



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 3/5/2017  
Invoice #: 200044  
API#  
Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation  
Well Name: camenisch 36n-22hz

County: Weld  
State: Colorado  
Sec: 23  
Twp: 1n  
Range: 67w

Consultant: lane  
Rig Name & Number: wmo 252  
Distance To Location: 34  
Units On Location: 4028/4030/4019  
Time Requested: 530 pm  
Time Arrived On Location: 500 pm  
Time Left Location: 7:30pm

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft) : 1,861  
Total Depth (ft) : 1871  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 80  
Conductor ID : 15.5  
Shoe Joint Length (ft) : 42  
Landing Joint (ft) :

Max Rate: 7  
Max Pressure: 1500

## Cement Data

Cement Name: BFN III  
Cement Density (lb/gal) : 14.2  
Cement Yield (cuft) : 1.48  
Gallons Per Sack: 7.40  
% Excess: 15%  
Displacement Fluid lb/gal: 8.3  
Fluid Ahead (bbls): 30.0  
H2O Wash Up (bbls): 10.0

Spacer Ahead Makeup

h2o

Casing ID

8.921

Casing Grade

J-55 only used

## Calculated Results

cuft of Shoe 18.23 cuft  
(Casing ID Squared) X (.005454) X (Shoe Joint ft)  
cuft of Conductor 64.40 cuft  
(Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)  
cuft of Casing 1000.99 cuft  
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)  
Total Slurry Volume 1083.63 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)  
bbls of Slurry 192.99 bbls  
(Total Slurry Volume) X (.1781)  
Sacks Needed 732 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)  
Mix Water 129.00 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 140.62 bbls

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

## Pressure of cement in annulus

Hydrostatic Pressure: 1372.86 PSI

## Pressure of the fluids inside casing

Displacement: 784.32 psi

Shoe Joint: 30.98 psi

Total 815.30 psi

Differential Pressure: 557.56 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 309.63 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.



Customer  
Well Name

Anadarko Petroleum Corporation  
camenisch 36n-22hz

INVOICE #  
LOCATION  
FOREMAN  
Date

200044

Weld

Kirk Kallhoff

3/5/2017

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## DESCRIPTION OF JOB EVENTS

X  
Work Performed

X WSS  
Title

X 3-5-17  
Date

SERIES 2000

