



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 1/23/2015

Invoice # 45117

API# 05-123-40838

Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation

Well Name: GREEN 3N-8HZ

County: Weld

State: Colorado

Sec: 8

Twp: 1N

Range: 65W

Consultant: LESTER

Rig Name & Number: MAJORS 42

Distance To Location: 23

Units On Location: 4031-3107, 4024-3203

Time Requested: 1930

Time Arrived On Location: 1830

Time Left Location: 2200

WELL DATA

Casing Size OD (in) : 9.625

Casing Weight (lb) : 36.00

Casing Depth (ft) : 1,561

Total Depth (ft) : 1576

Open Hole Diameter (in.) : 13.50

Conductor Length (ft) : 85

Conductor ID : 15.25

Shoe Joint Length (ft) : 43

Landing Joint (ft) : 8

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: 10%

Displacement Fluid lb/gal: 8.3

BBL to Pit: 11.0

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 18.76 cuft

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

cuft of Conductor 64.87 cuft

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

cuft of Casing 793.25 cuft

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

Total Slurry Volume 876.87 cuft

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

bbls of Slurry 156.17 bbls

(Total Slurry Volume) X (.1781)

Sacks Needed 589 sk

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

Mix Water 104.81 bbls

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

Displacement: 117.92 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1151.20 PSI

Pressure of the fluids inside casing

Displacement: 654.24 psi

Shoe Joint: 31.88 psi

Total 686.12 psi

Differential Pressure: 465.08 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 272.73 bbls

X

L E Cole

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
GREEN 3N-8HZ

INVOICE #
LOCATION
FOREMAN
Date

45117
Weld
JASON KELEHER
1/23/2015

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	1945															
MIRU	1845															
CIRCULATE	2013	0	2050	0	0			0			0			0		
Drop Plug		10	2051	60	10			10			10			10		
2050		20	2054	60	20			20			20			20		
		30	2057	60	30			30			30			30		
		40	2059	110	40			40			40			40		
M & P		50	2101	210	50			50			50			50		
Time	Sacks	60	2102	310	60			60			60			60		
2019-2048	589	70	2104	340	70			70			70			70		
		80	2106	430	80			80			80			80		
		90	2108	480	90			90			90			90		
		100	2109	550	100			100			100			100		
		110	2111	560	110			110			110			110		
% Excess	10%	120	2114	520	120			120			120			120		
Mixed bbls	104.82	130	BUMP	1500	130			130			130			130		
Total Sacks	589	140			140			140			140			140		
bbl Returns	11	150			150			150			150			150		
Water Temp	48															

Notes:

PERFORMED PRESSURE TEST TO 2000 PSI AT 2010, PUMPED 30 BBL WATER WITH DYE IN 2ND 10 AT 2013, MIXED AND PUMPED 589 SKS AT 14.2,
156.1 BBL AT 2019, SHUT DOWN AT 2048, STARTED DISPLACEMENT AT 2050, PLUG LANDED AT 520 PSI AT 2114 AND PRESSURED UP TO 1500, HELD
FOR 2 MINUTES AND RELEASED TO CHECK FLOATS, GOT .5 BBL BACK, FLOATS HELD, PRESSURED BACK UP TO 1000 PSI FOR 2 MINUTES AND RELEASED

X 7 E Case
Work Preformed

X _____
Title

X _____
Date

GREEN 3N-8HZ SURFACE

