



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 11/19/2014
Invoice # 65028
API# 05-123-38366
Foreman: Lee Sharp

Customer: Noble Energy Inc.

Well Name: Burton K25 67-1HN

County: Weld
State: Colorado

Sec: 25
Twp: 4N
Range: 66W

Consultant: Tyler B. Hule
Rig Name & Number: PD 828
Distance To Location: 5
Units On Location: 4015 & 4022
Time Requested: 11:00
Time Arrived On Location: 10:10
Time Left Location:


WELL DATA	Cement Data
Casing Size OD (in) :	Cement Name:
Casing Weight (lb) :	Cement Density (lb/gal) :
Casing Depth (ft.) :	Cement Yield (cuft) :
Total Depth (ft) : 674	Gallons Per Sack: 3.69
Open Hole Diameter (in.) :	% Excess: 10
Conductor Length (ft) :	Displacement Fluid lb/gal: 8.3
Conductor ID :	BBL to Pit:
Shoe Joint Length (ft) :	Fluid Ahead (bbls): 42.2
Landing Joint (ft) :	H2O Wash Up (bbls): 21.1
Max Rate:	Spacer Ahead Makeup
Max Pressure:	10F+10D+20F=40 bbl

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results	
(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
(Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)	Pressure of the fluids inside casing
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	
(Total Slurry Volume) X (.1781)	
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	
(Sacks Needed) X (Gallons Per Sack) ÷ 42	
 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.	



**Bison Oil Well Cementing
Single Cement Surface Pipe**

Customer
Well Name

Noble Energy Inc.
Burton K25-67-1HN

INVOICE #
LOCATION
FOREMAN
Date

65028
Weld
Lee Sharp
11/19/2014

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

		Displace 1			Displace 2			Displace 3			Displace 4			Displace 5		
		BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI
Safety Meeting	2:05															
MIRU	12:20															
CIRCULATE	2:48	0	3:16		0			0			0			0		
Drop Plug		10	3:20	40	10			10			10			10		
3:16		20	3:24	80	20			20			20			20		
		30	3:29	170	30			30			30			30		
		40	3:32	260	40			40			40			40		
M & P		50	LAND	970	50			50			50			50		
Time	Sacks	60			60			60			60			60		
3:03	322	70			70			70			70			70		
		80			80			80			80			80		
		90			90			90			90			90		
		100			100			100			100			100		
		110			110			110			110			110		
% Excess		120			120			120			120			120		
Mixed bbls	45	130			130			130			130			130		
Total Sacks		140			140			140			140			140		
bbl Returns	10	150			150			150			150			150		
Water Temp	70															

Notes:

The day

Job went smoothly, and with no issues.

Plug landed 1/2 bbl early

Weather condition warranted expedited casing test.

X

Work Performed

X

Well Site Supervisor

Title

X

11-19-14

Date