

**Hamilton 1-29**

**Proposed Schematic**

**1-May-12**

<b>Field:</b> WFU	<b>AFE / Network #:</b> 0	<b>LAT:</b> 40.3541
<b>County:</b> Moffat	<b>Shell Working Interest:</b> 100%	<b>LONG:</b> 107.6217
<b>Township:</b> Sec: 29, Twp: 5n, Rng: 91W	<b>AFE Drilling Cost:</b> \$0	<b>Ground Elevation:</b> 6343 ft (surveyed)
<b>Rig:</b> Savanna 650	<b>Plan Days:</b> 0	<b>RKB to Ground:</b> 16.5 ft
<b>Permit API:</b> 0		<b>RKB Elevation:</b> 6359.5 ft

**Objectives: Drill Surface and Intermediate into top of Niobrara  
Drill Lateral to total MD without losses**

30" Hole drilled to 20" pipe (0.25") set @ Cement to surface	90 90		<p><b>NOTES</b></p> <p>Notify COGCC according to NW Notifications Test BOPs to 2000 psi Test 10-3/4" csg to 1500 psi for 30 min Test 7-5/8" csg to 1500 psi for 30 min</p>	<p><b>OFFSET DATA</b></p>
13-1/2" Hole drilled to 10-3/4" 40.5# J-55 STC Cement to surface	500 500			
9-7/8" Hole drilled to 7-5/8" 29.7# P-110 LTC Cement to 250'	2855 2855			
<b>FORMATION</b>	<b>TVD TOP</b>	<b>BITS AND BHAS</b>	<b>DRILLING PARAMETERS</b>	<b>DRILLING FLUIDS</b>
Mancos	Surface	<b>Surface:</b> 13.5" bit, 8" 1.5? motor, PWD SUB, NMDC, MWD, NMDC, 6.75" Shock Sub, 5" HWDP to surface	<b>Surface:</b> WOB and GPM: Maximum RPM: 45	
Marapos	80	<b>Intermediate:</b> 9-7/8" bit, 6.75" 1.83? motor, (6.75" 1.5? w/ 9-3/4" stab motor) PWD SUB, NMDC, MWD, NMDC, 11x HWDP, 5" jars, 3x HWDP, 4" DP to surface	<b>Intermediate:</b> WOB: 9-15 Klbs Flow: 350 GPM Rotation: less than 45 RPM	
X Bentonite	4,256	<b>Pilot/Production:</b> 6-3/4" bit, 4.75" 1.83? motor (1.5? w 6.5" stab), PWD SUB, NMDC, MWD, NMDC, 4" DP to Surface	<b>Production:</b> WOB: 5-10Klbs Flow: See below Rotation: 30-50 RPM	
Buck Peak	2,430			
IB1	2,519			
Tow Creek	2,800			
		<b>IB2</b> 2,993' MD 2,927' TVD	<b>Base/Main Bench</b> 3,600' MD 3,235' TVD	<b>Carlile</b> N/A' MD 3,724' TVD
<b>Logging Program</b>	<b>Production Flow Rates</b>	<b>CASING</b>		<b>Cement</b>
<b>Surface:</b> -None <b>Intermediate:</b> Open Hole Logs: Sonic Scanner (BARS), FMI (Multiple Passes), Spectral GR-PEX-ECS <b>Production:</b> Open Hole: OBMI, Sonic Scanner, GR, PEX, ECS (optional)	<b>Initial Production Flow:</b> -1000 Strd Cubic Feet Air -35 GPM Oil Based Mud  <b>Increase Oil Based Mud flow as necessary by observing live PWD data and increase to keep bottom hole pressure constant.</b>	<b>Surface:</b> 10 3/4" 40.5# J-55 R3 ST&C 0 – 500 ft <b>Centralization Program:</b> -1 centralizer per joint on bottom 3 joints. -1 centralizer every other joint to 200' from surface • No centralizers closer to surface in case top job is  <b>Intermediate:</b> 7 5/8" 29.7# P-110 R3 LT&C 0 – 2855 ft <b>Centralization Program:</b> -Follow SLB program  <b>Production:</b> 5 1/2" 17# N-80 R3 H511 2720 – 6392 ft	<b>Surface:</b> Lead: 14.5 ppg Class G/Pozmix Blend - 172 Sacks Tail: 15.8 ppg Class G – 105 sacks TOC: Surface, BOC: 500'  <b>Intermediate:</b> 9.47 ppg LiteCrete, Hole Size: 7-7/8, Cement TOC: 250' TVD, Cement Btm: 2,855' TVD. Est. Sks: X,XXX  <b>Production:</b> None	