

Confidentiality Requested:

Yes No

Kansas Corporation Commission Oil & Gas Conservation Division 1166007

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:			F6	eet from North /	South Line of Section
City:	State: Z	ip:+	Fe	eet from East /	West Line of Section
Contact Person:			Footages Calculated from	Nearest Outside Section C	Corner:
Phone: ()			□ NE □ NW	V □SE □SW	
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:	W	ell #:
	e-Entry	Workover	Field Name:		
	_		Producing Formation:		
☐ Oil ☐ WSW ☐ D&A	☐ SWD	∐ SIOW ∏ SIGW	Elevation: Ground:	Kelly Bushing:	
	GSW	Temp. Abd.	Total Vertical Depth:	Plug Back Total D	epth:
CM (Coal Bed Methane)	dow	Temp. Abd.	Amount of Surface Pipe Se	et and Cemented at:	Feet
☐ Cathodic ☐ Other (Co	ore. Expl., etc.):		Multiple Stage Cementing	Collar Used? Yes	No
If Workover/Re-entry: Old Well I			If yes, show depth set:		
Operator:			If Alternate II completion, c	cement circulated from:	
Well Name:			feet depth to:	w/	sx cmt.
Original Comp. Date:					
Deepening Re-perf	J	ENHR Conv. to SWD	Drilling Fluid Managemer	nt Plan	
Plug Back	Conv. to G		(Data must be collected from to		
Commingled	Permit #		Chloride content:	ppm Fluid volume	: bbls
Dual Completion			Dewatering method used:_		
SWD			Location of fluid disposal if	hauled offsite:	
ENHR	Permit #:				
GSW	Permit #:		Operator Name:		
			Lease Name:		
Spud Date or Date R	eached 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 Approved by: Date:

Page Two



Operator Name:				Lease I	Name: _			Well #:					
Sec Twp	S. R	East	West	County	:								
INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to	ring and shut-in press o surface test, along v	ures, whet vith final c	ther shut-in pre hart(s). Attach	essure reac extra shee	hed stati t if more	c level, hydrosta space is neede	tic pressures, bod.	ottom hole temp	erature, fluid re	ecovery,			
files must be submitte						gs must be ema	liled to kcc-well-	ogs@kcc.ks.go	v. Digital electi	ronic log			
Drill Stem Tests Taker (Attach Additional		Ye	es No			J	on (Top), Depth						
Samples Sent to Geo	logical Survey	Ye	es No		Nam	e		Тор	Datum	1			
Cores Taken Electric Log Run		☐ Ye											
List All E. Logs Run:													
				RECORD	Ne								
	0: 11.1					ermediate, product		" 0 1	T 15				
Purpose of String	Size Hole Drilled		e Casing (In O.D.)	Weig Lbs.		Setting Depth	Type of Cement	# Sacks Used	Type and Pe Additive				
			ADDITIONAL	CEMENTI	NG / SQL	JEEZE RECORD							
Purpose:	Depth Top Bottom	Туре	of Cement	# Sacks	Used		Type and	Percent Additives					
Perforate Protect Casing	Top Detterm												
Plug Back TD Plug Off Zone													
1 lug 0 li 20 lio													
Did you perform a hydrau	ulic fracturing treatment of	on this well?	•			Yes	No (If No, s	kip questions 2 a	nd 3)				
Does the volume of the t			_		-		= ` `	kip question 3)					
Was the hydraulic fractur	ing treatment information	n submitted	to the chemical of	disclosure re	gistry?	Yes	No (If No, f	ill out Page Three	of the ACO-1)				
Shots Per Foot			D - Bridge Plug Each Interval Perf				cture, Shot, Ceme			Depth			
						(			_				
TUBING RECORD:	Size:	Set At:		Packer A	<del></del>	Liner Run:							
		0017111				[	Yes N	0					
Date of First, Resumed	Production, SWD or EN	HR.	Producing Meth	nod:	g 🗌	Gas Lift (	Other (Explain)						
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wat	er B	bls.	Gas-Oil Ratio	Gra	avity			
DIODOCITI	01.05.040			4ETUOD 05	001451	TION		DDODUCT	ONLINITED (A)				
DISPOSITION Solo	ON OF GAS:  Used on Lease		N Open Hole	∥ETHOD OF ☐ Perf.			nmingled	PRODUCTION	ON INTERVAL:				
	bmit ACO-18.)		Other (Specify)		(Submit		mit ACO-4)						

Form	ACO1 - Well Completion
Operator	Rama Operating Co., Inc.
Well Name	Hillard 4-1
Doc ID	1166007

## All Electric Logs Run

BHCS	
MEL	
DIL	
DUCP	

Form	ACO1 - Well Completion
Operator	Rama Operating Co., Inc.
Well Name	Hillard 4-1
Doc ID	1166007

### Tops

Name	Тор	Datum
Heebner	3540	-1684
Toronto	3554	-1698
Brown Lime	3722	-1866
Lansing	3742	-1886
Base KC	4092	-2236
Mississippi	4188	-2332
Viola	4243	-2387
Simpson Shale	4282	-2426
Uper Sand	4288	-2432
Lower Sand	4318	-2462
Arbuckle	4410	-2554
RTD	4626	-2770





## TREATMENT REPORT

Customer Q.		1000	<u> </u>	ease No.	·				Date						
		<u> Trera</u>	111/9	Nell# 4					9-2	1-13					
Field Order #	Station	$n \rho_r \sim$	· ·		<del>'</del>	Casing, 37	Depth	287	County /	2 Jacques		State 1/5			
	(2)		2316	- 1 1 1 1 1	- Inc		Formation			UTT Legal Des	scription / ~	28-13			
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Max Press	Max Pres	s	To	•	Frac			Avg			15 Min.	<u> </u>			
Well Connection	The Art	/ol.	To	· · · ·	<u> </u>			HHP Used			Annulus Pr	essure			
Plug Depth	Packer De	enth	To		Flush			Gas Volum	e.		Total Load	· ·			
Customer Representative BILLY			To	Station	I n Manag	er Kev	110		Treater J	00					
			70959	19918			28443		19826	1980	(e)				
Driver Names				45.E			TOC		<u> </u>	555É					
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## TREATMENT REPORT

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Type Job C	NW 8	35/8 S	F				Formation	)	·	• :	Legal D	escription /	-28-	<del>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</del>
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Field Order #	Station			Well #	Casing //	Depth	٠	County PRA	29-	13	State	
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Max Press	Max Press	From	-	Го	Frac		Avg			15 Min.		
Well Connectio	n Annulus Vo	From	-	Го			HHP Used			Annulus I		
Plug Depth	Packer De	From	-	Го	Flush		Gas Volum	e .		Total Load		
Customer Rep	resentative			Station	Manager DAU	IE Sec	- Agriculture	Treater	obent	h//-	<u> </u>	
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Taylor Printing, Inc. 620-672-36

**OPERATOR** 

Company: Rama Operating Company, Inc.

101 S. Main st Address:

Stafford, Kansas 67578

Contact Geologist:

Contact Phone Nbr: 620-234-5191

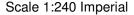
Well Name: Hillard #4-1

8 5/8" @ 1123' API: Location: 15-151-24086-00-00

Pool: Field: Rollingson State: Kansas, Pratt County Country: USA



## Joshua R. Austin Petroleum Geologist report for RAMA Operating CO., Inc



Well Name: Hillard #4-1 Surface Location: 8 5/8" @ 1123'

**Bottom Location:** 

API: 15-151-24086-00-00

License Number:

Spud Date: 9/20/2013 Time: 3:34 PM

Region: W2-NE-SW-NE Sec 1-28s-13w

**Drilling Completed:** 9/28/2013 Time: 5:50 PM

Surface Coordinates: 1,650 From North Line & 1,700' From East Line

**Bottom Hole Coordinates:** 

Ground Elevation: 1843.00ft K.B. Elevation: 1856.00ft

Logged Interval: 3100.00ft 4626.00ft To:

Total Depth: 4626.00ft Formation: Simpson

**Drilling Fluid Type:** Chemical mud was displaced at 3093'

#### **SURFACE CO-ORDINATES**

Well Type: Vertical

Longitude: Latitude:

N/S Co-ord: 1,650 From North Line E/W Co-ord: 1,700' From East Line

#### LOGGED BY

Company: Joshua R. Austin, Petroleum Geologist

Address: 732 NE 110th Ave Stafford, KS 67578

Phone Nbr: 620-546-3960

Logged By: Geologist Name: Josh Austin

#### CONTRACTOR

Contractor: Sterling Drilling Company

Rig #:

Rig Release:

Rig Type: mud rotary Spud Date: 9/20/2013 Time: 3:34 PM TD Date: 9/28/2013 Time: 5:50 PM

Time:

#### **ELEVATIONS**

K.B. Elevation: 1856.00ft K.B. to Ground: 13.00ft Ground Elevation: 1843.00ft

#### **NOTES**

On the basis of the drill stem test and after reviewing the electric logs, it was recommended by all parties involved to set 5 1/2" production casing to further test the Simpson Sand. After the electric logs drilling commenced to a rotary total depth of 4626' for a possible saltwater displosal well.

# RAMA Operating Co., Inc. well comparison sheet

		DRILLING	WELL			COMPARIS	SON WELL			COMPARI	SON WELL	100	
		Hillard	l #4-1			Hillar	rd #3			Hillard-Travis			
	1856	KB			1849	9 KB	Struct		1848	RB KB	Struct		
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	/////	Log	Log	Sub-Sea	A 100 TO	Log	
Heebner	3542	-1686	3540	-1684	3532	-1683	-3	-1	3523	-1675	-11	-9	
Toronto	3558	-1702	3554	-1698					3546	-1698	-4	0	
Douglas	3581	-1725	3576	-1720			111.7		3558	-1710	-15	-10	
Brown Lime	3725	-1869	3722	-1866	3714	-1865	-4	-1	3704	-1856	-13	-10	
Lansing	3737	-1881	3742	-1886	3732	-1883	2	-3	3725	-1877	-4	-9	
Base KC	4100	-2244	4092	-2236			, ,,,		4068	-2220	-24	-16	
Mississippi	4190	-2334	4188	-2332	4179	-2330	-4	-2	4174	-2326	-8	-6	
Viola	4245	-2389	4243	-2387					4236	-2388	-1	1	
Simpson Shale	4285	-2429	4282	-2426	4274	-2425	-4	-1	4269	-2421	-8	-5	
Upper Sand	4292	-2436	4288	-2432					4280	-2432	-4	0	
Lower Sand	4318	-2462	4318	-2462	H				4308	-2460	-2	-2	
Arbuckle	4414	-2558	4410	-2554			¢ ***		7		( )	-2554	
Total Depth	3980	-2124	3980	-2124			7 77		4324	-2476	50		



#### DRILL STEM TEST REPORT

Rama Operating Co.

1-28s-13w Pratt Ks.

101 S. Main

Hillard #4-1

Stafford Ks. 67578

Job Ticket: 52358

ATTN: Josh Austin

Test Start: 2013.09.27 @ 05:34:50

DST#: 1

GENERAL INFORMATION:

Formation: Simpson Sd.

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)

Time Tool Opened: 07:25:50 Tester: Gary Pevoteaux

Time Test Ended: 12:07:20 Unit No: 5

Interval: 4280.00 ft (KB) To 4336.00 ft (KB) (TVD) Reference Bevations: 1856.00 ft (KB)

Total Depth: 4336.00 ft (KB) (TVD) 1843.00 ft (CF)

Hole Diameter: 7.88 inchesHole Condition: Fair KB to GR/CF: 13.00 ft

Serial #: 8352 Inside

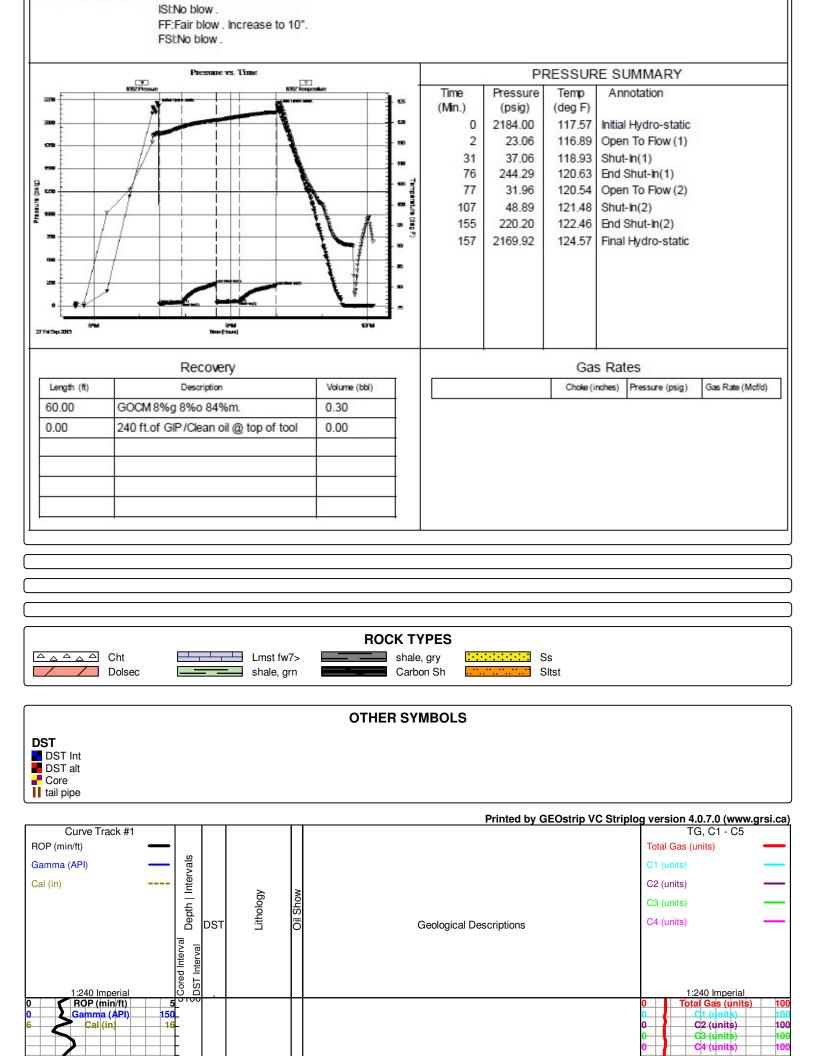
Press@RunDepth: 48.89 psig @ 4281.00 ft (KB) Capacity: 8000.00 psig

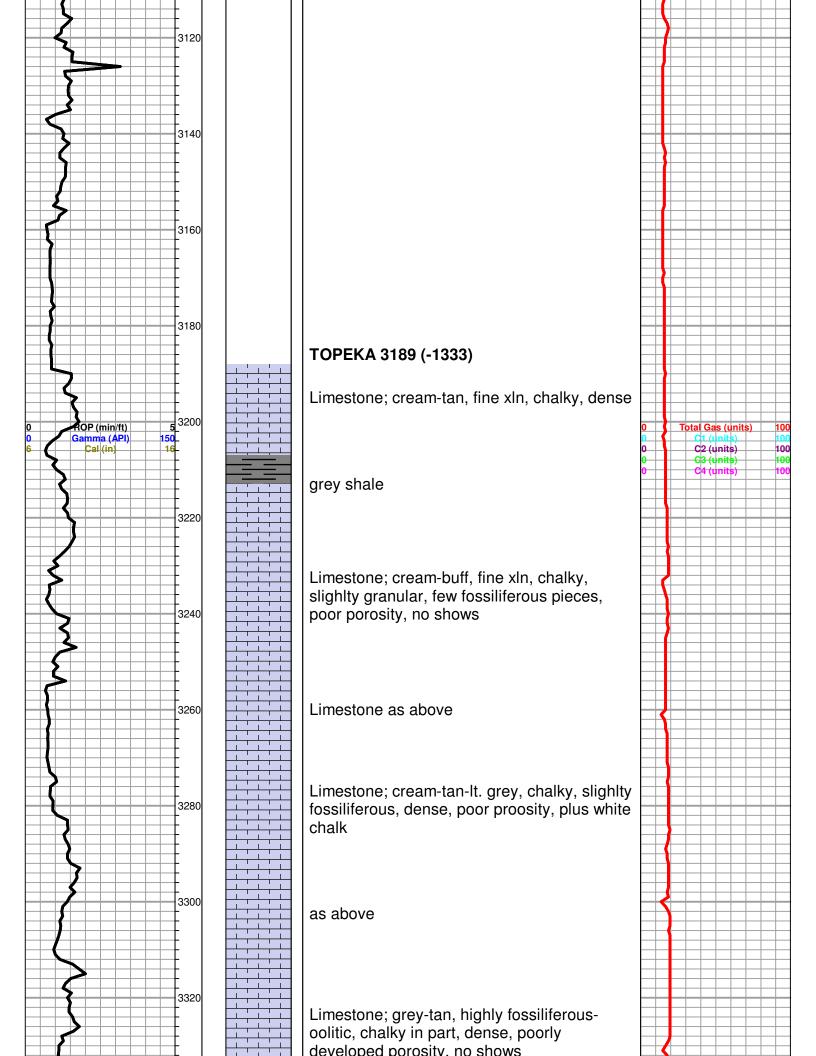
 Start Date:
 2013.09.27
 End Date:
 2013.09.27
 Last Calib.:
 2013.09.27

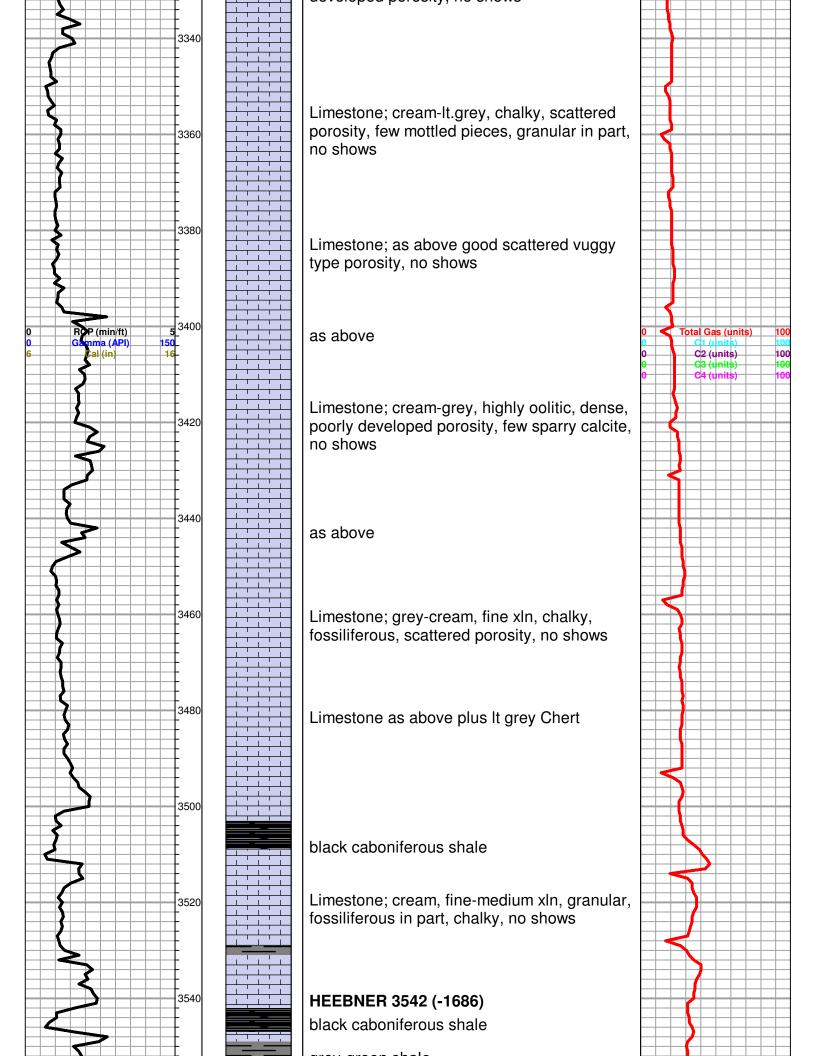
 Start Time:
 05:34:55
 End Time:
 12:07:19
 Time On Btm:
 2013.09.27 @ 07:24:35

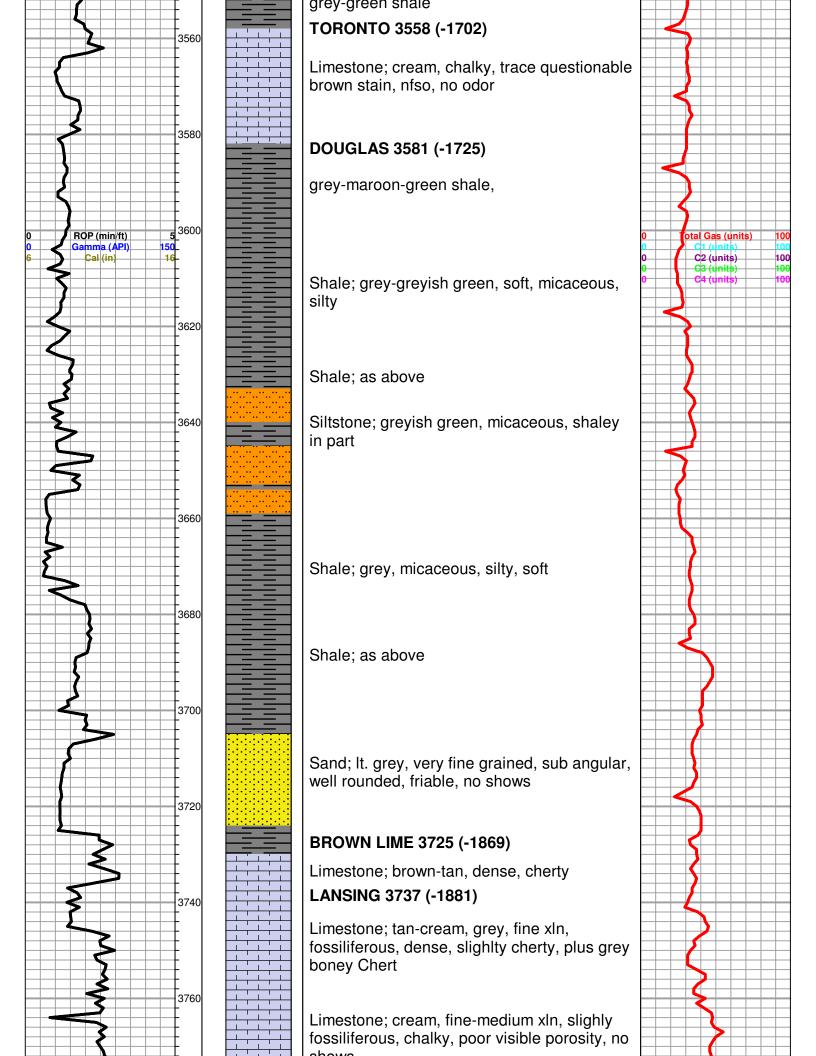
Time Off Btm: 2013.09.27 @ 10:00:50

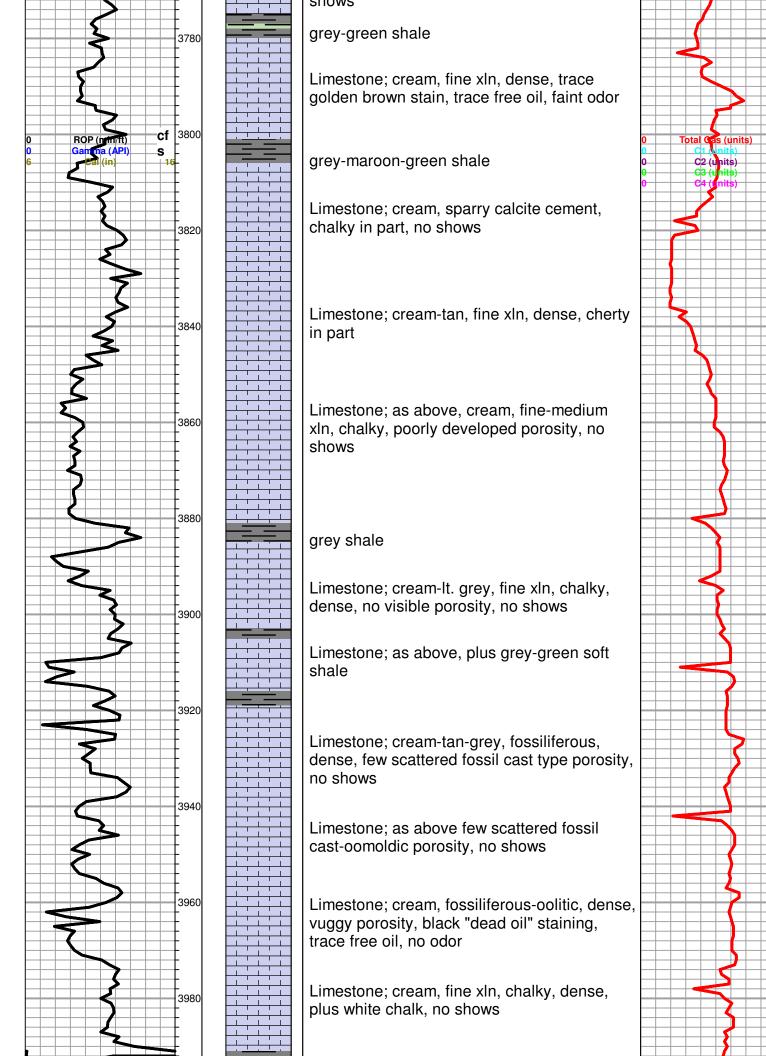
TEST COMMENT: IF:Fair blow . Increase to 10".

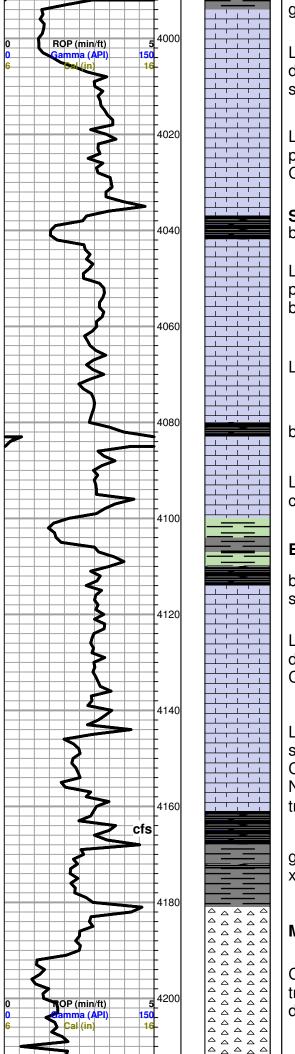












grey-maroon-green shale

Limestone; cream-white, chalky, poorly developed porosity, slighlty granular, no shows

Limestone; tan-cream, fine xln, dense, cherty, poor porosity, no shows, plus grey boney Chert

#### **STARK SHALE**

black carboniferous shale

Limestone; cream, fine-medium xln, chalky in part, few scattered inter xln porosity, trace brown stain, NSFO, no odor

Limestone; as above, plus grey Chert

black carboniferous shale

Limestone; buff-cream, fine xln, dense, cherty, poor porosity, no shows

#### **BASE KANSAS CITY 4100**

black carboniferous shale, plus grey-green shale

Limestone; cream-white, fin xln, chalky, dense, poor visible porosity, no shows, trace Chert; grey-lt. grey-cream, boney

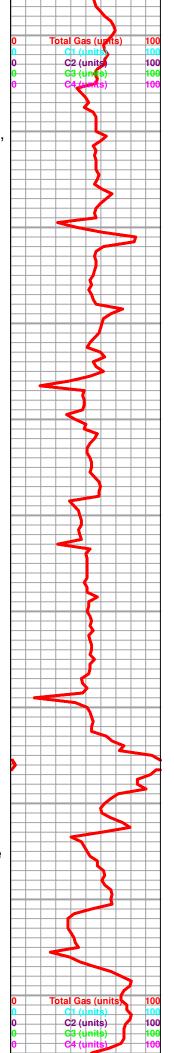
Limestone; cream, fine xln, inter xln porosity, spotty brown stain, NSFO, no odor plus Chert; grey-smokey grey, brown-black stain, NSFO

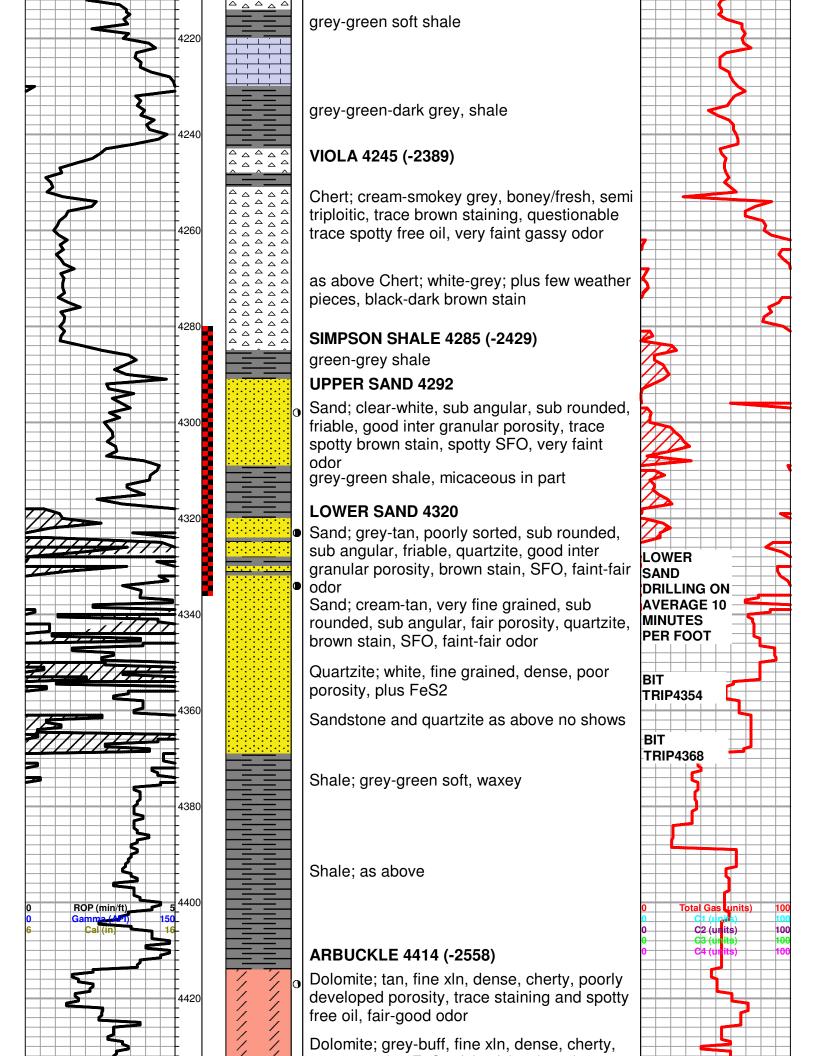
trace black cardoniferous shale

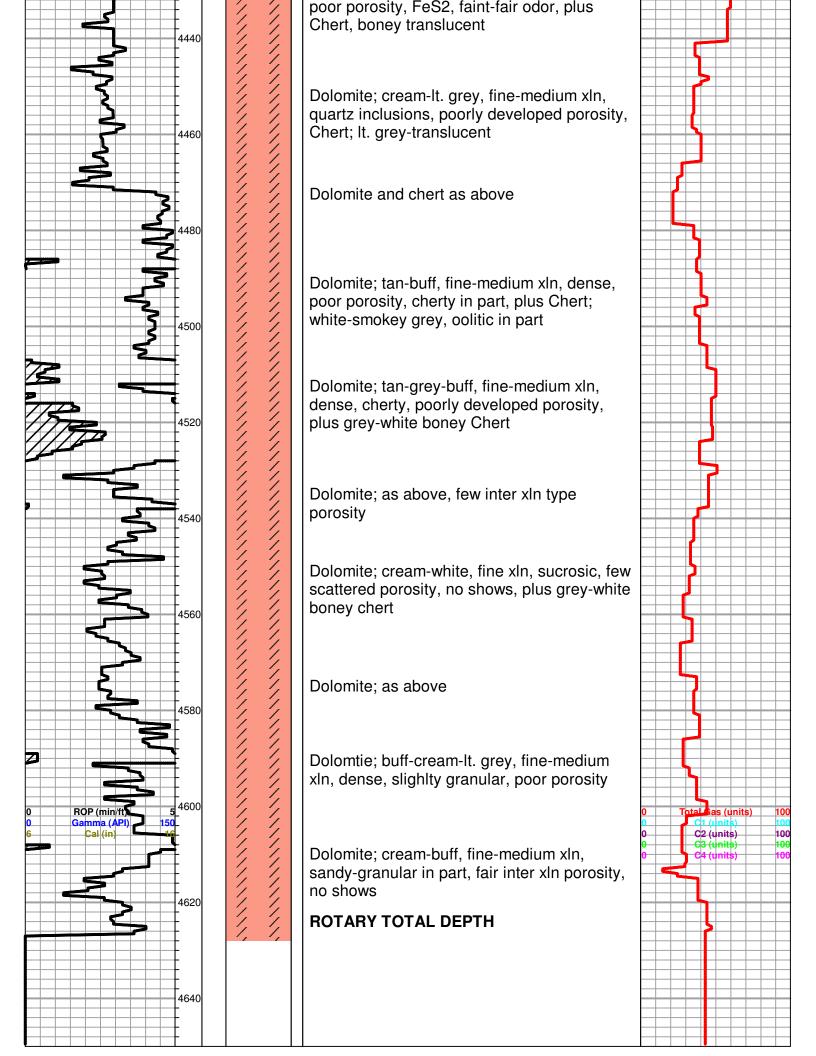
grey-green shale plus Limestone; cream, fine xln, chalky, dense, no shows

#### MISSISSIPPI 4190 (-2334)

Chert; cream-amber, boney/fresh, few semi tripolitic pieces, brown spotty stain, no odor, dull grey fluorescence







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

November 18, 2013

Robin L. Austin Rama Operating Co., Inc. 101 S MAIN ST STAFFORD, KS 67578-1429

Re: ACO1 API 15-151-22423-00-00 Hillard 4-1 NE/4 Sec.01-28S-13W Pratt 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, Robin L. Austin