



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1081406  
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
-----------------------------------	-----------------	---

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: \_\_\_\_\_

1081406

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

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Samuel Gary Jr. & Associates, Inc.
Well Name	SATTERFIELD ET AL 1-1
Doc ID	1081406

All Electric Logs Run

ARRAY IND
DEN-NEUT
MICRO
SONIC
SPECTRAL

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  
Ward Loyd, Commissioner  
Thomas E. Wright, Commissioner

Sam Brownback, Governor

May 15, 2012

CLAYTON CAMOZZI  
Samuel Gary Jr. & Associates, Inc.  
1515 WYNKOOP, STE 700  
DENVER, CO 80202

Re: ACO1  
API 15-009-25650-00-00  
SATTERFIELD ET AL 1-1  
SE/4 Sec.01-17S-15W  
Barton 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 at 303-831-4673.

Respectfully,  
CLAYTON CAMOZZI



**QUALITY OILWELL CEMENTING, INC.**  
 PO Box 32 - 740 West Wichita Ave, Russell KS 67665  
 Phone: 785-324-1041 fax: 785-483-1087  
 Email: cementing@ruraltel.net

Date: 1/28/2012  
 Invoice # 217

P.O.#:  
 Due Date: 2/27/2012  
 Division: Russell

# Invoice

2/16  
 ✓ 1202-AP-159

**Contact:**  
 Samuel Gary Jr & Associates Inc  
**Address/Job Location:**  
 Samuel Gary Jr & Associates Inc  
 1815 11th Street  
 Great Bend, KS 67530

*Sutterfield*  
**Reference:**  
 SUTTERFIELD ET AL 1-1

**Description of Work:**  
 SURFACE JOB

<input checked="" type="checkbox"/> DRLG <input type="checkbox"/> COMP <input type="checkbox"/> W/O <input type="checkbox"/> LOE <input type="checkbox"/> GG	
Account	8200.138
Well/Prospect	
Deck	
AFE	
Approval	<i>[Signature]</i>
Description	

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 963.85	No				
Common-Class A	200	\$ 2,575.56	Yes				
Bulk Truck Matl-Material Service Charge	211	\$ 445.44	No				
Calcium Chloride	7	\$ 278.27	Yes				
Pump Truck Mileage-Job to Nearest Camp	25	\$ 263.36	No				
Bulk Truck Mileage-Job to Nearest Bulk Plant	25	\$ 154.11	No				
8 5/8" Wooden Plug	1	\$ 80.22	Yes				
Premium Gel (Bentonite)	4	\$ 68.74	Yes				

**Invoice Terms:**

Net 30

SubTotal: \$ 4,829.55  
 Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice: \$ (724.43)

SubTotal for Taxable Items:	\$ 2,552.36
SubTotal for Non-Taxable Items:	\$ 1,552.75
<b>Total:</b>	<b>\$ 4,105.11</b>
<b>Tax:</b>	<b>\$ 186.32</b>
<b>Amount Due:</b>	<b>\$ 4,291.44</b>
<b>Applied Payments:</b>	
<b>Balance Due:</b>	<b>\$ 4,291.44</b>

7.30% Barton County Sales Tax

**Thank You For Your Business!**

Past Due Invoices are subject to a service charge (annual rate of 24%)  
 This does not include any applicable taxes unless it is listed.  
 ©2008-2013 Straker Investments, LLC. All rights reserved.

RECEIVED

JAN 31 2012

SAMUEL GARY JR.  
 & ASSOCIATES, INC.

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 217

Date	1/25/12	Sec.	1	Twp.	17	Range	13	County	Burton	State	KS	On Location		Finish	4:15 AM
Lease	Suttonfield ET/Well No. 1-1			Location Gulation, 1E, 2S, 1E, 1/2S, W into											
Contractor	VAL Rig #6							Owner							
Type Job	Surface							To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish center and helper to assist owner or contractor to do work as listed.							
Hole Size	12 1/4"			T.D. 439'											
Csg.	8 5/8"			Depth 439'											
Tbg. Size				Depth											
Tool				Depth											
Cement Left in Csg.	20'			Shoe Joint				The above was done to satisfaction and supervision of owner agent or contractor.							
Meas Line				Displace 26 7/8 Bbls.				Cement Amount Ordered 200 sk Com 3 1/4 U, 2 1/2 gal							

**EQUIPMENT**

Pumptrk	9	No.	Cementer	Paul	Common	200
			Helper			
Bulktrk	3	No.	Driver	Matt	Poz. Mix	
			Driver			
Bulktrk	PJ	No.	Driver	Jason	Gel.	4
			Driver			

**JOB SERVICES & REMARKS**

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
Est. Circ	Sand
Mix 200 sk	Handling 211
Displace	Mileage
Cement Circulated	

**FLOAT EQUIPMENT**

Guide Shoe	
Centralizer	8 5/8"
Baskets	Head + manifold
AFU Inserts	
Float Shoe	Wood Plug
Latch Down	
Pumptrk Charge	Surface
Mileage	25

Thank You!!

X Signature *Paul Mark*

Tax  
Discount  
Total Charge



**QUALITY OILWELL CEMENTING, INC.**  
 PO Box 32 - 740 West Wichita Ave, Russell KS 67665  
 Phone: 785-324-1041 fax: 785-483-1087  
 Email: cementing@ruraltel.net

Date: 2/3/2012  
 Invoice # 575

P.O.#:  
 Due Date: 3/4/2012  
 Division: Russell

# Invoice

*8/29*  
*V1202-AP-482*

**Contact:**  
 Samuel Gary Jr & Associates Inc  
**Address/Job Location:**  
 Samuel Gary Jr & Associates Inc  
 1815.11th Street  
 Great Bend, KS 67530

**Reference:**  
 SATTERFIELD ET-AL 1-1

**Description of Work:**  
 PLUG JOB

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 991.39	Yes				
Common-Class A	123	\$ 1,629.22	Yes				
Bulk Truck Matl-Material Service Charge	212	\$ 460.34	Yes				
POZ Mix-Standard	82	\$ 409.53	Yes				
Pump Truck Mileage-Job to Nearest Camp	25	\$ 270.89	Yes				
Bulk Truck Mileage-Job to Nearest Bulk Plant	25	\$ 158.51	Yes				
Premium Gel (Bentonite)	7	\$ 123.73	Yes				
Flo Seal	50	\$ 108.57	Yes				
Dry Hole Plug	1	\$ 60.80	Yes				

**Invoice Terms:**

Net 30

	SubTotal:	\$	4,212.98
	Discount Available <u>ONLY</u> if Invoice is Paid & Received within listed terms of invoice:	\$	(631.95)
SubTotal for Taxable Items:		\$	3,581.04
SubTotal for Non-Taxable Items:		\$	-
Total:		\$	3,581.04
Tax:		\$	261.42
7.30% Barton County Sales Tax			

**Thank You For Your Business!**

**Amount Due: \$ 3,842.45**  
**Applied Payments:**  
**Balance Due: \$ 3,842.45**

Past Due Invoices are subject to a service charge (annual rate of 24%)  
 This does not include any applicable taxes unless it is listed.  
 ©2008-2013 Straker Investments, LLC. All rights reserved.

**RECEIVED**

**FEB 10 2012**

**SAMUEL GARY JR.  
 & ASSOCIATES, INC.**

DRLG  COMP  W/O  LOE  GG

Account	8200.145
Well/Prospect	
Deck	
AFE	
Approval	<i>[Signature]</i>
Description	

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 575

Date	1-30-12	Sec.	1	Twp.	17	Range	15	County	Barton	State	Ks	On Location		Finish	2:00AM
Lease	Satterfield ET AL		Well No.	1-1		Location	281 + Galatia Rd, W to 80 Rd, 2 1/2 S								
Contractor	Dal #6				Owner	W/S									
Type-Job	Plug				To Quality Oilwell Cementing, Inc. 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	7 7/8"		T.D.	3600'											
Csg.			Depth	Charge To Sam Gary Jr & Assoc.											
Tbg. Size	4 1/2" D.P.		Depth	3464'											
Tool			Depth	Street											
Cement Left in Csg.			Shoe Joint	City State											
Meas Line			Displace	H2O/Mud											
				Cement Amount Ordered	205 5x 60/40 4 1/2 Gel 4#ES										

**EQUIPMENT**

Pumptrk	15 No.	Cementor Helper	Cisco	Common	123
Bulktrk	14 No.	Driver	Mike	Poz. Mix	82
Bulktrk	pu No.	Driver	Rick	Gel.	7

**JOB SERVICES & REMARKS**

Remarks:		Calcium
Rat Hole	30 SX	Hulls
Mouse Hole	15 SX	Salt
Centralizers		Flowseal 50#
Baskets		Kol-Seal
D/V or Port Collar		Mud CLR 48
25 SX - 3464'		CFL-117 or CD110 CAF 38
25 SX - 1000'		Sand
100 SX - 520'		Handling 212
10 SX - 40' w/ plug		Mileage

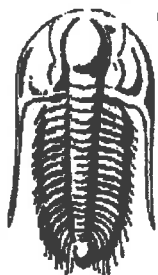
**FLOAT EQUIPMENT**

30 SX - Rathole	Guide Shoe
15 SX - Mousehole	Centralizer
	Baskets
	AFU Inserts
Cement did Circulate.	Float Shoe
	Latch Down
	1- Dry hole plug
	Pumptrk Charge
	Mileage 25 plug

X Signature *Randy Marks*

Tax  
Discount  
Total Charge





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Samuel Gary Jr & Associates Inc**

1515 Wynkoop ste 700  
Denver CO 80202

ATTN: Clayton Camozzi

**Satterfield #1-1**

**1-17s-15w Barton,KS**

Start Date: 2012.01.28 @ 22:02:46

End Date: 2012.01.29 @ 06:10:16

Job Ticket #: 46386                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

**ORIGINAL**

Printed: 2012.02.02 @ 14:14:26

Samuel Gary Jr & Associates Inc

1-17s-15w Barton,KS

Satterfield #1-1

DST # 1

Lansing F & G

2012.01.28



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Samuel Gary Jr & Associates Inc

1-17s-15w Barton,KS

1515 Wynkoop ste 700  
Denver CO 80202

Satterfield #1-1

Job Ticket: 46386

DST#: 1

ATTN: Clayton Camozzi

Test Start: 2012.01.28 @ 22:02:46

## GENERAL INFORMATION:

Formation: **Lansing F & G**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:25:16

Time Test Ended: 06:10:16

Test Type: Conventional Bottom Hole (Initial)

Tester: Jeff Brown

Unit No: 150

Interval: **3290.00 ft (KB) To 3333.00 ft (KB) (TVD)**

Reference Elevations: 1980.00 ft (KB)

Total Depth: 3333.00 ft (KB) (TVD)

1972.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

## Serial #: 8321

Inside

Press@RunDepth: 42.65 psig @ 3294.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.01.28

End Date:

2012.01.29

Last Calib.: 2012.01.29

Start Time: 22:02:47

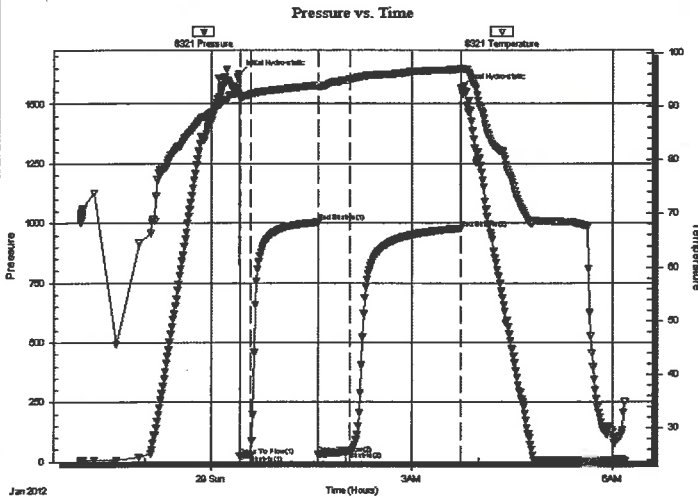
End Time:

06:10:16

Time On Btm: 2012.01.29 @ 00:24:46

Time Off Btm: 2012.01.29 @ 03:43:46

**TEST COMMENT:** IFP-10-min-Weak blow built to 2 in  
ISI-60-Min-Weak surface blow back died in 26 min  
FFP-30-Min-Weak blow built to 3 1/2 in  
FSI-90-Min-Dead no blow back



## PRESSURE SUMMARY

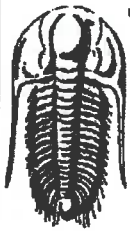
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1624.55	91.99	Initial Hydro-static
1	22.61	91.56	Open To Flow (1)
10	28.53	92.24	Shut-In (1)
71	1003.33	93.95	End Shut-In (1)
71	31.00	93.73	Open To Flow (2)
99	42.65	95.05	Shut-In (2)
199	977.70	96.89	End Shut-In (2)
199	1567.08	97.02	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
36.00	Mud with a scum of oil	0.50

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

Samuel Gary Jr & Associates Inc

**1-17s-15w Barton,KS**

1515 Wynkoop ste 700  
Denver CO 80202

**Satterfield #1-1**

ATTN: Clayton Camozzi

Job Ticket: 46386

DST#: 1

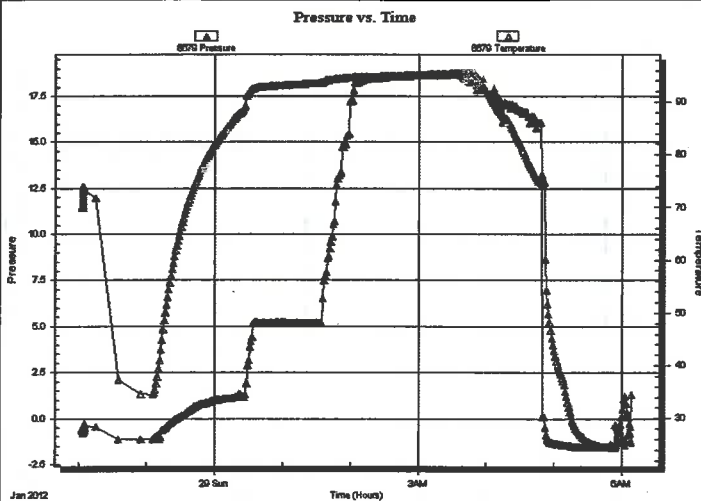
Test Start: 2012.01.28 @ 22:02:46

**GENERAL INFORMATION:**

Formation: **Lansing F & G**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 00:25:16  
 Time Test Ended: 06:10:16  
 Interval: **3290.00 ft (KB) To 3333.00 ft (KB) (TVD)**  
 Total Depth: 3333.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jeff Brown  
 Unit No: 150  
 Reference Elevations: 1980.00 ft (KB)  
 1972.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8679 Fluid**  
 Press@RunDepth: psig @ 3256.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2012.01.28 End Date: 2012.01.29 Last Calib.: 2012.01.29  
 Start Time: 22:02:59 End Time: 06:08:58 Time On Btm: Time Off Btm:

**TEST COMMENT:** IFF-10-min-Weak blow built to 2 in  
 ISI-60-Min-Weak surface blow back died in 26 min  
 FFP-30-Min-Weak blow built to 3 1/2 in  
 FSI-90-Min-Dead no blow back



**PRESSURE SUMMARY**

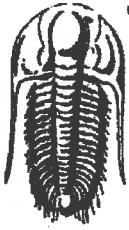
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

**Recovery**

Length (ft)	Description	Volume (bbl)
36.00	Mud w ith a scum of oil	0.50

**Gas Rates**

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Samuel Gary Jr & Associates Inc

**1-17s-15w Barton,KS**

1515 Wynkoop ste 700  
Denver CO 80202

**Satterfield #1-1**

Job Ticket: 46386

**DST#: 1**

ATTN: Clayton Camozzi

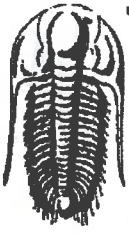
Test Start: 2012.01.28 @ 22:02:46

### Tool Information

Drill Pipe:	Length: 3288.00 ft	Diameter: 3.80 inches	Volume: 46.12 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 54000.00 lb
			<u>Total Volume: 46.12 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	3290.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 ft			
Tool Length:	77.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Recorder	0.00	8679	Fluid	3256.00	
Stubb	5.00			3261.00	
Shut In Tool	5.00			3266.00	
Sampler	2.00			3268.00	
Hydraulic tool	5.00			3273.00	
Jars	5.00			3278.00	
Safety Joint	3.00			3281.00	
Packer	4.00			3285.00	34.00 Bottom Of Top Packer
Packer	5.00			3290.00	
Stubb	1.00			3291.00	
Perforations	2.00			3293.00	
Change Over Sub	1.00			3294.00	
Recorder	0.00	8321	Inside	3294.00	
Recorder	0.00	8737	Outside	3294.00	
Drill Pipe	31.00			3325.00	
Change Over Sub	1.00			3326.00	
Perforations	4.00			3330.00	
Bullnose	3.00			3333.00	43.00 Bottom Packers & Anchor

**Total Tool Length: 77.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Samuel Gary Jr & Associates Inc

**1-17s-15w Barton,KS**

1515 Wynkoop ste 700  
Denver CO 80202

**Satterfield #1-1**

Job Ticket: 46386

**DST#: 1**

ATTN: Clayton Camozzi

Test Start: 2012.01.28 @ 22:02:46

**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: 59.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
36.00	Mud with a scum of oil	0.505

Total Length: 36.00 ft      Total Volume: 0.505 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 2000 mL of total fluid 50 ML of oil 1

950 mL of mud 510 psi. OCM 20% O80%M

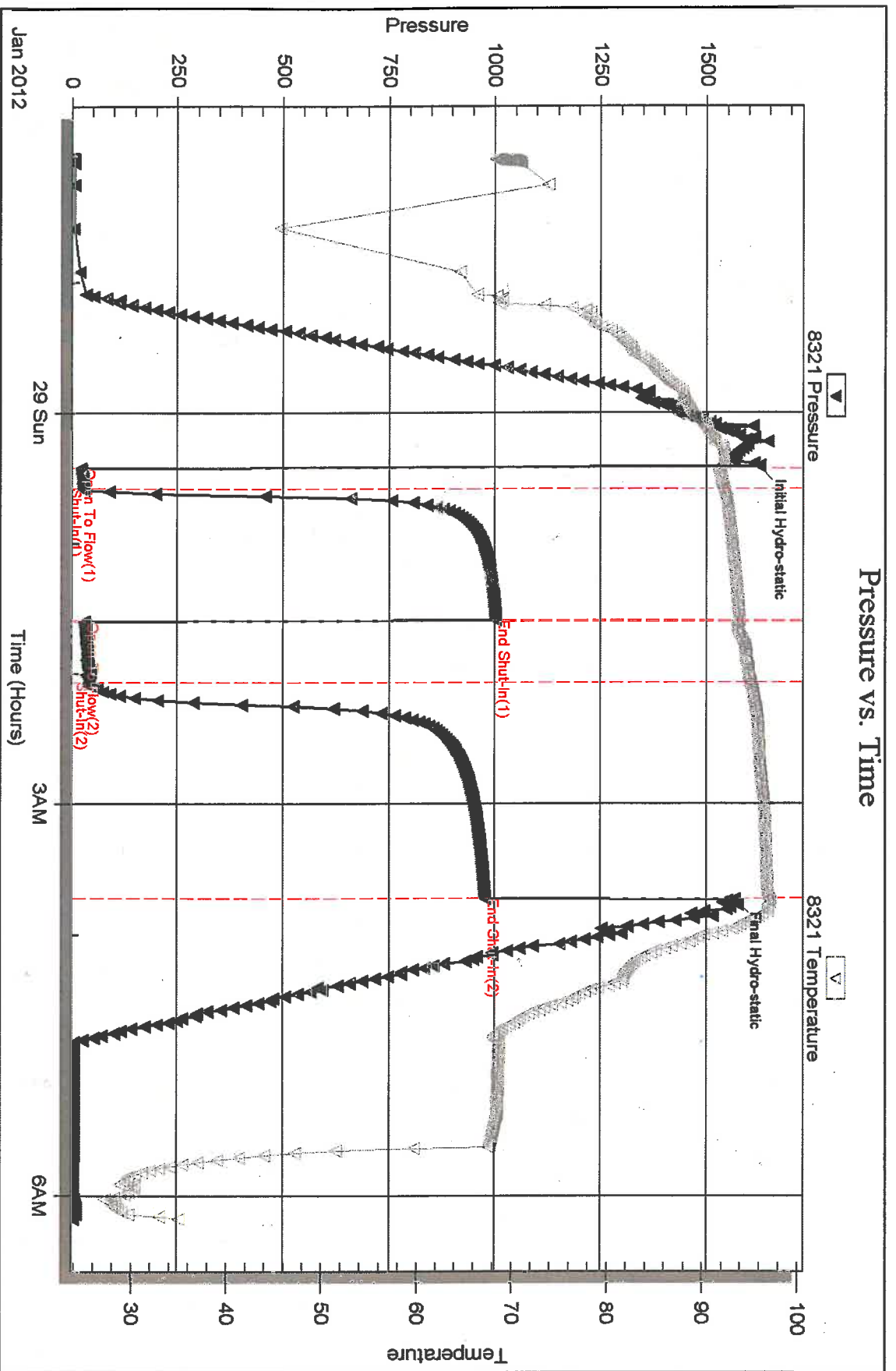
Serial #: 8321

Inside

Samuel Gary Jr & Associates Inc

Satterfield #1-1

DST Test Number: 1



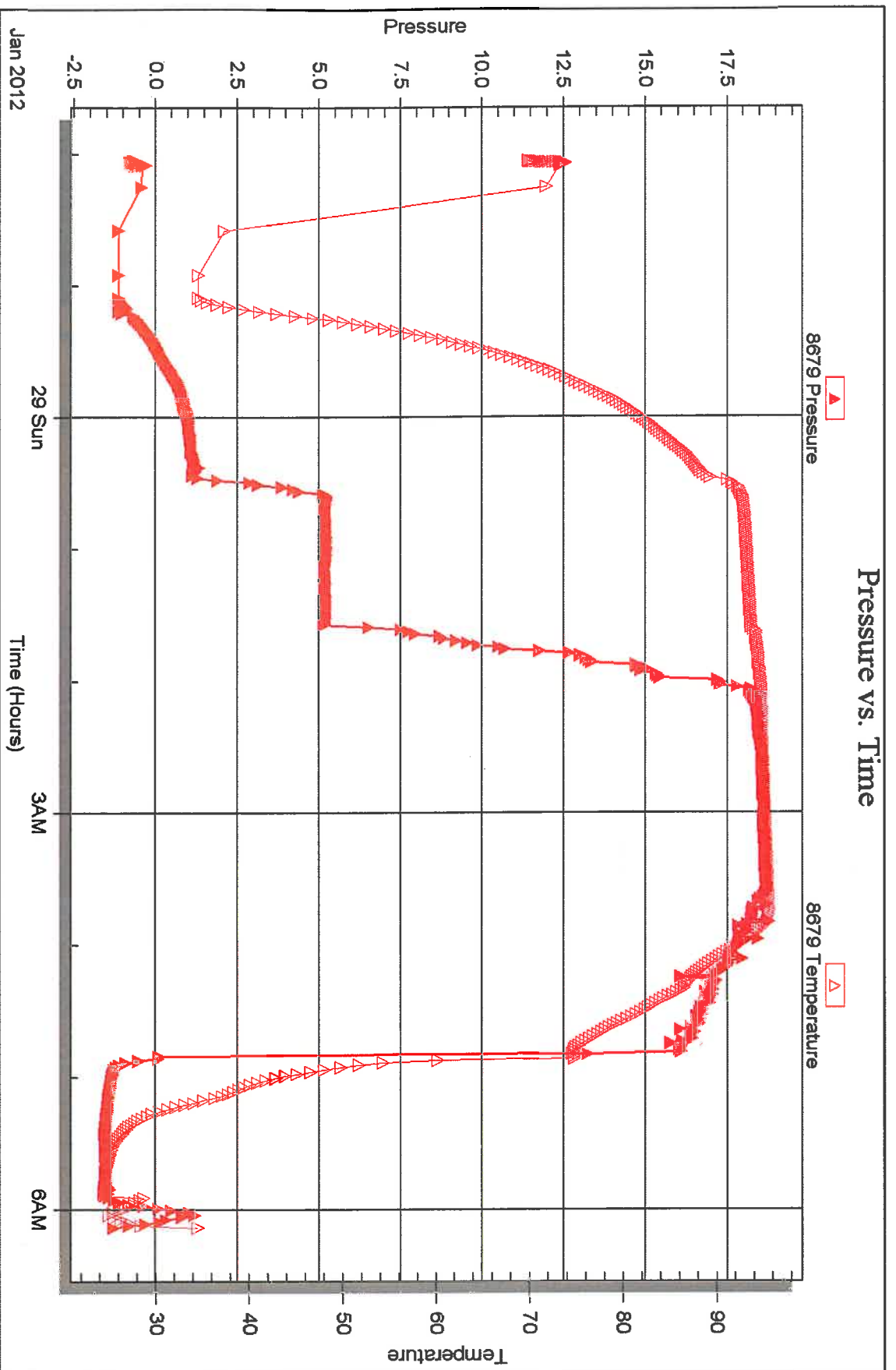
Serial #: 8679

Fluid

Samuel Gary Jr & Associates Inc

Satterfield #1-1

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Samuel Gary Jr & Associates Inc**

1515 Wynkoop ste 700  
Denver CO 80202

ATTN: Clayton Camozzi

### **Satterfield #1-1**

#### **1-17s-15w Barton,KS**

Start Date: 2012.01.30 @ 12:24:18

End Date: 2012.01.30 @ 18:42:18

Job Ticket #: 46387                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.02.02 @ 14:14:51

Samuel Gary Jr & Associates Inc

1-17s-15w Barton,KS

Satterfield #1-1

DST # 2

Lansing-D

2012.01.30





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Samuel Gary Jr & Associates Inc

1-17s-15w Barton,KS

1515 Wynkoop ste 700  
Denver CO 80202

**Satterfield #1-1**

Job Ticket: 46387

DST#: 2

ATTN: Clayton Camozzi

Test Start: 2012.01.30 @ 12:24:18

## GENERAL INFORMATION:

Formation: **Lansing-D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:09:48

Time Test Ended: 18:42:18

Test Type: Conventional Straddle (Reset)

Tester: Jeff Brown

Unit No: 150

Interval: **3258.00 ft (KB) To 3275.00 ft (KB) (TVD)**

Total Depth: 3600.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1980.00 ft (KB)

1972.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 8321** Inside

Press@RunDepth: 24.73 psig @ 3259.00 ft (KB)

Start Date: 2012.01.30

End Date:

2012.01.30

Start Time: 12:24:19

End Time:

18:42:18

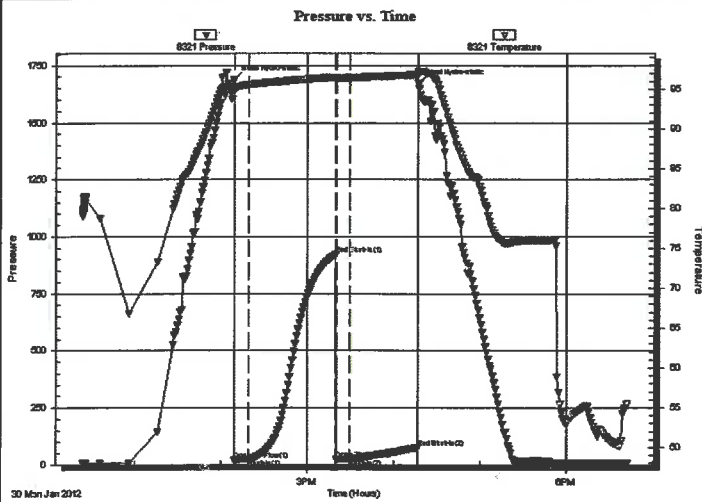
Capacity: 8000.00 psig

Last Calib.: 2012.01.30

Time On Btm: 2012.01.30 @ 14:09:18

Time Off Btm: 2012.01.30 @ 16:17:18

TEST COMMENT: IFP-10-Min-Weak blow built to 1/2  
ISI-60-min-Dead no blow back  
FFP-10-Min-Dead no blow  
FSI-45-min-Dead no blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1689.45	95.38	Initial Hydro-static
1	21.63	94.93	Open To Flow (1)
11	24.74	95.58	Shut-In(1)
71	924.30	96.48	End Shut-In(1)
71	26.00	96.09	Open To Flow (2)
81	24.73	96.42	Shut-In(2)
128	76.42	96.79	End Shut-In(2)
128	1670.67	97.17	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
4.00	Mud w ith oil spots	0.06

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Samuel Gary Jr & Associates Inc

1-17s-15w Barton,KS

1515 Wynkoop ste 700  
Denver CO 80202

**Satterfield #1-1**

Job Ticket: 46387 **DST#: 2**

ATTN: Clayton Camozzi

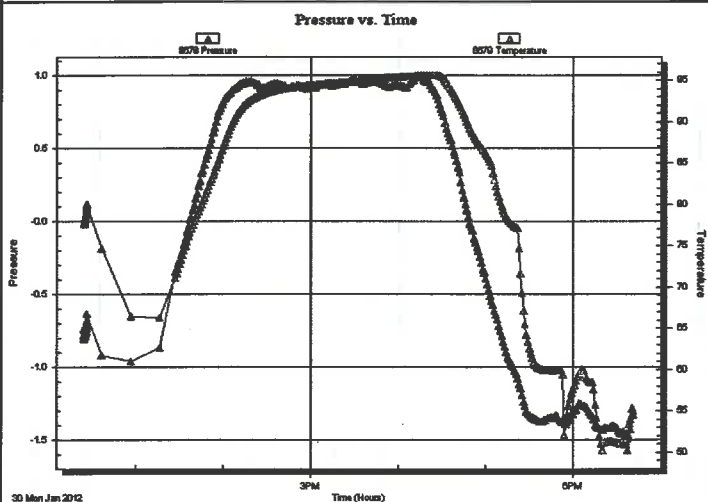
Test Start: 2012.01.30 @ 12:24:18

## GENERAL INFORMATION:

**Formation:** Lansing-D  
**Deviated:** No Whipstock ft (KB)  
**Time Tool Opened:** 14:09:48  
**Time Test Ended:** 18:42:18  
**Interval:** 3258.00 ft (KB) To 3275.00 ft (KB) (TVD)  
**Total Depth:** 3600.00 ft (KB) (TVD)  
**Hole Diameter:** 7.88 inches **Hole Condition:** Good  
**Test Type:** Conventional Straddle (Reset)  
**Tester:** Jeff Brown  
**Unit No:** 150  
**Reference Elevations:** 1980.00 ft (KB)  
 1972.00 ft (CF)  
**KB to GR/CF:** 8.00 ft

**Serial #: 8679** **Fluid**  
**Press@RunDepth:** psig @ 3223.00 ft (KB) **Capacity:** 8000.00 psig  
**Start Date:** 2012.01.30 **End Date:** 2012.01.30 **Last Calib.:** 2012.01.30  
**Start Time:** 12:24:26 **End Time:** 18:40:55 **Time On Btm:**  
**Time Off Btm:**

**TEST COMMENT:** IFF-10-Min-Weak blow built to 1/2  
 ISI-60-min-Dead no blow back  
 FFP-10-Min-Dead no blow  
 FSI-45-min-Dead no blow back



## PRESSURE SUMMARY

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

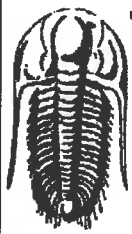
## Recovery

Length (ft)	Description	Volume (bbl)
4.00	Mud w ith oil spots	0.06

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE TESTING, INC**

**DRILL STEM TEST REPORT**

Samuel Gary Jr & Associates Inc

1-17s-15w Barton,KS

1515 Wynkoop ste 700  
Denver CO 80202

**Satterfield #1-1**

Job Ticket: 46387 DST#: 2

ATTN: Clayton Camozzi

Test Start: 2012.01.30 @ 12:24:18

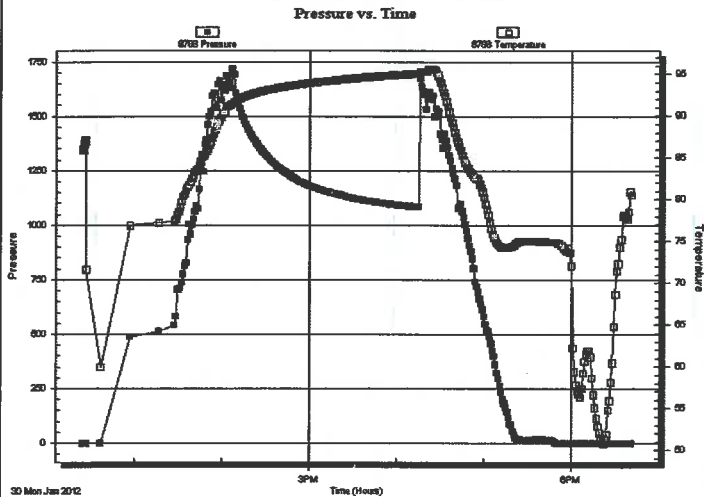
**GENERAL INFORMATION:**

Formation: **Lansing-D**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 14:09:48  
 Time Test Ended: 18:42:18  
 Interval: **3258.00 ft (KB) To 3275.00 ft (KB) (TVD)**  
 Total Depth: 3600.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Straddle (Reset)  
 Tester: Jeff Brown  
 Unit No: 150  
 Reference Elevations: 1980.00 ft (KB)  
 1972.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8788 Below (Straddle)**  
 Press@RunDepth: psig @ 3279.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2012.01.30 End Date: 2012.01.30 Last Calib.: 2012.01.30  
 Start Time: 12:24:22 End Time: 18:40:51 Time On Btmr  
 Time Off Btmr

**TEST COMMENT:** IFP-10-Min-Weak blow built to 1/2  
 ISI-60-min-Dead no blow back  
 FFP-10-Min-Dead no blow  
 FSI-45-min-Dead no blow back



**PRESSURE SUMMARY**

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

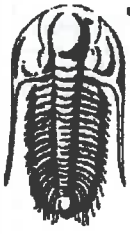
**Recovery**

Length (ft)	Description	Volume (bbl)
4.00	Mud w ith oil spots	0.06

**Gas Rates**

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Samuel Gary Jr & Associates Inc

**1-17s-15w Barton,KS**

1515 Wynkoop ste 700  
Denver CO 80202

**Satterfield #1-1**

Job Ticket: 46387

**DST#: 2**

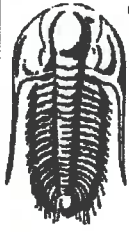
ATTN: Clayton Camozzi

Test Start: 2012.01.30 @ 12:24:18

### Tool Information

Drill Pipe:	Length: 3254.00 ft	Diameter: 3.80 inches	Volume: 45.65 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 45.65 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3258.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	3275.00 ft			
Interval between Packers:	17.00 ft			
Tool Length:	374.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Recorder	0.00	8679	Fluid	3223.00	
Stubb	5.00			3228.00	
Shut In Tool	5.00			3233.00	
Sampler	3.00			3236.00	
Hydraulic tool	5.00			3241.00	
Jars	5.00			3246.00	
Safety Joint	3.00			3249.00	
Packer	4.00			3253.00	35.00 Bottom Of Top Packer
Packer	5.00			3258.00	
Stubb	1.00			3259.00	
Recorder	0.00	8321	Inside	3259.00	
Recorder	0.00	8737	Outside	3259.00	
Perforations	12.00			3271.00	
Blank Off Sub	1.00			3272.00	
Stubb	3.00			3275.00	17.00 Tool Interval
Packer	1.00			3276.00	
Stubb	1.00			3277.00	
Perforations	1.00			3278.00	
Change Over Sub	1.00			3279.00	
Recorder	0.00	8788	Below	3279.00	
Drill Pipe	314.00			3593.00	
Change Over Sub	1.00			3594.00	
Bullnose	3.00			3597.00	322.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>374.00</b>				



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Samuel Gary Jr & Associates Inc

**1-17s-15w Barton,KS**

1515 Wynkoop ste 700  
Denver CO 80202

**Satterfield #1-1**

Job Ticket: 46387

**DST#: 2**

ATTN: Clayton Camozzi

Test Start: 2012.01.30 @ 12:24:18

**Mud and Cushion Information**

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 55.00 sec/qt  
Water Loss: 7.79 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 3600.00 ppm  
Filter Cake: 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
4.00	Mud with oil spots	0.056

Total Length: 4.00 ft      Total Volume: 0.056 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments: 2000 ml of total fluid 40 psi  
2000 mL of mud with oil spots

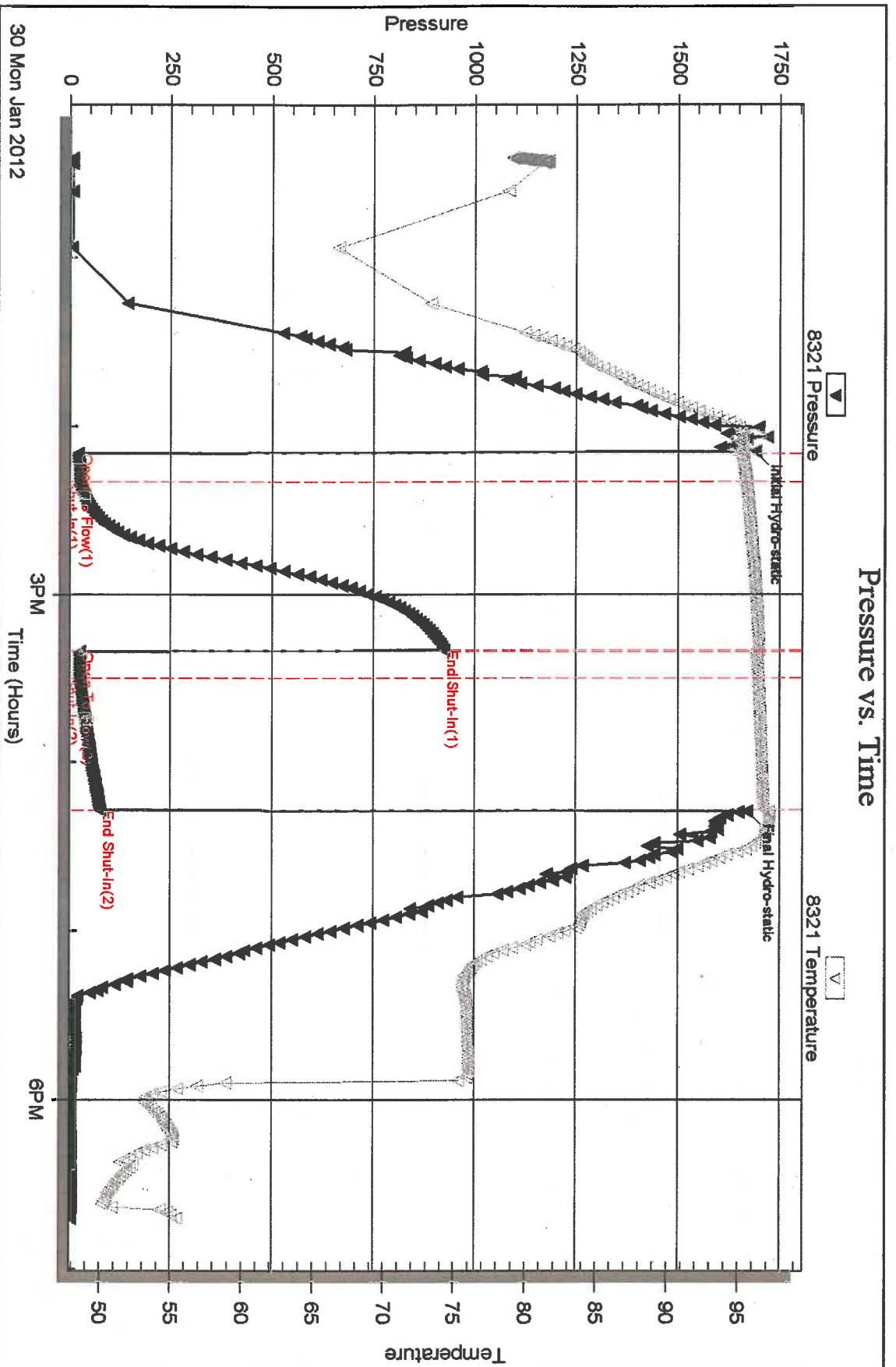
Serial #: 8321

Inside

Samuel Gary Jr & Associates Inc

Satterfield #1-1

DST Test Number: 2



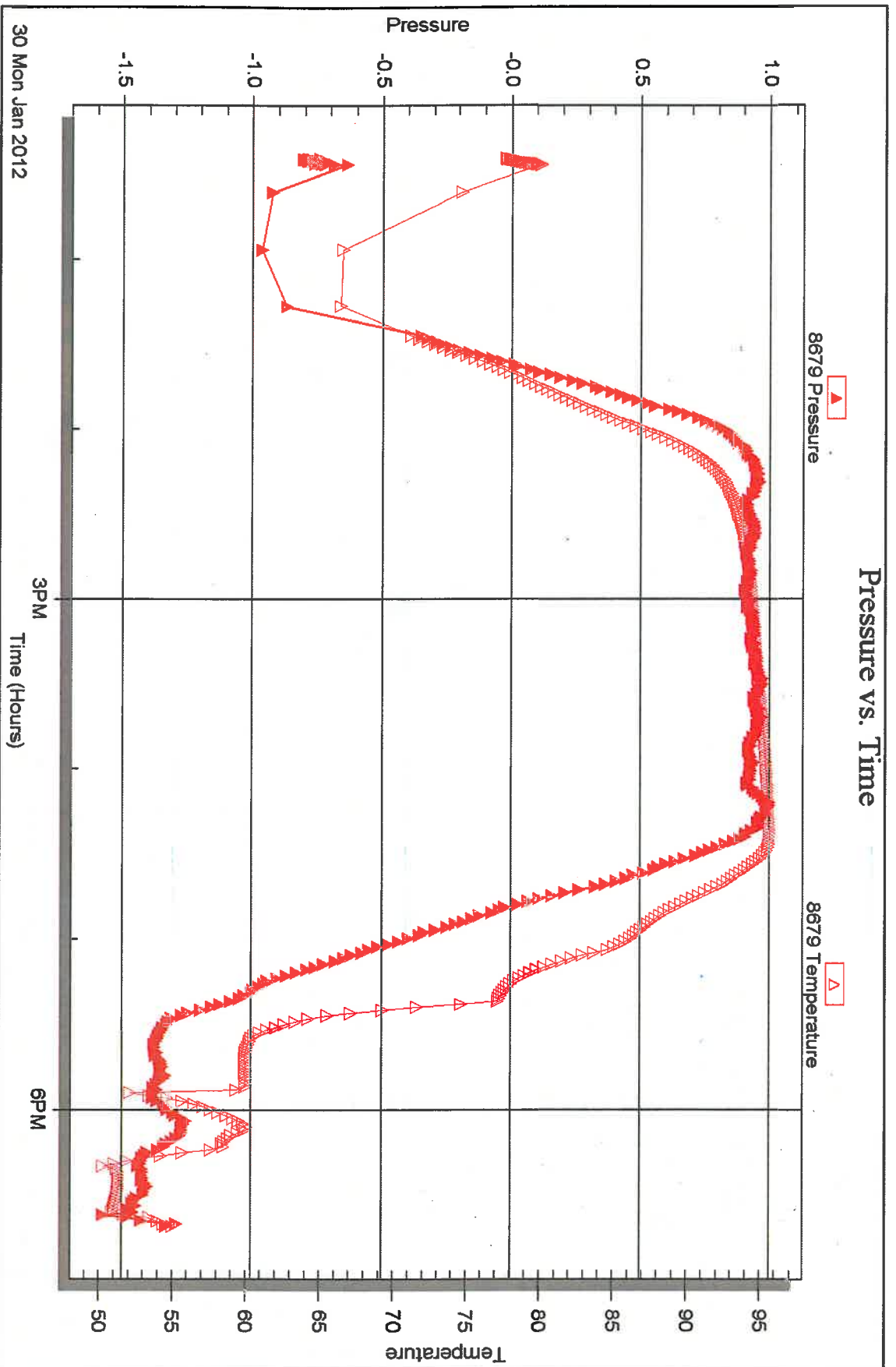
Serial #: 8679

Fluid

Samuel Gary Jr & Associates Inc

Satterfield #1-1

DST Test Number: 2



Tribble Testing, Inc

Ref. No: 46387

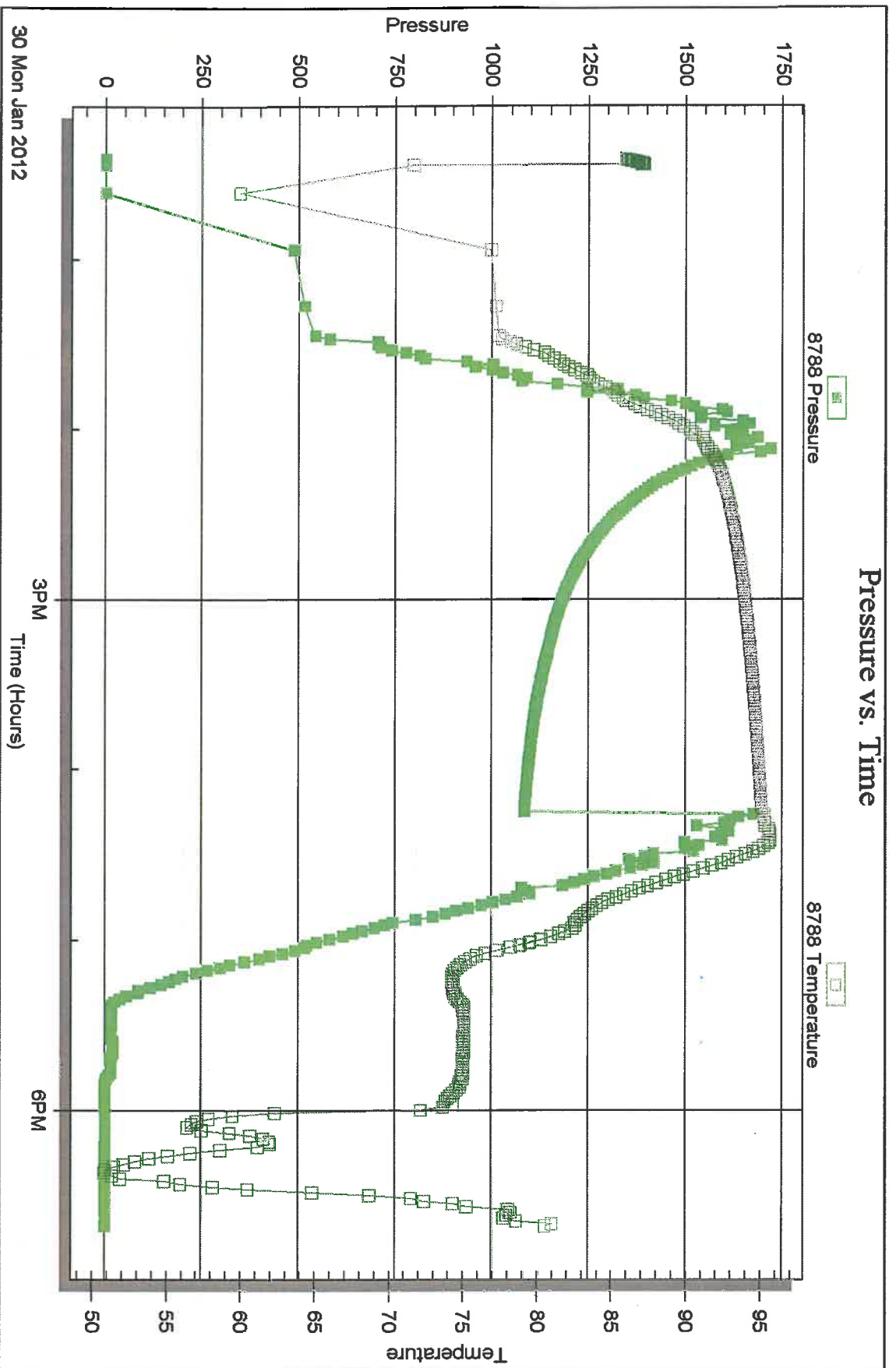
Printed: 2012.02.02 @ 14:14:54

Serial #: 8788

Below (Stratton) Gary Jr & Associates Inc

Satterfield #1-1

DST Test Number: 2



Thickrite Testing, Inc

Ref. No: 46387

Printed: 2012.02.02 @ 14:14:54





Scale 1:240 (5"=100') Imperial  
Measured Depth Log

Well Name: SGA Satterfield et al # 1-1  
Location: SEC 1 17s 15w, Barton County, Kansas  
License Number: 15-009-2560-0000  
Spud Date: 1-24-2012  
Surface Coordinates: 2520 FSL & 100' FEL  
Region: WILDCAT  
Drilling Completed: 1/30/2012

Bottom Hole  
Coordinates:  
Ground Elevation (ft): 1972' K.B. Elevation (ft): 1982'  
Logged Interval (ft): 1700 To: 3600' Total Depth (ft): 3600'  
Formation: Lansing, Arbuckle  
Type of Drilling Fluid:

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

**OPERATOR**

Company: Samuel Gary Jr, & Assoc.  
Address: 1515 Wynkoop, Ste. # 700  
Denver, Colo. 80202  
Geo: Clayton Camozzi

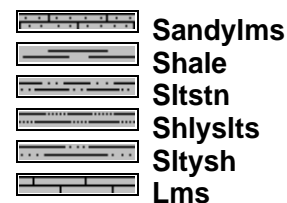
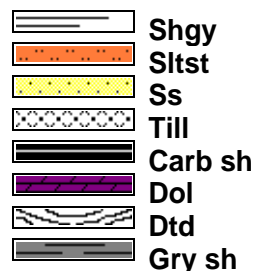
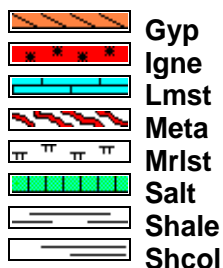
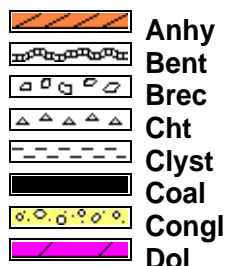
**GEOLOGIST**

Name: TIM HEDRICK/JEFF QUIMBY  
Company: Earth Tech OGL, Inc.  
Address: PO Box 683  
Hooker, Okla . 73945  
Off. 888-543-8378

**DST's Report**

DST #1 3290'-3333' 10 60 30 90  
IF-WK BLOW 2"/ISI WK BLOW DIED IN 26 MIN/ FF- 3.5" BLOW/FSI- NB  
IH-1625,FH-1567/IF-23 TO 29, FF-31 TO 43/ ISI-1003, FSI-978  
REC-36' MUD WITH A SCUM OF OIL BHT-97 DEG  
SAMPLER REC. 50ML OIL, 1950 ML MUD, 510 PSI, TOTAL 2000 ML, OCM 20% OIL, 80% MUD

## ROCK TYPES

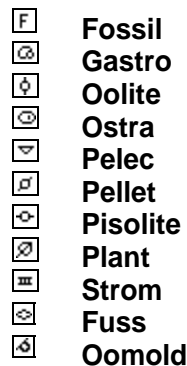
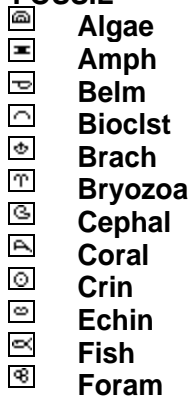


## ACCESSORIES

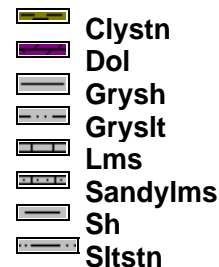
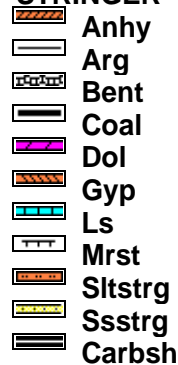
### MINERAL



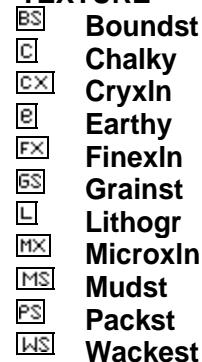
### FOSSIL



### STRINGER

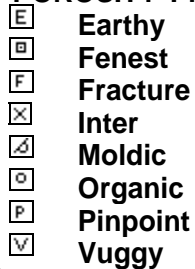


### TEXTURE



## OTHER SYMBOLS

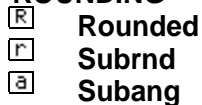
### POROSITY TYPE



### SORTING



### ROUNDING



### OIL SHOWS

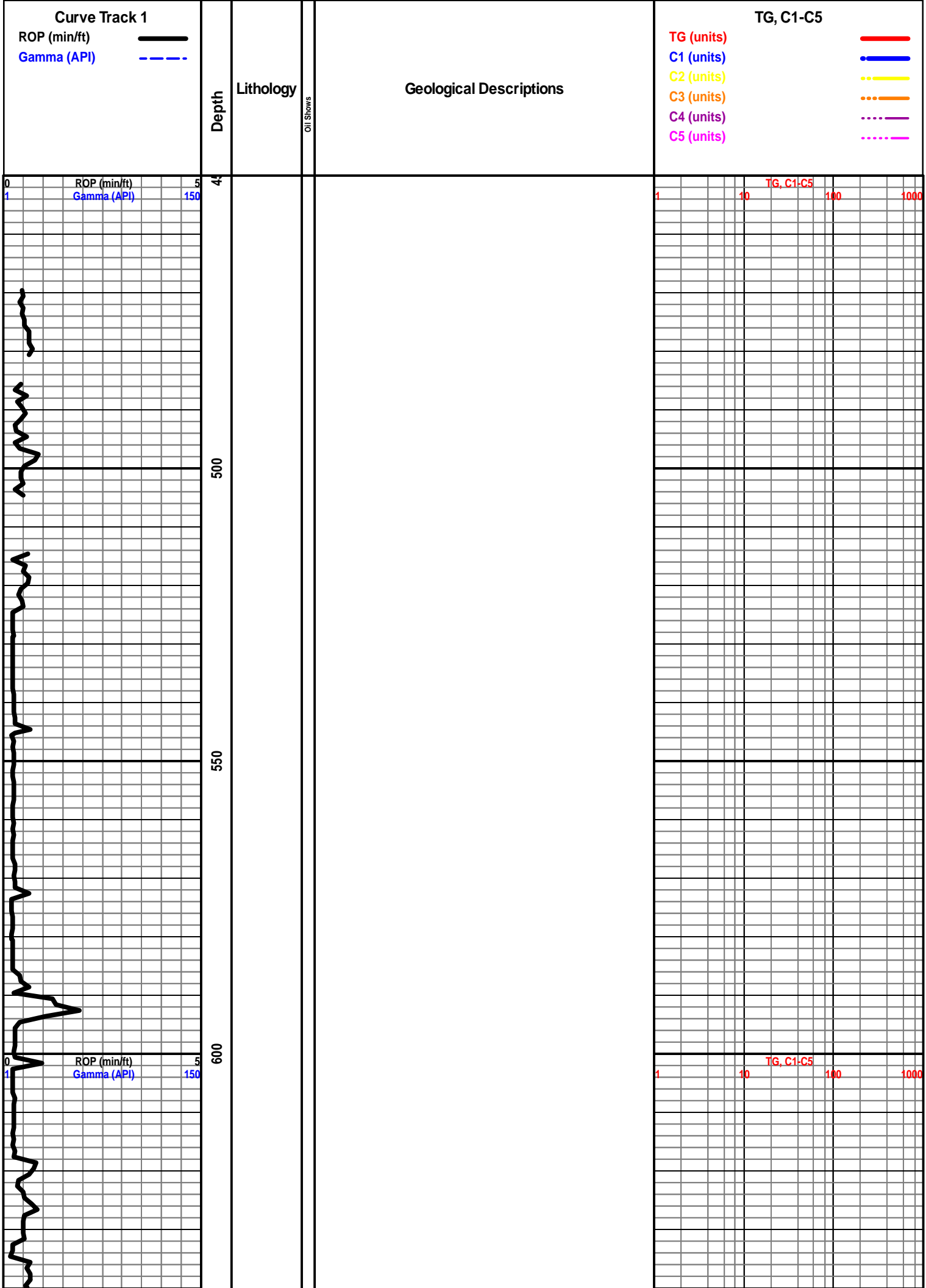


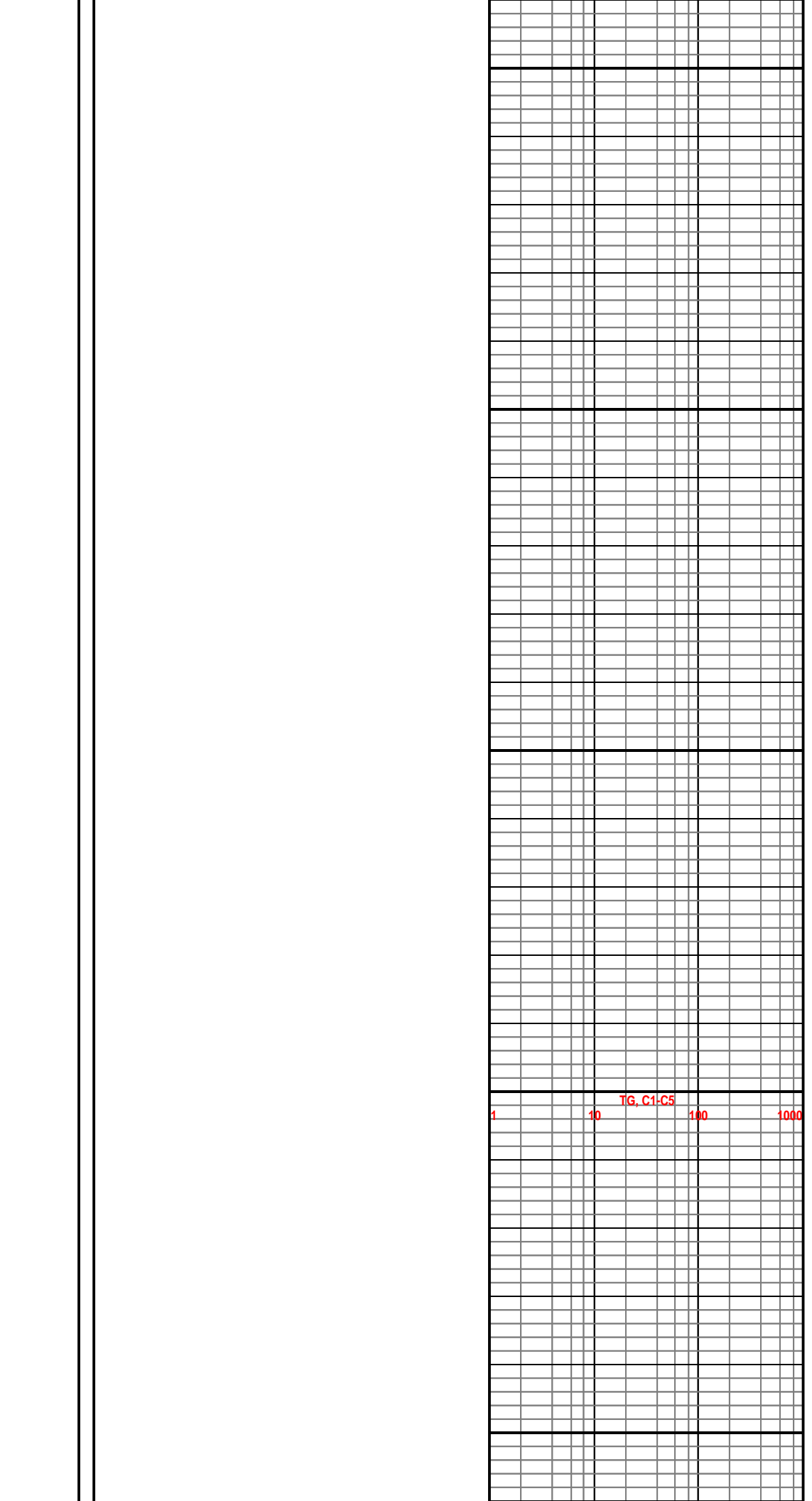
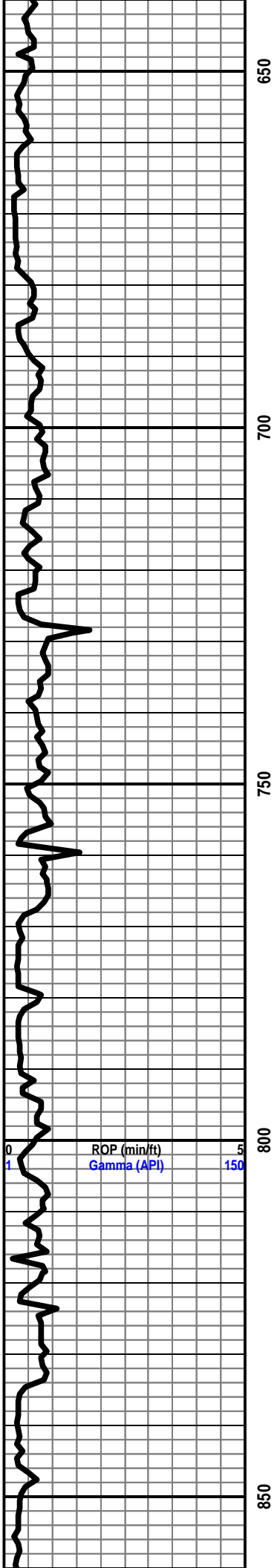
### INTERVALS

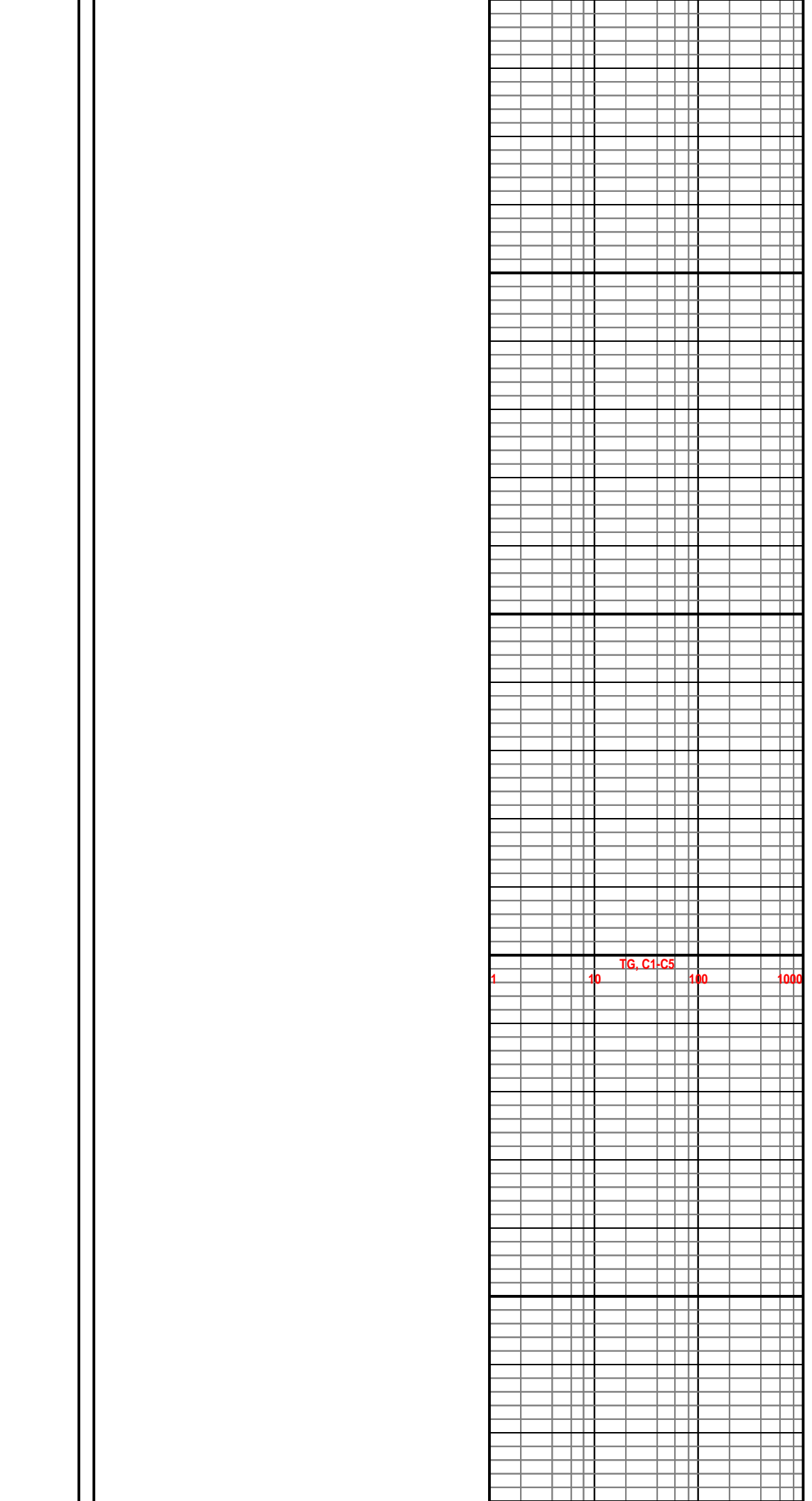
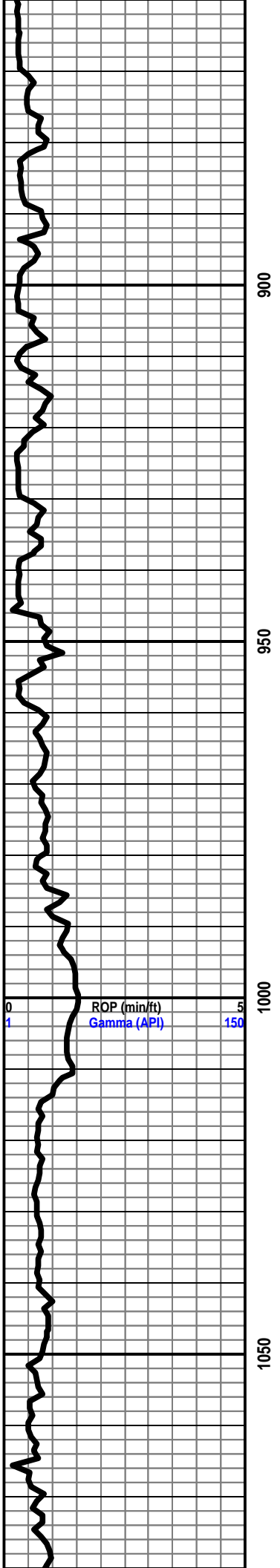


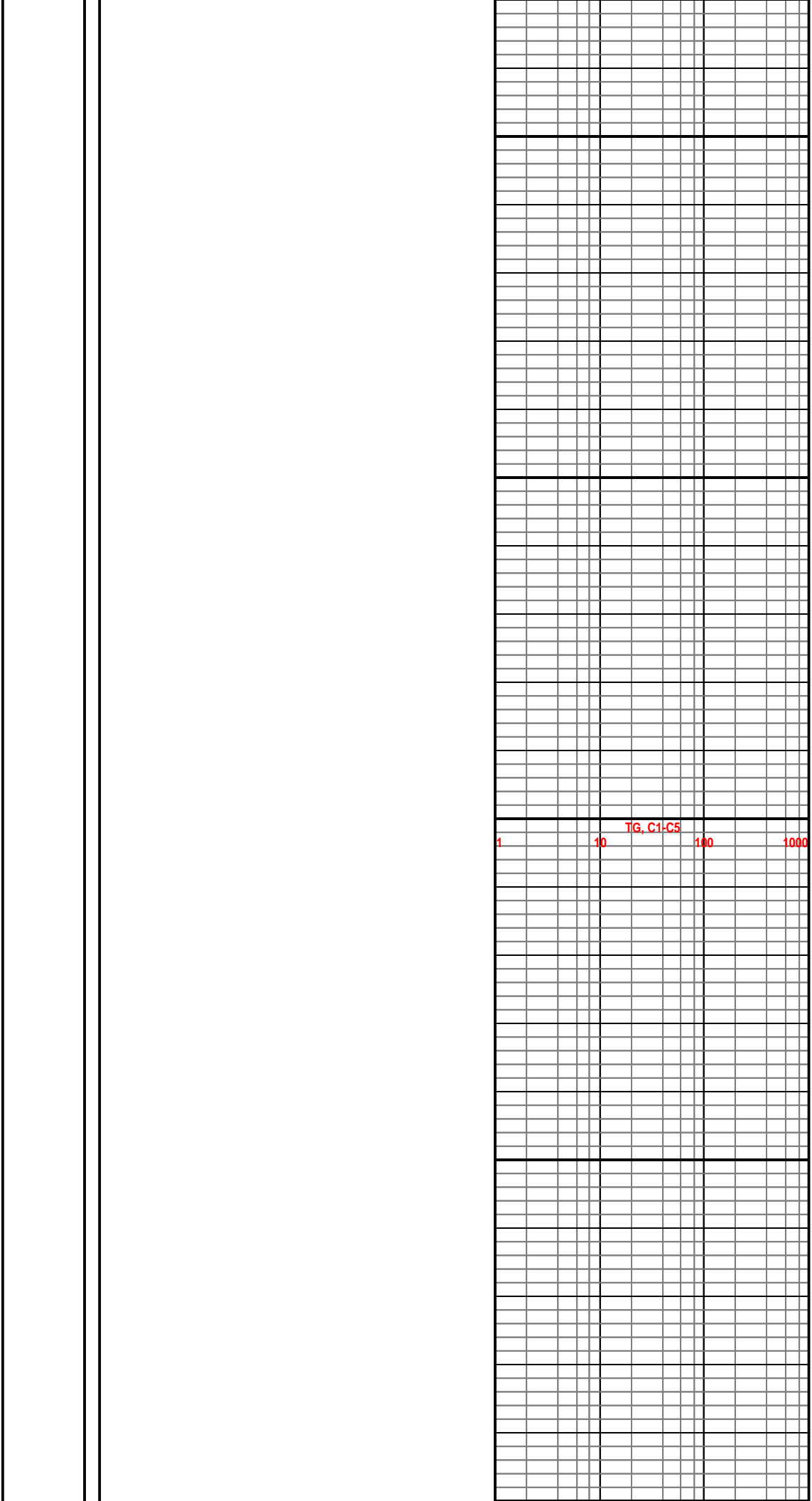
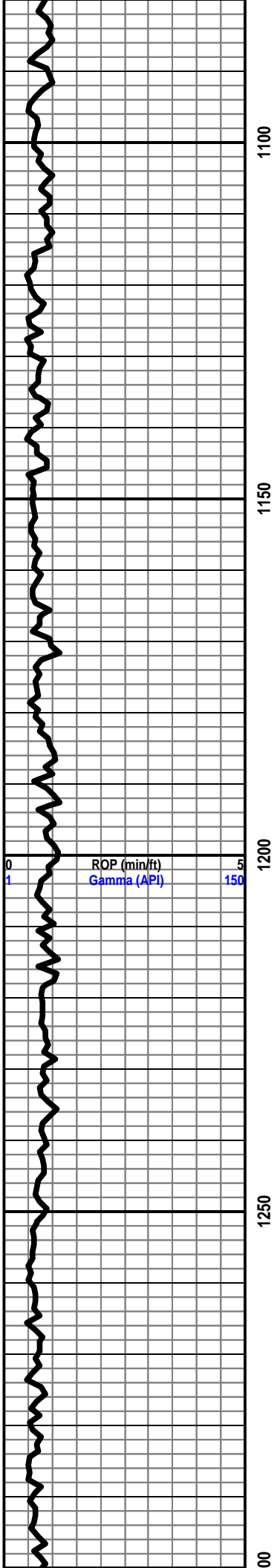
### EVENTS

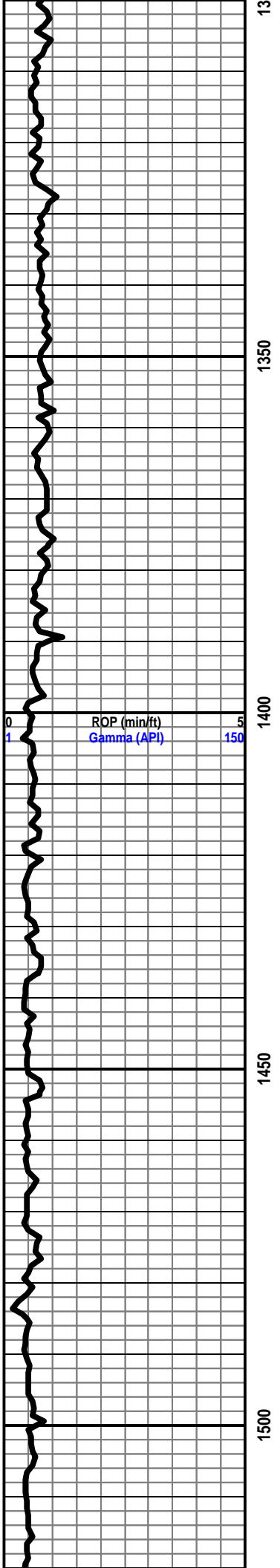












13

1350

1400

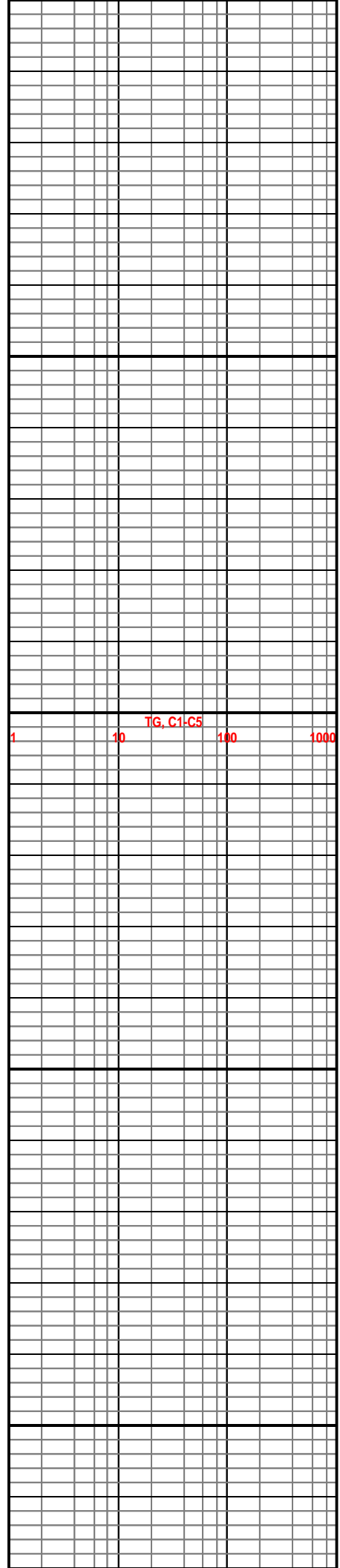
1450

1500

0  
1

ROP (min/ft)  
Gamma (API)

5  
150



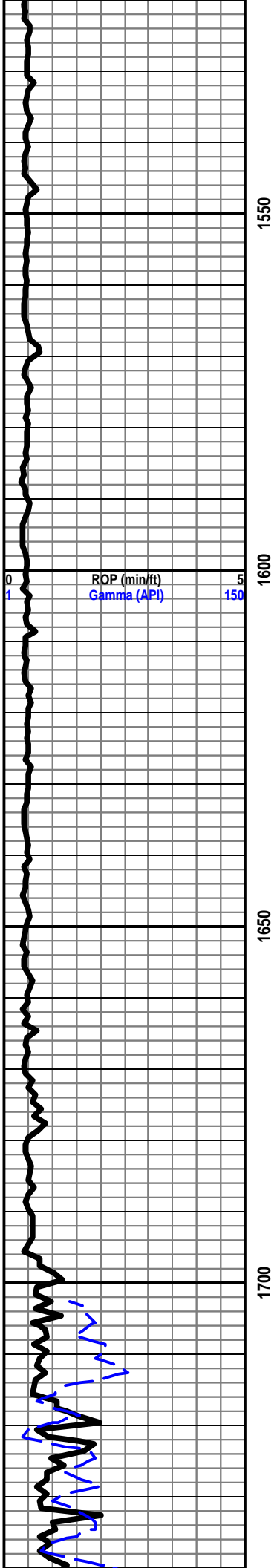
1

10

TG, C1-C5

100

1000



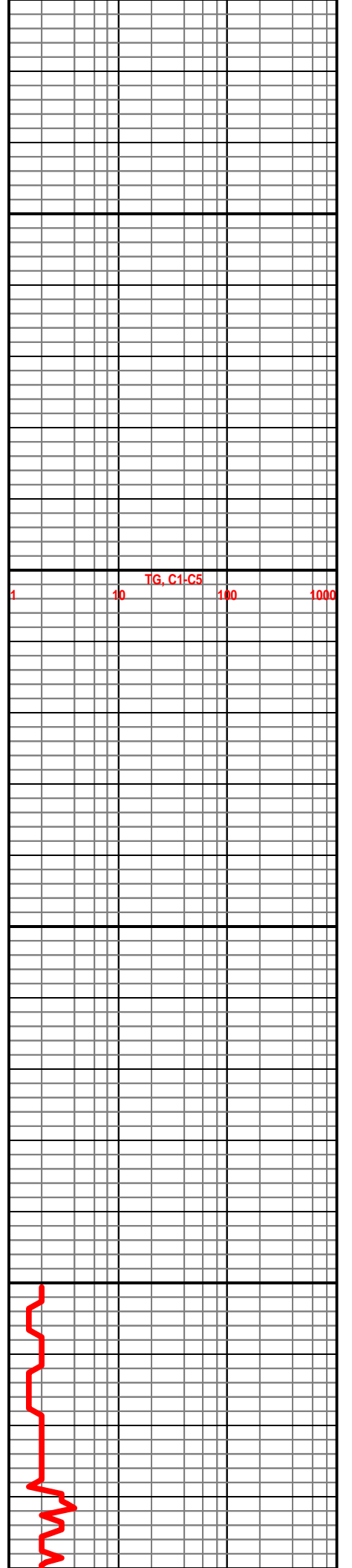
1550

1600

1650

1700

START UNMANNED UNIT 1/26/2012



TG, C1-C5

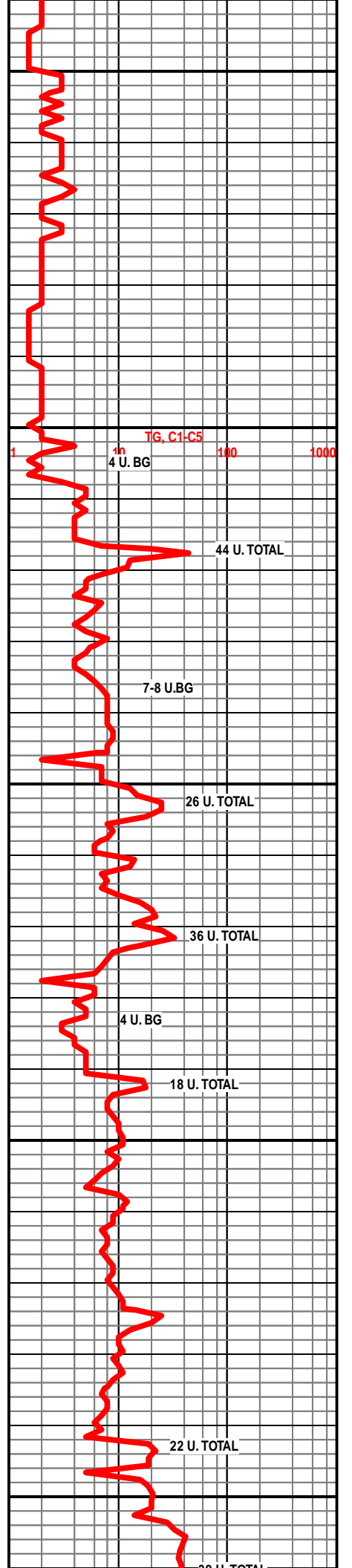
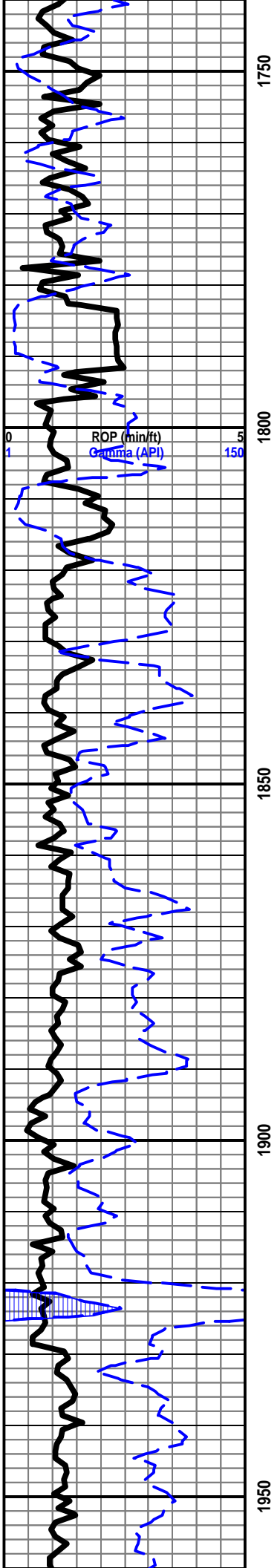
1

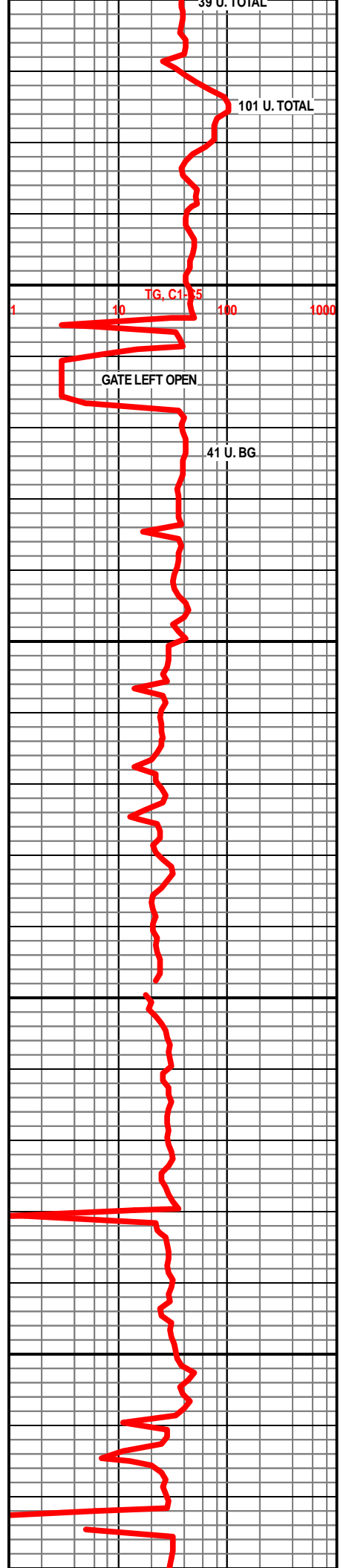
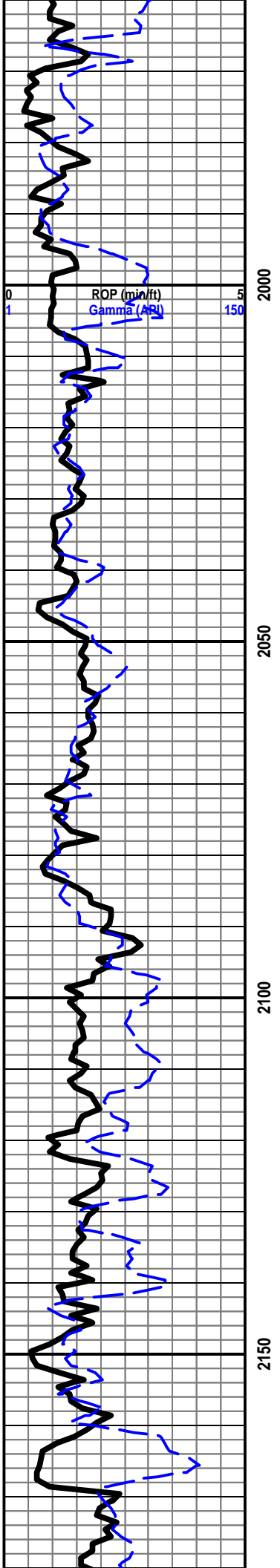
10

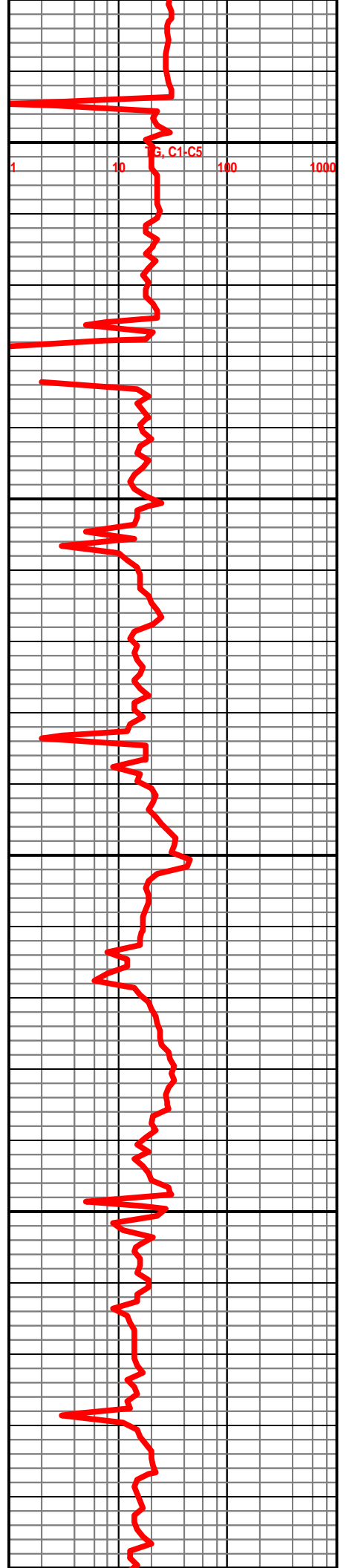
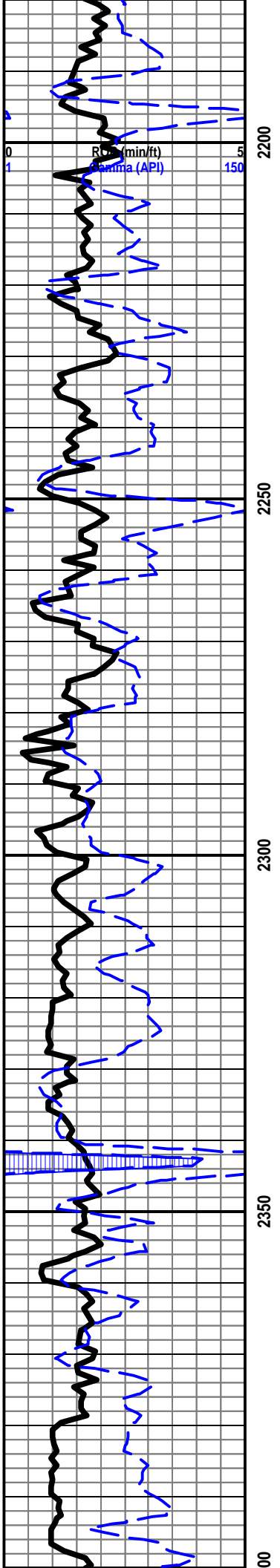
100

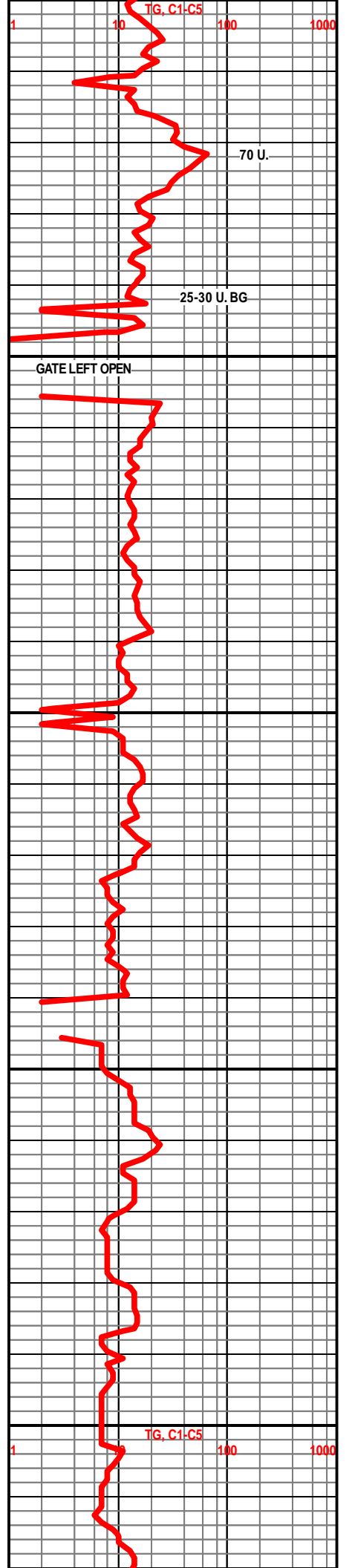
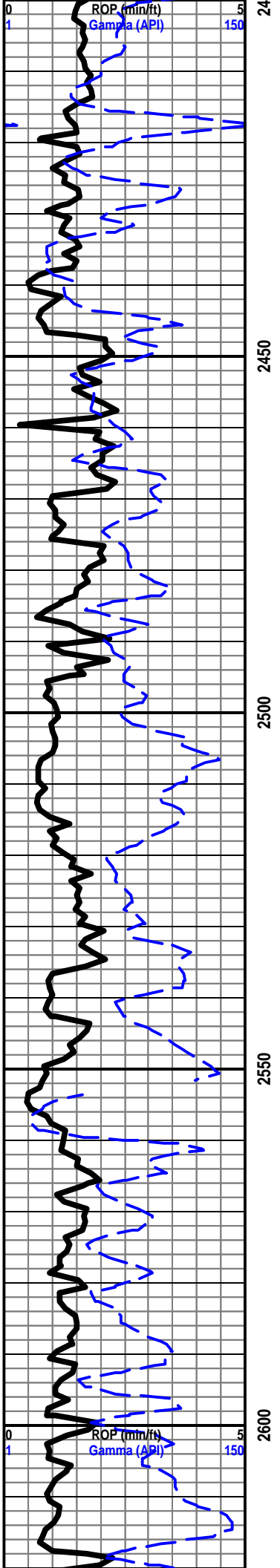
1000

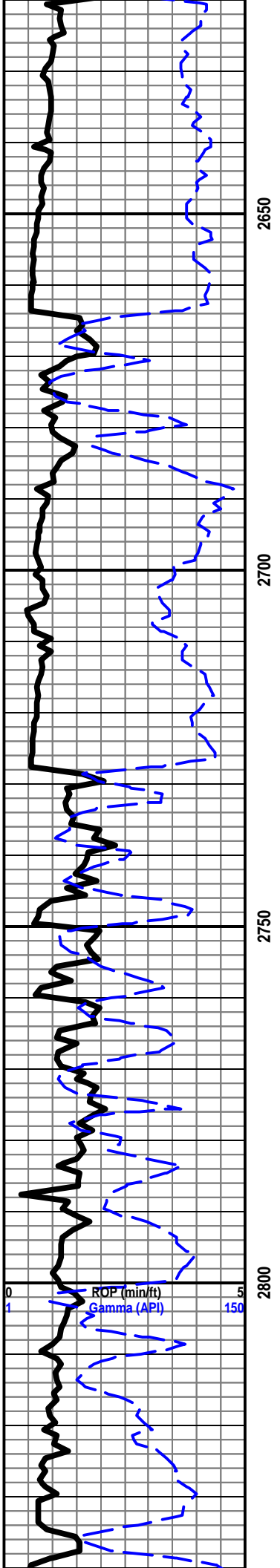




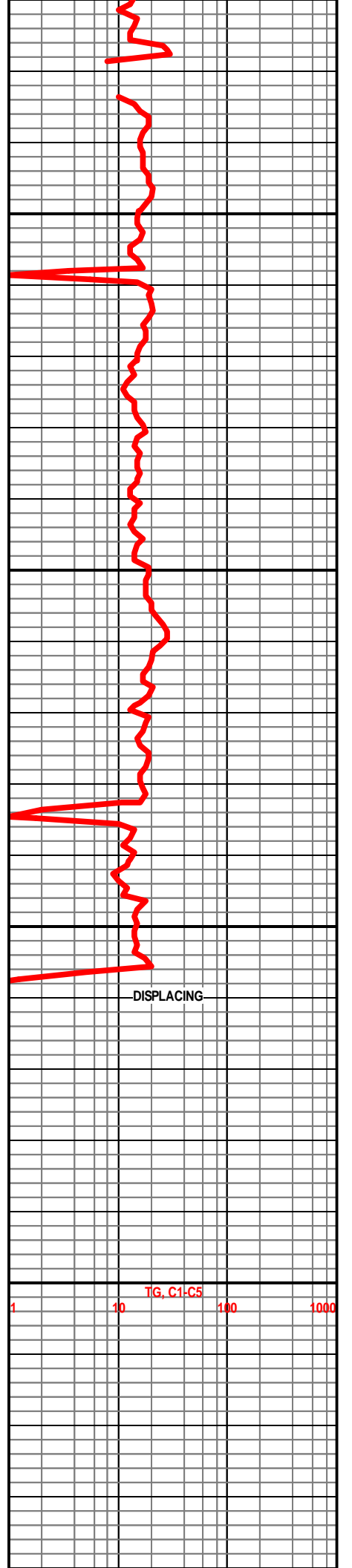




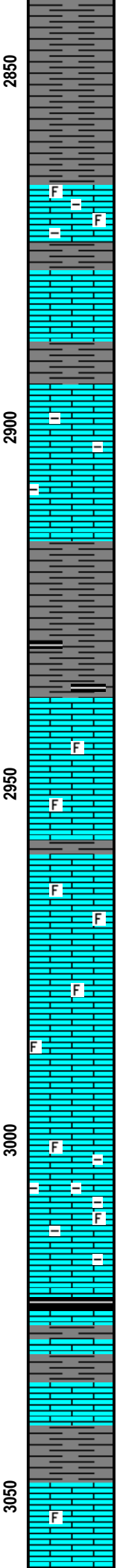
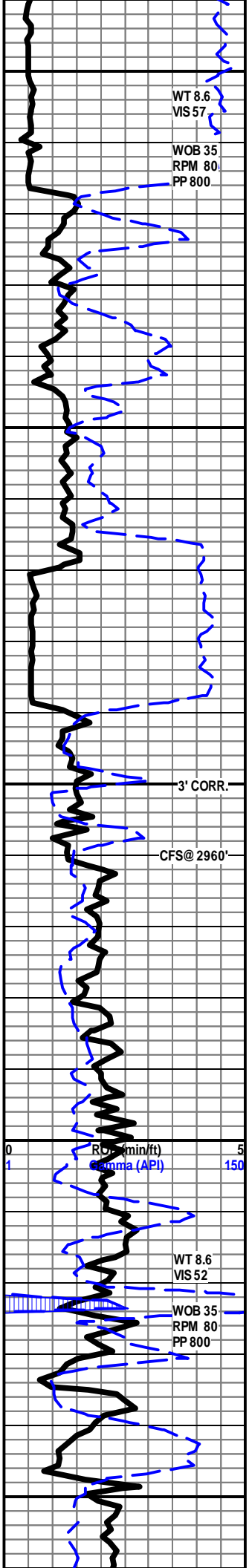




BRS 2664' - 682'



START 24 HR MANNED UNIT AT 2870' 1/27/2012



SH- LT TO MD GY- FRM IP TO V/ SFT GMMY TXT

LS- LT TN TN LT BRN- HD DNS MD-F-XLN , SLI RE-XLN MTRX IP, FOSS IP, HVY TR IMBD LT GY SH IP, TR SFT CHLK IP, NO FLO, NO VIS POR, NO VIS SHOW

LS- CRM LT TN LT GY- HD DNS TO BRITT, MOTT IP, F-XLN TO TT SUCRO MTRX, HVY TR DISS LT GY SH IP, NO FLO, NO VIS POR, NO VIS SHOW

**SEVERY 2919' - 937'**

SH- LT TO MD GY- V/ SFT GMMY TXT TO FRM IP TR CARB IP

**TOPEKA 2939' - 957'**

2942 - 2945' LS- CRM LT TN TN ( DUE TO LT TN STN IN 60%) HD TO V/ BRITT, V/ FN SUCRO MTRX, TR IMBD FOSS FRGS IP, BRIT YEL GLD FLO IN 80%, NO POR TO HVY TR SCAT MICRO PP POR IN 20%, V/ GD FLSH CUT IN 60-80%, GD SLO STRM CUT IN 40%, GD OIL ODOR, TN LCH ON DISH

LS- LT TN TN- HD DNS F-V/F-XLN RE-XLN MTRX, ABDT IMBD FOSS FRGS IP, TR IMBD SH IP, LT BRIT YEL MIN FLO THRU, NO VIS POR, NO VIS SHOW

LS- CRM BFF- HD DNS TO BRITT IP, MD-XLN IP RE-XLN TR FOSS FRGS IP, TO V/ TT SUCRO IP W/ IMBD FOSS FRGS, LT BRIT YEL MIN FLO THRU, NO VIS POR, NO VIS SHOW

LS- CRM LT TN GY TO DK GY- HD DNS MOTT, MD-XLN TO TT SUCRO MTRX TR TO ABDT IMBD SH IP, TR FOSS FRGS IP, LT BRIT YEL MIN FLO IP, NO VIS POR, NO VIS SHOW

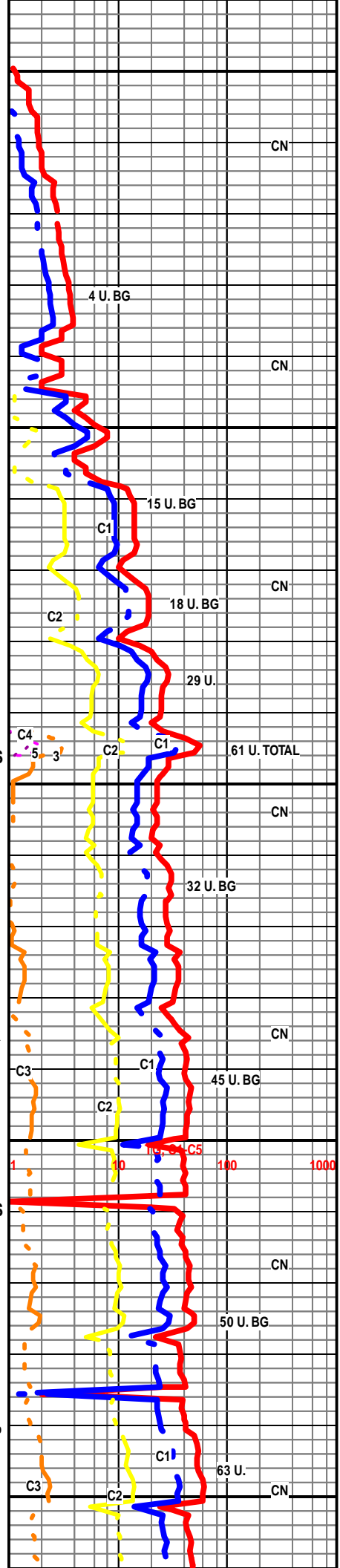
SH- BLK SFT CARB V/ CALC TO LMY IP

SH- LT GY TO V/LT GRN- FRM IP TO V/ SFT GMMY TXT

SH- LT GRN TO LT GY- FRM BLKY SMTH TXT, TO V/ SFT IP

**LeCOMPTON 3047' - 1065'**

LS- LT TN TN - HD DNS F-V/F-XLN TO CRYPTO-XLN IP, TR



CN

CN

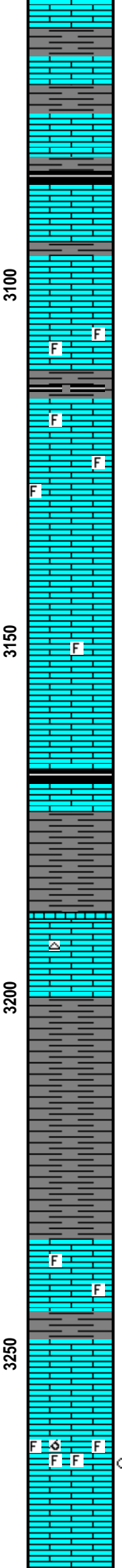
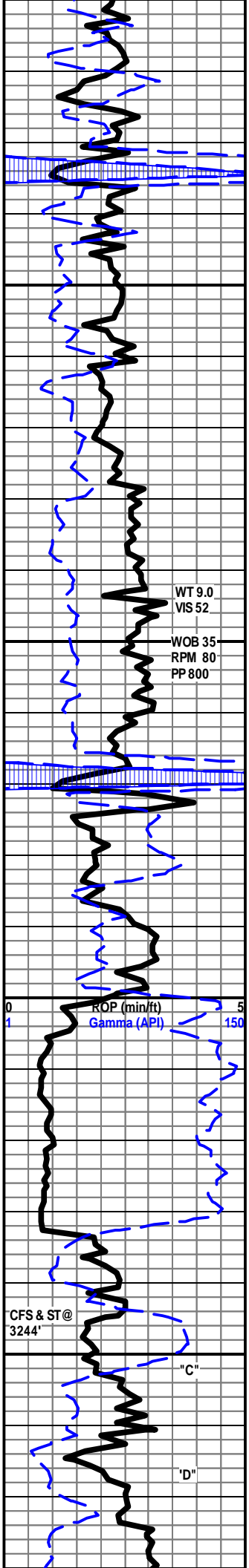
CN

CN

CN

CN

CN



SCAT FSS FRGS IP, NO FLO TO SCAT LT BRIT YEL MIN FLO IP, NO VIS POR, NO VIS SHOW

LS- OFF WHT CRM LT GY- HD DNS MOTT, SUCRO MTRX IP TO MD-XLN V/ ARG TO SHLY, HVY TR SFT WHT CHLK IP, NO FLO, NO VIS POR, NO VISSHOW

SH- BLK SFT CARB

LS- LT TN TN LT BRN- HD DNS SLI TR BRITT IP, F-XLN IP TO V/ TT SUCRO MTRX, RE-XLN IP, ABTD SCAT IMBD FOSS FRGS IP, SCAT LT YEL MIN FLO IP, NO VIS POR, NO VIS SHOW

SH- DK GY FRM BLKY IP TO BRN SFT CARB

LS- OFF WHT CRM LT TN- HD DNS IP TO SFT IP, MD-XLN RE-XLN MTRX, V/SUCRO S-CHLKY TO CHLKY IP,IMBD FOSS FRGS, LT YEL SCAT MIN FLO, NO VIS POR, NO VIS SHOW

LS- CRM LT TN TN- HD DNS , F-V/F-XLN, TR CRYPTO -XLN IP, V/ SLI TR FOSS IP, NO FLO, NO VIS POR, NO VIS SHOW

**HEEBNER 3168' - 1186'**

SH- BLK SFT CARB

SH- LT GY TO LT GRN - FRM BLKY SMTH TXT TO SFTSMTH TXT IP

LS- OFF WHT CRM ,HD DNS IP TO BRITT, F-XLN TO SUCRO SLI S-CHLKY MTRX IP, SLI TR LT TN CHRT, LT BRIT YEL MIN FLO IP, NO VIS POR, NO VIS SHOW

**DOUGLAS 3199' - 1217'**

SH- LT GY TO LT GRN- FRM BLKY IP TO V/ SFT GMMY TXT, SLI TR SLTY IP

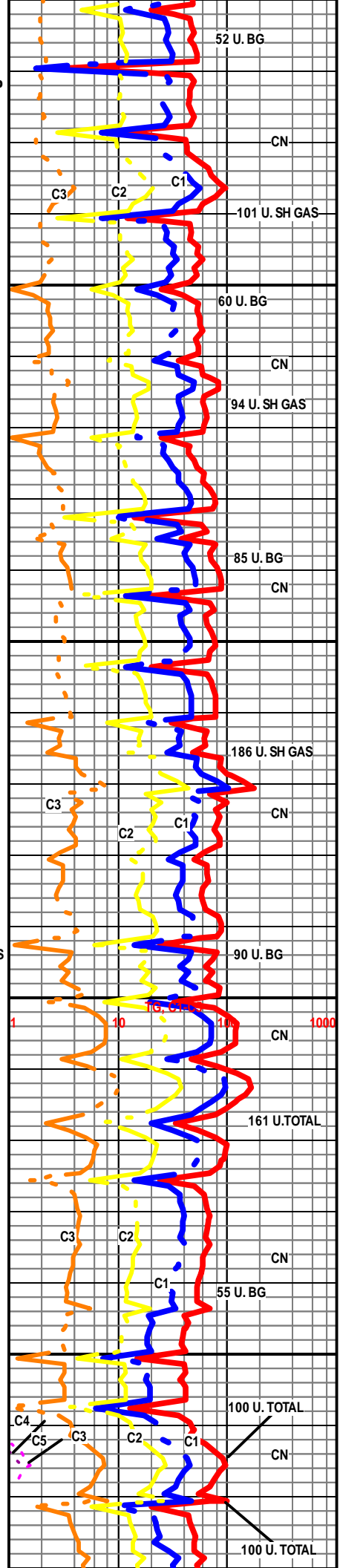
**LANSING 3234' - 1252'**

LS- OFF WHT CRM LT TN - HD DNS TO BRITT IP, MD-XLN RE-XLN MTRX IP, V/ SUCRO TO SLI S-CHLKY IP, TR SCAT IMBD FOSS FRGS IP,SLI TR IMBD LT GY SH IP,DLL YEL MIN FLO IP, NO VIS POR, NO VIS SHOW

**LANSING "C" 3249' - 1267'**

LS- WHT OFF WHT, HD DNS TO V/BRITT, MD-XLN TO RE-XLN MTRX, DLL YEL FLO IN 20%, NO VIS POR, NO VIS CUT OR SHOW

3263-3266' LS- OFF WHT CRM LT TN - HD TO V/ BRITT, MD-XLN RE-XLN MTRX, V/ FOSS SCAT IN 60%, TR MD CALC XLS IMBD IP, SMLL IMBD OOL IN 20%,DLL YEL IN 60%, BRIT YEL GLD FLO IN 40%,PR TO FR TO TR GD SCAT MICRO VUG IN 60%-70%, POS PR OOLMD POR IP, NO FLUSH CUT TRS OF V/PR SLOW STRM CUT 20%.



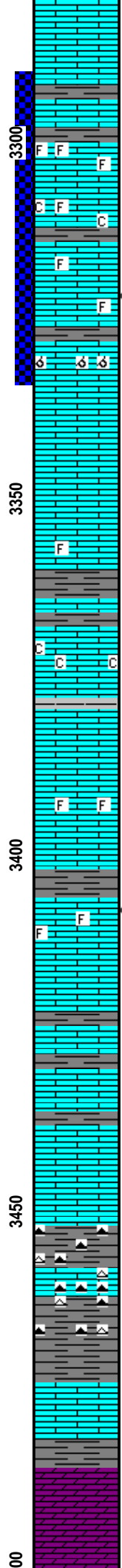
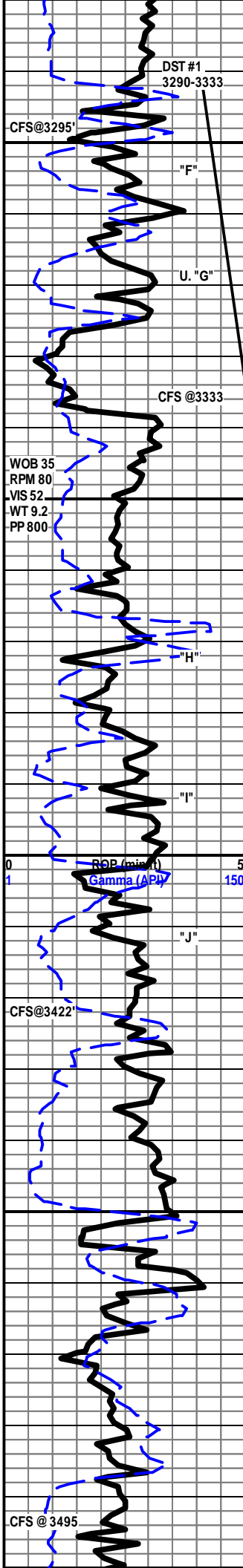
WT 9.0  
VIS 52  
WOB 35  
RPM 80  
PP 800

ROP (min/ft)  
Gamma (API)

CFS & ST@  
3244'

"C"

"D"



**LANSING "F" 3302'- 1320'**

3302-3304 LS- CRM LT TN TO TN LT BRN DUE TO OIL STN IN 70%, HD DNS IP TO VBRITT, MD-XLN VRE-XLN MTRX, VFOSSABDNT IMBD SML OOL IN 50%-60%, SMLL CALC XLS IP, BRIT YEL GLD FLO IN 80% DLL YELL IN 20%, FR VIS INTR OLL POR IN 40% TRS OF GD INTR FOSS POR IP, GD FLUSH CUT TO GD SLW STRM MILKY BLUE CUT IN 70%, GD OIL ODOR, LT TN LCH ON DISH

3313-3316 LS- OFF WHT TO WHT, MD HD TO SFT, CHLKY MTRX TO ABDT SFT CHLK, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

3321-3322 LS- CRM LT TN TO DRK GRY DRK TN OIL STN SCATT IP, HD DNS, MD TO V/F-XLN VRE-XLN MTRX, ABDT IMBD FOSS FRGS AND IMBD SH IN 10%, DLL YELL GLD FLO SCAT IN 40% NO FLO SCATT IN 30% DLL YELL FLO IN 30%, TRS SCATT MICRO VUG POR IP POSS FRACT POR IP, V/WEAK FLUSH CUT TO GD SLW STRM CUT SCATT IN 40% FR OIL ODOR

3328-3333 LS- OFF WHT TO CRM LT TN WITH TN STN IN 30%, HD TO BRITT, MD TO F-XLN VRE-XLN MTRX, IMBD FOSS FRGS IN 40%, OOL IP, BRIT YEL GLD FLO IN 40% DLL YEL FLO IN 20% NO FLO IN 40%, GD SCAT MICRO VUG POR IN 40% PR SCAT INT- OOL POR IN 40% FR INTRFOSS IN 20%, WK TO FR FLSH CUT IN 40% FR TO GD SLW STRM CUT IN 40% PR SLW STRM CUT IN 40% NO CUT IN 20%, GD OIL ODOR

LS- OFF WHT CRM TN, HD DNS TO BRITT, F-XLN RE-XLN MTRX, FOSS FRGS IP, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

**LANSING "H" 3368-1386**

LS- WHT OFF WHT CRM, MD HD TO SFT, F-XLN TO CHLKY MTRX, ABDT SFT WHT CHLK, DLL YELL FLO, NO VIS POR, NO VIS CUT OR SHOW

3393-3394' LS-CRM BRN DRK TN BRN DUE TO OIL STN IN 80%, HD DNS SLI TRS OF BRITT, MD-XLN RE-XLN MTRX, SCATT IMBD SMLL FOSS FRGS IP THRU, SLI TRS SUCRO SUB-CHLKY IP, BRIT YEL GLD FLO IN 70% DLL YELL IN 20% NO FLO IN 10%, V/PR MICRO PPPOR IN 10% TO NO POR IN 90%, GD FLUSH CUT IN 10% PR TO FR SLW STRM CUT IN 40% GD SLW STRM CUT IN 10% NO CUT IN 50%, FR TO GD OIL ODOR, NO LCH ON DISH

3408-3412 LS- OFF WHT CRM BUFF LT TN IP DUE TO OIL STN IN 20%, HD VBRITT, V/SUCRO MTRX TO SUB CHLKY IP, SMLL IMBD CALC-XLS IP, FOSS FRGS IP, DLL YEL FLO 50% BRIT YEL GLD FLO IN 50%, V/PR MICRO PP POR IN 25% SLI TRS PR INTER FOSS POR, NO FLUSH CUT TO V/PR SLW STRM CUT IN 30%,

LS- OFF WHT CRM TN, HD DNS, F/MD-XLN TO RE-XLN MTRX IP, SMLL IMBD CALC XLS IP, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

LS- CRM TO TN, HD V/DNS, F/MD-XLN, SUCRO MTRX IP, SUB CHLKY IP, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

**BKC 3451' - 1469'**

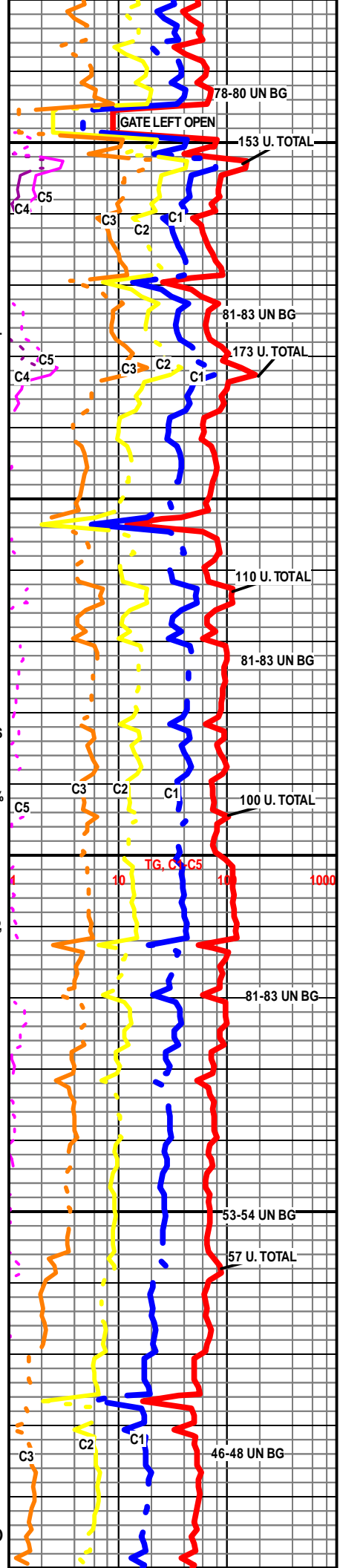
SH- RED DRK RED, VSFT GMMY TXT, ABDT IMBD MOTT RED BRN ORG DRK YELL CHRT

3459-3461 LS- WHT OFF WHT CRM TO TN IP, HD DNS, F/MD-XLN RE-XLN MTRX, IMBD FOSS FRGS IP, DLL YELL FLO 40% BRIT YEL GLD FLO IN 30% NO FLO IN 30%, NO POR IN 70% FRACT POR IP, GD FLUSH CUT IN 20%, PR SLW STRM CUT IN 40% GD SLW STRM CUT IN 30% NO CUT IN 30%, FR TO GD ODOR

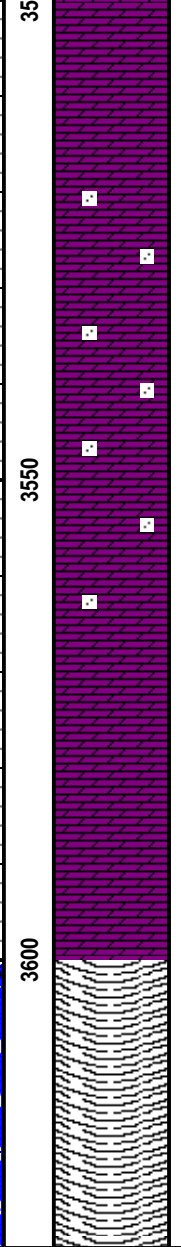
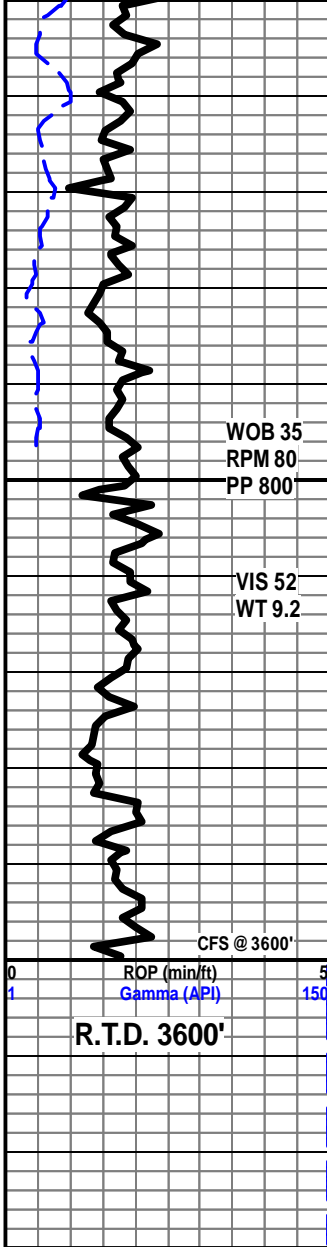
LS- OFF WHT CRM, HD DNS, F-XLN RE-XLN MTRX, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

**ARBUCKLE 3487'-1505'**

3487-3490 DOL- LT TN CRM LT TN IN 30%, HD V/DNS, V TT SUCRO MTRX, ABDT IMBD SMLL ANG DOLO GRNS THRU, HVY TR IMBD CHLK IN 30-40 %, BRIT YEL GLD FLO IN 80% DLL YEL FLO IN 20%, NO VIS POR, NO FLSH CUT







TO FR TO GD SLO STRM CUT IN 50%, NO CUT IN 50%

3490-3510' DOL- TN CRM , HD V/DNS, F/MD-XLN RE-XLN MTRX IP TO SUCRO IP , TR FOSS IP, HVY TR SCAT SFT WHT CHLK, BRIT YEL FLO IN 80%, TR BRIT YEL GLD FLO IN 10%, NO VIS POR, NO VIS CUT

DOL- LT TN CRM OFF WHT, HD V/DNS, MD-XLN RE-XLN MTRX TR FOSS IP, TR OF SFT WHT CHLK, IMBD CLR SUB RND TO RND SND GRNS, DLL YEL FLO IN 70% NO FLO IN 30%, NO VIS POR TO TR PR INTER-XLN POR IP,NO VIS SHOW

DOL- WHT OFF WHT TO CRM IP, HD V/DNS, MD-XLN SUCRO IP, TR OF SFT WHT CHLK IP, IMBD CLR RND TO SUB ANG SND GRNS, DLL YEL FLO, NO VIS POR, NO VIS CUT OR SHOW

DOL- OFF WHT WHT- HD DNS TO TR BRITT, F-XLN TO V/ CRS SUCRO MTRX, TR ABDT ANG DOLO GRNS IMBD IP, ABDT SCAT IMBD SFT WHT CHLK,DLL YEL FLO THRU, TR PR INTER-XLN POR IP, NO VIS SHOW

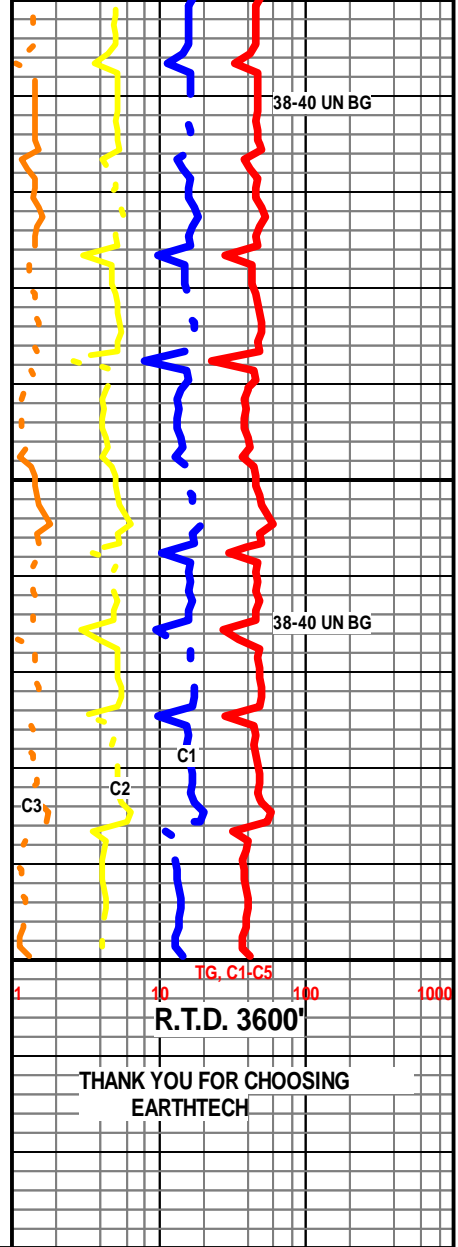
RTD 3600' @ 2:30 AM 1/30/2012

ST 10 STANDS

CTCH 2.5 HRS

TOFL

WEATHERFORD/ LIBERAL



THANK YOU FOR CHOOSING  
EARTHTECH