

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM05039A
2. Name of Operator BOPCO LP		6. If Indian, Allottee or Tribe Name
Contact: ELIZABETH OSBORNE E-Mail: eosborne@basspet.com		7. If Unit or CA/Agreement, Name and/or No. 891000303X
3a. Address P O BOX 2760 MIDLAND, TX 79702	3b. Phone No. (include area code) Ph: 817-390-8671	8. Well Name and No. POKER LAKE UNIT 471H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 34 T25S R30E NENE 900FNL 860FEL		9. API Well No. 30-015-43435-00-X1
		10. Field and Pool, or Exploratory CORRAL CANYON
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

BOPCO, L.P. Respectfully requests to change the production horizon of the Poker Lake Unit 471H from the Delaware to the Second Bone Spring sand. Second Bone Spring Sand top is located at 9,456' TVD, with a bottom at 10,591' TVD. Directional plan as well as amendments to the 8 point drilling program are attached.

NM OIL CONSERVATION
ARTESIA DISTRICT

SEP 06 2016

RECEIVED

*Provide C102 for change in pool
to NMOCD 9-6-16*

14. I hereby certify that the foregoing is true and correct. Electronic Submission #346656 verified by the BLM Well Information System For BOPCO LP, sent to the Carlsbad Committed to AFMSS for processing by DEBORAH MCKINNEY on 08/23/2016 (16DLM0648SE)	
Name (Printed/Typed) ELIZABETH OSBORNE	Title GEOLOGIST
Signature (Electronic Submission)	Date 08/04/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>CHARLES NIMMER</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>08/31/2016</u>
Conditions of approval, if any, are attached. Approval of this notice 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.		Office Carlsbad

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

BOPCO, L.P., Poker Lake Unit #471H

1. Geologic Formations

TVD of target	9703	Pilot hole depth	NA
MD at TD:	19099	Deepest expected fresh water:	400

The Surface hole location is nonstandard, and inside the Poker Lake Unit.

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Top Rustler	852	Water	
Top Salado	1187	Salt	
Base Salt	3684	Salt	
Top Lamar	3882	Barren	
Cherry Canyon	4837	Oil/Gas	
Brushy Canyon	6040	Oil/Gas	
T/Bone Spring Lime	7604	Oil/Gas	
1 st Bone Spring Sand	8612	Oil/Gas	
Top 2 nd BS Sand	9456	Target Zone	
Top 3 rd BS Sand	10591	Oil/Gas	

*H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
17.5"	0	1160	13.375"	54.5	J55	STC	2.00	1.77	9.43
12.25"	0	3850	9.625"	40	J55	LTC	1.14	1.84	4.85
8.75"	0	19099	5.5"	17	HCP110	LTC	1.63	1.94	3.79
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Is casing API approved? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	N
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	N/A
Is well within the designated 4 string boundary.	N

BOPCO, L.P., Poker Lake Unit #471H

Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	N
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	N
Is 2 nd string set 100' to 600' below the base of salt?	Y
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	N
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	N
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	N

3. Cementing Program

Casing	# Sk	Wt. lb/gal	Yld ft ³ /sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	690	13.5	1.75	8.69	14	Lead: Class C + 2% CACL + 4% Bentonite + 0.25 LB/SK Cello Flake + 3 lb/sk LCM-1
	340	14.8	1.35	6.35	8	Tail: Class C + 2% CACL + 0.25 LB/Sk CF + 3 LB/Sk LCM-1
Inter.	750	12.9	1.85	9.32	14	Lead: EconoCEM HLC + 5% CaCl + 5#/sk Gilsonite
	190	14.8	1.33	6.34	6	Tail: Class C neat
Prod.	600	11	2.64	14.87	11	1 st Lead: Tuned Light + 0.125 pps Poly – E- Flake
	1890	12	2.03	11.41	14	1 st Tail: Class H + 0.5% Halad-344 + 0.25% CFR-3 + 0.5% Econolite
	DV Tool 5000'					
	300	11	2.35	11.7	11	2 nd stage Primary: Tuned Light + 0.125 pps Poly – E- Flake

DV tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe.

Casing String	TOC	% Excess
Surface	0'	100%
Intermediate	0'	30%
2 nd Intermediate	0'	50%
Production	3350'	50%

4. Pressure Control Equipment

A variance is requested for the use of a diverter on the surface casing. See attached for

BOPCO, L.P., Poker Lake Unit #471H

	schematic.
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KOP – 9130'

BOP installed and tested before drilling which hole?	Size?	System Rated WP	Type	✓	Tested to:
12-1/4"	13-5/8"	3M	Annular	x	50% of working pressure
			Blind Ram	x	3000
			Pipe Ram	x	
			Double Ram		
			Other*		
			Annular		
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other*		
			Annular		
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other*		

*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
X	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
N	Are anchors required by manufacturer?
X	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of

BOPCO, L.P., Poker Lake Unit #471H

30 days. If any seal subject to test pressure is broken the system must be tested.
See attached schematic.

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. shoe	FW Gel	8 -9.2	38-70	N/C
Surf csg	Int shoe	Saturated Brine	9.8-10.2	28-30	N/C
Int. shoe	TD	FW/Gel/Starch	8.7-9.0	28-36	<100

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	Pason/Visual Monitoring
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6. Logging and Testing Procedures

Logging, Coring and Testing.	
	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
X	No Logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain
	Coring? If yes, explain

Additional logs planned	Interval
Resistivity	Int. shoe to KOP
Density	Int. shoe to KOP
CBL	Production casing
Mud log	Intermediate shoe to TD
PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4600 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. Standard LCM will be on location to use when needed.

BOPCO, L.P., Poker Lake Unit #471H

Hydrogen Sulfide (H₂S) monitors will be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

	H ₂ S is present
X	H ₂ S Plan attached

8. Other facets of operation

Is this a walking operation? No

Will be pre-setting casing? No

Attachments

 X Directional Plan

 Other, describe



BOPCO, LP



Location: Eddy County, NM
Field: Poker Lake Unit (Eddy Co., NM)
Facility: Poker Lake Unit No. 471H

Slot: Poker Lake Unit No. 471H
Well: Poker Lake Unit No. 471H
Wellbore: Poker Lake Unit No. 471H 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	89.637	22.00	0.00	0.00	0.00	0.00
KOP	9130.95	0.000	89.637	9130.95	0.00	0.00	0.00	0.00
Landing	10023.05	89.210	89.637	9703.85	3.58	565.05	10.00	565.06
TD/PBHI	19099.71	89.210	89.637	9829.00	61.10	9640.66	0.00	9640.85

Bottom Hole Location

MD (ft)	Inc (")	Az (")	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
19099.71	89.210	89.637	9829.00	61.10	9640.66	655370.90	397300.80	32°05'28.688"N	103°49'53.880"W

Plot reference wellpath is Poker Lake Unit No. 471H Rev A.0

True vertical depths are referenced to Rg: TBA (KB)

Measured depths are referenced to Rg: TBA (KB)

Rg: TBA (KB) to Mean Sea Level: 3282 feet

Mean Sea Level to Ground level (At Slot: Poker Lake Unit No. 471H): -3260 feet

Coordinates are in feet referenced to Slot

Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet

* = Wellpath was transformed from a different geodetic datum

North Reference: Grid north

Scale: True distance

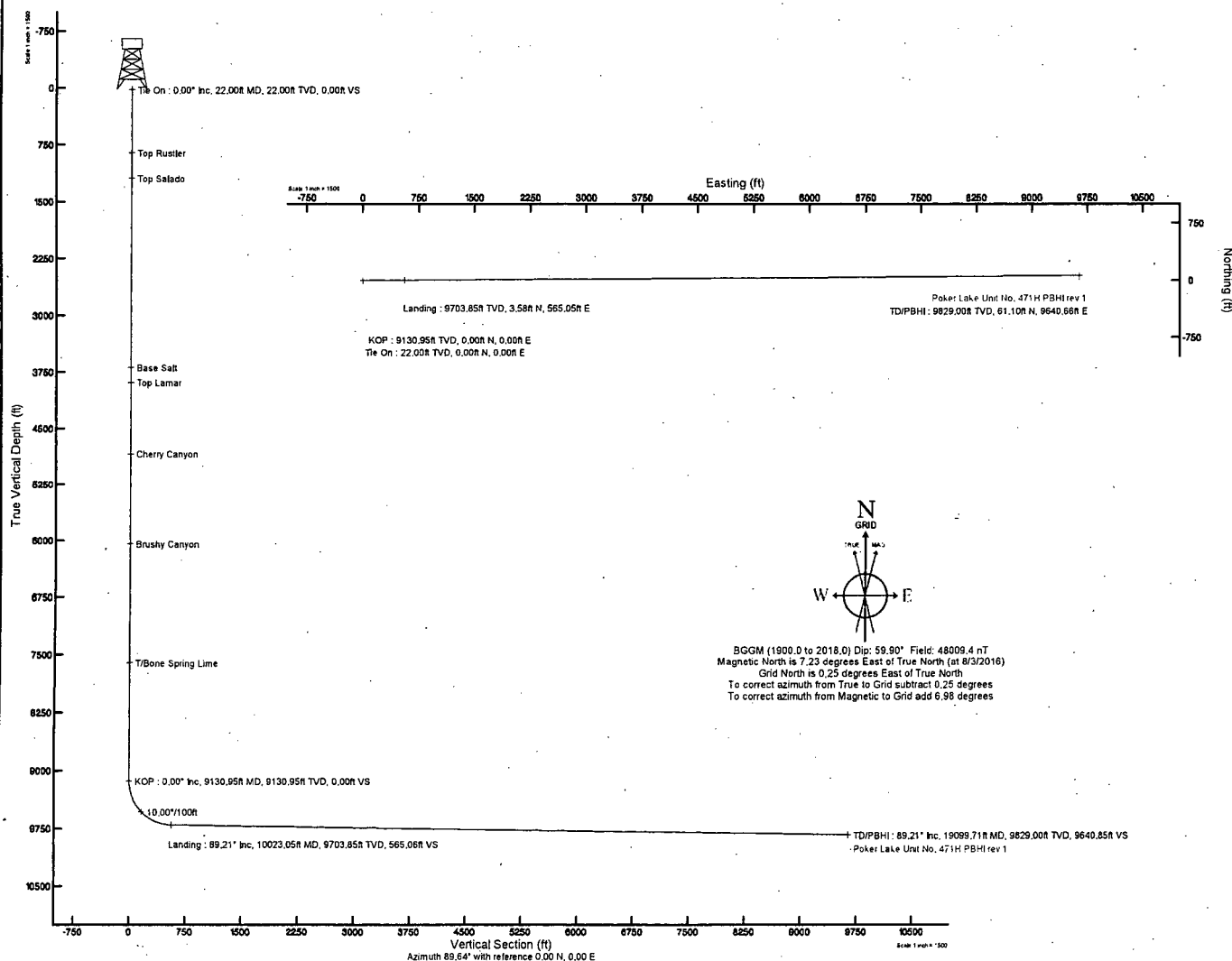
Depths are in feet

Created by: tranlam on 2016-08-03

Database: WA_Midland

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Poker Lake Unit No. 471H	645730.900	397239.700	32°05'28.514"N	103°51'45.941"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
Poker Lake Unit No. 471H	0.00	0.00	645730.900	397239.700
Rg: TBA (KB) to Ground level (At Slot: Poker Lake Unit No. 471H)			22ft	
Mean Sea Level to Ground level (At Slot: Poker Lake Unit No. 471H)			-3260ft	
Rg: TBA (KB) to Mean Sea Level			3282ft	





Planned Wellpath Report

Poker Lake Unit No. 471H Rev A.0
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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, LP	Slot	Poker Lake Unit No. 471H
Area	Eddy County, NM	Well	Poker Lake Unit No. 471H
Field	Poker Lake Unit (Eddy Co., NM)	Wellbore	Poker Lake Unit No. 471H PWB
Facility	Poker Lake Unit No. 471H		

REPORT SETUP INFORMATION			
Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Tranlam
Scale	0.999933	Report Generated	8/3/2016 at 4:05:50 PM
Convergence at slot	0.26° East	Database/Source file	WA_Midland/Poker_Lake_Unit_No_471H_Rev_A.0.xml

WELLPATH LOCATION			
	Local coordinates		Geographic coordinates
	North[ft]	East[ft]	
Slot Location	0.00	0.00	Latitude 32°05'28.514"N
Facility Reference Pt		645730.90	Longitude 103°51'45.941"W
Field Reference Pt		630272.49	103°51'45.941"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rg: TBA (KB) to Facility Vertical Datum	3282.00ft
Horizontal Reference Pt	Slot	Rg: TBA (KB) to Mean Sea Level	3282.00ft
Vertical Reference Pt	Rg: TBA (KB)	Rg: TBA (KB) to Ground Level at Slot (Poker Lake Unit No. 471H)	22.00ft
MD Reference Pt	Rg: TBA (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	89.64°



Planned Wellpath Report

Poker Lake Unit No. 471H Rev A.0

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, LP	Slot	Poker Lake Unit No. 471H
Area	Eddy County, NM	Well	Poker Lake Unit No. 471H
Field	Poker Lake Unit (Eddy Co., NM)	Wellbore	Poker Lake Unit No. 471H PWB
Facility	Poker Lake Unit No. 471H		

WELLPATH DATA (202 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]	Build Rate ["/100ft]	Turn Rate ["/100ft]	Comments
0.00†	0.000	89.637	0.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
22.00	0.000	89.637	22.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00 Tie On
122.00†	0.000	89.637	122.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
222.00†	0.000	89.637	222.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
322.00†	0.000	89.637	322.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
422.00†	0.000	89.637	422.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
522.00†	0.000	89.637	522.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
622.00†	0.000	89.637	622.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
722.00†	0.000	89.637	722.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
822.00†	0.000	89.637	822.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
852.00†	0.000	89.637	852.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00 Top Rustler
922.00†	0.000	89.637	922.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
1022.00†	0.000	89.637	1022.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
1122.00†	0.000	89.637	1122.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
1187.00†	0.000	89.637	1187.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00 Top Salado
1222.00†	0.000	89.637	1222.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
1322.00†	0.000	89.637	1322.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
1422.00†	0.000	89.637	1422.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
1522.00†	0.000	89.637	1522.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
1622.00†	0.000	89.637	1622.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
1722.00†	0.000	89.637	1722.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
1822.00†	0.000	89.637	1822.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
1922.00†	0.000	89.637	1922.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
2022.00†	0.000	89.637	2022.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
2122.00†	0.000	89.637	2122.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
2222.00†	0.000	89.637	2222.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
2322.00†	0.000	89.637	2322.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
2422.00†	0.000	89.637	2422.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
2522.00†	0.000	89.637	2522.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00
2622.00†	0.000	89.637	2622.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	0.00



Planned Wellpath Report

Poker Lake Unit No. 471H Rev A.0

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, LP		Slot	Poker Lake Unit No. 471H
Area	Eddy County, NM		Well	Poker Lake Unit No. 471H
Field	Poker Lake Unit (Eddy Co., NM)		Wellbore	Poker Lake Unit No. 471H PWB
Facility	Poker Lake Unit No. 471H			

WELLPATH DATA (202 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]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
2722.00†	0.000	89.637	2722.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
2822.00†	0.000	89.637	2822.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
2922.00†	0.000	89.637	2922.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
3022.00†	0.000	89.637	3022.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
3122.00†	0.000	89.637	3122.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
3222.00†	0.000	89.637	3222.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
3322.00†	0.000	89.637	3322.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
3422.00†	0.000	89.637	3422.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
3522.00†	0.000	89.637	3522.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
3622.00†	0.000	89.637	3622.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
3684.00†	0.000	89.637	3684.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	Base Salt
3722.00†	0.000	89.637	3722.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
3822.00†	0.000	89.637	3822.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
3882.00†	0.000	89.637	3882.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	Top Lamar
3922.00†	0.000	89.637	3922.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
4022.00†	0.000	89.637	4022.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
4122.00†	0.000	89.637	4122.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
4222.00†	0.000	89.637	4222.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
4322.00†	0.000	89.637	4322.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
4422.00†	0.000	89.637	4422.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
4522.00†	0.000	89.637	4522.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
4622.00†	0.000	89.637	4622.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
4722.00†	0.000	89.637	4722.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
4822.00†	0.000	89.637	4822.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
4837.00†	0.000	89.637	4837.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	Cherry Canyon
4922.00†	0.000	89.637	4922.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
5022.00†	0.000	89.637	5022.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
5122.00†	0.000	89.637	5122.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
5222.00†	0.000	89.637	5222.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
5322.00†	0.000	89.637	5322.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, LP	Slot	Poker Lake Unit No. 471H
Area	Eddy County, NM	Well	Poker Lake Unit No. 471H
Field	Poker Lake Unit (Eddy Co.,NM)	Wellbore	Poker Lake Unit No. 471H PWB
Facility	Poker Lake Unit No. 471H		

WELLPATH DATA (202 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]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
5422.00†	0.000	89.637	5422.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
5522.00†	0.000	89.637	5522.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
5622.00†	0.000	89.637	5622.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
5722.00†	0.000	89.637	5722.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
5822.00†	0.000	89.637	5822.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
5922.00†	0.000	89.637	5922.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
6022.00†	0.000	89.637	6022.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
6040.00†	0.000	89.637	6040.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	Brushy Canyon
6122.00†	0.000	89.637	6122.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
6222.00†	0.000	89.637	6222.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
6322.00†	0.000	89.637	6322.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
6422.00†	0.000	89.637	6422.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
6522.00†	0.000	89.637	6522.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
6622.00†	0.000	89.637	6622.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
6722.00†	0.000	89.637	6722.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
6822.00†	0.000	89.637	6822.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
6922.00†	0.000	89.637	6922.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
7022.00†	0.000	89.637	7022.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
7122.00†	0.000	89.637	7122.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
7222.00†	0.000	89.637	7222.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
7322.00†	0.000	89.637	7322.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
7422.00†	0.000	89.637	7422.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
7522.00†	0.000	89.637	7522.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
7604.00†	0.000	89.637	7604.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
7622.00†	0.000	89.637	7622.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	7/Bone Spring Lime
7722.00†	0.000	89.637	7722.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
7822.00†	0.000	89.637	7822.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
7922.00†	0.000	89.637	7922.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
8022.00†	0.000	89.637	8022.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
8122.00†	0.000	89.637	8122.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, LP			Slot	Poker Lake Unit No. 471H
Area	Eddy County, NM			Well	Poker Lake Unit No. 471H
Field	Poker Lake Unit (Eddy Co., NM)			Wellbore	Poker Lake Unit No. 471H PWB
Facility	Poker Lake Unit No. 471H				

WELLPATH DATA (202 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]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
8222.00†	0.000	89.637	8222.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
8322.00†	0.000	89.637	8322.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
8422.00†	0.000	89.637	8422.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
8522.00†	0.000	89.637	8522.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
8622.00†	0.000	89.637	8622.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
8722.00†	0.000	89.637	8722.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
8822.00†	0.000	89.637	8822.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
8922.00†	0.000	89.637	8922.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
9022.00†	0.000	89.637	9022.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
9122.00†	0.000	89.637	9122.00	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	
9130.95	0.000	89.637	9130.95	0.00	0.00	0.00	645730.90	397239.70	32°05'28.514"N	103°51'45.941"W	0.00	0.00	0.00	KOP
9222.00†	9.105	89.637	9221.62	7.22	0.05	7.22	645738.12	397239.75	32°05'28.514"N	103°51'45.857"W	10.00	10.00	98.45	
9322.00†	19.105	89.637	9318.48	31.56	0.20	31.56	645762.46	397239.90	32°05'28.514"N	103°51'45.574"W	10.00	10.00	0.00	
9422.00†	29.105	89.637	9409.64	72.35	0.46	72.35	645803.24	397240.16	32°05'28.515"N	103°51'45.100"W	10.00	10.00	0.00	
9522.00†	39.105	89.637	9492.34	128.35	0.81	128.34	645859.24	397240.51	32°05'28.516"N	103°51'44.449"W	10.00	10.00	0.00	
9622.00†	49.105	89.637	9564.06	197.86	1.25	197.85	645928.74	397240.95	32°05'28.518"N	103°51'43.641"W	10.00	10.00	0.00	
9722.00†	59.105	89.637	9622.61	278.76	1.77	278.76	646009.64	397241.47	32°05'28.519"N	103°51'42.700"W	10.00	10.00	0.00	
9822.00†	69.105	89.637	9666.23	368.61	2.34	368.60	646099.48	397242.04	32°05'28.521"N	103°51'41.656"W	10.00	10.00	0.00	
9922.00†	79.105	89.637	9693.58	464.66	2.95	464.65	646195.52	397242.64	32°05'28.523"N	103°51'40.540"W	10.00	10.00	0.00	
10022.00†	89.105	89.637	9703.84	564.01	3.57	564.00	646294.86	397243.27	32°05'28.525"N	103°51'39.385"W	10.00	10.00	0.00	
10023.05	89.210	89.637	9703.85	565.06	3.58	565.05	646295.91	397243.28	32°05'28.525"N	103°51'39.373"W	10.00	10.00	0.00	landing
10122.00†	89.210	89.637	9705.22	664.00	4.21	663.98	646394.84	397243.91	32°05'28.527"N	103°51'38.223"W	0.00	0.00	0.00	
10222.00†	89.210	89.637	9706.60	763.99	4.84	763.97	646494.82	397244.54	32°05'28.529"N	103°51'37.060"W	0.00	0.00	0.00	
10322.00†	89.210	89.637	9707.98	863.98	5.48	863.96	646594.80	397245.18	32°05'28.531"N	103°51'35.898"W	0.00	0.00	0.00	
10422.00†	89.210	89.637	9709.35	963.97	6.11	963.95	646694.78	397245.81	32°05'28.532"N	103°51'34.736"W	0.00	0.00	0.00	
10522.00†	89.210	89.637	9710.73	1063.96	6.74	1063.94	646794.77	397246.44	32°05'28.534"N	103°51'33.574"W	0.00	0.00	0.00	
10622.00†	89.210	89.637	9712.11	1163.95	7.38	1163.93	646894.75	397247.08	32°05'28.536"N	103°51'32.411"W	0.00	0.00	0.00	
10722.00†	89.210	89.637	9713.49	1263.94	8.01	1263.92	646994.73	397247.71	32°05'28.538"N	103°51'31.249"W	0.00	0.00	0.00	
10822.00†	89.210	89.637	9714.87	1363.93	8.64	1363.90	647094.71	397248.34	32°05'28.540"N	103°51'30.087"W	0.00	0.00	0.00	
10922.00†	89.210	89.637	9716.25	1463.92	9.28	1463.89	647194.69	397248.98	32°05'28.542"N	103°51'28.925"W	0.00	0.00	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, LP	Slot	Poker Lake Unit No. 471H
Area	Eddy County, NM	Well	Poker Lake Unit No. 471H
Field	Poker Lake Unit (Eddy Co., NM)	Wellbore	Poker Lake Unit No. 471H PWB
Facility	Poker Lake Unit No. 471H		

WELLPATH DATA (202 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]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
11022.00†	89.210	89.637	9717.63	1563.91	9.91	1563.88	647294.67	397249.61	32°05'28.544"N	103°51'27.762"W	0.00	0.00	0.00	
11122.00†	89.210	89.637	9719.01	1663.90	10.55	1663.87	647394.66	397250.25	32°05'28.546"N	103°51'26.600"W	0.00	0.00	0.00	
11222.00†	89.210	89.637	9720.38	1763.89	11.18	1763.86	647494.64	397250.88	32°05'28.548"N	103°51'25.438"W	0.00	0.00	0.00	
11322.00†	89.210	89.637	9721.76	1863.88	11.81	1863.85	647594.62	397251.51	32°05'28.550"N	103°51'24.276"W	0.00	0.00	0.00	
11422.00†	89.210	89.637	9723.14	1963.87	12.45	1963.83	647694.60	397252.15	32°05'28.552"N	103°51'23.113"W	0.00	0.00	0.00	
11522.00†	89.210	89.637	9724.52	2063.86	13.08	2063.82	647794.58	397252.78	32°05'28.553"N	103°51'21.951"W	0.00	0.00	0.00	
11622.00†	89.210	89.637	9725.90	2163.86	13.71	2163.81	647894.56	397253.41	32°05'28.555"N	103°51'20.789"W	0.00	0.00	0.00	
11722.00†	89.210	89.637	9727.28	2263.85	14.35	2263.80	647994.55	397254.05	32°05'28.557"N	103°51'19.627"W	0.00	0.00	0.00	
11822.00†	89.210	89.637	9728.66	2363.84	14.98	2363.79	648094.53	397254.68	32°05'28.559"N	103°51'18.464"W	0.00	0.00	0.00	
11922.00†	89.210	89.637	9730.04	2463.83	15.62	2463.78	648194.51	397255.31	32°05'28.561"N	103°51'17.302"W	0.00	0.00	0.00	
12022.00†	89.210	89.637	9731.41	2563.82	16.25	2563.77	648294.49	397255.95	32°05'28.563"N	103°51'16.140"W	0.00	0.00	0.00	
12122.00†	89.210	89.637	9732.79	2663.81	16.88	2663.75	648394.47	397256.58	32°05'28.565"N	103°51'14.978"W	0.00	0.00	0.00	
12222.00†	89.210	89.637	9734.17	2763.80	17.52	2763.74	648494.45	397257.22	32°05'28.567"N	103°51'13.816"W	0.00	0.00	0.00	
12322.00†	89.210	89.637	9735.55	2863.79	18.15	2863.73	648594.43	397257.85	32°05'28.568"N	103°51'12.653"W	0.00	0.00	0.00	
12422.00†	89.210	89.637	9736.93	2963.78	18.78	2963.72	648694.42	397258.48	32°05'28.570"N	103°51'11.491"W	0.00	0.00	0.00	
12522.00†	89.210	89.637	9738.31	3063.77	19.42	3063.71	648794.40	397259.12	32°05'28.572"N	103°51'10.329"W	0.00	0.00	0.00	
12622.00†	89.210	89.637	9739.69	3163.76	20.05	3163.70	648894.38	397259.75	32°05'28.574"N	103°51'09.167"W	0.00	0.00	0.00	
12722.00†	89.210	89.637	9741.07	3263.75	20.69	3263.69	648994.36	397260.38	32°05'28.576"N	103°51'08.004"W	0.00	0.00	0.00	
12822.00†	89.210	89.637	9742.45	3363.74	21.32	3363.67	649094.34	397261.02	32°05'28.578"N	103°51'06.842"W	0.00	0.00	0.00	
12922.00†	89.210	89.637	9743.82	3463.73	21.95	3463.66	649194.32	397261.65	32°05'28.580"N	103°51'05.680"W	0.00	0.00	0.00	
13022.00†	89.210	89.637	9745.20	3563.72	22.59	3563.65	649294.31	397262.29	32°05'28.582"N	103°51'04.518"W	0.00	0.00	0.00	
13122.00†	89.210	89.637	9746.58	3663.71	23.22	3663.64	649394.29	397262.92	32°05'28.583"N	103°51'03.355"W	0.00	0.00	0.00	
13222.00†	89.210	89.637	9747.96	3763.70	23.85	3763.63	649494.27	397263.55	32°05'28.585"N	103°51'02.193"W	0.00	0.00	0.00	
13322.00†	89.210	89.637	9749.34	3863.69	24.49	3863.62	649594.25	397264.19	32°05'28.587"N	103°51'01.031"W	0.00	0.00	0.00	
13422.00†	89.210	89.637	9750.72	3963.68	25.12	3963.60	649694.23	397264.82	32°05'28.589"N	103°50'59.869"W	0.00	0.00	0.00	
13522.00†	89.210	89.637	9752.10	4063.67	25.76	4063.59	649794.21	397265.45	32°05'28.591"N	103°50'58.706"W	0.00	0.00	0.00	
13622.00†	89.210	89.637	9753.48	4163.67	26.39	4163.58	649894.20	397266.09	32°05'28.593"N	103°50'57.544"W	0.00	0.00	0.00	
13722.00†	89.210	89.637	9754.85	4263.66	27.02	4263.57	649994.18	397266.72	32°05'28.594"N	103°50'56.382"W	0.00	0.00	0.00	
13822.00†	89.210	89.637	9756.23	4363.65	27.66	4363.56	650094.16	397267.36	32°05'28.596"N	103°50'55.220"W	0.00	0.00	0.00	
13922.00†	89.210	89.637	9757.61	4463.64	28.29	4463.55	650194.14	397267.99	32°05'28.598"N	103°50'54.057"W	0.00	0.00	0.00	



Planned Wellpath Report

Poker Lake Unit No. 471H Rev A.0

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, LP			Slot	Poker Lake Unit No. 471H
Area	Eddy County, NM			Well	Poker Lake Unit No. 471H
Field	Poker Lake Unit (Eddy Co., NM)			Wellbore	Poker Lake Unit No. 471H PWB
Facility	Poker Lake Unit No. 471H				

WELLPATH DATA (202 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]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
14022.00†	89.210	89.637	9758.99	4563.63	28.92	4563.54	650294.12	397268.62	32°05'28.600"N	103°50'52.895"W	0.00	0.00	0.00	
14122.00†	89.210	89.637	9760.37	4663.62	29.56	4663.52	650394.10	397269.26	32°05'28.602"N	103°50'51.733"W	0.00	0.00	0.00	
14222.00†	89.210	89.637	9761.75	4763.61	30.19	4763.51	650494.09	397269.89	32°05'28.603"N	103°50'50.571"W	0.00	0.00	0.00	
14322.00†	89.210	89.637	9763.13	4863.60	30.83	4863.50	650594.07	397270.52	32°05'28.605"N	103°50'49.408"W	0.00	0.00	0.00	
14422.00†	89.210	89.637	9764.51	4963.59	31.46	4963.49	650694.05	397271.16	32°05'28.607"N	103°50'48.246"W	0.00	0.00	0.00	
14522.00†	89.210	89.637	9765.88	5063.58	32.09	5063.48	650794.03	397271.79	32°05'28.609"N	103°50'47.084"W	0.00	0.00	0.00	
14622.00†	89.210	89.637	9767.26	5163.57	32.73	5163.47	650894.01	397272.42	32°05'28.611"N	103°50'45.922"W	0.00	0.00	0.00	
14722.00†	89.210	89.637	9768.64	5263.56	33.36	5263.45	650993.99	397273.06	32°05'28.612"N	103°50'44.759"W	0.00	0.00	0.00	
14822.00†	89.210	89.637	9770.02	5363.55	33.99	5363.44	651093.98	397273.69	32°05'28.614"N	103°50'43.597"W	0.00	0.00	0.00	
14922.00†	89.210	89.637	9771.40	5463.54	34.63	5463.43	651193.96	397274.33	32°05'28.616"N	103°50'42.435"W	0.00	0.00	0.00	
15022.00†	89.210	89.637	9772.78	5563.53	35.26	5563.42	651293.94	397274.96	32°05'28.618"N	103°50'41.273"W	0.00	0.00	0.00	
15122.00†	89.210	89.637	9774.16	5663.52	35.90	5663.41	651393.92	397275.59	32°05'28.620"N	103°50'40.111"W	0.00	0.00	0.00	
15222.00†	89.210	89.637	9775.54	5763.51	36.53	5763.40	651493.90	397276.23	32°05'28.621"N	103°50'38.948"W	0.00	0.00	0.00	
15322.00†	89.210	89.637	9776.91	5863.50	37.16	5863.39	651593.88	397276.86	32°05'28.623"N	103°50'37.786"W	0.00	0.00	0.00	
15422.00†	89.210	89.637	9778.29	5963.49	37.80	5963.37	651693.87	397277.49	32°05'28.625"N	103°50'36.624"W	0.00	0.00	0.00	
15522.00†	89.210	89.637	9779.67	6063.48	38.43	6063.36	651793.85	397278.13	32°05'28.627"N	103°50'35.462"W	0.00	0.00	0.00	
15622.00†	89.210	89.637	9781.05	6163.47	39.06	6163.35	651893.83	397278.76	32°05'28.629"N	103°50'34.299"W	0.00	0.00	0.00	
15722.00†	89.210	89.637	9782.43	6263.46	39.70	6263.34	651993.81	397279.40	32°05'28.630"N	103°50'33.137"W	0.00	0.00	0.00	
15822.00†	89.210	89.637	9783.81	6363.45	40.33	6363.33	652093.79	397280.03	32°05'28.632"N	103°50'31.975"W	0.00	0.00	0.00	
15922.00†	89.210	89.637	9785.19	6463.44	40.97	6463.32	652193.77	397280.66	32°05'28.634"N	103°50'30.813"W	0.00	0.00	0.00	
16022.00†	89.210	89.637	9786.57	6563.43	41.60	6563.31	652293.76	397281.30	32°05'28.636"N	103°50'29.650"W	0.00	0.00	0.00	
16122.00†	89.210	89.637	9787.94	6663.42	42.23	6663.29	652393.74	397281.93	32°05'28.637"N	103°50'28.488"W	0.00	0.00	0.00	
16222.00†	89.210	89.637	9789.32	6763.41	42.87	6763.28	652493.72	397282.56	32°05'28.639"N	103°50'27.326"W	0.00	0.00	0.00	
16322.00†	89.210	89.637	9790.70	6863.40	43.50	6863.27	652593.70	397283.20	32°05'28.641"N	103°50'26.164"W	0.00	0.00	0.00	
16422.00†	89.210	89.637	9792.08	6963.39	44.13	6963.26	652693.68	397283.83	32°05'28.643"N	103°50'25.001"W	0.00	0.00	0.00	
16522.00†	89.210	89.637	9793.46	7063.38	44.77	7063.25	652793.66	397284.47	32°05'28.644"N	103°50'23.839"W	0.00	0.00	0.00	
16622.00†	89.210	89.637	9794.84	7163.37	45.40	7163.24	652893.64	397285.10	32°05'28.646"N	103°50'22.677"W	0.00	0.00	0.00	
16722.00†	89.210	89.637	9796.22	7263.36	46.04	7263.22	652993.63	397285.73	32°05'28.648"N	103°50'21.515"W	0.00	0.00	0.00	
16822.00†	89.210	89.637	9797.60	7363.35	46.67	7363.21	653093.61	397286.37	32°05'28.650"N	103°50'20.352"W	0.00	0.00	0.00	
16922.00†	89.210	89.637	9798.97	7463.35	47.30	7463.20	653193.59	397287.00	32°05'28.651"N	103°50'19.190"W	0.00	0.00	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, LP			Slot	Poker Lake Unit No. 471H
Area	Eddy County, NM			Well	Poker Lake Unit No. 471H
Field	Poker Lake Unit (Eddy Co., NM)			Wellbore	Poker Lake Unit No. 471H PWB
Facility	Poker Lake Unit No. 471H				

WELLPATH DATA (202 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 [°/100ft]	Longitude [°/100ft]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
17022.00†	89.210	89.637	9800.35	7563.34	47.94	7563.19	653293.57	397287.63	32°05'28.653"N	103°50'18.028"W	0.00	0.00	0.00	
17122.00†	89.210	89.637	9801.73	7563.33	48.57	7563.18	653393.55	397288.27	32°05'28.655"N	103°50'16.866"W	0.00	0.00	0.00	
17222.00†	89.210	89.637	9803.11	7763.32	49.20	7763.17	653493.53	397288.90	32°05'28.657"N	103°50'15.703"W	0.00	0.00	0.00	
17322.00†	89.210	89.637	9804.49	7863.31	49.84	7863.16	653593.52	397289.53	32°05'28.658"N	103°50'14.541"W	0.00	0.00	0.00	
17422.00†	89.210	89.637	9805.87	7963.30	50.47	7963.14	653693.50	397290.17	32°05'28.660"N	103°50'13.379"W	0.00	0.00	0.00	
17522.00†	89.210	89.637	9807.25	8063.29	51.11	8063.13	653793.48	397290.80	32°05'28.662"N	103°50'12.217"W	0.00	0.00	0.00	
17622.00†	89.210	89.637	9808.63	8163.28	51.74	8163.12	653893.46	397291.44	32°05'28.663"N	103°50'11.054"W	0.00	0.00	0.00	
17722.00†	89.210	89.637	9810.00	8263.28	52.37	8263.11	653993.44	397292.07	32°05'28.665"N	103°50'09.892"W	0.00	0.00	0.00	
17822.00†	89.210	89.637	9811.38	8363.27	53.01	8363.10	654093.42	397292.70	32°05'28.667"N	103°50'08.730"W	0.00	0.00	0.00	
17922.00†	89.210	89.637	9812.76	8463.26	53.64	8463.09	654193.41	397293.34	32°05'28.669"N	103°50'07.568"W	0.00	0.00	0.00	
18022.00†	89.210	89.637	9814.14	8563.25	54.27	8563.07	654293.39	397293.97	32°05'28.670"N	103°50'06.406"W	0.00	0.00	0.00	
18122.00†	89.210	89.637	9815.52	8663.24	54.91	8663.06	654393.37	397294.60	32°05'28.672"N	103°50'05.243"W	0.00	0.00	0.00	
18222.00†	89.210	89.637	9816.90	8763.23	55.54	8763.05	654493.35	397295.24	32°05'28.674"N	103°50'04.081"W	0.00	0.00	0.00	
18322.00†	89.210	89.637	9818.28	8863.22	56.18	8863.04	654593.33	397295.87	32°05'28.675"N	103°50'02.919"W	0.00	0.00	0.00	
18422.00†	89.210	89.637	9819.66	8963.21	56.81	8963.03	654693.31	397296.51	32°05'28.677"N	103°50'01.757"W	0.00	0.00	0.00	
18522.00†	89.210	89.637	9821.03	9063.20	57.44	9063.02	654793.30	397297.14	32°05'28.679"N	103°50'00.594"W	0.00	0.00	0.00	
18622.00†	89.210	89.637	9822.41	9163.19	58.08	9163.01	654893.28	397297.77	32°05'28.680"N	103°49'59.432"W	0.00	0.00	0.00	
18722.00†	89.210	89.637	9823.79	9263.18	58.71	9262.99	654993.26	397298.41	32°05'28.682"N	103°49'58.270"W	0.00	0.00	0.00	
18822.00†	89.210	89.637	9825.17	9363.17	59.34	9362.98	655093.24	397299.04	32°05'28.684"N	103°49'57.108"W	0.00	0.00	0.00	
18922.00†	89.210	89.637	9826.55	9463.16	59.98	9462.97	655193.22	397299.67	32°05'28.685"N	103°49'55.945"W	0.00	0.00	0.00	
19022.00†	89.210	89.637	9827.93	9563.15	60.61	9562.96	655293.20	397300.31	32°05'28.687"N	103°49'54.783"W	0.00	0.00	0.00	
19099.71	89.210	89.637	9829.00†	9640.85	61.10	9640.66	655370.90	397300.80	32°05'28.688"N	103°49'53.880"W	0.00	0.00	0.00	TD/PBHI



Planned Wellpath Report

Poker Lake Unit No. 471H Rev A.0

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, LP	Slot	Poker Lake Unit No. 471H
Area	Eddy County, NM	Well	Poker Lake Unit No. 471H
Field	Poker Lake Unit (Eddy Co., NM)	Wellbore	Poker Lake Unit No. 471H PWB
Facility	Poker Lake Unit No. 471H		

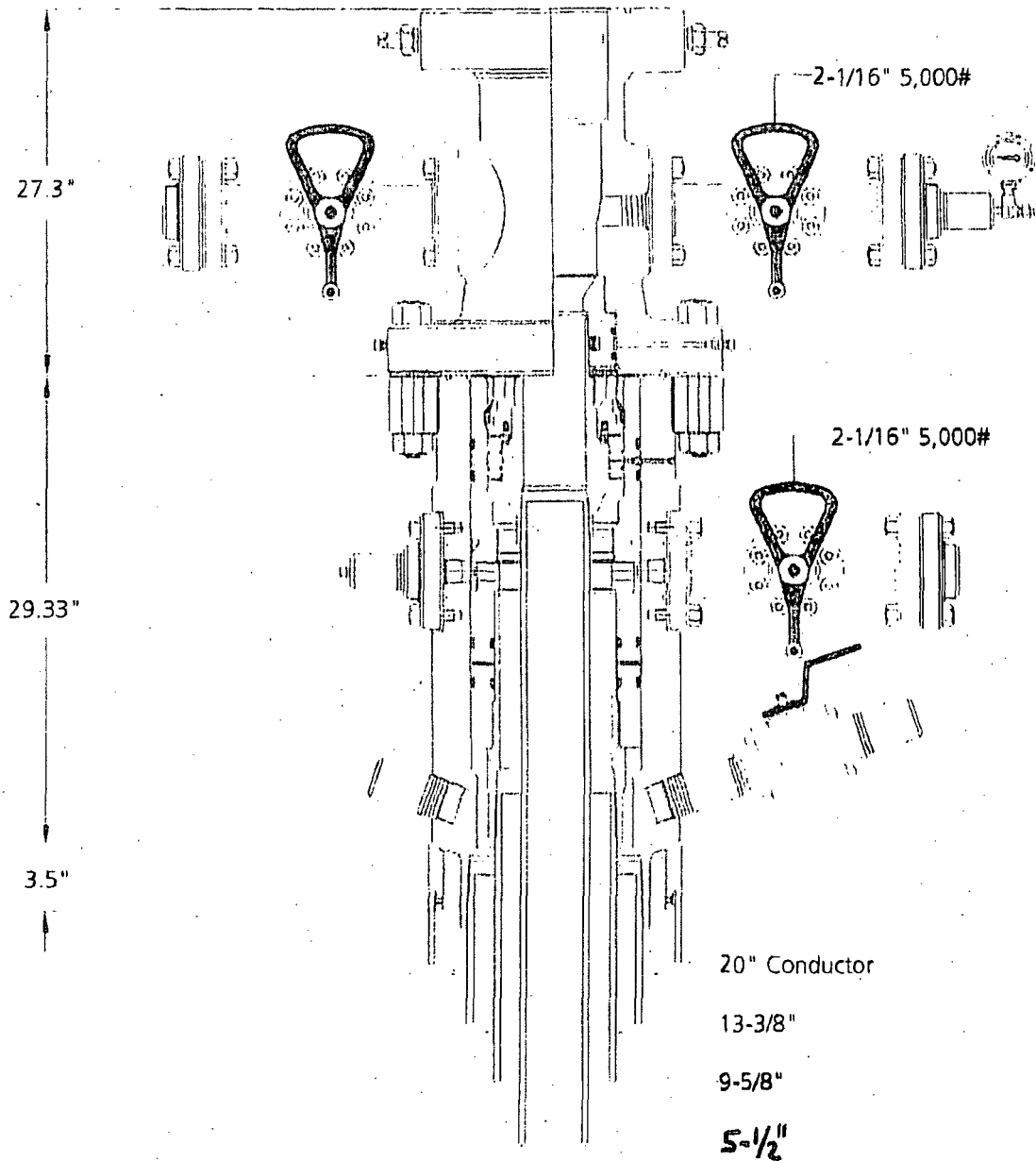
TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) Poker Lake Unit No. 471H PBHI rev 1	19099.71	9829.00	61.10	9640.66	655370.90	397300.80	32°05'28.688"N	103°49'53.880"W	point

SURVEY PROGRAM - Ref Wellbore: Poker Lake Unit No. 471H PWB Ref Wellpath: Poker Lake Unit No. 471H Rev A.0

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
22.00	21000.00	BHI NaviTrak (Axial)		Poker Lake Unit No. 471H PWB

Note: Dimensional information reflected
on this drawing are estimated
measurements only.



BOPCO
Project: South East New Mexico

CAMERON

Name

Date

Working Order

#

21077904