

30-015-39835

2105 MARKET STREET
MIDLAND, TX 79703
24 HR (432) 694-9517

STATE OF NEW MEXICO

COUNTY OF Eddy

I, Pacer White, Directional Driller certify that I am employed by Baker Hughes INTEQ; did conduct

or supervise on the day(s) of Dec 15, 2012 through Jan 13, 2013 the

taking of MWD surveys from a depth of 7,852 to a depth of 15,546 that

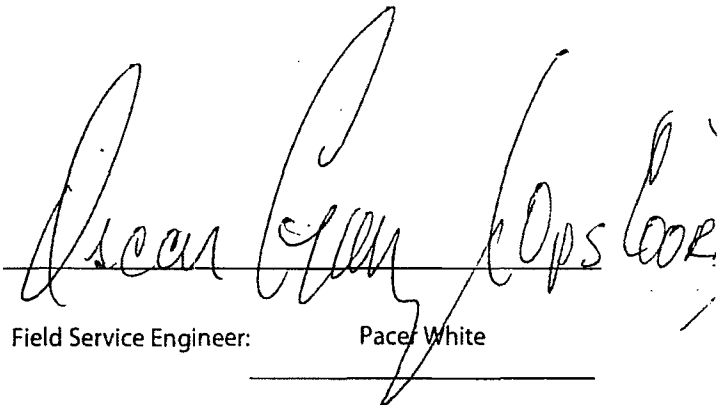
the data is true, correct, complete and within the limitations of the tool as set forth by Baker Hughes INTEQ; that I am

authorized and qualified to make this report; that this survey was conducted at the request of BOPCO, L.P.

for the Poker Lake Unit No. 332H in Eddy

County, NM; and that I have reviewed this report and find that it conforms to

the principles and procedures as set forth by INTEQ.


Field Service Engineer: Pacer White



BOPCO, L.P.

Location: Eddy County, NM
Field: Poker Lake Unit
Facility: Poker Lake Unit No. 332H

Slot: No.332H SHL
Well: No.332H
Wellbore: No.332H PWB

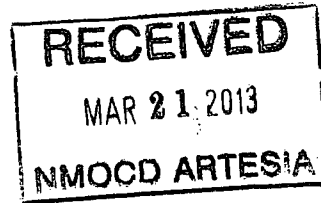
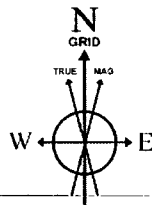


Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	7812.00	60.020	138.080	7582.76	-327.61	343.02	0.00	474.33
EOC	8244.40	89.429	133.366	7695.50	-622.04	631.82	6.88	886.49
No. 332H PBHL	15619.13	89.429	133.366	7769.00	-5685.73	5992.82	0.00	8260.83

Plot reference wellpath is Rev-H.0

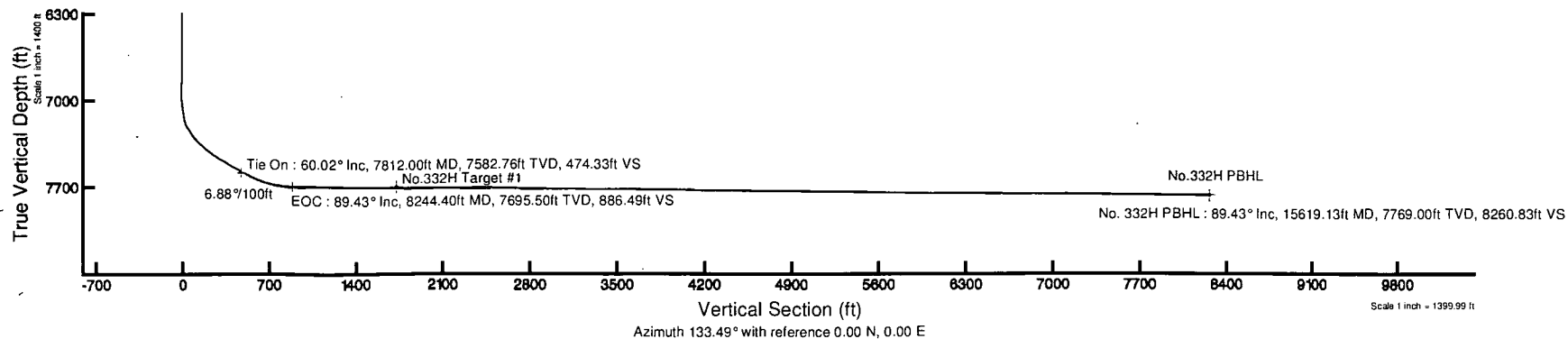
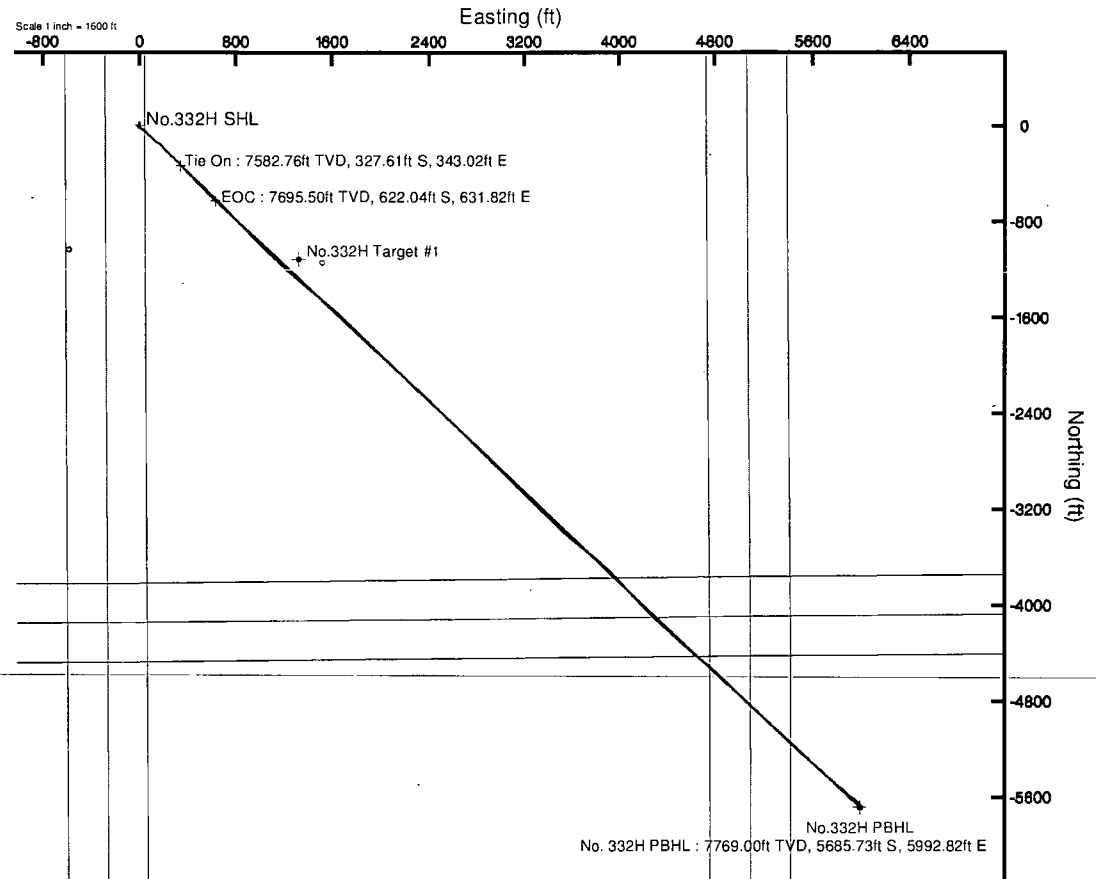
True vertical depths are referenced to Rig on No.332H SHL (KB)	Grid System: NAD27 / 1M New Mexico SP, Eastern Zone (5001), US feet
Measured depths are referenced to Rig on No.332H SHL (KB)	North Reference: Grid north
Rig on No.332H SHL (KB) to Mean Sea Level: 3449 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: No.332H SHL): -3427 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: hankol on 1/3/2013



BGGM (1945.0 to 2014.0) Dip: 60.08° Field: 48430.1 nT
Magnetic North is 7.65 degrees East of True North (at 12/16/2012)
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 7.40 degrees

For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.40 = 97.40



Rev-H.0



Actual Wellpath Report

No. 332 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.332H SHL
Area	Eddy County, NM	Well	No.332H
Field	Poker Lake Unit	Wellbore	No. 332 AWB
Facility	Poker Lake Unit No. 332H		

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	1/14/2013 at 9:29:29 AM
Convergence at slot	0.24° East	Database/Source file	WA Midland/No. 332_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	641339.62	455252.80	32°15'02.807"N	103°52'34.121"W
Facility Reference Pt			641339.62	455252.80	32°15'02.807"N	103°52'34.121"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.332H SHL (KB) to Facility Vertical Datum	22.00ft
Horizontal Reference Pt	Slot	Rig on No.332H SHL (KB) to Mean Sea Level	3449.00ft
Vertical Reference Pt	Rig on No.332H SHL (KB)	Rig on No.332H SHL (KB) to Mud Line at Slot (No.332H SHL)	22.00ft
MD Reference Pt	Rig on No.332H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	133.49°



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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.332H SHL
Area	Eddy County, NM	Well	No.332H
Field	Poker Lake Unit	Wellbore	No. 332 AWB
Facility	Poker Lake Unit No. 332H		

WELLPATH DATA (161 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	0.000	0.00	0.00	0.00	0.00	641339.62	455252.80	32°15'02.807"N	103°52'34.121"W	0.00	
240.00	0.610	0.000	240.00	-0.88	1.28	0.00	641339.62	455254.08	32°15'02.820"N	103°52'34.121"W	0.25	
502.00	2.240	0.000	501.91	-5.36	7.79	0.00	641339.62	455260.60	32°15'02.884"N	103°52'34.120"W	0.62	
655.00	2.000	0.000	654.80	-9.26	13.45	0.00	641339.62	455266.26	32°15'02.940"N	103°52'34.120"W	0.16	
703.00	2.210	32.300	702.77	-10.02	15.07	0.49	641340.12	455267.88	32°15'02.956"N	103°52'34.114"W	2.48	
891.00	1.300	347.900	890.69	-12.48	20.22	1.98	641341.61	455273.02	32°15'03.007"N	103°52'34.097"W	0.84	
1054.00	1.200	355.200	1053.65	-15.28	23.73	1.45	641341.08	455276.53	32°15'03.042"N	103°52'34.103"W	0.12	
1237.00	0.900	355.600	1236.62	-17.78	27.07	1.18	641340.81	455279.88	32°15'03.075"N	103°52'34.106"W	0.16	
1426.00	0.500	4.700	1425.60	-19.39	29.38	1.14	641340.76	455282.18	32°15'03.098"N	103°52'34.106"W	0.22	
1615.00	0.500	350.500	1614.60	-20.57	31.01	1.07	641340.69	455283.81	32°15'03.114"N	103°52'34.107"W	0.07	
1804.00	0.200	287.900	1803.59	-21.52	31.93	0.62	641340.24	455284.73	32°15'03.123"N	103°52'34.112"W	0.24	
1993.00	0.600	283.300	1992.59	-22.68	32.25	-0.66	641338.96	455285.06	32°15'03.126"N	103°52'34.127"W	0.21	
2182.00	0.400	267.100	2181.58	-23.99	32.45	-2.28	641337.34	455285.25	32°15'03.128"N	103°52'34.146"W	0.13	
2371.00	0.400	268.400	2370.58	-24.91	32.40	-3.60	641336.02	455285.20	32°15'03.128"N	103°52'34.161"W	0.00	
2560.00	0.250	259.700	2559.57	-25.62	32.30	-4.66	641334.96	455285.11	32°15'03.127"N	103°52'34.173"W	0.08	
2750.00	0.460	233.100	2749.57	-25.99	31.77	-5.68	641333.94	455284.57	32°15'03.122"N	103°52'34.185"W	0.14	
2939.00	0.400	237.000	2938.56	-26.27	30.96	-6.84	641332.78	455283.76	32°15'03.114"N	103°52'34.199"W	0.04	
3128.00	0.400	212.900	3127.56	-26.30	30.04	-7.75	641331.87	455282.85	32°15'03.105"N	103°52'34.209"W	0.09	
3317.00	0.500	145.000	3316.56	-25.37	28.82	-7.64	641331.99	455281.62	32°15'03.092"N	103°52'34.208"W	0.27	
3505.00	0.900	143.900	3504.54	-23.12	26.95	-6.30	641333.33	455279.75	32°15'03.074"N	103°52'34.193"W	0.21	
3694.00	1.100	145.400	3693.51	-19.88	24.26	-4.39	641335.23	455277.06	32°15'03.047"N	103°52'34.171"W	0.11	
3972.00	0.300	159.200	3971.49	-16.62	21.38	-2.62	641337.00	455274.18	32°15'03.019"N	103°52'34.150"W	0.29	
4161.00	0.400	152.700	4160.49	-15.55	20.33	-2.14	641337.48	455273.13	32°15'03.008"N	103°52'34.145"W	0.06	
4350.00	0.400	172.200	4349.48	-14.41	19.09	-1.75	641337.87	455271.89	32°15'02.996"N	103°52'34.140"W	0.07	
4539.00	0.400	180.100	4538.48	-13.44	17.78	-1.66	641337.96	455270.58	32°15'02.983"N	103°52'34.139"W	0.03	
4728.00	0.200	193.400	4727.47	-12.82	16.80	-1.74	641337.88	455269.60	32°15'02.973"N	103°52'34.140"W	0.11	
4916.00	0.300	187.500	4915.47	-12.37	15.99	-1.88	641337.74	455268.79	32°15'02.965"N	103°52'34.142"W	0.05	
5105.00	0.200	189.500	5104.47	-11.89	15.17	-2.00	641337.63	455267.98	32°15'02.957"N	103°52'34.143"W	0.05	
5294.00	0.400	210.800	5293.47	-11.56	14.28	-2.39	641337.23	455267.09	32°15'02.948"N	103°52'34.148"W	0.12	
5483.00	0.400	243.400	5482.46	-11.64	13.42	-3.32	641336.31	455266.22	32°15'02.940"N	103°52'34.159"W	0.12	



Actual Wellpath Report

No. 332 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.332H SHL
Area	Eddy County, NM	Well	No.332H
Field	Poker Lake Unit	Wellbore	No. 332 AWB
Facility	Poker Lake Unit No. 332H		

WELLPATH DATA (161 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
5671.00	0.300	206.100	5670.46	-11.72	12.68	-4.12	641335.50	455265.49	32°15'02.933"N	103°52'34.168"W	0.13	
5859.00	0.400	216.500	5858.46	-11.49	11.72	-4.73	641334.90	455264.52	32°15'02.923"N	103°52'34.175"W	0.06	
6048.00	0.500	216.700	6047.45	-11.32	10.52	-5.61	641334.01	455263.33	32°15'02.911"N	103°52'34.186"W	0.05	
6237.00	0.600	234.700	6236.44	-11.41	9.29	-6.91	641332.71	455262.09	32°15'02.899"N	103°52'34.201"W	0.10	
6426.00	0.800	244.400	6425.43	-12.07	8.15	-8.91	641330.71	455260.95	32°15'02.888"N	103°52'34.224"W	0.12	
6615.00	1.000	247.400	6614.40	-13.21	6.94	-11.62	641328.00	455259.75	32°15'02.876"N	103°52'34.256"W	0.11	
6803.00	1.000	248.800	6802.38	-14.58	5.72	-14.67	641324.96	455258.52	32°15'02.864"N	103°52'34.291"W	0.01	
6903.00	3.080	256.500	6902.31	-16.42	4.78	-18.09	641321.53	455257.58	32°15'02.855"N	103°52'34.331"W	2.09	
6960.00	3.210	259.720	6959.22	-18.19	4.14	-21.15	641318.47	455256.94	32°15'02.849"N	103°52'34.367"W	0.38	
6990.00	6.520	138.960	6989.16	-16.99	2.70	-20.86	641318.76	455255.50	32°15'02.835"N	103°52'34.363"W	28.71	
7020.00	6.220	117.730	7018.98	-13.73	0.66	-18.30	641321.32	455253.46	32°15'02.814"N	103°52'34.334"W	7.87	
7050.00	6.480	119.960	7048.79	-10.52	-0.94	-15.40	641324.23	455251.86	32°15'02.798"N	103°52'34.300"W	1.19	
7080.00	8.380	120.370	7078.54	-6.75	-2.89	-12.05	641327.58	455249.91	32°15'02.779"N	103°52'34.261"W	6.34	
7110.00	8.970	122.690	7108.20	-2.32	-5.26	-8.19	641331.43	455247.54	32°15'02.755"N	103°52'34.216"W	2.29	
7140.00	9.050	126.410	7137.83	2.32	-7.93	-4.32	641335.30	455244.88	32°15'02.729"N	103°52'34.171"W	1.96	
7170.00	9.580	124.990	7167.43	7.13	-10.76	-0.38	641339.24	455242.05	32°15'02.701"N	103°52'34.126"W	1.93	
7200.00	26.790	125.750	7195.82	16.37	-16.18	7.21	641346.83	455236.62	32°15'02.647"N	103°52'34.038"W	57.37	
7230.00	30.010	129.290	7222.21	30.55	-24.88	18.51	641358.13	455227.92	32°15'02.560"N	103°52'33.906"W	12.11	
7260.00	32.310	122.030	7247.89	45.90	-33.89	31.12	641370.74	455218.91	32°15'02.470"N	103°52'33.760"W	14.67	
7290.00	32.100	129.520	7273.29	61.72	-43.22	44.07	641383.69	455209.59	32°15'02.377"N	103°52'33.610"W	13.32	
7320.00	38.290	136.030	7297.80	78.98	-55.00	56.69	641396.31	455197.81	32°15'02.260"N	103°52'33.463"W	24.10	
7350.00	43.300	135.210	7320.50	98.56	-69.00	70.40	641410.01	455183.81	32°15'02.121"N	103°52'33.304"W	16.79	
7380.00	46.280	132.160	7341.79	119.69	-83.58	85.68	641425.30	455169.23	32°15'01.976"N	103°52'33.127"W	12.24	
7410.00	46.220	136.770	7362.55	141.34	-98.75	101.14	641440.76	455154.06	32°15'01.826"N	103°52'32.948"W	11.10	
7440.00	48.410	130.500	7382.89	163.37	-113.94	117.10	641456.72	455138.87	32°15'01.675"N	103°52'32.763"W	17.00	
7470.00	49.620	135.610	7402.58	186.00	-129.40	133.63	641473.25	455123.42	32°15'01.521"N	103°52'32.571"W	13.47	
7500.00	55.910	106.160	7420.98	208.80	-141.19	153.86	641493.47	455111.62	32°15'01.403"N	103°52'32.336"W	80.51	
7530.00	55.980	142.640	7438.17	232.66	-154.85	173.79	641513.40	455097.97	32°15'01.267"N	103°52'32.105"W	100.20	
7560.00	55.990	138.270	7454.96	257.33	-174.02	189.62	641529.23	455078.80	32°15'01.077"N	103°52'31.921"W	12.07	
7590.00	58.200	135.410	7471.26	282.47	-192.38	206.85	641546.46	455060.44	32°15'00.895"N	103°52'31.722"W	10.88	



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.332H SHL
Area	Eddy County, NM	Well	No.332H
Field	Poker Lake Unit	Wellbore	No. 332 AWB
Facility	Poker Lake Unit No. 332H		

WELLPATH DATA (161 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
7620.00	59.330	135.340	7486.81	308.11	-210.63	224.87	641564.48	455042.18	32°15'00.713"N	103°52'31.513"W	3.77	
7650.00	59.550	135.260	7502.07	333.93	-229.00	243.04	641582.65	455023.82	32°15'00.531"N	103°52'31.302"W	0.77	
7680.00	59.500	133.270	7517.28	359.78	-247.04	261.55	641601.16	455005.78	32°15'00.351"N	103°52'31.088"W	5.72	
7710.00	60.400	133.240	7532.31	385.74	-264.84	280.47	641620.07	454987.99	32°15'00.175"N	103°52'30.868"W	3.00	
7740.00	60.360	134.430	7547.13	411.82	-282.90	299.28	641638.88	454969.93	32°14'59.995"N	103°52'30.650"W	3.45	
7770.00	60.380	134.480	7561.97	437.90	-301.16	317.89	641657.49	454951.66	32°14'59.813"N	103°52'30.434"W	0.16	
7800.00	60.370	137.410	7576.80	463.95	-319.90	336.02	641675.62	454932.93	32°14'59.627"N	103°52'30.224"W	8.49	
7812.00	60.020	138.080	7582.76	474.33	-327.61	343.02	641682.62	454925.22	32°14'59.551"N	103°52'30.143"W	5.65	
7852.00	62.500	135.000	7602.00	509.34	-353.05	367.15	641706.75	454899.78	32°14'59.298"N	103°52'29.863"W	9.17	
7883.00	64.100	133.900	7615.93	537.03	-372.44	386.92	641726.52	454880.39	32°14'59.105"N	103°52'29.634"W	6.06	
7915.00	66.200	134.000	7629.37	566.07	-392.59	407.82	641747.42	454860.24	32°14'58.905"N	103°52'29.392"W	6.57	
7946.00	68.100	133.400	7641.41	594.63	-412.33	428.48	641768.07	454840.50	32°14'58.709"N	103°52'29.152"W	6.38	
7977.00	69.800	133.400	7652.55	623.56	-432.21	449.50	641789.09	454820.63	32°14'58.511"N	103°52'28.908"W	5.48	
8008.00	71.900	132.900	7662.71	652.85	-452.23	470.86	641810.45	454800.60	32°14'58.312"N	103°52'28.661"W	6.94	
8039.00	74.200	132.900	7671.75	682.50	-472.42	492.58	641832.17	454780.42	32°14'58.111"N	103°52'28.409"W	7.42	
8070.00	76.200	133.800	7679.67	712.47	-492.99	514.38	641853.96	454759.85	32°14'57.907"N	103°52'28.156"W	7.04	
8101.00	78.100	134.300	7686.56	742.69	-514.00	536.10	641875.68	454738.84	32°14'57.698"N	103°52'27.904"W	6.33	
8133.00	79.900	134.900	7692.67	774.09	-536.06	558.46	641898.05	454716.78	32°14'57.479"N	103°52'27.645"W	5.92	
8164.00	82.400	134.500	7697.44	804.71	-557.60	580.23	641919.81	454695.24	32°14'57.265"N	103°52'27.392"W	8.16	
8196.00	84.600	134.400	7701.06	836.50	-579.87	602.93	641942.51	454672.98	32°14'57.044"N	103°52'27.129"W	6.88	
8227.00	87.100	134.000	7703.30	867.41	-601.42	625.09	641964.67	454651.43	32°14'56.829"N	103°52'26.872"W	8.17	
8258.00	89.600	134.800	7704.20	898.40	-623.10	647.23	641986.81	454629.75	32°14'56.614"N	103°52'26.616"W	8.47	
8353.00	90.400	136.400	7704.20	993.33	-690.97	713.69	642053.27	454561.88	32°14'55.939"N	103°52'25.845"W	1.88	
8448.00	90.500	135.900	7703.45	1088.22	-759.48	779.51	642119.07	454493.38	32°14'55.259"N	103°52'25.082"W	0.54	
8542.00	90.500	136.100	7702.63	1182.13	-827.09	844.80	642184.37	454425.77	32°14'54.587"N	103°52'24.325"W	0.21	
8637.00	90.500	137.600	7701.80	1276.96	-896.40	909.77	642249.33	454356.47	32°14'53.898"N	103°52'23.572"W	1.58	
8731.00	90.100	134.600	7701.31	1370.85	-964.12	974.94	642314.49	454288.75	32°14'53.225"N	103°52'22.817"W	3.22	
8825.00	89.900	134.400	7701.31	1464.84	-1030.01	1041.99	642381.54	454222.87	32°14'52.571"N	103°52'22.040"W	0.30	
8919.00	89.900	134.600	7701.47	1558.82	-1095.89	1109.03	642448.58	454156.99	32°14'51.916"N	103°52'21.262"W	0.21	
9013.00	89.900	132.500	7701.64	1652.81	-1160.65	1177.16	642516.70	454092.23	32°14'51.272"N	103°52'20.472"W	2.23	



Actual Wellpath Report

No. 332 AWP

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REFERENCE WELLPATH IDENTIFICATION					
Operator	BOPCO, L.P.			Slot	No.332H SHL
Area	Eddy County, NM			Well	No.332H
Field	Poker Lake Unit			Wellbore	No. 332 AWB
Facility	Poker Lake Unit No. 332H				

WELLPATH DATA (161 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
9107.00	89.900	132.800	7701.80	1746.80	-1224.34	1246.29	642585.83	454028.55	32°14'50.639"N	103°52'19.670"W	0.32	
9202.00	89.300	131.600	7702.46	1841.78	-1288.15	1316.67	642656.20	453964.75	32°14'50.005"N	103°52'18.854"W	1.41	
9296.00	89.500	129.700	7703.45	1935.65	-1349.38	1387.98	642727.50	453903.52	32°14'49.396"N	103°52'18.027"W	2.03	
9390.00	89.400	129.100	7704.35	2029.41	-1409.04	1460.61	642800.13	453843.86	32°14'48.802"N	103°52'17.184"W	0.65	
9484.00	89.500	129.600	7705.25	2123.16	-1468.64	1533.30	642872.81	453784.27	32°14'48.209"N	103°52'16.341"W	0.54	
9578.00	89.400	131.700	7706.16	2217.03	-1529.87	1604.61	642944.12	453723.04	32°14'47.600"N	103°52'15.514"W	2.24	
9672.00	89.400	133.400	7707.14	2311.01	-1593.43	1673.85	643013.35	453659.49	32°14'46.969"N	103°52'14.711"W	1.81	
9766.00	89.400	134.500	7708.12	2405.00	-1658.66	1741.52	643081.02	453594.26	32°14'46.320"N	103°52'13.926"W	1.17	
9860.00	89.400	134.600	7709.11	2498.98	-1724.60	1808.50	643148.00	453528.32	32°14'45.665"N	103°52'13.150"W	0.11	
9954.00	89.500	134.500	7710.01	2592.96	-1790.54	1875.49	643214.98	453462.39	32°14'45.009"N	103°52'12.373"W	0.15	
10048.00	89.400	133.800	7710.91	2686.95	-1856.01	1942.93	643282.42	453396.92	32°14'44.359"N	103°52'11.591"W	0.75	
10142.00	89.300	134.400	7711.98	2780.93	-1921.42	2010.43	643349.91	453331.51	32°14'43.709"N	103°52'10.808"W	0.65	
10236.00	89.400	134.300	7713.05	2874.92	-1987.13	2077.64	643417.12	453265.81	32°14'43.055"N	103°52'10.029"W	0.15	
10329.00	88.800	134.700	7714.51	2967.89	-2052.31	2143.97	643483.44	453200.64	32°14'42.408"N	103°52'09.260"W	0.78	
10422.00	89.000	134.200	7716.29	3060.86	-2117.42	2210.34	643549.81	453135.53	32°14'41.761"N	103°52'08.491"W	0.58	
10517.00	89.400	135.900	7717.62	3155.81	-2184.65	2277.45	643616.92	453068.31	32°14'41.092"N	103°52'07.713"W	1.84	
10610.00	89.400	133.900	7718.59	3248.78	-2250.28	2343.32	643682.78	453002.68	32°14'40.440"N	103°52'06.949"W	2.15	
10704.00	89.400	131.500	7719.58	3342.75	-2314.02	2412.39	643751.85	452938.94	32°14'39.806"N	103°52'06.148"W	2.55	
10798.00	89.400	131.000	7720.56	3436.68	-2376.00	2483.06	643822.51	452876.97	32°14'39.190"N	103°52'05.329"W	0.53	
10894.00	89.500	133.600	7721.48	3532.64	-2440.60	2554.06	643893.50	452812.38	32°14'38.548"N	103°52'04.505"W	2.71	
10988.00	89.400	133.100	7722.39	3626.64	-2505.12	2622.41	643961.85	452747.86	32°14'37.906"N	103°52'03.713"W	0.54	
11081.00	89.500	134.300	7723.28	3719.63	-2569.37	2689.64	644029.07	452683.61	32°14'37.268"N	103°52'02.933"W	1.29	
11173.00	88.900	134.900	7724.56	3811.61	-2633.96	2755.14	644094.57	452619.03	32°14'36.626"N	103°52'02.174"W	0.92	
11266.00	89.300	135.200	7726.02	3904.56	-2699.77	2820.83	644160.26	452553.22	32°14'35.972"N	103°52'01.412"W	0.54	
11360.00	89.400	134.500	7727.09	3998.53	-2766.06	2887.47	644226.89	452486.94	32°14'35.313"N	103°52'00.640"W	0.75	
11454.00	89.400	132.900	7728.07	4092.52	-2831.00	2955.42	644294.84	452422.00	32°14'34.668"N	103°51'59.852"W	1.70	
11547.00	89.500	133.000	7728.97	4185.51	-2894.36	3023.49	644362.90	452358.65	32°14'34.038"N	103°51'59.063"W	0.15	
11640.00	89.400	135.900	7729.86	4278.48	-2959.48	3089.87	644429.28	452293.53	32°14'33.390"N	103°51'58.293"W	3.12	
11734.00	89.300	134.600	7730.93	4372.43	-3026.23	3156.04	644495.45	452226.79	32°14'32.727"N	103°51'57.526"W	1.39	
11827.00	89.400	134.100	7731.98	4465.41	-3091.24	3222.54	644561.94	452161.78	32°14'32.081"N	103°51'56.755"W	0.55	



Actual Wellpath Report

No. 332 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.332H SHL
Area	Eddy County, NM	Well	No.332H
Field	Poker Lake Unit	Wellbore	No. 332 AWB
Facility	Poker Lake Unit No. 332H		

WELLPATH DATA (161 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
11921.00	89.400	133.900	7732.97	4559.40	-3156.53	3290.16	644629.55	452096.49	32°14'31.432"N	103°51'55.971"W	0.21	
12014.00	89.500	133.500	7733.86	4652.40	-3220.78	3357.39	644696.78	452032.25	32°14'30.793"N	103°51'55.192"W	0.44	
12108.00	89.500	133.600	7734.68	4746.40	-3285.54	3425.51	644764.90	451967.49	32°14'30.149"N	103°51'54.402"W	0.11	
12202.00	89.400	134.600	7735.58	4840.38	-3350.95	3493.01	644832.39	451902.09	32°14'29.499"N	103°51'53.619"W	1.07	
12295.00	89.400	131.300	7736.56	4933.36	-3414.31	3561.07	644900.45	451838.74	32°14'28.869"N	103°51'52.830"W	3.55	
12388.00	89.400	129.100	7737.53	5026.20	-3474.33	3632.10	644971.47	451778.72	32°14'28.272"N	103°51'52.006"W	2.37	
12482.00	89.400	127.700	7738.51	5119.82	-3532.71	3705.76	645045.12	451720.34	32°14'27.691"N	103°51'51.152"W	1.49	
12576.00	89.300	128.600	7739.58	5213.40	-3590.77	3779.67	645119.03	451662.28	32°14'27.114"N	103°51'50.294"W	0.96	
12669.00	89.300	130.900	7740.72	5306.19	-3650.23	3851.17	645190.52	451602.83	32°14'26.522"N	103°51'49.465"W	2.47	
12763.00	89.300	134.300	7741.87	5400.16	-3713.84	3920.34	645259.69	451539.22	32°14'25.890"N	103°51'48.663"W	3.62	
12857.00	89.300	136.800	7743.01	5494.08	-3780.94	3986.16	645325.51	451472.13	32°14'25.223"N	103°51'47.900"W	2.66	
12950.00	89.400	137.700	7744.07	5586.88	-3849.22	4049.28	645388.62	451403.85	32°14'24.545"N	103°51'47.168"W	0.97	
13045.00	89.400	136.700	7745.06	5681.67	-3918.92	4113.83	645453.16	451334.15	32°14'23.852"N	103°51'46.420"W	1.05	
13138.00	89.400	135.600	7746.04	5774.57	-3985.99	4178.25	645517.58	451267.10	32°14'23.186"N	103°51'45.674"W	1.18	
13232.00	89.900	135.000	7746.61	5868.52	-4052.80	4244.37	645583.69	451200.29	32°14'22.522"N	103°51'44.907"W	0.83	
13326.00	89.800	133.200	7746.86	5962.51	-4118.21	4311.87	645651.19	451134.88	32°14'21.871"N	103°51'44.125"W	1.92	
13421.00	89.500	131.700	7747.44	6057.49	-4182.33	4381.96	645721.28	451070.77	32°14'21.234"N	103°51'43.312"W	1.61	
13516.00	89.500	133.700	7748.27	6152.47	-4246.75	4451.77	645791.08	451006.35	32°14'20.594"N	103°51'42.503"W	2.11	
13611.00	89.700	133.000	7748.93	6247.47	-4311.96	4520.85	645860.16	450941.15	32°14'19.945"N	103°51'41.702"W	0.77	
13707.00	89.600	130.700	7749.52	6343.42	-4376.00	4592.36	645931.66	450877.11	32°14'19.308"N	103°51'40.873"W	2.40	
13802.00	89.600	129.500	7750.18	6438.25	-4437.19	4665.02	646004.32	450815.92	32°14'18.700"N	103°51'40.030"W	1.26	
13897.00	89.700	129.300	7750.76	6533.00	-4497.49	4738.43	646077.72	450755.63	32°14'18.100"N	103°51'39.178"W	0.24	
13993.00	89.600	133.600	7751.35	6628.92	-4561.02	4810.37	646149.65	450692.10	32°14'17.468"N	103°51'38.344"W	4.48	
14088.00	89.600	134.500	7752.01	6723.91	-4627.07	4878.64	646217.93	450626.05	32°14'16.811"N	103°51'37.552"W	0.95	
14183.00	89.600	134.500	7752.67	6818.89	-4693.66	4946.40	646285.68	450559.47	32°14'16.150"N	103°51'36.767"W	0.00	
14278.00	89.600	135.800	7753.34	6913.85	-4761.01	5013.40	646352.67	450492.13	32°14'15.480"N	103°51'35.991"W	1.37	
14374.00	89.300	134.100	7754.26	7009.81	-4828.82	5081.33	646420.60	450424.32	32°14'14.806"N	103°51'35.203"W	1.80	
14469.00	89.300	133.200	7755.42	7104.80	-4894.39	5150.07	646489.33	450358.75	32°14'14.154"N	103°51'34.406"W	0.95	
14564.00	89.300	133.500	7756.58	7199.79	-4959.60	5219.14	646558.40	450293.55	32°14'13.506"N	103°51'33.605"W	0.32	
14659.00	89.200	134.100	7757.82	7294.78	-5025.35	5287.70	646626.96	450227.81	32°14'12.853"N	103°51'32.811"W	0.64	



Actual Wellpath Report

No. 332 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.332H SHL
Area	Eddy County, NM	Well	No.332H
Field	Poker Lake Unit	Wellbore	No. 332 AWB
Facility	Poker Lake Unit No. 332H		

WELLPATH DATA (161 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
14755.00	89.000	133.400	7759.33	7390.77	-5091.72	5357.04	646696.29	450161.44	32°14'12.193"N	103°51'32.007"W	0.76	
14850.00	89.200	134.300	7760.82	7485.76	-5157.53	5425.54	646764.78	450095.64	32°14'11.539"N	103°51'31.213"W	0.97	
14945.00	89.200	132.600	7762.15	7580.74	-5222.85	5494.50	646833.74	450030.32	32°14'10.889"N	103°51'30.413"W	1.79	
15040.00	89.200	132.400	7763.48	7675.72	-5287.03	5564.53	646903.77	449966.15	32°14'10.251"N	103°51'29.601"W	0.21	
15136.00	89.300	132.200	7764.73	7771.69	-5351.63	5635.53	646974.76	449901.55	32°14'09.609"N	103°51'28.778"W	0.23	
15231.00	89.300	131.700	7765.89	7866.65	-5415.13	5706.18	647045.41	449838.05	32°14'08.977"N	103°51'27.959"W	0.53	
15326.00	90.100	130.200	7766.39	7961.55	-5477.39	5777.93	647117.15	449775.79	32°14'08.358"N	103°51'27.127"W	1.79	
15421.00	88.400	130.400	7767.64	8056.39	-5538.83	5850.37	647189.59	449714.36	32°14'07.747"N	103°51'26.287"W	1.80	
15517.00	88.400	130.200	7770.32	8152.21	-5600.90	5923.56	647262.77	449652.30	32°14'07.130"N	103°51'25.438"W	0.21	
15546.00	89.200	129.900	7770.92	8181.15	-5619.55	5945.76	647284.96	449633.64	32°14'06.944"N	103°51'25.180"W	2.95	
15619.00	89.200	129.900	7771.94	8254.00	-5666.38	6001.75	647340.96	449586.83	32°14'06.478"N	103°51'24.531"W	0.00	Projection to bit

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No.332H Target #1		7694.00	-1111.88	1321.37	642660.90	454141.00	32°14'51.749"N	103°52'18.791"W	point
No.332H PBHL		7769.00	-5685.73	5992.82	647332.03	449567.48	32°14'06.287"N	103°51'24.636"W	point



Actual Wellpath Report

No. 332 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.332H SHL
Area	Eddy County, NM	Well	No.332H
Field	Poker Lake Unit	Wellbore	No. 332 AWB
Facility	Poker Lake Unit No. 332H		

WELLPATH COMPOSITION - Ref Wellbore: No. 332 AWB Ref Wellpath: No. 332 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	655.00	Drift Indicator (Standard)	Rig Shots (240'-655')	No. 332 AWB
655.00	3694.00	NaviTrak (Standard)	BHI MWD NaviTrak 12.25" Hole <703-3694>	No. 332 AWB
3694.00	6803.00	NaviTrak (Standard)	BHI MWD NaviTrak 8.75" Hole <3972-7716>	No. 332 AWB
6803.00	7812.00	Generic gyro - northseeking (Standard)	VES Gyros <6903-7812>	No. 332 AWB
7812.00	15546.00	NaviTrak (Standard)	BHI / Navitrak MWD <7852-15546>	No. 332 AWB
15546.00	15619.00	Blind Drilling (std)	Projection to bit	No. 332 AWB