



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 2/25/2020
 Invoice #: 900479
 AFE #: 2147205
 Foreman: Corey Barras

Customer: Anadarko Petroleum Corporation

Well Name: Damore 18-6HZ

County: Weld
 State: Colorado
 Sec: 18
 Twp: 5n
 Range: 67w

Consultant: David
 Rig Name & Number: CARTEL 88
 Distance To Location: 15
 Units On Location: 4028/3103-4020/3203-4033/3201
 Time Requested: 930
 Time Arrived On Location: 845
 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) : 1,883	Cement Yield (cuft) : 1.48
Total Depth (ft) : 1893	Gallons Per Sack: 7.48
Open Hole Diameter (in.) : 13.50	% Excess: 10%
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	Pressure of cement in annulus
cuft of Shoe 18.23 cuft (Casing ID Squared) X (.005454) X (Shoe Joint ft)	Displacement: 142.94 bbls (Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)
cuft of Conductor 61.05 cuft (Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)	Hydrostatic Pressure: 1389.09 PSI
cuft of Casing 969.30 cuft (Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	Pressure of the fluids inside casing
Total Slurry Volume 1048.58 cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	Displacement: 793.80 psi
bbls of Slurry 186.75 bbls (Total Slurry Volume) X (.1781)	Shoe Joint: 30.98 psi
Sacks Needed 708 sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	Total 824.79 psi
Mix Water 126.18 bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42	Differential Pressure: 564.30 psi
	Collapse PSI: 2020.00 psi
	Burst PSI: 3520.00 psi
	Total Water Needed: 319.12 bbls

X
 Authorization To Proceed

Damore 18-6HZ

