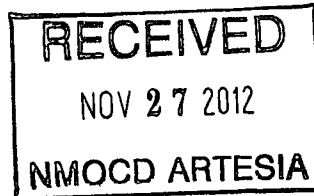


30-015-39486

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 Jun 22, 2012 through Jul 22, 2012 the

taking of MWD surveys from a depth of 7,173 to a depth of 15,700 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. 341H 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.

A handwritten signature in black ink, appearing to read "Pacer White (Ops Coord)". The signature is written over a horizontal line.

Field Service Engineer: Pacer White



BOPCO, L.P.

Location: Eddy County, NM
Field: Poker Lake Unit
Facility: Poker Lake Unit No. 341H

Slot: No.341H SHL
Well: No.341H
Wellbore: No.341H PWB

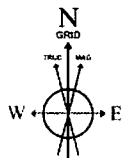


Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	7158.10	0.720	196.540	7157.11	-64.98	-4.57	0.00	41.10
Est KOP	7271.00	0.720	196.540	7270.00	-66.34	-4.97	0.00	41.73
Curve 60°	7768.37	60.000	132.750	7680.85	-230.66	168.24	12.00	280.48
150' Tangent/ 7" Casing	7918.37	60.000	132.750	7755.85	-318.84	263.63	0.00	410.38
EOC	8169.09	90.000	132.750	7820.00	-481.36	439.44	11.97	649.80
Target #1	8213.09	90.000	132.750	7820.00	-511.23	471.75	0.00	693.80
TL	8258.90	89.084	132.746	7820.37	-542.32	505.39	2.00	739.61
Target #2	14490.24	89.084	132.746	7920.00	-4771.29	5080.91	0.00	6970.00
TL	14537.08	90.017	132.825	7920.37	-4803.11	5115.29	2.00	7016.84
No. 341H PBHL	15751.38	90.017	132.825	7920.00	-5628.56	6005.89	0.00	8231.12

Plot reference wellpath is Rev-F.0

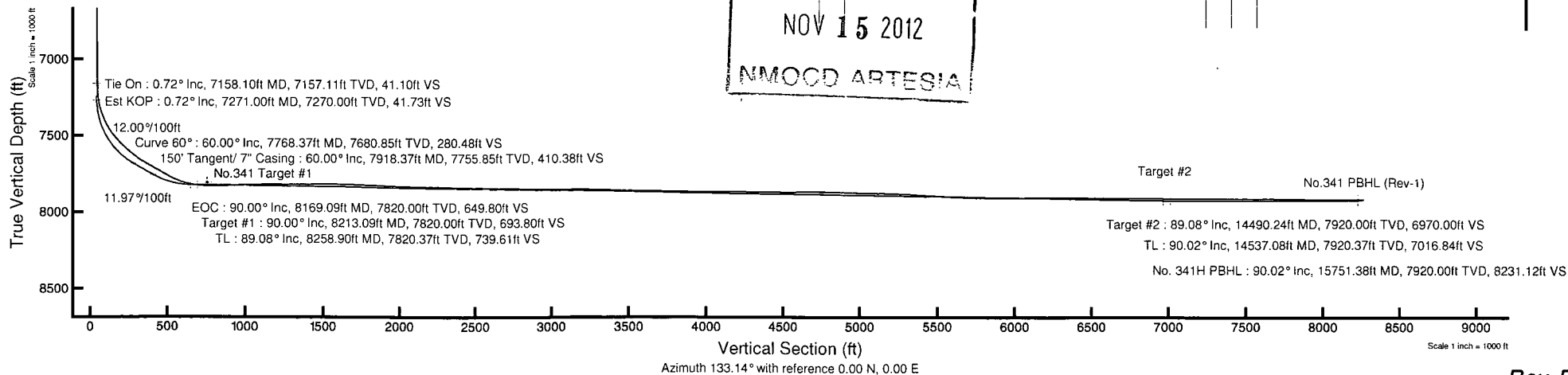
True vertical depths are referenced to Rig on No.341H SHL (KB)	Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No.341H SHL (KB)	North Reference: Grid north
Rig on No.341H SHL (KB) to Mean Sea Level: 3460 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: No.341H SHL): -3441 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: genibry on 6/29/2012



BGGM (1945.0 to 2013.0) Dip: 60.11° Field: 48611.2 nT
Magnetic North is 7.81 degrees East of True North (at 4/20/2011)
Grid North is 0.25 degrees East of True North

To correct azimuth from True to Grid subtract 0.25 degrees
To correct azimuth from Magnetic to Grid add 7.55 degrees

For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.55 = 97.55



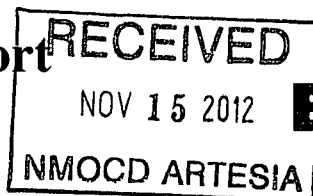
Rev-F.0



Actual Wellpath Report

No.341H AWP

Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.341H SHL
Area	Eddy County, NM	Well	No.341H
Field	Poker Lake Unit	Wellbore	No.341H AWB
Facility	Poker Lake Unit No. 341H		

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	0.999934	Report Generated	7/24/2012 at 10:59:37 AM
Convergence at slot	0.25° East	Database/Source file	WA Midland/No.341H_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	647573.18	439712.07	32°12'28.747"N	103°51'22.338"W
Facility Reference Pt			647573.18	439712.07	32°12'28.747"N	103°51'22.338"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.341H SHL (KB) to Facility Vertical Datum	19.00ft
Horizontal Reference Pt	Slot	Rig on No.341H SHL (KB) to Mean Sea Level	3460.00ft
Vertical Reference Pt	Rig on No.341H SHL (KB)	Rig on No.341H SHL (KB) to Mud Line at Slot (No.341H SHL)	19.00ft
MD Reference Pt	Rig on No.341H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	133.14°



Actual Wellpath Report

No.341H AWP
Page 2 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.341H SHL
Area	Eddy County, NM	Well	No.341H
Field	Poker Lake Unit	Wellbore	No.341H AWP
Facility	Poker Lake Unit No. 341H		

WELLPATH DATA (194 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	314.730	0.00	0.00	0.00	0.00	647573.18	439712.07	32°12'28.747"N	103°51'22.338"W	0.00	
100.00	0.080	314.730	100.00	-0.07	0.05	-0.05	647573.13	439712.12	32°12'28.747"N	103°51'22.338"W	0.08	
200.00	0.140	308.840	200.00	-0.26	0.17	-0.19	647572.99	439712.25	32°12'28.749"N	103°51'22.340"W	0.06	
300.00	0.290	250.780	300.00	-0.50	0.17	-0.53	647572.66	439712.24	32°12'28.749"N	103°51'22.344"W	0.25	
400.00	0.410	249.050	400.00	-0.77	-0.04	-1.10	647572.08	439712.03	32°12'28.747"N	103°51'22.350"W	-0.12	
500.00	0.680	212.900	499.99	-0.83	-0.67	-1.76	647571.43	439711.40	32°12'28.740"N	103°51'22.358"W	0.42	
528.40	0.950	206.260	528.39	-0.73	-1.02	-1.95	647571.23	439711.05	32°12'28.737"N	103°51'22.360"W	1.01	
623.10	1.620	206.140	623.07	-0.11	-2.93	-2.89	647570.29	439709.14	32°12'28.718"N	103°51'22.371"W	0.71	
717.80	2.110	193.950	717.72	1.13	-5.82	-3.90	647569.28	439706.25	32°12'28.690"N	103°51'22.383"W	0.66	
812.50	2.370	188.460	812.34	3.10	-9.45	-4.61	647568.58	439702.62	32°12'28.654"N	103°51'22.392"W	0.36	
907.20	2.270	191.100	906.97	5.21	-13.23	-5.26	647567.93	439698.84	32°12'28.616"N	103°51'22.400"W	0.15	
1001.90	2.520	193.940	1001.58	7.22	-17.09	-6.12	647567.06	439694.98	32°12'28.578"N	103°51'22.410"W	0.29	
1096.60	2.510	195.350	1096.19	9.20	-21.11	-7.17	647566.01	439690.96	32°12'28.538"N	103°51'22.422"W	0.07	
1191.30	2.540	199.420	1190.80	11.01	-25.09	-8.42	647564.77	439686.99	32°12'28.499"N	103°51'22.437"W	0.19	
1286.10	2.170	201.020	1285.52	12.53	-28.74	-9.76	647563.42	439683.33	32°12'28.463"N	103°51'22.453"W	0.40	
1380.80	2.020	203.150	1380.16	13.78	-31.95	-11.06	647562.13	439680.12	32°12'28.431"N	103°51'22.468"W	0.18	
1475.50	1.800	209.340	1474.80	14.70	-34.78	-12.44	647560.74	439677.29	32°12'28.403"N	103°51'22.484"W	0.32	
1570.20	1.550	212.960	1569.46	15.29	-37.15	-13.87	647559.31	439674.92	32°12'28.380"N	103°51'22.501"W	0.29	
1664.90	0.720	224.060	1664.14	15.50	-38.66	-14.98	647558.20	439673.42	32°12'28.365"N	103°51'22.514"W	0.90	
1759.60	0.540	239.130	1758.84	15.37	-39.31	-15.78	647557.41	439672.76	32°12'28.359"N	103°51'22.523"W	0.26	
1854.30	0.350	221.580	1853.54	15.26	-39.76	-16.35	647556.83	439672.32	32°12'28.354"N	103°51'22.530"W	0.24	
1949.00	0.320	179.900	1948.23	15.44	-40.24	-16.54	647556.64	439671.83	32°12'28.350"N	103°51'22.532"W	0.25	
2043.70	0.490	156.220	2042.93	16.00	-40.87	-16.38	647556.80	439671.20	32°12'28.343"N	103°51'22.530"W	0.25	
2138.40	0.580	149.370	2137.63	16.83	-41.66	-15.97	647557.21	439670.42	32°12'28.335"N	103°51'22.526"W	0.12	
2233.20	0.510	148.900	2232.42	17.70	-42.43	-15.51	647557.67	439669.64	32°12'28.328"N	103°51'22.520"W	0.07	
2327.90	0.370	157.370	2327.12	18.38	-43.07	-15.17	647558.01	439669.00	32°12'28.321"N	103°51'22.516"W	0.16	
2422.60	0.230	180.510	2421.82	18.79	-43.55	-15.06	647558.13	439668.53	32°12'28.317"N	103°51'22.515"W	0.19	
2517.30	0.230	225.540	2516.52	18.91	-43.87	-15.20	647557.99	439668.20	32°12'28.314"N	103°51'22.517"W	0.19	
2612.00	0.240	230.560	2611.22	18.88	-44.13	-15.49	647557.70	439667.95	32°12'28.311"N	103°51'22.520"W	0.02	
2706.70	0.190	236.250	2705.92	18.82	-44.34	-15.77	647557.42	439667.73	32°12'28.309"N	103°51'22.523"W	0.06	
2801.40	0.090	146.190	2800.62	18.85	-44.49	-15.86	647557.33	439667.58	32°12'28.307"N	103°51'22.524"W	0.22	
2896.10	0.230	81.480	2895.32	19.04	-44.52	-15.63	647557.56	439667.55	32°12'28.307"N	103°51'22.522"W	0.22	
2990.80	0.290	65.800	2990.02	19.25	-44.40	-15.22	647557.96	439667.68	32°12'28.308"N	103°51'22.517"W	0.10	
3085.50	0.290	56.280	3084.71	19.40	-44.17	-14.80	647558.38	439667.91	32°12'28.311"N	103°51'22.512"W	0.05	
3180.30	0.480	67.320	3179.51	19.62	-43.88	-14.24	647558.95	439668.19	32°12'28.313"N	103°51'22.506"W	0.21	
3275.00	0.610	78.760	3274.21	20.07	-43.63	-13.38	647559.81	439668.44	32°12'28.316"N	103°51'22.496"W	0.18	
3369.70	0.890	91.160	3368.90	20.91	-43.55	-12.15	647561.04	439668.53	32°12'28.317"N	103°51'22.481"W	0.34	
3464.40	0.980	95.650	3463.59	22.10	-43.64	-10.61	647562.58	439668.43	32°12'28.316"N	103°51'22.463"W	0.12	
3559.10	0.940	103.980	3558.27	23.42	-43.91	-9.05	647564.14	439668.17	32°12'28.313"N	103°51'22.445"W	0.15	
3653.80	1.030	107.940	3652.96	24.87	-44.36	-7.48	647565.70	439667.72	32°12'28.308"N	103°51'22.427"W	0.12	
3748.50	1.080	116.230	3747.64	26.50	-45.01	-5.87	647567.31	439667.06	32°12'28.302"N	103°51'22.408"W	0.17	
3843.20	0.920	121.170	3842.33	28.09	-45.80	-4.42	647568.76	439666.27	32°12'28.294"N	103°51'22.391"W	0.19	
3937.90	0.670	124.960	3937.02	29.39	-46.51	-3.32	647569.87	439665.56	32°12'28.287"N	103°51'22.379"W	0.27	
4032.60	0.490	130.010	4031.72	30.34	-47.09	-2.55	647570.63	439664.98	32°12'28.281"N	103°51'22.370"W	0.20	
4127.40	0.470	140.920	4126.51	31.13	-47.65	-2.00	647571.19	439664.42	32°12'28.275"N	103°51'22.363"W	0.10	



Actual Wellpath Report

No.341H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.341H SHL
Area	Eddy County, NM	Well	No.341H
Field	Poker Lake Unit	Wellbore	No.341H AWP
Facility	Poker Lake Unit No. 341H		

WELLPATH DATA (194 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
4222.10	0.450	145.930	4221.21	31.88	-48.26	-1.55	647571.64	439663.81	32°12'28.269"N	103°51'22.358"W	0.05	
4316.80	0.400	134.370	4315.91	32.57	-48.80	-1.10	647572.08	439663.27	32°12'28.264"N	103°51'22.353"W	0.10	
4411.50	0.390	137.540	4410.60	33.22	-49.27	-0.65	647572.54	439662.80	32°12'28.259"N	103°51'22.348"W	0.03	
4506.20	0.360	132.200	4505.30	33.84	-49.71	-0.21	647572.98	439662.37	32°12'28.255"N	103°51'22.343"W	0.05	
4600.90	0.330	125.680	4600.00	34.41	-50.07	0.23	647573.42	439662.01	32°12'28.252"N	103°51'22.337"W	0.05	
4695.60	0.230	119.430	4694.70	34.86	-50.32	0.62	647573.80	439661.75	32°12'28.249"N	103°51'22.333"W	0.11	
4790.30	0.180	102.030	4789.40	35.17	-50.44	0.93	647574.12	439661.63	32°12'28.248"N	103°51'22.329"W	0.08	
4885.00	0.050	131.430	4884.10	35.34	-50.50	1.11	647574.29	439661.57	32°12'28.247"N	103°51'22.327"W	0.15	
4979.70	0.150	232.360	4978.80	35.36	-50.61	1.04	647574.22	439661.47	32°12'28.246"N	103°51'22.328"W	0.18	
5074.40	0.330	249.120	5073.50	35.22	-50.78	0.69	647573.87	439661.30	32°12'28.244"N	103°51'22.332"W	0.20	
5169.20	0.340	258.740	5168.30	34.94	-50.93	0.16	647573.34	439661.14	32°12'28.243"N	103°51'22.338"W	0.06	
5263.90	0.340	260.890	5262.99	34.61	-51.03	-0.40	647572.79	439661.04	32°12'28.242"N	103°51'22.345"W	0.01	
5358.60	0.450	269.170	5357.69	34.17	-51.08	-1.05	647572.14	439660.99	32°12'28.242"N	103°51'22.352"W	0.13	
5453.30	0.510	265.840	5452.39	33.61	-51.12	-1.84	647571.35	439660.96	32°12'28.241"N	103°51'22.362"W	0.07	
5548.00	0.410	257.530	5547.09	33.14	-51.22	-2.59	647570.60	439660.85	32°12'28.240"N	103°51'22.370"W	0.13	
5642.70	0.240	248.730	5641.78	32.86	-51.36	-3.10	647570.08	439660.71	32°12'28.239"N	103°51'22.376"W	0.19	
5737.40	0.260	228.090	5736.48	32.75	-51.58	-3.45	647569.73	439660.49	32°12'28.237"N	103°51'22.380"W	0.10	
5832.10	0.280	197.970	5831.18	32.83	-51.94	-3.68	647569.50	439660.13	32°12'28.233"N	103°51'22.383"W	0.15	
5926.80	0.370	190.860	5925.88	33.10	-52.46	-3.81	647569.37	439659.61	32°12'28.228"N	103°51'22.385"W	0.10	
6021.60	0.460	184.440	6020.68	33.50	-53.14	-3.90	647569.29	439658.93	32°12'28.221"N	103°51'22.386"W	0.14	
6116.30	0.500	181.800	6115.37	34.01	-53.94	-3.94	647569.25	439658.14	32°12'28.213"N	103°51'22.386"W	0.05	
6211.00	0.530	181.390	6210.07	34.57	-54.79	-3.96	647569.22	439657.29	32°12'28.205"N	103°51'22.387"W	0.03	
6305.70	0.350	162.690	6304.77	35.12	-55.50	-3.89	647569.30	439656.57	32°12'28.198"N	103°51'22.386"W	0.24	
6400.40	0.500	150.000	6399.47	35.76	-56.14	-3.59	647569.59	439655.94	32°12'28.192"N	103°51'22.382"W	0.19	
6495.10	0.780	152.510	6494.16	36.77	-57.06	-3.09	647570.09	439655.01	32°12'28.182"N	103°51'22.377"W	0.30	
6589.80	0.630	201.570	6588.85	37.57	-58.12	-2.98	647570.20	439653.95	32°12'28.172"N	103°51'22.375"W	0.63	
6684.50	0.650	203.370	6683.55	37.94	-59.10	-3.39	647569.80	439652.98	32°12'28.162"N	103°51'22.380"W	0.03	
6779.20	0.620	182.840	6778.24	38.45	-60.10	-3.63	647569.56	439651.97	32°12'28.152"N	103°51'22.383"W	0.24	
6873.90	0.730	189.230	6872.93	39.12	-61.21	-3.75	647569.43	439650.86	32°12'28.141"N	103°51'22.384"W	0.14	
6968.60	0.810	193.990	6967.63	39.78	-62.46	-4.01	647569.18	439649.62	32°12'28.129"N	103°51'22.387"W	0.11	
7063.40	0.800	190.080	7062.42	40.47	-63.76	-4.29	647568.90	439648.32	32°12'28.116"N	103°51'22.391"W	0.06	
7158.10	0.720	196.540	7157.11	41.10	-64.98	-4.57	647568.61	439647.10	32°12'28.104"N	103°51'22.394"W	0.12	
7173.00	0.700	171.000	7172.01	41.21	-65.16	-4.58	647568.60	439646.92	32°12'28.102"N	103°51'22.394"W	2.11	
7205.00	1.300	151.900	7204.00	41.71	-65.67	-4.38	647568.80	439646.40	32°12'28.097"N	103°51'22.392"W	2.12	
7236.00	4.400	144.800	7234.96	43.21	-66.95	-3.53	647569.65	439645.12	32°12'28.085"N	103°51'22.382"W	10.05	
7268.00	8.000	144.400	7266.77	46.59	-69.77	-1.53	647571.66	439642.31	32°12'28.057"N	103°51'22.359"W	11.25	
7298.00	12.500	142.200	7296.28	51.85	-74.03	1.68	647574.86	439638.04	32°12'28.014"N	103°51'22.322"W	15.05	
7330.00	16.500	140.300	7327.26	59.78	-80.27	6.71	647579.89	439631.81	32°12'27.952"N	103°51'22.264"W	12.59	
7362.00	19.800	137.200	7357.66	69.70	-87.74	13.30	647586.48	439624.33	32°12'27.878"N	103°51'22.187"W	10.74	
7393.00	22.500	134.400	7386.57	80.87	-95.75	21.10	647594.28	439616.33	32°12'27.799"N	103°51'22.097"W	9.30	
7424.00	25.300	133.200	7414.91	93.43	-104.43	30.17	647603.35	439607.64	32°12'27.712"N	103°51'21.992"W	9.17	
7455.00	28.800	131.100	7442.52	107.52	-113.88	40.63	647613.81	439598.20	32°12'27.618"N	103°51'21.871"W	11.70	
7485.00	33.200	130.100	7468.22	122.95	-123.93	52.36	647625.54	439588.15	32°12'27.518"N	103°51'21.735"W	14.77	
7517.00	38.000	129.200	7494.24	141.54	-135.80	66.71	647639.89	439576.28	32°12'27.400"N	103°51'21.568"W	15.09	
7548.00	41.500	129.300	7518.07	161.31	-148.34	82.06	647655.23	439563.74	32°12'27.275"N	103°51'21.390"W	11.29	



Actual Wellpath Report

No.341H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.341H SHL
Area	Eddy County, NM	Well	No.341H
Field	Poker Lake Unit	Wellbore	No.341H AWP
Facility	Poker Lake Unit No. 341H		

WELLPATH DATA (194 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
7580.00	43.900	130.300	7541.58	182.97	-162.24	98.72	647671.90	439549.85	32°12'27.137"N	103°51'21.197"W	7.79	
7611.00	46.200	130.700	7563.48	204.89	-176.48	115.40	647688.58	439535.60	32°12'26.996"N	103°51'21.004"W	7.48	
7642.00	47.800	130.700	7584.62	227.54	-191.27	132.59	647705.77	439520.82	32°12'26.848"N	103°51'20.804"W	5.16	
7674.00	49.800	129.700	7605.70	251.58	-206.81	150.98	647724.16	439505.28	32°12'26.694"N	103°51'20.591"W	6.68	
7707.00	51.700	131.400	7626.58	277.11	-223.42	170.39	647743.57	439488.67	32°12'26.529"N	103°51'20.366"W	7.00	
7738.00	53.900	132.400	7645.32	301.79	-239.91	188.77	647761.94	439472.17	32°12'26.365"N	103°51'20.153"W	7.55	
7769.00	56.400	134.300	7663.04	327.23	-257.38	207.26	647780.43	439454.71	32°12'26.191"N	103°51'19.939"W	9.50	
7800.00	59.900	134.900	7679.39	353.55	-275.87	226.01	647799.18	439436.22	32°12'26.007"N	103°51'19.722"W	11.41	
7831.00	60.600	134.300	7694.77	380.45	-294.76	245.17	647818.34	439417.33	32°12'25.819"N	103°51'19.500"W	2.81	
7861.00	60.800	134.700	7709.46	406.61	-313.10	263.83	647837.00	439398.99	32°12'25.637"N	103°51'19.283"W	1.34	
7900.00	60.200	134.000	7728.66	440.54	-336.83	288.10	647861.27	439375.26	32°12'25.401"N	103°51'19.002"W	2.19	
7977.00	60.400	134.000	7766.81	507.42	-383.29	336.22	647909.38	439328.81	32°12'24.939"N	103°51'18.445"W	0.26	
8009.00	64.000	134.200	7781.73	535.72	-402.99	356.54	647929.70	439309.11	32°12'24.744"N	103°51'18.209"W	11.26	
8040.00	68.000	134.600	7794.34	564.03	-422.80	376.77	647949.93	439289.30	32°12'24.547"N	103°51'17.975"W	12.96	
8072.00	72.000	134.800	7805.28	594.08	-443.95	398.14	647971.29	439268.16	32°12'24.336"N	103°51'17.727"W	12.51	
8105.00	76.000	136.300	7814.38	625.77	-466.59	420.34	647993.50	439245.51	32°12'24.111"N	103°51'17.470"W	12.88	
8136.00	79.800	136.400	7820.87	656.02	-488.52	441.26	648014.41	439223.59	32°12'23.893"N	103°51'17.227"W	12.26	
8168.00	83.800	136.600	7825.44	687.64	-511.49	463.06	648036.21	439200.62	32°12'23.665"N	103°51'16.975"W	12.52	
8200.00	88.100	135.100	7827.70	719.51	-534.38	485.29	648058.44	439177.72	32°12'23.438"N	103°51'16.717"W	14.23	
8232.00	89.500	135.600	7828.37	751.48	-557.14	507.77	648080.92	439154.97	32°12'23.211"N	103°51'16.457"W	4.65	
8264.00	88.900	134.900	7828.81	783.45	-579.87	530.30	648103.44	439132.24	32°12'22.986"N	103°51'16.196"W	2.88	
8296.00	89.700	133.400	7829.20	815.45	-602.15	553.25	648126.40	439109.96	32°12'22.764"N	103°51'15.930"W	5.31	
8328.00	90.200	133.500	7829.23	847.45	-624.16	576.49	648149.63	439087.95	32°12'22.545"N	103°51'15.661"W	1.59	
8359.00	92.000	133.000	7828.64	878.44	-645.40	599.06	648172.20	439066.72	32°12'22.334"N	103°51'15.399"W	6.03	
8391.00	92.000	133.400	7827.52	910.42	-667.29	622.37	648195.51	439044.83	32°12'22.116"N	103°51'15.129"W	1.25	
8486.00	92.000	132.800	7824.20	1005.36	-732.16	691.70	648264.83	438979.96	32°12'21.471"N	103°51'14.325"W	0.63	
8582.00	91.100	131.900	7821.61	1101.31	-796.81	762.62	648335.75	438915.32	32°12'20.829"N	103°51'13.503"W	1.33	
8677.00	89.400	131.200	7821.19	1196.27	-859.81	833.71	648406.84	438852.32	32°12'20.202"N	103°51'12.679"W	1.94	
8773.00	89.800	130.800	7821.86	1292.20	-922.79	906.16	648479.28	438789.34	32°12'19.576"N	103°51'11.839"W	0.59	
8869.00	90.300	134.100	7821.78	1388.18	-987.58	976.98	648550.10	438724.56	32°12'18.931"N	103°51'11.019"W	3.48	
8964.00	91.200	133.500	7820.54	1483.17	-1053.33	1045.54	648618.66	438658.82	32°12'18.278"N	103°51'10.224"W	1.14	
9060.00	88.400	131.000	7820.87	1579.14	-1117.86	1116.59	648689.70	438594.29	32°12'17.636"N	103°51'09.401"W	3.91	
9155.00	88.200	131.900	7823.69	1674.05	-1180.72	1187.77	648760.87	438531.43	32°12'17.011"N	103°51'08.576"W	0.97	
9251.00	88.200	131.300	7826.70	1769.97	-1244.42	1259.52	648832.62	438467.73	32°12'16.377"N	103°51'07.744"W	0.62	
9346.00	87.400	131.800	7830.35	1864.86	-1307.39	1330.56	648903.65	438404.77	32°12'15.751"N	103°51'06.920"W	0.99	
9441.00	87.500	130.800	7834.58	1959.72	-1370.03	1401.86	648974.95	438342.14	32°12'15.128"N	103°51'06.094"W	1.06	
9531.00	88.700	132.300	7837.56	2049.63	-1429.68	1469.17	649042.26	438282.48	32°12'14.535"N	103°51'05.314"W	2.13	
9631.00	88.900	132.600	7839.66	2149.60	-1497.16	1542.94	649116.02	438215.01	32°12'13.864"N	103°51'04.459"W	0.36	
9727.00	89.200	131.800	7841.25	2245.57	-1561.64	1614.05	649187.12	438150.54	32°12'13.223"N	103°51'03.634"W	0.89	
9822.00	87.800	129.000	7843.74	2340.42	-1623.18	1686.36	649259.43	438089.00	32°12'12.610"N	103°51'02.796"W	3.29	
9917.00	89.300	130.500	7846.14	2435.22	-1683.91	1759.37	649332.44	438028.28	32°12'12.006"N	103°51'01.950"W	2.23	
10012.00	88.800	129.700	7847.71	2530.07	-1745.09	1832.03	649405.09	437967.10	32°12'11.398"N	103°51'01.107"W	0.99	
10107.00	89.000	129.100	7849.54	2624.85	-1805.38	1905.43	649478.48	437906.82	32°12'10.798"N	103°51'00.256"W	0.67	
10202.00	89.700	130.100	7850.62	2719.66	-1865.93	1978.62	649551.67	437846.27	32°12'10.195"N	103°50'59.408"W	1.28	
10297.00	88.800	131.200	7851.86	2814.56	-1927.81	2050.69	649623.73	437784.39	32°12'09.580"N	103°50'58.572"W	4.50	



Actual Wellpath Report

No.341H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.341H SHL
Area	Eddy County, NM	Well	No.341H
Field	Poker Lake Unit	Wellbore	No.341H AWB
Facility	Poker Lake Unit No. 341H		

WELLPATH DATA (194 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
10392.00	89.000	133.500	7853.68	2909.53	-1991.79	2120.88	649693.92	437720.42	32°12'08.944"N	103°50'57.759"W	2.43	
10418.00	89.000	134.400	7854.14	2935.52	-2009.83	2139.59	649712.63	437702.38	32°12'08.764"N	103°50'57.542"W	3.46	
10514.00	90.100	135.800	7854.89	3031.46	-2077.83	2207.35	649780.39	437634.39	32°12'08.088"N	103°50'56.757"W	1.85	
10609.00	89.700	135.900	7855.06	3126.35	-2145.99	2273.52	649846.55	437566.23	32°12'07.411"N	103°50'55.990"W	0.43	
10704.00	89.200	136.200	7855.97	3221.22	-2214.38	2339.45	649912.48	437497.84	32°12'06.731"N	103°50'55.227"W	0.61	
10799.00	88.500	136.000	7857.88	3316.08	-2282.82	2405.31	649978.33	437429.41	32°12'06.051"N	103°50'54.464"W	0.77	
10895.00	88.100	134.300	7860.72	3411.97	-2350.85	2472.99	650046.00	437361.38	32°12'05.375"N	103°50'53.680"W	1.82	
10989.00	89.200	135.300	7862.94	3505.90	-2417.06	2539.66	650112.68	437295.17	32°12'04.717"N	103°50'52.907"W	1.58	
11085.00	89.500	135.400	7864.03	3601.83	-2485.35	2607.13	650180.13	437226.89	32°12'04.038"N	103°50'52.126"W	0.33	
11180.00	89.800	135.100	7864.61	3696.76	-2552.82	2674.01	650247.01	437159.42	32°12'03.367"N	103°50'51.351"W	0.45	
11277.00	89.900	135.400	7864.86	3793.69	-2621.71	2742.30	650315.29	437090.54	32°12'02.683"N	103°50'50.560"W	0.33	
11372.00	89.100	135.200	7865.69	3888.62	-2689.23	2809.11	650382.11	437023.02	32°12'02.011"N	103°50'49.786"W	0.87	
11467.00	90.700	134.300	7865.86	3983.58	-2756.11	2876.58	650449.57	436956.15	32°12'01.347"N	103°50'49.004"W	1.93	
11563.00	89.900	134.300	7865.35	4079.56	-2823.16	2945.28	650518.27	436889.11	32°12'00.680"N	103°50'48.208"W	0.83	
11659.00	88.600	131.200	7866.61	4175.53	-2888.31	3015.76	650588.74	436823.96	32°12'00.032"N	103°50'47.392"W	3.50	
11755.00	89.300	132.000	7868.37	4271.48	-2952.03	3087.54	650660.51	436760.24	32°11'59.398"N	103°50'46.560"W	1.11	
11849.00	89.800	132.000	7869.11	4365.46	-3014.93	3157.39	650730.36	436697.35	32°11'58.773"N	103°50'45.750"W	0.53	
11942.00	88.200	130.300	7870.73	4458.38	-3076.11	3227.40	650800.37	436636.17	32°11'58.164"N	103°50'44.939"W	2.51	
12037.00	90.400	131.600	7871.89	4553.30	-3138.36	3299.14	650872.10	436573.92	32°11'57.545"N	103°50'44.107"W	2.69	
12132.00	90.900	133.300	7870.81	4648.28	-3202.48	3369.23	650942.19	436509.81	32°11'56.908"N	103°50'43.295"W	1.87	
12227.00	89.900	133.900	7870.15	4743.28	-3267.99	3438.03	651010.98	436444.30	32°11'56.256"N	103°50'42.498"W	1.23	
12322.00	87.500	134.100	7872.31	4838.23	-3333.96	3506.34	651079.29	436378.34	32°11'55.600"N	103°50'41.706"W	2.54	
12416.00	87.700	134.500	7876.24	4932.13	-3399.55	3573.56	651146.50	436312.75	32°11'54.948"N	103°50'40.927"W	0.48	
12512.00	88.600	132.600	7879.34	5028.07	-3465.66	3643.10	651216.03	436246.65	32°11'54.291"N	103°50'40.122"W	2.19	
12607.00	89.400	133.300	7881.00	5123.06	-3530.38	3712.62	651285.55	436181.93	32°11'53.647"N	103°50'39.316"W	1.12	
12703.00	88.900	132.200	7882.42	5219.04	-3595.53	3783.11	651356.03	436116.78	32°11'52.999"N	103°50'38.499"W	1.26	
12798.00	86.500	131.300	7886.24	5313.93	-3658.74	3853.92	651426.84	436053.58	32°11'52.371"N	103°50'37.679"W	2.70	
12892.00	86.400	132.300	7892.06	5407.72	-3721.27	3923.86	651496.77	435991.06	32°11'51.749"N	103°50'36.868"W	1.07	
12983.00	87.200	131.600	7897.14	5498.56	-3782.00	3991.43	651564.34	435930.32	32°11'51.145"N	103°50'36.085"W	1.17	
13078.00	86.900	132.300	7902.03	5593.41	-3845.43	4061.99	651634.90	435866.91	32°11'50.514"N	103°50'35.267"W	0.80	
13173.00	88.600	132.400	7905.76	5688.33	-3909.37	4132.14	651705.05	435802.97	32°11'49.878"N	103°50'34.454"W	1.79	
13268.00	89.100	132.600	7907.66	5783.30	-3973.54	4202.17	651775.07	435738.80	32°11'49.240"N	103°50'33.643"W	0.57	
13363.00	89.600	133.200	7908.74	5878.29	-4038.20	4271.76	651844.65	435674.14	32°11'48.597"N	103°50'32.836"W	0.82	
13459.00	90.200	133.300	7908.91	5974.29	-4103.98	4341.68	651914.57	435608.37	32°11'47.943"N	103°50'32.026"W	0.63	
13554.00	90.400	132.400	7908.41	6069.29	-4168.59	4411.33	651984.21	435543.77	32°11'47.301"N	103°50'31.219"W	0.97	
13649.00	90.600	132.700	7907.58	6164.28	-4232.83	4481.31	652054.19	435479.53	32°11'46.662"N	103°50'30.408"W	0.38	
13744.00	90.100	132.400	7907.00	6259.27	-4297.07	4551.29	652124.17	435415.30	32°11'46.023"N	103°50'29.597"W	0.61	
13840.00	90.700	132.400	7906.33	6355.26	-4361.80	4622.18	652195.05	435350.57	32°11'45.379"N	103°50'28.776"W	0.62	
13935.00	89.100	132.900	7906.50	6450.26	-4426.16	4692.05	652264.92	435286.21	32°11'44.739"N	103°50'27.966"W	1.76	
14031.00	90.200	132.900	7907.08	6546.25	-4491.51	4762.37	652335.23	435220.87	32°11'44.089"N	103°50'27.151"W	1.15	
14126.00	89.700	133.000	7907.17	6641.25	-4556.24	4831.91	652404.76	435156.14	32°11'43.446"N	103°50'26.346"W	0.54	
14221.00	88.200	132.800	7908.91	6736.23	-4620.89	4901.49	652474.34	435091.49	32°11'42.803"N	103°50'25.540"W	1.59	
14316.00	91.100	133.900	7909.49	6831.22	-4686.10	4970.56	652543.40	435026.29	32°11'42.154"N	103°50'24.739"W	3.26	
14411.00	89.100	133.100	7909.32	6926.21	-4751.49	5039.46	652612.31	434960.91	32°11'41.504"N	103°50'23.941"W	2.27	
14505.00	89.500	133.000	7910.47	7020.20	-4815.65	5108.15	652680.99	434896.75	32°11'40.866"N	103°50'23.145"W	0.44	



Actual Wellpath Report

No.341H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.341H SHL
Area	Eddy County, NM	Well	No.341H
Field	Poker Lake Unit	Wellbore	No.341H AWB
Facility	Poker Lake Unit No. 341H		

WELLPATH DATA (194 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
14600.00	90.000	132.700	7910.88	7115.20	-4880.25	5177.80	652750.63	434832.15	32°11'40.224"N	103°50'22.338"W	0.61	
14695.00	90.600	134.100	7910.39	7210.19	-4945.53	5246.82	652819.65	434766.88	32°11'39.575"N	103°50'21.538"W	1.60	
14790.00	88.400	133.000	7911.22	7305.18	-5010.97	5315.66	652888.49	434701.44	32°11'38.924"N	103°50'20.741"W	2.59	
14886.00	90.300	133.200	7912.30	7401.17	-5076.56	5385.75	652958.57	434635.86	32°11'38.272"N	103°50'19.929"W	1.99	
14980.00	89.700	132.200	7912.30	7495.17	-5140.30	5454.83	653027.65	434572.12	32°11'37.638"N	103°50'19.128"W	1.24	
15075.00	90.300	133.000	7912.30	7590.16	-5204.61	5524.76	653097.57	434507.82	32°11'36.998"N	103°50'18.318"W	1.05	
15169.00	88.700	132.300	7913.12	7684.15	-5268.29	5593.89	653166.70	434444.14	32°11'36.365"N	103°50'17.517"W	1.86	
15264.00	88.900	131.000	7915.11	7779.10	-5331.41	5664.86	653237.66	434381.02	32°11'35.737"N	103°50'16.694"W	1.38	
15359.00	89.400	131.700	7916.52	7874.04	-5394.16	5736.17	653308.96	434318.27	32°11'35.113"N	103°50'15.868"W	0.91	
15454.00	89.300	131.800	7917.60	7969.00	-5457.42	5807.04	653379.83	434255.02	32°11'34.484"N	103°50'15.047"W	0.15	
15549.00	90.000	132.100	7918.18	8063.98	-5520.92	5877.69	653450.48	434191.52	32°11'33.852"N	103°50'14.228"W	0.80	
15644.00	89.900	132.900	7918.26	8158.97	-5585.10	5947.73	653520.51	434127.35	32°11'33.214"N	103°50'13.417"W	0.85	
15700.00	89.200	132.900	7918.70	8214.97	-5623.22	5988.75	653561.53	434089.23	32°11'32.835"N	103°50'12.941"W	1.25	
15751.00	89.200	132.900	7919.42	8265.97	-5657.94	6026.11	653598.88	434054.52	32°11'32.489"N	103°50'12.508"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.341 Target #1		7807.00	-526.38	542.00	648115.15	439185.73	32°12'23.514"N	103°51'16.057"W	point
No.341 PBHL (Rev-1)		7920.00	-5628.56	6005.89	653578.67	434083.90	32°11'32.781"N	103°50'12.742"W	point
Target #2		7920.00	-4771.29	5080.91	652653.75	434941.10	32°11'41.306"N	103°50'23.460"W	point

WELLPATH COMPOSITION - Ref Wellbore: No.341H AWB Ref Wellpath: No.341H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7158.10	Generic gyro - northseeking (Standard)	Gyro Data Gyro <100-7158.1>	No.341H AWB
7158.10	15700.00	NaviTrak (Standard)	BHI MWD NaviTrak <7173-15700>	No.341H AWB
15700.00	15751.00	Blind Drilling (std)	Projection to bit	No.341H AWB