



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 3/29/2015

Invoice # 80118

API# 05-123-41288

Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation

Well Name: BAT 29N2-9HZ

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, 4022-3213

Time Requested: 30

Time Arrived On Location: 230

Time Left Location: 930

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft) : 1,537
Total Depth (ft) : 1550
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 40
Conductor ID : 15.25
Shoe Joint Length (ft) : 43
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: 14.0
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 18.55 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 877.86 cuft

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

Total Slurry Volume 926.94 cuft

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

bbls of Slurry 165.09 bbls

(Total Slurry Volume) X (.1781)

Sacks Needed 622 sk

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

Mix Water 110.79 bbls

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

Displacement: 115.89 bbls
(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

Pressure of cement in annulus

Hydrostatic Pressure: 1133.73 PSI

Pressure of the fluids inside casing

Displacement: 644.23 psi

Shoe Joint: 31.53 psi

Total 675.76 psi

Differential Pressure: 457.97 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 276.69 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 29N2-9HZ

INVOICE #
LOCATION
FOREMAN
Date

80118
Weld
JASON KELEHER
3/29/2015

Treatment Report Page 2

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	715															
MIRU	230															
CIRCULATE	740	0	817	0	0			0			0			0		
Drop Plug		10	818	120	10			10			10			10		
817		20	820	100	20			20			20			20		
		30	823	100	30			30			30			30		
		40	825	120	40			40			40			40		
M & P		50	827	190	50			50			50			50		
Time	Sacks	60	829	260	60			60			60			60		
0746-0815	622	70	830	300	70			70			70			70		
		80	832	370	80			80			80			80		
		90	834	450	90			90			90			90		
		100	836	480	100			100			100			100		
		110	839	430	110			110			110			110		
% Excess	20%	120	841	440	120			120			120			120		
Mixed bbls	110.7	130	BUMP	820	130			130			130			130		
Total Sacks	622	140			140			140			140			140		
bbl Returns	14	150			150			150			150			150		
Water Temp	54															

Notes:

PERFORMED PRESSURE TEST TO 1500 PSI AT 0738, PUMPED 30 BBL WATER WITH DYE IN 2ND 10 AT 0740, MIXED AND PUMPED 622 SKS AT 14.2, 165 BBL AT 0746, SHUT DOWN AT 0815, STARTED DISPLACEMENT AT 0817, PLUG LANDED AT 440 PSI AT 0841 AND PRESSURED UP TO 820, HELD FOR 5 MINUTES AND RELEASED TO CHECK FLOATS, GOT .5 BBL WATER BACK, FLOATS HELD.

X  Signature

X _____ Title

X _____ Date

BAT 29N2-9HZ SURFACE

