



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 2/9/2019  
Invoice #: 300265  
API#: 05-123-49247  
Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation  
Well Name: MAB 15-6HZ

County: Weld  
State: Colorado  
Sec: 15  
Twp: 1N  
Range: 66W  
Consultant: DAVE  
Rig Name & Number: CARTEL 88  
Distance To Location: 33  
Units On Location: 4045-3103,4023-3216,4044-3216  
Time Requested: 300  
Time Arrived On Location: 2330  
Time Left Location: 730

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft.) : 1,852  
Total Depth (ft) : 1862  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 80  
Conductor ID : 15.25  
Shoe Joint Length (ft) : 42  
Landing Joint (ft) : 5  
  
Max Rate: 8  
Max Pressure: 2000

## Cement Data

Cement Name: BFN III  
Cement Density (lb/gal) : 14.2  
Cement Yield (cuft) : 1.48  
Gallons Per Sack: 7.48  
% Excess: 10%  
Displacement Fluid lb/gal: 8.3  
BBL to Pit: 18.0  
Fluid Ahead (bbls): 30.0  
H2O Wash Up (bbls): 10.0  
  
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 18.08 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 952.78 cuft**  
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)  
**Total Slurry Volume 1031.91 cuft**  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)  
**bbls of Slurry 183.78 bbls**  
(Total Slurry Volume) X (.1781)  
**Sacks Needed 697 sk**  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)  
**Mix Water 124.17 bbls**  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

**Displacement: 140.36 bbls**

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

## Pressure of cement in annulus

**Hydrostatic Pressure: 1366.42 PSI**

## Pressure of the fluids inside casing

**Displacement: 780.70 psi**

**Shoe Joint: 30.73 psi**

**Total 811.43 psi**

**Differential Pressure: 554.99 psi**

**Collapse PSI: 2020.00 psi**

**Burst PSI: 3520.00 psi**

**Total Water Needed: 304.54 bbls**

X   
Authorization To Proceed



Anadarko Petroleum Corporation  
MAB 15-6HZ

INVOICE #  
LOCATION  
FOREMAN  
Date

300265
Weld
JASON KELEHER
2/9/2019

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### DESCRIPTION OF JOB EVENTS

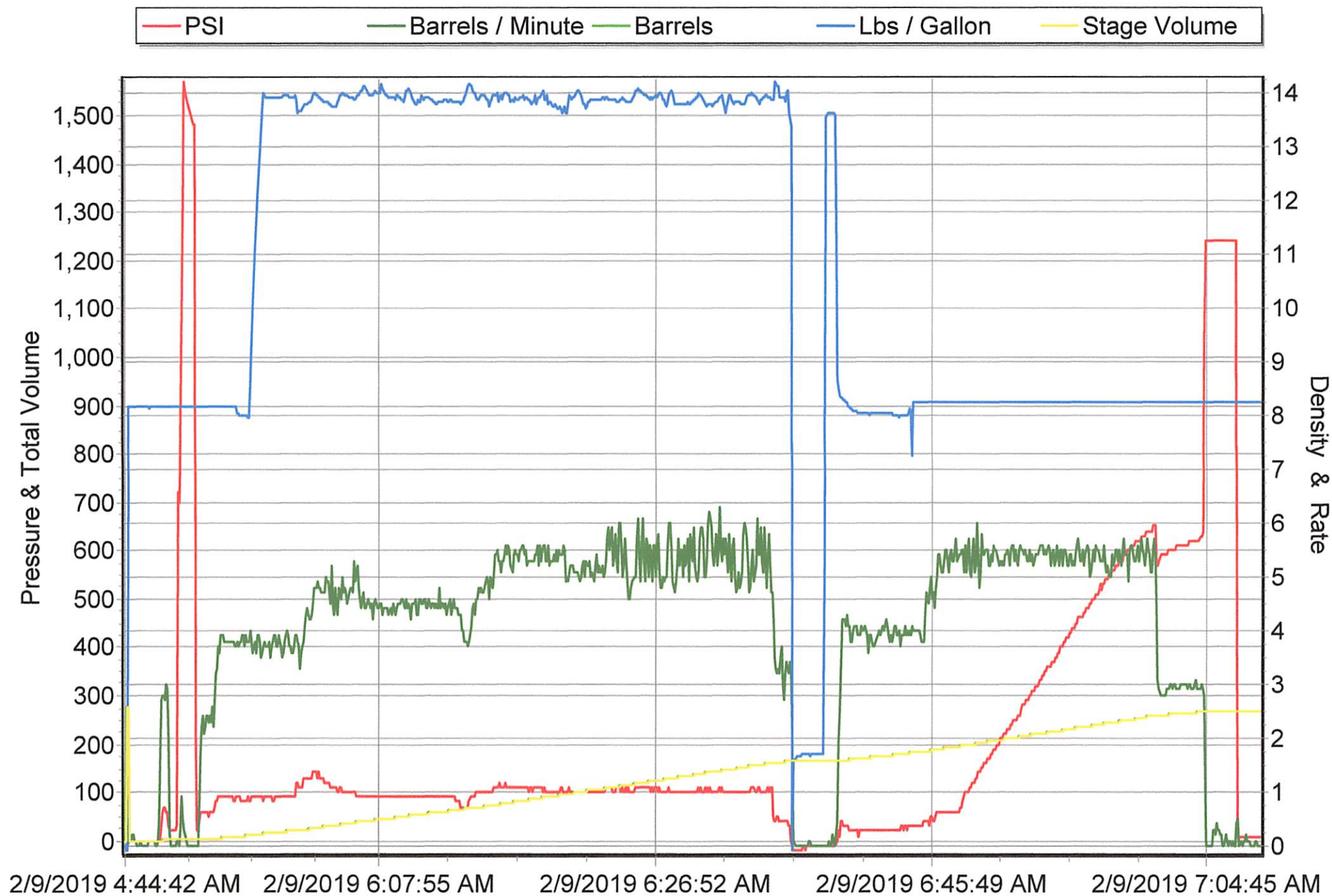
X David Corbett  
Authorized signature

X Co-man  
Title

X 2-9-19  
Date



# MAB 15-6HZ SURFACE





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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.