



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 8/15/2015  
Invoice # 90026  
API# 05-123-41922  
Supervisor Nick

Customer: Anadarko Petroleum Corporation

Well Name: Sarchet 37N-20HZ

County: Weld  
State: Colorado

Sec: 20  
Twp: 2N  
Range: 65W

Consultant: Hayden  
Rig Name & Number: Noble 2  
Distance To Location: 25  
Units On Location: 024/3210/4027/3106/3105/320  
Time Requested: 22:00  
Time Arrived On Location: 20:25  
Time Left Location: 1:25

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft.) : 1,846  
Total Depth (ft) : 1856  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 60  
Conductor ID : 15.25  
Shoe Joint Length (ft) : 43  
Landing Joint (ft) : 10  
  
Max Rate: 8  
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: 15%  
Displacement Fluid lb/gal: 8.3  
BBL to Pit: 33.0  
Fluid Ahead (bbls): 30.0  
H2O Wash Up (bbls): 20.0  
  
Spacer Ahead Makeup  
30 bbl dye in second 10

Casing ID

8.921

Casing Grade

J-55 only used

## Calculated Results

cuft of Shoe 18.66 cuft  
(Casing ID Squared) X (.005454) X (Shoe Joint ft)  
  
cuft of Conductor 45.79 cuft  
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)  
  
cuft of Casing 1003.80 cuft  
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)  
  
Total Slurry Volume 1068.25 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)  
  
bbls of Slurry 190.26 bbls  
(Total Slurry Volume) X (.1781)  
  
Sacks Needed 717 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)  
  
Mix Water 127.69 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 140.16 bbls  
(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

## Pressure of cement in annulus

Hydrostatic Pressure: 1361.79 PSI

## Pressure of the fluids inside casing

Displacement: 777.42 psi

Shoe Joint: 31.72 psi

Total 809.14 psi

Differential Pressure: 552.65 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 317.84 bbls

x   
Authorization To Proceed

Customers hereby acknowledges and specifically agrees to the terms and condition on this work order, including, without limitation, the provisions on this work order.

X  
Date

# Sarchet 37N-20HZ

