



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 1/15/2015

Invoice # 45114

API# 05-123-40860

Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation

Well Name: HUNZIKER 27N-28HZ

County: Weld

State: Colorado

Sec: 28

Twp: 2N

Range: 67W

Consultant: RANDY

Rig Name & Number: AES 10

Distance To Location: 21

Units On Location: 4031-3107, 4035-3204

Time Requested: 400

Time Arrived On Location: 230

Time Left Location: 1130

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft) : 1,313
Total Depth (ft) : 1328
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 40
Conductor ID : 15.25
Shoe Joint Length (ft) : 42
Landing Joint (ft) : 5

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: 16%

Displacement Fluid lb/gal: 8.3

BBL to Pit: 13.0

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 18.02 cuft

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

cuft of Conductor 30.53 cuft

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

cuft of Casing 719.07 cuft

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

Total Slurry Volume 767.62 cuft

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

bbls of Slurry 136.71 bbls

(Total Slurry Volume) X (.1781)

Sacks Needed 515 sk

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

Mix Water 91.75 bbls

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

Displacement: 98.66 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 968.42 PSI

Pressure of the fluids inside casing

Displacement: 548.13 psi

Shoe Joint: 30.63 psi

Total 578.76 psi

Differential Pressure: 389.66 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 240.42 bbls


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
HUNZIKER 27N-28HZ

INVOICE #
LOCATION
FOREMAN
Date

45114
Weld
JASON KELEHER
1/15/2015

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

Safety Meeting		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
MIRU	830	0	1001	0	0			0			0			0		
CIRCULATE	300	10	1003	40	10			10			10			10		
Drop Plug	924	20	1005	60	20			20			20			20		
1001		30	1007	60	30			30			30			30		
		40	1009	90	40			40			40			40		
M & P		50	1012	170	50			50			50			50		
Time	Sacks	60	1014	260	60			60			60			60		
0932-0958	515	70	1016	300	70			70			70			70		
		80	1019	340	80			80			80			80		
		90	1022	360	90			90			90			90		
		100	1024	380	100			100			100			100		
		110	BUMP	1460	110			110			110			110		
% Excess	16%	120			120			120			120			120		
Mixed bbls	91.7	130			130			130			130			130		
Total Sacks	515	140			140			140			140			140		
bbl Returns	13	150			150			150			150			150		
Water Temp	37															

Notes:

PERFORMED PRESSURE TEST TO 2000 PSI AT 0920, PUMPED 30 BBL WATER WITH DYE IN 2ND 10 AT 0924, MIXED AND PUMPED 515 SKS AT 14.2, 136.7 BBL AT 0932, SHUT DOWN AT 0958, STARTED DISPLACEMENT AT 1001, PLUG LANDED AT 380 PSI AT 1024 AND PRESSURED UP TO 1460, 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 
Work Preformed

X
Title

X
Date

HUNZIKER 27N-28HZ SURFACE

