



BISON

Bison Oil Well Cementing Inc.
1547 Gaylord Street
Denver, CO 80206
303-296-3010

Invoice

Date	Invoice #
3/20/2014	12085

Bill To
Noble Energy Inc. Attn: Accounting 1625 Broadway Ste 2000 Denver, CO 80202

Location	Well Name & No.	Terms	Job Type		
Weld CO	Romero PCG10-7911N	Net 30	Surface Pipe		
Item	Description	Qty	U/M	Rate	Amount
Pump surface	PUMP Charge-surface pipe	1			
Discount 15%	Discount 15%				
MILEAGE	Mileage charge	360			
Discount 15%	Discount 15%				
Data Acquisition ...	Data Acquisition Charge	1			
Discount 15%	Discount 15%				
	Subtotal of Services				
BFN III Summer ...	BFN III Blend	421	Sack		
Discount 15%	Discount 15%				
KCL Mud Flush	(BHS 117)	5	qt		
Discount 15%	Discount 15%				
Dye - 4880	Dye (Hot Pink 4880)	8	oz		
Discount 15%	Discount 15%				
	Subtotal of Materials				

Please Remit Payment To:

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

Subtotal
Sales Tax
Total
Balance Due

BISON OIL WELL CEMENTING, INC.

1738 Wynkoop St., Ste. 102
Denver, Colorado 80202
Phone: 303-296-3010
Fax: 303-298-8143
E-mail: bisonoil1@qwestoffice.net



SERVICE INVOICE

Nº 12085

WELL NO. AND FARM <i>Remero PC 610-79HN</i>		COUNTY <i>Weld</i>	STATE <i>Colo</i>	DATE <i>3-20-14</i>
CHARGE TO <i>Noble</i>		WELL LOCATION SEC. <i>3</i> TWP. <i>4N</i> RANGE <i>6SW</i>		CONTRACTOR <i>H&P 326</i>
		DELIVERED TO <i>WCR 43+48</i>	LOCATION <i>1 Shop</i>	CODE
		SHIPPED VIA <i>4027-3106/4031-3204</i>	LOCATION <i>2 43+48</i>	CODE
		TYPE AND PURPOSE OF JOB <i>SURFACE PIPE</i>	LOCATION <i>3 Shop</i>	CODE
			WELL TYPE <i>Gas + Oil</i>	CODE

PRICE REFERENCE	DESCRIPTION	UNITS		UNIT PRICE	AMOUNT
		QTY.	MEAS.		
	<i>Pump Charge</i>	<i>1</i>	<i>EA.</i>		
	<i>RFN III 3% BCCA-1.25 1/4 sk BFLA-1</i>	<i>421</i>	<i>SK.</i>		
	<i>BCLY-1</i>	<i>5</i>	<i>QT.</i>		
	<i>Pink Dye</i>	<i>8</i>	<i>OZ.</i>		
	<i>Mileage 1.50 mile 60 mph round Trip</i>	<i>3</i>	<i>EA.</i>		
	<i>Data Int.</i>	<i>1</i>	<i>EA.</i>		

RIG NAME & NUMBER <i>H&P 326</i>	
WELL NAME & NUMBER <i>Remero PC 610-79HN</i>	
WFE NUMBER <i>133212</i>	
TASK (ORL, COMP, W/O, P&A) <i>ORL</i>	
EXP TYPE <i>1.1</i>	
ACTG CODE <i>0017</i>	
DOLLAR TOTAL BEING APPL'D <i>10,468.85</i>	
FIELD APPROVAL <i>[Signature]</i>	DATE <i>3/26/14</i>
ROUTE <i>Weld</i>	OVER <i>Miles</i>
TAX REFERENCES	
MAIL TO: NOBLE ENERGY INC. ATTN: ACCOUNTS PAYABLE 1625 W. 10TH AVE., SUITE 2200 DENVER, CO 80202	
NO INVOICE WILL BE PAID W/O ALL ATTACHED SIGNED FIELD TICKETS	

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%.

TOTAL

SUBJECT TO CORRECTION

Customer or His 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 side hereof which include the release and indemnity.



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 3/21/2014

Invoice # 42130-12085

API# 05-123-4018

Foreman: LEE SHARP

Customer: NOBLE

Well Name: REMERO G10-79HN

County: WELD

State: Colorado

Sec: 3

Twp: 4N

Range: 65W

Consultant: JOHN DRAHOTA

Rig Name & Number: H & P 326

Distance To Location: 10

Units On Location: 4027-3106;

Time Requested: 9:00 PM

Time Arrived On Location: 8:42 PM

Time Left Location: 1:30 AM

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 689
Total Depth (ft) : 739
Open Hole Diameter (in.) : 13.75
Conductor Length (ft) : 160
Conductor ID : 15.5
Shoe Joint Length (ft) : 37
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: 30%
Displacement Fluid lb/gal: 8.3
BBL to Pit: 14.0
Fluid Ahead (bbls): 50.0
H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup

50BBL=10KCL DYE2ND1030KCL

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 16.07 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 315.23 cuft

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

Total Slurry Volume 411.81 cuft

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

bbls of Slurry 95.35 bbls

(Total Slurry Volume) X (.1781) X (% Excess Cement)

Sacks Needed 422 sk

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

Mix Water 59.12 bbls

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

Displacement: 53.76 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 552.27 PSI

Pressure of the fluids inside casing

Displacement: 285.61 psi

Shoe Joint: 29.24 psi

Total 314.85 psi

Differential Pressure: 237.42 psi

Collapse PSI: #N/A psi

Burst PSI: #N/A psi

Total Water Needed: 182.88 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.



INVOICE #
LOCATION
FOREMAN
Date

12130-12085
WELD
LEE SHARP
3/21/2014

Customer
Well Name

NOBLE
REMERO G10-79HN

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

[illegible]

Notes:

The day job went well 14 bbl return displace 54 bbl set plug @ 12:17 @610 psi

X

✕

[illegible]

✕

Date

Work Preformed