



Company: B.P.
Project: La Plata County, CO NAD83
Site: East Sauls Creek Pad
Well: East Sauls Creek 26 1- 1
Wellbore: Lateral 3 (Bayfield)
Design: Plan #4

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



Plan: Plan #4 (East Sauls Creek 26 1- 1/Lateral 3 (Bayfield))

Created By: Janie Collins Date: 15:58, December 05 2016

WELL DETAILS: East Sauls Creek 26 1- 1

GL 7340' & RKB 11' @ 7351.00usft (Aztec 507) 7340.00				
Northing	Easting	Latitude	Longitude	Slot
1227800.12	2414731.21	37.2749771	-107.5115588	

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Target
2565.00	65.00	87.49	2388.55	19.01	433.59	0.00	0.00	433.94	
2752.00	87.44	87.40	2432.80	27.06	613.87	12.00	-0.24	614.38	
3191.56	87.44	105.00	2452.59	-20.18	1048.70	4.00	90.40	1045.54	
3391.56	87.44	105.00	2461.53	-71.89	1241.69	0.00	0.00	1235.04	
3866.08	87.44	86.00	2482.92	-117.12	1711.39	4.00	-90.43	1701.13	
7266.08	87.44	86.00	2634.78	119.82	5099.72	0.00	0.00	5097.59	
7865.47	87.44	62.00	2661.95	283.66	5671.10	4.00	-90.54	5677.86	
8175.88	87.21	87.49	2676.68	364.57	5967.77	8.20	91.11	5978.90	
8285.26	87.21	87.49	2682.00	369.35	6076.92	0.00	0.00	6088.13	



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

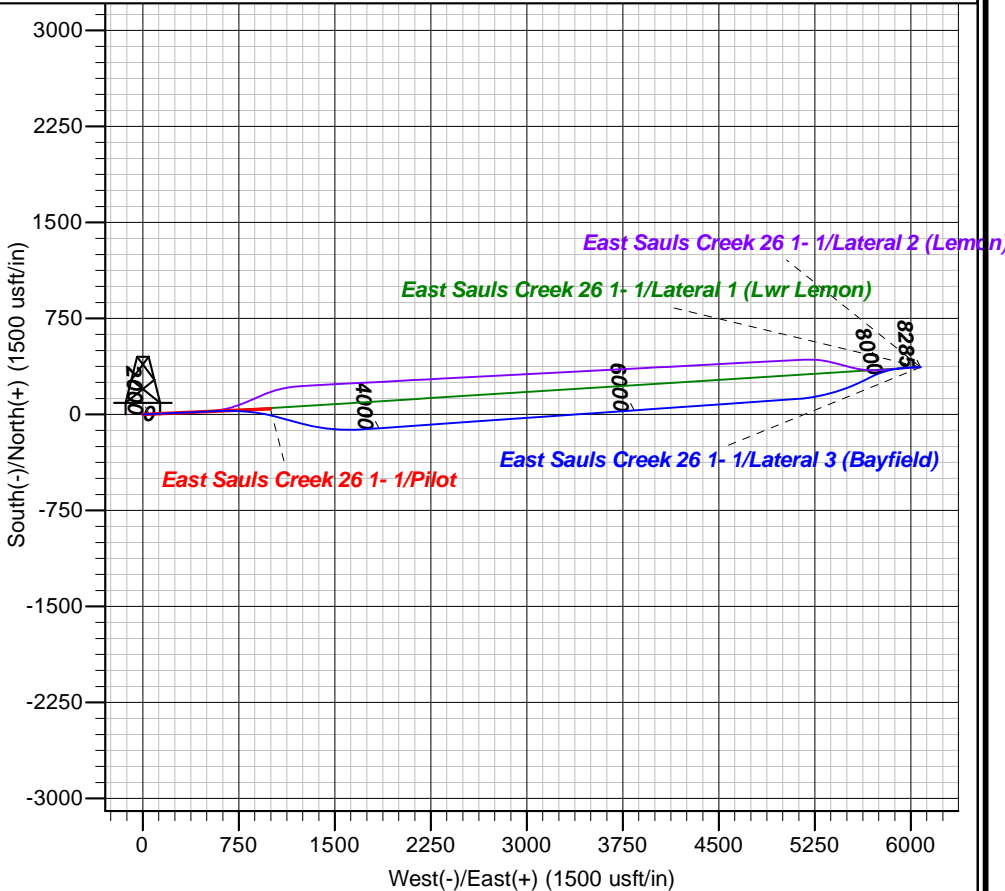
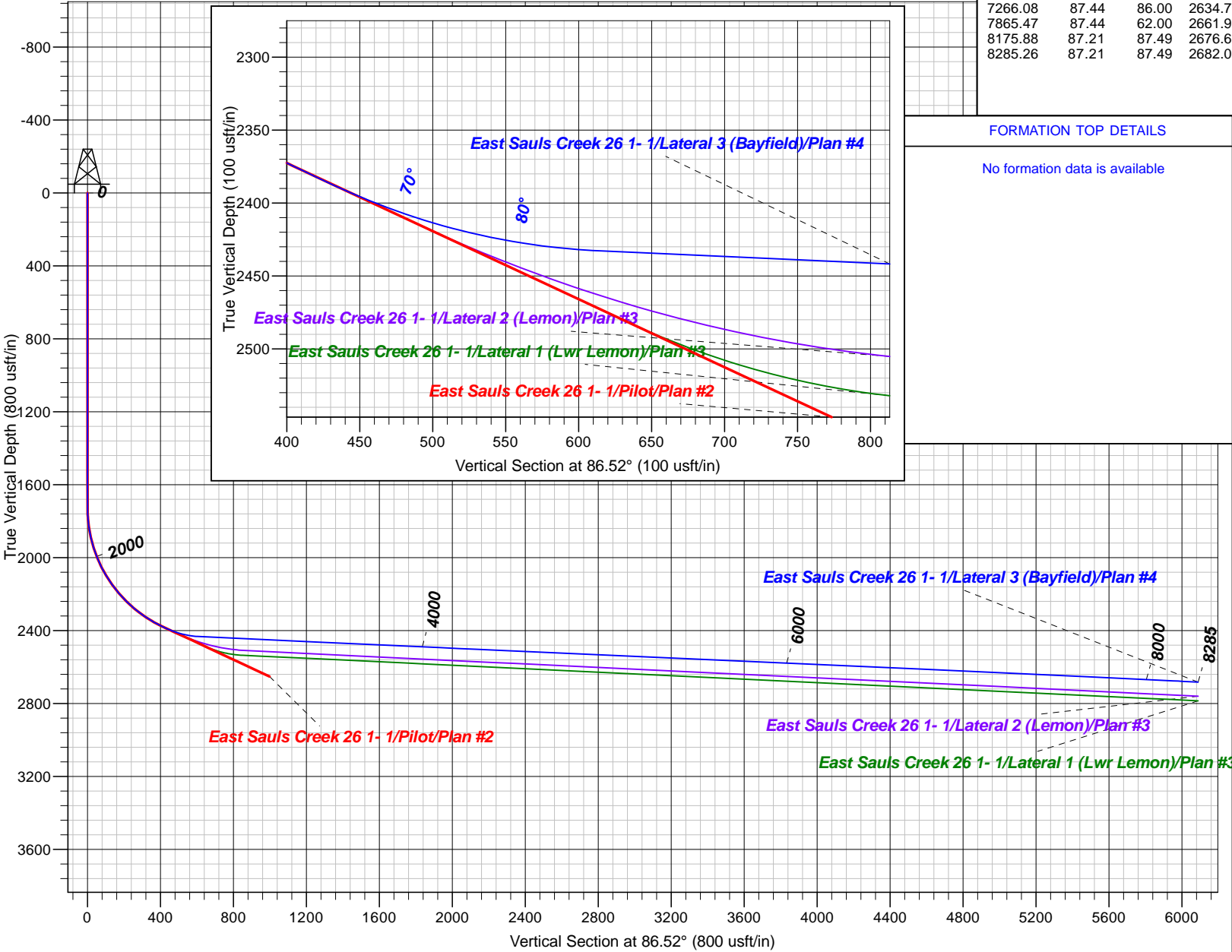
ESC 26-1 1 Bayfield Lat 3 PBHL

FORMATION TOP DETAILS

No formation data is available

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
ESC 26-1 1 Bayfield Lat 3 PBHL	2682.00	369.35	6076.92	1228169.47	2420808.13	37.2763487	-107.4907059





B.P.

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

Lateral 3 (Bayfield)

Plan: Plan #4

Standard Planning Report

05 December, 2016





Database:	Grand Junction District	Local Co-ordinate Reference:	Well East Sauls Creek 26 1- 1
Company:	B.P.	TVD Reference:	GL 7340' & RKB 11' @ 7351.00usft (Aztec 507)
Project:	La Plata County, CO NAD83	MD Reference:	GL 7340' & RKB 11' @ 7351.00usft (Aztec 507)
Site:	East Sauls Creek Pad	North Reference:	Grid
Well:	East Sauls Creek 26 1- 1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 3 (Bayfield)		
Design:	Plan #4		

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- 1					
Well Position	+N/-S	-6.33 usft	Northing:	1,227,800.12 usft	Latitude:	37.2749770
	+E/-W	18.97 usft	Easting:	2,414,731.21 usft	Longitude:	-107.5115588
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	7,340.00 usft

Wellbore	Lateral 3 (Bayfield)				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	9/30/2016	9.40	63.80	50,335

Design	Plan #4				
Audit Notes:					
Version:	Phase:	PLAN		Tie On Depth:	2,565.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	86.52	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
2,565.00	65.00	87.49	2,388.55	19.01	433.59	0.00	0.00	0.00	0.00	
2,752.00	87.44	87.40	2,432.80	27.06	613.87	12.00	12.00	-0.05	-0.24	
3,191.56	87.44	105.00	2,452.59	-20.18	1,048.70	4.00	0.00	4.00	90.40	
3,391.56	87.44	105.00	2,461.53	-71.89	1,241.69	0.00	0.00	0.00	0.00	
3,866.08	87.44	86.00	2,482.92	-117.12	1,711.39	4.00	0.00	-4.00	-90.43	
7,266.08	87.44	86.00	2,634.78	119.82	5,099.72	0.00	0.00	0.00	0.00	
7,865.47	87.44	62.00	2,661.95	283.66	5,671.10	4.00	0.00	-4.00	-90.54	
8,175.88	87.21	87.49	2,676.68	364.57	5,967.77	8.20	-0.07	8.21	91.11	
8,285.26	87.21	87.49	2,682.00	369.35	6,076.92	0.00	0.00	0.00	0.00	ESC 26-1 1 Bayfield L



Database:	Grand Junction District	Local Co-ordinate Reference:	Well East Sauls Creek 26 1- 1
Company:	B.P.	TVD Reference:	GL 7340' & RKB 11' @ 7351.00usft (Aztec 507)
Project:	La Plata County, CO NAD83	MD Reference:	GL 7340' & RKB 11' @ 7351.00usft (Aztec 507)
Site:	East Sauls Creek Pad	North Reference:	Grid
Well:	East Sauls Creek 26 1- 1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 3 (Bayfield)		
Design:	Plan #4		

Planned 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)
2,565.00	65.00	87.49	2,388.55	19.01	433.59	433.94	0.00	0.00	0.00
2,600.00	69.20	87.47	2,402.16	20.42	465.79	466.17	12.00	12.00	-0.05
2,700.00	81.20	87.42	2,427.66	24.72	562.20	562.66	12.00	12.00	-0.05
2,752.00	87.44	87.40	2,432.80	27.06	613.87	614.38	12.00	12.00	-0.05
2,800.00	87.43	89.32	2,434.95	28.43	661.79	662.30	4.00	-0.02	4.00
2,900.00	87.41	93.33	2,439.46	26.12	761.65	761.83	4.00	-0.02	4.00
3,000.00	87.41	97.33	2,443.97	16.85	861.09	860.53	4.00	0.00	4.00
3,100.00	87.42	101.33	2,448.49	0.65	959.65	957.92	4.00	0.01	4.00
3,191.56	87.44	105.00	2,452.59	-20.18	1,048.70	1,045.54	4.00	0.02	4.00
3,200.00	87.44	105.00	2,452.97	-22.36	1,056.84	1,053.54	0.00	0.00	0.00
3,300.00	87.44	105.00	2,457.44	-48.22	1,153.34	1,148.29	0.00	0.00	0.00
3,391.56	87.44	105.00	2,461.53	-71.89	1,241.69	1,235.04	0.00	0.00	0.00
3,400.00	87.44	104.66	2,461.90	-74.05	1,249.84	1,243.04	4.00	-0.03	-4.00
3,500.00	87.41	100.66	2,466.40	-95.94	1,347.29	1,338.99	4.00	-0.02	-4.00
3,600.00	87.40	96.65	2,470.92	-110.97	1,446.03	1,436.63	4.00	-0.01	-4.00
3,700.00	87.41	92.65	2,475.44	-119.07	1,545.58	1,535.51	4.00	0.00	-4.00
3,800.00	87.42	88.65	2,479.96	-120.20	1,645.45	1,635.13	4.00	0.02	-4.00
3,866.08	87.44	86.00	2,482.92	-117.12	1,711.39	1,701.13	4.00	0.03	-4.00
3,900.00	87.44	86.00	2,484.43	-114.75	1,745.19	1,735.01	0.00	0.00	0.00
4,000.00	87.44	86.00	2,488.90	-107.79	1,844.85	1,834.91	0.00	0.00	0.00
4,100.00	87.44	86.00	2,493.37	-100.82	1,944.50	1,934.80	0.00	0.00	0.00
4,200.00	87.44	86.00	2,497.83	-93.85	2,044.16	2,034.70	0.00	0.00	0.00
4,300.00	87.44	86.00	2,502.30	-86.88	2,143.82	2,134.60	0.00	0.00	0.00
4,400.00	87.44	86.00	2,506.77	-79.91	2,243.47	2,234.49	0.00	0.00	0.00
4,500.00	87.44	86.00	2,511.23	-72.94	2,343.13	2,334.39	0.00	0.00	0.00
4,600.00	87.44	86.00	2,515.70	-65.97	2,442.79	2,434.28	0.00	0.00	0.00
4,700.00	87.44	86.00	2,520.16	-59.01	2,542.44	2,534.18	0.00	0.00	0.00
4,800.00	87.44	86.00	2,524.63	-52.04	2,642.10	2,634.08	0.00	0.00	0.00
4,900.00	87.44	86.00	2,529.10	-45.07	2,741.76	2,733.97	0.00	0.00	0.00
5,000.00	87.44	86.00	2,533.56	-38.10	2,841.41	2,833.87	0.00	0.00	0.00
5,100.00	87.44	86.00	2,538.03	-31.13	2,941.07	2,933.76	0.00	0.00	0.00
5,200.00	87.44	86.00	2,542.50	-24.16	3,040.73	3,033.66	0.00	0.00	0.00
5,300.00	87.44	86.00	2,546.96	-17.19	3,140.38	3,133.56	0.00	0.00	0.00
5,400.00	87.44	86.00	2,551.43	-10.22	3,240.04	3,233.45	0.00	0.00	0.00
5,500.00	87.44	86.00	2,555.90	-3.26	3,339.70	3,333.35	0.00	0.00	0.00
5,600.00	87.44	86.00	2,560.36	3.71	3,439.35	3,433.25	0.00	0.00	0.00
5,700.00	87.44	86.00	2,564.83	10.68	3,539.01	3,533.14	0.00	0.00	0.00
5,800.00	87.44	86.00	2,569.30	17.65	3,638.67	3,633.04	0.00	0.00	0.00
5,900.00	87.44	86.00	2,573.76	24.62	3,738.33	3,732.93	0.00	0.00	0.00
6,000.00	87.44	86.00	2,578.23	31.59	3,837.98	3,832.83	0.00	0.00	0.00
6,100.00	87.44	86.00	2,582.70	38.56	3,937.64	3,932.73	0.00	0.00	0.00
6,200.00	87.44	86.00	2,587.16	45.53	4,037.30	4,032.62	0.00	0.00	0.00
6,300.00	87.44	86.00	2,591.63	52.49	4,136.95	4,132.52	0.00	0.00	0.00
6,400.00	87.44	86.00	2,596.10	59.46	4,236.61	4,232.41	0.00	0.00	0.00
6,500.00	87.44	86.00	2,600.56	66.43	4,336.27	4,332.31	0.00	0.00	0.00
6,600.00	87.44	86.00	2,605.03	73.40	4,435.92	4,432.21	0.00	0.00	0.00
6,700.00	87.44	86.00	2,609.50	80.37	4,535.58	4,532.10	0.00	0.00	0.00
6,800.00	87.44	86.00	2,613.96	87.34	4,635.24	4,632.00	0.00	0.00	0.00
6,900.00	87.44	86.00	2,618.43	94.31	4,734.89	4,731.89	0.00	0.00	0.00
7,000.00	87.44	86.00	2,622.90	101.27	4,834.55	4,831.79	0.00	0.00	0.00
7,100.00	87.44	86.00	2,627.36	108.24	4,934.21	4,931.69	0.00	0.00	0.00
7,200.00	87.44	86.00	2,631.83	115.21	5,033.86	5,031.58	0.00	0.00	0.00



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Project:	La Plata County, CO NAD83	MD Reference:	GL 7340' & RKB 11' @ 7351.00usft (Aztec 507)
Site:	East Sauls Creek Pad	North Reference:	Grid
Well:	East Sauls Creek 26 1- 1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 3 (Bayfield)		
Design:	Plan #4		

Planned 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)
7,266.08	87.44	86.00	2,634.78	119.82	5,099.72	5,097.59	0.00	0.00	0.00
7,300.00	87.43	84.64	2,636.30	122.58	5,133.49	5,131.47	4.00	-0.04	-4.00
7,400.00	87.40	80.64	2,640.81	135.38	5,232.54	5,231.12	4.00	-0.03	-4.00
7,500.00	87.39	76.63	2,645.36	155.06	5,330.46	5,330.05	4.00	-0.01	-4.00
7,600.00	87.38	72.63	2,649.93	181.53	5,426.77	5,427.78	4.00	0.00	-4.00
7,700.00	87.39	68.63	2,654.49	214.65	5,520.99	5,523.84	4.00	0.01	-4.00
7,800.00	87.42	64.62	2,659.01	254.28	5,612.67	5,617.76	4.00	0.02	-4.00
7,865.47	87.44	62.00	2,661.95	283.66	5,671.10	5,677.86	4.00	0.03	-4.00
7,900.00	87.39	64.83	2,663.51	299.09	5,701.94	5,709.59	8.20	-0.15	8.21
8,000.00	87.27	73.05	2,668.17	334.96	5,795.08	5,804.73	8.20	-0.11	8.21
8,100.00	87.22	81.26	2,672.99	357.15	5,892.38	5,903.20	8.20	-0.06	8.21
8,175.88	87.21	87.49	2,676.68	364.57	5,967.77	5,978.90	8.20	-0.01	8.21
8,200.00	87.21	87.49	2,677.85	365.62	5,991.84	6,002.98	0.00	0.00	0.00
8,285.26	87.21	87.49	2,682.00	369.35	6,076.92	6,088.13	0.00	0.00	0.00
ESC 26-1 1 Bayfield Lat 3 PBHL - ESC Lat 2 Lemon PBHL									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
ESC 26-1 1 Bayfield Lat - plan hits target center - Point	0.00	360.00	2,682.00	369.35	6,076.92	1,228,169.47	2,420,808.13	37.2763487	-107.4907060