

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

2-21-09

Form ACO-1
September 1999
Form Must Be Typed

CONFIDENTIAL

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License # 3842
Name: LARSON OPERATING COMPANY
A DIVISION OF LARSON ENGINEERING, INC.
Address: 562 WEST STATE ROAD 4
City/State/Zip: OLMITZ, KS 67564-8561
Purchaser: NCRA
Operator Contact Person: TOM LARSON
Phone: (620) 653-7368
Contractor: Name: BEREDCO, INC.
License: 5147
Wellsite Geologist: THOMAS FUNK

Designate Type of Completion:
 New Well Re-Entry Workover
 Oil SWD SIOW Temp Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Re-entry: Old Well Info as follows:
Operator: _____
Well Name: _____
Original Comp. Date: _____ Original Total Depth: _____
 Deepening Re-perf. Conv. to Enhr./SWD
 Plug Back _____ Plug Back Total Depth _____
 Commingled _____ Docket No. _____
 Dual Completion _____ Docket No. _____
 Other (SWD or Enhr.?) _____ Docket No. _____

<u>10/24/2006</u>	<u>11/3/2006</u>	<u>1/3/2007</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 101-21969-00-00
County: LANE
APPR SE SW NW Sec. 21 Twp. 16 S. R. 27 East West
2310 feet from NORTH Line of Section
810 feet from WEST Line of Section
Footages Calculated from Nearest Outside Section Corner:
(circle one) NE SE NW SW
Lease Name: HALL Well #: 1-21
Field Name: _____
Producing Formation: MARMATON
Elevation: Ground: 2698' Kelly Bushing: 2707'
Total Depth: 4600' Plug Back Total Depth: 4553'
Amount of Surface Pipe Set and Cemented at 268 Feet
Multiple State Cementing Collar Used? Yes No
If yes, show depth set 2115 Feet
If Alternate II completion, cement circulated from 2115
feet depth to SURFACE w/ 205 sx cmt.

Drilling Fluid Management Plan ALF # NH9-2508
(Data must be collected from the Reserve Pit)
Chloride content 9000 ppm Fluid volume 900 bbls
Dewatering method used ALLOWED TO DRY
Location of fluid disposal if hauled offsite: _____
Operator Name: _____
Lease Name: _____ License No.: _____
Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West
County: _____ Docket No.: _____

INSTRUCTIONS: An original and two copies of this information shall be filed with the Kansas Corporation Commission, 130 South Market-Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.

Signature: Carol Larson
Title: SECRETARY/TREASURER Date: 2/21/07
Subscribed and sworn to before me this 21ST day of FEBRUARY,
2007.
Notary Public: Debra J. Ludwig
Date Commission Expires: 5-5-2008

KCC Office Use ONLY

Letter of Confidentiality Attached
If Denied, Yes Date: _____
 Wireline Log Received
 Geologist Report Received
 UIC Distribution

RECEIVED
KANSAS CORPORATION COMMISSION
FEB 22 2007

DEBRA J. LUDWIG
Notary Public - State of Kansas
My Appt. Expires 5-5-2008

CONSERVATION DIVISION
WICHITA, KS

Operator Name: LARSON OPERATING COMPANY
A DIVISION OF LARSON ENGINEERING, INC. Lease Name: HALL Well #: 1-21
 Sec. 21 Twp. 16 S. R. 27 East West County: LANE

INSTRUCTIONS: Show important tops and base of formation penetrated. Detail all cores. Report all final copes of drill stem 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. Attach copy of all Electric Wireline Logs surveyed. Attach final geologist well site report.

Drill Stem Tests Taken (Attach Additional Sheets)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Sample Sent to Geological Survey	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	ANHYDRITE	2124	+583
Electric Log Run (Submit Copy)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	BASE ANHYDRITE	2159	+548
List All E. Logs Run:	DUAL INDUCTION		HEEBNER SH	3934	-1227
	DUAL COMP POROSITY		LANSING	3974	-1267
	BOREHOLE COMP SONIC		STARK SH	4214	-1507
	MICRORESISTIVITY		MARMATON	4321	-1614
			PAWNEE	4414	-1707
			FT SCOTT	4466	-1759
			CHEROKEE SH	4492	-1785
			MISSISSIPPIAN	4582	-1875

CASING RECORD <input checked="" 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
SURFACE	12-1/4"	8-5/8"	24#	268'	CLASS A	175	2% GEL, 3% CC
PRODUCTION	7-7/8"	5-1/2"	15.5#	4599'	SMD	125	1/4#/SK FLOCELE
					EA-2	100	5#/SK GILSONITE, 1/2% CFR

ADDITIONAL CEMENTING/SQUEEZE RECORD					
Purpose:	Depth		Type of Cement	# Sacks Used	Type and Percent Additives
	Top	Bottom			
<input type="checkbox"/> Perforate					
<input type="checkbox"/> Protect Casing					
<input type="checkbox"/> Plug Back TD					
<input type="checkbox"/> Plug Off Zone					
	SURF	2115	SMD	205	1/4#/SK FLOCELE

Shots per Foot	PERFORATION RECORD - Bridge Plugs Set/Type		Acid. Fracture, Shot, Cement, Squeeze Record	
	Specify Footage of Each Interval Perforated		(Amount and Kind of Material Used)	
4	4486-90'		500 GAL 15% MCA	4486-90'
4	4469-71'		500 GAL 15% MCA	4469-71'
4	4358-62'		500 GAL 15% MCA	4658-62'
4	4337-41'		500 GAL 15% MCA	4337-41'

TUBING RECORD				Liner Run	
Size	Set At	Packer At			
2-3/8"	4548		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Date of First, Resumed Production, SWD or Enh.			Producing Method		
1/3/07			<input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)		
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	148	0	13	0	42

Disposition of Gas: Vented Sold Used on Lease Open Hole Perf. Dually Comp. Commingled Other (Specify) _____

Production Interval: 4486-4341' OA

If vented, submit ACO-18.)



CHARGE TO: WASO, OPERATING
 ADDRESS _____
 CITY, STATE, ZIP CODE _____

TICKET
 No 11140

CONFIDENTIAL
 FEB 21 2007
 KCC

PAGE 1 OF 1

1. SERVICE LOCATIONS <u>NESS CITY KS</u>	WELL/PROJECT NO. <u>1-21</u>	LEASE <u>HALL</u>	COUNTY/PARISH <u>WJE</u>	STATE <u>KS</u>	CITY	DATE <u>11-15-06</u>	OWNER <u>SAME</u>
2.	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR <u>WOB WEST WELL SERVICE</u>	RIG NAME/NO.	SHIPPED VIA <u>CT</u>	DELIVERED TO <u>LOADING</u>	ORDER NO.	
3.	WELL TYPE <u>OIL</u>	WELL CATEGORY <u>DEVELOPMENT</u>	JOB PURPOSE <u>COMPT PORT COLLAR</u>	WELL PERMIT NO.	WELL LOCATION <u>PSUBWIS K- 1/2 E, N 210</u>		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		1			MILEAGE # 104	40		MC		4.00	160.00
577		1			PUMP SERVICE	1		JOB		850.00	850.00
330		1			SWIFT MULTI-JOBSSY STAPLES	205		SKS		13.50	2767.50
276		1			FLOCELE	56		LBS		1.25	70.00
290		1			DAG	1		GAL		32.00	32.00
581		1			SERVICE CHARGE COMPT	225		SKS		1.10	247.50
583		1			DEBRAGE	22326		LBS	446.52 TM	1.00	446.52
RECEIVED KANSAS CORPORATION COMMISSION FEB 22 2007 CONSERVATION DIVISION WICHITA, KS											

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

X
 DATE SIGNED 11-15-06 TIME SIGNED 1:00 A.M. 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	<u>4573.52</u>
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?				<u>Lane TAX 5.3%</u>	<u>15.208</u>
ARE YOU SATISFIED WITH OUR SERVICE? <input type="checkbox"/> YES <input type="checkbox"/> NO				TOTAL	<u>4725.60</u>
<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
Wade Wasen

APPROVAL _____ Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 11-15-08 PAGE NO. 1

CUSTOMER UNION OPERATING WELL NO. 1-21 LEASE HALL JOB TYPE CEMENT PORT COLLAR TICKET NO. 11140

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL/GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1200							ON LOCATION
								2 3/8 x 5 1/2 PORT COLLAR 2115'
	1205				✓		1000	PSE TEST CASING - HELD
	1210	3	2	✓		400		OPEN - PORT COLLAR INJ RATE
	1215	4	114	✓		450		MIX CEMENT 205 SWS SMD 1/4" / SK FLOCC
	1250	4	7	✓		575		DISPARE CEMENT
	1300				✓		1000	CLOSE PORT COLLAR - PSE TEST - HELD
								CIRCULATE 15 SWS OUT TO POT
	1310	3 1/2	25		✓		500	RUN 4 JTS - CIRCULATE CLEAN
								WASH TRUCK
	1400							JOB COMPLETE

RECEIVED
KANSAS CORPORATION COMMISSION
FEB 22 2007
CONSERVATION DIVISION
WISNITH, KS

IN REPLY TO
1002 1 7 011
3022

THANK YOU
WAKE, DANNY, RYAN



CHARGE TO:
LEASON OPERATING
 ADDRESS
 CITY, STATE, ZIP CODE

TICKET
 No 11621

PAGE 1 OF 2

FEB 21 2007
 KCCO
 CONFIDENTIAL

SERVICE LOCATIONS 1. <u>NESS CITY, KS</u>	WELL/PROJECT NO. <u>1-21</u>	LEASE <u>HALL</u>	COUNTY/PARISH <u>LAJE</u>	STATE <u>KS</u>	CITY	DATE <u>11-3-06</u>	OWNER <u>SAME</u>
2.	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR <u>BRESCO DRUG</u>	RIG NAME/NO.	SHIPPED VIA <u>CT</u>	DELIVERED TO <u>LOUISIANA</u>	ORDER NO.	
3.	WELL TYPE <u>OIL</u>	WELL CATEGORY <u>DEVELOPMENT</u>	JOB PURPOSE <u>5 1/2" LONGSTRING</u>	WELL PERMIT NO.	WELL LOCATION <u>PRODUCTION - 1/2 E 1/2 W</u>		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		1			MILEAGE # 104	45	MC			4.00	180.00
578		1			PUMP SERVICE	1	JOB	4600	FT	1250.00	1250.00
221		1			LEASING KCL	2	GAL			26.00	52.00
281		1			MUDFLUSH	500	GAL			.75	375.00
419		1			ROTARY HEAD RENTAL	1	JOB			250.00	250.00
RECEIVED KANSAS CORPORATION COMMISSION FEB 22 2007 CONSERVATION DIVISION WICHITA, KS											

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

x J.C. Larson
 DATE SIGNED 11-3-06 TIME SIGNED 1630 A.M. 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 #1	2107.00	
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				#2	4324.05	
WE UNDERSTOOD AND MET YOUR NEEDS?				subtotal	6431.05	
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				TAX	224.04	
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				Lane 5.3%		
ARE YOU SATISFIED WITH OUR SERVICE? <input type="checkbox"/> YES <input type="checkbox"/> NO					TOTAL	6655.09
<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 Wade Watson APPROVAL

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 11-3-06 PAGE NO. 7

CUSTOMER WELSON OPERATING WELL NO. 1-21 LEASE HALL JOB TYPE 5 1/2" LOGGING TICKET NO. 11621

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL/GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1630							ON LOCATION
								TD - 4600
								TP - 4607.58
								ST - 42.49
								5 1/2" / FT 15.5
								SEC = 4599
								PORTCOLLAR = 2115
	1715							DROP BALL - CIRCULATE ROTATE
	1818	6	12			✓	500	PUMP 500 GAL MUDFLUSH "
	1820	6	20			✓	500	PUMP 20 BBLs KCL-FLUSH "
	1827		4 1/2					PLUG RH - MH
	1834	6	52			✓	400	MIX COMHT LA - 125 SMD = 12.2 PPG "
		4 1/2	24			✓	250	TL - 100 EA2 = 15.5 PPG "
	1848							WASH OUT PUMP - LINES
	1850							RELEASE CATCH DOWN PLUG
	1852	7	0			✓		DISPLACE PLUG "
		6 1/2	98				750	SHUT OFF ROTATING
	1910	6 1/2	108.4				1500	PLUG DOWN - PSE UP CATCH'D PLUG
	1912						OK	RELEASE PSE - HELD
								WASH UP TRUCK
	2000							JOB COMPLETE

RECEIVED
 KANSAS CORPORATION COMMISSION
 CONSERVATION DIVISION
 FEB 22 2007
 WICHITA, KS

THANK YOU
 WABE, DUSTY, SEAN

ALLIED CEMENTING CO., INC.

26254

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

Abasocity

DATE <u>10-24-06</u>	SEC. <u>21</u>	TWP. <u>16</u>	RANGE <u>27</u>	CALLED OUT <u>7:30pm</u>	ON LOCATION <u>10:30pm</u>	JOB START <u>7:45am</u>	JOB FINISH <u>8:30am</u>
LEASE <u>Hall</u>		WELL # <u>1-21</u>		LOCATION <u>Utica 7 1/2 W 1/2 N W.S</u>		COUNTY <u>Jame</u>	STATE <u>KS</u>
OLD OR <u>NEW</u> (Circle one)							

CONTRACTOR Bairdco Dwy #10

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 274

CASING SIZE 8 5/8 DEPTH 268

TUBING SIZE _____ DEPTH _____

DRILL PIPE _____ DEPTH _____

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. 15

PERFS. _____

DISPLACEMENT 16

OWNER KCC

CEMENT FEB 21 2007

AMOUNT ORDERED CONFIDENTIAL

1754 Com 39cc 29Hbl

COMMON	<u>17544</u>	@	<u>10.65</u>	<u>1863.75</u>
POZMIX		@		
GEL	<u>3.44</u>	@	<u>16.65</u>	<u>49.95</u>
CHLORIDE	<u>S.44</u>	@	<u>46.60</u>	<u>233.00</u>
ASC		@		

RECEIVED

KANSAS CORPORATION COMMISSION

FEB 22 2007

CONSERVATION DIVISION

WICHTA, KS

HANDLING	<u>183.44</u>	@	<u>1.90</u>	<u>347.70</u>
MILEAGE	<u>183.44</u>	@	<u>09.33</u>	<u>543.91</u>
TOTAL				<u>3037.91</u>

EQUIPMENT

PUMP TRUCK CEMENTER David

224 HELPER J. Wagoner

BULK TRUCK

357 DRIVER Karen

BULK TRUCK

_____ DRIVER _____

REMARKS:

New 23#
Core 8 5/8 casing / reg pump
max Cemt, disp plug w/ 16 BAC
Cemt dial Core

Thanks

CHARGE TO: Larson Oper

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB	<u>268</u>			
PUMP TRUCK CHARGE				<u>815.00</u>
EXTRA FOOTAGE		@		
MILEAGE	<u>3.3</u>	@	<u>6.00</u>	<u>198.00</u>
MANIFOLD		@		
TOTAL				<u>1013.00</u>

PLUG & FLOAT EQUIPMENT

<u>8 5/8 Topwood</u>	@	<u>60.00</u>
	@	
	@	
	@	
	@	
TOTAL		<u>60.00</u>

To Allied Cementing Co., Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

TAX _____

TOTAL CHARGE _____

DISCOUNT _____ IF PAID IN 30 DAYS

SIGNATURE Maw B. Johnson

PRINTED NAME

2-21-09

LARSON OPERATING COMPANY
A DIVISION OF LARSON ENGINEERING, INC.
562 WEST STATE ROAD 4
OLMITZ, KS 67564-8561
(620) 653-7368
(620) 653-7635 FAX

ACO-1 CONFIDENTIALITY REQUEST

VIA UPS NEXT DAY AIR

February 21, 2007

Kansas Corporation Commission
Oil & Gas Conservation Division
130 South Market, Room 2078
Wichita, KS 67202

KCC
FEB 21 2007
CONFIDENTIAL

RECEIVED
KANSAS CORPORATION COMMISSION
FEB 22 2007
CONSERVATION DIVISION
WICHITA, KS

Re: Hall 1-21
Lane County, Kansas
API #15-101-21969-00-00


Ladies and Gentlemen:

Enclosed please find the ACO-1 Well Completion Form, with copies of logs, geo report, cementing tickets and DST data (if applicable) for the captioned well. We request that all information be held confidential for the period of one year, two years if we may so request at this time.

If you have questions or require additional information, please call.

Sincerely,

Larson Operating Company



Carol Larson
Secretary/Treasurer

Encl.