



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 8/19/2014
 Invoice # 25037
 API# 05-123-39247
 Foreman: Calvin Reimers

Customer: Anadarko Petroleum Corporation

Well Name: Sack 29C-30HZ

County: Weld
 State: Colorado
 Sec: 31
 Twp: 1N
 Range: 67W

Consultant: Bob
 Rig Name & Number: Major 42
 Distance To Location: 30 Miles
 Units On Location: 4034-3104/4018-3204
 Time Requested: 900pm
 Time Arrived On Location: 715pm
 Time Left Location: 2:45 Am

WELL DATA	Cement Data
Casing Size OD (in) : <u>9.625</u>	Cement Name: <u>BFN III</u>
Casing Weight (lb) : <u>36.00</u>	Cement Density (lb/gal) : <u>14.2</u>
Casing Depth (ft.) : <u>1,308</u>	Cement Yield (cuft) : <u>1.49</u>
Total Depth (ft) : <u>1318</u>	Gallons Per Sack: <u>7.48</u>
Open Hole Diameter (in.) : <u>13.50</u>	% Excess: <u>21%</u>
Conductor Length (ft) : _____	Displacement Fluid lb/gal: <u>8.3</u>
Conductor ID : _____	BBL to Pit: <u>10</u>
Shoe Joint Length (ft) : <u>43</u>	Fluid Ahead (bbls): <u>30.0</u>
Landing Joint (ft) : <u>8</u>	H2O Wash Up (bbls): <u>20.0</u>
Max Rate: <u>7</u>	Spacer Ahead Makeup
Max Pressure: <u>2500</u>	<u>30 bbls H2O+Dye in 2nd 10 bbls</u>

Calculated Results	Pressure of cement in annulus
cuft of Shoe <u>18.66</u> cuft (Casing ID Squared) X (.005454) X (Shoe Joint ft)	Displacement: <u>98.41</u> bbls (Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)
cuft of Conductor <u>0.00</u> cuft (Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)	Hydrostatic Pressure: <u>964.91</u> PSI
cuft of Casing <u>770.95</u> cuft (Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	Pressure of the fluids inside casing
Total Slurry Volume <u>789.61</u> cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	Displacement: <u>545.44</u> psi
bbls of Slurry <u>140.63</u> bbls (Total Slurry Volume) X (.1781)	Shoe Joint: <u>31.72</u> psi
Sacks Needed <u>530</u> sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	Total <u>577.17</u> psi
Mix Water <u>94.38</u> bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42	Differential Pressure: <u>387.75</u> psi
	Collapse PSI: <u>2020.00</u> psi
	Burst PSI: <u>3520.00</u> psi
	Total Water Needed: <u>242.79</u> bbls

Bob Porter
 Authorization To Proceed



**BISON Oil well Cementing
Single Cement Surface Pipe**

Customer
Well Name

Anadarko Petroleum Corporation
Sack 29C-30HZ

INVOICE #
LOCATION
FOREMAN
Date

25037
Weld
Calvin Reimers
8/19/2014

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DESCRIPTION OF JOB EVENTS

		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
Safety Meeting	1240am															
MIRU	1210am															
CIRCULATE	104am	0	138am	80	0			0			0			0		
Drop Plug		10	141am	50	10			10			10			10		
	137am	20	143am	50	20			20			20			20		
		30	145am	150	30			30			30			30		
		40	147am	190	40			40			40			40		
M & P		50	149am	240	50			50			50			50		
Time	Sacks	60	150am	320	60			60			60			60		
110am	530	70	152am	400	70			70			70			70		
134am		80	154am	500	80			80			80			80		
		90	156am	500	90			90			90			90		
		100	159am	410	100			100			100			100		
		110	Bump	930	110			110			110			110		
% Excess	21%	120			120			120			120			120		
Mixed bbls	94.38	130			130			130			130			130		
Total Sacks	530	140			140			140			140			140		
bbl Returns	10	150			150			150			150			150		
Water Temp	65.8															

Notes:

The day
1/2 BBL Back on Bleed Off

X Bob J. Porter 1142
Work Performed

X _____
Title

X _____
Date

SERIES 2000

