



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 10/29/2014
 Invoice #: 25077
 API#: 05-123-39234
 Foreman: Calvin Reimers

Customer: Anadarko Petroleum Corporation
 Well Name: Gee 26C-12HZ

County: Weld
 State: Colorado
 Sec: 24
 Twp: 2N
 Range: 67W

Consultant: Randy
 Rig Name & Number: Major 29
 Distance To Location: 18 Miles
 Units On Location: 4023-3104/3105-3210
 Time Requested: 1130am
 Time Arrived On Location: 1000am
 Time Left Location: 1000pm

WELL DATA	
Casing Size OD (in) :	9.625
Casing Weight (lb) :	36.00
Casing Depth (ft.) :	1,045
Total Depth (ft) :	1061
Open Hole Diameter (in.) :	13.50
Conductor Length (ft) :	
Conductor ID :	
Shoe Joint Length (ft) :	40
Landing Joint (ft) :	8
Max Rate:	7
Max Pressure:	2500

Cement Data	
Cement Name:	BFN III
Cement Density (lb/gal) :	14.2
Cement Yield (cuft) :	1.49
Gallons Per Sack:	7.48
% Excess:	16%
Displacement Fluid lb/gal:	8.3
BBL to Pit:	5
Fluid Ahead (bbls):	30.0
H2O Wash Up (bbls):	20.0
Spacer Ahead Makeup	
30bbls H2O+Dye in 2nd 10bbls	

Casing ID: 8.921 Casing Grade: J-55 only used

Calculated Results		
cuft of Shoe	17.25	cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)		
cuft of Conductor	0.00	cuft
(Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)		
cuft of Casing	590.69	cuft
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)		
Total Slurry Volume	607.93	cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)		
bbls of Slurry	108.27	bbls
(Total Slurry Volume) X (.1781)		
Sacks Needed	408	sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)		
Mix Water	72.66	bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42		

Displacement:	78.31	bbls
(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)		
Pressure of cement in annulus		
Hydrostatic Pressure:	770.68	PSI
Pressure of the fluids inside casing		
Displacement:	433.32	psi
Shoe Joint:	29.32	psi
Total	462.64	psi
Differential Pressure:	308.04	psi
Collapse PSI:	2020.00	psi
Burst PSI:	3520.00	psi
Total Water Needed:	200.97	bbls

Randy Case
 Authorization To Proceed

Customers hereby acknowledges and specifically agrees to the terms and condition on this work order, including, without limitation, the provisions on this work order.

SERIES 2000

