



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 8/9/2015  
Invoice #: 80427  
API#: 05-123-41917  
Foreman: Calvin Reimers

Customer: Anadarko Petroleum Corporation  
Well Name: Sarchet 16N-20HZ

County: Weld  
State: Colorado  
Sec: 20  
Twp: 2N  
Range: 65W

Consultant: Chris / Sean  
Rig Name & Number: Noble 2  
Distance To Location: 28 Miles  
Units On Location: 4023-3104/4024-3203  
Time Requested: 130pm  
Time Arrived On Location: 1230pm  
Time Left Location: 6:30pm

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft.) : 1,872  
Total Depth (ft) : 1888  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 40  
Conductor ID : 15.25  
Shoe Joint Length (ft) : 39  
Landing Joint (ft) : 10

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: 20%  
Displacement Fluid lb/gal: 8.3  
BBL to Pit: 24  
Fluid Ahead (bbls): 30.0  
H2O Wash Up (bbls): 15.0

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 16.89 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 1074.16 cuft  
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 1121.58 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 199.75 bbls  
(Total Slurry Volume) X (.1781)

Sacks Needed 753 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 134.06 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 142.45 bbls

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

## Pressure of cement in annulus

Hydrostatic Pressure: 1380.65 PSI

## Pressure of the fluids inside casing

Displacement: 790.20 psi

Shoe Joint: 28.71 psi

Total 818.91 psi

Differential Pressure: 561.74 psi

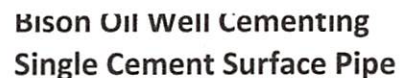
Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 321.51 bbls

X   
Authorization To Proceed





Sarchet 16N-20HZ

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### DESCRIPTION OF JOB EVENTS

Date \_\_\_\_\_

# SERIES 2000

