



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 11/2/2014  
Invoice # 45066  
API# 05-123-39236  
Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation  
Well Name: GEE 16C-25HZ

County: Weld  
State: Colorado

Sec: 24  
Twp: 2N  
Range: 67W

Consultant: RANDY  
Rig Name & Number: MAJORS 27  
Distance To Location: 18  
Units On Location: 4031-3106/ 4022-3213  
Time Requested: 1230  
Time Arrived: 2300  
Time Left Location: 330

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft.) : 1,013  
Total Depth (ft) : 1030  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) :  
Conductor ID :  
Shoe Joint Length (ft) : 40  
Landing Joint (ft) : 8

Max Rate: 7  
Max Pressure: 2500

## Cement Data

Cement Name: BFN III  
Cement Density (lb/gal) : 14.2  
Cement Yield (cuft) : 1.49  
Gallons Per Sack: 7.48  
% Excess: 26%  
Displacement Fluid lb/gal: 8.3  
BBL to Pit: 15.0  
Fluid Ahead (bbls): 30.0  
H2O Wash Up (bbls): 20.0

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

Casing ID

8.921

Casing Grade

J-55 only used

## Calculated Results

**cuft of Shoe** 17.45 cuft  
(Casing ID Squared) X (.005454) X (Shoe Joint ft)

**cuft of Conductor** 0.00 cuft  
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

**cuft of Casing** 623.08 cuft  
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

**Total Slurry Volume** 640.53 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

**bbls of Slurry** 114.08 bbls  
(Total Slurry Volume) X (.1781)

**Sacks Needed** 430 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

**Mix Water** 76.56 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

**Displacement:** 75.86 bbls  
(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

## Pressure of cement in annulus

**Hydrostatic Pressure:** 747.61 PSI

## Pressure of the fluids inside casing

**Displacement:** 419.63 psi

**Shoe Joint:** 29.66 psi

**Total** 449.30 psi

**Differential Pressure:** 298.31 psi

**Collapse PSI:** 2020.00 psi

**Burst PSI:** 3520.00 psi

**Total Water Needed:** 202.42 bbls

*Randy Case*  
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.





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INVOICE #  
LOCATION  
FOREMAN  
Date

45066	Weld	JASON KELE	11/2/201
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Customer  
Well Name

Anadarko Petroleum Corporation
GEE 16C-25HZ

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### DESCRIPTION OF JOB EVENTS

[illegible]

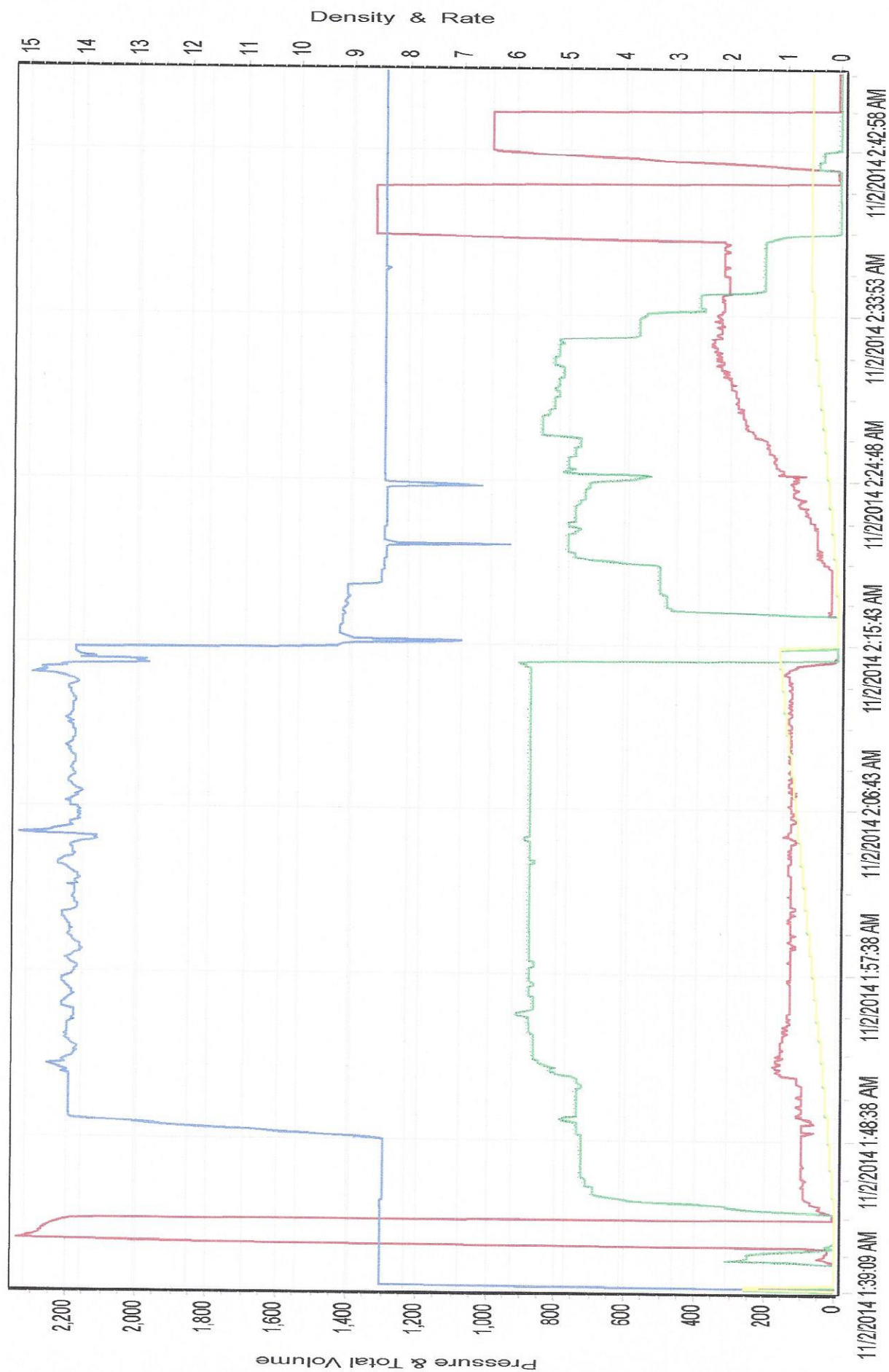
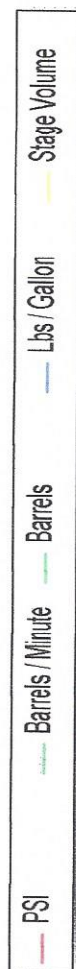
PERFORMED PRESSURE TEST TO 2000 PSI AT 0142, PUMPED 30 BBL WATER WITH DYE IN THE 2ND 10 AT 0144, MIXED AND PUMPED 430 SKS AT 14.2, 114.1 BBL AT 0151, SHUT DOWN AT 0214, STARTED DISPLACEMENT AT 0216, PLUG LANDED AT 330 PSI AT 0237 AND PRESSURED UP TO 1330 PSI FOR 2 MINUTES AND RELEASED, CHECKED FLOATS AND GOT .5 BBL BACK, REPRESSURED UP TO 1000 PSI FOR 2 MINUTES AND RELEASED.

Work Performed

X APC Consultant

Date X 11/02/2014

# GEE 16C-25HZ SURFACE







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