



Anadarko Petroleum Corporation  
buddy 7-15hz

200398
Weld
KirkKallhoff
1/31/2019

Treatment Report Page 2

## DESCRIPTION OF JOB EVENTS

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x

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1-31-19

Date \_\_\_\_\_



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 1/31/2019  
Invoice # 200398  
API#  
Foreman: KirkKallhoff

Customer: Anadarko Petroleum Corporation

Well Name: buddy 7-15hz

County: Weld  
State: Colorado  
Sec: 30  
Twp: 2N  
Range: 65w  
Consultant: brent  
Rig Name & Number: Cartel 88  
Distance To Location: 35  
Units On Location: 4047/4030  
Time Requested: 100 pm  
Time Arrived On Location: 1030 am  
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.) : 1,871	Cement Yield (cuft) : 1.48
Total Depth (ft) : 1861	Gallons Per Sack: 7.40
Open Hole Diameter (in.) : 12.25	% Excess: 5%
Conductor Length (ft) : 80	Displacement Fluid lb/gal: 8.3
Conductor ID : 15.25	BBL to Pit:
Shoe Joint Length (ft) : 39	Fluid Ahead (bbls): 30.0
Landing Joint (ft) : 8	H2O Wash Up (bbls): 10.0
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: 142.25 bbls</b> (Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)
<b>cuft of Shoe 16.93 cuft</b> (Casing ID Squared) X (.005454) X (Shoe Joint ft)	<b>Pressure of cement in annulus</b>
<b>cuft of Conductor 61.05 cuft</b> (Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)	<b>Hydrostatic Pressure: 1380.24 PSI</b>
<b>cuft of Casing 588.95 cuft</b> (Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	<b>Pressure of the fluids inside casing</b>
<b>Total Slurry Volume 666.93 cuft</b> (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	<b>Displacement: 789.92 psi</b>
<b>bbls of Slurry 118.78 bbls</b> (Total Slurry Volume) X (.1781)	<b>Shoe Joint: 28.77 PSI</b>
<b>Sacks Needed 451 sk</b> (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	<b>Total 818.69 psi</b>
<b>Mix Water 79.40 bbls</b> (Sacks Needed) X (Gallons Per Sack) ÷ 42	<b>Differential Pressure: 561.54 psi</b>
	<b>Collapse PSI: 2020.00 psi</b>
	<b>Burst PSI: 3520.00 psi</b>
	<b>Total Water Needed: 261.64 bbls</b>

X  
Authorization To Proceed

# SERIES 2000

