



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 5/1/2017  
Invoice #: 900092  
API#: 05-123-44298  
Foreman: Corey B.

Customer: Bill Barrett Corp.

Well Name: Kunesmiller 5-61-22/0801B2

County: Weld  
State: Colorado  
Sec: 5N  
Twp: 61W  
Range: 21

Consultant:  
Rig Name & Number: White Mountain 344  
Distance To Location:  
Units On Location: 4027/3103-4031/4201  
Time Requested: 1900  
Time Arrived On Location: 1800  
Time Left Location:

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft.) : 813  
Total Depth (ft) : 811  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 0  
Conductor ID : 19.166  
Shoe Joint Length (ft) : 44  
Landing Joint (ft) : 0  
Max Rate: 6  
Max Pressure: 1000

## Cement Data

Cement Name: BFN III  
Cement Density (lb/gal) : 14.2  
Cement Yield (cuft) : 1.48  
Gallons Per Sack: 7.40  
% Excess: 30%  
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** 18.88 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** 516.54 cuft  
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)  
**Total Slurry Volume** 535.42 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)  
**bbls of Slurry** 95.36 bbls  
(Total Slurry Volume) X (.1781)  
**Sacks Needed** 362 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)  
**Mix Water** 63.74 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

**Displacement:** 59.49 bbls

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

## Pressure of cement in annulus

**Hydrostatic Pressure:** 599.75 PSI

## Pressure of the fluids inside casing

**Displacement:** 331.79 psi

**Shoe Joint:** 32.09 psi

**Total** 363.88 psi

**Differential Pressure:** 235.87 psi

**Collapse PSI:** 2020.00 psi

**Burst PSI:** 3520.00 psi

**Total Water Needed:** 163.23 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.



**Bison Oil Well Cementing  
Single Cement Surface Pipe**

Customer  
Well Name

Bill Barrett Corp.  
Kunesmiller 5-61-22/0801B2

INVOICE #  
LOCATION  
FOREMAN  
Date

900092  
Weld  
Corey B.  
5/1/2017

Treatment Report Page 2

**DESCRIPTION OF JOB EVENTS**

Amount Pumped	Time/Date	Event	Description	Rate	BBLs	Pressure
% Excess 30%						
Mixed bbls 63.74	1800	Arrive on location	Running Casing			
Total Sacks 362	1805	Bison Safety Meeting				
bbl Returns 23	1815	Rig up				
Water Temp 57						
	1945	Safety Meeting for Job	Bison and Rig Crew			
Notes:	2008	Start Job				
	2012	Test Lines				
	2015	Spacer	Water with die in 1st ten	4.5	20	30
	2020	Cement	14.2ppg	5	95	50
	2038	ShutDown				
	2040	Drop Plug	Preloaded in Plug Container			
	2042	Start Displacement		4.5	40	150
	2057	Bump Plug	400 over Final lift pressure (690 PSI)	2	59	190
	2100	Check Floats	with 1/2 bbl back			
	2102	End Job				
	2105	Rig Down				
	2130	Leave Location				
		23 bbl of cement to surface				

X

Work Performed

X

Title

X

Date