



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1250076  
OIL & GAS CONSERVATION DIVISION

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 # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
-----------------------------------	-----------------	---

API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

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: \_\_\_\_\_



1250076

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  
 Flowing     Pumping     Gas Lift     Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
--	---	---



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

MAIN OFFICE  
 P.O.Box884  
 Chanute, KS 66720  
 620/431-9210, 1-800/467-8676  
 Fax 620/431-0012

Invoice

Invoice# 802353

Invoice Date: 11/30/14

Terms: Net 30

Page 1

D & Z EXPLORATION  
 901 N. ELM ST.  
 ST. ELMO IL 62458  
 USA  
 6188293274

Cattle Tracks #5

Part No	Description	Quantity	Unit Price	Discount(%)	Total
5401	Cement Pumper	1.000	1,085.0000	0.000	1,085.00
5402	Casing Footage	912.000	0.2300	100.000	0.00
5407	Min. Bulk Delivery Charge	0.500	368.0000	0.000	184.00
5502C	80 Vacuum Truck Cement	1.500	100.0000	0.000	150.00
1124	Poz Cement Mix	128.000	11.5000	30.000	1,030.40
1118B	Premium Gel / Bentonite	415.000	0.2200	30.000	63.91
1111	Sodium Chloride (Granulated Salt)	269.000	0.3900	30.000	73.44
1110A	Kol Seal (50# BAG)	640.000	0.4600	30.000	206.08
4402	2 1/2 Rubber Plug	1.000	29.5000	0.000	29.50

Subtotal 3,620.87  
 Discounted Amount 798.54  
 SubTotal After Discount 2,822.33

Amount Due 3,767.79 If paid after 12/30/14

Tax: 103.49  
 Total: 2,925.82



1270

TICKET NUMBER 50677  
 LOCATION Ottawa, KS  
 FOREMAN Carey Kennedy

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

INVOICE # 1272 # 802353  
 FIELD TICKET & TREATMENT REPORT  
 CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
11/26/14	3392	Cattle Tracks # 5	NE 33	14	22	JO
CUSTOMER Dt 7 Exploration			TRUCK #			
MAILING ADDRESS 901 N. Elm St			DRIVER		TRUCK #	
CITY St Elmo			DRIVER		TRUCK #	
STATE IL			DRIVER		TRUCK #	
ZIP CODE 62458			DRIVER		TRUCK #	

JOB TYPE long string HOLE SIZE 5 5/8" HOLE DEPTH 940' CASING SIZE & WEIGHT 2 7/8" EUE  
 CASING DEPTH 912' DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT IN CASING \_\_\_\_\_  
 DISPLACEMENT 5.28 bbls DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE 4.5 bpm

REMARKS: held safety meeting, established circulation, mixed & pumped 200 # Gel followed by 10 bbls fresh water, mixed & pumped 128 sks 5% Pozmix cement w/ 2% gel, 5% salt, & 5# Kalreal per sk, cement to surface, flushed pump clean, pumped 2 1/2" rubber plug to casing TD w/ 5.28 bbls fresh water, pressured to 800 PSI, released pressure, shut in casing.

*[Handwritten signature]*

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE		1085.00
5406	on lease	MILEAGE		
5402	912'	casing footage		
5467	1/2 min	you mileage		184.00
5502C	1.5 hrs	50 Vac		150.00
1124	128 sks	5% Pozmix cement	1472.00	
1118B	415 #	Gel	91.30	
1111	269 #	Salt	104.91	
1110A	440 #	Kalreal	294.40	
		materials	1962.61	
		-30%	588.76	
		subtotal		1373.83
4402	1	2 1/2" rubber plug		29.50
			3558.03	
		7.375%	SALES TAX	108.50
			ESTIMATED TOTAL	2925.83

1908

Revin 3737

AUTHORIZATION \_\_\_\_\_ 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.

## TERMS

In consideration of the prices to be charged for Consolidated Oil Well Services, LLC (COWS) services, equipment and products and for the performance of services and supplying of materials, Customer agrees to the following terms and conditions.

**Terms.** Cash in advance unless satisfactory credit is established. On credit sales, invoices are payable within 30 days of the invoice date. On all invoices not paid within 30 days, Customer agrees to pay COWS interest at the rate of 18% per annum or the maximum rate allowed by law, whichever is higher. In the event COWS retains an attorney to pursue collection of any account, Customer agrees to pay all collection costs and attorney's fees incurred by COWS.

Any applicable federal, state or local sales, use, occupation, consumer's or emergency taxes shall be added to the quoted price. All process license fees required to be paid to others will be added to the scheduled prices.

All COWS' prices are subject to change without notice.

## SERVICE CONDITIONS

Customer warrants that the well is in proper condition to receive the services, equipment, products and materials to be supplied by COWS. The Customer shall at all time have complete care, custody, and control of the well, the drilling and production equipment of the well, and the premises about the well. A responsible representative of the Customer shall be present to specify depths, pressures, or materials used for any service which is to be performed.

(a) COWS shall not be responsible for any claim, cause of action or demand (hereinafter referred to as a "claim") for damage to property, or injury to or death of employees and representatives, of Customer or the well owner (if different from Customer), unless such damage, injury or death is caused by the willful misconduct or gross negligence of COWS, including but not limited to sub-surface damage and surface damage arising from sub-surface damage.

(b) Unless a claim is the result of the sole willful misconduct or gross negligence of COWS, Customer shall be responsible for and indemnify and hold COWS harmless from any claim for: (1) reservoir loss or damage, or property damage resulting from sub-surface pressure, losing control of the well and/or a well blowout; (2) damages as a result of a subsurface trespass, or an action in the nature thereof, arising from a service operation performed by COWS; (3) injury to or death of persons, other than employees of COWS, or damage to property (including, but not limited to, injury to the well), or any damages whatsoever, irrespective of cause, growing out of or in any way connected with the use of radioactive material in the well hole; and (4) well damage or reservoir damage caused by (i) loss of circulation, cement invasion, cement misplacement, pumping cement or cement plugs on wells with loss of circulation, including the failure to displace plug to proper depth, (ii) sub-surface pressure and resulting failure to complete pumping of cement or cement plug, including dehydration of cement slurry or flashing, plugged float shoe, annulus bridging or plugging, or (iii) down hole tools being lost or left in the well, or becoming stuck in the well for any reason and by any cause. COWS may furnish down hole tools and may supply supervision for the running and placement of such tools but will not be liable for any damage, loss or result caused by the use of such tools.

Furthermore, Customer will be responsible for the cost to replace such tools if they are lost or left in the well.

(c) COWS makes no guarantee of the effectiveness of any COWS' products, supplies or materials, or the results of any COWS' treatment or services.

(d) Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, COWS is unable to guarantee the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by COWS. COWS' personnel will use their best efforts in gathering such information and their best judgement in interpreting it, but Customer agrees that COWS shall not be responsible for any damage arising from the use of such information except where due to COWS' gross negligence or willful misconduct in the preparation or furnishing of it.

(e) COWS may buy and re-sell to Customer down hole equipment including but not limited to float equipment, DV tools, port coils, type A & B packers, and Customer agrees that COWS is not an agent or dealer for the companies who manufacture such items, and further agrees that Customer shall be solely responsible for and indemnify COWS against any claim with regard to the effectiveness, malfunction of, or functionality of such items.

## WARRANTIES - LIMITATION OF LIABILITY

COWS warrants title to the products, supplies and materials, and that the same are free from defects in workmanship and materials. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, NOR ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE, WHICH EXTEND BEYOND THOSE STATED ON THE IMMEDIATELY PRECEDING SENTENCE. COWS's liability and Customer's exclusive remedy in any claim (whether in contract, tort, breach of warranty or otherwise,) arising out of the sale or use of any COWS' products, supplies, materials or services is expressly limited to the replacement of such products, supplies, materials or services or their return to COWS or, at COWS' option, an allowance to Customer of credit for the cost of such items.

Customer waives and releases all claims against COWS for any special, incidental, indirect, consequential or punitive damages.

Johnson County, KS  
Well: Cattle Track 5  
Lease Owner: D Z

Town Oilfield Service, Inc.  
(913) 837-8400

Commenced Spudding:  
11/25/2014

WELL LOG

Thickness of Strata	Formation	Total Depth
10	Soil-Clay	10
6	Shale	16
7	Lime	23
6	Shale	29
15	Lime	44
8	Shale	52
9	Lime	61
9	Shale	70
23	Lime	93
17	Shale	110
20	Lime	130
12	Shale	142
18	Lime	160
27	Shale	187
16	Lime	203
12	Shale	215
9	Lime	224
23	Shale	247
20	Lime	267
51	Shale	318
17	Lime	335
15	Shale	350
18	Lime	368
4	Shale	372
4	Lime	376
4	Shale	380
15	Lime	395
168	Shale	563
5	Lime	568
2	Shale	570
3	Lime	573
11	Shale	584
4	Lime	588
147	Shale	735
5	Broken Sand	740
10	Sandy Shale	750
101	Shale	851
1	Broken Sand	852
2	Limey Sand	854
3	Broken Sand	857



# Short Cuts

## TANK CAPACITY

BBLS. (42 gal.) equals  $D^2 \times .14 \times h$   
D equals diameter in feet.  
h equals height in feet.

## BARRELS PER DAY

Multiply gals. per minute x 34.2

HP equals  $BPH \times PSI \times .0004$

BPH - barrels per hour

PSI - pounds square inch

## TO FIGURE PUMP DRIVES

- \* D - Diameter of Pump Sheave
- \* d - Diameter of Engine Sheave
- SPM - Strokes per minute
- RPM - Engine Speed
- R - Gear Box Ratio
- \*C - Shaft Center Distance

D -  $RPM \times d$  over  $SPM \times R$

d -  $SPM \times R \times D$  over RPM

SPM -  $RPM \times D$  over  $R \times d$

R -  $RPM \times D$  over  $SPM \times d$

BELT LENGTH -  $2C + 1.57(D + d) + \frac{(D-d)^2}{4C}$

\* Need these to figure belt length

TO FIGURE AMPS:  $\frac{WATTS}{VOLTS} = AMPS$

746 WATTS equal 1 HP

# Log Book

Well No. 5

Farm Cattle Track

KS  
(State)

Johnson  
(County)

33  
(Section)

14  
(Township)

22  
(Range)

For D+Z Exploration  
(Well Owner)

## Town Oilfield Services, Inc.

1207 N. 1st East

Louisburg, KS 66053

913-710-5400





Thickness of Strata	Formation	Total Depth	Remarks
10	soil & clay	10	
6	shale	16	
7	lime	23	
6	shale	29	
15	lime	44	
8	shale	52	
9	lime	61	
9	shale	70	
23	lime	93	
17	shale	110	
20	lime	130	
12	shale	142	
18	lime	160	
27	shale	187	
16	lime	203	
12	shale	215	
9	lime	224	
23	shale	247	
20	lime	267	
51	shale	318	
17	lime	335	
15	shale	350	
18	lime	368	
4	shale	372	
4	lime	376	
4	shale	380	
15	lime	395	



NOTES:

940' TD  
 5<sup>5</sup>/<sub>8</sub> hole  
 911.80' 2<sup>7</sup>/<sub>8</sub> pipe  
 20' 7" surface  
 3 sacks cement  
 Bonus Well

Rules of Thumb

CEMENTING ANNULUS

2" ID - 6 <sup>1</sup> / <sub>4</sub> "	- 1 Sack	.....	5.8'
2" ID - 8"	- 1 Sack	.....	3.1'
3" ID - 8"	- 1 Sack	.....	3.5'
4" ID - 8"	- 1 Sack	.....	4.0'

CAPACITY

2"	- 1 BBL.	equals.....	256'
2 <sup>1</sup> / <sub>2</sub> "	- 1 BBL.	equals.....	164'
3"	- 1 BBL.	equals.....	115'
4"	- 1 BBL.	equals.....	64'
4 <sup>7</sup> / <sub>8</sub> "	- 1 BBL.	equals.....	43'
6 <sup>1</sup> / <sub>4</sub> "	- 1 BBL.	equals.....	26'
8"	- 1 BBL.	equals.....	16'

WATER - CEMENT RATIO

5.5 gals. to 1 sack - 2<sup>1</sup>/<sub>2</sub> hours  
 to thicken slurry

7.7 gals. to 1 sack - 2 hours  
 to thicken slurry