



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 7/8/2015

Invoice # 80609

API# 05-123-41793

Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation

Well Name: TEDFORD 28N-28HZ

County: WELD

State: Colorado

Sec: 28

Twp: 2N

Range: 66W

Consultant: CHRIS

Rig Name & Number: NOBLE 2

Distance To Location: 19

Units On Location: 4031-3106/ 4034-3211

Time Requested: 600

Time Arrived On Location: 430

Time Left Location: 1100

## WELL DATA

Casing Size OD (in) : 9.625  
 Casing Weight (lb) : 36.00  
 Casing Depth (ft.) : 1,867  
 Total Depth (ft) : 1876  
 Open Hole Diameter (in.) : 13.50  
 Conductor Length (ft) : 47  
 Conductor ID : 15.25  
 Shoe Joint Length (ft) : 43  
 Landing Joint (ft) : 7

Max Rate: 6

Max Pressure: 1000

## Cement Data

Cement Name: BFN III  
 Cement Density (lb/gal) : 14.2  
 Cement Yield (cuft) : 1.49  
 Gallons Per Sack: 7.48  
 % Excess: 20%  
 Displacement Fluid lb/gal: 8.3  
 BBL to Pit: 21.0  
 Fluid Ahead (bbls): 30.0  
 H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup

30BBL WATER/ DYE IN 2ND 10

Casing ID

8.921

Casing Grade

J-55 only used

## Calculated Results

**cuft of Shoe 18.58 cuft**

(Casing ID Squared) X (.005454) X (Shoe Joint ft)

**cuft of Conductor 35.87 cuft**

(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

**cuft of Casing 1067.39 cuft**

(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

**Total Slurry Volume 1121.83 cuft**

(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

**bbls of Slurry 199.80 bbls**

(Total Slurry Volume) X (.1781)

**Sacks Needed 753 sk**

(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

**Mix Water 134.09 bbls**

(Sacks Needed) X (Gallons Per Sack) ÷ 42

**Displacement: 141.57 bbls**

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

## Pressure of cement in annulus

**Hydrostatic Pressure: 1377.29 PSI**

## Pressure of the fluids inside casing

**Displacement: 786.56 psi**

**Shoe Joint: 31.57 psi**

**Total 818.13 psi**

**Differential Pressure: 559.15 psi**

**Collapse PSI: 2020.00 psi**

**Burst PSI: 3520.00 psi**

**Total Water Needed: 325.66 bbls**

X *San M...*  
 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.



# TEDFORD 28N-28HZ SURFACE

