



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 10/18/2017  
Invoice #: 900193  
API#: 05-123-45225  
Foreman: Corey B.

Customer: Anadarko Petroleum Corporation  
Well Name: Burough 27N-17HZ

County: Weld  
State: Colorado  
Sec: 17  
Twp: 1N  
Range: 66W  
Consultant: Matt  
Rig Name & Number: Cartel 88  
Distance To Location: 32  
Units On Location: 027/3103-4033/3212-4020/321  
Time Requested: 2130  
Time Arrived On Location: 2010  
Time Left Location:

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft.) : 1,869  
Total Depth (ft) : 1879  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 80  
Conductor ID : 15.25  
Shoe Joint Length (ft) : 44  
Landing Joint (ft) : 15  
  
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: 7.40  
% Excess: 15%  
Displacement Fluid lb/gal: 8.3  
BBL to Pit:  
Fluid Ahead (bbls): 30.0  
H2O Wash Up (bbls): 20.0  
  
Spacer Ahead Makeup  
30 bbl with Die in 2nd 10

Casing ID

8.921

Casing Grade

J-55 only used

## Calculated Results

**cuft of Shoe** 19.10 cuft  
(Casing ID Squared) X (.005454) X (Shoe Joint ft)

**cuft of Conductor** 61.05 cuft  
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

**cuft of Casing** 1005.49 cuft  
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

**Total Slurry Volume** 1085.64 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

**bbls of Slurry** 193.35 bbls  
(Total Slurry Volume) X (.1781)

**Sacks Needed** 734 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

**Mix Water** 129.24 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

**Displacement:** 142.25 bbls

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

## Pressure of cement in annulus

**Hydrostatic Pressure:** 1378.76 PSI

## Pressure of the fluids inside casing

**Displacement:** 786.91 psi

**Shoe Joint:** 32.46 psi

**Total** 819.36 psi

**Differential Pressure:** 559.40 psi

**Collapse PSI:** 2020.00 psi

**Burst PSI:** 3520.00 psi

**Total Water Needed:** 321.49 bbls

X   
Authorization To Proceed

Date \_\_\_\_\_

# Borough 27N-17HZ

