

Date \_\_\_\_\_



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 2/21/2020

Invoice # 200572

API#

Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation

Well Name: damore 18-1hz

County: Weld

State: Colorado

Sec: 18

Twp: 5N

Range: 67W

Consultant: john

Rig Name & Number: Cartel 88

Distance To Location: 18

Units On Location: 4047/4034/4039

Time Requested: 500 am

Time Arrived On Location: 300 am

Time Left Location: 12:00pm

## WELL DATA

Casing Size OD (in) : 9.625

Casing Weight (lb) : 36.00

Casing Depth (ft.) : 1,843

Total Depth (ft) : 1853

Open Hole Diameter (in.) : 13.50

Conductor Length (ft) : 80

Conductor ID : 15.25

Shoe Joint Length (ft) : 40

Landing Joint (ft) : 8

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: 7.40

% Excess: 15%

Displacement Fluid lb/gal: 8.3

BBL to Pit:

Fluid Ahead (bbls): 30.0

H2O Wash Up (bbls): 10.0

Spacer Ahead Makeup

30 bbl with Die in 2nd 10

Casing ID

8.921

Casing Grade

J-55 only used

## Calculated Results

cuft of Shoe 17.36 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 990.87 cuft

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

Total Slurry Volume 1069.29 cuft

(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 190.44 bbls

(Total Slurry Volume) X (.1781)

Sacks Needed 722 sk

(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 127.30 bbls

(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 140.01 bbls

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

## Pressure of cement in annulus

Hydrostatic Pressure: 1359.58 PSI

## Pressure of the fluids inside casing

Displacement: 777.42 psi

Shoe Joint: 29.51 PSI

Total 806.93 psi

Differential Pressure: 552.65 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 307.30 bbls

X   
Authorization To Proceed

# SERIES 2000

