

**McVAY DRILLING COMPANY**

P.O. Box 2450
Hobbs, New Mexico 88241
(575) 397-3311
FAX: 39-DRILL

RECEIVED

JAN 25 2012

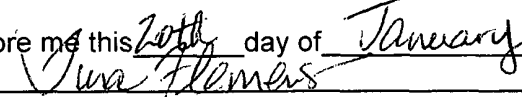
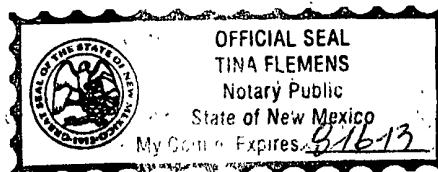
BOPCO WTD PRODUCTION

Well Name and Num: Poker Lake Unit 333H
Location: Sec. 13, T24S, R30E
Operator: BOPCo
Drilling Contractor: McVay Drilling Company

30-015-39294

The undersigned certifies that he is an authorized representative of the drilling contractor who drilled the above described well and that he has conducted deviation tests and obtained the following results:

<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>
0.90	247	1.04	6287	91.60	8921	89.50	12632
0.50	452	0.49	6725	90.90	9067	91.00	12914
0.28	658	1.30	7101	91.70	9349	87.80	13008
0.63	763	8.70	7283	90.70	9537	90.00	13196
0.40	1145	22.50	7419	91.20	9724	91.60	13384
0.20	1524	25.80	7492	91.30	9818	89.60	13759
0.20	1902	41.70	7679	91.30	10193	92.00	13853
0.03	2281	46.70	7771	90.70	10568	90.90	13946
0.10	2660	49.10	7803	91.90	10662	92.20	14228
0.70	3032	67.10	8024	92.30	10943	92.70	14450
0.06	3409	68.80	8056	91.70	11318	91.40	14603
0.80	3787	88.70	8340	89.90	11412	91.50	14791
0.40	4056	90.60	8403	92.80	11788	90.20	14978
0.69	4539	89.10	8471	92.00	11881	89.80	15040
0.76	5007	89.50	8545	92.40	11975		
1.16	5430	90.40	8670	90.20	12069		
1.21	5822	91.70	8795	90.70	12256		

By: Subscribed and sworn to before me this 20th day of January, 2012
Notary Public, Lea County, New Mexico



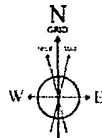
BOPCO, L.P.

Location: Eddy County, NM
Field: Poker Lake Unit
Facility: Poker Lake Unit No. 333H

Slot: No.333H SHL
Well: No.333H
Wellbore: No.333H PWB

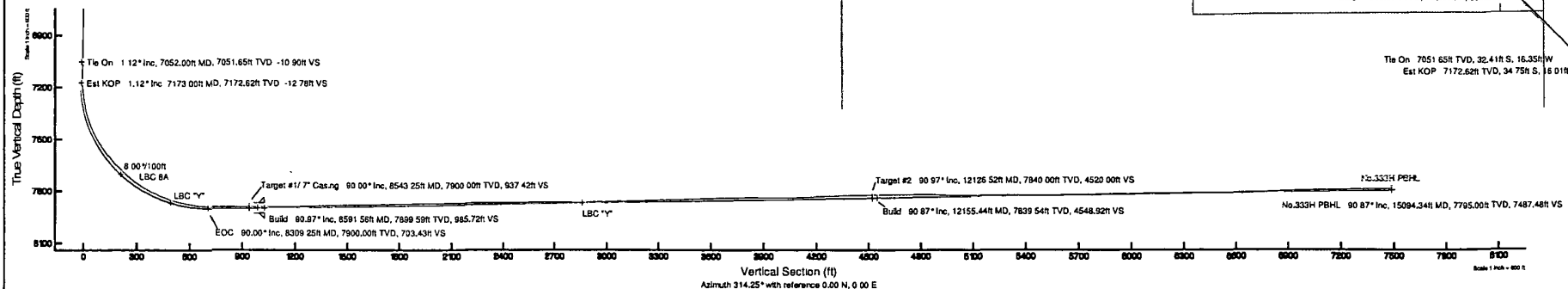
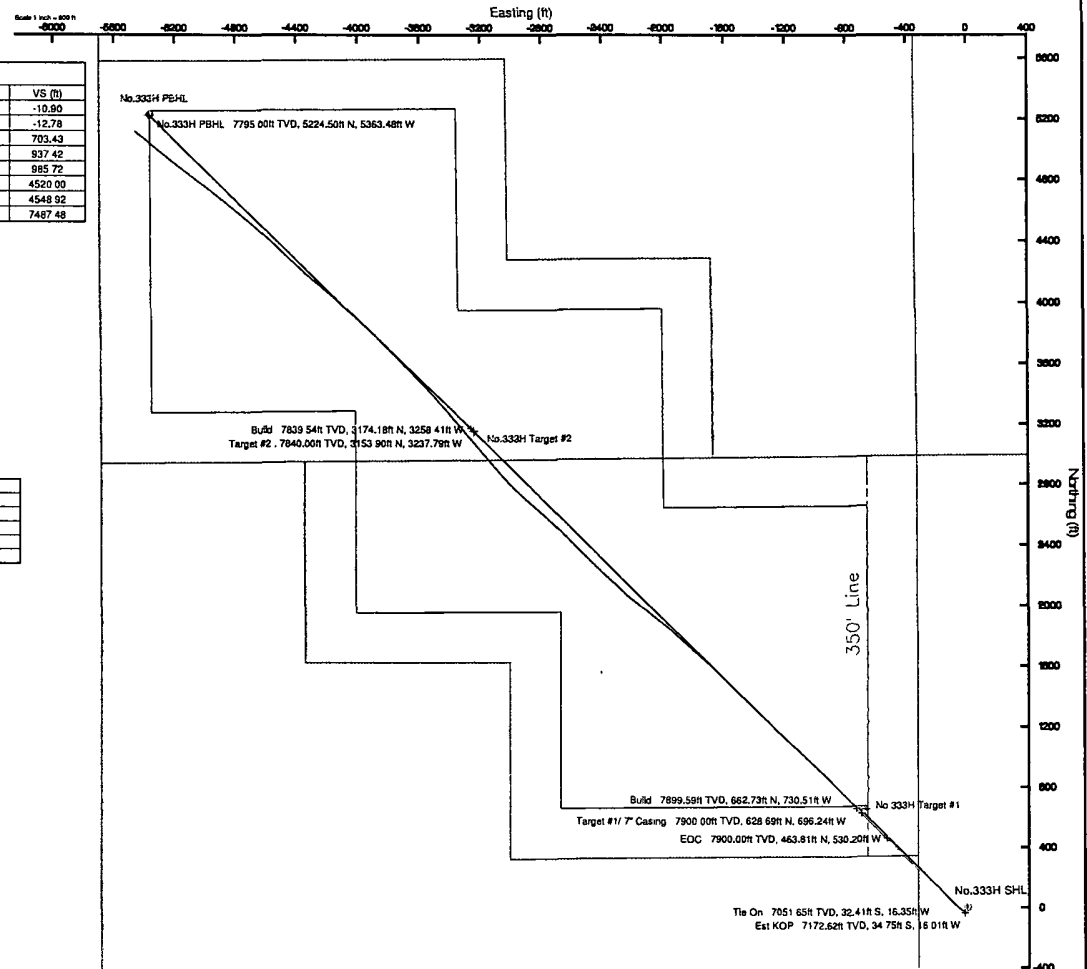


Well Profile Data							
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (1100ft)
Tie On	7052.00	1.120	171.780	7051.65	-32.41	-16.35	0.00
Est KOP	7173.00	1.120	171.780	7172.62	-34.75	-16.01	0.00
EOC	8309.25	90.000	314.800	7900.00	463.81	-530.20	8.00
Target #1/ 7" Casing	8543.25	90.000	314.800	7900.00	628.69	-496.24	0.00
Build	8591.56	90.866	314.815	7899.59	662.73	-730.51	2.00
Target #2	12126.52	90.966	314.815	7840.00	3153.90	-3237.79	0.00
Build	12155.44	90.868	314.245	7839.54	3174.18	-3258.41	2.00
No.333H PBHL	15094.34	90.868	314.245	7795.00	5224.50	-5363.48	0.00



BGGM (1945.0 to 2012.0) Dip: 60.13° Field: 48569.2 nT
Magnetic North is 7.71 degrees East of True North (at 11/1/2011)
Grid North is 0.26 degrees East of True North
To correct azimuth from True to Grid subtract 0.26 degrees
To correct azimuth from Magnetic to Grid add 7.44 degrees
For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.44 = 97.44

Plot reference wellpath is Plan #3	Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
True vertical depths are referenced to Rig on No.333H SHL (KB)	North Reference: Grid north
Measured depths are referenced to Rig on No.333H SHL (KB)	Scale: True distance
Rig on No.333H SHL (KB) to Mean Sea Level: 3475 feet	Depths are in feet
Mean Sea Level to Mud Line (At Slot: No.333H SHL): -3456 feet	Created by: jones on 1/6/2012
Coordinates are in feet referenced to Slot	





Actual Wellpath Report

No.333HAWP

Page 1 of 6



BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.333HSHL
Area	Eddy County, NM	Well	No.333H
Field	Poker Lake Unit	Wellbore	No.333HAWB
Facility	Poker Lake Unit No. 333H		

REPORT SETUP INFORMATION			
Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	Well Architect® 3.0.0
North Reference	Grid	User	Gentry
Scale	0.999936	Report Generated	1/12/2012 at 7:49:16 AM
Convergence at slot	0.26° East	Database/Source file	WA Midland/No.333H_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	652130.25	442947.20	32°13'00.559"N	103°50'29.125"W
Facility Reference Pt			652130.25	442947.20	32°13'00.559"N	103°50'29.125"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.333HSHL (KB) to Facility Vertical Datum	19.00ft
Horizontal Reference Pt	Slot	Rig on No.333HSHL (KB) to Mean Sea Level	3475.00ft
Vertical Reference Pt	Rig on No.333HSHL (KB)	Rig on No.333HSHL (KB) to Mud Line at Slot (No.333HSHL)	19.00ft
MD Reference Pt	Rig on No.333HSHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	314.25°



Actual Wellpath Report

No.333HAWP

Page 2 of 6



BAKER HUGHES

REFERENCE WELLPATH ID AND LOCATION

Operator	BOPCO, L.P.	Slot	No.333HSHL
Area	Eddy County, NM	Well	No.333H
Field	Poker Lake Unit	Wellbore	No.333HAWB
Facility	Poker Lake Unit No. 333H		

WELLPATH DATA (195 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	204.200	0.00	0.00	0.00	0.00	652130.25	442947.20	32°13'00.559"N	103°50'29.125"W	0.00	
19.00	0.000	204.200	19.00	0.00	0.00	0.00	652130.25	442947.20	32°13'00.559"N	103°50'29.125"W	0.00	
100.00	0.300	204.200	100.00	-0.07	-0.19	-0.09	652130.16	442947.00	32°13'00.557"N	103°50'29.127"W	0.37	
200.00	0.380	182.520	200.00	-0.38	-0.76	-0.21	652130.04	442946.43	32°13'00.551"N	103°50'29.128"W	0.15	
300.00	0.290	184.100	300.00	-0.77	-1.35	-0.24	652130.01	442945.85	32°13'00.545"N	103°50'29.128"W	0.09	
400.00	0.290	224.160	400.00	-0.93	-1.78	-0.44	652129.81	442945.42	32°13'00.541"N	103°50'29.131"W	0.20	
500.00	0.340	234.830	499.99	-0.88	-2.13	-0.85	652129.39	442945.06	32°13'00.538"N	103°50'29.136"W	0.08	
587.50	0.460	272.440	587.49	-0.57	-2.27	-1.42	652128.83	442944.93	32°13'00.536"N	103°50'29.142"W	0.32	
682.10	0.450	264.290	682.09	-0.05	-2.29	-2.17	652128.08	442944.91	32°13'00.536"N	103°50'29.151"W	0.07	
776.70	0.460	263.360	776.69	0.43	-2.37	-2.91	652127.33	442944.83	32°13'00.535"N	103°50'29.160"W	0.01	
871.40	0.480	268.430	871.38	0.95	-2.42	-3.69	652126.56	442944.77	32°13'00.535"N	103°50'29.169"W	0.05	
966.00	0.500	275.850	965.98	1.55	-2.39	-4.49	652125.75	442944.80	32°13'00.535"N	103°50'29.178"W	0.07	
1060.60	0.470	293.590	1060.58	2.24	-2.20	-5.26	652124.99	442945.00	32°13'00.537"N	103°50'29.187"W	0.16	
1155.20	0.440	306.130	1155.17	2.96	-1.83	-5.91	652124.34	442945.37	32°13'00.541"N	103°50'29.194"W	0.11	
1249.80	0.290	322.170	1249.77	3.56	-1.42	-6.35	652123.90	442945.77	32°13'00.545"N	103°50'29.199"W	0.19	
1344.40	0.230	340.250	1344.37	3.96	-1.06	-6.56	652123.69	442946.14	32°13'00.548"N	103°50'29.202"W	0.11	
1439.00	0.250	358.570	1438.97	4.28	-0.67	-6.63	652123.62	442946.53	32°13'00.552"N	103°50'29.203"W	0.08	
1533.60	0.140	353.260	1533.57	4.52	-0.35	-6.65	652123.60	442946.85	32°13'00.555"N	103°50'29.208"W	0.12	
1628.20	0.120	278.890	1628.17	4.69	-0.22	-6.76	652123.49	442946.98	32°13'00.557"N	103°50'29.204"W	0.17	
1722.80	0.260	256.950	1722.77	4.89	-0.25	-7.07	652123.18	442946.95	32°13'00.556"N	103°50'29.208"W	0.16	
1817.50	0.260	256.240	1817.47	5.12	-0.35	-7.49	652122.76	442946.85	32°13'00.555"N	103°50'29.213"W	0.00	
1912.10	0.290	253.190	1912.07	5.35	-0.47	-7.92	652122.33	442946.73	32°13'00.554"N	103°50'29.218"W	0.04	
2006.70	0.320	244.050	2006.66	5.55	-0.66	-8.39	652121.86	442946.54	32°13'00.553"N	103°50'29.223"W	0.06	
2101.30	0.320	229.580	2101.26	5.66	-0.94	-8.83	652121.42	442946.25	32°13'00.550"N	103°50'29.228"W	0.09	
2195.90	0.290	223.950	2195.86	5.69	-1.29	-9.20	652121.05	442945.91	32°13'00.546"N	103°50'29.233"W	0.04	
2290.50	0.210	201.130	2290.46	5.62	-1.62	-9.42	652120.82	442945.58	32°13'00.543"N	103°50'29.235"W	0.13	
2385.10	0.160	161.070	2385.06	5.43	-1.91	-9.44	652120.80	442945.29	32°13'00.540"N	103°50'29.236"W	0.14	
2479.70	0.180	122.170	2479.66	5.17	-2.11	-9.28	652120.97	442945.09	32°13'00.538"N	103°50'29.234"W	0.12	
2574.30	0.080	43.070	2574.26	5.03	-2.14	-9.10	652121.14	442945.05	32°13'00.538"N	103°50'29.232"W	0.19	
2668.90	0.130	344.470	2668.86	5.12	-1.99	-9.09	652121.16	442945.21	32°13'00.539"N	103°50'29.231"W	0.12	
2763.60	0.380	27.570	2763.56	5.30	-1.61	-8.97	652121.28	442945.59	32°13'00.543"N	103°50'29.230"W	0.32	
2858.20	0.580	30.300	2858.16	5.51	-0.92	-8.58	652121.66	442946.28	32°13'00.550"N	103°50'29.225"W	0.21	
2952.80	0.540	26.960	2952.75	5.76	-0.11	-8.14	652122.11	442947.09	32°13'00.558"N	103°50'29.220"W	0.05	
3047.40	0.550	12.990	3047.35	6.12	0.73	-7.84	652122.41	442947.93	32°13'00.566"N	103°50'29.217"W	0.14	
3142.00	0.690	6.690	3141.94	6.71	1.74	-7.67	652122.58	442948.94	32°13'00.576"N	103°50'29.215"W	0.16	
3236.60	0.630	16.930	3236.53	7.29	2.80	-7.45	652122.80	442950.00	32°13'00.587"N	103°50'29.212"W	0.14	
3331.20	0.620	38.030	3331.13	7.59	3.70	-6.98	652123.26	442950.90	32°13'00.596"N	103°50'29.207"W	0.24	
3425.80	0.420	54.780	3425.73	7.58	4.31	-6.39	652123.86	442951.50	32°13'00.602"N	103°50'29.200"W	0.26	
3520.40	0.220	132.670	3520.32	7.33	4.38	-5.97	652124.28	442951.58	32°13'00.602"N	103°50'29.195"W	0.46	
3615.00	0.540	183.210	3614.92	6.86	3.82	-5.86	652124.39	442951.01	32°13'00.597"N	103°50'29.193"W	0.46	
3709.70	0.840	188.830	3709.61	6.16	2.68	-5.99	652124.26	442949.88	32°13'00.585"N	103°50'29.195"W	0.32	
3804.30	0.690	188.210	3804.21	5.43	1.44	-6.18	652124.07	442948.63	32°13'00.573"N	103°50'29.197"W	0.16	
3898.90	0.410	188.250	3898.80	4.89	0.54	-6.31	652123.94	442947.73	32°13'00.564"N	103°50'29.199"W	0.30	
3993.50	0.230	192.260	3993.40	4.59	0.02	-6.40	652123.85	442947.21	32°13'00.559"N	103°50'29.200"W	0.19	
4088.10	0.220	192.300	4088.00	4.40	-0.35	-6.48	652123.77	442946.85	32°13'00.555"N	103°50'29.201"W	0.01	



Actual Wellpath Report

No.333HAWP

Page 3 of 6



OPERATOR INFORMATION			
Operator	BOPCO, L.P.	Slot	No.333HSHL
Area	Eddy County, NM	Well	No.333H
Field	Poker Lake Unit	Wellbore	No.333HAWB
Facility	Poker Lake Unit No. 333H		

WELLPATH DATA (195 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
4182.70	0.190	194.700	4182.60	4.22	-0.68	-6.56	652123.69	442946.52	32°13'00.552"N	108°50'29.202"W	0.03	
4277.30	0.220	184.210	4277.20	4.03	-1.01	-6.61	652123.64	442946.19	32°13'00.549"N	108°50'29.202"W	0.05	
4371.90	0.320	174.570	4371.80	3.71	-1.45	-6.60	652123.65	442945.75	32°13'00.545"N	108°50'29.202"W	0.12	
4466.50	0.470	178.860	4466.40	3.23	-2.10	-6.56	652123.68	442945.09	32°13'00.538"N	108°50'29.202"W	0.16	
4561.10	0.570	186.860	4560.99	2.67	-2.96	-6.61	652123.64	442944.24	32°13'00.530"N	108°50'29.203"W	0.13	
4655.80	0.650	189.710	4655.69	2.08	-3.96	-6.76	652123.49	442943.24	32°13'00.520"N	108°50'29.204"W	0.09	
4750.40	0.680	186.560	4750.28	1.43	-5.04	-6.91	652123.33	442942.16	32°13'00.509"N	108°50'29.206"W	0.05	
4845.00	0.700	195.060	4844.87	0.81	-6.16	-7.13	652123.12	442941.04	32°13'00.498"N	108°50'29.209"W	0.11	
4939.60	0.730	209.100	4939.47	0.37	-7.24	-7.57	652122.68	442939.96	32°13'00.487"N	108°50'29.214"W	0.19	
5034.20	0.840	214.340	5034.06	0.09	-8.34	-8.26	652121.99	442938.86	32°13'00.476"N	108°50'29.222"W	0.14	
5128.80	0.840	217.180	5128.65	-0.11	-9.47	-9.07	652121.18	442937.73	32°13'00.465"N	108°50'29.232"W	0.04	
5223.40	0.830	225.420	5223.24	-0.18	-10.50	-9.97	652120.28	442936.70	32°13'00.455"N	108°50'29.242"W	0.13	
5318.00	0.840	220.790	5317.83	-0.21	-11.51	-10.91	652119.33	442935.69	32°13'00.445"N	108°50'29.253"W	0.07	
5412.60	0.780	219.550	5412.42	-0.31	-12.53	-11.78	652118.47	442934.67	32°13'00.435"N	108°50'29.263"W	0.07	
5507.20	0.870	232.490	5507.01	-0.26	-13.46	-12.76	652117.49	442933.74	32°13'00.426"N	108°50'29.275"W	0.22	
5601.90	0.750	233.330	5601.70	-0.05	-14.27	-13.82	652116.42	442932.93	32°13'00.418"N	108°50'29.287"W	0.13	
5696.50	0.710	230.240	5696.29	0.10	-15.01	-14.77	652115.48	442932.18	32°13'00.411"N	108°50'29.298"W	0.06	
5791.10	0.720	228.730	5790.88	0.21	-15.78	-15.67	652114.58	442931.42	32°13'00.403"N	108°50'29.309"W	0.02	
5885.70	0.660	221.220	5885.48	0.23	-16.58	-16.47	652113.77	442930.62	32°13'00.395"N	108°50'29.318"W	0.11	
5980.30	0.650	215.870	5980.07	0.12	-17.43	-17.15	652113.10	442929.77	32°13'00.387"N	108°50'29.326"W	0.07	
6074.90	0.610	209.320	6074.66	-0.09	-18.30	-17.71	652112.54	442928.90	32°13'00.378"N	108°50'29.333"W	0.09	
6169.50	0.770	192.950	6169.26	-0.55	-19.36	-18.10	652112.15	442927.84	32°13'00.368"N	108°50'29.337"W	0.27	
6264.10	0.980	185.890	6263.85	-1.38	-20.78	-18.32	652111.93	442926.41	32°13'00.354"N	108°50'29.340"W	0.25	
6358.70	1.160	180.120	6358.43	-2.55	-22.55	-18.41	652111.84	442924.65	32°13'00.336"N	108°50'29.341"W	0.22	
6453.30	1.140	179.660	6453.01	-3.87	-24.45	-18.41	652111.84	442922.75	32°13'00.318"N	108°50'29.341"W	0.02	
6547.90	1.010	177.140	6547.59	-5.15	-26.22	-18.36	652111.89	442920.98	32°13'00.300"N	108°50'29.341"W	0.15	
6642.60	0.570	168.290	6642.28	-6.15	-27.51	-18.22	652112.03	442919.69	32°13'00.287"N	108°50'29.339"W	0.48	
6737.20	0.500	156.480	6736.88	-6.92	-28.35	-17.96	652112.29	442918.85	32°13'00.279"N	108°50'29.336"W	0.14	
6831.80	0.650	145.250	6831.48	-7.83	-29.17	-17.49	652112.76	442918.03	32°13'00.271"N	108°50'29.331"W	0.20	
6926.40	0.890	157.380	6926.07	-9.03	-30.29	-16.90	652113.35	442916.91	32°13'00.260"N	108°50'29.324"W	0.31	
7052.00	1.120	171.780	7051.65	-10.90	-32.41	-16.35	652113.90	442914.79	32°13'00.239"N	108°50'29.318"W	0.27	
7117.00	1.300	170.800	7116.63	-12.00	-33.76	-16.14	652114.11	442913.44	32°13'00.225"N	108°50'29.315"W	0.28	
7149.00	0.900	196.700	7148.63	-12.40	-34.36	-16.16	652114.09	442912.84	32°13'00.219"N	108°50'29.315"W	1.96	
7180.00	1.800	280.000	7179.62	-12.12	-34.51	-16.71	652113.54	442912.69	32°13'00.218"N	108°50'29.322"W	6.18	
7211.00	3.800	296.400	7210.58	-10.73	-33.97	-18.11	652112.14	442913.23	32°13'00.223"N	108°50'29.338"W	6.89	
7243.00	6.300	297.500	7242.46	-8.04	-32.69	-20.61	652109.64	442914.51	32°13'00.236"N	108°50'29.367"W	7.82	
7273.00	8.700	295.700	7272.20	-4.32	-30.94	-24.12	652106.13	442916.26	32°13'00.254"N	108°50'29.408"W	8.04	
7305.00	10.800	298.200	7303.73	0.86	-28.48	-28.94	652101.31	442918.72	32°13'00.278"N	108°50'29.464"W	6.69	
7335.00	12.500	301.200	7333.11	6.72	-25.47	-34.20	652096.05	442921.73	32°13'00.308"N	108°50'29.525"W	6.01	
7366.00	15.000	304.600	7363.22	13.95	-21.45	-40.37	652089.88	442925.75	32°13'00.348"N	108°50'29.596"W	8.47	
7398.00	17.700	307.400	7393.93	22.86	-16.14	-47.64	652082.61	442931.06	32°13'00.401"N	108°50'29.681"W	8.79	
7429.00	20.500	308.800	7423.22	32.95	-9.88	-55.62	652074.63	442937.32	32°13'00.463"N	108°50'29.773"W	9.15	
7460.00	23.200	309.900	7451.99	44.44	-2.56	-64.54	652065.72	442944.64	32°13'00.536"N	108°50'29.877"W	8.81	
7492.00	25.800	312.000	7481.11	57.69	6.15	-74.55	652055.70	442953.34	32°13'00.623"N	108°50'29.993"W	8.57	
7522.00	28.600	313.600	7507.79	71.39	15.47	-84.60	652045.65	442962.67	32°13'00.716"N	108°50'30.109"W	9.65	



Actual Wellpath Report

No.333HAWP

Page 4 of 6



BAKER HUGHES

REFERENCE WELL IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.333HSHL
Area	Eddy County, NM	Well	No.333H
Field	Poker Lake Unit	Wellbore	No.333HAWB
Facility	Poker Lake Unit No. 333H		

WELLPATH DATA (195 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
7553.00	31.100	313.600	7534.67	86.82	26.11	-95.77	652034.48	442973.30	32°13'00.821"N	103°50'30.239"W	8.06	
7585.00	34.100	316.100	7561.63	104.06	38.27	-107.98	652022.27	442985.47	32°13'00.942"N	103°50'30.380"W	10.27	
7616.00	36.800	317.200	7586.88	122.02	51.35	-120.32	652009.94	442998.55	32°13'01.072"N	103°50'30.523"W	8.95	
7648.00	39.800	317.900	7611.99	141.81	65.99	-133.70	651996.56	443013.18	32°13'01.218"N	103°50'30.678"W	9.47	
7679.00	41.700	318.000	7635.47	162.01	81.01	-147.25	651983.00	443028.20	32°13'01.367"N	103°50'30.835"W	6.13	
7710.00	43.500	317.900	7658.29	182.95	96.59	-161.31	651968.95	443043.78	32°13'01.522"N	103°50'30.998"W	5.81	
7741.00	45.100	317.400	7680.48	204.56	112.59	-175.89	651954.37	443059.78	32°13'01.681"N	103°50'31.167"W	5.28	
7771.00	46.700	315.400	7701.35	226.08	128.19	-190.75	651939.51	443075.38	32°13'01.836"N	103°50'31.339"W	7.17	
7803.00	49.100	314.700	7722.81	249.82	144.99	-207.53	651922.74	443092.18	32°13'02.003"N	103°50'31.533"W	7.67	
7835.00	51.700	314.500	7743.20	274.48	162.30	-225.08	651906.18	443109.49	32°13'02.175"N	103°50'31.737"W	8.14	
7866.00	54.300	314.200	7761.86	299.23	179.60	-242.78	651887.48	443126.79	32°13'02.347"N	103°50'31.942"W	8.42	
7898.00	57.400	315.300	7779.82	325.71	198.25	-261.59	651868.68	443145.43	32°13'02.532"N	103°50'32.160"W	10.10	
7930.00	60.500	316.000	7796.32	353.11	217.85	-280.75	651849.52	443165.03	32°13'02.727"N	103°50'32.382"W	9.87	
7962.00	63.800	316.400	7811.27	381.39	238.27	-300.32	651829.94	443185.45	32°13'02.930"N	103°50'32.608"W	10.37	
7993.00	66.800	316.300	7824.47	409.41	258.56	-319.69	651810.58	443205.74	32°13'03.132"N	103°50'32.833"W	6.46	
8024.00	67.100	315.900	7836.85	437.82	279.04	-339.39	651790.88	443226.22	32°13'03.335"N	103°50'33.061"W	4.36	
8056.00	68.800	314.900	7848.87	467.47	300.16	-360.22	651770.06	443247.33	32°13'03.545"N	103°50'33.302"W	6.05	
8089.00	72.100	314.000	7859.91	498.56	321.93	-382.41	651747.86	443269.10	32°13'03.762"N	103°50'33.559"W	10.32	
8119.00	75.500	313.700	7868.28	527.37	341.88	-403.19	651727.09	443289.06	32°13'03.960"N	103°50'33.800"W	11.37	
8151.00	78.300	314.500	7875.53	558.53	363.57	-425.57	651704.71	443310.74	32°13'04.176"N	103°50'34.099"W	9.08	
8182.00	79.700	315.100	7881.44	588.96	385.01	-447.16	651683.12	443332.19	32°13'04.389"N	103°50'34.310"W	4.90	
8214.00	80.400	315.300	7886.97	620.47	407.38	-469.37	651660.91	443354.55	32°13'04.611"N	103°50'34.567"W	2.27	
8245.00	82.300	315.500	7891.64	651.11	429.20	-490.88	651639.40	443376.37	32°13'04.828"N	103°50'34.816"W	6.16	
8277.00	85.400	315.600	7895.06	682.92	451.91	-513.16	651617.12	443399.08	32°13'05.054"N	103°50'35.074"W	9.69	
8308.00	88.200	315.600	7896.79	713.86	474.02	-534.82	651595.47	443421.19	32°13'05.273"N	103°50'35.325"W	9.03	
8340.00	88.700	315.800	7897.66	745.83	496.91	-557.16	651573.13	443444.08	32°13'05.501"N	103°50'35.584"W	1.68	
8371.00	89.500	315.300	7898.15	776.82	519.04	-578.86	651551.42	443466.20	32°13'05.721"N	103°50'35.836"W	3.04	
8403.00	90.600	314.900	7898.12	808.82	541.71	-601.45	651528.84	443488.87	32°13'05.946"N	103°50'36.097"W	3.66	
8433.00	91.000	313.700	7897.70	838.81	562.66	-622.92	651507.37	443509.82	32°13'06.154"N	103°50'36.346"W	4.22	
8471.00	89.500	314.100	7897.53	876.81	589.00	-650.30	651479.99	443536.16	32°13'06.416"N	103°50'36.663"W	4.09	
8525.00	89.500	314.100	7898.00	930.81	626.58	-689.07	651441.22	443573.74	32°13'06.790"N	103°50'37.113"W	0.00	
8545.00	89.500	312.700	7898.18	950.81	640.32	-708.61	651426.69	443587.48	32°13'06.927"N	103°50'37.281"W	7.00	
8608.00	89.900	312.600	7898.51	1013.78	683.01	-749.94	651380.36	443630.16	32°13'07.351"N	103°50'37.818"W	0.65	
8670.00	90.400	314.700	7898.35	1075.77	725.80	-794.80	651335.50	443672.95	32°13'07.777"N	103°50'38.338"W	3.48	
8733.00	90.800	314.600	7897.69	1138.77	770.07	-839.62	651290.69	443717.22	32°13'08.217"N	103°50'38.857"W	0.65	
8795.00	91.700	315.700	7896.33	1200.74	814.02	-883.33	651246.98	443761.16	32°13'08.654"N	103°50'39.364"W	2.29	
8858.00	92.300	315.500	7894.14	1263.69	859.00	-927.38	651202.93	443806.14	32°13'09.101"N	103°50'39.874"W	1.00	
8921.00	91.600	314.900	7891.99	1326.64	903.68	-971.75	651158.56	443850.81	32°13'09.545"N	103°50'40.388"W	1.46	
8983.00	91.900	314.500	7890.10	1388.61	947.27	-1015.80	651114.52	443894.40	32°13'09.978"N	103°50'40.899"W	0.81	
9067.00	90.900	313.700	7888.05	1472.58	1005.70	-1076.10	651054.22	443952.83	32°13'10.559"N	103°50'41.597"W	1.52	
9161.00	90.700	313.000	7886.73	1566.56	1070.22	-1144.45	650985.88	444017.35	32°13'11.201"N	103°50'42.390"W	0.77	
9255.00	91.700	314.100	7884.77	1660.53	1134.97	-1212.56	650917.77	444082.09	32°13'11.844"N	103°50'43.179"W	1.58	
9349.00	91.700	314.300	7881.98	1754.49	1200.48	-1279.92	650850.41	444147.60	32°13'12.496"N	103°50'43.960"W	0.21	
9443.00	91.100	314.400	7879.68	1848.46	1266.17	-1347.12	650783.22	444213.28	32°13'13.149"N	103°50'44.738"W	0.65	
9537.00	90.700	315.000	7878.20	1942.45	1332.28	-1413.92	650716.42	444279.39	32°13'13.806"N	103°50'45.512"W	0.77	



Actual Wellpath Report

No.333HAWP

Page 5 of 6



REFERENCE WELLPATH ID INDICATION

Operator	BOPCO, L.P.	Slot	No.333HSHL
Area	Eddy County, NM	Well	No.333H
Field	Poker Lake Unit	Wellbore	No.333HAWB
Facility	Poker Lake Unit No. 333H		

WELLPATH DATA (195 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
9631.00	91.100	314.600	7876.73	2036.43	1398.50	-1480.61	650649.73	444345.61	32°13'14.464"N	108°50'46.285"W	0.60	
9724.00	91.200	315.000	7874.86	2129.41	1464.02	-1546.59	650583.76	444411.12	32°13'15.115"N	108°50'47.050"W	0.44	
9818.00	91.300	315.300	7872.81	2223.37	1530.65	-1612.87	650517.49	444477.74	32°13'15.778"N	108°50'47.818"W	0.34	
9912.00	89.900	312.700	7871.83	2317.36	1595.93	-1680.48	650449.88	444543.03	32°13'16.427"N	108°50'48.601"W	3.14	
10006.00	89.900	311.200	7871.99	2411.28	1658.77	-1750.38	650379.98	444605.86	32°13'17.052"N	108°50'49.412"W	1.60	
10099.00	91.100	312.400	7871.18	2504.19	1720.75	-1819.71	650310.66	444667.84	32°13'17.668"N	108°50'50.215"W	1.82	
10193.00	91.300	312.800	7869.21	2598.13	1784.37	-1888.89	650241.49	444731.44	32°13'18.301"N	108°50'51.017"W	0.48	
10287.00	90.000	310.600	7868.14	2692.02	1846.89	-1959.06	650171.32	444793.96	32°13'18.922"N	108°50'51.831"W	2.72	
10381.00	89.500	308.700	7868.55	2785.71	1906.87	-2031.43	650098.95	444853.94	32°13'19.519"N	108°50'52.670"W	2.09	
10474.00	91.500	308.800	7867.74	2878.27	1965.07	-2103.95	650026.43	444912.14	32°13'20.098"N	108°50'53.511"W	2.15	
10568.00	90.700	307.600	7865.94	2971.73	2023.19	-2177.81	649952.58	444970.25	32°13'20.677"N	108°50'54.368"W	1.53	
10662.00	91.900	313.100	7863.80	3065.45	2084.01	-2249.40	649881.00	445031.07	32°13'21.282"N	108°50'55.198"W	5.99	
10756.00	91.500	312.200	7861.01	3159.37	2147.67	-2318.51	649811.89	445094.72	32°13'21.915"N	108°50'55.999"W	1.05	
10850.00	92.200	313.200	7857.98	3253.29	2211.38	-2387.55	649742.85	445158.43	32°13'22.548"N	108°50'56.799"W	1.30	
10943.00	92.300	315.500	7854.33	3346.21	2276.33	-2454.00	649676.41	445223.38	32°13'23.194"N	108°50'57.569"W	2.47	
11037.00	91.700	313.100	7851.05	3440.14	2341.94	-2521.23	649609.19	445288.98	32°13'23.846"N	108°50'58.348"W	2.63	
11131.00	92.400	317.200	7847.68	3534.05	2408.52	-2587.47	649542.95	445355.56	32°13'24.508"N	108°50'59.116"W	4.42	
11224.00	90.400	313.500	7845.41	3626.99	2474.65	-2652.79	649477.63	445421.68	32°13'25.165"N	108°50'59.873"W	4.52	
11318.00	91.700	314.300	7843.69	3720.97	2539.82	-2720.51	649409.92	445486.85	32°13'25.813"N	108°51'00.658"W	1.62	
11412.00	89.900	311.900	7842.37	3814.93	2604.03	-2789.13	649341.30	445551.06	32°13'26.452"N	108°51'01.453"W	3.19	
11506.00	89.500	310.300	7842.87	3908.78	2665.82	-2859.96	649270.48	445612.84	32°13'27.066"N	108°51'02.274"W	1.75	
11600.00	89.800	312.700	7843.44	4002.66	2728.10	-2930.36	649200.09	445675.12	32°13'27.686"N	108°51'03.090"W	2.57	
11693.00	93.100	316.300	7841.09	4095.61	2793.24	-2996.65	649133.80	445740.26	32°13'28.333"N	108°51'03.859"W	5.25	
11788.00	92.800	319.400	7836.20	4190.28	2863.57	-3060.31	649070.14	445810.58	32°13'29.032"N	108°51'04.596"W	3.27	
11881.00	92.000	319.700	7832.30	4282.80	2934.28	-3120.59	649009.86	445881.29	32°13'29.734"N	108°51'05.294"W	0.92	
11975.00	92.400	320.100	7828.69	4376.27	3006.13	-3181.09	648949.36	445953.13	32°13'30.448"N	108°51'05.995"W	0.60	
12069.00	90.200	319.400	7826.56	4469.81	3077.85	-3241.81	648888.65	446024.85	32°13'31.160"N	108°51'06.698"W	2.46	
12163.00	90.500	319.500	7825.99	4563.42	3149.28	-3302.92	648827.55	446096.26	32°13'31.870"N	108°51'07.405"W	0.34	
12256.00	90.700	319.400	7825.01	4656.03	3219.94	-3363.38	648767.09	446166.92	32°13'32.572"N	108°51'08.105"W	0.24	
12350.00	91.100	319.600	7823.54	4749.63	3291.41	-3424.42	648706.06	446238.39	32°13'33.282"N	108°51'08.812"W	0.48	
12444.00	88.600	318.700	7823.78	4843.28	3362.50	-3485.90	648644.58	446309.48	32°13'33.988"N	108°51'09.524"W	2.83	
12538.00	86.800	316.900	7827.56	4937.01	3432.08	-3548.98	648581.50	446379.05	32°13'34.679"N	108°51'10.255"W	2.71	
12632.00	89.500	315.800	7830.59	5030.89	3500.05	-3613.82	648516.66	446447.02	32°13'35.355"N	108°51'11.006"W	3.10	
12726.00	90.500	316.200	7830.59	5124.85	3567.67	-3679.12	648451.37	446514.63	32°13'36.027"N	108°51'11.763"W	1.15	
12820.00	91.100	315.600	7829.28	5218.80	3635.16	-3744.53	648385.97	446582.12	32°13'36.697"N	108°51'12.521"W	0.90	
12914.00	91.000	316.200	7827.56	5312.74	3702.66	-3809.93	648320.57	446649.61	32°13'37.368"N	108°51'13.278"W	0.65	
13008.00	87.800	313.300	7828.54	5406.71	3768.81	-3876.67	648253.83	446715.76	32°13'38.026"N	108°51'14.052"W	4.59	
13102.00	90.600	314.300	7829.85	5500.69	3833.86	-3944.50	648186.01	446780.81	32°13'38.673"N	108°51'14.838"W	3.16	
13196.00	91.000	313.300	7828.54	5594.67	3898.92	-4012.34	648118.17	446845.86	32°13'39.319"N	108°51'15.624"W	1.15	
13290.00	89.900	313.500	7827.80	5688.66	3963.50	-4080.64	648049.88	446910.43	32°13'39.961"N	108°51'16.416"W	1.19	
13384.00	91.600	312.800	7826.57	5782.63	4027.78	-4149.21	647981.32	446974.71	32°13'40.600"N	108°51'17.211"W	1.96	
13477.00	90.000	309.000	7825.27	5875.44	4088.65	-4219.48	647911.05	447035.58	32°13'41.206"N	108°51'18.026"W	4.43	
13571.00	91.300	309.700	7824.21	5969.09	4148.25	-4292.16	647838.37	447095.17	32°13'41.799"N	108°51'18.869"W	1.57	
13665.00	91.900	312.700	7821.58	6062.91	4210.13	-4362.85	647767.69	447157.05	32°13'42.414"N	108°51'19.688"W	3.25	
13759.00	89.600	311.400	7820.35	6156.82	4273.08	-4432.64	647697.90	447219.99	32°13'43.040"N	108°51'20.498"W	2.81	



Actual Wellpath Report

No.333HAWP

Page 6 of 6



BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.333HSHL
Area	Eddy County, NM	Well	No.333H
Field	Poker Lake Unit	Wellbore	No.333HAWB
Facility	Poker Lake Unit No. 333H		

WELLPATH DATA (195 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
13853.00	92.000	314.800	7819.04	6250.77	4337.29	-4501.25	647629.29	447284.20	32°13'43.679"N	108°51'21.293"W	4.43	
13946.00	90.900	312.800	7816.68	6343.74	4401.63	-4568.35	647562.20	447348.54	32°13'44.318"N	108°51'22.071"W	2.45	
14040.00	90.600	311.600	7815.45	6437.67	4464.77	-4637.98	647492.57	447411.67	32°13'44.946"N	108°51'22.878"W	1.32	
14134.00	88.900	309.600	7815.86	6531.47	4525.93	-4709.35	647421.22	447472.83	32°13'45.554"N	108°51'23.706"W	2.79	
14228.00	92.200	309.000	7814.96	6625.10	4585.46	-4782.07	647348.49	447532.35	32°13'46.147"N	108°51'24.549"W	3.57	
14322.00	92.400	308.800	7811.19	6718.61	4644.44	-4855.17	647275.40	447591.33	32°13'46.734"N	108°51'25.397"W	0.30	
14415.00	92.700	308.400	7807.05	6811.07	4702.40	-4927.78	647202.80	447649.29	32°13'47.310"N	108°51'26.239"W	0.54	
14509.00	92.300	306.200	7802.95	6904.28	4759.31	-5002.48	647128.10	447706.19	32°13'47.877"N	108°51'27.106"W	2.38	
14603.00	91.400	307.800	7799.92	6997.48	4815.85	-5077.51	647053.08	447762.73	32°13'48.439"N	108°51'27.976"W	1.95	
14696.00	90.800	306.700	7798.13	7089.77	4872.13	-5151.52	646979.07	447819.00	32°13'49.000"N	108°51'28.835"W	1.35	
14791.00	91.500	308.400	7796.22	7184.10	4930.01	-5226.82	646903.78	447876.88	32°13'49.576"N	108°51'29.709"W	1.93	
14884.00	91.700	309.600	7793.63	7276.67	4988.51	-5299.06	646831.54	447935.38	32°13'50.158"N	108°51'30.547"W	1.31	
14978.00	90.200	308.900	7792.07	7370.29	5047.98	-5371.84	646758.76	447994.84	32°13'50.749"N	108°51'31.391"W	1.76	
15040.00	89.800	307.700	7792.07	7431.96	5086.40	-5420.50	646710.11	448033.26	32°13'51.132"N	108°51'31.955"W	2.04	
15091.00	89.800	307.700	7792.25	7482.62	5117.59	-5460.85	646669.76	448064.45	32°13'51.442"N	108°51'32.424"W	0.00 Proj. to Bit	

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No.333H PBHL		7795.00	5224.50	-5363.48	646767.12	448171.35	32°13'52.496"N	108°51'31.285"W	point
No.333H Target #2		7840.00	3153.90	-3237.79	648892.67	446100.89	32°13'31.913"N	108°51'06.647"W	point
No.333H Target #1		7900.00	652.41	-669.77	651460.53	443599.57	32°13'07.045"N	108°50'36.887"W	point

WELLPATH COMPOSITION - Ref Wellbore: No.333HAWB Ref Wellpath: No.333HAWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
19.00	7052.00	Generic gyro - northseeking (Standard)	GyroData Gyros <100-7052>	No.333HAWB
7052.00	15091.00	NaviTrak (Standard)	MWD NaviTrak <7117-XXXX>	No.333HAWB