

Nichols 0994-13-21W
Mesa County, Colorado
DRILLING PROGNOSIS

Surface Location

SW/4 of NE/4
 Section 24 T9S R94W 6th P.M.
 Graded Elevation 7137' MSL
 RKB Elevation 7167' (30' KB H&P 522)

SHL Geographical Coordinates (NAD-83)

Slot B-3
 Latitude 39.264708000° N
 Longitude 107.830572000° W

Directional Target

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

BHL Geographical Coordinates (NAD-83)

Latitude 39.269856000° N
 Longitude 107.835053000° 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	7961-ft	1030-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
 197
 86

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
 857
 296

Tail

ThermaCem GJ2
 50:50 Poz:G
 Pol-E-Flake, Kol-Seal
 5911-ft
 13.30
 1.73
 419
 129

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	2600	2417	Sd/Sh; gas	8.8	9.0 - 9.3
Williams Fork	4602	4167	Sd/Sh; gas & SW	8.8	9.0 - 9.3
Top of Gas	6111	5567	Sd/Sh; gas & SW	8.8 - 9.2	9.0 - 9.5
Cameo	7011	6467	Sd/Sh/Coals; gas & condensate	8.8 - 9.2	9.0 - 9.5
Base Cameo Coal	7671	7127	Sd/Sh/Coals; gas & condensate	8.8 - 9.2	9.0 - 9.5
Rollins	7711	7167	Sd/Sh; gas, condensate & SW	9.0 - 9.5	9.3 - 9.7
Total Depth	7961	7417	Sd/Sh; gas, condensate & SW	9.0 - 9.5	9.5 - 9.7

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