



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1313209
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
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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: _____

1313209

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <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> _____	PRODUCTION INTERVAL: _____ _____
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Johnson County, KS
 Well:Knabe 23
 Lease Owner: DE TZ

Town Oilfield Service, Inc.
 (913) 294-2125

Commenced Spudding:
 7/21/16

WELL LOG

Thickness of Strata	Formation	Total Depth
0-16	Soil-Clay	16
48	Shale	64
5	Lime	69
2	Shale	71
15	Lime	86
7	Shale	93
9	Lime	102
8	Shale	110
19	Lime	129
3	Shale	132
17	Sandy Shale	149
29	Lime	178
15	Shale	193
8	Lime	201
9	Shale	210
29	Lime	239
15	Shale	254
10	Lime	264
20	Shale	284
6	Lime	290
4	Shale	294
7	Lime	301
43	Shale	344
25	Lime	369
9	Shale	378
21	Lime	399
4	Shale	403
4	Lime	407
5	Shale	412
6	Lime	418
28	Shale	446
18	Sandy Shale	464
126	Shale	590
5	Lime	595
3	Shale	598
1	Lime	599
9	Shale	608
7	Lime	615
4	Sand	619
12	Shale	631

Short Cuts

TANK CAPACITY

BBLs. (42 gal.) equals $D^2 \times 1.4 \times h$
D equals diameter in feet.
h equals height in feet.

BARRELS PER DAY

Multiply gals. per minute x 34.2

HP equals BPH x PSI x .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 $SPM \times d$

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

* Need these to figure belt length

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

746 WATTS equal 1 HP

Log Book

Well No. 23

Farm Knabe

KS Johnson
(State) (County)

31 14 22
(Section) (Township) (Range)

For DE & TZ LLC
(Well Owner)

Town Oilfield Services, Inc.

1207 N. 1st East
Louisburg, KS 66053
913-710-5400

Thickness of Strata	Formation	Total Depth	Remarks
0-16	Soil - clay	16	
48	Shale	64	
5	Lime	69	
2	Shale	71	
15	Lime	86	
7	Shale	93	
9	Lime	102	
8	Shale	110	
19	Lime	129	
3	Shale	132	
17	sandy shale	149	
29	Lime	178	
15	Shale	193	
8	Lime	201	
9	Shale	210	
29	Lime	239	
15	Shale	254	
10	Lime	264	
20	Shale	284	
6	Lime	290	
4	Shale	294	
7	Lime	301	
43	Shale	344	
25	Lime	369	
9	Shale	378	
21	Lime	399	
4	Shale	403	

403

Thickness of Strata	Formation	Total Depth	Remarks
4	Lime	407	
5	Shale	412	
6	Lime	418	Heather
28	Shale	446	
18	sandy shale	464	
126	Shale	590	
5	Lime	595	
3	Shale	598	
1	Lime	599	
9	Shale	608	
7	Lime	615	
4	Sand	619	good oil show
12	Shale	631	
3	Lime	634	
7	Shale	641	
2	Lime	643	
6	Shale	649	
4	Lime	653	
23	Shale	676	red bed
1	Lime	677	
76	Shale	753	
7	Sand	760	broken - good oil show
5	sandy shale	765	
17	Shale	782	
4	Lime	786	
27	Shale	813	
7	Sand	820	broken - slight show



CONSOLIDATED
Oil Well Services, LLC

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#

808152

Invoice Date: 07/26/16

Terms: Net 30

Page 1

D.E. EXPLORATION

P.O. BOX 128
WELLSVILLE KS 66092
USA
7858834057

KNABE #23

Part No	Description	Quantity	Unit Price	Discount(%)	Total
CE0450	Cement Pump Charge 0 - 1500'	1.000	1,500.0000	62.000	570.00
CE0002	Equipment Mileage Charge - Heavy Equipment	25.000	7.1500	62.000	67.93
CE0711	Minimum Cement Delivery Charge	1.000	660.0000	62.000	250.80
WE0853	80 BBL Vacuum Truck (Cement Services)	1.000	100.0000	62.000	38.00
CC5840	Poz-Blend I A (50:50)	118.000	13.5000	62.000	605.34
CC5965	Bentonite	298.000	0.3000	62.000	33.97
CC5326	Sodium Chloride, Salt	238.000	1.0000	62.000	90.44
CC6077	Kolseal	590.000	0.5000	62.000	112.10
CP8176	2 7/8" Top Rubber Plug	1.000	45.0000	62.000	17.10

Subtotal 4,699.15

Discounted Amount 2,913.47

SubTotal After Discount 1,785.68

Amount Due 4,873.77 If paid after 08/25/16

Tax: 66.35

Total: 1,852.03



CONSOLIDATED
Oil Well Services, LLC

6271
6175

TICKET NUMBER 50156
LOCATION Ottawa KS
FOREMAN Fred Maden

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

FIELD TICKET & TREATMENT REPORT
INVOICE # 808152 EMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
7-22-16	2355	Kuabe # 23	NE 31	14	22	JO
CUSTOMER			TRUCK #	DRIVER	TRUCK #	DRIVER
DE + TZ LLC % DE Exploration			712	Fred Mad		
MAILING ADDRESS			368	Ar Mad		
P.O. Box 128			369	Mik Hoa		
CITY	STATE	ZIP CODE	503	Kei Det		
Wellsville	KS	66092				

JOB TYPE Long string HOLE SIZE 5 7/8 HOLE DEPTH 960 CASING SIZE & WEIGHT 2 7/8 EOE
 CASING DEPTH 942 DRILL PIPE Baffle in TUBING @ 910' OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 32' Plug
 DISPLACEMENT 5.29 BBL DISPLACEMENT PSI _____ MIX PSI _____ RATE 48 BPM

REMARKS: Hold Safety Meeting. Establish pump rate. Mix + Pump 100# Gel
Flush. Mix + Pump 118# SKS Poz Blend I A Cement 2% Gel 5% Salt
5# Kal Seal/sk. Cement to surface. Flush pump + lines clean.
Displace 2 1/2" Rubber plug to Baffle in casing. Pressure to
600# PSI. Release pressure to set float valve. Shut in casing.

T.O.S Drilling - (Wes)

Fred Maden

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	368	1500.00
CE0002	25	MILEAGE	368	178.75
CE0711	Minimum	Ten Miles Delivery	563	660.00
WF0853	1 hr	80 BBL Vac Truck	369	100.00
		Sub Total		2438.75
		Less 62%		1512.03
				926.73
CC5840	118 SKS	Poz Blend I A Cement		1593.00
CC5965	226#	Bentonite Gel		89.40
CC5326	238#	Salt		238.00
CC6077	590#	Kal Seal		295.00
CP8176	1	2 1/2" Rubber Plug		45.00
		Sub Total		2260.40
		Less 62%		1401.45
				858.95
		7.725% TAX		66.35
		ESTIMATED TOTAL		1852.03

Ravin 3737

AUTHORIZATION Buyer MCM TITLE _____ DATE (48732)

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