

30-015-41299



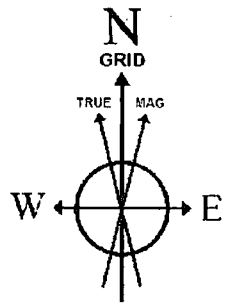
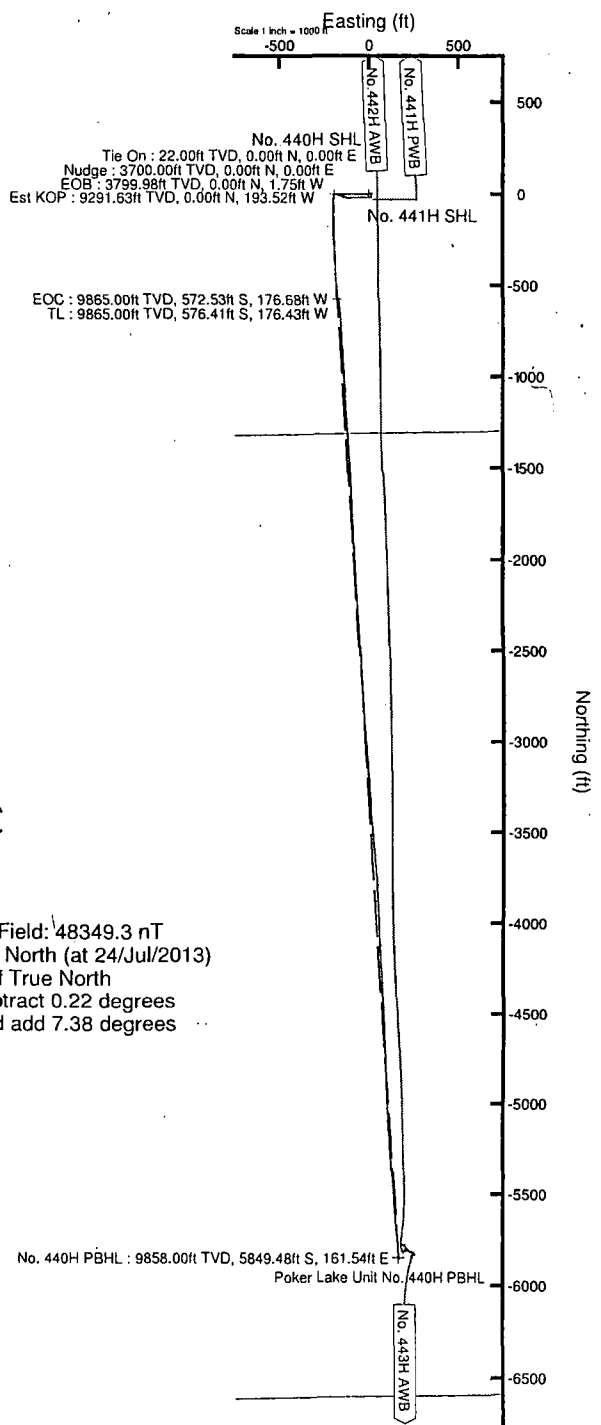
BOPCO, L.P.

Location: Eddy County, NM Slot: No. 440H SHL
 Field: Poker Lake Unit Well: No. 440H
 Facility: Poker Lake Unit No. 440H and No. 441H Wellbore: No. 440H PWB

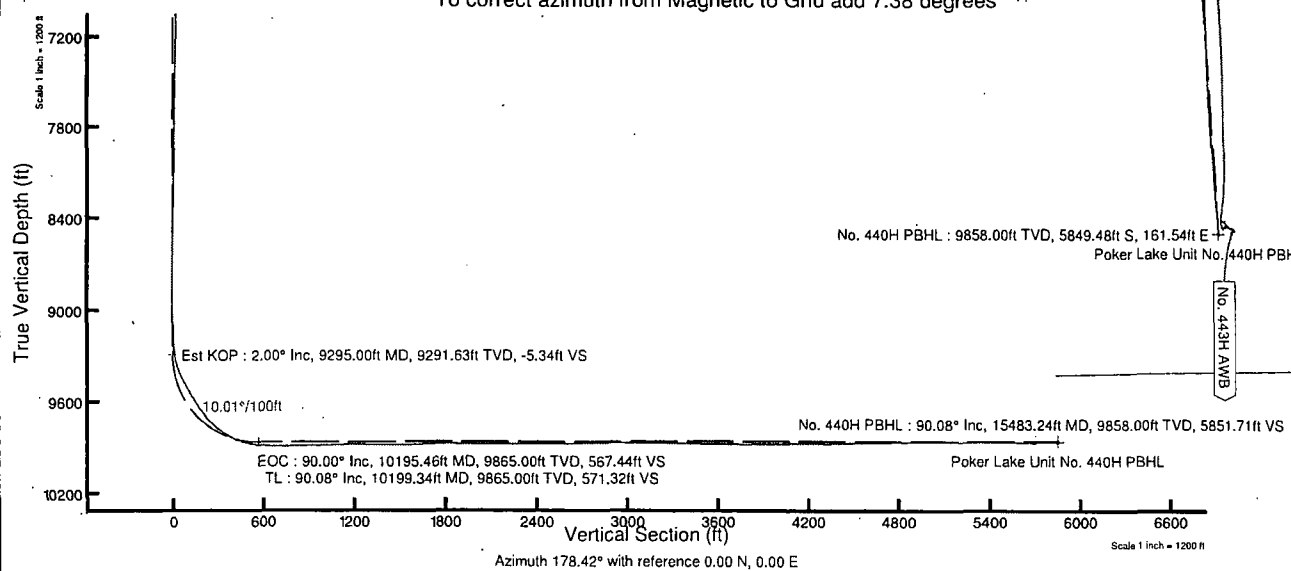


Well Profile Data							
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	VS (ft)
Tie On	22.00	0.000	270.000	22.00	0.00	0.00	0.00
Nudge	3700.00	0.000	270.000	3700.00	0.00	0.00	0.00
EOB	3800.00	2.000	270.000	3799.98	0.00	-1.75	-0.05
Est KOP	9295.00	2.000	270.000	9291.63	0.00	-193.52	-5.34
EOC	10195.46	90.000	176.316	9865.00	-572.53	-176.68	567.44
TL	10199.34	90.076	176.333	9865.00	-576.41	-178.43	571.32
No. 440H PBHL	15483.24	90.076	176.333	9858.00	-5849.48	161.54	5851.71

Plot reference wellbore is Rev-E.0
 True vertical depths are referenced to Rig on No. 440H SHL (KB)
 Measured depths are referenced to Rig on No. 440H SHL (KB)
 Rig on No. 440H SHL (KB) to Mean Sea Level 3179 feet
 Mean Sea Level to Mud line (At Slot No. 440H SHL): 0 feet
 Coordinates are in feet referenced to Slot
 Grid System: NAD83 / T.M. New Mexico SP, Eastern Zone (2001), US feet
 North Reference: Grid north
 Scale: True distance
 Depths are in feet
 Created by: gblipol on 17/Oct/2013



BGGM (1945.0 to 2015.0) Dip: 60.05° Field: 48349.3 nT
 Magnetic North is 7.60 degrees East of True North (at 24/Jul/2013)
 Grid North is 0.22 degrees East of True North
 To correct azimuth from True to Grid subtract 0.22 degrees
 To correct azimuth from Magnetic to Grid add 7.38 degrees





Actual Wellpath Report

No. 440H AWP

Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 440H SHL
Area	Eddy County, NM	Well	No. 440H
Field	Poker Lake Unit	Wellbore	No. 440H AWB
Facility	Poker Lake Unit No. 440H and No. 441H		

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 4.0.1
North Reference	Grid	User	Gentbry
Scale	0.999928	Report Generated	12/27/2013 at 2:52:41 PM
Convergence at slot	0.22° East	Database/Source file	MidlandDB/No. 440H_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	627966.57	441728.55	32°12'49.506"N	103°55'10.451"W
Facility Reference Pt			627966.57	441728.55	32°12'49.506"N	103°55'10.451"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. 440H SHL (KB) to Facility Vertical Datum	3179.00ft
Horizontal Reference Pt	Slot	Rig on No. 440H SHL (KB) to Mean Sea Level	3179.00ft
Vertical Reference Pt	Rig on No. 440H SHL (KB)	Rig on No. 440H SHL (KB) to Mud Line at Slot (No. 440H SHL)	3179.00ft
MD Reference Pt	Rig on No. 440H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	178.42°



Actual Wellpath Report

No. 440H AWP

Page 2 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 440H SHL
Area	Eddy County, NM	Well	No. 440H
Field	Poker Lake Unit	Wellbore	No. 440H AWB
Facility	Poker Lake Unit No. 440H and No. 441H		

WELLPATH DATA (169 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	116.050	0.00	0.00	0.00	0.00	627966.57	441728.55	32°12'49.506"N	103°55'10.451"W	0.00	
22.00	0.000	116.050	22.00	0.00	0.00	0.00	627966.57	441728.55	32°12'49.506"N	103°55'10.451"W	0.00	
100.00	0.310	116.050	100.00	0.10	-0.09	0.19	627966.76	441728.46	32°12'49.505"N	103°55'10.449"W	0.40	
200.00	0.310	115.640	200.00	0.35	-0.33	0.68	627967.25	441728.22	32°12'49.503"N	103°55'10.443"W	0.00	
300.00	0.420	122.630	300.00	0.68	-0.64	1.23	627967.80	441727.91	32°12'49.500"N	103°55'10.437"W	0.12	
400.00	0.560	114.090	399.99	1.09	-1.04	1.98	627968.55	441727.51	32°12'49.496"N	103°55'10.428"W	0.16	
500.00	1.230	106.840	499.98	1.65	-1.55	3.46	627970.03	441727.00	32°12'49.491"N	103°55'10.411"W	0.68	
551.00	1.170	101.530	550.97	1.94	-1.81	4.49	627971.06	441726.74	32°12'49.488"N	103°55'10.399"W	0.25	
608.00	1.100	77.800	607.96	1.97	-1.81	5.60	627972.17	441726.74	32°12'49.488"N	103°55'10.386"W	0.83	
702.00	1.200	74.600	701.94	1.57	-1.36	7.43	627974.00	441727.19	32°12'49.493"N	103°55'10.364"W	0.13	
793.00	1.300	86.600	792.92	1.31	-1.05	9.38	627975.95	441727.50	32°12'49.496"N	103°55'10.342"W	0.31	
888.00	1.300	88.100	887.89	1.27	-0.95	11.53	627978.10	441727.60	32°12'49.497"N	103°55'10.317"W	0.04	
982.00	1.400	69.300	981.87	0.88	-0.51	13.67	627980.24	441728.04	32°12'49.501"N	103°55'10.292"W	0.48	
1077.00	0.700	57.200	1076.85	0.20	0.22	15.24	627981.81	441728.77	32°12'49.508"N	103°55'10.273"W	0.77	
1172.00	0.700	48.300	1171.84	-0.47	0.92	16.16	627982.73	441729.47	32°12'49.515"N	103°55'10.263"W	0.11	
1267.00	1.000	32.000	1266.83	-1.54	2.01	17.04	627983.60	441730.56	32°12'49.526"N	103°55'10.253"W	0.40	
1361.00	0.700	27.600	1360.82	-2.72	3.21	17.74	627984.31	441731.76	32°12'49.537"N	103°55'10.244"W	0.33	
1455.00	0.600	20.200	1454.82	-3.68	4.18	18.17	627984.74	441732.73	32°12'49.547"N	103°55'10.239"W	0.14	
1550.00	0.500	353.200	1549.81	-4.55	5.06	18.30	627984.86	441733.61	32°12'49.556"N	103°55'10.238"W	0.29	
1644.00	0.500	33.100	1643.81	-5.30	5.81	18.47	627985.04	441734.36	32°12'49.563"N	103°55'10.236"W	0.36	
1739.00	0.100	268.600	1738.81	-5.64	6.16	18.61	627985.18	441734.71	32°12'49.567"N	103°55'10.234"W	0.59	
1834.00	0.200	246.400	1833.81	-5.58	6.09	18.38	627984.95	441734.64	32°12'49.566"N	103°55'10.237"W	0.12	
1929.00	0.300	256.600	1928.81	-5.47	5.96	17.99	627984.55	441734.51	32°12'49.565"N	103°55'10.241"W	0.11	
2025.00	0.400	251.200	2024.81	-5.32	5.80	17.42	627983.99	441734.35	32°12'49.563"N	103°55'10.248"W	0.11	
2120.00	0.300	210.200	2119.80	-5.01	5.48	16.98	627983.55	441734.03	32°12'49.560"N	103°55'10.253"W	0.28	
2214.00	0.400	234.400	2213.80	-4.61	5.07	16.59	627983.16	441733.62	32°12'49.556"N	103°55'10.258"W	0.19	
2310.00	0.800	208.200	2309.80	-3.84	4.29	16.01	627982.57	441732.84	32°12'49.548"N	103°55'10.264"W	0.49	
2405.00	1.100	215.000	2404.78	-2.54	2.96	15.17	627981.74	441731.51	32°12'49.535"N	103°55'10.274"W	0.34	
2499.00	1.400	219.700	2498.76	-0.95	1.33	13.92	627980.49	441729.88	32°12'49.519"N	103°55'10.289"W	0.34	
2594.00	1.500	219.000	2593.73	-0.87	-0.53	12.39	627978.96	441728.02	32°12'49.501"N	103°55'10.307"W	0.11	
2689.00	1.200	210.800	2688.70	2.65	-2.35	11.10	627977.67	441726.20	32°12'49.483"N	103°55'10.322"W	0.37	
2783.00	1.200	182.500	2782.68	4.47	-4.18	10.56	627977.12	441724.37	32°12'49.465"N	103°55'10.328"W	0.62	
2878.00	1.200	168.000	2877.66	6.44	-6.14	10.72	627977.29	441722.41	32°12'49.445"N	103°55'10.326"W	0.32	
2973.00	1.300	159.900	2972.64	8.44	-8.13	11.30	627977.86	441720.42	32°12'49.425"N	103°55'10.320"W	0.21	
3068.00	1.600	158.500	3067.61	10.71	-10.37	12.15	627978.72	441718.18	32°12'49.403"N	103°55'10.310"W	0.32	
3163.00	2.000	159.600	3162.56	13.52	-13.16	13.22	627979.79	441715.39	32°12'49.376"N	103°55'10.298"W	0.42	
3258.00	1.400	154.600	3257.52	16.15	-15.76	14.29	627980.86	441712.79	32°12'49.350"N	103°55'10.285"W	0.65	
3353.00	0.500	154.000	3352.51	17.59	-17.18	14.97	627981.54	441711.37	32°12'49.336"N	103°55'10.277"W	0.95	
3441.00	0.030	182.400	3440.51	17.96	-17.55	15.14	627981.71	441711.00	32°12'49.332"N	103°55'10.275"W	0.54	
3534.00	0.200	113.700	3533.51	18.06	-17.64	15.29	627981.86	441710.91	32°12'49.331"N	103°55'10.274"W	0.21	
3628.00	1.000	272.400	3627.50	18.07	-17.67	14.62	627981.19	441710.88	32°12'49.331"N	103°55'10.282"W	1.26	
3724.00	2.500	273.200	3723.45	17.84	-17.52	11.69	627978.26	441711.03	32°12'49.332"N	103°55'10.316"W	1.56	
3820.00	2.600	274.400	3819.36	17.44	-17.24	7.43	627974.00	441711.31	32°12'49.335"N	103°55'10.365"W	0.12	
3915.00	2.500	268.900	3914.27	17.19	-17.11	3.21	627969.78	441711.44	32°12'49.337"N	103°55'10.414"W	0.28	
4009.00	2.400	265.800	4008.18	17.27	-17.30	-0.80	627965.77	441711.26	32°12'49.335"N	103°55'10.461"W	0.18	



Actual Wellpath Report

No. 440H AWP

Page 3 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 440H SHL
Area	Eddy County, NM	Well	No. 440H
Field	Poker Lake Unit	Wellbore	No. 440H AWP
Facility	Poker Lake Unit No. 440H and No. 441H		

WELLPATH DATA (169 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
4105.00	2.500	268.500	4104.09	17.36	-17.50	-4.90	627961.67	441711.05	32°12'49.333"N	103°55'10.509"W	0.16	
4200.00	2.500	266.100	4199.00	17.44	-17.69	-9.04	627957.53	441710.86	32°12'49.332"N	103°55'10.557"W	0.11	
4295.00	2.600	269.500	4293.91	17.48	-17.85	-13.26	627953.31	441710.70	32°12'49.330"N	103°55'10.606"W	0.19	
4390.00	2.500	267.300	4388.81	17.48	-17.97	-17.49	627949.08	441710.58	32°12'49.329"N	103°55'10.655"W	0.15	
4484.00	2.500	268.200	4482.72	17.53	-18.13	-21.58	627944.99	441710.42	32°12'49.328"N	103°55'10.703"W	0.04	
4579.00	2.500	269.600	4577.63	17.49	-18.21	-25.73	627940.85	441710.34	32°12'49.327"N	103°55'10.751"W	0.06	
4674.00	2.500	266.800	4672.54	17.51	-18.34	-29.87	627936.71	441710.21	32°12'49.326"N	103°55'10.799"W	0.13	
4769.00	2.500	271.300	4767.45	17.46	-18.41	-34.01	627932.57	441710.14	32°12'49.325"N	103°55'10.848"W	0.21	
4864.00	2.300	270.500	4862.37	17.29	-18.34	-37.98	627928.59	441710.21	32°12'49.326"N	103°55'10.894"W	0.21	
4958.00	2.300	267.700	4956.29	17.24	-18.40	-41.76	627924.82	441710.15	32°12'49.326"N	103°55'10.938"W	0.12	
5053.00	2.100	271.200	5051.22	17.18	-18.44	-45.40	627921.17	441710.11	32°12'49.326"N	103°55'10.980"W	0.25	
5148.00	2.100	264.900	5146.16	17.21	-18.56	-48.87	627917.70	441709.99	32°12'49.325"N	103°55'11.021"W	0.24	
5243.00	2.200	265.900	5241.09	17.39	-18.85	-52.43	627914.15	441709.70	32°12'49.322"N	103°55'11.062"W	0.11	
5337.00	2.200	264.500	5335.02	17.60	-19.15	-56.02	627910.55	441709.40	32°12'49.319"N	103°55'11.104"W	0.06	
5431.00	2.400	267.600	5428.95	17.75	-19.40	-59.78	627906.79	441709.15	32°12'49.317"N	103°55'11.148"W	0.25	
5526.00	2.700	269.600	5523.85	17.73	-19.50	-64.01	627902.57	441709.05	32°12'49.316"N	103°55'11.197"W	0.33	
5620.00	2.800	270.800	5617.75	17.59	-19.49	-68.52	627898.06	441709.06	32°12'49.316"N	103°55'11.249"W	0.12	
5715.00	2.700	270.200	5712.64	17.42	-19.45	-73.08	627893.50	441709.10	32°12'49.317"N	103°55'11.302"W	0.11	
5809.00	2.600	270.900	5806.54	17.26	-19.41	-77.42	627889.15	441709.15	32°12'49.317"N	103°55'11.353"W	0.11	
5999.00	2.000	265.600	5996.38	17.24	-19.59	-85.04	627881.54	441708.96	32°12'49.316"N	103°55'11.442"W	0.33	
6189.00	2.100	266.400	6186.26	17.52	-20.07	-91.82	627874.76	441708.49	32°12'49.311"N	103°55'11.520"W	0.05	
6379.00	2.000	266.300	6376.14	17.77	-20.50	-98.60	627867.98	441708.05	32°12'49.307"N	103°55'11.599"W	0.05	
6569.00	1.900	256.900	6566.03	18.52	-21.43	-104.98	627861.60	441707.13	32°12'49.298"N	103°55'11.674"W	0.18	
6760.00	2.000	273.300	6756.92	18.87	-21.95	-111.39	627855.19	441706.60	32°12'49.293"N	103°55'11.748"W	0.30	
6950.00	2.100	269.500	6946.80	18.52	-21.79	-118.18	627848.40	441706.76	32°12'49.295"N	103°55'11.827"W	0.09	
7140.00	2.700	284.200	7136.63	17.24	-20.72	-126.00	627840.58	441707.83	32°12'49.306"N	103°55'11.918"W	0.45	
7330.00	2.800	295.200	7326.42	13.93	-17.65	-134.54	627832.04	441710.90	32°12'49.337"N	103°55'12.018"W	0.28	
7519.00	2.300	302.900	7515.23	9.70	-13.62	-141.90	627824.68	441714.93	32°12'49.377"N	103°55'12.103"W	0.32	
7708.00	1.500	275.800	7704.13	7.24	-11.31	-147.54	627819.04	441717.24	32°12'49.400"N	103°55'12.169"W	0.63	
7898.00	2.900	286.900	7893.98	5.39	-9.67	-154.62	627811.97	441718.88	32°12'49.417"N	103°55'12.251"W	0.77	
8088.00	3.300	286.900	8083.70	2.14	-6.68	-164.45	627802.14	441721.87	32°12'49.447"N	103°55'12.365"W	0.21	
8278.00	2.000	294.800	8273.50	-1.07	-3.70	-172.69	627793.89	441724.85	32°12'49.476"N	103°55'12.461"W	0.71	
8468.00	1.600	289.100	8463.40	-3.48	-1.44	-178.21	627788.38	441727.11	32°12'49.499"N	103°55'12.525"W	0.23	
8656.00	0.100	168.000	8651.38	-4.25	-0.74	-180.65	627785.93	441727.81	32°12'49.506"N	103°55'12.554"W	0.88	
8846.00	1.900	279.900	8841.35	-4.71	-0.36	-183.72	627782.86	441728.19	32°12'49.510"N	103°55'12.589"W	1.02	
9036.00	2.200	238.000	9031.23	-3.49	-1.75	-189.92	627776.67	441726.80	32°12'49.496"N	103°55'12.661"W	0.79	
9181.00	2.600	229.400	9176.11	-0.01	-5.37	-194.77	627771.81	441723.18	32°12'49.461"N	103°55'12.718"W	0.37	
9258.00	4.200	177.100	9252.98	3.91	-9.32	-195.96	627770.63	441719.23	32°12'49.422"N	103°55'12.732"W	4.31	
9289.00	7.700	183.000	9283.81	7.11	-12.53	-196.01	627770.58	441716.02	32°12'49.390"N	103°55'12.733"W	11.45	
9321.00	11.400	183.600	9315.36	12.40	-17.83	-196.32	627770.26	441710.72	32°12'49.337"N	103°55'12.737"W	11.57	
9353.00	14.800	184.100	9346.53	19.62	-25.06	-196.81	627769.77	441703.49	32°12'49.266"N	103°55'12.743"W	10.63	
9384.00	18.400	178.600	9376.23	28.46	-33.91	-196.97	627769.61	441694.64	32°12'49.178"N	103°55'12.745"W	12.66	
9416.00	23.200	181.100	9406.14	39.81	-45.27	-196.97	627769.61	441683.29	32°12'49.066"N	103°55'12.745"W	15.25	
9448.00	26.400	181.200	9435.18	53.22	-58.68	-197.24	627769.34	441669.87	32°12'48.933"N	103°55'12.749"W	10.00	
9479.00	28.500	180.100	9462.69	67.49	-72.97	-197.40	627769.19	441655.58	32°12'48.792"N	103°55'12.752"W	6.97	



Actual Wellpath Report

No. 440H AWP

Page 4 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 440H SHL
Area	Eddy County, NM	Well	No. 440H
Field	Poker Lake Unit	Wellbore	No. 440H AWB
Facility	Poker Lake Unit No. 440H and No. 441H		

WELLPATH DATA (169 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
9511.00	31.000	181.300	9490.47	83.36	-88.85	-197.60	627768.99	441639.71	32°12'48.635"N	103°55'12.755"W	8.03	
9543.00	31.000	182.400	9517.90	99.81	-105.32	-198.13	627768.45	441623.24	32°12'48.472"N	103°55'12.762"W	1.77	
9574.00	30.800	181.500	9544.50	115.70	-121.23	-198.67	627767.91	441607.33	32°12'48.314"N	103°55'12.769"W	1.62	
9606.00	31.500	179.800	9571.89	132.24	-137.78	-198.86	627767.73	441590.78	32°12'48.151"N	103°55'12.772"W	3.51	
9638.00	32.400	179.100	9599.04	149.17	-154.71	-198.70	627767.89	441573.85	32°12'47.983"N	103°55'12.770"W	3.04	
9669.00	33.400	179.800	9625.07	166.00	-171.55	-198.53	627768.05	441557.01	32°12'47.816"N	103°55'12.769"W	3.45	
9701.00	35.200	178.700	9651.50	184.03	-189.58	-198.29	627768.29	441538.98	32°12'47.638"N	103°55'12.767"W	5.95	
9733.00	37.900	177.200	9677.21	203.09	-208.62	-197.61	627768.98	441519.94	32°12'47.449"N	103°55'12.760"W	8.89	
9765.00	40.400	176.500	9702.02	223.28	-228.79	-196.49	627770.09	441499.78	32°12'47.250"N	103°55'12.748"W	7.93	
9796.00	43.700	176.200	9725.04	244.03	-249.51	-195.17	627771.42	441479.06	32°12'47.045"N	103°55'12.734"W	10.66	
9828.00	46.700	177.300	9747.58	266.72	-272.18	-193.89	627772.70	441456.39	32°12'46.820"N	103°55'12.720"W	9.69	
9859.00	50.800	176.700	9768.02	290.01	-295.45	-192.66	627773.92	441433.13	32°12'46.590"N	103°55'12.707"W	13.31	
9891.00	54.600	176.400	9787.41	315.45	-320.85	-191.13	627775.45	441407.72	32°12'46.339"N	103°55'12.690"W	11.90	
9923.00	57.300	176.600	9805.32	341.95	-347.31	-189.51	627777.07	441381.26	32°12'46.077"N	103°55'12.672"W	8.45	
9954.00	60.900	176.300	9821.24	368.53	-373.86	-187.86	627778.72	441354.72	32°12'45.814"N	103°55'12.654"W	11.64	
9986.00	64.900	176.400	9835.82	396.99	-402.28	-186.05	627780.53	441326.30	32°12'45.533"N	103°55'12.634"W	12.50	
10017.00	66.900	177.900	9848.47	425.28	-430.54	-184.65	627781.94	441298.04	32°12'45.253"N	103°55'12.619"W	7.82	
10049.00	71.100	175.800	9859.94	455.13	-460.36	-183.00	627783.58	441268.22	32°12'44.958"N	103°55'12.601"W	14.48	
10081.00	74.800	173.700	9869.32	485.66	-490.82	-180.20	627786.39	441237.77	32°12'44.656"N	103°55'12.570"W	13.15	
10113.00	78.700	173.500	9876.65	516.69	-521.77	-176.72	627789.86	441206.82	32°12'44.350"N	103°55'12.531"W	12.20	
10143.00	82.000	174.000	9881.68	546.16	-551.16	-173.50	627793.08	441177.43	32°12'44.059"N	103°55'12.495"W	11.12	
10175.00	85.200	173.400	9885.25	577.85	-582.77	-170.01	627796.57	441145.83	32°12'43.746"N	103°55'12.456"W	10.17	
10207.00	87.000	174.000	9887.43	609.67	-614.50	-166.51	627800.07	441114.10	32°12'43.432"N	103°55'12.416"W	5.93	
10238.00	87.500	174.500	9888.91	640.55	-645.31	-163.41	627803.17	441083.29	32°12'43.127"N	103°55'12.382"W	2.28	
10270.00	88.700	175.000	9889.97	672.46	-677.15	-160.48	627806.10	441051.45	32°12'42.812"N	103°55'12.349"W	4.06	
10302.00	90.300	175.900	9890.25	704.42	-709.05	-157.95	627808.64	441019.55	32°12'42.496"N	103°55'12.321"W	5.74	
10397.00	90.900	176.300	9889.26	799.34	-803.82	-151.48	627815.10	440924.79	32°12'41.558"N	103°55'12.250"W	0.76	
10492.00	91.000	176.200	9887.68	894.25	-898.61	-145.27	627821.31	440830.01	32°12'40.620"N	103°55'12.182"W	0.15	
10587.00	91.600	176.300	9885.53	989.16	-993.38	-139.06	627827.52	440735.24	32°12'39.682"N	103°55'12.114"W	0.64	
10682.00	91.500	176.000	9882.96	1084.05	-1088.13	-132.68	627833.90	440640.50	32°12'38.744"N	103°55'12.044"W	0.33	
10777.00	90.500	176.800	9881.30	1178.98	-1182.93	-126.72	627839.86	440545.71	32°12'37.806"N	103°55'11.979"W	1.35	
10872.00	89.100	175.300	9881.63	1273.89	-1277.70	-120.18	627846.40	440450.95	32°12'36.868"N	103°55'11.907"W	2.16	
10967.00	89.300	176.200	9882.96	1368.78	-1372.42	-113.14	627853.44	440356.23	32°12'35.930"N	103°55'11.829"W	0.97	
11062.00	89.800	176.600	9883.70	1463.71	-1467.23	-107.17	627859.41	440261.43	32°12'34.992"N	103°55'11.764"W	0.67	
11156.00	91.700	178.000	9882.47	1557.68	-1561.11	-102.74	627863.83	440167.55	32°12'34.062"N	103°55'11.717"W	2.51	
11251.00	91.700	177.500	9879.66	1652.63	-1656.00	-99.02	627867.56	440072.67	32°12'33.123"N	103°55'11.677"W	0.53	
11346.00	91.900	177.500	9876.67	1747.57	-1750.86	-94.87	627871.70	439977.82	32°12'32.184"N	103°55'11.633"W	0.21	
11440.00	89.500	176.700	9875.52	1841.54	-1844.73	-90.12	627876.46	439883.96	32°12'31.255"N	103°55'11.582"W	2.69	
11535.00	89.000	176.500	9876.77	1936.48	-1939.55	-84.49	627882.09	439789.14	32°12'30.317"N	103°55'11.521"W	0.57	
11630.00	89.400	176.200	9878.09	2031.41	-2034.35	-78.44	627888.14	439694.35	32°12'29.379"N	103°55'11.455"W	0.53	
11725.00	90.200	176.400	9878.43	2126.34	-2129.15	-72.31	627894.27	439599.56	32°12'28.440"N	103°55'11.388"W	0.87	
11819.00	90.100	176.400	9878.18	2220.28	-2222.96	-66.41	627900.17	439505.75	32°12'27.512"N	103°55'11.323"W	0.11	
11913.00	90.600	176.500	9877.60	2314.22	-2316.78	-60.58	627905.99	439411.94	32°12'26.583"N	103°55'11.260"W	0.54	
12008.00	90.500	176.900	9876.69	2409.18	-2411.62	-55.12	627911.46	439317.11	32°12'25.644"N	103°55'11.200"W	0.43	
12103.00	90.000	176.800	9876.28	2504.14	-2506.47	-49.90	627916.68	439222.26	32°12'24.706"N	103°55'11.144"W	0.54	



Actual Wellpath Report

No. 440H AWP

Page 5 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 440H SHL
Area	Eddy County, NM	Well	No. 440H
Field	Poker Lake Unit	Wellbore	No. 440H AWB
Facility	Poker Lake Unit No. 440H and No. 441H		

WELLPATH DATA (169 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
12198.00	89.500	176.300	9876.69	2599.09	-2601.30	-44.18	627922.39	439127.44	32°12'23.767"N	103°55'11.082"W	0.74	
12292.00	91.400	177.000	9875.95	2693.04	-2695.13	-38.69	627927.89	439033.62	32°12'22.838"N	103°55'11.022"W	2.15	
12386.00	91.500	177.000	9873.58	2786.98	-2788.97	-33.77	627932.80	438939.78	32°12'21.910"N	103°55'10.969"W	0.11	
12481.00	90.700	175.400	9871.75	2881.88	-2883.74	-27.47	627939.10	438845.02	32°12'20.972"N	103°55'10.900"W	1.88	
12575.00	89.600	174.000	9871.51	2975.68	-2977.34	-18.79	627947.78	438751.43	32°12'20.045"N	103°55'10.803"W	1.89	
12670.00	91.100	175.500	9870.93	3070.48	-3071.93	-10.10	627956.47	438656.85	32°12'19.109"N	103°55'10.706"W	2.23	
12764.00	88.800	175.700	9871.01	3164.36	-3165.65	-2.89	627963.68	438563.14	32°12'18.181"N	103°55'10.626"W	2.46	
12859.00	89.500	176.600	9872.42	3259.27	-3260.42	3.49	627970.06	438468.37	32°12'17.243"N	103°55'10.556"W	1.20	
12953.00	89.800	176.400	9872.99	3353.22	-3354.24	9.23	627975.80	438374.56	32°12'16.314"N	103°55'10.494"W	0.38	
13048.00	88.200	173.900	9874.65	3448.04	-3448.88	17.26	627983.83	438279.93	32°12'15.378"N	103°55'10.405"W	3.12	
13143.00	90.100	175.100	9876.06	3542.80	-3543.42	26.36	627992.93	438185.39	32°12'14.442"N	103°55'10.303"W	2.37	
13237.00	89.300	174.700	9876.55	3636.62	-3637.05	34.72	628001.28	438091.77	32°12'13.515"N	103°55'10.210"W	0.95	
13332.00	89.400	174.700	9877.63	3731.42	-3731.64	43.49	628010.06	437997.19	32°12'12.579"N	103°55'10.112"W	0.11	
13427.00	90.500	177.100	9877.71	3826.32	-3826.39	50.28	628016.85	437902.45	32°12'11.641"N	103°55'10.037"W	2.78	
13522.00	89.600	177.300	9877.63	3921.29	-3921.27	54.92	628021.49	437807.57	32°12'10.702"N	103°55'09.987"W	0.97	
13616.00	91.500	177.800	9876.73	4015.27	-4015.18	58.94	628025.51	437713.67	32°12'09.772"N	103°55'09.945"W	2.09	
13710.00	90.300	176.600	9875.25	4109.24	-4109.05	63.53	628030.10	437619.80	32°12'08.843"N	103°55'09.896"W	1.81	
13805.00	90.100	176.500	9874.92	4204.19	-4203.88	69.25	628035.81	437524.98	32°12'07.905"N	103°55'09.833"W	0.24	
13901.00	89.100	176.500	9875.59	4300.13	-4299.69	75.11	628041.67	437429.17	32°12'06.956"N	103°55'09.769"W	1.04	
13996.00	91.600	178.100	9875.01	4395.10	-4394.58	79.58	628046.15	437334.30	32°12'06.017"N	103°55'09.722"W	3.12	
14090.00	91.100	177.800	9872.79	4489.07	-4488.49	82.95	628049.51	437240.39	32°12'05.088"N	103°55'09.687"W	0.62	
14185.00	91.100	177.900	9870.97	4584.05	-4583.41	86.51	628053.07	437145.48	32°12'04.148"N	103°55'09.649"W	0.11	
14280.00	91.100	177.900	9869.15	4679.03	-4678.32	89.99	628056.55	437050.57	32°12'03.209"N	103°55'09.613"W	0.00	
14375.00	91.100	177.900	9867.32	4774.00	-4773.24	93.47	628060.03	436955.66	32°12'02.270"N	103°55'09.577"W	0.00	
14469.00	91.300	178.300	9865.35	4867.98	-4867.17	96.59	628063.15	436861.74	32°12'01.340"N	103°55'09.545"W	0.48	
14564.00	90.600	177.800	9863.78	4962.97	-4962.10	99.82	628066.38	436766.82	32°12'00.400"N	103°55'09.512"W	0.91	
14659.00	88.400	177.000	9864.61	5057.94	-5056.99	104.13	628070.69	436671.93	32°11'59.461"N	103°55'09.466"W	2.46	
14753.00	90.300	176.500	9865.67	5151.89	-5150.83	109.46	628076.02	436578.10	32°11'58.533"N	103°55'09.408"W	2.09	
14848.00	91.100	176.600	9864.51	5246.83	-5245.65	115.17	628081.73	436483.29	32°11'57.594"N	103°55'09.346"W	0.85	
14944.00	90.800	176.300	9862.92	5342.76	-5341.45	121.12	628087.68	436387.49	32°11'56.646"N	103°55'09.281"W	0.44	
15038.00	89.200	175.900	9862.92	5436.68	-5435.23	127.51	628094.07	436293.72	32°11'55.718"N	103°55'09.210"W	1.75	
15133.00	89.500	176.000	9864.00	5531.59	-5529.99	134.22	628100.78	436198.97	32°11'54.780"N	103°55'09.137"W	0.33	
15227.00	88.200	175.000	9865.89	5625.44	-5623.68	141.59	628108.15	436105.29	32°11'53.852"N	103°55'09.055"W	1.74	
15306.00	88.200	175.000	9868.37	5704.26	-5702.34	148.47	628115.03	436026.63	32°11'53.074"N	103°55'08.978"W	0.00	Proj to Bit



Actual Wellpath Report

No. 440H AWP

Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 440H SHL
Area	Eddy County, NM	Well	No. 440H
Field	Poker Lake Unit	Wellbore	No. 440H AWB
Facility	Poker Lake Unit No. 440H and No. 441H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Poker Lake Unit No. 440H PBHL		9858.00	6968.37	12.03	627978.60	448696.40	32°13'58.461"N	103°55'09.998"W	point

WELLPATH COMPOSITION - Ref Wellbore: No. 440H AWB Ref Wellpath: No. 440H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
22.00	551.00	Generic gyro - northseeking (Standard)	VES Gyros <100-551>	No. 440H AWB
551.00	15227.00	NaviTrak (Standard)	BHI MWD NaviTrak <608-XXXX>	No. 440H AWB
15227.00	15306.00	Blind Drilling (std)	Projection to bit	No. 440H AWB