KOLAR Document ID: 1457676

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 # 32446
Name: Merit Energy Company, LLC
Address 1: 13727 NOEL ROAD, SUITE 1200
Address 2:
City: DALLAS State: TX Zip: 75240 + ____
Contact Person: IDANIA MEDINA
Phone: (620) 629-4228
CONTRACTOR: License # 34199
Name: Rawhide Well Service, LLC
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: AMOCO PRODUCTION COMPANY
Well Name: ELLSAESSER 2
Original Comp. Date: 7/29/1984 Original Total Depth: 5850
☐ 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 #:

5/14/2018		6/5/2018
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-081-20310-00-01
Spot Description:
__ - __ - NW - SW Sec. 23 Twp. 29 S. R. 33 ☐ East ☑ West
2008 Feet from ☐ North / ☑ South Line of Section
4579 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: Haskell
Lease Name: ELLSAESSER (NPHU) Well #: 2
Field Name: N.E. LEMON
Producing Formation: KANSAS CITY "B"
Elevation: Ground: 2931 Kelly Bushing: 2941
Total Vertical Depth: 5850 Plug Back Total Depth: 5250
Amount of Surface Pipe Set and Cemented at: 1627 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** ☐ **Drill Stem Tests Received**
☐ **Geologist Report / Mud Logs Received**
☑ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 04/17/2019

Operator Name: Merit Energy Company, LLC Lease Name: ELLSAESSER (NPHU) Well #: 2

Sec. 23 Twp. 29 S. R. 33 ☐ East ☑ West County: Haskell

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
SEE ORIGINAL		

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	12.25	9.625	32	1627	H	950	SEE ORIGINAL
Production	8.75	7	23	5850	H	530	SEE ORIGINAL

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	4218-4228	H	100	SEE ATTACHED
	-			

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: 6/27/2018	Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☑ Other *(Explain)* injecting					
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)*	4660	4672

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)*
	4660	4672			previous perfs
			CIBP Cast Iron Bridge Plug	5250	

TUBING RECORD:	Size:	Set At:	Packer At:
	2.8750	4643	4643

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

Form	ACO1 - Well Completion
Operator	Merit Energy Company, LLC
Well Name	ELLSAESSER (NPHU) 2
Doc ID	1457676

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	12.25	9.625	32	1627	H	950	SEE ORIGINAL
Production	8.75	7	23	5850	H	530	SEE ORIGINAL

FIELD TICKET

Client	MERIT ENERGY COMPANY
Well	Ellsaesser 2
Job Description	Squeeze-Hole - Existing Well
Print Date	May 16, 2018

Field Ticket # FT-06812-D2D8Z50202-09304

Field Ticket #	FT-06812-D2D8Z50202-09304	**Credit Approval #**	
Client	MERIT ENERGY COMPANY	**Purchase Approval #**	
	PO BOX 1293, LIBERAL, 67905-1293	**Invoice #**	

Field Rep	Erik Chavez	**Well**	Ellsaesser 2
Field Client Rep	Martin Aregon	**Well API #**	15-081-20310
District	Liberal, KS	**County**	USA
Job Type	Squeeze-Hole - Existing Well	**State/Province**	KS
Job Depth (ft)	0.00	**Field**	LEMON NORTHEAST
Gas Used On Job	No	**Lease**	Ellsaesser

FIELD TICKET

Client	MERIT ENERGY COMPANY
Well	Ellsaesser 2
Job Description	Squeeze-Hole - Existing
Print Date	Well May 16, 2018

Field Ticket # FT-06812-D2D8Z50202-09304

MATERIALS

Product Code	Description	UOM	Quantity	List Price	Gross Amount	Disc (%)	Net Amount
L100112	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	LB	235.0000	$2.40	$564.00	45.00	$310.20
L100318	CEMENT EXTENDER, GYPSUM, A-10	LB	564.0000	$0.72	$406.08	45.00	$223.34
L100022	CEMENT, CLASS H, HSR	SK	300.0000	$50.27	$15,081.00	45.00	$8,294.55
L100120	EXTENDER, BENTONITE	LB	188.0000	$2.08	$391.04	45.00	$215.07
L100404	SALT,SODIUM CHLORIDE, A-5	LB	485.0000	$1.04	$504.40	45.00	$277.42
			Product Material Subtotal:		**$16,946.52**		**$9,320.58**

SERVICES

Product Code	Description	UOM	Quantity	List Price	Gross Amount	Disc (%)	Net Amount
S-100004	Cement Crew Mobilization-Demobilizaton Fee	EA	1.00	$10,880.00	$10,880.000	90.00	$1,088.000
S-100051	Cement pump charge, 3,001-4,000 feet/901-1,200 m	6/HR	1.00	$5,472.00	$5,472.000	90.00	$547.200
S-100001	Mileage - vehicle heavy weight	MI	50.00	$18.96	$948.000	90.00	$94.800
S-100002	Mileage - vehicle light weight	MI	50.00	$10.72	$536.000	90.00	$53.600
				Service Subtotal:	**$17,836.00**		**$1,783.60**

FIELD TICKET

Client	MERIT ENERGY COMPANY
Well	**Ellsaesser** 2
Job Description	Squeeze-Hole - Existing Well
Print Date	May 16, 2018

Field Ticket # FT-06812-D2D8Z50202-09304

FIELD ESTIMATES

TOTAL GROSS AMOUNT	$34,782.520
TOTAL % DISC	68.075%
TOTAL NET AMOUNT	$11,104.180

Arrive Location

Client Rep.

Service Order

I authorize work to begin per service instructions in accordance with the terms and conditions printed on the following pages of this form and represent that I have authority to accept and sign this order.

Service receipt

I certify that the materials and services listed were received and all services performed in a workmanlike manner.

BJ REPRESENTATIVE

Erik Chavez

CLIENT AUTHORIZED AGENT

Martin Aregon

Cementing Treatment

Start Date	5/16/2018	**Field Ticket#**	
End Date	5/16/2018	**Well**	Ellsaesser 2
Client	MERIT ENERGY COMPANY	**API#**	15-081-20310
Client Field Rep.	Martin Aregon	**Well Classification**	
Service Sup.	Erik Chavez	**County**	
District	Liberal, KS	**State/Province**	KS
Type of Job	Squeeze-Hole - Existing Well	**Formation**	
Execution ID	EXC-06812-D2D8Z502	**Rig**	
Project ID	PRJ1006846		

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)	Grade	Thread
Casing	4.95	5.50	15.50	4228.00	4228.00			
Tubing	2.44	2.88	6.50	4147.00	4147.00			

Shoe Length (ft):

HARDWARE

Bottom Plug Used?	No	**Tool Type**	Cement Retainer
Bottom Plug Provided By		**Tool Depth (ft)**	4,147.00
Bottom Plug Size		**Max Tubing Pressure - Rated (psi)**	
Top Plug Used?	No	**Max Tubing Pressure - Operated (psi)**	
Top Plug Provided By		**Max Casing Pressure - Rated (psi)**	
Top Plug Size		**Max Casing Pressure - Operated (psi)**	
Centralizers Used	No	**Pipe Movement**	None
Centralizers Quantity		**Job Pumped Through**	Squeeze Manifold
Centralizers Type		**Top Connection Thread**	8rd
Landing Collar Depth (ft)	4,147	**Top Connection Size**	2.875

CIRCULATION PRIOR TO JOB

Well Circulated By		**Solids Present at End of Circulation**	No

Cementing Treatment

Circulation Prior to Job	No	**10 sec SGS**	
Circulation Time (min)		**10 min SGS**	
Circulation Rate (bpm)		**30 min SGS**	
Circulation Volume (bbls)		**Flare Prior to/during the Cement Job**	No
Lost Circulation Prior to Cement Job	No	**Gas Present**	No
Mud Density In (ppg)		**Gas Units**	
Mud Density Out (ppg)			
PV Mud In			
PV Mud Out			
YP Mud In			
YP Mud Out			

TEMPERATURE

Ambient Temperature (°F)	78.00	**Slurry Cement Temperature (°F)**	
Mix Water Temperature (°F)	64.00	**Flow Line Temperature (°F)**	

BJ FLUID DETAILS

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Planned Top of Fluid (Ft)	Length (Ft)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Lead Slurry	Thixo Lead	15.6000	1.3270	5.81		0.00	100	133.0000	23.7000
Tail Slurry	Tail Cement	15.6000	1.1881	5.24		0.00	250	298.0000	53.1000

Fluid Type	Fluid Name	Component	Concentration	UOM
Lead Slurry	Thixo Lead	EXTENDER, BENTONITE	2.0000	BWOB
Lead Slurry	Thixo Lead	CEMENT, CLASS H, HSR	100.0000	PCT
Lead Slurry	Thixo Lead	SALT,SODIUM CHLORIDE, A-5	10.0000	BWOW
Lead Slurry	Thixo Lead	CEMENT EXTENDER, GYPSUM, A-10	6.0000	BWOB
Tail Slurry	Tail Cement	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	1.0000	BWOB
Tail Slurry	Tail Cement	CEMENT, CLASS H, HSR	100.0000	PCT

TREATMENT SUMMARY

Cementing Treatment

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)	Comments
5/16/2018 1:26 PM	Thixo Lead	2.20	23.70	0.00		
5/16/2018 1:59 PM	Tail Cement	1.20	33.00	1,038.00		

	Min	Max	Avg
Pressure (psi)	0.00	1,038.00	0.00
Rate (bpm)	1.20	2.20	1.70

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By		**Amount of Cement Returned/Reversed**	
Calculated Displacement Volume (bbls)		**Method Used to Verify Returns**	
Actual Displacement Volume (bbls)		**Amount of Spacer to Surface**	
Did Float Hold?	No	**Pressure Left on Casing (psi)**	0.00
Bump Plug	No	**Amount Bled Back After Job**	
Bump Plug Pressure (psi)		**Total Volume Pumped (bbls)**	111.00
Were Returns Planned at Surface	No	**Top Out Cement Spotted**	No
Cement returns During Job		**Lost Circulation During Cement Job**	No

CEMENT PLUG

Bottom of Cement Plug?	No	**Wiper Balls Used?**	No
Wiper Ball Quantity		**Plug Catcher**	No
Number of Plugs			

SQUEEZE

Injection Rate (bpm)	2.200	**Fluid Density (ppg)**	8.40
Injection Pressure (psi)	0.000	**ISIP (psi)**	0.00
Type of Squeeze	Block	**FSIP (psi)**	850.00
Operators Max SQ Pressure (psi)	1,500.00		

COMMENTS

Treatment Report

Cementing Treatment

Job Summary

Prime Lines 2 bbls
Pressure Test 1500 psi
Pressure Backside 500 psi
Injection Test 10 bbls
LCmt 100 sks @ 15.6 ppg / 23.633 bbls
TCmt 250 sks / 1% CC @ 15.6 ppg / 52.90 bbls
Shutdown/WashEquipment
Displacement / Hestitation per customer
Retainer=24.011 bbls
Top= 2.868 / 26.879 bbls
Btm= 3.2724 / 27.283 bbls
Sting out 8ft
Reverse out 50 bbls Fresh H20

1. **Prime Lines 2 bbls**
2. **Pressure Test 1500 psi**
3. **Pressure up back side 500 psi**
4. **Injection test 10 bbls**
5. **LCmt 100 sks @ 15.6 ppg / 23.633 bbls**
6. **TCmt 250 sks / CC @ 15.6 / 52.90 bbls**
7. **Shutdown wash equipment**
8. **Displacement / Hestitation per customer**
   Retainer = 24.011
   Top = 2.868 / 26.879
   Btm = 3.2724 / 27.283
9. **Sting out 8ft**
10. **Reverse out 50 bbls**