



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 9/2/2015

Invoice # 80526

API#

Foreman: Kirk Kallhoff

Customer: Noble Energy Inc.

Well Name: kidd Id22-780

County: Weld
State: Colorado

Sec: 17
Twp: 5n
Range: 63w

Consultant: tawn
Rig Name & Number: H&P 326

Distance To Location:
Units On Location: 4029-3106/4035-3211
Time Requested: 930 pm
Time Arrived On Location: 800 pm
Time Left Location: 1:30 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.) :	755	Cement Yield (cuft) :	1.49
Total Depth (ft) :	765	Gallons Per Sack:	7.48
Open Hole Diameter (in.) :	13.50	% Excess:	30%
Conductor Length (ft) :	100	Displacement Fluid lb/gal:	8.3
Conductor ID :	16	BBL to Pit:	
Shoe Joint Length (ft) :	38	Fluid Ahead (bbls):	60.0
Landing Joint (ft) :	35	H2O Wash Up (bbls):	10.0
Max Rate:		Spacer Ahead Makeup	
Max Pressure:			

Casing ID	8.921	Casing Grade	J-55 only used
Calculated Results		Displacement: 58.14 bbls	
cuft of Shoe 16.49 cuft		(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)	
(Casing ID Squared) X (.005454) X (Shoe Joint ft)		Pressure of cement in annulus	
cuft of Conductor 89.10 cuft		Hydrostatic Pressure: 556.96 PSI	
(Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)		Pressure of the fluids inside casing	
cuft of Casing 416.15 cuft		Displacement: 309.16 psi	
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)		Shoe Joint: 28.03 psi	
Total Slurry Volume 521.74 cuft		Total 337.19 psi	
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)		Differential Pressure: 219.77 psi	
bbls of Slurry 92.92 bbls		Collapse PSI: 2020.00 psi	
(Total Slurry Volume) X (.1781)		Burst PSI: 3520.00 psi	
Sacks Needed 350 sk		Total Water Needed: 190.50 bbls	
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)			
Mix Water 62.36 bbls			
(Sacks Needed) X (Gallons Per Sack) ÷ 42			

Authorization To Proceed

