

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ATS-11-88

FORM APPROVED
OMB No 1004-0136
Expires July 31, 2010**EQ**

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER		CONFIDENTIAL	
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		7. If Unit or CA Agreement, Name and No NMNM71016X	
2. Name of Operator BOPCO, L.P.		8. Lease Name and Well No POKER LAKE UNIT 341H [306402]	
Contact KATY E HOLSTER E-Mail: keholster@basspet.com		9. API Well No. 30-015-39486	
3a. Address PO BOX 2760 MIDLAND, TX 79702		10. Field and Pool, or Exploratory POKER LAKE NW (DELAWARE) [96046]	
3b. Phone No. (include area code) Ph: 432-683-2277		11. Sec., T., R., M., or Bk and Survey or Area Sec 23 T24S R30E Mer NMP	
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface NWNW Lot D 925FNL 1110FWL 32.207986 N Lat, 103.856206 W Lon At proposed prod. zone ^{NW} SENW Lot D 470FNL 865FWL 32.194731 N Lat, 103.840031 W Lon		12. County or Parish EDDY	
14. Distance in miles and direction from nearest town or post office* 20 MILES EAST OF MALAGA, NM		13. State NM	
15. Distance from proposed location to nearest property or lease line, ft (Also to nearest drig. unit line, if any) 925'		16. No. of Acres in Lease 4335.40	
17. Spacing Unit dedicated to this well 520.00		18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft 443.76'	
19. Proposed Depth 14554 MD 7901 TVD		20. BLM/BIA Bond No. on file COB 000050	
21. Elevations (Show whether DF, KB, RT, GL, etc.) 3441 GL		22. Approximate date work will start 01/01/2013	
23. Estimated duration 30		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 (Electronic Submission)	Name (Printed/Typed) PETE A LENSING Ph: 432-683-2277	Date 07/27/2011
Title DRILLING ENGINEER		
Approved by (Signature) <i>/s/ Don Peterson</i>	Name (Printed/Typed) <i>/s/ Don Peterson</i>	Date OCT 06 2011
Title FIELD MANAGER		
Office CARLSBAD FIELD OFFICE		

Application approval does not warrant or certify 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.

Additional Operator Remarks (see next page)

Electronic Submission #113964 verified by the BLM Well Information System
For BOPCO, L.P., sent to the Carlsbad

CARLSBAD CONTROLLED WATER BASIN**SEE ATTACHED FOR
CONDITIONS OF APPROVAL****APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED****** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED *****[Signature]*

Additional Operator Remarks:

- Attached, please find the following documents for PLU #346H:
 - Survey Plat
 - 8pt Drilling Plan
 - Multi-Surface Use Plan
 - Proposed Directional Survey
 - BOP Diagram
 - Operator Certification Letter
 - LPC Exception Letter
 - MOA (form 8140-9)
 - Interim Reclamation Diagram
 - Proposed Flowline Diagram
 - H2S Contingency Plan

The application fee of \$6500 and the MOA fee of \$1420 were sent via Fedex to the Carlsbad field office on July 27, 2011.

Surface casing is to be set into the Rustler below all fresh water sands at an approximate depth of 1300' and cement circulated to surface.

7" casing will be set at approximately 8,322' MD, 7,821' TVD (thru curve) and cemented in two stages with DV Tool set at approximately 5500'. Cement top 500' into 9-5/8" intermediate.

Production liner will be 4-1/2" with Baker hydraulic packers for zone isolation. Top of 4-1/2" liner will be 200' above 7" casing shoe at an approximate depth of 8,122'.

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 non-standard and is located inside the Poker Lake Unit.

The bottom hole location is unorthodox and located inside the Poker Lake Unit.

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 #341H

LEGAL DESCRIPTION - SURFACE: 925' FNL, 1110' FWL, Section 23, T24S, R30E, Eddy County, NM.
BHL: 470' FNL, 865' FWL, Section 25, 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 3463' (estimated)
 GL 3441'

FORMATION	ESTIMATED TOP FROM KB		ESTIMATED SUB-SEA TOP BEARING	
	TVD	MD		
T/Fresh Water	400'	400'	+ 3,063'	Fresh Water
T/Rustler	564'	564'	+ 2,899'	Barren
T/Salt	2,096'	2,096'	+ 1,367'	Barren
B/Salt	3,756'	3,756'	- 293'	Barren
T/Lamar	3,998'	3,998'	- 535'	Barren
T/Ramsey	4,093'	4,093'	- 630'	Oil/Gas
T/Lower Cherry Canyon	6,166'	6,166'	- 2,703'	Oil/Gas
KOP	7,341'	7,341'	- 3,878'	Oil/Gas
T/Lwr Brushy Canyon "8A" Sd	7,614'	7,631'	- 4,151'	Oil/Gas
T/Lwr Brushy Canyon "Y" Sd	7,787'	7,917'	- 4,324'	Oil/Gas
EOC	7,818'	8,084'	- 4,355'	Oil/Gas
Target #1	7,818'	8,084'	- 4,355'	Oil/Gas
TD Horizontal Hole	7,901'	14,554'	- 4,438'	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, or 54.5#, J-55 8rd, ST&C*	0' - 1300'	17-1/2"	Surface	New
9-5/8", 40#, J-55, 8rd, LT&C	0' - 4058' <i>4000</i>	12-1/4"	Intermediate	New <i>See COA</i>
7", 26#, N-80, Buttress or 8rd LTC*	0' - 8322'	8-3/4"	Production	New
4-1/2", 11.6#, HCP-110, 8rd, LT&C	8122' - 14,554'	6-1/8"	Production	New

CASING DESIGN SAFETY FACTORS:

TYPE	TENSION	COLLAPSE	BURST
13-3/8", 48#, H-40, 8rd, ST&C	6.00	1.11	2.86
13-3/8", 54.5#, J-55, 8rd, STC	14.01	1.77	4.52
9-5/8", 40#, J-55, 8rd, LT&C	14.60	1.19	1.04
7", 26#, N-80, Buttress	3.45	1.27	1.15
7", 26#, N-80, 8rd, LTC	2.97	1.22	1.15
4-1/2", 11.6#, HCP-110, 8rd, LT&C	3.53	1.77	1.69

* 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. 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.

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 1)

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

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

The BOPE when rigged up on the 7" intermediate casing spool (6-1/8" open hole) will consist of 13-5/8" x 5,000 psi annular, 13-5/8" x 5,000 psi pipe & blind rams with mud cross choke manifold and chokes as in Diagram 1. The pipe and blind rams, choke, kelly lines, kelly cocks inside BOP, etc. will be tested to 3000 psig by independent tester. In addition to the high pressure test, a low pressure (250-300 psig) test will be required. Hydril will be tested to 1500 psig.

These tests will be performed:

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

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

POINT 5: MUD PROGRAM

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	Ph
0' - 1300'	FW Spud Mud	8.5 - 9.2	38-70	NC	NC	NC	10.0
1300' - 4058' 4000'	Brine Water	9.8 - 10.2	28-30	NC	NC	NC	9.5 - 10.5
4058' - 8322'	FW/Gel	8.7 - 9.0	28-36	NC	NC	NC	9.5 - 10.0
8322' - 14,554'	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.

Mud Logger: Rigged up at 100'.

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' – 800' (100% excess Circ to surface)	670	800	ExtendaCem CZ	8.72	13.70	1.68
Tail: 800' – 1300' (100% excess)	475	500	ExtendaCem CZ	8.72	13.70	1.68
INTERMEDIATE:						
Lead: 0' – 3558' (100% excess Circ to surface)	1020	3558	EconoCem HLC 5% CaCl + 5 #/sk Gilsonite	9.32	12.90	1.85
Tail: 3558' – 4058' (100% excess)	270	500	HalCem C	6.34	14.80	1.33
2ND INTERMEDIATE						
Stage 1:						
Lead: 5500' - 7219' (50% excess)	150	1719	Tuned Light + 0.75% CFR-3 + 1.5#/sk CaCl	12.41	10.20	2.76
Tail: 7219'-8322' (50% excess)	170	1103	VersaCem-PBSH2 + 0.4% Halad-9	8.76	13.0	1.65
DV Tool @ 5500'						
Stage 2:						
Lead: 3558'– 5000' (50% excess) (TOC 500' into 9-5/8")	160	1442	EconoCem HLC + 1% Econolite + 5% CaCl + 5#/sk Gilsonite	10.71	12.60	2.04
Tail: 5000'- 5500' (50% excess)	100	500	HalCem C	6.34	14.80	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 7,341' at which point a directional hole will be kicked off and drilled at an azimuth of 133.626 degrees, building angle at 12 deg/100' to 89.265 degrees where the measured depth is 8,084' (7,818' TVD). This angle and azimuth will be maintained for 238' to a measured depth of 8,322' (7,821' TVD). At this depth 7", 26#, N80, Buttress, or 8rd LTC casing will be installed and cemented in two stages (DV Tool @ approximately 5,500') with TOC at 3,558' (500' above 9-5/8" casing shoe). A 6-1/8" open hole lateral will then be drilled out from 7" casing at an azimuth of 133.626 degrees, inclination of 89.265 degrees to a measured depth of 14,554' (7,901' TVD). At this depth 4-1/2", 11.6#, HCP110, 8rd, LTC casing will be installed with Baker hydraulic packers installed for zone isolation in the lateral. Top of 4-1/2" liner at approximately 8,122' (200' above 7" casing shoe).

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

5

Normal pressures are anticipated throughout Delaware section. A BHP of 3451 psi (max) or MWE of 8.4 ppg is expected. Lost circulation may exist in the Delaware Section from 3,998'-7,901' 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

JDB



BOPCO, L.P.

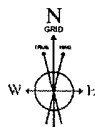
Location Eddy County, NM
Field Poker Lake Unit
Facility Poker Lake Unit No. 341H

Slot No 341H SHL
Well No. 341H
Wellbore No. 341H PWB



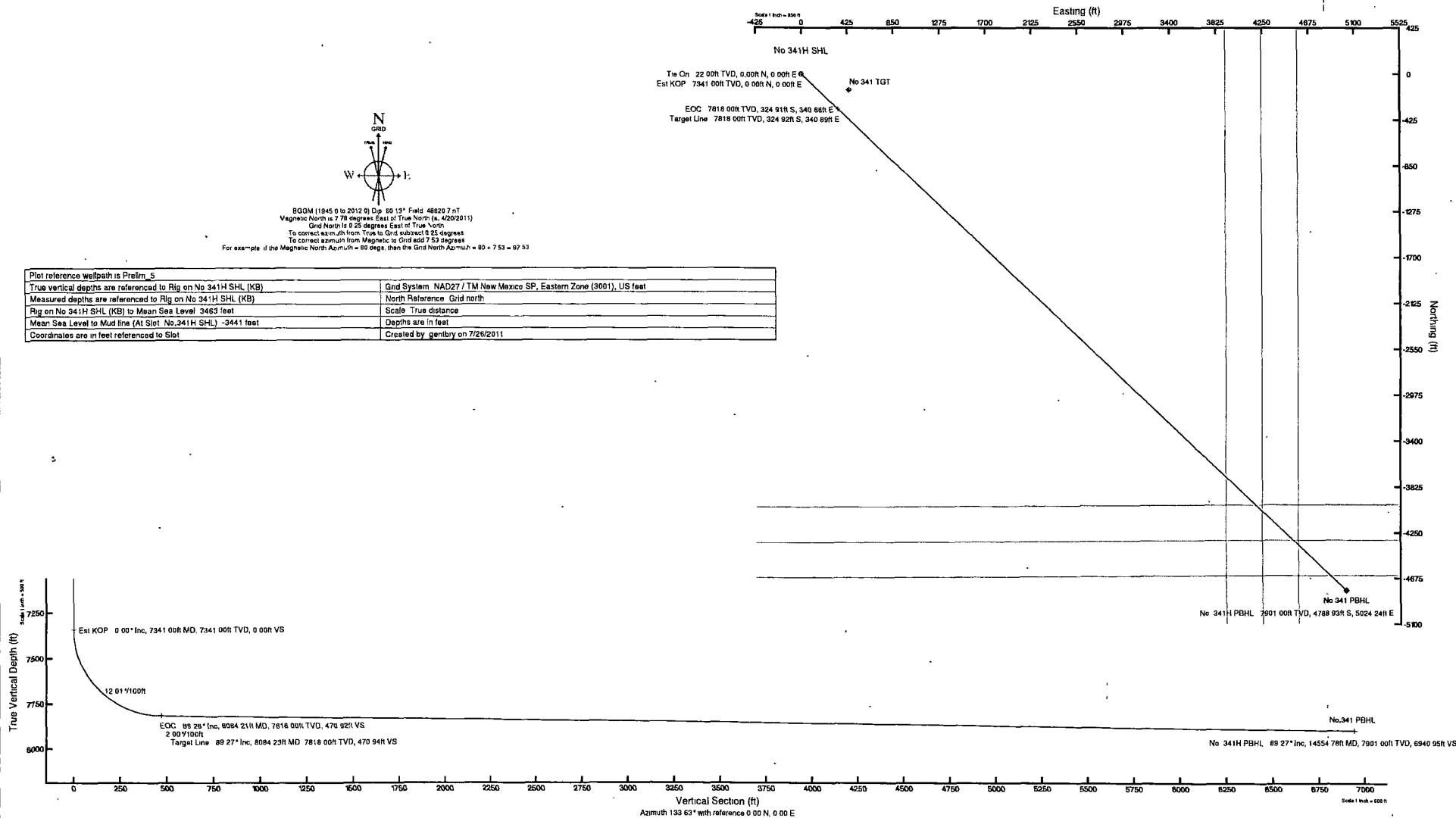
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	22.00	0.000	133.626	22.00	0.00	0.00	0.00	0.00
Est KOP	7341.00	0.000	133.626	7341.00	0.00	0.00	0.00	0.00
EOC	8084.21	89.265	133.626	7818.00	-324.91	340.88	12.01	470.92
Target Line	8084.23	89.265	133.626	7818.00	-324.92	340.89	2.00	470.94
No. 341H PBHL	14554.78	89.265	133.626	7901.00	-4788.93	5024.24	0.00	6940.95



BGGM (1945 to 2012) Dip: 60.13° Field: 48620.7 nT
Magnetic North is 7.78 degrees East of True North (s. 4/20/2011)
Grid North is 0.25 degrees East of True North
To correct azimuth from True to Grid subtract 0.25 degrees
To correct azimuth from Magnetic to Grid add 7.53 degrees
For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.53 = 97.53

Plot reference wellpath is Prelim_5	
True vertical depths are referenced to Rig on No 341H SHL (KB)	Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No 341H SHL (KB)	North Reference: Grid north
Rig on No 341H SHL (KB) to Mean Sea Level: 3463 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot No. 341H SHL): -3441 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: gentbry on 7/26/2011





Planned Wellpath Report

Prelim_5

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.341H SHL
Area	Eddy County, NM	Well	No.341H
Field	Poker Lake Unit	Wellbore	No.341H PWB
Facility	Poker Lake Unit No. 341H		

REPORT SETUP INFORMATION			
Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect@ 3.0.0
North Reference	Grid	User	Gentbry
Scale	0.999934	Report Generated	7/26/2011 at 3:36:01 PM
Convergence at slot	0.25° East	Database/Source file	WA Midland/No.341H_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W
Facility Reference Pt			647573.74	439701.77	32°12'28.645"N	103°51'22.332"W
Field Reference Pt			630272.49	405347.85	32°06'49.387"N	103°54'45.266"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on No.341H SHL (KB) to Facility Vertical Datum	22.00ft
Horizontal Reference Pt	Slot	Rig on No.341H SHL (KB) to Mean Sea Level	3463.00ft
Vertical Reference Pt	Rig on No.341H SHL (KB)	Rig on No.341H SHL (KB) to Mud Line at Slot (No.341H SHL)	22.00ft
MD Reference Pt	Rig on No.341H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	133.63°



Planned Wellpath Report

Prelim_5

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.341H SHL
Area	Eddy County, NM	Well	No.341H
Field	Poker Lake Unit	Wellbore	No.341H PWB
Facility	Poker Lake Unit No. 341H		

WELLPATH DATA (159 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	133.626	0.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
22.00	0.000	133.626	22.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	Tie On
122.00†	0.000	133.626	122.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
222.00†	0.000	133.626	222.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
322.00†	0.000	133.626	322.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
422.00†	0.000	133.626	422.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
522.00†	0.000	133.626	522.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
564.00†	0.000	133.626	564.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	Rustler
622.00†	0.000	133.626	622.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
722.00†	0.000	133.626	722.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
822.00†	0.000	133.626	822.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
922.00†	0.000	133.626	922.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
1022.00†	0.000	133.626	1022.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
1122.00†	0.000	133.626	1122.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
1222.00†	0.000	133.626	1222.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
1322.00†	0.000	133.626	1322.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
1422.00†	0.000	133.626	1422.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
1522.00†	0.000	133.626	1522.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
1622.00†	0.000	133.626	1622.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
1722.00†	0.000	133.626	1722.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
1822.00†	0.000	133.626	1822.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
1922.00†	0.000	133.626	1922.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
2022.00†	0.000	133.626	2022.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
2096.00†	0.000	133.626	2096.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	Salt
2122.00†	0.000	133.626	2122.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
2222.00†	0.000	133.626	2222.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
2322.00†	0.000	133.626	2322.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
2422.00†	0.000	133.626	2422.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
2522.00†	0.000	133.626	2522.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
2622.00†	0.000	133.626	2622.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
2722.00†	0.000	133.626	2722.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
2822.00†	0.000	133.626	2822.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
2922.00†	0.000	133.626	2922.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
3022.00†	0.000	133.626	3022.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
3122.00†	0.000	133.626	3122.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
3222.00†	0.000	133.626	3222.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
3322.00†	0.000	133.626	3322.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
3422.00†	0.000	133.626	3422.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
3522.00†	0.000	133.626	3522.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
3622.00†	0.000	133.626	3622.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
3722.00†	0.000	133.626	3722.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
3756.00†	0.000	133.626	3756.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	base/Salt
3822.00†	0.000	133.626	3822.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
3922.00†	0.000	133.626	3922.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
3998.00†	0.000	133.626	3998.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	Lamar Lime



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.341H SHL
Area	Eddy County, NM	Well	No.341H
Field	Poker Lake Unit	Wellbore	No.341H PWB
Facility	Poker Lake Unit No. 341H		

WELLPATH DATA (159 stations) = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4022.00+	0.000	133.626	4022.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
4093.00+	0.000	133.626	4093.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	Ramsey
4122.00+	0.000	133.626	4122.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
4222.00+	0.000	133.626	4222.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
4322.00+	0.000	133.626	4322.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
4422.00+	0.000	133.626	4422.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
4522.00+	0.000	133.626	4522.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
4622.00+	0.000	133.626	4622.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
4722.00+	0.000	133.626	4722.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
4822.00+	0.000	133.626	4822.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
4922.00+	0.000	133.626	4922.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
5022.00+	0.000	133.626	5022.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
5122.00+	0.000	133.626	5122.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
5222.00+	0.000	133.626	5222.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
5322.00+	0.000	133.626	5322.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
5422.00+	0.000	133.626	5422.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
5522.00+	0.000	133.626	5522.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
5622.00+	0.000	133.626	5622.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
5722.00+	0.000	133.626	5722.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
5822.00+	0.000	133.626	5822.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
5922.00+	0.000	133.626	5922.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
6022.00+	0.000	133.626	6022.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
6122.00+	0.000	133.626	6122.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
6166.00+	0.000	133.626	6166.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	Lower Cherry Canyon
6222.00+	0.000	133.626	6222.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
6322.00+	0.000	133.626	6322.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
6422.00+	0.000	133.626	6422.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
6522.00+	0.000	133.626	6522.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
6622.00+	0.000	133.626	6622.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
6722.00+	0.000	133.626	6722.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
6822.00+	0.000	133.626	6822.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
6922.00+	0.000	133.626	6922.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
7022.00+	0.000	133.626	7022.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
7122.00+	0.000	133.626	7122.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
7222.00+	0.000	133.626	7222.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
7322.00+	0.000	133.626	7322.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	
7341.00	0.000	133.626	7341.00	0.00	0.00	0.00	647573.74	439701.77	32°12'28.645"N	103°51'22.332"W	0.00	Est KOP
7422.00+	9.729	133.626	7421.61	6.86	-4.73	4.97	647578.71	439697.04	32°12'28.598"N	103°51'22.274"W	12.01	
7522.00+	21.739	133.626	7517.69	33.93	-23.41	24.56	647598.30	439678.37	32°12'28.412"N	103°51'22.047"W	12.01	
7622.00+	33.750	133.626	7606.03	80.40	-55.47	58.20	647631.93	439646.31	32°12'28.094"N	103°51'21.657"W	12.01	
7631.65+	34.909	133.626	7614.00	85.84	-59.22	62.14	647635.87	439642.55	32°12'28.056"N	103°51'21.612"W	12.01	LBC 8A
7722.00+	45.761	133.626	7682.77	144.23	-99.51	104.40	647678.14	439602.27	32°12'27.656"N	103°51'21.122"W	12.01	
7822.00+	57.771	133.626	7744.54	222.64	-153.61	161.16	647734.89	439548.18	32°12'27.118"N	103°51'20.464"W	12.01	
7917.30+	69.217	133.626	7787.00	307.77	-212.35	222.79	647796.51	439489.44	32°12'26.534"N	103°51'19.750"W	12.01	LBC "Y" Sand
7922.00+	69.782	133.626	7788.65	312.18	-215.39	225.97	647799.70	439486.40	32°12'26.504"N	103°51'19.713"W	12.01	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.341H SHL
Area	Eddy County, NM	Well	No.341H
Field	Poker Lake Unit	Wellbore	No.341H PWB
Facility	Poker Lake Unit No. 341H		

WELLPATH DATA (159 stations) = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8022.00+	81.793	133.626	7813.15	408.94	-282.15	296.02	647869.74	439419.64	32°12'25.840"N	103°51'18.901"W	12.01	
8084.21	89.265	133.626	7818.00	470.92	-324.91	340.88	647914.60	439376.89	32°12'25.415"N	103°51'18.381"W	12.01	EOC
8084.23	89.265	133.626	7818.00	470.94	-324.92	340.89	647914.61	439376.87	32°12'25.415"N	103°51'18.381"W	2.00	Target Line
8122.00+	89.265	133.626	7818.48	508.70	-350.98	368.23	647941.95	439350.82	32°12'25.156"N	103°51'18.064"W	0.00	
8222.00+	89.265	133.626	7819.77	608.70	-419.97	440.61	648014.32	439281.83	32°12'24.470"N	103°51'17.226"W	0.00	
8322.00+	89.265	133.626	7821.05	708.69	-488.96	512.99	648086.70	439212.85	32°12'23.784"N	103°51'16.387"W	0.00	
8422.00+	89.265	133.626	7822.33	808.68	-557.95	585.37	648159.07	439143.86	32°12'23.098"N	103°51'15.548"W	0.00	
8522.00+	89.265	133.626	7823.62	908.67	-626.94	657.75	648231.44	439074.88	32°12'22.412"N	103°51'14.709"W	0.00	
8622.00+	89.265	133.626	7824.90	1008.66	-695.93	730.13	648303.82	439005.89	32°12'21.726"N	103°51'13.870"W	0.00	
8722.00+	89.265	133.626	7826.18	1108.66	-764.92	802.51	648376.19	438936.91	32°12'21.041"N	103°51'13.032"W	0.00	
8822.00+	89.265	133.626	7827.46	1208.65	-833.91	874.89	648448.57	438867.92	32°12'20.355"N	103°51'12.193"W	0.00	
8922.00+	89.265	133.626	7828.75	1308.64	-902.90	947.27	648520.94	438798.94	32°12'19.669"N	103°51'11.354"W	0.00	
9022.00+	89.265	133.626	7830.03	1408.63	-971.89	1019.65	648593.32	438729.95	32°12'18.983"N	103°51'10.515"W	0.00	
9122.00+	89.265	133.626	7831.31	1508.62	-1040.88	1092.02	648665.69	438660.97	32°12'18.297"N	103°51'09.677"W	0.00	
9222.00+	89.265	133.626	7832.59	1608.61	-1109.87	1164.40	648738.07	438591.98	32°12'17.611"N	103°51'08.838"W	0.00	
9322.00+	89.265	133.626	7833.88	1708.61	-1178.86	1236.78	648810.44	438523.00	32°12'16.925"N	103°51'07.999"W	0.00	
9422.00+	89.265	133.626	7835.16	1808.60	-1247.85	1309.16	648882.82	438454.01	32°12'16.239"N	103°51'07.160"W	0.00	
9522.00+	89.265	133.626	7836.44	1908.59	-1316.83	1381.54	648955.19	438385.03	32°12'15.553"N	103°51'06.322"W	0.00	
9622.00+	89.265	133.626	7837.73	2008.58	-1385.82	1453.92	649027.56	438316.04	32°12'14.868"N	103°51'05.483"W	0.00	
9722.00+	89.265	133.626	7839.01	2108.57	-1454.81	1526.30	649099.94	438247.06	32°12'14.182"N	103°51'04.644"W	0.00	
9822.00+	89.265	133.626	7840.29	2208.56	-1523.80	1598.68	649172.31	438178.07	32°12'13.496"N	103°51'03.805"W	0.00	
9922.00+	89.265	133.626	7841.57	2308.56	-1592.79	1671.06	649244.69	438109.09	32°12'12.810"N	103°51'02.967"W	0.00	
10022.00+	89.265	133.626	7842.86	2408.55	-1661.78	1743.44	649317.06	438040.10	32°12'12.124"N	103°51'02.128"W	0.00	
10122.00+	89.265	133.626	7844.14	2508.54	-1730.77	1815.82	649389.44	437971.12	32°12'11.438"N	103°51'01.289"W	0.00	
10222.00+	89.265	133.626	7845.42	2608.53	-1799.76	1888.20	649461.81	437902.13	32°12'10.752"N	103°51'00.450"W	0.00	
10322.00+	89.265	133.626	7846.70	2708.52	-1868.75	1960.58	649534.19	437833.15	32°12'10.066"N	103°50'59.612"W	0.00	
10422.00+	89.265	133.626	7847.99	2808.52	-1937.74	2032.96	649606.56	437764.16	32°12'09.380"N	103°50'58.773"W	0.00	
10522.00+	89.265	133.626	7849.27	2908.51	-2006.73	2105.34	649678.94	437695.18	32°12'08.695"N	103°50'57.934"W	0.00	
10622.00+	89.265	133.626	7850.55	3008.50	-2075.72	2177.72	649751.31	437626.19	32°12'08.009"N	103°50'57.096"W	0.00	
10722.00+	89.265	133.626	7851.84	3108.49	-2144.71	2250.10	649823.68	437557.21	32°12'07.323"N	103°50'56.257"W	0.00	
10822.00+	89.265	133.626	7853.12	3208.48	-2213.70	2322.48	649896.06	437488.22	32°12'06.637"N	103°50'55.418"W	0.00	
10922.00+	89.265	133.626	7854.40	3308.47	-2282.69	2394.86	649968.43	437419.24	32°12'05.951"N	103°50'54.580"W	0.00	
11022.00+	89.265	133.626	7855.68	3408.47	-2351.68	2467.23	650040.81	437350.25	32°12'05.265"N	103°50'53.741"W	0.00	
11122.00+	89.265	133.626	7856.97	3508.46	-2420.67	2539.61	650113.18	437281.27	32°12'04.579"N	103°50'52.902"W	0.00	
11222.00+	89.265	133.626	7858.25	3608.45	-2489.66	2611.99	650185.56	437212.28	32°12'03.893"N	103°50'52.064"W	0.00	
11322.00+	89.265	133.626	7859.53	3708.44	-2558.65	2684.37	650257.93	437143.30	32°12'03.207"N	103°50'51.225"W	0.00	
11422.00+	89.265	133.626	7860.81	3808.43	-2627.64	2756.75	650330.31	437074.31	32°12'02.521"N	103°50'50.386"W	0.00	
11522.00+	89.265	133.626	7862.10	3908.43	-2696.63	2829.13	650402.68	437005.33	32°12'01.835"N	103°50'49.547"W	0.00	
11622.00+	89.265	133.626	7863.38	4008.42	-2765.62	2901.51	650475.06	436936.35	32°12'01.149"N	103°50'48.709"W	0.00	
11722.00+	89.265	133.626	7864.66	4108.41	-2834.61	2973.89	650547.43	436867.36	32°12'00.464"N	103°50'47.870"W	0.00	
11822.00+	89.265	133.626	7865.95	4208.40	-2903.60	3046.27	650619.80	436798.38	32°11'59.778"N	103°50'47.031"W	0.00	
11922.00+	89.265	133.626	7867.23	4308.39	-2972.59	3118.65	650692.18	436729.39	32°11'59.092"N	103°50'46.193"W	0.00	
12022.00+	89.265	133.626	7868.51	4408.38	-3041.58	3191.03	650764.55	436660.41	32°11'58.406"N	103°50'45.354"W	0.00	
12122.00+	89.265	133.626	7869.79	4508.38	-3110.56	3263.41	650836.93	436591.42	32°11'57.720"N	103°50'44.516"W	0.00	
12222.00+	89.265	133.626	7871.08	4608.37	-3179.55	3335.79	650909.30	436522.44	32°11'57.034"N	103°50'43.677"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.341H SHL
Area	Eddy County, NM	Well	No.341H
Field	Poker Lake Unit	Wellbore	No.341H PWB
Facility	Poker Lake Unit No. 341H		

WELLPATH DATA (159 stations) * = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12322.00+	89.265	133.626	7872.36	4708.36	-3248.54	3408.17	650981.68	436453.45	32°11'56.348"N	103°50'42.838"W	0.00	
12422.00+	89.265	133.626	7873.64	4808.35	-3317.53	3480.55	651054.05	436384.47	32°11'55.662"N	103°50'42.000"W	0.00	
12522.00+	89.265	133.626	7874.92	4908.34	-3386.52	3552.93	651126.43	436315.48	32°11'54.976"N	103°50'41.161"W	0.00	
12622.00+	89.265	133.626	7876.21	5008.33	-3455.51	3625.31	651198.80	436246.50	32°11'54.290"N	103°50'40.322"W	0.00	
12722.00+	89.265	133.626	7877.49	5108.33	-3524.50	3697.69	651271.18	436177.51	32°11'53.604"N	103°50'39.484"W	0.00	
12822.00+	89.265	133.626	7878.77	5208.32	-3593.49	3770.07	651343.55	436108.53	32°11'52.918"N	103°50'38.645"W	0.00	
12922.00+	89.265	133.626	7880.06	5308.31	-3662.48	3842.44	651415.92	436039.54	32°11'52.232"N	103°50'37.806"W	0.00	
13022.00+	89.265	133.626	7881.34	5408.30	-3731.47	3914.82	651488.30	435970.56	32°11'51.546"N	103°50'36.968"W	0.00	
13122.00+	89.265	133.626	7882.62	5508.29	-3800.46	3987.20	651560.67	435901.57	32°11'50.861"N	103°50'36.129"W	0.00	
13222.00+	89.265	133.626	7883.90	5608.29	-3869.45	4059.58	651633.05	435832.59	32°11'50.175"N	103°50'35.291"W	0.00	
13322.00+	89.265	133.626	7885.19	5708.28	-3938.44	4131.96	651705.42	435763.60	32°11'49.489"N	103°50'34.452"W	0.00	
13422.00+	89.265	133.626	7886.47	5808.27	-4007.43	4204.34	651777.80	435694.62	32°11'48.803"N	103°50'33.613"W	0.00	
13522.00+	89.265	133.626	7887.75	5908.26	-4076.42	4276.72	651850.17	435625.63	32°11'48.117"N	103°50'32.775"W	0.00	
13622.00+	89.265	133.626	7889.03	6008.25	-4145.41	4349.10	651922.55	435556.65	32°11'47.431"N	103°50'31.936"W	0.00	
13722.00+	89.265	133.626	7890.32	6108.24	-4214.40	4421.48	651994.92	435487.66	32°11'46.745"N	103°50'31.098"W	0.00	
13822.00+	89.265	133.626	7891.60	6208.24	-4283.39	4493.86	652067.30	435418.68	32°11'46.059"N	103°50'30.259"W	0.00	
13922.00+	89.265	133.626	7892.88	6308.23	-4352.38	4566.24	652139.67	435349.69	32°11'45.373"N	103°50'29.420"W	0.00	
14022.00+	89.265	133.626	7894.17	6408.22	-4421.37	4638.62	652212.04	435280.71	32°11'44.687"N	103°50'28.582"W	0.00	
14122.00+	89.265	133.626	7895.45	6508.21	-4490.36	4711.00	652284.42	435211.72	32°11'44.001"N	103°50'27.743"W	0.00	
14222.00+	89.265	133.626	7896.73	6608.20	-4559.35	4783.38	652356.79	435142.74	32°11'43.315"N	103°50'26.905"W	0.00	
14322.00+	89.265	133.626	7898.01	6708.19	-4628.34	4855.76	652429.17	435073.75	32°11'42.629"N	103°50'26.066"W	0.00	
14422.00+	89.265	133.626	7899.30	6808.19	-4697.33	4928.14	652501.54	435004.77	32°11'41.943"N	103°50'25.228"W	0.00	
14522.00+	89.265	133.626	7900.58	6908.18	-4766.32	5000.52	652573.92	434935.78	32°11'41.257"N	103°50'24.389"W	0.00	
14554.78	89.265	133.626	7901.00	6940.95	-4788.93	5024.24	652597.64	434913.17	32°11'41.032"N	103°50'24.114"W	0.00	No. 341H PBHL

HOLE & CASING SECTIONS - Ref Wellbore: No.341H PWB - Ref Wellpath: Prelim_5									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
7in Casing	22.00	8269.00	8247.00	22.00	7820.37	0.00	0.00	-452.39	474.63



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.341H SHL
Area	Eddy County, NM	Well	No.341H
Field	Poker Lake Unit	Wellbore	No.341H PWB
Facility	Poker Lake Unit No. 341H		

TARGETS

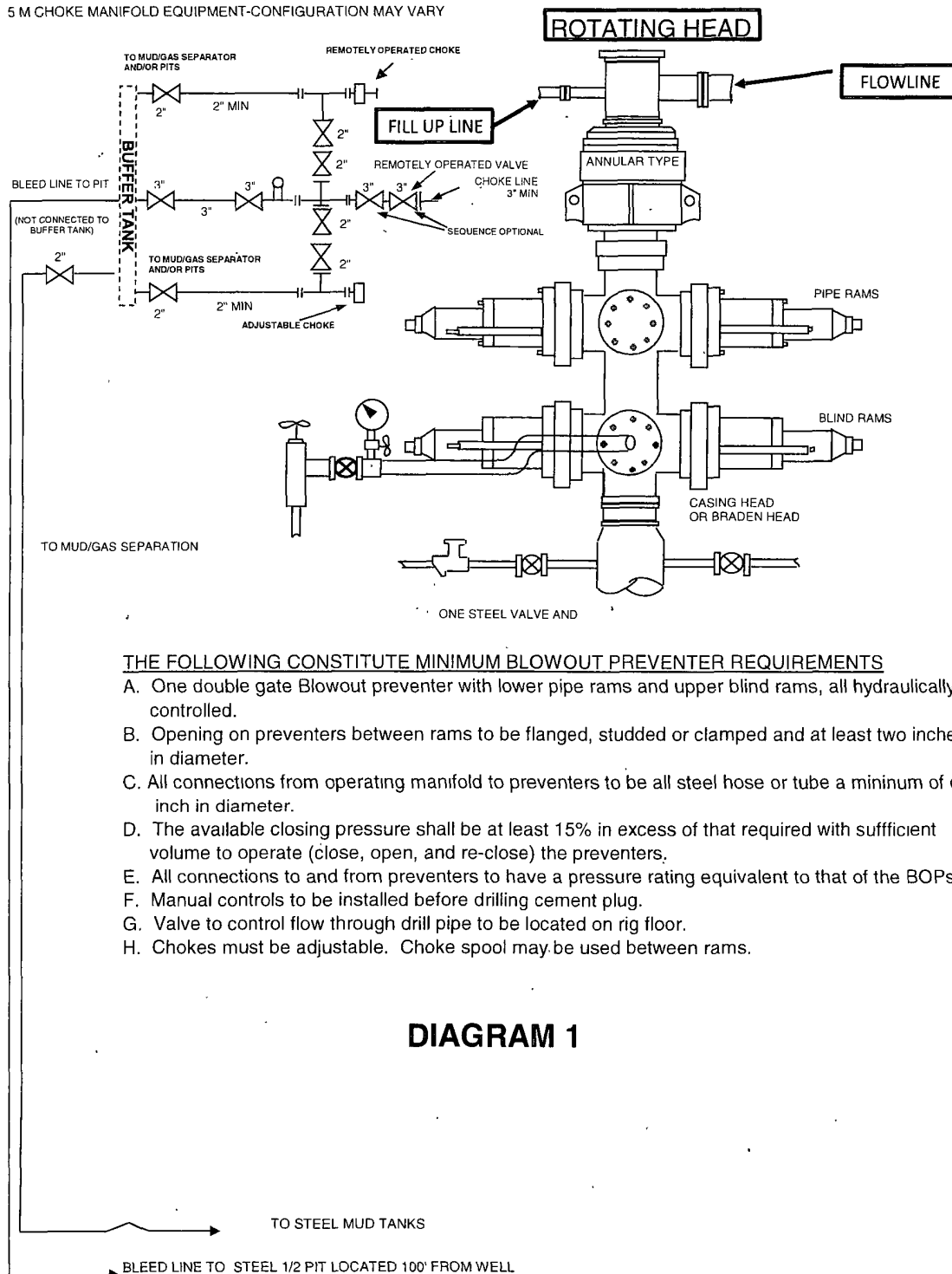
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No.341 TGT		7796.00	-146.68	440.49	648014.20	439555.10	32°12'27.174"N	103°51'17.213"W	point
1) No.341 PBHL	14554.78	7901.00	-4788.93	5024.24	652597.64	434913.17	32°11'41.032"N	103°50'24.114"W	point

SURVEY PROGRAM - Ref Wellbore: No.341H PWB - Ref Wellpath: Prelim_5

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
22.00	14554.78	NaviTrak (Standard)		No.341H PWB

BOPCO, L. P.

5 M CHOKE MANIFOLD EQUIPMENT-CONFIGURATION MAY VARY



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- A. One double gate Blowout preventer with lower pipe rams and upper blind rams, all hydraulically controlled.
- B. Opening on preventers between rams to be flanged, studded or clamped and at least two inches in diameter.
- C. All connections from operating manifold to preventers to be all steel hose or tube a minimum of one inch in diameter.
- D. The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate (close, open, and re-close) the preventers.
- E. All connections to and from preventers to have a pressure rating equivalent to that of the BOPs.
- F. Manual controls to be installed before drilling cement plug.
- G. Valve to control flow through drill pipe to be located on rig floor.
- H. Chokes must be adjustable. Choke spool may be used between rams.

DIAGRAM 1

DISTRICT I --- CHECKLIST FOR INTENTS TO DRILL

Operator BOPCO, L.P. OGRID # 260737
 Well Name & # POKER LAKE UNIT 341H Surface Type (F) (S) (P)
 Location: UL D, Sect 23 Township 24 s, RNG 30 e, Sub-surface Type (F) (S) (P)

A. Date C101 rec'd 10 / 12 / 2011 C101 reviewed 10 / 12 / 2011

B. 1. Check mark, Information is OK on Forms:

OGRID ✓, BONDING ✓, PROP CODE ✓, WELL # ✓, SIGNATURE ✓
 2. Inactive Well list as of: 10 / 12 / 2011 # wells 424, # Inactive wells 4

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: 10 / 12 / 2011

a. District Denial because operator needs addition bonding:

No Letter required ✓; Sent Letter to Operator , To Santa Fe

b. District Denial because of Inactive well list and Financial Assurance:

No Letter required ✓; Sent Letter to Operator , To Santa Fe

C. C102 YES ✓, NO , Signature ✓

1. Pool POKER LAKE NW (DBL), Code 306402

a. Dedicated acreage 200, What Units

b. SUR. Location Standard ✓: Non-Standard Location

c. Well shares acres: Yes , No , # of wells plus this well #

2. 2nd. Operator in same acreage, Yes , No

Agreement Letter , Disagreement letter

3. Intent to Directional Drill Yes ✓, No

a. Dedicated acreage 200, What Units

b. Bottomhole Location Standard ✓, 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 ✓

D. Blowout Preventer Yes ✓, No

E. H2S Yes ✓, No

F. C144 Pit Registration Yes , No

G. Does APD require Santa Fe Approval:

1. Non-Standard Location: Yes , No , NSL #

2. Non-Standard Proration: Yes , No , NSP #

3. Simultaneous Dedication: Yes , No , SD #

Number of wells Plus #

4. Injection order Yes , No ✓; PMX # or WFX #

5. SWD order Yes , NO ✓; SWD #

6. DHC from SF ; DHC-HOB ; Holding

7. OCD Approval Date 10 / 12 / 2011

API #30-015 -- 39486

8. Reviewers TES