



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 6/6/2015  
Invoice #: 80047  
API#: 05-123-41503-00  
Foreman: Calvin Reimers

Customer: Anadarko Petroleum Corporation  
Well Name: English Farms 36N-8HZ

County: Weld  
State: Colorado  
Sec: 8  
Twp: 1N  
Range: 65W

Consultant: Don / Tobin  
Rig Name & Number: Extreme 24  
Distance To Location: 22 Miles  
Units On Location: 4023-3104/4030-3203  
Time Requested: 900am  
Time Arrived On Location: 735am  
Time Left Location: 1:30pm

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft.) : 1,865  
Total Depth (ft) : 1891  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 43  
Conductor ID : 16  
Shoe Joint Length (ft) : 43  
Landing Joint (ft) : 19

Max Rate: 6  
Max Pressure: 1750

## Cement Data

Cement Name: BFN III  
Cement Density (lb/gal) : 14.2  
Cement Yield (cuft) : 1.49  
Gallons Per Sack: 7.48  
% Excess: 25%  
Displacement Fluid lb/gal: 8.3  
BBL to Pit: 30  
Fluid Ahead (bbls): 30.0  
H2O Wash Up (bbls): 10.0

Spacer Ahead Makeup  
30 bbls With Dye in 2nd 10 bbls

Casing ID

8.921

Casing Grade

J-55 only used

## Calculated Results

**cuft of Shoe** 18.61 cuft  
(Casing ID Squared) X (.005454) X (Shoe Joint ft)

**cuft of Conductor** 38.31 cuft  
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

**cuft of Casing** 1113.12 cuft  
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

**Total Slurry Volume** 1170.05 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

**bbls of Slurry** 208.39 bbls  
(Total Slurry Volume) X (.1781)

**Sacks Needed** 785 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

**Mix Water** 139.85 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

**Displacement:** 142.34 bbls

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

## Pressure of cement in annulus

**Hydrostatic Pressure:** 1375.86 PSI

## Pressure of the fluids inside casing

**Displacement:** 785.69 psi

**Shoe Joint:** 31.63 psi

**Total** 817.33 psi

**Differential Pressure:** 558.54 psi

**Collapse PSI:** 2020.00 psi

**Burst PSI:** 3520.00 psi

**Total Water Needed:** 322.19 bbls

X   
Authorization To Proceed



X  
Date

## SERIES 2000

