

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION 1057149

Form ACO-1 June 2009 Form Must Be Typed Form must be Signed All blanks must be Filled

WELL COMPLETION FORM

WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #	API No. 15
Name:	Spot Description:
Address 1:	
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from Cast / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	County:
Name:	Lease Name: Well #:
Wellsite Geologist:	Field Name:
Purchaser:	Producing Formation:
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:
New Well Re-Entry Workover	Total Depth: Plug Back Total Depth:
	Amount of Surface Pipe Set and Cemented at: Feet
Gas D&A ENHR SIGW	Multiple Stage Cementing Collar Used? Yes No
OG GSW Temp. Abd.	If yes, show depth set: Feet
CM (Coal Bed Methane)	If Alternate II completion, cement circulated from:
Cathodic Other (Core, Expl., etc.):	feet depth to:w/sx cmt.
If Workover/Re-entry: Old Well Info as follows:	
Operator:	Drilling Fluid Management Dian
Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth:	
Deepening Re-perf. Conv. to ENHR Conv. to SWD	Chloride content: ppm Fluid volume: bbls
Conv. to GSW	Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled Permit #:	Operator Name:
Dual Completion Permit #:	
SWD Permit #:	Lease Name: License #:
ENHR Permit #:	Quarter Sec Twp S. R East West
GSW Permit #:	County: Permit #:
Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date	

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

	Side Two	1057149
Operator Name:	Lease Name:	Well #:
Sec TwpS. R East _ West	County:	

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken (Attach Additional Sheets)		Yes	No		Lc	-	n (Top), Depth an		Sample
Samples Sent to Geolog	ical Survey	Yes	No		Name	9		Тор	Datum
Cores Taken Electric Log Run Electric Log Submitted Electronically <i>(If no, Submit Copy)</i>		☐ Yes ☐ Yes ☐ Yes	☐ No ☐ No ☐ No						
List All E. Logs Run:									
			CASING	RECORD	Ne	w Used			
		Report al	ll strings set-c	onductor, surfa	ace, inte	rmediate, product	ion, etc.		
Purpose of String	Size Hole Drilled	Size Ca Set (In		Weigh Lbs. / F		Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
Protect Casing Plug Back TD				
Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated					e		Depth		
TUBING RECORD:	Siz	ze:	Set At:	Packer At: Liner Run:				No		
Date of First, Resumed	Product	ion, SWD or ENHF	λ .	Producing Method:			Other (Explain)			
Estimated Production Per 24 Hours			ls.	Gas Mcf Wate		er Bbls.		Gas-Oil Ratio	Gravity	
DISPOSITION OF GAS:				METHOD OF COMPLETION:				PRODUCTION IN	TERVAL:	
Vented Sold Used on Lease			Open Hole Perf. Dually C				Commingled (Submit ACO-4)			
(If vented, Su	bmit ACC)-18.)		Other (Specify)						

Form	ACO1 - Well Completion
Operator	Larson Engineering, Inc. dba Larson Operating Company
Well Name	Harris Unit #1-20
Doc ID	1057149

Tops

Name	Тор	Datum
Anhydrite	2186	+710
Base Anhydrite	2243	+653
Heebner Sh	3897	-1001
Lansing-KC	3938	-1042
Stark Sh	4219	-1323
Base KC	4302	-1406
Marmaton	4333	-1437
Pawnee	4427	-1531
Fort Scott	4477	-1581
Cherokee	4498	-162
Mississippi	4569	-1673

Form	ACO1 - Well Completion
Operator	Larson Engineering, Inc. dba Larson Operating Company
Well Name	Harris Unit #1-20
Doc ID	1057149

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	4548-50, 4553-55	250 Gal 15% NEFe	4548-50, 4553-55
4	4436-41	250 Gal 15% NEFe	4436-41
5	4383-85	250 Gal 15% NERe	4436-41, 4383-85
		300 Gal 15% MCA	4436-41, 4383-85
4	4357-70,	250 Gal 15% MCA	4357-70
4	4308-16	300 Gal 15% MCA	4357-70, 4308-16
		500 Gal 15% MCA	4357-70, 4308-16
	CIBP @ 4505'		
	Cmt retainer @ 4414'		
		Cmt perfs w/ 75 sx std cmt	4436-41





Invoice

 DATE
 INVOICE #

 2/24/2011
 20527

BILL TO

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Larson Engineering, Inc. 562 West State Road 4 Olmitz, KS 67564-8561

- Acidizing
- Cement
- Tool Rental

TERMS	Well N	lo.	Lease	County	Contractor	We	Well Type Wel		ell Category	Job Purpos	e Operator
Net 30	#1-20)	Harris Unit	Lane	Wild West Well S	Oil Dev			evelopment	Cement Port Co	llar Jason
PRICE	REF.			DESCRIPT	ION		QT	(UM	UNIT PRICE	AMOUNT
575D 576D-D 290 276 330 581D 583D		Mileage - 1 Way Pump Charge - Port Collar - 2147 Feet D-Air Flocele Swift Multi-Density Standard (MIDCON II) Service Charge Cement Drayage						40 N 1 J 2 C 47 L 185 S 225 S 446.54 T		5.00 1,100.00 35.00 1.50 15.00 1.50 1.00	200.00 1,100.00 70.00T 70.50T 2,775.00T 337.50 446.54
		Subtotal Sales Tax Lane County								6.30%	4,999.54 183.68
931	08										
Thank You For Your Business!								Tota	l	\$5,183.22	

Services	FT	ADD	RGE TO:	LARSON ENGINEERING							тю 20	27		
2. TICKET TYPE CONTRACTOR SERVICE LOCATIONS 1. NESS (STY,KS. TICKET TYPE CONTRACTOR SERVICE WILD WEST				ARRISUNITI-20 LANE KS. TWELLSERV, RIG NAME/NO. SHIPPED I CATEGORY JOB PURPOSE			DELIVERED T	Amy, KS. 24 DELIVERED TO LOCATION WELL PERMIT NO. WEL				TE OWNER 4 FEB // OWNER UDER NO. ELL LOCATION		
4. REFERRAL LOCATION	INVOICE INSTRUC		DEVE	LOPMENT (EMENT PORT	" (JUAR					<u>3u1/5, 1</u>	<u>120</u>	, N INTO	<u>, ,</u>
	IDARY REFERENCE/		ACCT DF		DESCRIPTION		QTY.	U/M	QTY.	U/M	UNIT	-	AMOUNT	r
575 576D		 		MILEAGE #110 Pump CHA	IR6E		40	212	2147	FT.	5 1100	100	200	190 190
290 276		/		D-AIR FLOCELE			2 41	E 20		 	35	1 3 1 3 1 3 1 3 1 1 3 1	70 70	- <u>6</u>
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				DANYAGE		··· .		////205 	44654		/		<u>446</u>	
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.				REMIT PAYMENT TO: OUR EQUIPMEN WITHOUT BREZ WE UNDERSTO MET YOUR NEE			OOD AND EDS?	AG		DIS- AGREE	PAGE TO		4999	54
MUST BE SIGNED BY SUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS				P.O. BOX 466 NESS CITY KS 67560			YOU SATISFIED WITH OUR SERVICE?				Lane TAX 07 10.3%		183	68
24 FEB //	24 FEB // 1500 \$ PM				785-798-2300			STOMER DID NOT WISH TO RESPOND				TOTAL		22
SWIFT OPERATOR	Rockt		APPROVA		The customer hereby ack	nowledges receipt (of the materials a	ind servi	ces listed on t	his ticket			Thank (You!

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RECEIVED FEB 2 4 2011,



Invoice

 DATE
 INVOICE #

 2/22/2011
 20149

BILL TO

Larson Engineering, Inc. 562 West State Road 4 Olmitz, KS 67564-8561

- Acidizing
- Cement
- Tool Rental

TERMS	Well N	o. Lease	County	Contractor	We	II Туре	w	ell Category	Job Purpose	e Operator
Net 30	#1-20	Harris Unit	Lane	H D Drilling Rig #3		Oil	D	evelopment	5-1/2" LongStr	ing Jason
PRICE	REF.		DESCRIP	TION		QT	(UM	UNIT PRICE	AMOUNT
575D 578D-L 281 221 290 419-5 276 277 283 284 285 325 330 581D 583D		Mileage - 1 Way Pump Charge - Long Mud Flush Liquid KCL (Clayfin D-Air 5 1/2" Rotating Head Flocele Gilsonite (Coal Seal) Salt Calseal CFR-1 Standard Cement Swift Multi-Density Service Charge Cem Drayage Subtotal Sales Tax Lane Cour	() d Rental) Standard (MII ent			47	2 2 1 57 700 500 5 47 100 125 225	Job Gallon(s) Gallon(s) Each Lb(s) Lb(s) Lb(s) Sack(s) Lb(s) Sacks	5.00 1,400.00 1.00 25.00 35.00 150.00 1.50 0.40 0.15 30.00 4.00 12.00 15.00 1.50 1.00	200.00 1,400.00 500.00T 50.00T 150.00T 85.50T 280.00T 75.00T 150.00T 1,200.00T 1,875.00T 337.50 471.28 7,032.28 291.28
We A	ppre	ciate Your	Busines	is!		I		Tota		\$7,323.56

SEMUEL DOCTORS WELLDROJECT NO. LEASE COUNTY/AMMENT ISTATE CITY DATE JAPEET/I 1. DESC CFLY, KS. MELDROJECT NO. HAGRELS UNIT I-aD LANUE KS. Amy, KS. JAPEET/I DATE JAPEET/I 2. MELDROJECT NO. MELDROJECT NO. DELULING. RIL # 3 MELDROJECT NO. DELULING. RIL # 3 DESCRIPTION DTY. UM UMIL # 3 DELULING. RIL # 3 DESCRIPTION DTY. UM UMIL # 3 DTY. UM DTY. UM DTY. UM DTY. U	SWIFT ADDRESS Services, Inc.	LARSON ENGINEERING	-	TICKET 20149
REFERENCE PART NUMBER LOC ACCT DF DESCRIPTION OTY UM OTY OTY	2. TICKET TYPE CONTRACTOR SALES WELL TYPE OIL 4. TICKET TYPE CONTRACTOR MAD DR/ WELL TYPE OIL OIL	AGRIS UNIT 1- 20 LANE KS. RIG NAME/NO. SHIPPEI ULING. RIG #3 CATEGORY JOB PURPOSE L.	Amy, KS. O DELIVERED TO LOCATIDN WELL PERMIT NO. W	
the terms and conditions on the reverse side hereof which include, REMIT PAYMENT TO: OUR EQUIPMENT PERFORMED PAGE 2 4/4/22	REFERENCE PART NUMBER LOC ACCT C 575 1 - </th <th>MILEAGE #110 PUMP CHARGE MUD FLUSH LIQUID KCL D-AIR</th> <th>40 mil 1008 4(450 FT 500 82 2 82 2 82</th> <th>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</th>	MILEAGE #110 PUMP CHARGE MUD FLUSH LIQUID KCL D-AIR	40 mil 1008 4(450 FT 500 82 2 82 2 82	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
LIMITED WARRANTY provisions. MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS X 1, C. for work on DELIVERY OF GOODS DATE SIGNED 20 COLUMN ALL STORED 10, 20 COLUMN ALL STORED 1	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 22 FEB11. TIME SIGNED /915 AM.	REMIT PAYMENT TO: OUR EQUIPMENT WE UNDERSTO MET YOUR NEE SWIFT SERVICES, INC. P.O. BOX 466 NESS CITY, KS 67560 785-798-2300	IT PERFORMED IXDOWN? IXDOWN? OG AND DDS? WAS THE EQUIPMENT ED JOB UY? SFIED WITH OUR SERVICE? UY? UY? SFIED WITH OUR SERVICE? I YES NO JSTOMER DID NOT WISH TO RESPOND	Hartonial Hule 121 Frace 2 Hule 121 Sub total 7032 28 Logic Tax 291 28 U.3% 291 28 TOTAL 73,23 50

SW	IFT	PO E	30x 466.			TICKET CONTINUATION				ПСКЕТ 2	DI		
Service			y, KS 675 5-798-230			LARSON ENGINEERING	HAR	R15 6	WIT 1-20	22 FEB		PAGE OF	2
	SECONDARY REFERENCE	LOC		G 🕮	TIME	DESCRIPTION			aty. 🔛 (UM)				
276	· · · · · · · · · · · ·	1				FLOCFLE	57				20	85	50
277	·	1				COALSEAC	700	<u>lbs</u>			42	<u>280</u>	00
283						SALT	500	lþs	<u> </u>		15	75	<u>20</u> 201
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									CONTIN	UATIONTOTAL	in it.	4662	28

JOB LO	G			_	SWIFT	Servi	ces, Inc.	DATE 22 FEBIL PAGE NO.
	N ENGIN	EERING.	WELL NO.		HARRIS	UNIT	1-20 JOB TYPE 5'2 LONGSTRING.	TICKET NO. 20149
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T C	PRESSUR	E (PSI) CASING	DESCRIPTION OF OPERATION AND	
	153D						ON LOCATION	
							52-15,5pp6	
							RIDE 4450	
							SHOE JT. 42,48'	
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	1645						DROP BALL CIRCULATE	
					_	0757		
	1749	ا اب	5	-			Pump S BUL KCL FULST	
		 	12	_ /			Pump 500 gal MUD FL	
		<u>u</u>	15			A00	Pump 15 Bbl RCL FLUS	н
	1756		7				PLUGRH (30 SX)	· · · · · · · · · · · · · · · · · · ·
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	1758	4	345			200	MIX 95 5x SMD@/2,7	 0P6.
		4	24	· V			MIX/DDSX EA2E/SISF	•
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							WASHOUT PUMPING LIN	IES.
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	1824	7					RELEASE PLUG START DIS	PLACEMENT
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	1841		1092	· \	1	1500	PLUG DOWN PRESSURE UP LA	ITCA PLUGIN
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<u>. </u>	1843						RELEASE PRESSURE DRY	
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ALLIED CEMEN	TING CO., L D.# 20-5975804	LC. 0	3865 5
REMIT TO P.O. BOX 31 RUSSELL, KANSAS 67665	SER		3
BATES-11 SEGO TWP RANGEZO C	ALLED OUT ON LOCATION	JOB STARE	JOB EINGH
LEASE rris Well# 1-20 LOCATION Digh	ton 10w 15-34	Lan-e	STATE S
OLD OR NEW (Circle one)	N15		
CONTRACTOR H-D Kie 3	OWNER		
TYPE OF JOB JUT FACE 400 HOLE SIZE 124T.D. 258	CEMENT		
CASING SIZE 8 DEPTH 254	AMOUNT ORDERED $\frac{12}{2}$	5 sk Co	m
TUBING SIZE DEPTH		<u>- 22</u>	7-0
DRILL PIPEDEPTHTOOLDEPTH			
PRES. MAX MINIMUM	COMMON 175	_@ <u>13.S</u> O_	2.362.50
MEAS. LINE SHOE JOINT	POZMIX	_@	
CEMENT LEFT IN CSG. 15 PERFS.	GEL <u>3</u> CHLORIDE (_@ <u>20,25</u> @51.50	60.25 309.00
DISPLACEMENT / 5 b b L	ASC	_@_ <u>\$%\$5</u> _	
EQUIPMENT		@	·
		@	<u> </u>
PUMPTRUCK CEMENTER Mille Mi		@	
# 123 HELPER 1306 BR			
BULKTRUCK #482-18 DRIVER 1411/1 We		@	
BULK TRUCK	9 0-17	@ @	
# DRIVER	HANDLING 175	 @ <u>2.25</u>	393.25
Brown in	MILEAGE 175 x 30 %.1	0	525.00
REMARKS:		TOTAL	3.651,00
MixComent + Displace	SERV	ICE	
Circulate To Sursace	DEPTH OF JOB 258	4	
	PUMP TRUCK CHARGE		
	EXTRA FOOTAGE MILEAGE	@ @	210.00
	MANIFOLD		
		@	
I san faling ha		@	
CHARGE TO: harson Enginering STREET		TOTAL	1201.00
CITYSTATEZIP	PLUG & FLOA	AT EQUIPMEN	T .
1. 1/2		@	
Thomas you	· · · ·	@	
To Allied Cementing Co., LLC.		@	
You are hereby requested to rent cementing equipment			
and furnish cementer and helper(s) to assist owner or		_ ~	
contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or	·	TOTAL	<u> </u>
contractor. I have read and understand the "GENERAL			
• TERMS AND CONDITIONS" listed on the reverse side.	SALES TAX (If Any)		
1 - 1 - 1	TOTAL CHARGES		
PRINTED NAME LEWAYNE TRESNER	DISCOUNT	IF PAII	D IN 30 DAYS

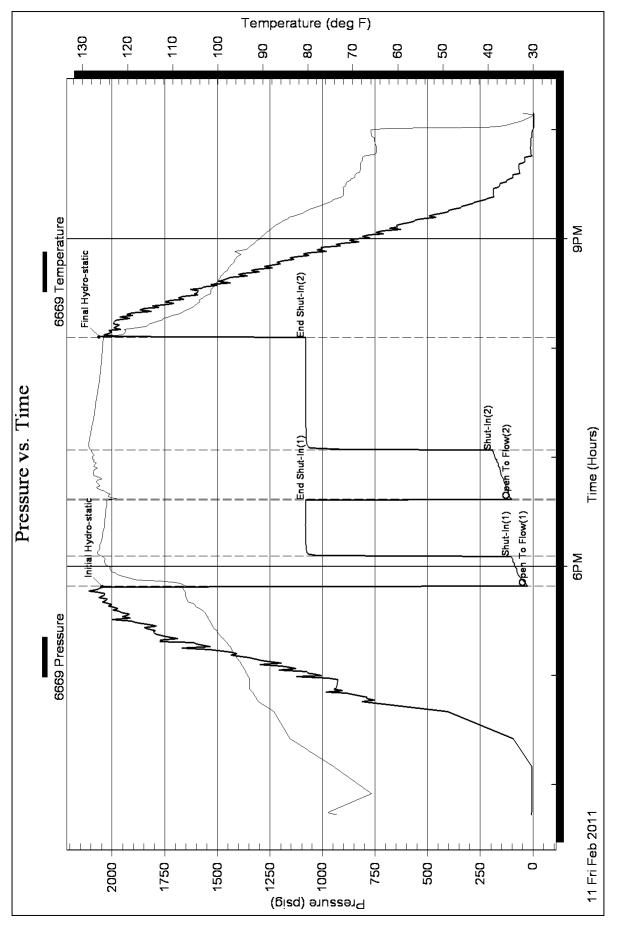
SIGNATURE Buleque Trens

. .

	DRILL STEM TES	ST R	EP	ORT				
RILOBITE	Larson Enginering			На	rris Unit	1-20		
ESTING , INC.				20 -	-18-30 La	ane C	O KS	
	Olmitz KS 67564			Job	Ticket: 04	0682	DST	#:1
	ATTN: Bob Lew ellyn			Tes	st Start: 20	011.02.	11 @ 15:43:1	5
GENERAL INFORMATION:								
Formation:Lansing "H"Deviated:NoWhipstock:Time Tool Opened:17:49:00Time Test Ended:22:09:00	ft (KB)			Tes	ster: I	Conver Vike Ro 48	ntional Bottom oberts	Hole
Interval:4110.00 ft (KB) To47Total Depth:4145.00 ft (KB) (The second secon				Ref	erence Ele KB t	evation	2889.	00 ft (KB) .00 ft (CF) .00 ft
Serial #: 6669OutsidePress@RunDepth:191.44 psigStart Date:2011.02.11Start Time:15:43:15TEST COMMENT:IF:Built to 10" bloIS:No return blowFF:BOB in 23 minFS:NO return blo	End Date: End Time: w v n.	2011. 22:)2.11)9:00	Capacity Last Cal Time On Time Off	ib.: Btm: 2		8000. 2011.02. 2.11 @ 17:48: 2.11 @ 20:06:	45
Pressure vs. 1				D			JMMARY	
11 Fir Feb 201	000 Temperiture 130 130 130 120 100 00 100 00 100 00 00 00 00		me in.) 1 17 48 48 76 137 138	Pressure (psig) 2046.99 24.90 104.69 1081.30 102.46 191.44 1080.82 2061.45	Temp (deg F) 107.75 106.86 125.43 124.53	Ann Initial Open Shut- End S Open Shut- End S	Hydro-static To Flow (1) In(1) Shut-In(1) To Flow (2)	
Recovery					Ga	s Rat	es	
Length (ft) Description 1.00 free oil	Volume (bbl)				Choke (i	nches)	Pressure (psig)	Gas Rate (Mcf/d)
360.00 sw	4.04							
Trilobite Testing, Inc	Ref. No: 040682							3:47 Page 1

	TF	ILL STEM TEST REPOR		FL			
RILOBIT	Larso	n Enginering	Harris Uni	it 1-20			
ESIN		/est State Road 4	20-18-30 Lane CO KS				
	Olmitz	KS 67564	Job Ticket: ()40682 I	DST#:1		
	ATTN	Bob Lew ellyn	Test Start: 2	2011.02.11 @ 15:4	13:15		
lud and Cushion Infor	mation						
lud Type: Gel Chem		Cushion Type:		Oil A PI:	0 deg API		
ud Weight: 9.00 lb/g	gal	Cushion Length:	ft	Water Salinity:	11500 ppm		
iscosity: 62.00 se	c/qt	Cushion Volume:	bbl				
/ater Loss: 6.79 in ³		Gas Cushion Type:					
esistivity: 0.00 oh		Gas Cushion Pressure:	psig				
alinity: 1900.00 pp ter Cake: 1.00 inc							
ecovery Information							
_		Recovery Table	1	-			
	Length ft	Description	Volume bbl				
	1.00	free oil	0.005				
L	360.00	SW	4.039	9			
Total	Length: 36	1.00 ft Total Volume: 4.044 bbl					
Num	Fluid Samples: 0	Num Gas Bombs: 0	Serial #	L.			





Printed: 2011.02.12 @ 13:43:47 Page 3

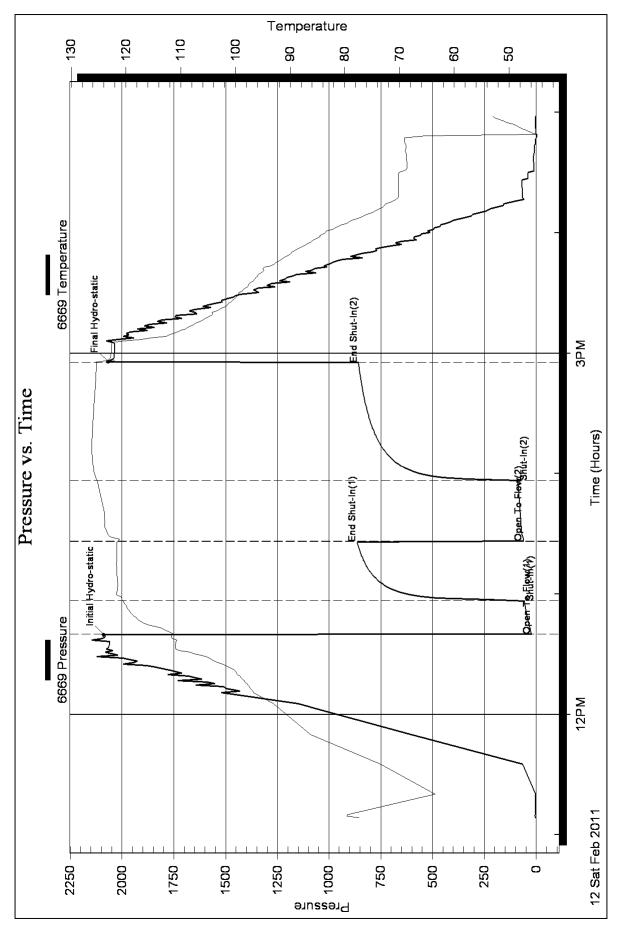
Ref. No: 040682

	DRILL STEM TES	ST REPORT
RILOBITE	Larson Enginering	Harris Unit 1-20
ESTING , INC.	562 West State Road 4	20-18-30 Lane CO KS
	Olmitz KS 67564	Job Ticket: 040683 DST#:2
	ATTN: Bob Lew ellyn	Test Start: 2011.02.12 @ 11:08:15
GENERAL INFORMATION:		
Formation:Lansing "I"Deviated:NoWhipstock:Time Tool Opened:12:39:45Time Test Ended:16:57:45	ft (KB)	Test Type:Conventional Bottom HoleTester:Mike RobertsUnit No:48
Interval:4175.00 ft (KB) To41Total Depth:4175.00 ft (KB) (ThHole Diameter:7.88 inchesHole	/D)	Reference Elevations: 2896.00 ft (KB) 2889.00 ft (CF) KB to GR/CF: 7.00 ft
Serial #: 6669OutsidePress@RunDepth:88.01 psigStart Date:2011.02.12Start Time:11:08:15TEST COMMENT:IF:Buit to 4" blowIS:No return blowFF:Built to 4" blowFS:No return blowFS:No return blow	End Date: End Time:	Capacity: 8000.00 psig 2011.02.12 Last Calib.: 2011.02.12 16:57:45 Time On Btm: 2011.02.12 @ 12:39:30 Time Off Btm: 2011.02.12 @ 14:55:45
Pressure vs. T	0889 Temperature 130	PRESSURE SUMMARY Time Pressure Temp Annotation
220 100 120 100 100 100 100 100	Training weeks the second seco	(Min.)(psig)(deg F)02087.11111.73Initial Hydro-static121.29111.38Open To Flow (1)1757.59120.55Shut-In(1)47863.65121.63End Shut-In(1)
Recovery		Gas Rates
Length (ft) Description	Volume (bbl)	Choke (inches) Pressure (psig) Gas Rate (Mcf/d)
3.00 free oil 142.00 mcsw 30%m70%w	0.01	
	 	

		ILL STEM TEST REPOR	RT	FLU	IID SUMMAR
	ITE Larso	n Enginering	Harris Uni	it 1-20	
I ESTI		/est State Road 4 KS 67564	20-18-30 L Job Ticket: 0	T#:2	
	ATTN	: Bob Lew ellyn	Test Start: 2	15	
lud and Cushion Info	ormation				
ud Type: Gel Chem		Cushion Type:		Oil A PI:	0 deg API
ud Weight: 9.00 lk	b/gal	Cushion Length:	ft	Water Salinity:	ppm
iscosity: 64.00 s	-	Cushion Volume:	bbl	,	
/ater Loss: 6.78 ir		Gas Cushion Type:			
esistivity: 0.00 c	ohm.m	Gas Cushion Pressure:	psig		
alinity: 3000.00 p	opm				
Iter Cake: 1.00 ir	nches				
ecovery Information	ı				
		Recovery Table		٦	
	Length ft	Description	Volume bbl		
	3.00	free oil	0.015	5	
	142.00	mcsw 30%m 70%w	0.999	9	
Tot	tal Length: 14	5.00 ft Total Volume: 1.014 bb	bl		
Nu	m Fluid Samples: 0	Num Gas Bombs: 0	Serial #	:	
		W=.381@57.7=12,100ppm			
		wv=.361@37.7=12,100ppm			

Serial #: 6669 Outside Larson Enginering

20-18-30 Lane CO KS



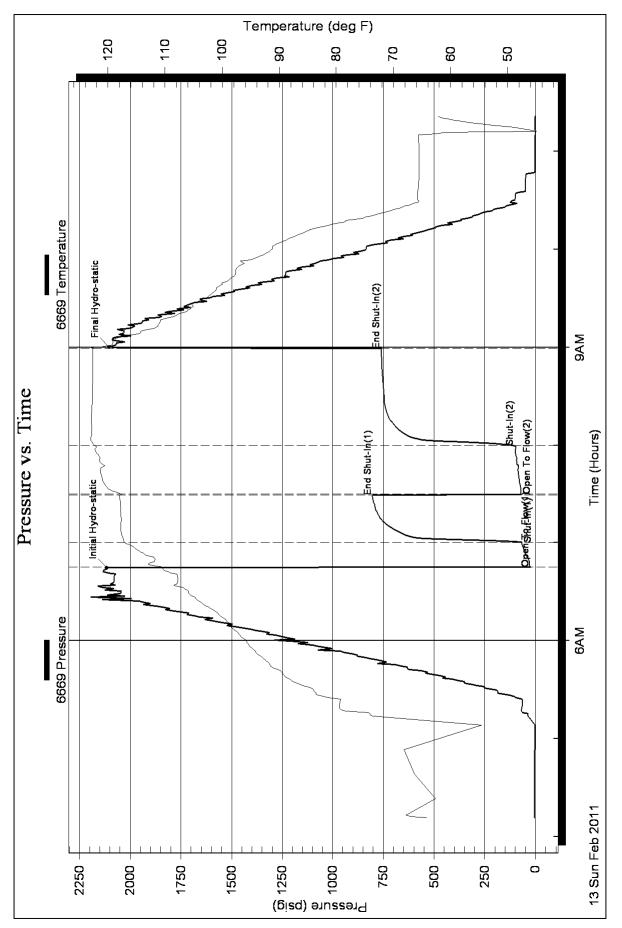
Printed: 2011.02.13 @ 13:38:34 Page 3

Ref. No: 040683

	DRILL STEM T	ΈS	T REP	ORT				
RILOBITE	Larson Enginering			На	rris Unit	1-20		
ESTING , INC	562 West State Road 4			20-	-18-30 La	ane C	O KS	
	Olmitz KS 67564			Job	Ticket: 04	0684	DST	#:3
	ATTN: Bob Lew ellyn			Tes	st Start: 20)11.02.	13 @ 04:11:15	5
GENERAL INFORMATION:	•							
Formation:Lansing "K"Deviated:NoWhipstock:Time Tool Opened:06:44:45Time Test Ended:11:21:15	ft (KB)			Tes	ster: I	Conver Vike Ro 48	ntional Bottom oberts	Hole
Interval:4218.00 ft (KB) To4Total Depth:4234.00 ft (KB) (THole Diameter:7.88 inches Hole				Ref	erence Ele KB t	evation: o GR/C	2889.	00 ft (KB) 00 ft (CF) 00 ft
Serial #: 6669OutsidePress@RunDepth:102.04 psigStart Date:2011.02.13Start Time:04:11:15TEST COMMENT:IF:Built to 5"blow	End Date: End Time:		2011.02.13 11:21:15	Capacity Last Cali Time On Time Off	ib.: Btm: 2		8000. 2011.02. 2.13 @ 06:44: 2.13 @ 09:00:	30
IS:No return blo FF:Built to 4" blo FS:No return blo	W							
Pressure vs. 8889 Pressure	Time 6889 Temperature					-	IMMARY	
2200 2000 1750 1200 1000		- 120 - 110 - 000 Temperature (deg F) - 70 - 70 - 50	Time (Min.) 0 16 45 45 75 135 135 136	Pressure (psig) 2114.29 24.54 66.66 801.25 71.08 102.04 759.67 2104.06		Initial Open Shut- End S Open Shut- End S	Shut-In(1) To Flow (2)	
Recovery					Ga	s Rate	es	
Length (ft) Description	Volume (bbl)]			Choke (i	nches)	Pressure (psig)	Gas Rate (Mcf/d)
75.00 free oil100% o	0.37	1						
49.00 mco 30%m 70%o	0.35	4						
112.00 ocm 10%o 90%m	1.57	+						
		+						
		+						
Trilobite Testing. Inc	Ref. No: 040684	4)2.13 @ 13:37	

don.		DRI	ILL STEM TEST REPOR	Г	F	LUID SUMMARY
		Larson	n Enginering	Harris Un	it 1-20	
	RILOBITE ESTING , INC.	Olmitz	/est State Road 4 KS 67564 Bob Lew ellyn	Job Ticket: (.ane CO KS 040684 2011.02.13 @ 04	DST#: 3 :11:15
Mud and (Cushion Information					
	Gel Chem 9.00 lb/gal 64.00 sec/qt 6.79 in ³ 0.00 ohm.m 3000.00 ppm 1.00 inches		Cushion Type: Cushion Length: Cushion Volume: Gas Cushion Type: Gas Cushion Pressure:	ft bbl psig	Oil API: Water Salinity:	36 deg API 0 ppm
Recovery	Information					
			Recovery Table	1	-	
	Lengt ft	th	Description	Volume bbl		
		75.00	free oil100% o	0.369	9	
		49.00	mco 30%m 70%o	0.35		
	P	112.00	ocm 10%o 90%m	1.57	1	
	Total Length:		6.00 ft Total Volume: 2.290 bbl			
	Num Fluid Samp Laboratory Nam		Num Gas Bombs: 0 Laboratory Location:	Serial #		
	Recovery Com					





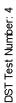
Printed: 2011.02.13 @ 13:37:50 Page 3

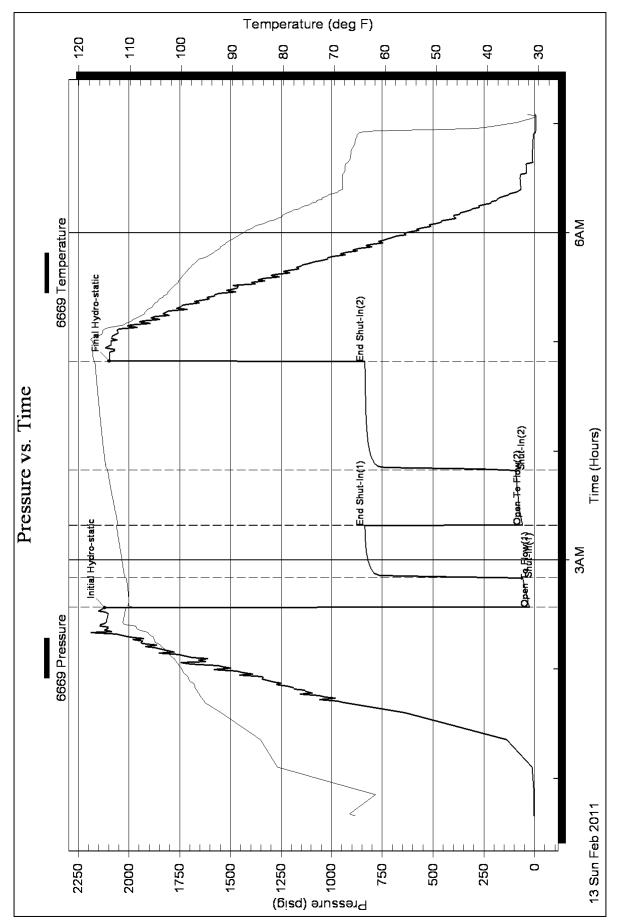
Ref. No: 040684

	DRILL STEM TE	ST R	EP	ORT						
RILOBITE	Larson Enginering			На	rris Unit	1-20				
ESTING , IN	JOZ WEST OTALE HOAD 4			20	20-18-30 Lane CO KS					
	Olmitz KS 67564			Job	o Ticket: 04	10685	DST#	#: 4		
	ATTN: Bob Lew ellyn		Test Start: 2011.02.13 @ 00:39:00							
GENERAL INFORMATION:	•									
Formation:Lansing "L"Deviated:NoWhipstock:Time Tool Opened:02:34:00Time Test Ended:07:04:45	ft (KB)			Tes	ster: I	Conventior Mike Rober 48	nal Bottom F rts	Hole		
Interval:4258.00 ft (KB) ToTotal Depth:4279.00 ft (KB) (Hole Diameter:7.88 inches H				Re	ference Ele KB t	evations: to GR/CF:	2889.0	00 ft (KB) 00 ft (CF) 00 ft		
Serial #: 6669OutsidePress@RunDepth:93.47 psigStart Date:2011.02.13Start Time:00:39:15TEST COMMENT:IF:Built to 2" bla IS:No return bla FF:Built to 2" bla FS:No return bla	End Date: End Time:	2011. 07:	02.13 04:45	Capacity Last Ca Time On Time Of	lib.: Btm: 2		8000.0 2011.02.1 3 @ 02:33:4 3 @ 04:49:3	15		
Pressure vs					RESSUF					
2000 Presure 0000 Presure 00	000 Temperature 100 100 100 100 00 00 00 00 00		me lin.) 1 17 45 46 76 136 136	Pressure (psig) 2117.88 24.69 57.51 834.64 59.61 93.47 834.25 2096.49	Temp (deg F) 110.87 109.54 110.78 112.70 112.46	Annota Initial Hyd Open To Shut-In(1 End Shut Open To Shut-In(2 End Shut	tion Flow (1)) -In(1) Flow (2) 2) -In(2)			
Recovery					Ga	s Rates				
Length (ft) Description	Volume (bbl)				Choke (i	nches) Pres	sure (psig)	Gas Rate (Mcf/d)		
2.00 free oil 112.00 sw 100% sw	0.01 0.57									
Trilobite Testing, Inc	Ref. No: 040685				Printed:	2011 02 1	1 @ 08.14.	44 Page 1		

		DRIL	L STE	M TEST R	EPORT	-	I	FLUID SU	MMAR
	BITE	Larson E	Enginering			Harris Un	it 1-20		
ES I			st State Road	14		20-18-30 L	ane CO KS		
	(Olmitz KS	S 67564			Job Ticket: (040685	DST#:4	
	ļ	ATTN: Bob Lew ellyn			Test Start: 2	2011.02.13 @ 00	0:39:00		
ud and Cushion Inf	formation								
ud Type: Gel Chem			Cushi	ion Type:			Oil A PI:	0	deg API
	lb/gal			ion Length:		ft	Water Salinity:	20000	
scosity: 45.00	sec/qt		Cushi	ion Volume:		bbl			
ater Loss: 7.20	in ³		Gas (Cushion Type:					
esistivity: 0.00	ohm.m		Gas (Cushion Pressure:		psig			
alinity: 3000.00	ppm								
ter Cake: 1.00	inches								
ecovery Informatio	n		Deer						
				overy Table	T		Т		
	Length ft		De	escription		Volume bbl			
			free oil			0.010			
	112	2.00 9	sw 100% sv	N		0.569	9		
То	otal Length:	114.0	00 ft To	otal Volume:	0.579 bbl				
La	um Fluid Samples aboratory Name: ecovery Commen		La	um Gas Bombs: aboratory Location: 2=20,000 ppm	0	Serial #	:		
La	aboratory Name:		La	aboratory Location:		Serial #	÷.		







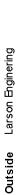
Printed: 2011.02.14 @ 08:44:46 Page 3

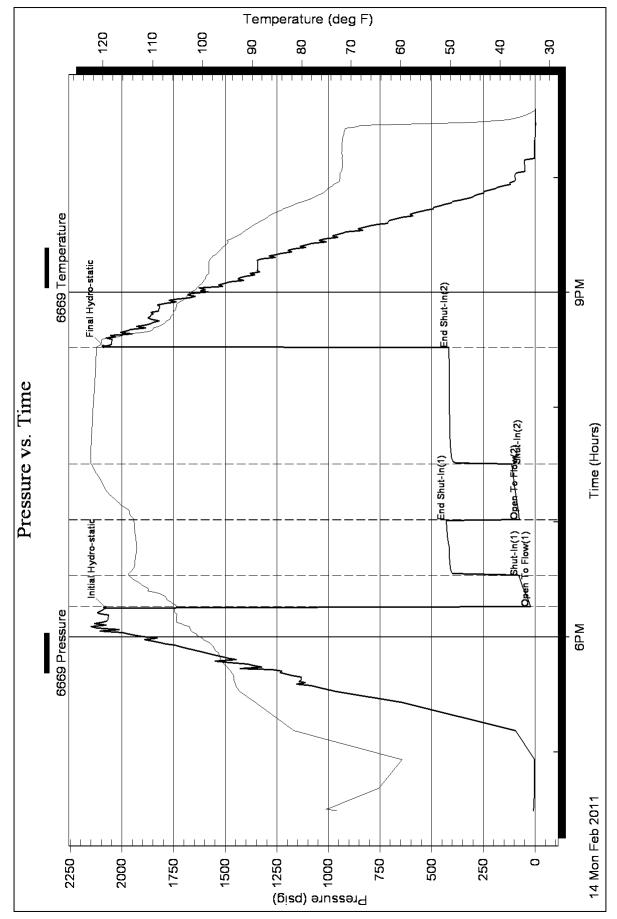
Ref. No: 040685

	DRILL STEM TES	ST REPO	ORT		
RILOBITE	Larson Enginering		Harris	Unit 1-20	
ESTING , INC	302 WC31 Olaic Noad 4		20-18-3	30 Lane CC) KS
	Olmitz KS 67564		Job Tick	et: 040686	DST#:5
	ATTN: Bob Lew ellyn		Test Sta	art: 2011.02.1	4 @ 16:39:15
GENERAL INFORMATION:					
Formation:Lansing "L"Deviated:NoWhipstock:Time Tool Opened:18:25:45Time Test Ended:22:45:30	ft (KB)		Test Typ Tester: Unit No:	Mike Rob	ional Bottom Hole berts
Interval:4267.00 ft (KB) To4Total Depth:4291.00 ft (KB) (THole Diameter:7.88 inches Ho			Referen	ce Elevations: KB to GR/CF	2889.00 ft (CF)
Serial #: 6669OutsidePress@RunDepth:112.78 psigStart Date:2011.02.14Start Time:16:29:15TEST COMMENT:IF:Built to 5" bloIS:No return bloFF:Built to 3" bloFS:No return bloFS:No return blo	End Date: End Time: w w	2011.02.14 22:35:30	Capacity: Last Calib.: Time On Btm: Time Off Btm		8000.00 psig 2011.02.14 14 @ 18:15:15 14 @ 20:31:45
Pressure vs.			PRES	SURE SUN	/MARY
220 000 Presue 0000 Presue 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			Pressure (psig) Te (dd 2079.66 2079.66 10 21.62 10 75.04 11 429.64 12 75.83 12 112.78 12 415.28 12	emp Anno eg F) 55.67 Initial H 55.28 Open T 14.82 Shut-In 13.80 End Sh 13.74 Open T 22.32 Shut-In 21.33 End Sh	tation ydro-static fo Flow (1) u(1) ut-In(1) fo Flow (2) u(2)
Recovery				Gas Rates	
Length (ft) Description 2.00 free oil	Volume (bbl) 0.01			Choke (inches) P	ressure (psig) Gas Rate (Mcf/d)
172.00 w cm 70%m 30%w	1.41				

		DRII	L STEM TEST RE	EPORT	-		FLUID S	UMMAR
	RILOBITE ESTING , INC	Larson	Enginering		Harris Uni	t 1-20		
	ESTING , INC	562 We	st State Road 4	20-18-30 Lane CO KS				
		Olmitz K	S 67564	Job Ticket: 0	40686	DST#:5		
		ATTN:	Bob Lew ellyn		Test Start: 2	2011.02.14 @ 10	6:39:15	
Mud and Cushi	on Information							
Mud Type: Gel Ch			Cushion Type:			Oil A PI:		0 deg A Pl
/lud Weight: /iscosity:	9.00 lb/gal 42.00 sec/qt		Cushion Length: Cushion Volume:		ft bbl	Water Salinity:		ppm
Vater Loss:	7.19 in ³		Gas Cushion Type:		ומט			
Resistivity:	0.00 ohm.m		Gas Cushion Pressure:		psig			
-	000.00 ppm 1.00 inches							
Recovery Infor	mation							
	r	T	Recovery Table			т		
	Lengt ft	th	Description		Volume bbl			
			free oil		0.010	+		
		172.00	w cm 70%m 30%w		1.411	1		
	Recovery Com	nents:						
Trilobite Testing,	Inc	Re	ef. No: 040686		Printec	: 2011.02.15 @	08:57:24	Page 2







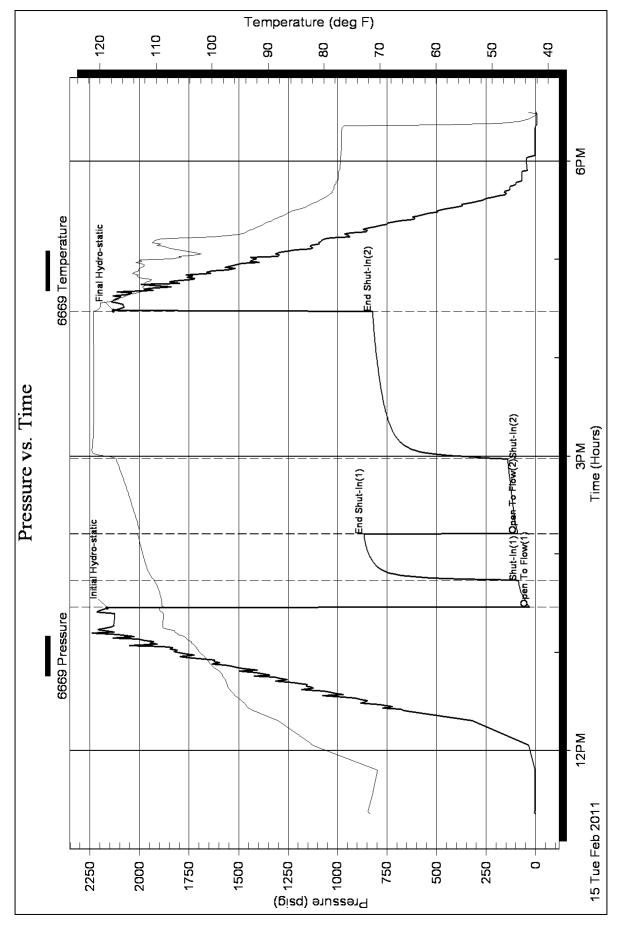
Printed: 2011.02.15 @ 08:57:24 Page 3

Ref. No: 040686

	DRILL STEM TES	REPORT						
RILOBITE	Larson Enginering	Harri	Harris Unit 1-20					
ESTING , INC	562 West State Road 4 Olmitz KS 67564	20-18	8-30 Lane CO KS					
			icket: 040687 DST#:6					
	ATTN: Bob Lew ellyn	Test S	Start: 2011.02.15 @ 11:21:15					
GENERAL INFORMATION:								
Formation:MarmatonDeviated:NoWhipstock:Time Tool Opened:13:27:15Time Test Ended:18:30:0	ft (KB)	Test T Teste Unit N	r: Mike Roberts	9				
Interval:4298.00 ft (KB) To43Total Depth:4374.00 ft (KB) (ThHole Diameter:7.88 inchesHole	/D)	Refere	ence Elevations: 2896.00 2889.00 KB to GR/CF: 7.00	ft (CF)				
Serial #: 6669OutsidePress@RunDepth:140.66 psigStart Date:2011.02.15Start Time:11:21:15TEST COMMENT:IF:Built to 6" blowIS:No return blow	End Date: End Time:	Capacity: 011.02.15 Last Calib.: 18:30:00 Time On Bt Time Off Bt	tm: 2011.02.15 @ 13:27:00	psig				
FF:Built to 7" blov FS:No return blov Pressure vs. T	N	PRE	ESSURE SUMMARY					
1 The Feb 201	0003 Temperature 0004 Tempera	Time Pressure (Min.) (psig) (0 2162.03 1 1 31.71 17 17 86.52 45 45 862.87 140.66 92 140.66 181	Temp (deg F)Annotation109.43Initial Hydro-static108.57Open To Flow (1)110.26Shut-In(1)113.23End Shut-In(1)113.03Open To Flow (2)117.14Shut-In(2)121.24End Shut-In(2)120.59Final Hydro-static					
Recovery		[]	Gas Rates]				
Length (ft) Description 298.00 mud w ith oil spots	Volume (bbl) 3.16		Choke (inches) Pressure (psig) Gas	Rate (Mcf/d)				
Trilobite Testing. Inc	Ref. No: 040687		Printed: 2011.02.16 @ 08:11:28					

			DRI	LL STEM TEST REPOR	Т	FLU	ID SUMMARY		
Olmitz KS 67564 Job Ticket: 040687 DST#:6 ATTN: Bob Lew ellyn Test Start: 2011.02.15 @ 11:21:15 Mud and Cushion Information Mud Type: Gel Chem Oushion Type: Mud Weight: 9.00 lb/gal Cushion Length: ft Water Loss: 7.18 in ³ Gas Cushion Volume: bbl Water Loss: 7.18 in ³ Gas Cushion Pressure: psig Salinity: 3000.00 ppm Filter Cake: 1.00 inches Recovery Table Length Description Volume 3.160 Job Ticket: 040687 DST#: 6 Mud Weight: 0.01 h/gat Cushion Volume: bbl Water Loss: 7.18 in ³ Gas Cushion Volume: Resistivity: 0.00 ohm.m Gas Cushion Pressure: psig Salinity: 3000.00 ppm Filter Cake: 1.00 inches Recovery Table Length Description Volume Mud with oil spots 3.160 Colspan= 2 <td></td> <td>RILUBITE</td> <td>Larsor</td> <td>n Enginering</td> <td>Harris Un</td> <td>it 1-20</td> <td></td>		RILUBITE	Larsor	n Enginering	Harris Un	it 1-20			
ATTN: Bob Lew ellyn Test Start: 2011.02.15 @ 11:21:15 Mud and Cushion Information Mud Type: Gel Chem Oil API: 0 deg Mud Weight: 9.00 lb/gal Cushion Length: ft Water Salinity: 0 ppr Viscosity: 42.00 sec/qt Cushion Volume: bbl bbl Water Loss: 7.18 in ³ Gas Cushion Type: Big Big Salinity: 3000.00 ppm Gas Cushion Pressure: psig Big Salinity: 3000.00 ppm Effect Cake: 1.00 inches Ecovery Information Recovery Information Total Length Description Volume 298.00 mud with oil spots 3.160 Num Fluid Samples: 0 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: Laboratory Name: Laboratory Location: Serial #: Big		ESTING , INC							
Mud and Cushion Information Mud Type: Gel Chem Qushion Type: Oil API: O deg Mud Weight: 9.00 lb/gal Qushion Length: ft Water Salinity: 0 ppm Viscosity: 42.00 sec/qt Qushion Volume: bbl Water Loss: 7.18 in³ Gas Cushion Type: Resistivity: 0.00 ohm.m Gas Cushion Pressure: psig Salinity: 3000.00 ppm Filter Cake: 1.00 inches Recovery Information Recovery Table Length Description Volume bbl 298.00 mud with oil spots 3.160 Total Length: 298.00 ft Total Volume: 3.160 bbl Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: Laboratory Name: Laboratory Location: Mud with oil spots Serial #: Laboratory Name: Laboratory Location: Mum Fluid Samples: 0 Num Gas Bombs: 0 Serial #: Laboratory Name: Laboratory			ATTN:	Bob Lew ellvn			-		
Mud Type: Gel Chem Cushion Type: Oil API: 0 deg Mud Weight: 9.00 lb/gal Cushion Length: ft Water Salinity: 0 ppm Viscosity: 42.00 sec/qt Cushion Volume: bbl viscosity: 0 deg Water Loss: 7.18 in ³ Gas Cushion Volume: bbl viscosity: 0 deg Water Loss: 7.18 in ³ Gas Cushion Type: esitivity: 0.00 ohm.m Gas Cushion Pressure: psig Salinity: 3000.00 ppm Filter Cake: 1.00 inches Filter Cake: 1.00 inches Recovery Information Volume					-				
Recovery Information Recovery Table Length Description Volume 1 298.00 mud with oil spots 3.160 298.00 mud with oil spots 3.160 Total Length: 298.00 ft Total Volume: 3.160 bbl Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: Laboratory Name: Laboratory Location: Laboratory Location:	Mud Type: 0 Mud Weight: Viscosity: Water Loss: Resistivity: Salinity:	Gel Chem 9.00 lb/gal 42.00 sec/qt 7.18 in ³ 0.00 ohm.m 3000.00 ppm		Cushion Length: Cushion Volume: Gas Cushion Type:	bbl		0 deg A Pl 0 ppm		
Recovery Table Length ft Description Volume bbl 298.00 mud with oil spots 3.160 Total Length: 298.00 ft Total Volume: 3.160 bbl Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: Laboratory Name: Laboratory Location: Laboratory Location:									
ft bbl 298.00 mud with oil spots 3.160 Total Length: 298.00 ft Total Volume: 3.160 bbl Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: Laboratory Name: Laboratory Location: Laboratory Location:				Recovery Table					
298.00 mud with oil spots 3.160 Total Length: 298.00 ft Total Volume: 3.160 bbl Num Fluid Samples: 0 Serial #: Laboratory Name: Laboratory Location: Laboratory Location:		Leng	ıth	Description]			
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: Laboratory Name: Laboratory Location:									
Laboratory Name: Laboratory Location:		Total Length:							
				Laboratory Location:					





Ref. No: 040687

Robert C. Lewellyn

P. O. Box 375 Kechi, Kansas 67067 316-518-0495 boblewellyn@yahoo.com

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Consulting Petroleum Geologist

GEOLOGICAL REPORT

Larson Engineering, Inc.

No. 1-20 Harris Unit 728' FSL & 2502' FWL Sec. 20-18S-30W Lane County, Kansas

H D Drilling, LLC				
February 05, 2011				
February 22, 2011				
8 5/8" @ 255 KBM/175 sx.				
DIL CNL/CDL MEL				
2896 KB 2889 GL				
2186 (+ 710)				
2243 (+ 653)				
3897 (-1001)				
3938 (-1042)				
4117 (-1221)				
4219 (-1323)				
4262 (-1366)				
4302 (-1406)				
4333 (-1437)				
4427 (-1531)				
4458 (-1562)				
4477 (-1581)				
4498 (-1602)				
4569 (-1673)				
4651 (-1755)				

Samples were examined microscopically from 3800 to Rotary Total Depth. Samples were examined wet and dry and samples from potentially productive zones were viewed under a fluoroscope and checked for oil cut. Following is a description of zones of interest, Drill Stem Tests, etc. For a complete lithologic description of all formations refer to the sample log in the back pages of this report.

Lansing-Kansas City Zones:

3938-3964 (A Zone)

Limestone, cream to buff, dense and chalky to finely crystalline, slightly fossiliferous, trace of poor to fair scattered vugular porosity, some scattered dead stain, no show of live oil

3974-3987 (B Zone)

Limestone, cream to buff, dense to finely crystalline and slightly fossiliferous, some chalky, scattered poor intercrystalline and vugular porosity with dead stain, no show of live oil. Some finely oollitic limestone with black oolites.

3989-4021 (C/D Zone)

Limestone, cream, some buff, trace of tan, dense with much chalk, some scattered finely crystalline, slightly fossiliferous, zone is mostly tight with no shows of oil.

4023-4039 (E Zone)

Limestone, buff to tan, dense to finely crystalline, slightly fossiliferous, scattered poor intercrystalline and vugular porosity, trace of dead stain, no show of live oil.

4040-4056 (F Zone)

Limestone, cream to buff to tan, dense to finely crystalline, scattered poor to fair intercrystalline and vugular porosity, trace of scattered dead stain, one or two pieces with questionable very poor spotted stain, no free oil, no odor, no fluorescence, no cut, zone warrants no further evaluation.

4059-4069 (G Zone)

Limestone, cream to buff, some gray, finely crystalline and partly oolitic, trace of very poor intercrystalline, interoolitic, and scattered ooliticastic porosity, no show of oil. Lower portion of section consisted of cream, dense and chalky limestone, some finely crystalline with poor intercrystalline porosity and no show of oil.

4131-4145 (H Zone)

Limestone, buff to tan, dense to finely crystalline, slightly fossiliferous, fair intercrystallline and interfossil porosity, some fair vugular porosity, fair spotted stain, good show of free oil, good odor, good fluorescence, good cut.

Drill Stem Test No. 1 4110-4145 15-30-30-60; built to 10 inch blow on first flow period, no blowback; blow off bottom of bucket in 23 minutes on second flow, no blowback; recovered one foot of free oil and 360 feet of saltwater. ISIP 1081# FSIP 1080# IFP 24-104# FFP 102-191# IHP 2046# FHP 2061# BHT N/A The lower portion of the H Zone consisted of limestone, buff to tan to brown, dense to finely crystalline, mostly tight with a trace of poor spotted stain.

4173-4190 (I Zone)

Limestone, buff to tan, trace of gray, dense to finely crystalline, fossiliferous in part, poor to fair intercrystalline and interfossil porosity, scattered poor spotted stain, fair show of free oil, fair odor, poor fluorescence, fair cut, trace of white to light gray sub-translucent chert.

Drill Stem Test No. 2 4175-4190 15-30-30-60; blow built to 4" on first flow, no blowback; blow built to 4" on second flow, no blowback; recovered 3 feet of free oil and 142 feet of mud cut saltwater (70% water, 30% mud) ISIP 863# FSIP 856# IFP 21-57# FFP 61-88# IHP 2087# FHP 2066# BHT N/A.

4198-4219 (J Zone)

Limestone, buff to tan and gray, finely crystalline and partly oolitic, partly mealy with scattered cream chalky, zone is mostly tight with only a trace of very poor intercrystalline and interoolitic porosity, rare trace of very poor spotted stain with scattered dead stain, no free oil, no odor, no fluorescence, no cut. Zone warrants no further evaluation.

4228-4234 (K Zone)

Limestone, buff to tan, some gray, dense to finely crystalline, slightly fossiliferous and oolitic, fair intercrystalline porosity with scattered fair spotted stain, fair show of free oil, fair to good odor, fair fluorescence, good cut.

Drill Stem Test No. 3 4218-4234 15-30-30-60; built to 5 inch blow on first flow, no blowback; built to 4 inch blow on second flow; recovered 75 feet of free oil, 49 feet of mud cut oil (70% oil, 30% mud), 112 feet of oil cut mud (10% oil, 90% mud). ISIP 801# FSIP 759# IFP 24-66# FFP 71-102# IHP 2114# FHP 2104# BHT 122 degrees.

4238-4249 (K2 Zone)

Limestone, buff to tan, finely crystalline, trace of medium crystalline, slightly fossiliferous and oolitic, fair intercrystalline porosity, rare trace of very poor spotted stain, no free oil, no odor, no fluorescence, no cut, zone warrants no further eveluation.

4255-4259 (K3 Zone)

Limestone, buff to tan, finely crystalline, trace of medium crystalline, slightly fossiliferous and oolitic, fair intercrystalline porosity, some scattered vugular porosity, poor to fair spotted stain, slight show of free oil, fair odor, poor to fair fluorescence, fair cut. Recommend perforating this zone prior to abandonment.

4265-4279 (Middle Creek and L Zone)

Limestone, buff to tan to brown, some gray, finely crystalline with scattered oolitic and fossiliferous,

poor to fair intercrystalline and vugular porosity, poor to fair spotted stain, show of free oil, good odor, poor fluorescence, fair to good cut, trace of chert, light gray, opaque, fresh.

Drill Stem Test No. 4 4258-4279 15-30-30-60; built to 2 inch blow on first flow, no blowback; built to 2 inch blow on second flow, no blowback; recovered 2 feet of free oil and 112 feet of saltwater. ISIP 834# FSIP 834# IFP 24-57# FFP 59-93# IHP 2117# FHP 2096# BHT 116 degrees.

4285-4290 (L2 Zone)

Limestone, buff to tan, dense to finely crystalline, brittle, poor to fair intercrystalline porosity, some poor vugular porosity, scattered poor to fair spotted stain, show of free oil, faint to fair odor, poor fluorescence, poor to fair cut.

Drill Stem Test No. 5 4267-4291 15-30-30-60; built to 5 inch blow on first flow, no blowback; built to 3 inch blow on second flow, no blowback; recovered 2 feet of free oil and 174 feet of water cut mud (30% water, 70% mud). ISIP 429# FSIP 415# IFP 21-75# FFP 75-112# IHP 2079# FHP 2087# BHT 121 degrees.

4304-4316 (Pleasanton Zone)

Limestone, buff to tan, some brown, some gray, dense to finely crystalline and slightly fossiliferous, poor to fair intercrystalline porosity, some fair vugular porosity, scattered poor to fair stain, show of free oil, good odor, poor fluorescence, fair cut

4357-4370 (Marmaton Zone)

Limestone, cream to buff, some gray, dense and fine to medium crystalline, partly fossiliferous, fair intercrystalline porosity, some poor to fair fossil cast and interfossil porosity, fair spotted stain, fair show of free oil, fair odor, poor to fair fluorescence, fair cut.

Drill Stem Test No. 6 4298-4374 15-30-45-90; built to 6 inch blow on first flow, no blowback; built to 7 inch blow on second flow, no blowback; recovered 298 feet of mud with oil spots. ISIP 862# FSIP 821# IFP 31-86# FFP 90-140# IHP 2162# FHP 2131# BHT 121 degrees.

4384-4423 (Altamont Zone)

Limestone, cream to buff, some light gray, dense to finely crystalline with considerable chalk, mostly tight with a trace of scattered very poor intercrystalline porosity, some scattered dead stain, no show of live oil. Zone warrants no further evaluation.

4427-4453 (Pawnee Zone)

Limestone, cream to buff to tan, dense and fine to medium crystalline, fair to good vugular and intercrystalline porosity, fair spotted stain, fair show of free oil, fair odor, fair fluorescence, fair to good cut, some scattered chert, fresh, opaque, gray.

4458-4473 (Myrick Station Zone)

Limestone, buff to tan, some brown, dense to finely crystalline, trace of broken intercrystalline porosity streaks with very poor spotted stain, very slight show of free oil, faint fleeting odor, poor fluorescence, poor cut.

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4477-4498 (Fort Scott Zone)
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Limestone, buff to tan, some brown, dense to finely crystalline and oolitic, zone is mostly tight with rare traces of questionable stain, no free oil, no odor, no fluorescence, no cut. Zone warrants no further evaluation.

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4501-4528 (Cherokee Lime Zones)
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Broken streaks of tan to brown limestone, dense with scattered finely crystalline, mostly tight with no shows of oil.

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4530-4554 (Johnson Zone)
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Limestone, tan to brown, dense to finely crystalline, partly fossiliferous, poor vugular and intercrystalline porosity, trace poor spotted stain, rare very slight show of free oil, no odor, no fluorescence, no cut. Zone warrants no further evaluation.

4569-4651 (Mississippian)

Limestone, partly dolomitic, tan to brown, dense and fine to medium crystalline, partly chalky, brittle and flaky, some scattered oolitic, trace of poor intercrystalline porosity, some scattered dead stain, no show of live oil. Lower portion is buff to tan, slightly dolomitic, finely crystalline limestone with no show of oil.

Conclusions and Recommendations:

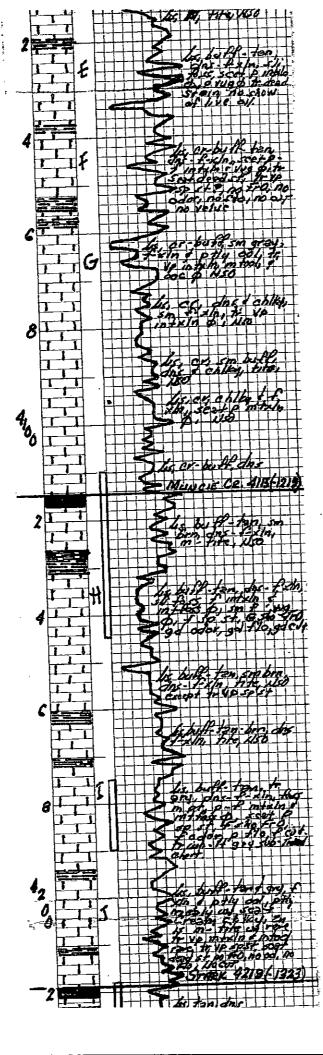
Production casing was cemented in the No. 1-20 Harris Unit. The well should be completed with treatment as necessary to facilitate production in accordance with Tom Larson and Kyle Carter.

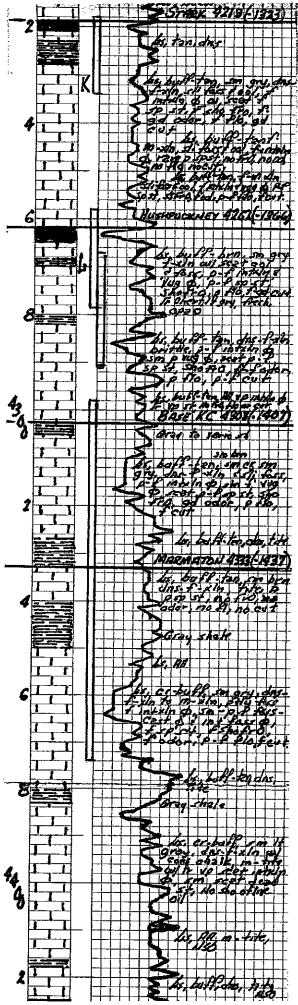
Respectfully submitted,

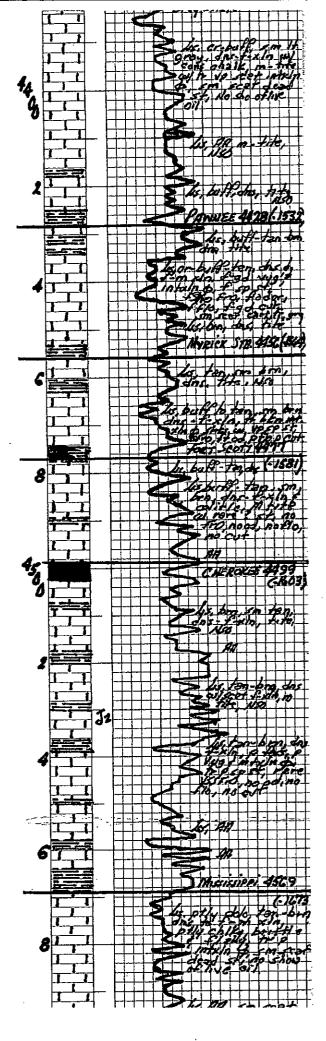
Robert C. Lewellyn Petroleum Geologist

RCL:me

COMPANY DARSON ENGINEERING. KAUSAS COUNTY FARM HARRIS LLUIT 1-20 SURVEY 158 FSL - 2502 FWL BLOCK SEC. 20 total DEPTH 4650 HDDrilling LLC, Rig 3 185 30 N CONTRACTOR 11. <u>02-04-2011</u> COMPLETED 02-2011 REMARKS ALTITUDE 2896 KB PRODUCTION record CASING RODUCT 818 @ 255 KBM/175 sx 30 E 2 4 nuch Ch2 6 8 4000 N D RA, h KSO 74

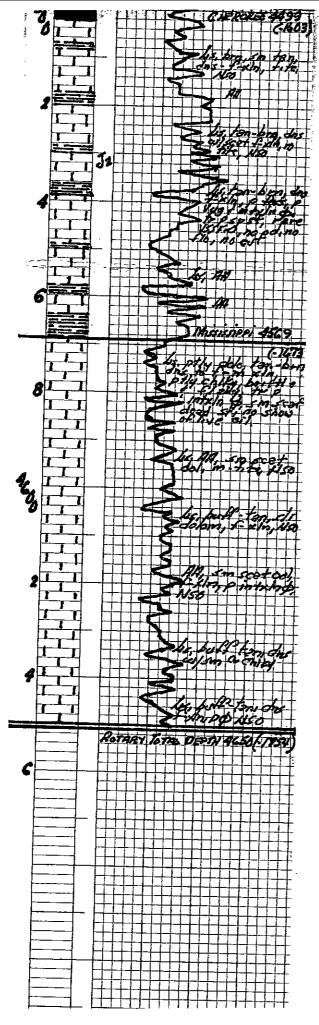






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RECEIVED MAR 2 8 2011



Invoice

 DATE
 INVOICE #

 3/25/2011
 20071

BILL TO

Larson Engineering, Inc. 562 West State Road 4 Olmitz, KS 67564-8561

- Acidizing
- Cement
- Tool Rental

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Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Mark Sievers, Chairman Ward Loyd, Commissioner Thomas E. Wright, Commissioner Sam Brownback, Governor

June 06, 2011

Thomas Larson Larson Engineering, Inc. dba Larson Operating Company 562 W STATE RD 4 OLMITZ, KS 67564-8561

Re: ACO1 API 15-101-22278-00-00 Harris Unit #1-20 SW/4 Sec.20-18S-30W Lane County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully, Thomas Larson Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Mark Sievers, Chairman Ward Loyd, Commissioner Thomas E. Wright, Commissioner Sam Brownback, Governor

June 07, 2011

Thomas Larson Larson Engineering, Inc. dba Larson Operating Company 562 W STATE RD 4 OLMITZ, KS 67564-8561

Re: ACO-1 API 15-101-22278-00-00 Harris Unit #1-20 SW/4 Sec.20-18S-30W Lane County, Kansas

Dear Thomas Larson:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection(e)(2) of that regulation states "All rights to confidentiality shall be lost if the filings are not timely."

The above referenced well was spudded on 2/4/2011 and the ACO-1 was received on June 06, 2011 (not within the 120 days timely requirement).

Therefore, your request for confidential treatment of data contained within the ACO-1 filing cannot be granted at this time.

If you should have any questions, please do not hesitate to contact me at (316)337-6200.

Sincerely,

Production Department