



BISON

Bison Oil Well Cementing Inc.
 1738 Wynkoop St.
 Suite 102
 Denver, CO 80202
 303-296-3010

Invoice

Date	Invoice #
5/27/2011	9849

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

Location	Well Name & No.	Job Type	Terms	Rig	
Weld CO	Kummer PCLE 23-17	Surface	Net 30		
Item	Description	Qty	U/M	Rate	Amount
Pump surface	PUMP Charge-surface pipe	1			
Discount 15%	Discount 15%				
MILEAGE	Mileage charge	420			
Discount 15%	Discount 15%				
Data Acquisitio...	Data Acquisition Charge	1			
Discount 15%	Discount 15%				
	Subtotal of Services				
BFN III	BFN III Blend	301	Sack		
Discount 15%	Discount 15%				
KCL Mud Flush	(BHS 117)	4	qt		
Discount 15%	Discount 15%				
Dye - 4880	Dye (Hot Pink 4880)	10	oz		
Discount 15%	Discount 15%				
Sugar	Sugar	10	lb		
Discount 15%	Discount 15%				
	Subtotal of Materials				

Please Remit Invoices 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: 303-296-8143
E-mail: bisonoil1@qwestoffice.net

REF. INVOICE # 9849

LOCATION Hwy 14-95

FOREMAN Kirk Kallhoef

TREATMENT REPORT

DATE	WELL NAME	SECTION	TWP	RGE	COUNTY	FORMATION
5-27-11	Kummer PLE 23-17	23	8N	61W	weld	

CHARGE TO Noble	OWNER
MAILING ADDRESS	OPERATOR Noble
CITY	CONTRACTOR Cade 21
STATE ZIP CODE	DISTANCE TO LOCATION
TIME ARRIVED ON LOCATION 11:30am	TIME LEFT LOCATION 6:00pm

WELL DATA			PRESSURE LIMITATIONS		
HOLE SIZE 12 1/4	TUBING SIZE	PERFORATIONS		THEORETICAL	INSTRUCTED
TOTAL DEPTH 771	TUBING DEPTH	SHOTS/FT	SURFACE PIPE ANNULUS LONG		
PBD 771	TUBING WEIGHT 684.77	OPEN HOLE	STRING		
CASING SIZE 8 5/8	TUBING CONDITION		TUBING		

CASING DEPTH	730	TREATMENT VIA	TYPE OF TREATMENT	TREATMENT RATE
CASING WEIGHT 2415	PACKER DEPTH		<input checked="" type="checkbox"/> SURFACE PIPE	BREAKDOWN BPM
CASING CONDITION good			<input type="checkbox"/> PRODUCTION CASING	INITIAL BPM
			<input type="checkbox"/> SQUEEZE CEMENT	FINAL BPM

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 Rig up, safety meeting, Psitest, circ 40 BBLs KEL H2O, 2nd 10w/ Dye, mix Pump 326 SKs cement at 30% Excess at 1.27 yield at 152 lbs or until cement stops ns. Release Plug, Disp 48.6 BBLs H2O Bump Plug at 150psi over Lift Psi, wait 5 min Release Psi, work up Rig Down

Arrived w/ 575 SKs cement 4 gal KEL 16oz Dye 73.6 BBLs slurry

JOB SUMMARY
DESCRIPTION OF JOB EVENTS safety meeting, 4:35 pm circ 4:45 pm cement 4:57 pm
Drop Plug 5:20 pm Disp 5:20 pm
16 BBLs at 4.0 BBLs/m 5:24 pm 160 psi used 20% Excess
20 BBLs at 4.0 BBLs/m 5:27 pm 280 psi used 30 SKs cement
30 BBLs at 4.0 BBLs/m 5:32 pm 350 psi 68 BBLs slurry
40 BBLs at 2.5 BBLs/m 5:35 pm 350 psi
3.4 BBLs at 5:37 pm 1.0 BBLs/m 310 psi
Bump Plug 5:37 pm 470 psi

Lift at 274 SKs cement 3 gal KEL 6oz Dye 13 BBLs Back 18

Page Foster

WSS

5-25-11

AUTHORIZATION TO PROCEED

TITLE

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.