



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 10/7/2019

Invoice # 200519

API#

Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation

Well Name: mae j 8-5hz

County: Weld

State: Colorado

Sec: 12

Twp: 1n

Range: 68w

Consultant: bryan

Rig Name & Number: Cartel 88

Distance To Location: 39

Units On Location: 4047/4027/4024

Time Requested: 500 am

Time Arrived On Location: 300 am

Time Left Location: 8:00 am

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.) : 1,865	Cement Yield (cuft) : 1.48
Total Depth (ft) : 1875	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) : 41	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

Calculated Results	Pressure of cement in annulus
cuft of Shoe 17.80 cuft (Casing ID Squared) X (.005454) X (Shoe Joint ft)	Displacement: 141.63 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: 1375.81 PSI
cuft of Casing 959.62 cuft (Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	Pressure of the fluids inside casing
Total Slurry Volume 1038.47 cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	Displacement: 786.47 psi
bbls of Slurry 184.95 bbls (Total Slurry Volume) X (.1781)	Shoe Joint: 30.25 PSI
Sacks Needed 702 sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	Total 816.72 psi
Mix Water 123.63 bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42	Differential Pressure: 559.09 psi
	Collapse PSI: 2020.00 psi
	Burst PSI: 3520.00 psi
	Total Water Needed: 305.26 bbls

X Authorization To Proceed

SERIES 2000

