



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 2/26/2018  
Invoice #: 900268  
API#: 05-123-46080  
Foreman: Corey Barras

Customer: Bill Barrett Corp.  
Well Name: Anschutz State 5-62-26 4956 C

County: Weld  
State: Colorado  
Sec: 27  
Twp: 5N  
Range: 62W

Consultant: Matt  
Rig Name & Number: WM 344  
Distance To Location: 42  
Units On Location: 4024/3103 -4024/3201  
Time Requested: 1800  
Time Arrived On Location: 1715  
Time Left Location: 1845

WELL DATA	Cement Data
Casing Size OD (in) : 9.625	Cement Name: BFN III
Casing Weight (lb) : 36.00	Cement Density (lb/gal) : 14.2
Casing Depth (ft.) : 817	Cement Yield (cuft) : 1.48
Total Depth (ft) : 817	Gallons Per Sack: 7.49
Open Hole Diameter (in.) : 13.50	% Excess: 10%
Conductor Length (ft) : 0	Displacement Fluid lb/gal: 8.3
Conductor ID : 0	BBL to Pit: 13.0
Shoe Joint Length (ft) : 42	Fluid Ahead (bbls): 20.0
Landing Joint (ft) : 0	H2O Wash Up (bbls): 20.0
Max Rate: 8	Spacer Ahead Makeup
Max Pressure: 2500	20 BBL with die in 1st 10

Casing ID	8.921	Casing Grade	J-55 only used
<b>Calculated Results</b>	<b>Displacement:</b>	<b>58.68</b>	<b>bbls</b>
cuft of Shoe 18.23 cuft (Casing ID Squared) X (.005454) X (Shoe Joint ft)	(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)		
cuft of Conductor 0.00 cuft (Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)	<b>Pressure of cement in annulus</b>		
cuft of Casing 430.62 cuft (Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	<b>Hydrostatic Pressure:</b>	<b>590.90</b>	<b>PSI</b>
Total Slurry Volume 448.85 cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	<b>Pressure of the fluids inside casing</b>		
bbls of Slurry 79.94 bbls (Total Slurry Volume) X (.1781)	<b>Displacement:</b>	<b>327.27</b>	<b>psi</b>
Sacks Needed 303 sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	<b>Shoe Joint:</b>	<b>30.98</b>	<b>psi</b>
Mix Water 54.08 bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42	<b>Total</b>	<b>358.25</b>	<b>psi</b>
	<b>Differential Pressure:</b>	<b>232.65</b>	<b>psi</b>
	<b>Collapse PSI:</b>	<b>2020.00</b>	<b>psi</b>
	<b>Burst PSI:</b>	<b>3520.00</b>	<b>psi</b>
	<b>Total Water Needed:</b>	<b>152.76</b>	<b>bbls</b>

X   
Authorization To Proceed



Bill Barrett Corp.
Anschutz State 5-62-26 4956 C

900268
Weld
Corey Barras
2/26/2018

Treatment Report Page 2

### DESCRIPTION OF JOB EVENTS

X
Work Preformed

X	Title
1	1. The first title
2	2. The second title
3	3. The third title
4	4. The fourth title
5	5. The fifth title
6	6. The sixth title
7	7. The seventh title
8	8. The eighth title
9	9. The ninth title
10	10. The tenth title

X  
Date