

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

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

Gas DH EOR

OG GSW

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 EOR Conv. to SWD
 Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

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 Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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 <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 Geologist Report / Mud Logs <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
--	---

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				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
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> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
---	---	------------------------------------

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
----------------	-------	---------	------------	--

Form	ACO1 - Well Completion
Operator	Griffin, Charles N.
Well Name	ADDIE 4
Doc ID	1467923

Tops

Name	Top	Datum
Heebner	3924	-1910
Brown Lime	4089	-2075
Lansing	4106	-2092
Stark	4370	-2356
B/KC	4497	-2483
Pawnee	4554	-2540
Cherokee	4598	-2584
Mississippi	4659	-2645
Viola	4692	-2678
Simpson Shale	4789	-2775
Arbuckle	4932	-2918



DRILL STEM TEST REPORT

Prepared For: **Charles N Griffin**

PO Box 347
Pratt, KS 67124

ATTN: Bruce Reed

Addie #4

28-29S-15W Pratt,KS

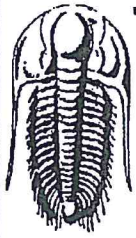
Start Date: 2019.05.01 @ 15:48:00

End Date: 2019.05.02 @ 00:04:02

Job Ticket #: 64967 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2019.05.03 @ 10:44:33



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Charles N Griffin
PO Box 347
Pratt, KS 67124
ATTN: Bruce Reed

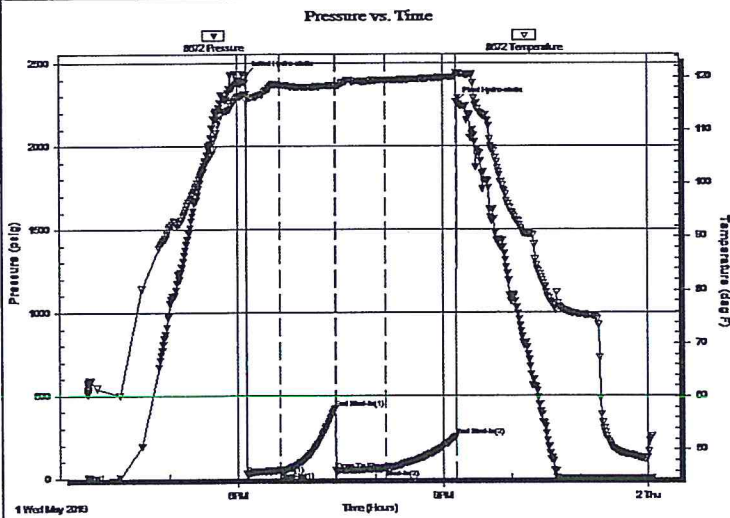
28-29S-15W Pratt,KS
Addie #4
Job Ticket: 64967 **DST#: 1**
Test Start: 2019.05.01 @ 15:48:00

GENERAL INFORMATION:

Formation: **Viola**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:08:17
Time Test Ended: 00:04:02
Interval: **4674.00 ft (KB) To 4716.00 ft (KB) (TVD)**
Total Depth: 4829.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good
Reference Elevations: 2010.00 ft (KB)
1999.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8672 Inside
Press@RunDepth: 53.17 psig @ 4675.00 ft (KB) Capacity: psig
Start Date: 2019.05.01 End Date: 2019.05.02 Last Calib.: 2019.05.02
Start Time: 15:48:01 End Time: 00:04:02 Time On Btm: 2019.05.01 @ 18:07:47
Time Off Btm: 2019.05.01 @ 21:11:32

TEST COMMENT: IF: Weak Blow , Built to 2 1/4"
IS: No Blow Back
FF: Weak Blow , Built to 1 inch
FS: No Blow Back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2426.69	116.73	Initial Hydro-static
1	25.07	115.55	Open To Flow (1)
30	43.27	118.50	Shut-In(1)
78	419.17	118.39	End Shut-In(1)
78	44.42	118.38	Open To Flow (2)
121	53.17	119.37	Shut-In(2)
183	252.78	120.09	End Shut-In(2)
184	2266.42	120.67	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
60.00	Mud	0.30

Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (MMcf/d)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Charles N Griffin

28-29S-15W Pratt, KS

PO Box 347
Pratt, KS 67124

Addie #4

Job Ticket: 64967

DST#: 1

ATTN: Bruce Reed

Test Start: 2019.05.01 @ 15:48:00

GENERAL INFORMATION:

Formation: **Viola**

Deviated: **No** Whipstock: _____ ft (KB)

Time Tool Opened: 18:08:17

Test Type: **Conventional Straddle (Initial)**

Tester: **Leal Cason**

Time Test Ended: 00:04:02

Unit No: **74**

Interval: **4674.00 ft (KB) To 4716.00 ft (KB) (TVD)**

Reference Elevations: **2010.00 ft (KB)**

Total Depth: **4829.00 ft (KB) (TVD)**

1999.00 ft (CF)

Hole Diameter: **7.88 inches** Hole Condition: **Good**

KB to GR/CF: **11.00 ft**

Serial #: 6668 Below (Straddle)

Press@RunDepth: _____ psig @ **4723.00 ft (KB)**

Capacity: _____ psig

Start Date: **2019.05.01**

End Date: **2019.05.01**

Last Calib.: **2019.05.02**

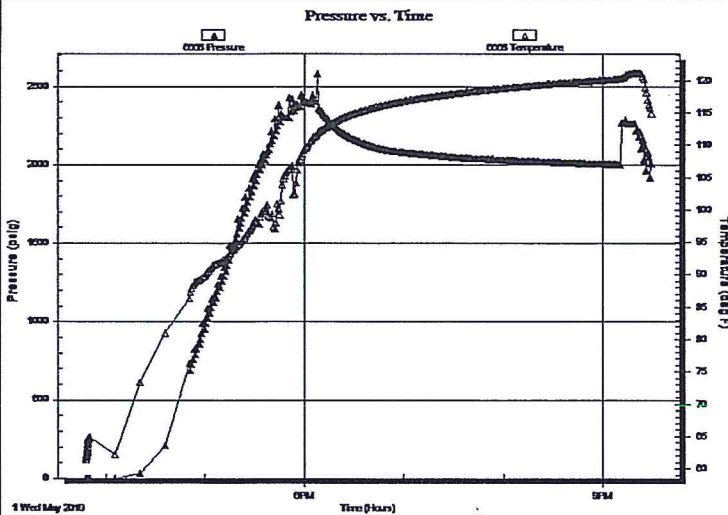
Start Time: **15:48:01**

End Time: **21:30:02**

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Weak Blow , Built to 2 1/4"
IS: No Blow Back
FF: Weak Blow , Built to 1 inch
FSI: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Mud	0.30

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (MMcf/d)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Charles N Griffin

28-29S-15W Pratt, KS

PO Box 347
Pratt, KS 67124

Addie #4

Job Ticket: 64967

DST#: 1

ATTN: Bruce Reed

Test Start: 2019.05.01 @ 15:48:00

GENERAL INFORMATION:

Formation: **Viola**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:08:17
 Time Test Ended: 00:04:02

Test Type: Conventional Straddle (Initial)
 Tester: Leal Cason
 Unit No: 74

Interval: **4674.00 ft (KB) To 4716.00 ft (KB) (TVD)**
 Total Depth: 4829.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2010.00 ft (KB)
 1999.00 ft (CF)
 KB to GR/CF: 11.00 ft

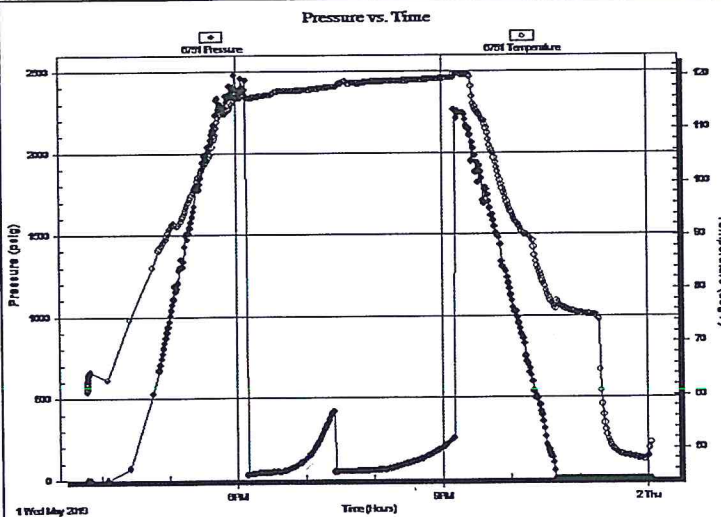
Serial #: 6751

Outside

Press@RunDepth: psig @ 4675.00 ft (KB)
 Start Date: 2019.05.01 End Date: 2019.05.02
 Start Time: 15:48:01 End Time: 00:04:02

Capacity: psig
 Last Calib.: 2019.05.02
 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF: Weak Blow , Built to 2 1/4"
 IS: No Blow Back
 FF: Weak Blow , Built to 1 inch
 FS: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Mud	0.30

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (MMcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charles N Griffin

28-29S-15W Pratt,KS

PO Box 347
Pratt, KS 67124

Addie #4

Job Ticket: 64967

DST#: 1

ATTN: Bruce Reed

Test Start: 2019.05.01 @ 15:48:00

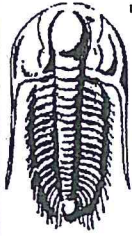
Tool Information

Drill Pipe:	Length: 4538.00 ft	Diameter: 3.80 inches	Volume: 63.66 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 116.00 ft	Diameter: 2.25 inches	Volume: 0.57 bbl	Weight to Pull Loose: 90000.00 lb
		Total Volume:	64.23 bbl	Tool Chased: ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4674.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	4716.00 ft			
Interval between Packers:	42.00 ft			
Tool Length:	181.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Successful Straddle

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4653.00	
Hydraulic tool	5.00			4658.00	
Jars	5.00			4663.00	
Safety Joint	2.00			4665.00	
Packer	5.00			4670.00	26.00 Bottom Of Top Packer
Packer	4.00			4674.00	
Stubb	1.00			4675.00	
Recorder	0.00	8672	Inside	4675.00	
Recorder	0.00	6751	Outside	4675.00	
Perforations	40.00			4715.00	
Blank Off Sub	1.00			4716.00	42.00 Tool Interval
Packer	3.00			4719.00	
Perforations	2.00			4721.00	
Change Over Sub	2.00			4723.00	
Recorder	0.00	6668	Below	4723.00	
Drill Pipe	96.00			4819.00	
Change Over Sub	2.00			4821.00	
perforations	5.00			4826.00	
Bullnose	3.00			4829.00	113.00 Bottom Packers & Anchor

Total Tool Length: 181.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charles N Griffin

28-29S-15W Pratt,KS

PO Box 347
Pratt, KS 67124

Addie #4

Job Ticket: 64967

DST#: 1

ATTN: Bruce Reed

Test Start: 2019.05.01 @ 15:48:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 48.00 sec/qt
Water Loss: 8.78 in³
Resistivity: ohm.m
Salinity: 6000.00 ppm
Filter Cake: 0.02 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	Mud	0.295

Total Length: 60.00 ft Total Volume: 0.295 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8672

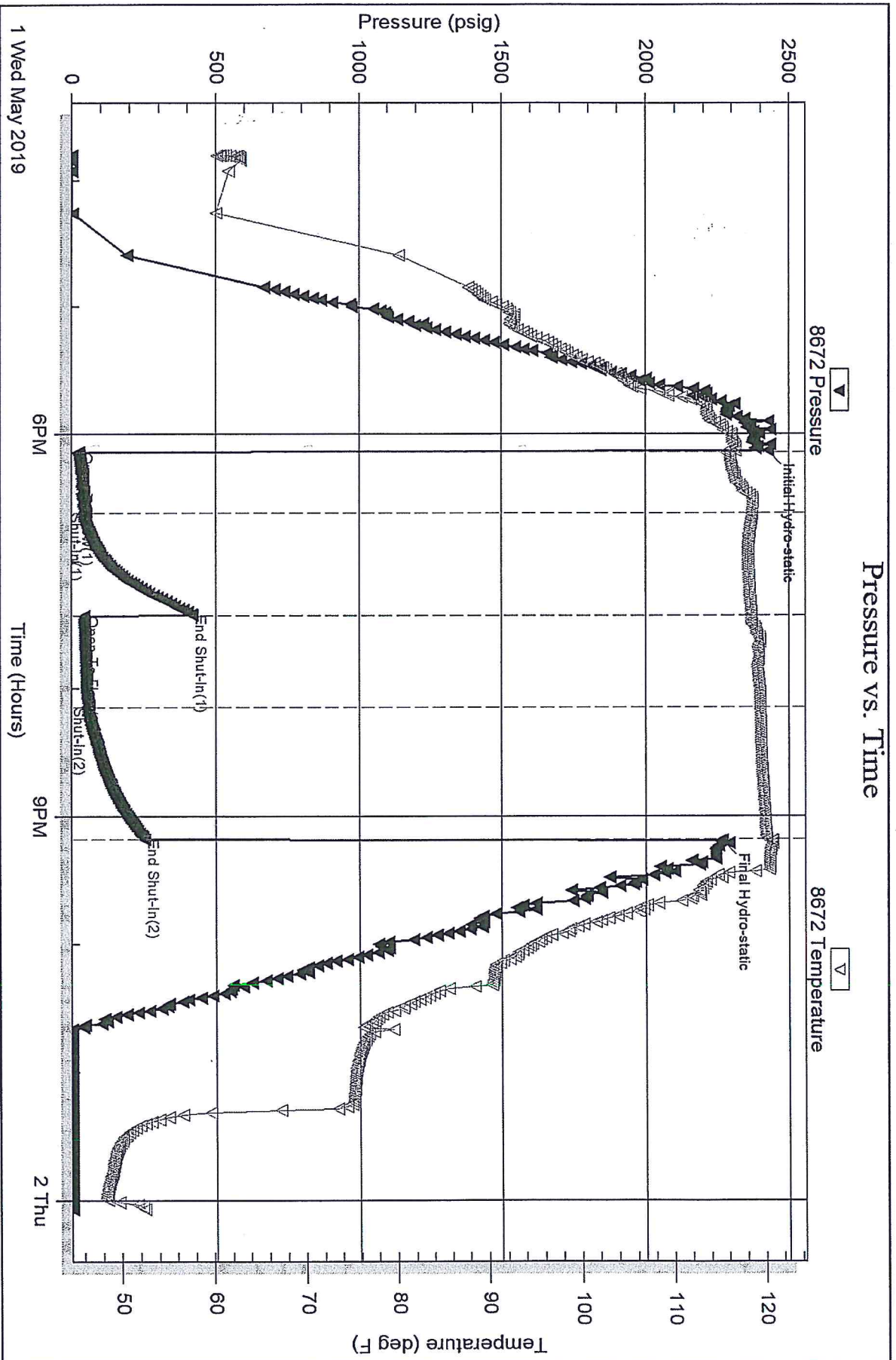
Inside

Charles N Griffin

Addie #4

DST Test Number: 1

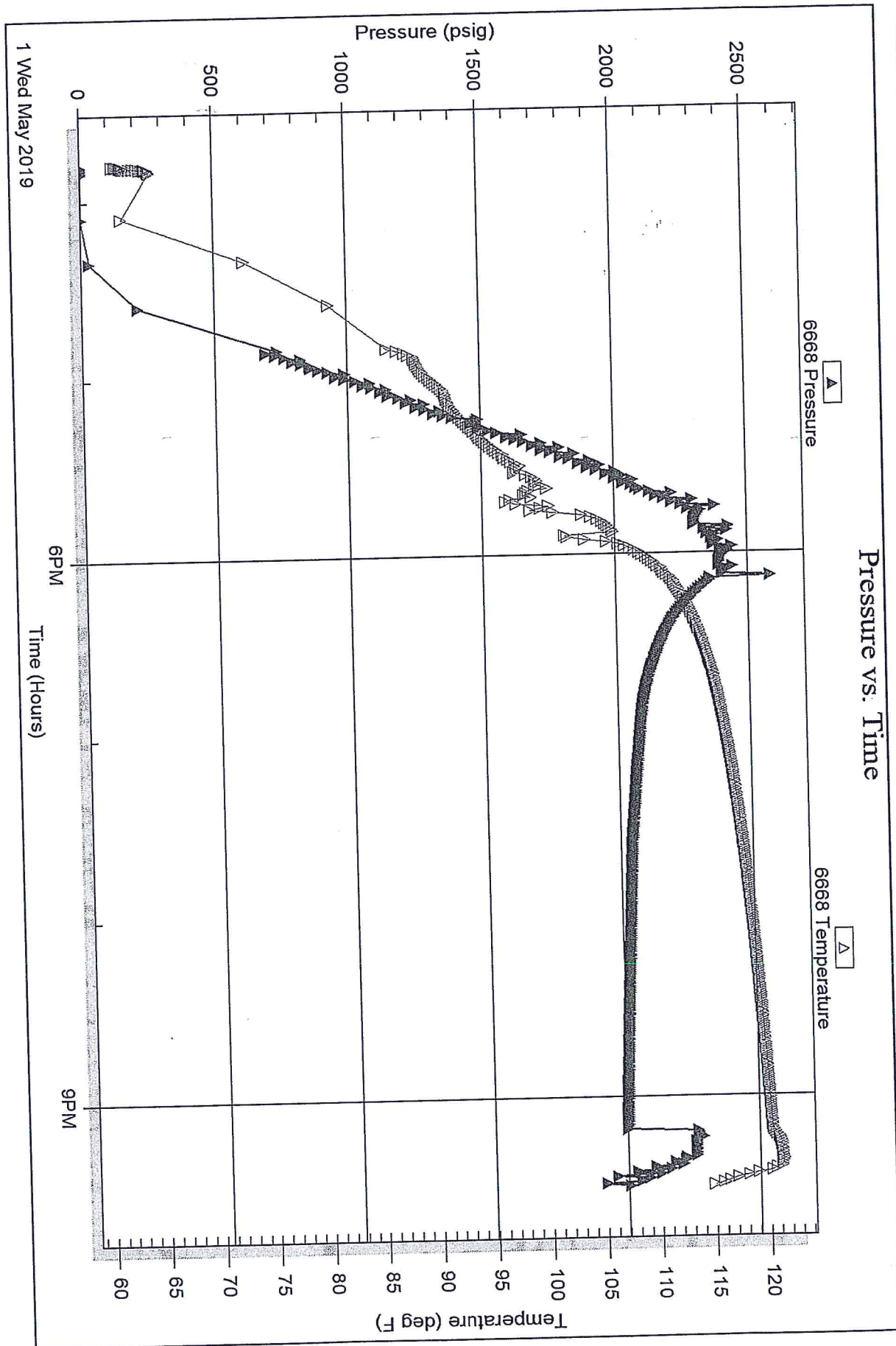
Pressure vs. Time



Triobite Testing, Inc

Ref. No: 64967

Printed: 2019.05.03 @ 10:44:34

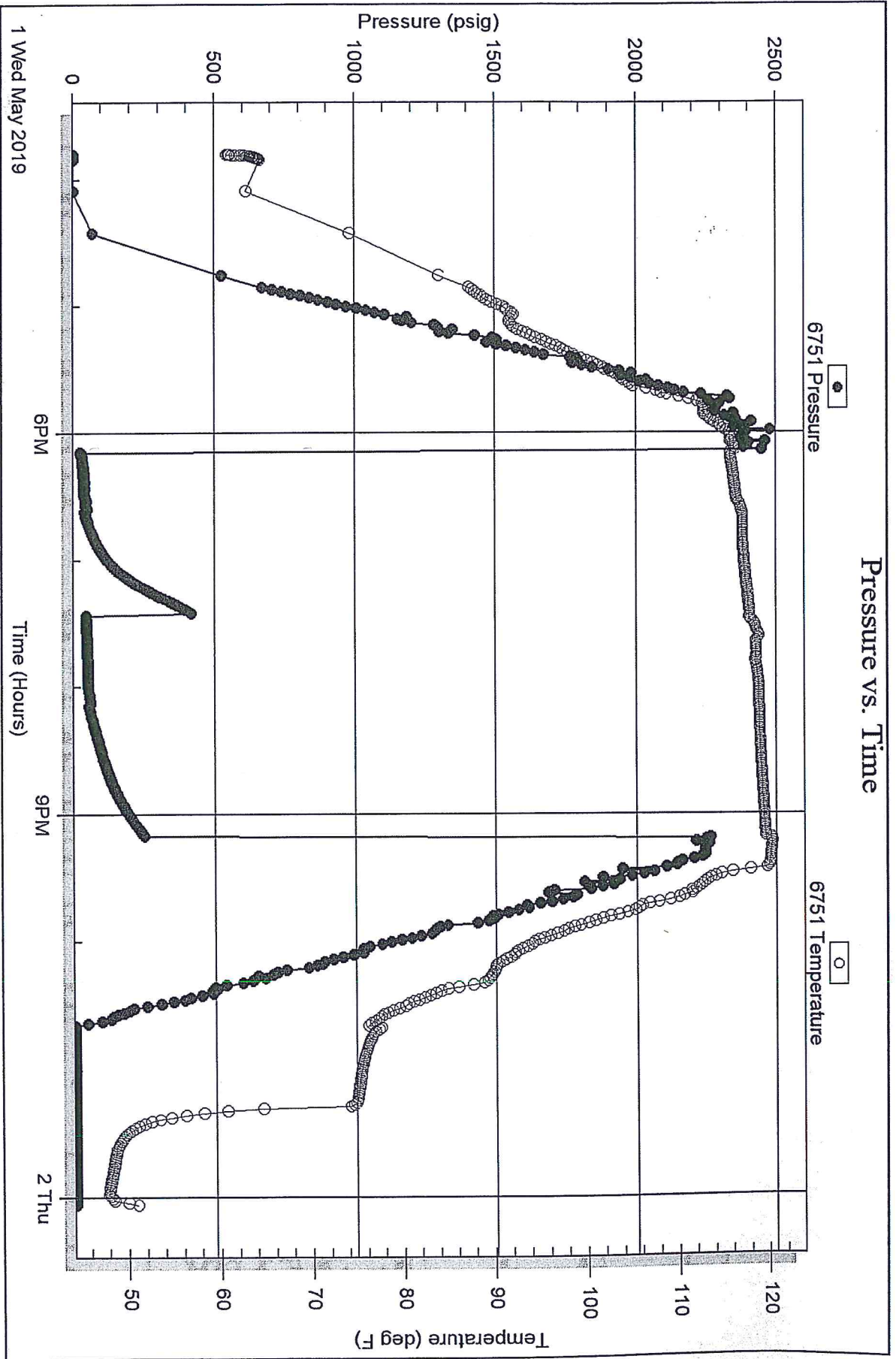


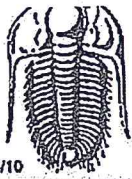
Serial #: 6751

Outside Charles N Griffin

Addle #4

DST Test Number: 1





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 64967

Well Name & No. 4 Addie Test No. 1 Date 05/01/19
 Company Charles N. Griffin Elevation 2010 KB 1999 GL
 Address PO Box 347 Pratt, KS 67124
 Co. Rep/Geo. Bruce Reed Rig WW 14
 Location: Sec. 28 Twp 29S Rge. 15W Co. Pratt State KS

Interval Tested 4674 - 4716 Zone Tested Viola
 Anchor Length 42 Drill Pipe Run 4538 Mud Wt. 9.1
 Top Packer Depth 4669 Drill Collars Run 116 Vis 48
 Bottom Packer Depth 4716 Wt. Pipe Run 0 WL 8.8
 Total Depth 4829 Chlorides 6000 ppm System LCM 6

Blow Description FF: weak blow, Built to 2 1/4 inch
ISI: NO Blow Back
FF: weak blow, Built to 1 inch
FSI: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%m
<u>60</u>	<u>Mud</u>				
Rec	Feet of	%gas	%oil	%water	%m
Rec	Feet of	%gas	%oil	%water	%m
Rec	Feet of	%gas	%oil	%water	%m
Rec	Feet of	%gas	%oil	%water	%m

Rec Total 60 BHT 120 Gravity N/C API RW N/C @ N/C Chlorides N/C pp
 (A) Initial Hydrostatic 2427 Test 1300 T-On Location 14:00
 (B) First Initial Flow 25 Jars 250 T-Started 15:48
 (C) First Final Flow 43 Safety Joint 75 T-Open 18:08
 (D) Initial Shut-In 419 Circ Sub T-Pulled 21:10
 (E) Second Initial Flow 44 Hourly Standby T-Out 00:04
 (F) Second Final Flow 53 Mileage (60) Twice Comments Had to Drive
 (G) Final Shut-In 253 Sampler 60+60 Back to shop for ad
 (H) Final Hydrostatic 2266 Straddle 600 Perf. Successful
 EM Tool
 Ruined Shale Packer
 Ruined Packer
 Extra Copies
 Initial Open 30
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 60
 Sub Total 0
 Total 2345
 Sub Total 2345
 MP/DST Disc't

Approved By Bruce Reed Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

QUALITY WELL SERVICE, INC.

Inv. 7110
C-2013

Federal Tax I.D. # 481187368

Home Office 30060 N. Hwy 281, Pratt, KS 67124

Mailing Address P.O. Box 468

Office 620-727-3410
Fax 620-672-3663

Rich's Cell 620-727-3409
Brady's Cell 620-727-6964

Date	Sec.	Twp.	Range	County	State	On Location	Finish
4-27-19	28	29S	15W	PRATT	KS		
Lease Addie	Well No. 4	Location PRATT, KS W on HWY 54 to 140 th Rd					
Contractor WW Dzlg Rig #14				Owner 10S to 100 th Rd 1E to 130 th 7S E. into To Quality Well Service, Inc.			
Type Job Surface				You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.			
Hole Size 12 1/4	T.D. 267'						
Csg. 8 5/8 23 #	Depth 267'			Charge To Griffin			
Tbg. Size	Depth			Street			
Tool	Depth			City State			
Cement Left in Csg. 25	Shoe Joint 25			The above was done to satisfaction and supervision of owner agent or contractor.			
Meas Line	Displace 15.5			Cement Amount Ordered 300 sk Common			
EQUIPMENT				2 1/2 GAL 3/4" CL 1/2" PS USEO 275 sk			
Pumptrk 8 No.	TI			Common 275 sk			
Bulktrk 10 No.	SALCE			Poz. Mix			
Bulktrk No.				Gel. 5 sk			
Pickup No.				Calcium 10 sk			
JOB SERVICES & REMARKS				Hulls			
Rat Hole				Salt			
Mouse Hole				Flowseal 137.5 lbs			
Centralizers				Kol-Seal			
Baskets				Mud CLR 48			
D/V or Port Collar				CFL-117 or CD110 CAF 38			
Run 6 #1's 8 5/8 23 # Csg set @ 267'				Sand			
Csg on Bottom Hookup to Csg				Handling 290			
Break Circ w leg				Mileage 25			
START Pumping 5 Bbls H ₂ O				8 5/8 FLOAT EQUIPMENT			
START mix Pump 275 sk				Guide Shoe HEAD & manifold			
Common 2 1/2 GAL 3/4" CL 1/2" PS @ 14.8 1/4				Centralizer 8 5/8 WOODEN Plug			
SHOT DOWN				Baskets			
RELEASE 8 5/8 WOODEN Plug				AFU Inserts			
START DISP				Float Shoe			
Plug down 15.5 Bbls				Latch Down			
CLOSE Valve on Csg				SERVICE Sup.			
Good circ thru JOB				LMV 25			
CIRC CNT TO PT				Pumptrk Charge 5CF			
Thank you				Mileage 50			
PLEASE Call AGAIN				Tax			
TODD TI TAKE				Discount			
John [Signature]				Total Charge			

QUALITY WELL SERVICE, INC.

7113

Federal Tax I.D. # 481187368

Home Office 30060 N. Hwy 281, Pratt, KS 67124

Mailing Address P.O. Box 468

Office 620-727-3410

Fax 620-672-3663

Rich's Cell 620-727-3409

Brady's Cell 620-727-6964

Inv
C-2020

Date	Sec.	Twp.	Range	County	State	On Location	Finish
5-3-19	28	29S	15W	PRATT	Ks		
Lease Addie	Well No.		Location PRATT, Ks W on Hwy 54 to 140 th Rd				
Contractor WW Drlg. Rig # 14	Owner		10 S to 100 th Rd 1 E to 130 th .7 S				
Type Job 5 1/2 L.S.	To Quality Well Service, Inc.		You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. E into				
Hole Size 7 7/8	T.D. 5100						
Csg. 5 1/2	Depth 4855 4967		Charge To Griffir				
Tbg. Size	Depth		Street				
Tool	Depth		City State				
Cement Left in Csg. 19.17	Shoe Joint 19.17		The above was done to satisfaction and supervision of owner agent or contractor.				
Meas Line	Displace 117.76		Cement Amount Ordered 200 sk Pro C				
EQUIPMENT			2 1/2 GAL 10% SA H 5 1/2 SK KOSEAL				
Pumptrk 8 No.			Common 200 sk				
Bulktrk 15 No.			Poz. Mix				
Bulktrk No.			Gel. 4 sk				
Pickup No.			Calcium				
JOB SERVICES & REMARKS			Hulls				
Rat Hole 3) sk			Salt 22 sk				
Mouse Hole 2) sk			Flowseal				
Centralizers 1-2-3-4-5-6			Kol-Seal 1000 lbs				
Baskets Bottom SHOE JT			Mud CLR 48 500 gal				
D/V or Port Collar PKR on Bottom 1 4967			CFL-117 or CD110 CAF 38 CL-1 D gal				
Don 123 H's 5 1/2 15.5" csg set d 4855			Sand				
csg on Bottom Hook up to csg			Handling 226				
BREAK circ w/ rig 30 min drop Ball			Mileage 25				
SET PKR 678' circ			5 1/2 FLOAT EQUIPMENT				
START Pumping 5 Bbls H ₂ O 12 Bbls mf 5 Bbls H ₂ O			Guide Shoe HEAD? manifold 1 EA -				
START Plug R.M Holes 3) sk			Centralizer 6 EA -				
START mic & Pump 150 sk ↓ csg d 14.8 gal 1.50			Baskets 1 EA -				
SHUT DOWN CLEAR Pump Lines RELEASED Plug			AFU inserts Add H ₂ O 3 hrs				
START DISO 2 1/2 KCL			Float Shoe PKR SHOE 1 EA -				
Lift ps. 100 Bbls at 650"			Latch Down 1 EA -				
Plug down 117.76 1000#			SERVICE SUP				
PS. JO 1500#			LMV 2.5				
RELEASE! HELD 1/2 Bbl BACK			Pumptrk Charge LS				
Good circ thru JO3			Mileage 50				
Thank you TONN PLEASE CALL AGAIN TAKE							
Signature <i>[Signature]</i>							
			Tax				
			Discount				
			Total Charge				

OPERATOR

Company:
Address:

Charles N. Griffin
PO Box 347
Pratt, KS 67124

Contact Geologist:
Contact Phone Nbr:
Well Name:
Location:
Pool:
State:

#4 Addie
Section 28-29S-15W
Kansas

API: 15-151-22489
Field: Croft
Country: USA

Scale 1:240 Imperial

Well Name:
Surface Location:
Bottom Location:
API:
License Number:
Spud Date:
Region:
Drilling Completed:
Surface Coordinates:
Bottom Hole Coordinates:
Ground Elevation:
K.B. Elevation:
Logged Interval:
Total Depth:
Formation:
Drilling Fluid Type:

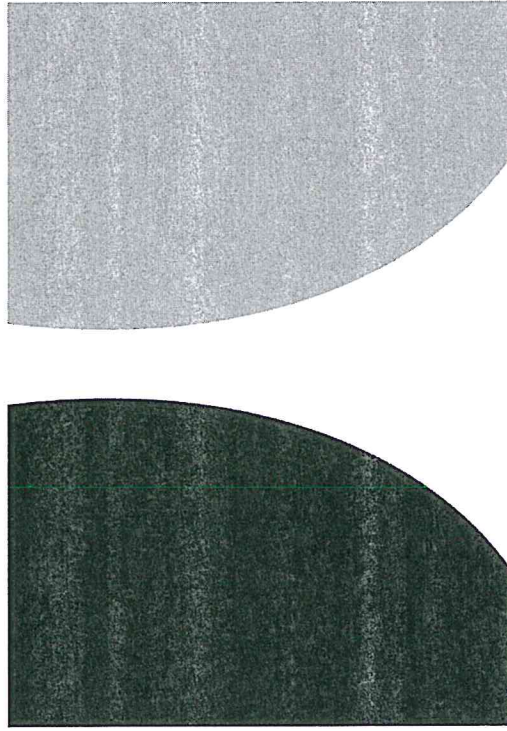
#4 Addie
Section 28-29S-15W
15-151-22489
4/26/2019
Pratt County
5/2/2019
530' FSL & 330' FWL
2003.00ft
2014.00ft
3800.00ft
5100.00ft
Chemical (MurdCo)

Time: 7:15 PM
Time: 7:30 PM
To: 5100.00ft

SURFACE CO-ORDINATES

Well Type: Vertical
Longitude: 530' FSL
N/S Co-ord: 330' FWL
E/W Co-ord: Latitude:

LOGGED BY



TERRATECH

ENERGY SERVICE, LLC

Company: TerraTech Energy Service LLC.
Address: 1632 S. West St. Suite 12
Wichita, KS 67208

Phone Nbr: 316-617-3959
Logged By: Geologist

Name: Bruce Reed

CONTRACTOR

Contractor: WW Drilling
Rig #: 14
Rig Type: mud rotary
Spud Date: 4/26/2019
TD Date: 5/2/2019
Rig Release: 5/3/2019
Time: 7:15 PM
Time: 7:30 PM
Time: 4:15 PM

ELEVATIONS

K.B. Elevation: 2014.00ft
K.B. to Ground: 11.00ft
Ground Elevation: 2003.00ft

NOTES

Surface Casing: 8-5/8" at 267'
Production Casing: 5-1/2" at 4966'

Daily Penetration:
04/26/19 Spud @ 7:15 PM
04/27/19 267'
04/28/19 2645'

04/29/19	4026'
04/30/19	4471'
05/01/19	4825'
05/02/19	4825' RTD @ 7:30 PM
05/03/19	5100' Rig released @ 4:15 PM

DRILL STEM TEST

DST #1 4674'-4716'. Viola Straddle. Weak blow that built throughout the first flow period. Weak blow throughout second flow period. Recovered: 60' mud
 IFP/30" 25-43 psi, ISIP/45" 419 psi, FFP/45" 44-53 psi. FSIP/60" 253 psi





FORMATION TOPS

Formation	Sample Top	Datum	Log Top	Datum	Comparison*
Heebner	3924'	-1910	3930'	-1916	-1911
Brown Lime	4089'	-2075	4092'	-2078	-2073
Lansing	4106'	-2092	4110'	-2096	-2087
Stark	4370'	-2356	4372'	-2358	-2351
Base KC	4497'	-2483	4496'	-2482	-2475
Pawnee	4554'	-2540	4560'	-2545	-2537

Mississippi	4659'	-2645	4656'	-2642	-2597
Viola	4692'	-2678	4693'	-2679	-2654
Simpson	4789'	-2775	4793'	-2775	-2677
Arbuckle	4932'	-2918	Not logged		

*Charles N. Griffin, #2 Addie, 1190' FSL & 790'FWL Section 28-29S-15W, Pratt County, Kansas

ROCK TYPES

	Cht		Lmst fw7> shale, gry		Carbon Sh
	Dolprim		Ss		

ACCESSORIES

MINERAL
 Chert White

OTHER SYMBOLS

INTERVALS Oil Show DST

INTERVALS

- Core
- DST

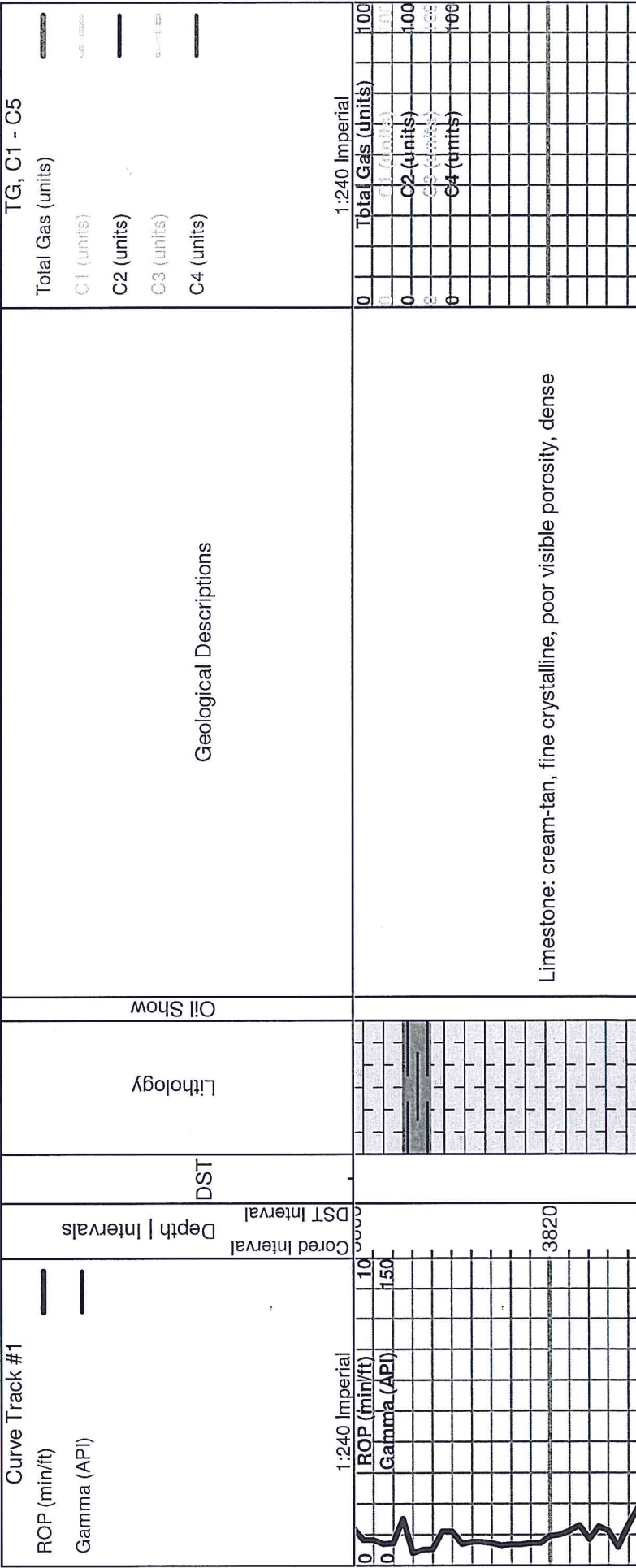
Oil Show

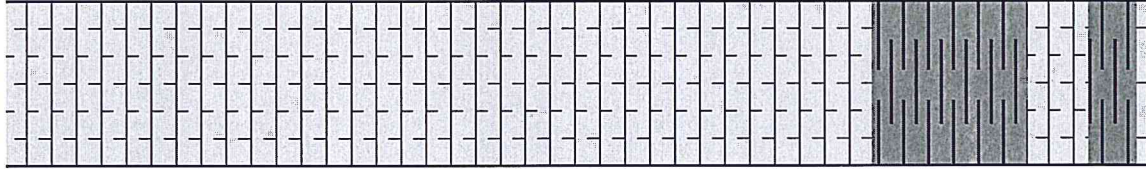
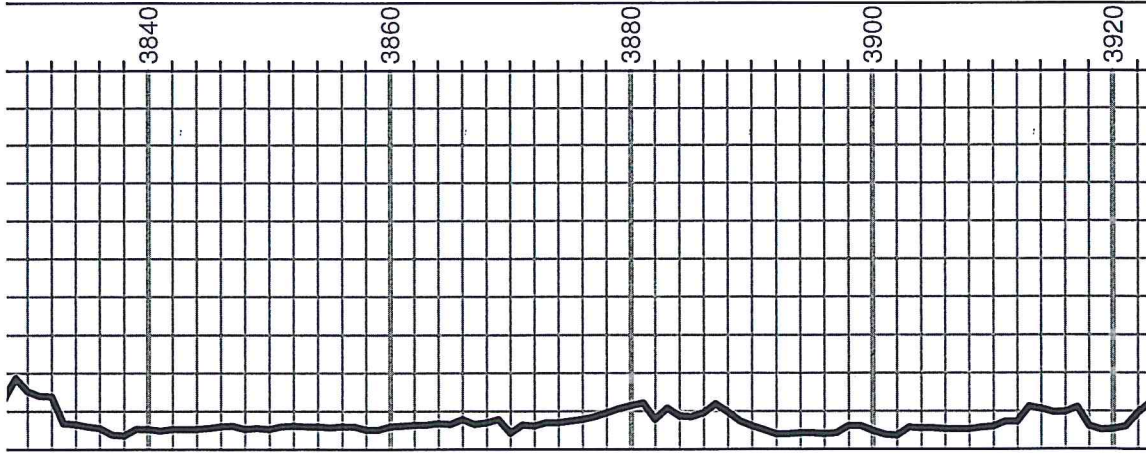
- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Stn
- D Dead Oil Stn
- Fluorescence
- * Gas

DST

- DST Int
- DST alt
- Core
- || tail pipe

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





Limestone: cream-light tan-gray, fine crystalline, very slightly fossiliferous, poor to fair visible porosity, no shows

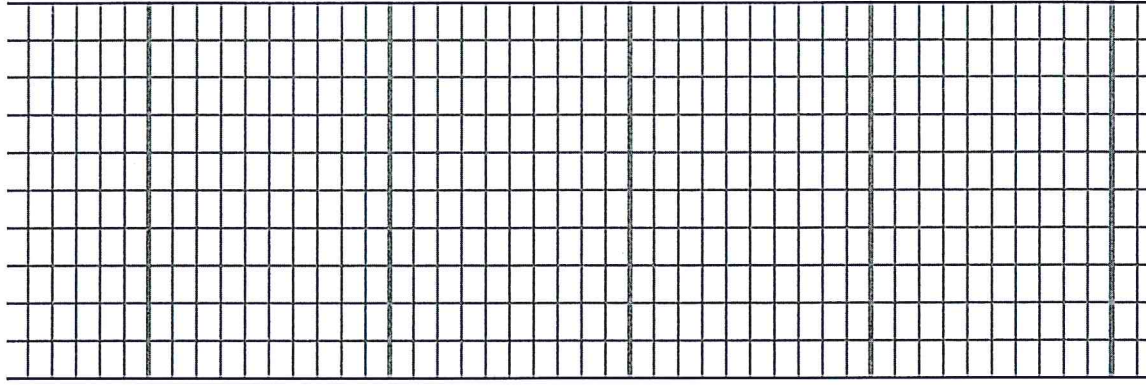
Limestone: as above

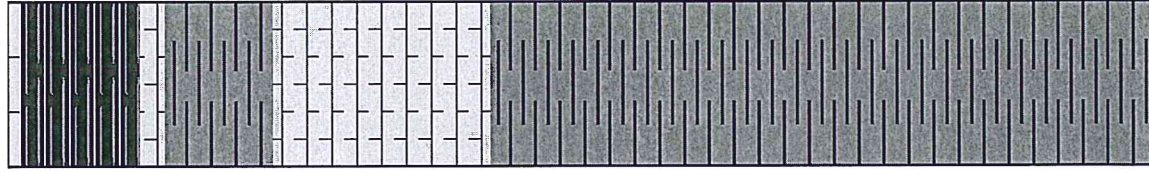
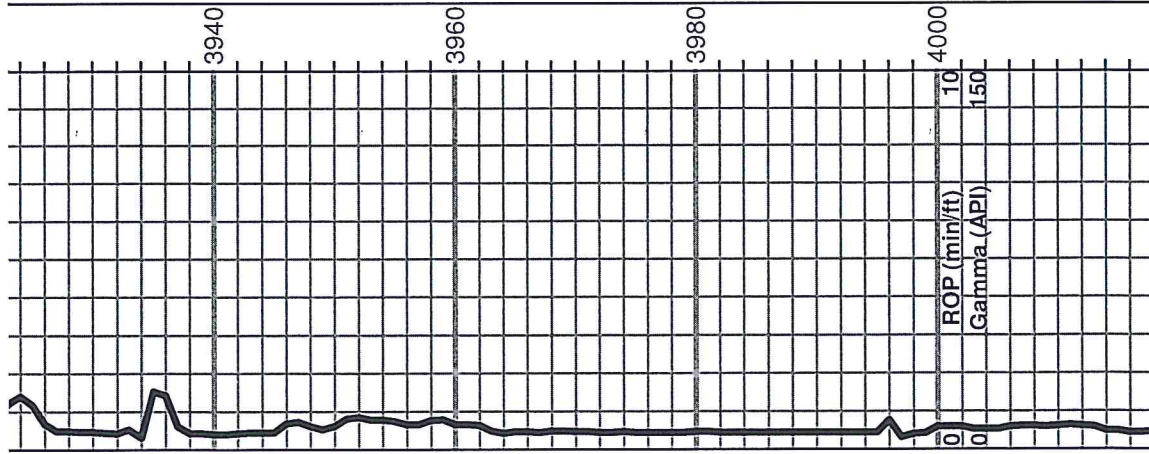
Limestone: cream-light tan, fine crystalline, dense

Limestone: as above

Shale: gray-green-brown with light tan, dense limestone

Heehner 3924' (-1910)





LOG

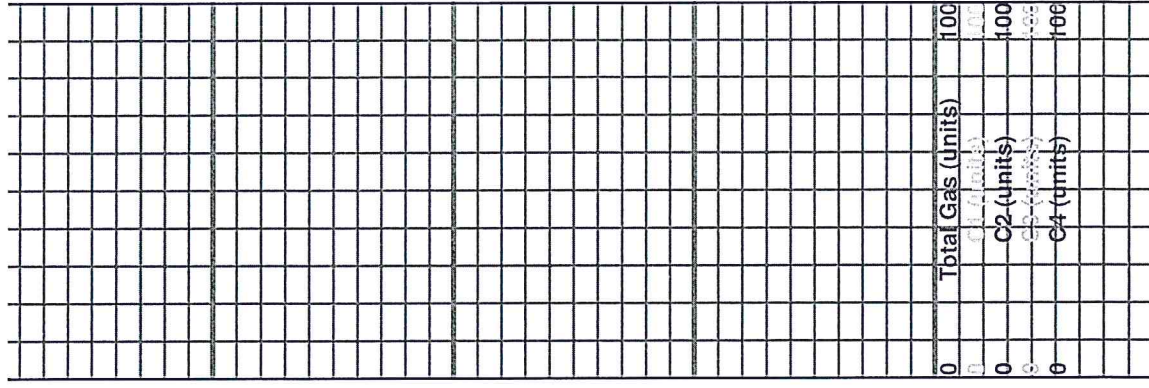
Shale: black, carbonaceous, fissile

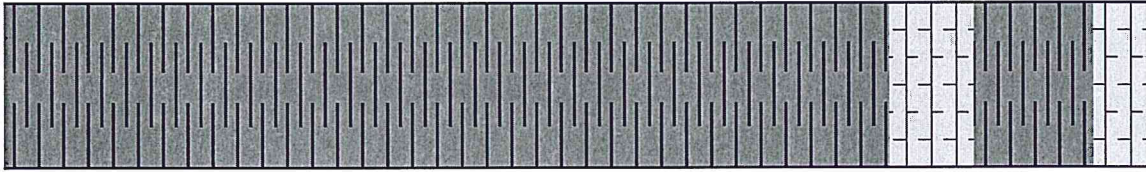
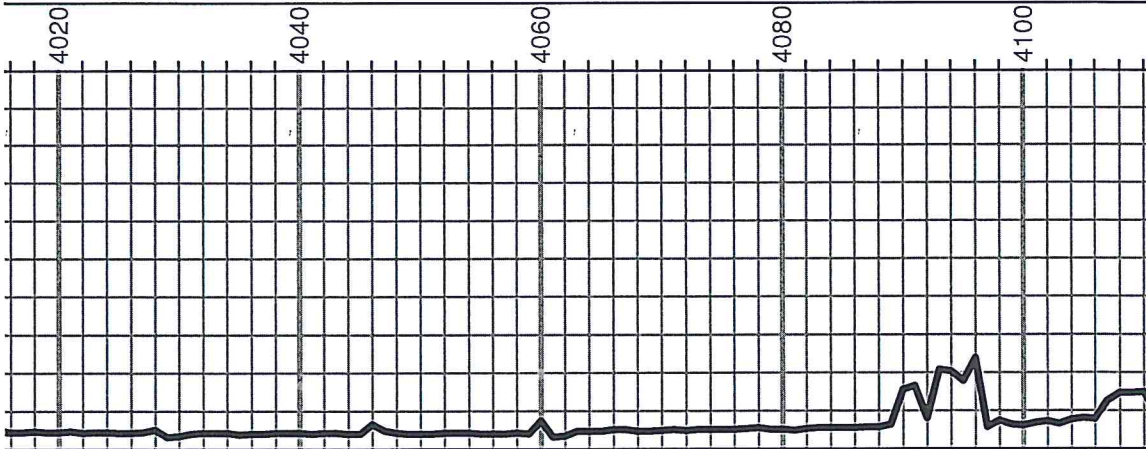
Shale: gray-green

Limestone: cream-white, fine crystalline, poor visible porosity, chalky

Shale: gray-brown, silty

Shale: dark gray-gray, silty





Shale: as above

Shale: dark-medium gray, silty to sandy

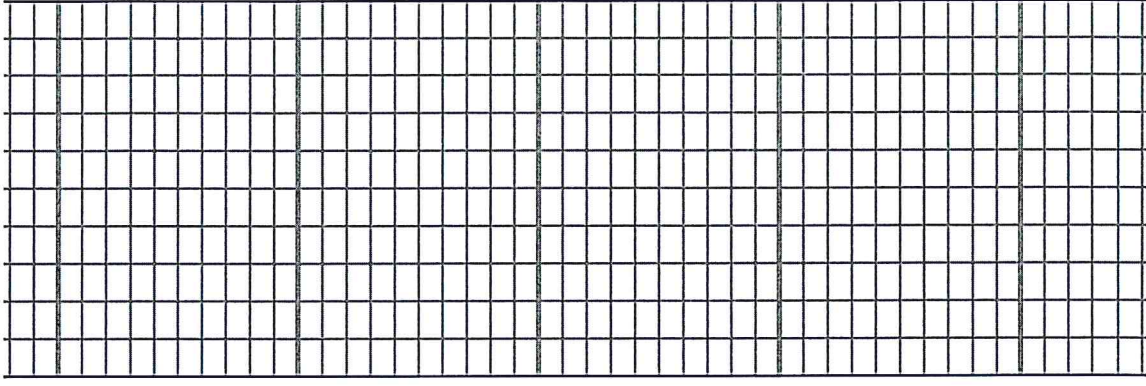
Shale: gray-medium gray, silty to sandy

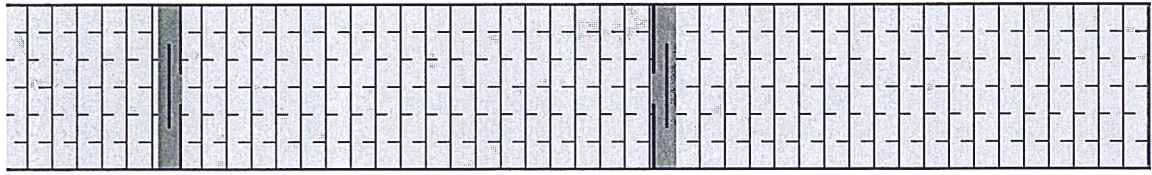
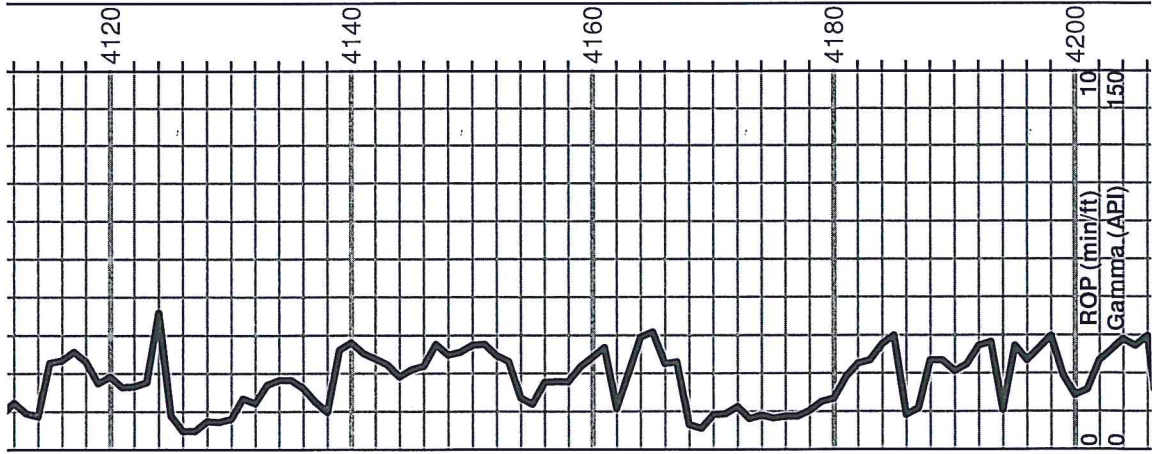
Shale: gray, silty to sandy

Brown Lime 4089' (-2075)

Limestone: tan-brown, fine crystalline, very dense shales, dark-medium gray

Lansing 4106' (-2092)





Limestone: tan-cream-white, fine crystalline, scattered visible porosity

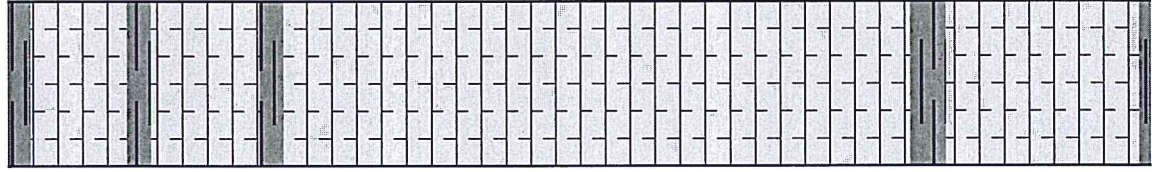
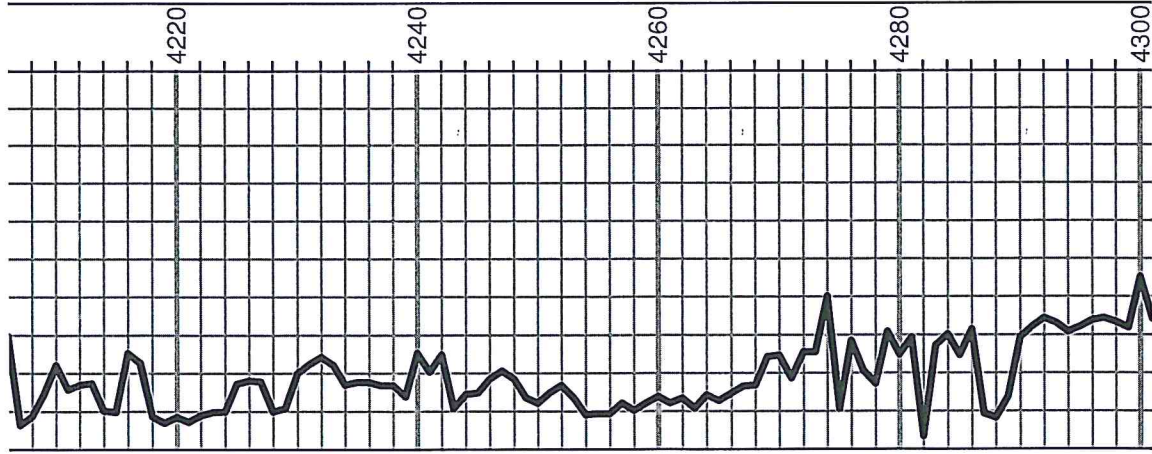
Limestone: cream-tan-light tan, fine crystalline to slightly fossiliferous, rare visible porosity, sub chalky, odor

Limestone: cream-light tan, fine crystalline, poor visible porosity, sub chalky, slight odor

Limestone: cream-white-tan, fine crystalline, poor to no visible porosity, sub chalky

Limestone: gray-tan-cream, fine crystalline to slightly fossiliferous

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



Limestone: light brown-cream, fine crystalline, sub shaley

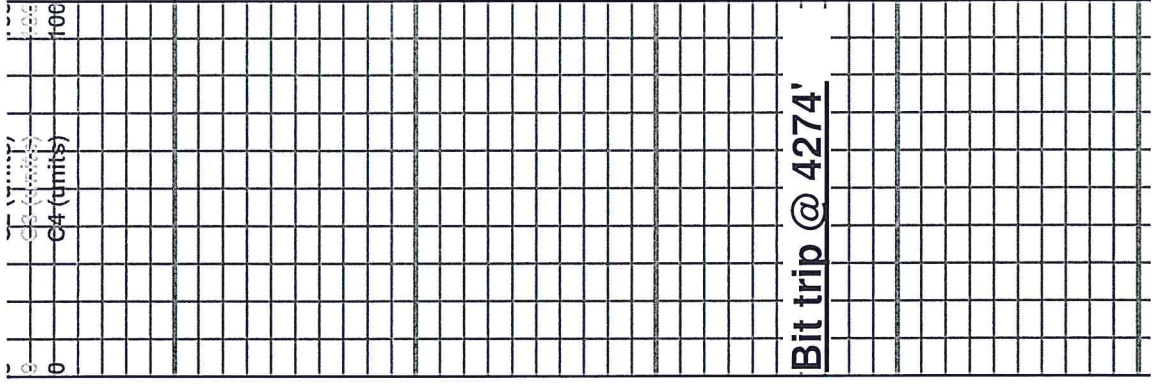
Limestone: light tan-cream-white, fine crystalline to slightly fossiliferous, poor visible porosity, sub chalky

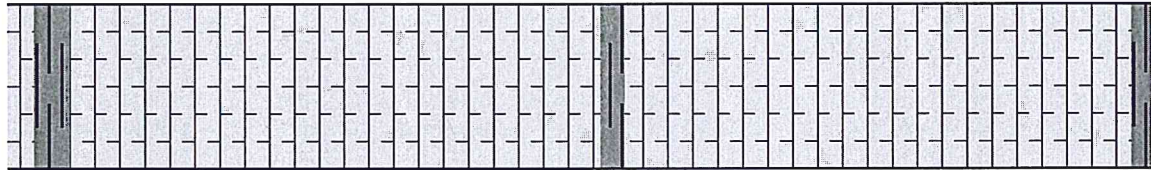
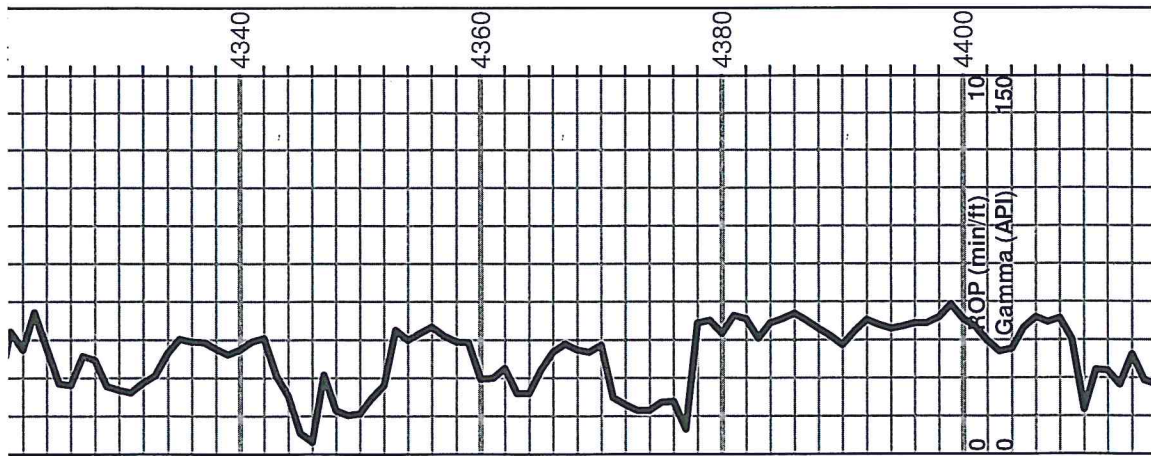
Limestone: as above

Trip cavings

Sample carries lots of shales

Limestone: light tan-cream-gray, fine crystalline, slightly fossiliferous





Limestone: cream-tan-white, dense

Limestone: cream-tan-gray, fine crystalline, slightly fossiliferous, dense

Limestone: cream-gray, dense

Limestone: as above

Stark 4370' (-2356)

Shale: dark-gray

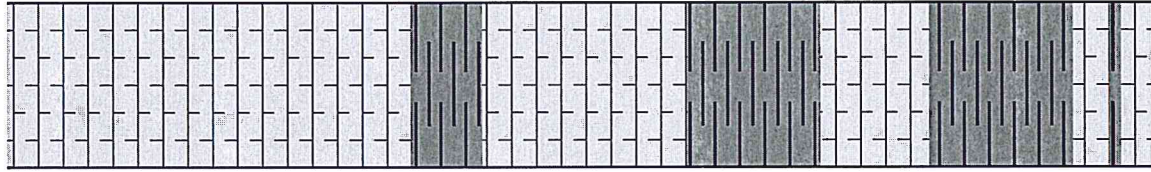
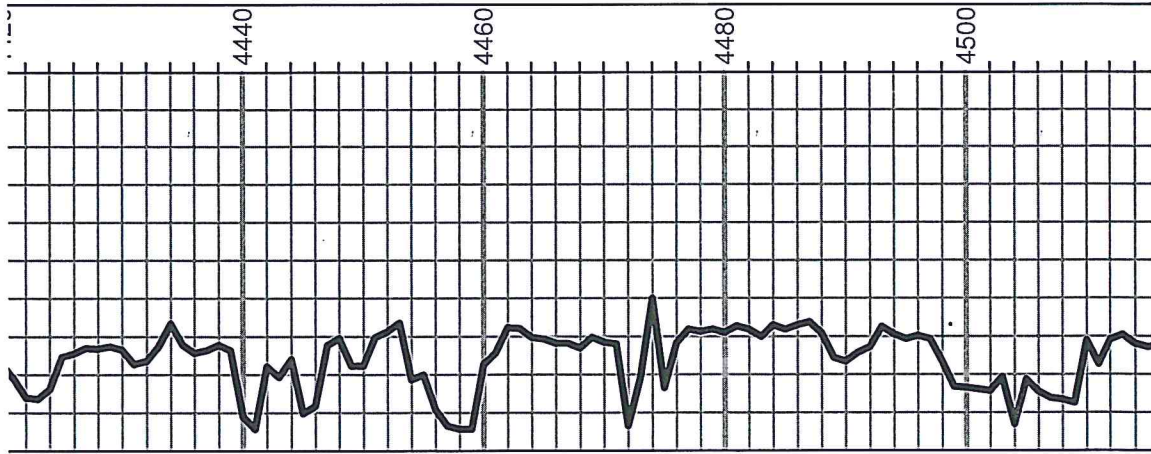
Limestone: cream-tan, fine crystalline, rare visible porosity, chalky, no shows

Limestone: tan, fine crystalline, dense, poor to no visible porosity

Limestone: cream, fine crystalline, sub chalky, dense

Limestone: as above

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



no visible porosity, dense

Limestone: cream-gray, dense

Limestone: cream-white, fine crystalline, sub chalky

Limestone: cream-white-light tan, fine crystalline, rare visible porosity, dense

Shale: gray-red

Limestone: cream-gray, fine crystalline

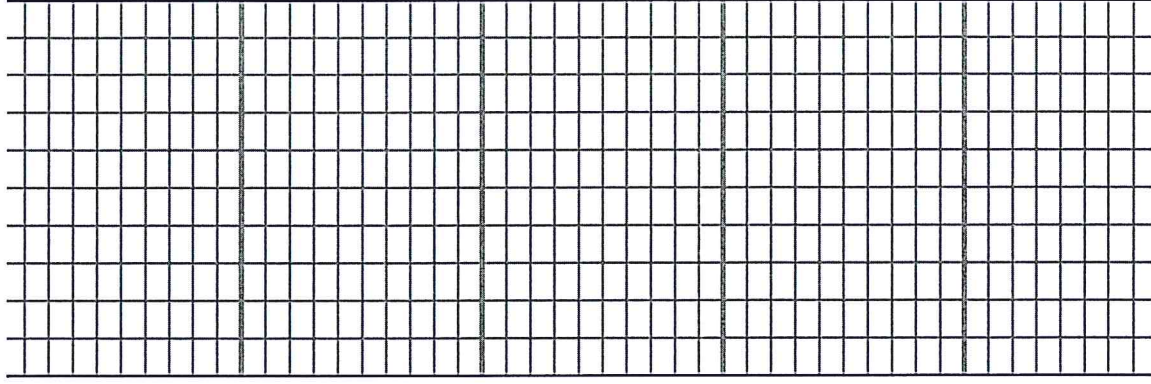
Flood shale: gray-green-red

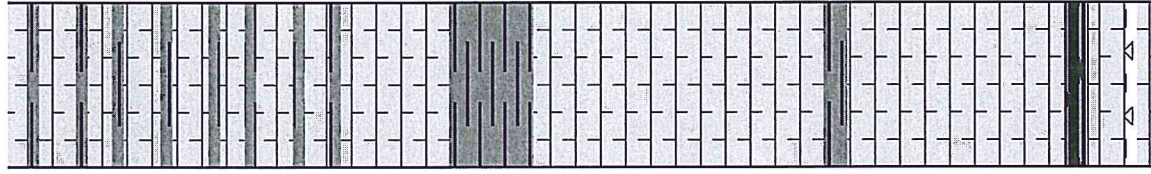
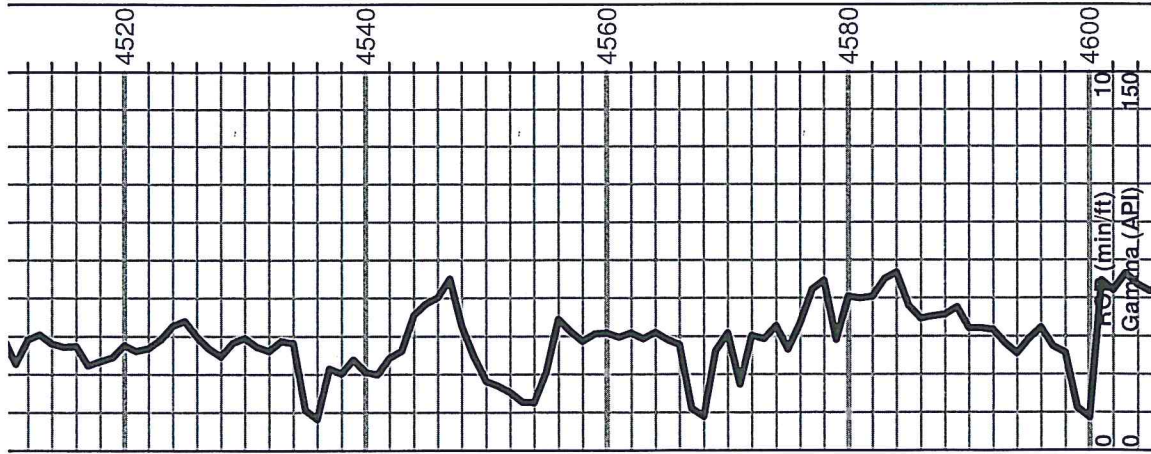
Limestone: cream-white, fine crystalline, chalky

B/KC 4497' (-2483)

Shale: vari-colored

Shale: as above





Limestone: cream-light tan, fine crystalline, soft, chalky, shales, gray-green-rust red

Shaley limestone: as above

Limestone: cream-gray, fine to almost micro-crystalline, dense

Shale: gray-green-soft

Pawnee 4554' (-2540)

Limestone: gray, fine crystalline, very dense

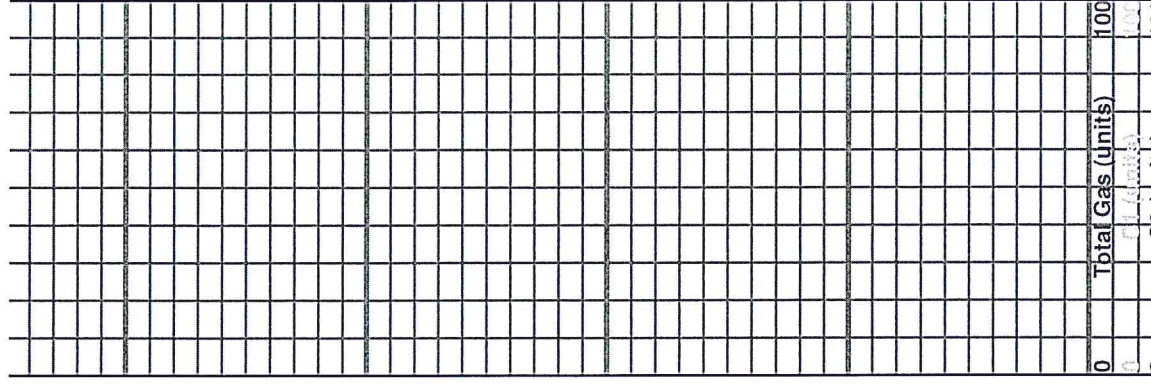
Limestone: cream-light tan, fine crystalline, poor to no visible porosity, sub chalky

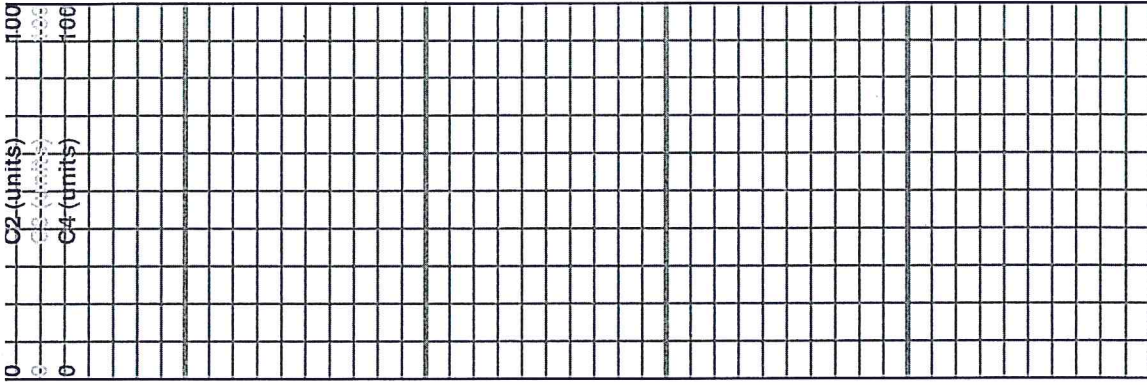
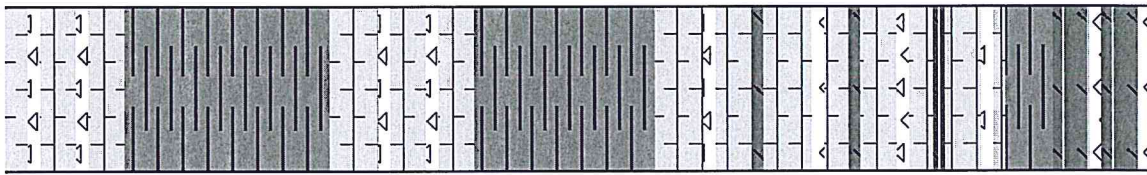
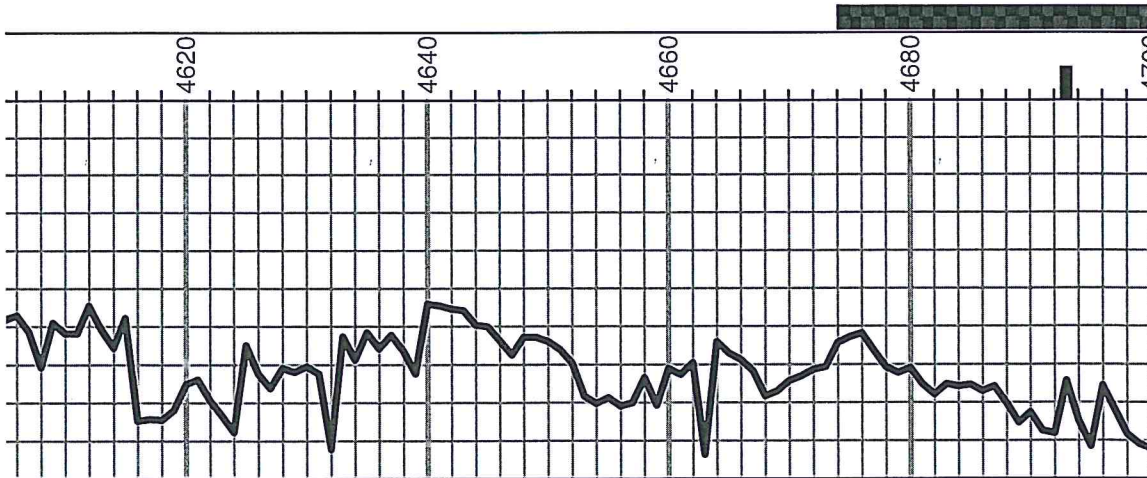
Shale: dark-medium gray

Limestone: light gray-light tan, fine to slightly medium crsytalline, sub chalky

Cherokee 4598' (-2584)

Black shale





Limestone: cream-tan, fine crystalline, dense, few pieces vari-colored chert

Shales: gray-green

Shale: gray-green, brown

Limestone: cream-green, fine crystalline, abundant chert

Abundant vari-colored shales

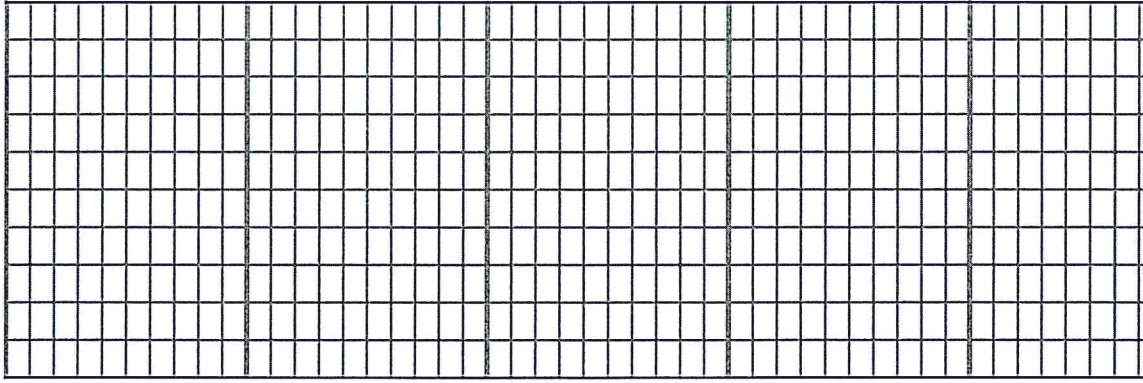
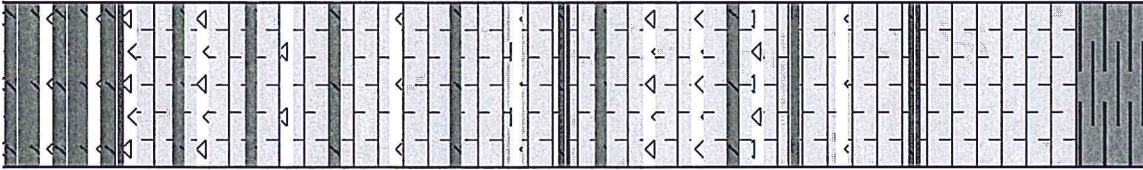
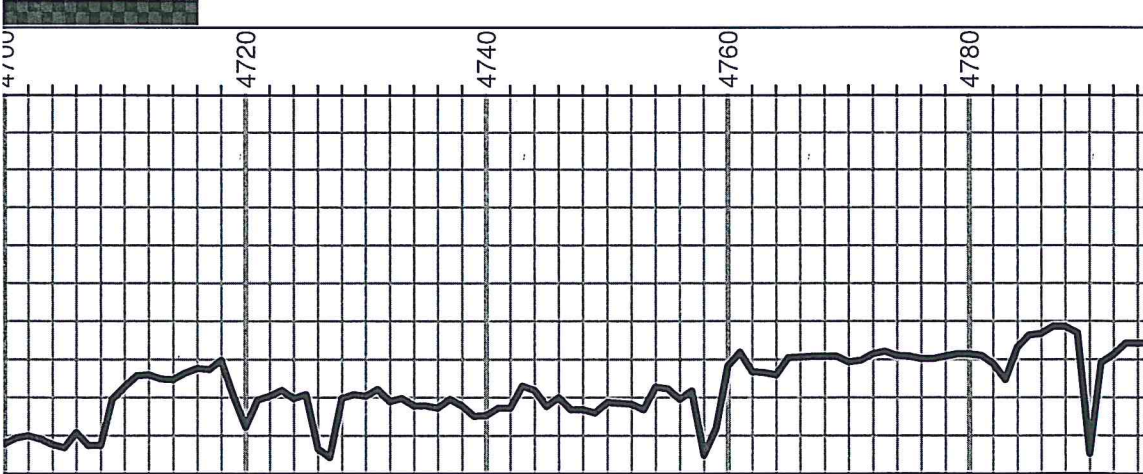
Mississippi 4659' (-2645)

Limestone: cream-light tan, fine crystalline, dense, few pieces weathered chert, sandy in part

Dolomitic: pale green, fine crystalline, sub sucrosic, sandy in part, some chert

Viola 4692' (-2678)

Circulated at 4693' Dolomitic limestone: cream-light green, finely sucrosic, cherts weathered that bleed gas, no quality shows



Dolomite: cream-tan, fine crystalline, lots of white, vitreous chert, some pieces with fair sponge texture, fair odor, scum in cup, 15%-20% bright yellow fluorescence

Cherts/dolomitic limestone: very sharp and blocky, barren

Cherty dolomite as above

Cherty dolomite as above, barren

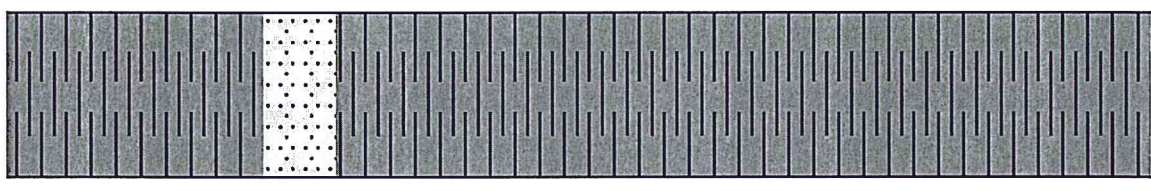
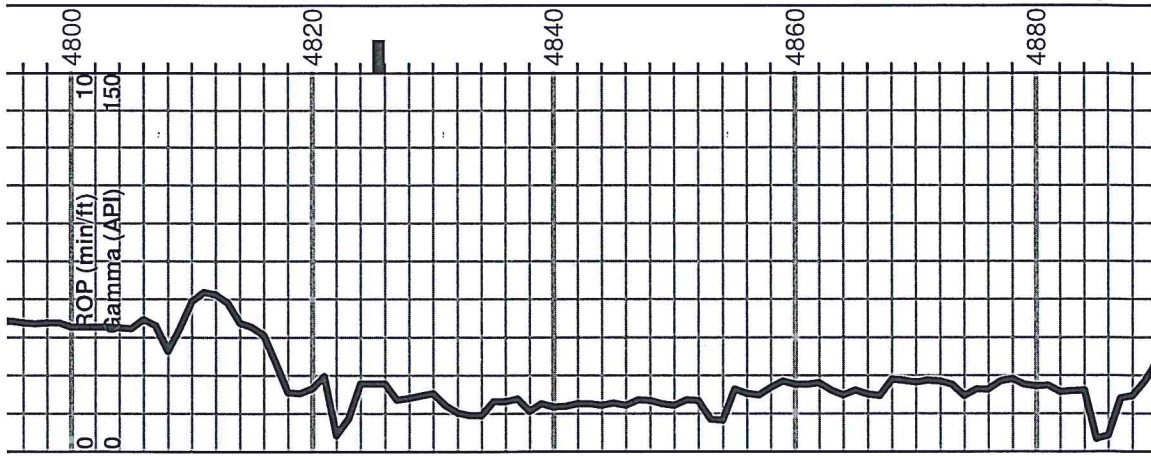
Cherty dolomitic limestone: as above

Limestone: light tan, fine to very fine crystalline, rare piece dolomite, chert, pure white

Flood cherts

Flood cherts with minor amount limestone: very slightly dolomitic

Simpson Shale 4789' (-2775)



Few pieces Simpson type shale

Increase in shale

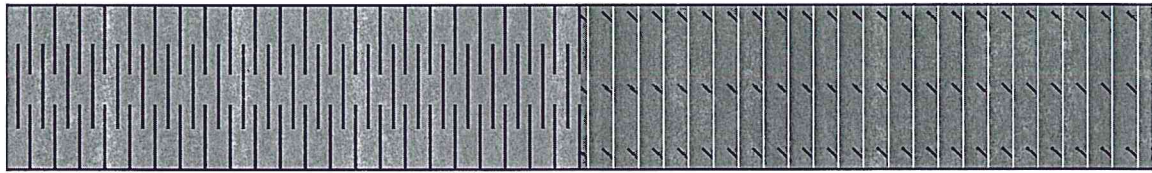
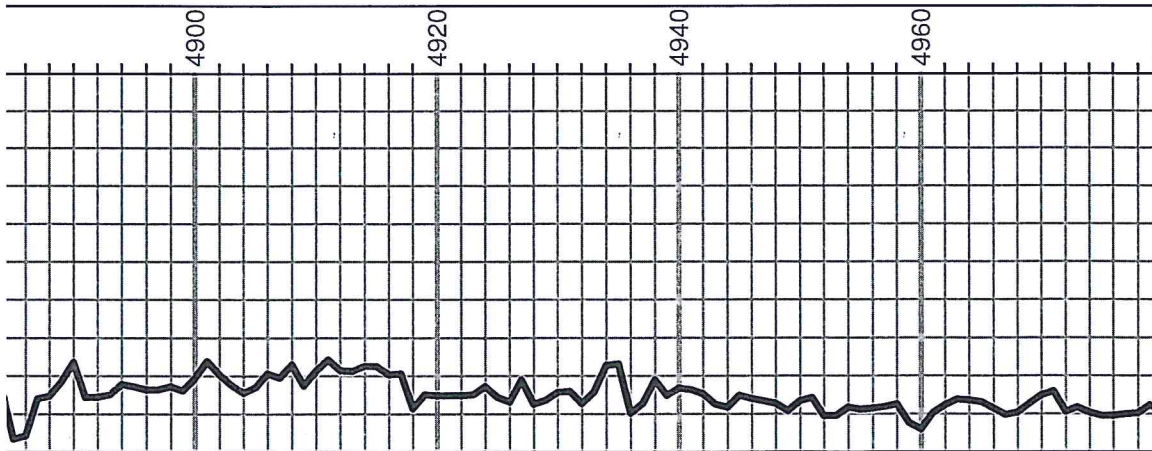
Circulated at 4825' mostly Simpson type shale, with scattered gray-cream, fine grained sandstone, no shows

Shale: dark gray, turquoise

Shale: dark gray, turquoise

Shale: dark gray-green-red-blue

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



Shale: gray-medium gray

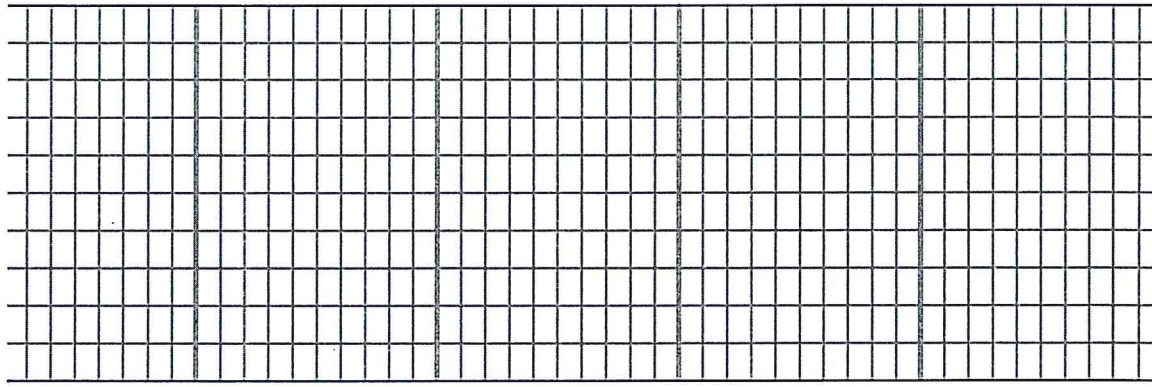
Shale: Simpson type, pyrite, few pieces white, fine grained sandstone

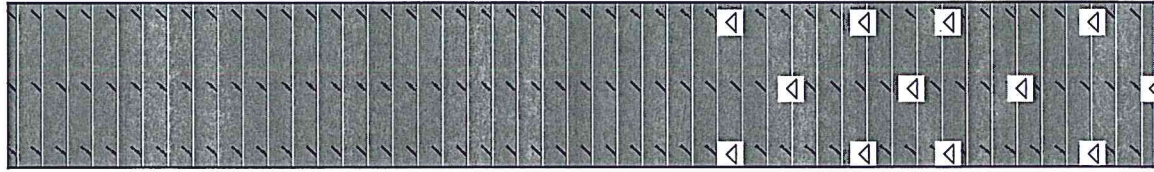
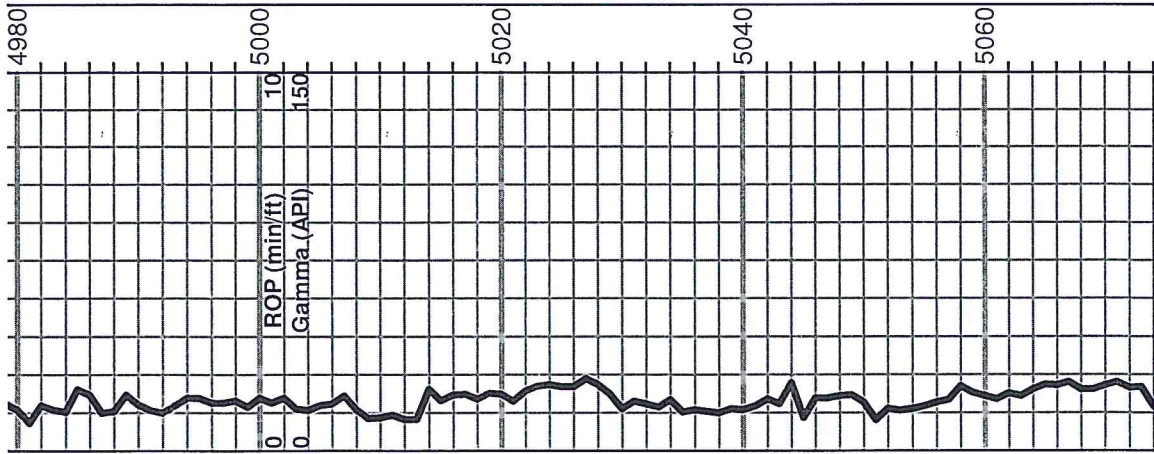
Arbuckle 4932' (-2918)

Dolomite: cream-light tan, fine crystalline, sucrosic, poor to no visible porosity

Dolomite: light tan-cream, fine to slightly medium crystalline, bright mineral fluorescence, no show free oil

Dolomite: light tan-cream, fine to more medium crystalline, fair visible





porosity, bright mineral fluorescence, no show free oil

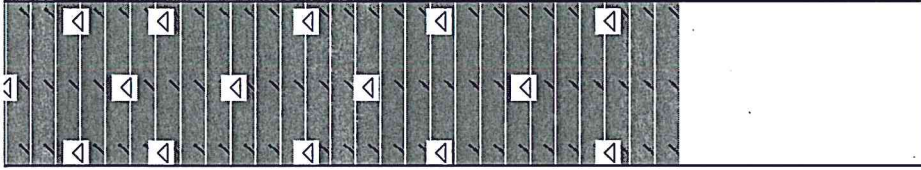
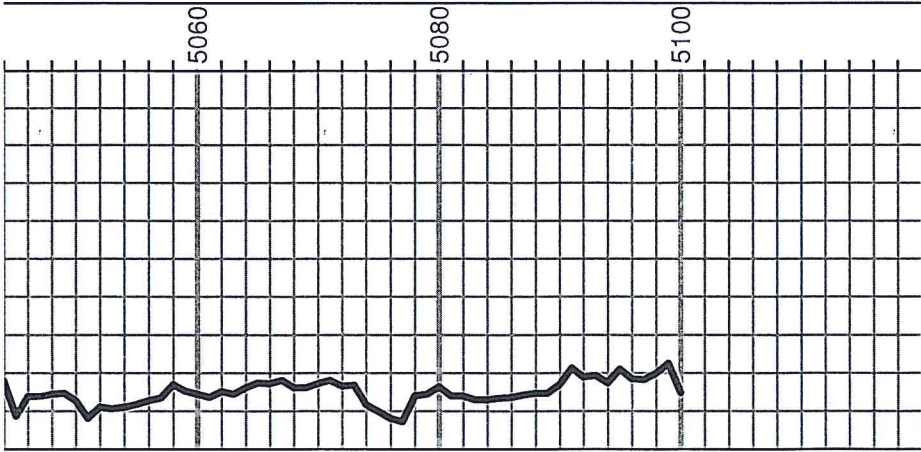
Dolomite: mostly medium crystalline, no shows

Dolomite: as above

Dolomite: cream-light tan, medium to coarse crystalline, fair visible porosity, trace white oolitic chert

Dolomite and chert: as above

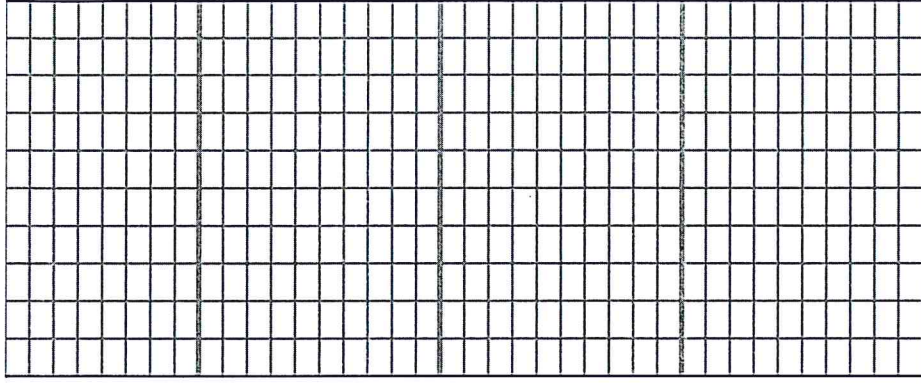
0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100



Dolomite and chert: as above

Dolomite and more cream, coarse to medium crystalline, fair visible porosity, some chert

Dolomite: as above



OPERATOR

Company:
Address:

Charles N. Griffin
PO Box 347
Pratt, KS 67124

Contact Geologist:
Contact Phone Nbr:
Well Name:
Location:
Pool:
State:

#4 Addie
Section 28-29S-15W
Kansas

API: 15-151-22489
Field: Croft
Country: USA

Scale 1:240 Imperial

Well Name:
Surface Location:
Bottom Location:
API:
License Number:
Spud Date:
Region:
Drilling Completed:
Surface Coordinates:
Bottom Hole Coordinates:
Ground Elevation:
K.B. Elevation:
Logged Interval:
Total Depth:
Formation:
Drilling Fluid Type:

#4 Addie
Section 28-29S-15W
15-151-22489
4/26/2019
Pratt County
5/2/2019
530' FSL & 330' FWL
2003.00ft
2014.00ft
3800.00ft
5100.00ft
Chemical (MurdCo)

Time: 7:15 PM

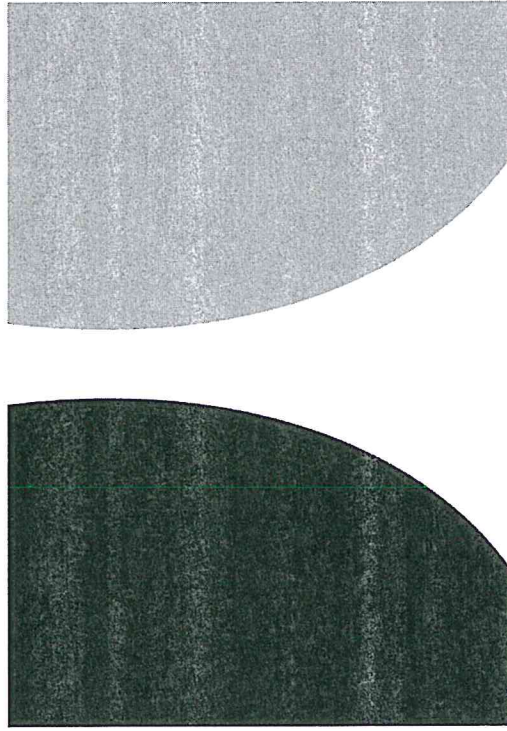
Time: 7:30 PM

To: 5100.00ft

SURFACE CO-ORDINATES

Well Type: Vertical
Longitude: 530' FSL
N/S Co-ord: 330' FWL
E/W Co-ord: Latitude:

LOGGED BY



TERRATECH

ENERGY SERVICE, LLC

Company: TerraTech Energy Service LLC.
Address: 1632 S. West St. Suite 12
Wichita, KS 67208

Phone Nbr: 316-617-3959
Logged By: Geologist

Name: Bruce Reed

CONTRACTOR

Contractor: WW Drilling
Rig #: 14
Rig Type: mud rotary
Spud Date: 4/26/2019
TD Date: 5/2/2019
Rig Release: 5/3/2019
Time: 7:15 PM
Time: 7:30 PM
Time: 4:15 PM

ELEVATIONS

K.B. Elevation: 2014.00ft
K.B. to Ground: 11.00ft
Ground Elevation: 2003.00ft

NOTES

Surface Casing: 8-5/8" at 267'
Production Casing: 5-1/2" at 4966'

Daily Penetration:
04/26/19 Spud @ 7:15 PM
04/27/19 267'
04/28/19 2645'

04/29/19	4026'
04/30/19	4471'
05/01/19	4825'
05/02/19	4825' RTD @ 7:30 PM
05/03/19	5100' Rig released @ 4:15 PM

DRILL STEM TEST

DST #1 4674'-4716'. Viola Straddle. Weak blow that built throughout the first flow period. Weak blow throughout second flow period. Recovered: 60' mud
 IFP/30" 25-43 psi, ISIP/45" 419 psi, FFP/45" 44-53 psi. FSIP/60" 253 psi

FORMATION TOPS

Formation	Sample Top	Datum	Log Top	Datum	Comparison*
Heebner	3924'	-1910	3930'	-1916	-1911
Brown Lime	4089'	-2075	4092'	-2078	-2073
Lansing	4106'	-2092	4110'	-2096	-2087
Stark	4370'	-2356	4372'	-2358	-2351
Base KC	4497'	-2483	4496'	-2482	-2475
Pawnee	4554'	-2540	4560'	-2545	-2537

INTERVALS

- Core
- DST

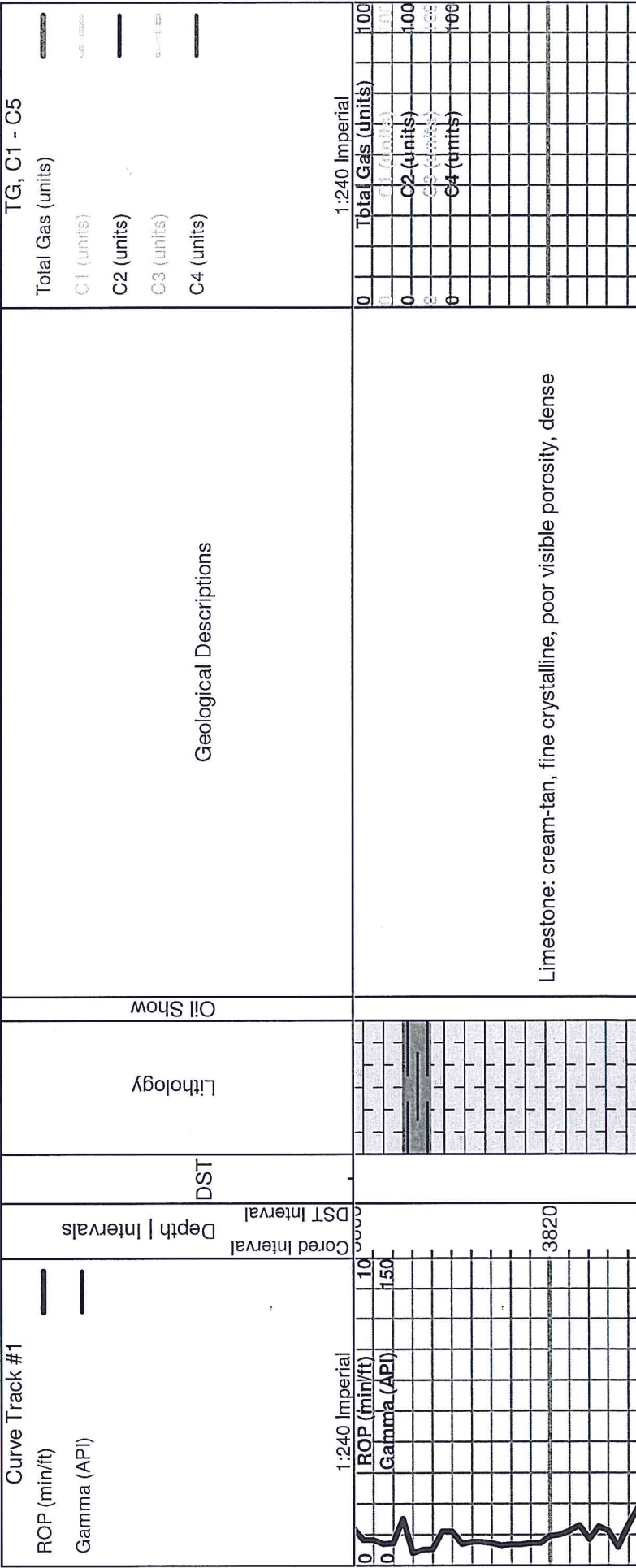
Oil Show

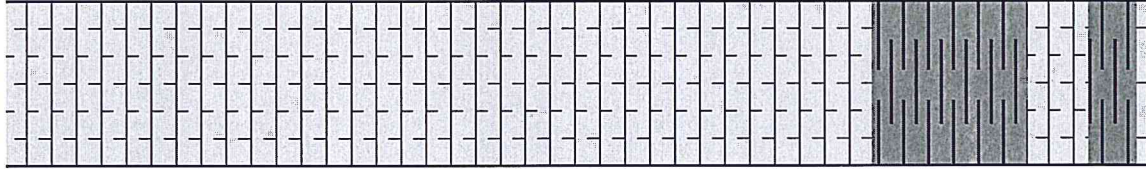
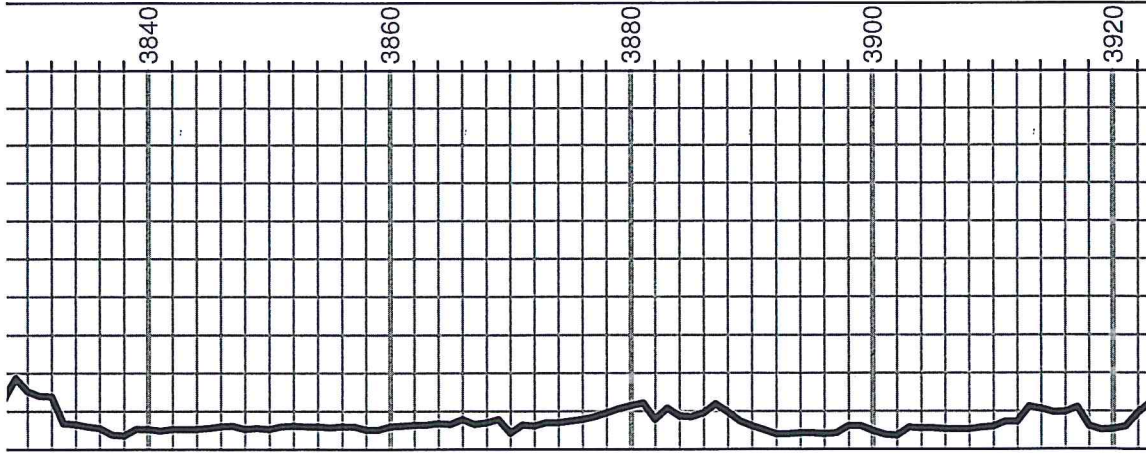
- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Stn
- D Dead Oil Stn
- Fluorescence
- * Gas

DST

- DST Int
- DST alt
- Core
- || tail pipe

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





Limestone: cream-light tan-gray, fine crystalline, very slightly fossiliferous, poor to fair visible porosity, no shows

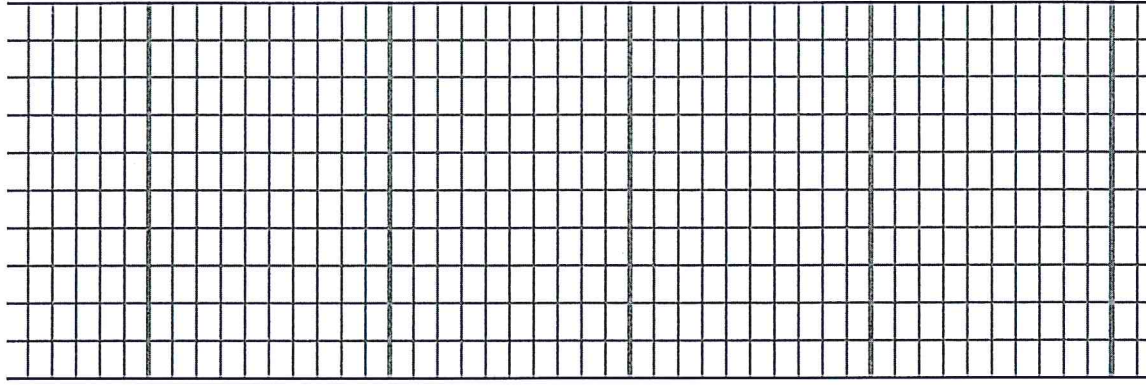
Limestone: as above

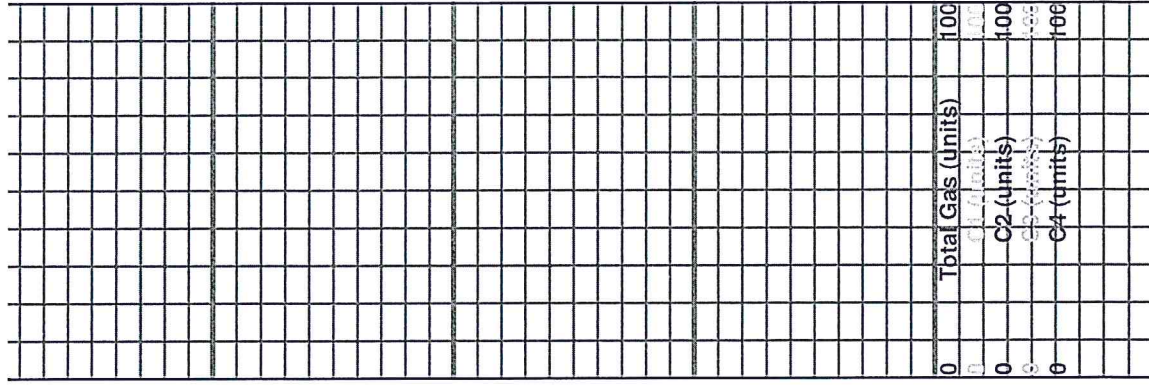
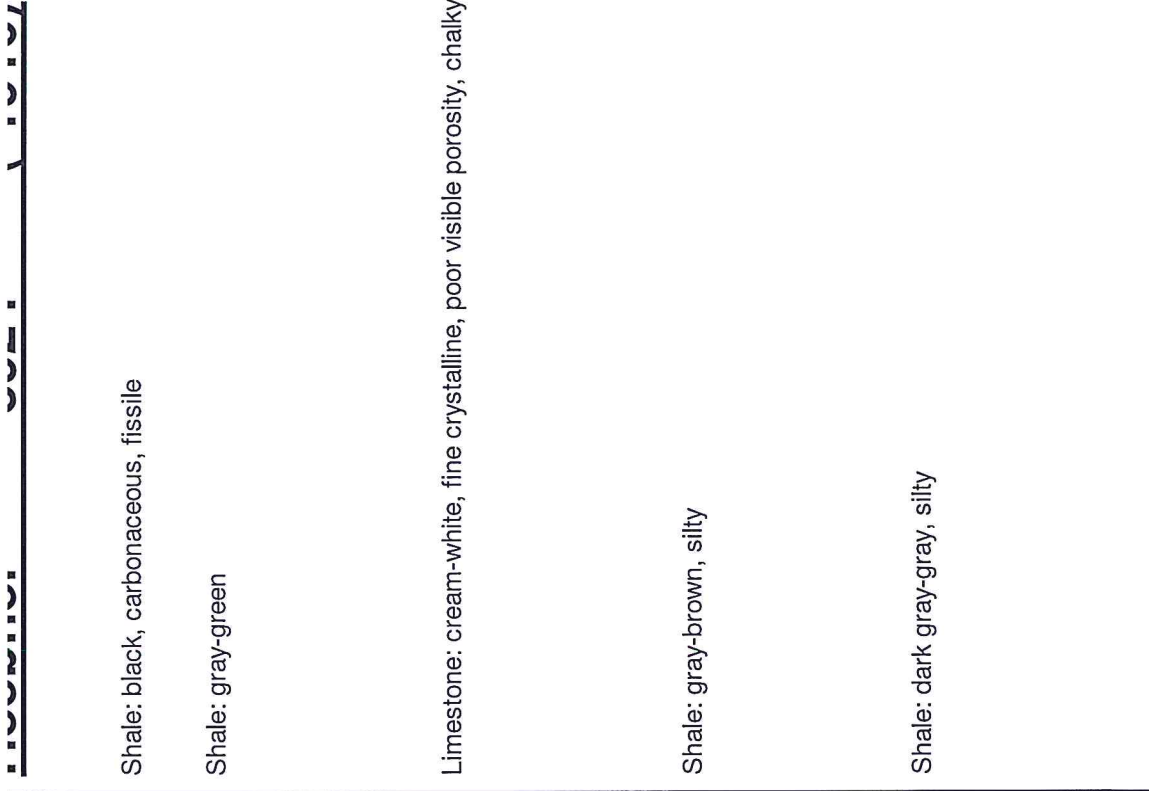
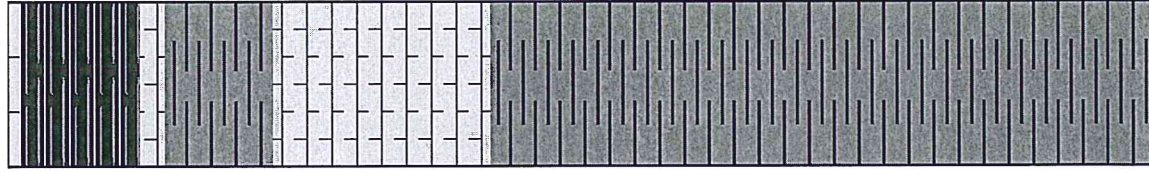
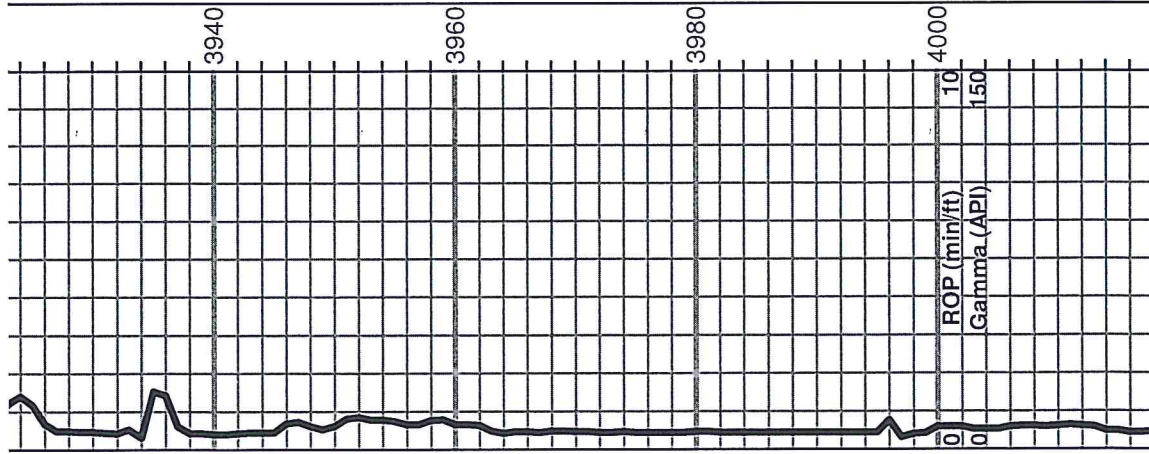
Limestone: cream-light tan, fine crystalline, dense

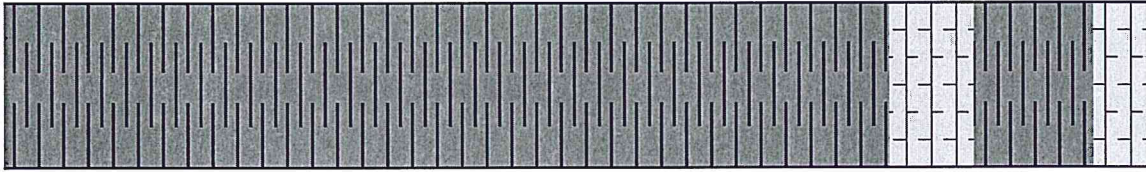
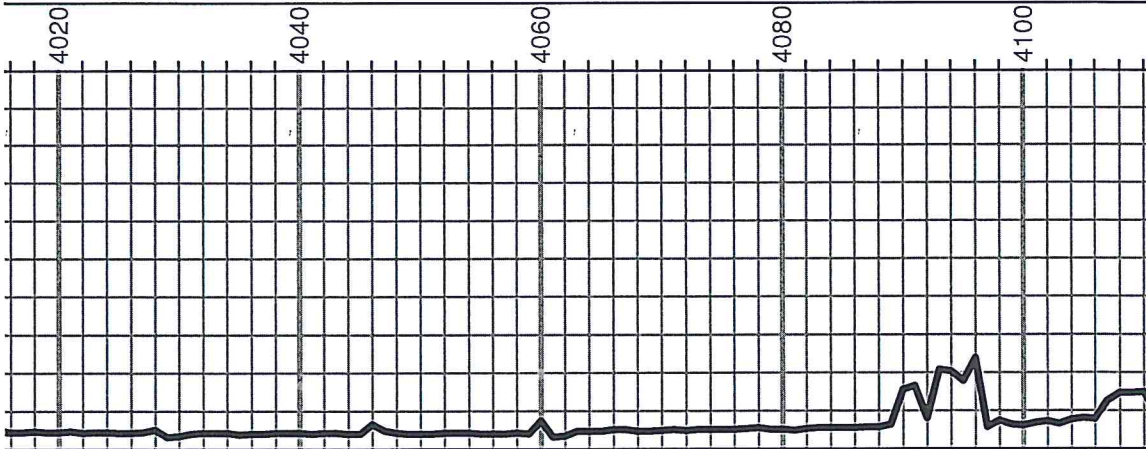
Limestone: as above

Shale: gray-green-brown with light tan, dense limestone

Heehner 3924' (-1910)







Shale: as above

Shale: dark-medium gray, silty to sandy

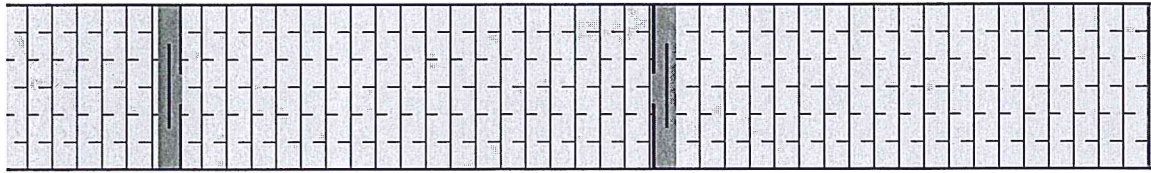
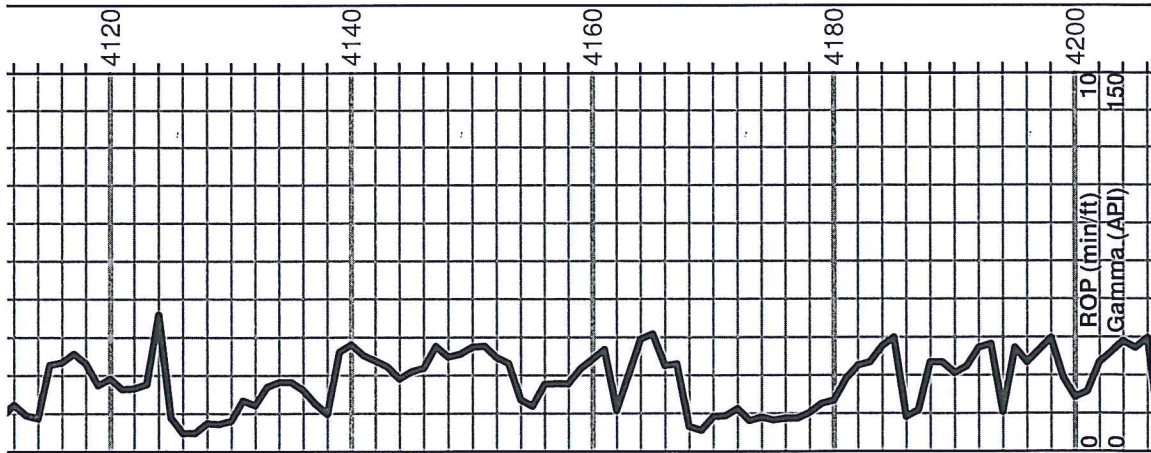
Shale: gray-medium gray, silty to sandy

Shale: gray, silty to sandy

Brown Lime 4089' (-2075)

Limestone: tan-brown, fine crystalline, very dense shales, dark-medium gray

Lansing 4106' (-2092)



Limestone: tan-cream-white, fine crystalline, scattered visible porosity

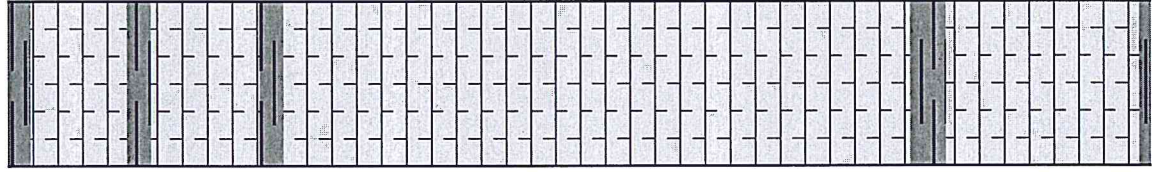
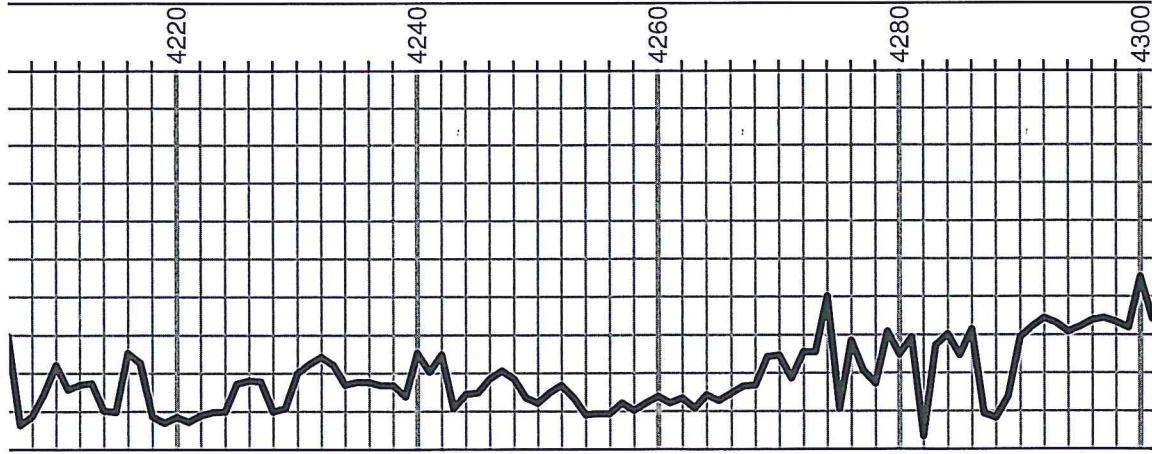
Limestone: cream-tan-light tan, fine crystalline to slightly fossiliferous, rare visible porosity, sub chalky, odor

Limestone: cream-light tan, fine crystalline, poor visible porosity, sub chalky, slight odor

Limestone: cream-white-tan, fine crystalline, poor to no visible porosity, sub chalky

Limestone: gray-tan-cream, fine crystalline to slightly fossiliferous

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



Limestone: light brown-cream, fine crystalline, sub shaley

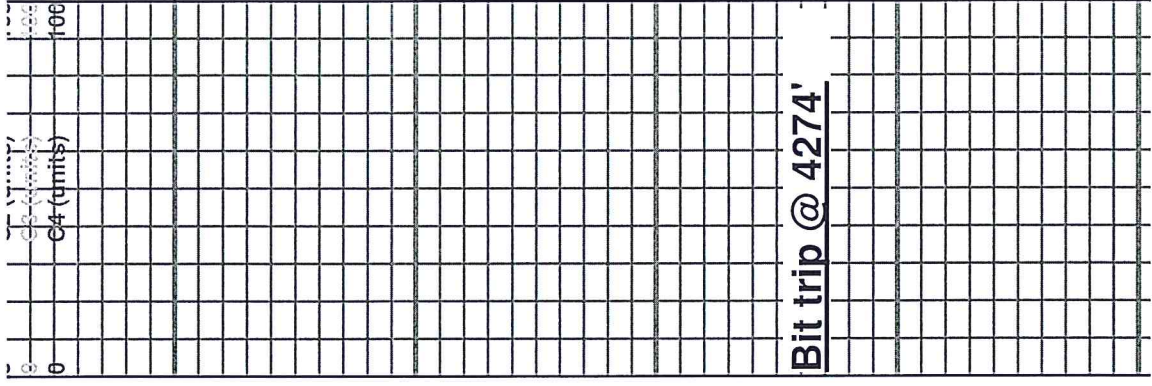
Limestone: light tan-cream-white, fine crystalline to slightly fossiliferous, poor visible porosity, sub chalky

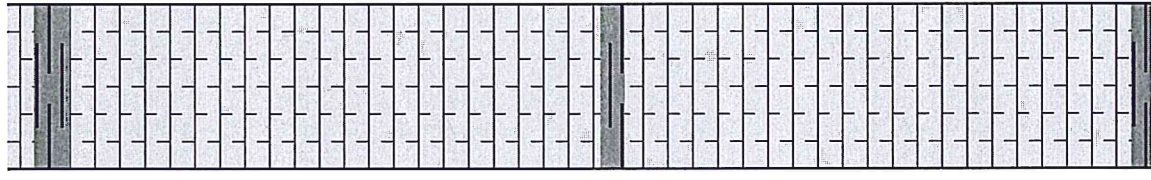
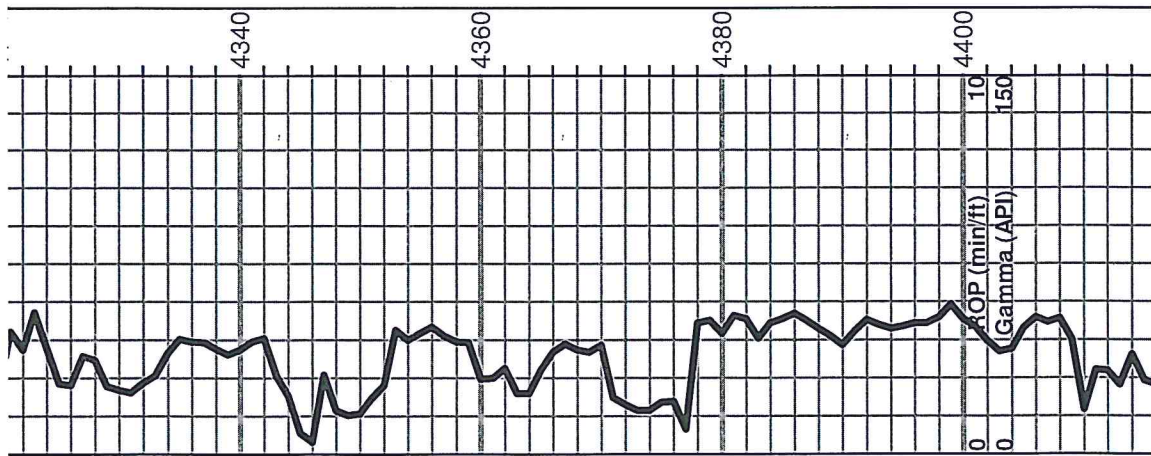
Limestone: as above

Trip cavings

Sample carries lots of shales

Limestone: light tan-cream-gray, fine crystalline, slightly fossiliferous





Limestone: cream-tan-white, dense

Limestone: cream-tan-gray, fine crystalline, slightly fossiliferous, dense

Limestone: cream-gray, dense

Limestone: as above

Stark 4370' (-2356)

Shale: dark-gray

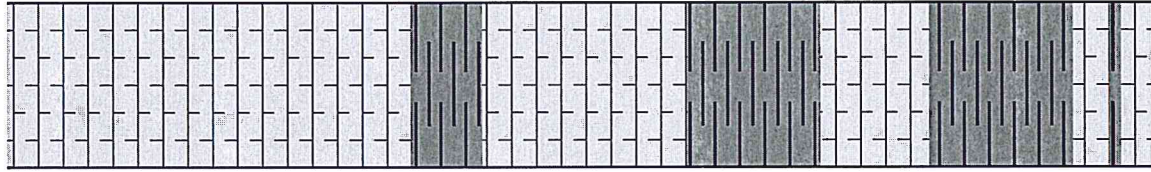
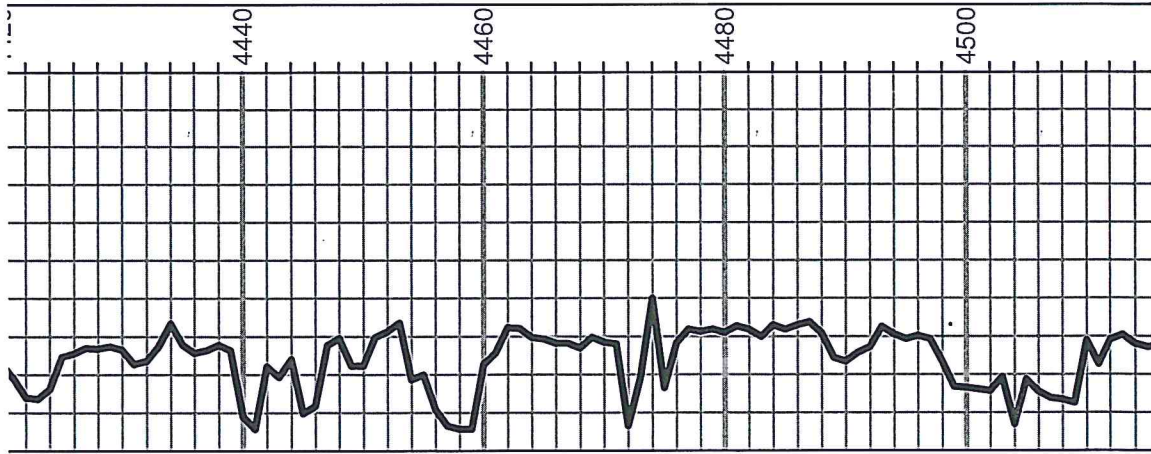
Limestone: cream-tan, fine crystalline, rare visible porosity, chalky, no shows

Limestone: tan, fine crystalline, dense, poor to no visible porosity

Limestone: cream, fine crystalline, sub chalky, dense

Limestone: as above

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



no visible porosity, dense

Limestone: cream-gray, dense

Limestone: cream-white, fine crystalline, sub chalky

Limestone: cream-white-light tan, fine crystalline, rare visible porosity, dense

Shale: gray-red

Limestone: cream-gray, fine crystalline

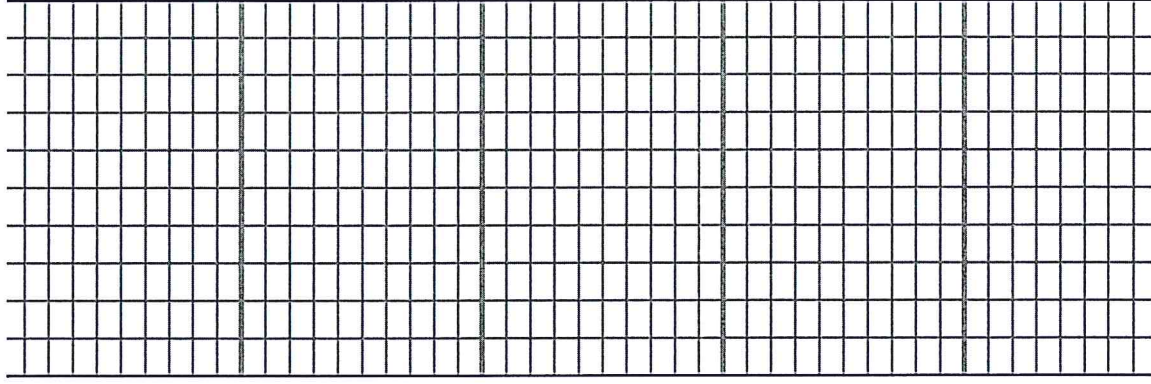
Flood shale: gray-green-red

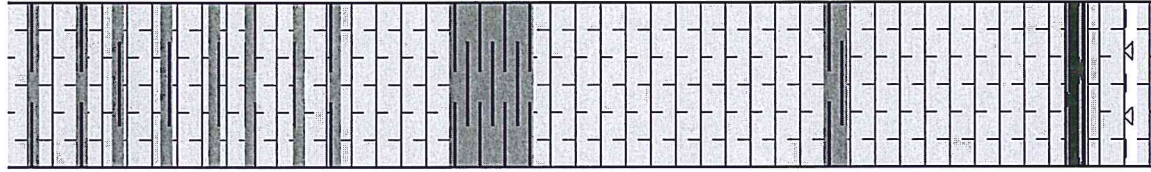
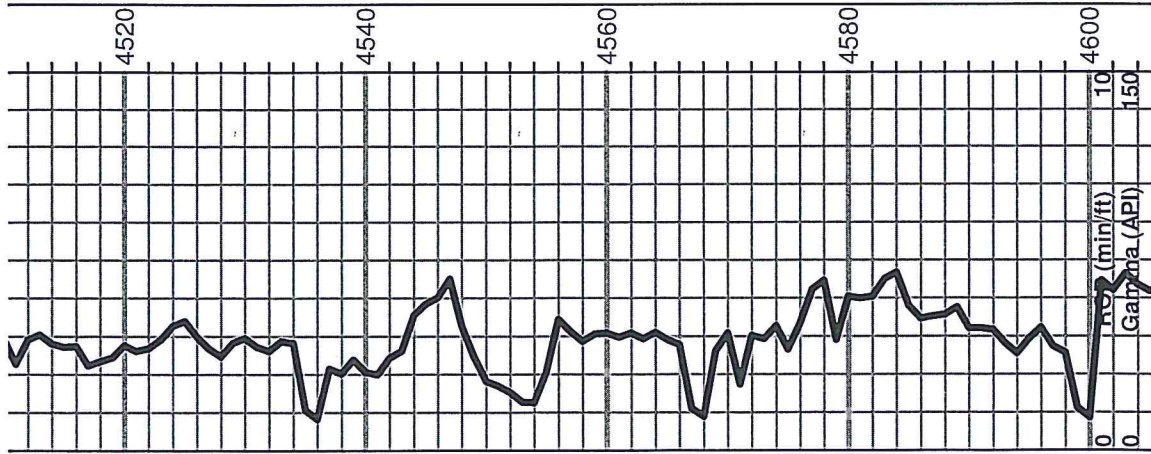
Limestone: cream-white, fine crystalline, chalky

B/KC 4497' (-2483)

Shale: vari-colored

Shale: as above





Limestone: cream-light tan, fine crystalline, soft, chalky, shales, gray-green-rust red

Shaley limestone: as above

Limestone: cream-gray, fine to almost micro-crystalline, dense

Shale: gray-green-soft

Pawnee 4554' (-2540)

Limestone: gray, fine crystalline, very dense

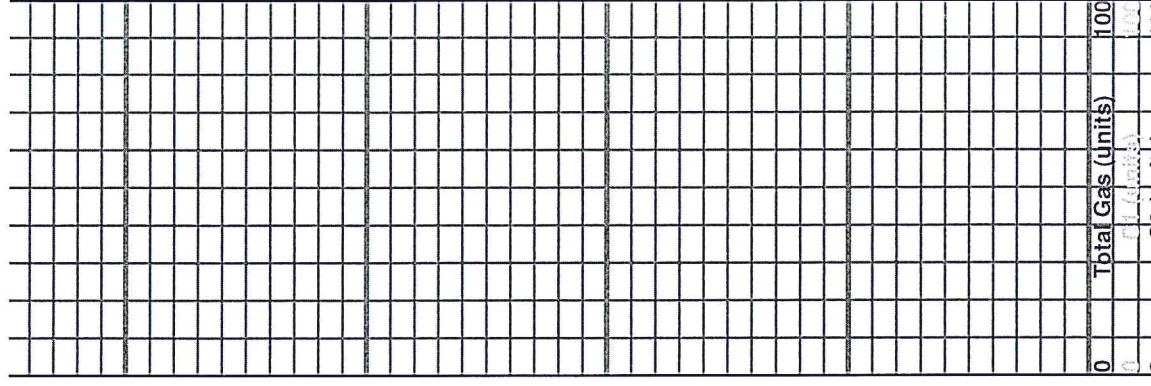
Limestone: cream-light tan, fine crystalline, poor to no visible porosity, sub chalky

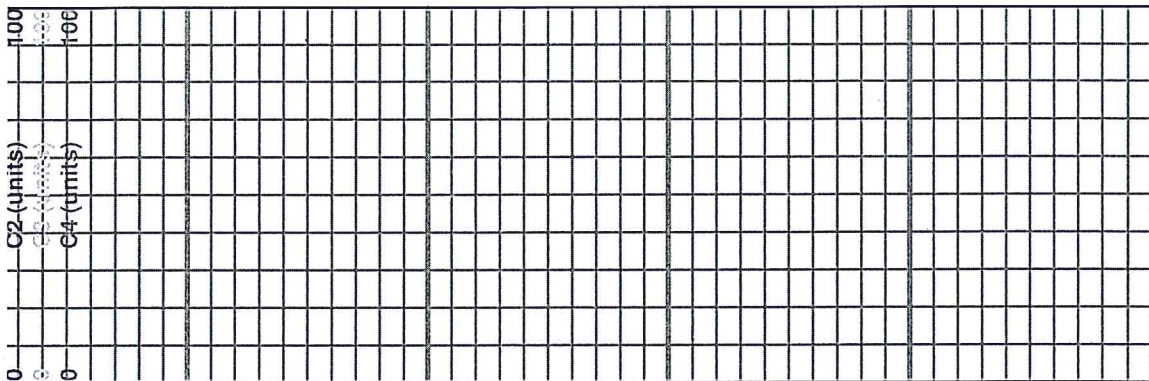
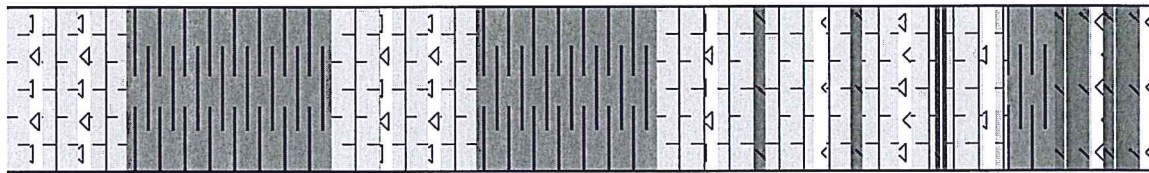
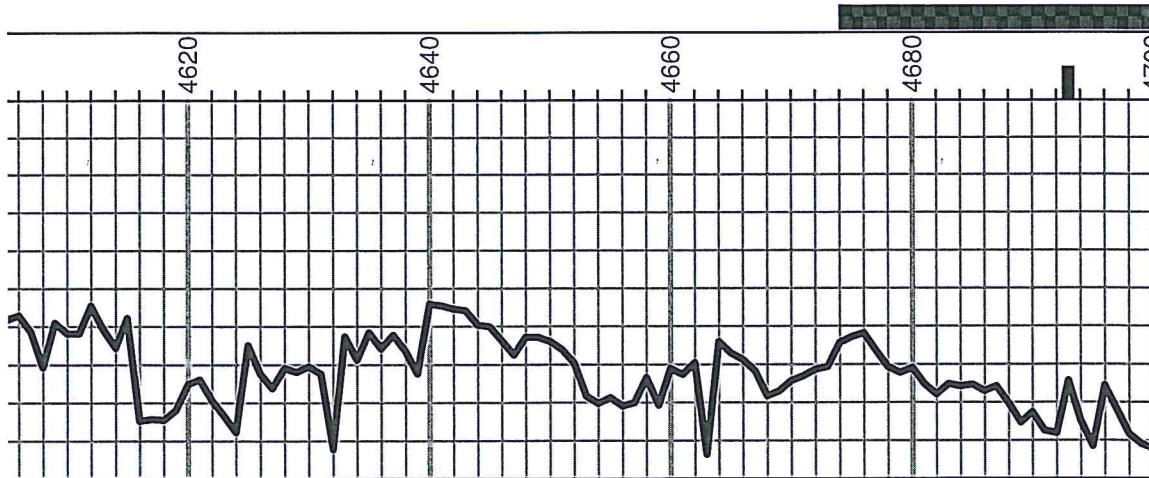
Shale: dark-medium gray

Limestone: light gray-light tan, fine to slightly medium crsytalline, sub chalky

Cherokee 4598' (-2584)

Black shale





Limestone: cream-tan, fine crystalline, dense, few pieces vari-colored chert

Shales: gray-green

Shale: gray-green, brown

Limestone: cream-green, fine crystalline, abundant chert

Abundant vari-colored shales

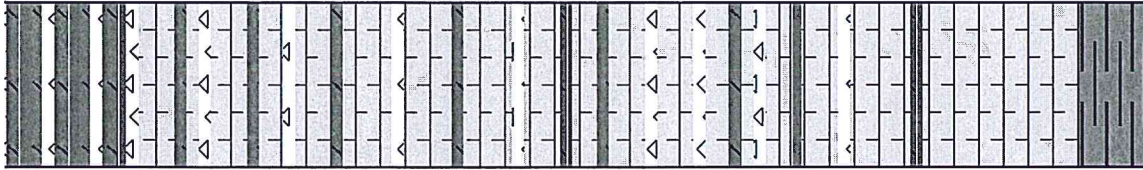
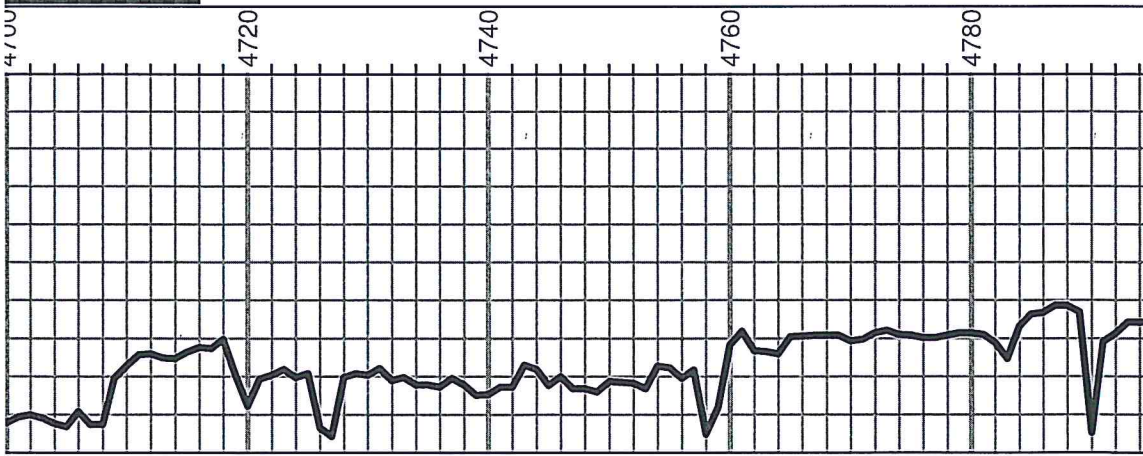
Mississippi 4659' (-2645)

Limestone: cream-light tan, fine crystalline, dense, few pieces weathered chert, sandy in part

Dolomitic: pale green, fine crystalline, sub sucrosic, sandy in part, some chert

Viola 4692' (-2678)

Circulated at 4693' Dolomitic limestone: cream-light green, finely sucrosic, cherts weathered that bleed gas, no quality shows



Dolomite: cream-tan, fine crystalline, lots of white, vitreous chert, some pieces with fair sponge texture, fair odor, scum in cup, 15%-20% bright yellow fluorescence

Cherts/dolomitic limestone: very sharp and blocky, barren

Cherty dolomite as above

Cherty dolomite as above, barren

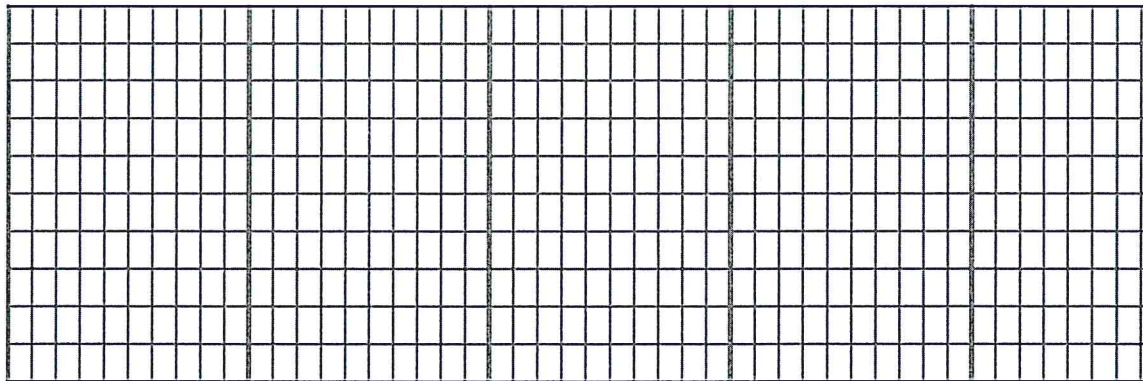
Cherty dolomitic limestone: as above

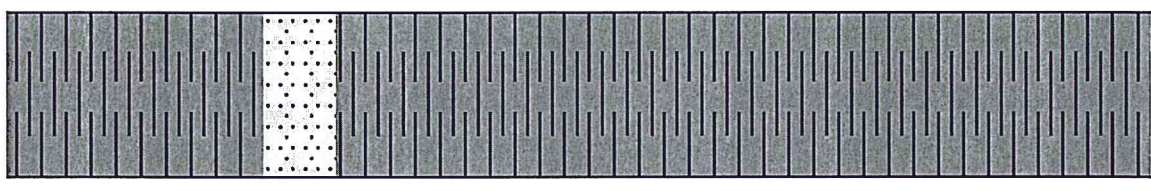
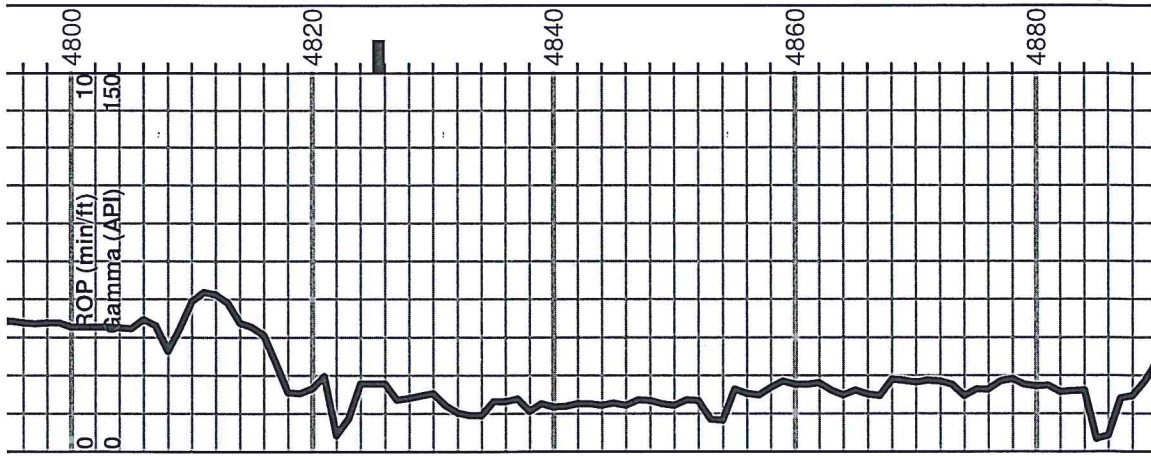
Limestone: light tan, fine to very fine crystalline, rare piece dolomite, chert, pure white

Flood cherts

Flood cherts with minor amount limestone: very slightly dolomitic

Simpson Shale 4789' (-2775)





Few pieces Simpson type shale

Increase in shale

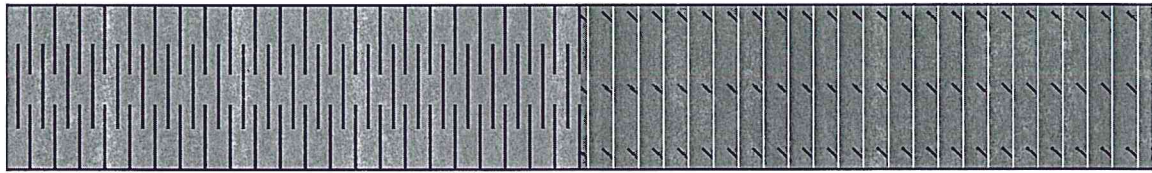
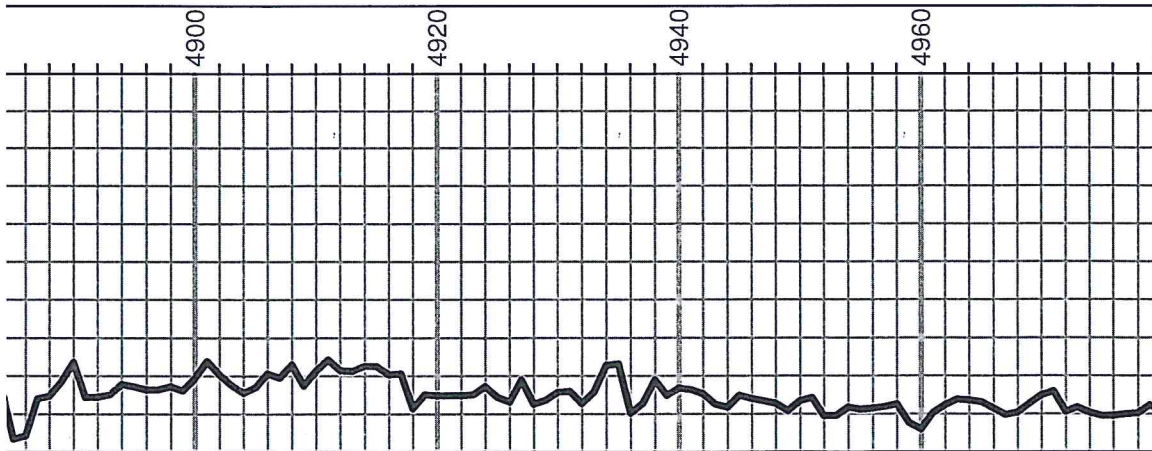
Circulated at 4825' mostly Simpson type shale, with scattered gray-cream, fine grained sandstone, no shows

Shale: dark gray, turquoise

Shale: dark gray, turquoise

Shale: dark gray-green-red-blue

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



Shale: gray-medium gray

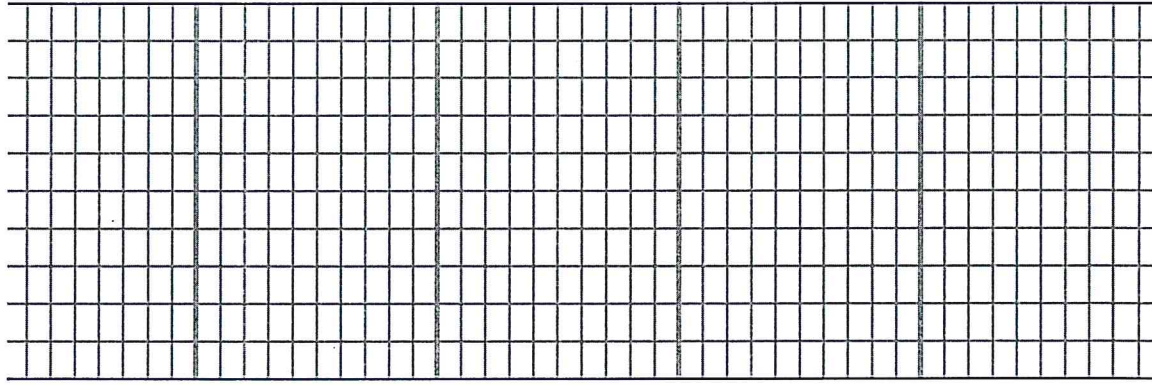
Shale: Simpson type, pyrite, few pieces white, fine grained sandstone

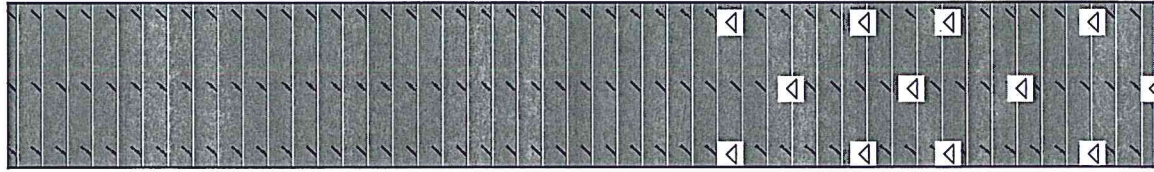
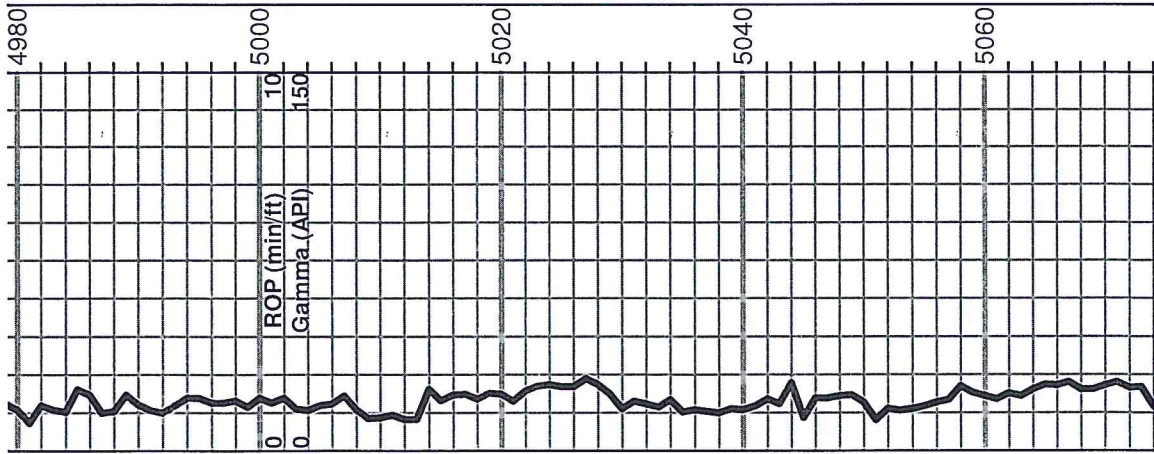
Arbuckle 4932' (-2918)

Dolomite: cream-light tan, fine crystalline, sucrosic, poor to no visible porosity

Dolomite: light tan-cream, fine to slightly medium crystalline, bright mineral fluorescence, no show free oil

Dolomite: light tan-cream, fine to more medium crystalline, fair visible





porosity, bright mineral fluorescence, no show free oil

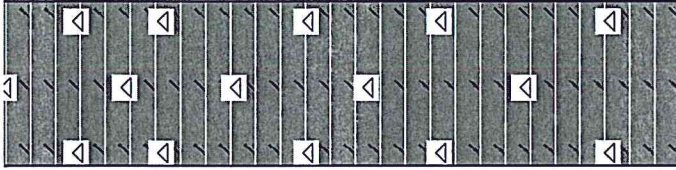
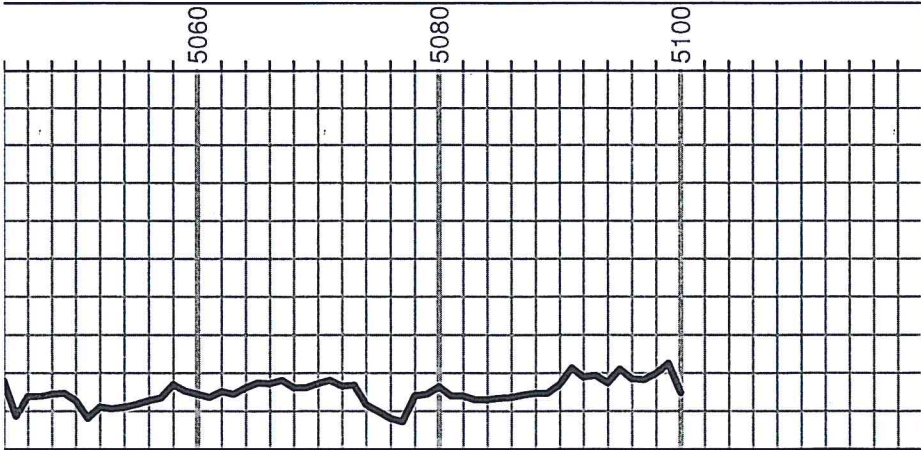
Dolomite: mostly medium crystalline, no shows

Dolomite: as above

Dolomite: cream-light tan, medium to coarse crystalline, fair visible porosity, trace white oolitic chert

Dolomite and chert: as above

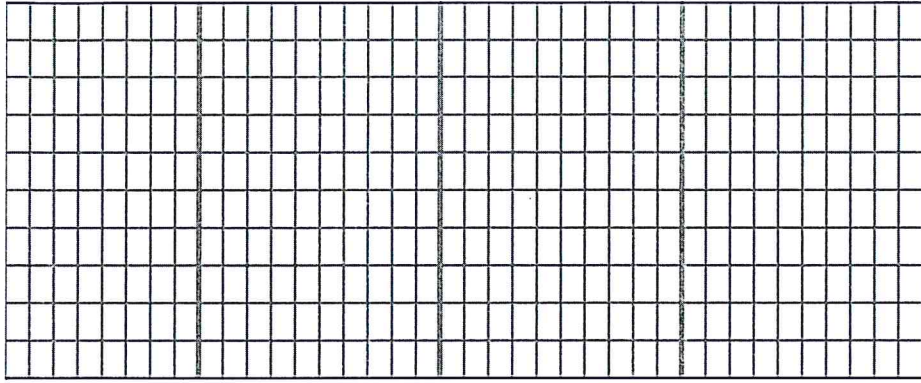
0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100



Dolomite and chert: as above

Dolomite and more cream, coarse to medium crystalline, fair visible porosity, some chert

Dolomite: as above





GRIFFIN MANAGEMENT LLC

P.O. Box 347 • Pratt, KS 67124 • 620-672-9700

August 7, 2019

Kansas Corporation Commission
Conservation Division
130 S. Market, Room 2078
Wichita, KS 67202-3802

Re: Form ACO1 Confidential and Form CDP-5
Exploration & Production Waste Transfer
Addie #4
Pratt County, Kansas
API# 15-151-22489-00-00

Gentlemen:

Attached is the ACO1 Well Completion Form with Cement tickets, Drill Stem Test along with Geological Report. The Dual Induction Log, & Sonic Cement Bond Log have been sent by emailed to the KCC requesting the logs be kept confidential.

Per the General Rules & Regulation Section 82-3-107 (e) (4), Griffin Management, LLC requests that page 2 of the ACO1 form for the above captioned well be held confidential for an additional 12 months.

I have also filed the Exploration & Production Waste transfer.

Should you have questions or need additional information, please contact me at the above letterhead address or telephone number.

Sincerely,

A handwritten signature in black ink that reads "Charles N. Griffin". The signature is written in a cursive style.

Charles N. Griffin *CF*