

Well: State 7-62 36-1H
Zone of Interest: Niobrara Shale

1.0) Summary of Operations

Re-enter well.

Set cast iron bridge plug below kick off point. Perform negative pressure test. Set 7" casing whipstock.

Mill a window above whipstock.

Drill 6" curve and lateral hole to TD per attached directional plan.

Set 4-1/2" casing to surface and cement as shown below.

Suspend well and move drilling rig out in preparation for well completion

2.0 CASING AND CEMENTING PROGRAM

The proposed casing program will be as follows:

<u>Purpose</u>	<u>Interval</u>		<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	<u>Condition</u>
	<u>From</u>	<u>To</u>	<u>(")</u>	<u>(")</u>	<u>Lbs/Ft</u>			
Production	0	10086	6	4 1/2	11.6	P-110	LTC	New

Casing design subject to revision based on geologic conditions encountered.

Casing Safety Factors:

Interval	Casing	Burst	Collapse	Axial
Production	4 1/2	1.32	2.26	1.63

Centralizer Program

Casing	4 1/2	
# of Bow-type spring centralizer	63	

Cement Program

Production Casing Cement		Slurry Volume			Weight	Yield	Mix H2O	TOC
		% Excess	(BBLs)	(Sacks)	(PPG)	(cuft/sk)	(GPS)	
Tail Slurry		20%	93	356	14.60	1.46	6.10	5567
		Lead			Tail			
Production Casing Cement	Poz Type I-II 50/50				50/50 Poz Premium			
	1 % Bentonite (Light Weight Additive)				2 % Bentonite (Light Weight Additive)			
	3 lbm/sk Silicalite Compacted (Additive Material)				5 lbm/sk Silicalite Compacted (Light Weight Additive)			
	3 % Microbond HT (Additive Material)				0.5 % Versaset (Thixotropic Additive)			
	0.2 % Halad(R)-322 (Low Fluid Loss Control)				0.5 % Econolite (Cement Material)			
	0.4 % Halad(R)-344 (Low Fluid Loss Control)				0.6 % HR-7 (Retarder)			
	0.3 % HR-5 (Retarder)				0.5 % D-AIR 3000 (Defoamer)			
					0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive)			
					0.25 lbm/sk Kwik Seal (Lost Circulation Additive)			

MUD PROGRAM

<u>Purpose</u>	<u>Interval</u>		<u>Hole Size</u>	<u>Mud Type</u>	<u>Mud Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>	<u>pH</u>
	<u>From</u>	<u>To</u>	(")	(")	<u>Lbs/Ft</u>			
Production	5767'	10086'	6	WBM	8.5 - 10.0	36 – 46	4 – 6	9

WBM = Water Based Mud