Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1139164

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 # 3882
Name: Samuel Gary Jr. & Associates, Inc.
Address 1: 1515 WYNKOOP, STE 700
Address 2:
City: DENVER State: CO Zip: 80202 + ____
Contact Person: CHRISTOPHER MITCHELL
Phone: (303) 831-4673
CONTRACTOR: License # 31548
Name: Discovery Drilling
Wellsite Geologist: TIM HEDRICK
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 #:

1/21/2013	1/27/2013	1/28/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-051-26463-00-00
Spot Description:
E2 - NE - NE - SW Sec. 30 Twp. 14 S. R. 16 ☐ East ☑ West
2310 Feet from ☐ North / ☑ South Line of Section
2520 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW
GPS Location: Lat: ____ *(e.g. xx.xxxxx)* , Long: ____ *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Ellis
Lease Name: BRUNGARDT ET AL Well #: 1-30
Field Name:
Producing Formation: N/A
Elevation: Ground: 1933 Kelly Bushing: 1941
Total Vertical Depth: 3561 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 852 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: 76000 ppm Fluid volume: 560 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:
Operator Name: KARLIN, GENE DBA GENE KARLIN COMPANY
Lease Name: NUSS License #: 3444
Quarter SW Sec. 5 Twp. 13 S. R. 17 ☐ East ☑ West
County: ELLIS Permit #: D25588

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: 05/13/2013
☑ **Confidential Release Date:** 05/13/2015
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 05/14/2013

1139164

Operator Name: Samuel Gary Jr. & Associates, Inc. Lease Name: BRUNGARDT ET AL Well #: 1-30

Sec. 30 Twp. 14 S. R. 16 ☐ East ☑ West County: Ellis

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
TOPEKA	2934	-993
HEEBNER	3156	-1215
LANSING	3205	-1264
ARBUCKLE	3454	-1513
TD	3561	

CASING RECORD ☑ New ☐ 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
SURFACE	12.25	8.625	23	852	COMMON CLASS A	350	2% GEL, 3% CC

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate ___ Protect Casing ___ Plug Back TD ___ 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: ☐ 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: ☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*

METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* ☐ Other *(Specify)* _____

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Samuel Gary Jr. & Associates, Inc.
Well Name	BRUNGARDT ET AL 1-30
Doc ID	1139164

All Electric Logs Run

DEN-NEUT
INDUCTION
MICROLOG
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: 1/24/2013
Invoice # 6300

P.O.#:

Due Date: 2/23/2013
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
JAN 31 2013
SAMUEL GARY JR. & ASSOCIATES, INC.

Reference:
BRUNGARDT ET-AL 1-30

Description of Work:
LONG SURFACE JOB

☑ DRLG ☐ COMP ☐ W/O ☐ LOE ☐ GG

Account	8200.138
Well/Prospect	
Deck	
AFE	
Approval	KB
Description	

Services / Items Included:	Quantity	Price	Taxable
Labor		$ 991.39	No
Common-Class A	350	$ 4,765.20	Yes
8 5/8" Basket	3	$ 1,029.26	Yes
Bulk Truck Matl-Material Service Charge	370	$ 803.43	No
Calcium Chloride	13	$ 672.69	Yes
8 5/8" Centralizer	3	$ 208.46	Yes
Flo Seal	87	$ 188.91	Yes
Pump Truck Mileage-Job to Nearest Camp	16	$ 173.37	No
Premium Gel (Bentonite)	7	$ 123.73	Yes
8 5/8" Top Rubber Plug	1	$ 115.09	Yes
Baffle Plate Aluminum, 8 5/8"	1	$ 97.71	Yes

Item	Quantity	Price	Taxable
Bulk Truck Mileage-Job to Nearest Bulk Plant	16	$101.45	No

Invoice Terms:
Net 30

SubTotal:	$	*9,270.68*
Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice:	$	(1,390.60)
SubTotal for Taxable Items:	$	6,120.89
SubTotal for Non-Taxable Items:	$	1,759.19
Total:	$	7,880.08
6.30% Ellis County Sales Tax Tax:	$	385.62
Amount Due:	**$**	**8,265.70**
Applied Payments:		
Balance Due:	**$**	**8,265.70**

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.

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. 6300

Date	Sec.	Twp.	Range	County	State	On Location	Finish
1-22-13	30	14	16	ELLIS	KANSAS		8:15 AM

Location VICTORIA - 6 TO BUTTERFIELD TR. - 3/4E - N/INTO

Lease BRUNGARDT ALLEN Well No. #1-30

Owner SAM GARY JR.

Contractor D.D #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 L. SURFACE

Hole Size 12¼" T.D. 852'

Csg. 8⅝" Depth 852'

Charge To SAM GARY JR.

Street 1515 WYNKOOP, STE 700

City DENVER State CO, 80202

Tbg. Size Depth

Tool Depth

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

Cement Left in Csg. Shoe Joint 41.73

Cement Amount Ordered 350 COM 3% CC 2% GEL ¼ GEL

Meas Line Displace 51½ BBLS

EQUIPMENT

Pumptrk #15	No.	Cementer
		Helper NICK
Bulktrk #4	No.	Driver
		Driver LONNIE M.
Bulktrk #P/U	No.	Driver
		Driver CISCO

JOB SERVICES & REMARKS

Remarks:

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

CEMENT DID CIRCULATE!

THANK YOU!

X Signature

Common	350
Poz. Mix	
Gel.	7
Calcium	13
Hulls	
Salt	
Flowseal	87#
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	370
Mileage	

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	3 - 8⅝"
Baskets	3 - 8⅝
AFU Inserts	
Float Shoe	
Latch Down	
	1 - 8⅝ BAFFLE PLATE
	1 - 8⅝ SOLID RUBBER PLUG
Pumptrk Charge	
Mileage	16
Tax	
Discount	
Total Charge	

Date: 1/30/2013
Invoice # 6371

P.O.#:

Due Date: 3/1/2013
Division: *Russell*

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

Invoice

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

RECEIVED
FEB 08 2013
SAMUEL GARY JR. & ASSOCIATES, INC.

☑ DRLG ☐ COMP ☐ W/O ☐ LOE ☐ GG

Account	8200.145
Well/Prospect	
Deck	
AFE	
Approval	
Description	

Reference:
BRUNGARDT ET AL 1-30

Description of Work:
PLUG JOB

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		$ 991.39	Yes				
Common-Class A	135	$ 1,838.01	Yes				
Bulk Truck Matl-Material Service Charge	233	$ 505.94	Yes				
POZ Mix-Standard	90	$ 449.49	Yes				
Pump Truck Mileage-Job to Nearest Camp	16	$ 173.37	Yes				
Premium Gel (Bentonite)	8	$ 141.40	Yes				
Flo Seal	50	$ 108.57	Yes				
Bulk Truck Mileage-Job to Nearest Bulk Plant	16	$ 101.45	Yes				
Dry Hole Plug	1	$ 60.80	Yes				

Invoice Terms:
Net 30

SubTotal:	$	*4,370.41*
Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice:	$	(655.56)
SubTotal for Taxable Items:	$	3,714.85
SubTotal for Non-Taxable Items:	$	-
Total:	$	3,714.85
6.30% Ellis County Sales Tax Tax:	$	234.04
Amount Due:	**$**	**3,948.89**
Applied Payments:		
Balance Due:	**$**	**3,948.89**

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.

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 6371

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
1-28-13	30	14	16	Ellis	KS		645 PM

Location Victoria S to Butterfield ½ E Into

Lease B Rungaldt ET AL Well No. 1-30 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 Plug

Hole Size 7 7/8 T.D. 3560 Charge To Sam Gary Jr & Assoc.

Csg. Drill Pipe Depth Street

Tbg. Size Depth City State

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

Cement Left in Csg. Shoe Joint Cement Amount Ordered 275 60/40 4% Gel

Meas Line Displace

EQUIPMENT

Pumptrk 5 No. Cementer Helper Josh

Bulktrk 8 No. Driver Driver Brett

Bulktrk 24 No. Driver Driver Doug

JOB SERVICES & REMARKS

Remarks:

Rat Hole 30 SX

Mouse Hole 15 SX

Centralizers

Baskets

D/V or Port Collar

1st 3434ft 50 SX

2nd 1075 ft 40 SX

3rd 500 ft 80 SX

4th 40 ft 10 SX

Common	135
Poz. Mix	90
Gel.	8
Calcium	
Hulls	
Salt	
Flowseal	50#
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	233
Mileage	

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	

Wood plug

Pumptrk Charge plug

Mileage 16 pg

Tax

Discount

Total Charge

X Signature Terry Wilson

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop, Ste 700
Denver CO 80202

ATTN: Clayton

30-14-16,Ellis,KS

Brungardt #1-30

Job Ticket: 50264 **DST#: 1**

Test Start: 2013.01.25 @ 15:35:00

GENERAL INFORMATION:

Formation: **KC "D-G"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:15:30
Time Test Ended: 22:30:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Brett Dickinson
Unit No: 59

Interval: 3240.00 ft (KB) To 3310.00 ft (KB) (TVD)
Total Depth: 3310.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

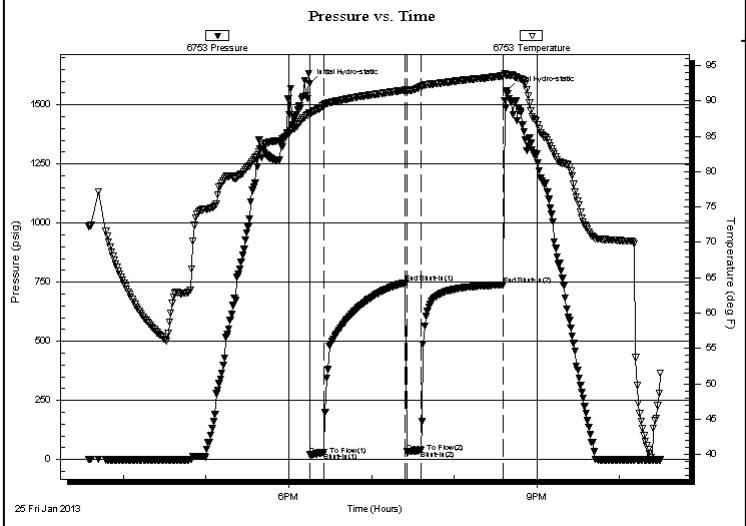
Reference Elevations: 1948.00 ft (KB)
1940.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6753 **Inside**

Press@RunDepth: 38.42 psig @ 3241.00 ft (KB)
Start Date: 2013.01.25 End Date: 2013.01.25
Start Time: 15:35:05 End Time: 22:29:59

Capacity: 8000.00 psig
Last Calib.: 2013.01.25
Time On Btm: 2013.01.25 @ 18:15:00
Time Off Btm: 2013.01.25 @ 20:38:00

TEST COMMENT: 10min IF-1.25in blow
60min ISI-No blow
10min FF-.25in blow
60min FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1590.94	88.37	Initial Hydro-static
1	20.00	88.12	Open To Flow (1)
11	30.44	89.41	Shut-In(1)
70	745.76	91.55	End Shut-In(1)
71	33.31	91.38	Open To Flow (2)
81	38.42	92.02	Shut-In(2)
141	739.46	93.55	End Shut-In(2)
143	1559.10	93.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	mud	0.07

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop, Ste 700
Denver CO 80202

ATTN: Clayton

30-14-16,Ellis,KS

Brungardt #1-30

Job Ticket: 50264 **DST#: 1**

Test Start: 2013.01.25 @ 15:35:00

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:	54.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	mud	0.074

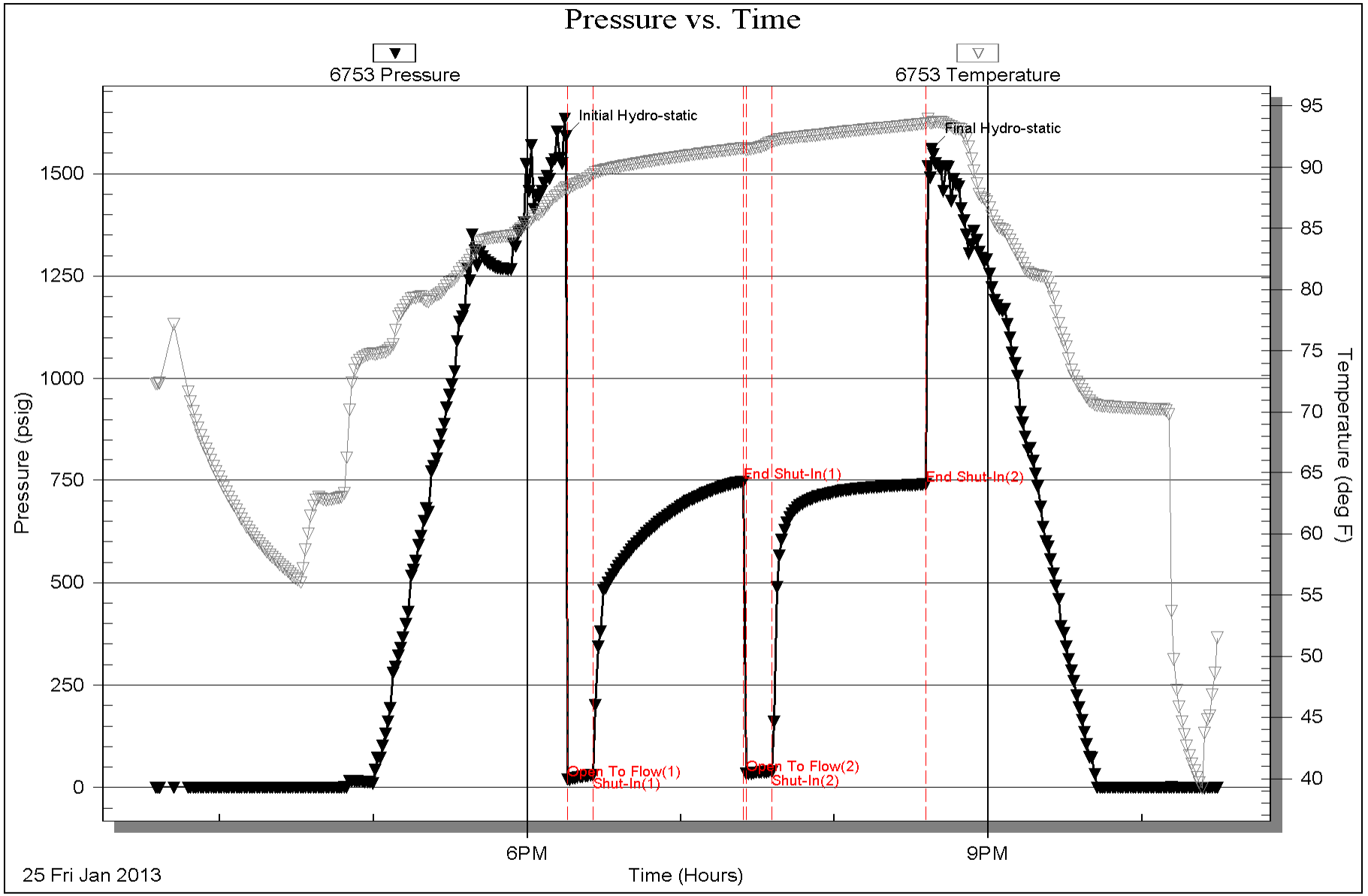
Total Length: 15.00 ft Total Volume: 0.074 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Sampler Data 200 psi 3000ml mud

Serial #: 6753 **Inside** Samuel Gary Jr. & Associates Inc. Brungardt #1-30 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 50264 Printed: 2013.01.26 @ 06:26:13

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop, Ste 700
Denver CO 80202

ATTN: Clayton Camozzi

30-14-16,Ellis,KS

Brungardt #1-30

Job Ticket: 50265 **DST#: 2**

Test Start: 2013.01.26 @ 07:50:00

GENERAL INFORMATION:

Formation: **KC "I,J"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:51:00
Time Test Ended: 14:27:00

Test Type: Conventional Bottom Hole (Reset)
Tester: Brett Dickinson
Unit No: 59

Interval: 3370.00 ft (KB) To 3395.00 ft (KB) (TVD)
Total Depth: 3395.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

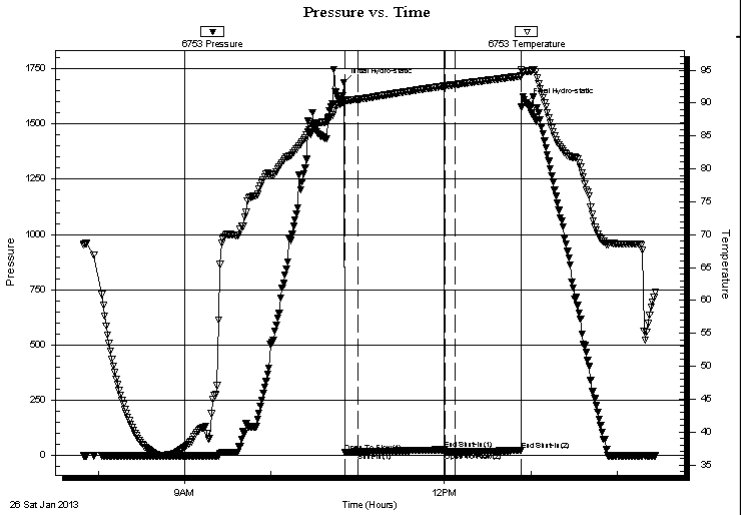
Reference Elevations: 1948.00 ft (KB)
1940.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6753 **Inside**

Press@RunDepth: 17.41 psig @ 3371.00 ft (KB)
Start Date: 2013.01.26 End Date: 2013.01.26
Start Time: 07:50:05 End Time: 14:26:59

Capacity: 8000.00 psig
Last Calib.: 2013.01.26
Time On Btm: 2013.01.26 @ 10:50:30
Time Off Btm: 2013.01.26 @ 12:56:30

TEST COMMENT: 10min IF-1/4in blow
60min ISI-No blow
8min FF-No blow
45min FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1685.96	90.39	Initial Hydro-static
1	16.31	90.11	Open To Flow (1)
10	16.95	90.56	Shut-In(1)
70	26.72	92.57	End Shut-In(1)
70	16.92	92.58	Open To Flow (2)
77	17.41	92.80	Shut-In(2)
123	24.00	94.08	End Shut-In(2)
126	1594.81	94.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Mud	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop, Ste 700
Denver CO 80202

ATTN: Clayton Camozzi

30-14-16,Ellis,KS

Brungardt #1-30

Job Ticket: 50265 **DST#: 2**

Test Start: 2013.01.26 @ 07:50:00

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:	54.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Mud	0.005

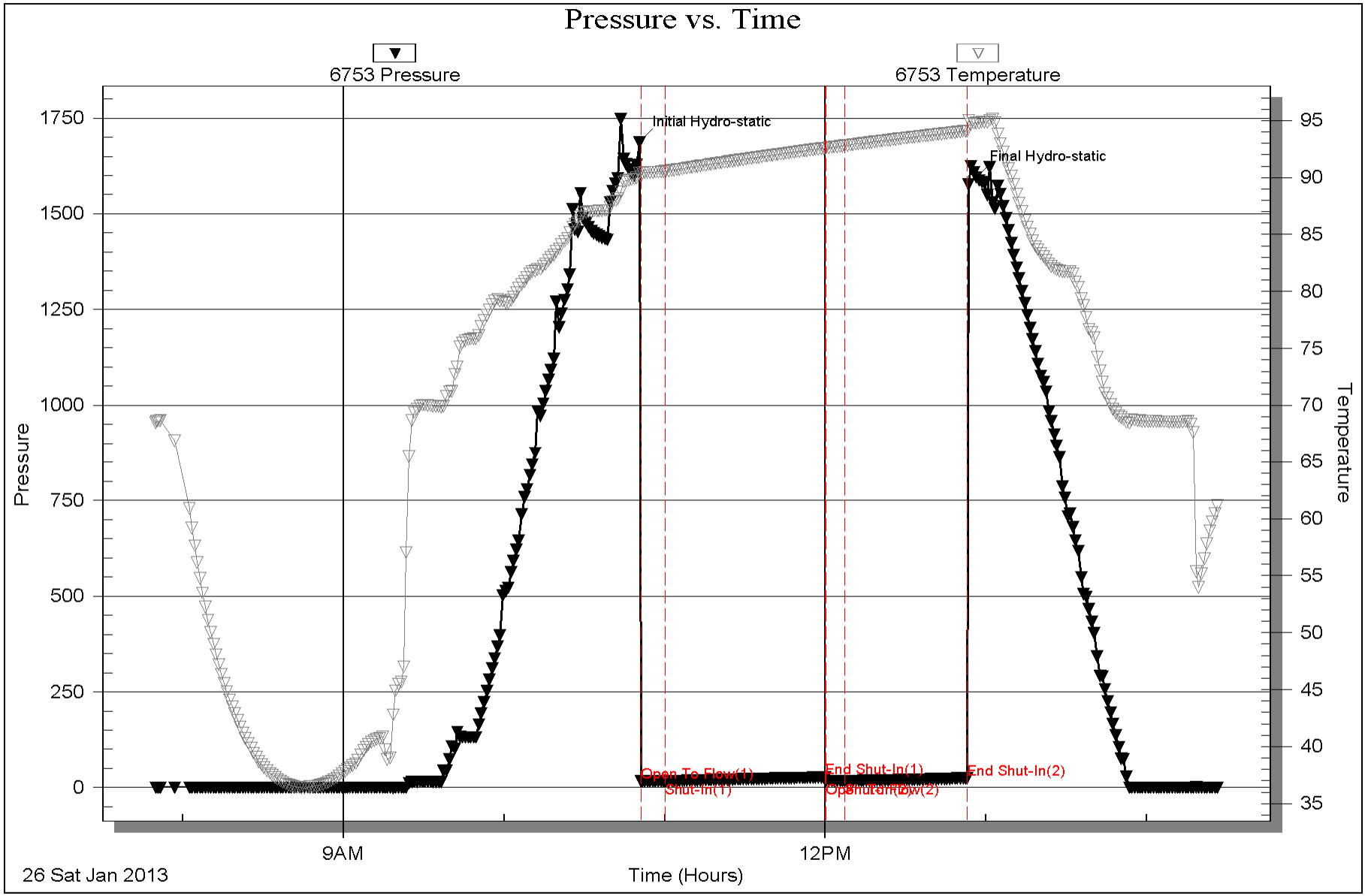
Total Length: 1.00 ft Total Volume: 0.005 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Sampler Data Empty

Serial #: 6753 **Inside** Samuel Gary Jr. & Associates Inc. Brungardt #1-30 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 50265 Printed: 2013.01.28 @ 02:07:25

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop, Ste 700
Denver CO 80202

ATTN: Clayton Camozzi

30-14-16,Ellis,KS

Brungardt #1-30

Job Ticket: 50266 **DST#: 3**

Test Start: 2013.01.27 @ 16:00:00

GENERAL INFORMATION:

Formation: **Arb**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:46:00
Time Test Ended: 22:33:00

Test Type: Conventional Straddle (Reset)
Tester: Brett Dickinson
Unit No: 59

Interval: 3458.00 ft (KB) To 3468.00 ft (KB) (TVD)
Total Depth: 3561.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

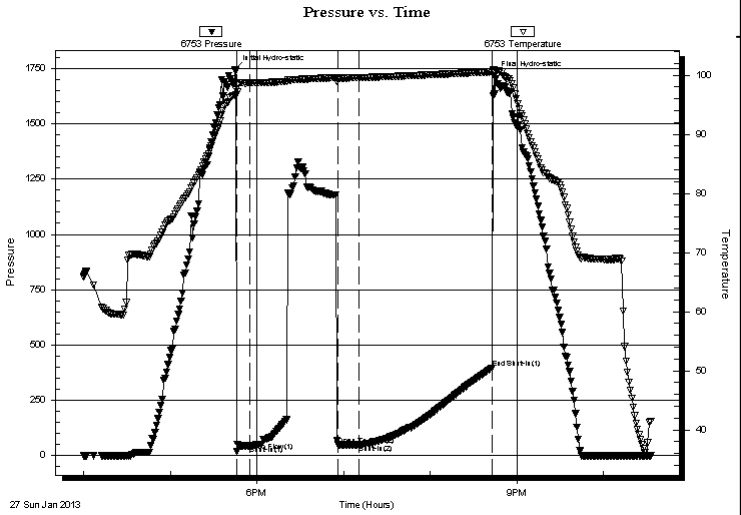
Reference Elevations: 1948.00 ft (KB)
1940.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6753 **Outside**

Press@RunDepth: 44.94 psig @ 3464.00 ft (KB)
Start Date: 2013.01.27 End Date: 2013.01.27
Start Time: 16:00:05 End Time: 22:32:59

Capacity: 8000.00 psig
Last Calib.: 2013.01.27
Time On Btm: 2013.01.27 @ 17:45:00
Time Off Btm: 2013.01.27 @ 20:44:00

TEST COMMENT: 10min IF-3.75in blow
60min ISI-No blow
15min FF-Very weak surface blow died in 10min
90min FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1745.61	96.59	Initial Hydro-static
1	18.04	96.68	Open To Flow (1)
10	44.94	98.75	Shut-In(1)
71	48.57	99.47	Open To Flow (2)
86	49.39	99.58	Shut-In(2)
178	396.50	100.57	End Shut-In(1)
179	1717.95	100.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud	0.64

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop, Ste 700
Denver CO 80202

ATTN: Clayton Camozzi

30-14-16,Ellis,KS

Brungardt #1-30

Job Ticket: 50266 **DST#: 3**

Test Start: 2013.01.27 @ 16:00:00

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:	49.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.99 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	6000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Mud	0.638

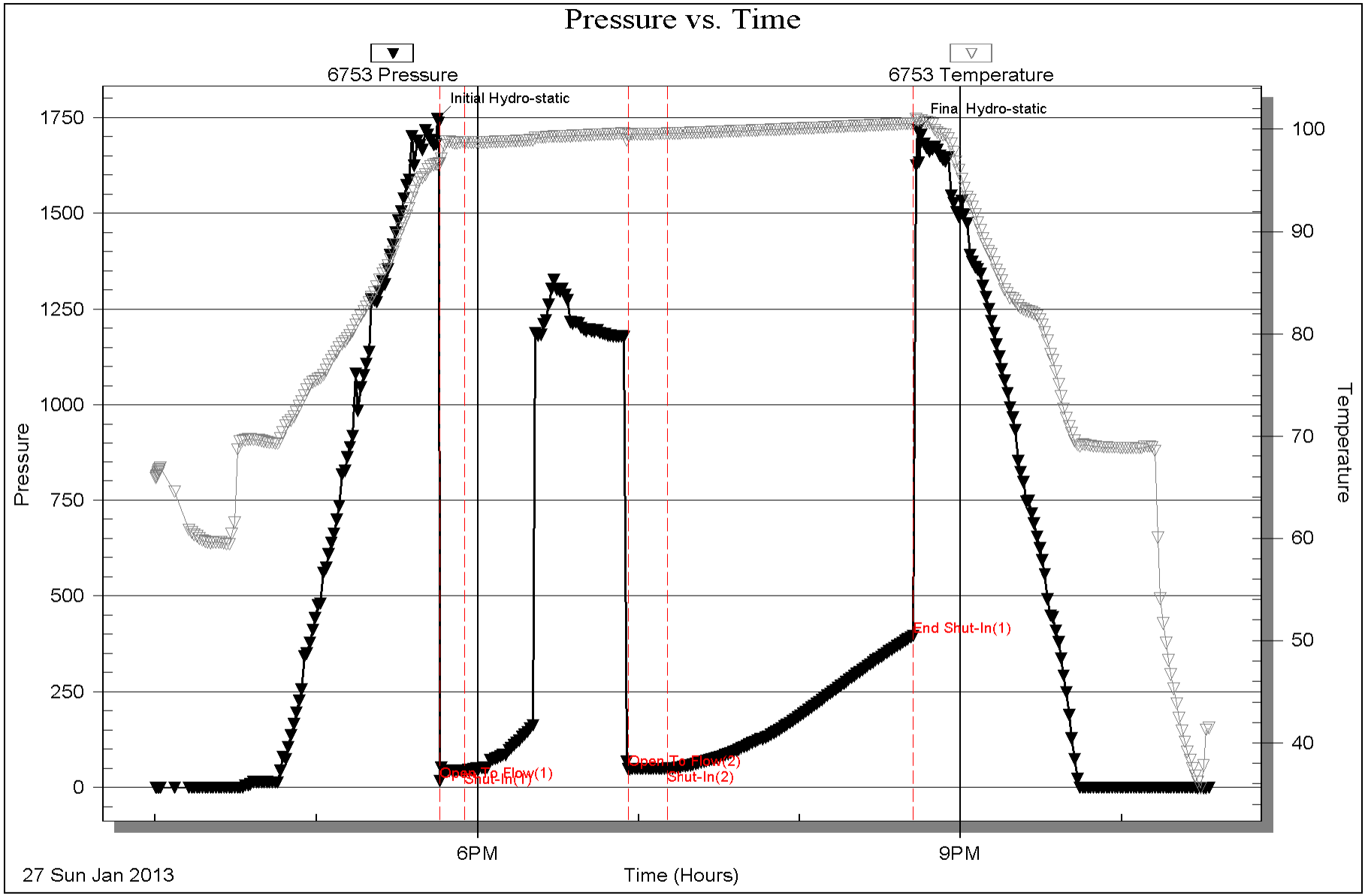
Total Length: 65.00 ft Total Volume: 0.638 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Sampler Data 25psi 4000ml mud

Serial #: 6753 **Outside** Samuel Gary Jr. & Associates Inc. Brungardt #1-30 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 50266 Printed: 2013.01.28 @ 02:08:36

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

Well Name:	SGA Brungardt et al 1-30		
Location:	Sec. 30 - 14S - 16W Ellis County, Kansas		
License Number:	15-051-26463-0000	Region:	WILDCAT
Spud Date:	Jan 21, 2013	Drilling Completed:	Jan 27, 2013
Surface Coordinates:	2310 FSL/ 2520 FWL		
Bottom Hole Coordinates:			
Ground Elevation (ft):	1933'	K.B. Elevation (ft):	1941'
Logged Interval (ft):	2900' To: 3560'	Total Depth (ft):	3560'
Formation:	LANSING/ ARBUCKLE		
Type of Drilling Fluid:			

OPERATOR

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

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 3240'-3310' 10 60 10 60
IF- 1 1/4IN BLOW / ISI- NO BLOW/ FF- 1/4IN BLOW/ FSI- NO BLOW
IH- 1591, FH- 1559/ IF- 20 TO 33/ FF- 30 TO 38/ ISI- 746, FSI- 739
RECOVERY- 15' MUD 100% MUD
SAMPLER- 3000ML MUD 200 PSI

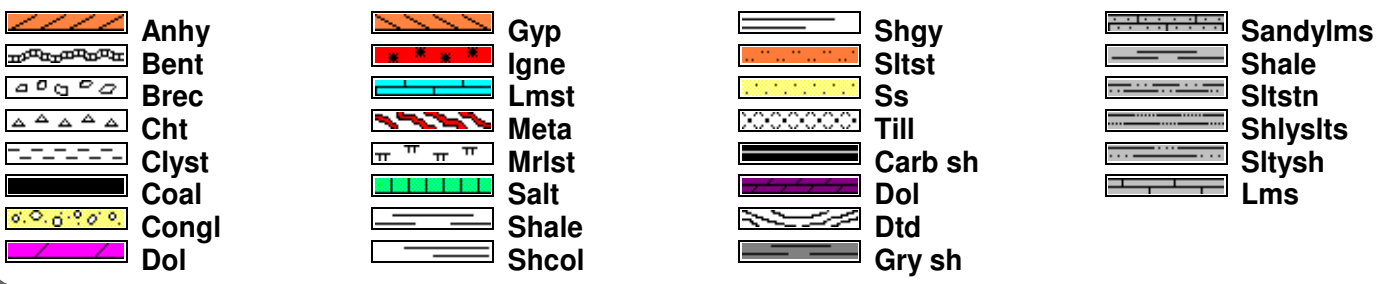
DST's Report

DST#2 3370'-3395' 10 60 8 45
IF 1/4 IN BLOW/ ISI- NO BLOW/ FF- NO BLOW/ FSI- NO BLOW
IH- 1686, FH- 1595/ IF- 16 TO 17/ FF- 17 TO 17/ ISI- 27, FSI- 24
RECOVERY- 1' MUD 100% MUD

DST's Report

DST#3 3458'-3468' 10 60 15 90
IF- 3 3/4 IN BLOW/ ISI- NO BLOW/ FF- VERY WEAK SURFACE BLOW DIED IN 10 MINUTES/ FSI- NO BLOW
IH- 1746, FH- 1718/ IF- 18 TO 49/ FF- 45 TO 49/ ISI- N/A, FSI- 397
RECOVERY- 65' MUD, 100% MUD
SAMPLER- 4000 ML MUD, 25 PSI

ROCK TYPES



ACCESSORIES

MINERAL
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Slty

FOSSIL
- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

STRINGER
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh
- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

TEXTURE
- BS Boundst
- C Chalky
- CX Cryxln
- E Earthy
- FX Finexln
- GS Grainst
- L Lithogr
- MX Microxln
- MS Mudst
- PS Packst
- WS Wackest

OTHER SYMBOLS

POROSITY TYPE
- E Earthy
- F Fenest
- F Fracture
- X Inter
- Moldic
- O Organic
- P Pinpoint
- V Vuggy

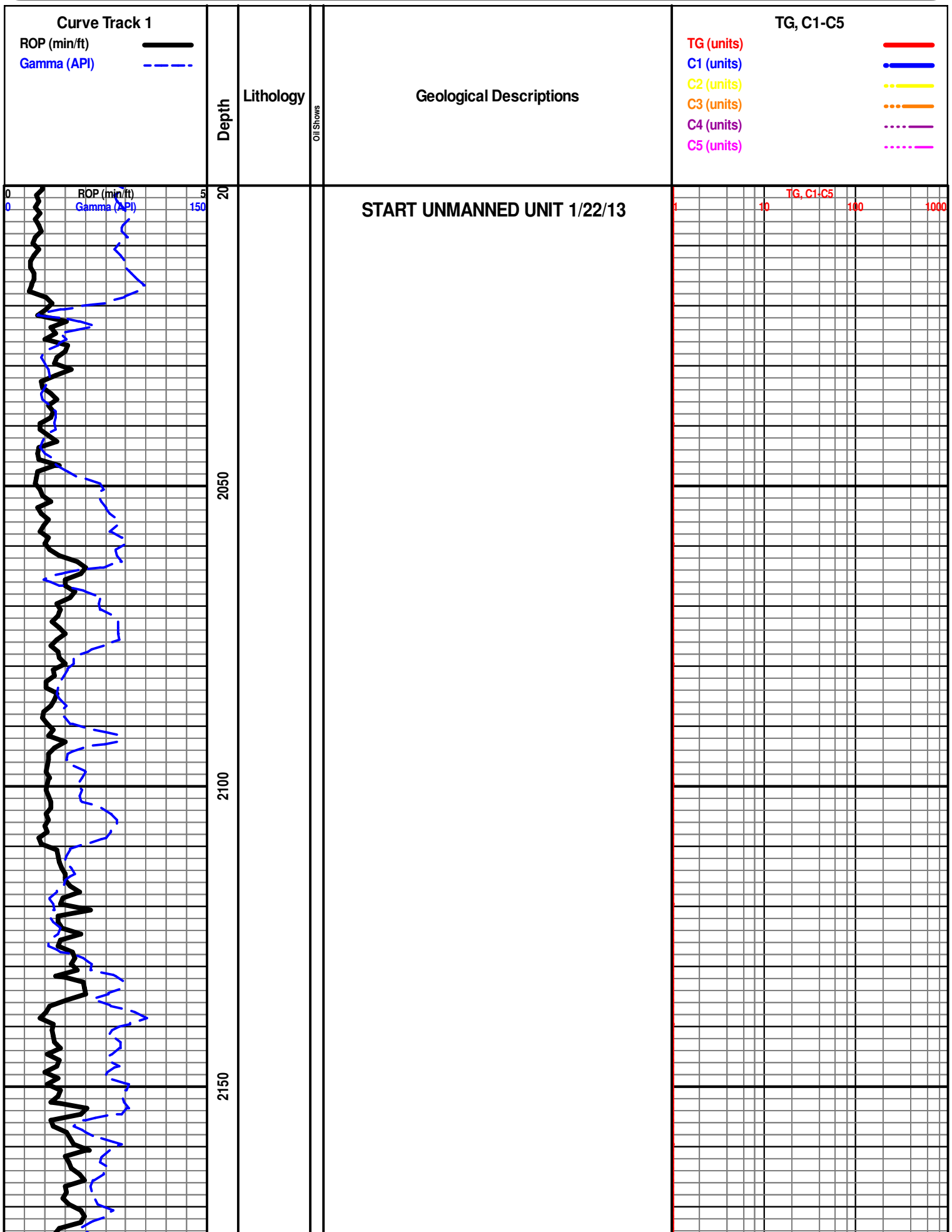
SORTING
- W Well
- M Moderate
- P Poor

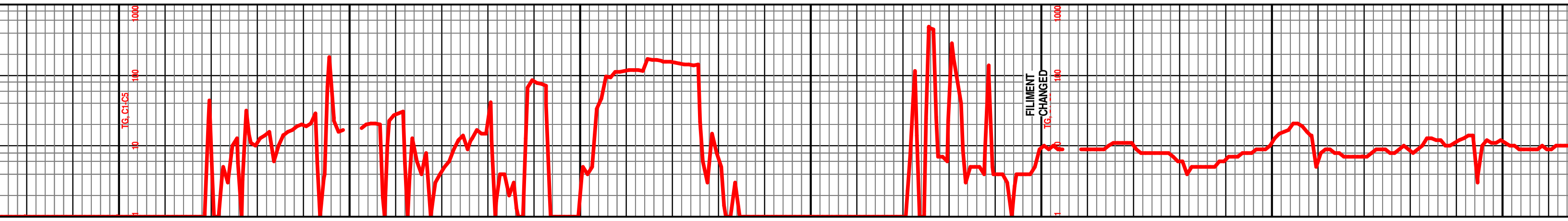
ROUNDING
- R Rounded
- r Subrnd
- a Subang
- A Angular

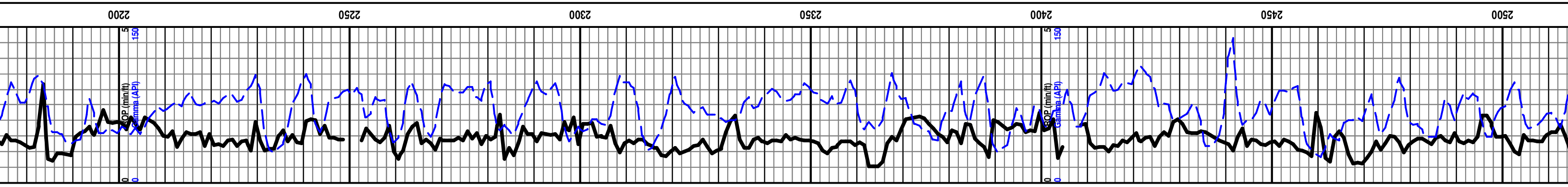
OIL SHOWS
- Even
- Spotted
- Ques
- D Dead
- Gas show

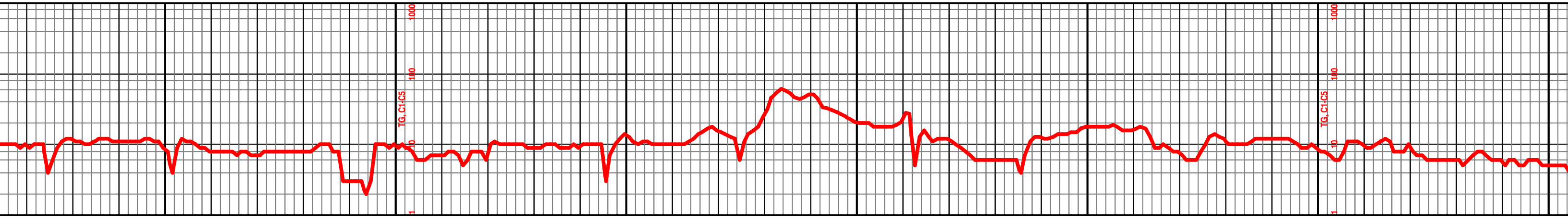
INTERVALS
- Core
- Dst
- Dst

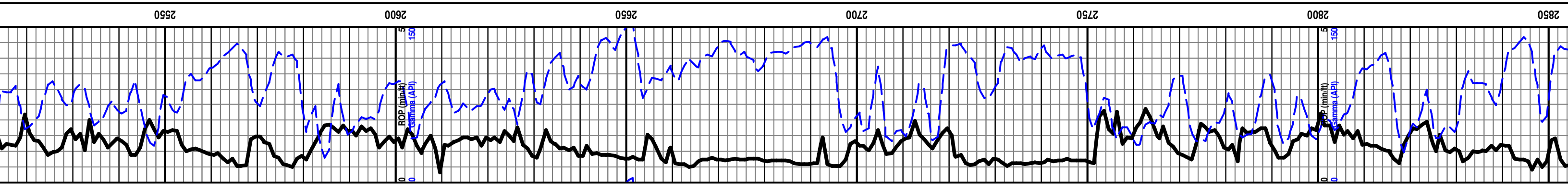
EVENTS
- Rft
- Sidewall

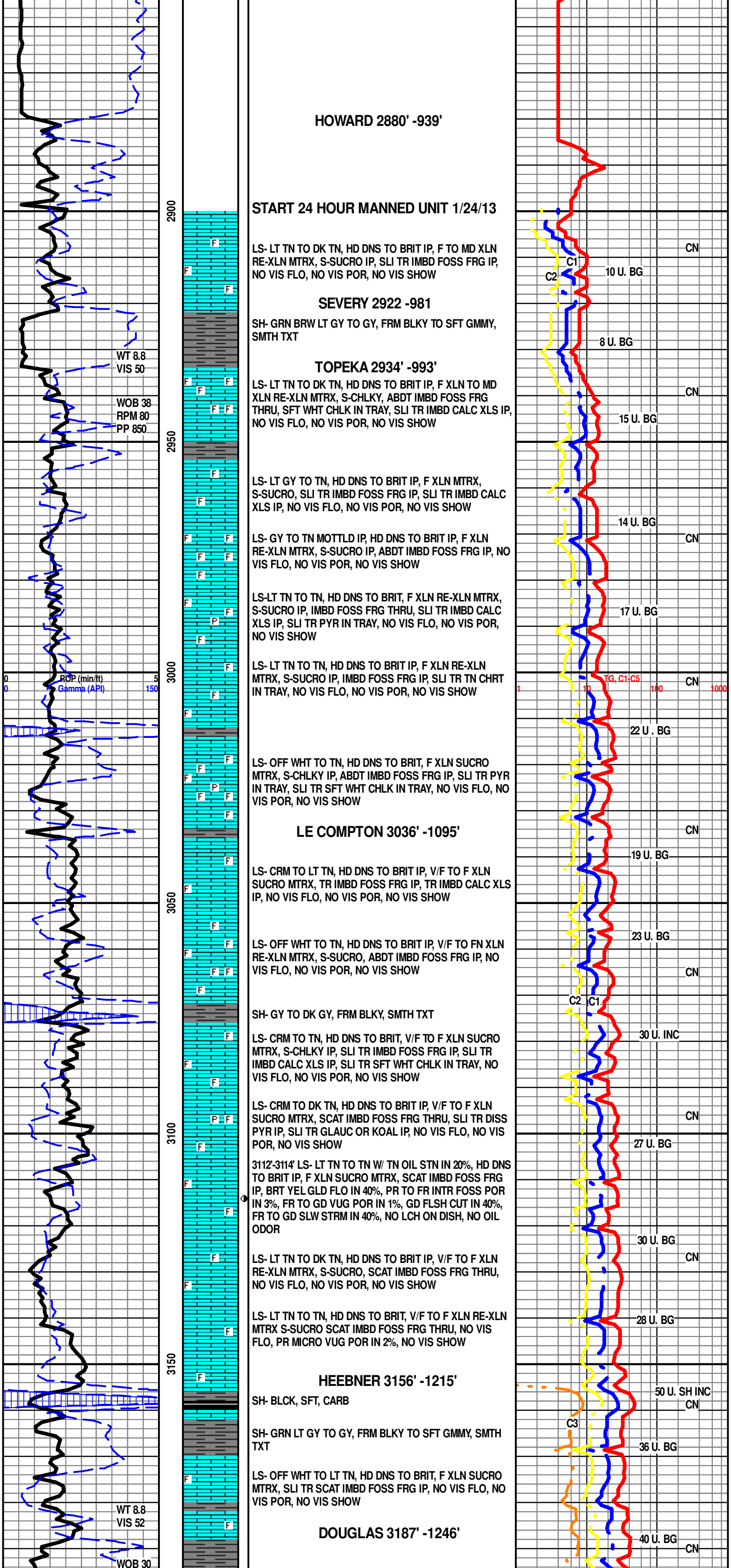



TG, C1,C5
1000
100
10
1
FILIMENT
CHANGED
TG,
1000
100
1


2200
2250
2300
2350
2400
2450
2500
ROP (min/ft)
Gamma (API)
5
150
0
0
ROP (min/ft)
Gamma (API)
5
150
0
0


TG, C1-C5
1000
100
10
1
TG, C1-C5
1000
100
10
1


2550
2600
2650
2700
2750
2800
2850
ROP (min/ft)
Gamma (API)
5
0
150
0
ROP (min/ft)
Gamma (API)
5
0
150
0


2900
2950
3000
3050
3100
3150
WT 8.8
VIS 50
WOB 38
RPM 80
PP 850
0 ROP (min/ft) 5
0 Gamma (API) 150
WT 8.8
VIS 52
WOB 30
HOWARD 2880' -939'
START 24 HOUR MANNED UNIT 1/24/13
LS- LT TN TO DK TN, HD DNS TO BRIT IP, F TO MD XLN RE-XLN MTRX, S-SUCRO IP, SLI TR IMBD FOSS FRG IP, NO VIS FLO, NO VIS POR, NO VIS SHOW
SEVERY 2922 -981
SH- GRN BRW LT GY TO GY, FRM BLKY TO SFT GMMY, SMTH TXT
TOPEKA 2934' -993'
LS- LT TN TO DK TN, HD DNS TO BRIT IP, F XLN TO MD XLN RE-XLN MTRX, S-CHLKY, ABDT IMBD FOSS FRG THRU, SFT WHT CHLK IN TRAY, SLI TR IMBD CALC XLS IP, NO VIS FLO, NO VIS POR, NO VIS SHOW
LS- LT GY TO TN, HD DNS TO BRIT IP, F XLN MTRX, S-SUCRO, SLI TR IMBD FOSS FRG IP, SLI TR IMBD CALC XLS IP, NO VIS FLO, NO VIS POR, NO VIS SHOW
LS- GY TO TN MOTTLD IP, HD DNS TO BRIT IP, F XLN RE-XLN MTRX, S-SUCRO IP, ABDT IMBD FOSS FRG IP, NO VIS FLO, NO VIS POR, NO VIS SHOW
LS-LT TN TO TN, HD DNS TO BRIT, F XLN RE-XLN MTRX, S-SUCRO IP, IMBD FOSS FRG THRU, SLI TR IMBD CALC XLS IP, SLI TR PYR IN TRAY, NO VIS FLO, NO VIS POR, NO VIS SHOW
LS- LT TN TO TN, HD DNS TO BRIT IP, F XLN RE-XLN MTRX, S-SUCRO IP, IMBD FOSS FRG IP, SLI TR TN CHRT IN TRAY, NO VIS FLO, NO VIS POR, NO VIS SHOW
LS- OFF WHT TO TN, HD DNS TO BRIT, F XLN SUCRO MTRX, S-CHLKY IP, ABDT IMBD FOSS FRG IP, SLI TR PYR IN TRAY, SLI TR SFT WHT CHLK IN TRAY, NO VIS FLO, NO VIS POR, NO VIS SHOW
LE COMPTON 3036' -1095'
LS- CRM TO LT TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, TR IMBD FOSS FRG IP, TR IMBD CALC XLS IP, NO VIS FLO, NO VIS POR, NO VIS SHOW
LS- OFF WHT TO TN, HD DNS TO BRIT IP, V/F TO FN XLN RE-XLN MTRX, S-SUCRO, ABDT IMBD FOSS FRG IP, NO VIS FLO, NO VIS POR, NO VIS SHOW
SH- GY TO DK GY, FRM BLKY, SMTH TXT
LS- CRM TO TN, HD DNS TO BRIT, V/F TO F XLN SUCRO MTRX, S-CHLKY IP, SLI TR IMBD FOSS FRG IP, SLI TR IMBD CALC XLS IP, SLI TR SFT WHT CHLK IN TRAY, NO VIS FLO, NO VIS POR, NO VIS SHOW
LS- CRM TO DK TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, SCAT IMBD FOSS FRG THRU, SLI TR DISS PYR IP, SLI TR GLAUC OR KOAL IP, NO VIS FLO, NO VIS POR, NO VIS SHOW
3112'-3114' LS- LT TN TO TN W/ TN OIL STN IN 20%, HD DNS TO BRIT IP, F XLN SUCRO MTRX, SCAT IMBD FOSS FRG IP, BRT YEL GLD FLO IN 40%, PR TO FR INTR FOSS POR IN 3%, FR TO GD VUG POR IN 1%, GD FLSH CUT IN 40%, FR TO GD SLW STRM IN 40%, NO LCH ON DISH, NO OIL ODOR
LS- LT TN TO DK TN, HD DNS TO BRIT IP, V/F TO F XLN RE-XLN MTRX, S-SUCRO, SCAT IMBD FOSS FRG THRU, NO VIS FLO, NO VIS POR, NO VIS SHOW
LS- LT TN TO TN, HD DNS TO BRIT, V/F TO F XLN RE-XLN MTRX S-SUCRO SCAT IMBD FOSS FRG THRU, NO VIS FLO, PR MICRO VUG POR IN 2%, NO VIS SHOW
HEEBNER 3156' -1215'
SH- BLCK, SFT, CARB
SH- GRN LT GY TO GY, FRM BLKY TO SFT GMMY, SMTH TXT
LS- OFF WHT TO LT TN, HD DNS TO BRIT, F XLN SUCRO MTRX, SLI TR SCAT IMBD FOSS FRG IP, NO VIS FLO, NO VIS POR, NO VIS SHOW
DOUGLAS 3187' -1246'
C1
C2
10 U. BG
CN
8 U. BG
15 U. BG
14 U. BG
17 U. BG
TG, C1-C5
1 10 100 1000
22 U . BG
19 U. BG
23 U. BG
C2 C1
30 U. INC
27 U. BG
30 U. BG
28 U. BG
50 U. SH INC
C3
36 U. BG
40 U. BG

RPM 80
PP 800

0 ROP (min/ft) 5
0 Gamma (API) 150

CFS@3214'

DST#1
3240'-3310'
WT 8.9
VIS 51

WOB 30
RPM 80
PP 800

CFS@3260'

CFS@3292'
WT 8.9
VIS 54

WOB 30
RPM 80
PP 800

CFS@ 3310'

DST#2
3370'-3395'
WT 8.9
VIS 54

WOB 30
RPM 80
PP 800

CFS@3395'

0 ROP (min/ft) 5
0 Gamma (API) 150

WT 8.9
VIS 60

WOB 30
RPM 80
PP 800

CFS@3456'

CFS@3468'

3200
3250
3300
3350
3400
3450
3500

SH- GRN TO GY, FRM BLKY, SMTH TO SLTY TXT

LANSING 3204' -1263'

LS- CRM TO LT TN, HD DNS, V/F TO F XLN SUCRO MTRX, SLI TR IMBD FOSS FRG IP, NO VIS FLO, NO VIS POR, NO VIS SHOW

LANSING "C" 3227' -1286'

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

3251'-3253' LS- OFF WHT TO CRM W/ TN OIL STN IN 45%, HD DNST TO BRIT, V/F TO F XLN SUCRO MTRX, ABDT IMBD OOL THRU, SLI TR IMBD FOSS FRG IP, DUL YEL GLD FLO IN 50%, FR INTR OOL POR IN 7%, GD FLSH CUT IN 60%, GD MLKY BLU SLW STRM IN 60%, TN LCH ON DISH, NO OIL ODOR

LANSING "F" 3275' -1334'

3275'-3277' LS- CRM TO LT TN W/ LT TN TO TN OIL STN IN 60%, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, ABDT IMBD OOL THRU, DUL YEL GLD FLO IN 30%, BRT YEL GLD FLO IN 30%, FR TO GD INTR OOL POR IN 10%, GD FLSH CUT IN 60%, GD SLW STRM CUT IN 60%, TN LCH ON DISH, WK OIL ODOR

3290'-3292' LS- CRM TO LT TN W/ TN OIL STN IN 30%, LOS IN 1%, HD DNS, V/F TO F XLN SUCRO MTRX, ABDT IMBD OOL THRU, DUL YEL GLD FLO IN 35%, PR TO FR INTR OOL POR IN 5%, FR FLSH CUT IN 30%, FR TO GD SLW STRM IN 30%, V/LT TN LCH ON DISH, NO OIL ODOR

3299'-3301' LS- WHT TO LT TN W/ TN OIL STN IN 30%, HD DNS TO BRIT, V/F TO F XLN SUCRO MTRX, S-CHLKY IP, IMBD OOL IP, DUL YEL GLD FLO IN 30%, FR INTR OOL POR IN 5%, FR TO GD VUG POR IN 3%, PR TO FR FLSH CUT IN 35%, FR TO GD SLW STRM IN 40%, LT TN LCH ON DISH, FR OIL ODOR

LS- CRM TO LT TN, HD DNS TO BRIT IP, F XLN SUCRO MTRX, S-CHLKY, TR SCAT IMBD FOSS FRG IP, NO VIS FLO, NO VIS POR, NO VIS SHOW

SH- GRN BRW LT GY TO GY, FRM BLKY, SMTH TXT

LANSING "H" 3343'-1402'

3347'-3348' LS- CRM TO TN W/ TN OIL STN IN 20%, HD DNS, V/F TO F XLN SUCRO MTRX, SCAT IMBD OOL THRU, SLI TR OOLMLD IP, DUL YEL GLD FLO IN 20%, FR OOLMLD POR IN 3%, FR VUG POR IN 20%, FR FLSH CUT IN 20%, FR SLW STRM IN 25%, LT TN LCH ON DISH, NO OIL ODOR

LS CRM TO LT TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, SLI TR IMBD CALC XLS IP, NO VIS FLO, NO VIS POR, NO VIS SHOW

3381'-3383' LS- CRM TO LT TN W/ TN OIL STN IN 60%, HD DNS TO BRIT, F XLN SUCRO MTRX, S-CHLKY IP, IMBD OOL THRU, SLI TR OOLMLD IP, DUL YEL GLD FLO IN 50%, FR TO GD OOLMLD POR IN 5%, FR TO GD VUG POR IN 3%, PR TO FR INTR OOL POR IN 2%, FR FLSH CUT IN 60%, FR TO GD SLW STRM IN 60%, LT TN LCH ON DISH, FR OIL ODOR

LS- OFF WHT TO LT TN, HD DNS TO BRIT IP, F XLN SUCRO MTRX, SCAT IMBD CALC XLS IP, NO VIS FLO, NO VIS POR, NO VIS SHOW

SH- GRN BRWN TO GY, FRM BLKY, SMTH TXT

LS- OFF WHT TO LT TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, S-CHLKY IP, ABDT IMBD OOL IP, SLI TR SFT WHT CHLK IN TRAY, NO VIS FLO, NO VIS POR, NO VIS SHOW

LS- OFF WHT TO TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, RE-XLN IP, IMBD OOL IP, TR IMBD CALC XLS IP, NO VIS FLO, NO VIS POR, NO VIS SHOW

LS- CRM TO LT TN, HD DNS TO V/ BRIT, F XLN CHLKY MTRX, S-SUCRO, IMBD OOL IP, SFT WHT CHLK IN TRAY, NO VIS FLO, NO VIS POR, NO VIS SHOW

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

BKC 3449' -1508'

ARBUCKLE 3454' -1513'

3454'-3456' DOLO- LT TN TO TN, HD DNS TO BRIT IP, V/F TO F XLN RE-XLN MTRX, ABDT IMBD SM TO MD S-ANG TO ANG DOLO GRNS THRU, SLI TR QRTZ XLS IN TRAY, NO VIS FLO, V/PR INTR GRN POR IN 5%, NO FLSH CUT, V/PR TO PR SLW STRM IN 5%, NO LCH ON DISH, NO OIL ODOR

3463'-3465' DOLO- CRM TO LT TN W/ TN OIL STN IN 75%, HD DNS TO BRIT IP, F XLN SUCRO MTRX, ABDT IMBD SM TO MD S-ANG TO S-RND DOLO GRNS THRU, BRT YEL GLD FLO IN 50%, DUL YEL GLD FLO IN 25%, TT TO PR INTR GRN POR IN 5%, NO FLSH CUT, V/PR TO PR SLW STRM IN 75%, V/ LT TN LCH ON DISH, NO OIL ODOR

3475'-3476' DOLO- CRM TO LT TN, W/ TN OIL STN IN 70%, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, ABDT IMBD SM TO MD S-ANG TO S-RND DOLO GRNS THRU, BRT YEL GLD FLO IN 70%, TT TO PR INTR GRN POR IN 5%, NO FLSH CUT, V/PR TO PR SLW STRM IN 70%, NO LCH ON DISH, NO OIL ODOR

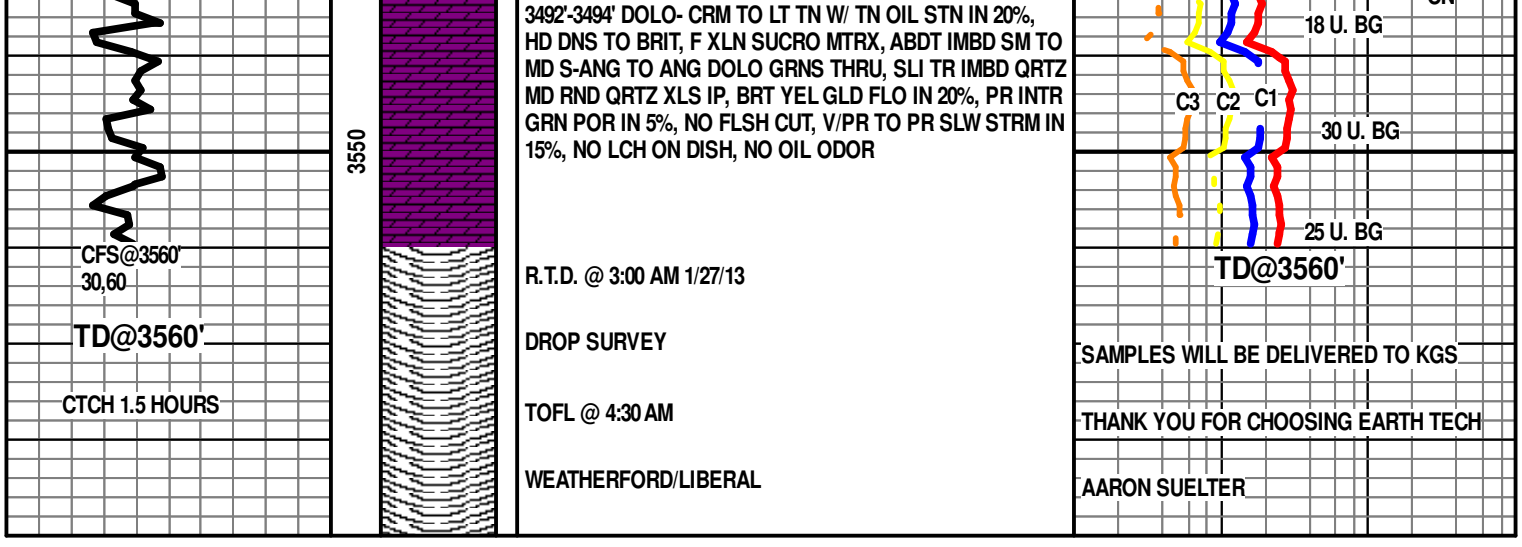
3484'-3486' DOLO- CRM TO LT TN W/ TN OIL STN IN 80%, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, ABDT IMBD SM TO MD S-ANG TO ANG DOLO GRNS THRU, BRT YEL GLD FLO IN 80%, PR INT GRN POR IN 7%, NO FLSH CUT, V/PR TO PR SLW STRM IN 75%, NO LCH ON DISH, NO OIL ODOR

TG C1-C5
1 10 1000

40 U. BG
CN
33 U. BG
C3 C2 C1
CN
43 U. INC
35 U. BG
CN
51 U. INC
C5
67 U. SHOW
CN
25. U BG
30 U. BG
CN
22 U. BG
40 U. INC
CN
C3 C2
C5 C1
C4
99 U. SHOW
30 U. BG

TG C1-C5
1 10 100 1000

CN
20 U. BG
22 U. BG
CN
20 U. BG
22 U. BG
CN
23 U. BG
CN
30 U. INC
22 U. BG
CN


3550
CFS@3560'
30,60
TD@3560'
CTCH 1.5 HOURS
3492'-3494' DOLO- CRM TO LT TN W/ TN OIL STN IN 20%, HD DNS TO BRIT, F XLN SUCRO MTRX, ABDT IMBD SM TO MD S-ANG TO ANG DOLO GRNS THRU, SLI TR IMBD QRTZ MD RND QRTZ XLS IP, BRT YEL GLD FLO IN 20%, PR INTR GRN POR IN 5%, NO FLSH CUT, V/PR TO PR SLW STRM IN 15%, NO LCH ON DISH, NO OIL ODOR
R.T.D. @ 3:00 AM 1/27/13
DROP SURVEY
TOFL @ 4:30 AM
WEATHERFORD/LIBERAL
18 U. BG
C3
C2
C1
30 U. BG
25 U. BG
TD@3560'
SAMPLES WILL BE DELIVERED TO KGS
THANK YOU FOR CHOOSING EARTH TECH
AARON SUELTER

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

Kansas
Corporation Commission

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

May 13, 2013

CHRISTOPHER MITCHELL
Samuel Gary Jr. & Associates, Inc.
1515 WYNKOOP, STE 700
DENVER, CO 80202

Re: ACO1
API 15-051-26463-00-00
BRUNGARDT ET AL 1-30
SW/4 Sec.30-14S-16W
Ellis 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,
CHRISTOPHER MITCHELL