

Confidentiality Requested:

Yes No

Kansas Corporation Commission Oil & Gas Conservation Division

1115358

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:	SecTwpS. R
Address 2:	Feet from
City: State: Zip:+	Feet from _ East / _ West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxxxx) (e.gxxx.xxxxxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
☐ New Well ☐ Re-Entry ☐ Workover	Field Name:
□ Oil □ WSW □ SHOW □ Gas □ D&A □ ENHR □ SIGW □ OG □ GSW □ Temp. Abd. □ CM (Coal Bed Methane) □ Cathodic □ Other (Core, Expl., etc.): If Workover/Re-entry: Old Well Info as follows:	Producing Formation: Kelly Bushing: Total Vertical Depth: Plug Back Total Depth: Feet Multiple Stage Cementing Collar Used? Yes No 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 SWD Plug Back Conv. to GSW Conv. to Producer Commingled Permit #: Dual Completion Permit #: SWD Permit #:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit) Chloride content: ppm Fluid volume: bbls Dewatering method used: Location of fluid disposal if hauled offsite:
☐ ENHR Permit #: ☐ GSW Permit #:	Operator Name:
GSW Permit #:	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date	Quarter Sec. Twp. S. R. East West County: Permit #:

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY		
Confidentiality Requested		
Date:		
Confidential Release Date:		
☐ Wireline Log Received		
Geologist Report Received		
UIC Distribution		
ALT I II III Approved by: Date:		

Page Two



Operator Name:				Lease N	Name: _			Well #:		
Sec Twp	S. R	East	West	County	:					
INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to	ring and shut-in pres o surface test, along	sures, whethe with final cha	er shut-in pre art(s). Attach	essure reac n extra shee	hed stati t if more	c level, hydrosta space is neede	itic pressures, bot d.	tom hole temp	erature, fluid re	ecovery,
Final Radioactivity Lo files must be submitte						ogs must be ema	ailed to kcc-well-lo	gs@kcc.ks.go	v. Digital electr	ronic log
Drill Stem Tests Taker (Attach Additional		Yes	☐ No				on (Top), Depth ar		Sampl	
Samples Sent to Geo	logical Survey	Yes	□No		Nam	е		Тор	Datum	1
Cores Taken Electric Log Run		☐ Yes ☐ Yes	☐ No ☐ No							
List All E. Logs Run:										
				RECORD	Ne					
	2	1				ermediate, product		T	I	
Purpose of String	Size Hole Drilled		Casing n O.D.)	Weig Lbs. /		Setting Depth	Type of Cement	# Sacks Used	Type and Pe Additive	
			ADDITIONAL	CEMENTIN	NG / SQL	JEEZE RECORD				
Purpose:	Depth Top Bottom	Type of	Cement	# Sacks	Used		Type and F	ercent Additives		
Perforate Protect Casing	100 20111111									
Plug Back TD Plug Off Zone										
1 lug 0 li 20 lio										
Did you perform a hydrau	ulic fracturing treatment	on this well?				Yes	No (If No, ski	ip questions 2 ar	nd 3)	
Does the volume of the t							= :	p question 3)		
Was the hydraulic fractur	ring treatment information	on submitted to	the chemical	disclosure re	gistry?	Yes	No (If No, fill	out Page Three	of the ACO-1)	
Shots Per Foot		ION RECORD Footage of Eac					cture, Shot, Cement			epth
	open,					,,				
TUBING RECORD:	Size:	Set At:		Packer A	t:	Liner Run:				
							Yes No			
Date of First, Resumed	Production, SWD or Ef	NHR. F	Producing Met	hod: Pumpin	a	Gas Lift 0	Other (Explain)			
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wat			Gas-Oil Ratio	Gra	avity
	1									
	ON OF GAS:		en Hole	METHOD OF			mmingled	PRODUCTION	ON INTERVAL:	ļ
Vented Solo	I Used on Lease bmit ACO-18.)		en noie _	Perf.	(Submit		mmingled mit ACO-4)			

Form	ACO1 - Well Completion
Operator	Flatirons Resources LLC
Well Name	Lawrence 42-23
Doc ID	1115358

Tops

Name	Тор	Datum
Anhydrite - top	2132	589
Anhydrite - base	2167	554
Topeka	3672	-951
Heebner	3927	-1206
Lansing	3962	-1241
Base Kansas City	4291	-1570
Marmaton	4317	-1596
Pawnee	4428	-1707
Ft. Scott	4470	-1749
Johnson zone	4537	-1836
Mississippian	4621	-1900



Flatirons Resources LLC

ATTN: Clayton Erickson

303 E. 17th. AVE

Denver CO 80203

STE 940

23-16s-28w Lane Co KS

Lawrence 42 23

Job Ticket: 51315

DST#: 1

Test Start: 2012.12.07 @ 12:25:15

GENERAL INFORMATION:

Formation: Marmaton-Pawnee

Deviated: Whipstock: Test Type: Conventional Bottom Hole (Initial) ft (KB)

Time Tool Opened: 14:35:45 Tester: Mike Roberts 65

Time Test Ended: 19:36:00 Unit No:

Interval: 4365.00 ft (KB) To 4445.00 ft (KB) (TVD) Reference Elevations: 2721.00 ft (KB) Total Depth: 4445.00 ft (KB) (TVD)

2711.00 ft (CF)

Hole Diameter: 6.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft

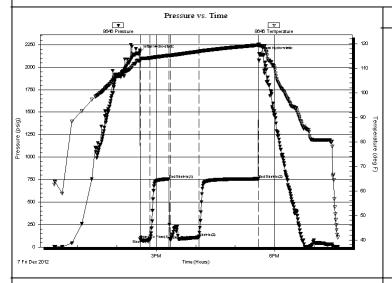
Serial #: 8646

Press@RunDepth: 108.48 psig @ ft (KB) Capacity: 8000.00 psig

Start Date: 2012.12.07 End Date: 2012.12.07 Last Calib.: 2012.12.07 Start Time: 12:25:15 End Time: 2012.12.07 @ 14:35:15 19:36:00 Time On Btm: Time Off Btm: 2012.12.07 @ 17:36:30

TEST COMMENT: IF:Built to 8" blow

IS:No return blow FF:BOB in 8 min. FS:No return blow



PRESSURE SUMMARY

Time	Pressure	Temp	Annotation
(Min.)	(psig)	(deg F)	
0	2163.82	113.26	Initial Hydro-static
1	85.64	113.03	Open To Flow (1)
15	79.75	114.15	Shut-In(1)
45	757.63	115.25	End Shut-In(1)
46	82.18	115.18	Open To Flow (2)
90	108.48	116.82	Shut-In(2)
180	758.49	119.43	End Shut-In(2)
182	2147.80	119.32	Final Hydro-static

Recovery

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
--	----------------	-----------------	------------------

Trilobite Testing, Inc. Ref. No: 51315 Printed: 2012.12.07 @ 23:03:17



FLUID SUMMARY

Flatirons Resources LLC

303 E. 17th. AVE

Denver CO 80203

STE 940

23-16s-28w Lane Co KS

Lawrence 42 23

Job Ticket: 51315

DST#: 1

ATTN: Clayton Erickson

Test Start: 2012.12.07 @ 12:25:15

Mud and Cushion Information

Mud Type:Gel ChemCushion Type:Oil A Pl:0 deg A PlMud Weight:9.00 lb/galCushion Length:ftWater Salinity:0 ppm

Viscosity: 44.00 sec/qt Cushion Volume: bbl

Water Loss: 5.57 in³ Gas Cushion Type:

Resistivity: 0.00 ohm.m Gas Cushion Pressure: psig

Salinity: 1800.00 ppm Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	GIP= 588 ft	0.000
92.00	gcom 5%g 25%o 60%m	1.291
62.00	gcom 10%g 30 %o 60%m	0.870

Total Length: 154.00 ft Total Volume: 2.161 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 51315 Printed: 2012.12.07 @ 23:03:18

- 80

Temperature (deg F)

90

100

110

120

40

50

60

70

Trilobite Testing, Inc

Ref. No:



Flatirons Resources LLC

ATTN: Clayton Erickson

303 E. 17th. AVE

Denver CO 80203

STE 940

23-16s-28w Lane Co KS

Lawrence 42 23

Job Ticket: 51316

DST#: 2

Test Start: 2012.12.08 @ 07:27:15

65

Reference Elevations:

GENERAL INFORMATION:

Formation: Ft. Scott

Deviated: No Whipstock: ft (KB) Test Typ

Time Tool Opened: 09:35:00 Tester: Mike Roberts

Time Test Ended: 13:46:00

Interval: 4447.00 ft (KB) To 4498.00 ft (KB) (TVD)

Total Depth: 4498.00 ft (KB) (TVD)

Hole Diameter: 6.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Reset)

2721.00 ft (KB) 2711.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8646

Press@RunDepth: 38.07 psig @ ft (KB) Capacity: 8000.00 psig

 Start Date:
 2012.12.08
 End Date:
 2012.12.08
 Last Calib.:
 2012.12.08

 Start Time:
 07:27:15
 End Time:
 13:46:00
 Time On Btm:
 2012.12.08 @ 09:34:45

Time Off Btm: 2012.12.08 @ 11:57:45

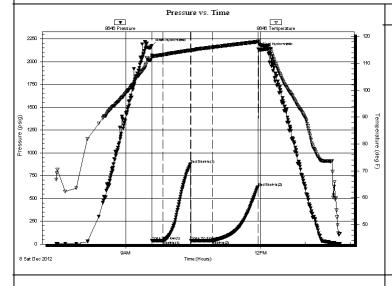
Unit No:

TEST COMMENT: IF:Built to w eak surface blow

IS:No return blow

FF:Weak surface blow that died in 10 min.

FS:No return blow.



PRESSURE SUMMARY

Time	Pressure	Temp	Annotation
(Min.)	(psig)	(deg F)	
0	2173.27	112.96	Initial Hydro-static
1	35.56	112.30	Open To Flow (1)
15	36.39	113.18	Shut-In(1)
52	878.93	114.89	End Shut-In(1)
53	38.82	114.63	Open To Flow (2)
82	38.07	116.01	Shut-In(2)
142	625.67	118.04	End Shut-In(2)
143	2128.15	117.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	mud w ith oil spots	0.28
* Recovery from mult	tiple tests	

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
----------------	-----------------	------------------

Trilobite Testing, Inc Ref. No: 51316 Printed: 2012.12.08 @ 23:06:26



FLUID SUMMARY

Flatirons Resources LLC

23-16s-28w Lane Co KS

303 E. 17th. AVE

STE 940

Denver CO 80203

ATTN: Clayton Erickson

Lawrence 42 23

Job Ticket: 51316

Serial #:

DST#: 2

Test Start: 2012.12.08 @ 07:27:15

Mud and Cushion Information

Mud Type:Gel ChemCushion Type:Oil A Pl:0 deg A PlMud Weight:9.00 lb/galCushion Length:ftWater Salinity:0 ppm

Mud Weight: 9.00 lb/gal Cushion Length: ft
Viscosity: 44.00 sec/qt Cushion Volume: bbl

Water Loss: 5.59 in³ Gas Cushion Type:

Resistivity: 0.00 ohm.m Gas Cushion Pressure: psig

Salinity: 1800.00 ppm Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	mud w ith oil spots	0.281

Total Length: 20.00 ft Total Volume: 0.281 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0

Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 51316 Printed: 2012.12.08 @ 23:06:28

80

Temperature (deg F)

90

100

110

120

50

9

70

Trilobite Testing, Inc

Ref. No:

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/

Sam Brownback, Governor

Mark Sievers, Chairman Thomas E. Wright, Commissioner Shari Feist Albrecht, Commissioner

February 12, 2013

John Marvin Flatirons Resources LLC 303 E 17TH AVE STE 940 DENVER, CO 80203

Re: ACO1 API 15-101-22410-00-00 Lawrence 42-23 NE/4 Sec.23-16S-28W 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, John Marvin

ALLIED OIL & GAS SERVICES, LLC 059118 Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 93999	SEI	ERVICE POINT:		
SOUTHLAKE, TEXAS 76092		(rocut 6	Rend KS	
		900 PM	930 Pm	
DATE //-30-12 SEC. TWP. RANGE C.	ALLED OUT ON LOCATION		JOB FINISH	
	16:00 19:20	20:57 COUNTY	STATE	
LEASE CAUTENCE WELL # 42-23 LOCATION 96 W. to	283 N to 4W	Lane	AS	
	N Imile W. m Law		, 2	
i i i i i i i i i i i i i i i i i i i	IN MAINE W. IN LOC	1,01	6.	
CONTRACTOR Val # 7	OWNER Flat Iran 1	Resources		
TYPE OF JOB Sufface				
HOLE SIZE 121/4 T.D. 221	CEMENT			
CASING SIZE 85/8 DEPTH 209.93	AMOUNT ORDERED _20	0 5x's A	+3% (.(-1	
TUBING SIZE DEPTH	1 2010 Crel		3.45-6-7	
DRILL PIPE DEPTH				
TOOL DEPTH			.)	
PRES. MAX MINIMUM	COMMON200	@17.90	3580.00	
MEAS. LINE SHOE JOINT 20'	POZMIX	@		
CEMENT LEFT IN CSG. 20', 127 665, 5.3 5cls	GEL 3	@ 23.40	70.20	
PERFS.	CHLORIDE 7	@ 64.00	448.00	
DISPLACEMENT 12.5 6615	ASC	@ 	718.2	
EQUIPMENT	7100			
Charles Elkins				
PUMPTRUCK CEMENTER Latrick Helsesson /				
# 398 HELPER Trest Hall 2		@		
BULK TRUCK		@		
# 3411 DRIVER Kevis Weighous 3				
BULK TRUCK		_		
# DRIVER	HANDLING 215 Y	@ @ <u>ス・48</u>	533.20	
	MILEAGE 9.83 x 55 x	2.60		
DEMA DUC.	MILEAGE 1.83 X 33	2.60	1700	
REMARKS:	1.105	TOTAL	6.037.09	
rumped 5 bbls Fresh water.	540. 50		5909,30	
Pumped 418 6613 cement @ 152ppg-2005x	5 491,50 SERV	ICE		
Displaced 12.5 bbls fresh water				
18ave 20 Feat 1.27 6615 5.3 5x's comest income	DEPTH OF JOB 209			
Gradule 5665, to	PUMP TRUCK CHARGE	1512.	25	
Circulated Stals 21 Sx's cerest to suffere	EXTRA FOOTAGE	. @	091	
	MILEAGE Hum 55	5007.00	423.00 350 -	
	MANIFOLD.	@		
	LUM 55	50 @ 4·40	242.00 22000	
		@		
CHARGE TO: Flat Iron Becourses			2082,25	
CHARGE TO. 1 THE CHICK		mom. •		
STREET		TOTAL	2.177.	
CITYSTATEZIP	PLUG & FLOA	AT EQUIPMEN	T	
			/	
	1 8 5/8 swedge		e N/C	
		@		
		@		
To: Allied Oil & Gas Services, 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		
contractor. I have read and understand the "GENERAL	. – 0 . 0			
	SALES TAX (If Any) 258, 18			
TERMS AND CONDITIONS" listed on the reverse side.	24 2001 84 7091 50			
	TOTAL CHARGES & 21	7.		
PRINTED NAME JAMES Shultz	DISCOUNT	IE DA I	D IN 30 DAVS	
Visit IV	210000111	T FAI	a 2 Cm 4/1 di	
	6.16		2597.46 Mesc	
SIGNATURE	•		DIN 30 DAYS 2397.46 disc 5594.09	
0-0		net &	5594.07	
		ho Anso	tax	
		menou		



TICKET NUMBER 39215

LOCATION CARRY 125

FOREMAN TUZZY

	nanute, KS 66720 Fi or 800-467-8676	LLD HOKE	CEMEN	IMENIKEP T	UKI	-	KS
DATE	CUSTOMER# WE	ELL NAME & NUM		SECTION	TOWNSHIP	RANGE	COUNTY
129-12	2955 LAW	vence 1	12-23	23	16	28	LANG
CUSTOMER			5 M2 05			Control of the Char	(A) (A) (A) (B) (A)
Flady		<u> </u>	٠.	TRUCK #	DRIVER	TRUCK#	DRIVER
MAILING ADDRE	SS		Pryling	399	DAMONM		
OLTA (1112 20	566	Jeremy S.		
CITY	STATE	ZIP CODE	win		1		
	HOLE SIZE_		_ HOLE DEPTH	146251	CASING SIZE & V	VEIGHT_5'\Z	12115
	4615 DRILL PIPE		_TUBING		-	OTHER DO	
SLURRY WEIGH	T <u> (4、7 - 12、</u> S SLURRY VOL	1.36-1.80	R WATER gal/s	k	CEMENT LEFT in	CASING 2 7	2
DISPLACEMENT	109.3 DISPLACEME	NT PSI	MIX PSI		RATE		
REMARKS: 5	whose horse	W UALL &	ET , Con	++111	2,4,6,8,	9,16,1	3.56
BASKed	3 Bot 57-84	1 Du-	Tool To	, 727 p.d	Riewhar	lerrer la	de.
Niy tou	mp 500501 m	vel Flus	h Sollo	weel by 1	803451	1435 A 1	D 20541
20000	W/5# Kolsealp	erati wy	Shown	and line	5 Dros No	35 00 ml -0	5= 11.00
60 BBh	= watek , 501/2	PPL < MAN	1 1:24	11255 650	2 1 4 4 6	1000 130	DO #
Dron Du	Bomb wast10	WAY CALL	~ Tool	1000	'cr lbr	10362 130	ock wi
	14 . Mi+ 4255 K						
	and lines. Di						
1207	= 1050 BU 700 C	DI DIOS A	Not all us	A DESTA	12054	a tole 1	0 5 th
,,,,,	1037 00 (00) (1800	2 emons	ara cti		rules Ku.	
ACCOUNT	QUANITY or UNITS	T 5.	TOODIDTION -4	050,4050 00			
CODE	QUANTITOT UNITS	- DI	SCRIPTION OF	SERVICES or PRO	DDUC1	UNIT PRICE	TOTAL
54010	l	PUMP CHARG	SE			30200	
5406	30	MILEAGE		, , ,		500	15000
5407A	28.89 401			Delluery		167	1447 50
11045	1805 ks	Class	'A' com	tne		1765	3177
1111	861*	SAIT				,45	387 45
1110A	900*	120154	u (.56	50400
1118B	3610#	Bond	some			, 25	90250
1131	4753KS	60140				1510	717735
11446	50054	mud 7	Flugh			,00	500
	7-0-541	Flores				282	NIC
4159				1 2 -1		111300	
	<u> </u>	5112	440 7	load shoe	<u>'</u>	5800	41300
4130	9	1 3 3 3	Baske	1,2485		30 -	522 00
	<u> </u>				, 0	27600	552
4283	\	7 '2'	DU (De	1 w/ (at		385000	38503
		-			18404A1		223971
				18551	090		22 59 35
		-		5 u b	المملا		20338 15
					,		
vin 3737				4 - 18 - 18 m s.	10	SALES TAX	1019,50
	Birt Allebra			en com		ESTIMATED TOTAL	21357.6
JTHORIZTION	DICI. LII COME		TITLE	CA LUU		DATE	

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.