



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 3/20/2015

Invoice # 80113

API# 05-123-39284

Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation

Well Name: TROUDT 34C-33HZ

County: Weld

State: Colorado

Sec: 33

Twp: 2N

Range: 67W

Consultant: TIM

Rig Name & Number: ADVANCED 10

Distance To Location: 24

Units On Location: 4031-3107, 4032-3210

Time Requested: 700

Time Arrived On Location: 630

Time Left Location: 1000

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft) : 1,160
Total Depth (ft) : 1175
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 40
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: 16%

Displacement Fluid lb/gal: 8.3

BBL to Pit: 12.0

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 30.53 cuft

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

cuft of Casing 632.77 cuft

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

Total Slurry Volume 682.28 cuft

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

bbls of Slurry 121.51 bbls

(Total Slurry Volume) X (.1781)

Sacks Needed 458 sk

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

Mix Water 81.55 bbls

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

Displacement: 86.68 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 855.74 PSI

Pressure of the fluids inside casing

Displacement: 481.32 psi

Shoe Joint: 32.25 psi

Total 513.58 psi

Differential Pressure: 342.16 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 218.24 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
TROUDT 34C-33HZ

INVOICE #
LOCATION
FOREMAN
Date

80113
Weld
JASON KELEHER
3/20/2015

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

Safety Meeting		Displace 1			Displace 2			Displace 3			Displace 4			Displace 5		
MIRU		BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI
CIRCULATE	715	0	816	0	0			0			0			0		
Drop Plug	630	10	818	40	10			10			10			10		
816	738	20	820	30	20			20			20			20		
		30	823	30	30			30			30			30		
		40	827	80	40			40			40			40		
M & P		50	830	150	50			50			50			50		
Time	Sacks	60	834	220	60			60			60			60		
0746-0814	458	70	837	290	70			70			70			70		
		80	841	340	80			80			80			80		
		90	844	360	90			90			90			90		
		100	BUMP	870	100			100			100			100		
		110			110			110			110			110		
% Excess	16%	120			120			120			120			120		
Mixed bbls	81.5	130			130			130			130			130		
Total Sacks	458	140			140			140			140			140		
bbl Returns	12	150			150			150			150			150		
Water Temp	44															

Notes:

PERFORMED PRESSURE TEST TO 1500 PSI AT 0734, PUMPED 30 BBL WATER WITH DYE IN 2ND 10 AT 0738, MIXED AND PUMPED 458 SKS AT 14.2, 121.5 BBL AT 0746, SHUT DOWN AT 0814, STARTED DISPLACEMENT AT 0816, PLUG LANDED AT 360 PSI AT 0844 AND PRESSURED UP TO 870, HELD FOR 5 MINUTES AND RELEASED TO CHECK FLOATS, GOT .5 BBL WATER BACK, FLOATS HELD.

X 
Signature

X _____
Title

X _____
Date

TROUDT 34C-33HZ SURFACE

