



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 5/13/2017  
Invoice #: 200090  
API#:   
Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation  
Well Name: hilgers 17n-34hz

County: Weld  
State: Colorado  
Sec: 22  
Twp: 3n  
Range: 68w  
Consultant: bryan  
Rig Name & Number: wmo 252  
Distance To Location: 28  
Units On Location: 4028/4030/4035  
Time Requested: 1000 pm  
Time Arrived On Location: 830 pm  
Time Left Location: 2:00pm

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft.) : 1,851  
Total Depth (ft) : 1876  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 80  
Conductor ID : 15.6  
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) : 1.49  
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): 10.0  
  
Spacer Ahead Makeup

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 65.76 cuft  
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)  
cuft of Casing 995.37 cuft  
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)  
Total Slurry Volume 1080.23 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)  
bbls of Slurry 192.39 bbls  
(Total Slurry Volume) X (.1781)  
Sacks Needed 725 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)  
Mix Water 127.74 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 140.86 bbls

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

## Pressure of cement in annulus

Hydrostatic Pressure: 1365.48 PSI

## Pressure of the fluids inside casing

Displacement: 779.14 psi

Shoe Joint: 32.46 psi

Total 811.60 psi

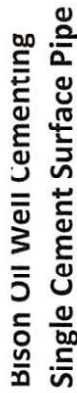
Differential Pressure: 553.88 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 308.59 bbls

X   
Authorization To Proceed



INVOICE #  
LOCATION  
FOREMAN  
Date

200090	Weld	Kirk Kallh	5/14/201
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Customer  
Well Name

Anadarko Petroleum Corporation  
hilgers 17n-34hz

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## DESCRIPTION OF JOB EVENTS

[illegible]

X Bryan Boers

X Co. Man  
Title

Date X 5-11-17



# SERIES 2000

