

Well Details: PA 43-26

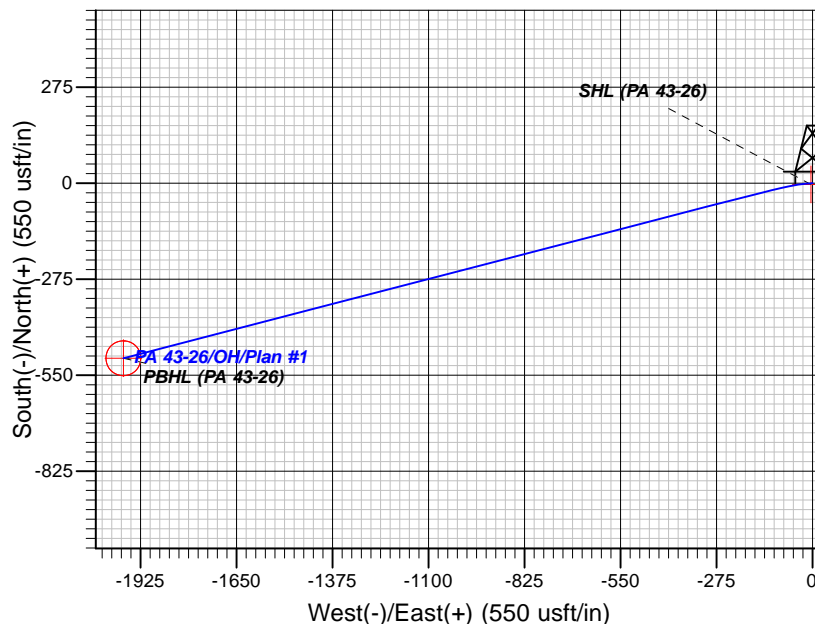
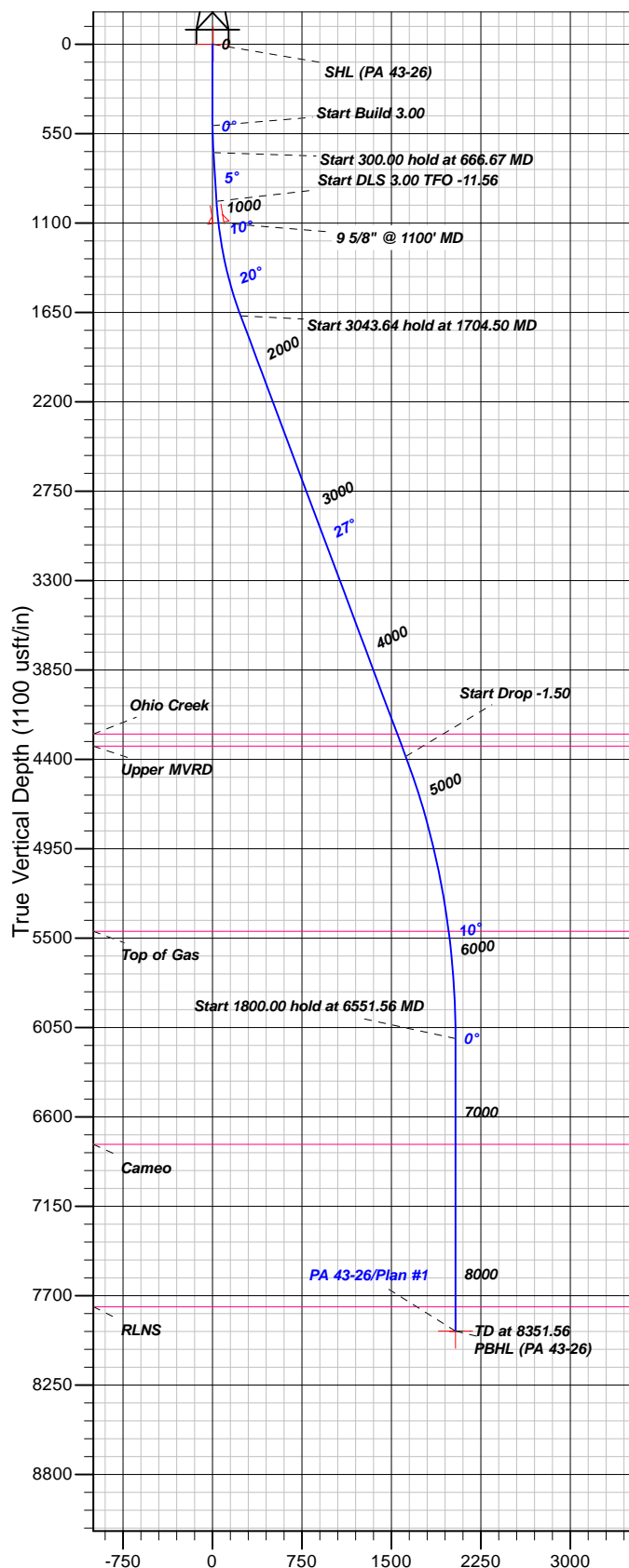
GL 5224' + KB 24' @ 5248.00usft (Original Well Elev)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1615190.04	2308732.79	39.4968835	-107.9498885	PA 43-26 (A1)



M Azimuths to True North
Magnetic North: 9.45°

Magnetic Field
Strength: 51743.6snT
Dip Angle: 65.82°
Date: 5/22/2017
Model: HDGM



FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
4243.00	4593.37	Ohio Creek
4318.00	4677.58	Upper MVRD
5458.00	5888.23	Top of Gas
6768.00	7201.56	Cameo
7768.00	8201.56	RLNS

Plan: Plan #1

16:34, June 04 2017
Created By: Mel Mireles

PROJECT DETAILS: Garfield County, CO NAD83

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

System Datum: Mean Sea Level

CASING DETAILS

TVD	MD	Name	Size
1097.63	1100.00	9 5/8" @ 1100' MD	9.62

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSept	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	
3	666.67	5.00	265.00	666.46	-0.63	-7.24	3.00	265.00	7.17	
4	966.67	5.00	265.00	965.31	-2.91	-33.29	0.00	0.00	32.98	
5	1704.50	27.05	255.44	1670.17	-48.45	-230.17	3.00	-11.56	235.01	
6	4748.14	27.05	255.44	4380.84	-396.36	-1569.94	0.00	0.00	1619.20	
7	6551.56	0.00	0.00	6118.00	-501.39	-1974.40	1.50	180.00	2037.07	
8	8351.56	0.00	0.00	7918.00	-501.39	-1974.40	0.00	0.00	2037.07	PBHL (PA 43-26)

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SHL (PA 43-26)	0.00	-3.40	-4.52	1615186.77	2308728.18	39.4968741	-107.9499045	Point
- plan misses target center by 5.65usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)								
PBHL (PA 43-26)	7918.00	-501.39	-1974.40	1614742.07	2306745.59	39.4955067	-107.9568849	Circle (Radius: 50.00)
- plan hits target center								



TEP Rocky Mountain LLC

**Garfield County, CO NAD83
PA 22-25 Pad
PA 43-26 - Slot PA 43-26 (A1)**

OH

Plan: Plan #1

Standard Planning Report

04 June, 2017



Database:	Grand Junction District	Local Co-ordinate Reference:	Well PA 43-26 - Slot PA 43-26 (A1)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 5224' + KB 24' @ 5248.00usft (Original Well Elev)
Project:	Garfield County, CO NAD83	MD Reference:	GL 5224' + KB 24' @ 5248.00usft (Original Well Elev)
Site:	PA 22-25 Pad	North Reference:	True
Well:	PA 43-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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

Site		PA 22-25 Pad			
Site Position:		Northing:	1,615,186.77 usft	Latitude:	39.4968742
From:	Map	Easting:	2,308,728.18 usft	Longitude:	-107.9499045
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	-1.55 °

Well	PA 43-26 - Slot PA 43-26 (A1), A1					
Well Position	+N/-S	3.40 usft	Northing:	1,615,190.04 usft	Latitude:	39.4968835
	+E/-W	4.52 usft	Easting:	2,308,732.79 usft	Longitude:	-107.9498885
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	5,224.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/22/2017	9.45	65.82	51,744

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	255.75

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
666.67	5.00	265.00	666.46	-0.63	-7.24	3.00	3.00	0.00	265.00	
966.67	5.00	265.00	965.31	-2.91	-33.29	0.00	0.00	0.00	0.00	
1,704.50	27.05	255.44	1,670.17	-48.45	-230.17	3.00	2.99	-1.30	-11.56	
4,748.14	27.05	255.44	4,380.84	-396.36	-1,569.94	0.00	0.00	0.00	0.00	
6,551.56	0.00	0.00	6,118.00	-501.39	-1,974.40	1.50	-1.50	0.00	180.00	
8,351.56	0.00	0.00	7,918.00	-501.39	-1,974.40	0.00	0.00	0.00	0.00	PBHL (PA 43-26)

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Project:	Garfield County, CO NAD83	MD Reference:	GL 5224' + KB 24' @ 5248.00usft (Original Well Elev)
Site:	PA 22-25 Pad	North Reference:	True
Well:	PA 43-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL (PA 43-26)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	3.00	265.00	599.95	-0.23	-2.61	2.58	3.00	3.00	0.00
666.67	5.00	265.00	666.46	-0.63	-7.24	7.17	3.00	3.00	0.00
700.00	5.00	265.00	699.66	-0.89	-10.13	10.04	0.00	0.00	0.00
800.00	5.00	265.00	799.28	-1.65	-18.82	18.64	0.00	0.00	0.00
900.00	5.00	265.00	898.90	-2.41	-27.50	27.25	0.00	0.00	0.00
966.67	5.00	265.00	965.31	-2.91	-33.29	32.98	0.00	0.00	0.00
1,000.00	5.98	263.08	998.49	-3.25	-36.46	36.14	3.00	2.95	-5.77
1,100.00	8.95	259.85	1,097.63	-5.25	-49.30	49.07	3.00	2.97	-3.23
9 5/8" @ 1100' MD									
1,200.00	11.94	258.22	1,195.97	-8.73	-67.09	67.17	3.00	2.99	-1.63
1,300.00	14.93	257.24	1,293.22	-13.69	-89.79	90.39	3.00	2.99	-0.98
1,400.00	17.93	256.58	1,389.12	-20.11	-117.33	118.67	3.00	2.99	-0.66
1,500.00	20.92	256.10	1,483.42	-27.97	-149.63	151.92	3.00	3.00	-0.48
1,600.00	23.92	255.74	1,575.85	-37.26	-186.62	190.05	3.00	3.00	-0.36
1,700.00	26.92	255.45	1,666.16	-47.94	-228.19	232.97	3.00	3.00	-0.29
1,704.50	27.05	255.44	1,670.17	-48.45	-230.17	235.01	3.00	3.00	-0.25
1,800.00	27.05	255.44	1,755.22	-59.37	-272.20	278.44	0.00	0.00	0.00
1,900.00	27.05	255.44	1,844.28	-70.80	-316.22	323.92	0.00	0.00	0.00
2,000.00	27.05	255.44	1,933.34	-82.23	-360.24	369.40	0.00	0.00	0.00
2,100.00	27.05	255.44	2,022.40	-93.66	-404.26	414.88	0.00	0.00	0.00
2,200.00	27.05	255.44	2,111.46	-105.09	-448.28	460.35	0.00	0.00	0.00
2,300.00	27.05	255.44	2,200.52	-116.52	-492.30	505.83	0.00	0.00	0.00
2,400.00	27.05	255.44	2,289.58	-127.95	-536.32	551.31	0.00	0.00	0.00
2,500.00	27.05	255.44	2,378.64	-139.38	-580.33	596.79	0.00	0.00	0.00
2,600.00	27.05	255.44	2,467.71	-150.81	-624.35	642.27	0.00	0.00	0.00
2,700.00	27.05	255.44	2,556.77	-162.25	-668.37	687.74	0.00	0.00	0.00
2,800.00	27.05	255.44	2,645.83	-173.68	-712.39	733.22	0.00	0.00	0.00
2,900.00	27.05	255.44	2,734.89	-185.11	-756.41	778.70	0.00	0.00	0.00
3,000.00	27.05	255.44	2,823.95	-196.54	-800.43	824.18	0.00	0.00	0.00
3,100.00	27.05	255.44	2,913.01	-207.97	-844.45	869.66	0.00	0.00	0.00
3,200.00	27.05	255.44	3,002.07	-219.40	-888.47	915.13	0.00	0.00	0.00
3,300.00	27.05	255.44	3,091.13	-230.83	-932.48	960.61	0.00	0.00	0.00
3,400.00	27.05	255.44	3,180.19	-242.26	-976.50	1,006.09	0.00	0.00	0.00
3,500.00	27.05	255.44	3,269.25	-253.69	-1,020.52	1,051.57	0.00	0.00	0.00
3,600.00	27.05	255.44	3,358.31	-265.12	-1,064.54	1,097.05	0.00	0.00	0.00
3,700.00	27.05	255.44	3,447.37	-276.55	-1,108.56	1,142.52	0.00	0.00	0.00
3,800.00	27.05	255.44	3,536.43	-287.98	-1,152.58	1,188.00	0.00	0.00	0.00
3,900.00	27.05	255.44	3,625.49	-299.41	-1,196.60	1,233.48	0.00	0.00	0.00
4,000.00	27.05	255.44	3,714.55	-310.85	-1,240.62	1,278.96	0.00	0.00	0.00
4,100.00	27.05	255.44	3,803.61	-322.28	-1,284.63	1,324.44	0.00	0.00	0.00
4,200.00	27.05	255.44	3,892.67	-333.71	-1,328.65	1,369.91	0.00	0.00	0.00
4,300.00	27.05	255.44	3,981.73	-345.14	-1,372.67	1,415.39	0.00	0.00	0.00
4,400.00	27.05	255.44	4,070.79	-356.57	-1,416.69	1,460.87	0.00	0.00	0.00
4,500.00	27.05	255.44	4,159.85	-368.00	-1,460.71	1,506.35	0.00	0.00	0.00
4,593.37	27.05	255.44	4,243.00	-378.67	-1,501.81	1,548.81	0.00	0.00	0.00

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Project:	Garfield County, CO NAD83	MD Reference:	GL 5224' + KB 24' @ 5248.00usft (Original Well Elev)
Site:	PA 22-25 Pad	North Reference:	True
Well:	PA 43-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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)
Ohio Creek									
4,600.00	27.05	255.44	4,248.91	-379.43	-1,504.73	1,551.83	0.00	0.00	0.00
4,677.58	27.05	255.44	4,318.00	-388.30	-1,538.88	1,587.11	0.00	0.00	0.00
Upper MVRD									
4,700.00	27.05	255.44	4,337.97	-390.86	-1,548.75	1,597.30	0.00	0.00	0.00
4,748.14	27.05	255.44	4,380.84	-396.36	-1,569.94	1,619.20	0.00	0.00	0.00
4,800.00	26.27	255.44	4,427.18	-402.21	-1,592.46	1,642.47	1.50	-1.50	0.00
4,871.50	25.20	255.44	4,491.59	-410.02	-1,622.51	1,673.52	1.50	-1.50	0.00
PA 43-26 MVRD									
4,900.00	24.77	255.44	4,517.42	-413.04	-1,634.16	1,685.55	1.50	-1.50	0.00
5,000.00	23.27	255.44	4,608.76	-423.27	-1,673.57	1,726.26	1.50	-1.50	0.00
5,100.00	21.77	255.44	4,701.13	-432.90	-1,710.64	1,764.57	1.50	-1.50	0.00
5,200.00	20.27	255.44	4,794.47	-441.92	-1,745.36	1,800.44	1.50	-1.50	0.00
5,300.00	18.77	255.44	4,888.72	-450.32	-1,777.71	1,833.86	1.50	-1.50	0.00
5,400.00	17.27	255.44	4,983.81	-458.09	-1,807.66	1,864.80	1.50	-1.50	0.00
5,500.00	15.77	255.44	5,079.67	-465.24	-1,835.18	1,893.24	1.50	-1.50	0.00
5,600.00	14.27	255.44	5,176.25	-471.76	-1,860.27	1,919.16	1.50	-1.50	0.00
5,700.00	12.77	255.44	5,273.48	-477.63	-1,882.90	1,942.54	1.50	-1.50	0.00
5,800.00	11.27	255.44	5,371.28	-482.87	-1,903.07	1,963.37	1.50	-1.50	0.00
5,888.23	9.95	255.44	5,458.00	-486.95	-1,918.79	1,979.62	1.50	-1.50	0.00
Top of Gas									
5,900.00	9.77	255.44	5,469.60	-487.46	-1,920.74	1,981.63	1.50	-1.50	0.00
6,000.00	8.27	255.44	5,568.36	-491.40	-1,935.92	1,997.32	1.50	-1.50	0.00
6,100.00	6.77	255.44	5,667.49	-494.69	-1,948.60	2,010.41	1.50	-1.50	0.00
6,200.00	5.27	255.44	5,766.94	-497.33	-1,958.75	2,020.90	1.50	-1.50	0.00
6,300.00	3.77	255.44	5,866.62	-499.31	-1,966.39	2,028.79	1.50	-1.50	0.00
6,400.00	2.27	255.44	5,966.48	-500.64	-1,971.49	2,034.06	1.50	-1.50	0.00
6,500.00	0.77	255.44	6,066.44	-501.31	-1,974.06	2,036.72	1.50	-1.50	0.00
6,551.56	0.00	0.00	6,118.00	-501.39	-1,974.40	2,037.07	1.50	-1.50	0.00
6,600.00	0.00	0.00	6,166.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
6,700.00	0.00	0.00	6,266.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
6,800.00	0.00	0.00	6,366.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
6,900.00	0.00	0.00	6,466.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
7,000.00	0.00	0.00	6,566.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
7,100.00	0.00	0.00	6,666.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
7,200.00	0.00	0.00	6,766.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
7,201.56	0.00	0.00	6,768.00	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
Cameo									
7,300.00	0.00	0.00	6,866.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
7,400.00	0.00	0.00	6,966.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
7,500.00	0.00	0.00	7,066.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
7,600.00	0.00	0.00	7,166.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
7,700.00	0.00	0.00	7,266.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
7,800.00	0.00	0.00	7,366.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
7,900.00	0.00	0.00	7,466.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
8,000.00	0.00	0.00	7,566.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
8,100.00	0.00	0.00	7,666.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
8,200.00	0.00	0.00	7,766.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
8,201.56	0.00	0.00	7,768.00	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
RLNS									
8,300.00	0.00	0.00	7,866.44	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00

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Site:	PA 22-25 Pad	North Reference:	True
Well:	PA 43-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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)
8,351.56	0.00	0.00	7,918.00	-501.39	-1,974.40	2,037.07	0.00	0.00	0.00
PA 43-26 PBHL - PBHL (PA 43-26)									

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
SHL (PA 43-26) - plan misses target center by 5.65usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	-3.40	-4.52	1,615,186.77	2,308,728.18	39.4968742	-107.9499045
PBHL (PA 43-26) - plan hits target center - Circle (radius 50.00)	0.00	0.00	7,918.00	-501.39	-1,974.40	1,614,742.07	2,306,745.59	39.4955067	-107.9568849

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,100.00	1,097.63	9 5/8" @ 1100' MD	9.62	13.50	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,593.37	4,242.99	Ohio Creek		0.00		
4,677.58	4,317.99	Upper MVRD		0.00		
5,888.23	5,457.99	Top of Gas		0.00		
7,201.56	6,767.99	Cameo		0.00		
8,201.56	7,767.99	RLNS		0.00		