



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 8/10/2015  
Invoice # 80623  
API# 05-123-41916  
Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation  
Well Name: SARCHET 38C-20HZ

County: Weld  
State: Colorado  
Sec: 20  
Twp: 2N  
Range: 65W  
Consultant: CHRIS  
Rig Name & Number: NOBLE 2  
Distance To Location: 28  
Units On Location: 4031-3106/ 4034-3203  
Time Requested: 930  
Time Arrived On Location: 800  
Time Left Location: 1300

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft) : 1,867  
Total Depth (ft) : 1876  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 40  
Conductor ID : 15.25  
Shoe Joint Length (ft) : 43  
Landing Joint (ft) : 7

Max Rate: 6  
Max Pressure: 1250

## Cement Data

Cement Name: BFN III  
Cement Density (lb/gal) : 14.2  
Cement Yield (cuft) : 1.49  
Gallons Per Sack: 7.48  
% Excess: 20%  
Displacement Fluid lb/gal: 8.3  
BBL to Pit: 28.0  
Fluid Ahead (bbls): 30.0  
H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup  
30BBL WATER/ DYE IN 2ND 10

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 30.53 cuft  
(Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)  
cuft of Casing 1071.20 cuft  
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length )  
Total Slurry Volume 1120.33 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)  
bbls of Slurry 199.53 bbls  
(Total Slurry Volume) X (.1781)  
Sacks Needed 752 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)  
Mix Water 133.91 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 141.52 bbls

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

## Pressure of cement in annulus

Hydrostatic Pressure: 1376.92 PSI

## Pressure of the fluids inside casing

Displacement: 786.31 psi

Shoe Joint: 31.63 psi

Total 817.94 psi

Differential Pressure: 558.98 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 325.43 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.

Date \_\_\_\_\_

## SARCHET 38C-20HZ SURFACE

