

OCD Artesia

Form 3160-3
(April 2004)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NM 0030452
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator BOPCO, L. P. <260737>		7. If Unit or CA Agreement, Name and No.
3a. Address P. O. Box 2760 Midland, TX 79702	3b. Phone No. (include area code) 432-683-2277	8. Lease Name and Well No. Poker Lake Unit #342H <306402>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWNW, UL D, 1295' FNL, 115' FWL, Lat N32.206933, Long W103.859422 At proposed prod. zone 1250' FNL, 45' FEL, Sec 26, T24S, R30E, Lat N32.192447, Lg W103.842661		9. API Well No. 30-015-38666
14. Distance in miles and direction from nearest town or post office* 17 miles east of Malaga, NM		10. Field and Pool, or Exploratory Poker Lake SW (Delaware) <96047>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 25'	16. No. of acres in lease 1200	11. Sec., T. R. M. or Blk. and Survey or Area Sec 23, T24S, R30E, Mer NMP
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 3369'	19. Proposed Depth 14,951' MD, 7855' TVD	12. County or Parish Eddy County
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3436' GL	22. Approximate date work will start* 04/01/2011	13. State NM
17. Spacing Unit dedicated to this well 640		
20. BLM/BIA Bond No. on file COB000050		
23. Estimated duration 30 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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>KH08JW</i>	Name (Printed/Typed) Katy Holster	Date 1/28/11
Title Administrative Assistant		
Approved by (Signature) /s/ Don Peterson	Name (Printed/Typed)	Date
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

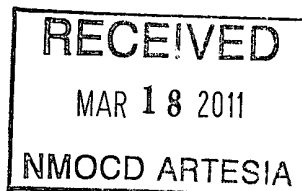
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

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

SEE ATTACHED FOR
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS

Surface casing is to be set into the Rustler below all fresh water sands at an approximate depth of 766'.

7" casing will be set at approximately 8274' MD (thru curve) and cemented in two stages with DV Tool set at approximately 5000'. Cement will be circulated to surface.

Production liner will be 4-1/2" run, with Baker hydraulic packers for zone isolation. Top of 4-1/2" liner will be approximately 200' above KOP (7129').

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

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

The surface and bottom hole locations are both unorthodox.

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

EIGHT POINT DRILLING PROGRAM BOPCO, L.P.

NAME OF WELL: Poker Lake Unit #342H

LEGAL DESCRIPTION - SURFACE: 1295' FNL, 115' FWL, Section 23, T24S, R30E, Eddy County, NM.
BHL: 1250' FNL, 45' FEL, Section 26, T24S, R30E, Eddy County, New Mexico.

POINT 1: ESTIMATED FORMATION TOPS

(See No. 2 Below)

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

Anticipated Formation Tops: KB 3455' (estimated)
GL 3436'

FORMATION	ESTIMATED TOP FROM KB		ESTIMATED SUB-SEA TOP	BEARING
	TVD	MD		
B/Fresh Water	400'	400'	+ 3,055'	Fresh Water
T/Rustler	456'	456'	+ 2,999'	Barren
T/Salt	776'	776'	+ 2,679'	Barren
B/Salt	3,763'	3,763'	- 308'	Barren
T/Lamar	3,981'	3,981'	- 526'	Barren
T/Ramsey	4,094'	4,094'	- 639'	Oil/Gas
T/Lower Cherry Canyon	6,145'	6,145'	- 2,690'	Oil/Gas
KOP	7,329'	7,329'	- 3,893'	Oil/Gas
T/Lwr Brushy Canyon	7,660'	7,617'	- 4,145'	Oil/Gas
T/"Y" Sand	7,765'	7,881'	- 4,310'	Oil/Gas
EOC	7,805'	8,074'	- 4,350'	Oil/Gas
TD Horizontal Hole	7,855'	14,951'	- 4,400'	Oil/Gas

POINT 3: CASING PROGRAM

TYPE	INTERVALS (MD)	Hole Size	PURPOSE	CONDITION
20"	0' - 60'	24"	Conductor	Contractor Discretion
13-3/8", 48#, H-40, 8rd, ST&C or 54.5#, J-55*	0' - 766'	17-1/2"	Surface	New
9-5/8", 40#, J-55, 8rd, LT&C	0' - 4001'	12-1/4"	Intermediate	New
7", 26#, N-80, 8rd, LT&C or Buttress*	0' - 8274'	8/3/4"	Production	New
4-1/2", 11.6#, HCP-110, 8rd, LT&C	7,129' - 15,092'	6-1/8"	Production	New

CASING DESIGN SAFETY FACTORS:

TYPE	TENSION	COLLAPSE	BURST
13-3/8", 48#, H-40, 8rd, ST&C	10.18	2.07	2.30
13-3/8", 54.5#, J-55, 8rd, STC	14.3	3.16	3.66
9-5/8", 40#, J-55, 8rd, LT&C	15.29	1.32	1.07
7", 26#, 8rd, N-80, LT&C	2.97	1.46	1.08
7", 26#, N-80, Buttress	3.82	1.46	1.08
4-1/2", 11.6#, HCP-110, 8rd, LT&C	3.62	1.91	2.19

* Depending on availability

DESIGN CRITERIA AND CASING LOADING ASSUMPTIONS:

SURFACE CASING - (13-3/8")

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 - (9-5/8")

Tension	A 1.6 design factor utilizing the effects of buoyancy (10 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 (0.52 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. 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.

2ND INTERMEDIATE CASING - (7")

Tension	A 1.6 design factor utilizing the effects of buoyancy (9.0 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 1.25 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 CASING - (4-1/2")

Tension	A 1.6 design factor utilizing the effects of buoyancy (9.0 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 1.25 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)

The blowout preventer equipment will be as shown in Diagram #1 and will consist of a 13-5/8" X 5000 psi double ram type preventer (5000 psi WP) and a bag type (Hydril) annular preventer (5000 psi WP). The same BOPE will be installed on the surface casinghead and on all subsequent casing strings. The BOP stack, chokes, kill lines, upper and lower kelly cocks, inside BOP, choke manifold when installed on the surface casinghead will be hydro-tested to 200 psig & 2000 psig by a independent tester. The BOP stack, chokes, kill lines, upper and lower kelly cocks, inside BOP, choke manifold, when rigged up on the 9-5/8" intermediate casing spool will be tested to 3000 psig by independent tester (hydril to 2500 psig). In addition to the high pressure test, a low pressure (250 psig) test will be required.

The BOP stack, chokes, kill lines, upper and lower kelly cocks, inside BOP, choke manifold, when rigged up on the 7" intermediate casing spool will be tested to 3000 psig by independent tester (hydril to 2500 psig). In addition to the high pressure test, a low pressure (250 psig) test will be required.

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.

POINT 5: MUD PROGRAM

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	Ph
0' - 766'	FW Spud Mud	8.5 - 9.2	38-70	NC	NC	NC	10.0
766' - 4001'	Brine Water	9.8 - 10.2	28-30	NC	NC	NC	9.5 - 10.5
4001' - 8274'	FW/Gel	8.7 - 9.0	28-36	NC	NC	NC	9.5 - 10.0
8274' - 14,951'	FW/Gel/Starch	8.7 - 9.0	28-36	NC	NC	<100	9.5 - 10.0

NOTE: May increase vis for logging purposes only.

POINT 6: TECHNICAL STAGES OF OPERATION

A) TESTING

None anticipated.

B) LOGGING *See COA*

Run #1: GR with MWD during drilling of build and horizontal portions of 8-3/4" and 6-1/8" hole.

Run #2: Shuttle log w/GR, PE, Density, Neutron, Resistivity in lateral leg open hole (lateral).

Mud Logger: Rig up from 200' to TD

C) CONVENTIONAL CORING

None anticipated.

D) CEMENT

<u>INTERVAL</u>	<u>AMOUNT SXS</u>	<u>FT OF FILL</u>	<u>TYPE</u>	<u>GALS/SX</u>	<u>PPG</u>	<u>FT³/SX</u>
SURFACE:						
Lead: 0 – 466' (100% excess Circ to surface)	500	466	Class "C" 35/65+6% gel +3pps star-seal+.04% FL10+0.25% R-38+5% salt	9.95	12.8	1.91
Tail: 466' – 766' (100% excess)	330	300	Class "C" + 2% CaCl ₂ +3lb star-seal+0.25% R-38	6.12	14.8	1.36
INTERMEDIATE:						
Lead: 0' – 3501' (100% excess Circ to surface)	1050	3501	Class "C" 35/65+6% gel +3pps star-seal+.04% FL10+0.25% R-38+5% salt	9.95	12.8	1.91
Tail: 3501' – 4001' (100% excess)	300	500	Class "C" + 2% CaCl ₂ + 0.25% R-38	6.34	14.8	1.35
2ND INTERMEDIATE						
Stage 1:						
Lead: 5000' - 7329' (50% excess)	360	2329	RSS Micro+.5% FMS+ 0.3% FL10+0.8% C-12 +3pps Gilsonite+0.25 R-38	10.09	10.5	2.41
Tail: 7329'-8274' (50% excess)	50	945	RSS Micro+0.2% C-37+ 0.2%+C-12+0.2% FL10+ +0.25% R-38	7.03	13.0	1.38
DV Tool @ 5,000'						
Stage 2:						
Lead: 0' – 4900' (50% excess) (TOC 500' into 9-5/8")	500	4900	RSS Micro+35% FMS+ 0.5% C-12+3pps Gilsonite +0.5% R-38	10.16	10.5	2.42
Tail: 4900'-5000' (50% excess)	50	100	Cass "C" + 0.20% R-38	6.31	14.8	1.33

E) DIRECTIONAL DRILLING

BOPCO, L.P. plans to drill out the 9-5/8" intermediate casing with a 8-3/4" bit to a TVD of approximately 7328'. At this depth a 8-3/4" directional hole will be initiated at an azimuth of 134.94°, building angle at 12.00°/100' to a max of 89.59° at a TVD of 7805' (MD 8074'). This angle and azimuth will be maintained for another 200'. At this depth 7" casing will be installed and cement circulated to surface (DV Tool @ 5000'). A 6-1/8" open hole will be drilled thru the lateral to a MD of 14,951' (TVD 7855'). 4-1/2" casing will be installed in the lateral using Baker Hydraulic packers to isolated pay intervals in the "Y" Sand.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

5

Normal pressures are anticipated throughout Delaware section. A BHP of 3581 psi (max) or MWE of 8.4 ppg is expected. Lost circulation may exist in the Delaware Section from 4094'-7660' TVD. No H₂S is anticipated.

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

30 days drilling operations

14 days completion operations

SMM/keh



Weatherford®

Drilling Services

Proposal

BOPCO, L.P.

POKER LAKE UNIT #342H

EDDY CO NM

WELL FILE: **PLAN 2**

JANUARY 11, 2011

Weatherford International, Ltd.

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BOPCO, L.P.

Poker Lake Unit 342H
Eddy Co, NM

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	134.94	0.00	0.00	0.00	0.00	0.00	0.00	
2	7327.54	0.00	134.94	7327.54	0.00	0.00	0.00	0.00	0.00	
3	8074.07	89.58	134.94	7805.00	-334.82	335.51	12.00	134.94	473.99	
4	14951.15	89.58	134.94	7855.00	-5192.52	5203.20	0.00	0.00	7350.89	Pbhl

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Poker Lake Unit 342H	0.00	0.00	439324.53	646580.10	32°12'24.955N	103°51'33.916W	N/A

TARGET DETAILS

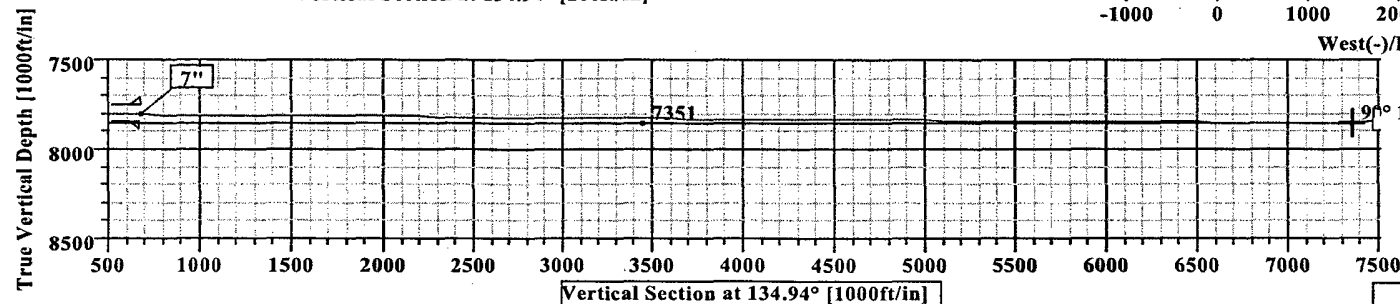
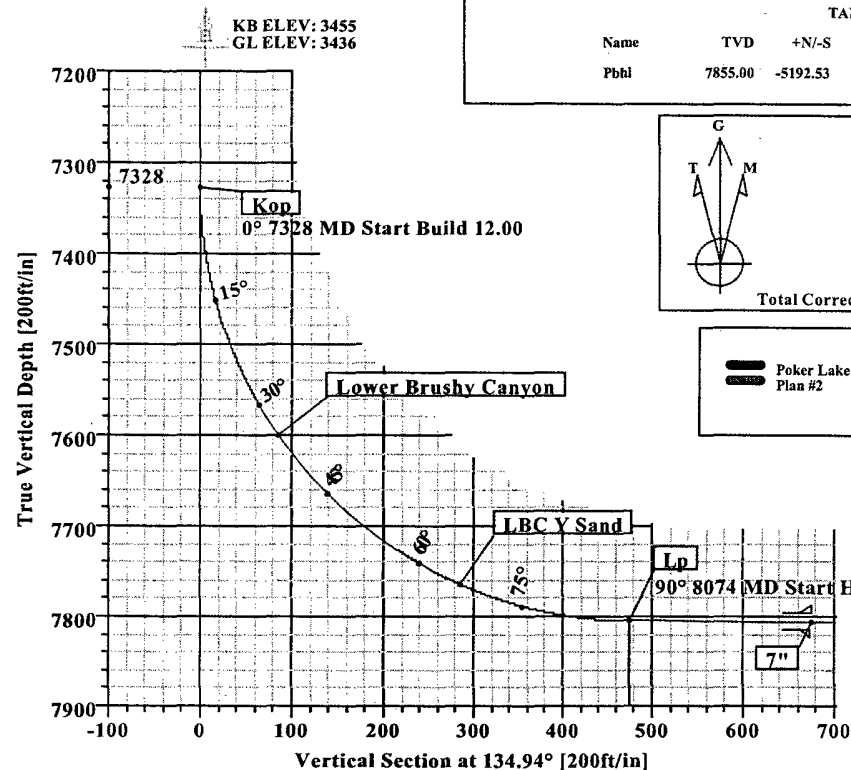
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Pbhl	7855.00	-5192.53	5203.20	434132.01	651783.30	Point

FIELD DETAILS

Eddy County, NM (Nad 27)
Geodetic System: US State Plane Coordinate System 1927
Ellipsoid: NAD27 (Clarke 1866)
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010
System Datum: Mean Sea Level
Local North: Grid North

SITE DETAILS

Poker Lake Unit 342H
Site Centre Northing: 439324.53
Easting: 646580.10
Ground Level: 3436.00
Positional Uncertainty: 0.00
Convergence: 0.25



FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	7600.00	7617.50	Lower Brushy Canyon
2	7765.00	7880.69	LBC Y Sand

Plan: Plan #2 (Poker Lake Unit 342H/1)
Created By: R Joyner
Date: 1/11/2011

Weatherford International, Inc.

DIRECTIONAL PLAN REPORT



Weatherford

Company: BOPCO, L.P.		Date: 1/11/2011	Time: 11:38:50	Page: 1
Field: Eddy County, NM (Nad 27)		Co-ordinate(NE) Reference:	Well: Poker Lake Unit 342H, Grid North	
Site: Poker Lake Unit 342H		Vertical (TVD) Reference:	SITE: 3455.0	
Well: Poker Lake Unit 342H		Section (VS) Reference:	Well: (0.00N,0.00E,134.94Azi)	
Wellpath: 1		Survey Calculation Method:	Minimum Curvature Db: Sybase	

Plan: Plan #2	Date Composed: 1/11/2011
Principal: Yes	Version: 1
	Tied-to: From Surface

Field: Eddy County, NM (Nad 27)

Map System: US State Plane Coordinate System 1927	Map Zone: New Mexico, Eastern Zone
Geo Datum: NAD27 (Clarke 1866)	Coordinate System: Well Centre
Sys Datum: Mean Sea Level	Geomagnetic Model: IGRF2010

Site: Poker Lake Unit 342H

Site Position:	Northing: 439324.53 ft	Latitude: 32 12 24.955 N
From: Map	Easting: 646580.10 ft	Longitude: 103 51 33.916 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 3436.00 ft		Grid Convergence: 0.25 deg

Well: Poker Lake Unit 342H	Slot Name:
Well Position: +N/-S 0.00 ft Northing: 439324.53 ft Latitude: 32 12 24.955 N	
+E/-W 0.00 ft Easting: 646580.10 ft Longitude: 103 51 33.916 W	
Position Uncertainty: 0.00 ft	

Wellpath: 1	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 4/1/2011	Above System Datum: Mean Sea Level
Field Strength: 48620 nT	Declination: 7.74 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 60.13 deg
ft	+N/-S ft +E/-W ft Direction deg
0.00	0.00 0.00 134.94

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	134.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7327.54	0.00	134.94	7327.54	0.00	0.00	0.00	0.00	0.00	0.00	
8074.07	89.58	134.94	7805.00	-334.82	335.51	12.00	12.00	0.00	134.94	
14951.15	89.58	134.94	7855.00	-5192.52	5203.20	0.00	0.00	0.00	0.00	Pbhl

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
7300.00	0.00	134.94	7300.00	0.00	0.00	0.00	0.00	439324.53	646580.10	
7327.54	0.00	134.94	7327.54	0.00	0.00	0.00	0.00	439324.53	646580.10	Kop
7350.00	2.69	134.94	7349.99	-0.37	0.37	0.53	12.00	439324.16	646580.48	
7375.00	5.69	134.94	7374.92	-1.66	1.67	2.36	12.00	439322.87	646581.77	
7400.00	8.69	134.94	7399.72	-3.88	3.88	5.49	12.00	439320.66	646583.99	
7425.00	11.69	134.94	7424.32	-7.00	7.02	9.91	12.00	439317.53	646587.12	
7450.00	14.69	134.94	7448.66	-11.03	11.05	15.62	12.00	439313.50	646591.16	
7475.00	17.69	134.94	7472.67	-15.96	15.99	22.59	12.00	439308.58	646596.09	
7500.00	20.69	134.94	7496.27	-21.76	21.81	30.81	12.00	439302.77	646601.91	
7525.00	23.69	134.94	7519.42	-28.43	28.49	40.25	12.00	439296.10	646608.59	
7550.00	26.69	134.94	7542.04	-35.95	36.02	50.89	12.00	439288.58	646616.13	
7575.00	29.69	134.94	7564.07	-44.29	44.38	62.70	12.00	439280.24	646624.49	
7600.00	32.69	134.94	7585.45	-53.44	53.55	75.65	12.00	439271.10	646633.65	
7617.50	34.79	134.94	7600.00	-60.30	60.43	85.37	12.00	439264.23	646640.53	Lower Brushy Canyon
7625.00	35.69	134.94	7606.13	-63.36	63.49	89.70	12.00	439261.17	646643.59	
7650.00	38.69	134.94	7626.04	-74.03	74.19	104.81	12.00	439250.50	646654.29	
7675.00	41.69	134.94	7645.14	-85.43	85.61	120.94	12.00	439239.10	646665.71	

Weatherford International, Inc.

DIRECTIONAL PLAN REPORT



Weatherford

Company: BOPCO, L.P. Field: Eddy County, NM (Nad 27) Site: Poker Lake Unit 342H Well: Poker Lake Unit 342H Wellpath: 1	Date: 1/11/2011 Co-ordinate(NE) Reference: Well: Poker Lake Unit 342H, Grid North Vertical (TVD) Reference: SITE 3455.0 Section (VS) Reference: Well (0.00N,0.00E,134.94Azi) Survey Calculation Method: Minimum Curvature Db: Sybase
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Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
7700.00	44.69	134.94	7663.36	-97.52	97.72	138.05	12.00	439227.02	646677.82	
7725.00	47.69	134.94	7680.66	-110.26	110.49	156.09	12.00	439214.27	646690.59	
7750.00	50.69	134.94	7697.00	-123.63	123.88	175.01	12.00	439200.91	646703.98	
7775.00	53.69	134.94	7712.32	-137.58	137.86	194.76	12.00	439186.96	646717.96	
7800.00	56.69	134.94	7726.59	-152.08	152.39	215.29	12.00	439172.46	646732.49	
7825.00	59.69	134.94	7739.76	-167.08	167.43	236.53	12.00	439157.45	646747.53	
7850.00	62.69	134.94	7751.81	-182.55	182.93	258.44	12.00	439141.98	646763.03	
7875.00	65.69	134.94	7762.69	-198.45	198.86	280.94	12.00	439126.08	646778.96	
7880.69	66.38	134.94	7765.00	-202.12	202.54	286.14	12.00	439122.41	646782.64	LBC Y Sand
7900.00	68.69	134.94	7772.38	-214.73	215.17	303.98	12.00	439109.80	646795.27	
7925.00	71.69	134.94	7780.85	-231.34	231.82	327.50	12.00	439093.19	646811.92	
7950.00	74.69	134.94	7788.08	-248.24	248.75	351.43	12.00	439076.29	646828.86	
7975.00	77.69	134.94	7794.04	-265.39	265.94	375.71	12.00	439059.14	646846.04	
8000.00	80.69	134.94	7798.73	-282.74	283.32	400.26	12.00	439041.80	646863.42	
8025.00	83.69	134.94	7802.12	-300.23	300.85	425.03	12.00	439024.30	646880.95	
8050.00	86.69	134.94	7804.22	-317.83	318.48	449.94	12.00	439006.71	646898.58	
8074.07	89.58	134.94	7805.00	-334.82	335.51	473.99	12.00	438989.71	646915.61	Lp
8100.00	89.58	134.94	7805.19	-353.13	353.86	499.92	0.00	438971.40	646933.96	
8200.00	89.58	134.94	7805.91	-423.77	424.64	599.92	0.00	438900.76	647004.74	
8274.10	89.58	134.94	7806.45	-476.11	477.09	674.01	0.00	438848.42	647057.19	7"
8300.00	89.58	134.94	7806.64	-494.41	495.42	699.91	0.00	438830.13	647075.53	
8400.00	89.58	134.94	7807.37	-565.04	566.20	799.91	0.00	438759.49	647146.31	
8500.00	89.58	134.94	7808.09	-635.68	636.98	899.91	0.00	438688.85	647217.09	
8600.00	89.58	134.94	7808.82	-706.31	707.77	999.91	0.00	438618.22	647287.87	
8700.00	89.58	134.94	7809.55	-776.95	778.55	1099.90	0.00	438547.58	647358.65	
8800.00	89.58	134.94	7810.28	-847.59	849.33	1199.90	0.00	438476.95	647429.43	
8900.00	89.58	134.94	7811.00	-918.22	920.11	1299.90	0.00	438406.31	647500.21	
9000.00	89.58	134.94	7811.73	-988.86	990.89	1399.90	0.00	438335.67	647571.00	
9100.00	89.58	134.94	7812.46	-1059.50	1061.67	1499.89	0.00	438265.04	647641.78	
9200.00	89.58	134.94	7813.18	-1130.13	1132.45	1599.89	0.00	438194.40	647712.56	
9300.00	89.58	134.94	7813.91	-1200.77	1203.24	1699.89	0.00	438123.77	647783.34	
9400.00	89.58	134.94	7814.64	-1271.40	1274.02	1799.89	0.00	438053.13	647854.12	
9500.00	89.58	134.94	7815.36	-1342.04	1344.80	1899.88	0.00	437982.49	647924.90	
9600.00	89.58	134.94	7816.09	-1412.68	1415.58	1999.88	0.00	437911.86	647995.68	
9700.00	89.58	134.94	7816.82	-1483.31	1486.36	2099.88	0.00	437841.22	648066.46	
9800.00	89.58	134.94	7817.55	-1553.95	1557.14	2199.87	0.00	437770.58	648137.25	
9900.00	89.58	134.94	7818.27	-1624.58	1627.92	2299.87	0.00	437699.95	648208.03	
10000.00	89.58	134.94	7819.00	-1695.22	1698.70	2399.87	0.00	437629.31	648278.81	
10100.00	89.58	134.94	7819.73	-1765.86	1769.49	2499.87	0.00	437558.68	648349.59	
10200.00	89.58	134.94	7820.45	-1836.49	1840.27	2599.86	0.00	437488.04	648420.37	
10300.00	89.58	134.94	7821.18	-1907.13	1911.05	2699.86	0.00	437417.40	648491.15	
10400.00	89.58	134.94	7821.91	-1977.77	1981.83	2799.86	0.00	437346.77	648561.93	
10500.00	89.58	134.94	7822.64	-2048.40	2052.61	2899.86	0.00	437276.13	648632.72	
10600.00	89.58	134.94	7823.36	-2119.04	2123.39	2999.85	0.00	437205.49	648703.50	
10700.00	89.58	134.94	7824.09	-2189.67	2194.17	3099.85	0.00	437134.86	648774.28	
10800.00	89.58	134.94	7824.82	-2260.31	2264.96	3199.85	0.00	437064.22	648845.06	
10900.00	89.58	134.94	7825.54	-2330.95	2335.74	3299.85	0.00	436993.59	648915.84	
11000.00	89.58	134.94	7826.27	-2401.58	2406.52	3399.84	0.00	436922.95	648986.62	
11100.00	89.58	134.94	7827.00	-2472.22	2477.30	3499.84	0.00	436852.31	649057.40	
11200.00	89.58	134.94	7827.73	-2542.86	2548.08	3599.84	0.00	436781.68	649128.19	
11300.00	89.58	134.94	7828.45	-2613.49	2618.86	3699.83	0.00	436711.04	649198.97	
11400.00	89.58	134.94	7829.18	-2684.13	2689.64	3799.83	0.00	436640.41	649269.75	
11500.00	89.58	134.94	7829.91	-2754.76	2760.43	3899.83	0.00	436569.77	649340.53	

Weatherford International, Inc.

DIRECTIONAL PLAN REPORT



Company: BOPCO, L.P. Field: Eddy County, NM (Nad 27) Site: Poker Lake Unit 342H Well: Poker Lake Unit 342H Wellpath: 1	Date: 1/11/2011 Co-ordinate(NE) Reference: Well: Poker Lake Unit 342H, Grid North Vertical (TVD) Reference: SITE 3455.0 Section (VS) Reference: Well (0.00N,0.00E,134.94Azi) Survey Calculation Method: Minimum Curvature Db: Sybase
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Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
11600.00	89.58	134.94	7830.63	-2825.40	2831.21	3999.83	0.00	436499.13	649411.31	
11700.00	89.58	134.94	7831.36	-2896.04	2901.99	4099.82	0.00	436428.50	649482.09	
11800.00	89.58	134.94	7832.09	-2966.67	2972.77	4199.82	0.00	436357.86	649552.87	
11900.00	89.58	134.94	7832.82	-3037.31	3043.55	4299.82	0.00	436287.22	649623.65	
12000.00	89.58	134.94	7833.54	-3107.94	3114.33	4399.82	0.00	436216.59	649694.44	
12100.00	89.58	134.94	7834.27	-3178.58	3185.11	4499.81	0.00	436145.95	649765.22	
12200.00	89.58	134.94	7835.00	-3249.22	3255.89	4599.81	0.00	436075.32	649836.00	
12300.00	89.58	134.94	7835.72	-3319.85	3326.68	4699.81	0.00	436004.68	649906.78	
12400.00	89.58	134.94	7836.45	-3390.49	3397.46	4799.81	0.00	435934.04	649977.56	
12500.00	89.58	134.94	7837.18	-3461.13	3468.24	4899.80	0.00	435863.41	650048.34	
12600.00	89.58	134.94	7837.90	-3531.76	3539.02	4999.80	0.00	435792.77	650119.12	
12700.00	89.58	134.94	7838.63	-3602.40	3609.80	5099.80	0.00	435722.13	650189.91	
12800.00	89.58	134.94	7839.36	-3673.03	3680.58	5199.80	0.00	435651.50	650260.69	
12900.00	89.58	134.94	7840.09	-3743.67	3751.36	5299.79	0.00	435580.86	650331.47	
13000.00	89.58	134.94	7840.81	-3814.31	3822.15	5399.79	0.00	435510.23	650402.25	
13100.00	89.58	134.94	7841.54	-3884.94	3892.93	5499.79	0.00	435439.59	650473.03	
13200.00	89.58	134.94	7842.27	-3955.58	3963.71	5599.78	0.00	435368.95	650543.81	
13300.00	89.58	134.94	7842.99	-4026.22	4034.49	5699.78	0.00	435298.32	650614.59	
13400.00	89.58	134.94	7843.72	-4096.85	4105.27	5799.78	0.00	435227.68	650685.37	
13500.00	89.58	134.94	7844.45	-4167.49	4176.05	5899.78	0.00	435157.05	650756.16	
13600.00	89.58	134.94	7845.18	-4238.12	4246.83	5999.77	0.00	435086.41	650826.94	
13700.00	89.58	134.94	7845.90	-4308.76	4317.61	6099.77	0.00	435015.77	650897.72	
13800.00	89.58	134.94	7846.63	-4379.40	4388.40	6199.77	0.00	434945.14	650968.50	
13900.00	89.58	134.94	7847.36	-4450.03	4459.18	6299.77	0.00	434874.50	651039.28	
14000.00	89.58	134.94	7848.08	-4520.67	4529.96	6399.76	0.00	434803.86	651110.06	
14100.00	89.58	134.94	7848.81	-4591.30	4600.74	6499.76	0.00	434733.23	651180.84	
14200.00	89.58	134.94	7849.54	-4661.94	4671.52	6599.76	0.00	434662.59	651251.63	
14300.00	89.58	134.94	7850.27	-4732.58	4742.30	6699.76	0.00	434591.96	651322.41	
14400.00	89.58	134.94	7850.99	-4803.21	4813.08	6799.75	0.00	434521.32	651393.19	
14500.00	89.58	134.94	7851.72	-4873.85	4883.87	6899.75	0.00	434450.68	651463.97	
14600.00	89.58	134.94	7852.45	-4944.49	4954.65	6999.75	0.00	434380.05	651534.75	
14700.00	89.58	134.94	7853.17	-5015.12	5025.43	7099.75	0.00	434309.41	651605.53	
14800.00	89.58	134.94	7853.90	-5085.76	5096.21	7199.74	0.00	434238.77	651676.31	
14900.00	89.58	134.94	7854.63	-5156.39	5166.99	7299.74	0.00	434168.14	651747.10	
14951.15	89.58	134.94	7855.00	-5192.52	5203.20	7350.89	0.00	434132.01	651783.30	Pbhl

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	Latitude Deg Min Sec	Longitude Deg Min Sec
Pbhl			7855.00	-5192.53	5203.20	434132.01	651783.30	32 11 33.339 N	103 50 33.632 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
4200.00	4200.00	9.625	12.250	9 5/8"
8274.10	7806.45	7.000	8.750	7"

Weatherford International, Inc.

DIRECTIONAL PLAN REPORT



Weatherford

Company: BOPCO, L.P.	Date: 1/11/2011	Time: 11:38:50	Page: 4
Field: Eddy County, NM (Nad 27)	Co-ordinate(NE) Reference:	Well: Poker Lake Unit 342H, Grid North	
Site: Poker Lake Unit 342H	Vertical (TVD) Reference:	SITE 3455.0	
Well: Poker Lake Unit 342H	Section (VS) Reference:	Well (0.00N,0.00E,134.94Azi)	
Wellpath: 1	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Annotation

MD ft	TVD ft	
7327.54	7327.54	Kop
8074.07	7805.00	Lp
14951.15	7855.00	Pbhl

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
7617.50	7600.00	Lower Brushy Canyon		0.00	0.00
7880.69	7765.00	LBC Y Sand		0.00	0.00

**Weatherford****Weatherford Drilling Services**

GeoDec v5.03

Report Date: December 29, 2010
Job Number: _____
Customer: BOPCO
Well Name: Poker Lake Unit #342H
API Number: _____
Rig Name: _____
Location: Eddy Co, NM
Block: _____
Engineer: RWJ

US State Plane 1927	Geodetic Latitude / Longitude
System: New Mexico East 3001 (NON-EXACT)	System: Latitude / Longitude
Projection: SPC27 Transverse Mercator	Projection: Geodetic Latitude and Longitude
Datum: NAD 1927 (NADCON CONUS)	Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866	Ellipsoid: Clarke 1866
North/South 439324.533 USFT	Latitude 32.2069320 DEG
East/West 646580.104 USFT	Longitude -103.8594211 DEG
Grid Convergence: .25°	
Total Correction: +7.49°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.20693° N	32° 12 min 24.955 sec
Longitude =	103.85942° W	103° 51 min 33.916 sec

Magnetic Declination =	7.74°	[True North Offset]
Local Gravity =	.9988 g	Checksum = 6594
Local Field Strength =	48616 nT	Magnetic Vector X = 23995 nT
Magnetic Dip =	60.13°	Magnetic Vector Y = 3263 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z = 42156 nT
Spud Date =	Apr 01, 2011	Magnetic Vector H = 24215 nT

Signed: _____

Date: _____



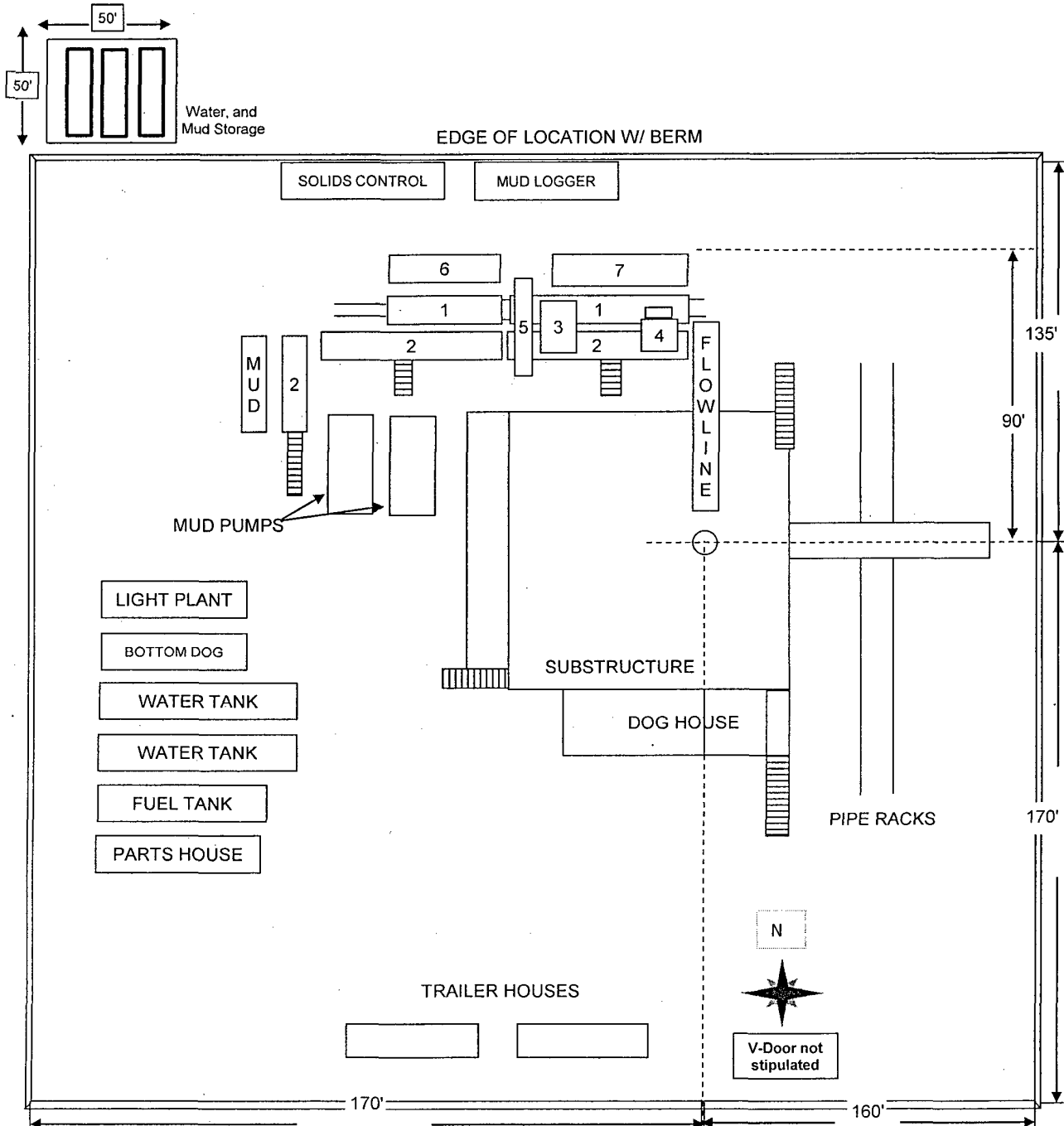
BOPCO, L.P.
Poker Lake Unit #342H
Sec 23, T23S-R30E
Eddy County, NM

Exhibit "D"

RIG LAYOUT SCHEMATIC
INCLUSIVE OF CLOSED-LOOP DESIGN PLAN

Solids Control Equipment Legend

- | | |
|-----------------|--------------------|
| 1) Roll Off Bin | 5) Centrifuge |
| 2) Steel Tank | 6) Dewatering Unit |
| 3) Mud Cleaner | 7) Catch Tank |
| 4) Shaker | |



5 M CHOKE MANIFOLD EQUIPMENT-CONFIGURATION MAY VARY



Flare Pit (100' from well head)

DISTRICT I --- CHECKLIST FOR INTENTS TO DRILL

Operator BOPCO LP OGRID # 260737
 306402 Well Name & # POKER LAKE UNIT # 342H Surface Type (F) (S) (P)
 Location: UL D1, Sect 23, Township 24s, RNG 30e,
A 26 24 - 30 Sub-surface Type (F) (S) (P)

- A. Date C101 rec'd / / C101 reviewed / /
- B. 1. Check mark, Information is OK on Forms:
 OGRID X, BONDING FED, PROP CODE X, WELL # X, SIGNATURE
 2. Inactive Well list as of: 4/4/11 # wells 403, # Inactive wells 6
 a. District Grant APD but see number of inactive wells:
 No letter required ; Sent Letter to Operator , to Santa Fe
 3. Additional Bonding as of: 4/4/11
 a. District Denial because operator needs addition bonding:
 No Letter required X; Sent Letter to Operator , To Santa Fe
 b. District Denial because of Inactive well list and Financial Assurance:
 No Letter required X; Sent Letter to Operator , To Santa Fe
- C. C102 YES X, NO , Signature
 1. Pool POKER LAKE, DEL SW, Code 96047
 a. Dedicated acreage 640, What Units 22: A, H; 23: D, E, F, J, K, L; N, O, P
 b. SUR. Location Standard X: Non-Standard Location 28: D, E
 c. Well shares acres: Yes , No X, # of wells plus this well # 26: A, B, H
 2. 2nd. Operator in same acreage, Yes , No
 Agreement Letter , Disagreement letter X
 3. Intent to Directional Drill Yes X, No
 a. Dedicated acreage 640, What Units
 b. Bottomhole Location Standard X, Non-Standard Bottomhole
 4. Downhole Commingle: Yes , No
 a. Pool #2 , Code , Acres
 Pool #3 , Code , Acres
 Pool #4 , Code , Acres
 5. POTASH Area Yes , No FED
 D. Blowout Preventer Yes , No
 E. H2S Yes , No
 F. C144 Pit Registration Yes , No X, need
 G. Does APD require Santa Fe Approval:
 1. Non-Standard Location: Yes , No X, NSL #
 2. Non-Standard Proration: Yes , No X, NSP #
 3. Simultaneous Dedication: Yes , No X, SD #
 Number of wells Plus #
 4. Injection order Yes , No X; PMX # or WFX #
 5. SWD order Yes , NO X; SWD #
 6. DHC from SF ; DHC-HOB ; Holding
 7. OCD Approval Date / / API #30-0 15-38666
 8. Reviewers