

Date \_\_\_\_\_



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 1/30/2019  
Invoice #: 200397  
API#  
Foreman: KirkKallhoff

Customer: Anadarko Petroleum Corporation  
Well Name: buddy 7-14hz

County: Weld  
State: Colorado  
Sec: 30  
Twp: 2N  
Range: 65w  
Consultant: dave  
Rig Name & Number: Cartel 88  
Distance To Location: 35  
Units On Location: 4047/4030  
Time Requested: 930 pm  
Time Arrived On Location: 700 pm  
Time Left Location: 12:00pm

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.) : 1,873	Cement Yield (cuft) : 1.48
Total Depth (ft) : 1883	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) : 40	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: 142.32 bbls</b>	
<b>cuft of Shoe 17.36 cuft</b> (Casing ID Squared) X (.005454) X (Shoe Joint ft)		(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)	
<b>cuft of Conductor 61.05 cuft</b> (Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)		<b>Pressure of cement in annulus</b>	
<b>cuft of Casing 589.61 cuft</b> (Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length )		<b>Hydrostatic Pressure: 1381.71 PSI</b>	
<b>Total Slurry Volume 668.02 cuft</b> (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)		<b>Pressure of the fluids inside casing</b>	
<b>bbls of Slurry 118.97 bbls</b> (Total Slurry Volume) X (.1781)		<b>Displacement: 790.35 psi</b>	
<b>Sacks Needed 451 sk</b> (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)		<b>Shoe Joint: 29.51 PSI</b>	
<b>Mix Water 79.53 bbls</b> (Sacks Needed) X (Gallons Per Sack) ÷ 42		<b>Total 819.86 psi</b>	
		<b>Differential Pressure: 561.85 psi</b>	
		<b>Collapse PSI: 2020.00 psi</b>	
		<b>Burst PSI: 3520.00 psi</b>	
		<b>Total Water Needed: 261.85 bbls</b>	

X   
Authorization To Proceed

NO212

1/30/2019 11:35:41 PM

### SERIES 2000

