



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 1/30/2014
Invoice #: 12308
API#: 445564
Foreman: MONTE

Customer: encana
Well Name: volg mccoy 2f-sh-f267

County: weld
State: colorado
Sec: 5
Twp: 2n
Range: 67w

Consultant: quiz
Rig Name & Number: h & p 278
Distance To Location: 24.2
Units On Location: 3106-2311
Time Requested: 2:30am
Time Arrived On Location: 2:00am
Time Left Location:

WELL DATA

Casing Size OD (in) : 9.6250
Casing Weight (lb) : 40
Casing Depth (ft.) : 850
Total Depth (ft) : 865
Open Hole Diameter (in.) : 12.25
Conductor Length (ft) : 108
Conductor ID : 15.5
Shoe Joint Length (ft) : 45
Landing Joint (ft) : 28

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: 35%
Displacement Fluid lb/gal:
BBL to Pit:
Fluid Ahead (bbls):
H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup
20 fresh 10 dye

Casing ID

8.835

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 19.16 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 86.95 cuft
(Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)

cuft of Casing 232.38 cuft
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 338.48 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 81.38 bbls
(Total Slurry Volume) X (.1781) X (% Excess Cement)

Sacks Needed 360 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 50.46 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 63.16 bbls
(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

Pressure of cement in annulus

Hydrostatic Pressure: 671.16 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

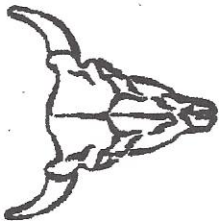
Collapse PSI: 2570.00 psi

Burst PSI: 3950.00 psi

Total Water Needed: 70.46 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

12308
weld
MONTE
1/30/2014

Customer
Well Name

encana
volg mccoy 2f-sh-f267

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

	6:15am 5:10 7:12	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		0	7:40	20	0			0			0			0		
MIRU		10	7:43	130	10			10			10			10		
CIRCULATE		20	7:45	260	20			20			20			20		
Drop Plug		30	7:47	300	30			30			30			30		
		40	7:49	390	40			40			40			40		
		50	7:51	430	50			50			50			50		
M & P		60	7:55	370	60			60			60			60		
Time		360	7:59	450	70			70			70			70		
7:14-7:38		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	35%	130			130			130			130			130		
Mixed bbls	50.46	140			140			140			140			140		
Total Sacks	360	150			150			150			150			150		
bbl Returns		31														

Notes:

safety meeting, miru, pressure test per company man, circulate 30 bbls ahead with dye in last 10. mix and pump 360 sks at 35 % excess

drop plug and displace 61.42 bbls h2o, 31 back

X *[Signature]*

X Title

X 1-30-14 Date



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Cementing Customer Satisfaction Survey

Service Date 1/30/2014
Well Name volg mccooy 2f-sh-f267
County weld
State colorado
SEC 5
TWP 2n
RNG 67w

Invoice Number 20511
API # 445564
Job Type Single Cement Surface Pipe
Company Name encana

Customer Representative charlie

Supervisor Name monte

Employee Name (Including Supervisor)
lee
jeff
kurt

Exposure Hours (Per Employee)

7
7
7
21

Total Exposure Hours

Did we encounter any problems on this job?

☐ Yes ☒ No

To Be Completed By Customer

Rating/Description

- 5 - Superior Performance (Established new quality/performance standards)
 - 4 - Exceeded Expectation (Provided more than what was required/expected)
 - 3 - Met Expectations (Did what was expected)
 - 2 - Below Expectations (Job problems/failures occurred - *Recovery made)
 - 1 - Poor Performance (Job problems/failures occurred - *Some recovery made)
- *Recovery: resolved issue(s) on jobsite in a timely and professional manner

RATING CATEGORY

Personnel -
Equipment -
Job Design -
Product/Material -
Health & Safety -
Environmental -
Timeliness -
Condition/Appearance -
Communication -

CUSTOMER SATISFACTION RATING

Did our personnel perform to your satisfaction?
Did our equipment perform to your satisfaction?
Did we perform the job to the agreed upon design?
Did our products and materials perform as you expected?
Did we perform in a safe and careful manner (Pre/post mtgs, PPE, TSMR, etc..)?
Did we perform in an environmentally sound manner (spills, leaks, cleanup, etc..)?
Was job performed as scheduled (On time to site, accessible to customers, completed when expected)?
Did the equipment condition and appearance meet your expectations?
How well did our personnel communicate during mobilization, rig up and job execution?

Please Circle:

Yes ☒ No
Yes ☒ No
Yes ☒ No
Yes ☒ No
Yes ☒ No
Did an accident or injury occur?
Did an injury requiring medical treatment occur?
Did a first-aid injury occur?
Did a vehicle accident occur?
Was a post-job safety meeting held?

Please Circle:

Yes ☒ No
Yes ☒ No
Yes ☒ No
Yes ☒ No
Yes ☒ No

Was a pre-job safety meeting held?
Was a job safety analysis completed?
Were emergency services discussed?
Did environmental incident occur?
Did any near misses occur?

Additional Comments:

THE INFORMATION HEREIN IS CORRECT -

x *Charlie*

Customer Representative's Signature

DATE: _____

Any additional Customer Comments or HSE concerns should be described on the back of this form