

A Gyrodata Directional Survey

FINAL DEFINITIVE COPY

for

BOPCO, LP

Lease: BIG EDDY UNIT Well: 258H, 8 INCH DRILL COLLARS
Location: LATSHAW #18, EDDY COUNTY, NEW MEXICO

Job Number: MD0314GDM338

Run Date: 30 Mar 2014

Report Generated: 25 Jun 2014 09:09

Surveyor: Michael Robles

Calculation Method: MINIMUM CURVATURE

Survey surface coordinates obtained from: Well Plan/Plot

Survey Latitude: 32.265922 deg. N Longitude: 103.848014 deg. W

Azimuth Correction:

Gyro: -0.26000 deg to Grid North

Depth Reference: Rotary Table

Air Gap (RKB to Ground / RKB to MSL): 30.00

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

Provides signature page

15-402218

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BOPCO, LP

Lease: BIG EDDY UNIT Well: 258H, 8 INCH DRILL COLLARS

Location: LATSHAW #18, EDDY COUNTY, NEW MEXICO

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MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
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0.00	0.00	0.00	0.00	0.00	0.0 0.0	0.00 N 0.00 E
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0 - 875 FT. RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 8" DRILL COLLAR

ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO LATSHAW DRILLING RIG #18 R.K.B. HEIGHT OF 30 FT.

86.65	0.56	355.80	0.65	86.65	0.4 355.8	0.42 N 0.03 W
167.64	0.51	328.05	0.32	167.64	1.1 347.4	1.12 N 0.25 W
260.70	0.47	323.77	0.06	260.69	1.9 338.7	1.78 N 0.69 W
356.53	0.30	296.25	0.25	356.52	2.5 332.4	2.20 N 1.15 W
449.80	0.30	280.06	0.09	449.79	2.9 325.6	2.35 N 1.61 W
543.05	0.39	254.80	0.18	543.04	3.2 317.0	2.31 N 2.16 W
636.04	0.33	281.30	0.19	636.03	3.6 310.0	2.28 N 2.72 W
728.25	0.17	307.40	0.21	728.23	3.9 308.1	2.42 N 3.08 W
822.07	0.12	151.52	0.30	822.05	4.0 307.5	2.41 N 3.14 W
875.76	0.11	138.48	0.06	875.74	3.9 307.0	2.32 N 3.08 W

Final Station Closure: Distance: 3.86 ft Az: 306.97 deg.



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, LP	Slot	No. 258H SHL
Area	Eddy County, NM	Well	No. 258H
Field	Big Eddy	Wellbore	No. 258H AWB
Facility	Big Eddy Unit No.258H & No. 259H		

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 4.0.0
North Reference	Grid	User	Burnranj
Scale	0.999935	Report Generated	5/22/2014 at 10:07:56 AM
Convergence at slot	0.26° East	Database/Source file	WA_MIDLAND/C:\Users\burnranj\AppData\Roaming\Well Explorer\temp\BOPCO, LP No. 258H SHL_Final Surveys.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	649416.23	591788.70	32°37'33.574"N	103°50'52.849"W
Facility Reference Pt			649416.23	591788.70	32°37'33.574"N	103°50'52.849"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. 258H SHL (KB) to Facility Vertical Datum	30.00ft
Horizontal Reference Pt	Slot	Rig on No. 258H SHL (KB) to Mean Sea Level	3502.00ft
Vertical Reference Pt	Rig on No. 258H SHL (KB)	Rig on No. 258H SHL (KB) to Mud Line at Slot (No. 258H SHL)	30.00ft
MD Reference Pt	Rig on No. 258H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	284.33°



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Field	Big Eddy	Wellbore	No. 258H AWB
Facility	Big Eddy Unit No.258H & No. 259H		

WELLPATH DATA (194 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]	DLS [°/100ft]	Comments
0.00†	0.000	280.030	0.00	0.00	0.00	0.00	649416.23	591788.70	0.00	
30.00	0.000	280.030	30.00	0.00	0.00	0.00	649416.23	591788.70	0.00	
62.00	0.710	280.030	62.00	0.20	0.03	-0.20	649416.03	591788.73	2.22	
107.00	0.880	304.450	106.99	0.80	0.28	-0.75	649415.48	591788.98	0.83	
197.00	0.970	5.590	196.99	1.56	1.43	-1.25	649414.98	591790.13	1.05	
288.00	0.570	296.060	287.98	2.13	2.39	-1.58	649414.65	591791.09	1.03	
378.00	0.590	278.110	377.97	3.02	2.66	-2.44	649413.79	591791.36	0.20	
468.00	0.230	80.370	467.97	3.32	2.75	-2.72	649413.51	591791.45	0.90	
559.00	0.420	326.230	558.97	3.40	3.06	-2.73	649413.50	591791.76	0.61	
649.00	0.200	30.250	648.97	3.60	3.47	-2.83	649413.40	591792.17	0.42	
739.00	0.380	70.300	738.97	3.31	3.70	-2.47	649413.76	591792.40	0.29	
830.00	0.460	79.250	829.97	2.73	3.87	-1.83	649414.40	591792.57	0.11	
920.00	0.530	91.600	919.96	2.00	3.93	-1.06	649415.17	591792.63	0.14	
1010.00	0.600	351.830	1009.96	1.77	4.39	-0.71	649415.52	591793.09	0.96	
1100.00	2.590	327.020	1099.92	3.45	6.56	-1.88	649414.35	591795.26	2.29	
1191.00	3.820	326.770	1190.78	7.20	10.82	-4.66	649411.57	591799.52	1.35	
1281.00	4.570	333.070	1280.54	11.77	16.52	-7.93	649408.30	591805.22	0.98	
1371.00	5.090	334.120	1370.22	16.71	23.31	-11.30	649404.93	591812.01	0.59	
1462.00	5.280	334.000	1460.84	22.03	30.71	-14.90	649401.34	591819.40	0.21	
1552.00	4.520	333.150	1550.52	27.05	37.59	-18.31	649397.92	591826.29	0.85	
1642.00	4.200	332.160	1640.25	31.59	43.67	-21.45	649394.78	591832.37	0.37	
1733.00	3.780	331.870	1731.03	35.85	49.26	-24.42	649391.81	591837.96	0.46	
1823.00	2.900	326.830	1820.88	39.54	53.79	-27.07	649389.16	591842.48	1.03	
1913.00	2.340	323.340	1910.79	42.64	57.16	-29.41	649386.82	591845.86	0.65	
2003.00	2.100	323.620	2000.72	45.35	59.97	-31.49	649384.75	591848.66	0.27	
2094.00	1.920	327.520	2091.66	47.75	62.59	-33.29	649382.94	591851.29	0.25	
2184.00	1.620	335.420	2181.62	49.65	65.02	-34.63	649381.60	591853.72	0.43	
2274.00	2.350	333.580	2271.56	51.65	67.83	-35.98	649380.25	591856.53	0.81	
2370.00	2.270	341.460	2367.49	53.96	71.40	-37.46	649378.77	591860.09	0.34	
2420.00	1.640	345.120	2417.46	54.85	73.03	-37.96	649378.27	591861.72	1.28	
2470.00	1.110	347.540	2467.44	55.42	74.19	-38.25	649377.98	591862.89	1.07	
2520.00	0.750	347.340	2517.44	55.79	74.98	-38.43	649377.81	591863.68	0.72	
2570.00	0.770	2.430	2567.43	56.00	75.64	-38.48	649377.75	591864.33	0.40	
2620.00	0.820	10.260	2617.43	56.10	76.33	-38.41	649377.83	591865.02	0.24	
2670.00	1.050	10.350	2667.42	56.16	77.13	-38.26	649377.97	591865.82	0.46	
2720.00	1.050	7.320	2717.41	56.24	78.04	-38.12	649378.11	591866.73	0.11	
2770.00	1.240	358.770	2767.40	56.44	79.03	-38.07	649378.16	591867.73	0.51	
2820.00	1.510	356.450	2817.39	56.79	80.23	-38.12	649378.11	591868.92	0.55	
2870.00	1.480	9.540	2867.37	57.05	81.52	-38.06	649378.17	591870.22	0.68	
2920.00	1.460	3.390	2917.35	57.22	82.80	-37.91	649378.32	591871.49	0.32	
2970.00	1.790	357.930	2967.33	57.56	84.21	-37.90	649378.33	591872.91	0.73	
3020.00	1.850	0.730	3017.31	57.97	85.80	-37.92	649378.31	591874.49	0.21	
3070.00	1.570	12.240	3067.29	58.19	87.28	-37.77	649378.47	591875.97	0.88	
3120.00	1.440	10.420	3117.27	58.26	88.56	-37.51	649378.73	591877.26	0.28	
3170.00	1.520	5.740	3167.25	58.40	89.84	-37.33	649378.91	591878.53	0.29	



Actual Wellpath Report

No. 258H AWP - Final

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Operator	BOPCO, LP	Slot	No. 258H SHL
Area	Eddy County, NM	Well	No. 258H
Field	Big Eddy	Wellbore	No. 258H AWP
Facility	Big Eddy Unit No.258H & No. 259H		

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]	DLS [°/100ft]	Comments
3220.00	1.680	7.850	3217.23	58.58	91.23	-37.16	649379.07	591879.92	0.34	
3270.00	1.670	5.420	3267.21	58.77	92.68	-36.99	649379.24	591881.37	0.14	
3320.00	1.660	1.820	3317.19	59.04	94.13	-36.90	649379.33	591882.82	0.21	
3370.00	1.770	19.760	3367.17	59.13	95.58	-36.62	649379.62	591884.27	1.09	
3420.00	2.290	37.730	3417.14	58.66	97.09	-35.74	649380.49	591885.79	1.63	
3470.00	2.580	34.350	3467.09	57.88	98.81	-34.50	649381.73	591887.51	0.65	
3520.00	2.630	35.870	3517.04	57.07	100.67	-33.19	649383.04	591889.37	0.17	
3570.00	2.650	34.520	3566.99	56.25	102.55	-31.86	649384.37	591891.25	0.13	
3586.00	2.800	42.400	3582.97	55.94	103.15	-31.39	649384.84	591891.84	2.52	
3681.00	1.500	12.600	3677.90	54.88	106.08	-29.55	649386.68	591894.77	1.76	
3776.00	1.400	356.900	3772.87	55.27	108.45	-29.35	649386.89	591897.14	0.43	
3872.00	0.700	329.500	3868.86	56.03	110.12	-29.71	649386.53	591898.82	0.88	
3967.00	0.700	321.400	3963.85	56.90	111.08	-30.36	649385.87	591899.77	0.10	
4063.00	0.700	310.300	4059.84	57.90	111.91	-31.18	649385.06	591900.61	0.14	
4158.00	0.600	328.100	4154.84	58.78	112.71	-31.88	649384.35	591901.40	0.24	
4345.00	0.800	335.100	4341.82	60.31	114.73	-32.95	649383.28	591903.42	0.12	
4440.00	0.500	318.000	4436.82	61.08	115.64	-33.51	649382.73	591904.33	0.37	
4536.00	0.800	323.300	4532.81	61.95	116.49	-34.19	649382.05	591905.18	0.32	
4632.00	0.700	330.900	4628.80	62.87	117.54	-34.87	649381.36	591906.23	0.15	
4727.00	0.800	330.800	4723.79	63.73	118.62	-35.48	649380.75	591907.31	0.11	
4823.00	0.500	329.800	4819.79	64.48	119.57	-36.02	649380.22	591908.26	0.31	
4918.00	0.800	318.100	4914.78	65.32	120.42	-36.67	649379.57	591909.11	0.34	
5013.00	0.700	340.900	5009.77	66.20	121.46	-37.30	649378.93	591910.15	0.33	
5109.00	0.800	310.800	5105.77	67.12	122.45	-38.00	649378.23	591911.15	0.42	
5204.00	0.800	311.800	5200.76	68.30	123.33	-39.00	649377.24	591912.02	0.01	
5300.00	0.200	307.900	5296.75	69.05	123.88	-39.63	649376.61	591912.57	0.63	
5396.00	0.300	351.800	5392.75	69.30	124.23	-39.80	649376.44	591912.92	0.22	
5491.00	0.700	323.600	5487.75	69.84	124.94	-40.17	649376.06	591913.64	0.48	
5586.00	0.600	327.600	5582.74	70.65	125.83	-40.79	649375.45	591914.52	0.12	
5778.00	0.700	352.200	5774.73	71.83	127.84	-41.48	649374.75	591916.53	0.15	
5968.00	0.700	347.100	5964.72	72.80	130.12	-41.90	649374.33	591918.81	0.03	
6159.00	1.000	335.100	6155.70	74.38	132.77	-42.86	649373.37	591921.46	0.18	
6350.00	0.800	317.500	6346.67	76.55	135.27	-44.46	649371.77	591923.96	0.18	
6541.00	0.900	321.500	6537.65	78.87	137.42	-46.30	649369.93	591926.12	0.06	
6732.00	0.900	322.100	6728.63	81.25	139.78	-48.15	649368.08	591928.47	0.00	
6924.00	1.000	336.900	6920.60	83.46	142.51	-49.74	649366.49	591931.20	0.14	
7115.00	0.600	328.200	7111.58	85.19	144.90	-50.92	649365.31	591933.59	0.22	
7306.00	0.700	351.000	7302.57	86.37	146.90	-51.63	649364.60	591935.59	0.14	
7496.00	0.700	0.500	7492.56	87.11	149.21	-51.80	649364.43	591937.90	0.06	
7687.00	0.100	263.600	7683.55	87.55	150.35	-51.96	649364.28	591939.04	0.38	
7878.00	0.100	309.400	7874.55	87.85	150.44	-52.25	649363.98	591939.13	0.04	
8068.00	0.200	159.400	8064.55	87.81	150.24	-52.26	649363.97	591938.93	0.15	
8259.00	0.400	157.100	8255.55	87.22	149.31	-51.88	649364.35	591938.00	0.10	
8426.00	0.200	60.500	8422.55	86.66	148.92	-51.40	649364.83	591937.61	0.28	
8475.00	0.400	293.000	8471.55	86.76	149.02	-51.49	649364.75	591937.71	1.11	



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Field	Big Eddy	Wellbore	No. 258H AWP
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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]	DLS [°/100ft]	Comments
8507.00	3.200	317.700	8503.53	87.62	149.73	-52.19	649364.04	591938.42	8.88	
8538.00	6.800	323.700	8534.40	89.76	151.85	-53.86	649362.37	591940.54	11.72	
8570.00	10.900	324.700	8566.02	93.53	155.85	-56.73	649359.50	591944.54	12.82	
8602.00	15.400	326.200	8597.17	99.00	161.85	-60.85	649355.39	591950.54	14.10	
8634.00	19.000	325.800	8627.73	106.07	169.69	-66.14	649350.10	591958.38	11.26	
8665.00	22.300	327.800	8656.74	114.12	178.84	-72.11	649344.12	591967.53	10.88	
8697.00	25.100	328.500	8686.04	123.40	189.77	-78.89	649337.34	591978.46	8.79	
8729.00	27.700	329.500	8714.70	133.51	201.97	-86.22	649330.02	591990.66	8.24	
8761.00	30.100	331.100	8742.71	144.25	215.40	-93.87	649322.37	592004.09	7.88	
8792.00	33.200	332.500	8769.10	155.24	229.74	-101.55	649314.69	592018.43	10.28	
8824.00	36.500	333.300	8795.35	167.33	246.02	-109.87	649306.36	592034.70	10.41	
8856.00	39.100	334.300	8820.64	180.07	263.62	-118.53	649297.71	592052.30	8.35	
8888.00	40.900	334.000	8845.15	193.34	282.13	-127.50	649288.74	592070.81	5.66	
8919.00	42.700	334.200	8868.26	206.69	300.71	-136.52	649279.72	592089.39	5.82	
8951.00	44.100	333.800	8891.51	220.92	320.47	-146.16	649270.08	592109.15	4.46	
8983.00	45.600	333.900	8914.19	235.56	340.73	-156.10	649260.14	592129.41	4.69	
9015.00	48.300	334.700	8936.04	250.60	361.80	-166.24	649250.00	592150.48	8.63	
9046.00	51.200	335.000	8956.06	265.64	383.22	-176.29	649239.95	592171.89	9.38	
9078.00	54.000	335.900	8975.50	281.59	406.34	-186.85	649229.39	592195.01	9.03	
9110.00	57.400	337.300	8993.53	297.76	430.60	-197.34	649218.90	592219.27	11.22	
9142.00	59.600	337.600	9010.25	314.13	455.80	-207.80	649208.44	592244.47	6.92	
9173.00	61.600	337.800	9025.47	330.24	480.78	-218.05	649198.19	592269.45	6.48	
9205.00	64.000	337.000	9040.09	347.34	507.06	-228.99	649187.26	592295.72	7.82	
9237.00	66.700	336.200	9053.44	365.14	533.74	-240.54	649175.70	592322.41	8.74	
9268.00	69.400	335.500	9065.02	383.03	559.98	-252.31	649163.94	592348.64	8.96	
9300.00	71.600	335.200	9075.71	402.00	587.39	-264.89	649151.36	592376.05	6.93	
9332.00	73.900	335.100	9085.19	421.30	615.12	-277.73	649138.52	592403.78	7.19	
9364.00	76.900	335.100	9093.26	440.88	643.20	-290.76	649125.48	592431.86	9.38	
9395.00	79.300	334.900	9099.65	460.11	670.69	-303.58	649112.67	592459.35	7.77	
9427.00	81.200	334.600	9105.07	480.20	699.22	-317.04	649099.21	592487.87	6.01	
9459.00	81.600	334.100	9109.86	500.53	727.74	-330.73	649085.52	592516.39	1.99	
9491.00	81.800	333.700	9114.47	521.06	756.18	-344.66	649071.59	592544.82	1.39	
9523.00	82.200	333.700	9118.93	541.69	784.58	-358.70	649057.55	592573.23	1.25	
9555.00	82.100	333.300	9123.30	562.42	812.95	-372.85	649043.41	592601.60	1.28	
9586.00	82.200	332.800	9127.53	582.68	840.33	-386.77	649029.49	592628.97	1.63	
9618.00	82.700	332.800	9131.74	603.71	868.54	-401.27	649014.99	592657.18	1.56	
9650.00	86.500	332.800	9134.75	624.83	896.87	-415.83	649000.43	592685.51	11.87	
9682.00	90.600	331.200	9135.56	646.36	925.11	-430.84	648985.42	592713.75	13.75	
9714.00	93.000	330.000	9134.55	668.47	952.97	-446.54	648969.72	592741.61	8.38	
9746.00	92.900	327.300	9132.91	691.33	980.26	-463.17	648953.10	592768.90	8.43	
9777.00	92.600	324.300	9131.42	714.53	1005.87	-480.57	648935.69	592794.50	9.71	
9809.00	92.200	321.100	9130.08	739.59	1031.30	-499.94	648916.32	592819.93	10.07	
9841.00	91.300	318.500	9129.10	765.63	1055.73	-520.58	648895.68	592844.36	8.59	
9873.00	90.600	315.200	9128.57	792.61	1079.07	-542.46	648873.80	592867.69	10.54	
9904.00	89.800	311.900	9128.46	819.66	1100.42	-564.93	648851.34	592889.05	10.95	



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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, LP	Slot	No. 258H SHL
Area	Eddy County, NM	Well	No. 258H
Field	Big Eddy	Wellbore	No. 258H AWB
Facility	Big Eddy Unit No.258H & No. 259H		

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]	DLS [°/100ft]	Comments
9936.00	89.500	308.700	9128.66	848.42	1121.12	-589.33	648826.94	592909.74	10.04	
9968.00	89.400	305.500	9128.96	877.92	1140.41	-614.85	648801.42	592929.04	10.00	
10000.00	90.400	302.800	9129.02	908.02	1158.38	-641.33	648774.95	592947.00	9.00	
10032.00	90.500	300.100	9128.77	938.60	1175.07	-668.62	648747.65	592963.69	8.44	
10064.00	90.500	297.300	9128.49	969.59	1190.44	-696.69	648719.59	592979.05	8.75	
10095.00	89.600	293.900	9128.46	999.99	1203.83	-724.64	648691.64	592992.45	11.35	
10127.00	88.400	289.800	9129.02	1031.70	1215.73	-754.33	648661.95	593004.35	13.35	
10159.00	88.000	285.800	9130.03	1063.62	1225.51	-784.78	648631.51	593014.13	12.56	
10191.00	87.900	284.400	9131.17	1095.60	1233.84	-815.65	648600.64	593022.46	4.38	
10223.00	88.300	284.800	9132.23	1127.58	1241.90	-846.60	648569.69	593030.52	1.77	
10255.00	88.700	282.700	9133.07	1159.57	1249.50	-877.67	648538.62	593038.12	6.68	
10286.00	89.100	280.400	9133.66	1190.52	1255.71	-908.03	648508.26	593044.32	7.53	
10318.00	88.800	277.500	9134.25	1222.37	1260.69	-939.64	648476.66	593049.30	9.11	
10350.00	88.200	274.900	9135.09	1254.04	1264.14	-971.44	648444.86	593052.76	8.34	
10382.00	87.400	272.200	9136.32	1285.45	1266.12	-1003.35	648412.95	593054.74	8.79	
10414.00	87.600	269.900	9137.71	1316.56	1266.71	-1035.31	648380.99	593055.32	7.21	
10446.00	88.100	269.100	9138.91	1347.47	1266.43	-1067.28	648349.02	593055.04	2.95	
10478.00	89.300	268.700	9139.64	1378.31	1265.81	-1099.27	648317.03	593054.43	3.95	
10573.00	92.100	269.700	9138.48	1470.00	1264.49	-1194.24	648222.07	593053.10	3.13	
10669.00	92.200	269.100	9134.88	1562.70	1263.48	-1290.17	648126.15	593052.10	0.63	
10764.00	91.900	270.200	9131.48	1654.54	1262.90	-1385.11	648031.22	593051.52	1.20	
10860.00	92.600	270.000	9127.71	1747.52	1263.07	-1481.03	647935.30	593051.68	0.76	
10955.00	90.700	270.900	9124.98	1839.70	1263.82	-1575.98	647840.35	593052.43	2.21	
11051.00	89.800	271.100	9124.56	1933.12	1265.49	-1671.97	647744.38	593054.11	0.96	
11146.00	90.700	270.700	9124.14	2025.52	1266.98	-1766.95	647649.40	593055.60	1.04	
11242.00	91.900	269.900	9121.96	2118.63	1267.49	-1862.92	647553.43	593056.10	1.50	
11337.00	90.800	269.300	9119.73	2210.48	1266.82	-1957.89	647458.47	593055.44	1.32	
11433.00	91.100	268.600	9118.13	2303.03	1265.06	-2053.86	647362.50	593053.68	0.79	
11528.00	91.200	269.700	9116.23	2394.70	1263.66	-2148.83	647267.54	593052.27	1.16	
11624.00	91.100	271.200	9114.30	2487.87	1264.41	-2244.81	647171.57	593053.02	1.57	
11719.00	90.400	271.900	9113.06	2580.51	1266.98	-2339.76	647076.62	593055.59	1.04	
11815.00	91.700	270.700	9111.30	2674.02	1269.16	-2435.72	646980.68	593057.77	1.84	
11910.00	91.700	270.200	9108.48	2766.21	1269.90	-2530.67	646885.73	593058.52	0.53	
12006.00	90.500	270.200	9106.64	2859.29	1270.24	-2626.65	646789.75	593058.85	1.25	
12102.00	89.000	268.500	9107.06	2952.02	1269.15	-2722.64	646693.77	593057.76	2.36	
12197.00	89.900	268.200	9107.97	3043.34	1266.41	-2817.60	646598.82	593055.03	1.00	
12292.00	91.500	267.900	9106.81	3134.53	1263.18	-2912.53	646503.90	593051.80	1.71	
12388.00	91.600	268.800	9104.21	3226.78	1260.42	-3008.45	646407.98	593049.03	0.94	
12483.00	91.300	270.200	9101.81	3318.59	1259.59	-3103.42	646313.02	593048.20	1.51	
12579.00	90.300	272.300	9100.47	3412.08	1261.68	-3199.38	646217.07	593050.30	2.42	
12674.00	89.300	273.300	9100.80	3505.17	1266.32	-3294.26	646122.19	593054.94	1.49	
12769.00	89.600	274.200	9101.71	3598.55	1272.54	-3389.05	646027.40	593061.15	1.00	
12865.00	92.100	273.700	9100.29	3692.96	1279.15	-3484.81	645931.66	593067.76	2.66	
12960.00	91.900	271.800	9096.97	3785.96	1283.70	-3579.64	645836.84	593072.32	2.01	
13056.00	91.000	271.300	9094.54	3879.56	1286.30	-3675.57	645740.91	593074.91	1.07	



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, LP	Slot	No. 258H SHL
Area	Eddy County, NM	Well	No. 258H
Field	Big Eddy	Wellbore	No. 258H AWB
Facility	Big Eddy Unit No.258H & No. 259H		

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]	DLS [°/100ft]	Comments
13162.00	91.100	269.700	9092.60	3982.46	1287.22	-3781.54	645634.94	593075.84	1.51	
13258.00	91.900	268.900	9090.08	4075.15	1286.05	-3877.50	645538.99	593074.66	1.18	
13353.00	92.700	267.800	9086.27	4166.40	1283.32	-3972.38	645444.11	593071.93	1.43	
13448.00	91.800	267.600	9082.54	4257.36	1279.51	-4067.23	645349.27	593068.12	0.97	
13544.00	90.700	267.500	9080.45	4349.25	1275.41	-4163.12	645253.39	593064.02	1.15	
13639.00	89.200	267.600	9080.53	4440.20	1271.35	-4258.03	645158.49	593059.96	1.58	
13735.00	89.600	267.300	9081.54	4532.06	1267.07	-4353.93	645062.59	593055.69	0.52	
13830.00	90.900	266.000	9081.12	4622.57	1261.52	-4448.76	644967.77	593050.14	1.94	
13926.00	90.700	265.600	9079.78	4713.59	1254.49	-4544.50	644872.04	593043.11	0.47	
14022.00	90.200	265.200	9079.03	4804.40	1246.79	-4640.18	644776.36	593035.41	0.67	
14117.00	89.800	266.400	9079.03	4894.47	1239.84	-4734.93	644681.62	593028.45	1.33	
14212.00	89.400	267.100	9079.69	4985.03	1234.45	-4829.77	644586.78	593023.07	0.85	
14239.00	89.100	267.300	9080.04	5010.83	1233.13	-4856.74	644559.82	593021.75	1.34	
14310.00	89.100	267.300	9081.16	5078.71	1229.79	-4927.65	644488.91	593018.41	0.00	

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No. 258H PBHL/TD		9081.00	1250.95	-4898.13	644518.43	593039.56	32°37'46.169"N	103°51'50.053"W	point
No. 258H PBHL/TD (Rev-1)		9081.00	1551.40	-4930.06	644486.50	593340.00	32°37'49.143"N	103°51'50.411"W	point

WELLPATH COMPOSITION - Ref Wellbore: No. 258H AWB - Ref Wellpath: No. 258H AWP - Final

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	3570.00	Generic gyro - northseeking (Standard)	MS Gyros <62'-3570>	No. 258H AWB
3570.00	14239.00	NaviTrak (Standard)	BHI Navitrak MWD <3586'-XXXX>	No. 258H AWB
14239.00	14310.00	Blind Drilling (std)	Projection to bit	No. 258H AWB