Confidentiality Requested: Yes No

KANSAS CORPORATION COMMISSION **OIL & GAS CONSERVATION DIVISION**

1172157

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.xxxx) (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:
Oil WSW SWD Gas D&A ENHR OG GSW CM (Coal Bed Methane) GSW Cathodic Other (Core, Expl., etc.): If Workover/Re-entry: Old Well Info as follows: Operator:		Producing Formation:
	Conv. to Producer	(Data must be collected from the Reserve Pit)
Dual Completion Permit #:		Chloride content: ppm Fluid volume: bbls Dewatering method used:
		Location of fluid disposal if hauled offsite:
		Operator Name:
GSW Permit #:		Lease Name: License #:
1	ompletion Date or ecompletion Date	Quarter Sec TwpS. 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:

				Page 1wo 1172157					
Operator Na	me:			Lease Name:		_ Well #:			
Sec	Twp	S. R	East West	County:					

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

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

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 Sh	eets)	Yes No		-	n (Top), Depth an		Sample
Samples Sent to Geolog	gical Survey	Yes No	Nam	e		Тор	Datum
Cores Taken Electric Log Run		☐ Yes ☐ No ☐ Yes ☐ No					
List All E. Logs Run:							
			RECORD Ne				
		Report all strings set-o	onductor, surface, inte	ermediate, productio	on, 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 / SQU	JEEZE RECORD	-		
Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used		Type and Pe	ercent Additives	
Protect Casing							
Plug Off Zone							

Did you perform a hydraulic fracturing treatment on this well?	Yes	No
Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?	Yes	No
Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?	Yes	No

PERFORATION RECORD - Bridge Plugs Set/Type Acid, Fracture, Shot, Cement Squeeze Record Shots Per Foot Specify Footage of Each Interval Perforated Depth (Amount and Kind of Material Used) TUBING RECORD: Size: Set At: Packer At: Liner Run: Yes No Date of First, Resumed Production, SWD or ENHR. Producing Method: Pumping Gas Lift Flowing Other (Explain) Estimated Production Oil Bbls. Gas Mcf Water Bbls. Gas-Oil Ratio Gravity Per 24 Hours DISPOSITION OF GAS: METHOD OF COMPLETION: PRODUCTION INTERVAL: Open Hole Perf. Dually Comp. Commingled Vented Sold Used on Lease (Submit ACO-5) (Submit ACO-4) (If vented, Submit ACO-18.) Other (Specify)

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

Form	ACO1 - Well Completion
Operator	Rama Operating Co., Inc.
Well Name	Greenback 1-27
Doc ID	1172157

All Electric Logs Run

DUCP	
DIL	
MICRO	
SONIC	

Form	ACO1 - Well Completion
Operator	Rama Operating Co., Inc.
Well Name	Greenback 1-27
Doc ID	1172157

Tops

Name	Тор	Datum
Heebner	3619	-1662
Toronto	3643	-1686
Douglas	3654	-1697
Lansing	3796	-1839
Base KC	4128	-2171
Mississipian	4224	-2267
Viola	4309	-2352
Simpson Sand	4351	-2394
Total Depth	4430	-2473

Pe A	hua R. Austin troleum Geologist report for A Operating CO., Inc						
COMPANY: RAMA Operat	ting Company, Inc.						
LEASE: Greenback #1-27							
FIELD: <u>luka-Carmi</u> LOCATION: <u>330' FSL & 23</u>	310' FWL Se-Se-Se						
SEC:27 TWSP:26s	RGE: <u>13w</u>						
COUNTY: Pratt STA	TE: Kansas						
KB:1957 GL:1944							
API # <u>15-151-22427-00-00</u>	2						
CONTRACTOR: Sterling	Drilling (rig #5)						
Spud: <u>11-18-2013</u>	Comp: <u>11-27-2013</u>						
RTD: <u>3742</u>	LTD: <u>3742</u>						
Mud Up: <u>3092'</u>	Type Mud: Chemical was displaced						
Samples Saved From: <u>3200'to RTD</u> Drilling Time Kept From: <u>3200'to RTD</u> Samples Examined From: <u>3200'to RTD</u> Geological Supervision From: <u>3200'to RTD</u> Geologist on Well: <u>Josh Austin</u> Surface Casing: <u>13 3/8" @ 275'</u> Production Casing: <u>None</u>							
Electronic Surveys: <u>By P</u>	ioneer Energy Services						

NOTES On the basis of the low structural position, drill stem test and after evaluating the electric logs, it was recommended by all parties involved in the Greenback 1-27 be plug and abandon at the rotary total depth 4430'

	AMA Ope ell comp			
DRILLING	WELL	COMPARI	SON WELL	COMPARISON WELL

	Greenback 1-27				1	Soeken #1			Hoener 1A			
					SE-SW-SE 27-26s-13w			SW-SW-SW 27-26s-13w				
	1957	170			1963	170	Struct		1953	170	Struct	tural onship
Formation	Sample	Sub-Sea	Log	Sub-Sea	17	Sub-Sea	Sample	Log	Log	Sub-Sea		Log
/	-		-		Log		-	-			-	-
Heebner	3622	-1665	3619	-1662	3586	-1623	-42	-39	3594	-1631	-34	-31
Toronto	3641	-1684	3643	-1686	3606	-1643	-41	-43	3611	-1648	-36	-38
Douglas	3655	-1698	3654	-1697	3625	-1662	-36	-35	3627	-1664	-34	-33
Brown Lime	3783	-1826	3779	-1822	3750	-1787	-39	-35	3754	-1791	-35	-31
Lansing	3800	-1843	3796	-1839	3776	-1813	-30	-26	3782	-1819	-24	-20
Base KC	4127	-2170	4128	-2171	4093	-2130	-40	-41	4099	-2136	-34	-35
Mississippi	4217	-2260	4224	-2267	4170	-2207	-53	-60	4184	-2221	-39	-46
Viola	4312	-2355	4309	-2352	4260	-2297	-58	-55	4262	-2299	-56	-53
Simpson Sand	4350	-2393	4351	-2394	4321	-2358	-35	-36	4323	-2360	-33	-34
Total Depth	4430	-2473	4428	-2471	4425	-2462			4484	-2521		

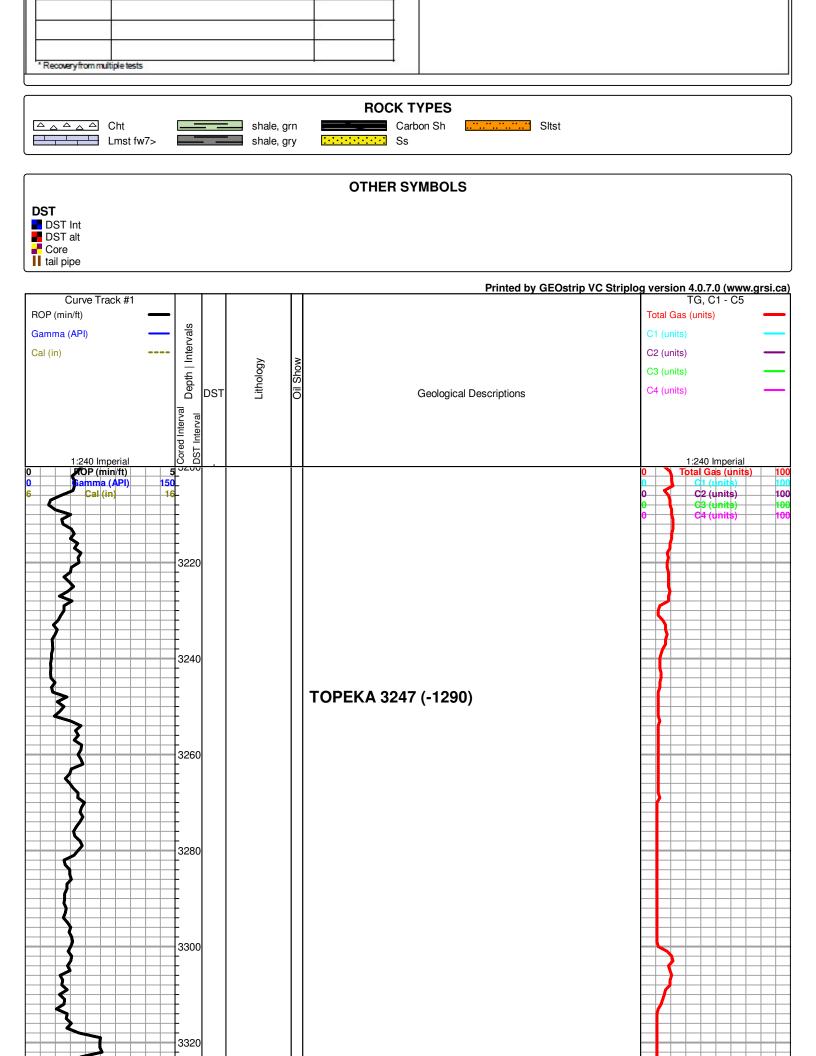
	DRILL STEM TES		ORT					
RILOBITE	RAMA Oper. Co. Inc.		27-	27-26s13w. Pratt Co. KS				
ESTING , INC	101 S. Main St. Stafford, KS 67578-1429		Greenback 1-27 Job Ticket: 51852 DST#:1					
121	ATTN: Josh Austin		Tes	t Start: 20	013.11.24 @	21:46:42		
GENERAL INFORMATION:								
Formation: Lans. H-K								
Deviated: No Whipstock:	0.00 ft (KB)					al Bottom Hole	e (Initial)	
Time Tool Opened: 00:43:42					Ryan Reyno	lds		
Time Test Ended: 05:31:12			Unit	No:	48			
Interval: 3960.00 ft (KB) To 4			Ref	erence Be	evations:	1957.00		
Total Depth: 4035.00 ft (KB) (T				1/D	CDIOD:	1944.00		
Hole Diameter: 7.88 inches Hol	e Condition: Fair			KB L	to GR/CF:	13.00	n.	
Start Date: 2013.11.24 Start Time: 21:46:47 TEST COMMENT: IF: Good blow . 1 ISI: No blow FF: Fair blow . 1 FSI: No blow	1/2" - 9"	2013.11.25 05:31:11	Last Cali Time On Time Off	Btm:	2013.11.25 2013.11.25	-		
Pressure vs.			P	RESSUR	RE SUMM	ARY		
ETE Presure	572 Temperakan 150	Time	Pressure	Temp	Annotatio	on		
		(Min.)	(psig)	(deg F)	Initial I had	a atatia		
		0	2085.66 23.50		Initial Hydro Open To F			
		33	73.37		Shut-In(1)			
		79	1061.04		End Shut-li	n(1)		
		79	78.33		Open To F	low (2)		
		108	108.71	113.91				
		158 159	1044.18 1994.24		End Shut-li Final Hydro			
23 28 28 28 28 10	<u> </u>							

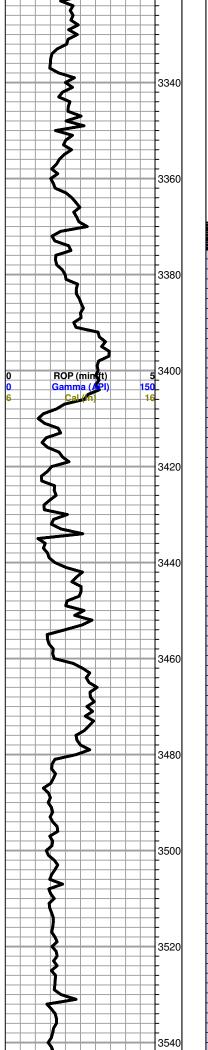
	Recovery			Gas Rat	es	
Length (ft)	Description	Volume (bbl)	Choke (inches) Pressure (psig) Gas Ra			
150.00	VSLI OCMW trc%oil, 49%mud, 50%w tr	0.74				
90.00	SLI OGCM 1%oil, 5%gas, 94%mud	0.44				

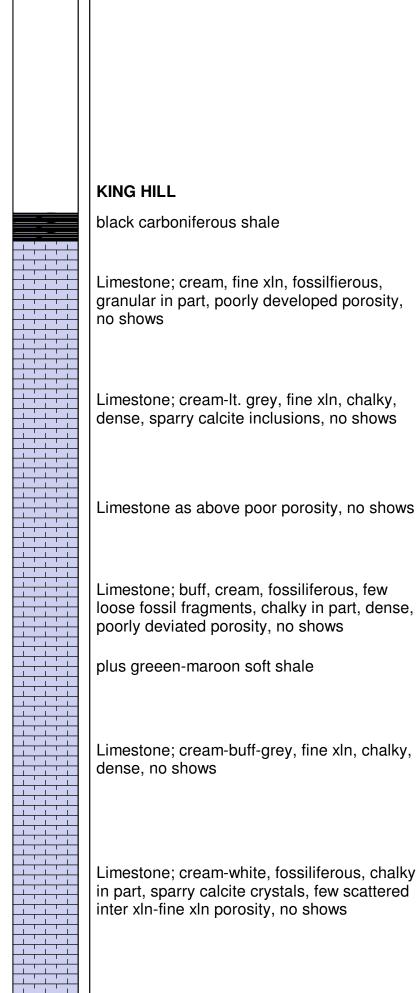
113×	DRILL STEM TES		ORT			3		
RILOBITE	RAMA Oper. Co. Inc.			27-26513w. Pratt Co. KS				
ESTING , INC			Gre Job	DST#:2				
GENERAL INFORMATION: Formation: Viola Deviated: No Whipstock: Time Tool Opened: 06:08:23	0.00 ft (KB)		Test		Convention: Ryan Reyno	al Bottom Hole (Reset)		
Time Test Ended: 10:51:08			Unit		48	Jug		
Interval:4255.00 ft (KB) To42Total Depth:4280.00 ft (KB) (THole Diameter:7.88 inches Hole			Refe		evations: o GR/CF:	1957.00 ft (KB) 1944.00 ft (CF) 13.00 ft		
Serial #: 8792 Outside Press@RunDepth: 30.75 psig Start Date: 2013.11.26 Start Time: 04:01:13 TEST COMMENT: IF: Strong blow ISt No blow FF: Strong blow FSt: No blow FS: No blow	End Date: End Time:	2013.11.26 10:51:07	Capacity: Last Calib Time On E Time Off I	ol.: Btm: 1		8000.00 psig 2013.11.26 @ 06:06:38 @ 08:41:23		
Pressure vs.			PR	ESSUR	E SUMM	IARY		
270 Produce 270 P		Time (Min.) 0 2 32 78 79 108 154 155	Pressure (psig) 2210.08 23.64 23.66 414.88 23.16 30.75 340.73 2094.40	Temp (deg F) 111.94 111.86 115.26 116.58 117.42	Annotati Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut-	ion ro-static Flow (1) In(1) Flow (2) In(2)		
Recovery			L	Ga	s Rates			
Length (ft) Description	Volume (bbl)			Choke (i		ure (psig) Gas Rate (Mct/d)		

30.00	GOCM 5%gas, 5%oil, 90%mud	0.15
0.00	980' GIP	0.00
Recovery from	n multiple tests	

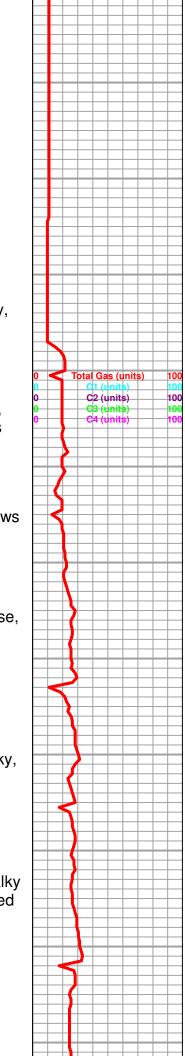
	7						
RILOBITE	DRILL STEM TES	ST REP	ORT				
	RAMA Oper. Co. Inc.		27-26s13w. Pratt Co. KS				
ESTING , INC.	101 S. Main St. Stafford, KS 67578-1429		Greenback 1-27				
			Job Tick	DST#:3			
	ATTN: Josh Austin		Test Sta	irt: 2013.11.26 @	22:15:15		
GENERAL INFORMATION:							
Formation:ViolaDeviated:NoWhipstock:Time Tool Opened:00:16:15Time Test Ended:05:01:00	0.00 ft (KB)		Test Type: Conventional Bottom Hole (Rese Tester: Ryan Reynolds Unit No: 48				
Interval: 4288.00 ft (KB) To 43 Total Depth: 4348.00 ft (KB) (TV) 1348.00 ft (KB) (TV)	/D)		Reference Elevations: 1957.00 ft (KE 1944.00 ft (CF				
Hole Diameter: 7.88 inches Hole	e Condition: Fair			KB to GR/CF:	13.00 ft		
Serial #: 8792 Outside Press@RunDepth: 31.90 psig Start Date: 2013.11.26 Start Time: 22:15:20	@ 4289.00 ft (KB) End Date: End Time:	2013.11.27 05:00:59	Capacity: Last Calib.: Time On Btm: Time Off Btm	2013.11.27			
FSI: No blow Pressure vs. T			PRES	SURE SUMM	ARY		
229	572 Temporature 1742 Temporature	Time		emp Annotatio	on		
- 2		(Min.) 0		eg F) 08.83 Initial Hydro	o-static		
···		2	18.90 10	08.40 Open To F			
- /		32	2012 2010 2010 2020	11.77 Shut-In(1)	-(1)		
		78		14.13 End Shut-I 14.09 Open To F			
		78 107	0.000.00.00.00.000.000.0000000000000000	15.35 Shut-In(2)			
		152		16.87 End Shut-I			
		450	04E4 76 44	17.87 Final Hydro	o-static		
	1 1 1 1	153	2154.76 11	And the second se			
		153	2154.70				
- [¥\] /		153	2154.70				
		153	2154.70				
		153	2154.70				
Nor 200 Tereptung		153	2154.70				
		153		Gas Rates	ire (psig) Gas Rate (Mcf/d)		
Nor 200 Trest-tan) Recovery	Volume (bbl)	153		Gas Rates	ire (psig) Gas Rate (Mcf/d)		
Nor 200 200 200 Temptant	Volume (bbl)			Gas Rates	nre (psig) Gas Rate (Mcf/d)		

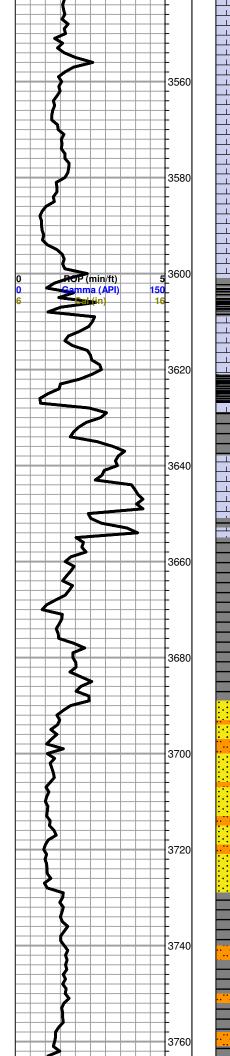






Limestone as above; few granular pieces





Limestone; grey, fine xln dense, fossiliferous, few scattered porosity

Limestone; It. grey-cream, fine-medium xIn, chalky in part, dense, few scattered inter xIn porosity, no shows

black-dark grey shale

HEEBNER 3622 (-1665)

Black Carboniferous Shale

TORONTO 3641 (-1684)

Limestone; cream-white, fine xln, chalky, poorly developed porosity, no shows, plus white chalk

DOUGLAS 365 (-1698)

Shale; grey-greyish green, dark grey, soft, micaceous, silty in part

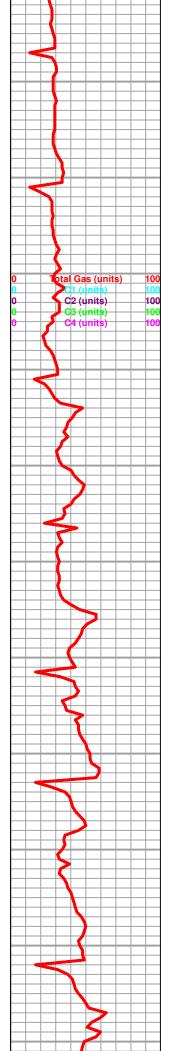
UPPER DOUGLAS SAND

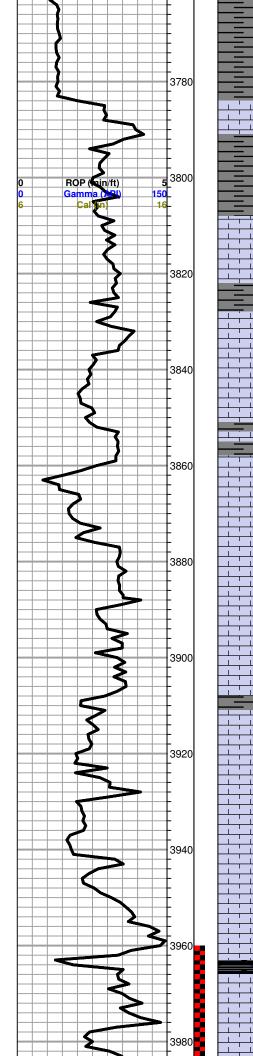
Sand; greyish green, micaceous, very fine grained, slity in part

as above

Siltstone; grey-greyish green, micaceous, plus Shale; grey-dark grey, micaceous, soft/gummy

Shale; grey-greyish green, micaceous,





soft/gummy, silty in part

BROWN LIME 3783 (-1826)

Limestone; tan-buff, fine xln, fossiliferous in part, dense, cherty

LANSING 3800 (-1843)

Limstone; grey-cream, fine xln, chalky, mottled in part, poor porosity, no shows

dark grey-black shale

Limstone; cream-lt. grey, fine xln, few sparry calcite crystals, chalky, dense, no shows

as above

Limestone; buff-grey, fine xln, dense, few sparry calcite, few scattered sub oomoldic type porosity, no shows

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

Limestone; as above

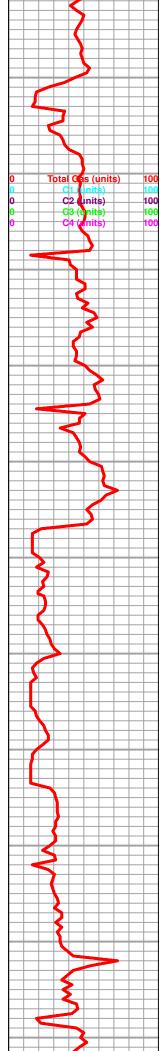
Limestone; buff-brown, fine xl, dense, slighlty fossiliferous, poor porosity, cherty, no shows

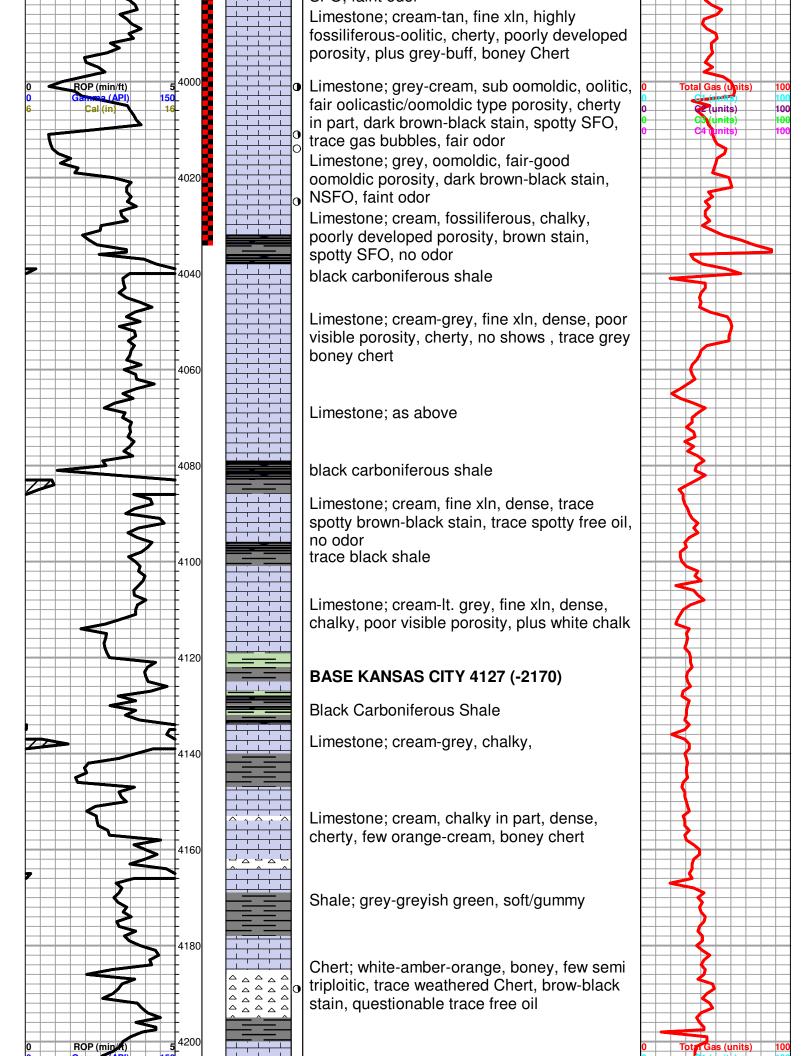
Limestone; cream-white-lt. grey, fine xln, chalky, fossiliferous in part, few inter xln porosity, no shows

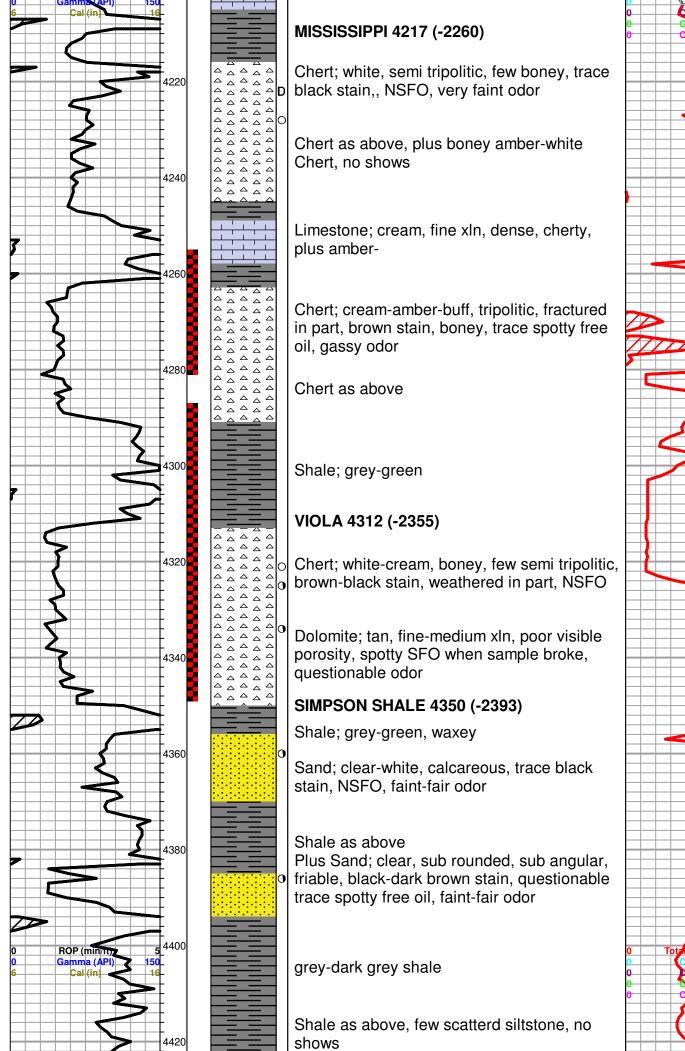
Limestone; brown-buff-tan, fine xln, dense, few recrystalized pieces, cherty, no visible porosity

black carboniferous shale

Limestone; cream-grey, sub oomoldic, fair oomoldic prosity, brown-black stain, spotty SEO faint odor









(units)

10

	ROTARY TOTAL DEPTH 4430 (-2473)	

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		PERATI		Lease N	No.				Date			
	HMH - C	<u>) PERATI</u>	NG .	Well #	1.5	2.77		· · · · ·		11-19	-13	
Field Order #		PO0-	jen i	\downarrow		Casing	Depth	79	Count		State	ŶÇ
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	E DATA			ING DAT			ISED	· · · · · · · · · · · · · · · · · · ·	ас	TREATMEN	• :	
Casing Size						Acid		· · · · ·	RATE		ISIP	
7 <u>578</u> Depth 70	Depth			То		Pre Pad		Max			5 Min.	
Volume	Volume	From		То	· · · ·	Pad		Min			10 Min.	
Max Press	Max Press			To		Frac		Avg	·		15 Min.	
Well Connectio	on Annulus V			То	\uparrow			HHP Used	l ,		Annulus Pressu	re .
Plug Depta /	Packer De			То		Flush		Gas Volun	ne		Total Load	······································
Customer Rep	presentative				tion N	Manager OK	in Set	4	Trea	ater Policiet	filliones	
Service Units	37900	33708	2)92	20 199	leo	2/010		· •				
Driver Names	Sullisa	9RAU			2/4							
Time	Casing Pressure	Tubing Pressure		Pumped	Y	Rate				Service Log	a Marina di Yana	
1:50 A	m					· · ·	on loc	. Sol	f_{i}	menty		
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