



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 11/23/2013
Invoice #: 12527
API#: 445564
Foreman: MONTI

Customer: bill barrett 0461 BH
Well Name: circle b 6-66-9-0461 con

County: WELD
State: Colorado
Sec: 9
Twp: 6n
Range: 66w

Consultant: pete
Rig Name & Number: major
Distance To Location: 21.6
Units On Location: 3106-3210
Time Requested: 9:00am
Time Arrived On Location: 9:00am
Time Left Location: 12:00

WELL DATA

Casing Size OD (in): 9.6250
Casing Weight (lb): 36
Casing Depth (ft): 790
Total Depth (ft): 800
Open Hole Diameter (in.): 13.50
Conductor Length (ft):
Conductor ID:
Shoe Joint Length (ft): 44
Landing Joint (ft): 8

Max Rate:
Max Pressure:

Cement Data

Cement Name: BFN III
Cement Density (lb/gal): 15.2
Cement Yield (cuft): 1.27
Gallons Per Sack: 5.89
% Excess: 20%
Displacement Fluid lb/gal: 8.3
BBL to Pit:
Fluid Ahead (bbls):
H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup

10 fresh 10 dye 40 fresh

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 18.88 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)
cuft of Conductor 0.00 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)
cuft of Casing 386.33 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 405.21 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 86.60 bbls
(Total Slurry Volume) X (.1781) X (% Excess Cement)
Sacks Needed 383 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 53.69 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 58.37 bbls
(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

Pressure of cement in annulus

Hydrostatic Pressure: 624.16 PSI

Pressure of the fluids inside casing

Displacement: 322.08 psi

Shoe Joint: 34.35 psi

Total 356.43 psi

Differential Pressure: 267.73 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 73.69 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.