



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 7/22/2014
Invoice #: 45007
API#: 05-123-39185
Foreman: JASON

Customer: Anadarko Petroleum Corporation
Well Name: BAREFOOT 34N-25HZ

County: Weld
State: Colorado
Sec: 25
Twp: 3N
Range: 68W
Consultant: BOB
Rig Name & Number: MAJORS 42
Distance To Location: 17
Units On Location: 4033-3106/ 4018-3204
Time Requested: 430
Time Arrived On Location: 300
Time Left Location: 930

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft) : 1,342
Total Depth (ft) : 1352
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) :
Conductor ID :
Shoe Joint Length (ft) : 41
Landing Joint (ft) : 8

Max Rate: 7
Max Pressure: 2500

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: 16.0
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup
BBL H2O WITH, 2ND 10 WITH DYE

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 17.80 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)
cuft of Conductor 0.00 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)
cuft of Casing 756.88 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 774.68 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 137.97 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 520 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 92.59 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 101.20 bbls
(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

Pressure of cement in annulus

Hydrostatic Pressure: 989.99 PSI

Pressure of the fluids inside casing

Displacement: 560.97 psi

Shoe Joint: 30.25 psi

Total 591.21 psi

Differential Pressure: 398.78 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 243.79 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.



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

Customer
Well Name

Anadarko Petroleum Corporation
BAREFOOT 34N-25HZ

INVOICE #
LOCATION
FOREMAN
Date

45007
Weld
JASON
7/22/2014

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

Safety Meeting	645	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
MIRU	300															
CIRCULATE	724	0	802	0	0			0			0			0		
Drop Plug		10	805	50	10			10			10			10		
802		20	808	70	20			20			20			20		
		30	810	80	30			30			30			30		
		40	812	160	40			40			40			40		
M & P		50	813	210	50			50			50			50		
Time	Sacks	60	815	300	60			60			60			60		
0732-0759	520	70	817	350	70			70			70			70		
		80	819	430	80			80			80			80		
		90	821	430	90			90			90			90		
		100	824	410	100			100			100			100		
		110	825	420	110			110			110			110		
% Excess	15%	120	BUMP	930	120			120			120			120		
Mixed bbls	92.6	130			130			130			130			130		
Total Sacks	520	140			140			140			140			140		
bbl Returns	16	150			150			150			150			150		
Water Temp	75															

Notes:

The day

PRESSURE TESTED TO 2000 PSI @ 0720, PUMPED 30 BBL WATER WITH DYE IN 2ND 10 @ 0724, MIX AND PUMPED 520 SKS AT 14.2, 137.9 BBLs AT 0732, STARTED DISPLACEMENT AT 0802, PLUG LANDED AT 420 PSI AT 0825 AND PRESSURED UP TO 930 PSI AND HELD FOR 2 MINUTES, RELEASED PRESSURE AND GOT .5 BBL BACK

X Bob Hester m42
Work Performed

X _____
Title

X _____
Date

SERIES 2000

