



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 6/11/2017  
Invoice #: 900113  
API#: 05-123-44081  
Foreman: Corey B.

Customer: Anadarko Petroleum Corporation  
Well Name: Gabel 2C-5HZ

County: Weld  
State: Colorado  
Sec: 8  
Twp: 1N  
Range: 66W  
Consultant: Matt  
Rig Name & Number: 252  
Distance To Location: 36  
Units On Location: 1027-3103/4020-3212/4019-321  
Time Requested: 2000  
Time Arrived On Location: 1915  
Time Left Location:

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft.) : 1,830  
Total Depth (ft) : 1840  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 80  
Conductor ID : 15.25  
Shoe Joint Length (ft) : 44  
Landing Joint (ft) : 15

Max Rate: 8bm  
Max Pressure: 2000

## Cement Data

Cement Name: BFN III  
Cement Density (lb/gal) : 14.2  
Cement Yield (cuft) : 1.48  
Gallons Per Sack: 7.49  
% Excess: 15%  
Displacement Fluid lb/gal: 8.3  
BBL to Pit:  
Fluid Ahead (bbls): 30.0  
H2O Wash Up (bbls): 20.0  
Spacer Ahead Makeup  
30 bbl /2nd 10 BBL with Die

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 61.05 cuft  
(Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X  
(Conductor Length ft)

cuft of Casing 983.57 cuft  
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing  
Depth - Conductor Length )

Total Slurry Volume 1063.72 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 189.45 bbls  
(Total Slurry Volume) X (.1781)

Sacks Needed 719 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 128.17 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 139.23 bbls

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

## Pressure of cement in annulus

Hydrostatic Pressure: 1349.99 PSI

## Pressure of the fluids inside casing

Displacement: 770.09 psi

Shoe Joint: 32.46 psi

Total 802.55 psi

Differential Pressure: 547.44 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 317.41 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 \_\_\_\_\_

# Gabel 2C-5HZ

