



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1101143
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: _____



1101143

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
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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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Form	ACO1 - Well Completion
Operator	Rama Operating Co., Inc.
Well Name	Wilson 'B' 8
Doc ID	1101143

All Electric Logs Run

Mel
Ducp
Dil
Bhcs

Form	ACO1 - Well Completion
Operator	Rama Operating Co., Inc.
Well Name	Wilson 'B' 8
Doc ID	1101143

Tops

Name	Top	Datum
Anhydrite	1072	+1024
Herrington	2148	-52
Tarkio	3086	-990
Heebner	3641	-1545
Toronto	3646	-1550
Brown Lime	3758	-1662
Lansing	3764	-1668
Base Lansing	4065	-1969
Mississippian	4218	-2122
Kinderhook SD	4257	-2161
Viola	4332	-2236
RTD	4480	-2384

Customer <i>Rama Operating</i>	Lease No.	Date <i>10-31-12</i>
Lease <i>Wilson</i>	Well # <i>B-8</i>	
Field Order # <i>7315</i>	Station <i>Pratt</i>	Casing <i>8 5/8</i>
	Depth	County <i>Edwards</i>
Type Job <i>CNW-8 5/8 Surface</i>	Formation	State <i>KS</i>
		Legal Description <i>4-25-16</i>

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
<i>8 5/8</i>		<i>200</i>		<i>60/40 P02</i>				
Depth	Depth	From	To	Pre Pad	Max		5 Min.	
<i>116</i>			<i>2906</i>	<i>390 CC</i>				
Volume	Volume	From	To	Pad	Min		10 Min.	
<i>116</i>				<i>1/4" Cellulose</i>				
Max Press	Max Press	From	To	Frac	Avg		15 Min.	
<i>116</i>								
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure	
<i>116</i>								
Plug Depth	Packer Depth	From	To	Flush	Gas Volume		Total Load	
<i>258</i>				<i>15</i>				

Customer Representative *Billy* Station Manager *Dave Scott* Treater *Steve Orlando*

Service Units	<i>27283</i>	<i>27463</i>	<i>19955</i>	<i>31010</i>					
Driver Names	<i>W. L. J. J. J.</i>	<i>R. J. J.</i>							

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>11:00 PM</i>					<i>On location - Safety meeting</i>
					<i>Run 6 3/8 8 5/8 Surface</i>
					<i>Casing on bottom</i>
					<i>Break circulation with Rig</i>
<i>1:00 AM</i>	<i>200</i>		<i>43</i>	<i>5</i>	<i>Mix 200 sks 60/40 P02 @ 14.8#/gal</i>
					<i>Shut Down</i>
					<i>Release plug</i>
<i>1:26</i>	<i>0</i>		<i>0</i>	<i>4</i>	<i>Start H₂O Displacement</i>
<i>1:28</i>	<i>250</i>		<i>5</i>	<i>"</i>	<i>Convert TO Surface</i>
<i>1:30 AM</i>	<i>250</i>		<i>15</i>	<i>3</i>	<i>Plug Down</i>
					<i>Close In well</i>
					<i>Circulation Thru Job</i>
					<i>Circulated 110 bbl TOP</i>
					<i>Job Complete</i>
					<i>Thanks, Steve</i>

Customer Rama Oper. Co. INC	Lease No.	Date 11-9-12
Lease Wilson B	Well # 8	
Field Order # 07037A	Station Pratt KS	Casing 5 1/2"
		Depth 4475'
Type Job 5 1/2" Long String	Formation C.N.W.	County Edwards
		State KS
		Legal Description 4-25-16

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME	
Casing Size 3 1/2"	Tubing Size	Shots/Ft		Acid 500 GAL mud Flush	RATE	PRESS	ISIP
Depth 4475'	Depth	From	To	Pre Pad 200 SKs AA2	Max @ 15.3 #/gal		5 Min.
Volume 109	Volume	From	To	Pad 30 SKs AA2	Min for R.H.		10 Min.
Max Press # 1000	Max Press	From	To	Frac 20 SKs AA2	Avg M.H.		15 Min.
Well Connection P.C.	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth 4455'	Packer Depth	From	To	Flush Disa H2O	Gas Volume		Total Load

Customer Representative (Robin Austin) RADDY	Station Manager SCOTTY	Treater Allen
Service Units 28443 27463 19959 21016		
Driver Names Allen Mike Steve Young		

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
1200 PM					DN Loc. Discuss Safety, Setup Plan to B
					Rig Laying down collars
130					Rig up to Run 5 1/2" csg 14'
245					Start 5 1/2" csg. Shoe Joint 20'
					w/ Reg. Shoe insert fill in collar
					cent. lat on in between #2 + #3
					4-6-8-10-12
445					Casing @ 4475' CIR w/ Rig
545			5	4	Pump 5-BBL H2O
			12	4	Pump 500 GAL mud Flush, 12-BBL
			5	4	Pump 5-BBL H2O spacer
			48	5	Mix + Pump 200 SKs AA2 - cmt 153'
					Finish mix, wash out Pump + Line
606				5	Drop Top Rubber Plug 5 1/2" St. Disp.
	600			4	Caught Lift PS 75 BBLs out
			109	3	Plug down Plug R.H. 30 SK
					Release to TRK. O' Plug MH 20 SK
					Wash up Equip. + Rack up.
745					Job complete
					THANKS Allen, Mike M.
					Steve

OPERATOR

Company: Rama Operating Co., Inc.
 Address: 101 S. Main ST
 Stafford, Kansas 67578

Contact Geologist:
 Contact Phone Nbr: 620-234-5191
 Well Name: Wilson "B" 8
 Location: 8 5/8" @ 266'
 Pool:
 State: Kansas, Edwards County

API: 15-047-21614-00-00
 Field: Wil
 Country: USA



Joshua R. Austin

Petroleum Geologist

report for

RAMA Operating CO., Inc



Scale 1:240 Imperial

Well Name: Wilson "B" 8
 Surface Location: 8 5/8" @ 266'
 Bottom Location:
 API: 15-047-21614-00-00
 License Number:
 Spud Date: 10/30/2012 Time: 3:34 PM
 Region: Ne-Sw-Nw-Nw 4-25s-16w
 Drilling Completed: 11/8/2012 Time: 7:50 PM
 Surface Coordinates: 982' From North Line & 500' From West Line
 Bottom Hole Coordinates:
 Ground Elevation: 2087.00ft
 K.B. Elevation: 2096.00ft
 Logged Interval: 1900.00ft To: 4480.00ft
 Total Depth: 4480.00ft
 Formation: Viola
 Drilling Fluid Type: Chemical mud was displaced at 2606'

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: Latitude:
 N/S Co-ord: 982' From North Line
 E/W Co-ord: 500' From West Line

LOGGED BY

Company: Joshua R. Austin, Petroleum Geologist
 Address: 732 NE 110th Ave
 Stafford, KS 67578
 Phone Nbr: 620-546-3960
 Logged By: Geologist Name: Josh Austin

CONTRACTOR

Contractor: Sterling Drilling Company
 Rig #: 4
 Rig Type: mud rotary
 Spud Date: 10/30/2012 Time: 3:34 PM
 TD Date: 11/8/2012 Time: 7:50 PM
 Rig Release: 11/9/2012 Time: 4:00 PM

ELEVATIONS

K.B. Elevation: 2096.00ft
 K.B. to Ground: 9.00ft

Ground Elevation: 2087.00ft

NOTES

On the basis of the positive structural position and after reviewing the electric logs it was recommended by all parties involved that 5 1/2" production casing be set and cemented at rotary total depth 4480.
 The following zones should be tested before plugging; Viola, Lansing (K,J,H,F), Toronto

RAMA Operating CO., Inc. well comparison sheet

DRILLING WELL					COMPARISON WELL			
Stalling/ Gartung					WILSON B #6			
2096 KB					2094 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log
Anhydrite	1078	1018	1072	1024	1070	1024	-6	0
Herington	2152	-56	2148	-52	2148	-54	-2	2
Ft. Riley	2324	-228	2320	-224	2322	-228	0	4
Red Eagle	2720	-624	2720	-624	2722	-628	4	4
Tarkio	3089	-993	3086	-990	3086	-992	-1	2
Howard	3239	-1143	3237	-1141	3234	-1140	-3	-1
Heebner	3642	-1546	3641	-1545	3640	-1546	0	1
Toronto	3646	-1550	3646	-1550				
Douglas	3666	-1570	3667	-1571				
Brown Lime	3759	-1663	3758	-1662	3757	-1663	0	1
Lansing	3766	-1670	3764	-1668	3764	-1670	0	2
Base KC	4067	-1971	4065	-1969	4072	-1978	7	9
Mississippi	4220	-2124	4218	-2122	4220	-2126	2	4
Kinderhook Sand	4259	-2163	4257	-2161	4260	-2166	3	5
Viola	4332	-2236	4332	-2236	4331	-2237	1	1
Total Depth	4480	-2384	4480	-2384	4565	-2471		

DRILL STEM TEST REPORT

Owner: Rama Operating Co Inc 4-26-18 Edwards Co

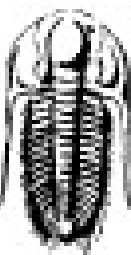
1015 Main
 Stafford KS
 67578

Wilson B #8

Job Ticket: 49670 DATE: 1

ATTN: Robin Austin/ Josh A

Test Start: 2012.11.03 @ 20:28:13



**TRILOBITE
 TESTING, INC.**

GENERAL INFORMATION:

Formation: LeCompton

Deviated: No Whipstick: ft (KB)

Test Type: Conventional Bottom Hole (Initial)

Time Tool Opened: 03:39:43

Time Test Ended: 09:22:43

Tester: Chris Steels

Unit No: #47

Interval: 3460.00 ft (KB) To 3480.00 ft (KB) (TVD)

Total Depth: 3480.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches hole Condition: Fair

Reference Elevations: 2095.00 ft (KB)

2087.00 ft (CP)

KB to GWCF: 9.00 ft

Serial #: 8766

Press@RunDepth: 480.20 psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.11.03

End Date: 2012.11.04

Last Cellb: 2012.11.04

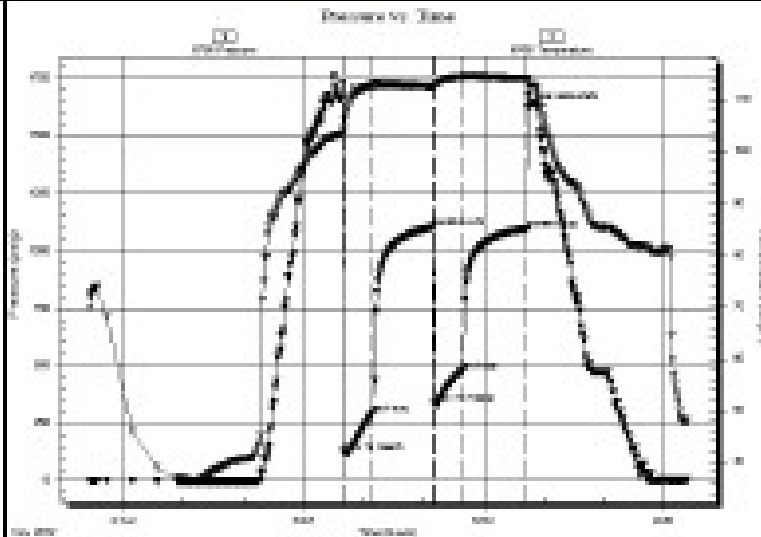
Start Time: 23:28:18

End Time: 09:22:43

Time On Btm: 2012.11.04 @ 03:37:13

Time Off Btm: 2012.11.04 @ 06:44:13

TEST COMMENT: IF: Strong blow BOB 10 sec GTS 4 min TSTM
IS: No blow back
FP: Strong blow BOB 2 min gas was TSTM
FS: Fair blow back



PRESSURE SUMMARY

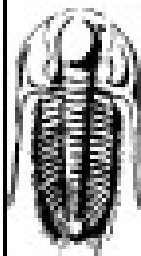
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1658.49	903.30	Initial Hydro-static
3	129.08	904.81	Open To Flow (1)
33	293.85	112.81	Shut-in (1)
83	1103.80	112.58	End Shut-in (1)
95	335.90	112.71	Open To Flow (2)
122	480.20	114.38	Shut-in (2)
186	1095.70	114.03	End Shut-in (2)
187	1622.27	113.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	3482 GIP	0.00
80.00	G,M,W 5%gas 45% mud 50% water	0.39
858.00	Water 100%	10.73

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mscf/D)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Name Operating Co Inc

4-26-18 Edwards Co

1015 Main

Wilson B #8

Stafford KS

Job Ticket: 49671

DST#: 2

67578

ATTN: Robin Austin/ Josh A.

Test Start: 2012.11.08 @ 21:24:57

GENERAL INFORMATION:

Formation: Lansing J

Deviated: No Whipstock ft (KB)

Time Tool Opened: 01:20:57

Time Test Ended: 08:41:42

Test Type: Conventional Bottom Hole (Reef)

Tester: Chris Steels

Unit No: #47

Interval: 3560.00 ft (KB) To 3588.00 ft (KB) (TVD)

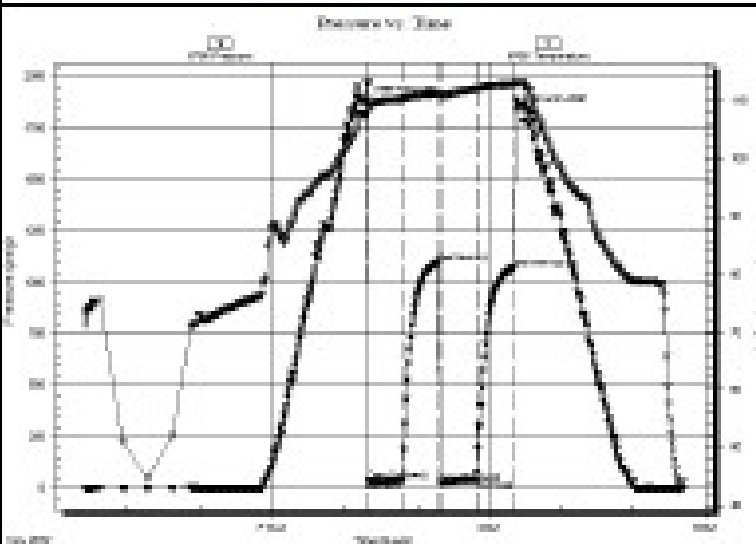
Reference Elevations: 2095.00 ft (KB)

Total Depth: 3480.00 ft (KB) (TVD) 2087.00 ft (CF)
 Hole Diameter: 7.88 inches hole Condition: Fair KB to GVOF: 9.00 ft

Serial #: 8766

Press@RunDepth: 41.97 psig @ ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.11.08 End Date: 2012.11.07 Last Call: 2012.11.07
 Start Time: 21:25:02 End Time: 08:41:41 Time On Btm: 2012.11.07 @ 01:18:27
 Time Off Btm: 2012.11.07 @ 03:22:27

TEST COMMENT: IF: Strong blow BOB 30 sec GTS 25 min TSTM
 IS: No blow back
 PF: Strong blow BOB 30 sec
 FS: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1881.85	107.75	Initial Hydro-static
3	40.95	108.76	Open To Flow (1)
30	37.17	110.31	Shut-in(1)
60	1100.13	111.32	End Shut-in(1)
63	29.90	110.89	Open To Flow (2)
92	41.97	112.06	Shut-in(2)
123	1074.94	112.90	End Shut-in(2)
124	1897.33	113.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	3040' GP	0.00
80.00	M, G, W With oil spots 5% gas 20% water	10.39 b

* Recovery from multiple tests

Gas Rates

	Core (inches)	Pressure (psig)	Gas Rate (Mscf/d)

ROCK TYPES

- Anyh vert
- sdy lmst
- shale, gry
- Ss
- Cht
- Lmst fw7>
- Carbon Sh
- Slst
- Dolsec
- shale, grn
- shale, red

ACCESSORIES

MINERAL

△ Chert White

STRINGER

Dolomite

OTHER SYMBOLS

- DST Int
- DST alt
- Core
- tail pipe

ROP (min/ft)

Gamma (API)

Cal (in)

ROP (min/ft)

Gamma (API)

Cal (in)

Depth | Intervals

Cored Interval

DST Interval

DST

Lithology

Oil Show

Geological Descriptions

Total Gas (units)

C1 (units)

C2 (units)

C3 (units)

C4 (units)

Total Gas (units)

C1 (units)

C2 (units)

C3 (units)

C4 (units)

1:240 Imperial

ROP (min/ft)

Gamma (API)

Cal (in)

5

150

16

1000

1800

1820

1840

1860

1880

1900

1920

1940

1960

1980

1:240 Imperial

Total Gas (units)

C1 (units)

C2 (units)

C3 (units)

C4 (units)

100

100

100

100

100

100

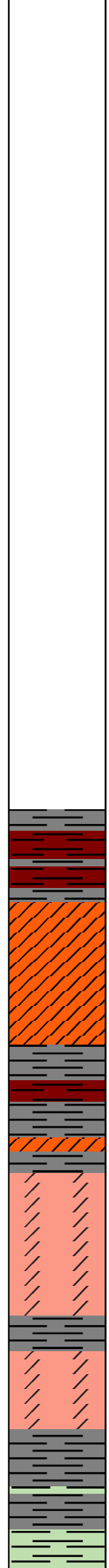
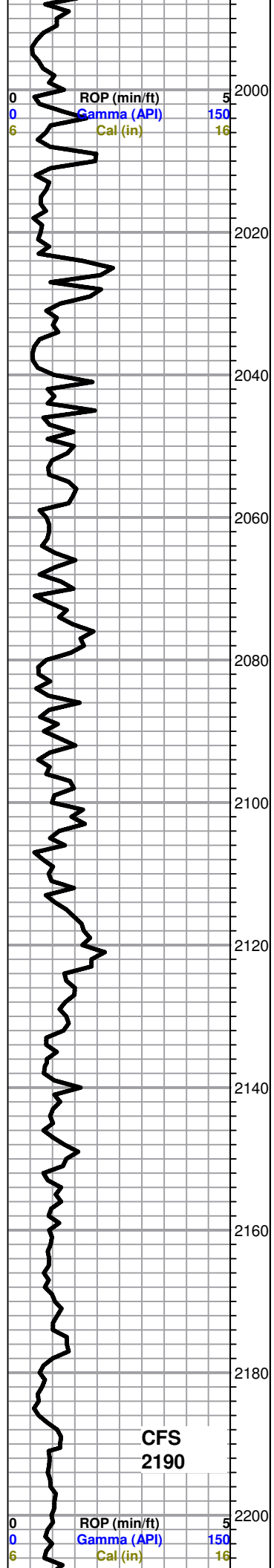
100

100

100

100

100



grey-red shale, soft and gummy

Anhydrite; grey-lt. grey-white

grey-dark grey shale

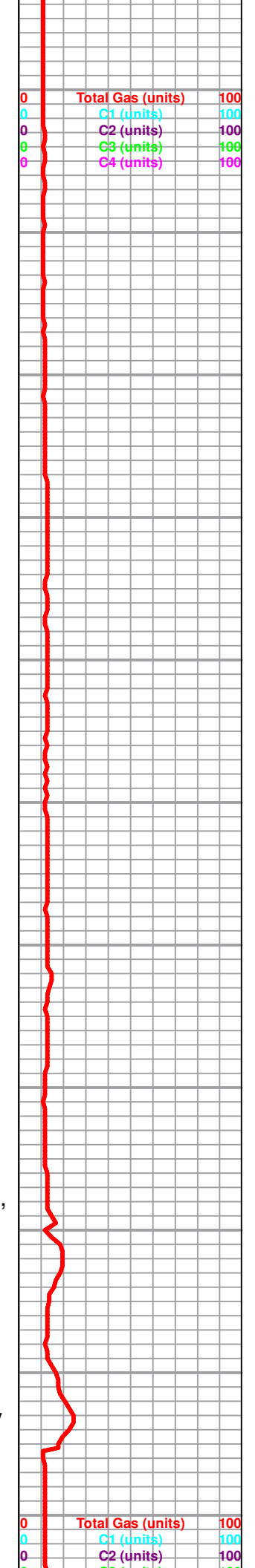
HERINGTON 2152 (-56)

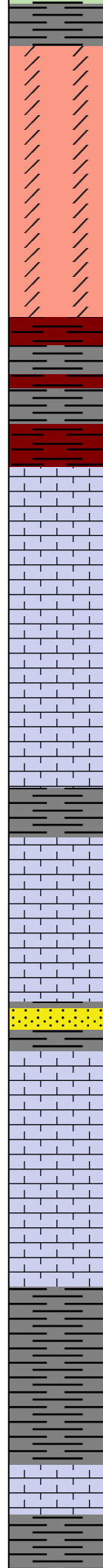
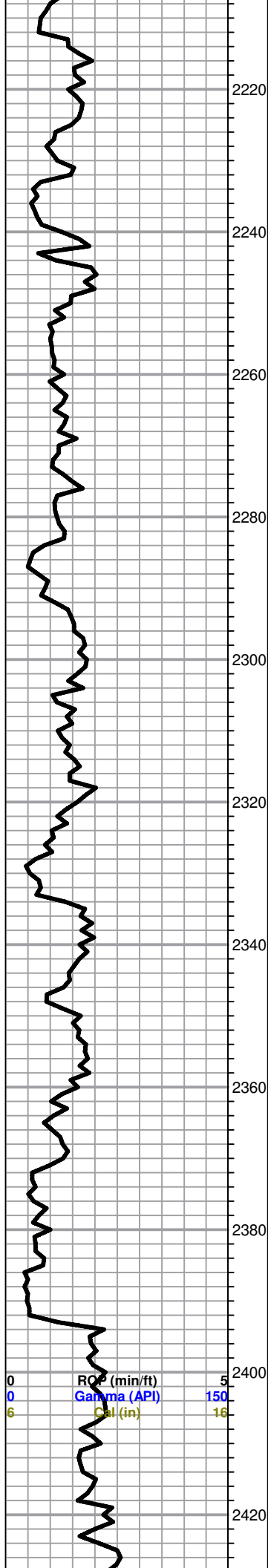
Dolomite; grey-buff, fine xln, slightly sucrosic, poorly developed porosity, shaley in part, no shows

grey-brick red shale

Dolomite; grey-lt. grey, fine-medium xln, slightly micaceous, trace gas bubbles, poorly developed porosity, no shows

grey shale





WINFIELD 2212 (-116)

Dolomite; grey-lt. grey, fine xln, dense, poor porosity, plus grey boney Chert

Dolomite as above plus Chert

Shale; grey-brick red

TOWANDA 2274 (-178)

Limestone; cream-white-lt. grey, fine xln, chalky in part, dense, poor visible porosity, no shows, questionable "gassy" odor, no gas bubbles

Limestone; grey-lt. grey-cream, fine xln, chalky in part, dense, poor porosity, no shows

grey-maroon-green soft, shale

FT. RILEY 2324 (-228)

Limestone; lt. grey-white, fine xln, chalky in part, dolomitic, few scattered porosity, trace gas bubbles, no odor

trace Sand; grey, micaceous, glauconitic, no shows

FLORENCE 2356 (-260)

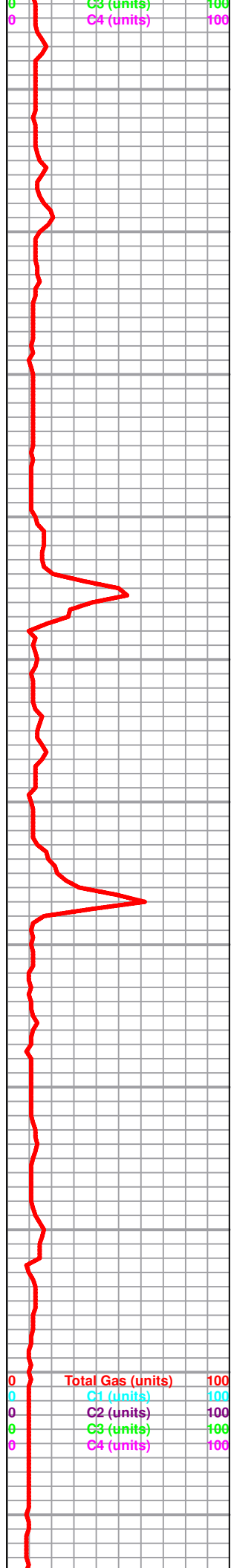
Limestone; cream-lt grey, micro-fine xln, chalky

Limestone; as above, finely oolitic in part, scattered porosity, plus cream-lt. grey boney Chert

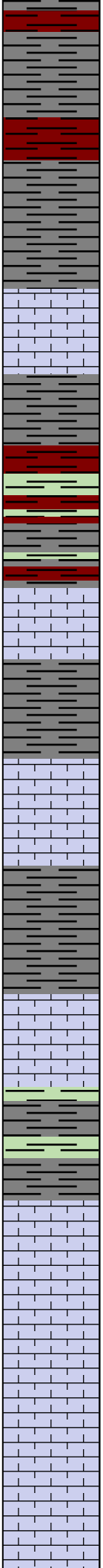
BASE FLORENCE

Shale; grey-green soft

Limestone; cream-white, fine xln, chalky, dense



2440
2460
2480
2500
2520
2540
2560
2580
2600
2620
2640



Shale; grey, soft, gummy
Abundant Shale as above, brick red-grey

WREFORD 2468

Limestone; cream, fine-medium xln, chalky, trace inter xln porosity, no shows, abundant shale (poor sample)

Shale; grey-green-brick red, soft/gummy

Limestone; cream-white, fine xln, chalky, dense in part, slightly cherty

grey shale

CROUSE

Limestone; grey-cream, fine-medium xln, granular in part, scattered porosity, no shows

grey soft, gummy, shale

Limestone; tan-buff, highly fossiliferous-oolitic, dense in part, poorly developed porosity, no shows

grey-greyish green shale

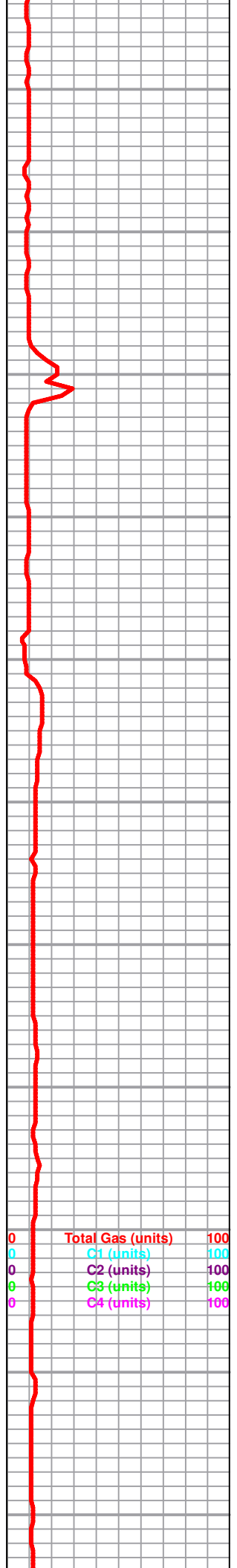
Limestone; grey-cream, oolitic in part, mottled, dense, poor porosity, no shows

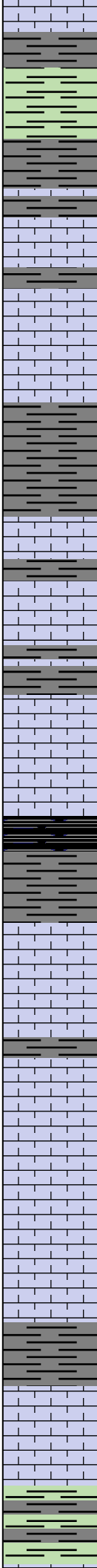
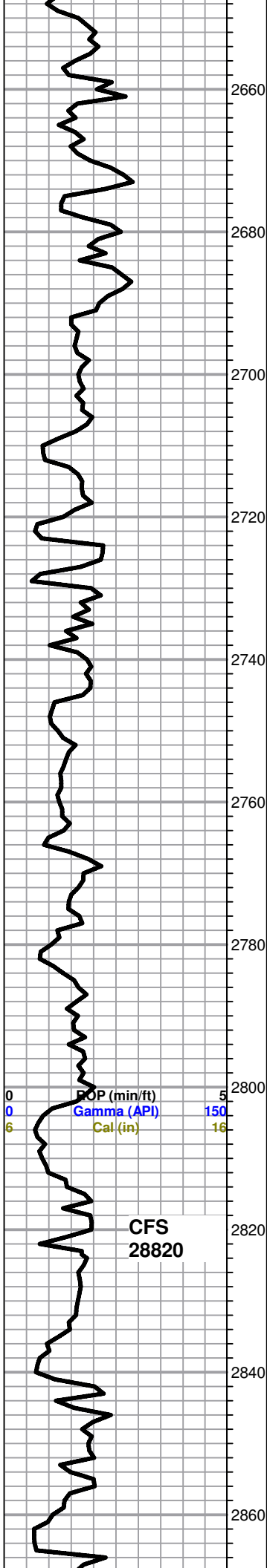
Limestone; as above plus abundant grey-green-maroon shale

Limestone; cream-buff, highly oolitic, few scattered porosity, no shows

ROP (min/ft) 5
Gamma (API) 150
Cal (in) 16

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





Shale; grey-green-red

NEVA 2682 (-586)

Limestone; cream, fine xln, dense, cherty, plus Chert; tan-cream, boney

Limestone; as above

shale; grey-green

RED EAGLE 2720 (-624)

Limestone; grey, fine xln, dense, slightly cherty, trace dolomitic, poor porosity, no shows

Limestone; grey-cream, fine-medium xln, chalky in part, dense, slightly cherty, no shows

black carboniferous shale

Shale; grey-greyish green

black carboniferous shale

FORAKER 2783 (-687)

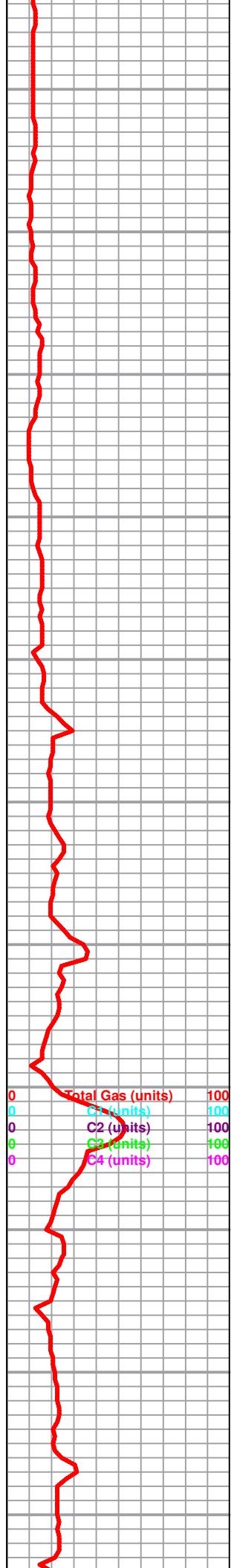
Limestone; cream, highly oolitic, chalky in part, no shows

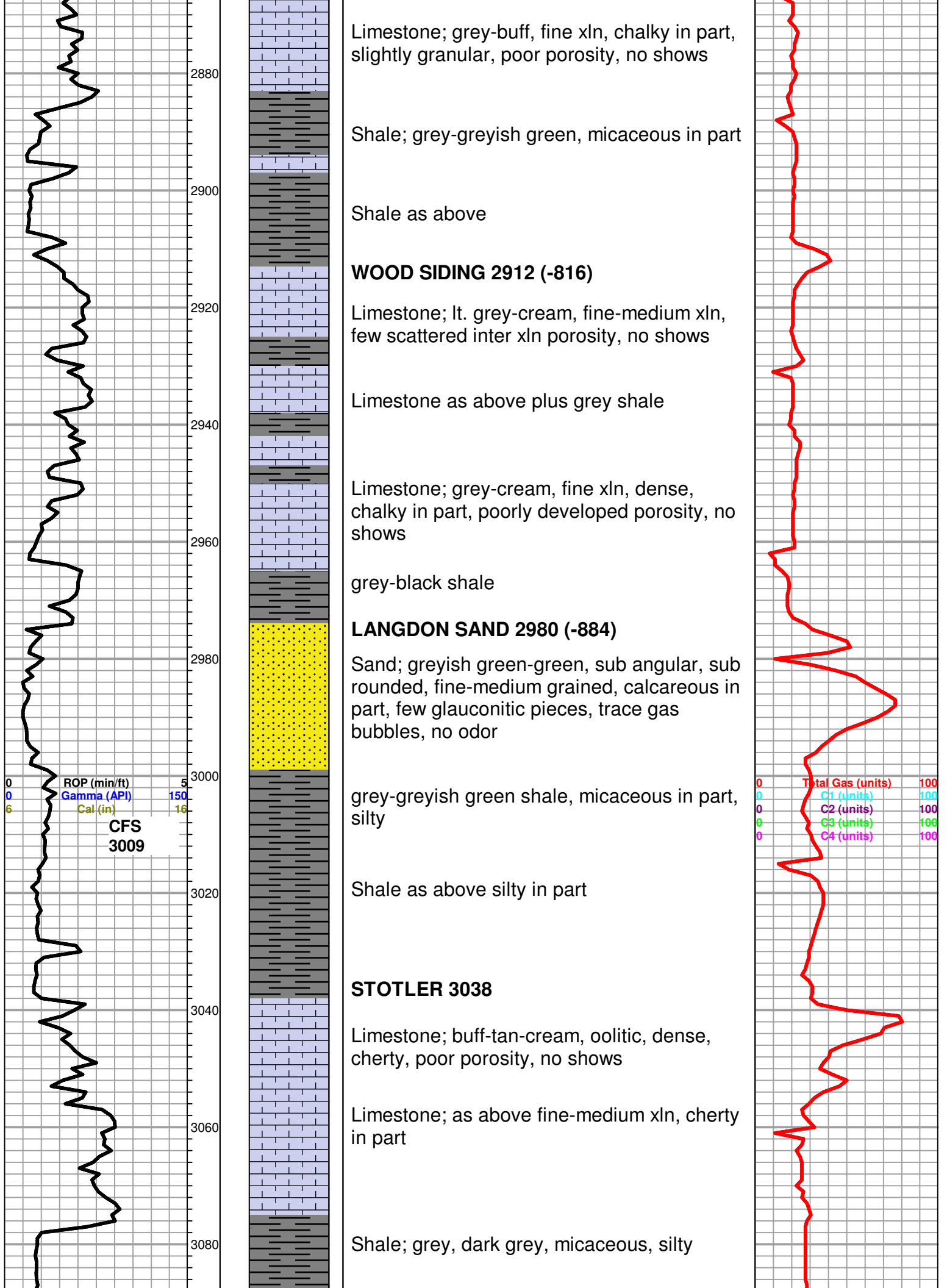
Limestone; cream-white, few oolitic pieces, fine-medium xln, chalky in part, poorly developed inter xln porosity, questionable trace gas bubbles

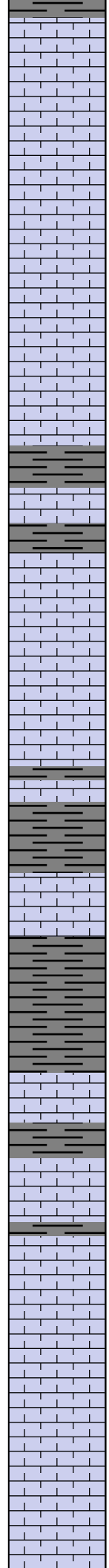
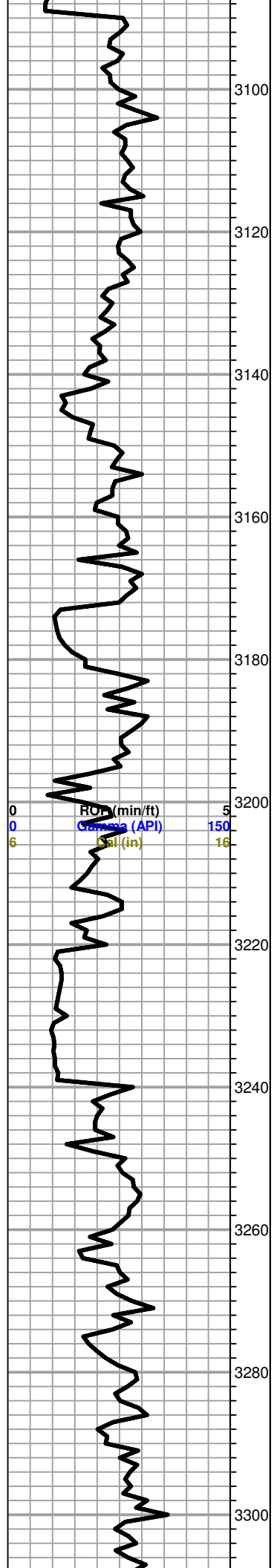
grey-green-maroon shale, soft/ gummy

Limestone; cream-white, chalky, dense, poor porosity, no shows

grey-green shale, silty in part







TARKIO 3089 (-993)

Limestone; cream-tan, granular, fine-medium xln, chalky in part, slightly fossiliferous, no shows

Limestone; as above

Limestone; cream-buff, fine xln, dense, oolitic in part, few fossiliferous pieces, poorly developed porosity, no shows

grey shale

BERN 3167 (-1071)

Limestone; cream-white, fine xln, chalky in part, highly oolitic in part, scattered vuggy-inter xln porosity, no shows

Limestone; as above

Shale; grey-dark grey

Shale; grey-dark grey soft

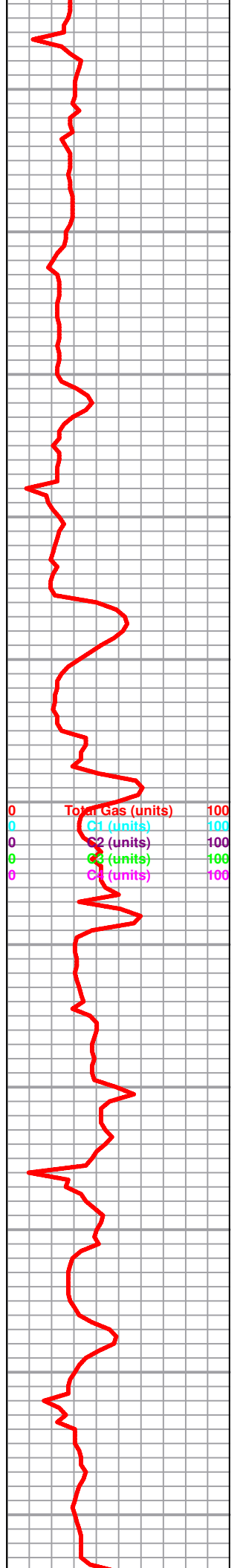
HOWARD 3239 (-1143)

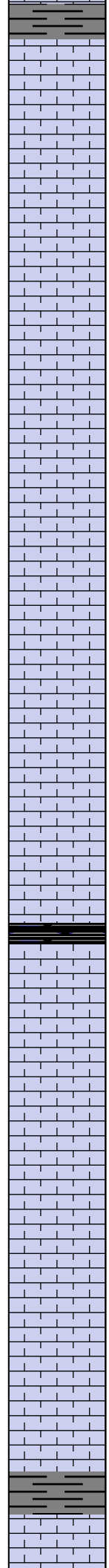
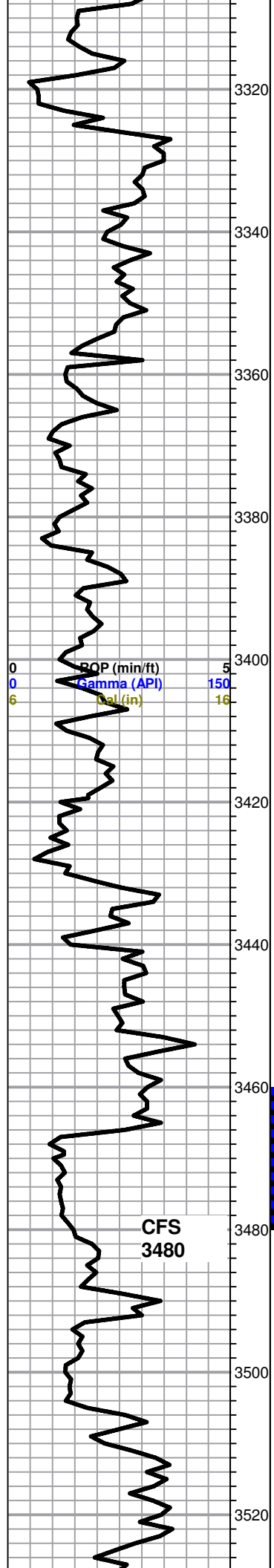
Limstone; tan-buff-lt. grey, fine xln, oolitic in part, chalky, poorly developed porosity, no shows

TOPEKA 3264 (-1168)

Limestone; cream-white, fine xln, chalky, slightly fossiliferous

Limestone; as above granular in part





grey-black shale

Limestone; lt. grey-buff, fine xln, granular in part, chalky, trace golden brown stain, NSFO, very faint odor

Limestone; cream-lt. grey, fine xln, chalky in part, dense, cherty, few fossiliferous pieces, plus grey Chert

Limestone and Chert; as above

Limestone; cream-lt. grey-white, fine xln, chalky, dense, few granular pieces, slightly fossiliferous, plus abundant white Chalk

Limestone; grey-buff, fine-medium xln, dense in part, slightly sucrosic in part, trace dolomitic limestone, poorly developed porosity, no shows

black carboniferous shale

LECOMPTON

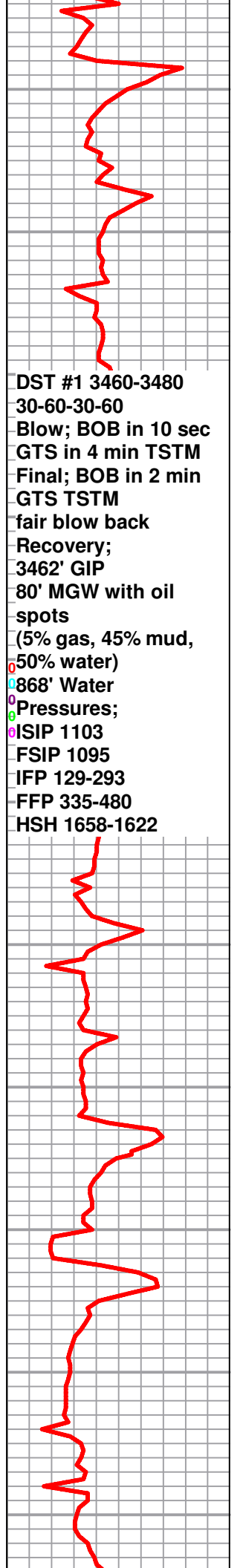
Limestone; lt. grey, fine xln, chalky in part, dense, poor porosity

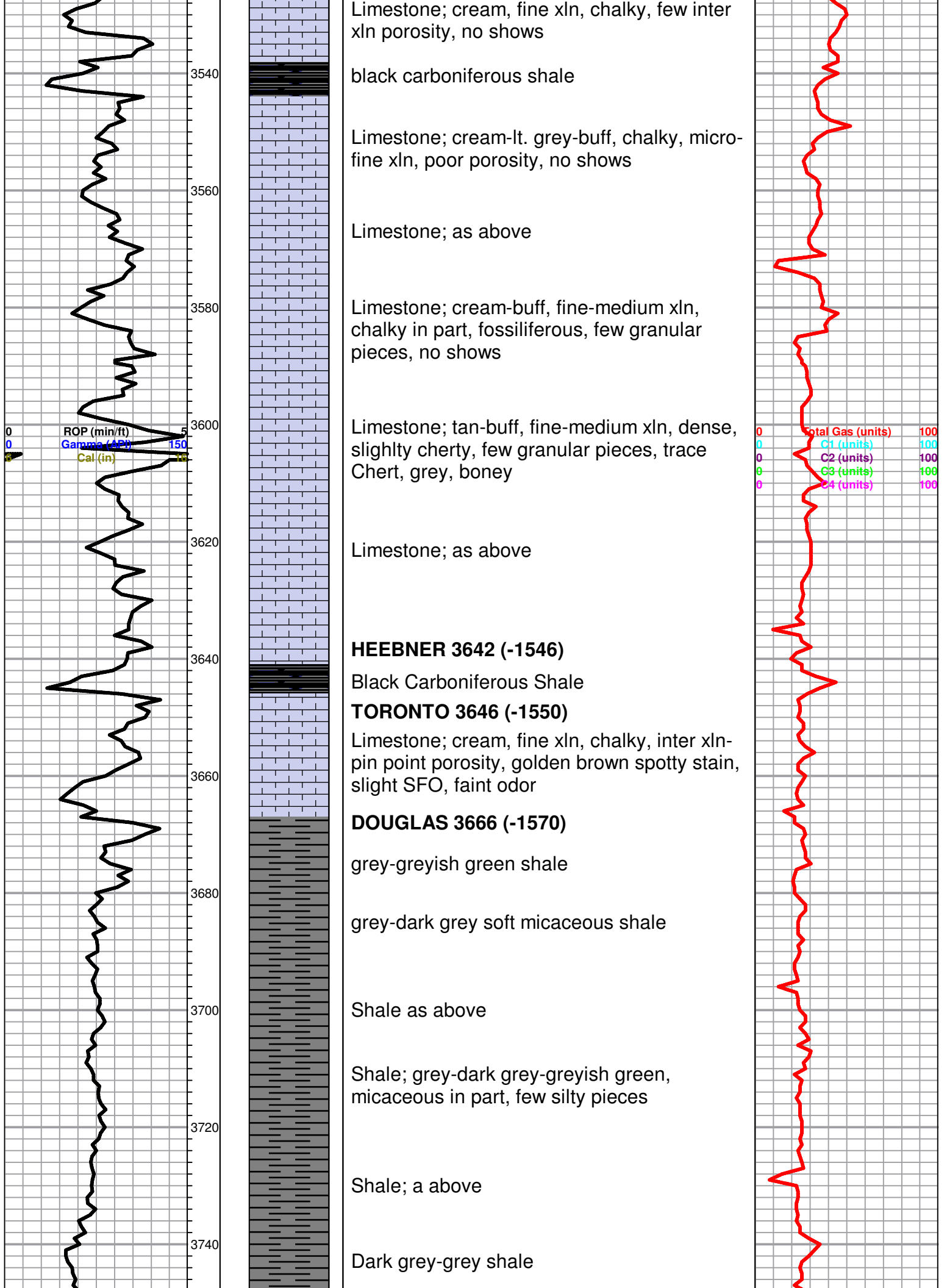
Limestone; cream, fine xln, granular in part, chalky, few scattered inter xln-pin point porosity, trace brown stain, trace spotty free oil, questionable faint odor

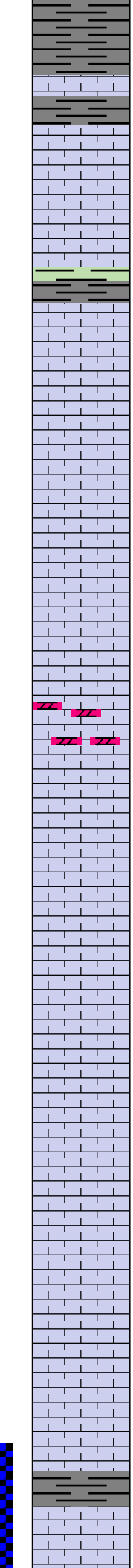
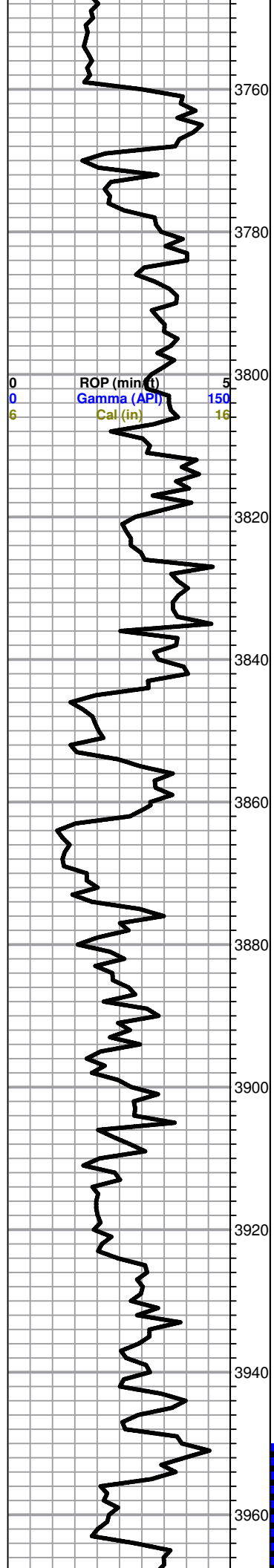
Limestone; buff-grey, fine xln, fossiliferous, dense, few scattered porosity, no shows

Limestone; as above cherty

grey-greyish green, shale







BROWN LIME 3759 (-1663)

LANSING 3766 (-1670)

Limestone; lt. grey, fine xln, chalky, oolitic-fossiliferous in part, poor porosity, no shows

shale; grey-green

Limestone; cream-brown-tan, fine xln, chalky in part, dense, oolitic, poorly developed porosity, no show

Limestone; white-cream, fine xln, chalky, black stain, NSFO, faint odor, plus white chalk

Limestone; tan-buff, fine xln, sucrosic, dolomitic in part, trace inter xln porosity, trace spotty brown stain, questionable trace spotty free oil, strong odor

Limestone; grey-cream, fine xln, dense, cherty, few vuggy porosity, trace grey-brown stain, spotty SFO, good gassy odor

Limestone; grey, dense, chalky in part, few inter xln porosity, cherty, plus grey Chert, fair gassy odor

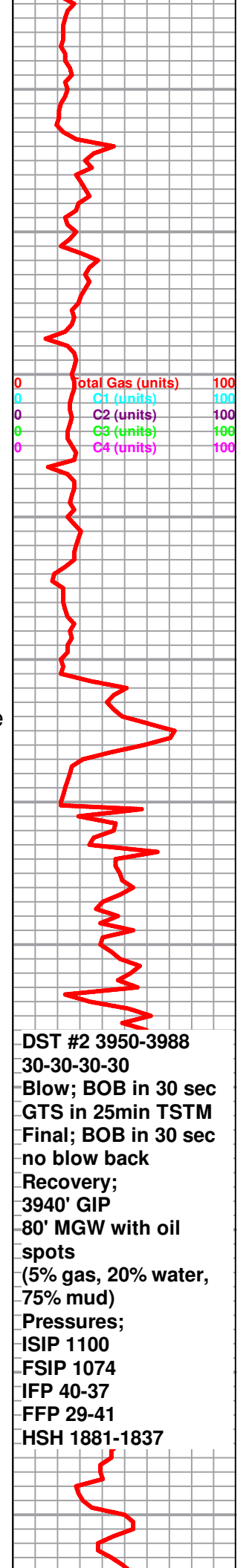
Limestone; cream-grey, chalky, sub oomoldic-oomoldic, fair oomoldic type porosity, trace brown stain, NSFO, gassy odor

Limestone; lt. grey-buff, fine-medium xln, chalky in part, poorly developed porosity, trace brown stain, NSFO, very faint odor

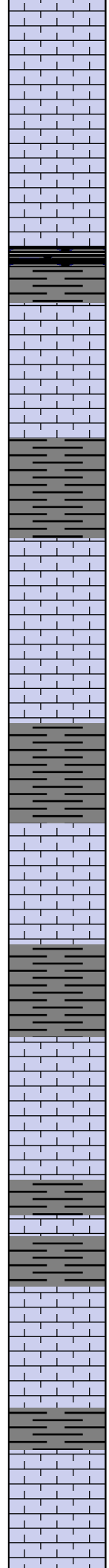
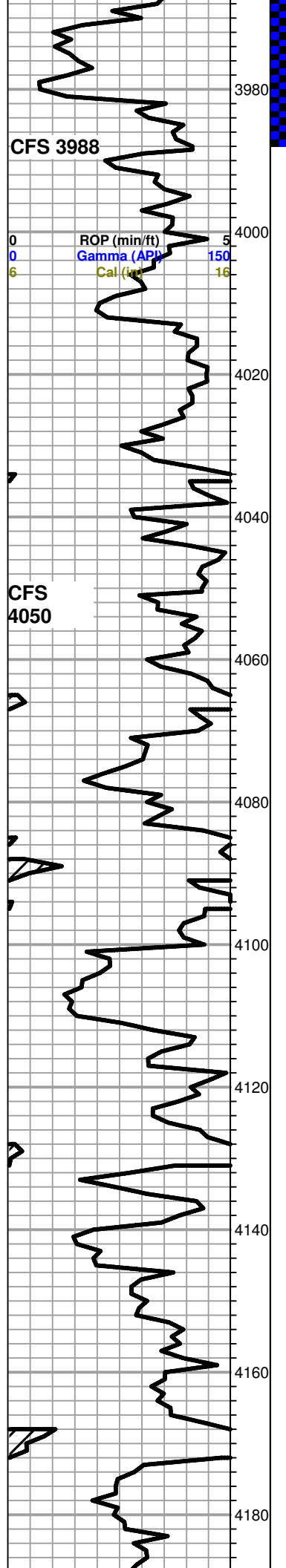
Limestone; cream-lt. grey, fine xln, dense, poor porosity, cherty, plus grey Chert, no shows

grey-green shale

Limestone; cream buff, oomoldic, chalky, fair



DST #2 3950-3988
30-30-30-30
Blow; BOB in 30 sec
GTS in 25min TSTM
Final; BOB in 30 sec
no blow back
Recovery;
3940' GIP
80' MGW with oil spots
(5% gas, 20% water, 75% mud)
Pressures;
ISIP 1100
FSIP 1074
IFP 40-37
FFP 29-41
HSH 1881-1837



Limestone; cream-buff, oomoldic, chalky, fair-good oomoldic porosity, brown-black spotty stain, slight SFO, good-strong odor, few gas bubbles

Limestone; cream-white, chalky, fine xln, dense, few black stain, poorly developed porosity, NSFO, plus grey-white boney chert

STARK SHALE (4001 -1905)
black carboniferous shale plus grey-green shale

Limestone; cream-grey-buff, fine xln, chalky in part, few dense, inter xln porosity, brown stain, trace free oil, very faint odor

grey-maroon-greyish green Shale

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

BASE KANSAS CITY 4067 (-1971)
black-grey shale

Limestone; buff, fine xln, dense, cherty in part, poor visible porosity, no shows, plus white chalk

grey-greyish green shale, silty in part

Limestone; cream-white, fine-medium xln, chalky in part, slightly fossiliferous, poor visible porosity, no shows

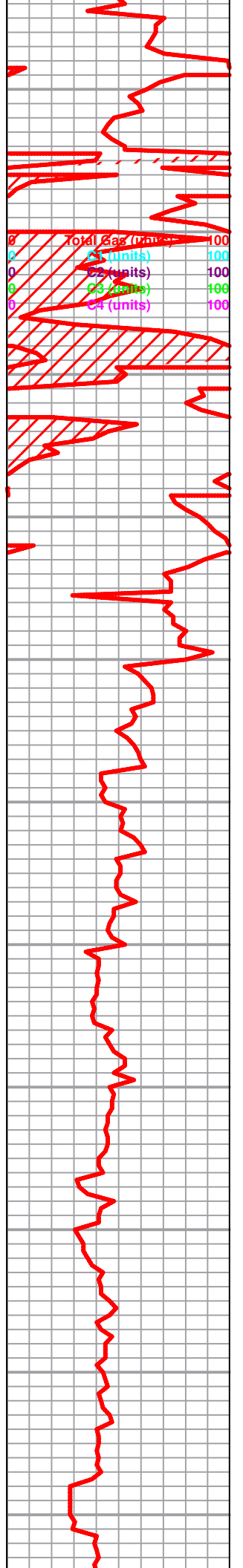
Shale; grey soft/ gummy

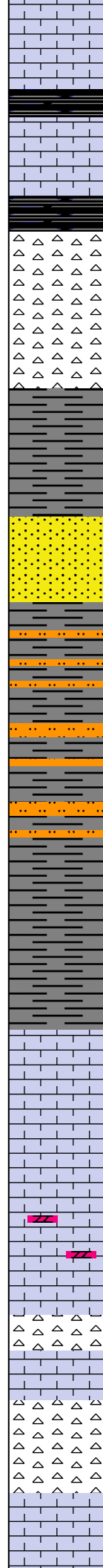
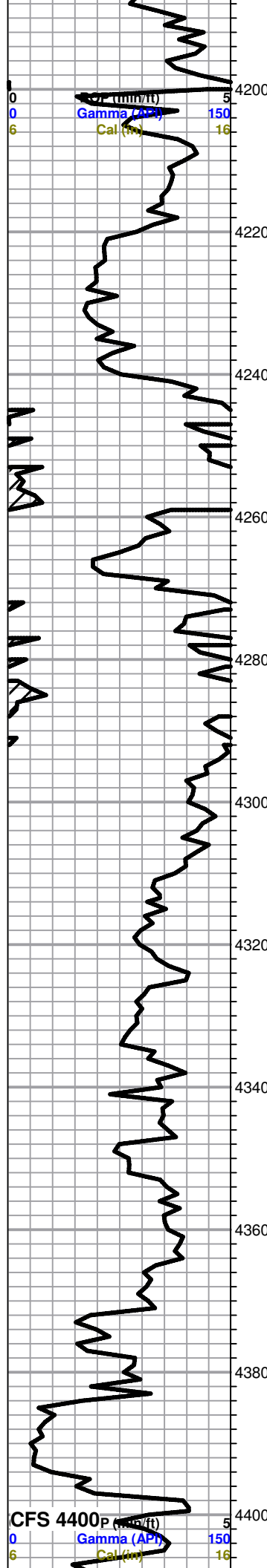
Shale as above

Limestone; lt. grey-buff-cream, fine xln, chalky in part, dense, few sparry calcite, slightly fossiliferous, no shows

black-grey shale

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





developed porosity, no shows

black carboniferous shale

MISSISSIPPI 4220 (-2124)
Chert; white-lt. grey, boney, few semi tripolitic, trace black edge staining, NSFO, questionable odor
Chert as above

grey-greish green-maroon shale

KINDERHOOK SAND 4259 (-2163)
Sand; greyish green, very fine-fine grained, sub rounded, well cemented, poor inter granular porosity, no shows

Grey-greish green-dark brown shale, silty in part, few dolomitic pieces

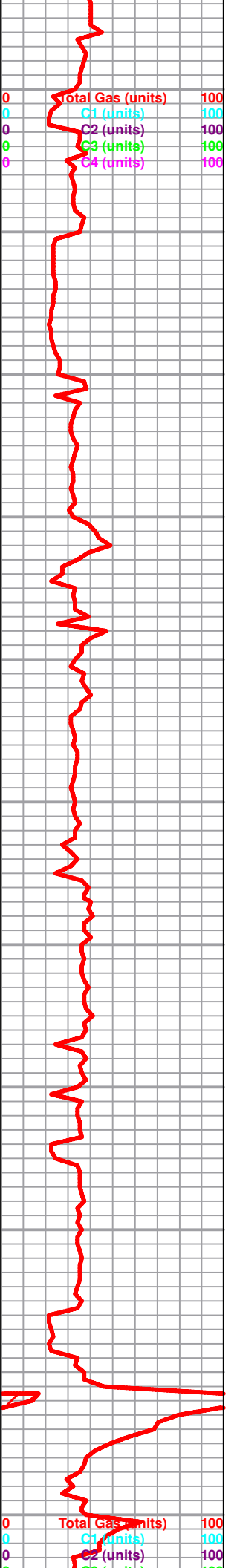
shale; as above

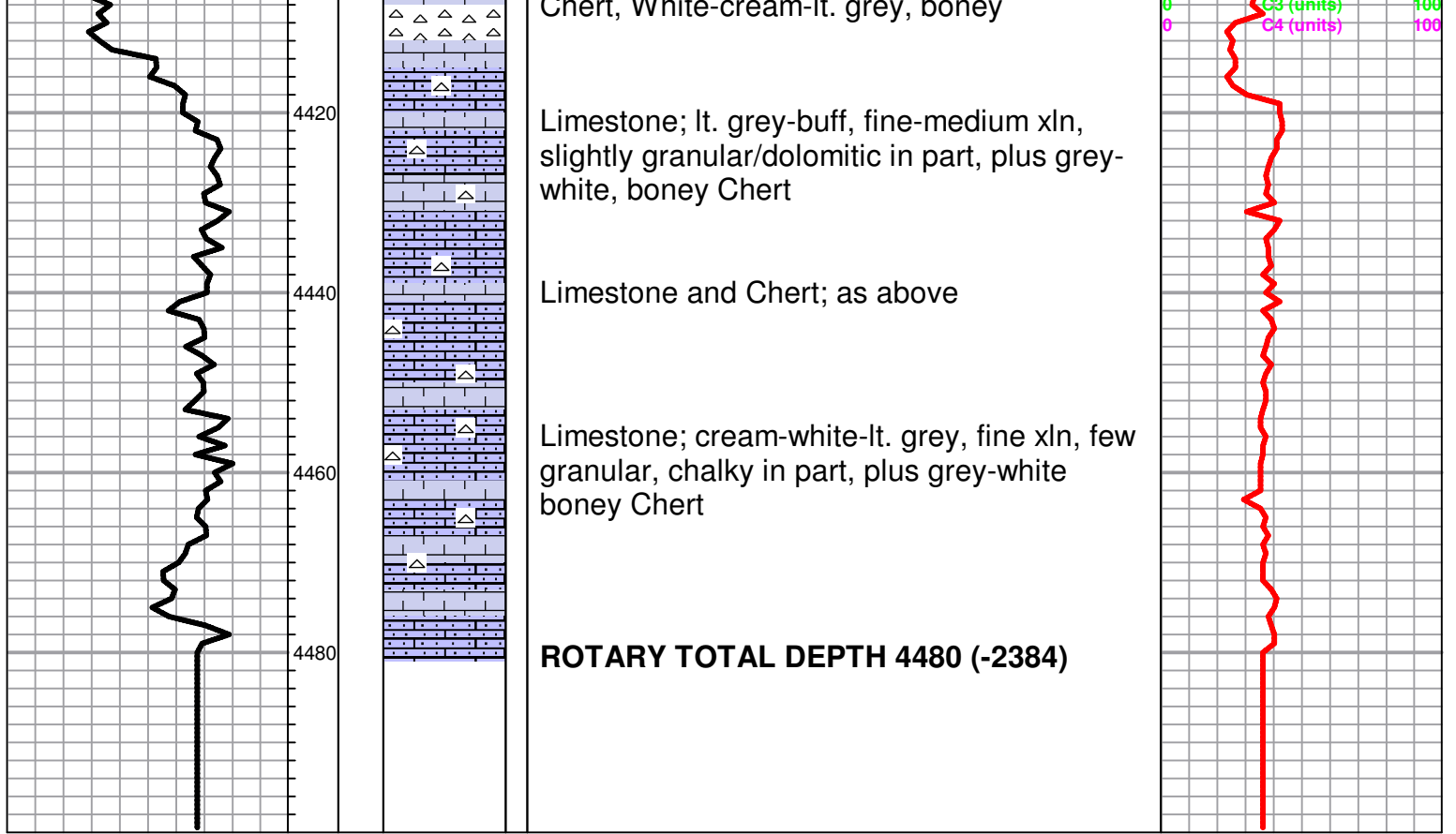
Shale; dark grey-grey soft, few gummy pieces

VIOLA 4332 (-2236)
Chert; lt. grey-white, boney, semi tripolitic, no shows
Plus Limestone; cream, fine xln, cherty, no shows
Chert as above, trace limestone; slightly dolomitic, no shows
Limestone; white-cream, fine xln, chalky in part, cherty, plus Chert; white-cream, boney

Chert; cream-lt. grey-buff, tripolitic, boney/fresh, golden brown stain, trace free oil, questionable odor

Limestone; white-cream, fine xln, chalky, poorly developed porosity, no shows, plus Chert; white-cream, lt. grey-boney







**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Rama Operating Co Inc

4-25-16 Edwards Co

101S Main
Stafford KS
67578
ATTN: Robin Austin/ Josh A

Wilson B #8

Job Ticket: 49670

DST#: 1

Test Start: 2012.11.03 @ 23:26:13

GENERAL INFORMATION:

Formation: **LeCompton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:39:43

Time Test Ended: 09:22:43

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Staats

Unit No: #47

Interval: 3460.00 ft (KB) To 3480.00 ft (KB) (TVD)

Reference Elevations: 2096.00 ft (KB)

Total Depth: 3480.00 ft (KB) (TVD)

2087.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 6755

Press @ RunDepth: 480.20 psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.11.03

End Date:

2012.11.04

Last Calib.:

2012.11.04

Start Time:

23:26:18

End Time:

09:22:43

Time On Btm:

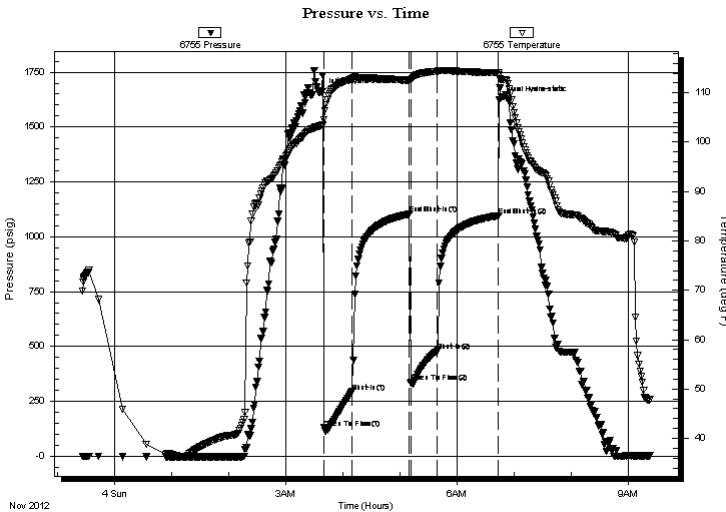
2012.11.04 @ 03:37:13

Time Off Btm:

2012.11.04 @ 06:44:13

TEST COMMENT: IF: Strong blow BOB 10 sec GTS 4 min TSTM
IS: No blow back
FF: Strong blow BOB 2 min gas w as TSTM
FS: Fair blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1658.49	103.30	Initial Hydro-static
3	129.06	104.61	Open To Flow (1)
33	293.85	112.81	Shut-In(1)
93	1103.60	112.58	End Shut-In(1)
95	335.90	112.71	Open To Flow (2)
122	480.20	114.38	Shut-In(2)
186	1095.70	114.03	End Shut-In(2)
187	1622.27	113.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	3462 GIP	0.00
80.00	G,M,W 5%gas 45%mud 50%w ater	0.39
868.00	Water 100%	10.73

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Rama Operating Co Inc

4-25-16 Edwards Co

101S Main
Stafford KS
67578
ATTN: Robin Austin/ Josh A

Wilson B #8

Job Ticket: 49670

DST#: 1

Test Start: 2012.11.03 @ 23:26:13

GENERAL INFORMATION:

Formation: **LeCompton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:39:43

Time Test Ended: 09:22:43

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Staats

Unit No: #47

Interval: 3460.00 ft (KB) To 3480.00 ft (KB) (TVD)

Reference Elevations: 2096.00 ft (KB)

Total Depth: 3480.00 ft (KB) (TVD)

2087.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 6773 Outside

Press@RunDepth: psig @ 3461.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.11.03

End Date:

2012.11.04

Last Calib.:

2012.11.04

Start Time: 23:31:53

End Time:

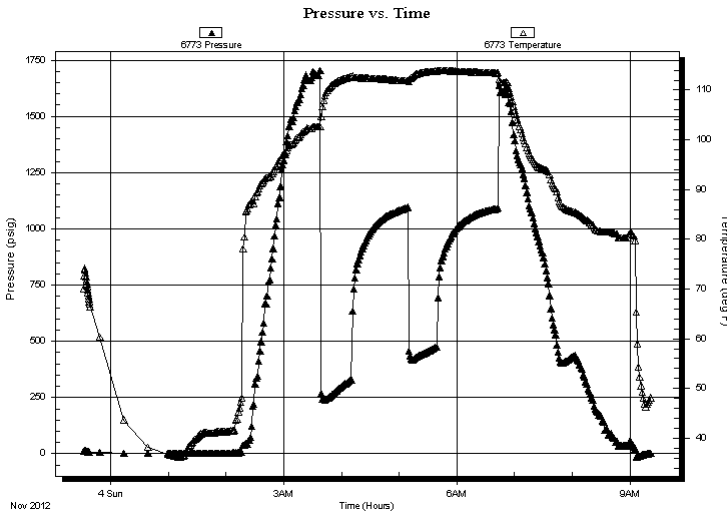
09:22:18

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Strong blow BOB 10 sec GTS 4 min TSTM
IS: No blow back
FF: Strong blow BOB 2 min gas w as TSTM
FS: Fair blow back

PRESSURE SUMMARY



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

Length (ft)	Description	Volume (bbl)
0.00	3462 GIP	0.00
80.00	G,M,W 5%gas 45%mud 50%w ater	0.39
868.00	Water 100%	10.73

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Rama Operating Co Inc

4-25-16 Edwards Co

101S Main
Stafford KS
67578

Wilson B #8

Job Ticket: 49670

DST#: 1

ATTN: Robin Austin/ Josh A

Test Start: 2012.11.03 @ 23:26:13

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	3462 GIP	0.000
80.00	G,M,W 5%gas 45%mud 50%water	0.393
868.00	Water 100%	10.727

Total Length: 948.00 ft Total Volume: 11.120 bbl

Num Fluid Samples: 0

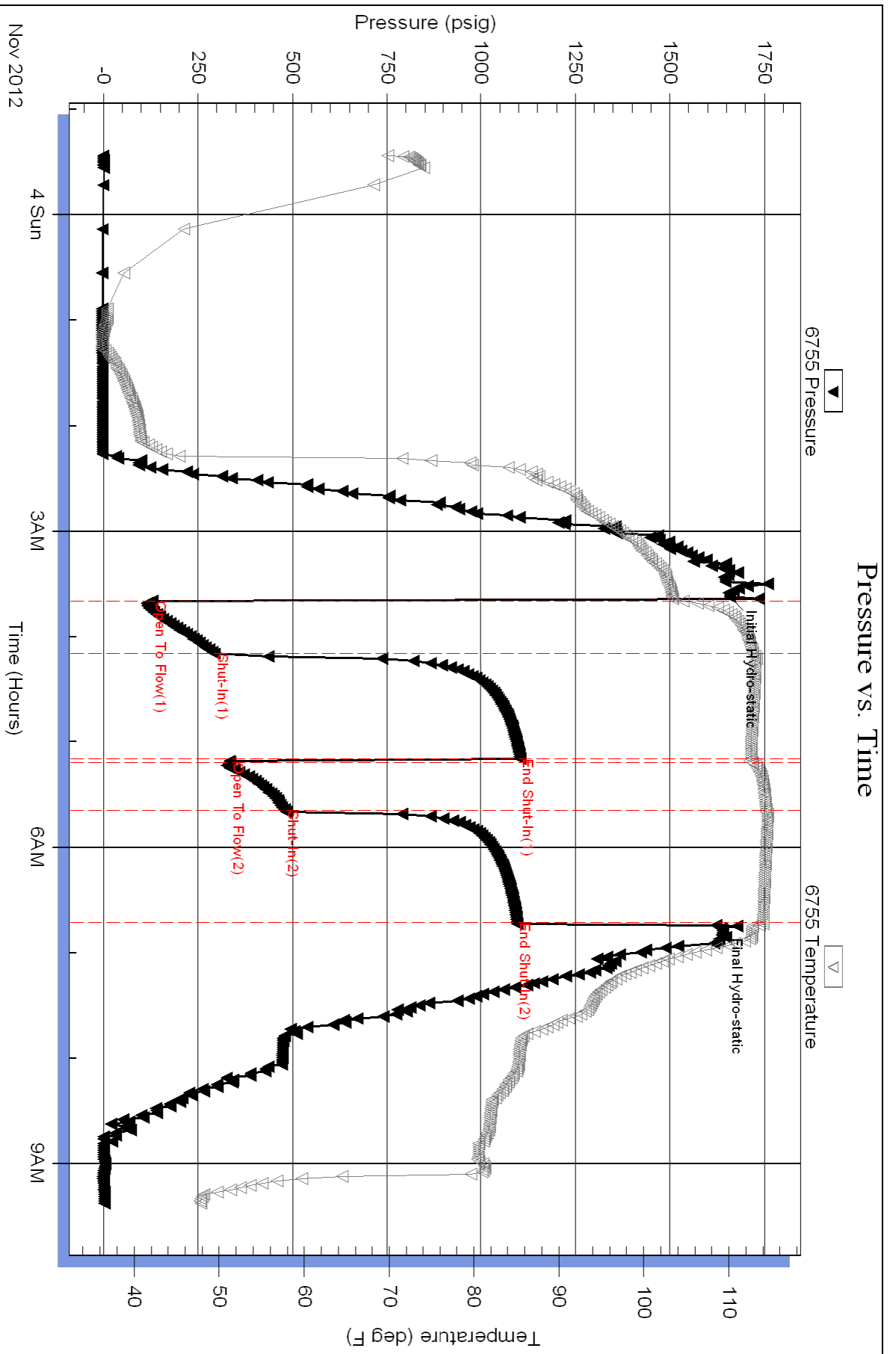
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

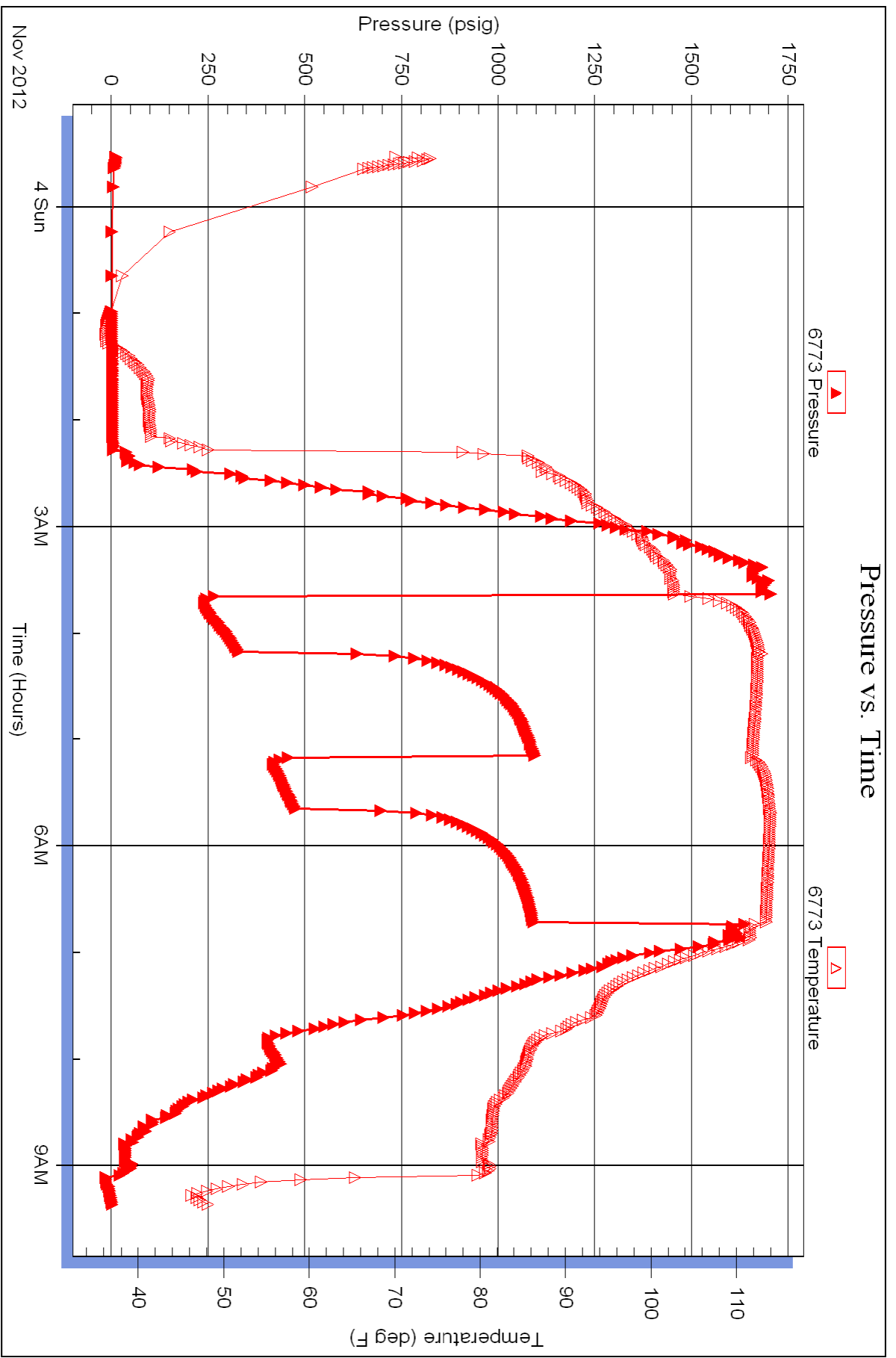


Serial #: 6773

Outside Rama Operating Co Inc

Wilson B #8

DST Test Number: 1





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Rama Operating Co Inc

4-25-16 Edwards Co

101S Main
Stafford KS
67578
ATTN: Robin Austin/ Josh A

Wilson B #8

Job Ticket: 49671

DST#: 2

Test Start: 2012.11.06 @ 21:24:57

GENERAL INFORMATION:

Formation: **Lansing J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:20:57

Time Test Ended: 05:41:42

Test Type: Conventional Bottom Hole (Reset)

Tester: Chris Staats

Unit No: #47

Interval: 3950.00 ft (KB) To 3988.00 ft (KB) (TVD)

Reference Elevations: 2096.00 ft (KB)

Total Depth: 3480.00 ft (KB) (TVD)

2087.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 6755

Press @ RunDepth: 41.97 psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.11.06 End Date: 2012.11.07

Last Calib.: 2012.11.07

Start Time: 21:25:02 End Time: 05:41:41

Time On Btm: 2012.11.07 @ 01:18:27

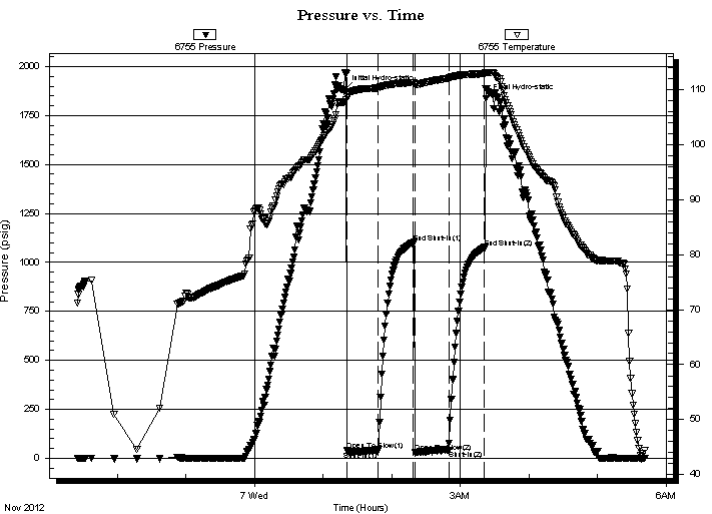
Time Off Btm: 2012.11.07 @ 03:22:27

TEST COMMENT: IF: Strong blow BOB 30 sec GTS 25 min TSTM

IS: No blow back

FF: Strong blow BOB 30 sec

FS: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1881.85	107.75	Initial Hydro-static
3	40.95	108.76	Open To Flow (1)
30	37.17	110.31	Shut-In(1)
60	1100.13	111.32	End Shut-In(1)
63	29.90	110.89	Open To Flow (2)
92	41.97	112.06	Shut-In(2)
123	1074.94	112.90	End Shut-In(2)
124	1837.33	113.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	3940' GIP	0.00
80.00	M,G,W With oil spots 5%gas 20%water	70.39h

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Rama Operating Co Inc

4-25-16 Edwards Co

101S Main
Stafford KS
67578

Wilson B #8

Job Ticket: 49671

DST#: 2

ATTN: Robin Austin/ Josh A

Test Start: 2012.11.06 @ 21:24:57

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 44.00 sec/qt

Water Loss: 8.79 in³

Resistivity: 0.00 ohm.m

Salinity: 3000.00 ppm

Filter Cake: 0.02 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	3940' GIP	0.000
80.00	M,G,W With oil spots 5%gas 20%water 75%r	0.393

Total Length: 80.00 ft Total Volume: 0.393 bbl

Num Fluid Samples: 0

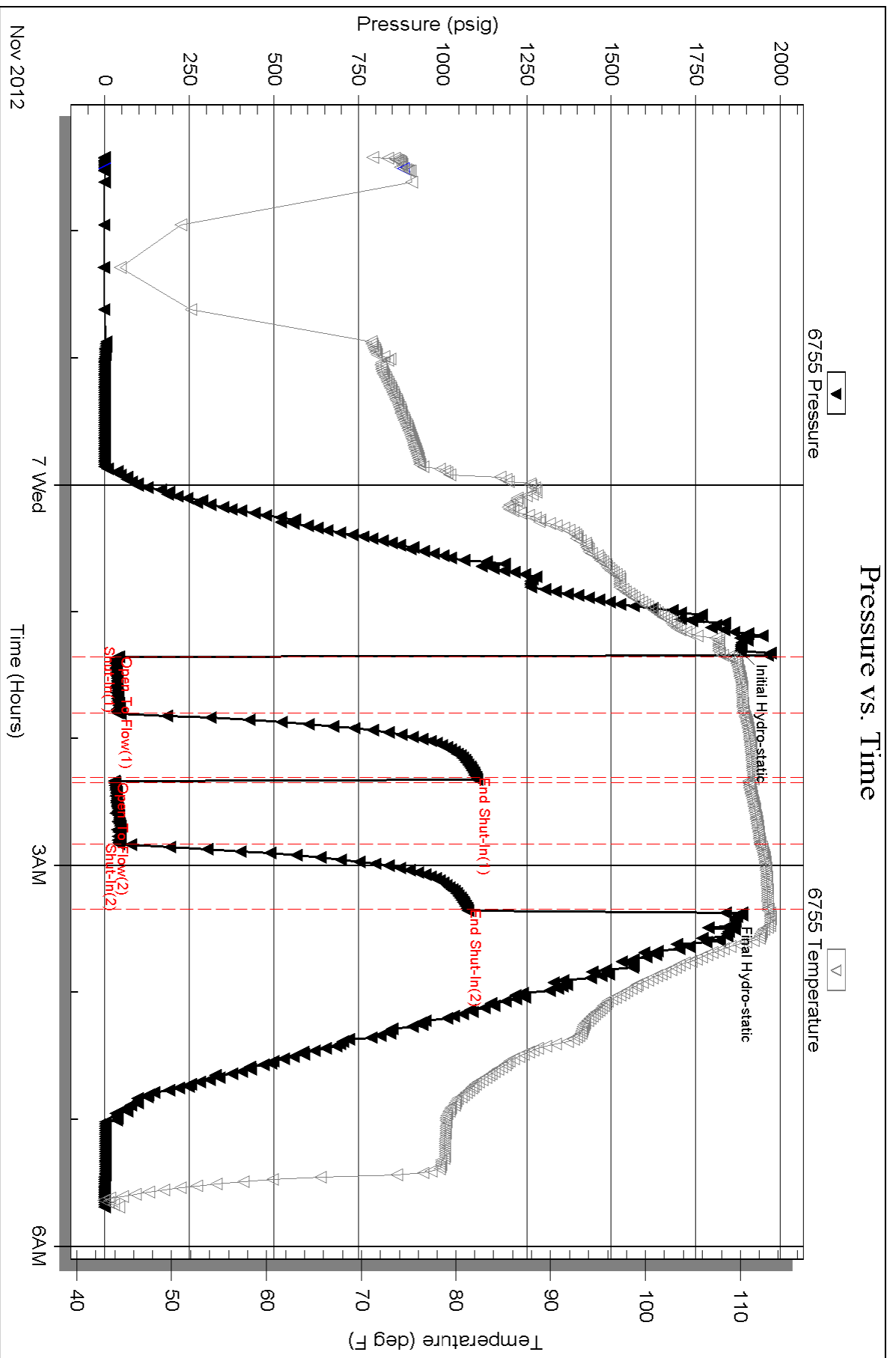
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



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



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

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

Sam Brownback, Governor

February 12, 2013

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

Re: ACO1
API 15-047-21614-00-00
Wilson 'B' 8
NW/4 Sec.04-25S-16W
Edwards 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