



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1141601  
OIL & GAS CONSERVATION DIVISION

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 # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- 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:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

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 #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx)      (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

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: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

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:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

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: \_\_\_\_\_



1141601

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to [kcc-well-logs@kcc.ks.gov](mailto: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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, 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 / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*  
 Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*  
 Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  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	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR: \_\_\_\_\_ Producing Method:  
 Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Rama Operating Co., Inc.
Well Name	BRIGGEMAN FARMS 3-27
Doc ID	1141601

Tops

Name	Top	Datum
Howard	3187	-1233
Topeka	3250	-1296
Heebner	3598	-1644
Brown Lime	3760	-1806
Lansing	3780	-1826
Base Lansing	4107	-2153
Viola	4220	-2266
Arbuckle	4408	-2454
RTD	4501	-2547

Customer <b>RAMA OPERATING CO. INC.</b>	Lease No.	Date <b>3-27-2016</b>
Lease <b>BRIGGEMAN FARMS</b>	Well # <b>3-27</b>	
Field Order # <b>01935</b>	Station <b>PRATT, KS.</b>	Casing <b>13 3/8"</b>
Type Job <b>CNW-13 3/8" C.P.</b>	Formation <b>TD-270'</b>	Depth
		County <b>PRATT</b>
		State <b>KS.</b>
		Legal Description <b>21-26-13</b>

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME .1570		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
13 3/8" x 4 1/2"		CMT -		300 SKS (60)/40 P02			5 Min.	
Depth 263.01	Depth	From	To	Pre Pad @ 1.21 CUFT <sup>3</sup>	Max		10 Min.	
Volume 211 BBL	Volume	From	To	Pad	Min	SHOE ST. = 15'		15 Min.
Max Press 500	Max Press	From	To	Frac	Avg	Annulus Pressure		
Well Connection S.V.	Annulus Vol.	From	To		HHP Used	Total Load		
Plug Depth 250	Packer Depth	From	To	Flush 39 BBL	Gas Volume			

Customer Representative **R. GINEST** Station Manager **D. SCOTT** Treater **K. LESLEY**

Service Units	37586	19959	19843	19826	19860				
Driver Names	LESLEY	MARQUEZ	LAWRENCE						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
12:00AM					ON LOCATION - SAFETY MEETING
3:10AM					RUN 17 STS. 13 3/8" x 4 1/2" CSG.
6:20AM					CSG. ON BOTTOM
6:40AM					HOOK UP TO CSG. / BREAK CIRC. W/ RIG
6:50AM	150		5	6	H <sub>2</sub> O AHEAD
6:55AM	50		65	6	MIX 300 SKS. (60)/40 P02 @ 14.8 PPG
7:06AM	0		0	5	START DISPLACEMENT
7:13AM	100		35	2	SLOW RATE
7:15AM	100		39	2	CMT. @ DESIRED DEPTH
					CIRC. THRU JOB
					CIRC. 20 BBL TO PIT

JOB COMPLETE,  
THANKS -  
KEVEN LESLEY

Customer <b>RAMA OPERATING CO. INC.</b>		Lease No. <b>WIZ.</b>	Date <b>3-28-2013</b>	
Lease <b>BRIDGEMAN FARMS</b>		Well # <b>3-27</b>		
Field Order #	Station <b>PRATT, Ks.</b>	Casing <b>5 1/2"</b>	Depth	County <b>TRATT</b> State <b>Ks.</b>
Type Job <b>CNW-8 5/8" S.P.</b>	Formation <b>TD-958'</b>	Legal Description <b>27-20-13</b>		

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size <b>8.75" X 2.125"</b>	Tubing Size	Shots/Ft	<b>CMT-</b>	Acid <b>200 SKS. 60/40 POZ</b>	RATE	PRESS	ISIP	
Depth <b>473.75'</b>	Depth	From	To	Pre Pad <b>@ 1.21 CUFT<sup>3</sup></b>	Max <b>LOST CIRC @ 700</b>		5 Min.	
Volume <b>100.65 BBL</b>	Volume	From	To	Pad <b>200 SKS. A-COW</b>	Min <b>BASKETS @ #1, #2</b>		10 Min.	
Max Press <b>500</b>	Max Press	From	To	Frac <b>@ 2.47 CUFT<sup>3</sup></b>	Avg		15 Min.	
Well Connection <b>P.C.</b>	Annulus Vol.	From	To		HHP Used		Annulus Pressure	
Plug Depth <b>471.39'</b>	Packer Depth	From	To	Flush <b>58 BBL</b>	Gas Volume		Total Load	

Customer Representative **R. GINEST** Station Manager **D. SCOTT** Treater **K. LESLEY**

Service Units	<b>37586</b>	<b>19889</b>	<b>19843</b>	<b>19826</b>	<b>19860</b>				
Driver Names	<b>LESLEY</b>	<b>MARQUEZ</b>	<b>LAWRENCE</b>						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<b>2:00AM</b>					<b>ON LOCATION - SAFETY MEETING</b>
<b>5:30AM</b>					<b>RUN 22 STS. 8 5/8" X 2 1/4" CSG.</b>
<b>7:40AM</b>					<b>CSG. ON BOTTOM / HOOK UP TO CSG.</b>
<b>8:09AM</b>			<b>32</b>	<b>5</b>	<b>MIX 150 SKS. 60/40 POZ @ 14.8 PPG</b>
<b>8:15AM</b>					<b>SHUT DOWN - DROP T.R. PLUG</b>
<b>8:18AM</b>			<b>0</b>	<b>5</b>	<b>START DISPLACEMENT</b>
<b>8:28AM</b>	<b>100</b>		<b>50</b>	<b>3</b>	<b>SLOW RATE</b>
<b>8:30AM</b>	<b>150</b>		<b>58</b>	<b>3</b>	<b>PLUG DOWN - CLOSE IN @ HEAD</b>
<b>9:00AM</b>					<b>NO CIRC.</b>
<b>10:35AM</b>					<b>WAIT <del>10</del> 2 HRS.</b>
<b>10:40AM</b>					<b>RUN 1" OUTSIDE CSG.</b>
<b>11:00AM</b>			<b>20</b>	<b>2</b>	<b>MIX 50 SKS. 10/40 POZ @ 14.8 PPG</b>
			<b>60</b>	<b>2</b>	<b>MIX <del>100</del> 50 SKS. A-COW @ 10 PPG</b>
<b>12:45PM</b>					<b>CMT. TO SURFACE</b>

JOB COMPLETE,  
THANKS -  
**K. LESLEY**

Customer <b>RAMA OPERATING</b>	Lease No.	Date <b>04-04-13</b>
Lease <b>BRIGGSMAN FARMS</b>	Well # <b>3-27</b>	
Field Order # <b>6927</b>	Station <b>PRATT KS</b>	Casing <b>5 1/2</b>
	Depth	County <b>PRATT</b>
Type Job <b>CW 5th Long Stairs</b>	Formation	Legal Description <b>27-26-13</b>

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
<b>5 1/2</b>				Pre Pad	Max		5 Min.
Depth <b>4484</b>	Depth	From	To	Pad	Min		10 Min.
Volume <b>109</b>	Volume	From	To	Frac	Avg		15 Min.
Max Press <b>1500</b>	Max Press	From	To		HHP Used		Annulus Pressure
Well Connection <b>PC</b>	Annulus Vol.	From	To	Flush	Gas Volume		Total Load
Plug Depth <b>4408</b>	Packer Depth	From	To				

Customer Representative	Station Manager <b>DAVE SCOTT</b>	Treater <b>Robert [Signature]</b>
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Service Units	<b>27900</b>	<b>27463</b>	<b>30463</b>	<b>37547</b>				
Driver Names	<b>Sullivan</b>	<b>McKhan</b>	<b>NORINA - Liberal HAND</b>					


Time	Casing Pressure	Tubing Pressure	Bbbs. Pumped	Rate	Service Log
<b>3:30</b>					on loc softy medly
					RWD 109 STS 5 1/2 #14 csg.
<b>7:30</b>					CASING ON BOTTOM
<b>7:40</b>					Hook Rip to circ.
<b>8:40</b>	<b>200</b>	<b>300</b>	<b>5</b>	<b>3.5</b>	BT SPICER
			<b>12</b>		BT MUD-Flush
			<b>5</b>		BT SPICER
			<b>38</b>	<b>4.5</b>	mix cont 150 sk AA 2 cont
					cont mix-D shot down wash pump lines
					Release Plug
				<b>5.5</b>	BT DISO
	<b>450</b>		<b>78</b>		LIHT PSI
	<b>600</b>			<b>3.5</b>	Slow Rate
<b>9:30</b>	<b>1400</b>		<b>109</b>		Plug down HEAT HOLD
			<b>7</b>		Plug RH w/ 20 sk 60/40 per cent
			<b>4</b>		Plug MH w/ 20 sk
					JOB complete
					Thank you

**OPERATOR**

Company: RAMA Operating Company Inc.  
 Address: 101 S. Main St.  
 Stafford, Kansas 67578

Contact Geologist:  
 Contact Phone Nbr: 620-234-5191  
 Well Name: Briggeman Farms 3-27  
 Location: 13 3/8" @ 260' 8 5/8" @ 953'  
 Pool:  
 State: Kansas, Pratt County

API: 15-151-22413-00-00  
 Field: luka-Carmi Northwest  
 Country: USA




# Joshua R. Austin

## Petroleum Geologist

report for

# RAMA Operating CO., Inc



Scale 1:240 Imperial

Well Name: Briggeman Farms 3-27  
 Surface Location: 13 3/8" @ 260' 8 5/8" @ 953'  
 Bottom Location:  
 API: 15-151-22413-00-00  
 License Number:  
 Spud Date: 3/26/2013 Time: 4:30 PM  
 Region: Nw-Sw-Ne 27-26s-13w  
 Drilling Completed: 4/4/2013 Time: 5:50 PM  
 Surface Coordinates: 1,650' From North Line & 2,310' From East Line  
 Bottom Hole Coordinates:  
 Ground Elevation: 1943.00ft  
 K.B. Elevation: 1954.00ft  
 Logged Interval: 3000.00ft To: 4500.00ft  
 Total Depth: 4500.00ft  
 Formation: Arbuckle  
 Drilling Fluid Type: Chemical mud was displaced at 2983'

**SURFACE CO-ORDINATES**

Well Type: Vertical  
 Longitude: Latitude:  
 N/S Co-ord: 1,650' From North Line  
 E/W Co-ord: 2,310' 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  
 Rig #: 2  
 Rig Type: mud rotary  
 Spud Date: 3/26/2013 Time: 4:30 PM  
 TD Date: 4/4/2013 Time: 5:50 PM  
 Rig Release: Time:

**ELEVATIONS**

K.B. Elevation: 1954.00ft  
 K.B. to Ground: 11.00ft

Ground Elevation: 1943.00ft

**NOTES**

On the basis of the positive structural position, drill stem test and after reviewing the electric logs it was recommended by all parties involved in the Briggeman 3-27 to run 5 1/2" production casing to further test the Arbuckle, Viola, and Lansing zones.

2050-2060 we had a 150 unit gas kick in the Chase Section

# RAMA Operating Co., Inc. well comparison sheet

DRILLING WELL					COMPARISON WELL			
Briggeman Farms 3-27					Briggeman Farms 1-27			
1954 KB					1959 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log
Stotler	3010	-1056	N/A	N/A	3012	-1053	-3	N/A
Howard	3187	-1233	N/A	N/A	3188	-1229	-4	N/A
Topeka	3250	-1296	N/A	N/A	3253	-1294	-2	N/A
Heebner	3600	-1646	3598	-1644	3600	-1641	-5	-3
Toronto	3616	-1662	3613	-1659	3616	-1657	-5	-2
Douglas	3633	-1679	3629	-1675	3633	-1674	-5	-1
Brown Lime	3760	-1806	3760	-1806	3765	-1806	0	0
Lansing	3783	-1829	3780	-1826	3784	-1825	-4	-1
Base KC	4108	-2154	4107	-2153	4109	-2150	-4	-3
Mississippi	4183	-2229	4191	-2237	4195	-2236	7	-1
Viola	4218	-2264	4220	-2266	4245	-2286	22	20
Simpson Sand	4316	-2362	4328	-2374	4346	-2387	25	13
Arbuckle	4401	-2447	4408	-2454	4421	-2462	15	8
Total Depth	4500	-2546	4501	-2547	4596	-2637		



**TRIOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Rama Operating Co. Inc.

27-26s-13w Pratt Ks.

101 S. Main  
Stafford Ks. 67578

Briggeman #3-27

Job Ticket: 50958

DST#: 1

ATTN: Josh Austin

Test Start: 2013.04.02 @ 13:27:10

**GENERAL INFORMATION:**

Formation: Viola

Deviated: No Whipstock: ft (KB)

Test Type: Conventional Bottom Hole (Initial)



Time Tool Opened: 16:02:25  
 Time Test Ended: 21:34:55

Tester: Gary Revoteaux  
 Unit No: 56

Interval: 4222.00 ft (KB) To 4235.00 ft (KB) (TVD)  
 Total Depth: 4235.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1954.00 ft (KB)  
 1943.00 ft (CF)  
 KB to GR/CF: 11.00 ft

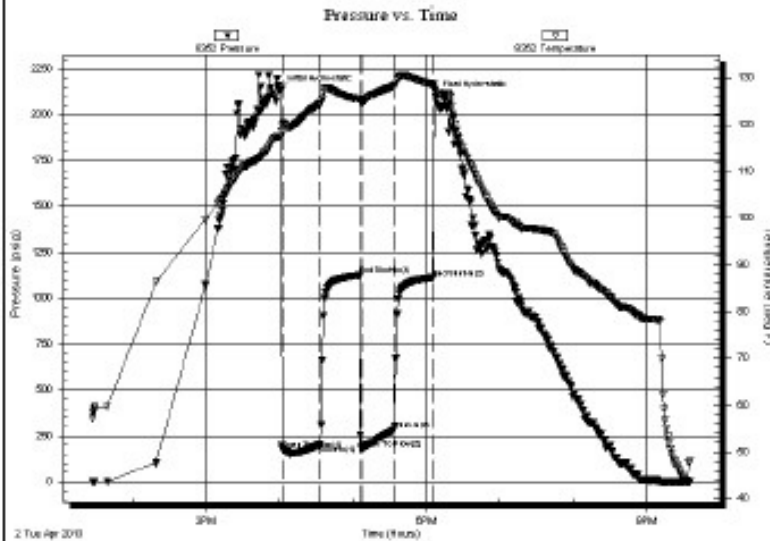
Serial #: 8352

Outside

Press@RunDepth: 282.61 psig @ 4223.00 ft (KB)  
 Start Date: 2013.04.02 End Date: 2013.04.02  
 Start Time: 13:27:15 End Time: 21:34:54

Capacity: 8000.00 psig  
 Last Calib.: 2013.04.02  
 Time On Btm: 2013.04.02 @ 15:59:55  
 Time Off Btm: 2013.04.02 @ 18:06:55

TEST COMMENT: IF:Strong blow . B.O.B. in 13 secs. GTS in 9 mins.(see gas flow report)  
 IS:Strongn blow . B.O.B.  
 FF:Strong blow . (see gas flow report)  
 FS:Strong blow . B.O.B.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2132.00	117.49	Initial Hydro-static
3	176.30	119.92	Open To Flow (1)
34	203.24	124.56	Shut-In(1)
66	1125.70	125.48	End Shut-In(1)
67	181.73	124.81	Open To Flow (2)
94	282.61	128.19	Shut-In(2)
126	1113.78	128.69	End Shut-In(2)
127	2096.98	127.09	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
217.00	GOCM 46%g 18%o 36% m	1.07
1703.00	CGO 46%g 54%o	23.89

Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	6.00	74.73
Last Gas Rate	0.25	2.00	26.02
Max. Gas Rate	0.38	7.50	80.23



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Rama Operating Co. Inc.

27-26s-13w Pratt Ks.

101 S. Main  
 Stafford Ks. 67578

Briggeman #3-27

ATTN: Josh Austin

Job Ticket: 50958

DST#: 1

Test Start: 2013.04.02 @ 13:27:10

Gas Rates Information

Temperature: 59 (deg F)  
 Relative Density: 0.65  
 Z Factor: 0.8

Gas Rates Table

Flow Period	Bapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
-------------	-------------	----------------	-----------------	------------------

		(inches)	(psig)	(mcf/d)
1	15	0.38	6.00	74.73
1	20	0.38	7.00	78.39
1	30	0.38	7.50	80.23
2	10	0.25	4.00	29.19
2	20	0.25	3.00	27.60
2	30	0.25	2.00	26.02

### ROCK TYPES

Cht	Dolsec	shale, gry	Ss
Cht vari	Lmst fw7>	Carbon Sh	
Chtcongl	shale, grn	shale, red	

### ACCESSORIES

#### STRINGER

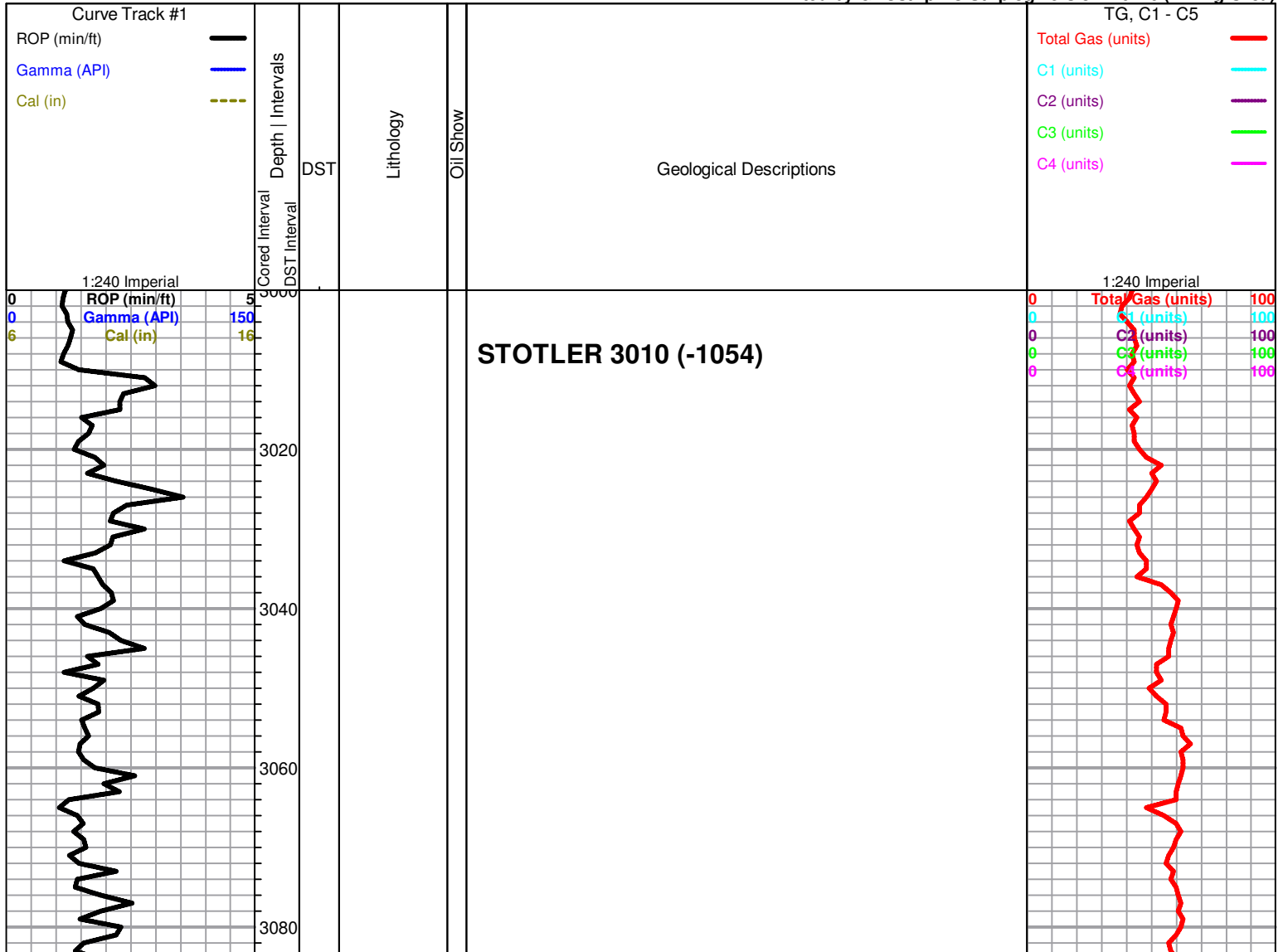
	Dolomite
	Sandstone

### OTHER SYMBOLS

#### DST

	DST Int
	DST alt
	Core
	tail pipe

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)



3100  
3120  
3140  
3160  
3180  
3200  
3220  
3240  
3260  
3280  
3300

**BERN 3161 (-1205)**

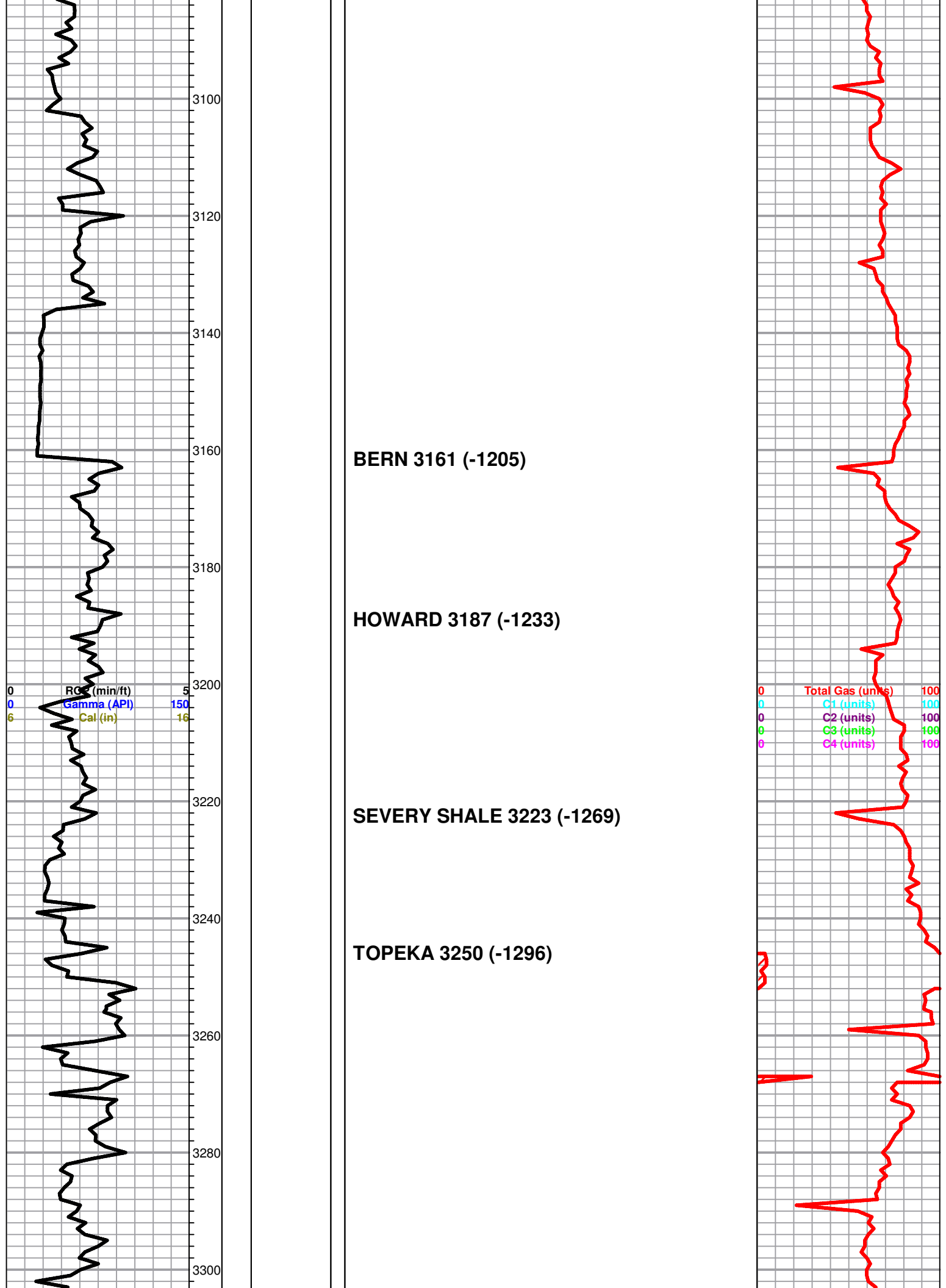
**HOWARD 3187 (-1233)**

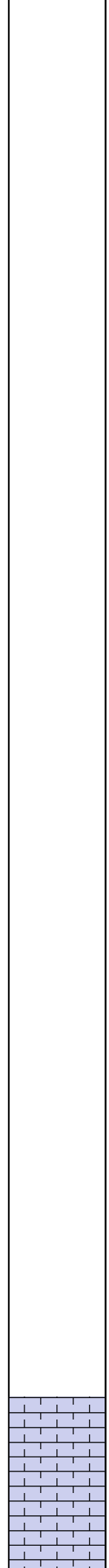
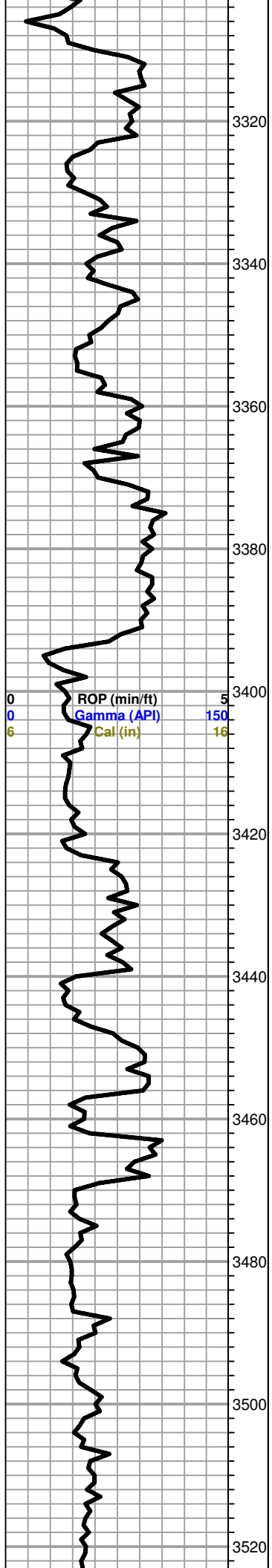
**SEVERY SHALE 3223 (-1269)**

**TOPEKA 3250 (-1296)**

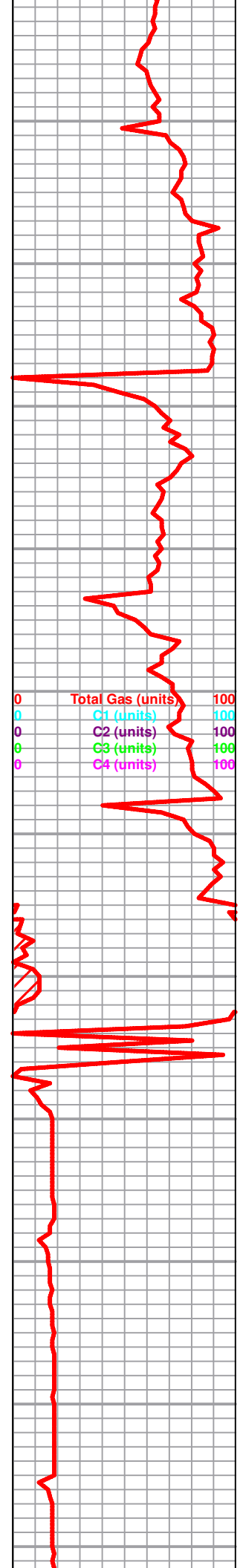
0 RGR (min/ft) 5  
0 Gamma (API) 150  
6 Cal (in) 16

0 Total Gas (units) 100  
0 C1 (units) 100  
0 C2 (units) 100  
0 C3 (units) 100  
0 C4 (units) 100



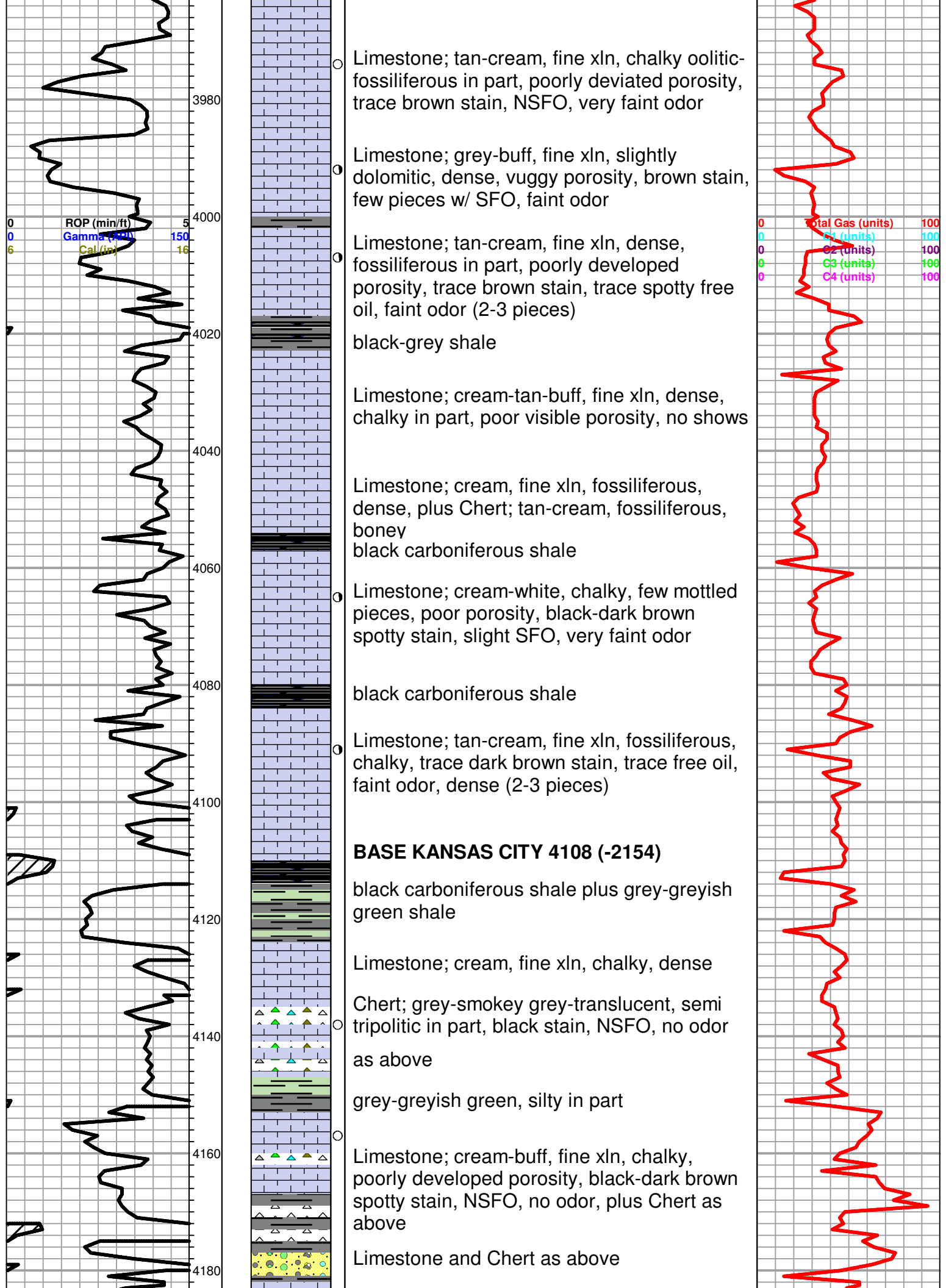


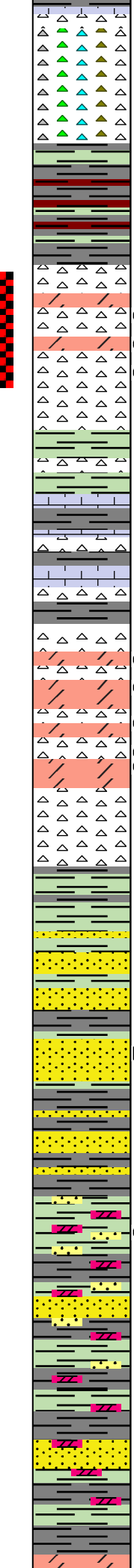
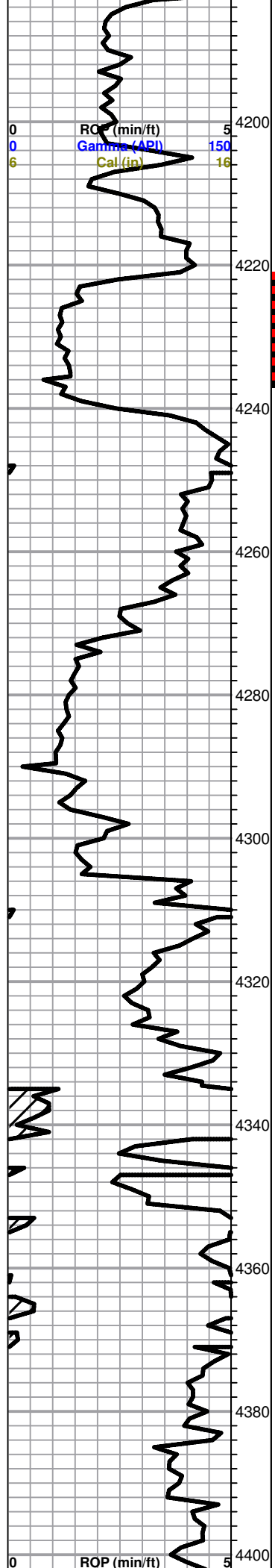
Limestone; cream-tan, fine-medium xln, chalky, fossiliferous in part, poorly developed porosity, no shows











**MISSISSIPPI 4183 (-2229)**

Chert; translucent-cream-white, slightly fossiliferous, boney/fresh, brown-black edge staining

abundant Shale; grey-greyish green, maroon, plus

**VIOLA 4218 (-2264)**

Chert; cream-buff-lt.grey, boney, semi tripolitic, plus Dolomite; brown, fine xln, brown stain, SFO, good gassy odor

Shale; lt. grey-green, "Limey"

Limestone; grey-cream, fine xln, chalky, dense plus white-cream, boney/fresh Chert

Chert; white-tan, boney, semi tripolitic, few fractured-vuggy type porosity, brown-dark brown stain, SFO, gassy odor, trace Dolomite; cream, fine-medium xln, brown stain, SFO

as above, Dolomite; tan, fine xln, dense, fair vuggy porosity, brown stain, SFO, gas bubbles, fair-good gassy odor

Chert; white-cream, boney / fresh, black edge staining, NSFO

**SIMPSON SHALE 4305 (-2351)**

Shale; grey-greyish green, waxey, trace Sand; medium grained, sub angular, sub rounded, calcareous, no shows

trace Sand; clear, sub angular, sub rounded, fine-medium grained, few loose quartz crystals, black "dead oil" stain, NSFO, no odor

Sand; as above, cream-clear, calcareous, no shows plus Dolomite; cream-tan, fine xln, sucrosic, dense, no shows

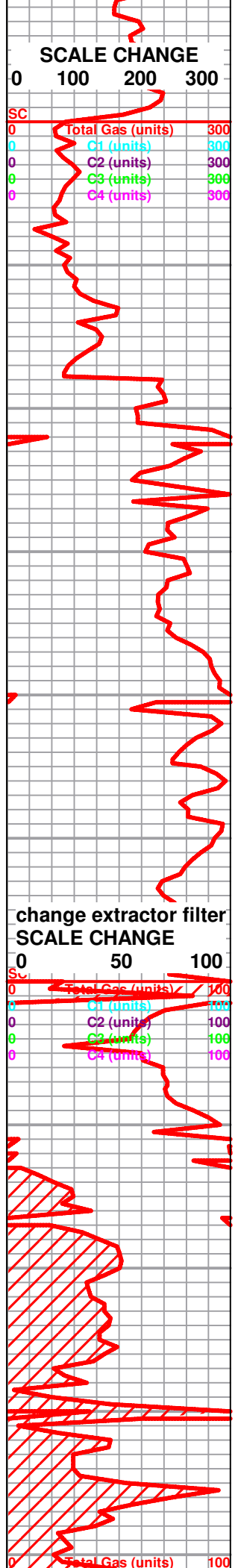
Trace dolomitic Sand, medium grained, brown stain, SFO, faint odor

Shale; grey-greyish green-dark grey, few micaceous pieces, silty in part, slightly calcareous

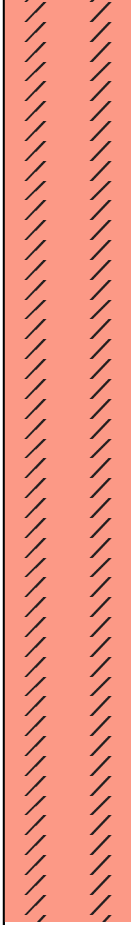
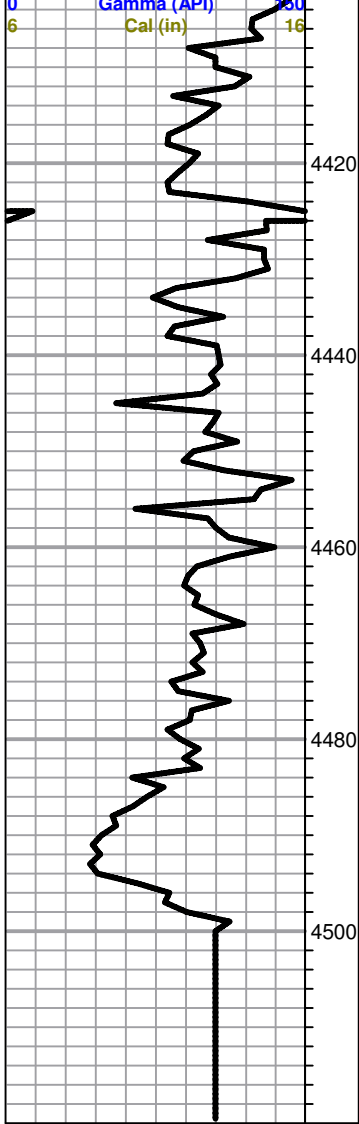
plus Sand; clear, sub angular, sub rounded, fine-medium grained, dolomitic in part, no shows

Shale; grey-greyish green-dark grey

**APBUCKLE 4401 (-2447)**







**ARBUCKLE 4401 (-2447)**

○ Dolomite; tan-cream, fine xln, sucrosic, dense in part, few scattered inter xln porosity, trace brown stain, trace spotty free oil, no odor

○ Dolomite; buff, fine xln, good vuggy porosity, trace stain, spotty SFO, flash odor

○ Dolomite; grey-cream-tan, fine xln, dense, few scattered inter xln porosity, no shows

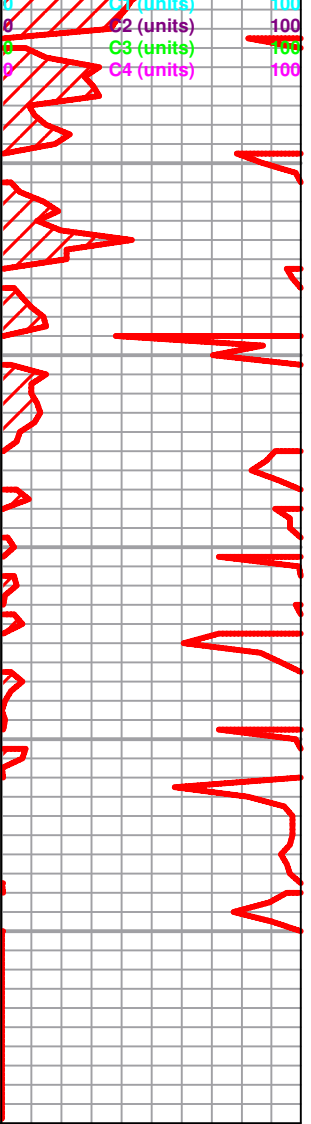
○ Dolomite; buff-cream, fine xln, sucrosic in part, dense, poorly developed porosity, trace golden brown stain, questionable trace spotty free oil, fair odor, plus white, boney, Chert

○ Dolomite; cream, scattered sparry calcite, few recrystallized pieces, brown stain SFO, fair odor

○ Dolomite; buff-tan-grey, fine-medium xln, dense, cherty, poor visible porosity, plus chert, tan, boney, no shows

○ Dolomite; grey-tan, fine-medium xln, fair-good oomoldic-vuggy porosity (barren)

**ROTARY TOTAL DEPTH 4500 (-2546)**



Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



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<http://kcc.ks.gov/>

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

Sam Brownback, Governor

May 30, 2013

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

Re: ACO1  
API 15-151-22413-00-00  
BRIGGEMAN FARMS 3-27  
NE/4 Sec.27-26S-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