



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 1/8/2015
Invoice # 45105
API# 05-123-40750
Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation
Well Name: GOODIN 16N-B6HZ

County: Weld
State: Colorado
Sec: 7
Twp: 1N
Range: 65W
Consultant: TOBY
Rig Name & Number: MAJOR 42
Distance To Location: 22
Units On Location: 4031-3107, 4024-3203
Time Requested: 700
Time Arrived On Location: 630
Time Left Location: 1130

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft) : 1,581
Total Depth (ft) : 1587
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 46
Conductor ID : 15.25
Shoe Joint Length (ft) : 41
Landing Joint (ft) : 8

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: 15%
Displacement Fluid lb/gal: 8.3
BBL to Pit: 31.0
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 17.66 **cuft**
(Casing ID Squared) X (.005454) X (Shoe Joint ft)
cuft of Conductor 35.10 **cuft**
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)
cuft of Casing 862.73 **cuft**
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 915.49 **cuft**
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 163.05 **bbls**
(Total Slurry Volume) X (.1781)
Sacks Needed 614 **sk**
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 109.43 **bbls**
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 119.70 **bbls**
(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

Pressure of cement in annulus

Hydrostatic Pressure: 1166.30 **PSI**

Pressure of the fluids inside casing

Displacement: 664.16 **psi**

Shoe Joint: 30.01 **psi**

Total 694.17 **psi**

Differential Pressure: 472.14 **psi**

Collapse PSI: 2020.00 **psi**

Burst PSI: 3520.00 **psi**

Total Water Needed: 279.12 **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
GOODIN 16N-B6HZ

INVOICE #
LOCATION
FOREMAN
Date

45105
Weld
JASON KELEHER
1/8/2015

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	745															
MIRU	640															
CIRCULATE	828	0	954	0	0			0			0			0		
Drop Plug		10	956	40	10			10			10			10		
953		20	959	40	20			20			20			20		
		30	1001	70	30			30			30			30		
		40	1003	100	40			40			40			40		
M & P		50	1007	200	50			50			50			50		
Time	Sacks	60	1009	300	60			60			60			60		
0839-951	614	70	1012	360	70			70			70			70		
		80	1014	380	80			80			80			80		
		90	1017	400	90			90			90			90		
		100	1019	470	100			100			100			100		
		110	1022	430	110			110			110			110		
% Excess	15%	120	1025	430	120			120			120			120		
Mixed bbls	109.4	130	BUMP	1430	130			130			130			130		
Total Sacks	614	140			140			140			140			140		
bbl Returns	31	150			150			150			150			150		
Water Temp	58															

Notes:

PERFORMED PRESSURE TEST TO 2000 PSI AT 0825, PUMPED 30 BBL WATER WITH DYE IN 2ND 10 AT 0828, MIXED AND PUMPED 614 SKS AT 14.2, 162.9 BBL AT 0839, SHUT DOWN AT 0951, STARTED DISPLACEMENT AT 0954, PLUG LANDED AT 430 PSI AT 1025 AND PRESSURED UP TO 1430, HELD FOR 2 MINUTES AND RELEASED TO CHECK FLOATS, GOT .5 BBL BACK, FLOATS HELD, PRESSURED BACK UP TO 1000 PSI FOR 2 MINUTES AND RELEASED

X _____ X _____ X _____
Work Preformed Title Date

GOODIN 16N-B6HZ SURFACE

