



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 6/9/2015

Invoice # 80089

API#

Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation

Well Name: viper pyro 41n-14hxr

County: Weld

State: Colorado

Sec: 15

Twp: 3n

Range: 67w

Consultant: toby

Rig Name & Number: pinn 4

Distance To Location: 17

Units On Location: 4038-3103/4020-3212

Time Requested: 1000 pm

Time Arrived On Location: 915 pm

Time Left Location:

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft) : 817
Total Depth (ft) : 837
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 16
Shoe Joint Length (ft) : 41
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 17.80 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 71.28 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

cuft of Casing 432.23 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 521.31 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 92.84 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 350 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 62.31 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 60.76 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 602.70 PSI

Pressure of the fluids inside casing

Displacement: 334.60 psi

Shoe Joint: 30.25 psi

Total 364.84 psi

Differential Pressure: 237.86 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 163.07 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.

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M/D TOTCO 2000 SERIES

