

Confidentiality Requested:

Yes No

## KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1191502

Form ACO-1
August 2013
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 East _ West                  |                            |                      |  |  |
| Address 2:                          |            |                    | Feet from North / South Line of Section |                            |                      |  |  |
| City:                               | State: Z   | ip:+               | Fe                                      | eet from East / V          | West Line of Section |  |  |
| Contact Person:                     |            |                    | Footages Calculated from N              | Nearest Outside Section Co | orner:               |  |  |
| Phone: ()                           |            |                    | □ NE □ NW                               | / □SE □SW                  |                      |  |  |
| CONTRACTOR: License #               |            |                    | GPS Location: Lat:                      | , Long:                    |                      |  |  |
| Name:                               |            |                    |   | (e.g. xx.xxxxx)            | (e.gxxx.xxxxx)       |  |  |
| Wellsite Geologist:                 |            |                    | Datum: NAD27                            | NAD83 WGS84                |                      |  |  |
| Purchaser:                          |            |                    | County:                                 |                            |                      |  |  |
| Designate Type of Completion:       |            |                    | Lease Name:                             | We                         | ell #:               |  |  |
|                                     | e-Entry    | Workover           | Field Name:                             |                            |                      |  |  |
|                                     | _          |                    | Producing Formation:                    |                            |                      |  |  |
| ☐ Oil ☐ WSW ☐ D&A                   | ☐ SWD      | ∐ SIOW<br>∏ SIGW   | Elevation: Ground:                      | Kelly Bushing: _           |                      |  |  |
|                                     | GSW        | Temp. Abd.         | Total Vertical Depth:                   | Plug Back Total De         | epth:                |  |  |
| CM (Coal Bed Methane)               | dow        | Temp. Abd.         | Amount of Surface Pipe Se               | et and Cemented at:        | Feet                 |  |  |
| Cathodic Other (Core, Expl., etc.): |            |                    | Multiple Stage Cementing (              | Collar Used? Yes           | No                   |  |  |
| If Workover/Re-entry: Old Well I    |            |                    | If yes, show depth set:                 |                            | Feet                 |  |  |
| Operator:                           |            |                    | If Alternate II completion, ce          | ement circulated from:     |                      |  |  |
| Well Name:                          |            |                    | feet depth to:                          | w/                         | sx cmt.              |  |  |
| Original Comp. Date:                |            |                    |   |                            |                      |  |  |
| Deepening Re-perf                   | •          | ENHR Conv. to SWD  | Drilling Fluid Managemen                | nt Dian                    |                      |  |  |
| ☐ Plug Back                         | Conv. to G |                    | (Data must be collected from the        |                            |                      |  |  |
| Commingled                          | Pormit #:  |                    | Chloride content:                       | ppm Fluid volume:          | bbls                 |  |  |
| Dual Completion                     |            |                    | Dewatering method used:_                |                            |                      |  |  |
| SWD                                 |            |                    | Location of fluid disposal if           | hauled offsite:            |                      |  |  |
| ☐ ENHR                              |            |                    |   |                            |                      |  |  |
| GSW Permit #:                       |            |                    | Operator Name:                          |                            |                      |  |  |
| _ <del>_</del>                      |            |                    | Lease Name:                             | License #:                 |                      |  |  |
| Spud Date or Date R                 | eached TD  | Completion Date or | Quarter Sec                             | TwpS. R                    | East _ West          |  |  |
| Recompletion Date                   |            | Recompletion Date  | County:                                 | Permit #:                  |                      |  |  |

## **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             |  |  |  |  |  |  |  |  |
|---------------------------------|--|--|--|--|--|--|--|--|
| Confidentiality Requested       |  |  |  |  |  |  |  |  |
| Date:                           |  |  |  |  |  |  |  |  |
| Confidential Release Date:      |  |  |  |  |  |  |  |  |
| Wireline Log Received           |  |  |  |  |  |  |  |  |
| Geologist Report Received       |  |  |  |  |  |  |  |  |
| UIC Distribution                |  |  |  |  |  |  |  |  |
| ALT I II III Approved by: Date: |  |  |  |  |  |  |  |  |

Page Two



| Operator Name:   |                           |   | L                     | ease Name: _         |                     |                     | Well #:          |  |
|--|---------------------------|---|-----------------------|----------------------|---------------------|---------------------|------------------|--|
| Sec Twp  | S. R                      | East We                                 | est C                 | County:              |                     |                     |                  |  |
| INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to | ring and shut-in pres     | sures, whether sh                       | ut-in pressur         | e reached stati      | c level, hydrosta   | tic pressures, bott |                  | rval tested, time tool<br>erature, fluid recovery, |
| Final Radioactivity Lo files must be submitted                 |                           |   |                       |                      | ogs must be ema     | iled to kcc-well-lo | gs@kcc.ks.go     | v. Digital electronic log                          |
| Drill Stem Tests Taker<br>(Attach Additional                   |                           | No                                      | L                     | _                    | on (Top), Depth an  |                     | Sample           |  |
| Samples Sent to Geo  | logical Survey            | Yes                                     | No                    | Nam                  | e                   |                     | Тор              | Datum  |
| Cores Taken<br>Electric Log Run                                |                           | Yes Yes                                 | No<br>No              |                      |                     |                     |                  |  |
| List All E. Logs Run:  |                           |   |                       |                      |                     |                     |                  |  |
|  |                           | (                                       | CASING REC            | ORD Ne               | ew Used             |                     |                  |  |
|  |                           | · ·                                     |                       | ıctor, surface, inte | ermediate, producti | 1                   |                  | I  |
| Purpose of String  | Size Hole<br>Drilled      | Size Casin<br>Set (In O.D               |                       | Weight<br>Lbs. / Ft. | Setting<br>Depth    | Type of<br>Cement   | # Sacks<br>Used  | Type and Percent<br>Additives                      |
|  |                           |   |                       |                      |                     |                     |                  |  |
|  |                           |   |                       |                      |                     |                     |                  |  |
|  |                           |   |                       |                      |                     |                     |                  |  |
|  |                           |   |                       |                      |                     |                     |                  |  |
|  |                           | ADD                                     | ITIONAL CEN           | MENTING / SQL        | JEEZE RECORD        |                     |                  |  |
| Purpose:   | Depth<br>Top Bottom       | Type of Cem                             | ent #                 | Sacks Used           |                     | Type and P          | ercent Additives |  |
| Perforate Protect Casing                                       | 100 20111111              |   |                       |                      |                     |                     |                  |  |
| Plug Back TD<br>Plug Off Zone                                  |                           |   |                       |                      |                     |                     |                  |  |
| 1 lag on zono  |                           |   |                       |                      |                     |                     |                  |  |
| Did you perform a hydrau                                       | ulic fracturing treatment | on this well?                           |                       |                      | Yes                 | No (If No, ski      | o questions 2 ar | nd 3)  |
| Does the volume of the to                                      |                           | •                                       |                       |                      |                     | _ ` ` '             | p question 3)    |  |
| Was the hydraulic fractur                                      | ing treatment information | on submitted to the c                   | hemical disclo        | sure registry?       | Yes                 | No (If No, fill     | out Page Three   | of the ACO-1)                                      |
| Shots Per Foot   |                           | ION RECORD - Bri<br>Footage of Each Int |                       |                      |                     | cture, Shot, Cement |                  | d<br>Depth   |
|  | , ,                       |   |                       |                      | ,                   |                     | ,                | ·  |
|  |                           |   |                       |                      |                     |                     |                  |  |
|  |                           |   |                       |                      |                     |                     |                  |  |
|  |                           |   |                       |                      |                     |                     |                  |  |
|  |                           |   |                       |                      |                     |                     |                  |  |
|  |                           |   |                       |                      |                     |                     |                  |  |
| TUBING RECORD:   | Size:                     | Set At:                                 | Pa                    | acker At:            | Liner Run:          |                     |                  |  |
|  |                           |   |                       |                      |                     | Yes No              |                  |  |
| Date of First, Resumed   | Production, SWD or Ef     |   | cing Method:<br>owing | Pumping              | Gas Lift C          | other (Explain)     |                  |  |
| Estimated Production<br>Per 24 Hours                           | Oil                       | Bbls. G                                 | as Mcf                | Wate                 | er Bi               | ols. G              | as-Oil Ratio     | Gravity  |
| DIODOCITI  | ON OF CAS:                |   | N 4 - T - 1           |                      | TION:               |                     | PROPUSTIC        | ON INTERVAL.                                       |
| Vented Solo  | ON OF GAS:  Used on Lease | Open Ho                                 |                       | IOD OF COMPLE $\Box$ |                     | nmingled            | PRODUCTION       | ON INTERVAL:                                       |
|  | bmit ACO-18.)             | Other (S                                | necify)               | (Submit              |                     | mit ACO-4)          |                  |  |



265733

TICKET NUMBER 42611 LOCATION Ottawa

DATE

|               | ii Mən Bərrisə                      | reg            | $\alpha \cup \alpha$ |                       |                | FOREMAN A       | lan Mc         | der         |
|---------------|-------------------------------------|----------------|----------------------|-----------------------|----------------|-----------------|----------------|-------------|
|               |                                     | , FIELI        | TICKET               | & TREA                | TMENT REP      |                 |                | 87 P. 10    |
| ) Box 884, Ch | nanute, KS 66720<br>or 800-467-8676 |                |                      | CEMEN                 | Т              |                 | - SAVOR T      | COUNTY      |
| DATE -        | CUSTOMER#                           | WELL           | IAME & NUMBE         | R                     | SECTION        | TOWNSHIP        | RANGE          | Mí          |
| -30-14        | 4448                                | Harbiso        | n 51                 | 2.2                   | NR6            | 1.17            | 20             | Mic         |
| STOMER        |                                     | -              | d.D                  |                       | TRUCK#         | DRIVER          | TRUCK#         | DRIVER      |
| LING ADDRE    | ss Beson                            | rces t         | 00                   |                       | 730            | AlaMad          | Safety         | Meet        |
| 13 93         | 11/ 11/2                            | <del>1</del> 5 |                      |                       | 368            | AN McD          |                |             |
| 10 7.J        | 110                                 | STATE Z        | IP CODE              |                       | 675            | be: Det         |                |             |
| revian        | & PenK                              |                | 16210                |                       | 548            | MikHag          | 2              | 7/8.        |
|               | 13 String 1                         | HOLE SIZE      |                      | HOLE DEPT             | H_764          | CASING SIZE & V |                | 4, Xbasfle  |
| ING DEPTH_    |                                     | ORILL PIPE     |                      | TUBING                | -1-            | CEMENT LEFT in  | 240            |             |
| RRY WEIGHT    |                                     | SLURRY VOL     |                      | WATER gal/<br>MIX PSI | 200            | RATE 4/6        | pm             |             |
| LACEMENT_     |                                     | DISPLACEMENT   | PC X                 | blish                 | col ral        | le. Miz         | red d          | ampeo       |
| ARKS:         | 7                                   | esting.        | 1 - 519              | 159.0                 | 15 50 15       | DCem            | ent p          | 195         |
| OD # 9.       | PI 7011                             | sued           | ey /                 | 200                   | 18BCK1         | Cica            | hated          |             |
| 70 Sc         | 1 0 12 #                            | Su It          | BTAL                 | Flu                   | shod           | Jamp. 1         | mord           | plag        |
| - emo         | on to ga                            | 11/0/1         | 4010                 | 80                    | D PELL         | BCA J           | logt           |             |
| 19, bo        | DE FILE                             | lve,           | W. CA                |                       |                |                 |                |             |
| Class         | ed Usi                              | 007            |                      |                       |                |                 |                |             |
| 1111          | Rayo                                |                |                      | V                     |                |                 | 11             |             |
| 1209          | [\00]                               |                |                      |                       |                | Alman           | Musica         |             |
|               |                                     |                |                      |                       |                | NAVIOV          | 1              |             |
| CCOUNT.       | QUANITY                             | or UNITS       | DE                   | SCRIPTION             | of SERVICES or | PRODUCT         | UNIT PRICE     | TOTAL       |
| CODE          |                                     |                | PUMP CHARG           |                       |                | 365             | ?              | 1083        |
| 401           |                                     |                | MILEAGE              |                       |                | 3b8             |                | 8400        |
| 406           | 7.0                                 | 7              | Coc                  | 1 .                   | footace        | e 368           | •              |             |
| 402           |                                     | (o.d.          |                      | * W . 1               | 2. C           | 548             |                | 36800       |
| 407           | M                                   | 7              | 80 V                 | C                     | 90             | 675             |                | 18000       |
| 5026          |                                     | ×              | .500                 | 910-                  |                |                 |                |             |
|               |                                     |                |                      |                       |                |                 |                |             |
|               | 150                                 | 7              | 5015                 | 77 0 1                | 2.11 Put       |                 |                | 1828.50     |
| 24            | 1 ( )                               | -1             |                      | 000                   | Mout           |                 |                | 80.74       |
| 183           | 36                                  | ) +7           | SEL                  | ~ N3                  | 10/20          | 000-1           |                | 10800       |
| 274           | 80                                  | ,长             | Aue                  | 2000                  | 1 4801         | oseal           |                | 1995        |
| 102           |                                     | 1              | 21/2                 | Pla                   | 9              |                 | <del>-  </del> | 10C         |
|               |                                     | //             |                      |                       | +              |                 | _              |             |
|               |                                     |                |                      |                       | <u> </u>       |                 |                |             |
|               |                                     |                |                      |                       |                | <u> </u>        |                |             |
|               |                                     |                |                      |                       |                |                 | PI             | Important   |
| <del> +</del> |                                     |                |                      |                       |                |                 |                | milliptod - |
|               |                                     |                |                      |                       |                |                 |                | hoien       |
|               |                                     |                |                      |                       |                | 1.50            |                |             |
|               |                                     |                |                      |                       |                |                 | SALE           | STAX 156.   |
|               |                                     |                |                      |                       |                |                 | ESTIN          | MATED 100   |
|               | , ,                                 |                |                      |                       |                | *               | то             | TAL STAC    |

AUTHORIZTION 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\_

LEASE NAME Harbison OPERATOR IT SHOULD START DATE: 17 Jan 14
WELL = KR #2 LOCATION: Miami County API =
SURFACE PIPE: 0.5 Ft 2010 Cement = bags 5
PRODUCTION: PIPE: SIZE: 278 = FT 76.2

|                     |          | 1 5               | Thickness | Formation | Comment              | Depth |
|---------------------|----------|-------------------|-----------|-----------|----------------------|-------|
| Thickness Formation | Comment  | Depth             | L         | Lime      |                      | 562   |
| 6 501               |          | 12                | 11-       | Shale     |                      | 578   |
| 6 Lime              |          | 16                | 'à        | Lime      |                      | 550   |
|                     |          | 28                | 8         | Thale     | Black                | 582   |
| 12 Lime<br>25 Shale |          | 53                | 9         | Shale     |                      | 591   |
| 13 Lime             |          | 66                | 5         | Shale     | wht.                 | 596   |
| 30 Shale            |          | 86                | à         | Shale     | wht Liney            | 598   |
| 1 Lime              |          | 57                | 1         | Shale     | ,                    | 599   |
| 78 Shale            |          | 165               | a         | Line      |                      | 601   |
| 19 Lime             |          | 184               | ち         | Shale     |                      | 1006  |
| 24 Shale            |          | 818               | 4         | Shale     | Red                  | 610   |
| 2 Lime              |          | वेव०              | 4)        | Shale     |                      | 1614  |
| 1 Shale             |          | 291               | 4         | Thale     | limey                | 618   |
| 5 Lime              |          | 226               | a         | Lime      | 1                    | 600   |
| 15 Shale            |          | 241               | à         | Shale     |                      | 622   |
| 17 Lime             |          | 258               | 4         | Shale     |                      | 626   |
| 14 Shale            |          | 272               | 4         | Thate     | Jome sand            | 630   |
| Lime                |          | 284               | 10        | Shale     |                      | 640   |
| Shale               |          | 285               | 4         | Shale     | wht                  | 644   |
| Tig Lime            |          | 294               | 10        | Shale     |                      | 654   |
| shale               |          | 995               | 5         | Sand      | BrokenCt             | * 659 |
| 1.3 Lime            |          | 898               | 20        | Shale     |                      | 679   |
| 10 Shale            |          | 308               | 0         | Shale     |                      | 698   |
| aa Lime             |          | 3.30              | 6         | Lime      |                      | 704   |
| 1 Shale             |          | 331               | 30        | Shale     | 2                    | 732   |
| à Lime              |          | 333               | 30        | Lime      | TD                   | 1764  |
| 3 Shale             | Black    | 336               |           |           |                      |       |
| 17                  | EX-CSI . | 346               | *         | 1000      | 659-79               | 14    |
| 24 Shale            |          | 346<br>370<br>374 | X         | Core      | 659-79<br>le 31.75 x | Ž ,   |
| 24 Shale            |          | 374               | *         | Ronn      |                      |       |
| 4 Lime<br>143 Shale |          | 517               |           | 1 101/11  | X                    |       |
| 143 Shale           |          | 21/               | <b></b>   | -         |                      |       |
| 6 Lime<br>5 Shale   |          | 523               | <b></b>   |           |                      |       |
| 5 Shale             |          | 528               | ٥         |           |                      |       |
| 6 Lime<br>22 Shale  |          | 525<br>534<br>538 | 1         |           |                      |       |
| 22 Shale            |          | 569               |           |           |                      |       |