

OCD-ARTESIA
FEB 13 2009

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



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

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
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
BOPCO, L. P.

3a. Address
P. O. Box 2760 Midland, TX 79702

3b. Phone No. (include area code)
432-683-2277

4. Location of Well (Footage, Sec, T, R, M, or Survey Description)

**Surface: SESW, 600' FSL, 2200' FWL, Sec 27, T24S, R30E, Lat N32.183128, Lon W103.869975
BHL: NENE, 660' FNL, 500' FEL, Sec 28, T24S, R30E, Lat N32.194225, Lon W103.878722**

5. Lease Serial No.
NM 02862

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
Poker Lake Unit #300H

9. API Well No.
30-015-36950

10. Field and Pool, or Exploratory Area
Nash Draw (Dela, BS, Avalon Sd)

11. County or Parish, State
Eddy County, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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 recompleting 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 recompleting 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 requests approval of a change in KOP and length of lateral as a result of changing the bottom hole location of the Poker Lake Unit #300H. A new 8 point drilling plan is attached for review.

BOPCO L.P. Bond # on file: COB000050

*see original APD Conditions of Approval,
pressure control section not included
in new 8 point plan - see original APD & drilling COP*

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Annette Childers

Title **Administrative Assistant**

Signature

Annette Childers

Date

2-6-09

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

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.

Title

Office

APPROVED

FEB 9 2009

**WESLEY W. INGRAM
PETROLEUM ENGINEER**

Title 18 USC Section 1001 and Title 43 USC 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)

EIGHT POINT DRILLING PROGRAM

BOPCO, L.P.

Revised to reflect new BHL & KOP*

NAME OF WELL: Poker Lake Unit #300H

LEGAL DESCRIPTION - SURFACE: 600' FSL, 2200' FWL, Section 27, T24S, R30E, Eddy County, NM.
BHL: 600' FNL, 500' FEL, Section 28, 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 3377' (estimated)
GL 3352'

FORMATION	ESTIMATED TOP FROM KB		ESTIMATED SUB-SEA TOP	BEARING
	TVD	MD		
T/Rustler	1777'	1777'	+ 1600'	Barren
B/Rustler	2147'	2147'	+ 1230'	Barren
T/Salt	2177'	2177'	+ 1200'	Barren
B/Salt	3837'	3837'	- 460'	Barren
T/Lamar Lime	3907'	3907'	- 530'	Barren
T/Ramsey	3942'	3942'	- 565'	Oil/Gas
T/Lower Cherry Canyon	6042'	6042'	- 2665'	Oil/Gas
KOP (Kick Off Point)	7175'	7175'	- 3798'	N/A
T/Lower Brushy Canyon	7562'	7562'	- 4185'	Oil/Gas
EOC Target	7652'	7930'	- 4275'	Oil/Gas
Bone Spring Lime	7752'	7752'	- 4375'	Oil/Gas
Avalon Sand	7862'	7862'	- 4485'	Oil/Gas
TD (Pilot Hole)	7954'	7954'	- 4577'	Oil/Gas
TD Horizontal Hole	7597'	12,307'	- 4220'	Oil/Gas

POINT 3: CASING PROGRAM

TYPE	INTERVALS (MD)	Hole Size	PURPOSE	CONDITION
20"	0' - 60'	24"	Conductor	Contractor Discretion
13-3/8", 48#, H-40, 8RD, ST&C	0' - 180' <i>see COP</i>	17-1/2"	Surface	New
9-5/8", 36#, J-55, 8RD, LT&C	0' - 3922'	12-1/4"	Intermediate	New
5-1/2", 17#, HCP-110, 8RD, LT&C	0' - 7175' <i>Sundry</i>	8-3/4"	Production	New
5-1/2", 17#, HCP-110, Ultra Flush JT	7175' - 12,307' <i>11/25/08</i>	8-3/4"	Production	New

CASING DESIGN SAFETY FACTORS:

TYPE	TENSION	COLLAPSE	BURST
13-3/8", 48#, H-40, 8RD, ST&C	10.67	2.34	2.82
9-5/8", 36#, J-55, 8RD, LT&C	3.69	1.14	1.12
5-1/2", 17#, HCP-110, 8RD, LT&C	3.33	2.07	3.16
5-1/2", 17#, HCP-110, Ultra Flush Jt	2.38	2.07	3.16

*Change in BHL, did not affect casing design except to increase footage of casing in the lateral. The build rate in the curve remains at 12°/100'.

These tests will be performed:

- a) Upon installation
- b) After any component changes
- c) Fifteen 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' - 750'	FW Spud Mud	8.5 - 9.2	38-70	NC	NC	NC	10.0
750' - 3922'	Brine Water	9.8 - 10.2	28-30	NC	NC	NC	9.5 - 10.5
3922' - 7409'	FW/Gel	8.7 - 9.0	28-36	NC	NC	NC	9.5 - 10.0
7409' - 12,307'	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

Run #1: PEX (GR-CNL/LDT-AIT) from TD of pilot hole 7949' to base of intermediate casing at 3922'.

Run #2: GR with MWD during drilling of build and horizontal portions of 8-3/4" hole.

C) CONVENTIONAL CORING

None anticipated.

D) CEMENT ← see COA

INTERVAL	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT ³ /SX
SURFACE:						
Lead: 0 - 450' (100% excess Circ to surface)	375	450	EconoCem HLC + 2.7 #/sk Salt	10.14	12.8	1.87
Tail: 450' - 750' (100% excess)	340	300	HalCem "C" + 2% CaCl ₂	6.37	14.8	1.35
INTERMEDIATE:						
Lead: 0' - 3422' (100% excess Circ to surface)	750	3422	EconoCem HLC + 2.87 #/sk Salt	10.29	12.8	1.89
Tail: 3422' - 3922' (100% excess)	260	500	HalCem "C" + 1% CaCl ₂	6.29	14.8	1.35

D) CEMENT - Cont'd...

<u>INTERVAL</u>	<u>AMOUNT</u> <u>SXS</u>	<u>FT OF</u> <u>FILL</u>	<u>TYPE</u>	<u>GALS/SX</u>	<u>PPG</u>	<u>FT³/SX</u>
PRODUCTION:						
Lead: 3422' - 7100' (50% excess circ to surface)	475	3678	Halco Tuned Lite	14.40	9.7	3.13
Tail 7100' - 12,307' (50% excess)	750	5207	Premium Plus Acid Soluble + 10 #/sk Silicate 50/50 Blend + 0.7% Halad-344 + 0.3% HR-601 + 0.25 #/sk D-AIR-3000	11.34	15.0	2.62

E) DIRECTIONAL DRILLING

see COA → BOPCO, L.P. plans to drill out the 9-5/8" intermediate casing with a 8-3/4" bit to a TVD of approximately 7950' at which point open hole logs will be run. The 8-3/4" hole will be plugged back to approximately 7175'. At this depth a 8-3/4" directional hole will be initiated at an azimuth of 325.92°, building angle at 12.00°/100' to a max of 90.69° at a TVD of 7652' (MD 7930'). This 90.69° angle will be maintained to a MD of 12,307' or TVD of 7597'.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout Delaware section. A BHP of 3384 psi (max) or MWE of 8.4 ppg is expected. Lost circulation may exist in the Delaware Section from 3900'-7747' 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

39 days drilling operations

14 days completion operations



Gary E. Gerhard

GEG/mac
February 6, 2009

BOPCO L.P.

Eddy Co. New Mexico (Nad 27)

Poker Lake Unit #300H

Poker Lake Unit #300H

Lateral #1

Plan: Plan #1

Standard Planning Report

06 February, 2009

Planning Report

Database: EDM 5000 1 Black Viper
Company: BOPCO L P
Project: Eddy Co. New Mexico (Nad 27)
Site: Poker Lake Unit #300H
Well: Poker Lake Unit #300H
Wellbore: Lateral #1
Design: Plan #1

Local Co-ordinate Reference: Site Poker Lake Unit #300H
TVD Reference: KB @ 3377.00ft
MD Reference: KB @ 3377.00ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Eddy Co. New Mexico (Nad 27)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Ground Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Poker Lake Unit #300H			
Site Position:		Northing:	430,651.10 ft	Latitude: 32° 10' 59.253 N
From:	Map	Easting:	643,353.03 ft	Longitude: 103° 52' 11.926 W
Position Uncertainty:	0.00 ft	Slot Radius:	0"	Grid Convergence: 0.25°

Well:	Poker Lake Unit #300H			
Well Position	+N/-S	0.00 ft	Northing:	430,651.10 ft
	+E/-W	0.00 ft	Easting:	643,353.03 ft
Position Uncertainty		0.00 ft	Wellhead Elevation:	3,373.00 ft
			Ground Level:	3,352.00 ft

Wellbore	Lateral #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF200510	10/24/2008	8.02	60.17	48,849

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	7,174.50
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	325.92

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
7,174.50	0.00	0.00	7,174.50	0.00	0.00	0.00	0.00	0.00	0.00	
7,930.61	90.72	325.92	7,652.00	400.48	-270.97	12.00	12.00	0.00	325.92	
12,307.02	90.72	325.92	7,597.00	4,024.85	-2,723.30	0.00	0.00	0.00	0.00	PBHL#1[PLU#300H]

Planning Report

Database: EDM 5000.1 Black Viper
 Company: BOPCO L P
 Project: Eddy Co. New Mexico (Nad 27)
 Site: Poker Lake Unit #300H
 Well: Poker Lake Unit #300H
 Wellbore: Lateral #1
 Design: Plan #1

Local Co-ordinate Reference: Site Poker Lake Unit #300H
 TVD Reference: KB @ 3377.00ft
 MD Reference: KB @ 3377.00ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,174.50	0.00	0.00	7,174.50	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	3.06	325.92	7,199.99	0.56	-0.38	0.68	12.00	12.00	0.00
7,230.00	6.66	325.92	7,229.88	2.67	-1.81	3.22	12.00	12.00	0.00
7,260.00	10.26	325.92	7,259.54	6.32	-4.28	7.63	12.00	12.00	0.00
7,290.00	13.86	325.92	7,288.88	11.51	-7.79	13.90	12.00	12.00	0.00
7,320.00	17.46	325.92	7,317.76	18.22	-12.33	22.00	12.00	12.00	0.00
7,350.00	21.06	325.92	7,346.08	26.41	-17.87	31.89	12.00	12.00	0.00
7,380.00	24.66	325.92	7,373.72	36.06	-24.40	43.54	12.00	12.00	0.00
7,410.00	28.26	325.92	7,400.57	47.13	-31.89	56.90	12.00	12.00	0.00
7,440.00	31.86	325.92	7,426.53	59.57	-40.31	71.92	12.00	12.00	0.00
7,470.00	35.45	325.92	7,451.50	73.34	-49.62	88.55	12.00	12.00	0.00
7,500.00	39.05	325.92	7,475.37	88.38	-59.80	106.71	12.00	12.00	0.00
7,530.00	42.65	325.92	7,498.06	104.63	-70.79	126.33	12.00	12.00	0.00
7,560.00	46.25	325.92	7,519.47	122.02	-82.56	147.33	12.00	12.00	0.00
7,590.00	49.85	325.92	7,539.52	140.50	-95.07	169.64	12.00	12.00	0.00
7,620.00	53.45	325.92	7,558.13	159.98	-108.25	193.17	12.00	12.00	0.00
7,650.00	57.05	325.92	7,575.23	180.40	-122.06	217.81	12.00	12.00	0.00
7,680.00	60.65	325.92	7,590.74	201.66	-136.45	243.48	12.00	12.00	0.00
7,710.00	64.25	325.92	7,604.62	223.68	-151.35	270.08	12.00	12.00	0.00
7,740.00	67.85	325.92	7,616.79	246.39	-166.71	297.49	12.00	12.00	0.00
7,770.00	71.45	325.92	7,627.22	269.68	-182.47	325.61	12.00	12.00	0.00
7,800.00	75.05	325.92	7,635.87	293.47	-198.57	354.33	12.00	12.00	0.00
7,830.00	78.65	325.92	7,642.69	317.66	-214.94	383.54	12.00	12.00	0.00
7,860.00	82.25	325.92	7,647.67	342.16	-231.51	413.12	12.00	12.00	0.00
7,890.00	85.85	325.92	7,650.78	366.87	-248.23	442.96	12.00	12.00	0.00
7,920.00	89.45	325.92	7,652.01	391.69	-265.03	472.93	12.00	12.00	0.00
7,930.61	90.72	325.92	7,652.00	400.48	-270.97	483.54	12.00	12.00	0.00
7,950.00	90.72	325.92	7,651.75	416.53	-281.84	502.92	0.00	0.00	0.00
7,980.00	90.72	325.92	7,651.38	441.38	-298.65	532.92	0.00	0.00	0.00
8,010.00	90.72	325.92	7,651.00	466.22	-315.46	562.92	0.00	0.00	0.00
8,040.00	90.72	325.92	7,650.62	491.07	-332.27	592.92	0.00	0.00	0.00
8,070.00	90.72	325.92	7,650.25	515.91	-349.08	622.91	0.00	0.00	0.00
8,100.00	90.72	325.92	7,649.87	540.76	-365.89	652.91	0.00	0.00	0.00
8,130.00	90.72	325.92	7,649.49	565.60	-382.70	682.91	0.00	0.00	0.00
8,160.00	90.72	325.92	7,649.11	590.45	-399.51	712.91	0.00	0.00	0.00
8,190.00	90.72	325.92	7,648.74	615.29	-416.32	742.90	0.00	0.00	0.00
8,220.00	90.72	325.92	7,648.36	640.14	-433.13	772.90	0.00	0.00	0.00
8,250.00	90.72	325.92	7,647.98	664.98	-449.94	802.90	0.00	0.00	0.00
8,280.00	90.72	325.92	7,647.61	689.83	-466.75	832.90	0.00	0.00	0.00
8,310.00	90.72	325.92	7,647.23	714.67	-483.56	862.89	0.00	0.00	0.00
8,340.00	90.72	325.92	7,646.85	739.52	-500.37	892.89	0.00	0.00	0.00
8,370.00	90.72	325.92	7,646.48	764.36	-517.18	922.89	0.00	0.00	0.00
8,400.00	90.72	325.92	7,646.10	789.21	-533.99	952.89	0.00	0.00	0.00
8,430.00	90.72	325.92	7,645.72	814.05	-550.80	982.89	0.00	0.00	0.00
8,460.00	90.72	325.92	7,645.34	838.90	-567.61	1,012.88	0.00	0.00	0.00
8,490.00	90.72	325.92	7,644.97	863.74	-584.43	1,042.88	0.00	0.00	0.00
8,520.00	90.72	325.92	7,644.59	888.58	-601.24	1,072.88	0.00	0.00	0.00
8,550.00	90.72	325.92	7,644.21	913.43	-618.05	1,102.88	0.00	0.00	0.00
8,580.00	90.72	325.92	7,643.84	938.27	-634.86	1,132.87	0.00	0.00	0.00
8,610.00	90.72	325.92	7,643.46	963.12	-651.67	1,162.87	0.00	0.00	0.00
8,640.00	90.72	325.92	7,643.08	987.96	-668.48	1,192.87	0.00	0.00	0.00
8,670.00	90.72	325.92	7,642.71	1,012.81	-685.29	1,222.87	0.00	0.00	0.00
8,700.00	90.72	325.92	7,642.33	1,037.65	-702.10	1,252.86	0.00	0.00	0.00
8,730.00	90.72	325.92	7,641.95	1,062.50	-718.91	1,282.86	0.00	0.00	0.00

Planning Report

Database: EDM 5000.1 Black Viper
 Company: BOPCO L P
 Project: Eddy Co. New Mexico (Nad 27)
 Site: Poker Lake Unit #300H
 Well: Poker Lake Unit #300H
 Wellbore: Lateral #1
 Design: Plan #1

Local Co-ordinate Reference: Site Poker Lake Unit #300H
 TVD Reference: KB @ 3377.00ft
 MD Reference: KB @ 3377.00ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,760.00	90.72	325.92	7,641.57	1,087.34	-735.72	1,312.86	0.00	0.00	0.00
8,790.00	90.72	325.92	7,641.20	1,112.19	-752.53	1,342.86	0.00	0.00	0.00
8,820.00	90.72	325.92	7,640.82	1,137.03	-769.34	1,372.85	0.00	0.00	0.00
8,850.00	90.72	325.92	7,640.44	1,161.88	-786.15	1,402.85	0.00	0.00	0.00
8,880.00	90.72	325.92	7,640.07	1,186.72	-802.96	1,432.85	0.00	0.00	0.00
8,910.00	90.72	325.92	7,639.69	1,211.57	-819.77	1,462.85	0.00	0.00	0.00
8,940.00	90.72	325.92	7,639.31	1,236.41	-836.58	1,492.85	0.00	0.00	0.00
8,970.00	90.72	325.92	7,638.94	1,261.26	-853.39	1,522.84	0.00	0.00	0.00
9,000.00	90.72	325.92	7,638.56	1,286.10	-870.20	1,552.84	0.00	0.00	0.00
9,030.00	90.72	325.92	7,638.18	1,310.95	-887.02	1,582.84	0.00	0.00	0.00
9,060.00	90.72	325.92	7,637.80	1,335.79	-903.83	1,612.84	0.00	0.00	0.00
9,090.00	90.72	325.92	7,637.43	1,360.64	-920.64	1,642.83	0.00	0.00	0.00
9,120.00	90.72	325.92	7,637.05	1,385.48	-937.45	1,672.83	0.00	0.00	0.00
9,150.00	90.72	325.92	7,636.67	1,410.33	-954.26	1,702.83	0.00	0.00	0.00
9,180.00	90.72	325.92	7,636.30	1,435.17	-971.07	1,732.83	0.00	0.00	0.00
9,210.00	90.72	325.92	7,635.92	1,460.02	-987.88	1,762.82	0.00	0.00	0.00
9,240.00	90.72	325.92	7,635.54	1,484.86	-1,004.69	1,792.82	0.00	0.00	0.00
9,270.00	90.72	325.92	7,635.17	1,509.70	-1,021.50	1,822.82	0.00	0.00	0.00
9,300.00	90.72	325.92	7,634.79	1,534.55	-1,038.31	1,852.82	0.00	0.00	0.00
9,330.00	90.72	325.92	7,634.41	1,559.39	-1,055.12	1,882.81	0.00	0.00	0.00
9,360.00	90.72	325.92	7,634.03	1,584.24	-1,071.93	1,912.81	0.00	0.00	0.00
9,390.00	90.72	325.92	7,633.66	1,609.08	-1,088.74	1,942.81	0.00	0.00	0.00
9,420.00	90.72	325.92	7,633.28	1,633.93	-1,105.55	1,972.81	0.00	0.00	0.00
9,450.00	90.72	325.92	7,632.90	1,658.77	-1,122.36	2,002.80	0.00	0.00	0.00
9,480.00	90.72	325.92	7,632.53	1,683.62	-1,139.17	2,032.80	0.00	0.00	0.00
9,510.00	90.72	325.92	7,632.15	1,708.46	-1,155.98	2,062.80	0.00	0.00	0.00
9,540.00	90.72	325.92	7,631.77	1,733.31	-1,172.79	2,092.80	0.00	0.00	0.00
9,570.00	90.72	325.92	7,631.40	1,758.15	-1,189.60	2,122.80	0.00	0.00	0.00
9,600.00	90.72	325.92	7,631.02	1,783.00	-1,206.42	2,152.79	0.00	0.00	0.00
9,630.00	90.72	325.92	7,630.64	1,807.84	-1,223.23	2,182.79	0.00	0.00	0.00
9,660.00	90.72	325.92	7,630.26	1,832.69	-1,240.04	2,212.79	0.00	0.00	0.00
9,690.00	90.72	325.92	7,629.89	1,857.53	-1,256.85	2,242.79	0.00	0.00	0.00
9,720.00	90.72	325.92	7,629.51	1,882.38	-1,273.66	2,272.78	0.00	0.00	0.00
9,750.00	90.72	325.92	7,629.13	1,907.22	-1,290.47	2,302.78	0.00	0.00	0.00
9,780.00	90.72	325.92	7,628.76	1,932.07	-1,307.28	2,332.78	0.00	0.00	0.00
9,810.00	90.72	325.92	7,628.38	1,956.91	-1,324.09	2,362.78	0.00	0.00	0.00
9,840.00	90.72	325.92	7,628.00	1,981.76	-1,340.90	2,392.77	0.00	0.00	0.00
9,870.00	90.72	325.92	7,627.63	2,006.60	-1,357.71	2,422.77	0.00	0.00	0.00
9,900.00	90.72	325.92	7,627.25	2,031.45	-1,374.52	2,452.77	0.00	0.00	0.00
9,930.00	90.72	325.92	7,626.87	2,056.29	-1,391.33	2,482.77	0.00	0.00	0.00
9,960.00	90.72	325.92	7,626.49	2,081.14	-1,408.14	2,512.76	0.00	0.00	0.00
9,990.00	90.72	325.92	7,626.12	2,105.98	-1,424.95	2,542.76	0.00	0.00	0.00
10,020.00	90.72	325.92	7,625.74	2,130.82	-1,441.76	2,572.76	0.00	0.00	0.00
10,050.00	90.72	325.92	7,625.36	2,155.67	-1,458.57	2,602.76	0.00	0.00	0.00
10,080.00	90.72	325.92	7,624.99	2,180.51	-1,475.38	2,632.76	0.00	0.00	0.00
10,110.00	90.72	325.92	7,624.61	2,205.36	-1,492.19	2,662.75	0.00	0.00	0.00
10,140.00	90.72	325.92	7,624.23	2,230.20	-1,509.00	2,692.75	0.00	0.00	0.00
10,170.00	90.72	325.92	7,623.86	2,255.05	-1,525.82	2,722.75	0.00	0.00	0.00
10,200.00	90.72	325.92	7,623.48	2,279.89	-1,542.63	2,752.75	0.00	0.00	0.00
10,230.00	90.72	325.92	7,623.10	2,304.74	-1,559.44	2,782.74	0.00	0.00	0.00
10,260.00	90.72	325.92	7,622.72	2,329.58	-1,576.25	2,812.74	0.00	0.00	0.00
10,290.00	90.72	325.92	7,622.35	2,354.43	-1,593.06	2,842.74	0.00	0.00	0.00
10,320.00	90.72	325.92	7,621.97	2,379.27	-1,609.87	2,872.74	0.00	0.00	0.00
10,350.00	90.72	325.92	7,621.59	2,404.12	-1,626.68	2,902.73	0.00	0.00	0.00

Planning Report

Database: EDM 5000 1 Black Viper
 Company: BOPCO L.P.
 Project: Eddy Co. New Mexico (Nad 27)
 Site: Poker Lake Unit #300H
 Well: Poker Lake Unit #300H
 Wellbore: Lateral #1
 Design: Plan #1

Local Co-ordinate Reference: Site Poker Lake Unit #300H
 TVD Reference: KB @ 3377.00ft
 MD Reference: KB @ 3377.00ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,380.00	90.72	325.92	7,621.22	2,428.96	-1,643.49	2,932.73	0.00	0.00	0.00
10,410.00	90.72	325.92	7,620.84	2,453.81	-1,660.30	2,962.73	0.00	0.00	0.00
10,440.00	90.72	325.92	7,620.46	2,478.65	-1,677.11	2,992.73	0.00	0.00	0.00
10,470.00	90.72	325.92	7,620.09	2,503.50	-1,693.92	3,022.72	0.00	0.00	0.00
10,500.00	90.72	325.92	7,619.71	2,528.34	-1,710.73	3,052.72	0.00	0.00	0.00
10,530.00	90.72	325.92	7,619.33	2,553.19	-1,727.54	3,082.72	0.00	0.00	0.00
10,560.00	90.72	325.92	7,618.95	2,578.03	-1,744.35	3,112.72	0.00	0.00	0.00
10,590.00	90.72	325.92	7,618.58	2,602.88	-1,761.16	3,142.71	0.00	0.00	0.00
10,620.00	90.72	325.92	7,618.20	2,627.72	-1,777.97	3,172.71	0.00	0.00	0.00
10,650.00	90.72	325.92	7,617.82	2,652.57	-1,794.78	3,202.71	0.00	0.00	0.00
10,680.00	90.72	325.92	7,617.45	2,677.41	-1,811.59	3,232.71	0.00	0.00	0.00
10,710.00	90.72	325.92	7,617.07	2,702.25	-1,828.40	3,262.71	0.00	0.00	0.00
10,740.00	90.72	325.92	7,616.69	2,727.10	-1,845.22	3,292.70	0.00	0.00	0.00
10,770.00	90.72	325.92	7,616.32	2,751.94	-1,862.03	3,322.70	0.00	0.00	0.00
10,800.00	90.72	325.92	7,615.94	2,776.79	-1,878.84	3,352.70	0.00	0.00	0.00
10,830.00	90.72	325.92	7,615.56	2,801.63	-1,895.65	3,382.70	0.00	0.00	0.00
10,860.00	90.72	325.92	7,615.18	2,826.48	-1,912.46	3,412.69	0.00	0.00	0.00
10,890.00	90.72	325.92	7,614.81	2,851.32	-1,929.27	3,442.69	0.00	0.00	0.00
10,920.00	90.72	325.92	7,614.43	2,876.17	-1,946.08	3,472.69	0.00	0.00	0.00
10,950.00	90.72	325.92	7,614.05	2,901.01	-1,962.89	3,502.69	0.00	0.00	0.00
10,980.00	90.72	325.92	7,613.68	2,925.86	-1,979.70	3,532.68	0.00	0.00	0.00
11,010.00	90.72	325.92	7,613.30	2,950.70	-1,996.51	3,562.68	0.00	0.00	0.00
11,040.00	90.72	325.92	7,612.92	2,975.55	-2,013.32	3,592.68	0.00	0.00	0.00
11,070.00	90.72	325.92	7,612.55	3,000.39	-2,030.13	3,622.68	0.00	0.00	0.00
11,100.00	90.72	325.92	7,612.17	3,025.24	-2,046.94	3,652.67	0.00	0.00	0.00
11,130.00	90.72	325.92	7,611.79	3,050.08	-2,063.75	3,682.67	0.00	0.00	0.00
11,160.00	90.72	325.92	7,611.41	3,074.93	-2,080.56	3,712.67	0.00	0.00	0.00
11,190.00	90.72	325.92	7,611.04	3,099.77	-2,097.37	3,742.67	0.00	0.00	0.00
11,220.00	90.72	325.92	7,610.66	3,124.62	-2,114.18	3,772.67	0.00	0.00	0.00
11,250.00	90.72	325.92	7,610.28	3,149.46	-2,130.99	3,802.66	0.00	0.00	0.00
11,280.00	90.72	325.92	7,609.91	3,174.31	-2,147.81	3,832.66	0.00	0.00	0.00
11,310.00	90.72	325.92	7,609.53	3,199.15	-2,164.62	3,862.66	0.00	0.00	0.00
11,340.00	90.72	325.92	7,609.15	3,224.00	-2,181.43	3,892.66	0.00	0.00	0.00
11,370.00	90.72	325.92	7,608.78	3,248.84	-2,198.24	3,922.65	0.00	0.00	0.00
11,400.00	90.72	325.92	7,608.40	3,273.69	-2,215.05	3,952.65	0.00	0.00	0.00
11,430.00	90.72	325.92	7,608.02	3,298.53	-2,231.86	3,982.65	0.00	0.00	0.00
11,460.00	90.72	325.92	7,607.64	3,323.37	-2,248.67	4,012.65	0.00	0.00	0.00
11,490.00	90.72	325.92	7,607.27	3,348.22	-2,265.48	4,042.64	0.00	0.00	0.00
11,520.00	90.72	325.92	7,606.89	3,373.06	-2,282.29	4,072.64	0.00	0.00	0.00
11,550.00	90.72	325.92	7,606.51	3,397.91	-2,299.10	4,102.64	0.00	0.00	0.00
11,580.00	90.72	325.92	7,606.14	3,422.75	-2,315.91	4,132.64	0.00	0.00	0.00
11,610.00	90.72	325.92	7,605.76	3,447.60	-2,332.72	4,162.63	0.00	0.00	0.00
11,640.00	90.72	325.92	7,605.38	3,472.44	-2,349.53	4,192.63	0.00	0.00	0.00
11,670.00	90.72	325.92	7,605.01	3,497.29	-2,366.34	4,222.63	0.00	0.00	0.00
11,700.00	90.72	325.92	7,604.63	3,522.13	-2,383.15	4,252.63	0.00	0.00	0.00
11,730.00	90.72	325.92	7,604.25	3,546.98	-2,399.96	4,282.62	0.00	0.00	0.00
11,760.00	90.72	325.92	7,603.87	3,571.82	-2,416.77	4,312.62	0.00	0.00	0.00
11,790.00	90.72	325.92	7,603.50	3,596.67	-2,433.58	4,342.62	0.00	0.00	0.00
11,820.00	90.72	325.92	7,603.12	3,621.51	-2,450.39	4,372.62	0.00	0.00	0.00
11,850.00	90.72	325.92	7,602.74	3,646.36	-2,467.21	4,402.62	0.00	0.00	0.00
11,880.00	90.72	325.92	7,602.37	3,671.20	-2,484.02	4,432.61	0.00	0.00	0.00
11,910.00	90.72	325.92	7,601.99	3,696.05	-2,500.83	4,462.61	0.00	0.00	0.00
11,940.00	90.72	325.92	7,601.61	3,720.89	-2,517.64	4,492.61	0.00	0.00	0.00
11,970.00	90.72	325.92	7,601.24	3,745.74	-2,534.45	4,522.61	0.00	0.00	0.00

Planning Report

Database: EDM 5000.1 Black Viper
 Company: BOPCO L.P.
 Project: Eddy Co. New Mexico (Nad 27)
 Site: Poker Lake Unit #300H
 Well: Poker Lake Unit #300H
 Wellbore: Lateral #1
 Design: Plan #1

Local Co-ordinate Reference: Site Poker Lake Unit #300H
 TVD Reference: KB @ 3377.00ft
 MD Reference: KB @ 3377 00ft
 North Reference: Gnd
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,000.00	90.72	325.92	7,600.86	3,770.58	-2,551.26	4,552.60	0.00	0.00	0.00
12,030.00	90.72	325.92	7,600.48	3,795.43	-2,568.07	4,582.60	0.00	0.00	0.00
12,060.00	90.72	325.92	7,600.10	3,820.27	-2,584.88	4,612.60	0.00	0.00	0.00
12,090.00	90.72	325.92	7,599.73	3,845.12	-2,601.69	4,642.60	0.00	0.00	0.00
12,120.00	90.72	325.92	7,599.35	3,869.96	-2,618.50	4,672.59	0.00	0.00	0.00
12,150.00	90.72	325.92	7,598.97	3,894.81	-2,635.31	4,702.59	0.00	0.00	0.00
12,180.00	90.72	325.92	7,598.60	3,919.65	-2,652.12	4,732.59	0.00	0.00	0.00
12,210.00	90.72	325.92	7,598.22	3,944.49	-2,668.93	4,762.59	0.00	0.00	0.00
12,240.00	90.72	325.92	7,597.84	3,969.34	-2,685.74	4,792.58	0.00	0.00	0.00
12,270.00	90.72	325.92	7,597.47	3,994.18	-2,702.55	4,822.58	0.00	0.00	0.00
12,300.00	90.72	325.92	7,597.09	4,019.03	-2,719.36	4,852.58	0.00	0.00	0.00
12,307.02	90.72	325.92	7,597.00	4,024.85	-2,723.30	4,859.60	0.00	0.00	0.00

Design Targets

Target Name hit/miss target Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
HL[PLU#300H] - plan misses target center by 7174.50ft at 7174.50ft MD (7174.50 TVD, 0.00 N, 0.00 E) - Rectangle (sides W0.00 H0.00 D0.00)	0.00	0.00	0.00	0.00	0.00	430,651.10	643,353.03	32° 10' 59.253 N	103° 52' 11.926 W
PBHL#1[PLU#300H] - plan hits target center - Point	0.00	0.00	7,597.00	4,024.85	-2,723.30	434,675.94	640,629.73	32° 11' 39.198 N	103° 52' 43.416 W

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,619.78	7,558.00	Lower Brushy Canyon		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
7,174.50	7,174.50	0.00	0.00	KOP Build 12°/100' :: TFO 325.92
7,930.61	7,652.00	400.48	-270.97	EOC Hold 90.72° INC . 325.92° AZI



Project Eddy Co. New Mexico (Nad 27)
 Site Poker Lake Unit #300H
 Well Poker Lake Unit #300H
 Wellbore Lateral #1
 Plan Plan #1 (Poker Lake Unit #300H/Lateral #1)



PROJECT DETAILS Eddy Co. New Mexico (Nad 27)
 Geodetic System US State Plane 1927 (Exact solution)
 Datum NAD 1927 (NADCON CONUS)
 Ellipsoid Clarke 1856
 Zone New Mexico East 3001
 System Datum Ground Level



Azimuths to Grid North
 True North -0.25°
 Magnetic North 7.78°
 Magnetic Field
 Strength 48848.8nT
 Dip Angle 60.17°
 Date 10/24/2008
 Model IGRF200510

ANNOTATIONS

TVD	MD	Annotation
7174.50	7174.50	KOP Build 12°/100' TFO 325.92
7652.00	7630.61	EOC Hold 90 72° INC 325.92° AZI

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dlog	TFace	VFace	Target
1	7174.50	0.00	0.00	7174.50	0.00	0.00	0.00	0.00	0.00	
2	7630.61	90.72	325.92	7652.00	400.48	-270.97	12.00	325.92	483.54	
3	12307.02	90.72	325.92	7697.00	4024.85	-2723.30	0.00	0.00	4859.60	PBHL#1(PLU#300H)

