



# BISON

Bison Oil Well Cementing Inc.  
Suite 102  
Denver, CO 80202  
303-296-3010

## Invoice

Date	Invoice #
1/18/2013	11687

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

Location	Well Name & No.	Terms	Job Type		
Weld CO	Furrow Federal PCAB14-64	Net 30	Surface		
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%				
HOURS	Wait Time	3			
	Subtotal of Services				
BFN III Winter ...	BFN III Blend	466	Sack		
Discount 15%	Discount 15%				
KCL Mud Flush	(BHS 117)	5	qt		
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 (2.9%)

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

REF. INVOICE # 11687

LOCATION 55-80

FOREMAN Kirk Hallhoff  
Dario, Pablo, Mario

## TREATMENT REPORT

DATE	WELL NAME	SECTION	TWP	RGE	COUNTY	FORMATION
1-18-13	Furrow Federal PCAB 14-64	14	7N	64W	weld	

CHARGE TO Noble	OWNER
MAILING ADDRESS	OPERATOR Noble
CITY	CONTRACTOR Ensign 121
STATE ZIP CODE	DISTANCE TO LOCATION
TIME ARRIVED ON LOCATION 10:30am	TIME LEFT LOCATION 7:00pm

WELL DATA			PRESSURE LIMITATIONS		
HOLE SIZE 13 3/4	TUBING SIZE	PERFORATIONS		THEORETICAL	INSTRUCTED
TOTAL DEPTH 1167	TUBING DEPTH	SHOTS/FT	SURFACE PIPE ANNULUS LONG		
9370 #15/074	TUBING WEIGHT	OPEN HOLE	STRING		
CASING SIZE 9 5/8	TUBING CONDITION		TUBING		
CASING DEPTH 1116	TREATMENT VIA		TYPE OF TREATMENT		TREATMENT RATE
CASING WEIGHT 36 lb	PACKER DEPTH		1 SURFACE PIPE		BREAKDOWN BPM
CASING CONDITION good			[ ] PRODUCTION CASING		INITIAL BPM
			[ ] SOOZE CEMENT		FINAL BPM
			[ ] ACID BREAKDOWN		MINIMUM BPM
			[ ] ACID STIMULATION		MAXIMUM BPM
			[ ] ACID SPOTTING		AVERAGE BPM
			[ ] MISC PUMP		
			[ ] OTHER		HYD HHP = RATE X PRESSURE X 40.8

PRESSURE SUMMARY		
BREAKDOWN or CIRCULATING psi	AVERAGE psi	
FINAL DISPLACEMENT psi	ISIP psi	
ANNULUS psi	5 MIN SIP psi	
MAXIMUM psi	15 MIN SIP psi	
MINIMUM psi		

INSTRUCTIONS PRIOR TO JOB: Set fly meeting, Rig up, Psi test, Per cement circ 50 bbls KCL H2O, mix & Pump Lead cement at 20% Excess at 1.69 yield at 13.1 lbs, 366 SKS, mix & Pump Tail cement 1127 yield 15.2 lbs 100 SKS, Release Plug Displace 88.0 BBLs H2O, Pump Plug At 150 Psi over Lift Psi, wait 5 min Release Psi, wash up, Rig Down  
Arrived w/ 750 SKS cement, 4 gal KCL  
H2O test OK  
110.1 BBLs slurry Lead 22.6 Tail

JOB SUMMARY  
DESCRIPTION OF JOB EVENTS: Set fly meeting 4:05 pm circ 4:40 pm cement 4:49 pm displacement 5:27 pm  
Drop Plug 5:30 pm Displace 5:34 pm  
10 BBLs At 6 BBLs/m 5:32 pm 300 psi  
20 BBLs At 6 BBLs/m 5:34 pm 340 psi  
30 BBLs At 6 BBLs/m 5:35 pm 370 psi  
40 BBLs At 6 BBLs/m 5:37 pm 440 psi  
50 BBLs At 6 BBLs/m 5:39 pm 480 psi  
60 BBLs At 6 BBLs/m 5:41 pm 540 psi  
70 BBLs At 6.5 BBLs/m 5:53 pm 380 psi  
80 BBLs At 2.5 BBLs/m 5:56 pm 420 psi  
88.1 BBLs At 1 BBL/m 5:59 pm 420 psi  
Bump Plug 5:59 pm 820 psi  
Lift w/ 284 SKS cement 2 gal 3 gals KCL  
BBLs Back 40

used 366 SKS Lead  
20% Excess  
110.1 BBLs slurry  
used 100 SKS Tail  
22.6 BBLs slurry

Michael Magner  
AUTHORIZATION TO PROCEED

TITLE

1-18-13

DATE

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.