

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 # _____

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

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 #: _____

Spud Date or Recompletion Date _____ Date Reached TD _____ Completion Date or Recompletion Date _____

API No.: _____

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 Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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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				

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: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
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) (Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Larson Engineering, Inc. dba Larson Operating Company
Well Name	SISTERS 1-23
Doc ID	1364888

Perforations

Shots Per Foot	Perforation Top	Perforation Bottom	BridgePlugType	BridgePlugSet At	Material Record
4	4442	4444	CIBP	4430	none
4	4394	4396			250 gal 15% MCA
4	4332	4335			Ac 4332-35, 4337-41, 4328-30 w/ 250 gal 15% MCA
4	4337	4341			
4	4328	4330			
4	4280	4282			250 gal 15% MCA
4	4234	4244			250 gal 15% MCA
4	4198	4200			250 gal 15% MCA, SQZ:50 sx Class A w/ Halad in 20 sx



Services, Inc.

CHARGE TO: Larson Engineering
ADDRESS
CITY, STATE, ZIP CODE

TICKET 30320

PAGE 1 OF 1

1. SERVICE LOCATION Ness City KS	WELL/PROJECT NO. # 1-23	LEASE Sislers	COUNTY/PARISH Leone	STATE KS	CITY Dighton	DATE 5-17-17	OWNER Same
2. TICKET TYPE SERVICE	CONTRACTOR Southward Drilling	RIG NAME/NO. # 8	SHIPPED VIA CT	DELIVERED TO Location	WELL PERMIT NO.	ORDER NO.	WELL LOCATION Dighton KS-65, 134 yd, 5 in/b
3. WELL TYPE Development	WELL CATEGORY Development	JOB PURPOSE Cement 8 3/8" Surface Pipe					
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.			UNIT PRICE	AMOUNT	
		LOC	ACCT	DF		QTY.	UM	QTY.			UM
575					MILEAGE			40	mi	5.00	200.00
576.5					Pump Charge - Shallow Surface			8 3/8	in	1.00	800.00
325					Standard Cement			165	skt	12.25	2021.25
278					Calcium Chloride			3	90	7.00	280.00
279					Bentonite Gel			2	90	3.75	75.00
290					D-Air			2	gal	42.00	84.00
276					Flocel			1/4	lb	50.00	112.50
581					Service Charge Cement			165	skt	1.50	247.50
582					Minimum Drayage Charge			1	ea	250.00	250.00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.

DATE SIGNED: 5-17-17
TIME SIGNED: 0140
AM/PM: AM

REMIT PAYMENT TO:
SWIFT SERVICES, INC.
P.O. BOX 466
NESS CITY, KS 67560
785-798-2300

SURVEY

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?

WE UNDERSTOOD AND MET YOUR NEEDS?

OUR SERVICE WAS PERFORMED WITHOUT DELAY?

WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?

ARE YOU SATISFIED WITH OUR SERVICE? YES NO

CUSTOMER DID NOT WISH TO RESPOND

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	WE UNDERSTOOD AND MET YOUR NEEDS?	OUR SERVICE WAS PERFORMED WITHOUT DELAY?	WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?	ARE YOU SATISFIED WITH OUR SERVICE?
1020.00	407.00	407.00	407.00	173.60
50.00	306.03	306.03	306.03	173.60
7.50	7.50	7.50	7.50	173.60
TOTAL	3836.88	3836.88	3836.88	3836.88

SWIFT OPERATOR: David Huesh
APPROVAL: [Signature]

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES: The customer hereby acknowledges receipt of the materials and services listed on this ticket.

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 5-17-17 PAGE NO. 1

CUSTOMER Larson Engineering WELL NO. *1-23 LEASE Sisters JOB TYPE 8 7/8 Surface TICKET NO. *30320

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0100							on location 8 7/8" 20"
								RTD-266 TP-266
	0205							Break Circulation
	0213	4	5		✓		200	Pump 5 bbl water Spacer
	0215	4 1/2	40		✓		200	mix 165 sks STD 2% Gel 3% cc @ 14.7 fpp
	0225	4 1/2	0		✓		100	Start Displacement
		4 1/2	11		✓			circulate Cement to surface
	0230	4 1/2	16.3		✓		300	Kick out Pump *20 sks*
								Shut in
								wash up truck
	0300							Job Complete
								Thank You Dave Preston Isaac



CHARGE TO: Lalson Engineering
 ADDRESS:
 CITY, STATE, ZIP CODE:

TICKET 30377

SERVICE LOCATIONS: 1. Ness City KS
 WELL/PROJECT NO. 1-23 LEASE Sisters COUNTY/PARISH LANE STATE KS CITY Dighton DATE 23 MAY 17 OWNER
 2. TICKET TYPE SERVICE SALES CONTRACTOR SOUTHWIND RIG NAME/NO. 8 SHIPPED via DELIVERED TO location ORDER NO.
 3. WELL TYPE oil WELL CATEGORY Development JOB PURPOSE cement long string WELL PERMIT NO. WELL LOCATION 23-19-29
 4. REFERRAL LOCATION INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UNIT PRICE	AMOUNT
		LOC	ACCT	DF		QTY.	UM		
575					MILEAGE TRX 114	40	mi	5.00	200.00
578					Pump Charge	1	ea	1250.00	1250.00
325					Standard cement (for 4A-2)	175	sk	12.25	2143.75
284					coal seal	800	lb	30.00	240.00
293					salt	900	lb	0.20	180.00
277					coal seal (Gibsonite)	1225	lb	0.75	918.75
292					hhd-322	200	lb	8.00	1600.00
276					flocube	25	lb	2.25	56.25
280					mixt-flocube 21	500	gal	3.00	1500.00
221					KCL liquid	2000	gal	2.50	5000.00
419					Rotating head rental	1	ea	200.00	200.00
					Service Charge & Draying from Construction Dept				556.50

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 MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS
 X [Signature]
 DATE SIGNED TIME SIGNED A.M. P.M.
 0130

REMIT PAYMENT TO:
 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY	AGREE	UN-DECIDED	DISP-AGREE	PAGE TOTAL
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				8895.25
WE UNDERSTOOD AND MET YOUR NEEDS?				-889.53
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				8005.72
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				404.99
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES	<input type="checkbox"/> NO		TOTAL 8470.71

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.
 SWIFT OPERATOR [Signature] APPROVAL [Signature] Thank You!



PO Box 466
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 30377

CUSTOMER Carson Engineering WELL Sisters 1-23 DATE 23 MAR 17 PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT.	DF								
581		1				SERVICE CHARGE					1.50	262.50
583		1				MILEAGE CHARGE					0.75	294.00
						TOTAL WEIGHT	19600					
						LOADED MILES	40					
						TON MILES		392				

CONTINUATION TOTAL

JOB LOG

SWIFT Services, Inc.

DATE 23 MAY 17 PAGE NO. 1

CUSTOMER Larson Engineering WELL NO. 1-23 LEASE Sisters JOB TYPE concrete long string TICKET NO. 30377

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								175 bbls SA-2 cement w/ 1/4" floccle, 7" floccle, 5 1/2" x 15.5" casing to 4541' TD 4542 PC-2124'
	2230							on loc TRK 114
	2258							Drop ball - circulate - ROTATE
MAY 24	0000	4	15				200	Pump 15 bbl KCL flush
		4	12				200	Pump 500 gal floccle
		4	5				200	Pump 5 bbl KCL flush
	0005		8					Plug RT - 11H 30sk - 20sk
	0012	4	39				200	Mix SA-2 cement 125sk @ 15.3 ppm
								Drop latch down plug wash out Pump & Line
	0040	6 1/4					200	Displace plug
		6:4	85				400	
		6:4	100				600	
	0100	6:4	107				1600	Land plug
								Release pressure to work - dried up
	0105							wait & rock
	0125							Rack up
	0125							job complete
								Thanks Blaine, Flint & Gang



CHARGE TO: Larsen Engineering
 ADDRESS _____
 CITY, STATE, ZIP CODE _____

TICKET 30578

SERVICE LOCATIONS	WELL/PROJECT NO.	LEASE	COUNTY/PARISH	STATE	CITY	DATE	OWNER
1. <u>Ness City KS</u>	<u>#1-23</u>	<u>Sisters</u>	<u>Lane</u>	<u>KS</u>	<u>Dighton</u>	<u>5-26-17</u>	<u>Same</u>
2.	TICKET TYPE	CONTRACTOR	RIG NAME/NO.	SHIPPED VIA	DELIVERED TO	ORDER NO.	
3.	<input checked="" type="checkbox"/> SERVICE	<u>Wild West Well Service</u>	<u>#2</u>	<u>CT</u>	<u>Location</u>		
4. REFERRAL LOCATION	WELL TYPE	WELL CATEGORY	JOB PURPOSE	WELL PERMIT NO.	WELL LOCATION		
	<u>Oil</u>	<u>Development</u>	<u>Cement 5 1/2" Port Collar</u>		<u>Dighton - 65, 1 3/4 mi, Sink</u>		

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		UM		UNIT PRICE	AMOUNT	
		LOC	ACCT	DF								
575		1			MILEAGE			40	mi	5 ⁰⁰	200	00
576D		1			Pump Charge - Port Collar	5 1/2	in	1	job	1250 ⁰⁰	1250	00
330		1			SMD Cement			190	lbs	15 ⁷⁵	2992	50
276		1			Flocele	1/4	lb	50	lbs	2 ²⁵	112	50
290		1			D-Air			2	gal	42 ⁰⁰	84	00
581		1			Service Charge Cement			235	lbs	1 ⁵⁰	352	50
583		1			Drayage	23290	lbs	466	TM	00 ⁷⁵	349	50

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MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

x [Signature]
 DATE SIGNED 5-26-17 TIME SIGNED 12:30 P.M.

REMIT PAYMENT TO:

 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY			AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL	5341 ⁰⁰
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?						102	534 ¹⁰
WE UNDERSTOOD AND MET YOUR NEEDS?						804	4806 ⁹⁰
OUR SERVICE WAS PERFORMED WITHOUT DELAY?						<u>Lane</u>	
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?						7:510	215 ²⁶
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES <input type="checkbox"/> NO					TOTAL	5022 ¹⁶
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND							

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR David Kuehn APPROVAL _____

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 5-26-17 PAGE NO. 1

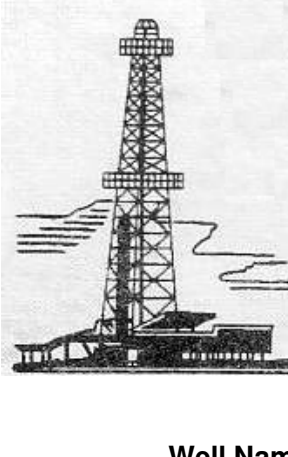
CUSTOMER *Lawson Engineering* WELL NO. #1-23 LEASE *Sisters* JOB TYPE *Perf Collar* TICKET NO.

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1100							on location 2 3/8" x 5 1/2"
								P.C. - 2122
	1105	∅	∅		✓		1000	Pressure test * Hold *
								Open P.C.
	1110	3	5		✓		300	Injection Rate
	1115	3 1/2	105		✓		400	mix 190 stg SMD w/ 1/4" flo @ 11.2 ppg circulate cement to surface * 20 stg *
		3 1/2	7 1/2		✓		400	Displace Cement
	1145	∅	∅		✓		1000	Close P.C. Test * Hold *
								Run 5 stg
	1200	3	20		✓		300	Reverse Clean * 190 stg total * * 20 stg pit *
								wash up truck
	1230							Job Complete

Thank You
Dave Preston Shane

WELLSITE GEOLOGIST'S REPORT

VERNON C. SCHRAG
CONSULTANT GEOLOGIST



Scale 1:240 (5"=100') Imperial

Well Name: SISTERS #1-23
 Location: NE SE NW SEC. 23-19S-29W
 Licence Number: API: 15-101-22593
 Spud Date: May 16, 2017
 Surface Coordinates: 663' FNL & 1129' FWL

Region: Lane Co., KS
 Drilling Completed: May 23, 2017

Bottom Hole Coordinates:
 Ground Elevation (ft): 2823' K.B. Elevation (ft): 2833'
 Logged Interval (ft): 3800' To: RTD Total Depth (ft): 4540'
 Formation: Ft. Scott (WIW)
 Type of Drilling Fluid: Chemical Premix (Displaced)

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR:

Company: Larson Engineering Inc.
 Address: 562 West State Road 4
 Olin, KS 67564-8561

DRILLING CONTRACTOR:

Southwind Drilling Co., Rig #8

DP 4.5" XH (16.6#); DC 6-1/4" x 2-3/8" x 496'; Kelly 40.00'; Tool Joint 5.5" ; Bit: HA-23X, 7-7/8", standard jets 14-14-14; rpm 80, WOB 35k; Kelly Bushing 10' above ground level; Bill Sanders (tool pusher), Doug Roberts (daylight driller).

CASING:

Ran 6 jts new 8-5/8" 20# R3 STC 8rd csg. Tallied 253', set @ 266' KB.

Ran 107 jts new 5-1/2" 15.5# R3 LTC 8rd csg. Tallied 4545.16', set @ 4541' KB.

CIRCULATION SYSTEM:

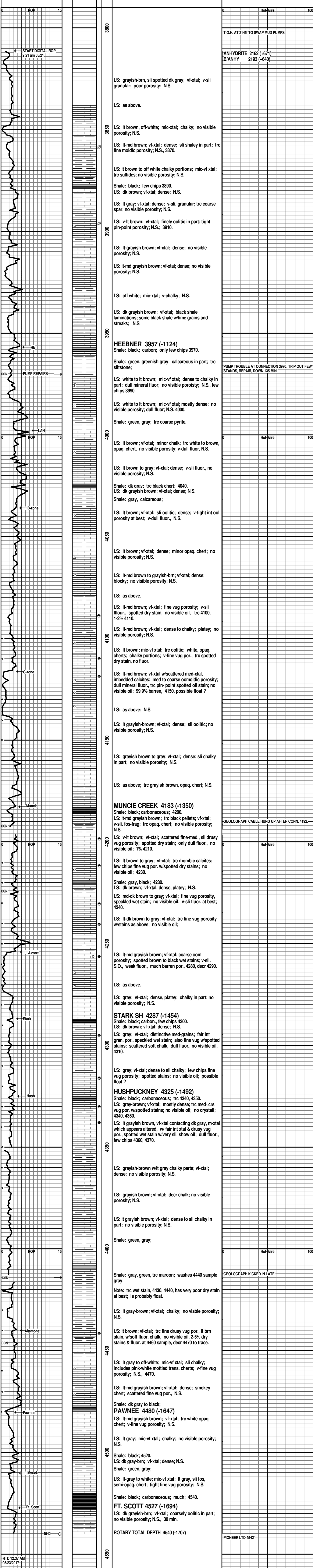
Continental EMSCO D-300, duplex, 6 x 14 (from 2145'), 60 spm, Chemical, premix, earth pits, MudCo/Service Mud, Inc., Jason Whiting

OPEN HOLE LOGS:

DN, DI (SP), ML, No Sonic; stacked tools, 5" detail LTD-3600; 2" DI to surface casing; Pioneer Wireline Services, Hays, KS, LTD 4542'.

DRILL STEM TESTS:

None.



RTD 12:37 AM
05/23/2017