



Bison Oil Well Cementing Single Cement Surface Pipe

Invoice # 12731
API# 445564
Foreman: monte

Customer: bill barrett
Well Name: 70 Ranch 4-63-3-4856CDH

County: weld
State: colorado
Sec: 3
Twp: 4n
Range: 63w
Consultant: casey
Rig Name & Number: major
Distance To Location: 26.4
Units On Location: 3104-2313
Time Requested: 100am
Time Arrived On Location: 1200am
Time Left Location: 530

WELL DATA

Casing Size OD (in) : 9.6250
Casing Weight (lb) : 36
Casing Depth (ft.) : 818
Total Depth (ft) : 820
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) :
Conductor ID :
Shoe Joint Length (ft) : 43
Landing Joint (ft) : 6

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:
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 18.62 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 399.78 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 418.40 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 89.42 bbls
(Total Slurry Volume) X (.1781) X (% Excess Cement)
Sacks Needed 395 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 55.44 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 60.39 bbls
(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

Pressure of cement in annulus

Hydrostatic Pressure: 645.89 PSI

Pressure of the fluids inside casing

Displacement: #N/A psi

Shoe Joint: 33.87 psi

Total #N/A psi

Differential Pressure: #N/A psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 75.44 bbls

X Casey Lane
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.