



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 3/13/2018

Invoice #: 200264

API#

Foreman: Kirk Kallhoff

**Customer:** Anadarko Petroleum Corporation

**Well Name:** quarter circle 24-10hz

County: Weld

State: Colorado

Sec: 24

Twp: 1n

Range: 67w

Consultant: levi

Rig Name & Number: CARTEL 88

Distance To Location: 33

Units On Location: 4028/4041/4030

Time Requested: 930 am

Time Arrived On Location: 800 am

Time Left Location: 12:30pm

## WELL DATA

Casing Size OD (in) : 9.625  
 Casing Weight (lb) : 36.00  
 Casing Depth (ft.) : 1,868  
 Total Depth (ft) : 1878  
 Open Hole Diameter (in.) : 13.50  
 Conductor Length (ft) : 80  
 Conductor ID : 15.5  
 Shoe Joint Length (ft) : 40  
 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) : 1.48  
 Gallons Per Sack: 7.48  
 % Excess: 10%  
 Displacement Fluid lb/gal: 8.3  
 BBL to Pit:  
 Fluid Ahead (bbls): 30.0  
 H2O Wash Up (bbls): 10.0

Spacer Ahead Makeup  
 30 BBL WATER, DYE IN 2ND 10

Casing ID

8.921

Casing Grade

J-55 only used

## Calculated Results

**cuft of Shoe** 17.36 cuft

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

**cuft of Conductor** 64.40 cuft

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

**cuft of Casing** 961.23 cuft

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

**Total Slurry Volume** 1043.00 cuft

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

**bbls of Slurry** 185.76 bbls

(Total Slurry Volume) X (.1781)

**Sacks Needed** 705 sk

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

**Mix Water** 125.51 bbls

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

**Displacement:** 141.94 bbls

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

## Pressure of cement in annulus

**Hydrostatic Pressure:** 1378.02 PSI

## Pressure of the fluids inside casing

**Displacement:** 788.20 psi

**Shoe Joint:** 29.51 psi

**Total** 817.71 psi

**Differential Pressure:** 560.32 psi

**Collapse PSI:** 2020.00 psi

**Burst PSI:** 3520.00 psi

**Total Water Needed:** 307.45 bbls

X *Kirk Kallhoff*  
 Authorization To Proceed



# SERIES 2000

