



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 1/21/2018  
Invoice #: 900243  
API#: 05-123-43721  
Foreman: Corey Barras

Customer: Bill Barrett Corp.

Well Name: Anschutz Equus Farms 4-62-28-6457 CB

County: Weld  
State: Colorado  
Sec: 28  
Twp: 4N  
Range: 62W

Consultant: Matt  
Rig Name & Number: WM 344  
Distance To Location: 25  
Units On Location: 4024/3103 -4034/3213  
Time Requested: 130  
Time Arrived On Location: 1200  
Time Left Location:

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft.) : 821  
Total Depth (ft) : 821  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 0  
Conductor ID : 0  
Shoe Joint Length (ft) : 42  
Landing Joint (ft) : 0  
Max Rate: 8  
Max Pressure: 2500

## Cement Data

Cement Name: BFN III  
Cement Density (lb/gal) : 14.2  
Cement Yield (cuft) : 1.48  
Gallons Per Sack: 7.49  
% Excess: 10%  
Displacement Fluid lb/gal: 8.3  
BBL to Pit:  
Fluid Ahead (bbls): 20.0  
H2O Wash Up (bbls): 20.0  
Spacer Ahead Makeup  
20 BBL with die in 1st 10

Casing ID

8.921

Casing Grade

J-55 only used

## Calculated Results

**cuft of Shoe** 18.23 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** 431.16 cuft  
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)  
**Total Slurry Volume** 449.39 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)  
**bbls of Slurry** 80.04 bbls  
(Total Slurry Volume) X (.1781)  
**Sacks Needed** 304 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)  
**Mix Water** 54.15 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

**Displacement:** 58.75 bbls

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

## Pressure of cement in annulus

**Hydrostatic Pressure:** 591.64 PSI

## Pressure of the fluids inside casing

**Displacement:** 327.70 psi

**Shoe Joint:** 30.98 psi

**Total** 358.68 psi

**Differential Pressure:** 232.95 psi

**Collapse PSI:** 2020.00 psi

**Burst PSI:** 3520.00 psi

**Total Water Needed:** 152.90 bbls

X

Authorization To Proceed

## Bison Oil Well Cementing Single Cement Surface Pipe

Customer  
Well Name

Bill Barrett Corp.
Inschutz Equus Farms 4-62-28-6457 C

INVOICE #  
LOCATION  
FOREMAN  
Date

900243
Weld
Corey Barras
1/21/2018

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### DESCRIPTION OF JOB EVENTS

[illegible]

X

Work Preformed

X

Title

X

Date \_\_\_\_\_