



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 11/25/2014  
 Invoice #: 25089  
 API#: 05-123-40534  
 Foreman: Calvin Reimers

Customer: Anadarko Petroleum Corporation  
 Well Name: Vollmar 28N-11HZ

County: Weld  
 State: Colorado  
 Sec: 14  
 Twp: 2N  
 Range: 67W

Consultant: Lester  
 Rig Name & Number: Major 42  
 Distance To Location: 21 Miles  
 Units On Location: 4023-3104/4027-3211  
 Time Requested: 530pm  
 Time Arrived On Location: 455pm  
 Time Left Location: 9:00 pm

## WELL DATA

Casing Size OD (in) : 9.625  
 Casing Weight (lb) : 36.00  
 Casing Depth (ft.) : 1,188  
 Total Depth (ft) : 1200  
 Open Hole Diameter (in.) : 13.50  
 Conductor Length (ft) :  
 Conductor ID :  
 Shoe Joint Length (ft) : 43  
 Landing Joint (ft) : 8  
 Max Rate: 7  
 Max Pressure: 2500

## Cement Data

Cement Name: BFN III  
 Cement Density (lb/gal) : 14.2  
 Cement Yield (cuft) : 1.49  
 Gallons Per Sack: 7.48  
 % Excess: 15%  
 Displacement Fluid lb/gal: 8.3  
 BBL to Pit: 10  
 Fluid Ahead (bbls): 30.0  
 H2O Wash Up (bbls): 20.0  
 Spacer Ahead Makeup  
 30bbls H2O+Dye in 2nd 10bbls

Casing ID

8.921

Casing Grade

J-55 only used

## Calculated Results

**cuft of Shoe** 18.56 cuft  
 (Casing ID Squared) X (.005454) X (Shoe Joint ft)

**cuft of Conductor** 0.00 cuft  
 (Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)

**cuft of Casing** 668.31 cuft  
 (Open Hole Squared) -(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

**Total Slurry Volume** 686.87 cuft  
 (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

**bbls of Slurry** 122.33 bbls  
 (Total Slurry Volume) X (.1781)

**Sacks Needed** 461 sk  
 (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

**Mix Water** 82.10 bbls  
 (Sacks Needed) X (Gallons Per Sack) ÷ 42

**Displacement:** 89.13 bbls

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

## Pressure of cement in annulus

**Hydrostatic Pressure:** 876.20 PSI

## Pressure of the fluids inside casing

**Displacement:** 493.69 psi

**Shoe Joint:** 31.54 psi

**Total** 525.24 psi

**Differential Pressure:** 350.96 psi

**Collapse PSI:** 2020.00 psi

**Burst PSI:** 3520.00 psi

**Total Water Needed:** 221.23 bbls

X *J P Case*  
 Authorization To Proceed



# SERIES 2000

