

Kansas Corporation Commission Oil & Gas Conservation Division

1060313

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 # | API No. 15 |
|--|---|
| Name: | Spot Description: |
| Address 1: | SecTwpS. R |
| Address 2: | Feet from North / South Line of Section |
| City: | Feet from _ East / _ West Line of Section |
| Contact Person: | Footages Calculated from Nearest Outside Section Corner: |
| Phone: () | □NE □NW □SE □SW |
| CONTRACTOR: License # | County: |
| Name: | Lease Name: Well #: |
| Wellsite Geologist: | Field Name: |
| Purchaser: | Producing Formation: |
| Designate Type of Completion: | Elevation: Ground: Kelly Bushing: |
| New Well Re-Entry Workover | Total Depth: Plug Back Total Depth: |
| Oil WSW SWD SIOW Gas D&A ENHR SIGW OG GSW Temp. Abd. CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.): | Amount of Surface Pipe Set and Cemented at: Feet Multiple Stage Cementing Collar Used? |
| Operator: | |
| Well Name: | Drilling Fluid Management Plan (Data must be collected from the Reserve Pit) |
| Original Comp. Date: Original Total Depth: Deepening Re-perf. Conv. to ENHR Conv. to SWD Conv. to GSW | Chloride content: ppm Fluid volume: bbls Dewatering method used: |
| Plug Back: Plug Back Total Depth | Location of fluid disposal if hauled offsite: |
| Commingled Permit #: | Operator Name: |
| Dual Completion Permit #: | Lease Name: License #: |
| SWD Permit #: | Quarter Sec Twp S. R |
| ☐ ENHR Permit #: ☐ GSW Permit #: | County: Permit #: |
| Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date | |

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: Date: | | | | | |

Side Two



| Operator Name: | | | Lease N | Name: | | | Well #: | | |
|--|--|---|--------------------------|-------------|------------------|---|-------------------|-----------|----------------|
| Sec Twp | S. R | East West | County | : | | | | | |
| INSTRUCTIONS: Show time tool open and clost recovery, and flow rates ine Logs surveyed. Att | ed, flowing and shut- if gas to surface tes | in pressures, whether at, along with final chart | shut-in press | sure reache | ed static level, | hydrostatic press | sures, bottom h | ole tempe | erature, fluid |
| Orill Stem Tests Taken (Attach Additional Sh | reets) | Yes No | | Log | Formation | n (Top), Depth an | d Datum | □ s | ample |
| Samples Sent to Geolo | , | ☐ Yes ☐ No | | Name | | | Тор | D | atum |
| Cores Taken Electric Log Run Electric Log Submitted (If no, Submit Copy) | | Yes No Yes No Yes No | | | | | | | |
| List All E. Logs Run: | | | | | | | | | |
| | | CASING Report all strings set | G RECORD | New | Used | on, etc. | | | |
| Purpose of String | Size Hole Drilled | Size Casing Set (In O.D.) | Weig | ght | Setting Depth | Type of Cement | # Sacks Used | | nd Percent |
| | Dillied | Set (III O.D.) | LDS. / | 1 1. | Бериі | Cement | Osed | Ac | luitives |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | ADDITIONA | L CEMENTIN | NG / SQUEE | EZE RECORD | | | | |
| Purpose: —— Perforate —— Protect Casing —— Plug Back TD | Depth Top Bottom | Type of Cement | # Sacks | Used | | Type and F | Percent Additives | | |
| Plug Off Zone | | | | | | | | | |
| Shots Per Foot | PERFORATIO Specify Fo | N RECORD - Bridge Plu ootage of Each Interval Pe | gs Set/Type erforated | | | cture, Shot, Cement nount and Kind of Ma | | d | Depth |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| TUBING RECORD: | Size: | Set At: | Packer A | t: I | Liner Run: | ☐ Yes ☐ No | | | |
| Date of First, Resumed P | roduction, SWD or ENH | R. Producing Me | thod: | g Ga | as Lift O | ther (Explain) | | | |
| Estimated Production Per 24 Hours | Oil B | bls. Gas | Mcf | Water | Bk | ols. (| Gas-Oil Ratio | | Gravity |
| DISPOSITION | N OF GAS: | | METHOD OF | | | | PRODUCTIO | ON INTERV | AL: |
| Vented Sold (If vented, Subm | Used on Lease | Open Hole | Perf. | U Dually Co | | nmingled nit ACO-4) | | | |
| (To.noa, Gabii | | Other (Specify) _ | | | | [| | | |

Well Report SHULTZ 4M-2

API Number: W884
Project Area: SYCAMORE AFE Amount: \$0.00

KS MONTGOMERY

31S - 14E - 2 771N - 309W

| Activity Date | Activity Description |
|----------------------|--|
| 4/26/2011 | MIRU Thornton, drilled 11" hole 21.5' deep, RIH W/1 joint 8-5/8" surface casing. Mixed 4 sx type 1 cement, dumped down the backside. SDFN. |
| 4/27/2011 | TIH W/ 6 3/4" BIT, HAMMER AND DRILL PIPE, DRILLED OUT FROM SURFACE TO TD OF 1286'. TAKING SAMPLES FROM ZONES OF INTREST RD DRILL MOVE IN OSAGE WIRELING PULLED LOGGS FROM LOGGER DEPTH TO SURFACE JOB COMPLETE AWAITING DECISION ON RUNNING PIPE. |
| 4/29/2011 | MI PU, RIH w/ 30 JOINTS 4-1/2" CASING, RIG UP CONSOLIDATED, BREAK CIRCULATION WITH 35 BBLS FRESH WTR PUMP 10 SKS GEL FLUSH W/HULLS, 20 BBLS WATER SPACER, 15 BBLS CAUSTIC PRE-FLUSH, 10 BBLS DYE WTR. MIXED 135 SKS THKSET CMT W/8#KOL-SEAL,1/8# PHENOSEAL PER SK.,1/4% CFL-115, 1/4% @ 13.4#/GAL YIELD 1.75. WASHED OUT PUMP AND LINES SHUTDOWN, RELEASE PLUG, DISPLACE W/20.3 BBLS FRESH WTR. FINAL PUMPING PRESSURE 700 PSI, BUMP PLUG TO 1200 PSI. WAIT 2 MINUTES, RELEASE PRESSURE, FLOAT HELD GOOD CEMENT RETURNS TO SURFACE, 44 BBLS SLURRY, 7 BBLS TO PIT. RD MOL. |
| | CSG STRING: 14.26' SUB 30 JOINTS 4-1/2" FROM SUNRISE LANDED CSG @ 1279.46' PBTD - 1279.46' TD 1286' |
| 5/23/2011 | MIRU Osage Wireline & Consolidated Oil Well Services. Osage RIH and ran CBL-CCL/VDL from 1276' to 0'. Bond looks good all depths. Osage RIH and perforated Cattleman from 1198' to 1204 with 2 spf, 180 degree, 25 gm. TOTAL 13 holes Consolidated spotted 100 gallons 15% HCL across Cattleman perfs. Spearheaded 200 gals additional (300 total) followed by 75 bbls PAD (25 ppt gelled city water with 2% KCL & biocide) and followed by 3,500 lbs 16/30 and 3,700 lbs 12/20 sand at 0.25 to 3 ppg concentrations. Flushed with 19 bbls water. Breakdown 1228 psig, ISIP 605 psig, 5 min 456 psig, 10 min 323 psig, 15 min 199 psig. ATP 890 psig, MTP 1074 psig, ATR 20 BPM, MTR 20 BPM. |
| | TOTALS: 300 gallons 15% HCL, 7,200 lbs 16/30 & 12/20 sand, 244 bbls gelled water |
| | Shut well in overnight to allow gel to break. Rig down Osage and Consolidated. |

Wednesday, July 27, 2011 Page 1 of 2

5/24/2011 TIH W/ TBG WASHED 50' OF SAND TO TD SET SN @ 1224 TIH W/ RODS & PMP SPACED ROD STRING HUNG ON JACK

TBG STRING 2 3/8 TBG - 40 SUBS - 0 SN @ 1224 15' OEMA @ 1239

ROD STRING 3/4 RODS - 48 1-8',1-4' PONY 1 1/2 X 6' BHD W/ GA 1 1/8 X 11' POLISH ROD

Wednesday, July 27, 2011 Page 2 of 2



LOCATION EUICK 145

FOREMAN RICK Ledford

DATE

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

AUTHORIZTION ALP

FIELD TICKET & TREATMENT REPORT

| 620-431-9210 | or 800-467-867 | 6 | | CEMEN. | T API | # 15-125- | 32056-00-0 | 20 |
|--|--|--|--|--------------|--------------|--|-----------------------|---------------------|
| DATE | CUSTOMER# | WELI | NAME & NUMI | BER | SECTION | TOWNSHIP | RANGE | COUNTY |
| 4-29-11 | 4758 | Shult | 2 # 4M-2 | , | 2 | 31 | 142 | MG |
| CUSTOMER | The state of the s | Rivers of State St. | Smalley A.66 | and the last | | | · 南级市场(4)(4) | |
| | Layre Ene | 134 | A STATE FROM THE | 10 3 | TRUCK# | DRIVER | TRUCK# | DRIVER |
| MAILING ADDRE | ESS / | | | | 520 | John | | LUNI XBYT "113 |
| | 10. Box 160 | | | 1304 | 515 | Calin | San Hill Call Charles | |
| CITY | | STATE | ZIP CODE | 200 | | | Ted benusers | 3.670.610.0 |
| 5, | icamore | 123 | mary districts | HARD TO | | The second second | o from Colf | indenti in T |
| JOB TYPE lan | gstring 0 | HOLE SIZE | 63/4" | HOLE DEPTH | 1286 | CASING SIZE & V | VEIGHT 41/2 | 10.37 |
| CASING DEPTH | 1279" | DRILL PIPE | | _TUBING | ALERT OF SET | granical field to granic | OTHER | of and a source |
| SLURRY WEIGH | HT_/3."# | SLURRY VOL_ | 44 Bb) | WATER gal/sl | k_ 8. ° | CEMENT LEFT in | CASING O | e din General Auto- |
| DISPLACEMEN" | т 20.3 вы | DISPLACEMEN | T PSI 700 | MIX PSI /20 | 0 | RATE | Live Service Bu | Double of |
| REMARKS: 5 | afety meet | 2108 - Rig | is to 1 | 1/2" (95,00 | Break C | Trevlation 1 | 1 35 Bb | 1 fresh |
| | | THE RESERVE OF THE PARTY OF THE | The state of the property of the state of th | | | 15 Bb1 cau | | |
| 10 851 | due water. | Mixed) | 35 SKS | thexset | cement is | 18 * Kol-seal) | 15K. 1/9#ph | enospol/sx |
| + 1/470 | CF2-115 @ | 13.4 #/gel. | Washout | purp + /1. | nes, shut a | dour, relasse | Jatch dow | n plug. |
| | | | | | | os PSI. Bur | | |
| | | | | | | to surface = | | |
| pit. | Job complet | e. Rig down | n. 11 - 1 - 1 - 1 | a market to | one like | to the state of th | | S WANTED |
| DESCRIPTION OF A DESCRI | | | | 170316 | | | | |

ACCOUNT **QUANITY or UNITS DESCRIPTION of SERVICES or PRODUCT UNIT PRICE** TOTAL CODE PUMP CHARGE MILEAGE 40 160.00 135 3113 18.30 2470.50 475.20 1080# 1110A 17# 20.74 18# phenoseal Isx 1107A 347 338.30 1135A 500 TH gel-flush 1118B 100.00 hulls 21.00 1103 374.47 43 5407A 155.00 4453 155.00 175.00 175.00 4156 5417.21 246.19 SALES TAX Ravin 3737 **ESTIMATED** TOTAL

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.

TITLE

Air Drilling Specialist Oil & Gas Wells

THORNTON AIR ROTARY, LLC

Office Phone: 620-879-2073

PO Box 449 Caney, KS 67333

| 4 | | |
|---|----------------|-----------|
| | Date Started | 4/26/2011 |
| | Date Completed | 4/27/2011 |

| Neil No. | Operator | Lease | A.P.I# | County | |
|----------|----------|-------|--------|------------|-----------------|
| 4M-2 | | | | Montgomery | State Kansas |
| | | | | | |
| 1/4 | 1/4 | 1/4 | Sec. | Twp. | Rge. |

| Driller | Type/Well | Cement Used | Casing Used | Depth | Size of Hole |
|---------|-----------|-------------|-------------|-------|--------------|
| Sean | Oil | 4 | 21' 85/8 | 1286 | 6 3/4 |

| Formatio | n Record |
|-----------|----------|
| 1071-1087 | SHALE |

| | | | on Necolu | | |
|-----------|-------------|-----------|------------------|--|--|
| 0-2 | DIRT | 1071-1087 | SHALE | $\neg \neg \neg$ | |
| 2-12 | CLAY | 1087-1089 | LIME | _ | |
| 12-74 | LIME | 1089-1091 | SHALE | ++ | |
| 74-300 | SHALE | 1091-1092 | COAL | ++ | |
| 300-406 | SAND | 1092-1099 | SANDY SHALE | + | |
| 406-412 | SHALE | 1099-1133 | SHALE | + | |
| 412-538 | LIME | 1133-1135 | COAL | ++ | |
| 538-550 | SHALE | 1135-1148 | SHALE | ++ | |
| 550-564 | LIME | 1148-1149 | COAL | - | |
| 564-594 | SAND | 1149-1184 | SHALE | | |
| 594-656 | LIME | 1184-1189 | SANDY SHALE | + | |
| 656-725 | SHALE | 1189-1206 | SAND / LITE ODOR | + | |
| 725-732 | LIME | 1206-1209 | SANDY SHALE | ++ | |
| 732-755 | SANDY SHALE | 1209-1211 | COAL | | |
| 755-782 | LIME | 1211-1226 | SHALE | | |
| 782-804 | SAND | | SAND | ++ | |
| 804-887 | SANDY SHALE | | SHALE | + | |
| 887-888 | COAL | 1286 | TD | + | |
| 888-916 | LIME | | | | |
| 916-921 | BLACK SHALE | | | - | |
| 921-975 | SHALE | | | + | |
| 975-1000 | LIME | | | | |
| 1000-1010 | BLACK SHALE | | | 1 1 | |
| 1010-1018 | LIME | | | | |
| 1018-1021 | BLACK SHALE | | | 1 | |
| 1021-1022 | COAL | | | | |
| 1022-1026 | LIME | | | | |
| 1026-1034 | SAND | | | | |
| 1034-1070 | SHALE | | | - | |
| 1070-1071 | COAL | | | | |

Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Sam Brownback, Governor

Mark Sievers, Chairman Ward Loyd, Commissioner Thomas E. Wright, Commissioner

July 27, 2011

Victor H Dyal Layne Energy Operating, LLC P O Box 160 Sycamore, KS 67363

Re: ACO1 API 15-125-32056-00-00 Shultz 4M-2 NW/4 Sec.02-31S-14E Montgomery County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully, Victor H Dyal