



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 4/3/2014
Invoice #: 12111
API#:
Foreman: monte

Customer: noble
Well Name: wells ranch ae 30-65-1bhn

County: weld
State: colorado
Sec: 29
Twp: 6n
Range: 62w

Consultant: josh
Rig Name & Number: h & p 321
Distance To Location: 34.5
Units On Location: 4028-3102 4018-3202
Time Requested: 22:30
Time Arrived On Location: 22:10
Time Left Location: 1:30 AM

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft) : 597
Total Depth (ft) : 636
Open Hole Diameter (in) : 13.75
Conductor Length (ft) : 100
Conductor ID : 15.5
Shoe Joint Length (ft) : 45
Landing Joint (ft) : 35

Max Rate:
Max Pressure:

Cement Data

Cement Name: bfm 111
Cement Density (lb/gal) : 15.2
Cement Yield (cuft) : 1.27
Gallons Per Sack: 5.89
% Excess: 20%
Displacement Fluid lb/gal:
BBL to Pit:
Fluid Ahead (bbls): 40.0
H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup

10 fresh 10 dye 20 fresh

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 19.53 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 80.51 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

cuft of Casing 261.36 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 361.40 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 77.24 bbls
(Total Slurry Volume) X (.1781) X (% Excess Cement)

Sacks Needed 341 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 47.89 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 45.34 bbls
(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

Pressure of cement in annulus

Hydrostatic Pressure: 471.39 PSI

Pressure of the fluids inside casing

Displacement: #N/A psi

Shoe Joint: 35.53 psi

Total #N/A psi

Differential Pressure: #N/A psi

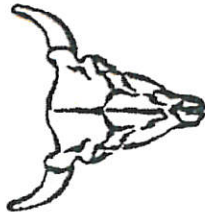
Collapse PSI: #N/A psi

Burst PSI: #N/A psi

Total Water Needed: 153.23 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

noble
wells ranch ae 30-65-1bhn

INVOICE #
LOCATION
FOREMAN
Date

12111
weld
monte
4/3/2014

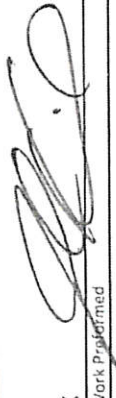
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DESCRIPTION OF JOB EVENTS

		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	11:20pm															
MIRU	11:00															
CIRCULATE	11:52	0	12:29	20	0			0			0			0		
Drop Plug		10	12:31	110	10			10			10			10		
		20	12:33	200	20			20			20			20		
12:29		30	12:35	270	30			30			30			30		
		40	12:38	280	40			40			40			40		
M & P		45	12:40	530	50			50			50			50		
		60			60			60			60			60		
Time	Sacks	70			70			70			70			70		
12:00-12:25	341	80			80			80			80			80		
		90			90			90			90			90		
		100			100			100			100			100		
		110			110			110			110			110		
		120			120			120			120			120		
% Excess	20%	130			130			130			130			130		
Mixed bbls	48	140			140			140			140			140		
Total Sacks	342	150			150			150			150			150		
bbl Returns	19															
Water Temp	50.5															

Notes:

safety meeting, miru, pressure test per company man, mix and pump 341 sks cement, drop plug and displace 45.3 bbls h2o
bump plug at 11:42 pm at 530 psi, raise pressure to 1000 psi hold 15 min. 19 bbls back

X 

X WSS

X 4-2-14

Work Performed

Title

Date