



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 12/24/2017  
Invoice #: 900230  
API#: 05-123-45461  
Foreman: Corey Barras

Customer: Anadarko Petroleum Corporation

Well Name: Speak Fed 32N2-5HZ

County: Weld  
State: Colorado  
Sec: 11  
Twp: 1N  
Range: 67W

Consultant: Matt  
Rig Name & Number: Cartel 88  
Distance To Location: 31  
Units On Location: 1027-3103/4020-3214/4024-320  
Time Requested: 2200  
Time Arrived On Location: 2330  
Time Left Location:

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.) : 1,859	Cement Yield (cuft) : 1.48
Total Depth (ft) : 1870	Gallons Per Sack: 7.40
Open Hole Diameter (in.) : 13.50	% Excess: 5%
Conductor Length (ft) : 80	Displacement Fluid lb/gal: 8.3
Conductor ID : 15.25	BBL to Pit:
Shoe Joint Length (ft) : 44	Fluid Ahead (bbls): 30.0
Landing Joint (ft) : 15	H2O Wash Up (bbls): 20.0
Max Rate: 8	Spacer Ahead Makeup
Max Pressure: 2000	30 bbl with Die in 2nd 10

Casing ID	8.921	Casing Grade	J-55 only used
<b>Calculated Results</b>		<b>Displacement:</b>	<b>141.47 bbls</b>
<b>cuft of Shoe</b>	<b>19.10 cuft</b>	(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)	
(Casing ID Squared) X (.005454) X (Shoe Joint ft)		<b>Pressure of cement in annulus</b>	
<b>cuft of Conductor</b>	<b>61.05 cuft</b>	<b>Hydrostatic Pressure:</b>	<b>1371.38 PSI</b>
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)		<b>Pressure of the fluids inside casing</b>	
<b>cuft of Casing</b>	<b>912.92 cuft</b>	<b>Displacement:</b>	<b>782.59 psi</b>
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)		<b>Shoe Joint:</b>	<b>32.46 psi</b>
<b>Total Slurry Volume</b>	<b>993.07 cuft</b>	<b>Total</b>	<b>815.05 psi</b>
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)		<b>Differential Pressure:</b>	<b>556.33 psi</b>
<b>bbls of Slurry</b>	<b>176.87 bbls</b>	<b>Collapse PSI:</b>	
(Total Slurry Volume) X (.1781)		<b>Burst PSI:</b>	
<b>Sacks Needed</b>	<b>671 sk</b>	<b>Total Water Needed:</b>	
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)		<b>309.70 bbls</b>	
<b>Mix Water</b>	<b>118.22 bbls</b>		
(Sacks Needed) X (Gallons Per Sack) ÷ 42			

X Authorization To Proceed

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Customer  
Well Name

Anadarko Petroleum Corporation  
Speak Fed 32N2-5HZ

INVOICE #  
LOCATION  
FOREMAN  
Date

900230  
Weld  
Corey Barras  
12/25/2017

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### DESCRIPTION OF JOB EVENTS

[illegible]

**X**

Work Performed

X

Title

✓

Date \_\_\_\_\_

# Speak Fed 32N2-5HZ

