





# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 2/23/2020

Invoice # 900478

AFE # 2147213

Foreman: Corey Barras

**Customer:** Anadarko Petroleum Corporation

**Well Name:** Damore 18-4HZ

County: Weld

State: Colorado

Sec: 18

Twp: 5n

Range: 67w

Consultant: Joe

Rig Name & Number: CARTEL 88

Distance To Location: 15

Units On Location: 4028/3103-4020/32034033-3201

Time Requested: 1930

Time Arrived On Location: 1830

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.) : 1,868	Cement Yield (cuft) : 1.48
Total Depth (ft) : 1878	Gallons Per Sack: 7.48
Open Hole Diameter (in.) : 13.50	% Excess: 12%
Conductor Length (ft) : 80	Displacement Fluid lb/gal: 8.3
Conductor ID : 15.25	BBL to Pit:
Shoe Joint Length (ft) : 42	Fluid Ahead (bbls): 30.0
Landing Joint (ft) : 8	H2O Wash Up (bbls): 20.0
Max Rate: 8	Spacer Ahead Makeup
Max Pressure: 2000	30 BBL WATER, DYE IN 2ND 10

Casing ID 8.921 Casing Grade J-55 only used

Calculated Results	Displacement: 141.78 bbls
<b>cuft of Shoe</b> 18.23 cuft (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</b> 61.05 cuft (Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)	<b>Pressure of cement in annulus</b>
<b>cuft of Casing</b> 978.71 cuft (Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	<b>Hydrostatic Pressure: 1378.02 PSI</b>
<b>Total Slurry Volume</b> 1057.99 cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	<b>Pressure of the fluids inside casing</b>
<b>bbls of Slurry</b> 188.43 bbls (Total Slurry Volume) X (.1781)	<b>Displacement: 787.34 psi</b>
<b>Sacks Needed</b> 715 sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	<b>Shoe Joint: 30.98 psi</b>
<b>Mix Water</b> 127.31 bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42	<b>Total 818.32 psi</b>
	<b>Differential Pressure: 559.70 psi</b>
	<b>Collapse PSI: 2020.00 psi</b>
	<b>Burst PSI: 3520.00 psi</b>
	<b>Total Water Needed: 319.10 bbls</b>

X for Walls  
Authorization To Proceed

# Damore 18-4HZ

