

Confidentiality Requested:

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1173908

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:				
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 #	GPS Location: Lat:, Long:			
Name:	(e.g. xx.xxxxx) (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:			
	Elevation: Ground: Kelly Bushing:			
	Total Vertical Depth: Plug Back Total Depth:			
GSW I lemp. Abd.	Amount of Surface Pipe Set and Cemented at: Feet			
\Box Cathodic \Box Other (Core Expl. etc.):	Multiple Stage Cementing Collar Used? Yes No			
If Workover/Be-entry: Old Well Info as follows:	If yes, show depth set:			
Operator	If Alternate II completion, cement circulated from:			
Woll Name:	feet denth to: w/ sx cmt			
Original Comp. Data:				
Deepening Re-pening Conv. to ENHR Conv. to SWD Plug Back Conv. to GSW Conv. to Producer	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)			
	Chloride content: ppm Fluid volume: bbls			
Commingled Permit #:	Dewatering method used:			
SWD Permit #:	Leastion of fluid diagonal if hould offaite:			
ENHB Permit #:	Location of huid disposa if hadred offsite.			
GSW Permit #	Operator Name:			
	Lease Name: License #:			
Soud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East West			
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 Iwo	1173908
Operator Name:	Lease Name:	Well #:
Sec TwpS. R East _ West	County:	
INCTRUCTIONS: Chause important tang of formations paratrated	atail all aaraa Bapart all final	agnies of drill stome tests giving interval tested, time test

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 She	ets)	Yes No		🗌 Log	Formatio	on (Top), Depth and	d Datum	Sample
Samples Sent to Geologi	ical Survey	Yes No		Name			Тор	Datum
Cores Taken Electric Log Run		☐ Yes ☐ No ☐ Yes ☐ No						
List All E. Logs Run:								
		CASING Report all strings set-	RECORD	New [Used diate, product	ion, 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 /	SQUEEZ	E RECORD			
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Use	ed		Type and Pe	ercent Additives	
Protect Casing Plug Back TD								
Plug Off Zone								

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

<u>۱</u>	/es	
<u> </u>	/es	

Yes

No

No

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

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

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated			A	cid, Fracture, Shot, C (Amount and Kind	ement Squeeze Record d of Material Used)	Depth			
TUBING RECORD:	Siz	ze:	Set At:		Packer	r At:	Liner Ru	in: Yes	No	
Date of First, Resumed	I Product	ion, SWD or ENHF	ł.	Producing N	lethod:	ping	Gas Lift	Other <i>(Explain)</i>		
Estimated Production Per 24 Hours		Oil Bbl	S.	Gas	Mcf	Wate	er	Bbls.	Gas-Oil Ratio	Gravity
									1	
DISPOSITI	DISPOSITION OF GAS:			METHOD OF COMPLETION		TION:		PRODUCTION INT	ERVAL:	
Vented Solo	d 🗌 l	Used on Lease		Open Hole	Perf.	Dually	Comp.	Commingled		
(If vented, Su	ıbmit ACC)-18.)		Other <i>(Specify)</i>		(Submit /	400-5)	(Submit ACO-4)		

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

Form	ACO1 - Well Completion
Operator	Lasso Energy LLC
Well Name	Renick 1
Doc ID	1173908

All Electric Logs Run

Tucker: Compensated Neutron PEL Density Micro Log
Tucker: Phased Induction Shallow Focus SP Log
Tucker: Borehole Volume Caliper Log
LogTech of Kansas: Cement Bond Log

Form	ACO1 - Well Completion
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Well Name	Renick 1
Doc ID	1173908

Tops

Name	Тор	Datum
Heebner	3989	-1295
Toronto	4004	-1310
Lansing-Kansas City	4074	-1380
LKC 'B'	4109	-1415
LKC 'D'	4144	-1450
LKC 'F'	4174	-1480
LKC 'G'	4199	-1595
Muncie Creek	4244	-1550
LKC 'H'	4251	-1557
LKC 'l'	4276	-1582
LKC 'J'	4312	-1618
Stark	4373	-1679
LKC 'K'	4387	-1693
Hushpuckney	4417	-1723
LKC 'L'	4419	-1725
Base Kansas City	4504	-1810
Marmaton	4527	-1833
Pawnee	4605	-1911
Fort Scott	4631	-1937
Cherokee	4645	-1951
Ste. Genevieve	4773	-2079
St. Louis	4831	-2137
Spergen	5041	-2347
Warsaw	5262	-2568

Form	ACO1 - Well Completion
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Tops

Name	Тор	Datum
Osage	5384	-2690
Kinderhook	5544	-2850
Viola	5694	-3000
Simpson	5784	-3090
Arbuckle	5800	-3106

Form	ACO1 - Well Completion
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Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
1	Osage Perforations	Shot 6 holes	5444'-5450'
	CIBP		5430'
1	Osage Perforations	Shot 24 holes	5384'-5408'
1	Osage Perforations	Shot 12 holes	5356'-5368'
	Acidize Osage	300 gal 15% NE Acid	5356'-5368' & 5384'- 5408'
	CIBP		5330'
4	St. Louis Perforations	Shot 40 holes	4834'-4844'
	Acidize St. Louis	300 gal 15% NE Acid	4834'-4844'
	Acidize St. Louis w/perf balls	1700 gal 15% NE-FE Acid w/60 perf balls	4834'-4844'
4	Cherokee Sand Perforations	Shot 20 holes	4729'-4734'
4	Cherokee Sand Perforations	Shot 40 holes	4713'-4723'
	Acidize Cherokee Sand	300 gal 15% NE-FE Acid	4729'-4734' & 4713'- 4723'
	Acidize Cherokee Sand	2000 gal 7.5% NE-FE Acid	4729'-4734' & 4713'- 4723'

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Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	1670	A Common & Premium Plus	605	
Production	7.875	5.5	17	5796	Class H	345	AA2



Scale 1:240 Imperial				
Well Name: Surface Location: Bottom Location:	Renick #1 1650' FNL and 330' FEL			
API: License Number: Spud Date: Region: Drilling Completed: Surface Coordinates: Bottom Hole Coordinates:	15-069-20446-0000 34320 11/14/2013 Sec. 29 - T25S - R29W, Gray County 11/26/2013	Time: y Time:	7:30 PM 2:50 PM	
Ground Elevation: K.B. Elevation: Logged Interval: Total Depth: Formation: Drilling Fluid Type:	2682.00ft 2694.00ft 3500.00ft 5870.00ft Mississippian - St. Louis Chemical/Fresh Water Gel	To:	5870.00ft	
	OPERATOR			
Company: Address:	Lasso Energy LLC P.O. Box 465 1125 S. Main St. Chose KS 67524			
Contact Geologist: Contact Phone Nbr: Well Name:	Bruce Kelso 918.633.9655 Renick #1			
Location: Pool: State:	1650' FNL and 330' FEL Kansas	API: Field: Country:	15-069-20446-0000 Ingalls USA	
	LOGGED BY			
	EXPLORATION			
Company: Address: Phone Nbr:	Valhalla Exploration, LLC 8100 E. 22nd St. North Building 1800-2 Wichita, KS 67226 316.655.3550	News	Devel W. Detterree	
Logged By:	Geologist	iname:	Derek W. Patterson	

REMARKS

After review of the geologic log and sample descriptions, as well as the open hole electric logs for the Renick #1, it was decided upon by operator to run 5 1/2" production casing for further evaluation of said well.

Note: the RTD was 5870' and the LTD 5866'. The drill time, lithology, and gas curves have been shifted anywhere from 3'-5' shallow/higher to correspond with the electric log curves. DST #1 interval has been shifted 4' shallow/higher. All connection and circulation points have also been moved to match the overall shift.

The well samples were saved, submitted, and will be available for review at the Kansas Geologic Survey's Well Sample Library located in Wichita, KS.

Respectfully Submitted,

Derek W. Patterson

GENERAL INFORMATION

Service Companies

Drilling Contractor: Ninnescah Drilling - Rig #101 Tool Pusher: Rick Barringer Daylight Driller: Jason Barringer Drilling Fluid: Mud-Co/Service Mud Inc. Engineers: Terry Ison Justin Whiting Evening Driller: Juan Navarro Morning Driller: Ronald Guerrero Relief: Oscar Orona

Gas Detector: Bluestem Environmental Engineer: Sidney Edelbrock Unit: 0756 Operational By: 1840'

Deviation Survey		
Depth	Survey	
1630'	1 1/2°	
2686'	1/4 °	
4852'	3/4 °	
RTD - 5870'	1/2°	

Logging Company: Tucker Energy Services Engineer: J. Adams Logs Ran: DI, CDNL, Micro

Testing Company: Superior Testers Tester: Shane Konzem

Pipe Strap		
Depth	Pipe Strap	
4852'	6.47' Long to Board (windy)	

				Bit Record				
Bit #	Size	Make	Туре	Serial Number	Depth In	Depth Out	Feet	Hours
1	12 1/4"	Varel	Mill Tooth	1386925	0'	1630'	1630'	20
2	13 1/4"	Varel	Mill Tooth	1386926	1630'	1672'	42'	1.25
3	7 7/8"	Varel	HE21	1384993	1672'	4852'	3180'	96.5
4	7 7/8"	Varel	HE29	1382860	4852'	5870'	1018'	63.25

	Surface Casing
11.17.2013	Ran 39 joints of new 23#/ft 8 5/8" casing, tallying 1655', set @ 1670' KB.
	Cemented with 455 sacks A Common, 150 sacks Premium Plus. Cement did circulate.
	Plug down @ 1815 hrs 11.17.13. By Basic Energy Services.
	Production Casing
11.27.2013	Ran 154 joints of used 17#/ft 5 1/2" production casing, tallying 5796.19', set @ 5796' KB.
11.28.2013	Cemented with 345 sacks AA2 Class H. Cement did circulate.
	Plug down @ 1300 hrs 11.28.13. By Basic Energy Services.

DAILY DRILLING REPORT

[Date	0700 Hrs Depth	Previous 24 Hours of Operations
11.2	20.2013	4025'	Drilling and connections Topeka. Geologist Derek W. Patterson on location 2220 hrs 11.19.13. Reset Bloodhound, rezero system, test system. Drilling and connections Topeka, Heebner, and into Toronto. Drilling and connections Toronto. Made 825' over past 24 hrs of operations. WOB: 40k RPM: 75 PP: 900 SPM: 60 DMC: \$0.00 CMC: \$5,580.20
11.2	21.2013	4550'	CFS @ 4028' (Tor). Resume drilling and connections Toronto and into Lansing-KC. Drilling and connections Lansing-KC. Rezero system, test system. Drilling and connections Lansing-KC, Base Kansas City, and into Marmaton. Made 525' over past 24 hrs of operations. WOB: 40k RPM: 75 PP: 1200 SPM: 60 DMC: \$4,979.65 CMC: \$10,559.85
11.2	22.2013	4852'	Drilling and connections Marmaton, Pawnee, Fort Scott, and into Cherokee. Stop @ 4760' for short trip 1950 hrs 11.21.13. Conduct 20 stand short trip, CTCH back on bottom. Resume drilling following short trip 2330 hrs 11.21.13. Drilling and connections Cherokee, Ste. Genevieve (Miss), and into St. Louis (Miss). CFS @ 4852' (St. Louis 'B'). Made 302' over past 24 hrs of operations. WOB: 40k RPM: 75 PP: 1200 SPM: 60 DMC: \$2,325.10 CMC: \$12,884.95
11.2	23.2013	4852'	CFS @ 4852' (St. Louis 'B'). Shows and structure warrant test. CTCH, drop survey, strap out for DST #1 0730 hrs 11.22.13. Rig up tester, make up tool. Bridge encountered @ 1775', impassable with tool. Pull out of hole with tool. TIH with bit to bottom, CTCH. TOH with bit for DST #1 (re-run). Bridge encountered again. TIH with tool. TIH with bit to bridge. Wash through bridge, circulate on zone before TOH with bit. TIH with tool. Made 0' over past 24 hrs of operations. WOB: n/a RPM: n/a PP: n/a SPM: n/a DMC: \$496.30 CMC: \$13,381.25
11.2	24.2013	5063'	TIH with tool all the way to bottom. Conduct DST #1, test successful. TIH with new bit, CTCH. Resume drilling following DST #1 1700 hrs 11.23.13. Drilling and connections St. Louis and into Spergen. Drilling and connections Spergen. Made 211' over past 24 hrs of operations. WOB: 40k RPM: 70-75 PP: 1000 SPM: 60

		BM0: \$0.00 BM0: \$13,301.23
11.25.2013	5449'	 Drilling and connections Spergen. Superior Tester released and tool off location. Drilling and connections Spergen and into Warsaw. CFS @ 5377' (Warsaw). Resume drilling and connections Warsaw and into Osage. Made 386' over past 24 hrs of operations. WOB: 40k RPM: 70-75 PP: 1000 SPM: 60 DMC: \$1,330.35 CMC: \$14,711.60
11.26.2013	5739'	Drilling and connections Osage, Kinderhook, and into Viola. Drilling and connections Viola. Made 290' over past 24 hrs of operations. WOB: 40k RPM: 70-75 PP: 1000 SPM: 60 DMC: \$1,115.15 CMC: \$15,826.75
11.27.2013	RTD- 5870' LTD - 5866'	Drilling and connections Viola, Simpson, and into Arbuckle. Drilling and connections Arbuckle ahead to RTD of 5870'. RTD reached 1450 hrs 11.26.13. CTCH, conduct 20 stand short trip, CTCH back on bottom. Drop survey, TOH for open hole logging operations 1845 hrs 11.26.13. Rig up Tucker Energy Services. Conduct open hole logging operations. Orders received to run 5 1/2" production casing for further evaluation of the Renick #1. Geologist Derek W. Patterson off location 0540 hrs 11.27.13. Made 131' over past 24 hrs of operations. WOB: 40k RPM: 70-75 PP: 1000 SPM: 60 DMC: \$1,378.85 CMC: \$17,205.60 Total Mud Cost: \$17,292.45

					v	VELLC		RISON	SHEE	I						
		Drillin	g Well			Compar	ison Well			Compari	ison Well			Compar	ison Well	
	Lass	o Energy l	LLC - Ren	ick #1	S	Slawson - F	Renick 'X'	#1	Gear	Pet - Klies	en-St. Uni	t 'B' #1	Slawson	- Renick-S	trawn-St.	Unit 'A' #1
	S	Sec. 29 - T	25S - R29	W	5	Sec. 29 - T	25S - R29	w	s	ec. 28 - T2	25S - R29	w	s	Sec. 29 - T	25S - R29	W
		NE S	SE NE			NEN	IE SE			SW S	WNW			SEN	IE NE	
					Oil - S	t. Louis	Stru	ctural	Oil - S	t. Louis	Struc	ctural	Oil - S	t. Louis	Struc	ctural
-	2694	KB			2685	KB	Relat	onship	2686	KB	Relati	onship	2685	KB	Relati	onship
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Heebner	3993	-1299	3989	-1295	3997	-1312	13	17	3993	-1307	8	12	3984	-1299	0	4
l oronto	4008	-1314	4004	-1310	4011	-1326	12	16	4008	-1322	8	12	3996	-1311	-3	1
Lansing-Kansas City	4079	-1385	4074	-1380	4080	-1395	10	15	40//	-1391	6	11	4067	-1382	-3	2
	4118	-1424	4109	-1415	4116	-1431	/	10	4112	-1426	2	10	4103	-1418	-6	3
	4152	-1458	4144	-1450	4151	-1400	8	17	4146	-1460	2	10	4140	-1400	-3	5
	4104	-1430	41/4	-1400	4102	-1437	11	16	4170	-1430	6	11	4170	-1405	-5	5
Muncie Creek	4250	-1556	4733	-1550	4250	-1565	9	15	4246	-1560	4	10	4239	-1554	-2	4
LKC 'H'	4258	-1564	4251	-1557	4258	-1573	9	16	4253	-1567	3	10	4250	-1565	1	8
LKC 'I'	4282	-1588	4276	-1582	4283	-1598	10	16	4276	-1590	2	8	4271	-1586	-2	4
LKC 'J'	4317	-1623	4312	-1618	4320	-1635	12	17	4310	-1624	1	6	4307	-1622	-1	4
Stark	4376	-1682	4373	-1679	4380	-1695	13	16	4374	-1688	6	9	4368	-1683	1	4
LKC 'K'	4378	-1684	4387	-1693	4382	-1697	13	4	4377	-1691	7	-2	4372	-1687	3	-6
Hushpuckney	4419	-1725	4417	-1723	4419	-1734	9	11	4418	-1732	7	9	4409	-1724	-1	1
LKC 'L'	4423	-1729	4419	-1725	4422	-1737	8	12	4421	-1735	6	10	4412	-1727	-2	2
Base Kansas City	4512	-1818	4504	-1810	4510	-1825	7	15	4508	-1822	4	12	4500	-1815	-3	5
Marmaton	4534	-1840	4527	-1833	4534	-1849	9	16	4530	-1844	4	11	4525	-1840	0	7
Pawnee	4609	-1915	4605	-1911	4611	-1926	11	15	4611	-1925	10	14	4600	-1915	0	4
Fort Scott	4635	-1941	4631	-1937	4638	-1953	12	16	4636	-1950	9	13	4626	-1941	0	4
Cherokee	4652	-1958	4645	-1951	4652	-1967	9	16	4649	-1963	5	12	4641	-1956	-2	5
Basal Penn Sand		Not P	resent		4780	-2095	Ν	I/A	L	Not P	resent			Not P	resent	
Ste. Genevieve	4776	-2082	4773	-2079	4805	-2120	38	41	4778	-2092	10	13	4768	-2083	1	4
St. Louis	4828	-2134	4831	-2137	4835	-2150	16	13	4826	-2140	6	3	4812	-2127	-7	-10
Spergen	5046	-2352	5041	-2347												
Warsaw	5266	-2572	5262	-2568												
Vsaye Kindorhook	5540	-2090	5544	-2090		Not Pe	hotratod			Not Per	potratod			Not Pe	notrated	
Viola	5701	-3007	5694	-3000		14011-01	lotititou			14011 01	loudiou			14011 0	Tottatoa	
Simpson	5789	-3095	5784	-3090												
Arbuckle	5806	-3112	5800	-3106												
Total Depth	5870	-3176	5866	-3172	5054	-2369	-807	-803	4984	-2298	-878	-874	5000	-2315	-861	-857
				- tala an An		4019	4020	SQU'D	Dent	4835	4842	ACTIVE	Dant	4824	4828	P&A
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WELL COMPARISON SHEET

MINERAL

▲ Chert, dark
 ∠ Dolomitic

FOSSIL

F Fossils < 20% ♦ Oolite

ACCESSORIES

STRINGER Limestone1

Shale Carb

TEXTURE C Chalky L Lithogr

 ∩∪ Glauconite P Pyrite Sandy Siliceous Silty △ Chert White ✓ Euhed rhombs of dol or (Oomoldic X Sponge Spicules	 Shale Green Shale Gray Shale Teal
		OTHER SYMBOLS
MISC Daily Report Digital Photo Document Folder Link Vertical Log File Horizontal Log File Core Log File Drill Cuttings Rpt	DST DST1 DST2 DST3 Core tail pipe	

					Printed by GEOstrip VC Striple	og ve	ersi	on 4	.0.7	ν.) (ν	ww.g	rsi.ca)
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Geologist Derek W. Patterson On Location 2220 hrs 11.19.13







Limestone: It cream It gray, dense tight matrix, microxln, scattered subfossiliferous to barren, poor visible porosity, no shows, no fluorescence.

Shale: dk red dk gray, blocky to slightly rounded, most dense and hard.

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Limestone: cream It gray, dense tight matrix, microxln, scattered fossiliferous to Vis: 53 Wt: 9.1 Shale Kick Total Gas (units) C2 (units) 100 3 (units) 10



texture, most barren, fair pinpoint porosity in most, no shows, even it yellow mineral fluorescence, no cut.

Shale: gray It gray dk gray, blocky to rounded, hard to soft, with abundant interbedded Limestone: cream tan, dense tight matrix, micro-cryptoxln, sub-fossiliferous, poor visible porosity, no shows, poor dull white mineral fluorescence in few pieces, no cut.

LANSING-KANSAS CITY 4074' (-1380')

Limestone: It cream cream, dense chalky matrix, microxln, most fossiliferous, poor visible porosity, no shows, even dull white mineral fluorescence, no cut, with scattered Chert: It gray off white, opaque-translucent, fresh and sharp.

Limestone: cream It cream, softer chalky matrix, vfxln, fossiliferous-oolitic, fair pinpoint to medium vuggy/oomoldic porosity in most, scattered poor whitishyellow fluorescence, no cut, with Chert: gray It gray off white cream, opaquetranslucent, fresh and sharp, most fossiliferous, and some scattered Chalk in sample.

Shale: gray It gray, blocky to rounded, most soft.

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Limestone: cream tan, dense compact matrix, micro-cryptoxln, subfossiliferous, poor visible porosity, no shows, no fluorescence, with abundant Chert; tan brown, opaque-translucent, fresh and sharp.

Limestone: cream It cream tan, dense tight matrix, micro-cryptoxln, abundant compact fossiliferous, poor-no visible porosity, no shows, no fluorescence, with some scattered Chert as above.

Shale: gray It gray pale green, most rounded and soft.

Limestone: cream It cream It gray, dense chalky matrix, microxln, fossiliferous, poor-fair interfossiliferous porosity, no shows, poor dull whitish-yellow mineral fluorescence, no cut, with Chert: white cream gray, opaque, fresh and sharp, fossiliferous, and some scattered Chalk.

Limestone: tan brown mottled, dense matrix, vfxln, most fossiliferous, grainy texture, poor visible porosity, no shows, no fluorescence, with scattered Chert as above, loose Chalk drops out.

Shale: gray dk gray some dk red, blocky to rounded, mostly soft.

Limestone: cream It cream off white, dense tight matrix, microxln, compact fossiliferous, poor visible porosity, no shows, poor dull white mineral fluorescence, no cut, with Chert: cream tan gray off white, opaque, fresh and sharp, some fossiliferous.

Limestone: cream tan, dense xln matrix, micro-vfxln, oolitic/fossiliferous with good-excellent oomoldic development and associated porosity, no shows, poor yellowish-white mineral fluorescence, no cut, with Chert: cream tan off white, opaque, fresh and sharp, some fossiliferous.

Limestone: cream tan, dense tight matrix, most cryptoxin to lithographic nondescript, some scattered sub-fossiliferous with most barren, poor-no visible porosity, no shows, no fluorescence, with Chert: gray cream off white, opaquetranslucent, fresh and sharp, fossiliferous in part.

Limestone: cream tan, dense matrix, micro-cryptoxln, some lithographic nondescript, barren, poor-no visible porosity, no shows, poor dull white mineral fluorescence, no cut, with scattered Chert as above.

MUNCIE CREEK 4244' (-1550')

Shale: gray dk gray It gray, most soft and mushy.

Limestone: off white It gray It cream, dense sub-chalky to sub-cherty matrix, micro-cryptoxIn, scattered sub-fossiliferous to barren, trace poor vug development and associated porosity, no shows, even dull yellow-white mineral fluorescence, no cut, with fair amount of loose Chalk, and Chert: It gray white, translucent, fresh and sharp.







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Limestone: It gray off white, dense matrix, micro-cryptoxln, fossiliferous in part, scattered imbedded calcite crystals with some 2ndary xln fill, overall poor visible porosity, no shows, some bright It yellow mineral fluorescence in those with xln fill/inclusions, no cut, with some interbedded Shale.

Limestone: cream It tan, dense matrix, micro-vfxln, some grainy, heavily oolitic to oocastic, poor visible porosity with most xln filled, no shows, poor It yellow mineral fluorescence, no cut, with Chert: cream off white, opaque, fresh and sharp, oolitic-fossiliferous, and some loose Chalk.

Limestone: cream tan brown, dense matrix, vf-microxln, heavily oolitic with excellent oomoldic development and associated porosity, fair amount of 2ndary xIn fill in porosity, no shows, even dull whitish-green mineral fluorescence, no

Limestone: cream tan brown, dense matrix, vf-microxln, heavily oolitic with good oomoldic development and associated porosity, fair amount of 2ndary xln fill in porosity, no shows, even dull whitish-green mineral fluorescence, no cut.

Limestone: gray It gray cream, dense cherty matrix, oolitic to sub-oolitic, poor visible porosity, no shows, little-no fluorescence, no cut.

STARK 4373' (-1679')

Shale: black, carbonaceous, blocky to rounded, softer, no gas show.

Shale: gray dk gray, blocky to rounded, soft.

Limestone: It cream It tan, dense tight matrix, microxIn, occasional compact oolitic with most barren, poor visible porosity, no shows, little-no mineral fluorescence, no cut, with scattered Chert: It gray white, opaque-translucent,

Limestone: cream It cream, dense tight matrix, microxln, scattered compact oolitic to mostly barren, some 2ndary xln along edges, overall poor visible porosity, no shows, little-no mineral fluorescence, no cut, with continued scattered Chert as above.

Total Gas (units)

C2 (units)

C3 (units)

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HUSHPUCKNEY 4417' (-1723')

Shale: black dk gray, most carbonaceous, blocky and dense, no gas show.

Limestone: cream It cream, dense sub-chalky matrix, micro-vfxln, most fossiliferous-oolitic, some imbedded calcite crystals, overall poor visible porosity, no shows, little-no fluorescence, no cut.

Limestone: cream It cream, dense sub-chalky matrix, microxln, fossiliferousoolitic, occasional poor oomoldic/vug development and associated porosity, some fair interclast porosity, no shows, even dull It yellow mineral fluorescence, no cut, with scattered Chert: It gray cream tan, opaquetranslucent, fresh and sharp, some fossiliferous in part.

Shale: gray dk gray dk green, blocky and firm, limey, most fissile to splintery, silty in part, with Limestone stringers as above, no shows.

Limestone: cream It cream, dense sub-chalky matrix, vfxln, most fossiliferousoolitic, compact, poor interfossiliferous porosity in few pieces, no shows, littleno mineral fluorescence, no cut, with Chert: gray cream tan, opaque, fresh and sharp, some fossiliferous in part.



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BASE KANSAS CITY 4504' (-1810')

INFLUX - Shale: gray dk gray dk green dk red, blocky to rounded, dense and hard to soft, some silty in part.

Shale: gray dk gray dk green dk red, blocky to rounded, dense and hard to soft, some silty in part.

MARMATON 4527' (-1833')

Limestone: cream It cream off white, dense matrix, micro-cryptoxln, mostly barren, poor visible porosity, no shows, little-no mineral fluorescence, no cut, with scattered Chert fragments.

Limestone: cream It cream off white, dense matrix, micro-cryptoxln with some lithographic non-descript, mostly barren with the occasional sub-fossiliferous, poor visible porosity, no shows, little-no mineral fluorescence, no cut, with scattered Chert fragments.

Limestone: It cream cream, dense matrix, micro-vfxln, most oolitic with fair oomoldic development and associated porosity, no shows, poor-no mineral fluorescence, no cut, with abundant loose Chalk in sample, sample washes white.

Limestone: cream It cream tan, dense matrix, micro-vfxln, most heavily ooliticfossiliferous, grainy texture in some, fair-poor interclast porosity with fair amount of 2ndary xln fill, no shows, no fluorescence, with scattered Chert: cream tan brown, opaque-translucent, fresh and sharp.

PAWNEE 4605' (-1911')

Limestone: cream It cream, dense matrix, vfxln, heavily oolitic with fair-good oomoldic development and associated porosity, no shows, little-no mineral fluorescence, no cut.

Limestone: cream tan, dense matrix, cryptoxln, most barren, no visible porosity, no shows, with scattered Chert: off white It cream, opaque, fresh and sharp, heavily oolitic.

FORT SCOTT 4631' (-1937')

Limestone: cream tan, dense matrix, microxln, scattered oolitic-fossiliferous, poor visible porosity, no shows, little-no mineral fluorescence, no cut.

CHEROKEE 4645' (-1951')

Shale: black dk gray, carbonaceous, blocky, most firm and dense, some softer and waxy, good show gas.

Limestone: cream tan, dense tight matrix, microxln, fossiliferous-oolitic, poor visible porosity, no shows, no fluorescence, with abundant (interbedded/stringers) Shale: gray dk gray some black, very dense and blocky, hard, some pyritic in part.

Limestone: tan gray, dense tight matrix, cryptoxln with abundant lithographic non-descript, barren, no visible porosity, no shows, no fluorescence, with continued abundant Shale as above.

Limestone: cream gray, mostly dense matrix, micro-vfxln, most heavily oolitic, fair interclast porosity, no shows, no fluorescence, with Limestone: cream tan, dense tight matrix, lithographic non-descript, barren, no visible porosity, no shows, no fluorescence, and scattered Shale stringers: gray It gray, blocky and dense, most hard.

Limestone: gray cream, dense tight matrix, cryptoxIn, some lithographic nondescript, barren, no visible porosity, no shows, no fluorescence, with

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interbedded Shale: gray It gray, blocky to rounded, soft.

Limestone: most as above, with trace Limestone: cream, chalky matrix, microxln, some edge weathering, fair pinpoint porosity, poor-fair show It brown oil upon break, spotty It yellow fluorescence, bluish-white cut, moderate odor.

Limestone: gray cream, dense tight matrix, micro-cryptoxln, most barren, poor visible porosity, no shows, no fluorescence.

4756' cfs - Predominately Limestone: gray cream, dense tight matrix, microcryptoxln, most barren, poor visible porosity, no shows, no fluorescence, with some scattered Chert: cream tan, opaque, fresh and sharp, and interbedded/stringers of Shale: gray dk gray, blocky to rounded, most firm.

Limestone: cream It cream, dense matrix, cryptoxln, barren, poor-no visible porosity, no shows, no fluorescence, with fair amount of loose Chalk, and scattered Chert: cream tan, opaque, fresh and sharp, sample washes white.

MISSISSIPPIAN - STE. GENEVIEVE 4773' (-2079')

INFLUX - Limestone: It cream It cream off white, dense sub-chalky matrix, vfmicroxln, most oolitic, some scattered arenaceous material, fair intergranular/interclast porosity, no shows, no fluorescence.

Limestone: It cream off white It gray, most soft chalky matrix, some friable, vfmicroxln, scattered oolitic material, most heavily arenaceous, fair-poor interclast porosity, no shows, no fluorescence.

Limestone: It cream off white It gray, friable-dense chalky matrix, vf-microxln, scattered oolitic material, most heavily arenaceous, fair-poor interclast porosity, no shows, no fluorescence, with some loose Chalk.

Limestone: It cream off white It gray, mostly friable chalky matrix, vf-microxln, scattered oolitic material, some glauconitic in part, most heavily arenaceous, fair-poor interclast porosity, no shows, no fluorescence, with some loose Chalk.

ST. LOUIS 4831' (-2137')

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Limestone: off white It cream, mostly dense matrix, vfxIn, heavily oolitic, fair amount of imbedded silica grains, some chalky in part, overall poor interoolitic porosity, no shows, no fluorescence, no odor, with loose Chalk.

4848' cfs - Limestone: cream tan It cream, dense matrix, micro-vfxln, heavily oolitic, overall fair/-good interoolitic/pinpoint porosity, fair-good show heavy brown oil upon break with increase under lamp, good milky-white cut upon break, even-spotty bright It yellow fluorescence, grading to a tighter oolitic lime, decrease in visible porosity in lower portion, moderate gassy odor.

Limestone: It gray off white, sub-friable to dense slightly chalky matrix, vfmicroxln, heavily arenaceous, some oolitic in part, fair interclast porosity, no shows, no fluorescence.

Limestone: It gray off white, sub-friable to dense slightly chalky matrix, vfmicroxln, heavily arenaceous, some oolitic in part, fair interclast porosity, no shows, no fluorescence.

Limestone: It cream It gray, mostly dense matrix, some chalky and softer, microxln, increase in oolitic material, still carrying fair amount of arenaceous material, some with just a few imbedded silica grains, fair-poor interclast porosity, no shows, no fluorescence, with trace Chert: cream off white, opaque, fresh and sharp, oolitic in part, and loose Chalk, sample washes white.

Limestone: It cream It gray, mostly dense with some sub-chalky softer matrix, microxln, most oolitic to heavily oolitic, still carrying fair amount of arenaceous material, some with just a few imbedded silica grains, fair-poor interclast porosity, no shows, no fluorescence, with trace Chert: cream off white, opaque, fresh and sharp, oolitic in part, and fair amount of loose Chalk, sample washes white.

Limestone: It cream It gray, dense tight matrix in most, vf-microxln, most compact oolitic, some scattered arenaceous material, overall poor visible porosity, no shows, no fluorescence, loose Chalk drops out.

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Limestone: It cream, dense tight matrix, microxIn, compact oolitic, overall poor interoolitic porosity, no shows, no fluorescence.

Limestone: cream It cream, mostly dense tight matrix, some softer and chalky, micro-vfxln, heavily oolitic, some fair interoolitic porosity, no shows, no fluorescence, with scattered Chert: It gray off white It cream, opaquetranslucent, fresh and sharp, oolitic in part.

Limestone: cream tan It brown, dense tight sub-chalky matrix, micro-cryptoxln, most compact oolitic with some barren to lithographic non-descript, poor-no visible porosity, no shows, no fluorescence, with fair amount of Chert as above.

Limestone: cream tan, dense matrix, micro-cryptoxln, some lithographic nondescript, compact oolitic to barren, poor-no visible porosity, no shows, no fluorescence, with continued scattered Chert, and carrying fair amount of Shale content: gray dk gray dk green, blocky and dense (background?).

Limestone: cream tan, dense matrix, micro-cryptoxln, some lithographic nondescript, compact oolitic to barren, poor-no visible porosity, no shows, no fluorescence, with continued scattered Chert, and carrying increased amount of Shale content: gray dk gray dk green, blocky and dense (background?).

Limestone: cream tan, dense matrix, micro-cryptoxln, some lithographic nondescript, compact oolitic to barren, poor-no visible porosity, no shows, no fluorescence, with continued scattered Chert, and carrying increased amount of Shale content: gray dk gray dk green, blocky and dense (background?).

SPERGEN 5041' (-2347')

INFLUX - Limestone: tan cream brown some gray, dense dolomitic matrix, micro-cryptoxln, oolitic, no visible porosity, no shows, no fluorescence, with some scattered Chert: cream tan, opaque, fresh and sharp, barren, and still carrying fair amount of Shale as above.

Limestone: tan cream some gray, dense dolomitic matrix, micro-cryptoxln, oolitic, no visible porosity, no shows, no fluorescence, with INFLUX Limestone: off white It gray some mottled, softer chalky matrix, microxln, some oolitic in part, overall poor visible porosity, no shows, no fluorescence, and scattered Chert: cream tan, opaque, fresh and sharp, barren.

INFLUX - Chert: gray smokey gray some cream to tan, opaque-translucent, fresh and sharp, oolitic, no shows, with INLUX Dolomite: It cream, dense to sub-friable matrix, vf-fxln, sucrosic texture, fair interxln porosity, no shows, no fluorescence.

Limestone: cream It cream, dense tight to softer sub-chalky matrix, vfxIn, scattered sub-oolitic to barren, poor visible porosity, no shows, no fluorescence, with some loose Chalk.

Chert: gray It gray cream, translucent, fresh and sharp, most fossiliferousoolitic, some spiculitic in part.

Limestone: cream It cream, mostly dense matrix, vfxln, most oolitic to suboolitic with some barren, poor visible porosity, no shows, no fluorescence.

Limestone: cream It cream, sub-chalky to dolomitic matrix, vf-fxln, some grainy, sub-oolitic to barren, fair interclast/interxln porosity, no shows, no fluorescence, with scattered Chert: It gray off white, opaque-translucent, fresh and sharp, fossiliferous-oolitic in part, and some loose Chalk in sample.





Limestone: cream It cream, sub-chalky to dolomitic matrix, vf-fxln, some grainy, sub-oolitic to barren, fair interclast/interxln porosity, no shows, no fluorescence, with scattered Chert: It gray off white, opaque-translucent, fresh and sharp, fossiliferous-oolitic in part, and some loose Chalk in sample.

Limestone: cream It cream some tan mottled, sub-chalky to dolomitic matrix, vf-fxln, increase in dolomitic material, some grainy, mostly barren with some sub-oolitic, fair interclast/interxln porosity, no shows, no fluorescence, with scattered Chert: It gray off white, opaque-translucent, fresh and sharp, fossiliferous-oolitic in part, and some loose Chalk in sample.

Limestone: cream It cream gray some tan mottled, sub-chalky to dolomitic matrix, vf-fxln, fair amount of dolomitic material, some grainy, mostly barren with some sub-oolitic, fair interclast/interxln porosity, no shows, no fluorescence, with scattered Chert: It gray off white, opaque-translucent, fresh and sharp, fossiliferous-oolitic in part, and some loose Chalk in sample.

Limestone: cream It cream gray some tan mottled, sub-chalky to dolomitic matrix, vf-fxln, fair amount of dolomitic material, some grainy, mostly barren with some sub-oolitic, fair interclast/interxln porosity, no shows, no fluorescence, with scattered Chert: It gray off white, opaque-translucent, fresh and sharp, fossiliferous-oolitic in part, and some loose Chalk in sample.

INFLUX - Dolomitic Limestone: It gray gray dk gray cream dk cream most mottled, dense dolomitic matrix, vf-fxln, barren, some grainy, overall poor visible porosity, no shows, no fluorescence, with scattered Chert: gray cream tan mottled, opaque-translucent, fresh and sharp, majority fossiliferous.

WARSAW 5262' (-2568')

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Dolomitic Limestone: It gray gray dk gray cream dk cream most mottled, dense dolomitic matrix, vf-fxln, barren, some grainy, overall poor visible porosity, no shows, no fluorescence, with scattered Dolomite: gray It gray, sucrosic matrix, fxln, fair interxln porosity, no shows, no fluorescence, and scattered Chert: gray cream tan mottled, opaque-translucent, fresh and sharp, majority fossiliferous.

Dolomitic Limestone: It gray gray dk gray cream dk cream most mottled, dense dolomitic matrix, vf-fxln, barren, some grainy, some fair pinpoint/interxln porosity, no shows, no fluorescence, with scattered Dolomite: gray It gray, sucrosic matrix, fxln, fair interxln porosity, no shows, no fluorescence, scattered Chert as above, and fair amount of loose translucent Silica shards (chalcedonic Chert?).

Dolomitic Limestone: It gray gray cream dk cream most mottled, dense dolomitic matrix, vf-fxln, some scattered large imbedded clasts, some grainy, overall poor visible porosity, no shows, no fluorescence, with scattered Dolomite: gray It gray, sucrosic matrix, fxln, fair interxln porosity, no shows, no fluorescence, most Chert and Silica shards drop out.

Dolomitic Limestone: It gray off white It cream mottled, dense dolomitic to softer sub-chalky matrix, vf-fxln, most barren, grainy, becoming glauconitic, overall poor-fair interxln porosity, no shows, no fluorescence, with fair amount of loose Chalk.

5373' cfs - Dolomite/Dolomitic Limestone: gray It gray off white cream mottled, dense matrix, fxln, much glauconitic, fair interxln/pinpoint porosity, no shows, no fluorescence, with increase in Chert: clear smokey gray, translucent, fresh and sharp, some fossiliferous-spiculitic in part, couple of pieces with poor It brown stain, no live shows, spotty It yellow fluorescence in stained area, no cut, no odor in sample.





Predominately Dolomite: gray It gray off white, dense sucrosic matrix, vfxln, spiculitic in part, abundant glauconitic, overall poor visible porosity, no shows, no fluorescence, with Dolomitic Limestone: gray It gray mottled, dense dolomitic matrix, vf-fxln, poor visible porosity, no shows, no fluorescence, and scattered Chert as above, no shows.

OSAGE 5384' (-2690')

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Chert: clear smokey gray, translucent-opaque, fresh and sharp, some fossiliferous-spiculitic in part, no shows, no fluorescence, with Dolomite: gray It gray off white, dense to slightly friable sucrosic matrix, vfxln, spiculitic in part, overall fair interxln/pinpoint porosity, no shows, no fluorescence.

Chert: clear smokey gray, translucent-opaque, fresh and sharp, some fossiliferous-spiculitic in part, no shows, no fluorescence, with Dolomite: gray It gray off white, dense to slightly friable sucrosic matrix, vfxln, spiculitic in part, overall fair interxln/pinpoint porosity, no shows, no fluorescence.

Dolomite: gray It gray off white, dense to slightly friable sucrosic matrix, vfxln, spiculitic in part, overall fair interxln/pinpoint porosity, no shows, no fluorescence, with Chert: clear smokey gray, translucent-opaque, fresh and sharp, some fossiliferous-spiculitic in part, no shows, no fluorescence, and trace Limestone: gray dk gray mottled, dense dolomitic matrix, vf-fxln, barren, glauconitic in part, poor interxln porosity, no shows, no fluorescence.

Dolomite: gray It gray off white, dense to slightly friable sucrosic matrix, vfxln, spiculitic in part, overall fair interxln/pinpoint porosity, no shows, no fluorescence, with Chert: clear smokey gray, translucent-opaque, fresh and sharp, some fossiliferous-spiculitic in part, no shows, no fluorescence, and trace Limestone: gray dk gray mottled, dense dolomitic matrix, vf-fxln, barren, glauconitic in part, poor interxln porosity, no shows, no fluorescence.

Dolomite: gray It gray off white, dense to slightly friable sucrosic matrix, vfxln, spiculitic in part, overall fair interxln/pinpoint porosity, no shows, no fluorescence, with abundant Chert: gray It gray smokey gray frosted, translucent-opaque, fresh and sharp, some fossiliferous-spiculitic in part, no shows, no fluorescence, and trace Limestone: gray dk gray mottled, dense dolomitic matrix, vf-fxln, barren, poor interxln porosity, no shows, no fluorescence.

Limestone: tan gray, dense dolomitic matrix, vfxln, barren, poor interxln/micro pinpoint porosity, no shows, no fluorescence, with some scattered Dolomite as above, and continued Chert, no shows.

Dolomite: It gray off white, very dense matrix, micro-vfxln, barren, poor visible porosity, no shows, scattered It yellow mineral fluorescence, no cut, with nearly 50% Chert: gray It gray smokey gray, opaque-translucent, fresh and sharp, some frosted.

Dolomite: It gray off white, very dense matrix, micro-vfxln, barren, poor visible porosity, no shows, scattered It yellow mineral fluorescence, no cut, with continued abundant Chert: gray It gray smokey gray, opaque-translucent, fresh and sharp, some frosted, and scattered Limestone: cream tan, dense brittle matrix, cryptoxln, barren, no visible porosity, no shows, no fluorescence.

KINDERHOOK 5544' (-2850')

INFLUX - Shale: gray dk gray pale green some black carbonaceous, blocky and firm to softer and waxy, splintery-fissile material, some pyritic with Limestone: cream It cream, dense dolomitic to chalky matrix, micro-cryptoxln, barren to sub-oolitic, poor-fair interoolitic to poor-no interxln porosity, no shows, no fluorescence, and some loose Chalk in sample.

Predominately Limestone: tan brown cream, dense matrix, micro-vfxln, most compact oolitic with some sub-arenaceous material, fair interclast porosity throughout, no shows, no fluorescence, with continued abundant Shale, and fair amount of loose Chalk.







Dolomite: It cream gray, dense tight matrix, microxIn, poor xIn development and porosity, no shows, even bright It vellow mineral fluorescence, no cut, grading

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			C: \$1	7,2	05.	60
0	Total	Gas (ι	inits)		100



DST #3.bmp

DRI	LL STEM TES	TREP	ORT			
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	Derek Fallerson		1631.01	ant. 2015.11	.20 @ 00.40.0	0
GENERAL INFORMATION. Formation: St. Louis Mississipp Deviated: No Whipstock: Time Tool Opened: 08:35:30 Time Test Ended: 14:04:30	ft (KB)		Test Ty Tester: Unit No	ype: Conve : Shane o: 3335/2	ntional Bottom Konzem 286/Great Bend	Hole (Initial)
Interval: 4826.00 ft (KB) To 4852.00 ft (Total Depth: 4852.00 ft (KB) (TVD) 1000 ft (KB) (TVD) Hole Diameter: 7.88 inches Hole Condition	KB) (TVD) 1: Poor		Refere	nce Elevation KB to GR/0	ns: 2694 2682 CF: 12	.00 ft(KB) .00 ft(CF) .00 ft
Press@RunDepth: 56.31 psia @ 48 Start Date: 2013.11.23 Er Start Time: 05:45:00 Er TEST COMMENT: 1st Open/ 10 Minutes 1st Shut In/ 45 Minutes 2nd Open/ 15 Minutes. 2nd Shut In/ 90 Minutes.	48.00 ft (KB) nd Date: nd Time: s. Weak blow built to 1/2 . No blow back. . No blow flushed tool a No blow back.	2013.11.23 14:04:30 inch in 5 gallo iter 5 minutes	Capacity: Last Calib.: Time On Btn Time Off Btr n bucket. and gained flue	n: 2013.1 m: 2013.1 sh bubbles th	5000 2013.11 11.23 @ 08:29 11.23 @ 11:17 nen blow died.	.00 psia .21 :30 :30
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Recovery				Gas Rat	es	
Length (ft) Description 20.00 mud	Volume (bbl) 0.28		I	Choke (inches)	Pressure (psia)	Gas Rate (M ct/d)

Printed: 2013.11.21 @ 14:25:24



Cement Report

-	Libera	al, Kansas		L		Data (1 11 12			
Customer	1 ASIG	ENORGH		Lease No. R	enicle	Date //	Cale 11-16-13			
Lease R	wick	1		Well #)		Service Receipt	1717-04360			
Casing C	-5/011	Depth 11	70'	County Gru	94	State KS				
Job Type	Z-42-	SURFAIR	Formation		Legal D	escription 29-25-	29			
		Pipe D	Data		Perfo	rating Data	Cement Data			
Casing size	0 8 5/011		Tubing Size		S	hots/Ft	Lead 455 sks			
Depth /	670'		Depth		From	То	1/4 # Poluflake			
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Max Press	1500 ps;		Max Press		From	То	Tail in 150 sks			
Well Conne	ction		Annulus Vol. 127	ISBLO	From	То	PREmius Plus Cement			
Plug Depth	ug Depth 1628 Pa				From	То	VH & PolyFlake 1.34 all			
Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate		Service	Log			
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1640	1500:11	Ves	2 BBLS.		Pump 21	3BLS water Tou	I Lives To Rie Floor			
		100			1500 ps,	. Good test.	- Lines OK			
1655	200			5	Stant	mixing Lead a	ament At 11.4 ppg			
1000			1 Alexandre		2.950.14	sk - 18. Japleton	~			
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			and the second states and	and a graph because	h.	+ 1		
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1750	300		104.2 BBLS	5	Start	- Displacement	- 1670'-42 X.	0640 BBL H.
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Driver Name	s Rog	len	mike	CESAR		Tim		
							10	2
12h	la	dan					Mosan 1/2	5
Custome	r Represe	ntative /	Stat	tion Manag	er		Cementer	Taylor Printing, Inc.

	BA NERGY SURE PUMP	SERVICES	00 S. Coun beral, Kans ione 620-62	try Esta sas 6790 4-2277	ites Rd. 5		FIELD SERVICE TICKET 1717 04360 A DATE TICKET NO			
DATE OF 11-16	-13 0	ISTRICT / 7/7	and stage		NEW WELL	OLD WELL	PROD INJ WDW CUSTOMER			
CUSTOMER LA	550 E.	Jengy			LEASE Rewick WELL NO. /					
ADDRESS					COUNTY GRAM STATE KS					
CITY		STATE			SERVICE C	REW Ro	sen - Mile - Tim - Corna			
AUTHORIZED BY					JOB TYPE:	Z4)	2 85/8" Sunface			
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQU	JIPMENT#	HRS	TRUCK CALLED			
21753	6			1			ARRIVED AT JOB 11-16-13 (100 0100			
20112-2200	1					-	START OPERATION			
198-2-10883	6			275 7 T			FINISH OPERATION			
							RELEASED AM 1840			

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered). The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

> SIGNED: (WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

MILES FROM STATION TO WELL

OLUDNENT AND SERVICE

REF. NO.	MATCHIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	a sumo	DIAI
CLICI	A-Con Blend	SK	455			
CL110	Premium Plus Cement 1 1	SK	1507	the first of the		
CC109	Calcium Chlonide 1 - +	LB	282-	en free all and all	San and	1.45.3
120102	Cettoflake	LB	38			
CF1453	Flappen Type Tweent Float Valve 85%"	EA	1			-
CF 353	Guide Shoe, Texas Pattern, 85/8" (Blue)	En	1			- State
C.F-4556	Compat Baskets, CANVAS 8 5/2"	EA	1	1000 C		-
CF-4405	Economiaen Hiwred, Welded Standard Centraling	EA	3			1
CF-105	Jop Robbin Const Plun, 85/8"	GA	1	A STATE OF THE STATE	1. 10	1
E101	Henry Equipmont Milence 3 units	MI	255		1960 (84)	100
CE-140	Blanding & Mixing Senvine Change	SK	605			
E-113	Proppant and Bulk Delivery Changes, per Ton Mil	TM	2418			
CE-202	Depth Change 1001'-2000'	HR	4			
CE-504	Muy Container Utizations Change	Job	1			1 22
E-100	Unit Milenge Change - Pickup	ME	85			1
5-003	Service Superviser, First & Has on Location	EA	1	Langer Property	Annan	100
7-105	Cernet DATE Acquisition Marita	EA	1			
CE-403	Additional Hos. After First 6 Hes	HR	6			S Soll
States and			Par and			
and the second				SUB TOTAL	17260	90
CH	EMICAL / ACID DATA:					-
	SERVICE & EQUIP	MENT	%TA	X ON \$	T. B. S. D. L.	
	MATERIALS	1 Line line	%TA	X ON \$	Contraction of the second	
Carlot March 1995		No. A. S.	Sale States	TOTAL		
and the later						
SERVICE		ICE				
REPRESENTATI	VE ORDERED BY CUSTOMER AND R	ECEIVE	D BY:	June 12.1	-	
FIELD SERVICE	OPDER NO	(WELL O	WNER OPERAT	OR CONTRACTOR OR	AGENT)	
DENNALLE	CHUCH NO.					

SLOUD UND MORE TR.

ITEM/PRICE

1	FIE	LD	SE	RV	/IC	E	TI	CKE	T
1	7	1 -	7	Λ	4	7	1	1	7

	1700 S. Country Estates Rd. Liberal, Kansas 67905 Phone 620-624-2277
NENGI OLIVIOLO	

PRESSURE PUMPING & WIRELINE DATE TICKET NO							DATE TICKET NO				
DATE OF 11.27-13 DISTRICT 1717						NEW OLD PROD INJ WDW CUSTOMER WELL WELL PROD INJ WDW CORDER NO.:					
CUSTOMER Lasso Energy					LEASE Renicle #1 WELL NO.						
ADDRESS						COUNTY Gray STATE 115					
CITY		STATE		l May -		SERVICE CREW I. CHAUE, SAM, Gabe					
AUTHORIZED BY	Ten,	Bett				JOB TYPE:	242	Str han Story			
EQUIPMENT#	HRS	EQUIPMENT#		HRS	EQL	IPMENT#	HRS	TRUCK CALLED 11.77.13 PM-1200			
71-1-71	1	714-07		11	31811.	7	0	ARRIVED AT JOB 11-27-13 AM-330			
189)8	8	10891		8	2040) -	8	START OPERATION // 27/3 PM-/155			
		17110	-	1 -)///	<u> </u>	/	FINISH OPERATION 11 77-13 PM-115			
		199 - 2000 - A.			10-10-140	I Developed		RELEASED 11-28-13 AM2230			
								MILES FROM STATION TO WELL \$5			

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered). The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP. GRAD

SIGNED: (WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	-	UNIT	QUANTITY	UNIT PRICE	\$ AMOUN	т
CLIUS	AA2 Cant	5	512	395		7189	00
CC113	Gypsum	6	15	1840		1395	0
CCIII	Salt		16	2190		1095	CO
CC103	C-15		13	224		2800	00
CC105	C-4120	V	16	93		372	00
CCZOI	Gilsonite	-	13	1975		1323	25
CF 1451	Insert Floot Value	~	Et	1		215	00
CF 351	Guide Shoe Texas		Ch	1		200	60
CF-4452	Contralizer 342	~	EA.	20		1500	CO
CF 103	Rubber Plix		CA	1		105	00
CF4552	Court Basket		CA	1		955	ws.
CC155	Suger Flush	5	sol	500		765	00
CE 501	Casa Swill Kertal		TA	1		200	60
2101	Heavy Equinant Millege	1.1.0	m	(70		1190	00
CE 740	Blesch & Mon Charles		5R	395		553	60
2113	Bulle Deliver Chage		tan	1581		2529	60
CERCE	perth Chye		Uhrs	1		2880	00
CE 504	Plug Cortays Charge		30b	<u>r</u>		250	cio
EICO	Pit Kon plitege					361.	25
						10	1

CHEMICAL	/ ACID	DATA:	
 0110110110			
100 C			

	SUB TOTAL	16258
SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
	ΤΟΤΑΙ	

have SERVICE REPRESENTATIVE

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY:

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.



1700 S. Country Estates Rd. P.O. Box 129 Liberal, Kansas 67905 Phone 620-624-2277

FIELD SERVICE TICKET CONT.

ТІСКЕТ NO. 171704711

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
5003	Service Sinewiser	64	/		175 00
CESU3	Derrick Charge	EA-	1		3000
-					
Antonio de la Contra de Co					
		an fandemake den en en fan			

TAYLOR PRINTING, INC (800) 870-7102

\frown										
(\mathbf{B})	BA	SIC	5M 9							
	ENERGY Libera	SERVICES I, Kansas	· · · · · · · · · · · · · · · · · · ·					Cement Report		
Customer	a 550 2	nengy		Lease No.	Date 11-27-13					
Lease Ne			Well # /			^{ot} 4711				
Casing 5	1/2	Depth 580	04	County Gr	oy		State 125			
Job Type Z	42 100	Siley	Formation		7	Legal Descriptio	5-29			
		Pipe D)ata			Perforatin	g Data	Cement Data		
Casing size	51/2	17#	Tubing Size	Shots/Ft			/Ft	Lead		
Depth 55	?//		Depth 55 30'		From		То			
Volume / 3	35 6/5		Volume		From		То			
Max Press	200		Max Press		From		То	Tail in 3955/C AAZ		
Well Connec	ction 51/z		Annulus Vol.		From		То	1. 51 +T -SK		
Plug Depth	5781		Packer Depth		From		То	6.6461-51C JU, 8-#		
Time	Casing Pressure	Tubing Pressure	Bbis. Pumbed	Rate			Service	e Log		
1500							Arrive On	- Lacation		
1700						Safe	1/2 Mar	1- Nig Up		
1800						nis 1	lung Casing			
100 SP.	n					Circ	state "	nig		
1205						Hoole	: Up 10	BES		
1210	2000		1.0	1.0	Pressure Test					
1215	400		5	5.5	Pum Illata Space					
1720	390		12	5.5		Pinn	SUDA Flo	isk		
1225	375		5	5.5		Pingo	Water 51	nacer		
1230	350		93	5.5		Pinn	Cont O	14.8#		
1245					ļ	Dree	n Plug L	Jash Up		
1250	400		125	6.0		1.	150/40C			
110	1100		10	2.0		510	w Down	L		
115	1600		,1	1		Land	Plug - 1	Ploat Held		
					ļ	Plu	r Ratt.	Morse Hole		
					<u> </u>					
					ļ					
								······		
						r	······			
Service Uni	1s 789	38	70897-19570	30463-3	7775					
Driver Nam	es Tra	7	Som	Gabe						

pick

Serpett

STIPhot Cementer

Customer Representative

Station Manager

Taylor Printing, Inc.

