

### Kansas Corporation Commission Oil & Gas Conservation Division

1063160

Form ACO-1

June 2009

Form Must Be Typed

Form must be Signed

All blanks must be Filled

### WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

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

### **AFFIDAVIT**

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

**Submitted Electronically** 

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

Side Two



Operator Name:			Lease Name	e:			_ Well #:	
Sec Twp	S. R	East West	County:					
time tool open and clos	sed, flowing and shut s if gas to surface tes	I base of formations per in pressures, whether set, along with final chart well site report.	shut-in pressure	reached s	static level,	hydrostatic press	sures, bottom h	ole temperature, fl
Orill Stem Tests Taken (Attach Additional S		Yes No		Log	Formatio	n (Top), Depth an	d Datum	Sample
Samples Sent to Geolo		☐ Yes ☐ No	N	lame			Тор	Datum
Cores Taken Electric Log Run Electric Log Submitted (If no, Submit Copy)	I Electronically	Yes No Yes No Yes No						
List All E. Logs Run:			RECORD [		Used			
	Size Hole	Report all strings set- Size Casing	-conductor, surface Weight		ate, producti Setting	on, etc.  Type of	# Sacks	Type and Percen
Purpose of String	Drilled	Set (In O.D.)	Lbs. / Ft.		Depth	Cement	Used	Additives
		ADDITIONA	L OFMENTING (	00115575	DECORD			
		ADDITIONA	L CEMENTING / :	SQUEEZE	RECORD			
Purpose:  Perforate Protect Casing Plug Back TD Plug Off Zone	Depth Top Bottom	Type of Cement	# Sacks Used	d		Type and F	Percent Additives	
Shots Per Foot		ON RECORD - Bridge Plu ootage of Each Interval Pe				cture, Shot, Cement mount and Kind of Ma	•	d Depth
TUBING RECORD:	Size:	Set At:	Packer At:	Line	r Run:	Yes No		
Date of First, Resumed I	Production, SWD or ENI	HR. Producing Me	thod:	Gas Li	ift C	Other (Explain)		
Estimated Production Per 24 Hours	Oil E	Bbls. Gas	Mcf	Water	В	bls. (	Gas-Oil Ratio	Gravity
DISPOSITIO	Used on Lease	Open Hole	METHOD OF COM Perf. D	MPLETION: ually Comp omit ACO-5)	. Cor	nmingled mit ACO-4)	PRODUCTIO	ON INTERVAL:
(If vented, Sub	mit ACO-18.)	Other (Specify) _						

Form	ACO1 - Well Completion
Operator	Empire Energy E&P, LLC
Well Name	Newcomer C L 9
Doc ID	1063160

### All Electric Logs Run

micro
sonic
dual induction
compensated neutron/density PE
compensated neutron/density PE (sandstone matrix)
Cement Bond

Form	ACO1 - Well Completion
Operator	Empire Energy E&P, LLC
Well Name	Newcomer C L 9
Doc ID	1063160

### Tops

Name	Тор	Datum
Anhydrite	827	1010
Tarkio Lime	2355	-518
1st Tarkio Sand	2365	-528
Dover	2382	-545
2nd Tarkio Sand	2391	-554
Tarkio Lime	2430	-593
Elmont	2491	-654
Scranton Shale	2578	-741
Howard	2633	-796
Severy Shale	2626	-839
Topeka	2695	-858
Heebner	2926	-1089
Toronto	2944	-1107
Lansing	2983	-1146
Base Kansas City	3189	-1352
Reagan Sand	3251	-1414
Granite Wash	3317	-1480

Form	ACO1 - Well Completion
Operator	Empire Energy E&P, LLC
Well Name	Newcomer C L 9
Doc ID	1063160

### Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
2	3252-3256		3252-3256
	CIBP		3240
3	2948-2950	2400 gals of 15% HCl and ball sealers	
3	3007-3011		
3	3026-3030		
3	3037.5-3038.5		
3	3116-3118		
3	3134-3136		
3	3151-3152		
3	3171-3172		
3	3176-3178		

### QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Cell 785-324-1041 Home Office P.O. Box 32 Russell, KS 67665

No. 4661

On Location Finish Sec. Range County State Twp. Date Well No. Location Lease Owner Contractor To Quality Oilwell Cementing, Inc. Type Job You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. T.D. Hole Size Charge Depth Csg. Depth Tbg. Size Street Depth Tool City State Shoe Joint The above was done to satisfaction and supervision of owner agent or contractor. Cement Left in Csg Displace Cement Amount Ordered Meas Line **EQUIPMENT** Cementer Common 320 Pumptrk Helper Driver Bulktrk Poz. Mix Driver Driver No. Bulktrk Gel. Driver JOB SERVICES & REMARKS Calcium Remarks: Hulls Rat Hole Salt Mouse Hole Flowseal Centralizers Kol-Seal **Baskets** Mud CLR 48 D/V or Port Collar CFL-117 or CD110 CAF 38 Sand Handling Mileage FLOAT EQUIPMENT Guide Shoe Centralizer Baskets AFU Inserts Float Shoe Latch Down Pumptrk Charge Mileage\_ Tax Discount Total Charge



10244 NE Hwy. 61 P.O. Box 8613 Pratt, Kansas 67124 Phone 620-672-1201

### FIELD SERVICE TICKET

TICKET NO.\_\_\_

1718 03924 A

DATE

DATE OF JOB	: 6.h - /	, [	DISTRICT &	de Lui		WELL 🗵	OLD	PROD []INJ	J 🗌 WDW	□ CL OF	JSTOMER RDER NO.	:
CUSTOMER	(	·	5407	. / _		LEASEN	ور ۵ کے لیے	16er	or los		WELL N	O.
ADDRESS	1	Garage F. S.F.	44	1224999		COUNTY			/√ STATE	Kar	USAS	
CITY			STATE			SERVICE CI		Ven				
AUTHORIZED E	3Y		-			JOB TYPE:	51/5	Lynn	Stores		C.,	J W
EQUIPMENT	Г#	HRS	EQUIPMENT#	HRS	EQU	IPMENT#	HRS	TRUCK ČAL	LED & - 13	DATE	AM PM	TIME
38443	84	2		_				ARRIVED A	Г ЈОВ 💪 - / -	-//	AM PM	<del>Vu 0</del>
19960-199	1 10	2						START OPE		14 11	AM PM	330
								FINISH OPE	RATION	<u> 74                                   </u>	AM PM	520
,								RELEASED	6	141		30
*						<del></del>		MILES FROM	M STATION TO	) WELL	75-11	1/05
ITEM/PRICE REF. NO.	ns contrac		the written consent of an o		auv.	A + +	UNIT	(WELL OWN	ER, OPERATOR	<del>/-</del> -	ACTOR ØF	-
	1 A A	7	cenout				SK	300	No. of the second secon		1340	0 00
	601	<del>// 0 -</del>	Por				SK	50			1600	
		· ·					8 3	7 7			16.	7
	4	<del>+</del>		13 to 1000			$\frac{1/b}{1/b}$	9/6			+5	
	and the first	***	n K				16	14/ -	wi <sup>n a</sup>		726	5
<del></del>	for 1 A	- 3 7					16	94 /	<u> </u>	1	# 7 D.	5 00
<del>- (                                   </del>	<del>G</del> -	<del>- 3 - 5</del>	<del> </del>				15	/000	metal.	1 6	<u> 420</u>	99
2 6 6 2 2 2	1 23	Le L	A. S. Pla	c + 1/2	FF1+	5/2/3/6/6	e E A	E A -/-	and the second s		You	00
	4.	40 P	7/1 F/or + 9	£400.	<u> </u>	314e	EA	EA- /-	at the same of the	4	1360	, 00
67/65	74	601		<u> S/4 =</u>	~		E/1	10 -	me"		1/0	9 0 U
<del>= 7                                   </del>	<u> </u>	SKE	4 3 / 3 / 2				2 A			+	-> 8	7.0V
<del>2304</del>	The state of the s	~//_	<u>KCL</u> Su	6			906				1 7	5 00
					<del></del>	***************************************				+		
						notenation to the control of the con				+++		
CHE	MICAL / A	ACID DAT	A:						SUB T	OTAL		
						VICE & EQUIF	PMENT	~~	K ON \$			
					MAT	ERIALS		%TA>	X ON \$	OTAL		
									Т	OTAL		
										1		I

SERVICE REPRESENTATIVE THE ABOVE MATERIAL AND SERVICE

ORDERED BY CUSTOMER AND RECEIVED BY:



10244 NE Hwy. 61 P.O. Box 8613 Pratt, Kansas 67124 Phone 620-672-1201

### FIELD SERVICE TICKET 1718 00004

PRESSURE PUMPING & WIRELINE DATE TICKET NO. DATE OF JOB NEW WELL OLD PROD INJ CUSTOMER ORDER NO. □ WDW DISTRICT CUSTOMER LEASE WELL NO. **ADDRESS** COUNTY STATE CITY STATE SERVICE CREW **AUTHORIZED BY** JOB TYPE: **EQUIPMENT#** HRS **EQUIPMENT#** HRS **EQUIPMENT#** HRS TRUCK CALLED DATE TIME ARRIVED AT JOB AM PM START OPERATION AM PM FINISH OPERATION AM PM RELEASED MILES FROM STATION TO WELL

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:

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SEI	RVICES USED UNIT	T	R, OPERATOR, CON- UNIT PRICE	\$ AMOUNT	
	I die				¥ 2700	
	- yr		2.3		B 4 ~ ~	3
			7 2 .			
						+
Const. Statement of the const.			17/		8 722	
4		150	14 1		# 1	2.11
	<u> </u>	11/2	7 . 7 ) **		A War	ļ -
	<u> </u>		2/-		A Zagi	
a for first to the	- And the state of		111-1-		\$ 12 mg	12 17 21
to the second of		Say 1	10 +		A 17 11	
	band the same of t		)		27	/
	The state of the s				£ 17.27	<i>3</i>
	= /					
					:	
CHE	MICAL / ACID DATA:			SUB TOTAL		
		SERVICE & EQUIPMENT	%TAX C	N \$		
		MATERIALS	%TAX C	N S		
	y to sell pelle		-	TOTAL		
SERVICE		VE MATERIAL AND SERVICE				

THE ABOVE MATERIAL AND SERVICE

ORDERED BY CUSTOMER AND RECEIVED BY:

FIELD SERVICE ORDER NO.

REPRESENTATIVE

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)



10244 NE Hwy. 61 P.O. Box 8613 Pratt, Kansas 67124 Phone 620-672-1201

### FIELD SERVICE TICKET

1718 · A

DATE OF JOB C - 14 - 11 DISTRICT K A 7/ S A S WELL WELL PROD INJ WDW C	5924A
JOB 6 - 14-11 DISTRICT KANSAS WELL WELL WELL WELL WELL WELL	CUSTOMER ORDER NO.:
CUSTOMER EMPIRE ENGISE STRILL LEASE Newcomber CL	WELL NO. 9
ADDRESS COUNTY RUSSELL 10-14-14 STATE	ANSM-S
CITY STATE SERVICE CREW A 1/2 ~	
AUTHORIZED BY JOB TYPE: 5 /3 / 20 S S + CLUC	
EQUIPMENT# HRS EQUIPMENT# HRS EQUIPMENT# HRS TRUCK CALLED / 3.3.0 (A)	TE AM TIME
28443 P.U 2 ARRIVED AT JOB 6-14-1	AM PM
19960-1991S 2 START OPERATION 6-14-	AM >
FINISH OPERATION 6-14	// AM 530
RELEASED A 19.	// AM 630
MILES FROM STATION TO WEL	
become a part of this contract without the written consent of an officer of Basic Energy Services LP.  SIGNED:  (WELL OWNER, OPERATOR, CONT	TRACTOR OR AGENT
ITEM/PRICE REF. NO. MATERIAL, EQUIPMENT AND SERVICES USED UNIT QUANTITY UNIT PRICE	\$ AMOUNT
E100 UNIT Milenge Fickup Mi 75	N 318 75
= 101 Henry Epin Milense mi 150	K 1050 00
E 113 Bulk Del Charge Ton 868 036	Carried and and the second
CF 204 Depth Charge 3001-4000 4-h	B 2/60 07
ESOI CASING SWINGL	5 200 0
EESO4 Plus Container Util 2 Ation Che Tol 1	250 0
1003 Serdice Supervisor first 8his no Lec. 84 1	N /ZS 00
	,
SUB TOTAL  CHEMICAL / ACID DATA:	
CHEMICAL / ACID DATA:	//, 44 63
CHEMICAL / ACID DATA:	

SERVICE REPRESENTATIVE/ THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: 🗡

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

### BASIC \*\* 10244 NE Hwy. 61 P.O. Box 8613 Pratt, Kansas 67124

### FIELD SERVICE TICKET

1718 - A

		SERVICES Ph	one 620-672	-1201			DATE	TICKET NO		<u>124</u>	
DATE OF JOB	177 17	DISTRICT / / / / /			NEW 🗆	OLD	PROD []INJ	□ WDW	□ CU OR	STOMER RDER NO.:	
CUSTOMER		7-7-		Ž - \$	LEASE		·	<u> </u>		WELL NO.	. /
ADDRESS					COUNTY		T y se	STATE	ŕ		
CITY		STATE			SERVICE C	CREW , :					
AUTHORIZED E	BY.				JOB TYPE:		/	4		./	1
EQUIPMENT	T# HRS	EQUIPMENT#	HRS	EQU	IPMENT#	HRS	TRUCK CALL	ED / ) j. s	DATE	AM TII	ME
2 8 4 9 3	64 3		*	4,0		: 27	ARRIVED AT	JOB ,		AN PM	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							START OPER	RATION		AM PM	
				***************************************			FINISH OPER	RATION		AM PM	, d
							RELEASED	1	:	AM PM	
							MILES FROM	STATION TO	WELL	12	1 -
ITEM/PRICE REF. NO.	· · · · · · · · · · · · · · · · · · ·	t the written consent of an of				S	GNED:(WELL OWNE	R, OPERATOR, O		ACTOR OR AC	
REF. NO.		Tribulation and the second	7,472 02,1110				QO/MITTT	0141111100			
				7,							1/3
F 17 C		TIN CAL		/		T . 3 1	Sandi Care		r	and the second	100
					7	4.7.	1		9	w / v ·	-
	12 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u> </u>	- Control of the Cont	2	<u> </u>				ć.		
		<u> </u>					/			<u> </u>	-
					<u> </u>	7	/				173
	<u> </u>				· · · · · · · · · · · · · · · · · · ·	:					
		ž. , ,				4	1				
											-
5										CARROLL CARROL	-
N. N.											-
CHE	MICAL / ACID DA	TA:						SUB TO	ΓAL		
-				SER'	VICE & EQUI	PMENT	%TAX	ON \$			
				MAT	ERIALS		%TAX				
								TOT		The second secon	52
SERVICE REPRESENTATIVE	= /	40	THE ABOVE				ı BV·				



### TREATMENT REPORT

	C. 9 2		,							
Customer	'e Enler		116	Lease No	•		<del></del>	Date		
Lease	woomb	7- C	I man	Well# ੂ		green g	* >/**	1 / _	14-11	
Field Orde	er# Station		į,		Casing	/_// Dept	h/	County	c co //	State
Type Job	5/5" 6	425.	4,00	10	e al a	Formation	3340		Legal Descript	ion
PI	PE DATA	PERF	ORATIN	G DATA		USED		TREA	TMENT RESU	F
Casing Size	Tubing Siz	e Shots/F	t	20 C	Acid	140 Poz		RATE PRE	SS ISIF	
Depth_	Depth	From	To		Pre Pad	7 0	Max >	<u> </u>		n.
Volume	Volume	From	то		Pad		Min	Phis	Ca + 19.N	lin. (e
Max Press	Max Press	From	To	)	Frac	7	Avg	7 0	15 M	
Well Connec	ction Annulus Vo	ol. From	To	)			HHP Used	j	Annı	ulus Pressure
Plug Depth	Packer De	oth From	То	)	Flush	% KCC	Gas Volur	ne	Total	Load
Customer R	epresentative	ich F	) oan	Station	Manager			Treater	C med	
Service Unit	s 2 x443	27463	1996	0.199	18 7					
Driver Names	Aller	Lucas	JAILOC	1 Brun	4adt					- Processing and the second
Time	Casing Pressure	Tubing Pressure	Bbls. Ρι	umped	Rate			Servi	ce Log 🔏 🖘	# 2
1/2/00	2 10%					02600	_0is	C 1 3 5 S	a 17.4. S	oten Plant
(230	4 20		· · · · · · · · · · · · · · · · · · ·			out o	F Ho	1/e w/	B:4	V
-						RISUP	<u>+0 R</u>	425/2	2 CASINO	, 411.72 15.
						व रहे	7.01	14	Pipe. 1	
125 1	3 1994		******************************			Start	CASÍ	<u> ک دی</u>	fae Ja	int 47.07
					· · · · · · · · · · · · · · · · · · ·	w/El	01+S	hoe y	L, O. B.	efflein_
						ch llac	cent	1-3-5-	7-9-11-1	3-15-17-15
						BASKE	ts p	iN HS	- QiN	R 10
330						CHSIN		3337		up yeir
	4		woods*			14 (Ko)	1 a + - /	1:0e	9 000/c	iR.
430	200#		.5			MIX	205K	s 60/4°	9 Poz. 6	29/0226
			1	. 7		SCAU	وميوم	@ 12	<u> </u>	hloriox.
			<u> </u>	1/2		Mix:	<u>2003 f</u>	SAAZ	<u>e 15,3</u>	
1212					7 7	FINIS	4 M D	<u>LINS CH</u>	at-washo	out People Line
147			THE PERSON NAMED IN COLUMN 1		6/2	11/08	<u> 165.</u>	<u>L. O. S</u>	Start D	isa. Rotate 6 BBIs out
200	COOK		0.4	_	6	CAUSLO	<u> </u>	+ 137	w/40	5 BBIS out
00	500 1		8°	)	4/2	1/45	01000	of many	~ FL	
	O id				***************************************	Keler	950 F	STC	25	
					THE RESERVE OF THE PERSON OF T	MIUS K	AT!	tole w/	305K	60/40.
			***************************************			WASh	P & 1	· O Park		10/40.
					788	105	Com	Plete		
	l	1		1		1 thans	KS 11	11001/	70 AS 5	VACCOOL.

## JAMES C. MUSGROVE

Petroleum Geologist 212 Main Street P.O. Box 215 Claflin, KS 67525

Office (620) 588-4250

Res. Claflin (620) 587-3444

Empire Energy E & P, LLC C.L. Newcomer #9 SW-SE-NW-NE (1008' FNL & 1711' FEL) Section 10-14s-14w Russell County, Kansas

## 5 1/2" Production Casing Set

American Eagle Drilling Company (Rig #3) Contractor:

June 8, 2011 Commenced:

June 13, 2011 Completed: 1837' K.B; 1835 D.F; 1832' G.L Elevation:

Casing program:

Surface; 8 5/8" @ 831' Production; 5 ½" @ 3339'

Samples saved and examined 2300' to the Rotary Total Depth. Sample: One (1) foot drilling time recorded and kept 2300 ft to the Rotary Total Drilling time:

Depth.

All depths measured from the Kelly Bushing Measurements:

None. **Drill Stem Tests:**  By Superior Well Services; Dual Induction, Compensated Neutron/Density, Micro and Sonic Log. Electric Log:

Formation	Log Depth	Sub-Sea Datum
Anhydrite	827	+1010
Tarkio Lime	2355	-518
1st Tarkio Sand	2365	-528
Dover	2382	-545
2 <sup>nd</sup> Tarkio Sand	2391	-554
Tarkio Lime	2430	-593
Elmont	2491	-654
Scranton Shale	2578	-741
Howard	2633	962-
Severy Shale	2626	-839
Topeka	2695	-858
Heebner	2926	-1089
Toronto	2944	-1107
Lansing	2983	-1146
Base Kansas City	3189	-1352
Reagan Sand	3251	-1414
Granite Wash	3317	-1480
Rotary Total Depth	3340	-1503
Log Total Depth	3340	-1503
	- · · · · · · · · · · · · · · · · · · ·	

(All tops and zones corrected to Electric Log measurements).

Empire Energy E & P, LLC C.L. Newcomer #9 SW-SE-NW-NE (1008' FNL & 1711' FEL) Section 10-14s-14w Russell County, Kansas

### SHOWS OF OIL, TESTING DATA, ANALYSIS, SAMPLE

## 1<sup>ST</sup> TARKIO SAND SECTION

rounded, friable, scattered porosity, trace brown stain, trace of Sand; gray and grayish green, very fine grained, micaceous, free oil and no odor in fresh samples. 2365-2376′

# 2<sup>ND</sup> TARKIO SAND SECTION

Sand; gray, very fine grained, sub rounded, friable, fair to good intergranular porosity, fair stain and saturation, show of free oil and odor in fresh samples. 2391-2405

# 3<sup>RD</sup> TARKIO SAND SECTION

Sand; gray, very fine grained, micaceous, shaley, poor visible porosity, trace stain, trace of free oil and no odor in fresh samples (poor developments). 2452-2580

## SCRANTON SECTION

Sand; gray and dark gray, very fine grained, micaceous, poor visible porosity, questionable stain, no show of free oil and no odor in fresh samples (poorly developed). 2602-2607

### **TOPEKA SECTION**

Limestone; as above, slightly dolomitic, fair stain and saturation, trace of free oil and faint odor in fresh samples.	Limestone; tan, gray, fossiliferous/oolitic, fair to good porosity, good stain and saturation, show of free oil and questionable odor in fresh samples.	Limestone; tan, finely oolitic, fair porosity, good stain and saturation, good show of free oil and fair odor in fresh samples.
2717-2723'	2735-2741′	2875-2786'
	_ ,-	

## TORONTO SECTION

2891-2910′

Limestone; as above, finely oolitic, fine vuggy to oomoldic type porosity, good stain and saturation, show of free oil and fair odor in fresh samples.

Limestone; tan, cream, comoldic, fair comoldic porosity, good stain and saturation, fair show of free oil and faint odor in fresh	samples.
2944-2950'	

### LANSING SECTION

Limestone; white, tan, fine and medium crystalline, chalky, trace	brown stain, trace of free oil and no odor in fresh samples.
2984-2990' Lin	bro

Empire Energy E & P, LLC C.L. Newcomer #9 SW-SE-NW-NE (1008' FNL & 1711' FEL) Section 10-14s-14w Russell County, Kansas Page 3

Limestone; gray, oolitic, fossiliferous, scattered porosity, dark brown stain and saturation, show of free oil and odor in fresh		
oolitic, saturati		
; gray, n and s		
estone vn stai	samples	
Lim bro	san	
3007-3012'		

Limestone; tan, fossiliferous, oomoldic, fair to good vuggy type	porosity, golden brown stain, show of free oil and questionable	
Limestone; tan, fossiliferous,	porosity, golden brown stain,	odor.
3025-3032		

3061-3064'	Limestone; tan and gray, fossiliferous/oomoldic, fair porosity,
	trace tree oil and faint odor.

brown stain, trace	
Limestone; gray, oolitic, poor to fair porosity, brown stain, trace	of free oil and faint odor
3084-3089	

Limestone; tan, fossiliferous/oomoldic, fair oomoldic porosity,	dark brown to brown stain, show of free oil and odor in fresh	samples.
3131-3136		

3149-3159'	Limestone; gray, finely oolitic, fossiliferous, fair pinpoint porosity, and fossil cast porosity, brown and light brown stain, show of
	free oil and faint odor in fresh samples

Limestone; as above, few medium crystalline, chalky, trace stain,	show of free oil and faint odor in fresh samples.
3166-3170'	

## **MARMATON SECTION**

3205-3220'	Limestone; white and gray, fossiliferous, chalky, poor visible norosity noor stain trace of free oil and questionable odor in
	fresh samples.

### REAGAN SECTION

Sand; white, clear, quartzitic, sub rounded, medium grained,	friable, fair intergranular porosity, trace stain, show of free oil and
3251-3260'	

odor tresh samples.	

Sand; clear, white, fine and medium grained, sub rounded, sub	angular, friable, fair sorting, fair to good intergranular porosity,	good stain and saturation, show of free oil and strong odor in	fresh samples.
3260-3280			

quartz grains.
and loose angular o
Sand; as above, an
3280-3290' S

3290-3317	Sand; pink and white, clear, very fine and medium grained, sub
	rounded, friable, decreasing stain and show, and good odor in
	fresh samples, plus white chalk and tan chert.

## GRANITE WASH SECTION

is, and clear angular quartz	
Abundant loose rounded quartz grains, and clear angular quartz	and mica.
3317-3340'	

3340	3340
Rotary Total Depth	Log Total Depth

Empire Energy E & P, LLC C.L. Newcomer #9 SW-SE-NW-NE (1008' FNL & 1711' FEL) Section 10-14s-14w Russell County, Kansas Page 4

Recommendations: 5 1/2" production casing was set and cemented. Respectfully submitted;

James C. Musgrove, Petroleum Geologist

XX O MA