



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1234041
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: _____

1234041

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. 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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
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:				

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <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> _____	PRODUCTION INTERVAL: _____ _____
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Joshua R. Austin

Petroleum Geologist

report for

RAMA Operating CO., Inc



COMPANY: RAMA Operating Company, Inc.

LEASE: Kummer #5-4

FIELD: Chase-Silica

LOCATION: Se-Nw-Nw-Ne (500' FNL & 2080' FEL)

SEC: 4 TWSP: 20s RGE: 11w

COUNTY: Barton STATE: Kansas

KB: 1783' GL: 1774'

API # 15-159-26058-00-00

CONTRACTOR: Sterling Drilling (rig #4)

Spud: 11/28/2014 Comp: 12/03/2014

RTD: 3355' LTD: N/A

Mud Up: 2600' Type Mud: Chemical was displaced

Samples Saved From: 2600'-RTD

Drilling Time Kept From: 2600' - RTD

Samples Examined From: 2600' - RTD

Geological Supervision From: 2880' to RTD

Geologist on Well: Josh Austin

Surface Casing: 8 5/8" @ 335'

Production Casing: none

Electronic Surveys: none

NOTES

Due to the low structural position and lack of shows in the samples, it was recommended by all parties involved in the Kummer 5-4 that it be plugged and abandoned at the rotary total depth 3355'.

RAMA Operating Co., Inc.

well comparison sheet

DRILLING WELL

COMPARISON WELL

COMPARISON WELL

Formation	1783 KB				1785 KB				Structural Relationship		1780 KB		Structural Relationship	
	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log		
Heebner	2922	-1139	N/A	N/A	2917	-1132	-7	N/A	2922	-1142	3	N/A		
Douglas	2953	-1170	N/A	N/A	2948	-1163	-7	N/A				N/A		
Brown Lime	3043	-1260	N/A	N/A	3040	-1255	-5	N/A				N/A		
Lansing	3063	-1280	N/A	N/A	3062	-1277	-3	N/A	3067	-1287	7	N/A		
Arbuckle	3345	-1562	N/A	N/A	3316	-1531	-31	N/A	3322	-1542	-20	N/A		
Total Depth	3355	-1572	N/A	N/A	3420	-1635		N/A	3325	-1545		N/A		

ROCK TYPES

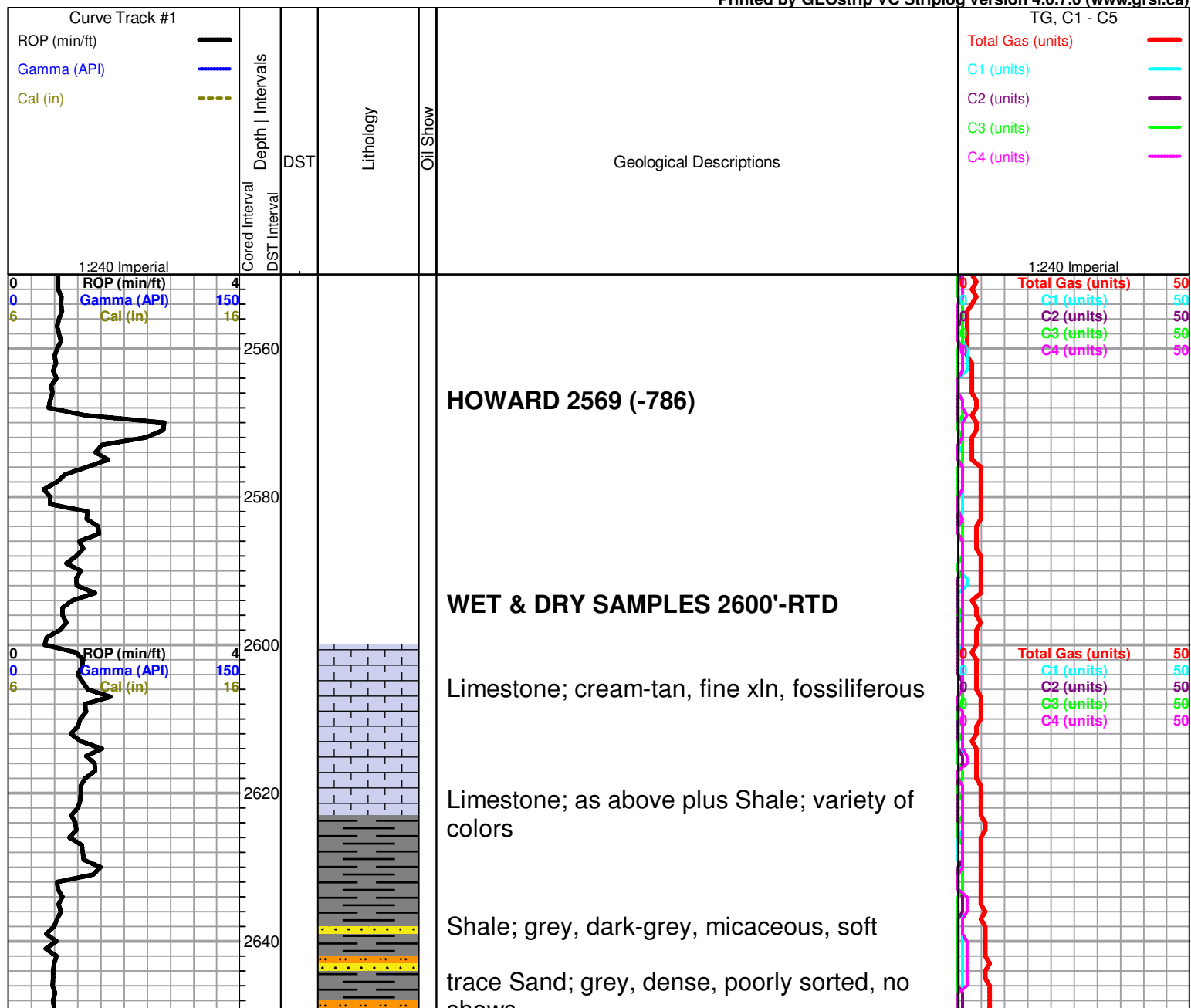
	Chtcong		Lmst fw7>		shale, gry		shale, red		Sltst
	Dolsec		shale, grn		Carbon Sh		Ss		

OTHER SYMBOLS

DST

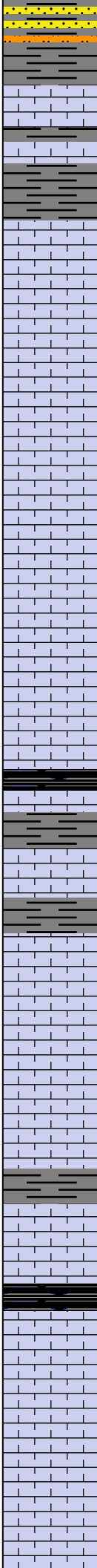
- DST Int
- DST alt
- Core
- tail pipe

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



2660
2680
2700
2720
2740
2760
2780
2800
2820
2840
2860

0 ROP (in/ft) 4
0 Gamma (API) 150
6 C_{log} (in) 16



TOPEKA 2660 (-877)

Limestone; buff, fine-medium xln, chalky, slightly granular, no shows

Shale; grey-greyish green

Limestone; lt. grey-cream, fine xln, dense, slightly fossiliferous, chalky, no shows

Limestone; as above, dense, slightly cherty

Limestone; cream, fine xln, chalky in part, poor visible porosity, no shows

Limestone; as above cream-lt. grey, fossiliferous in part, chalky

KING HILL

black carboniferous shale

grey shale

Limestone; cream, fine xln, chalky, plus grey shale

Limestone; cream-white, fine xln, chalky, dense, plus Chert; grey-lt. grey, boney

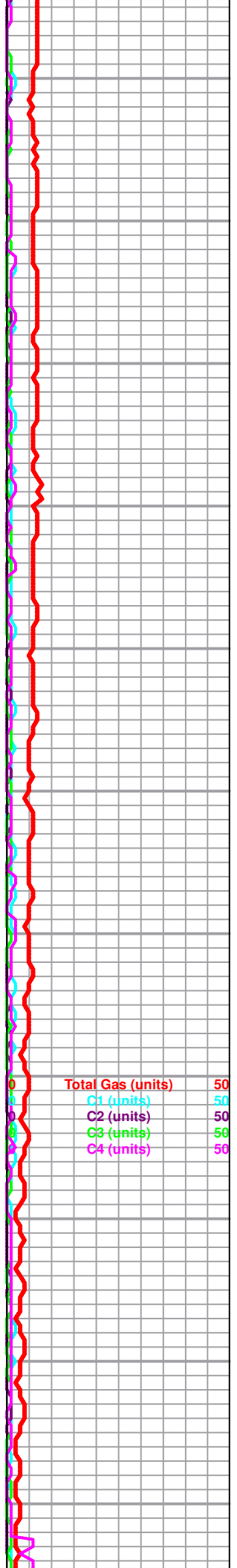
grey-green shale

QUEEN HILL

black carboniferous shale

Limestone; cream-lt. grey, fine-medium xln, granular in part, fossiliferous, few chalky pieces, scattered porosity, no shows

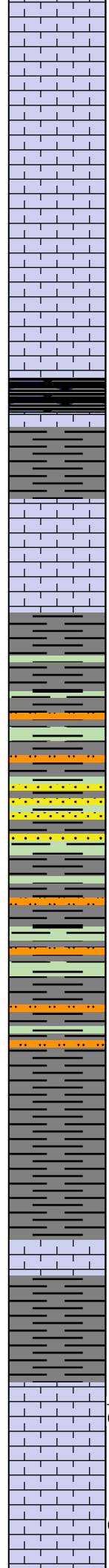
Limestone as above, no shows



Total Gas (units) 50
C1 (units) 50
C2 (units) 50
C3 (units) 50
C4 (units) 50

2880
2900
2920
2940
2960
2980
3000
3020
3040
3060
3080

0 ROP (min/ft) 4
0 Gamma (API) 150
6 Cal (in) 16



Limestone; buff-cream, fine xln, chalky, dense, slightly fossiliferous, poor porosity, no shows

Limestone; grey-cream, fine xln, fossiliferous in part, dense, cherty, no visible porosity, no shows

HEEBNER 2922 (-1139)
Black Carboniferous Shale

Shale; grey-green-maroon

TORONTO 2939 (-1156)
Limestone; cream-white, fine xln, chalky, dense, no shows

DOUGLAS 2953 (-1170)
Shale; greyish green, silty

Shale; grey-greish green-brick red, few micaceous pieces, trace Siltstone; grey, dense
Trace Sand; clear-grey, sub angular, sub rounded, fine grained, scattered loose unc. qtz, no shows, plus FeS2

Shale; grey-green-maroon, micaceous in part, soft, silty

Shale; grey-dark grey-greish green, soft, silty in part, few micaceous pieces

Shale; as above

BROWN LIME 3043 (-1260)
Limestone; tan-buff, fine xln, dense, cherty

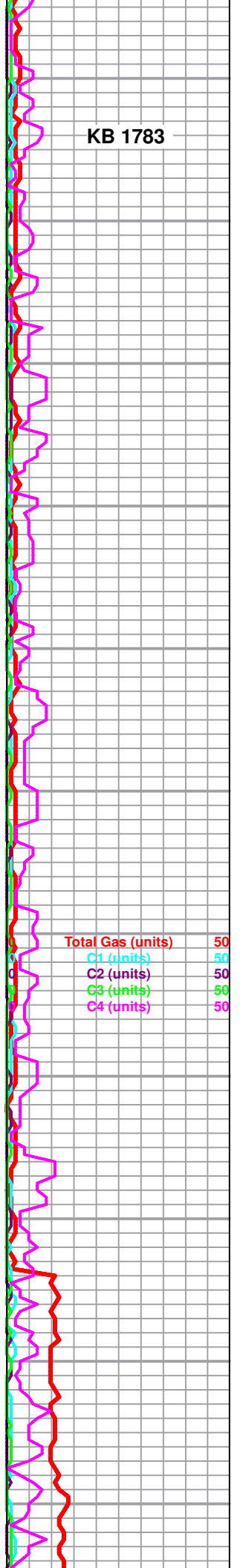
grey-gryeish green shale

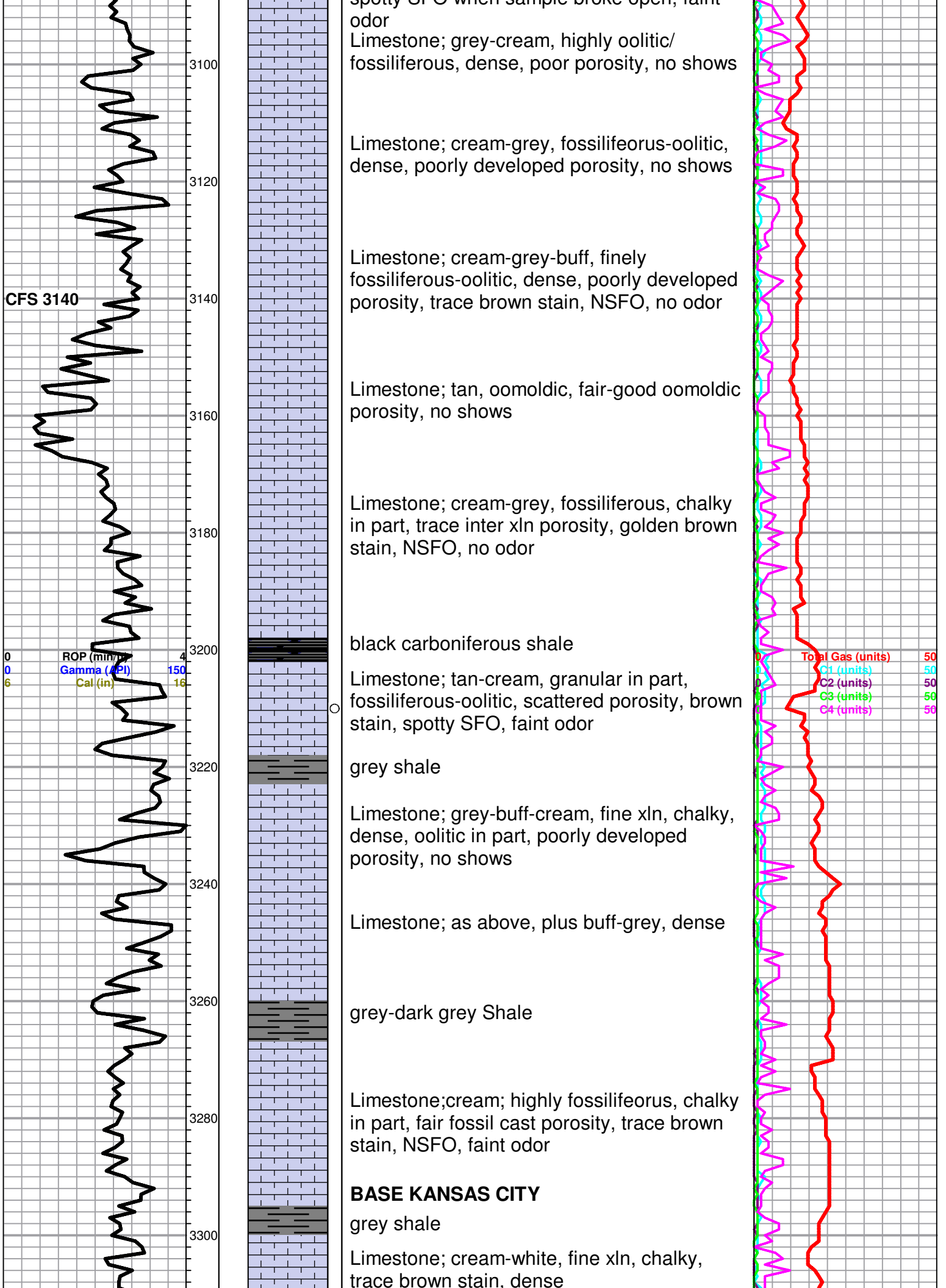
LANSING 3063 (-1280)
Limestone; cream-white, chalky, fossiliferous, few inter xln porosity, grey-brown stain, trace spotty free oil, gas bubbles when broke, faint odor

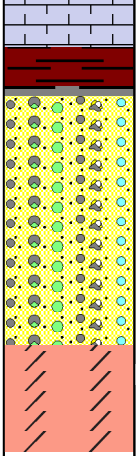
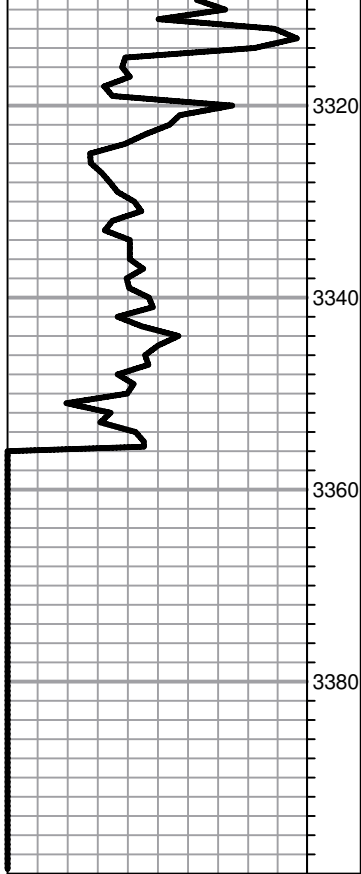
Limestone; grey-cream, fine xln, sparry calcite inclusions, poorly developed porosity, spotty SEO when sample broke open, faint

KB 1783

Total Gas (units) 50
C1 (units) 50
C2 (units) 50
C3 (units) 50
C4 (units) 50







CONGLOMERATE 3315

Shale; brick red, soft/gummy

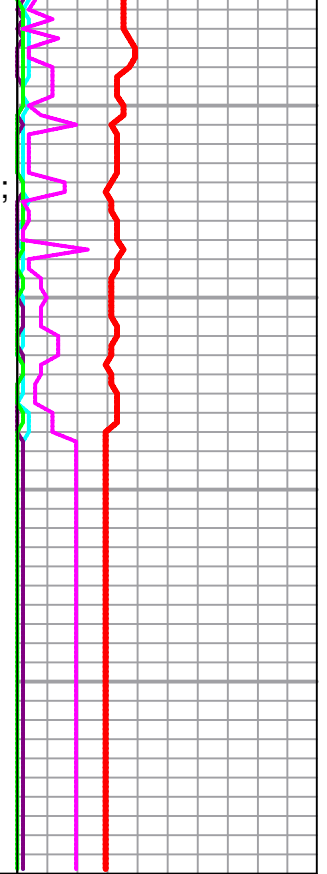
Shale; brick red-grey, soft/gummy, plus Chert; orange-cream-pink, fresh

ARBUCKLE 3345 (-1562)

Dolomite; cream, fine xn, sucrosic, few scattered porosity, trace black-dark brown stain, NSFO, no odor

Dolomite; cream-buff, fine xln, dense, poor visible porosity, no shows, cherty in part

ROTARY TOTAL DEPTH 3355 (-1572)



Customer Egms Operating Co. Inc.	Lease No.	Date 11-28-2014
Lease Kummer	Well # 5-4	
Field Order # 11430	Station Prgardiles	Casing 8 5/8
Type Job CNW/ 8 5/8 surface	Depth 333	County Barton
	Formation TD-335	State KS
		Legal Description 4-20-11

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid		RATE	PRESS	ISIP
8 5/8								
Depth 333	Depth	From	To	Pre Pad		Max		5 Min.
Volume 21	Volume	From	To	Pad		Min		10 Min.
Max Press	Max Press	From	To	Frac		Avg		15 Min.
Well Connection	Annulus Vol.	From	To			HHP Used		Annulus Pressure
Plug Depth 313	Packer Depth	From	To	Flush		Gas Volume		Total Load

Customer Representative Lenny Salsos Station Manager Kevin Gordley Treater Darin Franklin

Service Units	27283	84981	19843	19903	21010				
Driver Names	Darin	Ed	Ed	Ps+E	Ps+E				

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
8:30pm					on location / safety meeting
					330sx 60/40 P02 2% Gel, 3% bic
					1/4# Cellfibre 14.8 pps, 1.21 yield
					5.18 water requirement
9:00pm	400		3	5	pump 3 bbls water
	400		71	5	mix 330 SIC cement
					Shut down
					Release plug
	400		20	5	DISD 1910
10:00pm					Shut in
					CTRC Cement to PS