Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1153807

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 # 5822
Name: Val Energy, Inc.
Wellsite Geologist: TIM HEDRICK
Purchaser: SAMUEL GARY JR. & ASSOCIATES, INC.

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 #:

4/12/2013	4/19/2013	4/20/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-051-26509-00-00
Spot Description:
NW SE SW SE Sec. 31 Twp. 14 S. R. 16 ☐ East ☑ West
520 Feet from ☐ North / ☑ South Line of Section
1865 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: PFEIFER Well #: 1-31
Field Name:
Producing Formation: LANSING
Elevation: Ground: 1919 Kelly Bushing: 1929
Total Vertical Depth: 3590 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 853 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: 62000 ppm Fluid volume: 240 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: 08/01/2013
☑ **Confidential Release Date:** 08/01/2015
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 08/02/2013

1153807

Operator Name: Samuel Gary Jr. & Associates, Inc. Lease Name: PFEIFER Well #: 1-31

Sec. 31 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	2924	-995
HEEBNER	3142	-1213
LANSING	3191	-1262
ARBUCKLE	3486	-1557
TD	3590	

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	853	COMMON CLASS A	350	2% GEL, 3% CC
PRODUCTION	7.875	5.5	15.5	3578	Q-PRO-C	180	10% SALT, 5% GILSONITE

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
Attached	Attached	Attached	Attached

TUBING RECORD: Size: 2.875 Set At: 3518 Packer At: Liner Run: ☐ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. 5/13/2013

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	130		24		

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:
3192-3399 OA

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	PFEIFER 1-31
Doc ID	1153807

All Electric Logs Run

DEN-NEUT
INDUCTION
MICRO
SONIC
SPECTRAL GR

Form	ACO1 - Well Completion
Operator	Samuel Gary Jr. & Associates, Inc.
Well Name	PFEIFER 1-31
Doc ID	1153807

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	3192-3194	250 GAL 28% MCA W/ 3% MAS	3192-3194
4	3214-3219	250 GAL 28% MCA W/ 3% MAS	3214-3219
4	3268-3274	500 GAL 28% MCA W/ 3% MAS	3268-3274
4	3278-3290	500 GAL 28% MCA W/ 3% MAS	3278-3290
4	3328-3335	500 GAL 28% MCA W/ 3% MAS	3328-3335
4	3353-3358	500 GAL 28% MCA W/ 3% MAS	3353-3358
4	3376-3380	500 GAL 28% MCA W/ 3% MAS	3376-3380
4	3385-3399	500 GAL 28% MCA W/ 3% MAS	3385-3399

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/

August 01, 2013

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

Re: ACO1
API 15-051-26509-00-00
PFEIFER 1-31
SE/4 Sec.31-14S-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

Date: 4/17/2013
Invoice # 6607

P.O.#:

Due Date: 5/17/2013
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@ruraltel.net

Invoice

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

RECEIVED
APR 23 2013
SAMUEL GARY JR. & ASSOCIATES, INC.

☑ DRLG ☐ COMP ☐ W/O ☐ LOE ☐ GG

Account	8200.138
Well/Prospect	
Deck	
AFE	
Approval	
Description	

Reference:
PFIEFER 1-31

Description of Work:
LONG SURFACE JOB

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
Pump Truck Mileage-Job to Nearest Camp	15	$	162.53	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
Bulk Truck Mileage-Job to Nearest Bulk Plant	15	$	95.11	No

Item	Quantity	Price	Taxable

Invoice Terms:
Net 30

SubTotal:	$	*9,064.59*
Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice:	$	(1,359.69)
SubTotal for Taxable Items:	$	5,960.31
SubTotal for Non-Taxable Items:	$	1,744.59
Total:	$	7,704.90
6.30% Ellis County Sales Tax Tax:	$	375.50
Amount Due:	**$**	**8,080.40**
Applied Payments:		
Balance Due:	**$**	**8,080.40**

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. 6607

Date	Sec.	Twp.	Range	County	State	On Location	Finish
4-13-13	31	14	16	Ellis	Ks		1:15 pm

Location Victoria, Ks - S to Antonino Rd, 3/4 E

Lease Pfeifer Well No. 1-31

Owner O'Brien

Contractor Val #6

Type Job Surface

To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Hole Size 12 1/4" T.D. 853'

Charge To Sam Gary Jr & Associates

Csg. 8 5/8" Depth 853'

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. 40.68' Shoe Joint 40.68'

Cement Amount Ordered 350 sx Common 3% CC 2% Gel

Meas Line Displace 51 3/4 BLS

EQUIPMENT

Pumptrk 15 No. Cementer Helper Nick

Bulktrk 4 No. Driver Driver Lonnie W.

~~Bulktrk~~ PU, No. Driver Driver Rick

JOB SERVICES & REMARKS

Remarks: Cement did Circulate

Rat Hole

Mouse Hole

Centralizers 1, 13, 19

Baskets 2, 13, 19

D/V or Port Collar

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

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	3
Baskets	3
AFU Inserts	
Float Shoe	
Latch Down	
	1 - Baffle plate
	1 - Rubber plug
Pumptrk Charge	Long Surface
Mileage	15
Tax	
Discount	
Total Charge	

X Signature

Date: 4/22/2013
Invoice # 6766

P.O.#:

Due Date: 5/22/2013
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@ruralTel.net

Invoice

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

RECEIVED
APR 26 2013
SAMUEL GARY JR. & ASSOCIATES, INC.

☐ DRLG ☑ COMP ☐ W/O ☐ LOE ☐ GG

Account	8300.238
Well/Prospect	
Lease	
AFE	
Approval	
Description	

Reference:
PFIEFER 1-31

Description of Work:
PROD LONG STRING

Services / Items Included:

	Quantity	Price	Taxable
Labor		$ 963.85	No
Common-Class A	225	$ 2,978.25	Yes
Gilsonite	1057	$ 1,673.58	Yes
CFL 117	176	$ 1,144.39	Yes
5 1/2" Basket	3	$ 1,089.33	Yes
Bulk Truck Matl-Material Service Charge	254	$ 536.22	No
CD-110	117	$ 494.00	Yes
5 1/2" Turbolizer	8	$ 489.78	Yes
Mud Clear	500	$ 390.56	Yes
Defoamer A or CAF-38	50	$ 369.44	Yes
Auto Fill Float Shoe, 5 1/2"	1	$ 323.00	Yes

Item	Quantity	Price	Taxable
Salt (Fine)	19	$279.98	Yes
Latch Down Plug & Baffle, 5 1/2"	1	$236.44	Yes
Pump Truck Mileage-Job to Nearest Camp	15	$158.02	No
Flo Seal	56	$118.22	Yes
Bulk Truck Mileage-Job to Nearest Bulk Plant	15	$92.47	No
KCL	2	$63.04	Yes

Invoice Terms:
Net 30

SubTotal:	$	*11,400.57*
Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice:	$	(1,710.09)
SubTotal for Taxable Items:	$	8,202.51
SubTotal for Non-Taxable Items:	$	1,487.97
Total:	$	9,690.48
6.30% Ellis County Sales Tax Tax:	$	516.76
Amount Due:	**$**	**10,207.24**
Applied Payments:		
Balance Due:	**$**	**10,207.24**

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

No. 6766

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

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

Date	Sec.	Twp.	Range	County	State	On Location	Finish
4-20-20	31	14	16	ELLIS	KANSAS		7:15PM

Location VICTORIA-STO ANTONIO Rd.-1½E-W/INTO

Lease PFIEFER Well No. #1-31

Owner SAM GARY JR.

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.

Contractor VAL #16

Type Job PROD-STRING

Charge To SAM GARY JR.

Hole Size 7 7/8 T.D. 3,590'

Csg. 5½" 15.5LB-NEW Depth 3578.20'

Street 1515 WYNKOOP, STE 700

Tbg. Size Depth

City DENVER State CO, 80202

Tool Depth

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

Cement Amount Ordered ~~235~~ 225 Q-Pro C 10% salt 5% gilsonite ¼ Flow .3% CD-110 .18% CFL-117 .25% CAF-38

Cement Left in Csg. Shoe Joint 40.23

Meas Line Displace 86 BBLS

EQUIPMENT

Pumptrk #5	No.	Cementer Helper	BRETT P.
Bulktrk #14	No.	Driver Driver	HEATH F.
Bulktrk P/U	No.	Driver Driver	CISCO A.

JOB SERVICES & REMARKS

Remarks:

Rat Hole 30 SKS

Mouse Hole 15 SKS

Centralizers

Baskets

D/V or Port Collar

DROPPED BALL-ESTABLISHED CIRCULATION CIRCULATED ON BOTTOM 1 HR-PUMPED 500 GAL. OF MUD-CLR 48-PLUGGED RATHOLE 30 SKS-PLUGGED MOUSEHOLE 15 SKS-[redacted] MIXED & PUMPED 180 SKS DOWN 5½"-DROPPED PLUG & WASHED PUMP-DISPLACE PLUG 20 BBLS OF K.C.L. AHEAD: PLUG LANDED & HELD!

LIFT PRESSURE 800 LBS

PLUG LANDED @ 84 BBLS 1400 LBS.

THANK YOU!

X Signature

Common 225

Poz. Mix

~~Gel.~~ KCL 2 gal

~~Calcium~~ CD 110 117#

Hulls

Salt 19

Flowseal 56#

Kol-Seal 1057#

Mud CLR 48 500 GAL.

CFL-~~117~~ or CD110 CAF 38 58#

Sand 176#

Handling 254

Mileage

FLOAT EQUIPMENT

Guide Shoe

Centralizer 8-5½" TUBOS

Baskets 3-5½" WEATHERFORDS

AFU Inserts

Float Shoe 1-5½" W/BALL

Latch Down 1-5½" W/PLUG

KCL

Pumptrk Charge Prod Long String

Mileage 15

Tax

Discount

Total Charge

DRILL STEM TEST REPORT

Samuel Gary Jr.& Associates

1515 Wynkoop Suite 700
Denver, CO. 80202

ATTN: Chris Mitchell

31-14s-16w-Ellis

Pfeifer #1-31

Job Ticket: 52223 **DST#: 1**

Test Start: 2013.04.17 @ 03:08:41

GENERAL INFORMATION:

Formation: **A-B-C**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 06:04:56
Time Test Ended: 12:21:26

Test Type: Conventional Bottom Hole (Initial)
Tester: Jason McLemore
Unit No: 54

Interval: 3170.00 ft (KB) To 3245.00 ft (KB) (TVD)
Total Depth: 3245.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

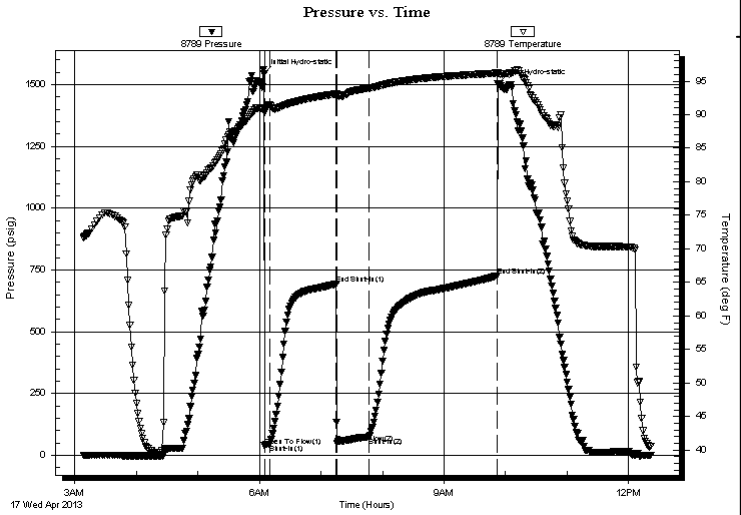
Reference Elevations: 1930.00 ft (KB)
1922.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8789 **Inside**

Press@RunDepth: 74.46 psig @ 3238.00 ft (KB)
Start Date: 2013.04.17 End Date: 2013.04.17
Start Time: 03:08:43 End Time: 12:21:26

Capacity: 8000.00 psig
Last Calib.: 2013.04.17
Time On Btm: 2013.04.17 @ 06:04:41
Time Off Btm: 2013.04.17 @ 09:52:26

TEST COMMENT: IFP-Good Blow , Built to 5-1/2"
ISI-Dead
FFP-Strong, BOB on Open
FSI-Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1544.71	90.93	Initial Hydro-static
1	38.10	90.38	Open To Flow (1)
6	44.70	91.53	Shut-In(1)
71	693.59	93.09	End Shut-In(1)
71	48.30	92.90	Open To Flow (2)
103	74.46	93.93	Shut-In(2)
227	726.77	96.18	End Shut-In(2)
228	1502.31	96.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
110.00	GOCM-20%G-25%O-55%M	1.54
0.00	795' Gas In Pipe	0.00

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr.& Associates

1515 Wynkoop Suite 700
Denver, CO. 80202

ATTN: Chris Mitchell

31-14s-16w-Ellis

Pfeifer #1-31

Job Ticket: 52223 **DST#: 1**

Test Start: 2013.04.17 @ 03:08:41

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:	51.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	5500.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
110.00	GOCM-20%G-25%O-55%M	1.543
0.00	795' Gas In Pipe	0.000

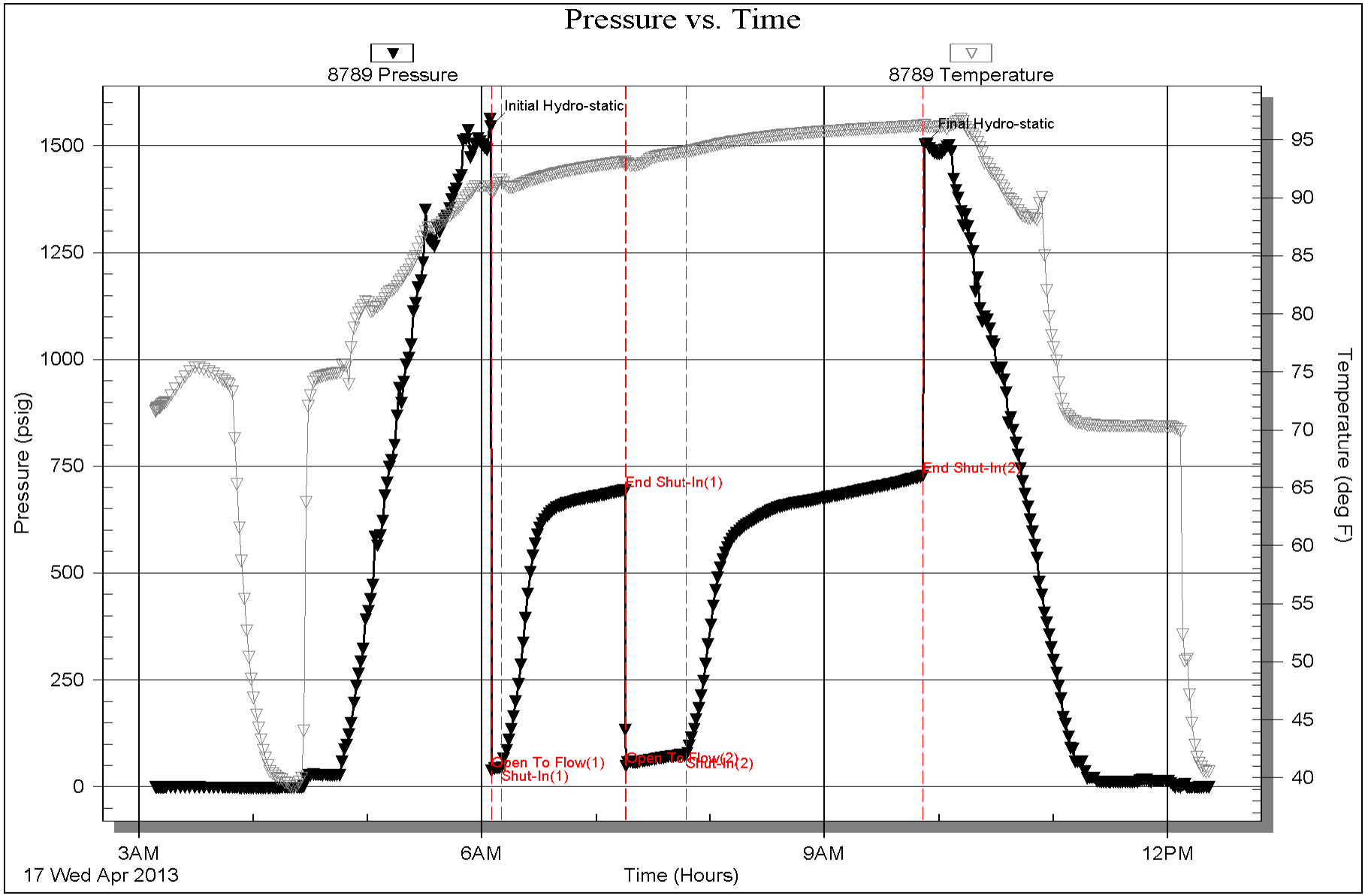
Total Length: 110.00 ft Total Volume: 1.543 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Sampler-650#, 1000ml Oil,500ml Mud, 2500ml Gas

Serial #: 8789 **Inside** Samuel Gary Jr.& Associates Pfeifer #1-31 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 52223 Printed: 2013.04.17 @ 13:29:13

DRILL STEM TEST REPORT

Samuel Gary Jr.& Associates

1515 Wynkoop
Suite 700
Denver, CO. 80202
ATTN: Chris Mitchell

31-14s-16w-Ellis

Pfeifer #1-31

Job Ticket: 52224 **DST#: 2**

Test Start: 2013.04.17 @ 19:28:45

GENERAL INFORMATION:

Formation: **D-G**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 21:43:30
Time Test Ended: 04:18:15

Test Type: Conventional Bottom Hole (Reset)
Tester: Jason McLemore
Unit No: 54

Interval: 3243.00 ft (KB) To 3278.00 ft (KB) (TVD)
Total Depth: 3278.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

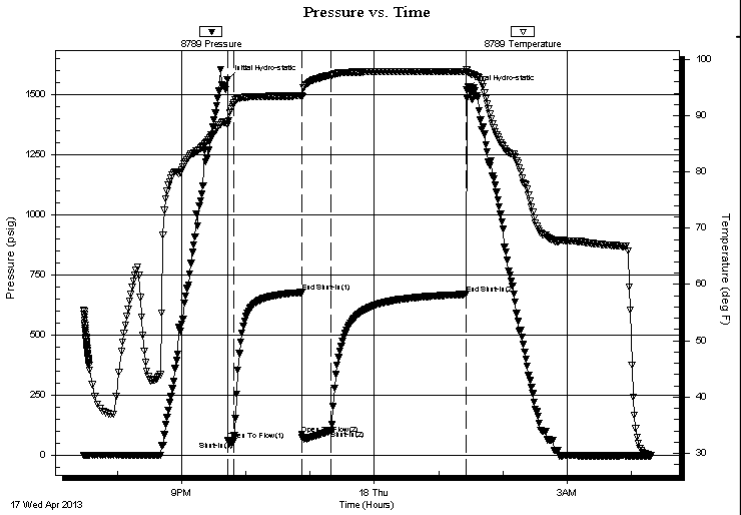
Reference Elevations: 1930.00 ft (KB)
1922.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8789 **Inside**

Press@RunDepth: 101.80 psig @ 3245.00 ft (KB)
Start Date: 2013.04.17 End Date: 2013.04.18
Start Time: 19:28:47 End Time: 04:18:15

Capacity: 8000.00 psig
Last Calib.: 2013.04.18
Time On Btm: 2013.04.17 @ 21:43:00
Time Off Btm: 2013.04.18 @ 01:26:00

TEST COMMENT: IFP-Good Blow , BOB in 2 Min.
ISI-Dead
FFP-Strong,BOB in 1 Min.
FGSI-Blow back BOB in 15 Min.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1561.87	89.00	Initial Hydro-static
1	60.96	88.37	Open To Flow (1)
6	57.58	92.00	Shut-In(1)
69	677.04	93.53	End Shut-In(1)
70	86.05	93.31	Open To Flow (2)
97	101.80	97.17	Shut-In(2)
223	669.03	97.79	End Shut-In(2)
223	1518.19	98.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	Frothy Oil-50%G-50%O	2.52
30.00	Muddy Water-90%W-10%M	0.42
0.00	930' Gas In Pipe	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary Jr.& Associates

1515 Wynkoop
Suite 700
Denver, CO. 80202
ATTN: Chris Mitchell

31-14s-16w-Ellis

Pfeifer #1-31

Job Ticket: 52224 **DST#: 2**

Test Start: 2013.04.17 @ 19:28:45

GENERAL INFORMATION:

Formation: **D-G**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 21:43:30
Time Test Ended: 04:18:15

Test Type: Conventional Bottom Hole (Reset)
Tester: Jason McLemore
Unit No: 54

Interval: 3243.00 ft (KB) To 3278.00 ft (KB) (TVD)
Total Depth: 3278.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

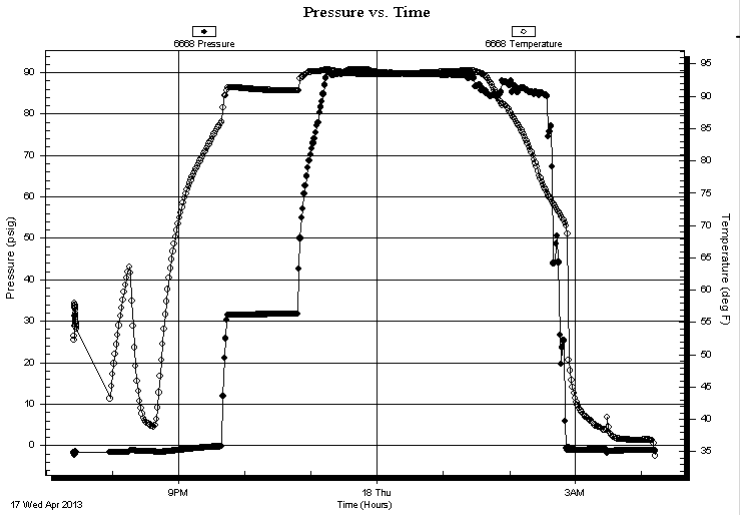
Reference Elevations: 1930.00 ft (KB)
1922.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6668 **Fluid**

Press@RunDepth: psig @ 3207.00 ft (KB)
Start Date: 2013.04.17 End Date: 2013.04.18
Start Time: 19:24:42 End Time: 04:13:00

Capacity: 8000.00 psig
Last Calib.: 2013.04.18
Time On Btm:
Time Off Btm:

TEST COMMENT: IFP-Good Blow , BOB in 2 Min.
ISI-Dead
FFP-Strong,BOB in 1 Min.
FGSI-Blow back BOB in 15 Min.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
180.00	Frothy Oil-50%G-50%O	2.52
30.00	Muddy Water-90%W-10%M	0.42
0.00	930' Gas In Pipe	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

1515 Wynkoop
Suite 700
Denver, CO. 80202

ATTN: Chris Mitchell

31-14s-16w-Ellis

Pfeifer #1-31

Job Ticket: 52224 **DST#: 2**

Test Start: 2013.04.17 @ 19:28:45

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	28 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	75000 ppm
Viscosity:	51.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	5500.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	Frothy Oil-50%G-50%O	2.525
30.00	Muddy Water-90%W-10%M	0.421
0.00	930' Gas In Pipe	0.000

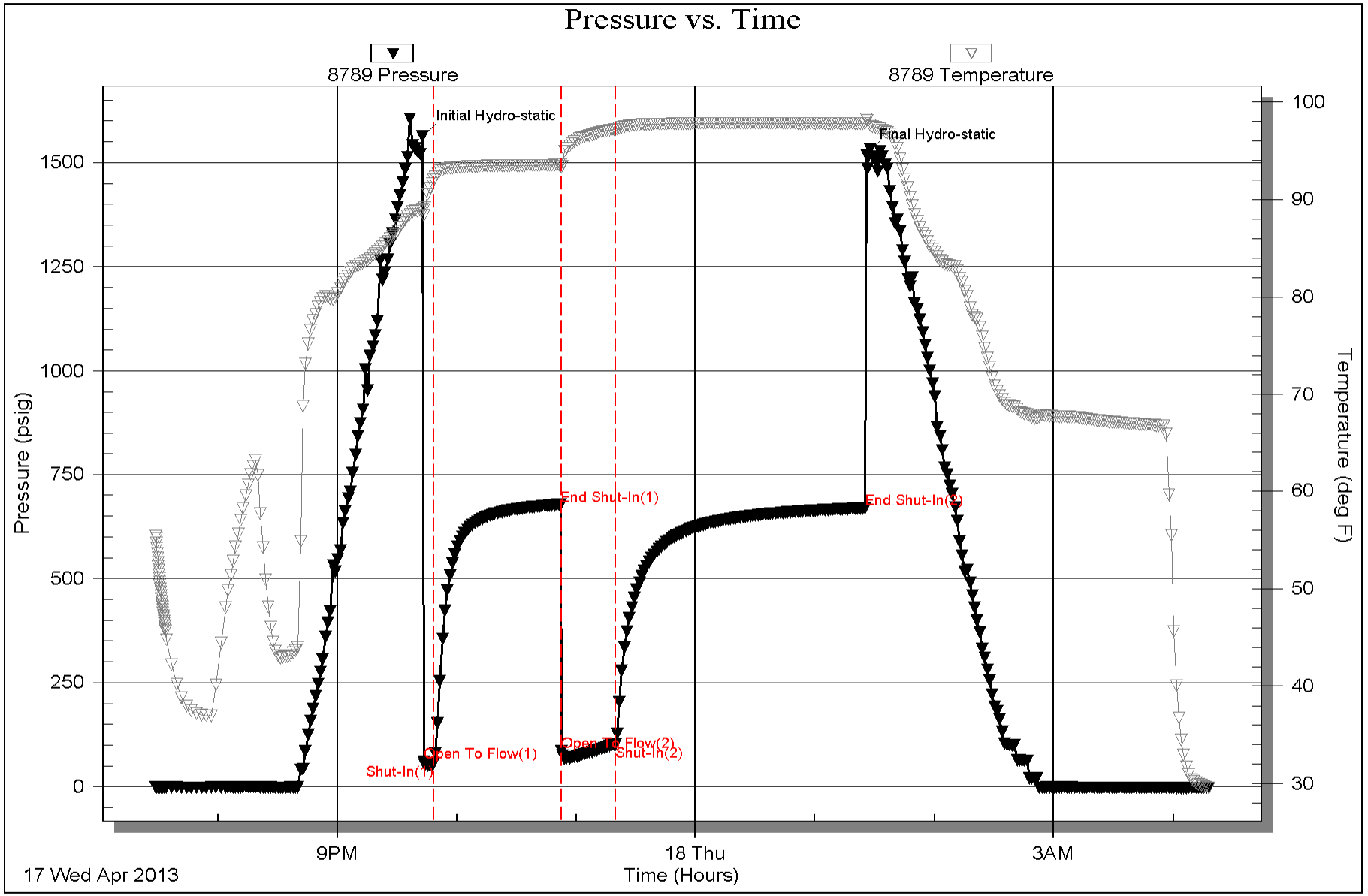
Total Length: 210.00 ft Total Volume: 2.946 bbl

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

Laboratory Name: Laboratory Location:

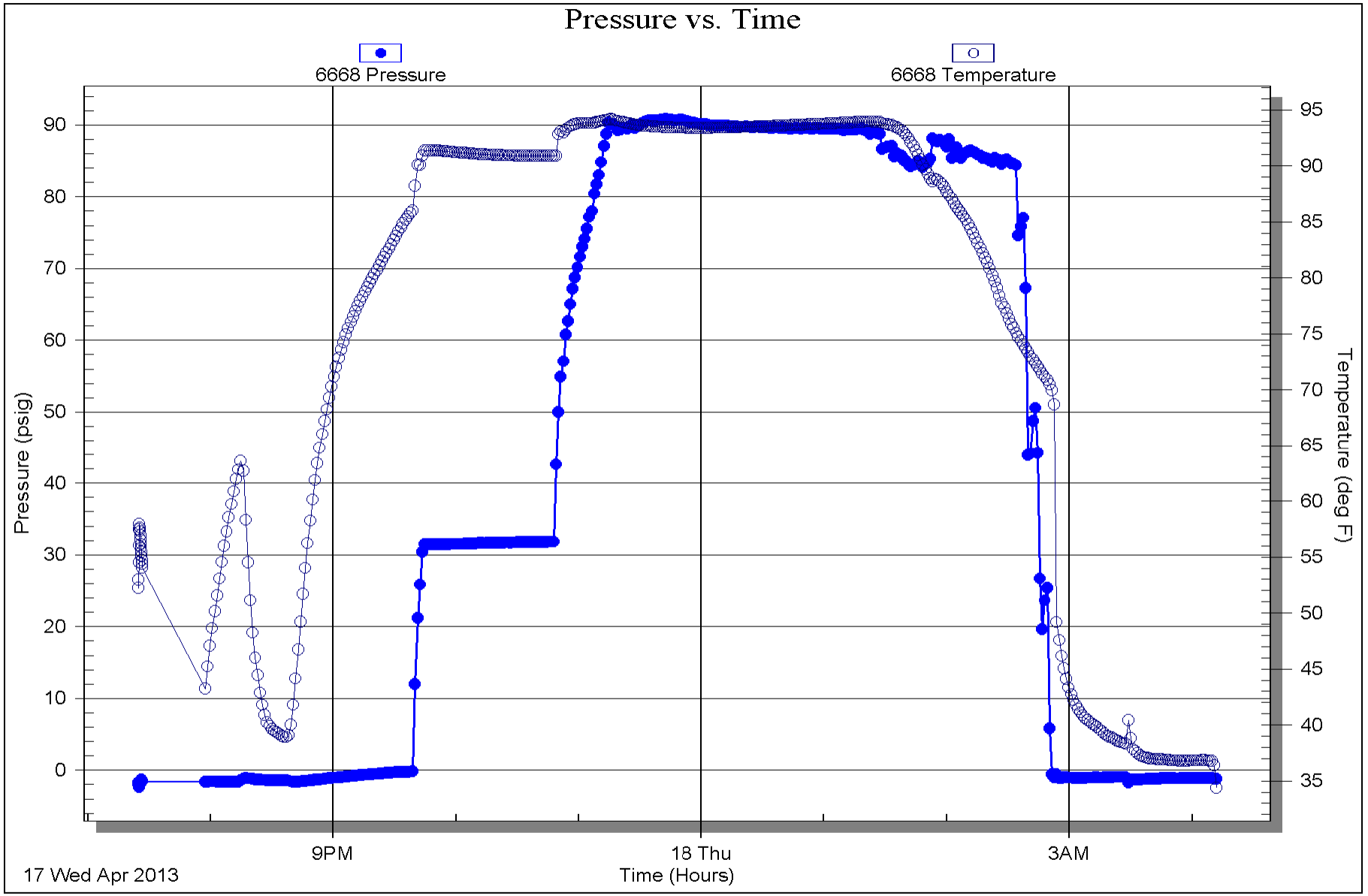
Recovery Comments: Sampler:600#,1500ml Oil-500ml Water

Serial #: 8789 **Inside** Samuel Gary Jr.& Associates Pfeifer #1-31 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 52224 Printed: 2013.04.18 @ 07:51:27

Serial #: 6668 **Fluid** Samuel Gary Jr.& Associates Pfeifer #1-31 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 52224 Printed: 2013.04.18 @ 07:51:27

DRILL STEM TEST REPORT

Samuel Gary Jr.& Associates

1515 Wynkoop
Suite 700
Denver, CO. 80202
ATTN: Chris Mitchell

31-14s-16w-Ellis

Pfeifer #1-31

Job Ticket: 52225 **DST#: 3**

Test Start: 2013.04.18 @ 14:29:41

GENERAL INFORMATION:

Formation: **Middle G-H**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 17:08:26
Time Test Ended: 23:50:56

Test Type: Conventional Bottom Hole (Reset)
Tester: Jason McLemore
Unit No: 54

Interval: 3277.00 ft (KB) To 3343.00 ft (KB) (TVD)
Total Depth: 3343.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

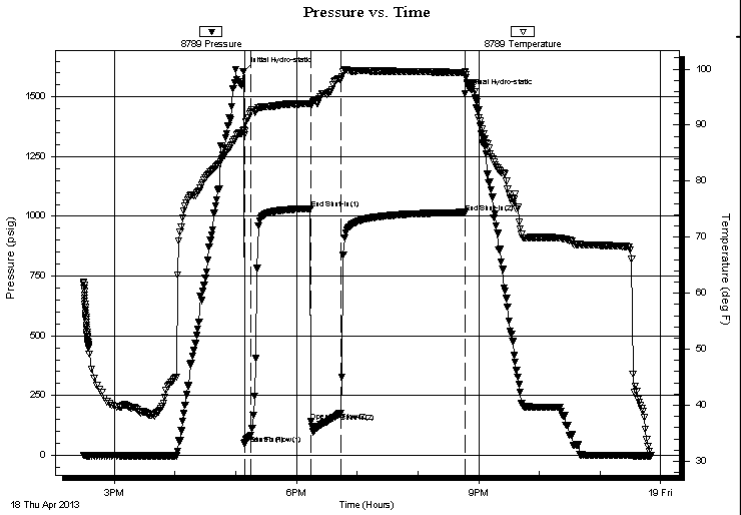
Reference Elevations: 1930.00 ft (KB)
1922.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8789 **Inside**

Press@RunDepth: 176.54 psig @ 3312.00 ft (KB)
Start Date: 2013.04.18 End Date: 2013.04.18
Start Time: 14:29:43 End Time: 23:50:56

Capacity: 8000.00 psig
Last Calib.: 2013.04.18
Time On Btm: 2013.04.18 @ 17:07:56
Time Off Btm: 2013.04.18 @ 20:46:41

TEST COMMENT: IFP-Strong, BOB in 2 Min.
ISI-Dead
FFP-Strong,BOB in 30 Seconds
FSI-Blow back BOB in 25 Min., Gas To Surface on Shut in.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1604.17	89.17	Initial Hydro-static
1	47.76	88.32	Open To Flow (1)
7	82.99	92.30	Shut-In(1)
66	1032.52	93.86	End Shut-In(1)
67	140.74	93.60	Open To Flow (2)
96	176.54	98.21	Shut-In(2)
219	1016.54	99.41	End Shut-In(2)
219	1512.67	99.54	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	Gassy Oil-30%G-70%O	3.37
135.00	GHOCM-40%G-35%O-25%M	1.89

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary Jr.& Associates

1515 Wynkoop
Suite 700
Denver, CO. 80202
ATTN: Chris Mitchell

31-14s-16w-Ellis

Pfeifer #1-31

Job Ticket: 52225 **DST#: 3**

Test Start: 2013.04.18 @ 14:29:41

GENERAL INFORMATION:

Formation: **Middle G-H**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 17:08:26
Time Test Ended: 23:50:56

Test Type: Conventional Bottom Hole (Reset)
Tester: Jason McLemore
Unit No: 54

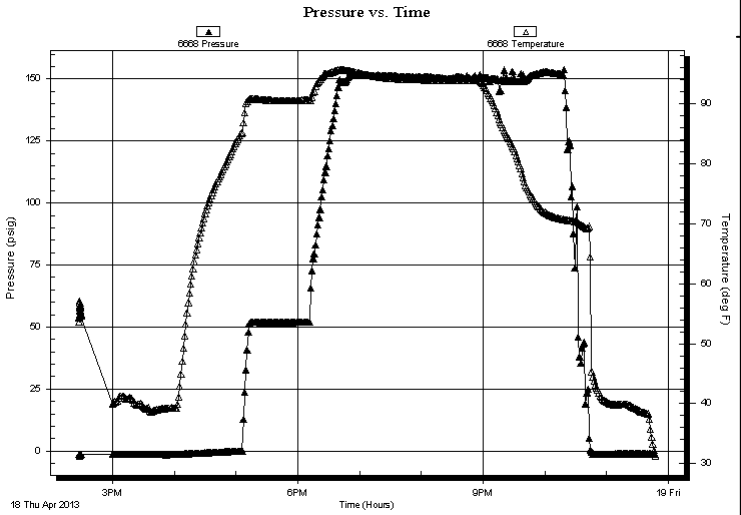
Interval: 3277.00 ft (KB) To 3343.00 ft (KB) (TVD)
Total Depth: 3343.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 1930.00 ft (KB)
1922.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6668 **Fluid**
Press@RunDepth: psig @ 3241.00 ft (KB)
Start Date: 2013.04.18 End Date: 2013.04.18
Start Time: 14:27:14 End Time: 23:48:02

Capacity: 8000.00 psig
Last Calib.: 2013.04.18
Time On Btm:
Time Off Btm:

TEST COMMENT: IFP-Strong, BOB in 2 Min.
ISI-Dead
FFP-Strong,BOB in 30 Seconds
FSI-Blow back BOB in 25 Min., Gas To Surface on Shut in.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
240.00	Gassy Oil-30%G-70%O	3.37
135.00	GHOCM-40%G-35%O-25%M	1.89

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr.& Associates

1515 Wynkoop
Suite 700
Denver, CO. 80202

ATTN: Chris Mitchell

31-14s-16w-Ellis

Pfeifer #1-31

Job Ticket: 52225 **DST#: 3**

Test Start: 2013.04.18 @ 14:29:41

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	31 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	51.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	5500.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
240.00	Gassy Oil-30%G-70%O	3.367
135.00	GHOCM-40%G-35%O-25%M	1.894

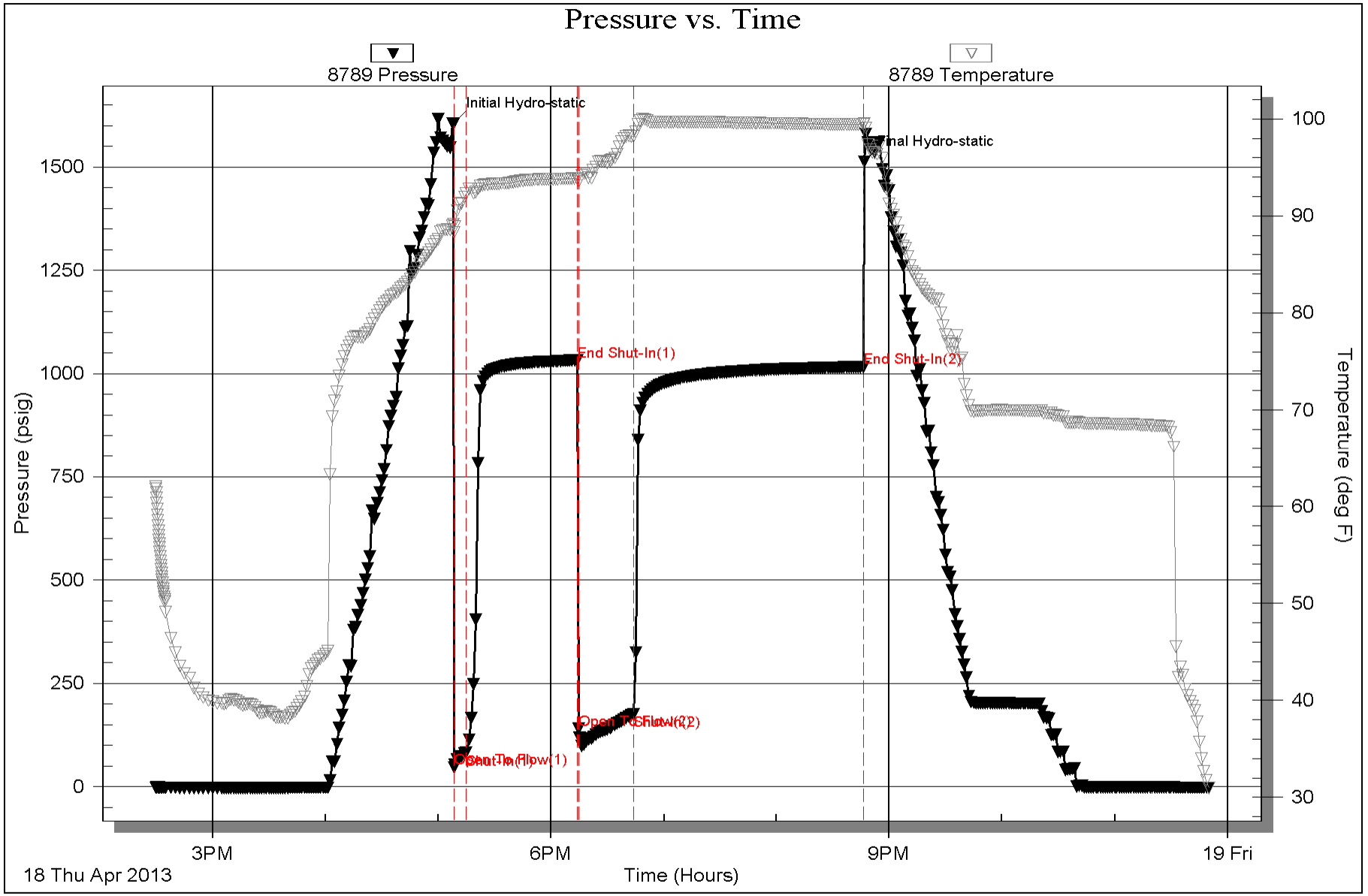
Total Length: 375.00 ft Total Volume: 5.261 bbl

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

Laboratory Name: Laboratory Location:

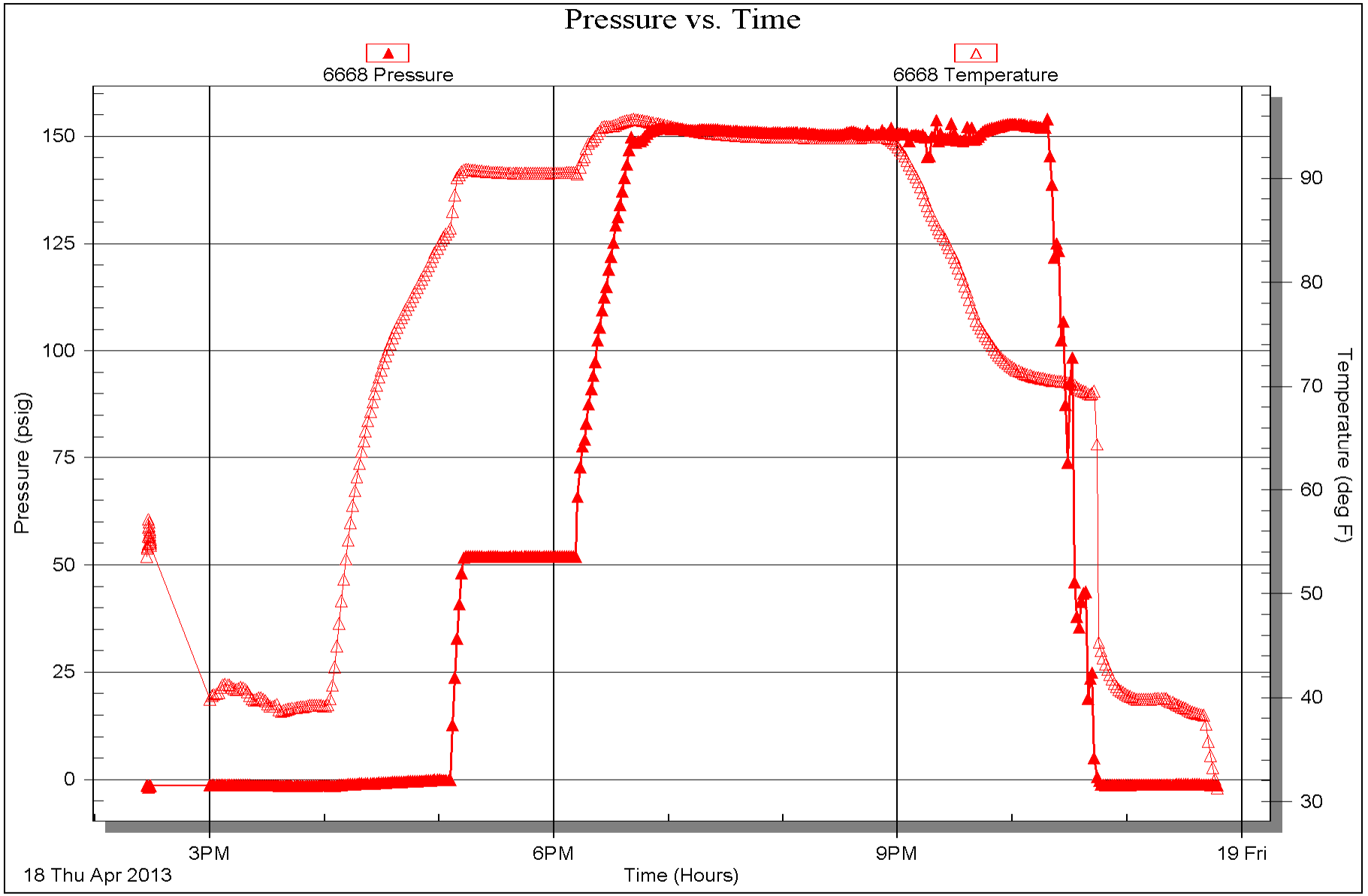
Recovery Comments: Sampler:750#, 2100ml Gas, 900ml Oil

Serial #: 8789 **Inside** Samuel Gary Jr.& Associates Pfeifer #1-31 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 52225 Printed: 2013.04.19 @ 00:27:11

Serial #: 6668 **Fluid** Samuel Gary Jr.& Associates Pfeifer #1-31 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 52225 Printed: 2013.04.19 @ 00:27:11

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

Well Name:	Pfeifer 1-31		
Location:	Sec. 31-14S-16W Ellis County, Kansas		
License Number:	15-051-26509-0000	Region:	WILDCAT
Spud Date:	Apr. 13, 2013	Drilling Completed:	Apr. 19, 2013
Surface Coordinates:	520 FSL/ 1865 FEL		
Bottom Hole Coordinates:			
Ground Elevation (ft):	1919'	K.B. Elevation (ft):	1929'
Logged Interval (ft):	2900' To: 3590'	Total Depth (ft):	3590'
Formation:			
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 3170'-3245' 5 60 40 120
IF- GOOD BLOW, BUILT TO 5 1/2"/ ISI- DEAD/ FF- STRONG BOB ON OPEN/ FSI- DEAD
IH- 1545, FH- 1502/ IF-38 TO 48/ FF- 45 TO 75/ ISI- 694, FSI- 727
RECOVERY- 110' GASSY OCM 20% GAS, 25% OIL, 55% MUD/ 795' GIP
SAMPLER- 1000 ML OIL, 500 ML MUD, 1500 ML TOTAL

DST's Report

DST# 3243'-3278' 5 60 30 120
IF- GOOD BLOW, BOB IN 2 MIN/ ISI- DEAD/ FF- STRONG BOB IN 1 MIN/ FSI- BLOWBACK BOB IN 15 MIN
IH- 1562, FH- 1518/ IF- 61 TO 86/ FF- 58 TO 102/ ISI- 677, FSI- 669
RECOVERY- 180' FROTHY OIL 50% GAS, 50% OIL/ 30' MUDDY WATER 90% WATER, 10% MUD/ 930' GIP
SAMPLER- 1500 ML OIL, 500 ML WATER

DST's Report

DST#3 3277'-3343' 5 60 30 120
IF- STRONG BOB IN 2 MIN/ ISI- DEAD/ FF- STRONG BOB IN 30 SECONDS/ FSI- STRONG BOB IN 25 MIN, GAS TO SURFACE ON SHUT IN
IH- 1604, FH 1513/ IF- 48 TO 141/ FF- 83 TO 177/ ISI- 1033, FSI- 1017
RECOVERY- 240' GASSY OIL/ 135' GHOCM 40% GAS, 35% OIL, 25% MUD
SAMPLER- 2100 ML GAS, 900 ML OIL, 3000 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
- 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
- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

POROSITY TYPE
- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

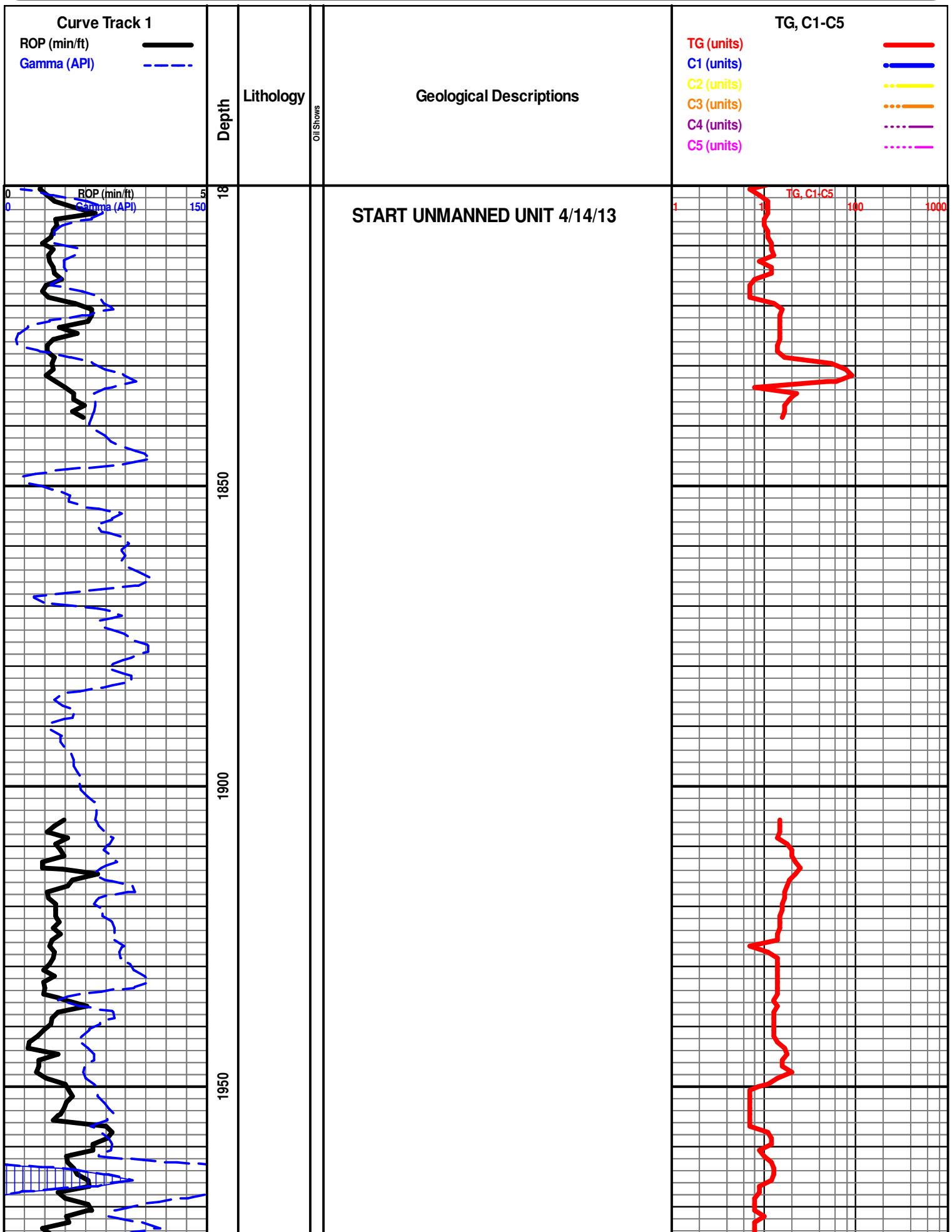
SORTING
- Well
- Moderate
- Poor

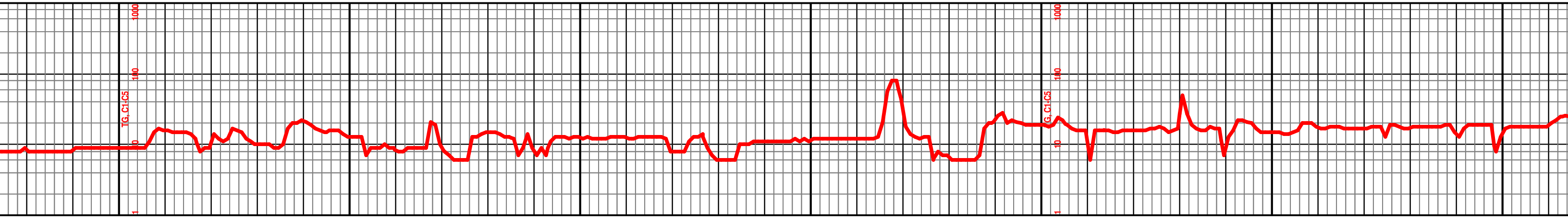
ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

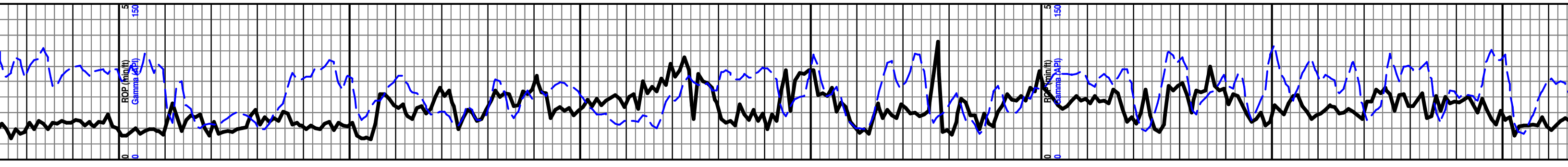
OIL SHOWS
- Even
- Spotted
- Ques
- Dead
- Gas show

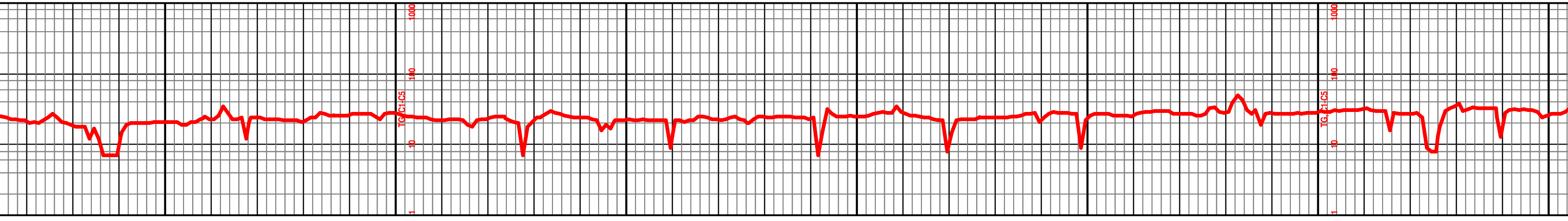
INTERVALS
- Core
- Dst
- Dst

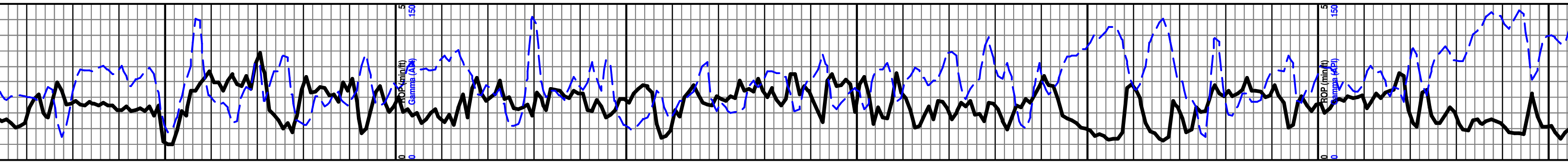
EVENTS
- Rft
- Sidewall

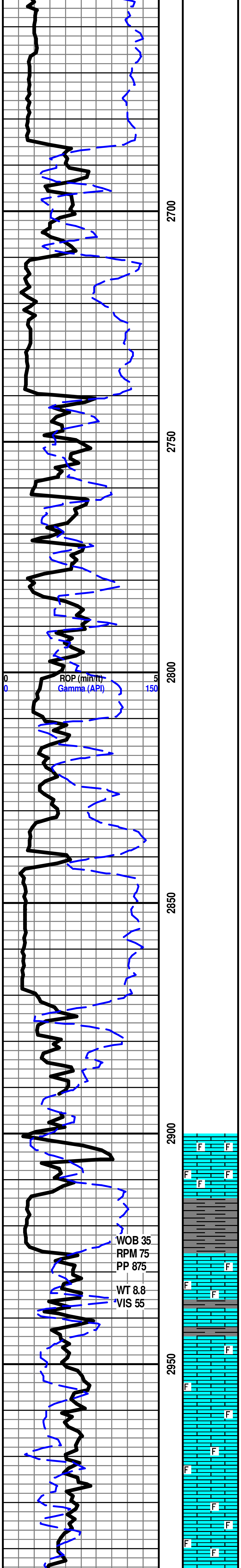



TG, C1-C5
1000
100
10
1


2000
2050
2100
2150
2200
2250
2300
ROP (min/ft)
Gamma (API)
5
150
0
0


1000
100
10
1
TG/C1:C5
1000
100
10
1
TG/C1:C5


2350
2400
2450
2500
2550
2600
2650
5
150
0
0
ROP (min/ft)
Gamma (API)
5
150
0
0
ROP (min/ft)
Gamma (API)



HOWARD 2871' -942'

START 24 HOUR MANNED UNIT 4/16/13

LS- TN TO DK TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, RE-XLN IP, ABDT IMBD FOSS FRG THRU, NO VIS FLO, NO VIS POR, NO VIS SHOW

SEVERY 2913' -984'

SH- BRWN LT GY TO DK GY, FRM BLKY TO SFT GMMY, SMTH TXT

TOPEKA 2926' -997'

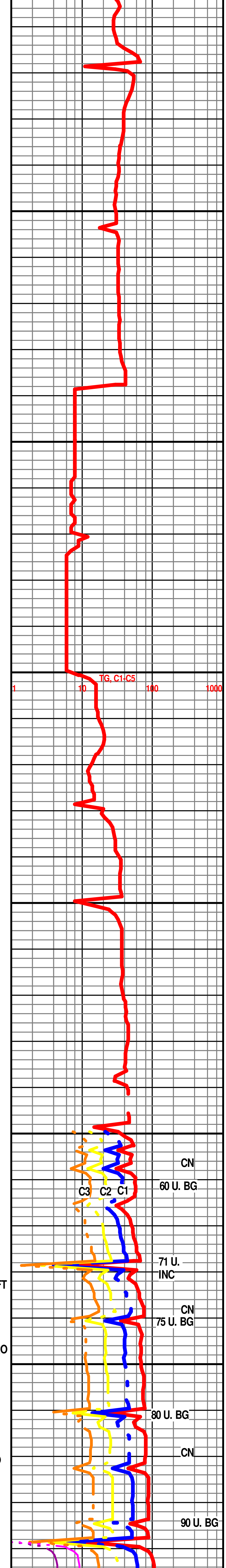
LS- LT TN TO DK TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, S-CHLKY IP, SCAT IMBD FOSS FRG IP, SFT WHT CHLK IN TRAY, NO VIS FLO, NO VIS POR, NO VIS SHOW

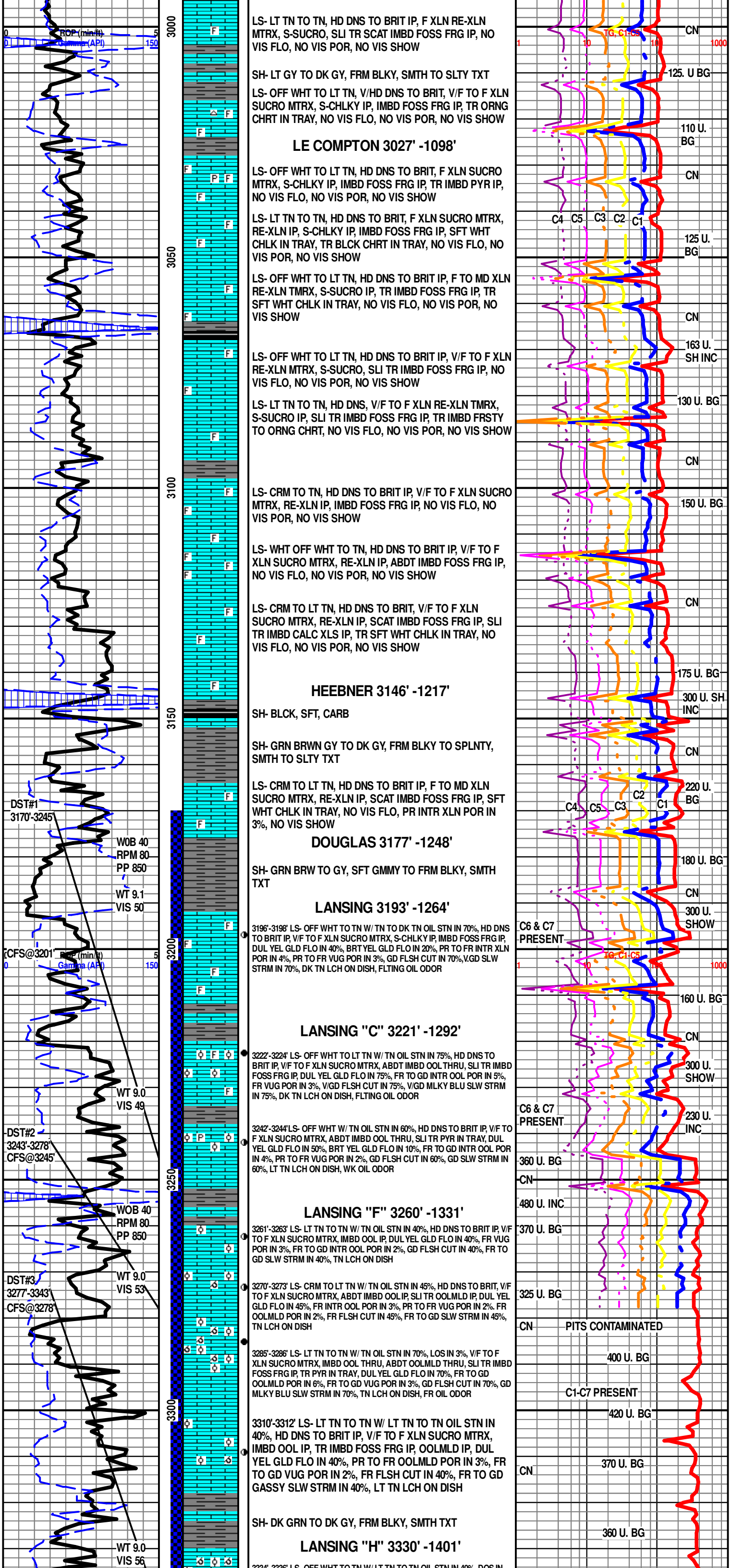
LS- CRM TO TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, RE-XLN IP, SCAT IMBD FOSS FRG THRU, NO VIS FLO, NO VIS POR, NO VIS SHOW

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

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

LS- CRM TO TN, HD DNS TO BRIT, V/F TO F XLN SUCRO MTRX, S-CHLKY, SCAT IMBD FOSS FRG THRU, TR SFT WHT CHLK 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, SLI TR SCAT IMBD FOSS FRG IP, NO VIS FLO, NO VIS POR, NO VIS SHOW

SH- LT GY TO DK GY, FRM BLKY, SMTH TO SLTY TXT

LS- OFF WHT TO LT TN, V/HD DNS TO BRIT, V/F TO F XLN SUCRO MTRX, S-CHLKY IP, IMBD FOSS FRG IP, TR ORNG CHRT IN TRAY, NO VIS FLO, NO VIS POR, NO VIS SHOW

LE COMPTON 3027' -1098'

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

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

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

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

LS- LT TN TO TN, HD DNS, V/F TO F XLN RE-XLN TMRX, S-SUCRO IP, SLI TR IMBD FOSS FRG IP, TR IMBD FRSTY TO ORNG CHRT, NO VIS FLO, NO VIS POR, NO VIS SHOW

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

LS- WHT OFF WHT TO TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, RE-XLN IP, ABDT IMBD FOSS FRG IP, NO VIS FLO, NO VIS POR, NO VIS SHOW

LS- CRM TO LT TN, HD DNS TO BRIT, V/F TO F XLN SUCRO MTRX, RE-XLN 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

HEEBNER 3146' -1217'

SH- BLCK, SFT, CARB

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

LS- CRM TO LT TN, HD DNS TO BRIT IP, F TO MD XLN SUCRO MTRX, RE-XLN IP, SCAT IMBD FOSS FRG IP, SFT WHT CHLK IN TRAY, NO VIS FLO, PR INTR XLN POR IN 3%, NO VIS SHOW

DOUGLAS 3177' -1248'

SH- GRN BRW TO GY, SFT GMMY TO FRM BLKY, SMTH TXT

LANSING 3193' -1264'

3196'-3198' LS- OFF WHT TO TN W/ TN TO DK TN OIL STN IN 70%, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, S-CHLKY IP, IMBD FOSS FRG IP, DUL YEL GLD FLO IN 40%, BRT YEL GLD FLO IN 20%, PR TO FR INTR XLN POR IN 4%, PR TO FR VUG POR IN 3%, GD FLSH CUT IN 70%,V.GD SLW STRM IN 70%, DK TN LCH ON DISH, FLTING OIL ODOR

LANSING "C" 3221' -1292'

3222'-3224' LS- OFF WHT TO LT TN W/ TN OIL STN IN 75%, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, ABDT IMBD OOL THRU, SLI TR IMBD FOSS FRG IP, DUL YEL GLD FLO IN 75%, FR TO GD INTR OOL POR IN 5%, FR VUG POR IN 3%, V/GD FLSH CUT IN 75%, V/GD MLKY BLU SLW STRM IN 75%, DK TN LCH ON DISH, FLTING OIL ODOR

3242'-3244'LS- OFF WHT W/ TN OIL STN IN 60%, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, ABDT IMBD OOL THRU, SLI TR PYR IN TRAY, DUL YEL GLD FLO IN 50%, BRT YEL GLD FLO IN 10%, FR TO GD INTR OOL POR IN 4%, PR TO FR VUG POR IN 2%, GD FLSH CUT IN 60%, GD SLW STRM IN 60%, LT TN LCH ON DISH, WK OIL ODOR

LANSING "F" 3260' -1331'

3261'-3263' LS- LT TN TO TN W/ TN OIL STN IN 40%, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, IMBD OOL IP, DUL YEL GLD FLO IN 40%, FR VUG POR IN 3%, FR TO GD INTR OOL POR IN 2%, GD FLSH CUT IN 40%, FR TO GD SLW STRM IN 40%, TN LCH ON DISH

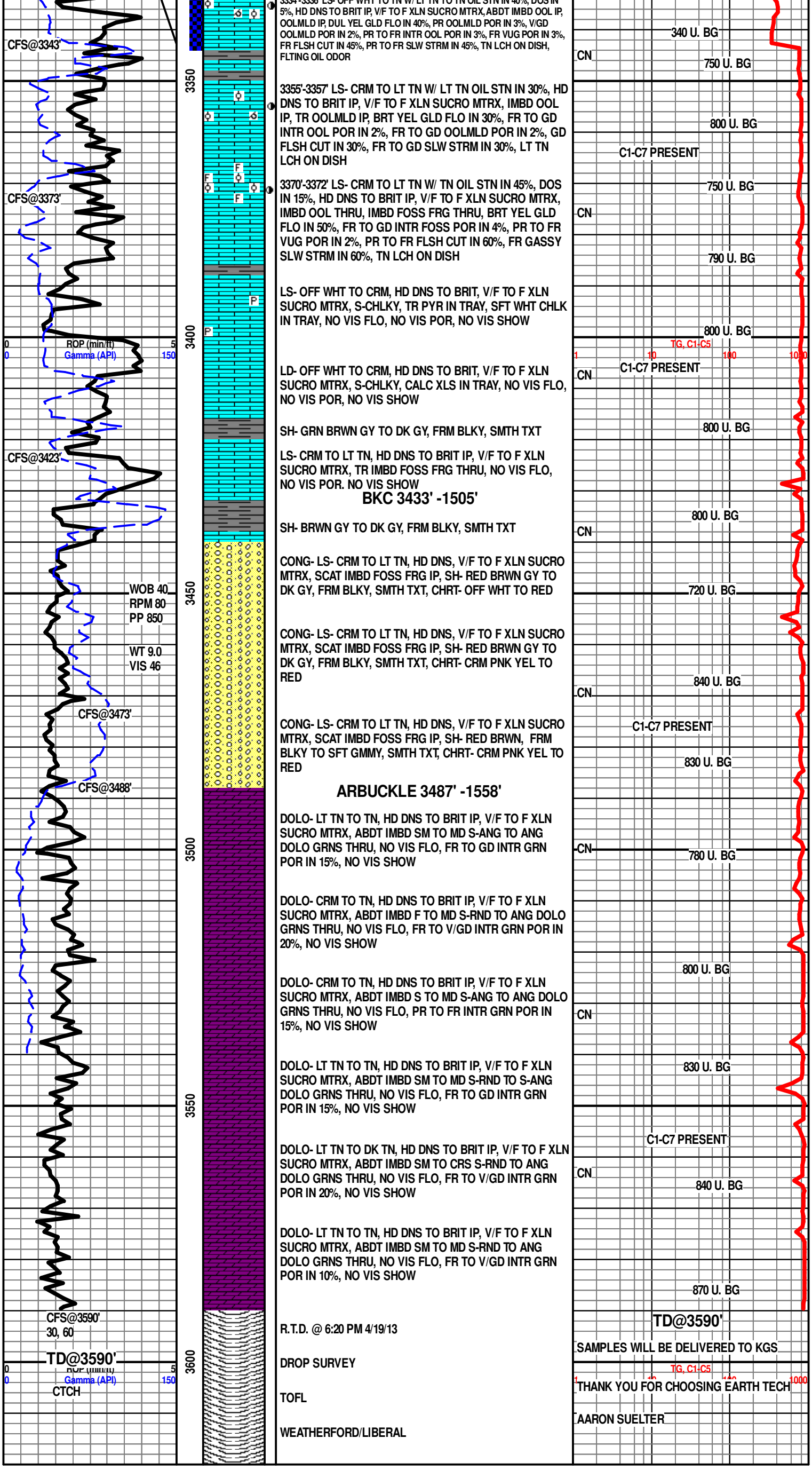
3270'-3273' LS- CRM TO LT TN W/ TN OIL STN IN 45%, HD DNS TO BRIT, V/F TO F XLN SUCRO MTRX, ABDT IMBD OOLIP, SLI TR OOLMLD IP, DUL YEL GLD FLO IN 45%, FR INTR OOL POR IN 3%, PR TO FR VUG POR IN 2%. FR OOLMLD POR IN 2%, FR FLSH CUT IN 45%, FR TO GD SLW STRM IN 45%, TN LCH ON DISH

3285'-3286' LS- LT TN TO TN W/ TN OIL STN IN 70%, LOS IN 3%, V/F TO F XLN SUCRO MTRX, IMBD OOL THRU, ABDT OOLMLD THRU, SLI TR IMBD FOSS FRG IP, TR PYR IN TRAY, DUL YEL GLD FLO IN 70%, FR TO GD OOLMLD POR IN 6%, FR TO GD VUG POR IN 3%, GD FLSH CUT IN 70%, GD MLKY BLU SLW STRM IN 70%, TN LCH ON DISH, FR OIL ODOR

3310'-3312' LS- LT TN TO TN W/ LT TN TO TN OIL STN IN 40%, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, IMBD OOL IP, TR IMBD FOSS FRG IP, OOLMLD IP, DUL YEL GLD FLO IN 40%, PR TO FR OOLMLD POR IN 3%, FR TO GD VUG POR IN 2%, FR FLSH CUT IN 40%, FR TO GD GASSY SLW STRM IN 40%, LT TN LCH ON DISH

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

LANSING "H" 3330' -1401'


CFS@3343'
CFS@3373'
CFS@3423'
WOB 40
RPM 80
PP 850
WT 9.0
VIS 46
CFS@3473'
CFS@3488'
CFS@3590'
30, 60
TD@3590'
CTCH
0
ROP (min/ft)
5
0
Gamma (API)
150
3350
3400
3450
3500
3550
3600
3354'-3356' LS- OFF WHT TO TN W/ LT TN TO TN OIL STN IN 40%, DOS IN 5%, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, ABDT IMBD OOL IP, OOLMLD IP, DUL YEL GLD FLO IN 40%, PR OOLMLD POR IN 3%, V/GD OOLMLD POR IN 2%, PR TO FR INTR OOL POR IN 3%, FR VUG POR IN 3%, FR FLSH CUT IN 45%, PR TO FR SLW STRM IN 45%, TN LCH ON DISH, FLTING OIL ODOR
3355'-3357' LS- CRM TO LT TN W/ LT TN OIL STN IN 30%, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, IMBD OOL IP, TR OOLMLD IP, BRT YEL GLD FLO IN 30%, FR TO GD INTR OOL POR IN 2%, FR TO GD OOLMLD POR IN 2%, GD FLSH CUT IN 30%, FR TO GD SLW STRM IN 30%, LT TN LCH ON DISH
3370'-3372' LS- CRM TO LT TN W/ TN OIL STN IN 45%, DOS IN 15%, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, IMBD OOL THRU, IMBD FOSS FRG THRU, BRT YEL GLD FLO IN 50%, FR TO GD INTR FOSS POR IN 4%, PR TO FR VUG POR IN 2%, PR TO FR FLSH CUT IN 60%, FR GASSY SLW STRM IN 60%, TN LCH ON DISH
LS- OFF WHT TO CRM, HD DNS TO BRIT, V/F TO F XLN SUCRO MTRX, S-CHLKY, TR PYR IN TRAY, SFT WHT CHLK IN TRAY, NO VIS FLO, NO VIS POR, NO VIS SHOW
LD- OFF WHT TO CRM, HD DNS TO BRIT, V/F TO F XLN SUCRO MTRX, S-CHLKY, CALC XLS IN TRAY, NO VIS FLO, NO VIS POR, NO VIS SHOW
SH- GRN BRWN GY TO DK GY, FRM BLKY, SMTH TXT
LS- CRM TO LT TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, TR IMBD FOSS FRG THRU, NO VIS FLO, NO VIS POR. NO VIS SHOW
BKC 3433' -1505'
SH- BRWN GY TO DK GY, FRM BLKY, SMTH TXT
CONG- LS- CRM TO LT TN, HD DNS, V/F TO F XLN SUCRO MTRX, SCAT IMBD FOSS FRG IP, SH- RED BRWN GY TO DK GY, FRM BLKY, SMTH TXT, CHRT- OFF WHT TO RED
CONG- LS- CRM TO LT TN, HD DNS, V/F TO F XLN SUCRO MTRX, SCAT IMBD FOSS FRG IP, SH- RED BRWN GY TO DK GY, FRM BLKY, SMTH TXT, CHRT- CRM PNK YEL TO RED
CONG- LS- CRM TO LT TN, HD DNS, V/F TO F XLN SUCRO MTRX, SCAT IMBD FOSS FRG IP, SH- RED BRWN, FRM BLKY TO SFT GMMY, SMTH TXT, CHRT- CRM PNK YEL TO RED
ARBUCKLE 3487' -1558'
DOLO- LT TN TO TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, ABDT IMBD SM TO MD S-ANG TO ANG DOLO GRNS THRU, NO VIS FLO, FR TO GD INTR GRN POR IN 15%, NO VIS SHOW
DOLO- CRM TO TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, ABDT IMBD F TO MD S-RND TO ANG DOLO GRNS THRU, NO VIS FLO, FR TO V/GD INTR GRN POR IN 20%, NO VIS SHOW
DOLO- CRM TO TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, ABDT IMBD S TO MD S-ANG TO ANG DOLO GRNS THRU, NO VIS FLO, PR TO FR INTR GRN POR IN 15%, NO VIS SHOW
DOLO- LT TN TO TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, ABDT IMBD SM TO MD S-RND TO S-ANG DOLO GRNS THRU, NO VIS FLO, FR TO GD INTR GRN POR IN 15%, NO VIS SHOW
DOLO- LT TN TO DK TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, ABDT IMBD SM TO CRS S-RND TO ANG DOLO GRNS THRU, NO VIS FLO, FR TO V/GD INTR GRN POR IN 20%, NO VIS SHOW
DOLO- LT TN TO TN, HD DNS TO BRIT IP, V/F TO F XLN SUCRO MTRX, ABDT IMBD SM TO MD S-RND TO ANG DOLO GRNS THRU, NO VIS FLO, FR TO V/GD INTR GRN POR IN 10%, NO VIS SHOW
R.T.D. @ 6:20 PM 4/19/13
DROP SURVEY
TOFL
WEATHERFORD/LIBERAL
340 U. BG
CN
750 U. BG
800 U. BG
C1-C7 PRESENT
750 U. BG
CN
790 U. BG
800 U. BG
TG, C1-C5
1
10
100
1000
C1-C7 PRESENT
CN
800 U. BG
800 U. BG
CN
720 U. BG
840 U. BG
CN
C1-C7 PRESENT
830 U. BG
CN
780 U. BG
800 U. BG
CN
830 U. BG
C1-C7 PRESENT
CN
840 U. BG
870 U. BG
TD@3590'
SAMPLES WILL BE DELIVERED TO KGS
TG, C1-C5
1
10
100
1000
THANK YOU FOR CHOOSING EARTH TECH
AARON SUELTER