



BISON

Bison Oil Well Cementing Inc.
Greenwood Village, CO 80111

Invoice

Date	Invoice #
1/5/2018	200217

Bill To
Bill Barrett Corp. 1099 18th Street, Suite 2300 Denver, CO 80202

Location	Well Name & No.	Terms	Job Type		
Weld CO	UPRR 5-1	Net 30	4 1/2 Casing Cement		
Item	Description	Qty	U/M	Rate	Amount
Pump surface	PUMP Charge-surface pipe	1		2,300.00	2,300.00
MILEAGE	Mileage charge-Pickup	64		1.50	96.00
Discount 15%	Discount 15%			-15.00%	-14.40
MILEAGE	Mileage charge-Truck	128		4.00	512.00
Discount 15%	Discount 15%			-15.00%	-76.80
Data Acquisition ...	Data Acquisition Charge	1		225.00	225.00
Discount 15%	Discount 15%			-15.00%	-33.75
	Subtotal of Services				3,008.05
BFN III Blend T...	BFN III Blend	293	Sack	20.19	5,915.67
Discount 15%	Discount 15%			-15.00%	-887.35
Rubber Plug 4 1/2"	Rubber plug 4 1/2"	1		50.00	50.00
	Subtotal of Materials				5,078.32
					8,086.37

Please Remit Payment To:

Bison Oil Well Cementing, Inc.
P.O. Box 29671
Thornton, CO 80229

Subtotal	\$8,086.37
Sales Tax (2.9%)	\$0.00
Total	\$8,086.37
Balance Due	\$8,086.37



Bison Oil Well Cementing
 6143 S Willow Drive, Suite 400
 Greenwood Village, CO 80111

FIELD INVOICE #

200217

FIELD INVOICE

WELL NO. AND FARM uprr 5-1	COUNTY Weld	STATE Colorado	DATE 1/5/2018	Contractor ensign 312
CHARGE TO Bill Barrett Corp. 1099 18th Street, Suite 2300 Denver, CO 80202	WELL LOCATION			
	Section 3	TWP 5n	RANGE 62w	
	DELIVERED TO 34-68		LOCATION 1 shop	CODE
	SHIPPED VIA		LOCATION 2 2 34-68	CODE
	TYPE AND PURPOSE OF JOB 4 1/2" Casing Cement		LOCATION 3 shop	CODE
			WELL TYPE gas	CODE

ITEM	DESCRIPTION	UNITS		UNIT PRICE	AMOUNT
		QTY.	MEAS.		
PUMP CHARGE					\$ -
SURFACE		1		\$ 2,300.00	\$ 2,300.00
					\$ -
MILLEAGE CHARGE					\$ -
Pickup	\$1.50 per Mile	64		\$ 4.00	\$ 256.00
Truck/Equipment	\$4.00 per Mile	64		\$ 4.00	\$ 256.00
Truck/Equipment	\$4.00 per Mile	64		\$ 4.00	\$ 256.00
					\$ -
CEMENT CHARGE:					\$ -
BFN III		293		\$ 21.00	\$ 6,153.00
					\$ -
ADDITIVES CHARGE:					\$ -
4 1/2 rubber plug		1	ea	\$ 50.00	\$ 50.00
					\$ -
FLOAT EQUIPMENT:					\$ -
					\$ -
OTHER CHARGES:					\$ -
DATA ACQUISITION FEE		1		\$ 225.00	\$ 225.00

SUB TOTAL \$ 9,496.00

TAX \$ -

TOTAL \$ 9,496.00

If this account is not paid within 30 days of invoice date a FINANCE CHARGE will be made. Computed at a single monthly rate of 1 1/2% which is equal to an ANNUAL PERCENTAGE RATE OF 18%.

SUBJECT TO CORRECTION

M C. Cumberland
 Code 840-015
 NR# 198760
 198770
 198780

Customer or Agent

Bison Oil Well Cementing, Inc. Representative

Customers hereby acknowledges and specifically agrees to the terms and conditions on this work order, including, without limitation, the provisions on the reverse hereof which include the release and indemnity.



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 1/5/2018
 Invoice # 200217
 API# _____
 Foreman: Kirk Kallhoff

Customer: Bill Barrett Corp.
 Well Name: uprr 5-1

County: Weld
 State: Colorado
 Sec: 3
 Twp: 5n
 Range: 62w

Consultant: chris
 Rig Name & Number: ensign 312
 Distance To Location: 32
 Units On Location: 2
 Time Requested: 1200 pm
 Time Arrived On Location: 1130 am
 Time Left Location: 3:00pm

WELL DATA		Cement Data	
Casing Size OD (in) :	<u>4.5</u>	Cement Name:	<u>BFN III</u>
Casing Weight (lb) :	<u>11.60</u>	Cement Density (lb/gal) :	<u>14.8</u>
Casing Depth (ft.) :	<u>440</u>	Cement Yield (cuft) :	<u>1.32</u>
Total Depth (ft) :	<u>440</u>	Gallons Per Sack:	<u>6.30</u>
Open Hole Diameter (in.) :	<u>8.63</u>	% Excess:	<u>30%</u>
Conductor Length (ft) :		Displacement Fluid lb/gal:	<u>8.3</u>
Conductor ID :		BBL to Pit:	
Shoe Joint Length (ft) :		Fluid Ahead (bbls):	<u>20.0</u>
Landing Joint (ft) :	<u>0</u>	H2O Wash Up (bbls):	<u>10.0</u>
Max Rate:	<u>8</u>	Spacer Ahead Makeup	
Max Pressure:	<u>2500</u>		<u>h2o dye in 1st 10</u>

Calculated Results	Displacement:	6.84	bbls
cuft of Shoe <u>0.00</u> cuft (Casing ID Squared) X (.005454) X (Shoe Joint ft)	(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)		
cuft of Conductor <u>0.00</u> cuft (Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)	Pressure of cement in annulus		
cuft of Casing <u>168.90</u> cuft (Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	Hydrostatic Pressure: <u>338.27</u> PSI		
Total Slurry Volume <u>168.90</u> cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	Pressure of the fluids inside casing		
bbls of Slurry <u>30.08</u> bbls (Total Slurry Volume) X (.1781)	Displacement: <u>189.72</u> psi		
Sacks Needed <u>128</u> sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	Shoe Joint: <u>0.00</u> psi		
Mix Water <u>19.19</u> bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42	Total <u>189.72</u> psi		
	Differential Pressure: <u>148.55</u> psi		
	Collapse PSI: <u>#N/A</u> psi		
	Burst PSI: <u>#N/A</u> psi		
	Total Water Needed: <u>56.03</u> 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

Cementing Customer Satisfaction Survey

Service Date	1/5/2018
Well Name	uprr 5-1
County	Weld
State	Colorado
SEC	3
TWP	5n
RNG	62w

Invoice Number	200217
API #	0
Job Type	Single Cement Surface Pipe
Company Name	Bill Barrett Corp.

Customer Representative **chris**

Supervisor Name **Kirk Kallhoff**

Employee Name (Including Supervisor)	Exposure Hours (Per Employee)
kirk	3.5
frank	3.5
himi	3.5
rick	3.5
dave	3.5
Total Exposure Hours	17.5

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	CUSTOMER SATISFACTION RATING
_____	Personnel -	Did our personnel perform to your satisfaction?
_____	Equipment -	Did our equipment perform to your satisfaction?
_____	Job Design -	Did we perform the job to the agreed upon design?
_____	Product/Material -	Did our products and materials perform as you expected?
_____	Health & Safety -	Did we perform in a safe and careful manner (Pre/post mtgs, PPE, TSMR, etc..)?
_____	Environmental -	Did we perform in an environmentally sound manner (spills, leaks, cleanup, etc..)?
_____	Timeliness -	Was job performed as scheduled (On time to site, accessible to customers, completed when expected)?
_____	Condition/Appearance -	Did the equipment condition and appearance meet your expectations?
_____	Communication -	How well did our personnel communicate during mobilization, rig up and job execution?

Please Circle:

Yes <input type="radio"/> No <input checked="" type="radio"/>	Did an accident or injury occur?	Yes <input checked="" type="radio"/> No <input type="radio"/>	Was a pre-job safety meeting held?
Yes <input type="radio"/> No <input checked="" type="radio"/>	Did an injury requiring medical treatment occur?	Yes <input checked="" type="radio"/> No <input type="radio"/>	Was a job safety analysis completed?
Yes <input type="radio"/> No <input checked="" type="radio"/>	Did a first-aid injury occur?	Yes <input checked="" type="radio"/> No <input type="radio"/>	Were emergency services discussed?
Yes <input type="radio"/> No <input checked="" type="radio"/>	Did a vehicle accident occur?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Did environmental incident occur?
Yes <input checked="" type="radio"/> No <input type="radio"/>	Was a post-job safety meeting held?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Did any near misses occur?

Additional Comments:

THE INFORMATION HEREIN IS CORRECT -

X
Customer Representative's Signature

DATE: 1-5-18

SERIES 2000

