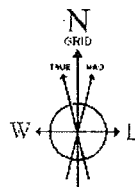
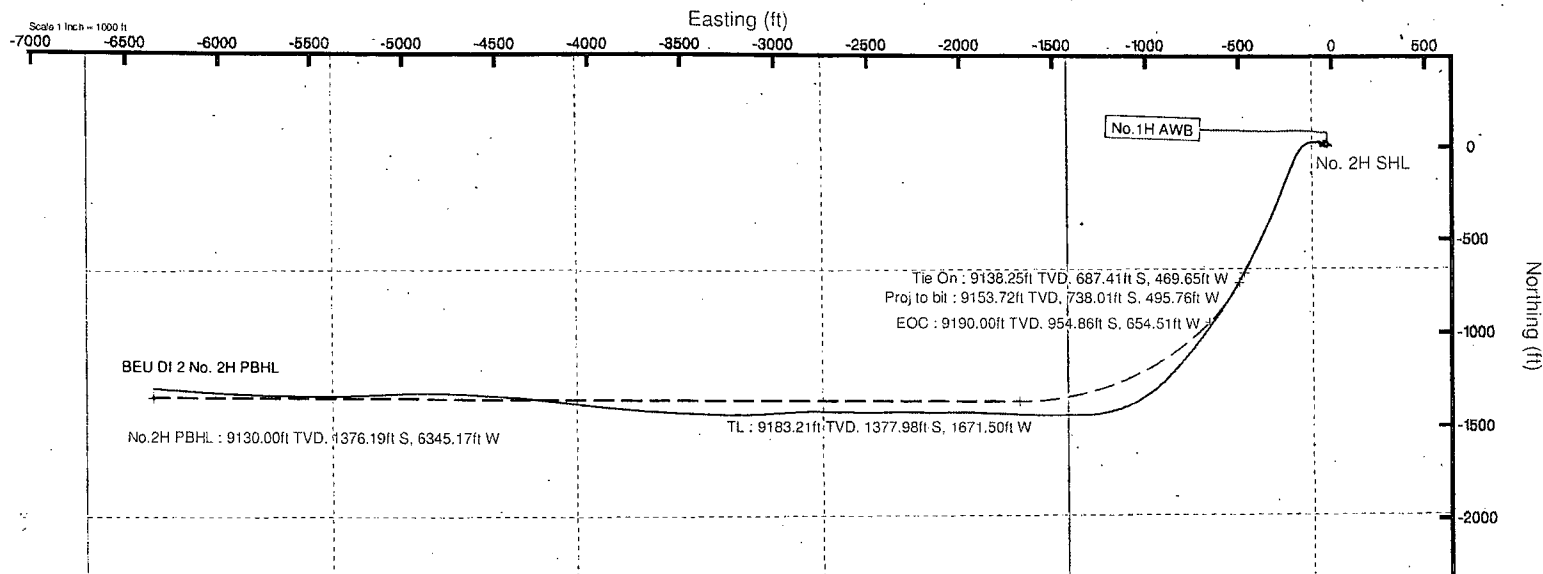




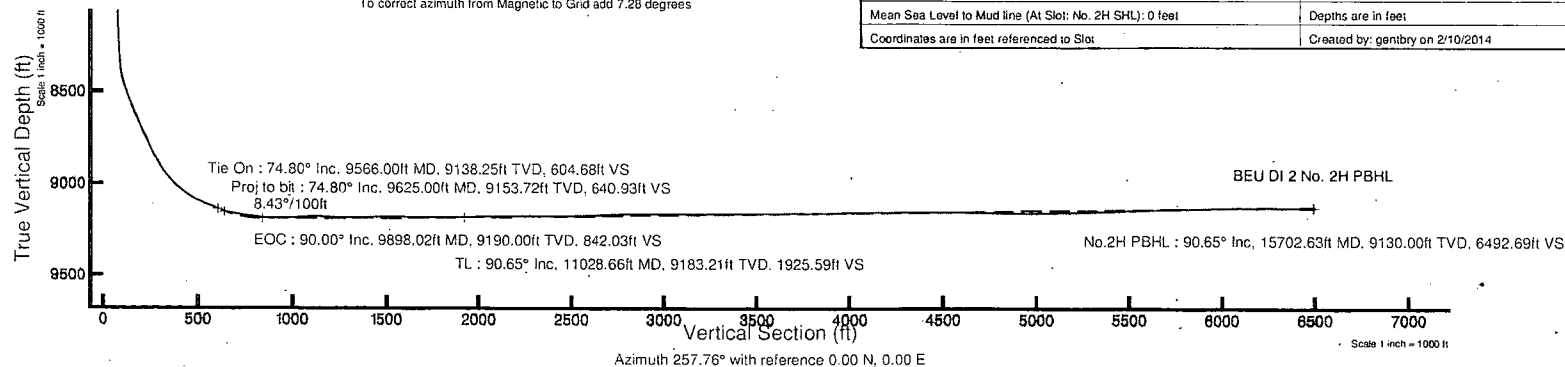
BOPCO, L.P.

Location: Eddy County, NM
Field: Big Eddy
Facility: Big Eddy Unit DI-2

Slot: No. 2H SHL
Well: No. 2H
Wellbore: No. 2H PWB



BGGM (1945.0 to 2015.0) Dip: 60.43° Field: 48541.7 nT
Magnetic North is 7.54 degrees East of True North (at 1/31/2014)
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 7.28 degrees



Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	9566.00	74.800	207.300	9138.25	-687.41	-469.65	0.00	604.68
Proj to bit	9625.00	74.800	207.300	9153.72	-738.01	-495.76	0.00	640.93
EOC	9898.02	90.000	224.800	9190.00	-954.86	-654.51	8.43	842.03
TL	11028.66	90.652	270.022	9183.21	-1377.98	-1671.50	4.00	1925.59
No. 2H PBHL	15702.63	90.652	270.022	9130.00	-1376.19	-6345.17	0.00	6492.69

Plot reference wellpath is Rev-J.0	
True vertical depths are referenced to Rig on No. 2H SHL (KB)	Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 2H SHL (KB)	North Reference: Grid north
Rig on No. 2H SHL (KB) to Mean Sea Level: 3495 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: No. 2H SHL): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: gentbry on 2/10/2014

15-41861

Rev-J.0



Actual Wellpath Report

No.2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	Big Eddy	Wellbore	No.2H AWB
Facility	Big Eddy Unit DI-2		

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 4.0.1
North Reference	Grid	User	Gentbry
Scale	0.999934	Report Generated	2/25/2014 at 10:51:20 AM
Convergence at slot	0.26° East	Database/Source file	MidlandDB/No.2H_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-2.57	-349.97	648220.80	590421.70	32°37'20.100"N	103°51'06.899"W
Facility Reference Pt			648570.75	590424.27	32°37'20.110"N	103°51'02.807"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. 2H SHL (KB) to Facility Vertical Datum	3495.00ft
Horizontal Reference Pt	Slot	Rig on No. 2H SHL (KB) to Mean Sea Level	3495.00ft
Vertical Reference Pt	Rig on No. 2H SHL (KB)	Rig on No. 2H SHL (KB) to Mud Line at Slot (No. 2H SHL)	3495.00ft
MD Reference Pt	Rig on No. 2H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	257.76°



Actual Wellpath Report

No.2H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	Big Eddy	Wellbore	No.2H AWB
Facility	Big Eddy Unit DI-2		

WELLPATH DATA (214 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	323.070	0.00	0.00	0.00	0.00	648220.80	590421.70	32°37'20.100"N	103°51'06.899"W	0.00	
100.00	0.240	323.070	100.00	0.09	0.17	-0.13	648220.67	590421.87	32°37'20.102"N	103°51'06.901"W	0.24	
200.00	0.360	315.500	200.00	0.34	0.56	-0.47	648220.33	590422.26	32°37'20.106"N	103°51'06.905"W	0.13	
300.00	0.540	311.530	300.00	0.79	1.10	-1.04	648219.76	590422.80	32°37'20.111"N	103°51'06.911"W	0.18	
400.00	0.650	307.530	399.99	1.43	1.75	-1.85	648218.95	590423.45	32°37'20.118"N	103°51'06.921"W	0.12	
500.00	1.020	300.840	499.98	2.45	2.56	-3.06	648217.74	590424.26	32°37'20.126"N	103°51'06.935"W	0.38	
600.00	1.780	299.600	599.95	4.26	3.78	-5.18	648215.62	590425.48	32°37'20.138"N	103°51'06.960"W	0.76	
700.00	2.310	294.640	699.88	7.03	5.39	-8.36	648212.44	590427.09	32°37'20.154"N	103°51'06.997"W	0.56	
734.90	2.400	293.740	734.75	8.18	5.97	-9.67	648211.13	590427.67	32°37'20.160"N	103°51'07.012"W	0.28	
829.70	2.580	299.880	829.47	11.37	7.84	-13.33	648207.47	590429.53	32°37'20.178"N	103°51'07.055"W	0.34	
924.40	2.850	296.520	924.06	14.79	9.95	-17.29	648203.51	590431.65	32°37'20.200"N	103°51'07.101"W	0.33	
1019.20	2.950	300.090	1018.74	18.43	12.22	-21.51	648199.29	590433.92	32°37'20.222"N	103°51'07.150"W	0.22	
1114.00	3.010	301.470	1113.41	22.03	14.75	-25.74	648195.06	590436.45	32°37'20.247"N	103°51'07.199"W	0.10	
1208.70	2.690	299.300	1207.99	25.49	17.13	-29.80	648191.00	590438.83	32°37'20.271"N	103°51'07.247"W	0.36	
1303.50	1.790	303.340	1302.72	28.19	19.03	-32.98	648187.83	590440.73	32°37'20.290"N	103°51'07.284"W	0.96	
1398.20	1.550	306.230	1397.38	30.08	20.60	-35.25	648185.56	590442.30	32°37'20.306"N	103°51'07.310"W	0.27	
1493.00	1.430	306.500	1492.15	31.71	22.07	-37.23	648183.57	590443.76	32°37'20.320"N	103°51'07.333"W	0.13	
1587.80	1.380	309.540	1586.92	33.19	23.50	-39.06	648181.74	590445.19	32°37'20.335"N	103°51'07.355"W	0.09	
1682.50	1.230	311.130	1681.59	34.51	24.89	-40.71	648180.10	590446.59	32°37'20.348"N	103°51'07.374"W	0.16	
1777.30	1.000	316.910	1776.38	35.54	26.16	-42.04	648178.76	590447.86	32°37'20.361"N	103°51'07.389"W	0.27	
1872.00	0.800	329.050	1871.06	36.17	27.33	-42.94	648177.86	590449.03	32°37'20.373"N	103°51'07.400"W	0.29	
1966.80	0.570	37.550	1965.86	36.03	28.28	-43.00	648177.81	590449.97	32°37'20.382"N	103°51'07.400"W	0.84	
2061.60	1.440	86.040	2060.64	34.49	28.73	-41.52	648179.28	590450.43	32°37'20.387"N	103°51'07.383"W	1.21	
2156.30	2.000	103.750	2155.30	31.82	28.42	-38.73	648182.07	590450.12	32°37'20.383"N	103°51'07.350"W	0.81	
2251.10	2.000	103.870	2250.04	28.85	27.63	-35.52	648185.29	590449.33	32°37'20.375"N	103°51'07.313"W	0.00	
2345.80	1.990	103.880	2344.69	25.89	26.84	-32.31	648188.49	590448.54	32°37'20.367"N	103°51'07.276"W	0.01	
2440.60	1.280	101.450	2439.45	23.44	26.24	-29.68	648191.12	590447.93	32°37'20.361"N	103°51'07.245"W	0.75	
2535.40	1.010	102.860	2534.23	21.72	25.84	-27.83	648192.98	590447.54	32°37'20.357"N	103°51'07.223"W	0.29	
2630.10	0.720	160.700	2628.92	20.89	25.09	-26.82	648193.99	590446.79	32°37'20.350"N	103°51'07.211"W	0.92	
2724.90	0.980	177.150	2723.71	20.95	23.72	-26.58	648194.22	590445.42	32°37'20.336"N	103°51'07.209"W	0.37	
2819.60	0.910	159.540	2818.40	20.97	22.21	-26.28	648194.53	590443.91	32°37'20.321"N	103°51'07.205"W	0.31	
2914.40	0.930	149.670	2913.18	20.63	20.84	-25.62	648195.18	590442.54	32°37'20.308"N	103°51'07.198"W	0.17	
3009.20	1.060	135.820	3007.97	19.92	19.54	-24.62	648196.18	590441.24	32°37'20.295"N	103°51'07.186"W	0.29	
3103.90	1.270	118.410	3102.65	18.66	18.42	-23.09	648197.71	590440.12	32°37'20.284"N	103°51'07.168"W	0.43	
3198.70	1.210	130.290	3197.43	17.26	17.27	-21.40	648199.40	590438.97	32°37'20.272"N	103°51'07.149"W	0.28	
3293.40	1.240	143.970	3292.11	16.23	15.80	-20.04	648200.76	590437.49	32°37'20.258"N	103°51'07.133"W	0.31	
3388.20	1.130	153.730	3386.89	15.59	14.13	-19.02	648201.78	590435.83	32°37'20.241"N	103°51'07.121"W	0.24	
3483.00	1.420	171.730	3481.66	15.45	12.13	-18.44	648202.36	590433.83	32°37'20.221"N	103°51'07.114"W	0.52	
3577.70	1.580	191.490	3576.33	16.06	9.69	-18.53	648202.27	590431.39	32°37'20.197"N	103°51'07.115"W	0.57	
3672.50	1.580	198.260	3671.10	17.24	7.16	-19.20	648201.60	590428.86	32°37'20.172"N	103°51'07.123"W	0.20	
3767.20	1.400	199.090	3765.76	18.51	4.83	-19.99	648200.81	590426.53	32°37'20.149"N	103°51'07.133"W	0.19	
3862.00	1.410	204.840	3860.54	19.81	2.68	-20.86	648199.95	590424.38	32°37'20.128"N	103°51'07.143"W	0.15	
3956.80	1.330	210.900	3955.31	21.27	0.68	-21.91	648198.89	590422.38	32°37'20.108"N	103°51'07.155"W	0.17	
4051.50	1.160	208.590	4049.99	22.65	-1.11	-22.93	648197.87	590420.59	32°37'20.090"N	103°51'07.167"W	0.19	
4146.30	0.970	210.960	4144.77	23.82	-2.64	-23.81	648197.00	590419.06	32°37'20.075"N	103°51'07.178"W	0.21	



Actual Wellpath Report

No.2H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	Big Eddy	Wellbore	No.2H AWB
Facility	Big Eddy Unit DI-2		

WELLPATH DATA (214 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
4241.00	0.880	220.460	4239.46	24.95	-3.88	-24.69	648196.11	590417.82	32°37'20.063"N	103°51'07.188"W	0.19	
4335.80	0.600	233.600	4334.25	25.98	-4.73	-25.56	648195.24	590416.97	32°37'20.055"N	103°51'07.198"W	0.34	
4430.60	0.530	243.380	4429.04	26.86	-5.22	-26.35	648194.45	590416.48	32°37'20.050"N	103°51'07.208"W	0.13	
4525.30	0.590	254.760	4523.74	27.77	-5.54	-27.22	648193.59	590416.16	32°37'20.047"N	103°51'07.218"W	0.13	
4620.10	0.690	269.950	4618.53	28.82	-5.67	-28.26	648192.54	590416.03	32°37'20.046"N	103°51'07.230"W	0.21	
4714.80	0.690	284.530	4713.23	29.88	-5.53	-29.38	648191.42	590416.17	32°37'20.047"N	103°51'07.243"W	0.18	
4809.60	0.660	285.280	4808.02	30.88	-5.24	-30.46	648190.34	590416.46	32°37'20.050"N	103°51'07.256"W	0.03	
4904.40	0.550	284.220	4902.82	31.77	-4.99	-31.43	648189.38	590416.71	32°37'20.052"N	103°51'07.267"W	0.12	
4999.10	0.520	290.640	4997.51	32.54	-4.72	-32.27	648188.53	590416.98	32°37'20.055"N	103°51'07.277"W	0.07	
5093.90	0.610	290.990	5092.31	33.32	-4.39	-33.14	648187.66	590417.31	32°37'20.058"N	103°51'07.287"W	0.10	
5188.60	0.730	288.430	5187.00	34.26	-4.02	-34.19	648186.62	590417.68	32°37'20.062"N	103°51'07.299"W	0.13	
5283.40	0.530	294.440	5281.79	35.13	-3.65	-35.16	648185.64	590418.05	32°37'20.066"N	103°51'07.310"W	0.22	
5378.20	0.350	307.300	5376.59	35.67	-3.29	-35.79	648185.01	590418.41	32°37'20.069"N	103°51'07.318"W	0.22	
5472.90	0.530	306.030	5471.29	36.15	-2.86	-36.37	648184.43	590418.84	32°37'20.074"N	103°51'07.325"W	0.19	
5567.70	0.630	301.090	5566.08	36.82	-2.33	-37.17	648183.63	590419.37	32°37'20.079"N	103°51'07.334"W	0.12	
5662.40	0.630	304.390	5660.78	37.56	-1.77	-38.05	648182.75	590419.93	32°37'20.085"N	103°51'07.344"W	0.04	
5757.20	0.610	305.290	5755.57	38.26	-1.18	-38.89	648181.91	590420.52	32°37'20.090"N	103°51'07.354"W	0.02	
5852.00	0.600	305.130	5850.37	38.93	-0.61	-39.71	648181.09	590421.09	32°37'20.096"N	103°51'07.363"W	0.01	
5946.70	0.670	305.040	5945.06	39.65	0.00	-40.57	648180.24	590421.70	32°37'20.102"N	103°51'07.373"W	0.07	
6041.50	0.700	307.500	6039.86	40.40	0.67	-41.48	648179.32	590422.37	32°37'20.109"N	103°51'07.384"W	0.04	
6136.20	0.730	309.700	6134.55	41.14	1.41	-42.40	648178.40	590423.11	32°37'20.116"N	103°51'07.395"W	0.04	
6231.00	0.720	309.320	6229.34	41.88	2.17	-43.33	648177.47	590423.87	32°37'20.124"N	103°51'07.406"W	0.01	
6325.80	0.820	310.570	6324.13	42.66	2.99	-44.30	648176.50	590424.69	32°37'20.132"N	103°51'07.417"W	0.11	
6420.50	0.800	310.960	6418.82	43.47	3.86	-45.32	648175.48	590425.56	32°37'20.141"N	103°51'07.429"W	0.02	
6515.30	0.830	307.200	6513.61	44.31	4.71	-46.37	648174.44	590426.41	32°37'20.149"N	103°51'07.441"W	0.06	
6610.00	0.850	310.090	6608.30	45.19	5.58	-47.45	648173.35	590427.28	32°37'20.158"N	103°51'07.454"W	0.05	
6704.80	1.090	312.320	6703.09	46.14	6.64	-48.65	648172.15	590428.34	32°37'20.168"N	103°51'07.468"W	0.26	
6799.60	1.190	312.530	6797.87	47.23	7.91	-50.05	648170.76	590429.61	32°37'20.181"N	103°51'07.484"W	0.11	
6894.30	1.280	315.510	6892.55	48.36	9.33	-51.51	648169.29	590431.03	32°37'20.195"N	103°51'07.501"W	0.12	
6989.10	1.460	317.590	6987.32	49.54	10.98	-53.07	648167.74	590432.68	32°37'20.211"N	103°51'07.519"W	0.20	
7083.80	1.760	314.750	7081.98	50.93	12.89	-54.91	648165.89	590434.59	32°37'20.230"N	103°51'07.541"W	0.33	
7178.60	2.300	307.520	7176.72	52.96	15.07	-57.46	648163.35	590436.77	32°37'20.252"N	103°51'07.570"W	0.63	
7273.40	1.970	314.680	7271.46	55.07	17.38	-60.12	648160.68	590439.08	32°37'20.275"N	103°51'07.601"W	0.45	
7368.10	1.790	320.590	7366.11	56.64	19.67	-62.22	648158.58	590441.36	32°37'20.298"N	103°51'07.626"W	0.28	
7462.90	1.380	311.210	7460.87	57.99	21.56	-64.02	648156.78	590443.26	32°37'20.317"N	103°51'07.647"W	0.51	
7557.60	1.390	288.330	7555.54	59.66	22.67	-65.97	648154.84	590444.37	32°37'20.328"N	103°51'07.669"W	0.58	
7652.40	1.580	269.660	7650.31	61.93	23.03	-68.37	648152.44	590444.73	32°37'20.331"N	103°51'07.697"W	0.55	
7747.20	2.050	257.080	7745.07	64.91	22.64	-71.33	648149.48	590444.34	32°37'20.328"N	103°51'07.732"W	0.65	
7841.90	1.990	239.670	7839.71	68.16	21.43	-74.40	648146.41	590443.13	32°37'20.316"N	103°51'07.768"W	0.65	
7936.70	2.270	251.180	7934.44	71.59	20.00	-77.59	648143.21	590441.69	32°37'20.302"N	103°51'07.805"W	0.54	
8031.40	2.060	268.510	8029.08	75.13	19.35	-81.07	648139.73	590441.04	32°37'20.295"N	103°51'07.846"W	0.72	
8126.20	2.890	278.530	8123.79	79.04	19.66	-85.14	648135.67	590441.36	32°37'20.299"N	103°51'07.894"W	0.98	
8221.00	3.310	273.050	8218.45	83.91	20.16	-90.23	648130.57	590441.86	32°37'20.304"N	103°51'07.953"W	0.54	
8283.00	4.130	270.700	8280.32	87.81	20.28	-94.25	648126.55	590441.98	32°37'20.305"N	103°51'08.000"W	1.34	
8330.00	4.400	273.900	8327.19	91.20	20.42	-97.74	648123.06	590442.12	32°37'20.307"N	103°51'08.041"W	0.77	



Actual Wellpath Report

No.2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	Big Eddy	Wellbore	No.2H AWB
Facility	Big Eddy Unit DI-2		

WELLPATH DATA (214 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
8362.00	5.200	269.200	8359.07	93.80	20.49	-100.42	648120.39	590442.18	32°37'20.308"N	103°51'08.072"W	2.78	
8394.00	8.300	262.800	8390.85	97.52	20.18	-104.16	648116.65	590441.87	32°37'20.305"N	103°51'08.116"W	9.95	
8426.00	11.700	261.200	8422.36	103.06	19.39	-109.66	648111.15	590441.09	32°37'20.297"N	103°51'08.180"W	10.66	
8458.00	15.200	256.600	8453.48	110.50	17.92	-116.95	648103.86	590439.62	32°37'20.283"N	103°51'08.266"W	11.43	
8490.00	17.800	248.400	8484.16	119.52	15.15	-125.58	648095.23	590436.85	32°37'20.256"N	103°51'08.367"W	10.89	
8522.00	20.500	243.800	8514.39	129.78	10.87	-135.16	648085.65	590432.57	32°37'20.214"N	103°51'08.479"W	9.66	
8554.00	22.700	235.200	8544.15	140.93	4.87	-145.26	648075.55	590426.57	32°37'20.155"N	103°51'08.597"W	12.03	
8586.00	24.500	227.700	8573.48	152.38	-3.12	-155.24	648065.57	590418.58	32°37'20.076"N	103°51'08.714"W	10.93	
8618.00	26.300	219.500	8602.39	163.69	-13.06	-164.66	648056.15	590408.64	32°37'19.979"N	103°51'08.825"W	12.33	
8650.00	29.300	214.100	8630.70	174.92	-25.02	-173.57	648047.25	590396.68	32°37'19.861"N	103°51'08.930"W	12.23	
8681.00	32.600	210.700	8657.28	186.10	-38.49	-182.08	648038.73	590383.22	32°37'19.728"N	103°51'09.030"W	12.04	
8713.00	35.100	207.800	8683.86	197.90	-54.04	-190.78	648030.03	590367.66	32°37'19.574"N	103°51'09.133"W	9.30	
8745.00	36.800	203.900	8709.77	209.47	-70.94	-198.95	648021.86	590350.76	32°37'19.407"N	103°51'09.229"W	8.91	
8777.00	37.600	201.800	8735.26	220.59	-88.77	-206.46	648014.35	590332.94	32°37'19.231"N	103°51'09.318"W	4.69	
8808.00	38.100	202.100	8759.73	231.28	-106.41	-213.57	648007.24	590315.29	32°37'19.057"N	103°51'09.402"W	1.72	
8840.00	38.000	201.600	8784.93	242.33	-124.72	-220.91	647999.90	590296.99	32°37'18.876"N	103°51'09.489"W	1.01	
8871.00	39.200	201.100	8809.16	253.03	-142.73	-227.95	647992.86	590278.98	32°37'18.698"N	103°51'09.572"W	4.00	
8901.00	41.500	202.000	8832.02	263.83	-160.80	-235.09	647985.73	590260.92	32°37'18.520"N	103°51'09.656"W	7.91	
8933.00	44.000	201.800	8855.52	276.02	-180.95	-243.19	647977.63	590240.76	32°37'18.321"N	103°51'09.752"W	7.82	
8964.00	45.700	202.300	8877.50	288.34	-201.21	-251.40	647969.42	590220.50	32°37'18.121"N	103°51'09.849"W	5.60	
8996.00	46.800	201.700	8899.62	301.34	-222.64	-260.06	647960.76	590199.07	32°37'17.909"N	103°51'09.951"W	3.69	
9028.00	49.200	200.400	8921.03	314.39	-244.84	-268.59	647952.22	590176.88	32°37'17.690"N	103°51'10.052"W	8.08	
9060.00	52.100	200.300	8941.32	327.71	-268.03	-277.20	647943.62	590153.68	32°37'17.461"N	103°51'10.154"W	9.07	
9091.00	54.300	200.600	8959.89	341.12	-291.29	-285.87	647934.95	590130.43	32°37'17.231"N	103°51'10.257"W	7.14	
9122.00	57.000	201.900	8977.38	355.24	-315.14	-295.15	647925.67	590106.58	32°37'16.995"N	103°51'10.367"W	9.37	
9153.00	58.800	202.800	8993.85	370.15	-339.43	-305.14	647915.68	590082.30	32°37'16.756"N	103°51'10.485"W	6.31	
9185.00	60.900	203.500	9009.93	386.17	-364.87	-316.02	647904.80	590056.86	32°37'16.504"N	103°51'10.613"W	6.83	
9216.00	63.500	204.100	9024.38	402.31	-389.95	-327.08	647893.74	590031.77	32°37'16.257"N	103°51'10.744"W	8.56	
9248.00	64.800	203.700	9038.34	419.29	-416.28	-338.75	647882.07	590005.45	32°37'15.997"N	103°51'10.882"W	4.22	
9280.00	65.400	204.300	9051.81	436.45	-442.80	-350.56	647870.27	589978.93	32°37'15.735"N	103°51'11.021"W	2.53	
9311.00	65.900	204.400	9064.59	453.28	-468.53	-362.20	647858.62	589953.20	32°37'15.481"N	103°51'11.159"W	1.64	
9342.00	68.900	205.300	9076.50	470.54	-494.49	-374.23	647846.60	589927.24	32°37'15.224"N	103°51'11.301"W	10.04	
9374.00	72.500	206.000	9087.08	489.08	-521.71	-387.30	647833.52	589900.02	32°37'14.956"N	103°51'11.455"W	11.44	
9406.00	74.600	205.900	9096.14	508.06	-549.31	-400.73	647820.10	589872.43	32°37'14.683"N	103°51'11.613"W	6.57	
9438.00	74.700	205.700	9104.61	527.07	-577.09	-414.16	647806.67	589844.65	32°37'14.409"N	103°51'11.772"W	0.68	
9470.00	74.800	206.300	9113.03	546.18	-604.84	-427.69	647793.13	589816.90	32°37'14.135"N	103°51'11.932"W	1.84	
9502.00	74.600	206.400	9121.47	565.43	-632.50	-441.39	647779.44	589789.25	32°37'13.862"N	103°51'12.093"W	0.69	
9534.00	74.900	207.600	9129.89	584.96	-660.00	-455.41	647765.42	589761.74	32°37'13.590"N	103°51'12.258"W	3.74	
9566.00	74.800	207.300	9138.25	604.68	-687.41	-469.65	647751.18	589734.33	32°37'13.320"N	103°51'12.426"W	0.96	
9625.00	78.700	208.700	9151.77	641.77	-738.11	-496.61	647724.22	589683.64	32°37'12.819"N	103°51'12.744"W	7.00	
9656.00	79.800	209.800	9157.55	661.95	-764.68	-511.49	647709.34	589657.07	32°37'12.557"N	103°51'12.920"W	4.97	
9687.00	81.600	211.000	9162.56	682.67	-791.06	-526.97	647693.86	589630.69	32°37'12.297"N	103°51'13.102"W	6.95	
9717.00	82.300	212.000	9166.76	703.21	-816.39	-542.49	647678.34	589605.37	32°37'12.047"N	103°51'13.285"W	4.04	
9748.00	83.000	212.500	9170.73	724.75	-842.39	-558.90	647661.94	589579.37	32°37'11.790"N	103°51'13.478"W	2.77	
9780.00	84.200	213.700	9174.30	747.37	-869.03	-576.26	647644.58	589552.73	32°37'11.527"N	103°51'13.682"W	5.29	



Actual Wellpath Report

No.2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	Big Eddy	Wellbore	No.2H AWB
Facility	Big Eddy Unit DI-2		

WELLPATH DATA (214 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
9811.00	84.800	214.000	9177.27	769.60	-894.66	-593.45	647627.39	589527.10	32°37'11.275"N	103°51'13.885"W	2.16	
9843.00	84.900	214.900	9180.14	792.79	-920.94	-611.48	647609.36	589500.82	32°37'11.015"N	103°51'14.097"W	2.82	
9875.00	85.000	215.500	9182.96	816.27	-946.99	-629.85	647590.99	589474.78	32°37'10.758"N	103°51'14.313"W	1.89	
9907.00	85.900	215.700	9185.50	839.91	-972.92	-648.42	647572.42	589448.84	32°37'10.503"N	103°51'14.532"W	2.88	
9939.00	87.600	215.900	9187.31	863.67	-998.83	-667.11	647553.73	589422.93	32°37'10.247"N	103°51'14.751"W	5.35	
9971.00	89.300	216.400	9188.18	887.58	-1024.66	-685.98	647534.87	589397.11	32°37'09.992"N	103°51'14.973"W	5.54	
10001.00	91.000	216.700	9188.10	910.15	-1048.76	-703.85	647517.00	589373.01	32°37'09.755"N	103°51'15.184"W	5.75	
10097.00	90.600	220.000	9186.76	984.30	-1124.03	-763.40	647457.46	589297.75	32°37'09.013"N	103°51'15.884"W	3.46	
10129.00	91.700	220.600	9186.11	1009.69	-1148.43	-784.09	647436.76	589273.35	32°37'08.772"N	103°51'16.127"W	3.92	
10161.00	91.900	221.200	9185.11	1035.28	-1172.61	-805.03	647415.82	589249.17	32°37'08.534"N	103°51'16.373"W	1.98	
10193.00	92.700	221.500	9183.82	1061.02	-1196.61	-826.15	647394.70	589225.17	32°37'08.297"N	103°51'16.621"W	2.67	
10224.00	92.900	221.800	9182.31	1086.03	-1219.74	-846.73	647374.13	589202.04	32°37'08.069"N	103°51'16.863"W	1.16	
10256.00	91.200	223.000	9181.17	1112.11	-1243.36	-868.29	647352.56	589178.43	32°37'07.836"N	103°51'17.116"W	6.50	
10288.00	89.100	225.400	9181.08	1138.77	-1266.30	-890.60	647330.26	589155.49	32°37'07.611"N	103°51'17.378"W	9.97	
10320.00	88.000	228.000	9181.89	1166.17	-1288.23	-913.88	647306.98	589133.55	32°37'07.394"N	103°51'17.652"W	8.82	
10352.00	87.500	230.400	9183.15	1194.25	-1309.12	-938.08	647282.78	589112.66	32°37'07.189"N	103°51'17.936"W	7.66	
10383.00	87.900	233.700	9184.39	1222.15	-1328.17	-962.50	647258.36	589093.62	32°37'07.001"N	103°51'18.222"W	10.71	
10414.00	88.500	236.500	9185.37	1250.74	-1345.90	-987.91	647232.95	589075.89	32°37'06.827"N	103°51'18.520"W	9.23	
10445.00	89.700	238.700	9185.85	1279.84	-1362.50	-1014.08	647206.79	589059.29	32°37'06.664"N	103°51'18.827"W	8.08	
10476.00	90.000	241.100	9185.94	1309.34	-1378.05	-1040.90	647179.97	589043.74	32°37'06.511"N	103°51'19.141"W	7.80	
10508.00	91.000	243.800	9185.66	1340.20	-1392.85	-1069.27	647151.60	589028.95	32°37'06.366"N	103°51'19.474"W	9.00	
10539.00	91.400	248.100	9185.01	1370.53	-1405.48	-1097.56	647123.31	589016.32	32°37'06.243"N	103°51'19.805"W	13.93	
10571.00	92.000	250.300	9184.06	1402.16	-1416.83	-1127.46	647093.41	589004.96	32°37'06.132"N	103°51'20.155"W	7.12	
10666.00	91.200	259.300	9181.40	1496.90	-1441.70	-1219.01	647001.87	588980.09	32°37'05.889"N	103°51'21.227"W	9.51	
10761.00	88.500	268.300	9181.65	1591.26	-1451.95	-1313.35	646907.54	588969.84	32°37'05.792"N	103°51'22.330"W	9.89	
10856.00	89.700	269.900	9183.14	1684.39	-1453.45	-1408.32	646812.58	588968.35	32°37'05.782"N	103°51'23.441"W	2.11	
10951.00	90.000	270.400	9183.39	1777.18	-1453.20	-1503.32	646717.58	588968.60	32°37'05.788"N	103°51'24.551"W	0.61	
11046.00	91.100	270.500	9182.48	1869.85	-1452.45	-1598.31	646622.60	588969.35	32°37'05.800"N	103°51'25.662"W	1.16	
11141.00	91.100	272.700	9180.65	1962.08	-1449.80	-1693.25	646527.67	588972.00	32°37'05.830"N	103°51'26.772"W	2.32	
11237.00	90.900	271.100	9178.98	2055.15	-1446.62	-1789.18	646431.74	588975.18	32°37'05.866"N	103°51'27.893"W	1.68	
11330.00	90.900	273.000	9177.52	2145.26	-1443.29	-1882.10	646338.82	588978.51	32°37'05.903"N	103°51'28.979"W	2.04	
11425.00	90.600	270.400	9176.27	2237.45	-1440.47	-1977.05	646243.89	588981.33	32°37'05.935"N	103°51'30.089"W	2.75	
11520.00	89.900	268.400	9175.86	2330.49	-1441.47	-2072.03	646148.91	588980.33	32°37'05.930"N	103°51'31.200"W	2.23	
11616.00	89.900	271.000	9176.03	2424.40	-1441.97	-2168.02	646052.92	588979.83	32°37'05.929"N	103°51'32.322"W	2.71	
11711.00	91.300	271.400	9175.03	2516.79	-1439.98	-2263.00	645957.96	588981.82	32°37'05.953"N	103°51'33.432"W	1.53	
11807.00	92.000	268.400	9172.27	2610.60	-1440.15	-2358.94	645862.02	588981.65	32°37'05.955"N	103°51'34.554"W	3.21	
11902.00	93.100	268.800	9168.04	2703.81	-1442.47	-2453.82	645767.15	588979.33	32°37'05.937"N	103°51'35.663"W	1.23	
11998.00	91.200	271.700	9164.44	2797.46	-1442.05	-2549.74	645671.24	588979.75	32°37'05.945"N	103°51'36.785"W	3.61	
12094.00	89.900	270.200	9163.52	2890.92	-1440.45	-2645.71	645575.27	588981.34	32°37'05.965"N	103°51'37.907"W	2.07	
12189.00	89.900	272.000	9163.68	2983.35	-1438.63	-2740.69	645480.29	588983.17	32°37'05.987"N	103°51'39.017"W	1.89	
12285.00	89.700	267.000	9164.02	3077.31	-1439.47	-2836.66	645384.33	588982.33	32°37'05.983"N	103°51'40.139"W	5.21	
12379.00	90.300	266.600	9164.02	3170.15	-1444.72	-2930.51	645290.49	588977.08	32°37'05.935"N	103°51'41.236"W	0.77	
12473.00	90.400	266.500	9163.44	3263.04	-1450.37	-3024.34	645196.67	588971.43	32°37'05.883"N	103°51'42.334"W	0.15	
12566.00	90.400	267.700	9162.79	3354.81	-1455.08	-3117.22	645103.80	588966.72	32°37'05.841"N	103°51'43.420"W	1.29	
12658.00	90.400	270.500	9162.15	3445.00	-1456.52	-3209.19	645011.82	588965.28	32°37'05.831"N	103°51'44.495"W	3.04	



Actual Wellpath Report

No.2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	Big Eddy	Wellbore	No.2H AWB
Facility	Big Eddy Unit DI-2		

WELLPATH DATA (214 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
12751.00	90.800	271.700	9161.18	3535.48	-1454.74	-3302.17	644918.86	588967.06	32°37'05.852"N	103°51'45.582"W	1.36	
12843.00	90.500	272.300	9160.13	3624.65	-1451.53	-3394.11	644826.92	588970.27	32°37'05.888"N	103°51'46.657"W	0.73	
12936.00	90.200	272.700	9159.57	3714.59	-1447.47	-3487.02	644734.02	588974.33	32°37'05.932"N	103°51'47.743"W	0.54	
13028.00	90.100	272.900	9159.32	3803.44	-1442.98	-3578.91	644642.14	588978.82	32°37'05.981"N	103°51'48.817"W	0.24	
13121.00	91.200	273.900	9158.27	3892.99	-1437.46	-3671.73	644549.32	588984.34	32°37'06.040"N	103°51'49.902"W	1.60	
13214.00	91.400	274.800	9156.16	3982.10	-1430.41	-3764.44	644456.61	588991.39	32°37'06.113"N	103°51'50.985"W	0.99	
13306.00	91.000	275.400	9154.23	4069.90	-1422.23	-3856.06	644365.01	588999.56	32°37'06.198"N	103°51'52.056"W	0.78	
13399.00	91.000	276.300	9152.61	4158.29	-1412.75	-3948.56	644272.51	589009.04	32°37'06.296"N	103°51'53.137"W	0.97	
13491.00	90.300	276.500	9151.57	4245.46	-1402.50	-4039.98	644181.10	589019.29	32°37'06.402"N	103°51'54.205"W	0.79	
13583.00	89.900	276.100	9151.41	4332.68	-1392.40	-4131.42	644089.66	589029.39	32°37'06.505"N	103°51'55.274"W	0.61	
13675.00	89.900	276.100	9151.57	4420.01	-1382.63	-4222.90	643998.19	589039.16	32°37'06.606"N	103°51'56.343"W	0.00	
13768.00	89.200	275.000	9152.30	4508.56	-1373.63	-4315.46	643905.63	589048.16	32°37'06.699"N	103°51'57.424"W	1.40	
13860.00	88.300	273.500	9154.30	4596.75	-1366.82	-4407.18	643813.92	589054.97	32°37'06.771"N	103°51'58.496"W	1.90	
13952.00	89.000	273.200	9156.47	4685.34	-1361.44	-4499.00	643722.11	589060.35	32°37'06.828"N	103°51'59.569"W	0.83	
14044.00	88.400	273.900	9158.56	4773.85	-1355.75	-4590.80	643630.32	589066.04	32°37'06.888"N	103°52'00.642"W	1.00	
14137.00	89.200	272.500	9160.51	4863.47	-1350.56	-4683.63	643537.49	589071.23	32°37'06.944"N	103°52'01.727"W	1.73	
14229.00	90.600	270.600	9160.67	4952.81	-1348.07	-4775.59	643445.54	589073.72	32°37'06.972"N	103°52'02.802"W	2.57	
14321.00	91.000	270.000	9159.38	5042.61	-1347.59	-4867.58	643353.55	589074.20	32°37'06.981"N	103°52'03.878"W	0.78	
14413.00	91.000	268.500	9157.78	5132.75	-1348.79	-4959.55	643261.58	589073.00	32°37'06.973"N	103°52'04.953"W	1.63	
14506.00	91.600	267.000	9155.67	5224.32	-1352.44	-5052.45	643168.69	589069.35	32°37'06.941"N	103°52'06.039"W	1.74	
14598.00	91.600	267.400	9153.10	5315.04	-1356.94	-5144.31	643076.84	589064.86	32°37'06.900"N	103°52'07.114"W	0.43	
14693.00	91.700	267.900	9150.36	5408.59	-1360.83	-5239.19	642981.97	589060.96	32°37'06.866"N	103°52'08.223"W	0.54	
14789.00	91.600	268.800	9147.60	5502.91	-1363.59	-5335.11	642886.05	589058.20	32°37'06.843"N	103°52'09.345"W	0.94	
14884.00	91.600	269.400	9144.95	5596.02	-1365.08	-5430.06	642791.11	589056.71	32°37'06.832"N	103°52'10.455"W	0.63	
14978.00	91.600	270.100	9142.32	5687.93	-1365.49	-5524.02	642697.16	589056.30	32°37'06.832"N	103°52'11.553"W	0.74	
15074.00	91.600	270.900	9139.64	5781.53	-1364.66	-5619.98	642601.20	589057.14	32°37'06.845"N	103°52'12.675"W	0.83	
15169.00	91.500	271.400	9137.07	5873.92	-1362.75	-5714.92	642506.26	589059.04	32°37'06.867"N	103°52'13.785"W	0.54	
15265.00	91.300	272.200	9134.72	5967.02	-1359.74	-5810.85	642410.35	589062.06	32°37'06.901"N	103°52'14.906"W	0.86	
15360.00	90.700	272.600	9133.07	6058.93	-1355.76	-5905.75	642315.45	589066.03	32°37'06.945"N	103°52'16.016"W	0.76	
15455.00	90.700	273.400	9131.91	6150.58	-1350.79	-6000.61	642220.60	589071.00	32°37'06.998"N	103°52'17.124"W	0.84	
15550.00	90.300	273.600	9131.08	6242.01	-1344.99	-6095.43	642125.78	589076.80	32°37'07.060"N	103°52'18.233"W	0.47	
15644.00	90.300	273.700	9130.59	6332.42	-1339.00	-6189.24	642031.98	589082.79	32°37'07.123"N	103°52'19.329"W	0.11	
15721.00	90.600	273.800	9129.98	6406.44	-1333.97	-6266.07	641955.16	589087.82	32°37'07.176"N	103°52'20.227"W	0.41	
15800.00	90.600	273.800	9129.15	6482.36	-1328.73	-6344.89	641876.34	589093.06	32°37'07.231"N	103°52'21.148"W	0.00	Proj to Bit

HOLE & CASING SECTIONS - Ref Wellbore: No.2H AWB Ref Wellpath: No.2H AWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
12.25in Open Hole	29.00	4000.00	3971.00	29.00	3998.50	0.01	-0.01	-0.16	-22.40



Actual Wellpath Report

No.2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	Big Eddy	Wellbore	No.2H AWB
Facility	Big Eddy Unit DI-2		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
BEU DI 2 No. 2H PBHL		9130.00	-1376.19	-6345.17	641876.06	589045.60	32°37'06.762"N	103°52'21.154"W	point

WELLPATH COMPOSITION - Ref Wellbore: No.2H AWB Ref Wellpath: No.2H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8283.00	Generic gyro - northseeking (Standard)	GyroData Gyros <100-8283>	No.2H AWB
8283.00	15721.00	NaviTrak (Standard)	BHI MWD NaviTrak <8330-XXXX>	No.2H AWB
15721.00	15800.00	Blind Drilling (std)	Projection to bit	No.2H AWB