



INVOICE

| | |
|------------|-----------|
| DATE | INVOICE # |
| 10/15/2012 | 3502 |

| |
|---|
| BILL TO |
| TUG HILL OPERATING 550 BAILEY AVE, SUITE 510 FORT WORTH, TX 76107 |

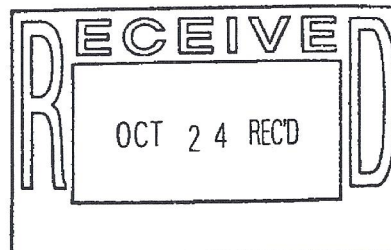
| |
|--|
| REMIT TO |
| EDGE SERVICES, INC. PO BOX 14201 OKLAHOMA CITY, OK 73113 |

| COUNTY | STARTING D... | WORK ORDER | RIG NUMBER | LEASE NAME | Terms |
|---------------|---------------|------------|----------------|-------------|---------------|
| HODGEMAN, ... | 10/15/2012 | 2846 | PATTERSON #172 | HAHN 1-15 H | Due on rec... |

Description

DRILLED 100' OF 30" CONDUCTOR HOLE
 DRILLED 8' OF 76" HOLE
 FURNISHED AND SET 8' X 6' TINHORN CELLAR
 FURNISHED 100' OF 20" CONDUCTOR PIPE
 DRILLED MOUSE HOLE
 FURNISHED 73' OF 16" CONDUCTOR PIPE

TOTAL BID \$20,000.00



Well Name Hahn 1-15H
 AFE No. 12-0160
 ACCNT No. 840.05
 Name Chase Bender
 Signature [Handwritten Signature]

| | |
|-------------------|----------|
| Sales Tax (7.45%) | \$383.46 |
|-------------------|----------|

Thank you for your business.

TOTAL \$20,383.46

Well Starting:

Well Ending:

[View Report](#)

Report Date Starting:

Report Date Ending:

AFEList:



Daily Drilling Report

5/7/2013 12:48 PM

Well Information

| | | | | | | |
|-------------------------|---------------------------|---|--------------------|---------------------------------|------------------------------|--------------------------|
| Well Hahns Inc 1-15H | Country USA | State KS | County Hodgeman | Field Unknown | Report Date 10/16/2012 | Lease 226 FNL 660 FEL |
| AFE Number 12-0160 | API / IPO UWI Hodgeman | Qtr/Qtr, Block, Sec, Town, Range .15,22S,23W | Orig KB Elev (ft) | Ground Elevation (ft) 2344.0 | KB-GRD (ft) -2344.0 | |
| | | | | Spud Date 2/18/2013 | Rig Release Date 3/6/2013 | |

Daily Operations

24 Hour Summary
Drilled and cemented conductor; Used 225 sacks of cement.

24 Hr Forecast
Drill and cement mouse hole.

Operations At Report Time
Reporting.

| | | | |
|-----------------------------------|--|----------------------------|----------------|
| Daily Total (Cost) \$55,944.00 | Cum Daily Total (cost) \$108,562.00 | Total AFE (Cost) \$0.00 | Hole Condition |
|-----------------------------------|--|----------------------------|----------------|

Daily Contacts

| | |
|-------------------------------------|----------------------------------|
| Wellsite Supervisor Chase Bender | Supervisor Phone 501-733-3139 |
|-------------------------------------|----------------------------------|

Time Log

Mud Checks

| | | | | | | | | |
|--------------------------|---------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-----------------|-------------------|--------------|
| Type | Depth (ftKB) | Source | Density (lb/gal) | Funnel Viscosity (s/qt) | Filtrate (mL/30min) | | | |
| HTHP Filtrate (ml/30min) | Mud Lost Hole (bbl) | Mud Lost (Surf) (bbl) | PV(cp) | YP (lb/100ft ²) | pH | | | |
| Vis 6rpm | Lime (lb/bbl) | Gel 30 min (lb/100ft ²) | Gel 30 min (lb/100ft ²) | Gel 10 sec (lb/100ft ²) | Gel 10 min (lb/100ft ²) | | | |
| Calcium (mg/L) | Ca CL (wt%) | Solids (%) | LGS (%) | Sand (%) | Percent Oil (%) | Oil Water Ratio | Electric Stab (V) | MBT (lb/bbl) |

Bit Record

BHA

Drilling Parameters

| | | | | | |
|--------------------------------|------------------|---------------------------------|-----------------------------------|---------------------|-----------------|
| Start Depth (ftKB) | End Depth (ftKB) | Cum Depth Drilled (ft) 0 | Total ROP (ft/hr) #Error | Drilling Torque | |
| Motor RPM (rpm) | RPM (rpm) | QGas Inj (ft ³ /min) | Drilling Time (hr) 0.00 | Rotating Time (hr) | Circ. Time (hr) |
| Cum Drilling Time (hr) 0.00 | SPP (psi) | FlowRate (gpm) 0.00 | TFA (incl Noz) (in ²) | Weight on Bit (lbf) | String Wt (lbf) |

Pump Operations

Hydraulic Data

Survey Data