

North Castor Gulch 2-16

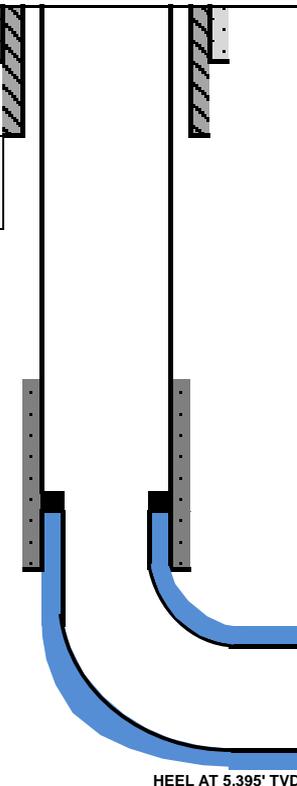
Contingency Schematic

22-Aug-12

Field: WFU	AFE / Network #: 0	LAT: 0
County: Moffat	Shell Working Interest: 100%	LONG: 0
Township: Sec: 16, Twp: 5n, Rng: 91W	AFE Drilling Cost: \$0	Ground Elevation: 6987 ft (surveyed)
Rig: Savanna 650	Plan Days: 0	RKB to Ground: 16.5 ft
Permit API: 0		RKB Elevation: 7003.5 ft

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

30" Hole drilled to	90
20" pipe (0.25") set @	90
Cement to surface	
13-1/2" Hole drilled to	1250
10-3/4" 40.5# J-55 STC @	1250
Cement to surface	
9-7/8" Hole drilled to	5001
7-5/8" 29.7# P-110 LTC @	5001
Top of cement 4230' MD	



NOTES	Casing
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	Surface: 10 3/4" 40.5# J-55 R3 ST&C 0-1250 ft Intermediate: 7 5/8" 29.7# P-110 R3 LT&C 0-5475 ft Production: 5 1/2" 17# N-80 R3 H511 4800-10482 ft MD (200' liner overlap)
DRILLING FLUIDS	
	Surface: Clear Gyp Water Hi-Vis Sweeps as needed Intermediate: Clear Gyp Water + Air Begin with 350 SCFM + 350 GPM Watch Cuttings return to gauge cleaning Production: Aerated OBM Follow WFT Program use PWD to watch BHP. Consult Engineer as needed.

TOE AT 5,293' TVD / 10,482' MD

HEEL AT 5,395' TVD / 6,050' MD