

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

064711

Form ACO-1 June 2009 Form Must Be Typed Form must be Signed All blanks must be Filled

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

| OPERATOR: License # 33711 | | API No. 15 - 15-035-24434-00-00 |
|---|----------------------------------|--|
| Name: B-C Steel, LLC | | Spot Description: |
| 200 N EDV CT | | E2_NW_NW_NE_Sec17_Twp33_S. R6 Fast West |
| Address 2: | ··- | 330 Feet from 🗹 North / 🗌 South Line of Section |
| City: YATES CENTER State: KS | Zip: 66783 + 1280 | Feet from 🗹 East / 🗌 West Line of Section |
| Contact Person: Bert Carlson | | Footages Calculated from Nearest Outside Section Corner: |
| Phone: (620) 625-2999 | | Øne □nw □se □sw |
| CONTRACTOR: License # 33734 | | County: Cowley |
| Name: Hat Drilling LLC | | Lease Name: DARFUS STEWART Well #: 17-2 |
| Wellsite Geologist: Mark Brecheisen | | Field Name: |
| Purchaser: | | Producing Formation: Mississippian |
| Designate Type of Completion: | | Elevation: Ground: 1329 Kelly Bushing: 1337 |
| ✓ New Well Re-Entry | ☐ Workover | Total Depth: 3190 Plug Back Total Depth: |
| Gas D&A E | WD SIOW NHR SIGW SW Temp. Abd. | Amount of Surface Pipe Set and Cemented at: 466 Feet Multiple Stage Cementing Collar Used? Yes No If yes, show depth set: Feet |
| CM (Coal Bed Methane) | | If Alternate II completion, cement circulated from: |
| Cathodic Other (Core, Expl., e | tc.): | feet depth to:w/sx cmt |
| If Workover/Re-entry: Old Well Info as follows: | ows: | |
| Operator: | | Drilling Fluid Management Plan |
| Well Name: | | (Data must be collected from the Reserve Pit) |
| Original Comp. Date: Ori | ginal Total Depth: | Chloride content: 330 ppm Fluid volume: 3000 bbls |
| | Conv. to ENHR Conv. to SWD | Dewatering method used: Evaporated |
| Plug Back: | Plug Back Total Depth | Location of fluid disposal if hauled offsite: |
| Commingled Permit | !#: | Operator Name: |
| | i#: | Lease Name: License #: |
| | t#: | Quarter Sec TwpS. R |
| | 1#: | County: Permit #: |
| | t#: | Permit #. |
| 8/1/2011 8/11/2011 | 9/5/2011 | |
| Spud Date or Date Reached TD Recompletion Date | Completion Date or | |

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

| KCC Office Use ONLY |
|--|
| Letter of Confidentiality Received |
| Date: |
| Confidential Release Date: |
| ☑ Wireline Log Received |
| ☑ Geologist Report Received |
| UIC Distribution |
| ALT I II III Approved by: Described Date: 10/21/2011 |

Side Two



| Operator Name: B-C | Steel, LLC | | Lease N | Name: _ | JARFUS STE | WART | . Well #: <u>17</u> | -2 | |
|--|--|---|--------------|----------------|--------------------|---|---------------------|-----------|-------------------------|
| Sec. <u>17</u> Twp.33 | s. r. <u>6</u> | ✓ East | County | Cowl | ey | | | | |
| time tool open and clos | sed, flowing and shu s if gas to surface te | d base of formations pen it-in pressures, whether s ist, along with final chart(well site report. | hut-in press | sure read | ched static level, | hydrostatic press | ures, bottom i | ole tempe | erature, fluid |
| Drill Stem Tests Taken (Attach Additional St | heats) | Yes No | | | og Formation | (Top), Depth an | d Datum | | Sample |
| Samples Sent to Geold | • | Yes No | | Nam Altamo | | | Тор 2786 | | Datum '54 |
| Cores Taken | | ☑ Yes ☐ No | | Pawne | | | 2798 | | 104 |
| Electric Log Run | | ✓ Yes □ No | | Fort S | | | 2850 | | 54 |
| Electric Log Submitted (If no, Submit Copy) | • | ✓ Yes No . | | 1 | sippian | | 3122 | | 24 |
| | | | | Mulbe | • • | | 2786 | • | 88 |
| List All E. Logs Run: | | | | lexing | * | | 2816 | 28 | 20 |
| Gammy Ray Neutron | Cement bond | | | | shale coal | | 2858 | | 162 |
| | | CASING | RECORD | ✓ Ne | | | | | |
| | | Report all strings set- | | | | on, etc. | | | |
| Purpose of String | Size Hole Drilled | Size Casing Set (In O.D.) | Weig Lbs. | | Setting Depth | Type of Cement | # Sacks Used | | and Percent dditives |
| surface | 9.2500 | 8.675 | 20 | | 466 | cement | 100 | kol-sea | ıl |
| longstring | 6.7500 | 4.500 | 16.60 | | 3190 | quick set | 100 | kol-sea | al |
| | | | | | | | | | |
| | | ADDITIONAL | L CEMENTII | NG / SQL | JEEZE RECORD | | | | |
| Purpose: | Depth Top Bottom | Type of Cement | # Sacks | Used | | Type and F | Percent Additives | 3 | |
| Protect Casing | - | | | | | | | | |
| Plug Back TD Plug Off Zone | | | | | | | | • | |
| | • | | | | <u> </u> | | | | |
| Shots Per Foot | | ON RECORD - Bridge Plug Footage of Each Interval Per | | | | cture, Shot, Cemen nount and Kind of M | | rd | Depth |
| | | | | | | | | | |
| | | | | | | | | | <u> </u> |
| | | | | | | | | | - |
| | | | | | | | <u></u> | | |
| TUBING RECORD: | Size: .8700 | Set At: 3190 | Packer A | t: | Liner Run: | Yes 🗸 No | | | |
| Date of First, Resumed I 10/6/2011 | Production, SWD or El | NHR. Producing Met | thod: Pumpin | 9 🗆 | Gas Lift 0 | ther (Explain) | | | |
| Estimated Production Per 24 Hours | Oll | Bbls. Gas | Mcf | Wat | er Bl | bis. | Gas-Oil Ratio | | Gravity |
| | | l | | | | т | · | | |
| DISPOSITIO | ON OF GAS: | | METHOD OF | _ | _ | | PRODUCTI | ON INTER | VAL: |
| ☐ Vented ☐ Sold | Used on Lease | Open Hole [| Perf. | Dually (Submit | | nmingled mit ACO-4) | | | |
| (If vented, Sub. | mit ACO-18.) | Other (Specify) | | | , , , | ´ _ | | | |



McPherson Drilling Co.

15256 112th Road Winfield, Kansas 67156

Phone/Fax: 620-221-3560

Customer:

Date:

8/3/2011

BC Management Services Corp.

1432 Nighthawk Rd Yates Center, KS 66783

Invoice No.:

20110803

Terms:

Due on receipt

| DESCRIPTION | QTY | RATE | AMOUNT |
|--|-----|----------|----------|
| Lease name: Darfus-Stewart #17-2 TD: 466'; set 466' 8 5/8" casing | 466 | 12.50 | 5,825.00 |
| Cemented with 120 sx pos mix; pumped plug to 440' | 1 | 3,000.00 | 3,000.00 |
| | | | |
| | | | |
| | | | |

Thank you for your business! CK 8762

Bill McPherson CK**8773 ラ
 Total
 \$8,825.00

 Payments/Credits
 \$-6,000.00

 Balance Due
 \$2,825.00

If mailing payment please send to:
McPherson Drilling Co.
PO Box 41
Burden, KS 67019



REMIT TO

Consolidated Oil Well Services, LLC Dept. 970 P.O. Box 4346 Houston, TX 77210-4346

MAIN OFFICE P.O. Box 884 Chanute, KS 66720 620/431-9210 • 1-800/467-8676 FAX 620/431-0012

INVOICE

Invoice #

243485

Invoice Date: 08/18/2011 Terms:

Page

DARFUS STEWART 17-2

31417

17-338-6E

08-12-11

KS

B.C. STREL GAS LLC 209 N. FRY P.O. BOX 326 YATES CENTER KS 66783 (620) 625-2999

Part Number Description Qty Unit Price 1126A THICK SET CEMENT 100.00 18.3000 1830.00 1110A KOL SEAL (50# BAG) 500.00 .4400 220.00 1123 CITY WATER .0156 3000.00 46.80 4404 4 1/2" RUBBER PLUG 45,0000 1.00 45.00 Description Hours Unit Price Total 437 80 BBL VACUUM TRUCK (CEMENT) 4.00 90.00 360.00 479 TON MILEAGE DELIVERY 385.01 1.26 485.11 520 CEMENT PUMP 1.00 975.00 975.00 520 EQUIPMENT MILEAGE (ONE WAY) 70.00 4.00 280.00

2141.80 Freight: .00 Tax: Parts:

145.64 AR

4387.55

Labor:

.00 Misc:

.00 Total:

4387.55

Sublt:

.00 Supplies:

.00 Change:

.00

Signed

Date



entered entered

TICKET NUMBER 31417

LOCATION Eureka, KS

FOREMAN Shannon Feck

PO Box 884, Chanute, KS 66720 620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT

CEMENT ADI # 15-035-24434

| CUSTOMER B.C. Styl LLC Hat TRUCK# DRIVER TRUCK# DRIVER MAILING ADDRESS MAILING ADDRESS 209 N. Fry CITY STATE STATE STATE STATE STATE STATE COMPAN | 12V-101-0210 1 | 0, 000 40, 00, 0 | • | | | ·· <u>////</u> | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | · • · | |
|--|----------------|------------------|-------------|---|------------------|----------------|---|-------------------|----------|
| PUSTOMER B.C. Stell LLC AAILING ADDRESS 209 N. Fry STATE ZIP CODE Yates Center KS 66783 HOLE SIZE 636 HOLE DEPTH 3190 CASING SIZE & WEIGHT 45/2 CASING DEPTH 3170 SILURRY WEIGHT 13.6 SLURRY VOL 40 8bl WATER GAUSK 9.0 CEMENT LEFT In CASING MORE DISPLACEMENT 48.5 8bl DISPLACEMENT PSI 900 MIX PSI 1300 bump Plug RATE SBM REMARKS: Rig up to 45" Casing Break circulation with 10 Bbl water, mixed 100 SKS appear Thick set cement with 54 Kol-sea/SK @ 13.6 5 Shut down wash out pump a lines. Release 45" Rubber Plug & displace with 48.5 Bb Water. Final Pumpino Pressure of 900 psi, bimped Plug to 1300psi. Wait two minutes release pressure. Plug held good. Job Complete | DATE | CUSTOMER# | WEL | L NAME & NUM | BER | SECTION | TOWNSHIP | RANGE | COUNTY |
| CONTINUED B.C. Stall LLC WAILING ADDRESS 209 N. Fry STATE ZIP CODE Yates Center KS 66783 JOB TYPE 1/3 01 HOLE SIZE 64 HOLE DEPTH 3190 CASING SIZE & WEIGHT 42 CASING DEPTH 3170 DRILL PIPE TUBING SLURRY WEIGHT 13.4 SLURRY VOL 40 8bl WATER Gallsk 9.0 CEMENT LEFT In CASING 1000 DISPLACEMENT 48.5 8bl DISPLACEMENT PSI 900 MIX PSI 1300 bump Plug RATE 58PM REMARKS: Rig up to 42" Casing Break circulation with 10 Bbl Water, mixed 100 SKs attempt 110 Ks. Set Dement with 54 Kol-Seal/SK @ 13.6 Shut down was hout pump d lines. Release 42" Rubber Plug & dis place with 48.5 Bb Water. Final Pumping Pressure of 900 Bi, Dimped Plug to 1300psi. Wait two minutes release Pressure. Plug held good. Job Complete | 8-12-11 | 1162 | Darfus | Stewart | 17-2 | /7 | 335 | | Cowley_ |
| MAILING ADDRESS 209 N. Fry STATE ZIP CODE Yates Center K5 66783 JOB TYPE 1/5 0il HOLE SIZE 64" HOLE DEPTH 3170 SLURRY WEIGHT 13.6" SLURRY VOL 40 8bl DISPLACEMENT 48.5 8bl DISPLACEMENT 48.5 8bl DISPLACEMENT PSI 900 MIX PSI 1300 bump Plug RATE 58PM REMARKS: Rig up to 42" casing Break circulation with 10 Bbl water, mited 100 5Ks although Thick Set Cement with 54" Kol-sel/sk @ 13.6 4". Shut down Wash out Pump a lines. Release 42" Rubber Plug & dis Place with 48.5 Bbl Water. Final Pumping Pressure of 900 psi, bumped Plug to 1300psic Weit two minutes release pressure. Plug held good. Job Complete | CUSTOMER | • • | | | T | 44 | the state of | | المسروق |
| 209 N. Fry CITY STATE TUBING TUBING OTHER STATE STA | 7 | 3.C. SHJ | LLC | | Hat | | | TRUCK# | DRIVER |
| STATE ZIPCODE Yates Center KS 66783 JOB TYPE 1/5 0il HOLE SIZE 634" HOLE DEPTH 3190' CASING SIZE & WEIGHT 4½ CASING DEPTH 3170 DRILL PIPE TUBING OTHER SLURRY WEIGHT 13.6" SLURRY VOL 40 8bl WATER Gallak 9.0" CEMENT LEFT IN CASING MOME DISPLACEMENT 48.5 8bl DISPLACEMENT PSI 900 MIX PSI 1300 bump Plug RATE 580M REMARKS: Rig up to 4½" Casing Break circulation with 10 Bbl water, mived 100 SKS 84000 Thick set Cement with 54 Kol-seal/sk @ 13.64. Shut down Wash out Pump & lines. Release 4½" Rubber Plug & displace with 48.5 Bb Water. Final Pumping Pressure of 900 psi, bumped Plug to 1300psi, Wait two Minutes release Pressure. Plug held good. Job Complete | MAILING ADDRI | ESS | | | DELL | 520 | Allen B | | .] |
| JOB TYPE 1/5 0il HOLE SIZE 64" HOLE DEPTH 3190' CASING SIZE & WEIGHT 42 CASING DEPTH 3170 DRILL PIPE TUBING OTHER SLURRY WEIGHT 13.6" SLURRY VOL 40 8bl WATER GAILSK 9.0 CEMENT LEFT IN CASING NOME DISPLACEMENT 48.5 8bl DISPLACEMENT PSI 900 MIX PSI 1300 bump Play RATE 58PM REMARKS: Rig up to 42" Casing, Break circulation with 10 Bbl water, mixed 100 SKS phase Thick set Cement with 5th Kol-seal/SK @ 13.6 th Shut down Wash out Pump & lines. Release 42" Rubber Plug & displace with 48.5 Bb Water. Final Pumping Pressure of 900 pi, bumped Plug to 1300psie Wait two Minutes release Pressure. Plug held good. Job Complete | | 209 | N. Fr | Υ | | 479 | calin H | | |
| JOB TYPE 1/5 0il HOLE SIZE 634" HOLE DEPTH 3190' CASING SIZE & WEIGHT 42 CASING DEPTH 3170 DRILL PIPE TUBING OTHER SLURRY WEIGHT 13.6" SLURRY VOL 40 8bl WATER GAISK 9.0 CEMENT LEFT IN CASING MONE DISPLACEMENT 48.5 8bl DISPLACEMENT PSI 900 MIX PSI 1300 bump Play RATE 58PM REMARKS: Rig up to 42" Casing Break circulation with 10 Bbl Water, mixed 100 SKS attach Thick set Cement with 5th Kol-Seal/SK @ 13.6 th Shut down Wash out Pump & lines. Release 42" Rubber Play & dis place with 48.5 Bbl Water. Final Pumping Pressure of 900 psi, bumped Play to 1300psi. Wait two minutes release Pressure. Play held good. Job Complete | CITY | | STATE | L | 7 | 437 | Jim M | | |
| JOB TYPE 1/5 0il HOLE SIZE 624" HOLE DEPTH 3190' CASING SIZE & WEIGHT 42 CASING DEPTH 3170 DRILL PIPE TUBING OTHER SLURRY WEIGHT 13.6" SLURRY VOL 40 8bl WATER GAILSK 9.0 CEMENT LEFT IN CASING MONE DISPLACEMENT 48.5 8bl DISPLACEMENT PSI 900 MIX PSI 1300 bump Plug RATE 58PM REMARKS: Rig up to 42" Casing, Break circulation with 10 Bbl Water, mixed 100 SKS Remark Set Cement with 5# Kol-Seal/SK @ 13.6 #. Shut down Wash out Pump & lines. Release 42" Rubber Plug & dis place with 48.5 Bbl Water. Final Pumping Pressure of 900 psi, bumped Plug to 1300psis. Wait two minutes release pressure. Plug held good. Job Complete | Yate | s Center | l KS | 66783 | | | | | |
| CASING DEPTH 3170 DRILL PIPE TUBING OTHER SLURRY WEIGHT 13.6 SLURRY VOL 40 8bl WATER gallsk 9.0 CEMENT LEFT In CASING MONE DISPLACEMENT 48.5 Bbl DISPLACEMENT PSI 900 MIX PSI 1300 bump Plug RATE 5BPM REMARKS: Rig up to 42" casing, Break circulation with 10 Bbl Water, mived 100 SKS BARGO Thick Set Cement with 5th Kol-Seal/SK @ 13.6 th. Shut down Wash out Pump & lines. Rolease 42" Rubber Plug & displace with 48.5 Bbl Water. Final Pumping Pressure of 900 psi, bumped Plug to 1300psi. Wait two minutes release pressure. Plug held good. Job complete | | | HOLE SIZE 6 | 24" | _ _ HOLE DEPT | H 3190' | CASING SIZE & \ | WEIGHT <u>4</u> 2 | |
| SLURRY WEIGHT 13.6 SLURRY VOL 40 861 WATER GALLSK 9.0 CEMENT LEFT In CASING MORE DISPLACEMENT 48.5 861 DISPLACEMENT PSI 900 MIX PSI 1300 bump Phy RATE 58PM REMARKS: Rig up to 45" casing, Break circulation with 10 Bbl water, mixed 100 sks appear Thick set Cement with 5th kol-seal/sk @ 13.6 th. Shut down Wash out Pump & lines. Rolease 45" Rubber Plug & displace with 48.5 Bb Water. Final Pumping Pressure of 900 psi, bumped Plug to 1300psi. Wait two minutes release pressure. Plug held good. Job complete | CASING DEPTH | 3170 | | | TUBING | | | | - |
| DISPLACEMENT 48. Bb DISPLACEMENT PSI 900 MIX PSI 1306 bump 1 mg RATE STATE REMARKS: Rig up to 4½" casing, Break circulation with 10 Bb water, mived 100 sts attent Thick set Cement with 5th tol-seal/st @ 13.6th. Shut down wash out pump a lines. Rolease 4½" Rubber Plug & displace with 48,5 Bb Water. Final Pumping Pressure of 900 psi, bumped Plug to 1300psi. Wait two minutes release pressure. Plug held good. Job complete | SI LIBBY WEIGH | HT /3.6 4 | SLURRY VOL | 40 8b/ | | sk 9.0 | CEMENT LEFT In | CASING 10 | le |
| REMARKS: Rig up to 4½" casing Break circulation with 10 Bbl water, mited 100 sks attage Thick set Coment with 5# Kol-seal/sk @ 13.6 #. Shut down wash out pump a lines. Release 4½" Rubber Plug & displace with 48,5 Bb water. Final Pumping Pressure of 900 psi, bumped Plug to 1300psi. Wait two minutes release pressure. Plug held good. Job complete | OLDINA FILIDA | TUQ 5 BH | DISDI ACEME | IT PSI 900 | MIX PSI | 300 bump Plu | RATE 58PM | | |
| 100 sks attino Thick set Cement with 5th Kol-seal/sk @ 13.6th. Shut down wash out pump a lines. Release 4's" Rubber Plug & displace with 48.5 Bb water. Final Pumping Pressure of 900 psi, bumped Plug to 1300psi. Wait two minutes release pressure. Plug held good. Job complete | DISPLACEMENT |) | 1/2" | cina Rec | k | Hadim will | ID Rhl | Water | mixed |
| wash out pump a lines. Rolease 42" Rubber Plug & displace with 48,5 Bb Water. Firm Pumping Pressure of 900 psi, bumped Plug to 1300psi. Wait two minutes release pressure. Plug held good. Job complete | | of to | 72 Ca | si-q, Ulca | | r# Valc | | | |
| Water. Final Pumping Pressure of 900 psi, bumped flug to 1300psi. Wait two minutes release pressure. Plug held good. Job complete | 100 SKS | antura 1 | nick set | <u>Cement</u> | WITH | LL Oli | 1 1 1 0 | <u> </u> | UGS DI |
| Water. Final Pumping Pressure of 900 psi, bumped flug to 1300psi. Wait two minutes release pressure. Plug held good. Job complete | wash o | OMP PUMP | a lines. | Kolease | 43 KU. | poer riug | + ais place | WIFE | 70,- 00/ |
| minutes release pressure. Plus held good. Job complete | water. | Final Du | mpino Pri | essure of | 900 Psi. | bumped 1 | DIV9 to 131 | opsia Wal | + two |
| | Marian da e | selonce 1 | Dreceire | Olus hold | and. | Tob Co | molete | <u> </u> | |
| "Thanks Shannon & Cyrw" | PHI HUTE 3 | | | , , , , , , , , , , , , , , , , , , , | J | | T | | |
| "Thanks Shannon & Crew" | | | | | | | | | -, |
| Thanks Shannon & Crew" | | | | | | | | | |
| Manks Unannon & Cyrw | | | | 1 | <u> </u> | 1 / | - , -/ | | |
| | | | | nanKs | Unan | non & Cyr | <u>.w</u> | | |

| ACCOUNT | QUANITY or UNITS | DESCRIPTION of SERVICES or PRODUCT | UNIT PRICE | TOTAL |
|--------------|------------------|------------------------------------|--------------------|---------------------|
| 5401 | 1 | PUMP CHARGE . | 975.∞ | 975.00 |
| 5406 | 70 | MILEAGE | 4.00 | 290.00 |
| 1126 A | 1'00 SKS | Thick Set Cement | 18, 30 | 1830.00 |
| 1110 A | 500# | Kol-Seal @ 5 \$/SK | , 44 | 2 20.00 |
| 5407A | 5.5 Tons | Ton-mileage bulk truck | 1. 26 | 485. " |
| 5502 C | H Hours | go Bbl Vac Truck | 90.00/ Hour | 360.00 |
| 1/23 | 3000 gal | city Water | 15.00/1000 | 46.80 |
| 4404 | | 4's Rubber Plug | 45.00 | 45.00 |
| | | | | |
| | | | | |
| | | | Sub total | 4241.91 |
| | | | 6.8% SALES TAX | 145. W |
| Revin 3737 | 2 × 1/0+ | = २४३५१४८ | ESTIMATED TOTAL | 4387. ⁵⁵ |
| AUTHORIZTION | 940 A Walon | TITLE | DATE | - // |

ITILE DATE 8-72-77

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

Geological Report

Darfus Stewart #17-2 330' FNL; 2127' FEL NW NW NE; Sec. 17, T33S; R6E Cowley County, KS API # 035-24434-00-00

Operator:

B-C Steel, LLC., C/O Bert Carlson, 209 North Fry, Yates Center, KS,

66783. (License # 33734)

Drilling Contractor:

Hat Drilling. Midway Mud Rotary Rig #2.

Wellsite Geologist:

Mark Brecheisen.

Dates Drilled:

August 9th, 2011 to August 11th, 2011.

Size Hole:

8 1/4"

Total Depth:

3190'

Elevation:

1337'

Drilling Fluid:

Freshwater, bentonite and additives.

Surface Casing:

300' of 8-5/8" casing cement to surface.

Formation Tops:

Formation tops were picked from cased-hole electric logs.

Field Name:

Wilson

Status:

Oil Well.

Oil Shows:

Altamont Limestone @2786'-2754'. Pawnee Limestone @ 2798'-2804'. Fort Scott Limestone @2850'-2854'

Mississippian Chert (chat) @3122'-3124' & 3137'-3139'

Gas Shows:

Mulberry Coal @ 2786'-2788', 56 unit gas kick on hotwire.

Pawnee Limestone @ 2798'-2804', 33 unit gas kick on hotwire.

Lexington Coal and Shale @ 2816'-2820', 48 unit gas kick on hotwire. Fort Scott Limestone @ 2850 '-2854', 66 unit gas kick on hotwire. . Mulky Shale and Coal @ 2858'-2862'34 unit gas kick on hot wire.

Water Encountered: No appreciable water encountered upon drilling.

On Location:

August 09, 2011, @ 11:30 AM: Left location @ TD. Well Depth of 3190'

@11:23 AM. August 11th, 2011.

- 1800*-2580*: Samples examined for oil content no sample description available. No oil content observed within this interval; no petroliferous odor/show.
- 2580'-2590': Limestone, dusky yellowish brown to olive gray, fine crystalline, fairly hard, sucrosic. No petroliferous odor/show.
- 2590'-2600': South Mound Shale, black, carbonaceous in part; trace of thinly banded vitrain coal present.
- 2603'-2625': Shale, medium dark gray with traces of red shale present, soft, silty to sandy with few scattered sandstone laminae present.
- 2625'-2637': Limestone, olive gray, fine crystalline, hard, dense, slightly sucrosic, mottled, no visible porosity. No fluorescence, no petroliferous odor/show.
- 2637'-2649': Shale, dark gray with traces of red shale present. Soft, greasy to silty/sandy. Traces of black shale present. Calcareous in part, carbonaceous in part

Top of Lenapah Limestone @ 2649'(-1329')

- 2649'-2652': Limestone, olive gray, fine crystalline, hard, dense, sucrosic. No fluorescence, no petroliferous odor/ show.
- 2652'-2666': Cleveland Sandstone, light to medium gray, very fine grained, well sorted with sub-angular to sub-rounded grains, fairly friable, argillaceous, no visible oil staining present.
- 2666'-2722': Shale, medium to medium dark gray, silty/sandy, fairly hard.

Top of Altamont Limestone @ 2722'(-1385')

- 2722'-2770': Limestone, dark yellowish brown to olive gray, fine crystalline, good friability, good inter-crystalline porosity in some samples, hard, dense in basal section. A drilling break was encountered from 2744'-2754', a description of that interval is as follows:
 - Limestone, light brown to olive gray, fine crystalline, good friability, pinpoint and vugular porosity on samples with light brown oil stain, saturation is uneven, fair to good milky blue cut with good residual oil show to tray under ultraviolet light. Wet acid cut left visible oil in dimple tray under white light indicating good oil saturation. Overall, 60% mottled, bright yellow hydrocarbon fluorescence, excellent petroliferous odor/good show.

It should be noted that a strong petroliferous odor was observed on the drilling floor when this interval was cut. No appreciable gas kick was observed after drilling this interval.

2770'-2786': Shale, medium to medium dark gray with traces of red shale present. Soft and greasy to silty/sandy.

2786'-2788': Mulberry Coal, thinly banded vitrain coal, < 10% flat cleat faces, many conchoidal fractures present. A 56 unit gas kick was observed, on the hotwire, after drilling this interval.

2788'-2790': Shale, dark gray with traces of white underclay present.

Top of Pawnee Limestone @ 2790'(-1453')

2790'-2816': Limestone, dark to dusky yellowish brown, fine crystalline, mottled. very hard, dense, no visible porosity, sucrosic in part. A drilling break was encountered from

2798'-2804', A description of that interval is as follows:

• Limestone, dark yellowish brown, fine crystalline, pinpoint and vugular porosity on 40% to 50% of samples. These samples exhibited mottled to even light brown oil stain on their surfaces, saturation was mottled to even. When tested for oil content, samples showed a slow, uneven, fair to good milky blue cut; oil visible in dimple tray with wet acid cut, good residual show to tray after cut when examined under ultraviolet light. Strong petroliferous odor/good show.

A 36 unit gas kick was observed on the hot wire after drilling this interval.

2816'-2820': Lexington Shale, black, fissile, and carbonaceous in part. A 48 unit gas kick was observed, on the hot wire, after drilling this interval.

2820'-2827': Shale, dark gray, hard, and calcareous in part.

Top of Fort Scott Limestone @ 2827'(-1490')

2827'-2847': Limestone, pale yellowish brown, fine crystalline, very friable, mottled in part. good inter-crystalline porosity. A drilling break was encountered from 2850'-2854': a description of that interval is as follows:

 Light brown oil stain on many sample surfaces, staining is mottled to mostly even, saturation is poor to fair: slow, uneven, fair milky blue cut: fair residual oil show to tray after cut when examined under ultraviolet light. No residual show to tray in white light. 25% mottled to even bright yellow hydrocarbon fluorescence. Good petroliferous odor/fair show.

A 66 unit gas kick was observed on the hot wire, after drilling this interval.

2847'-2854': Summit Shale, dark to black, carbonaceous in part.

2854'-2858': Limestone, pale yellowish brown, fine crystalline, fairly friable, sucrosic. 60% even medium bright yellow hydrocarbon fluorescence.

2858'-2862': Mulky Shale and Coal, shale dark gray to black, carbonaceous, pyritic with traces of thinly banded vitrain coal present. A 34 unit gas kick was observed, on the hot wire, after drilling this interval.

Top of the Cherokee Group @ 2862'(-1525')

2862'-2916': Shale medium dark gray, silty/sandy, micaceous in part, fairly soft, traces of sandstone present: medium dark gray, very fine grain, well sorted with subangular to subrounded grains, very friable micaceous.

argillaceous. Trace of even variegated, yellow mineral fluorescence. No petroliferous odor/show.

2916'-2942': Shale, medium to dark gray with traces of black shale and coal present. Fissile in part, pyritic in part, silty/sandy in part, traces of sandstone present-medium dark gray, very fined grain, micaceous argillaceous, slight oil staining on surface of few samples, no saturation. Overall trace off mottled, very dull yellow hydrocarbon fluorescence. No petroliferous odor/show.

Top of the Ardmore (Verdigris) Limestone @ 2942' (-1605')

- 2942'-2944': Limestone, very dusky red, very fine crystalline, extremely hard, dense, no visible porosity. Trace of mottle dull yellow fluorescence, no petroliferous odor/show.
- 2944'-2949': Shale medium dark gray to black, carbonaceous in part, gas bubbles observed popping out of some black shale samples. No gas show on hot wire.
- 2949'-3119': Shale, medium to dark gray with traces of pale green, red and black present. Soft, greasy to silty/sandy. Few traces of interbedded limestone and sandstone present. Pyrite traces observed with black shale. Overall no fluorescence, no petroliferous odor/show.

Top of the Mississippian @ 3119' (-1782')

- 3119'-3140': Shale (40%), medium to dark gray pyritic in part, traces of pale green and dusky blue shale present. Limestone (35%) pale yellowish brown, fine crystalline, fairly friable glauconitic. Chert (25%) yellowish gray to light brown, very hard, amorphous. Oil shows from 3122'-3124' and 3137'-3139' are described as follows:
 - Chert amorphous for most samples containing oil, few tripolitic samples present with pinpoint and vugular porosity present.
 Samples drusy in appearance with light brown pinpoint to mottled oil stain present. Samples containing oil represent a small percentage of total chert samples. Samples exhibit slow, uneven poor milky blue cut. Samples exhibit fair residual show to tray under ultraviolet light. Overall 20% pin point to mottled bright yellow mineral and hydrocarbon fluorescence. Weak petroliferous odor/poor show.

Geologist

No gas show detected after drilling this interval. Mississippian is nonviable for commercial production due to poor oil content and low porosity.

3140'-3190': Limestone (60%), olive gray fine crystalline, very hard, dense, sucrosic, no visible porosity. Shale (40%), medium dark gray to dark gray, soft, greasy, calcareous. 5% trace, even, dull yellow mineral fluorescence. No petroliferous odo r/show.

T.D. @ 3190' @ 11:23 pm, August 11th, 2011