



BOPCO, L.P.

Location: Eddy County, NM
Field: Poker Lake Unit
Facility: Poker Lake Unit No. 312H

Slot: No. 312H
Well: No. 312H
Wellbore: No. 312H PWB

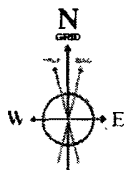


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NMOOD ARTESIA



BGGM (1945 C to 2013.3) Dip: 60.05° Field: 48475.7 nT
Magnetic North is 7.65 degrees East of True North (at 5/7/2012)
Grid North is 0.30 degrees East of True North
To correct azimuth from True to Grid subtract 0.30 degrees
To correct azimuth from Magnetic to Grid add 7.35 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.35 = 97.35

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (%100ft)	VS (ft)
Tie On	7893.00	39.04	165.56	7867.14	-152.39	4.97	0.00	110.50
EOC	8469.46	89.466	132.382	8115.00	-557.29	287.42	10.01	595.87
TL	8469.48	89.466	132.382	8115.00	-557.31	287.44	2.00	595.89
Target #2	10401.28	89.466	132.382	8133.00	-1859.41	1714.34	0.00	2526.19
TL	10408.04	89.331	132.382	8133.07	-1863.96	1719.33	2.00	2532.94
No.312H PBHL	13571.11	89.331	132.382	8170.00	-3995.94	4055.64	0.00	5693.48

Plot reference wellbore is Raw-AD	
True vertical depths are referenced to Rig on No. 312H (NEB)	Grid System: NAD83 / TM New Mexico SP, Easting Zone 120011 US feet
Measured depths are referenced to Rig on No. 312H (NEB)	North Reference: Grid North
Rig on No. 312H (NEB) to Mean Sea Level: 3481 feet	Scale: True distance
Mean Sea Level to Mud Sea (at Slot No. 312H) - 3481 feet	Deaths are in feet
Coordinates are in feet referenced to Slot	Created by garbary on 5/7/2012

Scale 1 inch = 1200 ft

Easting (ft)

-600 0 600 1200 1800 2400 3000 3600 4200 4800

No. 312H

Tie On: 7867.14ft TVD, 152.39ft S, 4.97ft E

EOC: 8115.00ft TVD, 557.29ft S, 287.42ft E

TL: 8115.00ft TVD, 557.31ft S, 287.44ft E

No. 312H Target #1

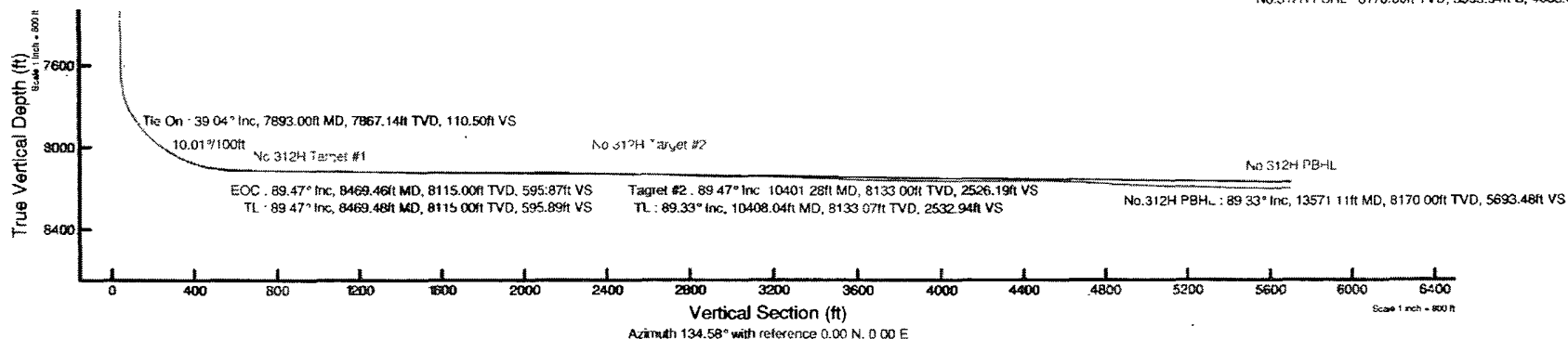
Target #2: 8133.00ft TVD, 1859.41ft S, 1714.34ft E
TL: 8133.07ft TVD, 1863.96ft S, 1719.33ft E

No. 312H Target #2

No.312H PBHL
No.312H PBHL: 8170.00ft TVD, 3995.94ft S, 4055.64ft E

North (ft)

600
0
-600
-1200
-1800
-2400
-3000
-3600
-4200





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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 312H
Area	Eddy County, NM	Well	No. 312H
Field	Poker Lake Unit	Wellbore	No.312H AWB
Facility	Poker Lake Unit No. 312H		

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	0.999943	Report Generated	5/18/2012 at 8:09:32 AM
Convergence at slot	0.30° East	Database/Source file	WA Midland/No.312H_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	671396.36	428882.90	32°10'40.451"N	103°46'45.710"W
Facility Reference Pt			671396.36	428882.90	32°10'40.451"N	103°46'45.710"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. 312H (KB) to Facility Vertical Datum	20.00ft
Horizontal Reference Pt	Slot	Rig on No. 312H (KB) to Mean Sea Level	3481.00ft
Vertical Reference Pt	Rig on No. 312H (KB)	Rig on No. 312H (KB) to Mud Line at Slot (No. 312H)	20.00ft
MD Reference Pt	Rig on No. 312H (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	134.58°



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REFERENCE WELLPATH IDENTIFICATION

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Area	Eddy County, NM	Well	No. 312H
Field	Poker Lake Unit	Wellbore	No.312H AWP
Facility	Poker Lake Unit No. 312H		

WELLPATH DATA (167 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	236.980	0.00	0.00	0.00	0.00	671396.36	428882.90	32°10'40.451"N	103°46'45.710"W	0.00	
20.00	0.000	236.980	20.00	0.00	0.00	0.00	671396.36	428882.90	32°10'40.451"N	103°46'45.710"W	0.00	
76.10	0.380	236.980	76.10	-0.04	-0.10	-0.16	671396.20	428882.80	32°10'40.450"N	103°46'45.712"W	0.68	
169.30	0.420	236.470	169.30	-0.18	-0.46	-0.70	671395.66	428882.44	32°10'40.446"N	103°46'45.718"W	0.04	
262.40	0.450	227.820	262.39	-0.27	-0.89	-1.26	671395.10	428882.01	32°10'40.442"N	103°46'45.725"W	0.08	
355.60	0.560	222.620	355.59	-0.27	-1.47	-1.83	671394.53	428881.43	32°10'40.436"N	103°46'45.731"W	0.13	
448.80	1.340	205.460	448.78	0.10	-2.79	-2.61	671393.75	428880.11	32°10'40.423"N	103°46'45.740"W	0.88	
542.00	1.630	199.950	541.95	1.01	-5.02	-3.53	671392.83	428877.88	32°10'40.401"N	103°46'45.751"W	0.35	
635.20	1.700	197.680	635.11	2.19	-7.59	-4.40	671391.96	428875.31	32°10'40.376"N	103°46'45.762"W	0.10	
728.30	1.690	194.790	728.17	3.49	-10.23	-5.17	671391.19	428872.67	32°10'40.350"N	103°46'45.771"W	0.09	
821.50	1.350	196.280	821.33	4.70	-12.61	-5.83	671390.53	428870.29	32°10'40.326"N	103°46'45.779"W	0.37	
914.70	1.090	197.670	914.51	5.62	-14.51	-6.41	671389.95	428868.39	32°10'40.308"N	103°46'45.785"W	0.28	
1010.00	0.990	200.450	1009.80	6.36	-16.14	-6.97	671389.39	428866.76	32°10'40.292"N	103°46'45.792"W	0.12	
1105.30	0.770	204.890	1105.09	6.92	-17.50	-7.53	671388.83	428865.40	32°10'40.278"N	103°46'45.799"W	0.24	
1200.60	0.650	212.320	1200.38	7.25	-18.53	-8.09	671388.27	428864.37	32°10'40.268"N	103°46'45.805"W	0.16	
1295.90	0.460	218.270	1295.67	7.40	-19.29	-8.61	671387.75	428863.61	32°10'40.260"N	103°46'45.811"W	0.21	
1391.20	0.210	225.650	1390.97	7.44	-19.71	-8.98	671387.38	428863.19	32°10'40.256"N	103°46'45.816"W	0.27	
1486.40	0.090	227.130	1486.17	7.44	-19.89	-9.16	671387.20	428863.01	32°10'40.255"N	103°46'45.818"W	0.13	
1581.70	0.100	45.440	1581.47	7.43	-19.88	-9.15	671387.21	428863.02	32°10'40.255"N	103°46'45.818"W	0.20	
1677.00	-0.200	43.490	1676.77	7.43	-19.70	-8.98	671387.38	428863.20	32°10'40.256"N	103°46'45.816"W	0.11	
1772.30	0.260	31.440	1772.07	7.38	-19.40	-8.75	671387.61	428863.51	32°10'40.259"N	103°46'45.813"W	0.08	
1867.60	0.250	25.010	1867.37	7.26	-19.02	-8.55	671387.81	428863.88	32°10'40.263"N	103°46'45.811"W	0.03	
1962.90	0.080	20.870	1962.67	7.16	-18.77	-8.44	671387.92	428864.13	32°10'40.266"N	103°46'45.809"W	0.18	
2058.20	0.100	193.470	2057.97	7.18	-18.79	-8.43	671387.93	428864.11	32°10'40.265"N	103°46'45.809"W	0.19	
2153.50	0.230	202.630	2153.27	7.30	-19.05	-8.53	671387.83	428863.85	32°10'40.263"N	103°46'45.810"W	0.14	
2248.80	0.210	193.850	2248.57	7.46	-19.39	-8.64	671387.72	428863.51	32°10'40.259"N	103°46'45.812"W	0.04	
2344.10	0.240	145.030	2343.87	7.74	-19.73	-8.57	671387.79	428863.17	32°10'40.256"N	103°46'45.811"W	0.20	
2439.30	0.280	138.470	2439.07	8.17	-20.07	-8.30	671388.06	428862.84	32°10'40.253"N	103°46'45.808"W	0.05	
2534.60	0.300	136.960	2534.36	8.65	-20.42	-7.98	671388.38	428862.48	32°10'40.249"N	103°46'45.804"W	0.02	
2629.90	0.220	178.560	2629.66	9.03	-20.79	-7.80	671388.56	428862.11	32°10'40.246"N	103°46'45.802"W	0.21	
2725.20	0.210	203.370	2724.96	9.23	-21.13	-7.87	671388.49	428861.77	32°10'40.242"N	103°46'45.803"W	0.10	
2820.50	0.150	215.650	2820.26	9.31	-21.39	-8.01	671388.35	428861.51	32°10'40.240"N	103°46'45.804"W	0.07	
2915.80	0.050	155.860	2915.56	9.37	-21.53	-8.06	671388.30	428861.37	32°10'40.238"N	103°46'45.805"W	0.14	
3011.10	0.140	145.180	3010.86	9.52	-21.66	-7.98	671388.38	428861.24	32°10'40.237"N	103°46'45.804"W	0.10	
3106.40	0.330	113.000	3106.16	9.89	-21.87	-7.66	671388.70	428861.03	32°10'40.235"N	103°46'45.800"W	0.24	
3201.70	0.510	103.880	3201.46	10.51	-22.08	-7.00	671389.36	428860.82	32°10'40.233"N	103°46'45.793"W	0.20	
3296.90	0.570	99.410	3296.65	11.26	-22.26	-6.12	671390.24	428860.65	32°10'40.231"N	103°46'45.782"W	0.08	
3392.20	0.570	94.850	3391.95	12.01	-22.37	-5.18	671391.18	428860.53	32°10'40.230"N	103°46'45.772"W	0.05	
3487.50	0.580	91.560	3487.25	12.73	-22.43	-4.22	671392.14	428860.47	32°10'40.229"N	103°46'45.760"W	0.04	
3582.80	0.670	94.780	3582.54	13.51	-22.49	-3.19	671393.17	428860.42	32°10'40.229"N	103°46'45.748"W	0.10	
3678.10	0.860	101.520	3677.83	14.54	-22.68	-1.93	671394.43	428860.23	32°10'40.227"N	103°46'45.734"W	0.22	
3773.40	0.870	107.280	3773.12	15.78	-23.03	-0.54	671395.82	428859.87	32°10'40.223"N	103°46'45.718"W	0.09	
3868.70	0.620	117.400	3868.41	16.92	-23.49	0.61	671396.97	428859.42	32°10'40.219"N	103°46'45.704"W	0.30	
3964.00	0.590	134.380	3963.71	17.90	-24.07	1.42	671397.78	428858.84	32°10'40.213"N	103°46'45.695"W	0.19	
4059.30	0.560	144.640	4059.00	18.85	-24.79	2.04	671398.40	428858.11	32°10'40.206"N	103°46'45.688"W	0.11	



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Area	Eddy County, NM	Well	No. 312H
Field	Poker Lake Unit	Wellbore	No.312H AWP
Facility	Poker Lake Unit No. 312H		

WELLPATH DATA (167 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 [1/100ft]	Comments
4154.60	0.610	154.000	4154.30	19.79	-25.62	2.53	671398.89	428857.28	32°10'40.197"N	103°46'45.682"W	0.11	
4249.90	0.500	159.860	4249.59	20.64	-26.47	2.90	671399.26	428856.43	32°10'40.189"N	103°46'45.678"W	0.13	
4345.10	0.450	165.170	4344.79	21.34	-27.22	3.13	671399.49	428855.68	32°10'40.181"N	103°46'45.675"W	0.07	
4440.40	0.570	165.010	4440.09	22.07	-28.04	3.35	671399.71	428854.86	32°10'40.173"N	103°46'45.673"W	0.13	
4535.70	0.610	155.860	4535.38	22.95	-28.96	3.68	671400.04	428853.94	32°10'40.164"N	103°46'45.669"W	0.11	
4631.00	0.600	160.320	4630.68	23.87	-29.90	4.06	671400.42	428853.01	32°10'40.155"N	103°46'45.664"W	0.05	
4726.30	0.560	156.790	4725.97	24.75	-30.79	4.41	671400.77	428852.11	32°10'40.146"N	103°46'45.660"W	0.06	
4821.60	0.470	162.150	4821.27	25.53	-31.59	4.71	671401.07	428851.31	32°10'40.138"N	103°46'45.657"W	0.11	
4916.90	0.420	163.570	4916.56	26.18	-32.30	4.93	671401.29	428850.60	32°10'40.131"N	103°46'45.654"W	0.05	
5012.20	0.250	158.480	5011.86	26.68	-32.83	5.11	671401.47	428850.07	32°10'40.126"N	103°46'45.652"W	0.18	
5107.50	0.140	176.490	5107.16	26.96	-33.14	5.19	671401.55	428849.76	32°10'40.123"N	103°46'45.652"W	0.13	
5202.80	0.170	123.200	5202.46	27.18	-33.33	5.32	671401.68	428849.57	32°10'40.121"N	103°46'45.650"W	0.15	
5298.00	0.180	117.570	5297.66	27.46	-33.48	5.57	671401.93	428849.42	32°10'40.119"N	103°46'45.647"W	0.02	
5393.30	0.180	109.970	5392.96	27.74	-33.60	5.84	671402.20	428849.30	32°10'40.118"N	103°46'45.644"W	0.03	
5488.60	0.170	104.190	5488.26	28.00	-33.68	6.12	671402.48	428849.22	32°10'40.117"N	103°46'45.641"W	0.02	
5583.90	0.120	108.270	5583.56	28.21	-33.75	6.35	671402.71	428849.15	32°10'40.117"N	103°46'45.638"W	0.05	
5679.20	0.170	127.370	5678.86	28.44	-33.87	6.56	671402.92	428849.03	32°10'40.115"N	103°46'45.636"W	0.07	
5774.50	0.220	76.710	5774.16	28.68	-33.91	6.85	671403.21	428848.99	32°10'40.115"N	103°46'45.632"W	0.18	
5869.80	0.400	86.130	5869.46	29.00	-33.85	7.36	671403.72	428849.05	32°10'40.116"N	103°46'45.626"W	0.20	
5965.10	0.330	88.200	5964.76	29.41	-33.82	7.96	671404.32	428849.09	32°10'40.116"N	103°46'45.619"W	0.07	
6060.40	0.190	92.470	6060.05	29.71	-33.81	8.40	671404.76	428849.09	32°10'40.116"N	103°46'45.614"W	0.15	
6155.60	0.270	169.720	6155.25	30.01	-34.04	8.59	671404.95	428848.86	32°10'40.114"N	103°46'45.612"W	0.31	
6250.90	0.320	122.700	6250.55	30.46	-34.41	8.86	671405.22	428848.50	32°10'40.110"N	103°46'45.609"W	0.25	
6346.20	0.210	144.810	6345.85	30.89	-34.69	9.18	671405.54	428848.21	32°10'40.107"N	103°46'45.605"W	0.16	
6441.50	0.440	136.820	6441.15	31.43	-35.10	9.53	671405.89	428847.80	32°10'40.103"N	103°46'45.601"W	0.25	
6536.80	0.710	166.970	6536.45	32.29	-35.94	9.92	671406.28	428846.96	32°10'40.095"N	103°46'45.597"W	0.42	
6632.10	1.200	148.000	6631.73	33.76	-37.37	10.58	671406.94	428845.54	32°10'40.081"N	103°46'45.589"W	0.61	
6727.40	0.660	147.250	6727.02	35.27	-38.67	11.40	671407.76	428844.23	32°10'40.068"N	103°46'45.580"W	0.57	
6822.70	0.530	146.080	6822.31	36.23	-39.50	11.95	671408.31	428843.40	32°10'40.059"N	103°46'45.573"W	0.14	
6918.00	0.260	150.090	6917.61	36.87	-40.05	12.30	671408.66	428842.85	32°10'40.054"N	103°46'45.569"W	0.28	
7013.30	0.490	211.320	7012.91	37.18	-40.59	12.20	671408.56	428842.31	32°10'40.049"N	103°46'45.570"W	0.45	
7108.60	0.950	221.580	7108.20	37.31	-41.53	11.46	671407.82	428841.37	32°10'40.039"N	103°46'45.579"W	0.50	
7203.80	0.930	216.490	7203.39	37.46	-42.74	10.48	671406.84	428840.16	32°10'40.027"N	103°46'45.591"W	0.09	
7299.10	1.120	215.360	7298.67	37.72	-44.12	9.48	671405.84	428838.78	32°10'40.014"N	103°46'45.602"W	0.20	
7394.40	1.040	209.220	7393.96	38.10	-45.64	8.52	671404.88	428837.27	32°10'39.999"N	103°46'45.614"W	0.15	
7489.70	1.070	214.090	7489.24	38.49	-47.13	7.60	671403.96	428835.77	32°10'39.984"N	103°46'45.624"W	0.10	
7585.00	1.210	209.570	7584.52	38.91	-48.74	6.60	671402.96	428834.16	32°10'39.968"N	103°46'45.636"W	0.17	
7607.00	2.290	215.830	7606.51	39.04	-49.30	6.23	671402.59	428833.60	32°10'39.963"N	103°46'45.640"W	4.98	
7639.00	7.030	207.750	7638.40	39.70	-51.55	4.94	671401.30	428831.35	32°10'39.941"N	103°46'45.656"W	14.92	
7671.00	12.050	201.680	7669.94	41.57	-56.39	2.80	671399.16	428826.51	32°10'39.893"N	103°46'45.681"W	15.98	
7703.00	16.530	192.810	7700.95	45.27	-63.94	0.55	671396.91	428818.96	32°10'39.818"N	103°46'45.707"W	15.54	
7735.00	20.400	187.710	7731.30	51.01	-73.91	-1.21	671395.15	428809.00	32°10'39.720"N	103°46'45.728"W	13.09	
7767.00	24.620	184.110	7760.86	58.69	-86.09	-2.43	671393.93	428796.81	32°10'39.599"N	103°46'45.743"W	13.87	
7798.00	28.490	179.980	7788.58	68.07	-99.93	-2.89	671393.47	428782.97	32°10'39.462"N	103°46'45.750"W	13.83	
7830.00	32.360	173.290	7816.18	80.12	-116.08	-1.89	671394.47	428766.83	32°10'39.302"N	103°46'45.739"W	16.06	



Actual Wellpath Report

No.312H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 312H
Area	Eddy County, NM	Well	No. 312H
Field	Poker Lake Unit	Wellbore	No.312H AWB
Facility	Poker Lake Unit No. 312H		

WELLPATH DATA (167 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
7862.00	36.320	169.430	7842.60	94.59	-133.91	0.85	671397.21	428749.00	32°10'39.126"N	103°46'45.708"W	14.12	
7893.00	39.040	165.560	7867.14	110.50	-152.39	4.97	671401.33	428730.51	32°10'38.943"N	103°46'45.661"W	11.62	
7942.00	42.500	160.200	7904.25	138.67	-182.93	14.43	671410.79	428699.98	32°10'38.640"N	103°46'45.553"W	10.04	
7974.00	45.000	154.500	7927.37	159.06	-203.32	22.97	671419.33	428679.59	32°10'38.438"N	103°46'45.455"W	14.58	
8006.00	46.700	147.900	7949.67	181.04	-223.41	34.03	671430.39	428659.50	32°10'38.238"N	103°46'45.327"W	15.72	
8038.00	49.000	143.000	7971.15	204.33	-242.93	47.49	671443.85	428639.98	32°10'38.045"N	103°46'45.172"W	13.43	
8069.00	51.800	139.800	7990.92	228.04	-261.58	62.40	671458.76	428621.33	32°10'37.859"N	103°46'45.000"W	12.03	
8102.00	55.800	138.600	8010.40	254.58	-281.73	79.80	671476.16	428601.18	32°10'37.659"N	103°46'44.798"W	12.47	
8133.00	59.700	138.600	8026.94	280.73	-301.39	97.14	671493.49	428581.52	32°10'37.464"N	103°46'44.598"W	12.58	
8163.00	63.600	139.000	8041.18	307.05	-321.26	114.52	671510.88	428561.66	32°10'37.266"N	103°46'44.397"W	13.05	
8195.00	66.000	137.500	8054.81	335.94	-342.85	133.80	671530.16	428540.07	32°10'37.051"N	103°46'44.174"W	8.62	
8227.00	67.100	137.500	8067.54	365.26	-364.50	153.64	671549.99	428518.42	32°10'36.836"N	103°46'43.944"W	3.44	
8258.00	71.600	136.900	8078.47	394.23	-385.77	173.34	671569.69	428497.15	32°10'36.625"N	103°46'43.716"W	14.63	
8290.00	75.200	137.400	8087.61	424.86	-408.25	194.19	671590.54	428474.67	32°10'36.401"N	103°46'43.475"W	11.35	
8321.00	77.900	137.500	8094.82	454.97	-430.46	214.58	671610.93	428452.46	32°10'36.180"N	103°46'43.239"W	8.72	
8353.00	80.400	137.100	8100.85	486.36	-453.56	235.89	671632.24	428429.37	32°10'35.951"N	103°46'42.993"W	7.91	
8377.00	83.300	136.800	8104.25	510.10	-470.92	252.11	671648.45	428412.01	32°10'35.778"N	103°46'42.805"W	12.15	
8409.00	84.000	136.200	8107.79	541.88	-493.99	274.00	671670.35	428388.94	32°10'35.549"N	103°46'42.552"W	2.87	
8440.00	85.300	137.300	8110.68	572.72	-516.47	295.15	671691.49	428366.46	32°10'35.325"N	103°46'42.307"W	5.48	
8471.00	86.900	137.700	8112.79	603.61	-539.27	316.04	671712.38	428343.66	32°10'35.099"N	103°46'42.065"W	5.32	
8503.00	87.100	137.500	8114.46	635.52	-562.87	337.59	671733.93	428320.07	32°10'34.864"N	103°46'41.816"W	0.88	
8535.00	87.500	138.600	8115.97	667.43	-586.64	358.96	671755.30	428296.30	32°10'34.628"N	103°46'41.569"W	3.65	
8567.00	89.400	138.900	8116.83	699.33	-610.69	380.05	671776.39	428272.25	32°10'34.389"N	103°46'41.325"W	6.01	
8630.00	89.900	139.000	8117.22	762.14	-658.20	421.42	671817.76	428224.74	32°10'33.916"N	103°46'40.846"W	0.81	
8724.00	89.300	135.000	8117.88	856.04	-726.93	485.51	671881.84	428156.01	32°10'33.233"N	103°46'40.105"W	4.30	
8821.00	89.100	131.300	8119.23	952.98	-793.25	556.26	671952.59	428089.70	32°10'32.573"N	103°46'39.286"W	3.82	
8916.00	89.900	132.400	8120.06	1047.87	-856.63	627.02	672023.35	428026.32	32°10'31.942"N	103°46'38.466"W	1.43	
9010.00	89.400	131.700	8120.63	1141.77	-919.59	696.82	672093.14	427963.37	32°10'31.316"N	103°46'37.658"W	0.92	
9106.00	88.600	132.000	8122.31	1237.65	-983.63	768.32	672164.63	427899.33	32°10'30.678"N	103°46'36.830"W	0.89	
9202.00	89.900	131.300	8123.57	1333.51	-1047.42	840.04	672236.35	427835.54	32°10'30.043"N	103°46'36.000"W	1.54	
9297.00	88.700	129.700	8124.73	1428.26	-1109.11	912.27	672308.58	427773.86	32°10'29.429"N	103°46'35.163"W	2.11	
9393.00	90.300	130.000	8125.56	1523.93	-1170.62	985.97	672382.27	427712.35	32°10'28.817"N	103°46'34.309"W	1.70	
9489.00	90.900	129.600	8124.56	1619.59	-1232.07	1059.72	672456.02	427650.91	32°10'28.205"N	103°46'33.455"W	0.75	
9584.00	90.100	130.600	8123.73	1714.29	-1293.25	1132.38	672528.68	427589.72	32°10'27.596"N	103°46'32.613"W	1.35	
9679.00	89.900	130.600	8123.73	1809.07	-1355.08	1204.51	672600.80	427527.90	32°10'26.980"N	103°46'31.778"W	0.21	
9775.00	90.700	130.900	8123.23	1904.85	-1417.74	1277.24	672673.52	427465.24	32°10'26.357"N	103°46'30.936"W	0.89	
9871.00	90.100	132.400	8122.56	2000.72	-1481.54	1348.97	672745.25	427401.45	32°10'25.722"N	103°46'30.105"W	1.68	
9966.00	89.200	132.700	8123.14	2095.66	-1545.78	1418.95	672815.23	427337.21	32°10'25.082"N	103°46'29.295"W	1.00	
10061.00	88.600	133.000	8124.96	2190.60	-1610.37	1488.59	672884.86	427272.62	32°10'24.439"N	103°46'28.488"W	0.71	
10157.00	88.600	133.700	8127.31	2286.54	-1676.25	1558.37	672954.64	427206.75	32°10'23.784"N	103°46'27.681"W	0.73	
10252.00	88.900	134.400	8129.38	2381.52	-1742.29	1626.64	673022.90	427140.72	32°10'23.127"N	103°46'26.890"W	0.80	
10348.00	89.800	134.900	8130.47	2477.51	-1809.75	1694.93	673091.19	427073.26	32°10'22.456"N	103°46'26.100"W	1.07	
10441.00	88.500	134.900	8131.85	2570.50	-1875.39	1760.79	673157.05	427007.63	32°10'21.803"N	103°46'25.338"W	1.40	
10535.00	87.400	132.900	8135.21	2664.42	-1940.52	1828.48	673224.73	426942.49	32°10'21.155"N	103°46'24.554"W	2.43	
10631.00	87.600	132.500	8139.40	2760.28	-2005.56	1898.96	673295.21	426877.46	32°10'20.508"N	103°46'23.738"W	0.47	



Actual Wellpath Report

No.312H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 312H
Area	Eddy County, NM	Well	No. 312H
Field	Poker Lake Unit	Wellbore	No.312H AWP
Facility	Poker Lake Unit No. 312H		

WELLPATH DATA (167 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
10726.00	88.600	132.900	8142.55	2855.18	-2069.95	1968.74	673364.98	426813.07	32°10'19.867"N	103°46'22.930"W	1.13	
10821.00	90.800	134.400	8143.05	2950.15	-2135.52	2037.47	673433.71	426747.51	32°10'19.215"N	103°46'22.135"W	2.80	
10916.00	89.900	133.300	8142.46	3045.14	-2201.33	2105.98	673502.21	426681.70	32°10'18.560"N	103°46'21.342"W	1.50	
11011.00	89.100	133.600	8143.29	3140.12	-2266.66	2174.94	673571.17	426616.38	32°10'17.910"N	103°46'20.543"W	0.90	
11107.00	88.600	132.600	8145.22	3236.07	-2332.24	2245.02	673641.25	426550.80	32°10'17.257"N	103°46'19.732"W	1.16	
11203.00	88.200	132.100	8147.90	3331.96	-2396.88	2315.94	673712.17	426486.16	32°10'16.614"N	103°46'18.911"W	0.67	
11298.00	87.600	131.200	8151.38	3426.77	-2459.98	2386.88	673783.10	426423.07	32°10'15.986"N	103°46'18.089"W	1.14	
11394.00	87.200	130.900	8155.74	3522.49	-2522.96	2459.20	673855.42	426360.09	32°10'15.359"N	103°46'17.252"W	0.52	
11489.00	88.300	130.700	8159.47	3617.21	-2584.98	2531.06	673927.27	426298.07	32°10'14.742"N	103°46'16.420"W	1.18	
11584.00	89.800	130.900	8161.04	3711.98	-2647.05	2602.96	673999.17	426236.01	32°10'14.124"N	103°46'15.587"W	1.59	
11680.00	89.500	132.400	8161.63	3807.85	-2710.84	2674.69	674070.89	426172.22	32°10'13.489"N	103°46'14.756"W	1.59	
11775.00	89.400	133.100	8162.54	3902.80	-2775.33	2744.45	674140.65	426107.74	32°10'12.847"N	103°46'13.949"W	0.74	
11871.00	88.900	131.700	8163.96	3998.72	-2840.05	2815.33	674211.52	426043.02	32°10'12.203"N	103°46'13.128"W	1.55	
11967.00	90.000	133.500	8164.89	4094.65	-2905.02	2885.99	674282.18	425978.05	32°10'11.556"N	103°46'12.310"W	2.20	
12062.00	90.100	133.100	8164.80	4189.63	-2970.18	2955.13	674351.31	425912.90	32°10'10.908"N	103°46'11.510"W	0.43	
12158.00	90.100	134.200	8164.64	4285.61	-3036.44	3024.59	674420.77	425846.64	32°10'10.249"N	103°46'10.706"W	1.15	
12254.00	89.900	135.200	8164.64	4381.61	-3103.96	3092.82	674489.00	425779.12	32°10'09.577"N	103°46'09.916"W	1.06	
12349.00	90.100	133.800	8164.64	4476.61	-3170.55	3160.58	674556.75	425712.54	32°10'08.915"N	103°46'09.132"W	1.49	
12445.00	87.400	132.100	8166.73	4572.54	-3235.94	3230.82	674626.99	425647.16	32°10'08.264"N	103°46'08.319"W	3.32	
12540.00	86.900	132.600	8171.45	4667.35	-3299.85	3300.94	674697.11	425583.24	32°10'07.628"N	103°46'07.507"W	0.74	
12636.00	86.200	132.300	8177.23	4763.11	-3364.53	3371.65	674767.81	425518.57	32°10'06.984"N	103°46'06.688"W	0.79	
12730.00	86.900	131.200	8182.89	4856.82	-3427.01	3441.65	674837.81	425456.09	32°10'06.362"N	103°46'05.878"W	1.39	
12825.00	88.000	131.500	8187.11	4951.57	-3489.71	3512.89	674909.05	425393.40	32°10'05.738"N	103°46'05.053"W	1.20	
12920.00	88.400	131.200	8190.10	5046.38	-3552.44	3584.17	674980.32	425330.67	32°10'05.114"N	103°46'04.228"W	0.53	
13015.00	89.000	130.100	8192.25	5141.13	-3614.31	3656.23	675052.37	425268.81	32°10'04.498"N	103°46'03.393"W	1.32	
13110.00	89.100	131.800	8193.83	5235.92	-3676.56	3727.97	675124.11	425206.56	32°10'03.878"N	103°46'02.562"W	1.79	
13206.00	88.000	131.500	8196.26	5331.76	-3740.34	3799.68	675195.81	425142.78	32°10'03.243"N	103°46'01.732"W	1.19	
13301.00	88.400	133.800	8199.24	5426.66	-3804.67	3869.51	675265.64	425078.46	32°10'02.603"N	103°46'00.924"W	2.46	
13397.00	88.800	133.200	8201.59	5522.61	-3870.73	3939.13	675335.25	425012.40	32°10'01.946"N	103°46'00.118"W	0.75	
13493.00	90.700	137.300	8202.01	5618.58	-3938.89	4006.70	675402.82	424944.25	32°10'01.268"N	103°45'59.336"W	4.71	
13520.00	90.300	137.400	8201.77	5645.54	-3958.75	4024.99	675421.11	424924.39	32°10'01.070"N	103°45'59.124"W	1.53	
13572.00	90.300	137.400	8201.50	5697.48	-3997.02	4060.18	675456.30	424886.11	32°10'00.690"N	103°45'58.717"W	0.00	Proj. to Bit



Actual Wellpath Report

No.312H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 312H
Area	Eddy County, NM	Well	No. 312H
Field	Poker Lake Unit	Wellbore	No.312H AWB
Facility	Poker Lake Unit No. 312H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No.312H Target #1		8115.00	-468.83	475.84	671872.17	428414.10	32°10'35.787"N	103°46'40.202"W	point
No.312H Target #2		8133.00	-1859.41	1714.34	673110.60	427023.60	32°10'21.964"N	103°46'25.877"W	point
No.312H PBHL		8170.00	-3995.94	4055.64	675451.76	424887.19	32°10'00.700"N	103°45'58.770"W	point

WELLPATH COMPOSITION - Ref Wellbore: No.312H AWB Ref Wellpath: No.312H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	7585.00	Generic gyro - northseeking (Standard)	Gyro Data, Gyro <76.1-7585>	No.312H AWB
7585.00	7893.00	ISCWSA MWD, Rev. 2 (Standard)	Pathfinder MWD <7607-7893>	No.312H AWB
7893.00	13520.00	NaviTrak (Standard)	BHI MWD NaviTrak 6 1/8" Hole <7942-13520> PTB(13572)	No.312H AWB
13520.00	13572.00	Blind Drilling (std)	Projection to bit	No.312H AWB