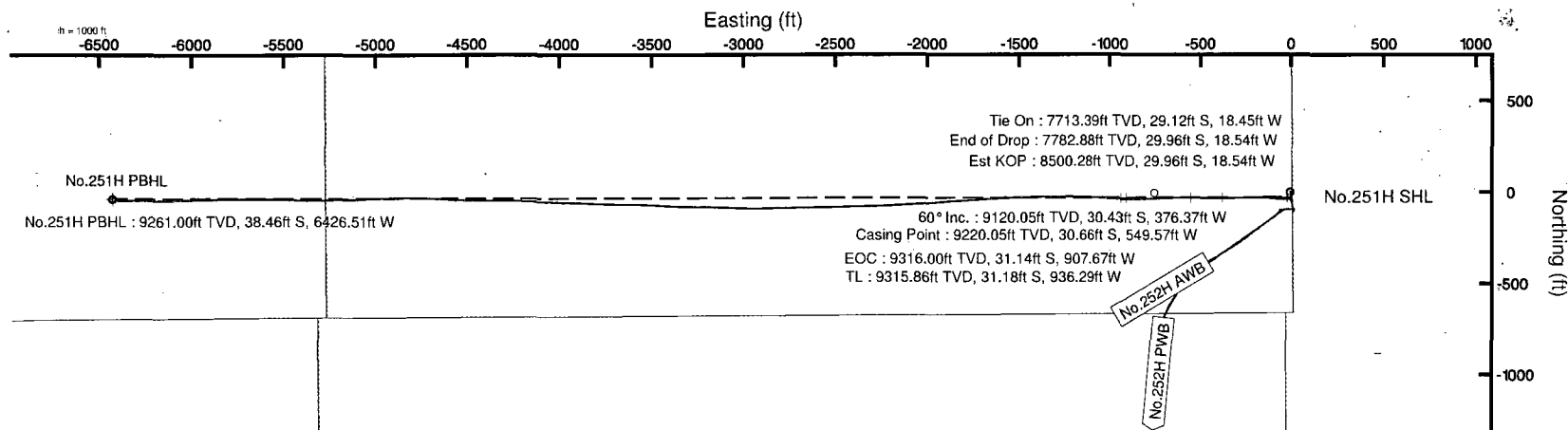




BOPCO, L.P.

Location: Eddy County, NM
Field: Big Eddy
Facility: Big Eddy Unit No.251H & No.252H

Slot: No.251H SHL
Well: No.251H
Wellbore: No.251H PWB

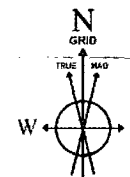
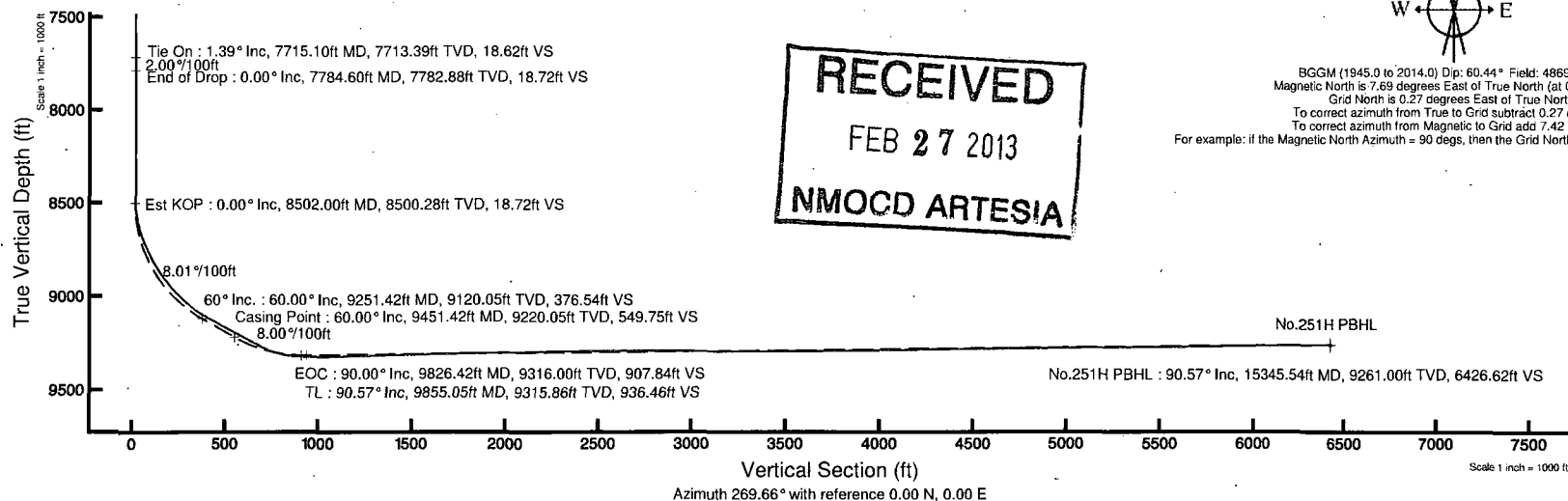


Well Profile Data

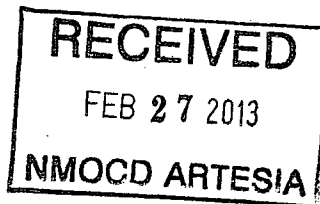
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	7715.10	1.390	186.580	7713.39	-29.12	-18.45	0.00	18.62
End of Drop	7784.60	0.000	269.924	7782.88	-29.96	-18.54	2.00	18.72
Est KOP	8502.00	0.000	269.924	8500.28	-29.96	-18.54	0.00	18.72
60° Inc.	9251.42	60.000	269.924	9120.05	-30.43	-376.37	8.01	376.54
Casing Point	9451.42	60.000	269.924	9220.05	-30.66	-549.57	0.00	549.75
EOC	9826.42	90.000	269.924	9316.00	-31.14	-907.67	8.00	907.84
TL	9855.05	90.572	269.924	9315.86	-31.18	-936.29	2.00	936.46
No.251H PBHL	15345.54	90.572	269.924	9261.00	-38.46	-6426.51	0.00	6426.62

Plot reference wellpath is Rev-D.0

True vertical depths are referenced to Rig on No.251H SHL (KB)	Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No.251H SHL (KB)	North Reference: Grid north
Rig on No.251H SHL (KB) to Mean Sea Level: 3506 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: No.251H SHL): -3476 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: genibry on 10/23/2012



BGGM (1945.0 to 2014.0) Dip: 60.44° Field: 48697.1 nT
Magnetic North is 7.69 degrees East of True North (at 08/13/2012)
Grid North is 0.27 degrees East of True North
To correct azimuth from True to Grid subtract 0.27 degrees
To correct azimuth from Magnetic to Grid add 7.42 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.42 = 97.42





Actual Wellpath Report

No. 251H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.251H SHL
Area	Eddy County, NM	Well	No.251H
Field	Big Eddy	Wellbore	No. 251H AWB
Facility	Big Eddy Unit No.251H & No.252H		

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	0.999937	Report Generated	11/29/2012 at 8:18:15 AM
Convergence at slot	0.27° East	Database/Source file	WA Midland/No. 251H_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	40.00	-0.21	654736.30	586502.31	32°36'41.018"N	103°49'50.935"W
Facility Reference Pt			654736.51	586462.31	32°36'40.622"N	103°49'50.934"W
Field Reference Pt			610823.03	524402.80	32°26'28.262"N	103°58'26.774"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No.251H SHL (KB) to Facility Vertical Datum	3506.00ft
Horizontal Reference Pt	Slot	Rig on No.251H SHL (KB) to Mean Sea Level	3506.00ft
Vertical Reference Pt	Rig on No.251H SHL (KB)	Rig on No.251H SHL (KB) to Mud Line at Slot (No.251H SHL)	30.00ft
MD Reference Pt	Rig on No.251H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	269.66°



Actual Wellpath Report

No. 251H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.251H SHL
Area	Eddy County, NM	Well	No.251H
Field	Big Eddy	Wellbore	No. 251H AWP
Facility	Big Eddy Unit No.251H & No.252H		

WELLPATH DATA (189 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	200.270	0.00	0.00	0.00	0.00	654736.30	586502.31	32°36'41.018"N	103°49'50.935"W	0.00	
77.10	0.120	200.270	77.10	0.03	-0.08	-0.03	654736.27	586502.23	32°36'41.017"N	103°49'50.935"W	0.16	
170.80	0.330	192.260	170.80	0.12	-0.43	-0.12	654736.18	586501.88	32°36'41.014"N	103°49'50.936"W	0.23	
264.50	0.450	185.320	264.50	0.22	-1.06	-0.21	654736.09	586501.25	32°36'41.008"N	103°49'50.937"W	0.14	
358.20	0.680	186.770	358.19	0.32	-1.98	-0.31	654735.99	586500.33	32°36'40.998"N	103°49'50.938"W	0.25	
451.90	0.970	184.620	451.88	0.46	-3.32	-0.44	654735.86	586498.99	32°36'40.985"N	103°49'50.940"W	0.31	
548.60	1.210	179.430	548.57	0.53	-5.16	-0.50	654735.80	586497.15	32°36'40.967"N	103°49'50.941"W	0.27	
641.60	1.660	178.540	641.54	0.50	-7.49	-0.45	654735.85	586494.82	32°36'40.944"N	103°49'50.940"W	0.48	
734.60	2.370	176.660	734.48	0.37	-10.75	-0.31	654735.99	586491.56	32°36'40.912"N	103°49'50.939"W	0.77	
829.10	3.310	173.940	828.86	0.00	-15.42	0.10	654736.40	586486.89	32°36'40.866"N	103°49'50.934"W	1.00	
924.80	3.670	170.480	924.38	-0.77	-21.19	0.89	654737.19	586481.13	32°36'40.808"N	103°49'50.925"W	0.44	
1019.00	3.630	168.400	1018.39	-1.83	-27.08	1.99	654738.29	586475.23	32°36'40.750"N	103°49'50.913"W	0.15	
1111.90	3.560	166.770	1111.11	-3.05	-32.77	3.24	654739.54	586469.54	32°36'40.694"N	103°49'50.898"W	0.13	
1206.70	3.260	167.090	1205.74	-4.29	-38.26	4.52	654740.82	586464.05	32°36'40.639"N	103°49'50.884"W	0.32	
1301.80	2.860	172.590	1300.71	-5.17	-43.25	5.43	654741.73	586459.06	32°36'40.590"N	103°49'50.873"W	0.52	
1397.00	2.320	174.680	1395.81	-5.63	-47.52	5.92	654742.22	586454.79	32°36'40.548"N	103°49'50.868"W	0.58	
1490.50	2.270	176.520	1489.23	-5.90	-51.26	6.20	654742.50	586451.06	32°36'40.511"N	103°49'50.865"W	0.10	
1584.90	1.890	178.940	1583.57	-6.02	-54.68	6.35	654742.65	586447.63	32°36'40.477"N	103°49'50.863"W	0.41	
1679.20	0.410	201.520	1677.85	-5.91	-56.55	6.25	654742.55	586445.77	32°36'40.458"N	103°49'50.865"W	1.61	
1772.80	0.350	325.540	1771.45	-5.63	-56.62	5.97	654742.27	586445.69	32°36'40.458"N	103°49'50.868"W	0.72	
1868.00	0.500	348.970	1866.65	-5.39	-55.98	5.72	654742.02	586446.34	32°36'40.464"N	103°49'50.871"W	0.24	
1962.50	0.570	358.020	1961.14	-5.30	-55.10	5.63	654741.93	586447.21	32°36'40.473"N	103°49'50.872"W	0.12	
2056.30	0.570	4.570	2054.94	-5.32	-54.17	5.65	654741.95	586448.14	32°36'40.482"N	103°49'50.872"W	0.07	
2150.30	0.570	12.840	2148.93	-5.47	-53.25	5.79	654742.09	586449.07	32°36'40.491"N	103°49'50.870"W	0.09	
2244.80	0.400	12.550	2243.43	-5.65	-52.47	5.97	654742.26	586449.85	32°36'40.499"N	103°49'50.868"W	0.18	
2340.40	0.400	7.420	2339.03	-5.77	-51.81	6.08	654742.38	586450.50	32°36'40.505"N	103°49'50.866"W	0.04	
2435.30	0.370	11.130	2433.92	-5.88	-51.18	6.18	654742.48	586451.13	32°36'40.511"N	103°49'50.865"W	0.04	
2530.80	0.300	11.420	2529.42	-5.99	-50.63	6.29	654742.59	586451.68	32°36'40.517"N	103°49'50.864"W	0.07	
2625.10	0.350	2.100	2623.72	-6.05	-50.10	6.35	654742.65	586452.21	32°36'40.522"N	103°49'50.863"W	0.08	
2719.90	0.610	357.550	2718.52	-6.05	-49.31	6.34	654742.64	586453.00	32°36'40.530"N	103°49'50.863"W	0.28	
2814.40	0.610	345.360	2813.01	-5.90	-48.32	6.19	654742.49	586453.99	32°36'40.540"N	103°49'50.865"W	0.14	
2908.40	0.600	331.040	2907.01	-5.54	-47.41	5.83	654742.13	586454.91	32°36'40.549"N	103°49'50.869"W	0.16	
3003.40	0.750	320.200	3002.00	-4.91	-46.49	5.19	654741.49	586455.82	32°36'40.558"N	103°49'50.876"W	0.21	
3097.60	0.750	321.760	3096.19	-4.14	-45.54	4.41	654740.71	586456.78	32°36'40.567"N	103°49'50.885"W	0.02	
3192.20	0.660	330.230	3190.79	-3.49	-44.58	3.76	654740.06	586457.74	32°36'40.577"N	103°49'50.893"W	0.15	
3286.80	0.670	345.670	3285.38	-3.09	-43.57	3.35	654739.65	586458.74	32°36'40.587"N	103°49'50.898"W	0.19	
3382.00	0.620	345.740	3380.57	-2.83	-42.53	3.09	654739.39	586459.78	32°36'40.597"N	103°49'50.901"W	0.05	
3477.10	0.700	317.270	3475.67	-2.32	-41.60	2.57	654738.87	586460.71	32°36'40.606"N	103°49'50.907"W	0.35	
3570.00	0.840	304.010	3568.56	-1.37	-40.81	1.62	654737.92	586461.51	32°36'40.614"N	103°49'50.918"W	0.24	
3664.20	1.040	297.160	3662.75	-0.04	-40.03	0.28	654736.58	586462.28	32°36'40.622"N	103°49'50.933"W	0.24	
3759.90	0.940	302.410	3758.43	1.39	-39.21	-1.15	654735.15	586463.10	32°36'40.630"N	103°49'50.950"W	0.14	
3853.30	1.110	304.930	3851.82	2.77	-38.28	-2.54	654733.76	586464.03	32°36'40.639"N	103°49'50.966"W	0.19	
3948.30	1.010	309.580	3946.80	4.16	-37.22	-3.94	654732.36	586465.09	32°36'40.650"N	103°49'50.983"W	0.14	
4042.10	0.920	309.200	4040.59	5.38	-36.22	-5.16	654731.14	586466.09	32°36'40.660"N	103°49'50.997"W	0.10	
4136.60	0.890	314.740	4135.08	6.48	-35.23	-6.27	654730.03	586467.09	32°36'40.670"N	103°49'51.010"W	0.10	



Actual Wellpath Report

No. 251H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.251H SHL
Area	Eddy County, NM	Well	No.251H
Field	Big Eddy	Wellbore	No. 251H AWP
Facility	Big Eddy Unit No.251H & No.252H		

WELLPATH DATA (189 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
4231.60	0.880	316.230	4230.06	7.50	-34.18	-7.30	654729.00	586468.13	32°36'40.680"N	103°49'51.022"W	0.03	
4325.10	0.920	310.770	4323.55	8.56	-33.17	-8.36	654727.94	586469.14	32°36'40.690"N	103°49'51.034"W	0.10	
4419.70	0.910	314.070	4418.14	9.67	-32.15	-9.48	654726.82	586470.16	32°36'40.700"N	103°49'51.047"W	0.06	
4514.30	0.800	318.360	4512.73	10.64	-31.14	-10.46	654725.84	586471.18	32°36'40.710"N	103°49'51.059"W	0.13	
4608.40	0.730	319.690	4606.82	11.46	-30.19	-11.28	654725.02	586472.12	32°36'40.720"N	103°49'51.068"W	0.08	
4703.40	0.600	315.900	4701.82	12.20	-29.37	-12.02	654724.28	586472.94	32°36'40.728"N	103°49'51.077"W	0.14	
4798.30	0.350	281.760	4796.71	12.82	-28.95	-12.65	654723.65	586473.36	32°36'40.732"N	103°49'51.084"W	0.39	
4892.80	0.420	251.350	4891.21	13.43	-29.01	-13.26	654723.04	586473.31	32°36'40.732"N	103°49'51.091"W	0.23	
4987.20	0.440	253.420	4985.61	14.11	-29.22	-13.94	654722.37	586473.09	32°36'40.730"N	103°49'51.099"W	0.03	
5079.70	0.360	256.940	5078.11	14.73	-29.39	-14.56	654721.74	586472.93	32°36'40.728"N	103°49'51.106"W	0.09	
5174.10	0.280	261.460	5172.50	15.25	-29.49	-15.08	654721.22	586472.82	32°36'40.727"N	103°49'51.112"W	0.09	
5269.00	0.280	265.420	5267.40	15.71	-29.54	-15.54	654720.76	586472.77	32°36'40.726"N	103°49'51.118"W	0.02	
5362.10	0.310	273.970	5360.50	16.19	-29.54	-16.01	654720.29	586472.77	32°36'40.727"N	103°49'51.123"W	0.06	
5456.60	0.330	279.430	5455.00	16.71	-29.48	-16.54	654719.76	586472.83	32°36'40.727"N	103°49'51.130"W	0.04	
5550.90	0.290	301.580	5549.30	17.18	-29.31	-17.01	654719.29	586473.00	32°36'40.729"N	103°49'51.135"W	0.13	
5646.00	0.270	329.360	5644.40	17.50	-28.99	-17.33	654718.97	586473.32	32°36'40.732"N	103°49'51.139"W	0.14	
5739.60	0.310	337.510	5738.00	17.71	-28.57	-17.54	654718.76	586473.74	32°36'40.736"N	103°49'51.141"W	0.06	
5833.10	0.370	339.800	5831.49	17.91	-28.05	-17.74	654718.56	586474.26	32°36'40.741"N	103°49'51.143"W	0.07	
5927.80	0.370	339.490	5926.19	18.12	-27.48	-17.95	654718.35	586474.84	32°36'40.747"N	103°49'51.146"W	0.00	
6021.20	0.380	348.830	6019.59	18.28	-26.89	-18.12	654718.18	586475.42	32°36'40.753"N	103°49'51.148"W	0.07	
6114.40	0.400	351.920	6112.79	18.38	-26.26	-18.22	654718.08	586476.05	32°36'40.759"N	103°49'51.149"W	0.03	
6208.50	0.380	353.370	6206.89	18.46	-25.63	-18.31	654718.00	586476.68	32°36'40.765"N	103°49'51.150"W	0.02	
6302.90	0.370	354.840	6301.28	18.52	-25.02	-18.37	654717.93	586477.30	32°36'40.771"N	103°49'51.151"W	0.01	
6396.90	0.390	356.230	6395.28	18.56	-24.39	-18.42	654717.88	586477.92	32°36'40.778"N	103°49'51.151"W	0.02	
6491.60	0.410	357.240	6489.98	18.60	-23.73	-18.45	654717.85	586478.58	32°36'40.784"N	103°49'51.152"W	0.02	
6585.80	0.400	0.980	6584.18	18.60	-23.07	-18.47	654717.84	586479.24	32°36'40.791"N	103°49'51.152"W	0.03	
6680.60	0.440	5.850	6678.98	18.56	-22.38	-18.42	654717.88	586479.94	32°36'40.798"N	103°49'51.151"W	0.06	
6775.10	0.350	12.340	6773.47	18.45	-21.73	-18.32	654717.98	586480.58	32°36'40.804"N	103°49'51.150"W	0.11	
6868.90	0.300	17.740	6867.27	18.31	-21.22	-18.19	654718.11	586481.09	32°36'40.809"N	103°49'51.148"W	0.06	
6963.70	0.190	17.790	6962.07	18.19	-20.83	-18.06	654718.24	586481.48	32°36'40.813"N	103°49'51.147"W	0.12	
7056.30	0.100	12.690	7054.67	18.12	-20.61	-18.00	654718.30	586481.70	32°36'40.815"N	103°49'51.146"W	0.10	
7149.60	0.080	252.130	7147.97	18.17	-20.55	-18.04	654718.26	586481.76	32°36'40.816"N	103°49'51.147"W	0.17	
7244.10	0.280	183.540	7242.47	18.24	-20.80	-18.12	654718.18	586481.51	32°36'40.813"N	103°49'51.148"W	0.28	
7337.80	0.610	172.890	7336.17	18.20	-21.52	-18.07	654718.23	586480.79	32°36'40.806"N	103°49'51.147"W	0.36	
7431.90	1.100	174.050	7430.26	18.05	-22.92	-17.92	654718.38	586479.39	32°36'40.792"N	103°49'51.145"W	0.52	
7526.10	1.310	183.710	7524.44	18.04	-24.89	-17.89	654718.41	586477.42	32°36'40.773"N	103°49'51.145"W	0.31	
7621.50	1.240	189.970	7619.81	18.30	-27.00	-18.14	654718.16	586475.32	32°36'40.752"N	103°49'51.148"W	0.16	
7715.10	1.390	186.580	7713.39	18.62	-29.12	-18.45	654717.85	586473.19	32°36'40.731"N	103°49'51.152"W	0.18	
7789.00	0.700	174.800	7787.27	18.69	-30.46	-18.51	654717.79	586471.85	32°36'40.718"N	103°49'51.153"W	0.97	
7884.00	0.300	173.900	7882.27	18.62	-31.29	-18.43	654717.87	586471.03	32°36'40.709"N	103°49'51.152"W	0.42	
7978.00	0.600	172.400	7976.27	18.53	-32.02	-18.34	654717.96	586470.29	32°36'40.702"N	103°49'51.151"W	0.32	
8072.00	0.800	173.500	8070.26	18.40	-33.16	-18.20	654718.10	586469.15	32°36'40.691"N	103°49'51.149"W	0.21	
8167.00	1.000	161.700	8165.25	18.07	-34.61	-17.86	654718.44	586467.71	32°36'40.676"N	103°49'51.145"W	0.29	
8259.00	0.400	293.400	8257.24	18.12	-35.24	-17.91	654718.39	586467.07	32°36'40.670"N	103°49'51.146"W	1.41	
8353.00	0.200	280.800	8351.24	18.58	-35.08	-18.37	654717.93	586467.23	32°36'40.672"N	103°49'51.151"W	0.22	



Actual Wellpath Report

No. 251H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.251H SHL
Area	Eddy County, NM	Well	No.251H
Field	Big Eddy	Wellbore	No. 251H AWB
Facility	Big Eddy Unit No.251H & No.252H		

WELLPATH DATA (189 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
8447.00	0.800	136.500	8445.24	18.29	-35.52	-18.08	654718.22	586466.79	32°36'40.667"N	103°49'51.148"W	1.03	
8478.00	0.800	210.900	8476.24	18.26	-35.87	-18.04	654718.26	586466.45	32°36'40.664"N	103°49'51.147"W	3.12	
8510.00	3.200	253.000	8508.22	19.23	-36.32	-19.01	654717.29	586465.99	32°36'40.660"N	103°49'51.159"W	8.32	
8541.00	5.900	254.500	8539.12	21.59	-37.00	-21.37	654714.93	586465.31	32°36'40.653"N	103°49'51.186"W	8.72	
8572.00	9.200	262.000	8569.84	25.59	-37.77	-25.36	654710.94	586464.54	32°36'40.646"N	103°49'51.233"W	11.09	
8603.00	12.000	266.400	8600.31	31.26	-38.32	-31.04	654705.27	586464.00	32°36'40.640"N	103°49'51.299"W	9.40	
8635.00	14.300	269.100	8631.47	38.54	-38.59	-38.31	654697.99	586463.72	32°36'40.638"N	103°49'51.385"W	7.44	
8667.00	18.200	274.400	8662.19	47.47	-38.27	-47.25	654689.06	586464.05	32°36'40.642"N	103°49'51.489"W	13.03	
8698.00	21.200	275.400	8691.37	57.88	-37.37	-57.66	654678.65	586464.95	32°36'40.651"N	103°49'51.611"W	9.74	
8729.00	22.400	272.700	8720.16	69.35	-36.56	-69.14	654667.17	586465.75	32°36'40.660"N	103°49'51.745"W	5.04	
8762.00	24.300	275.200	8750.45	82.39	-35.65	-82.18	654654.12	586466.66	32°36'40.669"N	103°49'51.897"W	6.49	
8826.00	28.400	275.000	8807.79	110.67	-33.13	-110.47	654625.84	586469.18	32°36'40.695"N	103°49'52.228"W	6.41	
8858.00	31.300	274.800	8835.54	126.52	-31.77	-126.34	654609.97	586470.54	32°36'40.710"N	103°49'52.413"W	9.07	
8889.00	33.900	273.800	8861.66	143.17	-30.52	-142.99	654593.32	586471.79	32°36'40.723"N	103°49'52.608"W	8.57	
8920.00	36.100	272.100	8887.05	160.92	-29.62	-160.75	654575.57	586472.70	32°36'40.733"N	103°49'52.815"W	7.76	
8951.00	36.700	270.600	8912.00	179.31	-29.18	-179.14	654557.18	586473.13	32°36'40.738"N	103°49'53.030"W	3.46	
8983.00	38.700	270.200	8937.32	198.87	-29.05	-198.70	654537.61	586473.26	32°36'40.740"N	103°49'53.259"W	6.30	
9014.00	40.900	269.200	8961.13	218.71	-29.16	-218.54	654517.77	586473.16	32°36'40.740"N	103°49'53.491"W	7.39	
9045.00	43.800	268.200	8984.04	239.59	-29.63	-239.42	654496.90	586472.68	32°36'40.736"N	103°49'53.735"W	9.60	
9076.00	46.100	267.800	9005.98	261.48	-30.40	-261.31	654475.01	586471.91	32°36'40.729"N	103°49'53.991"W	7.48	
9108.00	47.800	267.600	9027.82	284.85	-31.34	-284.67	654451.65	586470.97	32°36'40.721"N	103°49'54.264"W	5.33	
9139.00	50.000	268.300	9048.20	308.20	-32.17	-308.01	654428.31	586470.14	32°36'40.714"N	103°49'54.537"W	7.30	
9171.00	53.000	268.900	9068.12	333.24	-32.78	-333.05	654403.28	586469.53	32°36'40.709"N	103°49'54.830"W	9.49	
9202.00	56.000	269.400	9086.12	358.47	-33.15	-358.28	654378.05	586469.16	32°36'40.707"N	103°49'55.125"W	9.77	
9233.00	59.200	270.200	9102.73	384.64	-33.24	-384.45	654351.88	586469.07	32°36'40.707"N	103°49'55.431"W	10.55	
9265.00	60.400	270.800	9118.82	412.29	-33.00	-412.10	654324.22	586469.31	32°36'40.711"N	103°49'55.754"W	4.09	
9297.00	60.700	270.600	9134.56	440.15	-32.66	-439.97	654296.36	586469.65	32°36'40.715"N	103°49'56.080"W	1.08	
9360.00	61.100	270.800	9165.20	495.19	-31.99	-495.01	654241.32	586470.32	32°36'40.725"N	103°49'56.723"W	0.69	
9388.00	61.400	270.700	9178.66	519.74	-31.67	-519.56	654216.78	586470.65	32°36'40.729"N	103°49'57.010"W	1.12	
9482.00	61.900	269.700	9223.30	602.46	-31.38	-602.28	654134.06	586470.93	32°36'40.736"N	103°49'57.977"W	1.08	
9514.00	61.300	268.800	9238.52	630.60	-31.75	-630.43	654105.92	586470.57	32°36'40.733"N	103°49'58.306"W	3.10	
9546.00	62.100	268.400	9253.69	658.77	-32.44	-658.59	654077.75	586469.88	32°36'40.728"N	103°49'58.635"W	2.73	
9572.00	63.300	268.200	9265.62	681.87	-33.12	-681.69	654054.66	586469.19	32°36'40.722"N	103°49'58.905"W	4.67	
9604.00	64.900	267.400	9279.59	710.64	-34.23	-710.45	654025.90	586468.08	32°36'40.713"N	103°49'59.242"W	5.48	
9636.00	67.900	267.700	9292.40	739.94	-35.48	-739.74	653996.61	586466.83	32°36'40.702"N	103°49'59.584"W	9.41	
9667.00	71.800	267.600	9303.08	769.02	-36.67	-768.81	653967.54	586465.64	32°36'40.691"N	103°49'59.924"W	12.58	
9699.00	76.400	268.100	9311.85	799.77	-37.83	-799.56	653936.79	586464.49	32°36'40.681"N	103°50'00.284"W	14.45	
9730.00	80.500	268.400	9318.05	830.13	-38.75	-829.91	653906.44	586463.56	32°36'40.673"N	103°50'00.638"W	13.26	
9762.00	84.800	269.700	9322.14	861.86	-39.28	-861.64	653874.72	586463.04	32°36'40.670"N	103°50'01.009"W	14.03	
9857.00	89.800	272.500	9326.62	956.68	-37.45	-956.47	653779.89	586464.86	32°36'40.692"N	103°50'02.118"W	6.03	
9863.00	90.000	273.700	9326.63	962.67	-37.13	-962.47	653773.90	586465.19	32°36'40.696"N	103°50'02.188"W	20.28	
9958.00	91.300	273.300	9325.55	1057.45	-31.33	-1057.28	653679.09	586470.98	32°36'40.757"N	103°50'03.296"W	1.43	
10053.00	91.100	272.100	9323.56	1152.29	-26.85	-1152.15	653584.22	586475.46	32°36'40.806"N	103°50'04.405"W	1.28	
10148.00	91.300	270.600	9321.57	1247.23	-24.62	-1247.10	653489.28	586477.70	32°36'40.833"N	103°50'05.515"W	1.59	
10243.00	91.200	269.200	9319.50	1342.20	-24.78	-1342.08	653394.31	586477.53	32°36'40.835"N	103°50'06.625"W	1.48	



Actual Wellpath Report

No. 251H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.251H SHL
Area	Eddy County, NM	Well	No.251H
Field	Big Eddy	Wellbore	No. 251H AWP
Facility	Big Eddy Unit No.251H & No.252H		

WELLPATH DATA (189 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
10338.00	91.300	268.200	9317.43	1437.16	-26.94	-1437.03	653299.37	586475.38	32°36'40.818"N	103°50'07.735"W	1.06	
10433.00	91.300	267.100	9315.27	1532.08	-30.83	-1531.92	653204.48	586471.48	32°36'40.784"N	103°50'08.845"W	1.16	
10528.00	91.400	266.200	9313.03	1626.92	-36.38	-1626.73	653109.67	586465.93	32°36'40.734"N	103°50'09.953"W	0.95	
10623.00	91.200	266.400	9310.88	1721.73	-42.51	-1721.51	653014.90	586459.80	32°36'40.678"N	103°50'11.062"W	0.30	
10718.00	91.100	266.200	9308.97	1816.55	-48.64	-1816.29	652920.13	586453.67	32°36'40.621"N	103°50'12.170"W	0.24	
10813.00	91.400	265.400	9306.90	1911.31	-55.59	-1911.01	652825.41	586446.72	32°36'40.557"N	103°50'13.278"W	0.90	
10908.00	91.600	265.900	9304.41	2006.05	-62.80	-2005.71	652730.72	586439.52	32°36'40.490"N	103°50'14.385"W	0.57	
11002.00	91.000	267.000	9302.28	2099.87	-68.62	-2099.50	652636.94	586433.70	32°36'40.437"N	103°50'15.482"W	1.33	
11098.00	91.900	267.000	9299.85	2195.74	-73.64	-2195.34	652541.11	586428.68	32°36'40.391"N	103°50'16.602"W	0.94	
11193.00	90.900	269.400	9297.53	2290.67	-76.62	-2290.26	652446.19	586425.69	32°36'40.366"N	103°50'17.712"W	2.74	
11288.00	91.100	268.600	9295.87	2385.65	-78.28	-2385.23	652351.23	586424.04	32°36'40.354"N	103°50'18.822"W	0.87	
11383.00	90.800	268.000	9294.30	2480.61	-81.10	-2480.17	652256.29	586421.22	32°36'40.331"N	103°50'19.932"W	0.71	
11478.00	90.400	269.300	9293.30	2575.59	-83.34	-2575.14	652161.33	586418.98	32°36'40.313"N	103°50'21.043"W	1.43	
11573.00	90.300	269.000	9292.72	2670.58	-84.74	-2670.12	652066.35	586417.57	32°36'40.303"N	103°50'22.153"W	0.33	
11668.00	89.700	269.400	9292.72	2765.58	-86.07	-2765.11	651971.37	586416.24	32°36'40.295"N	103°50'23.264"W	0.76	
11763.00	90.400	268.400	9292.64	2860.57	-87.89	-2860.09	651876.39	586414.42	32°36'40.281"N	103°50'24.374"W	1.28	
11858.00	89.200	270.400	9292.97	2955.56	-88.89	-2955.08	651781.41	586413.43	32°36'40.275"N	103°50'25.485"W	2.46	
11953.00	89.000	272.000	9294.46	3050.51	-86.90	-3050.05	651686.45	586415.42	32°36'40.299"N	103°50'26.595"W	1.70	
12048.00	89.000	272.300	9296.12	3145.41	-83.34	-3144.97	651591.54	586418.98	32°36'40.339"N	103°50'27.704"W	0.32	
12143.00	90.100	270.600	9296.87	3240.35	-80.93	-3239.93	651496.59	586421.38	32°36'40.367"N	103°50'28.814"W	2.13	
12232.00	90.100	271.000	9296.71	3329.34	-79.69	-3328.92	651407.60	586422.62	32°36'40.384"N	103°50'29.854"W	0.45	
12332.00	90.700	273.500	9296.01	3429.22	-75.77	-3428.83	651307.69	586426.55	32°36'40.427"N	103°50'31.022"W	2.57	
12427.00	90.800	273.100	9294.77	3524.02	-70.30	-3523.66	651212.87	586432.02	32°36'40.485"N	103°50'32.130"W	0.43	
12522.00	89.900	270.200	9294.19	3618.95	-67.56	-3618.61	651117.92	586434.75	32°36'40.517"N	103°50'33.240"W	3.20	
12617.00	90.800	270.800	9293.61	3713.94	-66.73	-3713.61	651022.94	586435.58	32°36'40.529"N	103°50'34.351"W	1.14	
12712.00	90.600	272.700	9292.45	3808.86	-63.83	-3808.55	650928.00	586438.48	32°36'40.562"N	103°50'35.460"W	2.01	
12807.00	90.600	271.900	9291.45	3903.76	-60.02	-3903.47	650833.09	586442.29	32°36'40.604"N	103°50'36.570"W	0.84	
12902.00	90.500	271.800	9290.54	3998.68	-56.95	-3998.41	650738.15	586445.36	32°36'40.639"N	103°50'37.680"W	0.15	
12997.00	90.700	272.800	9289.55	4093.57	-53.14	-4093.33	650643.24	586449.17	32°36'40.681"N	103°50'38.789"W	1.07	
13092.00	90.900	272.300	9288.22	4188.44	-48.91	-4188.23	650548.35	586453.40	32°36'40.727"N	103°50'39.898"W	0.57	
13186.00	90.900	271.000	9286.74	4282.37	-46.21	-4282.17	650454.41	586456.10	32°36'40.758"N	103°50'40.996"W	1.38	
13281.00	90.700	269.700	9285.42	4377.36	-45.63	-4377.16	650359.43	586456.68	32°36'40.768"N	103°50'42.107"W	1.38	
13376.00	90.600	270.800	9284.34	4472.34	-45.21	-4472.15	650264.44	586457.10	32°36'40.777"N	103°50'43.217"W	1.16	
13470.00	90.500	273.200	9283.44	4566.25	-41.93	-4566.08	650170.52	586460.38	32°36'40.814"N	103°50'44.315"W	2.56	
13565.00	90.700	273.300	9282.44	4661.06	-36.55	-4660.93	650075.68	586465.76	32°36'40.871"N	103°50'45.423"W	0.24	
13660.00	90.600	272.200	9281.36	4755.91	-31.99	-4755.81	649980.80	586470.32	32°36'40.921"N	103°50'46.532"W	1.16	
13755.00	90.000	269.000	9280.87	4850.89	-31.00	-4850.79	649885.83	586471.32	32°36'40.935"N	103°50'47.643"W	3.43	
13850.00	90.700	267.200	9280.29	4945.85	-34.15	-4945.73	649790.89	586468.17	32°36'40.908"N	103°50'48.753"W	2.03	
13945.00	90.600	267.500	9279.21	5040.76	-38.54	-5040.62	649696.01	586463.78	32°36'40.869"N	103°50'49.862"W	0.33	
14040.00	90.600	269.000	9278.21	5135.73	-41.44	-5135.57	649601.07	586460.87	32°36'40.844"N	103°50'50.972"W	1.58	
14134.00	90.300	267.900	9277.47	5229.70	-43.98	-5229.53	649507.11	586458.33	32°36'40.823"N	103°50'52.071"W	1.21	
14230.00	90.600	269.600	9276.72	5325.68	-46.07	-5325.50	649411.15	586456.24	32°36'40.807"N	103°50'53.193"W	1.80	
14324.00	90.500	272.400	9275.82	5419.64	-44.43	-5419.47	649317.18	586457.88	32°36'40.827"N	103°50'54.291"W	2.98	
14419.00	90.500	271.600	9274.99	5514.56	-41.12	-5514.41	649222.25	586461.19	32°36'40.865"N	103°50'55.401"W	0.84	
14514.00	90.500	270.400	9274.16	5609.53	-39.46	-5609.39	649127.27	586462.85	32°36'40.885"N	103°50'56.511"W	1.26	



Actual Wellpath Report

No. 251H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.251H SHL
Area	Eddy County, NM	Well	No.251H
Field	Big Eddy	Wellbore	No. 251H AWB
Facility	Big Eddy Unit No.251H & No.252H		

WELLPATH DATA (189 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
14609.00	91.100	270.100	9272.83	5704.51	-39.05	-5704.38	649032.29	586463.27	32°36'40.894"N	103°50'57.622"W	0.71	
14704.00	91.000	269.300	9271.09	5799.50	-39.54	-5799.36	648937.32	586462.77	32°36'40.893"N	103°50'58.732"W	0.85	
14799.00	91.100	268.700	9269.35	5894.47	-41.20	-5894.33	648842.35	586461.11	32°36'40.881"N	103°50'59.842"W	0.64	
14893.00	91.000	268.600	9267.63	5988.44	-43.42	-5988.29	648748.40	586458.90	32°36'40.863"N	103°51'00.941"W	0.15	
14987.00	90.800	267.400	9266.15	6082.39	-46.70	-6082.22	648654.48	586455.62	32°36'40.835"N	103°51'02.039"W	1.29	
15083.00	91.000	271.100	9264.64	6178.36	-47.95	-6178.18	648558.52	586454.36	32°36'40.827"N	103°51'03.161"W	3.86	
15179.00	91.100	270.600	9262.89	6274.32	-46.53	-6274.16	648462.55	586455.78	32°36'40.845"N	103°51'04.283"W	0.53	
15257.00	91.100	270.500	9261.39	6352.30	-45.78	-6352.14	648384.58	586456.53	32°36'40.856"N	103°51'05.194"W	0.13	
15331.00	91.100	270.500	9259.97	6426.28	-45.13	-6426.12	648310.60	586457.18	32°36'40.866"N	103°51'06.059"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.251H PBHL		9261.00	-38.46	-6426.51	648310.21	586463.85	32°36'40.932"N	103°51'06.063"W	point
No.251 Target #1		9339.00	-4.49	-749.99	653986.36	586497.82	32°36'41.009"N	103°49'59.702"W	point

WELLPATH COMPOSITION - Ref Wellbore: No. 251H AWB Ref Wellpath: No. 251H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7715.10	Generic gyro - northseeking (Standard)	Gyrodata Gyro <77.1-7715.1>	No. 251H AWB
7715.10	15257.00	NaviTrak (Standard)	BHI MWD NaviTrak <7789-XXXX>	No. 251H AWB
15257.00	15331.00	Blind Drilling (std)	Projection to bit	No. 251H AWB