



Bison Oil Well Cementing
 1547 Gaylord Street
 Denver, CO 80206

FIELD INVOICE #

90049

FIELD INVOICE

| | | | | |
|--|---|--------------------------|-------------------------------------|------------------------------|
| WELL NO. AND FARM Cook 26G-16HZ | COUNTY Weld | STATE Colorado | DATE 10/23/2015 | Contractor Noble 2 |
| CHARGE TO Anadarko Petroleum Corporation | WELL LOCATION | | | |
| PO Box 4995 | Section 16 | TWP 2N | RANGE 65W | |
| The Woodlands, TX 77387 | DELIVERED TO cr. 41 & cr. 22 | | LOCATION 1 Greeley | CODE |
| | SHIPPED VIA 4024/3210/4007/3106/3105/3204 | | LOCATION 2 cr. 41 & cr.22 | CODE |
| | TYPE AND PURPOSE OF JOB SURFACE | | LOCATION 3 Greeley | CODE |
| | | | WELL TYPE Oil | CODE |

| ITEM | DESCRIPTION | UNITS | | UNIT PRICE | AMOUNT |
|--------------------------|-------------|-------|-------|------------|--------|
| | | QTY. | MEAS. | | |
| PUMP CHARGE | | | | | \$ - |
| SURFACE | | 1 | | | |
| MILLEAGE CHARGE | | | | | |
| Pickup | | 60 | mile | | |
| Truck/Equipment | | 60 | mile | | |
| Truck/Equipment | | 60 | mile | | |
| CEMENT CHARGE: | | | | | |
| BFN III | | 775 | sack | | |
| ADDITIVES CHARGE: | | | | | |
| Red Dye | | 16 | oz | | |
| FLOAT EQUIPMENT: | | | | | |
| RUBBER PLUG - 9 5/8" | | | | | |
| OTHER CHARGES: | | | | | |
| DATA ACQUISITION FEE | | 1 | | | |
| Containment | | 1 | | | |
| Wait Time | | 0 | hour | | |

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%.

TAX

Sean M. Kelly
 Customer or Agent

COOK 26G-16HZ NOBLE 2
 FRANK KINNEY USER ID: CUO741
 CONSULTANT: *Sean Giddings*
 AFE# 2111710 DATE: 10/23/15
 GL CODE: 800/2090

SUBJECT TO CORRECTION
[Signature]
 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 riverside hereof which include the release and indemnity.



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 10/23/2015
 Invoice #: 90049
 API#: 05-123-42237
 Supervisor: Nick

Customer: Anadarko Petroleum Corporation
 Well Name: Cook 26G-16HZ

County: Weld
 State: Colorado
 Sec: 16
 Twp: 2N
 Range: 65W

Consultant: Chris
 Rig Name & Number: Noble 2
 Distance To Location: 30
 Units On Location: 024/3210/4007/3106/3105/320
 Time Requested: 3:30
 Time Arrived On Location: 2:25
 Time Left Location: 7:30

| WELL DATA | Cement Data |
|----------------------------------|--------------------------------|
| Casing Size OD (in) : 9.625 | Cement Name: BFN III |
| Casing Weight (lb) : 36.00 | Cement Density (lb/gal) : 14.2 |
| Casing Depth (ft.) : 1,927 | Cement Yield (cuft) : 1.49 |
| Total Depth (ft) : 1937 | Gallons Per Sack: 7.48 |
| Open Hole Diameter (in.) : 13.50 | % Excess: 20% |
| Conductor Length (ft) : 40 | Displacement Fluid lb/gal: 8.3 |
| Conductor ID : 15.25 | BBL to Pit: 31.0 |
| Shoe Joint Length (ft) : 42 | Fluid Ahead (bbls): 30.0 |
| Landing Joint (ft) : 10 | H2O Wash Up (bbls): 20.0 |
| Max Rate: 7 | Spacer Ahead Makeup |
| Max Pressure: 1250 | 30 bbl dye in second 10 |

| Calculated Results | Pressure of cement in annulus |
|---|--|
| cuft of Shoe 18.23 cuft (Casing ID Squared) X (.005454) X (Shoe Joint ft) | Displacement: 146.50 bbls (Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint) |
| cuft of Conductor 30.53 cuft (Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft) | Hydrostatic Pressure: 1421.55 PSI |
| cuft of Casing 1106.68 cuft (Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length) | Pressure of the fluids inside casing |
| Total Slurry Volume 1155.43 cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing) | Displacement: 812.78 psi Shoe Joint: 30.98 psi Total: 843.76 psi |
| bbls of Slurry 205.78 bbls (Total Slurry Volume) X (.1781) | Differential Pressure: 577.79 psi |
| Sacks Needed 775 sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement) | Collapse PSI: 2020.00 psi Burst PSI: 3520.00 psi |
| Mix Water 138.11 bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42 | Total Water Needed: 334.60 bbls |

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.

Cook 26G-16HZ

