KOLAR Document ID: 1415087

Confidentiality Requested:
☐ Yes ☑ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
January 2018
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 6142
Name: Town Oil Company Inc.
Address 1: 16205 W 287TH ST
Address 2:
City: PAOLA State: KS Zip: 66071 + 8482
Contact Person: Winton Town
Phone: (913) 294-2125
CONTRACTOR: License # 6142
Name: Town Oil Company Inc.
Wellsite Geologist: NA
Purchaser:

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover
☑ Oil ☐ WSW ☐ SWD
☐ Gas ☐ DH ☐ EOR
☐ OG ☐ GSW
☐ 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 EOR ☐ Conv. to SWD
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ EOR Permit #:
☐ GSW Permit #:

6/26/2018 Spud Date or Recompletion Date
7/6/2018 Date Reached TD
7/6/2018 Completion Date or Recompletion Date

API No.: 15-037-22359-00-00
Spot Description:
SW- SW- SE -NW Sec. 36 Twp. 28 S. R. 21 ☑ East ☐ West
2900 Feet from ☐ North / ☑ South Line of Section
3800 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Crawford
Lease Name: ZUMMALLEN Well #: Z-1
Field Name:
Producing Formation: Bartlesville
Elevation: Ground: 906 Kelly Bushing: 0
Total Vertical Depth: 456 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 20 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: 1200 ppm Fluid volume: 20 bbls
Dewatering method used: Evaporated
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** ☐ **Drill Stem Tests Received**
☐ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** Karen Ritter **Date:** 07/12/2018

Operator Name: Town Oil Company Inc. Lease Name: ZUMMALLEN Well #: Z-1

Sec. 36 Twp. 28 S. R. 21 ☑ East ☐ West County: Crawford

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 *(Attach Additional Sheets)*	☐ Yes	☑ No
Samples Sent to Geological Survey	☐ Yes	☑ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☐ Yes	☑ No
Geologist Report / Mud Logs	☐ Yes	☑ No

List All E. Logs Run:

☐ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
NA	NA	NA

CASING RECORD ☑ New ☐ 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
Surface	12.250	8	10	20	Portland	5	50/50 POZ
Production	6.750	4	8	410	Portland	67	50/50 POZ

ADDITIONAL CEMENTING / SQUEEZE RECORD

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

1. Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/ Injection:	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:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:	
		Top	Bottom
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☑ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	410	430

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Town Oil Company Inc.
Well Name	ZUMMALLEN Z-1
Doc ID	1415087

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.250	8	10	20	Portland	5	50/50 POZ
Production	6.750	4	8	410	Portland	67	50/50 POZ

Crawford County, KS
Well: Zummallen Z-1
Lease Owner: Town Oil Co.

Town Oil Company, Inc.
(913) 294-2125

Commenced Spudding:
6/26/2018

WELL LOG

Thickness of Strata	Formation	Total Depth
18	Soil-Clay	18
1	Lime	19
20	Shale	21
1	Sandy Lime	22
24	Shale	46
6	Sandy Lime	52
52	Shale	104
2	Slate	106
2	Shale	108
28	Lime	136
3	Slate	139
24	Shale	163
8	Sandy Lime	191
49	Shale	219
7	Lime	226
8	Shale	234
7	Lime	241
100	Shale	341
5	Lime	346
54	Shale	408
1	Sandy Lime	409
6	Shale	410
20	Oil Sand	430
20	Shale	450
6	Shale	456-TD

Short Cuts

TANK CAPACITY

BBLS. (42 gal.) equals D^2x.14xh
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 - RPMxd over SPMxR
d - SPMxRxD over RPM
SPM - RPMXD over RxD
R - RPMXD over SPMxD

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

* Need these to figure belt length

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

746 WATTS equal 1 HP

Log Book

Well No. Z-1

Farm Zummallen

KS (State) Crawford (County)

36 (Section) 28 (Township) 21 (Range)

For Town Oil Co. (Well Owner)

Town Oil Company, Inc.
16205 W. 287th St.
Paola, KS 660 1
913-294-

Zummallen Farm: Crawford County

KS State; Well No. Z-1

Elevation

Commenced Spuding 6-26 20 18

Finished Drilling 7-6 20 18

Driller's Name Winton Town

Driller's Name

Driller's Name

Tool Dresser's Name Derrick Holestein

Tool Dresser's Name

Tool Dresser's Name

Contractor's Name Town Oil Co.

36 28 21

(Section) (Township) (Range)

Distance from line, ft.

Distance from line, ft.

CASING AND TUBING RECORD

10" Set		10" Pulled	
8" Set	20' 5sks	8" Pulled	
6¼" Set		6¼" Pulled	
4" Set	410'	4" Pulled	
2" Set		2" Pulled	

CASING AND TUBING MEASUREMENTS

Feet	In.	Feet	In.	Feet	In.
8	10				
29	6	28	9		
29	8	32	7		
32	6	29	4		
31	6	33	5		
30	9	33	7		
30	1	32	3		
31	—	33	3		
31	6	31	1		
32	6	26	7		
31	1	20	7		
32	5	29	8		
31	3	28	2		
29	6	30	6		
31	4	30	7		
29	8	430	6		
29	7	- 20	06		
20	8	410	—		
31	2				
30	3				
32	6				
[illegible]					
619	1				
6	0				
625	1				

-1-1

Thickness of Strata	Formation	Total Depth	Remarks
18	Soft blue clay	18	
1	Lime	19	
20	shale	219	
1	Lime sandy	22	Hard
24	Shale	46	
6	Sandy Lime	52	Coal Show
52	Shale	104	
2	Slate	106	
2	Shale	108	
28	Lime	136	Brown very Hard 120 - 136
3	Slate	139	
24	Shale	163	
8	Sandy Lime	171	
48	Shale	219	
7	Lime	226	
8	Shale	234	
7	Lime	241	
100	Shale	341	
5	Lime	346	
54	Shale	400	
1	Lime Sandy	401	
6	Shale	412	
18	Oil Sand	430	
20	Shale	450	
		456	TD

QES

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

SM - 11090
PO - 17333
FT - 10977

TICKET NUMBER 54051
LOCATION Ottawa, KS
FOREMAN Casey Kennedy

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
7/6/18	7823	Zurmuehlen #Z-1	NW 36	28	21	CR

CUSTOMER: Town Oil Co.
MAILING ADDRESS: 16205 W. 287. St.
CITY: Paola | STATE: KS | ZIP CODE: 66071

TRUCK #	DRIVER	TRUCK #	DRIVER
729	Casken	✓ Safety	Meeting
467	Kei Car	✓	
503	HarBec	✓	

JOB TYPE Longstring | HOLE SIZE 6 3/4" | HOLE DEPTH 442' | CASING SIZE & WEIGHT 4 1/2"
CASING DEPTH 410' | DRILL PIPE | TUBING Sand - 412' - 442' | OTHER
SLURRY WEIGHT | SLURRY VOL | WATER gal/sk | CEMENT LEFT In CASING 5'
DISPLACEMENT 6.46 bbls | DISPLACEMENT PSI | MIX PSI | RATE 4 bpm

REMARKS: Held safety meeting, established circulation, mixed + pumped 100# Gel followed by 5 bbls fresh water, mixed + pumped 67 sks Pozblend 1A cement w/ 2% gel per sk, cement to surface, displaced cement w/ 6.46 bbls fresh water, shut in casing.

Customer Supplied H_2O

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	1500.00	
CE0002	—	MILEAGE	—	
CE0711	1/2 min	ton mileage	330.00	
		trucks	1830.00	
		- 30%	549.00	
		Subtotal		1281.00
CC5840	167 Sks	Pozblend 1A cement	904.50	
CC5965	213 #	Gel	63.90	
		materials	968.40	
		- 30%	290.52	
		Subtotal		677.88
		7.5%	SALES TAX	50.84
			ESTIMATED TOTAL	2009.72

SCANNED
7-9 AM

Ravin 3737

AUTHORIZTION Scott Rickland TITLE Driller DATE 7-16-18

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's