



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 3/21/2015
Invoice #: 80016
API#: 05-123-39281
Foreman: Calvin Reimers

Customer: Anadarko Petroleum Corporation
Well Name: Troudt 35C-33HZ

County: Weld
State: Colorado
Sec: 33
Twp: 2N
Range: 67W

Consultant: Randy/Tim
Rig Name & Number: Advanced 10
Distance To Location: 24 Miles
Units On Location: 4027-3106/4030-3203
Time Requested: 300pm
Time Arrived On Location: 200pm
Time Left Location: 7:00pm

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,159
Total Depth (ft) : 1174
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 40
Conductor ID : 16
Shoe Joint Length (ft) : 42
Landing Joint (ft) : 8

Max Rate: 6
Max Pressure: 1750

Cement Data

Cement Name: BFN III
Cement Density (lb/gal) : 14.2
Cement Yield (cuft) : 1.49
Gallons Per Sack: 7.48
% Excess: 15%
Displacement Fluid lb/gal: 8.3
BBL to Pit: 11
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 18.08 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 35.64 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

cuft of Casing 627.48 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 681.20 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 121.32 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 457 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 81.42 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 87.03 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 855.26 PSI

Pressure of the fluids inside casing

Displacement: 481.93 psi

Shoe Joint: 30.73 psi

Total 512.66 psi

Differential Pressure: 342.60 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 218.45 bbls

X

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.



DISON ON WELL CEMENTING Single Cement Surface Pipe

Customer
Well Name

Anadarko Petroleum Corporation
Troudtt 35C-33HZ

INVOICE #
LOCATION
FOREMAN
Date

80010
Weld
Calvin Reimers
3/21/2015

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DESCRIPTION OF JOB EVENTS

Safety Meeting MIRU CIRCULATE Drop Plug 544pm M & P Time Sacks 513pm 542pm % Excess Mixed bbls Total Sacks bbl Returns Water Temp	257pm 230pm 507pm 544pm M & P Time Sacks 513pm 542pm % 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	545pm	50	0			0			0			0		
		10	548pm	0	10			10			10			10		
		20	551pm	30	20			20			20			20		
		30	553pm	60	30			30			30			30		
		40	556pm	200	40			40			40			40		
		50	558pm	260	50			50			50			50		
		60	600pm	320	60			60			60			60		
		70	602pm	390	70			70			70			70		
		80	604pm	380	80			80			80			80		
		90	608pm	370	90			90			90			90		
		100	Bump	920	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

PSI Test 505pm 1000psi, Cicr 300 bbls With Dye in 2nd 10bbls 507pm , Cement 14.2 lb. 513pm , Shut down at 542pm, Drop Plug 544pm, Displace 545pm

87 bbls , Bump Plug 608pm Held 5 min. , Relesed Float Held and got 1/2 bbl Back

X Randy Case
Work Preformed

X APC Consultant
Title

X 03/21/2015
Date

SERIES 2000

