



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 4/30/2017
Invoice # 200079
API#
Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation

Well Name: butterball 40n-34hz

County: Weld
State: Colorado
Sec: 10
Twp: 2n
Range: 67w

Consultant: shawn
Rig Name & Number: wmo 252
Distance To Location: 26
Units On Location: 4028/4020/4019
Time Requested: 930 pm
Time Arrived On Location: 900 pm
Time Left Location: 12:15 pm

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,820
Total Depth (ft) : 1845
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 15.6
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) : 1.49
Gallons Per Sack: 7.40
% Excess: 15%
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 19.10 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 65.76 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

cuft of Casing 977.95 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 1062.81 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 189.29 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 713 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 125.68 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 138.46 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1342.61 PSI

Pressure of the fluids inside casing

Displacement: 765.78 psi

Shoe Joint: 32.46 psi

Total 798.24 psi

Differential Pressure: 544.38 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 304.13 bbls

X
Authorization To Proceed

X 4-30-17
Date

WUCID 2

SERIES 2000

