

BOPCO, L.P.

Location: Eddy County, NM
Field: Poker Lake Unit
Facility: Poker Lake Unit No. 368H

Slot: No.368H SHL
Well: No.368H
Wellbore: No.368H PWB

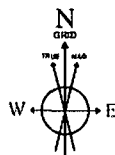


Well Profile Data

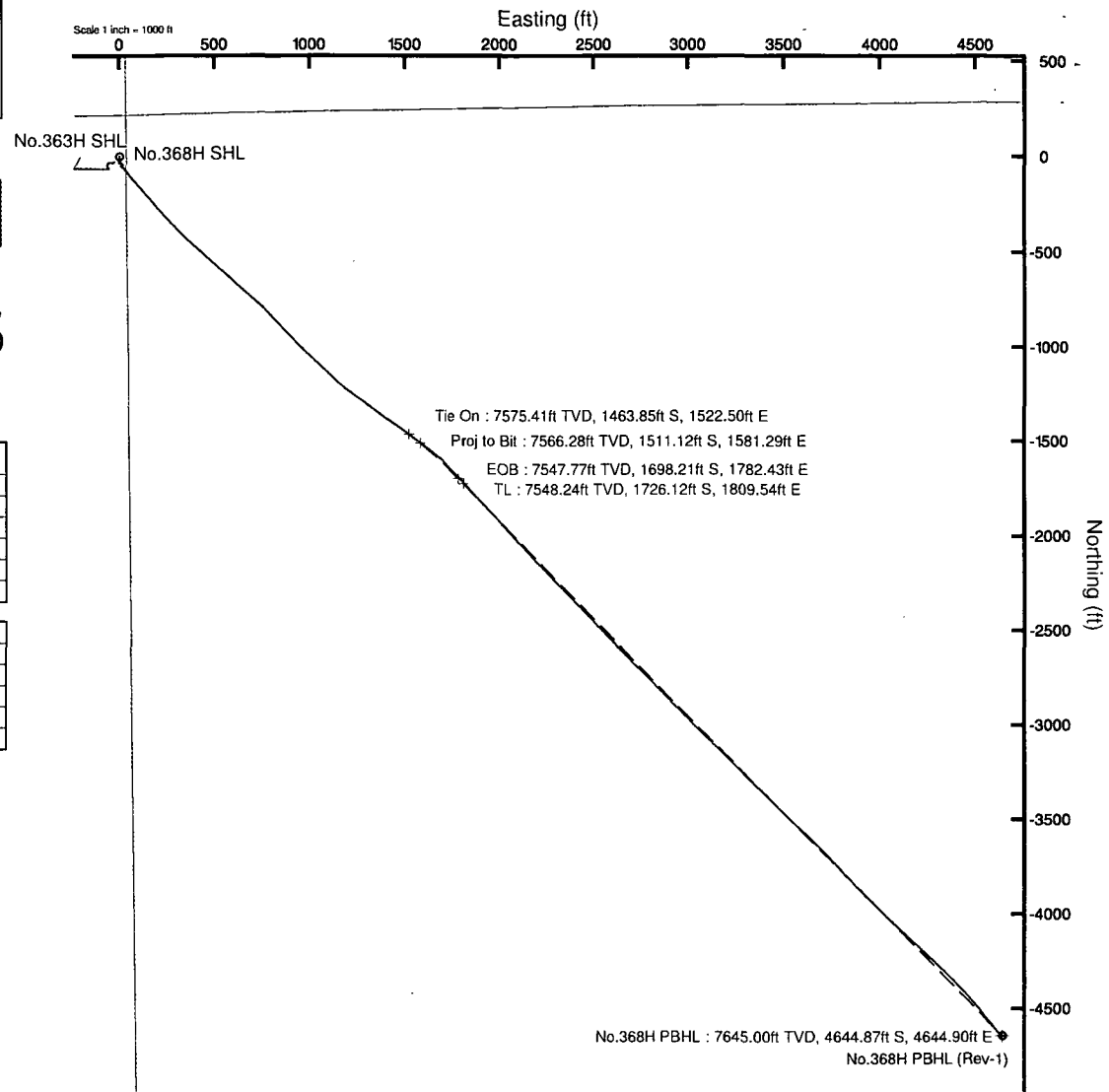
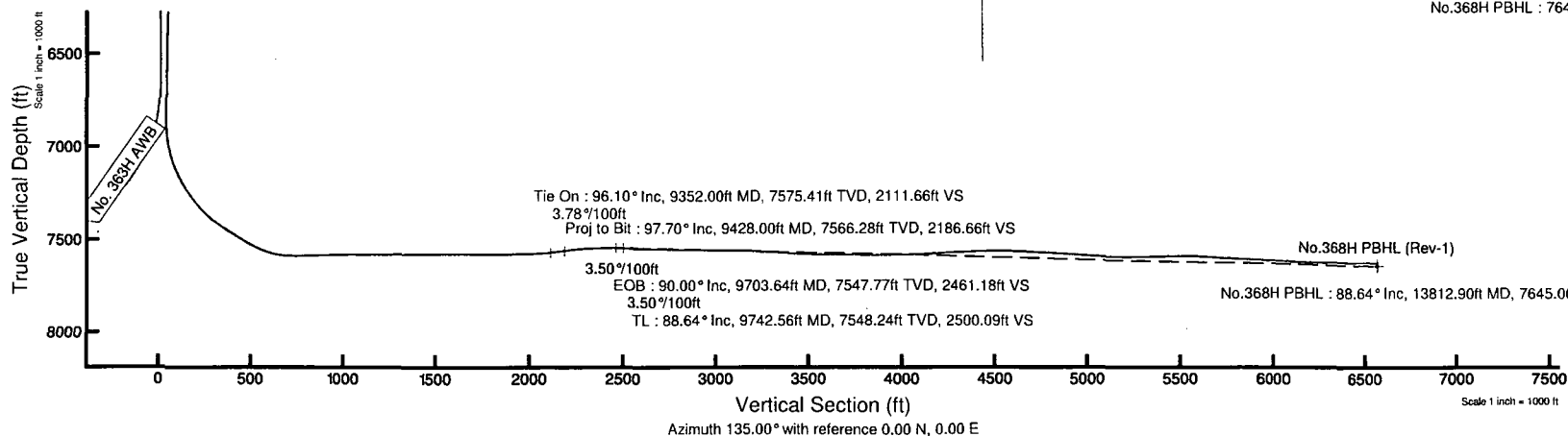
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	9352.00	96.100	127.600	7575.41	-1463.85	1522.50	0.00	2111.66
Proj to Bit	9428.00	97.700	130.000	7566.28	-1511.12	1581.29	3.78	2186.66
EOB	9703.64	90.000	135.830	7547.77	-1698.21	1782.43	3.50	2461.18
TL	9742.56	88.638	135.830	7548.24	-1726.12	1809.54	3.50	2500.09
No.368H PBHL	13812.90	88.638	135.830	7645.00	-4644.87	4644.90	0.00	6568.85

Plot reference wellpath is Rev-K.0

True vertical depths are referenced to Rig on No.368H SHL (KB)	Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No.368H SHL (KB)	North Reference: Grid north
Rig on No.368H SHL (KB) to Mean Sea Level: 3330 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: No.368H SHL): -3308 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: gentry on 02/20/2013



BGGM (1945.0 to 2014.0) Dip: 60.01° Field: 48368.4 nT
Magnetic North is 7.62 degrees East of True North (at 02/08/2013)
Grid North is 0.24 degrees East of True North
To correct azimuth from True to Grid subtract 0.24 degrees
To correct azimuth from Magnetic to Grid add 7.38 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.38 = 97.38



Rev-K.0



Actual Wellpath Report

No. 368 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.368H SHL
Area	Eddy County, NM	Well	No.368H
Field	Poker Lake Unit	Wellbore	No. 368 AWB
Facility	Poker Lake Unit No. 368H		

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	Harrkol
Scale	0.999932	Report Generated	3/1/2013 at 11:17:23 AM
Convergence at slot	0.24° East	Database/Source file	WA Midland/No._368_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	641124.53	429791.54	32°10'50.849"N	103°52'37.884"W
Facility Reference Pt			641124.53	429791.54	32°10'50.849"N	103°52'37.884"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.368H SHL (KB) to Facility Vertical Datum	22.00ft
Horizontal Reference Pt	Slot	Rig on No.368H SHL (KB) to Mean Sea Level	3330.00ft
Vertical Reference Pt	Rig on No.368H SHL (KB)	Rig on No.368H SHL (KB) to Mud Line at Slot (No.368H SHL)	22.00ft
MD Reference Pt	Rig on No.368H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	135.00°



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REFERENCE WELLPATH IDENTIFICATION			
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Field	Poker Lake Unit	Wellbore	No. 368 AWB
Facility	Poker Lake Unit No. 368H		

WELLPATH DATA (173 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	72.740	0.00	0.00	0.00	0.00	641124.53	429791.54	32°10'50.849"N	103°52'37.884"W	0.00	
100.00	0.540	72.740	100.00	0.22	0.14	0.45	641124.98	429791.68	32°10'50.851"N	103°52'37.878"W	0.54	
150.00	0.320	66.470	150.00	0.38	0.27	0.80	641125.33	429791.81	32°10'50.852"N	103°52'37.874"W	0.45	
200.00	0.260	26.480	200.00	0.40	0.42	0.98	641125.51	429791.96	32°10'50.853"N	103°52'37.872"W	0.41	
250.00	0.190	45.900	250.00	0.36	0.58	1.09	641125.62	429792.12	32°10'50.855"N	103°52'37.871"W	0.21	
300.00	0.210	28.730	300.00	0.34	0.72	1.20	641125.73	429792.26	32°10'50.856"N	103°52'37.870"W	0.13	
350.00	0.160	38.460	350.00	0.30	0.86	1.28	641125.81	429792.39	32°10'50.858"N	103°52'37.869"W	0.12	
400.00	0.150	36.050	400.00	0.28	0.96	1.36	641125.89	429792.50	32°10'50.859"N	103°52'37.868"W	0.02	
450.00	0.060	35.370	450.00	0.27	1.04	1.42	641125.95	429792.58	32°10'50.860"N	103°52'37.867"W	0.18	
500.00	0.210	189.060	500.00	0.32	0.97	1.42	641125.95	429792.51	32°10'50.859"N	103°52'37.867"W	0.53	
550.00	0.370	198.600	549.99	0.44	0.72	1.35	641125.88	429792.26	32°10'50.856"N	103°52'37.868"W	0.33	
600.00	0.330	195.980	599.99	0.59	0.43	1.26	641125.79	429791.97	32°10'50.854"N	103°52'37.869"W	0.09	
650.00	0.520	195.080	649.99	0.77	0.08	1.16	641125.69	429791.62	32°10'50.850"N	103°52'37.870"W	0.38	
700.00	0.540	194.580	699.99	1.00	-0.37	1.05	641125.57	429791.17	32°10'50.846"N	103°52'37.872"W	0.04	
750.00	0.660	188.490	749.99	1.29	-0.88	0.94	641125.47	429790.66	32°10'50.841"N	103°52'37.873"W	0.27	
800.00	0.750	179.890	799.98	1.70	-1.50	0.90	641125.43	429790.04	32°10'50.834"N	103°52'37.873"W	0.28	
828.00	0.880	180.210	827.98	1.98	-1.89	0.90	641125.43	429789.65	32°10'50.831"N	103°52'37.873"W	0.46	
902.00	1.100	189.500	901.97	2.79	-3.16	0.78	641125.31	429788.38	32°10'50.818"N	103°52'37.875"W	0.37	
994.00	1.000	192.200	993.95	3.74	-4.82	0.47	641125.00	429786.72	32°10'50.802"N	103°52'37.879"W	0.12	
1088.00	1.300	195.100	1087.94	4.71	-6.65	0.02	641124.55	429784.89	32°10'50.783"N	103°52'37.884"W	0.32	
1183.00	1.200	191.800	1182.91	5.80	-8.66	-0.47	641124.06	429782.88	32°10'50.764"N	103°52'37.890"W	0.13	
1278.00	1.100	187.900	1277.89	6.89	-10.54	-0.80	641123.73	429781.00	32°10'50.745"N	103°52'37.894"W	0.13	
1372.00	1.000	175.200	1371.88	8.06	-12.25	-0.85	641123.68	429779.29	32°10'50.728"N	103°52'37.894"W	0.27	
1466.00	1.100	164.500	1465.86	9.47	-13.94	-0.54	641123.99	429777.60	32°10'50.711"N	103°52'37.891"W	0.23	
1550.00	1.000	167.100	1549.85	10.80	-15.43	-0.16	641124.37	429776.11	32°10'50.697"N	103°52'37.886"W	0.13	
1642.00	1.000	166.900	1641.83	12.16	-17.00	0.20	641124.73	429774.55	32°10'50.681"N	103°52'37.882"W	0.00	
1734.00	0.700	167.300	1733.82	13.31	-18.33	0.50	641125.03	429773.22	32°10'50.668"N	103°52'37.879"W	0.33	
1826.00	0.500	234.700	1825.82	13.72	-19.11	0.30	641124.83	429772.44	32°10'50.660"N	103°52'37.881"W	0.75	
1918.00	0.800	201.500	1917.81	13.91	-19.94	-0.26	641124.27	429771.61	32°10'50.652"N	103°52'37.888"W	0.51	
2013.00	1.100	213.000	2012.80	14.36	-21.32	-1.00	641123.53	429770.22	32°10'50.638"N	103°52'37.896"W	0.37	



Actual Wellpath Report

No. 368 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.368H SHL
Area	Eddy County, NM	Well	No.368H
Field	Poker Lake Unit	Wellbore	No. 368 AWB
Facility	Poker Lake Unit No. 368H		

WELLPATH DATA (173 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
2107.00	1.800	183.100	2106.77	15.54	-23.55	-1.58	641122.95	429767.99	32°10'50.616"N	103°52'37.903"W	1.07	
2202.00	1.800	192.500	2201.72	17.34	-26.49	-1.98	641122.55	429765.05	32°10'50.587"N	103°52'37.908"W	0.31	
2296.00	1.000	177.200	2295.70	18.74	-28.76	-2.26	641122.27	429762.79	32°10'50.565"N	103°52'37.911"W	0.93	
2391.00	1.300	173.800	2390.68	20.19	-30.65	-2.10	641122.43	429760.89	32°10'50.546"N	103°52'37.910"W	0.32	
2485.00	1.100	148.700	2484.66	21.90	-32.49	-1.52	641123.01	429759.06	32°10'50.528"N	103°52'37.903"W	0.59	
2580.00	1.000	136.000	2579.64	23.61	-33.86	-0.47	641124.06	429757.68	32°10'50.514"N	103°52'37.891"W	0.27	
2673.00	0.700	100.000	2672.63	24.89	-34.54	0.65	641125.18	429757.00	32°10'50.507"N	103°52'37.878"W	0.64	
2768.00	0.700	103.900	2767.62	25.86	-34.78	1.79	641126.32	429756.76	32°10'50.505"N	103°52'37.865"W	0.05	
2863.00	0.600	26.900	2862.62	26.20	-34.48	2.58	641127.11	429757.06	32°10'50.508"N	103°52'37.855"W	0.86	
2958.00	0.500	348.100	2957.62	25.70	-33.63	2.72	641127.25	429757.91	32°10'50.516"N	103°52'37.854"W	0.40	
3051.00	0.200	328.000	3050.61	25.20	-33.10	2.55	641127.08	429758.45	32°10'50.522"N	103°52'37.856"W	0.34	
3145.00	0.300	120.000	3144.61	25.28	-33.08	2.67	641127.20	429758.46	32°10'50.522"N	103°52'37.854"W	0.52	
3240.00	1.100	120.300	3239.61	26.40	-33.66	3.68	641128.21	429757.88	32°10'50.516"N	103°52'37.843"W	0.84	
3335.00	1.200	75.100	3334.59	27.78	-33.87	5.43	641129.96	429757.67	32°10'50.514"N	103°52'37.822"W	0.94	
3430.00	1.400	119.000	3429.57	29.40	-34.18	7.40	641131.93	429757.37	32°10'50.511"N	103°52'37.799"W	1.04	
3524.00	2.100	140.800	3523.52	32.22	-36.07	9.49	641134.02	429755.48	32°10'50.492"N	103°52'37.775"W	1.02	
3618.00	1.600	132.000	3617.47	35.24	-38.28	11.56	641136.09	429753.26	32°10'50.470"N	103°52'37.751"W	0.61	
3712.00	0.700	139.200	3711.45	37.12	-39.59	12.91	641137.44	429751.95	32°10'50.457"N	103°52'37.735"W	0.97	
3806.00	0.600	140.200	3805.45	38.19	-40.41	13.60	641138.13	429751.14	32°10'50.449"N	103°52'37.728"W	0.11	
3994.00	0.600	154.700	3993.44	40.09	-42.05	14.65	641139.18	429749.49	32°10'50.433"N	103°52'37.715"W	0.08	
4184.00	0.400	139.900	4183.43	41.69	-43.46	15.50	641140.03	429748.09	32°10'50.419"N	103°52'37.706"W	0.12	
4374.00	0.600	133.500	4373.42	43.35	-44.65	16.65	641141.18	429746.89	32°10'50.407"N	103°52'37.692"W	0.11	
4562.00	0.600	161.000	4561.41	45.22	-46.26	17.69	641142.21	429745.28	32°10'50.391"N	103°52'37.680"W	0.15	
4748.00	0.500	148.700	4747.40	46.88	-47.87	18.42	641142.95	429743.67	32°10'50.375"N	103°52'37.672"W	0.08	
4934.00	0.700	177.300	4933.39	48.51	-49.70	18.90	641143.43	429741.84	32°10'50.357"N	103°52'37.666"W	0.19	
5122.00	0.400	121.400	5121.39	50.00	-51.19	19.51	641144.04	429740.35	32°10'50.342"N	103°52'37.659"W	0.31	
5310.00	0.200	191.900	5309.38	50.81	-51.85	20.01	641144.53	429739.69	32°10'50.335"N	103°52'37.654"W	0.20	
5499.00	0.100	175.700	5498.38	51.12	-52.34	19.95	641144.48	429739.20	32°10'50.331"N	103°52'37.654"W	0.06	
5687.00	0.200	151.800	5686.38	51.56	-52.79	20.12	641144.65	429738.75	32°10'50.326"N	103°52'37.652"W	0.06	
5875.00	0.200	176.700	5874.38	52.11	-53.41	20.29	641144.82	429738.13	32°10'50.320"N	103°52'37.650"W	0.05	



Actual Wellpath Report

No. 368 AWP

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**BAKER
HUGHES**

REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.368H SHL
Area	Eddy County, NM	Well	No.368H
Field	Poker Lake Unit	Wellbore	No. 368 AWB
Facility	Poker Lake Unit No. 368H		

WELLPATH DATA (173 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
6062.00	1.000	299.600	6061.37	50.79	-52.93	18.89	641143.42	429738.61	32°10'50.325"N	103°52'37.667"W	0.60	
6246.00	1.300	290.200	6245.34	47.34	-51.42	15.54	641140.07	429740.13	32°10'50.340"N	103°52'37.706"W	0.19	
6433.00	1.300	332.200	6432.29	43.39	-48.81	12.56	641137.09	429742.74	32°10'50.366"N	103°52'37.740"W	0.50	
6621.00	0.700	342.300	6620.26	40.33	-45.83	11.21	641135.74	429745.72	32°10'50.395"N	103°52'37.756"W	0.33	
6776.00	0.400	349.100	6775.26	39.04	-44.39	10.82	641135.35	429747.15	32°10'50.410"N	103°52'37.760"W	0.20	
6838.00	0.300	133.500	6837.26	39.03	-44.29	10.90	641135.43	429747.25	32°10'50.411"N	103°52'37.759"W	1.08	
6870.00	1.100	129.300	6869.25	39.42	-44.54	11.20	641135.73	429747.00	32°10'50.408"N	103°52'37.756"W	2.50	
6901.00	3.100	133.700	6900.23	40.55	-45.31	12.03	641136.56	429746.23	32°10'50.400"N	103°52'37.746"W	6.47	
6933.00	5.400	141.900	6932.14	42.91	-47.10	13.59	641138.12	429744.45	32°10'50.383"N	103°52'37.728"W	7.42	
6964.00	7.800	142.200	6962.93	46.45	-49.91	15.78	641140.31	429741.64	32°10'50.355"N	103°52'37.703"W	7.74	
6996.00	10.400	141.700	6994.53	51.47	-53.89	18.90	641143.43	429737.66	32°10'50.315"N	103°52'37.666"W	8.13	
7027.00	13.300	140.200	7024.86	57.80	-58.83	22.92	641147.45	429732.72	32°10'50.266"N	103°52'37.620"W	9.41	
7058.00	16.200	139.700	7054.84	65.66	-64.86	28.00	641152.53	429726.68	32°10'50.206"N	103°52'37.561"W	9.36	
7089.00	18.900	140.100	7084.39	74.98	-72.02	34.02	641158.54	429719.53	32°10'50.135"N	103°52'37.492"W	8.72	
7120.00	21.700	140.400	7113.46	85.68	-80.28	40.89	641165.42	429711.26	32°10'50.053"N	103°52'37.412"W	9.04	
7151.00	24.300	141.100	7142.00	97.73	-89.67	48.55	641173.08	429701.88	32°10'49.960"N	103°52'37.323"W	8.43	
7184.00	26.900	141.600	7171.76	111.90	-100.80	57.45	641181.98	429690.74	32°10'49.849"N	103°52'37.220"W	7.91	
7215.00	29.700	141.200	7199.05	126.51	-112.29	66.62	641191.15	429679.26	32°10'49.735"N	103°52'37.114"W	9.05	
7246.00	32.200	140.200	7225.63	142.37	-124.62	76.72	641201.25	429666.93	32°10'49.613"N	103°52'36.997"W	8.23	
7278.00	34.600	139.700	7252.35	159.92	-138.10	88.06	641212.58	429653.45	32°10'49.479"N	103°52'36.866"W	7.55	
7309.00	37.000	139.300	7277.49	178.00	-151.89	99.84	641224.36	429639.66	32°10'49.342"N	103°52'36.730"W	7.78	
7341.00	39.600	139.400	7302.60	197.77	-166.93	112.76	641237.28	429624.62	32°10'49.193"N	103°52'36.580"W	8.13	
7372.00	42.100	139.300	7326.04	217.99	-182.32	125.96	641250.49	429609.24	32°10'49.040"N	103°52'36.427"W	8.07	
7404.00	44.700	139.600	7349.29	239.91	-199.02	140.26	641264.78	429592.53	32°10'48.874"N	103°52'36.262"W	8.15	
7436.00	47.800	139.600	7371.42	262.94	-216.62	155.24	641279.76	429574.93	32°10'48.699"N	103°52'36.088"W	9.69	
7467.00	50.400	139.200	7391.71	286.30	-234.41	170.48	641295.00	429557.15	32°10'48.523"N	103°52'35.912"W	8.44	
7498.00	53.700	138.900	7410.78	310.68	-252.87	186.50	641311.02	429538.69	32°10'48.339"N	103°52'35.726"W	10.67	
7530.00	56.700	139.000	7429.04	336.90	-272.68	203.76	641328.27	429518.87	32°10'48.142"N	103°52'35.527"W	9.38	
7560.00	57.000	137.900	7445.44	361.97	-291.48	220.42	641344.93	429500.08	32°10'47.956"N	103°52'35.334"W	3.23	
7618.00	57.500	137.600	7476.82	410.69	-327.59	253.22	641377.73	429463.97	32°10'47.597"N	103°52'34.954"W	0.97	



Actual Wellpath Report

No. 368 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.368H SHL
Area	Eddy County, NM	Well	No.368H
Field	Poker Lake Unit	Wellbore	No. 368 AWB
Facility	Poker Lake Unit No. 368H		

WELLPATH DATA (173 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
7653.00	57.500	136.900	7495.62	440.19	-349.26	273.25	641397.76	429442.30	32°10'47.382"N	103°52'34.722"W	1.69	
7685.00	59.200	136.200	7512.41	467.42	-369.04	291.99	641416.50	429422.53	32°10'47.185"N	103°52'34.505"W	5.63	
7716.00	60.800	135.900	7527.91	494.26	-388.37	310.62	641435.13	429403.20	32°10'46.993"N	103°52'34.289"W	5.23	
7748.00	64.200	134.500	7542.69	522.64	-408.50	330.62	641455.13	429383.07	32°10'46.793"N	103°52'34.057"W	11.31	
7780.00	67.300	132.700	7555.83	551.80	-428.61	351.75	641476.25	429362.96	32°10'46.593"N	103°52'33.812"W	10.96	
7812.00	70.200	131.800	7567.43	581.58	-448.66	373.82	641498.33	429342.91	32°10'46.394"N	103°52'33.557"W	9.43	
7843.00	73.000	132.000	7577.21	610.95	-468.30	395.72	641520.22	429323.27	32°10'46.199"N	103°52'33.303"W	9.05	
7876.00	77.900	132.200	7585.50	642.85	-489.71	419.41	641543.91	429301.86	32°10'45.986"N	103°52'33.028"W	14.86	
7907.00	83.200	132.100	7590.59	673.38	-510.23	442.07	641566.57	429281.35	32°10'45.782"N	103°52'32.766"W	17.10	
7939.00	88.000	132.000	7593.04	705.23	-531.59	465.76	641590.25	429259.99	32°10'45.569"N	103°52'32.491"W	15.00	
7970.00	89.500	132.000	7593.72	736.18	-552.33	488.79	641613.28	429239.25	32°10'45.363"N	103°52'32.224"W	4.84	
8002.00	90.800	132.300	7593.63	768.14	-573.80	512.51	641637.01	429217.78	32°10'45.150"N	103°52'31.949"W	4.17	
8023.00	90.700	132.300	7593.36	789.11	-587.93	528.04	641652.54	429203.65	32°10'45.009"N	103°52'31.769"W	0.48	
8119.00	91.600	131.900	7591.43	884.97	-652.28	599.26	641723.75	429139.31	32°10'44.370"N	103°52'30.944"W	1.03	
8214.00	91.400	132.100	7588.95	979.81	-715.82	669.83	641794.32	429075.77	32°10'43.738"N	103°52'30.126"W	0.30	
8308.00	89.500	132.200	7588.21	1073.68	-778.90	739.52	641864.00	429012.69	32°10'43.111"N	103°52'29.318"W	2.02	
8403.00	90.900	137.200	7587.88	1168.65	-845.70	807.02	641931.49	428945.90	32°10'42.447"N	103°52'28.536"W	5.47	
8499.00	90.600	137.700	7586.62	1264.55	-916.42	871.93	641996.40	428875.19	32°10'41.744"N	103°52'27.784"W	0.61	
8594.00	90.700	135.600	7585.54	1359.50	-985.49	937.14	642061.60	428806.12	32°10'41.058"N	103°52'27.029"W	2.21	
8689.00	90.000	132.500	7584.96	1454.48	-1051.53	1005.41	642129.87	428740.08	32°10'40.402"N	103°52'26.238"W	3.35	
8783.00	90.700	133.800	7584.39	1548.42	-1115.82	1073.98	642198.44	428675.80	32°10'39.763"N	103°52'25.444"W	1.57	
8878.00	89.300	134.300	7584.39	1643.41	-1181.87	1142.26	642266.71	428609.76	32°10'39.106"N	103°52'24.653"W	1.56	
8972.00	89.600	125.100	7585.29	1736.90	-1241.84	1214.50	642338.95	428549.78	32°10'38.510"N	103°52'23.815"W	9.79	
9067.00	90.400	126.100	7585.29	1830.62	-1297.14	1291.75	642416.19	428494.49	32°10'37.959"N	103°52'22.919"W	1.35	
9161.00	90.300	126.200	7584.72	1923.50	-1352.59	1367.65	642492.08	428439.04	32°10'37.407"N	103°52'22.039"W	0.15	
9257.00	92.400	124.500	7582.46	2018.11	-1408.12	1445.92	642570.35	428383.52	32°10'36.854"N	103°52'21.131"W	2.81	
9352.00	96.100	127.600	7575.41	2111.66	-1463.85	1522.50	642646.92	428327.80	32°10'36.300"N	103°52'20.243"W	5.07	
9432.00	97.200	126.100	7566.15	2190.32	-1511.50	1586.08	642710.50	428280.14	32°10'35.825"N	103°52'19.505"W	2.31	
9464.00	96.500	128.000	7562.33	2221.78	-1530.64	1611.44	642735.85	428261.00	32°10'35.635"N	103°52'19.211"W	6.29	
9496.00	95.500	129.000	7558.99	2253.40	-1550.45	1636.34	642760.76	428241.19	32°10'35.438"N	103°52'18.923"W	4.41	



Actual Wellpath Report

No. 368 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.368H SHL
Area	Eddy County, NM	Well	No.368H
Field	Poker Lake Unit	Wellbore	No. 368 AWB
Facility	Poker Lake Unit No. 368H		

WELLPATH DATA (173 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
9528.00	94.500	130.800	7556.20	2285.15	-1570.90	1660.79	642785.21	428220.75	32°10'35.234"N	103°52'18.639"W	6.42	
9559.00	93.100	132.000	7554.14	2316.02	-1591.36	1684.00	642808.41	428200.30	32°10'35.031"N	103°52'18.370"W	5.94	
9591.00	92.000	133.400	7552.72	2347.97	-1613.04	1707.49	642831.90	428178.62	32°10'34.816"N	103°52'18.098"W	5.56	
9623.00	91.400	134.700	7551.77	2379.95	-1635.27	1730.48	642854.89	428156.38	32°10'34.594"N	103°52'17.832"W	4.47	
9652.00	90.800	135.500	7551.21	2408.94	-1655.81	1750.94	642875.35	428135.84	32°10'34.390"N	103°52'17.595"W	3.45	
9683.00	89.700	136.300	7551.08	2439.94	-1678.07	1772.52	642896.92	428113.58	32°10'34.169"N	103°52'17.345"W	4.39	
9714.00	88.100	137.100	7551.67	2470.91	-1700.63	1793.77	642918.18	428091.03	32°10'33.945"N	103°52'17.099"W	5.77	
9775.00	88.700	137.100	7553.38	2531.85	-1745.30	1835.28	642959.68	428046.37	32°10'33.501"N	103°52'16.618"W	0.98	
9836.00	89.100	137.100	7554.55	2592.80	-1789.97	1876.80	643001.19	428001.69	32°10'33.057"N	103°52'16.137"W	0.66	
9898.00	89.600	137.500	7555.25	2654.74	-1835.53	1918.84	643043.23	427956.13	32°10'32.605"N	103°52'15.650"W	1.03	
9959.00	88.400	137.100	7556.32	2715.68	-1880.36	1960.20	643084.59	427911.31	32°10'32.160"N	103°52'15.171"W	2.07	
10021.00	88.900	137.300	7557.78	2777.62	-1925.84	2002.31	643126.70	427865.84	32°10'31.708"N	103°52'14.684"W	0.87	
10082.00	89.400	137.300	7558.68	2838.56	-1970.66	2043.68	643168.06	427821.02	32°10'31.262"N	103°52'14.205"W	0.82	
10174.00	88.000	136.900	7560.77	2930.48	-2038.03	2106.28	643230.67	427753.65	32°10'30.593"N	103°52'13.480"W	1.58	
10266.00	89.500	137.300	7562.78	3022.39	-2105.41	2168.89	643293.27	427686.28	32°10'29.924"N	103°52'12.755"W	1.69	
10358.00	89.900	136.300	7563.26	3114.34	-2172.47	2231.87	643356.24	427619.22	32°10'29.257"N	103°52'12.025"W	1.17	
10448.00	86.400	136.100	7566.16	3204.26	-2237.39	2294.12	643418.49	427554.31	32°10'28.612"N	103°52'11.304"W	3.90	
10540.00	86.700	136.000	7571.70	3296.08	-2303.50	2357.86	643482.22	427488.20	32°10'27.955"N	103°52'10.566"W	0.34	
10632.00	86.500	136.400	7577.16	3387.90	-2369.79	2421.42	643545.78	427421.92	32°10'27.297"N	103°52'09.830"W	0.49	
10724.00	87.300	136.500	7582.13	3479.73	-2436.37	2484.71	643609.07	427355.34	32°10'26.635"N	103°52'09.097"W	0.88	
10816.00	89.000	136.800	7585.10	3571.64	-2503.23	2547.83	643672.18	427288.48	32°10'25.971"N	103°52'08.366"W	1.88	
10908.00	91.000	135.500	7585.10	3663.62	-2569.57	2611.56	643735.91	427222.15	32°10'25.312"N	103°52'07.628"W	2.59	
11000.00	86.300	135.500	7587.27	3755.56	-2635.16	2676.01	643800.35	427156.57	32°10'24.660"N	103°52'06.881"W	5.11	
11093.00	90.400	134.700	7589.94	3848.50	-2700.99	2741.62	643865.95	427090.74	32°10'24.006"N	103°52'06.121"W	4.49	
11185.00	91.200	135.400	7588.66	3940.49	-2766.09	2806.61	643930.94	427025.64	32°10'23.359"N	103°52'05.369"W	1.16	
11256.00	90.800	136.400	7587.42	4011.47	-2817.07	2856.01	643980.34	426974.67	32°10'22.852"N	103°52'04.796"W	1.52	
11350.00	92.300	135.300	7584.88	4105.42	-2884.49	2921.45	644045.78	426907.25	32°10'22.182"N	103°52'04.038"W	1.98	
11445.00	94.000	135.900	7579.66	4200.27	-2952.26	2987.82	644112.14	426839.49	32°10'21.509"N	103°52'03.270"W	1.90	
11541.00	93.900	135.200	7573.05	4296.04	-3020.63	3054.89	644179.20	426771.12	32°10'20.829"N	103°52'02.493"W	0.73	
11635.00	92.800	134.900	7567.55	4389.88	-3087.04	3121.18	644245.49	426704.72	32°10'20.169"N	103°52'01.725"W	1.21	



Actual Wellpath Report

No. 368 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.368H SHL
Area	Eddy County, NM	Well	No.368H
Field	Poker Lake Unit	Wellbore	No. 368 AWB
Facility	Poker Lake Unit No. 368H		

WELLPATH DATA (173 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
11731.00	91.400	135.100	7564.03	4485.81	-3154.87	3189.02	644313.32	426636.89	32°10'19.495"N	103°52'00.939"W	1.47	
11826.00	87.900	135.200	7564.61	4580.79	-3222.21	3256.01	644380.31	426569.55	32°10'18.826"N	103°52'00.163"W	3.69	
11921.00	87.000	134.800	7568.84	4675.70	-3289.32	3323.11	644447.41	426502.45	32°10'18.159"N	103°51'59.386"W	1.04	
12041.00	87.400	135.300	7574.70	4795.55	-3374.15	3407.79	644532.08	426417.63	32°10'17.316"N	103°51'58.405"W	0.53	
12135.00	86.600	135.500	7579.62	4889.42	-3440.98	3473.70	644597.99	426350.80	32°10'16.652"N	103°51'57.642"W	0.88	
12230.00	86.600	134.300	7585.26	4984.25	-3507.92	3540.87	644665.16	426283.86	32°10'15.986"N	103°51'56.864"W	1.26	
12323.00	86.200	133.800	7591.10	5077.05	-3572.46	3607.58	644731.86	426219.33	32°10'15.345"N	103°51'56.091"W	0.69	
12416.00	89.600	134.900	7594.50	5169.97	-3637.41	3674.03	644798.30	426154.38	32°10'14.699"N	103°51'55.321"W	3.84	
12511.00	90.700	137.500	7594.26	5264.94	-3705.97	3739.78	644864.04	426085.83	32°10'14.018"N	103°51'54.560"W	2.97	
12607.00	90.900	137.600	7592.92	5360.84	-3776.80	3804.57	644928.83	426015.00	32°10'13.314"N	103°51'53.810"W	0.23	
12702.00	91.700	137.600	7590.76	5455.71	-3846.94	3868.61	644992.87	425944.87	32°10'12.618"N	103°51'53.068"W	0.84	
12797.00	88.600	135.300	7590.51	5550.66	-3915.78	3934.05	645058.30	425876.04	32°10'11.934"N	103°51'52.310"W	4.06	
12892.00	85.200	134.400	7595.65	5645.51	-3982.67	4001.29	645125.54	425809.15	32°10'11.269"N	103°51'51.532"W	3.70	
12987.00	86.900	133.700	7602.19	5740.27	-4048.56	4069.40	645193.65	425743.26	32°10'10.614"N	103°51'50.742"W	1.93	
13083.00	86.000	133.300	7608.14	5836.05	-4114.51	4138.91	645263.15	425677.31	32°10'09.958"N	103°51'49.937"W	1.03	
13178.00	86.700	133.900	7614.18	5930.83	-4179.89	4207.56	645331.80	425611.94	32°10'09.308"N	103°51'49.142"W	0.97	
13273.00	87.200	133.200	7619.24	6025.66	-4245.25	4276.32	645400.55	425546.58	32°10'08.659"N	103°51'48.345"W	0.90	
13368.00	87.900	134.700	7623.30	6120.55	-4311.12	4344.65	645468.87	425480.72	32°10'08.004"N	103°51'47.554"W	1.74	
13463.00	89.100	136.700	7625.79	6215.51	-4379.09	4410.97	645535.19	425412.76	32°10'07.328"N	103°51'46.786"W	2.45	
13558.00	89.400	139.200	7627.03	6310.37	-4449.62	4474.59	645598.80	425342.23	32°10'06.628"N	103°51'46.049"W	2.65	
13653.00	88.900	139.300	7628.44	6405.09	-4521.58	4536.59	645660.80	425270.28	32°10'05.913"N	103°51'45.332"W	0.54	
13760.00	89.600	142.000	7629.84	6511.56	-4604.31	4604.42	645728.63	425187.56	32°10'05.091"N	103°51'44.547"W	2.61	
13812.00	89.600	142.000	7630.20	6563.17	-4645.28	4636.44	645760.64	425146.58	32°10'04.684"N	103°51'44.176"W	0.00	Projection to bit



Actual Wellpath Report

No. 368 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.368H SHL
Area	Eddy County, NM	Well	No.368H
Field	Poker Lake Unit	Wellbore	No. 368 AWB
Facility	Poker Lake Unit No. 368H		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No.368H Target #1		7555.00	-574.79	396.00	641520.51	429216.79	32°10'45.145"N	103°52'33.305"W	point
No.368H Target #2		7563.00	-1632.97	1125.04	642249.49	428158.69	32°10'34.643"N	103°52'24.875"W	point
No.368H Target #3		7629.00	-4072.12	2805.50	643929.83	425719.70	32°10'10.435"N	103°52'05.447"W	point
No.368H PBHL (Rev-1)		7645.00	-4644.87	4644.90	645769.10	425147.00	32°10'04.688"N	103°51'44.078"W	point
No.368H PBHL		7648.00	-5308.72	3657.52	644781.80	424483.19	32°09'58.162"N	103°51'55.598"W	point

WELLPATH COMPOSITION - Ref Wellbore: No. 368 AWB Ref Wellpath: No. 368 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	828.00	Generic gyro - northseeking (Standard)	Unknown GYROS <100-828>	No. 368 AWB
828.00	13760.00	NaviTrak (Standard)	BHI / Navitrak MWD <902-13760>	No. 368 AWB
13760.00	13812.00	Blind Drilling (std)	Projection to bit	No. 368 AWB