



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 7/16/2017

Invoice #: 200123

API#

Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation

Well Name: rw 36n-32hz

County: Weld

State: Colorado

Sec: 6

Twp: 3n

Range: 66w

Consultant: sean

Rig Name & Number: cartel 88

Distance To Location: 20

Units On Location: 4028/4039/4034

Time Requested: 330 am

Time Arrived On Location: 130 am

Time Left Location: 5:30 pm

## WELL DATA

Casing Size OD (in) : 9.625  
 Casing Weight (lb) : 36.00  
 Casing Depth (ft.) : 1,866  
 Total Depth (ft) : 1876  
 Open Hole Diameter (in.) : 13.50  
 Conductor Length (ft) : 80  
 Conductor ID : 15.6  
 Shoe Joint Length (ft) : 42  
 Landing Joint (ft) : 8

Max Rate: 8  
 Max Pressure: 2000

## Cement Data

Cement Name: BFN III  
 Cement Density (lb/gal) : 14.2  
 Cement Yield (cuft) : 1.49  
 Gallons Per Sack: 7.40  
 % Excess: 6%  
 Displacement Fluid lb/gal: 8.3  
 BBL to Pit:  
 Fluid Ahead (bbls): 30.0  
 H2O Wash Up (bbls): 10.0

Spacer Ahead Makeup

Casing ID

8.921

Casing Grade

J-55 only used

## Calculated Results

**cuft of Shoe** 18.23 cuft  
 (Casing ID Squared) X (.005454) X (Shoe Joint ft)

**cuft of Conductor** 65.76 cuft  
 (Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

**cuft of Casing** 925.24 cuft  
 (Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

**Total Slurry Volume** 1009.24 cuft  
 (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

**bbls of Slurry** 179.74 bbls  
 (Total Slurry Volume) X (.1781)

**Sacks Needed** 677 sk  
 (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

**Mix Water** 119.34 bbls  
 (Sacks Needed) X (Gallons Per Sack) ÷ 42

**Displacement:** 141.63 bbls

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

## Pressure of cement in annulus

**Hydrostatic Pressure:** 1376.55 PSI

## Pressure of the fluids inside casing

**Displacement:** 786.47 psi

**Shoe Joint:** 30.98 psi

**Total:** 817.46 psi

**Differential Pressure:** 559.09 psi

**Collapse PSI:** 2020.00 psi

**Burst PSI:** 3520.00 psi

**Total Water Needed:** 300.97 bbls

X *[Signature]*  
 Authorization To Proceed



# SERIES 2000

