KOLAR Document ID: 1352982

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 RD STE 1200
Address 2:
City: DALLAS State: TX Zip: 75240 + ____
Contact Person: IDANIA MEDINA
Phone: (620) 629-4228
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: Merit Energy Geologist
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 #:

1/2/2017	1/6/2017	1/25/2017
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-067-21831-00-00
Spot Description:
SE - NW - SW - NE Sec. 10 Twp. 29 S. R. 38 ☐ East ☑ West
1663 Feet from ☑ North / ☐ South Line of Section
2038 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: Grant
Lease Name: LONGBOW Well #: 4-10
Field Name: Big Sky
Producing Formation: St Louis
Elevation: Ground: 3111 Kelly Bushing: 3124
Total Vertical Depth: 5900 Plug Back Total Depth: 5846
Amount of Surface Pipe Set and Cemented at: 1515 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 5000 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: 800 ppm Fluid volume: 772 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: 04/20/2017
☑ **Confidential Release Date:** 04/20/2019
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☐ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 05/03/2017

Operator Name: Merit Energy Company, LLC Lease Name: LONGBOW Well #: 4-10

Sec. 10 Twp. 29 S. R. 38 ☐ East ☑ West County: Grant

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: Attached

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

Name	Top	Datum
Attached	Attached	Attached

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	8.625	24	1515	Class A	575	See Attached
Production	7.875	5.5	17	5890	Class A	235	See Attached

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: 1/25/2017	Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	70				

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)*	St Louis	

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:
	2.8750	5751	

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

Form	ACO1 - Well Completion
Operator	Merit Energy Company, LLC
Well Name	LONGBOW 4-10
Doc ID	1352982

All Electric Logs Run

ANNULAR HOLE VOLUME PLOT
ARRAY COMPENSATED TRUE RESISTIVITY LOG 1 LOG
ARRAY COMPENSATED TRUE RESISTIVITY LOG 2 LOG
ARRAY COMPENSATED TRUE RESISTIVITY LOG 5 LOG
BOREHOLE SONIC ARRAY LOG
MICROLOG
QUAD COMBO LOG
REPEAT SECTION
SPECTRAL DENSITY DUAL SPACED NEUTRON LOG

Form	ACO1 - Well Completion
Operator	Merit Energy Company, LLC
Well Name	LONGBOW 4-10
Doc ID	1352982

Tops

Name	Top	Datum
HEEBNER	3813	
TORONTO	3837	
LANSING	3900	
MARMATON	4447	
PAWNEE	4614	
FT SCOTT	4640	
CHEROKEE	4692	
ATOKA	4900	
MORROW	5194	
L. MORROW	5444	
CHESTER	5567	
ST GENEVIEVE	5596	
ST LOUIS	5644	
ST LOUIS B	5700	

Form	ACO1 - Well Completion
Operator	Merit Energy Company, LLC
Well Name	LONGBOW 4-10
Doc ID	1352982

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	5700-5708, 5712-5720 St. Louis	Acid-5000 gal 15% HCL, flush w/ 33 bbls fresh water (w/ biocide)	5700-5720

Form	ACO1 - Well Completion
Operator	Merit Energy Company, LLC
Well Name	LONGBOW 4-10
Doc ID	1352982

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	8.625	24	1515	Class A	575	See Attached
Production	7.875	5.5	17	5890	Class A	235	See Attached

ALLIED OFS, LLC
REMIT TO: P.O. Box 205803
Dallas, Texas 75320-5803

Cementing Services
Field Ticket

Printed on 1/9/2017 at 1:19 AM

Field Ticket Number: LIB1701081903/0030	*Field Ticket Date:*	Monday, January 09, 2017

Bill To:
MERIT ENERGY COMPANY
Liberal, KS 67901
P O Box 1293 / 1900 W 2nd St

Job Name:	02 Production/Long String
Well Location:	Haskell, KS
Well Name:	Longbow
Well Number:	4-10
Well Type:	New Well
Rig Number:	
Shipping Point:	Liberal, KS
Sales Office:	Mid Con

PERSONEL		EQUIPMENT	
ALDO ESPINOZA		984-	
CRISTIAN CAMACHO		1071-545	
ALEX AYALA		956-841	
VICTOR GARCIA		774-1066	

SERVICES - SERVICES - SERVICES

Description	QTY	UOM	Unit Amt	Gross Amt	Unit Net	Discount	Net Amount
PUMP, CASING CEMENT 5001-6000 FT	1.00	min. 4 hr	3,099.25	3099.25	1,022.75	67.0%	1,022.75
CMLP	1.00	per day	275.00	275.00	90.75	67.0%	90.75
PHDL	527.00	per cu. Ft.	2.48	1306.96	0.82	67.0%	431.30
DRYG	1076.00	ton-mile	2.75	2959.00	0.91	67.0%	976.47
MILV	50.00	per mile	4.40	220.00	1.45	67.0%	72.60
MIHV	50.00	per mile	7.70	385.00	2.54	67.0%	127.05

FLOAT EQUIPMENT -- FLOAT EQUIPMENT -- FLOAT EQUIPMENT

GS-5.5	1.00	each	281.00	281.00	126.45	55.0%	126.45
SSFC-5.5	1.00	each	725.00	725.00	326.25	55.0%	326.25
CEN-5.5	25.00	each	57.00	1,425.00	25.65	55.0%	641.25
SC - 5.5	1.00	each	5,335.00	5,335.00	2,400.75	55.0%	2,400.75
TLK - 5.5	6.00	each	85.00	510.00	38.25	55.0%	229.50
CB-5.5	1.00	each	395.00	395.00	177.75	55.0%	177.75

MATERIALS - MATERIALS - MATERIALS

CW-HVS	12.00	bbl	58.70	704.40	19.37	67.0%	232.45
CW-HVS	12.00	bbl	58.70	704.40	19.37	67.0%	232.45
CB-APH ✓	125.00	sack	21.79	2,723.75	7.19	67.0%	898.84
CFL-210	53.00	pound	18.90	1,001.70	6.24	67.0%	330.56
CLC-KOL	625.00	pound	0.98	612.50	0.32	67.0%	202.13
CLC-CPF	32.00	pound	2.97	95.04	0.98	67.0%	31.36
CA-500	525.00	pound	0.88	462.00	0.29	67.0%	152.46
CA-200	767.00	pound	0.68	521.56	0.22	67.0%	172.11
CD-100	21.00	pound	7.73	162.33	2.55	67.0%	53.57
CDF-100P	25.00	pound	3.50	87.50	1.16	67.0%	28.88
CB-ASA ✓	210.00	sack	23.50	4,935.00	7.76	67.0%	1,628.55
CFL-210	99.00	pound	18.90	1,871.10	6.24	67.0%	617.46
CLC-KOL	1050.00	pound	0.98	1,029.00	0.32	67.0%	339.57
CLC-CPF	53.00	pound	2.97	157.41	0.98	67.0%	51.95
CDF-100P	42.00	pound	3.50	147.00	1.16	67.0%	48.51
CB-ASA ✓	50.00	sack	23.50	1,175.00	7.76	67.0%	387.75
CFL-210	24.00	pound	18.90	453.60	6.24	67.0%	149.69
CLC-KOL	250.00	pound	0.98	245.00	0.32	67.0%	80.85

ALLIED OFS, LLC

Cementing Services
Field Ticket

Printed on 1/9/2017 at 1:19 AM

CLC-CPF	13.00	pound	2.97	38.61	0.98	67.0%	12.74
CDF-100P	10.00	pound	3.50	35.00	1.16	67.0%	11.55
ADDITIONAL ITEMS - ADDITIONAL ITEMS - ADDITIONAL ITEMS							
Additional hours, in excess of set hours	2.00	per hour	440.00	880.00	145.20	67.0%	290.40

	Gross	Discount	Final
Services Total	8,245.21	5,524.29	2,720.92
Equipment Total	8,671.00	4,769.05	3,901.95
Materials Total	17,161.90	11,498.47	5,663.43
Additional Items	880.00	589.60	290.40
Final Total	**34,958.11**	**22,381.41**	**12,576.70**

Allied Rep ALDO ESPINOZA
Customer Agent:

This output does NOT include taxes. Applicaple sales tax will be billed on the final invoice.
Customer hereby acknowledges receipt of the materials and services described above and on the attached documents.
I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the following page.

X
Customer Signature

Field Ticket Total (USD): **$12,576.70**

GENERAL TERMS AND CONDITIONS

DEFINITIONS: In these terms and conditions, "ALLIED" shall mean Allied Oil & Gas Services, LLC, and "CUSTOMER" shall refer to the party identified by that term on the front of this contract. As applicable, "JOB" relates to the services described on the front side of this contract, "MERCHANDISE" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

-TERMS: Unless satisfactory credit has been established, CUSTOMER must tender full cash payment to ALLIED before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, CUSTOMER agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing, in no event shall this Contract provide for interest exceeding the maximum rate of interest that CUSTOMER may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate. Any amounts previously paid as excess interest shall be deducted from the amounts owing from the CUSTOMER or at the option of ALLIED, refunded directly to CUSTOMER. For purposes of this paragraph, ALLIED and CUSTOMER agree that Kansas law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

-ATTORNEY FEES: In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the terms of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limited to, a reasonable sum as and for attorney's fees.

-PRICES AND TAXES: All merchandise listed in ALLIED'S current price schedule are F.O.B. ALLIED'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by ALLIED shall be added to the quoted prices charged to CUSTOMER.

-TOWING CHARGES: ALLIED will make a reasonable attempt to get to and from each job site using its own equipment. Should ALLIED be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by ALLIED, will be charged to and paid by the CUSTOMER.

-PREPARATION CHARGES: If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay ALLIED for the expenses incurred by ALLIED as a result of the cancellation.

-DEADHAUL CHARGES: Unless otherwise specified on the front of this Contract, a deadhaul charge as set forth in ALLIED'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.

-SERVICE CONDITIONS AND LIABILITIES:

1). ALLIED carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond ALLIED'S control, ALLIED shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. CUSTOMER shall be responsible for and indemnify, defend, and hold harmless ALLIED, its officers, agents and employees, from and against any and all claims or suits for:

A). Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and

B). Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with ALLIED'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of ALLIED or its employees.

2). With respect to any of ALLIED'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to ALLIED at the landing, CUSTOMER shall either recover the lost item without cost to ALLIED or reimburse ALLIED the current replacement cost of the item unless the loss or damage results from the sole negligence of ALLIED or its employees.

3). ALLIED does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

-WARRANTIES:

1). ALLIED warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. ALLIED'S obligation under this warranty is expressly limited to repair, replacement, or allowance for credit, at its option, for any merchandise which is determined by ALLIED to be defective. THIS IS THE SOLE WARRANTY OF ALLIED AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and ALLIED shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2). More specifically:

A). Nothing in this contract shall be construed as a warranty by ALLIED of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

B). Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by ALLIED or any interpretation of tests, meter readings, chart information, analysis of research, or recommendations made by ALLIED, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross

C). Work done by ALLIED shall be under the direct supervision and control of the CUSTOMER or his agent, and ALLIED will accomplish the jobas an independent contractor and not as an employee or agent of the CUSTOMER.

Well
AFE
CL
Office
Date

ALLIED OFS, LLC

Cement Job Summary

Job Number:	LIB1701081903/(	Job Purpose	02 Production/Long String		
Customer:	MERIT ENERGY COMPANY			Date:	1/9/2017
Well Name:	Longbow	Number:	4-10	API/UWI:	
County:	Haskell	City:		State:	KS
Cust. Rep:		Phone:		Rig Phone:	
Legal Desc:				Rig Name:	DUKE 9
Distance	50 miles (one way)			Supervisor	Aldo Espinosa

Employees:	Emp. ID:	Employees:	Emp. ID:
ALDO ESPINOZA			
CRISTIAN CAMACHO			
ALEX AYALA			
VICTOR GARCIA			

Equipment:	
984-	
1071-545	
956-841	
774-1066	

Well Information

Open Hole Section

Description:	Size (in):	Excess	Top MD (ft)	Btm MD (ft)	
OPEN HOLE	7 7/8	25%	5000	5,900	
OPEN HOLE	7 7/8			5,000	
OPEN HOLE	7 7/8				
OPEN HOLE	7 7/8				

Tubulars

Description:	Size (in):	Wgt. (lb/ft)	ID (in)	Grade:	Top MD (ft)	Btm MD (ft)
PREVIOUS CASING	8 5/8	24	8.097	J-55	0	1,450
TOTAL CASING	5 1/2	17	4.892	J55	0	5,890
STAGE TOOL	5 1/2	17	4.892	J55		4,992
SHOE	5 1/2	17	4.892	J55	5,848	5,890

Materials - Pumping Schedule

STAGE #1

Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Spacer 1	HIVIS SWEEP	12	8.40	n/a	n/a
Fluid Name	**Description**	**Rqstd Qty**	**Density**	**Yield**	**Water (gal/sk)**
Tail 1	ALLIED 50/50 POZ BLEND - CLASS H	125	13.60	1.61	7.36
Addl. Additive	**Description**	**Conc. (lb/sk)**	**Determined by**	**Load Volume**	**UOM**
CFL-210	FLUID LOSS ADDITIVE - LOW TEMP	0.42	% BWOC	52.5	lbm
CLC-KOL	KOL-SEAL	5	lb/sk	625.0	lbm
CLC-CPF	CELLOPHANE FLAKES	0.25	lb/sk	31.3	lbm
CA-500	GYPSUM	4.2	% BWOC	525.0	lbm
CA-200	SODIUM CHLORIDE	6.13088	% BWOW	766.4	lbm
CD-100	CEMENT DISPERSANT	0.168	% BWOC	21.0	lbm
CDF-100P	DEFOAMER - POWDER	0.2	lb/sk	25.0	lbm
Fluid Name	**Description**	**Rqstd Qty**	**Density**	**Yield**	**Water (gal/sk)**
Disp. 3	Displacement	136.1762333	8.33	n/a	n/a

STAGE #2

Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Stg 2 Spacer 1	HIVIS SWEEP	12	8.40	n/a	n/a

ALLIED OFS, LLC

Cement Job Summary

Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Stg 2 Tail 1	ALLIED SPECIAL BLEND CEMENT - CLASS A	210	13.60	1.92	9.56
Addl. Additive	**Description**	**Conc. (lb/sk)**	**Determined by**	**Load Volume**	**UOM**
CFL-210	FLUID LOSS ADDITIVE - LOW TEMP	0.47	% BWOC	98.7	lbm
CLC-KOL	KOL-SEAL	5	lb/sk	1050.0	lbm
CLC-CPF	CELLOPHANE FLAKES	0.25	lb/sk	52.5	lbm
CDF-100P	DEFOAMER - POWDER	0.2	lb/sk	42.0	lbm
Fluid Name	**Description**	**Rqstd Qty**	**Density**	**Yield**	**Water (gal/sk)**
Stg 2 Tail 2	ALLIED SPECIAL BLEND CEMENT - CLASS A	50	12.10	2.81	16.00
Addl. Additive	**Description**	**Conc. (lb/sk)**	**Determined by**	**Load Volume**	**UOM**
CFL-210	FLUID LOSS ADDITIVE - LOW TEMP	0.47	% BWOC	23.5	lbm
CLC-KOL	KOL-SEAL	5	lb/sk	250.0	lbm
CLC-CPF	CELLOPHANE FLAKES	0.25	lb/sk	12.5	lbm
CDF-100P	DEFOAMER - POWDER	0.2	lb/sk	10.0	lbm
Fluid Name	**Description**	**Rqstd Qty**	**Density**	**Yield**	**Water (gal/sk)**
Stg 2 Disp. 1	Displacement	116.2309946	8.33	n/a	n/a

Job Number:	LIB1701081903/(	Job Purpose	02 Production/Long String		
Customer:	MERIT ENERGY COMPANY			Date:	1/9/2017
Well Name:	Longbow		Number: 4-10	API/UWI:	
County:	Haskell	City:		State:	KS
Cust. Rep:		Phone:		Rig Phone:	0
Distance	50 miles (one way)			Supervisor	Aldo Espinosa

TIME	PRESSURE - (PSI)		FLUID PUMPED DATA		COMMENTS
AM/PM	CASING	ANNULUS	VOLUME	RATE (BPM)	
1/8/2017					DATE
200pm					on location
230pm					rig up
500pm					casing on bottom
515pm					when rig was circulating, when ball hit shoe
					pressured up to 2500 psi
530pm					safety meeting
547pm	3000			1	pressure test lines 3000 psi
548pm	430		12	4	12 bbl hivis sweep
554pm	200		35	4	125sk/35 bbl slurry
617pm					shut manifold, drop plug
619pm				3	wash pumping lines to pit
623pm	70			3	start displacement
627pm	70		20	4	20 bbl gone
633pm	120		20	4	40 bbl gone
638pm	140		20	4	60 bbl gone
643pm	130		20	4	80 bbl gone
647pm	300		20	4	100 bbl gone
650pm	360		10	2.5	110 slow down to 2.5 bpm to go trhu DV Tool
654pm	500		10	2.5	120 bbl gone
703pm	600		16	2.5	136 bbl shit it in, didn't bump plug
706pm	0				check floats, not holding, 1 bbl back
708pm					talked to company ing. Assuming that
					float is damaged acording to the pressure
					registered when ball hit it, decided to wait
710pm					30 min to drop tool opener
740pm					drop tool opener, give 20 min
800pm	900			1.5	open tool 900 psi to open

ALLIED OFS, LLC

Cement Job Summary

802pm	300		20	4	brake circulation, swap to rig
					SECOND STAGE
1050pm					swap to pump
1055pm	280		12	4	12 bbl hivis sweep
1113pm	60		25	2	cement rat & mouse
1120pm	220		72	4	210sk/72 bbl cement
1155pm				3	wash pumping lines to pit
1201am	100			3	start displacement
1006am	110		20	4	20 bbl gone
1210am	120		20	4	40 bbl gone
1214am	130		20	5	60 bbl gone
1218am	480		20	5	80 bbl gone
1223am	780		20	2.5	100 bbl slow down to 2.5 bpm
1230am	980-2500		16	2.5	116 bbl bump plug, 1500 over
1233am	0				DV Tool holding
1240am					rig down
120am					leave location
					thanks

ALLIED OFS,LLC

Cement Job Summary

Job Number:	Lib1701031357	Job Purpose	01 Surface		
Customer:	MERIT ENERGY COMPANY			Date:	1/3/2017
Well Name:	LongBow		Number: 4-10	API/UWI:	
County:	Grant	City:	Ulysses, Kansas	State:	KS
Cust. Rep:		Phone:		Rig Phone:	
Legal Desc:				Rig Name:	Duke Drilling#9
Distance	50 miles (one way)			Supervisor	James Peppin

Employees:	Emp. ID:	Employees:	Emp. ID:
James Peppin		Victor Garcia	
Jaime Torrez		Ramon Escarcega	

Equipment:	
903-4/501-5	1080-4/842-5
705-4/467-5	

Well Information

Open Hole Section

Description:	Size (in):	Excess	Top MD (ft)	Btm MD (ft)	
OPEN HOLE	12 1/4	110%	1283	1,518	TAIL CEMENT
OPEN HOLE	12 1/4	110%	0	1,283	LEAD CEMENT
OPEN HOLE	12 1/4			0	
OPEN HOLE	12 1/4				

Tubulars

Description:	Size (in):	Wgt. (lb/ft)	ID (in)	Grade:	Top MD (ft)	Btm MD (ft)
TOTAL CASING	8 5/8	24	8.097	J-55	0	1,515
SHOE	8 5/8	24	8.097	J-55	1,473	1,515

Materials - Pumping Schedule

Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Spacer 1	Fresh Water	10	8.33	n/a	n/a
Fluid Name	**Description**	**Rqstd Qty**	**Density**	**Yield**	**Water (gal/sk)**
Lead 1	ALLIED MULTI-DENSITY CEMENT - CLASS A	400	12.10	2.55	14.86
Addl. Additive	**Description**	**Conc. (lb/sk)**	**Determined by**	**Load Volume**	**UOM**
CA-100	CALCIUM CHLORIDE, PELLETS OR FLAKE	2.82	% BWOC	1128.0	lbm
CLC-CPF	CELLOPHANE FLAKES	0.5	lb/sk	200.0	lbm
Fluid Name	**Description**	**Rqstd Qty**	**Density**	**Yield**	**Water (gal/sk)**
Tail 1	CLASS A COMMON	175	15.20	1.27	5.74
Addl. Additive	**Description**	**Conc. (lb/sk)**	**Determined by**	**Load Volume**	**UOM**
CA-100	CALCIUM CHLORIDE, PELLETS OR FLAKE	1.88	% BWOC	329.0	lbm
CLC-CPF	CELLOPHANE FLAKES	0.5	lb/sk	87.5	lbm
Fluid Name	**Description**	**Rqstd Qty**	**Density**	**Yield**	**Water (gal/sk)**
Disp. 1	Displacement	93.80588357	8.33	n/a	n/a

Job Number:	Lib1701031357	Job Purpose	01 Surface		
Customer:	MERIT ENERGY COMPANY			Date:	1/3/2017
Well Name:	LongBow		Number: 4-10	API/UWI:	
County:	Grant	City:	Ulysses, Kansas	State:	KS
Cust. Rep:		Phone:		Rig Phone:	0
Distance	50 miles (one way)			Supervisor	James Peppin

TIME	PRESSURE - (PSI)	FLUID PUMPED DATA	COMMENTS