



BISON

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

Invoice

Date	Invoice #
1/11/2013	11298

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

Location	Well Name & No.	Terms	Job Type		
Weld CO	English Farms XX08-72HN	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	3.5			
	Subtotal of Services				
BFN III Winter ...	BFN III Blend	472	Sack		
Discount 15%	Discount 15%				
KCL Mud Flush	(BHS 117)	3	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 # 11298

LOCATION WCR 41+12

FOREMAN Calvin Reimers

TREATMENT REPORT

DATE	WELL NAME	SECTION	TWP	RGE	COUNTY	FORMATION
1-11-13	English Farms XX08-72HN	8'	1N	65W	Weld	

CHARGE TO Noble	OWNER
MAILING ADDRESS	OPERATOR Noble
CITY	CONTRACTOR H&P Rig 321
STATE ZIP CODE	DISTANCE TO LOCATION
TIME ARRIVED ON LOCATION 10:00 AM.	TIME LEFT LOCATION 6:30 PM.

WELL DATA			PRESSURE LIMITATIONS		
HOLE SIZE 13 3/4	TUBING SIZE	PERFORATIONS		THEORETICAL	INSTRUCTED
TOTAL DEPTH 1178	TUBING DEPTH	SHOTS/FT	SURFACE PIPE ANNULUS LONG		
PBTD 1129.56	TUBING WEIGHT	OPEN HOLE	STRING		
CASING SIZE 9 5/8	TUBING CONDITION		TUBING		

CASING DEPTH 1148.03	TREATMENT VIA	TYPE OF TREATMENT	TREATMENT RATE
CASING WEIGHT 3616.	PACKER DEPTH	[] SURFACE PIPE	BREAKDOWN BPM
CASING CONDITION Good		[] PRODUCTION CASING	INITIAL BPM

TPWLT 1168.03	PRESSURE SUMMARY	[] SQUEEZE CEMENT	FINAL BPM
BREAKDOWN or CIRCULATING psi	AVERAGE psi	[] ACID BREAKDOWN	MINIMUM BPM
FINAL DISPLACEMENT psi	ISIP psi	[] ACID STIMULATION	MAXIMUM BPM
ANNULUS psi	5 MIN SIP psi	[] ACID SPOTTING	AVERAGE BPM
MAXIMUM psi	15 MIN SIP psi	[] MISC PUMP	
MINIMUM psi		[] OTHER	HYD HHP = RATE X PRESSURE X 40.8

INSTRUCTIONS PRIOR TO JOB Safety meeting, Rig up, Psi Test to 500 Psi, Circ 30 bbls H₂O with KCL, Mix + pump Lead at 20% EXCESS = 372 sks at 13.1 lbs. 1.69 yield, Mix + pump Tail at 0% EXCESS = 100 sks at 15.2 lbs. 1.27 yield To COVER 204' + shoe, Drop plug, Displace 87.3 bbls H₂O, Bump plug at 150 Psi OVER Lift Psi, Wait 5 min THEN bleed off Psi, Wash up, Rig down,

JOB SUMMARY

DESCRIPTION OF JOB EVENTS Safety MEETING 3:31pm, Circ 4:05pm, Cement 4:11pm to 4:50pm.

Drop Plug 4:54pm, Displace 4:55pm.

10 bbls. 510 Psi 5:01pm 6.0 bbls/m 60 bbls 510 Psi 5:10pm 6.0 bbls/m

20 bbls. 510 Psi 5:03pm 6.0 bbls/m 70 bbls 570 Psi 5:12pm 6.0 bbls/m

30 bbls. 500 Psi 5:05pm 6.0 bbls/m 80 bbls 470 Psi 5:14pm 4.5 bbls/m

40 bbls. 500 Psi 5:06pm 6.0 bbls/m 87.3 bbls 390 Psi 5:17pm 1.0 bbls/m

50 bbls. 500 Psi 5:08pm 6.0 bbls/m Bump Plug 600 Psi at 5:17pm

USED 20% EXCESS ON LEAD = 372 sks 109.55 bbls Slurry
0% EXCESS ON TAIL = 100 sks 22.61 bbls Slurry

2.7 bbls Slurry to the Pit

Roger [Signature]
AUTHORIZATION TO PROCEED

WSS

TITLE

1-11-12

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.