



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 3/13/2015

Invoice # 80108

API# 05-123-40957

Foreman: JASON KELEHER

**Customer:** Anadarko Petroleum Corporation

**Well Name:** CHEESE 38C-28HZ

County: Weld

State: Colorado

Sec: 28

Twp: 3N

Range: 65W

Consultant: TIM

Rig Name & Number: ADVANCED 10

Distance To Location: 12

Units On Location: 4031-3107, 4022-3213

Time Requested: 1000

Time Arrived On Location: 900

Time Left Location: 1300

## WELL DATA

Casing Size OD (in) : 9.625  
Casing Weight (lb) : 36.00  
Casing Depth (ft) : 1,177  
Total Depth (ft) : 1192  
Open Hole Diameter (in.) : 13.50  
Conductor Length (ft) : 60  
Conductor ID : 15.25  
Shoe Joint Length (ft) : 44  
Landing Joint (ft) : 5

Max Rate: 6

Max Pressure: 1500

## Cement Data

Cement Name: BFN III

Cement Density (lb/gal) : 14.2

Cement Yield (cuft) : 1.49

Gallons Per Sack: 7.48

% Excess: 20%

Displacement Fluid lb/gal: 8.3

BBL to Pit: 24.0

Fluid Ahead (bbls): 30.0

H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup

30 BBL WATER W/ DYE IN 2ND 10

Casing ID

8.921

Casing Grade

J-55 only used

## Calculated Results

cuft of Shoe 18.98 cuft

(Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 45.79 cuft

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

cuft of Casing 655.18 cuft

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

Total Slurry Volume 719.95 cuft

(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 128.22 bbls

(Total Slurry Volume) X (.1781)

Sacks Needed 483 sk

(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 86.05 bbls

(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 88.01 bbls

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

## Pressure of cement in annulus

Hydrostatic Pressure: 868.38 PSI

## Pressure of the fluids inside casing

Displacement: 488.71 psi

Shoe Joint: 32.25 psi

Total 520.97 psi

Differential Pressure: 347.42 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 224.06 bbls

X

*[Signature]*

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  
CHEESE 38C-28HZ

INVOICE #  
LOCATION  
FOREMAN  
Date

80108  
Weld  
JASON KELEHER  
3/13/2015

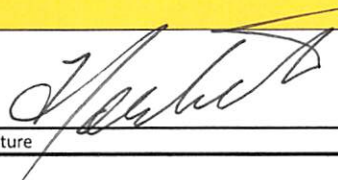
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**DESCRIPTION OF JOB EVENTS**

		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	1030															
MIRU	900															
CIRCULATE	1053	0	1128	0	0			0			0			0		
Drop Plug		10	1129	40	10			10			10			10		
1128		20	1131	70	20			20			20			20		
		30	1134	90	30			30			30			30		
		40	1137	150	40			40			40			40		
M & P		50	1139	270	50			50			50			50		
Time	Sacks	60	1141	340	60			60			60			60		
1100-1126	483	70	1143	380	70			70			70			70		
		80	1145	400	80			80			80			80		
		90	1147	400	90			90			90			90		
		100	BUMP	1480	100			100			100			100		
		110			110			110			110			110		
% Excess	20%	120			120			120			120			120		
Mixed bbls	86	130			130			130			130			130		
Total Sacks	483	140			140			140			140			140		
bbl Returns	24	150			150			150			150			150		
Water Temp	53															

Notes:

PERFORMED PRESSURE TEST TO 1500 PSI AT 1052, PUMPED 30 BBL WATER WITH DYE IN 2ND 10 AT 1053, MIXED AND PUMPED 483 SKS AT 14.2, 128.2 BBL AT 1100, SHUT DOWN AT 1126, STARTED DISPLACEMENT AT 1128, PLUG LANDED AT 400 PSI AT 1147 AND PRESSURED UP TO 1480, HELD FOR 5 MINUTES AND RELEASED TO CHECK FLOATS, GOT .5 BBL WATER BACK, FLOATS HELD.

X   
Signature

X  
Title

X  
Date



# CHEESE 38C-28HZ SURFACE

