



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 3/27/2015  
Invoice #: 80018  
API#: 05-123-41290-00  
Foreman: Calvin Reimers

Customer: Anadarko Petroleum Corporation  
Well Name: Bat 4C-9HZ

County: Weld  
State: Colorado  
Sec: 9  
Twp: 1N  
Range: 65W

Consultant: Toby  
Rig Name & Number: Advanced 10  
Distance To Location: 26 Miles  
Units On Location: 4027-3106/4030-3203  
Time Requested: 1000am  
Time Arrived On Location: 830am  
Time Left Location: 2:15pm

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft.) : 1,579  
Total Depth (ft) : 1588  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 45  
Conductor ID : 16  
Shoe Joint Length (ft) : 44  
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: 9  
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** 18.99 cuft  
(Casing ID Squared) X (.005454) X (Shoe Joint ft)

**cuft of Conductor** 40.09 cuft  
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

**cuft of Casing** 861.94 cuft  
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

**Total Slurry Volume** 921.02 cuft  
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

**bbls of Slurry** 164.03 bbls  
(Total Slurry Volume) X (.1781)

**Sacks Needed** 618 sk  
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

**Mix Water** 110.09 bbls  
(Sacks Needed) X (Gallons Per Sack) ÷ 42

**Displacement:** 119.27 bbls

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

## Pressure of cement in annulus

**Hydrostatic Pressure:** 1164.53 PSI

## Pressure of the fluids inside casing

**Displacement:** 661.79 psi

**Shoe Joint:** 32.27 psi

**Total** 694.07 psi

**Differential Pressure:** 470.46 psi

**Collapse PSI:** 2020.00 psi

**Burst PSI:** 3520.00 psi

**Total Water Needed:** 279.36 bbls

X

Authorization To Proceed





# DISON ON Well Cementing Single Cement Surface Pipe

Customer  
Well Name

Anadarko Petroleum Corporation  
Bat 4C-9HZ

INVOICE #  
LOCATION  
FOREMAN  
Date

00018  
Weld  
Calvin Reimers  
3/27/2015

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## DESCRIPTION OF JOB EVENTS

Safety Meeting MIRU CIRCULATE Drop Plug 1258pm M & P Time Sacks 1223pm 1255pm % Excess Mixed bbls Total Sacks bbl Returns Water Temp	1149am 900am 1214pm 1258pm 1223pm 1255pm 15% 110.09 618 9 51.2	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	1259pm	60	0			0			0			0		
		10	101pm	30	10			10			10			10		
		20	103pm	30	20			20			20			20		
		30	105pm	50	30			30			30			30		
		40	107pm	120	40			40			40			40		
		50	109pm	180	50			50			50			50		
		60	111pm	240	60			60			60			60		
		70	113pm	280	70			70			70			70		
		80	115pm	340	80			80			80			80		
		90	117pm	400	90			90			90			90		
		100	118pm	450	100			100			100			100		
		110	120pm	440	110			110			110			110		
		120	124pm	410	120			120			120			120		
		130	Bump	900	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 1212pm 1000psi, Cidr 30 bbls with Dye in 2nd 10 bbls 1214pm, Cement 1223pm 618 sks 164.03 bbls Slurry at 14.2 lbs. 1.49 Yield Shut Down at

1255pm, Drop Plug 1258pm, Displace 1259pm 119.27 bbls H2O, Land Plug 124pm, 1/2 bbl Back on Bleed Off, Float Held, 9 bbls Slurry to Surface.

X

Work Performed

X

Title

X

Date

# SERIES 2000

