

Meadco Properties, Ltd.

Harris Federal #2

Eddy County, New Mexico

CASING & CEMENTING PROGRAM

Surface Casing:

15" hole size; set approximately 650' of 13-3/8", 61# J-55 new casing using 320 sx of Class "C" cmt. containing 4% gel, 2% Calcium Chloride with 1/4# flocele per sk, tail in with 330 sx Class "C" cmt. containing 2% Calcium Chloride with 1/4# flocele per sk.

Intermediate Casing:

11" hole size; set approximately 4400' 8-5/8" & 32#, K-55, 8R ST & C new casing, cmt. to surface using DV Multiple Stage tool at approximately 1800'. The first stage cmt. will consist of 431 sx of Halliburton Light cmt. containing 5# of Gilsonite & 1/4# flocele per sk., tail in with 200 sx of Class "C" containing 2% Calcium Chloride & 1/4# flocele per sk. The second stage cmt. will consist of 615 sx Halliburton Light cmt. containing 15# salt and 1/4# flocele per sk tail in with 300 sx Class "C" cmt. containing 2% Calcium Chloride & 1/4# flocele per sk.

Production String:

7 7/8" hole size: set 5 1/2" 20# N-80 LT & 17# K-55 buttress from 12,800' to surface. Cmt. with 620 sx Halliburton Light cmt. containing 0.6% Halad 22, 5# Gilsonite & 1/4# flocele.

Casing Design:

0 - 650'	650' of 13-3/8", 61# J-55 new casing.
0 - 4400'	4400' of 8-5/8", 32# K-55 8R ST & C casing.
0 - 3000'	3000' of 5-1/2" 17# K-55 Buttress casing.
3000' - 8300' ^{8300'}	6200' ^{5300'} of 5-1/2" 17# K-55 LT & C casing
8300' ^{8300'} - 12800'	2500' ^{4500'} of 5-1/2" 20# N-80 LT & C casing