



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 10/14/2017
Invoice #: 900190
API#: 05-123-45249
Foreman: Corey B.

Customer: Anadarko Petroleum Corporation
Well Name: Robin 9-17HZ

County: Weld
State: Colorado
Sec: 9
Twp: 1N
Range: 65W

Consultant: Matt
Rig Name & Number: Cartel 88
Distance To Location: 39
Units On Location: 1027/3103-4033/3212-4020/321
Time Requested: 900
Time Arrived On Location: 820
Time Left Location:

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,864
Total Depth (ft) : 1874
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 15.25
Shoe Joint Length (ft) : 44
Landing Joint (ft) : 15

Max Rate: 8
Max Pressure: 2000

Cement Data

Cement Name: BFN III
Cement Density (lb/gal) : 14.2
Cement Yield (cuft) : 1.48
Gallons Per Sack: 7.40
% Excess: 20%
Displacement Fluid lb/gal: 8.3
BBL to Pit:
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup
30 bbl with Die in @nd 10

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 19.10 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)
cuft of Conductor 61.05 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)
cuft of Casing 1046.27 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 1126.42 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 200.62 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 761 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 134.10 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 141.86 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1375.07 PSI

Pressure of the fluids inside casing

Displacement: 784.75 psi

Shoe Joint: 32.46 psi

Total 817.21 psi

Differential Pressure: 557.86 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 325.96 bbls

X *[Signature]*
Authorization To Proceed

X 10-14-17
Date

Robin 9-17HZ

