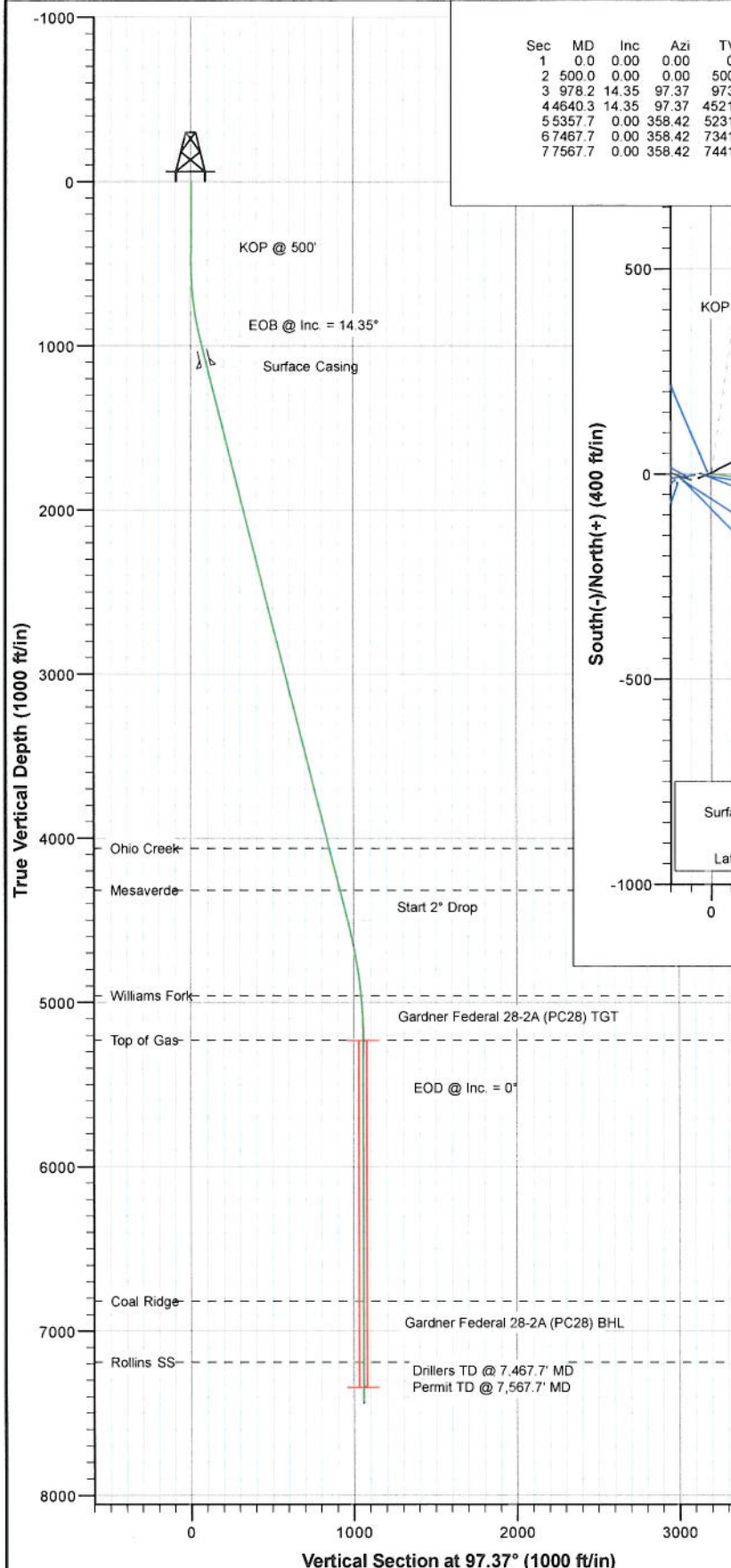


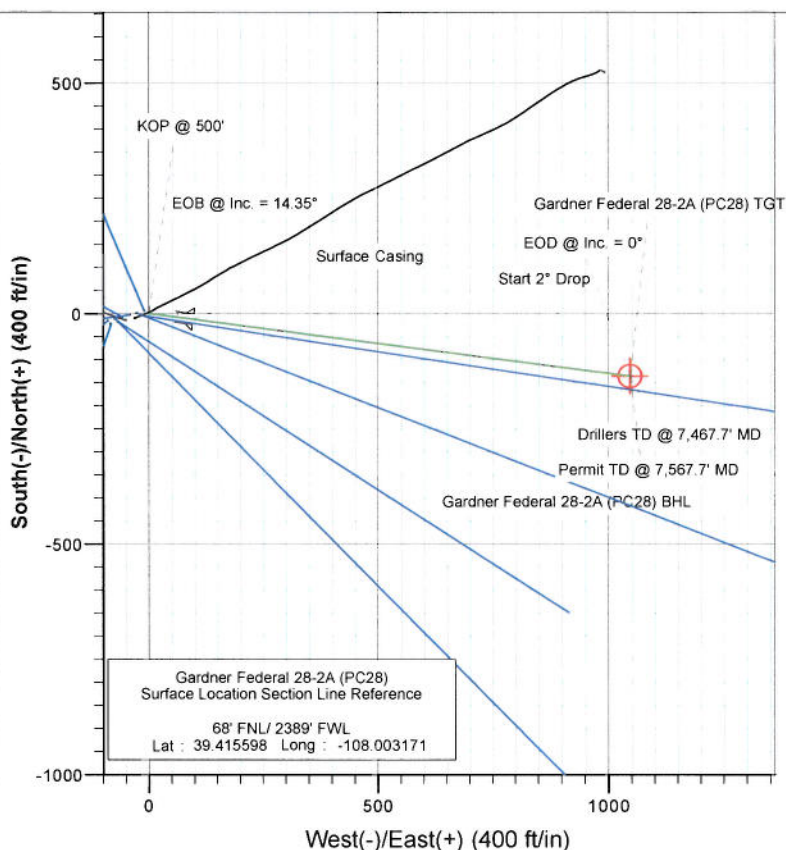


Project: S. Piceance (Parachute)
 Site: NENW Sec28-T7S-R95W (PC-28)
 Well: Gardner Federal 28-2A (PC28)
 Wellbore: DD
 Plan: Plan #3



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSecl	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	
3	978.2	14.35	97.37	973.2	-7.6	59.1	3.00	97.37	59.6	
4	4640.3	14.35	97.37	4521.1	-124.0	959.0	0.00	0.00	967.0	
5	5357.7	0.00	358.42	5231.0	-135.5	1047.6	2.00	180.00	1056.3	Gardner Federal 28-2A (PC28) TGT
6	7467.7	0.00	358.42	7341.0	-135.5	1047.6	0.00	358.42	1056.3	Gardner Federal 28-2A (PC28) BHL
7	7567.7	0.00	358.42	7441.0	-135.5	1047.6	0.00	358.42	1056.3	



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4063.0	4167.4	Ohio Creek
4318.0	4430.6	Mesaverde
4959.0	5085.2	Williams Fork
5231.0	5357.7	Top of Gas
6819.0	6945.7	Coal Ridge
7191.0	7317.7	Rollins SS



Azimuths to True North
 Magnetic North: 10.39°

Magnetic Field
 Strength: 52290.7nT
 Dip Angle: 65.70°
 Date: 11/18/2010
 Model: IGRF200510

Plan #3
 Gardner Federal 28-2A (PC28)
 115XXX; SC

KBE @ 6442.0ft (Original Well Elev)
 North American Datum 1983
 Well Gardner Federal 28-2A (PC28), True North

Target	Azimuth	Origin Type	N/S		
Gardner Federal 28-2A (PC28) BHL	97.37	Slot	0.0		
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
Gardner Federal 28-2A (PC28) TGT	5231.0	-135.5	1047.6	39.415226	-107.999463
Gardner Federal 28-2A (PC28) BHL	7341.0	-135.5	1047.6	39.415226	-107.999463

Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB
Company: EnCana Oil & Gas (USA) Inc
Project: S. Piceance (Parachute)
Site: NENW Sec28-T7S-R95W (PC28)
Well: Gardner Federal 28-2A (PC28)
Wellbore: DD
Design: Plan #3

Local Co-ordinate Reference: Well Gardner Federal 28-2A (PC28)
TVD Reference: KBE @ 6442.0ft (Original Well Elev)
MD Reference: KBE @ 6442.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project S. Piceance (Parachute), Garfield County, CO

Map System: US State Plane 1983
Geo Datum: North American Datum 1983
Map Zone: Colorado Central Zone
System Datum: Mean Sea Level

Site NENW Sec28-T7S-R95W (PC28)

Site Position: Northing: 1,585,994.80 ft Latitude: 39.415560
From: Lat/Long Easting: 2,292,840.18 ft Longitude: -108.003350
Position Uncertainty: 0.0 ft Slot Radius: 13.200 in Grid Convergence: -1.58 °

Well Gardner Federal 28-2A (PC28)

Well Position +N/-S 0.0 ft Northing: 1,586,007.23 ft Latitude: 39.415598
 +E/-W 0.0 ft Easting: 2,292,891.11 ft Longitude: -108.003171
Position Uncertainty 0.0 ft Wellhead Elevation: ft Ground Level: 6,420.0 ft

Wellbore DD

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	11/18/2010	10.39	65.70	52,291

Design Plan #3

Audit Notes:

Version: Phase: PLAN Tie On Depth: 0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	97.37

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
978.2	14.35	97.37	973.2	-7.6	59.1	3.00	3.00	0.00	97.37	
4,640.3	14.35	97.37	4,521.1	-124.0	959.0	0.00	0.00	0.00	0.00	
5,357.7	0.00	358.42	5,231.0	-135.5	1,047.6	2.00	-2.00	0.00	180.00	Gardner Federal 28-2
7,467.7	0.00	358.42	7,341.0	-135.5	1,047.6	0.00	0.00	0.00	358.42	Gardner Federal 28-2
7,567.7	0.00	358.42	7,441.0	-135.5	1,047.6	0.00	0.00	0.00	358.42	

Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB
 Company: EnCana Oil & Gas (USA) Inc
 Project: S. Piceance (Parachute)
 Site: NENW Sec28-T7S-R95W (PC28)
 Well: Gardner Federal 28-2A (PC28)
 Wellbore: DD
 Design: Plan #3

Local Co-ordinate Reference: Well Gardner Federal 28-2A (PC28)
 TVD Reference: KBE @ 6442.0ft (Original Well Elev)
 MD Reference: KBE @ 6442.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	KOP @ 500'
600.0	3.00	97.37	600.0	-0.3	2.6	2.6	3.00	3.00	
700.0	6.00	97.37	699.6	-1.3	10.4	10.5	3.00	3.00	
800.0	9.00	97.37	798.8	-3.0	23.3	23.5	3.00	3.00	
900.0	12.00	97.37	897.1	-5.4	41.4	41.7	3.00	3.00	
978.2	14.35	97.37	973.2	-7.6	59.1	59.6	3.00	3.00	EOB @ Inc. = 14.35°
1,000.0	14.35	97.37	994.3	-8.3	64.4	65.0	0.00	0.00	
1,100.0	14.35	97.37	1,091.2	-11.5	89.0	89.7	0.00	0.00	
1,134.9	14.35	97.37	1,125.0	-12.6	97.6	98.4	0.00	0.00	Surface Casing
1,200.0	14.35	97.37	1,188.1	-14.7	113.6	114.5	0.00	0.00	
1,300.0	14.35	97.37	1,285.0	-17.9	138.1	139.3	0.00	0.00	
1,400.0	14.35	97.37	1,381.9	-21.0	162.7	164.1	0.00	0.00	
1,500.0	14.35	97.37	1,478.7	-24.2	187.3	188.9	0.00	0.00	
1,600.0	14.35	97.37	1,575.6	-27.4	211.9	213.6	0.00	0.00	
1,700.0	14.35	97.37	1,672.5	-30.6	236.4	238.4	0.00	0.00	
1,800.0	14.35	97.37	1,769.4	-33.8	261.0	263.2	0.00	0.00	
1,900.0	14.35	97.37	1,866.3	-36.9	285.6	288.0	0.00	0.00	
2,000.0	14.35	97.37	1,963.2	-40.1	310.2	312.7	0.00	0.00	
2,100.0	14.35	97.37	2,060.0	-43.3	334.7	337.5	0.00	0.00	
2,200.0	14.35	97.37	2,156.9	-46.5	359.3	362.3	0.00	0.00	
2,300.0	14.35	97.37	2,253.8	-49.6	383.9	387.1	0.00	0.00	
2,400.0	14.35	97.37	2,350.7	-52.8	408.5	411.9	0.00	0.00	
2,500.0	14.35	97.37	2,447.6	-56.0	433.0	436.6	0.00	0.00	
2,600.0	14.35	97.37	2,544.4	-59.2	457.6	461.4	0.00	0.00	
2,700.0	14.35	97.37	2,641.3	-62.4	482.2	486.2	0.00	0.00	
2,800.0	14.35	97.37	2,738.2	-65.5	506.8	511.0	0.00	0.00	
2,900.0	14.35	97.37	2,835.1	-68.7	531.3	535.8	0.00	0.00	
3,000.0	14.35	97.37	2,932.0	-71.9	555.9	560.5	0.00	0.00	
3,100.0	14.35	97.37	3,028.8	-75.1	580.5	585.3	0.00	0.00	
3,200.0	14.35	97.37	3,125.7	-78.2	605.1	610.1	0.00	0.00	
3,300.0	14.35	97.37	3,222.6	-81.4	629.6	634.9	0.00	0.00	
3,400.0	14.35	97.37	3,319.5	-84.6	654.2	659.6	0.00	0.00	
3,500.0	14.35	97.37	3,416.4	-87.8	678.8	684.4	0.00	0.00	
3,600.0	14.35	97.37	3,513.3	-90.9	703.3	709.2	0.00	0.00	
3,700.0	14.35	97.37	3,610.1	-94.1	727.9	734.0	0.00	0.00	
3,800.0	14.35	97.37	3,707.0	-97.3	752.5	758.8	0.00	0.00	
3,900.0	14.35	97.37	3,803.9	-100.5	777.1	783.5	0.00	0.00	
4,000.0	14.35	97.37	3,900.8	-103.7	801.6	808.3	0.00	0.00	
4,100.0	14.35	97.37	3,997.7	-106.8	826.2	833.1	0.00	0.00	
4,167.4	14.35	97.37	4,063.0	-109.0	842.8	849.8	0.00	0.00	Ohio Creek
4,200.0	14.35	97.37	4,094.5	-110.0	850.8	857.9	0.00	0.00	
4,300.0	14.35	97.37	4,191.4	-113.2	875.4	882.7	0.00	0.00	
4,400.0	14.35	97.37	4,288.3	-116.4	899.9	907.4	0.00	0.00	
4,430.6	14.35	97.37	4,318.0	-117.3	907.5	915.0	0.00	0.00	Mesaverde
4,500.0	14.35	97.37	4,385.2	-119.5	924.5	932.2	0.00	0.00	
4,600.0	14.35	97.37	4,482.1	-122.7	949.1	957.0	0.00	0.00	
4,640.3	14.35	97.37	4,521.1	-124.0	959.0	967.0	0.00	0.00	Start 2" Drop

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Gardner Federal 28-2A (PC28)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 6442.0ft (Original Well Elev)
Project:	S. Piceance (Parachute)	MD Reference:	KBE @ 6442.0ft (Original Well Elev)
Site:	NENW Sec28-T7S-R95W (PC28)	North Reference:	True
Well:	Gardner Federal 28-2A (PC28)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,700.0	13.15	97.37	4,579.1	-125.8	973.1	981.2	2.00	-2.00	
4,800.0	11.15	97.37	4,676.9	-128.5	993.9	1,002.2	2.00	-2.00	
4,900.0	9.15	97.37	4,775.3	-130.8	1,011.4	1,019.8	2.00	-2.00	
5,000.0	7.15	97.37	4,874.3	-132.6	1,025.5	1,034.0	2.00	-2.00	
5,085.2	5.45	97.37	4,959.0	-133.8	1,034.8	1,043.4	2.00	-2.00	Williams Fork
5,100.0	5.15	97.37	4,973.7	-134.0	1,036.1	1,044.7	2.00	-2.00	
5,200.0	3.15	97.37	5,073.4	-134.9	1,043.3	1,052.0	2.00	-2.00	
5,300.0	1.15	97.37	5,173.3	-135.4	1,047.0	1,055.7	2.00	-2.00	
5,357.7	0.00	358.42	5,231.0	-135.5	1,047.6	1,056.3	2.00	-2.00	EOD @ Inc. = 0° - Top of Gas
5,400.0	0.00	358.42	5,273.3	-135.5	1,047.6	1,056.3	0.00	0.00	
5,500.0	0.00	358.42	5,373.3	-135.5	1,047.6	1,056.3	0.00	0.00	
5,600.0	0.00	358.42	5,473.3	-135.5	1,047.6	1,056.3	0.00	0.00	
5,700.0	0.00	358.42	5,573.3	-135.5	1,047.6	1,056.3	0.00	0.00	
5,800.0	0.00	358.42	5,673.3	-135.5	1,047.6	1,056.3	0.00	0.00	
5,900.0	0.00	358.42	5,773.3	-135.5	1,047.6	1,056.3	0.00	0.00	
6,000.0	0.00	358.42	5,873.3	-135.5	1,047.6	1,056.3	0.00	0.00	
6,100.0	0.00	358.42	5,973.3	-135.5	1,047.6	1,056.3	0.00	0.00	
6,200.0	0.00	358.42	6,073.3	-135.5	1,047.6	1,056.3	0.00	0.00	
6,300.0	0.00	358.42	6,173.3	-135.5	1,047.6	1,056.3	0.00	0.00	
6,400.0	0.00	358.42	6,273.3	-135.5	1,047.6	1,056.3	0.00	0.00	
6,500.0	0.00	358.42	6,373.3	-135.5	1,047.6	1,056.3	0.00	0.00	
6,600.0	0.00	358.42	6,473.3	-135.5	1,047.6	1,056.3	0.00	0.00	
6,700.0	0.00	358.42	6,573.3	-135.5	1,047.6	1,056.3	0.00	0.00	
6,800.0	0.00	358.42	6,673.3	-135.5	1,047.6	1,056.3	0.00	0.00	
6,900.0	0.00	358.42	6,773.3	-135.5	1,047.6	1,056.3	0.00	0.00	
6,945.7	0.00	358.42	6,819.0	-135.5	1,047.6	1,056.3	0.00	0.00	Coal Ridge
7,000.0	0.00	358.42	6,873.3	-135.5	1,047.6	1,056.3	0.00	0.00	
7,100.0	0.00	358.42	6,973.3	-135.5	1,047.6	1,056.3	0.00	0.00	
7,200.0	0.00	358.42	7,073.3	-135.5	1,047.6	1,056.3	0.00	0.00	
7,300.0	0.00	358.42	7,173.3	-135.5	1,047.6	1,056.3	0.00	0.00	
7,317.7	0.00	358.42	7,191.0	-135.5	1,047.6	1,056.3	0.00	0.00	Rollins SS
7,400.0	0.00	358.42	7,273.3	-135.5	1,047.6	1,056.3	0.00	0.00	
7,467.7	0.00	358.42	7,341.0	-135.5	1,047.6	1,056.3	0.00	0.00	Drillers TD @ 7,467.7' MD
7,500.0	0.00	358.42	7,373.3	-135.5	1,047.6	1,056.3	0.00	0.00	
7,567.7	0.00	358.42	7,441.0	-135.5	1,047.6	1,056.3	0.00	0.00	Permit TD @ 7,567.7' MD

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target - Shape									
Gardner Federal 28-2A (- plan hits target center - Circle (radius 25.0)	0.00	358.42	5,231.0	-135.5	1,047.6	1,585,842.95	2,293,934.58	39.415226	-107.999463
Gardner Federal 28-2A (- plan hits target center - Circle (radius 25.0)	0.00	358.42	7,341.0	-135.5	1,047.6	1,585,842.95	2,293,934.58	39.415226	-107.999463

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Gardner Federal 28-2A (PC28)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 6442.0ft (Original Well Elev)
Project:	S. Piceance (Parachute)	MD Reference:	KBE @ 6442.0ft (Original Well Elev)
Site:	NENW Sec28-T7S-R95W (PC28)	North Reference:	True
Well:	Gardner Federal 28-2A (PC28)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #3		

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,134.9	1,125.0	Surface Casing	8.625	12.250

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,167.4	4,063.0	Ohio Creek		0.00	
4,430.6	4,318.0	Mesaverde		0.00	
5,085.2	4,959.0	Williams Fork		0.00	
5,357.7	5,231.0	Top of Gas		0.00	
6,945.7	6,819.0	Coal Ridge		0.00	
7,317.7	7,191.0	Rollins SS		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
500.0	500.0	0.0	0.0	KOP @ 500'
978.2	973.2	-7.6	59.1	EOB @ Inc. = 14.35°
4,640.3	4,521.1	-124.0	959.0	Start 2° Drop
5,357.7	5,231.0	-135.5	1,047.6	EOD @ Inc. = 0°
7,467.7	7,341.0	-135.5	1,047.6	Drillers TD @ 7,467.7' MD
7,567.7	7,441.0	-135.5	1,047.6	Permit TD @ 7,567.7' MD