



# Bison Oil Well Cementing Single Cement Surface Pipe

Invoice # 12729  
API# 445564  
Foreman: monte

Customer: bill barrett  
Well Name: 70ranch 4-63-3-3225cdh

County: weld  
State: colorado  
Sec: 3  
Twp: 4n  
Range: 63w  
Consultant: casey  
Rig Name & Number: major  
Distance To Location: 157.6  
Units On Location: 3104-2313  
Time Requested: 1130pm  
Time Arrived On Location: 1030  
Time Left Location: 330

## WELL DATA

Casing Size OD (in) : 9.6250  
Casing Weight (lb) : 36  
Casing Depth (ft) : 808  
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: -23%  
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 394.89 cuft  
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)  
Total Slurry Volume 413.51 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)  
bbls of Slurry 56.71 bbls  
(Total Slurry Volume) X (.1781) X (% Excess Cement)  
Sacks Needed 251 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)  
Mix Water 35.16 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 59.61 bbls

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

## Pressure of cement in annulus

Hydrostatic Pressure: 638.00 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: 55.16 bbls

X Casey  
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.