



BOPCO, L.P.

Location: Eddy County, NM
Field: Poker Lake Unit
Facility: Poker Lake Unit No. 442H and 443H

Slot: No. 442H SHL
Well: No. 442H
Wellbore: No. 442H PWB



30-05 41195

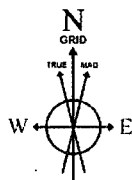
Scale 1 inch = 1000 ft
Easting (ft)
-500 0 500
No.442H PBHL : 8650.00ft TVD, 5959.48ft N, 119.24ft W

PLU No. 442H PBHL

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	22.00	0.000	358.854	22.00	0.00	0.00	0.00	0.00
Est. KOP	8065.00	0.000	358.854	8065.00	0.00	0.00	0.00	0.00
EOC	8963.79	89.872	358.854	8638.00	571.61	-11.43	10.00	571.72
TL	8963.81	89.872	358.854	8638.00	571.63	-11.44	2.00	571.75
No.442H PBHL	14352.75	89.872	358.854	8650.00	5959.48	-119.24	0.00	5960.67

Plot reference wellpath is Rev-E.0

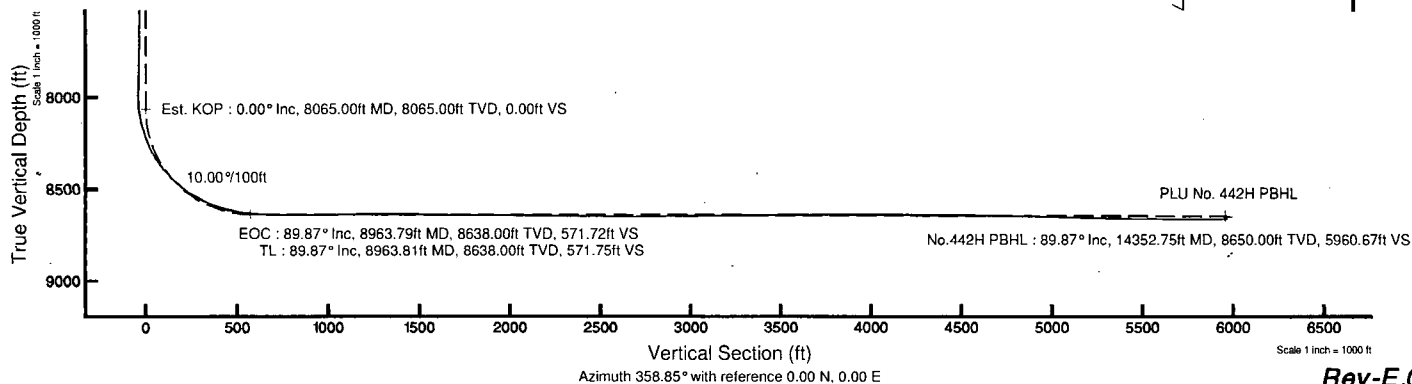
True vertical depths are referenced to Rig on No. 442H SHL (KB)	Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 442H SHL (KB)	North Reference: Grid north
Rig on No. 442H SHL (KB) to Mean Sea Level: 3175 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: No. 442H SHL): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: genibry on 04/23/2013



BGGM (1945.0 to 2014.0) Dip: 60.02° Field: 48400.1 nT
Magnetic North is 7.67 degrees East of True North (at 11/30/2012)
Grid North is 0.22 degrees East of True North
To correct azimuth from True to Grid subtract 0.22 degrees
To correct azimuth from Magnetic to Grid add 7.45 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.45 = 97.45

TL : 8638.00ft TVD, 571.63ft N, 11.44ft W
EOC : 8638.00ft TVD, 571.61ft N, 11.43ft W

Est. KOP : 8065.00ft TVD, 0.00ft N, 0.00ft E No. 442H SHL



Rev-E.0



Actual Wellpath Report

No.442H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 442H SHL
Area	Eddy County, NM	Well	No. 442H
Field	Poker Lake Unit	Wellbore	No.442H AWB
Facility	Poker Lake Unit No. 442H and 443H		

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	0.999928	Report Generated	05/09/2013 at 8:01:35 AM
Convergence at slot	0.22° East	Database/Source file	WA Midland/No.442H_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	28.20	-28.26	628153.24	435949.26	32°11'52.307"N	103°55'08.537"W
Facility Reference Pt			628181.49	435921.07	32°11'52.026"N	103°55'08.210"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. 442H SHL (KB) to Facility Vertical Datum	3175.00ft
Horizontal Reference Pt	Slot	Rig on No. 442H SHL (KB) to Mean Sea Level	3175.00ft
Vertical Reference Pt	Rig on No. 442H SHL (KB)	Rig on No. 442H SHL (KB) to Mud Line at Slot (No. 442H SHL)	3175.00ft
MD Reference Pt	Rig on No. 442H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	358.85°



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 442H SHL
Area	Eddy County, NM	Well	No. 442H
Field	Poker Lake Unit	Wellbore	No.442H AWB
Facility	Poker Lake Unit No. 442H and 443H		

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	216.350	0.00	0.00	0.00	0.00	628153.24	435949.26	32°11'52.307"N	103°55'08.537"W	0.00	
100.00	0.180	216.350	100.00	-0.12	-0.13	-0.09	628153.14	435949.14	32°11'52.305"N	103°55'08.538"W	0.18	
200.00	0.150	204.770	200.00	-0.37	-0.37	-0.24	628152.99	435948.89	32°11'52.303"N	103°55'08.540"W	0.04	
300.00	0.200	175.740	300.00	-0.66	-0.66	-0.28	628152.95	435948.60	32°11'52.300"N	103°55'08.541"W	0.10	
400.00	0.370	116.050	400.00	-0.98	-0.98	0.02	628153.26	435948.28	32°11'52.297"N	103°55'08.537"W	0.32	
500.00	0.770	100.960	499.99	-1.27	-1.25	0.97	628154.21	435948.01	32°11'52.294"N	103°55'08.526"W	0.42	
600.00	0.910	100.440	599.98	-1.57	-1.52	2.41	628155.65	435947.74	32°11'52.291"N	103°55'08.509"W	0.14	
700.00	0.910	98.290	699.97	-1.86	-1.78	3.98	628157.21	435947.48	32°11'52.289"N	103°55'08.491"W	0.03	
800.00	0.900	96.980	799.96	-2.10	-1.99	5.54	628158.78	435947.27	32°11'52.287"N	103°55'08.473"W	0.02	
900.00	0.890	94.660	899.94	-2.29	-2.15	7.10	628160.33	435947.11	32°11'52.285"N	103°55'08.455"W	0.04	
1000.00	0.940	91.410	999.93	-2.41	-2.23	8.69	628161.93	435947.03	32°11'52.284"N	103°55'08.436"W	0.07	
1100.00	0.310	67.880	1099.93	-2.35	-2.15	9.76	628163.00	435947.11	32°11'52.285"N	103°55'08.424"W	0.67	
1200.00	0.140	32.470	1199.92	-2.15	-1.95	10.08	628163.31	435947.32	32°11'52.287"N	103°55'08.420"W	0.21	
1300.00	0.150	23.900	1299.92	-1.93	-1.72	10.20	628163.43	435947.54	32°11'52.289"N	103°55'08.419"W	0.02	
1400.00	0.190	351.680	1399.92	-1.64	-1.44	10.22	628163.46	435947.82	32°11'52.292"N	103°55'08.418"W	0.10	
1500.00	0.200	346.460	1499.92	-1.31	-1.11	10.16	628163.40	435948.16	32°11'52.295"N	103°55'08.419"W	0.02	
1600.00	0.210	307.740	1599.92	-1.02	-0.82	9.97	628163.21	435948.44	32°11'52.298"N	103°55'08.421"W	0.14	
1700.00	0.230	289.160	1699.92	-0.84	-0.65	9.64	628162.87	435948.62	32°11'52.300"N	103°55'08.425"W	0.07	
1800.00	0.260	290.120	1799.92	-0.69	-0.50	9.24	628162.47	435948.76	32°11'52.301"N	103°55'08.430"W	0.03	
1900.00	0.280	288.450	1899.92	-0.52	-0.35	8.79	628162.03	435948.92	32°11'52.303"N	103°55'08.435"W	0.02	
2000.00	0.270	289.590	1999.92	-0.36	-0.19	8.34	628161.57	435949.07	32°11'52.304"N	103°55'08.440"W	0.01	
2100.00	0.430	244.710	2099.92	-0.43	-0.27	7.78	628161.01	435948.99	32°11'52.304"N	103°55'08.447"W	0.31	
2200.00	0.540	242.840	2199.91	-0.79	-0.65	7.02	628160.25	435948.62	32°11'52.300"N	103°55'08.456"W	0.11	
2300.00	0.700	247.380	2299.91	-1.22	-1.10	6.04	628159.27	435948.17	32°11'52.295"N	103°55'08.467"W	0.17	
2400.00	0.720	249.660	2399.90	-1.65	-1.55	4.88	628158.12	435947.71	32°11'52.291"N	103°55'08.481"W	0.03	
2500.00	0.720	266.770	2499.89	-1.88	-1.80	3.67	628156.90	435947.46	32°11'52.289"N	103°55'08.495"W	0.21	
2600.00	0.540	278.690	2599.89	-1.82	-1.77	2.57	628155.81	435947.50	32°11'52.289"N	103°55'08.507"W	0.22	
2700.00	0.070	150.930	2699.88	-1.79	-1.75	2.14	628155.37	435947.51	32°11'52.289"N	103°55'08.513"W	0.59	
2800.00	0.430	129.630	2799.88	-2.09	-2.04	2.46	628155.69	435947.22	32°11'52.286"N	103°55'08.509"W	0.37	
2900.00	0.680	126.350	2899.88	-2.70	-2.63	3.22	628156.46	435946.63	32°11'52.280"N	103°55'08.500"W	0.25	
3000.00	1.430	124.650	2999.86	-3.79	-3.69	4.73	628157.96	435945.57	32°11'52.270"N	103°55'08.483"W	0.75	
3100.00	1.760	126.980	3099.82	-5.47	-5.33	6.98	628160.22	435943.94	32°11'52.254"N	103°55'08.456"W	0.34	
3200.00	1.410	148.310	3199.79	-7.47	-7.30	8.85	628162.09	435941.96	32°11'52.234"N	103°55'08.435"W	0.68	
3300.00	0.290	184.310	3299.77	-8.79	-8.60	9.48	628162.72	435940.67	32°11'52.221"N	103°55'08.427"W	1.19	
3310.00	0.260	205.450	3309.77	-8.83	-8.64	9.47	628162.70	435940.62	32°11'52.221"N	103°55'08.428"W	1.05	
3388.00	0.300	291.600	3387.77	-8.91	-8.73	9.20	628162.44	435940.54	32°11'52.220"N	103°55'08.431"W	0.49	
3543.00	0.200	51.500	3542.77	-8.59	-8.41	9.04	628162.27	435940.85	32°11'52.223"N	103°55'08.433"W	0.28	
3638.00	0.300	42.600	3637.77	-8.31	-8.12	9.34	628162.57	435941.14	32°11'52.226"N	103°55'08.429"W	0.11	
3732.00	0.200	69.700	3731.77	-8.08	-7.89	9.66	628162.89	435941.38	32°11'52.228"N	103°55'08.425"W	0.16	
3826.00	0.500	127.000	3825.77	-8.28	-8.08	10.14	628163.37	435941.19	32°11'52.226"N	103°55'08.420"W	0.45	
3920.00	0.600	113.600	3919.76	-8.74	-8.52	10.92	628164.15	435940.74	32°11'52.222"N	103°55'08.411"W	0.17	
4017.00	0.300	120.100	4016.76	-9.08	-8.85	11.60	628164.84	435940.41	32°11'52.218"N	103°55'08.403"W	0.31	
4113.00	0.400	143.300	4112.76	-9.48	-9.25	12.02	628165.25	435940.02	32°11'52.215"N	103°55'08.398"W	0.18	
4208.00	0.500	157.500	4207.76	-10.14	-9.89	12.38	628165.61	435939.37	32°11'52.208"N	103°55'08.394"W	0.16	
4302.00	0.200	180.000	4301.75	-10.69	-10.44	12.53	628165.77	435938.83	32°11'52.203"N	103°55'08.392"W	0.35	



Actual Wellpath Report

No.442H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 442H SHL
Area	Eddy County, NM	Well	No. 442H
Field	Poker Lake Unit	Wellbore	No.442H AWB
Facility	Poker Lake Unit No. 442H and 443H		

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
4397.00	0.100	225.600	4396.75	-10.91	-10.66	12.47	628165.71	435938.60	32°11'52.201"N	103°55'08.393"W	0.16	
4493.00	0.300	202.300	4492.75	-11.20	-10.95	12.32	628165.55	435938.31	32°11'52.198"N	103°55'08.394"W	0.22	
4587.00	0.300	145.800	4586.75	-11.63	-11.38	12.36	628165.60	435937.88	32°11'52.193"N	103°55'08.394"W	0.30	
4682.00	0.300	173.500	4681.75	-12.08	-11.84	12.53	628165.77	435937.43	32°11'52.189"N	103°55'08.392"W	0.15	
4777.00	0.300	146.000	4776.75	-12.54	-12.29	12.70	628165.93	435936.97	32°11'52.184"N	103°55'08.390"W	0.15	
4872.00	0.200	134.300	4871.75	-12.87	-12.61	12.96	628166.19	435936.65	32°11'52.181"N	103°55'08.387"W	0.12	
4967.00	0.200	219.700	4966.75	-13.11	-12.85	12.97	628166.20	435936.41	32°11'52.179"N	103°55'08.387"W	0.29	
5062.00	0.100	226.000	5061.75	-13.29	-13.04	12.80	628166.04	435936.22	32°11'52.177"N	103°55'08.389"W	0.11	
5157.00	0.300	126.900	5156.75	-13.50	-13.25	12.94	628166.18	435936.02	32°11'52.175"N	103°55'08.387"W	0.35	
5252.00	0.300	139.300	5251.75	-13.85	-13.58	13.30	628166.54	435935.68	32°11'52.172"N	103°55'08.383"W	0.07	
5347.00	0.500	135.400	5346.74	-14.34	-14.07	13.76	628166.99	435935.20	32°11'52.167"N	103°55'08.378"W	0.21	
5442.00	0.600	133.700	5441.74	-14.99	-14.71	14.41	628167.64	435934.56	32°11'52.160"N	103°55'08.370"W	0.11	
5536.00	0.600	156.400	5535.73	-15.79	-15.50	14.96	628168.20	435933.77	32°11'52.153"N	103°55'08.364"W	0.25	
5631.00	0.600	157.000	5630.73	-16.72	-16.41	15.35	628168.59	435932.85	32°11'52.144"N	103°55'08.359"W	0.01	
5727.00	0.700	189.400	5726.72	-17.76	-17.45	15.45	628168.69	435931.81	32°11'52.133"N	103°55'08.358"W	0.39	
5822.00	0.600	183.000	5821.72	-18.83	-18.52	15.33	628168.57	435930.74	32°11'52.123"N	103°55'08.360"W	0.13	
5916.00	0.600	165.400	5915.71	-19.80	-19.49	15.43	628168.67	435929.77	32°11'52.113"N	103°55'08.359"W	0.20	
6012.00	0.400	120.300	6011.71	-20.46	-20.15	15.85	628169.08	435929.12	32°11'52.107"N	103°55'08.354"W	0.44	
6107.00	0.500	147.300	6106.71	-20.99	-20.66	16.36	628169.59	435928.60	32°11'52.101"N	103°55'08.348"W	0.24	
6202.00	0.500	131.600	6201.70	-21.62	-21.29	16.89	628170.13	435927.98	32°11'52.095"N	103°55'08.342"W	0.14	
6296.00	0.400	164.900	6295.70	-22.22	-21.88	17.28	628170.52	435927.39	32°11'52.089"N	103°55'08.337"W	0.29	
6391.00	0.500	172.900	6390.70	-22.95	-22.61	17.42	628170.66	435926.66	32°11'52.082"N	103°55'08.336"W	0.12	
6486.00	0.500	152.200	6485.69	-23.73	-23.38	17.67	628170.90	435925.88	32°11'52.074"N	103°55'08.333"W	0.19	
6581.00	0.500	164.400	6580.69	-24.51	-24.15	17.97	628171.21	435925.11	32°11'52.067"N	103°55'08.329"W	0.11	
6677.00	0.700	173.700	6676.68	-25.49	-25.14	18.15	628171.38	435924.13	32°11'52.057"N	103°55'08.327"W	0.23	
6772.00	0.900	179.200	6771.67	-26.82	-26.46	18.22	628171.46	435922.81	32°11'52.044"N	103°55'08.326"W	0.23	
6867.00	0.900	189.600	6866.66	-28.30	-27.94	18.11	628171.34	435921.32	32°11'52.029"N	103°55'08.328"W	0.17	
6962.00	1.000	184.500	6961.65	-29.86	-29.50	17.92	628171.15	435919.76	32°11'52.014"N	103°55'08.330"W	0.14	
7057.00	0.800	218.500	7056.64	-31.19	-30.85	17.44	628170.68	435918.42	32°11'52.001"N	103°55'08.336"W	0.59	
7152.00	0.600	240.900	7151.63	-31.94	-31.61	16.59	628169.83	435917.66	32°11'51.993"N	103°55'08.346"W	0.35	
7248.00	0.900	250.600	7247.62	-32.41	-32.10	15.44	628168.68	435917.16	32°11'51.988"N	103°55'08.359"W	0.34	
7343.00	1.400	241.600	7342.60	-33.17	-32.90	13.72	628166.95	435916.36	32°11'51.980"N	103°55'08.379"W	0.56	
7438.00	1.200	242.200	7437.58	-34.15	-33.92	11.82	628165.05	435915.35	32°11'51.970"N	103°55'08.401"W	0.21	
7533.00	1.800	247.000	7532.55	-35.15	-34.97	9.56	628162.80	435914.30	32°11'51.960"N	103°55'08.428"W	0.64	
7628.00	2.200	249.200	7627.49	-36.32	-36.20	6.49	628159.72	435913.07	32°11'51.948"N	103°55'08.463"W	0.43	
7723.00	1.900	247.500	7722.43	-37.51	-37.45	3.33	628156.56	435911.82	32°11'51.936"N	103°55'08.500"W	0.32	
7818.00	1.600	192.700	7817.39	-39.37	-39.34	1.58	628154.82	435909.92	32°11'51.917"N	103°55'08.521"W	1.72	
7913.00	1.300	205.400	7912.36	-41.62	-41.61	0.83	628154.06	435907.65	32°11'51.895"N	103°55'08.530"W	0.46	
7960.00	1.400	210.900	7959.35	-42.58	-42.59	0.30	628153.54	435906.68	32°11'51.885"N	103°55'08.536"W	0.35	
8030.00	3.400	302.200	8029.30	-42.17	-42.21	-1.89	628151.34	435907.05	32°11'51.889"N	103°55'08.561"W	5.29	
8062.00	7.000	337.300	8061.17	-39.83	-39.91	-3.45	628149.79	435909.36	32°11'51.912"N	103°55'08.579"W	14.52	
8094.00	10.000	340.900	8092.81	-35.37	-35.48	-5.11	628148.12	435913.78	32°11'51.956"N	103°55'08.598"W	9.52	
8126.00	12.500	344.500	8124.20	-29.37	-29.52	-6.95	628146.29	435919.75	32°11'52.015"N	103°55'08.620"W	8.11	
8158.00	16.300	344.600	8155.19	-21.66	-21.85	-9.07	628144.17	435927.41	32°11'52.091"N	103°55'08.644"W	11.88	
8189.00	18.100	348.700	8184.80	-12.71	-12.93	-11.16	628142.07	435936.33	32°11'52.179"N	103°55'08.668"W	7.00	



Actual Wellpath Report

No.442H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 442H SHL
Area	Eddy County, NM	Well	No. 442H
Field	Poker Lake Unit	Wellbore	No.442H AWB
Facility	Poker Lake Unit No. 442H and 443H		

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
8221.00	17.800	353.600	8215.24	-2.94	-3.20	-12.68	628140.55	435946.07	32°11'52.275"N	103°55'08.685"W	4.81	
8253.00	21.200	359.700	8245.41	7.72	7.45	-13.26	628139.98	435956.72	32°11'52.381"N	103°55'08.691"W	12.37	
8285.00	24.600	6.500	8274.89	20.11	19.86	-12.54	628140.70	435969.12	32°11'52.504"N	103°55'08.682"W	13.45	
8316.00	29.000	7.400	8302.55	33.94	33.73	-10.84	628142.40	435982.99	32°11'52.641"N	103°55'08.662"W	14.25	
8348.00	32.200	8.000	8330.09	50.04	49.87	-8.65	628144.59	435999.13	32°11'52.800"N	103°55'08.636"W	10.05	
8380.00	35.500	7.800	8356.66	67.64	67.53	-6.20	628147.03	436016.78	32°11'52.975"N	103°55'08.606"W	10.32	
8412.00	38.100	7.100	8382.28	86.59	86.53	-3.72	628149.52	436035.79	32°11'53.163"N	103°55'08.577"W	8.23	
8443.00	41.300	5.700	8406.13	106.22	106.21	-1.52	628151.71	436055.46	32°11'53.358"N	103°55'08.550"W	10.72	
8475.00	44.300	4.500	8429.61	127.83	127.86	0.40	628153.64	436077.11	32°11'53.572"N	103°55'08.527"W	9.71	
8507.00	47.000	4.700	8451.98	150.59	150.67	2.24	628155.48	436099.92	32°11'53.797"N	103°55'08.505"W	8.45	
8539.00	49.200	3.600	8473.35	174.31	174.42	3.96	628157.20	436123.67	32°11'54.032"N	103°55'08.483"W	7.34	
8570.00	52.200	2.200	8492.98	198.23	198.38	5.17	628158.40	436147.62	32°11'54.269"N	103°55'08.468"W	10.29	
8602.00	54.900	1.300	8511.99	223.94	224.10	5.95	628159.18	436173.35	32°11'54.524"N	103°55'08.458"W	8.74	
8634.00	58.100	1.100	8529.65	250.60	250.78	6.51	628159.74	436200.02	32°11'54.788"N	103°55'08.450"W	10.01	
8666.00	60.600	1.000	8545.96	278.10	278.30	7.01	628160.25	436227.54	32°11'55.060"N	103°55'08.443"W	7.82	
8697.00	63.400	359.600	8560.51	305.46	305.67	7.15	628160.39	436254.91	32°11'55.331"N	103°55'08.440"W	9.87	
8729.00	66.100	359.000	8574.16	334.40	334.60	6.80	628160.03	436283.84	32°11'55.617"N	103°55'08.443"W	8.61	
8761.00	68.800	359.200	8586.43	363.95	364.15	6.33	628159.57	436313.39	32°11'55.910"N	103°55'08.447"W	8.46	
8792.00	70.900	359.600	8597.11	393.05	393.25	6.03	628159.26	436342.48	32°11'56.198"N	103°55'08.450"W	6.88	
8824.00	73.900	359.500	8606.79	423.55	423.75	5.79	628159.02	436372.98	32°11'56.499"N	103°55'08.451"W	9.38	
8856.00	76.900	358.600	8614.85	454.51	454.71	5.27	628158.51	436403.94	32°11'56.806"N	103°55'08.456"W	9.76	
8887.00	78.900	358.100	8621.35	484.82	485.00	4.40	628157.64	436434.23	32°11'57.106"N	103°55'08.464"W	6.64	
8919.00	80.700	357.800	8627.02	516.31	516.48	3.27	628156.51	436465.70	32°11'57.417"N	103°55'08.476"W	5.70	
8951.00	83.500	358.000	8631.41	548.00	548.15	2.11	628155.35	436497.37	32°11'57.731"N	103°55'08.488"W	8.77	
8982.00	86.000	359.000	8634.25	578.86	579.00	1.30	628154.54	436528.22	32°11'58.036"N	103°55'08.496"W	8.68	
9013.00	86.600	358.400	8636.25	609.80	609.93	0.60	628153.84	436559.15	32°11'58.342"N	103°55'08.503"W	2.73	
9077.00	87.300	358.900	8639.66	673.71	673.82	-0.90	628152.33	436623.04	32°11'58.974"N	103°55'08.518"W	1.34	
9172.00	89.600	359.400	8642.23	768.66	768.77	-2.31	628150.92	436717.98	32°11'59.914"N	103°55'08.530"W	2.48	
9266.00	90.700	357.600	8641.98	862.66	862.73	-4.77	628148.46	436811.93	32°12'00.844"N	103°55'08.554"W	2.24	
9362.00	90.800	357.400	8640.72	958.62	958.63	-8.96	628144.28	436907.83	32°12'01.793"N	103°55'08.599"W	0.23	
9457.00	90.900	356.600	8639.31	1053.56	1053.49	-13.93	628139.31	437002.68	32°12'02.732"N	103°55'08.652"W	0.85	
9552.00	91.000	356.000	8637.74	1148.45	1148.28	-20.06	628133.18	437097.46	32°12'03.670"N	103°55'08.719"W	0.64	
9647.00	90.000	357.100	8636.91	1243.37	1243.10	-25.78	628127.46	437192.27	32°12'04.609"N	103°55'08.782"W	1.56	
9743.00	90.100	356.600	8636.83	1339.31	1338.96	-31.05	628122.19	437288.12	32°12'05.557"N	103°55'08.839"W	0.53	
9837.00	89.500	357.800	8637.15	1433.27	1432.84	-35.64	628117.59	437382.00	32°12'06.486"N	103°55'08.888"W	1.43	
9932.00	89.100	357.300	8638.31	1528.24	1527.75	-39.70	628113.53	437476.90	32°12'07.426"N	103°55'08.931"W	0.67	
10027.00	88.500	357.700	8640.30	1623.19	1622.64	-43.85	628109.39	437571.78	32°12'08.365"N	103°55'08.975"W	0.76	
10122.00	89.900	358.700	8641.63	1718.17	1717.58	-46.83	628106.41	437666.71	32°12'09.304"N	103°55'09.005"W	1.81	
10217.00	90.000	359.000	8641.71	1813.17	1812.56	-48.74	628104.50	437761.68	32°12'10.244"N	103°55'09.023"W	0.33	
10313.00	89.800	358.900	8641.88	1909.17	1908.54	-50.50	628102.74	437857.66	32°12'11.194"N	103°55'09.039"W	0.23	
10408.00	89.300	359.000	8642.63	2004.16	2003.52	-52.24	628101.00	437952.64	32°12'12.134"N	103°55'09.055"W	0.54	
10502.00	89.500	359.300	8643.61	2098.16	2097.51	-53.63	628099.61	438046.61	32°12'13.064"N	103°55'09.067"W	0.38	
10597.00	89.200	359.500	8644.69	2193.15	2192.49	-54.63	628098.61	438141.59	32°12'14.004"N	103°55'09.075"W	0.38	
10692.00	89.400	359.600	8645.85	2288.13	2287.48	-55.37	628097.87	438236.58	32°12'14.944"N	103°55'09.079"W	0.24	
10787.00	89.300	359.700	8646.93	2383.12	2382.48	-55.95	628097.29	438331.56	32°12'15.884"N	103°55'09.082"W	0.15	



Actual Wellpath Report

No.442H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 442H SHL
Area	Eddy County, NM	Well	No. 442H
Field	Poker Lake Unit	Wellbore	No.442H AWB
Facility	Poker Lake Unit No. 442H and 443H		

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
10882.00	89.200	359.700	8648.17	2478.10	2477.47	-56.45	628096.79	438426.55	32°12'16.824"N	103°55'09.083"W	0.11	
10977.00	88.200	359.100	8650.33	2573.07	2572.43	-57.44	628095.80	438521.51	32°12'17.764"N	103°55'09.091"W	1.23	
11072.00	90.500	359.200	8651.40	2668.06	2667.41	-58.85	628094.39	438616.48	32°12'18.704"N	103°55'09.103"W	2.42	
11167.00	90.700	359.100	8650.41	2763.05	2762.40	-60.26	628092.98	438711.45	32°12'19.644"N	103°55'09.115"W	0.24	
11262.00	90.800	358.600	8649.17	2858.04	2857.37	-62.17	628091.07	438806.42	32°12'20.584"N	103°55'09.133"W	0.54	
11357.00	91.600	358.400	8647.18	2953.02	2952.31	-64.66	628088.58	438901.36	32°12'21.523"N	103°55'09.157"W	0.87	
11451.00	90.000	359.200	8645.86	3047.00	3046.28	-66.62	628086.62	438995.32	32°12'22.453"N	103°55'09.176"W	1.90	
11547.00	90.400	359.100	8645.53	3143.00	3142.27	-68.05	628085.19	439091.30	32°12'23.403"N	103°55'09.188"W	0.43	
11642.00	90.900	358.800	8644.45	3238.00	3237.25	-69.79	628083.45	439186.27	32°12'24.343"N	103°55'09.204"W	0.61	
11736.00	90.400	358.900	8643.38	3331.99	3331.22	-71.68	628081.57	439280.24	32°12'25.273"N	103°55'09.222"W	0.54	
11832.00	91.100	358.700	8642.13	3427.98	3427.19	-73.69	628079.56	439376.20	32°12'26.223"N	103°55'09.241"W	0.76	
11927.00	90.900	358.400	8640.47	3522.96	3522.15	-76.09	628077.15	439471.15	32°12'27.163"N	103°55'09.265"W	0.38	
12020.00	90.300	358.300	8639.50	3615.95	3615.10	-78.77	628074.47	439564.10	32°12'28.082"N	103°55'09.292"W	0.65	
12115.00	90.000	358.100	8639.25	3710.95	3710.06	-81.75	628071.49	439659.04	32°12'29.022"N	103°55'09.322"W	0.38	
12210.00	90.400	357.600	8638.92	3805.93	3804.99	-85.31	628067.93	439753.97	32°12'29.962"N	103°55'09.360"W	0.67	
12305.00	90.400	357.400	8638.25	3900.90	3899.89	-89.46	628063.78	439848.87	32°12'30.901"N	103°55'09.404"W	0.21	
12400.00	90.000	357.800	8637.92	3995.88	3994.81	-93.44	628059.81	439943.78	32°12'31.840"N	103°55'09.446"W	0.60	
12495.00	89.500	357.000	8638.34	4090.85	4089.71	-97.75	628055.50	440038.67	32°12'32.780"N	103°55'09.492"W	0.99	
12589.00	89.000	356.900	8639.57	4184.79	4183.57	-102.75	628050.50	440132.52	32°12'33.709"N	103°55'09.546"W	0.54	
12684.00	89.500	356.300	8640.81	4279.70	4278.39	-108.38	628044.86	440227.34	32°12'34.647"N	103°55'09.607"W	0.82	
12779.00	89.700	358.100	8641.47	4374.66	4373.27	-113.02	628040.22	440322.21	32°12'35.586"N	103°55'09.657"W	1.91	
12875.00	89.800	359.500	8641.89	4470.66	4469.25	-115.03	628038.21	440418.18	32°12'36.536"N	103°55'09.676"W	1.46	
12970.00	89.400	359.200	8642.55	4565.65	4564.24	-116.11	628037.14	440513.16	32°12'37.476"N	103°55'09.684"W	0.53	
13065.00	88.900	358.400	8643.96	4660.64	4659.21	-118.10	628035.15	440608.13	32°12'38.416"N	103°55'09.703"W	0.99	
13159.00	88.800	359.200	8645.85	4754.62	4753.17	-120.07	628033.18	440702.08	32°12'39.346"N	103°55'09.722"W	0.86	
13255.00	88.800	359.000	8647.86	4850.60	4849.13	-121.57	628031.67	440798.04	32°12'40.295"N	103°55'09.735"W	0.21	
13350.00	88.700	358.700	8649.93	4945.57	4944.09	-123.48	628029.76	440892.99	32°12'41.235"N	103°55'09.753"W	0.33	
13445.00	88.200	358.200	8652.50	5040.54	5039.02	-126.05	628027.20	440987.91	32°12'42.175"N	103°55'09.778"W	0.74	
13540.00	88.700	358.800	8655.07	5135.50	5133.95	-128.54	628024.71	441082.84	32°12'43.114"N	103°55'09.803"W	0.82	
13635.00	88.200	358.800	8657.64	5230.46	5228.90	-130.52	628022.72	441177.77	32°12'44.054"N	103°55'09.822"W	0.53	
13730.00	89.300	359.800	8659.71	5325.44	5323.87	-131.68	628021.56	441272.73	32°12'44.993"N	103°55'09.831"W	1.56	
13825.00	89.300	359.700	8660.88	5420.42	5418.86	-132.10	628021.15	441367.72	32°12'45.933"N	103°55'09.832"W	0.11	
13921.00	89.500	359.300	8661.88	5516.40	5514.85	-132.94	628020.31	441463.70	32°12'46.883"N	103°55'09.837"W	0.47	
14016.00	89.700	358.800	8662.54	5611.40	5609.83	-134.51	628018.73	441558.68	32°12'47.823"N	103°55'09.851"W	0.57	
14111.00	89.900	358.500	8662.88	5706.40	5704.81	-136.75	628016.50	441653.65	32°12'48.763"N	103°55'09.873"W	0.38	
14206.00	90.200	358.300	8662.79	5801.40	5799.77	-139.40	628013.84	441748.60	32°12'49.703"N	103°55'09.900"W	0.38	
14310.00	89.700	357.800	8662.88	5905.39	5903.71	-142.94	628010.31	441852.53	32°12'50.732"N	103°55'09.936"W	0.68	
14371.00	89.700	357.800	8663.20	5966.37	5964.66	-145.28	628007.96	441913.48	32°12'51.335"N	103°55'09.961"W	0.00	Proj to Bit



Actual Wellpath Report

No.442H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 442H SHL
Area	Eddy County, NM	Well	No. 442H
Field	Poker Lake Unit	Wellbore	No.442H AWB
Facility	Poker Lake Unit No. 442H and 443H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
PLU No. 442H PBHL		8650.00	5959.48	-119.24	628034.00	441908.30	32°12'51.283"N	103°55'09.658"W	point

WELLPATH COMPOSITION - Ref Wellbore: No.442H AWB Ref Wellpath: No.442H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	3310.00	Generic gyro - northseeking (Standard)	Gyrodata Gyro <100-3310>	No.442H AWB
3310.00	14310.00	NaviTrak (Standard)	BHI MWD <611-14310>	No.442H AWB
14310.00	14371.00	Blind Drilling (std)	Projection to bit	No.442H AWB



Actual Wellpath Report

No.442H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 442H SHL
Area	Eddy County, NM	Well	No. 442H
Field	Poker Lake Unit	Wellbore	No.442H AWB
Facility	Poker Lake Unit No. 442H and 443H		

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	0.999928	Report Generated	05/09/2013 at 8:01:35 AM
Convergence at slot	0.22° East	Database/Source file	WA Midland/No.442H_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	28.20	-28.26	628153.24	435949.26	32°11'52.307"N	103°55'08.537"W
Facility Reference Pt			628181.49	435921.07	32°11'52.026"N	103°55'08.210"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. 442H SHL (KB) to Facility Vertical Datum	3175.00ft
Horizontal Reference Pt	Slot	Rig on No. 442H SHL (KB) to Mean Sea Level	3175.00ft
Vertical Reference Pt	Rig on No. 442H SHL (KB)	Rig on No. 442H SHL (KB) to Mud Line at Slot (No. 442H SHL)	3175.00ft
MD Reference Pt	Rig on No. 442H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	358.85°



Actual Wellpath Report

No.442H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 442H SHL
Area	Eddy County, NM	Well	No. 442H
Field	Poker Lake Unit	Wellbore	No.442H AWB
Facility	Poker Lake Unit No. 442H and 443H		

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	216.350	0.00	0.00	0.00	0.00	628153.24	435949.26	32°11'52.307"N	103°55'08.537"W	0.00	
100.00	0.180	216.350	100.00	-0.12	-0.13	-0.09	628153.14	435949.14	32°11'52.305"N	103°55'08.538"W	0.18	
200.00	0.150	204.770	200.00	-0.37	-0.37	-0.24	628152.99	435948.89	32°11'52.303"N	103°55'08.540"W	0.04	
300.00	0.200	175.740	300.00	-0.66	-0.66	-0.28	628152.95	435948.60	32°11'52.300"N	103°55'08.541"W	0.10	
400.00	0.370	116.050	400.00	-0.98	-0.98	0.02	628153.26	435948.28	32°11'52.297"N	103°55'08.537"W	0.32	
500.00	0.770	100.960	499.99	-1.27	-1.25	0.97	628154.21	435948.01	32°11'52.294"N	103°55'08.526"W	0.42	
600.00	0.910	100.440	599.98	-1.57	-1.52	2.41	628155.65	435947.74	32°11'52.291"N	103°55'08.509"W	0.14	
700.00	0.910	98.290	699.97	-1.86	-1.78	3.98	628157.21	435947.48	32°11'52.289"N	103°55'08.491"W	0.03	
800.00	0.900	96.980	799.96	-2.10	-1.99	5.54	628158.78	435947.27	32°11'52.287"N	103°55'08.473"W	0.02	
900.00	0.890	94.660	899.94	-2.29	-2.15	7.10	628160.33	435947.11	32°11'52.285"N	103°55'08.455"W	0.04	
1000.00	0.940	91.410	999.93	-2.41	-2.23	8.69	628161.93	435947.03	32°11'52.284"N	103°55'08.436"W	0.07	
1100.00	0.310	67.880	1099.93	-2.35	-2.15	9.76	628163.00	435947.11	32°11'52.285"N	103°55'08.424"W	0.67	
1200.00	0.140	32.470	1199.92	-2.15	-1.95	10.08	628163.31	435947.32	32°11'52.287"N	103°55'08.420"W	0.21	
1300.00	0.150	23.900	1299.92	-1.93	-1.72	10.20	628163.43	435947.54	32°11'52.289"N	103°55'08.419"W	0.02	
1400.00	0.190	351.680	1399.92	-1.64	-1.44	10.22	628163.46	435947.82	32°11'52.292"N	103°55'08.418"W	0.10	
1500.00	0.200	346.460	1499.92	-1.31	-1.11	10.16	628163.40	435948.16	32°11'52.295"N	103°55'08.419"W	0.02	
1600.00	0.210	307.740	1599.92	-1.02	-0.82	9.97	628163.21	435948.44	32°11'52.298"N	103°55'08.421"W	0.14	
1700.00	0.230	289.160	1699.92	-0.84	-0.65	9.64	628162.87	435948.62	32°11'52.300"N	103°55'08.425"W	0.07	
1800.00	0.260	290.120	1799.92	-0.69	-0.50	9.24	628162.47	435948.76	32°11'52.301"N	103°55'08.430"W	0.03	
1900.00	0.280	288.450	1899.92	-0.52	-0.35	8.79	628162.03	435948.92	32°11'52.303"N	103°55'08.435"W	0.02	
2000.00	0.270	289.590	1999.92	-0.36	-0.19	8.34	628161.57	435949.07	32°11'52.304"N	103°55'08.440"W	0.01	
2100.00	0.430	244.710	2099.92	-0.43	-0.27	7.78	628161.01	435948.99	32°11'52.304"N	103°55'08.447"W	0.31	
2200.00	0.540	242.840	2199.91	-0.79	-0.65	7.02	628160.25	435948.62	32°11'52.300"N	103°55'08.456"W	0.11	
2300.00	0.700	247.380	2299.91	-1.22	-1.10	6.04	628159.27	435948.17	32°11'52.295"N	103°55'08.467"W	0.17	
2400.00	0.720	249.660	2399.90	-1.65	-1.55	4.88	628158.12	435947.71	32°11'52.291"N	103°55'08.481"W	0.03	
2500.00	0.720	266.770	2499.89	-1.88	-1.80	3.67	628156.90	435947.46	32°11'52.289"N	103°55'08.495"W	0.21	
2600.00	0.540	278.690	2599.89	-1.82	-1.77	2.57	628155.81	435947.50	32°11'52.289"N	103°55'08.507"W	0.22	
2700.00	0.070	150.930	2699.88	-1.79	-1.75	2.14	628155.37	435947.51	32°11'52.289"N	103°55'08.513"W	0.59	
2800.00	0.430	129.630	2799.88	-2.09	-2.04	2.46	628155.69	435947.22	32°11'52.286"N	103°55'08.509"W	0.37	
2900.00	0.680	126.350	2899.88	-2.70	-2.63	3.22	628156.46	435946.63	32°11'52.280"N	103°55'08.500"W	0.25	
3000.00	1.430	124.650	2999.86	-3.79	-3.69	4.73	628157.96	435945.57	32°11'52.270"N	103°55'08.483"W	0.75	
3100.00	1.760	126.980	3099.82	-5.47	-5.33	6.98	628160.22	435943.94	32°11'52.254"N	103°55'08.456"W	0.34	
3200.00	1.410	148.310	3199.79	-7.47	-7.30	8.85	628162.09	435941.96	32°11'52.234"N	103°55'08.435"W	0.68	
3300.00	0.290	184.310	3299.77	-8.79	-8.60	9.48	628162.72	435940.67	32°11'52.221"N	103°55'08.427"W	1.19	
3310.00	0.260	205.450	3309.77	-8.83	-8.64	9.47	628162.70	435940.62	32°11'52.221"N	103°55'08.428"W	1.05	
3388.00	0.300	291.600	3387.77	-8.91	-8.73	9.20	628162.44	435940.54	32°11'52.220"N	103°55'08.431"W	0.49	
3543.00	0.200	51.500	3542.77	-8.59	-8.41	9.04	628162.27	435940.85	32°11'52.223"N	103°55'08.433"W	0.28	
3638.00	0.300	42.600	3637.77	-8.31	-8.12	9.34	628162.57	435941.14	32°11'52.226"N	103°55'08.429"W	0.11	
3732.00	0.200	69.700	3731.77	-8.08	-7.89	9.66	628162.89	435941.38	32°11'52.228"N	103°55'08.425"W	0.16	
3826.00	0.500	127.000	3825.77	-8.28	-8.08	10.14	628163.37	435941.19	32°11'52.226"N	103°55'08.420"W	0.45	
3920.00	0.600	113.600	3919.76	-8.74	-8.52	10.92	628164.15	435940.74	32°11'52.222"N	103°55'08.411"W	0.17	
4017.00	0.300	120.100	4016.76	-9.08	-8.85	11.60	628164.84	435940.41	32°11'52.218"N	103°55'08.403"W	0.31	
4113.00	0.400	143.300	4112.76	-9.48	-9.25	12.02	628165.25	435940.02	32°11'52.215"N	103°55'08.398"W	0.18	
4208.00	0.500	157.500	4207.76	-10.14	-9.89	12.38	628165.61	435939.37	32°11'52.208"N	103°55'08.394"W	0.16	
4302.00	0.200	180.000	4301.75	-10.69	-10.44	12.53	628165.77	435938.83	32°11'52.203"N	103°55'08.392"W	0.35	



Actual Wellpath Report

No.442H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 442H SHL
Area	Eddy County, NM	Well	No. 442H
Field	Poker Lake Unit	Wellbore	No.442H AWB
Facility	Poker Lake Unit No. 442H and 443H		

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
4397.00	0.100	225.600	4396.75	-10.91	-10.66	12.47	628165.71	435938.60	32°11'52.201"N	103°55'08.393"W	0.16	
4493.00	0.300	202.300	4492.75	-11.20	-10.95	12.32	628165.55	435938.31	32°11'52.198"N	103°55'08.394"W	0.22	
4587.00	0.300	145.800	4586.75	-11.63	-11.38	12.36	628165.60	435937.88	32°11'52.193"N	103°55'08.394"W	0.30	
4682.00	0.300	173.500	4681.75	-12.08	-11.84	12.53	628165.77	435937.43	32°11'52.189"N	103°55'08.392"W	0.15	
4777.00	0.300	146.000	4776.75	-12.54	-12.29	12.70	628165.93	435936.97	32°11'52.184"N	103°55'08.390"W	0.15	
4872.00	0.200	134.300	4871.75	-12.87	-12.61	12.96	628166.19	435936.65	32°11'52.181"N	103°55'08.387"W	0.12	
4967.00	0.200	219.700	4966.75	-13.11	-12.85	12.97	628166.20	435936.41	32°11'52.179"N	103°55'08.387"W	0.29	
5062.00	0.100	226.000	5061.75	-13.29	-13.04	12.80	628166.04	435936.22	32°11'52.177"N	103°55'08.389"W	0.11	
5157.00	0.300	126.900	5156.75	-13.50	-13.25	12.94	628166.18	435936.02	32°11'52.175"N	103°55'08.387"W	0.35	
5252.00	0.300	139.300	5251.75	-13.85	-13.58	13.30	628166.54	435935.68	32°11'52.172"N	103°55'08.383"W	0.07	
5347.00	0.500	135.400	5346.74	-14.34	-14.07	13.76	628166.99	435935.20	32°11'52.167"N	103°55'08.378"W	0.21	
5442.00	0.600	133.700	5441.74	-14.99	-14.71	14.41	628167.64	435934.56	32°11'52.160"N	103°55'08.370"W	0.11	
5536.00	0.600	156.400	5535.73	-15.79	-15.50	14.96	628168.20	435933.77	32°11'52.153"N	103°55'08.364"W	0.25	
5631.00	0.600	157.000	5630.73	-16.72	-16.41	15.35	628168.59	435932.85	32°11'52.144"N	103°55'08.359"W	0.01	
5727.00	0.700	189.400	5726.72	-17.76	-17.45	15.45	628168.69	435931.81	32°11'52.133"N	103°55'08.358"W	0.39	
5822.00	0.600	183.000	5821.72	-18.83	-18.52	15.33	628168.57	435930.74	32°11'52.123"N	103°55'08.360"W	0.13	
5916.00	0.600	165.400	5915.71	-19.80	-19.49	15.43	628168.67	435929.77	32°11'52.113"N	103°55'08.359"W	0.20	
6012.00	0.400	120.300	6011.71	-20.46	-20.15	15.85	628169.08	435929.12	32°11'52.107"N	103°55'08.354"W	0.44	
6107.00	0.500	147.300	6106.71	-20.99	-20.66	16.36	628169.59	435928.60	32°11'52.101"N	103°55'08.348"W	0.24	
6202.00	0.500	131.600	6201.70	-21.62	-21.29	16.89	628170.13	435927.98	32°11'52.095"N	103°55'08.342"W	0.14	
6296.00	0.400	164.900	6295.70	-22.22	-21.88	17.28	628170.52	435927.39	32°11'52.089"N	103°55'08.337"W	0.29	
6391.00	0.500	172.900	6390.70	-22.95	-22.61	17.42	628170.66	435926.66	32°11'52.082"N	103°55'08.336"W	0.12	
6486.00	0.500	152.200	6485.69	-23.73	-23.38	17.67	628170.90	435925.88	32°11'52.074"N	103°55'08.333"W	0.19	
6581.00	0.500	164.400	6580.69	-24.51	-24.15	17.97	628171.21	435925.11	32°11'52.067"N	103°55'08.329"W	0.11	
6677.00	0.700	173.700	6676.68	-25.49	-25.14	18.15	628171.38	435924.13	32°11'52.057"N	103°55'08.327"W	0.23	
6772.00	0.900	179.200	6771.67	-26.82	-26.46	18.22	628171.46	435922.81	32°11'52.044"N	103°55'08.326"W	0.23	
6867.00	0.900	189.600	6866.66	-28.30	-27.94	18.11	628171.34	435921.32	32°11'52.029"N	103°55'08.328"W	0.17	
6962.00	1.000	184.500	6961.65	-29.86	-29.50	17.92	628171.15	435919.76	32°11'52.014"N	103°55'08.330"W	0.14	
7057.00	0.800	218.500	7056.64	-31.19	-30.85	17.44	628170.68	435918.42	32°11'52.001"N	103°55'08.336"W	0.59	
7152.00	0.600	240.900	7151.63	-31.94	-31.61	16.59	628169.83	435917.66	32°11'51.993"N	103°55'08.346"W	0.35	
7248.00	0.900	250.600	7247.62	-32.41	-32.10	15.44	628168.68	435917.16	32°11'51.988"N	103°55'08.359"W	0.34	
7343.00	1.400	241.600	7342.60	-33.17	-32.90	13.72	628166.95	435916.36	32°11'51.980"N	103°55'08.379"W	0.56	
7438.00	1.200	242.200	7437.58	-34.15	-33.92	11.82	628165.05	435915.35	32°11'51.970"N	103°55'08.401"W	0.21	
7533.00	1.800	247.000	7532.55	-35.15	-34.97	9.56	628162.80	435914.30	32°11'51.960"N	103°55'08.428"W	0.64	
7628.00	2.200	249.200	7627.49	-36.32	-36.20	6.49	628159.72	435913.07	32°11'51.948"N	103°55'08.463"W	0.43	
7723.00	1.900	247.500	7722.43	-37.51	-37.45	3.33	628156.56	435911.82	32°11'51.936"N	103°55'08.500"W	0.32	
7818.00	1.600	192.700	7817.39	-39.37	-39.34	1.58	628154.82	435909.92	32°11'51.917"N	103°55'08.521"W	1.72	
7913.00	1.300	205.400	7912.36	-41.62	-41.61	0.83	628154.06	435907.65	32°11'51.895"N	103°55'08.530"W	0.46	
7960.00	1.400	210.900	7959.35	-42.58	-42.59	0.30	628153.54	435906.68	32°11'51.885"N	103°55'08.536"W	0.35	
8030.00	3.400	302.200	8029.30	-42.17	-42.21	-1.89	628151.34	435907.05	32°11'51.889"N	103°55'08.561"W	5.29	
8062.00	7.000	337.300	8061.17	-39.83	-39.91	-3.45	628149.79	435909.36	32°11'51.912"N	103°55'08.579"W	14.52	
8094.00	10.000	340.900	8092.81	-35.37	-35.48	-5.11	628148.12	435913.78	32°11'51.956"N	103°55'08.598"W	9.52	
8126.00	12.500	344.500	8124.20	-29.37	-29.52	-6.95	628146.29	435919.75	32°11'52.015"N	103°55'08.620"W	8.11	
8158.00	16.300	344.600	8155.19	-21.66	-21.85	-9.07	628144.17	435927.41	32°11'52.091"N	103°55'08.644"W	11.88	
8189.00	18.100	348.700	8184.80	-12.71	-12.93	-11.16	628142.07	435936.33	32°11'52.179"N	103°55'08.668"W	7.00	



Actual Wellpath Report

No.442H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 442H SHL
Area	Eddy County, NM	Well	No. 442H
Field	Poker Lake Unit	Wellbore	No.442H AWB
Facility	Poker Lake Unit No. 442H and 443H		

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
8221.00	17.800	353.600	8215.24	-2.94	-3.20	-12.68	628140.55	435946.07	32°11'52.275"N	103°55'08.685"W	4.81	
8253.00	21.200	359.700	8245.41	7.72	7.45	-13.26	628139.98	435956.72	32°11'52.381"N	103°55'08.691"W	12.37	
8285.00	24.600	6.500	8274.89	20.11	19.86	-12.54	628140.70	435969.12	32°11'52.504"N	103°55'08.682"W	13.45	
8316.00	29.000	7.400	8302.55	33.94	33.73	-10.84	628142.40	435982.99	32°11'52.641"N	103°55'08.662"W	14.25	
8348.00	32.200	8.000	8330.09	50.04	49.87	-8.65	628144.59	435999.13	32°11'52.800"N	103°55'08.636"W	10.05	
8380.00	35.500	7.800	8356.66	67.64	67.53	-6.20	628147.03	436016.78	32°11'52.975"N	103°55'08.606"W	10.32	
8412.00	38.100	7.100	8382.28	86.59	86.53	-3.72	628149.52	436035.79	32°11'53.163"N	103°55'08.577"W	8.23	
8443.00	41.300	5.700	8406.13	106.22	106.21	-1.52	628151.71	436055.46	32°11'53.358"N	103°55'08.550"W	10.72	
8475.00	44.300	4.500	8429.61	127.83	127.86	0.40	628153.64	436077.11	32°11'53.572"N	103°55'08.527"W	9.71	
8507.00	47.000	4.700	8451.98	150.59	150.67	2.24	628155.48	436099.92	32°11'53.797"N	103°55'08.505"W	8.45	
8539.00	49.200	3.600	8473.35	174.31	174.42	3.96	628157.20	436123.67	32°11'54.032"N	103°55'08.483"W	7.34	
8570.00	52.200	2.200	8492.98	198.23	198.38	5.17	628158.40	436147.62	32°11'54.269"N	103°55'08.468"W	10.29	
8602.00	54.900	1.300	8511.99	223.94	224.10	5.95	628159.18	436173.35	32°11'54.524"N	103°55'08.458"W	8.74	
8634.00	58.100	1.100	8529.65	250.60	250.78	6.51	628159.74	436200.02	32°11'54.788"N	103°55'08.450"W	10.01	
8666.00	60.600	1.000	8545.96	278.10	278.30	7.01	628160.25	436227.54	32°11'55.060"N	103°55'08.443"W	7.82	
8697.00	63.400	359.600	8560.51	305.46	305.67	7.15	628160.39	436254.91	32°11'55.331"N	103°55'08.440"W	9.87	
8729.00	66.100	359.000	8574.16	334.40	334.60	6.80	628160.03	436283.84	32°11'55.617"N	103°55'08.443"W	8.61	
8761.00	68.800	359.200	8586.43	363.95	364.15	6.33	628159.57	436313.39	32°11'55.910"N	103°55'08.447"W	8.46	
8792.00	70.900	359.600	8597.11	393.05	393.25	6.03	628159.26	436342.48	32°11'56.198"N	103°55'08.450"W	6.88	
8824.00	73.900	359.500	8606.79	423.55	423.75	5.79	628159.02	436372.98	32°11'56.499"N	103°55'08.451"W	9.38	
8856.00	76.900	358.600	8614.85	454.51	454.71	5.27	628158.51	436403.94	32°11'56.806"N	103°55'08.456"W	9.76	
8887.00	78.900	358.100	8621.35	484.82	485.00	4.40	628157.64	436434.23	32°11'57.106"N	103°55'08.464"W	6.64	
8919.00	80.700	357.800	8627.02	516.31	516.48	3.27	628156.51	436465.70	32°11'57.417"N	103°55'08.476"W	5.70	
8951.00	83.500	358.000	8631.41	548.00	548.15	2.11	628155.35	436497.37	32°11'57.731"N	103°55'08.488"W	8.77	
8982.00	86.000	359.000	8634.25	578.86	579.00	1.30	628154.54	436528.22	32°11'58.036"N	103°55'08.496"W	8.68	
9013.00	86.600	358.400	8636.25	609.80	609.93	0.60	628153.84	436559.15	32°11'58.342"N	103°55'08.503"W	2.73	
9077.00	87.300	358.900	8639.66	673.71	673.82	-0.90	628152.33	436623.04	32°11'58.974"N	103°55'08.518"W	1.34	
9172.00	89.600	359.400	8642.23	768.66	768.77	-2.31	628150.92	436717.98	32°11'59.914"N	103°55'08.530"W	2.48	
9266.00	90.700	357.600	8641.98	862.66	862.73	-4.77	628148.46	436811.93	32°12'00.844"N	103°55'08.554"W	2.24	
9362.00	90.800	357.400	8640.72	958.62	958.63	-8.96	628144.28	436907.83	32°12'01.793"N	103°55'08.599"W	0.23	
9457.00	90.900	356.600	8639.31	1053.56	1053.49	-13.93	628139.31	437002.68	32°12'02.732"N	103°55'08.652"W	0.85	
9552.00	91.000	356.000	8637.74	1148.45	1148.28	-20.06	628133.18	437097.46	32°12'03.670"N	103°55'08.719"W	0.64	
9647.00	90.000	357.100	8636.91	1243.37	1243.10	-25.78	628127.46	437192.27	32°12'04.609"N	103°55'08.782"W	1.56	
9743.00	90.100	356.600	8636.83	1339.31	1338.96	-31.05	628122.19	437288.12	32°12'05.557"N	103°55'08.839"W	0.53	
9837.00	89.500	357.800	8637.15	1433.27	1432.84	-35.64	628117.59	437382.00	32°12'06.486"N	103°55'08.888"W	1.43	
9932.00	89.100	357.300	8638.31	1528.24	1527.75	-39.70	628113.53	437476.90	32°12'07.426"N	103°55'08.931"W	0.67	
10027.00	88.500	357.700	8640.30	1623.19	1622.64	-43.85	628109.39	437571.78	32°12'08.365"N	103°55'08.975"W	0.76	
10122.00	89.900	358.700	8641.63	1718.17	1717.58	-46.83	628106.41	437666.71	32°12'09.304"N	103°55'09.005"W	1.81	
10217.00	90.000	359.000	8641.71	1813.17	1812.56	-48.74	628104.50	437761.68	32°12'10.244"N	103°55'09.023"W	0.33	
10313.00	89.800	358.900	8641.88	1909.17	1908.54	-50.50	628102.74	437857.66	32°12'11.194"N	103°55'09.039"W	0.23	
10408.00	89.300	359.000	8642.63	2004.16	2003.52	-52.24	628101.00	437952.64	32°12'12.134"N	103°55'09.055"W	0.54	
10502.00	89.500	359.300	8643.61	2098.16	2097.51	-53.63	628099.61	438046.61	32°12'13.064"N	103°55'09.067"W	0.38	
10597.00	89.200	359.500	8644.69	2193.15	2192.49	-54.63	628098.61	438141.59	32°12'14.004"N	103°55'09.075"W	0.38	
10692.00	89.400	359.600	8645.85	2288.13	2287.48	-55.37	628097.87	438236.58	32°12'14.944"N	103°55'09.079"W	0.24	
10787.00	89.300	359.700	8646.93	2383.12	2382.48	-55.95	628097.29	438331.56	32°12'15.884"N	103°55'09.082"W	0.15	



Actual Wellpath Report

No.442H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 442H SHL
Area	Eddy County, NM	Well	No. 442H
Field	Poker Lake Unit	Wellbore	No.442H AWB
Facility	Poker Lake Unit No. 442H and 443H		

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
10882.00	89.200	359.700	8648.17	2478.10	2477.47	-56.45	628096.79	438426.55	32°12'16.824"N	103°55'09.083"W	0.11	
10977.00	88.200	359.100	8650.33	2573.07	2572.43	-57.44	628095.80	438521.51	32°12'17.764"N	103°55'09.091"W	1.23	
11072.00	90.500	359.200	8651.40	2668.06	2667.41	-58.85	628094.39	438616.48	32°12'18.704"N	103°55'09.103"W	2.42	
11167.00	90.700	359.100	8650.41	2763.05	2762.40	-60.26	628092.98	438711.45	32°12'19.644"N	103°55'09.115"W	0.24	
11262.00	90.800	358.600	8649.17	2858.04	2857.37	-62.17	628091.07	438806.42	32°12'20.584"N	103°55'09.133"W	0.54	
11357.00	91.600	358.400	8647.18	2953.02	2952.31	-64.66	628088.58	438901.36	32°12'21.523"N	103°55'09.157"W	0.87	
11451.00	90.000	359.200	8645.86	3047.00	3046.28	-66.62	628086.62	438995.32	32°12'22.453"N	103°55'09.176"W	1.90	
11547.00	90.400	359.100	8645.53	3143.00	3142.27	-68.05	628085.19	439091.30	32°12'23.403"N	103°55'09.188"W	0.43	
11642.00	90.900	358.800	8644.45	3238.00	3237.25	-69.79	628083.45	439186.27	32°12'24.343"N	103°55'09.204"W	0.61	
11736.00	90.400	358.900	8643.38	3331.99	3331.22	-71.68	628081.57	439280.24	32°12'25.273"N	103°55'09.222"W	0.54	
11832.00	91.100	358.700	8642.13	3427.98	3427.19	-73.69	628079.56	439376.20	32°12'26.223"N	103°55'09.241"W	0.76	
11927.00	90.900	358.400	8640.47	3522.96	3522.15	-76.09	628077.15	439471.15	32°12'27.163"N	103°55'09.265"W	0.38	
12020.00	90.300	358.300	8639.50	3615.95	3615.10	-78.77	628074.47	439564.10	32°12'28.082"N	103°55'09.292"W	0.65	
12115.00	90.000	358.100	8639.25	3710.95	3710.06	-81.75	628071.49	439659.04	32°12'29.022"N	103°55'09.322"W	0.38	
12210.00	90.400	357.600	8638.92	3805.93	3804.99	-85.31	628067.93	439753.97	32°12'29.962"N	103°55'09.360"W	0.67	
12305.00	90.400	357.400	8638.25	3900.90	3899.89	-89.46	628063.78	439848.87	32°12'30.901"N	103°55'09.404"W	0.21	
12400.00	90.000	357.800	8637.92	3995.88	3994.81	-93.44	628059.81	439943.78	32°12'31.840"N	103°55'09.446"W	0.60	
12495.00	89.500	357.000	8638.34	4090.85	4089.71	-97.75	628055.50	440038.67	32°12'32.780"N	103°55'09.492"W	0.99	
12589.00	89.000	356.900	8639.57	4184.79	4183.57	-102.75	628050.50	440132.52	32°12'33.709"N	103°55'09.546"W	0.54	
12684.00	89.500	356.300	8640.81	4279.70	4278.39	-108.38	628044.86	440227.34	32°12'34.647"N	103°55'09.607"W	0.82	
12779.00	89.700	358.100	8641.47	4374.66	4373.27	-113.02	628040.22	440322.21	32°12'35.586"N	103°55'09.657"W	1.91	
12875.00	89.800	359.500	8641.89	4470.66	4469.25	-115.03	628038.21	440418.18	32°12'36.536"N	103°55'09.676"W	1.46	
12970.00	89.400	359.200	8642.55	4565.65	4564.24	-116.11	628037.14	440513.16	32°12'37.476"N	103°55'09.684"W	0.53	
13065.00	88.900	358.400	8643.96	4660.64	4659.21	-118.10	628035.15	440608.13	32°12'38.416"N	103°55'09.703"W	0.99	
13159.00	88.800	359.200	8645.85	4754.62	4753.17	-120.07	628033.18	440702.08	32°12'39.346"N	103°55'09.722"W	0.86	
13255.00	88.800	359.000	8647.86	4850.60	4849.13	-121.57	628031.67	440798.04	32°12'40.295"N	103°55'09.735"W	0.21	
13350.00	88.700	358.700	8649.93	4945.57	4944.09	-123.48	628029.76	440892.99	32°12'41.235"N	103°55'09.753"W	0.33	
13445.00	88.200	358.200	8652.50	5040.54	5039.02	-126.05	628027.20	440987.91	32°12'42.175"N	103°55'09.778"W	0.74	
13540.00	88.700	358.800	8655.07	5135.50	5133.95	-128.54	628024.71	441082.84	32°12'43.114"N	103°55'09.803"W	0.82	
13635.00	88.200	358.800	8657.64	5230.46	5228.90	-130.52	628022.72	441177.77	32°12'44.054"N	103°55'09.822"W	0.53	
13730.00	89.300	359.800	8659.71	5325.44	5323.87	-131.68	628021.56	441272.73	32°12'44.993"N	103°55'09.831"W	1.56	
13825.00	89.300	359.700	8660.88	5420.42	5418.86	-132.10	628021.15	441367.72	32°12'45.933"N	103°55'09.832"W	0.11	
13921.00	89.500	359.300	8661.88	5516.40	5514.85	-132.94	628020.31	441463.70	32°12'46.883"N	103°55'09.837"W	0.47	
14016.00	89.700	358.800	8662.54	5611.40	5609.83	-134.51	628018.73	441558.68	32°12'47.823"N	103°55'09.851"W	0.57	
14111.00	89.900	358.500	8662.88	5706.40	5704.81	-136.75	628016.50	441653.65	32°12'48.763"N	103°55'09.873"W	0.38	
14206.00	90.200	358.300	8662.79	5801.40	5799.77	-139.40	628013.84	441748.60	32°12'49.703"N	103°55'09.900"W	0.38	
14310.00	89.700	357.800	8662.88	5905.39	5903.71	-142.94	628010.31	441852.53	32°12'50.732"N	103°55'09.936"W	0.68	
14371.00	89.700	357.800	8663.20	5966.37	5964.66	-145.28	628007.96	441913.48	32°12'51.335"N	103°55'09.961"W	0.00	Proj to Bit



Actual Wellpath Report

No.442H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 442H SHL
Area	Eddy County, NM	Well	No. 442H
Field	Poker Lake Unit	Wellbore	No.442H AWB
Facility	Poker Lake Unit No. 442H and 443H		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
PLU No. 442H PBHL		8650.00	5959.48	-119.24	628034.00	441908.30	32°12'51.283"N	103°55'09.658"W	point

WELLPATH COMPOSITION - Ref Wellbore: No.442H AWB					Ref Wellpath: No.442H AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model			Log Name/Comment	Wellbore
0.00	3310.00	Generic gyro - northseeking (Standard)			Gyrodata Gyro <100-3310>	No.442H AWB
3310.00	14310.00	NaviTrak (Standard)			BHI MWD <611-14310>	No.442H AWB
14310.00	14371.00	Blind Drilling (std)			Projection to bit	No.442H AWB