



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 3/30/2015

Invoice # 80119

API# 05-123-41285

Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation

Well Name: BAT 29C-9HZ

County: Weld

State: Colorado

Sec: 9

Twp: 1N

Range: 65W

Consultant: VIVIAN

Rig Name & Number: ADVANCED 10

Distance To Location: 26

Units On Location: 4031-3107, 4030-3203

Time Requested: 300

Time Arrived On Location: 200

Time Left Location: 730

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft) : 1,545
Total Depth (ft) : 1560
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 40
Conductor ID : 15.25
Shoe Joint Length (ft) : 41
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: 22.0

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 17.76 cuft

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

cuft of Conductor 30.53 cuft

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

cuft of Casing 882.41 cuft

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

Total Slurry Volume 930.69 cuft

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

bbls of Slurry 165.76 bbls

(Total Slurry Volume) X (.1781)

Sacks Needed 625 sk

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

Mix Water 111.24 bbls

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

Displacement: 116.63 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1139.45 PSI

Pressure of the fluids inside casing

Displacement: 648.36 psi

Shoe Joint: 30.18 psi

Total 678.54 psi

Differential Pressure: 460.91 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 277.88 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.



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

Customer
Well Name

Anadarko Petroleum Corporation
BAT 29C-9HZ

INVOICE #
LOCATION
FOREMAN
Date

80119
Weld
JASON KELEHER
3/30/2015

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

Safety Meeting MIRU CIRCULATE Drop Plug 616 M & P Time Sacks 0543-0614	510 200 536	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	616	0	0			0			0			0		
		10	618	90	10			10			10			10		
		20	620	50	20			20			20			20		
		30	623	40	30			30			30			30		
		40	626	90	40			40			40			40		
		50	628	160	50			50			50			50		
		60	630	210	60			60			60			60		
		70	632	270	70			70			70			70		
		80	633	340	80			80			80			80		
		90	635	400	90			90			90			90		
		100	637	400	100			100			100			100		
		110	641	430	110			110			110			110		
		120	644	440	120			120			120			120		
% Excess	20%	130	BUMP	880	130			130			130			130		
Mixed bbls	111.3	140			140			140			140			140		
Total Sacks	625	150			150			150			150			150		
bbl Returns	22															
Water Temp	50															

Notes:

PERFORMED PRESSURE TEST TO 1500 PSI AT 0534, PUMPED 30 BBL WATER WITH DYE IN 2ND 10 AT 0536, MIXED AND PUMPED 625 SKS AT 14.2, 165.8 BBL AT 0543, SHUT DOWN AT 0614, STARTED DISPLACEMENT AT 0616, PLUG LANDED AT 440 PSI AT 0644 AND PRESSURED UP TO 880, HELD FOR 5 MINUTES AND RELEASED TO CHECK FLOATS, GOT .5 BBL WATER BACK, FLOATS HELD.

X

Signature

X

Title

X

Date

BAT 29C-9HZ SURFACE

