Confidentiality Requested: Yes No

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1225227

Form ACO-1 August 2013 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:	Sec TwpS. R East 🗌 West
Address 2:	Feet from Dorth / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	
Name:	(e.g. xx.xxxx) (e.gxxx.xxxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
☐ Oil	Elevation: Ground: Kelly Bushing:
OG GSW Temp. Ab	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
Deepening Re-perf. Conv. to ENHR Conv. to SW	D Drilling Fluid Management Plan
Plug Back Conv. to GSW Conv. to Proc	lucer (Data must be collected from the Reserve Pit)
	Chloride content: ppm Fluid volume: bbls
	Dewatering method used:
Dual Completion Permit #: SWD Permit #:	
ENHR Permit #:	
GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East 🗌 West
Recompletion Date Recompletion Date Recompletion Date	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
Geologist Report Received
UIC Distribution
ALT I II III Approved by: Date:

	Page Two	1225227
Operator Name:	Lease Name:	Well #:
Sec TwpS. 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 (Attach Additional Sh	neets)	Yes No		-	on (Top), Depth ar		Sample
Samples Sent to Geolog	gical Survey	Yes No	Name	e		Тор	Datum
Cores Taken Electric Log Run		☐ Yes ☐ No ☐ Yes ☐ No					
List All E. Logs Run:							
		CASING Report all strings set-o	RECORD Ne		on, 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 / SQU	EEZE RECORD			
Purpose:	Depth	Type of Cement	# Sacks Lised		Type and P	ercent Additives	

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

Did you perform a hydraulic fracturing treatment on this well?	Yes
Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?	Yes
Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?	Yes

(If No, skip questions 2 and 3) (If No, skip question 3)

No

No

No

(If No, fill out Page Three of the ACO-1)

Shots Per Foot		PERFORATION Specify For	RECOF	RD - Bridge F Each Interval	Plugs Set/Typ Perforated	e	ŀ		ement Squeeze Record d of Material Used)	Depth
TUBING RECORD:	Siz	ze:	Set At:		Packer	r At:	Liner Ru	un:	No	
Date of First, Resumed	l Producti	ion, SWD or ENHF	ł.	Producing N	/lethod:	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	S.	Gas	Mcf	Wat	er	Bbls.	Gas-Oil Ratio	Gravity
[I	
DISPOSITI	ON OF G	BAS:	_		_				PRODUCTION INT	ERVAL:
Vented Solo	d 🗌 l	Used on Lease		Open Hole	Perf.	Uually (Submit)	^v Comp. 4 <i>CO-5</i>)	Commingled (Submit ACO-4)		
(If vented, Su	bmit ACO	D-18.)		Other (Specify))	(,	(

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	M.A. Yost Operations, Inc
Well Name	Camp A 1
Doc ID	1225227

Tops

Name	Тор	Datum
Anhydrite	860	+967
Topeka	2717	+890
Heebner	2956	-1129
Toronto	2967	-1140
Lansing	3012	-1185
ВКС	3217	-1390
Arbuckle	3251	-1424
T.D.	3256	-1429

			MENTING,			
REMIT TO	18048 170RD RUSSELL, KS 67665		SEF	RVICE POINT:	steller	
	SEC. TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
DATE 27-	1 well#. /	LOCATION			COUNTY	STATE
OLD OR NEW (CIRCLE ONE)					
CONTRACTOR	Marson I 1		ONAIED			
TYPE OF JOB	199 Suchall		OWNER			
HOLE SIZE		.D. <i>FC 9</i> EPTH <i>F</i> &	CEMENT	2-10-	2.2.2	0/ 12
TUBING SIZE		EPTH 238	AMOUNT ORI	PERED 275	× 6 61923 . 3	$\mathcal{A}_{\mathcal{A}_{\mathcal{A}}}$
DRILL PIPE		EPTH	<u>~ /0401</u>			
TOOL		EPTH)			
PRES. MAX		INIMUM	COMMON		@	6 S
MEAS. LINE CEMENT LEFT IN (HOE JOINT				
PERFS			GEL CHLORIDE		· •	-
DISPLACEMENT	Star ANT		ASC		@ @	
	EQÜIPMENT			1	@	
PUMP TRUCK	CENTER				@	
$_{\#} P$	CEMENTER HELPER	<u>(ady</u>			@	
BULK TRUCK	THE EX STRAT		-		@	
# <u>R1</u>	DRIVER			1	@	
BULK TRUCK					@	
<u>+</u>	DRIVER				@	
8			HANDLING		@	
	DEMON		MILEAGE		TOTAL	
Den 22 1.	REMARKS:	150 D had	1		TOTAL	14
1967) 18 8 17	<u> 1. CHE SE 100 C (2011</u>	14 0 - pr (340). 1	Y .			
				SEF	RVICE	
S- Eller	G- det	· · · · · ·	DEPTH OF JOB			
		and the second	PUMP TRUCK (
	and store ada		EXTRA FOOTA	GE	@	-
<u>n / 373 50</u> Sies. es sel s	19 80 Car 5 1.11		MILEAGE 🐭	<u>x2</u>		
Here Const.	<u>4-54 5 4 \$ 441 c</u> 2015 - 54 5 - 5	7			@	
n 1 373 50 Fay and a Malat & Ta P M Ch 4	and the second	ulad C	MANIFOLD		@	
n 1 373 50 <u>Seen const</u> <u>Seen const</u> <u>Left al B Te</u> Left Curs	and the second	ulate	MANIFOLD	-	@	
emen Harge to:	OID CITE	ulate Operations	MANIFOLD		@	
Cemena Charge to: TREET	20, 0, 0, 0, 17. MA 105 S 911	ulate Operations	MANIFOLD			
Cemena Charge to: TREET	OID CITE	ulate Operations	MANIFOLD	<u>`</u>	@ TOTAL	
Cemena Charge to: TREET	20, 0, 0, 0, 17. MA 105 S 911	ulate Operations	MANIFOLD	<u>`</u>	@	
HARGE TO: TREET TTY TTY	$\frac{200}{2} \frac{1}{0} $	ulate Operations	MANIFOLD	<u>`</u>	@ TOTAL	
HARGE TO: TREET TTY HTY Global Cementing You are hereby	g, L.L.C., requested to rent cemer	$p = \frac{1}{6} $	MANIFOLD	PLUG & FLOA	© TOTAL AT EQUIPMENT @	
HARGE TO: TREET TTY Global Cementing (ou are hereby turnish cementer	g, L.L.C., requested to rent cemer and helper(s) to assist or	$\frac{1}{2} \frac{1}{2} \frac{1}$	MANIFOLD	PLUG & FLOA	© TOTAL AT EQUIPMENT @ @	
CHARGE TO: TREET TTY Global Cementing You are hereby turnish cementer to work as is list	g, L.L.C., requested to rent cemer and helper(s) to assist or ed. The above work was	$\frac{2}{P} = \frac{2}{OP^2(a^2 - ONS)}$ $\frac{1}{P} = \frac{1}{OP^2(a^2 - ONS)}$ $\frac{1}$	MANIFOLD	PLUG & FLOA	@ TOTAL AT EQUIPMENT @ @	
CHARGE TO:	g, L.L.C., requested to rent cemer and helper(s) to assist or ed. The above work was of owner agent or contra	$p = \frac{1}{2} $	MANIFOLD	PLUG & FLOA	© TOTAL AT EQUIPMENT @ @	
CHARGE TO:	g, L.L.C., requested to rent cemer and helper(s) to assist or ed. The above work was GENERAL TERMS AJ	$p = \frac{1}{2} $	MANIFOLD	PLUG & FLOA		
CHARGE TO:	g, L.L.C., requested to rent cemer and helper(s) to assist or ed. The above work was of owner agent or contra rGENERAL TERMS All rse side.	$p = \frac{1}{2} $	MANIFOLD	PLUG & FLOA		
HARGE TO: TREET TTREET Global Cementing (ou are hereby turnish cementer lo work as is list and supervision c understand the " isted on the reven	g, L.L.C., requested to rent cemer and helper(s) to assist or ed. The above work was of owner agent or contra GENERAL TERMS A) rse side.	$p = \frac{1}{2} $	MANIFOLD	PLUG & FLOA		
CHARGE TO:	g, L.L.C., requested to rent cemer and helper(s) to assist or ed. The above work was of owner agent or contra rGENERAL TERMS All rse side.	$p = \frac{1}{2} $	MANIFOLD	PLUG & FLOA		
HARGE TO: TREET TTREET Global Cementing (ou are hereby turnish cementer lo work as is list and supervision c understand the " isted on the reven	g, L.L.C., requested to rent cemer and helper(s) to assist or ed. The above work was of owner agent or contra GENERAL TERMS A) rse side.	$p = \frac{1}{2} $	MANIFOLD	PLUG & FLOA		

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15	GL		MENTING	J, L.L.C.		1403
REMIT TO 18048 170F	Ð		s	ERVICE POINT:	.4	
RUSSELL,	KS 67665				405Sell.	111
SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	IOD EDUCH
DATE 7-28-14 .27	14	15	CALLED OUT	ON LOCATION	10:48	
LEASE Camp A WELL #.	/	LOCATION		·	COUNTY	STATE
OLD OR NEW (CIRCLE ONE)	<u>8</u>					
CONTRACTOR	120	,		11	_	
CONTRACTOR CUT MUST	14 04 4		OWNER			
HOLE SIZE 774	/ Т.	D.	CEMENT		an an	10 11 201
CASING SIZE		EPTH <u>SSA</u> EPTH	_ AMOUNT O	RDERED <u>1005</u> Store Store 1	COM DE	Dartalag
DRILL PIPE		EPTH			die M	
TOOL		EPTH		and the second s		-
PRES. MAX 1500 B. MEAS. LINE		INIMUM		1 55	@	
CEMENT LEFT IN CSG.	SI	HOE JOINT	_ POZMIX 			
PERFS					@	2
DISPLACEMENT 7 2 4 2 EQUIPM			ASC		@	
EQUIPM	EN I				. @	
PUMP TRUCK CEMENTER	Watt	- Coder			@	
# All HELPER	Read	, cha			@	
BULK TRUCK # BH DRIVER	All and a second		10000000000000000000000000000000000000	·	. @	
BULK TRUCK	2116		_	1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 -	@	
# DRIVER	-				@	e provide a construction of the
			HANDLING.		. @	
D.E.1	1 DIG		MILEAGE		TOTA	-
	ARKS:	al level on V	1.		10111	
ACCORDENT FOR		hour is dal	-		NUCE .	
		1 10952 10%50		SEr	RVICE	
<u>16401-2760/45465-276</u> 268 upskill Ormo an	100	- Shat dayn	– DEPTH OF JC			2
1.1 1.50 72 mb/ 4/20			· .	K CHARGE		
tuy larded @ Istate			EXTRA FOOT	IAGE	@	-
held - plug RH = 303	r MH :	1558			@	-
					@	
CHARGE TO: M.A. YOST	Opera	Lions			@	
STREET _ PO BOX 81	18		-		TOTAL	
CITY <u>Rassell</u> STATE	WS ZH	67665				
				PLUG & FLOA	AT EQUIPMEN	T
Global Cementing, L.L.C.,						
You are hereby requested to	rent cemen	ting equipment and	d i all	DO Plug	@	
furnish cementer and helper(s)	to assist ov	wner or contractor to	0	hagent where	@	
do work as is listed. The above and supervision of owner agen	ve work was	done to satisfaction	<u> </u>	100001-20F	@	
inderstand the "GENERAL	TERMS AN	ND CONDITIONS	", <u></u>	mud Shick	@	
isted on the reverse side.		_ comprised	n (1997) 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		TOTAT	
1.7.11.	<	1			IOIAL	
PRINTED NAME Withan	- <u>~</u> 0.		SALES TAX (If Any)	-3	3
	- ×	1 1				
IGNATURE A Milean	da 1	Sugar	TOTAL CHAR	GES		

TRILOBITE	DRILL STEM TE	ST REF	PORT	-			
	M.A. Yost Operations			27-14s-1	5w Russell.	KS	
TESTING , INC	PO Box 811 Russell, KS 67665			Camp A	#1		
				Job Ticket:	60487	DST#:1	
	ATTN: Jack Yost / Mike Bai			Test Start:	2014.07.27 @	04:00:00	
GENERAL INFORMATION:							N., 8.
Deviated: No Whipstock: Time Tool Opened: 07:37:30 Time Test Ended: 12:35:30	ft (KB)			Test Type: Tester: Unit No:	Conventiona Bob Hamel 58	I Bottom Hole (Init	ial)
nterval: 2988.00 ft (KB) To 308 Total Depth: 3085.00 ft (KB) (TVI Hole Diameter: 7.88 inchesHole (D)			Reference		1825.00 ft (Ki 1818.00 ft (Cf	
erial #: 8679 Inside					O GR/CF:	7.00 ft	
ress @ PunDepth: 75.41 psig @ tart Date: 2014.07.27 tart Time: 04:00:01 EST COMMENT: I.F 45 - Blow built	End Date: End Time:	2014.07.27 12:35:30			2014.07.27 @ 2014.07.27 @		
F.S.I 45 - No blow Pressure vs. Time					RE SUMMA		
	Throad	Time (Min.) 0 1 48 96 96 145 193 194	Pressur (psig) 1487.25 52.86 64.60 757.14 64.97 75.41 703.66 1426.01	(deg F) 100.10 99.53 99.94	Open To Flow	static v (1) I) v (2) 2)	
Recovery				Gas	Rates		
Description 00 S,O,S,M, 100%M (FEW OIL SI	Volume (bbl) PECS) 0.70			Choke (in		sig) Gas Rate (Mcf/	/d)
SHOW OF FREE OIL IN TOOL	0.00			Printed: 2	014.07.29 @ 1	0:58:02	

RILOBITE	DRILL STEM TE	ST REF	PORT		1997 - 1997 - 1997 1997 - 1997 - 1997
TESTING , INC	M.A. Yost Operations PO Box 811 Russell, KS 67665 ATTN: Jack Yost / Mike Bai		27- Ca Job	14s-15w Russe mp A #1 Ticket: 60487 t Start: 2014.07.23	DST#:1
ENERAL INFORMATION: "rator" LKC A-C vated: No Whipstock: To Opened: 07:37:30 Te Test Ended: 12:35:30 erval: 2988.00 ft (KB) To 308 Depth: 3085.00 ft (KB) (TVI e Diameter: 7.88 inchesHole (rial #: 6625 Outside ss @ RunDepth: psig @ Tota: 2014.07.27 Time: 04:00:01	D) Condition: Fair	2014.07.27 12:36:30	Test Unit	er: Bob Ham No: 58 rence Elevations: KB to GR/CF:	1825.00 ft (KB) 1818.00 ft (CF)
F.S.I 45 - No blow Pressure vs. Time	back frace blow built to 1" back		Time Off E		
BEES Presure	CC25 Temperature	Time		Temp Annotat	
Ord The plane		(Min.)	(psig) ((deg F)	
Recovery				Gas Rates	
Description 0 S,O,S,M, 100%M (FEW OIL SI	Volume (bbl) PECS) 0.70			Choke (inches) Pressui	re (psig) Gas Rate (Mcf/d)
SHOW OF FREE OIL IN TOOL					

ATEN TOWOOD		DRII	LL STE	MTES	T REPOI	RT	TOOL DIAGR
RILOBI			st Operation	IS		27-14s-15w R	
ESTI	VG, INC	PO Box	011				
		10 DOX	KS 67665			Camp A #1 Job Ticket: 6048	7 007/14
		ATTN:	Jack Yost /	Mike Bai			7 DST#: 1 07.27 @ 04:00:00
Tool Information							
Drill Pipe: Length: 2	984.00 ft	Diameter:	3.80 in	ches Volume	: 41.86 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe: Length:	0.00 ft	Diameter:		ches Volume			Packer: 25000.00 lb
Drill Collar: Length:	0.00 ft	Diameter:		ches Volume			Loose: 60000.00 lb
Drill Pipe Above KB:	23.00 ft			Total Volume	: 41.86 bbl	Tool Chased	0.00 ft
	988.00 ft					String Weight:	Initial 39000.00 lb Final 40000.00 lb
Depth to Bottom Packer:	ft						
Interval betw een Packers: Tool Length:	97.00 ft 124.00 ft						
Number of Packers:		Diameter:	6.75 in	ches			
Tool Comments:							
Tool Description	Len	gth (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub		1.00			2962.00	Land Albert	
Shut In Tool		5.00			2967.00		
Hydraulic tool		5.00			2972.00		
Jars		5.00			2977.00		
Safety Joint		2.00			2979.00		
Packer	de la Calif	4.00			2983.00	27.00	Bottom Of Top Packe
Packer Stubb		5.00			2988.00		
Perforations		1.00			2989.00		
Change Over Sub		1.00 1.00			2990.00	, si a se disco as as an ân i	
Drill Pipe	F	3.00			2991.00 3054.00		
Change Over Sub		1.00			3055.00		
Recorder		0.00	6625	Outside	3055.00		
Recorder		0.00	8679	Inside	3055.00		
Perforations		6.00	23/0		3081.00		
Bullnose		4.00			3085.00	97.00	Bottom Packers & Anchor
Total Tool Le	nath:	124.00				North States and States	
	0						
Trilobite Testing, Inc		Ref	No: 60487			Printed 2014	.07.29 @ 10:58:03
		1.01.				1 mileu, 2014	.07.20 @ 10.00.00

TYN TOWO		RILL STEM TES	T REPORT		FLUID SUMMARY
And U have		A. Yost Operations	27	-14s-15w Russell,	٢S
ES	TING, INC PO) Box 811	Ca	amp A #1	
		ussell, KS 67665		b Ticket: 60487	DST#: 1
15/	A	TTN: Jack Yost / Mike Bai	Te	st Start: 2014.07.27 @	04:00:00
ud and Cushion Ir	formation	en la companya da companya			
d Type: Gel Chem		Cushion Type:	ft	Oil API:	deg API
	0 lb/gal 0 sec/qt	Cushion Length: Cushion Volume:	bbl	Water Salinit	y: ppm
ater Loss: 7.19	9 in³	Gas Cushion Typ			
sistivity: 0.00 linity: 2000.00	0 ohm.m 0 nom	Gas Cushion Pres	sure: psi	ig	
) inches				
ecovery Informatio	on	D			
	Longth	Recovery Table		Volume	
	Length ft	Description		bbl	
	50.	00 S,O,S,M, 100%M (FEW C 00 SHOW OF FREE OIL IN T		0.701	
1	Fotal Length:	50.00 ft Total Volume:	0.701 bbl	0.000	
	Num Fluid Samples:			Serial #:	
	aboratory Name:	Laboratory Lo		Gondiff.	
F	Recovery Comments	5:			
				Printed: 2014.07.29	@ 10.58.03
Trilobite Testing, Inc		Ref. No: 60487		1111100.2011101.20	@ 10.56.05

(IST TOU ODITE	DRILL STEM TES	ST REP	ORT				
RILOBITE	M.A. Yost Operations	- <u>1</u> - 2 - 1	27-	-14s-15w	Russell,KS		
TESTING , INC	PO Box 811 Russell, KS 67665			mp A #		DST#:2	
W.	ATTN: Jack Yost / Mike Bai				014.07.28 @ 04	:10:00	
GENERAL INFORMATION:							
Formation: Gorham Sand Deviated: No Whipstock: Time Tool Opened: 06:51:00 Time Test Ended: 13:04:30	ft (KB)		Tes	ster:	Conventional Bo Bob Hamel 58	ottom Hole (Rese	:)
nterval: 3232.00 ft (KB) To 32	56.00 ft (KB) (TVD)		Ref	erence E	evations:	1825.00 ft (KB)	
Total Depth: 3256.00 ft (KB) (TV			1.01	oronoo Et		1818.00 ft (CF)	
-cie Diameter: 7.88 inchesHole	Condition: Fair			KB	to GR/CF:	7.00 ft	
Serial #: 8679 Inside							C.
Pess@RunDepth: 240.37 psig (-		Capacity			8000.00 psig	
tart Date: 2014.07.28	End Date:	2014.07.28	Last Cali			14.07.28	
tart Time: 04:10:01	End Time:	13:04:30	Time On Time Off		2014.07.28 @ 0 2014.07.28 @ 1		
I.S.I 45 - Weak : F.F 45 - BOB in	surface blow back built to 1" 12 min surface blow back built to 2"	Time	Pressure	Temp	RE SUMMAR	Y	
F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min surface blow back built to 2" me	(Min.) 0 1 48 97 97	Pressure (psig) 1619.53 25.97 137.07 1081.61 142.11	Temp (deg F) 99.64 99.24 103.66 103.98 103.58	Annotation Initial Hydro-st Open To Flow Shut-In(1) End Shut-In(1) Open To Flow	tatic (1)	
I.S.I 45 - Weak : F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min surface blow back built to 2" me	(Min.) 0 1 48 97 97 97 144	Pressure (psig) 1619.53 25.97 137.07 1081.61	Temp (deg F) 99.64 99.24 103.66 103.98	Annotation Initial Hydro-st Open To Flow Shut-In(1) End Shut-In(1) Open To Flow Shut-In(2)	tatic (1)) (2)	
I.S.I 45 - Weak : F.F 45 - BOB in F.S.I 45 - Weak	surface blow back built to 1" 12 min surface blow back built to 2"	(Min.) 0 1 48 97 97 97 144	Pressure (psig) 1619.53 25.97 137.07 1081.61 142.11 240.37	Temp (deg F) 99.64 99.24 103.66 103.98 103.58 104.45	Annotation Initial Hydro-st Open To Flow Shut-In(1) End Shut-In(1) Open To Flow Shut-In(2) End Shut-In(2)	tatic (1)) (2)	
I.S.I 45 - Weak : F.F 45 - BOB in F.S.I 45 - Weak	surface blow back built to 1" 12 min surface blow back built to 2"	(Min.) 0 1 48 97 97 144 199	Pressure (psig) 1619.53 25.97 137.07 1081.61 142.11 240.37 1088.25	Temp (deg F) 99.64 99.24 103.66 103.98 103.58 104.45 104.17	Annotation Initial Hydro-st Open To Flow Shut-In(1) End Shut-In(1) Open To Flow Shut-In(2) End Shut-In(2)	tatic (1)) (2)	
I.S.I 45 - Weak : F.F 45 - BOB in F.S.I 45 - Weak	surface blow back built to 1" 12 min surface blow back built to 2"	(Min.) 0 1 48 97 97 144 199	Pressure (psig) 1619.53 25.97 137.07 1081.61 142.11 240.37 1088.25	Temp (deg F) 99.64 99.24 103.66 103.98 103.58 104.45 104.17	Annotation Initial Hydro-st Open To Flow Shut-In(1) End Shut-In(1) Open To Flow Shut-In(2) End Shut-In(2)	tatic (1)) (2)	
I.S.I 45 - Weak : F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min surface blow back built to 2"	(Min.) 0 1 48 97 97 144 199	Pressure (psig) 1619.53 25.97 137.07 1081.61 142.11 240.37 1088.25	Temp (deg F) 99.64 99.24 103.66 103.98 103.58 104.45 104.17	Annotation Initial Hydro-st Open To Flow Shut-In(1) End Shut-In(1) Open To Flow Shut-In(2) End Shut-In(2)	tatic (1)) (2)	
I.S.I 45 - Weak : F.F 45 - BOB in F.S.I 45 - Weak	surface blow back built to 1" 12 min surface blow back built to 2"	(Min.) 0 1 48 97 97 144 199	Pressure (psig) 1619.53 25.97 137.07 1081.61 142.11 240.37 1088.25	Temp (deg F) 99.64 99.24 103.66 103.98 103.58 104.45 104.17	Annotation Initial Hydro-st Open To Flow Shut-In(1) End Shut-In(1) Open To Flow Shut-In(2) End Shut-In(2)	tatic (1)) (2)	
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I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak	surface blow back built to 1" 12 min surface blow back built to 2"	(Min.) 0 1 48 97 97 144 199	Pressure (psig) 1619.53 25.97 137.07 1081.61 142.11 240.37 1088.25	Temp (deg F) 99.64 99.24 103.66 103.98 103.58 104.45 104.17 103.97	Annotation Initial Hydro-st Open To Flow Shut-In(1) End Shut-In(1) Open To Flow Shut-In(2) End Shut-In(2) Final Hydro-st Final Hydro-st	tatic (1) (2) atic	(6)
I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min surface blow back built to 2"	(Min.) 0 1 48 97 97 144 199	Pressure (psig) 1619.53 25.97 137.07 1081.61 142.11 240.37 1088.25	Temp (deg F) 99.64 99.24 103.66 103.98 104.45 104.17 103.97 Ga	Annotation Initial Hydro-st Open To Flow Shut-In(1) End Shut-In(1) Open To Flow Shut-In(2) End Shut-In(2) Final Hydro-st s Rates	tatic (1) (2) atic	4)
I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15 F.C 45 - 45 - 45 - 45 - 45 - 45 - 45 - 4	surface blow back built to 1" 12 min surface blow back built to 2"	(Min.) 0 1 48 97 97 144 199	Pressure (psig) 1619.53 25.97 137.07 1081.61 142.11 240.37 1088.25	Temp (deg F) 99.64 99.24 103.66 103.98 104.45 104.17 103.97 Ga	Annotation Initial Hydro-st Open To Flow Shut-In(1) End Shut-In(1) Open To Flow Shut-In(2) End Shut-In(2) Final Hydro-st s Rates	tatic (1) (2) atic	4)
I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15 F.C 45 - 45 - 45 - 45 - 45 - 45 - 45 - 4	surface blow back built to 1" 12 min surface blow back built to 2" The surface blow	(Min.) 0 1 48 97 97 144 199	Pressure (psig) 1619.53 25.97 137.07 1081.61 142.11 240.37 1088.25	Temp (deg F) 99.64 99.24 103.66 103.98 104.45 104.17 103.97 Ga	Annotation Initial Hydro-st Open To Flow Shut-In(1) End Shut-In(1) Open To Flow Shut-In(2) End Shut-In(2) Final Hydro-st s Rates	tatic (1) (2) atic	(d)
I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15 F.C 45 - 45 - 45 - 45 - 45 - 45 - 45 - 4	surface blow back built to 1" 12 min surface blow back built to 2" The surface blow	(Min.) 0 1 48 97 97 144 199	Pressure (psig) 1619.53 25.97 137.07 1081.61 142.11 240.37 1088.25	Temp (deg F) 99.64 99.24 103.66 103.98 104.45 104.17 103.97 Ga	Annotation Initial Hydro-st Open To Flow Shut-In(1) End Shut-In(1) Open To Flow Shut-In(2) End Shut-In(2) Final Hydro-st s Rates	tatic (1) (2) atic	3)
I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15 F.C 45 - 45 - 45 - 45 - 45 - 45 - 45 - 4	surface blow back built to 1" 12 min surface blow back built to 2" The surface blow	(Min.) 0 1 48 97 97 144 199	Pressure (psig) 1619.53 25.97 137.07 1081.61 142.11 240.37 1088.25	Temp (deg F) 99.64 99.24 103.66 103.98 104.45 104.17 103.97 Ga	Annotation Initial Hydro-st Open To Flow Shut-In(1) End Shut-In(1) Open To Flow Shut-In(2) End Shut-In(2) Final Hydro-st s Rates	tatic (1) (2) atic	4)

ATEN -		DRILL STEM T	EST REP	ORT				
	RILOBITE	M.A. Yost Operations	s	27-	14s-15w	Russell,	KS	
	ESTING , INC	PO Box 811		Ca	mp A #1			
目目		Russell, KS 67665			Ticket: 60		DST#:2	2
		ATTN: Jack Yost / Mike Ba	i i	Tes	t Start: 20	14.07.28 @	04:10:00	
GENERAL IN	FORMATION:	5 - 1 ²¹ 23				05		
Formation:	Gorham Sand							
Deviated: Time Tool Opene Time Test Endeo		ft (KB)		Tes	ter: I	Conventiona Bob Hamel 58	al Bottom Ho	le (Reset)
	3232.00 ft (KB) To 32	56.00 ft (KB) (TVD)			erence Ee	vations:	1825.00	ft (KB)
Total Depth:	3256.00 ft (KB) (TV	′D)				00/07	1818.00	
Hole Diameter:	7.88 inchesHole	Condition: Fair			KB t	o GR/CF:	7.00	tt .
Serial #: 66 Press@RunDep		@ 3234.00 ft (KB)		Capacity			8000.00	psig
Press@RunDep Start Date:	2014.07.28	End Date:	2014.07.28	Last Cali	b.:		2014.07.28	
Start Time:	04:10:01	End Time:	13:05:30	Time On Time Off				
TEST COMM	F.F 45 - BOB in	surface blow back built to 1"					ų A	
TEST COMM	I.S.I 45 - Weak F.F 45 - BOB in	surface blow back built to 1" 12 min surface blow back built to 2"		PI		RE SUMM		
	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min surface blow back built to 2"	Time ((Min.)		RESSUF Temp (deg F)	RE SUMM Annotati		
	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min surface blow back built to 2"	Time	Pi Pressure	Temp			
TEST COMM	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min surface blow back built to 2"	Time	Pi Pressure	Temp			
C	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min surface blow back built to 2"	Time	Pi Pressure	Temp			
C	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min surface blow back built to 2"	Time (Min.)	Pi Pressure	Temp			
C	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min surface blow back built to 2"	Time	Pi Pressure	Temp			
C	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min surface blow back built to 2"	Time (Min.)	Pi Pressure	Temp			
C	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min surface blow back built to 2"	Time (Min.)	Pi Pressure	Temp			
	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min surface blow back built to 2"	Time (Min.)	Pi Pressure	Temp			
	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min surface blow back built to 2"	Time (Min.)	Pi Pressure	Temp			
	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 10	surface blow back built to 1" 12 min : surface blow back built to 2"	Time (Min.)	Pi Pressure	Temp (deg F)	Annotati		
	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15	surface blow back built to 1" 12 min :surface blow back built to 2"	Time (Min.)	Pi Pressure	Temp (deg F)	Annotati	on	as Rate (Mc//d)
550 570 570 570 570 570 570 570	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15 Continue One Transmission Recovery Description	surface blow back built to 1" 12 min : surface blow back built to 2"	Time (Min.)	Pi Pressure	Temp (deg F)	Annotati	on	as Rate (Mcl/d)
50 50 50 50 50 50 50 50 50 50 50 50 50 5	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15 Continue One Pressure vs. 15 Continue Recovery Description H,O,C,M,W, 20%O 30%h	surface blow back built to 1" 12 min : surface blow back built to 2"	Time (Min.)	Pi Pressure	Temp (deg F)	Annotati	on	as Rate (McI/d)
Length (ft) 126.00 365.00	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 15 Continue One Transmission Recovery Description	surface blow back built to 1" 12 min : surface blow back built to 2"	Time (Min.)	Pi Pressure	Temp (deg F)	Annotati	on	as Rate (McI/d)
Length (ft) 126.00 365.00	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 13 Continue Continue Recovery Description H,O,C,M,W, 20% O 30% M C/O 100%	A 50%W 1.77 5.12	Time (Min.)	Pi Pressure	Temp (deg F)	Annotati	on	as Rate (Mcl/d)
Length (ff) 126.00 365.00	I.S.I 45 - Weak F.F 45 - BOB in F.S.I 45 - Weak Pressure vs. 13 Continue Continue Recovery Description H,O,C,M,W, 20% O 30% M C/O 100%	A 50%W 1.77 5.12	Time (Min.)	Pi Pressure	Temp (deg F)	Annotati	on	as Rate (Mct/d)

(IN TOU ODITE	DRIL	LST	EMTES	T REPOR	Т		
RILOBITE	MA Yos					and the second se	DIAGRAM
ESTING,	in in				27-14s-15w Ru	ussell,KS	
					Camp A #1		
	Russell, r	(S 67665			Job Ticket: 60488	DST#:2	
	ATTN: J	ack Yost	/ Mike Bai		Test Start: 2014.0	07.28 @ 04:10:00	
Tool Information							
DHI Poe: Length: 3236.00	ft Diameter:	3.80 i	inches Volume	: 45.39 bbl	ToolWainht	0700.00.0	а 23 ⁶ 2
	ft Diameter:		nches Volume		Tool Weight: Weight set on I	2500.00 lb Packer: 25000.00 lb	
Dril Coller: Length: 0.00	ft Diameter:		nches Volume		Weight to Pull L	.oose: 50000.00 lb	
Dril Pipe Above KB: 31.00	ft		Total Volume.	45.39 bbl	Tool Chased	0.00 ft	
Depth to Top Packer: 3232.00					String Weight:		- 1 - j ^a li
	ft					Final 42000.00 lb	a 3
Tool Length: 51.00 t							
Number of Packers: 2	ft Diameter:	0 75 .					
Tool Comments: 2	Diameter:	6.75 ir	ncnes				
ool Description	o marth (fr)		-				
hange Over Sub	ength (ft) Se	rial No.	Position	Depth (ft) Acc	cum. Lengths		
Shut in Tool	1.00 5.00			3206.00	5		
ty craulic tool				3211.00			
5L2 2.0.0010	5.00 5.00			3216.00			
ařety Joint				3221.00			
a ay John Bokar	2.00			3223.00			
icker	4.00			3227.00	27.00	Bottom Of Top	Packer
	1.00			3232.00			
Lee				3233.00			
	1.00			3234 00			
efforations		6625	Outside	3234.00			
rforations storder	1.00	6625 8679	Outside Inside	3234.00			
efforations acorder acorder efforations	1.00 0.00			3234.00 3234.00			
eforations acorder acorder acorder aforations	1.00 0.00 0.00			3234.00	24.00	Bottom Packara 8	ncher
efforations acorder acorder efforations	1.00 0.00 0.00 18.00			3234.00 3234.00 3252.00	24.00	Bottom Packers & A	nchor
eforations econder econder eforations illinose	1.00 0.00 0.00 18.00 4.00			3234.00 3234.00 3252.00	24.00	Bottom Packers & A	nchor
rforations corder forations Inose	1.00 0.00 0.00 18.00 4.00			3234.00 3234.00 3252.00	24.00	Bottom Packers & A	nchor
eforations econder econder eforations illinose	1.00 0.00 0.00 18.00 4.00			3234.00 3234.00 3252.00	24.00	Bottom Packers & A	nchor
rforations xoorder xoorder rforations ilrose	1.00 0.00 0.00 18.00 4.00			3234.00 3234.00 3252.00	24.00	Bottom Packers & A	nchor
erforations ecorder ecorder erforations Jinose	1.00 0.00 0.00 18.00 4.00			3234.00 3234.00 3252.00	24.00	Bottom Packers & A	nchor
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rforations xoorder xoorder rforations ilrose	1.00 0.00 0.00 18.00 4.00			3234.00 3234.00 3252.00	24.00	Bottom Packers & A	nchor
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rforations xoorder xoorder rforations ilrose	1.00 0.00 0.00 18.00 4.00			3234.00 3234.00 3252.00	24.00	Bottom Packers & A	nchor
eforations econder econder eforations illinose	1.00 0.00 0.00 18.00 4.00			3234.00 3234.00 3252.00	24.00	Bottom Packers & A	nchor
erforations ecorder ecorder erforations Jinose	1.00 0.00 0.00 18.00 4.00			3234.00 3234.00 3252.00	24.00	Bottom Packers & A	nchor
erforations ecorder ecorder erforations Jinose	1.00 0.00 0.00 18.00 4.00			3234.00 3234.00 3252.00	24.00	Bottom Packers & A	nchor
rforations corder corder forations inose	1.00 0.00 0.00 18.00 4.00			3234.00 3234.00 3252.00	24.00	Bottom Packers & A	nchor
erforations ecorder ecorder erforations Jinose	1.00 0.00 18.00 4.00 51.00	8679		3234.00 3234.00 3252.00			nchor
efforations ecorder ecorder efforations Unose Total Tool Length:	1.00 0.00 18.00 4.00 51.00			3234.00 3234.00 3252.00		Bottom Packers & A	nchor
	1.00 0.00 18.00 4.00 51.00	8679		3234.00 3234.00 3252.00			nchor
eforations econder eforations Jinose Total Tool Length:	1.00 0.00 18.00 4.00 51.00	8679		3234.00 3234.00 3252.00			nchor

	DR	ILL STEM TEST REPOI	RT	F	LUID SUMMARY
RILOBITE	M.A. Y	ost Operations	27-14s-15	w Russell,KS	
ESTING		x 811 II, KS 67665	Camp A #	#1	DOT# 0
	ATTN:	Jack Yost / Mike Bai	Job Ticket: 6 Test Start: 2	2014.07.28 @ 04:	DST#:2 10:00
lud and Cushion Informat	tion			264	
ud Type: Gel Chem ud Weight: 9.00 lb/gal iscosity: 52.00 sec/qt iater Loss: 7.98 in ^a esistivity: 0.00 ohm.m elinity: 300.00 ppm ter Cake: 1.00 inches		Cushion Type: Cushion Length: Cushion Volume: Gas Cushion Type: Gas Cushion Pressure:	ft bbl psig	Oil API: Water Salinity:	31.2 deg API 8500 ppm
ecovery Information			-		
	Length	Recovery Table Description	Volume	1	
	ft 126.00	H,O,C,M,W, 20%O 30%M 50%W	bbl 1.767		
	365.00 0.00	C/O 100% 315' G.I.P.	5.120	-	
				1	
	Samples: 0	.00 ft Total Volume: 6.887 b Num Gas Bombs: 0		-	
Num Fluid Laboratory	Samples: 0 y Name: Comments: CC		bbl Serial #:		
Num Fluid Laboratory	Samples: 0 y Name: Comments: CC R'	Num Gas Bombs: 0 Laboratory Location: DRRECTED OIL GRAVITY = 31.2 @ 60 Deg	obl Serial #:	2014.07.29 @ 10	