



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 6/4/2015

Invoice # 80084

API#

Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation

Well Name: Viper Pyro State 16N2-10HZ

County: Weld

State: Colorado

Sec: 15

Twp: 3n

Range: 67w

Consultant: sam

Rig Name & Number: pinnergy 4

Distance To Location: 26

Units On Location: 4038-3103/4034-3103

Time Requested: 1200 pm

Time Arrived On Location: 1000 pm

Time Left Location: 4:15 pm

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,887
Total Depth (ft) : 1907
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 60
Conductor ID : 16
Shoe Joint Length (ft) : 40
Landing Joint (ft) : 10

Max Rate:

Max Pressure:

Cement Data

Cement Name: BFN III
Cement Density (lb/gal) : 14.2
Cement Yield (cuft) : 1.49
Gallons Per Sack: 7.48
% Excess: 20%
Displacement Fluid lb/gal: 8.3
BBL to Pit:
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 10.0

Spacer Ahead Makeup

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 53.46 cuft

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

cuft of Casing 1071.49 cuft

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

Total Slurry Volume 1142.31 cuft

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

bbls of Slurry 203.45 bbls

(Total Slurry Volume) X (.1781)

Sacks Needed 767 sk

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

Mix Water 136.54 bbls

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

Displacement: 143.56 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1392.04 PSI

Pressure of the fluids inside casing

Displacement: 796.39 psi

Shoe Joint: 29.51 psi

Total 825.90 psi

Differential Pressure: 566.14 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 320.10 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 _____

M/D TOTCO 2000 SERIES

