



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 11/30/2014

Invoice # 35077

API#

Foreman: kirk kallhoff

Customer: Anadarko Petroleum Corporation

Well Name: barclay 2n-11hz

County: Weld

State: Colorado

Sec: 14

Twp: 2n

Range: 67w

Consultant: lester

Rig Name & Number: major 42

Distance To Location: 20

Units On Location: 4030-3103/4018-3204

Time Requested: 800 am

Time Arrived On Location: 700 am

Time Left Location:

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,096
Total Depth (ft) : 1115
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) :
Conductor ID :
Shoe Joint Length (ft) : 38
Landing Joint (ft) : 8

Max Rate:
Max Pressure:

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:
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 16.49 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 621.35 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 637.85 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 113.60 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 428 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 76.24 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 82.41 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 808.52 PSI

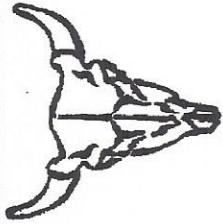
Pressure of the fluids inside casing

Displacement: 456.19 psi**Shoe Joint:** 28.03 psi**Total** 484.22 psi**Differential Pressure:** 324.30 psi**Collapse PSI:** 2020.00 psi**Burst PSI:** 3520.00 psi**Total Water Needed:** 208.65 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.



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Single Cement Surface Pipe

INVOICE #
LOCATION
FOREMAN
Date

35077
Weld
kirk kallhoff
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Customer
Well Name

Anadarko Petroleum Corporation
barclay 2n-11hz

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	928am														
MIRU	830am														
CIRCULATE	1000a	0	1036a	10			0			0			0		
Drop Plug		10	1040a	50			10			10			10		
		20	1042a	70			20			20			20		
1036 am		30	1044a	110			30			30			30		
		40	1046a	190			40			40			40		
		50	1108a	270			50			50			50		
M & P		60	1110a	330			60			60			60		
Time															
1007 am		70	1113a	370			70			70			70		
1033 am stop		80	1116a	360			80			80			80		
		90					90			90			90		
		100					100			100			100		
		110					110			110			110		
% Excess		120					120			120			120		
Mixed bbls		130					130			130			130		
Total Sacks		140					140			140			140		
bbl Returns		150					150			150			150		
Water Temp															

Notes:

bumped plug at 1119 am at 1340 psi

floats held

X

Work Performed

X

Title

Joe Carl

X

Date

11-30-14

M/D TOTCO 2000 SERIES

