

# HRM Resources

Drilling - Completion - Workover - Facilities

## WELLBORE DIAGRAM Proposed P&A

Well / Battery	API #	Total Depth	Est. Start Date
Alissa #1	05-087-08013	6,735'	
Location	Sec-Twn-Rng	Producing Horizon	County & State
NWSE	5-T6N-R60W	D Sand	Morgan

### WELLBORE DIAGRAM

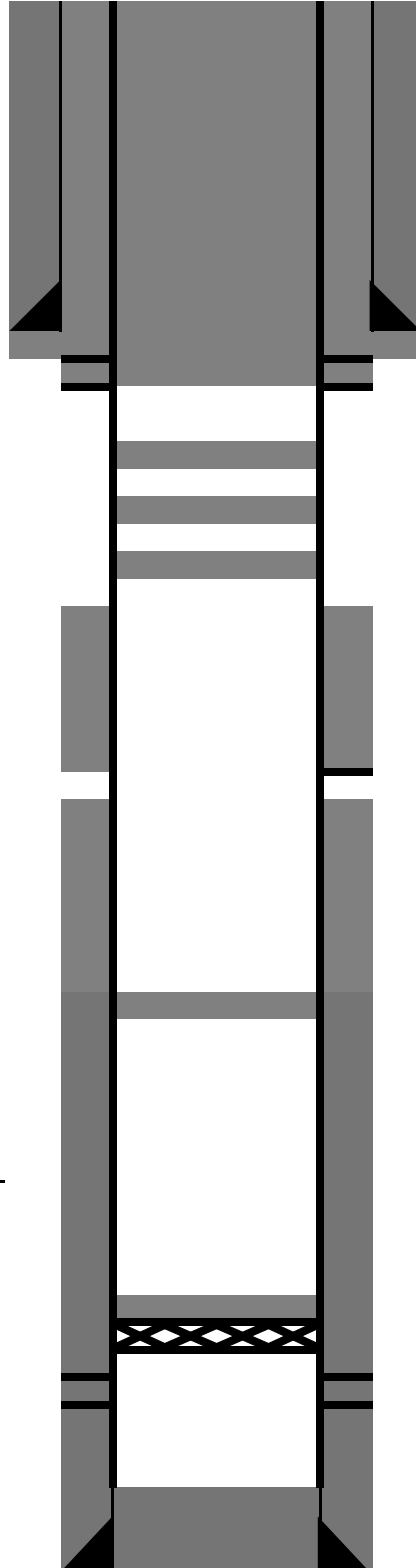
#### Cementing Information

Surface/Shoe plug  
276' to surface  
90 sxs cement

Balance plug 591' to 463'  
**10 sacks cement**  
Balance plug 930' to 802'  
**10 sacks cement**  
Balance plug 1,470' to 1,342'  
**10 sacks cement**

Balance plug 6,320'-5,999'  
25 sxs cern

CIBP set at 6,638' w/2 sxs  
Est top: 6,6



#### Surface Casing

8 5/8" 24# set at 226' TOC at surface  
12-1/4" OH

Upper Arapahoe - 541-432'

Lower Arapahoe - 880-609'

Laramie-Fox Hills - 1,420-1,164'

Cemented casing lead 2,084'-2,090'

TOC: 2,237'

Niobrara 6,060'-6,270'

Perfs at 6,688'-6,698' (D Sand)

#### Production Casing

4 1/2" 10.5 & 11.6# at 6,735'  
Cement - unknown

TD 6,735'