



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 5/17/2018

Invoice # 900298

API# 05-123-46588

Foreman: Corey Barras

Customer: Anadarko Petroleum Corporation

Well Name: English Farms 8-12HZ

County: Weld

State: Colorado

Sec: 8

Twp: 1N

Range: 65W

Consultant: Matt

Rig Name &amp; Number: Cartel 88

Distance To Location: 38

Units On Location: 4027-3103/4039-3214/4035-3213

Time Requested: 2100

Time Arrived On Location: 2000

Time Left Location:

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft.) : 1,831  
Total Depth (ft) : 1841  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 80  
Conductor ID : 15.25  
Shoe Joint Length (ft) : 44  
Landing Joint (ft) : 15  
  
Max Rate: 8  
Max Pressure: 2000

## Cement Data

Cement Name: BFN III  
Cement Density (lb/gal) : 14.2  
Cement Yield (cuft) : 1.48  
Gallons Per Sack: 7.40  
% Excess: 15%  
Displacement Fluid lb/gal: 8.3  
BBL to Pit:  
Fluid Ahead (bbls): 30.0  
H2O Wash Up (bbls): 20.0  
  
Spacer Ahead Makeup  
30 bbl with Die in 2nd 10

Casing ID

8.921

Casing Grade

J-55 only used

## Calculated Results

**cuft of Shoe** 19.10 cuft  
(Casing ID Squared) X (.005454) X (Shoe Joint ft)  
**cuft of Conductor** 61.05 cuft  
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)  
**cuft of Casing** 984.13 cuft  
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)  
**Total Slurry Volume** 1064.28 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)  
**bbls of Slurry** 189.55 bbls  
(Total Slurry Volume) X (.1781)  
**Sacks Needed** 719 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)  
**Mix Water** 126.70 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

**Displacement:** 139.31 bbls

(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

## Pressure of cement in annulus

**Hydrostatic Pressure:** 1350.73 PSI

## Pressure of the fluids inside casing

**Displacement:** 770.52 psi**Shoe Joint:** 32.46 PSI**Total** 802.98 psi**Differential Pressure:** 547.75 psi**Collapse PSI:** 2020.00 psi**Burst PSI:** 3520.00 psi**Total Water Needed:** 316.01 bbls  
Authorization to Proceed

Customers hereby acknowledges and specifically agrees to the terms and condition on this work order, including, without limitation, the provisions on this work order.

X

## English Farms 8-12HZ

