



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 12/14/2013
Invoice #: 12567
API#:
Foreman: Kirk

Customer: noble
Well Name: seyley b10-63-1hn

County: weld
State: Colorado
Sec: 10
Twp: 5n
Range: 64w

Consultant: steve
Rig Name & Number: h&p 315
Distance To Location:
Units On Location: 3103-3211
Time Requested: 100 pm
Time Arrived On Location: 1230 pm
Time Left Location: 7:30 pm

WELL DATA

Casing Size OD (in) : 9.6250
Casing Weight (lb) : 36
Casing Depth (ft) : 588
Total Depth (ft) : 624
Open Hole Diameter (in.) : 13.75
Conductor Length (ft) : 100
Conductor ID : 15.5
Shoe Joint Length (ft) : 43
Landing Joint (ft) : 31

Max Rate:
Max Pressure:

Cement Data

Cement Name: BFN III
Cement Density (lb/gal) : 15.2
Cement Yield (cuft) : 1.27
Gallons Per Sack: 5.89
% Excess: 30%
Displacement Fluid lb/gal: 8.3
BBL to Pit:
Fluid Ahead (bbls):
H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 18.66 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)
cuft of Conductor 80.51 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X
(Conductor Length ft)
cuft of Casing 256.63 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing
Depth - Conductor Length)
Total Slurry Volume 355.80 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 82.38 bbls
(Total Slurry Volume) X (.1781) X (% Excess Cement)
Sacks Needed 364 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 51.08 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 44.53 bbls
(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe
Joint)

Pressure of cement in annulus

Hydrostatic Pressure: 464.28 PSI

Pressure of the fluids inside casing

Displacement: 234.99 psi

Shoe Joint: 33.95 psi

Total 268.95 psi

Differential Pressure: 195.34 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 71.08 bbls

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.



noble
seyler b10-63-1hn

12567
weld
Kirk
12/14/2013

DESCRIPTION OF JOB EVENTS

Safety Meeting	700pm	Displace 1			Displace 2			Displace 3			Displace 4			Displace 5		
MIRU	630pm	BBLs	Time	PSI	BBLs	Time	PSI	BBLs	Time	PSI	BBLs	Time	PSI	BBLs	Time	PSI
CIRCULATE	743pm	0	813	20	0			0			0			0		
Drop Plug		10	815	110	10			10			10			10		
		20	817	180	20			20			20			20		
		30	819	240	30			30			30			30		
		40	821	240	40			40			40			40		
M & P		50			50			50			50			50		
		60			60			60			60			60		
Time	Sacks	70			70			70			70			70		
753 pm	321	80			80			80			80			80		
809 pm stop		90			90			90			90			90		
		100			100			100			100			100		
		110			110			110			110			110		
% Excess	15%	120			120			120			120			120		
Mixed bbls	45	130			130			130			130			130		
Total Sacks	321	140			140			140			140			140		
bbl Returns	--	150			150			150			150			150		

Notes:

bumped plug at 827 pm 450 psi 72.3 bbls slurry

Work Prepared

2011

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X 12-14-13
Date