



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 6/5/2015

Invoice # 80086

API#

Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation

Well Name: viper pyro 26n-14hz

County: Weld

State: Colorado

Sec: 15

Twp: 3n

Range: 67w

Consultant: toby

Rig Name & Number: pinnergy 4

Distance To Location: 17

Units On Location: 4038-3103/4024-3210

Time Requested: 1200 am

Time Arrived On Location: 930 pm

Time Left Location: 2:45pm

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 812
Total Depth (ft) : 832
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 60
Conductor ID : 16
Shoe Joint Length (ft) : 38
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 16.49 **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 441.03 **cuft**
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 510.98 **cuft**
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 91.01 **bbls**
(Total Slurry Volume) X (.1781)
Sacks Needed 343 **sk**
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 61.08 **bbls**
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 60.61 **bbls**

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

Pressure of cement in annulus

Hydrostatic Pressure: 599.01 **PSI**

Pressure of the fluids inside casing

Displacement: 333.73 **psi**

Shoe Joint: 28.03 **psi**

Total 361.77 **psi**

Differential Pressure: 237.25 **psi**

Collapse PSI: 2020.00 **psi**

Burst PSI: 3520.00 **psi**

Total Water Needed: 161.69 **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.

X

M/D TOTCO 2000 SERIES

