



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 8/1/2017  
Invoice #: 200135  
API#  
Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation  
Well Name: marrs 30n-10hz

County: Weld  
State: Colorado  
Sec: 22  
Twp: 1n  
Range: 67w  
Consultant: matt  
Rig Name & Number: cartel 88  
Distance To Location: 34  
Units On Location: 4028/4041/4036  
Time Requested: 230 am  
Time Arrived On Location: 100 am  
Time Left Location: 7:00 pm

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft.) : 1,863  
Total Depth (ft) : 1873  
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: 5%  
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** 914.97 cuft  
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)  
**Total Slurry Volume** 998.97 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)  
**bbls of Slurry** 177.92 bbls  
(Total Slurry Volume) X (.1781)  
**Sacks Needed** 670 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)  
**Mix Water** 118.13 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

**Displacement:** 141.40 bbls

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

## Pressure of cement in annulus

**Hydrostatic Pressure:** 1374.34 PSI

## Pressure of the fluids inside casing

**Displacement:** 785.18 psi

**Shoe Joint:** 30.98 psi

**Total** 816.16 psi

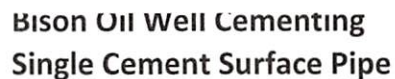
**Differential Pressure:** 558.17 psi

**Collapse PSI:** 2020.00 psi

**Burst PSI:** 3520.00 psi

**Total Water Needed:** 299.52 bbls

X *[Signature]*  
Authorization To Proceed



Anadarko Petroleum Corporation  
marrs 30n-10hz

200135
Weld
Kirk Kallhoff
8/1/2017

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## DESCRIPTION OF JOB EVENTS

X B. Bu  
Work Performed

X G. Man  
Title

X 8-1-17  
Date

# SERIES 2000

