



B.P.

**La Plata County, CO NAD83
East Sauls Creek Pad
East Sauls Creek 26 1-2**

Lower Lateral 1 (Drainage)

Design: Lower Lateral 1 (Drainage)

Standard Survey Report

27 November, 2017





Company Name: B.P.
Project: La Plata County, CO NAD83
Site: East Sauls Creek Pad
Well: East Sauls Creek 26 1-2
Wellbore: Lower Lateral 1 (Drainage)

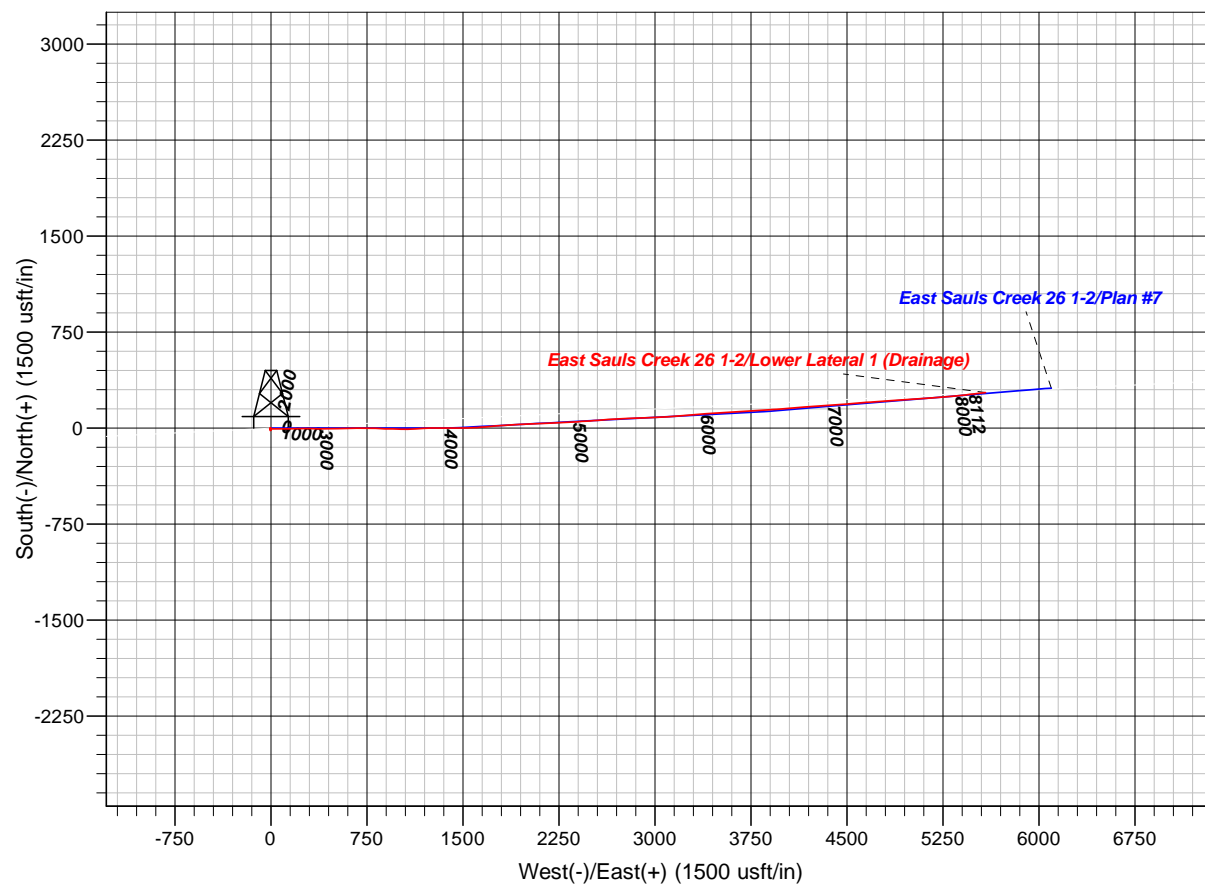
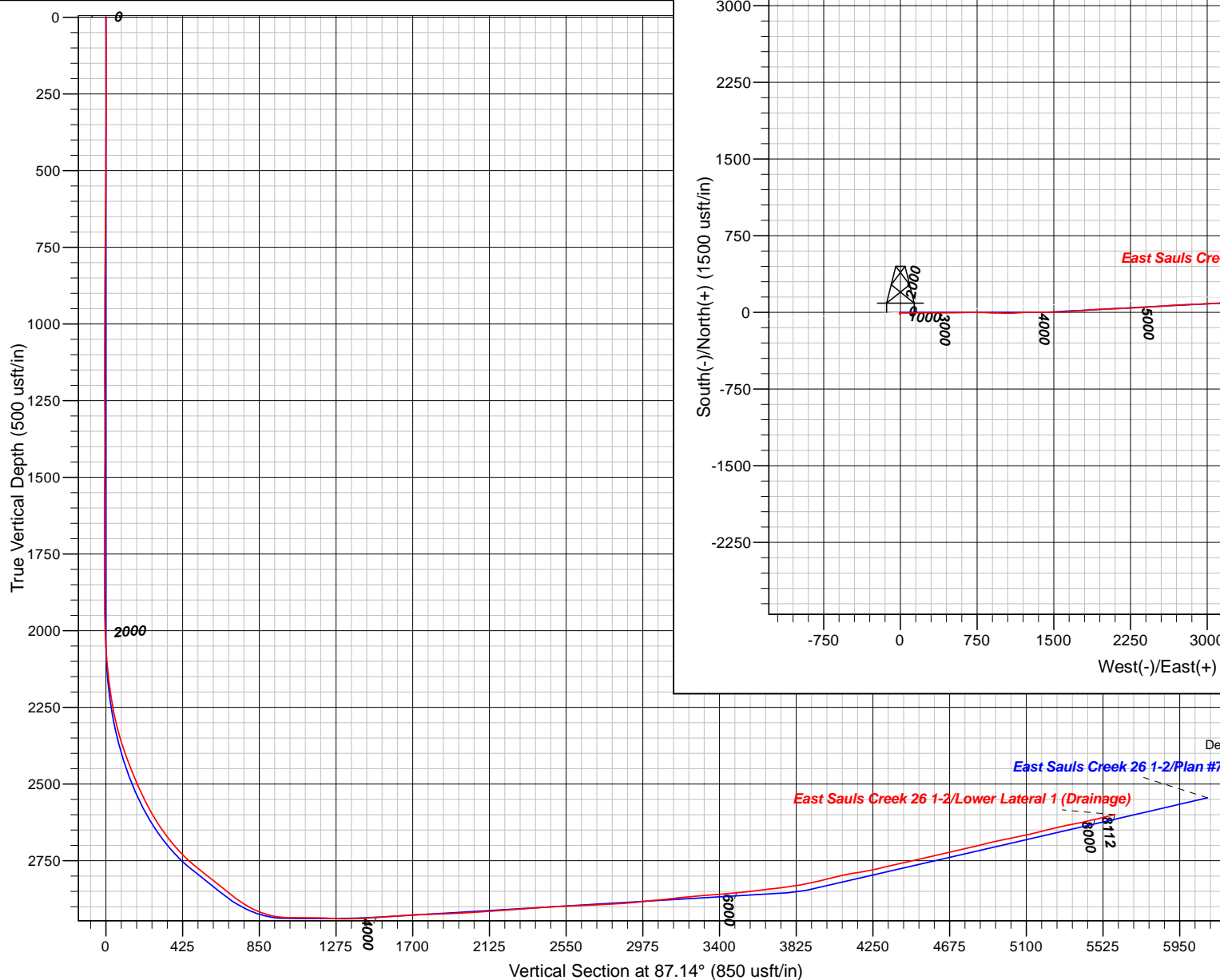


Azimuths to Grid North
True North: 1.23°
Magnetic North: 10.63°

Magnetic Field
Strength: 50334.7nT
Dip Angle: 63.80°
Date: 9/30/2016
Model: HDGM

WELL DETAILS: East Sauls Creek 26 1-2

GL 7340' & RKB 11' @ 7351.00usft (Aztec 507) 7340.00					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1227806.45	2414712.24	37.2749933	-107.5116244



Design: Lower Lateral 1 (Drainage) (East Sauls Creek 26 1-2/Lower Lateral 1 (Drainage))

Created By: Janie Collins Date: 15:26, November 27 2017

PROJECT DETAILS: La Plata County, CO NAD83

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Southern Zone

System Datum: Mean Sea Level
Local North: Grid



Survey Report



Company:	B.P.	Local Co-ordinate Reference:	Well East Sauls Creek 26 1-2
Project:	La Plata County, CO NAD83	TVD Reference:	GL 7340' & RKB 11' @ 7351.00usft (Aztec 507)
Site:	East Sauls Creek Pad	MD Reference:	GL 7340' & RKB 11' @ 7351.00usft (Aztec 507)
Well:	East Sauls Creek 26 1-2	North Reference:	Grid
Wellbore:	Lower Lateral 1 (Drainage)	Survey Calculation Method:	Minimum Curvature
Design:	Lower Lateral 1 (Drainage)	Database:	Grand Junction District

Project	La Plata County, CO NAD83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Southern Zone		

Site		East Sauls Creek Pad			
Site Position:		Northing:	1,227,806.45 usft	Latitude:	37.2749933
From:	Map	Easting:	2,414,712.24 usft	Longitude:	-107.5116245
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	-1.23 °

Well		East Sauls Creek 26 1-2				
Well Position	+N/-S	0.00 usft	Northing:	1,227,806.45 usft	Latitude:	37.2749933
	+E/-W	0.00 usft	Easting:	2,414,712.24 usft	Longitude:	-107.5116245
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	7,340.00 usft

Wellbore	Lower Lateral 1 (Drainage)				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	9/30/2016	9.40	63.80	50,335

Design	Lower Lateral 1 (Drainage)				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	87.14	

Survey Program	Date	11/27/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
88.19	601.16	Survey #2 - Surface Gyro Survey (Lower L	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
661.00	2,752.00	Survey #4 - Intermediate & Curve MWD S	MWD+HDGM	OWSG MWD + HDGM	
2,822.00	8,112.00	Survey #5 - Curve & Lateral MWD Surveys	MWD+HDGM	OWSG MWD + HDGM	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
88.19	0.59	146.78	88.19	-0.38	0.25	0.23	0.67	0.67	0.00	
96.28	0.79	155.93	96.28	-0.47	0.29	0.27	2.81	2.47	113.10	
125.09	0.73	160.63	125.09	-0.82	0.44	0.39	0.30	-0.21	16.31	
146.58	0.80	166.52	146.57	-1.10	0.52	0.46	0.49	0.33	27.41	
171.91	0.87	172.71	171.90	-1.46	0.58	0.51	0.45	0.28	24.44	
196.75	0.97	179.83	196.74	-1.86	0.61	0.51	0.61	0.40	28.66	
224.31	0.99	179.22	224.29	-2.33	0.61	0.49	0.08	0.07	-2.21	
248.36	0.92	177.95	248.34	-2.73	0.62	0.48	0.30	-0.29	-5.28	



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Site:	East Sauls Creek Pad	MD Reference:	GL 7340' & RKB 11' @ 7351.00usft (Aztec 507)
Well:	East Sauls Creek 26 1-2	North Reference:	Grid
Wellbore:	Lower Lateral 1 (Drainage)	Survey Calculation Method:	Minimum Curvature
Design:	Lower Lateral 1 (Drainage)	Database:	Grand Junction District

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
272.01	1.00	182.12	271.99	-3.12	0.62	0.46	0.45	0.34	17.63	
299.32	1.08	183.61	299.29	-3.62	0.59	0.41	0.31	0.29	5.46	
322.54	1.10	179.33	322.51	-4.06	0.58	0.38	0.36	0.09	-18.43	
349.62	1.17	184.74	349.58	-4.59	0.56	0.33	0.47	0.26	19.98	
373.43	1.24	185.09	373.39	-5.09	0.52	0.27	0.30	0.29	1.47	
397.14	1.35	186.93	397.09	-5.63	0.46	0.18	0.50	0.46	7.76	
424.42	1.49	191.27	424.36	-6.29	0.36	0.04	0.65	0.51	15.91	
447.66	1.54	191.54	447.60	-6.90	0.23	-0.11	0.22	0.22	1.16	
474.75	1.62	192.64	474.67	-7.63	0.08	-0.30	0.32	0.30	4.06	
498.68	1.73	193.21	498.59	-8.31	-0.08	-0.49	0.46	0.46	2.38	
522.45	1.90	191.87	522.35	-9.04	-0.24	-0.69	0.74	0.72	-5.64	
549.86	2.05	193.99	549.75	-9.96	-0.45	-0.95	0.61	0.55	7.73	
573.31	2.06	196.93	573.18	-10.77	-0.68	-1.21	0.45	0.04	12.54	
599.67	1.69	212.77	599.53	-11.55	-1.03	-1.60	2.40	-1.40	60.09	
601.16	2.18	201.63	601.02	-11.60	-1.05	-1.63	41.31	32.89	-747.65	
661.00	2.50	203.22	660.81	-13.86	-1.98	-2.67	0.55	0.53	2.66	
693.00	2.14	205.14	692.78	-15.04	-2.51	-3.26	1.15	-1.13	6.00	
724.00	1.77	203.63	723.76	-16.00	-2.95	-3.74	1.20	-1.19	-4.87	
755.00	1.56	212.65	754.75	-16.79	-3.37	-4.20	1.08	-0.68	29.10	
786.00	1.37	229.82	785.74	-17.39	-3.88	-4.74	1.54	-0.61	55.39	
817.00	0.98	231.03	816.73	-17.79	-4.37	-5.25	1.26	-1.26	3.90	
848.00	0.81	263.54	847.73	-17.99	-4.79	-5.68	1.70	-0.55	104.87	
879.00	0.86	268.27	878.73	-18.02	-5.24	-6.13	0.27	0.16	15.26	
911.00	0.55	303.15	910.72	-17.94	-5.61	-6.50	1.61	-0.97	109.00	
973.00	0.89	357.89	972.72	-17.30	-5.88	-6.73	1.17	0.55	88.29	
1,004.00	1.05	2.15	1,003.71	-16.77	-5.88	-6.71	0.57	0.52	13.74	
1,035.00	1.39	352.18	1,034.71	-16.12	-5.92	-6.71	1.29	1.10	-32.16	
1,066.00	1.56	351.85	1,065.70	-15.33	-6.03	-6.78	0.55	0.55	-1.06	
1,098.00	1.75	353.85	1,097.68	-14.41	-6.14	-6.85	0.62	0.59	6.25	
1,129.00	1.76	1.30	1,128.67	-13.46	-6.18	-6.85	0.74	0.03	24.03	
1,222.00	2.11	2.23	1,221.62	-10.32	-6.08	-6.59	0.38	0.38	1.00	
1,316.00	2.51	359.89	1,315.54	-6.54	-6.02	-6.34	0.44	0.43	-2.49	
1,377.00	2.35	355.30	1,376.48	-3.95	-6.12	-6.31	0.41	-0.26	-7.52	
1,408.00	1.85	345.01	1,407.46	-2.84	-6.31	-6.44	2.01	-1.61	-33.19	
1,439.00	2.04	350.65	1,438.45	-1.81	-6.53	-6.61	0.87	0.61	18.19	
1,470.00	1.61	345.30	1,469.43	-0.84	-6.73	-6.76	1.49	-1.39	-17.26	
1,502.00	1.74	332.12	1,501.42	0.02	-7.07	-7.06	1.27	0.41	-41.19	
1,533.00	1.31	323.05	1,532.41	0.72	-7.50	-7.45	1.59	-1.39	-29.26	
1,564.00	1.04	311.17	1,563.40	1.19	-7.92	-7.86	1.17	-0.87	-38.32	
1,595.00	0.40	289.22	1,594.40	1.41	-8.24	-8.16	2.21	-2.06	-70.81	
1,626.00	0.26	241.30	1,625.40	1.41	-8.40	-8.32	0.96	-0.45	-154.58	
1,657.00	0.54	219.76	1,656.40	1.26	-8.56	-8.48	1.01	0.90	-69.48	
1,689.00	0.53	160.97	1,688.39	1.01	-8.61	-8.54	1.64	-0.03	-183.72	



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Wellbore:	Lower Lateral 1 (Drainage)	Survey Calculation Method:	Minimum Curvature
Design:	Lower Lateral 1 (Drainage)	Database:	Grand Junction District

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,719.00	0.62	156.63	1,718.39	0.73	-8.50	-8.45	0.33	0.30	-14.47
1,749.00	0.85	160.85	1,748.39	0.37	-8.36	-8.33	0.79	0.77	14.07
1,780.00	1.15	175.92	1,779.39	-0.16	-8.26	-8.26	1.28	0.97	48.61
1,811.00	1.28	168.76	1,810.38	-0.81	-8.17	-8.20	0.64	0.42	-23.10
1,843.00	1.38	165.97	1,842.37	-1.53	-8.01	-8.08	0.37	0.31	-8.72
1,874.00	1.16	170.60	1,873.36	-2.20	-7.87	-7.97	0.78	-0.71	14.94
1,905.00	1.26	153.89	1,904.36	-2.82	-7.67	-7.80	1.18	0.32	-53.90
1,937.00	1.62	131.06	1,936.35	-3.43	-7.17	-7.33	2.09	1.13	-71.34
1,968.00	2.40	110.42	1,967.33	-3.95	-6.23	-6.42	3.39	2.52	-66.58
2,000.00	3.60	100.01	1,999.28	-4.36	-4.61	-4.82	4.10	3.75	-32.53
2,031.00	4.96	95.55	2,030.20	-4.65	-2.32	-2.55	4.51	4.39	-14.39
2,063.00	6.35	92.23	2,062.04	-4.86	0.82	0.58	4.46	4.34	-10.38
2,095.00	8.05	90.34	2,093.79	-4.94	4.83	4.58	5.36	5.31	-5.91
2,126.00	9.23	87.89	2,124.43	-4.86	9.49	9.23	3.99	3.81	-7.90
2,158.00	10.71	87.46	2,155.95	-4.63	15.02	14.77	4.63	4.63	-1.34
2,189.00	12.79	88.57	2,186.30	-4.42	21.33	21.09	6.75	6.71	3.58
2,221.00	15.05	89.84	2,217.36	-4.32	29.03	28.78	7.13	7.06	3.97
2,253.00	17.21	91.34	2,248.09	-4.42	37.92	37.65	6.87	6.75	4.69
2,284.00	19.69	91.56	2,277.50	-4.67	47.72	47.43	8.00	8.00	0.71
2,316.00	22.43	91.97	2,307.36	-5.03	59.22	58.89	8.57	8.56	1.28
2,347.00	25.57	91.62	2,335.68	-5.42	71.82	71.46	10.14	10.13	-1.13
2,379.00	28.24	91.25	2,364.21	-5.78	86.29	85.90	8.36	8.34	-1.16
2,410.00	30.34	90.51	2,391.24	-6.01	101.46	101.03	6.87	6.77	-2.39
2,442.00	31.62	89.22	2,418.68	-5.97	117.93	117.48	4.51	4.00	-4.03
2,473.00	34.08	88.84	2,444.72	-5.68	134.74	134.29	7.96	7.94	-1.23
2,505.00	35.64	88.42	2,470.98	-5.24	153.02	152.57	4.93	4.88	-1.31
2,536.00	36.52	87.64	2,496.03	-4.61	171.27	170.82	3.20	2.84	-2.52
2,568.00	37.64	87.55	2,521.56	-3.80	190.54	190.12	3.50	3.50	-0.28
2,600.00	39.54	88.55	2,546.57	-3.13	210.49	210.07	6.25	5.94	3.13
2,631.00	41.66	89.71	2,570.11	-2.83	230.66	230.23	7.26	6.84	3.74
2,663.00	43.92	90.50	2,593.59	-2.87	252.40	251.94	7.26	7.06	2.47
2,694.00	46.52	90.49	2,615.42	-3.06	274.40	273.90	8.39	8.39	-0.03
2,726.00	49.03	90.14	2,636.93	-3.19	298.09	297.56	7.89	7.84	-1.09
2,752.00	50.47	90.02	2,653.73	-3.21	317.94	317.38	5.55	5.54	-0.46
2,822.00	54.51	91.01	2,696.34	-3.73	373.45	372.80	5.88	5.77	1.41
2,854.00	56.90	90.98	2,714.37	-4.19	399.88	399.17	7.47	7.47	-0.09
2,885.00	59.47	91.09	2,730.71	-4.66	426.21	425.45	8.30	8.29	0.35
2,917.00	61.31	89.40	2,746.52	-4.78	454.03	453.23	7.36	5.75	-5.28
2,949.00	63.17	88.35	2,761.43	-4.22	482.34	481.53	6.50	5.81	-3.28
2,980.00	64.68	89.00	2,775.05	-3.58	510.18	509.37	5.22	4.87	2.10
3,012.00	65.16	88.98	2,788.62	-3.07	539.16	538.33	1.50	1.50	-0.06
3,043.00	65.24	89.06	2,801.62	-2.58	567.29	566.46	0.35	0.26	0.26
3,075.00	65.13	88.82	2,815.05	-2.05	596.33	595.49	0.76	-0.34	-0.75



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Survey										
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3,106.00	64.88	88.52	2,828.15	-1.39	624.42	623.58	1.19	-0.81	-0.97	
3,138.00	64.81	88.51	2,841.75	-0.64	653.38	652.54	0.22	-0.22	-0.03	
3,169.00	64.75	88.74	2,854.96	0.03	681.42	680.57	0.70	-0.19	0.74	
3,201.00	66.01	89.31	2,868.29	0.52	710.50	709.65	4.26	3.94	1.78	
3,232.00	67.93	90.94	2,880.42	0.46	739.03	738.13	7.86	6.19	5.26	
3,264.00	69.98	91.15	2,891.91	-0.09	768.89	767.93	6.44	6.41	0.66	
3,296.00	72.54	92.36	2,902.19	-1.02	799.17	798.13	8.76	8.00	3.78	
3,327.00	75.02	92.58	2,910.85	-2.30	828.91	827.77	8.03	8.00	0.71	
3,359.00	77.75	92.57	2,918.38	-3.70	859.98	858.72	8.53	8.53	-0.03	
3,390.00	79.87	91.60	2,924.40	-4.80	890.36	889.02	7.50	6.84	-3.13	
3,422.00	82.23	90.71	2,929.37	-5.44	921.97	920.55	7.87	7.38	-2.78	
3,453.00	84.96	91.45	2,932.83	-6.02	952.76	951.28	9.12	8.81	2.39	
3,485.00	87.98	92.03	2,934.80	-6.99	984.68	983.11	9.61	9.44	1.81	
3,516.00	89.80	91.72	2,935.40	-8.00	1,015.66	1,014.00	5.96	5.87	-1.00	
3,548.00	89.66	90.00	2,935.55	-8.48	1,047.66	1,045.93	5.39	-0.44	-5.38	
3,579.00	89.63	88.13	2,935.74	-7.98	1,078.65	1,076.91	6.03	-0.10	-6.03	
3,611.00	89.93	86.83	2,935.87	-6.57	1,110.62	1,108.91	4.17	0.94	-4.06	
3,638.00	89.73	86.52	2,935.95	-5.01	1,137.57	1,135.91	1.37	-0.74	-1.15	
3,669.00	89.83	85.76	2,936.07	-2.92	1,168.50	1,166.90	2.47	0.32	-2.45	
3,701.00	88.96	86.67	2,936.40	-0.81	1,200.43	1,198.90	3.93	-2.72	2.84	
3,732.00	87.99	88.70	2,937.23	0.45	1,231.39	1,229.88	7.26	-3.13	6.55	
3,764.00	88.02	89.51	2,938.34	0.94	1,263.37	1,261.84	2.53	0.09	2.53	
3,795.00	89.33	90.29	2,939.06	1.00	1,294.36	1,292.80	4.92	4.23	2.52	
3,827.00	89.73	90.44	2,939.32	0.79	1,326.36	1,324.75	1.33	1.25	0.47	
3,858.00	90.61	90.47	2,939.23	0.55	1,357.35	1,355.70	2.84	2.84	0.10	
3,890.00	91.14	89.87	2,938.74	0.45	1,389.35	1,387.65	2.50	1.66	-1.88	
3,921.00	91.61	89.65	2,938.00	0.58	1,420.34	1,418.61	1.67	1.52	-0.71	
3,953.00	91.81	89.95	2,937.04	0.70	1,452.33	1,450.56	1.13	0.63	0.94	
3,984.00	91.98	89.72	2,936.02	0.78	1,483.31	1,481.51	0.92	0.55	-0.74	
4,016.00	92.62	88.49	2,934.73	1.28	1,515.28	1,513.46	4.33	2.00	-3.84	
4,047.00	93.36	87.94	2,933.12	2.25	1,546.22	1,544.41	2.97	2.39	-1.77	
4,079.00	92.42	87.31	2,931.50	3.57	1,578.15	1,576.37	3.53	-2.94	-1.97	
4,110.00	92.12	85.93	2,930.28	5.40	1,609.07	1,607.34	4.55	-0.97	-4.45	
4,142.00	92.32	85.51	2,929.04	7.78	1,640.96	1,639.31	1.45	0.63	-1.31	
4,173.00	92.49	85.56	2,927.74	10.20	1,671.84	1,670.27	0.57	0.55	0.16	
4,205.00	92.72	85.54	2,926.28	12.68	1,703.71	1,702.22	0.72	0.72	-0.06	
4,237.00	91.18	85.59	2,925.19	15.15	1,735.59	1,734.19	4.82	-4.81	0.16	
4,268.00	90.57	85.56	2,924.72	17.54	1,766.50	1,765.18	1.97	-1.97	-0.10	
4,300.00	90.64	85.73	2,924.38	19.97	1,798.40	1,797.17	0.57	0.22	0.53	
4,331.00	90.64	85.68	2,924.03	22.29	1,829.32	1,828.15	0.16	0.00	-0.16	
4,363.00	90.81	85.62	2,923.63	24.72	1,861.22	1,860.14	0.56	0.53	-0.19	
4,394.00	91.28	86.51	2,923.06	26.85	1,892.14	1,891.13	3.25	1.52	2.87	
4,425.00	91.71	87.36	2,922.26	28.50	1,923.09	1,922.12	3.07	1.39	2.74	
4,457.00	92.18	87.17	2,921.17	30.03	1,955.03	1,954.10	1.58	1.47	-0.59	



Company:	B.P.	Local Co-ordinate Reference:	Well East Sauls Creek 26 1-2
Project:	La Plata County, CO NAD83	TVD Reference:	GL 7340' & RKB 11' @ 7351.00usft (Aztec 507)
Site:	East Sauls Creek Pad	MD Reference:	GL 7340' & RKB 11' @ 7351.00usft (Aztec 507)
Well:	East Sauls Creek 26 1-2	North Reference:	Grid
Wellbore:	Lower Lateral 1 (Drainage)	Survey Calculation Method:	Minimum Curvature
Design:	Lower Lateral 1 (Drainage)	Database:	Grand Junction District

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,488.00	92.08	87.69	2,920.02	31.42	1,985.98	1,985.08	1.71	-0.32	1.68
4,520.00	92.28	87.51	2,918.80	32.76	2,017.93	2,017.05	0.84	0.63	-0.56
4,552.00	92.21	87.39	2,917.55	34.18	2,049.87	2,049.03	0.43	-0.22	-0.38
4,583.00	92.15	87.45	2,916.37	35.57	2,080.82	2,080.01	0.27	-0.19	0.19
4,615.00	92.25	87.55	2,915.14	36.97	2,112.76	2,111.98	0.44	0.31	0.31
4,646.00	92.21	87.70	2,913.93	38.25	2,143.71	2,142.96	0.50	-0.13	0.48
4,678.00	92.08	88.20	2,912.74	39.40	2,175.67	2,174.93	1.61	-0.41	1.56
4,709.00	92.22	88.08	2,911.57	40.40	2,206.63	2,205.90	0.59	0.45	-0.39
4,740.00	92.35	87.05	2,910.34	41.72	2,237.58	2,236.88	3.35	0.42	-3.32
4,772.00	92.75	86.58	2,908.91	43.49	2,269.50	2,268.85	1.93	1.25	-1.47
4,803.00	92.62	86.75	2,907.46	45.30	2,300.41	2,299.81	0.69	-0.42	0.55
4,835.00	92.59	86.98	2,906.01	47.04	2,332.33	2,331.78	0.72	-0.09	0.72
4,866.00	92.72	86.62	2,904.57	48.77	2,363.25	2,362.74	1.23	0.42	-1.16
4,898.00	92.72	86.48	2,903.05	50.70	2,395.16	2,394.71	0.44	0.00	-0.44
4,929.00	92.85	86.56	2,901.54	52.58	2,426.06	2,425.67	0.49	0.42	0.26
4,961.00	91.54	86.57	2,900.32	54.49	2,457.98	2,457.64	4.09	-4.09	0.03
4,992.00	90.90	86.00	2,899.66	56.50	2,488.91	2,488.63	2.76	-2.06	-1.84
5,024.00	91.34	85.80	2,899.03	58.79	2,520.82	2,520.62	1.51	1.38	-0.63
5,055.00	91.48	85.87	2,898.27	61.04	2,551.73	2,551.60	0.50	0.45	0.23
5,086.00	91.51	85.81	2,897.46	63.29	2,582.64	2,582.58	0.22	0.10	-0.19
5,118.00	91.81	85.86	2,896.54	65.61	2,614.54	2,614.56	0.95	0.94	0.16
5,149.00	91.78	86.05	2,895.56	67.79	2,645.45	2,645.54	0.62	-0.10	0.61
5,181.00	91.61	86.23	2,894.62	69.95	2,677.36	2,677.52	0.77	-0.53	0.56
5,212.00	91.68	86.04	2,893.73	72.04	2,708.28	2,708.50	0.65	0.23	-0.61
5,243.00	91.65	86.29	2,892.83	74.11	2,739.19	2,739.48	0.81	-0.10	0.81
5,275.00	91.28	87.29	2,892.01	75.90	2,771.13	2,771.47	3.33	-1.16	3.13
5,306.00	91.34	87.77	2,891.30	77.24	2,802.10	2,802.46	1.56	0.19	1.55
5,338.00	92.12	88.22	2,890.33	78.36	2,834.06	2,834.44	2.81	2.44	1.41
5,369.00	92.69	88.17	2,889.03	79.33	2,865.02	2,865.41	1.85	1.84	-0.16
5,401.00	92.86	88.26	2,887.48	80.33	2,896.96	2,897.37	0.60	0.53	0.28
5,432.00	93.13	88.69	2,885.86	81.15	2,927.91	2,928.32	1.64	0.87	1.39
5,464.00	93.60	88.52	2,883.99	81.93	2,959.85	2,960.25	1.56	1.47	-0.53
5,495.00	94.06	88.04	2,881.92	82.86	2,990.76	2,991.18	2.14	1.48	-1.55
5,526.00	92.99	86.98	2,880.01	84.20	3,021.67	3,022.12	4.85	-3.45	-3.42
5,557.00	92.79	86.40	2,878.45	85.99	3,052.58	3,053.08	1.98	-0.65	-1.87
5,588.00	92.89	86.71	2,876.91	87.85	3,083.49	3,084.04	1.05	0.32	1.00
5,619.00	93.73	85.85	2,875.12	89.86	3,114.37	3,114.98	3.87	2.71	-2.77
5,650.00	93.93	86.04	2,873.05	92.04	3,145.23	3,145.90	0.89	0.65	0.61
5,681.00	93.70	85.22	2,870.99	94.40	3,176.07	3,176.82	2.74	-0.74	-2.65
5,712.00	93.56	84.94	2,869.02	97.05	3,206.89	3,207.74	1.01	-0.45	-0.90
5,743.00	94.10	84.63	2,866.95	99.87	3,237.69	3,238.65	2.01	1.74	-1.00
5,775.00	92.96	85.09	2,864.98	102.73	3,269.50	3,270.56	3.84	-3.56	1.44
5,806.00	92.72	84.71	2,863.45	105.48	3,300.34	3,301.50	1.45	-0.77	-1.23



Company:	B.P.	Local Co-ordinate Reference:	Well East Sauls Creek 26 1-2
Project:	La Plata County, CO NAD83	TVD Reference:	GL 7340' & RKB 11' @ 7351.00usft (Aztec 507)
Site:	East Sauls Creek Pad	MD Reference:	GL 7340' & RKB 11' @ 7351.00usft (Aztec 507)
Well:	East Sauls Creek 26 1-2	North Reference:	Grid
Wellbore:	Lower Lateral 1 (Drainage)	Survey Calculation Method:	Minimum Curvature
Design:	Lower Lateral 1 (Drainage)	Database:	Grand Junction District

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,837.00	92.15	85.93	2,862.13	108.01	3,331.21	3,332.45	4.34	-1.84	3.94	
5,868.00	91.98	86.57	2,861.01	110.03	3,362.12	3,363.43	2.13	-0.55	2.06	
5,899.00	92.41	86.23	2,859.83	111.98	3,393.04	3,394.40	1.77	1.39	-1.10	
5,930.00	92.85	86.26	2,858.40	114.01	3,423.94	3,425.37	1.42	1.42	0.10	
5,961.00	92.92	86.22	2,856.84	116.04	3,454.83	3,456.32	0.26	0.23	-0.13	
5,992.00	93.49	86.03	2,855.11	118.13	3,485.71	3,487.27	1.94	1.84	-0.61	
6,023.00	93.83	85.95	2,853.13	120.29	3,516.58	3,518.20	1.13	1.10	-0.26	
6,054.00	94.00	85.81	2,851.01	122.51	3,547.42	3,549.12	0.71	0.55	-0.45	
6,085.00	93.56	86.54	2,848.97	124.58	3,578.29	3,580.05	2.75	-1.42	2.35	
6,116.00	93.87	86.65	2,846.96	126.41	3,609.17	3,610.98	1.06	1.00	0.35	
6,147.00	94.03	86.55	2,844.83	128.25	3,640.04	3,641.91	0.61	0.52	-0.32	
6,178.00	94.41	86.75	2,842.55	130.05	3,670.90	3,672.82	1.38	1.23	0.65	
6,209.00	94.07	86.50	2,840.25	131.87	3,701.76	3,703.74	1.36	-1.10	-0.81	
6,241.00	94.10	86.75	2,837.97	133.75	3,733.63	3,735.65	0.78	0.09	0.78	
6,272.00	94.33	86.51	2,835.70	135.57	3,764.49	3,766.57	1.07	0.74	-0.77	
6,303.00	94.91	86.11	2,833.20	137.56	3,795.32	3,797.46	2.27	1.87	-1.29	
6,334.00	95.11	86.40	2,830.49	139.58	3,826.14	3,828.34	1.13	0.65	0.94	
6,365.00	96.36	86.41	2,827.39	141.51	3,856.92	3,859.18	4.03	4.03	0.03	
6,396.00	96.66	86.31	2,823.88	143.47	3,887.66	3,889.98	1.02	0.97	-0.32	
6,428.00	97.14	86.22	2,820.03	145.54	3,919.36	3,921.75	1.53	1.50	-0.28	
6,459.00	97.61	86.24	2,816.06	147.56	3,950.04	3,952.48	1.52	1.52	0.06	
6,490.00	98.26	85.81	2,811.78	149.68	3,980.67	3,983.18	2.51	2.10	-1.39	
6,521.00	99.10	85.78	2,807.10	151.93	4,011.23	4,013.82	2.71	2.71	-0.10	
6,552.00	97.82	85.48	2,802.54	154.27	4,041.80	4,044.47	4.24	-4.13	-0.97	
6,581.00	97.57	84.60	2,798.65	156.75	4,070.43	4,073.19	3.13	-0.86	-3.03	
6,610.00	96.30	84.91	2,795.15	159.38	4,099.10	4,101.95	4.51	-4.38	1.07	
6,641.00	95.68	84.90	2,791.92	162.12	4,129.81	4,132.76	2.00	-2.00	-0.03	
6,670.00	95.62	85.42	2,789.06	164.56	4,158.57	4,161.60	1.80	-0.21	1.79	
6,700.00	95.85	85.71	2,786.06	166.87	4,188.33	4,191.44	1.23	0.77	0.97	
6,733.00	96.46	86.12	2,782.53	169.20	4,221.05	4,224.24	2.22	1.85	1.24	
6,764.00	97.20	86.20	2,778.84	171.26	4,251.76	4,255.02	2.40	2.39	0.26	
6,798.00	98.02	86.22	2,774.34	173.49	4,285.39	4,288.71	2.41	2.41	0.06	
6,829.00	98.12	86.80	2,769.99	175.36	4,316.03	4,319.40	1.88	0.32	1.87	
6,861.00	98.49	85.77	2,765.36	177.41	4,347.62	4,351.06	3.39	1.16	-3.22	
6,892.00	97.37	86.08	2,761.09	179.59	4,378.25	4,381.76	3.75	-3.61	1.00	
6,923.00	97.44	85.55	2,757.09	181.84	4,408.91	4,412.49	1.71	0.23	-1.71	
6,954.00	97.07	85.43	2,753.18	184.26	4,439.56	4,443.23	1.25	-1.19	-0.39	
6,985.00	97.26	85.32	2,749.31	186.74	4,470.22	4,473.97	0.71	0.61	-0.35	
7,016.00	97.61	85.80	2,745.30	189.11	4,500.87	4,504.70	1.91	1.13	1.55	
7,048.00	98.22	85.23	2,740.89	191.59	4,532.47	4,536.38	2.60	1.91	-1.78	
7,079.00	97.98	85.50	2,736.52	194.07	4,563.06	4,567.06	1.16	-0.77	0.87	
7,110.00	97.68	85.43	2,732.30	196.50	4,593.67	4,597.76	0.99	-0.97	-0.23	
7,141.00	97.92	86.09	2,728.09	198.77	4,624.30	4,628.46	2.25	0.77	2.13	



Company:	B.P.	Local Co-ordinate Reference:	Well East Sauls Creek 26 1-2
Project:	La Plata County, CO NAD83	TVD Reference:	GL 7340' & RKB 11' @ 7351.00usft (Aztec 507)
Site:	East Sauls Creek Pad	MD Reference:	GL 7340' & RKB 11' @ 7351.00usft (Aztec 507)
Well:	East Sauls Creek 26 1-2	North Reference:	Grid
Wellbore:	Lower Lateral 1 (Drainage)	Survey Calculation Method:	Minimum Curvature
Design:	Lower Lateral 1 (Drainage)	Database:	Grand Junction District

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,172.00	97.38	85.51	2,723.97	201.02	4,654.94	4,659.18	2.54	-1.74	-1.87
7,203.00	97.58	86.04	2,719.93	203.29	4,685.59	4,689.90	1.81	0.65	1.71
7,234.00	98.23	85.87	2,715.67	205.45	4,716.22	4,720.60	2.17	2.10	-0.55
7,266.00	97.50	85.64	2,711.29	207.80	4,747.84	4,752.29	2.39	-2.28	-0.72
7,297.00	97.57	85.42	2,707.22	210.19	4,778.47	4,783.01	0.74	0.23	-0.71
7,328.00	97.82	85.78	2,703.07	212.55	4,809.10	4,813.72	1.41	0.81	1.16
7,359.00	98.46	85.98	2,698.68	214.76	4,839.71	4,844.40	2.16	2.06	0.65
7,390.00	97.81	85.98	2,694.30	216.91	4,870.32	4,875.08	2.10	-2.10	0.00
7,421.00	97.83	85.92	2,690.08	219.08	4,900.96	4,905.79	0.20	0.06	-0.19
7,452.00	96.83	86.47	2,686.12	221.12	4,931.64	4,936.53	3.67	-3.23	1.77
7,483.00	97.21	86.16	2,682.33	223.09	4,962.34	4,967.29	1.58	1.23	-1.00
7,514.00	97.75	86.45	2,678.30	225.08	4,993.01	4,998.03	1.97	1.74	0.94
7,546.00	97.13	85.59	2,674.16	227.28	5,024.67	5,029.75	3.29	-1.94	-2.69
7,577.00	96.70	86.27	2,670.42	229.46	5,055.36	5,060.52	2.58	-1.39	2.19
7,608.00	97.00	87.02	2,666.73	231.26	5,086.09	5,091.30	2.59	0.97	2.42
7,639.00	97.87	86.63	2,662.71	232.97	5,116.78	5,122.03	3.07	2.81	-1.26
7,671.00	98.38	86.21	2,658.19	234.94	5,148.40	5,153.71	2.06	1.59	-1.31
7,702.00	98.32	86.01	2,653.69	237.02	5,179.00	5,184.38	0.67	-0.19	-0.65
7,734.00	98.05	85.68	2,649.13	239.32	5,210.59	5,216.04	1.32	-0.84	-1.03
7,765.00	97.88	85.33	2,644.84	241.73	5,241.20	5,246.73	1.25	-0.55	-1.13
7,797.00	97.47	84.34	2,640.56	244.58	5,272.78	5,278.42	3.32	-1.28	-3.09
7,828.00	97.50	84.25	2,636.53	247.64	5,303.36	5,309.12	0.30	0.10	-0.29
7,860.00	96.53	84.89	2,632.62	250.64	5,334.98	5,340.84	3.62	-3.03	2.00
7,892.00	96.74	84.07	2,628.92	253.70	5,366.62	5,372.59	2.63	0.66	-2.56
7,923.00	97.16	83.68	2,625.17	256.98	5,397.22	5,403.32	1.84	1.35	-1.26
7,955.00	97.45	83.89	2,621.10	260.42	5,428.77	5,435.00	1.12	0.91	0.66
7,986.00	98.02	83.12	2,616.93	263.89	5,459.29	5,465.66	3.07	1.84	-2.48
8,017.00	97.64	83.09	2,612.71	267.58	5,489.78	5,496.29	1.23	-1.23	-0.10
8,055.00	97.85	83.33	2,607.58	272.03	5,527.17	5,533.86	0.83	0.55	0.63
8,112.00	97.85	83.33	2,599.80	278.59	5,583.25	5,590.20	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____