



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1096750
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
-----------------------------------	-----------------	---

API No. 15 - _____

Spot Description: _____

_____-_____-_____- Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1096750

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

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

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

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

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

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

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

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
 Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
 Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Samuel Gary Jr. & Associates, Inc.
Well Name	MILLER-LEIKER 1-28
Doc ID	1096750

All Electric Logs Run

ARRAY-IND
DEN-NEUT
MICRO
SONIC
SPECTRAL

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



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

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

October 09, 2012

TOM FERTAL
Samuel Gary Jr. & Associates, Inc.
1515 WYNKOOP, STE 700
DENVER, CO 80202

Re: ACO1
API 15-051-26316-00-00
MILLER-LEIKER 1-28
NW/4 Sec.28-14S-17W
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,
TOM FERTAL



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

Date: 6/24/2012
 Invoice # 876

P.O.#:
 Due Date: 7/24/2012
 Division: Russell

Invoice

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

Reference:
 MILLER-LEIKER 1-28

Description of Work:
 LONG SURFACE JOB

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 963.85	No	Bulk Truck Mileage-Job to Nearest Bulk Plant	8	\$49.32	No
Common-Class A	425	\$ 5,473.06	Yes				
8 5/8" Basket	3	\$ 1,000.67	Yes				
Bulk Truck Matl-Material Service Charge	448	\$ 945.78	No				
Calcium Chloride	15	\$ 754.62	Yes				
Flo Seal	100	\$ 211.11	Yes				
8 5/8" Centralizer	3	\$ 202.67	Yes				
Premium Gel (Bentonite)	8	\$ 137.48	Yes				
8 5/8" Top Rubber Plug	1	\$ 111.89	Yes				
Baffle Plate Aluminum, 8 5/8"	1	\$ 95.00	Yes				
Pump Truck Mileage-Job to Nearest Camp	8	\$ 84.28	No				

Invoice Terms:

Net 30

SubTotal: \$ 10,029.70
 Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice: \$ (1,504.45)

SubTotal for Taxable Items:	\$ 6,788.51
SubTotal for Non-Taxable Items:	\$ 1,736.74
Total:	\$ 8,525.24
Tax:	\$ 427.68

6.30% Ellis County Sales Tax

Amount Due: \$ 8,952.92

Applied Payments:

Balance Due: \$ 8,952.92

Thank You For Your Business!

Past Due Invoices are subject to a service charge (annual rate of 24%)
 This does not include any applicable taxes unless it is listed.
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DRLG COMP W/O LOE GG

Account	8200.138
Well/Prospect	
Deck	
AFE	
Approval	
Description	

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. 876

Date	Sec.	Twp.	Range.	County	State	On Location	Finish
6-20-12	28	14	17	ELLIS	KANSAS		10:45AM

Lease MURPHY LEASE	Well No.	Location
	1-28	TOWNSHIP 35 - 1E - 1/2 S - E INTO
Contractor	Owner	
DISCOVERY #2	SAM GARY JR	
Type Job	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	T.D.	
12 1/4"	1026'	
Csg.	Depth	Charge To
8 5/8" - 23LB	1026'	SAM GARY JR.
Tbg. Size	Depth	Street
		1515 WYNKOOP
Tool	Depth	City
		DENVER
Cement Left in Csg.	Shoe Joint	State
	40.35	CO, 80202
Meas Line	Displace	Cement Amount Ordered
	62 3/4 BLS	425com - 3cc - 2gEL

EQUIPMENT

Pumptrk #15	No.	Cementer Helper	NECK	Common	4/25
Bulktrk	No.	Driver	DOUG	Poz. Mix	
Bulktrk PLU	No.	Driver	CISCO	Gel.	8
				Calcium	15

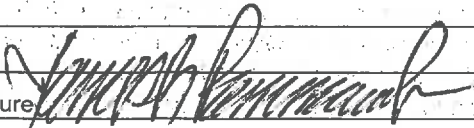
JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal 100#
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
	Sand
	Handling 4/18
	Mileage

CEMENT DID CIRCULATE ✓

FLOAT EQUIPMENT

	Guide Shoe
	Centralizer
	Baskets
	AFU Inserts
	Float Shoe
	Latch Down
	1- 8 5/8" RUBBER PLUG
	1- 8 5/8" BAFFLE PLATE
THANK YOU ✓	Pumptrk Charge Long Surface
	Mileage 8

X Signature 

Tax
Discount
Total Charge



QUALITY OILWELL CEMENTING, INC.

PO Box 32 - 740 West Wichita Ave, Russell KS 67665
 Phone: 785-324-1041 fax: 785-483-1087
 Email: cementing@ruraltel.net

Date: 6/30/2012
 Invoice # 694

P.O.#:

Due Date: 7/30/2012

Division: Russell

Invoice

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

DRILL COMP W/O LOG CG

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

RECEIVED

JUL 09 2012

SAMUEL GARY JR.
& ASSOCIATES, INC.

Reference:
 MILLER-LEIKER 1-28

Description of Work:
 PROD LONG STRING

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 963.85	No	Salt (Fine)	19	\$279.98	Yes
Common-Class A	225	\$ 2,897.50	Yes	Latch Down Plug & Baffle, 5 1/2"	1	\$236.44	Yes
Gilsonite	1057	\$ 1,873.58	Yes	Flo Seal	56	\$118.22	Yes
CFL 117	176	\$ 1,144.39	Yes	Pump Truck Mileage-Job to Nearest Camp	8	\$84.28	No
5 1/2" Basket	3	\$ 728.33	Yes	KCL	2	\$63.04	Yes
Bulk Truck Matl-Material Service Charge	254	\$ 536.22	No	Bulk Truck Mileage-Job to Nearest Bulk Plant	8	\$49.32	No
CD-110	117	\$ 494.00	Yes				
5 1/2" Turbolizer	7	\$ 428.56	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				

Invoice Terms:

Net 30

SubTotal: \$ 10,780.71

Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice: \$ (1,617.11)

SubTotal for Taxable Items:	\$ 7,774.99
SubTotal for Non-Taxable Items:	\$ 1,388.61
Total:	\$ 9,163.60
Tax:	\$ 489.82

6.30% Ellis County Sales Tax

Thank You For Your Business!

Amount Due: \$ 9,653.42
Applied Payments:
Balance Due: \$ 9,653.42

Past Due Invoices are subject to a service charge (annual rate of 24%)
 This does not include any applicable taxes unless it is listed.
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QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 694

Date	6-26-12	Sec. 28	Twp. 14	Range 17	County Ellis	State KS	On Location	Finish 12:30p
Lease	Miller-BETKER			Well No. 1-28	Location Tarkenton Hwy 40 35 Finto			

Contractor	D. Scovery #2		Owner	To Quality Oilwell Cementing, Inc.				
Type Job	Production String		You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.					
Hole Size	7 7/8	T.D.	3590	Charge To	Sam Gary J. + Assoc.			
Csg.	5 1/2 155#	Depth	3580.84	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.	42.46	Shoe Joint	42.46	Cement Amount Ordered 725 @ Pro C 10 1/2 salt 59 @ Leiksonite				
Meas Line		Displace	84 1/4 BL	14# Flo 3 1/2 CD-110 .3 1/2 CFL-117 .25% Caf-38				

EQUIPMENT

Pumptrk	9	No.	Cement Helper	1	Common	50 gal mud clear 20 BLKCL
Bulktrk	10	No.	Driver	Matt	Poz. Mix	
Bulktrk		No.	Driver	Levi	Gel.	

JOB SERVICES & REMARKS

Remarks:	Calcium	CD 110 @ 111#
Rat Hole 30	Hulls	Ken 2 gal
Mouse Hole	Salt	19
Centralizers 1, 3, 5, 9, 11, 13, 15	Flowseal	56#
Baskets 3 9 15	Kol-Seal	1057
D/V or Port Collar	Mud CLR 48	500 gal
5 1/2 set @ 358.84 - JASON @ 3538.38	CFL-117 or CD110-CAF 38	50#
Best Circulation Pump 50 gal mud clear	Sand	176#
20 BL spacer - Plug Rathole & mousehole	Handling	254
Cement 5 1/2 with #25K - Clear Lines	Mileage	

FLOAT EQUIPMENT

Guide Shoe	5 1/2
Centralizer	Turbo's 7
Baskets	3
AFU Inserts	
Float Shoe	1
Latch Down	1
	(Rotator)

Pumptrk Charge	Prod Long String
Mileage	8
Tax	
Discount	
Total Charge	

X Signature 



DRILL STEMTEST REPORT

Prepared For: **SGJ & Assoc. Inc.**

1515 Wynkoop Ste 700
Denver CO 80202

ATTN: Tom Feral

Miller-Leiker 1-28

28 14s 17w Ellis

Start Date: 2012.06.23 @ 12:00:00

End Date: 2012.06.23 @ 18:40:00

Job Ticket #: 47406 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.06.24 @ 11:35:36



**TRILOBITE
TESTING, INC.**

DRILL STEMTEST REPORT

SGJ & Assoc. Inc.
1515 Wynkoop Ste 700
Denver CO 80202
ATTN: Tom Fertal

28 14s 17w Elis
Miller-Leiker 1-28
Job Ticket: 47406 **DST#: 1**
Test Start: 2012.06.23 @ 12:00:00

GENERAL INFORMATION:

Formation: **LKC "F&G"**
 Deviated: Nb Whipstock: 1965.00 ft (KB)
 Time Tool Opened: 14:16:30
 Time Test Ended: 18:40:00
 Interval: **3296.00 ft (KB) To 3329.00 ft (KB) (TVD)**
 Total Depth: 3329.00 ft (KB) (TVD)
 Hble Diameter: 7.88 inches Hble Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jim Svaty
 Unit Nr: 41
 Reference Elevations: 1965.00 ft (KB)
 1957.00 ft (CF)
 KB to GR/CF: 8.00 ft

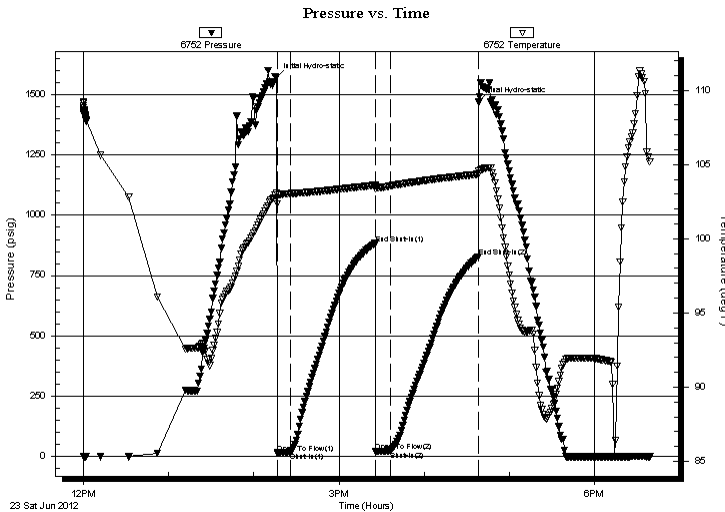
Serial #: 6752

Inside

Press @ Run Depth: 22.35 psig @ 3297.00 ft (KB)
 Start Date: 2012.06.23 End Date: 2012.06.23
 Start Time: 12:00:01 End Time: 18:39:00
 Capacity: 8000.00 psig
 Last Calib.: 2012.06.23
 Time On Btm: 2012.06.23 @ 14:16:00
 Time Off Btm: 2012.06.23 @ 16:38:30

TEST COMMENT: 10-IFP: Weak Surface Blow Died in 4min
 60-ISIP: No Blow
 10-FFP: Weak Surface Blow Died in 2min
 60-FSIP: No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1572.16	103.06	Initial Hydro-static
1	12.69	102.33	Open To Flow (1)
10	18.52	103.04	Shut-In (1)
70	882.95	103.61	End Shut-In (1)
70	19.63	103.35	Open To Flow (2)
80	22.35	103.56	Shut-In (2)
142	826.96	104.34	End Shut-In (2)
143	1469.64	104.56	Final Hydro-static

Recovery

Length (ft)	Description	Vdume (tbl)
7.00	OSM100%am	0.03

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEMTEST REPORT

SGJ & Assoc. Inc.
1515 Wynkoop Ste 700
Denver CO 80202
ATTN: Tom Fernal

28 14s 17w Elis

Miller-Leiker 1-28

Job Ticket: 47406

DST#: 1

Test Start: 2012.06.23 @ 12:00:00

GENERAL INFORMATION:

Formation: **LKC "F&G"**

Deviated: Nb Whipstock: 1965.00 ft (KB)

Time Tool Opened: 14:16:30

Time Test Ended: 18:40:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jim Svaty

Unit Nr: 41

Interval: **3296.00 ft (KB) To 3329.00 ft (KB) (TVD)**

Total Depth: 3329.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1965.00 ft (KB)

1957.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6741

Outside

Press@RunDepth: psig @ 3297.00 ft (KB)

Start Date: 2012.06.23

End Date:

2012.06.23

Start Time: 12:00:01

End Time:

18:39:00

Capacity: 8000.00 psig

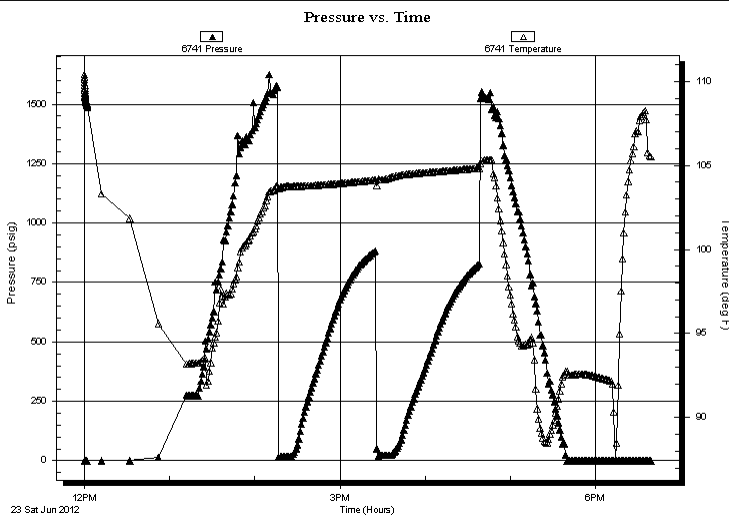
Last Calib:

2012.06.23

Time On Btm

Time Off Btm

TEST COMMENT: 10-IFP: Weak Surface Blow Died in 4min
60-ISIP: No Blow
10-FFP: Weak Surface Blow Died in 2min
60-FSIP: No Blow



PRESSURE SUMMARY

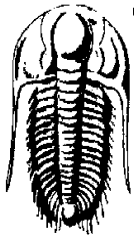
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
7.00	OSM100%am	0.03

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEMTEST REPORT

SGJ & Assoc. Inc.
1515 Wynkoop Ste 700
Denver CO 80202
ATTN Tom Fertal

28 14s 17w Elis
Miller-Leiker 1-28
Job Ticket: 47406 **DST#: 1**
Test Start: 2012.06.23 @ 12:00:00

GENERAL INFORMATION:

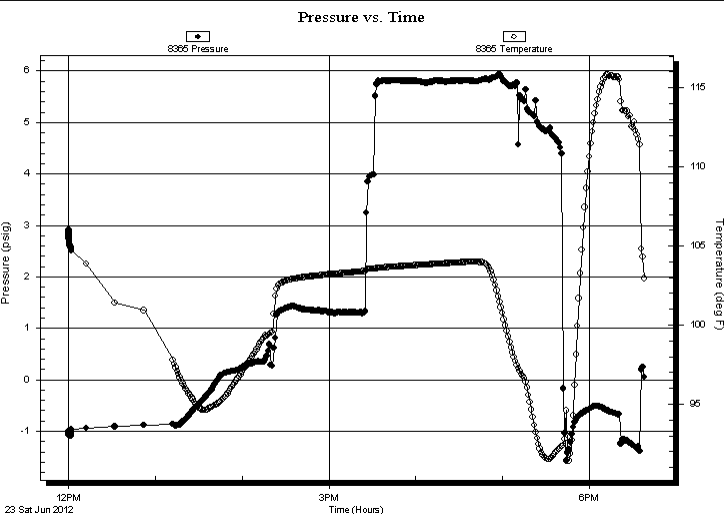
Formation: **LKC "F&G"**
Deviated: Nb Whipstock: 1965.00 ft (KB)
Time Tool Opened: 14:16:30
Time Test Ended: 18:40:00
Interval: **3296.00 ft (KB) To 3329.00 ft (KB) (TVD)**
Total Depth: 3329.00 ft (KB) (TVD)
Hble Diameter: 7.88 inches Hble Condition: Fair
Test Type: Conventional Bottom Hble (Initial)
Tester: Jim Svaty
Unit Nr: 41
Reference Elevations: 1965.00 ft (KB)
1957.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8365

Fluid

Press @ Run Depth: psig @ 3262.00 ft (KB)
Start Date: 2012.06.23 End Date: 2012.06.23 Capacity: 8000.00 psig
Start Time: 12:00:01 End Time: 18:38:30 Last Calib.: 2012.06.23
Time On Btm
Time Off Btm

TEST COMMENT: 10-IFP: Weak Surface Blow Died in 4min
60-ISIP: Nb Blow
10-FFP: Weak Surface Blow Died in 2min
60-FSIP: Nb Blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Vdume (tbl)
7.00	OSM100%am	0.03

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEMTEST REPORT

TOOL DIAGRAM

SGJ & Assoc. Inc.
1515 Wynkoop Ste 700
Denver CO 80202
ATTN: Tom Fertal

28 14s 17w Elis
Miller-Leiker 1-28
Job Ticket: 47406 **DST#: 1**
Test Start: 2012.06.23 @ 12:00:00

Tool Information

Drill Pipe:	Length: 3250.00 ft	Diameter: 3.80 inches	Volume: 45.59 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 48000.00 lb
			<u>Total Volume: 45.74 bbl</u>	Tool Chased: 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3296.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	33.00 ft			
Tool Length:	68.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length(ft) Serial No. Position Depth(ft) Accum Lengths

Tool Description	Length(ft)	Serial No.	Position	Depth(ft)	Accum Lengths
Change Over Sub	1.00			3262.00	
Recorder	0.00	8365	Fluid	3262.00	
Blank Spacing	5.00			3267.00	
Shut In Tool	5.00			3272.00	
Sampler	2.00			3274.00	
Hydraulic tool	5.00			3279.00	
Jars	5.00			3284.00	
Safety Joint	2.00			3286.00	
Packer	5.00			3291.00	35.00 Bottom Of Top Packer
Packer	5.00			3296.00	
Stubb	1.00			3297.00	
Recorder	0.00	6752	Inside	3297.00	
Recorder	0.00	6741	Outside	3297.00	
Perforations	29.00			3326.00	
Bullnose	3.00			3329.00	33.00 Bottom Packers & Anchor

Total Tool Length: 68.00



**TRILOBITE
TESTING, INC.**

DRILL STEMTEST REPORT

FLUID SUMMARY

SGJ & Assoc. Inc.
1515 Wynkoop Ste 700
Denver CO 80202
ATTN Tom Feral

28 14s 17w Elis
Miller-Leiker 1-28
Job Ticket: 47406 **DST#: 1**
Test Start: 2012.06.23 @ 12:00:00

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: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 cm ³	Gas Cushion Type:		
Resistivity: ohmm	Gas Cushion Pressure: psig		
Salinity: 3800.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
7.00	OSM100% _m	0.034

Total Length: 7.00ft Total Volume: 0.034 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Serial # 6752

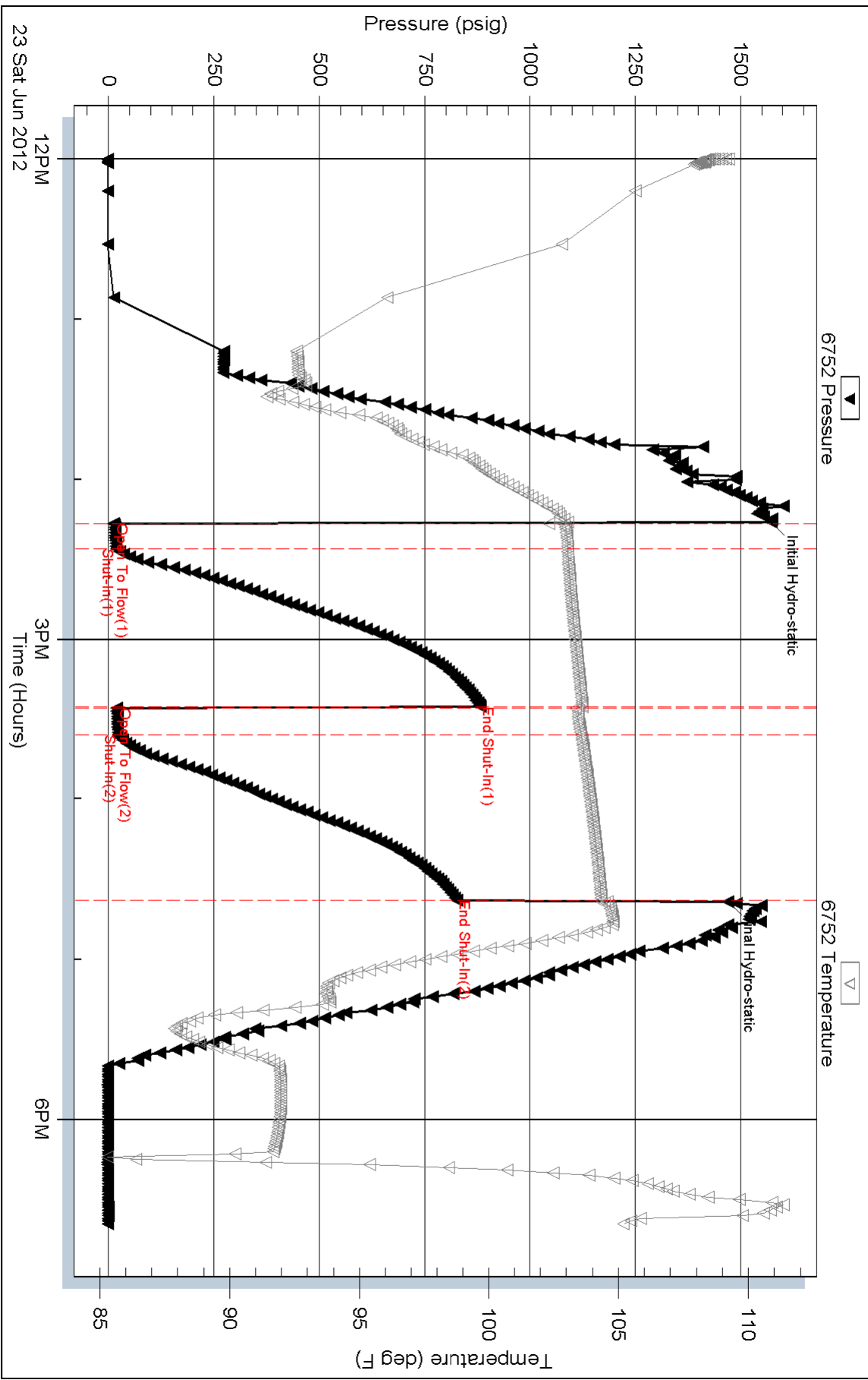
Inside

SGJ & Assoc. Inc.

Miller-Lelker 1-28

DST Test Number: 1

Pressure vs. Time



Trikkie Testing, Inc

Ref. No: 47406

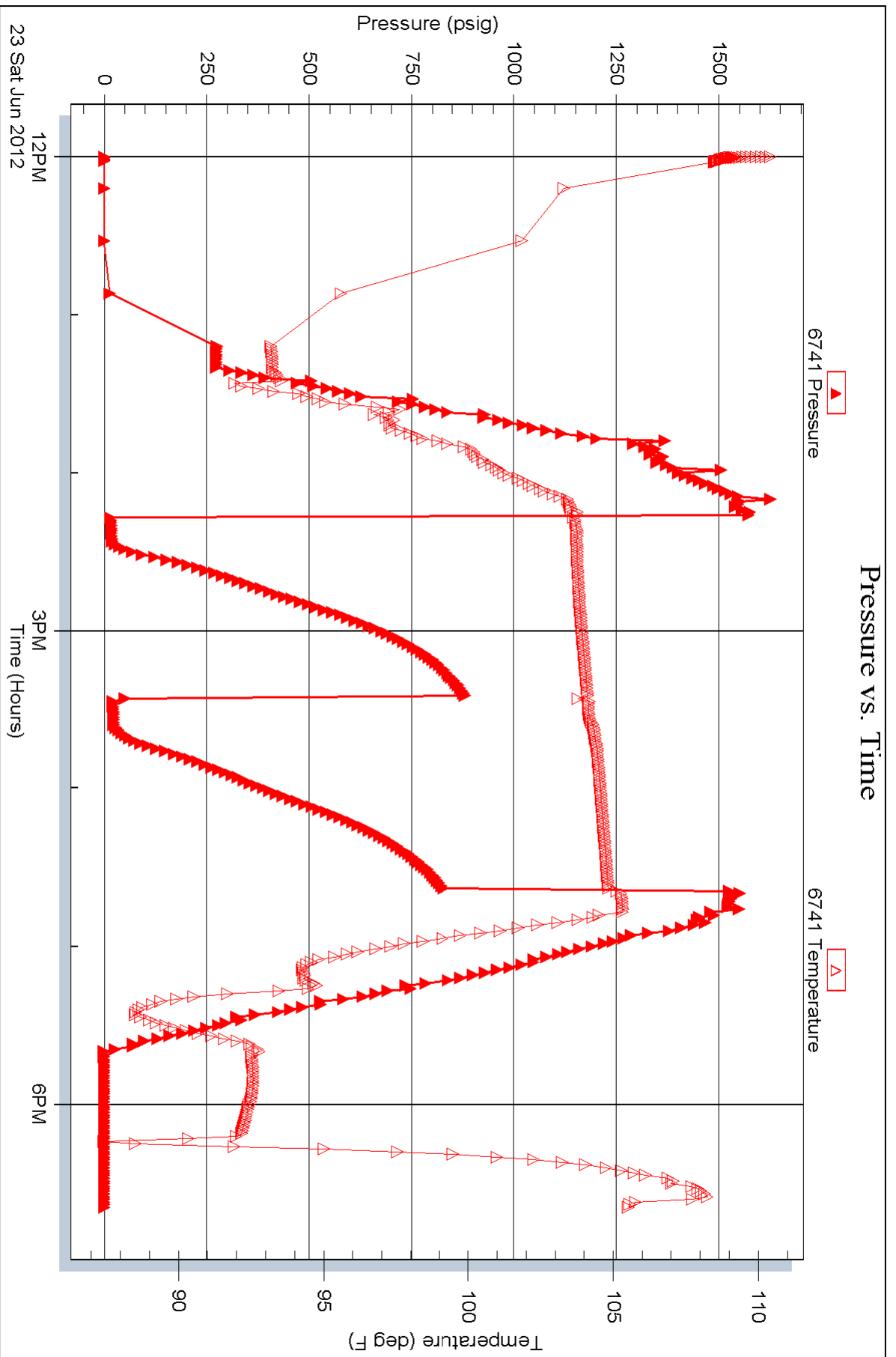
Printed: 2012.06.24 @11:35:38

Serial # 6741

Outside SGI & Assoc. Inc.

Miller-Lelker 1-28

DST Test Number: 1



Thiokol Testing, Inc

Ref. No: 47406

Printed: 2012.06.24 @11:35:39

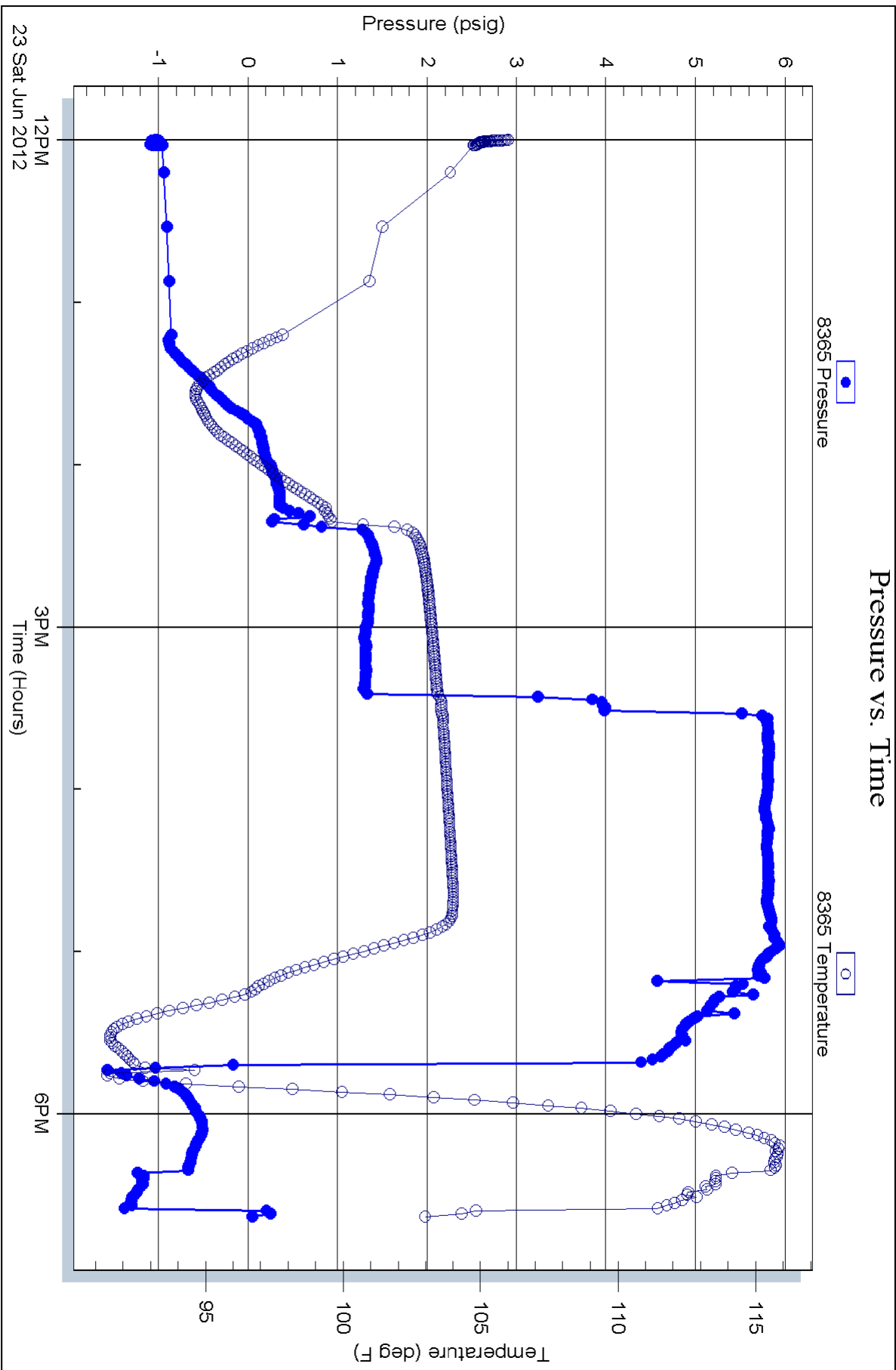
Serial # 8365

Fluid

SGJ & Assoc. Inc.

Miller-Lelker 1-28

DST Test Number: 1



Tridette Testing, Inc

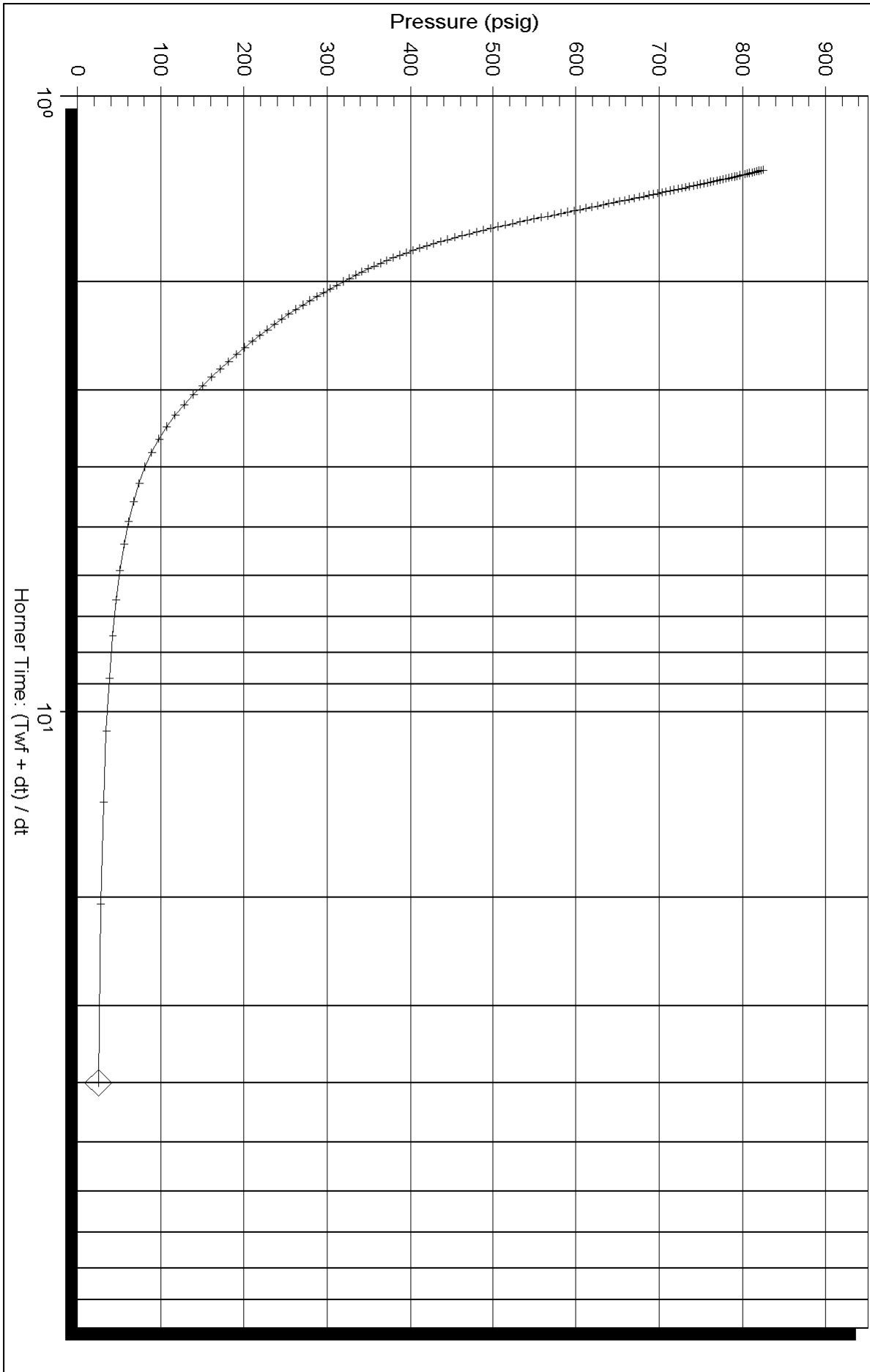
Ref. No: 47406

Printed: 2012.06.24 @11:35:39

Horner Plot

Horner Pressure

+



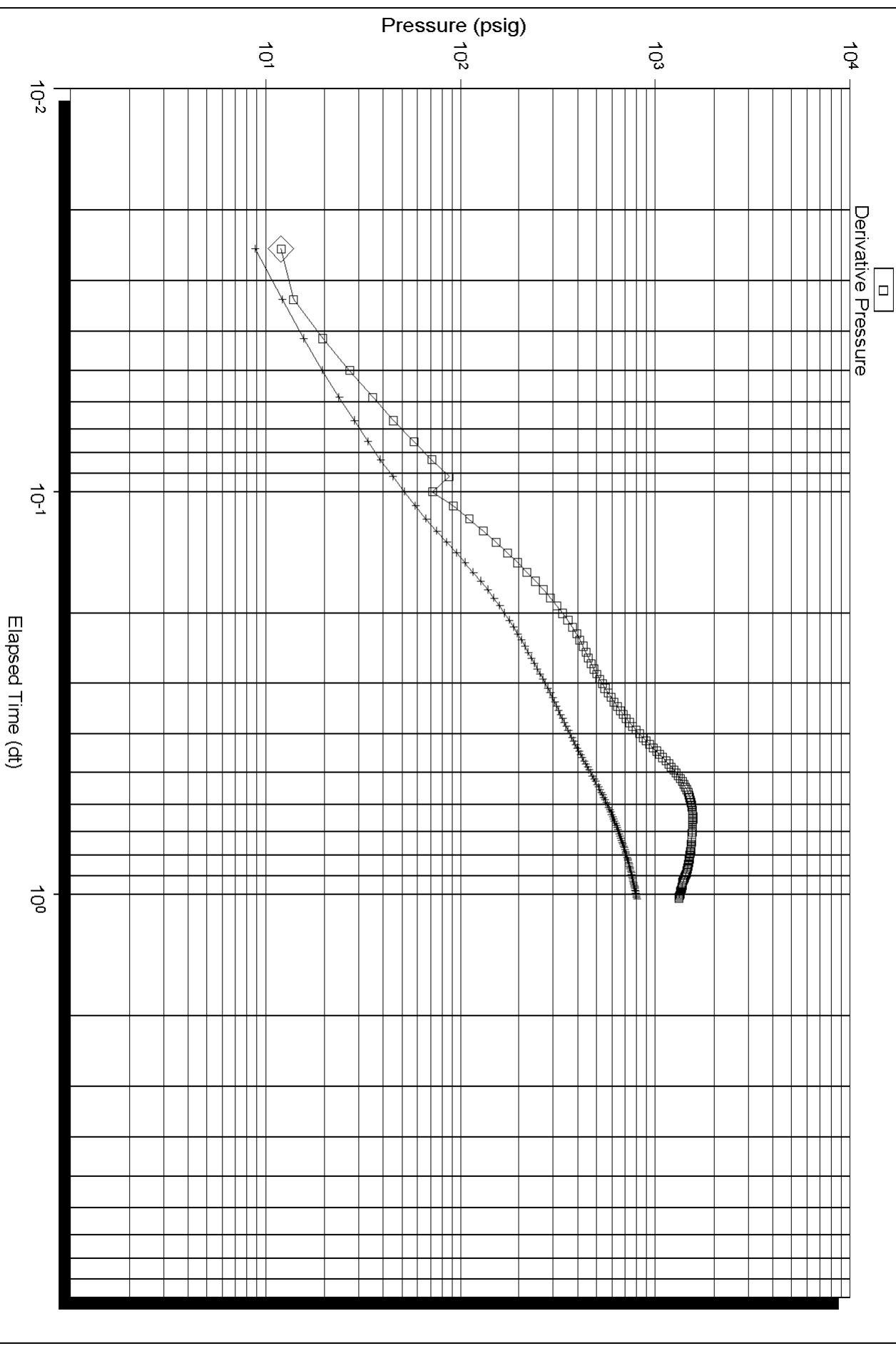
Serial Number: 6752 (Inside)

Pr :

Slope (m) : kpa/log cycle

Flow/Cycle: 2

Log-Log and Pseudo-Derivative



Serial Number: 6752 (Inside)

Flow Cycle: 2



DRILL STEM TEST REPORT

Prepared For: **SGJ & Assoc. Inc.**

1515 Wynkoop Ste 700
Denver CO 80202

ATTN: Tom Fertal

Miller-Leiker 1-28

28 14s 17w Ellis

Start Date: 2012.06.24 @ 09:20:00

End Date: 2012.06.24 @ 18:30:00

Job Ticket #: 47407 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.06.25 @ 09:06:43



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

SGJ & Assoc. Inc.
1515 Wynkoop Ste 700
Denver CO 80202
ATTN: Tom Fertal

28 14s 17w Ellis
Miller-Leiker 1-28
Job Ticket: 47407 **DST#: 2**
Test Start: 2012.06.24 @ 09:20:00

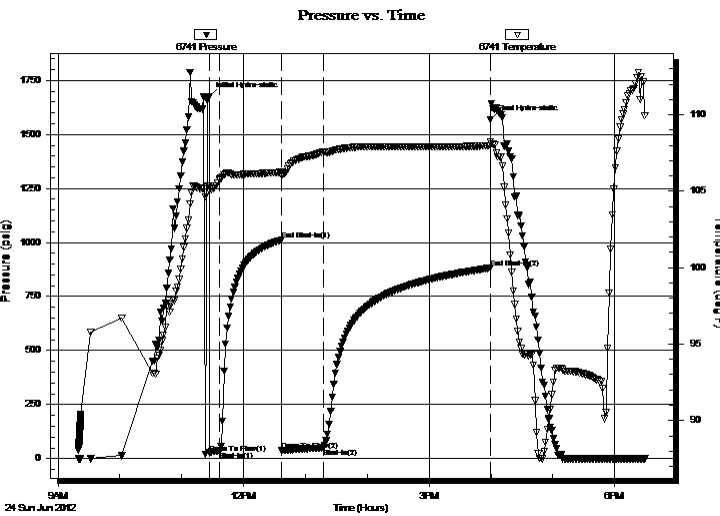
GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: 1965.00 ft (KB)
Time Tool Opened: 11:27:00
Time Test Ended: 18:30:00
Interval: **3450.00 ft (KB) To 3500.00 ft (KB) (TVD)**
Total Depth: 3500.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Jim Svaty
Unit No: 41
Reference Elevations: 1965.00 ft (KB)
1957.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6741

Press @ Run Depth: 49.42 psig @ ft (KB) Capacity: 8000.00 psig
Start Date: 2012.06.24 End Date: 2012.06.24 Last Calib.: 2012.06.24
Start Time: 09:20:01 End Time: 18:29:00 Time On Btm: 2012.06.24 @ 11:26:30
Time Off Btm: 2012.06.24 @ 15:59:30

TEST COMMENT: 10-IFP- Good Surge No Blow
60-ISIP- No Blow
40-FFP- Surface Blow in 2min. Building to 5in.
160-FSIP- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1676.24	105.36	Initial Hydro-static
1	26.76	105.04	Open To Flow (1)
11	35.85	105.77	Shut-In(1)
70	1010.79	106.23	End Shut-In(1)
71	39.03	106.05	Open To Flow (2)
111	49.42	107.56	Shut-In(2)
273	882.07	107.98	End Shut-In(2)
273	1569.27	108.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	OCM 20%o 80%m	0.43
30.00	CO 100%o	0.42

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

SGJ & Assoc. Inc.
 1515 Wynkoop Ste 700
 Denver CO 80202
 ATTN: Tom Fertal

28 14s 17w Ellis

Miller-Leiker 1-28

Job Ticket: 47407 **DST#: 2**
 Test Start: 2012.06.24 @ 09:20:00

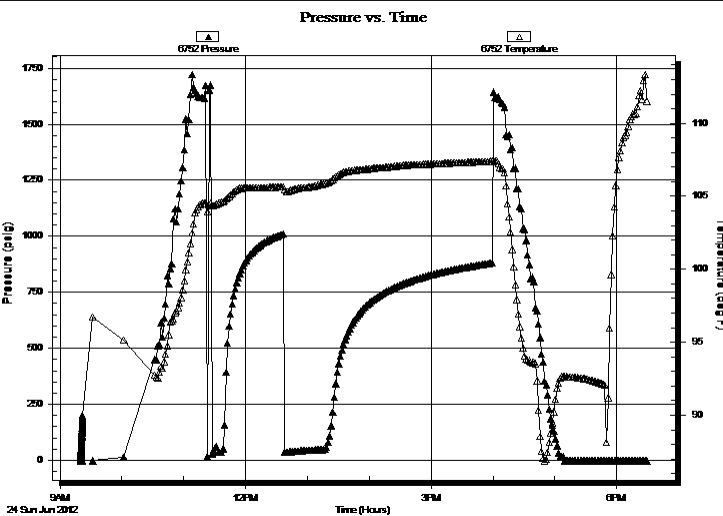
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: 1965.00 ft (KB)
 Time Tool Opened: 11:27:00
 Time Test Ended: 18:30:00
Interval: 3450.00 ft (KB) To 3500.00 ft (KB) (TVD)
 Total Depth: 3500.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Jim Svaty
 Unit No: 41
 Reference Elevations: 1965.00 ft (KB)
 1957.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 6752

Press @ Run Depth:	psig @	ft (KB)	Capacity:	8000.00 psig
Start Date:	2012.06.24	End Date:	2012.06.24	Last Calib.: 2012.06.24
Start Time:	09:20:01	End Time:	18:29:00	Time On Btm: Time Off Btm:

TEST COMMENT:
 10-IFP- Good Surge No Blow
 60-ISIP- No Blow
 40-FFP- Surface Blow in 2min. Building to 5in.
 160-FSIP- No Blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
50.00	OCM 20%o 80%m	0.43
30.00	CO 100%o	0.42

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

SGJ & Assoc. Inc.
1515 Wynkoop Ste 700
Denver CO 80202
ATTN: Tom Fertal

28 14s 17w Ellis
Miller-Leiker 1-28
Job Ticket: 47407 **DST#: 2**
Test Start: 2012.06.24 @ 09:20:00

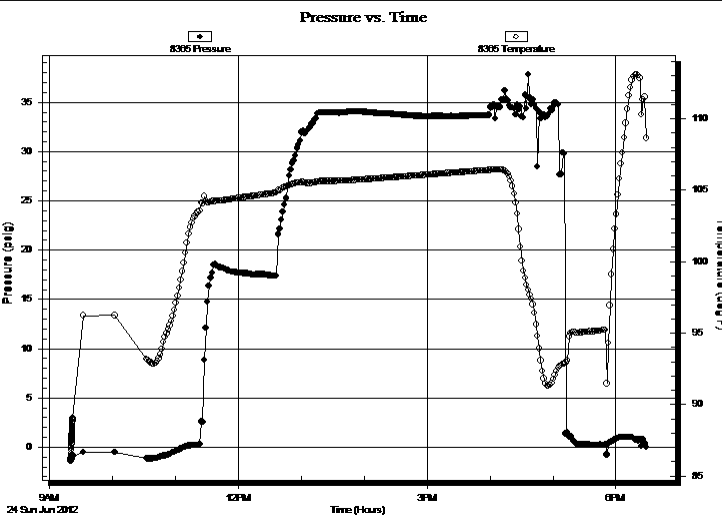
GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: 1965.00 ft (KB)
Time Tool Opened: 11:27:00
Time Test Ended: 18:30:00
Interval: **3450.00 ft (KB) To 3500.00 ft (KB) (TVD)**
Total Depth: 3500.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Jim Svaty
Unit No: 41
Reference Elevations: 1965.00 ft (KB)
1957.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8365

Press @ Run Depth: psig @ ft (KB) Capacity: 8000.00 psig
Start Date: 2012.06.24 End Date: 2012.06.24 Last Calib.: 2012.06.24
Start Time: 09:20:01 End Time: 18:29:30 Time On Btm:
Time Off Btm:

TEST COMMENT: 10-IFP- Good Surge No Blow
60-ISIP- No Blow
40-FFP- Surface Blow in 2min. Building to 5in.
160-FSIP- No Blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
50.00	OCM 20%o 80%m	0.43
30.00	CO 100%o	0.42

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

SGJ & Assoc. Inc.

28 14s 17w Ellis

1515 Wynkoop Ste 700
Denver CO 80202

Miller-Leiker 1-28

Job Ticket: 47407

DST#: 2

ATTN: Tom Fertal

Test Start: 2012.06.24 @ 09:20:00

Tool Information

Drill Pipe:	Length: 3406.00 ft	Diameter: 3.80 inches	Volume: 47.78 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 47.93 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3450.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	50.00 ft			
Tool Length:	85.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3416.00	
Recorder	0.00	8365	Fluid	3416.00	
Blank Spacing	5.00			3421.00	
Shut In Tool	5.00			3426.00	
Sampler	2.00			3428.00	
Hydraulic tool	5.00			3433.00	
Jars	5.00			3438.00	
Safety Joint	2.00			3440.00	
Packer	5.00			3445.00	35.00 Bottom Of Top Packer
Packer	5.00			3450.00	
Stubb	1.00			3451.00	
Recorder	0.00	6752	Inside	3451.00	
Recorder	0.00	6741	Outside	3451.00	
Perforations	13.00			3464.00	
Change Over Sub	1.00			3465.00	
Blank Spacing	31.00			3496.00	
Change Over Sub	1.00			3497.00	
Bullnose	3.00			3500.00	50.00 Bottom Packers & Anchor

Total Tool Length: 85.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

SGJ & Assoc. Inc.
1515 Wynkoop Ste 700
Denver CO 80202
ATTN: Tom Fertal

28 14s 17w Ellis
Miller-Leiker 1-28
Job Ticket: 47407 **DST#: 2**
Test Start: 2012.06.24 @ 09:20:00

Mud and Cushion Information

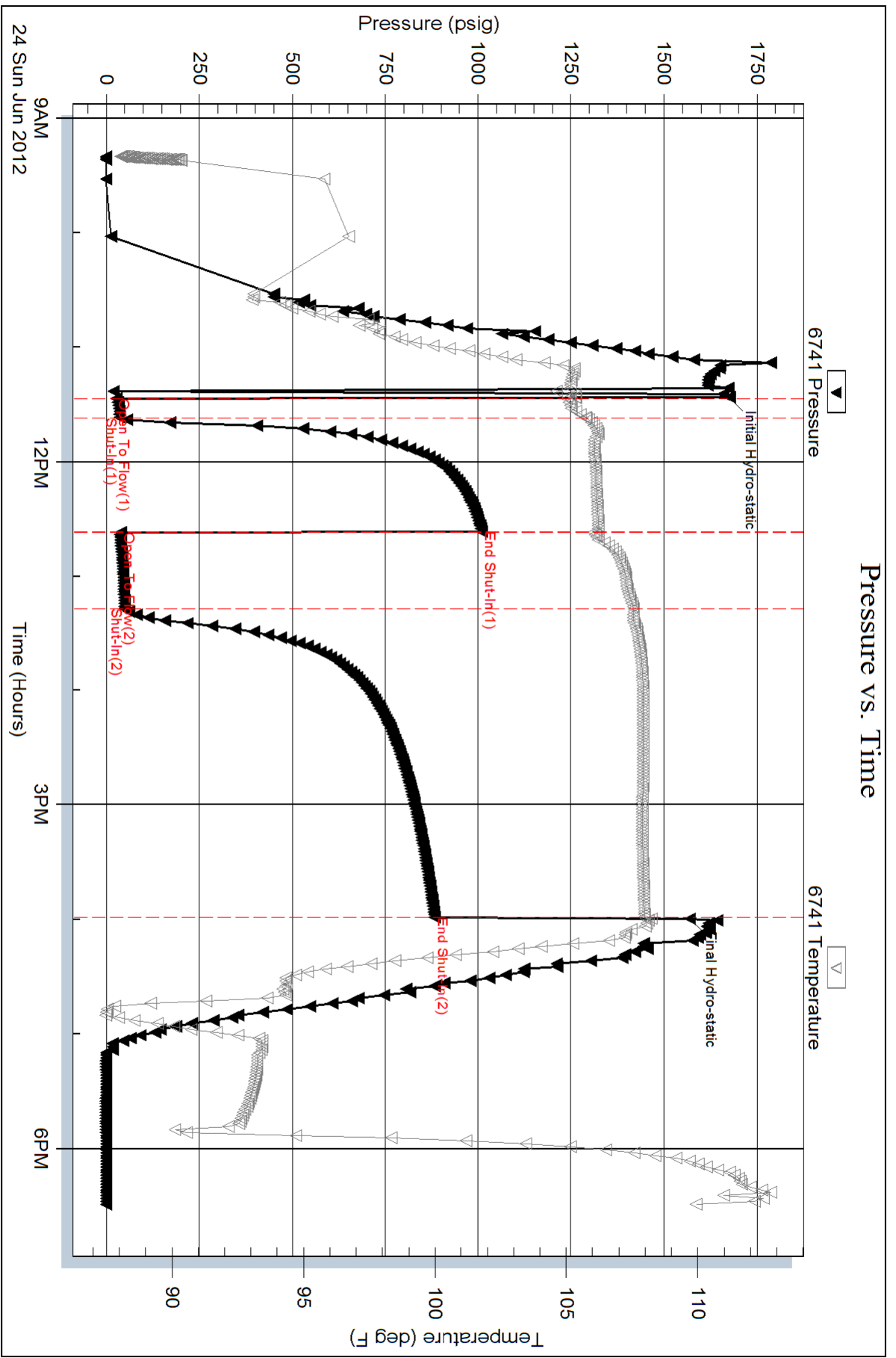
Mud Type: Gel Chem	Cushion Type:	Oil API: 28 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 46.00 sec/qt	Cushion Volume: bbl	
Water Loss: 9.57 cm ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 4000.00 ppm		
Filter Cake: inches		

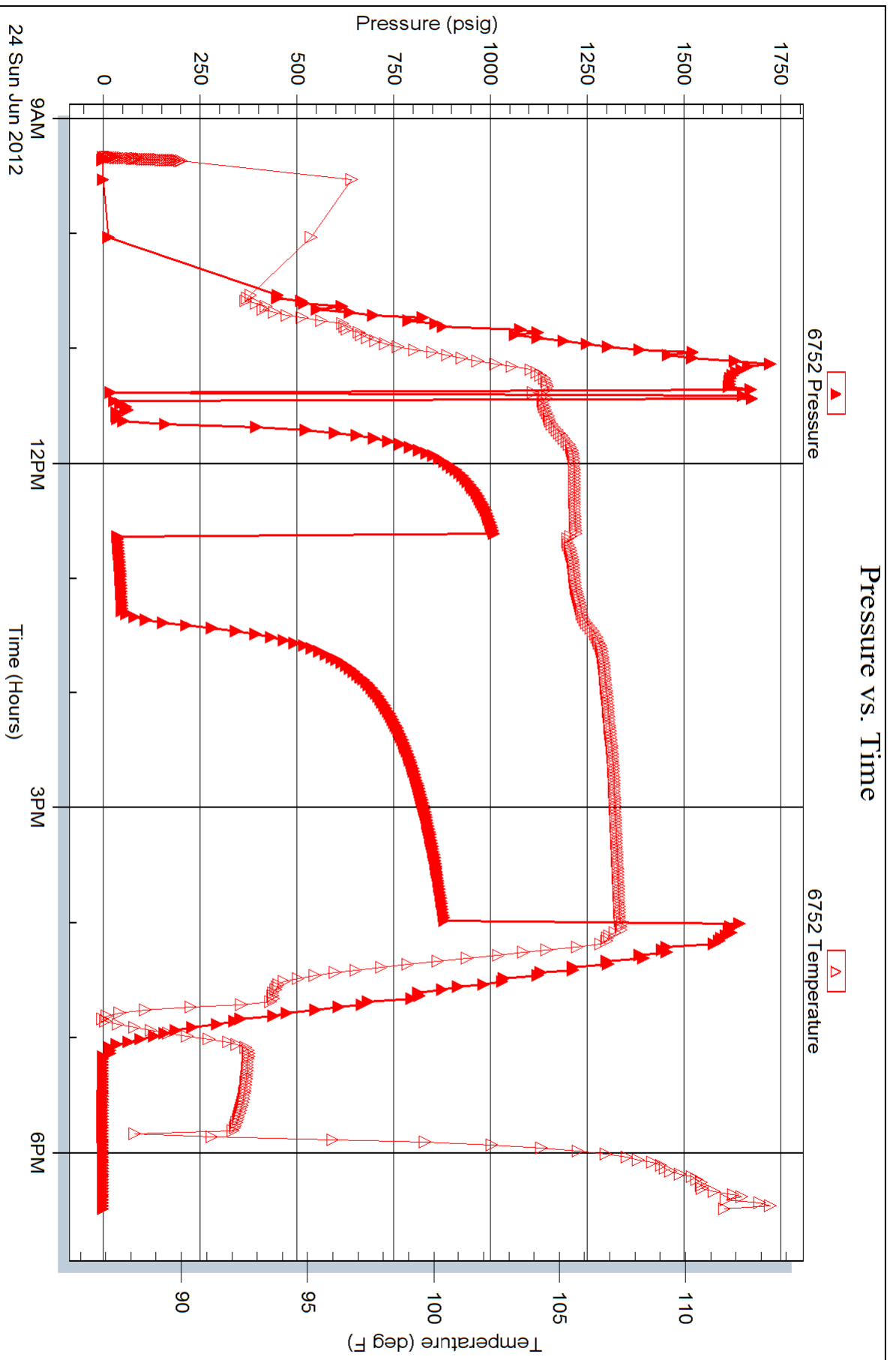
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	OCM 20%o 80%m	0.428
30.00	CO 100%o	0.421

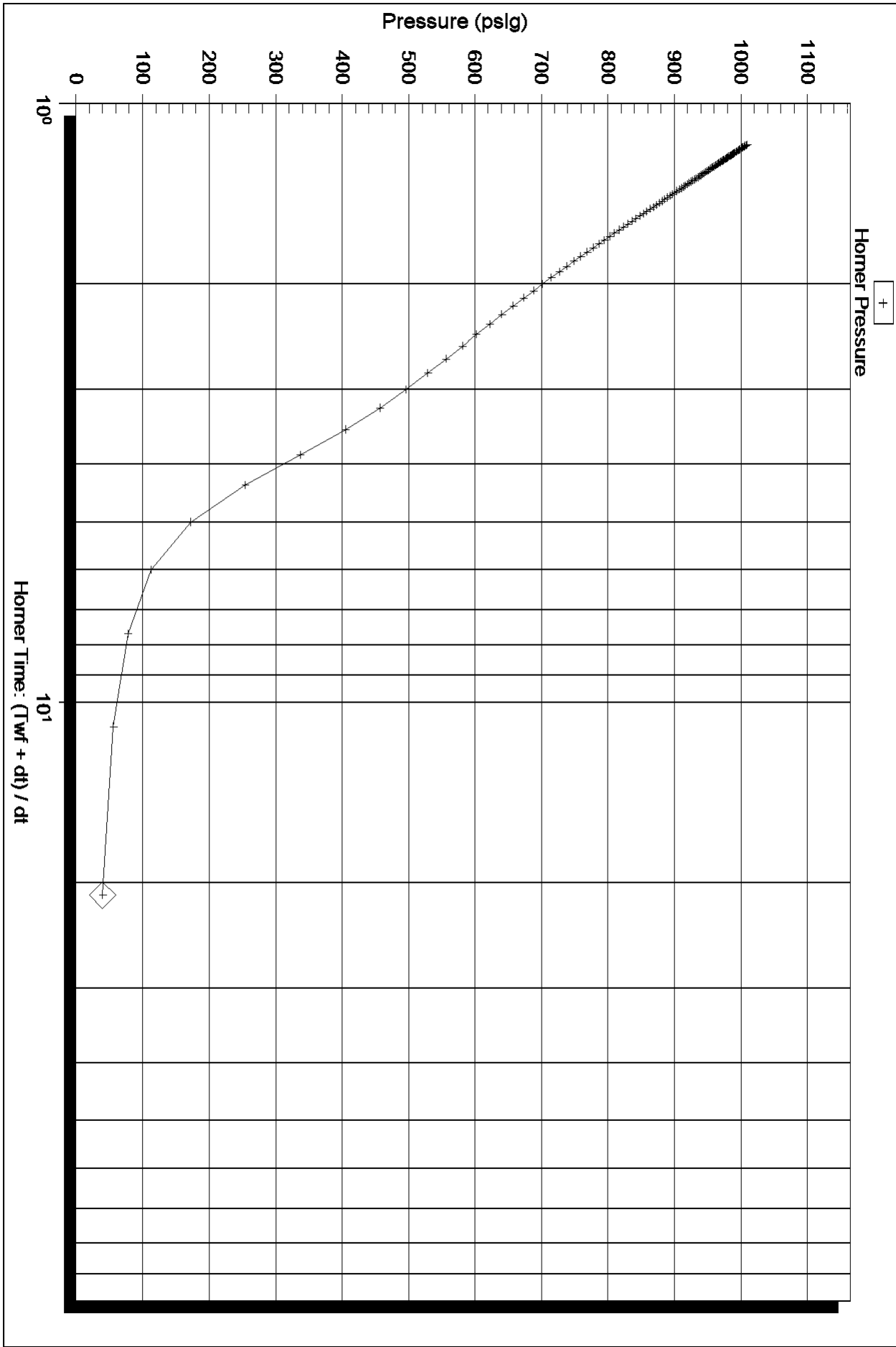
Total Length: 80.00 ft Total Volume: 0.849 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:







Horner Plot



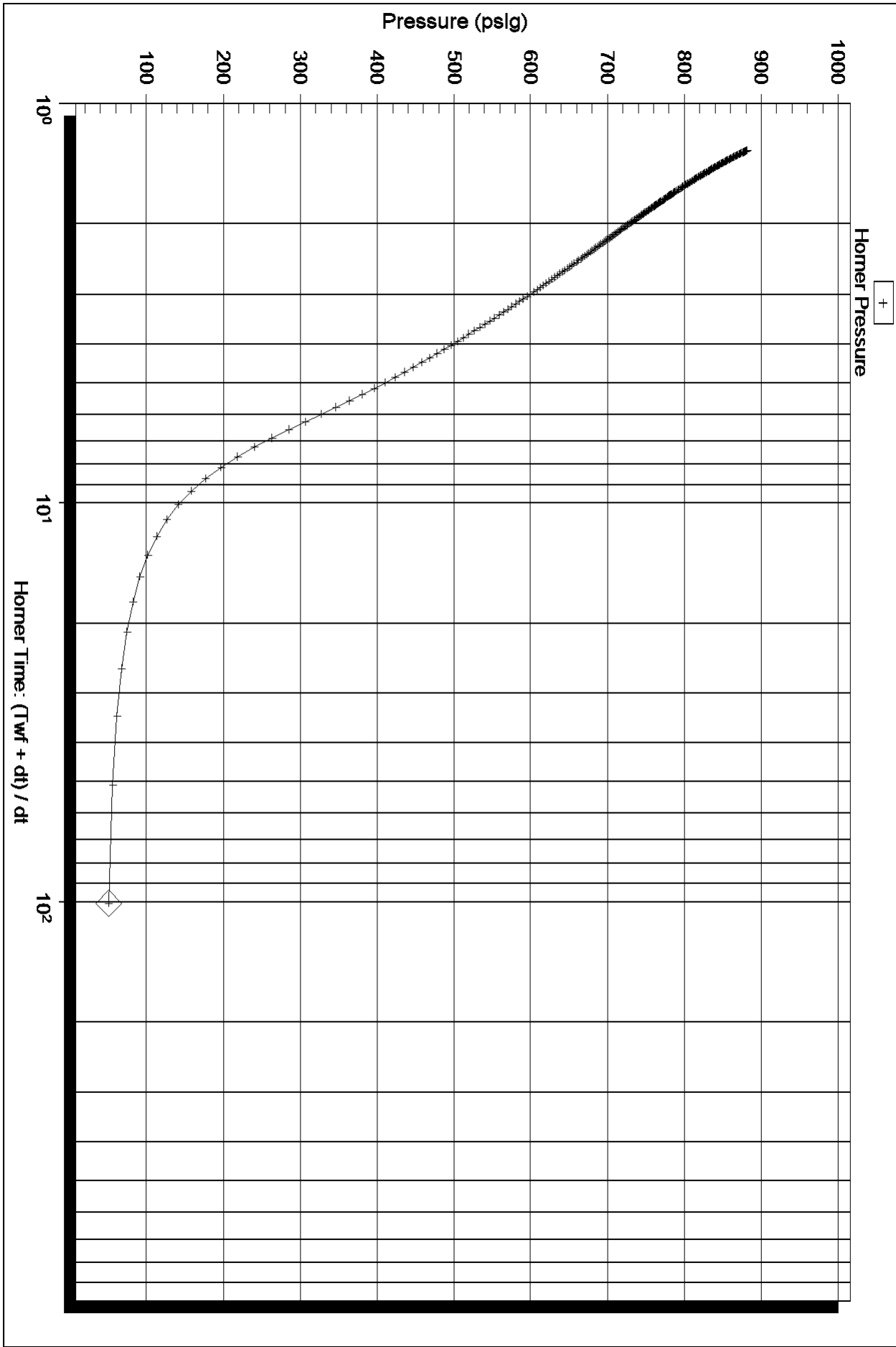
Serial Number: 6741 ()

P* :

Slope (m) : kpa/log cycle

Flow Cycle: 1

Horner Plot



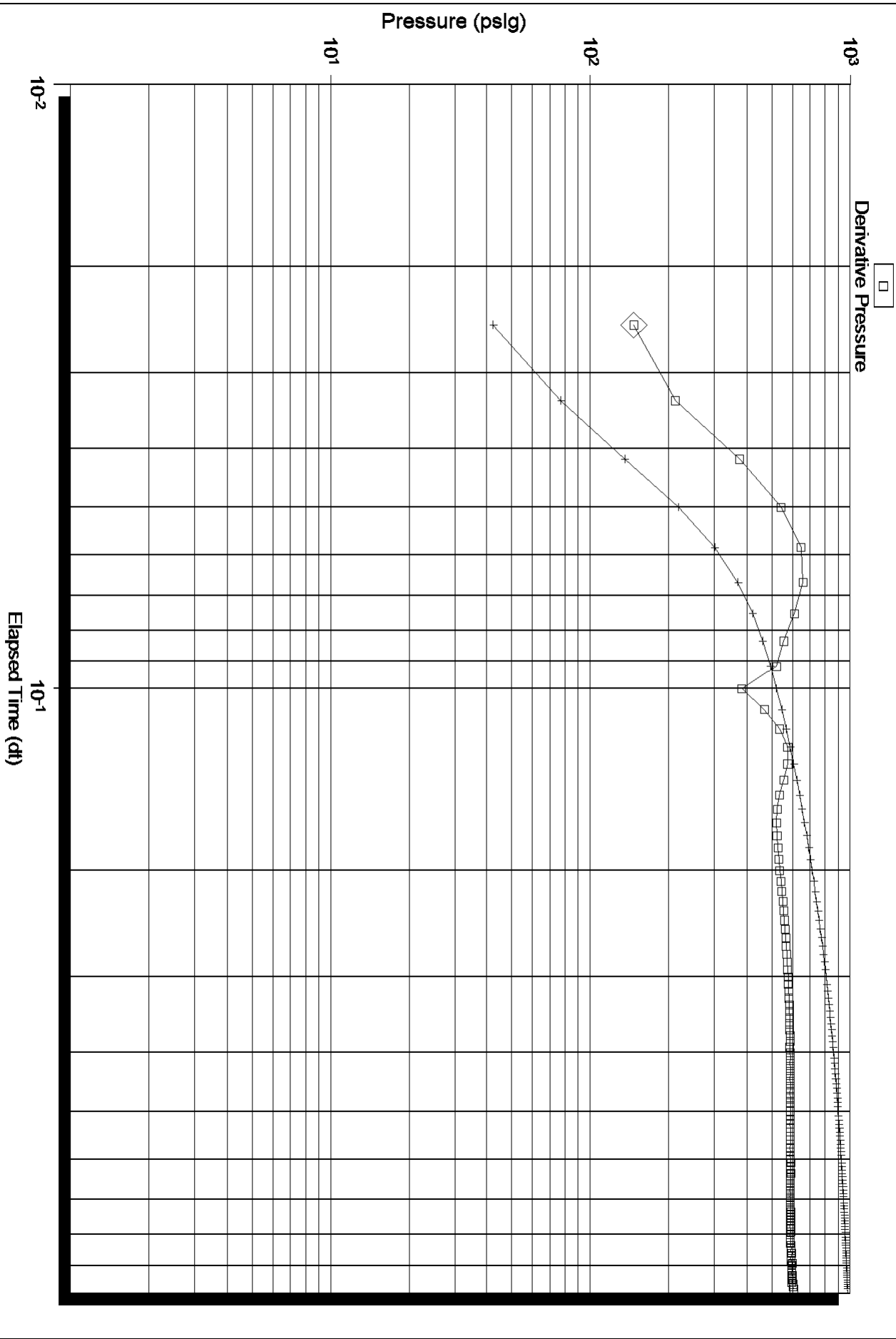
Serial Number: 6741 ()

P* :

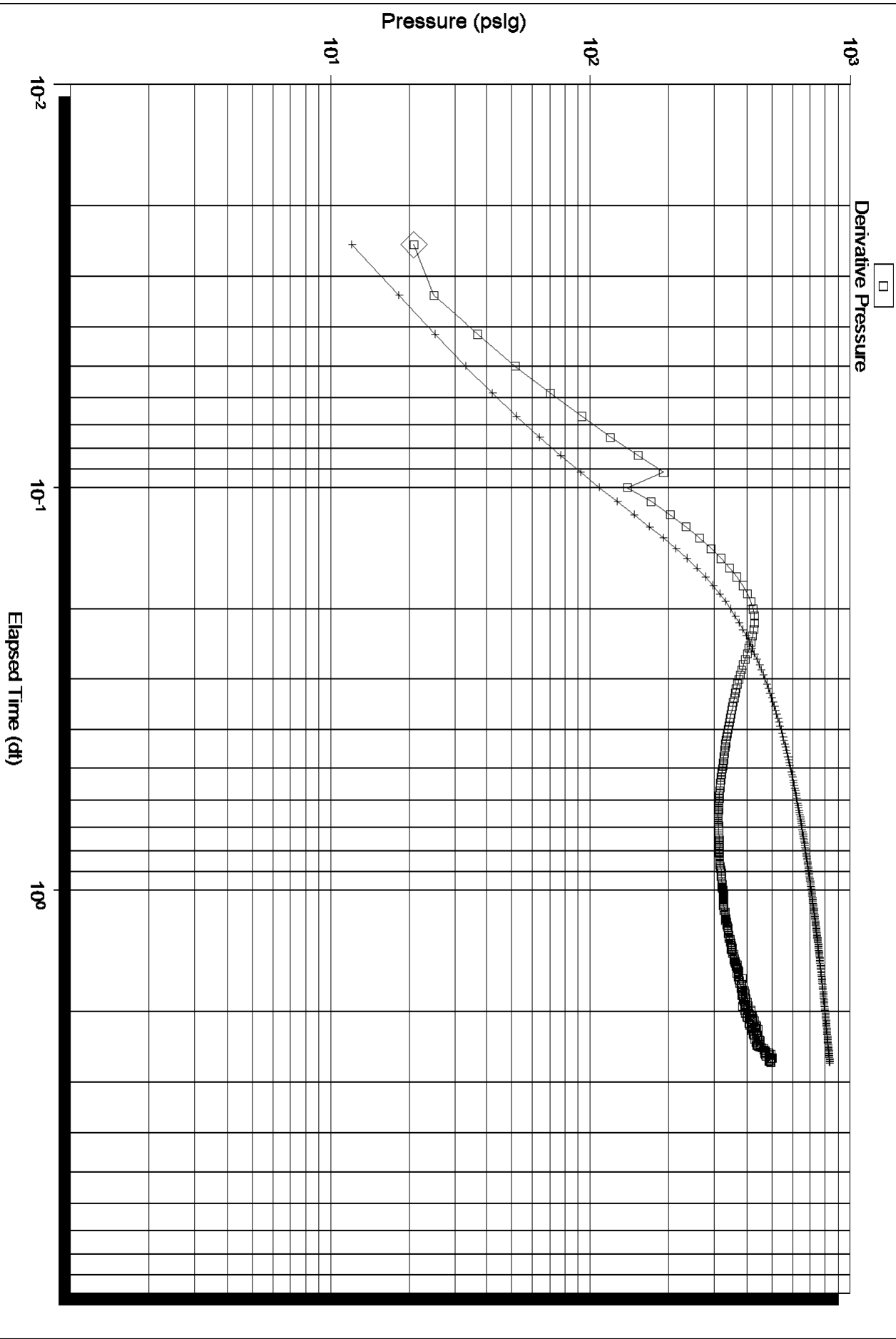
Slope (m) : kpa/log cycle

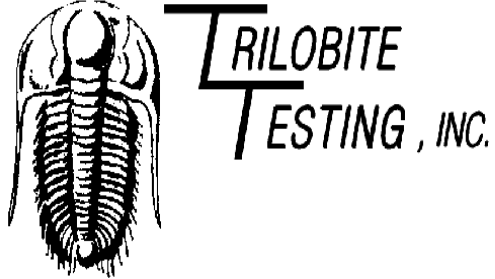
Flow Cycle: 2

Log-Log and Pseudo-Derivative



Log-Log and Pseudo-Derivative





DRILL STEM TEST REPORT

Prepared For: **SGJ & Assoc. Inc.**

1515 Wynkoop Ste 700
Denver CO 80202

ATTN: Tom Fertal

Miller-Leiker 1-28

28 14s 17w Ellis

Start Date: 2012.06.25 @ 14:48:00

End Date: 2012.06.26 @ 00:26:30

Job Ticket #: 47751 DST #: 3

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.06.26 @ 17:00:01



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

SGJ & Assoc. Inc.
 1515 Wynkoop Ste 700
 Denver CO 80202
 ATTN: Tom Fertal

28 14s 17w Ellis
Miller-Leiker 1-28
 Job Ticket: 47751 **DST#: 3**
 Test Start: 2012.06.25 @ 14:48:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: 1965.00 ft (KB)
 Time Tool Opened: 17:20:00
 Time Test Ended: 00:26:30
 Interval: **3504.00 ft (KB) To 3518.00 ft (KB) (TVD)**
 Total Depth: 3595.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Reset)
 Tester: Cody Bloedorn
 Unit No: 41
 Reference Elevations: 1965.00 ft (KB)
 1957.00 ft (CF)
 KB to GR/CF: 8.00 ft

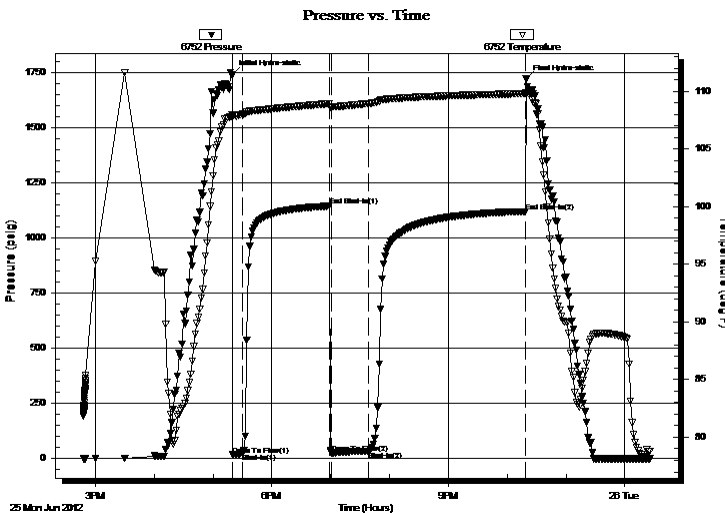
Serial #: 6752

Inside

Press @ Run Depth: 33.31 psig @ 3505.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.06.25 End Date: 2012.06.26 Last Calib.: 2012.06.26
 Start Time: 14:48:01 End Time: 00:26:30 Time On Btm: 2012.06.25 @ 17:19:30
 Time Off Btm: 2012.06.25 @ 22:19:30

TEST COMMENT: 10 - IF- 1/2" Blow
 90 - IS- No blow back
 40 - FF- 1 1/2" Blow
 160 - FS- No blow back.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1737.87	107.95	Initial Hydro-static
1	16.23	107.74	Open To Flow (1)
11	21.50	108.02	Shut-In(1)
100	1144.11	108.93	End Shut-In(1)
101	24.47	108.70	Open To Flow (2)
140	33.31	108.96	Shut-In(2)
299	1118.69	109.81	End Shut-In(2)
300	1719.40	109.92	Final Hydro-static

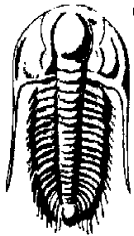
Recovery

Length (ft)	Description	Volume (bbl)
20.00	HOCM, 50%M, 50%O	0.10
25.00	Free Oil, 100%O	0.26

* Recovery from multiple tests

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

SGJ & Assoc. Inc.
1515 Wynkoop Ste 700
Denver CO 80202
ATTN: Tom Fertal

28 14s 17w Ellis
Miller-Leiker 1-28
Job Ticket: 47751 **DST#: 3**
Test Start: 2012.06.25 @ 14:48:00

GENERAL INFORMATION:

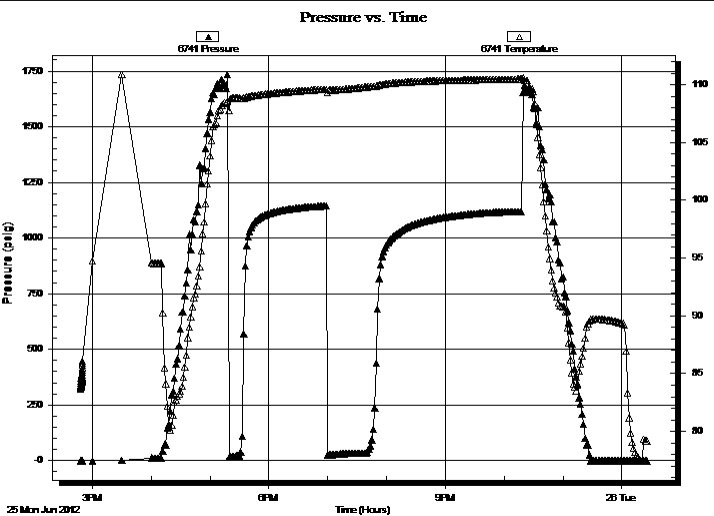
Formation: **Arbuckle**
Deviated: No Whipstock: 1965.00 ft (KB)
Time Tool Opened: 17:20:00
Time Test Ended: 00:26:30
Interval: **3504.00 ft (KB) To 3518.00 ft (KB) (TVD)**
Total Depth: 3595.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Straddle (Reset)
Tester: Cody Bloedorn
Unit No: 41
Reference Elevations: 1965.00 ft (KB)
1957.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6741

Outside

Press @ Run Depth: psig @ 3505.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.06.25 End Date: 2012.06.26 Last Calib.: 2012.06.26
Start Time: 14:48:01 End Time: 00:26:30 Time On Btm: Time Off Btm:

TEST COMMENT: 10 - IF- 1/2" Blow
90 - IS- No blow back
40 - FF- 1 1/2" Blow
160 - FS- No blow back.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	HOCM, 50%M, 50%O	0.10
25.00	Free Oil, 100%O	0.26

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

SGJ & Assoc. Inc.
 1515 Wynkoop Ste 700
 Denver CO 80202
 ATTN: Tom Fertal

28 14s 17w Ellis
Miller-Leiker 1-28
 Job Ticket: 47751 **DST#: 3**
 Test Start: 2012.06.25 @ 14:48:00

GENERAL INFORMATION:

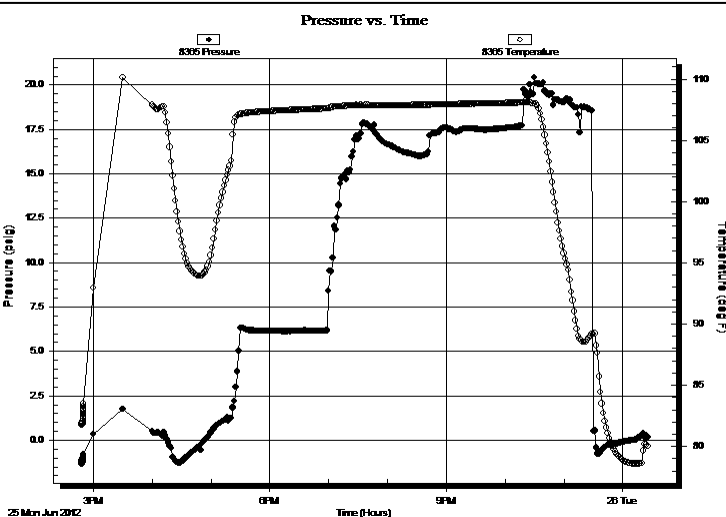
Formation: Arbuckle	Test Type: Conventional Straddle (Reset)
Deviated: No Whipstock: 1965.00 ft (KB)	Tester: Cody Bloedorn
Time Tool Opened: 17:20:00	Unit No: 41
Time Test Ended: 00:26:30	Reference Elevations: 1965.00 ft (KB)
Interval: 3504.00 ft (KB) To 3518.00 ft (KB) (TVD)	1957.00 ft (CF)
Total Depth: 3595.00 ft (KB) (TVD)	KB to GR/CF: 8.00 ft
Hole Diameter: 7.88 inches	Hole Condition: Fair

Serial #: 8365

Fluid

Press @ Run Depth: psig @ 3470.00 ft (KB)	Capacity: 8000.00 psig
Start Date: 2012.06.25	End Date: 2012.06.26
Start Time: 14:48:01	End Time: 00:26:00
	Last Calib.: 2012.06.26
	Time On Btm:
	Time Off Btm:

TEST COMMENT: 10 - IF- 1/2" Blow
 90 - IS- No blow back
 40 - FF- 1 1/2" Blow
 160 - FS- No blow back.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	HOCM, 50%M, 50%O	0.10
25.00	Free Oil, 100%O	0.26

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

SGJ & Assoc. Inc.
1515 Wynkoop Ste 700
Denver CO 80202
ATTN: Tom Fertal

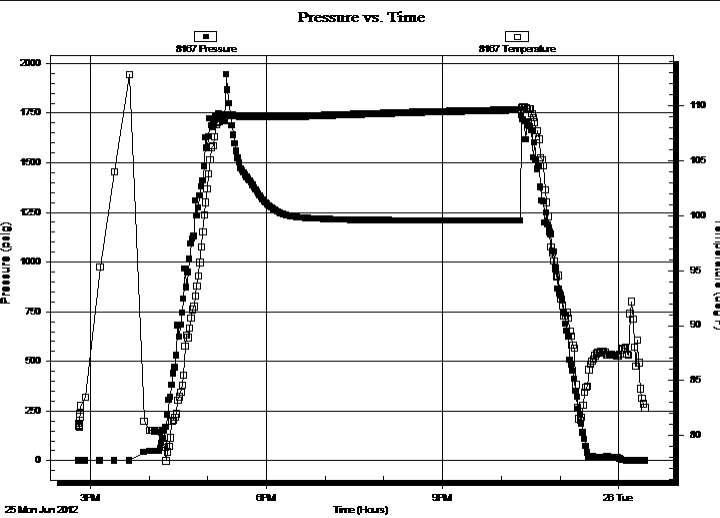
28 14s 17w Ellis
Miller-Leiker 1-28
Job Ticket: 47751 **DST#: 3**
Test Start: 2012.06.25 @ 14:48:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: 1965.00 ft (KB)
Time Tool Opened: 17:20:00
Time Test Ended: 00:26:30
Interval: **3504.00 ft (KB) To 3518.00 ft (KB) (TVD)**
Total Depth: 3595.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Straddle (Reset)
Tester: Cody Bloedorn
Unit No: 41
Reference Elevations: 1965.00 ft (KB)
1957.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8167 Below (Straddle)
Press @ Run Depth: psig @ 3595.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.06.25 End Date: 2012.06.26 Last Calib.: 2012.06.26
Start Time: 14:48:05 End Time: 00:26:30 Time On Btm:
Time Off Btm:

TEST COMMENT: 10 - IF- 1/2" Blow
90 - IS- No blow back
40 - FF- 1 1/2" Blow
160 - FS- No blow back.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	HOCM, 50%M, 50%O	0.10
25.00	Free Oil, 100%O	0.26

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

SGJ & Assoc. Inc.

28 14s 17w Ellis

1515 Wynkoop Ste 700
Denver CO 80202

Miller-Leiker 1-28

Job Ticket: 47751

DST#: 3

ATTN: Tom Fertal

Test Start: 2012.06.25 @ 14:48:00

Tool Information

Drill Pipe:	Length: 3448.00 ft	Diameter: 3.80 inches	Volume: 48.37 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 52000.00 lb
			Total Volume: 48.52 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3504.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	3518.00 ft			
Interval between Packers:	14.00 ft			
Tool Length:	129.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3470.00	
Recorder	0.00	8365	Fluid	3470.00	
Blank Spacing	5.00			3475.00	
Shut In Tool	5.00			3480.00	
Sampler	2.00			3482.00	
Hydraulic tool	5.00			3487.00	
Jars	5.00			3492.00	
Safety Joint	2.00			3494.00	
Packer	5.00			3499.00	35.00 Bottom Of Top Packer
Packer	5.00			3504.00	
Stubb	1.00			3505.00	
Recorder	0.00	6752	Inside	3505.00	
Recorder	0.00	6741	Outside	3505.00	
Perforations	12.00			3517.00	
Blank Off Sub	1.00			3518.00	14.00 Tool Interval
Packer	5.00			3523.00	
Change Over Sub	1.00			3524.00	
Drill Pipe	62.00			3586.00	
Change Over Sub	1.00			3587.00	
Perforations	8.00			3595.00	
Recorder	0.00	8167	Below	3595.00	
Bullnose	3.00			3598.00	80.00 Bottom Packers & Anchor
Total Tool Length:	129.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

SGJ & Assoc. Inc.

28 14s 17w Ellis

1515 Wynkoop Ste 700
Denver CO 80202

Miller-Leiker 1-28

Job Ticket: 47751

DST#: 3

ATTN: Tom Fertal

Test Start: 2012.06.25 @ 14:48:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 cm³

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 bbbl
20.00	HOCM, 50%M, 50%O	0.098
25.00	Free Oil, 100%O	0.260

Total Length: 45.00 ft Total Volume: 0.358 bbl

Num Fluid Samples: 0

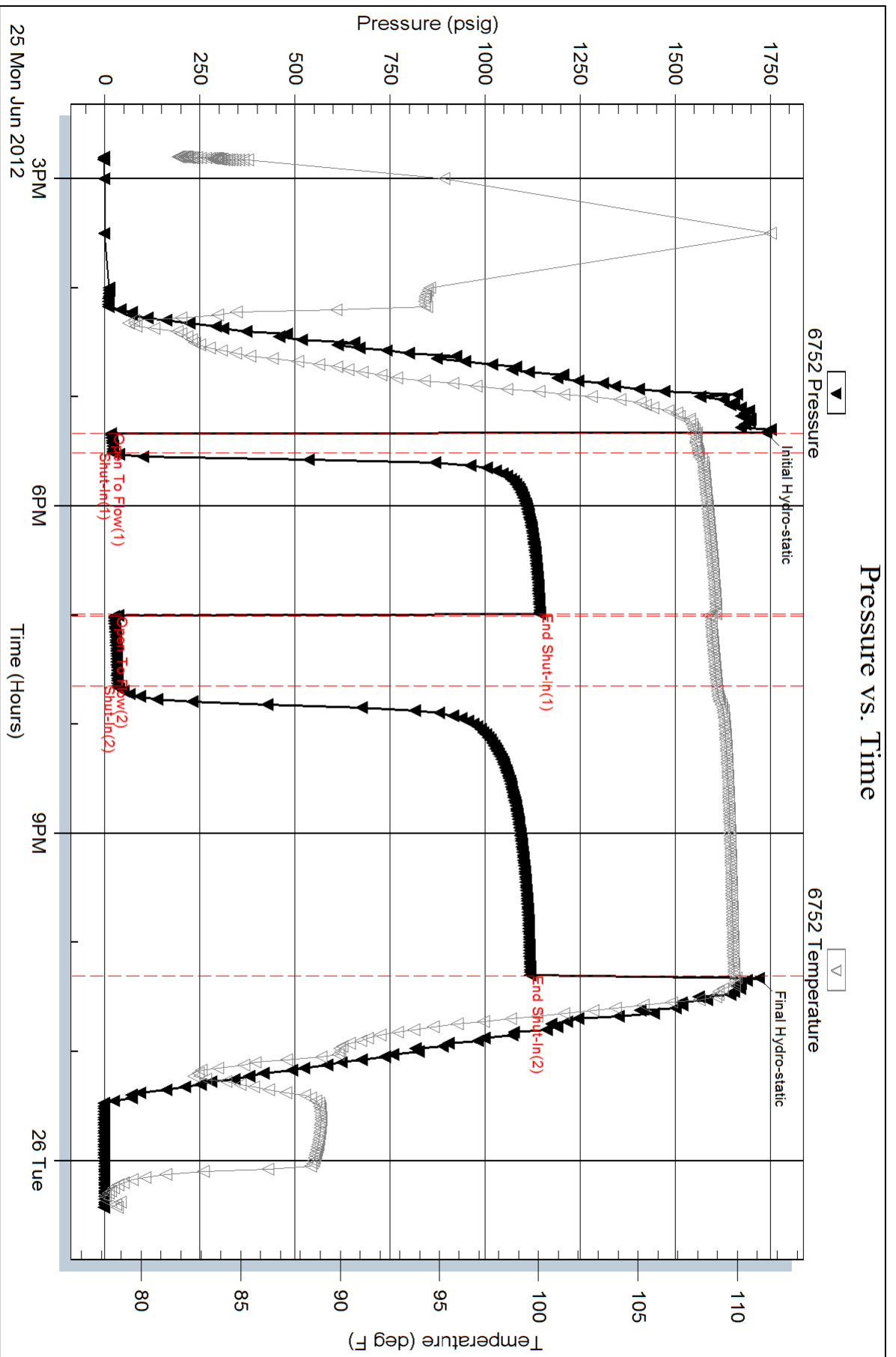
Num Gas Bombs: 0

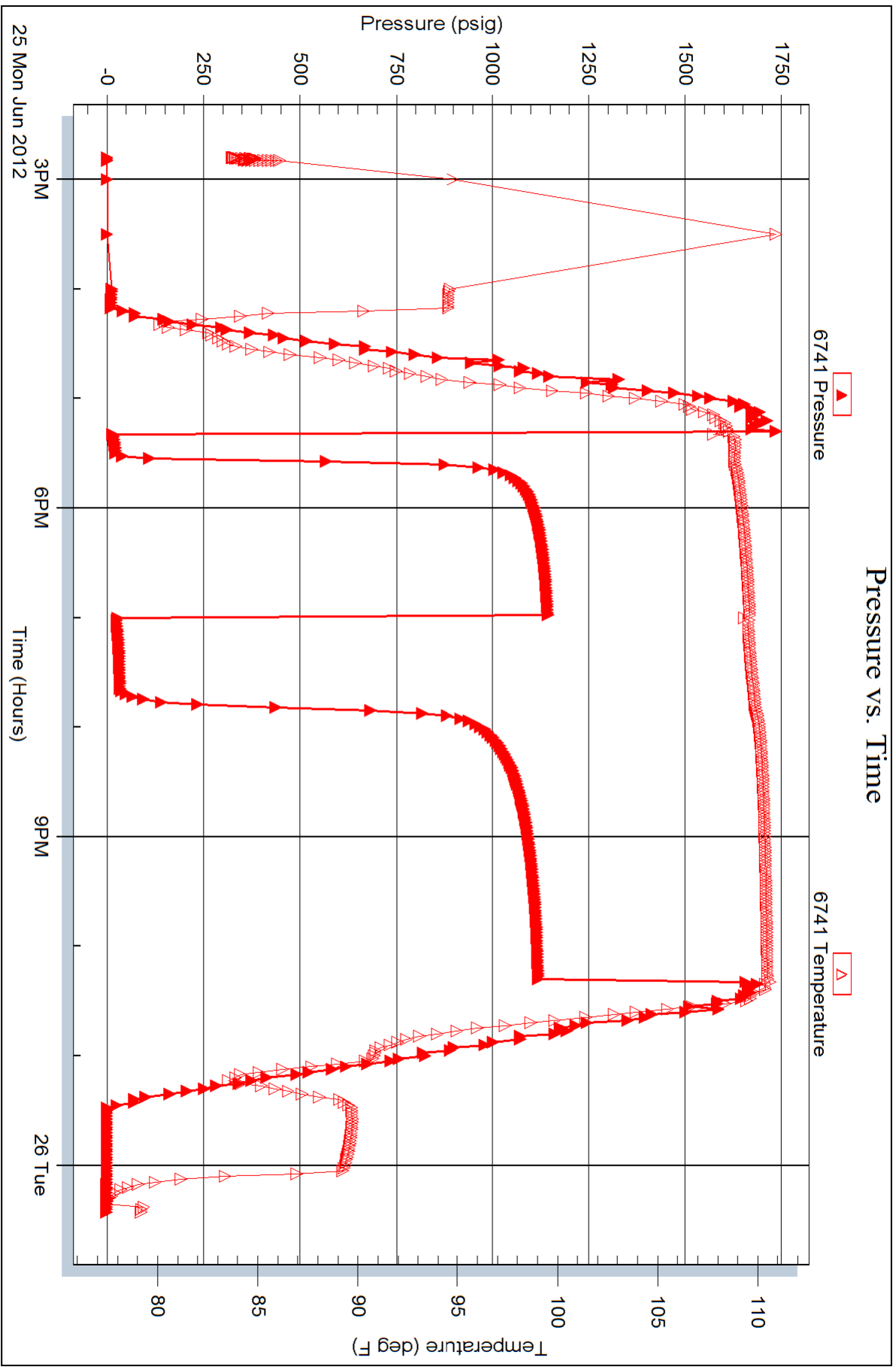
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler: 200 MLM, 1800 MLO





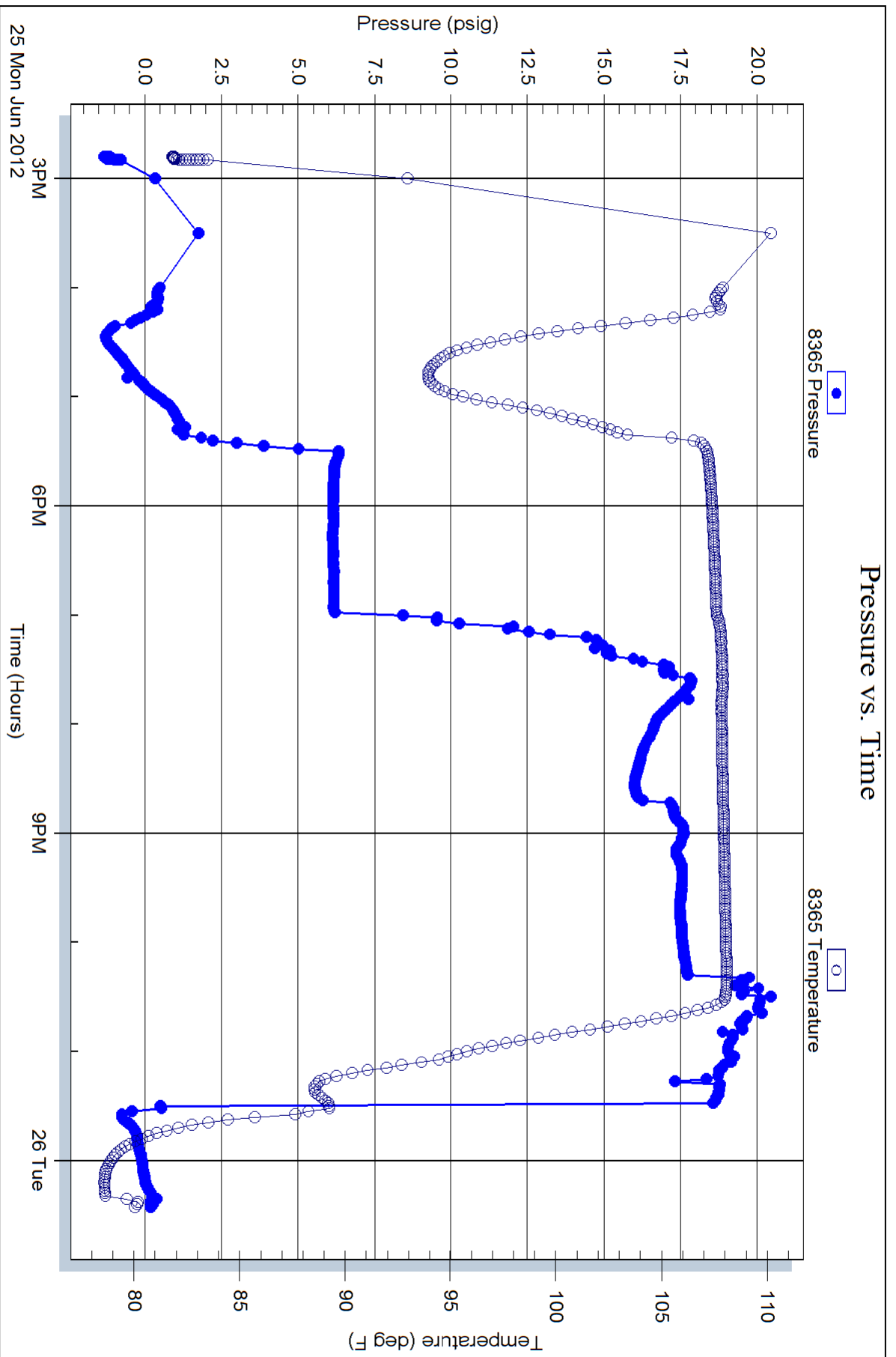
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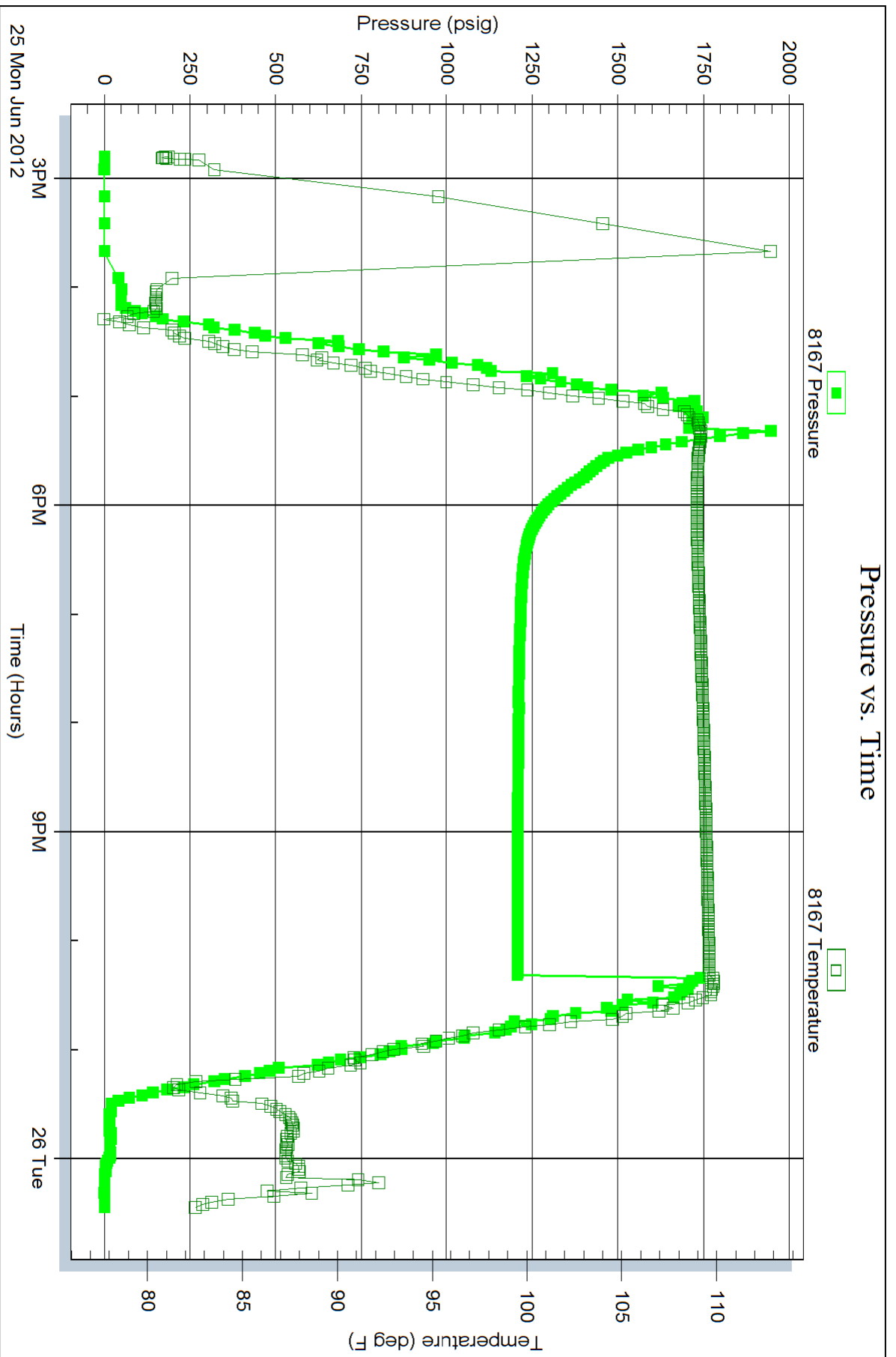
Fluid

SGJ & Assoc. Inc.

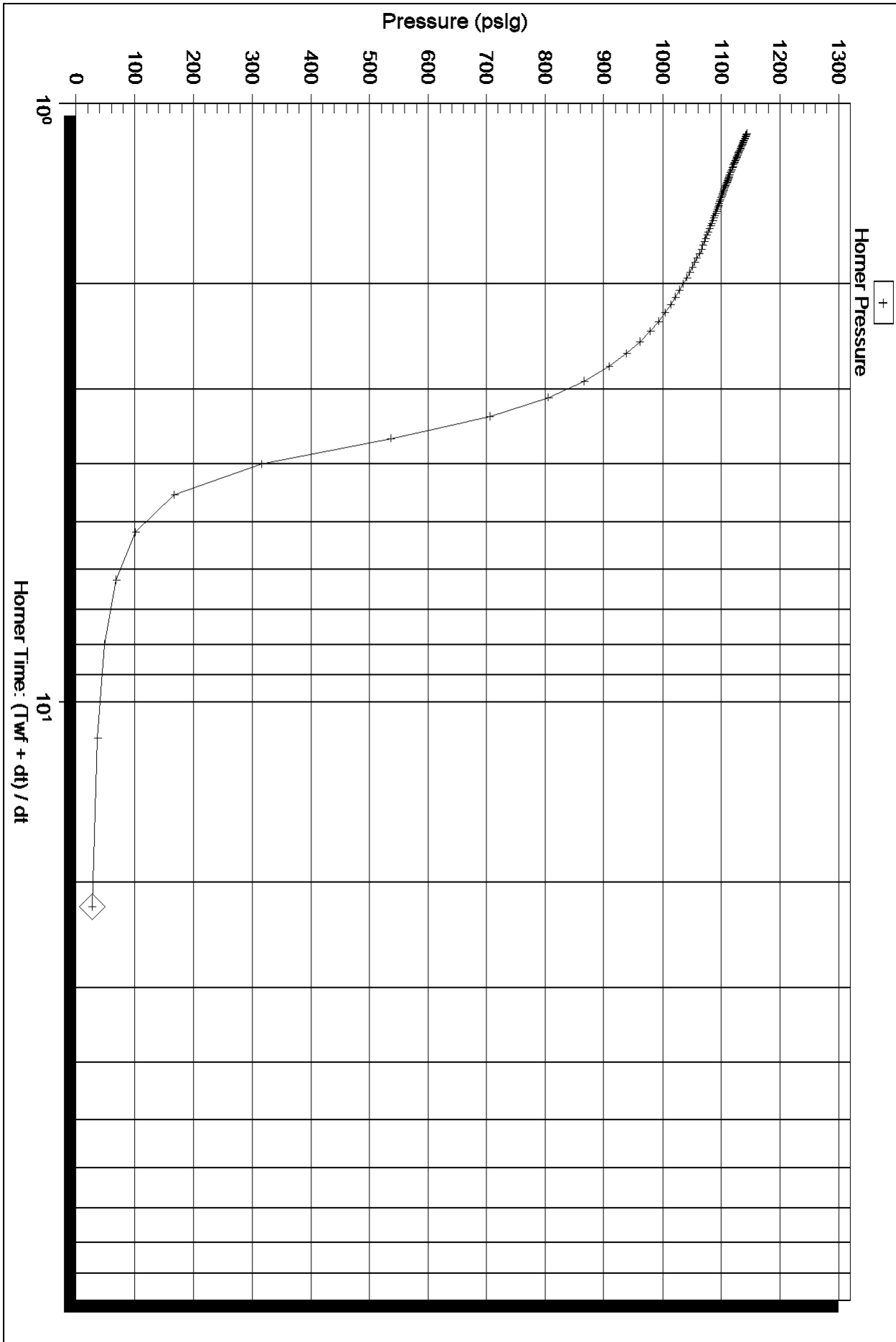
Miller-Leiker 1-28

DST Test Number: 3





Horner Plot



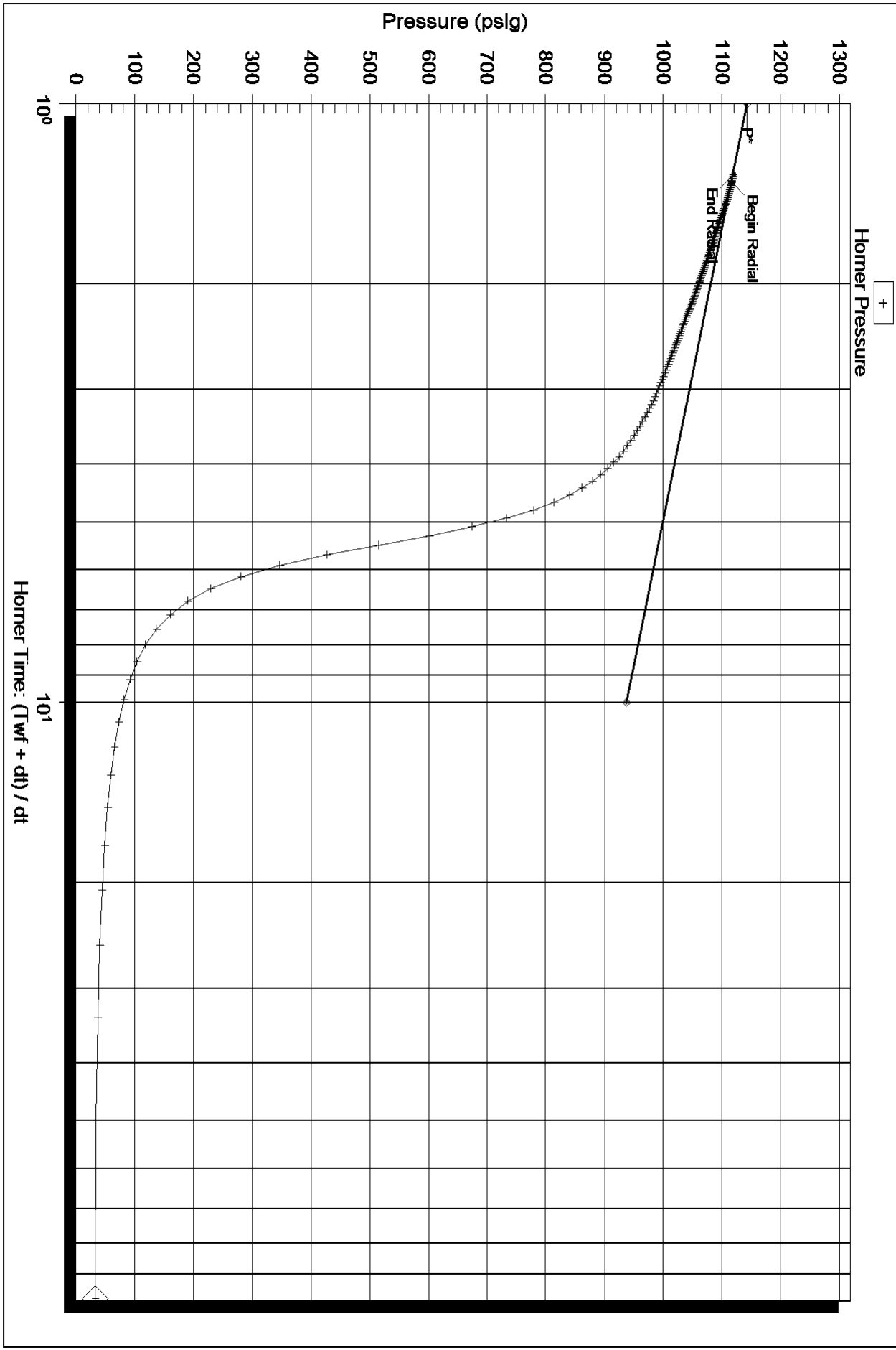
Serial Number: 6752 (Inside)

P* :

Slope (m) : kpa/log cycle

Flow Cycle: 1

Horner Plot



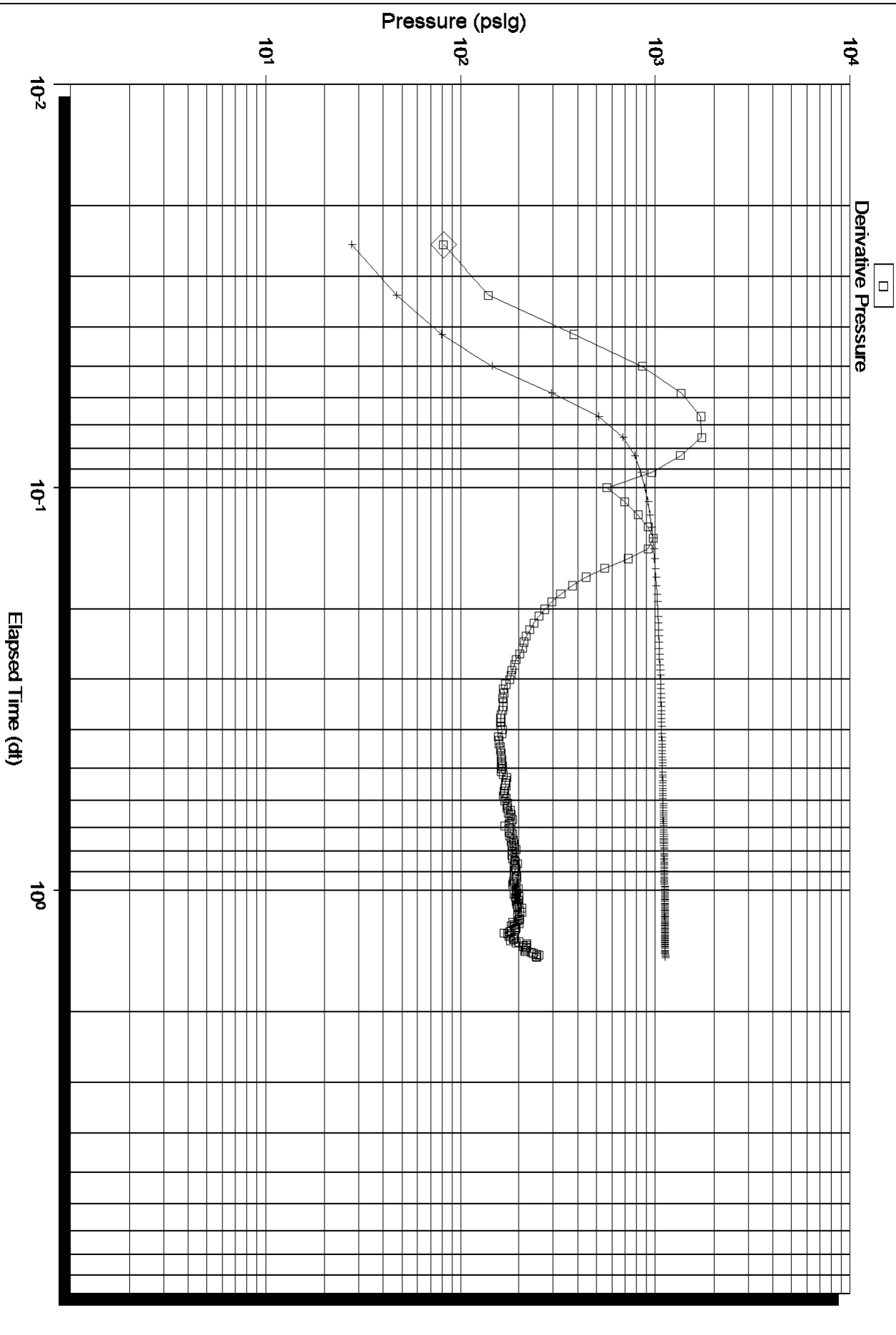
Serial Number: 6752 (Inside)

P* : 1142.90

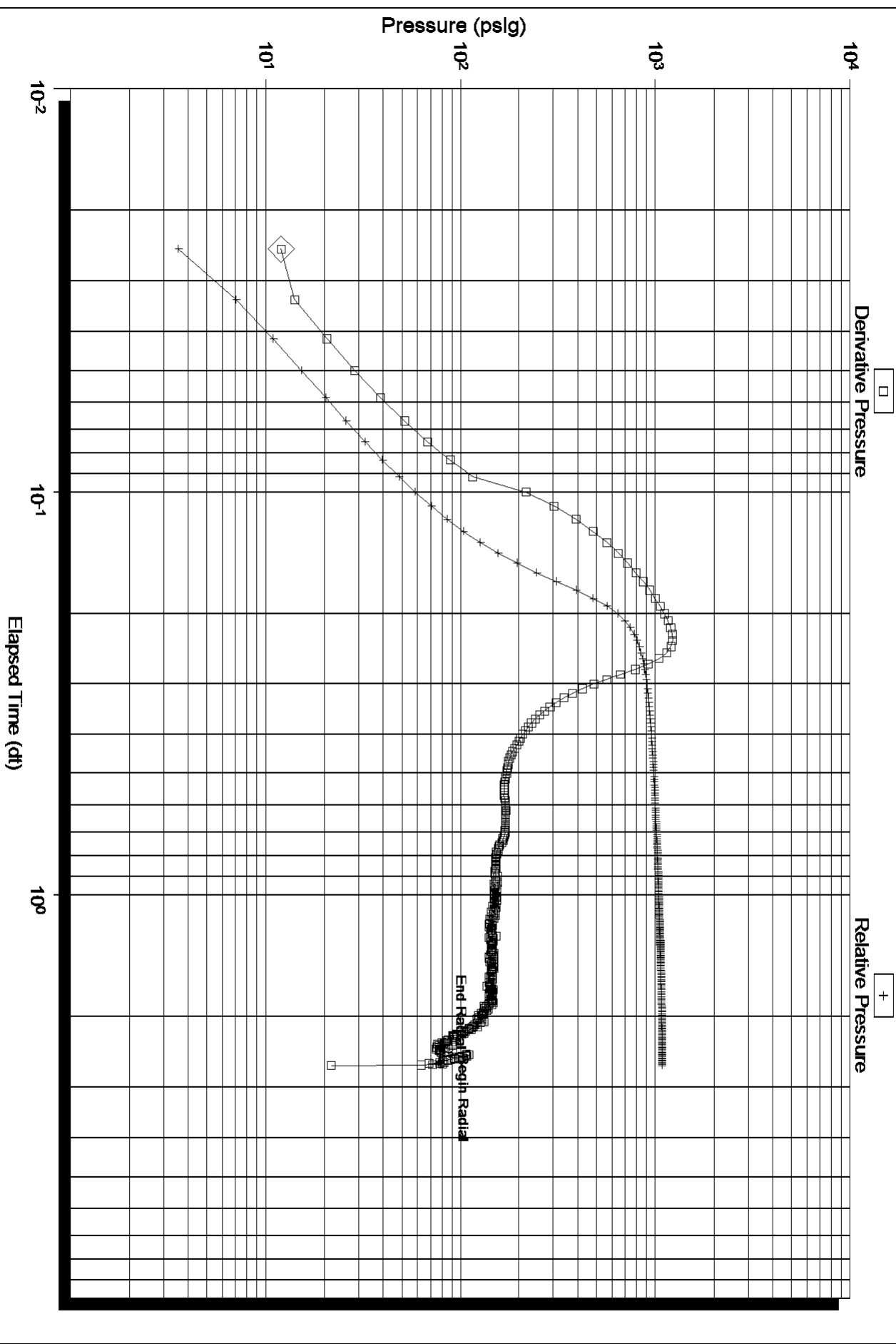
Slope (m) : 205.30 kpa/log cycle

Flow Cycle: 2

Log-Log and Pseudo-Derivative



Log-Log and Pseudo-Derivative





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

Well Name: MILLER- LEIKER 1-28
Location: SEC 28 14S 17W, Ellis County, Kansas
License Number: 15-051-26316-0000
Spud Date: JUNE 19,2012
Surface Coordinates: 1620' FNL & 1180' FWL
Region: Wildcat
Drilling Completed: JUNE 24,2012

Bottom Hole
Coordinates:
Ground Elevation (ft): 1957' K.B. Elevation (ft): 1965'
Logged Interval (ft): 2900' To: 3590' Total Depth (ft): 3590'
Formation: Lansing, Arbuckle
Type of Drilling Fluid: Natural chemical

Printed by WellSight Log Viewer 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: Tom Fertal

GEOLOGIST

Name: Tim Hedrick/ Darren Muse
Company: Earth Tech OGL, Inc.
Address: PO Box 683
Hooker, Okla . 73945
Off. 888-543-8378 Cell: 580-754-0062

DST Report

DST#1 3296-3329 10 60 10 60
IF-WK SRFC BLO DIED I 4 MIN./ISI- NB / FF-WK SRFC BLO DIED IN 2 MIN./ FSI- NB
IH- 1572, FH-1469/ IF- 12 TO 18, FF-19 TO 22/ ISI- 882, FSI-826
RECOVERED- 7' OIL SPECK MUD, 100 % MUD, BHT 107 DEGREES/ PIT CHLORIDES 3800
SAMPLER- 300 ML MUD/ 110 PSI, 300 ML TOTAL

DST's Report

DST#2 3450-3500 10 60 40 160
IF- GOOD SRGE, NO BLO/ ISI-NB/ F- SRFC BLO IN 2 MIN, BLT TO 5"/ FSI- NB
IH- 1676, FH- 1569/ IF- 26 TO 35, FF- 39 TO 49/ IIS- 1010, FSI- 882/
RECOVERED 80' TF, 50' OCM, 20%O., 80% M./ 30' CO 100% OIL.
GRAVITY-28/ BHT 107 DEG./ PIT CHL-4000
SAMPLER- 1800 ML OIL/ 375 PSI/ 1800 ML TOTAL

DST's Report

DST#3 3504-3518 10 90 40 160

IF-1/2 BLO/ ISI-NB/ FF-SRFC BLO BLT TO 1 1/2" / FSI-NB

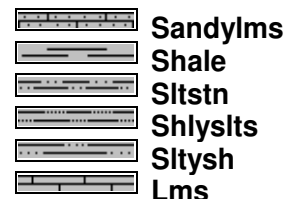
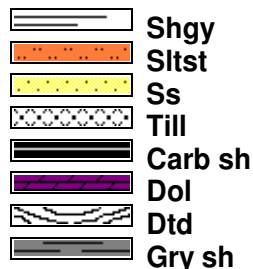
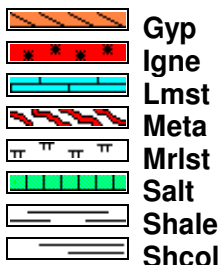
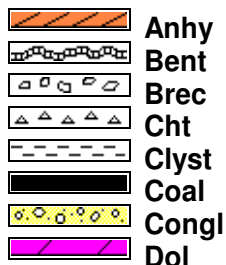
IH-1737, FH-1719/ IF-16 TO 21, FF- 24-33/ ISI-1144, FSI-1118

RECOVERED 45' TF, 20' HOCM, 50%O., 50%M./ 25' FREE OIL, 100% OIL.

GRAVITY -- / BHT 109 DEG./ PIT CHL-4000

SAMPLER- NO INFORMATION RECIEVED

ROCK TYPES

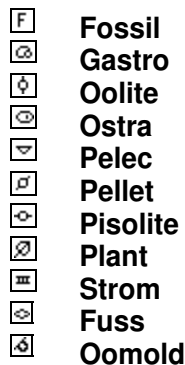
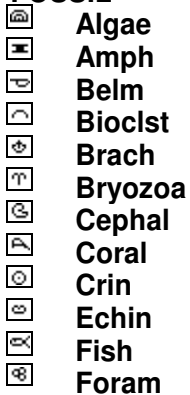


ACCESSORIES

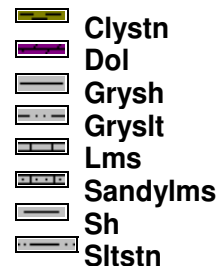
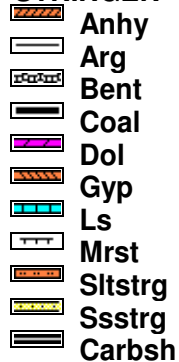
MINERAL



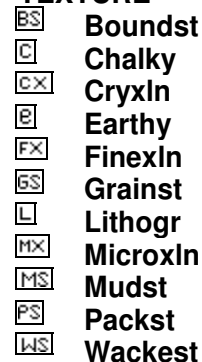
FOSSIL



STRINGER

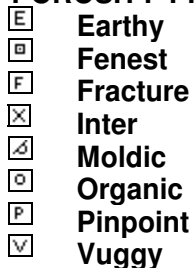


TEXTURE



OTHER SYMBOLS

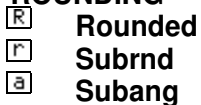
POROSITY TYPE



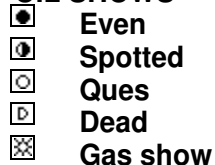
SORTING



ROUNDING



OIL SHOWS

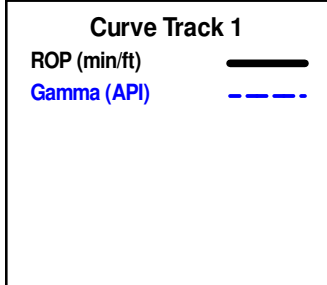


INTERVALS



EVENTS



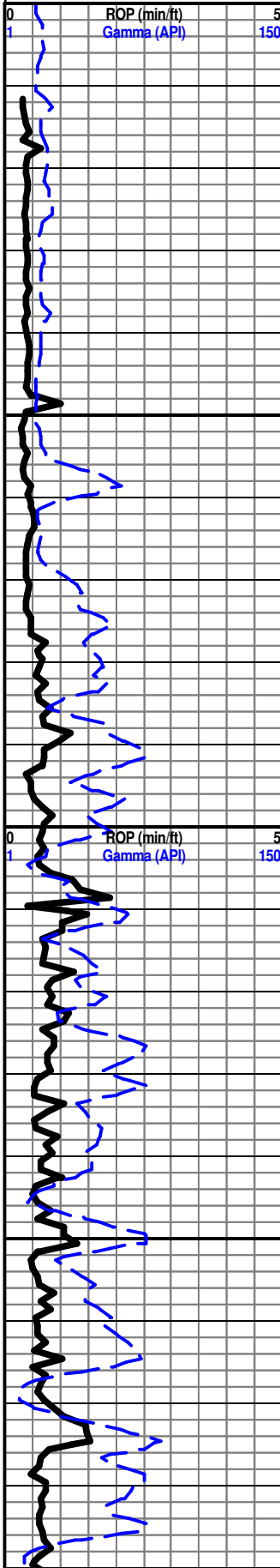
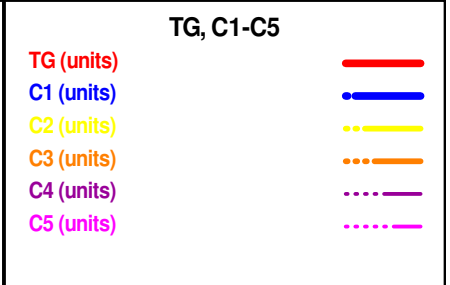


Depth

Lithology

Oil Shows

Geological Descriptions



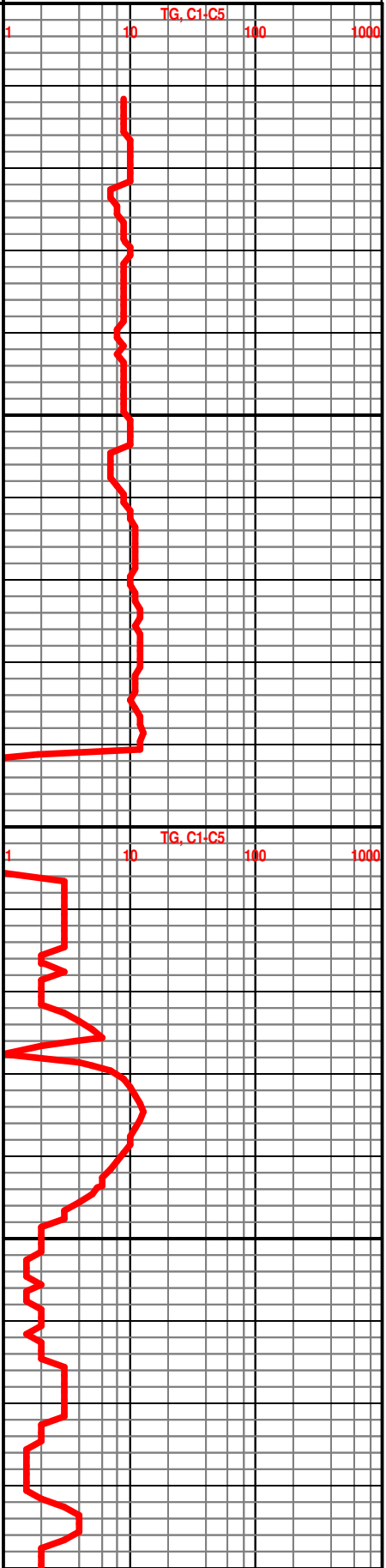
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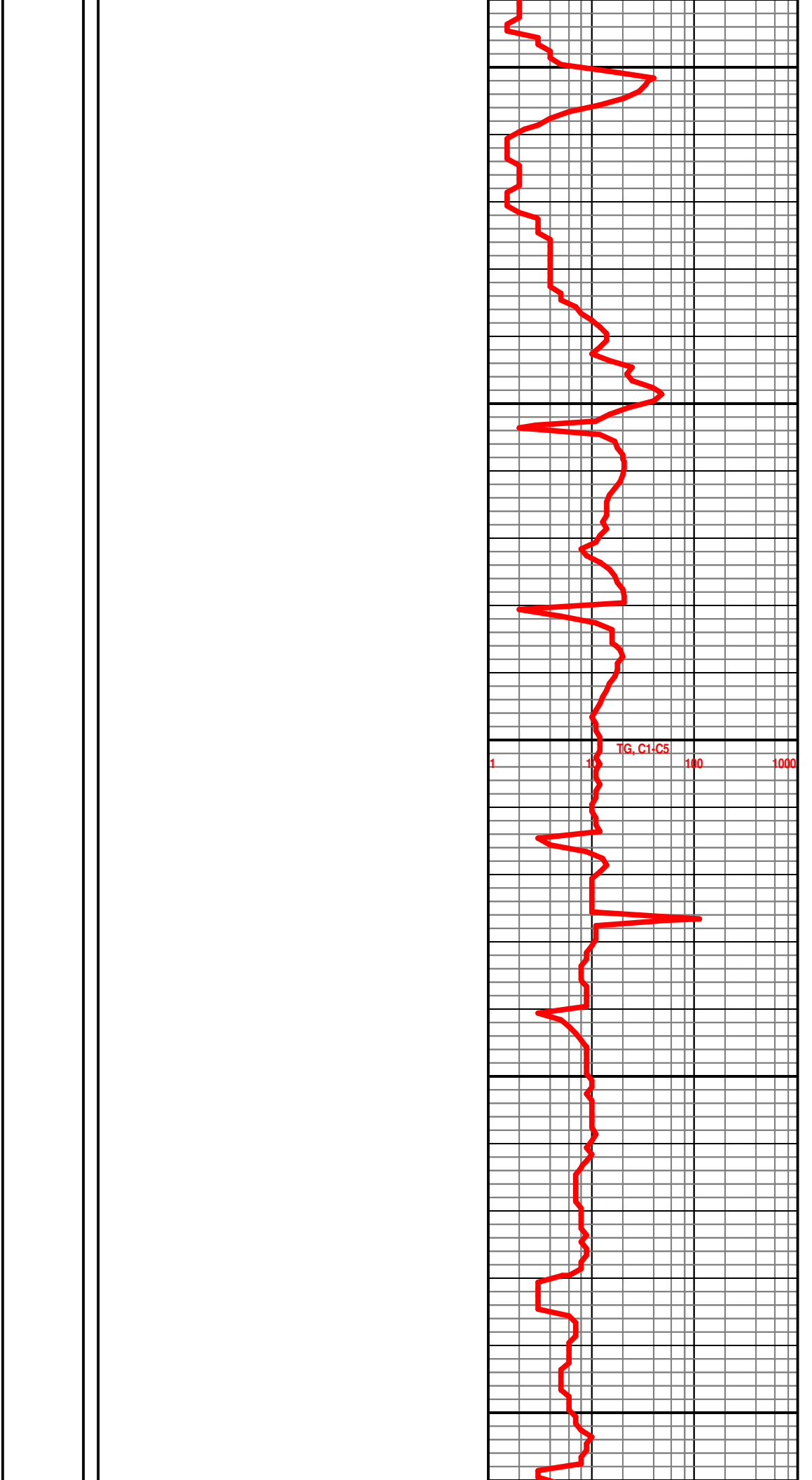
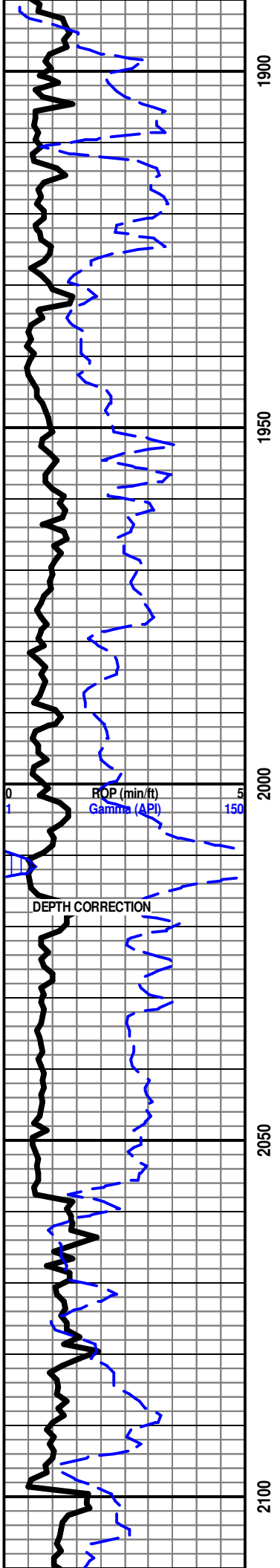
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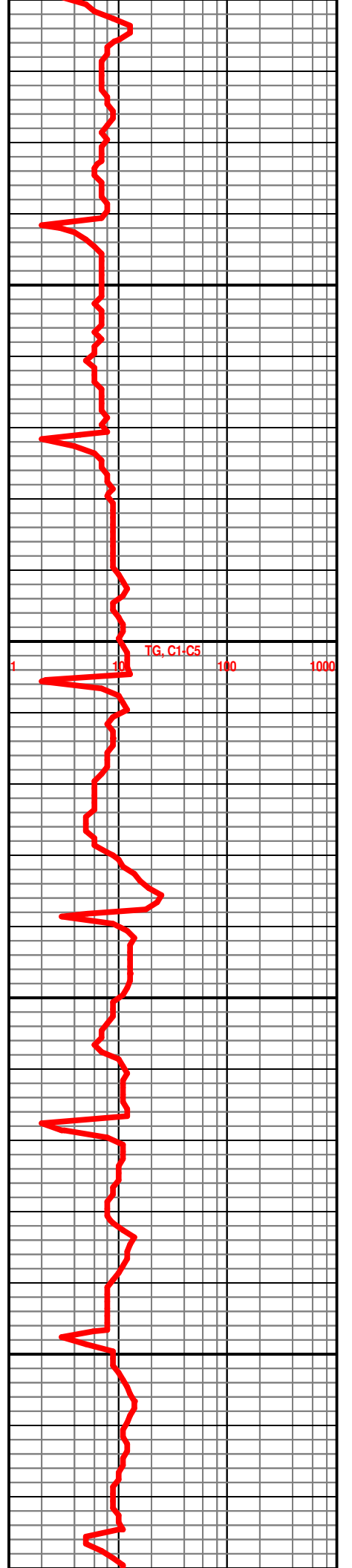
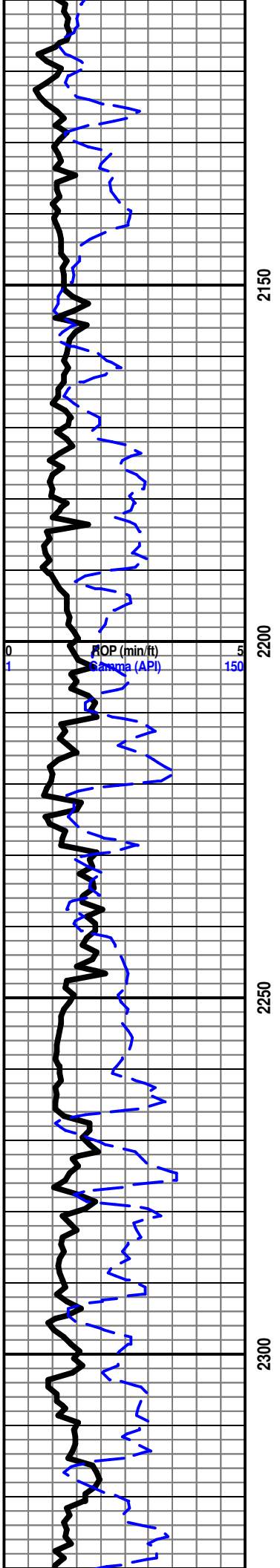
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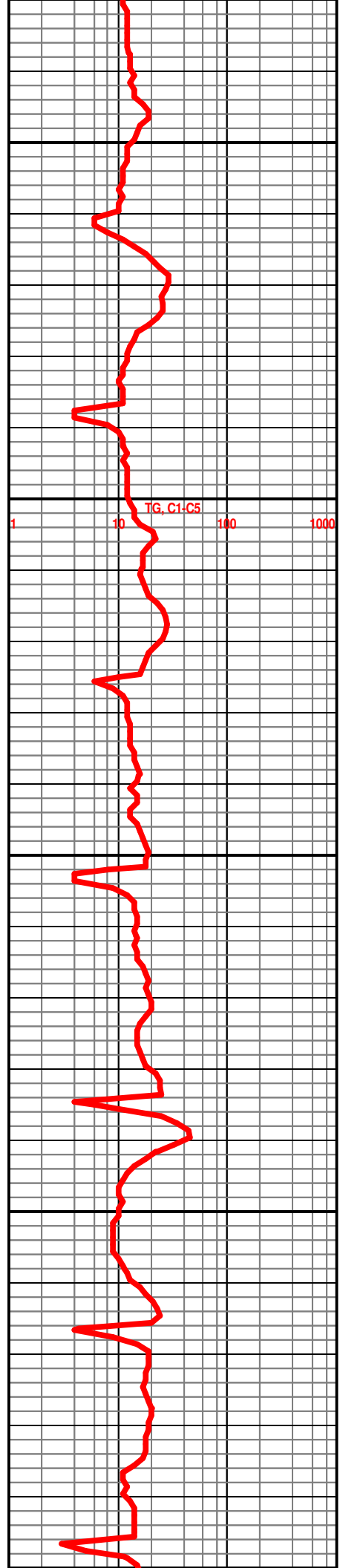
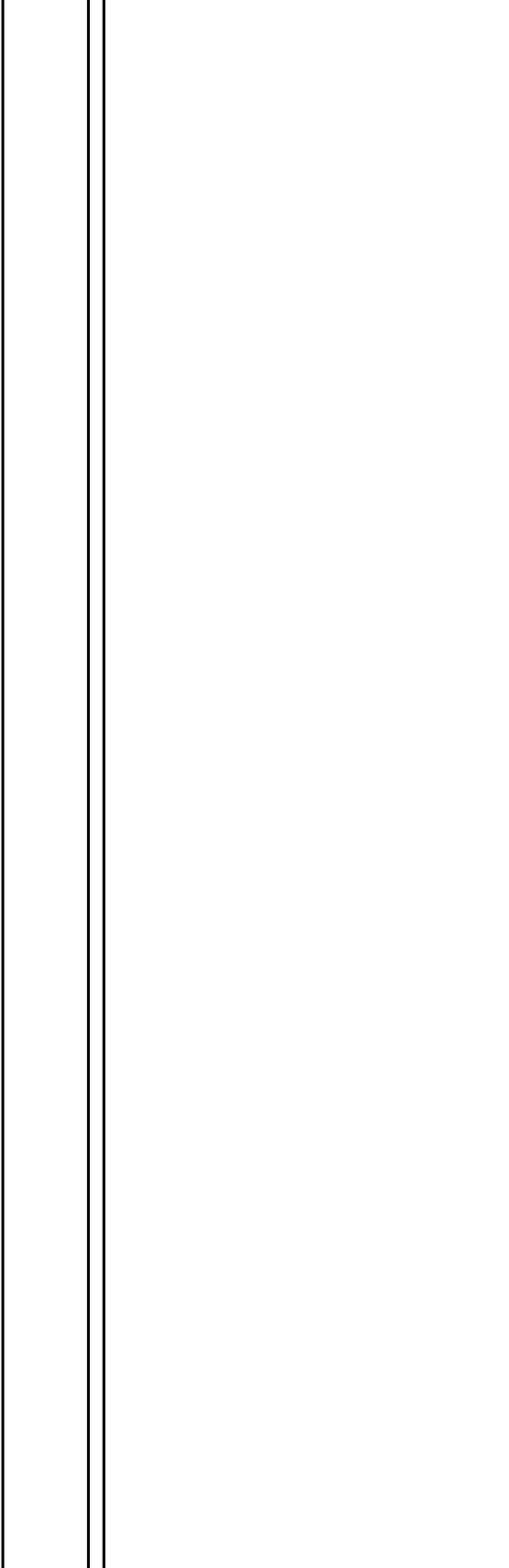
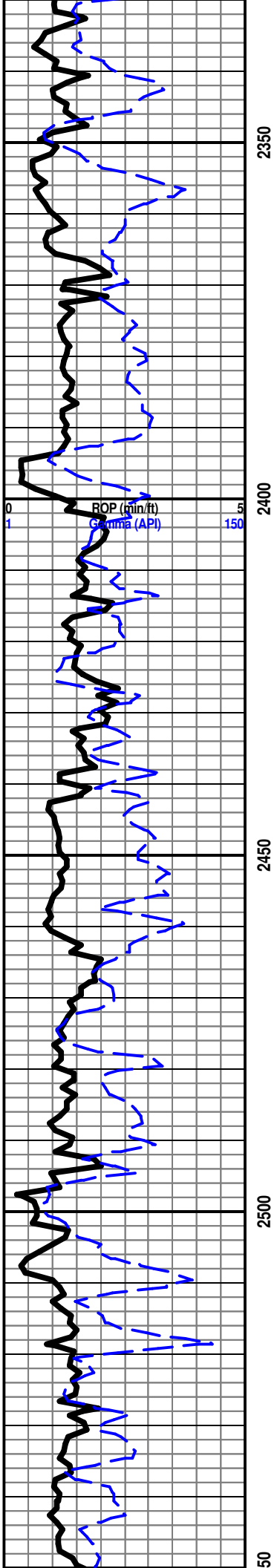
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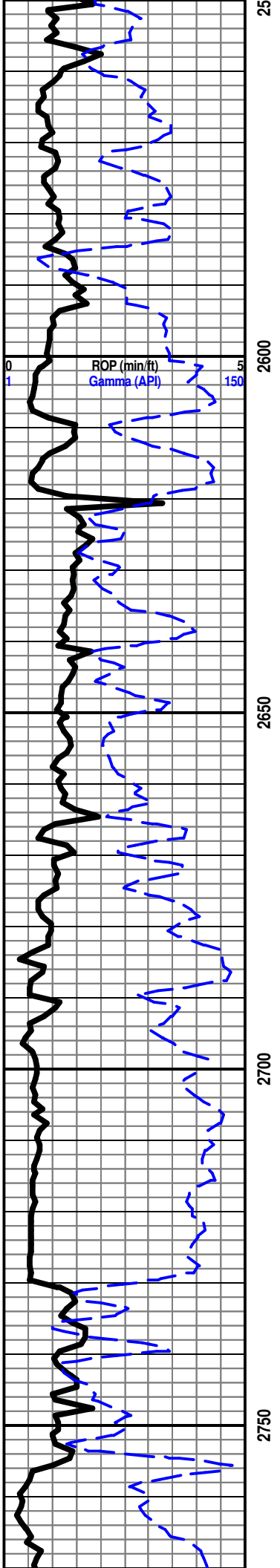
START UNMANNED UNIT 6/21/2012











25

2600

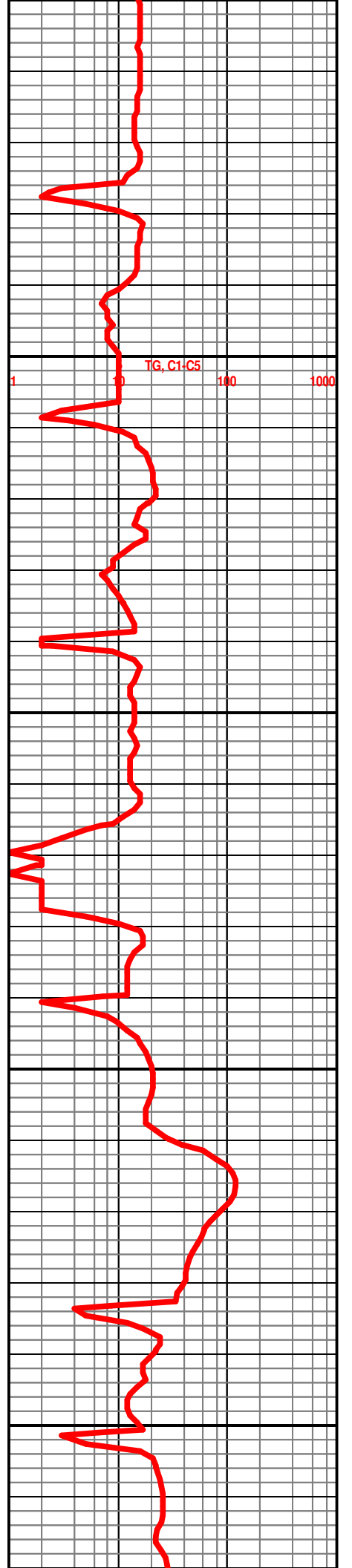
2650

2700

2750

ROP (min/ft)
Gamma (API)

BRS 2729' - 764'

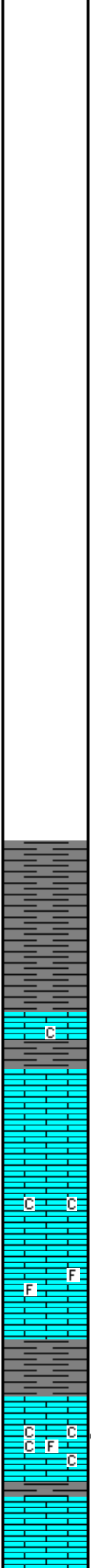
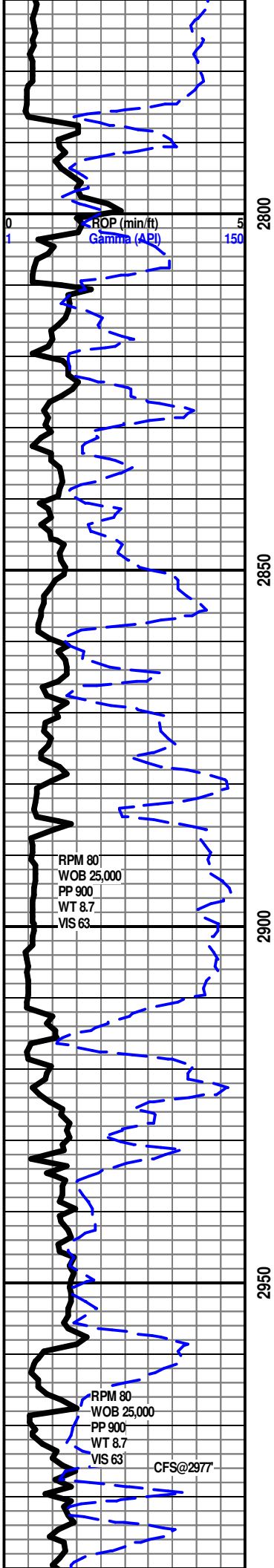


TG, C1-C5

1000

100

1



START MANNED UNIT 6/22/2012

HOWARD 2911'-946'

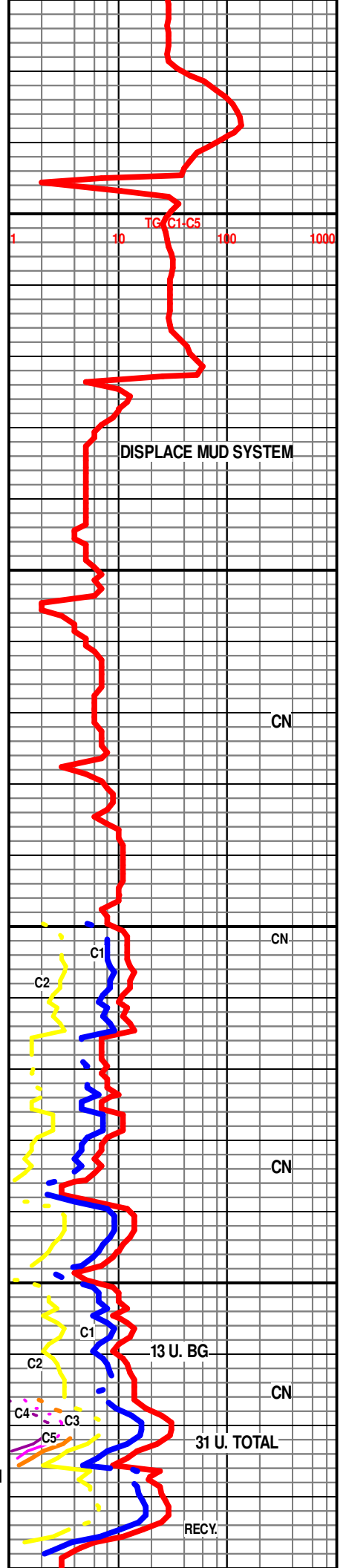
LS- CRM BUFF, HD DNS TO BRITT, MD XLN RE-XLN MTRX, FOSS IMBD IP, SLI TR WHT CHLK, NO FLO, NO VIS POR, NO SHOW

LS- CRM LT TN, HD DNS TO BRITT, MD XLN F-XLN IP, TR IMBD CALC XLS, SLI TR CHLK, DLL YEL MIN FLO, NO VIS POR, NO VIS SHOW

LS- CRM LT TN TO TN, HD DNS, MD TO F-XLN RE-XLN IP, SCATT IMBD FOSS FRGS, DLL YEL MIN FLO, NO VIS POR, NO VIS SHOW

TOPEKA 2964'-999'

2968'-2972'-LS-OFF WHT CRM TN BRN, DUE TO BRN OIL STN IN 50-60%, HD TO V/BRITT, V/SUCRO MTRX TO HVY TR SFT WHT CHLK IP, SLI TR FOSS IP, BRIT YEL GD FLO IN 70%, PR VIS MICRO PP POR IN 40%, V/GD FLSH CUT IN 40%, GD SLW STRM CUT IN 60%, LT OIL ODOR, TN STN ON DISH

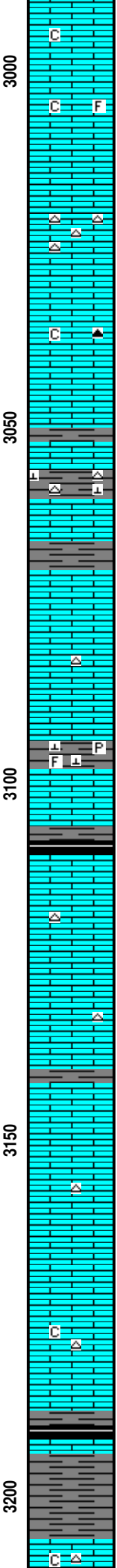
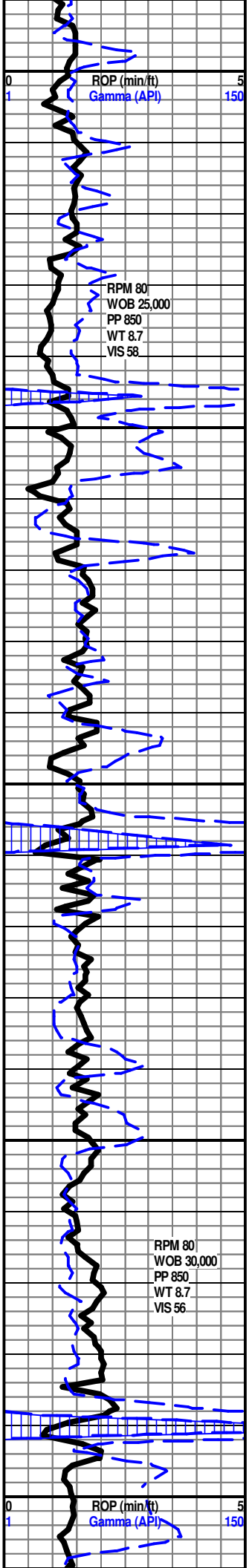


RPM 80
WOB 25,000
PP 900
WT 8.7
VIS 63

RPM 80
WOB 25,000
PP 900
WT 8.7
VIS 63

CFS@2977

RECY.



LS-CRM LT TN TO TN, HD DNS TO SLI TR BRITT, F-XLN TO SLI TR CHLK, NO FLO, NO VIS POR, NO VIS SHOW

LS-OFF WTH CRM BUFF, MD HD TO BRITT, V/SUCRO MTRX, SLI S-CHLKY IP, SLI TR FOSS FRGS, DLL YEL MIN FLO IP, NO VIS POR, NO VIS SHOW

LS- CRM LT TN LT GRY, MOTT HD DNS TO BRITT, V/RE-XLN MTRX, ABDT IMBD CLR WHT CHRT, NO VIS FLO, NO VIS POR, NO VIS SHOW

LS-CRM BUFF LT TN, HD DNS TO BRITT, V/SUCRO MTRX, F-XLN TO TR SFT CHLK IP, SLI TR BRN CHRT, NO VIS FLO, NO VIS POR, NO VIS SHOW

SH- BLK, SFT CARB

SH- GRY DRK GRY, FRM BLKY, V/CALC TO LMY, HVY TR GRY CHRT

Le COMPTON 3069'-1104'

LS- CRM LT TN TO TN, HD DNS IP TO TR BRITT, F-XLN TO MD XLN IP, TR WHT CHRT, NO VIS FLO, NO VIS POR, NO SHOW

SH- GRY DRK GRY TO BRN, FRM BLKY, V/ CALC TO LMY, HVY TR DISS PYR, TR FOSS FRGS

SH- SFT BLK CARB

LS- CRM LT TN, HD DNS TO MD HD, F-XLN TO V/F-XLN IP, TR WHT CHRT, V/DLL YEL FLO IP, NO VIS POR, NO VIS SHOW

LS- CRM BUFF LT TN, HD DNS, V/F-XLN TO F-XLN, SLI TR GYSH TN CHRT, NO VIS FLO, NO VIS POR, NO VIS SHOW

LS- OFF WHT TO CRM LT TN DUE TO SCATT OIL STN IN 20%, HD DNS TO V/BRITT IP, F- MD-XLN TO SUCRO IP, TR IMBD CALC XLS IP, TN WHT CHRT, V/V/DLL YEL FLO IN 30%, V/ PR INTER XLN POR IN 5%, POS FRACT POR IP, SLI OIL ODOR, TR BLCK GMMY OIL STN IP, GD FLSH CUT IN 20%, GD SLW STRM CUT IN 30%, LT TN STN ON DISH

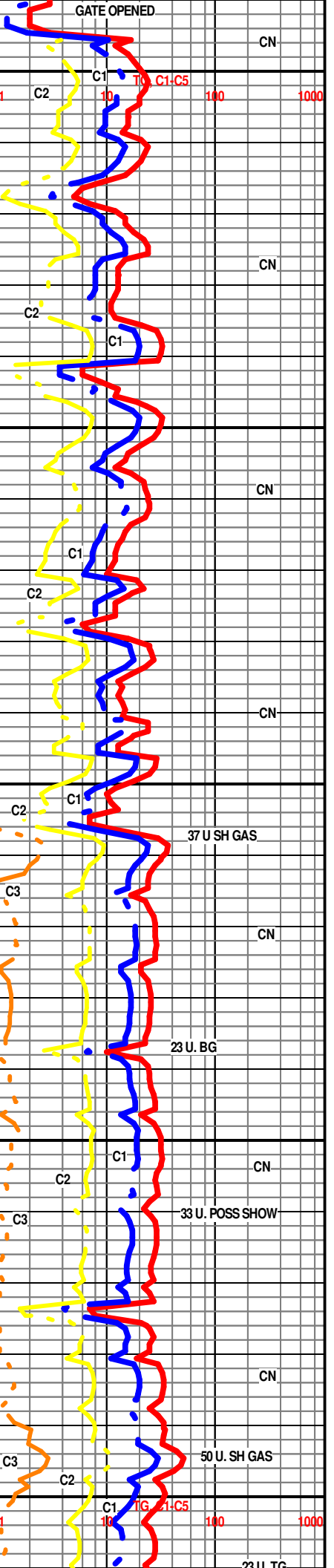
LS-CRM BUFF TO LT TN, HD TO BRITT, MD-XLN TO SUCRO SLI S-CHLKY MTRX, TR WHT CHRT, V/DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW

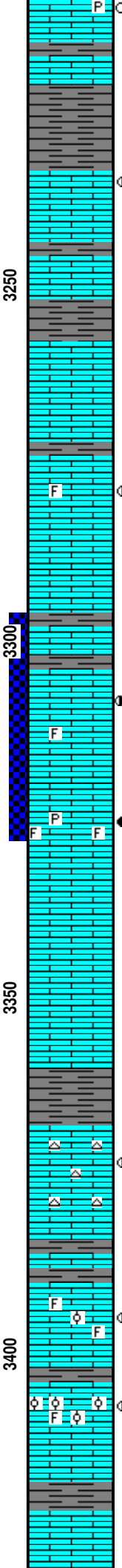
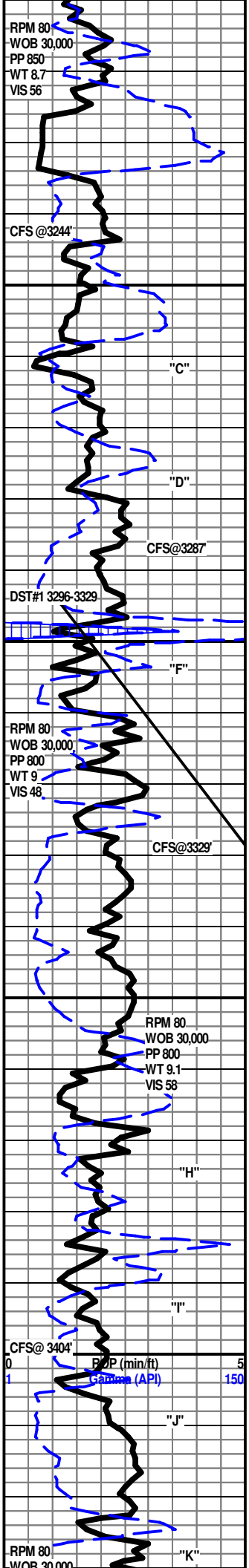
HEEBNER 3189' - 1224'

SH- SFT BLK CARB

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

LS- OFF WHT TO WHT CRM, TR TN STN IN 1%, HD DNS TO BRITT IP, WHT CHRT TR CHLKY IP TR BR PYR CI STR LT YEL MIN FLO TO TR LT YEL





DLL FLO, PR FLSH CUT IN 1%, GD SLOW STRM CUT IN 1%, NO ODOR, NO STN ON DISH
DOUGLAS 3222' - 1257'
 SH- LT GRY TO GY- FRM IP TO V/ SFT SLTY

LANSING 3234'-1269'
 LS- CRM LT TN LT GRY, SCATT TN OIL STN IN 40%, HD DNS TO SLT TR BRITT, SMLL CALC XLS ON ONE FACES IP, BRIT YEL GD FLO 60%, TR PR MICRO VUG POR, POSS FRACT POR, LT FLSH CUT TO A FR SLOW STRM CUT 60%, NO STN ON DISH, FR OIL ODOR

LANSING "C" 3258' - 1293'
 LS- OFF WHT WHT- MD HD TO SFT IP, MD-XLN, RE-XLN MTRX, SUCRO S-CHLKY IP, SMLL CALC XLS IMBD IP, DLL YEL MIN FLO IP, PR SCAT MICROVUG POR IP, NO VIS CUT OR SHOW

LS- OFF WHT CRM LT TN TN, DUE TO SCAT LT TN OILS STN SCAT IN 50%, HD DNS IP TO V/ BRITT, MD-XLN, RE-XLN MTRX, S-SUCRO, TR FOSS FRGS IP, TR SMLL CALC XLS IP, DLL YEL GLD FLO SPTTD IN 70%, PR SCAT INTER-XLN POR, PR SCAT MICROVUG POR IP, FR FLSH CUT IN 50%, FR TO GD SLO STRM CUT IN 60%, NO ODOR, V/ LT TN STN ON DISH

LANSING "F" 3304'-1339'
 3306'-3310'-LS- OFF WHT CRM LT TN TO LT BRN IP DUE TO OIL STN SCAT THRU, F-XLN RE-XLN MTRX, S-SUCRO SLI S-CHLKY IP, TR FOSS FRGS, HVY TR MD CALC XLS, BRIT YEL GLD SPTTD FLO 40%, DLL YEL GLD FLO 30%, PR VIS INTER XLN POR, SLI TR V/PR INTER FOSS POR, GD FLSH CUT 40%, V/GD SLOW STRM CUT 70%, LT TN LCH ON DISH, FR OIL ODOR

3322'-3327'-LS- CRM LT TN TO DRK TN DUE TO OIL STN 90%, ABDT DOS 50%, MD TO F-XLN, V/ RE-XLN MTRX, V/FOSS IP, HVY TR LRG FREE CALC XLS W/ OIL STN, SLI TR PYR, V/DLL YEL GLD FLO 80%, SLI TR SPTTD BRIT YEL GLD FLO IP, PR TO FR VIS INTER FOSS POR IP, PR TO FR VIS TR GD INTER XLN POR SCAT THRU, LIVE OIL IN DISH, GD STRNG OIL ODOR, EXCEL INST FLSH CUT THRU, EXCEL SLO STRM CUT THRU, BRN LCH ON DISH

LS- OFF WHT CRM BFF- HD DNS, TR BRITT IP, F-V/F-XLN, SLI TR S-LITHO IP, LT YEL MIN FLO IP, NO VIS POR, NO VIS SHOW

LANSING "H" 3368' - 1403'
 SH- LT GRN- FRM IP TO V/ SFT TXT

3372-3373' LS- OFF WHT TO WHT, TR SCAT LT TN OIL STN IN 2%, HD DNS F-XLN TO TT SUCRO MTRX IP, ABDT TN WHT CHRT W/ IMBD FOSS FRGS, BRIT YEL GLD FLO IN 10%, TO NO POR IN 90%, FR FLSH CUT IN 10%, TO GD SLO STRM CUT IN 10%, NO ODOR, NO STN ON DISH

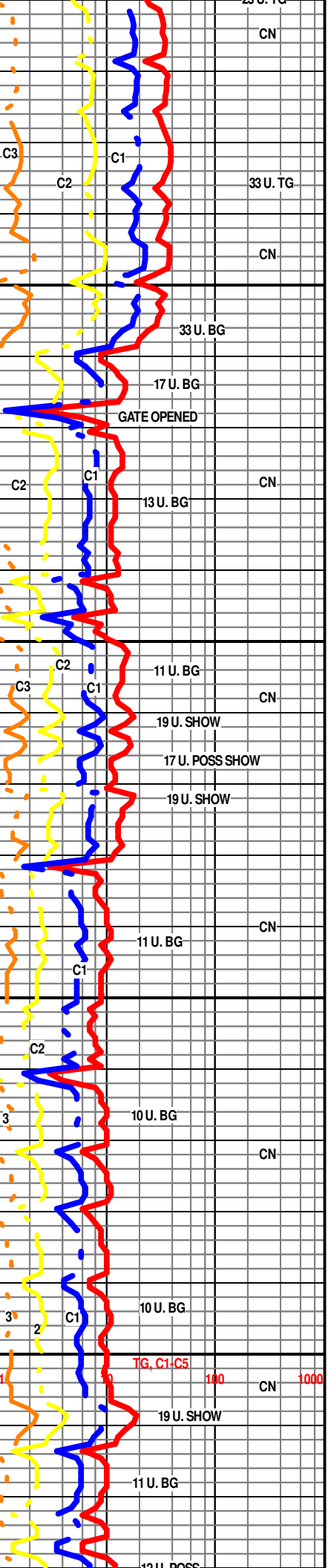
SH- LT TO MD GY- FRM BLKY SMTH TXT

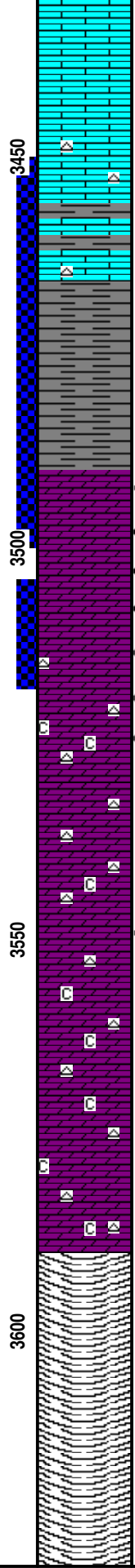
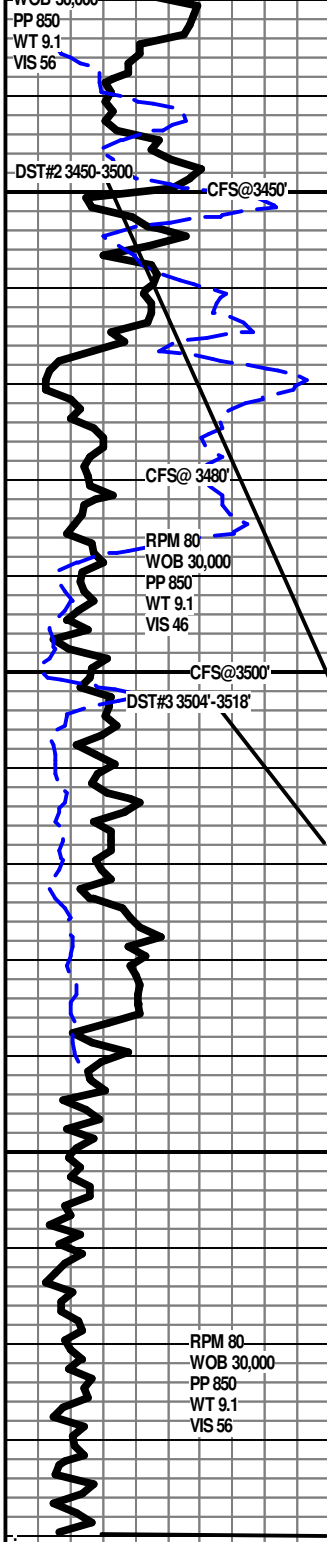
3393- 3395 LS- CRM LT TN TN- TN STN IN 20%, HD DNS F-XLN, RE-XLN MTRX, ABDT IMBD FOSS FRGS SCAT IP, SLI TR IMBD MICRO OOL, BRIT YEL GLD FLO IN 20%, V/ PR VIS INTER-XLN POR IP, GD FLSH CUT TO GD SLO STRM CUT IN 20%, NO ODOR, NO STN ON DISH

SH- BRIT GRN - SMTH TXT W/ IMBD DISS PYR

3406- 3410 LS- OFF WHT CRM LT TN DUE TO LT BRN OIL STN IN 60%, HD DNS MD-FXLN, RE-XLN MTRX, IMBD FOSS FRGS IP, ABDT IMBD V/ SMLL MICRO OOL IP, BRIT YEL GLD FLO IN 20%, DLL YEL GLD FLO IN 30%, PR VIS INT-OOL POR SCAT IN 40%, SLI TR PR INTER-FOSS POR IP, FR FLSH CUT IN 30%. GD SLO STRM CUT IN 50%, LT OIL ODOR

3422-3426 LS- OFF WHT WHT- FRM TO SFT, ABDT FRM WHT CHLK TO V/ SFT GMMY CHLK IP, NO FLO, NO VIS POR, NO VIS SHOW





LS- OFF WHT TO WHT, FRM TO HD IPABDT CHLK TO ABDT SFT GMMY WHT CHLK , NO FLO, NO VIS POR,NO VIS SHOW

LS- CRM OFF WHT - HD DNS TO BRITT, V/F-CRYPTO-XLN TO V/ S-CHLKY MTRX IP, HVY TR WHT CHRT, NO FLO, NO VIS POR, NO VIS SHOW

BKC 3466' - 1501'

SH- RED GY- FRM BLKY GRNY TXT IP TO V/ SFT GMMY

SH- RED GY BRN- FRM BLKY GRNY TXT TO V/ SFT GMMY IP

ARBUCKLE 3489'- 1524'

3489-3500' DOLO- BRN DK BRN DUE TO LIVE OIL STN THRU, HD DNS IP TO V/ V/ BRITT, MD-XLN TO CRS SUCRO MTRX, ABDT IMBD SMLL TO MD ANG DOLO GRNS THRU, V/ DLL YEL GLD FLO THRU, PR TO FR VIS INTER-XLN POR IN 60%, GD VIS INTER-XLN POR IN 10-20%, TR SCAT VUG POR IP, EXCEL INST FLSH CUT THRU, EXCEL SLO STRM MLKY BLU CUT THRU, GD STRNG OIL ODOR, BRN LCH ON DISH, OIL SKIM ON WATER IN TRAY THRU 60 CFS SAMPLE

3500-3510' DOLO- DK BRN DUE TO LIVE OIL STN THRU, HD DNS IP TO V/ BRITT, FN TO CRS SUCRO MTRX, ABDT IMBD SMLL TO MD ANG DOLO GRNS THRU, V/ DLL YEL GLD FLO THRU, PR TO FR VIS INTER-XLN POR IN 40%, GD VIS INTER-XLN POR IN 10%,HVY TR SCAT VUG POR IP, EXCEL INST FLSH CUT THRU, EXCEL SLO STRM MLKY BLU CUT THRU, GD STRNG OIL ODOR, BRN LCH ON DISH, LIVE OIL IN TRAY

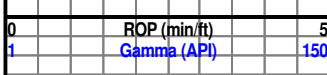
3511-3514- DOLO-LT BRN TO DK BRN DUE TO LIVE OIL STN IN 95%, HD DNS IP TO V/ BRITT, FN TO CRS SUCRO MTRX,MD -XLN IP,ABDT IMBD SMLL TO MD ANG DOLO GRNS THRU,HVY TR SFT WHT CHLK IN 5%, V/ DLL YEL GLD FLO IN 90%, TR BRIT YEL GLD FLO IN 3%, PR TO FR VIS INTER-XLN POR IN 30%,NO VIS POR IN 70%,HVY TR SCAT VUG POR IP, EXCEL INST FLSH CUT IN 90%, EXCEL SLO STRM MLKY BLU CUT THRU, GD STRNG OIL ODOR, BRN LCH ON DISH, LIVE OIL IN TRAY

3515- 3524- DOLO- OFF WHT TO CRM LT TN IPTN STN IN 60%, HD DNS TO V/ BRITT, MD-XLN TO CRS SUCRO MTRX, HVY TR ABDT IMBD WHT CHRT, DLL YEL GLD SPTTD FLO IN 40%, NO FLO IN 50%, BRIT YEL GLD FLO IN 10%, PR VIS INTER-XLN POR IN 70%, PR TO FR VIS INTER-XLN POR IN 30%, EXCEL FLSH CUT IN 50% EXCEL SLO STRM MLKY BLU CUT IN 70%, GD OIL ODOR, TN LCH ON DISH

3524-3550' DOLO- OFF WHT CRM LT TN IPTN OIL STN IN 30%, HD DNS TO BRITT, MD-F-XLN RE-XLN IP, FN TO CRS SUCRO IP, ABDT WHT CHRT, TR SFT WHT CHLK IPBRIT YEL MIN FLO IN 30%, TO NO FLO IN 60%, V/ PR VIS INTER-GRN POR IN 30%, FR FLSH CUT IN 30% ,FR TO TR GD SLO STRM CUT IN 30%, V/ LT OIL ODOR

3550-3590- DOLO WHT OFF WHT - HD V/ BRITT, MD-XLN IP TO V/ CRS SUCRO MTRX, ABDT SFT WHT CHLK THRU, ABDT WHT CHRT,TR IMBD GRN CLAY IP, BRIT YEL MIN FLO THRU, PR TO FR TR SCA GD INTER-XLN POR IP, NO VIUS CUT OR SHOW

R.T.D. 3590'

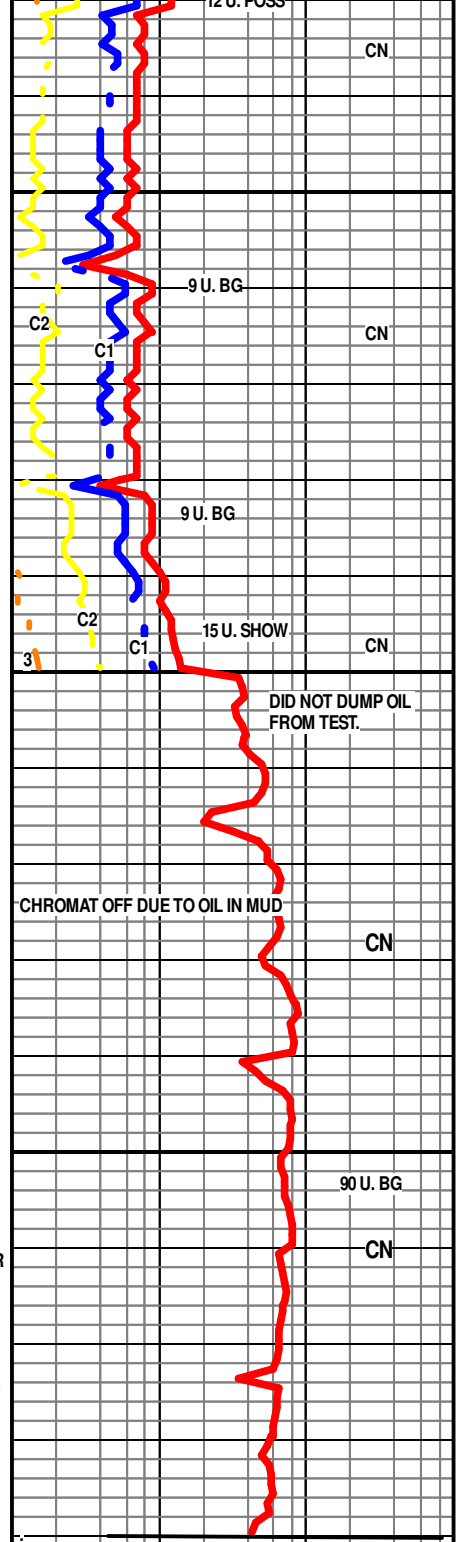


R.T.D. @ 11:22 PM JUNE 24, 2012

CTCH 1.5 HRS

TOFL

WEATHERFORD/ LIBERAL



R.T.D. 3590'

SAMPLES WILL BE DELIVERED TO THE KGS

THANKS FOR CHOOSING EARTH TECH