



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 6/15/2015
Invoice # 80404
API# 05-123-41490-00
Foreman: Calvin Reimers

Customer: Anadarko Petroleum Corporation
Well Name: Fehr 37N-29HZ

County: Weld
State: Colorado
Sec: 32
Twp: 2N
Range: 66W

Consultant: Toby / Bryan
Rig Name & Number: Pinn 4
Distance To Location: 19 Miles
Units On Location: 4023-3104/4030-3203
Time Requested: 400am
Time Arrived On Location: 205am
Time Left Location: 7:00am

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft) : 1,862
Total Depth (ft) : 1875
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 60
Conductor ID : 16
Shoe Joint Length (ft) : 42
Landing Joint (ft) : 10

Max Rate: 6
Max Pressure: 1750

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: 3 /
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 10.0

Spacer Ahead Makeup

30 bbls With Dye in 2nd 10 bbls

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 18.32 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 1056.62 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 1128.40 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 200.97 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 757 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 134.87 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 141.43 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1373.34 PSI

Pressure of the fluids inside casing

Displacement: 784.51 psi

Shoe Joint: 31.13 psi

Total 815.64 psi

Differential Pressure: 557.70 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 316.31 bbls

X
Authorization To Proceed

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SERIES 2000

