

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1113744

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:                                 |   |   |
|  |   | Feet from North / South Line of Section   |
| City: Sta                                  | ate: Zip:+                              | Feet from Cast / West Line of Section   |
| -  |   | Footages Calculated from Nearest Outside Section Corner:                        |
| Phone: ( )                                 |   |   |
|  |   | County:   |
|  |   | Lease Name: Well #:   |
|  |   | Field Name:   |
| -  |   |   |
|  |   | Producing Formation:  |
| Designate Type of Completion:              |   | Elevation: Ground: Kelly Bushing:   |
| New Well                                   | Entry Workover                          | Total Depth: Plug Back Total Depth:   |
| Oil WSW                                    | SWD SIOW                                | Amount of Surface Pipe Set and Cemented at: Feet                                |
| Gas D&A                                    | ENHR SIGW                               | Multiple Stage Cementing Collar Used?   |
| OG   | GSW Temp. Abd.                          | If yes, show depth set: Feet  |
| CM (Coal Bed Methane)                      |   | If Alternate II completion, cement circulated from:                             |
| Cathodic Other (Core                       | e, Expl., etc.):                        | feet depth to:w/sx cmt.   |
| If Workover/Re-entry: Old Well Infe        | o as follows:                           |   |
| Operator:                                  |   | Drilling Fluid Menonement Dien  |
| Well Name:                                 |   | Drilling Fluid Management Plan<br>(Data must be collected from the Reserve Pit) |
| Original Comp. Date:                       | Original Total Depth:                   |   |
| Deepening Re-perf.                         |   | Chloride content: ppm Fluid volume: bbls  |
|  | Conv. to GSW                            | Dewatering method used:   |
| Plug Back:                                 | Plug Back Total Depth                   | Location of fluid disposal if hauled offsite:                                   |
| Commingled                                 | Permit #:                               | Operator Name:  |
| Dual Completion                            | Permit #:                               |   |
| SWD  | Permit #:                               | Lease Name: License #:  |
| ENHR                                       | Permit #:                               | Quarter Sec TwpS. R East West   |
| GSW  | Permit #:                               | County: Permit #:   |
|  |   |   |
| Spud Date or Date Rea<br>Recompletion Date | Completion Date or<br>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    | 1113744 |
|-----------------------|-------------|---------|
| Operator Name:        | Lease Name: | Well #: |
| Sec TwpS. R East West | County:     |         |
|                       |             |         |

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

| Drill Stem Tests Taken<br>(Attach Additional Sheets)                                |                      | Yes No  | Lo                       | -                  | n (Top), Depth an |                 | Sample Datum                  |  |
|---|----------------------|---|--------------------------|--------------------|-------------------|-----------------|-------------------------------|--|
| Samples Sent to Geolog  | ical Survey          | Yes No  | Nam                      | e                  |                   | Тор             | Datum                         |  |
| Cores Taken<br>Electric Log Run<br>Electric Log Submitted E<br>(If no, Submit Copy) | lectronically        | <ul> <li>Yes</li> <li>No</li> <li>Yes</li> <li>No</li> <li>Yes</li> <li>No</li> </ul> |                          |                    |                   |                 |                               |  |
| List All E. Logs Run:   |                      |   |                          |                    |                   |                 |                               |  |
|   |                      | CASING  | RECORD Ne                | w Used             |                   |                 |                               |  |
|   |                      | Report all strings set-o  | conductor, surface, inte | ermediate, product | ion, etc.         |                 |                               |  |
| Purpose of String   | Size Hole<br>Drilled | Size Casing<br>Set (In O.D.)  | Weight<br>Lbs. / Ft.     | Setting<br>Depth   | Type of<br>Cement | # Sacks<br>Used | Type and Percent<br>Additives |  |
|   |                      |   |                          |                    |                   |                 |                               |  |

#### ADDITIONAL CEMENTING / SQUEEZE RECORD

| Purpose:<br>Perforate       | Depth<br>Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
|-----------------------------|---------------------|----------------|--------------|----------------------------|
| Protect Casing Plug Back TD |                     |                |              |                            |
| Plug Off Zone               |                     |                |              |                            |

| Shots Per Foot                       | PERFORATION RECORD - Bridge Plugs Set/Type<br>Specify Footage of Each Interval Perforated |                  |         |                |        | ement Squeeze Record<br>I of Material Used) | Depth    |                              |               |         |
|--------------------------------------|---|------------------|---------|----------------|--------|---|----------|------------------------------|---------------|---------|
|                                      |   |                  |         |                |        |   |          |                              |               |         |
|                                      |   |                  |         |                |        |   |          |                              |               |         |
|                                      |   |                  |         |                |        |   |          |                              |               |         |
|                                      |   |                  |         |                |        |   |          |                              |               |         |
|                                      |   |                  |         |                |        |   |          |                              |               |         |
| TUBING RECORD:                       | Siz   | ze:              | Set At: |                | Packer | At:   | Liner R  | un:                          | No            |         |
| Date of First, Resumed F             | Product   | ion, SWD or ENH  | ۲.      | Producing N    | _      | ping  | Gas Lift | Other (Explain)              |               |         |
| Estimated Production<br>Per 24 Hours |   | Oil Bb           | ls.     | Gas            | Mcf    | Wate  | ər       | Bbls.                        | Gas-Oil Ratio | Gravity |
|                                      |   |                  |         |                |        |   |          |                              | Ι             |         |
| DISPOSITION OF GAS:                  |   | METHOD OF COMPLE |         | TION:          |        | PRODUCTION INTE                             | RVAL:    |                              |               |         |
| Vented Sold                          |   | Jsed on Lease    |         | Open Hole      | Perf.  | Dually<br>(Submit )                         |          | Commingled<br>(Submit ACO-4) |               |         |
| (If vented, Subi                     | mit ACC   | )-18.)           |         | Other (Specify | )      |   |          |                              |               |         |

| Form      | ACO1 - Well Completion   |  |  |
|-----------|--------------------------|--|--|
| Operator  | Howell Oil Company, Inc. |  |  |
| Well Name | Howell Pizinger SWDW     |  |  |
| Doc ID    | 1113744                  |  |  |

All Electric Logs Run

| Micro          |  |
|----------------|--|
| Porosity       |  |
| Dual Induction |  |
| Cement Bond    |  |

| Form      | ACO1 - Well Completion   |
|-----------|--------------------------|
| Operator  | Howell Oil Company, Inc. |
| Well Name | Howell Pizinger SWDW     |
| Doc ID    | 1113744                  |

Tops

| Name          | Тор  | Datum |
|---------------|------|-------|
| Heebner Shale | 2354 | -878  |
| Lansing       | 2540 | -1604 |
| Mississippi   | 3270 | -1747 |
| Kinderhook    | 3578 | -2102 |
| Hunton        | 3656 | -2180 |
| Viola         | 3778 | -2302 |
| Simpson       | 3810 | -2334 |
| Arbuckle      | 3876 | -2400 |

| CONSOLIDATED   |              |                    | TICKET NUMB          | ER 35  | 426   |
|--|--------------|--------------------|----------------------|--|---|
| Oil Well Services, LLC                                       |              |                    | FOREMAN              | ARMINT   | tor m   |
| PO Box 884, Chanute, KS 66720 FIELD TICKE                    |              |                    |                      | on or a  |   |
| 620-431-9210 or 800-467-8676 DATE CUSTOMER # WELL NAME & NUM | CEMEN        | SECTION            | 15-679-0             | and the same of th | the second se |
|  |              | SECTION            | TOWNSHIP             | RANGE  | COUNTY  |
|  | JUDW         | 18                 | 222                  | aw   | MARIEY  |
| CUSTOMER DELLAPIDE THE                                       | ſ            | TRUCK #            | DRIVER               | TRUCK #  | DRIVER  |
| MAILING ADDRESS  | -            | 603                | Jeff 5               |  | DITIVEIT  |
| 2400 RivER BRech RU  |              | 291                | Jeven vA             |  |   |
| CITY STATE ZIP CODE  |              | 539                | Lisiphi              |  |   |
| HutchRisan 75 67502  |              |                    | - and                | Section 21110  |   |
| JOB TYPE SUPERACE B HOLE SIZE 17"                            | HOLE DEPTH   | 307                | CASING SIZE & W      | EIGHT 133  | 8 4815  |
| CASING DEPTH 307 DRILL PIPE                                  |              | Read The           |                      | OTHER  |   |
| SLURRY WEIGHT SLURRY VOL                                     | WATER gal/sk | <u></u>            | CEMENT LEFT in       |  |   |
| DISPLACEMENT 46,15 DISPLACEMENT PSI                          |              |                    | RATE                 |  | E Self make   |
| REMARKS: BLOKE CPACEDATRAZ - MALE                            | D 26036      | 5A+3%              | CACL2+2              | % Gelt.  | 516   |
| Noly - Osphered Coment with                                  | 42 66        | 3 WATER            | ountry               |  |   |
| A ALA LI   | 1 1          | 1                  |                      |  |   |
| Charlater Curart do Suly                                     | deri         |                    | Cherry Prode and the |  |   |
|  | )            | All and a strength |                      |  |   |
|  |              |                    |                      |  |   |
|  |              |                    |                      |  |   |
|  |              |                    |                      |  |   |

| ACCOUNT      | QUANITY or UNITS | DESCRIPTION of SERVICES or PRODUCT | UNIT PRICE               | TOTAL  |
|--------------|------------------|------------------------------------|--------------------------|--|
| 5401S        |                  | PUMP CHARGE                        | 85.00                    | 825,00   |
| JUDIO        | 54               | MILEAGE                            | 4.00                     | allarD   |
|              |                  |                                    | 1                        | Sugar  |
|              |                  |                                    |                          | - States and a state of the sta |
| 11045        | 260              | 3K5H                               | 14,95                    | 3887.00  |
| 1118B        | 750              | ibs bel                            | 121.                     | 157,50   |
| 1102         | 720              | Ups CACL2,                         | ,74                      | 532,80   |
| 1107         | 185              | 63 DIY-FTAKE                       | 2,35                     | 293.75   |
|              |                  |                                    | He Dente                 | New all the  |
|              |                  |                                    |                          |  |
| JADIA        | 54               | Bulk Deffvery X 12, 2 X            | 1,34                     | 882.79   |
|              |                  |                                    |                          |  |
|              |                  |                                    |                          |  |
|              |                  |                                    | The second second second |  |
|              |                  |                                    |                          |  |
|              |                  |                                    |                          |  |
|              | /                | -91/1-1                            |                          | 1 mail out   |
|              | 11               | YUBKOTA /                          | •                        | 6174,84  |
| Ravin 3737   | HAA              |                                    | SALES TAX                |  |
|              | 111/2            |                                    | ESTIMATED<br>TOTAL       |  |
| AUTHORIZTION | for fill         | TITLE                              | DATE                     |  |

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.

### CONSOLIDATED Oil Well Services, LLC

TICKET NUMBER 35393 LOCATION # 180 Elborado

FOREMAN Jacob Storm

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

## FIELD TICKET & TREATMENT REPORT

| 620-431-9210 C                   | or 800-467-8676  | 5                | CEMEN          | CEMENT Api 15-079-20695-00-00     |                 |                       |           |  |
|----------------------------------|--|------------------|----------------|-----------------------------------|-----------------|-----------------------|-----------|--|
| DATE                             | CUSTOMER #   | WELL NAME & NU   | IMBER          | SECTION                           | TOWNSHIP        | RANGE                 | COUNTY    |  |
| 12-9-12                          |  | Howell pizinger  | SWDW           | 18                                | 235             | 3w                    | Harvey    |  |
| CUSTOMER                         |  | 1 5              | Selfy          |                                   |                 |                       |           |  |
| Howell                           | 0.1  |                  | meating        | TRUCK #                           | DRIVER          | TRUCK #               | DRIVER    |  |
| MAILING ADDRE                    | SS   |                  | 180            | 603                               | Josh            |                       |           |  |
| 2400 1-                          | liver Birch  |                  | 29             | 681                               | mark            | and the second second |           |  |
| CITY                             |  | STATE ZIP CODE   | mg             | 702                               | Jawb            |                       |           |  |
| Hutchins                         | 00   | KS 67502         |                | Anistati Baanaa                   | 0 0000          |                       |           |  |
| JOB TYPE Lor                     | ngstring B   | HOLE SIZE 77/8   | HOLE DEPTH     | 4500                              | CASING SIZE & W | EIGHT 51/2            | 14 lb     |  |
| CASING DEPTH 3983 DRILL PIPE N/A |  |                  |                |                                   |                 |                       |           |  |
| SLURRY WEIGH                     | T <u>15 1b</u>   | SLURRY VOL       | _ WATER gal/s  |                                   | CEMENT LEFT in  | CASING 13-            | 1 shoe    |  |
| DISPLACEMENT                     | 94.91  | DISPLACEMENT PSI | MIX PSI 3      | 00                                | RATE 6.38       | bpm                   |           |  |
| REMARKS: So                      | alty m   | eating, Run pi   | oe to 3        | to 3903 curculate for 45min, open |                 |                       |           |  |
| packer 5                         | hoe pur  | 1p Stol water    | 500 gal        | Pulloo 1                          | (mud flugh)     | 5651 we               | 1         |  |
| mix 20                           | Mix 200 sks thicksort 5% kol-scal displaced plue with 94.91 bbl wete |                  |                |                                   |                 |                       |           |  |
| landing 1                        | plug at  | 1500 psi cl      | necked         | float                             | INet h          | eld Ja                | 56 compt  |  |
| plug R.                          | at hole  | with 30 sk.      | s and          | mouse                             | hole with       | 1 20 St               | 3 thickse |  |
|                                  |  |                  | and the second | all and a light of                |                 |                       |           |  |

| ACCOUNT      | QUANITY or UNITS | DESCRIPTION of SERVICES or PRODUCT | UNIT PRICE             | TOTAL         |
|--------------|------------------|------------------------------------|------------------------|---------------|
| 5401         |                  | PUMP CHARGE                        |                        |               |
| 5406         | 30               | MILEAGE                            | 1030,00                | 1030,00       |
| 5407         |                  | min bulk delivery                  | 350.00                 | 200,00        |
| 5402         | 1403             | Footage                            | 0.22                   | 350.00        |
| 1126A        | 200 SKS          | Thickst                            | 19.20                  | 384/0,00      |
| 1110A        | 1000 1b.5        | Kol-Seal                           | .46                    | 460,00        |
| 1144G        | 500 gal          | Dr 1100 (mud Flush)                | 1.05                   | 525,00        |
| 4104         | 20               | 51/2 Busket                        | 229.00                 | 458,00        |
| 4130         | 6                | s'/2 centrizer                     | 48,00                  | 288.00        |
| 4253         | 1                | S1/2 Type A Packer Shee            | 1584.00                | 1584,20       |
| 4454         |                  | S'/z hatch down Plug               | 2.54.00                | 254,00        |
| 5404         | 12               | personel standby                   | 84.00                  | 1008.00       |
|              |                  |                                    |                        | 1000,-0       |
|              |                  |                                    | a come and             | States and    |
|              |                  |                                    |                        | and the state |
|              | 0                |                                    | Subtotal               | 10305.66      |
|              |                  |                                    |                        |               |
|              | 1/ 1/            |                                    |                        |               |
| Ravin 3737   | //////           |                                    | SALES TAX<br>ESTIMATED |               |
|              | Lalla h          |                                    | TOTAL                  |               |
| AUTHORIZTION | andly            |                                    | DATE                   |               |

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



# **DIAMOND TESTING** P.O. Box 157 **HOISINGTON, KANSAS 67544**

Page 1 of 2 Pages

e ~4

(620) 653-7550 • (800) 542-7313 HowPizSWDWDST1

| Company Howell Oil Company, Inc.  | Lease & Well No. Howell Pizinger SWDW  |
|---|--|
| Elevation 1476 KB Formation Hunton  | Effective PayFt. Ticket NoS0249  |
| Date <u>12-7-12</u> Sec. <u>18</u> Twp. <u>23S</u> Range  | 3W County Harvey State Kansas  |
|   | Diamond Representative Jacob McCallie  |
| Formation Test No.       1       Interval Tested from         Packer Depth       3,651 ft.       Size       6 3/4 in.         Packer Depth       3,656 ft.       Size       6 3/4 in.         Depth of Selective Zone Set       3,708 ft.         Top Recorder Depth (Inside)       3,637 ft.         Bottom Recorder Depth (Outside)       3,694 ft.         Below Straddle Recorder Depth       3,941 ft.         Drilling Contractor       Val Energy, Inc.  |  |
| Mud TypeChemicalViscosity48   | Weight Pipe Lengthft I.Din.  |
| Weight9.4Water Loss8.0cc.   | Drill Pipe Length         3,623 ft         I.D.         3 1/2 in.                    |
| Chlorides1,600 P.P.M.   | Test Tool Length 33 ft Tool Size 3 1/2-IF in.  |
| Jars: Make Sterling Serial Number 3   | Anchor Length 52' perf. w/ 236' tail pipe Size 4 1/2-FH in.                          |
| Did Well Flow? No Reversed Out Yes  | Surface Choke Size <u>1</u> in. Bottom Choke Size <u>5/8</u> in.                     |
|   |  |
|   |  |
| Blow: 1st Open: Off bottom of bucket blow immediately. No blow back durin   | Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.                                |
| Blow: 1st Open: Off bottom of bucket blow immediately. No blow back durin 2nd Open: Off bottom of bucket blow in 30 secs. No blow back during   | Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.                                |
| Blow: 1st Open: Off bottom of bucket blow immediately.       No blow back during         2nd Open: Off bottom of bucket blow in 30 secs.       No blow back during         Recovered       383       ft. of mud w/ a trace of oil = 5.450090 bbls.       (Grind ou         Recovered       378       ft. of watery mud w/ a trace of oil = 5.378940 bbls.       (Grind ou         Recovered       2,205       ft. of slightly oil specked mud cut water (circ. to pit) = 3         Recovered       2,966       ft. of TOTAL FLUID = 42.206180 bbls.         Recovered       ft. of       Recovered         ft. of       TotAL FLUID = 42.206180 bbls.         Recovered       ft. of         Remarks       Tool Sample Grind Out: 1%-oil; 98%-water; 1%-mud   | Main Hole Size       7 7/8 in. Tool Joint Size       4 1/2-XH in.         g shut-in. |
| 2nd Open: Off bottom of bucket blow in 30 secs. No blow back during         Recovered       383         ft. of mud w/ a trace of oil = 5.450090 bbls. (Grind ou         Recovered       378         ft. of watery mud w/ a trace of oil = 5.378940 bbls. (G         Recovered       2,205         ft. of slightly oil specked mud cut water (circ. to pit) = 3         Recovered       2,966         ft. of TOTAL FLUID = 42.206180 bbls.         Recovered       ft. of         Recovered       ft. of   | Main Hole Size       7 7/8 in. Tool Joint Size       4 1/2-XH in.         g shut-in. |
| 2nd Open: Off bottom of bucket blow in 30 secs. No blow back during         Recovered       383       ft. of mud w/ a trace of oil = 5.450090 bbls. (Grind ou         Recovered       378       ft. of watery mud w/ a trace of oil = 5.378940 bbls. (Grind ou         Recovered       2,205       ft. of slightly oil specked mud cut water (circ. to pit) = 3         Recovered       2,966       ft. of TOTAL FLUID = 42.206180 bbls.         Recovered       ft. of         Recovered       ft. of         Recovered       ft. of         Time Set Packer(s)       4:44 A.M.         Time Started off Bottom  | Main Hole Size       7 7/8 in. Tool Joint Size       4 1/2-XH in.         g shut-in. |
| 2nd Open: Off bottom of bucket blow in 30 secs. No blow back during         Recovered       383       ft. of mud w/ a trace of oil = 5.450090 bbls. (Grind ou         Recovered       378       ft. of watery mud w/ a trace of oil = 5.378940 bbls. (Grind ou         Recovered       2,205       ft. of slightly oil specked mud cut water (circ. to pit) = 3         Recovered       2,966       ft. of TOTAL FLUID = 42.206180 bbls.         Recovered       ft. of         Remarks       Tool Sample Grind Out: 1%-oil; 98%-water; 1%-mud         Initial Hydrostatic Pressure   | Main Hole Size       7 7/8 in. Tool Joint Size       4 1/2-XH in.         g shut-in. |
| 2nd Open: Off bottom of bucket blow in 30 secs. No blow back during         Recovered       383       ft. of mud w/ a trace of oil = 5.450090 bbls. (Grind ou         Recovered       378       ft. of watery mud w/ a trace of oil = 5.378940 bbls. (G         Recovered       2,205       ft. of slightly oil specked mud cut water (circ. to pit) = 3         Recovered       2,966       ft. of TOTAL FLUID = 42.206180 bbls.         Recovered       ft. of         Remarks       Tool Sample Grind Out: 1%-oil; 98%-water; 1%-mud         Initial Hydrostatic Pressure.       (A)         Initial Flow Period.       15         (B)       20 | Main Hole Size       7 7/8 in. Tool Joint Size       4 1/2-XH in.         g shut-in. |

1742 P.S.I.

Final Hydrostatic Pressure.....(H)\_