



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 8/12/2014
Invoice #: 25032
API#: 05-123-39243
Foreman: Calvin Reimers

Customer: Anadarko Petroleum Corporation

Well Name: Sack 4N-30HZ

County: Weld
State: Colorado
Sec: 31
Twp: 1N
Range: 67W

Consultant: Allen
Rig Name & Number: Major 42
Distance To Location: 30 Miles
Units On Location: 4032_3104/4024-3203
Time Requested: 1230pm
Time Arrived On Location: 1125am
Time Left Location: 730pm

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,268
Total Depth (ft) : 1278
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) :
Conductor ID :
Shoe Joint Length (ft) : 42
Landing Joint (ft) : 8

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: 20%
Displacement Fluid lb/gal: 8.3
BBL to Pit: 2.1
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup

30 bbls H2O+Dye in 2nd 10 bbls

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 18.34 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 744.08 cuft
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 762.42 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 135.79 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 512 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 91.13 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 95.35 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 935.16 PSI

Pressure of the fluids inside casing

Displacement: 528.37 psi

Shoe Joint: 31.18 psi

Total 559.55 psi

Differential Pressure: 375.61 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 236.48 bbls

X
Authorization to Proceed



Bison Oil well Cementing
Single Cement Surface Pipe

Customer
Well Name

Anadarko Petroleum Corporation
Sack 4N-30HZ

INVOICE #
LOCATION
FOREMAN
Date

25032
Weld
Calvin Reimers
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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	106pm	0	220pm	100	0			0			0			0		
Drop Plug	1240pm	10	223pm	10	10			10			10			10		
	141pm	20	224pm	30	20			20			20			20		
	219pm	30	226pm	80	30			30			30			30		
		40	228pm	170	40			40			40			40		
M & P		50	230pm	230	50			50			50			50		
		60	232pm	290	60			60			60			60		
Time	Sacks	70	233pm	370	70			70			70			70		
147pm	512	80	235pm	430	80			80			80			80		
217pm		90	237pm	440	90			90			90			90		
		100	240pm	400	100			100			100			100		
		110	Bump	1430	110	242pm		110			110			110		
% Excess	20%	120	Bump	1020	120	244pm		120			120			120		
Mixed bbls	91.13	130			130			130			130			130		
Total Sacks	512	140			140			140			140			140		
bbl Returns	21	150			150			150			150			150		
Water Temp	81.3															

Notes:

The day

1/2 BBL Back on Bleed Off

X

Work Performed

X

Title

X

Date

SERIES 2000

