



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 8/17/2014

Invoice # 45017

API# 05-123-39501

Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation

Well Name: DOUTHIT 41C-27HZ

County: Weld

State: Colorado

Sec: 29

Twp: 3N

Range: 68W

Consultant: ELLIS

Rig Name & Number: MAJORS 29

Distance To Location: 17

Units On Location: 4031-3106/ 4024-3203

Time Requested: 130

Time Arrived On Location: 2330

Time Left Location: 330

WELL DATA

Casing Size OD (in) : 9.625

Casing Weight (lb) : 36.00

Casing Depth (ft) : 1,237

Total Depth (ft) : 1243

Open Hole Diameter (in.) : 13.50

Conductor Length (ft) :

Conductor ID :

Shoe Joint Length (ft) : 52

Landing Joint (ft) : 6

Max Rate: 7

Max Pressure: 2500

Cement Data

Cement Name: BFN III

Cement Density (lb/gal) : 14.2

Cement Yield (cuft) : 1.49

Gallons Per Sack: 7.48

% Excess: 15%

Displacement Fluid lb/gal: 8.3

BBL to Pit: 18.0

Fluid Ahead (bbls): 30.0

H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup

40BBL H2O W/KCL, Dye in 2nd 10

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 22.75 cuft

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

cuft of Conductor 0.00 cuft

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

cuft of Casing 695.15 cuft

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

Total Slurry Volume 717.90 cuft

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

bbls of Slurry 127.86 bbls

(Total Slurry Volume) X (.1781)

Sacks Needed 482 sk

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

Mix Water 85.81 bbls

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

Displacement: 92.03 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 912.42 PSI

Pressure of the fluids inside casing

Displacement: 510.70 psi

Shoe Joint: 38.66 psi

Total 549.37 psi

Differential Pressure: 363.05 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 227.84 bbls

X *Ellis Loren Major 29*
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
DOUTHIT 41C-27HZ

INVOICE #
LOCATION
FOREMAN
Date

45017
Weld
JASON KELEHER
8/17/2014

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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	115															
MIRU	2330															
CIRCULATE	140	0	215	0	0			0			0			0		
Drop Plug		10	218	20	10			10			10			10		
215		20	222	40	20			20			20			20		
		30	224	90	30			30			30			30		
		40	226	150	40			40			40			40		
M & P		50	227	240	50			50			50			50		
Time	Sacks	60	229	310	60			60			60			60		
0148-0212	482	70	231	390	70			70			70			70		
		80	233	440	80			80			80			80		
		90	236	410	90			90			90			90		
		100	237	420	100			100			100			100		
		110	BUMP	1010	110			110			110			110		
% Excess	15%	120			120			120			120			120		
Mixed bbls	85.8	130			130			130			130			130		
Total Sacks	482	140			140			140			140			140		
bbl Returns	16	150			150			150			150			150		
Water Temp	65															

Notes:

The day

PRESSURE TESTED TO 2000 PSI AT 0137, PUMPED 30 BBL WATER 2ND 10 HAVING DYE AT 0140, MIXED AND PUMPED 482 SKS AT 14.2, 127.8 BBL AT 148

SHUT DOWN AT 0212, DROPPED PLUG AT 0215, STARTED DISPLACEMENT AT 0215, PUMPED 92 BBL LANDING AT 420 PSI AND PRESSURED UP TO 1010

PSI, RELEASED PRESSURE AND CHECK FLOATS GOT .25 BBL BACK, REPRESSURED WELL TO 1000 PSI FOR 2 MINUTES AND RELEASED

X *Ellis Osine* Major 29
Work Performed

X _____
Title

X _____
Date

DOUTHIT 41C-27HZ

