

Confidentiality Requested:

☐ Yes ☐ No

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

1161869

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: \_\_\_\_\_



1161869

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 (Attach Additional Sheets)	<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 (Amount and Kind of Material Used)	Depth

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> 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 (If vented, Submit ACO-18.)	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled (Submit ACO-5) <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
--	---	--

Form	ACO1 - Well Completion
Operator	Samuel Gary Jr. & Associates, Inc.
Well Name	HAGER TRUST 2-35
Doc ID	1161869

All Electric Logs Run

DEN-NEUT
INDUCTION
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  
Thomas E. Wright, Commissioner  
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

October 08, 2013

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

Re: ACO1  
API 15-137-20655-00-00  
HAGER TRUST 2-35  
NW/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: 6/18/2013  
Invoice # 6925

P.O.#:  
Due Date: 7/18/2013  
Division: Russell

# Invoice

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

**RECEIVED**

**JUN 25 2013**

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

**Reference:**  
HAGER TRUST 2-35

**Description of Work:**  
LONG SURFACE JOB

<input 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				\$ 977.42	No				
Common-Class A	275			\$ 3,691.35	Yes				
8 5/8" Basket	2			\$ 676.51	Yes				
Bulk Truck Matl-Material Service Charge	291			\$ 622.99	No				
Calcium Chloride	10			\$ 510.16	Yes				
Pump Truck Mileage-Job to Nearest Camp	51			\$ 544.82	No				
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				
Premium Gel (Bentonite)	6			\$ 104.56	Yes				
Baffle Plate Aluminum, 8 5/8"	1			\$ 96.34	Yes				

**Invoice Terms:**

Net 30

SubTotal: \$ 7,793.45

Discount Available ONLY if Invoice is Paid & Received  
within listed terms of invoice: \$ (1,169.02)

SubTotal for Taxable Items: \$ 4,529.99

SubTotal for Non-Taxable Items: \$ 2,094.44

Total: \$ 6,624.43

Tax: \$ 319.36

7.05% Norton County Sales Tax

**Thank You For Your Business!**

**Amount Due: \$ 6,943.79**

**Applied Payments:**

**Balance Due: \$ 6,943.79**

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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**Federal Tax I.D.# 20-2886107**

No. 6925

Date	Sec.	Twp.	Range	County	State	On Location	Finish
6-18-13	35	4	23	Norton	KS		6:30pm
				Location Norton & Hwy 9 & 283.3N Finto			
Lease Nager Trust		Well No. 2-35		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 Surface				Charge To Sam Gary Jr & Associates			
Hole Size 12 1/4		T.D. 563		Street			
Csg. 8 5/8		Depth 562		City			
Tbg. Size		Depth		State			
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.			
Cement Left in Csg. 41.86		Shoe Joint 41.86		Cement Amount Ordered 225 com 30' 0" 2 1/2 4EL			
Meas Line		Displace 33 BCL					
EQUIPMENT				Common 275			
Pumptrk 1		No. Cementer		Poz. Mix			
Bulktrk		No. Driver		Gel. 6			
Bulktrk 1		No. Driver		Calcium 10			
JOB SERVICES & REMARKS				Hulls			
Remarks:				Salt			
Rat Hole				Flowseal			
Mouse Hole				Kol-Seal			
Centralizers				Mud CLR 48			
Baskets				CFL-117 or CD110 CAF 38			
D/V or Port Collar				Sand			
8 5/8 on bottom. Est Circulation.				Handling 291			
M. x 225 SK + Displace Pkg.				Mileage			
Baffle Plate set @ 520'				FLOAT EQUIPMENT			
Cement Circulated!				Guide Shoe 8 5/8			
				Centralizer 2			
				Baskets 2			
				AFU Inserts Rubber Plug			
				Float Shoe Baffle Plate			
				Latch Down			
				Pumptrk Charge Long Surface			
				Mileage 51			
				Tax			
				Discount			
				Total Charge			
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: 6/25/2013  
Invoice # 7955

P.O.#:

Due Date: 7/25/2013

Division: Russell

# Invoice

**Contact:**

Samuel Gary Jr &amp; Associates Inc

**Address/Job Location:**

Samuel Gary Jr &amp; Associates Inc

1815 11th Street

Great Bend, KS 67530

**Reference:**

HAGER TRUST 2-35

**Description of Work:**

PROS LONG STRING

**RECEIVED****JUL 03 2013****SAMUEL GARY JR.  
& ASSOCIATES, INC.**☐ DRLG ☐ COMP ☐ W/O ☐ LOE ☐ GG

Account	8300.238
Well/Prospect	
Deck	
AFE	
Approval	<i>[Signature]</i>
Description	

**Services / Items Included:**

	Quantity	Price	Taxable
Labor		\$ 1,530.82	No
mon, MetsoBeads, Plater, Gel, FloSeal, Calcium)	300	\$ 6,410.82	Yes
5 1/2" Triplex Shoe	1	\$ 1,296.47	Yes
5 1/2" Basket	4	\$ 1,028.24	Yes
Bulk Truck Matl-Material Service Charge	300	\$ 670.59	No
Pump Truck Mileage-Job to Nearest Camp	51	\$ 568.86	No
5 1/2" Turbolizer	7	\$ 453.76	Yes
Mud Clear	500	\$ 413.53	Yes
Bulk Truck Mileage-Job to Nearest Bulk Plant	51	\$ 332.88	No
Latch Down Plug & Baffle, 5 1/2"	1	\$ 250.35	Yes
Flo Seal	75	\$ 167.65	Yes

Item	Quantity	Price	Taxable
5 1/2" Limit Clamps	1	\$33.53	Yes

**Invoice Terms:**

Net 30

SubTotal: \$ 13,157.50

Discount Available ONLY if Invoice is Paid & Received  
within listed terms of invoice: \$ (1,973.63)

SubTotal for Taxable Items:	\$ 8,546.20
SubTotal for Non-Taxable Items:	\$ 2,637.68
Total:	\$ 11,183.87
Tax:	\$ 602.51

7.05% Norton County Sales Tax

**Thank You For Your Business!****Amount Due: \$ 11,786.38**  
**Applied Payments:**  
**Balance Due: \$ 11,786.38**

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. 7955

Date	6-25-13	Sec.	35	Twp.	4	Range	23	County	Norton	State	KS	On Location		Finish	3:45pm.
Location								Hwy 9 + Norton 3N 1/4 E Sinto							
Lease		Hager Trst		Well No.		235		Owner							
Contractor		Discovery #2		To Quality Oilwell Cementing, Inc.											
Type Job		Production String		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.		3850		Charge To							
Csg.		5 1/2 15.50#		Depth		1908		Sam Camp Jr & Assoc.							
Tbg. Size				Depth				Street							
Tool				Depth				City							
Cement Left in Csg.		33.11		Shoe Joint		33.11		State							
Meas Line				Displace		44 1/2 BBL		The above was done to satisfaction and supervision of owner agent or contractor.							
								Cement Amount Ordered							
								300 QmDC 1/4" F10							
								500 gal mud clear							
EQUIPMENT								Common							
Pumptrk		17		No.		Cement		300 MDC							
						Helper		Poz. Mix							
Bulktrk				No.		Driver		Gel.							
						Driver		Calcium							
Bulktrk		12		No.		Driver		Hulls							
						Driver		Salt							
JOB SERVICES & REMARKS								Flowseal							
Remarks:								75#							
Rat Hole								Kol-Seal							
30SK								Mud CLR 48							
Mouse Hole								500 gal							
15SK								CFL-117 or CD110 CAF 38							
Centralizers								Sand							
Baskets								Handling							
D/V or Port Collar								Mileage							
Set Plug @ 3724 with 50SK								FLOAT EQUIPMENT							
Triplex sero 1908. Est. Circulation								Guide Shoe							
Set Shoe. Pump 500gal mud flush +								5 1/2							
10 BCL space Cement Katholox Marshole								Centralizer							
Cement 5 1/2 with 20.5SK - Displace								7 Turbolizers							
Plug. Plug landed @ 1700 ft. 16.2								Baskets							
Release Program Dry.								4 Baskets Weather Bar							
Cement Circulated								AFU Inserts							
								1 stop Ring							
								Float Shoe							
								Triplex Shoe							
								Latch Down							
								1							
								Pumptrk Charge							
								prod Long String							
								Mileage							
								51							
								Tax							
								Discount							
								Total Charge							
Signature															





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates, Inc.

**35/4s/23w Norton KS**

1515 Wynkoop St. STE 700  
Denver, CO 80202

**Hager Trust #2-35**

Job Ticket: 52752

**DST#: 1**

ATTN: Clayton Camozzi

Test Start: 2013.06.22 @ 21:04:00

### GENERAL INFORMATION:

Formation: **Toronto - Upper LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:13:00

Time Test Ended: 04:41:45

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 57

Interval: **3397.00 ft (KB) To 3445.00 ft (KB) (TVD)**

Total Depth: 3445.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2297.00 ft (KB)

2289.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 8671 Inside**

Press @ Run Depth: 95.94 psig @ 3398.00 ft (KB)

Start Date: 2013.06.22

End Date:

2013.06.23

Start Time: 21:04:05

End Time:

04:41:44

Capacity: 8000.00 psig

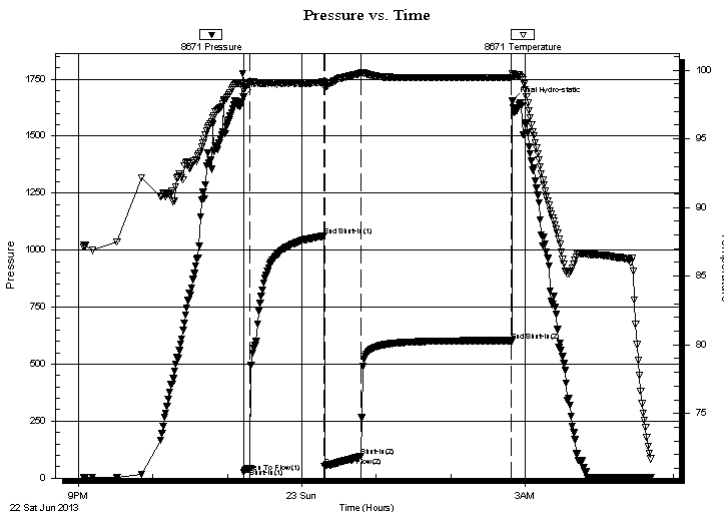
Last Calib.: 2013.06.23

Time On Btm: 2013.06.22 @ 23:12:45

Time Off Btm: 2013.06.23 @ 02:50:00

TEST COMMENT: 5 - IF: Blow built to 3 1/4"  
60 - IS: No blow back  
30 - FF: Blow built to BOB (11") in 29 min.  
120 - FSI: No blow back

### PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1671.06	99.08	Initial Hydro-static
1	24.04	98.07	Open To Flow (1)
6	42.83	99.00	Shut-In (1)
65	1062.18	99.12	End Shut-In (1)
66	51.11	98.72	Open To Flow (2)
95	95.94	99.75	Shut-In (2)
217	603.04	99.46	End Shut-In (2)
218	1653.31	99.73	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
67.00	Watery Mud 51%w, 49%w	0.67
63.00	MCW 70%w, 30%m	0.88
30.00	WCM 64%w, 36%w	0.42
0.00	Sampler: 140 PSI 700 mL W 400 mL M	0.00

### Gas Rates

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



ATTN: Clayton Camozzi

## KB to GR/CF: 8.00 ft

TEST COMMENT: 5 - IF: Blow built to 3 1/4"  
60 - IS: No blow back  
30 - FF: Blow built to BOB (11") in 29 min.  
120 - FS: No blow back

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



**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

### FLUID SUMMARY

Samuel Gary Jr. & Associates, Inc.

**35/4s/23w Norton KS**

1515 Wynkoop St. STE 700  
Denver, CO 80202

**Hager Trust #2-35**

Job Ticket: 52752

**DST#: 1**

ATTN: Clayton Camozzi

Test Start: 2013.06.22 @ 21:04:00

### Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 49.00 sec/qt

Water Loss: 7.97 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 300.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity: 22500 ppm

deg API

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
67.00	Watery Mud 51%m, 49%w	0.667
63.00	MCW 70%w, 30%m	0.884
30.00	WCM 64%m, 36%w	0.421
0.00	Sampler: 140 PSI 700 mL W 400 mL M	0.000

Total Length: 160.00 ft

Total Volume: 1.972 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .313 ohms @ 71.8 deg F Chlorides = 22,500 ppm

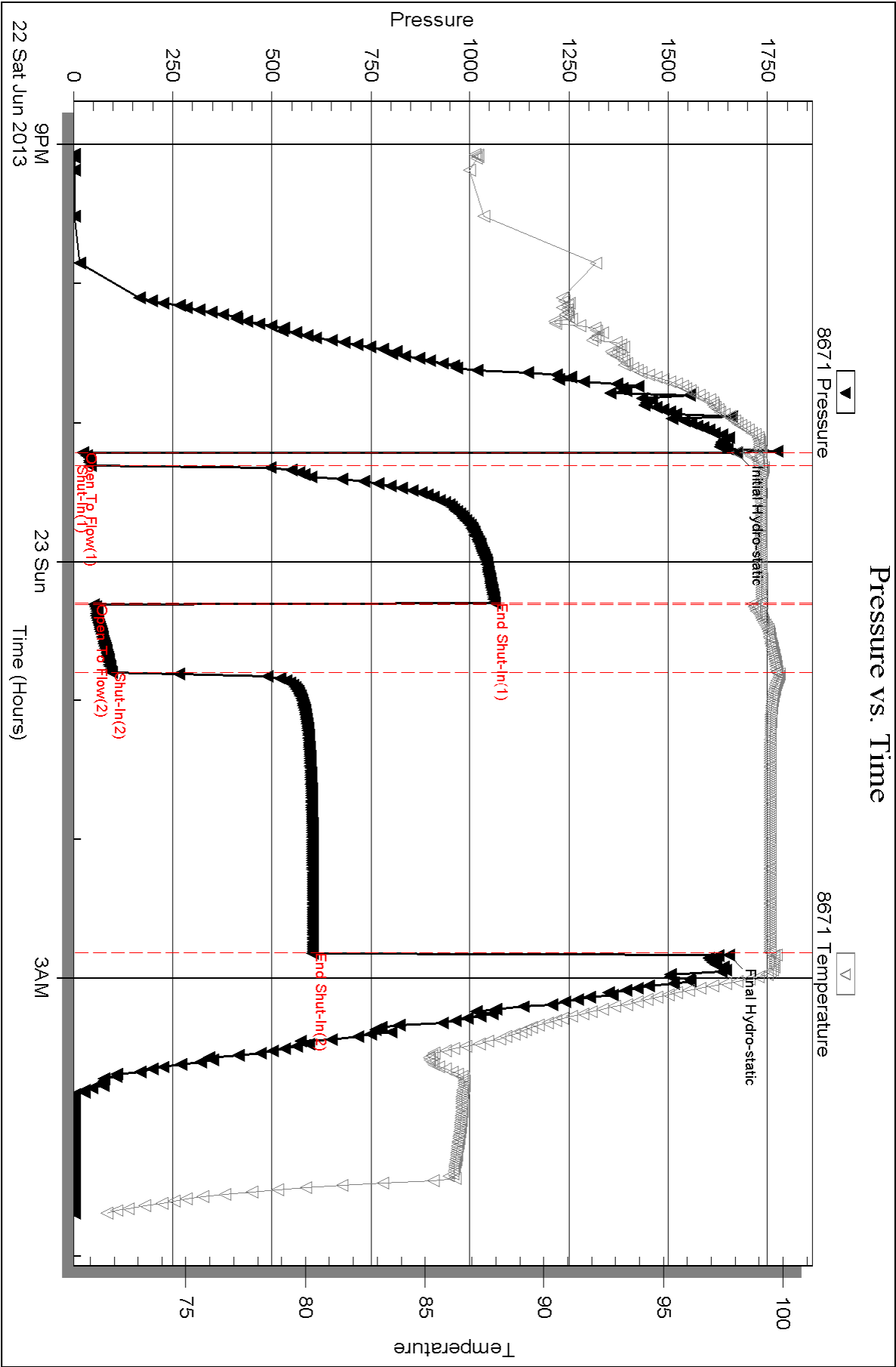
Serial #: 8671

Inside

Samuel Gary Jr. & Associates, Inc.

Hager Trust #2-35

DST Test Number: 1



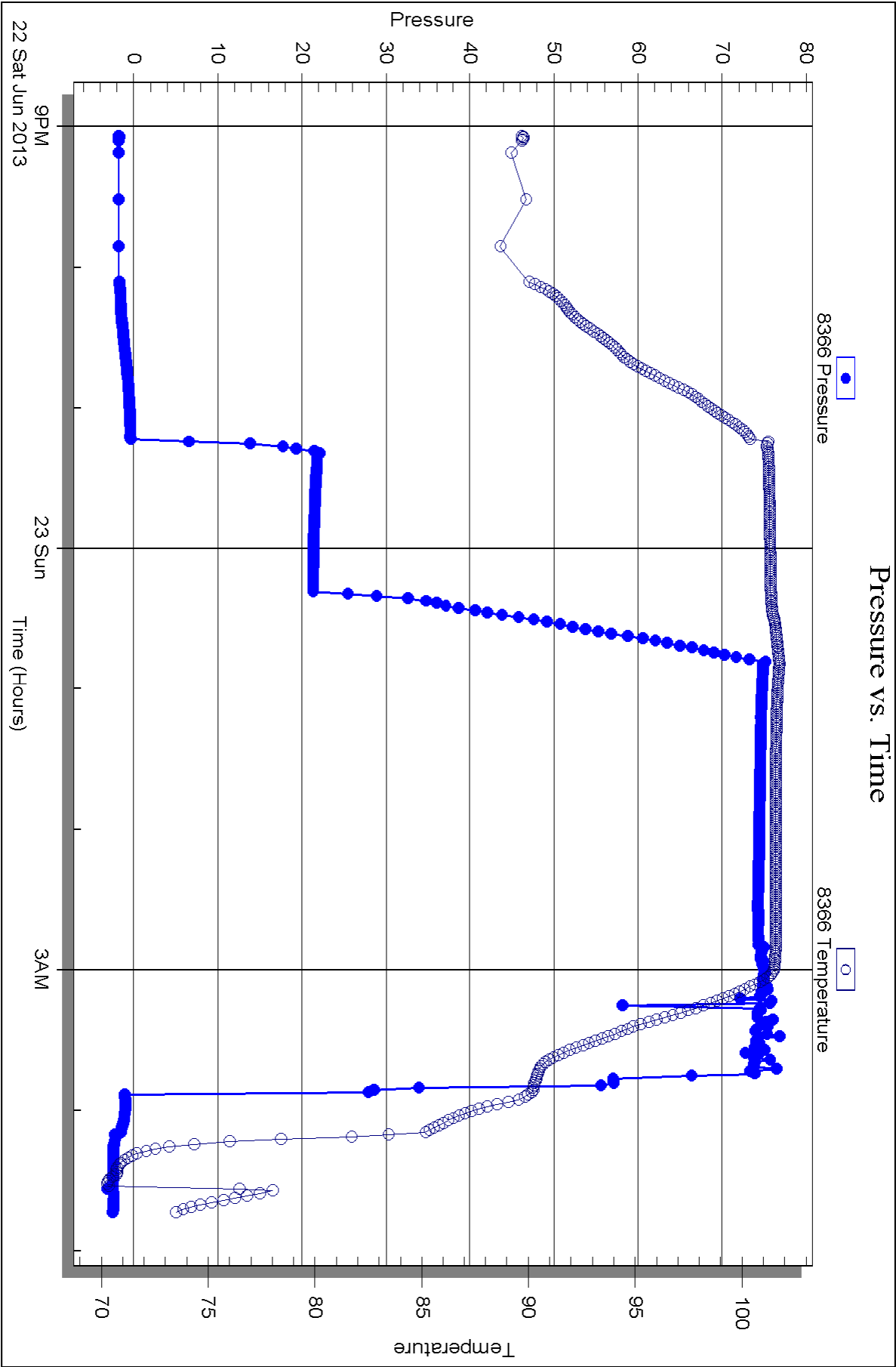
Serial #: 8366

Fluid

Samuel Gary Jr. & Associates, Inc.

Hager Trust #2-35

DST Test Number: 1





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates, Inc.

**35/4s/23w Norton KS**

1515 Wynkoop St. STE 700  
Denver, CO 80202

**Hager Trust #2-35**

Job Ticket: 52753

**DST#: 2**

ATTN: Clayton Camozzi

Test Start: 2013.06.23 @ 23:15:00

### GENERAL INFORMATION:

Formation: **Gorham Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:01:15

Time Test Ended: 06:50:30

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 57

**Interval: 3659.00 ft (KB) To 3699.00 ft (KB) (TVD)**

Reference Elevations: 2297.00 ft (KB)

Total Depth: 3699.00 ft (KB) (TVD)

2289.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8671 Inside**

Press@RunDepth: 398.02 psig @ 3660.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.06.23

End Date:

2013.06.24

Last Calib.: 2013.06.24

Start Time: 23:15:05

End Time:

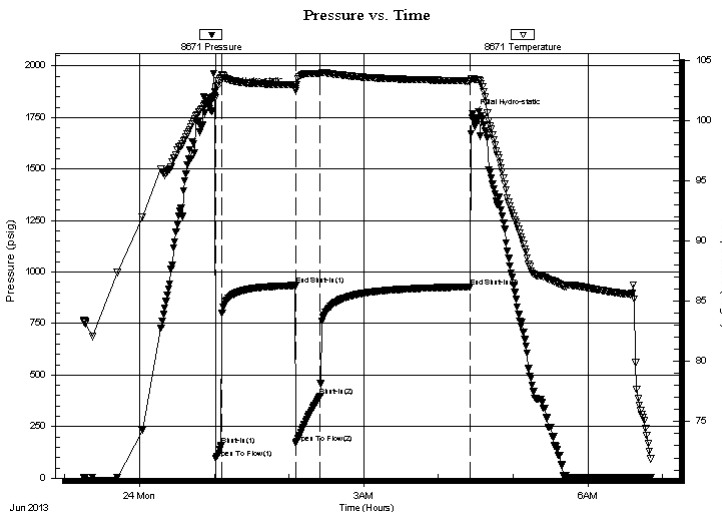
06:50:29

Time On Btm: 2013.06.24 @ 01:00:15

Time Off Btm: 2013.06.24 @ 04:27:30

**TEST COMMENT:** 5 - IF: Blow built to BOB (11") in 2 min.  
60 - IS: Blow back built slowly to 1/2" then died off  
20 - FF: Blow built to BOB in 2 1/2 min.  
120 - FSI: Weak surface blow back occasionally

### PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1873.60	102.02	Initial Hydro-static
1	96.40	101.89	Open To Flow (1)
6	159.64	103.56	Shut-In (1)
65	935.32	102.96	End Shut-In (1)
66	168.73	102.66	Open To Flow (2)
85	398.02	103.87	Shut-In (2)
206	927.93	103.28	End Shut-In (2)
208	1768.61	103.47	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
45.00	WCM 87% <sub>m</sub> , 13% <sub>w</sub>	0.36
460.00	SMCW 92% <sub>w</sub> , 8% <sub>m</sub>	6.45
300.00	MCW W/trace oil 72% <sub>w</sub> , 28% <sub>m</sub>	4.21
0.00	Sampler = 2500 mL W 410 PSI	0.00

### 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.

1515 Wynkoop St. STE 700  
Denver, CO 80202

ATTN: Clayton Camozzi

**35/4s/23w Norton KS**

**Hager Trust #2-35**

Job Ticket: 52753

**DST#: 2**

Test Start: 2013.06.23 @ 23:15:00

### GENERAL INFORMATION:

Formation: **Gorham Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:01:15

Time Test Ended: 06:50:30

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 57

**Interval: 3659.00 ft (KB) To 3699.00 ft (KB) (TVD)**

Total Depth: 3699.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2297.00 ft (KB)

2289.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 8366 Fluid**

Press @ Run Depth: psig @ 3626.00 ft (KB)

Start Date: 2013.06.23

End Date:

2013.06.24

Start Time: 23:15:05

End Time:

06:52:14

Capacity: 8000.00 psig

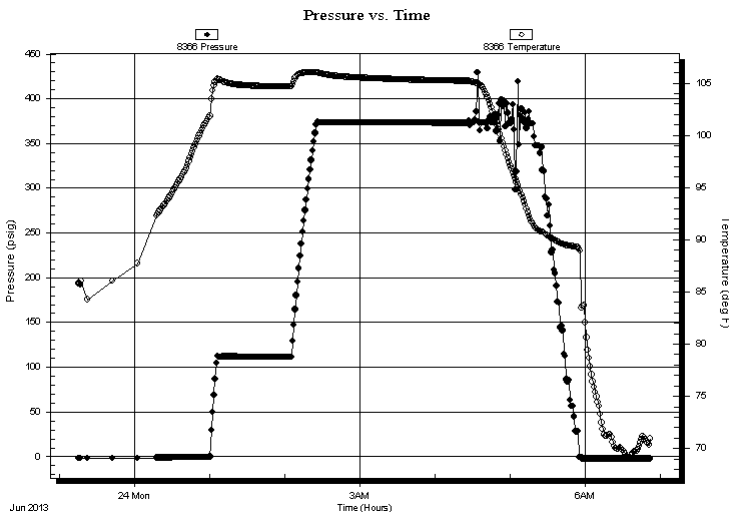
Last Calib.: 2013.06.24

Time On Btm:

Time Off Btm:

**TEST COMMENT:** 5 - IF: Blow built to BOB (11") in 2 min.  
60 - IS: Blow back built slowly to 1/2" then died off  
20 - FF: Blow built to BOB in 2 1/2 min.  
120 - FS: Weak surface blow back occasionally

### PRESSURE SUMMARY



Time  
(Min.)

Pressure  
(psig)

Temp  
(deg F)

Annotation

### Recovery

Length (ft)	Description	Volume (bbl)
45.00	WCM 87%w, 13%w	0.36
460.00	SMCW 92%w, 8%w	6.45
300.00	MCW W/trace oil 72%w, 28%w	4.21
0.00	Sampler = 2500 mL W 410 PSI	0.00

### 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, Inc.

**35/4s/23w Norton KS**

1515 Wynkoop St. STE 700  
Denver, CO 80202

**Hager Trust #2-35**

Job Ticket: 52753

**DST#: 2**

ATTN: Clayton Camozzi

Test Start: 2013.06.23 @ 23:15:00

### Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 70.00 sec/qt

Water Loss: 7.95 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 800.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity: 23000 ppm

deg API

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	WCM 87%m, 13%w	0.358
460.00	SMCW 92%w, 8%m	6.453
300.00	MCW W/trace oil 72%w, 28%m	4.208
0.00	Sampler = 2500 mL W 410 PSI	0.000

Total Length: 805.00 ft

Total Volume: 11.019 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .294 ohms @ 71.9 deg F Chlorides = 23000 ppm

Sampler RW = .286 ohms @ 71.8 deg F = 23,500 ppm

Serial #: 8671

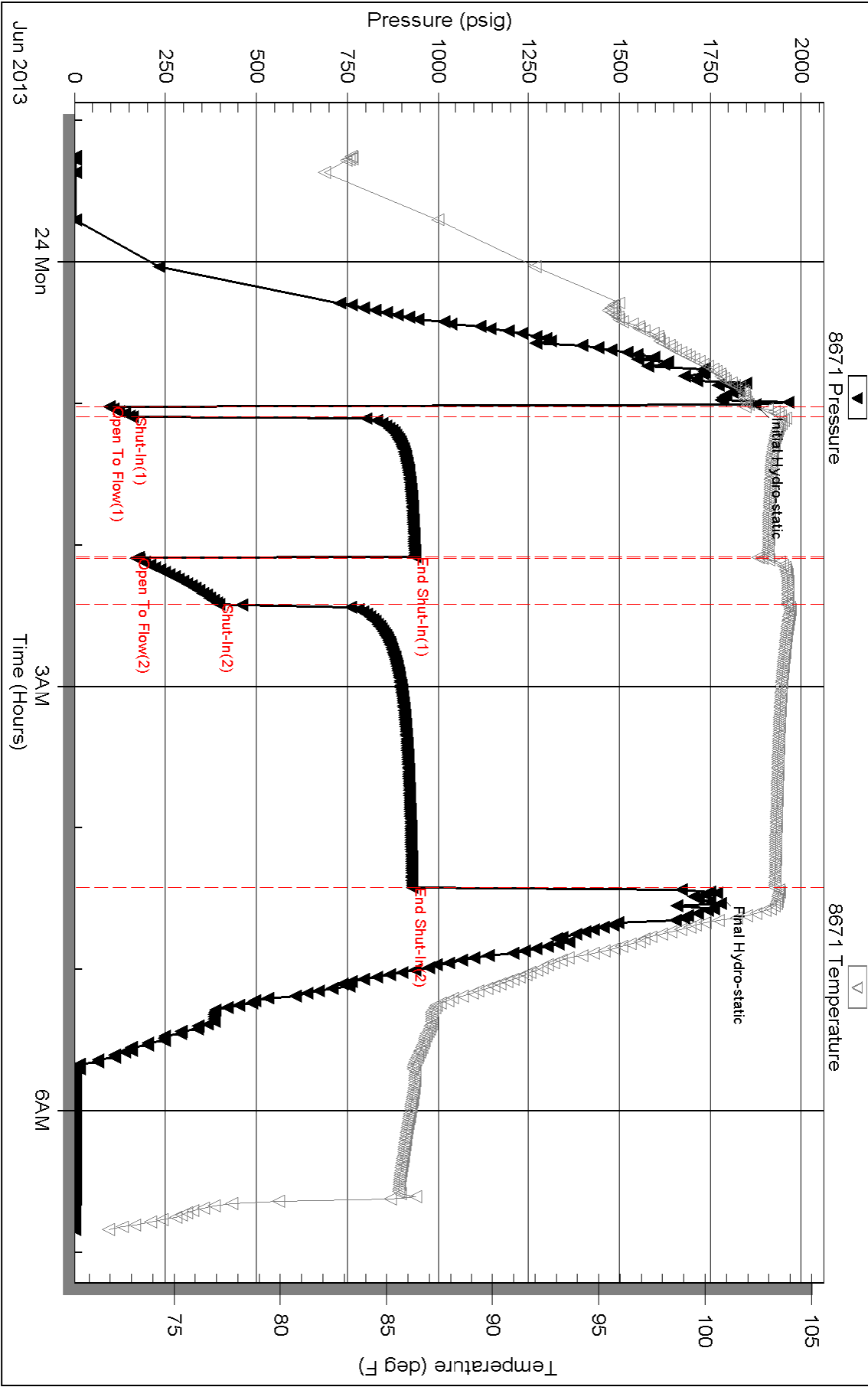
Inside

Samuel Gary Jr. & Associates, Inc.

Hager Trust #2-35

DST Test Number: 2

# Pressure vs. Time



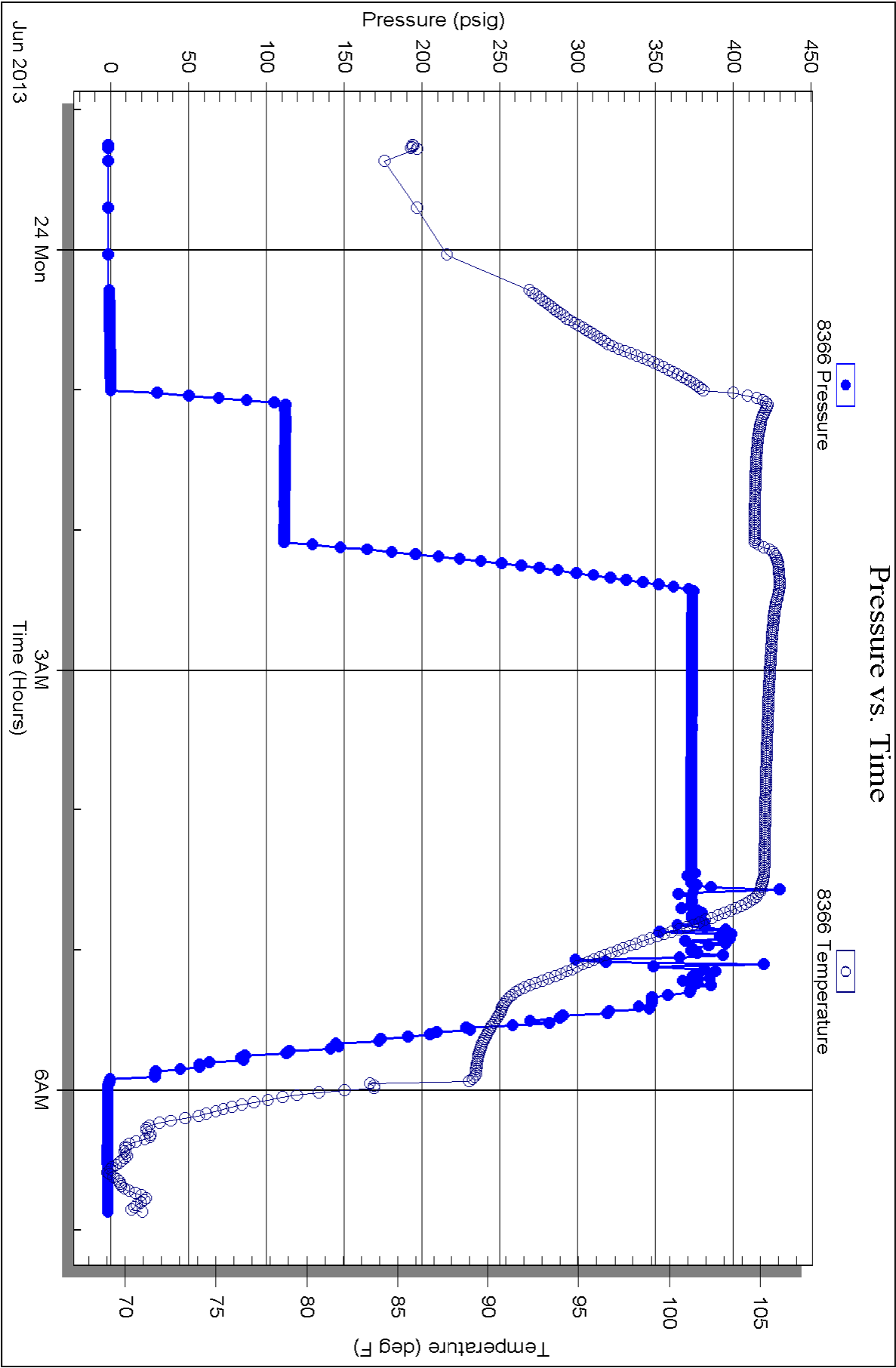
Serial #: 8366

Fluid

Samuel Gary Jr. & Associates, Inc.

Hager Trust #2-35

DST Test Number: 2





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

Well Name: Hager Trust 2-35  
Location: Sec. 35-4S-23W Norton County, Kansas  
License Number: 15-137-20655-0000  
Spud Date: June 18, 2013  
Surface Coordinates: 525 FNL/ 1625 FWL  
Region: WILDCAT  
Drilling Completed: June 24, 2013  
Bottom Hole Coordinates:  
Ground Elevation (ft): 2289' K.B. Elevation (ft): 2297'  
Logged Interval (ft): 3150' To: 3850' Total Depth (ft): 3850'  
Formation:  
Type of Drilling Fluid:

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: Clayton Camozzi

GEOLOGIST

Name: Aaron Suelter  
Company: Earth Tech OGL, Inc.  
Address: PO Box 683  
Hooker, Okla . 73945  
Off. 888-543-8378 Cell: 620-600-0777

DST's Report

DST#1 3397'-3445' 5 60 30 120  
IF- BLOW BUILT TO 3 1/4 / ISI- NO BLOW/ FF- BLOW BUILT TO BOB IN 11" IN 29 MINS/ FSI- NO BLOW  
IH- 1671, FH- 1653/ IF- 24 TO 51/ FF- 43 TO 96/ ISI- 1062, FSI- 603  
RECOVERY- 30' WCM 36% WATER, 64% MUD/ 63' MCW 70% WATER, 30% MUD/ 67' WATERY MUD 49% WATER, 51% MUD  
SAMPLER- 400 ML MUD, 700 ML WATER, 1100 ML TOTAL

DST's Report

DST#2 3659'-3699' 5 60 20 120  
IF- BLOW BUILT TO BOB 11" IN 2 MIN/ ISI- BLOWBACK BUILT SLOWLY TO 1/2" THEN DIED OFF/ FF- BLOW BUILT TO BOB IN 2 1/2 MIN/ FSI- WEAK SURFACE BLOWBACK OCCASIONALLY  
IH- 1874, FH- 1769/ IF- 96 TO 169/ FF- 160 TO 398/ ISI- 935, FSI- 928  
RECOVERY- 300' MCW W/ TRACE OIL 72% WATER, 28% MUD/ 460' SMCW 92% WATER, 8% MUD/ 45' WCM 13% WATER, 87% MUD  
SAMPLER- 2500 ML WATER, 2500 ML TOTAL

ROCK TYPES

Anhy  
Bent  
Brec  
Cht  
Clyst  
Coal  
Congl  
Dol

Gyp  
Igne  
Lmst  
Meta  
Mrlst  
Salt  
Shale  
Shcol

Shgy  
Sltst  
Ss  
Till  
Carb sh  
Dol  
Dtd  
Gry sh

Sandylms  
Shale  
Sltstn  
Shlyslts  
Sltysh  
Lms













## ACCESSORIES











## MINERAL

	Anhy
	Arggrn
	Arg
	Bent
	Bit
	Brecfrag
	Calc
	Carb
	Chtdk
	Chltlt
	Dol
	Feldspar
	Ferrpel
	Ferr
	Glau
	Gyp
	Hvymin
	Kaol
	Marl
	Minxl
	Nodule
	Phos
	Pyr












	<b>Salt</b>
	<b>Sandy</b>
	<b>Silt</b>
	<b>Sil</b>
	<b>Sulphur</b>
	<b>Tuff</b>
	<b>Chlorite</b>
	<b>Dol</b>
	<b>Sand</b>
	<b>Silty</b>




## FOSSIL

 **Algae**  
 **Amph**  
 **Belm**  
 **Bioclst**  
 **Brach**  
 **Bryozoa**  
 **Cephal**  
 **Coral**  
 **Crin**  
 **Echin**  
 **Fish**  
 **Foram**

	<b>Fossil</b>
	<b>Gastro</b>
	<b>Oolite</b>
	<b>Ostra</b>
	<b>Pelec</b>
	<b>Pellet</b>
	<b>Pisolite</b>
	<b>Plant</b>
	<b>Strom</b>
	<b>Fuss</b>
	<b>Oomold</b>

**STRINGER**

	Anhy
	Arg
	Bent
	Coal
	Dol
	Gyp
	Ls
	Mrst
	Sltstrg
	Ssstrg
	Carbsh









 **Clystn**  
 **Dol**  
 **Grysh**  
 **Gryslt**  
 **Lms**  
 **Sandylms**  
 **Sh**  
 **Sltstn**

## TEXTURE

<b>BS</b>	<b>Boundst</b>
<b>C</b>	<b>Chalky</b>
<b>CX</b>	<b>CryxIn</b>
<b>E</b>	<b>Earthy</b>
<b>FX</b>	<b>FinexIn</b>
<b>GS</b>	<b>Grainst</b>
<b>L</b>	<b>Lithogr</b>
<b>MX</b>	<b>MicroxIn</b>
<b>MS</b>	<b>Mudst</b>
<b>PS</b>	<b>Packst</b>
<b>WS</b>	<b>Wackest</b>

## OTHER SYMBOLS

## POROSITY TYPE

	<b>Earthy</b>
	<b>Fenest</b>
	<b>Fracture</b>
	<b>Inter</b>
	<b>Moldic</b>
	<b>Organic</b>
	<b>Pinpoint</b>
	<b>Vuggy</b>

## SORTING

☐ Well  
☐ Moderate  
☐ Poor

## ROUNDING

<b>R</b>	<b>Rounded</b>
<b>r</b>	<b>Subrnd</b>
<b>a</b>	<b>Subang</b>

Angular

## OIL SHOWS

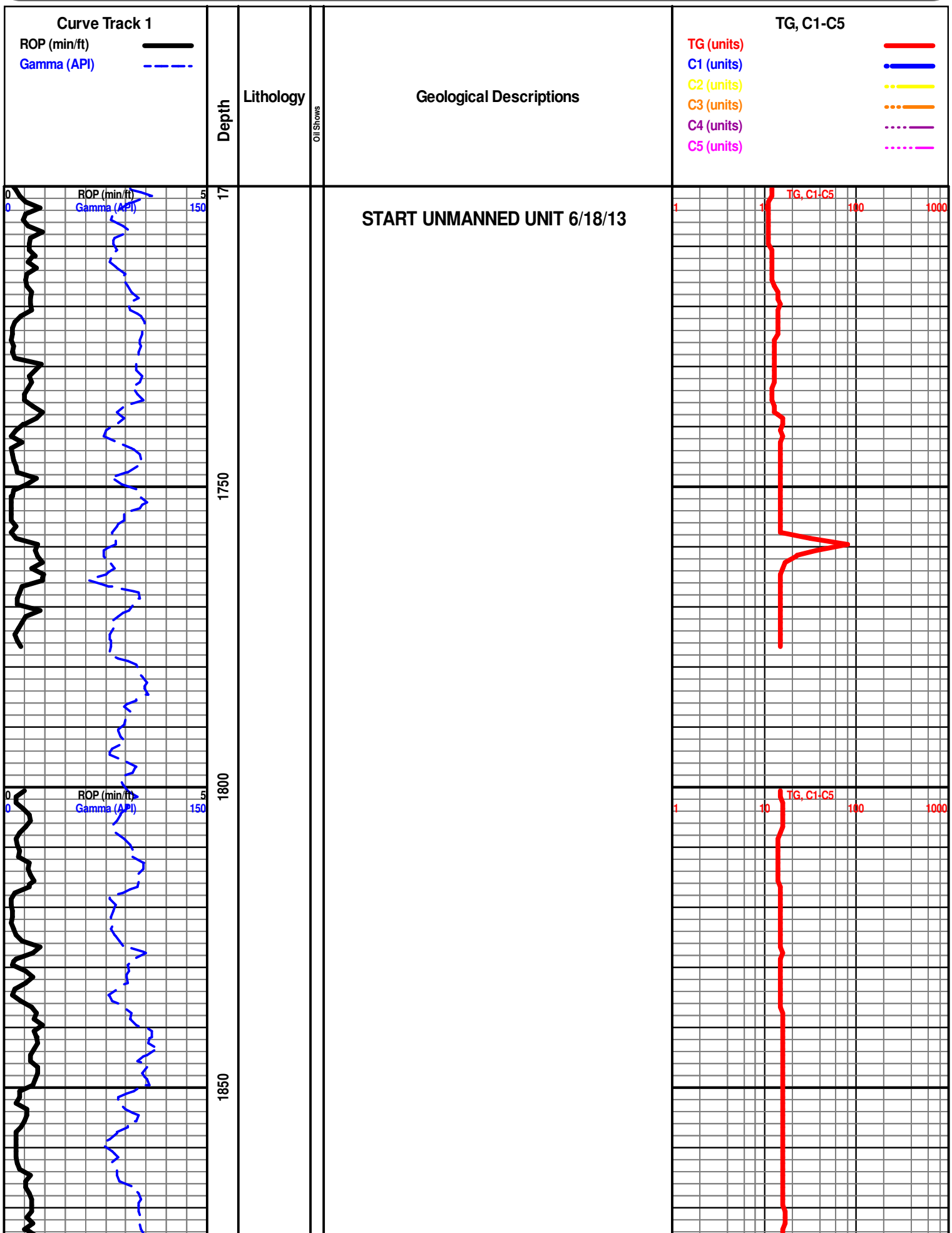
☐ Even  
☐ Spotted  
☐ Ques  
☐ Dead  
☐ Gas show

## INTERVALS

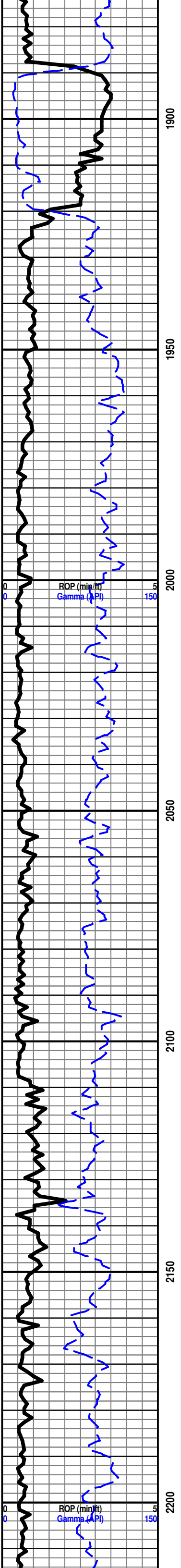
Core  
Dst  
Dst

## EVENTS

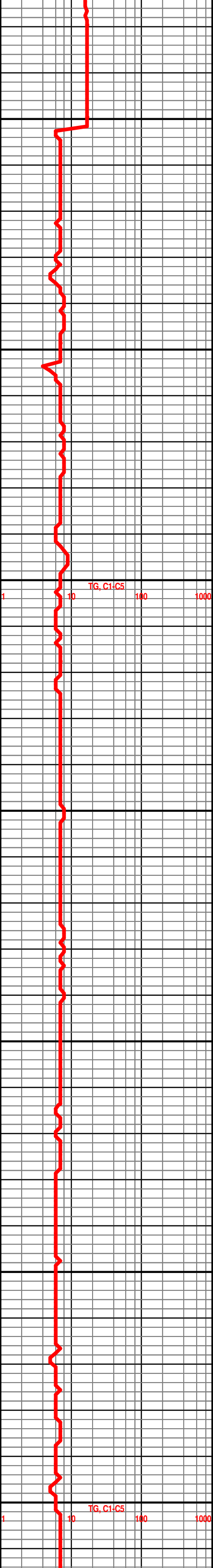
 **Rft**  
 **Sidewall**

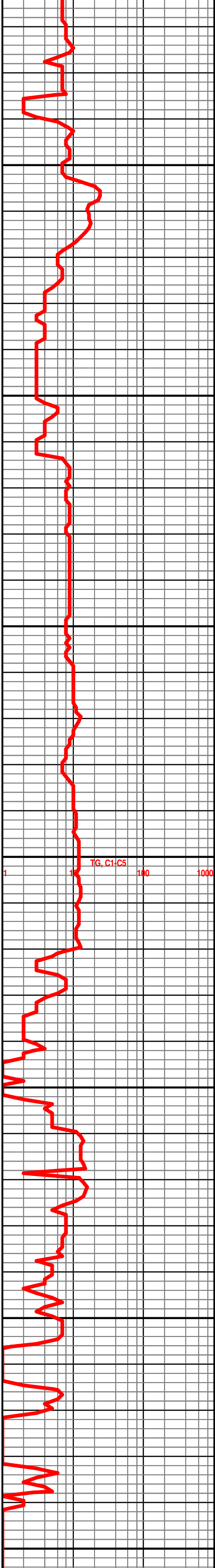
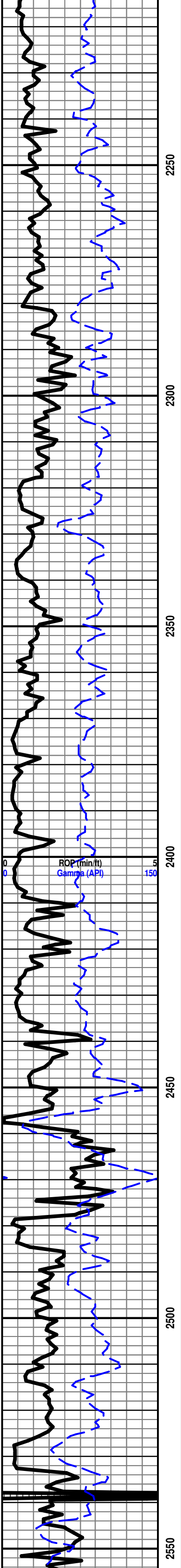


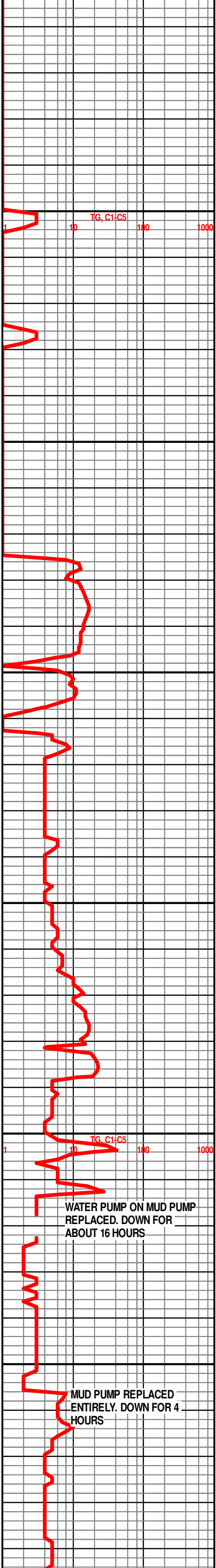
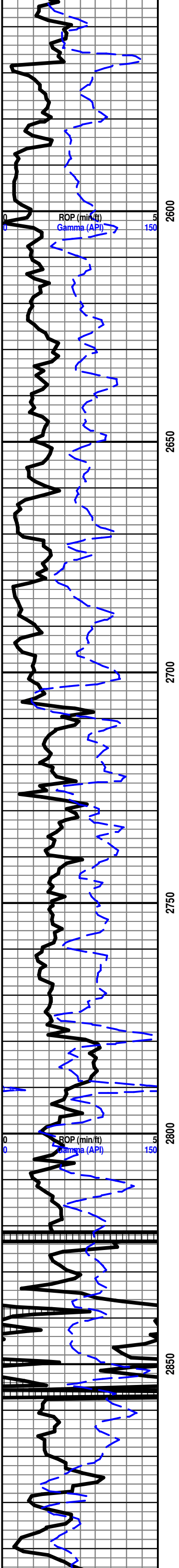


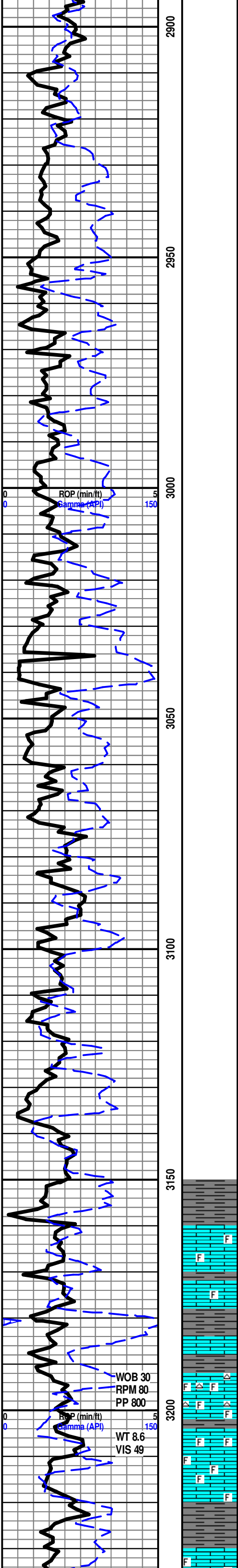


STONE CORRAL 1888' -413'









JANESVILLE SHALE 2924' -627'

START 24 HOUR MANNED UNIT 6/19/13

SH- BRWN TO GY, FRM BLKY TO SFT GMMY IP, SLTY TXT

LS- OFF WHT TO LT TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, S-CHLK IP, SCAT IMBD FOSS FRG IP, SLI TR IMBD CALC XLS IP, TR SFT WHT CHLK IN TRAY, NO VIS FLO, NO VIS POR, NO VIS SHOW

SH- BRWN LT GY TO GY, FRM BLKY, SLTY TXT

TOPEKA 3192' -895'

LS- OFF WHT CRM TO LT TN, HD DNS TO BRIT, F TO MD XLN SUCRO MTRX, S-CHLKY, ABDT IMBD FOSS FRG THRU, TN TO ORNG CHRT IN TRAY, SFT WHT CHLK IN TRAY, NO VIS FLO, NO VIS POR, NO VIS SHOW

LS- OFF WHT CRM TO LT TN, HD DNS TO BRIT, F TO MD XLN RE-XLN MTRX, S-SUCRO IP, ABDT IMBD FOSS FRG THRU, SLI TR OFF WHT TO TO ORNG CHRT IN TRAY, SLI TR SFT WHT CHLK IN TRAY, NO VIS FLO, NO VIS POR, NO VIS SHOW

SH- GRN BRWN TO GY, FRM BLKY TO SPLNTY, SLTY TXT

