DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
12/10/12		WJJ		SWD 1388	pWJJ1302266714

Lost Date 1/18/13

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION ~~DIVISION~~
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

Delaware B 23 Federal SWD #1

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
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

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

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

[B] ☐ Offset Operators, Leaseholders or Surface Owner

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

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

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

[F] ☐ Waivers are Attached

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

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Emma Galindo	Emma Galindo	Engineering Assist.	12/7/2012
Print or Type Name	Signature	Title	Date

ezgalindo@basspet.com
e-mail Address

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

(432) 683-2277 FAX (432) 687-0329

1/18/13

December 7, 2012

Re: Notice of Application for Authorization to Complete this well as a SWD Well
Delaware B 23 Federal SWD #1
Eddy County, New Mexico
File: 100-WF: DELB23FedSWD1.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 Delaware B 23 Federal SWD #1 located in Section 23, T24S, 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 #7160-3901-9846-4644-7997. Please find a copy of the notice attached. I will provide a copy of the signed receipt card when it returns.

Once we receive the newspaper ad and affidavit of publication from Carlsbad Current Argus, I will send you a copy. If additional information is required, please contact Emma Z. Galindo at the letterhead address, phone number or via email at ezgalindo@basspet.com.

Sincerely,

Emma Galindo

Emma Z. Galindo
Engineering Assistant

ezg
Attachments

CC: BLM

III. Well Data

A. 1) Lease name: **Delaware B 23 Federal SWD**
Well #: **1**
Section: **23**
Township: **T24S**
Range: **30E**
Footage: **1115' FNL & 2180' FWL**

2) Casing Info:

Casing size	Set depth	Sacks cmt	Hole size	TOC	Method
30", 157.68#, X52, PE	120		36"	Surface	Circulated
20, 94#, J-55, BTC	930	1,880	26"	Surface	Circulated
13-3/8", 68#, HCN-80, BTC	4,115	3,130	17-1/2"	Surface	Circulated
9-5/8", 53.50#, P-110, LT&C **	11,980	2,170	12-1/4"	Surface	Circulated
7-5/8", 39#, P-110, Ultra FJ	11,780-14,500	430	8-1/2"	TO T.O.L.	Circulated
7-5/8", 42.80#, P-110, Ultra FJ	14,500-16,300		8-1/2"		
**DV Tool @ 6,000'	16300– ~~18085~~ 17785 OH (5½")				

3) Tubing to be used (size, lining material, setting depth):
4-1/2" 12.75#, L-80, RTS-8 IPC tbg set @16,250'.

4) Name, model, and depth of packer to be used:
4-1/2" Baker FA Nickel Plated EXT/INT PC Pkr set @ 16,250'.

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

2) The injection interval and whether it is perforated or open hole:
Open hole from 16,300 - 17,785 O.H.
BOPCO will evaluate the open hole interval by mudlogging the well as well as running open hole logs as in the ND 19 SWD.

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 - 7,925' **Lower: None**

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance ___X___Disposal _____Storage
Application qualifies for administrative approval? _____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: Emma Z. Galindo DATE: 12/07/2012

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: _____

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

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 no 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: **3,257 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:	**1500'**
Depth:	**16,285 - 17,785'**

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 16,300-17,785' will be acidized with approximately 50 gallons 15% NEFE HCl per foot for a total of 75,000 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.

XII. Applicants for disposal wells must make an affimative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydology 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.

PROPOSED WELLBORE DIAGRAM

Lease: Delaware B 23 Federal SWD **Well No.:** 1
Injection
Reservior: Devonian and Montoya
Location: 1115' FNL & 2180' FWL S23-T24S-R30E
County: EDDY **St:** NM **API:** 30-015-

Elevation GL:	
Elevation KB:	
Spud:	
Completed	

Surface Csg.

Size:	20"
Wt	94#
Grd	J-55, BTC
Set @:	930'
Sxs cmt:	1880
TOC:	Surface
Hole Size:	26"

Intermediate Csg.

Size:	13 3/8"
Wt	68#
Grd	HCN-80, BTC
Set @:	4115'
Sxs Cmt:	3130
TOC:	Surface
Hole Size:	17 1/2"

Production Csg.

Size:	9 5/8"
Wt	53.5#
Grd	P-110, LT&C
Set @:	11980'
Sxs Cmt:	2170
TOC:	Surface
Hole Size:	17 1/4"

Liner

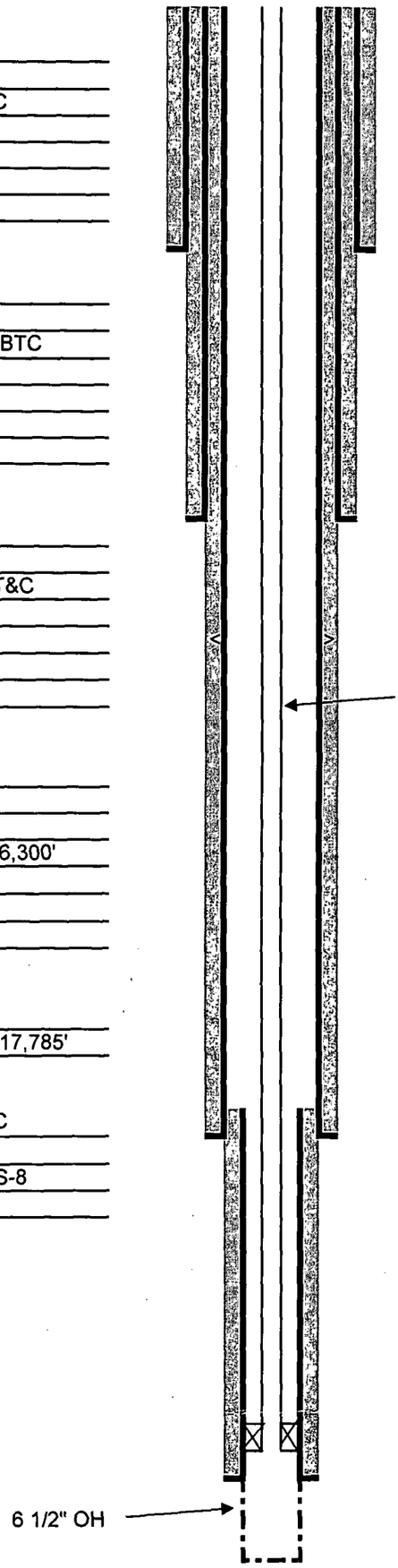
Size:	7 5/8"
Wt	39#
Grd	P-110 FJ
Set @:	11,780'-16,300'
Sxs Cmt:	430
TOC:	11,089'
Hole Size:	8 1/2"

Open Hole

Size:	6 1/2"
Depth:	16,300' - 17,785'

Tubing

Size:	4 1/2" IPC
Wt	12.75#
Grd	L-80, RTS-8
Set @:	16,250'



TD: 17,785'

Updated: 1/16/2012
Author: ezg
Engr: CCC

Re: PLU Delaware B 23 Federal SWD No. 1 Disposal Interval

The section drilled by the recent ND 19 Federal SWD No. 1 disposal well below the Woodford consists of a Devonian upper dolomite interval (15,603'-15,874') underlain by a tight limestone interval. Below this a second porous dolomite is present at a depth of 16,234' underlain by a second tight limestone section at a depth of 16,720'. This lower limestone appears to be the top of the Montoya formation based on log character. It is reasonable to assume that a Silurian section is present between the Devonian and Montoya, although the depth of the top of Silurian is uncertain at this time. The plan for the PLU Delaware B 23 Federal SWD No. 1 is to TD at the top of the tight limestone correlated as Montoya in the ND 19 well. The section open for disposal would therefore consist of Devonian, Silurian, and a short interval of Ordovician Montoya, although the tight Montoya limestone would most likely not effectively take water.

Braden, Jeremy D.

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.

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

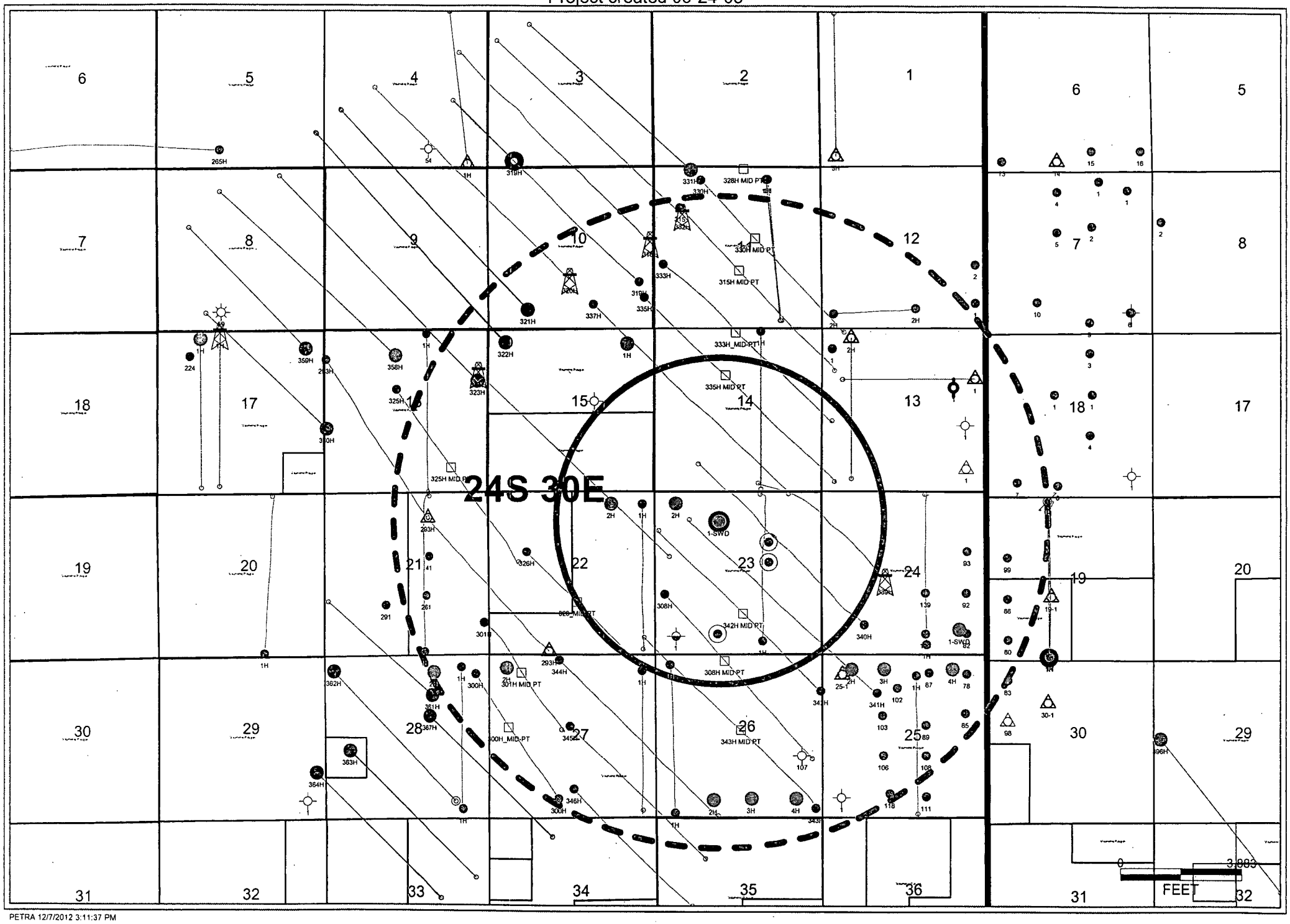
*reported on submitted prognosis

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
817-390-8662

Project created 06-24-08



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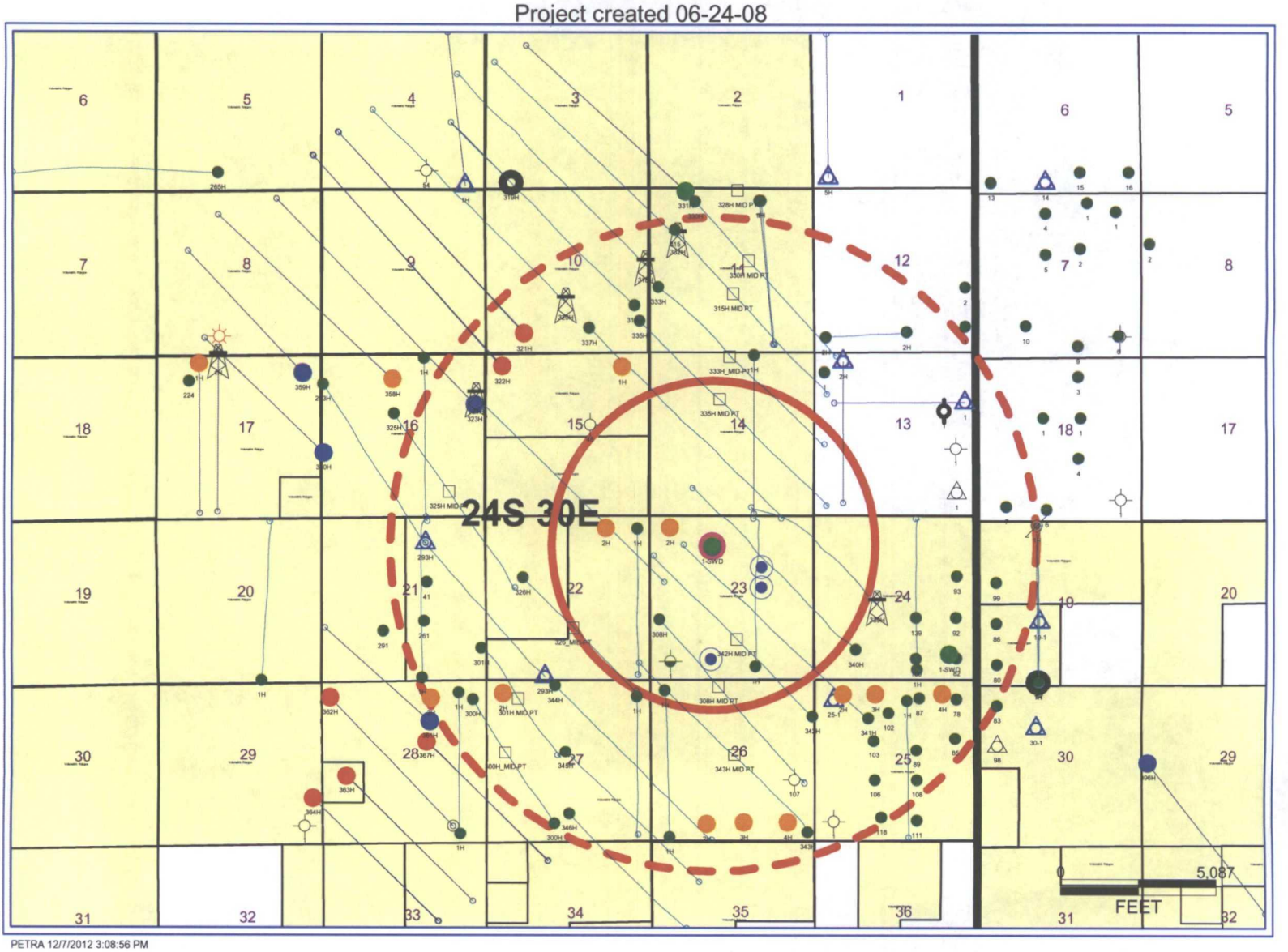
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GEOLOGICAL PROGNOSIS

BOPCO, L. P.	WEST TEXAS DIVISION	Issue Date: 7/9/2012

FIELD OR PROSPECT	WELL NAME	WELL NO.	API CLASS	EXP/DEV	EST. W.I.	EST. N.R.I.
Poker Lake	Delaware B 23 Federal SWD	1	1	SWD	1.00	n/a

LOCATION		COUNTY	STATE	PRIMARY OBJECTIVE
Surface:	1,000' FNL & 2,050' FWL, Sec. 23, T24S-R30E	Eddy	NM	Devonian
Bottom Hole:	n/a	Lateral Length:		n/a

TOTAL DEPTH		DRILLING TARGETS		
MD:	17,785'	Target 1:	n/a	TVD: n/a
TVD:	17,785'	Target 2:	n/a	TVD: n/a
		TD:	n/a	TVD: n/a
Pilot Hole Y/N	n/a	Pilot Hole Depth:	n/a	Lateral Drilling Direction n/a

FORMATION TOPS					BEST GEOLOGICAL CORRELATION WELL	
	ELEVATIONS	GL:	3,435'	KB: 3,460'	Operator	Richardson and Bass
FORMATION / MARKER	ESTIMATED DEPTHS				Well	Harrison Federal No. 1
					KB:	3,378'
	MD	TVD	SUBSEA	SUBSEA	Actual from Log	
Rustler	710'		2,750'	2,630'	822' *	
Salado	940'		2,520'	2,533'	919' *	
Lamar	4,060'		-600'	-628'	4,080' *	
Delaware Sands	4,095'		-635'	-663'	4,115' *	
Bone Spring	7,925'		-4,465'	-4,494'	7,946' *	
Wolfcamp	11,305'		-7,845'	-7,861'	11,239'	
Middle Wolfcamp**	12,553'		-9,093'	-9,183'	12,561'	
Strawn	13,445'		-9,985'	-10,244'	13,622'	
Atoka	13,505'		-10,045'	-10,302'	13,680'	
Morrow	13,965'		-10,505'	-10,944'	14,322'	
Middle Morrow	14,530'		-11,070'	-11,511'	14,889'	
Lower Morrow	15,010'		-11,550'	-11,991'	15,369'	
Mississippian Lime	15,875'		-12,415'	-12,806'	16,184'	
Woodford	16,130'		-12,670'	-13,115'	16,493'	
Devonian	16,285'		-12,825'	-13,244'	16,622'	
TD	17,785'		-14,325'			

RESERVOIR OBJECTIVES	PRIMARY	SECONDARY	DEPTH
Devonian (for water disposal)	X		16,695' - 18,200'

SIGNIFICANT OFFSET WELLS

OPERATOR	WELL NAME	WELL NO.	LOCATION	COUNTY	STATE
BOPCO	Poker Lake Unit	199	1,000' FSL & 1,685' FWL, Sec. 28, T24S-R31E	Eddy	NM
BOPCO	Harrison Federal	1	660' FNL & 660' FWL, Sec 12, T25S-R30E	Eddy	NM

TARGET SAND TOP DEPTHS		MUD LOGGER	
Top target sand @ SL	n/a	VENDOR:	MORCO
Top target sand @ EOC=	n/a	UNIT ON BY:	Surface to pick surface casing
Top target sand @ Target 1=	n/a	SAMPLES FROM: Surface	TO: TD
		SAMPLE INTERVAL (FT.):	10'

WIRELINE LOGGING PROGRAM

Spectral GR, Neutron-Density, Resistivity, Sonic from top of Delaware to TD. Cased hole GR-Neutron to surface.

Elemental Capture Spectroscopy Log from Bone Spring to Devonian. Rotary sidewall cores in Bone Spring and Wolfcamp.

MUST COMMENCE BY

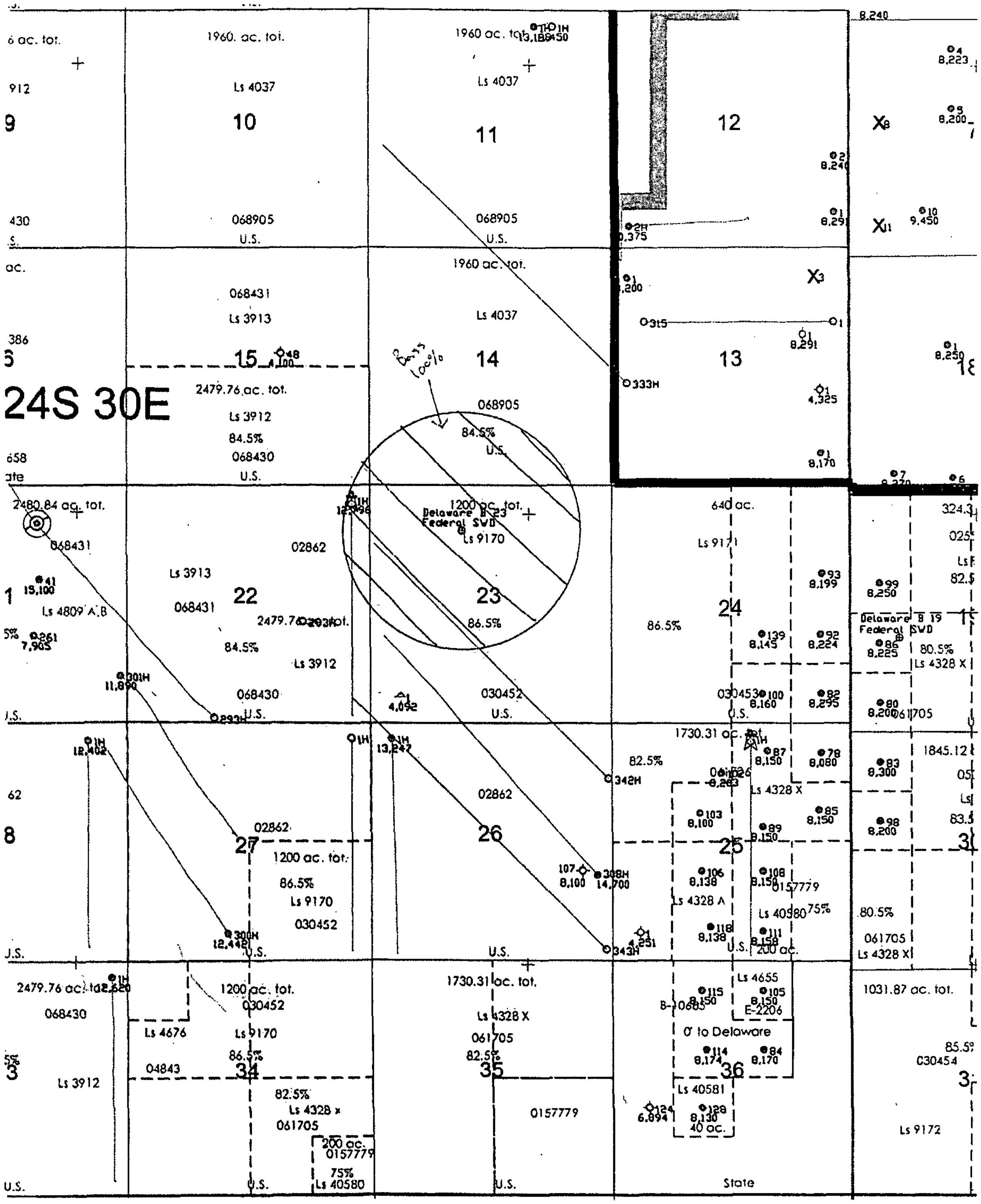
REMARKS

* These offset formation tops are from the Chesapeake PLU Big Sinks 23-24-30 No. 1H well.

TD depth is based on the thickness of Devonian porosity encountered in the ND 19 Federal SWD #1 well.

This location replaces the Delaware B 19 Federal SWD No. 1 proposed location.

Recommended by: (GEO)	Brian Pregger	Approved by (signature)	Date
XC: L. Muncy, S. Neuse, G. Hillis, W. Dannels, R. Sutton, C. Addington, Well File	EX: M. Roper, F. McCreight, K. Adams, J. Smitherman, B. Brigham, S. Johnson, S. Martinez, M. Lyon, K. Holster, W. McKee		7-17-12



24S 30E
1960. ac. tot.
Ls 4037
10
068905
U.S.
1960 ac. tot.
11
12
13
068431
Ls 3913
15
14
2479.76 ac. tot.
Ls 3912
84.5%
068430
2480.84 ac. tot.
1200 ac. tot.
Delaware B 23 Federal SWD
Ls 9170
02862
22
23
24
640 ac.
Ls 9171
86.5%
030452
Ls 4809 A,B
Delaware B 19 Federal SWD
80.5%
Ls 4328 X
061705
1730.31 ac. tot.
82.5%
27
26
25
Ls 4328 A
Ls 40580
0157779
75%
1845.12
2479.76 ac. tot.
068430
Ls 4676
04843
34
35
36
Ls 4655
E-2206
B-10685
0' to Delaware
Ls 40581
40 ac.
200 ac.
1031.87 ac. tot.
C30454
Ls 9172
State

DELAWARE B 23 FEDERAL SWD NO. 1
POKER LAKE UNIT
1,000' FNL & 2,050' FWL
Section 23, T24S-R30E
Eddy Co., New Mexico
PTD 17,785'

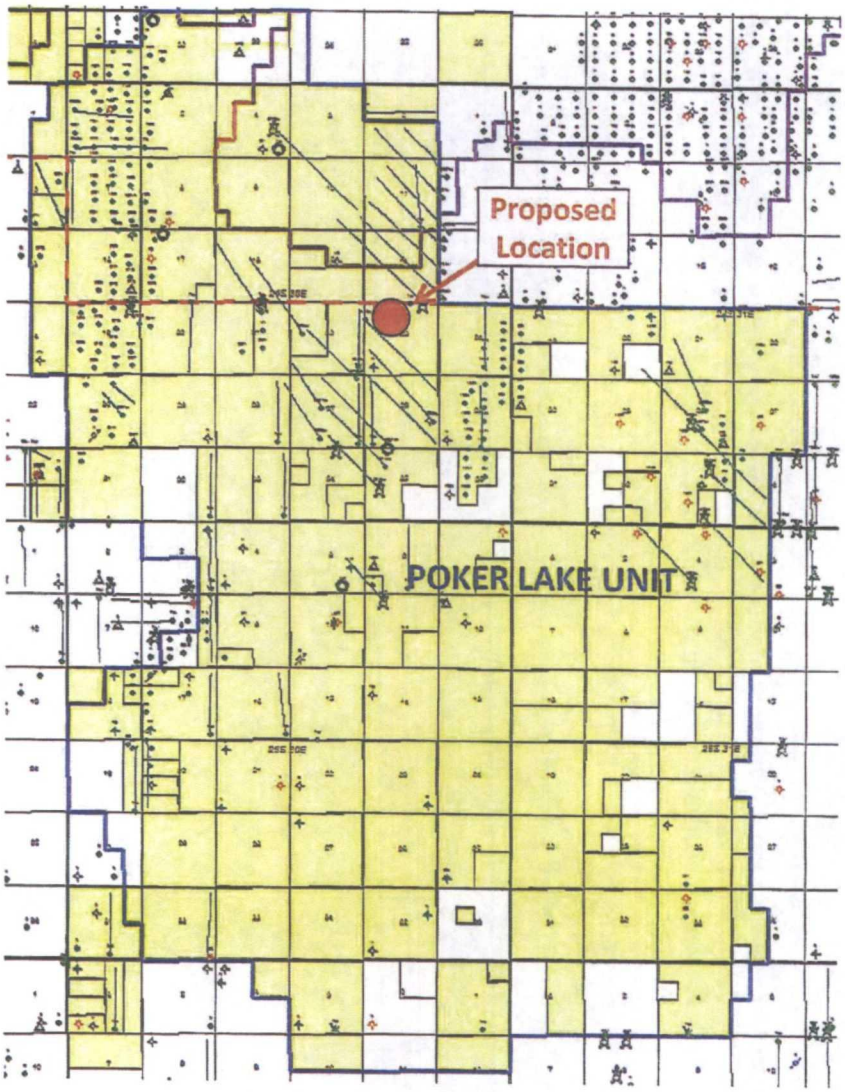
The Delaware B 23 Federal SWD No. 1 is proposed as a vertical salt water disposal well in the Poker Lake Unit. The well is proposed to a total depth of 17,785 feet to target porosity within the Devonian for water disposal purposes. The proposed well is located west of the Poker Lake Southwest (Delaware) field in the north central part of the Poker Lake Unit, 4 miles north of the Harrison Federal No. 1 well. The Harrison Federal, a plugged Devonian exploratory test drilled in 1952, was recently reentered, deepened into the Devonian, and successfully converted to water injection. Completion of the Delaware B Federal 19 SWD No. 1 will add needed water disposal capacity to the Poker Lake Unit.

At a proposed depth of 17,785' the well will TD 1,500' below the estimated top of the Devonian. Several thick sections of porous dolomite capable of taking water are present within the Devonian in the Poker Lake area. The recently drilled ND 19 SWD No. 1on the west side of the unit encountered two distinct porous intervals, an upper section 250' thick and a lower section 450' thick, separated by 400' of tight limestone. Drilling the proposed well 1,500' below the top of the Devonian will be sufficient to penetrate the entire section of anticipated porous dolomite.

Brian T. Riggs Geologist

DELAWARE B 23 FEDERAL SWD No. 1

Location Map



RECEIVED

JAN 08 2013

Form 3160-3
(April 2004)

Operator Copy

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

BOPCO WTD PRODUCTION

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☑ DRILL ☐ REENTER	5. Lease Serial No. NMNM 0030452
	6. If Indian, Allotee or Tribe Name
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☑ Other SWD ☐ Single Zone ☐ Multiple Zone	7. If Unit or CA Agreement, Name and No. Poker Lake Unit NMNM 71016X
2. Name of Operator BOPCO, L. P.	8. Lease Name and Well No. Delaware B 23 Fed 1 SWD
3a. Address P. O. Box 2760 Midland, TX 79702	3b. Phone No. (include area code) 432-683-2277
	9. API Well No.
4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface NENW, UL C, 1115' FNL & 2180' FWL, Lat: N32.207442, Lng:W103.8527 At proposed prod. zone	10. Field and Pool, or Exploratory Poker Lake SW (Delaware) Devonian
	11. Sec., T. R. M. or Blk. and Survey or Area Sec 23 T24S-R31E, Mer NMP
14. Distance in miles and direction from nearest town or post office* 22 miles east of Malaga	12. County or Parish Eddy / 13. State NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1115' (lease line) 3,369' (Unit line)	16. No. of acres in lease 1200	17. Spacing Unit dedicated to this well 40
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 761' (PLU 341H)	19. Proposed Depth 17,785' TVD	20. BLM/BIA Bond No. on file COB 000050
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3,435' GL	22. Approximate date work will start* 11/15/2012	23. Estimated duration 110 Days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature Jeremy Braden	Name (Printed/Typed) Jeremy Braden	Date 10-23-12
Title Engineering Assistant		
Approved by (Signature)	Name (Printed/Typed)	Date 1/2/13
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

Carlsbad Controlled Water Basin

EE ATTACHED FOR
ONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

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

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

Form C-102
Revised July 16, 2010

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	96101	SWD; Devonian

Property Code	Property Name	Well Number
306402	PLU DELAWARE B 23 FEDERAL	1 SWD

OGRID No.	Operator Name	Elevation
260737	BOPCO, L.P.	3435

Surface Location

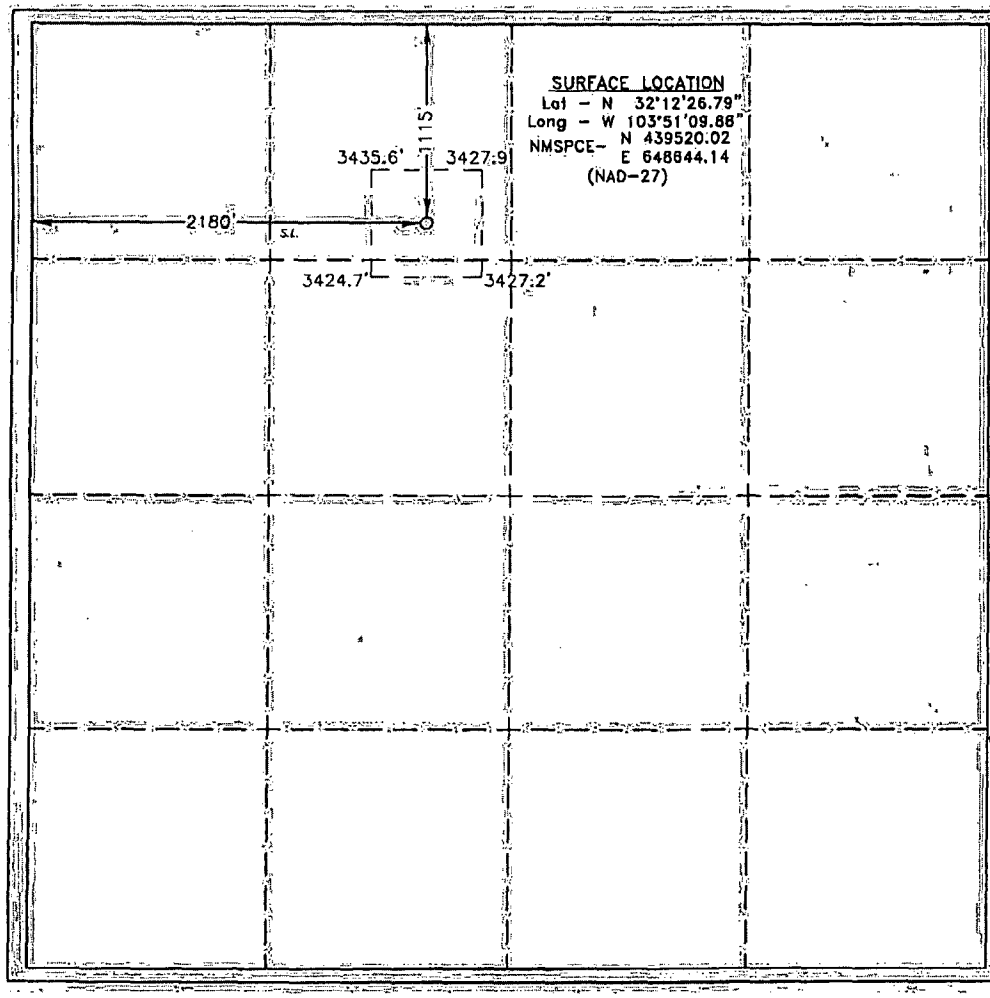
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	23	24 S	30 E		1115	NORTH	2180	WEST	EDDY

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
0			

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



OPERATOR CERTIFICATION

I hereby certify that the information 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.

Jeremy Braden 10-17-12
Signature Date

Jeremy Braden
Printed Name

jdbraden@basspet.com
Email Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.

JUNE 29, 2012

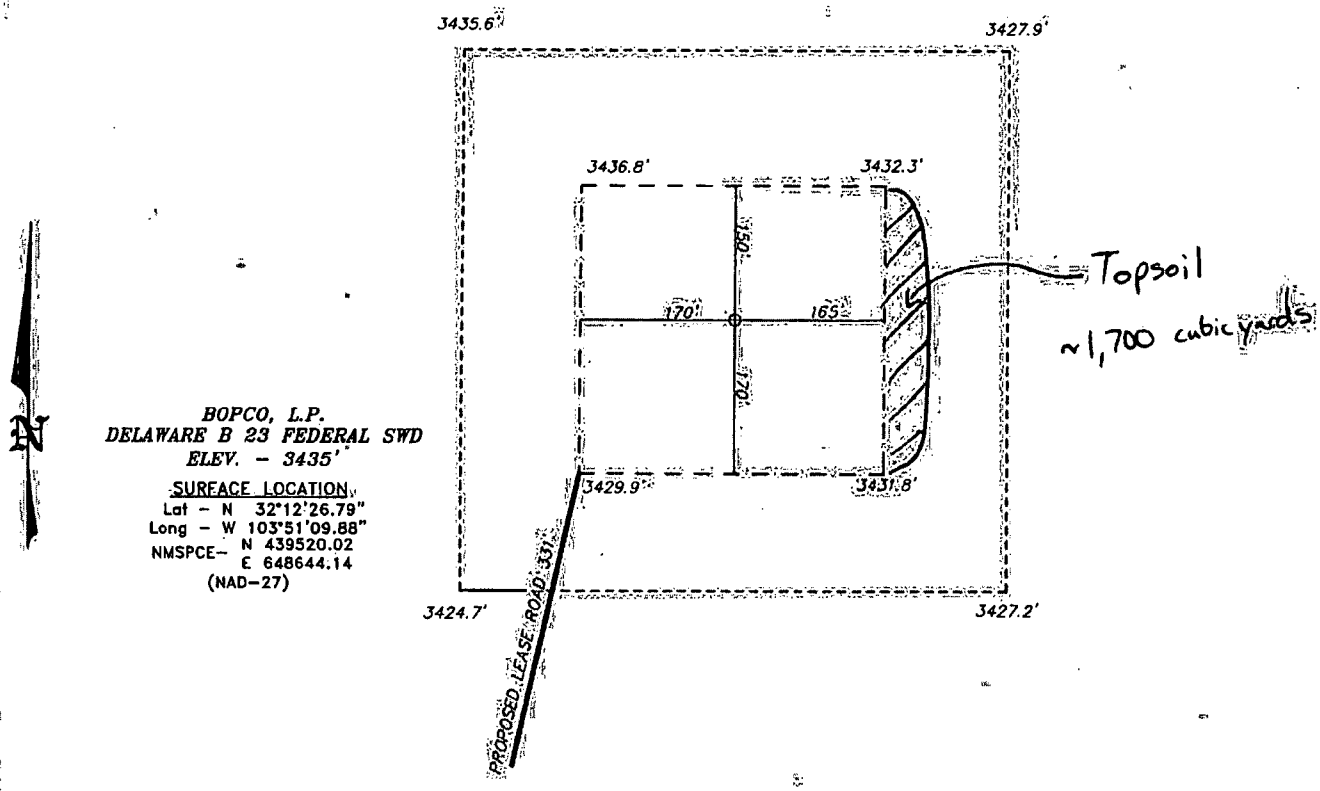
Date Surveyed
Signature & Seal of Professional Surveyor

Certificate No. Gary L. Jones 7977

BASIN SURVEYS 26947

SECTION 23, TOWNSHIP 24 SOUTH, RANGE 30 EAST, N.M.P.M.,

EDDY COUNTY, WELL PAD LAYOUT **NEW MEXICO.**



BOPCO, L.P.
DELAWARE B 23 FEDERAL SWD
ELEV. - 3435'

SURFACE LOCATION
Lat - N 32°12'26.79"
Long - W 103°51'09.88"
NMSPCE- N 439520.02
E 648644.14
(NAD-27)

TN 10/17/12

200 0 200 400 FEET
SCALE: 1" = 200'

Directions to Location:

FROM THE JUNCTION OF 787(TWIN WELLS) AND 748(McDONALD) GO NORTHERLY ON TWIN WELLS 1.7 MILES THEN GO NORTHWESTERLY 0.4 MILES TO BEGIN ROAD LATHE ON THE NORTH.

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

BOPCO, L.P.

REF: DELAWARE B 23 FED. SWD #1 / WELL PAD TOPO

THE DELAWARE B 23 FED. SWD #1 LOCATED 1115' FROM THE NORTH LINE AND 2180' FROM THE WEST LINE OF SECTION 23, TOWNSHIP 24 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

W.O. Number: 26947	Drawn By: D. JONES		
Date: 07-02-2012	Disk: DAJ 26947	Survey Date: 06-29-2012	Sheet 1 of 1 Sheets

PLU DELAWARE B 23 FEDERAL #1 SWD

Located 1115' FNL and 2180' FWL
Section 23, Township 24 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

basin surveys
focused on excellence in the oilfield

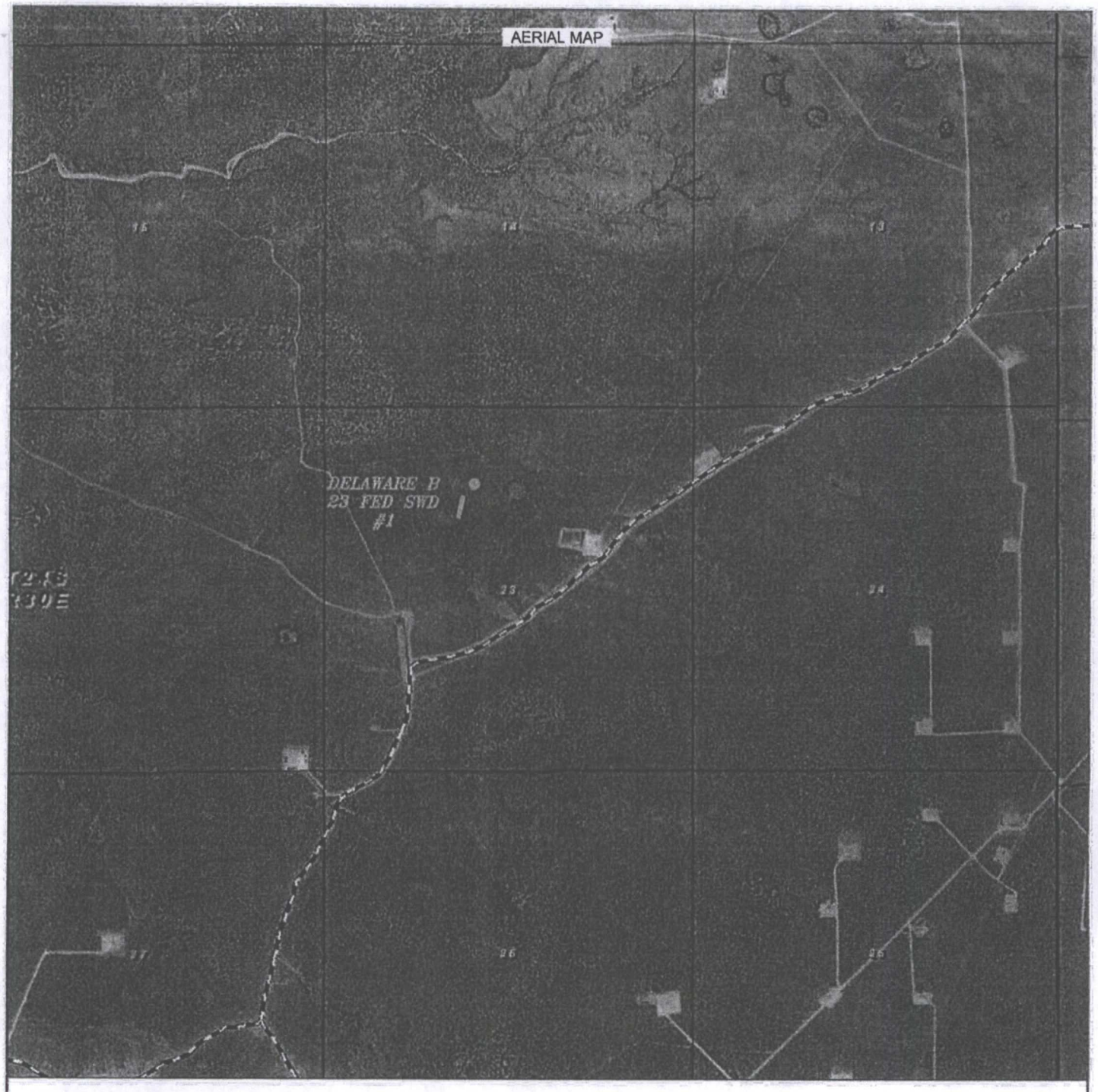
P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 – Office
(575) 392-2206 – Fax
basinsurveys.com

W.O. Number:	DAJ 26947
Survey Date:	06-29-2012
Scale:	1" = 2000'
Date:	07-02-2012

N

BOPCO, L.P.

Sheet 1 of 1 Sheets



DELAWARE B 23 FED. SWD #1
Located 1115' FNL and 2180' FWL
Section 23, Township 24 South, Range 30 East,
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basinsurveys.com

W.O. Number: DAJ 26947

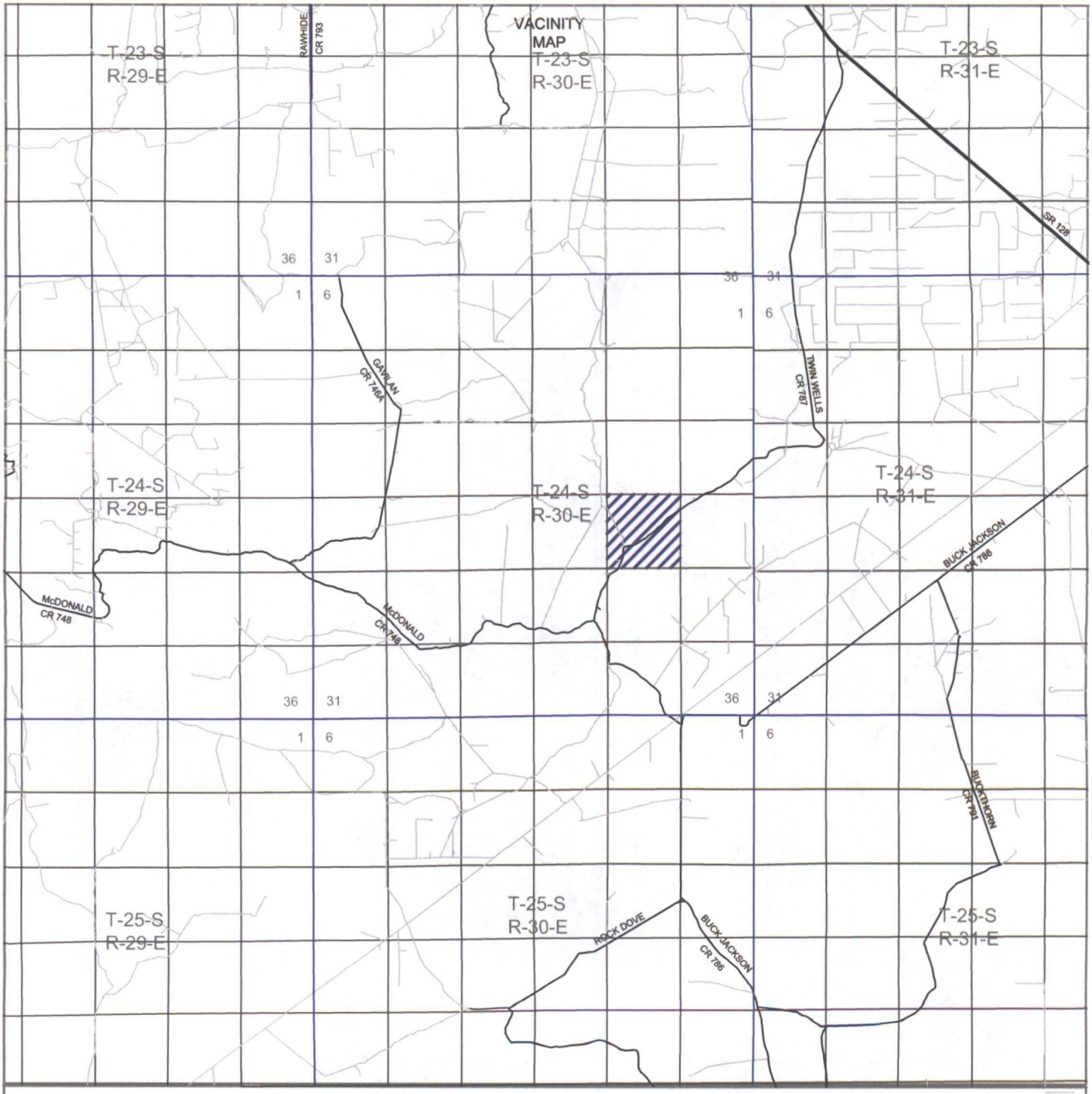
Scale: 1" = 2000'

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

N

BOPCO, L.P.

Sheet 1 of 1 Sheets



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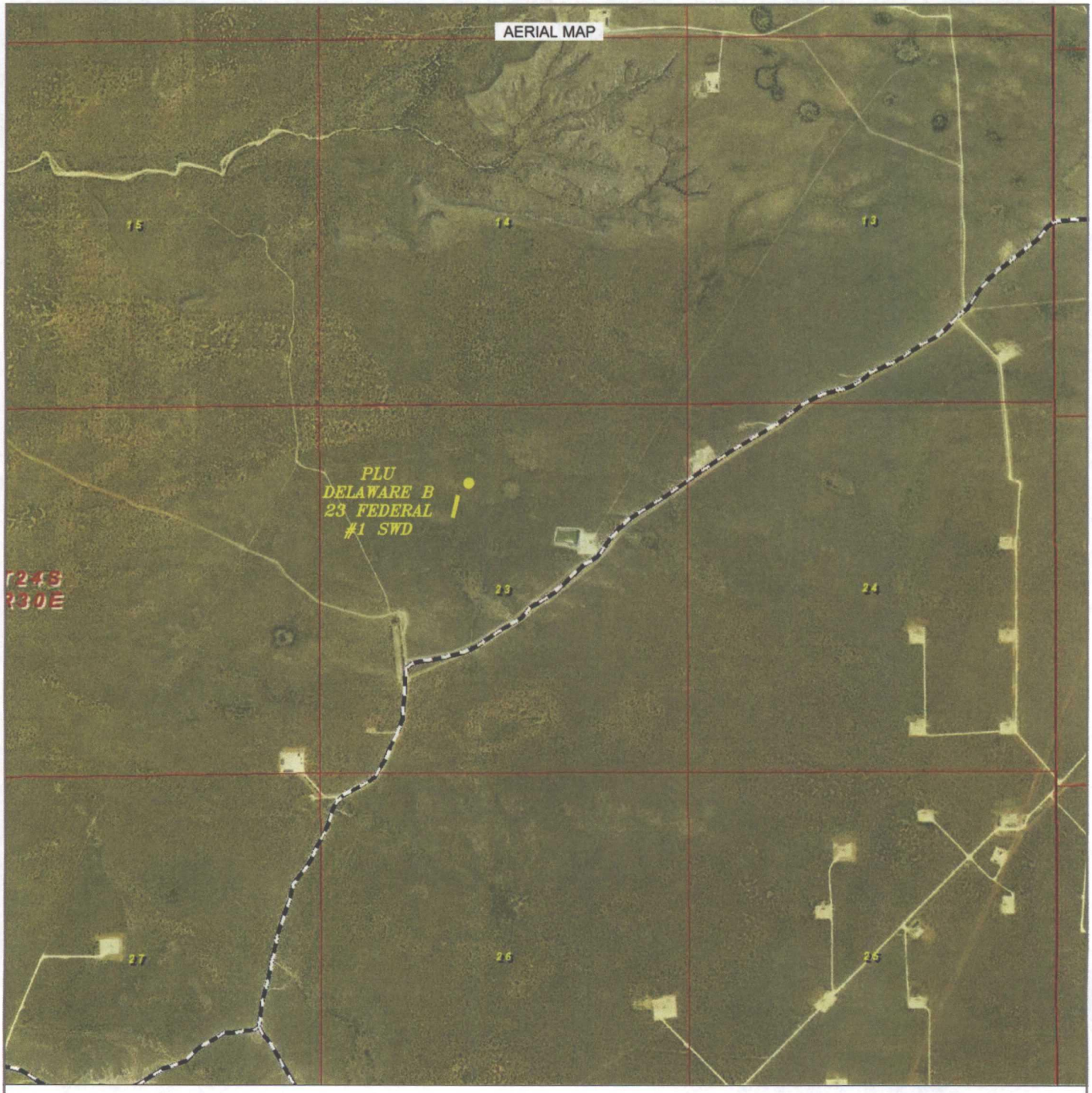
(575) 392-2206 – Fax
basinsurveys.com

W.O. Number:	DAJ 26947
Survey Date:	06-29-2012
Scale:	1" = 2 Miles
Date:	07-02-2012

N

BOPCO, L.P.

Sheet 1 of 1 Sheets



PLU DELAWARE B 23 FEDERAL #1 SWD

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W.O. Number: DAJ 26947

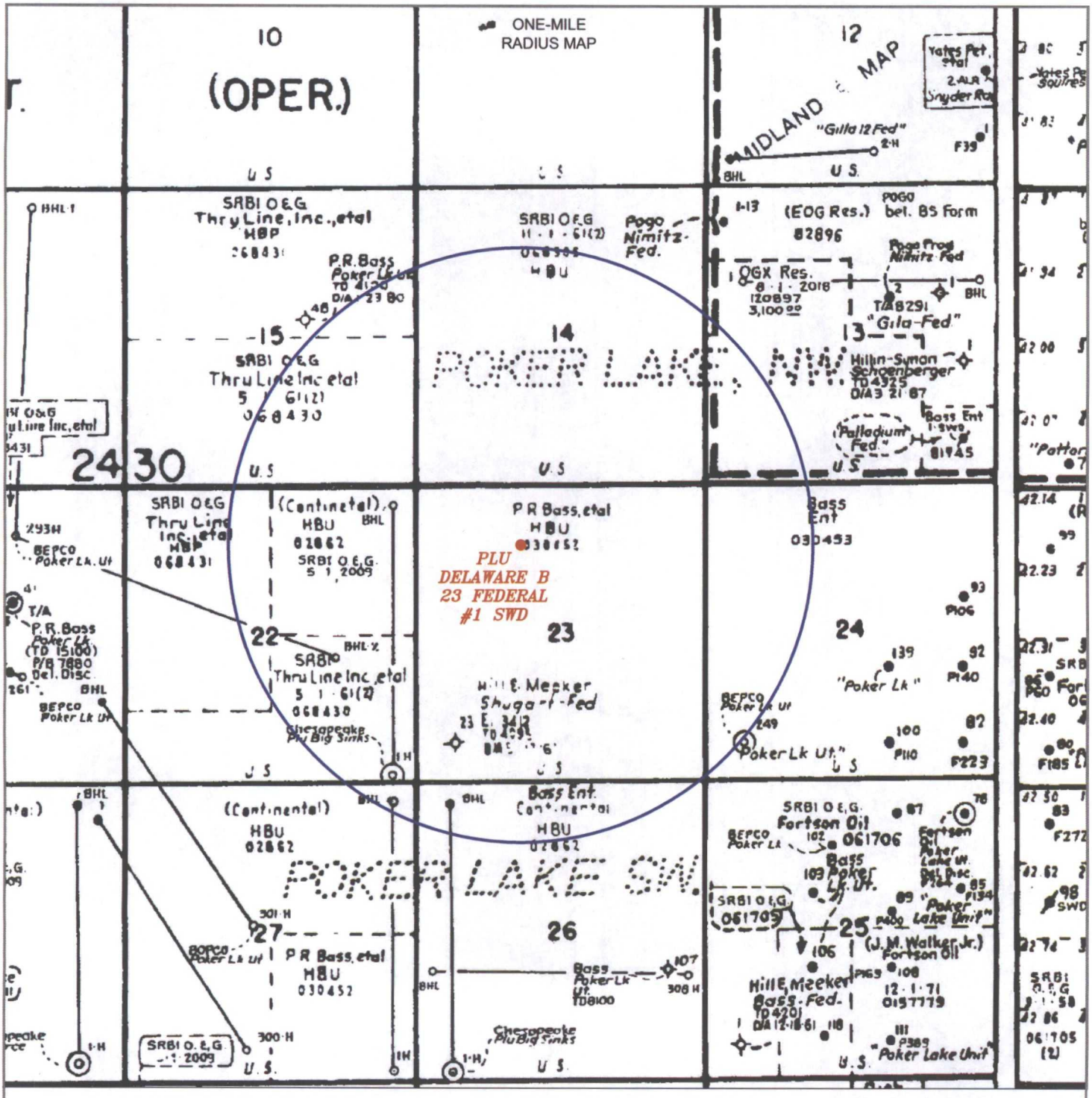
Scale: 1" = 2000'

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

N

BOPCO, L.P.

Sheet 1 of 1 Sheets



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basin surveys
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Hobbs, New Mexico 88241
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(575) 392-2206 – Fax
basinsurveys.com

W.O. Number: DAJ 26947

Scale: None

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

N

BOPCO, L.P.

Sheet 1 of 1 Sheets

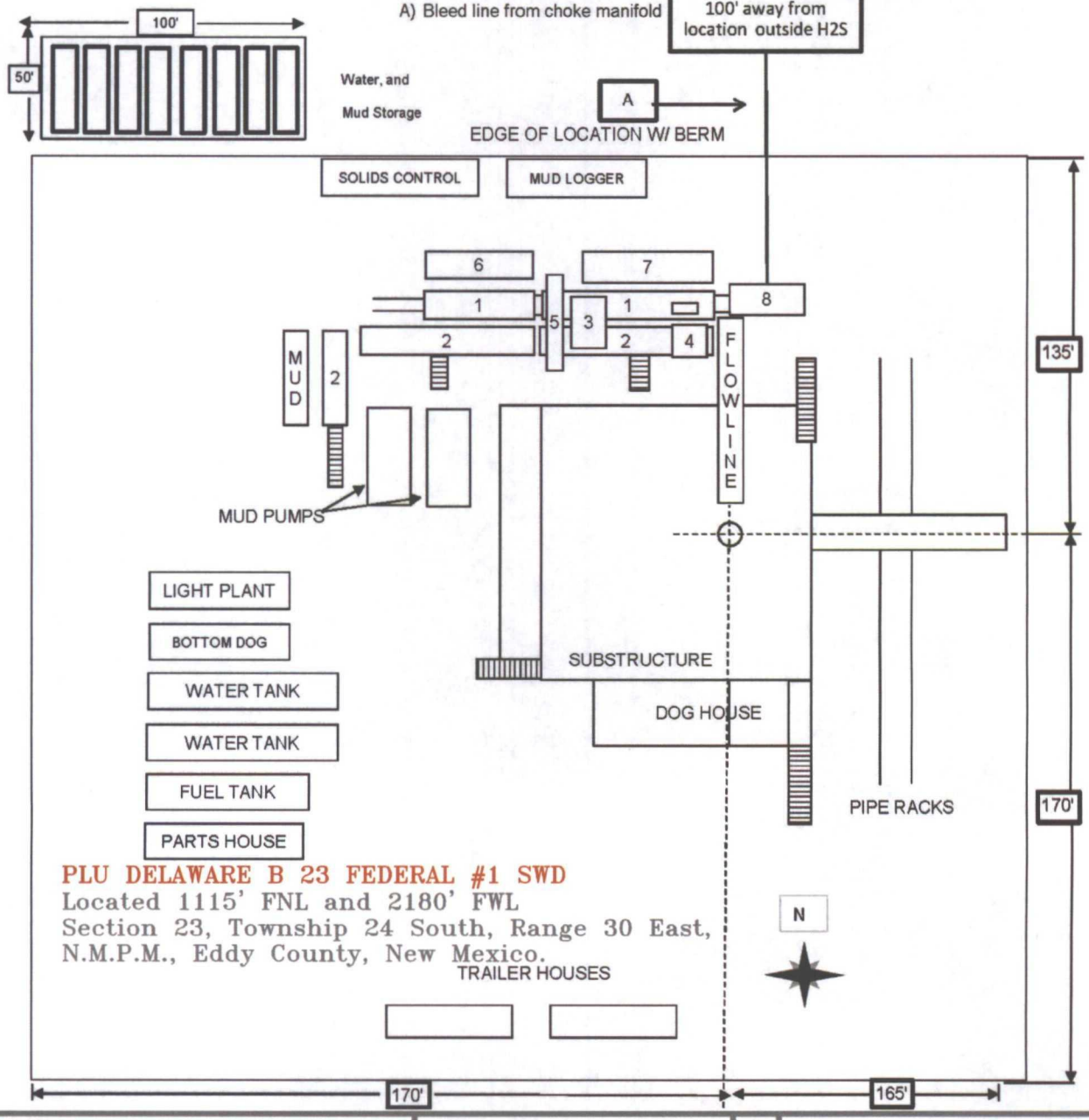
RIG LAYOUT

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 DELAWARE B 23 FEDERAL #1 SWD
Located 1115' FNL and 2180' FWL
Section 23, Township 24 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

basin surveys
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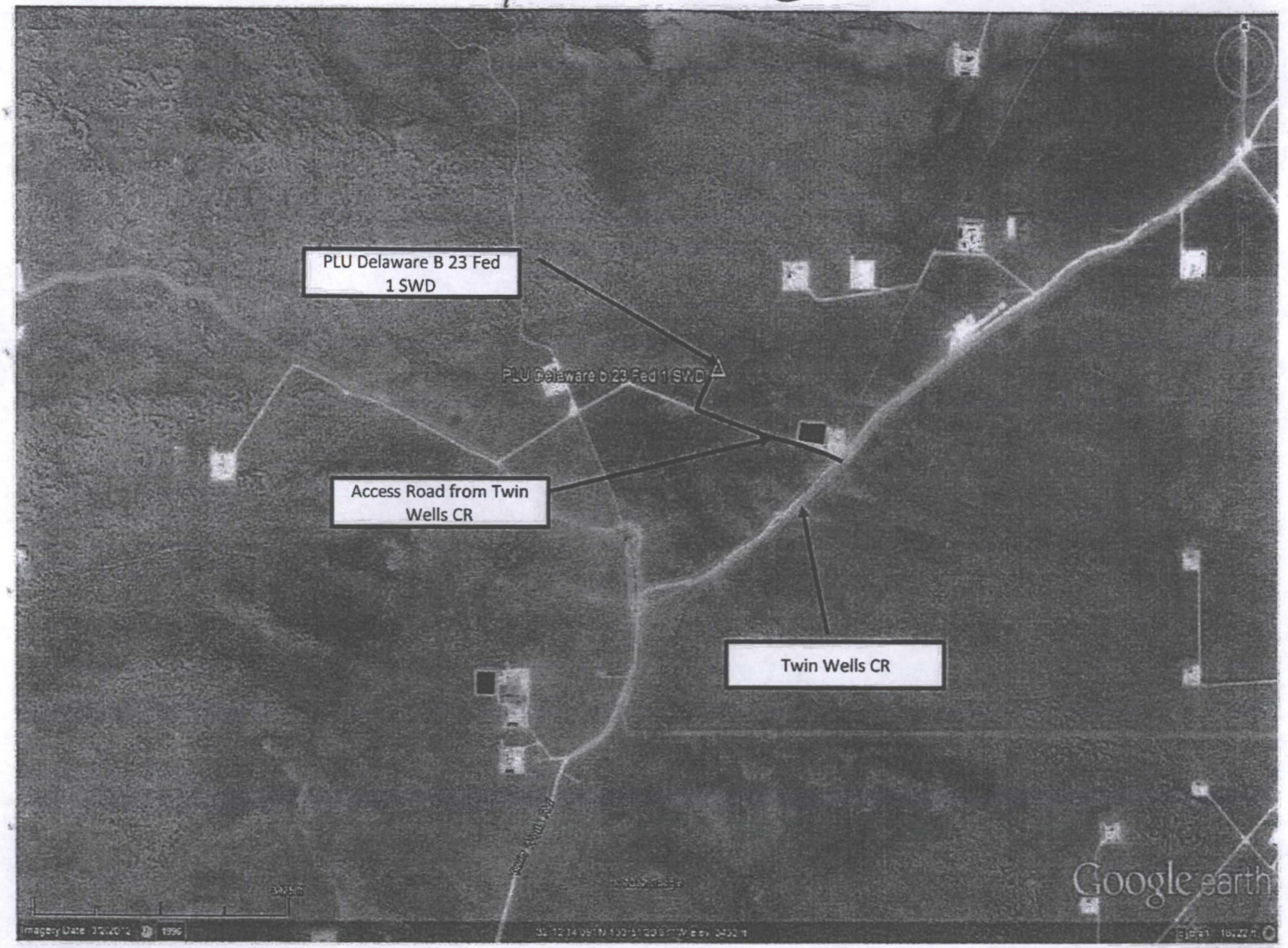
W.O. Number: DAJ 26947
Survey Date: 06-29-2012
Scale: 1" = 2000'
Date: 07-02-2012

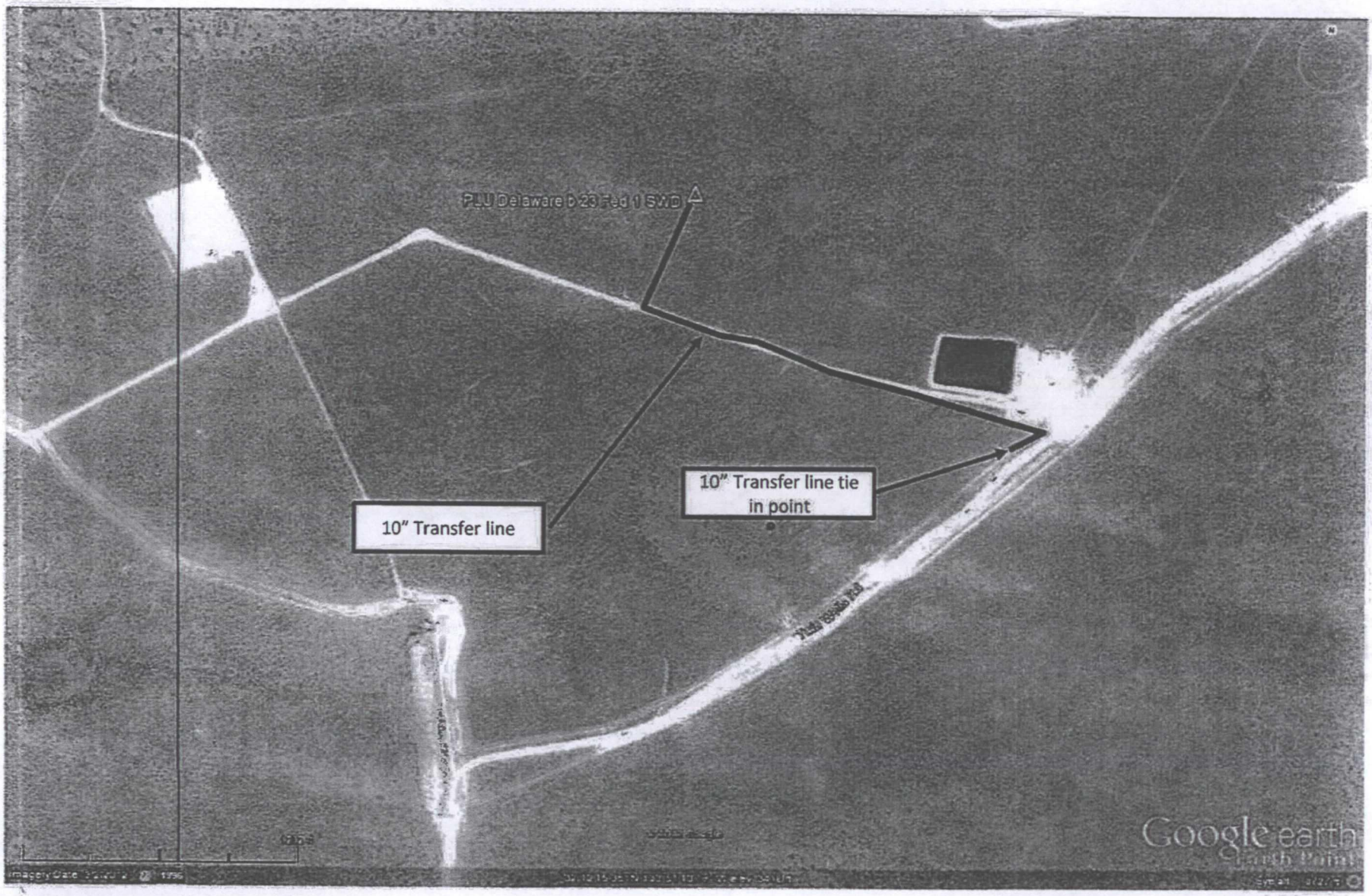
BOPCO, L.P.

Sheet 1 of 1 Sheets

Access Route



PLU Delaware B 23 Fed SWD 1
10" Transfer line and tie in point



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 12,000' into the Wolfcamp formation and cemented in two stages with DV tool set at approximately 7,000'. Cement will be circulated 500' into the 9-5/8" casing.

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: NMNM 0030452 (1200 acres)

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).

EIGHT POINT DRILLING PROGRAM
BOPCO, L.P.

NAME OF WELL: Delaware B 23 Federal SWD 1
LEGAL DESCRIPTION - SURFACE: 1,115' FNL, 2,180' FWL, Section 23, T24S, 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 3,460' (estimated)
GL 3,435'

Formation Description	Est from KB (TVD)	Est (MD)	SUB-SEA TOP	BEARING
T/Fresh Water	400'	400'	+	Fresh Water
T/Rustler	710'	710'	+ 2,750'	Barren
T/Salado	940'	940'	+ 2,520'	Barren
T/Lamar	4,060'	4,060'	- 600'	Oil/Gas
Delaware Sand	4,095'	4,095'	- 635'	Oil/Gas
Bone Spring	7,925'	7,925'	- 4,465'	Oil/Gas
Wolfcamp	11,305'	11,305'	- 7,845'	Oil/Gas
Middle Wolfcamp	12,553'	12,553'	- 9,093'	Oil/Gas
Strawn	13,445'	13,445'	- 9,985'	Oil/Gas
Atoka	13,505'	13,505'	- 10,045'	Oil/Gas
Morrow	13,965'	13,965'	- 10,505'	Oil/Gas
Middle Morrow	14,530'	14,530'	- 11,070'	Oil/Gas
Lower Morrow	15,010'	15,010'	- 11,550'	Oil/Gas
Mississippian Lime	15,875'	15,875'	- 12,415'	Oil/Gas
Woodford	16,130'	16,130'	- 12,670'	Oil/Gas
Devonian	16,285'	16,285'	- 12,825'	Brine Water
Ordovician Montoya	17,385'	17,385'	-13,925'	Brine Water
TD	17,785'	17,785'	- 14,325'	Brine Water

POINT 3: CASING PROGRAM

TYPE	INTERVAL MD	HOLE SIZE	PURPOSE	INSTALLATION TYPE
30"	0' – 120'	36"		
20", 94 ppf, J-55, BTC	0' – 930'	26"	Surface	New
13-3/8", 68 ppf, HCN-80, BTC	0' – 4,115'	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'~~ – 11,980'	12-1/4"	Production	New
7-5/8", 39 ppf, P-110 Ultra FJ	11,780' – 14,500'	8-1/2"	Prod. Liner	New
7-5/8", 42.80 ppf, P-110 Ultra FJ	14,500' – 16,300	8-1/2"	Prod Liner.	New

***9-5/8", 53.50, L-80 & HCL-80 will be special drift to 8.5".**

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 a 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" annular and diverter system per Diagram B (2,000 psi WP). The annular 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 spool (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 (10,000 psi WP). The pipe and blind rams, choke, kill lines, kelly cocks, inside BOP, etc. when installed will be hydro-tested as a 5M BOP/BOPE system equivalent or better by an independent tester. In addition to the high pressure test, a low pressure (250-300 psig) test will be required. The annular when installed on the intermediate casing will be tested to 2500 psig.

The BOPE when rigged up on the 9-5/8" production casing spool (8-1/2" 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. when installed will be hydro-tested as a 10M BOP/BOPE system equivalent or better by an independent tester. In addition to the high pressure test, a low pressure (250-300 psig) test will be required. The annular when installed on the intermediate casing will be tested to 5000 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, LP would like to request a variance to utilize a 3-1/2" ID, 10, 10,000 psi WP, armored flex hose to be installed between the BOP stack and choke manifold in the drilling of this well. The hose has passed a hydrostatic test to 15,OOO psi by Midwest Hose & Specialty, Inc. The 40' hose, serial number 7469, has 10,000 psi swedged fittings. This well will be drilled to a maximum TVD of 17,785' and a maximum surface pressure should be +4,595 psi. Which is max BHP minus 0.22 psi/ft. as per

Please refer to diagram 1 for BOP layout. Please see 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.

CASING DESIGN SAFETY FACTORS:

TYPE	TENSION	COLLAPSE	BURST
20", 94 ppf, J-55, BTC	18.66	1.15	1.37
13-3/8", 68 ppf, HCN-80, BTC	6.59	1.25	2.19
9-5/8", 53.50 ppf, ~~L-80~~, LTC* P-110	2.27	1.31	1.67
9-5/8", 53.50 ppf, ~~HCL-80~~, LTC*	6.07	1.39	1.66
7-5/8", 39 ppf, P-110 Ultra FJ	10.60	1.14	1.60
7-5/8", 42.80 ppf, P-110 Ultra FJ	16.58	1.29	1.77

P-110

***9-5/8", 53.50, ~~L-80 & HCL-80~~ will be special drift to 8.5".**

POINT 5: MUD PROGRAM

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	Ph
0 - 930'	FW Spud Mud	8.5 – 9.2	70-40	20	12	NC	10.0
930' - 4,115'	Brine Water	9.8 – 10.2	28-32	NC	NC	NC	10.0
4,115' – 9,000'	FW/Gel	8.7 – 9.0	28-32	NC	NC	NC	9.5 -10.5
9,000' – 11,980'	Cut Brine\Brine Mud	9.0 – 9.5	34-42	10	8	< 25	9.5 – 10.5
11,980' – 16.300'	XCD Brine Mud	11.0 – 12.5	45-48	20	10	< 5	9.5 – 10.5
16,300' – 17,785'	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 See COA

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

Run #2: Elemental Capture Spectroscopy log from Bone Spring to Devonian.

Mud Logger: Rigged up at 100'

C) CONVENTIONAL CORING

Rotary sidewall cores in Bone Spring and Wolfcamp.

D) CEMENT

INTERVAL	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT^3/SX
SURFACE:						
Lead: 0' – 630'	1140	630'	Cemex premium Plus C + bentonite + CaCl2	8.79	13.70	1.68
Tail: 630' – 930'	740	300'	Cemex Premium Plus C + CaCl2	6.48	14.80	1.35
INTERMEDIATE:						
Lead: 0' – 3,615'	2570	3615'	Class C + 0.1% HR-601, 3% salt	9.88	12.90	1.83
Tail: 3,615' – 4,115'	560	500	HalCem C	6.34	14.80	1.33
Production						
Stage 1:						
Lead: 6,000' – 11,250'	900	5250	Tuned Light + 0.75% + CFR-3 + 1.5#/sk CaCl	12.41	10.20	2.76
Tail: 11,250' – 11,980'	240	730	VersaCem-PBSH2 + 0.4% Halad-9	8.76	13.0	1.65
DV Tool @ 6,000'						
Stage 2:						
Lead: 3,615' – 5,500'	840	1885	EconCem HLC + 1% Econolite + 5% CaCl + 5#/sk Gilsonite	10.71	12.60	2.04
Tail: 5,500' – 6,000'	190	500	HalCem C	6.34	14.80	1.33
Production Liner						
Tail: 11,780' – 16,300'	430	4520	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.

1st 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" 1st Intermediate casing in areas outside the SOPA. Cement will be circulated to surface on areas inside the SOPA.

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

E) H_2S SAFTEY EQUIPMENT

As stated in the BLM Onshore Order 6, for wells located inside the H2S area, H_2S equipment will be rigged up after setting surface casing. For the wells located inside the H2S area the flare pit will be located 150' from the location. For wells located outside the H2S 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_2S anticipated in the area, although in the event that H_2S is encountered, the H_2S contingency plan attached will be implemented. **(Please refer to diagram 2 for choke manifold and closed loop system layout.) Please refer to H2S location diagram for location of important H2S safety items.**

F) CLOSED LOOP AND CHOKE MANIFLOLD

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 4,060'-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 5500 psi with 7500 ppm H2S and 5% CO2; however, we anticipate drilling down dip in a non-productive area. There is no Devonian production within +/- 4 miles.

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

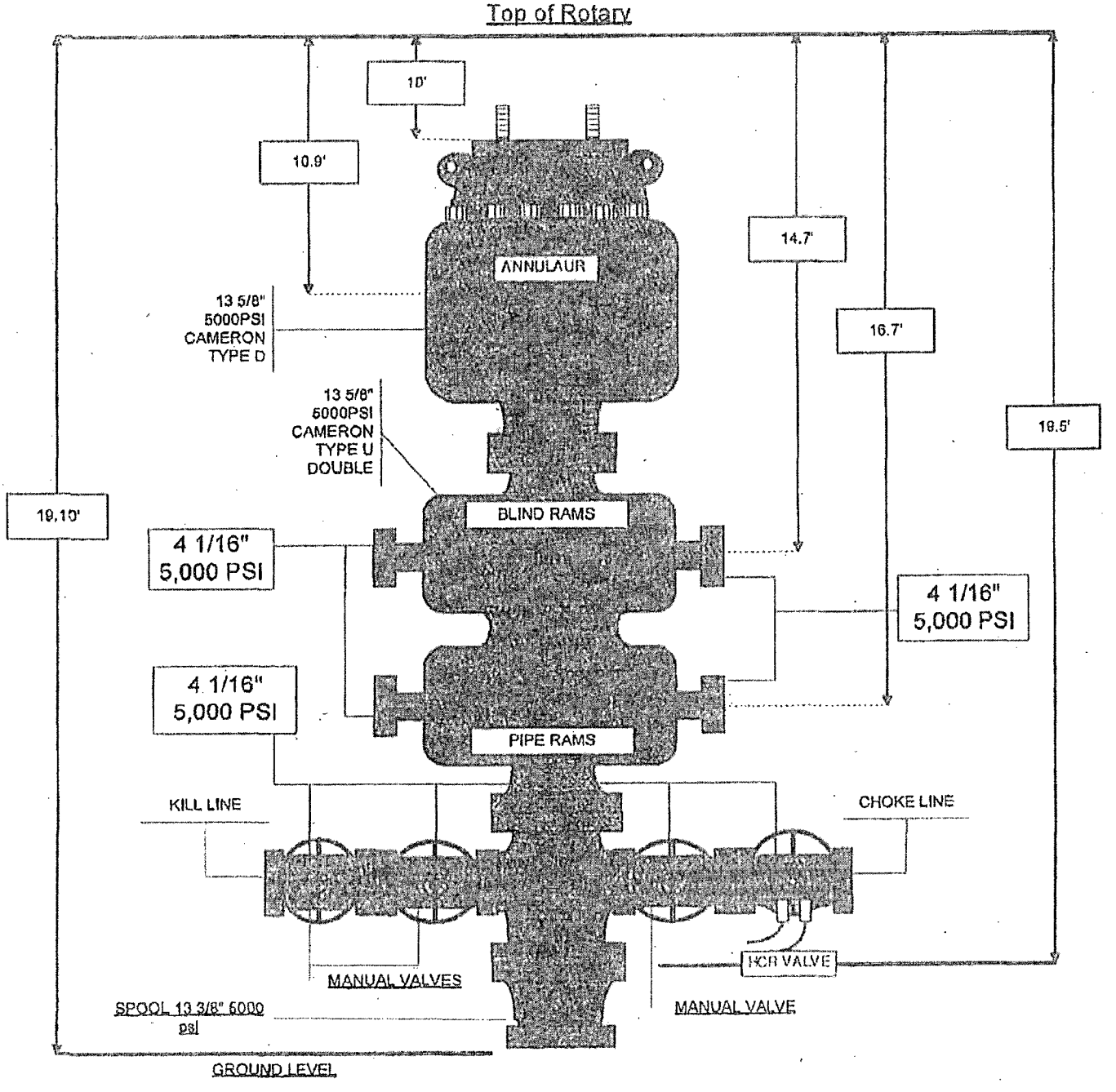
10 days completion operations

JDB

Diagram 1

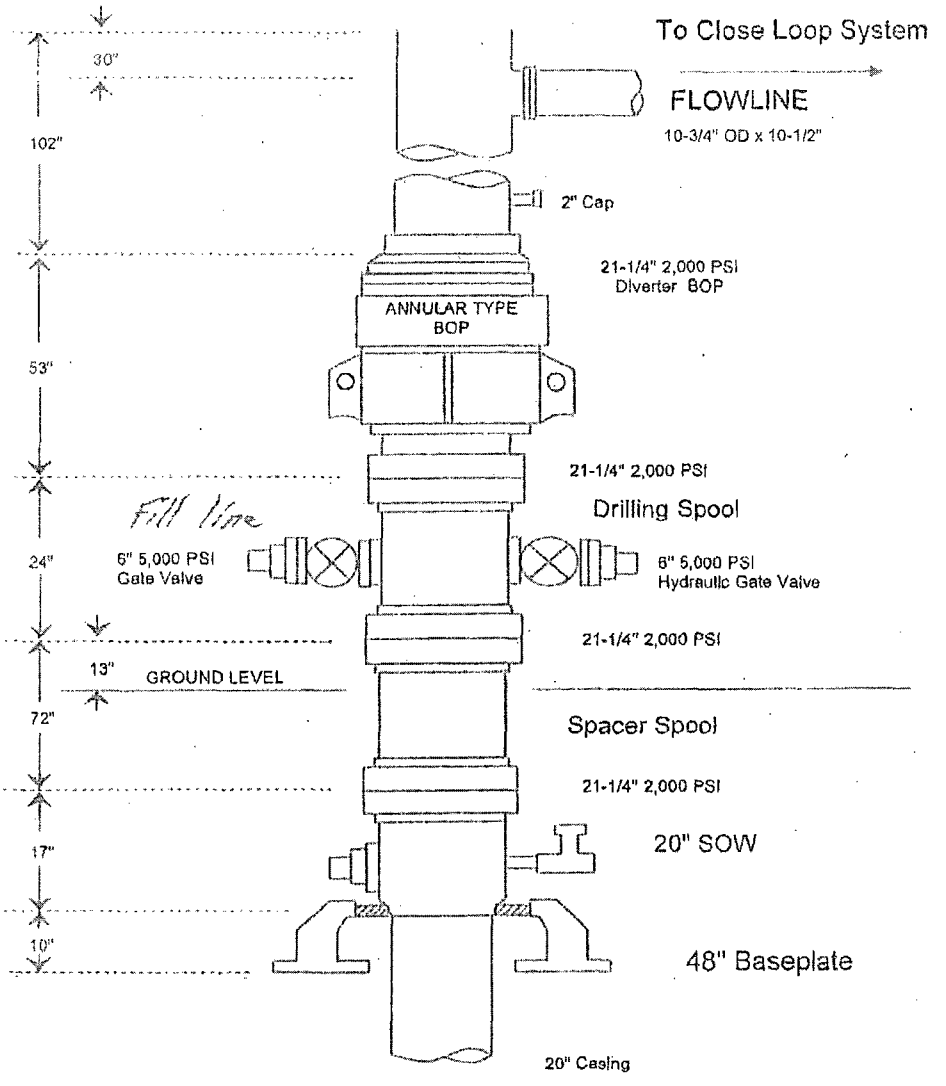
LATSHAW DRILLING

RIG 18



BOPCO, L. P

20" 2,000 PSI Diverter



Note: Actual lengths of casing heads may vary. Always measure items prior to installing in order to ensure proper spacing.

DIAGRAM B

P.O. BOX 98
MIDLAND, TX. 79702
PHONE (432) 683-4521

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
FAX (432) 682-8819

RESULT OF WATER ANALYSES

LABORATORY NO. 1112-73
SAMPLE RECEIVED 10-25-12
RESULTS REPORTED 10-31-12

TO: Carlos Cruz
PO Box 2267, Midland, TX 79702

COMPANY BOPCO LEASE

FIELD OR POOL

SECTION BLOCK SURVEY COUNTY Eddy STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 JR #29. 10-19-12
NO. 2 JR #124. 10-19-12
NO. 3 PLU #78. 10-19-12
NO. 4 PLU #213. 10-19-12

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.1976	1.2000	1.1942	1.1990
pH When Sampled				
pH When Received	5.50	5.40	5.40	5.40
Bicarbonate as HCO_3	12	10	12	10
Supersaturation as $CaCO_3$				
Undersaturation as $CaCO_3$				
Total Hardness as $CaCO_3$	95,000	87,000	84,000	84,000
Calcium as Ca	31,200	28,400	26,800	29,200
Magnesium as Mg	4,131	3,888	4,131	2,673
Sodium and/or Potassium	82,557	94,524	85,775	90,371
Sulfate as SO_4	153	151	153	136
Chloride as Cl	194,540	207,320	191,700	198,800
Iron as Fe	91	44	89	51
Barium as Ba	0	0	0	0
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	312,593	334,293	308,571	321,189
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen,				
Hydrogen Sulfide	0.0	0.0	0.0	0.0
Resistivity, ohms/m at 77° F.	0.044	0.039	0.045	0.044
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks

The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

Form No. 3

By Greg Ogden, B.S.

LATHAM PRINTING CO. - 333-1292

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

(432) 683-2277 FAX (432) 687-0329

November 21, 2012

Carlsbad Current Argus
P O Box 1629
Carlsbad, NM 88220

Re: Notice of Application to Dispose
Delaware B 23 Federal SWD #1
Sec 23; T24S; R30E
Eddy County, New Mexico
File: 100-WF: .C108
Certification: 7160 3901 9846 4644 7980

Gentlemen:

Enclosed for publication is a legal advertisement. BOPCO, L.P. requests that this be published for three consecutive days. BOPCO, L.P. is required by the New Mexico Oil Conservation Division to furnish them with a copy of this advertisement, from your newspaper, giving the dates of publication. Also enclosed is a check for the fee required to run this advertisement. Email me with any questions at ezgalindo@basspet.com.

Please send the ad, the affidavit of publication and the invoice to Emma Z. Galindo at the above letterhead address.

Sincerely,

Emma Z. Galindo

2. Article Number
7160 3901 9846 4644 7980
3. Service Type CERTIFIED MAIL
4. Restricted Delivery? (Extra Fee) Yes
1. Article Addressed to:
Carlsbad Current Argus
P.O. Box 1629
Carlsbad, NM 88220
Attn: Kathy McCarroll
Del B 23 Fed SWD 1

COMPLETE THIS SECTION ON DELIVERY
A. Received by (Please Print Clearly) Kathy McCarroll
B. Date of Delivery
C. Signature
X
Agent
Addressee
D. Is delivery address different from item 1? Yes
If YES, enter delivery address below: No

CARLSBAD NM
NOV 27 2012
USPS 88220-9998

PS Form 3811, January 2005 Domestic Return Receipt

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF RETURN ADDRESS FOLD AT DOTTED LINE

CERTIFIED MAIL

FOLD AND TEAR HERE

Thank you for using Return Receipt Service

2. Article Number

7160 3901 9846 4644 7997

3. Service Type **CERTIFIED MAIL**

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

1. Article Addressed to:

LINE 1

Bureau of Land Managenent
620 E. Greene Street
Carlsbad, NM 88220-6292

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) | B. Date of Delivery

C. Signature

X ☐ Agent ☐ Addressee

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

Delaware B 23 Fed SWD #1

PS Form 3811, January 2005 Domestic Return Receipt

Jones, William V., EMNRD

From: Galindo, Emma Z. <EZGalindo@BassPet.Com>
Sent: Monday, December 17, 2012 1:32 PM
To: Jones, William V., EMNRD
Subject: FW: Publication of Legal Advertisement; Delaware B 23 Federal SWD #1
Attachments: Cert Mail BLM Receipt.pdf

Attached is the Certified Receipt for the BLM copy of application.

Thanks,
Emma

From: Galindo, Emma Z.
Sent: Monday, December 10, 2012 1:11 PM
To: William.V.Jones@state.nm.us
Subject: FW: Publication of Legal Advertisement; Delaware B 23 Federal SWD #1

Mr. Jones,

Here is the advertisement and affidavit for the Delaware B 23 Federal SWD #1 I sent on Friday via Fed Ex. This will be another deep disposal as the one previous.

Thanks,
Emma

From: McCarroll, Kathy [mailto:kmccarroll@currentargus.com]
Sent: Monday, December 10, 2012 1:05 PM
To: Galindo, Emma Z.
Subject: RE: Publication of Legal Advertisement; Delaware B 23 Federal SWD #1

Emma

I'm sorry I have been out of the office. Here is the affidavit and the hard copy will be in today's mail.

Thanks

Kathy McCarroll
Customer Service
Carlsbad Current-Argus
620 S. Main St.
Carlsbad, NM 88220

Phone: (575) 628-5522
Web: http://www.currentargus.com

From: Galindo, Emma Z. [mailto:EZGalindo@BassPet.Com]
Sent: Thursday, December 06, 2012 2:43 PM

Jones, William V., EMNRD

From: Galindo, Emma Z. <EZGalindo@BassPet.Com>
Sent: Monday, December 10, 2012 12:11 PM
To: Jones, William V., EMNRD
Subject: FW: Publication of Legal Advertisement; Delaware B 23 Federal SWD #1
Attachments: BopcoDoc1.doc

Mr. Jones,

Here is the advertisement and affidavit for the Delaware B 23 Federal SWD #1 I sent on Friday via Fed Ex. This will be another deep disposal as the one previous.

Thanks,
Emma

From: McCarroll, Kathy [mailto:kmccarroll@currentargus.com]
Sent: Monday, December 10, 2012 1:05 PM
To: Galindo, Emma Z.
Subject: RE: Publication of Legal Advertisement; Delaware B 23 Federal SWD #1

Emma

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Thanks

Kathy McCarroll
Customer Service
Carlsbad Current-Argus
620 S. Main St.
Carlsbad, NM 88220

Phone: (575) 628-5522
Web: http://www.currentargus.com

From: Galindo, Emma Z. [mailto:EZGalindo@BassPet.Com]
Sent: Thursday, December 06, 2012 2:43 PM
To: McCarroll, Kathy
Subject: FW: Publication of Legal Advertisement; Delaware B 23 Federal SWD #1

Kathy,

I just tried calling you to find out the status on the publication with no luck. So, could give me an update at your earliest convenience?

Thanks,
Emma

RECEIVED

DEC 13 2012

BOPCO WTD PRODUCTION

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:

November 30 2012

December 1 2012

December 2 2012

That the cost of publication is **$148.00** and That payment thereof has been made and will be assessed as court costs.

Kathy McCarroll

Subscribed and sworn to before me this

10th day of December, 2012

Shirley Maxwell

My commission expires May 18, 2015
Notary Public

OFFICIAL SEAL
Shirley Maxwell
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 5/18/15

November 30, December 1 and 2, 2012

NOTICE OF APPLICATION FOR SALT WATER DISPOSAL WELL PERMIT

BOPCO, L.P. is in the process of applying to the New Mexico Oil Conservation 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 water into the Delaware B 23 Federal SWD #1 (Devonian Formation). The maximum allowable injection pressure will be 3,257 psi and the estimated maximum rate will be 30,000 bbls produced water/day. The proposed disposal well is located in Eddy County, New Mexico in Section 23, T24S, R30E. The produced salt water will be disposed at a subsurface depth of 16,285' - 18,085'.

Any questions concerning this application should be directed to Emma Z. Galindo, Engineering Assistant, 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.

Jones, William V., EMNRD

From: Galindo, Emma Z. <EZGalindo@BassPet.Com>
Sent: Thursday, January 17, 2013 2:18 PM
To: Jones, William V., EMNRD
Subject: RE: Disposal application from BOPCO, L.P.: PLU Delaware B 23 Fed SWD #1 30-015-40935 Devonian/Montoya Open Hole
Attachments: Delaware B 23 Disposal Interval Discussion .docx

Mr. Jones,
I have attached the answer to your questions for Item "C". In regards to Item "B", as on the ND 19 SWD, the entire well will be both mudlogged and open-hole logged. The revised package will be sent FedEx overnight to you this afternoon. Thank you for your help!

Thanks,
Emma

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Tuesday, January 15, 2013 4:51 PM
To: Galindo, Emma Z.
Cc: Ezeanyim, Richard, EMNRD; Wesley Ingram; Shapard, Craig, EMNRD
Subject: Disposal application from BOPCO, L.P.: PLU Delaware B 23 Fed SWD #1 30-015-40935 Devonian/Montoya Open Hole

Hello Ms. Galindo,
Looks like another VERY expensive, deep, new-drill for disposal purposes...

Just looked over the application as sent to me and to make sure our file is correct:

a. Since the well is now permitted by the BLM and has a fixed location and well depth, it seems the application to the OCD for SWD has discrepancies in the footage location of the well and the total depth of the well. Would you correct the footages, total depth, and any other items that are not consistent and resend a complete application to me as one package? I will throw away the previous submittal but use the previous date of submittal.

b. Also put in an explanation of how BOPCO will evaluate the new well for hydrocarbons in the open hole interval – will you mudlog the well and run open hole logs? We have required a mudlog for similar deep Devonian wells proposed by Apache for disposal....

c. For your Geo: Is there no Silurian (Fusselman) between the Devonian and Montoya? Will this well reach the Simpson or Ellenburger? If there is a question about the nomenclature or formation tops, BOPCO, LP could propose this well as a Devonian, Silurian, ~~Ordovician~~ SWD and it would include all those formation names. This would not delay your permit on our end. Montoya

Thank You,

Will

Re: PLU Delaware B 23 Federal SWD No. 1 Disposal Interval

The section drilled by the recent ND 19 Federal SWD No. 1 disposal well below the Woodford consists of a Devonian upper dolomite interval (15,603'-15,874') underlain by a tight limestone interval. Below this a second porous dolomite is present at a depth of 16,234' underlain by a second tight limestone section at a depth of 16,720'. This lower limestone appears to be the top of the Montoya formation based on log character. It is reasonable to assume that a Silurian section is present between the Devonian and Montoya, although the depth of the top of Silurian is uncertain at this time. The plan for the PLU Delaware B 23 Federal SWD No. 1 is to TD at the top of the tight limestone correlated as Montoya in the ND 19 well. The section open for disposal would therefore consist of Devonian, Silurian, and a short interval of Ordovician Montoya, although the tight Montoya limestone would most likely not effectively take water.

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Tuesday, January 15, 2013 3:51 PM
To: 'Galindo, Emma Z.'
Cc: Ezeanyim, Richard, EMNRD; Wesley_Ingram@blm.gov; Shapard, Craig, EMNRD
Subject: Disposal application from BOPCO, L.P.: PLU Delaware B 23 Fed SWD #1 30-015-40935 Devonian/Montoya Open Hole

Hello Ms. Galindo,
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c. For your Geo: Is there no Silurian (Fusselman) between the Devonian and Montoya? Will this well reach the Simpson or Ellenburger? If there is a question about the nomenclature or formation tops, BOPCO, LP could propose this well as a Devonian, Silurian, Ordovician SWD and it would include all those formation names. This would not delay your permit on our end. + Montoya

Thank You,

Will

From: Galindo, Emma Z. [mailto:EZGalindo@BassPet.Com]
Sent: Tuesday, January 15, 2013 7:59 AM
To: Jones, William V., EMNRD
Subject: Delaware B 23 Fed SWD #1

Mr. Jones,

Could you please give us an update on our request for the Delaware B 23 Fed SWD #1? Mr. Carlos Cruz wants to know the status of our application.

Thank you,
Emma Z. Galindo
Engineering Assistant
BOPCO, L.P.

in 12/10/12

Injection Permit Checklist First Email Date: 1/15/13 Final Reply Date: 1/18/13 Final Notice Date: 12/10/12

Issued Permit: Type: WFX/PMX/SWD Number: 1388 Permit Date 1/22/13 (Legacy Permit: ———)

Wells 1 Well Name(s): (PLU DELAWARE B 23 FEDERAL SWD) #1

API Num: 30-015-40935 Spud Date: Not Yet New/Old: N (UIC Cl II Primacy March 7, 1982)

Footages 1165 FNL/2180 FWL Lot Unit C Sec 23 Tsp 24S Rge 30E County EDDY

General Location or Pool Area: Poker LAKE UNIT

Operator: BOPCO, L.P. Contact EMMA Z. GALINDO

OGRID: 260737 RULE 5.9 Compliance (Wells) 3/489 (Finan Assur) OK IS 5.9 OK? OK

Well File Reviewed ✓ Current Status: Not Drilled/Not Permitted

Planned Work to Well: Permit/Drill/Eqp/DISPOSE

Diagrams: Before Conversion ___ After Conversion ✓ Are Elogs in Imaging?: Will be submitted

Well Details:	Sizes Hole.......Pipe	Setting Depths	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned ✓ or Existing __ Surface	26 – 20"	930	—	1880 SX	CIRC (Rustler)
Planned ✓ or Existing __ Interm	17 1/2 – 13 3/8	4115	—	3130 SX	CIRC (Lamar)
Planned ✓ or Existing __ LongSt	12 1/4 – 9 5/8	11,980	6000'	1140/1030	CIRC
Planned ✓ or Existing __ Liner	8 1/2 – 7 5/8	11480' – 16300	—	430	To.L.
Planned ✓ or Existing __ OpenHole	6 1/2" —	16,300' – 17,885		—	—

Depths/Formations:	Depths, Ft.	Formation	Tops?
Above			
Above	16285	Dev	✓
Proposed Interval TOP:	16,300'	Dev	
Proposed Interval BOTTOM:	~~18,085'~~	Montoya	
Below	17385' (?17,785')	Montoya	✓
Below			

Max. PSI 3260 OpenHole ✓ Perfs ___ Tubing Size 4 1/2 Packer Depth 16250

(Just over 1/2 mile, of)

~~Capitan Reef? (in__/thru__)~~ Potash? ___ Noticed? ___ [~~WIPP? __ Noticed?~~]Salado Top ___ Bot ___ ~~Cliff House?~~ ___

Fresh Water: MaxDepth: 400' FW Formation ___ Wells? None Analysis? — Affirmative Statement ✓

Disposal Fluid: Formation Source(s) ~~Bone Spring~~/Delaware On Lease ___ Only from Operator ___ or Commercial ___ ?

Disposal Interval: Protectable Waters? NO H/C Potential: Log__ /Mudlog__ /DST__ /Tested__ /Depleted__ Other ___

Notice: Newspaper Post Date 11/30/12 Surface Owner BLM N. Date 12/10/12

RULE 26.7(A) Identified Tracts? ___ Affected Persons: all BOPCO N. Date ———

AOR: Maps? ✓ Well List? ✓ Producing in Interval? NO Formerly Produced in Interval? —

Penetrating.......No. Active Wells 0 Num Repairs? 0 on which well(s)? —

Penetrating.......No. P&Aed Wells 0 Num Repairs? 0 on which well(s)? — Diagrams? —

Permit Conditions: Run Mudlog – Turn in

Issues:

Issues:

Issues: