



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 1/11/2015
Invoice #: 55056
API#:
Foreman: Monte Bedeaux

Customer: EnCana Oil & Gas (USA) Inc.

Well Name: File 3E-32H

County: Weld
State: Colorado
Sec: 32
Twp: 2n
Range: 68W

Consultant: Norman
Rig Name & Number: patterson 326
Distance To Location: 28.2
Units On Location: 4027-3106 4020-3212
Time Requested: 7:00 AM
Time Arrived On Location: 6:00 AM
Time Left Location: 8:30 AM

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 819
Total Depth (ft) : 880
Open Hole Diameter (in.) : 12.25
Conductor Length (ft) : 110
Conductor ID : 15.6
Shoe Joint Length (ft) : 44
Landing Joint (ft) : 35
Max Rate: 5
Max Pressure: 2000

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:
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 20.0
Spacer Ahead Makeup
10 fresh 10 dye 10 fresh

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 19.10 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)
cuft of Conductor 90.42 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)
cuft of Casing 333.07 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 442.59 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 78.82 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 348 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 48.87 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 62.62 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 646.68 PSI

Pressure of the fluids inside casing

Displacement: 334.17 psi

Shoe Joint: 34.74 psi

Total 368.91 psi

Differential Pressure: 277.77 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 161.49 bbls

X 
Authorization To Proceed



Displacement Cementing
Single Cement Surface Pipe

Customer
Well Name

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

INVOICE #
LOCATION
FOREMAN
Date

33030
Weld
Monte Bedeaux
1/11/2015

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DESCRIPTION OF JOB EVENTS

Safety Meeting MIRU CIRCULATE Drop Plug 7:38 M & P Time 7:20-7:34 % Excess Mixed bbls Total Sacks bbl Returns Water Temp	7:05	Displace 1			Displace 2			Displace 3			Displace 4			Displace 5		
	5:50	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI
	7:15	0	7:38	0	0			0			0			0		
		10	7:40	70	10			10			10			10		
		20	7:43	90	20			20			20			20		
		30	7:45	230	30			30			30			30		
		40	7:47	310	40			40			40			40		
		50	7:49	360	50			50			50			50		
		60	7:51	270	60			60			60			60		
		70	7:53	1020	70			70			70			70		
		80			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:

safty meeting, miru, pressure test per company man, circulate 30 bbls ahead with dye in 2nd 10, mix and pump 348 sks cement, drop plug and

displace 63.46 bbls h2o, bump plug at 7:53 am at 450 psi, raise to 1000 psi hold 5 min. release pressure, rash up rig down

X

Work Performed

X

Title

X

Date