Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1262399

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: GABE D'ARTHENAY
Phone: (303) 831-4673
CONTRACTOR: License # 30606
Name: Murfin Drilling Co., Inc.
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 #:

5/4/2015	5/13/2015	5/15/2015
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-153-21136-00-00
Spot Description:
__ - NE - NE - SW Sec. 7 Twp. 5 S. R. 35 ☐ East ☑ West
2280 Feet from ☐ North / ☑ South Line of Section
2280 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: Rawlins
Lease Name: FISHER Well #: 2-7
Field Name:
Producing Formation: N/A
Elevation: Ground: 3270 Kelly Bushing: 3281
Total Vertical Depth: 4748 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 308 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: 9800 ppm Fluid volume: 0 bbls
Dewatering method used: Evaporated

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: 08/26/2015
☑ **Confidential Release Date:** 08/25/2017
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 08/27/2015

1262399

Operator Name: Samuel Gary Jr. & Associates, Inc. Lease Name: FISHER Well #: 2-7

Sec. 7 Twp. 5 S. R. 35 ☐ East ☑ West County: Rawlins

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:

DEN-NEUT
INDUCTION
MICRO

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

Name	Top	Datum
TOPEKA	3977	-696
HEEBNER	4122	-841
LANSING	4169	-888

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	308	COMMON CLASS A	250	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:
_____
_____

Form	ACO1 - Well Completion
Operator	Samuel Gary Jr. & Associates, Inc.
Well Name	FISHER 2-7
Doc ID	1262399

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	308	COMMON CLASS A	250	2% GEL, 3% CC

ALLIED OIL & GAS SERVICES, LLC 064730

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT:
Oakley

DATE 5-4-15	SEC 7	TWP 5S	RANGE 35W	CALLED OUT	ON LOCATION 10:30pm	JOB START 12:30am	JOB FINISH 1:00Am
LEASE Fisher	WELL # 2-7		LOCATION Levant 14N 6W 3N			COUNTY Rawlins	STATE KS
OLD OR NEW (Circle one)			2½E into				

CONTRACTOR MurFin 2
TYPE OF JOB Surface
HOLE SIZE 12¼ T.D. 308'
CASING SIZE 8 5/8 DEPTH 302'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15'
PERFS.
DISPLACEMENT 18.6 BBL

EQUIPMENT

PUMP TRUCK # 422 CEMENTER Andrew Forslund
HELPER Darren Raethe
BULK TRUCK # 323 DRIVER Tracey (Pos)
BULK TRUCK # DRIVER

OWNER Samuel Gary Jr

CEMENT
AMOUNT ORDERED 250 sks com 3%cc

COMMON	250 sks	@ 12.50	4435.00
POZMIX		@	
GEL		@	
CHLORIDE	705 lb	@ 1.10	775.00
ASC		@	
		@	
Material Take		@	5,250.00
	(2362.80/45%)	@	
		@	
		@	
		@	
		@	
HANDLING	262 sc y/ft	@ 2.48	650.00
MILEAGE	2.35 Ton/mile 12.10 TON		1164.62
		TOTAL	

REMARKS:

Cement in cellar

Thank you

SERVICE

DEPTH OF JOB	302'		
PUMP TRUCK CHARGE			1512.25
EXTRA FOOTAGE		@	
MILEAGE	35 miles	@ 7.70	269.50
MANIFOLD	head	@	225.00
Light vehicle		@ 4.40	154.00
		@	
	(1811.86/45%)	TOTAL	4,036.37

CHARGE TO: Samuel Gary
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

8 5/8			
1 centralizer		@	25.00
		@	
		@	
		@	
		@	
	0	TOTAL	75.00

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any)
TOTAL CHARGES 9,351.37
DISCOUNT 4,174.36 (45%) IF PAID IN 30 DAYS
5,177.00 Net

PRINTED NAME Arturo Cabezas
SIGNATURE Arturo Cabezas

ALLIED OIL & GAS SERVICES, LLC 064174

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Oakley KS

DATE 5-14-15	SEC. 7	TWP. 5	RANGE 35	CALLED OUT	ON LOCATION 6:00 p.m.	JOB START 8:00 p.m	JOB FINISH 9:00 p.m
LEASE Fisher	WELL # 2-7	LOCATION Evart N to Rd B, W to Rd 6, N into				COUNTY Rawlins	STATE KS
OLD OR NEW (Circle one)							

CONTRACTOR Murfin 2

OWNER Same

TYPE OF JOB PTA

HOLE SIZE 7 7/8 T.D. 4000'

CASING SIZE DEPTH

TUBING SIZE 4 1/2 DEPTH 2980'

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG.

PERFS.

DISPLACEMENT 1st plug 30 bbl mud

CEMENT

AMOUNT ORDERED 255 sks 60/40 4% gel 1/4 # Flo-seal

		@	
COMMON		@	
POZMIX		@	
GEL		@	
CHLORIDE		@	
ASC		@	
Lite	255 sks	@ 18.92	4824.60
Flo-seal	64 #	@ 2.97	190.08
		@	
Material Total		@	5014.68
(2256.60/45%)		@	
		@	
		@	
		@	
HANDLING	273.87 ft³	@ 2.48	679.19
MILEAGE	11.44 tons x 70 mi x 2.75		2202.20
		TOTAL	

EQUIPMENT

PUMP TRUCK # 422 CEMENTER Paul Beaver
HELPER Darren Racette

BULK TRUCK # 373/306 DRIVER Brandon Wilkinson

BULK TRUCK # DRIVER

REMARKS:

mix 50 sks @ 2980' Displace w/ mud
mix 100 sks @ 2170' Displace w/ mud
mix 50 sks @ 360'
mix 40 sks @ 40' w/ wooden plug
mix 30 sks in R.H.
mix 15 sks in M.H.

Thank You!
Paul Beaver

SERVICE

DEPTH OF JOB			2980'
PUMP TRUCK CHARGE			2483.59
EXTRA FOOTAGE		@	
MILEAGE mi HV	70	@ 7.70	539.00
MANIFOLD		@	
mi LV	70	@ 4.40	308.00
		@	

(2795.39/45%) TOTAL 6,211.98

CHARGE TO: Samuel Gary + Assoc.

STREET

CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

8 5/8 Industrial

wooden plug	1	@	110.00
		@	
		@	
		@	
		@	

TOTAL 110.00

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any)

TOTAL CHARGES 11,336.66

DISCOUNT 5,051.99 (45%) IF PAID IN 30 DAYS

6,284.66 Net.

PRINTED NAME [signature]

SIGNATURE [signature]

DRILL STEM TEST REPORT

Samuel Gary Jr. & Assoc. Inc.

1515 Wynkoop, Suite 700
Denver, CO, 80202

ATTN: Chris Mitchell

7-5S-35W

Fisher #2-7

Job Ticket: 62208 **DST#: 1**

Test Start: 2015.05.11 @ 16:39:00

GENERAL INFORMATION:

Formation: **LKC "H & I"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:53:15
Time Test Ended: 22:25:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Donovan Baumann
Unit No: 54

Interval: 4282.00 ft (KB) To 4332.00 ft (KB) (TVD)
Total Depth: 4332.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

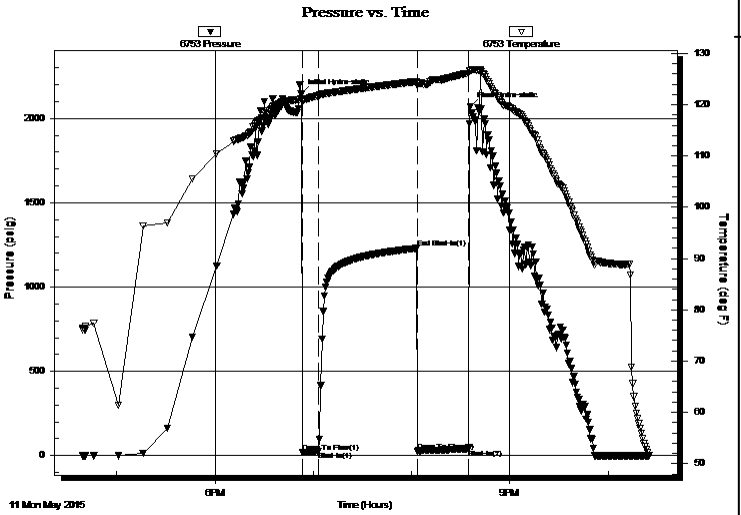
Reference Elevations: 3281.00 ft (KB)
3270.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6753 **Outside**

Press@RunDepth: 24.79 psig @ 4283.00 ft (KB)
Start Date: 2015.05.11 End Date: 2015.05.11
Start Time: 16:39:05 End Time: 22:24:59

Capacity: 8000.00 psig
Last Calib.: 2015.05.11
Time On Btm: 2015.05.11 @ 18:52:45
Time Off Btm: 2015.05.11 @ 20:36:00

TEST COMMENT: 10 - IF - Weak surface blow built to 3/4 in. in 10 min.
60 - ISI - No return
30 - FF - No surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2144.73	121.10	Initial Hydro-static
1	18.65	120.55	Open To Flow (1)
11	24.79	121.73	Shut-In(1)
71	1229.53	124.52	End Shut-In(1)
71	26.81	123.72	Open To Flow (2)
102	39.58	126.10	Shut-In(2)
104	2070.32	126.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	mud - 100M	0.07

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Assoc. Inc.

1515 Wynkoop, Suite 700
Denver, CO, 80202

ATTN: Chris Mitchell

7-5S-35W

Fisher #2-7

Job Ticket: 62208 **DST#: 1**

Test Start: 2015.05.11 @ 16:39:00

GENERAL INFORMATION:

Formation: **LKC "H & I"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:53:15
Time Test Ended: 22:25:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Donovan Baumann
Unit No: 54

Interval: 4282.00 ft (KB) To 4332.00 ft (KB) (TVD)
Total Depth: 4332.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

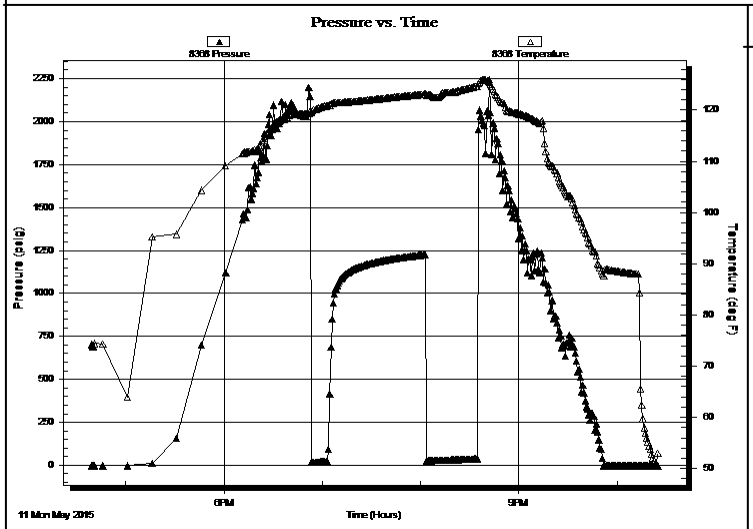
Reference Elevations: 3281.00 ft (KB)
3270.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8368 **Inside**

Press@RunDepth: psig @ 4283.00 ft (KB)
Start Date: 2015.05.11 End Date: 2015.05.11
Start Time: 16:39:05 End Time: 22:24:59

Capacity: 8000.00 psig
Last Calib.: 2015.05.11
Time On Btm:
Time Off Btm:

TEST COMMENT: 10 - IF - Weak surface blow built to 3/4 in. in 10 min.
60 - ISI - No return
30 - FF - No surface blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
15.00	mud - 100M	0.07

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Assoc. Inc.

1515 Wynkoop, Suite 700
Denver, CO, 80202

ATTN: Chris Mitchell

7-5S-35W

Fisher #2-7

Job Ticket: 62208 **DST#: 1**

Test Start: 2015.05.11 @ 16:39:00

GENERAL INFORMATION:

Formation: **LKC "H & I"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:53:15
Time Test Ended: 22:25:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Donovan Baumann
Unit No: 54

Interval: 4282.00 ft (KB) To 4332.00 ft (KB) (TVD)
Total Depth: 4332.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

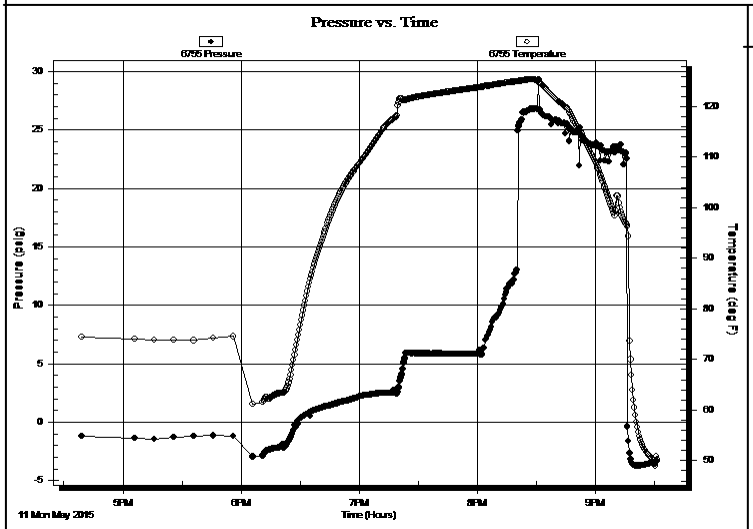
Reference Elevations: 3281.00 ft (KB)
3270.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6755

Press@RunDepth: psig @ ft (KB)
Start Date: 2015.05.11 End Date: 2015.05.11
Start Time: 16:39:05 End Time: 21:31:44

Capacity: 8000.00 psig
Last Calib.: 2015.05.11
Time On Btm:
Time Off Btm:

TEST COMMENT: 10 - IF - Weak surface blow built to 3/4 in. in 10 min.
60 - ISI - No return
30 - FF - No surface blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
15.00	mud - 100M	0.07

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Assoc. Inc.

1515 Wynkoop, Suite 700
Denver, CO, 80202

ATTN: Chris Mitchell

7-5S-35W

Fisher #2-7

Job Ticket: 62208 **DST#: 1**

Test Start: 2015.05.11 @ 16:39:00

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:	56.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.00 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	600.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

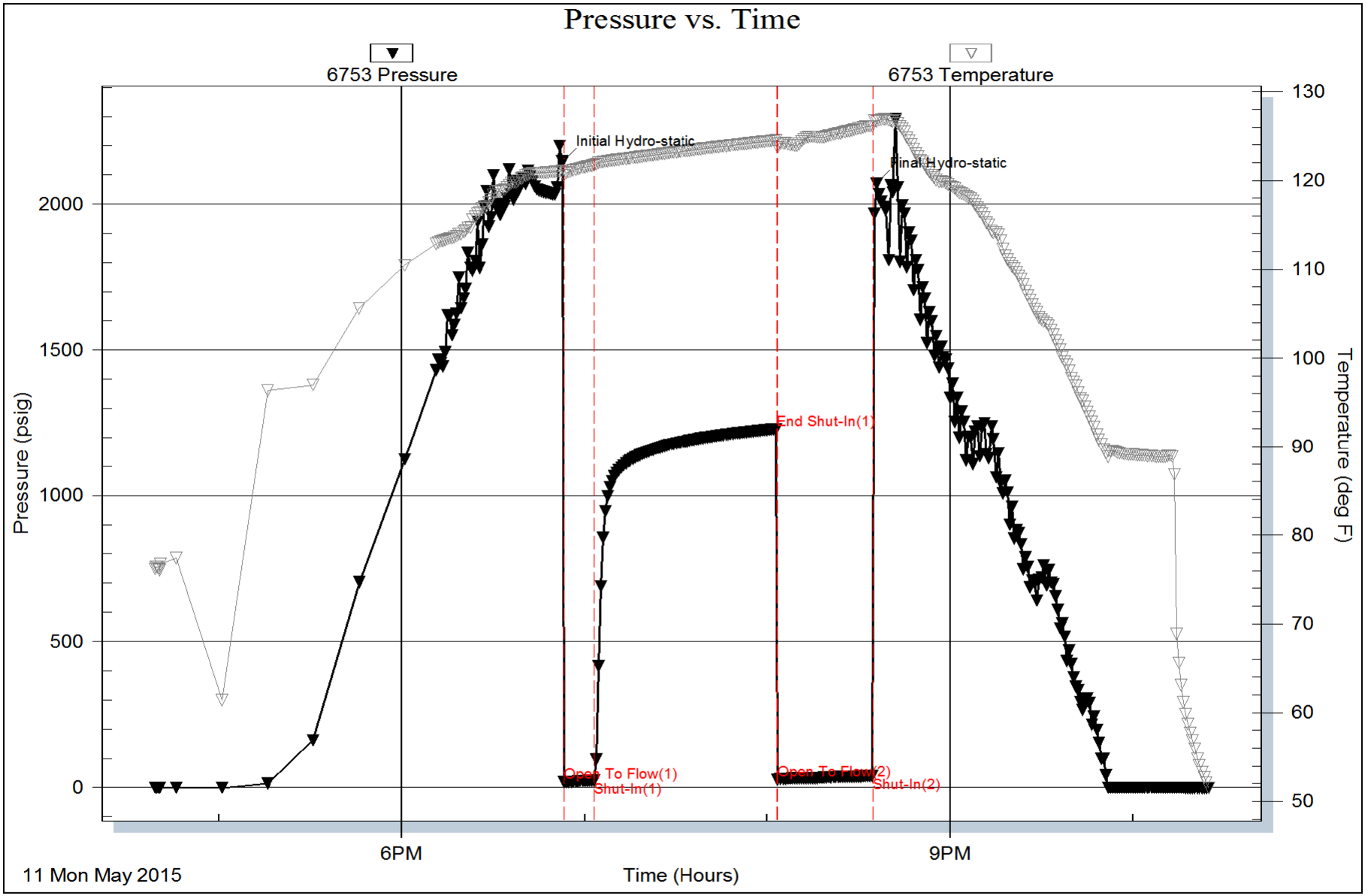
Recovery Table

Length ft	Description	Volume bbl
15.00	mud - 100M	0.074

Total Length: 15.00 ft Total Volume: 0.074 bbl

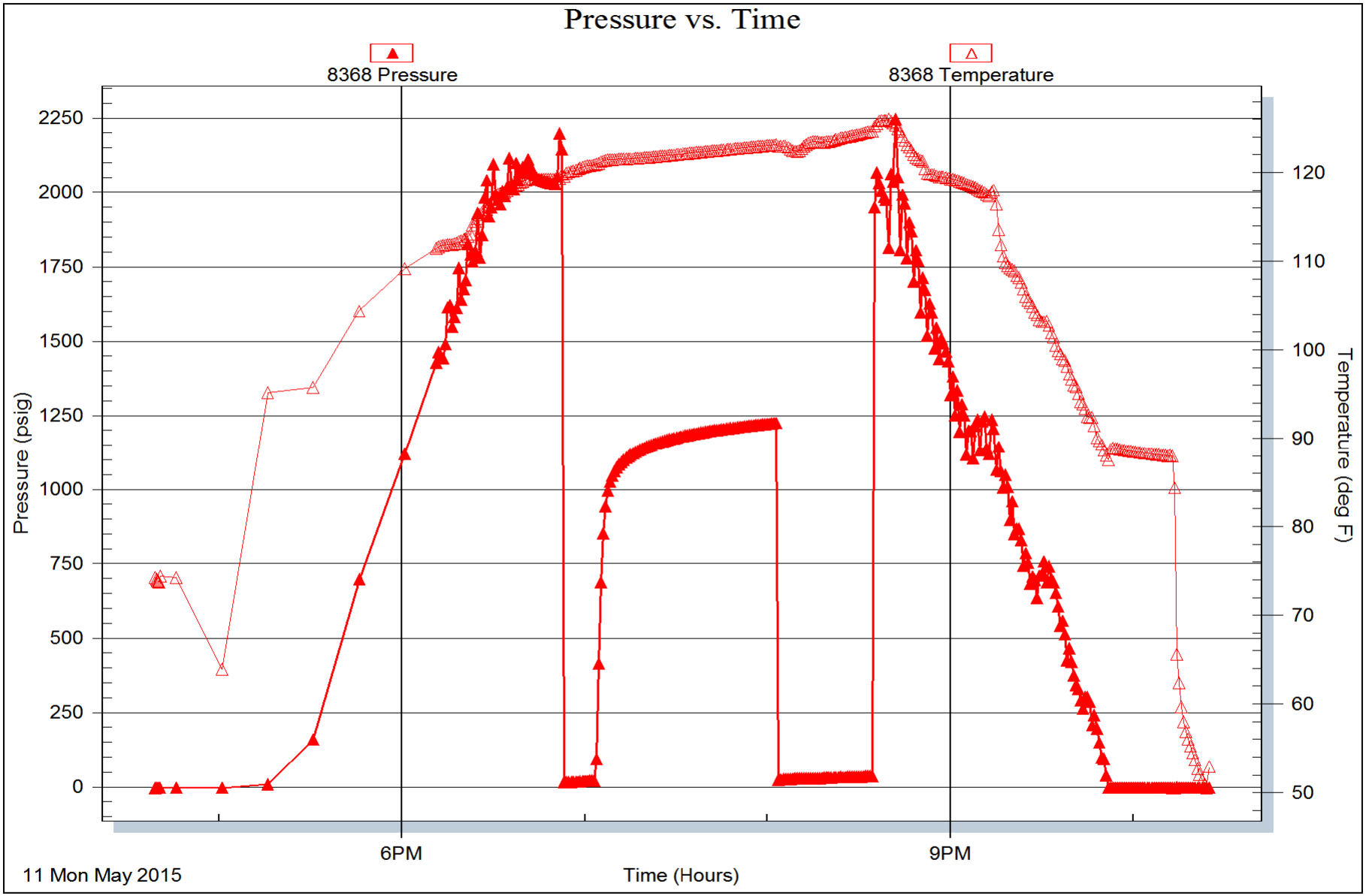
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6753 **Outside** Samuel Gary Jr. & Assoc. Inc. Fisher #2-7 DST Test Number: 1



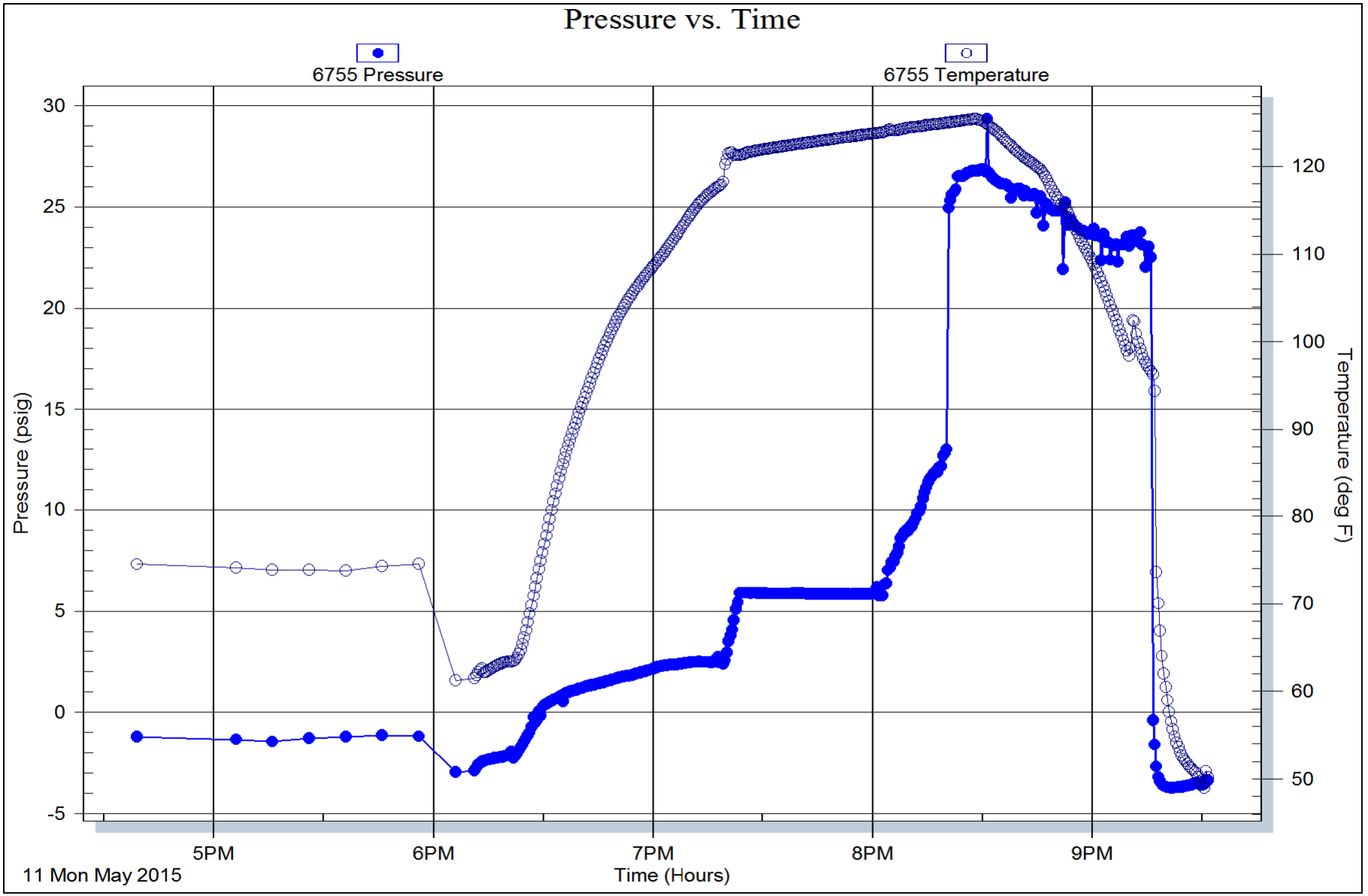
Trilobite Testing, Inc Ref. No: 62208 Printed: 2015.05.12 @ 00:04:56

Serial #: 8368 **Inside** Samuel Gary Jr. & Assoc. Inc. Fisher #2-7 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 62208 Printed: 2015.05.12 @ 00:04:56

Serial #: 6755 Samuel Gary Jr. & Assoc. Inc. Fisher #2-7 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 62208 Printed: 2015.05.12 @ 00:04:56

DRILL STEM TEST REPORT

Samuel Gary Jr. & Assoc. Inc.

1515 Wynkoop, Suite 700
Denver, CO, 80202

ATTN: Chris Mitchell

7-5S-35W

Fisher #2-7

Job Ticket: 62370 **DST#: 2**

Test Start: 2015.05.13 @ 05:33:00

GENERAL INFORMATION:

Formation: **Cherokee**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:43:30
Time Test Ended: 13:10:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Royal Fisher
Unit No: 54

Interval: 4603.00 ft (KB) To 4638.00 ft (KB) (TVD)
Total Depth: 4638.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

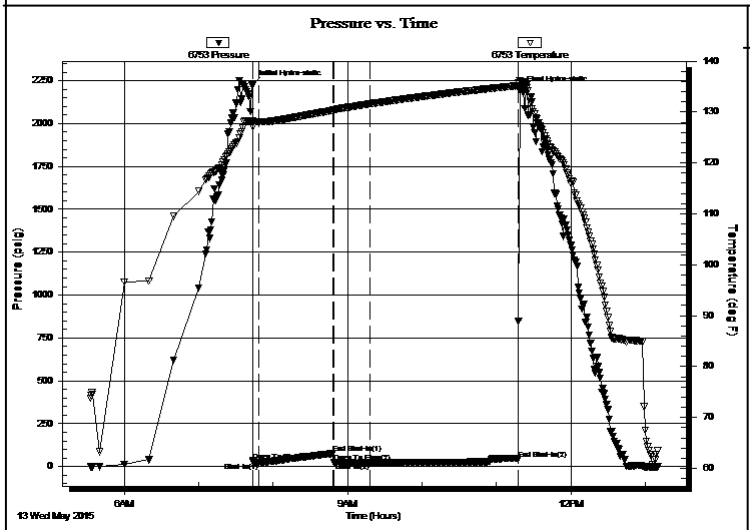
Reference Elevations: 3281.00 ft (KB)
3270.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6753 **Outside**

Press@RunDepth: 22.41 psig @ 4604.00 ft (KB)
Start Date: 2015.05.13 End Date: 2015.05.13
Start Time: 05:33:05 End Time: 13:10:29

Capacity: 8000.00 psig
Last Calib.: 2015.05.13
Time On Btm: 2015.05.13 @ 07:43:15
Time Off Btm: 2015.05.13 @ 11:18:45

TEST COMMENT: 5 - IF - Surface blow built to 1/4"
60 - ISI - No Return
30 - FF - No Surface blow
120 - FSI - No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2224.98	128.25	Initial Hydro-static
1	33.55	127.06	Open To Flow (1)
6	26.62	128.06	Shut-In(1)
65	77.16	130.33	End Shut-In(1)
66	22.88	130.34	Open To Flow (2)
95	22.41	131.59	Shut-In(2)
215	43.53	135.18	End Shut-In(2)
216	2190.63	136.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud - 100M	0.02

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Assoc. Inc.

1515 Wynkoop, Suite 700
Denver, CO, 80202

ATTN: Chris Mitchell

7-5S-35W

Fisher #2-7

Job Ticket: 62370 **DST#: 2**

Test Start: 2015.05.13 @ 05:33:00

GENERAL INFORMATION:

Formation: **Cherokee**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:43:30
Time Test Ended: 13:10:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Royal Fisher
Unit No: 54

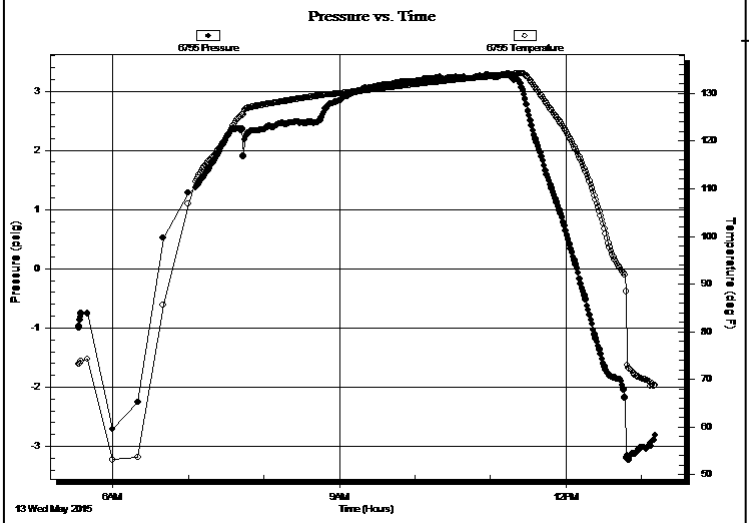
Interval: 4603.00 ft (KB) To 4638.00 ft (KB) (TVD)
Total Depth: 4638.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3281.00 ft (KB)
3270.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6755 **Fluid**
Press@RunDepth: psig @ 4571.00 ft (KB)
Start Date: 2015.05.13 End Date: 2015.05.13
Start Time: 05:33:05 End Time: 13:10:44

Capacity: 8000.00 psig
Last Calib.: 2015.05.13
Time On Btm:
Time Off Btm:

TEST COMMENT: 5 - IF - Surface blow built to 1/4"
60 - ISI - No Return
30 - FF - No Surface blow
120 - FSI - No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud - 100M	0.02

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Assoc. Inc.

1515 Wynkoop, Suite 700
Denver, CO, 80202

ATTN: Chris Mitchell

7-5S-35W

Fisher #2-7

Job Ticket: 62370 **DST#: 2**

Test Start: 2015.05.13 @ 05:33:00

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:	67.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.20 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1500.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

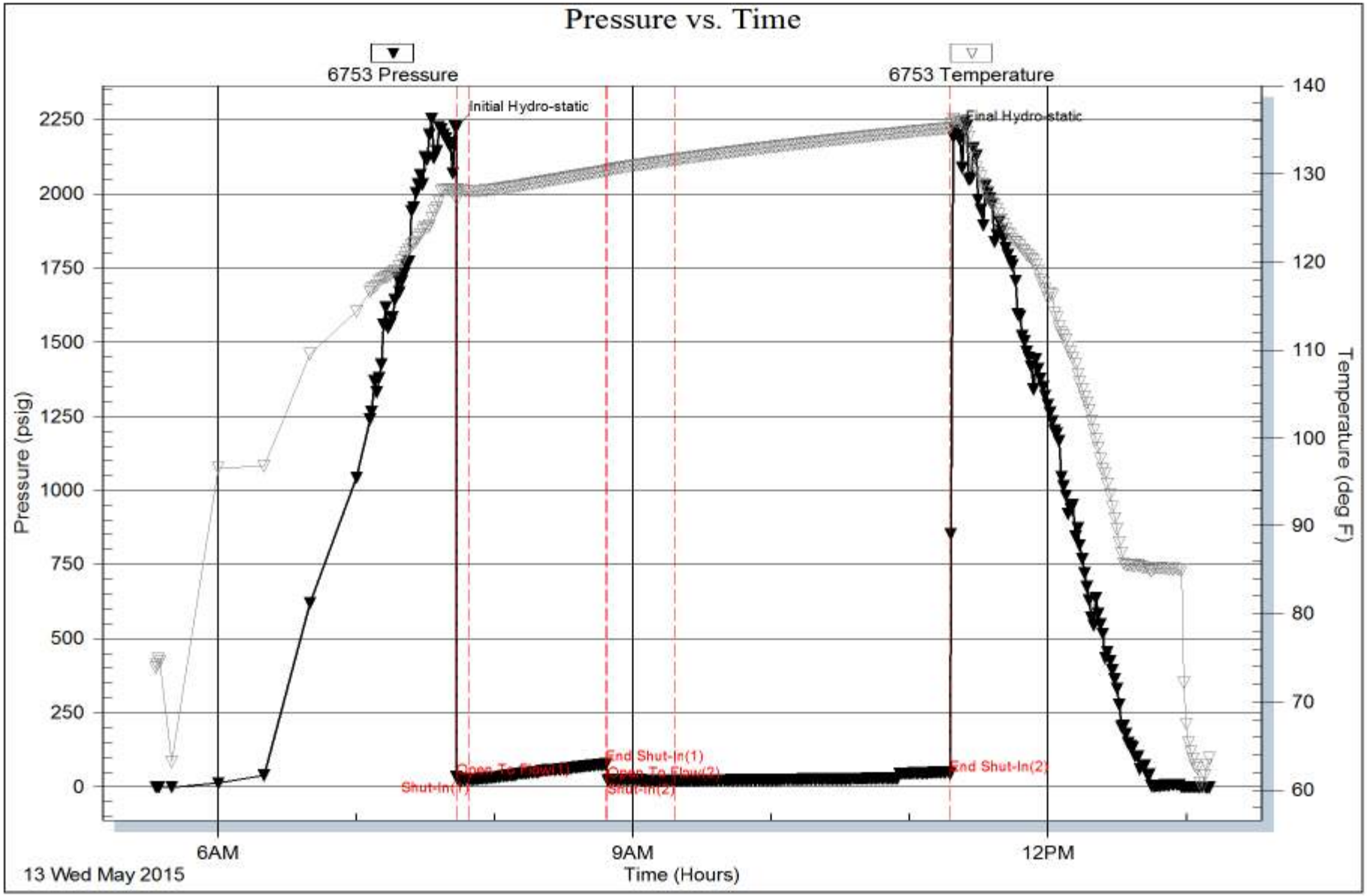
Recovery Table

Length ft	Description	Volume bbl
5.00	Mud - 100M	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

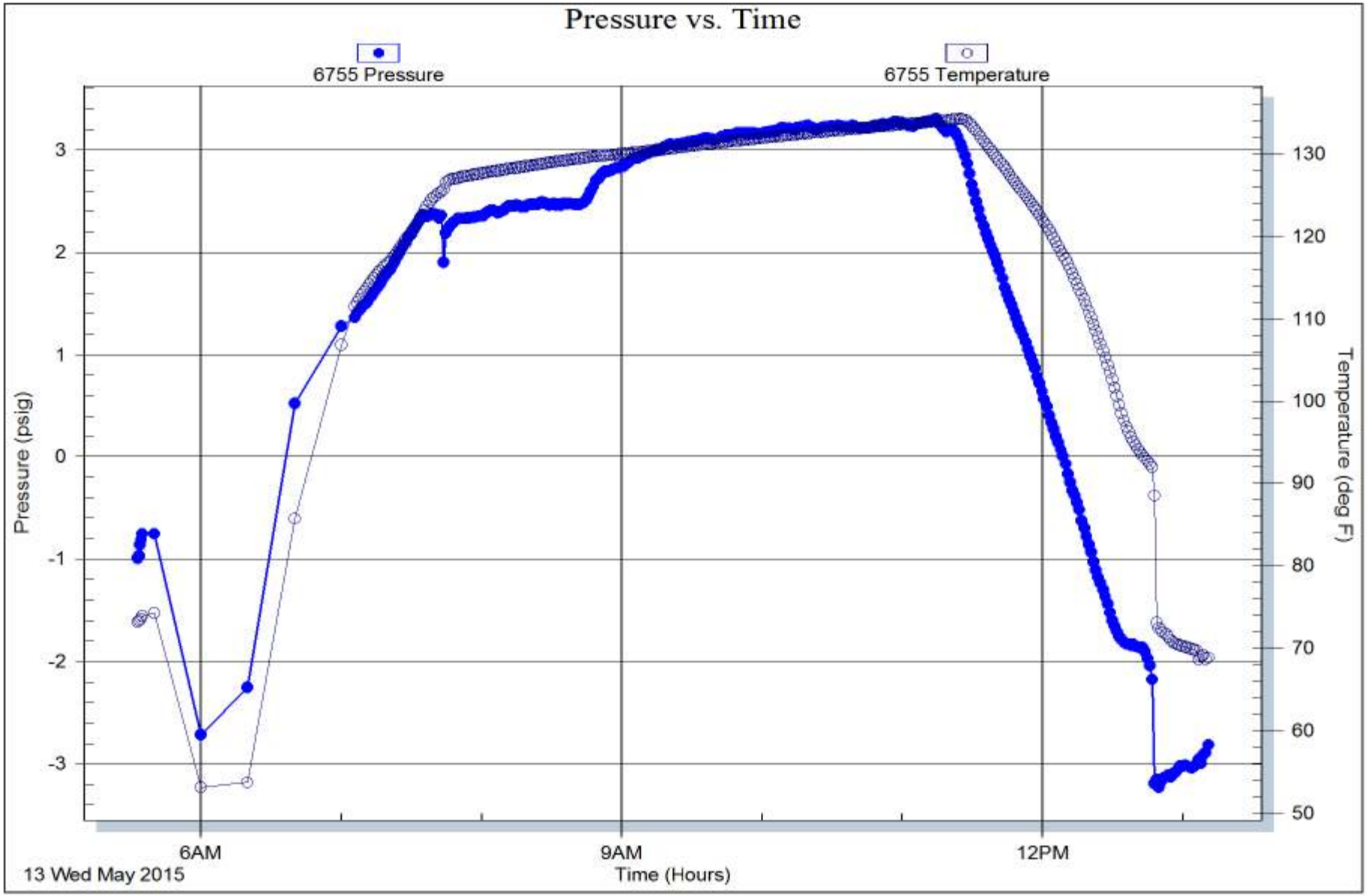
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6753 **Outside** Samuel Gary Jr. & Assoc. Inc. Fisher #2-7 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 62370 Printed: 2015.05.14 @ 09:18:30

Serial #: 6755 **Fluid** Samuel Gary Jr. & Assoc. Inc. Fisher #2-7 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 62370 Printed: 2015.05.14 @ 09:18:30

DRILL STEM TEST REPORT

Samuel Gary Jr. & Assoc. Inc.

1515 Wynkoop, Suite 700
Denver, CO, 80202

ATTN: Chris Mitchell

7-5S-35W

Fisher #2-7

Job Ticket: 62371 **DST#: 3**

Test Start: 2015.05.14 @ 09:12:00

GENERAL INFORMATION:

Formation: **Lans. 'K & L'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:24:30
Time Test Ended: 15:32:30

Test Type: Conventional Straddle (Initial)
Tester: Royal Fisher
Unit No: #54

Interval: 4356.00 ft (KB) To 4432.00 ft (KB) (TVD)
Total Depth: 4748.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

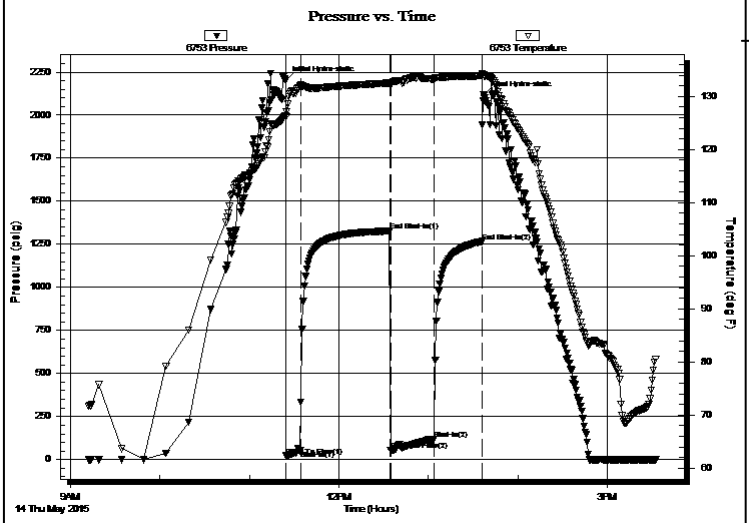
Reference Elevations: 3281.00 ft (KB)
3270.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6753 **Inside**

Press@RunDepth: 117.66 psig @ 4357.00 ft (KB)
Start Date: 2015.05.14 End Date: 2015.05.14
Start Time: 09:12:05 End Time: 15:32:29

Capacity: 8000.00 psig
Last Calib.: 2015.05.14
Time On Btm: 2015.05.14 @ 11:24:00
Time Off Btm: 2015.05.14 @ 13:37:00

TEST COMMENT: 10 - IF - Surface blow built up to 2"
60 - ISI - No Return
30 - FF - No Surface blow
30 - FSI - No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2201.46	126.40	Initial Hydro-static
1	22.07	126.25	Open To Flow (1)
10	54.81	131.94	Shut-In(1)
70	1327.63	132.53	End Shut-In(1)
71	52.93	132.03	Open To Flow (2)
100	117.66	133.29	Shut-In(2)
132	1266.83	133.89	End Shut-In(2)
133	2116.24	134.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
220.00	WM - 25W - 75M	1.21

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Assoc. Inc.

1515 Wynkoop, Suite 700
Denver, CO, 80202

ATTN: Chris Mitchell

7-5S-35W

Fisher #2-7

Job Ticket: 62371 **DST#: 3**

Test Start: 2015.05.14 @ 09:12:00

GENERAL INFORMATION:

Formation: **Lans. 'K & L'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:24:30
Time Test Ended: 15:32:30

Test Type: Conventional Straddle (Initial)
Tester: Royal Fisher
Unit No: #54

Interval: 4356.00 ft (KB) To 4432.00 ft (KB) (TVD)
Total Depth: 4748.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

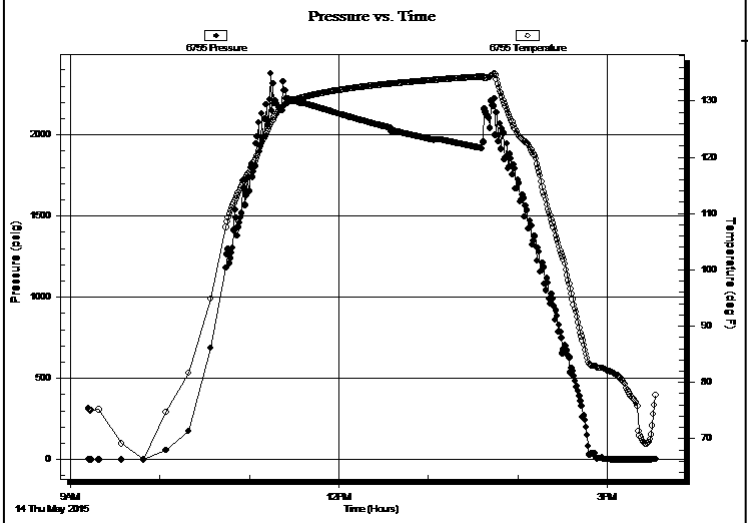
Reference Elevations: 3281.00 ft (KB)
3270.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6755 **Below (Straddle)**

Press@RunDepth: psig @ 4465.00 ft (KB)
Start Date: 2015.05.14 End Date: 2015.05.14
Start Time: 09:12:05 End Time: 15:32:44

Capacity: 8000.00 psig
Last Calib.: 2015.05.14
Time On Btm:
Time Off Btm:

TEST COMMENT: 10 - IF - Surface blow built up to 2"
60 - ISI - No Return
30 - FF - No Surface blow
30 - FSI - No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
220.00	WM - 25W - 75M	1.21

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Assoc. Inc.

1515 Wynkoop, Suite 700
Denver, CO, 80202

ATTN: Chris Mitchell

7-5S-35W

Fisher #2-7

Job Ticket: 62371 **DST#: 3**

Test Start: 2015.05.14 @ 09:12:00

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:	63.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.40 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
220.00	WM - 25W - 75M	1.210

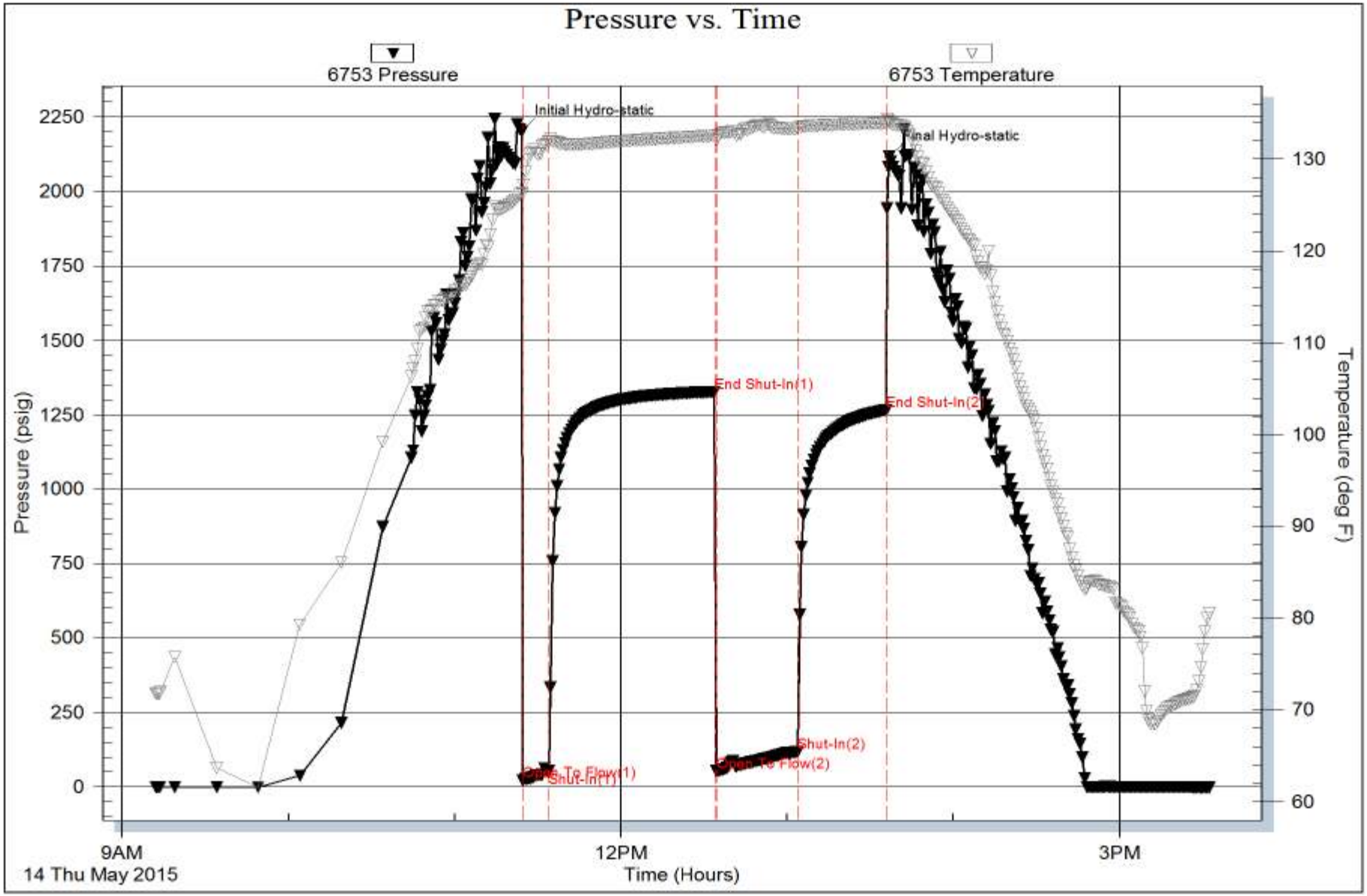
Total Length: 220.00 ft Total Volume: 1.210 bbl

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

Laboratory Name: Laboratory Location:

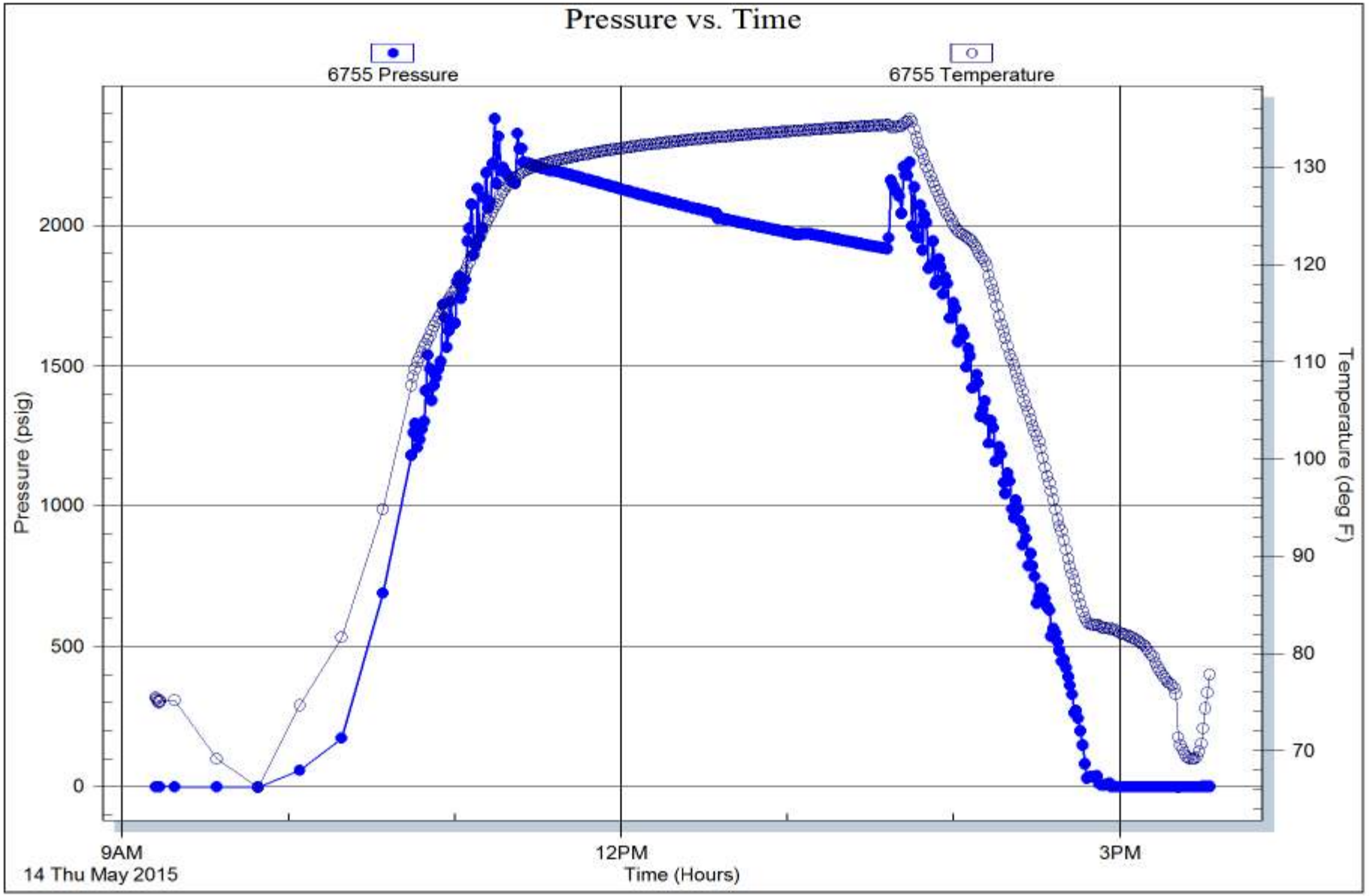
Recovery Comments:

Serial #: 6753 **Inside** Samuel Gary Jr. & Assoc. Inc. Fisher #2-7 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 62371 Printed: 2015.05.14 @ 16:32:56

Serial #: 6755 Below (Straddle) Gary Jr. & Assoc. Inc. Fisher #2-7 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 62371 Printed: 2015.05.14 @ 16:32:56

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

Well Name:	FISHER # 2-7		
Well Id:			
Location:	Sec 7 5S 35W, Rawlins County, Kansas		
License Number:	15-153-21136	Region:	Wildcat
Spud Date:	May 4, 2015	Drilling Completed:	May 13, 2015
Surface Coordinates:	2280' FSL & 2280' FWL		
Bottom Hole Coordinates:			
Ground Elevation (ft):	3270'	K.B. Elevation (ft):	3281'
Logged Interval (ft):	3900' To: 4740'	Total Depth (ft):	4740'
Formation:	Lansing		
Type of Drilling Fluid:	Natural Chemical		

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

OPERATOR

Company: Sam Gary Jr. & Associates
Address: 1515 Wynkoop, # 700
Denver, Co. 80202
Co. Geo: Chris Mitchell

GEOLOGIST

Name: Tim Hedrick/ Ian Bosmeijer
Company: Earth Tech OGL, Inc.
Address: PO Box 683
Hooker, Okla. 73945
1-888-543-8378

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Samuel Gary Jr. & Assoc. Inc.

1515 Wynkoop, Suite 700
Denver, CO, 80202

ATTN: Chris Mitchell

7-5S-35W

Fisher #2-7

Job Ticket: 62208 **DST#: 1**

Test Start: 2015.05.11 @ 16:39:00

GENERAL INFORMATION:

Formation: **LKC "H & I"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:53:15
Time Test Ended: 22:25:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Donovan Baumann
Unit No: 54

Interval: 4282.00 ft (KB) To 4332.00 ft (KB) (TVD)
Total Depth: 4332.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

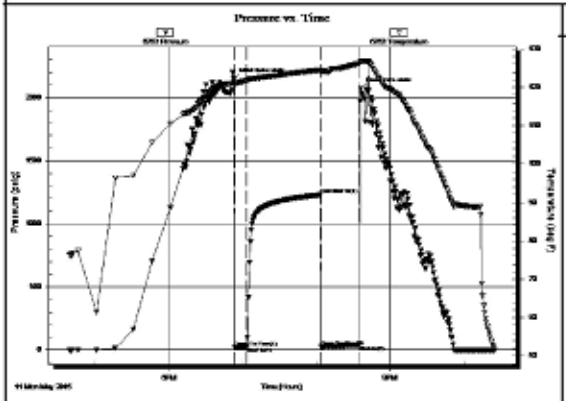
Reference Elevations: 3281.00 ft (KB)
3270.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6753 **Outside**

Press@RunDepth: 24.79 psig @ 4283.00 ft (KB)
Start Date: 2015.05.11 End Date: 2015.05.11
Start Time: 16:39:05 End Time: 22:24:59

Capacity: 8000.00 psig
Last Calib.: 2015.05.11
Time On Btm: 2015.05.11 @ 18:52:45
Time Off Btm: 2015.05.11 @ 20:36:00

TEST COMMENT: 10 - IF - Weak surface blow built to 3/4 in. in 10 min.
60 - ISI - No return
30 - FF - No surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2144.73	121.10	Initial Hydro-static
1	18.65	120.55	Open To Flow (1)
11	24.79	121.73	Shut-In(1)
71	1229.53	124.52	End Shut-In(1)
71	26.81	123.72	Open To Flow (2)
102	39.58	126.10	Shut-In(2)
104	2070.32	126.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	mud - 100M	0.07

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Samuel Gary Jr. & Assoc. Inc.

1515 Wynkoop, Suite 700
Denver, CO, 80202

ATTN: Chris Mitchell

7-5S-35W

Fisher #2-7

Job Ticket: 62370 **DST#: 2**

Test Start: 2015.05.13 @ 05:33:00

GENERAL INFORMATION:

Formation: **Cherokee**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:43:30
Time Test Ended: 13:10:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Royal Fisher
Unit No: 54

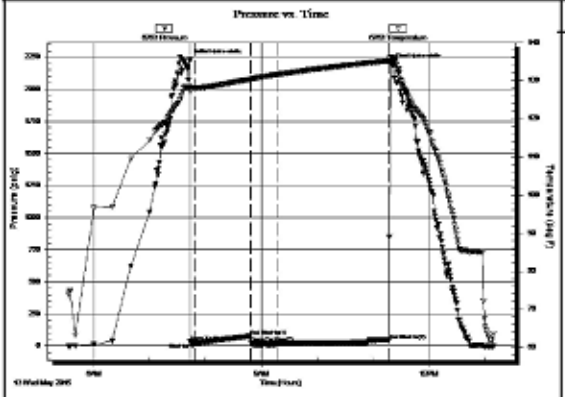
Interval: 4603.00 ft (KB) To 4638.00 ft (KB) (TVD)
Total Depth: 4638.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3281.00 ft (KB)
3270.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6753 **Outside**
Press@RunDepth: 22.41 psig @ 4604.00 ft (KB)
Start Date: 2015.05.13 End Date: 2015.05.13
Start Time: 05:33:05 End Time: 13:10:29

Capacity: 8000.00 psig
Last Calib.: 2015.05.13
Time On Btm: 2015.05.13 @ 07:43:15
Time Off Btm: 2015.05.13 @ 11:18:45

TEST COMMENT: 5 - IF - Surface blow built to 1/4"
60 - ISI - No Return
30 - FF - No Surface blow
120 - FSI - No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2224.98	128.25	Initial Hydro-static
1	33.55	127.06	Open To Flow (1)
6	26.62	128.06	Shut-In(1)
65	77.16	130.33	End Shut-In(1)
66	22.88	130.34	Open To Flow (2)
95	22.41	131.59	Shut-In(2)
215	43.53	135.18	End Shut-In(2)
216	2190.63	136.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud - 100M	0.02

Gas Rates

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

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

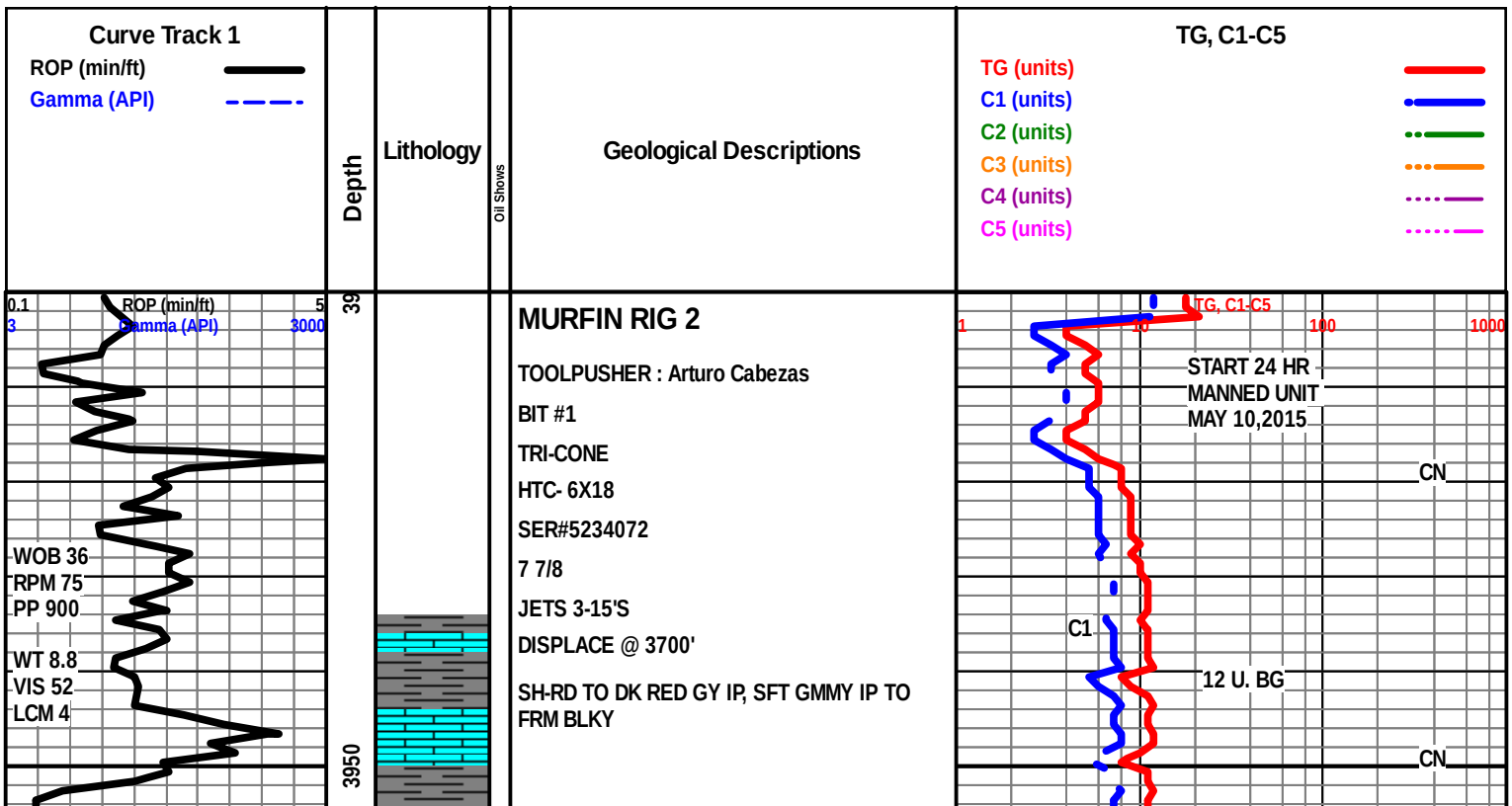
SORTING
- Well
- Moderate
- Poor

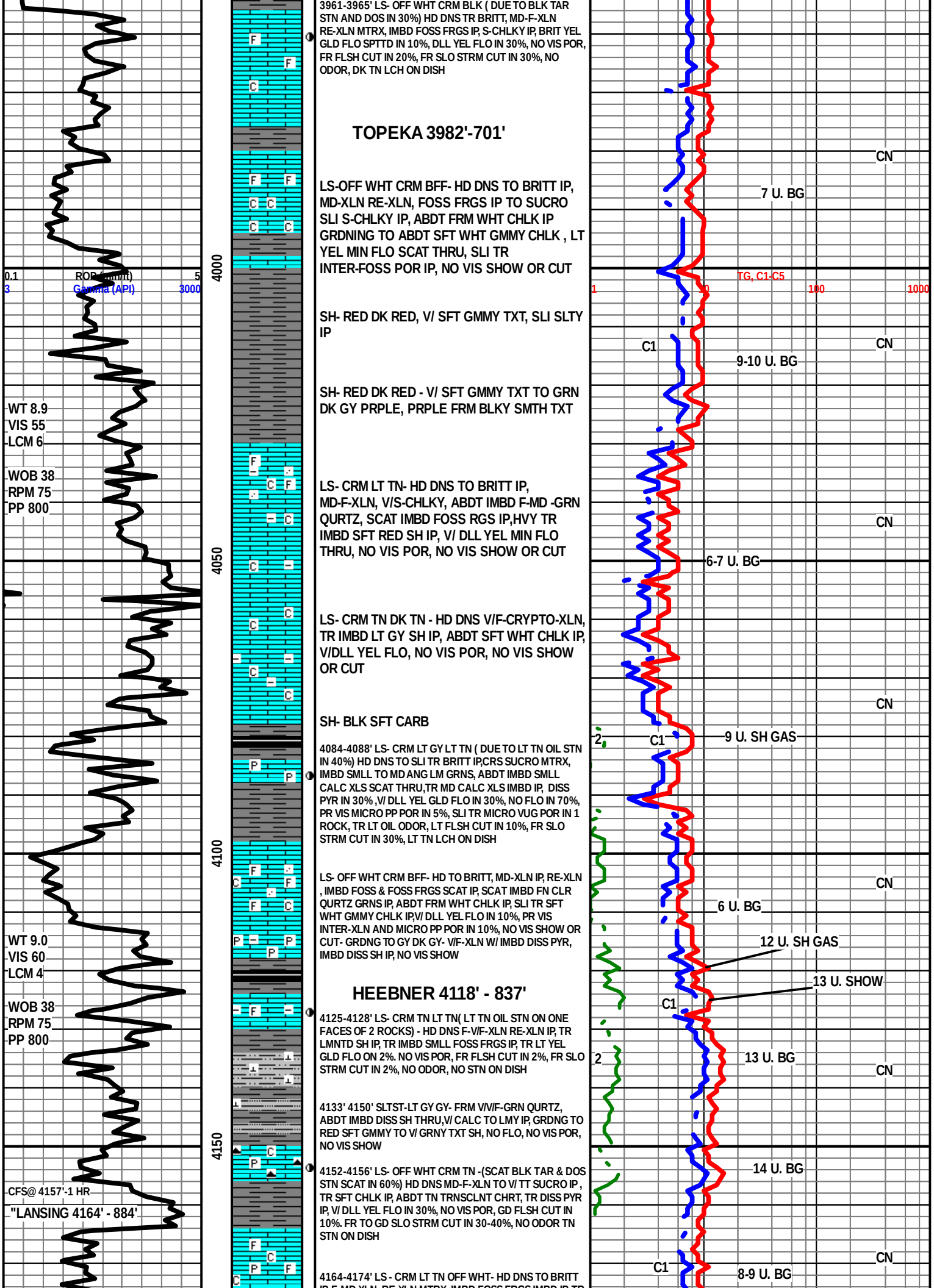
ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

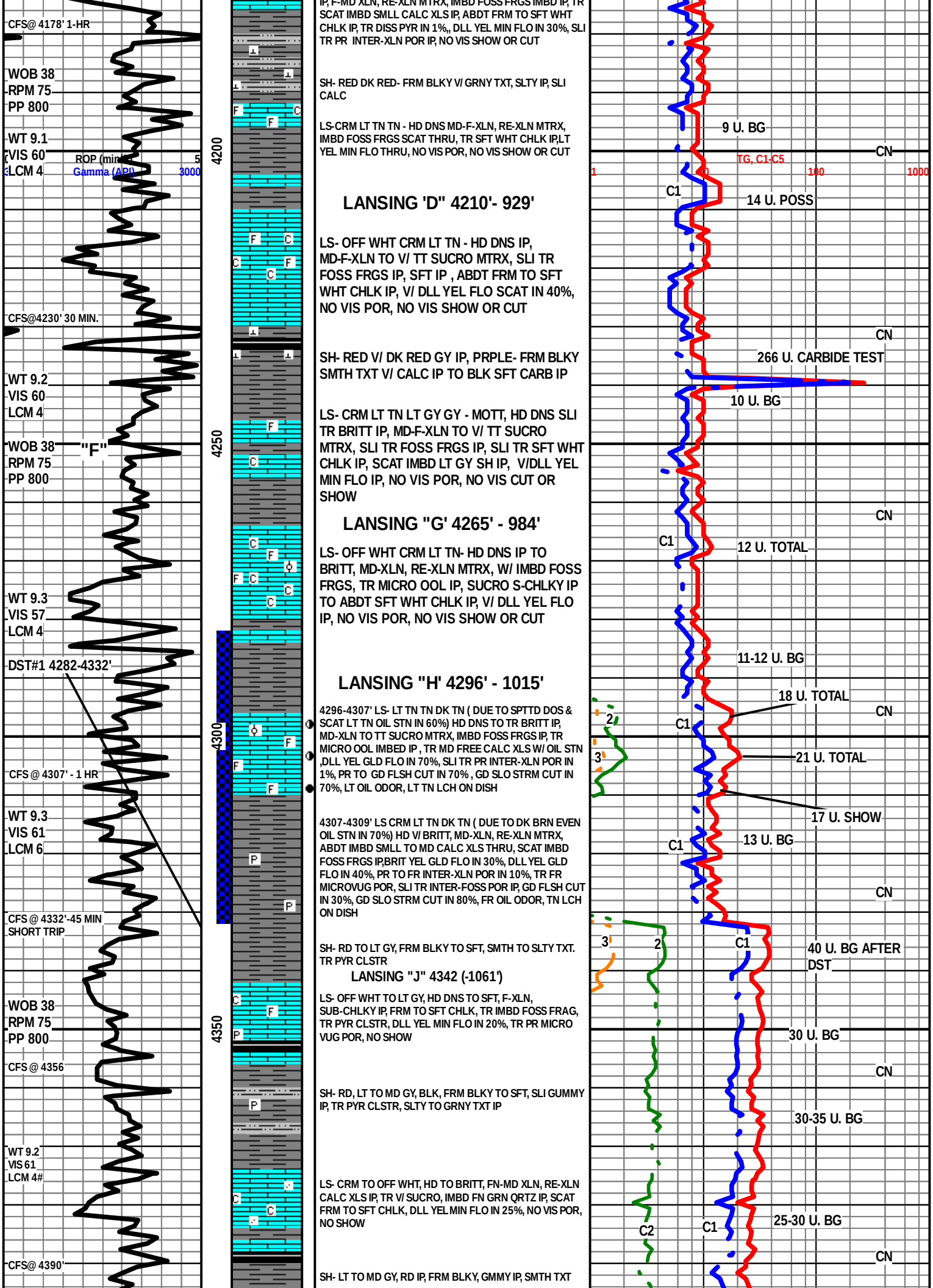
OIL SHOWS
- Even
- Spotted
- Ques
- Dead
- Gas show

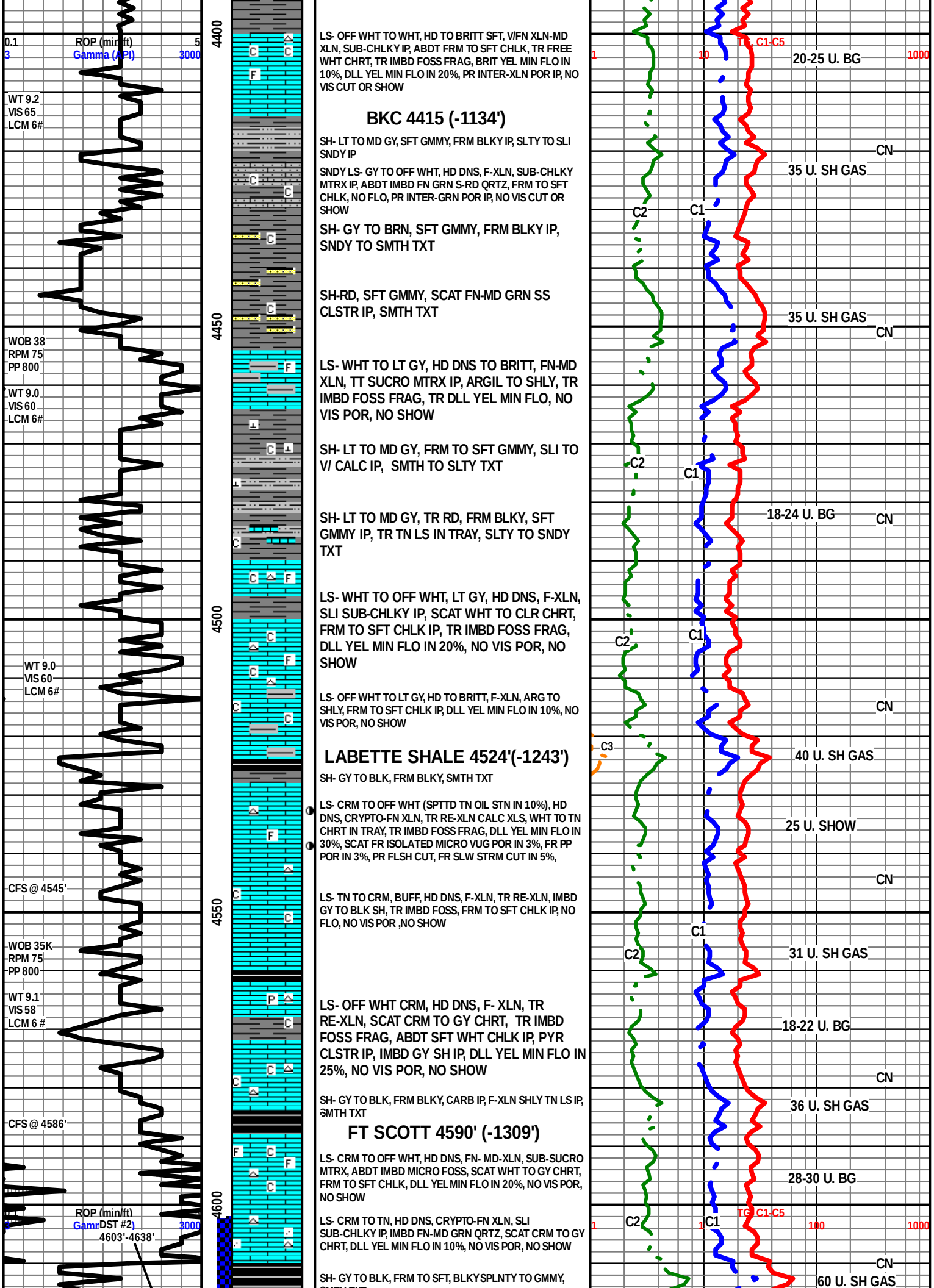
INTERVALS
- Core
- Dst
- Dst

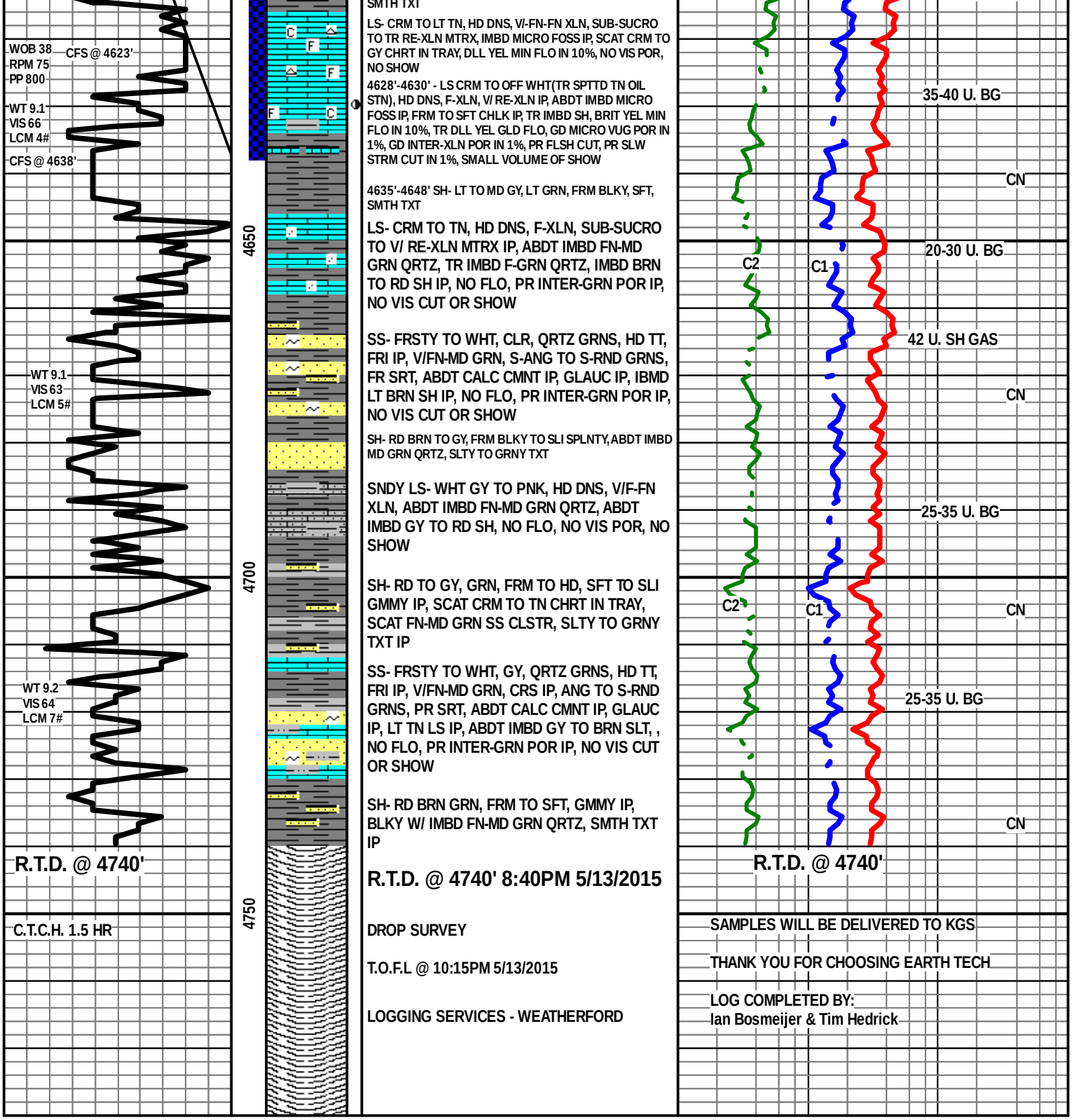
EVENTS
- Rft
- Sidewall




3961-3965' LS- OFF WHT CRM BLK (DUE TO BLK TAR STN AND DOS IN 30%) HD DNS TR BRITT, MD-F-XLN RE-XLN MTRX, IMBD FOSS FRGS IP, S-CHLKY IP, BRIT YEL GLD FLO SPTTD IN 10%, DLL YEL FLO IN 30%, NO VIS POR, FR FLSH CUT IN 20%, FR SLO STRM CUT IN 30%, NO ODOR, DK TN LCH ON DISH
TOPEKA 3982'-701'
LS-OFF WHT CRM BFF- HD DNS TO BRITT IP, MD-XLN RE-XLN, FOSS FRGS IP TO SUCRO SLI S-CHLKY IP, ABDT FRM WHT CHLK IP GRDNING TO ABDT SFT WHT GMMY CHLK , LT YEL MIN FLO SCAT THRU, SLI TR INTER-FOSS POR IP, NO VIS SHOW OR CUT
SH- RED DK RED, V/ SFT GMMY TXT, SLI SLTY IP
SH- RED DK RED - V/ SFT GMMY TXT TO GRN DK GY PRPLE, PRPLE FRM BLKY SMTH TXT
LS- CRM LT TN- HD DNS TO BRITT IP, MD-F-XLN, V/S-CHLKY, ABDT IMBD F-MD -GRN QURTZ, SCAT IMBD FOSS RGS IP,HVY TR IMBD SFT RED SH IP, V/ DLL YEL MIN FLO THRU, NO VIS POR, NO VIS SHOW OR CUT
LS- CRM TN DK TN - HD DNS V/F-CRYPTO-XLN, TR IMBD LT GY SH IP, ABDT SFT WHT CHLK IP, V/DLL YEL FLO, NO VIS POR, NO VIS SHOW OR CUT
SH- BLK SFT CARB
4084-4088' LS- CRM LT GY LT TN (DUE TO LT TN OIL STN IN 40%) HD DNS TO SLI TR BRITT IP,CRS SUCRO MTRX, IMBD SMLL TO MD ANG LM GRNS, ABDT IMBD SMLL CALC XLS SCAT THRU,TR MD CALC XLS IMBD IP, DISS PYR IN 30% ,V/ DLL YEL GLD FLO IN 30%, NO FLO IN 70%, PR VIS MICRO PP POR IN 5%, SLI TR MICRO VUG POR IN 1 ROCK, TR LT OIL ODOR, LT FLSH CUT IN 10%, FR SLO STRM CUT IN 30%, LT TN LCH ON DISH
LS- OFF WHT CRM BFF- HD TO BRITT, MD-XLN IP, RE-XLN , IMBD FOSS & FOSS FRGS SCAT IP, SCAT IMBD FN CLR QURTZ GRNS IP, ABDT FRM WHT CHLK IP, SLI TR SFT WHT GMMY CHLK IP,V/ DLL YEL FLO IN 10%, PR VIS INTER-XLN AND MICRO PP POR IN 10%, NO VIS SHOW OR CUT- GRDNG TO GY DK GY- V/F-XLN W/ IMBD DISS PYR, IMBD DISS SH IP, NO VIS SHOW
HEEBNER 4118' - 837'
4125-4128' LS- CRM TN LT TN(LT TN OIL STN ON ONE FACES OF 2 ROCKS) - HD DNS F-V/F-XLN RE-XLN IP, TR LMNTD SH IP, TR IMBD SMLL FOSS FRGS IP, TR LT YEL GLD FLO ON 2%. NO VIS POR, FR FLSH CUT IN 2%, FR SLO STRM CUT IN 2%, NO ODOR, NO STN ON DISH
4133' 4150' SLTST-LT GY GY- FRM V/V/F-GRN QURTZ, ABDT IMBD DISS SH THRU,V/ CALC TO LMY IP, GRDNG TO RED SFT GMMY TO V/ GRNY TXT SH, NO FLO, NO VIS POR, NO VIS SHOW
4152-4156' LS- OFF WHT CRM TN -(SCAT BLK TAR & DOS STN SCAT IN 60%) HD DNS MD-F-XLN TO V/ TT SUCRO IP , TR SFT CHLK IP, ABDT TN TRNSCLNT CHRT, TR DISS PYR IP, V/ DLL YEL FLO IN 30%, NO VIS POR, GD FLSH CUT IN 10%. FR TO GD SLO STRM CUT IN 30-40%, NO ODOR TN STN ON DISH
4164-4174' LS - CRM LT TN OFF WHT- HD DNS TO BRITT
4000
4050
4100
4150
0.1
ROP (min/ft)
5
3
Gamma (API)
3000
WT 8.9
VIS 55
LCM 6
WOB 38
RPM 75
PP 800
WT 9.0
VIS 60
LCM 4
WOB 38
RPM 75
PP 800
CFS@ 4157'-1 HR
"LANSING 4164' - 884'
TG, C1-C5
1
10
100
1000
CN
7 U. BG
C1
9-10 U. BG
6-7 U. BG
2
9 U. SH GAS
6 U. BG
12 U. SH GAS
13 U. SHOW
13 U. BG
14 U. BG
8-9 U. BG


CFS@ 4178' 1-HR
WOB 38
RPM 75
PP 800
WT 9.1
VIS 60
LCM 4
ROP (min/ft) 5
Gamma (API) 3000
CFS@4230' 30 MIN.
WT 9.2
VIS 60
LCM 4
WOB 38
RPM 75
PP 800
"F"
WT 9.3
VIS 57
LCM 4
DST#1 4282-4332'
CFS @ 4307' - 1 HR
WT 9.3
VIS 61
LCM 6
CFS @ 4332'-45 MIN SHORT TRIP
WOB 38
RPM 75
PP 800
CFS @ 4356
WT 9.2
VIS 61
LCM 4#
CFS@ 4390'
4200
4250
4300
4350
IP, F-MD XLN, RE-XLN MTRX, IMBD FOSS FRGS IMBD IP, TR SCAT IMBD SMLL CALC XLS IP, ABDT FRM TO SFT WHT CHLK IP, TR DISS PYR IN 1%,, DLL YEL MIN FLO IN 30%, SLI TR PR INTER-XLN POR IP, NO VIS SHOW OR CUT
SH- RED DK RED- FRM BLKY V/ GRNY TXT, SLTY IP, SLI CALC
LS-CRM LT TN TN - HD DNS MD-F-XLN, RE-XLN MTRX, IMBD FOSS FRGS SCAT THRU, TR SFT WHT CHLK IP,LT YEL MIN FLO THRU, NO VIS POR, NO VIS SHOW OR CUT
LANSING 'D" 4210'- 929'
LS- OFF WHT CRM LT TN - HD DNS IP, MD-F-XLN TO V/ TT SUCRO MTRX, SLI TR FOSS FRGS IP, SFT IP , ABDT FRM TO SFT WHT CHLK IP, V/ DLL YEL FLO SCAT IN 40%, NO VIS POR, NO VIS SHOW OR CUT
SH- RED V/ DK RED GY IP, PRPLE- FRM BLKY SMTH TXT V/ CALC IP TO BLK SFT CARB IP
LS- CRM LT TN LT GY GY - MOTT, HD DNS SLI TR BRITT IP, MD-F-XLN TO V/ TT SUCRO MTRX, SLI TR FOSS FRGS IP, SLI TR SFT WHT CHLK IP, SCAT IMBD LT GY SH IP, V/DLL YEL MIN FLO IP, NO VIS POR, NO VIS CUT OR SHOW
LANSING "G' 4265' - 984'
LS- OFF WHT CRM LT TN- HD DNS IP TO BRITT, MD-XLN, RE-XLN MTRX, W/ IMBD FOSS FRGS, TR MICRO OOL IP, SUCRO S-CHLKY IP TO ABDT SFT WHT CHLK IP, V/ DLL YEL FLO IP, NO VIS POR, NO VIS SHOW OR CUT
LANSING "H' 4296' - 1015'
4296-4307' LS- LT TN TN DK TN (DUE TO SPTTD DOS & SCAT LT TN OIL STN IN 60%) HD DNS TO TR BRITT IP, MD-XLN TO TT SUCRO MTRX, IMBD FOSS FRGS IP, TR MICRO OOL IMBED IP , TR MD FREE CALC XLS W/ OIL STN ,DLL YEL GLD FLO IN 70%, SLI TR PR INTER-XLN POR IN 1%, PR TO GD FLSH CUT IN 70% , GD SLO STRM CUT IN 70%, LT OIL ODOR, LT TN LCH ON DISH
4307-4309' LS CRM LT TN DK TN (DUE TO DK BRN EVEN OIL STN IN 70%) HD V/ BRITT, MD-XLN, RE-XLN MTRX, ABDT IMBD SMLL TO MD CALC XLS THRU, SCAT IMBD FOSS FRGS IP,BRIT YEL GLD FLO IN 30%, DLL YEL GLD FLO IN 40%, PR TO FR INTER-XLN POR IN 10%, TR FR MICROVUG POR, SLI TR INTER-FOSS POR IP, GD FLSH CUT IN 30%, GD SLO STRM CUT IN 80%, FR OIL ODOR, TN LCH ON DISH
SH- RD TO LT GY, FRM BLKY TO SFT, SMTH TO SLTY TXT. TR PYR CLSTR
LANSING "J" 4342 (-1061')
LS- OFF WHT TO LT GY, HD DNS TO SFT, F-XLN, SUB-CHLKY IP, FRM TO SFT CHLK, TR IMBD FOSS FRAG, TR PYR CLSTR, DLL YEL MIN FLO IN 20%, TR PR MICRO VUG POR, NO SHOW
SH- RD, LT TO MD GY, BLK, FRM BLKY TO SFT, SLI GUMMY IP, TR PYR CLSTR, SLTY TO GRNY TXT IP
LS- CRM TO OFF WHT, HD TO BRITT, FN-MD XLN, RE-XLN CALC XLS IP, TR V/ SUCRO, IMBD FN GRN QRTZ IP, SCAT FRM TO SFT CHLK, DLL YELMIN FLO IN 25%, NO VIS POR, NO SHOW
SH- LT TO MD GY, RD IP, FRM BLKY, GMMY IP, SMTH TXT
9 U. BG
CN
TG, C1-C5
1
10
100
1000
C1
14 U. POSS
CN
266 U. CARBIDE TEST
10 U. BG
CN
C1
12 U. TOTAL
11-12 U. BG
18 U. TOTAL
CN
2
C1
3
21 U. TOTAL
17 U. SHOW
C1
13 U. BG
CN
3
2
C1
40 U. BG AFTER DST
30 U. BG
CN
30-35 U. BG
C2
C1
25-30 U. BG
CN


0.1
3
ROP (min/ft)
Gamma (API)
5
3000
WT 9.2
VIS 65
LCM 6#
WOB 38
RPM 75
PP 800
WT 9.0
VIS 60
LCM 6#
WT 9.0
VIS 60
LCM 6#
CFS @ 4545'
WOB 35K
RPM 75
PP 800
WT 9.1
VIS 58
LCM 6 #
CFS @ 4586'
ROP (min/ft)
Gamn
DST #2)
4603'-4638'
3000
4400
4450
4500
4550
4600
LS- OFF WHT TO WHT, HD TO BRITT SFT, V/FN XLN-MD XLN, SUB-CHLKY IP, ABDT FRM TO SFT CHLK, TR FREE WHT CHRT, TR IMBD FOSS FRAG, BRIT YEL MIN FLO IN 10%, DLL YEL MIN FLO IN 20%, PR INTER-XLN POR IP, NO VIS CUT OR SHOW
BKC 4415 (-1134')
SH- LT TO MD GY, SFT GMMY, FRM BLKY IP, SLTY TO SLI SNDY IP
SNDY LS- GY TO OFF WHT, HD DNS, F-XLN, SUB-CHLKY MTRX IP, ABDT IMBD FN GRN S-RD QRTZ, FRM TO SFT CHLK, NO FLO, PR INTER-GRN POR IP, NO VIS CUT OR SHOW
SH- GY TO BRN, SFT GMMY, FRM BLKY IP, SNDY TO SMTH TXT
SH-RD, SFT GMMY, SCAT FN-MD GRN SS CLSTR IP, SMTH TXT
LS- WHT TO LT GY, HD DNS TO BRITT, FN-MD XLN, TT SUCRO MTRX IP, ARGIL TO SHLY, TR IMBD FOSS FRAG, TR DLL YEL MIN FLO, NO VIS POR, NO SHOW
SH- LT TO MD GY, FRM TO SFT GMMY, SLI TO V/ CALC IP, SMTH TO SLTY TXT
SH- LT TO MD GY, TR RD, FRM BLKY, SFT GMMY IP, TR TN LS IN TRAY, SLTY TO SNDY TXT
LS- WHT TO OFF WHT, LT GY, HD DNS, F-XLN, SLI SUB-CHLKY IP, SCAT WHT TO CLR CHRT, FRM TO SFT CHLK IP, TR IMBD FOSS FRAG, DLL YEL MIN FLO IN 20%, NO VIS POR, NO SHOW
LS- OFF WHT TO LT GY, HD TO BRITT, F-XLN, ARG TO SHLY, FRM TO SFT CHLK IP, DLL YEL MIN FLO IN 10%, NO VIS POR, NO SHOW
LABETTE SHALE 4524'(-1243')
SH- GY TO BLK, FRM BLKY, SMTH TXT
LS- CRM TO OFF WHT (SPTTD TN OIL STN IN 10%), HD DNS, CRYPTO-FN XLN, TR RE-XLN CALC XLS, WHT TO TN CHRT IN TRAY, TR IMBD FOSS FRAG, DLL YEL MIN FLO IN 30%, SCAT FR ISOLATED MICRO VUG POR IN 3%, FR PP POR IN 3%, PR FLSH CUT, FR SLW STRM CUT IN 5%,
LS- TN TO CRM, BUFF, HD DNS, F-XLN, TR RE-XLN, IMBD GY TO BLK SH, TR IMBD FOSS, FRM TO SFT CHLK IP, NO FLO, NO VIS POR ,NO SHOW
LS- OFF WHT CRM, HD DNS, F- XLN, TR RE-XLN, SCAT CRM TO GY CHRT, TR IMBD FOSS FRAG, ABDT SFT WHT CHLK IP, PYR CLSTR IP, IMBD GY SH IP, DLL YEL MIN FLO IN 25%, NO VIS POR, NO SHOW
SH- GY TO BLK, FRM BLKY, CARB IP, F-XLN SHLY TN LS IP, SMTH TXT
FT SCOTT 4590' (-1309')
LS- CRM TO OFF WHT, HD DNS, FN- MD-XLN, SUB-SUCRO MTRX, ABDT IMBD MICRO FOSS, SCAT WHT TO GY CHRT, FRM TO SFT CHLK, DLL YEL MIN FLO IN 20%, NO VIS POR, NO SHOW
LS- CRM TO TN, HD DNS, CRYPTO-FN XLN, SLI SUB-CHLKY IP, IMBD FN-MD GRN QRTZ, SCAT CRM TO GY CHRT, DLL YEL MIN FLO IN 10%, NO VIS POR, NO SHOW
SH- GY TO BLK, FRM TO SFT, BLKY SPLNTY TO GMMY,
TG, C1-C5
1
10
1000
20-25 U. BG
CN
35 U. SH GAS
C2
C1
35 U. SH GAS
CN
C2
C1
18-24 U. BG
CN
C2
C1
CN
C3
40 U. SH GAS
25 U. SHOW
CN
C1
C2
31 U. SH GAS
18-22 U. BG
CN
36 U. SH GAS
28-30 U. BG
TG, C1-C5
1
C2
1
C1
100
1000
CN
60 U. SH GAS


WOB 38
RPM 75
PP 800
CFS @ 4623'
WT 9.1
VIS 66
LCM 4#
CFS @ 4638'
WT 9.1
VIS 63
LCM 5#
WT 9.2
VIS 64
LCM 7#
R.T.D. @ 4740'
C.T.C.H. 1.5 HR
4650
4700
4750
C
F
F
F
C
SMTH TXT
LS- CRM TO LT TN, HD DNS, V/-FN-FN XLN, SUB-SUCRO TO TR RE-XLN MTRX, IMBD MICRO FOSS IP, SCAT CRM TO GY CHRT IN TRAY, DLL YEL MIN FLO IN 10%, NO VIS POR, NO SHOW
4628'-4630' - LS CRM TO OFF WHT(TR SPTTD TN OIL STN), HD DNS, F-XLN, V/ RE-XLN IP, ABDT IMBD MICRO FOSS IP, FRM TO SFT CHLK IP, TR IMBD SH, BRIT YEL MIN FLO IN 10%, TR DLL YEL GLD FLO, GD MICRO VUG POR IN 1%, GD INTER-XLN POR IN 1%, PR FLSH CUT, PR SLW STRM CUT IN 1%, SMALL VOLUME OF SHOW
4635'-4648' SH- LT TO MD GY, LT GRN, FRM BLKY, SFT, SMTH TXT
LS- CRM TO TN, HD DNS, F-XLN, SUB-SUCRO TO V/ RE-XLN MTRX IP, ABDT IMBD FN-MD GRN QRTZ, TR IMBD F-GRN QRTZ, IMBD BRN TO RD SH IP, NO FLO, PR INTER-GRN POR IP, NO VIS CUT OR SHOW
SS- FRSTY TO WHT, CLR, QRTZ GRNS, HD TT, FRI IP, V/FN-MD GRN, S-ANG TO S-RND GRNS, FR SRT, ABDT CALC CMNT IP, GLAUC IP, IBMD LT BRN SH IP, NO FLO, PR INTER-GRN POR IP, NO VIS CUT OR SHOW
SH- RD BRN TO GY, FRM BLKY TO SLI SPLNTY, ABDT IMBD MD GRN QRTZ, SLTY TO GRNY TXT
SNDY LS- WHT GY TO PNK, HD DNS, V/F-FN XLN, ABDT IMBD FN-MD GRN QRTZ, ABDT IMBD GY TO RD SH, NO FLO, NO VIS POR, NO SHOW
SH- RD TO GY, GRN, FRM TO HD, SFT TO SLI GMMY IP, SCAT CRM TO TN CHRT IN TRAY, SCAT FN-MD GRN SS CLSTR, SLTY TO GRNY TXT IP
SS- FRSTY TO WHT, GY, QRTZ GRNS, HD TT, FRI IP, V/FN-MD GRN, CRS IP, ANG TO S-RND GRNS, PR SRT, ABDT CALC CMNT IP, GLAUC IP, LT TN LS IP, ABDT IMBD GY TO BRN SLT, , NO FLO, PR INTER-GRN POR IP, NO VIS CUT OR SHOW
SH- RD BRN GRN, FRM TO SFT, GMMY IP, BLKY W/ IMBD FN-MD GRN QRTZ, SMTH TXT IP
R.T.D. @ 4740' 8:40PM 5/13/2015
DROP SURVEY
T.O.F.L @ 10:15PM 5/13/2015
LOGGING SERVICES - WEATHERFORD
35-40 U. BG
CN
20-30 U. BG
C2
C1
42 U. SH GAS
CN
25-35 U. BG
C2
C1
CN
25-35 U. BG
CN
R.T.D. @ 4740'
SAMPLES WILL BE DELIVERED TO KGS
THANK YOU FOR CHOOSING EARTH TECH
LOG COMPLETED BY:
Ian Bosmeijer & Tim Hedrick