

Form 3160-3
(April 2004)FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007UNITED 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. BHL: NM-030457 (See box 6)
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name See page one of 8pt Drilling plan.
2. Name of Operator BOPCO, L. P.		7. If Unit or CA Agreement, Name and No Poker Lake Unit NMNM71016X
3a. Address P. O. Box 2760 Midland, TX 79702		8. Lease Name and Well No. Poker Lake Unit 356H [306 902]
3b. Phone No. (include area code) 432-683-2277		9. API Well No. 30-015-39675
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWSE, UL J, 2210' FSL, 1850' FEL, Lat:N32.172808, Long:W103.779675 At proposed prod zone 1760' FNL, 2300' FWL, Sec 3, T25S, R31E, Lat:N32.161828, Lng:W103.76640		10. Field and Pool, or Exploratory Cotton Draw, SO (Delaware) [5038] 11. Sec, T, R, M. or Blk. and Survey or Area 33, T24S, R31E, Mer, NMP
14. Distance in miles and direction from nearest town or post office* 20 Miles East of Malaga, NM		12. County or Parish Eddy
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any) 1850'		13. State NM
16. No. of acres in lease 2824.76		17. Spacing Unit dedicated to this well 400
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 575'		20. BLM/BIA Bond No. on file COB 000050
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3453'		22. Approximate date work will start* 03/23/2012
		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>Jeremy Braden</i>	Name (Printed/Typed) Jeremy Braden	Date 9-12-11
Title Engineering Assistant		
Approved by (Signature) <i>/s/ W. W. Ingram</i>	Name (Printed/Typed) W. W. Ingram	Date NOV 09 2011
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

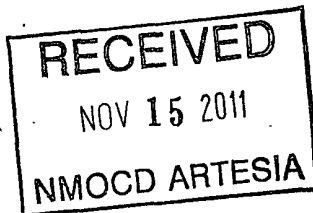
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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

Approval Subject to General Requirements
& Special Stipulations AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL

BOPCO, L.P.

**P. O. Box 2760
Midland, Texas 79702**

432-683-2277

FAX-432-687-0329

August 11, 2011

Bureau of Land Management
Carlsbad Field Office
620 East Green Street
Carlsbad, New Mexico 88220-6292

Attn: Mr. Don Peterson – Assistant Field Manager, Minerals

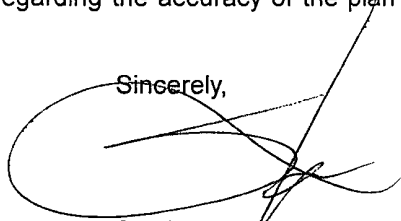
RE: APPLICATION FOR PERMIT TO DRILL
POKER LAKE UNIT #356H
2210' FSL, 1850' FEL, SEC. 33, T24S, R31E, EDDY COUNTY, NM

Dear Mr. Peterson,

In reference to the above captioned well, I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in the attached eight point drilling plan and multi-use surface plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by BOPCO, L.P. and it's contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

If you have any questions regarding the accuracy of the plan provided herein, please do not hesitate to contact me at (432) 683-2277.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stephen M. Martinez', is written over a large, loopy circular flourish.

Stephen M. Martinez
Division Drilling Superintendent

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised July 18, 2010

Submit one copy to appropriate
District Office

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-39675	Pool Code 96757 50386	Pool Name Poker Lake Cotton Draw, SO (Delaware)
Property Code 306402	Property Name POKER LAKE UNIT	Well Number 356H
OGRID No. 260737	Operator Name BOPCO, L.P.	Elevation 3453'

Surface Location

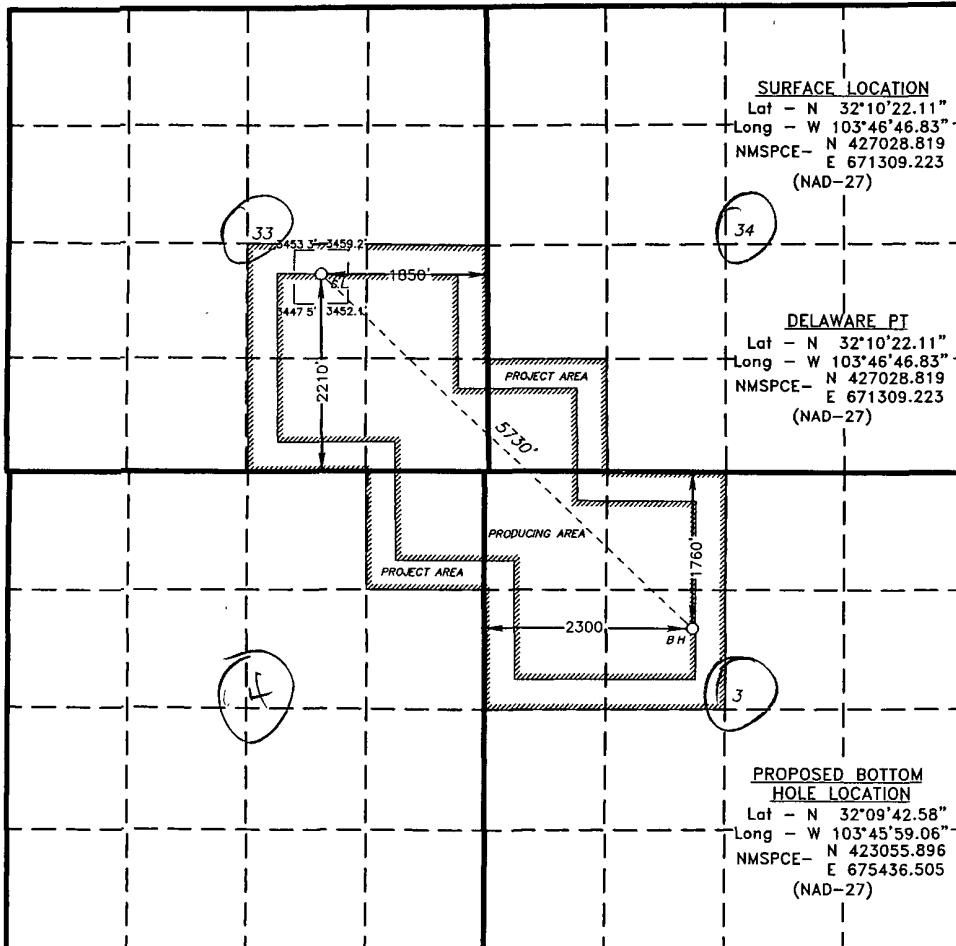
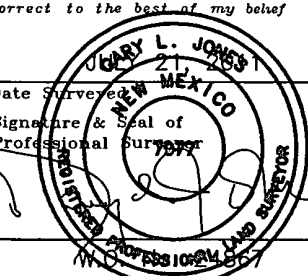
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	33	24 S	31 E		2210	SOUTH	1850	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	3	25 S	31 E		1760	NORTH	2300	WEST	EDDY

Dedicated Acres 400	Joint or Infill	Consolidation Code	Order No.
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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

 SURFACE LOCATION Lat - N 32°10'22.11" Long - W 103°46'46.83" NMSPE- N 427028.819 E 671309.223 (NAD-27) DELAWARE PT Lat - N 32°10'22.11" Long - W 103°46'46.83" NMSPE- N 427028.819 E 671309.223 (NAD-27) PROPOSED BOTTOM HOLE LOCATION Lat - N 32°09'42.58" Long - W 103°45'59.06" NMSPE- N 423055.896 E 675436.505 (NAD-27)	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. <i>Jeremy Braden</i> 8-22-11 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 supervision, and that the same is true and correct to the best of my belief  Date Surveyed Signature & Seal of Professional Surveyor Certificate No. Gary L. Jones 7977 BASIN SURVEYS 24867
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EIGHT POINT DRILLING PROGRAM BOPCO, L.P.

NAME OF WELL: Poker Lake Unit #356H

LEGAL DESCRIPTION - SURFACE: 2210' FSL, 1850' FEL, Section 33, T24S, R31E, Eddy County, NM.
BHL: 1760' FNL, 2300' FWL, Section 3, T25S, R31E, 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 3475' (estimated)
GL 3453'

<u>FORMATION</u>	<u>ESTIMATED TOP FROM KB</u>		<u>ESTIMATED SUB-SEA TOP</u>	<u>BEARING</u>
	<u>TVD</u>	<u>MD</u>		
T/Fresh Water	175'	175'	+ 3,300'	Fresh Water
T/Rustler	534'	534'	+ 2,941'	Barren
T/Salt	949'	949'	+ 2,526'	Barren
B/Salt	4,119'	4,119'	- 644'	Barren
T/Lamar	4,335'	4,335'	- 860'	Barren
T/Ramsey	4,383'	4,383'	- 908'	Oil/Gas
T/Lower Cherry Canyon	6,381'	6,381'	- 2,906'	Oil/Gas
KOP	7,655'	7,655'	- 4,180'	Oil/Gas
T/Lwr Brushy Canyon "U" Sd	7,779'	7,780'	- 4,304'	Oil/Gas
T/Lwr Brushy Canyon "8A" Sd	7,955'	7,976'	- 4,480'	Oil/Gas
T/Lwr Brushy Canyon "Y" Sd	8,107'	8,229'	- 4,632'	Oil/Gas
Target #1	8,146'	8,411'	- 4,671'	Oil/Gas
EOC	8,143'	8,411'	- 4,668'	Oil/Gas
TD Horizontal Hole	8,196'	13,667'	- 4,721'	Oil/Gas

POINT 3: CASING PROGRAM

<u>TYPE</u>	<u>INTERVALS (MD)</u>	<u>Hole Size</u>	<u>PURPOSE</u>	<u>CONDITION</u>
20"	0' - 80'	24"	Conductor	Contractor Discretion
13-3/8", 48#, H-40, or 54.5#, J-55 8rd, ST&C*	0' - 939'	17-1/2"	Surface	New
9-5/8", 40#, N-80, 8rd, LT&C or 40#, J-55, 8rd LTC*	0' - 4355'	12-1/4"	Intermediate	New
7", 26#, N-80, Buttress or 8rd LTC*	0' - 8522'	8-3/4"	Production	New

CASING DESIGN SAFETY FACTORS:

<u>TYPE</u>	<u>TENSION</u>	<u>COLLAPSE</u>	<u>BURST</u>
13-3/8", 48#, H-40, 8rd, ST&C*	8.26	1.57	3.30
13-3/8", 54.5#, J-55, 8rd, STC*	19.39	2.40	5.21
9-5/8", 40#, N-80, 8rd, LT&C*	5.01	1.22	2.37
9-5/8", 40#, J-55, 8rd, LT&C*	4.10	1.14	1.89
7", 26#, N-80, Buttress*	3.61	1.13	1.59
7", 26#, N-80, 8rd, LTC*	2.68	1.13	1.59

* 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' - 939'	FW Spud Mud	8.5 - 9.2	38-70	NC	NC	NC	10.0
939' - 4355'	Brine Water	9.8 - 10.2	28-30	NC	NC	NC	9.5 - 10.5
4355' - 8622'	FW/Gel	8.7 - 9.0	28-36	NC	NC	NC	9.5 - 10.0
8622' - 13,667'	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' – 439'	370	439	ExtendaCem CZ	8.72	13.70	1.68
Tail: 439' – 939'	460	500	ExtendaCem CZ	8.72	13.70	1.68
INTERMEDIATE:						
Lead: 0' – 3855'	1200	3855	EconoCem HLC 5% CaCl + 5 #/sk Gilsonite	9.32	12.90	1.85
Tail: 3855' – 4355'	270	500	HalCem C	6.34	14.80	1.33
2ND INTERMEDIATE						
Stage 1:						
Lead: 5000' – 7555'	220	2555	Tuned Light + 0.75% CFR-3 + 1.5#/sk CaCl	12.41	10.20	2.76
Tail: 7555' - 8522'	140	967	VersaCem-PBSH2 + 0.4% Halad-9	8.76	13.0	1.65
DV Tool @ 5000'						
Stage 2:						
Lead: 3855'–4500'	70	645	EconoCem HLC + 1% Econolite + 5% CaCl + 5#/sk Gilsonite	10.71	12.60	2.04
Tail: 4500'-5000'	100	500	HalCem C	6.34	14.80	1.33

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.

2nd Intermediate – 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) Completion System

A 4-1/2" completion system with open hole packers will be run in the producing lateral. 4-1/2", 11.6#, HCP-110, 8rd, LT&C casing will be run with safety factors as follows:
The top of the 4-1/2" completion system will be set at 8,472'.

<u>Tension</u>	<u>Collapse</u>	<u>Burst</u>
3.40	1.93	2.27

F) 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 7655' at which point a directional hole will be kicked off and drilled at an azimuth of 133.908 degrees, building angle at 12 deg/100' to 89.422 degrees at a MD of 8411' (8143' TVD). This angle and azimuth will be maintained for 111' to a measured depth of 8522' (8144' TVD). At this depth 7", 26#, N-80, Buttress, or 8rd LTC casing will be installed and cemented in two stages (DV Tool @ approximately 5000') with TOC at 3855' (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 133.908 degrees, inclination of 89.422 degrees to a measured depth of 13,667', TVD 8196'. At this depth a 4-1/2" Completion System with packers installed for zone isolation will be run into the producing lateral.

G) H₂S Safety Equipment

As stated in the BLM Onshore Order 6, for wells located in the SOPA, H₂S equipment will be rigged up after setting surface casing. For the wells located inside the SOPA the flare pit or 1/2 steel pits will be located 150' from the location. For wells located outside the SOPA the flare pit or 1/2 steel pit will be located 100' away from the location. **(See page 6 of Survey plat package)** There is not any H₂S anticipated in the area, although in the event that H₂S is encountered, the H₂S contingency plan attached will be implemented.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout Delaware section. A BHP of 3831 psi (max) or MWE of 9.0 ppg is expected. Lost circulation may exist in the Delaware Section from 4343'-8450' TVD.

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

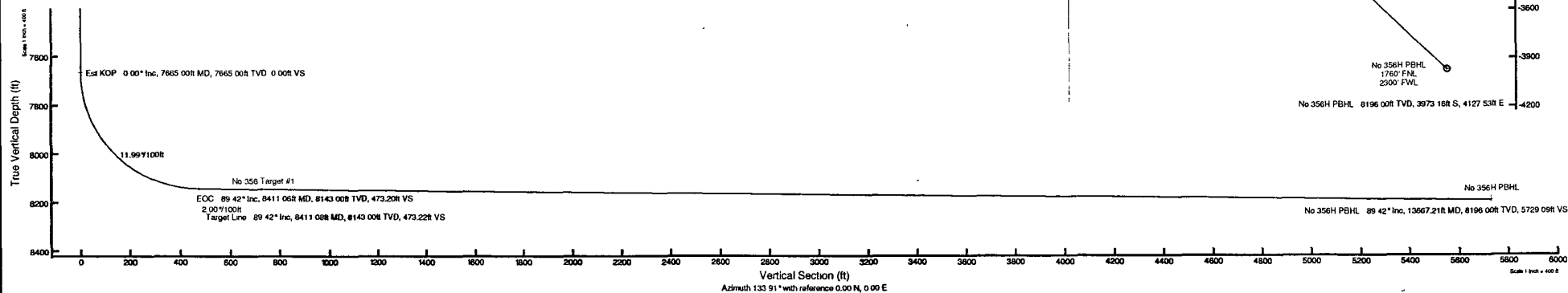
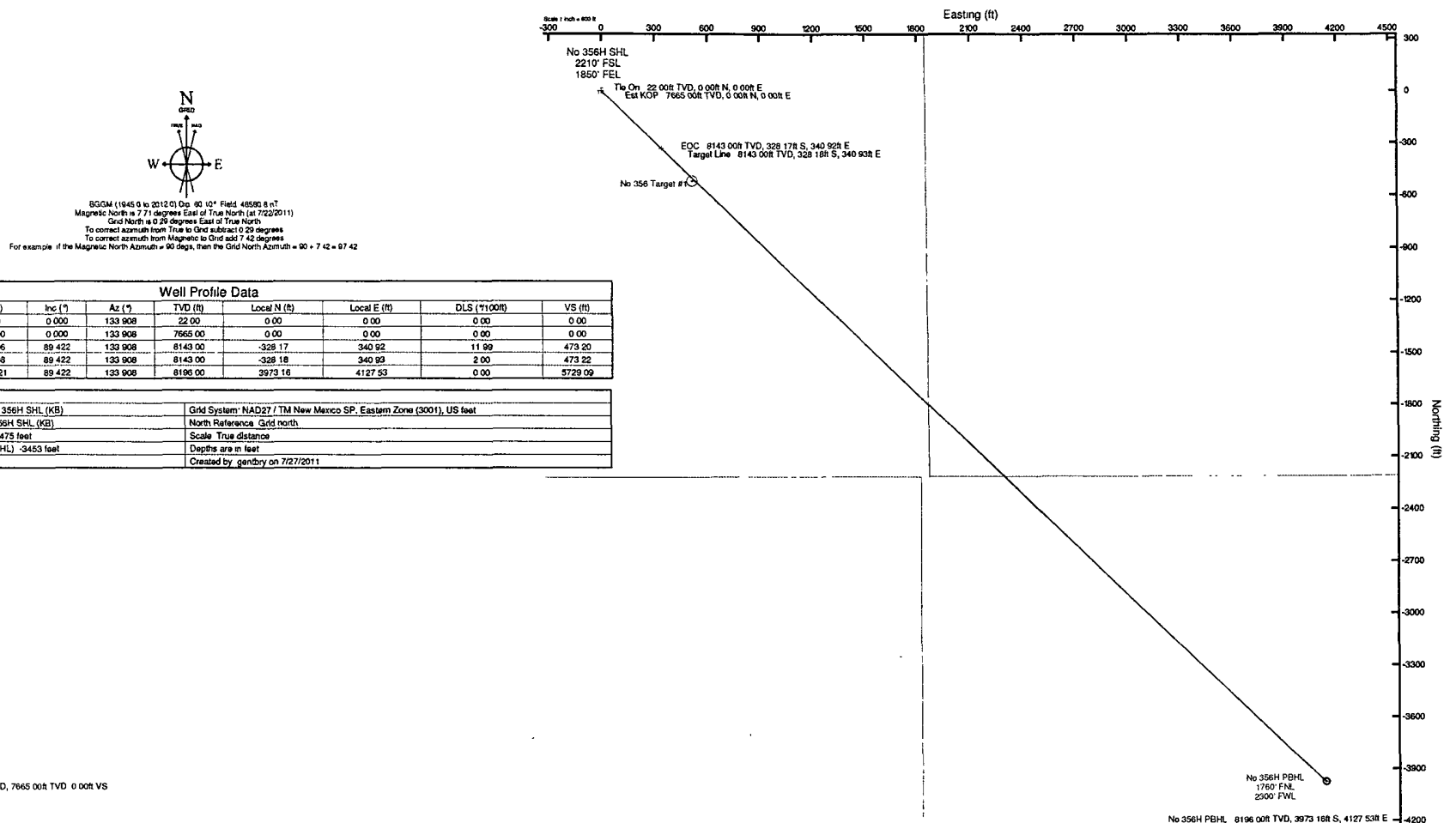
14 days completion operations

JDB

BOPCO, L.P.

Location: Eddy County, NM
Field: Poker Lake Unit
Facility: Poker Lake Unit No. 356H

Slot.	No.356H SHL
Well	No 356H
Wellbore.	No.356H PWB





Planned Wellpath Report

Prelim_2

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.356H SHL
Area	Eddy County, NM	Well	No.356H
Field	Poker Lake Unit	Wellbore	No.356H PWB
Facility	Poker Lake Unit No. 356H		

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	0.999943	Report Generated	7/27/2011 at 8:34:02 AM
Convergence at slot	0.29° East	Database/Source file	WA Midland/No.356H_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	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W
Facility Reference Pt			671309.22	427028.82	32°10'22.107"N	103°46'46.835"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.356H SHL (KB) to Facility Vertical Datum	22.00ft
Horizontal Reference Pt	Slot	Rig on No.356H SHL (KB) to Mean Sea Level	3475.00ft
Vertical Reference Pt	Rig on No.356H SHL (KB)	Rig on No.356H SHL (KB) to Mud Line at Slot (No.356H SHL)	22.00ft
MD Reference Pt	Rig on No.356H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	133.91°



Planned Wellpath Report

Prelim_2

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.356H SHL
Area	Eddy County, NM	Well	No.356H
Field	Poker Lake Unit	Wellbore	No.356H PWB
Facility	Poker Lake Unit No. 356H		

WELLPATH DATA (151 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	133.908	0.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
22.00	0.000	133.908	22.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	Tie On
122.00†	0.000	133.908	122.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
222.00†	0.000	133.908	222.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
322.00†	0.000	133.908	322.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
422.00†	0.000	133.908	422.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
522.00†	0.000	133.908	522.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
534.00†	0.000	133.908	534.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	Rustler
622.00†	0.000	133.908	622.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
722.00†	0.000	133.908	722.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
822.00†	0.000	133.908	822.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
922.00†	0.000	133.908	922.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
949.00†	0.000	133.908	949.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	Salt
1022.00†	0.000	133.908	1022.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
1122.00†	0.000	133.908	1122.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
1222.00†	0.000	133.908	1222.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
1322.00†	0.000	133.908	1322.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
1422.00†	0.000	133.908	1422.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
1522.00†	0.000	133.908	1522.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
1622.00†	0.000	133.908	1622.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
1722.00†	0.000	133.908	1722.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
1822.00†	0.000	133.908	1822.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
1922.00†	0.000	133.908	1922.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
2022.00†	0.000	133.908	2022.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
2122.00†	0.000	133.908	2122.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
2222.00†	0.000	133.908	2222.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
2322.00†	0.000	133.908	2322.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
2422.00†	0.000	133.908	2422.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
2522.00†	0.000	133.908	2522.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
2622.00†	0.000	133.908	2622.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
2722.00†	0.000	133.908	2722.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
2822.00†	0.000	133.908	2822.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
2922.00†	0.000	133.908	2922.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
3022.00†	0.000	133.908	3022.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
3122.00†	0.000	133.908	3122.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
3222.00†	0.000	133.908	3222.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
3322.00†	0.000	133.908	3322.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
3422.00†	0.000	133.908	3422.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
3522.00†	0.000	133.908	3522.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
3622.00†	0.000	133.908	3622.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
3722.00†	0.000	133.908	3722.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
3822.00†	0.000	133.908	3822.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
3922.00†	0.000	133.908	3922.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
4022.00†	0.000	133.908	4022.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
4119.00†	0.000	133.908	4119.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	B/Salt



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.356H SHL
Area	Eddy County, NM	Well	No.356H
Field	Poker Lake Unit	Wellbore	No.356H PWB
Facility	Poker Lake Unit No. 356H		

WELLPATH DATA (151 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
4122.00†	0.000	133.908	4122.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
4222.00†	0.000	133.908	4222.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
4322.00†	0.000	133.908	4322.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
4335.00†	0.000	133.908	4335.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	Lamar Lime
4383.00†	0.000	133.908	4383.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	Ramsey
4422.00†	0.000	133.908	4422.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
4522.00†	0.000	133.908	4522.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
4622.00†	0.000	133.908	4622.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
4722.00†	0.000	133.908	4722.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
4822.00†	0.000	133.908	4822.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
4922.00†	0.000	133.908	4922.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
5022.00†	0.000	133.908	5022.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
5122.00†	0.000	133.908	5122.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
5222.00†	0.000	133.908	5222.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
5322.00†	0.000	133.908	5322.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
5422.00†	0.000	133.908	5422.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
5522.00†	0.000	133.908	5522.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
5622.00†	0.000	133.908	5622.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
5722.00†	0.000	133.908	5722.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
5822.00†	0.000	133.908	5822.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
5922.00†	0.000	133.908	5922.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
6022.00†	0.000	133.908	6022.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
6122.00†	0.000	133.908	6122.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
6222.00†	0.000	133.908	6222.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
6322.00†	0.000	133.908	6322.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
6381.00†	0.000	133.908	6381.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	Lower Cherry Canyon
6422.00†	0.000	133.908	6422.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
6522.00†	0.000	133.908	6522.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
6622.00†	0.000	133.908	6622.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
6722.00†	0.000	133.908	6722.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
6822.00†	0.000	133.908	6822.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
6922.00†	0.000	133.908	6922.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
7022.00†	0.000	133.908	7022.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
7122.00†	0.000	133.908	7122.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
7222.00†	0.000	133.908	7222.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
7322.00†	0.000	133.908	7322.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
7422.00†	0.000	133.908	7422.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
7522.00†	0.000	133.908	7522.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
7622.00†	0.000	133.908	7622.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	
7665.00	0.000	133.908	7665.00	0.00	0.00	0.00	671309.22	427028.82	32°10'22.107"N	103°46'46.835"W	0.00	Est KOP
7722.00†	6.832	133.908	7721.87	3.39	-2.35	2.45	671311.67	427026.47	32°10'22.084"N	103°46'46.807"W	11.99	
7780.11†	13.797	133.908	7779.00	13.79	-9.57	9.94	671319.16	427019.26	32°10'22.012"N	103°46'46.720"W	11.99	Brushy Canyon "U"
7822.00†	18.818	133.908	7819.19	25.55	-17.72	18.41	671327.63	427011.10	32°10'21.931"N	103°46'46.622"W	11.99	
7922.00†	30.804	133.908	7909.80	67.44	-46.77	48.59	671357.80	426982.05	32°10'21.642"N	103°46'46.272"W	11.99	
7976.60†	37.349	133.908	7955.00	98.01	-67.97	70.62	671379.83	426960.85	32°10'21.431"N	103°46'46.017"W	11.99	LBC/SA



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.356H SHL
Area	Eddy County, NM	Well	No.356H
Field	Poker Lake Unit	Wellbore	No.356H PWB
Facility	Poker Lake Unit No. 356H		

WELLPATH DATA (151 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†	42.790	133.908	7989.73	127.23	-88.23	91.66	671400.88	426940.59	32°10'21.230"N	103°46'45.774"W	11.99	
8122.00†	54.776	133.908	8055.50	202.31	-140.30	145.76	671454.97	426888.53	32°10'20.712"N	103°46'45.148"W	11.99	
8222.00†	66.762	133.908	8104.24	289.42	-200.71	208.51	671517.72	426828.12	32°10'20.111"N	103°46'44.421"W	11.99	
8229.11†	67.614	133.908	8107.00	295.97	-205.26	213.23	671522.44	426823.58	32°10'20.065"N	103°46'44.366"W	11.99	LBC "Y" Sand
8322.00†	78.748	133.908	8133.84	384.75	-266.82	277.19	671586.40	426762.01	32°10'19.453"N	103°46'43.626"W	11.99	
8411.06	89.422	133.908	8143.00	473.20	-328.17	340.92	671650.12	426700.67	32°10'18.843"N	103°46'42.888"W	11.99	EOC
8411.08	89.422	133.908	8143.00	473.22	-328.18	340.93	671650.13	426700.66	32°10'18.843"N	103°46'42.888"W	2.00	Target Line
8422.00†	89.422	133.908	8143.11	484.14	-335.76	348.80	671658.00	426693.08	32°10'18.767"N	103°46'42.797"W	0.00	
8522.00†	89.422	133.908	8144.12	584.14	-405.10	420.85	671730.04	426623.74	32°10'18.077"N	103°46'41.963"W	0.00	
8622.00†	89.422	133.908	8145.13	684.13	-474.45	492.89	671802.08	426554.40	32°10'17.387"N	103°46'41.129"W	0.00	
8722.00†	89.422	133.908	8146.14	784.13	-543.80	564.93	671874.11	426485.06	32°10'16.698"N	103°46'40.295"W	0.00	
8822.00†	89.422	133.908	8147.14	884.12	-613.14	636.97	671946.15	426415.71	32°10'16.008"N	103°46'39.461"W	0.00	
8922.00†	89.422	133.908	8148.15	984.12	-682.49	709.01	672018.19	426346.37	32°10'15.318"N	103°46'38.627"W	0.00	
9022.00†	89.422	133.908	8149.16	1084.11	-751.84	781.05	672090.23	426277.03	32°10'14.628"N	103°46'37.793"W	0.00	
9122.00†	89.422	133.908	8150.17	1184.11	-821.19	853.09	672162.26	426207.68	32°10'13.938"N	103°46'36.960"W	0.00	
9222.00†	89.422	133.908	8151.18	1284.10	-890.53	925.14	672234.30	426138.34	32°10'13.248"N	103°46'36.126"W	0.00	
9322.00†	89.422	133.908	8152.19	1384.10	-959.88	997.18	672306.34	426069.00	32°10'12.558"N	103°46'35.292"W	0.00	
9422.00†	89.422	133.908	8153.19	1484.09	-1029.23	1069.22	672378.37	425999.65	32°10'11.868"N	103°46'34.458"W	0.00	
9522.00†	89.422	133.908	8154.20	1584.09	-1098.57	1141.26	672450.41	425930.31	32°10'11.178"N	103°46'33.624"W	0.00	
9622.00†	89.422	133.908	8155.21	1684.08	-1167.92	1213.30	672522.45	425860.97	32°10'10.488"N	103°46'32.790"W	0.00	
9722.00†	89.422	133.908	8156.22	1784.08	-1237.27	1285.34	672594.49	425791.63	32°10'09.798"N	103°46'31.956"W	0.00	
9822.00†	89.422	133.908	8157.23	1884.07	-1306.62	1357.38	672666.52	425722.28	32°10'09.109"N	103°46'31.122"W	0.00	
9922.00†	89.422	133.908	8158.24	1984.07	-1375.96	1429.43	672738.56	425652.94	32°10'08.419"N	103°46'30.288"W	0.00	
10022.00†	89.422	133.908	8159.24	2084.06	-1445.31	1501.47	672810.60	425583.60	32°10'07.729"N	103°46'29.454"W	0.00	
10122.00†	89.422	133.908	8160.25	2184.06	-1514.66	1573.51	672882.63	425514.25	32°10'07.039"N	103°46'28.621"W	0.00	
10222.00†	89.422	133.908	8161.26	2284.05	-1584.00	1645.55	672954.67	425444.91	32°10'06.349"N	103°46'27.787"W	0.00	
10322.00†	89.422	133.908	8162.27	2384.05	-1653.35	1717.59	673026.71	425375.57	32°10'05.659"N	103°46'26.953"W	0.00	
10422.00†	89.422	133.908	8163.28	2484.04	-1722.70	1789.63	673098.75	425306.22	32°10'04.969"N	103°46'26.119"W	0.00	
10522.00†	89.422	133.908	8164.29	2584.04	-1792.04	1861.67	673170.78	425236.88	32°10'04.279"N	103°46'25.285"W	0.00	
10622.00†	89.422	133.908	8165.29	2684.03	-1861.39	1933.72	673242.82	425167.54	32°10'03.589"N	103°46'24.451"W	0.00	
10722.00†	89.422	133.908	8166.30	2784.03	-1930.74	2005.76	673314.86	425098.20	32°10'02.899"N	103°46'23.617"W	0.00	
10822.00†	89.422	133.908	8167.31	2884.02	-2000.09	2077.80	673386.89	425028.85	32°10'02.209"N	103°46'22.783"W	0.00	
10922.00†	89.422	133.908	8168.32	2984.02	-2069.43	2149.84	673458.93	424959.51	32°10'01.519"N	103°46'21.950"W	0.00	
11022.00†	89.422	133.908	8169.33	3084.01	-2138.78	2221.88	673530.97	424890.17	32°10'00.829"N	103°46'21.116"W	0.00	
11122.00†	89.422	133.908	8170.34	3184.01	-2208.13	2293.92	673603.01	424820.82	32°10'00.140"N	103°46'20.282"W	0.00	
11222.00†	89.422	133.908	8171.34	3284.00	-2277.47	2365.96	673675.04	424751.48	32°09'59.450"N	103°46'19.448"W	0.00	
11322.00†	89.422	133.908	8172.35	3384.00	-2346.82	2438.00	673747.08	424682.14	32°09'58.760"N	103°46'18.614"W	0.00	
11422.00†	89.422	133.908	8173.36	3483.99	-2416.17	2510.05	673819.12	424612.79	32°09'58.070"N	103°46'17.780"W	0.00	
11522.00†	89.422	133.908	8174.37	3583.99	-2485.52	2582.09	673891.15	424543.45	32°09'57.380"N	103°46'16.947"W	0.00	
11622.00†	89.422	133.908	8175.38	3683.98	-2554.86	2654.13	673963.19	424474.11	32°09'56.690"N	103°46'16.113"W	0.00	
11722.00†	89.422	133.908	8176.39	3783.98	-2624.21	2726.17	674035.23	424404.77	32°09'56.000"N	103°46'15.279"W	0.00	
11822.00†	89.422	133.908	8177.39	3883.97	-2693.56	2798.21	674107.27	424335.42	32°09'55.310"N	103°46'14.445"W	0.00	
11922.00†	89.422	133.908	8178.40	3983.97	-2762.90	2870.25	674179.30	424266.08	32°09'54.620"N	103°46'13.611"W	0.00	
12022.00†	89.422	133.908	8179.41	4083.96	-2832.25	2942.29	674251.34	424196.74	32°09'53.930"N	103°46'12.777"W	0.00	
12122.00†	89.422	133.908	8180.42	4183.96	-2901.60	3014.34	674323.38	424127.39	32°09'53.240"N	103°46'11.944"W	0.00	



Planned Wellpath Report

Prelim_2

Page 5 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.356H SHL
Area	Eddy County, NM	Well	No.356H
Field	Poker Lake Unit	Wellbore	No.356H PWB
Facility	Poker Lake Unit No. 356H		

WELLPATH DATA (151 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
12222.00†	89.422	133.908	8181.43	4283.95	-2970.95	3086.38	674395.41	424058.05	32°09'52.550"N	103°46'11.110"W	0.00	
12322.00†	89.422	133.908	8182.44	4383.95	-3040.29	3158.42	674467.45	423988.71	32°09'51.860"N	103°46'10.276"W	0.00	
12422.00†	89.422	133.908	8183.44	4483.94	-3109.64	3230.46	674539.49	423919.36	32°09'51.170"N	103°46'09.442"W	0.00	
12522.00†	89.422	133.908	8184.45	4583.94	-3178.99	3302.50	674611.53	423850.02	32°09'50.480"N	103°46'08.608"W	0.00	
12622.00†	89.422	133.908	8185.46	4683.93	-3248.33	3374.54	674683.56	423780.68	32°09'49.790"N	103°46'07.775"W	0.00	
12722.00†	89.422	133.908	8186.47	4783.93	-3317.68	3446.58	674755.60	423711.34	32°09'49.100"N	103°46'06.941"W	0.00	
12822.00†	89.422	133.908	8187.48	4883.92	-3387.03	3518.63	674827.64	423641.99	32°09'48.410"N	103°46'06.107"W	0.00	
12922.00†	89.422	133.908	8188.49	4983.92	-3456.38	3590.67	674899.67	423572.65	32°09'47.720"N	103°46'05.273"W	0.00	
13022.00†	89.422	133.908	8189.49	5083.91	-3525.72	3662.71	674971.71	423503.31	32°09'47.030"N	103°46'04.439"W	0.00	
13122.00†	89.422	133.908	8190.50	5183.91	-3595.07	3734.75	675043.75	423433.96	32°09'46.341"N	103°46'03.606"W	0.00	
13222.00†	89.422	133.908	8191.51	5283.90	-3664.42	3806.79	675115.79	423364.62	32°09'45.651"N	103°46'02.772"W	0.00	
13322.00†	89.422	133.908	8192.52	5383.90	-3733.76	3878.83	675187.82	423295.28	32°09'44.961"N	103°46'01.938"W	0.00	
13422.00†	89.422	133.908	8193.53	5483.89	-3803.11	3950.87	675259.86	423225.93	32°09'44.271"N	103°46'01.104"W	0.00	
13522.00†	89.422	133.908	8194.54	5583.89	-3872.46	4022.92	675331.90	423156.59	32°09'43.581"N	103°46'00.271"W	0.00	
13622.00†	89.422	133.908	8195.54	5683.88	-3941.80	4094.96	675403.93	423087.25	32°09'42.891"N	103°45'59.437"W	0.00	
13667.21	89.422	133.908	8196.00	5729.09	-3973.16	4127.53	675436.51	423055.90	32°09'42.579"N	103°45'59.060"W	0.00	No.356H PBHL

HOLE & CASING SECTIONS - Ref Wellbore: No.356H PWB Ref Wellpath: Prelim_2

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	8612.00	8590.00	22.00	8145.03	0.00	0.00	-467.52	485.68

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No.356 Target #1		8146.00	-512.15	514.21	671823.40	426516.70	32°10'17.013"N	103°46'40.883"W	point
1) No.356H PBHL	13667.21	8196.00	-3973.16	4127.53	675436.51	423055.90	32°09'42.579"N	103°45'59.060"W	point

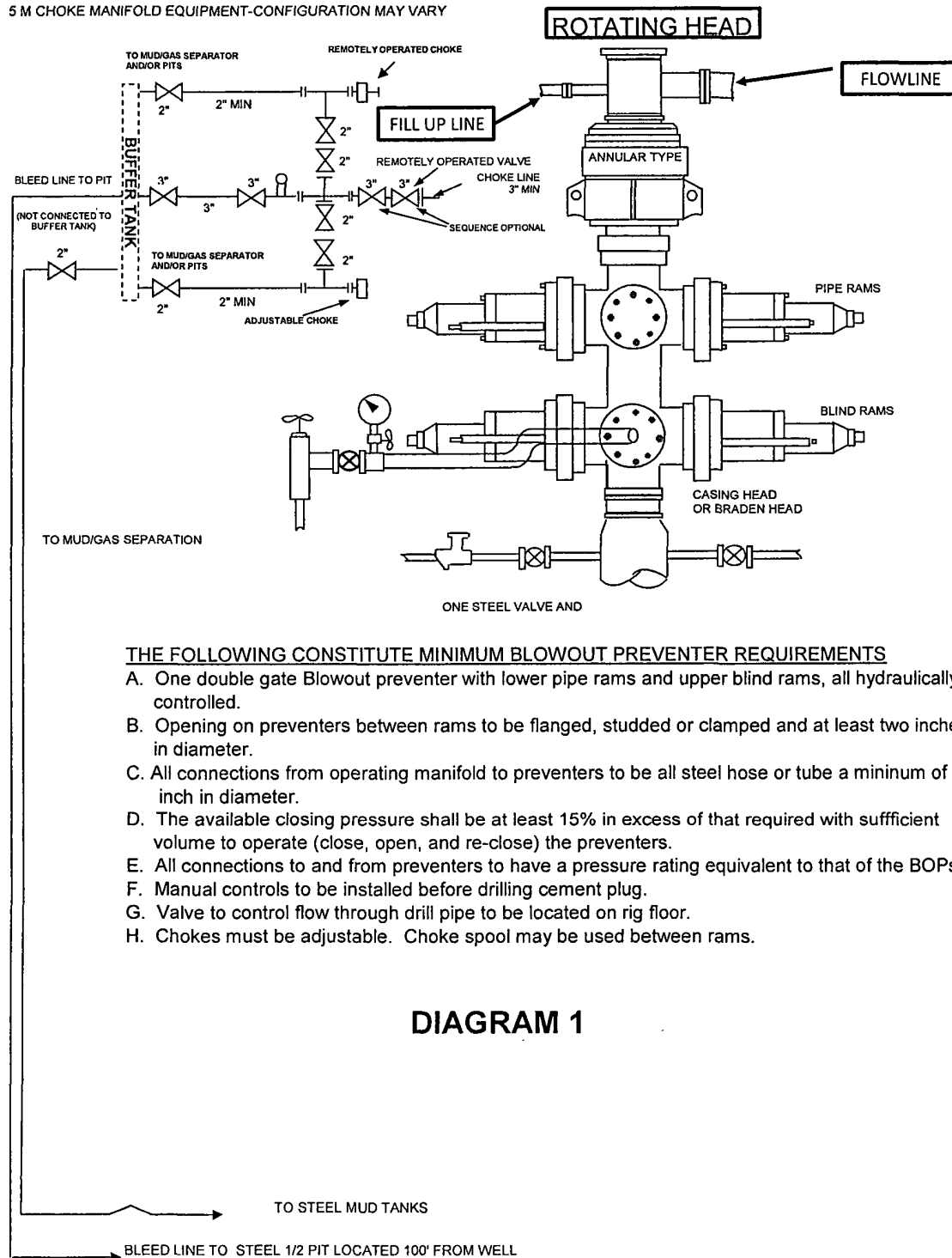
SURVEY PROGRAM - Ref Wellbore: No.356H PWB Ref Wellpath: Prelim_2

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
22.00	13667.21	NaviTrak (Standard)		No.356H PWB

BOPCO, L. P.

13 5/8" X 5-M WP BOPE WITH 5-M WP ANNULAR

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.

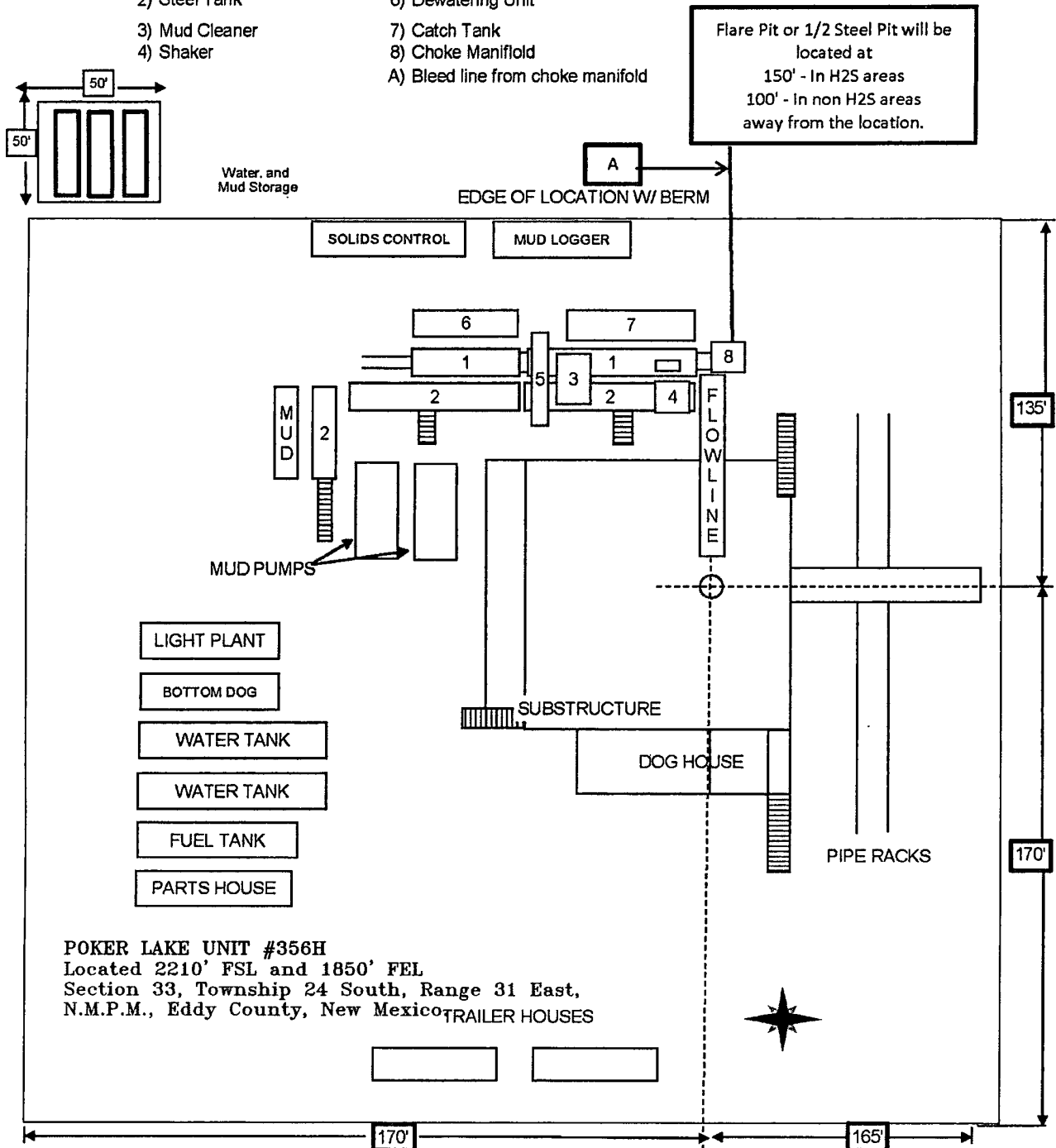
DIAGRAM 1

RIG LAYOUT

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 | 8) Choke Manifold |
| A) Bleed line from choke manifold | |



POKER LAKE UNIT #356H
Located 2210' FSL and 1850' FEL
Section 33, Township 24 South, Range 31 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: JMS 24867
Survey Date: 07-21-2011
Scale: 1" = 2000'
Date: 07-24-2011

BOPCO, L.P.

Sheet 6 of 6 Sheets

HYDROGEN SULFIDE (H₂S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H₂S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
 - Detection of H₂S, and
 - Measures for protection against the gas,
 - Equipment used for protection and emergency response.

Ignition of Gas source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever this is an ignition of the gas.

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

BOPCO L.P. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. (Operator Name)'s response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

H₂S CONTINGENCY PLAN EMERGENCY CONTACTS

BOPCO L.P. Midland Office

432-683-2277

Key Personnel

<u>Name</u>	<u>Title</u>	<u>Cell Phone Number</u>
Stephen Martinez	Drilling Supt.	432-556-0262
Buddy Jenkins	Assistant Supt.	432-238-3295
Bill Dannels	Engineer	432-638-9463
Brian Hammit	Engineer	432-638-9460
Charles Warne	Engineer	432-894-1392

Ambulance	911
State Police	575-746-2703
City Police	575-746-2703
Sheriff's Office	575-746-9888
Fire Department	575-746-2701
Local Emergency Planning Committee	575-746-2122
New Mexico Oil Conservation Division	575-748-1283

Carlsbad

Ambulance	911
State Police	575-885-3137
City Police	575-885-2111
Sheriff's Office	575-887-7551
Fire Department	575-887-3798
Local Emergency Planning Committee	575-887-6544
US Bureau of Land Management	575-887-6544

New Mexico Emergency Response Commission (Santa Fe)	505-476-9600
24 Hour	505-827-9126
New Mexico State Emergency Operations Center	505-476-9635
National Emergency Response Center (Washington, DC)	800-424-8802

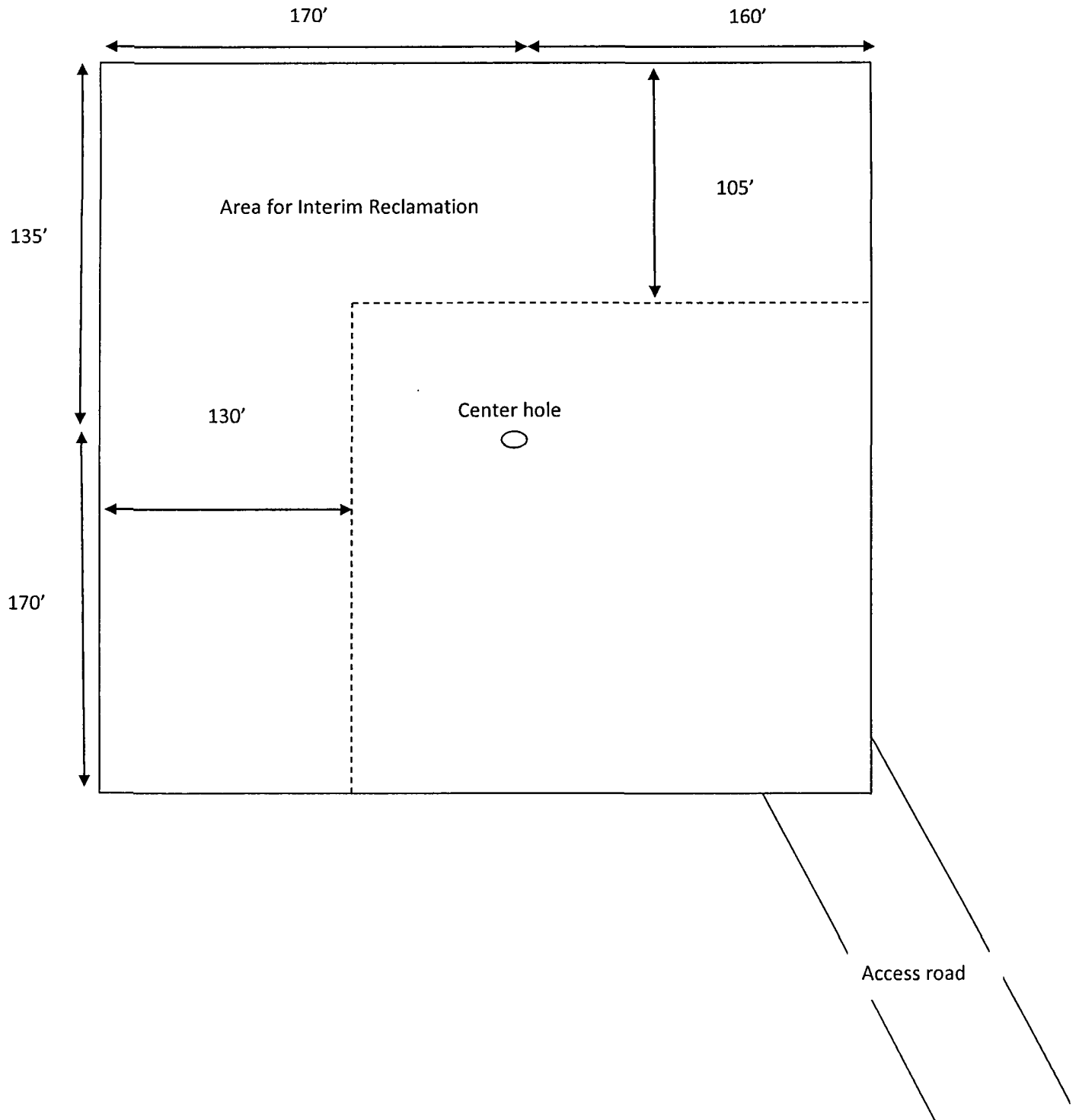
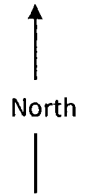
Other

Boots & Coots IWC	800-256-9688 or 281-931-8884
Cudd PressureControl	432-580-3544 or 432-570-5300
Halliburton	575-746-2757
B. J. Services	575-746-3569
Flight For Life – 4000 24 th St. Lubbock, Texas	806-743-9911
Aerocare – R3, Box 49F, Lubbock, Texas	806-747-8923
Med Flight Air Amb – 2301 Yale Blvd SE #D3, Albuquerque, NM	505-842-4433
S B Air Med Service – 2505 Clark Carr Loop SE, Albuquerque, NM	505-842-4949

Diagram 2

BOPCO, Poker Lake Unit 356H

Interim Reclamation Well Pad Layout



30-015-39675

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BOPCO LP
LEASE NO.:	NM030457
WELL NAME & NO.:	356H POKER LAKE UNIT
SURFACE HOLE FOOTAGE:	2210' FSL & 1850' FEL (sec. 33, T.24S.)
BOTTOM HOLE FOOTAGE:	1760' FNL & 2300' FWL (sec. 3, T. 25S.)
LOCATION:	Section 33, T.24 S., R.31 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Lesser Prairie-Chicken Timing Stipulations
 - Ground-level Abandoned Well Marker
 - Commercial Well Determination
- ☐ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - Logging Requirements
 - Waste Material and Fluids
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment & Reclamation**