

Gunderson 20-03E Mesa County, Colorado DRILLING PROGNOSIS

Surface Location

NE/4 of SE/4
Section 20 T9S R93W 6th P.M.
Graded Elevation 7475' MSL
RKB Elevation 7497' (22' KB Patterson 306)

SHL Geographical Coordinates (NAD-83)

Slot A-1
Latitude 39.260817000° N
Longitude 107.784442000° W

Directional Target

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

BHL Geographical Coordinates (NAD-83)

Latitude 39.267758000° N
Longitude 107.786711000° 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	1581-ft	surface
4-1/2"	7-7/8"	11.6 ppf	New	I-80	LTC	8478-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

EconoCem
40:60 Poz:G
Kol-Seal
1022-ft
12.70
1.64
1090
319

Tail

ThermaCem
30:70 Poz:G
Silica Flour, Pol-E-Flake, Kol-Seal
6328-ft
13.50
1.75
437
136

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	3147	2835	Sd/Sh; gas	8.8	9.0 - 9.3
Williams Fork	5291	4635	Sd/Sh; gas & SW	8.8	9.0 - 9.3
Top of Gas	6528	5835	Sd/Sh; gas & SW	8.8 - 9.2	9.0 - 9.5
Cameo	7628	6935	Sd/Sh/Coals; gas & condensate	8.8 - 9.2	9.0 - 9.5
Base Cameo Coal	8286	7593	Sd/Sh/Coals; gas & condensate	8.8 - 9.2	9.0 - 9.5
Rollins	8328	7635	Sd/Sh; gas, condensate & SW	9.0 - 9.5	9.3 - 9.7
Total Depth	8478	7785	Sd/Sh; gas, condensate & SW	9.0 - 9.5	9.5 - 9.7

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