



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 6/1/2015
Invoice #: 80140
API#: 05-123-41426
Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation

Well Name: VIPER PYRO 39N-10HZ

County: Weld

State: Colorado

Sec: 15

Twp: 3N

Range: 67W

Consultant: SAM

Rig Name & Number: PINN ENERGY 4

Distance To Location: 15

Units On Location: 4031-3107/ 4034-3203

Time Requested: 2130

Time Arrived On Location: 2000

Time Left Location: 700

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft) : 1,802
Total Depth (ft) : 1821
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 60
Conductor ID : 15.25
Shoe Joint Length (ft) : 43
Landing Joint (ft) : 10

Max Rate: 6
Max Pressure: 1000

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: 21.0
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup
30BBL WATER/ DYE IN 2ND 10

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 18.63 cuft

(Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 45.79 cuft

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

cuft of Casing 1023.34 cuft

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

Total Slurry Volume 1087.76 cuft

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

bbls of Slurry 193.73 bbls

(Total Slurry Volume) X (.1781)

Sacks Needed 730 sk

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

Mix Water 130.02 bbls

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

Displacement: 136.76 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1329.34 PSI

Pressure of the fluids inside casing

Displacement: 758.48 psi

Shoe Joint: 31.66 psi

Total 790.14 psi

Differential Pressure: 539.19 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 316.78 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 _____

VIPER PYRO 39N-10HZ SURFACE

