



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 3/10/2018
Invoice #: 666291
API#: 05-123-46253
Foreman: Nick Vigil

Customer: Anadarko Petroleum Corporation

Well Name: Quarter Circle 24-6HZ

County: Weld
State: Colorado
Sec: 13
Twp: 1N
Range: 66W
Consultant: Bryan
Rig Name & Number: Cartel 88
Distance To Location: 33 Miles
Units On Location: 4023/4024/4035
Time Requested: 21:00
Time Arrived On Location: 19:50
Time Left Location:

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,869
Total Depth (ft) : 1879
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 15.25
Shoe Joint Length (ft) : 42
Landing Joint (ft) : 10

Max Rate: 8
Max Pressure: 2000

Cement Data

Cement Name: BFN III
Cement Density (lb/gal) : 14.2
Cement Yield (cuft) : 1.49
Gallons Per Sack: 7.48
% Excess: 10%
Displacement Fluid lb/gal: 8.3
BBL to Pit:
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup
Dye in second 10 bbl

Casing ID	8.921	Casing Grade	J-55 only used
Calculated Results		Displacement:	142.02 bbls
cuft of Shoe 18.23 cuft (Casing ID Squared) X (.005454) X (Shoe Joint ft)		(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)		Pressure of cement in annulus	
cuft of Casing 961.77 cuft (Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)		Hydrostatic Pressure: 1378.76 PSI	
Total Slurry Volume 1041.05 cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)		Pressure of the fluids inside casing	
bbls of Slurry 185.41 bbls (Total Slurry Volume) X (.1781)		Displacement: 787.77 psi	
Sacks Needed 699 sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)		Shoe Joint: 30.98 psi	
Mix Water 124.43 bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42		Total 818.75 psi	
		Differential Pressure: 560.01 psi	
		Collapse PSI: 2020.00 psi	
		Burst PSI: 3520.00 psi	
		Total Water Needed: 316.45 bbls	

X
Authorization To Proceed

Date _____

Quarter Circle 24-6HZ

