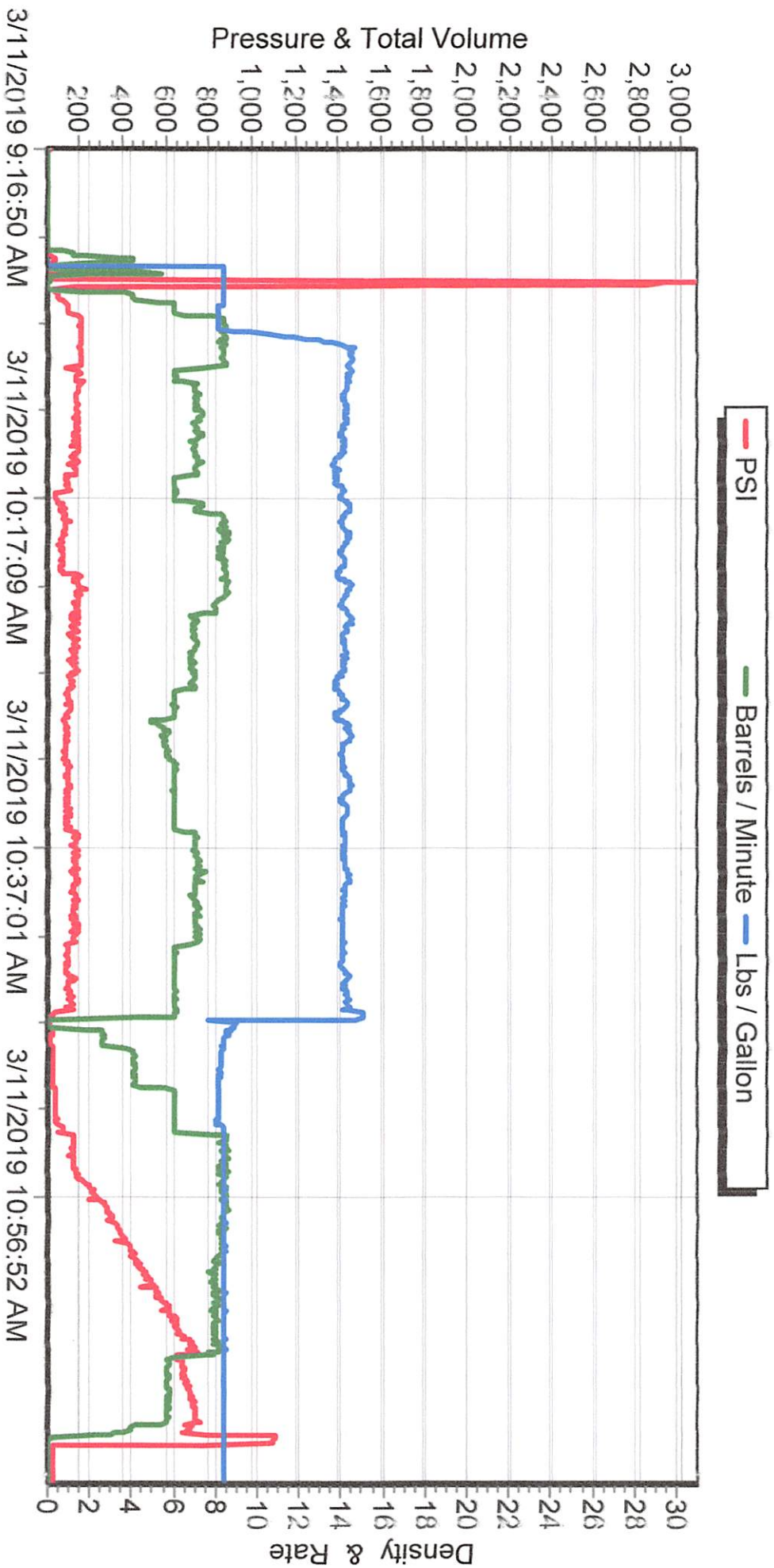


Date \_\_\_\_\_

# JDB 15-10HZ







# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 3/11/2019

Invoice # 606450

API# 05-123-49218

Foreman: Nick Vigil

Customer: Anadarko Petroleum Corporation

Well Name: JDB 15-10HZ

County: Weld

State: Colorado

Sec: 8

Twp: 1N

Range: 55W

Consultant: Brett

Rig Name & Number: Cartel 88

Distance To Location: 34 Miles

Units On Location: 4045/4044/4030/4023

Time Requested: 9:00

Time Arrived On Location: 8:40

Time Left Location:

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft) : 1,894  
Total Depth (ft) : 1904  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 80  
Conductor ID : 15.25  
Shoe Joint Length (ft) : 42  
Landing Joint (ft) : 10  
  
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: 7.48  
% Excess: 10%  
Displacement Fluid lb/gal: 8.3  
BBL to Pit:  
Fluid Ahead (bbls): 30.0  
H2O Wash Up (bbls): 10.0  
  
Spacer Ahead Makeup  
Dye in second 10 bbl

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** 61.05 cuft  
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)  
**cuft of Casing** 975.21 cuft  
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)  
**Total Slurry Volume** 1054.49 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)  
**bbls of Slurry** 187.80 bbls  
(Total Slurry Volume) X (.1781)  
**Sacks Needed** 708 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)  
**Mix Water** 126.04 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

**Displacement:** 143.95 bbls

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

## Pressure of cement in annulus

**Hydrostatic Pressure:** 1397.20 PSI

## Pressure of the fluids inside casing

**Displacement:** 798.55 psi

**Shoe Joint:** 30.98 psi

**Total** 829.53 psi

**Differential Pressure:** 567.67 psi

**Collapse PSI:** 2020.00 psi

**Burst PSI:** 3520.00 psi

**Total Water Needed:** 309.99 bbls

X

Authorization To Proceed