

Gunderson 20-07E

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 A-7
 Latitude 39.266783000° N
 Longitude 107.795281000° W

Directional Target

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

BHL Geographical Coordinates (NAD-83)

Latitude 39.265836000° N
 Longitude 107.788369000° 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	7993-ft	1022-ft

Cementing Details

8-5/8" Surface Casing

Halliburton Name	VariCem GJ5	Tail
Type	Extended	Extended
Additives	Pol-E-Flake	Pol-E-Flake
Planned top	Surface	1000-ft
Density (ppg)	12.30	12.80
Yield (cf/sx)	2.45	2.18
Volume (sx)	187	109
Volume (bbls)	82	42

4-1/2" Production Casing

Halliburton Name	NeoCem GJ2	Tail
Type	II/V	50:50 Poz:G
Additives	Pol-E-Flake	Pol-E-Flake, Kol-Seal
Planned top	1030-ft	5743-ft
Density (ppg)	12.50	13.30
Yield (cf/sx)	1.94	1.79
Volume (sx)	825	445
Volume (bbls)	285	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	2595	2451	Sd/Sh; gas	8.8	9.0 - 9.3
Williams Fork	4950	4551	Sd/Sh; gas & SW	8.8	9.0 - 9.3
Top of Gas	5943	5501	Sd/Sh; gas & SW	8.8 - 9.2	9.0 - 9.5
Cameo	7043	6601	Sd/Sh/Coals; gas & condensate	8.8 - 9.2	9.0 - 9.5
Base Cameo Coal	7703	7261	Sd/Sh/Coals; gas & condensate	8.8 - 9.2	9.0 - 9.5
Rollins	7743	7301	Sd/Sh; gas, condensate & SW	9.0 - 9.5	9.3 - 9.7
Total Depth	7993	7551	Sd/Sh; gas, condensate & SW	9.0 - 9.5	9.5 - 9.7

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