

Piceance 28-08M
Mesa County, Colorado
DRILLING PROGNOSIS

Surface Location

SW/4 of NW/4
 Section 28 T9S R93W 6th P.M.
 Graded Elevation 7556' MSL
 RKB Elevation 7578' (22' KB Patterson 306)

SHL Geographical Coordinates (NAD-83)

Slot A-9
 Latitude 39.250933333° N
 Longitude 107.779375000° W

Directional Target

50-ft radius cylinder centered on BHL
 From estimated top of gas (TOG) to TD

BHL Geographical Coordinates (NAD-83)

Latitude 39.250152778° N
 Longitude 107.774661110° W

| Casing OD | Hole Size | Weight | Grade | Coupling | Setting Depth (MD) | Top of Cement |
|-----------|-----------|----------|-------|----------|--------------------|---------------|
| 16" | Conductor | ¾" WT | - | Welded | 40-ft BGL | Grouted |
| 8-5/8" | 11" | 24 ppf | J-55 | STC | 1563-ft | surface |
| 4-1/2" | 7-7/8" | 11.6 ppf | I-80 | LTC | 8101-ft | 1022-ft |

Cementing Details

8-5/8" Surface Casing

Halliburton Name
 Type
 Additives
 Planned top
 Density (ppg)
 Yield (cf/sx)
 Volume (sx)
 Volume (bbls)

Lead

VariCem GJ5
 Extended
 Pol-E-Flake
 Surface
 12.30
 2.45
 192
 84

Tail

VariCem GJ5
 Extended
 Pol-E-Flake
 1000-ft
 12.80
 2.17
 114
 44

4-1/2" Production Casing

Halliburton Name
 Type
 Additives
 Planned top
 Density (ppg)
 Yield (cf/sx)
 Volume (sx)
 Volume (bbls)

Lead

VersaCem
 50:50 Poz:G
 Pol-E-Flake, Kol-Seal
 1022-ft
 12.80
 1.75
 807
 252

Tail

ExpandaCem
 50:50 Poz:G
 Silica Flour, Pol-E-Flake, Kol-Seal
 5201-ft
 13.30
 1.89
 545
 183

Formation Tops

| Name | MD (ft) | TVD (ft) | Expected Pore Pressure (ppg) | Planned Mud Weight (ppg) |
|-----------------|---------|--------------|------------------------------|--------------------------|
| Wasatch | - | Ground level | | |
| 'G' Sand | 2956 | 2836 | 8.8 | 9.0 - 9.3 |
| Williams Fork | 4900 | 4686 | 8.8 | 9.0 - 9.3 |
| Top of Gas | 5401 | 5186 | 8.8 - 9.2 | 9.0 - 9.5 |
| Cameo | 7201 | 6986 | 8.8 - 9.2 | 9.0 - 9.5 |
| Base Cameo Coal | 7859 | 7644 | 8.8 - 9.2 | 9.0 - 9.5 |
| Rollins | 7901 | 7686 | 9.0 - 9.5 | 9.3 - 9.7 |
| Total Depth | 8101 | 7886 | 9.0 - 9.5 | 9.5 - 9.7 |

BOP : 11" 5M Double Gate & 11" 5M Annular Preventer, Rotating Head