



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 12/21/2014

Invoice # 35092

API#

Foreman: Kirk Kallhoff

Customer: Bill Barrett Corp.

Well Name: will 6-62-15-0461 bh2

County: Weld

State: Colorado

Sec: 15

Twp: 6n

Range: 62w

Consultant: casy

Rig Name & Number: major 43

Distance To Location: 37

Units On Location: 4030-3103/4020-3212

Time Requested: 900 am

Time Arrived On Location: 700 am

Time Left Location:

WELL DATA

Casing Size OD (in) : 9.625

Casing Weight (lb) : 36.00

Casing Depth (ft) : 778

Total Depth (ft) : 800

Open Hole Diameter (in.) : 13.50

Conductor Length (ft) :

Conductor ID :

Shoe Joint Length (ft) : 43

Landing Joint (ft) : 8

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: 5%

Displacement Fluid lb/gal: 8.3

BBL to Pit:

Fluid Ahead (bbls): 20.0

H2O Wash Up (bbls): 10.0

Spacer Ahead Makeup

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 18.66 cuft

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

cuft of Conductor 0.00 cuft

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

cuft of Casing 399.24 cuft

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

Total Slurry Volume 417.91 cuft

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

bbls of Slurry 74.43 bbls

(Total Slurry Volume) X (.1781)

Sacks Needed 329 sk

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

Mix Water 46.15 bbls

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

Displacement: 57.44 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 614.31 PSI

Pressure of the fluids inside casing

Displacement: 316.92 psi

Shoe Joint: 33.95 psi

Total 350.87 psi

Differential Pressure: 263.44 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 133.59 bbls

X *Casy*
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

Bill Barrett Corp.
will 6-62-15-0461 bh2

INVOICE #
LOCATION
FOREMAN
Date

35092
Weld
Kirk Kallhoff
12/21/2014

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	955am															
MIRU	915am															
CIRCULATE	1017am	0	1040a	10	0			0			0			0		
Drop Plug		10	1043a	40	10			10			10			10		
1040 am		20	1045a	50	20			20			20			20		
		30	1047a	230	30			30			30			30		
		40	1049a	320	40			40			40			40		
M & P		50	1050a	280	50			50			50			50		
Time	Sacks	60			60			60			60			60		
1022 am	329	70			70			70			70			70		
1036 am stop		80			80			80			80			80		
		90			90			90			90			90		
		100			100			100			100			100		
		110			110			110			110			110		
% Excess	5%	120			120			120			120			120		
Mixed bbls	46.2	130			130			130			130			130		
Total Sacks	329	140			140			140			140			140		
bbl Returns	18	150			150			150			150			150		
Water Temp																

Notes:

bumped plug at 1054 am 460 psi

floats held

X

Work Preformed

Cooley

X

Title

Corman

X

Date

10-21-14



Bison Oil Well Cementing Single Cement Surface Pipe

Cementing Customer Satisfaction Survey

Service Date	12/21/2014
Well Name	will 6-62-15-0461 bh2
County	Weld
State	Colorado
SEC	15
TWP	6n
RNG	62w

Invoice Number	35092
API #	0
Job Type	Single Cement Surface Pipe
Company Name	Bill Barrett Corp.

Customer Representative **casv**

Supervisor Name **kirk**

Employee Name (Including Supervisor)
kirk
keith
cody

Exposure Hours (Per Employee)
4.5
4.5
4.5

Total Exposure Hours

13.5

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

<input checked="" type="checkbox"/>	Personnel -
<input checked="" type="checkbox"/>	Equipment -
<input checked="" type="checkbox"/>	Job Design -
<input checked="" type="checkbox"/>	Product/Material -
<input checked="" type="checkbox"/>	Health & Safety -
<input checked="" type="checkbox"/>	Environmental -
<input checked="" type="checkbox"/>	Timeliness -
<input checked="" type="checkbox"/>	Condition/Appearance -
<input checked="" type="checkbox"/>	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 | Did an accident or injury occur? |
| Yes | No | Did an injury requiring medical treatment occur? |
| Yes | No | Did a first-aid injury occur? |
| Yes | No | Did a vehicle accident occur? |
| Yes | No | Was a post-job safety meeting held? |

Please Circle:

- | | | |
|-----|----|--------------------------------------|
| Yes | No | Was a pre-job safety meeting held? |
| Yes | No | Was a job safety analysis completed? |
| Yes | No | Were emergency services discussed? |
| Yes | No | Did environmental incident occur? |
| Yes | No | Did any near misses occur? |

Additional Comments:

THE INFORMATION HEREIN IS CORRECT -

X

Customer Representative's Signature

DATE:

12-21-14

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

M/D TOTCO 2000 SERIES

