



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1155760  
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: \_\_\_\_\_



1155760

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR: \_\_\_\_\_ Producing Method:  
 Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

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

Form	ACO1 - Well Completion
Operator	Samuel Gary Jr. & Associates, Inc.
Well Name	HAGER TRUST 1-35
Doc ID	1155760

All Electric Logs Run

DIL
MICRO
POR
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  
Thomas E. Wright, Commissioner  
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

August 20, 2013

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

Re: ACO1  
API 15-137-20650-00-00  
HAGER TRUST 1-35  
SW/4 Sec.35-04S-23W  
Norton 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,  
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: 5/3/2013  
 Invoice # 6826  
 P.O.#:  
 Due Date: 6/2/2013  
 Division: Russell

# Invoice

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

**Reference:**  
 HAGER TRUST 1-35

**Description of Work:**  
 LONG SURFACE JOB

DRLG  COMP  W/O  LOE  GG

Account	8200.138
Well/Prospect	
Deck	
ASE	
Approval	<i>[Signature]</i>
Description	

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 977.42	No				
Common-Class A	250	\$ 3,355.77	Yes				
8 5/8" Basket	2	\$ 676.51	Yes				
Bulk Truck Matl-Material Service Charge	264	\$ 565.18	No				
Pump Truck Mileage-Job to Nearest Camp	51	\$ 544.82	No				
Calcium Chloride	9	\$ 459.15	Yes				
Bulk Truck Mileage-Job to Nearest Bulk Plant	51	\$ 318.81	No				
8 5/8" Centralizer	2	\$ 137.01	Yes				
8 5/8" Top Rubber Plug	1	\$ 113.46	Yes				
Baffle Plate Aluminum, 8 5/8"	1	\$ 96.34	Yes				
Premium Gel (Bentonite)	5	\$ 87.13	Yes				

**Invoice Terms:**

Net 30

SubTotal: \$ 7,331.62  
 Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice: \$ (1,099.74)

SubTotal for Taxable Items:	\$ 4,186.57
SubTotal for Non-Taxable Items:	\$ 2,045.31
<b>Total:</b>	<b>\$ 6,231.88</b>
<b>Tax:</b>	<b>\$ 295.15</b>

7.05% Norton County Sales Tax

**Thank You For Your Business!**

**Amount Due: \$ 6,527.03**  
**Applied Payments:**  
**Balance Due: \$ 6,527.03**

Past Due Invoices are subject to a service charge (annual rate of 24%)  
 This does not include any applicable taxes unless it is listed.  
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# 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. 6826

Date	5-1 4.30.13	Sec.	35	Twp.	4	Range	23	County	Norton	State	KS	On Location	10:30 PM	Finish	3:45 AM
Location								283 and hwy 9 2W 3N 1/8 E							

Lease Hager Trust Well No. 1-35 Owner South into

Contractor Discovery 2  
Type Job Surface

Hole Size 12 1/4 T.D. 604  
Csg. 8 5/8 Depth 604.34

Tbg. Size \_\_\_\_\_ Depth \_\_\_\_\_  
Tool \_\_\_\_\_ Depth \_\_\_\_\_

Cement Left in Csg. 91.92 Shoe Joint 41.92 ft Cement Amount Ordered 250 com 3% CC

Meas Line 23 # Displace 35.3/4 BA 2% gel

**EQUIPMENT**

Pumptrk	5	No.	Cementer	<u>Mark</u>	Common	<u>250</u>
Bulktrk	1	No.	Helper		Poz. Mix	
Bulktrk	pu	No.	Driver	<u>Brett</u>	Gel.	<u>5</u>
			Driver	<u>Lonnie W</u>	Calcium	<u>9</u>

**JOB SERVICES & REMARKS**

Remarks: Hager Trust 1-35

Rat Hole \_\_\_\_\_

Mouse Hole \_\_\_\_\_

Centralizers 1, 12

Baskets 2, 13

D/V or Port Collar \_\_\_\_\_

Cement did  
Cirukote

**FLOAT EQUIPMENT**

Guide Shoe \_\_\_\_\_

Centralizer 2 8 5/8

Baskets 2 8 5/8

AFU Inserts \_\_\_\_\_

Float Shoe \_\_\_\_\_

Latch Down \_\_\_\_\_

Baffle plate \_\_\_\_\_

Rubber Plug \_\_\_\_\_

Pumptrk Charge Long Surface

Mileage 51

X Signature [Signature]

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: 5/9/2011  
 Invoice # 6836  
 P.O.#:  
 Due Date: 6/8/2011  
 Division: Russell

# Invoice

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

**RECEIVED**

**MAY 15 2013**

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

**Reference:**  
 HAGER TRUST 1-35

**Description of Work:**  
 PLUG JOB

DRLG  COMP  W/O  LOE  GG

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

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 1,239.23	Yes				
Common-Class A	162	\$ 2,205.61	Yes				
Bulk Truck Matl-Material Service Charge	280	\$ 608.00	Yes				
Pump Truck Mileage-Job to Nearest Camp	51	\$ 552.61	Yes				
POZ Mix-Standard	108	\$ 539.38	Yes				
Bulk Truck Mileage-Job to Nearest Bulk Plant	51	\$ 323.37	Yes				
Premium Gel (Bentonite)	10	\$ 176.75	Yes				
Flo Seal	67	\$ 145.49	Yes				
Dry Hole Plug	1	\$ 60.80	Yes				

**Invoice Terms:**

Net 30

SubTotal:	\$	5,851.24
Discount Available <u>ONLY</u> if Invoice is Paid & Received within listed terms of invoice:	\$	(877.69)
<hr/>		
SubTotal for Taxable Items:	\$	4,973.55
SubTotal for Non-Taxable Items:	\$	-

7.05% Norton County Sales Tax

**Thank You For Your Business!**

Total:	\$	4,973.55
Tax:	\$	350.64
<b>Amount Due:</b>	<b>\$</b>	<b>5,324.19</b>
<b>Applied Payments:</b>		
<b>Balance Due:</b>	<b>\$</b>	<b>5,324.19</b>

Past Due Invoices are subject to a service charge (annual rate of 24%)  
 This does not include any applicable taxes unless it is listed.  
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# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

No. 6836

Phone 785-483-2025

Cell 785-324-1041

Date	5-6-13	Sec.	35	Twp.	4	Range	23	County	Norton	State	KS	On Location	10.45 PM	Finish	3:30 AM
------	--------	------	----	------	---	-------	----	--------	--------	-------	----	-------------	----------	--------	---------

Lease Hager Trust Well No. 1-35 Owner South into

Contractor Discovery 2  
 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.

Type Job plug sock Charge To Sam Gary Jr & Assoc

Hole Size \_\_\_\_\_ T.D. 3880 Street \_\_\_\_\_

Csg. Phill pipe Depth \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

Tbg. Size \_\_\_\_\_ Depth \_\_\_\_\_

Tool \_\_\_\_\_ Depth \_\_\_\_\_

Cement Left in Csg. \_\_\_\_\_ Shoe Joint \_\_\_\_\_

Meas Line \_\_\_\_\_ Displace \_\_\_\_\_

Cement Amount Ordered 770 60/40

Common 162

Poz. Mix 108

Gel. 10

Calcium \_\_\_\_\_

Hulls \_\_\_\_\_

Salt \_\_\_\_\_

Flowseal 67#

Kol-Seal \_\_\_\_\_

Mud CLR 48 \_\_\_\_\_

CFL-117 or CD110 CAF 38 \_\_\_\_\_

Sand \_\_\_\_\_

Handling 280

Mileage \_\_\_\_\_

**FLOAT EQUIPMENT**

Guide Shoe \_\_\_\_\_

Centralizer \_\_\_\_\_

Baskets \_\_\_\_\_

AFU Inserts \_\_\_\_\_

Float Shoe \_\_\_\_\_

Latch Down \_\_\_\_\_

wood plug

Pumptrk Charge plug

Mileage 51

Tax \_\_\_\_\_

Discount \_\_\_\_\_

Total Charge \_\_\_\_\_

Signature [Signature]





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates, Inc.

**34/4S/23W-Norton**

1515 Wynkoop Ste. 700  
Denver, CO 80202

**Hager Trust 1-35**

Job Ticket: 52123

**DST#: 1**

ATTN: Clayton Camozzi

Test Start: 2013.05.05 @ 00:09:30

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:19:00

Time Test Ended: 08:49:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 66

**Interval: 3724.00 ft (KB) To 3752.00 ft (KB) (TVD)**

Reference Elevations: 2293.00 ft (KB)

Total Depth: 3752.00 ft (KB) (TVD)

2285.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8520 Outside**

Press @ Run Depth: 218.00 psig @ 3728.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.05.05

End Date:

2013.05.05

Last Calib.:

2013.05.05

Start Time: 00:19:30

End Time:

08:49:30

Time On Btm:

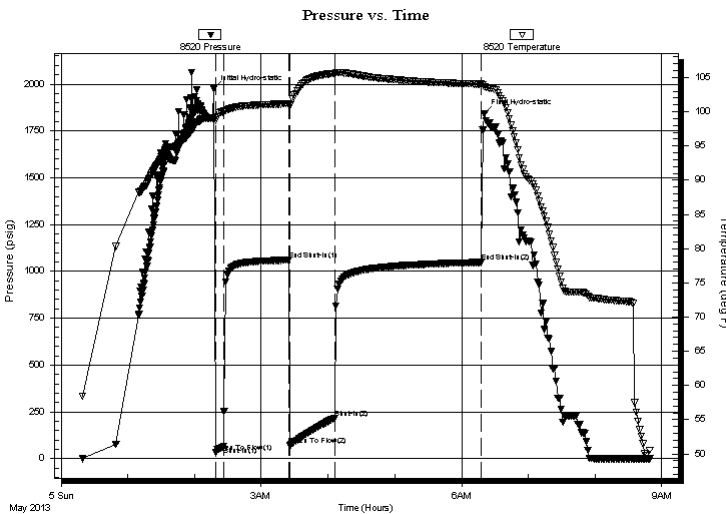
2013.05.05 @ 02:17:30

Time Off Btm:

2013.05.05 @ 06:20:30

**TEST COMMENT:** IF-Fair building blow . Built to 8 inches.  
ISI-No Return.  
FF-Fair building blow . BOB @ 11 minutes.  
FSI-No Return. Times-5-60-40-120

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1973.13	99.10	Initial Hydro-static
2	31.64	98.76	Open To Flow (1)
9	64.51	99.96	Shut-In(1)
68	1060.61	101.16	End Shut-In(1)
69	73.11	100.99	Open To Flow (2)
109	218.00	105.60	Shut-In(2)
240	1048.20	104.03	End Shut-In(2)
243	1841.31	103.69	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
251.00	95%Water/5%Mud	3.25
126.00	75%Water/25%Mud	1.77
63.00	60%Water/40%Mud	0.88

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Samuel Gary Jr. & Associates, Inc.

**34/4S/23W-Norton**

1515 Wynkoop Ste. 700  
Denver, CO 80202

**Hager Trust 1-35**

Job Ticket: 52123

**DST#: 1**

ATTN: Clayton Camozzi

Test Start: 2013.05.05 @ 00:09:30

### 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:

18200 ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.62 ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
251.00	95%Water/5%Mud	3.248
126.00	75%Water/25%Mud	1.767
63.00	60%Water/40%Mud	0.884

Total Length: 440.00 ft      Total Volume: 5.899 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler-2000ML Total. 175# Pressure. 1900 ML Water. 100 ML Mud.

Resistivity- .658 @ 41= 17000

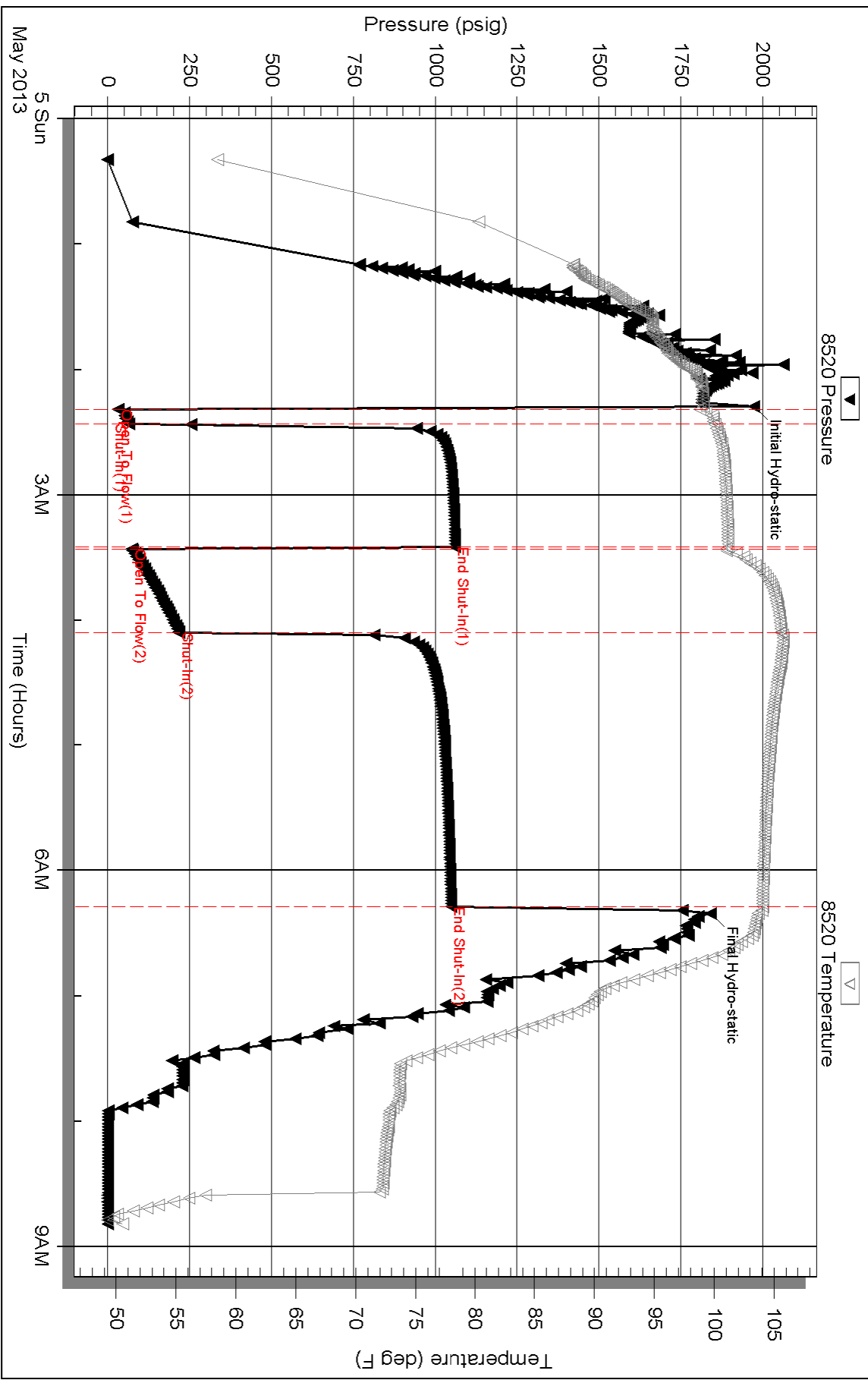
Serial #: 8520

Outside Samuel Gary Jr. & Associates, Inc.

Hager Trust 1-35

DST Test Number: 1

### Pressure vs. Time



Triobite Testing, Inc

Ref. No: 52123

Printed: 2013.05.05 @ 22:48:44

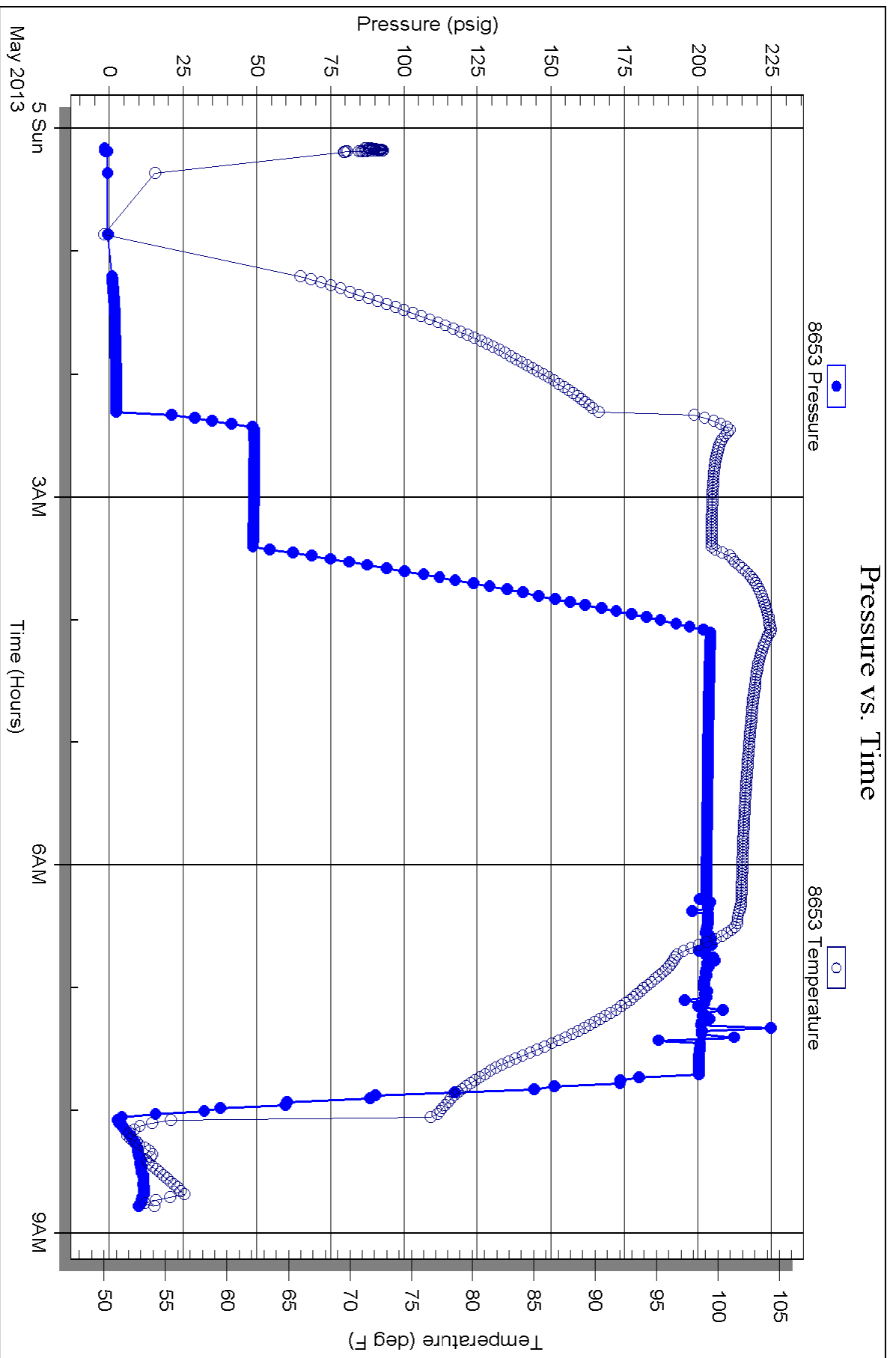
Serial #: 8653

Fluid

Samuel Gary Jr. & Associates, Inc.

Hager Trust 1-35

DST Test Number: 1





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates, Inc.

**34/4S/23W-Norton**

1515 Wynkoop Ste. 700  
Denver, CO 80202

**Hager Trust 1-35**

Job Ticket: 52124

**DST#: 2**

ATTN: Clayton Camozzi

Test Start: 2013.05.06 @ 13:15:30

## GENERAL INFORMATION:

Formation: **Toronto-Lansing**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:41:50

Time Test Ended: 20:23:30

Test Type: Conventional Straddle (Initial)

Tester: Dustin Rash

Unit No: 66

**Interval: 3430.00 ft (KB) To 3468.00 ft (KB) (TVD)**

Reference Elevations: 2293.00 ft (KB)

Total Depth: 3880.00 ft (KB) (TVD)

2285.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8520 Outside**

Press @ Run Depth: 28.45 psig @ 3434.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.05.06

End Date:

2013.05.06

Last Calib.:

2013.05.06

Start Time: 13:15:30

End Time:

20:23:30

Time On Btm:

2013.05.06 @ 14:41:40

Time Off Btm:

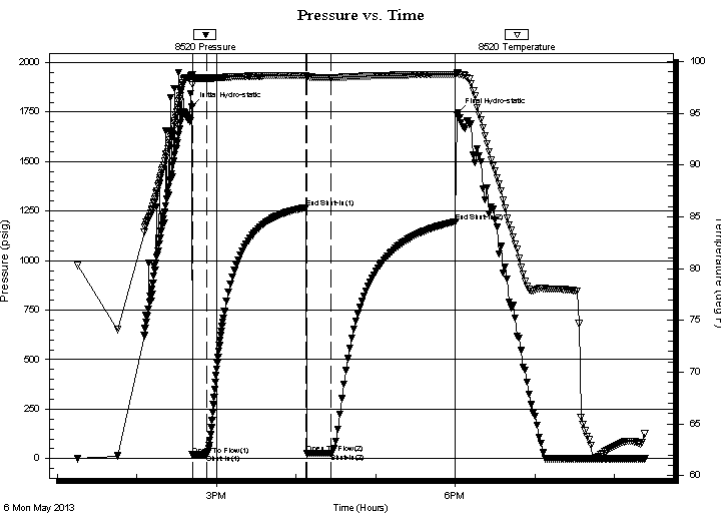
2013.05.06 @ 18:02:00

**TEST COMMENT:** IF-Weak surface blow throughout.

ISI-No Return.

FF-No Blow.

FSI-No Return. Times-10-75-20-90



## PRESSURE SUMMARY

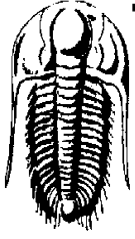
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1779.28	98.68	Initial Hydro-static
1	19.47	97.75	Open To Flow (1)
11	22.31	98.40	Shut-In(1)
86	1268.02	98.68	End Shut-In(1)
87	25.19	98.47	Open To Flow (2)
105	28.45	98.47	Shut-In(2)
199	1196.97	98.77	End Shut-In(2)
201	1746.63	98.83	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
6.00	100%Mud	0.03

## Gas Rates

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



**TRILOBITE**  
TESTING, INC.

# DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates, Inc.

**34/4S/23W-Norton**

1515 Wynkoop Ste. 700  
Denver, CO 80202

**Hager Trust 1-35**

Job Ticket: 52124

**DST#: 2**

ATTN: Clayton Camozzi

Test Start: 2013.05.06 @ 13:15:30

**GENERAL INFORMATION:**

Formation: **Toronto-Lansing**

Deviated: No Whipstock: ft (KB)

Test Type: Conventional Straddle (Initial)

Time Tool Opened: 14:41:50

Tester: Dustin Rash

Time Test Ended: 20:23:30

Unit No: 66

Interval: **3430.00 ft (KB) To 3468.00 ft (KB) (TVD)**

Reference Elevations: 2293.00 ft (KB)

Total Depth: 3880.00 ft (KB) (TVD)

2285.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8653** Fluid

Press@RunDepth: psig @ 3400.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.05.06

End Date: 2013.05.06

Last Calib.: 2013.05.06

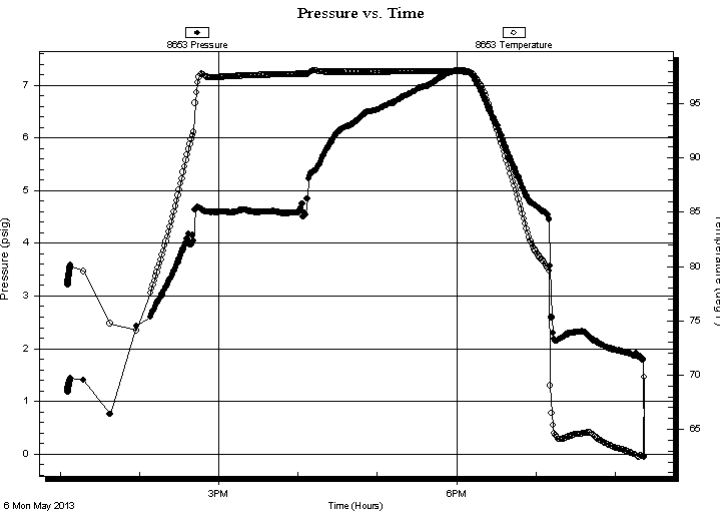
Start Time: 13:05:31

End Time: 20:22:00

Time On Btm:

Time Off Btm:

**TEST COMMENT:** IF-Weak surface blow throughout.  
IS-No Return.  
FF-No Blow.  
FS-No Return. Times-10-75-20-90



**PRESSURE SUMMARY**

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

**Recovery**

Length (ft)	Description	Volume (bbl)
6.00	100%Mud	0.03

**Gas Rates**

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







**TRILOBITE  
TESTING, INC.**

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**FLUID SUMMARY**

Samuel Gary Jr. & Associates, Inc.

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Denver, CO 80202

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Job Ticket: 52124

**DST#: 2**

ATTN: Clayton Camozzi

Test Start: 2013.05.06 @ 13:15:30

## 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: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
6.00	100%Mud	0.030

Total Length: 6.00 ft      Total Volume: 0.030 bbl

Num Fluid Samples: 0

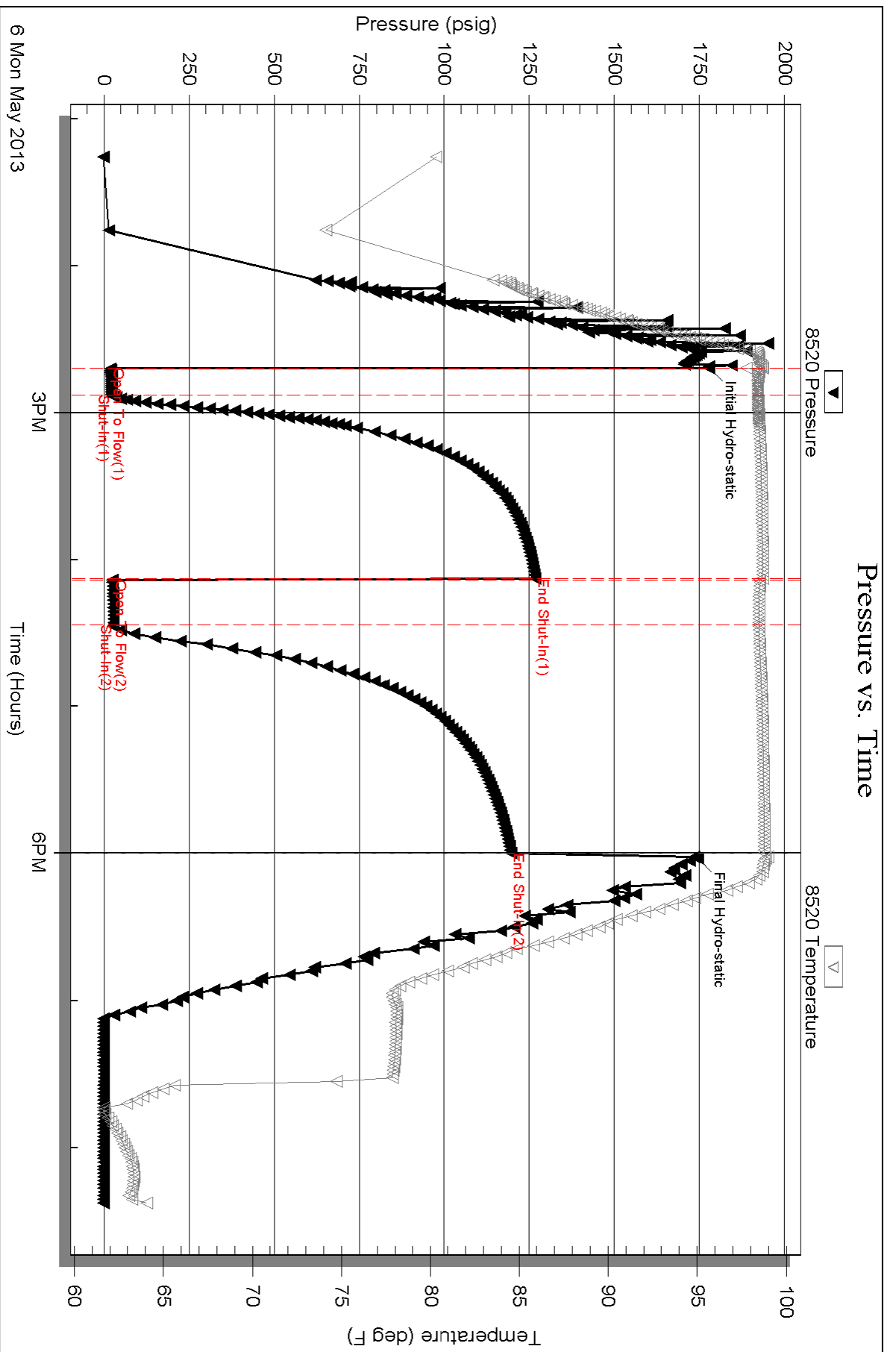
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler-2000ML total. 2000ML 100%Mud. 100# pressure.



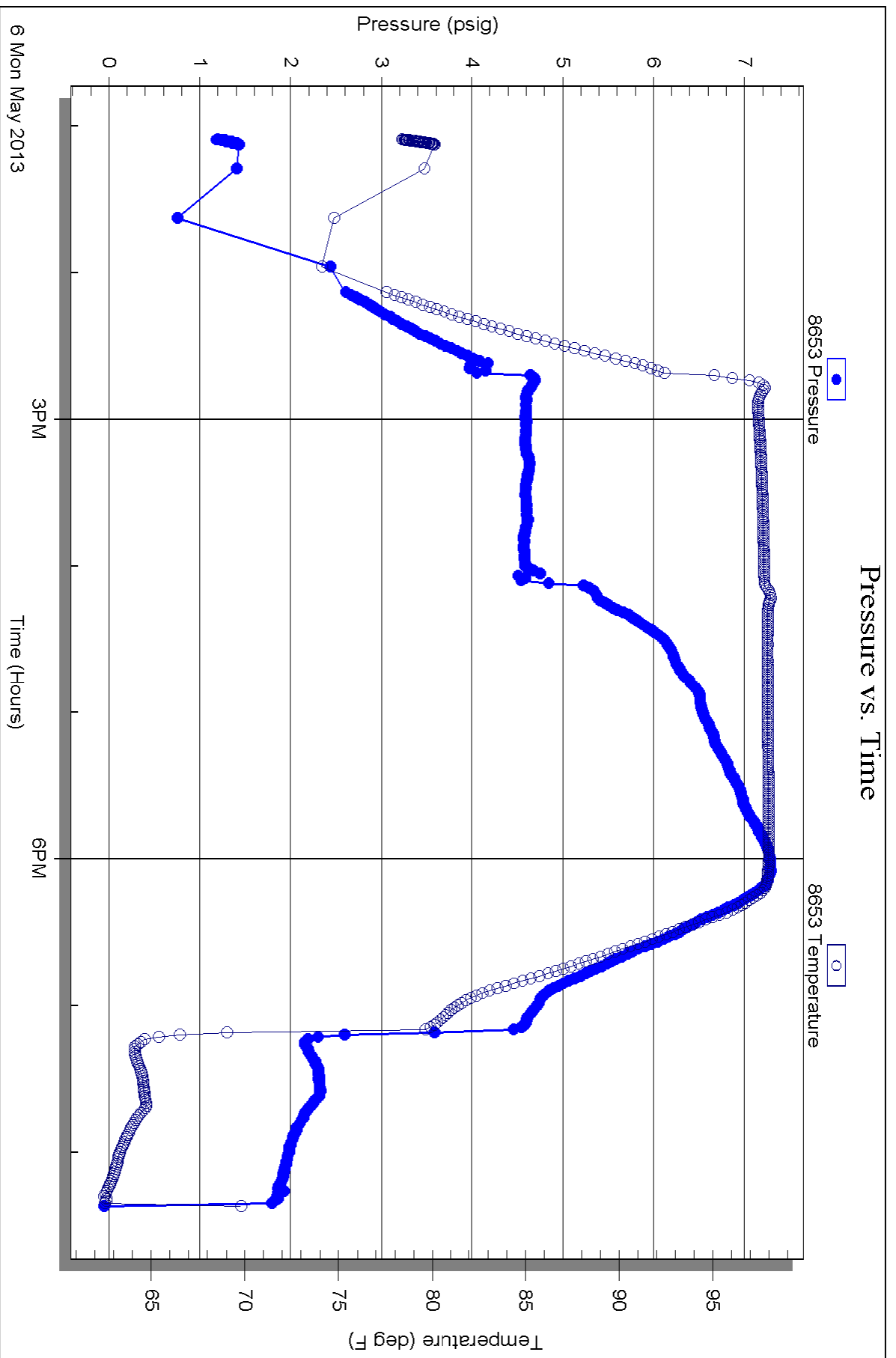
Serial #: 8653

Fluid

Samuel Gary Jr. & Associates, Inc.

Hager Trust 1-35

DST Test Number: 2

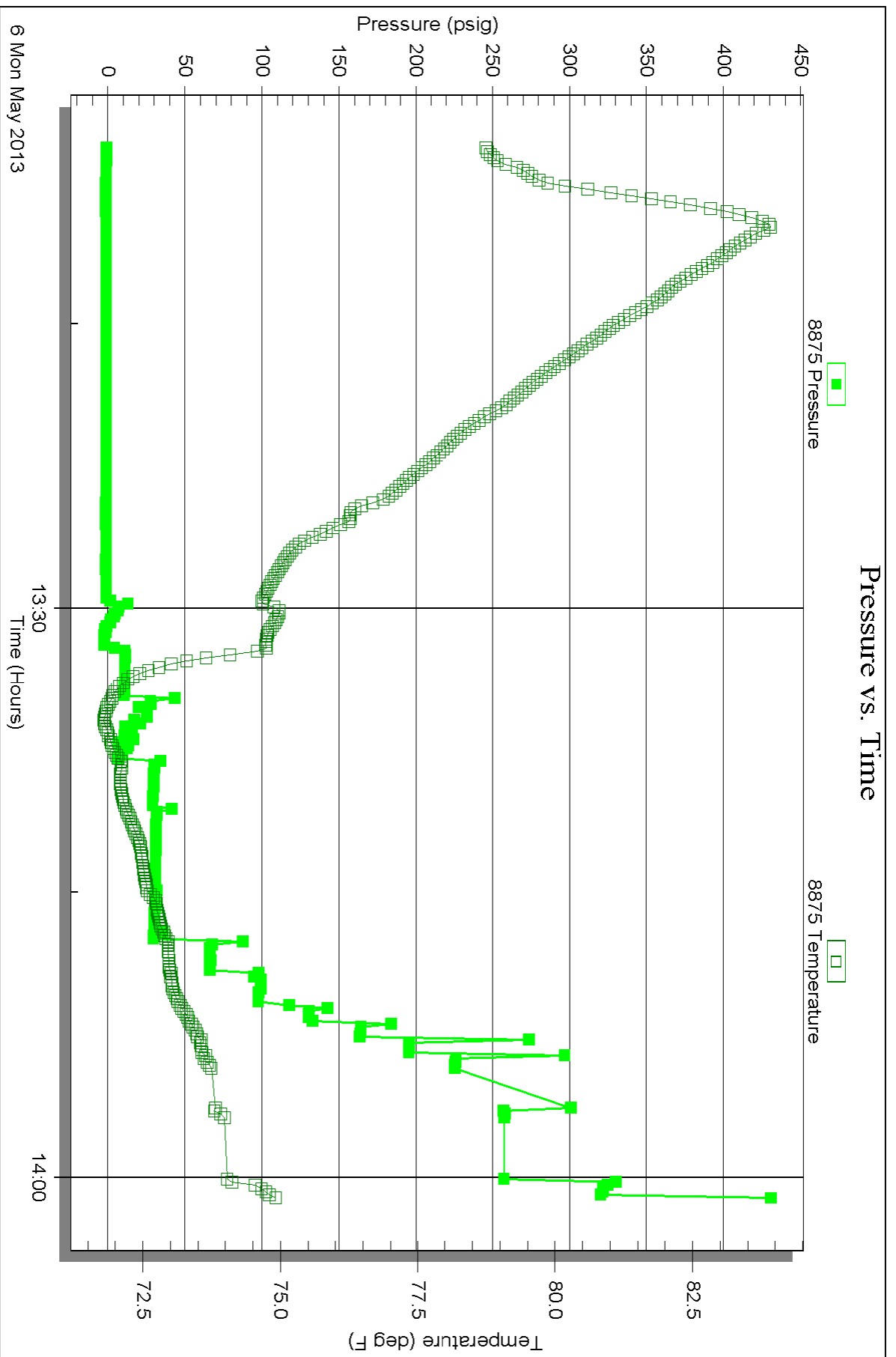


Serial #: 8875

Below (Stratton) Gary Jr. & Associates, Inc.

Hager Trust 1-35

DST Test Number: 2





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

Well Name: HAGER TRUST # 1-35  
 Location: Sec 35 4s 23w, Norton County, Kansas  
 License Number: 15-137-20654-0000  
 Spud Date: 4/30/13  
 Surface Coordinates: 920' FSL & 1860' FWL  
 Region: Wildcat  
 Drilling Completed: 5/6/13

Bottom Hole Coordinates:  
 Ground Elevation (ft): 2285' K.B. Elevation (ft): 2293'  
 Logged Interval (ft): 895' To: 3880' Total Depth (ft): 3880'  
 Formation: Lansing, Arbuckle  
 Type of Drilling Fluid:

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

**OPERATOR**

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

**GEOLOGIST**

Name: Tim Hedrick  
 Company: Earth Tech OGL, Inc  
 Address: PO Box 683  
 Hooker, Okla. 73945  
 Off: 888-543-8378 Cell: 580-754-0062

**DST's Report**

DST# 1 3724'-3752' 5-60-40-120  
 IF- FR BLDNG BLW, BLT TO 8", ISI- NO RETURN, FF- FR BLDNG BLW, BOB @ 11 MIN, FSI- NO RETURN  
 IH- 1973, FH-1841/ IF- 32 TO 65, FF- 73 TO 218/ ISI- 1061, FSI- 1048  
 REC 440' OF TF/ 63' OF MUDDY WATER 60% WATER, 40% MUD/ 126' OF MUDDY WATER 75% WATER, 25%  
 MUD/ 251' OF MUDDY WATER 95% WATER, 5% MUD/ BHT- 106, API RW- .622 @ 41 DEG/ CHLOR- 18,200 PPM

**ROCK TYPES**

Anhy	Gyp	Shgy	Sandylms
Bent	Igne	Sltst	Shale
Brec	Lmst	Ss	Sltstn
Cht	Meta	Till	Shlysits
Clyst	Mrlst	Carb sh	Sitysh
Coal	Salt	Dol	Lms
Congl	Shale	Dtd	
Dol	Shcol	Gry sh	

**ACCESSORIES**

<b>MINERAL</b>	Salt	Fossil	Clystn
Anhy	Sandy	Gastro	Dol
Arggrn	Silt	Oolite	Grysh
Arg	Sil	Ostra	Gryslt
Bent	Sulphur	Pelec	Lms
Bit	Tuff	Pellet	Sandylms
Brecfrag	Chlorite	Pisolite	Sh
Calc	Dol	Plant	Sltstn
Carb	Sand	Strom	
Chtdk	Sity	Fuss	
Chtlt		Oomold	
Dol	<b>FOSSIL</b>	<b>STRINGER</b>	<b>TEXTURE</b>
Feldspar	Algae	Anhy	Boundst
Ferrpel	Amph	Arg	Chalky
Ferr	Belm	Bent	Cryxln
Glau	Bioclst	Coal	Earthy
Gyp	Brach	Dol	Finexln
Hvymn	Bryozoa	Gyp	Grainst
Kaol	Cephal	Ls	Lithogr
Marl	Coral	Mrst	Microxln
Minxl	Crin	Sltstrg	Mudst
Nodule	Echin	Ssstrg	Packst
Phos	Fish	Carbsh	Wackest
Pyr	Foram		

OTHER SYMBOLS

POROSITY TYPE

- E Earthy
- B Fenest
- F Fracture
- X Inter
- A Moldic
- O Organic
- P Pinpoint
- V Vuggy

SORTING

- W Well
- M Moderate
- P Poor

ROUNDING

- R Rounded
- r Subrnd
- a Subang

- A Angular

OIL SHOWS

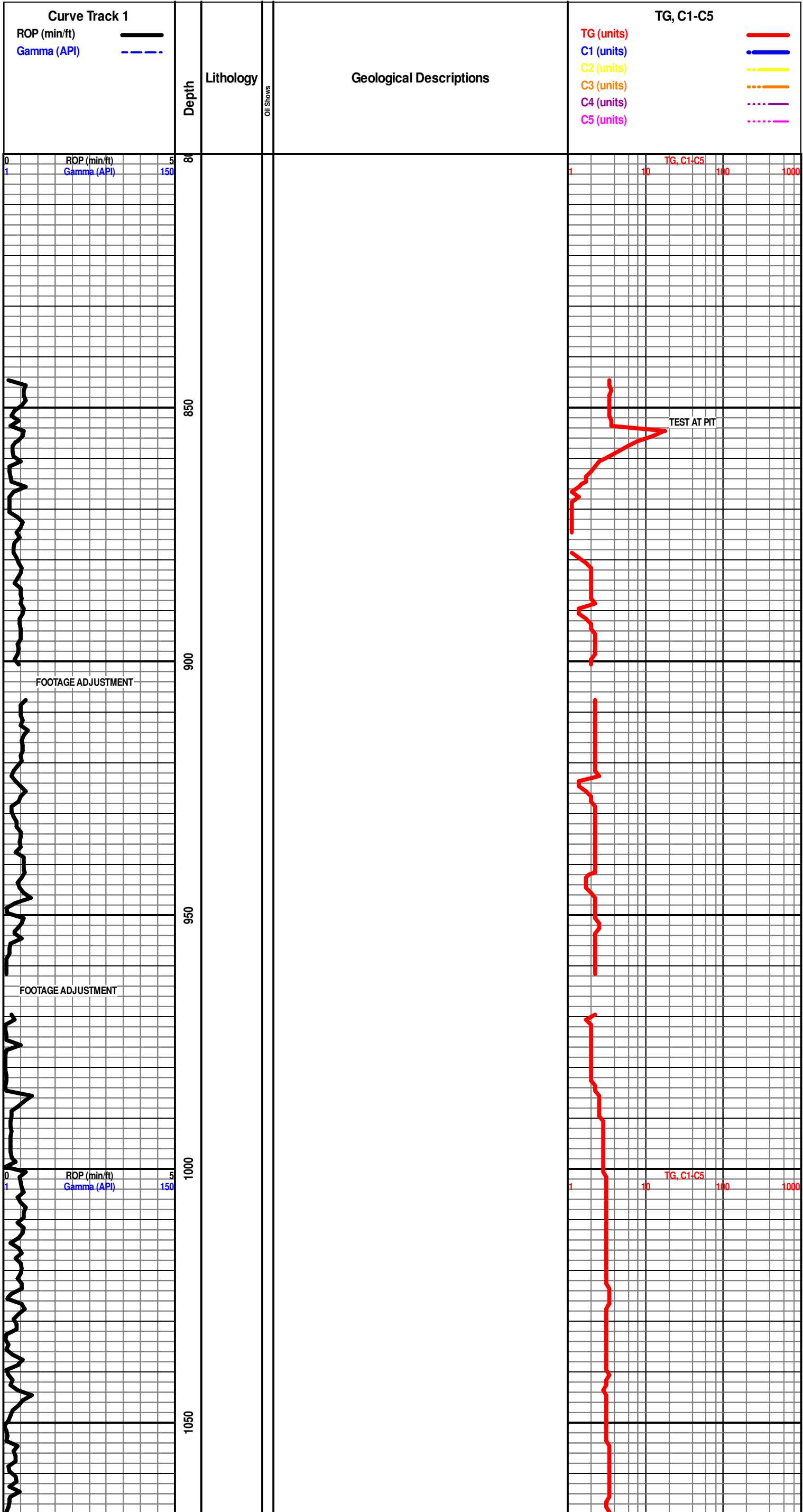
- Even
- ◐ Spotted
- ◑ Ques
- ◒ Dead
- ⊠ Gas show

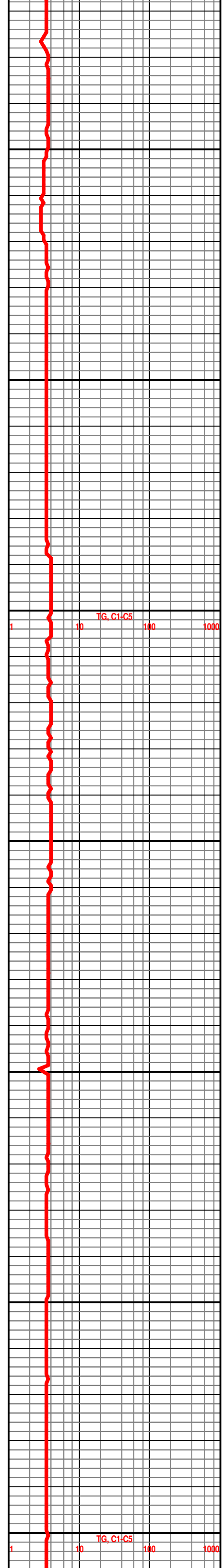
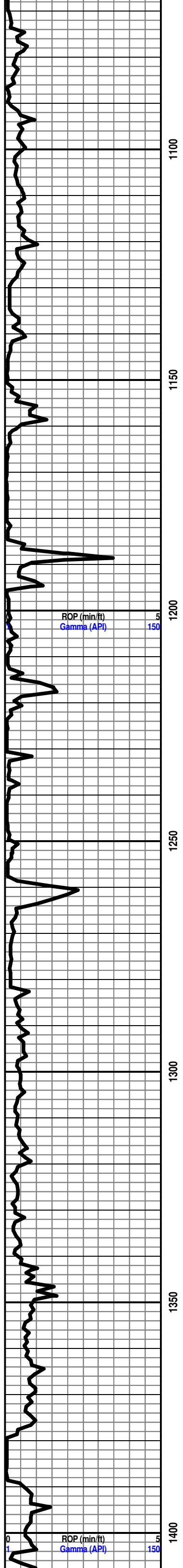
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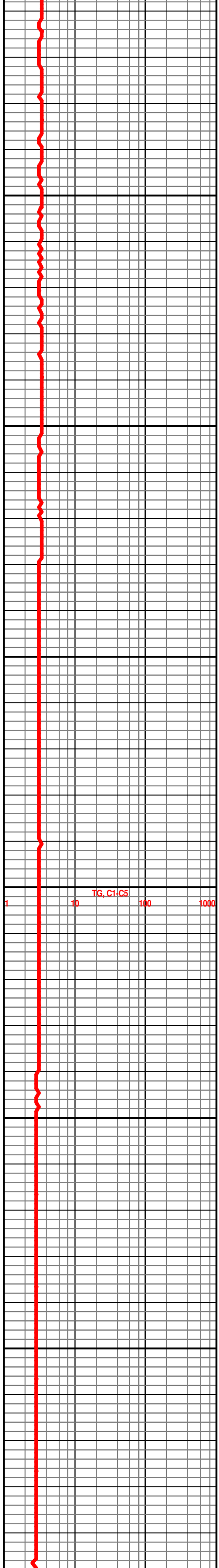
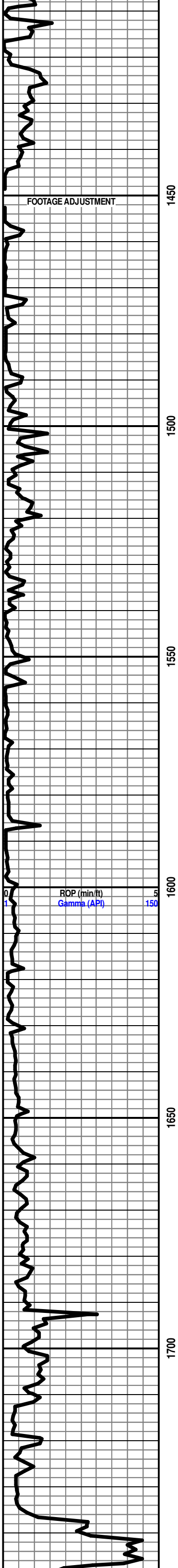
- Core
- Dst
- Dst

EVENTS

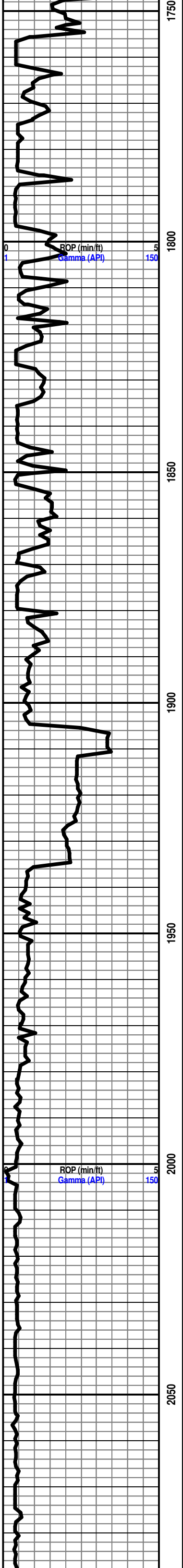
- ▤ Rft
- ▥ Sidewall



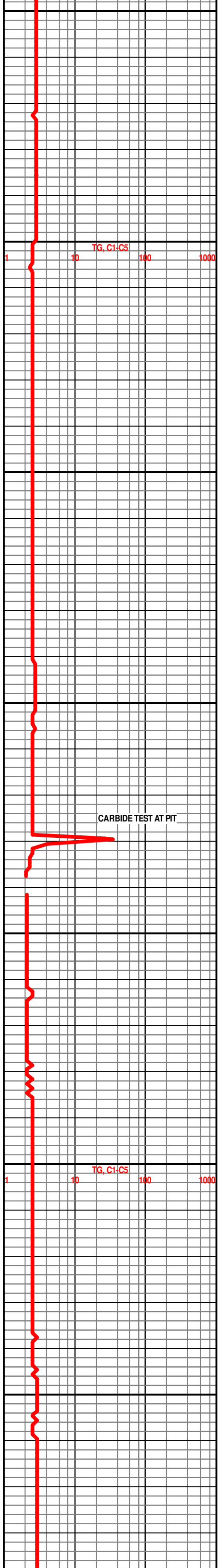


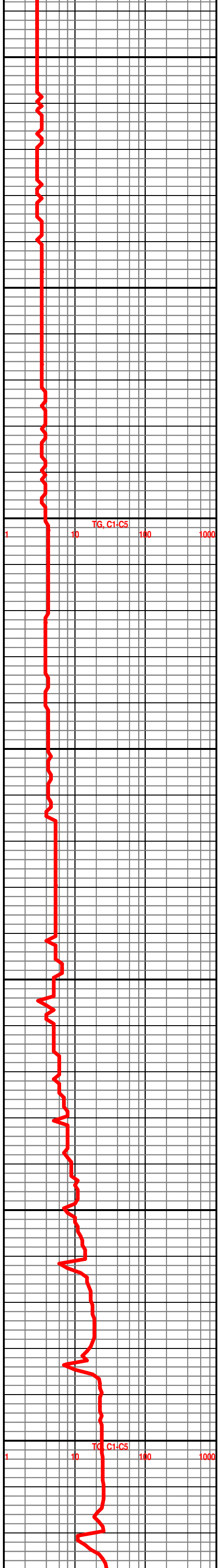
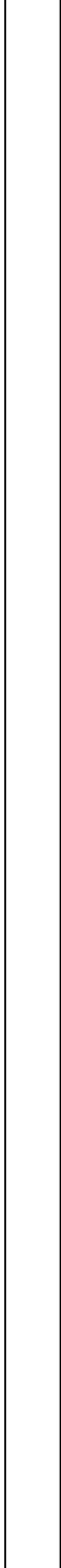
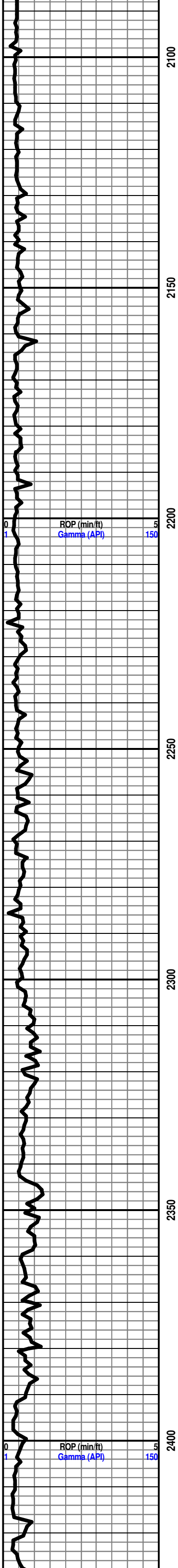


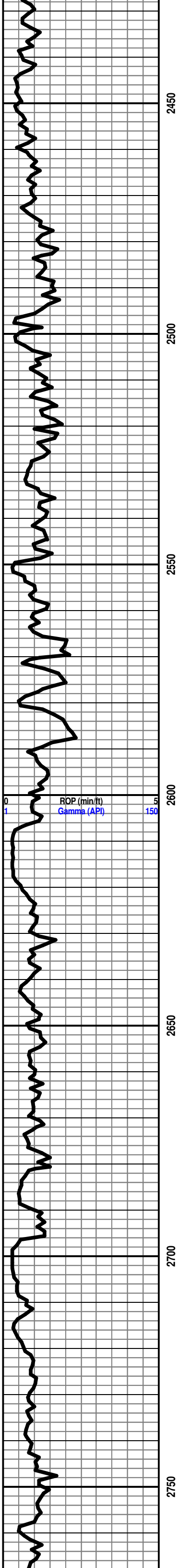




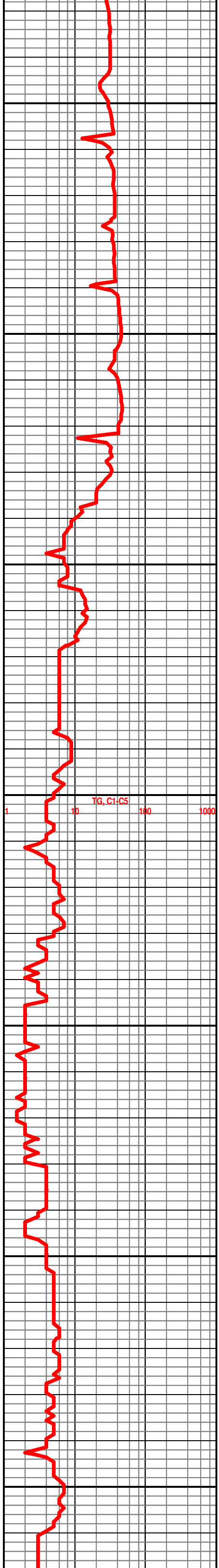
STONE CORRAL 1904' + 387'

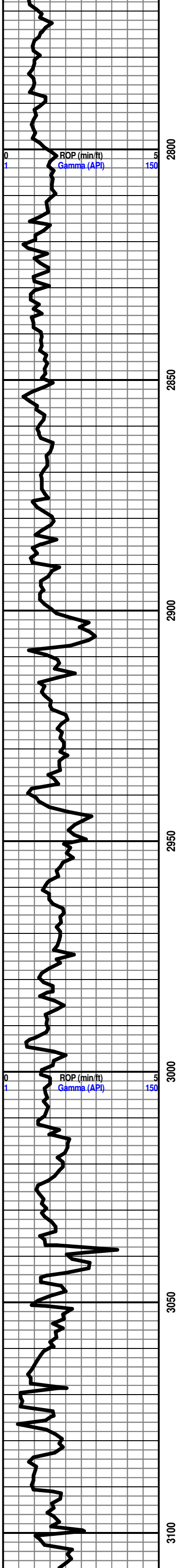




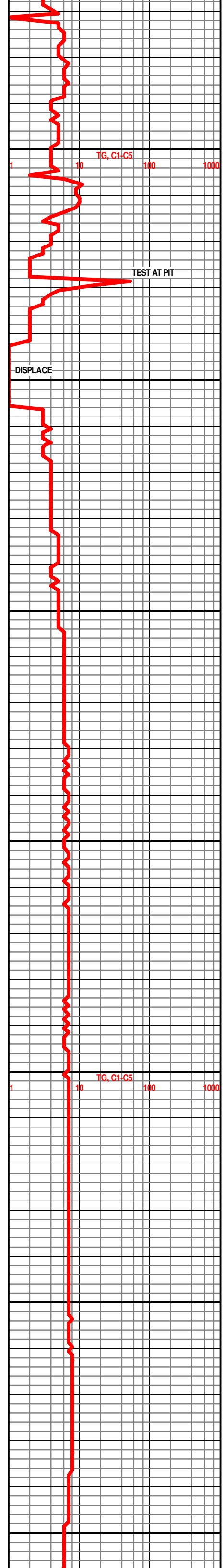


MATTFIELD 2478' - 185'

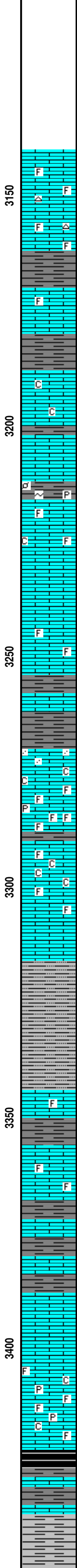
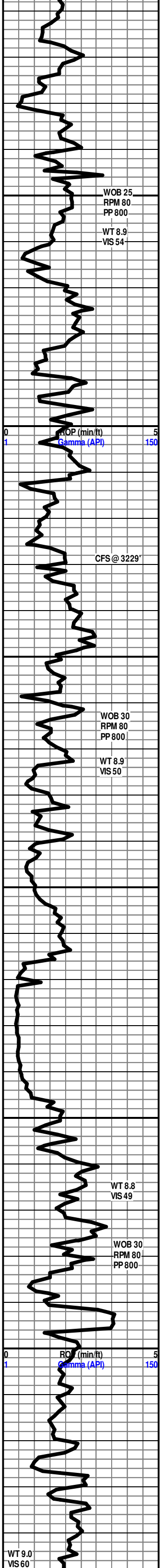




NEVA 2799' - 506'



TARKIO 3073' - 780'



LS-OFF WHT TO CRM, HD DNS TO BRITT, MD TO F-XLN, RE-XLN MTRX, V/FOSS, V/CHLKY IP, HVY TR TN CHRT, LT YEL FLO, TR V/PR MICRO PP POR, NO VIS SHOW OR CUT

LS-CRM TO BUFF, HD DNS TO TR BRITT, MD TO F-XLN, SLI RE-XLN IP, SCAT FOSS FRGS, TN WHT CHRT, LT YEL MIN FLO, NO VIS POR, NO VIS SHOW OR CUT

LS-LT TN TO CRM, HD DNS F-V/F-XLN, MOTT W/IMBD LT GY SH IP, TR FOSS IP DLL YEL FLO, NO VIS POR NO VIS SHOW

SH-LT GY TO DK GY, HD TO FRM SMTH TO GRNY TXT V/CALC IP

LS-OFF WHT TO WHT, V/SFT TO FRM, ABDT CHLK, TR SUCRO S-CHLKY, NO FLO, NO VIS POR, NO VIS SHOW

LS-CRM LT TN TO TN, HD DNS TO TR BRITT, F-V/F-XLN, TR MD XLN, TR SUCRO, DLL YEL FLO, NO VIS POR, NO VIS SHOW

SH-LT GRN TO GRN, FRM, GRNY TXT, HVY TR SLT ST W/IMBD GLAUC, TR IMBD PELT, HVY TR PYR CLSTRS

**TOPEKA 3218' - 925'**

LS-OFF WHT CRM LT TN, HD DNS TO BRITT, V/TT SUCRO MTRX TO F-XLN, RE-XLN IP SCAT FOSS FRGS IP, HVY TR SFT CHLK IP, TR CALC XLS IP LT YEL GLD FLO IN 30%, TR BRIT YEL GLD FLO IN 10%, NO VIS POR, NO VIS CUT OR SHOW

LS-CRM LT TN LT YEL, HD DNS TO BRITT, MD-XLN, RE-XLN MTRX, V/FOSS, SCAT IMBD CALC XLS, TRC GLAUC, SLI TR CHLK IP, DLL YEL FLO IP, NO VIS POR NO VIS SHOW

SH-LT GY TO LT GRN, FRM TO SMTH TXT, SLI GRNY TXT

3268-3273' LS-OFF WHT TO CRM-HD DNS TO BRITT, V/SUCRO MTRX V/S-CHLKY IP, ABDT IMBD FN CLR QURTZ GRNS IP, IMBD DISS SH IP, DLL YELL FLO IP, NO VIS POR, NO VIS SHOW

3273-3282' LS-OFF WHT TO CRM HD VB MD XLN, V/RE-XLN MTRX, V/FOSS, IMBD, SMLL CLAC XLS, TRC PYR, TRC S-CHLKY, DLL YEL FLO, PR TO FR VIS INT-FOSS POR, IP NO VIS CUT, NO VIS SHOW

LS- WHT OFF WHT CRM-MD HD TO FRM, V/SUCRO S-CHLKY MTRX, ABDT SOFT WHT CHLK, TR FREE FOSS, V/DLL YEL MIN FLO, NO VIS POR, NO VIS SHOW

SHLYSLTS- RD RUST, FRM TO SFT V/GRNY TXT, ABDT IMBD V/FN GRN QRTZ

LS-OFF WHT TO CRM, HD DNS TO BRITT, MD-XLN TO FN XLN, RE-XLN, SCAT FOSS FRGS, HVY TRC IMBD SFT CHLK, WHT ORNG CHRT, NO VIS POR, NO VIS SHOW

SH- DK RD TO RUST, FRM, V/GRNY TXT, IMBD SLTS

LS-CRM LT TN TN HD DNS, TRC BRITT, F-V/F-XLN, TRC MD-XLN TO SUCRO, S-CHLKY IP, TRC FOSS FRGS, DLL YEL FLO, NO VIS POR, NO VIS SHOW

SH-LT TO MD GRY, F-BLKY, SMTH TXT, SLI CALC IP

LS- CRM LT TN, HD DNS, V/F- CRYPTO-XLN, TRC S-SUCRO, NO FLO, NO VIS POR, NO SHOW

LS-OFF WHT TO CRM LT TN, HD DNS TO BRITT, MED TO F-XLN, RE-XLN, FOSS FRGS THRU, IMBD SMLL CALC XLS, PYR CLSTRS IP, TRC SFT WHT CHLK IP, DUL YEL MIN FLO, POOR TO FR INT-FOSS POR IP, NO VIS SHOW OR CUT

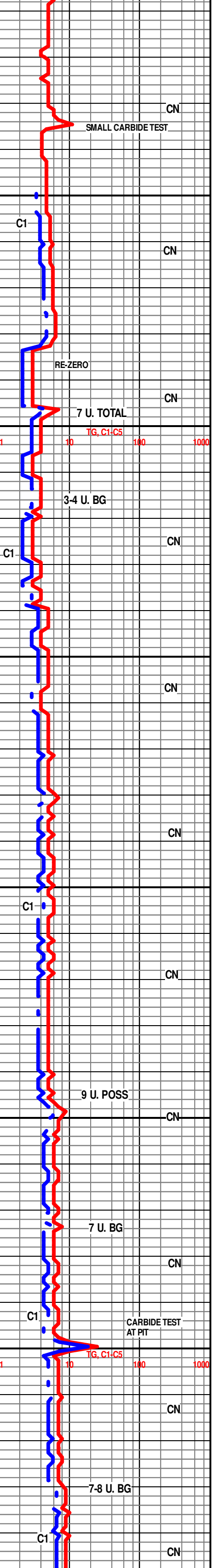
**HEBNER 3428' - 1135'**

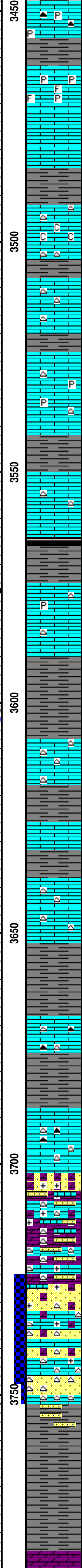
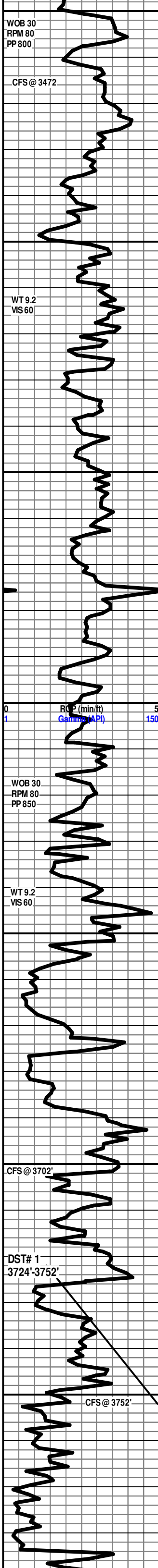
SH-BLK SFT CARB

SH-LT GRN TO GRN FRM BLKING SM TXT

**TORONTO 3450' - 1157'**

LS-OFF WHT CRM TN, (TN STN 70%) HD TO BRITT, V/SUCROMTRX, SLI





LS-CRM LT TN TO TN, TN DUE TO SPTD BRWN OIL STN 50%, HD DNS IP TO BRITT, MD TO F-XLN, V/RE-XLN MTRX, V/FOSS, SCTD IMBD DISS PYR IP, BRT YEL GLD SPTD FLO IN 20%, DLL YEL GLD FLO THRU, PR TO FR VIS INTER-FOSS POR SCAT THRU, TRC GD VIS INTER-FOSS POR 2%, EXCEL INST FLSH CUT THRU, EXCEL SLOW STRM RICH MILKY BLU CUT THRU, TN LCH ON DISH

**LANSING 3462' - 1169'**

LS-CRM LT TN TO TN, TN DUE TO SPTD BRWN OIL STN 50%, HD DNS IP TO BRITT, MD TO F-XLN, V/RE-XLN MTRX, V/FOSS, SCTD IMBD DISS PYR IP, BRT YEL GLD SPTD FLO IN 20%, DLL YEL GLD FLO THRU, PR TO FR VIS INTER-FOSS POR SCAT THRU, TRC GD VIS INTER-FOSS POR 2%, EXCEL INST FLSH CUT THRU, EXCEL SLOW STRM RICH MILKY BLU CUT THRU, TN LCH ON DISH

**LANSING "B" ZONE 3492' - 1199'**

3496'-3500' LS- LT TN TO TN, (W/ LIVE OIL STN IN 50-60%) HD DNS TO BRITT, MD-XLN, RE-XLN MTRX, CHLKY, S-SUCRO, SCAT IMBD CHLK THRU, ABDT WHT & ORNG CHRT THRU TRAY, DLL YEL GLD FLO 40% SPTD BRT YEL GLD FLO SCTD IN 10%, V PR TO PR TO TRC FR INTER-XLN POR IN 2-3%, FR TRC MICRO VUG POR IP, FR FLSH CUT IN 70%, GD SLOW STRM IN 70%, TN LCH ON DSH, NO OIL ODOR,

LS-WHT TO OFF WHT CRM IP V HD DNS, F/VF-XLN MTRX, SLI TRC S-CHLKY, SCAT WHT CHRT THRU, V DLL YEL FLO IN 20%, NO VIS POR, NO VIS CUT OR SHOW

LS-OFF WHT TO CRM HD DNS TO TRC BRITT IP, VF XLN MTRX, S-CHLKY, IMBD DISS PYR THRU, SCAT SFT WHT CHLK, NO VIS FLO, NO VIS POR, NO VIS SHOW

SH-LT GRY LT GRN MOTT, V FRM, BLCKY SMTH TXT

LS-WHT TO OFF WHT, VH DNS, VF/CRYPTO-XLN, S CHLKY, TRC IMBD CALC-XLS IP DUL YEL FLO IN 30%, NO VIS POR, NO VIS CUT OR SHOW

**LANSING "F" SHALE 3563' - 1270'**

SH-BLCK SFT CARB, W/LT GRY TO GRY V FRM SFT, SPLNTY

LS-OFF WHT TO CRM, VH DNS, VF/CRYPTO-XLN, SCAT WHT CHRT THRU TRAY, SLI TRC PYR, NO VIS FLO, NO VIS POR, NO VIS SHOW

**LANSING "G" ZONE 3609' - 1316'**

3615'-3617' LS-WHT OFF WHT (W D.O.S. SCAT 30 TO 40 %) (LT TN OIL STN IN 10%) HD DNS TO V BRITT, MD-XLN, CHLKY MTRX, ABDT IMBD WHT SFT CHLK THRU, SLI TRC SM IMBD CALC XLS, SCAT WHT CHRT IN TRAY, DLL YEL GLD FLO IN 20%, PR TO TRC FR MICRO VUG IP, FR FLSH CUT IN 30%, GD SLO STRM IN 30%, V SLI TRC LT TN LCH ON DSH, V LT OIL ODOR

LS-OFF WHT TO CRM, V HD DNS, V F-XLN MTRX, S CHLKY IP, SCAT IMBD CALC-XLS, WHT CHRT THRU OUT TRAY, V DLL YEL FLO 40%, NO VIS POR, NO VIS CUT OR SHOW

**BKC 3652' - 1359'**

SH-RD TO DRK RD GRN MOTT, V SFT TO GMMY THRU

LS-WHT TO OFF WHT, V HD, V F/CRYPTO-XLN MTRX, ABDT WHT CHRT THRU, NO VIS FLO, NO VIS POR, NO VIS SHOW

SH- RD GRN PRPL MOTT, SFT TO V GMMY, BLCKY

LS-WHT, V HD DNS, V F-XLN MTRX, ABDT WHT & ORNG CHRT THRU OUT TRAY, SLI TRC IMBD RD SH, DLL YEL FLO IN 40%, YEL FLO IN 10%, NO VIS POR, NO VIS CUT OR SHOW

CONGL- LMS W/ WHT CLR QRTZ GRNS INTERBD, BRN DOLO THRU, FELDSPAR & WHT CHRT, SLI TR PYR IN TRAY

3725'-3732' SS- CLR TO FRSTY, HD V FRI, F/MD GRNS S-ANG TO RND CLR QRTZ GRNS, FR SRT, PRED SIL CMNT TO TR CALC & DOLO CMNT IP, YEL GLD FLO IN 10%, SPTD BRT YEL GLD FLO SCAT IN 10%, FR TO GD VIS INTER-GRN POR IN 3-4%, EXCEL FLSH CUT IN 100%, EXCEL SLW STRM IN 100%, DK TN LCH ON DSH, LIVE OIL STN IN 40%, FREE FLOATING OIL IN TRAY

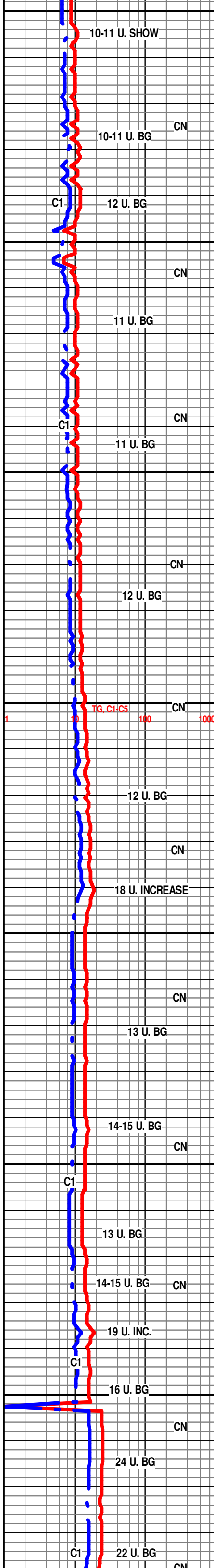
CONG- LMS & CLR QRTZ GRNS INTERBED, W/ TR TN BRWN DOLO, FELDSPAR, ABDT WHT & ORNG MOTT CHRT THRU

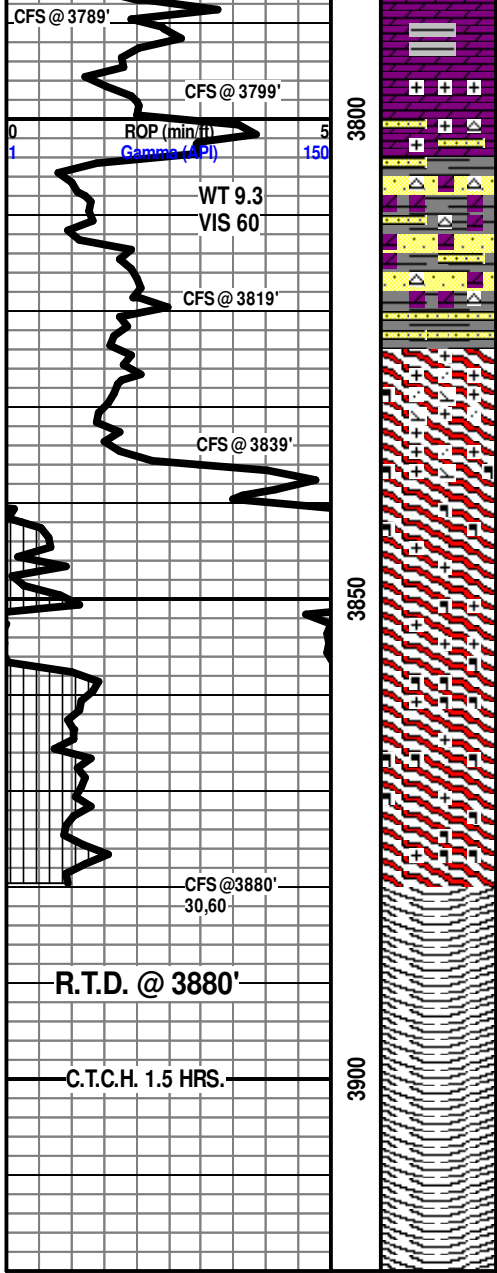
SH-RD PRPL GRN, SLI FRM TO V SFT, BLKY, W/ IMBD SM S-ANG CLR QRTZ GRNS

SH- RD PRP GRN, SFT TO V GMMY THRU

**ARBUCKLE 3784'-1491'**

3785'-3788'DOLO- LT TN W YEL TNT THRU HD DNS TO SLI TRC BRTT, RE-XLN, SUCRO MTRX, ABDT IMBD SM S-ANG TO S-RND DOLO GRNS THRU, SCAT SM S-ANG CLR QRTZ GRNS, NO VIS FLO, FR TO V GD VIS VUG POR IN 4-5%, PR VIS INTER-GRN POR IP, NO FLSH CUT, V SLI TRC





SLW STRM IN ONE ROCK, NO LCH ON DISH, NO OIL ODOR

DOLO-LT TN TO YEL TNT WHT, W IMBD RD SH, GRDING TO LG S- ANG CLR QRTZ GRNS, W ABDT IMBD FELDSPARS & SCATT BIOTITE

CONGL INTERBD- DOLO WHT W/ SM RND CLR QRTZ GRNS GRDING TO IMB RD SH THRU, SS- FRSTY WHT CLSTRS, V FRI, F GRNS RND CLR QRTZ GRNS, WEL SRT, PRED SIL CMNT, W/ SCAT CLR TO WHT CHRT, SCAT V SM TO MD TR LG S-RND TO RND CLR QRTZ GRNS W/ TR IMB FELDSPAR IP, NO VIS FLO, NO VIS POR, NO VIS SHOW

**GRANITE WASH 3824'-1531'**

3824'-3834' GRANITE WASH-ORG PINK SLI RD IP V HD DNS ANG S-ANG HV TRC FELDSPAR, ABDT MD TO LG S-ANG CLR QRTZ GRNS W HV TRC IMBD MIN, V SLI TRC IMBD PYR, NO VIS FLO, NO VIS POR, NO VIS SHOW

3834'-3839' GRANITE WASH-CLR FRSTY TO WHT ORG, V HD TT, ABDT ANG TO S- ANG TRC S-RND, HV TRC IMBD BIOTITE, MOSIAC OF FELDSPAR, NO VIS FLO, NO VIS POR, NO VIS SHOW

GRANITE WASH- CLR FRSTY IP GRDING TO ORG AND PNK, VHD, IMBD SM TO MD LG ANG TO S-ANG CLR QRTZ GRNS, PR SRT, HV TRC IMBD BIOTITE, SCAT IMBD FELDSPAR, NO VIS FLO, NO VIS POR, NO VIS SHOW

**R.T.D. @ 12:30 AM 5/6/13**

DROP SURVEY

T.O.F.L. @ 2:00 AM

WEATHERFORD/ LIBERAL, KS

