KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1062646

Form ACO-1
June 2009
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: NEIL SHARP
Phone: (303) 831-4673
CONTRACTOR: License # 5822
Name: Val Energy, Inc.
Wellsite Geologist: TIM HEDRICK
Purchaser:

Designate Type of Completion:

- [x] New Well
- [ ] Re-Entry
- [ ] Workover

- [x] 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
- [ ] Conv. to GSW
- [ ] Plug Back: Plug Back Total Depth
- [ ] Commingled Permit #:
- [ ] Dual Completion Permit #:
- [ ] SWD Permit #:
- [ ] ENHR Permit #:
- [ ] GSW Permit #:

05/07/2011	05/16/2011	05/19/2011
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-165-21921-00-00
Spot Description:
N2 - SW - SW - SW Sec. 26 Twp. 16 S. R. 16 [ ] East [x] West
430 Feet from [ ] North / [x] South Line of Section
330 Feet from [ ] East / [x] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[ ] NE [ ] NW [ ] SE [x] SW
County: Rush
Lease Name: MAIER Well #: 1-26
Field Name:
Producing Formation: LANSING
Elevation: Ground: 1974 Kelly Bushing: 1984
Total Depth: 3660 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1076 Feet
Multiple Stage Cementing Collar Used? [ ] Yes [x] 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: 39000 ppm Fluid volume: 1200 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: CRAIG OIL CO
Lease Name: NUSS #1 License #: 31341
Quarter NW Sec. 5 Twp. 16 S. R. 14 [ ] East [x] West
County: BARTON Permit #: D-10953

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

- [x] **Letter of Confidentiality Received**
  Date: 09/01/2011
- [x] **Confidential Release Date:** 08/31/2013
- [x] **Wireline Log Received**
- [ ] **Geologist Report Received**
- [ ] **UIC Distribution**

ALT [x] **I** [ ] **II** [ ] **III** **Approved by:** NAOMI JAMES **Date:** 09/02/2011

Side Two

[redacted]

1062646

Operator Name: Samuel Gary Jr. & Associates, Inc. Lease Name: MAIER Well #: 1-26

Sec. 26 Twp. 16 S. R. 16 ☐ East ☑ West County: Rush

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

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

Electric Log Submitted Electronically ☑ Yes ☐ No
(If no, Submit Copy)

List All E. Logs Run:
Attached

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

Name	Top	Datum
HEEBNER	3212	-1228
DOUGLAS	3246	-1262
LANSING	3269	-1285
ARBUCKLE	3547	-1563
TD	3660	

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	1076	CLASS A	375	2% GEL, 3% CC
PRODUCTION	7.875	5.5	15.5	3651	Q-PRO	175	4% GEL, 2% CC

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:
☐ Perforate
☐ Protect Casing
☐ Plug Back TD
☐ Plug Off Zone

Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
-			
-			

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
4	3270'-73'	400 GAL. OF 15% ACETIC ACID	3270'-73'
4	3410'-14'	400 GAL. OF 15% ACETIC ACID	3410'-14'
4	3430'-34'	400 GAL. OF 15% ACETIC ACID	3430'-34'
4	3444'-48'	400 GAL. OF 15% ACETIC ACID	3444'-48'
4	3456'-60'	400 GAL. OF 15% ACETIC ACID	3456'-60'

TUBING RECORD: Size: 2.875 Set At: 3653 Packer At:

Liner Run: ☐ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. 06/10/2011

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

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	3		20		

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:
3270-3460' OA

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

Form	ACO1 - Well Completion
Operator	Samuel Gary Jr. & Associates, Inc.
Well Name	MAIER 1-26
Doc ID	1062646

All Electric Logs Run

DEN
IND
MICRO
SONIC
SPECTRAL

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

Kansas
Corporation Commission

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

Mark Sievers, Chairman
Ward Loyd, Commissioner
Thomas E. Wright, Commissioner

Sam Brownback, Governor

September 01, 2011

NEIL SHARP
Samuel Gary Jr. & Associates, Inc.
1515 WYNKOOP, STE 700
DENVER, CO 80202

Re: ACO1
API 15-165-21921-00-00
MAIER 1-26
SW/4 Sec.26-16S-16W
Rush 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 at 303-831-4673.

Respectfully,
NEIL SHARP

Date: 5/12/2011
Invoice # 5007

P.O.#:

Due Date: 6/11/2011
Division: *Russell*

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

Invoice

Contact:
Samuel Gary Jr & Associates Inc
Address/Job Location:
Samuel Gary Jr & Associates Inc
3111 W. 10th Street
Great Bend, KS 67503

Reference:
MAIER 1-26

Description of Work:
LONG SURFACE JOB

☑ DRLG ☐ COMP ☐ W/O ☐ LOE ☐ GG

Account	8200 — 138
Well/Prospect	MAIER 1-26
Deck	
AFE	
Approval	CH
Description	

Services / Items Included:	Quantity	Price	Taxable
Labor		$ 963.85	No
Common-Class A	370	$ 4,764.78	Yes
8 5/8" Basket	3	$ 1,000.67	Yes
Bulk Truck Matl-Material Service Charge	390	$ 823.33	No
Calcium Chloride	13	$ 516.78	Yes
Pump Truck Mileage-Job to Nearest Camp	30	$ 316.03	No
8 5/8" Centralizer	3	$ 202.67	Yes
Flo Seal	90	$ 190.00	Yes
Bulk Truck Mileage-Job to Nearest Bulk Plant	30	$ 184.93	No
Premium Gel (Bentonite)	7	$ 120.29	Yes
8 5/8" Top Rubber Plug	1	$ 111.89	Yes

Item	Quantity	Price	Taxable
Baffle Plate Aluminum, 8 5/8"	1	$95.00	Yes

Invoice Terms:
Net 30

SubTotal:	$	*9,290.22*
Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice:	$	(1,393.53)
SubTotal for Taxable Items:	$	5,951.76
SubTotal for Non-Taxable Items:	$	1,125.66
Total:	$	7,896.69
6.30% Rush County Sales Tax Tax:	$	374.96
Amount Due:	$	**8,271.65**
Applied Payments:		
Balance Due:	$	**8,271.65**

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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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. 5007

Date	Sec.	Twp.	Range	County	State	On Location	Finish
5/8/11	26	16	16	Rush	KS		7:30 PM

Lease MAIER Well No. 1-26 Location Galatia, SW, 15, 1W, N into

Contractor VAL Rig #6

Type Job Surface

Hole Size 12¼" T.D. 1078'

Csg. 8⅝" 23# Depth 1076'

Tbg. Size Depth

Tool Depth

Cement Left in Csg. 38' Shoe Joint 38'

Meas Line Displace 66¼ Bbls.

EQUIPMENT

Pumptrk 1	No.	Cementer Helper	Paul
Bulktrk 12	No.	Driver Driver	Matt
Bulktrk PU	No.	Driver Driver	Rocky

JOB SERVICES & REMARKS

Remarks:

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

Est. Circ
Pump 10 Bbls. Water
Mix 370 sx
Displace
Land Plug
Cement Circulated

Thank You!

Owner

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.

Charge To Stanley Cary Jr. & Associates

Street

City State

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

Cement Amount Ordered 370 sx Com 3% CC 2% Gel ¼# per sx Floseal

Common 370

Poz. Mix

Gel. 7

Calcium 13

Hulls

Salt

Flowseal 90#

Kol-Seal

Mud CLR 48

CFL-117 or CD110 CAF 38

Sand

Handling 390

Mileage

FLOAT EQUIPMENT 8⅝"

Guide Shoe

Centralizer 3

Baskets 3

AFU Inserts

Float Shoe

Latch Down Baffle Plate
Head + manifold
Rubber Plug

Pumptrk Charge

Mileage

Tax

Discount

Total Charge

X Signature

Quality Oilwell Cementing

Date: 5/18/2011
Invoice # 4643

P.O.#:

Due Date: 6/17/2011
Division: *Russell*

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

Invoice

Contact:
Samuel Gary Jr & Associates Inc
Address/Job Location:
Samuel Gary Jr & Associates Inc
3111 W. 10th Street
Great Bend, KS 67503

Reference:
MAIER 1-26

Description of Work:
PROD LONG STRING

☐ DRLG ☑ COMP ☐ W/O ☐ LOE ☐ GG

Account	8300-228
Well/Prospect	MAIER 1-26
Deck	
AFE	
Approval	CA
Description	

Services / Items Included:	Quantity	Price	Taxable
Labor		$ 703.35	No
Common-Class A	225	$ 2,819.19	Yes
Gilsonite	1057	$ 1,628.35	Yes
CFL 117	176	$ 1,113.46	Yes
5 1/2" Basket	3	$ 708.65	Yes
CD-110	117	$ 480.65	Yes
5 1/2" Turbolizer	8	$ 476.54	Yes
Bulk Truck Matl-Material Service Charge	225	$ 462.16	No
Mud Clear	500	$ 380.00	Yes
Defoamer A or CAF-38	50	$ 359.46	Yes
Auto Fill Float Shoe, 5 1/2"	1	$ 314.27	Yes

Item	Quantity	Price	Taxable
Pump Truck Mileage-Job to Nearest Camp	30	$307.49	No
Salt (Fine)	19	$272.41	Yes
Latch Down Plug & Baffle, 5 1/2"	1	$230.05	Yes
Bulk Truck Mileage-Job to Nearest Bulk Plant	30	$179.94	No
Flo Seal	56	$115.03	Yes
KCL	2	$61.33	Yes

Invoice Terms:
Net 30

SubTotal:	$	*10,612.33*
Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice:	$	(1,591.85)
SubTotal for Taxable Items:	$	7,615.48
SubTotal for Non-Taxable Items:	$	807.15
Total:	$	9,020.48
6.30% Rush County Sales Tax Tax:	$	479.78
Amount Due:	$	**9,500.26**
Applied Payments:		
Balance Due:	$	**9,500.26**

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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QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 4643

Cell 785-324-1041

	Sec.	Twp.	Range	County	State	On Location	Finish
Date 5-16-11	26	16	16	Rush	Kansas		3:15A

Lease Maier Well No. 1-26 Location Galatia SW 15 16 Nwto

Contractor VAL Energy Rig 6

Type Job

Hole Size 7⅞ T.D. 3660

Csg. 5½ 15.5D Depth 3651

Tbg. Size Depth

Tool Depth

Cement Left in Csg. 21 Shoe Joint 21

Meas Line Displace 86½ Bbl

Owner

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.

Charge To Samuel Gary Jr. & Associates

Street

City State

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

Cement Amount Ordered 225 Q-Pro-C 10# Salt 5# Gilsonite .3% CD-110 .8% CFL-117 .25% CAF-38

Common 500 Gal Mud Clear-48 20 Bbl KCL

Poz. Mix

Gel.

Calcium CD-110 117#

Hulls 20 BBL KCL

Salt 19

Flowseal 56#

Kol-Seal 1057#

Mud CLR 48 500 gal

CFL-117 or CD110 CAF 38 50#

Sand CFL 117 176#

Handling

Mileage

EQUIPMENT

Pumptrk 5	No.	Cementer / Helper	Steve
Bulktrk 8	No.	Driver / Driver	Brandon
Bulktrk	No.	Driver / Driver	Corey

JOB SERVICES & REMARKS

Remarks:

Rat Hole 30sx

Mouse Hole 20sx

Centralizers 1 3 5 7 9 11 13 15

Baskets 3 9 15

D/V or Port Collar

30sx Rat Hole
20sx Mouse Hole
Pump 500 Gal Mud Clear-48
Mix 175sx Cement down 5½ Casing
Release plug Displace 86½ Bbl
20 Bbl KCL wt displacement

Land plug @ 1300 psi

Float Held

FLOAT EQUIPMENT

Guide Shoe

Centralizer 8 Turbos

Baskets 3

AFU Inserts

Float Shoe 1

Latch Down 1

Rotating Head

Pumptrk Charge Prod Long String

Mileage 30

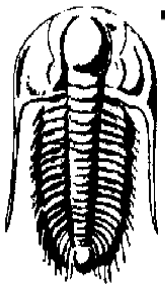
Tax

Discount

Total Charge

X Signature

Quality Oilwell Cementing



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Samuel Gary Jr. & Associates Inc.**

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

26/16S/16W-Rush

Maier 1-26

Start Date: 2011.05.12 @ 00:15:02
End Date: 2011.05.12 @ 07:37:02
Job Ticket #: 42822 DST #: 1

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42822 **DST#: 1**

Test Start: 2011.05.12 @ 00:15:02

GENERAL INFORMATION:

Formation: **LKC 'D&E'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:17:32
Time Test Ended: 07:37:02

Test Type: Conventional Bottom Hole
Tester: Dustin Rash
Unit No: 38

Interval: 3303.00 ft (KB) To 3329.00 ft (KB) (TVD)
Total Depth: 3329.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

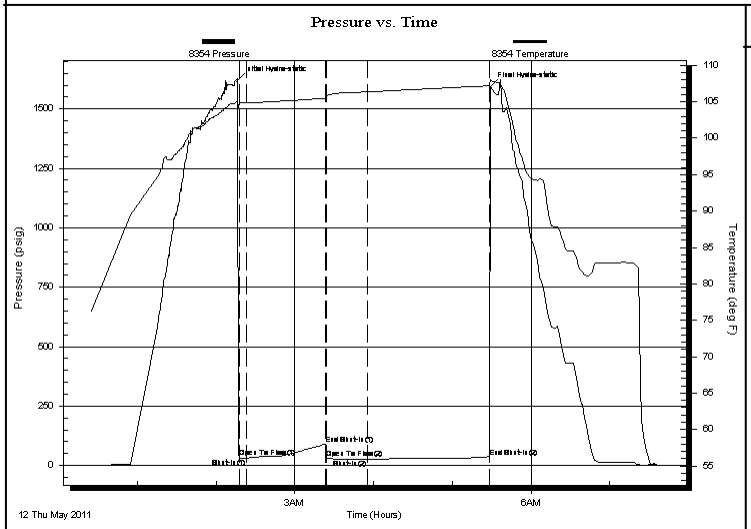
Reference Elevations: 1985.00 ft (KB)
1975.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8354 **Inside**

Press@RunDepth: 27.21 psig @ 3306.00 ft (KB)
Start Date: 2011.05.12 End Date: 2011.05.12
Start Time: 00:25:02 End Time: 07:37:02

Capacity: 8000.00 psig
Last Calib.: 2011.05.12
Time On Btm: 2011.05.12 @ 02:16:32
Time Off Btm: 2011.05.12 @ 05:29:02

TEST COMMENT: IF-Weak surface blow .
ISI-No Return.
FF-Few bubbles. Then died.
FSI-No Return. Time Intervals- 5-60-30-90



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1620.95	105.08	Initial Hydro-static
1	33.62	104.84	Open To Flow (1)
7	30.59	104.84	Shut-In(1)
67	90.17	105.47	End Shut-In(1)
68	28.49	105.77	Open To Flow (2)
99	27.21	106.36	Shut-In(2)
192	36.76	107.19	End Shut-In(2)
193	1593.37	108.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3.00	75%Mud/25%Oil	0.04

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42822 **DST#: 1**

Test Start: 2011.05.12 @ 00:15:02

GENERAL INFORMATION:

Formation: **LKC 'D&E'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:17:32
Time Test Ended: 07:37:02

Test Type: Conventional Bottom Hole
Tester: Dustin Rash
Unit No: 38

Interval: 3303.00 ft (KB) To 3329.00 ft (KB) (TVD)
Total Depth: 3329.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

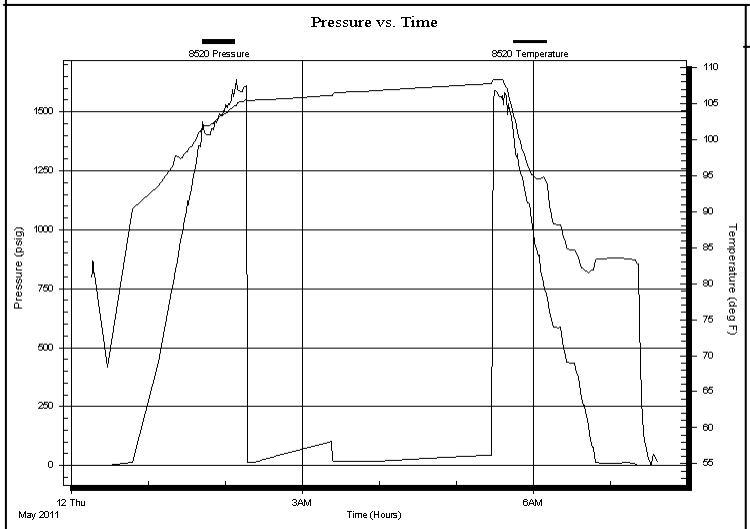
Reference Elevations: 1985.00 ft (KB)
1975.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8520 **Outside**

Press@RunDepth: psig @ 3306.00 ft (KB)
Start Date: 2011.05.12 End Date: 2011.05.12
Start Time: 00:16:01 End Time: 07:37:00

Capacity: 8000.00 psig
Last Calib.: 2011.05.12
Time On Btm:
Time Off Btm:

TEST COMMENT: IF-Weak surface blow .
ISI-No Return.
FF-Few bubbles. Then died.
FSI-No Return. Time Intervals- 5-60-30-90



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
3.00	75%Mud/25%Oil	0.04

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42822 **DST#: 1**

Test Start: 2011.05.12 @ 00:15:02

GENERAL INFORMATION:

Formation: **LKC 'D&E'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:17:32
Time Test Ended: 07:37:02

Test Type: Conventional Bottom Hole
Tester: Dustin Rash
Unit No: 38

Interval: 3303.00 ft (KB) To 3329.00 ft (KB) (TVD)
Total Depth: 3329.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

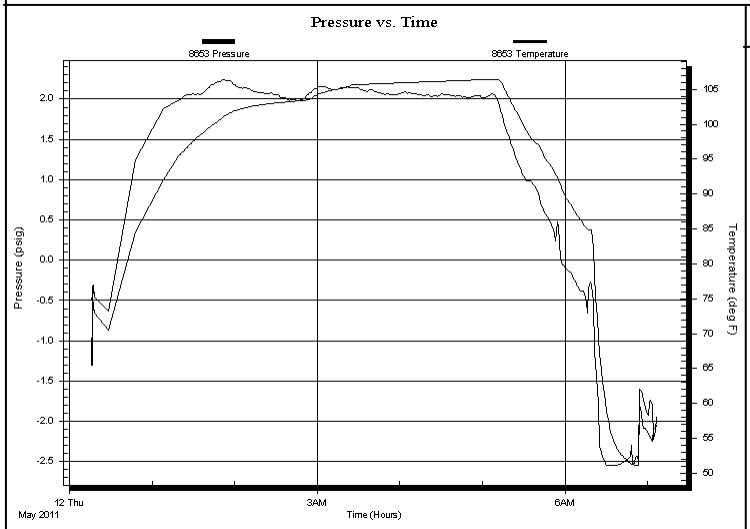
Reference Elevations: 1985.00 ft (KB)
1975.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8653 **Fluid**

Press@RunDepth: psig @ 3273.00 ft (KB)
Start Date: 2011.05.12 End Date: 2011.05.12
Start Time: 00:15:56 End Time: 07:07:25

Capacity: 8000.00 psig
Last Calib.: 2011.05.12
Time On Btm:
Time Off Btm:

TEST COMMENT: IF-Weak surface blow .
ISI-No Return.
FF-Few bubbles. Then died.
FSI-No Return. Time Intervals- 5-60-30-90



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
3.00	75%Mud/25%Oil	0.04

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42822 **DST#: 1**

Test Start: 2011.05.12 @ 00:15:02

Tool Information

Drill Pipe:	Length:	3286.00 ft	Diameter:	3.80	inches	Volume:	46.09	bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.70	inches	Volume:	0.00	bbl	
Drill Collar:	Length:	0.00 ft	Diameter:	2.25	inches	Volume:	0.00	bbl	
						Total Volume:	46.09	bbl	

Drill Pipe Above KB:	13.00 ft
Depth to Top Packer:	3303.00 ft
Depth to Bottom Packer:	ft
Interval betw een Packers:	26.00 ft
Tool Length:	56.00 ft
Number of Packers:	2
Diameter:	6.75 inches

Tool Weight:		3000.00 lb
Weight set on Packer:		24000.00 lb
Weight to Pull Loose:		2000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	50000.00 lb
	Final	50000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Recorder	0.00	8653	Fluid	3273.00		
Change Over Sub	1.00			3274.00		
Shut In Tool	5.00			3279.00		
Sampler	2.00			3281.00		
Hydraulic tool	5.00			3286.00		
Jars	5.00			3291.00		
Safety Joint	3.00			3294.00		
Packer	5.00			3299.00	30.00	Bottom Of Top Packer
Packer	4.00			3303.00		
Stubb	1.00			3304.00		
Perforations	2.00			3306.00		
Recorder	0.00	8354	Inside	3306.00		
Recorder	0.00	8520	Outside	3306.00		
Perforations	20.00			3326.00		
Bullnose	3.00			3329.00	26.00	Bottom Packers & Anchor
Total Tool Length:	**56.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42822 **DST#: 1**

Test Start: 2011.05.12 @ 00:15:02

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:	44.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.77 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4500.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
3.00	75%Mud/25%Oil	0.042

Total Length: 3.00 ft Total Volume: 0.042 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Sampler-1500ML-Mud/500ML-Oil Pressure-25#

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42822 **DST#: 1**

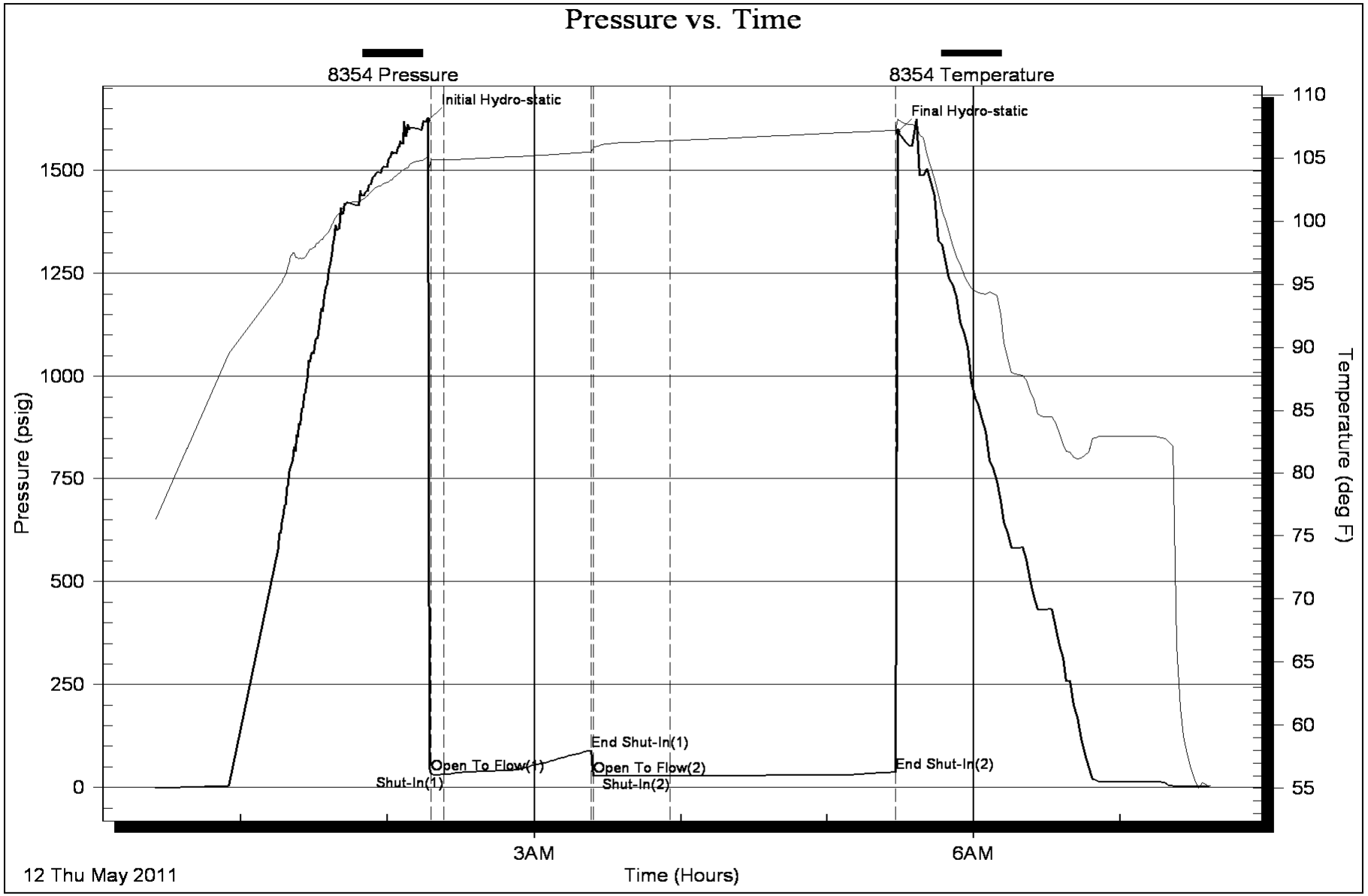
Test Start: 2011.05.12 @ 00:15:02

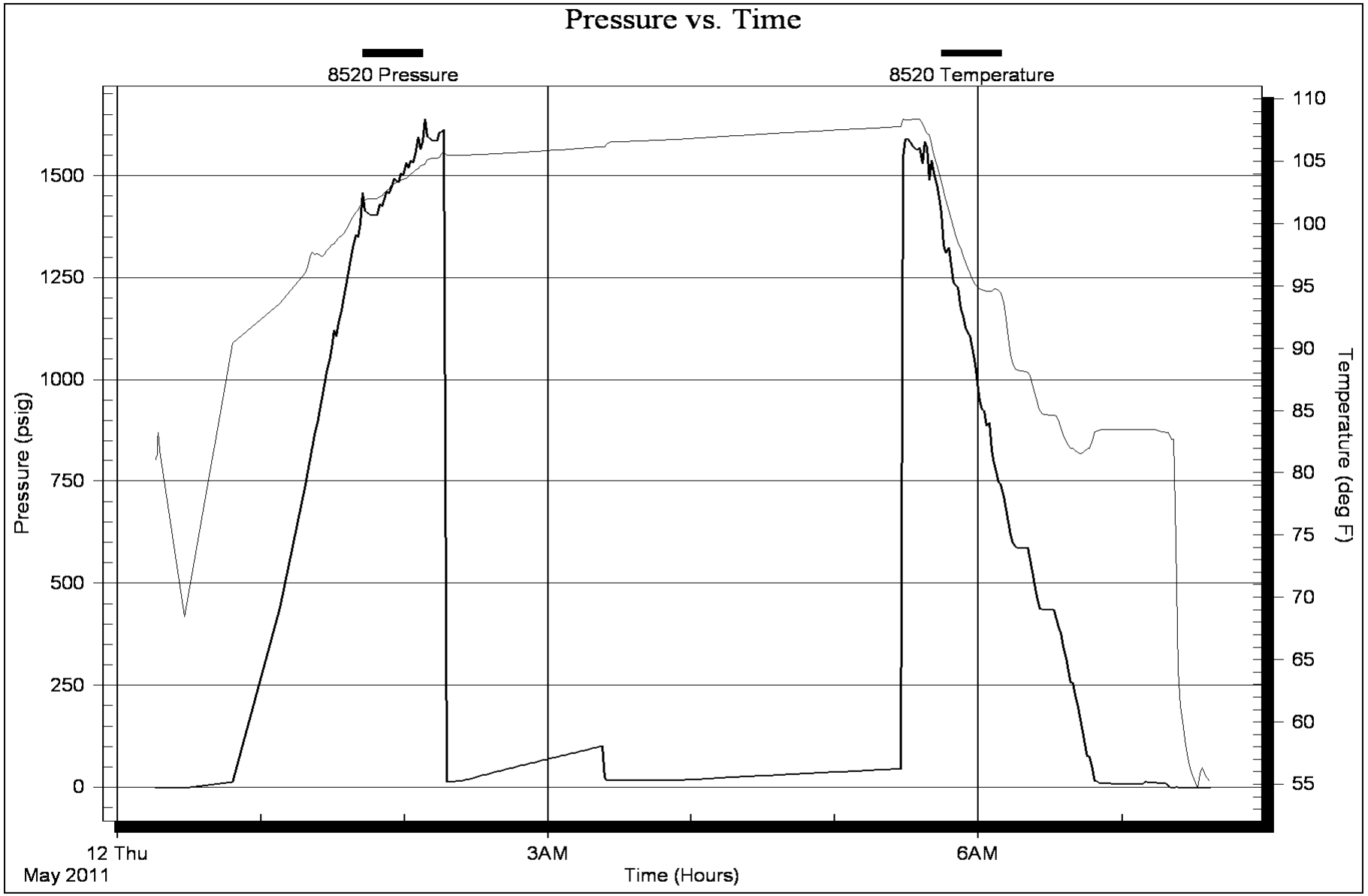
Gas Rates Information

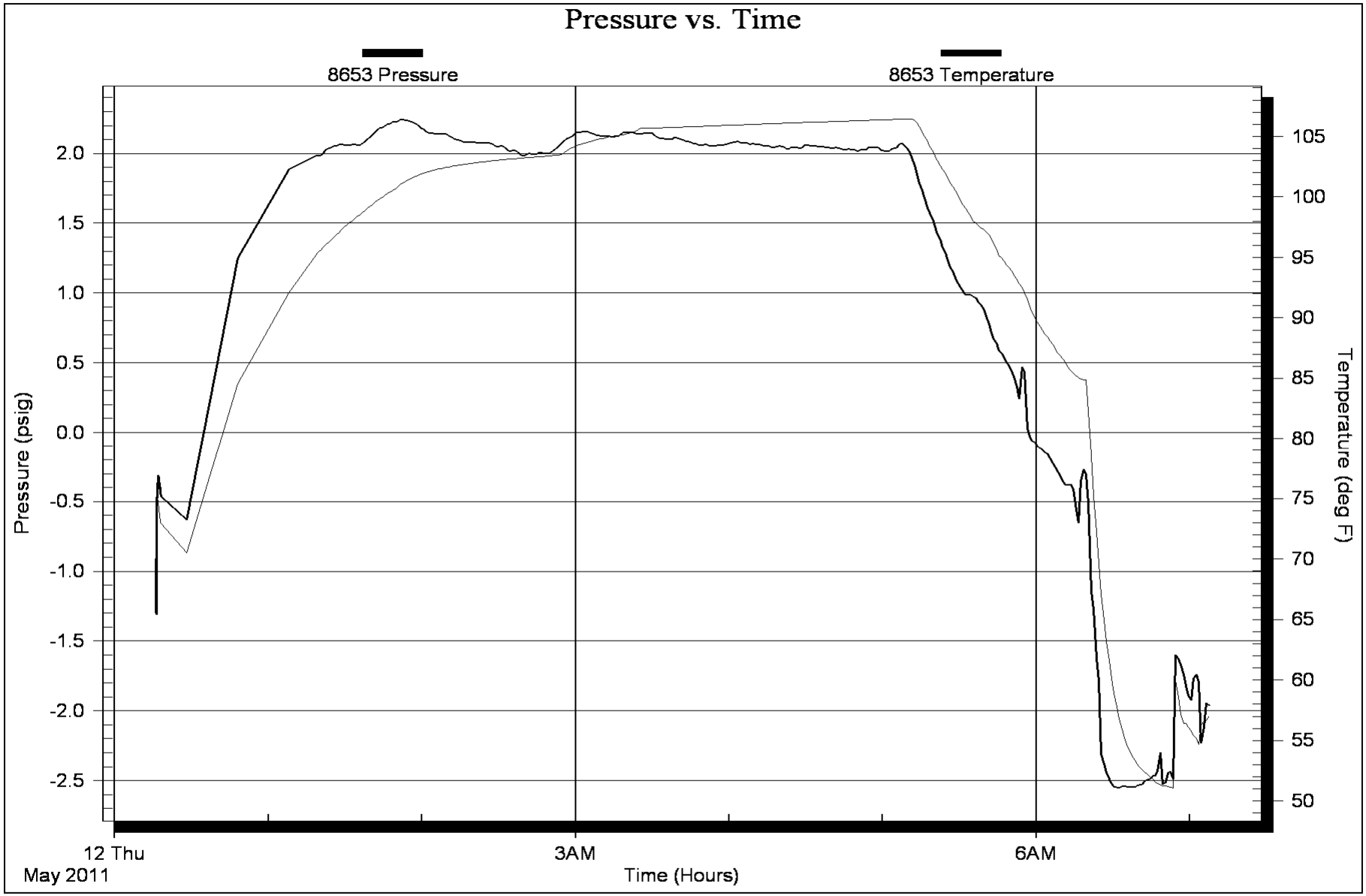
Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m^3/d)
		0.00	0.00	0.00


Pressure vs. Time
8354 Pressure
8354 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
End Shut-In(2)
Pressure (psig)
Temperature (deg F)
1500
1250
1000
750
500
250
0
110
105
100
95
90
85
80
75
70
65
60
55
3AM
6AM
12 Thu May 2011
Time (Hours)


Pressure vs. Time
8520 Pressure
8520 Temperature
Pressure (psig)
1500
1250
1000
750
500
250
0
Temperature (deg F)
110
105
100
95
90
85
80
75
70
65
60
55
12 Thu
May 2011
3AM
6AM
Time (Hours)


Pressure vs. Time
8653 Pressure
8653 Temperature
Pressure (psig)
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
Temperature (deg F)
105
100
95
90
85
80
75
70
65
60
55
50
12 Thu
May 2011
3AM
6AM
Time (Hours)

DRILL STEM TESTING - DATA LISTING

TRILOBITE TESTING, INC.

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42822 **DST#: 1**

Test Start: 2011.05.12 @ 00:15:02

Serial # 8354 Inside

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	-1.18	76.3
	30.0	3.97	89.5
	50.2	583.26	94.8
	50.7	617.48	94.9
	51.2	617.43	95.0
	51.7	651.54	95.1
	52.2	654.00	95.5
	52.7	685.02	95.6
	53.2	686.36	95.8
	53.7	726.81	96.0
	54.2	735.84	96.4
	54.7	763.62	96.6
	55.2	777.26	97.2
	55.7	789.26	97.3
	56.2	792.51	97.5
	56.7	828.12	97.5
	57.2	816.23	97.1
	57.7	858.30	97.1
	58.2	853.37	97.0
	58.7	885.83	97.0
	59.2	882.74	97.1
	59.7	921.64	97.0
	60.2	924.59	97.1
	60.7	955.90	97.1
	61.2	961.31	97.2
	61.7	978.28	97.2
	62.2	1000.71	97.5
	62.7	1039.21	97.5
	63.2	1035.81	97.8
	63.7	1057.33	97.8
	64.2	1056.49	97.9
	64.7	1055.49	97.9
	65.2	1083.96	98.0

Serial # 8354 Inside

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	65.7	1092.50	98.2
	66.2	1091.93	98.2
	66.7	1119.67	98.3
	67.2	1132.75	98.4
	67.7	1164.82	98.6
	68.2	1157.48	98.6
	68.7	1179.20	98.7
	69.2	1196.69	98.8
	69.7	1215.64	98.9
	70.2	1225.78	99.0
	70.7	1258.95	99.1
	71.2	1265.17	99.3
	71.7	1283.65	99.5
	72.2	1294.07	99.7
	72.7	1328.81	99.9
	73.2	1330.57	100.1
	73.7	1367.53	100.3
	74.2	1355.52	100.5
	74.7	1358.62	100.6
	75.2	1358.32	100.6
	75.7	1409.63	100.7
	76.2	1392.27	100.9
	76.7	1394.15	101.0
	77.2	1419.93	101.1
	77.7	1419.16	101.3
	78.2	1421.91	101.4
	78.7	1421.80	101.4
	79.2	1420.97	101.5
	79.7	1420.03	101.5
	80.2	1419.02	101.5
	80.7	1417.99	101.5
	81.2	1417.04	101.5
	81.7	1416.11	101.5

Printing every 3 samples

Serial # 8354 Inside				Serial # 8354 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	82.2	1415.37	101.5		102.7	1582.05	104.2
	82.7	1414.63	101.5		103.2	1611.59	104.2
	83.2	1413.85	101.5		103.7	1599.09	104.4
	83.7	1451.95	101.5		104.2	1603.35	104.5
	84.2	1439.21	101.6		104.7	1603.67	104.6
	84.7	1439.61	101.7		105.2	1603.55	104.6
	85.2	1438.73	101.7		105.7	1602.80	104.7
	85.7	1446.35	101.8		106.2	1602.19	104.7
	86.2	1449.91	102.0		106.7	1601.47	104.7
	86.7	1450.03	102.0		107.2	1600.53	104.8
	87.2	1463.77	102.1		107.7	1600.03	104.8
	87.7	1466.78	102.2		108.2	1599.20	104.8
	88.2	1466.76	102.3		108.7	1598.15	104.8
	88.7	1482.63	102.4		109.2	1611.09	104.8
	89.2	1485.60	102.5		109.7	1621.15	104.8
	89.7	1485.42	102.6		110.5	1616.69	105.0
	90.2	1494.03	102.7		111.0	1616.87	105.0
	90.7	1496.17	102.7	Initial Hydro-static	111.5	1620.95	105.1
	91.2	1495.95	102.8		112.0	45.65	104.2
	91.7	1494.93	102.8	Open To Flow (1)	112.5	33.62	104.8
	92.2	1494.09	102.8		113.0	31.25	104.9
	92.7	1505.99	102.9		114.5	30.43	104.8
	93.2	1509.38	103.0		116.0	30.06	104.8
	93.7	1509.35	103.0		117.0	30.57	104.8
	94.2	1508.89	103.0		117.5	30.63	104.8
	94.7	1507.86	103.0	Shut-In(1)	118.0	30.59	104.8
	95.2	1526.32	103.1		118.5	30.58	104.8
	95.7	1531.35	103.2		119.0	31.51	104.8
	96.2	1531.13	103.2		119.5	31.97	104.8
	96.7	1546.35	103.3		121.0	33.26	104.9
	97.2	1541.07	103.4		122.5	34.38	104.9
	97.7	1542.37	103.5		124.0	35.14	104.9
	98.2	1542.40	103.5		125.5	35.94	104.9
	98.7	1541.33	103.6		127.0	36.55	104.9
	99.2	1557.71	103.7		128.5	37.00	104.9
	99.7	1557.72	103.8		130.0	37.59	104.9
	100.2	1572.64	103.8		131.5	38.05	105.0
	100.7	1564.07	104.0		133.0	38.55	105.0
	101.2	1564.48	104.0		134.5	38.90	105.0
	101.7	1619.94	104.1		136.0	39.02	105.0
	102.2	1581.85	104.1		137.5	39.35	105.0

Printing every 3 samples

Serial # 8354 Inside				Serial # 8354 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	139.0	39.65	105.0		194.5	27.28	106.2
	140.5	39.89	105.0		196.0	27.20	106.3
	142.0	40.07	105.1		197.5	27.12	106.3
	143.5	40.45	105.1		199.0	27.07	106.3
	145.0	40.73	105.1		200.5	27.04	106.3
	146.5	41.44	105.1		202.0	26.98	106.3
	148.0	42.57	105.1		203.5	26.98	106.3
	149.5	45.50	105.1		205.0	26.98	106.3
	151.0	47.80	105.1		206.5	27.00	106.3
	152.5	50.13	105.2		208.0	27.06	106.3
	154.0	52.93	105.2		209.5	27.14	106.4
	155.5	55.09	105.2		210.0	27.17	106.4
	157.0	57.25	105.2	Shut-In(2)	210.5	27.21	106.4
	158.5	59.38	105.2		211.0	27.24	106.4
	160.0	61.69	105.2		211.5	27.27	106.4
	161.5	64.07	105.3		212.0	27.30	106.4
	163.0	66.65	105.3		213.5	27.39	106.4
	164.5	68.87	105.3		215.0	27.48	106.4
	166.0	71.31	105.3		216.5	27.56	106.4
	167.5	73.62	105.3		218.0	27.65	106.4
	169.0	76.05	105.4		219.5	27.73	106.4
	170.5	78.32	105.4		221.0	27.80	106.4
	172.0	80.66	105.4		222.5	27.89	106.5
	173.5	82.94	105.4		224.0	27.94	106.5
	175.0	85.42	105.4		225.5	28.01	106.5
	176.5	87.70	105.5		227.0	28.07	106.5
	177.0	88.49	105.5		228.5	28.13	106.5
	177.5	89.23	105.5		230.0	28.18	106.5
End Shut-In(1)	178.0	90.17	105.5		231.5	28.23	106.5
	178.5	33.46	105.5		233.0	28.27	106.6
Open To Flow (2)	179.0	28.49	105.8		234.5	28.31	106.6
	179.5	28.60	105.8		236.0	28.36	106.6
	181.0	28.38	106.0		237.5	28.41	106.6
	182.5	28.55	106.0		239.0	28.46	106.6
	184.0	27.95	106.1		240.5	28.50	106.6
	185.5	27.88	106.1		242.0	28.55	106.6
	187.0	27.79	106.2		243.5	28.60	106.7
	188.5	27.66	106.2		245.0	28.64	106.7
	190.0	27.95	106.2		246.5	28.70	106.7
	191.5	27.42	106.2		248.0	28.76	106.7
	193.0	27.34	106.2		249.5	28.81	106.7

Printing every 3 samples

Serial # 8354 Inside				Serial # 8354 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	251.0	28.87	106.7		307.5	1566.47	107.7
	252.5	28.93	106.7		309.0	1558.47	107.7
	254.0	28.97	106.7		310.5	1561.36	107.7
	255.5	29.03	106.8		312.0	1615.98	107.0
	257.0	29.09	106.8		313.5	1564.80	106.7
	258.5	29.16	106.8		315.0	1533.27	105.9
	260.0	29.22	106.8		316.5	1500.98	105.0
	261.5	29.27	106.8		318.0	1416.53	104.1
	263.0	29.31	106.8		319.5	1410.81	102.8
	264.5	29.37	106.8		321.0	1363.74	101.7
	266.0	29.41	106.9		322.5	1317.29	100.8
	267.5	29.45	106.9		324.0	1270.04	99.7
	269.0	29.50	106.9		325.5	1228.72	98.6
	270.5	29.57	106.9		327.0	1225.20	97.8
	272.0	29.63	106.9		328.5	1150.04	97.1
	273.5	29.70	106.9		330.0	1135.43	96.2
	275.0	29.78	106.9		331.5	1097.62	95.6
	276.5	29.86	107.0		333.0	1004.44	94.9
	278.0	29.96	107.0		334.5	991.20	94.6
	279.5	30.10	107.0		336.0	912.73	94.4
	281.0	29.94	107.0		337.5	925.16	94.3
	282.5	29.95	107.0		339.0	893.56	94.2
	284.0	30.27	107.0		340.5	825.87	94.2
	285.5	30.41	107.0		342.0	805.22	94.4
	287.0	31.24	107.1		343.5	749.58	94.2
	288.5	31.85	107.1		345.0	711.32	93.6
	290.0	32.27	107.1		346.5	676.59	91.5
	291.5	32.73	107.1		348.0	624.03	90.1
	293.0	33.45	107.1		349.5	583.86	88.4
	294.5	33.93	107.1		351.0	581.29	87.9
	296.0	34.35	107.1		352.5	580.33	87.8
	297.5	34.90	107.1		354.0	580.41	87.8
	299.0	35.44	107.2		355.5	573.23	87.8
	300.5	35.93	107.2		357.0	528.71	87.3
	302.0	36.61	107.2		358.5	499.37	86.4
	302.5	36.69	107.2		360.0	455.73	85.7
End Shut-In(2)	303.0	36.76	107.2		361.5	431.25	84.7
	303.5	1527.66	107.9		363.0	430.86	84.6
Final Hydro-static	304.0	1593.37	108.1		364.5	431.40	84.5
	304.5	1582.44	107.9		366.0	432.15	84.5
	306.0	1578.85	107.8		367.5	411.91	84.5

Printing every 3 samples

Serial # 8354 Inside				Serial # 8354 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	369.0	375.73	83.6		430.5	3.42	55.2
	370.5	343.71	82.8		432.0	3.39	55.0
	372.0	286.97	82.0				
	373.5	258.82	81.7				
	375.0	228.77	81.5				
	376.5	199.28	81.2				
	378.0	154.04	81.1				
	379.5	110.75	81.3				
	381.0	80.34	81.5				
	382.5	49.99	82.1				
	384.0	19.88	82.8				
	385.5	16.79	82.9				
	387.0	13.77	82.9				
	388.5	13.71	82.9				
	390.0	13.75	82.9				
	391.5	13.01	82.9				
	393.0	12.92	82.9				
	394.5	12.88	82.9				
	396.0	12.81	82.9				
	397.5	12.71	82.9				
	399.0	12.67	82.9				
	400.5	12.77	82.9				
	402.0	12.62	82.9				
	403.5	12.58	82.9				
	405.0	12.52	83.0				
	406.5	13.27	82.9				
	408.0	13.68	82.9				
	409.5	13.67	82.9				
	411.0	13.89	82.9				
	412.5	13.38	82.8				
	414.0	10.63	82.7				
	415.5	4.07	82.3				
	417.0	3.95	81.4				
	418.5	2.53	64.1				
	420.0	2.61	60.5				
	421.5	2.84	58.6				
	423.0	3.04	57.3				
	424.5	3.17	56.4				
	426.0	3.07	55.4				
	427.5	3.14	54.8				
	429.0	3.29	55.4				

Printing every 3 samples

DRILL STEM TESTING - DATA LISTING

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42822 **DST#: 1**

Test Start: 2011.05.12 @ 00:15:02

Serial # 8520 Outside

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	-1.45	81.0
	0.1	-1.50	81.0
	0.1	-1.45	81.1
	0.2	-1.41	81.1
	0.2	-1.40	81.1
	0.3	-1.36	81.2
	0.3	-1.36	81.2
	0.3	-1.34	81.2
	0.4	-1.31	81.2
	0.4	-1.31	81.1
	0.5	-1.34	81.1
	0.6	-1.38	81.2
	0.6	-1.40	81.3
	0.6	-1.42	81.7
	0.7	-1.43	82.1
	0.8	-1.44	82.5
	0.8	-1.44	82.9
	0.9	-1.45	83.1
	0.9	-1.44	83.2
	0.9	-1.44	83.2
	1.0	-1.42	83.2
	1.0	-1.40	83.1
	1.1	-1.39	83.0
	1.1	-1.38	82.9
	1.2	-1.36	82.8
	1.3	-1.35	82.7
	1.3	-1.33	82.6
	1.4	-1.33	82.5
	1.4	-1.32	82.4
	1.5	-1.31	82.3
	1.5	-1.30	82.2
	1.5	-1.27	82.1
	1.6	-1.26	82.0

Serial # 8520 Outside

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	1.6	-1.25	81.9
	1.7	-1.23	81.8
	1.8	-1.24	81.7
	1.8	-1.24	81.6
	1.9	-1.24	81.5
	1.9	-1.25	81.4
	2.0	-1.29	81.3
	12.0	-1.27	68.5
	42.0	135.87	89.6
	62.5	741.91	96.1
	64.0	804.08	96.7
	65.5	833.74	97.7
	67.0	916.92	97.5
	68.5	925.47	97.5
	70.0	966.64	97.3
	71.5	1017.26	97.8
	73.0	1096.61	98.1
	74.5	1120.98	98.4
	76.0	1188.35	98.7
	77.5	1170.71	99.0
	79.0	1245.90	99.3
	80.5	1262.84	99.8
	82.0	1339.11	100.3
	83.5	1354.47	100.9
	85.0	1456.37	101.2
	86.5	1457.15	101.6
	88.0	1410.44	101.9
	89.5	1404.99	102.0
	91.0	1402.68	102.0
	92.5	1402.12	102.0
	94.0	1427.02	102.2
	95.5	1443.87	102.5
	97.0	1458.68	102.7

Printing every 3 samples

Serial # 8520 Outside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	98.5	1474.24	103.0		160.0	63.18	105.8
	100.0	1490.56	103.2		161.5	65.74	105.8
	101.5	1483.26	103.3		163.0	67.54	105.8
	103.0	1503.19	103.5		164.5	69.59	105.9
	104.5	1531.46	103.6		166.0	71.49	105.9
	106.0	1591.80	103.9		167.5	73.56	105.9
	107.5	1531.87	104.1		169.0	75.80	105.9
	109.0	1548.42	104.3		170.5	77.95	105.9
	110.5	1564.06	104.6		172.0	79.93	106.0
	112.0	1579.61	104.7		173.5	82.12	106.0
	113.5	1595.20	105.1		175.0	84.27	106.0
	115.0	1587.72	105.2		176.5	86.38	106.0
	116.5	1585.37	105.2		178.0	88.60	106.0
	118.0	1584.11	105.3		179.5	90.77	106.1
	119.5	1607.58	105.6		181.0	93.06	106.1
	121.0	14.10	104.7		182.5	95.12	106.1
	122.5	13.45	105.5		184.0	97.50	106.1
	124.0	13.51	105.5		185.5	99.52	106.1
	125.5	14.40	105.5		187.0	101.92	106.2
	127.0	14.44	105.5		188.5	16.15	106.4
	128.5	16.20	105.5		190.0	16.26	106.5
	130.0	18.67	105.5		191.5	16.13	106.6
	131.5	21.21	105.5		193.0	16.19	106.6
	133.0	23.57	105.5		194.5	16.24	106.6
	134.5	26.00	105.5		196.0	16.24	106.6
	136.0	28.30	105.5		197.5	16.23	106.6
	137.5	30.51	105.5		199.0	16.23	106.6
	139.0	32.84	105.6		200.5	16.22	106.6
	140.5	35.14	105.6		202.0	16.22	106.6
	142.0	37.24	105.6		203.5	16.21	106.6
	143.5	39.64	105.6		205.0	16.21	106.6
	145.0	41.81	105.6		206.5	16.20	106.6
	146.5	44.04	105.6		208.0	16.18	106.7
	148.0	46.14	105.7		209.5	16.17	106.7
	149.5	48.30	105.7		211.0	16.16	106.7
	151.0	50.44	105.7		212.5	16.20	106.7
	152.5	52.66	105.7		214.0	16.40	106.7
	154.0	54.75	105.7		215.5	16.18	106.7
	155.5	56.85	105.7		217.0	16.15	106.8
	157.0	58.92	105.8		218.5	16.39	106.8
	158.5	61.21	105.8		220.0	17.07	106.8

Printing every 3 samples

Serial # 8520 Outside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	221.5	17.53	106.8		283.0	36.43	107.5
	223.0	18.12	106.8		284.5	36.73	107.5
	224.5	18.65	106.8		286.0	37.18	107.5
	226.0	19.12	106.8		287.5	37.62	107.5
	227.5	19.52	106.9		289.0	38.11	107.5
	229.0	20.04	106.9		290.5	38.43	107.6
	230.5	20.59	106.9		292.0	38.84	107.6
	232.0	20.95	106.9		293.5	39.47	107.6
	233.5	21.61	106.9		295.0	39.92	107.6
	235.0	21.85	106.9		296.5	40.20	107.6
	236.5	22.46	107.0		298.0	40.66	107.6
	238.0	22.94	107.0		299.5	41.15	107.6
	239.5	23.32	107.0		301.0	41.60	107.7
	241.0	23.86	107.0		302.5	41.91	107.7
	242.5	24.30	107.0		304.0	42.43	107.7
	244.0	24.73	107.1		305.5	42.88	107.7
	245.5	25.14	107.1		307.0	43.29	107.7
	247.0	25.54	107.1		308.5	43.53	107.7
	248.5	26.09	107.1		310.0	44.40	107.7
	250.0	26.57	107.1		311.5	44.58	107.8
	251.5	26.94	107.1		313.0	1595.55	108.4
	253.0	27.54	107.2		314.5	1589.85	108.3
	254.5	27.86	107.2		316.0	1575.83	108.3
	256.0	28.36	107.2		317.5	1566.20	108.3
	257.5	28.68	107.2		319.0	1564.90	108.3
	259.0	29.19	107.2		320.5	1529.48	108.1
	260.5	29.69	107.2		322.0	1501.72	107.5
	262.0	30.17	107.3		323.5	1489.53	107.1
	263.5	30.66	107.3		325.0	1510.98	105.8
	265.0	30.92	107.3		326.5	1478.35	104.7
	266.5	31.52	107.3		328.0	1445.58	103.7
	268.0	32.00	107.3		329.5	1328.16	102.6
	269.5	32.48	107.3		331.0	1325.86	101.1
	271.0	32.78	107.3		332.5	1280.81	100.4
	272.5	33.24	107.4		334.0	1244.39	99.4
	274.0	33.74	107.4		335.5	1225.01	98.5
	275.5	34.20	107.4		337.0	1201.73	97.5
	277.0	34.72	107.4		338.5	1129.19	96.9
	278.5	35.02	107.4		340.0	1109.94	96.1
	280.0	35.46	107.4		341.5	1078.08	95.5
	281.5	35.77	107.5		343.0	991.30	95.0

Printing every 3 samples

Serial # 8520 Outside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	344.5	948.04	94.8		406.0	8.13	83.5
	346.0	943.93	94.7		407.5	8.13	83.5
	347.5	887.79	94.6		409.0	8.13	83.5
	349.0	864.52	94.5		410.5	8.13	83.5
	350.5	793.62	94.7		412.0	8.09	83.5
	352.0	773.47	94.7		413.5	13.13	83.5
	353.5	741.98	94.4		415.0	10.60	83.5
	355.0	673.28	93.3		416.5	11.98	83.5
	356.5	650.50	90.8		418.0	11.94	83.5
	358.0	619.27	89.1		419.5	9.63	83.4
	359.5	588.09	88.3		421.0	8.83	83.3
	361.0	585.88	88.2		422.5	8.75	83.3
	362.5	584.74	88.2		424.0	-0.18	83.1
	364.0	588.51	88.1		425.5	-1.09	82.7
	365.5	558.75	87.8		427.0	-0.46	66.7
	367.0	501.42	86.8		428.5	-0.97	61.3
	368.5	467.25	85.9		430.0	-1.05	58.8
	370.0	437.24	84.9		431.5	-1.10	57.1
	371.5	435.13	84.7		433.0	-1.10	55.9
	373.0	434.62	84.7		434.5	-1.09	55.1
	374.5	434.48	84.6		436.0	-1.17	54.5
	376.0	434.45	84.6		437.5	-1.09	56.3
	377.5	392.51	84.2		439.0	-1.16	55.7
	379.0	336.49	83.4		440.5	-1.06	55.2
	380.5	316.31	82.6		441.0	-0.98	55.5
	382.0	255.68	82.0				
	383.5	255.86	81.9				
	385.0	194.98	81.6				
	386.5	165.89	81.5				
	388.0	117.50	81.6				
	389.5	75.24	81.9				
	391.0	45.21	82.0				
	392.5	14.96	83.3				
	394.0	15.03	83.4				
	395.5	8.69	83.5				
	397.0	8.72	83.5				
	398.5	8.45	83.5				
	400.0	8.75	83.5				
	401.5	8.16	83.5				
	403.0	8.14	83.5				
	404.5	8.13	83.5				

Printing every 3 samples

DRILL STEM TESTING - DATA LISTING

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42822 **DST#: 1**

Test Start: 2011.05.12 @ 00:15:02

Serial # 8653	**Fluid**		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	-1.30	74.8
	0.1	-1.23	74.9
	0.1	-1.28	75.0
	0.2	-1.26	75.1
	0.2	-1.03	75.1
	0.3	-1.34	75.1
	0.3	-1.17	75.2
	0.3	-0.58	74.5
	0.4	-0.54	74.7
	0.4	-0.52	75.0
	0.5	-0.50	75.1
	0.6	-0.48	75.1
	0.6	-0.45	75.1
	0.6	-0.42	75.0
	0.7	-0.40	75.0
	0.8	-0.38	74.9
	0.8	-0.36	74.9
	0.9	-0.34	74.8
	0.9	-0.33	74.7
	0.9	-0.32	74.7
	1.0	-0.31	74.6
	1.0	-0.31	74.5
	1.1	-0.31	74.4
	1.1	-0.32	74.3
	1.2	-0.32	74.2
	1.3	-0.32	74.1
	1.3	-0.34	74.0
	1.4	-0.35	73.9
	1.4	-0.36	73.9
	1.5	-0.37	73.8
	1.5	-0.38	73.7
	1.5	-0.39	73.6
	1.6	-0.40	73.5

Serial # 8653	**Fluid**		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	1.6	-0.40	73.5
	1.7	-0.40	73.4
	1.8	-0.40	73.3
	1.8	-0.41	73.2
	1.9	-0.41	73.1
	1.9	-0.41	73.1
	2.0	-0.45	73.0
	12.0	-0.63	70.5
	42.0	1.67	88.9
	62.5	1.98	95.2
	64.0	2.00	95.5
	65.5	2.01	95.9
	67.0	2.03	96.2
	68.5	2.04	96.5
	70.0	2.06	96.8
	71.5	2.06	97.1
	73.0	2.06	97.4
	74.5	2.06	97.7
	76.0	2.06	97.9
	77.5	2.06	98.2
	79.0	2.07	98.4
	80.5	2.07	98.7
	82.0	2.09	98.9
	83.5	2.11	99.2
	85.0	2.14	99.4
	86.5	2.17	99.7
	88.0	2.18	99.9
	89.5	2.19	100.1
	91.0	2.21	100.3
	92.5	2.22	100.5
	94.0	2.23	100.8
	95.5	2.24	101.0
	97.0	2.24	101.2

Printing every 3 samples

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	98.5	2.23	101.4
	100.0	2.23	101.6
	101.5	2.21	101.7
	103.0	2.19	101.8
	104.5	2.17	101.9
	106.0	2.15	102.0
	107.5	2.14	102.1
	109.0	2.13	102.2
	110.5	2.14	102.3
	112.0	2.14	102.4
	113.5	2.14	102.4
	115.0	2.12	102.5
	116.5	2.11	102.6
	118.0	2.10	102.6
	119.5	2.09	102.7
	121.0	2.08	102.7
	122.5	2.08	102.7
	124.0	2.08	102.8
	125.5	2.07	102.8
	127.0	2.07	102.9
	128.5	2.07	102.9
	130.0	2.07	102.9
	131.5	2.07	103.0
	133.0	2.05	103.0
	134.5	2.05	103.0
	136.0	2.04	103.1
	137.5	2.02	103.1
	139.0	2.02	103.1
	140.5	2.02	103.2
	142.0	2.00	103.2
	143.5	1.98	103.2
	145.0	1.99	103.2
	146.5	2.00	103.3
	148.0	2.00	103.3
	149.5	2.00	103.3
	151.0	2.00	103.3
	152.5	2.00	103.4
	154.0	2.00	103.4
	155.5	2.02	103.4
	157.0	2.05	103.4
	158.5	2.08	103.5

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	160.0	2.09	103.7
	161.5	2.11	103.9
	163.0	2.13	104.1
	164.5	2.15	104.2
	166.0	2.15	104.3
	167.5	2.16	104.5
	169.0	2.15	104.6
	170.5	2.14	104.6
	172.0	2.13	104.7
	173.5	2.13	104.8
	175.0	2.11	104.9
	176.5	2.12	104.9
	178.0	2.12	105.0
	179.5	2.12	105.0
	181.0	2.13	105.1
	182.5	2.15	105.1
	184.0	2.14	105.2
	185.5	2.15	105.3
	187.0	2.15	105.4
	188.5	2.14	105.6
	190.0	2.15	105.7
	191.5	2.15	105.7
	193.0	2.14	105.7
	194.5	2.13	105.7
	196.0	2.12	105.7
	197.5	2.11	105.7
	199.0	2.11	105.7
	200.5	2.10	105.7
	202.0	2.11	105.7
	203.5	2.11	105.8
	205.0	2.10	105.8
	206.5	2.09	105.8
	208.0	2.08	105.8
	209.5	2.08	105.8
	211.0	2.06	105.8
	212.5	2.06	105.8
	214.0	2.06	105.8
	215.5	2.06	105.9
	217.0	2.05	105.9
	218.5	2.05	105.9
	220.0	2.06	105.9

Printing every 3 samples

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	221.5	2.06	105.9
	223.0	2.06	105.9
	224.5	2.07	105.9
	226.0	2.08	105.9
	227.5	2.09	105.9
	229.0	2.08	106.0
	230.5	2.08	106.0
	232.0	2.07	106.0
	233.5	2.07	106.0
	235.0	2.06	106.0
	236.5	2.06	106.0
	238.0	2.06	106.0
	239.5	2.06	106.0
	241.0	2.04	106.1
	242.5	2.04	106.1
	244.0	2.05	106.1
	245.5	2.04	106.1
	247.0	2.04	106.1
	248.5	2.05	106.1
	250.0	2.05	106.1
	251.5	2.04	106.1
	253.0	2.05	106.1
	254.5	2.06	106.2
	256.0	2.06	106.2
	257.5	2.05	106.2
	259.0	2.05	106.2
	260.5	2.05	106.2
	262.0	2.04	106.2
	263.5	2.04	106.2
	265.0	2.04	106.2
	266.5	2.04	106.2
	268.0	2.04	106.3
	269.5	2.02	106.3
	271.0	2.03	106.3
	272.5	2.02	106.3
	274.0	2.02	106.3
	275.5	2.02	106.3
	277.0	2.04	106.3
	278.5	2.04	106.3
	280.0	2.04	106.3
	281.5	2.05	106.3

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	283.0	2.03	106.4
	284.5	2.02	106.4
	286.0	2.02	106.4
	287.5	2.03	106.4
	289.0	2.04	106.4
	290.5	2.06	106.4
	292.0	2.06	106.4
	293.5	2.04	106.4
	295.0	2.00	106.4
	296.5	1.91	106.3
	298.0	1.82	106.0
	299.5	1.74	105.4
	301.0	1.65	104.8
	302.5	1.57	104.1
	304.0	1.50	103.6
	305.5	1.42	103.0
	307.0	1.36	102.4
	308.5	1.28	102.0
	310.0	1.21	101.4
	311.5	1.15	100.8
	313.0	1.09	100.3
	314.5	1.04	99.7
	316.0	0.99	99.2
	317.5	0.99	98.7
	319.0	0.98	98.1
	320.5	0.97	97.8
	322.0	0.92	97.5
	323.5	0.88	97.3
	325.0	0.81	97.0
	326.5	0.72	96.5
	328.0	0.65	95.9
	329.5	0.59	95.1
	331.0	0.55	94.8
	332.5	0.51	94.4
	334.0	0.46	94.0
	335.5	0.38	93.4
	337.0	0.28	93.0
	338.5	0.47	92.5
	340.0	0.05	91.8
	341.5	-0.03	91.0
	343.0	-0.06	90.2

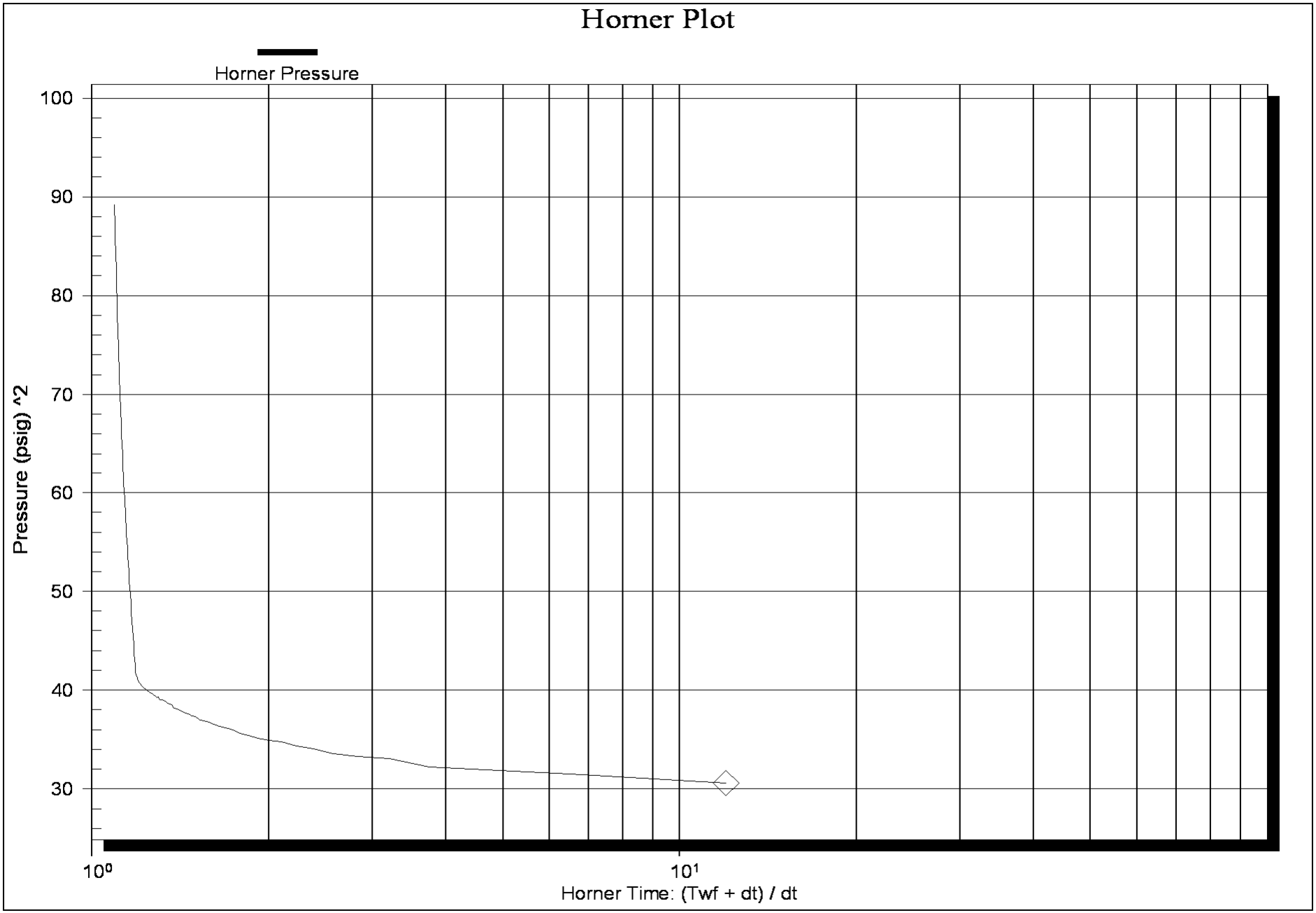
Printing every 3 samples

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	344.5	-0.10	89.6
	346.0	-0.13	89.1
	347.5	-0.15	88.7
	349.0	-0.17	88.3
	350.5	-0.23	87.8
	352.0	-0.27	87.3
	353.5	-0.32	86.9
	355.0	-0.37	86.4
	356.5	-0.38	85.9
	358.0	-0.38	85.5
	359.5	-0.52	85.2
	361.0	-0.43	85.0
	362.5	-0.27	84.9
	364.0	-0.30	84.5
	365.5	-1.14	78.6
	367.0	-1.39	73.7
	368.5	-1.78	69.6
	370.0	-2.35	65.9
	371.5	-2.44	63.2
	373.0	-2.51	60.9
	374.5	-2.54	58.9
	376.0	-2.54	57.3
	377.5	-2.54	55.9
	379.0	-2.54	55.0
	380.5	-2.55	54.2
	382.0	-2.54	53.6
	383.5	-2.53	53.1
	385.0	-2.53	52.7
	386.5	-2.50	52.4
	388.0	-2.49	52.1
	389.5	-2.47	51.8
	391.0	-2.46	51.5
	392.5	-2.30	51.3
	394.0	-2.44	51.2
	395.5	-2.45	51.2
	397.0	-2.47	51.1
	398.5	-1.60	60.0
	400.0	-1.65	57.8
	401.5	-1.74	56.4
	403.0	-1.86	56.3
	404.5	-1.92	55.8

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	406.0	-1.76	55.3
	407.5	-1.79	54.7
	409.0	-2.17	56.5
	410.5	-1.95	56.7
	411.5	-1.96	57.1

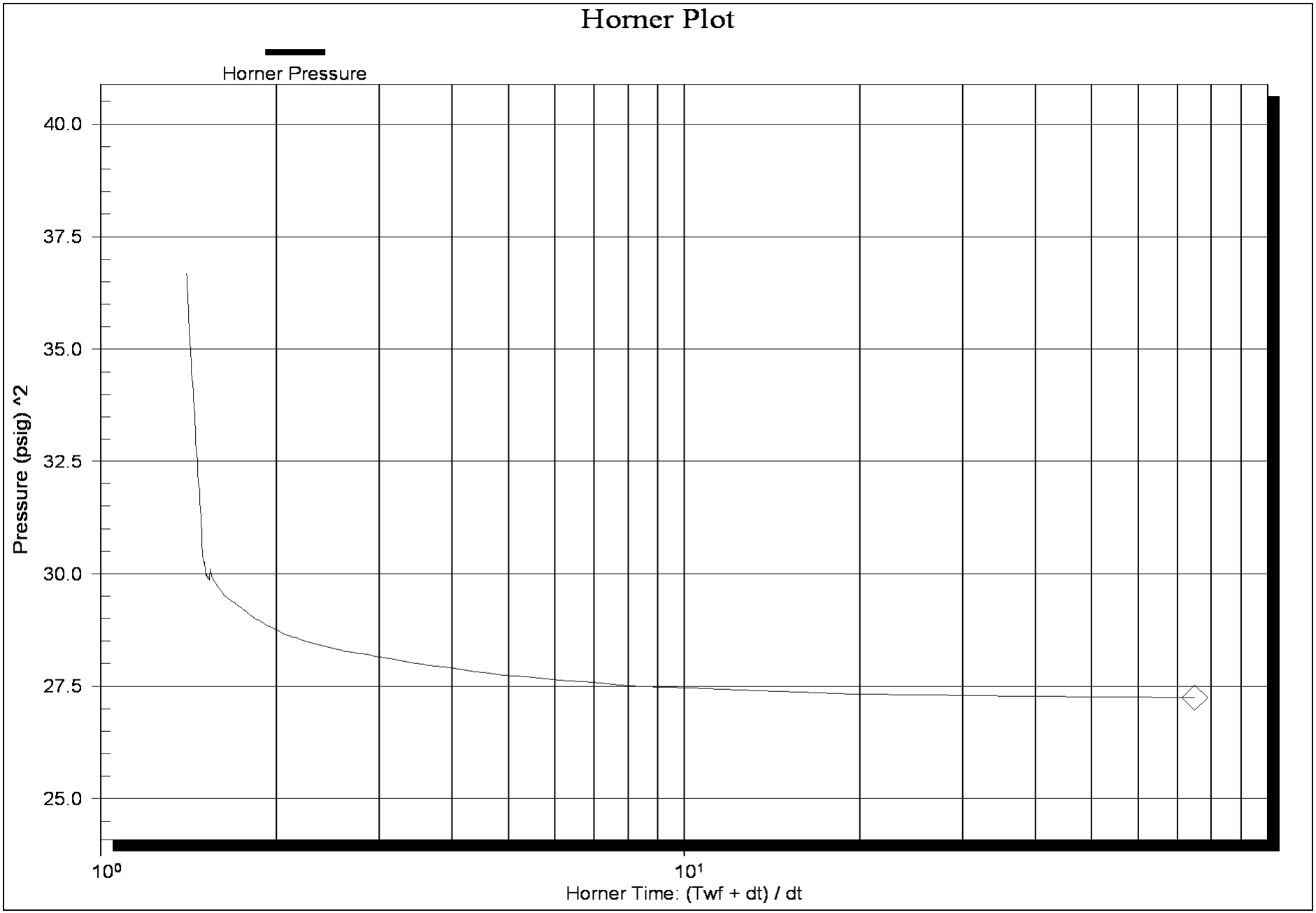
Printing every 3 samples

Horner Plot

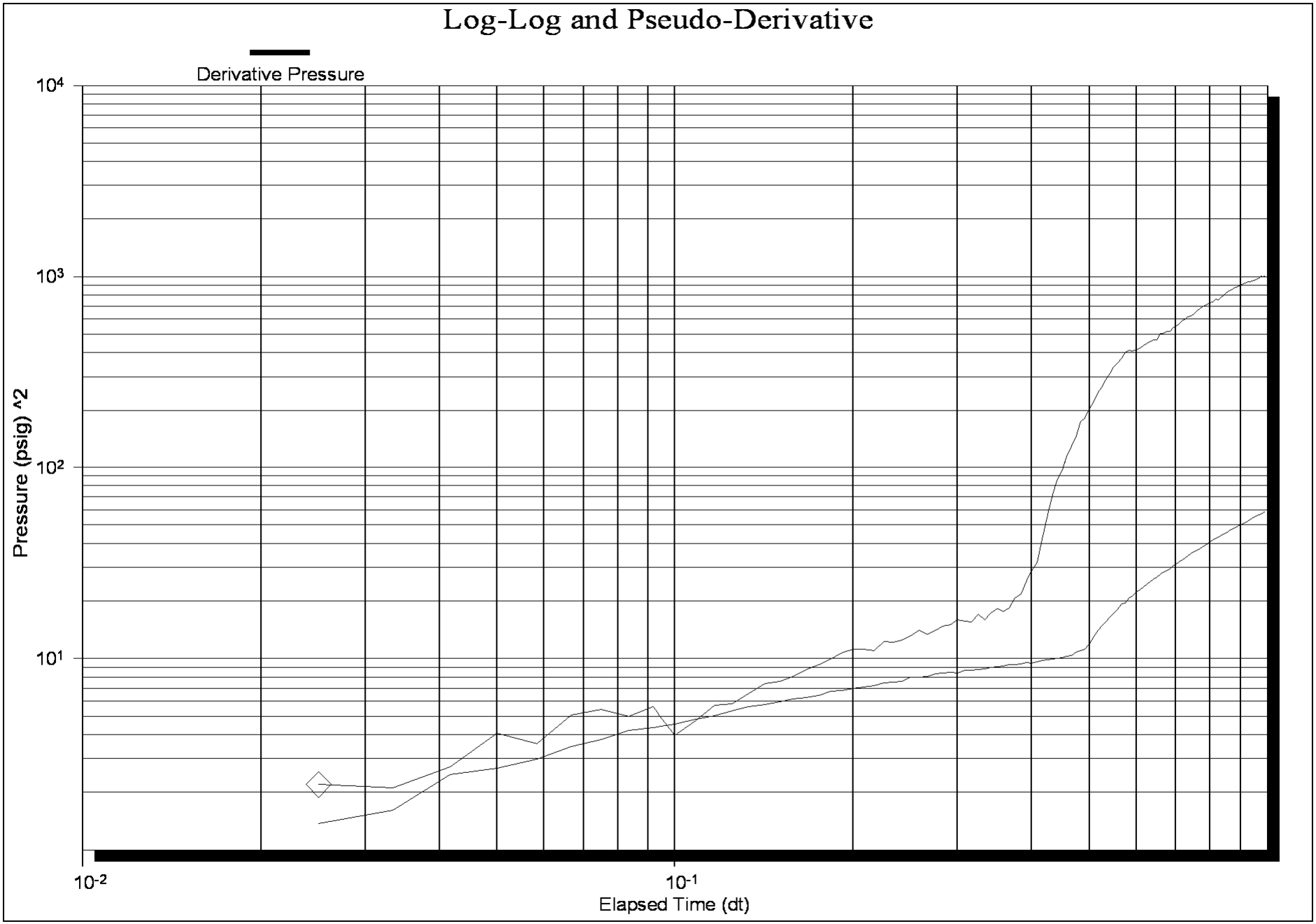


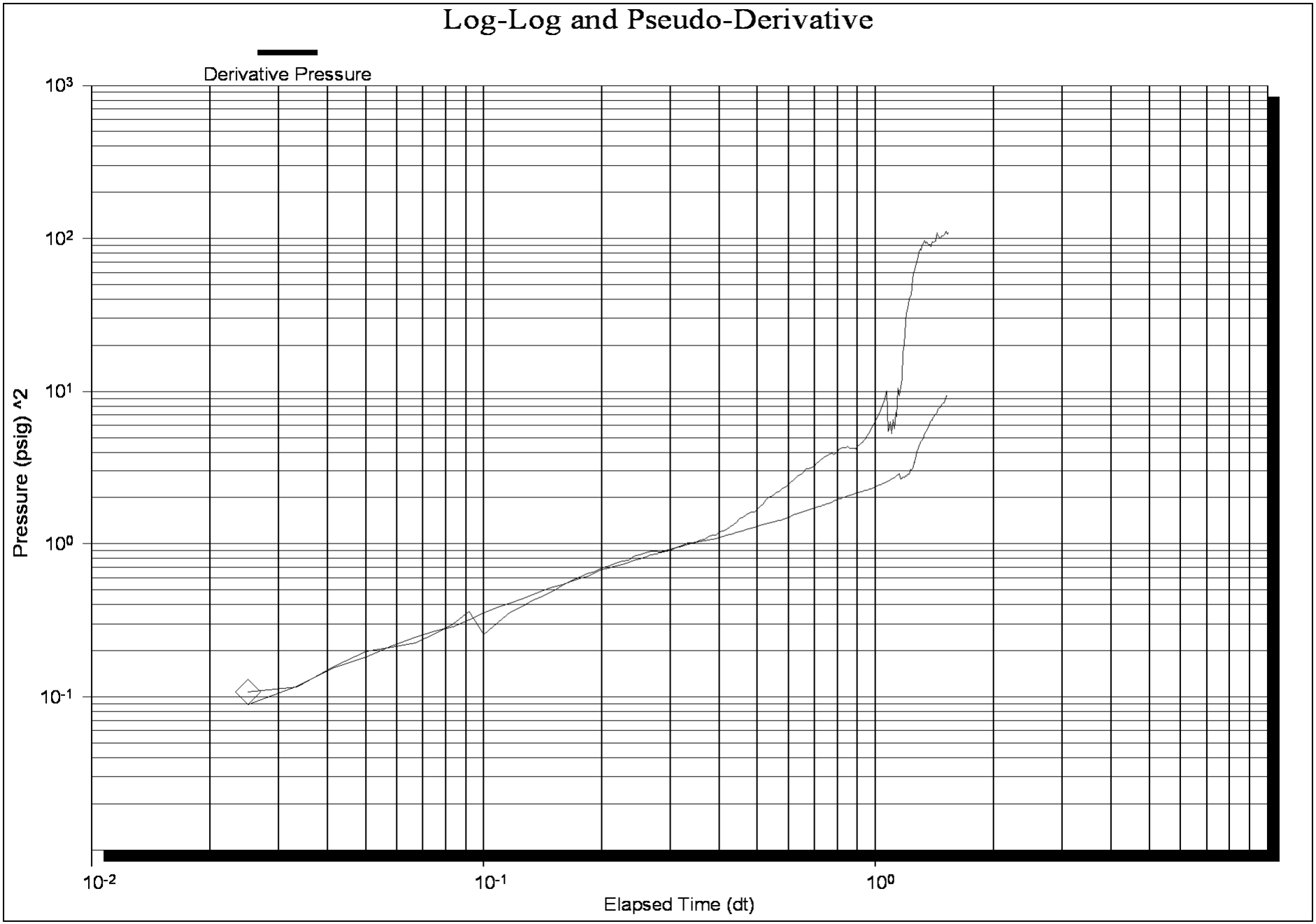
Serial Number: 8354 (Inside) P* : Slope (m) : kpa/log cycle Flow Cycle: 1

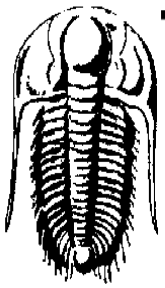
Horner Plot



Serial Number: 8354 (Inside) P* : Slope (m) : kpa/log cycle Flow Cycle: 2


Log-Log and Pseudo-Derivative
Derivative Pressure
10^4
10^3
10^2
10^1
Pressure (psig) ^2
10^-2
10^-1
Elapsed Time (dt)


Log-Log and Pseudo-Derivative
Derivative Pressure
Pressure (psig) ^2
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-1
10^0
Elapsed Time (dt)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Samuel Gary Jr. & Associates Inc.**

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

26/16S/16W-Rush

Maier 1-26

Start Date: 2011.05.12 @ 00:02:27
End Date: 2011.05.12 @ 08:00:57
Job Ticket #: 42883 DST #: 2

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42883 **DST#: 2**

Test Start: 2011.05.12 @ 00:02:27

GENERAL INFORMATION:

Formation: **LKC "H"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:38:57
Time Test Ended: 08:00:57

Test Type: Conventional Bottom Hole
Tester: Dustin Rash
Unit No: 38

Interval: 3405.00 ft (KB) To 3421.00 ft (KB) (TVD)
Total Depth: 3421.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

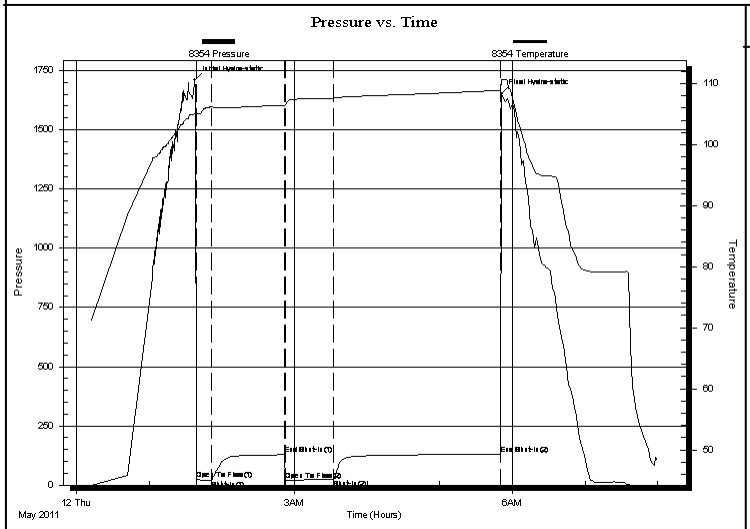
Reference Elevations: 1985.00 ft (KB)
1975.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8354 **Inside**

Press@RunDepth: 25.97 psig @ 3408.00 ft (KB)
Start Date: 2011.05.12 End Date: 2011.05.12
Start Time: 00:12:27 End Time: 08:00:57

Capacity: 8000.00 psig
Last Calib.: 2011.05.13
Time On Btm: 2011.05.12 @ 01:37:47
Time Off Btm: 2011.05.12 @ 05:50:57

TEST COMMENT: IF-Fair building blow . Built to 8 inches.
ISI-No Return.
FF-Strong building blow . BOB in 30 seconds.
FSI-No Return. Times- 10-60-40-135



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1709.03	105.07	Initial Hydro-static
2	23.11	104.39	Open To Flow (1)
14	20.39	106.24	Shut-In(1)
75	128.37	106.46	End Shut-In(1)
75	21.69	106.48	Open To Flow (2)
115	25.97	107.60	Shut-In(2)
253	130.19	108.89	End Shut-In(2)
254	1651.30	110.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
25.00	85%Mud/15%Oil	0.35
0.00	642' Low Odor G.I.P.	0.00

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42883 **DST#: 2**

Test Start: 2011.05.12 @ 00:02:27

GENERAL INFORMATION:

Formation: **LKC "H"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:38:57
Time Test Ended: 08:00:57

Test Type: Conventional Bottom Hole
Tester: Dustin Rash
Unit No: 38

Interval: 3405.00 ft (KB) To 3421.00 ft (KB) (TVD)
Total Depth: 3421.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

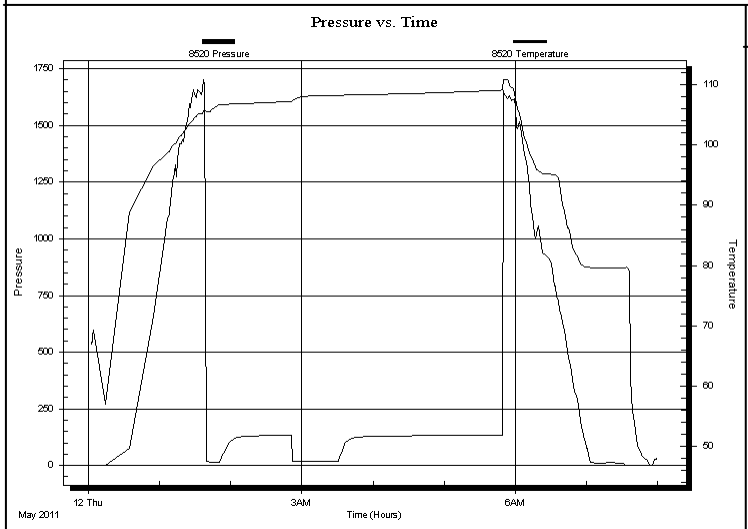
Reference Elevations: 1985.00 ft (KB)
1975.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8520 **Outside**

Press@RunDepth: psig @ 3408.00 ft (KB)
Start Date: 2011.05.12 End Date: 2011.05.12
Start Time: 00:02:43 End Time: 08:00:12

Capacity: 8000.00 psig
Last Calib.: 2011.05.13
Time On Btm:
Time Off Btm:

TEST COMMENT: IF-Fair building blow . Built to 8 inches.
ISI-No Return.
FF-Strong building blow . BOB in 30 seconds.
FSI-No Return. Times- 10-60-40-135



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
25.00	85%Mud/15%Oil	0.35
0.00	642' Low Odor G.I.P.	0.00

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42883 **DST#: 2**

Test Start: 2011.05.12 @ 00:02:27

GENERAL INFORMATION:

Formation: **LKC "H"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:38:57
Time Test Ended: 08:00:57

Test Type: Conventional Bottom Hole
Tester: Dustin Rash
Unit No: 38

Interval: 3405.00 ft (KB) To 3421.00 ft (KB) (TVD)
Total Depth: 3421.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

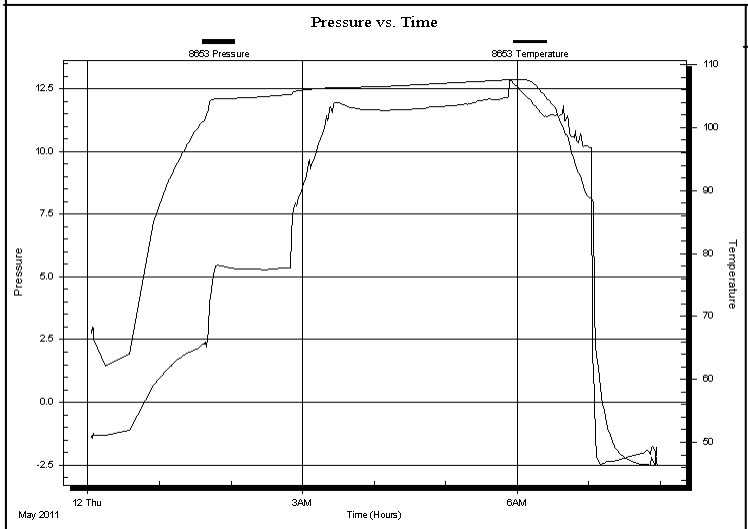
Reference Elevations: 1985.00 ft (KB)
1975.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8653 **Fluid**

Press@RunDepth: psig @ 3375.00 ft (KB)
Start Date: 2011.05.12 End Date: 2011.05.12
Start Time: 00:03:08 End Time: 07:58:07

Capacity: 8000.00 psig
Last Calib.: 2011.05.13
Time On Btm:
Time Off Btm:

TEST COMMENT: IF-Fair building blow . Built to 8 inches.
ISI-No Return.
FF-Strong building blow . BOB in 30 seconds.
FSI-No Return. Times- 10-60-40-135



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
25.00	85%Mud/15%Oil	0.35
0.00	642' Low Odor G.I.P.	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42883 **DST#: 2**

Test Start: 2011.05.12 @ 00:02:27

Tool Information

Drill Pipe:	Length:	3383.00 ft	Diameter:	3.80 inches	Volume:	47.45 bbl	Tool Weight:		3000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.70 inches	Volume:	0.00 bbl	Weight set on Packer:		24000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:		5000.00 lb
					Total Volume:	47.45 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		8.00 ft					String Weight:	Initial	49000.00 lb
Depth to Top Packer:		3405.00 ft						Final	50000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		16.00 ft							
Tool Length:		46.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Recorder	0.00	8653	Fluid	3375.00		
Change Over Sub	1.00			3376.00		
Shut In Tool	5.00			3381.00		
Sampler	2.00			3383.00		
Hydraulic tool	5.00			3388.00		
Jars	5.00			3393.00		
Safety Joint	3.00			3396.00		
Packer	5.00			3401.00	30.00	Bottom Of Top Packer
Packer	4.00			3405.00		
Stubb	1.00			3406.00		
Perforations	2.00			3408.00		
Recorder	0.00	8354	Inside	3408.00		
Recorder	0.00	8520	Outside	3408.00		
Perforations	10.00			3418.00		
Bullnose	3.00			3421.00	16.00	Bottom Packers & Anchor
Total Tool Length:	**46.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42883 **DST#: 2**

Test Start: 2011.05.12 @ 00:02:27

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:	47.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.78 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	5200.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	85%Mud/15%Oil	0.351
0.00	642' Low Odor G.I.P.	0.000

Total Length: 25.00 ft Total Volume: 0.351 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Sampler-1100 ML-Mud, 500 ML-Oil.
Pressure- 125#

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42883 **DST#: 2**

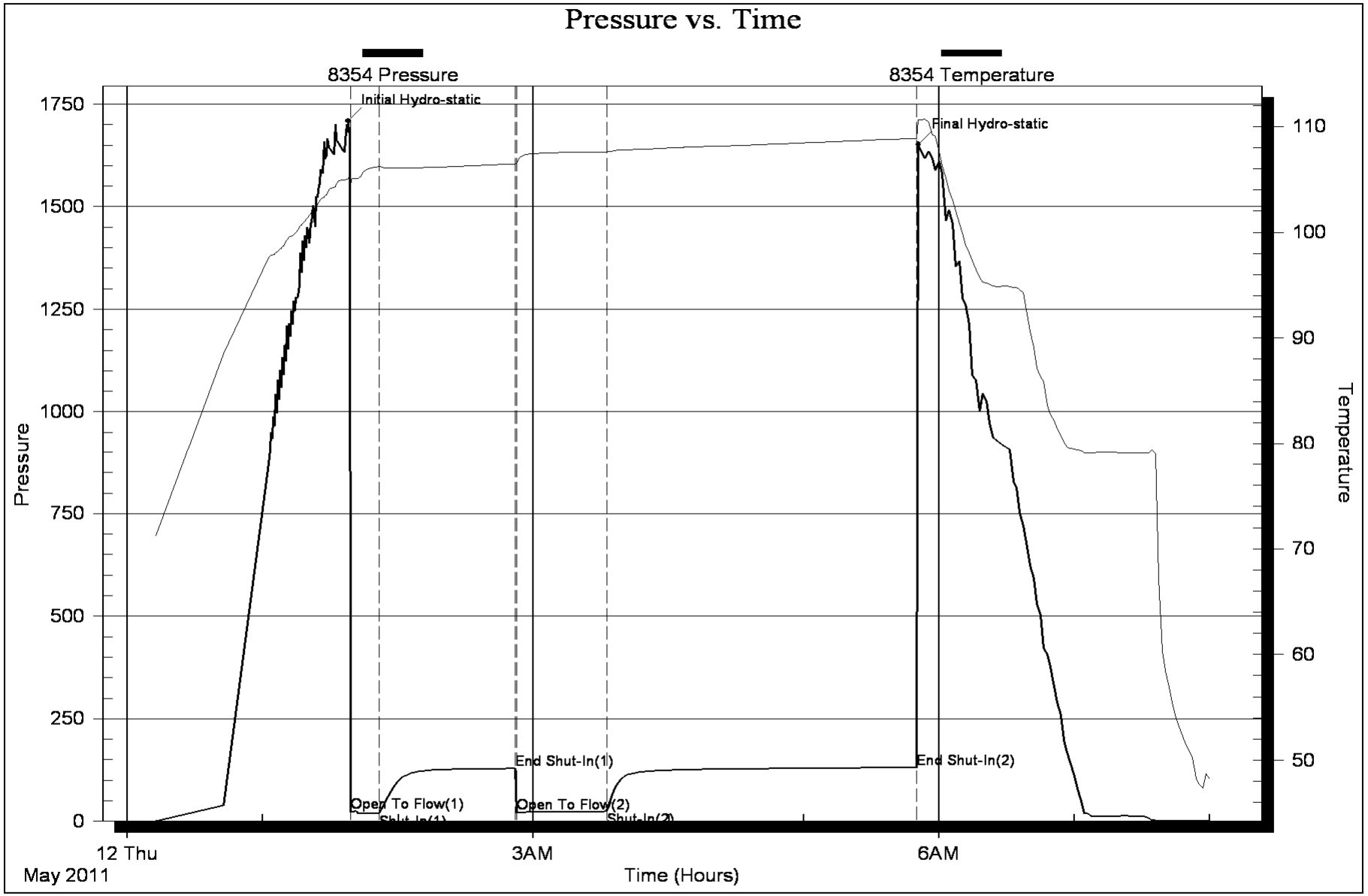
Test Start: 2011.05.12 @ 00:02:27

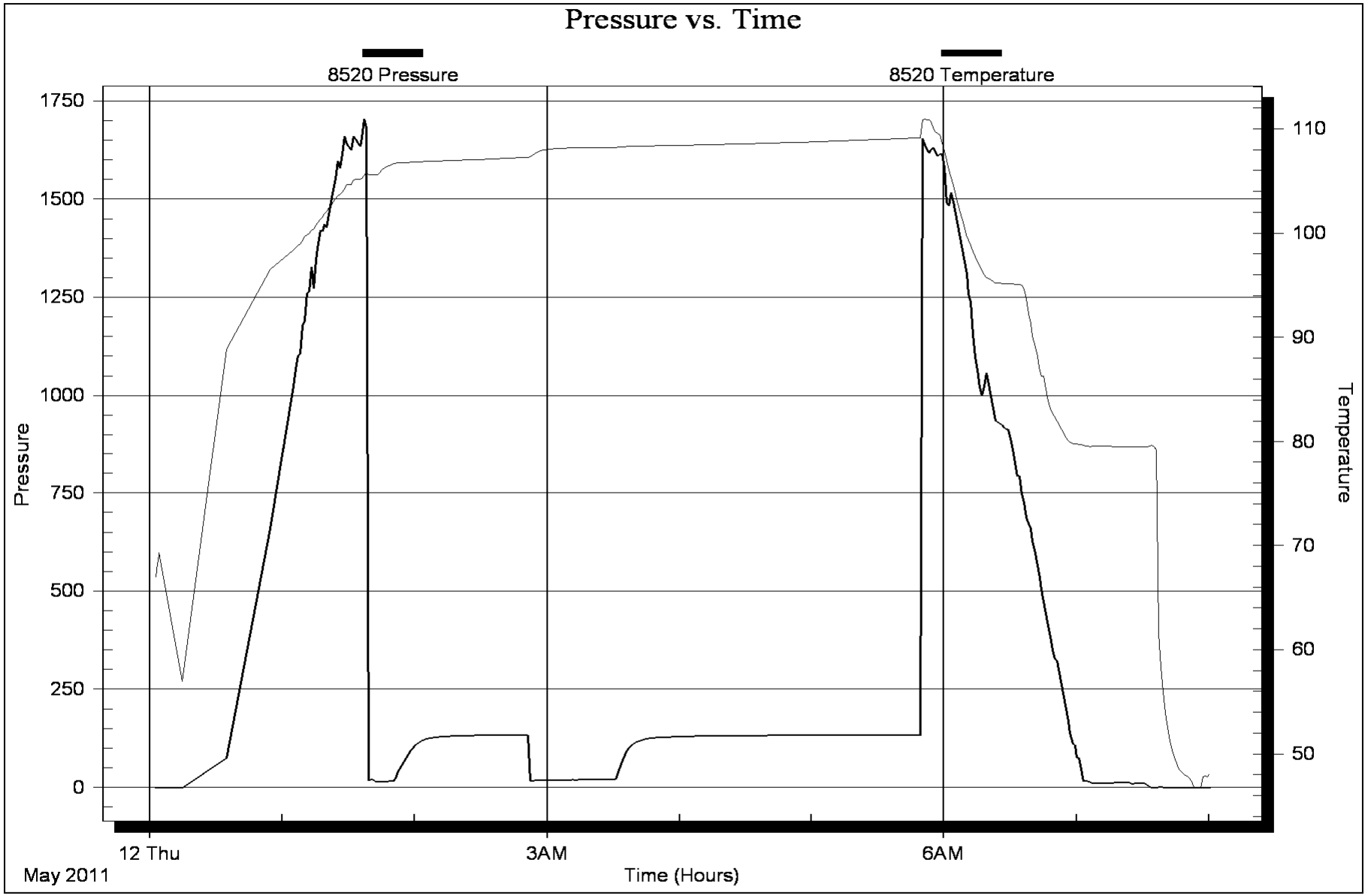
Gas Rates Information

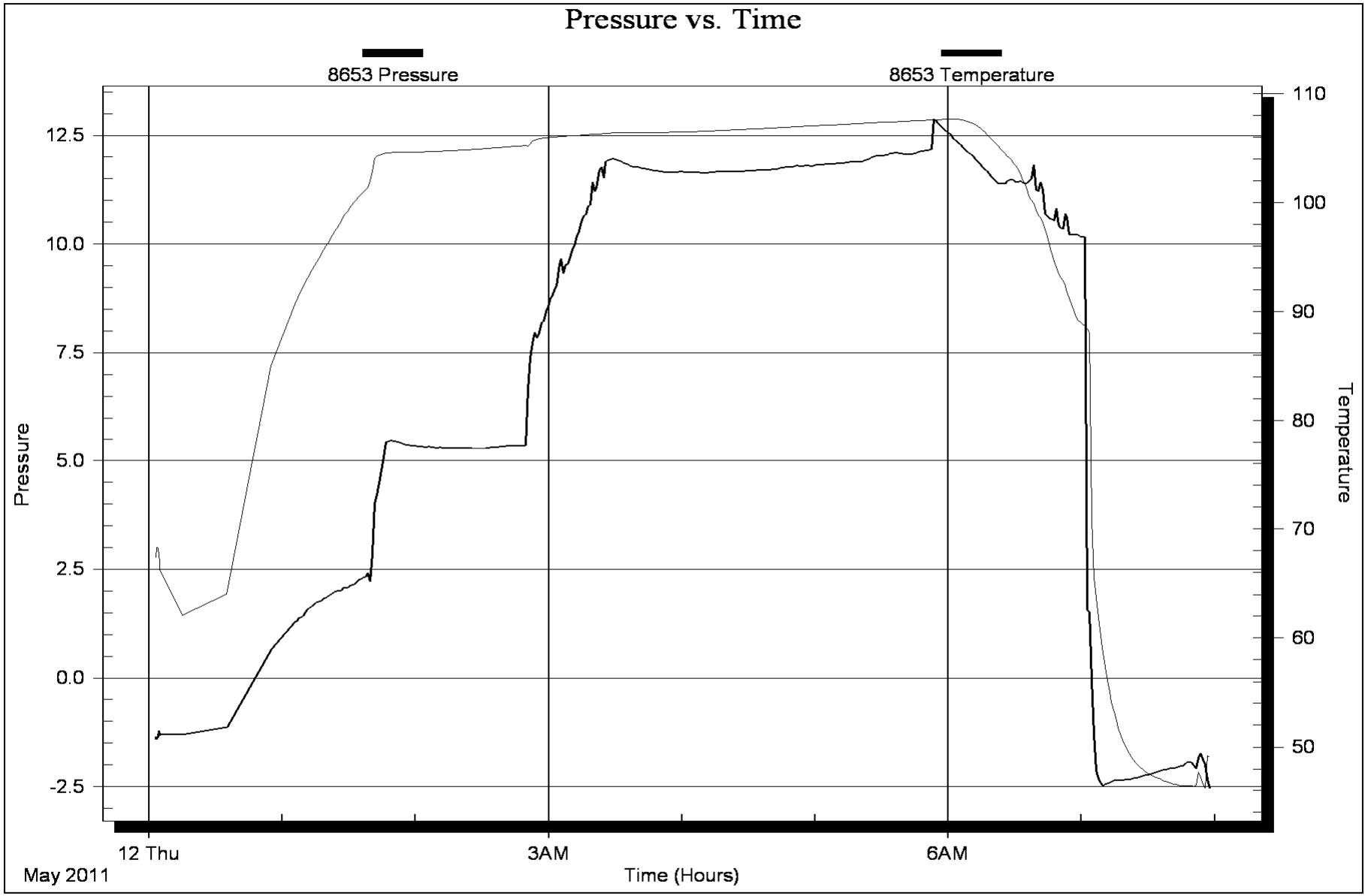
Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m^3/d)
		0.00	0.00	0.00


Pressure vs. Time
8354 Pressure
8354 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
1750
1500
1250
1000
750
500
250
0
Pressure
110
100
90
80
70
60
50
Temperature
12 Thu
May 2011
3AM
6AM
Time (Hours)


Pressure vs. Time
8520 Pressure
8520 Temperature
1750
1500
1250
1000
750
500
250
0
Pressure
110
100
90
80
70
60
50
Temperature
12 Thu
May 2011
3AM
6AM
Time (Hours)


Pressure vs. Time
8653 Pressure
8653 Temperature
12.5
10.0
7.5
5.0
2.5
0.0
-2.5
Pressure
110
100
90
80
70
60
50
Temperature
12 Thu
May 2011
3AM
6AM
Time (Hours)

DRILL STEM TESTING - DATA LISTING

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42883 **DST#: 2**

Test Start: 2011.05.12 @ 00:02:27

Serial # 8354 Inside

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	1.29	71.3
	40.0	279.13	93.1
	50.5	905.60	97.8
	51.2	949.18	97.8
	51.8	935.28	97.9
	52.5	966.08	97.9
	53.2	1042.42	98.1
	53.8	997.10	98.1
	54.5	1029.79	98.3
	55.2	1101.28	98.4
	55.8	1059.80	98.5
	56.5	1090.73	98.6
	57.2	1161.31	98.8
	57.8	1123.20	99.2
	58.5	1154.06	99.4
	59.2	1214.55	99.5
	59.8	1183.90	99.6
	60.5	1215.74	99.7
	61.2	1270.46	99.8
	61.8	1229.95	99.9
	62.5	1276.59	100.1
	63.2	1283.14	100.2
	63.8	1297.28	100.5
	64.5	1339.20	100.7
	65.2	1417.57	100.8
	65.8	1369.30	101.0
	66.5	1402.09	101.1
	67.2	1449.70	101.4
	67.8	1431.33	101.5
	68.5	1468.04	101.7
	69.2	1461.17	101.9
	69.8	1540.25	102.0
	70.5	1492.56	102.2

Serial # 8354 Inside

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	71.2	1523.78	102.5
	71.8	1597.12	102.7
	72.5	1554.81	102.9
	73.2	1590.97	103.1
	73.8	1583.50	103.2
	74.5	1689.23	103.3
	75.2	1615.81	103.4
	75.8	1670.83	103.5
	76.5	1646.66	103.9
	77.2	1642.58	104.1
	77.8	1636.67	104.2
	78.5	1630.87	104.2
	79.2	1626.34	104.2
	79.8	1631.61	104.3
	80.5	1660.18	104.7
	81.2	1654.40	104.8
	81.8	1647.96	104.9
	82.5	1641.99	104.9
	83.2	1636.41	105.0
	83.8	1632.75	105.0
	84.5	1680.83	105.0
	85.0	1662.72	105.0
	85.2	1682.94	105.0
Initial Hydro-static	85.3	1709.03	105.1
	85.5	1690.06	105.1
	85.7	1679.72	105.2
	85.8	1680.22	105.3
	86.2	1684.12	105.3
	86.3	1687.15	105.4
Open To Flow (1)	86.5	23.11	104.4
	86.7	23.33	104.9
	86.8	22.70	105.1
	87.0	22.96	105.1

Printing every 4 samples

Serial # 8354 Inside				Serial # 8354 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	87.7	23.45	105.0		117.0	121.62	106.1
	88.3	23.64	105.1		119.0	122.84	106.1
	89.0	23.70	105.1		121.0	123.74	106.1
	89.7	18.73	105.1		123.0	124.57	106.1
	90.3	19.34	105.2		125.0	125.08	106.2
	91.0	18.51	105.2		127.0	125.52	106.2
	91.7	18.39	105.6		129.0	125.82	106.2
	92.3	18.40	105.8		131.0	126.03	106.2
	93.0	18.51	105.9		133.0	126.22	106.2
	93.7	18.60	105.9		135.0	126.51	106.2
	94.3	18.73	106.0		137.0	126.95	106.3
	95.0	18.84	106.1		139.0	127.12	106.3
	95.7	18.95	106.1		141.0	127.26	106.3
	96.3	19.08	106.1		143.0	127.41	106.3
	97.0	19.21	106.1		145.0	127.55	106.3
	97.7	19.28	106.2		147.0	127.69	106.3
	98.3	19.36	106.2		149.0	127.82	106.4
	98.8	19.56	106.2		151.0	127.98	106.4
	99.0	19.62	106.2		153.0	128.13	106.4
Shut-In(1)	99.2	20.39	106.2		155.0	128.22	106.4
	99.3	21.93	106.2		157.0	128.31	106.4
	99.5	23.63	106.2		158.5	128.35	106.5
	99.7	25.38	106.2		159.0	128.37	106.5
	100.3	32.61	106.1	End Shut-In(1)	159.5	128.37	106.5
	101.0	39.58	106.1	Open To Flow (2)	160.0	21.69	106.5
	101.7	46.41	106.1		160.5	21.91	106.7
	102.3	53.17	106.1		161.0	21.37	106.9
	103.0	60.07	106.1		163.0	21.48	107.3
	103.7	66.64	106.0		165.0	22.06	107.4
	104.3	73.05	106.0		167.0	22.16	107.4
	105.0	79.35	106.0		169.0	22.21	107.4
	105.7	84.94	106.0		171.0	22.28	107.5
	106.3	90.24	106.0		173.0	22.35	107.5
	107.0	95.03	106.0		175.0	22.41	107.5
	107.7	99.18	106.1		177.0	22.48	107.5
	108.3	102.93	106.1		179.0	22.60	107.5
	109.0	106.19	106.1		181.0	22.71	107.5
	109.7	109.01	106.1		183.0	22.84	107.6
	111.0	112.18	106.1		185.0	22.93	107.6
	113.0	116.96	106.1		187.0	23.03	107.6
	115.0	119.74	106.1		189.0	23.12	107.6

Printing every 4 samples

Serial # 8354 Inside				Serial # 8354 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	191.0	23.21	107.6		265.5	127.82	108.3
	193.0	23.31	107.6		267.5	127.94	108.3
	195.0	23.36	107.6		269.5	128.06	108.3
	197.0	23.42	107.6		271.5	128.19	108.3
	199.0	23.52	107.6		273.5	128.30	108.3
	199.5	23.51	107.6		275.5	128.41	108.3
Shut-In(2)	200.0	25.97	107.6		277.5	128.51	108.4
	200.5	34.33	107.6		279.5	128.63	108.4
	201.0	42.52	107.6		281.5	128.74	108.4
	201.5	50.55	107.7		283.5	128.82	108.4
	203.5	78.81	107.7		285.5	128.90	108.4
	205.5	98.04	107.8		287.5	128.98	108.5
	207.5	108.26	107.8		289.5	129.07	108.5
	209.5	113.70	107.8		291.5	129.18	108.5
	211.5	116.96	107.8		293.5	129.28	108.5
	213.5	118.88	107.8		295.5	129.37	108.5
	215.5	120.31	107.9		297.5	129.46	108.5
	217.5	121.25	107.9		299.5	129.54	108.5
	219.5	122.10	107.9		301.5	129.62	108.6
	221.5	122.72	107.9		303.5	129.69	108.6
	223.5	123.26	107.9		305.5	129.73	108.6
	225.5	123.71	108.0		307.5	129.78	108.6
	227.5	124.08	108.0		309.5	129.83	108.6
	229.5	124.55	108.0		311.5	129.89	108.7
	231.5	124.83	108.0		313.5	129.97	108.7
	233.5	125.07	108.0		315.5	130.02	108.7
	235.5	125.67	108.0		317.5	130.09	108.7
	237.5	125.50	108.1		319.5	130.14	108.7
	239.5	126.04	108.1		321.5	130.18	108.8
	241.5	125.89	108.1		323.5	130.22	108.8
	243.5	126.38	108.1		325.5	130.26	108.8
	245.5	126.50	108.1		327.5	130.31	108.8
	247.5	126.65	108.1		329.5	130.36	108.8
	249.5	126.77	108.1		331.5	130.38	108.8
	251.5	126.89	108.2		333.5	130.39	108.9
	253.5	127.01	108.2		335.5	130.38	108.9
	255.5	127.12	108.2		336.5	130.36	108.9
	257.5	127.24	108.2		337.0	130.32	108.9
	259.5	127.39	108.2	End Shut-In(2)	337.5	130.19	108.9
	261.5	127.53	108.2		338.0	1560.94	110.5
	263.5	127.68	108.2	Final Hydro-static	338.5	1651.30	110.7

Printing every 4 samples

Serial # 8354 Inside				Serial # 8354 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	339.0	1643.69	110.6		421.0	11.77	79.1
	341.0	1621.18	110.7		423.0	11.66	79.1
	343.0	1633.78	110.4		425.0	11.19	79.1
	345.0	1612.36	109.2		427.0	12.37	79.1
	347.0	1524.54	109.0		429.0	12.89	79.1
	349.0	1580.15	106.3		431.0	14.00	79.1
	351.0	1521.15	104.6		433.0	10.91	79.1
	353.0	1451.80	103.3		435.0	11.54	79.1
	355.0	1354.22	102.0		437.0	11.53	79.1
	357.0	1310.47	100.7		439.0	11.51	79.1
	359.0	1298.03	99.3		441.0	7.09	79.3
	361.0	1214.23	98.1		443.0	1.98	79.0
	363.0	1123.60	97.0		445.0	1.14	67.2
	365.0	1033.34	95.9		447.0	0.55	59.7
	367.0	1044.59	95.3		449.0	0.64	57.4
	369.0	994.56	95.1		451.0	0.73	55.5
	371.0	943.10	94.9		453.0	0.80	53.9
	373.0	930.41	94.9		455.0	0.81	52.6
	375.0	922.52	94.9		457.0	0.79	51.5
	377.0	914.86	94.9		459.0	0.73	50.7
	379.0	905.02	94.9		461.0	0.70	48.5
	381.0	844.41	94.8		463.0	0.73	47.7
	383.0	782.55	94.7		465.0	0.64	47.3
	385.0	719.95	94.3		467.0	0.62	48.4
	387.0	655.14	92.0		468.5	0.62	49.1
	389.0	593.14	89.5				
	391.0	529.77	87.2				
	393.0	472.06	85.8				
	395.0	397.64	84.2				
	397.0	376.89	82.8				
	399.0	318.27	81.8				
	401.0	254.54	81.0				
	403.0	198.77	80.2				
	405.0	169.22	79.7				
	407.0	110.41	79.4				
	409.0	79.77	79.4				
	411.0	30.59	79.2				
	413.0	18.39	79.1				
	415.0	12.64	79.1				
	417.0	12.02	79.1				
	419.0	11.75	79.1				

Printing every 3 samples

DRILL STEM TESTING - DATA LISTING

TRILOBITE TESTING, INC.

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42883 **DST#: 2**

Test Start: 2011.05.12 @ 00:02:27

Serial # 8520 Outside

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	-1.13	66.9
	0.1	-1.18	67.0
	0.1	-1.17	67.1
	0.2	-1.18	67.1
	0.2	-1.21	67.2
	0.3	-1.24	67.3
	0.3	-1.26	67.3
	0.3	-1.27	67.4
	0.4	-1.25	67.5
	0.4	-1.24	67.5
	0.5	-1.26	67.6
	0.6	-1.27	67.7
	0.6	-1.29	67.8
	0.7	-1.30	67.9
	0.7	-1.31	68.0
	0.8	-1.31	68.1
	0.8	-1.28	68.2
	0.9	-1.27	68.3
	0.9	-1.28	68.4
	0.9	-1.27	68.5
	1.0	-1.26	68.6
	1.1	-1.25	68.6
	1.1	-1.23	68.7
	1.1	-1.20	68.8
	1.2	-1.20	68.9
	1.3	-1.19	68.9
	1.3	-1.20	69.0
	1.4	-1.21	69.1
	1.4	-1.19	69.1
	1.5	-1.17	69.2
	1.5	-1.16	69.3
	1.6	-1.16	69.3
	1.6	-1.15	69.3

Serial # 8520 Outside

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	1.6	-1.17	69.3
	1.7	-1.16	69.3
	1.8	-1.15	69.3
	1.8	-1.12	69.3
	1.9	-1.11	69.3
	1.9	-1.09	69.3
	2.0	-1.09	69.3
	12.0	-1.03	56.9
	42.0	351.06	94.0
	62.5	1024.98	98.4
	64.0	1028.91	98.7
	65.5	1105.80	99.0
	67.0	1121.75	99.5
	68.5	1259.23	99.8
	70.0	1214.59	100.1
	71.5	1272.27	100.4
	73.0	1307.19	101.0
	74.5	1419.52	101.3
	76.0	1400.02	101.7
	77.5	1428.03	102.1
	79.0	1470.76	102.4
	80.5	1523.20	103.0
	82.0	1553.00	103.4
	83.5	1579.93	103.7
	85.0	1609.50	104.0
	86.5	1640.70	104.6
	88.0	1627.49	104.7
	89.5	1660.05	105.1
	91.0	1647.46	105.2
	92.5	1634.37	105.2
	94.0	1697.02	105.2
	95.5	1682.70	105.8
	97.0	18.46	105.6

Printing every 3 samples

Serial # 8520 Outside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	98.5	18.98	105.6		160.0	132.02	107.2
	100.0	14.57	105.6		161.5	132.05	107.2
	101.5	14.29	105.8		163.0	132.07	107.2
	103.0	14.71	106.2		164.5	132.09	107.2
	104.5	14.44	106.4		166.0	132.11	107.2
	106.0	14.98	106.5		167.5	132.12	107.3
	107.5	15.12	106.6		169.0	16.54	107.3
	109.0	29.46	106.7		170.5	16.28	107.5
	110.5	45.49	106.8		172.0	16.26	107.7
	112.0	61.00	106.8		173.5	17.08	107.8
	113.5	75.94	106.8		175.0	16.98	107.9
	115.0	89.48	106.8		176.5	17.14	108.0
	116.5	100.81	106.8		178.0	17.23	108.0
	118.0	109.52	106.8		179.5	17.67	108.1
	119.5	115.64	106.8		181.0	17.77	108.1
	121.0	119.77	106.8		182.5	17.87	108.1
	122.5	122.68	106.9		184.0	18.00	108.1
	124.0	124.59	106.9		185.5	17.77	108.1
	125.5	126.09	106.9		187.0	17.96	108.2
	127.0	127.18	106.9		188.5	18.43	108.2
	128.5	128.00	106.9		190.0	18.24	108.2
	130.0	128.70	106.9		191.5	18.69	108.2
	131.5	129.18	106.9		193.0	18.81	108.2
	133.0	129.57	106.9		194.5	18.91	108.2
	134.5	129.94	106.9		196.0	19.02	108.2
	136.0	130.22	107.0		197.5	19.13	108.2
	137.5	130.47	107.0		199.0	19.25	108.2
	139.0	131.00	107.0		200.5	19.34	108.2
	140.5	131.14	107.0		202.0	19.45	108.2
	142.0	131.26	107.0		203.5	19.51	108.2
	143.5	131.36	107.0		205.0	19.58	108.2
	145.0	131.16	107.0		206.5	19.62	108.2
	146.5	131.55	107.0		208.0	19.66	108.2
	148.0	131.62	107.1		209.5	37.87	108.2
	149.5	131.69	107.1		211.0	61.66	108.3
	151.0	131.75	107.1		212.5	82.30	108.3
	152.5	131.80	107.1		214.0	97.87	108.3
	154.0	131.85	107.1		215.5	107.91	108.3
	155.5	131.89	107.1		217.0	113.88	108.3
	157.0	131.94	107.1		218.5	117.73	108.3
	158.5	131.97	107.2		220.0	120.41	108.3

Printing every 3 samples

Serial # 8520 Outside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	221.5	122.44	108.4		283.0	131.52	108.6
	223.0	123.59	108.4		284.5	131.53	108.6
	224.5	124.69	108.4		286.0	131.54	108.7
	226.0	125.44	108.4		287.5	131.59	108.7
	227.5	126.18	108.4		289.0	131.61	108.7
	229.0	126.76	108.4		290.5	131.63	108.7
	230.5	127.33	108.4		292.0	131.67	108.7
	232.0	127.66	108.4		293.5	131.69	108.7
	233.5	127.96	108.4		295.0	131.69	108.7
	235.0	128.23	108.4		296.5	131.70	108.7
	236.5	128.55	108.4		298.0	131.72	108.7
	238.0	128.92	108.4		299.5	131.74	108.8
	239.5	129.01	108.4		301.0	131.77	108.8
	241.0	129.22	108.4		302.5	131.80	108.8
	242.5	129.41	108.4		304.0	131.84	108.8
	244.0	129.89	108.4		305.5	131.87	108.8
	245.5	129.73	108.4		307.0	131.88	108.8
	247.0	129.86	108.4		308.5	131.90	108.8
	248.5	130.26	108.5		310.0	131.92	108.8
	250.0	130.34	108.5		311.5	131.93	108.8
	251.5	130.41	108.5		313.0	131.95	108.9
	253.0	130.48	108.5		314.5	131.97	108.9
	254.5	130.55	108.5		316.0	131.98	108.9
	256.0	130.65	108.5		317.5	131.98	108.9
	257.5	130.73	108.5		319.0	132.00	108.9
	259.0	130.80	108.5		320.5	131.99	108.9
	260.5	130.86	108.5		322.0	132.00	108.9
	262.0	130.93	108.5		323.5	132.02	108.9
	263.5	130.96	108.5		325.0	132.04	108.9
	265.0	131.02	108.5		326.5	132.05	109.0
	266.5	131.07	108.5		328.0	132.08	109.0
	268.0	131.13	108.5		329.5	132.10	109.0
	269.5	131.19	108.6		331.0	132.11	109.0
	271.0	131.23	108.6		332.5	132.12	109.0
	272.5	131.25	108.6		334.0	132.13	109.0
	274.0	131.29	108.6		335.5	132.13	109.0
	275.5	131.33	108.6		337.0	132.15	109.0
	277.0	131.37	108.6		338.5	132.17	109.1
	278.5	131.40	108.6		340.0	132.17	109.1
	280.0	131.44	108.6		341.5	132.18	109.1
	281.5	131.47	108.6		343.0	132.18	109.1

Printing every 3 samples

Serial # 8520 Outside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	344.5	132.16	109.1		406.0	381.79	83.0
	346.0	132.13	109.1		407.5	328.15	82.4
	347.5	1654.83	110.9		409.0	282.03	81.8
	349.0	1631.08	110.9		410.5	259.90	81.1
	350.5	1617.92	110.8		412.0	199.01	80.6
	352.0	1658.24	110.3		413.5	168.46	80.1
	353.5	1621.74	109.7		415.0	137.77	79.9
	355.0	1549.22	109.5		416.5	107.14	79.8
	356.5	1616.38	108.6		418.0	76.25	79.8
	358.0	1584.73	107.3		419.5	45.76	79.7
	359.5	1484.02	106.1		421.0	15.31	79.6
	361.0	1495.13	104.9		422.5	15.18	79.5
	362.5	1462.48	103.6		424.0	9.66	79.5
	364.0	1357.28	102.6		425.5	9.10	79.6
	365.5	1370.99	101.2		427.0	9.07	79.6
	367.0	1267.77	100.3		428.5	9.06	79.6
	368.5	1258.27	99.3		430.0	9.04	79.6
	370.0	1217.25	98.5		431.5	9.05	79.5
	371.5	1098.17	97.7		433.0	9.05	79.5
	373.0	1081.19	97.0		434.5	12.45	79.5
	374.5	999.68	96.3		436.0	12.38	79.5
	376.0	1047.96	95.8		437.5	12.35	79.5
	377.5	1028.23	95.6		439.0	12.37	79.5
	379.0	974.23	95.4		440.5	12.23	79.5
	380.5	936.74	95.2		442.0	8.38	79.5
	382.0	930.04	95.2		443.5	9.27	79.5
	383.5	923.73	95.2		445.0	9.25	79.5
	385.0	917.75	95.2		446.5	9.23	79.5
	386.5	912.55	95.2		448.0	9.24	79.5
	388.0	905.65	95.2		449.5	6.13	79.5
	389.5	826.93	95.1		451.0	-0.60	79.8
	391.0	812.90	95.1		452.5	-0.80	79.5
	392.5	745.77	95.0		454.0	-0.09	67.3
	394.0	719.99	94.2		455.5	-0.58	58.4
	395.5	671.24	92.3		457.0	-0.73	54.9
	397.0	628.11	90.7		458.5	-0.79	52.5
	398.5	596.05	89.1		460.0	-0.81	50.8
	400.0	535.23	87.7		461.5	-0.80	49.7
	401.5	504.10	86.2		463.0	-0.81	48.9
	403.0	429.80	86.1		464.5	-0.84	48.4
	404.5	412.43	83.9		466.0	-0.84	48.1

Printing every 3 samples

Serial # 8520 Outside				Serial # 8653 Fluid			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	467.5	-0.88	47.9				
	469.0	-0.90	47.6				
	470.5	-0.85	46.8				
	472.0	-0.76	46.7				
	473.5	-0.93	46.8				
	475.0	-0.85	47.9				
	476.5	-0.68	47.8				
	477.5	-0.82	48.1				

Printing every 3 samples

DRILL STEM TESTING - DATA LISTING

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42883 **DST#: 2**

Test Start: 2011.05.12 @ 00:02:27

Serial # 8653 **Fluid**

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	-1.35	67.4
	0.1	-1.42	67.5
	0.1	-1.38	67.6
	0.2	-1.37	67.6
	0.2	-1.35	67.7
	0.3	-1.37	67.8
	0.3	-1.38	67.8
	0.3	-1.38	67.9
	0.4	-1.40	68.0
	0.4	-1.42	68.0
	0.5	-1.41	68.1
	0.6	-1.40	68.2
	0.6	-1.39	68.2
	0.7	-1.39	68.3
	0.7	-1.38	68.2
	0.8	-1.37	68.3
	0.8	-1.38	68.3
	0.9	-1.38	68.3
	0.9	-1.36	68.2
	0.9	-1.35	68.2
	1.0	-1.34	68.2
	1.1	-1.32	68.2
	1.1	-1.31	68.2
	1.1	-1.29	68.1
	1.2	-1.29	68.1
	1.3	-1.29	68.0
	1.3	-1.28	67.9
	1.4	-1.27	67.9
	1.4	-1.25	67.8
	1.5	-1.23	67.7
	1.5	-1.22	67.6
	1.6	-1.23	67.5
	1.6	-1.25	67.4

Serial # 8653 **Fluid**

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	1.6	-1.25	67.2
	1.7	-1.29	67.1
	1.8	-1.29	67.0
	1.8	-1.32	66.8
	1.9	-1.31	66.7
	1.9	-1.30	66.5
	2.0	-1.29	66.4
	12.0	-1.31	62.1
	42.0	0.44	76.7
	62.5	1.29	90.7
	64.0	1.35	91.3
	65.5	1.39	91.9
	67.0	1.47	92.5
	68.5	1.57	93.1
	70.0	1.63	93.7
	71.5	1.70	94.2
	73.0	1.74	94.7
	74.5	1.78	95.3
	76.0	1.83	95.8
	77.5	1.88	96.3
	79.0	1.93	96.9
	80.5	1.97	97.4
	82.0	2.00	97.8
	83.5	2.02	98.4
	85.0	2.06	98.8
	86.5	2.09	99.3
	88.0	2.12	99.7
	89.5	2.15	100.1
	91.0	2.24	100.4
	92.5	2.27	100.8
	94.0	2.32	101.1
	95.5	2.41	101.4
	97.0	2.74	102.6

Printing every 3 samples

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	98.5	4.00	104.1
	100.0	4.35	104.3
	101.5	4.79	104.4
	103.0	5.42	104.5
	104.5	5.45	104.6
	106.0	5.47	104.6
	107.5	5.45	104.7
	109.0	5.44	104.7
	110.5	5.42	104.7
	112.0	5.41	104.7
	113.5	5.38	104.7
	115.0	5.36	104.7
	116.5	5.34	104.7
	118.0	5.34	104.7
	119.5	5.33	104.7
	121.0	5.33	104.7
	122.5	5.33	104.7
	124.0	5.32	104.7
	125.5	5.32	104.7
	127.0	5.30	104.7
	128.5	5.31	104.7
	130.0	5.30	104.7
	131.5	5.31	104.8
	133.0	5.31	104.8
	134.5	5.31	104.8
	136.0	5.30	104.8
	137.5	5.31	104.8
	139.0	5.30	104.9
	140.5	5.31	104.9
	142.0	5.30	104.9
	143.5	5.29	104.9
	145.0	5.29	104.9
	146.5	5.29	105.0
	148.0	5.30	105.0
	149.5	5.31	105.0
	151.0	5.32	105.0
	152.5	5.32	105.0
	154.0	5.32	105.1
	155.5	5.32	105.1
	157.0	5.34	105.1
	158.5	5.35	105.1

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	160.0	5.36	105.2
	161.5	5.35	105.2
	163.0	5.36	105.2
	164.5	5.34	105.2
	166.0	5.36	105.2
	167.5	6.67	105.2
	169.0	7.57	105.6
	170.5	7.97	105.8
	172.0	8.28	105.8
	173.5	8.18	105.9
	175.0	8.30	105.9
	176.5	8.56	106.0
	178.0	8.72	106.0
	179.5	8.93	106.0
	181.0	9.12	106.1
	182.5	9.65	106.1
	184.0	9.36	106.1
	185.5	9.54	106.1
	187.0	9.78	106.1
	188.5	9.97	106.2
	190.0	10.19	106.2
	191.5	10.50	106.2
	193.0	10.70	106.2
	194.5	10.87	106.2
	196.0	10.94	106.3
	197.5	11.21	106.3
	199.0	11.65	106.3
	200.5	11.77	106.3
	202.0	11.87	106.4
	203.5	11.93	106.4
	205.0	11.95	106.4
	206.5	11.95	106.4
	208.0	11.93	106.4
	209.5	11.90	106.4
	211.0	11.87	106.4
	212.5	11.83	106.4
	214.0	11.79	106.4
	215.5	11.78	106.4
	217.0	11.76	106.4
	218.5	11.75	106.4
	220.0	11.73	106.4

Printing every 3 samples

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	221.5	11.72	106.4
	223.0	11.71	106.4
	224.5	11.69	106.4
	226.0	11.68	106.4
	227.5	11.66	106.4
	229.0	11.65	106.5
	230.5	11.64	106.5
	232.0	11.64	106.5
	233.5	11.65	106.5
	235.0	11.65	106.5
	236.5	11.66	106.5
	238.0	11.65	106.5
	239.5	11.65	106.5
	241.0	11.64	106.5
	242.5	11.64	106.5
	244.0	11.64	106.5
	245.5	11.64	106.6
	247.0	11.63	106.6
	248.5	11.63	106.6
	250.0	11.65	106.6
	251.5	11.65	106.6
	253.0	11.66	106.6
	254.5	11.66	106.6
	256.0	11.66	106.6
	257.5	11.67	106.7
	259.0	11.67	106.7
	260.5	11.66	106.7
	262.0	11.67	106.7
	263.5	11.66	106.7
	265.0	11.67	106.7
	266.5	11.67	106.7
	268.0	11.68	106.8
	269.5	11.69	106.8
	271.0	11.69	106.8
	272.5	11.70	106.8
	274.0	11.70	106.8
	275.5	11.71	106.8
	277.0	11.71	106.9
	278.5	11.72	106.9
	280.0	11.72	106.9
	281.5	11.75	106.9

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	283.0	11.75	106.9
	284.5	11.77	106.9
	286.0	11.77	106.9
	287.5	11.78	107.0
	289.0	11.79	107.0
	290.5	11.78	107.0
	292.0	11.79	107.0
	293.5	11.79	107.0
	295.0	11.79	107.0
	296.5	11.80	107.1
	298.0	11.82	107.1
	299.5	11.81	107.1
	301.0	11.82	107.1
	302.5	11.83	107.1
	304.0	11.83	107.1
	305.5	11.83	107.2
	307.0	11.85	107.2
	308.5	11.86	107.2
	310.0	11.86	107.2
	311.5	11.88	107.2
	313.0	11.89	107.2
	314.5	11.88	107.2
	316.0	11.88	107.3
	317.5	11.89	107.3
	319.0	11.91	107.3
	320.5	11.94	107.3
	322.0	11.98	107.3
	323.5	12.00	107.3
	325.0	12.02	107.4
	326.5	12.02	107.4
	328.0	12.04	107.4
	329.5	12.05	107.4
	331.0	12.07	107.4
	332.5	12.09	107.4
	334.0	12.10	107.4
	335.5	12.07	107.5
	337.0	12.06	107.5
	338.5	12.06	107.5
	340.0	12.06	107.5
	341.5	12.08	107.5
	343.0	12.11	107.5

Printing every 3 samples

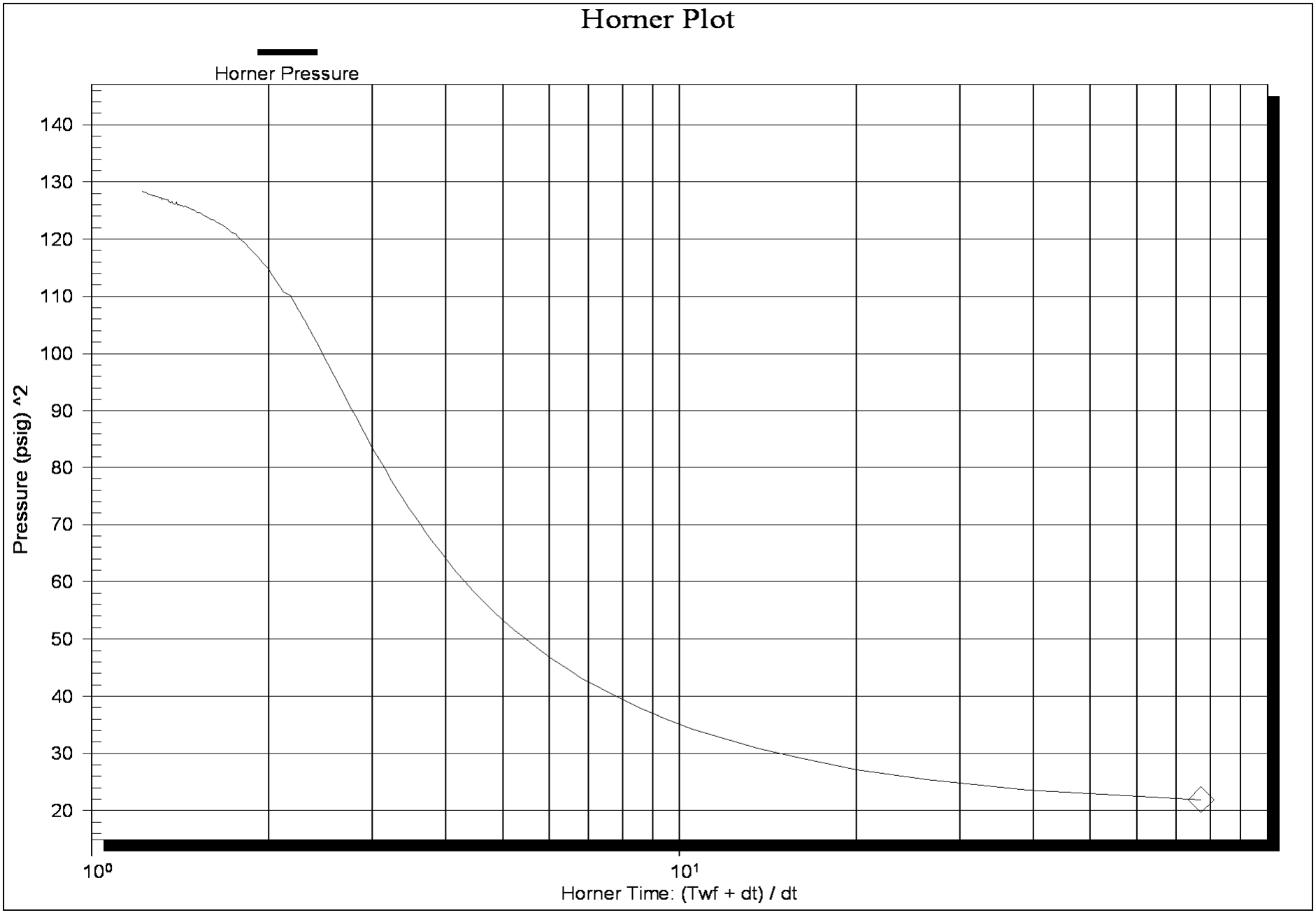
Serial # 8653	Fluid			Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	344.5	12.12	107.5		406.0	10.47	93.9
	346.0	12.14	107.6		407.5	10.38	93.2
	347.5	12.14	107.6		409.0	10.33	92.7
	349.0	12.16	107.6		410.5	10.60	91.8
	350.5	12.87	107.6		412.0	10.23	90.9
	352.0	12.80	107.6		413.5	10.20	90.2
	353.5	12.71	107.6		415.0	10.20	89.3
	355.0	12.64	107.6		416.5	10.18	89.0
	356.5	12.57	107.6		418.0	10.17	88.8
	358.0	12.52	107.7		419.5	1.57	88.5
	359.5	12.43	107.7		421.0	0.69	84.4
	361.0	12.35	107.7		422.5	-1.29	65.5
	362.5	12.28	107.6		424.0	-2.25	62.8
	364.0	12.21	107.6		425.5	-2.42	60.2
	365.5	12.13	107.5		427.0	-2.47	58.0
	367.0	12.09	107.4		428.5	-2.44	56.1
	368.5	12.01	107.2		430.0	-2.41	54.5
	370.0	11.91	107.1		431.5	-2.36	53.2
	371.5	11.83	106.8		433.0	-2.35	52.1
	373.0	11.74	106.6		434.5	-2.35	51.2
	374.5	11.67	106.3		436.0	-2.35	50.4
	376.0	11.58	105.9		437.5	-2.35	49.8
	377.5	11.49	105.6		439.0	-2.33	49.2
	379.0	11.41	105.3		440.5	-2.31	48.8
	380.5	11.41	104.9		442.0	-2.29	48.4
	382.0	11.39	104.6		443.5	-2.28	48.1
	383.5	11.44	104.3		445.0	-2.25	47.9
	385.0	11.48	104.0		446.5	-2.23	47.6
	386.5	11.46	103.6		448.0	-2.21	47.4
	388.0	11.43	103.3		449.5	-2.19	47.3
	389.5	11.46	102.7		451.0	-2.15	47.2
	391.0	11.40	101.9		452.5	-2.14	47.0
	392.5	11.41	101.2		454.0	-2.12	46.9
	394.0	11.48	100.5		455.5	-2.10	46.8
	395.5	11.81	100.0		457.0	-2.09	46.7
	397.0	11.24	99.2		458.5	-2.08	46.6
	398.5	11.43	98.7		460.0	-2.05	46.5
	400.0	10.73	97.9		461.5	-2.03	46.5
	401.5	10.65	96.9		463.0	-2.01	46.5
	403.0	10.60	95.6		464.5	-1.95	46.4
	404.5	10.55	94.6		466.0	-1.92	46.4

Printing every 3 samples

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	467.5	-2.01	46.4
	469.0	-1.98	46.3
	470.5	-1.74	47.2
	472.0	-1.93	46.3
	473.5	-2.34	49.2
	475.0	-2.49	48.8

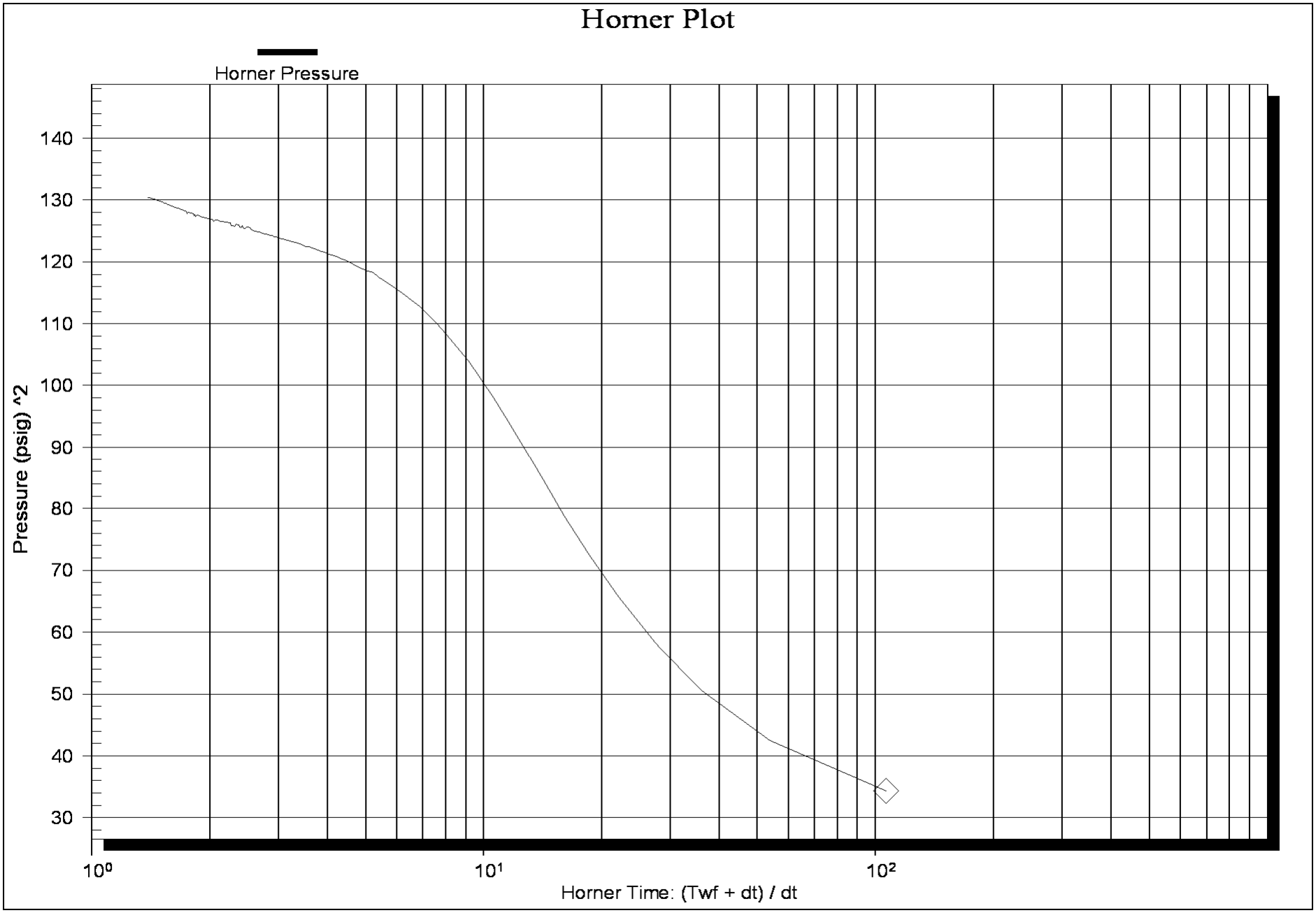
Printing every 3 samples

Horner Plot



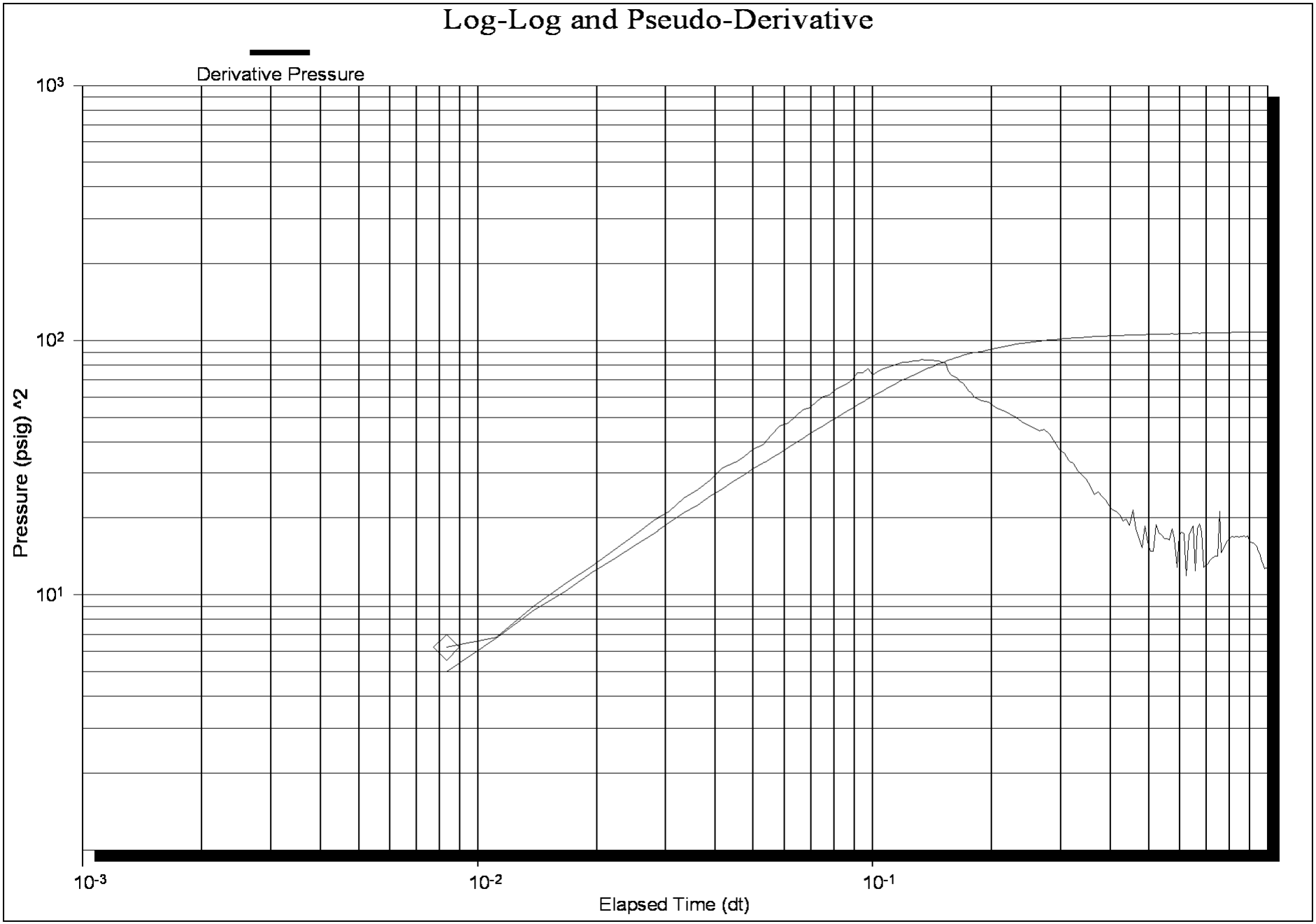
Serial Number: 8354 (Inside) P* : Slope (m) : kpa/log cycle Flow Cycle: 1

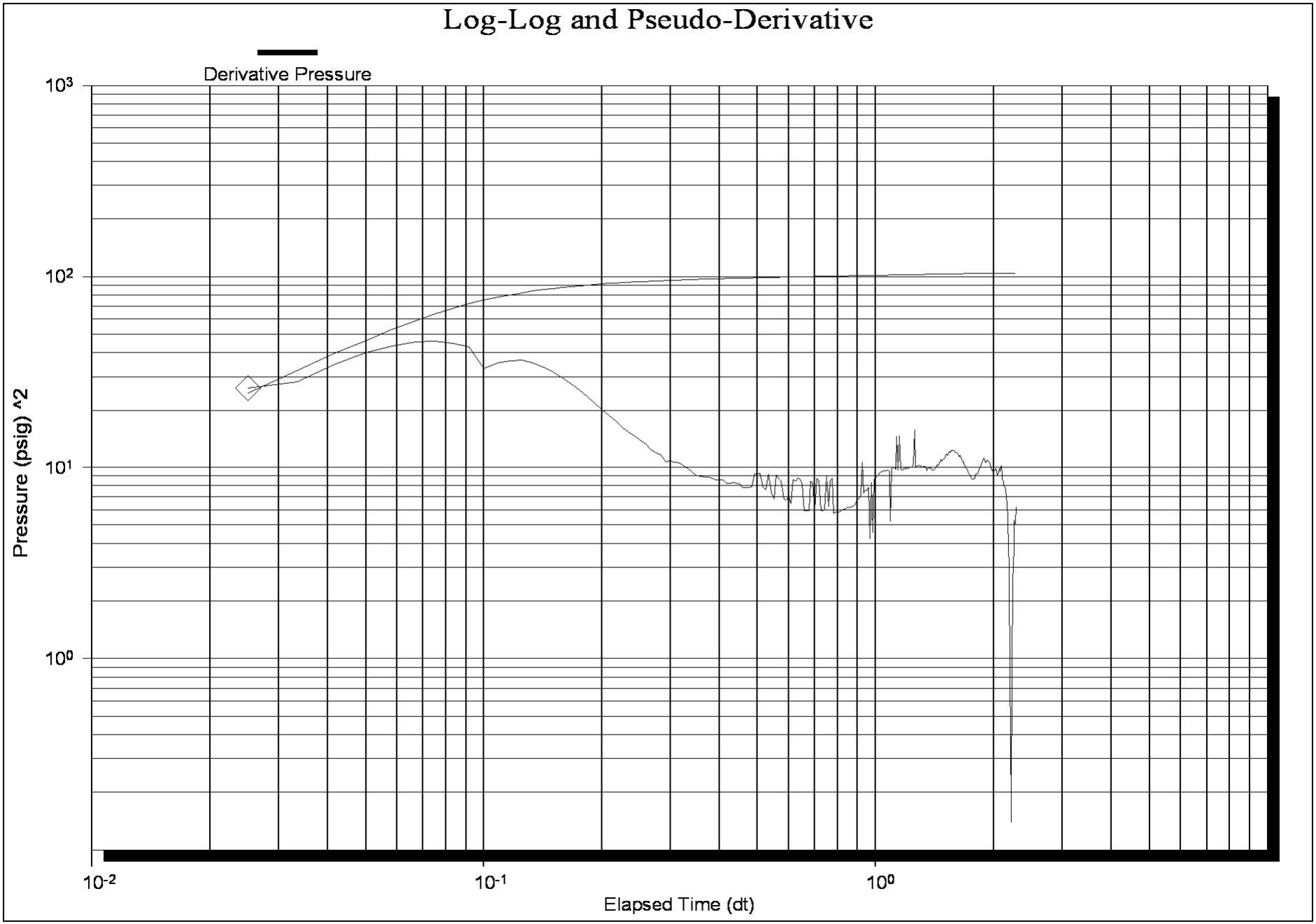
Horner Plot

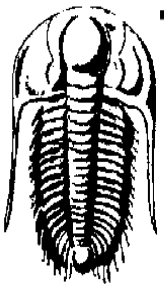


Serial Number: 8354 (Inside) P* : Slope (m) : kpa/log cycle Flow Cycle: 2

Log-Log and Pseudo-Derivative




Log-Log and Pseudo-Derivative
Derivative Pressure
10^3
10^2
10^1
10^0
Pressure (psig) ^2
10^{-2}
10^{-1}
10^0
Elapsed Time (dt)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Samuel Gary Jr. & Associates Inc.**

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

26/16S/16W-Rush

Maier 1-26

Start Date: 2011.05.13 @ 17:38:27
End Date: 2011.05.14 @ 01:10:27
Job Ticket #: 42884 DST #: 3

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42884 **DST#: 3**

Test Start: 2011.05.13 @ 17:38:27

GENERAL INFORMATION:

Formation: **LKC "I&J"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:53:47
Time Test Ended: 01:10:27

Test Type: Conventional Bottom Hole
Tester: Dustin Rash
Unit No: 38

Interval: 3424.00 ft (KB) To 3455.00 ft (KB) (TVD)
Total Depth: 3455.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

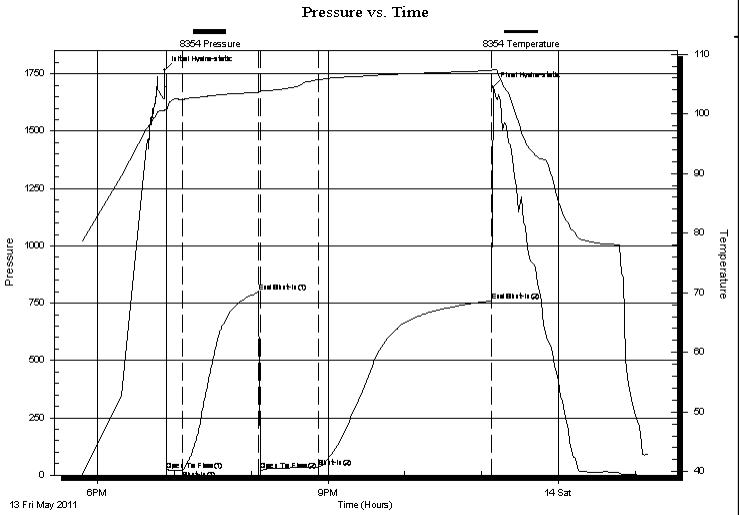
Reference Elevations: 1985.00 ft (KB)
1975.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8354 **Inside**

Press@RunDepth: 32.92 psig @ 3427.00 ft (KB)
Start Date: 2011.05.13 End Date: 2011.05.14
Start Time: 17:48:27 End Time: 01:10:27

Capacity: 8000.00 psig
Last Calib.: 2011.05.14
Time On Btm: 2011.05.13 @ 18:52:27
Time Off Btm: 2011.05.13 @ 23:08:57

TEST COMMENT: IF-Fair building blow . Built to 8 inches.
ISI-No Return.
FF-Fair building blow . BOB in 14 minutes 40 seconds.
FSI-No Return. Times- 10-60



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1765.37	100.64	Initial Hydro-static
2	22.68	100.03	Open To Flow (1)
14	22.92	102.41	Shut-In(1)
74	796.75	103.60	End Shut-In(1)
75	23.14	103.74	Open To Flow (2)
121	32.92	105.71	Shut-In(2)
256	759.75	107.27	End Shut-In(2)
257	1692.65	107.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	75%Mud/15%Gas/10%Oil	0.63
0.00	330' G.I.P.	0.00

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42884 **DST#: 3**

Test Start: 2011.05.13 @ 17:38:27

GENERAL INFORMATION:

Formation: **LKC "I&J"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:53:47
Time Test Ended: 01:10:27

Test Type: Conventional Bottom Hole
Tester: Dustin Rash
Unit No: 38

Interval: 3424.00 ft (KB) To 3455.00 ft (KB) (TVD)
Total Depth: 3455.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

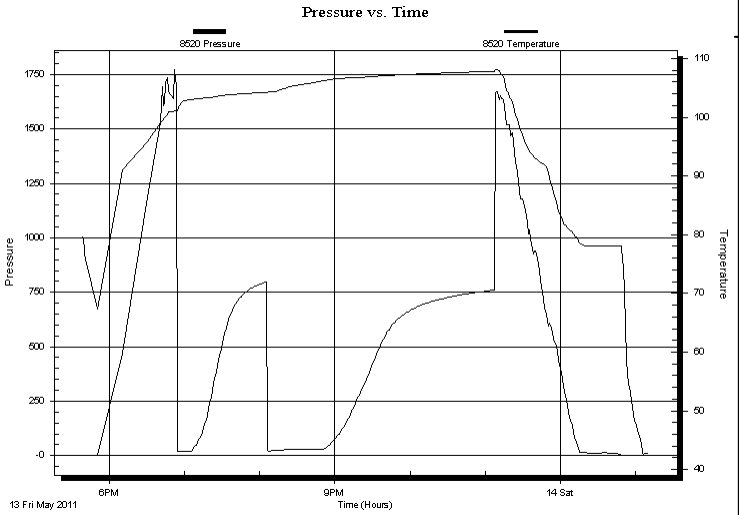
Reference Elevations: 1985.00 ft (KB)
1975.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8520 **Outside**

Press@RunDepth: psig @ 3427.00 ft (KB)
Start Date: 2011.05.13 End Date: 2011.05.14
Start Time: 17:38:46 End Time: 01:10:15

Capacity: 8000.00 psig
Last Calib.: 2011.05.14
Time On Btm:
Time Off Btm:

TEST COMMENT: IF-Fair building blow . Built to 8 inches.
ISI-No Return.
FF-Fair building blow . BOB in 14 minutes 40 seconds.
FSI-No Return. Times- 10-60



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
45.00	75%Mud/15%Gas/10%Oil	0.63
0.00	330' G.I.P.	0.00

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42884 **DST#: 3**

Test Start: 2011.05.13 @ 17:38:27

GENERAL INFORMATION:

Formation: **LKC "I&J"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:53:47
Time Test Ended: 01:10:27

Test Type: Conventional Bottom Hole
Tester: Dustin Rash
Unit No: 38

Interval: 3424.00 ft (KB) To 3455.00 ft (KB) (TVD)
Total Depth: 3455.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

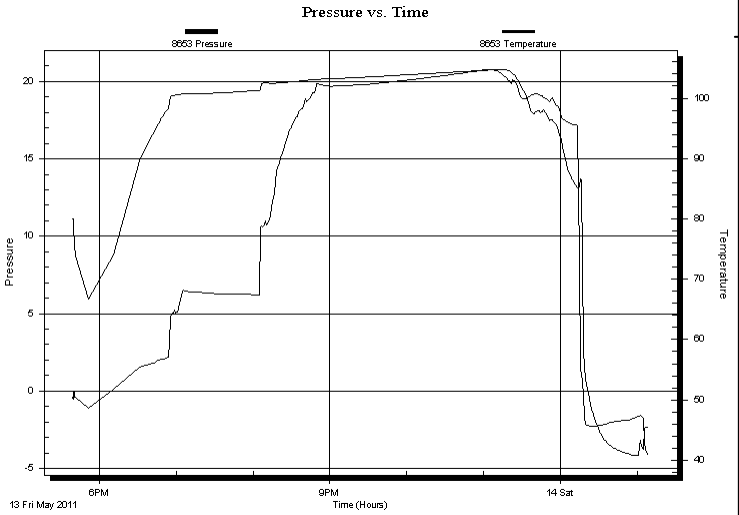
Reference Elevations: 1985.00 ft (KB)
1975.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8653 **Fluid**

Press@RunDepth: psig @ 3394.00 ft (KB)
Start Date: 2011.05.13 End Date: 2011.05.14
Start Time: 17:39:07 End Time: 01:08:36

Capacity: 8000.00 psig
Last Calib.: 2011.05.14
Time On Btm:
Time Off Btm:

TEST COMMENT: IF-Fair building blow . Built to 8 inches.
ISI-No Return.
FF-Fair building blow . BOB in 14 minutes 40 seconds.
FSI-No Return. Times- 10-60



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
45.00	75%Mud/15%Gas/10%Oil	0.63
0.00	330' G.I.P.	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42884 **DST#: 3**

Test Start: 2011.05.13 @ 17:38:27

Tool Information

Drill Pipe:	Length:	3410.00 ft	Diameter:	3.80 inches	Volume:	47.83 bbl	Tool Weight:		3000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.70 inches	Volume:	0.00 bbl	Weight set on Packer:		24000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:		4000.00 lb
					Total Volume:	47.83 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		16.00 ft					String Weight:	Initial	50000.00 lb
Depth to Top Packer:		3424.00 ft						Final	50000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		31.00 ft							
Tool Length:		61.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Recorder	0.00	8653	Fluid	3394.00		
Change Over Sub	1.00			3395.00		
Shut In Tool	5.00			3400.00		
Sampler	2.00			3402.00		
Hydraulic tool	5.00			3407.00		
Jars	5.00			3412.00		
Safety Joint	3.00			3415.00		
Packer	5.00			3420.00	30.00	Bottom Of Top Packer
Packer	4.00			3424.00		
Stubb	1.00			3425.00		
Perforations	2.00			3427.00		
Recorder	0.00	8354	Inside	3427.00		
Recorder	0.00	8520	Outside	3427.00		
Perforations	25.00			3452.00		
Bullnose	3.00			3455.00	31.00	Bottom Packers & Anchor
Total Tool Length:	**61.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42884 **DST#: 3**

Test Start: 2011.05.13 @ 17:38:27

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	41 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	47.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	5200.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	75%Mud/15%Gas/10%Oil	0.631
0.00	330' G.I.P.	0.000

Total Length: 45.00 ft Total Volume: 0.631 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Sampler-1.5 cubic feet gas. 1800 ML Oil.
500# Pressure. 41 Gravity.

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42884 **DST#: 3**

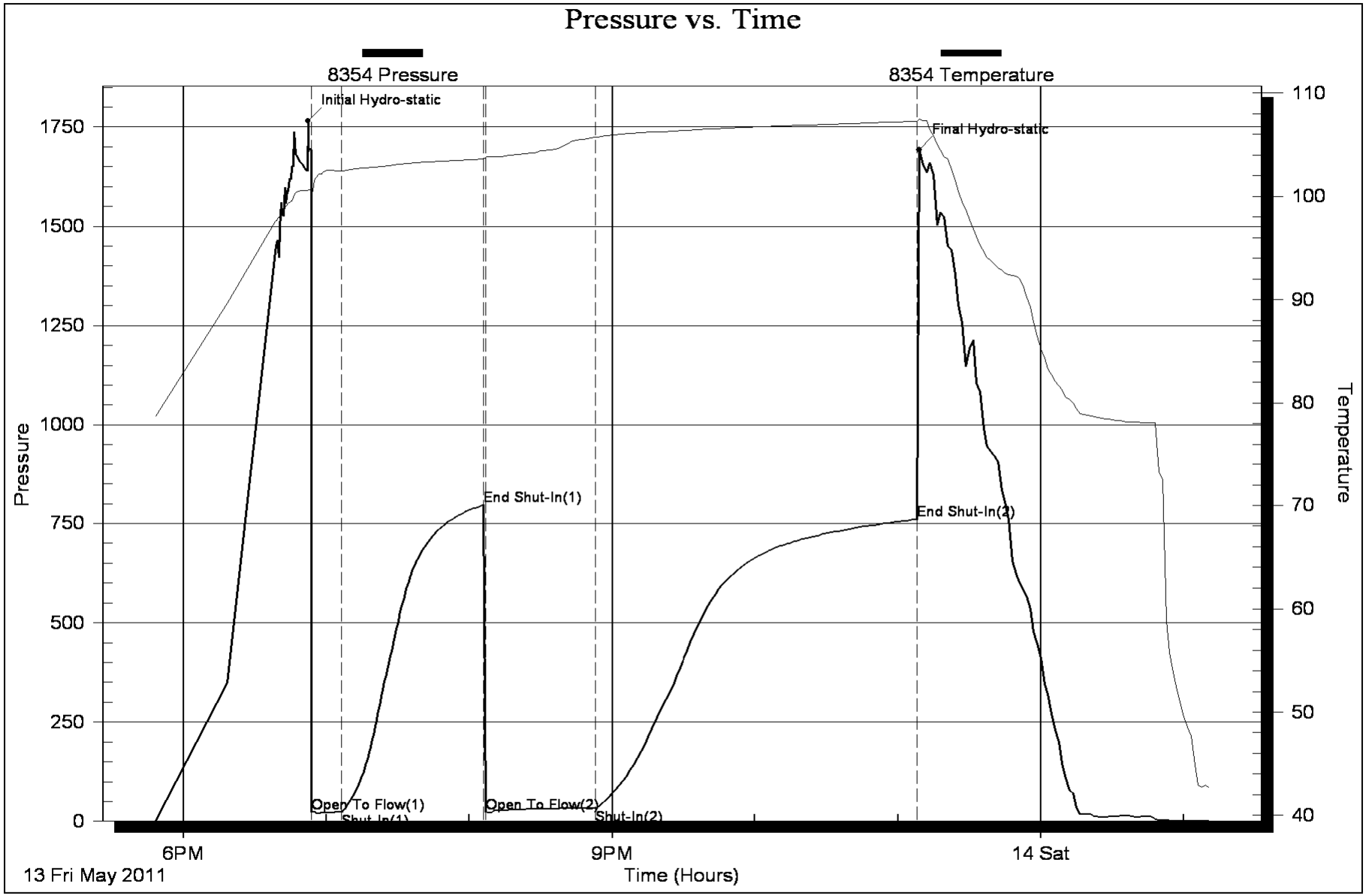
Test Start: 2011.05.13 @ 17:38:27

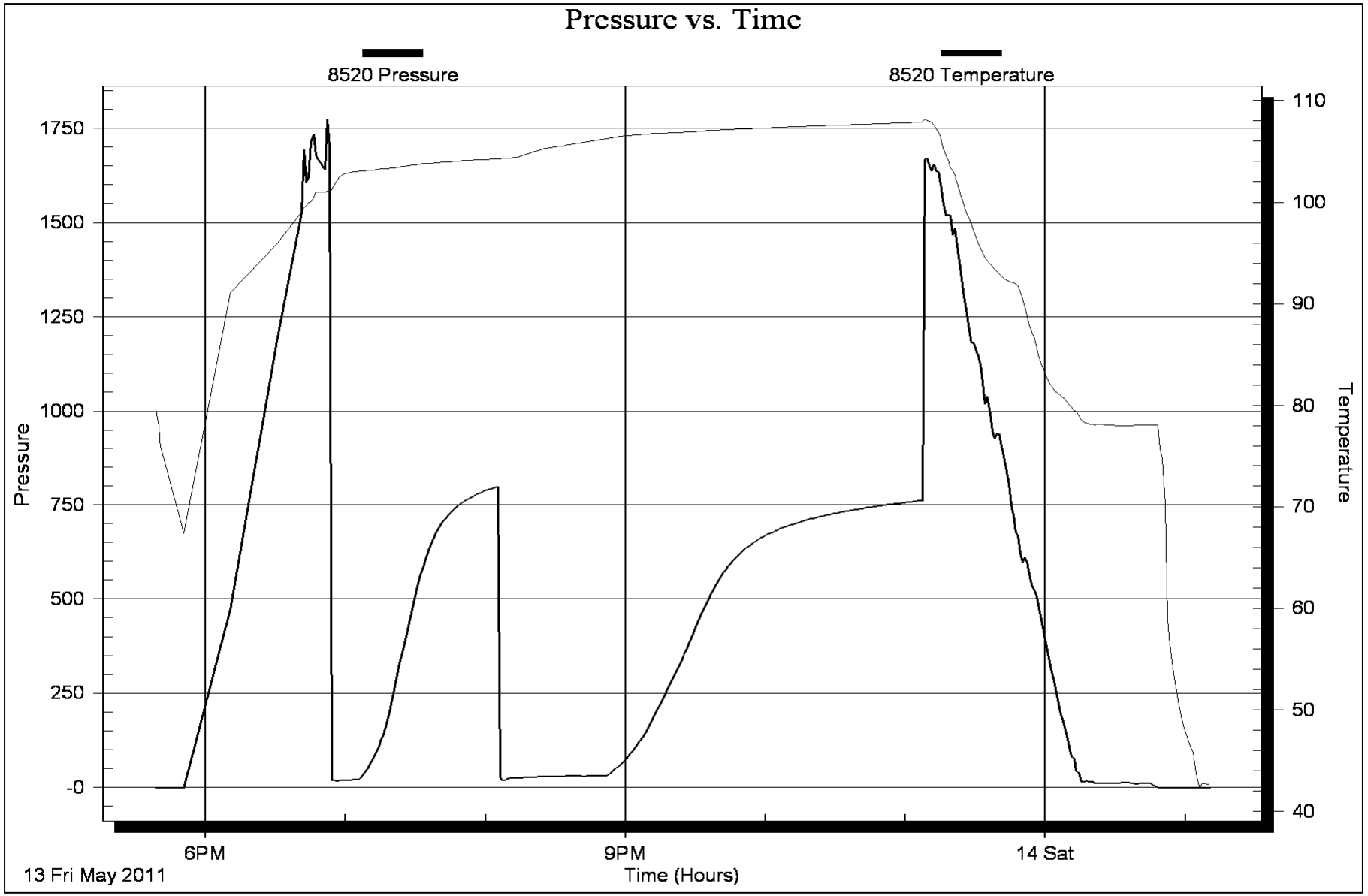
Gas Rates Information

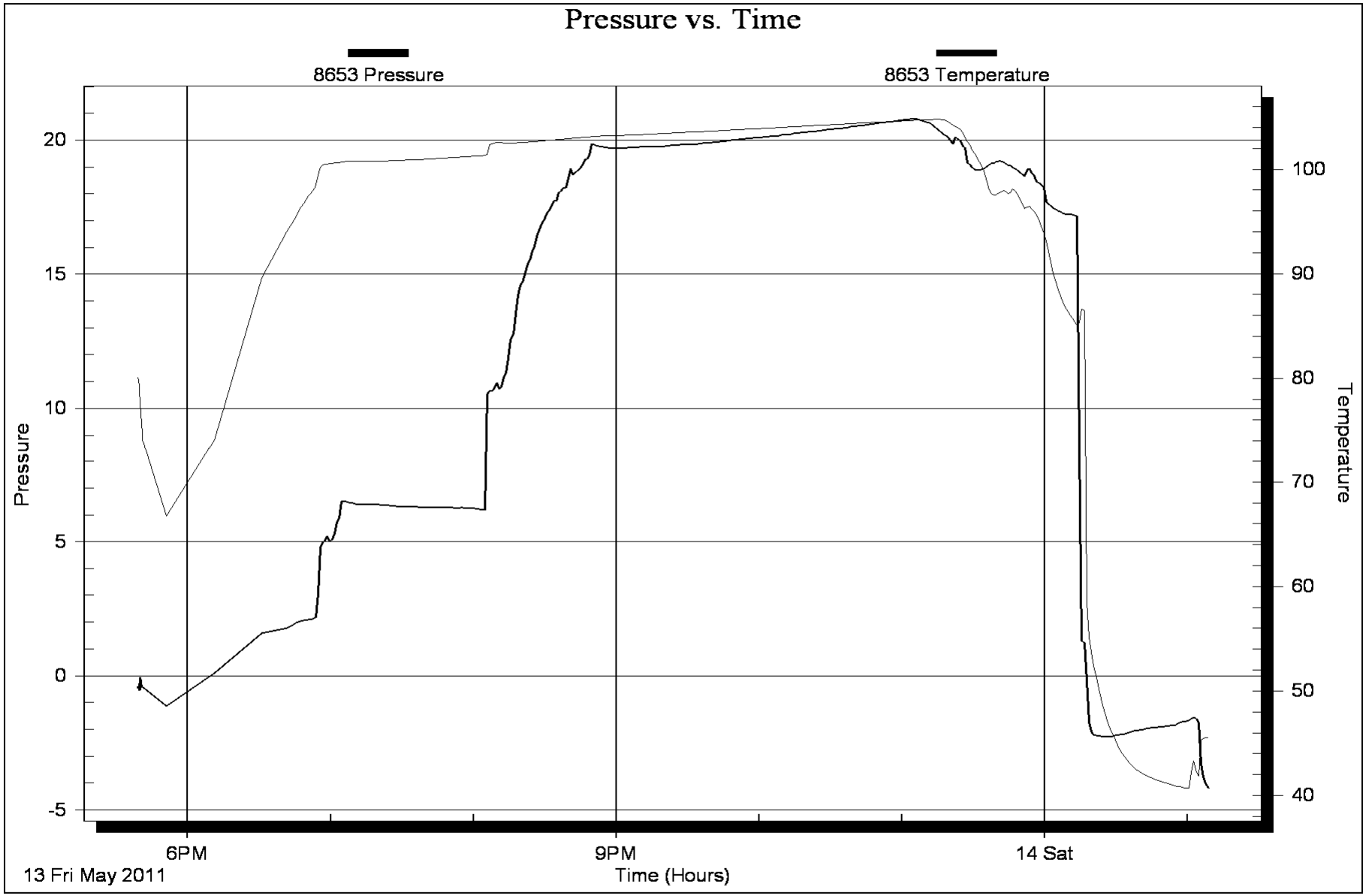
Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

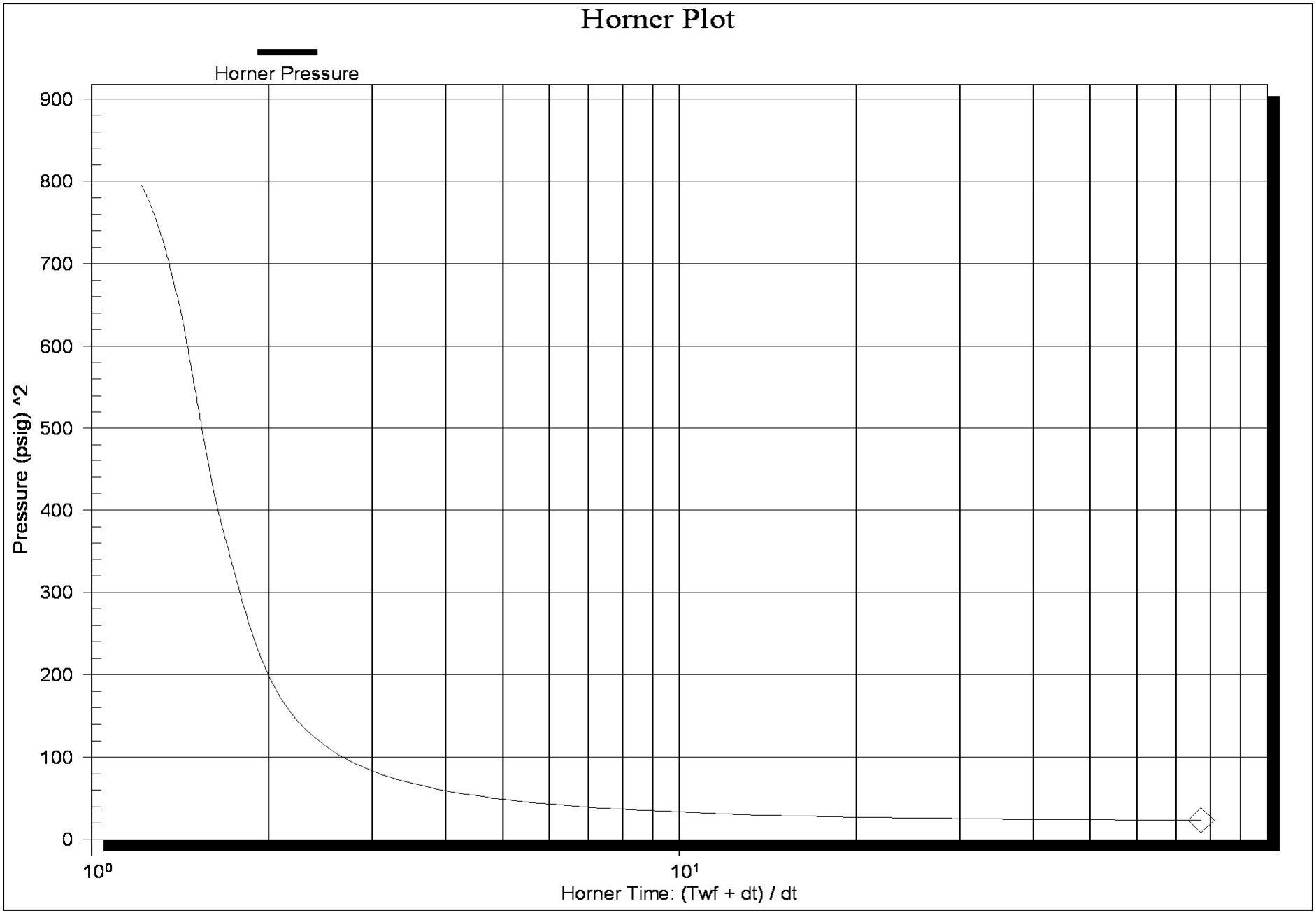
Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m^3/d)
		0.00	0.00	0.00


Pressure vs. Time
8354 Pressure
8354 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure
Temperature
1750
1500
1250
1000
750
500
250
0
110
100
90
80
70
60
50
40
6PM
9PM
14 Sat
13 Fri May 2011
Time (Hours)


Pressure vs. Time
8520 Pressure
8520 Temperature
1750
1500
1250
1000
750
500
250
-0
Pressure
110
100
90
80
70
60
50
40
Temperature
6PM
9PM
14 Sat
13 Fri May 2011
Time (Hours)

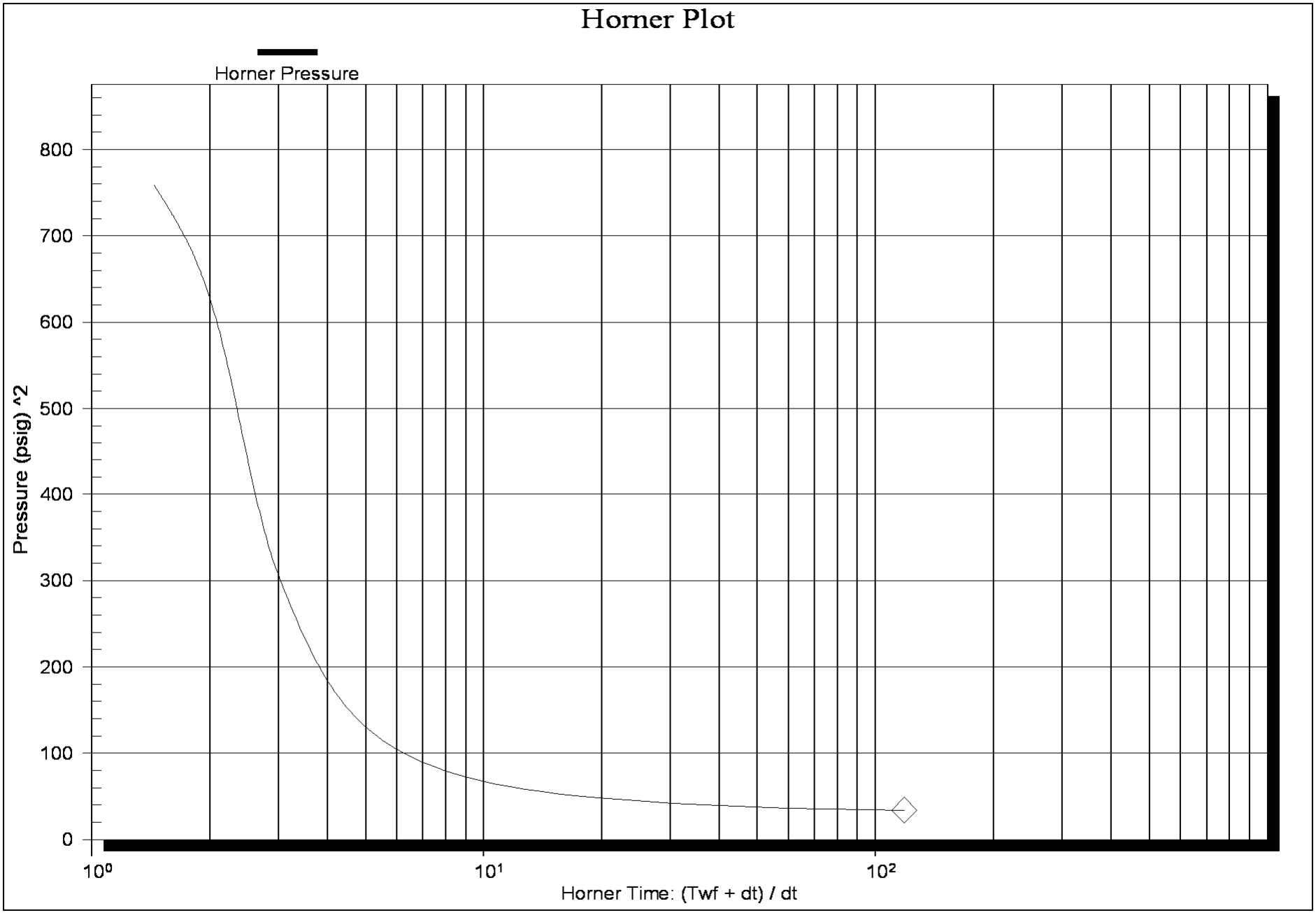

Pressure vs. Time
8653 Pressure
8653 Temperature
Pressure
Temperature
20
15
10
5
0
-5
100
90
80
70
60
50
40
6PM
9PM
14 Sat
13 Fri May 2011
Time (Hours)

Horner Plot

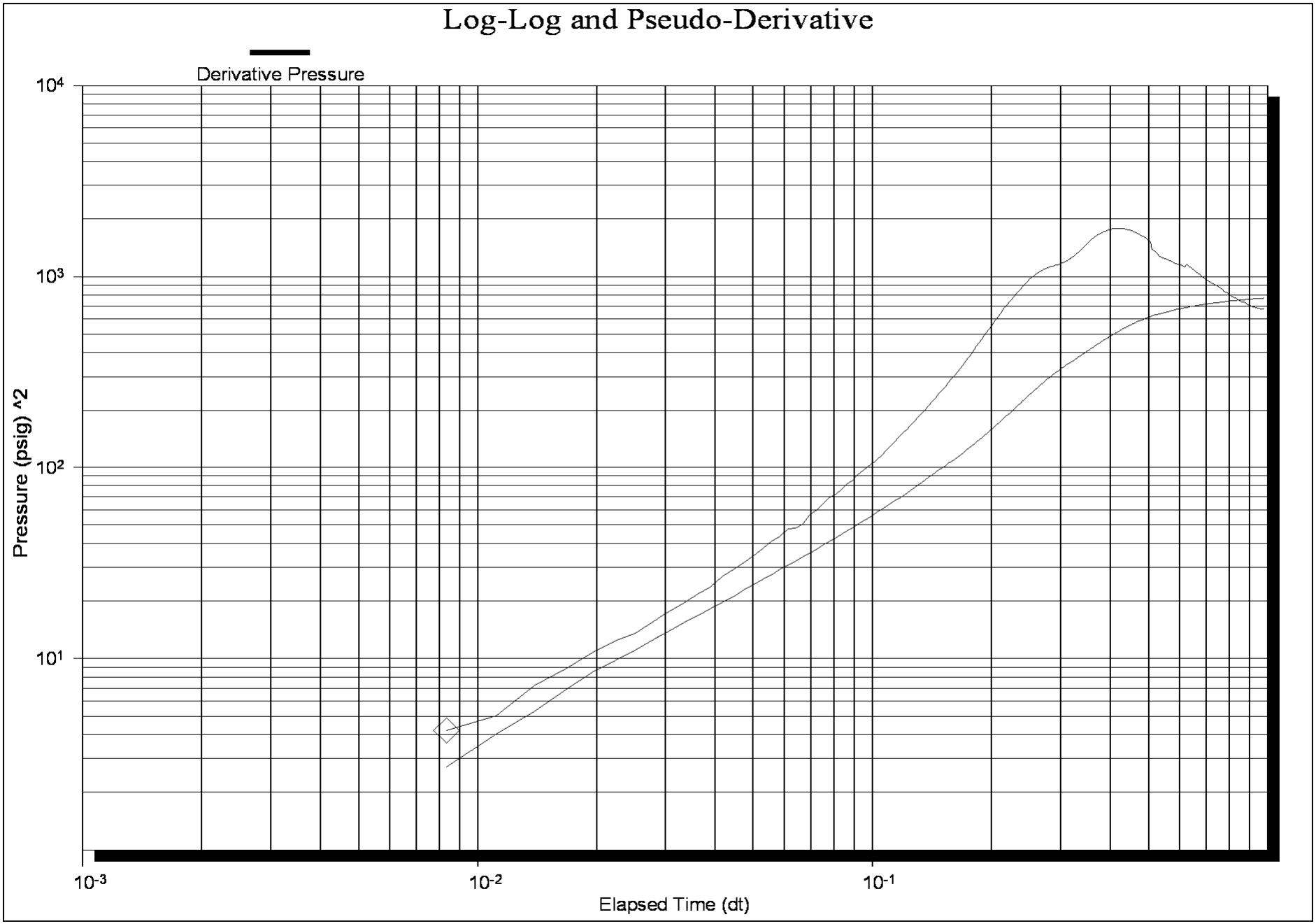


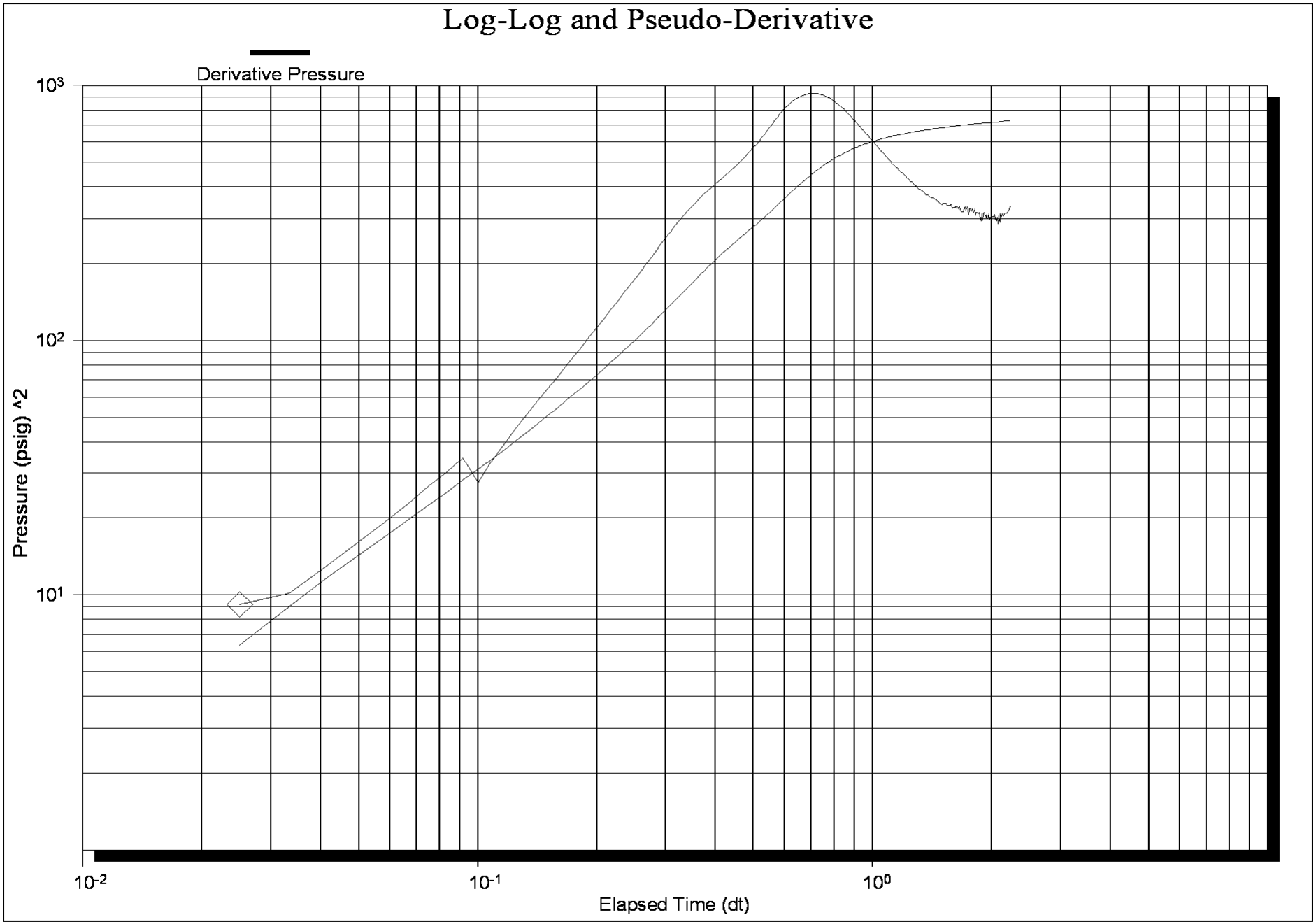
Serial Number: 8354 (Inside) P* : Slope (m) : kpa/log cycle Flow Cycle: 1

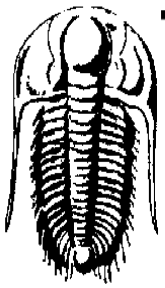
Horner Plot



Serial Number: 8354 (Inside) P* : Slope (m) : kpa/log cycle Flow Cycle: 2


Log-Log and Pseudo-Derivative
Derivative Pressure
10^4
10^3
10^2
10^1
Pressure (psig) ^2
10^-3
10^-2
10^-1
Elapsed Time (dt)


Log-Log and Pseudo-Derivative
Derivative Pressure
10^3
10^2
10^1
Pressure (psig) ^2
10^-2
10^-1
10^0
Elapsed Time (dt)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Samuel Gary Jr. & Associates Inc.**

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

26/16S/16W-Rush

Maier 1-26

Start Date: 2011.05.14 @ 19:20:08
End Date: 2011.05.15 @ 03:06:08
Job Ticket #: 42885 DST #: 4

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42885 **DST#: 4**

Test Start: 2011.05.14 @ 19:20:08

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:37:38
Time Test Ended: 03:06:08

Test Type: Conventional Bottom Hole
Tester: Dusitn Rash
Unit No: 38

Interval: 3508.00 ft (KB) To 3570.00 ft (KB) (TVD)
Total Depth: 3570.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

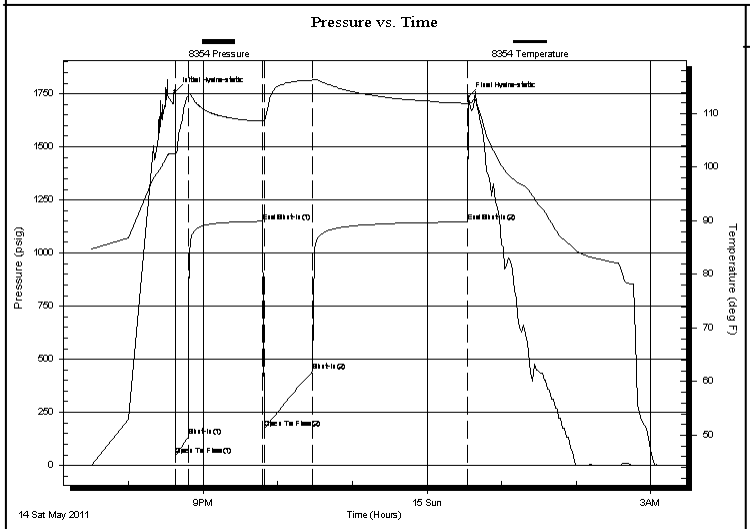
Reference Elevations: 1985.00 ft (KB)
1975.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8354 **Inside**

Press@RunDepth: 444.88 psig @ 3511.00 ft (KB)
Start Date: 2011.05.14 End Date: 2011.05.15
Start Time: 19:30:08 End Time: 03:06:08

Capacity: 8000.00 psig
Last Calib.: 2011.05.15
Time On Btm: 2011.05.14 @ 20:37:18
Time Off Btm: 2011.05.15 @ 00:33:38

TEST COMMENT: IF-Fair building blow . BOB in 5 minutes.
ISI-No Return.
FF-Fair building blow . BOB in 4 minutes 45 seconds.
FSI-No Return. Times- 10-60-4



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1761.87	102.63	Initial Hydro-static
1	46.10	102.02	Open To Flow (1)
11	135.42	113.34	Shut-In(1)
71	1149.35	108.59	End Shut-In(1)
72	172.97	108.53	Open To Flow (2)
111	444.88	116.24	Shut-In(2)
236	1146.34	111.90	End Shut-In(2)
237	1736.24	111.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
370.00	95%Water/5%Mud	5.19
310.00	80%Water/20%Mud	4.35
228.00	50%Water/50%Mud	3.20

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42885 **DST#: 4**

Test Start: 2011.05.14 @ 19:20:08

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:37:38
Time Test Ended: 03:06:08

Test Type: Conventional Bottom Hole
Tester: Dusitn Rash
Unit No: 38

Interval: 3508.00 ft (KB) To 3570.00 ft (KB) (TVD)
Total Depth: 3570.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

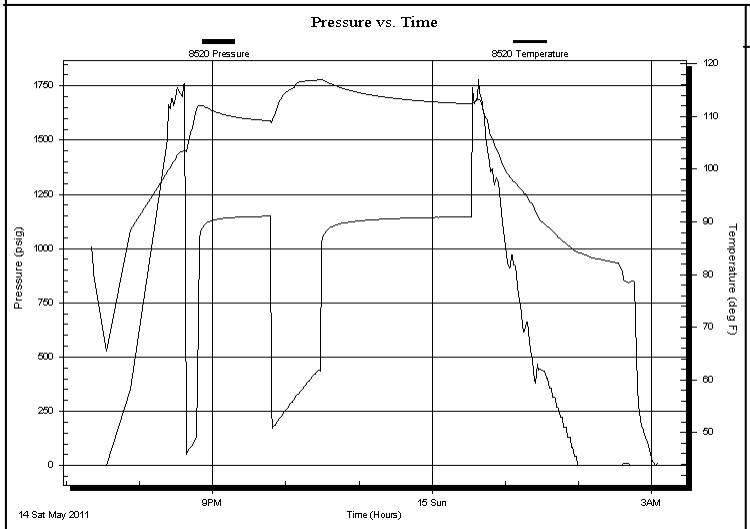
Reference Elevations: 1985.00 ft (KB)
1975.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8520 **Outside**

Press@RunDepth: psig @ 3511.00 ft (KB)
Start Date: 2011.05.14 End Date: 2011.05.15
Start Time: 19:20:32 End Time: 03:05:31

Capacity: 8000.00 psig
Last Calib.: 2011.05.15
Time On Btm:
Time Off Btm:

TEST COMMENT: IF-Fair building blow . BOB in 5 minutes.
ISI-No Return.
FF-Fair building blow . BOB in 4 minutes 45 seconds.
FSI-No Return. Times- 10-60-4



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
370.00	95%Water/5%Mud	5.19
310.00	80%Water/20%Mud	4.35
228.00	50%Water/50%Mud	3.20

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42885 **DST#: 4**

Test Start: 2011.05.14 @ 19:20:08

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:37:38
Time Test Ended: 03:06:08

Test Type: Conventional Bottom Hole
Tester: Dusitn Rash
Unit No: 38

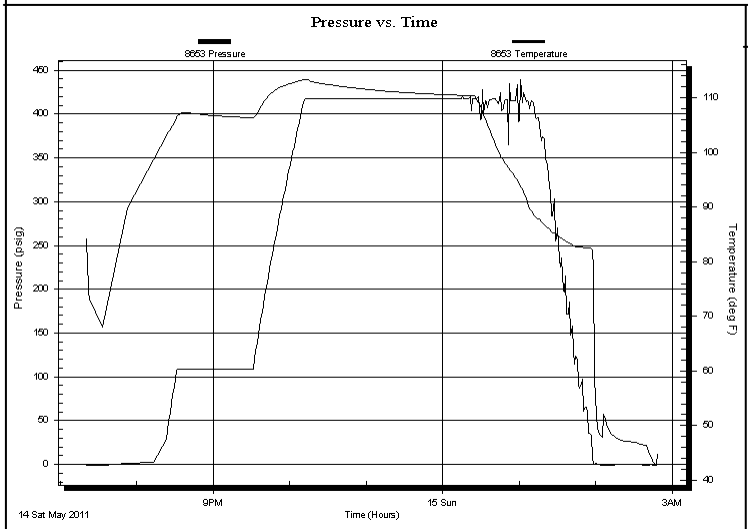
Interval: 3508.00 ft (KB) To 3570.00 ft (KB) (TVD)
Total Depth: 3570.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1985.00 ft (KB)
1975.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8653 **Fluid**
Press@RunDepth: psig @ 3478.00 ft (KB)
Start Date: 2011.05.14 End Date: 2011.05.15
Start Time: 19:20:46 End Time: 02:48:15

Capacity: 8000.00 psig
Last Calib.: 2011.05.15
Time On Btm:
Time Off Btm:

TEST COMMENT: IF-Fair building blow . BOB in 5 minutes.
ISI-No Return.
FF-Fair building blow . BOB in 4 minutes 45 seconds.
FSI-No Return. Times- 10-60-4



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
370.00	95%Water/5%Mud	5.19
310.00	80%Water/20%Mud	4.35
228.00	50%Water/50%Mud	3.20

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42885 **DST#: 4**

Test Start: 2011.05.14 @ 19:20:08

Tool Information

Drill Pipe:	Length:	3502.00 ft	Diameter:	3.80 inches	Volume:	49.12 bbl	Tool Weight:		3000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.70 inches	Volume:	0.00 bbl	Weight set on Packer:		24000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:		5000.00 lb
					Total Volume:	49.12 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		24.00 ft					String Weight:	Initial	48000.00 lb
Depth to Top Packer:		3508.00 ft						Final	52000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		62.00 ft							
Tool Length:		92.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Recorder	0.00	8653	Fluid	3478.00		
Change Over Sub	1.00			3479.00		
Shut In Tool	5.00			3484.00		
Sampler	2.00			3486.00		
Hydraulic tool	5.00			3491.00		
Jars	5.00			3496.00		
Safety Joint	3.00			3499.00		
Packer	5.00			3504.00	30.00	Bottom Of Top Packer
Packer	4.00			3508.00		
Stubb	1.00			3509.00		
Perforations	2.00			3511.00		
Recorder	0.00	8354	Inside	3511.00		
Recorder	0.00	8520	Outside	3511.00		
Change Over Sub	1.00			3512.00		
Drill Pipe	31.00			3543.00		
Change Over Sub	1.00			3544.00		
Perforations	23.00			3567.00		
Bullnose	3.00			3570.00	62.00	Bottom Packers & Anchor
Total Tool Length:	**92.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42885 **DST#: 4**

Test Start: 2011.05.14 @ 19:20:08

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:	38000 ppm
Viscosity:	60.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.19 in³	Gas Cushion Type:			
Resistivity:	0.26 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	6000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
370.00	95%Water/5%Mud	5.190
310.00	80%Water/20%Mud	4.348
228.00	50%Water/50%Mud	3.198

Total Length: 908.00 ft Total Volume: 12.736 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Sampler- 1900 ML-Water 100 ML-Oil
300#Pressure.

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42885 **DST#: 4**

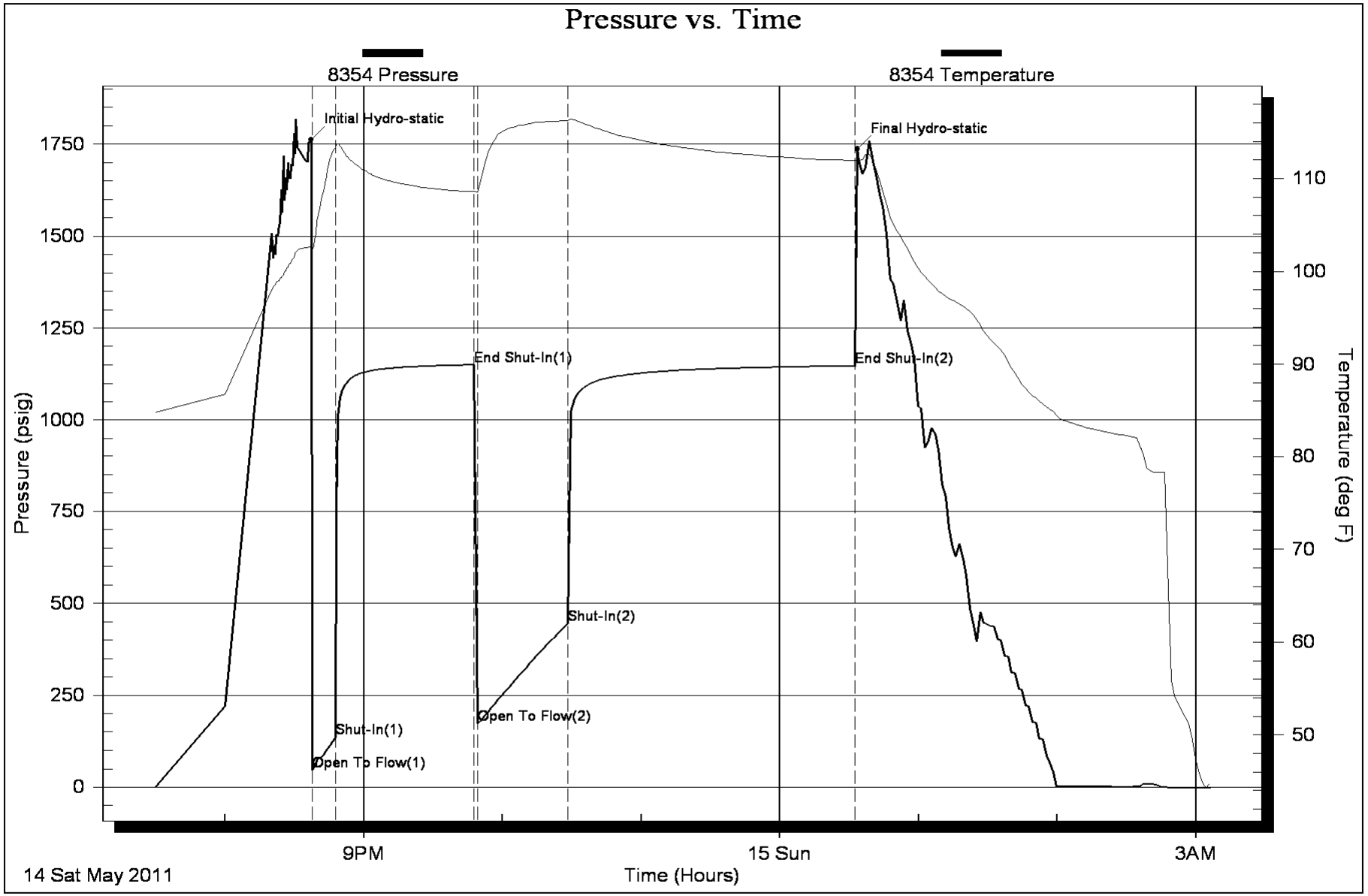
Test Start: 2011.05.14 @ 19:20:08

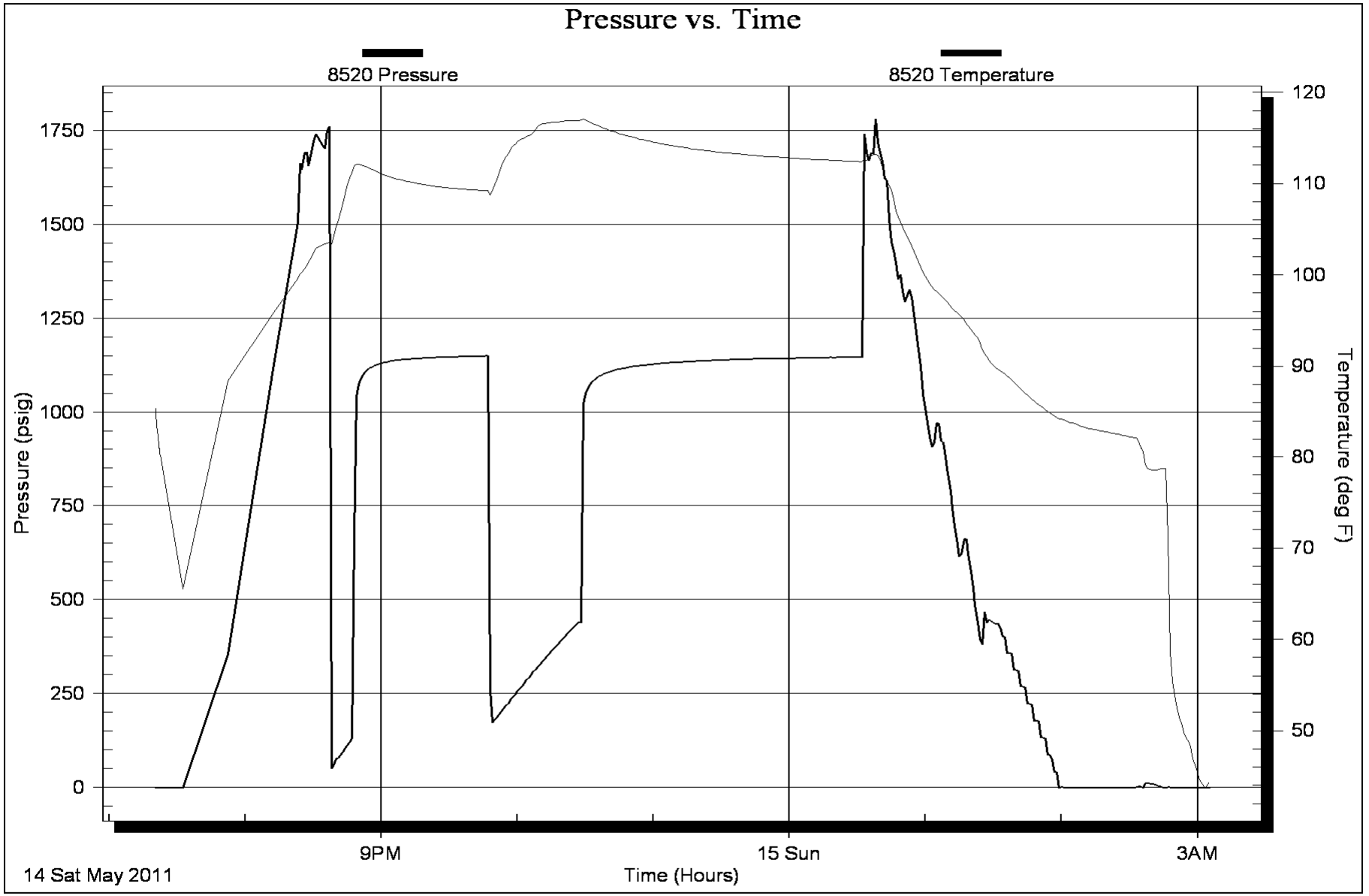
Gas Rates Information

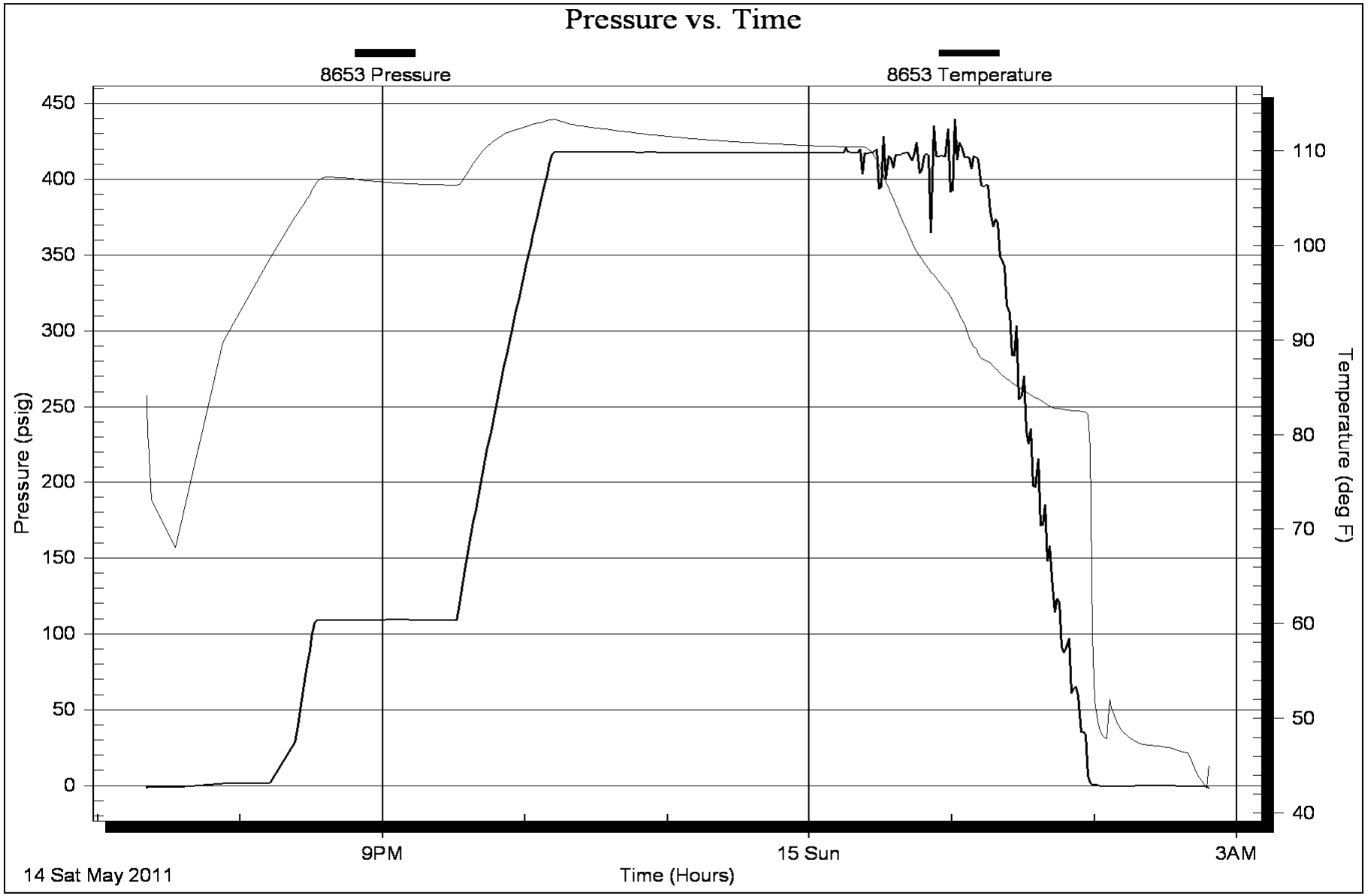
Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m^3/d)
		0.00	0.00	0.00


Pressure vs. Time
8354 Pressure
8354 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(2)
Shut-In(1)
Open To Flow(1)
Open To Flow(2)
Pressure (psig)
Temperature (deg F)
1750
1500
1250
1000
750
500
250
0
110
100
90
80
70
60
50
9PM
15 Sun
3AM
14 Sat May 2011
Time (Hours)


Pressure vs. Time
8520 Pressure
8520 Temperature
Pressure (psig)
Temperature (deg F)
1750
1500
1250
1000
750
500
250
0
120
110
100
90
80
70
60
50
9PM
15 Sun
3AM
14 Sat May 2011
Time (Hours)


Pressure vs. Time
8653 Pressure
8653 Temperature
Pressure (psig)
Temperature (deg F)
450
400
350
300
250
200
150
100
50
0
110
100
90
80
70
60
50
40
9PM
15 Sun
3AM
14 Sat May 2011
Time (Hours)

DRILL STEM TESTING - DATA LISTING

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42885 **DST#: 4**

Test Start: 2011.05.14 @ 19:20:08

Serial # 8354 Inside

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	0.99	84.8
	40.0	662.77	92.8
	50.5	1440.27	98.2
	51.2	1472.53	98.4
	51.8	1598.90	98.7
	52.5	1500.76	98.9
	53.2	1530.83	99.0
	53.8	1532.28	99.2
	54.5	1565.62	99.4
	55.2	1717.17	99.7
	55.8	1595.89	100.0
	56.5	1627.19	100.3
	57.2	1698.84	100.4
	57.8	1658.49	100.8
	58.5	1814.43	101.0
	59.2	1691.37	101.3
	59.8	1715.12	101.6
	60.5	1720.66	102.0
	61.2	1740.25	102.2
	61.8	1735.64	102.4
	62.5	1728.33	102.4
	63.2	1720.94	102.5
	63.8	1714.28	102.5
	64.5	1707.79	102.5
	65.2	1701.98	102.5
	65.8	1694.12	102.6
	66.5	1756.43	102.6
	66.8	1756.30	102.6
	67.0	1756.30	102.6
Initial Hydro-static	67.2	1761.87	102.6
	67.3	1749.71	102.6
Open To Flow (1)	67.5	46.10	102.0
	67.7	46.32	102.3

Serial # 8354 Inside

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	68.3	60.89	102.9
	69.0	60.06	103.8
	69.7	73.06	105.4
	70.3	77.81	106.4
	71.0	89.73	107.2
	71.7	82.53	107.8
	72.3	87.32	108.5
	73.0	93.70	109.3
	73.7	99.41	110.2
	74.3	105.58	111.1
	75.0	110.99	111.8
	75.7	117.13	112.4
	76.3	122.62	112.8
	77.0	128.23	113.1
	77.5	132.76	113.2
	77.7	134.15	113.3
Shut-In(1)	77.8	135.42	113.3
	78.0	270.46	113.5
	78.2	750.82	113.7
	78.3	921.81	113.7
	79.0	1035.69	113.6
	79.7	1061.82	113.5
	80.3	1076.57	113.2
	81.0	1086.93	113.0
	81.7	1094.47	112.7
	82.3	1100.60	112.5
	83.0	1105.55	112.3
	83.7	1109.81	112.1
	84.3	1113.12	111.9
	85.0	1116.20	111.8
	85.7	1118.71	111.6
	86.3	1121.08	111.5
	87.0	1122.75	111.4

Printing every 4 samples

Serial # 8354 Inside				Serial # 8354 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	87.7	1124.58	111.3		125.0	1147.56	108.8
	88.3	1126.09	111.1		127.0	1147.89	108.7
	89.0	1127.49	111.0		129.0	1148.24	108.7
	89.7	1128.72	110.9		131.0	1148.50	108.7
	90.3	1129.90	110.8		133.0	1149.09	108.6
	91.0	1130.98	110.7		135.0	1149.19	108.6
	91.7	1131.87	110.6		136.5	1149.29	108.6
	92.3	1132.71	110.5		137.0	1149.32	108.6
	93.0	1133.69	110.5	End Shut-In(1)	137.5	1149.35	108.6
	93.7	1134.31	110.4		138.0	1149.33	108.6
	94.3	1135.12	110.3		138.5	289.06	108.2
	95.0	1135.75	110.2	Open To Flow (2)	139.0	172.97	108.5
	95.7	1136.33	110.2		139.5	174.83	108.9
	96.3	1136.91	110.1		140.0	178.84	109.4
	97.0	1137.60	110.0		140.5	182.69	110.1
	97.7	1138.04	110.0		142.5	196.92	112.0
	98.3	1138.45	109.9		144.5	211.93	113.4
	99.0	1139.04	109.9		146.5	227.01	114.2
	99.7	1139.35	109.8		148.5	242.26	114.9
	100.3	1139.68	109.8		150.5	257.10	115.2
	101.0	1140.20	109.7		152.5	271.52	115.4
	101.7	1140.60	109.7		154.5	286.17	115.5
	102.3	1140.89	109.6		156.5	300.77	115.7
	103.0	1141.25	109.6		158.5	315.07	115.8
	103.7	1141.63	109.6		160.5	329.15	115.9
	104.3	1141.85	109.5		162.5	342.95	116.0
	105.0	1142.27	109.5		164.5	356.77	116.0
	105.7	1142.52	109.5		166.5	370.47	116.1
	106.3	1142.77	109.4		168.5	383.77	116.1
	107.0	1143.04	109.4		170.5	397.06	116.2
	107.7	1143.27	109.4		172.5	409.99	116.2
	108.3	1143.85	109.3		174.5	422.83	116.2
	109.0	1143.66	109.3		176.5	435.42	116.2
	109.7	1143.86	109.3		177.0	438.45	116.2
	111.0	1144.28	109.2		177.5	441.61	116.2
	113.0	1144.92	109.1	Shut-In(2)	178.0	444.88	116.2
	115.0	1145.54	109.0		178.5	439.31	116.2
	117.0	1145.95	109.0		179.0	977.04	116.4
	119.0	1146.45	108.9		179.5	1022.56	116.4
	121.0	1146.93	108.9		181.5	1064.47	116.2
	123.0	1147.25	108.8		183.5	1081.57	116.0

Printing every 4 samples

Serial # 8354 Inside				Serial # 8354 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	185.5	1091.74	115.8		267.5	1143.14	112.3
	187.5	1098.85	115.7		269.5	1143.31	112.3
	189.5	1104.25	115.5		271.5	1143.87	112.3
	191.5	1108.29	115.3		273.5	1143.74	112.3
	193.5	1111.83	115.1		275.5	1143.90	112.2
	195.5	1114.75	115.0		277.5	1144.15	112.2
	197.5	1117.14	114.8		279.5	1144.39	112.1
	199.5	1119.39	114.7		281.5	1144.50	112.1
	201.5	1121.23	114.6		283.5	1145.11	112.1
	203.5	1122.90	114.4		285.5	1144.95	112.1
	205.5	1124.45	114.3		287.5	1145.48	112.0
	207.5	1125.91	114.2		289.5	1145.64	112.0
	209.5	1127.22	114.1		291.5	1145.47	112.0
	211.5	1128.25	114.0		293.5	1145.92	112.0
	213.5	1129.30	113.9		295.5	1146.06	112.0
	215.5	1130.44	113.8		297.5	1146.16	111.9
	217.5	1131.18	113.7		299.5	1146.23	111.9
	219.5	1132.00	113.6		301.5	1146.30	111.9
	221.5	1132.97	113.5		302.0	1146.32	111.9
	223.5	1133.67	113.5	End Shut-In(2)	302.5	1146.34	111.9
	225.5	1134.39	113.4		303.0	1579.32	112.0
	227.5	1135.04	113.3	Final Hydro-static	303.5	1736.24	112.0
	229.5	1135.66	113.3		304.0	1704.47	111.9
	231.5	1136.21	113.2		306.0	1689.88	112.2
	233.5	1136.71	113.1		308.0	1703.62	112.7
	235.5	1137.34	113.1		310.0	1704.19	112.1
	237.5	1137.69	113.0		312.0	1560.11	110.8
	239.5	1138.24	113.0		314.0	1594.23	108.9
	241.5	1138.66	112.9		316.0	1505.51	107.2
	243.5	1139.13	112.8		318.0	1415.57	105.5
	245.5	1139.60	112.8		320.0	1323.21	104.6
	247.5	1139.91	112.7		322.0	1270.87	103.8
	249.5	1140.37	112.7		324.0	1274.38	102.9
	251.5	1140.73	112.7		326.0	1177.87	101.9
	253.5	1141.06	112.6		328.0	1165.73	101.0
	255.5	1141.36	112.6		330.0	1075.79	100.2
	257.5	1141.72	112.5		332.0	985.30	99.6
	259.5	1141.96	112.5		334.0	940.43	99.0
	261.5	1142.29	112.5		336.0	958.43	98.5
	263.5	1142.45	112.4		338.0	923.18	98.0
	265.5	1142.80	112.4		340.0	822.66	97.6

Printing every 4 samples

Serial # 8354 Inside				Serial # 8354 Inside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	342.0	753.17	97.2		424.0	1.25	82.1
	344.0	695.32	97.0		426.0	1.49	80.9
	346.0	627.71	96.7		428.0	8.93	79.0
	348.0	651.97	96.4		430.0	8.88	78.5
	350.0	575.12	96.1		432.0	6.78	78.3
	352.0	486.43	95.6		434.0	1.42	78.3
	354.0	417.87	95.0		436.0	-0.42	78.2
	356.0	427.88	94.4		438.0	-0.96	62.7
	358.0	446.65	93.6		440.0	-1.72	54.6
	360.0	440.79	92.9		442.0	-1.69	53.4
	362.0	433.79	92.4		444.0	-1.70	52.4
	364.0	402.79	91.9		446.0	-1.74	51.5
	366.0	398.84	91.4		448.0	-1.80	49.5
	368.0	357.92	90.4		450.0	-1.69	46.9
	370.0	312.74	89.6		452.0	-1.89	45.2
	372.0	263.24	88.8		454.0	-1.76	44.3
	374.0	266.47	88.0		456.0	-1.97	45.2
	376.0	221.89	87.4				
	378.0	192.97	86.9				
	380.0	176.04	86.5				
	382.0	131.60	86.0				
	384.0	89.15	85.6				
	386.0	85.81	85.2				
	388.0	41.17	84.9				
	390.0	1.37	84.2				
	392.0	0.16	84.0				
	394.0	1.86	83.8				
	396.0	1.94	83.7				
	398.0	2.35	83.5				
	400.0	2.89	83.3				
	402.0	3.24	83.2				
	404.0	2.67	83.1				
	406.0	2.58	83.0				
	408.0	1.51	82.9				
	410.0	1.86	82.7				
	412.0	1.83	82.6				
	414.0	0.39	82.5				
	416.0	0.38	82.4				
	418.0	0.52	82.3				
	420.0	0.43	82.3				
	422.0	1.09	82.2				

Printing every 3 samples

DRILL STEM TESTING - DATA LISTING

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42885 **DST#: 4**

Test Start: 2011.05.14 @ 19:20:08

Serial # 8520 Outside

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	-1.04	85.3
	0.1	-0.96	85.2
	0.1	-0.94	85.0
	0.2	-0.96	84.8
	0.2	-0.95	84.6
	0.3	-0.95	84.4
	0.3	-0.93	84.1
	0.3	-0.92	83.9
	0.4	-0.90	83.7
	0.4	-0.88	83.6
	0.5	-0.86	83.4
	0.6	-0.86	83.3
	0.6	-0.88	83.2
	0.7	-0.88	83.1
	0.7	-0.88	83.0
	0.8	-0.89	82.9
	0.8	-0.89	82.8
	0.9	-0.89	82.6
	0.9	-0.89	82.5
	0.9	-0.91	82.4
	1.0	-0.89	82.3
	1.1	-0.90	82.2
	1.1	-0.89	82.1
	1.1	-0.89	82.0
	1.2	-0.87	81.9
	1.3	-0.88	81.7
	1.3	-0.88	81.6
	1.4	-0.89	81.5
	1.4	-0.89	81.4
	1.5	-0.89	81.3
	1.5	-0.89	81.2
	1.6	-0.88	81.0
	1.6	-0.87	80.9

Serial # 8520 Outside

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	1.6	-0.87	80.8
	1.7	-0.89	80.7
	1.8	-0.88	80.6
	1.8	-0.90	80.5
	1.9	-0.91	80.4
	1.9	-0.92	80.3
	2.0	-0.93	80.2
	12.0	-0.97	65.5
	42.0	819.10	93.9
	62.5	1504.76	99.6
	64.0	1564.55	100.1
	65.5	1690.72	100.7
	67.0	1659.38	101.3
	68.5	1691.48	101.9
	70.0	1757.80	102.6
	71.5	1732.02	103.0
	73.0	1715.84	103.2
	74.5	1701.22	103.4
	76.0	1755.22	103.5
	77.5	51.31	103.4
	79.0	71.84	104.9
	80.5	77.94	106.0
	82.0	89.89	107.4
	83.5	103.80	108.9
	85.0	116.95	110.3
	86.5	130.03	111.2
	88.0	1005.01	112.1
	89.5	1073.90	112.1
	91.0	1095.44	112.0
	92.5	1107.58	111.9
	94.0	1115.57	111.7
	95.5	1121.08	111.5
	97.0	1125.27	111.4

Printing every 3 samples

Serial # 8520 Outside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	98.5	1128.40	111.2		160.0	259.86	114.7
	100.0	1130.88	111.0		161.5	270.89	114.9
	101.5	1133.01	110.9		163.0	281.97	115.1
	103.0	1134.78	110.8		164.5	292.74	115.3
	104.5	1136.43	110.7		166.0	303.79	115.5
	106.0	1137.40	110.6		167.5	314.65	116.0
	107.5	1138.75	110.4		169.0	325.40	116.4
	109.0	1139.54	110.3		170.5	335.86	116.5
	110.5	1140.52	110.3		172.0	345.81	116.6
	112.0	1141.38	110.2		173.5	356.28	116.7
	113.5	1142.03	110.1		175.0	366.79	116.7
	115.0	1142.52	110.0		176.5	377.02	116.8
	116.5	1143.18	110.0		178.0	386.76	116.8
	118.0	1143.77	109.9		179.5	396.69	116.8
	119.5	1144.09	109.8		181.0	406.63	116.9
	121.0	1144.75	109.8		182.5	416.41	116.9
	122.5	1145.10	109.7		184.0	425.68	116.9
	124.0	1145.42	109.7		185.5	435.30	116.9
	125.5	1145.82	109.6		187.0	444.60	116.9
	127.0	1146.13	109.6		188.5	1021.56	117.0
	128.5	1146.45	109.6		190.0	1058.18	116.9
	130.0	1146.78	109.5		191.5	1074.49	116.7
	131.5	1147.10	109.5		193.0	1084.73	116.6
	133.0	1147.37	109.4		194.5	1091.93	116.4
	134.5	1147.56	109.4		196.0	1097.39	116.2
	136.0	1147.85	109.4		197.5	1101.84	116.1
	137.5	1148.14	109.4		199.0	1105.45	115.9
	139.0	1148.29	109.3		200.5	1108.39	115.8
	140.5	1148.88	109.3		202.0	1111.03	115.7
	142.0	1148.63	109.3		203.5	1113.35	115.5
	143.5	1149.04	109.3		205.0	1115.42	115.4
	145.0	1149.12	109.2		206.5	1117.18	115.3
	146.5	1149.22	109.2		208.0	1119.05	115.2
	148.0	171.27	109.1		209.5	1120.51	115.1
	149.5	180.97	109.9		211.0	1121.64	115.0
	151.0	191.35	110.9		212.5	1122.99	114.9
	152.5	202.42	111.9		214.0	1124.12	114.9
	154.0	213.74	112.7		215.5	1125.20	114.8
	155.5	225.47	113.4		217.0	1126.22	114.7
	157.0	237.11	113.9		218.5	1127.03	114.6
	158.5	248.65	114.4		220.0	1127.97	114.5

Printing every 3 samples

Serial # 8520 Outside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	221.5	1128.92	114.4		283.0	1143.61	112.8
	223.0	1129.58	114.4		284.5	1143.70	112.7
	224.5	1130.27	114.3		286.0	1143.95	112.7
	226.0	1130.97	114.2		287.5	1144.09	112.7
	227.5	1131.53	114.2		289.0	1144.59	112.7
	229.0	1132.26	114.1		290.5	1144.39	112.6
	230.5	1132.75	114.0		292.0	1144.90	112.6
	232.0	1133.34	114.0		293.5	1145.03	112.6
	233.5	1133.83	114.0		295.0	1145.16	112.6
	235.0	1134.41	113.9		296.5	1144.99	112.6
	236.5	1134.90	113.8		298.0	1145.42	112.6
	238.0	1135.36	113.8		299.5	1145.19	112.5
	239.5	1135.82	113.7		301.0	1145.32	112.5
	241.0	1136.34	113.7		302.5	1145.73	112.5
	242.5	1136.72	113.6		304.0	1145.84	112.5
	244.0	1137.03	113.6		305.5	1145.94	112.5
	245.5	1137.41	113.5		307.0	1146.00	112.4
	247.0	1137.71	113.5		308.5	1146.05	112.4
	248.5	1138.14	113.5		310.0	1146.11	112.4
	250.0	1138.40	113.4		311.5	1146.14	112.4
	251.5	1138.76	113.4		313.0	1705.52	112.6
	253.0	1139.02	113.3		314.5	1669.30	112.7
	254.5	1139.49	113.3		316.0	1685.82	113.1
	256.0	1139.75	113.3		317.5	1779.58	113.2
	257.5	1139.93	113.2		319.0	1705.98	112.7
	259.0	1140.22	113.2		320.5	1668.47	111.8
	260.5	1140.55	113.2		322.0	1615.68	110.4
	262.0	1140.79	113.1		323.5	1514.09	109.7
	263.5	1141.08	113.1		325.0	1507.26	108.6
	265.0	1141.24	113.1		326.5	1397.47	107.0
	266.5	1141.57	113.0		328.0	1369.18	106.1
	268.0	1141.77	113.0		329.5	1322.16	105.2
	269.5	1141.85	113.0		331.0	1247.58	104.5
	271.0	1142.12	113.0		332.5	1326.37	103.7
	272.5	1142.34	112.9		334.0	1252.14	102.8
	274.0	1142.58	112.9		335.5	1213.78	102.0
	275.5	1142.75	112.9		337.0	1166.76	101.1
	277.0	1142.89	112.9		338.5	1047.33	100.3
	278.5	1143.52	112.8		340.0	1030.93	99.6
	280.0	1143.68	112.8		341.5	933.88	99.1
	281.5	1143.42	112.8		343.0	940.16	98.6

Printing every 3 samples

Serial # 8520 Outside				Serial # 8520 Outside			
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	344.5	971.06	98.2		406.0	-0.67	83.7
	346.0	968.23	97.8		407.5	-0.67	83.5
	347.5	920.68	97.4		409.0	-0.69	83.4
	349.0	830.44	97.1		410.5	-0.70	83.2
	350.5	788.04	96.6		412.0	-0.72	83.1
	352.0	701.24	96.2		413.5	-0.72	83.1
	353.5	646.88	95.9		415.0	-0.73	83.0
	355.0	625.85	95.6		416.5	-0.72	82.9
	356.5	659.22	95.1		418.0	-0.72	82.8
	358.0	617.03	94.5		419.5	-0.70	82.8
	359.5	575.04	94.0		421.0	-0.69	82.7
	361.0	491.52	93.5		422.5	-0.69	82.6
	362.5	439.32	93.1		424.0	-0.69	82.6
	364.0	395.54	92.2		425.5	-0.69	82.5
	365.5	467.30	91.4		427.0	-0.65	82.4
	367.0	447.06	90.8		428.5	-0.63	82.3
	368.5	443.13	90.3		430.0	-0.61	82.3
	370.0	436.91	89.9		431.5	-0.55	82.2
	371.5	436.62	89.6		433.0	1.33	82.1
	373.0	403.26	89.4		434.5	1.60	81.1
	374.5	401.41	89.1		436.0	9.77	79.9
	376.0	358.59	88.9		437.5	9.56	78.7
	377.5	356.01	88.5		439.0	9.37	78.6
	379.0	313.11	88.1		440.5	8.51	78.5
	380.5	310.73	87.7		442.0	5.48	78.6
	382.0	267.99	87.4		443.5	2.27	78.7
	383.5	265.66	87.0		445.0	-0.82	78.7
	385.0	222.36	86.7		446.5	-0.50	71.2
	386.5	220.47	86.4		448.0	-0.52	56.6
	388.0	176.99	86.1		449.5	-1.02	53.8
	389.5	176.14	85.8		451.0	-1.04	51.9
	391.0	131.92	85.5		452.5	-1.04	50.5
	392.5	131.07	85.2		454.0	-1.03	49.5
	394.0	86.22	85.0		455.5	-1.04	48.7
	395.5	72.71	84.7		457.0	-1.04	47.5
	397.0	41.38	84.4		458.5	-1.06	46.0
	398.5	-0.59	84.2		460.0	-1.06	44.9
	400.0	-0.46	84.2		461.5	-1.10	44.1
	401.5	-0.70	84.0		463.0	-1.07	43.4
	403.0	-0.69	83.9		464.5	-1.00	44.4
	404.5	-0.69	83.8		465.0	-1.07	44.9

Printing every 3 samples

DRILL STEM TESTING - DATA LISTING

Samuel Gary Jr. & Associates Inc.

1515 Wynkoop St. Ste 700
Denver,CO 80202

ATTN: Neil

Maier 1-26

26/16S/16W-Rush

Job Ticket: 42885 **DST#: 4**

Test Start: 2011.05.14 @ 19:20:08

Serial # 8653 **Fluid**

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	0.0	-1.53	84.1
	0.1	-0.79	82.5
	0.1	-0.71	82.2
	0.2	-0.70	81.9
	0.2	-0.69	81.6
	0.3	-0.69	81.3
	0.3	-0.69	81.0
	0.3	-0.71	80.7
	0.4	-0.72	80.5
	0.4	-0.74	80.2
	0.5	-0.78	79.9
	0.6	-0.81	79.6
	0.6	-0.86	79.3
	0.7	-0.91	79.1
	0.7	-0.95	78.8
	0.8	-0.97	78.5
	0.8	-0.98	78.3
	0.9	-1.00	78.1
	0.9	-1.02	77.9
	0.9	-1.03	77.6
	1.0	-1.04	77.4
	1.1	-1.04	77.2
	1.1	-1.04	77.0
	1.1	-1.04	76.8
	1.2	-1.06	76.5
	1.3	-1.08	76.3
	1.3	-1.11	76.1
	1.4	-1.13	75.8
	1.4	-1.17	75.6
	1.5	-1.19	75.4
	1.5	-1.22	75.2
	1.6	-1.25	74.9
	1.6	-1.28	74.7

Serial # 8653 **Fluid**

Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	1.6	-1.27	74.5
	1.7	-1.27	74.2
	1.8	-1.22	74.0
	1.8	-1.19	73.8
	1.9	-1.16	73.6
	1.9	-1.12	73.4
	2.0	-1.14	73.2
	12.0	-1.27	68.1
	42.0	1.67	94.4
	62.5	28.69	103.0
	64.0	44.43	103.7
	65.5	59.59	104.2
	67.0	74.69	104.7
	68.5	88.72	105.4
	70.0	102.69	106.1
	71.5	108.63	106.7
	73.0	108.55	107.0
	74.5	108.62	107.2
	76.0	108.69	107.2
	77.5	108.77	107.3
	79.0	108.80	107.2
	80.5	108.83	107.2
	82.0	108.85	107.2
	83.5	108.86	107.1
	85.0	108.85	107.1
	86.5	108.84	107.1
	88.0	108.84	107.0
	89.5	108.84	107.0
	91.0	108.86	106.9
	92.5	108.89	106.9
	94.0	108.91	106.8
	95.5	108.93	106.8
	97.0	108.96	106.8

Printing every 3 samples

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	98.5	108.97	106.7
	100.0	109.01	106.7
	101.5	109.04	106.7
	103.0	109.05	106.7
	104.5	109.05	106.6
	106.0	109.05	106.6
	107.5	109.03	106.6
	109.0	109.02	106.6
	110.5	109.02	106.5
	112.0	108.95	106.5
	113.5	108.92	106.5
	115.0	108.90	106.5
	116.5	108.87	106.5
	118.0	108.87	106.5
	119.5	108.87	106.5
	121.0	108.91	106.4
	122.5	108.93	106.4
	124.0	108.94	106.4
	125.5	108.96	106.4
	127.0	109.00	106.4
	128.5	108.96	106.4
	130.0	108.96	106.4
	131.5	119.76	106.5
	133.0	134.44	106.9
	134.5	147.94	107.5
	136.0	160.92	108.1
	137.5	173.85	108.7
	139.0	186.12	109.2
	140.5	198.75	109.7
	142.0	211.08	110.2
	143.5	223.02	110.5
	145.0	234.92	110.9
	146.5	246.60	111.1
	148.0	258.14	111.4
	149.5	269.39	111.6
	151.0	280.86	111.8
	152.5	292.07	112.0
	154.0	302.86	112.2
	155.5	313.65	112.3
	157.0	324.38	112.4
	158.5	335.18	112.5

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	160.0	345.88	112.6
	161.5	356.37	112.7
	163.0	366.33	112.9
	164.5	376.66	112.9
	166.0	386.78	113.0
	167.5	396.61	113.1
	169.0	406.51	113.2
	170.5	416.17	113.3
	172.0	417.74	113.3
	173.5	417.63	113.2
	175.0	417.64	113.1
	176.5	417.70	113.0
	178.0	417.72	112.9
	179.5	417.73	112.8
	181.0	417.75	112.7
	182.5	417.76	112.7
	184.0	417.76	112.6
	185.5	417.78	112.5
	187.0	417.77	112.5
	188.5	417.74	112.5
	190.0	417.71	112.4
	191.5	417.70	112.4
	193.0	417.68	112.3
	194.5	417.68	112.3
	196.0	417.67	112.2
	197.5	417.66	112.2
	199.0	417.65	112.1
	200.5	417.64	112.1
	202.0	417.62	112.0
	203.5	417.61	112.0
	205.0	417.60	111.9
	206.5	417.57	111.9
	208.0	417.57	111.8
	209.5	417.59	111.8
	211.0	417.59	111.8
	212.5	417.58	111.7
	214.0	417.59	111.7
	215.5	417.57	111.6
	217.0	417.54	111.6
	218.5	417.52	111.6
	220.0	417.51	111.5

Printing every 3 samples

Serial # 8653	Fluid			Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)	Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	221.5	417.49	111.5		283.0	417.30	110.5
	223.0	417.49	111.5		284.5	417.30	110.5
	224.5	417.48	111.4		286.0	417.29	110.5
	226.0	417.47	111.4		287.5	417.27	110.5
	227.5	417.48	111.4		289.0	417.26	110.5
	229.0	417.47	111.3		290.5	417.25	110.5
	230.5	417.46	111.3		292.0	417.25	110.5
	232.0	417.47	111.3		293.5	417.28	110.4
	233.5	417.46	111.2		295.0	345.89	110.4
	235.0	417.47	111.2		296.5	417.58	110.4
	236.5	417.46	111.2		298.0	417.50	110.4
	238.0	417.47	111.2		299.5	417.42	110.4
	239.5	417.47	111.1		301.0	423.99	110.4
	241.0	417.46	111.1		302.5	417.53	110.4
	242.5	417.45	111.1		304.0	406.48	110.2
	244.0	417.45	111.0		305.5	417.52	109.8
	245.5	417.45	111.0		307.0	419.07	109.3
	247.0	417.45	111.0		308.5	393.71	108.5
	248.5	417.45	111.0		310.0	415.82	107.7
	250.0	417.44	110.9		311.5	400.39	106.8
	251.5	417.43	110.9		313.0	417.29	105.9
	253.0	417.42	110.9		314.5	407.50	105.0
	254.5	417.42	110.9		316.0	441.27	104.1
	256.0	417.42	110.9		317.5	415.99	103.2
	257.5	417.43	110.8		319.0	449.18	102.3
	259.0	417.43	110.8		320.5	417.68	101.5
	260.5	417.43	110.8		322.0	405.97	100.6
	262.0	417.43	110.8		323.5	416.82	99.9
	263.5	417.41	110.8		325.0	415.54	99.2
	265.0	417.40	110.7		326.5	405.89	98.6
	266.5	417.39	110.7		328.0	416.53	98.0
	268.0	417.37	110.7		329.5	415.93	97.5
	269.5	417.37	110.7		331.0	414.74	97.1
	271.0	417.36	110.7		332.5	415.45	96.6
	272.5	417.34	110.6		334.0	412.25	96.2
	274.0	417.33	110.6		335.5	415.56	95.7
	275.5	417.33	110.6		337.0	414.85	95.2
	277.0	417.31	110.6		338.5	391.36	94.7
	278.5	417.31	110.6		340.0	414.88	94.0
	280.0	417.32	110.6		341.5	412.73	93.3
	281.5	417.31	110.6		343.0	424.87	92.5

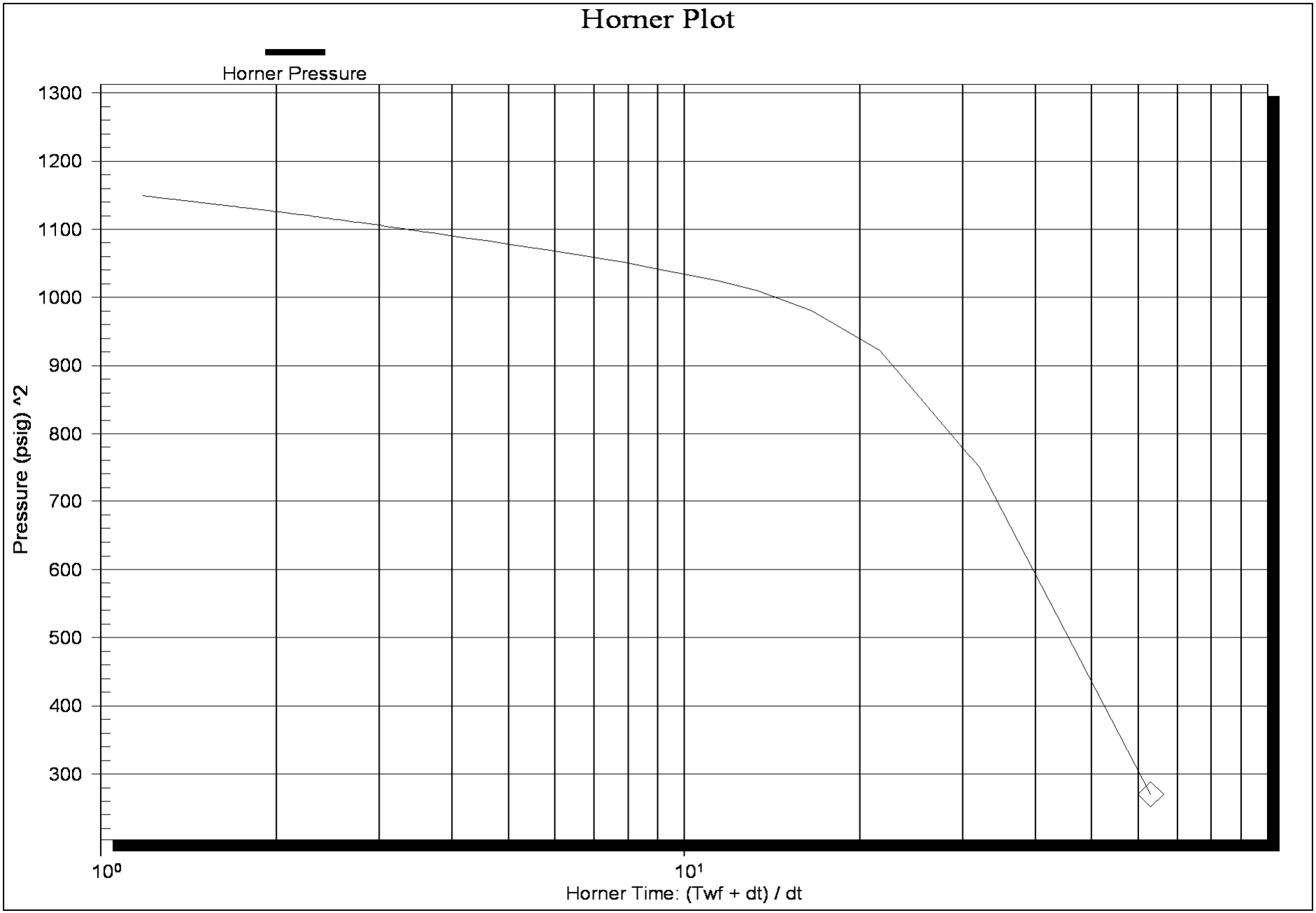
Printing every 3 samples

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	344.5	414.17	91.7
	346.0	409.31	90.6
	347.5	406.67	89.7
	349.0	419.25	89.2
	350.5	412.71	88.5
	352.0	395.50	88.1
	353.5	395.73	87.8
	355.0	395.79	87.7
	356.5	369.04	87.3
	358.0	368.32	86.9
	359.5	349.01	86.5
	361.0	346.49	86.3
	362.5	316.69	85.9
	364.0	310.96	85.7
	365.5	283.61	85.3
	367.0	294.81	85.2
	368.5	257.18	84.8
	370.0	257.17	84.7
	371.5	225.64	84.4
	373.0	225.21	84.2
	374.5	196.54	83.9
	376.0	209.74	83.8
	377.5	171.85	83.5
	379.0	156.15	83.3
	380.5	157.56	83.0
	382.0	124.24	82.9
	383.5	123.45	82.8
	385.0	88.18	82.7
	386.5	87.50	82.7
	388.0	96.05	82.7
	389.5	60.57	82.6
	391.0	61.98	82.6
	392.5	59.31	82.5
	394.0	32.79	82.5
	395.5	33.56	82.4
	397.0	1.63	82.1
	398.5	0.56	58.7
	400.0	0.58	50.5
	401.5	-0.18	48.8
	403.0	-0.44	48.1
	404.5	-0.48	47.8

Serial # 8653	Fluid		
Comments	Time (Min.)	Pressure (psig)	Temp. (deg F)
	406.0	-0.44	51.6
	407.5	-0.45	50.3
	409.0	-0.46	49.5
	410.5	-0.47	48.8
	412.0	-0.43	48.4
	413.5	-0.40	48.0
	415.0	-0.37	47.8
	416.5	-0.33	47.6
	418.0	-0.29	47.4
	419.5	-0.27	47.3
	421.0	-0.25	47.2
	422.5	-0.24	47.2
	424.0	-0.24	47.1
	425.5	-0.23	47.1
	427.0	-0.22	47.0
	428.5	-0.24	47.0
	430.0	-0.25	46.9
	431.5	-0.28	46.8
	433.0	-0.31	46.7
	434.5	-0.37	46.6
	436.0	-0.41	46.5
	437.5	-0.44	46.4
	439.0	-0.49	46.3
	440.5	-0.54	45.2
	442.0	-0.52	44.4
	443.5	-0.46	43.7
	445.0	-0.62	43.2
	446.5	-0.65	42.6
	447.5	-1.55	45.0

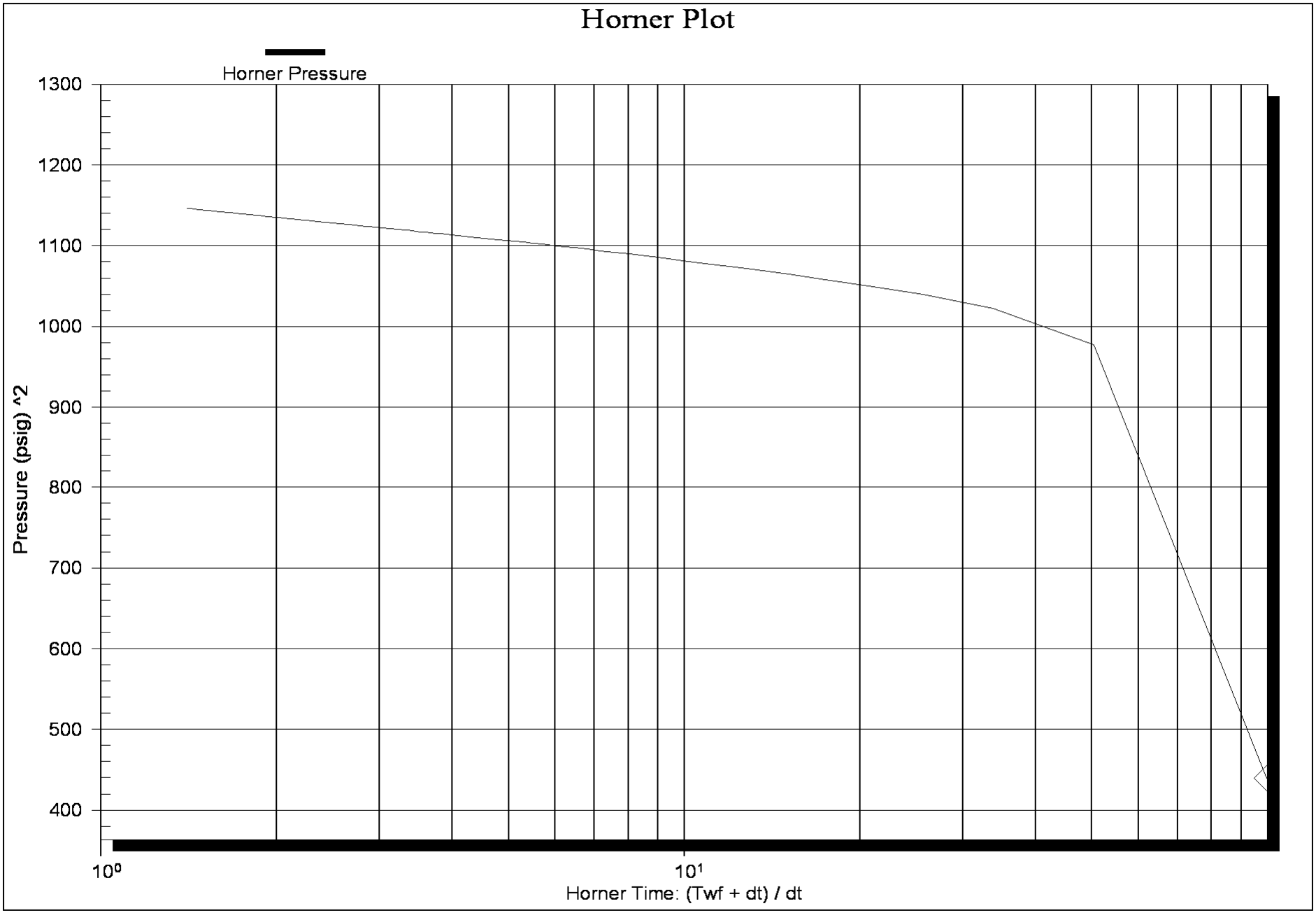
Printing every 3 samples

Horner Plot

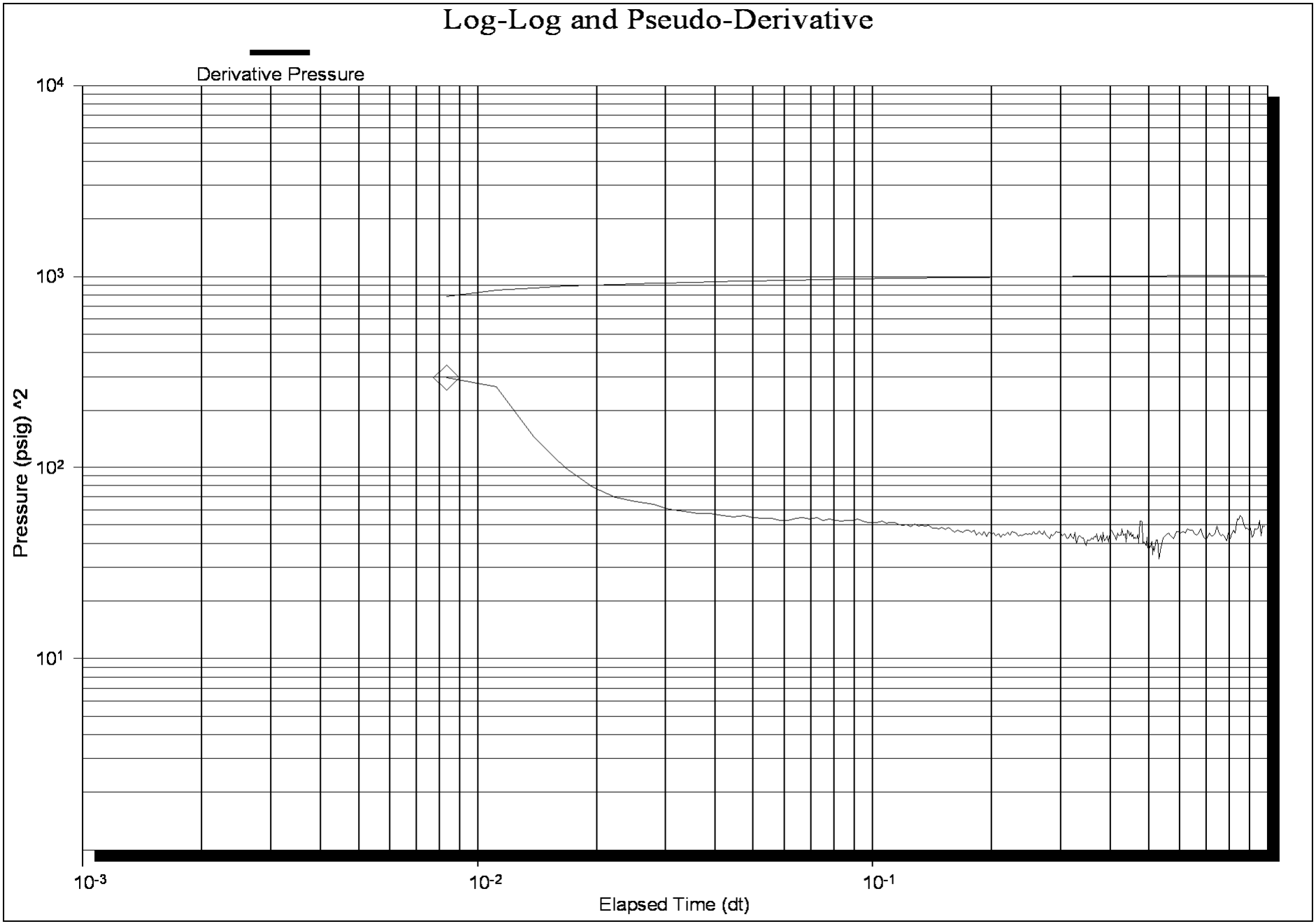


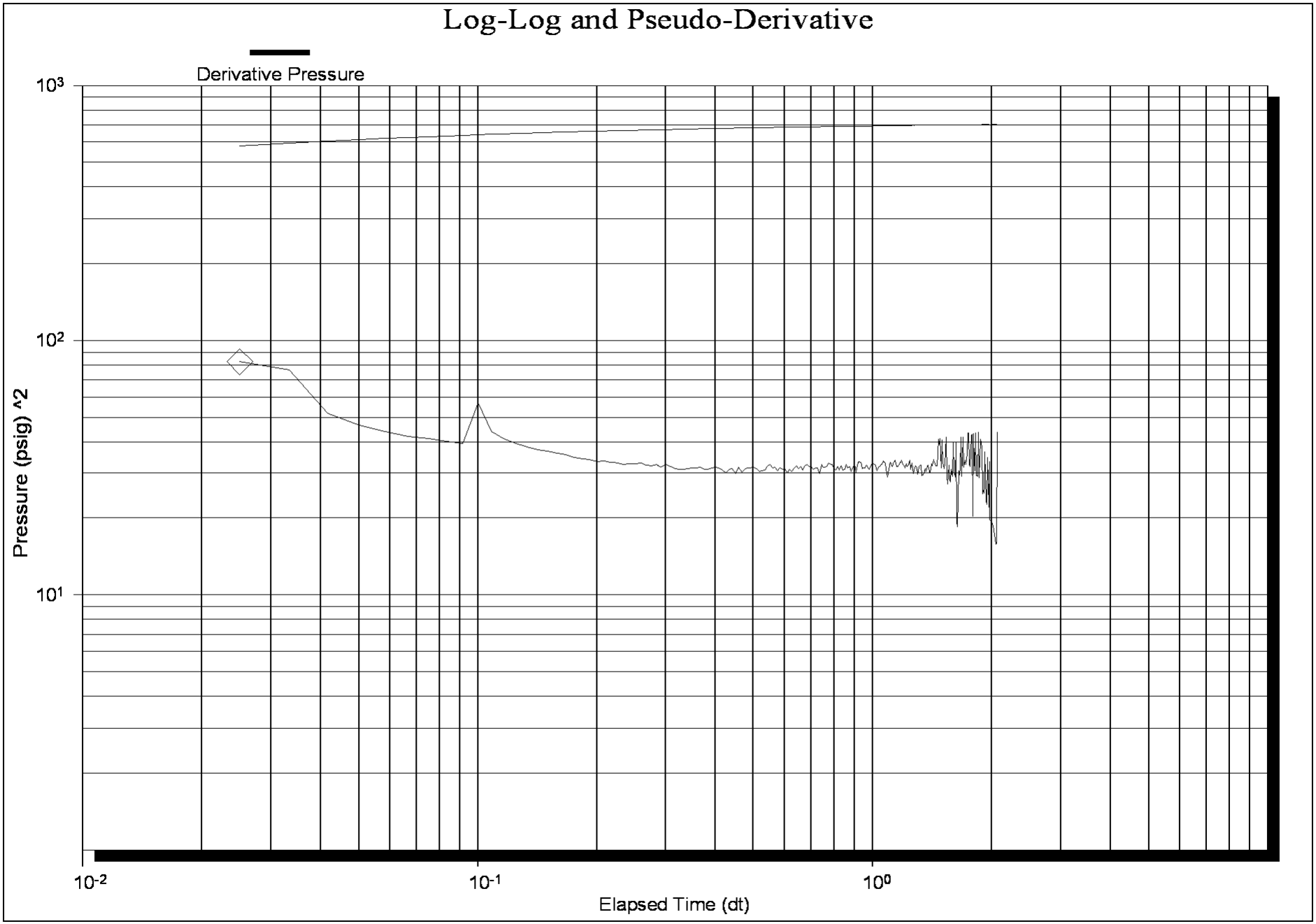
Serial Number: 8354 (Inside) P* : Slope (m) : kpa/log cycle Flow Cycle: 1

Horner Plot

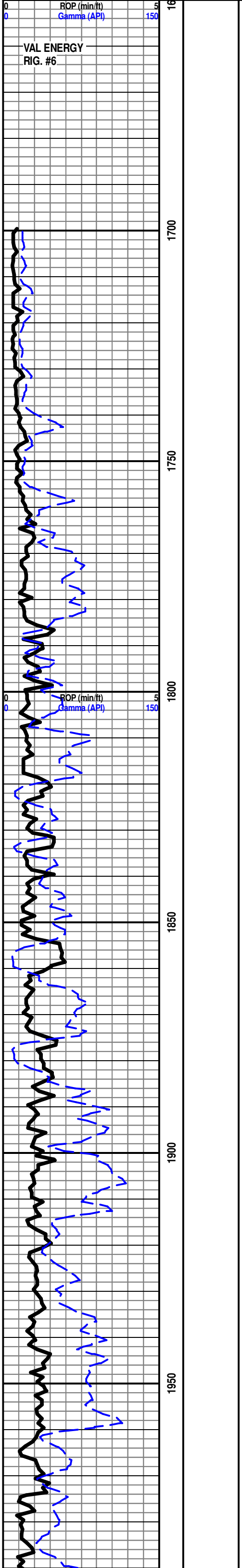


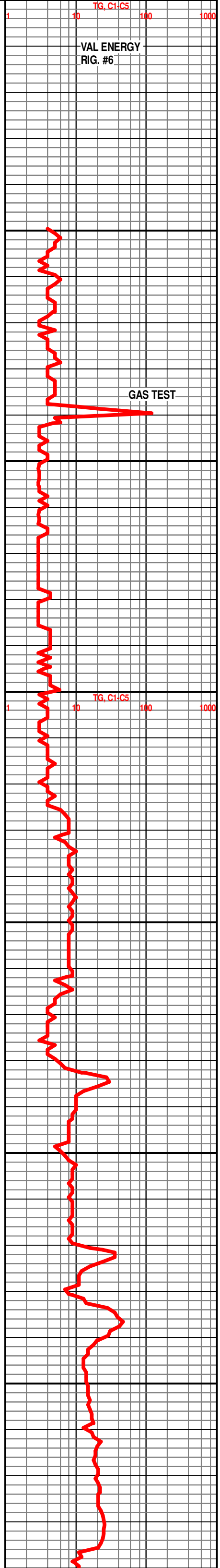
Serial Number: 8354 (Inside) P* : Slope (m) : kpa/log cycle Flow Cycle: 2

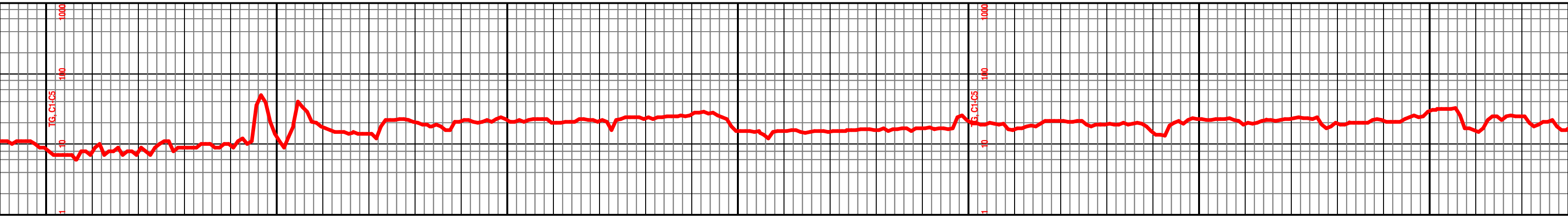

Log-Log and Pseudo-Derivative
Derivative Pressure
10^4
10^3
10^2
10^1
Pressure (psig) ^2
10^-3
10^-2
10^-1
Elapsed Time (dt)

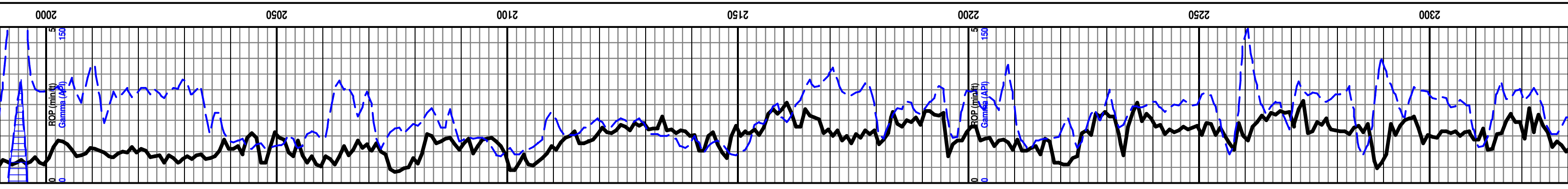

Log-Log and Pseudo-Derivative
Derivative Pressure
10³
10²
10¹
Pressure (psig) ^2
10⁻²
10⁻¹
10⁰
Elapsed Time (dt)

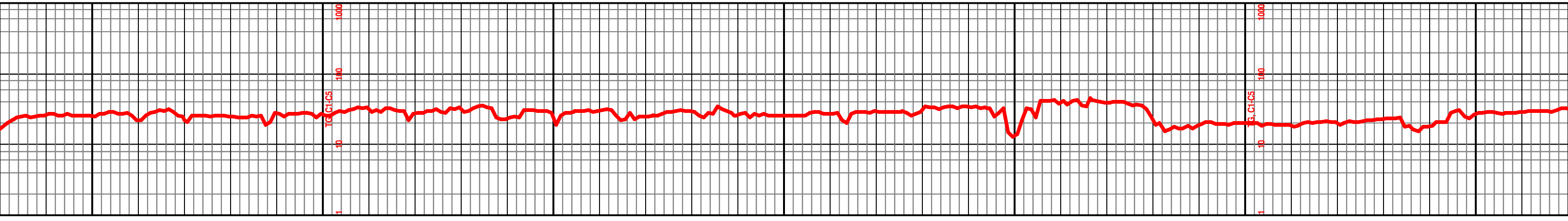
START UNMANNED UNIT 05/09/2011 @ 5:25 P.M.

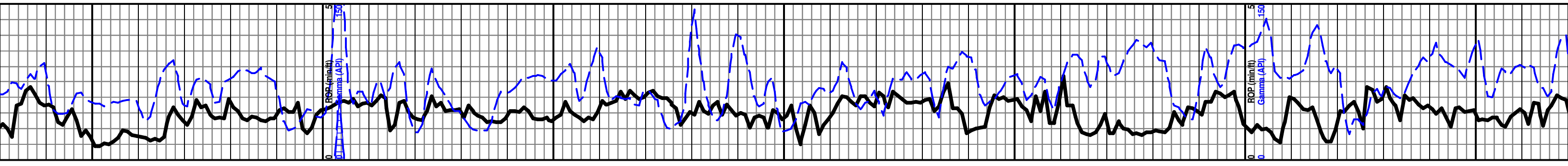


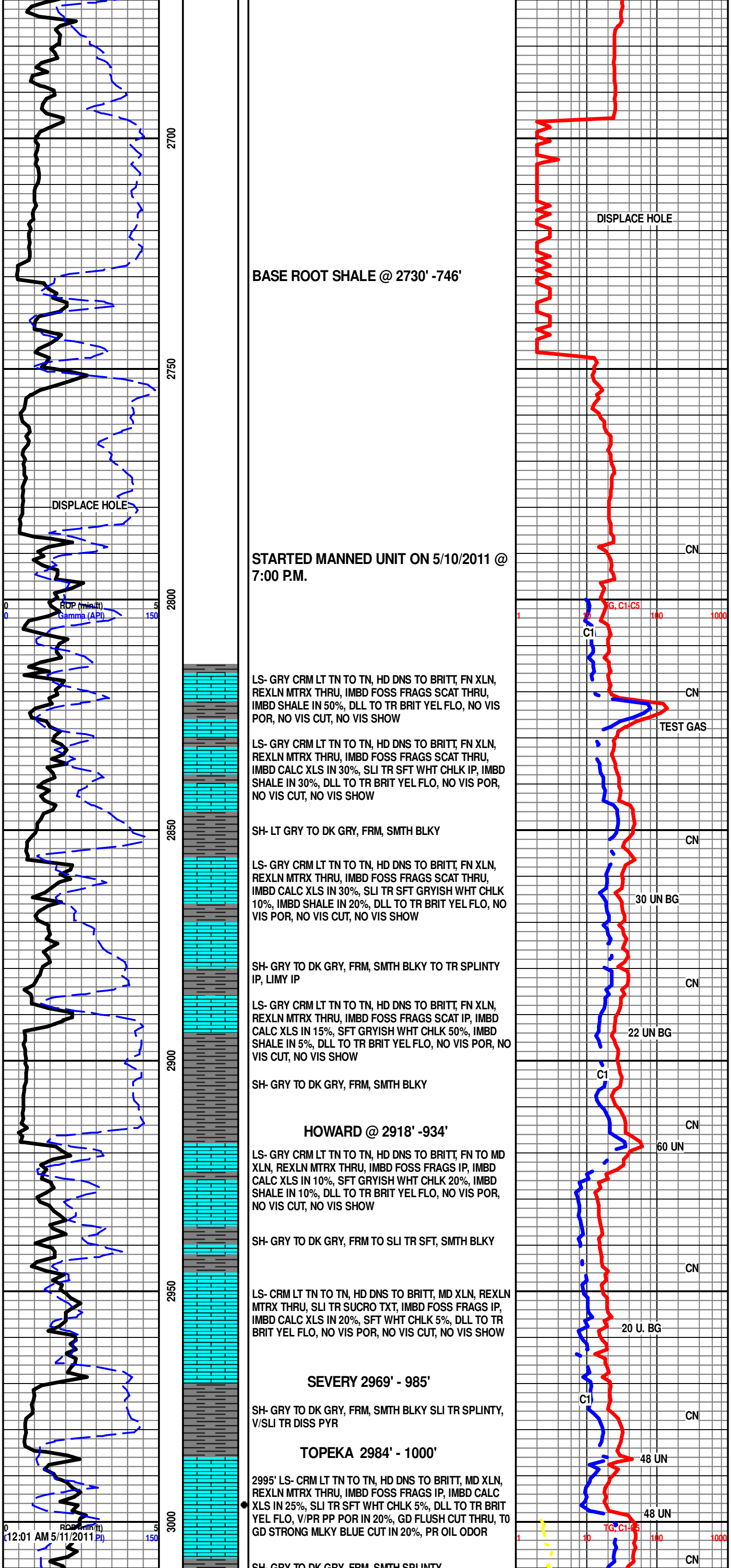



TG, C1-C5
1000
100
10
1
TG, C1-C5
1000
100
10
1


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


TG.C1.C5
1000
100
10
1


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


2700
2750
DISPLACE HOLE
0
ROP (min/ft)
5
0
Gamma (API)
150
2800
2850
2900
2950
3000
(12:01 AM 5/11/2011
PI)
BASE ROOT SHALE @ 2730' -746'
STARTED MANNED UNIT ON 5/10/2011 @ 7:00 P.M.
LS- GRY CRM LT TN TO TN, HD DNS TO BRITT, FN XLN, REXLN MTRX THRU, IMBD FOSS FRAGS SCAT THRU, IMBD SHALE IN 50%, DLL TO TR BRIT YEL FLO, NO VIS POR, NO VIS CUT, NO VIS SHOW
LS- GRY CRM LT TN TO TN, HD DNS TO BRITT, FN XLN, REXLN MTRX THRU, IMBD FOSS FRAGS SCAT THRU, IMBD CALC XLS IN 30%, SLI TR SFT WHT CHLK IP, IMBD SHALE IN 30%, DLL TO TR BRIT YEL FLO, NO VIS POR, NO VIS CUT, NO VIS SHOW
SH- LT GRY TO DK GRY, FRM, SMTH BLKY
LS- GRY CRM LT TN TO TN, HD DNS TO BRITT, FN XLN, REXLN MTRX THRU, IMBD FOSS FRAGS SCAT THRU, IMBD CALC XLS IN 30%, SLI TR SFT GRYISH WHT CHLK 10%, IMBD SHALE IN 20%, DLL TO TR BRIT YEL FLO, NO VIS POR, NO VIS CUT, NO VIS SHOW
SH- GRY TO DK GRY, FRM, SMTH BLKY TO TR SPLINTY IP, LIMY IP
LS- GRY CRM LT TN TO TN, HD DNS TO BRITT, FN XLN, REXLN MTRX THRU, IMBD FOSS FRAGS SCAT IP, IMBD CALC XLS IN 15%, SFT GRYISH WHT CHLK 50%, IMBD SHALE IN 5%, DLL TO TR BRIT YEL FLO, NO VIS POR, NO VIS CUT, NO VIS SHOW
SH- GRY TO DK GRY, FRM, SMTH BLKY
HOWARD @ 2918' -934'
LS- GRY CRM LT TN TO TN, HD DNS TO BRITT, FN TO MD XLN, REXLN MTRX THRU, IMBD FOSS FRAGS IP, IMBD CALC XLS IN 10%, SFT GRYISH WHT CHLK 20%, IMBD SHALE IN 10%, DLL TO TR BRIT YEL FLO, NO VIS POR, NO VIS CUT, NO VIS SHOW
SH- GRY TO DK GRY, FRM TO SLI TR SFT, SMTH BLKY
LS- CRM LT TN TO TN, HD DNS TO BRITT, MD XLN, REXLN MTRX THRU, SLI TR SUCRO TXT, IMBD FOSS FRAGS IP, IMBD CALC XLS IN 20%, SFT WHT CHLK 5%, DLL TO TR BRIT YEL FLO, NO VIS POR, NO VIS CUT, NO VIS SHOW
SEVERY 2969' - 985'
SH- GRY TO DK GRY, FRM, SMTH BLKY SLI TR SPLINTY, V/SLI TR DISS PYR
TOPEKA 2984' - 1000'
2995' LS- CRM LT TN TO TN, HD DNS TO BRITT, MD XLN, REXLN MTRX THRU, IMBD FOSS FRAGS IP, IMBD CALC XLS IN 25%, SLI TR SFT WHT CHLK 5%, DLL TO TR BRIT YEL FLO, V/PR PP POR IN 20%, GD FLUSH CUT THRU, T0 GD STRONG MLKY BLUE CUT IN 20%, PR OIL ODOR
DISPLACE HOLE
TG, C1-C5
1
10
100
1000
C1
CN
TEST GAS
30 UN BG
22 UN BG
60 UN
20 U. BG
48 UN
48 UN

ROP- 75
WOB- 38
PP- 775
WT- 9.1
VIS- 44

3050

SH- GRY TO DK GRY, FRM, SMTH SPLINTY

LS- CRM LT TN TO TN, HD DNS TO BRITT, MD XLN, REXLN MTRX THRU, IMBD FOSS FRAGS IP, IMBD CALC XLS IN 15%, DLL TO BRIT YEL FLO, V/PR PP POR IN 30%, FR FLUSH CUT THRU, T0 NO STREAM CUT, NO OIL ODOR

40 UN BG

LS- CRM LT TN TO TN, HD DNS TO BRITT, FN TO MD XLN, REXLN MTRX, SUCRO TXT SCAT THRU, IMBD FOSS FRAGS SCAT THRU, IMBD CALC XLS IN 50%, V/SLI TR SFT WHT CHLK 5%, DLL TO BRIT YEL FLO IN 40%, PR PP POR IN 30%, NO VIS CUT, NO VIS SHOW

CN
70 UN
C1
C2

SH- SOFT BLACK CARB SHALE

CN

SH- GRY TO DK GRY, FRM TO TR SFT, SMTH SPLINTY

40 UN BG

LE COMPTON 3085' -1101'

3100

SH- GRY TO DK GRY, FRM, SMTH SPLINTY

LS- CRM LT TN TO TN, HD DNS TO BRITT, FN XLN, REXLN MTRX THRU, SUCRO TXT THRU, IMBD FOSS FRAGS SCAT THRU, IMBD CALC XLS SCAT THRU 50%, TR PYR IN 10%, DLL TO BRIT YEL FLO IN 50%, NO VIS POR, NO VIS SHOW

CN

SH- GRY TO DK GRY, FRM, SMTH BLKY

35 UN BG

SH- SOFT BLACK CARB SHALE

3150

ROP- 75
WOB- 38
PP- 775
WT- 9.1
VIS- 44

LS- CRM LT TN TO TN, HD DNS TO BRITT, FN XLN, REXLN MTRX THRU, SUCRO TXT THRU, IMBD FOSS FRAGS SCAT THRU, IMBD CALC XLS SCAT THRU 40%, TR PYR IN 15%, DLL TO BRIT YEL FLO IN 40%, NO VIS POR, NO VIS SHOW

CN
C1
C2

SH- GRY TO DK GRY, FRM, SMTH BLKY

CN

3165' LS- CRM LT TN TO TN, HD DNS TO BRITT, FN XLN, REXLN MTRX THRU, SUCRO TXT THRU, IMBD FOSS FRAGS SCAT THRU, IMBD CALC XLS SCAT THRU 50%, LIVE TARY OIL ON 15%, DEAD OIL STAIN IN 10% DLL TO BRIT YEL FLO IN 30%, PR PP POR IN 30%, INST FLUSH CUT THRU, TO GD STRONG MLKY BLUE STREAM CUT IN 30%, V/PR OIL ODOR

43 UN BG

35 UN BG

LS- CRM LT TN TO TN, HD DNS TO BRITT, FN XLN, REXLN MTRX THRU, SUCRO TXT THRU, IMBD FOSS FRAGS SCAT THRU, IMBD CALC XLS SCAT THRU 40%, DISS PYR IN 20%, DLL TO BRIT YEL FLO IN 40%, V/PR PP POR IN 20%, NO VIS CUT, NO VIS SHOW

CN

3200

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

GATE LEFT OPEN
1 10 100 1000

SH- SOFT BLACK CARB SHALE

C1
C2
80 UN
CN

HEEBNER @ 3218' -1234'

LS- CRM OFF WHT LT TN TO TN, HD DNS TO BRITT, FN XLN, REXLN MTRX THRU, IMBD FOSS FRAGS SCAT IP, IMBD CALC XLS SCAT THRU 20%, DLL TO BRIT YEL FLO IN 40%, PR PP POR IN 25%, NO VIS CUT, NO VIS SHOW

C3

ROP- 75
WOB- 38
PP- 775
WT- 9.1
VIS- 44

3250

40 UN BG

DOUGLAS @ 3252' -1268'

SH- GRY TO DK GRY, FRM, SMTH BLKY TO SPLINTY

CN

LANSING @ 3270' -1286'

SHORT TRIP POINT 3278'
CFS @ 3278' 15,30,45,60

3272'-3280' LS- CRM LT TN TO TN, HD DNS TO BRITT, FN XLN, REXLN MTRX THRU, SUCRO TXT IP, IMBD FOSS FRAGS SCAT IP, TR FRM TO SFT WHT CHLK SCAT THRU, IMBD CALC XLS SCAT THRU 25%, DISS PYR IN 5%, DLL TO BRIT YEL FLO IN 30%, PR PP POR IN 35%, GD FLUSH CUT TO GD SLOW MLKY BLUE STREAM CUT IN 30%, NO OIL ODOR

23 UN BG

CN

"C" @ 3295'

LS- OFF WHT TO CRM TO BUFF, HD DNS TO BRITT, MD XLN, SUCRO TO S/CHLKY TO CHLKY IP, IMBD FOSS FRAGS IP, IMBD SM CALC IP, DLL YEL FLO IN 30%, TR V/PR PP POR IN 10%, NO VIS CUT, NO VIS SHOW

C1
C2
C3

CFS @ 3301' 15,30,45,60

3300

"D"

3306' -3309' LS- CRM LT TN TN- HD DNS TO BRITT, F-MD-XLN RE-XLN IP, TR FOSS FRGS IP, SMLL IMBD MICRO OOL IP, TR IMBD SMLL CALC XLS IP, LT TN STN SCAT IN 50%, BRI YEL GLD FLO IN 60%, PR TO FR VIS INTER-XLN POR ,PR PP POR IP, TR MICRO VUG POR , FR FLSH TO FR TO TR GD SLO STRM CUT, GD OIL ODOR, LT STN ON DSH

C5
42 UN
CN

DST #1
3303'-3329'

"E"

3320'-3322' LS- OFF WHT CRM LT TN TN (STN IN 30%) HD DNS TO BRITT, F-MD-XLN , RE-XLN MTRX THRU, SUCRO IP, FOSS FRGS SCAT IP, SMLL IMBD CALC XLS IMBD THRU, TR FRM WHT CHLK IMBD IP, BRIT YEL GLD FLO IN 40%, FR INTER-XLN POR SCAT IP, GD SCAT VUG POR IP, EXCEL FLSH CUT IN 40%, GD STRNG MLKY BLU STRM CUT IN 30%, STRNG OIL ODOR

34 UN
C1
C2
C4

CFS @ 3329' 15,30,45,60

"F" @ 3342'

3342'-3346' LS- OFF WHT CRM LT TN TN (STN IN 35%) HD DNS TO BRITT, MD XLN , RE-XLN MTRX THRU, SUCRO TXT IP, FOSS FRGS SCAT IP, IMBD CALC XLS THRU, TR FRM WHT CHLK SACT IP, BRIT YEL GLD FLO IN 25%, FR INTR-XLN POR IN 20%, PR FLUSH CUT THRU, TO V/PR

34 UN
C3
C5

CFS @ 3349' 15,30,45,60

3350

CFS @ 3359'
15,30,45,60

CFS @ 3379'
15,30,45,60

ROP- 75
WOB- 35
PP- 800
WT- 9.2
VIS- 47

CFS @ 3401'
15,30,45,60

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

DST #2
3405'-3421'

CFS @ 3421'
15,30,45,60

DST #3
3424'-3455'

CFS @ 3443'
15,30,45,60

CFS @ 3455'
15,30,45,60

CFS @ 3471'
15,30,45,60

CFS @ 3495'
15,30,45,60

DST #4
3508'-3570'

CFS @ 3550'
15,30,45,60

CFS @ 3570'
15,30,45,60

ROP- 80
WOB- 35
PP- 800
WT- 9.2
VIS- 52

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

CFS @ 3660'
15,30,45,60

CTCH 1.5 HOUR
T.O.H FOR LOGS

3300
3350
3400
3450
3500
3550
3600
3650

MERY BLUE WEAK STREAM CUT IN 10%, FR OIL ODOR

3354' LS- OFF WHT CRM LT TN TN (STN IN 25%) HD DNS TO BRITT, FN XLN , RE-XLN MTRX THRU, SUCRO TXT IP, FOSS FRGS SCAT IP, IMBD CALC XLS THRU, TR FRM WHT CHLK SACT IP, TR IMBD OOL SCAT THRU, TR DISS PYR SCAT IP, BRIT YEL GLD FLO IN 40%, FR INTR-XLN POR IN 15%, PR FLUSH CUT THRU, PR WEAK STREAM CUT IN 15%, FR OIL ODOR

3370' LS- OFF WHT CRM LT TN TN (STN IN 40%) HD DNS TO BRITT, FN XLN , RE-XLN MTRX THRU, FOSS FRGS SCAT IP, IMBD CALC XLS IP, TR FRM TO SFT WHT CHLK SCAT IP, TR IMBD OOL SCAT THRU, TR PYR IP, BRIT YEL GLD FLO IN 20%, PR PP POR IN 30%, FR FLUSH CUT THRU, PR WEAK STREAM CUT IN 10%, NO OIL ODOR

3390' LS- OFF WHT CRM LT TN TN (STN IN 40%) HD DNS TO BRITT, FN TO MD XLN , RE-XLN MTRX THRU, SUCRO TXT IP, FOSS FRAGS SCAT IP, SMLL IMBD CALC XLS THRU, TR FRM WHT CHLK IP, BRIT YEL GLD FLO IN 30%, FR INTER-XLN POR SCAT IP, GD SCAT VUG POR IP, GD FLUSH CUT IN 40% TO GD STRONG STREAM CUT IN 30%, GD OIL ODOR

3414' LS- OFF WHT CRM LT TN TN (STN IN 30%) HD DNS TO BRITT, FN TO MD XLN , RE-XLN MTRX THRU, SUCRO TXT IP, FOSS FRAGS SCAT IP, SMLL IMBD CALC XLS THRU, BRIT YEL GLD FLO IN 20%, FR INTER-XLN POR SCAT IP, FR PP POR SCAT THRU, GD FLUSH CUT IN 30% TO GD STRONG STREAM CUT IN 20%, EXCEL OIL ODOR

SH- GRY TO DK GRY, FRM, SMTH SPLINTY TO TR BLKY

3430' LS- WHT TO OFF WHT, CRM TN, (STN IN 20%), HD DNS TO BRITT, MD XLN, REXLN MTRX THRU, IMBD FOSS FRAGS IP, FN IMBD CALC XLS SCAT IP, FRM WHT CHLK SCAT THRU, GLD TO BRIT YEL FLO IN 40%, PR INTR-XLN POR TO TR FR VUG POR, PR FLUSH CUT TO V/PR STREAM CUT IN 5%, GD OIL ODOR

3448' LS- WHT TO OFF WHT, CRM TN, (STN IN 30%), HD DNS TO BRITT, MD XLN, REXLN MTRX THRU, V/SLI TR SUCRO TXT SCAT THRU, IMBD CALC XLS SCAT THRU, TR FRM WHT CHLK SCAT IP, TR LIVE OIL IN 15%, GLD TO BRIT YEL FLO IN 45%, FR INTR-XLN POR TO TR GD PP POR, GD INST FLUSH CUT THRU, TO GD STRONG MLKY BLUE STREAM CUT IN 40%, GD OIL ODOR

3460'-3464' LS- WHT TO OFF WHT, CRM TN, (DK STN IN 60%), HD DNS TO BRITT, V/FN TO FN XLN, REXLN MTRX THRU, TR SUCRO TXT SCAT THRU, IMBD CALC XLS SCAT THRU, TR IMBD OOL SCAT IP, TR LIVE OIL IN 50%, GLD TO BRIT YEL FLO IN 60%, FR INTR-XLN POR TO TR GD VUG POR TO SLI TR OOLMOLD POR, ECEL INST FLUSH CUT THRU, TO GD STRONG MLKY BLUE STREAM CUT THRU, ECEL OIL ODOR, DK BRN STAIN ON DISH

3481'-3485' LS- WHT TO OFF WHT, CRM TN, (STN IN 30%), HD DNS TO BRITT, MD XLN, REXLN MTRX THRU, IMBD CALC XLS SCAT IP, TR SFT WHT CHLK SCAT THRU, GLD TO BRIT YEL FLO IN 35%, TR FR PP POR, FR FLUSH CUT THRU, TO V/PR WEAK MLKY BLUE STREAM CUT IN 5%, PR OIL ODOR

BASE KANSAS CITY @ 3499' -1515'

SH- GRY TO DK GRY, SFT, BLKY

3510' LS- LT CRM, TN, DK TARY OIL STAIN IN 60%, HD DNS TO BRITT, FN XLN TO SUCRO REXLN MTRX THRU, V/FN TO FN ABDT LIME GRN THRU, W/IMBD V/FN S/RND TO RND CLR QURTZ GRNS IP, DLL GLD FLO IN 50%, FR PP POR TO TR GD INTR-XLN POR, ECEL INST FLUSH CUT THRU TO FR SLOW STREAM MLKY BLUE CUT IN 50%, NO OIL ODOR, DK TN OIL STAIN ON DISH

SH- GRY TO DK GRY TO REDSH BRN, SFT GUMMY, BLKY, V/CALC THRU

SH- GRY TO DK GRY TO REDSH BRN, SFT GUMMY, BLKY LIMMY THRU

SH- GRY TO DK GRY TO REDSH BRN, SFT GUMMY, BLKY LIMMY THRU, WHT CHRT SCAT THRU

ARBUCKLE @ 3558' - 1574'

3558'-3566' DOL- OFF WHT LT TN TO TN, HD DNS TO BRITT, FN TO MD XLN, REXLN MTRX THRU, SUCRO TXT IP, IMBD ABDT V/FN TO FN ANG DOL GRNS, SLI TR CHLK, SLI TR WHT CHRT SCAT IP, DLL GLD FLO THRU TO SCAT BRIT GLD FLO IN 20%, FR TO GD INTR-XLN POR IN 50%, EXCL INST FLUSH CUT THRU, TO EXCL STRONG MLKY BLUE CUT THRU, ECEL OIL ODOR, DK BRN STAIN ON DISH

3578' DOL- OFF WHT LT TN, HD DNS TO BRITT, FN TO MD XLN, REXLN MTRX THRU, SUCRO TXT IP, IMBD ABDT MD ANG DOL GRNS, SLI TR CHLK, DLL GLD FLO THRU, FR TO GD INTR-XLN POR IN 50%, FR FLUSH CUT THRU, TO GD STRONG MLKY BLUE CUT 30%, GD OIL ODOR, BRN STAIN ON DISH

3607' DOL- WHT TO OFF WHT, HD DNS TO BRITT, MD XLN, REXLN MTRX THRU, SUCRO TXT IP, IMBD ABDT MD ANG DOL GRNS, DLL GLD FLO THRU, FR INTR-XLN POR IN 20%, PR FLUSH CUT THRU, TO PR WEAK MLKY BLUE CUT 10%, GD OIL ODOR

DOL- WHT TO OFF WHT, HD DNS TO BRITT, MD XLN, REXLN MTRX THRU, SUCRO TXT IP, IMBD ABDT MD ANG DOL GRNS, DLL GLD FLO THRU, FR INTR-XLN POR IN 15%, NO VIS CUT NO VIS SHOW

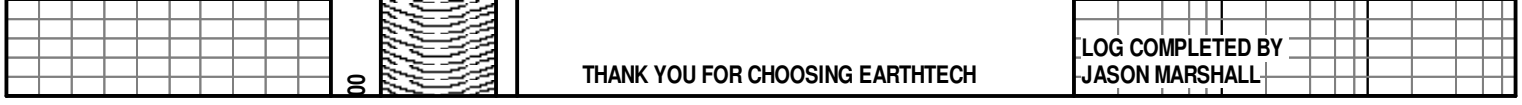
RTD 3660' @ 9:30 AM 05/15/2011

LOGS BY WEATHERFORD

LIBERAL KANSAS

CN
52 UN
CN
50 UN
1 TG, C1-C5 1000
10 100
140 UN
CN
C2
C3
200 UN
C4
C1
200 UN
CN
C5
200 UN
CN
210 UN
CN
232 UN
C1
C2
C3
180 UN
C4
CN
140 UN BG
CN
130 UN BG
1 TG, C1-C5 1000
10 100
CN
C1
C2
C3
100 UN BG
C4
CN
80 UN BG

SAMPLES WILL BE
DELIVERED TO THE KGS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THANK YOU FOR CHOOSING EARTHTECH
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JASON MARSHALL