



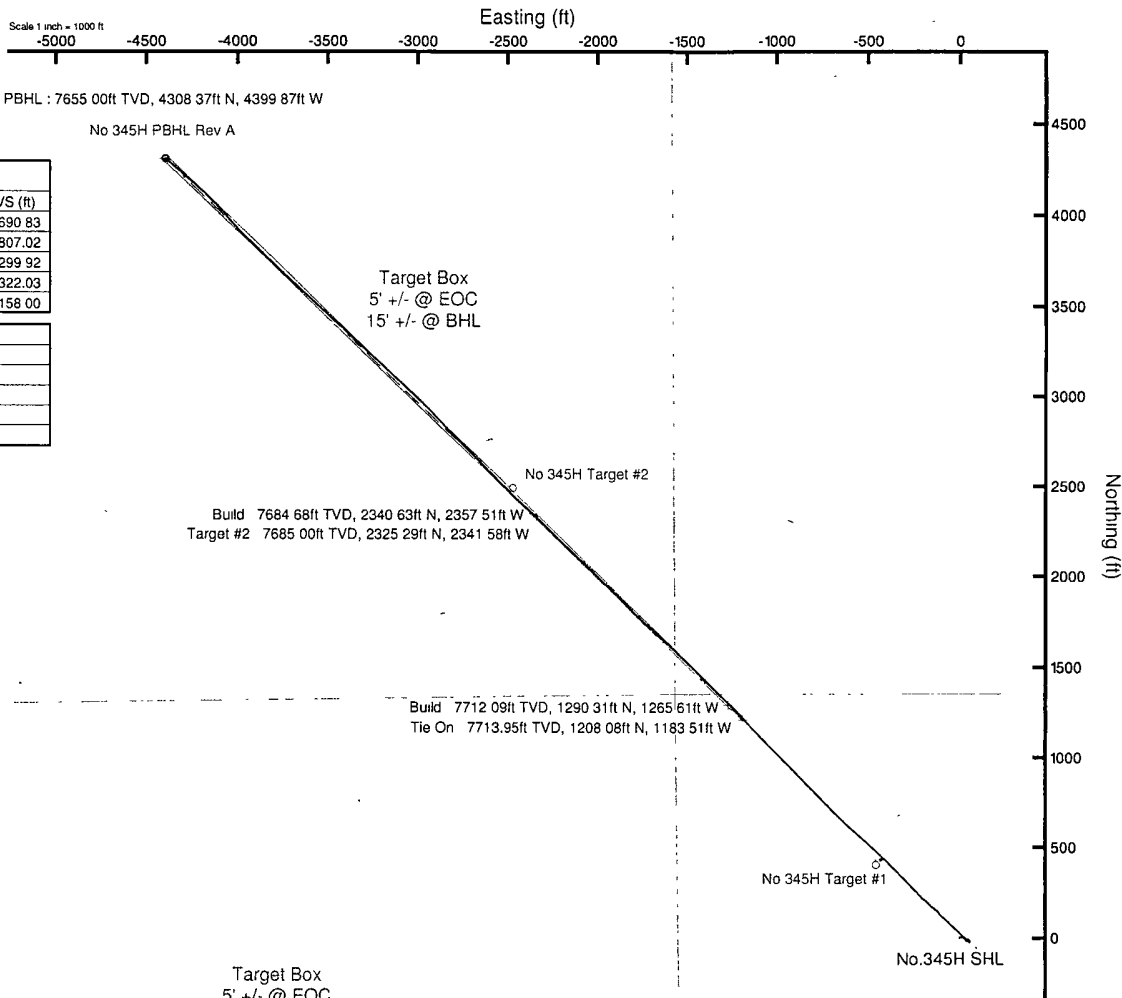
BOPCO, L.P.

Location: Eddy County, NM
Field: Poker Lake Unit
Facility: Poker Lake Unit No. 345H

Slot: No.345H SHL
Well: No.345H
Wellbore: No.345H PWB

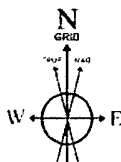


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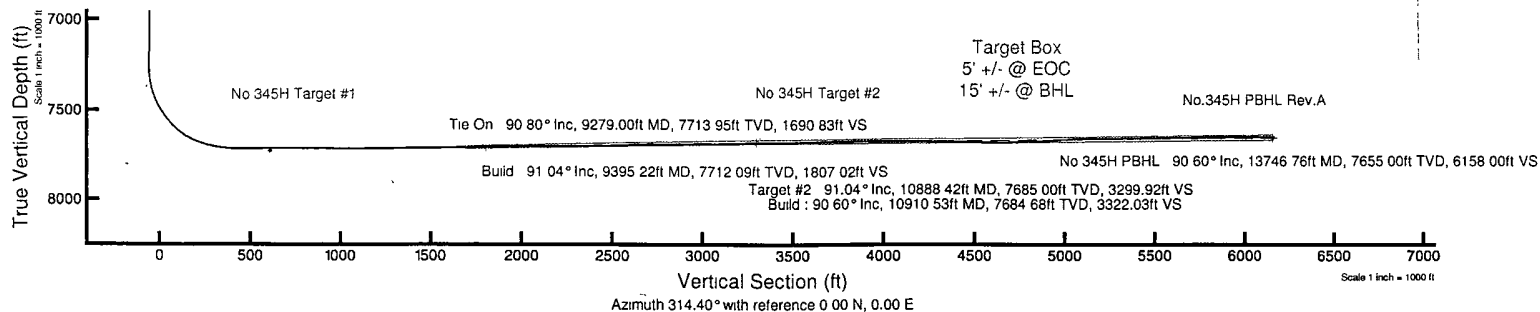


Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	9279.00	90.800	316.200	7713.95	1208.08	-1183.51	0.00	1690.83
Build	9395.22	91.039	313.888	7712.09	1290.31	-1265.61	2.00	1807.02
Target #2	10888.42	91.039	313.888	7685.00	2325.29	-2341.58	0.00	3299.92
Build	10910.53	90.600	313.934	7684.68	2340.63	-2357.51	2.00	3322.03
No 345H PBHL	13746.76	90.600	313.934	7655.00	4308.37	-4399.87	0.00	6158.00

Plot reference wellbore is Rev E 0	
True vertical depths are referenced to Rig on No 345H SHL (KB)	Grid System NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No 345H SHL (KB)	North Reference Grid north
Rig on No 345H SHL (KB) to Mean Sea Level 3375 feet	Scale True distance
Mean Sea Level to Mud line (At Slot No 345H SHL) -3356 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by gentry on 4/25/2012



BGGM (1945 0 to 2013 0) Dip 60.04° Field 48499 nT
Magnetic North is 7.71 degrees East of True North (at 2/29/2012)
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 7.45 degrees
For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.45 = 97.45





Actual Wellpath Report

No.345H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.345H SHL
Area	Eddy County, NM	Well	No.345H
Field	Poker Lake Unit	Wellbore	No.345H AWB
Facility	Poker Lake Unit No. 345H		

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	0.999934	Report Generated	5/3/2012 at 7:35:56 AM
Convergence at slot	0.25° East	Database/Source file	WA Midland/No.345H_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	648072.77	428733.59	32°10'40.081"N	103°51'17.092"W
Facility Reference Pt			648072.77	428733.59	32°10'40.081"N	103°51'17.092"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.345H SHL (KB) to Facility Vertical Datum	19.00ft
Horizontal Reference Pt	Slot	Rig on No.345H SHL (KB) to Mean Sea Level	3375.00ft
Vertical Reference Pt	Rig on No.345H SHL (KB)	Rig on No.345H SHL (KB) to Mud Line at Slot (No.345H SHL)	19.00ft
MD Reference Pt	Rig on No.345H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	314.40°



Actual Wellpath Report

No.345H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.345H SHL
Area	Eddy County, NM	Well	No.345H
Field	Poker Lake Unit	Wellbore	No.345H AWP
Facility	Poker Lake Unit No. 345H		

WELLPATH DATA (170 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	136.660	0.00	0.00	0.00	0.00	648072.77	428733.59	32°10'40.081"N	103°51'17.092"W	0.00	
76.00	0.520	136.660	76.00	-0.34	-0.25	0.24	648073.01	428733.34	32°10'40.078"N	103°51'17.089"W	0.68	
162.00	0.480	115.090	162.00	-1.07	-0.69	0.83	648073.60	428732.90	32°10'40.074"N	103°51'17.082"W	0.22	
247.00	0.590	92.030	246.99	-1.73	-0.85	1.59	648074.36	428732.74	32°10'40.072"N	103°51'17.073"W	0.28	
335.00	0.980	77.740	334.98	-2.48	-0.71	2.78	648075.55	428732.88	32°10'40.074"N	103°51'17.059"W	0.49	
423.00	1.460	72.960	422.96	-3.43	-0.22	4.59	648077.36	428733.37	32°10'40.079"N	103°51'17.038"W	0.56	
513.00	1.810	80.440	512.93	-4.82	0.35	7.08	648079.85	428733.94	32°10'40.084"N	103°51'17.009"W	0.45	
607.00	2.410	88.660	606.86	-7.07	0.64	10.52	648083.29	428734.23	32°10'40.087"N	103°51'16.969"W	0.71	
702.00	2.500	93.790	701.78	-10.04	0.55	14.59	648087.36	428734.14	32°10'40.086"N	103°51'16.922"W	0.25	
796.00	2.090	97.980	795.70	-12.97	0.18	18.33	648091.10	428733.77	32°10'40.082"N	103°51'16.878"W	0.47	
890.00	1.600	121.920	889.65	-15.63	-0.75	21.14	648093.91	428732.84	32°10'40.073"N	103°51'16.846"W	0.96	
985.00	1.540	121.910	984.62	-18.17	-2.13	23.35	648096.12	428731.46	32°10'40.059"N	103°51'16.820"W	0.06	
1079.00	1.500	117.320	1078.58	-20.58	-3.36	25.52	648098.29	428730.23	32°10'40.047"N	103°51'16.795"W	0.14	
1174.00	1.240	130.650	1173.56	-22.80	-4.60	27.40	648100.17	428728.99	32°10'40.034"N	103°51'16.773"W	0.43	
1268.00	1.110	136.240	1267.54	-24.72	-5.92	28.80	648101.57	428727.67	32°10'40.021"N	103°51'16.757"W	0.18	
1363.00	1.190	152.490	1362.52	-26.58	-7.46	29.90	648102.66	428726.13	32°10'40.006"N	103°51'16.744"W	0.35	
1457.00	1.330	144.990	1456.50	-28.58	-9.22	30.97	648103.74	428724.37	32°10'39.988"N	103°51'16.732"W	0.23	
1552.00	1.440	142.850	1551.47	-30.84	-11.07	32.33	648105.09	428722.52	32°10'39.970"N	103°51'16.716"W	0.13	
1646.00	1.200	142.170	1645.44	-32.99	-12.79	33.64	648106.41	428720.80	32°10'39.953"N	103°51'16.701"W	0.26	
1740.00	0.800	149.750	1739.43	-34.60	-14.14	34.58	648107.34	428719.45	32°10'39.940"N	103°51'16.690"W	0.45	
1835.00	0.600	153.010	1834.42	-35.71	-15.15	35.14	648107.90	428718.44	32°10'39.929"N	103°51'16.684"W	0.21	
1929.00	0.500	170.970	1928.42	-36.50	-16.00	35.42	648108.19	428717.59	32°10'39.921"N	103°51'16.680"W	0.21	
2024.00	0.360	119.200	2023.41	-37.12	-16.55	35.75	648108.52	428717.04	32°10'39.916"N	103°51'16.677"W	0.42	
2118.00	0.220	135.910	2117.41	-37.59	-16.83	36.13	648108.90	428716.76	32°10'39.913"N	103°51'16.672"W	0.17	
2213.00	0.070	29.170	2212.41	-37.76	-16.91	36.29	648109.06	428716.68	32°10'39.912"N	103°51'16.670"W	0.26	
2307.00	0.120	8.250	2306.41	-37.68	-16.76	36.33	648109.10	428716.83	32°10'39.914"N	103°51'16.670"W	0.06	
2402.00	0.090	328.230	2401.41	-37.55	-16.60	36.31	648109.07	428716.99	32°10'39.915"N	103°51'16.670"W	0.08	
2496.00	0.060	215.250	2495.41	-37.49	-16.57	36.24	648109.01	428717.02	32°10'39.915"N	103°51'16.671"W	0.13	
2590.00	0.150	178.290	2589.41	-37.58	-16.74	36.21	648108.98	428716.85	32°10'39.914"N	103°51'16.671"W	0.12	
2685.00	0.240	197.520	2684.41	-37.76	-17.05	36.16	648108.92	428716.54	32°10'39.911"N	103°51'16.672"W	0.12	
2779.00	0.280	171.420	2778.41	-38.04	-17.47	36.13	648108.90	428716.12	32°10'39.907"N	103°51'16.672"W	0.13	
2874.00	0.220	175.320	2873.41	-38.36	-17.88	36.18	648108.95	428715.71	32°10'39.902"N	103°51'16.672"W	0.07	
2968.00	0.180	128.370	2967.41	-38.64	-18.15	36.31	648109.08	428715.44	32°10'39.900"N	103°51'16.670"W	0.17	
3063.00	0.160	128.830	3062.41	-38.92	-18.33	36.53	648109.30	428715.27	32°10'39.898"N	103°51'16.667"W	0.02	
3157.00	0.130	135.350	3156.41	-39.16	-18.48	36.71	648109.48	428715.11	32°10'39.896"N	103°51'16.665"W	0.04	
3251.00	0.190	143.860	3250.41	-39.42	-18.69	36.88	648109.64	428714.91	32°10'39.894"N	103°51'16.664"W	0.07	
3346.00	0.340	143.520	3345.41	-39.85	-19.04	37.14	648109.90	428714.55	32°10'39.891"N	103°51'16.660"W	0.16	
3440.00	0.400	144.170	3439.41	-40.45	-19.53	37.49	648110.26	428714.06	32°10'39.886"N	103°51'16.656"W	0.06	
3535.00	0.400	144.370	3534.40	-41.11	-20.07	37.88	648110.65	428713.52	32°10'39.881"N	103°51'16.652"W	0.00	
3629.00	0.470	158.320	3628.40	-41.78	-20.69	38.22	648110.98	428712.90	32°10'39.875"N	103°51'16.648"W	0.13	
3724.00	0.470	178.880	3723.40	-42.42	-21.44	38.37	648111.13	428712.15	32°10'39.867"N	103°51'16.646"W	0.18	
3818.00	0.280	155.740	3817.40	-42.91	-22.04	38.47	648111.24	428711.55	32°10'39.861"N	103°51'16.645"W	0.25	
3913.00	0.040	59.670	3912.40	-43.13	-22.23	38.59	648111.36	428711.36	32°10'39.859"N	103°51'16.644"W	0.30	
4007.00	0.090	46.280	4006.40	-43.14	-22.17	38.67	648111.44	428711.43	32°10'39.860"N	103°51'16.643"W	0.06	
4101.00	0.180	64.520	4100.39	-43.19	-22.05	38.86	648111.63	428711.54	32°10'39.861"N	103°51'16.641"W	0.10	



Actual Wellpath Report

No.345H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.345H SHL
Area	Eddy County, NM	Well	No.345H
Field	Poker Lake Unit	Wellbore	No.345H AWB
Facility	Poker Lake Unit No. 345H		

WELLPATH DATA (170 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
4196.00	0.370	46.210	4195.39	-43.26	-21.78	39.22	648111.98	428711.82	32°10'39.864"N	103°51'16.636"W	0.22	
4290.00	0.440	51.100	4289.39	-43.31	-21.34	39.72	648112.48	428712.25	32°10'39.868"N	103°51'16.631"W	0.08	
4385.00	0.350	34.690	4384.39	-43.30	-20.87	40.17	648112.93	428712.72	32°10'39.873"N	103°51'16.625"W	0.15	
4479.00	0.370	42.820	4478.39	-43.24	-20.41	40.54	648113.30	428713.18	32°10'39.877"N	103°51'16.621"W	0.06	
4574.00	0.350	54.960	4573.39	-43.29	-20.02	40.98	648113.75	428713.57	32°10'39.881"N	103°51'16.616"W	0.08	
4668.00	0.380	39.660	4667.38	-43.32	-19.62	41.42	648114.18	428713.98	32°10'39.885"N	103°51'16.611"W	0.11	
4763.00	0.380	41.970	4762.38	-43.28	-19.14	41.83	648114.60	428714.45	32°10'39.890"N	103°51'16.606"W	0.02	
4857.00	0.230	24.150	4856.38	-43.20	-18.74	42.11	648114.88	428714.86	32°10'39.894"N	103°51'16.603"W	0.19	
4951.00	0.150	47.880	4950.38	-43.14	-18.48	42.28	648115.05	428715.11	32°10'39.896"N	103°51'16.601"W	0.12	
5046.00	0.290	29.730	5045.38	-43.09	-18.19	42.49	648115.26	428715.40	32°10'39.899"N	103°51'16.598"W	0.16	
5140.00	0.250	25.890	5139.38	-42.96	-17.80	42.70	648115.47	428715.79	32°10'39.903"N	103°51'16.596"W	0.05	
5235.00	0.280	29.450	5234.38	-42.84	-17.41	42.91	648115.67	428716.18	32°10'39.907"N	103°51'16.593"W	0.04	
5329.00	0.350	0.790	5328.38	-42.58	-16.92	43.02	648115.79	428716.67	32°10'39.912"N	103°51'16.592"W	0.18	
5424.00	0.400	333.820	5423.37	-42.07	-16.33	42.88	648115.65	428717.26	32°10'39.917"N	103°51'16.594"W	0.19	
5518.00	0.470	335.690	5517.37	-41.40	-15.69	42.58	648115.34	428717.90	32°10'39.924"N	103°51'16.597"W	0.08	
5612.00	0.490	4.830	5611.37	-40.78	-14.94	42.45	648115.22	428718.65	32°10'39.931"N	103°51'16.598"W	0.26	
5707.00	0.360	33.210	5706.37	-40.47	-14.28	42.65	648115.42	428719.31	32°10'39.938"N	103°51'16.596"W	0.26	
5801.00	0.360	34.290	5800.36	-40.36	-13.79	42.98	648115.74	428719.80	32°10'39.943"N	103°51'16.592"W	0.01	
5896.00	0.220	73.360	5895.36	-40.39	-13.49	43.32	648116.09	428720.10	32°10'39.946"N	103°51'16.588"W	0.25	
5990.00	0.300	97.760	5989.36	-40.68	-13.47	43.74	648116.50	428720.12	32°10'39.946"N	103°51'16.583"W	0.14	
6085.00	0.380	118.320	6084.36	-41.18	-13.66	44.26	648117.03	428719.93	32°10'39.944"N	103°51'16.577"W	0.15	
6179.00	0.720	129.410	6178.36	-42.07	-14.18	44.99	648117.76	428719.41	32°10'39.939"N	103°51'16.569"W	0.38	
6274.00	1.090	124.470	6273.34	-43.55	-15.07	46.20	648118.96	428718.52	32°10'39.930"N	103°51'16.555"W	0.40	
6368.00	1.210	126.550	6367.32	-45.42	-16.17	47.73	648120.50	428717.42	32°10'39.919"N	103°51'16.537"W	0.14	
6462.00	1.060	131.250	6461.31	-47.27	-17.33	49.18	648121.95	428716.26	32°10'39.907"N	103°51'16.520"W	0.19	
6557.00	0.980	148.330	6556.29	-48.93	-18.60	50.27	648123.04	428714.99	32°10'39.895"N	103°51'16.508"W	0.33	
6651.00	0.990	147.510	6650.28	-50.50	-19.97	51.13	648123.90	428713.62	32°10'39.881"N	103°51'16.498"W	0.02	
6746.00	1.140	148.670	6745.26	-52.22	-21.47	52.06	648124.83	428712.12	32°10'39.866"N	103°51'16.487"W	0.16	
6840.00	1.100	150.380	6839.24	-53.99	-23.05	52.99	648125.76	428710.54	32°10'39.851"N	103°51'16.476"W	0.06	
6935.00	1.200	150.540	6934.22	-55.82	-24.71	53.93	648126.70	428708.88	32°10'39.834"N	103°51'16.465"W	0.11	
7029.00	1.130	149.700	7028.20	-57.66	-26.37	54.89	648127.65	428707.22	32°10'39.818"N	103°51'16.454"W	0.08	
7124.00	1.220	143.660	7123.18	-59.57	-27.99	55.96	648128.72	428705.60	32°10'39.802"N	103°51'16.442"W	0.16	
7151.00	1.270	142.180	7150.18	-60.15	-28.46	56.31	648129.08	428705.13	32°10'39.797"N	103°51'16.438"W	0.22	
7183.00	1.400	136.600	7182.17	-60.89	-29.03	56.80	648129.56	428704.57	32°10'39.791"N	103°51'16.432"W	0.57	
7215.00	0.800	148.100	7214.16	-61.50	-29.50	57.18	648129.95	428704.09	32°10'39.787"N	103°51'16.428"W	1.99	
7247.00	0.600	316.800	7246.16	-61.55	-29.57	57.19	648129.95	428704.03	32°10'39.786"N	103°51'16.428"W	4.35	
7278.00	2.800	318.100	7277.15	-60.63	-28.88	56.57	648129.34	428704.71	32°10'39.793"N	103°51'16.435"W	7.10	
7309.00	5.700	314.400	7308.06	-58.33	-27.24	54.96	648127.73	428706.35	32°10'39.809"N	103°51'16.454"W	9.39	
7340.00	8.900	310.400	7338.80	-54.40	-24.61	52.04	648124.80	428708.98	32°10'39.835"N	103°51'16.487"W	10.45	
7371.00	12.400	309.200	7369.26	-48.69	-20.95	47.63	648120.40	428712.64	32°10'39.872"N	103°51'16.539"W	11.31	
7402.00	16.200	310.600	7399.30	-41.06	-16.03	41.77	648114.53	428717.56	32°10'39.920"N	103°51'16.606"W	12.31	
7434.00	20.300	312.400	7429.68	-31.05	-9.38	34.27	648107.04	428724.21	32°10'39.987"N	103°51'16.693"W	12.93	
7465.00	24.400	313.500	7458.35	-19.27	-1.34	25.65	648098.42	428732.25	32°10'40.067"N	103°51'16.793"W	13.29	
7497.00	28.800	313.900	7486.95	-4.95	8.55	15.30	648088.07	428742.14	32°10'40.165"N	103°51'16.913"W	13.76	
7528.00	33.000	313.900	7513.55	10.97	19.59	3.83	648076.60	428753.18	32°10'40.275"N	103°51'17.046"W	13.55	



Actual Wellpath Report

No.345H AWP

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BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.345H SHL
Area	Eddy County, NM	Well	No.345H
Field	Poker Lake Unit	Wellbore	No.345H AWB
Facility	Poker Lake Unit No. 345H		

WELLPATH DATA (170 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
7559.00	36.900	313.700	7538.95	28.72	31.88	-8.98	648063.79	428765.47	32°10'40.397"N	103°51'17.194"W	12.59	
7590.00	40.200	313.600	7563.19	48.04	45.21	-22.96	648049.81	428778.80	32°10'40.529"N	103°51'17.356"W	10.65	
7621.00	44.100	313.900	7586.17	68.84	59.60	-37.98	648034.79	428793.18	32°10'40.672"N	103°51'17.530"W	12.60	
7651.00	48.300	314.100	7606.93	90.48	74.64	-53.56	648019.22	428808.22	32°10'40.822"N	103°51'17.711"W	14.01	
7683.00	52.600	314.700	7627.30	115.15	91.90	-71.18	648001.60	428825.48	32°10'40.993"N	103°51'17.915"W	13.51	
7714.00	56.400	315.000	7645.30	140.38	109.69	-89.07	647983.71	428843.28	32°10'41.170"N	103°51'18.122"W	12.28	
7746.00	61.300	314.700	7661.85	167.76	129.00	-108.48	647964.30	428862.58	32°10'41.362"N	103°51'18.347"W	15.33	
7777.00	66.100	313.900	7675.58	195.54	148.40	-128.36	647944.42	428881.98	32°10'41.555"N	103°51'18.577"W	15.66	
7808.00	70.300	313.400	7687.09	224.32	168.26	-149.19	647923.59	428901.84	32°10'41.753"N	103°51'18.819"W	13.63	
7838.00	74.000	313.100	7696.28	252.86	187.83	-169.98	647902.80	428921.40	32°10'41.947"N	103°51'19.060"W	12.37	
7870.00	77.400	313.600	7704.19	283.86	209.11	-192.53	647880.26	428942.68	32°10'42.159"N	103°51'19.321"W	10.73	
7901.00	80.000	314.800	7710.26	314.26	230.30	-214.32	647858.47	428963.88	32°10'42.369"N	103°51'19.573"W	9.21	
7931.00	82.100	315.400	7714.93	343.89	251.29	-235.23	647837.55	428984.86	32°10'42.578"N	103°51'19.815"W	7.27	
7963.00	84.800	316.300	7718.58	375.66	274.10	-257.37	647815.41	429007.67	32°10'42.805"N	103°51'20.072"W	8.89	
7995.00	88.200	316.700	7720.53	407.58	297.27	-279.36	647793.43	429030.84	32°10'43.035"N	103°51'20.326"W	10.70	
8026.00	88.700	316.700	7721.37	438.54	319.82	-300.61	647772.18	429053.39	32°10'43.259"N	103°51'20.572"W	1.61	
8057.00	89.900	315.900	7721.75	469.52	342.23	-322.03	647750.77	429075.79	32°10'43.482"N	103°51'20.820"W	4.65	
8070.00	90.400	315.900	7721.71	482.52	351.56	-331.07	647741.72	429085.13	32°10'43.574"N	103°51'20.925"W	3.85	
8152.00	92.000	315.400	7720.00	564.48	410.19	-388.38	647684.42	429143.75	32°10'44.157"N	103°51'21.589"W	2.04	
8246.00	89.800	313.000	7718.52	658.45	475.70	-455.75	647617.05	429209.26	32°10'44.808"N	103°51'22.369"W	3.46	
8340.00	89.100	312.000	7719.42	752.39	539.20	-525.05	647547.76	429272.76	32°10'45.440"N	103°51'23.172"W	1.30	
8434.00	89.200	312.300	7720.82	846.31	602.28	-594.73	647478.08	429335.83	32°10'46.067"N	103°51'23.980"W	0.34	
8528.00	88.600	315.000	7722.62	940.28	667.14	-662.73	647410.08	429400.69	32°10'46.712"N	103°51'24.768"W	2.94	
8622.00	90.200	317.100	7723.61	1034.22	734.81	-727.96	647344.86	429468.35	32°10'47.384"N	103°51'25.523"W	2.81	
8716.00	90.700	316.200	7722.87	1128.15	803.16	-792.48	647280.34	429536.69	32°10'48.063"N	103°51'26.270"W	1.10	
8810.00	90.600	315.400	7721.80	1222.11	870.54	-858.01	647214.82	429604.07	32°10'48.733"N	103°51'27.029"W	0.86	
8903.00	92.300	316.300	7719.45	1315.05	937.25	-922.77	647150.07	429670.77	32°10'49.396"N	103°51'27.779"W	2.07	
8997.00	90.000	315.900	7717.56	1408.98	1004.96	-987.93	647084.91	429738.48	32°10'50.069"N	103°51'28.534"W	2.48	
9091.00	90.500	316.200	7717.15	1502.94	1072.64	-1053.17	647019.67	429806.15	32°10'50.741"N	103°51'29.289"W	0.62	
9185.00	91.300	316.000	7715.68	1596.89	1140.36	-1118.34	646954.51	429873.87	32°10'51.414"N	103°51'30.044"W	0.88	
9279.00	90.800	316.200	7713.95	1690.83	1208.08	-1183.51	646889.34	429941.59	32°10'52.087"N	103°51'30.799"W	0.57	
9373.00	91.800	316.600	7711.82	1784.75	1276.13	-1248.31	646824.54	430009.64	32°10'52.764"N	103°51'31.549"W	1.15	
9467.00	90.300	313.400	7710.10	1878.71	1342.58	-1314.76	646758.10	430076.08	32°10'53.424"N	103°51'32.319"W	3.76	
9561.00	91.400	314.900	7708.70	1972.70	1408.04	-1382.20	646690.67	430141.54	32°10'54.075"N	103°51'33.100"W	1.98	
9655.00	90.000	313.600	7707.55	2066.68	1473.63	-1449.52	646623.35	430207.12	32°10'54.727"N	103°51'33.880"W	2.03	
9748.00	90.300	312.700	7707.31	2159.66	1537.23	-1517.37	646555.50	430270.72	32°10'55.359"N	103°51'34.667"W	1.02	
9842.00	89.900	312.300	7707.15	2253.61	1600.73	-1586.67	646486.20	430334.22	32°10'55.990"N	103°51'35.470"W	0.60	
9936.00	90.200	313.200	7707.07	2347.57	1664.54	-1655.70	646417.18	430398.02	32°10'56.625"N	103°51'36.269"W	1.01	
10030.00	91.100	313.000	7706.00	2441.54	1728.76	-1724.33	646348.56	430462.24	32°10'57.263"N	103°51'37.065"W	0.98	
10124.00	92.200	314.300	7703.29	2535.49	1793.62	-1792.31	646280.58	430527.09	32°10'57.908"N	103°51'37.852"W	1.81	
10218.00	92.600	314.900	7699.36	2629.40	1859.56	-1859.18	646213.71	430593.03	32°10'58.563"N	103°51'38.627"W	0.77	
10312.00	89.200	313.100	7697.88	2723.37	1924.84	-1926.78	646146.12	430658.30	32°10'59.212"N	103°51'39.410"W	4.09	
10406.00	90.500	313.500	7698.13	2817.35	1989.30	-1995.19	646077.71	430722.76	32°10'59.853"N	103°51'40.203"W	1.45	
10500.00	91.300	314.200	7696.65	2911.33	2054.42	-2062.97	646009.94	430787.87	32°11'00.501"N	103°51'40.988"W	1.13	
10593.00	89.900	312.300	7695.68	3004.30	2118.13	-2130.70	645942.21	430851.58	32°11'01.134"N	103°51'41.773"W	2.54	



Actual Wellpath Report

No.345H AWP

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BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.345H SHL
Area	Eddy County, NM	Well	No.345H
Field	Poker Lake Unit	Wellbore	No.345H AWP
Facility	Poker Lake Unit No. 345H		

WELLPATH DATA (170 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
10687.00	91.000	313.200	7694.94	3098.26	2181.93	-2199.72	645873.20	430915.38	32°11'01.768"N	103°51'42.573"W	1.51	
10781.00	91.600	314.800	7692.80	3192.23	2247.21	-2267.32	645805.60	430980.65	32°11'02.417"N	103°51'43.356"W	1.82	
10875.00	91.900	314.700	7689.93	3286.18	2313.36	-2334.05	645738.88	431046.79	32°11'03.075"N	103°51'44.129"W	0.34	
10968.00	88.700	311.700	7689.45	3379.14	2377.00	-2401.82	645671.11	431110.43	32°11'03.707"N	103°51'44.914"W	4.72	
11086.00	92.700	314.000	7688.01	3497.06	2457.23	-2488.31	645584.63	431190.65	32°11'04.505"N	103°51'45.917"W	3.91	
11180.00	92.000	315.000	7684.15	3590.98	2523.06	-2555.29	645517.65	431256.47	32°11'05.159"N	103°51'46.693"W	1.30	
11274.00	91.200	316.100	7681.53	3684.92	2590.13	-2621.09	645451.86	431323.54	32°11'05.826"N	103°51'47.455"W	1.45	
11368.00	90.700	315.800	7679.97	3778.87	2657.68	-2686.44	645386.51	431391.09	32°11'06.497"N	103°51'48.212"W	0.62	
11462.00	90.700	315.500	7678.82	3872.84	2724.89	-2752.14	645320.81	431458.30	32°11'07.165"N	103°51'48.973"W	0.32	
11556.00	90.500	316.400	7677.83	3966.80	2792.45	-2817.50	645255.46	431525.85	32°11'07.836"N	103°51'49.730"W	0.98	
11650.00	90.500	317.100	7677.01	4060.72	2860.91	-2881.90	645191.06	431594.31	32°11'08.517"N	103°51'50.476"W	0.74	
11743.00	91.600	316.800	7675.31	4153.61	2928.86	-2945.38	645127.59	431662.25	32°11'09.192"N	103°51'51.211"W	1.23	
11837.00	87.500	312.800	7676.05	4247.56	2995.07	-3012.04	645060.93	431728.46	32°11'09.850"N	103°51'51.983"W	6.09	
11931.00	89.500	312.500	7678.51	4341.48	3058.73	-3081.15	644991.82	431792.11	32°11'10.483"N	103°51'52.784"W	2.15	
12025.00	88.300	312.500	7680.31	4435.41	3122.22	-3150.44	644922.54	431855.60	32°11'11.114"N	103°51'53.587"W	1.28	
12119.00	88.900	312.300	7682.61	4529.33	3185.59	-3219.84	644853.15	431918.96	32°11'11.744"N	103°51'54.391"W	0.67	
12213.00	90.100	312.600	7683.43	4623.27	3249.03	-3289.19	644783.80	431982.40	32°11'12.375"N	103°51'55.195"W	1.32	
12307.00	92.000	313.100	7681.71	4717.21	3312.94	-3358.09	644714.90	432046.31	32°11'13.010"N	103°51'55.993"W	2.09	
12402.00	92.200	313.100	7678.23	4812.12	3377.81	-3427.41	644645.59	432111.17	32°11'13.655"N	103°51'56.797"W	0.21	
12499.00	93.700	312.700	7673.23	4908.96	3443.75	-3498.37	644574.63	432177.11	32°11'14.311"N	103°51'57.619"W	1.60	
12594.00	94.300	312.100	7666.61	5003.67	3507.65	-3568.35	644504.66	432241.01	32°11'14.946"N	103°51'58.430"W	0.89	
12689.00	91.200	313.000	7662.05	5098.50	3571.81	-3638.25	644434.77	432305.16	32°11'15.584"N	103°51'59.240"W	3.40	
12784.00	89.700	312.100	7661.30	5193.44	3636.05	-3708.23	644364.79	432369.40	32°11'16.223"N	103°52'00.051"W	1.84	
12878.00	90.300	313.900	7661.30	5287.41	3700.16	-3776.97	644296.05	432433.50	32°11'16.860"N	103°52'00.848"W	2.02	
12972.00	90.800	313.700	7660.40	5381.40	3765.22	-3844.82	644228.21	432498.55	32°11'17.507"N	103°52'01.634"W	0.57	
13004.00	91.400	314.100	7659.79	5413.39	3787.40	-3867.87	644205.16	432520.73	32°11'17.727"N	103°52'01.901"W	2.25	
13098.00	90.900	314.100	7657.90	5507.37	3852.80	-3935.36	644137.68	432586.13	32°11'18.377"N	103°52'02.683"W	0.53	
13192.00	89.500	316.500	7657.57	5601.35	3919.61	-4001.47	644071.57	432652.93	32°11'19.041"N	103°52'03.449"W	2.96	
13286.00	91.800	319.700	7656.51	5695.13	3989.56	-4064.23	644008.81	432722.88	32°11'19.736"N	103°52'04.176"W	4.19	
13380.00	91.200	315.800	7654.04	5788.92	4059.10	-4127.40	643945.65	432792.41	32°11'20.427"N	103°52'04.907"W	4.20	
13474.00	90.600	313.800	7652.57	5882.90	4125.32	-4194.09	643878.97	432858.63	32°11'21.085"N	103°52'05.680"W	2.22	
13567.00	90.000	310.700	7652.08	5975.82	4187.84	-4262.92	643810.14	432921.15	32°11'21.707"N	103°52'06.478"W	3.40	
13661.00	90.600	311.800	7651.59	6069.68	4249.82	-4333.59	643739.47	432983.12	32°11'22.323"N	103°52'07.297"W	1.33	
13697.00	90.000	311.300	7651.40	6105.63	4273.70	-4360.53	643712.53	433007.00	32°11'22.560"N	103°52'07.609"W	2.17	
13749.00	90.000	311.300	7651.40	6157.55	4308.02	-4399.60	643673.47	433041.32	32°11'22.902"N	103°52'08.062"W	0.00	Proj to Bit



Actual Wellpath Report

No.345H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.345H SHL
Area	Eddy County, NM	Well	No.345H
Field	Poker Lake Unit	Wellbore	No.345H AWB
Facility	Poker Lake Unit No. 345H		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No.345H PBHL		7655.00	4575.42	-4585.28	643487.80	433308.70	32°11'25.556"N	103°52'10.209"W	point
No.345H PBHL Rev.A		7655.00	4308.37	-4399.87	643673.20	433041.67	32°11'22.905"N	103°52'08.065"W	point
No.345H Target #2		7685.00	2325.29	-2341.58	645731.35	431058.73	32°11'03.193"N	103°51'44.216"W	point
No.345H Target #1		7735.00	427.33	-428.26	647644.54	429160.89	32°10'44.328"N	103°51'22.052"W	point

WELLPATH COMPOSITION - Ref Wellbore: No.345H AWB Ref Wellpath: No.345H AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7151.00	Generic gyro - northseeking (Standard)	Gyro Data Gyro <76-7151>	No.345H AWB
7151.00	13697.00	NaviTrak (Standard)	BHI MWD NaviTrak <7183-XXXX>	No.345H AWB
13697.00	13749.00	Blind Drilling (std)	Projection to bit	No.345H AWB