

**Gunderson 20-12W
Mesa County, Colorado
DRILLING PROGNOSIS**

Surface Location

NE/4 of NW/4
Section 20 T9S R93W 6th P.M.
Graded Elevation 7146' MSL
RKB Elevation 7176' (30' KB H&P 522)

SHL Geographical Coordinates (NAD-83)

Slot B-12
Latitude 39.266589000° N
Longitude 107.795317000° W

Directional Target

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

BHL Geographical Coordinates (NAD-83)

Latitude 39.263048000° N
Longitude 107.797688000° W

Casing OD	Hole Size	Weight	Condition	Grade	Coupling	Setting Depth (MD)	Top of Cement
16"	26"	¾" WT	New	-	Welded	60-ft BGL	surface
8-5/8"	11"	24 ppf	New	J-55	STC	1530-ft	surface
4-1/2"	7-7/8"	11.6 ppf	New	Next-80	LTC	7729-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
187
82

Tail

VariCem GJ5
Extended
Pol-E-Flake
1000-ft
12.80
2.18
109
42

4-1/2" Production Casing

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

Lead

NeoCem GJ2
II/V
Pol-E-Flake
1030-ft
12.50
1.94
779
269

Tail

ThermaCem GJ2
50:50 Poz:G
Pol-E-Flake, Kol-Seal
5479-ft
13.30
1.79
445
142

Formation Tops (Sd = Sand; Sh = Shale; SW = salt water)

Name	MD (ft)	TVD (ft)	Description	Expected Pore Pressure (ppg)	Planned Mud Weight (ppg)
Wasatch	-	G.L.	Sd/Sh; freshwater to 500'	8.3	8.5 – 8.8
'G' Sand	2509	2422	Sd/Sh; gas	8.8	9.0 - 9.3
Williams Fork	4703	4522	Sd/Sh; gas & SW	8.8	9.0 - 9.3
Top of Gas	5679	5472	Sd/Sh; gas & SW	8.8 - 9.2	9.0 - 9.5
Cameo	6779	6572	Sd/Sh/Coals; gas & condensate	8.8 - 9.2	9.0 - 9.5
Base Cameo Coal	7439	7232	Sd/Sh/Coals; gas & condensate	8.8 - 9.2	9.0 - 9.5
Rollins	7479	7272	Sd/Sh; gas, condensate & SW	9.0 - 9.5	9.3 - 9.7
Total Depth	7729	7522	Sd/Sh; gas, condensate & SW	9.0 - 9.5	9.5 - 9.7

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