



# BISON

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

## Invoice

| Date      | Invoice # |
|-----------|-----------|
| 1/24/2013 | 11689     |

| Bill To   |
|---|
| Noble Energy Inc.<br>Attn: Accounting<br>1625 Broadway Ste 2000<br>Denver, CO 80202 |

| Location             | Well Name & No.          | Terms  | Job Type |      |        |
|----------------------|--------------------------|--------|----------|------|--------|
| Weld, CO             | Castor LC 25-72HN        | Net 30 | Surface  |      |        |
| Item                 | Description              | Qty    | U/M      | Rate | Amount |
| Pump surface         | PUMP Charge-surface pipe | 1      |          |      |        |
| Discount 15%         | Discount 15%             |        |          |      |        |
| MILEAGE              | Mileage charge           | 420    |          |      |        |
| Discount 15%         | Discount 15%             |        |          |      |        |
| Data Acquisition ... | Data Acquisition Charge  |        |          |      |        |
| Discount 15%         | Discount 15%             |        |          |      |        |
| BFN III Winter ...   | BFN III Blend            | 588    | Sack     |      |        |
| Discount 15%         | Discount 15%             |        |          |      |        |
| KCL Mud Flush        | (BHS 117)                | 5      | qt       |      |        |
| Discount 15%         | Discount 15%             |        |          |      |        |

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 # 11689

LOCATION 115-104

FOREMAN Kirk Kaibaf  
Dario, Pablo, Mario

## TREATMENT REPORT

|                                    |                                |                              |           |            |                |           |
|------------------------------------|--------------------------------|------------------------------|-----------|------------|----------------|-----------|
| DATE<br>1-24-13                    | WELL NAME<br>Caster 105-72 H/N | SECTION<br>2S                | TWP<br>9N | RGE<br>S4W | COUNTY<br>weld | FORMATION |
| CHARGE TO<br>Noble                 |                                | OWNER                        |           |            |                |           |
| MAILING ADDRESS                    |                                | OPERATOR<br>Noble            |           |            |                |           |
| CITY                               |                                | CONTRACTOR<br>H&P 322        |           |            |                |           |
| STATE ZIP CODE                     |                                | DISTANCE TO LOCATION         |           |            |                |           |
| TIME ARRIVED ON LOCATION<br>3:30pm |                                | TIME LEFT LOCATION<br>8:30pm |           |            |                |           |

| WELL DATA                |                  |               | PRESSURE LIMITATIONS      |  |                                  |
|--------------------------|------------------|---------------|---------------------------|--|----------------------------------|
| HOLE SIZE<br>13 3/4      | TUBING SIZE      | PERFORATIONS  | THEORETICAL               |  | INSTRUCTED                       |
| TOTAL DEPTH<br>1445      | TUBING DEPTH     | SHOTS/FT      | SURFACE PIPE ANNULUS LONG |  |                                  |
| PBTD 1399                | TUBING WEIGHT    | OPEN HOLE     | STRING                    |  |                                  |
| CASING SIZE<br>9 5/8     | TUBING CONDITION |               | TUBING                    |  |                                  |
| CASING DEPTH<br>1441     |                  | TREATMENT VIA | TYPE OF TREATMENT         |  | TREATMENT RATE                   |
| CASING WEIGHT<br>3615    | PACKER DEPTH     |               | 1" SURFACE PIPE           |  | BREAKDOWN BPM                    |
| CASING CONDITION<br>good |                  |               | [ ] PRODUCTION CASING     |  | INITIAL BPM                      |
|                          |                  |               | [ ] SOEZE 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 Plug, mixing Rig up, Psi test, Per comm, circ 50 BBS RLL H2O, mix Pump 488 SKS Lead cement at 20% Excess at 13.1 lb at 1.69 yield, mix Pump 100 SKS tail cement at 15.2 lbs at 1.27 yield Release Plug, Disp 108.1 BBS H2O, Bump Plug At 150 Psi over Lift Psi, wait 5 min Release Plug Wash up Rig Down. H2O test OK

Arrived w/ 600 SKS cement 4 gal KCL 146.8 BBS slurry Lead 22.6 BBS slurry Tail

JOB SUMMARY  
DESCRIPTION OF JOB EVENTS: Set Plug, mixing 6:03pm circ 6:31pm cement 6:40pm Stop cement 7:13pm  
Drop Plug 7:14pm Displace 7:14pm  
10 BBS At 6 BBS/m 7:17pm 300psi 108 BBS At 7:35pm 400psi  
20 BBS At 6 BBS/m 7:18pm 300psi Bump Plug At 7:35pm 570psi  
30 BBS At 6 BBS/m 7:20pm 300psi used 20% Excess Lead  
40 BBS At 6 BBS/m 7:22pm 300psi used 488 SKS cement Lead  
50 BBS At 6 BBS/m 7:23pm 330psi 146.8 BBS slurry Lead  
60 BBS At 6 BBS/m 7:25pm 410psi used 100 SKS Tail  
70 BBS At 6 BBS/m 7:27pm 450psi 22.6 BBS slurry Tail  
80 BBS At 6 BBS/m 7:28pm 500psi  
90 BBS At 6 BBS/m 7:30pm 540psi  
100 BBS At 3.5 BBS/m 7:32pm 460psi BBS Bed 33  
LPW/ 12 SKS cement 2 gal 3 gal KCL

M. Sutton  
AUTHORIZATION TO PROCEED

TITLE

1-24-13

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.