be acidized with approximately 50 gallons 15% NEFE HCl per foot for a total of 88,750 gallons.**
- X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted.)  
**Logs will be submitted. This will be a newly drilled well.**
- 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.  
**No known fresh water wells within one mile of proposed well, however, there is a stock tank (livestock watering) in Section 12, T25S, R30E.**
- 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 hydrology connection between the disposal zone and any underground sources of drinking water.  
**Applicant hereby affirms that he has examined the available geologic and engineering data and finds no evidence of open faults, or other hydrologic connection between the disposal zone and any underground source of drinking water.**



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

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

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

POD Number	Sub basin	Use	County	Q Q Q				Sec	Tws	Rng	X	Y	Depth	Depth	Water
				64	16	4	4						Well	Water	Column
C 01379	STK	ED	ED	4	4	3	10	25S	30E	606571	3556355*	400			
C 02245	STK	ED	ED	1	1	12	25S	30E	609311	3557710*	475				
													Average Depth to Water:	--	
													Minimum Depth:	--	
													Maximum Depth:	--	

↓  
Stock Tank

**Record Count: 2**

Basin/County Search:

Basin: Carlsbad

County: Eddy

PLSS Search:

Township: 25S

Range: 30E

\*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.



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*New Mexico Office of the State Engineer*  
**Active & Inactive Points of Diversion**  
(with Ownership Information)

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No PODs found.

**POD Search:**

POD Basin: Carlsbad

**Basin/County Search:**

Basin: Carlsbad

County: Eddy

**PLSS Search:**

Section(s): 3

Township: 25S

Range: 30E



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

No records found.

**PLSS Search:**

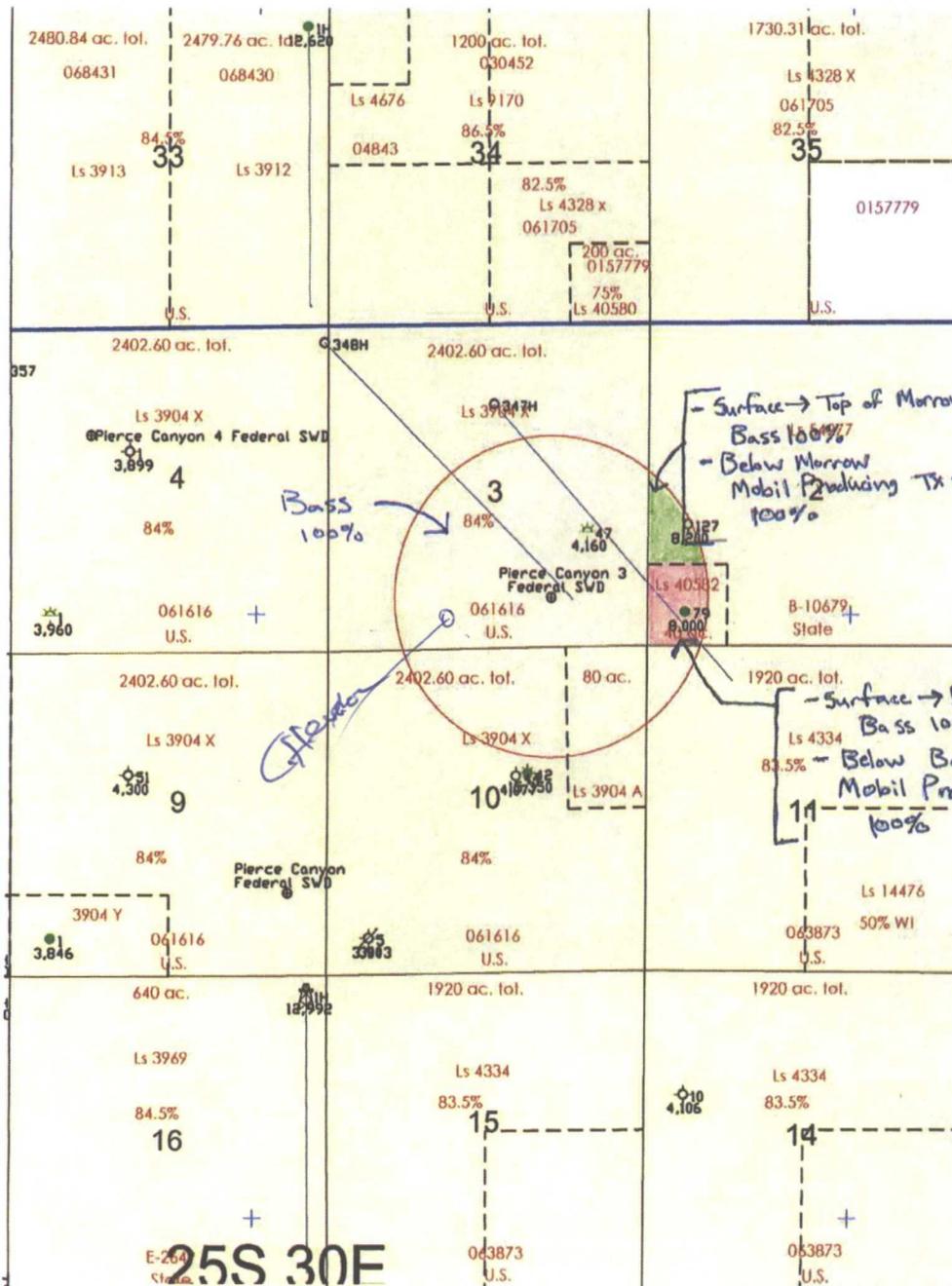
Section(s): 3

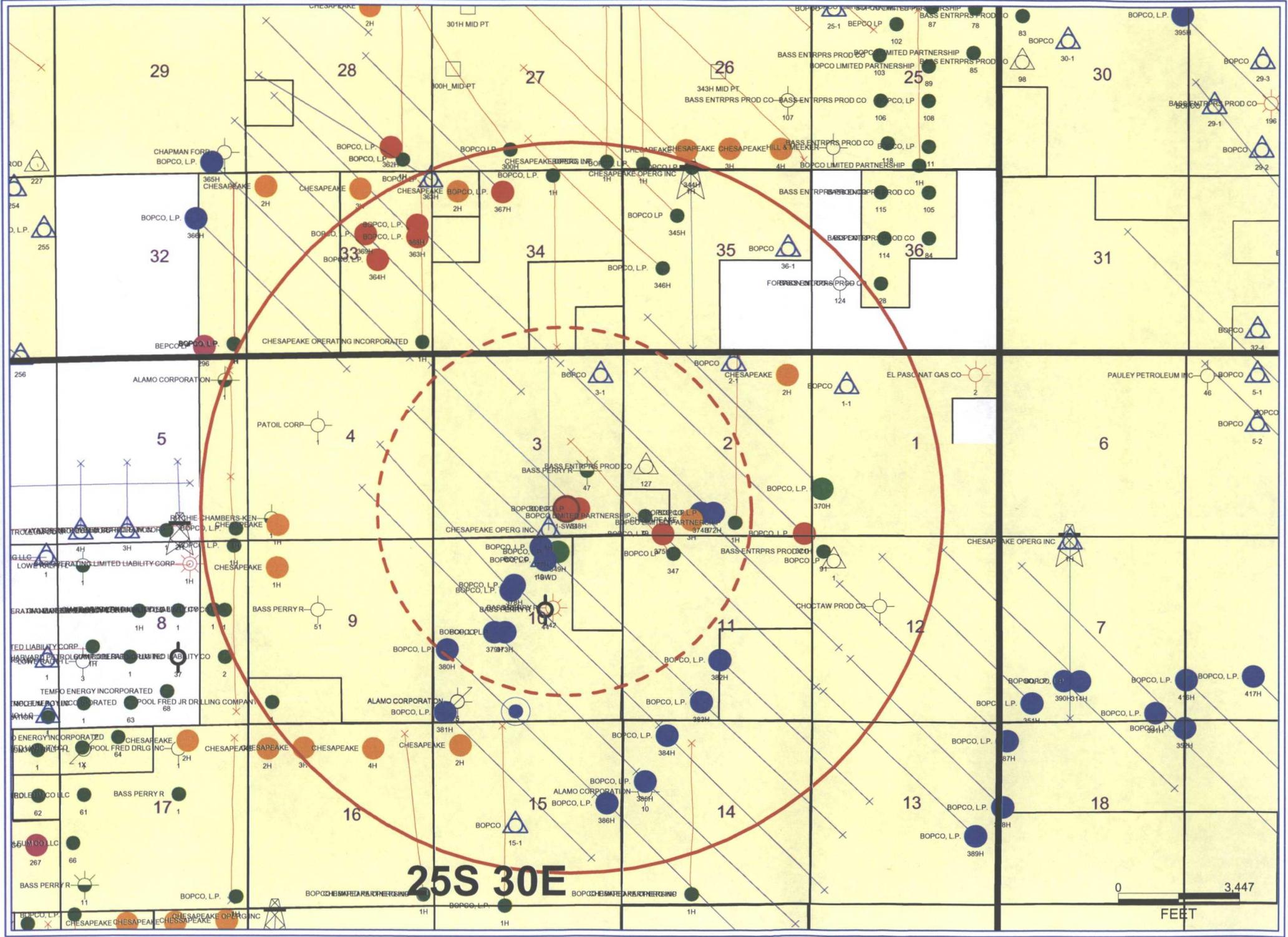
Township: 25S

Range: 30E

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.







25S 30E

0 3,447  
FEET



**PROPOSED WELLBORE DIAGRAM**

Lease: PLU Pierce Canyon 3 Federal SWD Well No.: 1  
 Injection  
 Reservoir: Devonian  
 Location: 814' FSL & 1630' FEL S3-T25S-R30E  
 County: EDDY St: NM API: 30-015-

**Surface Csg.**

Size: 20"  
 Wt: 94#  
 Grd: J-55, BTC  
 Set @: 1336'  
 Sxs cmt: 2690  
 TOC: Surface  
 Hole Size: 26"

**Intermediate Csg.**

Size: 13 3/8"  
 Wt: 68#  
 Grd: HCN-80, BTC  
 Set @: 4000'  
 Sxs Cmt: 2985  
 TOC: Surface  
 Hole Size: 17 1/2"

**Production Csg.**

Size: 9 5/8"  
 Wt: 53.5#  
 Grd: L-80, LT&C  
 Set @: 11289'  
 Sxs Cmt: 1905  
 TOC: Surface  
 Hole Size: 17 1/4"

**Liner**

Size: 7 5/8"  
 Wt: 39#  
 Grd: P-110 FJ  
 Set @: 11,289'-16,500'  
 Sxs Cmt: 450  
 TOC: 11,089'  
 Hole Size: 8 1/2"

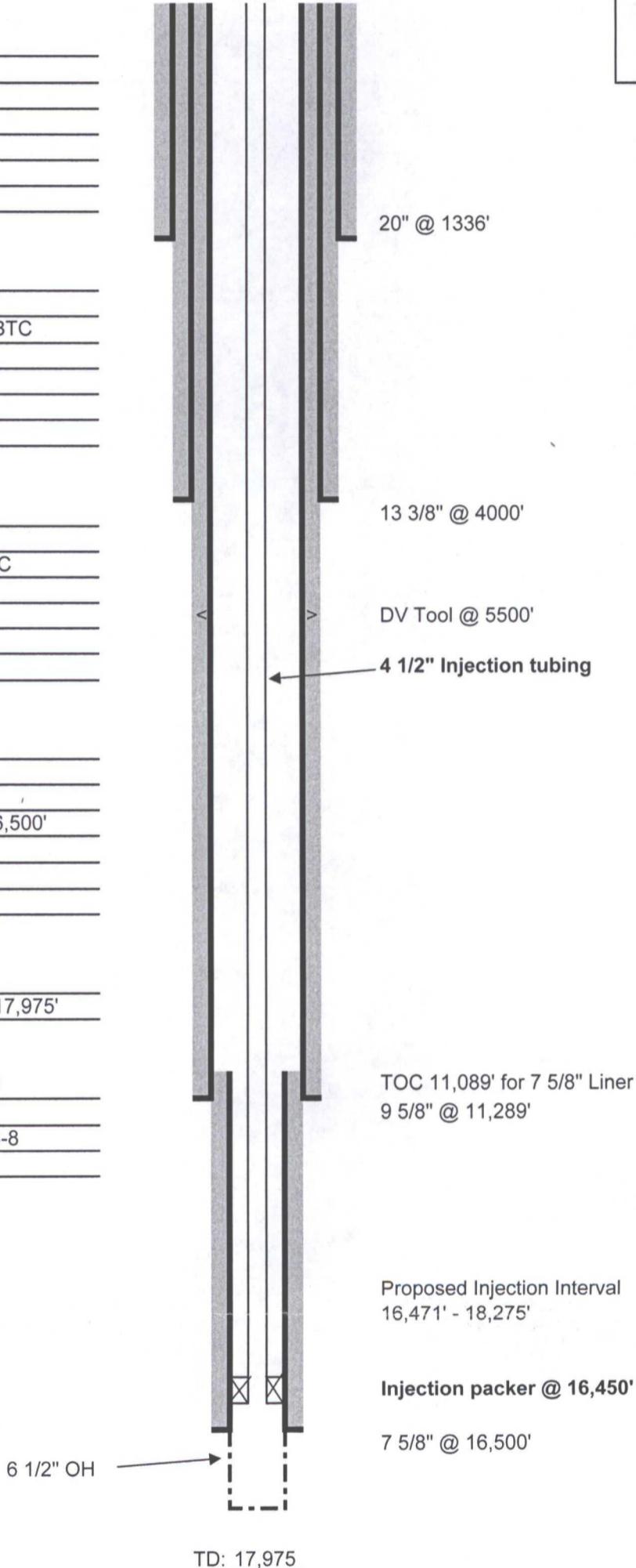
**Open Hole**

Size: 6 1/2"  
 Depth: 16,500' - 17,975'

**Tubing**

Size: 4 1/2" IPC  
 Wt: 12.75#  
 Grd: L-80, RTS-8  
 Set @: 16,450'

Elevation GL:  
 Elevation KB:  
 Spud:  
 Completed



Updated: 10/29/2012  
 Author: ezg  
 Engr: CCC

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II  
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised July 18, 2010

Submit one copy to appropriate  
District Office

**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code 96047	Pool Name Poker Lake SW (Delaware)
Property Code 306402	Property Name PLU PIERCE CANYON 3 FEDERAL SWD	Well Number 1
OGRID No. 260737	Operator Name BOPCO, L.P.	Elevation 3321'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	3	25 S	30 E		814	SOUTH	1630	EAST	EDDY

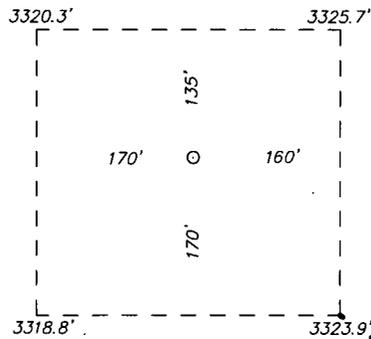
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County				
<table border="1"> <tr> <td>Dedicated Acres 40</td> <td>Joint or Infill</td> <td>Consolidation Code</td> <td>Order No.</td> </tr> </table>										Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.										

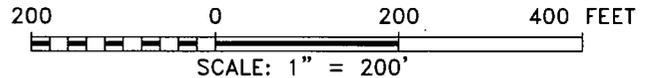
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p><b>OPERATOR CERTIFICATION</b></p> <p><i>I hereby certify that the information contained 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>Signature _____ Date _____</p> <p><u>Jeremy Braden</u> Printed Name <u>jdbraden@basspet.com</u> Email Address</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p><i>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.</i></p> <p>Date Surveyed _____</p> <p>Signature &amp; Seal of Professional Surveyor _____</p> <p></p>
	<p>Certificate No. Gary L. Jones 7977</p>
	<p>BASIN SURVEYS 25011</p>

SECTION 3, TOWNSHIP 25 SOUTH, RANGE 30 EAST, N.M.P.M.,  
 EDDY COUNTY, WELL PAD LAYOUT NEW MEXICO.



**BOPCO, L.P.**  
**PLU PIERCE CANYON 3 FEDERAL SWD #1**  
**ELEV. - 3321'**  
 Lat - N 32°09'16.40"  
 Long - W 103°51'54.03"  
 NMSPCE - N 420264.309  
 E 644935.227  
 (NAD-27)



Directions to Location:

FROM THE JUNCTION OF BUCK JACKSON AND ROCK DOVE, GO NORTH ON BUCK JACKSON FOR 2.5 MILES TO LEASE ROAD, ON LEASE ROAD GO SOUTHWEST 1.4 MILES TO PROPOSED LEASE ROAD.

**BASIN SURVEYS** P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 25011 Drawn By: J. SMALL

Date: 08-22-2011 Disk: JMS 25011

**BOPCO, L.P.**

REF: PLU PIERCE CANYON 3 FEDERAL SWD #1 / WELL PAD TOPO

THE PLU PIERCE CANYON 3 FEDERAL SWD #1 LOCATED 814'

FROM THE SOUTH LINE AND 1630' FROM THE EAST LINE OF

SECTION 3, TOWNSHIP 25 SOUTH, RANGE 30 EAST,

N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 08-18-2011 Sheet 1 of 6 Sheets



**PLU PIERCE CANYON 3 FEDERAL SWD #1**

Located 814' FSL and 1630' FEL  
 Section 3, Township 25 South, Range 30 East,  
 N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (575) 393-7316 - Office  
 (575) 392-2206 - Fax  
 basinsurveys.com

W.O. Number: JMS 25011

Survey Date: 08-18-2011

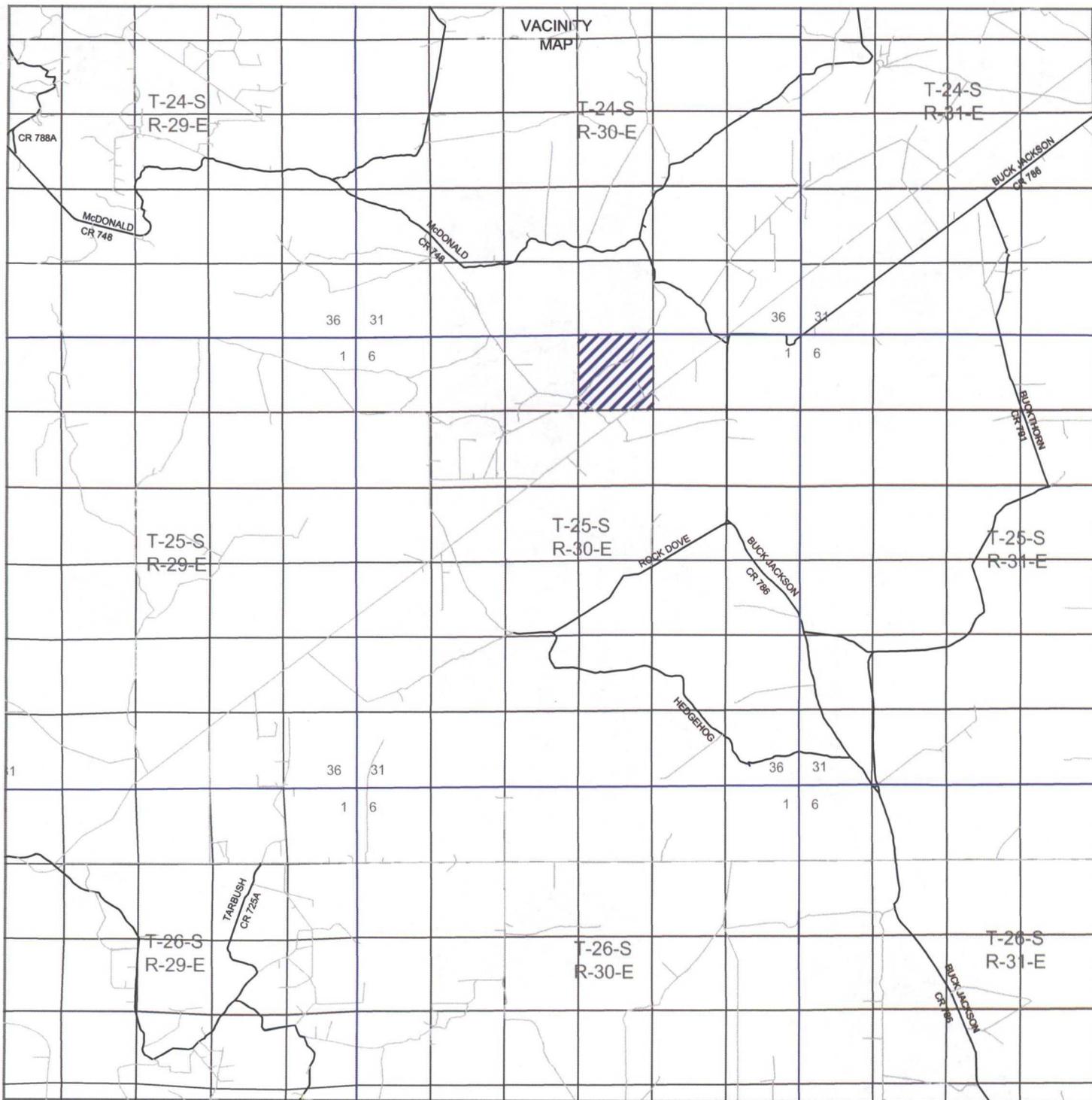
Scale: 1" = 2000'

Date: 08-22-2011



**BOPCO, L.P.**

Sheet 2 of 6 Sheets



**PLU PIERCE CANYON 3 FEDERAL SWD #1**

Located 814' FSL and 1630' FEL  
 Section 3, Township 25 South, Range 30 East,  
 N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (575) 393-7316 - Office  
 (575) 392-2206 - Fax  
 basinsurveys.com

W.O. Number: JMS 25011

Survey Date: 08-18-2011

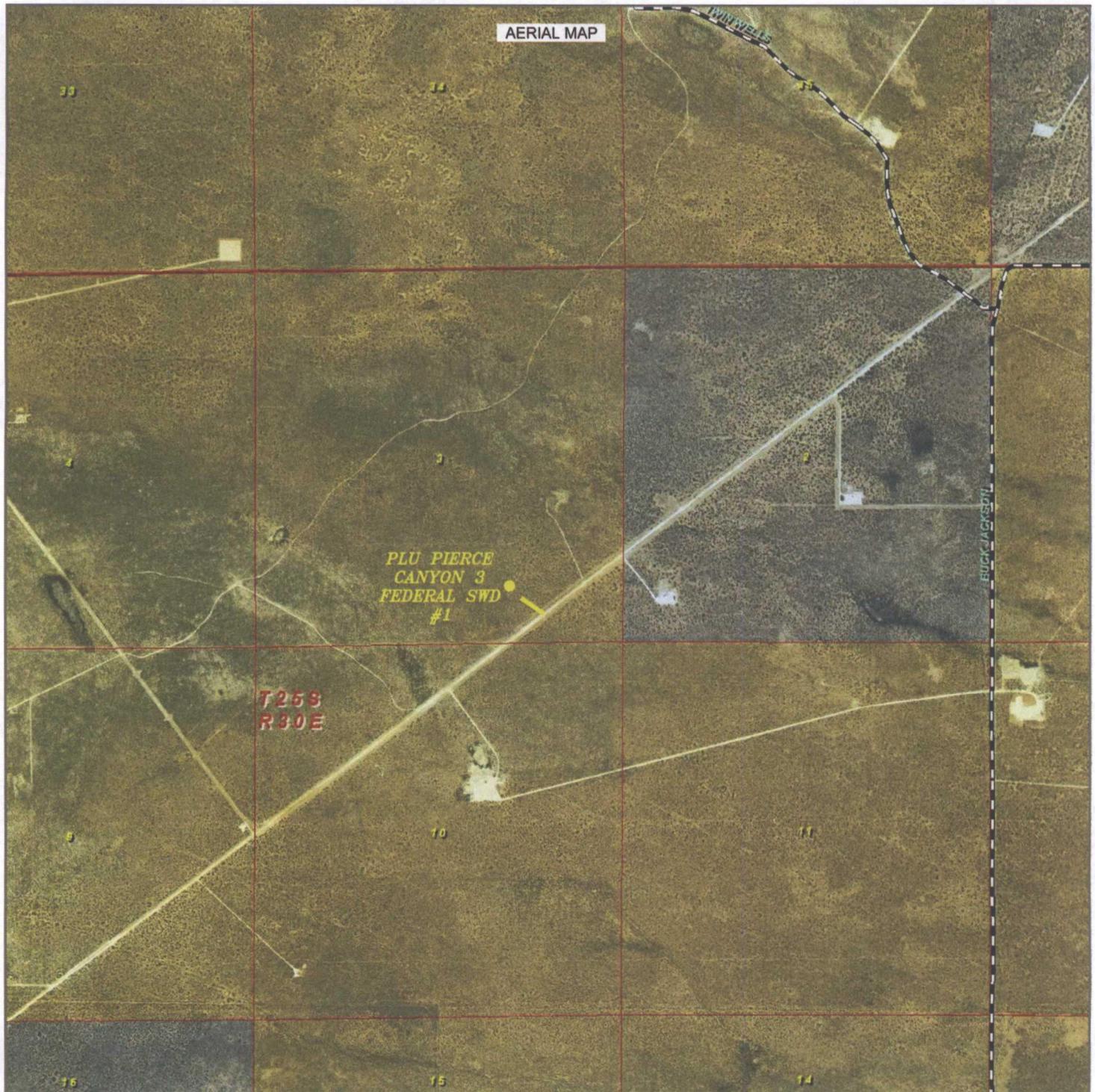
Scale: 1" = 2 Miles

Date: 08-22-2011



**BOPCO, L.P.**

Sheet 3 of 6 Sheets



**PLU PIERCE CANYON 3 FEDERAL SWD #1**  
 Located 814' FSL and 1630' FEL  
 Section 3, Township 25 South, Range 30 East,  
 N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (575) 393-7316 - Office  
 (575) 392-2206 - Fax  
 basinsurveys.com

W.O. Number: JMS 25011

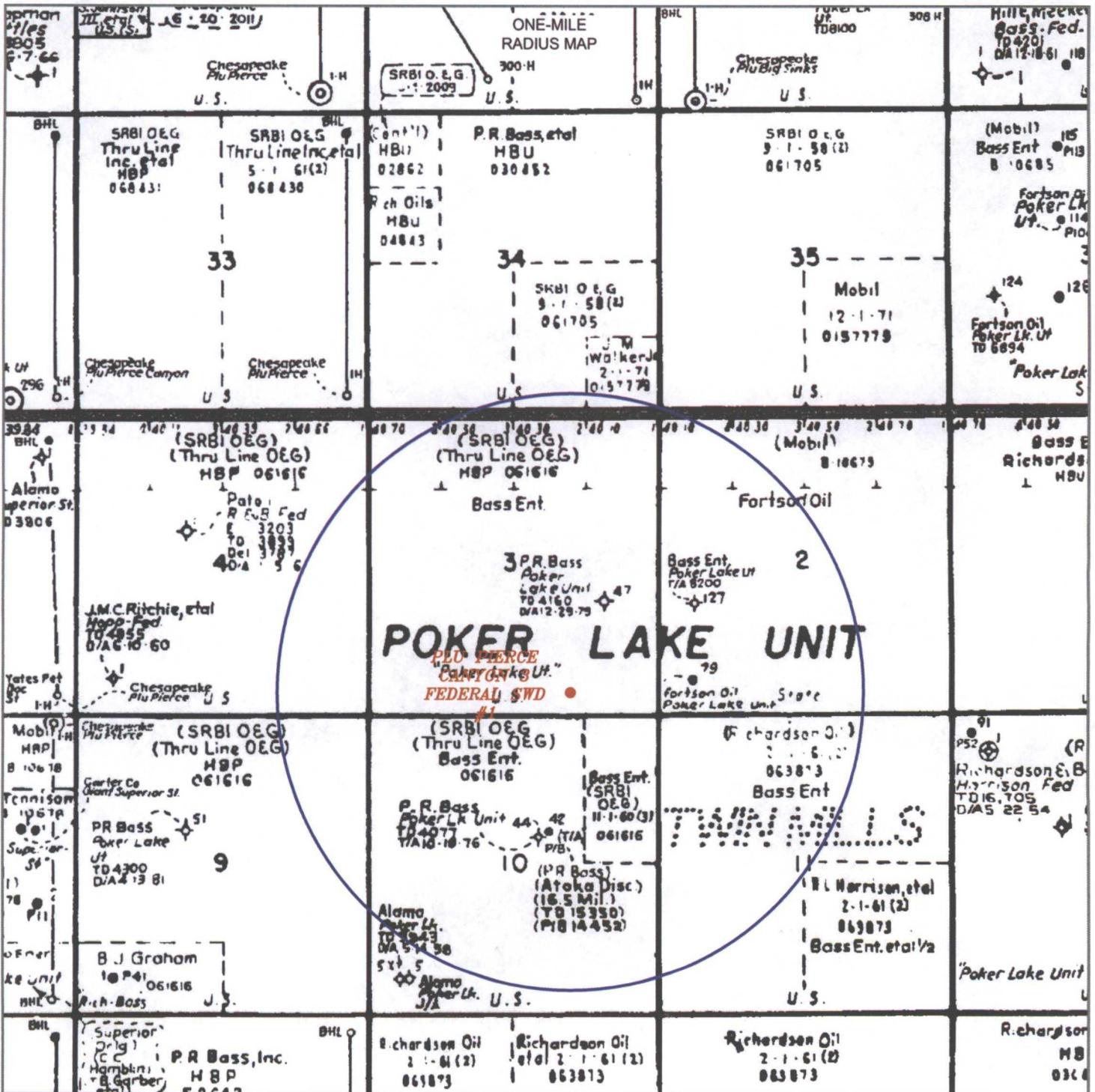
Scale: 1" = 2000'

YELLOW TINT - USA LAND  
 BLUE TINT - STATE LAND  
 NATURAL COLOR - FEE LAND



**BOPCO, L.P.**

Sheet 4 of 6 Sheets



**PLU PIERCE CANYON 3 FEDERAL SWD #1**  
 Located 814' FSL and 1630' FEL  
 Section 3, Township 25 South, Range 30 East,  
 N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (575) 393-7316 - Office  
 (575) 392-2206 - Fax  
 basinsurveys.com

W.O. Number: JMS 25011

Scale: None

YELLOW TINT - USA LAND  
 BLUE TINT - STATE LAND  
 NATURAL COLOR - FEE LAND

**BOPCO, L.P.**

Sheet 5 of 6 Sheets

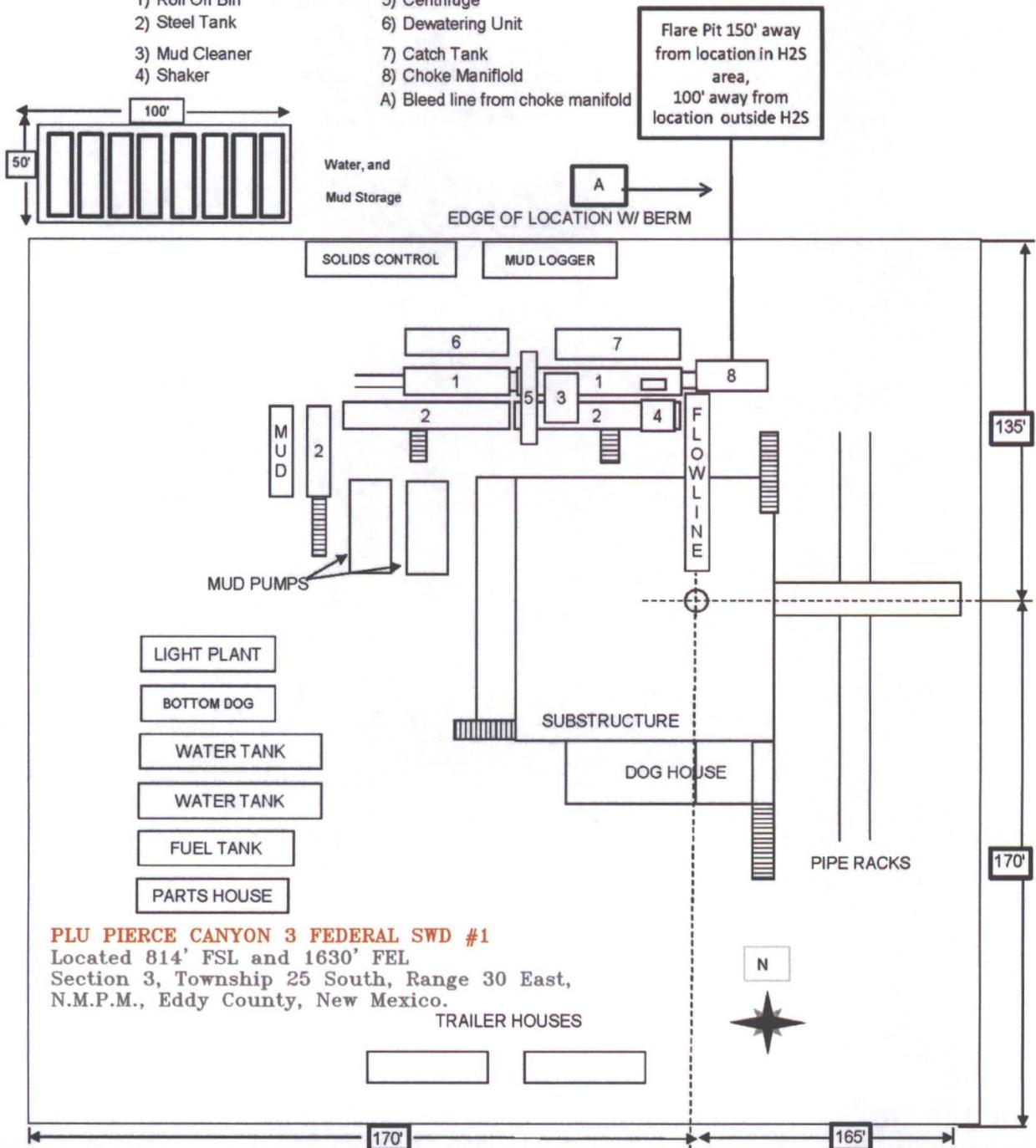


RIG LAYOUT

Exhibit "D"

RIG LAYOUT SCHEMATIC  
INCLUSIVE OF CLOSED-LOOP DESIGN PLAN  
Solids Control Equipment Legend

- 1) Roll Off Bin
- 2) Steel Tank
- 3) Mud Cleaner
- 4) Shaker
- 5) Centrifuge
- 6) Dewatering Unit
- 7) Catch Tank
- 8) Choke Manifold
- A) Bleed line from choke manifold



**PLU PIERCE CANYON 3 FEDERAL SWD #1**  
 Located 814' FSL and 1630' FEL  
 Section 3, Township 25 South, Range 30 East,  
 N.M.P.M., Eddy County, New Mexico.

TRAILER HOUSES



P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (575) 393-7316 - Office  
 (575) 392-2206 - Fax  
 basinsurveys.com

W.O. Number: JMS 25011  
 Survey Date: 08-18-2011  
 Scale: 1" = 2000'  
 Date: 08-22-2011



BOPCO, L.P.

Sheet 6 of 6 Sheets

20" OD Surface casing is to be set into the Rustler below all fresh water sands at an approximate depth of 930' and cement circulated to surface.

13-3/8" OD salt protection casing will be set into the Lamar Lime at 4,115'. Cement will be circulated to surface.

9-5/8" OD protection\production casing will be set at approximately 300' into the Wolfcamp formation @ TVD of 11,289' and cemented in two stages with DV tool set at approximately 5,500'. Cement will be circulated to surface.

Drilling procedure, BOP diagram, and anticipated tops are attached.

This well is located outside the R111 Potash area and Secretary's Potash area.

The surface location is nonstandard and located inside the Poker Lake Unit.

**Surface Lease Numbers- Federal Lease: NMCL 0061616A**

BOPCO, L.P., at P. O. Box 2760, Midland, TX, 79702 is a subsidiary of BOPCO, L.P., 201 Main Street, Ft. Worth, TX, 76102. Bond No. COB000050 (Nationwide).

**Galindo, Emma Z.**

---

**From:** Braden, Jeremy D.  
**Sent:** Friday, October 19, 2012 9:03 AM  
**To:** Galindo, Emma Z.  
**Subject:** FW: PLU SWD Devonian Info for BLM

Emma

Here is the additional geo tops for the SWD wells.

Let me know if you have any questions.

**Jeremy Braden**  
**BOPCO L.P.**  
**Engineering Assistant**  
**432-683-2277 (office)**  
**432-312-1113 (cell)**  
**432-221-7343 (direct)**

---

**From:** Pregger, Brian  
**Sent:** Wednesday, October 17, 2012 4:45 PM  
**To:** Braden, Jeremy D.  
**Cc:** Johnson, Steve F; Martinez, Stephen M.  
**Subject:** PLU SWD Devonian Info for BLM

Jeremy:

Please provide the BLM with the following new formation top information relative to the Poker Lake SWD wells that we are permitting.

	<u>Delaware B 23 Federal SWD #1</u>	<u>Pierce Canyon 3 Federal SWD #1</u>
Ordovician Montoya	17,385'	17,570'
TD	17,785'*	17,975'*

\*reported on submitted prognosis

The Ordovician Montoya top represents the base of the Devonian. The Montoya is a limestone that we will drill into to get rat hole for our logs; it is tight and will not be an injection zone. We have designed our TD depths several hundred feet below the Montoya top in case the top comes in low. If the Montoya top comes in as expected we will only drill into it deep enough to get rat hole.

Brian H. Pregger

BOPCO, L.P.  
201 Main St., Suite 2900  
Fort Worth, TX 76102

[bpregger@basspet.com](mailto:bpregger@basspet.com)  
817-390-8662

**EIGHT POINT DRILLING PROGRAM  
BOPCO, L.P.**

**NAME OF WELL: PLU Pierce Canyon 3 Federal SWD 1**

LEGAL DESCRIPTION - SURFACE: 814' FSL, 1,630' FEL, Section 3, T25S, R30E, Eddy County, NM.

**POINT 1: ESTIMATED FORMATION TOPS** (See No. 2 Below)

**POINT 2: WATER, OIL, GAS AND/OR MINERAL BEARING FORMATIONS**

Anticipated Formation Tops: KB 3,346' (estimated)

GL 3,321'

Formation Description	Est from KB (TVD)	Est (MD)	SUB-SEA TOP	BEARING
T/Fresh Water	400'	400'	+ 2,791'	Fresh Water
T/Rustler	946'	946'	+ 2,400'	Barren
T/Salado	1,346'	1,346'	+ 2,000'	Barren
T/Lamar	3,948'	3,948'	- 602'	Oil/Gas
Delaware Sand	3,981'	3,981'	- 635'	Oil/Gas
Bone Spring	7,736'	7,736'	- 4,390'	Oil/Gas
Wolfcamp	10,989'	10,989'	- 7,643'	Oil/Gas
Middle Wolfcamp	12,339'	12,339'	- 8,993'	Oil/Gas
Strawn	13,369'	13,369'	- 10,023'	Oil/Gas
Atoka	13,434'	13,434'	- 10,088'	Oil/Gas
Morrow	14,196'	14,196'	- 10,850'	Oil/Gas
Middle Morrow	14,761'	14,761'	- 11,415'	Oil/Gas
Lower Morrow	15,245'	15,245'	- 11,899'	Oil/Gas
Mississippian Lime	16,031'	16,031'	- 12,685'	Oil/Gas
Woodford	16,331'	16,331'	- 12,985'	Oil/Gas
Devonian	16,471'	16,471'	- 13,125'	Disposal Zone
TD	17,975'	17,975'	- 14,629'	Disposal Zone

**POINT 3: CASING PROGRAM**

TYPE	INTERVAL MD	HOLE SIZE	PURPOSE	INSTALLATION TYPE
30"	0' - 120'	36"		
20", 133 ppf, J-55, BTC	0' - 1,336'	26"	Surface	New
13-3/8", 68 ppf, HCN-80, BTC	0' - 4,000'	17-1/2"	Potash	New
9-5/8", 53.50 ppf, L-80, LTC	0' - 7,500'	12-1/4"	Production	New
9-5/8", 53.50 ppf, HCL-80, LTC	7,500' - 11,289'	12-1/4"	Production	New
7-5/8", 39 ppf, P-110 Ultra FJ	11,089' - 14,500'	8-1/2"	Prod. Liner	New
7-5/8", 42.80 ppf, P-110 Ultra FJ	14,500' - 16,500'	8-1/2"	Prod Liner.	New

**CASING DESIGN SAFETY FACTORS:**

<b>TYPE</b>	<b>TENSION</b>	<b>COLLAPSE</b>	<b>BURST</b>
20", 94 ppf, J-55, BTC	13.92	2.29	2.89
13-3/8", 68 ppf, HCN-80, BTC	6.78	1.29	2.25
9-5/8", 53.50 ppf, L-80, LTC	2.41	1.35	1.67
9-5/8", 53.50 ppf, HCL-80, LTC	7.18	1.50	1.66
7-5/8", 39 ppf, P-110 Ultra FJ	10.72	1.14	1.60
7-5/8", 42.80 ppf, P-110 Ultra FJ	15.10	1.29	1.77

**DESIGN CRITERIA AND CASING LOADING ASSUMPTIONS:**SURFACE CASING - (20")

- Tension A 1.6 design factor utilizing the effects of buoyancy (9.2 ppg).
- Collapse A 1.0 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.48 psi/ft). The effects of axial load on collapse will be considered.
- Burst A 1.3 design factor with a surface pressure equal to the fracture gradient at setting depth less a gas gradient to the surface. Internal burst force at the shoe will be fracture pressure at that depth. Backup pressure will be formation pore pressure. In all cases a conservative fracture pressure will be used such that it represents the upper limit of potential fracture resistance up to a 1.0 psi/ft gradient. The effects of tension on burst will not be utilized.

PROTECTIVE CASING - (13-3/8")

- Tension A 1.6 design factor utilizing the effects of buoyancy (10.2 ppg).
- Collapse A 1.125 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.
- In the case of development drilling, collapse design should be analyzed using internal evacuation equal to 1/3 the proposed total depth of the well. This criterion will be used when there is absolutely no potential of the protective string being used as a production casing string.
- Burst A 1.0 surface design factor and a 1.3 downhole design factor with a surface pressure equivalent to the fracture gradient at setting depth less a gas gradient to the surface. Internal burst force at the shoe will be fracture pressure at that depth. Back pressure will be formation pore pressure. In all cases a conservative fracture pressure will be used such that it represents the upper limit of potential fracture resistance up to a 1.0 psi/ft gradient.

Production CASING - (9-5/8")

- Tension A 1.6 design factor utilizing the effects of buoyancy (9.5 ppg).
- Collapse A 1.125 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.48 psi/ft). The effects of axial load on collapse will be considered.
- Burst A 1.25 design factor with anticipated maximum tubing pressure (5000 psig) on top of the maximum anticipated packer fluid gradient. (0.433 psi/ft) Backup on production strings will be formation pore pressure. (0.433 psi/ft) The effects of tension on burst will not be utilized.

Production Liner - (7-5/8")

- Tension A 1.6 design factor utilizing the effects of buoyancy (12.5 ppg).
- Collapse A 1.125 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.48 psi/ft). The effects of axial load on collapse will be considered.
- Burst A 1.25 design factor with anticipated maximum tubing pressure (5000 psig) on top of the maximum anticipated packer fluid gradient. (0.433 psi/ft) Backup on production strings will be formation pore pressure. (0.433 psi/ft) The effects of tension on burst will not be utilized.

#### **POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM 1 & 2)**

The BOPE when rigged up on the 20" surface casing head (17-1/2" hole) will consist of 20" hydril and diverter system per Diagram B (2,000 psi WP). The hydril when installed on surface casing will be tested to 1,000 psi. There will be a 6", 5000 psi gate valve installed on the drilling spool for fill up. The choke manifold system will be rigged up to the hydraulic gate valve on the drilling spool.

The BOPE when rigged up on the 13-3/8" intermediate casing head (12-1/4" open hole) will consist of 13-5/8" X 10,000 psi annular, (2) 13-5/8" x 10,000 psi pipe rams & (1) blind ram with mud cross, choke manifold, chokes, and hydril per Diagram 1 (5,000 psi WP). The pipe and blind rams, choke, kill lines, kelly cocks, inside BOP, etc. when installed on the surface casing head will be hydro-tested to 250-300 psig and 2000 psig by independent tester. The hydril when installed on surface casing head will be tested to 1000 psi.

The BOPE when rigged up on the 9-5/8" production casing spool (8-3/4" open hole) will consist of 13-5/8" x 10,000 psi annular, (2) 13-5/8" x 10,000 psi pipe rams & (1) blind ram with mud cross, choke manifold and chokes as in Diagram 1. The pipe and blind rams, choke, kill lines, kelly cocks inside BOP, etc. will be tested to 3000 psig by independent tester. In addition to the high pressure test, a low pressure (250-300 psig) test will be required. Hydril will be tested to 1500 psig.

The BOPE when rigged up on the 9-5/8" production casing spool (6-1/8" open hole) will consist of 13-5/8" x 10,000 psi annular, (2) 13-5/8" x 10,000 psi pipe rams & (1) blind ram with mud cross choke manifold and chokes as in Diagram 1. The pipe and blind rams, choke, kelly lines, kelly cocks inside BOP, etc. will be tested to 3000 psig by independent tester. In addition to the high pressure test, a low pressure (250-300 psig) test will be required. Hydril will be tested to 1500 psig.

These tests will be performed:

- a) Upon installation
- b) After any component changes
- c) Thirty days after a previous test
- d) As required by well conditions

A function test to insure that the preventers are operating correctly will be performed on each trip.

BOPCO, L.P. would like to request a variance to use an armored, 3" or 3.5", 10,000 psi WP flex hose for the choke line in the drilling of the well if the rig is equip with hose. (See specification for hose that might be used, attached with APD exhibits). This is rig equipment and will help quicken nipple up time thus saving money without a safety problem. The hose itself is rated to 10,000 psi ,and has 10,000 psi flanges on each end. This well is to be drilled to 17,785' MD (17,785' TVD) and max surface pressure should be +/- 4410.68 psi as prescribed in onshore order #2 shown as max BHP minus 0.22 psi/ft.

**Please refer to diagram 2 for choke manifold and closed loop system layout. If an armored flex hose is utilized, the company man will have all of the proper certified paper work for that hose available on location. Please refer to diagram 2 for choke manifold and closed loop system layout.**

**POINT 5: MUD PROGRAM**

<u>DEPTH</u>	<u>MUD TYPE</u>	<u>WEIGHT</u>	<u>FV</u>	<u>PV</u>	<u>YP</u>	<u>FL</u>	<u>Ph</u>
0 – 1,336'	FW Spud Mud	8.5 – 9.2	70-40	20	12	NC	10.0
1,336' - 4,000'	Brine Water	9.8 – 10.2	28-32	NC	NC	NC	10.0
4,000' – 9,000'	FW/Gel	8.7 – 9.0	28-32	NC	NC	NC	9.5 -10.5
9,000' – 11,500'	Cut Brine\Brine Mud	9.0 – 9.5	34-42	10	8	< 25	9.5 – 10.5
11,500' – 16,300'	XCD Brine Mud	11.0 – 13.0	45-48	20	10	< 5	9.5 – 10.5
16,300' – 17,975'	Fresh Water Mud	8.4 – 8.6	28-30	NC	NC	NC	9.5 – 10.5

**NOTE:** May increase vis for logging purposes only.

**POINT 6: TECHNICAL STAGES OF OPERATION**

A) TESTING  
None anticipated.

B) LOGGING

Run #1: GR, Neutron-Density, Resistivity, Dipole Sonic from top of Delaware to TD.  
Cased hole GR-Neutron to surface.

Mud Logger: Rigged up at 100'

C) CONVENTIONAL CORING

## D) CEMENT

INTERVAL	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT <sup>3</sup> /SX
<b>SURFACE:</b>						
Lead: 0' – 836'	1510	836'	Cemex premium Plus C + bentonite + CaCl <sub>2</sub>	8.79	13.70	1.68
Tail: 836' – 1,336'	1180	500'	Cemex Premium Plus C + CaCl <sub>2</sub>	6.48	14.80	1.35
<b>INTERMEDIATE:</b>						
Lead: 0' – 3,500'	2400	3500'	Class C + 0.1% HR-601, 3% salt	9.88	12.90	1.83
Tail: 3,500' – 4,000'	585	500'	HalCem C	6.34	14.80	1.33
<b>Production</b>						
<b>Stage 1:</b>						
Lead: 5,500' – 8,000'	610	2500'	Econ Cem + 0.57 Lap-1 + 5#sk Kol-Seal + 8#sk CaCl <sub>2</sub> + 0.77 HR-800 + 0.47 CFR-3	14.65	11.75	2.60
Tail: 8,000' – 11,289'	330	3289'	HalCem H + 0.67 Halad 9 + 0.27 HR-80D + 3#sk Kol-Seal	4.86	15.85	1.17
<b>DV Tool @ 5,500'</b>						
<b>Stage 2:</b>						
Lead: 0' – 5,000'	720	5000'	Tuned Light + 1.25 #sk CFR-3 + 0.15 #sk WG-17 + 1 #sk CaCl <sub>2</sub> + 20 #sk HGS 6000 + 3 #sk Kol-Seal + 1 #sk Cal-Seal 60	13.14	9.80	3.00
Tail: 5,000' – 5,500'	245	500'	HalCem C + 0.4% Halad 9	6.34	14.80	1.33
<b>Production Liner</b>						
Tail: 11,800' – 16,500'	450	4700'	VersaCem H + 0.5% Halad – 344 + 0.30% HR-601	5.05	14.40	1.24

Cement excesses will be as follows:

Surface – 100% excess with cement circulated to surface.

1<sup>st</sup> Intermediate – 50% excess above fluid caliper with cement circulated to surface.

Production- Production Liner – 50% above gauge hole or 35% above electric log caliper with cement circulated 500' up into the 9-5/8" 1<sup>st</sup> intermediate casing.

Cement volumes will be adjusted proportionately for depth changes of the multi stage tool.

E) H<sub>2</sub>S SAFETY EQUIPMENT

As stated in the BLM Onshore Order 6, for wells located inside the H<sub>2</sub>S area, H<sub>2</sub>S equipment will be rigged up after setting surface casing. For the wells located inside the H<sub>2</sub>S area the flare pit will be located 150' from the location. For wells located outside the H<sub>2</sub>S area flare pit will be located 100' away from the location. **(See page 6 of Survey plat package and diagram 2)** There is not any H<sub>2</sub>S anticipated in the area, although in the event that H<sub>2</sub>S is encountered, the H<sub>2</sub>S contingency plan attached will be implemented. **(Please refer to diagram 2 for choke manifold and closed loop system layout.) Please refer to H<sub>2</sub>S location diagram for location of important H<sub>2</sub>S safety items.**

F) CLOSED LOOP AND CHOKE MANIFOLD

**Please see diagram 2.**

**POINT 7: ANTICIPATED RESERVOIR CONDITIONS**

Normal pressures are anticipated throughout Delaware section. Lost circulation may exist, but not likely, in the Delaware Section from 3,981'- 7,900' TVD. Once in the Bone Spring, pore pressures will gradually increase to the top of the Wolfcamp. 9-5/8" casing will be set in the Wolfcamp and pore pressures will continue to increase through the Strawn and Atoka sections. A 7-5/8" production liner will be set into the Devonian with mud weights at 12.5 ppg or less. The Devonian BHP is 7200 psi and can be drilled with 8.5 ppg fresh water. Maximum surface pressures in the Devonian if productive could be 7944 psi with 7500 ppm H<sub>2</sub>S and 5% CO<sub>2</sub>.

**POINT 8: OTHER PERTINENT INFORMATION**

A) Auxiliary Equipment

Upper and lower kelly cocks. Full opening stab in valve on the rig floor.

B) Anticipated Starting Date

Upon approval

110 days drilling operations

10 days completion operations

JDB

**BOPCO, L. P.**  
6 DESTA DRIVE, SUITE 3700 (79705)  
P. O. BOX 2760  
MIDLAND, TEXAS 79702

(432) 683-2277

FAX (432) 687-0329

November 2, 2012

Re: Notice of Application for Authorization  
to Dispose  
PLU Pierce Canyon 3 Federal SWD #1  
Sec. 3, T25S, R30E  
Eddy County, New Mexico  
File: 100-WF: PLUPC3FedSWD1.C108

Mobil Producing Texas & New Mexico Inc  
Nine Greenway Plaza #2700  
Houston TX 77046

Gentlemen:

This letter and attached copy of our injection well application is to notify you, as Working Interest owner, that BOPCO, L.P. is petitioning the Oil Conservation Division to grant permission to dispose of fluid into a zone not productive of oil and gas in the subject wellbore.

If you should have any questions or require additional information, please contact Emma Z. Galindo at the above letterhead address, phone number or via email at [ezgalindo@basspet.com](mailto:ezgalindo@basspet.com). Any objections or requests for hearing must be filed with the Oil Conservation Division, 1220 South St. Frances Dr., Santa Fe, New Mexico 87505, within 15 days of this letter's date.

Sincerely,



Emma Z. Galindo  
Engineering Assistant

ezg  
Attachments

**BOPCO, L. P.**  
6 DESTA DRIVE, SUITE 3700 (79705)  
P. O. BOX 2760  
MIDLAND, TEXAS 79702

(432) 683-2277

FAX (432) 687-0329

November 2, 2012

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to Dispose  
PLU Pierce Canyon 3 Federal SWD #1  
Sec. 3, T25S, R30E  
Eddy County, New Mexico  
File: 100-WF: PLUPC3FedSWD1.C108

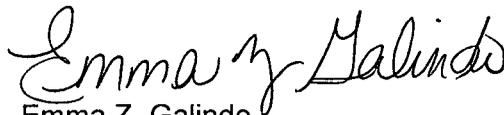
Mobil Producing Texas & New Mexico Inc  
P O Box 951436  
Dallas TX 75395

Gentlemen:

This letter and attached copy of our injection well application is to notify you, as Working Interest owner, that BOPCO, L.P. is petitioning the Oil Conservation Division to grant permission to dispose of fluid into a zone not productive of oil and gas in the subject wellbore.

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Sincerely,



Emma Z. Galindo  
Engineering Assistant

ezg  
Attachments

## Jones, William V., EMNRD

---

**From:** Galindo, Emma Z. <EZGalindo@BassPet.Com>  
**Sent:** Friday, November 16, 2012 1:39 PM  
**To:** Jones, William V., EMNRD  
**Subject:** PLU Pierce Canyon 3 Federal SWD #1  
**Attachments:** Cert Mail BLM Receipt.pdf

Mr. Jones,

I am attaching a copy of the signed receipt for the packet we sent Certified Mail to the BLM's Carlsbad office regarding the above mentioned well. The letter we sent to you stated we would provide you with a copy when we received the card. I will also be glad to place it in an envelope and send it to you if needed. Please let me know if there is anything else you need from us.

Thank you,

*Emma Z. Galindo*  
Engineering Assistant

 **BOPCO, L.P.**



# Affidavit of Publication

State of New Mexico,  
County of Eddy, ss.

**Kathy McCarroll**, being first duly sworn,  
on oath says:

That she is the Classified Supervisor of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

<u>October 25</u>	<u>2012</u>
<u>October 26</u>	<u>2012</u>
<u>October 27</u>	<u>2012</u>

That the cost of publication is **\$146.00** and That payment thereof has been made and will be assessed as court costs.

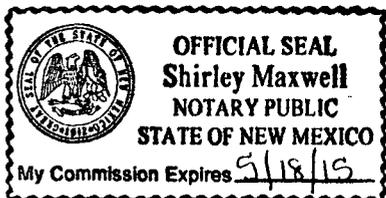
Kathy McCarroll

Subscribed and sworn to before me this

30th day of October, 2012

Shirley Maxwell

My commission expires May 18, 2015  
Notary Public



October 25, 26,  
and 27, 2012

### NOTICE OF APPLICATION FOR SALT WATER DIS- POSAL WELL PERMIT

BOPCO, L.P. is in the proc-  
ess of applying to the  
New Mexico Oil Conserva-  
tion Division for a permit  
to dispose of produced  
salt water into a porous  
formation not productive  
of oil or gas.

The applicant proposes to  
dispose of produced wa-  
ter into the PLU Pierce  
Canyon 3 Federal SWD #1  
(Devonian Formation).  
The maximum allowable  
injection pressure will be  
3,294 psi and the esti-  
mated maximum rate will  
be 30,000 bbls produced  
water/day. The proposed  
disposal well is located in  
Eddy County, New Mexico  
in Section 3, T25S, R30E.  
The produced salt water,  
will be disposed at a sub-  
surface depth of 16,471' -  
18,275'.

Any questions concerning  
this application should be

directed to Emma Z.  
Galindo, Engineering As-  
sistant, BOPCO, L.P., P O  
Box 2760, Midland, Texas  
79702-2760, (432) 683-  
2277.

Interested parties must  
file objections or requests  
for hearing with the Oil  
Conservation Division,  
1220 S. St. Francis Dr.,  
Santa Fe, New Mexico  
87505 within 15 days.

UNIT "O"

RECEIVED

NOV 01 2012

BOPCO WTD PRODUCTION

BOPCO, L. P.  
6 DESTA DRIVE, SUITE 3700 (79705)  
P. O. BOX 2760  
MIDLAND, TEXAS 79702

(432) 683-2277

FAX (432) 687-0329

November 2, 2012

Re: Notice of Application for Authorization  
to Dispose  
PLU Pierce Canyon 3 Federal SWD #1  
Sec. 3, T25S, R30E  
Eddy County, New Mexico  
File: 100-WF: PLUPC3FedSWD1.C108

Mobil Producing Texas & New Mexico Inc  
P O Box 951436  
Dallas TX 75395

Gentlemen:

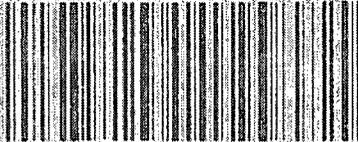
This letter and attached copy of our injection well application is to notify you, as Working Interest owner, that BOPCO, L.P. is petitioning the Oil Conservation Division to grant permission to dispose of fluid into a zone not productive of oil and gas in the subject wellbore.

If you should have any questions or require additional information, please contact Emma Z. Galindo at the above letterhead address, phone number or via email at [ezgalindo@basspet.com](mailto:ezgalindo@basspet.com). Any objections or requests for hearing must be filed with the Oil Conservation Division, 1220 South St. Frances Dr., Santa Fe, New Mexico 87505, within 15 days of this letter's date.

Sincerely,

*Emma Z. Galindo*

ezg  
Attachments

2. Article Number		COMPLETE THIS SECTION ON DELIVERY	
		A. Received by (Please Print Clearly) <i>W. K. H.</i>	B. Date of Delivery NOV 05 2012
7160 3901 9846 4644 7966		C. Signature <i>W. K. H.</i>	<input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee
3. Service Type CERTIFIED MAIL		D. Is delivery address different from item 1? If YES, enter delivery address below:	
4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
1. Article Addressed to:			

Mobil Producing TX & NM Inc  
P.O. Box 951436  
Dallas, TX 75395

## **Jones, William V., EMNRD**

---

**From:** Jones, William V., EMNRD  
**Sent:** Thursday, November 29, 2012 4:10 PM  
**To:** 'ezgalindo@basspet.com'  
**Cc:** Ezeanyim, Richard, EMNRD; Shapard, Craig, EMNRD; Sanchez, Daniel J., EMNRD  
**Subject:** Disposal application from BOPCO, L.P.: PLU Pierce Canyon 3 Federal SWD #1 30-015-NA 814FSL/1630FEL O/3/25S/30E/Eddy

Hello Ms. Galindo,  
Only a couple requests,

- a. Would you send a fresh water analysis from the windmill located within 1 mile – or let me know when it will arrive.
- b. Send a copy of the certified mailer sent to Mobil and the date it was mailed.
- c. Chevron seems to be the operator of a well within your AOR – Does Chevron own rights at the depths you will be disposing? If so, please send them notice.

This is I believe the deepest and highest capacity disposal permit application I have processed in the 10 years working at the OCD.

Please let your managers know that the number of inactive wells for BOPCO, LP is up to 5. If it were 6 or more, I would be prohibited from issuing this Disposal permit. If BOPCO expects the number of inactive wells to grow, it should consider contacting Daniel Sanchez of this office to ask for an Agreed Compliance Order that would give BOPCO some breathing room.

Thank You,

**William V. Jones, P.E.**  
505-476-3448W 505-476-3462F  
Engineering Bureau, Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

## Jones, William V., EMNRD

---

**From:** Galindo, Emma Z. <EZGalindo@BassPet.Com>  
**Sent:** Friday, November 30, 2012 8:56 AM  
**To:** Jones, William V., EMNRD  
**Subject:** RE: Disposal application from BOPCO, L.P.: PLU Pierce Canyon 3 Federal SWD #1 30-015-NA 814FSL/1630FEL O/3/25S/30E/Eddy  
**Attachments:** Mobil delivery confirmation.pdf

Mr. Jones,

*Attached is the copy of certified mailer sent to Mobil.....*

- a). The fresh water analysis will be gathered sometime today, as soon as I get results I will forward that to you.*
- c). I spoke to our land department and will send Chevron notice of our intent.*

*Thank you,  
Emma*

---

**From:** Jones, William V., EMNRD [<mailto:William.V.Jones@state.nm.us>]  
**Sent:** Thursday, November 29, 2012 5:10 PM  
**To:** Galindo, Emma Z.  
**Cc:** Ezeanyim, Richard, EMNRD; Shapard, Craig, EMNRD; Sanchez, Daniel J., EMNRD  
**Subject:** Disposal application from BOPCO, L.P.: PLU Pierce Canyon 3 Federal SWD #1 30-015-NA 814FSL/1630FEL O/3/25S/30E/Eddy

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- a. Would you send a fresh water analysis from the windmill located within 1 mile – or let me know when it will arrive.
- b. Send a copy of the certified mailer sent to Mobil and the date it was mailed.
- c. Chevron seems to be the operator of a well within your AOR – Does Chevron own rights at the depths you will be disposing? If so, please send them notice.

This is I believe the deepest and highest capacity disposal permit application I have processed in the 10 years working at the OCD.

Please let your managers know that the number of inactive wells for BOPCO, LP is up to 5. If it were 6 or more, I would be prohibited from issuing this Disposal permit. If BOPCO expects the number of inactive wells to grow, it should consider contacting Daniel Sanchez of this office to ask for an Agreed Compliance Order that would give BOPCO some breathing room.

Thank You,

William V. Jones, P.E.

## Jones, William V., EMNRD

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**From:** Galindo, Emma Z. <EZGalindo@BassPet.Com>  
**Sent:** Friday, November 30, 2012 1:14 PM  
**To:** Jones, William V., EMNRD  
**Cc:** Johnson, Steve F  
**Subject:** RE: Disposal application from BOPCO, L.P.: PLU Pierce Canyon 3 Federal SWD #1 30-015-NA 814FSL/1630FEL O/3/25S/30E/Eddy

Mr. Jones,

In regards to the Chevron operated well in question, PLU Big Sinks 3-25-30, a change of operator is being filed. BOPCO will be taking over operations. Chevron does have rights in the Bone Spring to Wolfcamp, not Devonian.

Also, as per Steve Johnson, 3 of the wells on the inactive list will be showing production for the month of October 2012. The office in Artesia has been notified. In addition to that, one of the other two wells will be plugged in the near future.

*Thanks,  
Emma*

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**From:** Jones, William V., EMNRD [<mailto:William.V.Jones@state.nm.us>]  
**Sent:** Friday, November 30, 2012 11:47 AM  
**To:** Galindo, Emma Z.  
**Subject:** RE: Disposal application from BOPCO, L.P.: PLU Pierce Canyon 3 Federal SWD #1 30-015-NA 814FSL/1630FEL O/3/25S/30E/Eddy

Thank You,  
Have a fun weekend!

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**From:** Galindo, Emma Z. [<mailto:EZGalindo@BassPet.Com>]  
**Sent:** Friday, November 30, 2012 8:56 AM  
**To:** Jones, William V., EMNRD  
**Subject:** RE: Disposal application from BOPCO, L.P.: PLU Pierce Canyon 3 Federal SWD #1 30-015-NA 814FSL/1630FEL O/3/25S/30E/Eddy

*Mr. Jones,*

*Attached is the copy of certified mailer sent to Mobil.....*

- a). The fresh water analysis will be gathered sometime today, as soon as I get results I will forward that to you.*
- c). I spoke to our land department and will send Chevron notice of our intent.*

*Thank you,  
Emma*

**Injection Permit Checklist** (11/15/2010)

WFX \_\_\_\_\_ PMX \_\_\_\_\_ SWD 1370 Permit Date 12/2/12 UIC Qtr (O/N/D)

# Wells 1 Well Name(s): PLU PIERCE CANYON 3 Fwd SWD #1

API Num: 30-015-NA Spud Date: New New/Old: N (UIC primacy March 7, 1982)

Footages 814 FSL/1630 FEL Unit 03 Sec 3 Tsp 25S Rge 30E County EDDY

General Location: \_\_\_\_\_

Operator: BOPO L.P. Contact EMMA Z GALINDO

OGRID: 26037 RULE 5.9 Compliance (Wells) 5/481 (Finan Assur) OK IS 5.9 OK? OK at 3 LIMIT!

Well File Reviewed None Current Status: NOT Permitted

Planned Work to Well: Drill/EQP/DEPSE

Diagrams: Before Conversion  After Conversion  Elogs in Imaging File: will be sent

Well Details:		Sizes Hole.....Pipe	Setting Depths	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
<input checked="" type="radio"/> New	<input type="radio"/> Existing	<u>Surface</u> 36 - 30"	<u>120</u>		<u>CONDUCTOR</u>	
<input checked="" type="radio"/> New	<input type="radio"/> Existing	<u>Interfil</u> 26 - 20"	<u>1356'</u>		<u>2690</u>	
<input checked="" type="radio"/> New	<input type="radio"/> Existing	<u>Long St</u> 17 1/2 13 3/8	<u>4500'</u>		<u>2985</u>	<u>CIRC Plan</u>
<input checked="" type="radio"/> New	<input type="radio"/> Existing	<u>Liner</u> 12 1/4 9 5/8	<u>11289'</u>	<u>5500'</u>	<u>1905'</u>	
<input checked="" type="radio"/> New	<input type="radio"/> Existing	<u>Open Hole</u> 8 1/2 7 5/8	<u>11089'-16500'</u>		<u>450</u>	

Depths/Formations:	Depths, Ft.	Formation	Tops?
Formation(s) Above	<u>16471</u>	<u>Dev</u>	<input checked="" type="checkbox"/>
<u>(est)</u> Injection TOP:	<u>16471</u>	<u>Dev</u>	Max. PSI <u>3294</u> Open Hole <input checked="" type="checkbox"/> Perfs _____
Injection BOTTOM:	<u>18275</u>	<u>Montoya</u>	Tubing Size <u>4 1/2</u> Packer Depth <u>16,450'</u>
Formation(s) Below	<u>17570</u>	<u>Montoya</u>	<input checked="" type="checkbox"/>

~~Capitan Reef? (Potash? Noticed?) (WDRP? Noticed?) Salado Top/Bot 1346-3300' Oil House?~~

Fresh Water: Depths: 148-540' Formation RUSTLER Wells? yes Analysis?  Affirmative Statement

Disposal Fluid Analysis? Sources: Delaware

Disposal Interval: Analysis? \_\_\_\_\_ Production Potential/Testing: NONE - WILL MUDLOG & LOG (NO CORE)

Notice: Newspaper Date 10/25/12 Surface Owner BLM Mineral Owner(s) \_\_\_\_\_

RULE 26.7(A) Affected Persons: MOBIL 11/2/12 Chevron Receipt

AOR: Maps?  Well List?  Producing in Interval? NO Wellbore Diagrams? \_\_\_\_\_

.....Active Wells 0 Repairs? \_\_\_\_\_ Which Wells? \_\_\_\_\_

.....P&A Wells 0 Repairs? \_\_\_\_\_ Which Wells? \_\_\_\_\_

Issues: \_\_\_\_\_ Request Sent \_\_\_\_\_ Reply: \_\_\_\_\_