

Date _____



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 8/9/2019
Invoice #: 200495
API#
Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation
Well Name: farley 23-2hz

County: Weld
State: Colorado
Sec: 12
Twp: 1n
Range: 68w
Consultant: bryan
Rig Name & Number: Cartel 88
Distance To Location: 25
Units On Location: 4047/4024/4041
Time Requested: 300 pm
Time Arrived On Location: 1200 pm
Time Left Location: 8:30 pm

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.) : 1,821	Cement Yield (cuft) : 1.48
Total Depth (ft) : 1831	Gallons Per Sack: 7.40
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) : 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
Calculated Results		Displacement: 138.30 bbls	
cuft of Shoe 17.36 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 935.97 cuft (Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)		Hydrostatic Pressure: 1343.35 PSI	
Total Slurry Volume 1014.38 cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)		Pressure of the fluids inside casing	
bbls of Slurry 180.66 bbls (Total Slurry Volume) X (.1781)		Displacement: 767.93 psi	
Sacks Needed 685 sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)		Shoe Joint: 29.51 PSI	
Mix Water 120.76 bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42		Total 797.44 psi	
		Differential Pressure: 545.91 psi	
		Collapse PSI: 2020.00 psi	
		Burst PSI: 3520.00 psi	
		Total Water Needed: 299.06 bbls	

X

Authorization To Proceed

SERIES 2000

