Bison Oil Well Cementing
Single Cement Surface Pipe

Date: 5/16/2014
Invoice # 12254
API#
Foreman: monte

Customer: noble
Well Name: Storis E24-77-1HN

County: weld
State: colorado
Sec: 24
Twp: 6n
Range: 65w

Consultant: hewey
Rig Name & Number: h&p 330
Distance To Location: 20
Units On Location: 4028-3202/4019-3211
Time Requested: 10:30
Time Arrived On Location: 9:35
Time Left Location:

WELL DATA

Casing Size OD (in) :	9.625
Casing Weight (lb) :	36.00
Casing Depth (ft.) :	720
Total Depth (ft) :	757
Open Hole Diameter (in.) :	13.75
Conductor Length (ft) :	130
Conductor ID :	15.6
Shoe Joint Length (ft) :	42
Landing Joint (ft) :	33
Max Rate:	
Max Pressure:	

Cement Data

Cement Name:	BFN III
Cement Density (lb/gal) :	15.2
Cement Yield (cuft) :	1.27
Gallons Per Sack:	5.89
% Excess:	20%
Displacement Fluid lb/gal:	8.3
BBL to Pit:	0.0
Fluid Ahead (bbls):	50.0
H20 Wash Up (bbls):	20.0

Spacer Ahead Makeup
10 fresh 10 dye 30 fresh

Casing ID 8.921 Casing Grade J-55 only used

Calculated Results

cuft of Shoe 18.13 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 106.86 cuft
(Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)

cuft of Casing 372.33 cuft
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 497.32 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 88.57 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 392 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 54.92 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 54.98 bbls
(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

Pressure of cement in annulus

Hydrostatic Pressure: 568.51 PSI

Pressure of the fluids inside casing

Displacement: 292.44 psi
Shoe Joint: 32.97 psi
Total 325.42 psi

Differential Pressure: 243.09 psi

Collapse PSI: 2020.00 psi
Burst PSI: 3520.00 psi

Total Water Needed: 179.90 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.

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INVOICE #
LOCATION
FOREMAN
Date
Ti

Customer: noble
Well Name: Storis E24-77-1HN

DESCRIPTION OF JOB EVENTS

		Displace 1			Displace 2			Displace 3			Displace 4		
Safety Meeting	11:47	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	
MIRU	10:55	0	12:41	0	0			0			0		
CIRCULATE	12:12	10	12:43	0	10			10			10		
Drop Plug		20	12:46	50	20			20			20		
12:41		30	12:52	150	30			30			30		
		40	12:55	230	40			40			40		
M & P		50	12:57	250	50			50			50		
Time	Sacks	60	12:59	490	60			60			60		
12:20-12:38	392	70			70			70			70		
		80			80			80			80		
		90			90			90			90		
		100			100			100			100		
		110			110			110			110		
% Excess	0%	120			120			120			120		
Mixed bbls	54.92	130			130			130			130		
Total Sacks	392	140			140			140			140		
bbl Returns		150			150			150			150		
Water Temp													

Notes:

safty meeting, miru. Pressure test per company man. Circulate 50 bbls ahead with dye in 2nd 10, mix and pump 392 sks at 20 % e

bump plug at 12:59pm at 490 psi 15 bbls back

X
Work Preformed

X
Title