



**WELL COMPLETION FORM**  
**WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

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

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

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Conv. to GSW
- Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

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

API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_-\_\_\_\_\_-\_\_\_\_\_- Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

**Drilling Fluid Management Plan**

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**AFFIDAVIT**

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

Submitted Electronically

**KCC Office Use ONLY**

- Letter of Confidentiality Received  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



1047418

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

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

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <i>(Submit ACO-4)</i>	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Samuel Gary Jr. & Associates, Inc.
Well Name	BRACK ET AL 1-10
Doc ID	1047418

All Electric Logs Run

ARRAY INDUCTION SHALLOW FOCUSSED ELECTRIC LOG
COMPACT PHOTO DENSITY COMPENSATED NEUTRON LOG
MICRO-RESISTIVITY LOG
COMPENSATED SONIC W/ INTEGRATED TRANSIT TIMES



*Mark Parkinson, Governor  
Thomas E. Wright, Chairman  
Joseph F. Harkins, Commissioner  
Ward Loyd, Commissioner*

November 24, 2010

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

Re: ACO1  
API 15-165-21892-00-00  
BRACK ET AL 1-10  
SE/4 Sec.10-17S-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,  
THOMAS G. FERTAL



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

Well Name: BRACK ET AL 1-10  
Location: SEC 10-17S-16W RUSH COUNTY, kS.  
License Number: API 15-165-21892-00  
Spud Date: 7/ 29/2010  
Surface Coordinates: 1100 FSL & 2560 FEL,  
Region: WILDCAT  
Drilling Completed: 8/06/2010

Bottom Hole  
Coordinates:  
Ground Elevation (ft): 1999' K.B. Elevation (ft): 2007'  
Logged Interval (ft): 1724' To: 3675' Total Depth (ft): 3675'  
Formation: Lansing, Arbuckle  
Type of Drilling Fluid:

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

#### OPERATOR

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

#### GEOLOGIST

Name: TIM HEDRICK  
Company: Earth Tech OGL, Inc.  
Address: PO Box 683  
Hooker, Okla . 73945  
Off. 888-543-8378 Cell: 620-655-2050

#### DST linformation

DST #1- 3254- 3313' 20-60-45-150  
IF- 2" WK BLO/ ISI- NO BLO/ FF- WK TO 3"/ FSI- NO BLO  
IH-1622, FH-1536 / IF-16 TO 58, FF-64 TO 120/ ISI-1071, FSI- 1059  
RECOVERED- 30' MUD W/ OIL SPOTS/ 185' WATER 78,000 CHL. ,SYST-CHL. 4500/ BHT 113 DEG.

DST#2 3320-3372' 15 60 45 150  
IF-BOB 13 MIN./ ISI- NO BLO/ FF-BLD TO 5" WK/ FSI- NO BLO  
IH- 1632, FH- 1571/ IF-42 TO 45, FF-57 TO 91/ISI- 1054, FSI-1053/ RECOVERED-155' TOTAL FL., 10' CLEAN  
OIL, 120' GIP BHT 112 DEG, 145' WATER.  
CHL- 80,000, SYST CHL-6100

#### DST information

DST#3 3392 - 2418 15-60-15-60  
IF-WK DIED IN 5 MIN,ISI- NB/ FF- NB/ FSI-NB  
IH-1681, FH-1612/ IF-18 TO 21, FF-23 TO 27 / ISI-282, FSI-56  
RECOVERED- 3' MUD W/ OIL SPOTS, BHT 110 DEG

DST#4 3415- 3450 20-60-60-180  
IF-2" BLO / ISI-NB/ FF-BOB IN 8 MIN./ FSI-NB  
IH- 1659, FH-1598/ IF- 18 TO 28, FF-23 TO 42/ ISI--1074, FSI-1103/ BHT- 113 DEG  
RECOVERD 75' TF, 480' GIP/ 60' MCGO, 10%G., 70% O., 20% M./ 15' OCGM, 20%G., 30% O., 50%M.

### DST Information



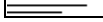

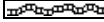



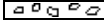







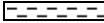
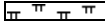



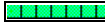



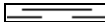
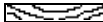

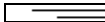

DST#5 3556-3567 10-60-30-90

IF- BOB 4 MIN., ISI-WK DIED IN 20 MIN, FF- BOB 3 MIN., FSI-WK BLO DIED IN 36 MIN.























































































IH-1751, FH-1685/ IF- 31 TO 51, FF- 60 TO 126/ ISI-1101, FSI-988.

RECOVERED- 360' TF, 550' GIP/ 80' MCGO, 10%G., 70%O., 20%M./ 280' CGO, 15%G., 85% O., 32 GR. BHT 120 DEG.


























### ROCK TYPES

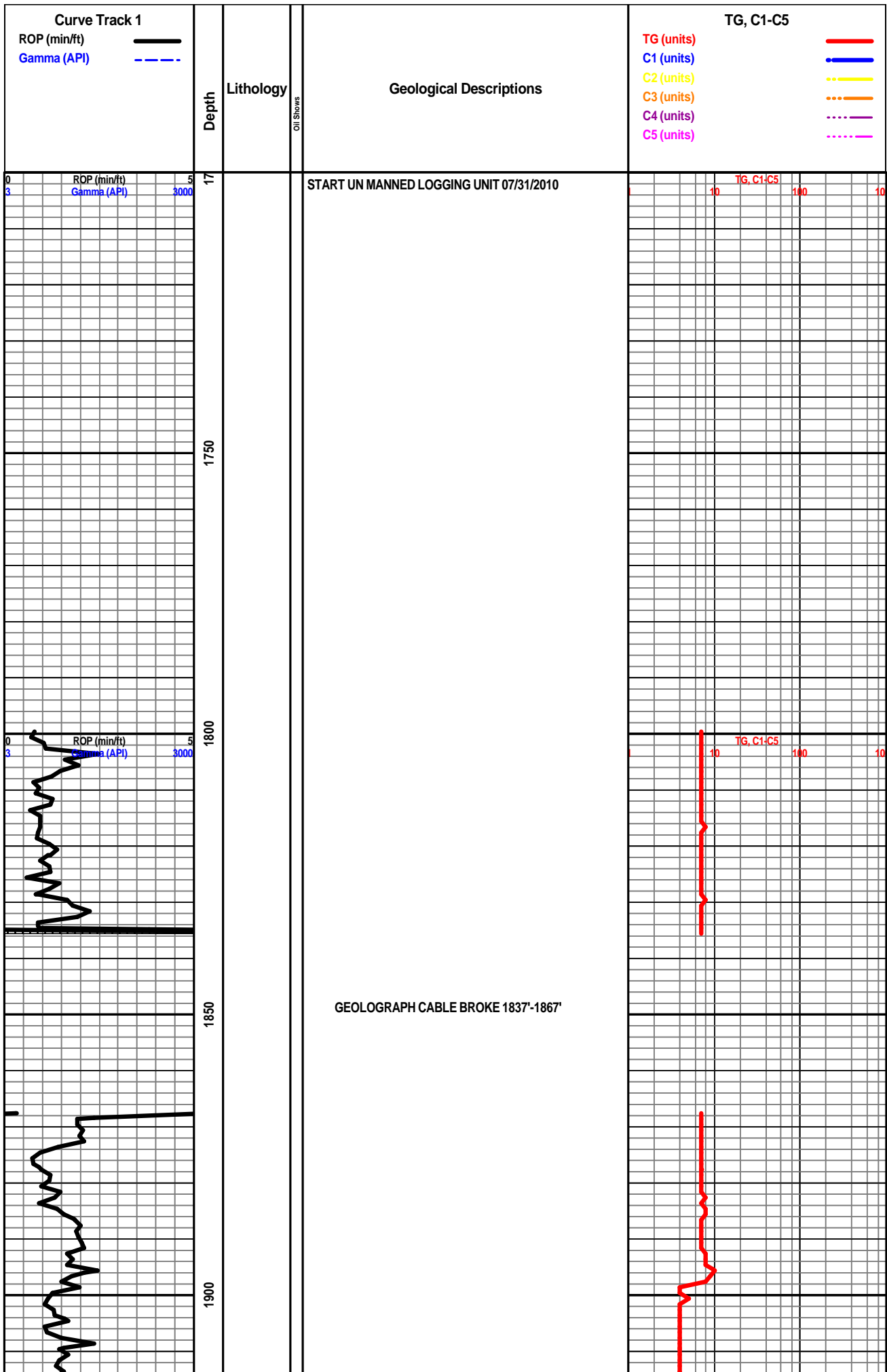
 Anhy	 Gyp	 Shgy	 Sandylms
 Bent	 Igne	 Sltst	 Shale
 Brec	 Lmst	 Ss	 Sltstn
 Cht	 Meta	 Till	 Shlyslts
 Clyst	 Mrst	 Carb sh	 Sitysh
 Coal	 Salt	 Dol	 Lms
 Congl	 Shale	 Dtd	
 Dol	 Shcol	 Gry sh	

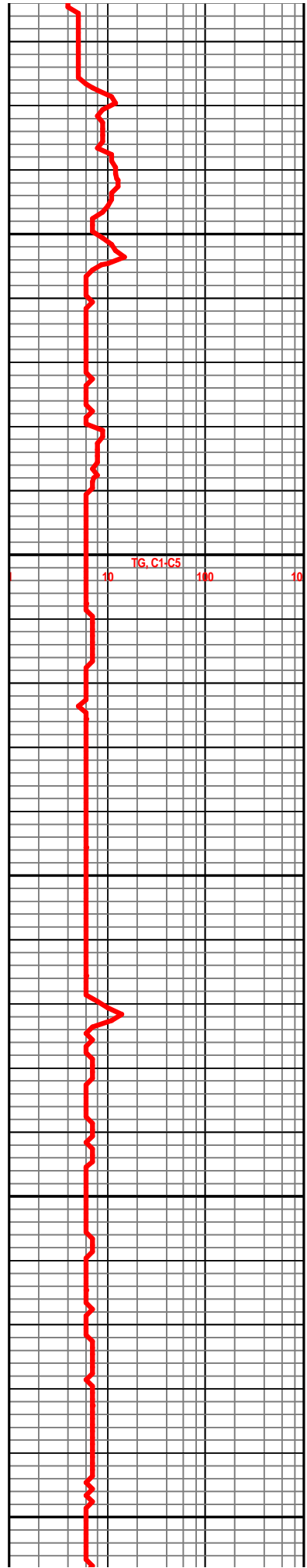
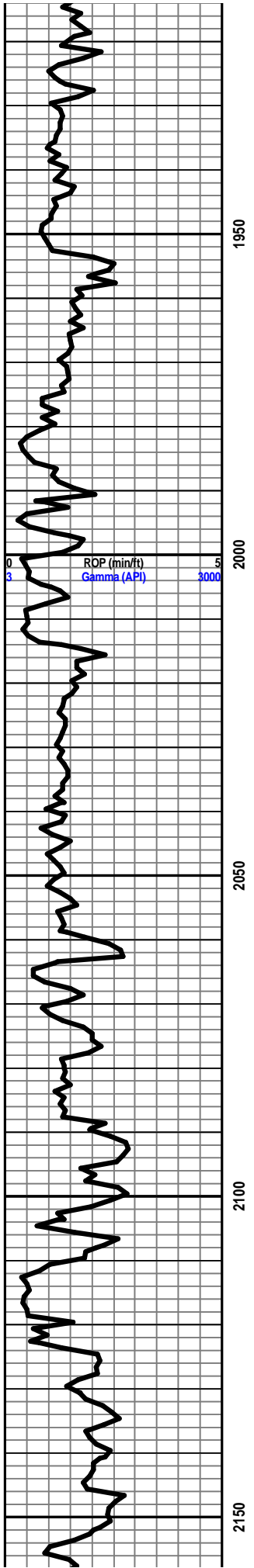
### ACCESSORIES

<b>MINERAL</b>	 Salt	 Fossil	 Clystn
 Anhy	 Sandy	 Gastro	 Dol
 Arggrn	 Silt	 Oolite	 Grysh
 Arg	 Sil	 Ostra	 Gryslt
 Bent	 Sulphur	 Pelec	 Lms
 Bit	 Tuff	 Pellet	 Sandylms
 Brecfrag	 Chlorite	 Pisolite	 Sh
 Calc	 Dol	 Plant	 Sltstn
 Carb	 Sand	 Strom	
 Chtdk	 Sity	 Fuss	
 Chtlt		 Oomold	
 Dol	<b>FOSSIL</b>	<b>STRINGER</b>	<b>TEXTURE</b>
 Feldspar	 Algae	 Anhy	 Boundst
 Ferrpel	 Amph	 Arg	 Chalky
 Ferr	 Belm	 Bent	 Cryxln
 Glau	 Bioclst	 Coal	 Earthy
 Gyp	 Brach	 Dol	 Finexln
 Hvymin	 Bryozoa	 Gyp	 Grainst
 Kaol	 Cephal	 Ls	 Lithogr
 Marl	 Coral	 Mrst	 Microxln
 Minxl	 Crin	 Sltstrg	 Mudst
 Nodule	 Echin	 Ssstrg	 Packst
 Phos	 Fish	 Carbsh	 Wackest
 Pyr	 Foram		

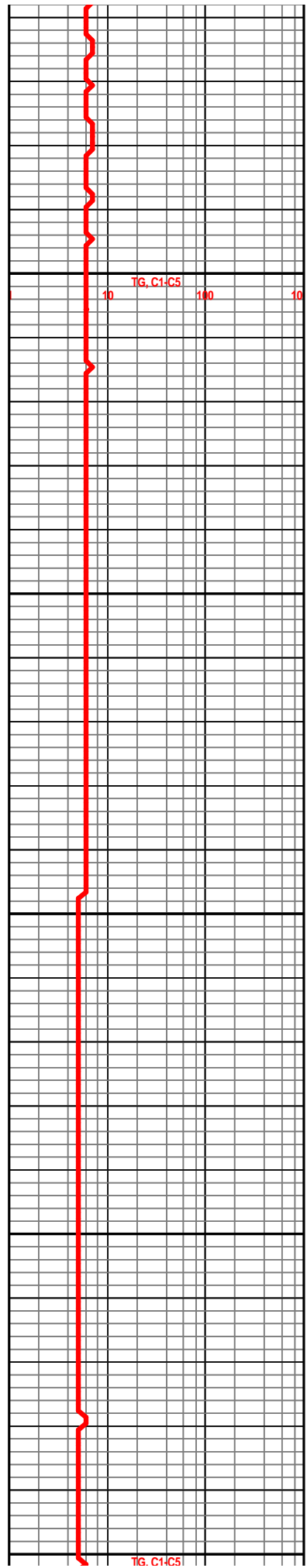
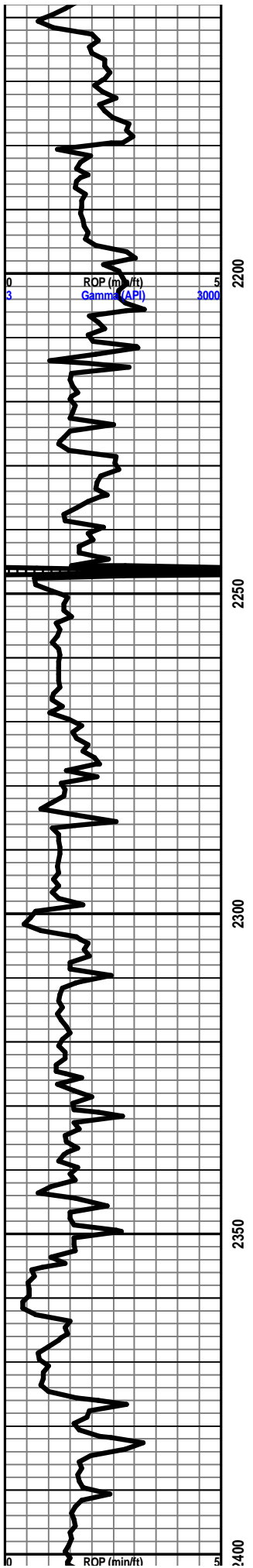
### OTHER SYMBOLS

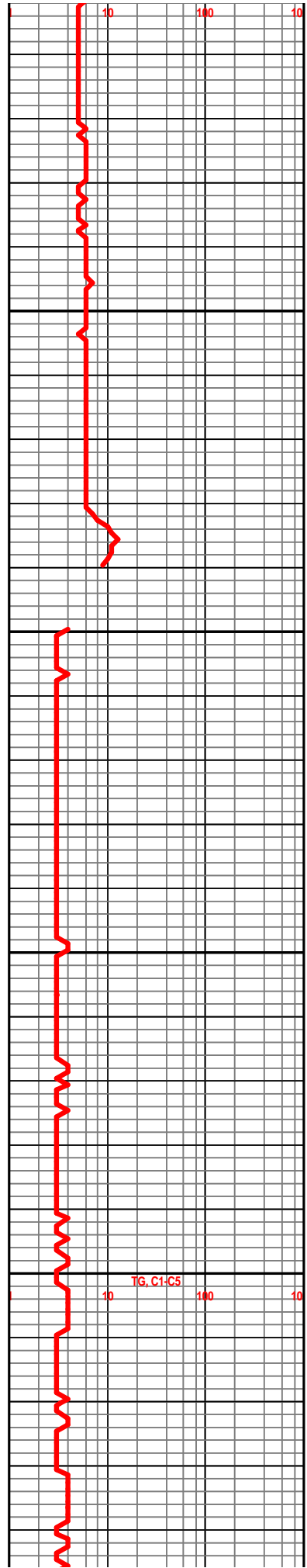
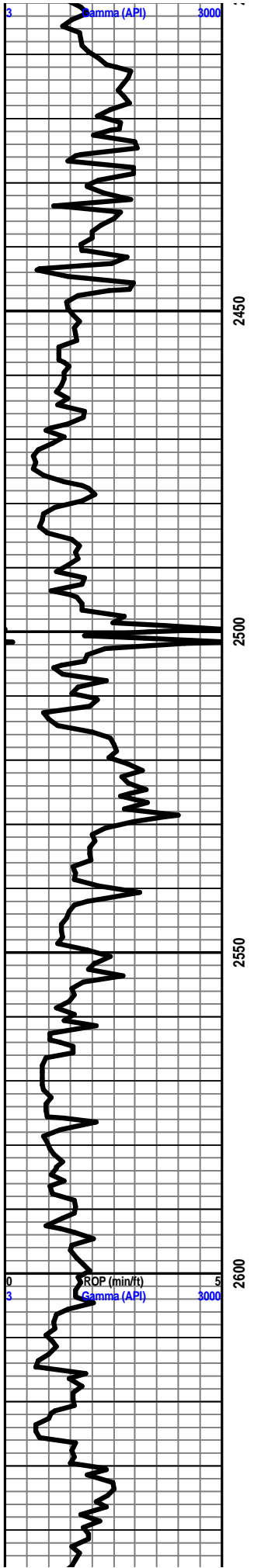
<b>POROSITY TYPE</b>	<b>SORTING</b>	 Angular	<b>INTERVALS</b>
 Earthy	 Well	<b>OIL SHOWS</b>	 Core
 Fenest	 Moderate	 Even	 Dst
 Fracture	 Poor	 Spotted	 Dst
 Inter	<b>ROUNDING</b>	 Ques	<b>EVENTS</b>
 Moldic	 Rounded	 Dead	 Rft
 Organic	 Subrnd	 Gas show	 Sidewall
 Pinpoint	 Subang		
 Vuggy			

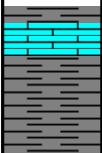
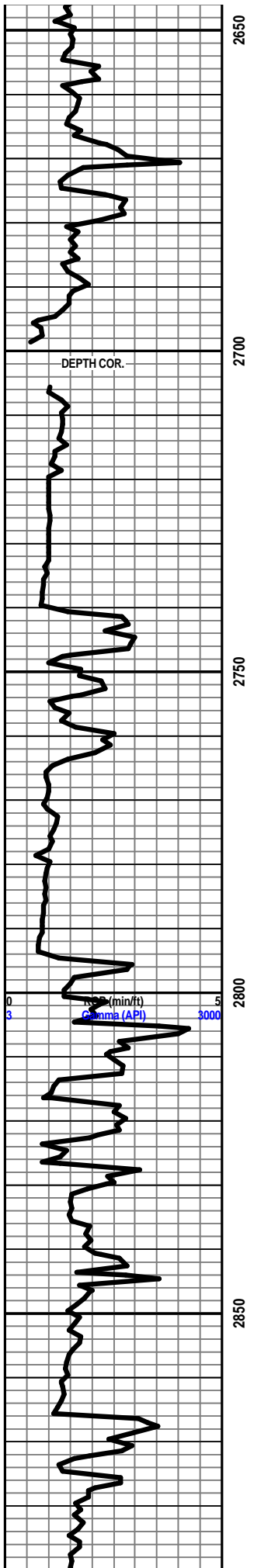








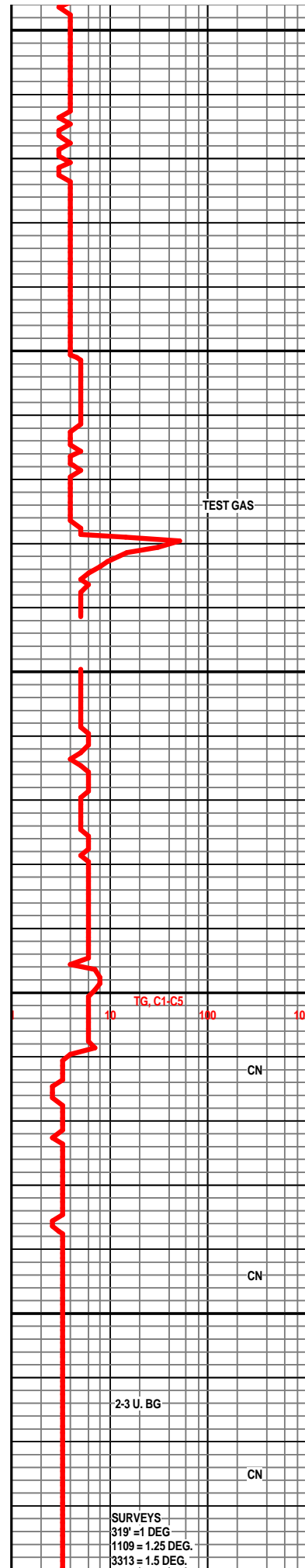


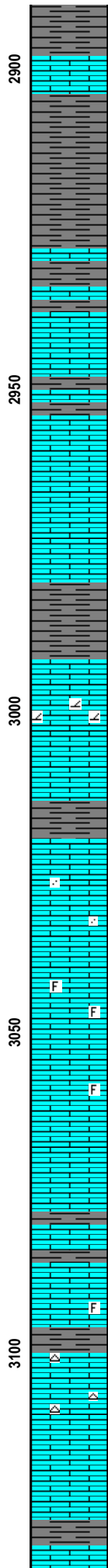
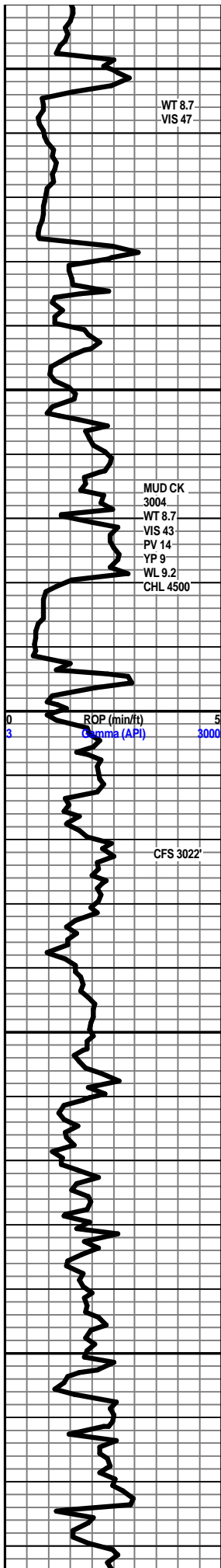


BASE ROOT SH. 2739' - 732'

DISPLACE @ 2805'

START 24 HR MANNED UNIT 8/01/2010





LS- CRM BFF- HD DNS TO BRITT IP, MD-XLN TO TT SUCRO MTRX, TR SML QURTZ GRNS IMBD, NO FLO, NO VIS POR, NO VIS SHOW

SH- LT GY TO DK GY- FRM BLKY IP TO V/ SFT SLTY,

**HOWARD 2926' - 919'**

LS- TN DK BRN IP, HD DNS MOTT, F-V/F-XLN, TR FOSS FRGS IP, TR DLL YEL MIN FLO IP, NO VIS POR, NO VIS SHOW

LS- CRM OFF WHT- HD DNS TO TR BRITT, MD-XLN TO SUCRO IP, TR PHNTM FOSS FRGS IP, NO FLO, NO VIS POR, NO VIS SHOW

LS- OFF WHT CRM LT GY- HD TO MD HD- MD-F-XLN RE-XLN IP SLI MOTT, W/ ABDT SFT WHT CHLK IP, TR IMBD LT GY SH, NO FLO, NO VIS POR, NO VIS SHOW

SH- LT TO MD GY- FRM IP TO V/ SFT SLTY LOOKING TXT, SLI TR PYR, TR CALC IP

**TOPEKA 2992' - 985'**

LS- DK TN BRN- HD DNS TR BRITT, ABDT IMBD F-MD ANG LM GRNS THRU, POSS DOLO CMNT THRU, NO FLO NO VIS POR, FR VIS SLO STRM CUT, NO ODOR

SH- LT TO MD GY- FRM BLKY SMTH TXT, SLI SLTY

LS- CRM BFF- HD DNS TO BRITT, MD-F-XLN, SUCRO S-CHLKY TO CHLKY MTRX IP, IMBD SMLL ANG QURTZ GRNS AND LM GRNS, NO FLO, NO VIS POR, NO VIS SHOW

LS- OFF WHT CRM BFF- MD-HD TO SFT, V/ SUCRO TO S-CHLKY MTRX, ANDT IMBD FOSS FRGS, TR IMBD ANG LM GRNS, TR SFT CHLK IP, NO FLO, NO VIS POR, NO VIS SHOW

LS- CRM LT TN TN - HD DNS TR BRITT, MD-F-XLN SLI S-SUCRO IP, TR FOSS FRGS IP, NO FLO, NO VIS POR, NO VIS SHOW

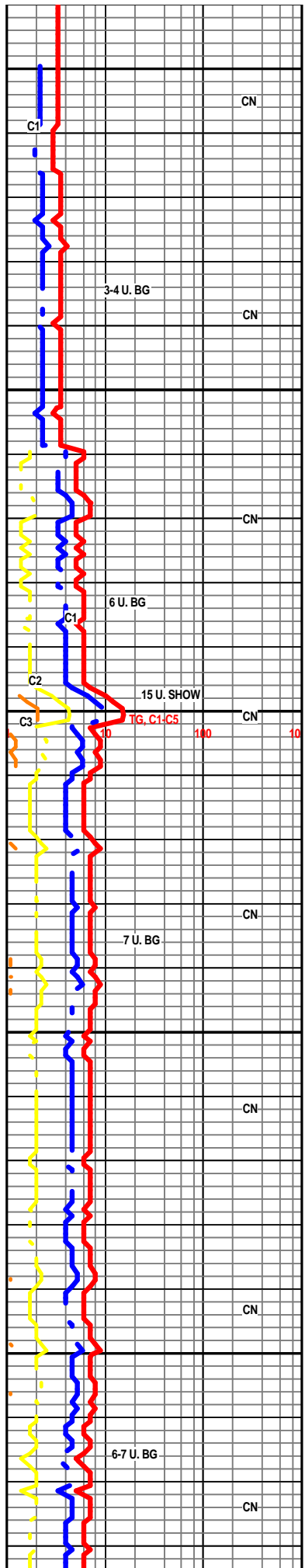
LS- OFF WHT BFF- HD BRITT, SUCRO MTRX, SLI S-CHLKY IP, NO FLO, NO VIS POR, NO VIS SHOW

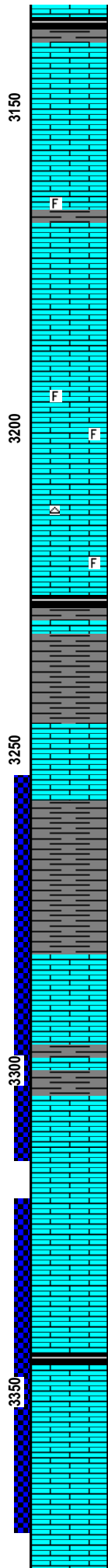
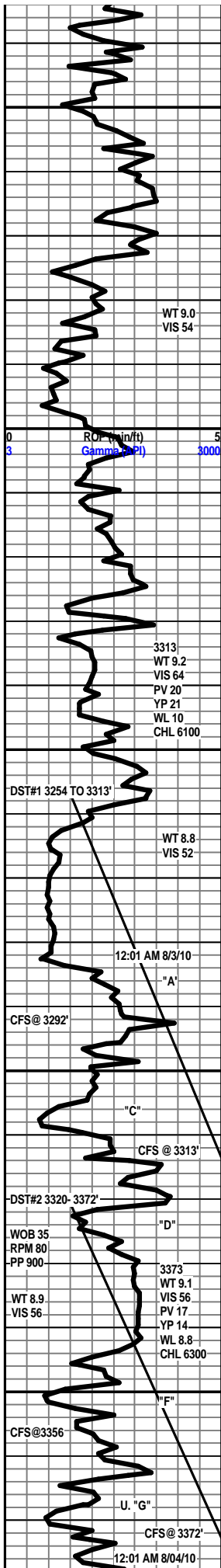
LS- OFF WHT CRM BFF- MD-HD TO SFT, V/ SFT V, SUCRO S-CHLKY MTRX, W/ IMBD LT BRN SH IP, TR FOSS FRGS, NO FLO, NO VIS POR, NO VIS SHOW

**LeCOMPTON 3101' - 1094'**

LS- CRM BFF- HD BRITT, MD-F-XLN, RE-XLN TRX R WHT CHRT IP, TR WHT SFT CHLK IP, NO FLO, NO VIS POR, NO VIS SHOW

LS- CRM BFF TN LT BRN- HD DNS MOTT, F-V/F-XLN, TR IMBD SMLL ANG LM GRNS, HVY TR LMNTD SML TO MD CALC XLS ON ONE FACES OF ROCK, NO FLO, NO VIS POR, NO VIS SHOW





SH- BLK SFT CARB

LS- OFF WHT CRM BFF- MD HD TO SFT, V/ SUCRO S-CHLKY TO CHLKY MTRX, SLI TR IMBD LT GY SH IP, NO FLO, NO VIS POR, NO VIS SHOW

LS- LT TN TN GY- HD DNS MOTT, F-V/F-XLN, TR IMBD GY SH IP, HVY TR IMBD FOSS IP, NO FLO, NO VIS POR, NO VIS SHOW

LS- OFF WHT CRM TN, TR BRN( DUE TO OIL STN, HD DNS TO BRITT IP, F-XLN TO S-SUCRO S-CHLKY IP, TR ASPHLTIC STN IP, NO FLO, TR SCAT MICRO PP POR IP TO NO POR, FR FLSH TO GD SLO STRM CUT IN 20%, NO ODOR( 3 ROCKS ONLY)

LS- CRM BFF- HD BRITT, MD-F-XLN RE-XLN MTRX, FOSS FRGS IP, GRDNG TO SUCRO S-CHLKY TO CHLKY IP, NO FLO, NO VIS POR, NO VIS SHOW OR CUT

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

**HEEBNER 3225' - 1218'**

SH- LT GY TO LT GRN, FRM BLKY SMTH TXT SLI GRNY TXT IP,

LS- OFF WHT CRM- HD DNS MD-F-XLN, RE-XLN MTRX IP, ABDT FOSS FRGS IMBD THRU, HVY TR VRGTD SMLL CALC XLS IP, SLI TR SFT IMBD IP, NO FLO, NO VIS POR, NO VIS SHOW

**DOUGLAS 3258' - 1251'**

**LANSING 3283' - 1276'**

3280- 84' LS - OFF WHT CRM- HD TO MD HD- SUCRO S-CHLKY GRDNG TO F-XLN HD DNS W/ SMLL TO LRG CALC XLS IMBD IP, NO FLO, POSS FRACT POR, NO VIS SHOW

3285 - 86' LS- CRM LT TN TN( TN STN IN 30%), HD DNS TO TR BRITT, MD-F-XLN, SLI RE-XLN MTRX, FOSS FRGS IP, HVY TR IMBD SMLL & LRG CALC XLS IP, DLL YEL GLD TO BRIT YEL GLD FLO IN 50%, PR TO TR FR MICRO PP TO SCAT PR MICRO VUG POR IP, POSS FRACT. POR, FR FLSH TO FR TO GD SLO STRM CUT, LT OIL ODOR, NO STN ON DISH

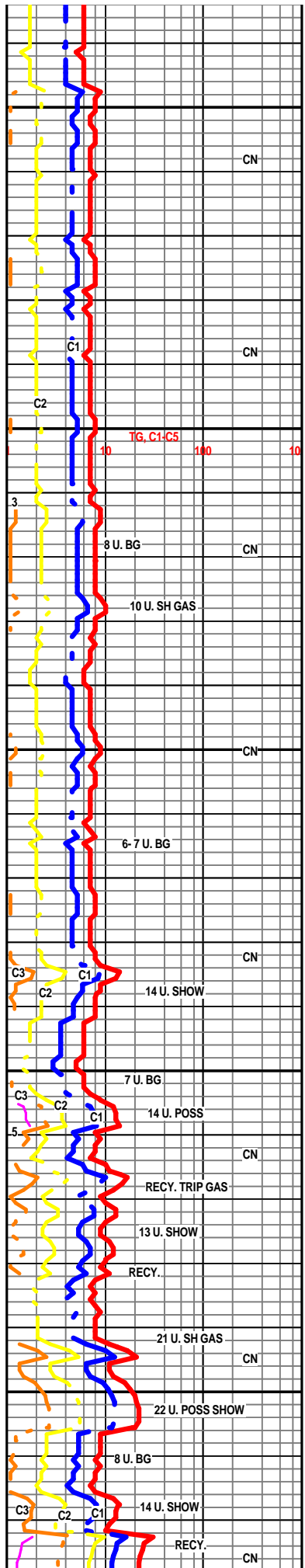
3305 TO 3309' LS-CRM LT TN BRN( OIL STN IN 70%) HD V/ BRITT, MD-XLN, V/ RE-XLN MTRX, V/ FOSS, ABDT SMLL TO MD S-RND TO S-ANG CLR DOLO GRNS W/ LMY CMNT SCAT THRU, SMLL TO MD OOL IP, TR CALC XLS IMBD IP, DLL YEL GLD FLO THRU, BRIT YEL SPSTD GLD FLO SCAT THRU, GD OIL ODOR, PR-FR TR GD INT-XLN POR, FR TO GD SCAT INTER-GRN POR IP, PR TO FR SCAT INTER-FOSS POR, FR SCAT MICRO VUG POR IP, TR INT-OOL POR, GD FLSH TO V/ GD SLO STRM CUT, TN STN ON DISH

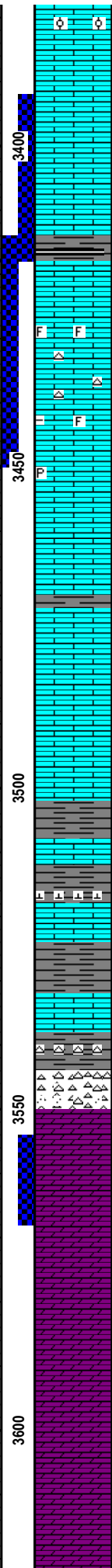
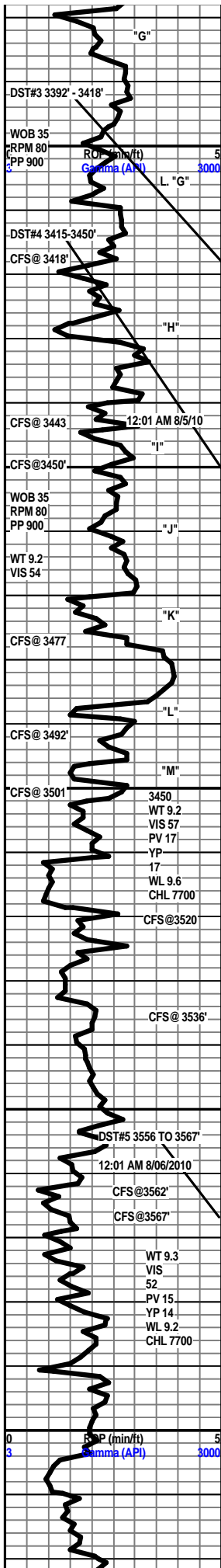
3321 TO 25' LS- CM BF LT TN( LT TN OIL STN IN 50-60%), hd DNS TO BRITT IP, MD-F-XLN RE-XLN MTRX, V/ MICRO OOL IP, W/ SMLL IMBD CALC XLS IN POR, FR TO GD SCAT MICRO VUG POR IP, TO HVY TR GD INT-OOL POR IP, FR SCAT INTER-XLN POR IP, DLL YE GLD FLO IN 30%, BRIT YELGLD FLO IN 80%, LT FLSH CUT TO FR SLO STRM MLKY CUT, FR OIL ODOR, NO HEAVIES IN GAS

SH- BLK SFT CARB

LS- WHT OFF WHT- FRM TO SFT, ABDT CHLK, W, TR TT SUCRO S-CHLKY IP, TR FLEETING OIL ODOR, NO FLO, NO VIS POR, NO VIS CUT

3368 TO 3371' LS -OFF WHT CRM LT TN( SCAT TN OIL STN 30%-) HD BRITT, MD-F-XLN, RE-XLN IP, FOSS FRGS IMBD IP, HVY TR SMLL OOL IP, HVY TR S-CHLKY IP, NO DLL YEL FLO, TR BRIT YEL GLD FLO IN 10%, PR SCAT INTER-XLN POR, TR VUG POR IP, FLEETING ODOR, SLI TR ABDT FRM WHT CHLK, GD FLSH TO GD SLO STRM CUT IN 30-40%





LS-CRM LT TN TN - HD DNS TO BRITT IP, MD-F-XLN, RE-XLN MTR IP, TR MICRO OOL IP, GRDNG TO F-VF-XLN S-SUCRO TO S-CHLKY IP, NO FLO, NO VIS POR, NO VIS SHOW

LS-CRM LT TN TN- HD DNS , F-VF-XLN, SLI TR FOSS FRG IP, NO FLO, NO VIS POR, NO VIS SHOW

3399 TO 3409 - LS- LT TN TN LT GY- MOTT, HD DNS F-VF-XLN TR SUCRO IP, (TN OIL STN IN 60% ON ONE FACES OF ROCK), MD CALC XLS IMBD ON ONE FACES OF ROCK IN 40%, SLI TR CHLK IP, DLL YEL GLD FLO THRU, BRIT YEL FLO GLD FLO SCAT IN 80%, POSS FRACT POR, TR MICRO PP POR IP, GD FLSH CUT TO GD SLO STRM CUT, FR OIL ODOR, NO STN ON DISH

3426 TO 3432' LS-TN DK BRN( 90% EVEN BRN OIL STN THRU) HD DNS IP TO V/ BRITT, MD-XLN, RE-XLN MTRX, ABDT IMBD SMLL TO MD ANG LM GRNS THRU, SCAT FOSS IP, SMLL CALC XLS IMBD IP, DLL YEL GLD FLO THRU, BRIT YEL GLD FLO IN 90%, PR -FR TR GD INTER-XLN POR THRU, TR GD VUG POR IP, HVY TR GD INTER-FOSS POR IP, GD OIL ODOR, EXCEL INST STRNG FLSH CUT TO EXCEL SLO STRM MLKY BLU CUT, TN LCH ON DISH

3440 -3443' LS- OFF WHT CRM LT TN (TN STN IN 10-20%) HD TO MD HD-MD-XLN RE-XLN MTRX, SUCRO S-CHLKY IP, FOSS FRGS IMBD IP, SLI TR IMBD GRN CLAY IP, DLL YEL GLD FLO IP, BRIT YEL GLD FLO IN 20%, PR FLSH CUT, FR SLO STRM CUT IN 20%, NO VIS POR IN 90%, SLI TR SCAT MICRO PP POR IN 10%

3445' LS - OFF WHT CRM LT TN IP (SCAT STN IN ISOLATED MICROVUGS) HD DNS F-VF-XLN, RE-XLN, SLI TR SMLL CALC XLS IMBD IP, DLL YEL GLD FLO IP, TO BRIT YEL GLD FLO IN 50%, V/ PR SCAT ISOLATED MICROVUG POR IP, FR FLSH CUT TO FR SLO STRM CUT.

3450' LS -CRM LT TN TN( HD DNS TO BRITT, (SCAT LT BRN OIL STN IN 60-70%, MD-F-XLN, RE-XLN MTRX, SMLL CALC XLS LMNTD AND SCAT THRU, TR SMLL TO MD LM GRNS IP, SLI TR PYR CLSTRS IP, DLL YEL GLD FLO THRU, SCAT BRIT YEL GLD FLO IN 80%, PR SCAT MICRO VUG POR, TR TIGHT MICRO PP POR IP, GD FLSH TO V/ GD SLO STRM RICH MLKY BLUE CUT, LT TN LCH ON DISH

3470- 76' LS- CRM TN BRN GY BLK( TAR STN SCAT IN 30%) HD DNS TR BRITT, F-CLN TO V/ TT SUCRO MTRX IP, GRDNG TO ABDT SFT GMMY CHLK IP, NO DLL FLO, SCAT BRIT YEL GLD FLO IN 20%, PR VIS SCAT ISOLATED MICROVUG POR IP, BLK OIL AND TAR STN IN POR, FLEETING OIL ODOR, PR FLSH TO GD SLO STRM CUT IN 30%

3488 -89' LS- OFF WHT TO CRM, FRM TO SFT, ABDT WHT CHLKY MTRX, ABDT SFT GMMY WHT CHLK IP, NO FLO, NO VIS POR, NO VIS SHOW

SH- MD TO DK GY-FRM BLKY SMTH TXT IP , LT GRN SMTH TXT IP

SH- RED- DK RD- FRM BLKY -GRNY TXT TO V/ SFT GMMY, W/ ABDT SFT WHT IP, NO FLO, NO VIS POR, NO VIS SHOW

3520-26 LS-CRM TN YELLOW- HD DNS MOTT, F-VF-XLN TR S-SUCRO IP, NO FLO, NO VIS POR, NO VIS SHOW

SH- RED DK RED- FRM BLKY GRNY TXT TO V/ SFT GMMY TXTIP

LS- CRM LT TN- HD DNS F-VF-XLN, TR FOSS FRGS IP, NO FLO, NO VIS POR, NO VIS SHOW

CHRT - RED ORANGE WHITE, WTHRD W, SLI TR IMBD SMLL RND CLR QURTZ GRNS IMBD

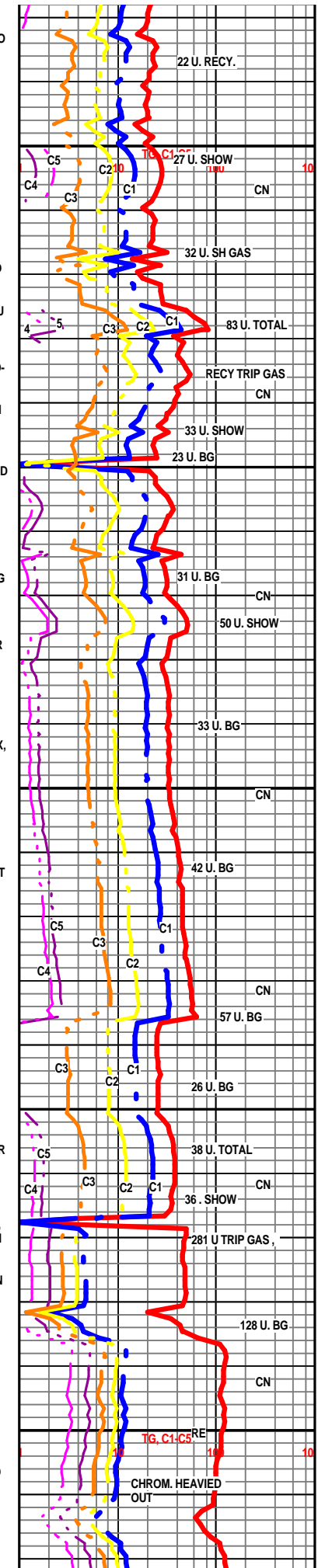
**ARBUCKLE 3552' - 1545'**

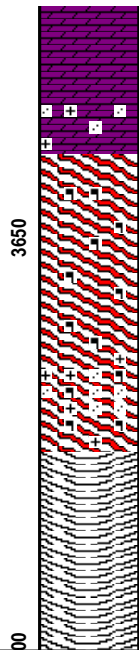
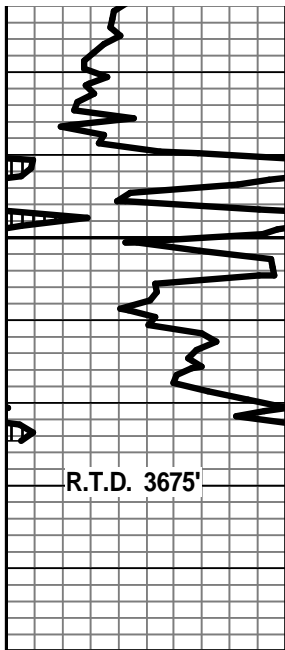
3552 TO 3562' DOLO- WHT W/ DK TN OIL STN IN 80-90%, HD TO V/ BRITT, F-XLN TO ABDT IMBD MD ANG WHT DOLO GRNS, THRU, TR PYR CLSTRS IP, DLL YEL GLD FLO THRU, TR SCAT BRIT YEL GLD FLO IN 10%, PR TO FR -GD TR EXCEL INTER-XLN POR THRU, GD OIL ODOR, EXCEL FLSH CUT TO EXCEL SLO STRM MLKY BLU CUT

3562 TO 3567' DOLO - WHT W/ DK TN OIL STN IN 100%, HD TO V/ BRITT, F-XLN TO ABDT IMBD SMLL TO MD ANG WHT DOLO GRNS THRU, RICH DLL YEL GLD FLO THRU, SCAT BRIT YEL GLD FLO IP, GD TO EXCEL INTER-XLN POR, ABDT FREE DOLO GRNS IN TRAY, EXCEL INST FLSH CUT TO EXCEL SLO STRM MLKY BLU CUT, V/ STRNG OIL ODOR, OIL IN SAMPLE BUCKET LIVE OIL IN DIMPLE DISH

3567 - 3574' DOLO- WHT LT TN DUE TO STN IN 100%, HD DNS IP TO V/ BRITT, F-XLN TO ABDT IMBD SMLL TO MD ANG WHT DOLO GRNS THRU, RICH DLL YEL GLD FLO THRU, SCAT BRIT YEL GLD FLO IP, GD TO EXCEL INTER-XLN POR, ABDT FREE DOLO GRNS IN TRAY, EXCEL INST FLSH CUT TO EXCEL SLO STRM MLKY BLU CUT, V/ STRNG OIL ODOR, LIVE OIL RUNNING OUT OF TRAYS UPON CLEANING, BRN OIL STN ON DISH

3575 -3582' DOLO- WHT LT TN TN STN IN 60-70%, HD DNS IP TO V/ BRITT, ABDT IMBD SMLL TO MD ANG DOLO GRNS THRU, DLL YEL GLD FLO IN 60%, SPTTD BRIT YEL GLD FLO IP, GD TO EXCEL INTER-XLN POR, TR VUG POR IP, HVY TR SFT WHT CHLK IP, GD OIL ODOR, LIVE OIL IN TRAY UPON WASHING SAMPLE, EXCEL FLUSH ANS SLO STRM MLKY BLUE CUT IN 60-70%, BRN LCH ON DISH.





3583 - 3620- DOLO- WHT OFF WHT LT TN HD DNS , F-ALN TO TO TT  
 SUCRO MTRX THRU, TR SFT WHT CHLK IP, LT YEL MIN FLO PR VIS  
 INTER-XLN POR IP PP POR IP, NO VIS CUT OR SHOW

3620-3639' DOLO- LT TN TN WHT IP, HD DNS TO BRITT, V/ TT SUCRO  
 MTRX TO SMLL AND DOLO GRNS IP, HVY TR SMLL S-RND CLR QURTZ  
 GRNS IMBD IP, HVY TR SMLL TO MD ANG QURTZ GRNS IP, TR FLDSPR,  
 NO VIS FLO, PR VIS INTER-XLN POR IP, NO VIS CUT OR SHOW

3640' - 3655' QURTZITE- FRSTY CLR, HD DNS ABDT SMLL TO MD TO  
 LRG CHARDS OF ANG QURTZ , ABDT IMBD MAGNETITE, HVY TR GRN  
 CLAY IP, NO FLO, NO VIS POR, NOVIS SHOW

3656 - 70' QURTZITE- FRSTY WHT ORANGE, HD DNS TO BRITT IP,  
 ABDT SMLL MD LRG ANG QURTZ GRNS, W/ HVY TR IMBD SMLL TO MD  
 S-ANG TO ANG QURTZ GRNS , ABDT IMBD LMNTD AND DISS  
 MAGNETITE, MICRO MICA IP, W, ABDT FLDSPR, TR GRN CLAY IMBD IP,  
 NO FLO, NO VIS POR, NO VIS SHOW

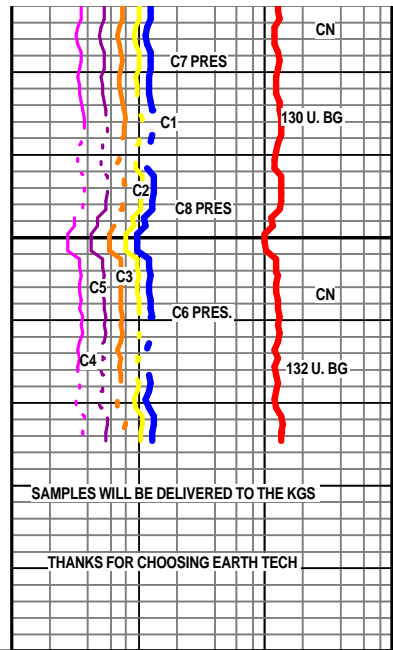
3672 - 75' QURTZITE- HD DNS - CLR TO FRSTY ORNG, ABDT  
 MD TO LRG ANG S-ANG QURTZ GRNS AND CHARDS, ABDT IMBD  
 MAGNETITE, FLDSPR, TR CLAY IP, NO FLO, NO VIS POR, NO VIS SHOW

T.D. AT 6:40 PM 8/06/2010

CTCH 2 HRS

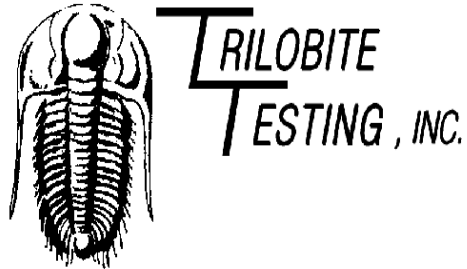
TRIP OUT F/ LOGS

WEATHERFORD /LIBERAL



SAMPLES WILL BE DELIVERED TO THE KGS

THANKS FOR CHOOSING EARTH TECH



## DRILL STEM TEST REPORT

Prepared For: **Sam Gary**

1515 Wynkoop Ste 700  
Denver Co 80202

ATTN: Tom Fertal

**10-17-16-Rush-Ks**

**Brack et al # 1-10**

Start Date: 2010.08.03 @ 04:15:53

End Date: 2010.08.03 @ 12:07:08

Job Ticket #: 039912      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Sam Gary

Brack et al # 1-10

10-17-16-Rush-Ks

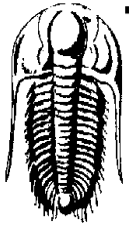
DST # 1

A-C

LKC

2010.08.03





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Sam Gary  
 1515 Wynkoop Ste 700  
 Denver Co 80202  
 ATTN: Tom Fertal

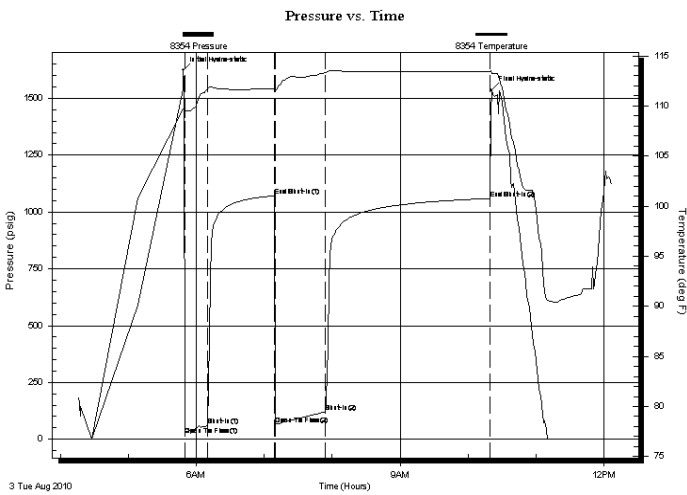
**Brack et al # 1-10**  
**10-17-16-Rush-Ks**  
 Job Ticket: 039912 **DST#: 1**  
 Test Start: 2010.08.03 @ 04:15:53

## GENERAL INFORMATION:

Formation: **A-C LKC**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 05:49:23  
 Time Test Ended: 12:07:08  
 Test Type: Conventional Bottom Hole  
 Tester: Dan Bangle  
 Unit No: 38  
 Interval: **3254.00 ft (KB) To 3313.00 ft (KB) (TVD)**  
 Total Depth: 3313.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Reference Elevations: 2007.00 ft (KB)  
 1919.00 ft (CF)  
 KB to GR/CF: 88.00 ft

**Serial #: 8354 Inside**  
 Press@RunDepth: 120.93 psig @ 3257.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2010.08.03 End Date: 2010.08.03 Last Calib.: 2010.08.03  
 Start Time: 04:15:54 End Time: 12:07:08 Time On Btm: 2010.08.03 @ 05:48:08  
 Time Off Btm: 2010.08.03 @ 10:20:53

TEST COMMENT: IF-Weak building to 2"  
 FF-Weak building to 3"



## PRESSURE SUMMARY

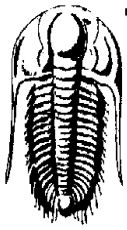
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1622.48	109.74	Initial Hydro-static
2	16.65	108.85	Open To Flow (1)
22	58.29	111.66	Shut-In(1)
81	1071.08	111.73	End Shut-In(1)
82	64.09	111.52	Open To Flow (2)
126	120.93	113.31	Shut-In(2)
272	1059.56	113.43	End Shut-In(2)
273	1536.40	113.21	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
185.00	Wtr Rw .08 @ 88 = 78000ppm	2.32
30.00	Mud w/ oil spots on top	0.42

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

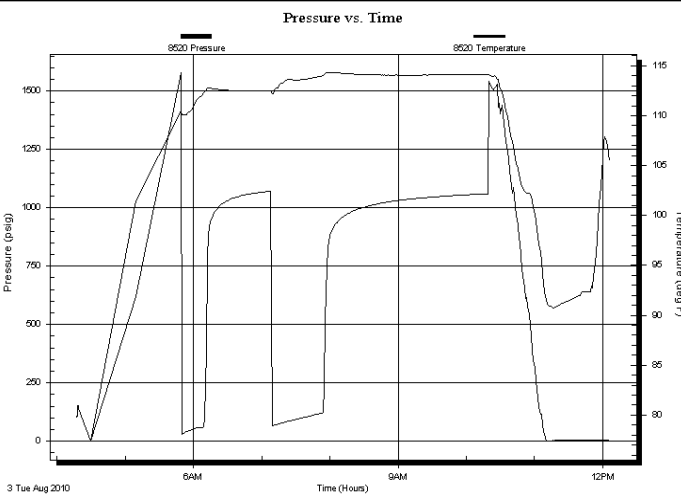
Sam Gary  
1515 Wynkoop Ste 700  
Denver Co 80202  
ATTN: Tom Fertal

**Brack et al # 1-10**  
**10-17-16-Rush-Ks**  
Job Ticket: 039912      **DST#: 1**  
Test Start: 2010.08.03 @ 04:15:53

## GENERAL INFORMATION:

Formation:      **A-C      LKC**  
Deviated:      No      Whipstock:                      ft (KB)      Test Type:      Conventional Bottom Hole  
Time Tool Opened: 05:49:23      Tester:      Dan Bangle  
Time Test Ended: 12:07:08      Unit No:      38  
**Interval:      3254.00 ft (KB) To      3313.00 ft (KB) (TVD)**      Reference Elevations:      2007.00 ft (KB)  
Total Depth:      3313.00 ft (KB) (TVD)      1919.00 ft (CF)  
Hole Diameter:      7.88 inches Hole Condition: Good      KB to GR/CF:      88.00 ft

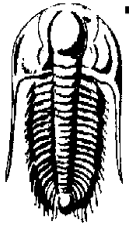
**Serial #: 8520      Outside**  
Press@RunDepth:                      psig @      3257.00 ft (KB)      Capacity:                      8000.00 psig  
Start Date:                      2010.08.03      End Date:                      2010.08.03      Last Calib.:                      2010.08.03  
Start Time:                      04:17:09      End Time:                      12:06:53      Time On Btm:                        
Time Off Btm:                        
TEST COMMENT: IF-Weak building to 2"  
FF-Weak building to 3"



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

Recovery		
Length (ft)	Description	Volume (bbl)
185.00	Wtr Rw .08 @ 88 = 78000ppm	2.32
30.00	Mud w/ oil spots on top	0.42

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



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Sam Gary  
1515 Wynkoop Ste 700  
Denver Co 80202  
ATTN: Tom Fertal

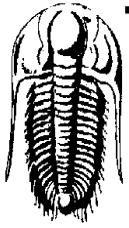
**Bracket # 1-10**  
**10-17-16-Rush-Ks**  
Job Ticket: 039912      **DST#: 1**  
Test Start: 2010.08.03 @ 04:15:53

**Tool Information**

Drill Pipe:	Length: 3209.00 ft	Diameter: 3.80 inches	Volume: 45.01 bbl	Tool Weight: 2800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 45.16 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	3254.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	59.00 ft			
Tool Length:	87.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3227.00	
Shut In Tool	5.00			3232.00	
Hydraulic tool	5.00			3237.00	
Jars	5.00			3242.00	
Safety Joint	3.00			3245.00	
Packer	5.00			3250.00	28.00      Bottom Of Top Packer
Packer	4.00			3254.00	
Stubb	1.00			3255.00	
Perforations	1.00			3256.00	
Change Over Sub	1.00			3257.00	
Recorder	0.00	8354	Inside	3257.00	
Recorder	0.00	8520	Outside	3257.00	
Drill Pipe	31.00			3288.00	
Change Over Sub	1.00			3289.00	
Perforations	21.00			3310.00	
Bullnose	3.00			3313.00	59.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>87.00</b>				



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Sam Gary  
1515 Wynkoop Ste 700  
Denver Co 80202  
ATTN: Tom Fertal

**Brack et al # 1-10**  
**10-17-16-Rush-Ks**  
Job Ticket: 039912      **DST#: 1**  
Test Start: 2010.08.03 @ 04:15:53

## 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: 78000 ppm	
Viscosity: 43.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.19 in <sup>3</sup>	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
185.00	Wtr Rw .08 @ 88 = 78000ppm	2.322
30.00	Mud w/ oil spots on top	0.421

Total Length: 215.00 ft      Total Volume: 2.743 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

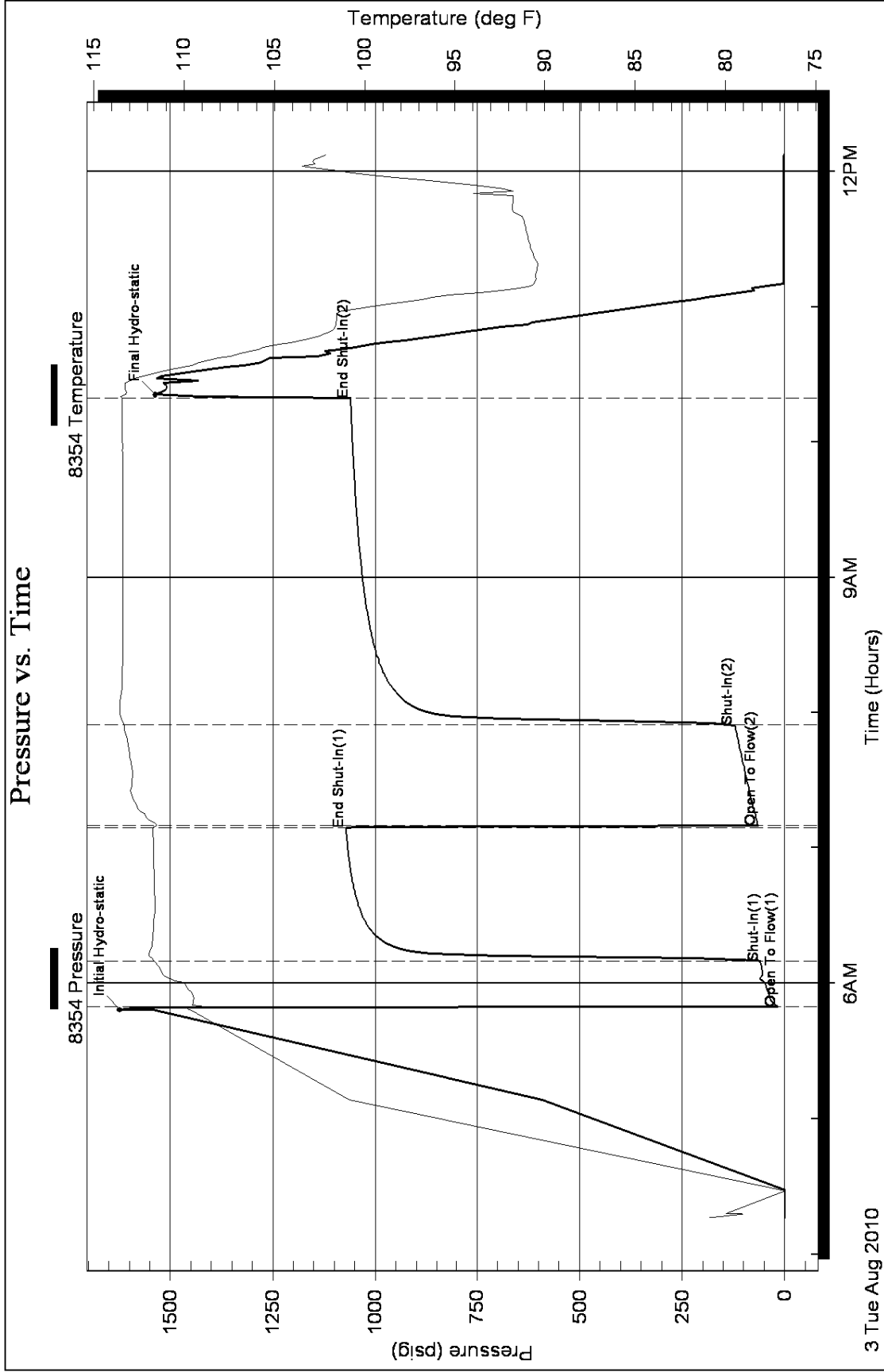
Serial #: 8354

Inside

Sam Gary

10-17-16-Rush-Ks

DST Test Number: 1

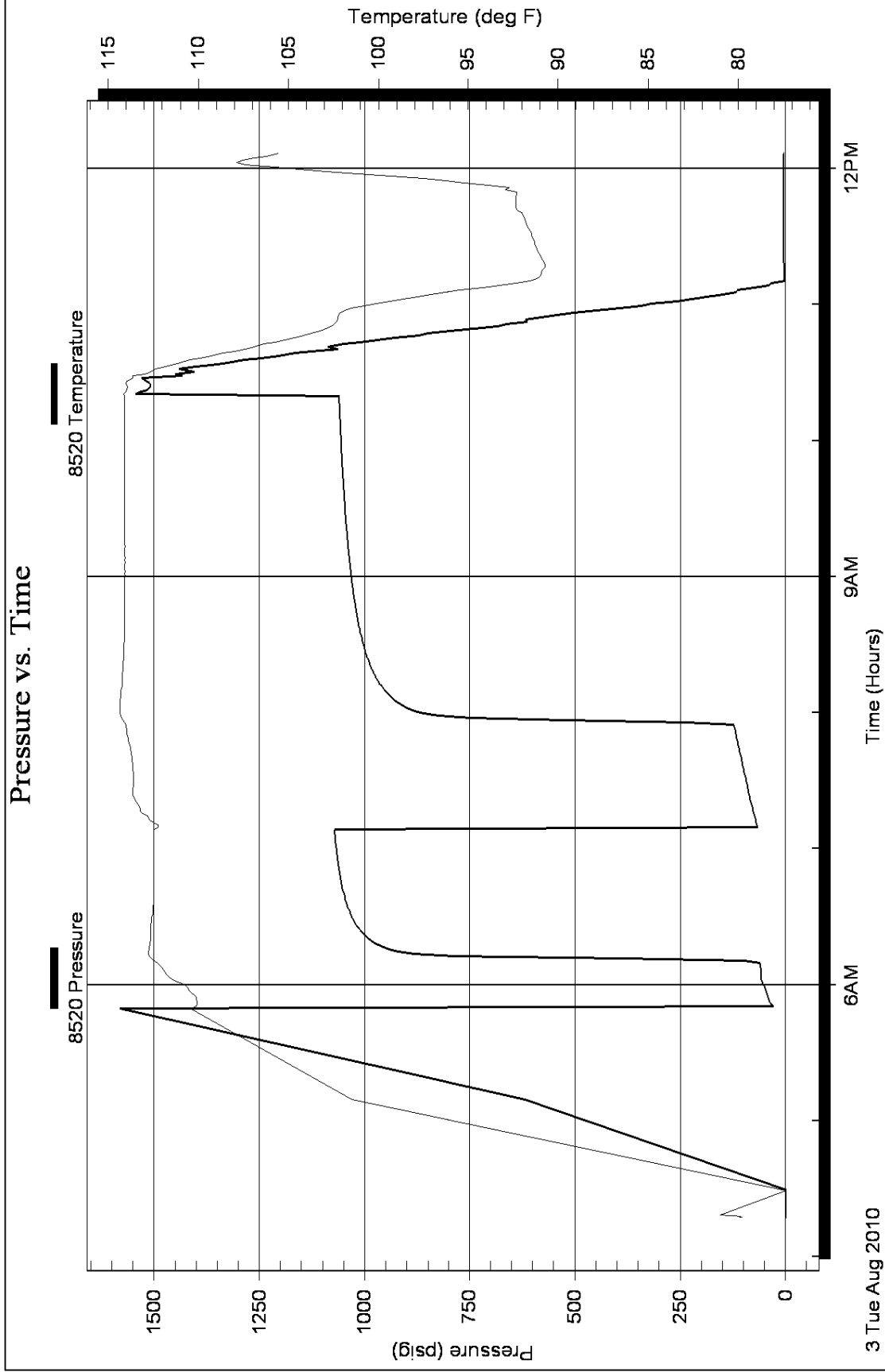


Serial #: 8520

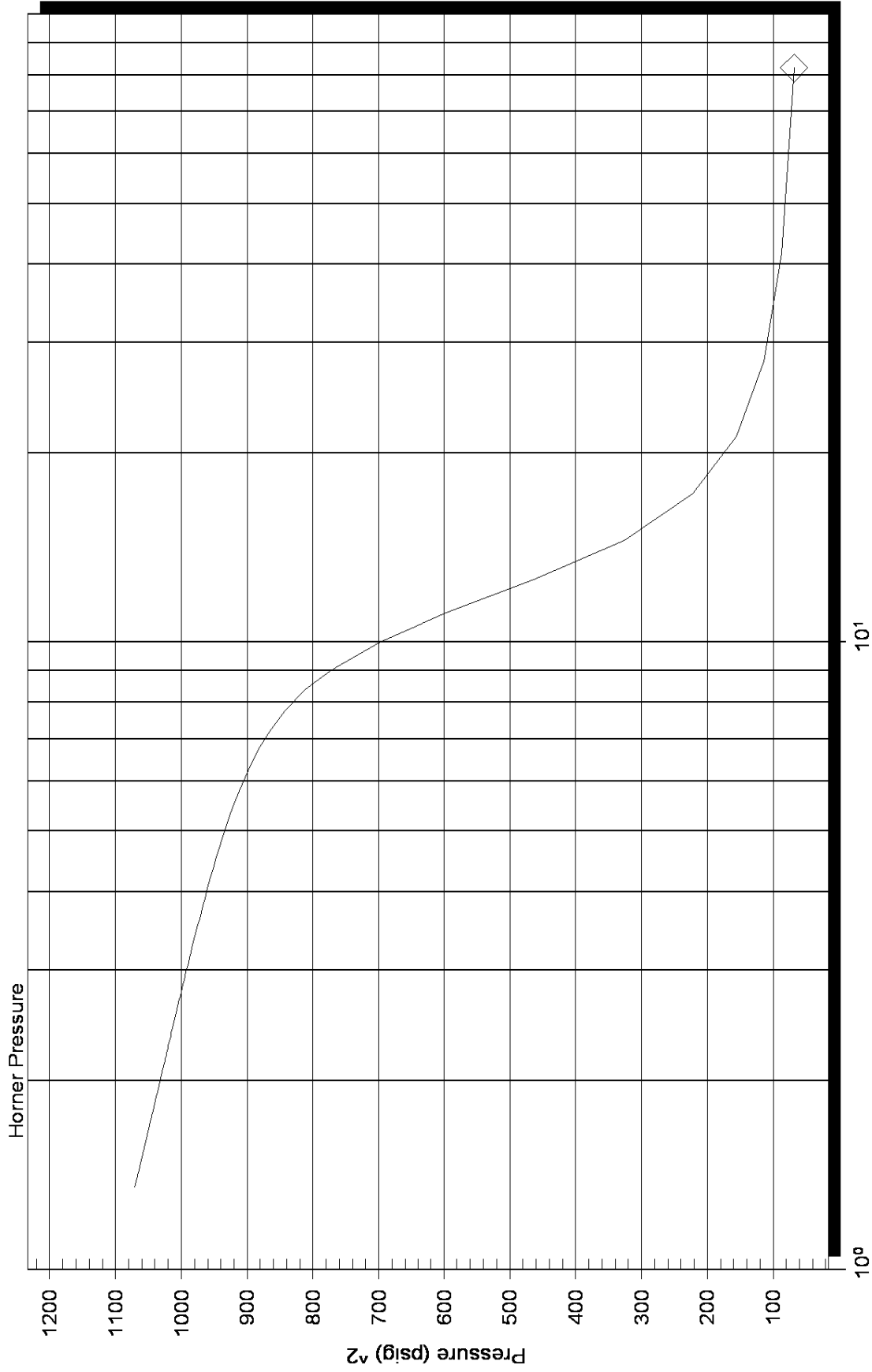
Outside Sam Gary

10-17-16-Rush-Ks

DST Test Number: 1



# Homer Plot



Serial Number: 8354 (Inside)

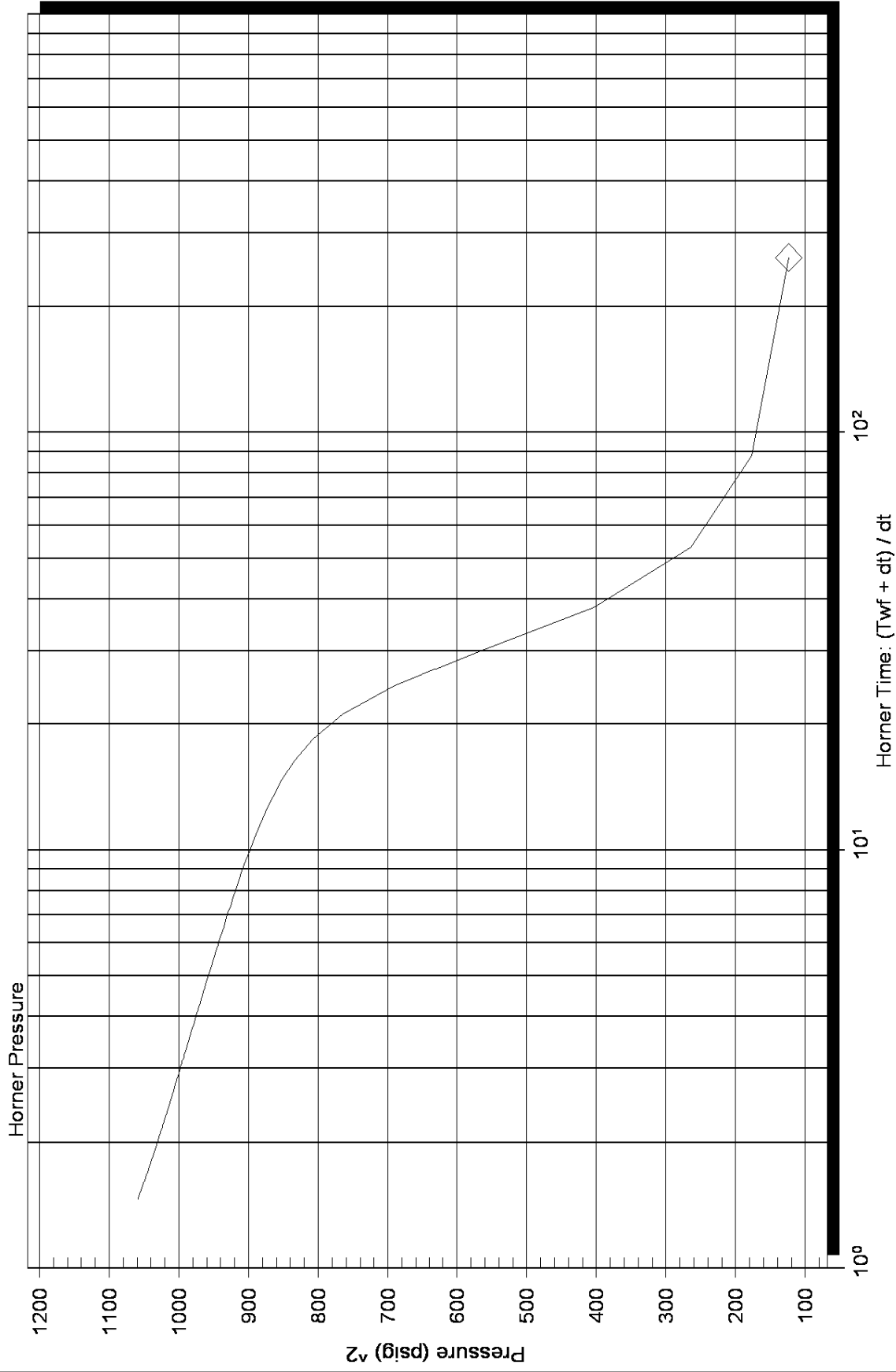
P\* :

Horner Time: (Twf + dt) / dt

Slope (m) : kpa/log cycle

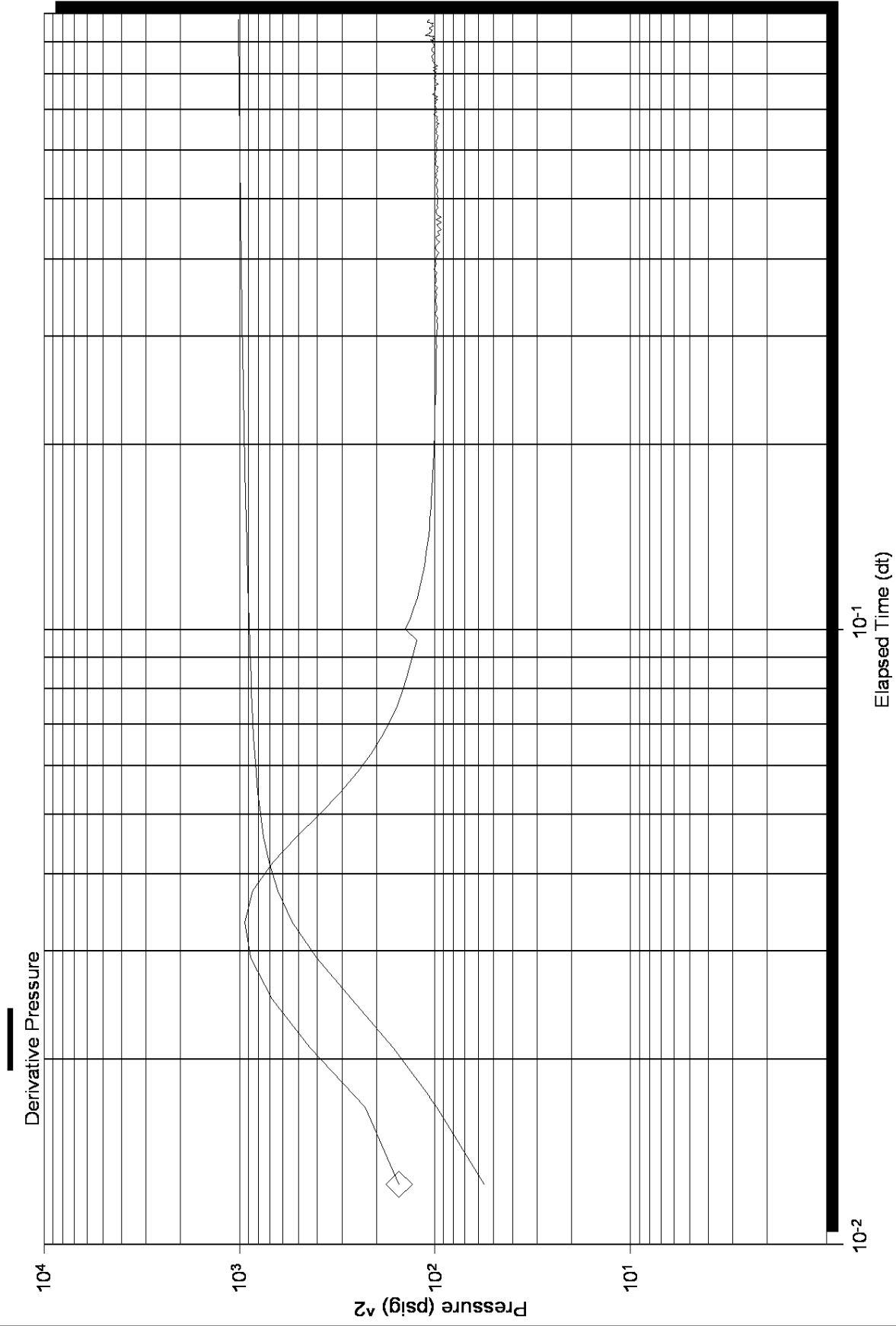
Flow Cycle: 1

# Homer Plot

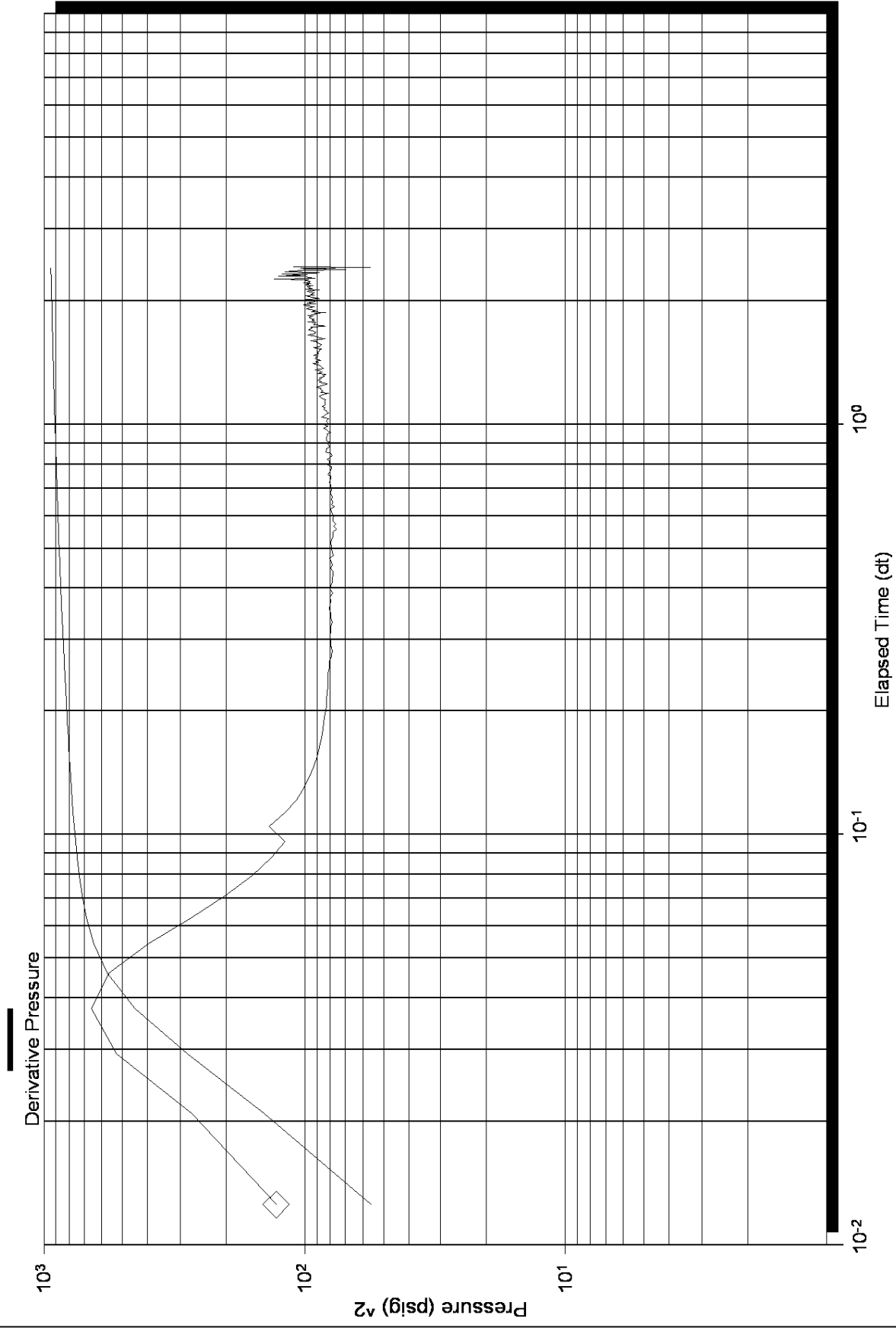


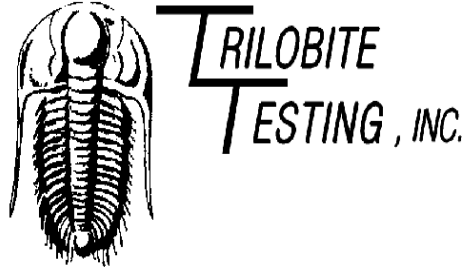


# Log-Log and Pseudo-Log-Log



# Log-Log and Pseudo-Log-Log





## DRILL STEM TEST REPORT

Prepared For: **Sam Gary**

1515 Wynkoop Ste 700  
Denver Co 80202

ATTN: Tom Fertal

### **10-17-16-Rush-Ks**

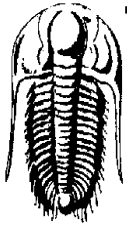
#### **Brack et al # 1-10**

Start Date: 2010.08.03 @ 21:54:27

End Date: 2010.08.04 @ 05:42:42

Job Ticket #: 039913      DST #: 2

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



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Sam Gary  
 1515 Wynkoop Ste 700  
 Denver Co 80202  
 ATTN: Tom Fertal

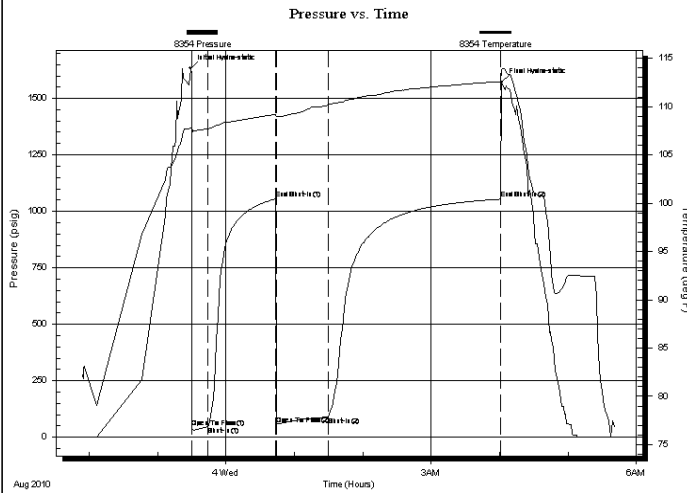
**Bracket # 1-10**  
**10-17-16-Rush-Ks**  
 Job Ticket: 039913 **DST#: 2**  
 Test Start: 2010.08.03 @ 21:54:27

**GENERAL INFORMATION:**

Formation: **D-G LKC**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 23:30:12  
 Time Test Ended: 05:42:42  
 Test Type: Conventional Bottom Hole  
 Tester: Dan Bangle  
 Unit No: 38  
 Interval: **3320.00 ft (KB) To 3372.00 ft (KB) (TVD)**  
 Total Depth: 3372.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Reference Elevations: 2007.00 ft (KB)  
 1919.00 ft (CF)  
 KB to GR/CF: 88.00 ft

**Serial #: 8354 Inside**  
 Press@RunDepth: 91.83 psig @ 3323.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2010.08.03 End Date: 2010.08.04 Last Calib.: 2010.08.04  
 Start Time: 21:54:28 End Time: 05:42:42 Time On Btm: 2010.08.03 @ 23:28:57  
 Time Off Btm: 2010.08.04 @ 04:02:12

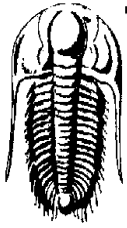
TEST COMMENT: IF-Strong B-B in 13 min  
 FF-Weak building to 5"



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1632.48	107.74	Initial Hydro-static
2	41.68	107.13	Open To Flow (1)
16	45.89	107.72	Shut-In(1)
75	1054.91	109.20	End Shut-In(1)
76	57.08	108.96	Open To Flow (2)
122	91.83	110.21	Shut-In(2)
272	1053.99	112.60	End Shut-In(2)
274	1571.65	113.79	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
145.00	Wtr Rw .08 @ 80 = 80000ppm	1.76
10.00	CO	0.14
0.00	120 GIP	0.00

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



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

Sam Gary  
1515 Wynkoop Ste 700  
Denver Co 80202  
ATTN: Tom Fertal

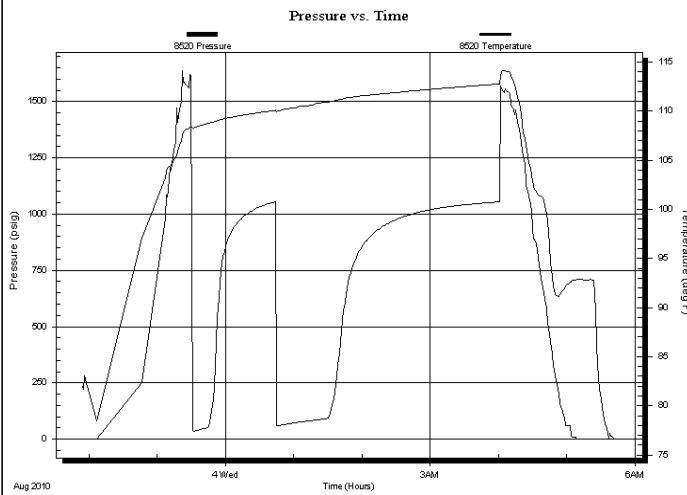
**Brack et al # 1-10**  
**10-17-16-Rush-Ks**  
Job Ticket: 039913 **DST#: 2**  
Test Start: 2010.08.03 @ 21:54:27

**GENERAL INFORMATION:**

Formation: **D-G LKC**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 23:30:12  
Time Test Ended: 05:42:42  
Interval: **3320.00 ft (KB) To 3372.00 ft (KB) (TVD)**  
Total Depth: 3372.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good  
Test Type: Conventional Bottom Hole  
Tester: Dan Bangle  
Unit No: 38  
Reference Elevations: 2007.00 ft (KB)  
1919.00 ft (CF)  
KB to GR/CF: 88.00 ft

**Serial #: 8520** **Outside**  
Press@RunDepth: psig @ 3323.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2010.08.03 End Date: 2010.08.04 Last Calib.: 2010.08.04  
Start Time: 21:54:28 End Time: 05:42:57 Time On Btm:  
Time Off Btm:

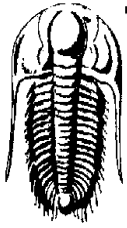
TEST COMMENT: IF-Strong B-B in 13 min  
FF-Weak building to 5"



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

Recovery		
Length (ft)	Description	Volume (bbl)
145.00	Wtr Rw .08 @ 80 = 80000ppm	1.76
10.00	CO	0.14
0.00	120 GIP	0.00

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



**TRILOBITE**  
TESTING, INC

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Sam Gary  
1515 Wynkoop Ste 700  
Denver Co 80202  
ATTN: Tom Fertal

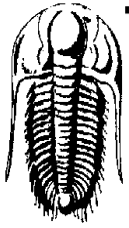
**Bracket # 1-10**  
**10-17-16-Rush-Ks**  
Job Ticket: 039913      **DST#: 2**  
Test Start: 2010.08.03 @ 21:54:27

**Tool Information**

Drill Pipe:	Length: 3271.00 ft	Diameter: 3.80 inches	Volume: 45.88 bbl	Tool Weight: 2800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 46.03 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	3320.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	52.00 ft			
Tool Length:	80.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3293.00	
Shut In Tool	5.00			3298.00	
Hydraulic tool	5.00			3303.00	
Jars	5.00			3308.00	
Safety Joint	3.00			3311.00	
Packer	5.00			3316.00	28.00      Bottom Of Top Packer
Packer	4.00			3320.00	
Stubb	1.00			3321.00	
Perforations	1.00			3322.00	
Change Over Sub	1.00			3323.00	
Recorder	0.00	8354	Inside	3323.00	
Recorder	0.00	8520	Outside	3323.00	
Drill Pipe	31.00			3354.00	
Change Over Sub	1.00			3355.00	
Perforations	14.00			3369.00	
Bullnose	3.00			3372.00	52.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>80.00</b>				



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Sam Gary  
1515 Wynkoop Ste 700  
Denver Co 80202  
ATTN: Tom Fertal

**Bracket # 1-10**  
**10-17-16-Rush-Ks**  
Job Ticket: 039913      **DST#: 2**  
Test Start: 2010.08.03 @ 21:54:27

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 34 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 80000 ppm
Viscosity: 64.00 sec/qt	Cushion Volume: bbl	
Water Loss: 9.98 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 6100.00 ppm		
Filter Cake: inches		

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
145.00	Wtr Rw .08 @ 80 = 80000ppm	1.761
10.00	CO	0.140
0.00	120 GIP	0.000

Total Length: 155.00 ft      Total Volume: 1.901 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

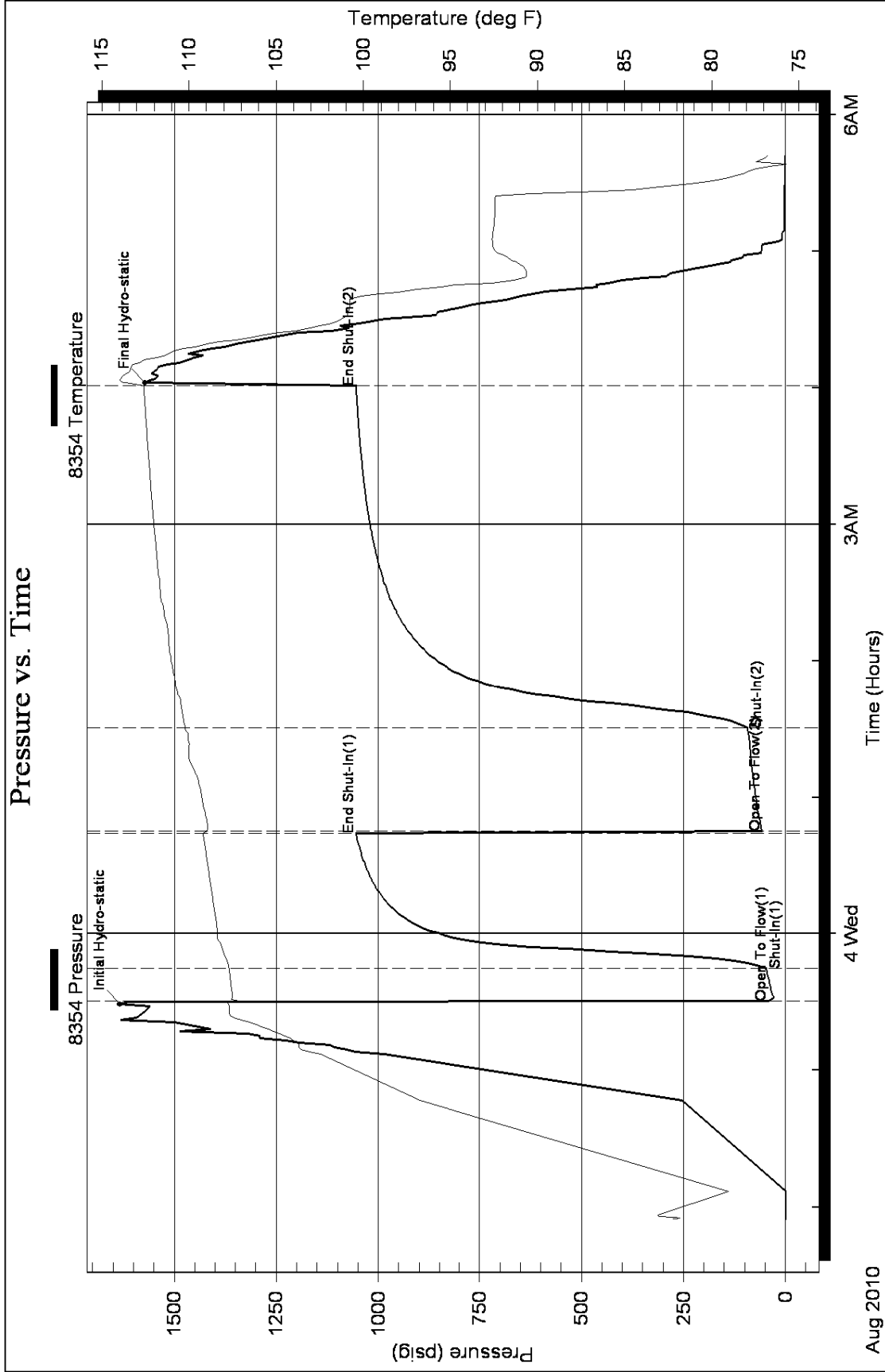
Serial #: 8354

Inside

Sam Gary

10-17-16-Rush-Ks

DST Test Number: 2



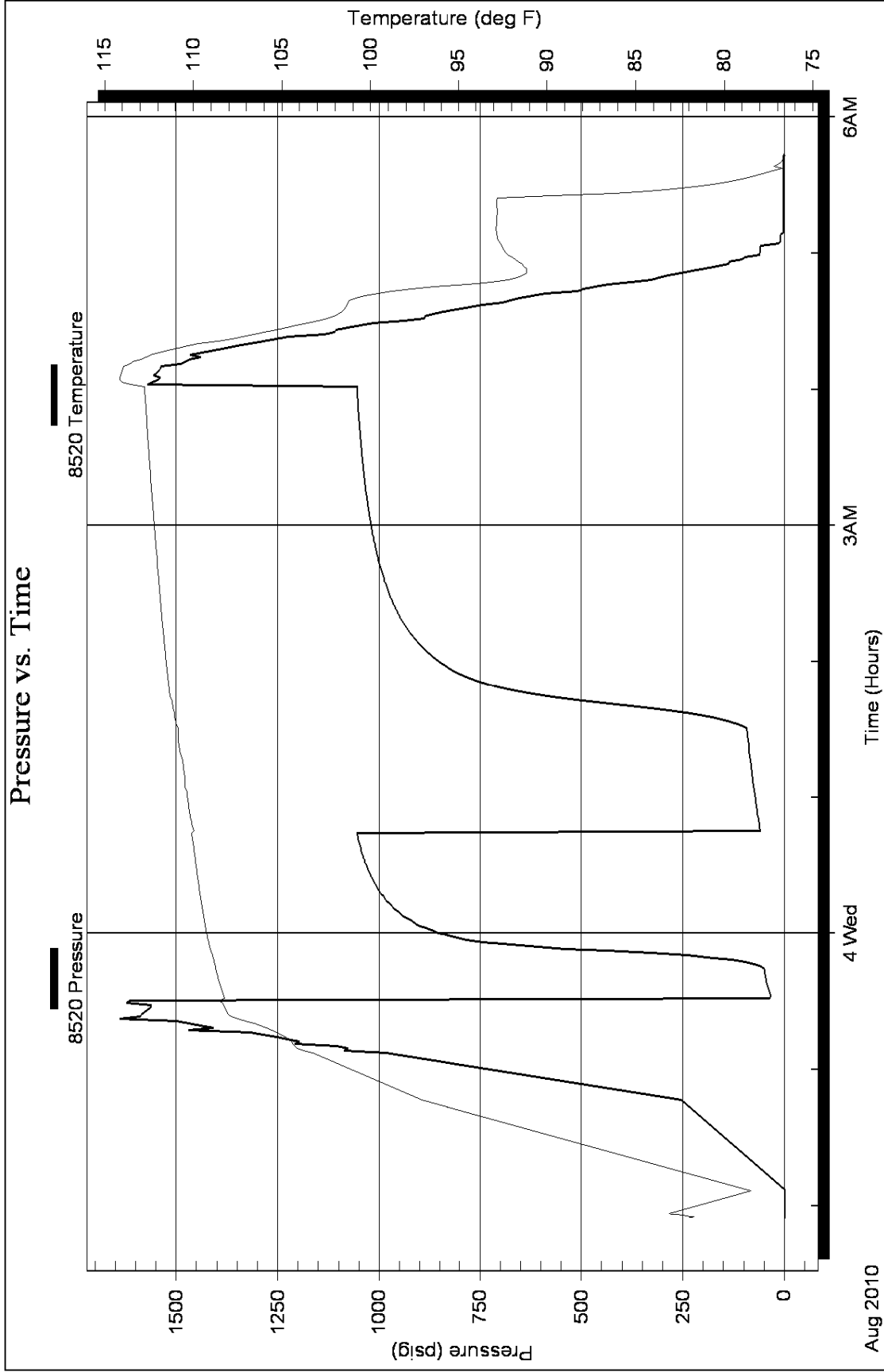


Serial #: 8520

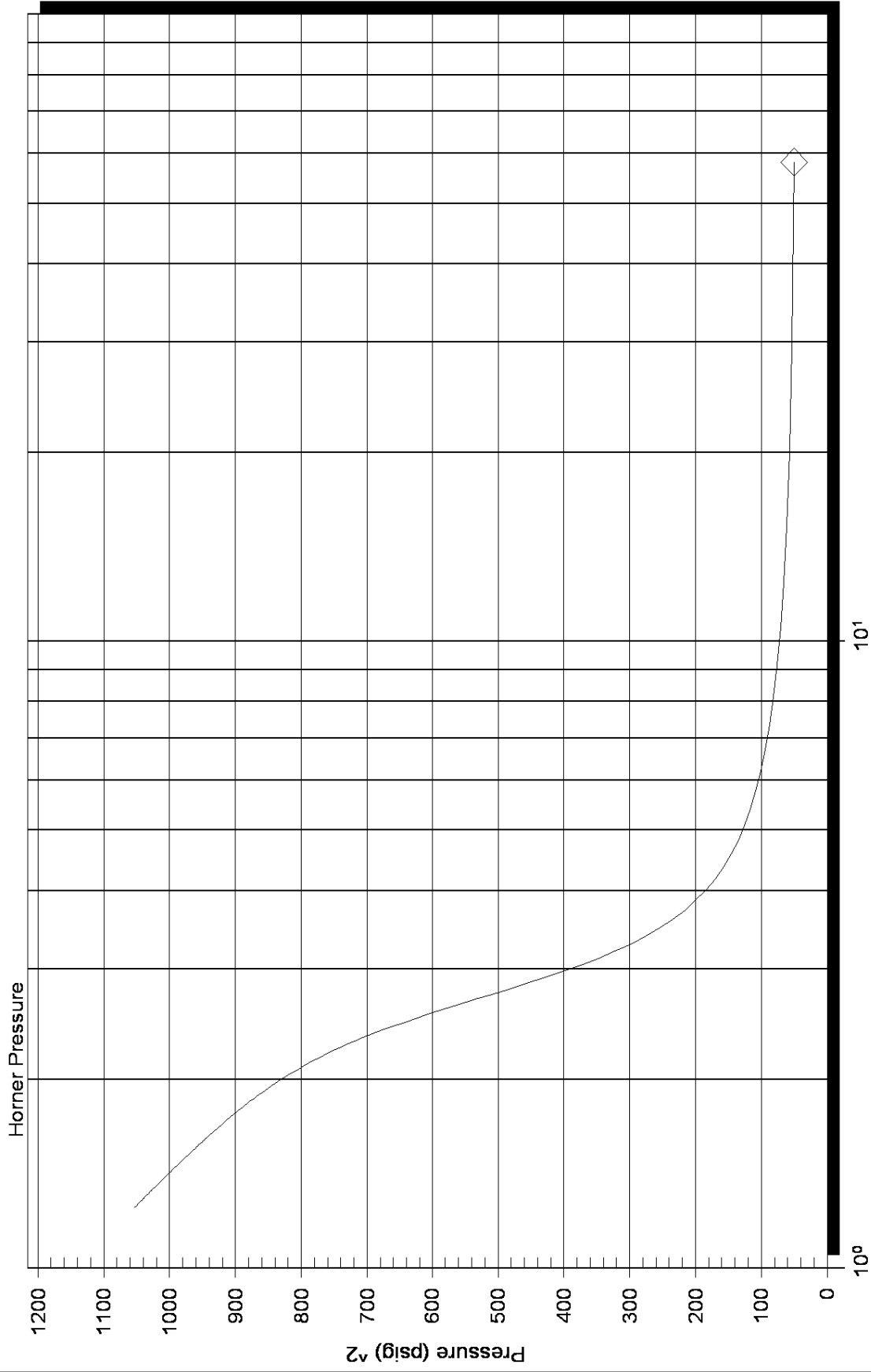
Outside Sam Gary

10-17-16-Rush-Ks

DST Test Number: 2



# Homer Plot



Serial Number: 8354 (Inside)

Slope (m) : kpa/log cycle

P\* :

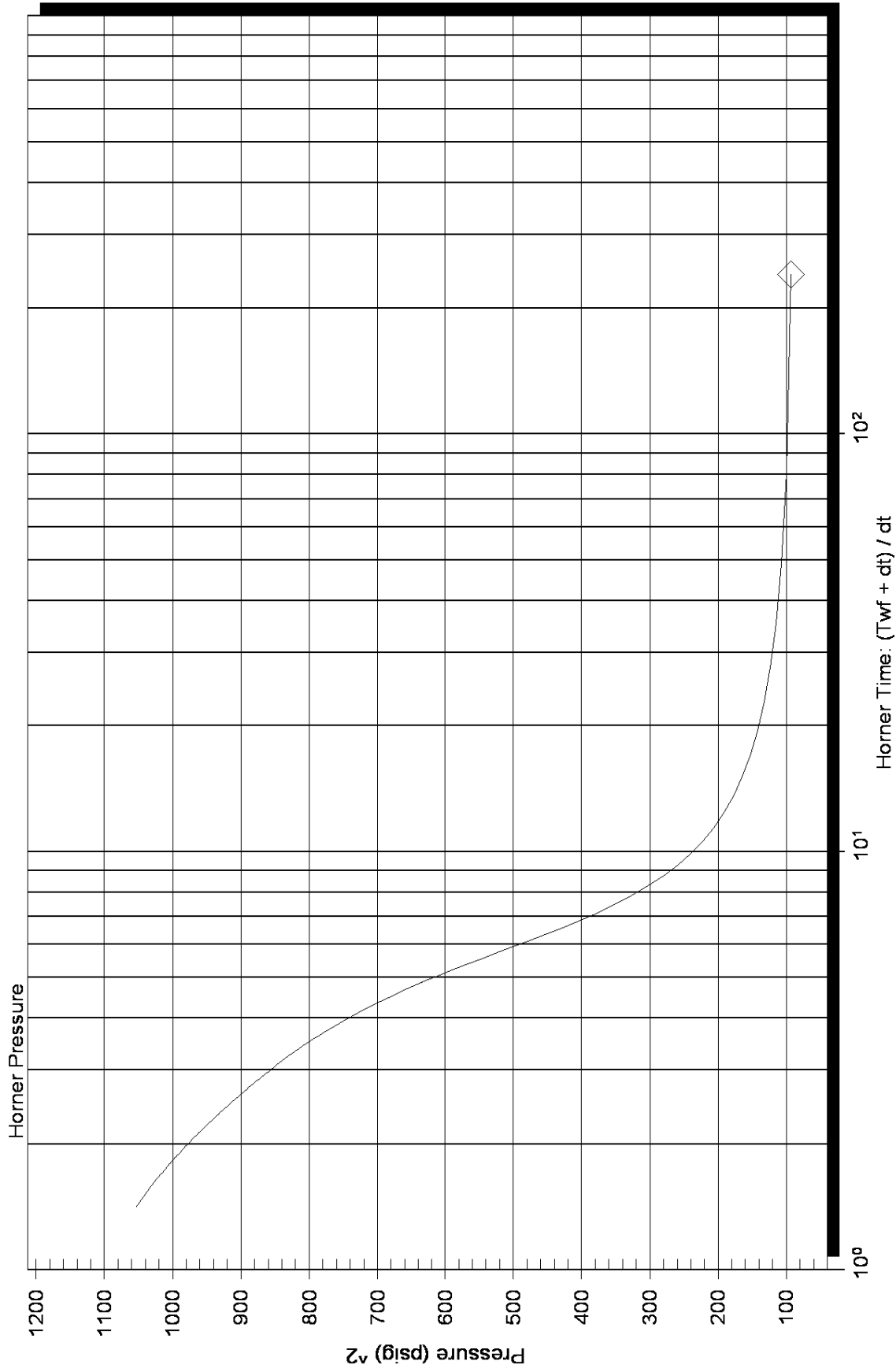
Horner Time: (Twf + dt) / dt

10<sup>1</sup>

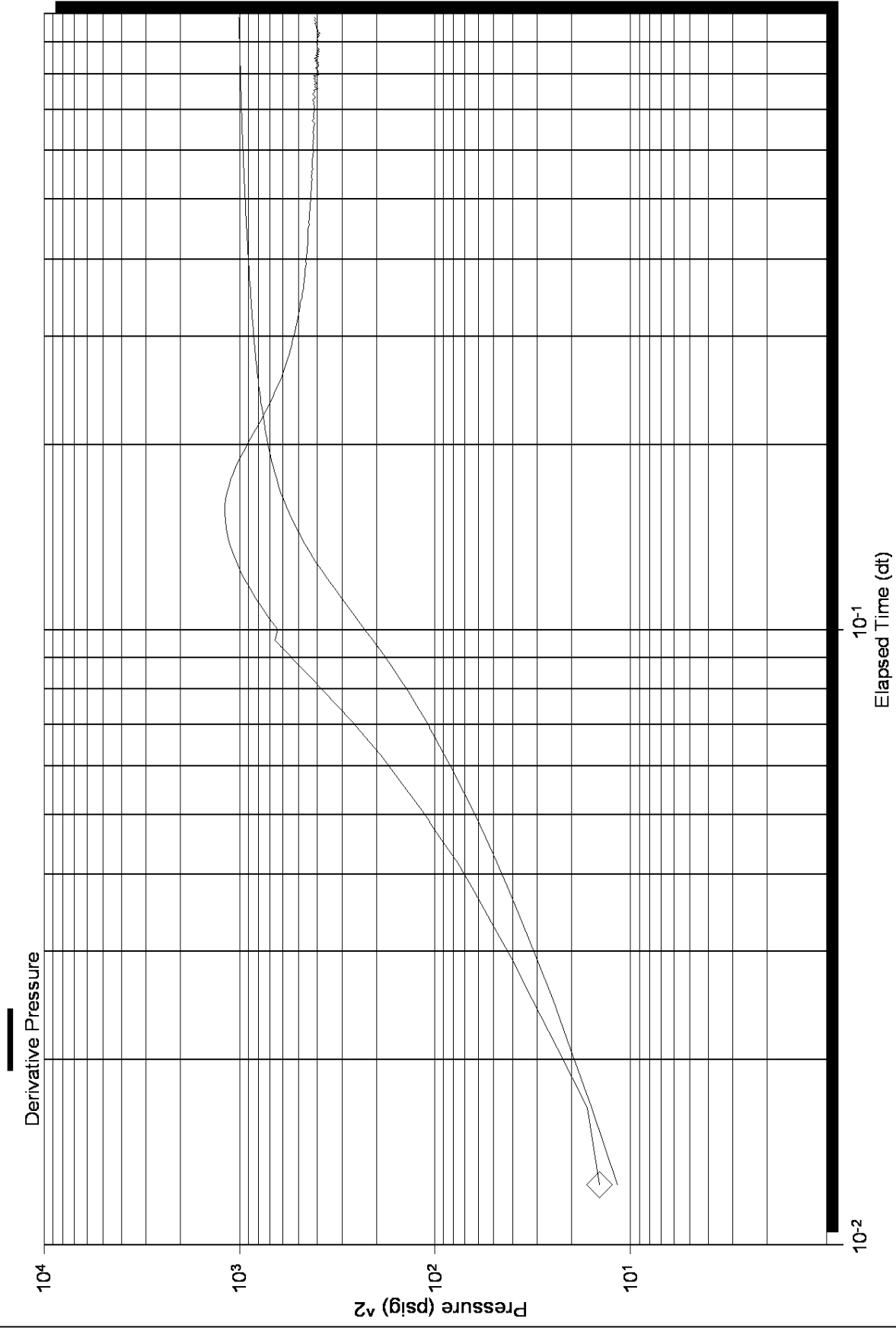
10<sup>0</sup>

Flow Cycle: 1

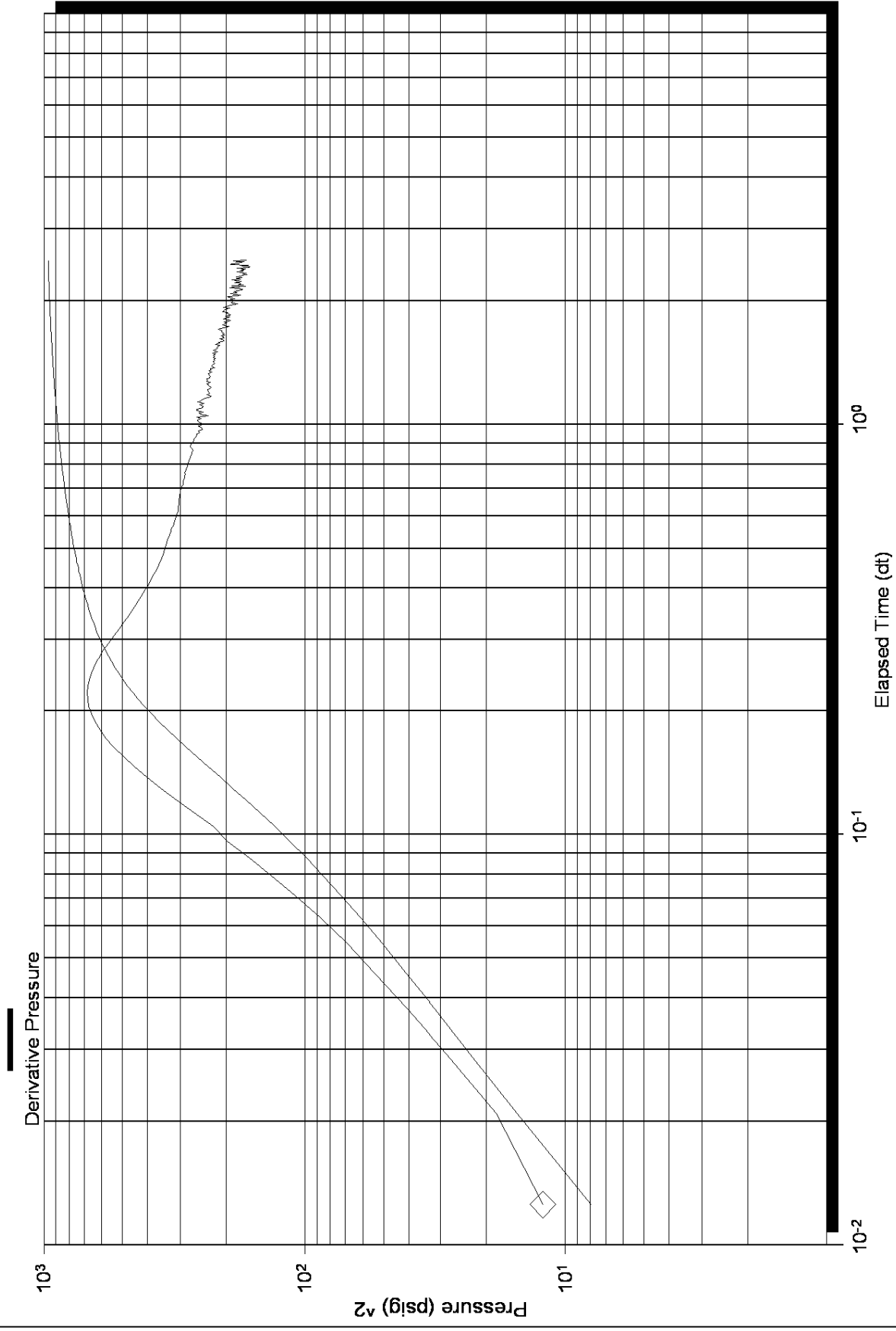
### Homer Plot

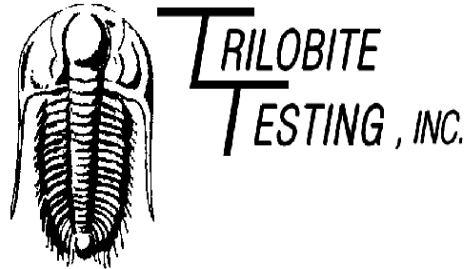


# Log-Log and Pseudo-Log-Log



# Log-Log and Pseudo-Log-Log





## DRILL STEM TEST REPORT

Prepared For: **Sam Gary**

1515 Wynkoop Ste 700  
Denver Co 80202

ATTN: Tom Fertal

**10-17-16-Rush-Ks**

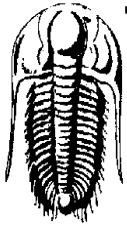
**Brack et al # 1-10**

Start Date: 2010.08.05 @ 02:50:13

End Date: 2010.08.05 @ 11:18:28

Job Ticket #: 039915      DST #: 4

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Sam Gary  
 1515 Wynkoop Ste 700  
 Denver Co 80202  
 ATTN: Tom Fertal

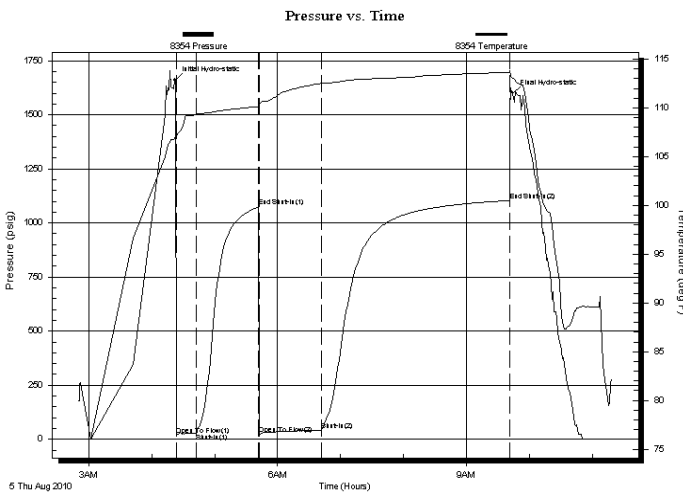
**Brack et al # 1-10**  
**10-17-16-Rush-Ks**  
 Job Ticket: 039915 **DST#: 4**  
 Test Start: 2010.08.05 @ 02:50:13

## GENERAL INFORMATION:

Formation: **H-I LKC**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 04:23:13  
 Time Test Ended: 11:18:28  
 Interval: **3415.00 ft (KB) To 3450.00 ft (KB) (TVD)**  
 Total Depth: 3450.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole  
 Tester: Dan Bangle  
 Unit No: 38  
 Reference Elevations: 2007.00 ft (KB)  
 1919.00 ft (CF)  
 KB to GR/CF: 88.00 ft

**Serial #: 8354 Inside**  
 Press@RunDepth: 42.89 psig @ 3416.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2010.08.05 End Date: 2010.08.05 Last Calib.: 2010.08.05  
 Start Time: 02:50:14 End Time: 11:18:28 Time On Btm: 2010.08.05 @ 04:22:28  
 Time Off Btm: 2010.08.05 @ 09:44:28

TEST COMMENT: IF-Weak building to 2"  
 FF-Strong B-B in 8 min



## PRESSURE SUMMARY

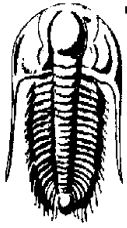
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1659.83	107.15	Initial Hydro-static
1	18.40	106.87	Open To Flow (1)
20	28.22	109.42	Shut-In(1)
80	1074.96	110.15	End Shut-In(1)
81	23.46	110.50	Open To Flow (2)
140	42.89	112.50	Shut-In(2)
319	1103.45	113.66	End Shut-In(2)
322	1598.23	113.04	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	MCGsyO 10%g 70%o 20%m	0.57
15.00	OCGsyM 20%g 30%o 50%m	0.21
0.00	480 GIP	0.00

## Gas Rates

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



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Sam Gary  
 1515 Wynkoop Ste 700  
 Denver Co 80202  
 ATTN: Tom Fertal

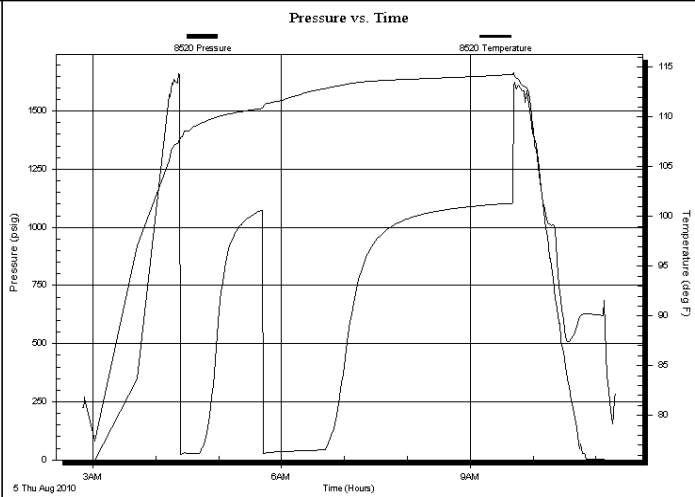
**Brack et al # 1-10**  
**10-17-16-Rush-Ks**  
 Job Ticket: 039915 **DST#: 4**  
 Test Start: 2010.08.05 @ 02:50:13

**GENERAL INFORMATION:**

Formation: **H-I LKC**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 04:23:13  
 Time Test Ended: 11:18:28  
 Interval: **3415.00 ft (KB) To 3450.00 ft (KB) (TVD)**  
 Total Depth: 3450.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole  
 Tester: Dan Bangle  
 Unit No: 38  
 Reference Elevations: 2007.00 ft (KB)  
 1919.00 ft (CF)  
 KB to GR/CF: 88.00 ft

**Serial #: 8520 Outside**  
 Press@RunDepth: psig @ 3416.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2010.08.05 End Date: 2010.08.05 Last Calib.: 2010.08.05  
 Start Time: 02:50:23 End Time: 11:18:52 Time On Btm:  
 Time Off Btm:

TEST COMMENT: IF-Weak building to 2"  
 FF-Strong B-B in 8 min

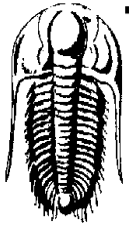


PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery		
Length (ft)	Description	Volume (bbl)
60.00	MCGsyO 10%g 70%o 20%m	0.57
15.00	OCGsyM 20%g 30%o 50%m	0.21
0.00	480 GIP	0.00

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





**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Sam Gary  
1515 Wynkoop Ste 700  
Denver Co 80202  
ATTN: Tom Fertal

**Bracket # 1-10**  
**10-17-16-Rush-Ks**  
Job Ticket: 039915      **DST#: 4**  
Test Start: 2010.08.05 @ 02:50:13

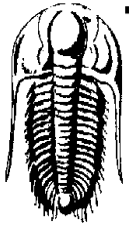
### Tool Information

Drill Pipe:	Length: 3365.00 ft	Diameter: 3.80 inches	Volume: 47.20 bbl	Tool Weight: 2800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 47.35 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3415.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	63.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3388.00	
Shut In Tool	5.00			3393.00	
Hydraulic tool	5.00			3398.00	
Jars	5.00			3403.00	
Safety Joint	3.00			3406.00	
Packer	5.00			3411.00	28.00      Bottom Of Top Packer
Packer	4.00			3415.00	
Stubb	1.00			3416.00	
Recorder	0.00	8354	Inside	3416.00	
Recorder	0.00	8520	Outside	3416.00	
Perforations	31.00			3447.00	
Bullnose	3.00			3450.00	35.00      Bottom Packers & Anchor

**Total Tool Length: 63.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Sam Gary  
1515 Wynkoop Ste 700  
Denver Co 80202  
ATTN: Tom Fertal

**Brack et al # 1-10**  
**10-17-16-Rush-Ks**  
Job Ticket: 039915      **DST#: 4**  
Test Start: 2010.08.05 @ 02:50:13

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6300.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

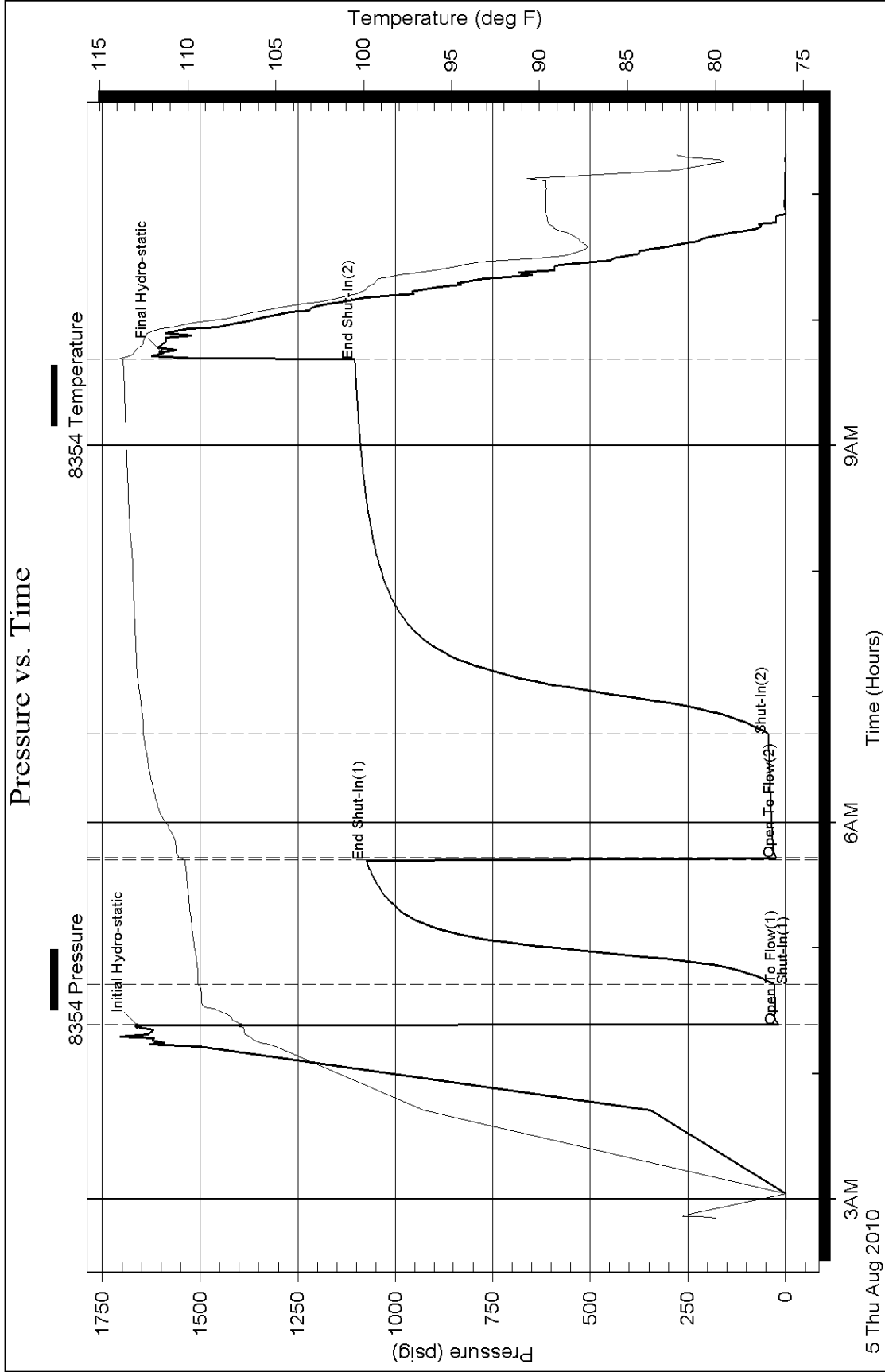
Length ft	Description	Volume bbl
60.00	MCGsyO 10%g 70%o 20%m	0.568
15.00	OCGsyM 20%g 30%o 50%m	0.210
0.00	480 GIP	0.000

Total Length: 75.00 ft      Total Volume: 0.778 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

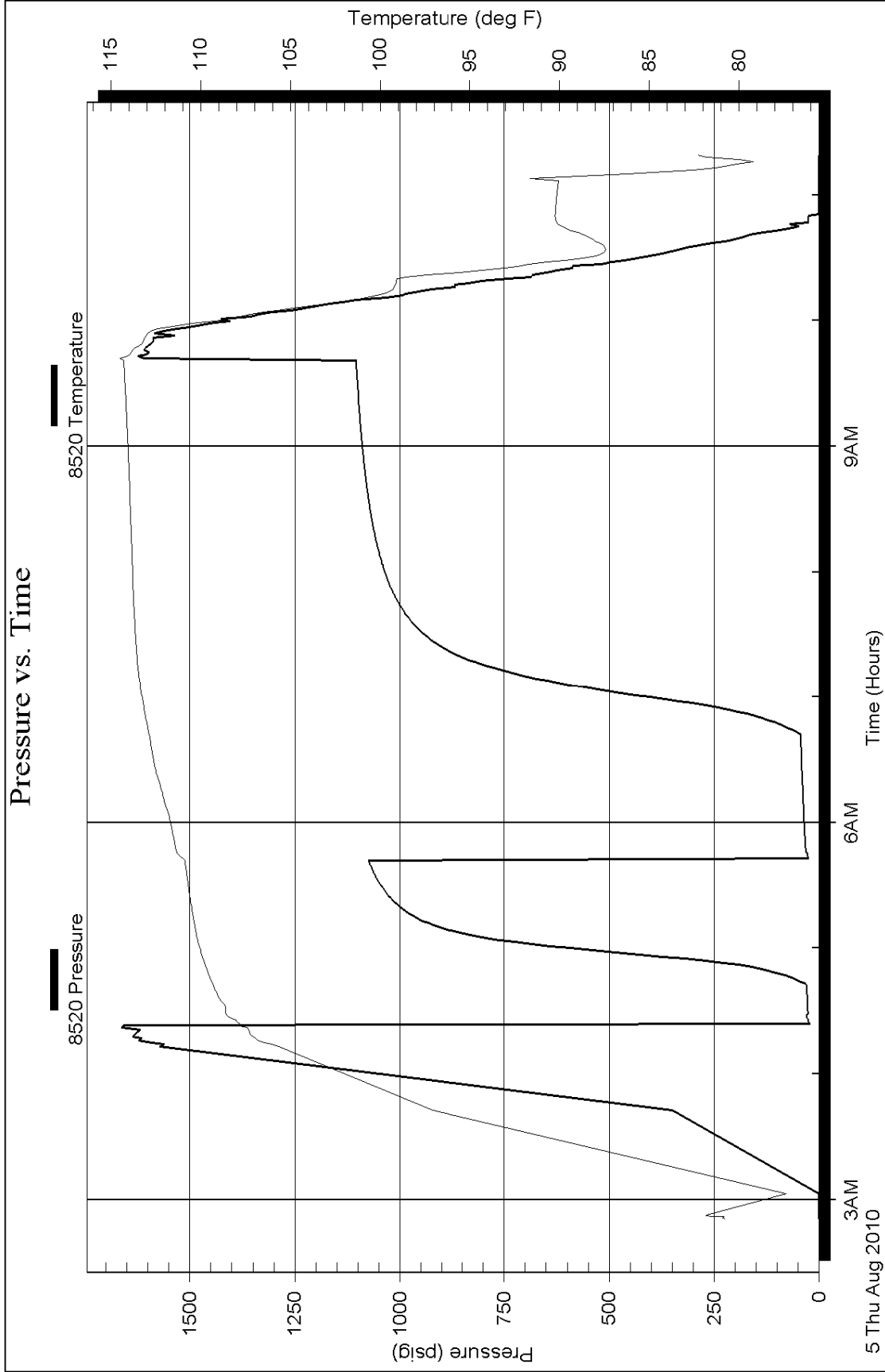


Serial #: 8520

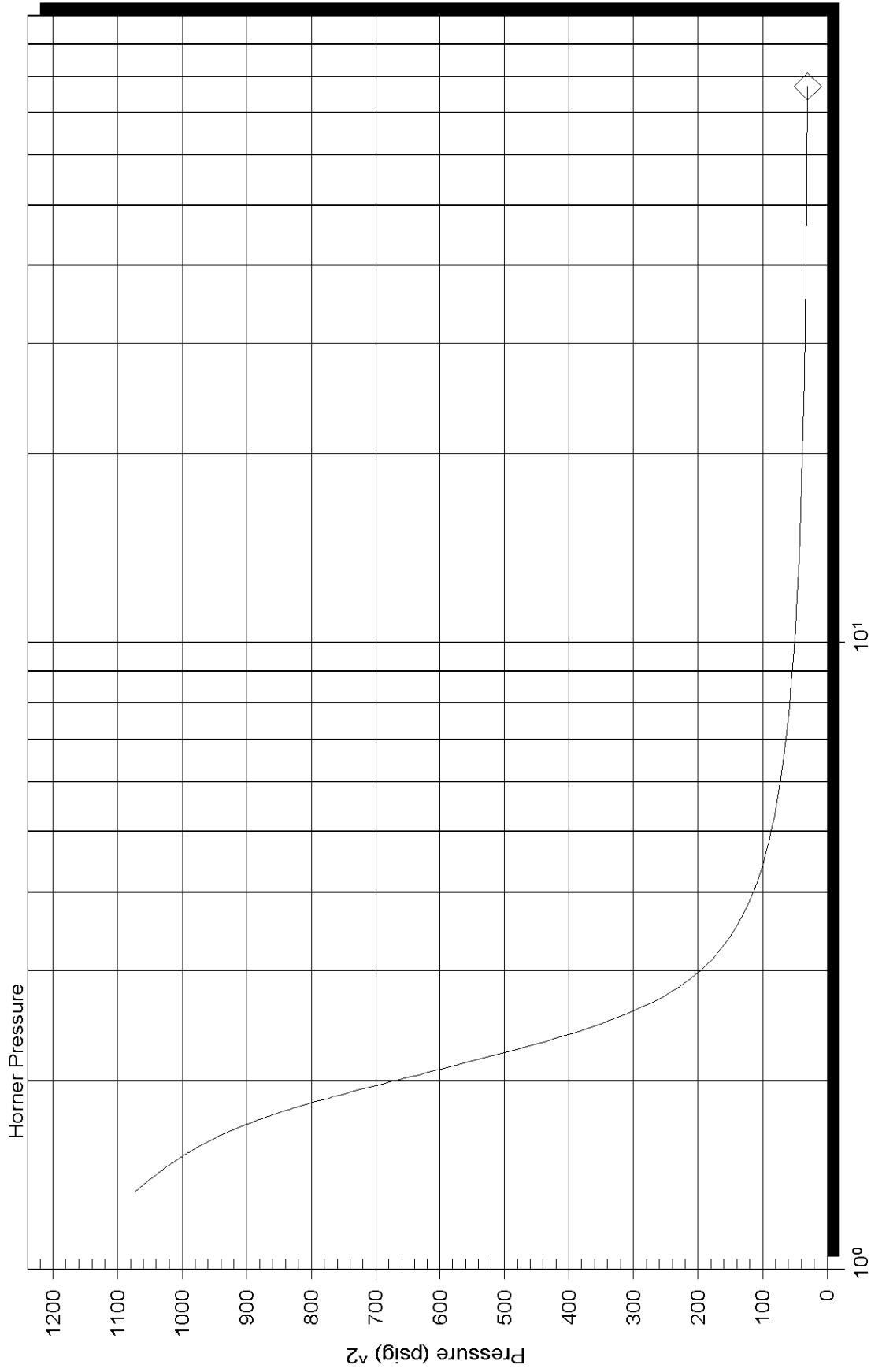
Outside Sam Gary

10-17-16-Rush-Ks

DST Test Number: 4



# Horner Plot



Serial Number: 8354 (Inside)

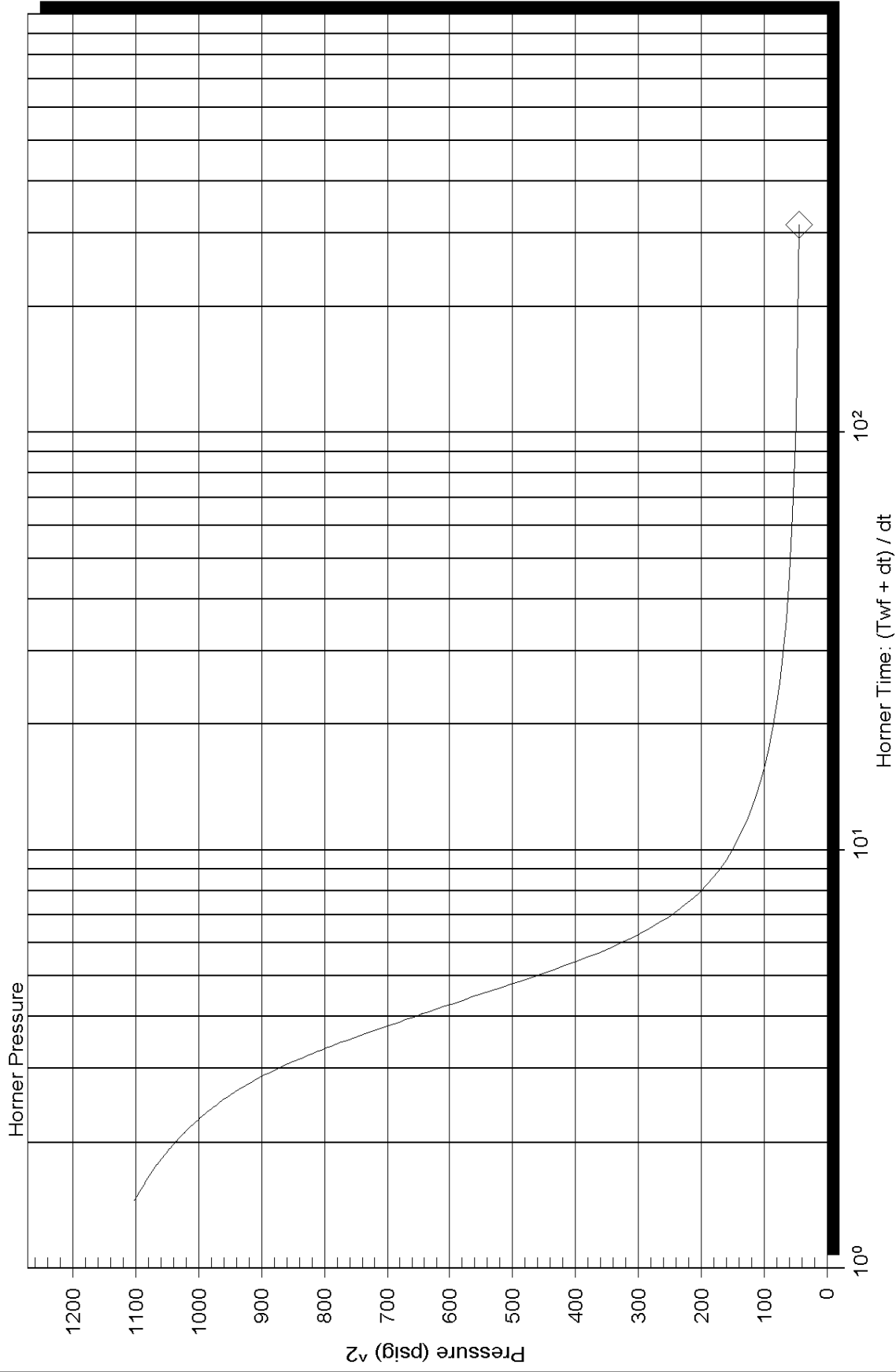
P\* :

Horner Time: (Twf + dt) / dt

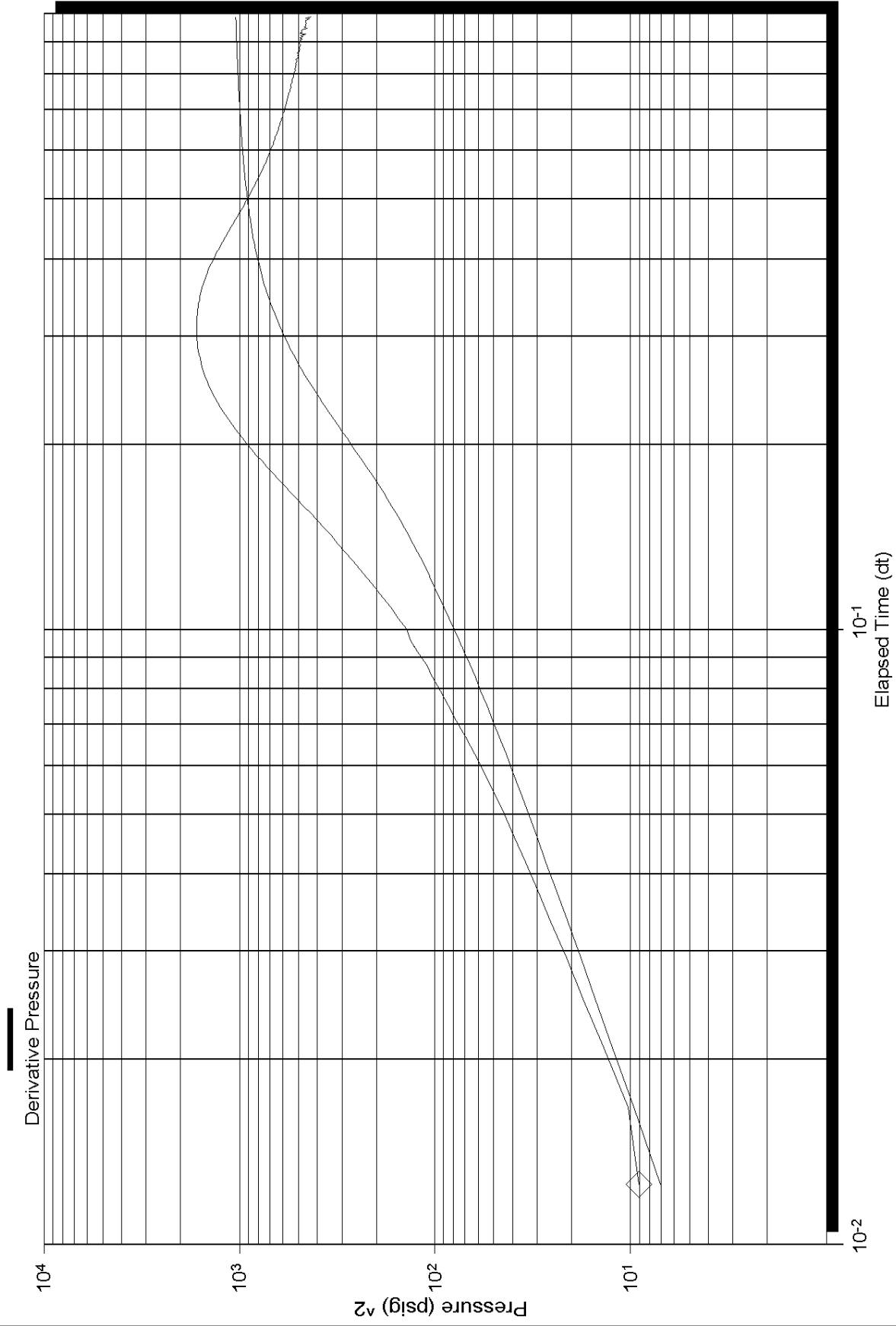
Slope (m) : kpa/log cycle

Flow Cycle: 1

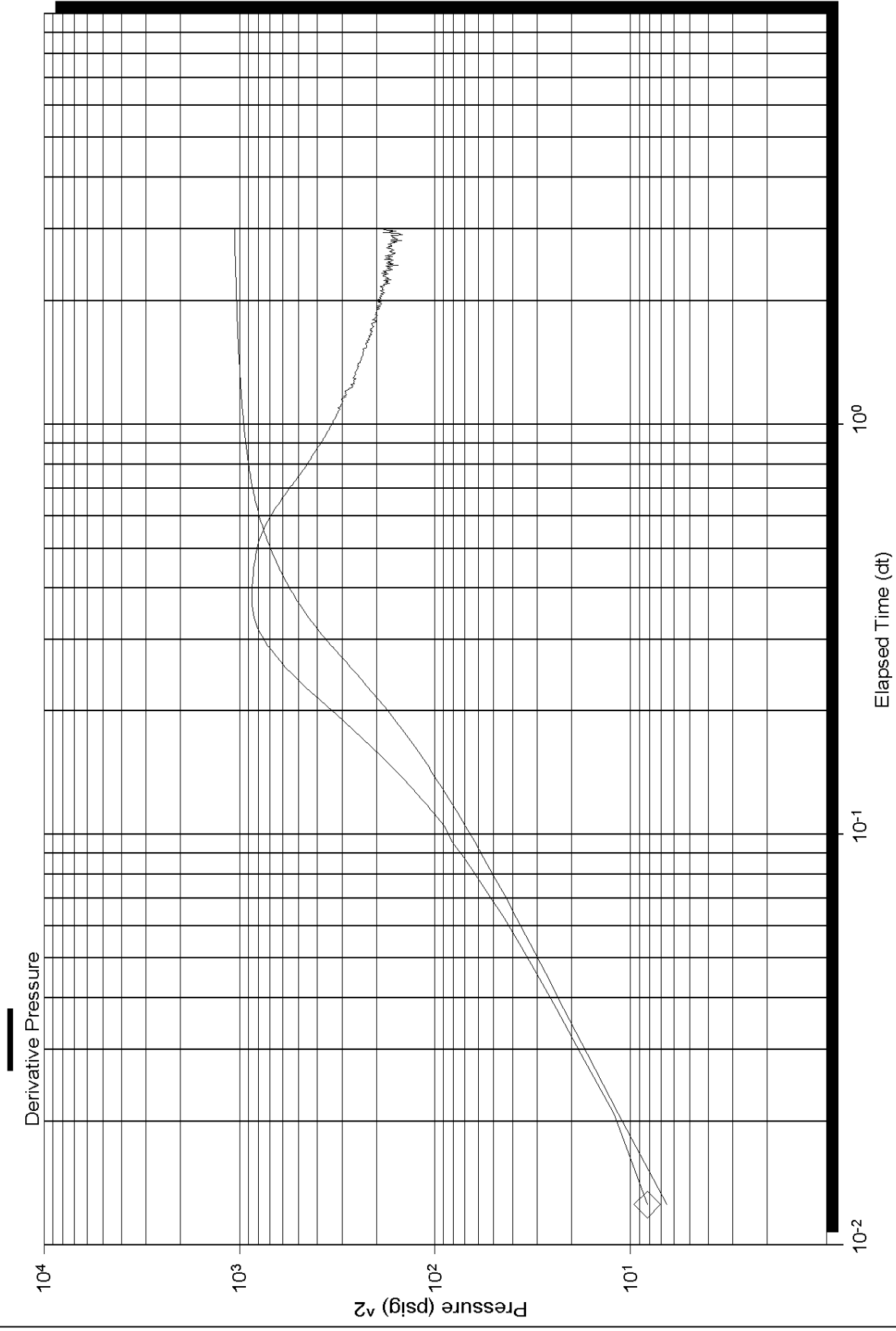
### Horner Plot



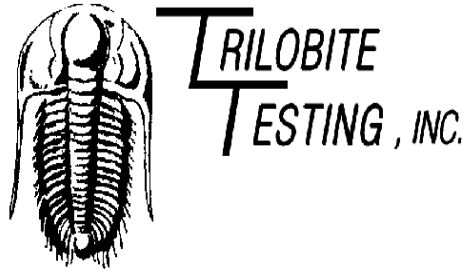
# Log-Log and Pseudo-Log-Log



# Log-Log and Pseudo-Log







## DRILL STEM TEST REPORT

Prepared For: **Sam Gary**

1515 Wynkoop Ste 700  
Denver Co 80202

ATTN: Tom Fertal

**10-17-16-Rush-Ks**

**Brack et al # 1-10**

Start Date: 2010.08.06 @ 03:50:42

End Date: 2010.08.06 @ 10:33:12

Job Ticket #: 039916      DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Sam Gary

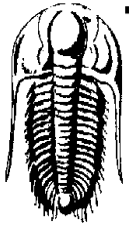
Brack et al # 1-10

10-17-16-Rush-Ks

DST # 5

Arbuckle

2010.08.06



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Sam Gary  
 1515 Wynkoop Ste 700  
 Denver Co 80202  
 ATTN: Tom Fertal

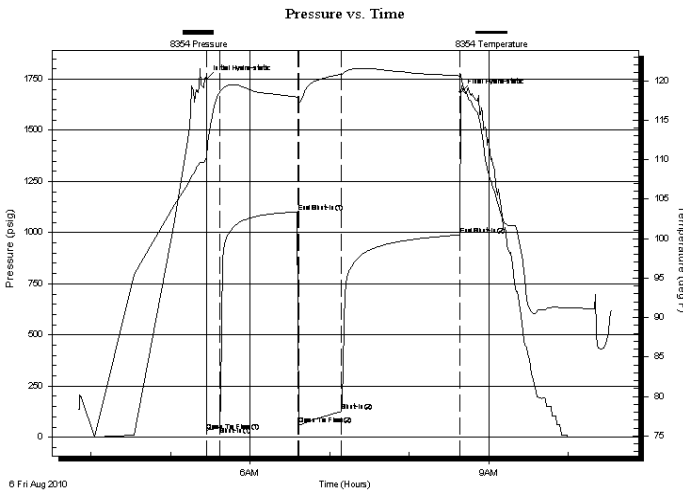
**Bracket # 1-10**  
**10-17-16-Rush-Ks**  
 Job Ticket: 039916 **DST#: 5**  
 Test Start: 2010.08.06 @ 03:50:42

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 05:27:27  
 Time Test Ended: 10:33:12  
 Interval: **3556.00 ft (KB) To 3567.00 ft (KB) (TVD)**  
 Total Depth: 3567.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole  
 Tester: Dan Bangle  
 Unit No: 38  
 Reference Elevations: 2007.00 ft (KB)  
 1919.00 ft (CF)  
 KB to GR/CF: 88.00 ft

**Serial #: 8354 Inside**  
 Press@RunDepth: 126.26 psig @ 3564.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2010.08.06 End Date: 2010.08.06 Last Calib.: 2010.08.06  
 Start Time: 03:50:43 End Time: 10:33:12 Time On Btm: 2010.08.06 @ 05:26:57  
 Time Off Btm: 2010.08.06 @ 08:38:42

**TEST COMMENT:** IF-Strong B-B in 4 min  
 IS-Weak building to 1/4" - died in 20 min  
 FF-Strong B-B in 3 min  
 FS-Weak building to 1/2" - died in 36 min



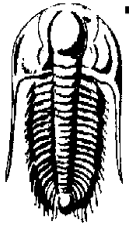
PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1751.03	110.20	Initial Hydro-static
1	31.49	110.24	Open To Flow (1)
10	51.08	118.53	Shut-In(1)
69	1101.83	117.93	End Shut-In(1)
70	60.40	117.34	Open To Flow (2)
102	126.26	120.82	Shut-In(2)
192	988.99	120.61	End Shut-In(2)
192	1686.63	120.80	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
80.00	MCGsyO 10%g 70%o 20%m	0.85
280.00	CGsyO 15%g 85%o	3.93
0.00	550 GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Sam Gary  
1515 Wynkoop Ste 700  
Denver Co 80202  
ATTN: Tom Fertal

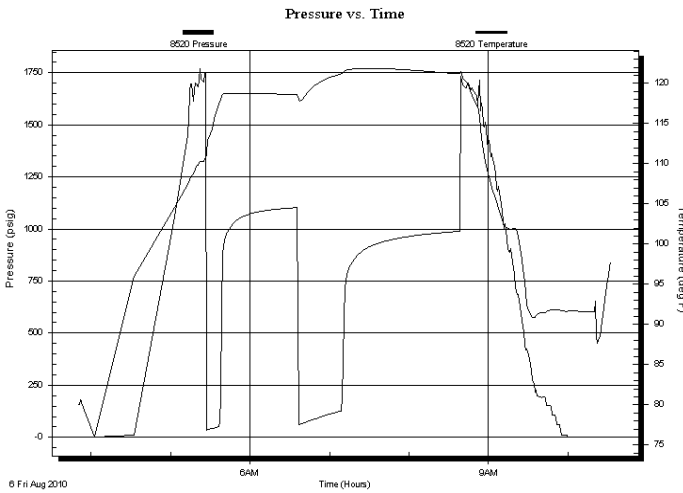
**Brack et al # 1-10**  
**10-17-16-Rush-Ks**  
Job Ticket: 039916 **DST#: 5**  
Test Start: 2010.08.06 @ 03:50:42

## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 05:27:27  
Time Test Ended: 10:33:12  
Interval: **3556.00 ft (KB) To 3567.00 ft (KB) (TVD)**  
Total Depth: 3567.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good  
Test Type: Conventional Bottom Hole  
Tester: Dan Bangle  
Unit No: 38  
Reference Elevations: 2007.00 ft (KB)  
1919.00 ft (CF)  
KB to GR/CF: 88.00 ft

**Serial #: 8520** **Outside**  
Press@RunDepth: psig @ 3564.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2010.08.06 End Date: 2010.08.06 Last Calib.: 2010.08.06  
Start Time: 03:50:52 End Time: 10:33:06 Time On Btm:  
Time Off Btm:

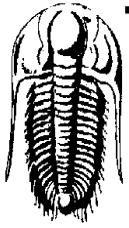
**TEST COMMENT:** IF-Strong B-B in 4 min  
IS-Weak building to 1/4" - died in 20 min  
FF-Strong B-B in 3 min  
FSI-Weak building to 1/2" - died in 36 min



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

Recovery		
Length (ft)	Description	Volume (bbl)
80.00	MCGsyO 10%g 70%o 20%m	0.85
280.00	CGsyO 15%g 85%o	3.93
0.00	550 GIP	0.00

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



**TRILOBITE**  
TESTING, INC

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Sam Gary  
1515 Wynkoop Ste 700  
Denver Co 80202  
ATTN: Tom Fertal

**Bracket # 1-10**  
**10-17-16-Rush-Ks**  
Job Ticket: 039916      **DST#: 5**  
Test Start: 2010.08.06 @ 03:50:42

### Tool Information

Drill Pipe:	Length: 3519.00 ft	Diameter: 3.80 inches	Volume: 49.36 bbl	Tool Weight: 2800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 49.51 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3556.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	11.00 ft			
Tool Length:	39.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3529.00	
Shut In Tool	5.00			3534.00	
Hydraulic tool	5.00			3539.00	
Jars	5.00			3544.00	
Safety Joint	3.00			3547.00	
Packer	5.00			3552.00	28.00      Bottom Of Top Packer
Packer	4.00			3556.00	
Stubb	1.00			3557.00	
Perforations	7.00			3564.00	
Recorder	0.00	8354	Inside	3564.00	
Recorder	0.00	8520	Outside	3564.00	
Bullnose	3.00			3567.00	11.00      Bottom Packers & Anchor

**Total Tool Length: 39.00**



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Sam Gary  
1515 Wynkoop Ste 700  
Denver Co 80202  
ATTN: Tom Fertal

**Brack et al # 1-10**  
**10-17-16-Rush-Ks**  
Job Ticket: 039916      **DST#: 5**  
Test Start: 2010.08.06 @ 03:50:42

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 32 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 57.00 sec/qt	Cushion Volume: bbl	
Water Loss: 9.59 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 7200.00 ppm		
Filter Cake: inches		

## Recovery Information

Recovery Table

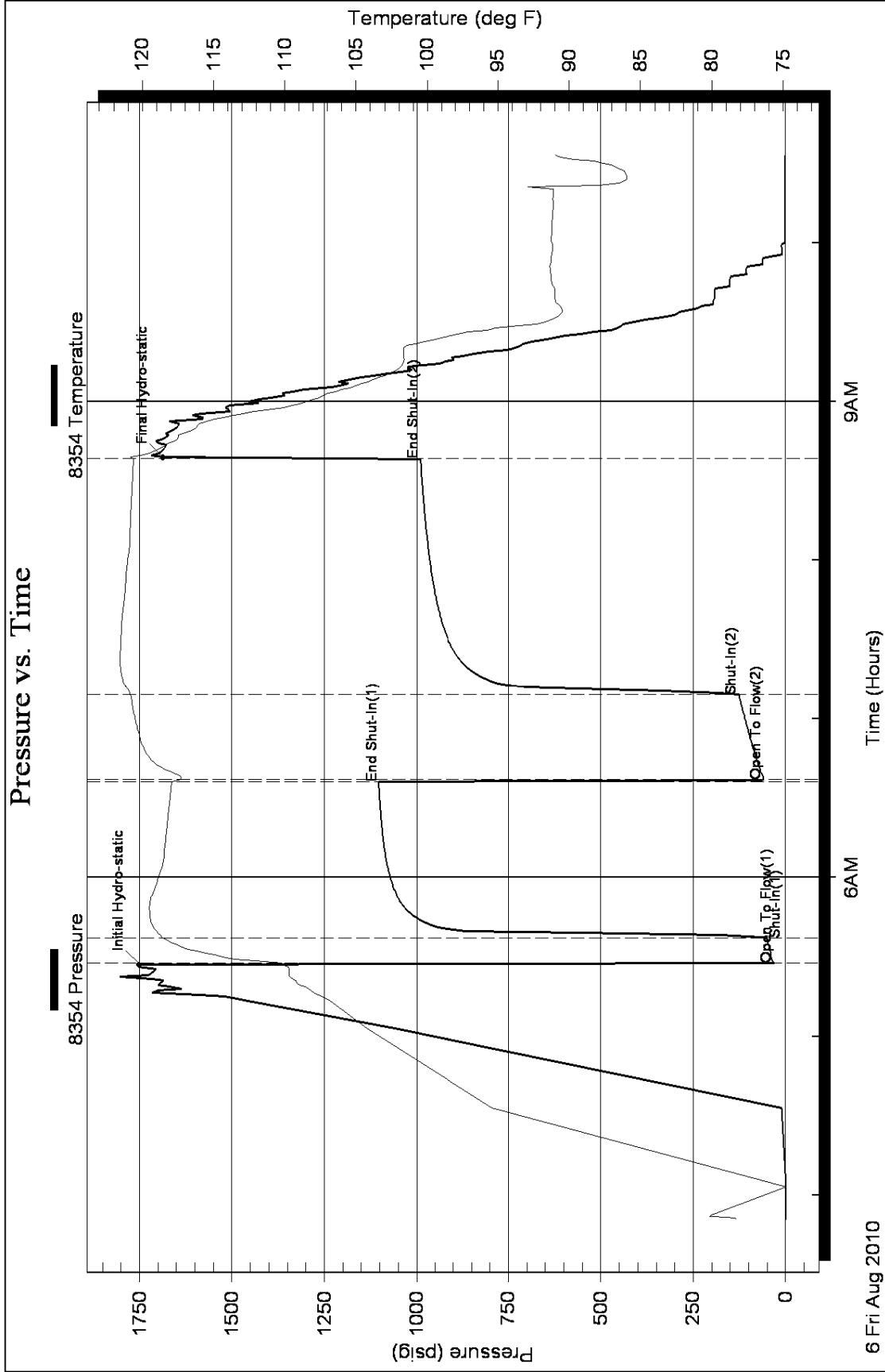
Length ft	Description	Volume bbl
80.00	MCGsyO 10%g 70%o 20%m	0.849
280.00	CGsyO 15%g 85%o	3.928
0.00	550 GIP	0.000

Total Length: 360.00 ft      Total Volume: 4.777 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

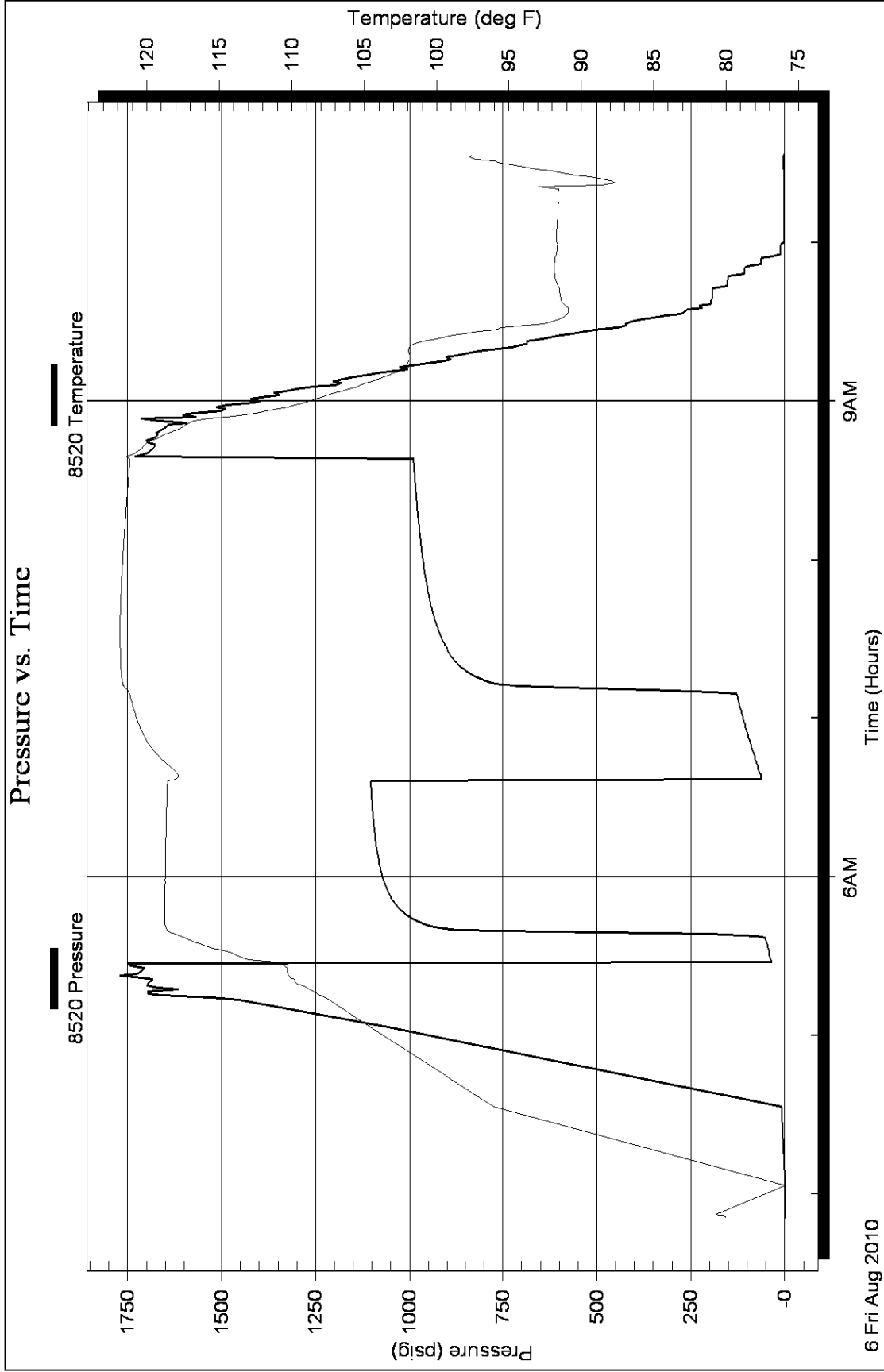


Serial #: 8520

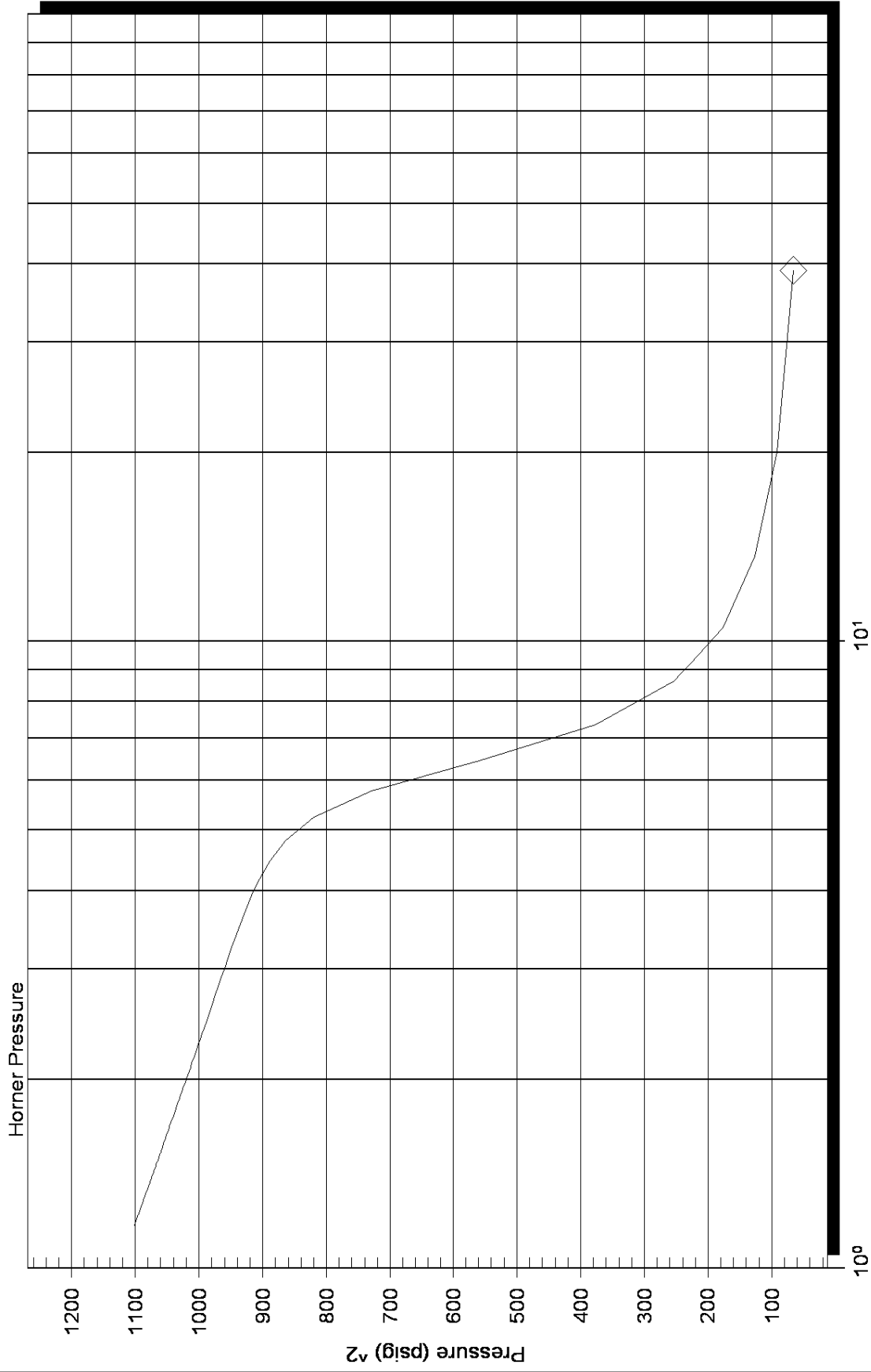
Outside Sam Gary

10-17-16-Rush-Ks

DST Test Number: 5



# Homer Plot



Serial Number: 8354 (Inside)

Slope (m) : kpa/log cycle

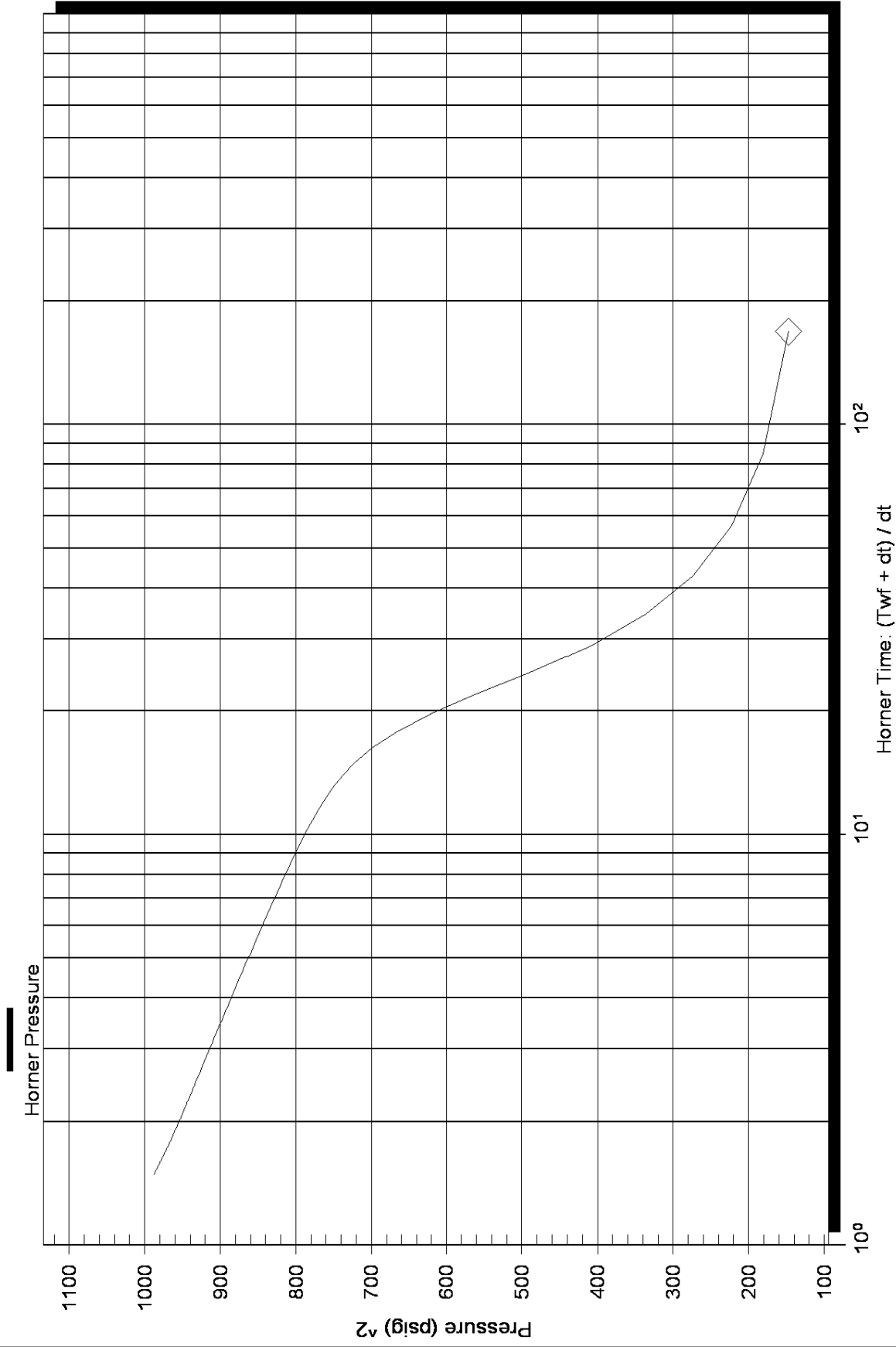
P\* :

Horner Time: (Twf + dt) / dt

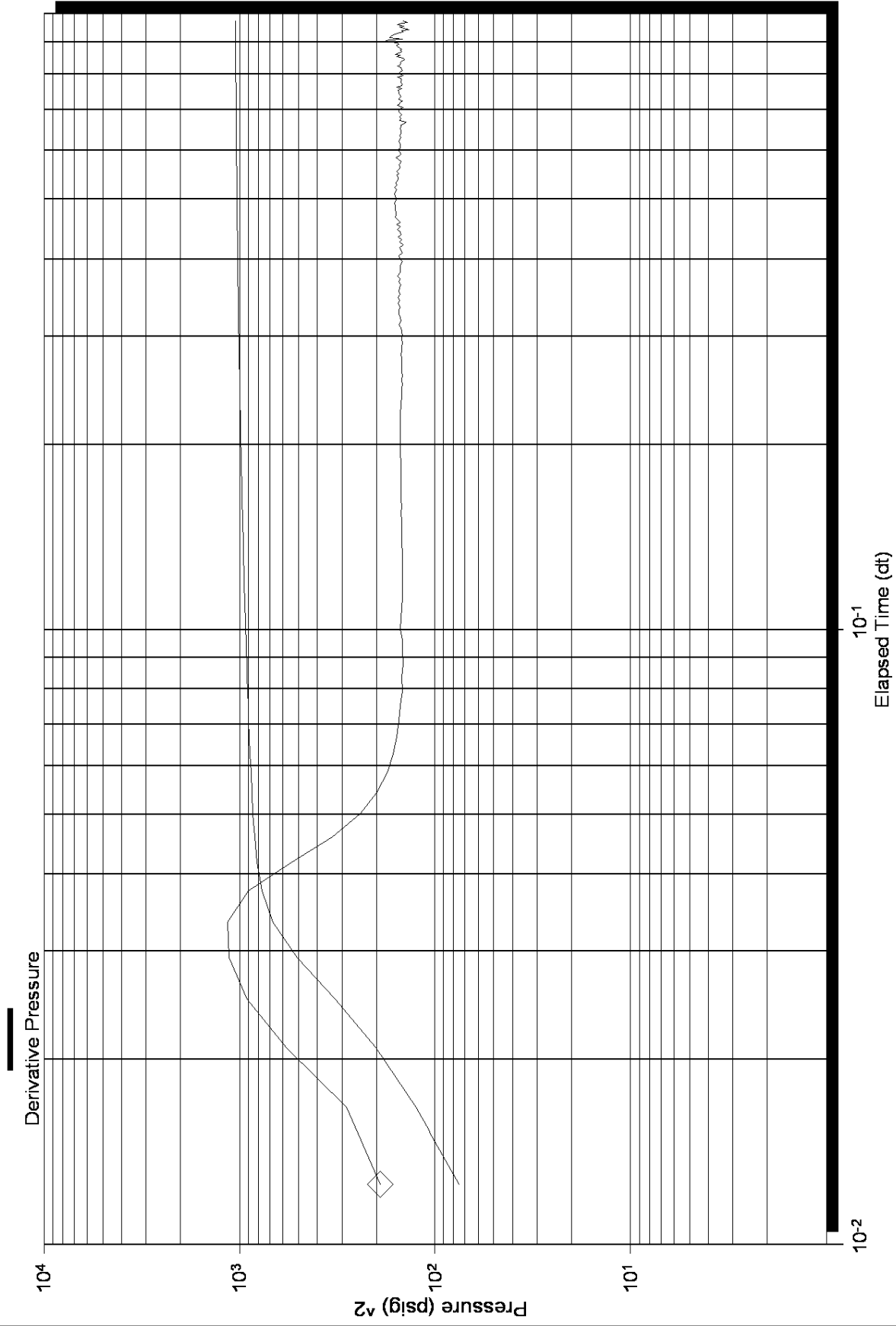
Flow Cycle: 1



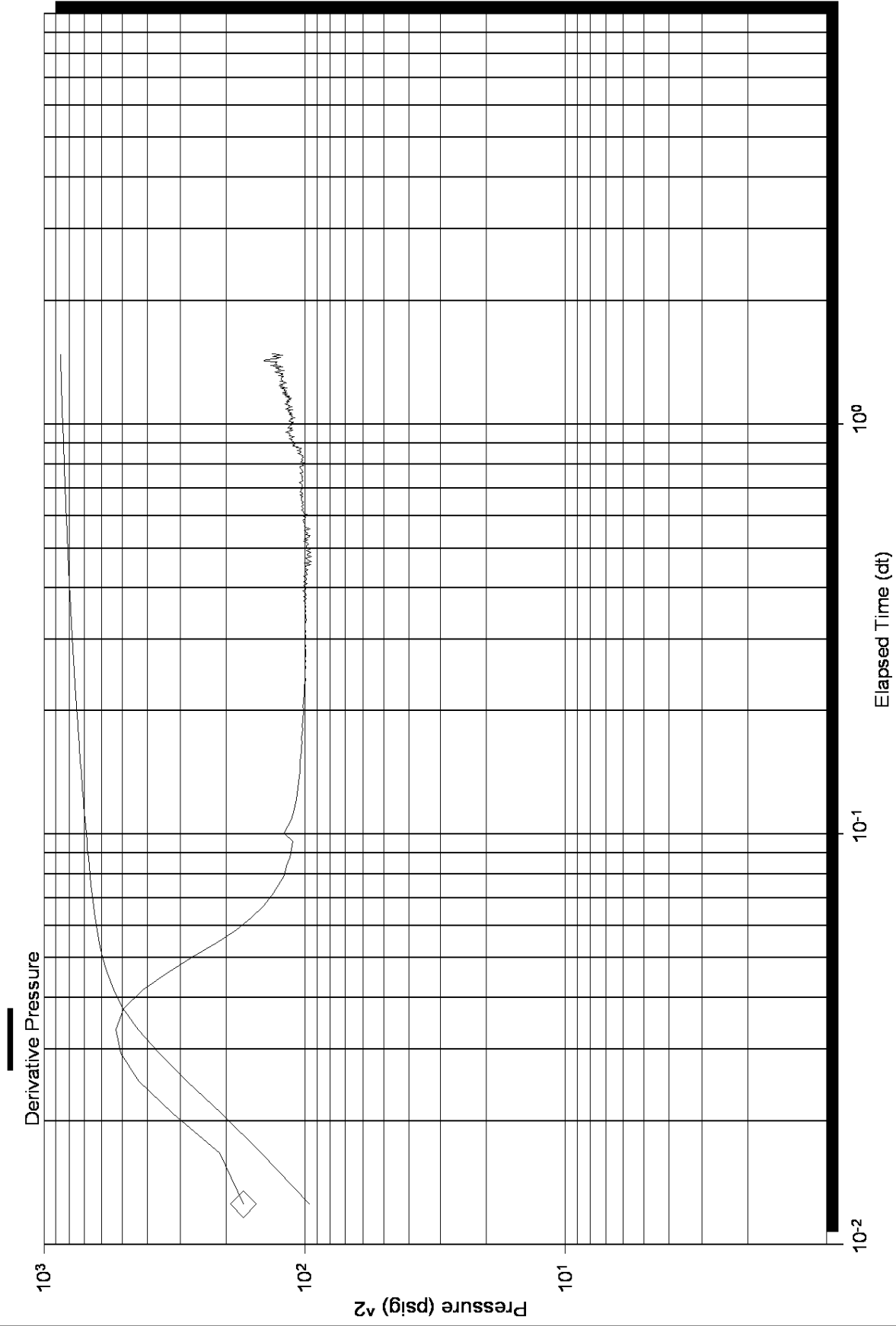
### Homer Plot



# Log-Log and Pseudo-Log-Log



# Log-Log and Pseudo-Log-Log





**QUALITY OILWELL CEMENTING, INC.**

740 West Wichita Ave., Russell KS 67665  
 Phone: 853-24-1041 Fax: 853-483-1087  
 Email: cementing@ruraltel.net  
 Pratt Location 820 388 5422

Date: 8/4/2010  
 Invoice # 4204

P.O.#:  
 Due Date: 9/3/2010  
 Division:

# Invoice

**Contact:**

Samuel Gary Jr & Associates Inc  
 Address/Job Location:  
 Samuel Gary Jr & Associates Inc  
 P.O. BOX 448  
 RUSSELL KS 67665

DRLG  COMP  W/O  LOC  
 AFE # \_\_\_\_\_  
 ACCT. # 8200-138  
 APPROVED BY KAS

**Reference:**

BRACK BTAC 1-100

**Description of Work:**

**Services / Items Included:**

Services / Items Included:	Quantity	Price	Item	Quantity	Price
Surface Job	1	\$0.00			
Truckage-from Job location to Nearest Camp	32	\$251.59			
Premium Gel (Bentonite)	8	\$112.62			
Flo Seal	100	\$172.95			
Common-Class A	400	\$4,046.96			
Calcium Chloride	14	\$455.92			
Truckage-from Job location to Nearest Bulk Plant	32	\$147.22			
Truck Material-Material Service Charge	422	\$664.91			
Baffle Plate Aluminum, 8 5/8"	1	\$77.83			
			8 5/8" Top Rubber Plug	1	\$91.66
			8 5/8" Centralizer	3	\$166.03
			8 5/8" Basket	3	\$819.77

Labor: \$548.34

Quoted by: Dave Funk

SubTotal: \$ 8,228.85

Discount Available ONLY if Invoice is Paid &  
 Received within listed terms of invoice: \$ (1,234.33)

Total: \$ 6,994.53

Tax: \$ 560.74

**\$ 7,555.27**

Applied Payments:

**Balance Due: \$ 7,555.27**

**Invoice Terms:**

Net 30

**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.  
 ©2008-2013 Straker Investments, LLC. All rights reserved.

**RECEIVED**

AUG 23 2010

SAMUEL GARY JR.  
 & ASSOCIATES, INC.

# 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. 4204

Date	7-30-10	Sec.	10	Twp.	17	Range	16	County	Rush	State	KS	On Location		Finish	8:00 p.m.	
Lease	BRACK ETAL			Well No.	1-10			Location	Culita SW 45 1/2 W 21 N 10							
Contractor	Discovery #2							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.							
Type Job	Surface							Charge To	Sam Gray							
Hole Size	12 1/4			T.D.	1109			Depth	1108							
Csg.	8 5/8 23#			Depth												
Thg. Size								Street								
Tool								City	State							
Cement Left in Csg.	42.25			Shoe Joint	42.25			The above was done to satisfaction and supervision of owner agent or contractor.								
Meas Line				Displace	67 3/4 BC			Cement Amount Ordered	400 Com 3 1/2 CC 2 1/2 Gel							
<b>EQUIPMENT</b>								1/4 # Flowseal								
Pumptrk	5	No.	Cement Helper		Chas		Common									
Bulktrk	12	No.	Driver		Blair		Poz. Mix									
Bulktrk		No.	Driver		Brian		Gel. 0									
<b>JOB SERVICES &amp; REMARKS</b>								Calcium 1/4								
Remarks:								Hulls								
Rat Hole								Salt								
Mouse Hole								Flowseal 100#								
Centralizers								Kol-Seal								
Baskets								Mud CLR 48								
D/V or Port Collar	Pumped 103 lbs - ahead of Cement							CFL-117 or CD110 CAF 38								
	8 5/8 Casing on Bottom. Est. Circulation							Sand								
	Mix 400SK + Displace Plug							Handling								
	Insert size @ 1065.75							Mileage								
<b>Float Equipment</b>																
	Cement Circulated!							Guide Shoe								
	Plug 1 unit @ 600 ps.							Centralizer 8 5/8 3								
								Baskets 3								
								AFU Inserts								
								Float Shoe								
								Latch Down								
								Bottle Plate								
								Pumptrk Charge Long Surface								
								Mileage 3.1								
												Tax				
												Discount				
												Total Charge				
Signature: <i>John Smith</i>																



PAGE 1 of 1	CUST NO 1003682	INVOICE DATE 08/10/2010
INVOICE NUMBER <b>1718 - 90380561</b>		

Pratt (620) 672-1201  
 B SAMUEL GARY JR. & ASSOCIATES  
 I 1670 BROADWAY STE 3300  
 L DENVER  
 L CO US 80202  
 T  
 O ATTN:

J LEASE NAME Brack ET AL 1-10  
 O LOCATION  
 B COUNTY Rush  
 S STATE KS  
 I JOB DESCRIPTION Cement-New Well Casing/Pi  
 T  
 E JOB CONTACT

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
40216136	19905		Net - 30 days	09/09/2010

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
<b>For Service Dates: 08/07/2010 to 08/07/2010</b>				
0040216136				
171802260A Cement-New Well Casing/Pi 08/07/2010 5 1/2" Longstring				
60/40 POZ	75.00	EA	7.56	566.98 T
50/50 POZ	150.00	EA	6.93	1,039.47 T
Cello-flake	37.00	EA	2.33	86.24 T
Calcium Chloride	252.00	EA	0.66	166.69 T
Cal-Set	750.00	EA	0.47	354.36 T
FLA-322	121.00	EA	4.72	571.71 T
Cement Gel	252.00	EA	0.16	39.69 T
Gilsonite	1,125.00	EA	0.42	474.85 T
CS-1L KCL Substitute	4.00	EA	22.05	88.20 T
Super Flush II	500.00	EA	0.96	481.94 T
Latch Down Plug & Baffle	1.00	EA	251.99	251.99
Auto Fill Float Shoe 5 1/2" (Blue)	1.00	EA	226.79	226.79
Turbolizer 5 1/2" (Blue)	8.00	EA	69.30	554.38
Unit Mileage Charge-Pickups, Vans & Cars	85.00	HR	2.68	227.58
Heavy Equipment Mileage	170.00	MI	4.41	749.68
Proppant and Bulk Delivery Charges	812.00	MI	1.01	818.47
Depth Charge; 3001-4000'	1.00	HR	1,360.77	1,360.77
Blending & Mixing Service Charge	225.00	MI	0.88	198.44
Casing Swivel Rental	1.00	EA	126.00	126.00
Plug Container Utilization Charge	1.00	EA	157.50	157.50
Service Supervisor	1.00	HR	110.25	110.25

DRLG  COMP  W/O  LOE  
 AFE # 8200-138  
 ACCT. # \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_

**RECEIVED**

AUG 27 2010

SAMUEL GARY JR.  
& ASSOCIATES, INC.

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:	SUB TOTAL	8,651.98
BASIC ENERGY SERVICES, LP	BASIC ENERGY SERVICES, LP	TAX	243.82
PO BOX 841903	PO BOX 10460	INVOICE TOTAL	8,895.80
DALLAS, TX 75284-1903	MIDLAND, TX 79702		



**BASIC**<sup>SM</sup>  
ENERGY SERVICES  
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61  
P.O. Box 8613  
Pratt, Kansas 67124  
Phone 620-672-1201

FIELD SERVICE TICKET  
1718 02260 A

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

DATE OF JOB <u>8-7-10</u> DISTRICT <u>KANSAS</u>		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/> CUSTOMER ORDER NO. _____							
CUSTOMER <u>Samuel Gary JR. VASSC. INC</u>		LEASE <u>BRACK FT AL 1-10</u> WELL NO. _____							
ADDRESS _____		COUNTY <u>Rush 10-17-16</u> STATE <u>KANSAS</u>							
CITY _____ STATE _____		SERVICE CREW <u>A. Worth K. Lasley Edward</u>							
AUTHORIZED BY _____		JOB TYPE: <u>5 1/2 Long String</u> <u>CMW</u>							
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	TIME
<u>28443 P.U.</u>	<u>1</u>						<u>8-6-10</u>	<u>PM</u>	<u>7:00</u>
<u>19903-19905</u>	<u>1</u>					ARRIVED AT JOB	<u>8-7-10</u>	<u>AM</u>	<u>6:55</u>
<u>19831-19862</u>	<u>1</u>					START OPERATION	<u>8-7-10</u>	<u>AM</u>	<u>3:00</u>
						FINISH OPERATION	<u>8-7-10</u>	<u>AM</u>	<u>4:00</u>
						RELEASED	<u>8-7-10</u>	<u>AM</u>	<u>4:45</u>
						MILES FROM STATION TO WELL	<u>85-mile</u>		

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED \_\_\_\_\_  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP103	60/40 Por		75-SK		\$ 900.00
CP104	50/50 Por		150-SK		\$ 1650.00
CC102	Cell FLAKE		37-1b		\$ 136.90
CC109	calcium chloride		257-1b		\$ 764.60
CC113	Cal set		750-1b		\$ 562.50
CC139	F/A 322		121-1b		\$ 907.50
CC200	Cement Gel		222-1b		\$ 63.00
CC201	Gilsonite		1125-1b		\$ 753.25
CF607	Latch Down Plug & Baffle 5/8" Blue	1-EN			\$ 400.00
CF1251	Auto Fill Float Shoe 5/8" Blue	1-EN			\$ 360.00
CF1651	Turbolizer 5/8" Blue	8-EN			\$ 880.00
CF704	CS-16 KCL sub	4-gal			\$ 140.00
CC155	Super flush #	500-gal			\$ 765.00

SUB TOTAL

DLS

SERVICE & EQUIPMENT	%TAX ON \$
MATERIALS	%TAX ON \$

TOTAL

SERVICE REPRESENTATIVE [Signature] THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: [Signature]

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.



**BASIC**<sup>SM</sup>  
ENERGY SERVICES  
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61  
P.O. Box 8613  
Pratt, Kansas 67124  
Phone 620-672-1201

FIELD SERVICE TICKET  
1718 02261 A

DATE \_\_\_\_\_ TICKET NO. 022604

DATE OF JOB <u>8-7-10</u> DISTRICT <u>KANSAS</u>		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/> CUSTOMER ORDER NO. _____							
CUSTOMER <u>SAMUEL GARY JR ASSOC. INC</u>		LEASE <u>BRACK ET AL 1-10</u> WELL NO. _____							
ADDRESS _____		COUNTY <u>Rush 10-17-16</u> STATE <u>KANS.</u>							
CITY _____ STATE _____		SERVICE CREW <u>A. Worth, K. Lesly, Edmonds</u>							
AUTHORIZED BY _____		JOB TYPE <u>5 1/2" L.S. CNDW</u>							
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	TIME
<u>28443 P.O.</u>	<u>1</u>						<u>8-6-10</u>	<u>PM</u>	<u>700</u>
<u>19903-19905</u>	<u>1</u>						<u>8-7-10</u>	<u>AM</u>	<u>655</u>
<u>19831-19862</u>	<u>1</u>						<u>8-7-10</u>	<u>AM</u>	<u>300</u>
							<u>8-7-10</u>	<u>AM</u>	<u>400</u>
							<u>8-7-10</u>	<u>AM</u>	<u>445</u>
						MILES FROM STATION TO WELL	<u>25 miles</u>		

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED \_\_\_\_\_  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
E101	Unit mileage charge Pickup		<u>25-mi</u>		<u>8 966.25</u>
E101	Heavy Equip mileage		<u>170-mi</u>		<u>4 1190.00</u>
E113	Bulk Delivery charge		<u>212-TM</u>		<u>5 1298.80</u>
CF204	Depth Charge 3001-4000'		<u>1-4hrs</u>		<u>4 2160.00</u>
CF240	Blending/Mixing Service chg.		<u>205-TM</u>		<u>8 315.00</u>
CF501	Casing Service Rental		<u>1-Job</u>		<u>13 200.00</u>
CF504	Plug Container Utilization chg.		<u>1-Job</u>		<u>13 250.00</u>
S003	Reduce Supervisor cost share alloc.		<u>1-CA</u>		<u>13 175.00</u>
SUB TOTAL					

CHEMICAL / ACID DATA

SERVICE & EQUIPMENT	%TAX ON \$
MATERIALS	%TAX ON \$

TOTAL

DL\$ 8661.98

SERVICE REPRESENTATIVE Allen P. Worth

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY [Signature]

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO. \_\_\_\_\_



Customer SAMUEL GARY TRASSCC		Lease No.		Date 8-7-10	
Lease BRACK ET AL		Well # #1-10			
Field Order # 07260A	Station Pratt KS	Casing " 5/8	Depth 3673.15	County Rush	State Kansas
Type Job 5/8" long string		Formation Cnw	103675	Legal Description 10-17-16	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size 5/8	Tubing Size	Shots/Ft	12-BBL	Acid	super flush	RATE	PRESS	ISIP
Depth 3673.15	Depth	From	To 5 BBL	Pre Pad	50 spacer	Max		5 Min.
Volume 870	Volume	From	To 25	Pad	SCAVENGER	Min	60/40 P02 @ 12	10 Min.
Max Press 1500	Max Press	From	To 150	Frac	50/50 P02 @ 13.8	Avg		15 Min.
Well Connection P.C.	Annulus Vol.	From	To			HHP Used		Annulus Pressure
Plug Depth 3673.41	Packer Depth	From	To	Flush	2% KCL	Gas Volume		Total Load

Customer Representative Kelly Brannon	Station Manager Scotty	Treater Allan E. Worth
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Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
6:55 AM					on loc. Discuss Safety, Safety Plan with Rig crew on Bottom
8:00					start out of Hole w/ Bit out of Hole Lay Down Kelly & Rig up to Run 5/8 casing 15.5'
12:00 AM					Start Csg. shoe joint 21.74' w/ F.S. & L.D. Baffle in collar. cont-1-3-5-7-9-11-13-15
					Tag Bottom @ 3675' Pick up to 3673' & circ w/ Pipe + Rotate pipe
3:00	300		12	5	Pump 12 BBLs super flush
			5	5	Pump 5 BBLs H <sub>2</sub> O
			9	5	9-BBL 60/40 P02 SCAVENGER 12 gal
			41		41-BBL 50/50 P02 @ 13.8 gal
3:15				5 1/2	Finish mix washout Pump & Line
	400			5	Drop L.D. Plug start Disg.
3:30	1500		27	5 1/2	Caught lift of PSI w/ 59 BBLs out Plug closed
	0				Release PSI 0
					Plug R.H. w/ 20 sts 60/40 P02.
					Plug. MH w/ 20 sts 60/40 P02.
4:45					washout & Rack up. Job complete