

Bison Oil Well Cementing Single Cement Surface Pipe

Date: 9/10/2014

Invoice # 35035

API#

Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation

Well Name: kerr 4n-12hz

County: Weld
State: Colorado

Sec: 13
Twp: 2n
Range: 67w

Consultant: allen
Rig Name & Number: major 42
Distance To Location: 15
Units On Location: 4030-3103/4024-3203
Time Requested: 130 am
Time Arrived On Location: 1200 am
Time Left Location: 6:00 pm

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft) : 1,058
Total Depth (ft) : 1078
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) :
Conductor ID :
Shoe Joint Length (ft) : 41
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 17.80 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 599.81 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 617.60 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 110.00 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 414 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 73.82 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 79.24 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 780.49 PSI

Pressure of the fluids inside casing

Displacement: 438.51 psi

Shoe Joint: 30.25 psi

Total 468.76 psi

Differential Pressure: 311.73 psi

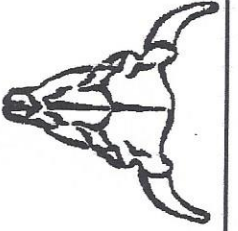
Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 203.06 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
 Kerr 4n-12hz

INVOICE #
 LOCATION
 FOREMAN
 Date

35035
 Weld
 Kirk Kallhoff
 9/10/2014

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

Safety Meeting MIRU CIRCULATE Drop Plug 500 am M & P	Displace 1			Displace 2			Displace 3			Displace 4			Displace 5		
	Time	BLS	PSI	Time	BLS	PSI	Time	BLS	PSI	Time	BLS	PSI	Time	BLS	PSI
400am															
315am															
427am	0	500am	10	0			0			0			0		
	10	502am	60	10			10			10			10		
	20	505am	60	20			20			20			20		
	30	507am	150	30			30			30			30		
	40	509am	220	40			40			40			40		
	50	511am	290	50			50			50			50		
	60	513am	360	60			60			60			60		
433 am	70	515am	390	70			70			70			70		
457 am stop	80			80			80			80			80		
	90			90			90			90			90		
	100			100			100			100			100		
	110			110			110			110			110		
% Excess	16%			120			120			120			120		
Mixed bbls	74			130			130			130			130		
Total Sacks	416			140			140			140			140		
bbl Returns	20			150			150			150			150		
Water Temp															

Notes:

bumped plug at 79 bbls at 520 am 1360 psi

110 bbls slurry

floats held

X *[Signature]* Title _____ X *[Signature]* Title _____
 Work Performed _____ Date *9-10-14*

M/D TOTCO 2000 SERIES

