



BOPCO, L.P.

Location: Eddy County, NM

Field: Poker Lake Unit

Facility: PLU Big Sinks 15-24-30 USA No.1H

Slot: No.1H SHL

Well: No.1H

Wellbore: No.1H PWB

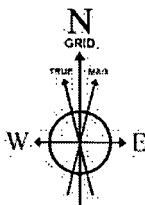


30-013-40936

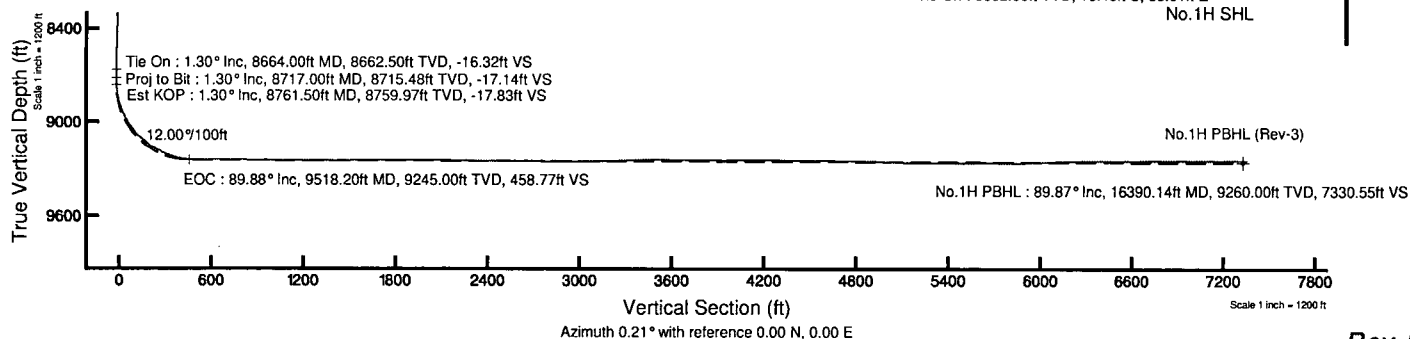
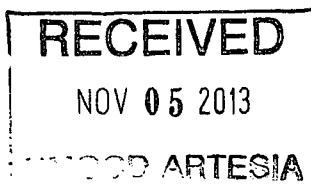
Scale 1 inch = 1200 ft
Easting (ft)
-600 0 600
No.1H PBHL : 9260.00ft TVD, 7330.50ft N, 26.81ft E
No.1H PBHL (Rev-3)

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	8664.00	1.300	133.200	8662.50	-16.46	38.01	0.00	-16.32
Proj to Bit	8717.00	1.300	133.200	8715.48	-17.28	38.88	0.00	-17.14
Est KOP	8761.50	1.300	133.200	8759.97	-17.97	39.62	0.00	-17.83
EOC	9518.20	89.875	359.838	9245.00	458.60	46.26	12.00	458.77
No.1H PBHL	16390.14	89.875	359.838	9260.00	7330.50	26.81	0.00	7330.55

Plot reference wellpath is Rev-E.0	
True vertical depths are referenced to Rig on No.1H SHL (KB)	Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No.1H SHL (KB)	North Reference: Grid north
Rig on No.1H SHL (KB) to Mean Sea Level: 3456 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: No.1H SHL): -3434 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: gentbry on 07/15/2013



BGGM (1945.0 to 2015.0) Dip: 60.06° Field: 48366.4 nT
Magnetic North is 7.58 degrees East of True North (at 06/12/2013)
Grid North is 0.25 degrees East of True North
To correct azimuth from True to Grid subtract 0.25 degrees
To correct azimuth from Magnetic to Grid add 7.33 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.33 = 97.33



Rev-E.0



Actual Wellpath Report

No.1H AWP

Page 1 of 5



REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.1H SHL
Area	Eddy County, NM	Well	No.1H
Field	Poker Lake Unit	Wellbore	No.1H AWB
Facility	PLU Big Sinks 15-24-30 USA No.1H		

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	0.999933	Report Generated	07/30/2013 at 8:32:32 AM
Convergence at slot	0.25° East	Database/Source file	WA Midland/No.1H_AWB.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	645689.00	441058.00	32°12'42.149"N	103°51'44.199"W
Facility Reference Pt			645689.00	441058.00	32°12'42.149"N	103°51'44.199"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.1H SHL (KB) to Facility Vertical Datum	22.00ft
Horizontal Reference Pt	Slot	Rig on No.1H SHL (KB) to Mean Sea Level	3456.00ft
Vertical Reference Pt	Rig on No.1H SHL (KB)	Rig on No.1H SHL (KB) to Mud Line at Slot (No.1H SHL)	22.00ft
MD Reference Pt	Rig on No.1H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.21°



Actual Wellpath Report

No.1H AWP

Page 2 of 5



REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.1H SHL
Area	Eddy County, NM	Well	No.1H
Field	Poker Lake Unit	Wellbore	No.1H AWB
Facility	PLU Big Sinks 15-24-30 USA No.1H		

WELLPATH DATA (154 stations)												
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	0.610	0.00	0.00	0.00	0.00	645689.00	441058.00	32°12'42.149"N	103°51'44.199"W	0.00	
87.40	0.720	0.610	87.40	0.55	0.55	0.01	645689.01	441058.55	32°12'42.154"N	103°51'44.199"W	0.82	
178.70	1.400	13.780	178.68	2.21	2.21	0.28	645689.28	441060.21	32°12'42.170"N	103°51'44.196"W	0.79	
273.80	1.170	20.860	273.76	4.24	4.24	0.90	645689.90	441062.24	32°12'42.191"N	103°51'44.188"W	0.29	
366.20	0.960	24.200	366.14	5.83	5.83	1.55	645690.55	441063.83	32°12'42.206"N	103°51'44.181"W	0.24	
458.70	0.950	32.460	458.63	7.19	7.18	2.28	645691.28	441065.18	32°12'42.220"N	103°51'44.172"W	0.15	
549.80	1.080	29.160	549.71	8.58	8.57	3.11	645692.11	441066.57	32°12'42.233"N	103°51'44.162"W	0.16	
642.40	1.090	14.110	642.30	10.20	10.19	3.75	645692.75	441068.19	32°12'42.249"N	103°51'44.155"W	0.31	
690.50	1.070	7.610	690.39	11.09	11.08	3.92	645692.92	441069.07	32°12'42.258"N	103°51'44.153"W	0.26	
801.00	1.000	354.700	800.87	13.07	13.06	3.96	645692.96	441071.06	32°12'42.278"N	103°51'44.152"W	0.22	
992.00	0.900	1.800	991.85	16.23	16.22	3.86	645692.86	441074.22	32°12'42.309"N	103°51'44.153"W	0.08	
1182.00	0.900	15.000	1181.82	19.17	19.15	4.29	645693.29	441077.15	32°12'42.338"N	103°51'44.148"W	0.11	
1372.00	1.400	22.700	1371.78	22.75	22.73	5.57	645694.57	441080.73	32°12'42.373"N	103°51'44.133"W	0.27	
1562.00	1.300	20.100	1561.73	26.92	26.90	7.21	645696.21	441084.90	32°12'42.414"N	103°51'44.114"W	0.06	
1752.00	0.900	33.200	1751.70	30.20	30.17	8.77	645697.77	441088.17	32°12'42.447"N	103°51'44.096"W	0.25	
1942.00	0.900	13.200	1941.67	32.91	32.87	9.92	645698.92	441090.87	32°12'42.473"N	103°51'44.082"W	0.16	
2132.00	1.800	51.600	2131.62	36.22	36.18	12.60	645701.60	441094.18	32°12'42.506"N	103°51'44.051"W	0.65	
2322.00	1.500	62.700	2321.54	39.23	39.17	17.15	645706.15	441097.17	32°12'42.535"N	103°51'43.997"W	0.23	
2513.00	1.400	65.300	2512.48	41.37	41.29	21.49	645710.49	441099.29	32°12'42.556"N	103°51'43.947"W	0.06	
2703.00	0.900	52.300	2702.44	43.27	43.18	24.78	645713.78	441101.17	32°12'42.575"N	103°51'43.908"W	0.30	
2892.00	1.700	25.400	2891.39	46.72	46.62	27.16	645716.16	441104.61	32°12'42.609"N	103°51'43.881"W	0.52	
3082.00	1.900	19.100	3081.30	52.25	52.14	29.40	645718.40	441110.13	32°12'42.663"N	103°51'43.854"W	0.15	
3272.00	1.900	72.600	3271.21	56.18	56.06	33.44	645722.43	441114.05	32°12'42.702"N	103°51'43.807"W	0.90	
3463.00	1.600	122.000	3462.13	55.73	55.59	38.72	645727.72	441113.59	32°12'42.697"N	103°51'43.746"W	0.78	
3653.00	0.700	140.700	3652.09	53.44	53.29	41.70	645730.70	441111.28	32°12'42.674"N	103°51'43.711"W	0.51	
3843.00	0.900	179.300	3842.07	51.05	50.90	42.46	645731.45	441108.89	32°12'42.650"N	103°51'43.702"W	0.30	
3958.00	0.900	217.700	3957.06	49.43	49.28	41.92	645730.91	441107.28	32°12'42.634"N	103°51'43.709"W	0.51	
4033.00	0.800	176.900	4032.05	48.44	48.29	41.58	645730.58	441106.29	32°12'42.625"N	103°51'43.713"W	0.80	
4223.00	0.700	169.700	4222.04	45.98	45.82	41.86	645730.86	441103.82	32°12'42.600"N	103°51'43.710"W	0.07	
4413.00	0.800	157.000	4412.02	43.62	43.46	42.59	645731.59	441101.46	32°12'42.577"N	103°51'43.701"W	0.10	
4602.00	0.700	160.200	4601.01	41.32	41.16	43.50	645732.49	441099.16	32°12'42.554"N	103°51'43.691"W	0.06	
4791.00	0.700	161.600	4789.99	39.14	38.98	44.25	645733.25	441096.98	32°12'42.532"N	103°51'43.682"W	0.01	
4981.00	0.700	167.600	4979.98	36.91	36.74	44.87	645733.86	441094.74	32°12'42.510"N	103°51'43.675"W	0.04	
5171.00	0.600	184.300	5169.96	34.78	34.62	45.04	645734.04	441092.62	32°12'42.489"N	103°51'43.673"W	0.11	
5362.00	0.600	179.000	5360.95	32.79	32.62	44.98	645733.98	441090.62	32°12'42.469"N	103°51'43.674"W	0.03	
5551.00	0.700	178.500	5549.94	30.64	30.48	45.03	645734.03	441088.48	32°12'42.448"N	103°51'43.673"W	0.05	
5741.00	0.700	190.300	5739.93	28.34	28.18	44.85	645733.85	441086.17	32°12'42.425"N	103°51'43.676"W	0.08	
5930.00	0.700	189.800	5928.91	26.06	25.90	44.45	645733.45	441083.90	32°12'42.403"N	103°51'43.680"W	0.00	
6120.00	1.200	195.400	6118.89	23.00	22.84	43.73	645732.72	441080.84	32°12'42.373"N	103°51'43.689"W	0.27	
6310.00	1.300	207.100	6308.84	19.16	19.00	42.22	645731.21	441077.00	32°12'42.335"N	103°51'43.707"W	0.14	
6500.00	1.400	210.200	6498.79	15.22	15.08	40.07	645729.06	441073.08	32°12'42.296"N	103°51'43.732"W	0.07	
6689.00	1.100	216.700	6687.74	11.77	11.63	37.82	645726.82	441069.63	32°12'42.262"N	103°51'43.758"W	0.18	
6879.00	1.300	216.600	6877.70	8.57	8.44	35.45	645724.44	441066.44	32°12'42.231"N	103°51'43.786"W	0.11	
7069.00	0.700	170.700	7067.68	5.69	5.56	34.35	645723.35	441063.56	32°12'42.202"N	103°51'43.799"W	0.50	
7258.00	0.800	163.900	7256.66	3.28	3.15	34.90	645723.90	441061.15	32°12'42.178"N	103°51'43.793"W	0.07	



Actual Wellpath Report

No.1H AWP

Page 3 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.1H SHL
Area	Eddy County, NM	Well	No.1H
Field	Poker Lake Unit	Wellbore	No.1H AWP
Facility	PLU Big Sinks 15-24-30 USA No.1H		

WELLPATH DATA (154 stations)

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
7447.00	0.900	153.700	7445.64	0.69	0.55	35.92	645724.92	441058.55	32°12'42.153"N	103°51'43.781"W	0.10	
7637.00	0.900	206.000	7635.62	-1.99	-2.12	35.93	645724.93	441055.88	32°12'42.126"N	103°51'43.781"W	0.42	
7826.00	0.800	193.500	7824.60	-4.61	-4.74	34.97	645723.97	441053.26	32°12'42.100"N	103°51'43.792"W	0.11	
8016.00	0.600	162.800	8014.58	-6.85	-6.98	34.96	645723.95	441051.02	32°12'42.078"N	103°51'43.793"W	0.22	
8205.00	1.000	173.700	8203.57	-9.44	-9.57	35.43	645724.43	441048.43	32°12'42.052"N	103°51'43.787"W	0.23	
8395.00	1.100	177.800	8393.53	-12.91	-13.04	35.68	645724.68	441044.96	32°12'42.018"N	103°51'43.784"W	0.07	
8585.00	0.800	121.600	8583.51	-15.42	-15.55	36.88	645725.88	441042.45	32°12'41.993"N	103°51'43.771"W	0.49	
8664.00	1.300	133.200	8662.50	-16.32	-16.46	38.01	645727.00	441041.54	32°12'41.984"N	103°51'43.758"W	0.68	
8697.00	1.600	142.000	8695.49	-16.93	-17.08	38.56	645727.56	441040.93	32°12'41.978"N	103°51'43.751"W	1.13	
8729.00	1.600	76.000	8727.48	-17.18	-17.32	39.27	645728.27	441040.68	32°12'41.976"N	103°51'43.743"W	5.45	
8761.00	4.400	46.700	8759.43	-16.22	-16.37	40.60	645729.59	441041.63	32°12'41.985"N	103°51'43.727"W	9.70	
8793.00	5.900	19.000	8791.31	-13.82	-13.97	42.03	645731.02	441044.03	32°12'42.009"N	103°51'43.711"W	8.94	
8823.00	9.400	18.900	8821.03	-10.04	-10.20	43.32	645732.32	441047.81	32°12'42.046"N	103°51'43.695"W	11.67	
8852.00	12.900	18.000	8849.48	-4.71	-4.87	45.09	645734.09	441053.13	32°12'42.098"N	103°51'43.675"W	12.08	
8883.00	16.400	15.900	8879.47	2.80	2.63	47.36	645736.36	441060.63	32°12'42.173"N	103°51'43.648"W	11.42	
8912.00	21.100	13.400	8906.92	11.83	11.65	49.69	645738.69	441069.65	32°12'42.262"N	103°51'43.620"W	16.44	
8943.00	24.000	12.100	8935.55	23.43	23.24	52.31	645741.30	441081.24	32°12'42.376"N	103°51'43.589"W	9.49	
8972.00	26.800	10.800	8961.75	35.63	35.43	54.77	645743.77	441093.43	32°12'42.497"N	103°51'43.560"W	9.84	
9003.00	30.100	9.500	8989.00	50.18	49.97	57.36	645746.36	441107.97	32°12'42.641"N	103°51'43.529"W	10.83	
9033.00	33.300	9.000	9014.52	65.75	65.53	59.89	645748.89	441123.52	32°12'42.794"N	103°51'43.499"W	10.70	
9063.00	36.700	8.700	9039.09	82.76	82.53	62.54	645751.53	441140.52	32°12'42.963"N	103°51'43.467"W	11.35	
9094.00	40.800	8.000	9063.26	101.96	101.72	65.35	645754.35	441159.72	32°12'43.152"N	103°51'43.433"W	13.30	
9124.00	44.600	7.500	9085.31	122.13	121.88	68.09	645757.09	441179.87	32°12'43.352"N	103°51'43.400"W	12.72	
9154.00	48.200	6.400	9105.99	143.70	143.44	70.71	645759.71	441201.43	32°12'43.565"N	103°51'43.369"W	12.29	
9184.00	52.100	5.100	9125.21	166.62	166.35	73.01	645762.01	441224.34	32°12'43.792"N	103°51'43.341"W	13.42	
9215.00	55.900	3.800	9143.43	191.62	191.35	74.95	645763.94	441249.34	32°12'44.039"N	103°51'43.317"W	12.72	
9244.00	59.000	2.100	9159.03	216.04	215.76	76.20	645765.20	441273.74	32°12'44.280"N	103°51'43.301"W	11.78	
9274.00	61.500	358.800	9173.92	242.07	241.80	76.40	645765.39	441299.78	32°12'44.538"N	103°51'43.298"W	12.67	
9305.00	63.800	356.200	9188.16	269.57	269.30	75.19	645764.18	441327.28	32°12'44.810"N	103°51'43.310"W	10.51	
9335.00	67.000	356.500	9200.65	296.78	296.52	73.45	645762.45	441354.50	32°12'45.080"N	103°51'43.329"W	10.71	
9365.00	69.700	357.500	9211.72	324.62	324.36	72.00	645760.99	441382.34	32°12'45.355"N	103°51'43.345"W	9.52	
9394.00	73.400	358.600	9220.89	352.11	351.85	71.06	645760.06	441409.82	32°12'45.627"N	103°51'43.354"W	13.26	
9425.00	77.000	359.400	9228.81	382.07	381.81	70.54	645759.54	441439.78	32°12'45.924"N	103°51'43.359"W	11.88	
9455.00	80.900	359.800	9234.56	411.50	411.25	70.34	645759.33	441469.22	32°12'46.215"N	103°51'43.359"W	13.07	
9485.00	84.700	359.900	9238.32	441.26	441.01	70.26	645759.26	441498.97	32°12'46.509"N	103°51'43.359"W	12.67	
9515.00	89.000	0.500	9239.97	471.21	470.95	70.37	645759.36	441528.92	32°12'46.806"N	103°51'43.356"W	14.47	
9618.00	89.900	0.700	9240.96	574.20	573.94	71.44	645760.44	441631.90	32°12'47.825"N	103°51'43.338"W	0.90	
9713.00	89.900	1.100	9241.12	669.19	668.93	72.94	645761.93	441726.88	32°12'48.765"N	103°51'43.316"W	0.42	
9808.00	89.500	0.300	9241.62	764.19	763.92	74.10	645763.09	441821.87	32°12'49.705"N	103°51'43.298"W	0.94	
9903.00	89.200	359.700	9242.70	859.18	858.91	74.10	645763.09	441916.85	32°12'50.645"N	103°51'43.293"W	0.71	
9999.00	89.000	359.200	9244.20	955.16	954.90	73.18	645762.17	442012.83	32°12'51.594"N	103°51'43.299"W	0.56	
10093.00	89.300	359.200	9245.60	1049.13	1048.88	71.86	645760.86	442106.80	32°12'52.525"N	103°51'43.309"W	0.32	
10188.00	89.400	359.900	9246.68	1144.12	1143.87	71.12	645760.11	442201.79	32°12'53.465"N	103°51'43.313"W	0.74	
10283.00	89.600	359.800	9247.51	1239.11	1238.86	70.87	645759.86	442296.78	32°12'54.405"N	103°51'43.311"W	0.24	
10379.00	90.900	358.300	9247.09	1335.09	1334.84	69.28	645758.27	442392.75	32°12'55.354"N	103°51'43.325"W	2.07	



Actual Wellpath Report

No.1H AWP

Page 4 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.1H SHL
Area	Eddy County, NM	Well	No.1H
Field	Poker Lake Unit	Wellbore	No.1H AWB
Facility	PLU Big Sinks 15-24-30 USA No.1H		

WELLPATH DATA (154 stations)

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
10473.00	90.700	357.300	9245.77	1428.99	1428.76	65.67	645754.66	442486.67	32°12'56.284"N	103°51'43.362"W	1.08	
10567.00	91.200	356.800	9244.22	1522.84	1522.63	60.83	645749.83	442580.52	32°12'57.213"N	103°51'43.413"W	0.75	
10662.00	90.200	357.900	9243.06	1617.71	1617.52	56.44	645745.44	442675.40	32°12'58.152"N	103°51'43.460"W	1.56	
10757.00	90.000	358.500	9242.89	1712.65	1712.47	53.46	645742.45	442770.35	32°12'59.092"N	103°51'43.490"W	0.67	
10852.00	89.800	359.000	9243.06	1807.62	1807.44	51.38	645740.38	442865.32	32°13'00.032"N	103°51'43.509"W	0.57	
10947.00	90.300	357.800	9242.97	1902.57	1902.41	48.73	645737.73	442960.27	32°13'00.972"N	103°51'43.535"W	1.37	
11042.00	90.200	357.800	9242.56	1997.49	1997.33	45.08	645734.08	443055.20	32°13'01.911"N	103°51'43.572"W	0.11	
11137.00	89.200	357.400	9243.06	2092.38	2092.25	41.11	645730.10	443150.10	32°13'02.850"N	103°51'43.614"W	1.13	
11233.00	88.600	358.600	9244.90	2188.29	2188.17	37.76	645726.75	443246.02	32°13'03.800"N	103°51'43.648"W	1.40	
11328.00	88.200	359.100	9247.55	2283.23	2283.11	35.85	645724.85	443340.96	32°13'04.739"N	103°51'43.665"W	0.67	
11422.00	89.400	359.000	9249.52	2377.19	2377.08	34.29	645723.29	443434.92	32°13'05.669"N	103°51'43.679"W	1.28	
11517.00	89.300	358.600	9250.60	2472.15	2472.05	32.30	645721.30	443529.88	32°13'06.609"N	103°51'43.697"W	0.43	
11612.00	89.800	358.200	9251.34	2567.10	2567.01	29.65	645718.65	443624.83	32°13'07.549"N	103°51'43.723"W	0.67	
11707.00	89.600	358.100	9251.84	2662.04	2661.96	26.58	645715.58	443719.78	32°13'08.489"N	103°51'43.754"W	0.24	
11801.00	89.900	357.900	9252.25	2755.97	2755.90	23.30	645712.30	443813.71	32°13'09.418"N	103°51'43.787"W	0.38	
11896.00	89.800	357.800	9252.50	2850.89	2850.83	19.74	645708.74	443908.64	32°13'10.358"N	103°51'43.824"W	0.15	
11991.00	90.200	359.200	9252.50	2945.84	2945.80	17.25	645706.25	444003.60	32°13'11.298"N	103°51'43.848"W	1.53	
12087.00	90.600	358.700	9251.83	3041.82	3041.78	15.49	645704.49	444099.57	32°13'12.247"N	103°51'43.864"W	0.67	
12182.00	90.900	0.400	9250.59	3136.80	3136.77	14.75	645703.75	444194.55	32°13'13.187"N	103°51'43.867"W	1.82	
12277.00	91.800	0.000	9248.35	3231.77	3231.74	15.08	645704.08	444289.52	32°13'14.127"N	103°51'43.859"W	1.04	
12373.00	92.900	0.500	9244.41	3327.69	3327.65	15.50	645704.50	444385.43	32°13'15.076"N	103°51'43.849"W	1.26	
12468.00	92.200	0.200	9240.18	3422.59	3422.56	16.08	645705.08	444480.32	32°13'16.015"N	103°51'43.837"W	0.80	
12563.00	89.400	359.800	9238.86	3517.57	3517.54	16.08	645705.08	444575.30	32°13'16.955"N	103°51'43.832"W	2.98	
12658.00	88.200	359.300	9240.85	3612.54	3612.51	15.33	645704.33	444670.26	32°13'17.895"N	103°51'43.836"W	1.37	
12753.00	89.900	359.400	9242.42	3707.52	3707.49	14.25	645703.25	444765.24	32°13'18.835"N	103°51'43.844"W	1.79	
12848.00	89.300	358.800	9243.09	3802.50	3802.47	12.76	645701.76	444860.21	32°13'19.775"N	103°51'43.857"W	0.89	
12943.00	89.500	0.400	9244.08	3897.48	3897.46	12.10	645701.10	444955.20	32°13'20.715"N	103°51'43.859"W	1.70	
13040.00	90.500	359.800	9244.08	3994.48	3994.46	12.27	645701.27	445052.19	32°13'21.675"N	103°51'43.852"W	1.20	
13135.00	91.500	1.900	9242.42	4089.45	4089.43	13.68	645702.67	445147.15	32°13'22.614"N	103°51'43.831"W	2.45	
13229.00	89.200	2.500	9241.85	4183.39	4183.35	17.28	645706.28	445241.07	32°13'23.544"N	103°51'43.784"W	2.53	
13323.00	89.200	2.100	9243.16	4277.32	4277.27	21.06	645710.05	445334.97	32°13'24.473"N	103°51'43.736"W	0.43	
13418.00	88.900	1.100	9244.74	4372.27	4372.22	23.71	645712.71	445429.92	32°13'25.412"N	103°51'43.700"W	1.10	
13513.00	89.900	0.700	9245.73	4467.26	4467.20	25.20	645714.20	445524.89	32°13'26.352"N	103°51'43.678"W	1.13	
13608.00	88.800	1.100	9246.81	4562.25	4562.18	26.69	645715.69	445619.87	32°13'27.292"N	103°51'43.656"W	1.23	
13703.00	89.600	0.000	9248.14	4657.23	4657.16	27.60	645716.60	445714.84	32°13'28.232"N	103°51'43.640"W	1.43	
13798.00	89.700	359.500	9248.72	4752.23	4752.16	27.19	645716.19	445809.83	32°13'29.172"N	103°51'43.640"W	0.54	
13893.00	89.100	0.400	9249.71	4847.22	4847.15	27.11	645716.10	445904.82	32°13'30.112"N	103°51'43.636"W	1.14	
13988.00	87.500	359.800	9252.53	4942.17	4942.11	27.27	645716.27	445999.77	32°13'31.051"N	103°51'43.629"W	1.80	
14083.00	87.000	0.500	9257.09	5037.06	5037.00	27.52	645716.52	446094.65	32°13'31.990"N	103°51'43.622"W	0.90	
14179.00	88.200	0.100	9261.11	5132.98	5132.91	28.02	645717.02	446190.56	32°13'32.939"N	103°51'43.611"W	1.32	
14273.00	89.800	0.100	9262.75	5226.96	5226.89	28.19	645717.19	446284.53	32°13'33.869"N	103°51'43.604"W	1.70	
14368.00	89.600	359.600	9263.24	5321.96	5321.89	27.94	645716.94	446379.53	32°13'34.809"N	103°51'43.602"W	0.57	
14463.00	89.500	359.400	9263.99	5416.95	5416.88	27.11	645716.11	446474.51	32°13'35.750"N	103°51'43.607"W	0.24	
14558.00	91.200	0.200	9263.41	5511.94	5511.88	26.78	645715.78	446569.50	32°13'36.690"N	103°51'43.606"W	1.98	
14653.00	90.600	359.600	9261.92	5606.92	5606.86	26.61	645715.61	446664.48	32°13'37.629"N	103°51'43.603"W	0.89	



Actual Wellpath Report

No.1H AWP

Page 5 of 5



REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.1H SHL
Area	Eddy County, NM	Well	No.1H
Field	Poker Lake Unit	Wellbore	No.1H AWB
Facility	PLU Big Sinks 15-24-30 USA No.1H		

WELLPATH DATA (154 stations)												
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
14748.00	89.300	359.000	9262.00	5701.91	5701.85	25.45	645714.45	446759.46	32°13'38.569"N	103°51'43.612"W	1.51	
14844.00	88.900	359.400	9263.51	5797.88	5797.83	24.11	645713.11	446855.44	32°13'39.519"N	103°51'43.623"W	0.59	
14939.00	92.200	0.400	9262.60	5892.86	5892.81	23.95	645712.94	446950.41	32°13'40.459"N	103°51'43.620"W	3.63	
15034.00	92.400	359.900	9258.78	5987.79	5987.74	24.19	645713.19	447045.33	32°13'41.398"N	103°51'43.612"W	0.57	
15129.00	92.400	359.800	9254.81	6082.70	6082.65	23.95	645712.94	447140.24	32°13'42.338"N	103°51'43.610"W	0.11	
15224.00	91.200	359.800	9251.82	6177.65	6177.60	23.61	645712.61	447235.18	32°13'43.277"N	103°51'43.609"W	1.26	
15319.00	91.200	359.300	9249.83	6272.62	6272.58	22.87	645711.87	447330.15	32°13'44.217"N	103°51'43.613"W	0.53	
15414.00	90.100	1.100	9248.76	6367.61	6367.57	23.20	645712.20	447425.13	32°13'45.157"N	103°51'43.604"W	2.22	
15510.00	89.800	0.600	9248.84	6463.60	6463.56	24.62	645713.62	447521.11	32°13'46.107"N	103°51'43.583"W	0.61	
15605.00	90.300	0.500	9248.76	6558.60	6558.55	25.54	645714.53	447616.10	32°13'47.047"N	103°51'43.567"W	0.54	
15700.00	90.500	0.200	9248.09	6653.60	6653.55	26.12	645715.11	447711.09	32°13'47.987"N	103°51'43.556"W	0.38	
15795.00	90.200	359.700	9247.51	6748.60	6748.55	26.03	645715.03	447806.08	32°13'48.927"N	103°51'43.552"W	0.61	
15890.00	89.900	359.400	9247.43	6843.59	6843.54	25.29	645714.29	447901.07	32°13'49.867"N	103°51'43.555"W	0.45	
15985.00	90.400	358.800	9247.18	6938.57	6938.53	23.79	645712.79	447996.05	32°13'50.807"N	103°51'43.568"W	0.82	
16080.00	89.600	0.300	9247.18	7033.56	7033.52	23.05	645712.05	448091.04	32°13'51.747"N	103°51'43.572"W	1.79	
16175.00	90.300	0.400	9247.26	7128.56	7128.52	23.63	645712.63	448186.03	32°13'52.687"N	103°51'43.560"W	0.74	
16270.00	91.200	359.600	9246.02	7223.55	7223.51	23.63	645712.63	448281.02	32°13'53.627"N	103°51'43.555"W	1.27	
16347.00	90.700	359.000	9244.74	7300.53	7300.49	22.69	645711.69	448357.99	32°13'54.389"N	103°51'43.562"W	1.01	
16400.00	90.400	358.600	9244.23	7353.51	7353.48	21.58	645710.58	448410.98	32°13'54.913"N	103°51'43.573"W	0.94	Proj to Bit

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No.1H PBHL (Rev-3)		9260.00	7330.50	26.80	645715.80	448388.00	32°13'54.685"N	103°51'43.513"W	point
PLU BS 15-24-30 USA No.1H PBHL		9260.00	4724.53	105.33	645794.32	445782.20	32°13'28.895"N	103°51'42.732"W	point
No.1H PBHL (Rev-2)		9265.00	6224.15	138.75	645827.74	447281.73	32°13'43.733"N	103°51'42.266"W	point

WELLPATH COMPOSITION - Ref Wellbore: No.1H AWB Ref Wellpath: No.1H AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	690.50	Generic gyro - northseeking (Standard)	Gyro	No.1H AWB
690.50	16347.00	NaviTrak (Standard)	BHI MWD NaviTrak <801-XXXX>	No.1H AWB
16347.00	16400.00	Blind Drilling (std)	Projection to bit	No.1H AWB