

**Nichols 0994-13-21E**  
**Mesa County, Colorado**  
**DRILLING PROGNOSIS**

**Surface Location**

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

**SHL Geographical Coordinates (NAD-83)**

Slot A-3  
 Latitude 39.264697000° N  
 Longitude 107.830539000° W

**Directional Target**

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

**BHL Geographical Coordinates (NAD-83)**

Latitude 39.270070000° N  
 Longitude 107.825741000° 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	8050-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  
 874  
 302

Tail

ThermaCem GJ2  
 50:50 Poz:G  
 Pol-E-Flake, Kol-Seal  
 6000-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	2698	2482	Sd/Sh; gas	8.8	9.0 - 9.3
Williams Fork	4693	4232	Sd/Sh; gas & SW	8.8	9.0 - 9.3
Top of Gas	6200	5632	Sd/Sh; gas & SW	8.8 - 9.2	9.0 - 9.5
Cameo	7100	6532	Sd/Sh/Coals; gas & condensate	8.8 - 9.2	9.0 - 9.5
Base Cameo Coal	7760	7192	Sd/Sh/Coals; gas & condensate	8.8 - 9.2	9.0 - 9.5
Rollins	7800	7232	Sd/Sh; gas, condensate & SW	9.0 - 9.5	9.3 - 9.7
Total Depth	8050	7482	Sd/Sh; gas, condensate & SW	9.0 - 9.5	9.5 - 9.7

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