



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 4/16/2017
Invoice #: 900081
API#: 05-123-43811
Foreman: Corey B.

Customer: Anadarko Petroleum Corporation
Well Name: Babcock 32N-33HZ

County: Weld
State: Colorado
Sec: 4
Twp: 2N
Range: 67W

Consultant: Matt
Rig Name & Number: 252
Distance To Location: 36
Units On Location: 1027-3103/4020-3212/4019-321
Time Requested: 1100
Time Arrived On Location: 1020
Time Left Location:

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,845
Total Depth (ft) : 1855
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: 8bm
Max Pressure: 2000

Cement Data

Cement Name: BFN III
Cement Density (lb/gal) : 14.2
Cement Yield (cuft) : 1.48
Gallons Per Sack: 7.49
% Excess: 15%
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 /2nd 10 BBL with Die

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 992.00 cuft
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 1072.15 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 190.95 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 724 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 129.19 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 140.39 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1361.06 PSI

Pressure of the fluids inside casing

Displacement: 776.56 psi

Shoe Joint: 32.46 psi

Total 809.02 psi

Differential Pressure: 552.04 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 319.58 bbls

X *B. Brown*
Authorization To Proceed

4-16-17

Babcock 32N-33HZ

