KOLAR Document ID: 1481577

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 # 32218
Name: TDR Construction, Inc.
Address 1: PO BOX 339
Address 2:
City: LOUISBURG State: KS Zip: 66053 + 0339
Contact Person: Lance Town
Phone: (913) 710-5400
CONTRACTOR: License # 32218
Name: TDR Construction, Inc.
Wellsite Geologist: N/A
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 #:

10/18/2019 Spud Date or Recompletion Date
10/23/2019 Date Reached TD
10/24/2019 Completion Date or Recompletion Date

API No.: 15-059-27235-00-00
Spot Description:
SE - SW - SW - SW Sec. 29 Twp. 15 S. R. 21 ☑ East ☐ West
207 Feet from ☐ North / ☑ South Line of Section
4888 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: Franklin
Lease Name: NORTH MOLDENHAUER Well #: 23A
Field Name: Paola-Rantoul
Producing Formation: Squirrel
Elevation: Ground: 1010 Kelly Bushing: 0
Total Vertical Depth: 820 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 21 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: 1500 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: 02/10/2020
☐ **Confidential Release Date:** 02/09/2022
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☐ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** Karen Ritter **Date:** 02/10/2020

Operator Name: TDR Construction, Inc. Lease Name: NORTH MOLDENHAUER Well #: 23A

Sec. 29 Twp. 15 S. R. 21 ☑ East ☐ West County: Franklin

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:

GammaRayNeutronCCL

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

Name	Top	Datum
Squirrel	722	GL

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	9	6.25	12	21	Portland	3	50/50 POZ
Production	5.625	2.875	6.5	804	Portland	102	50/50 POZ 2% Benonite

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: 2/10/2020	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)*	722	740

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)*
	722	740			

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	TDR Construction, Inc.
Well Name	NORTH MOLDENHAUER 23A
Doc ID	1481577

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	9	6.25	12	21	Portland	3	50/50 POZ
Production	5.625	2.875	6.5	804	Portland	102	50/50 POZ 2% Benonite

Franklin County, KS
Well: N. Moldenhauer #23A
Lease Owner: TDR

TDR Construction, INC
(913) 710-5400

Commenced Spudding: 10/18/19

WELL LOG

Thickness of Strata	Formation	Total Depth
21	soil & clay	21
49	shale	70
4	lime	74
5	shale	79
16	lime	95
8	shale	103
10	lime	113
4	shale	117
20	lime	137
38	shale	175
21	lime	196
81	shale	277
40	lime	317
20	shale	337
1	lime	338
20	shale	358
3	lime	361
14	shale	375
10	lime	385
1	shale	386
13	lime	399
10	shale	409
22	lime	431
4	shale	435
2	lime	437
5	shale	442
6	lime	448 Hertha
119	shale	567
10	sand	577 very little odor & show
35	shale	612
5	sand	617 no oil
4	shale	619
11	lime	630
19	shale	649
2	lime	651
29	shale	670
5	lime	675
11	shale	686
3	lime	689
2	shale	691
4	lime	695

Franklin County, KS
Well: N. Moldenhauer #23A
Lease Owner: TDR

TDR Construction, INC
(913) 710-5400

Commenced Spudding: 10/18/19

Thickness of Strata	Formation	Total Depth
13	shale	708
2	lime	710
11	shale	721
2	sandy shale	723
2	sand	725 broken
7	sand	732 solid-good saturation & bleed
6	sand	738 broken - good saturation
4	sand	742 mostly solid
2	sand	744 broken
14	sandy shale	758
62	shale	820 TD

Log Book

Well No. 23 A

Farm N. Moldenhauer

KS (State) Franklin (County)

29 (Section) 15 (Township) 21 E (Range)

For TDR Construction (Well Owner)

Town Oilfield Services, Inc.
1207 N. 1st East
Louisburg, KS 66053
913-710-5400

N. Moldenhauer Farm: Franklin County

KS State; Well No. 23 A

Elevation 1010'

Commenced Spuding 10/18 20 19

Finished Drilling 10/23 20 19

Driller's Name Ryan Ward

Driller's Name

Driller's Name

Tool Dresser's Name Jacob Shown

Tool Dresser's Name

Tool Dresser's Name

Contractor's Name TDR

29 (Section) 15 (Township) 21 E (Range)

Distance from S line, 207 ft.

Distance from E line, 4888 ft.

3 Sx
5-5/8" bore hole
2-7/8" casing

CASING AND TUBING RECORD

10" Set		10" Pulled	
8" Set		8" Pulled	
6¼" Set	21'	6¼" Pulled	
4" Set		4" Pulled	
2" Set		2" Pulled	

CASING AND TUBING MEASUREMENTS

Feet	In.	Feet	In.	Feet	In.
773'	to	Baffle			
804'	Total	pipe		2-7/8"	
820'	TD				

Thickness of Strata	Formation	Total Depth	Remarks
21	Soil & Clay	21	
49	Shale	70	
4	Lime	74	
5	Shale	79	
16	Lime	95	
8	Shale	103	
10	Lime	113	
4	Shale	117	
20	Lime	137	
38	Shale	175	
21	Lime	196	
81	Shale	277	
40	Lime	317	
20	Shale	337	
1	Lime	338	
20	Shale	358	
3	Lime	361	
14	Shale	375	
10	Lime	385	
1	Shale	386	
13	Lime	399	
10	Shale	409	
22	Lime	431	
4	Shale	435	
2	Lime	437	
5	Shale	442	
6	Lime	448	Hertha

448

Thickness of Strata	Formation	Total Depth	Remarks
119	Shale	567	
10	Sand	577	very little odor + show
35	Shale	612	
5	Sand	617	No oil
4	Shale	619	
11	Lime	630	
19	Shale	649	
2	Lime	651	
29	Shale	~~680~~ 670	
5	Lime	675	
11	Shale	686	
3	Lime	689	
2	Shale	691	
4	Lime	695	
13	Shale	708	
2	Lime	710	
11	Shale	721	
~~12~~ 2	Sandy Shale	~~743~~ 723	
2	Sand	~~725~~ Broken	Broken
7	Sand	732	Solid - Good Saturation + Bleed
6	Sand	738	Broken - Good Saturation
4	Sand	742	Mostly Solid
2	Sand	744	Broken
14	Sandy Shale	~~758~~ 758	
	Shale	820	T.D.

CEMENT TREATMENT REPORT

Customer:	TDR Construction	Well:	North Moldenhauer #23A	Ticket:	ICT2646
City, State:	Louisburg, KS	County:	FR, KS	Date:	10/24/2019
Field Rep:	Lance Town	S-T-R:	SW 29-15-21	Service:	longstring

Downhole Information	
Hole Size:	5 5/8 in
Hole Depth:	820 ft
Casing Size:	2 7/8 in
Casing Depth:	804 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	baffle
Depth:	773 ft
Displacement:	4.5 bbls

Calculated Slurry	
Weight:	# / sx
Water / Sx:	gal / sx
Yield:	ft^3 / sx
Bbls / Ft.:	
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	#DIV/0! sx

Product	% / #	#
Class A	50.00	4794
Poz	50.00	3774
Gel	2.00	171
CaCl		
Gypsum		
Metso		
Kol Seal		
Flo Seal		
Salt (bww)		
	Total	8,739

TIME	RATE	PSI	BBLs	REMARKS
	4.0			established circulation
	4.0			mixed and pumped 200# Bentonite followed by 5 bbls fresh water
	4.0			mixed and pumped 102 sks 50/50 Pozmix cement w/ 2% Bentonite per sk
	4.0			cement to surface, flushed pump clean
	2.0			pumped 2 1/2" rubber plug to baffle w/ 4.47 bbls fresh water
				pressured to 800 PSI, released pressure to set float valve
	4.0			washed up equipment

	CREW	UNIT
Cementer:	Casey Kennedy	239
Pump Operator:	Alan Mader	246
Bulk #1:		
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
3.66667 bpm	#DIV/0! psi	- bbls

Hurricane Services, Inc.
250 N. Water
Wichita, KS 67202