



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1219120
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: _____

1219120

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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

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

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

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

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

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> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Samuel Gary Jr. & Associates, Inc.
Well Name	THOMAS CASEY 1-32
Doc ID	1219120

All Electric Logs Run

DIL
MICRO
POROSITY
SONIC
SPECTRAL



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: 4/28/2014
 Invoice # 113
 P.O.#:
 Due Date: 5/28/2014
 Division: Russell

11405-AP-301
RECEIVED

5/22

Invoice

MAY 06 2014

Contact:
 Samuel Gary Jr & Associates Inc
Address/Job Location:
 Samuel Gary Jr & Associates Inc
 1935 LOUIE ROAD
 HAYS KANSAS 67601

Reference:
 THOMAS CASEY 1-32

Description of Work:
 SURFACE JOB

DRUG TWO SAMUEL GARY JR. & ASSOCIATES, INC.

Account	8200.138
Well/Prospect	
Deck	
AFE	
Approval	See filed ticket
Description	

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 1,020.55	Yes				
Common-Class A	160	\$ 2,682.35	Yes				
Pump Truck Mileage-Job to Nearest Camp	34	\$ 379.24	Yes				
Bulk Truck Matl-Material Service Charge	168	\$ 375.53	Yes				
Calcium Chloride	5	\$ 311.04	Yes				
Bulk Truck Mileage-Job to Nearest Bulk Plant	34	\$ 221.92	Yes				
Premium Gel (Bentonite)	3	\$ 54.59	Yes				

Invoice Terms:

Net 30

SubTotal:	\$	5,045.22
Discount Available <u>ONLY</u> if Invoice is Paid & Received within listed terms of invoice:	\$	(756.78)
<hr/>		
SubTotal for Taxable Items:	\$	4,288.43
SubTotal for Non-Taxable Items:	\$	-
<hr/>		
Total:	\$	4,288.44
Tax:	\$	263.74
<hr/>		
Amount Due:	\$	4,552.18
Applied Payments:		
Balance Due:	\$	4,552.18

6.15% Rooks 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.
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QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

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

No. 113

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
4-28-14	32	9	16	ROOK'S	KANSAS		1:00 PM

Location Natoma 4W 3N 1W S. 1ND

Lease	Well No.	Owner
<u>THOMAS CASEY</u>	<u>1-32</u>	To Quality Oilwell Cementing, Inc.

Contractor	Rig #	You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
<u>DISCOVERY PALG.</u>	<u>2</u>	

Type Job	Charge To
<u>CEMENT SURFACE</u>	<u>SAM GARY JR & ASSOCIATES INC</u>

Hole Size	T.D.	Street
<u>12 1/4</u>	<u>262'</u>	

Csg.	Depth	City	State
<u>8 5/8</u>	<u>262'</u>		

Tbg. Size	Depth	The above was done to satisfaction and supervision of owner agent or contractor.	

Tool	Depth	Cement Amount Ordered
		<u>160 cx Com.</u>

Cement Left in Csg.	Shoe Joint	Cement Amount Ordered
<u>15'</u>		<u>160 cx Com.</u>

Meas Line	Displace	Common
	<u>15 3/4 BBL</u>	<u>160</u>

EQUIPMENT

Pumptrk	No.	Cementer	Helper	Poz. Mix
<u>18</u>		<u>GLENN G.</u>	<u>CODY B.</u>	
Bulktrk	No.	Driver	Driver	Gel.
<u>3</u>		<u>CHAD M.</u>		<u>3</u>
Bulktrk	No.	Driver	Driver	Calcium
				<u>5</u>

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers <u>1</u>	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
	Sand
	Handling <u>168</u>
	Mileage

Ran 6 New Joints of 23 # 8 5/8 csg
Set @ 262, Received Circulation
& Cement w/ 160 cx Com 243.
& Displaced 15 3/4 BBL H₂O
SHUT IN @ 250 #.

FLOAT EQUIPMENT

Cement Did Circulate TO SURFACE	Guide Shoe
	Centralizer <u>1</u>
	Baskets
	AFU Inserts
	Float Shoe
	Latch Down

THANK'S

Signature	Pumptrk Charge	Tax
	<u>SURFACE</u>	
	Mileage <u>34</u>	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: 5/5/2014
 Invoice # 175

P.O.#:
 Due Date: 6/4/2014
 Division: Russell

Invoice

Contact:
 Samuel Gary Jr & Associates Inc
Address/Job Location:
 Samuel Gary Jr & Associates Inc
 1935 LOUIE ROAD
 HAYS KANSAS 67601

Reference:
 THOMAS CASEY 1-32

Description of Work:
 PROD STRING

DRLG COMP W/O LOE GG

Account	8260.138
Well/Prospect	
Deck	
AFE	
Approval	See field ticket
Description	

Services / Items Included:

	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 991.39	No	Auto Fill Float Shoe, 5 1/2"	1	\$332.23	Yes
Common-Class A	225	\$ 3,664.29	Yes	Salt (Fine)	19	\$287.97	Yes
Cement Port Collar, 5 1/2"	1	\$ 2,714.29	Yes	Latch Down Plug & Baffle, 5 1/2"	1	\$243.20	Yes
5 1/2" Basket	4	\$ 1,493.94	Yes	Bulk Truck Mileage-Job to Nearest Bulk Plant	34	\$215.58	No
CFL 117	176	\$ 1,177.09	Yes	KCL	2	\$64.84	Yes
5 1/2" Turbolizer	9	\$ 566.74	Yes				
Bulk Truck Matl-Material Service Charge	254	\$ 551.54	No				
CD-110	117	\$ 508.11	Yes				
Mud Clear	500	\$ 401.71	Yes				
Defoamer A or CAF-38	50	\$ 380.00	Yes				
Pump Truck Mileage-Job to Nearest Camp	34	\$ 368.40	No				

Invoice Terms:

Net 30		SubTotal: \$ 13,961.33
	<i>Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice:</i>	\$ (2,094.20)
	SubTotal for Taxable Items:	\$ 10,059.25
	SubTotal for Non-Taxable Items:	\$ 1,807.88
	Total:	\$ 11,867.13
	Tax:	\$ 618.64
	Amount Due:	\$ 12,485.77
	Applied Payments:	
	Balance Due:	\$ 12,485.77

6.15% Rooks County Sales Tax

Thank You For Your Business!

Past Due Invoices are subject to a service charge (annual rate of 24%)
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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. 175

Date	5-5-14	Sec.	32	Twp.	9	Range	16	County	Rooks	State	KS	On Location	8:15pm		
Location								Natomas W to 28 Rd IV to X Rd 1/2 W S46							
Lease	Thomas Casey			Well No.	1-32			Owner							
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	Production string							Charge To Sam Gary Jr. & Assoc							
Hole Size	7 7/8			T.D.	3541'			Street							
Csg.	5 1/2			Depth	3485.6			City							
Tbg. Size				Depth				State							
Tool	Port Collar			Depth	1230'			The above was done to satisfaction and supervision of owner agent or contractor.							
Cement Left in Csg.	33.20			Shoe Joint	33.20			Cement Amount Ordered 225 @ pro-C 10% Salt							
Meas Line	Displace 82 1/4 bbl							5% Wilsonite 1/4 flo seal .3% CD-110 .25% CAF 38 - .8% CFL117							
EQUIPMENT												Common	225		
Pumptrk	5	No.	Cementer	David				Poz. Mix							
Bulktrk	9	No.	Driver	Clayton				Gel.							
Bulktrk	PU	No.	Driver	Brett		Craig		Calcium CD 110 - 117							
JOB SERVICES & REMARKS												Hulls	RCK 2 gal		
Remarks:												Salt	19		
Rat Hole - 30sr												Flowseal	56		
Mouse Hole - 15sr												Kol-Seal	1057#		
Centralizers - 1, 3, 5, 7, 9, 11, 13, 15 + 55												Mud CLR 48	500 gal		
Baskets - 3, 9, 15 + 54												CFL-117 or CD110 CAF 38	30 BBL 507#		
Port Collar @ 54 - 1230'												Sand	176		
Land Plug @ 1200 #												Handling	254		
Lift PL 800 #												Mileage	5 1/2		
Mixed 500 gal Mud Flush												FLOAT EQUIPMENT			
Plugged Rat + Mouse 30/15sr												Guide Shoe			
Mixed 180 sr down 5 1/2												Centralizer	- 9		
Displaced 82 1/4 bbl												Baskets	- 4		
Landed Plug @ 1200												AFU Inserts			
Plug held												Float Shoe	- 1		
												Latch Down	- 1		
												Rubber Plug	- 1		
												1 Port Collar			
												Pumptrk Charge	prod string		
												Mileage	34		
												Tax			
												Discount			
												Total Charge			

X Signature



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: 5/12/2013
 Invoice # 122
 P.O.#:
 Due Date: 6/11/2013
 Division: Russell

Invoice

Contact:
 Samuel Gary Jr & Associates Inc
Address/Job Location:
 Samuel Gary Jr & Associates Inc
 1935 LOUIE ROAD
 HAYS KANSAS 67601

DRLG COMP W/O LOE GG

Account	8360.238
Well/Prospect	
Deck	
AFE	
Approval	see field ticket
Description	

Reference:
 THOMAS CASEY 1-32

Description of Work:
 PORT COLLAR JOB

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 1,020.55	No				
mon, MetsoBeads, Plater, Gel, FloSeal, Calcium)	200	\$ 4,273.88	Yes				
Bulk Truck Mat-Material Service Charge	200	\$ 447.06	No				
Pump Truck Mileage-Job to Nearest Camp	34	\$ 379.24	No				
Bulk Truck Mileage-Job to Nearest Bulk Plant	34	\$ 221.92	No				
Flo Seal	50	\$ 111.76	Yes				

Invoice Terms:

Net 30

SubTotal: \$ 6,454.41

Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice: \$ (968.16)

SubTotal for Taxable Items: \$ 3,727.80

SubTotal for Non-Taxable Items: \$ 1,758.45

Total: \$ 5,486.25

Tax: \$ 229.26

Amount Due: \$ 5,715.51

Applied Payments:

Balance Due: \$ 5,715.51

6.15% Rooks County Sales Tax

Thank You For Your Business!

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RECEIVED

MAY 20 2014

**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. 122

Date	5-12-14	Sec.	32	Twp.	9s	Range	16 W	County	ROOK'S	State	KANSAS	On Location		Finish	2:30 PM
Location													NATOMA KS. WEST TO RD #28, 3N 34W 4S		

Lease	THOMAS CASEY		Well No.	1-32		Owner									
Contractor	EXPRESS WELL SERVICE					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	PORT COLLAR (CIRC-CEMENT)					Charge To	SAM GARY JR								
Job Size	8 5/8		T.D.	262'		Street	Jr & Associates								
Csg.	5 1/2		Depth	3486		City									
Tbg. Size	2 7/8		Depth	DON'S PACKER SERVICE		State									
Tool	PORT COLLAR		Depth	1232		The above was done to satisfaction and supervision of owner agent or contractor.									
Cement Left in Csg.	Ø		Shoe Joint	TOP-CEMENT 2185		Cement Amount Ordered	200sx QMDC.								
Meas Line			Displace	6			W/ 1/4 # F10-SEAL PER SX								

EQUIPMENT

Pumptrk	18	No.	Cementor	GLENN G		Common									
			Helper	CODY B		Poz. Mix									
Bulktrk	9	No.	Driver	CLAYTON B		Gel.									
			Driver			Calcium									
Bulktrk		No.	Driver												
			Driver												

JOB SERVICES & REMARKS

Remarks:	FOUND PORT COLLAR @ 1232' LOAD														
Rat Hole	Hole, TEST TO 1000# (GOOD), OPEN														
Mouse Hole	PORT COLLAR & PUMPED 80 BBL/														
Centralizers	DRIG. MUD. RECEIVED CIRC W/ 5 BBL														
Baskets	MUD, MIXED 200SX QMDC. 1/4 F10-														
D/V or Port Collar	CEMENT CIRCULATED AROUND ANNULAR														
	AS BULK-TRUCK WAS EMPTY,														
	DISPLACED 6 BBL/ BEHIND CEMENT														
	CLOSED PORT COLLAR & TEST														
	TO 1,000# (GOOD), RAN 5														
	JTS 2 7/8 & WASHED CLEAN -														
	22 BBL/ SHORT WAY MIXED CEMENT @ 12#														
	FIRST 150 SX & 13# LAST 50 SX.														
	CEMENT DID CIRCULATE TO SURFACE														
	STATE REP. PAT PEDORA (KCC) ON LOCATION														
	THANK'S														
	Signature: [Signature]														

FLOAT EQUIPMENT

Handling	200														
Mileage															
Guide Shoe															
Centralizer															
Baskets															
AFU Inserts															
Float Shoe															
Latch Down															
Pumptrk Charge	port collar														
Mileage	34														

Tax	
Discount	
Total Charge	



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates

32-9s-16w-Rooks Co

1515 Wynkoop st STE 700
Denver CO 80202

Thomas Casey #1-32

Job Ticket: 57575

DST#: 1

ATTN: Chris Mitchell

Test Start: 2014.05.02 @ 03:10:53

GENERAL INFORMATION:

Formation: **Toronto & Lansing**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:32:03

Time Test Ended: 11:35:53

Test Type: Conventional Bottom Hole (Initial)

Tester: Tate Lang

Unit No: 49

Interval: 3130.00 ft (KB) To 3191.00 ft (KB) (TVD)

Reference Elevations: 2038.00 ft (KB)

Total Depth: 3191.00 ft (KB) (TVD)

2030.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8898 Outside

Press@RunDepth: 83.20 psig @ 3136.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.05.02 End Date: 2014.05.02

Last Calib.: 2014.05.02

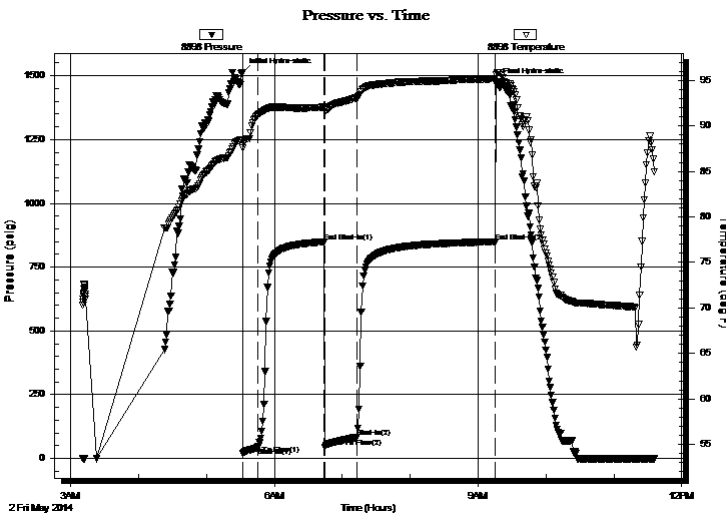
Start Time: 03:10:54 End Time: 11:35:53

Time On Btm: 2014.05.02 @ 05:31:53

Time Off Btm: 2014.05.02 @ 09:15:43

TEST COMMENT: B.O.B. In 8 mins
Weak surface blow
B.O.B. In 2 mins
B.O.B. in 90 mins

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1511.77	88.50	Initial Hydro-static
1	18.06	87.55	Open To Flow (1)
14	43.17	91.16	Shut-In(1)
72	849.16	92.04	End Shut-In(1)
73	44.75	91.86	Open To Flow (2)
101	83.20	93.10	Shut-In(2)
223	849.39	95.17	End Shut-In(2)
224	1474.13	95.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	30%G 70%O	0.56
124.00	20% 20% 60%M	1.74
0.00	645 GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Associates

32-9s-16w-Rooks Co

1515 Wynkoop st STE 700
Denver CO 80202

Thomas Casey #1-32

Job Ticket: 57575

DST#: 1

ATTN: Chris Mitchell

Test Start: 2014.05.02 @ 03:10:53

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 47.00 sec/qt
Water Loss: 8.79 in³
Resistivity: ohm.m
Salinity: 3500.00 ppm
Filter Cake: 1.00 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
40.00	30%G 70%O	0.561
124.00	20% 20% 60%M	1.739
0.00	645 GIP	0.000

Total Length: 164.00 ft Total Volume: 2.300 bbl

Num Fluid Samples: 0

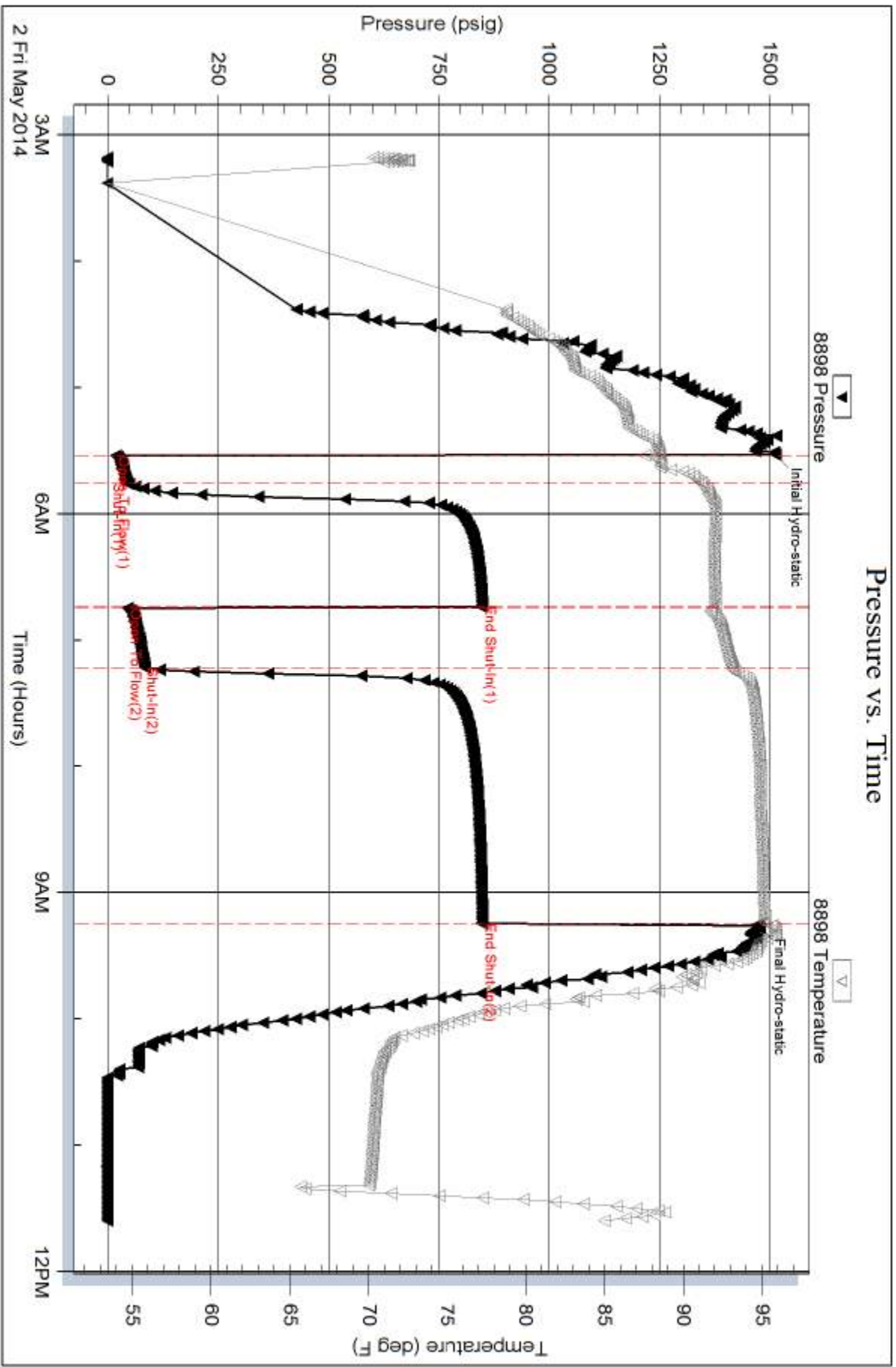
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



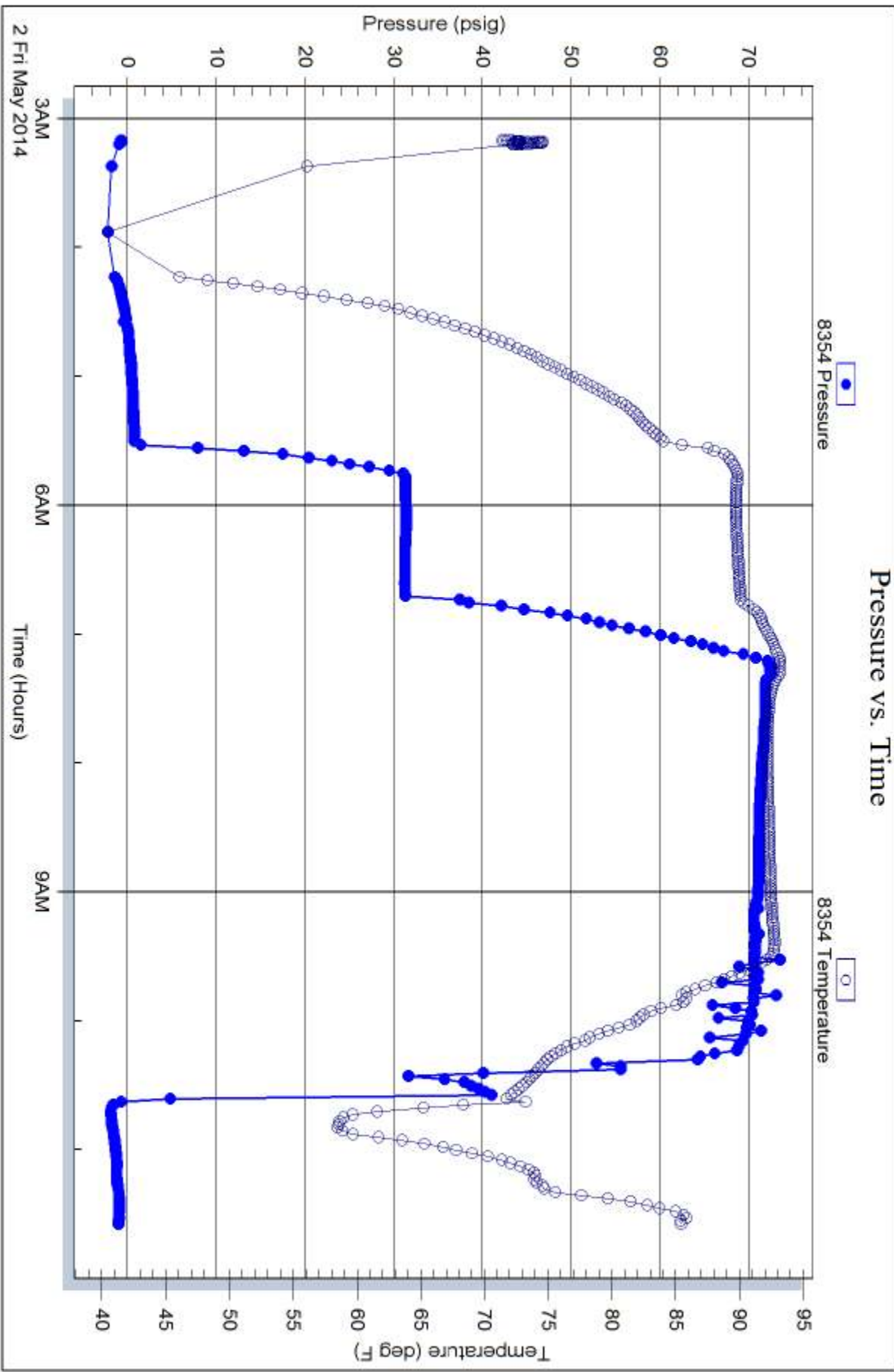
Serial #: 8354

Fluid

Samuel Gary Jr. & Associates

Thomas Casey #1-32

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 57575

Printed: 2014.05.02 @ 13:49:18



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates

32-9s-16w-Rooks Co

1515 Wynkoop st STE 700
Denver CO 80202

Thomas Casey #1-32

ATTN: Chris Mitchell

Job Ticket: 58926

DST#: 2

Test Start: 2014.05.02 @ 21:23:18

GENERAL INFORMATION:

Formation: **Lansing C&D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:09:38

Time Test Ended: 04:39:08

Test Type: Conventional Bottom Hole (Reset)

Tester: Tate Lang

Unit No: 49

Interval: 3194.00 ft (KB) To 3244.00 ft (KB) (TVD)

Reference Elevations: 2038.00 ft (KB)

Total Depth: 3244.00 ft (KB) (TVD)

2030.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8898 Outside

Press @ Run Depth: 17.52 psig @ 3199.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.05.02

End Date:

2014.05.03

Last Calib.:

2014.05.03

Start Time: 21:23:19

End Time:

04:39:08

Time On Btm:

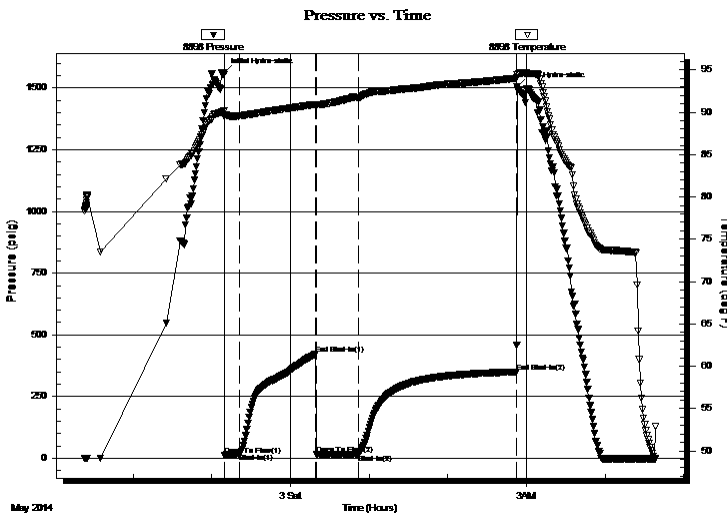
2014.05.02 @ 23:09:28

Time Off Btm:

2014.05.03 @ 02:52:48

TEST COMMENT: 10 min- IF- Weak surface blow built to 1/4 in
60 min- IS- Dead no blow back
30 min- FF- Dead no blow
120 min- FS- Dead no blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1561.20	90.14	Initial Hydro-static
1	13.24	89.48	Open To Flow (1)
12	19.05	89.58	Shut-In(1)
70	422.07	90.94	End Shut-In(1)
71	16.65	90.82	Open To Flow (2)
103	17.52	91.70	Shut-In(2)
223	350.10	94.01	End Shut-In(2)
224	1505.21	94.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100%M With oil spots	0.07

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Associates

32-9s-16w-Rooks Co

1515 Wynkoop st STE 700
Denver CO 80202

Thomas Casey #1-32

Job Ticket: 58926

DST#: 2

ATTN: Chris Mitchell

Test Start: 2014.05.02 @ 21:23:18

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	100%M With oil spots	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

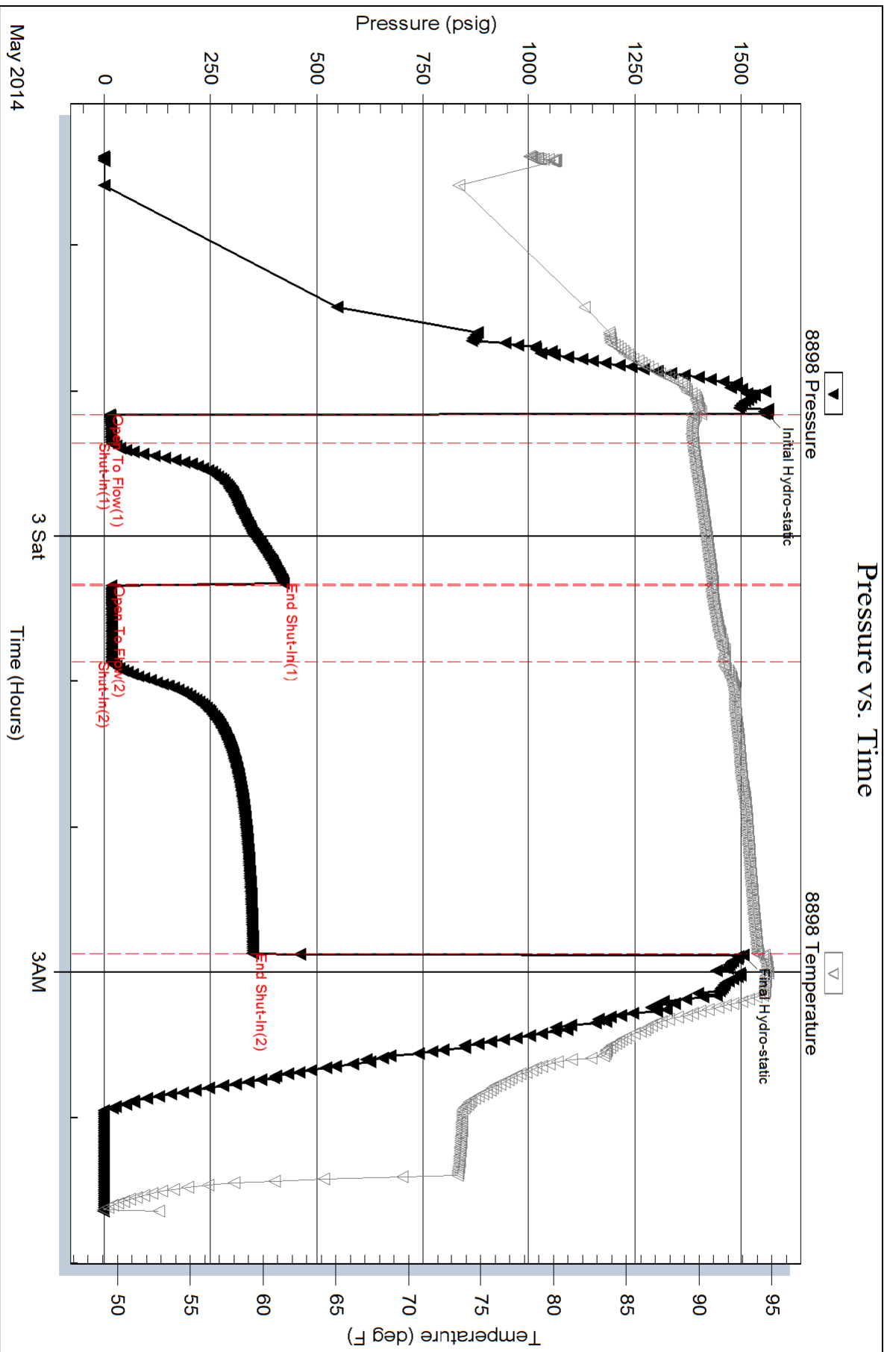
Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler-

100 PSI

150 ML Mud with oil spots



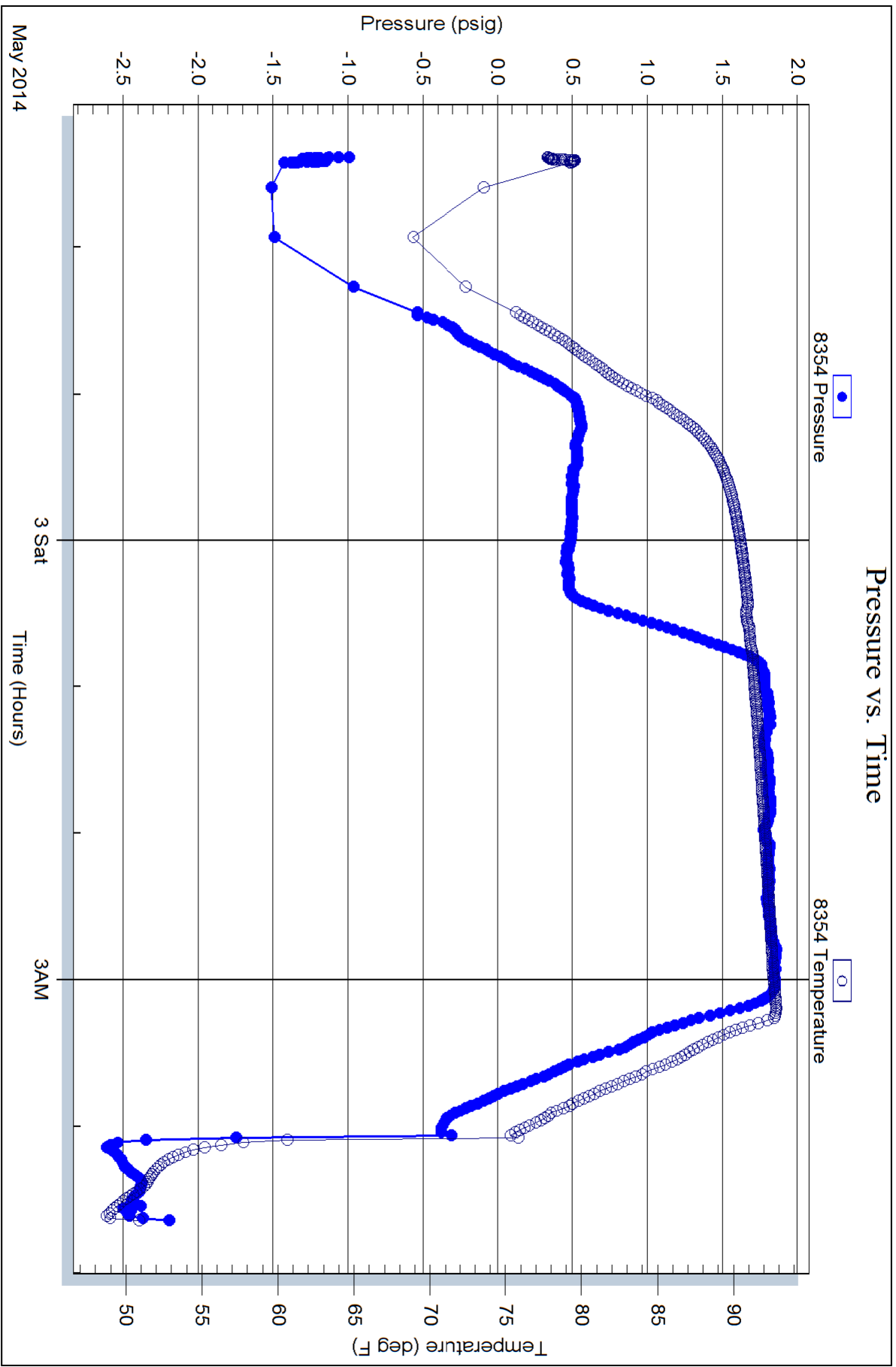
Serial #: 8354

Fluid

Samuel Gary Jr. & Associates

Thomas Casey #1-32

DST Test Number: 2





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates

32-9s-16w-Rooks Co

1515 Wynkoop st STE 700
Denver CO 80202

Thomas Casey #1-32

ATTN: Chris Mitchell

Job Ticket: 57544

DST#: 3

Test Start: 2014.05.03 @ 23:53:00

GENERAL INFORMATION:

Formation: **LKC J-K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:23:50

Time Test Ended: 08:42:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Tim Phillips

Unit No: 49

Interval: 3349.00 ft (KB) To 3415.00 ft (KB) (TVD)

Reference Elevations: 2038.00 ft (KB)

Total Depth: 3191.00 ft (KB) (TVD)

2030.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8897

Press @ Run Depth: 28.81 psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.05.03

End Date:

2014.05.04

Last Calib.:

2014.05.04

Start Time: 23:53:01

End Time:

08:30:19

Time On Btm:

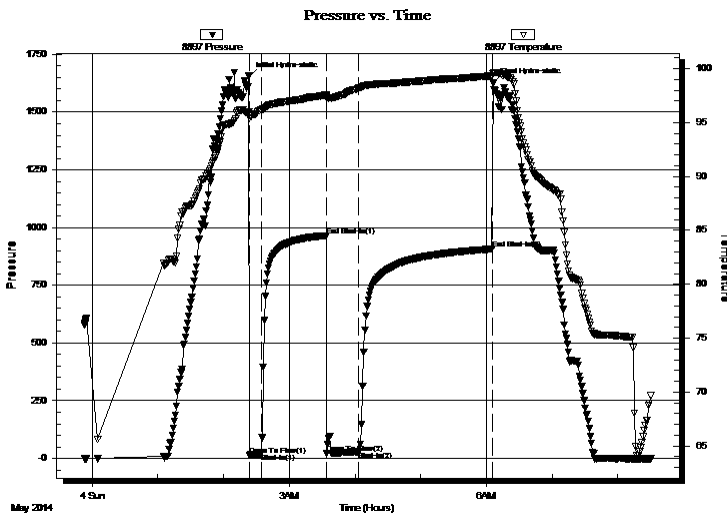
2014.05.04 @ 02:23:20

Time Off Btm:

2014.05.04 @ 06:06:00

TEST COMMENT: IFP- Weak blow built to 1.25in
ISI- Dead no blow back
FF- Weak blow built to 1 in
FSI- Dead no blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1655.48	95.99	Initial Hydro-static
1	12.48	95.41	Open To Flow (1)
11	19.92	96.16	Shut-In(1)
71	965.33	97.54	End Shut-In(1)
71	20.77	97.25	Open To Flow (2)
101	28.81	98.19	Shut-In(2)
222	907.06	99.32	End Shut-In(2)
223	1625.83	99.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud 100%	0.42

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Associates

32-9s-16w-Rooks Co

1515 Wynkoop st STE 700
Denver CO 80202

Thomas Casey #1-32

Job Ticket: 57544

DST#: 3

ATTN: Chris Mitchell

Test Start: 2014.05.03 @ 23:53:00

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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud 100%	0.421

Total Length: 30.00 ft Total Volume: 0.421 bbl

Num Fluid Samples: 0

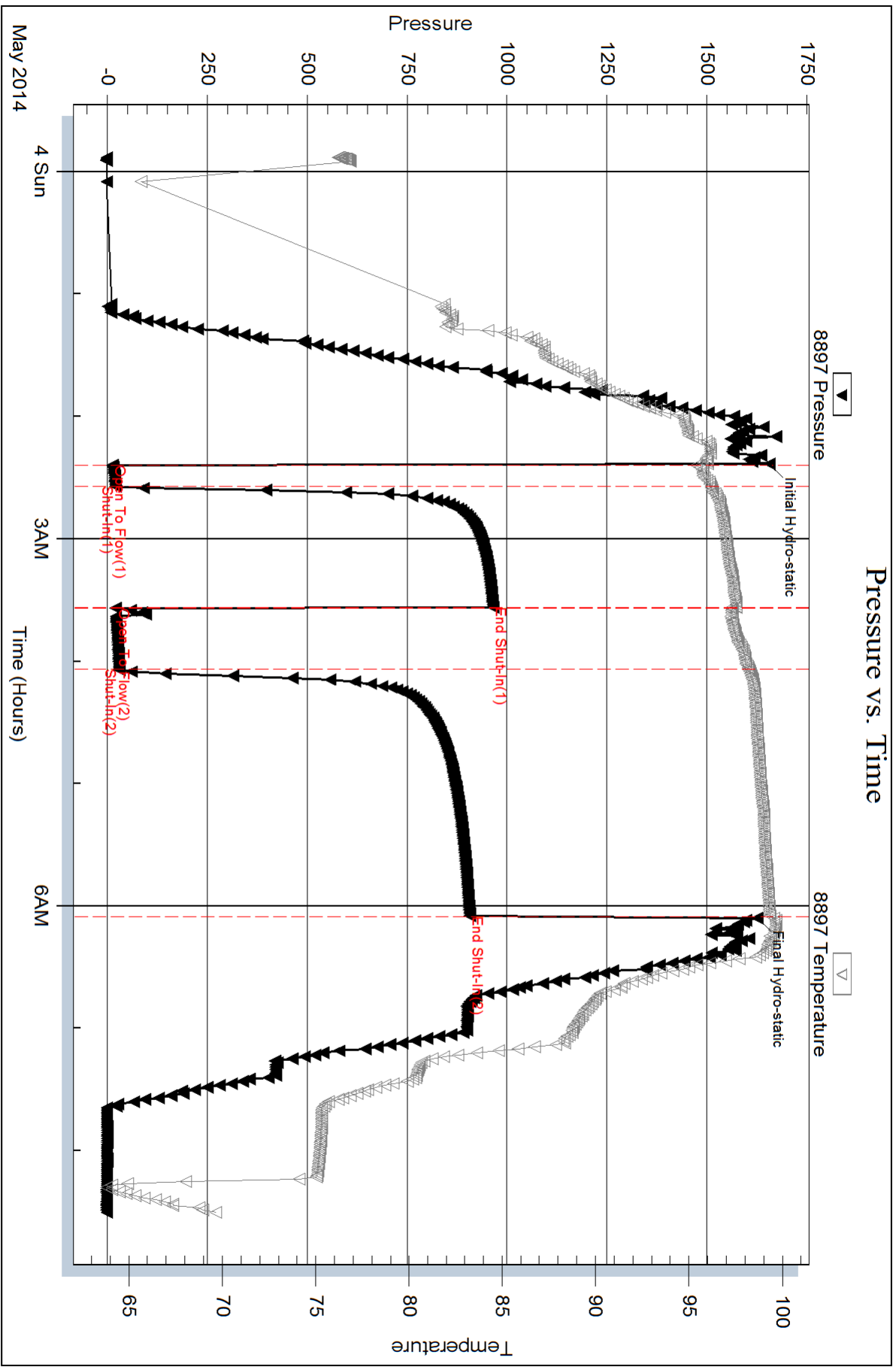
Num Gas Bombs: 0

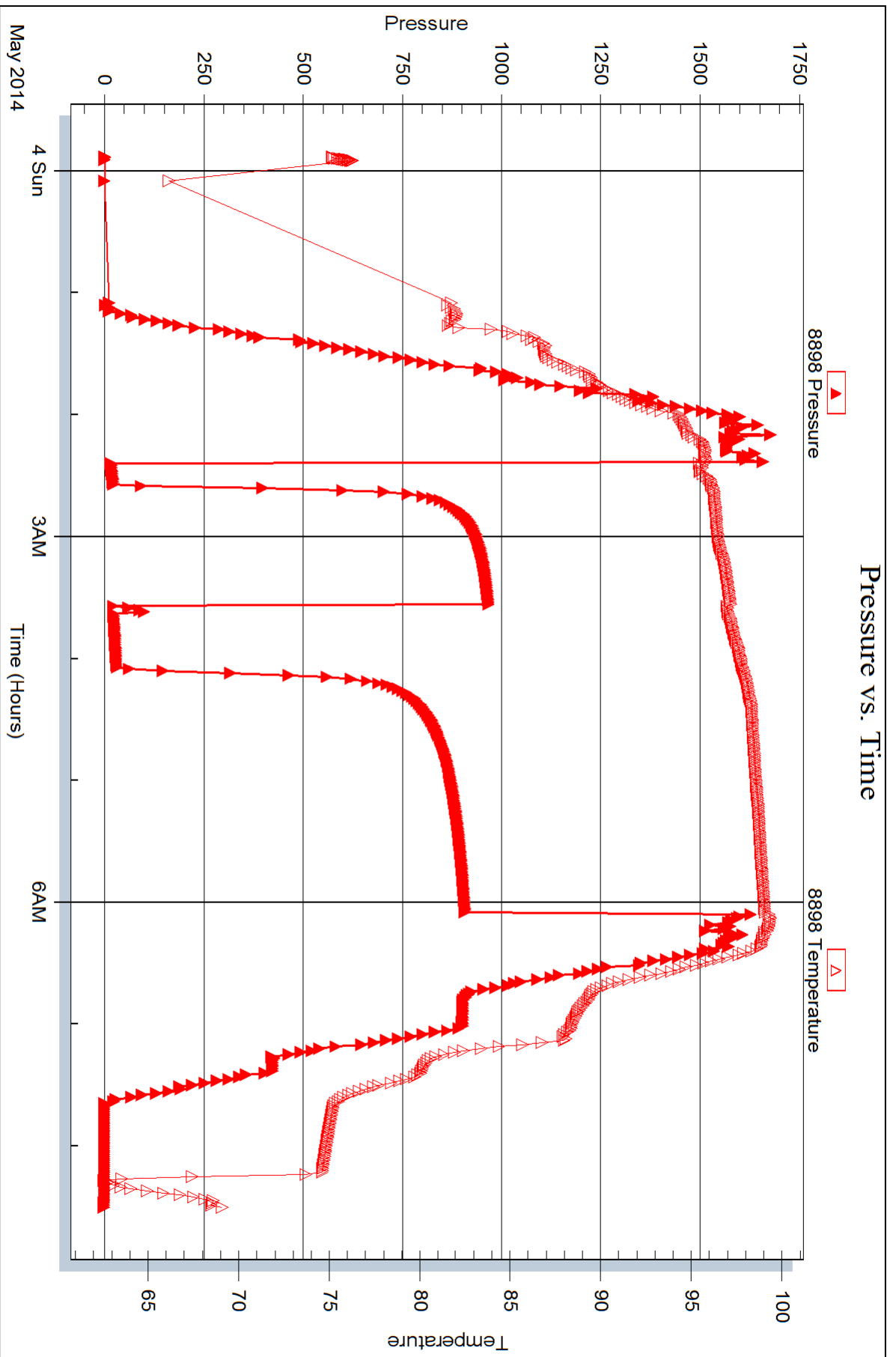
Serial #:

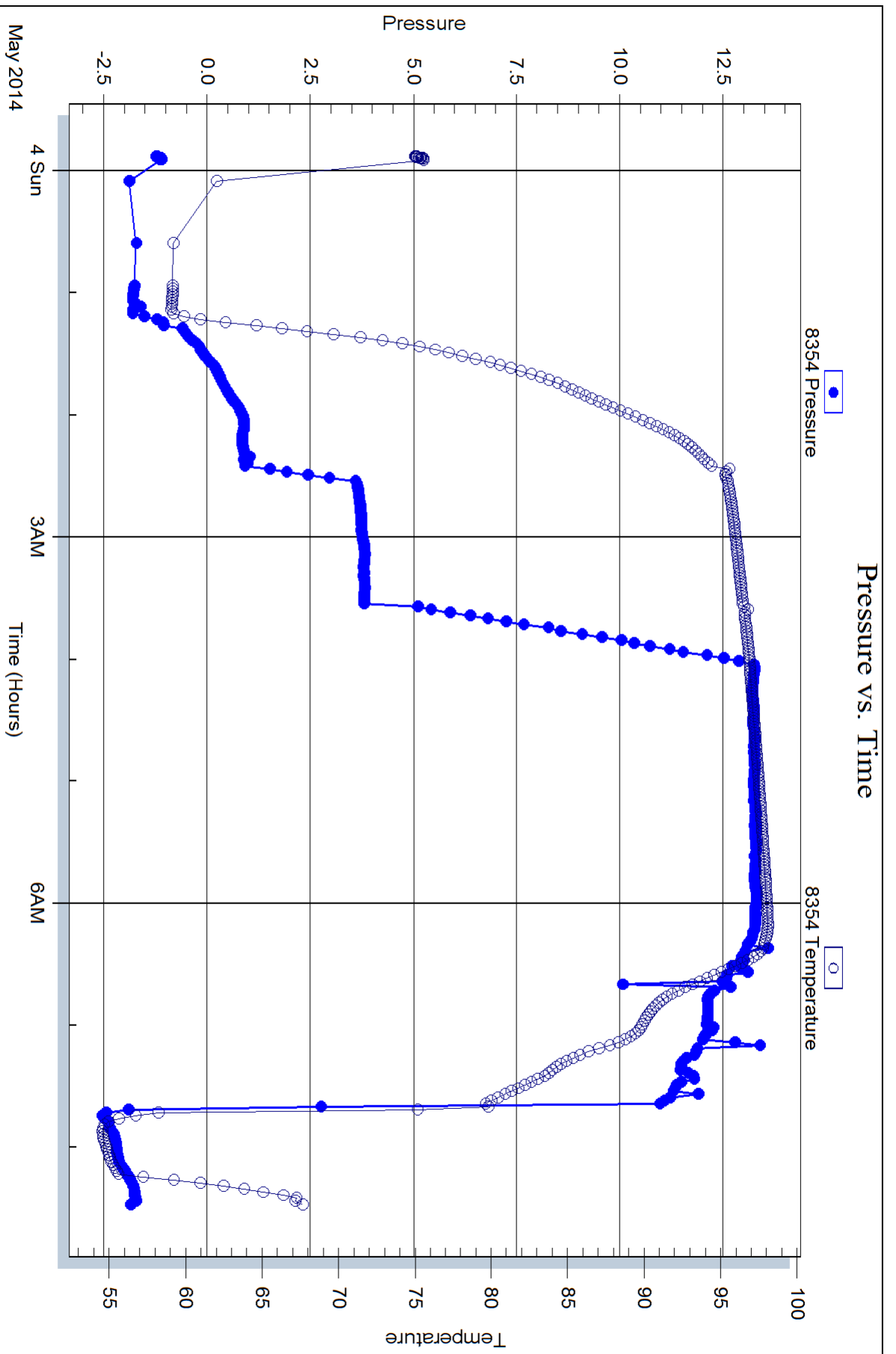
Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler: 1500ml @ 160 psi









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

Well Name: SGA Thomas Casey 1-32
Well Id:
Location: Sec. 32-19S-16W Rooks County, Kansas
License Number: 15-163-24208-0000
Spud Date: April 28, 2014
Surface Coordinates: 330 FNL/ 935 FEL
Region: Wildcat
Drilling Completed: May 4, 2014

Bottom Hole
Coordinates:
Ground Elevation (ft): 2030' K.B. Elevation (ft): 2038'
Logged Interval (ft): 2900' To: 3581' Total Depth (ft): 3581'
Formation: Lansing, Kansas City
Type of Drilling Fluid: Natural Chemical

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

OPERATOR

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

GEOLOGIST

Name: Jeff Kamps / Schuyler 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 3130'-3191' 10-60-30-120
IF- BOB IN 8 MIN/ ISI- WK SURF. BLW BACK/ FF- BOB IN 2 MIN/ FSI- BOB IN 90 MIN
IH- 1512, FH- 1474/ IF- 18 TO 45, FF- 43 TO 85/ ISI- 849, FSI- 849
REC. 164' OF TF/ 40' OF GO 30% GAS, 70% OIL/ 124' OF GOCM 20% GAS, 20% OIL, 60% MUD/ 645' OF GIP/
BHT- 96, GRAVITY- 36, CHLOR.- 3500 PPM SYSTEM

DST's Report

DST #2 3194'-3244' 10-60-30-120
IF- WK SURF BLW BUILT TO 1/4", ISI- DEAD NO BLW BACK, FF- DEAD NO BLW BACK, FSI- DEAD NO BLW
BACK
IH- 1561, FH- 1505/ IF- 13 TO 17, FF- 19 TO 18/ ISI- 422, FSI- 350
REC. 5' OF TF/ 5' OF MUD W/ OIL SPOTS 100% MUD/ BHT- 94, CHLOR.- 3500 PPM SYSTEM

DST's Report



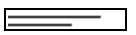
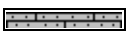
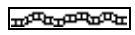



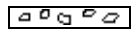







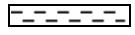
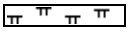







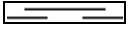
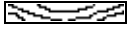

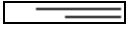

DST #3 3349'-3415' 10-60-30-120

IF - WK SURF BLOW BUILT TO 1.25", ISI- DEAD NO BLOW BACK, FF- WEAK BLOW BUILD TO 1", FSI - DEAD NO BLOW BACK























































































IH - 1655, FH - 1625 / IF-12 TO 20, FF 19 TO 28 / ISI- 965, FSI-907

REC. 30' OF TF, 30' OF MUD, 100% MUD/ BHT 96, CHLOR 6000 PPM SYSTEM


























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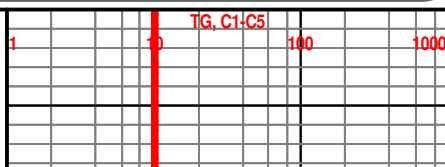
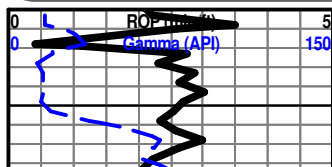
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	Bent		Igne		Sltst		Shale
	Brec		Lmst		Ss		Sltstn
	Cht		Meta		Till		Shlyslts
	Clyst		Mrlst		Carb sh		Sltysch
	Coal		Salt		Dol		Lms
	Congl		Shale		Dtd		
	Dol		Shcol		Gry sh		

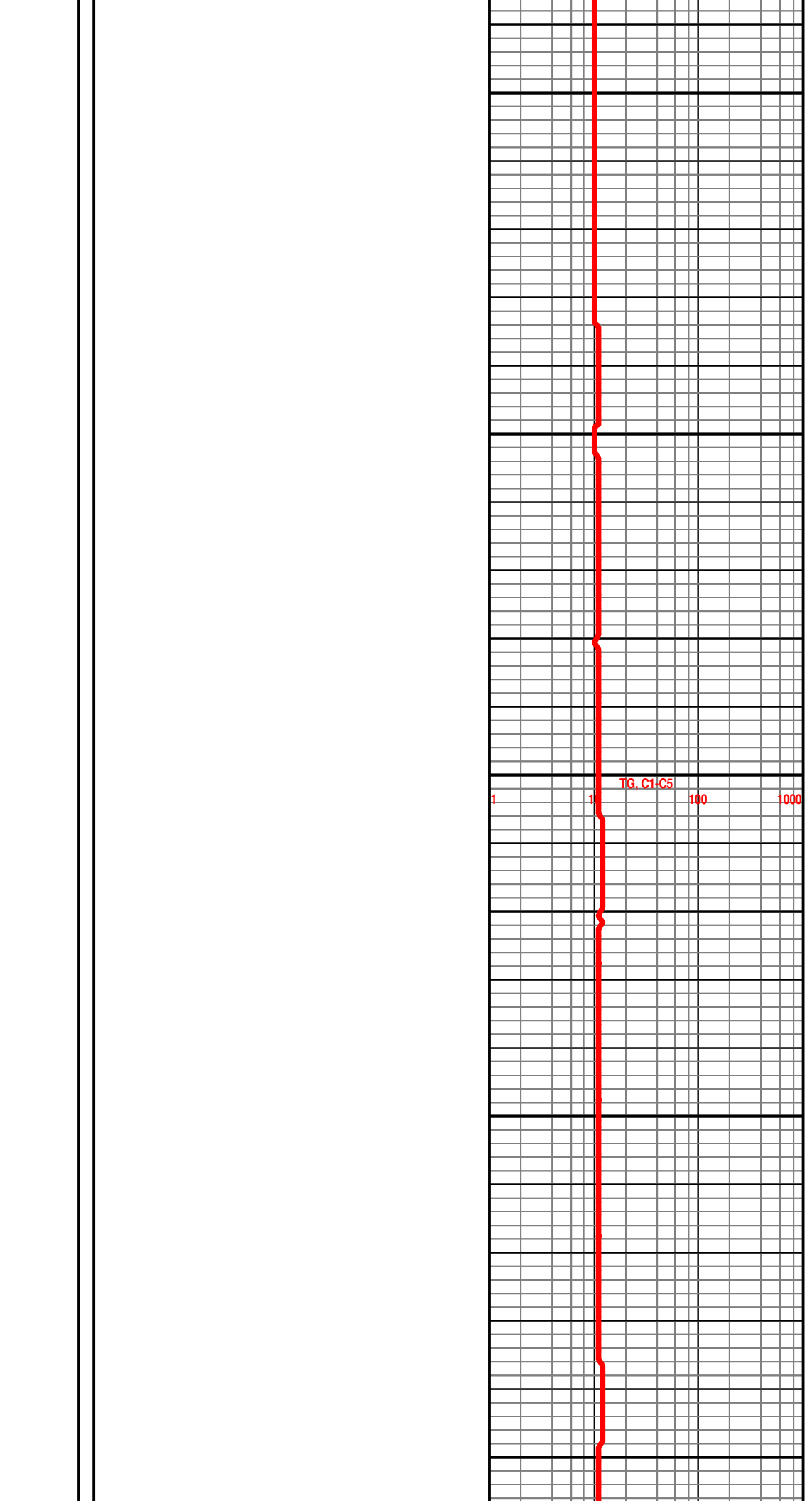
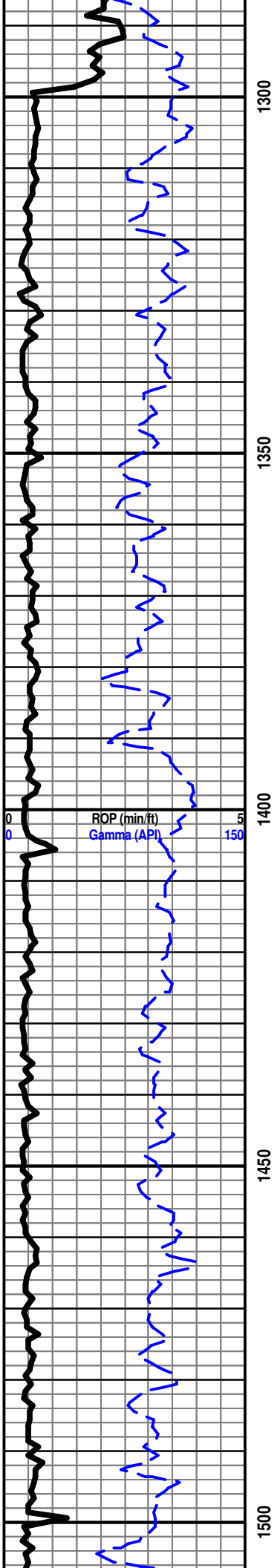
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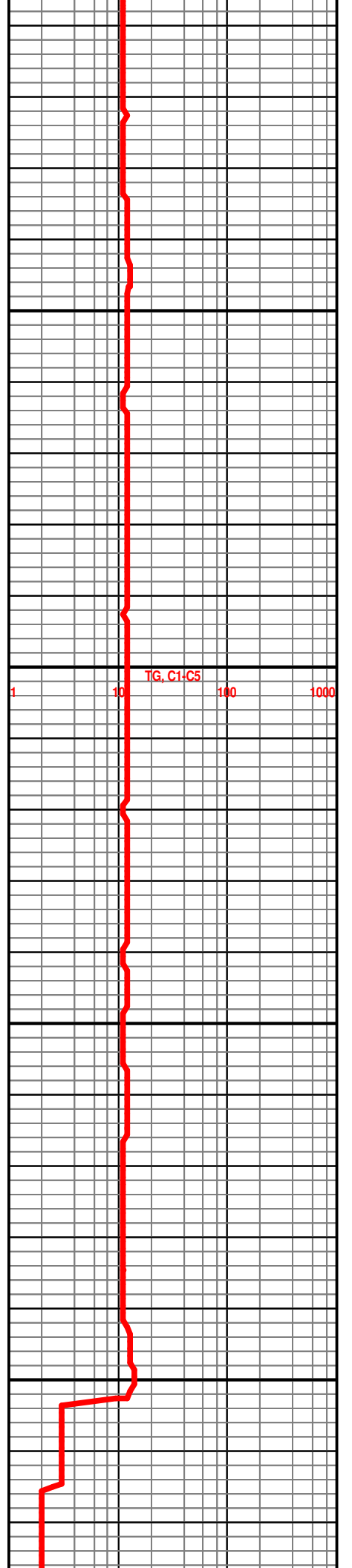
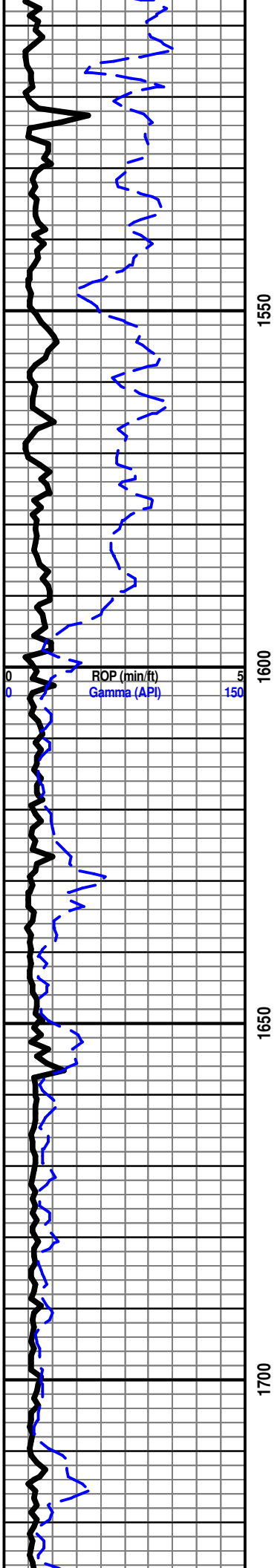
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	Anhy		Sandy		Gastro		Dol
	Arggrn		Silt		Oolite		Grysh
	Arg		Sil		Ostra		Gryslt
	Bent		Sulphur		Pelec		Lms
	Bit		Tuff		Pellet		Sandylms
	Brecfrag		Chlorite		Pisolite		Sh
	Calc		Dol		Plant		Sltstn
	Carb		Sand		Strom		
	Chtdk		Silty		Fuss	TEXTURE	
	Chtlt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

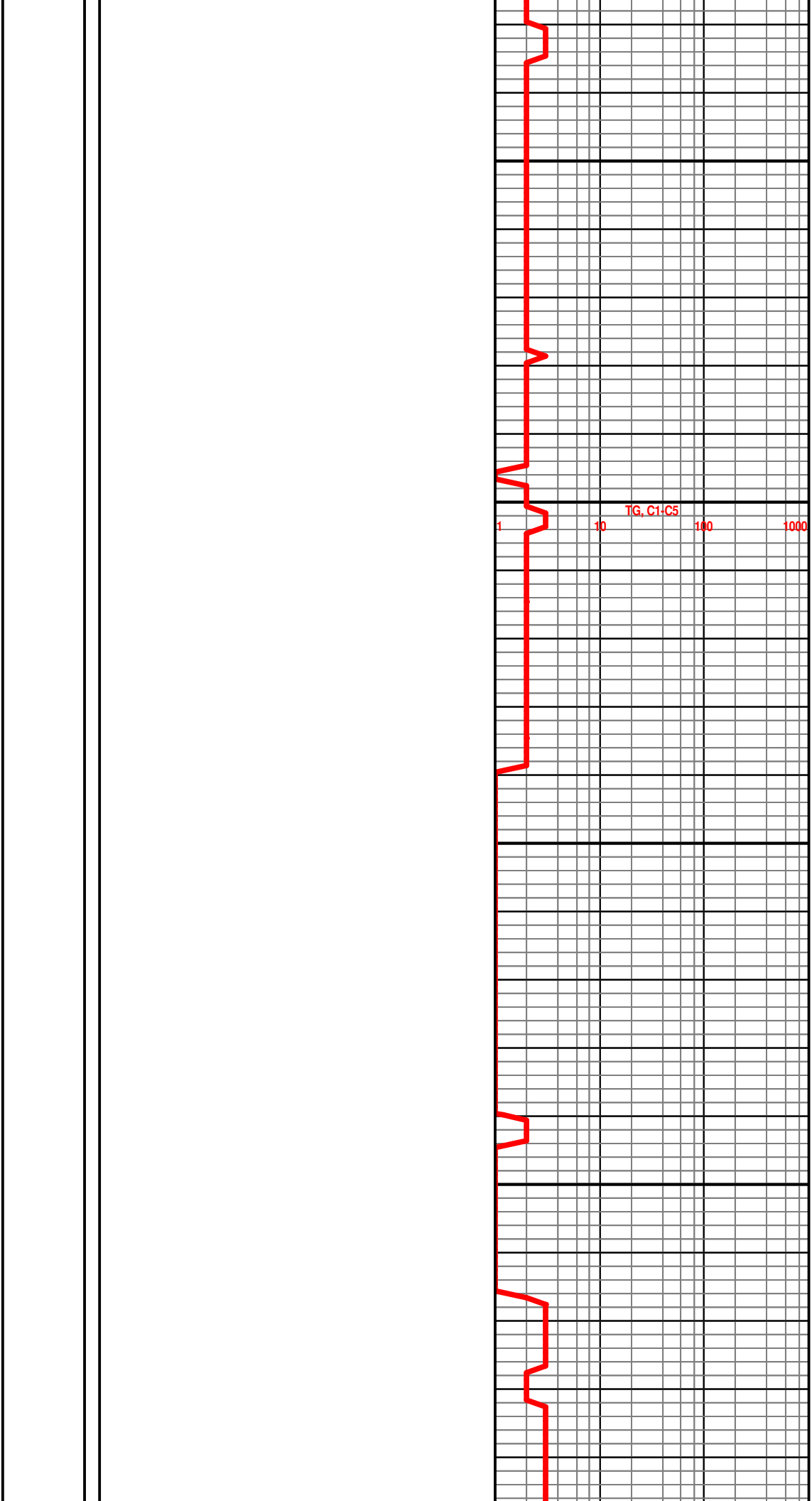
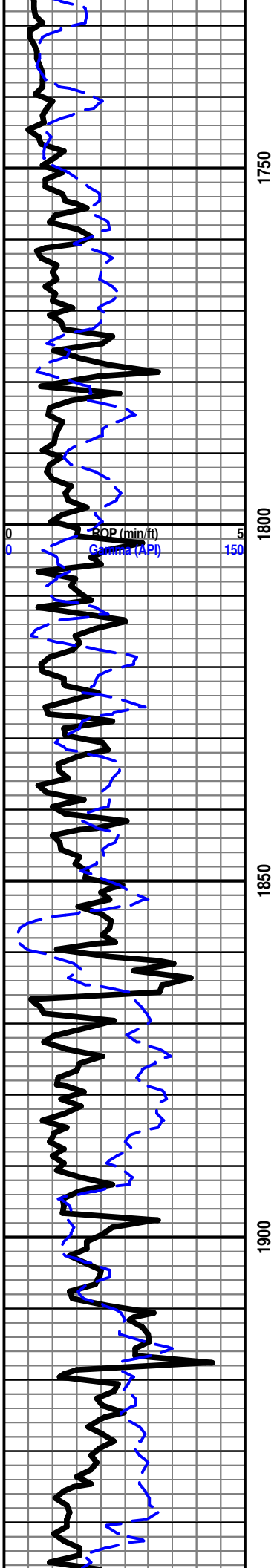
OTHER SYMBOLS

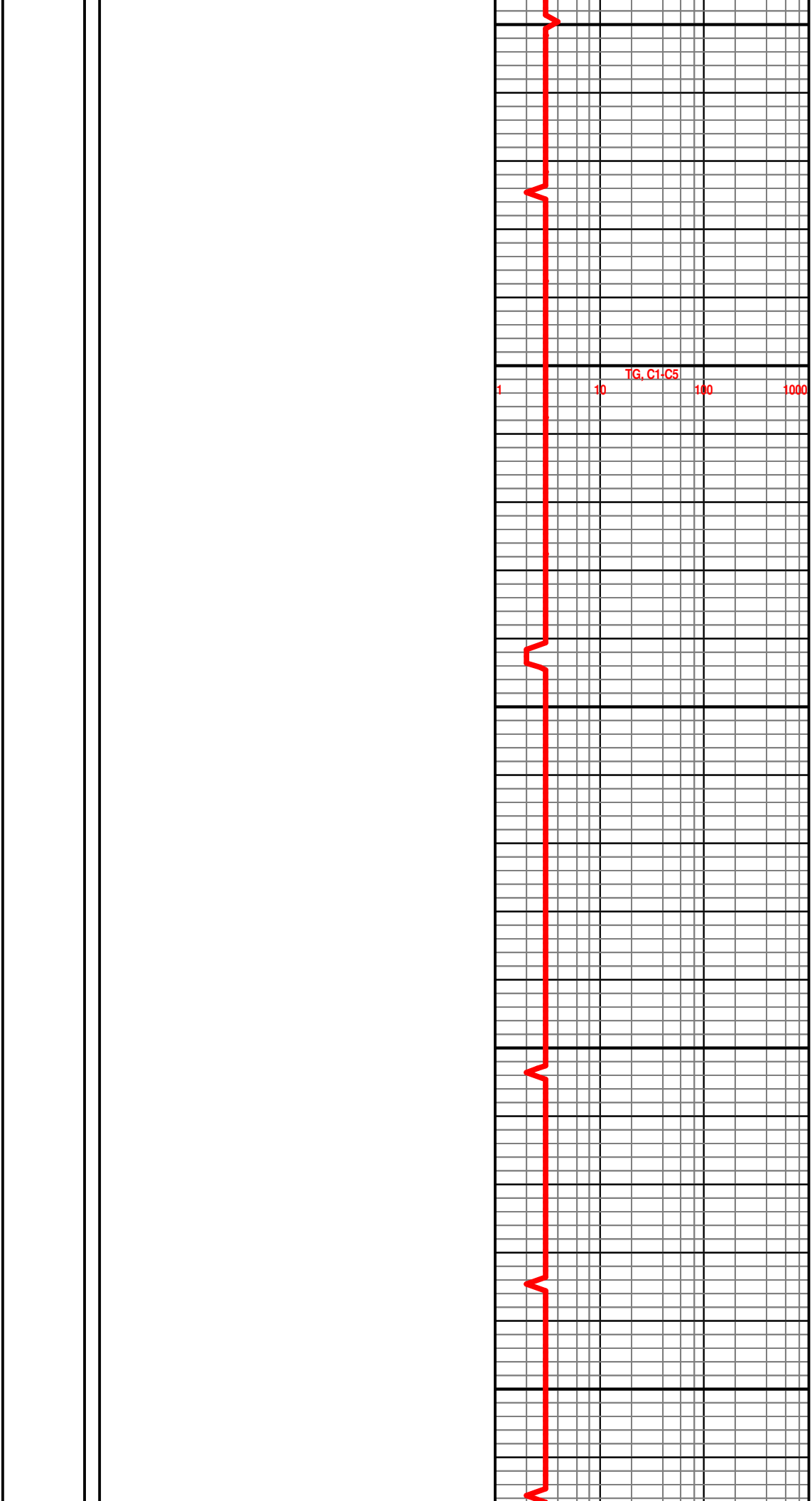
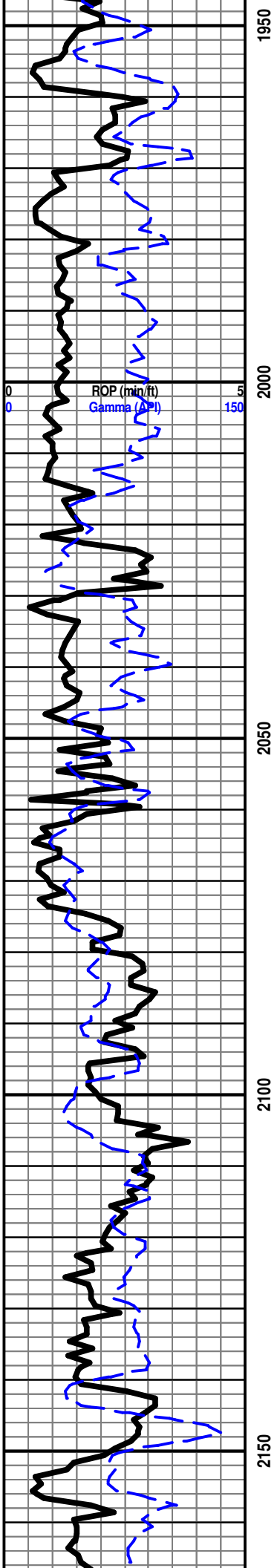
POROSITY TYPE	SORTING		Angular	INTERVALS	
					Core
		OIL SHOWS			Dst
			Even		Dst
			Spotted		
	ROUNDING		Ques	EVENTS	
			Dead		Rft
			Gas show		Sidewall
					

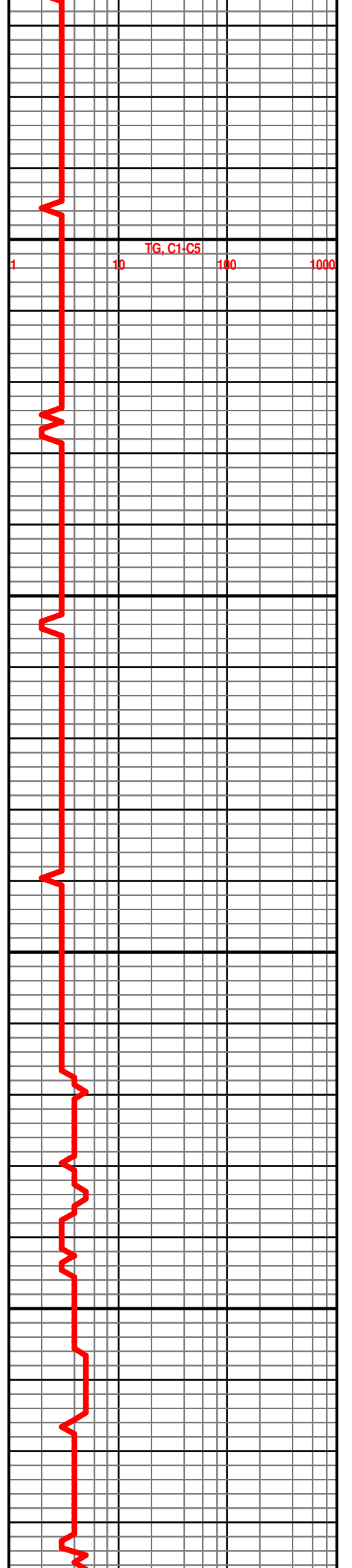
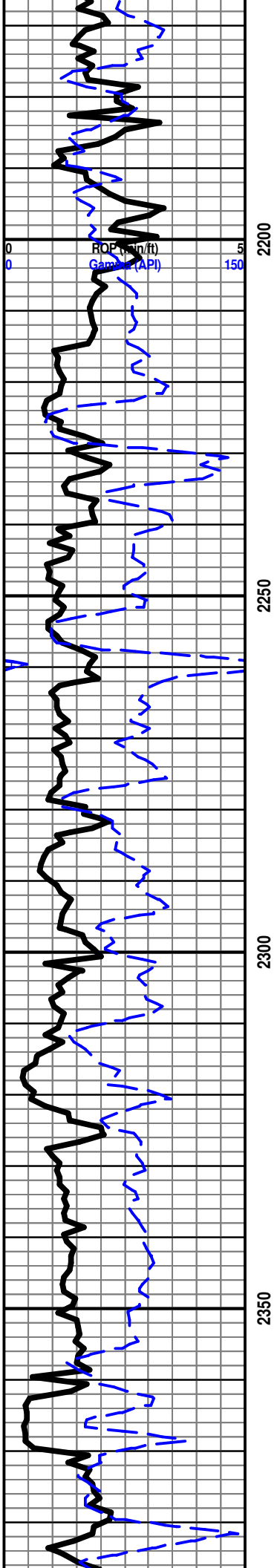


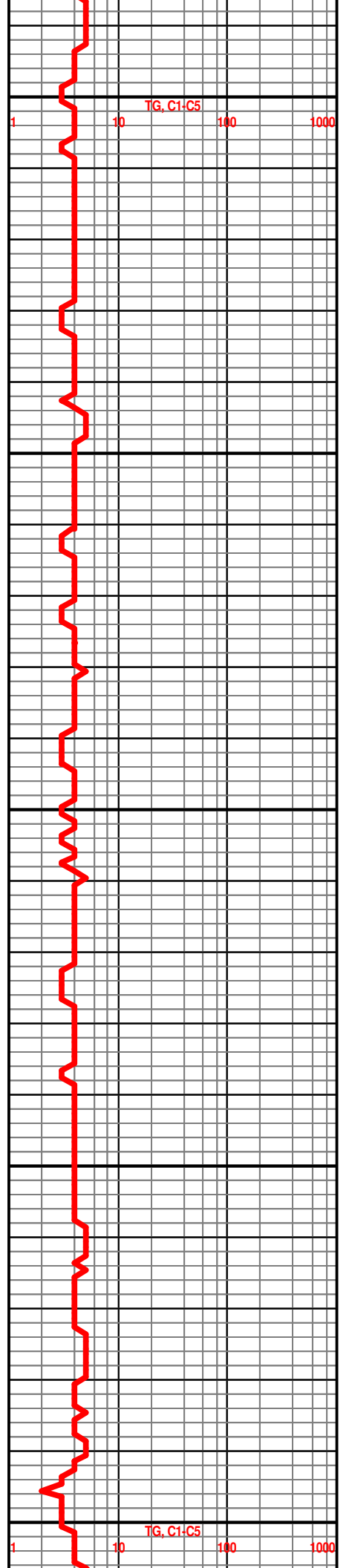
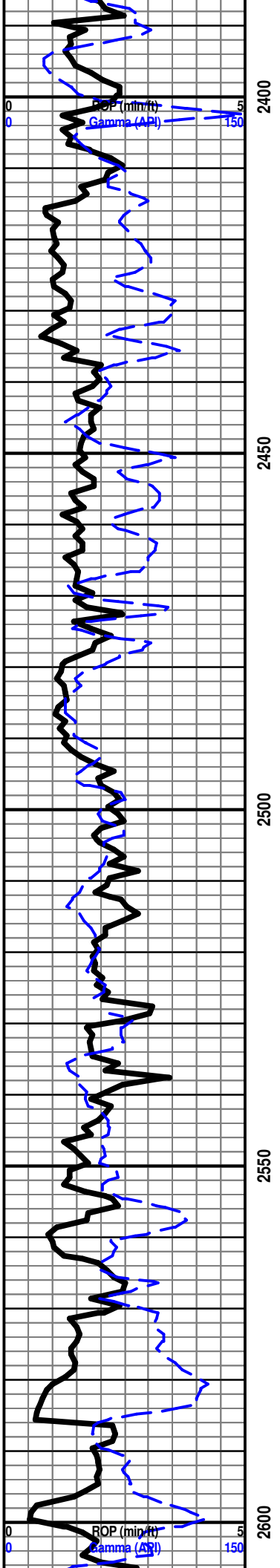


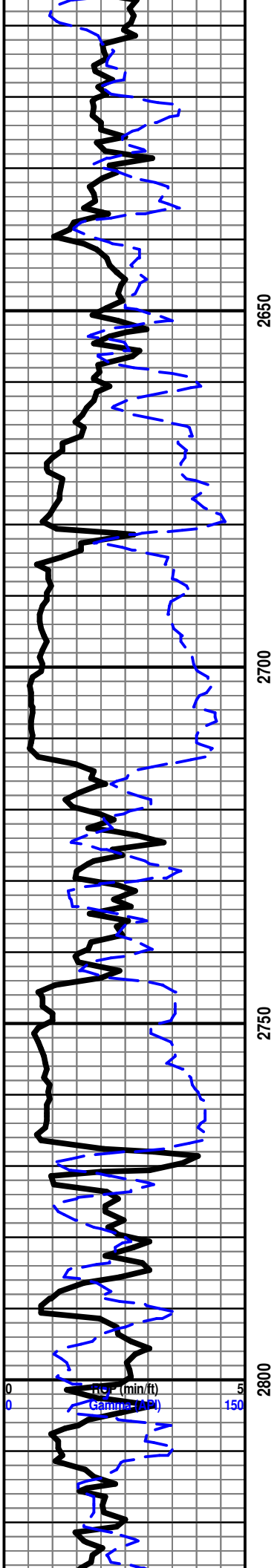












2650

2700

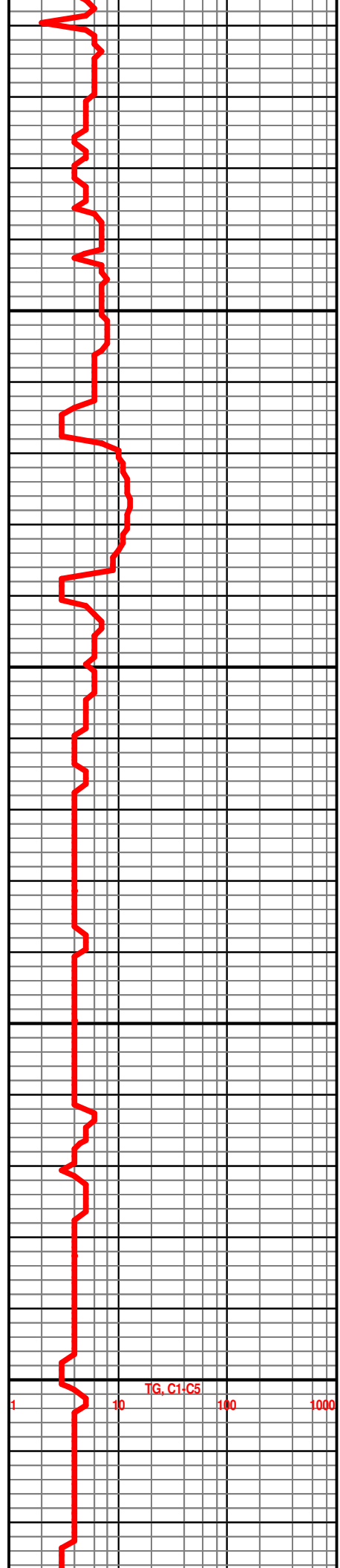
2750

2800

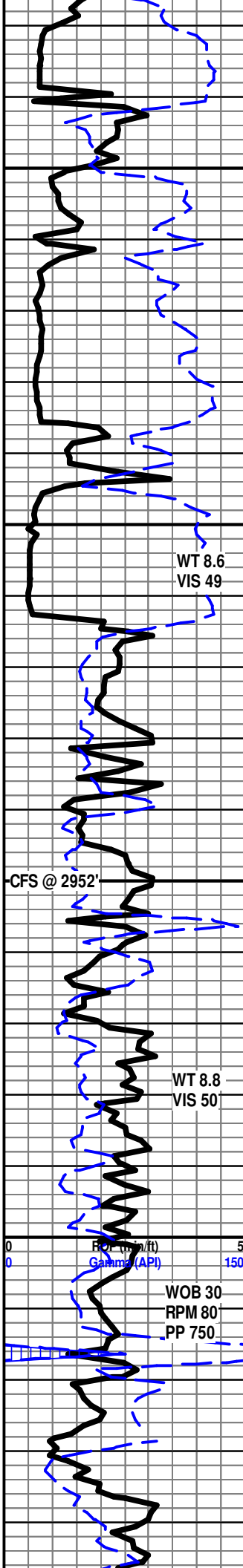
0 5 150
mgc (min/ft)
Gamma ray

BASE ROOT SHALE 2713' (-675')

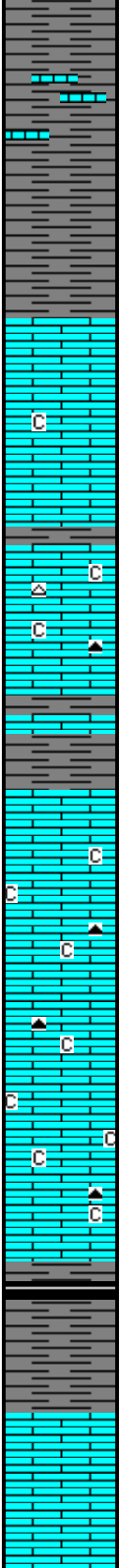
MUD DISPLACEMENT 2800'



1 10 100 1000
TG, C1-C5



2850
2900
2950
3000



START 24 HR MANNED UNIT 5/1/2014

SH - MD GY TO DRK GY, GMMY TO SFT, SMTH TO SLTY TXT

LS - LT GY TO GY, HD DNS, VF/F-XLN, S-CHLKY IP, TR IMBD SH, TR V DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW

TOPEKA 2939' (-901')

LS - CRM TO TN, HD DNS, F/VF-XLN, S-SUCRO, HVY TR SFT WHT CHLK IN TRAY, IMBD WHT CHRT IP, TR TRANS ORNG CHRT IN TRAY, DLL YEL MIN FLO THRU, NO VIS POR, NO VIS CUT OR SHOW

SGA TOPEKA 2965' (-927')

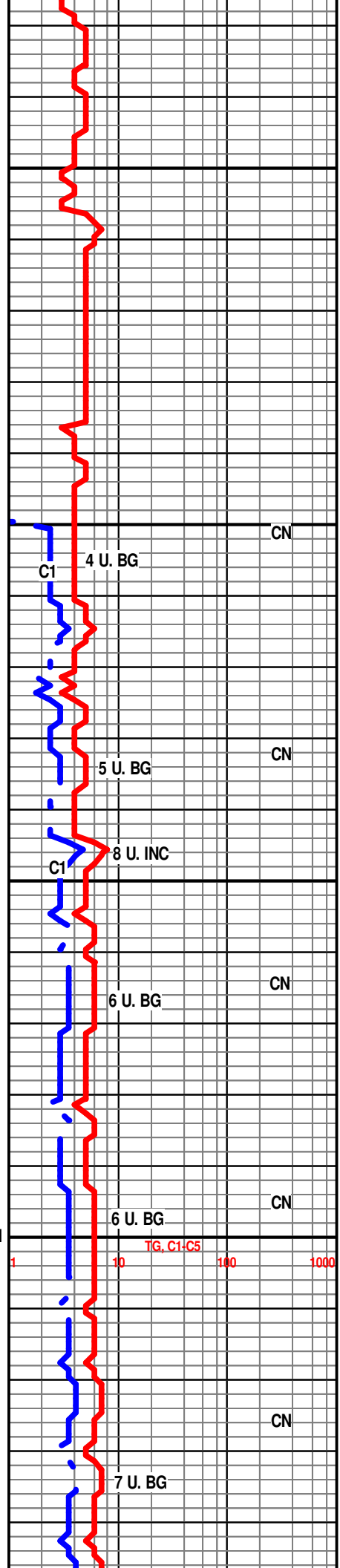
LS - LT TN TO CRM IP, HD DNS, F/VF-XLN, S-SUCRO, TR IMBD SH, HVY TR SFT WHT CHLK IN TRAY, SM TR DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW

LS - CRM TO LT TN, HD DNS, VF/F-XLN, S-SUCRO, IMBD FOSS FRAG IP, TR IMBD CALC-XLS, TR SFT WHT CHLK IN TRAY, SM TR TRANS ORNG CHRT IN TRAY, DLL YEL TO TR YEL FLO, NO VIS POR, NO VIS CUT OR SHOW

SH - BLK SFT CARB IP, GY TO DRK GY, SFT TO GMMY, BLKY SMTH TXT, LT TR SFT WHT CHLK, TR TN CHRT IN TRAY

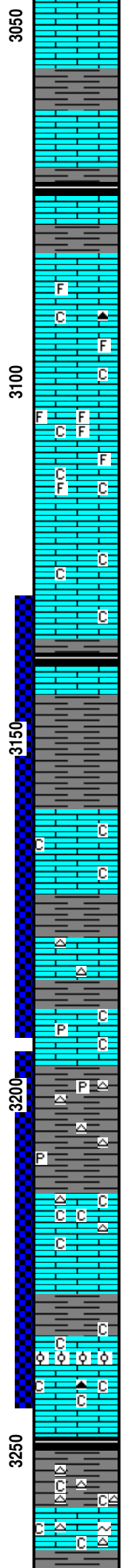
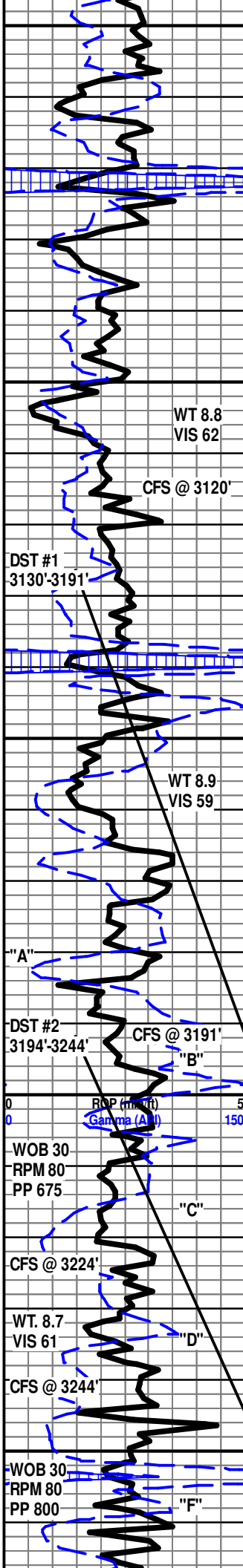
LECOMPTON 3030'(-992')

LS - OFF WHT TO CRM IP, HD DNS TO BRIT, F/VF-XLN, S-SUCRO, HVY TR SFT WHT CHLK IN TRAY, DLL YEL MIN FLO THRU, NO VIS POR, NO VIS CUT OR SHOW



CN
C1 4 U. BG
CN
5 U. BG
C1 8 U. INC
CN
6 U. BG
CN
6 U. BG
CN
7 U. BG

1 10 TG, C1-C5 100 1000



LS - WHT TO OFF WHT, HD DNS, VF-XLN, S-CHLKY IP, DLL YEL MIN FLO THRU, NO VIS POR, NO VIS CUT OR SHOW

CN

LS - CRM TO LT TN, HD DNS, F-XLN, S-SUCRO, DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW

11 U. SH GAS

CN

LS - CRM TO OFF WHT, HD DNS TO TR BRTT IP, MD/F/VF-XLN, S-CHLKY, LT TR SFT WHT CHLK IN TRAY, IMBD SCAT FOSS FRAG IP, LT TR TN CHRT IN TRAY, DLL YEL FLO IP, NO VIS POR, NO VIS CUT OR SHOW

WT 8.8
VIS 62

CFS @ 3120'

LS - TN TO DRK TN (DUE TO OIL STN IN 40-50%) HD DNS TO V BRTT, MD-XLN RE-XLN, S-SUCRO, ABTD IMBD FOSS FRAG THRU, HVY TR SFT WHT CHLK IN TRAY, DLL YEL GLD FLO THRU, PR TO FR INTER-FOSS POR IN 4%, TR VUG POR IP, GD INST FLSH CUT, GD SLOW STRM THRU, TN TO DRK TN LCH ON DISH, GD OIL ODOR

NC4,
C2 C3

31 U. SHOW

CN

LS - OFF WHT TO CRM, HD DNS, VF/F-XLN, S-SUCRO, ABTD SFT WHT CHLK THRU, TR IMBD CALC-XLS, DLL YEL FLO IP, NO VIS POR, NO VIS CUT OR SHOW

12 U. BG

HEEBNER 3138' (-1100')

3162'-3165' LS - TN TO BRWN (DUE TO OIL STN THRU), HD DNS TO BRTT, RE-XLN MTRX, V-SUCRO MTRX, IMBD SFT WHT CHLK IP, HVY TR SFT WHT CHLK IN TRAY, YEL TO BRT YEL FLO THRU, FR TO GD MICRO VUG POR IN 2%, PR INTER-FOSS POR IN 1%, EXCEL INST FLSH CUT, GD SLOW STRM THRU, DRK TN TO BRWN LCH ON DISH, GD OIL ODOR, ABTD FREE FLOATING OIL IN TRAY

WT 8.9
VIS 59

NC4,
C2 C3 C1

44 U. SHOW

CN

LANSING 3180' (-1142')

3170'-3173' LS - OFF WHT TO TN (W/ TN TO BRWN OIL STN IP), HD DNS, VF/F-XLN MTRX, S-SUCRO IP, TR IMBD SH IP, TR CLR CHRT IN TRAY, BRT YEL TO YEL GLD FLO THRU, PR VUG POR IN 2-3%, TR MICRO VUG POR IP, GD INST FLSH CUT, FR TO GD SLOW STRM IN 70%, LT TN LCH ON DISH, FR OIL ODOR

NC4,
C2 C3 C1

61 U. SHOW

CN

3193'-3195' LS - WHT TO CRM (W/ LT TN TO TN OIL STN IN 20%-30%), HD DNS, F-VF-XLN, S-SUCRO, LT TR SFT WHT CHLK, TR PYR IN TRAY, YEL TO YEL GLD FLO IN 50%, GD TO FR VUG POR IN 1%, PR INTER-XLN POR 1%, FR INST FLSH CUT, PR TO FR WK SLW STRM IN 30%, TR LT TN LCH ON DSH, FR OIL ODOR

DST #2
3194'-3244'

CFS @ 3191'

NC4,
C2 C3 C1 C5

151 U. INC.

CN

3216'-3219' LS - TN TO DK TN BRWN OFF WHT IP (DUE TO OIL STN IN 80%), HD DNS TO BRTT, MD-XLN, RE-XLN, V SUCRO, IMB SFT WHT CHLK IP, HVY TR SFT WHT CHLK IN TRAY, LT TR CLR CHRT, DLL YEL TO YEL GLD FLO IN 60%, PR TO FR MICRO VUG POR IN 4%, GD MICRO VUG POR IN 1%, FR INST FLSH CUT, PR TO FR SLW STRM IN 20%, LT TN LCH ON DSH, NO OIL ODOR

WOB 30
RPM 80
PP 675

"C"

CFS @ 3224'

LANSING "D" 3234' (-1196')

3236'-3239' LS - WHT TO CRM (W/ LT TN OIL STN IN 30%), HD DNS TO BRTT, MD-XLN RE-XLN MTRX, S-SUCRO, ABTD IMB OOL THRU, HVY TR SFT WHT CHLK IN TRAY, TR WHT & ORNG CHRT IN TRAY, YEL TO YEL GLD FLO IN 60%-70%, GD TO EXCEL INTER-OOL POR IN 5%, PR INTER-OOL POR IN 2%, EXCEL INST FLSH CUT, GD SLW STRM IN 40%, LT TN TO TN LCH ON DSH, NO OIL ODOR, FREE FLOATING OIL IN TRAY

WT. 8.7
VIS 61

CFS @ 3244'

NC4,
IC4

170 U. INC.

CN

LANSING "F" 3258' (-1220')

3261'-3163' LS - LT TN TO TN (W/ DK TN TO BRWN OIL STN IN 50% W/ TR LIVE OIL), HD DNS, VF/F-XLN, S-SUCRO, LT TR IMB WHT CHRT, SLI TR IMB GLAUC, HVY TR SFT WHT CHLK IN TRAY, LT TR WHT & TRANS ORNG CHRT, V DLL YEL FLO 60% TO TR BRT YEL GLD IN 5%, V PR TO PR VUG POR IN 1%, FR TO GD INST FLSH CUT, PR SLW STRM IN 20%, TR LT TN LCH ON DSH, FR OIL ODOR

WOB 30
RPM 80
PP 800

"F"

NC4,
IC4 C2 C3

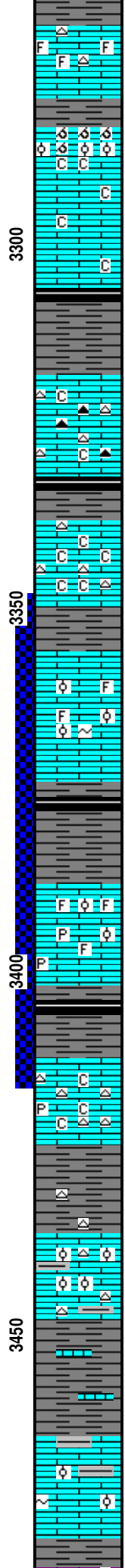
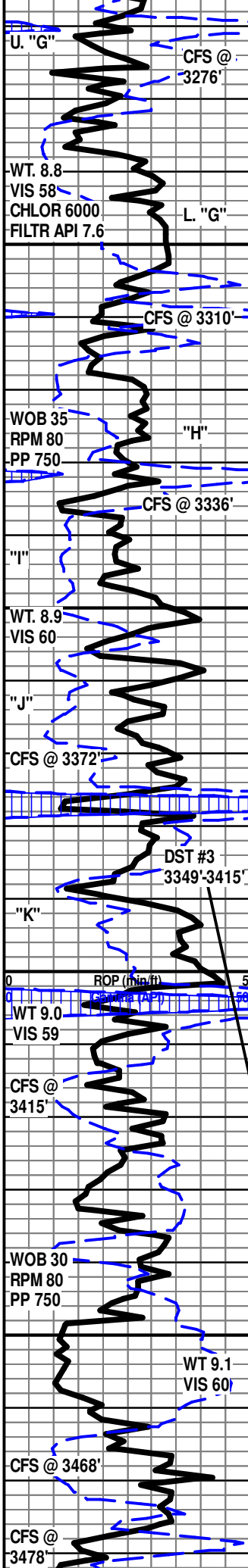
140 U. INC.

CN

175 U.

ERRATIC BG

1000



LS- OFF WHT TO WHT, HD DNS, VF-XLN, S-CHLKY, IMB FOSS FRGS IP, HVY TR FREE FOSSIL IN TRAY, TR WHT & TRANS ORNG CHRT, V DLL YEL FLO IN 30%, NO VIS POR, NO VIS CUT OR SHOW

3284'-3287' LS- OFF WHT TO CRM (W/ LT TN OIL STN IN 20%), HD DNS, MD-XLN, RE-XLN, HVY TR IMB OOL, V-OOLMOLD, TR IMB SFT WHT CHLK, TR FREE FOSSIL IN TRAY, DLL YEL IN 50%, TR BRT YEL GLD FLO IN 10%, PR TO FR OOLMOLD POR IN 2-3%, GD INTER-OOL POR IN 2%, GD INST FLSH CUT, PR TO FR SLW STRM IN 20%, NO LCH ON DSH, NO OIL ODOR

LS- WHT TO OFF WHT, HD DNS, VF-F-XLN, S-SUCRO IP, LT TR SFT WHT CHLK IN TRAY, V DLL YEL MIN FLO IN 20%, NO VIS POR, NO VIS CUT OR SHOW

LANSING "H" 3318' (-1280')

LS - WHT TO OFF WHT, HD DNS, VF/F-XLN, S-SUCRO, HVY TR WHT & TRAN ORNG CHRT IN TRAY, TR SFT WHT CHLK IN TRAY, V DLL YEL MIN FLO IP, NO VIS POR, NO VIS CUT OR SHOW

LS- WHT TO OFF WHT CRM IP, HD DNS TO SLI TR BRTT IP, VF-XLN, V S-CHLKY, ABDT SFT WHT CHLK THRU TRAY, HVY WHT CHRT, DLL YEL MIN FLO IN 30%, NO VIS POR, NO VIS CUT OR SHOW

3365'-3369' LS- WHT TO OFF WHT (W/ TN TO DK TN OIL STN 30%), HD DNS TO BRTT, MD-XLN, RE-XLN, S-SUCRO, SCAT IMB SM OOL, TR IMB FOSS FRGS, SLI TR IMB GLAUC, TR PYR IN TRAY, DLL YEL FLO IN 60%, BRT YEL GLD FLO IN 5%, PR TO FR INTER-OOL POR IN 2-3%, TR MICRO VUG POR IN 1%, FR TO GD INST FLSH CUT, GD SLW STRM IN 30%, TN TO DK TN LCH ON DSH, GD STRNG OIL ODOR

3388'-3390' LS- OFF WHT TO CRM(W/ DK TN TO BRWN OIL STN IN 90%) HD DNS TO BRTT, MD-XLN, RE-XLN, V SUCRO MTRX, SCAT IMBD OOL, SCAT IMBD FOSS FRAG, IMB SM TO MD ANG CLR QRTZ GRNS, SLI TR IMBD GLAUC, HVY TR PYR IN TRAY, TR FREE FOSS IN TRAY, DLL YEL FLO THRU, TR BRT YEL GLD FLO IN 10%, PR TO FR MICRO VUG POR IN 3%, FR TO TR GD INTER-XLN POR IN 1%, EXCEL INST FLSH CUT, GD TO EXCEL SLW STRM THRU, DK TN TO BRWN LCH ON DSH, FR OIL ODOR, FREE FLOATING OIL IN SAMPLE CUP

LS- OFF WHT TO CRM, HD DNS TO BRTT IP, VF/F-XLN, S-CHLKY, HVY TR WHT & TRANS WHT CHRT IN TRAY, TR PYR, V DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW

BKC 3425' (1387')

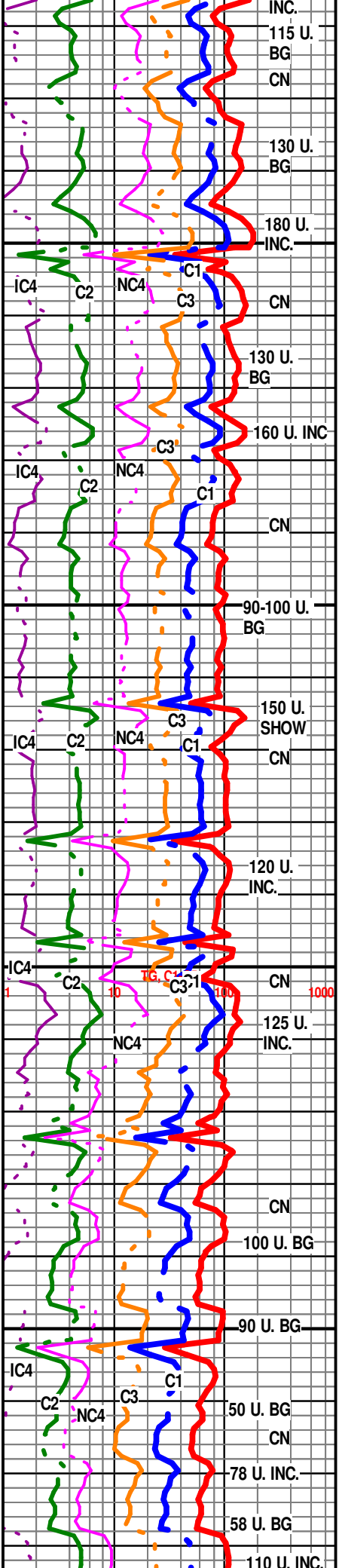
LS- WHT TO OFF WHT, HD DNS TO BRTT, F/VF-XLN, RE-XLN IP, S-CHLKY, IMB SM OOL THRU, TR IMB CLR QRTZ GRNS, ABDT WHT & TRANS WHT CHRT IN TRAY, INTERBD GY & RD SH, V DLL YEL MIN FLO IP, NO VIS POR, NO VIS CUT OR SHOW

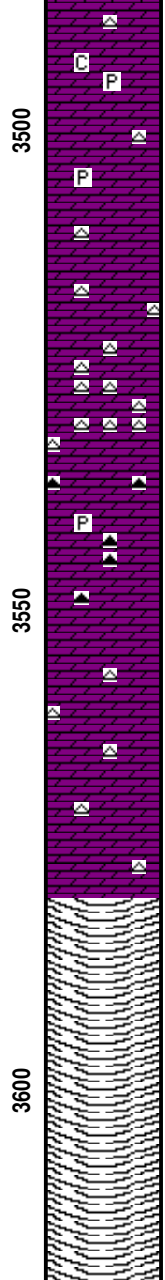
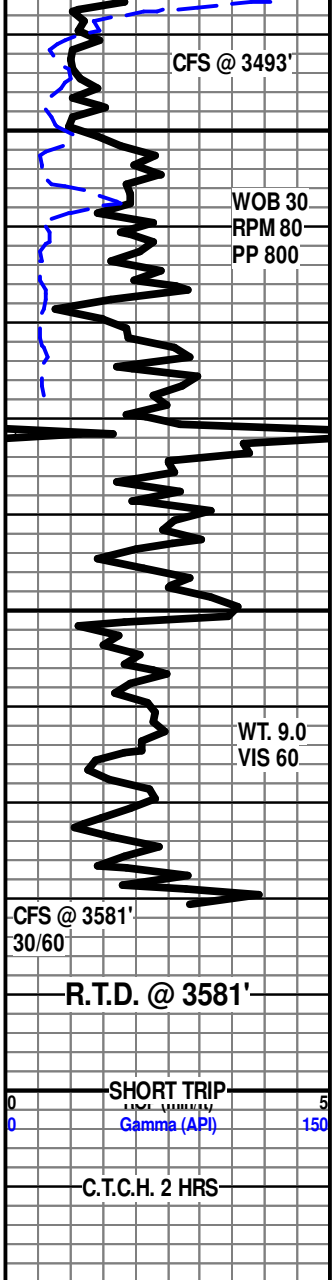
SH- GY TO RD GRN IP, SFT TO GMMY FRM IP, BLCKY TO SMTH TXT, SLTY TXT IP, HVY TR LS INTERBDS

LS- OFF WHT TO CRM, HD DNS TO BRTT, VF/F-XLN, S-SUCRO, TR IMB SM OOL. SLI TR IMB GLAUC, INTERBD RD SH THRU, V DLL YEL MIN FLO IP, NO VIS POR, NO VIS CUT OR SHOW

ARBUCKLE 3481' (-1443')

3482'-3484' DOLO- TN TO DK TN CRM IP (DUE TO OIL STN IN 60%), HD





DNS, MD-XLN RE-XLN, V CRS SUCRO MTRX, ABDT IMB SM RND TO ANG DOLO GRNS THRU, LT TR CLR TRANS CHRT, TR SFT WHT CHLK IN TRAY, DLL YEL FLO THRU, TR BRT YEL GLD FLO IN 10%, FR TO PR VUG POR IN 2%, FR TO GD INTER-GRN POR IN 3%, GD INST FLSH CUT, GD EXCEL SLOW STRM THRU, TN TO DK LCH ON DSH, WK OIL ODOR

3491'-3494' DOLO- LT TN TO TN (DUE TO OIL STN IN 10%), HD DNS, V RE-XLN, V CRS SUCRO MTRX, ABDT V SM TO SM RND DOLO GRNS THRU, SLI TR IMB PYR, TR WHT CHRT IN TRAY, DLL YEL FLO IN 60%, V PR INTER-GRN POR IN 1%, FR INST FLSH CUT, PR SLW STRM IN 5%, NO LCH ON DSH, NO OIL ODOR

DOLO- LT TN TO TN, HD DNS, MD-XLN, RE-XLN, CRS SUCRO MTRX, ABDT IMB SM RND DOLO GRNS THRU, TR IMB SFT WHT CHLK, HVY TR WHT & CLR CHRT IN TRAY, DLL YEL FLO THRU, NO VIS POR, NO VIS CUT OR SHOW

DOLO- LT TN TO TN ORNG, VF/F-XLN, V SUCRO, SCAT IMB V SM RND DOLO GRNS IP, HVY TR IMB ORNG CHRT IP, TR PYR IN TRAY, YEL MIN FLO THRU, NO VIS POR, NO VIS CUT OR SHOW

DOLO- TN TO LT TN, HD DNS, F/MD-XLN, CRS SUCRO MTRX, IMB SM ANG CLR QRTZ GRNS, IMB SM RND DOLO GRNS IP, HVY TR WHT & CLR CHRT IN TRAY, V DLL YEL MIN FLO IN 50%, V PR INTER-GRN POR IN 1%, NO VIS CUT OR SHOW

R.T.D. @ 11:10PM 5/4/2014

DROP SURVEY

T.O.F.L. @ 1:30 AM 5/5/2014

WEATHERFORD/ LIBERAL, KS

