



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 1/10/2015
Invoice # 25123
API# 05-123-38082
Foreman: Calvin Reimers

Customer: EnCana Oil & Gas (USA) Inc.
Well Name: File 3L-32H-K268

County: Weld
State: Colorado
Sec: 32
Twp: 2N
Range: 68W
Consultant: Norm/Robert
Rig Name & Number: Patterson 326
Distance To Location: 29 Miles
Units On Location: 4023-3104/4020-3212
Time Requested: 330am
Time Arrived On Location: 300am
Time Left Location: 7:15am

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 834
Total Depth (ft) : 880
Open Hole Diameter (in.) : 12.25
Conductor Length (ft) : 120
Conductor ID : 16
Shoe Joint Length (ft) : 44
Landing Joint (ft) : 35
Max Rate: 7
Max Pressure: 2500

Cement Data

Cement Name: BFN III
Cement Density (lb/gal) : 15.2
Cement Yield (cuft) : 1.27
Gallons Per Sack: 5.89
% Excess: 50%
Displacement Fluid lb/gal: 8.3
BBL to Pit: 23
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 19.14 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)
cuft of Conductor 106.92 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)
cuft of Casing 335.62 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 461.67 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 82.22 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 364 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 50.98 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 63.81 bbls

(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

Pressure of cement in annulus

Hydrostatic Pressure: 658.87 PSI

Pressure of the fluids inside casing

Displacement: 340.78 psi

Shoe Joint: 34.81 psi

Total 375.59 psi

Differential Pressure: 283.27 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 164.78 bbls

X
Authorization To Proceed



EnCana Oil & Gas (USA) Inc.
Single Cement Surface Pipe

Customer
Well Name

EnCana Oil & Gas (USA) Inc.
File 3L-32H-K268

INVOICE #
LOCATION
FOREMAN
Date

20123
Weld
Calvin Reimers
1/10/2015

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

Safety Meeting MIRU CIRCULATE Drop Plug 611am M & P Time 555am 608am % Excess Mixed bbls Total Sacks bbl Returns Water Temp	529am 330am 549am 611am M & P Time 555am 608am % Excess Mixed bbls Total Sacks bbl Returns Water Temp	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
		0	612am	90	0			0			0			0		
		10	615am	80	10			10			10			10		
		20	617am	160	20			20			20			20		
		30	619am	240	30			30			30			30		
		40	621am	340	40			40			40			40		
		50	623am	380	50			50			50			50		
		60	625am	320	60			60			60			60		
		70	627am	310	70			70			70			70		
		80	Bump	1060	80			80			80			80		
		90			90			90			90			90		
		100			100			100			100			100		
		110			110			110			110			110		
		120			120			120			120			120		
		130			130			130			130			130		
		140			140			140			140			140		
		150			150			150			150			150		

Notes:

The day

1/2 bbl Back on Bleed Off

X 
Work Performed

X
Title

X
Date