



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1217162  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
August 2013

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

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

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

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

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

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

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

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

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

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

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

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

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

Designate Type of Completion:

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

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

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

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

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

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

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

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

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

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

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

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

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

Datum:  NAD27       NAD83       WGS84

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

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

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

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

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

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

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

Multiple Stage Cementing Collar Used?  Yes  No

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

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

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

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

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

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

Location of fluid disposal if hauled offsite:

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

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

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

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

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

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

1217162

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

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

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

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

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

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

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

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

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

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

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

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

<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> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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# ALLIED OIL & GAS SERVICES, LLC 062319

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:

Medicine Lodge KS

DATE <u>3-10-14</u>	SEC. <u>26</u>	TWP. <u>32S</u>	RANGE <u>10W</u>	CALLED OUT	ON LOCATION <u>4:00P</u>	JOB START	JOB FINISH <u>6:00P</u>
LEASE <u>DoHMB</u>	WELL# <u>4</u>	LOCATION <u>Sharon KS 1/2 E of Trinity</u>			COUNTY <u>Barber</u>	STATE <u>KS</u>	
OLD OR <u>(NEW)</u> (Circle one)		R.T. <u>South into</u>					

CONTRACTOR Hardt OWNER R+B

TYPE OF JOB Surface

HOLE SIZE 12 1/8 T.D. 268 CEMENT AMOUNT ORDERED 225.5x 60:40:37.00

CASING SIZE 8 5/8 DEPTH 255 ± 2% Gel

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX 300 MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 20'

PERFS.

DISPLACEMENT 16 BBL Fresh

EQUIPMENT

PUMP TRUCK CEMENTER Jack Heard

# 548/545 HELPER Justin Rowen

BULK TRUCK

# 364 DRIVER C.J. Rackley

BULK TRUCK

# DRIVER

COMMON <u>Class A 135.5x</u>	@ <u>17.90</u>	<u>2416.50</u>
POZMIX <u>90.5x</u>	@ <u>9.35</u>	<u>841.50</u>
GEL <u>4.5x</u>	@ <u>23.40</u>	<u>93.60</u>
CHLORIDE <u>12.5x</u>	@ <u>64.00</u>	<u>768.00</u>
ASC	@	

HANDLING <u>241</u>	@ <u>2.48</u>	<u>597.68</u>
MILEAGE <u>10.15/16/2.60</u>		<u>422.24</u>
TOTAL		<u>5139.52</u>

REMARKS:

Break Circ w/ Truck  
Pump Spacer Mix + Pump Cmt  
Stop Wash up + Displace  
Continue Displacement stop  
Shut in Release pressure

SERVICE

DEPTH OF JOB	<u>255</u>	
PUMP TRUCK CHARGE	<u>1512</u>	
EXTRA FOOTAGE	@	
MILBAGE <u>16</u>	@ <u>7.70</u>	<u>123.20</u>
MANIFOLD	@	
<u>AV 16</u>	@ <u>4.40</u>	<u>70.40</u>
TOTAL		<u>1706.35</u>

CHARGE TO: R+B  
STREET \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
TOTAL		

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

SALES TAX (If Any) \_\_\_\_\_  
TOTAL CHARGES 62845.87

PRINTED NAME \_\_\_\_\_

DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

SIGNATURE Scott C. [Signature]

Net 5,818.98

# ALLIED OIL & GAS SERVICES, LLC 062249

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:  
*Medicine Lodge KS*

DATE <i>03-19-14</i>	SEC. <i>23</i>	TWP. <i>32s</i>	RANGE <i>10w</i>	CALLED OUT <i>2:00pm</i>	ON LOCATION <i>3:00pm</i>	JOB START <i>7:00pm</i>	JOB FINISH <i>8:30pm</i>
LEASE <i>Dohm B</i>	WELL # <i>1</i>	LOCATION <i>Sharon KS 1/2 E on old 160, N/4</i>			COUNTY <i>Barber</i>	STATE <i>KS</i>	
OLD OR NEW (Circle one)							

CONTRACTOR *Hardt* OWNER *R&B oil & gas, inc.*  
 TYPE OF JOB *Production*  
 HOLE SIZE *7 7/8* T.D. *4795*  
 CASING SIZE *5 1/2* 14" DEPTH *4786*  
 TUBING SIZE DEPTH  
 DRILL PIPE DEPTH  
 TOOL DEPTH  
 PRES. MAX *1250\** *Test 3000* MINIMUM  
 MEAS. LINE SHOE JOINT *42-97*  
 CEMENT LEFT IN CSG. *43'*  
 PERFS.  
 DISPLACEMENT *116 Bbls 2% KCL Water*

CEMENT  
 AMOUNT ORDERED *40s x 60; 40; 4 1/2; 4; 4% SMS*  
*7 1/2s x class H + 10% salt + 5' # Kolscal #*  
*1 4gal Clapns #12 Bbls ASF*

COMMON <i>A</i>	<i>24</i> sx	@ <i>17.90</i>	<i>429.60</i>
POZMIX	<i>16</i> sx	@ <i>9.35</i>	<i>149.60</i>
GEL	<i>2</i> sx	@ <i>23.40</i>	<i>46.80</i>
CHLORIDE		@	
ASC		@	
<i>H</i>	<i>125</i> sx	@ <i>21.20</i>	<i>2650.00</i>
<i>SALT</i>	<i>625</i>	@ <i>26.35</i>	<i>1712.75</i>
<i>Kolscal</i>	<i>625</i>	@ <i>.98</i>	<i>612.50</i>
<i>12 Bbls ASF</i>		@ <i>58.70</i>	<i>704.40</i>
<i>12 Gals Clapno</i>		@ <i>34.40</i>	<i>412.80</i>
<i>SMS</i>	<i>14</i>	@ <i>3.30</i>	<i>46.20</i>
		@	
		@	
HANDLING	<i>193</i>	@ <i>2.48</i>	<i>478.64</i>
MILEAGE	<i>8.29/15/2.60</i>	@ <i>35.00</i>	<i>380.00</i>
			TOTAL <i>6081.81</i>

EQUIPMENT  
 PUMP TRUCK CEMENTER *D. Felix*  
 # *558* HELPER *S. Priddy*  
 BULK TRUCK  
 # *364* DRIVER *Heider Alvarez (TWS)*  
 BULK TRUCK  
 # DRIVER

REMARKS:  
*Pipe on Btm, Brent One, thought we saw Ball, Pressured up - pressure test truck used truck to Pump 2200 PSE, Broke to 1800, Decreased to 1100, Hookup Mud Pump - (Pumped Pre flush, mixed Saturated Cement Mixed 125x tail Cement, Stop, Wash Pump & Lines, Release Plug, Start Disp. w/ 2% KCL water, See steady increase in PSE, slow late, slow again Pump Plug at 116 Bbls total Disp. Release PSE - Flants Held, Plug rat hole w/ 60:40 cement*

CHARGE TO: *R&B oil & gas, inc.*  
 STREET  
 CITY STATE ZIP

SERVICE

DEPTH OF JOB	<i>4786</i>		
PUMP TRUCK CHARGE	<i>2765.75</i>		
EXTRA FOOTAGE		@	
MILEAGE	<i>15</i>	@ <i>7.70</i>	<i>115.50</i>
MANIFOLD		@	<i>275.00</i>
<i>AV</i>	<i>15</i>	@ <i>4.40</i>	<i>66.00</i>
		@	
			TOTAL <i>3222.25</i>

PLUG & FLOAT EQUIPMENT

<i>1- Guide shoe</i>	@	<i>281.00</i>
<i>1- AFV insert</i>	@	<i>335.00</i>
<i>1- Rubber plug</i>	@	<i>85.00</i>
<i>10- heavy scratchers</i>	@ <i>89.00</i>	<i>890.00</i>
<i>8- centralizers</i>	@ <i>57.00</i>	<i>456.00</i>
		TOTAL <i>2047.00</i>

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

PRINTED NAME *TIM PIERCE*  
 SIGNATURE *Tim Pierce*

SALES TAX (If Any)  
 TOTAL CHARGES *11,351.06*  
 DISCOUNT IF PAID IN 30 DAYS  
*NET 9490.24*



# Timothy G. Pierce

## Petroleum Geologist

### GEOLOGIST'S REPORT DRILLING TIME AND SAMPLE LOG

COMPANY R & B Oil and Gas, Inc.

LEASE Dohm 'B' #1

FIELD Sharon

LOCATION NW SW SE (990' FSL & 2310' FEL)

SEC 23 TWSP 32S RGE 10W

COUNTY Barber STATE Kansas

CONTRACTOR Hardt Drilling Rig #1

SPUD 3-10-2014 COMP 3-19-2014

RTD 4795 LTD 4801

MUD UP 2840 TYPE MUD Chemical

SAMPLES SAVED FROM 3400 TO RTD

DRILLING TIME KEPT FROM 3400 TO RTD

SAMPLES EXAMINED FROM 3400 TO RTD

GEOLOGICAL SUPERVISION FROM 3435 to RTD

GEOLOGIST ON WELL Tim Pierce

#### ELEVATIONS

KB 1448'

DF \_\_\_\_\_

GL 1438'

Measurements Are All  
From Kelly Bushing

#### CASING

CONDUCTOR \_\_\_\_\_

SURFACE 8-5/8" at 268'

PRODUCTION 5-1/2" at 4784'

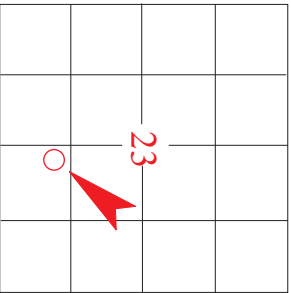
#### ELECTRICAL SURVEYS

DIL / CN-CD

Pioneer Energy Svcs

#### FORMATION TOPS ELECTRIC LOG SAMPLE

Heebner Sh.	3412 (-1964)	3406 (-1958)
Lansing	3644 (-2196)	3638 (-2190)
Stark Sh.	4086 (-2638)	4080 (-2632)
Cherokee Sh.	4314 (-2866)	4309 (-2861)
Mississippi	4353 (-2905)	4347 (-2899)
Viola	4678 (-3230)	4664 (-3216)
Simpson	4758 (-3310)	4752 (-3304)



API # 15-007-24,142

REMARKS Drill stem results indicate possible production from the Mississippi from 4373'- 4464', therefore production casing was run to test the well further.

A drill stem test covering a show in the Viola indicated poor reservoir development.

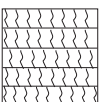
A show of oil and gas was noted in the Chattanooga Shale from 4834'- 4869'

A show in the KC Swope was tested with negative results.

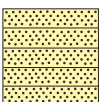
No other zones of interest were indicated by sample or electric logs.

Timothy G. Pierce

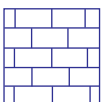
#### LEGEND



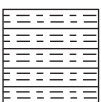
Anhydrite



Sandstone



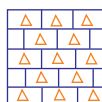
Limestone



Shale



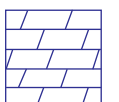
Carb Sh



Cherty LS



Chert



Dolomite

DRILLING TIME IN  
MINUTES PER FOOT

Rate of Penetration Decreases

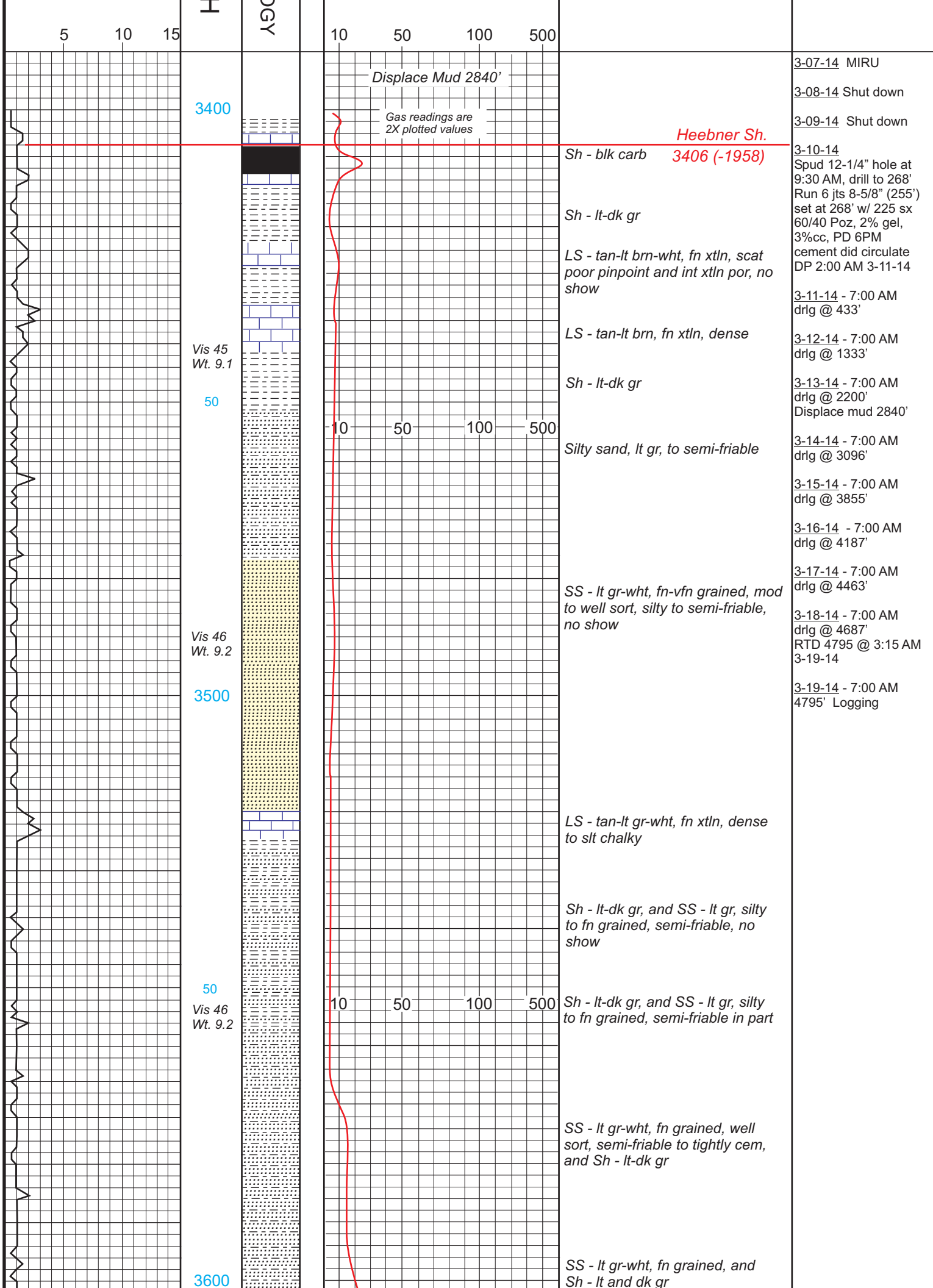
DEPTH

LITHOLOG

GAS SCALE

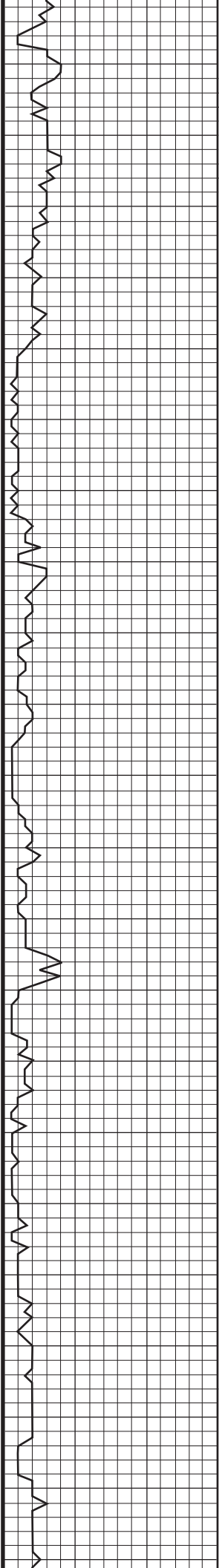
SAMPLE DESCRIPTION

REMARKS









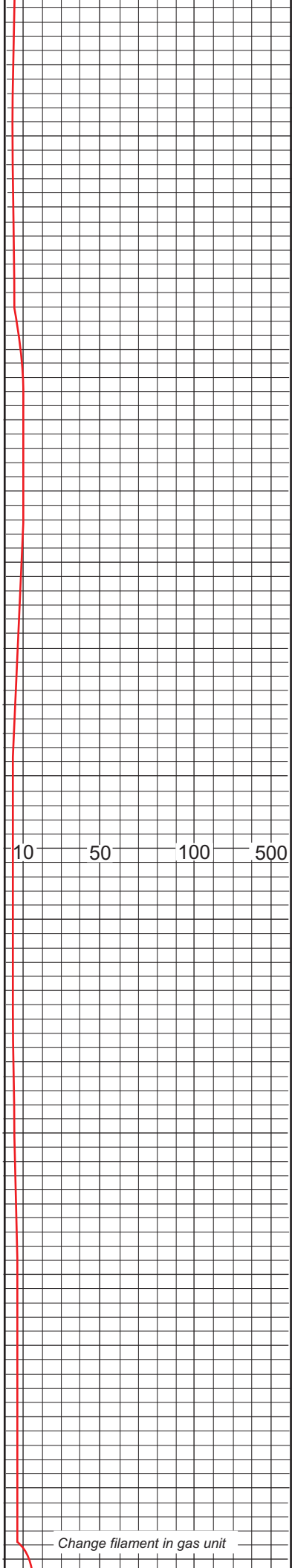
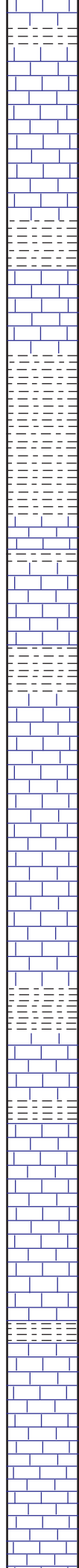
50  
Vis 55  
Wt. 9.3

Vis 47  
Wt. 9.4  
Filt 9.2  
Mud Co.

Vis 44  
Wt. 9.2

Vis 48  
Wt. 9.2

Vis 46  
Wt. 9.2



Sh - blk-gr

LS - dk gr, fn xtl, dense

Sh - blk-gr

LS - dk gr, fn xtl, dense

Sh - blk-gr, scat pyrite

LS - dk gr, fn xtl, slt fos, dense

Sh - blk-gr

LS - tan-lt gr, fn xtl, gd int xtl and vug por, no show

LS - tan-cream, fn xtl, fos, gd vug and fos cast por, no show

Sh - gr

LS - tan-brn, dense

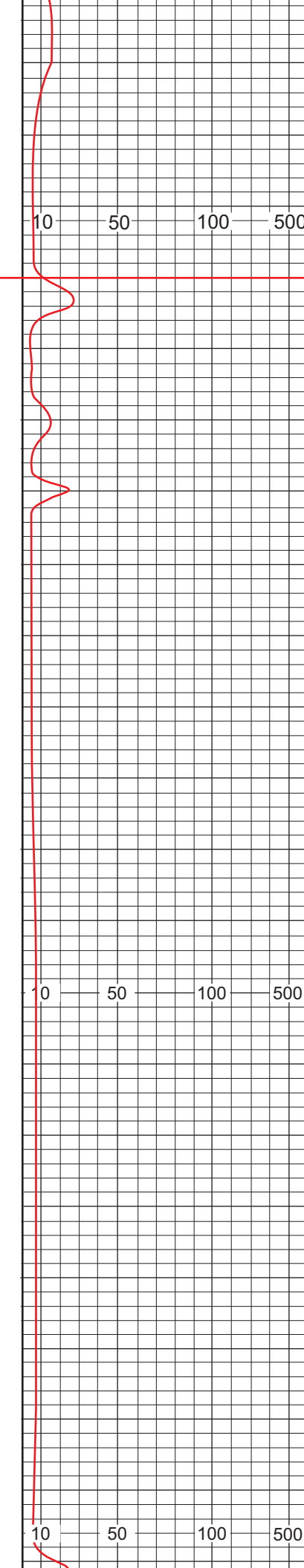
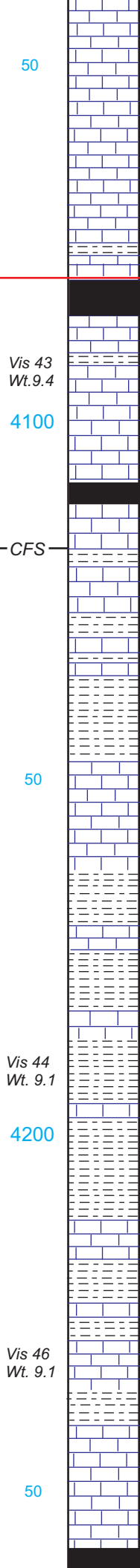
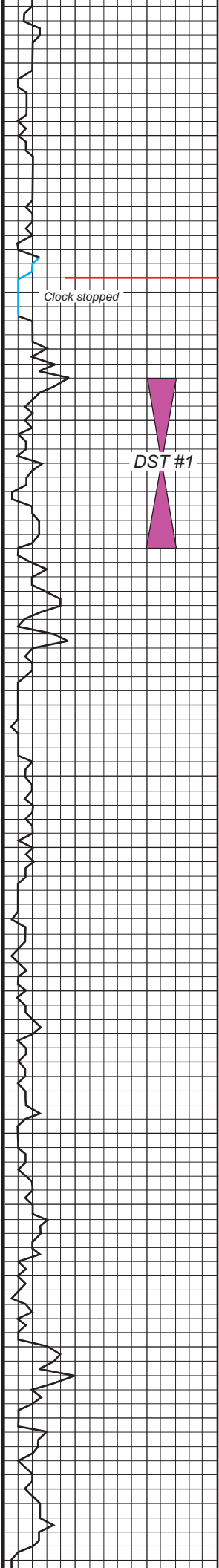
LS - tan-wht, fn xtl, fos, gd and fos cast por, scat chalk, no show

Sh - gr-blk

LS - lt gr-tan-wht, fn xtl, dense w/ scat chalk

LS - tan-brn-gr, fn xtl, fos, fair fos cast and int xtl por, no show

Change filament in gas unit



LS - tan-brn-gr, fn xtln, slt fos, scat fair pinpoint por, pred dense

LS - tan-brn-gr, dense

---

Sh - blk carb

LS - tan-brn, dense

Sh - gr-blk

LS - tan-brn-cream, fn xtln, scat p-f pinpoint to int xtln por, widely scat very small pieces w/ bright fluor, no odor, no vis stain

Sh - blk carb

LS - tan-brn, fn xtln, dense

LS - tan, fn xtln, dense

Sh - blk-gr, silty in part, slt pyritic

LS - dk gr-blk, fn xtln, dense

Sh - gr-blk, scat green

LS - dk gr-blk, dense

Sh - gr-blk

LS - dk gr-blk, dense

Sh - blk-gr-red

LS - gr-tan, fn xtln, dense

Sh - blk

Sh - gr

LS - gr-tan, dense

Sh - gr-blk

LS - tan-wht-lt gr, fn xtln, dense

**Stark Sh.**  
4080 (-2632)

---

**DST #1**  
4094-4118  
30-30-30-30

1st open - vwv blow incr to 1"

2nd open - no blow

Rec - 124' Wtr  
Chlorides 95K PPM

---

IFP: 15-45#  
FFP: 49-71#  
SIP: 1537-1501#  
HP: 2133-2009#  
BHT: 113 degrees

50

Vis 43  
Wt. 9.4

4100

DST #1

CFS

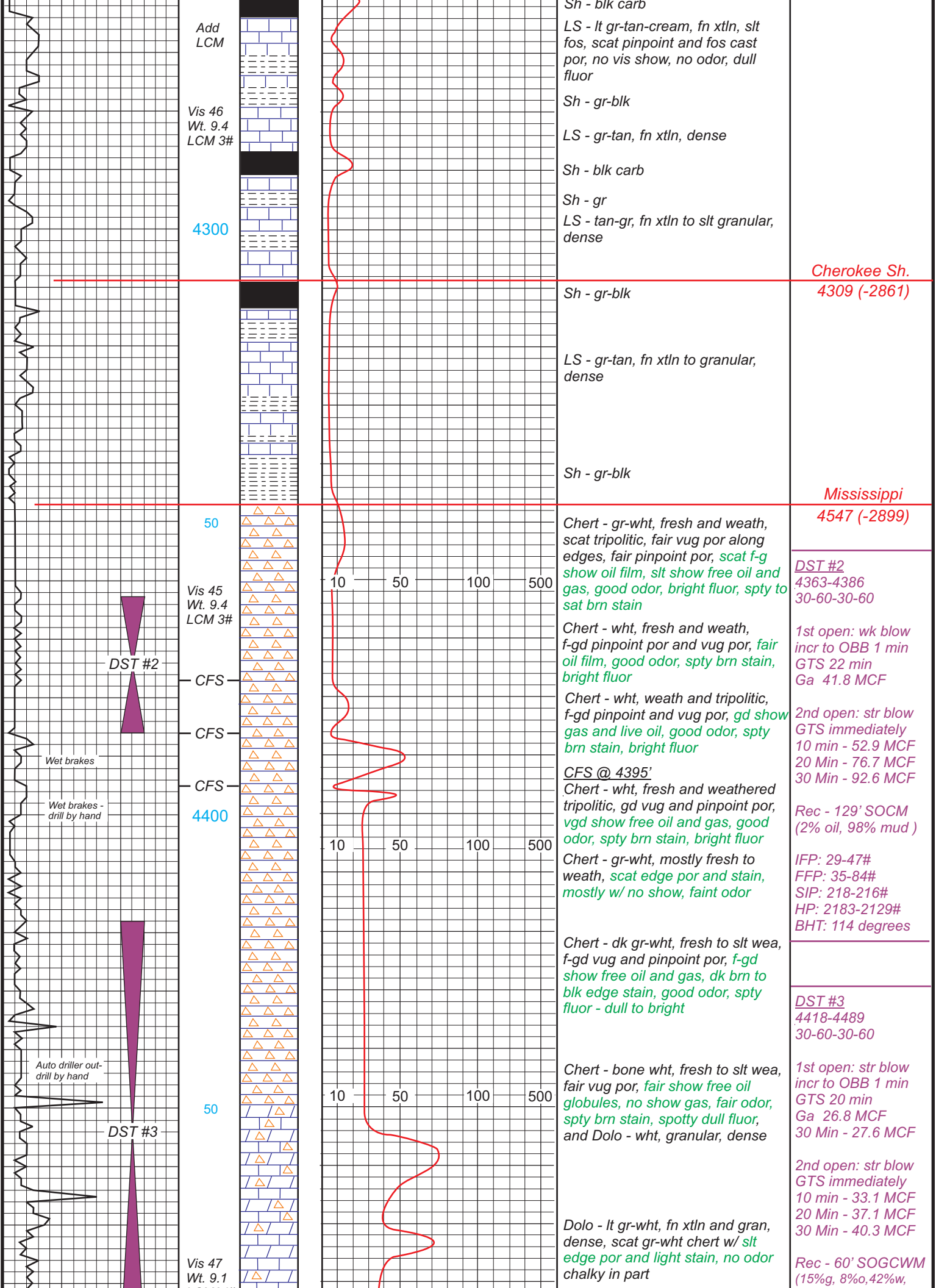
50

Vis 44  
Wt. 9.1

4200

Vis 46  
Wt. 9.1

50



Add LCM  
Vis 46  
Wt. 9.4  
LCM 3#

4300

**Cherokee Sh.**  
4309 (-2861)

**Mississippi**  
4547 (-2899)

50

Vis 45  
Wt. 9.4  
LCM 3#

DST #2

CFS

CFS

CFS

4400

DST #2  
4363-4386  
30-60-30-60

1st open: wk blow  
incr to OBB 1 min  
GTS 22 min  
Ga 41.8 MCF

2nd open: str blow  
GTS immediately  
10 min - 52.9 MCF  
20 Min - 76.7 MCF  
30 Min - 92.6 MCF

Rec - 129' SOCM  
(2% oil, 98% mud)

IFP: 29-47#  
FFP: 35-84#  
SIP: 218-216#  
HP: 2183-2129#  
BHT: 114 degrees

DST #3  
4418-4489  
30-60-30-60

1st open: str blow  
incr to OBB 1 min  
GTS 20 min  
Ga 26.8 MCF  
30 Min - 27.6 MCF

2nd open: str blow  
GTS immediately  
10 min - 33.1 MCF  
20 Min - 37.1 MCF  
30 Min - 40.3 MCF

Rec - 60' SOGCWM  
(15%g, 8%o, 42%w,

Sh - blk carb  
LS - lt gr-tan-cream, fn xtlh, slt fos, scat pinpoint and fos cast por, no vis show, no odor, dull fluor

Sh - gr-blk

LS - gr-tan, fn xtlh, dense

Sh - blk carb

Sh - gr

LS - tan-gr, fn xtlh to slt granular, dense

Sh - gr-blk

LS - gr-tan, fn xtlh to granular, dense

Sh - gr-blk

Chert - gr-wht, fresh and weath, scat tripolitic, fair vug por along edges, fair pinpoint por, scat f-g show oil film, slt show free oil and gas, good odor, bright fluor, spty to sat brn stain

Chert - wht, fresh and weath, f-gd pinpoint por and vug por, fair oil film, good odor, spty brn stain, bright fluor

Chert - wht, weath and tripolitic, f-gd pinpoint and vug por, gd show gas and live oil, good odor, spty brn stain, bright fluor

CFS @ 4395'

Chert - wht, fresh and weathered tripolitic, gd vug and pinpoint por, vgd show free oil and gas, good odor, spty brn stain, bright fluor

Chert - gr-wht, mostly fresh to weath, scat edge por and stain, mostly w/ no show, faint odor

Chert - dk gr-wht, fresh to slt wea, f-gd vug and pinpoint por, f-gd show free oil and gas, dk brn to blk edge stain, good odor, spty fluor - dull to bright

Chert - bone wht, fresh to slt wea, fair vug por, fair show free oil globules, no show gas, fair odor, spty brn stain, spotty dull fluor, and Dolo - wht, granular, dense

Dolo - lt gr-wht, fn xtlh and gran, dense, scat gr-wht chert w/ slt edge por and light stain, no odor chalky in part

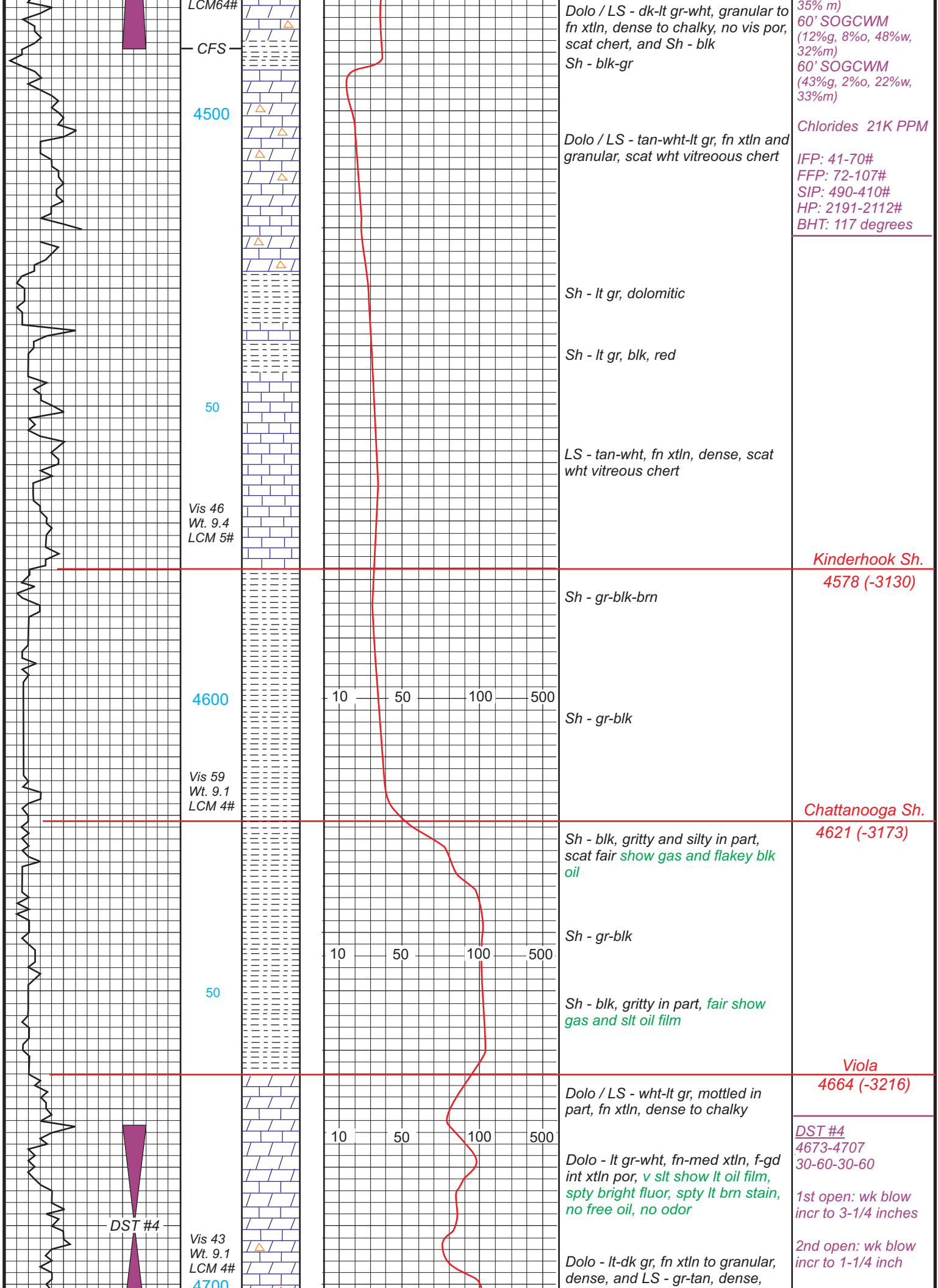
Wet brakes

Wet brakes - drill by hand

Auto driller out-drill by hand

DST #3

Vis 47  
Wt. 9.1



LCM64#

CFS

4500

50

Vis 46  
Wt. 9.4  
LCM 5#

4600

Vis 59  
Wt. 9.1  
LCM 4#

50

DST #4

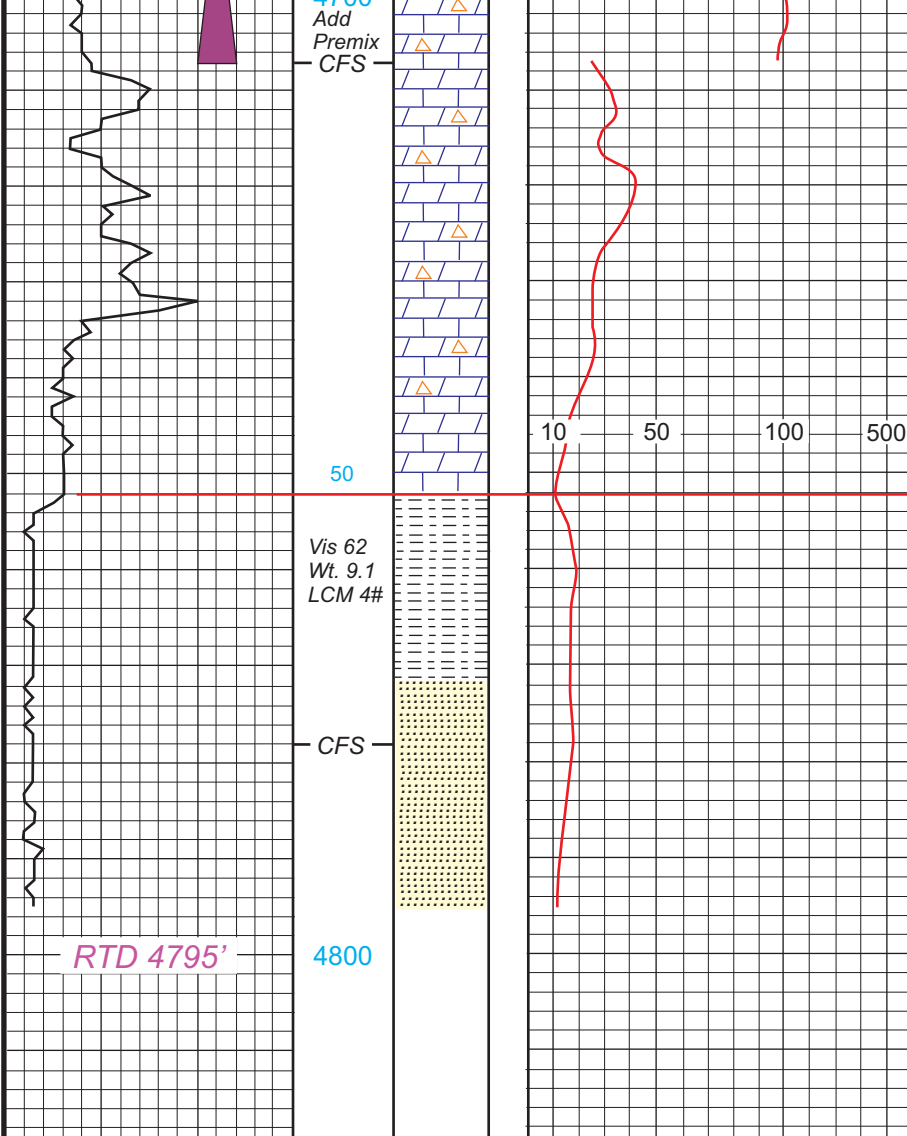


Vis 43  
Wt. 9.1  
LCM 4#  
4700

10 50 100 500

10 50 100 500

10 50 100 500



scat gr-wht chert

Dolo - gr-brn, fn xtl and granular, dense

Dolo - gr-brn, fn xtl and granular, dense, scat gr and wht vitreous chert

LS - wht-gr, mottled in part, fn-med xtl, dense to chalky

Rec: 20' Mud / trc oil  
IFP: 16-20#  
FFP: 19-26#  
SIP: 209-150#  
HP: 2299-2299#  
BHT: 116 degrees

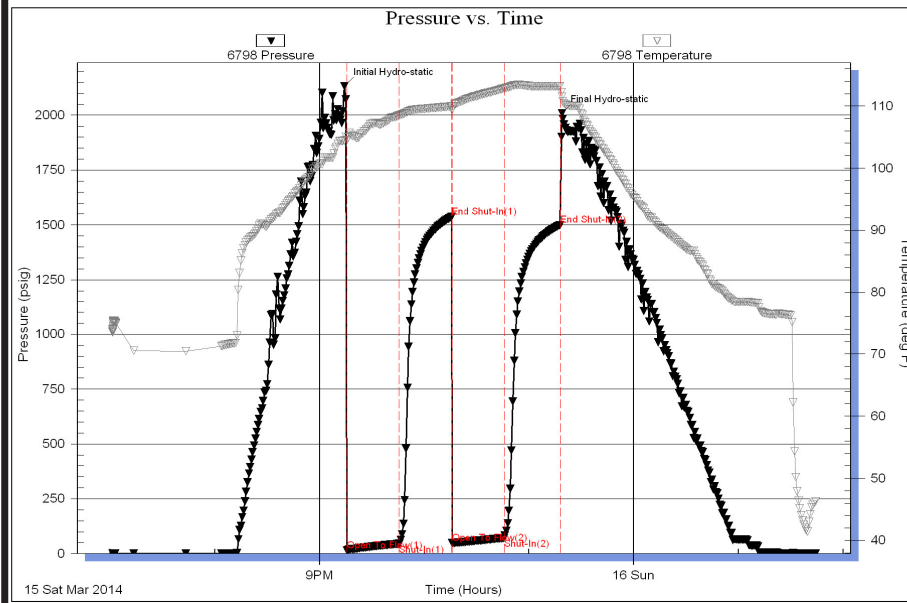
Sh - blk-gr-green

SS - brn-wht-clear, fn grained, sub rounded, well sorted, semi-friable to friable, no show

SS - wht-clear, fn grained, friable, gd int gran por, no show

Simpson Sh.  
4752 (-3304)

Serial #: 6798    Inside    R & B Oil & Gas    Dohm B 1    DST Test Number: 1



**DST #1**  
4094-4118  
30-30-30-30

1st open - vwv blow incr to 1"

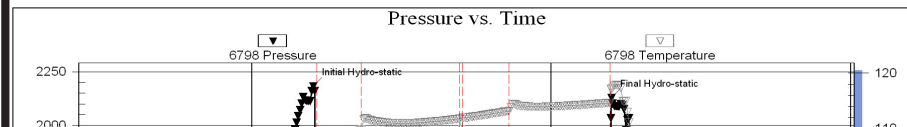
2nd open - no blow

Rec - 124' Wtr Chlorides 95K PPM

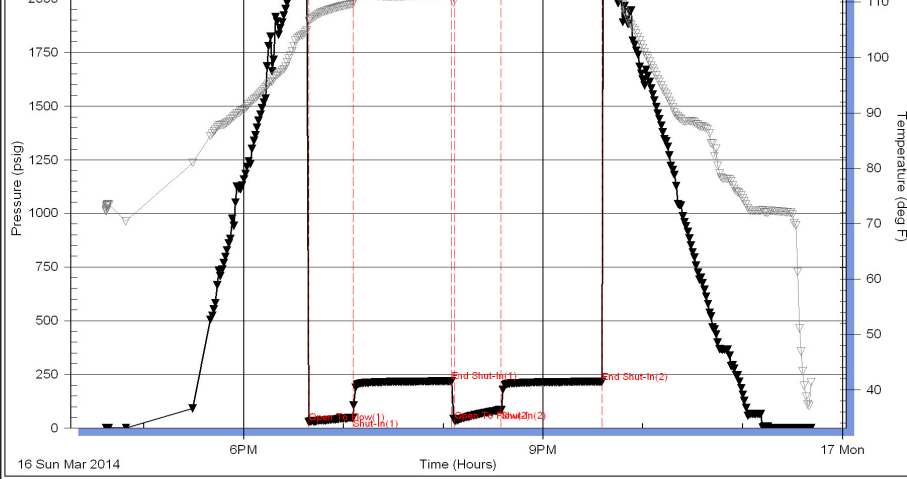
IFP: 15-45#  
FFP: 49-71#  
SIP: 1537-1501#  
HP: 2133-2009#  
BHT: 113 degrees

Trilobite Testing, Inc    Ref. No: 51967    Printed: 2014.03.16 @ 01:58:01

Serial #: 6798    Inside    R & B Oil & Gas    Dohm B 1    DST Test Number: 2



**DST #2**  
4363-4386  
30-60-30-60



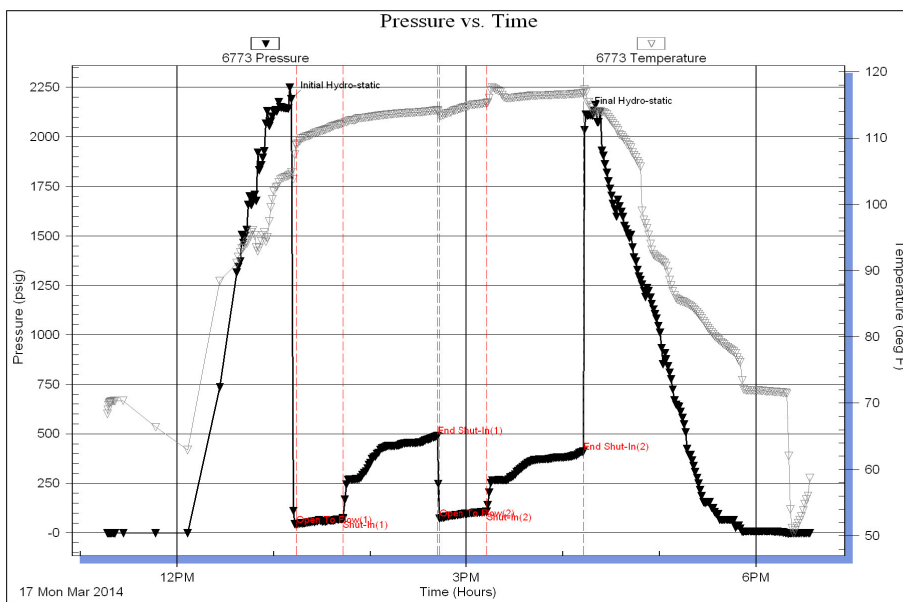
1st open: wk blow  
incr to OBB 1 min  
GTS 22 min  
Ga 41.8 MCF

2nd open: str blow  
GTS immediately  
10 min - 52.9 MCF  
20 Min - 76.7 MCF  
30 Min - 92.6 MCF

Rec - 129' SOCM  
(2% oil, 98% mud)

IFP: 29-47#  
FFP: 35-84#  
SIP: 218-216#  
HP: 2183-2129#  
BHT: 114 degrees

Serial #: 6773 Outside R & B Oil & Gas Dohm B 1 DST Test Number: 3



DST #3  
4418-4489  
30-60-30-60

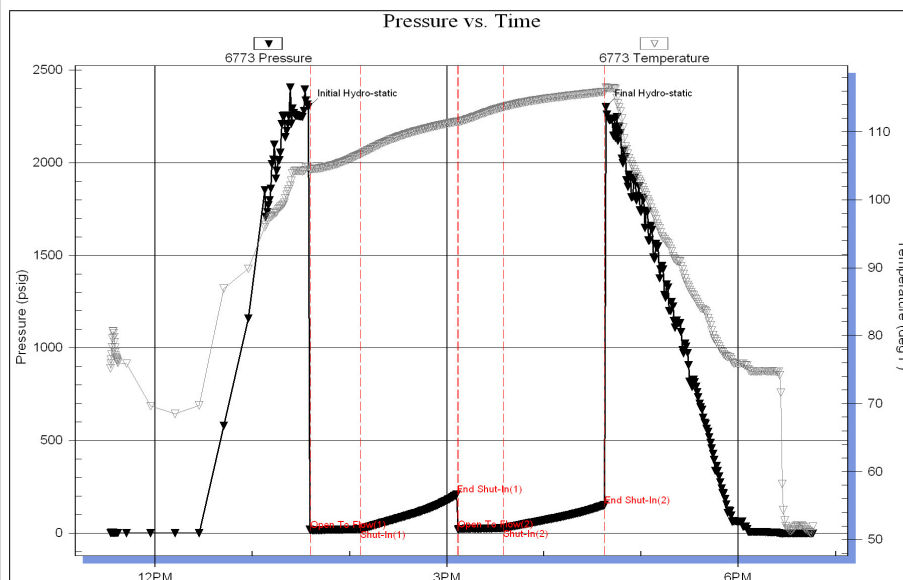
1st open: str blow  
incr to OBB 1 min  
GTS 20 min  
Ga 26.8 MCF  
30 Min - 27.6 MCF

2nd open: str blow  
GTS immediately  
10 min - 33.1 MCF  
20 Min - 37.1 MCF  
30 Min - 40.3 MCF

Rec - 60' SOGCWM  
(15%g, 8% o, 42%w,  
35% m)  
60' SOGCWM  
(12%g, 8%o, 48%w,  
32% m)  
60' SOGCWM  
(43%g, 2%o, 22%w,  
33% m)

IFP: 41-70#  
FFP: 72-107#  
SIP: 490-410#  
HP: 2191-2112#  
BHT: 117 degrees

Serial #: 6773 Outside R & B Oil & Gas Dohm B 1 DST Test Number: 4



DST #4  
4673-4707  
30-60-30-60

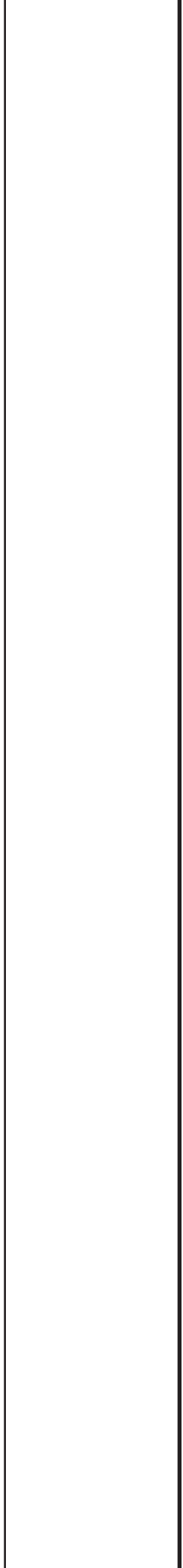
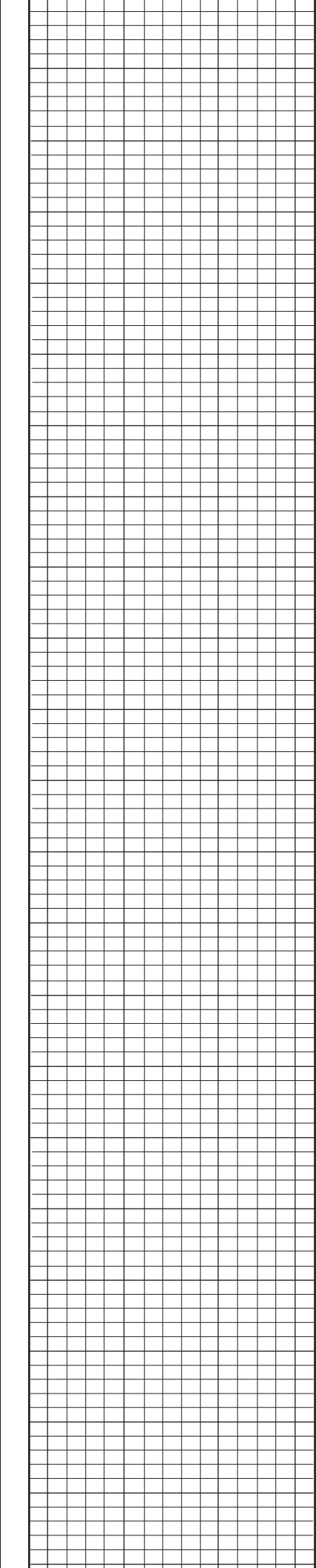
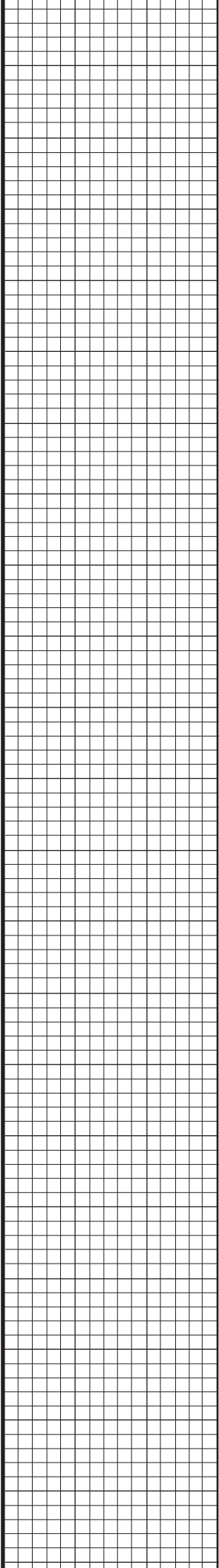
1st open: wk blow  
incr to 3-1/4 inches

2nd open: wk blow  
incr to 1-1/4 inch

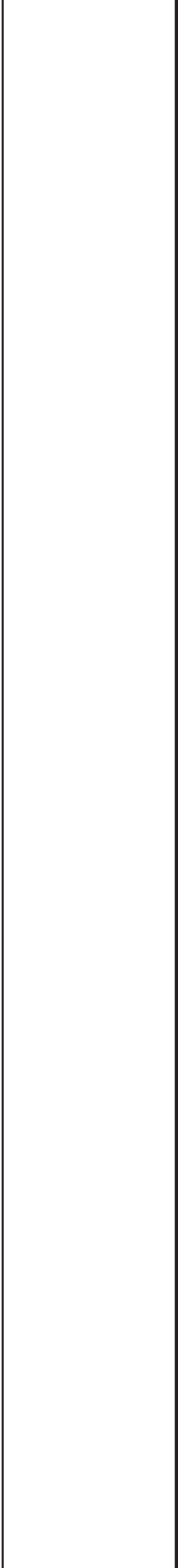
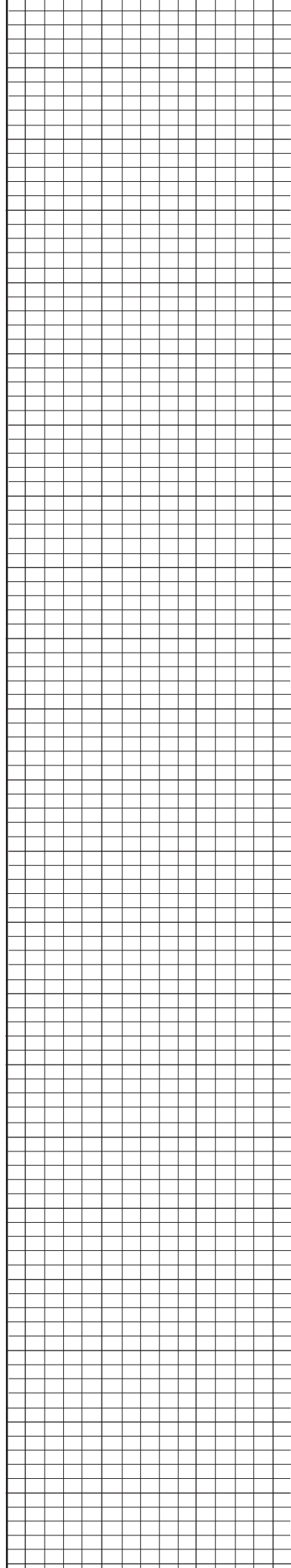
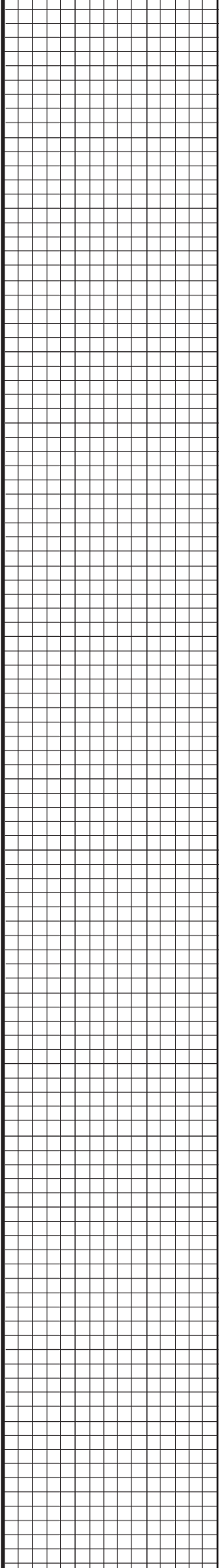
Rec: 20' Mud / trc oil

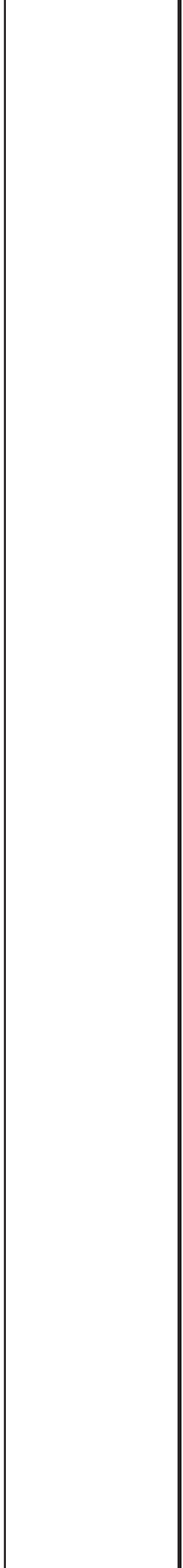
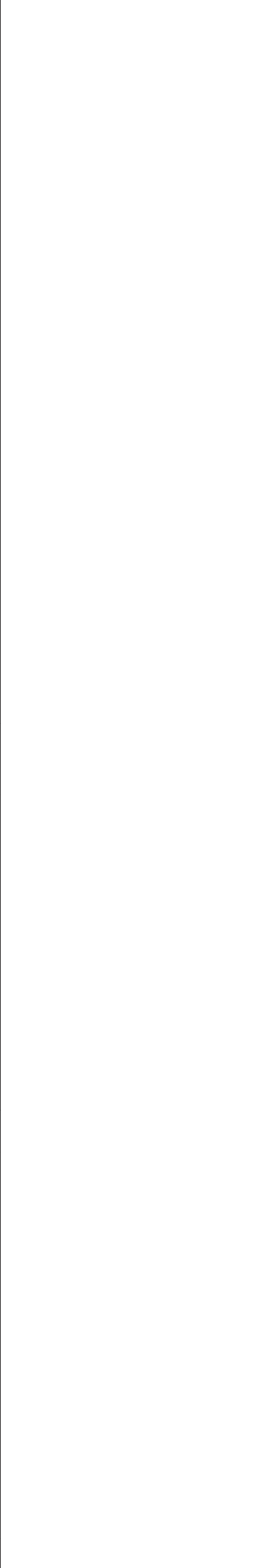
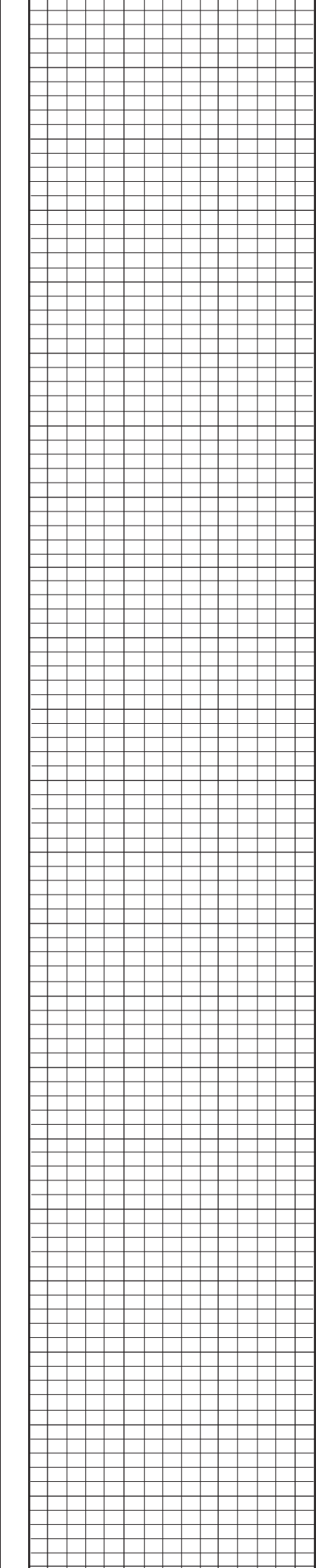
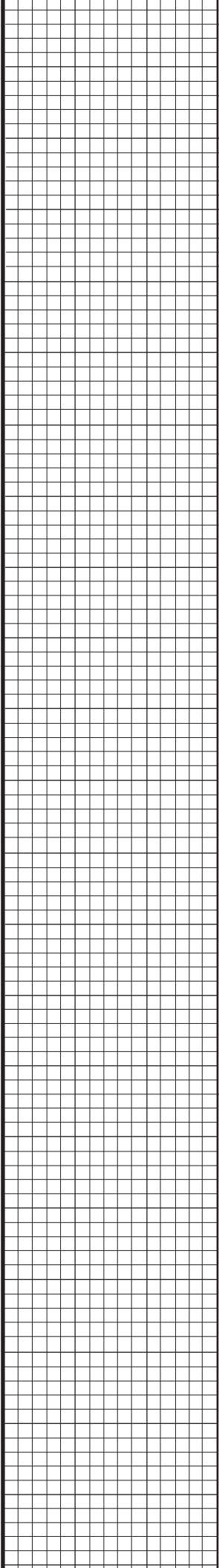
IFP: 16-20#  
FFP: 19-26#  
SIP: 209-150#  
HP: 2299-2299#  
BHT: 116 degrees

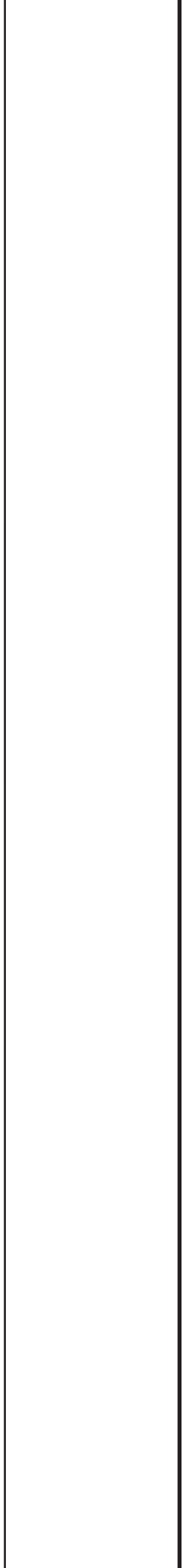
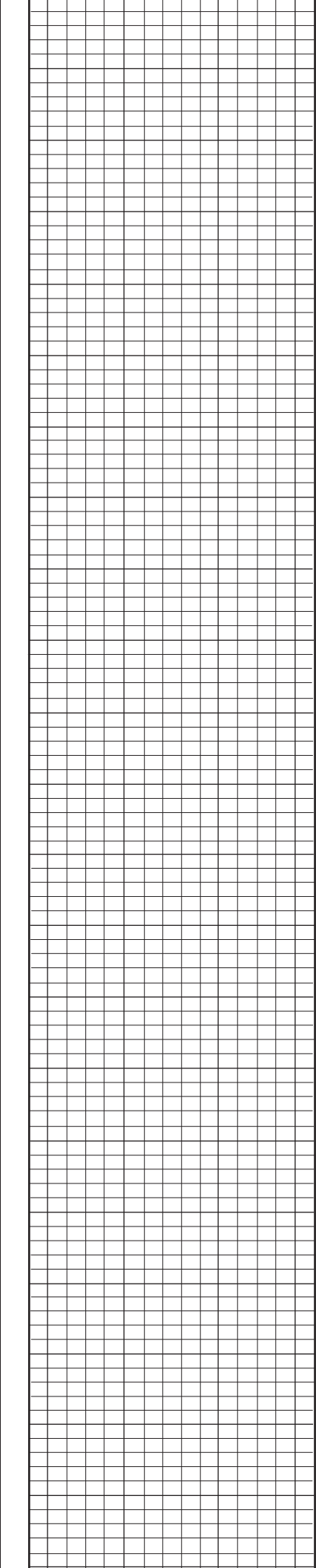
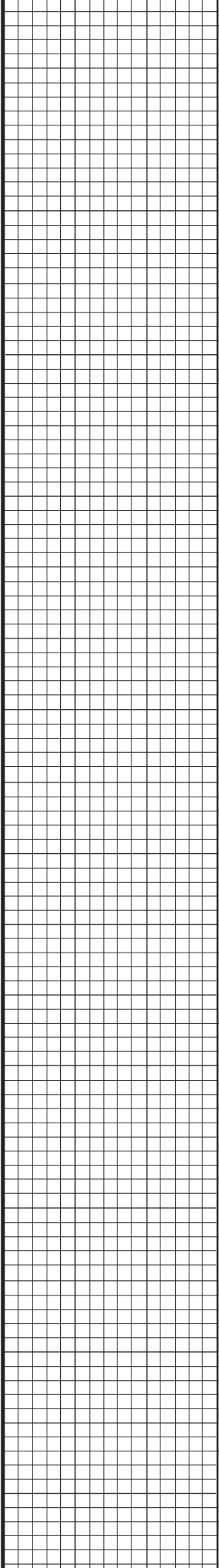


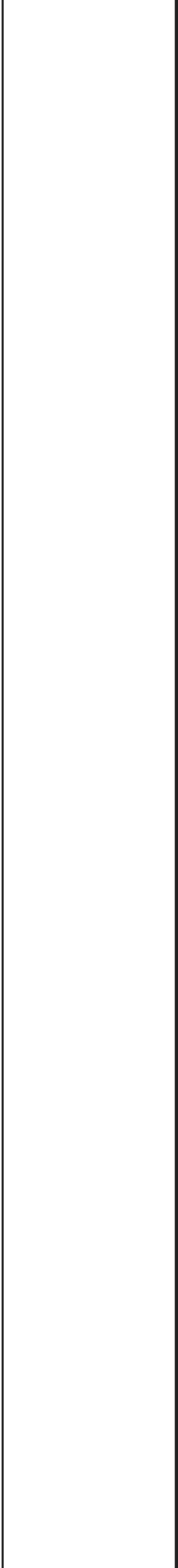
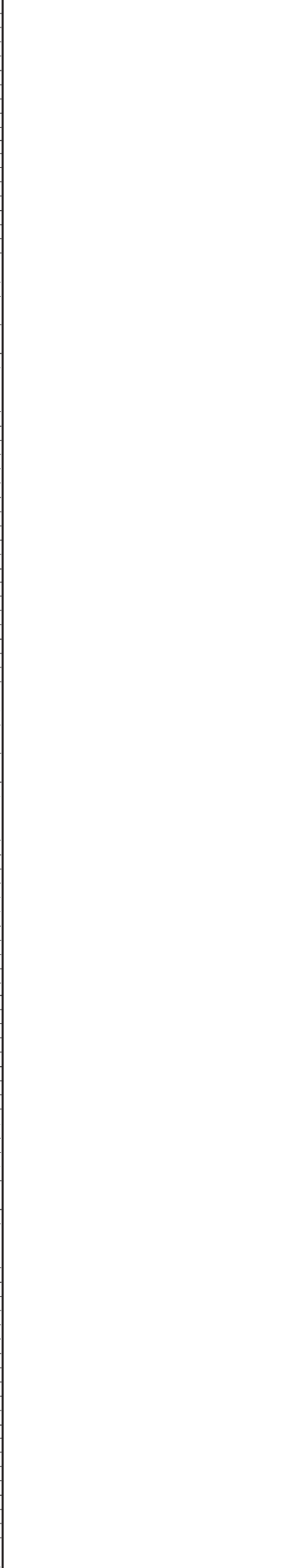
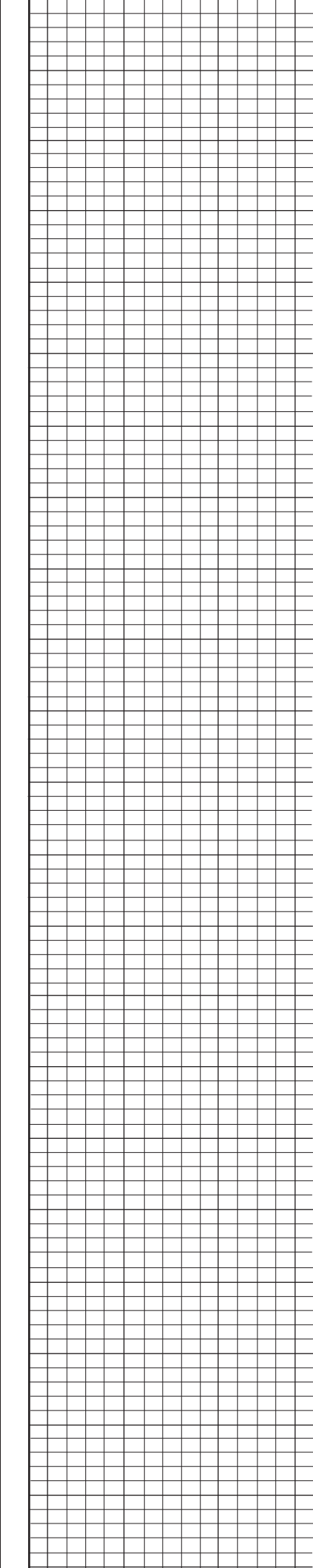
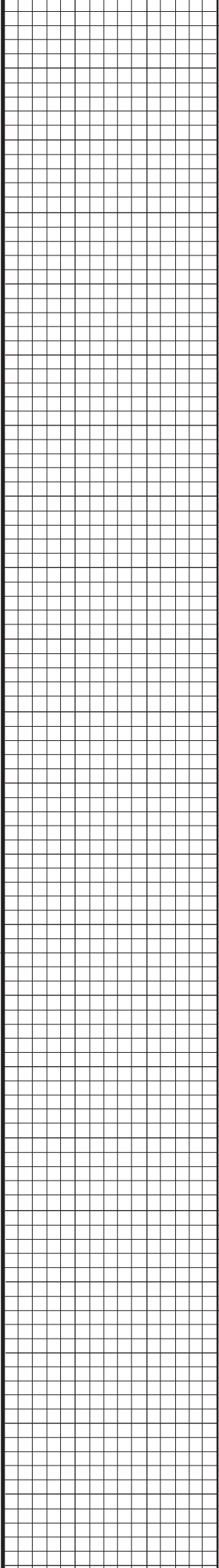


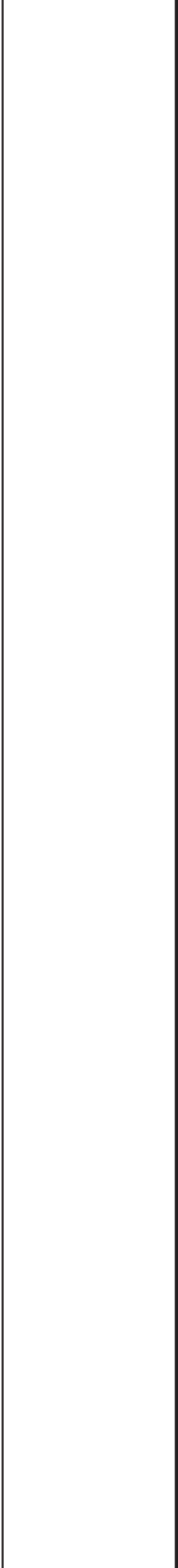
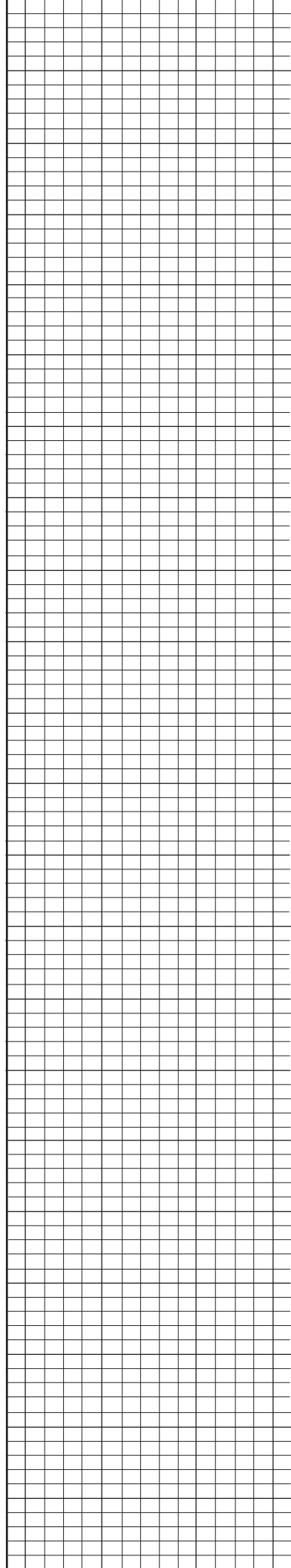
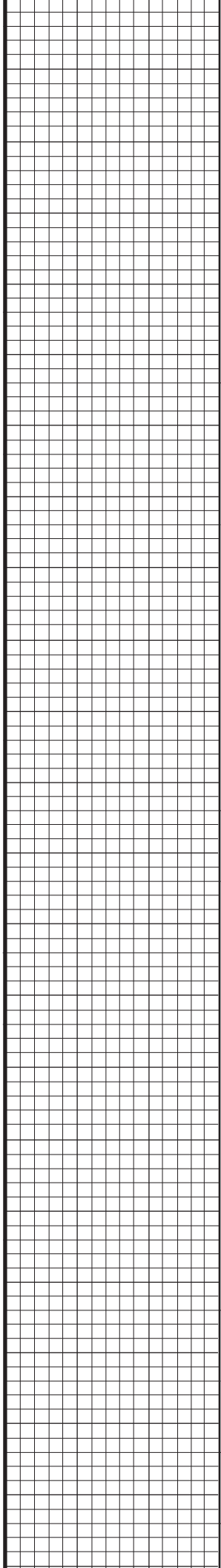


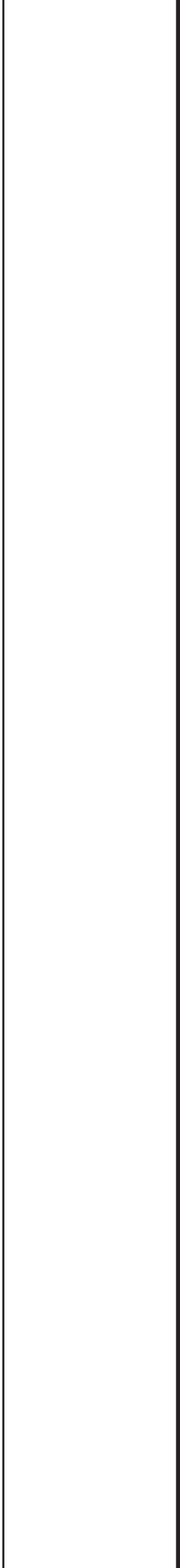
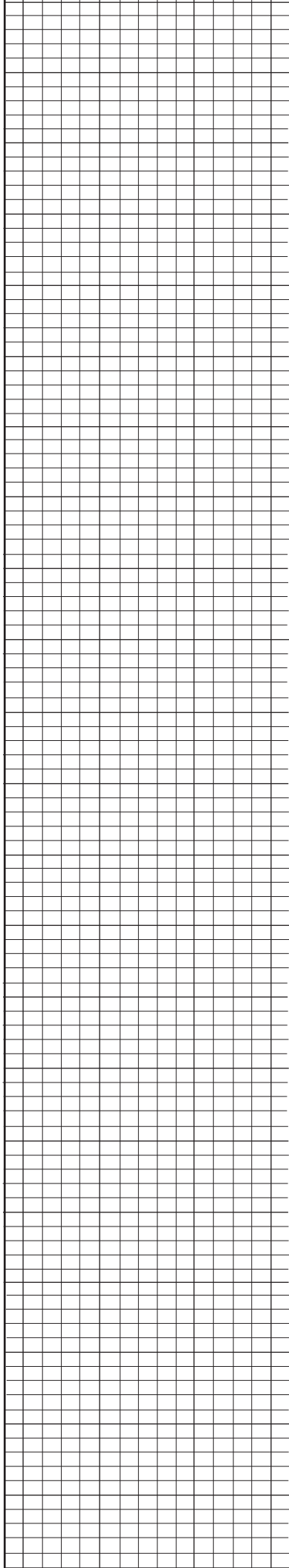
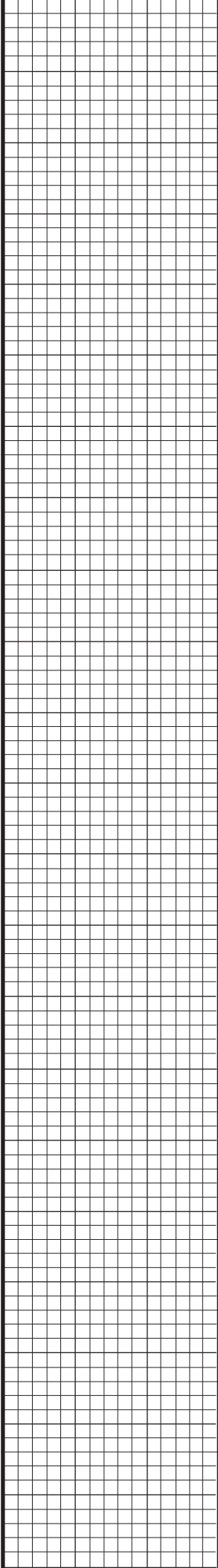


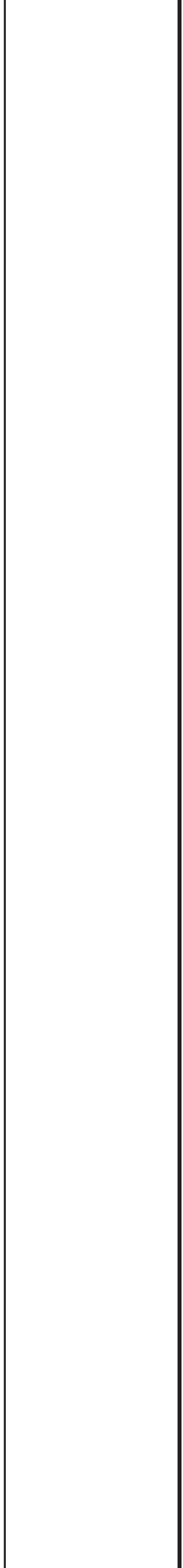
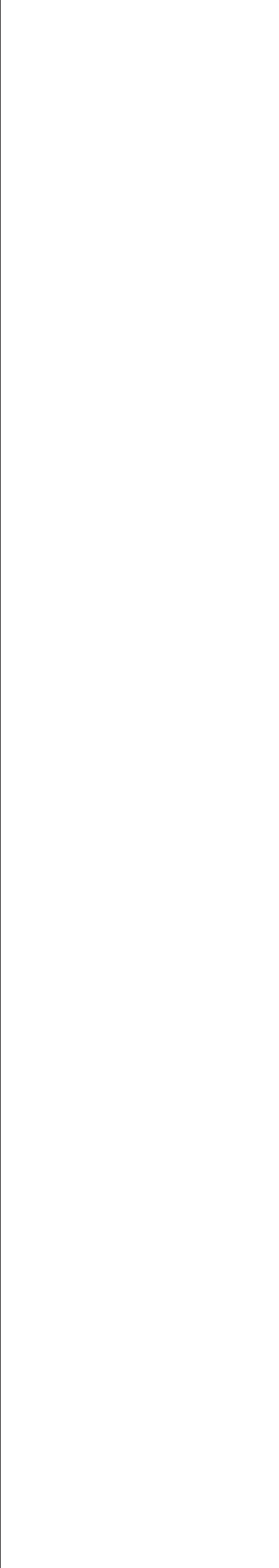
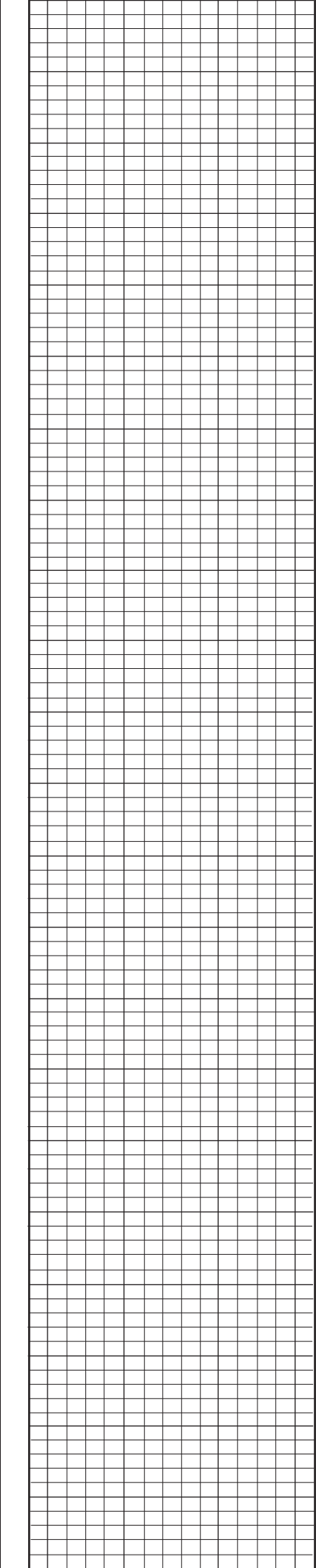
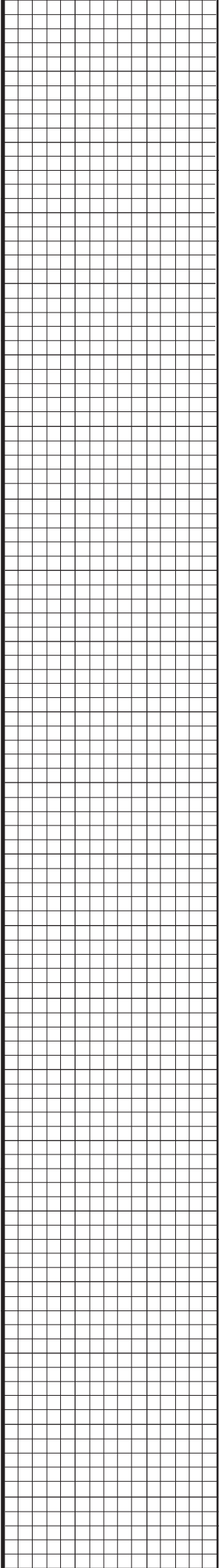


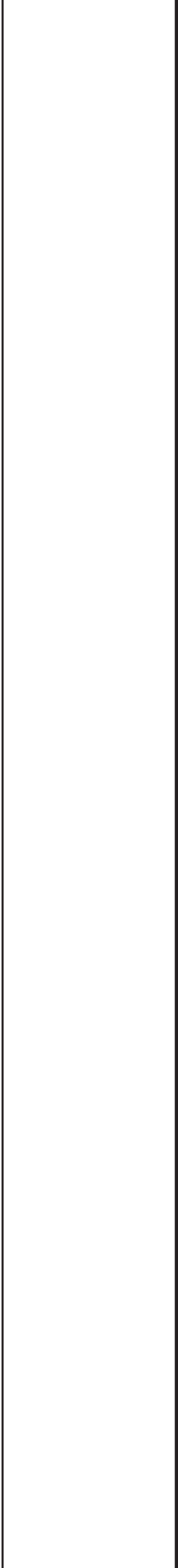
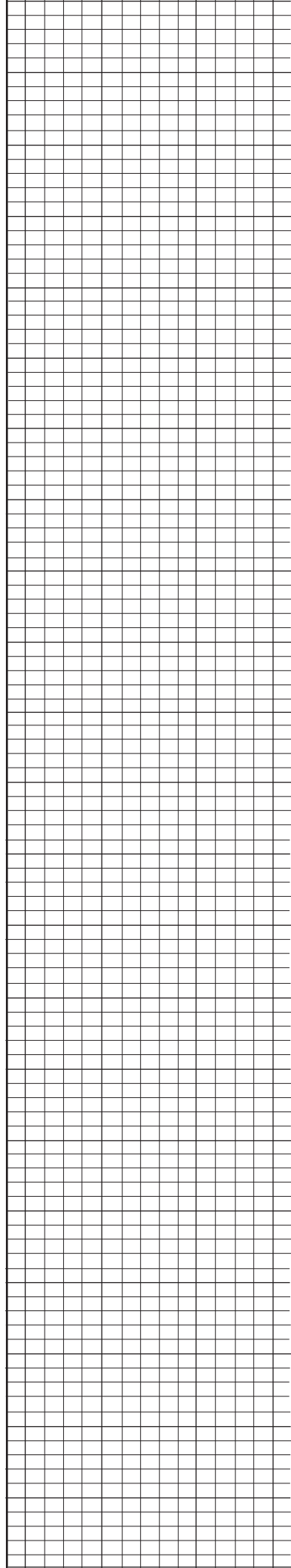
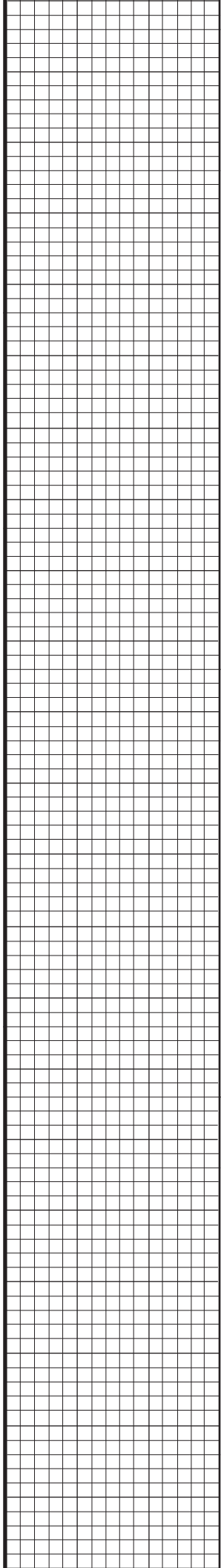




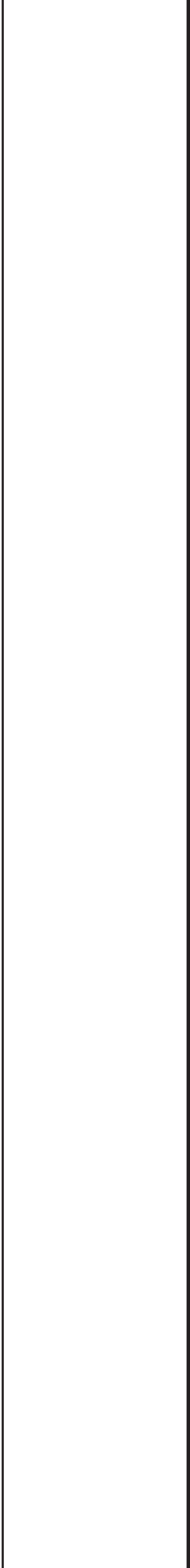
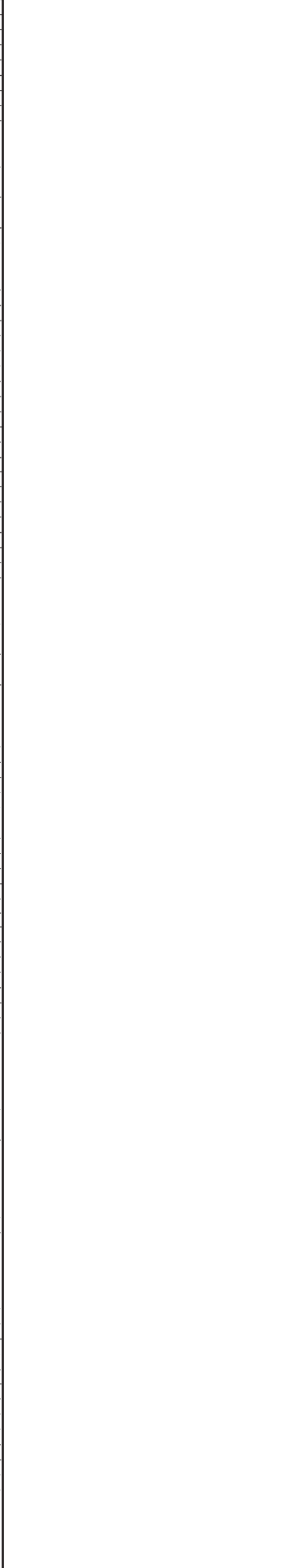
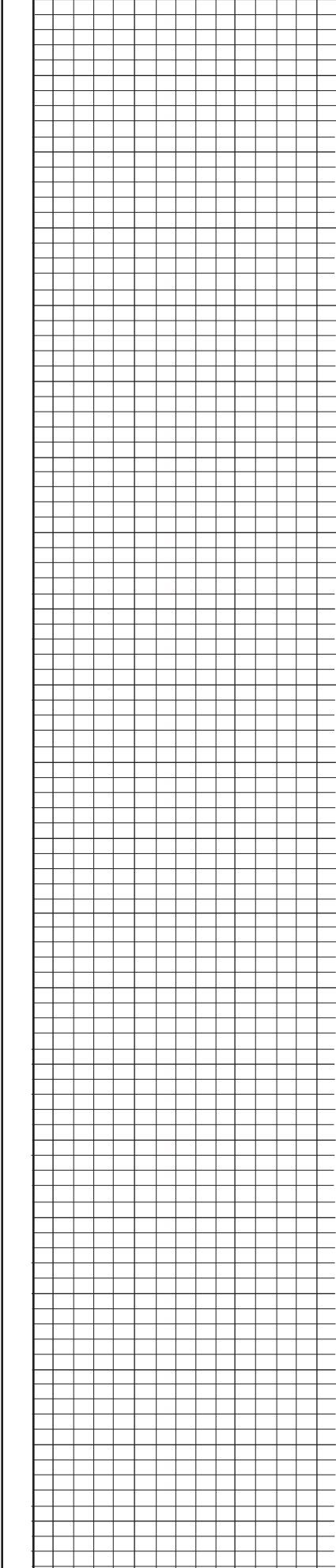
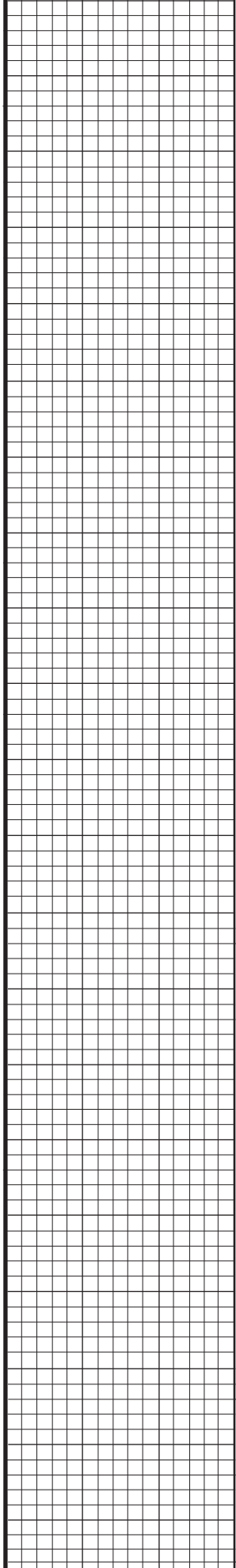


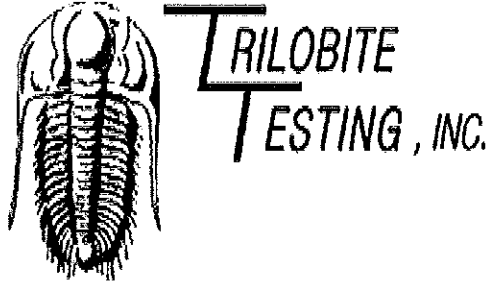












## DRILL STEM TEST REPORT

Prepared For: **R & B Oil & Gas**

PO Box 195  
Attica, KS 67009

ATTN: Tim Pierce

**Dohm B #1**

**23-32s-10w Barber,KS**

Start Date: 2014.03.15 @ 19:01:18

End Date: 2014.03.16 @ 01:44:03

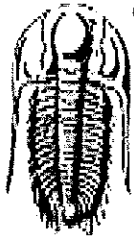
Job Ticket #: 51967                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.03.24 @ 11:55:05



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

R & B Oil & Gas

23-32s-10w Barber,KS

PO Box 195  
Attica, KS 67009

Dohm B #1

Job Ticket: 51967

DST#:1

ATTN: Tim Pierce

Test Start: 2014.03.15 @ 19:01:18

## GENERAL INFORMATION:

Formation: **Swope**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:15:33

Time Test Ended: 01:44:03

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 74

Interval: **4094.00 ft (KB) To 4118.00 ft (KB) (TVD)**

Reference Elevations: 1448.00 ft (KB)

Total Depth: 4118.00 ft (KB) (TVD)

1438.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 6798

Inside

Press@RunDepth: 71.45 psig @ 4095.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.15

End Date:

2014.03.16

Last Calib.: 2014.03.16

Start Time: 19:01:19

End Time:

01:44:03

Time On Btm: 2014.03.15 @ 21:14:03

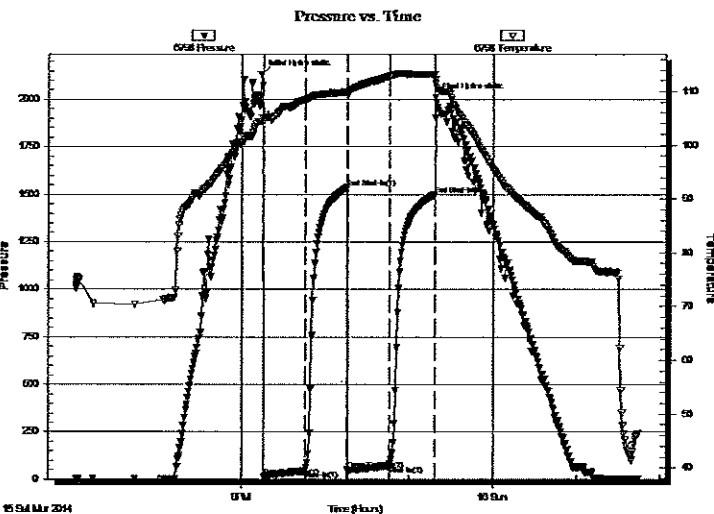
Time Off Btm: 2014.03.15 @ 23:18:48

TEST COMMENT: IF: Weak 1 inch Blow

IS: No Blow Back

FF: No Blow

FSt: No Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2133.05	104.45	Initial Hydro-static
2	15.23	104.57	Open To Flow (1)
32	44.73	108.47	Shut-In(1)
62	1537.01	109.94	End Shut-In(1)
62	49.15	109.35	Open To Flow (2)
92	71.45	112.81	Shut-In(2)
124	1500.74	113.18	End Shut-In(2)
125	2009.26	111.50	Final Hydro-static

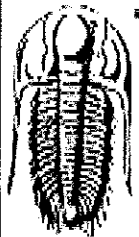
## Recovery

Length (ft)	Description	Volume (bbl)
124.00	Water	0.61

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

R & B Oil & Gas

**23-32s-10w Barber,KS**

PO Box 195  
Attica, KS 67009

**Dohm B #1**

Job Ticket: 51967

**DST#: 1**

ATTN: Tim Fierce

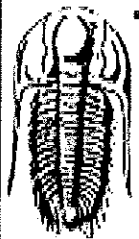
Test Start: 2014.03.15 @ 19:01:18

## Tool Information

Drill Pipe:	Length: 3962.00 ft	Diameter: 3.80 inches	Volume: 55.58 bbl	Tool Weight: 2100.00 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 56.19 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4094.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4080.00	
Hydraulic tool	5.00			4085.00	
Packer	5.00			4090.00	19.00 Bottom Of Top Packer
Packer	4.00			4094.00	
Stubb	1.00			4095.00	
Recorder	0.00	6798	Inside	4095.00	
Recorder	0.00	8367	Outside	4095.00	
Perforations	20.00			4115.00	
Bullnose	3.00			4118.00	24.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>43.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

R & B Oil & Gas

23-32s-10w Barber,KS

PO Box 195  
Attica, KS 67009

Dohm B #1

Job Ticket: 51967

DST#: 1

ATTN: Tim Pierce

Test Start: 2014.03.15 @ 19:01:18

## 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: 95000 ppm

Viscosity: 47.00 sec/qt

Cushion Volume: bbl

Water Loss: 9.16 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 4000.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	Water	0.610

Total Length: 124.00 ft      Total Volume: 0.610 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW was .13 @ 45 degrees

Serial #: 6798

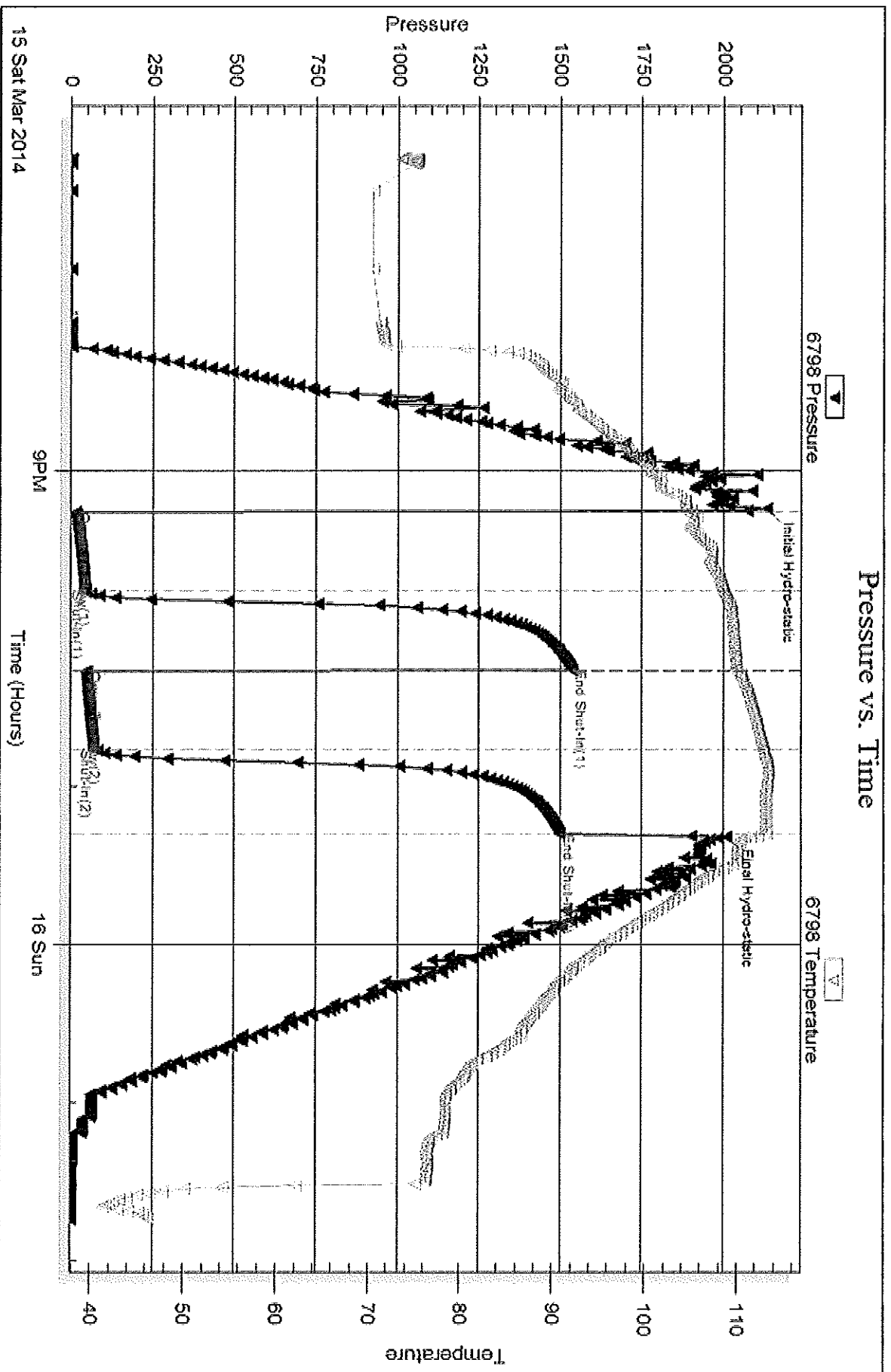
Inside

R & B Oil & Gas

Well B#1

DST Test Number: 1

### Pressure vs. Time



Tribble Testing, Inc

Ref. No: 51967

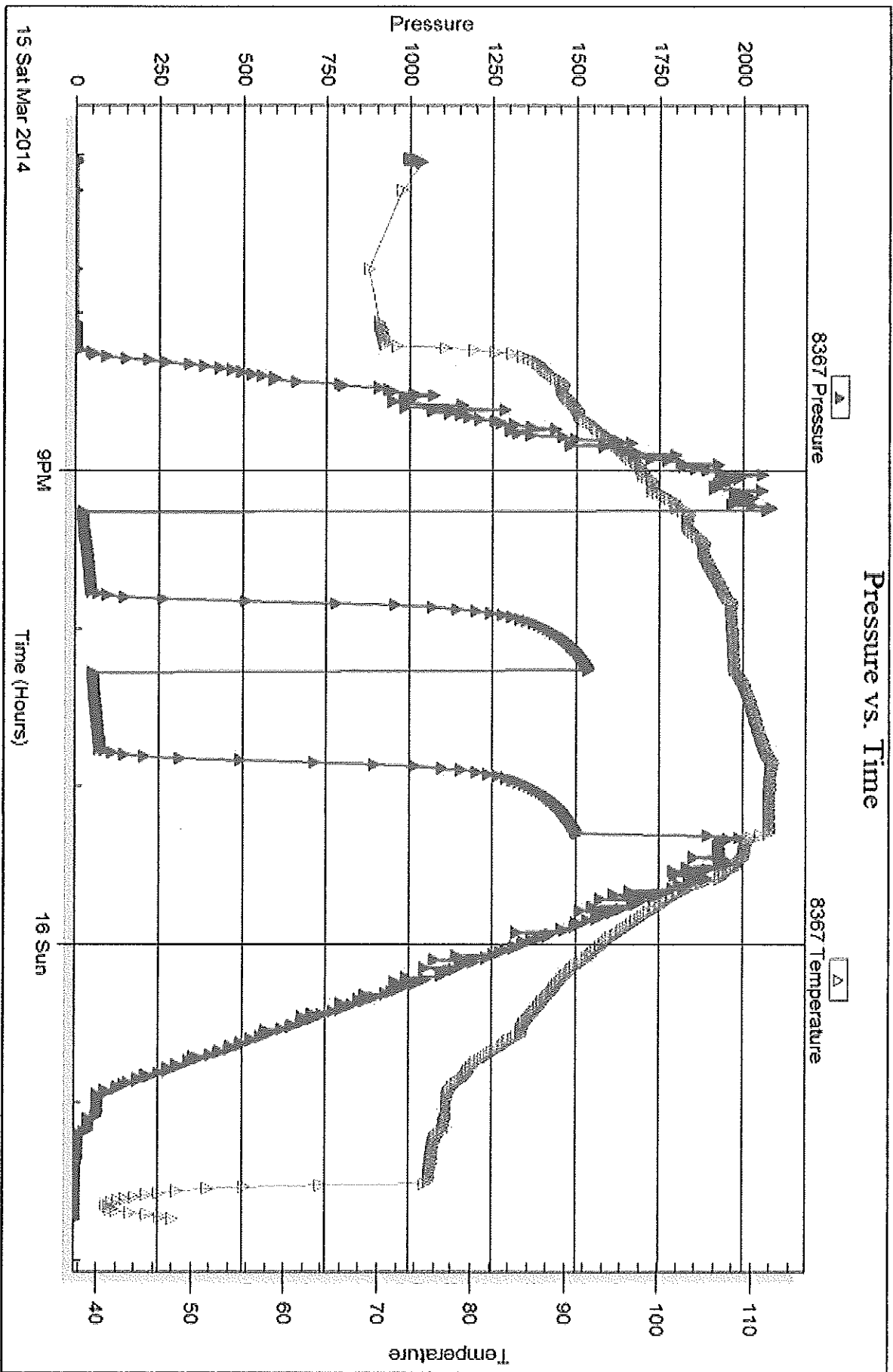
Printed: 2014.03.24 @ 11:55:08

Serial #: 8367

Outside R & B Oil & Gas

Well B#1

DST Test Number: 1

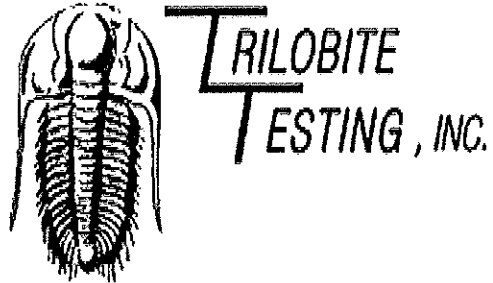


Tribble Testing, Inc

Ref. No: 51967

Printed: 2014.03.24 @ 11:55:09





## DRILL STEM TEST REPORT

Prepared For: **R & B Oil & Gas**

PO Box 195  
Attica, KS 67009

ATTN: Tim Pierce

**Dohm B #1**

**23-32s-10w Barber,KS**

Start Date: 2014.03.16 @ 16:37:13

End Date: 2014.03.16 @ 23:41:43

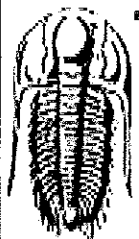
Job Ticket #: 51968                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.03.24 @ 11:53:37



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

R & B Oil & Gas

23-32s-10w Barber,KS

PO Box 195  
Attica, KS 67009

Dohm B #1

Job Ticket: 51968

DST#: 2

ATTN: Tim Pierce

Test Start: 2014.03.16 @ 16:37:13

## GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:38:58

Time Test Ended: 23:41:43

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 74

Interval: **4386.00 ft (KB) To 4386.00 ft (KB) (TVD)**

Total Depth: 4386.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1448.00 ft (KB)

1438.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6798

Inside

Press@RunDepth: 84.18 psig @ 4364.00 ft (KB)

Start Date: 2014.03.16

End Date: 2014.03.16

Start Time: 16:37:14

End Time: 23:41:43

Capacity: 8000.00 psig

Last Calib.: 2014.03.16

Time On Btm: 2014.03.16 @ 18:36:58

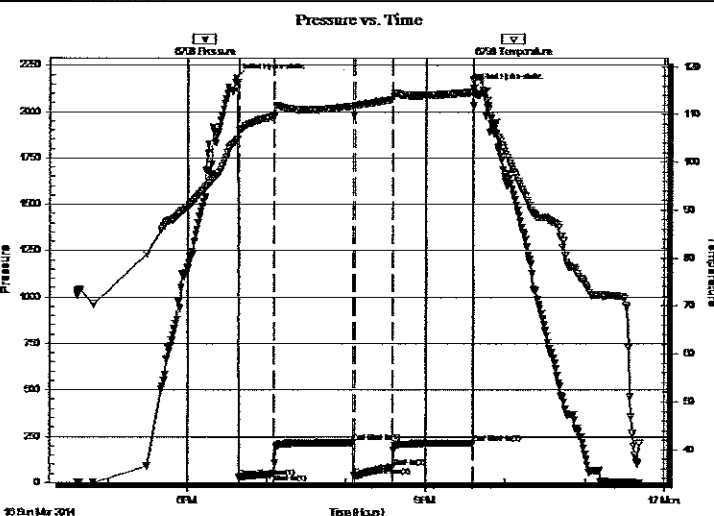
Time Off Btm: 2014.03.16 @ 21:36:13

TEST COMMENT: IF: Strong Blow, BOB in 1 minute, GTS in 22 minutes, Gauged Gas

IS: Weak Surface Blow Back

FF: Strong Blow, BOB & GTS immediate, Gauged Gas

FSt: No Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2182.71	104.57	Initial Hydro-static
2	28.84	106.59	Open To Flow (1)
29	47.22	109.64	Shut-In(1)
88	218.13	111.78	End Shut-In(1)
90	35.06	111.76	Open To Flow (2)
118	84.18	113.17	Shut-In(2)
179	215.85	114.66	End Shut-In(2)
180	2128.68	116.95	Final Hydro-static

## Recovery

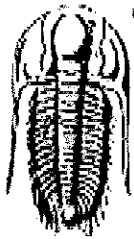
Length (ft)	Description	Volume (bbl)
0.00	4234 GIP	0.00
129.00	SOCM 2%O 98%M	0.68

\* Recovery from multiple tests

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	12.00	41.88
Last Gas Rate	0.25	44.00	92.65
Max. Gas Rate	0.25	44.00	92.65





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

R & B Oil & Gas

**23-32s-10w Barber,KS**

PO Box 195  
Attica, KS 67009

**Dohm B #1**

Job Ticket: 51968

**DST#:2**

ATTN: Tim Pierce

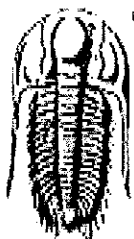
Test Start: 2014.03.16 @ 16:37:13

## Tool Information

Drill Pipe:	Length: 4239.00 ft	Diameter: 3.80 inches	Volume: 59.46 bbl	Tool Weight: 2100.00 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 90000.00 lb
		Total Volume: 60.07 bbl		Tool Chased: ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4363.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	42.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4349.00	
Hydraulic tool	5.00			4354.00	
Packer	5.00			4359.00	19.00 Bottom Of Top Packer
Packer	4.00			4363.00	
Stubb	1.00			4364.00	
Recorder	0.00	6798	Inside	4364.00	
Recorder	0.00	8367	Outside	4364.00	
Perforations	19.00			4383.00	
Bullnose	3.00			4386.00	23.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>42.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

R & B Oil & Gas

**23-32s-10w Barber,KS**

PO Box 195  
Attica, KS 67009

**Dohm B #1**

Job Ticket: 51968      **DST#: 2**

ATTN: Tim Pierce

Test Start: 2014.03.16 @ 16:37:13

## 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: 47.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.15 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: 0.02 inches			

## Recovery Information

Recovery Table

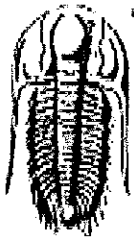
Length ft	Description	Volume bbl
0.00	4234 GIP	0.000
129.00	SOCM 2%O 98%M	0.680

Total Length: 129.00 ft      Total Volume: 0.680 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:



**TRILOBITE**  
**TESTING, INC**

# DRILL STEM TEST REPORT

**GAS RATES**

R & B Oil & Gas

23-32s-10w Barber,KS

PO Box 195  
Attica, KS 67009

Dohm B #1

Job Ticket: 51968

DST#:2

ATTN: Tim Pierce

Test Start: 2014.03.16 @ 16:37:13

## Gas Rates Information

Temperature: 59 (deg F)  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
1	30	0.25	12.00	41.88
2	10	0.25	19.00	52.99
2	20	0.25	34.00	76.78
2	30	0.25	44.00	92.65

Serial #: 6798

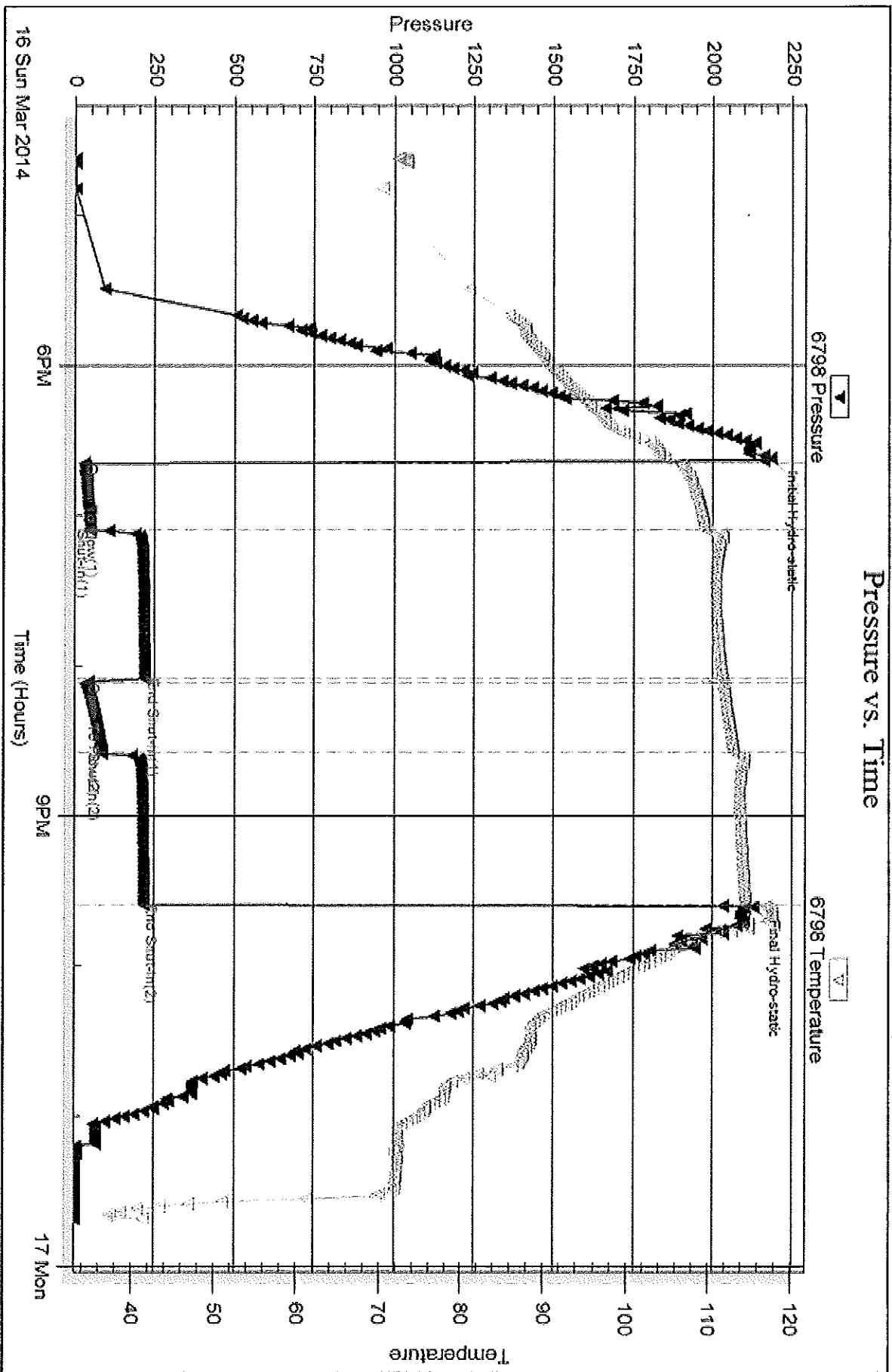
Inside

R & B Oil & Gas

Well B#1

DST Test Number: 2

### Pressure vs. Time



Tribble Testing, Inc

Ref. No: 51969

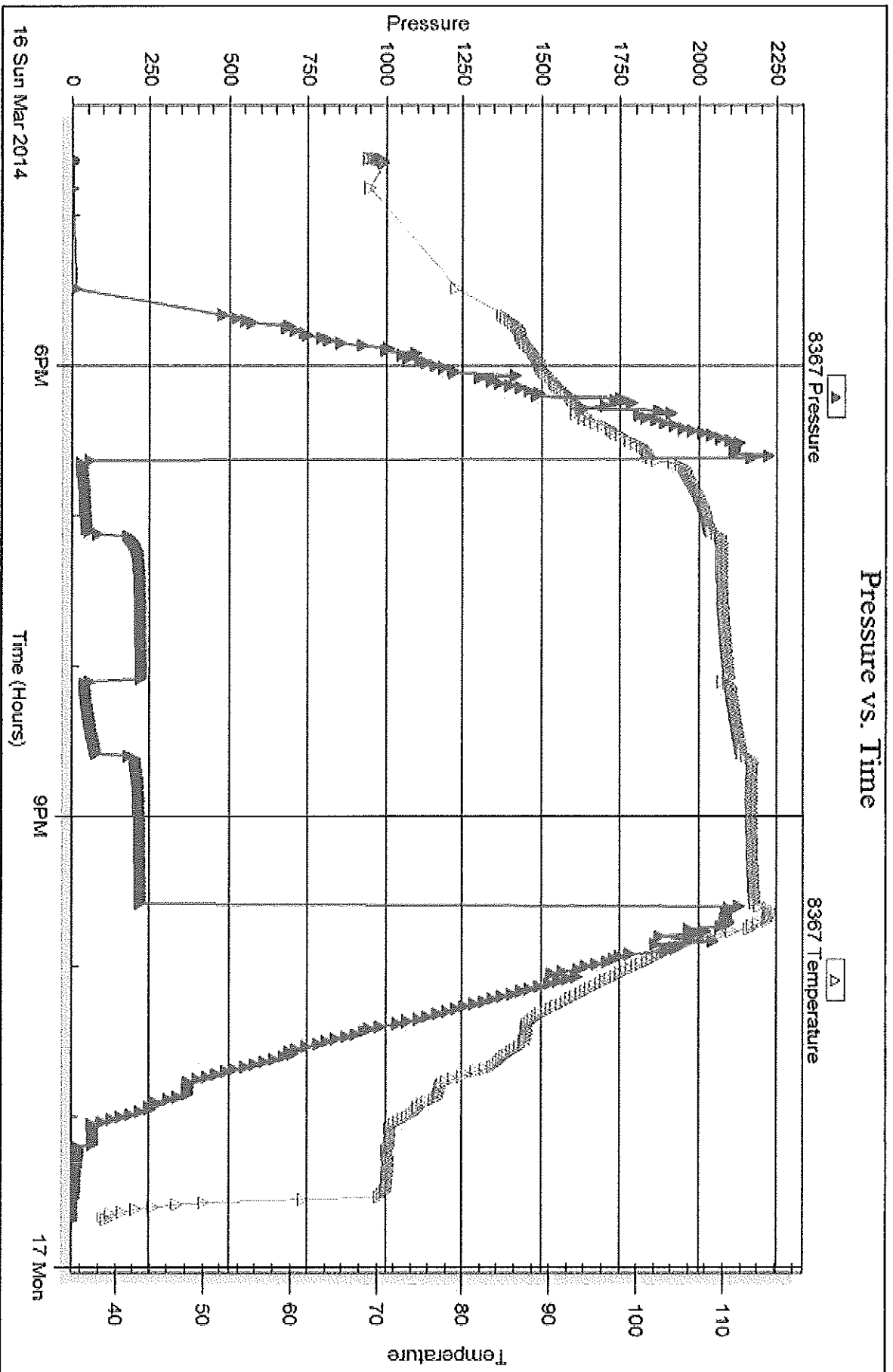
Printed: 2014.03.24 @ 11:53:40

Serial #: 8367

Outside R & B Oil & Gas

Dohm B#1

DST Test Number: 2

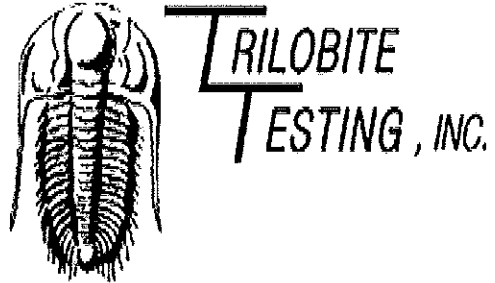


Trickle Testing, Inc

Ref. No: S1968

Printed: 2014.03.24 @ 11:53:40





## DRILL STEM TEST REPORT

Prepared For: **R & B Oil & Gas**

PO Box 195  
Attica, KS 67009

ATTN: Tim Pierce

### **Dohm B #1**

#### **23-32s-10w Barber,KS**

Start Date: 2014.03.17 @ 11:16:42

End Date: 2014.03.17 @ 18:33:12

Job Ticket #: 51942                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

R & B Oil & Gas

23-32s-10w Barber,KS

PO Box 195  
Attica, KS 67009

Dohm B #1

Job Ticket: 51942

DST#:3

ATTN: Tim Pierce

Test Start: 2014.03.17 @ 11:16:42

## GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:13:57

Time Test Ended: 18:33:12

Test Type: Conventional Bottom Hole (Reset)

Tester: Malt Smith

Unit No: 53

Interval: **4418.00 ft (KB) To 4489.00 ft (KB) (TVD)**

Total Depth: 4489.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1448.00 ft (KB)

1438.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: **6773**

Outside

Press@RunDepth: 107.38 psig @ 4419.00 ft (KB)

Start Date: 2014.03.17

End Date: 2014.03.17

Start Time: 11:16:47

End Time: 18:33:11

Capacity: 8000.00 psig

Last Calib.: 2014.03.17

Time On Btm: 2014.03.17 @ 13:11:12

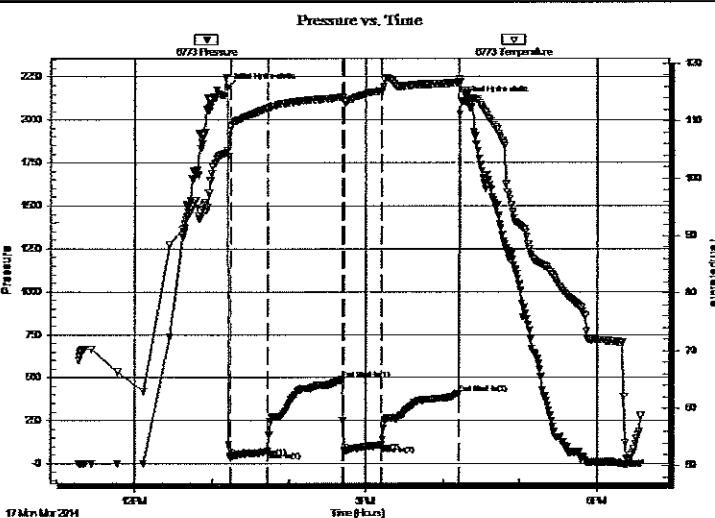
Time Off Btm: 2014.03.17 @ 16:14:12

TEST COMMENT: IF: Strong blow . B.O.B. in 48 secs., GTS in 23 mins., Gauged gas.

IS: Weak blow . Surf., to 1/2" after bleed off.

FF: Strong blow . B.O.B. in 10 secs., GTS immediate, Gauged gas see gas rates report.

FSt: No blow .



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2190.58	104.87	Initial Hydro-static
3	41.19	108.90	Open To Flow (1)
32	70.26	112.22	Shut-In(1)
91	490.05	114.21	End Shut-In(1)
92	72.02	113.39	Open To Flow (2)
122	107.38	115.27	Shut-In(2)
182	410.20	116.76	End Shut-In(2)
183	2111.68	116.89	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	SOGWCM 8%o 15%g 35%m 42%w	0.30
60.00	SOGWCM 8%o 12%g 32%m 48%w	0.30
60.00	SOGWCM 2%o 22%w 33%m 43%g	0.84
0.00	GTS	0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	2.50	26.81
Last Gas Rate	0.25	11.00	40.30
Max. Gas Rate	0.25	11.00	40.30

\* Recovery from multiple tests



**TRILOBITE**  
TESTING, INC

**DRILL STEM TEST REPORT**

R & B Oil & Gas

23-32s-10w Barber,KS

PO Box 195  
Attica, KS 67009

**Dohm B #1**

Job Ticket: 51942

DST#: 3

ATTN: Tim Fierce

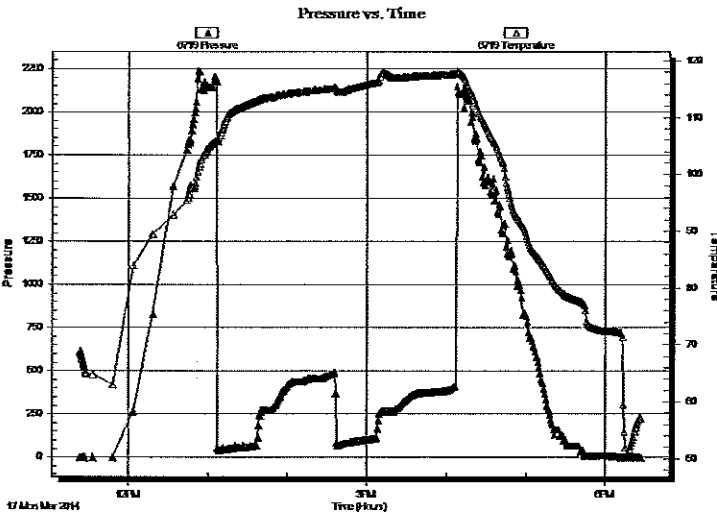
Test Start: 2014.03.17 @ 11:16:42

**GENERAL INFORMATION:**

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 13:13:57  
 Time Test Ended: 18:33:12  
 Interval: **4418.00 ft (KB) To 4489.00 ft (KB) (TVD)**  
 Total Depth: **4489.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: Fair  
 Test Type: **Conventional Bottom Hole (Reset)**  
 Tester: **Matt Smith**  
 Unit No: **53**  
 Reference Elevations: **1448.00 ft (KB)**  
**1438.00 ft (CF)**  
 KB to GR/CF: **10.00 ft**

**Serial #: 6719 Outside**  
 Press@RunDepth: psig @ **4419.00 ft (KB)** Capacity: **8000.00 psig**  
 Start Date: **2014.03.17** End Date: **2014.03.17** Last Calib.: **2014.03.17**  
 Start Time: **11:23:36** End Time: **18:27:30** Time On Btm:  
 Time Off Btm:

TEST COMMENT: IF: Strong blow . B.O.B. in 48 secs., GTS in 23 mins., Gauged gas.  
 IS: Weak blow . Surf., to 1/2" after bleed off.  
 FF: Strong blow . B.O.B. in 10 secs., GTS immediate, Gauged gas see gas rates report.  
 FS: No blow .



**PRESSURE SUMMARY**

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

**Recovery**

Length (ft)	Description	Volume (bbl)
60.00	SOGWCM 8%o 15%g 35%m 42%w	0.30
60.00	SOGWCM 8%o 12%g 32%m 48%w	0.30
60.00	SOGWCM 2%o 22%w 33%m 43%g	0.84
0.00	GTS	0.00

\* Recovery from multiple tests

**Gas Rates**

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	2.50	26.81
Last Gas Rate	0.25	11.00	40.30
Max. Gas Rate	0.25	11.00	40.30



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

R & B Oil & Gas

**23-32s-10w Barber,KS**

PO Box 195  
Attica, KS 67009

**Dohm B #1**

Job Ticket: 51942

**DST#:3**

ATTN: Tim Pierce

Test Start: 2014.03.17 @ 11:16:42

## Tool Information

Drill Pipe:	Length: 4300.00 ft	Diameter: 3.80 inches	Volume: 60.32 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 74000.00 lb
			<u>Total Volume: 60.91 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4418.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	71.00 ft			
Tool Length:	91.00 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			4399.00	
Shut In Tool	5.00			4404.00	
Hydraulic tool	5.00			4409.00	
Packer	4.00			4413.00	20.00 Bottom Of Top Packer
Packer	5.00			4418.00	
Stubb	1.00			4419.00	
Recorder	0.00	6719	Outside	4419.00	
Recorder	0.00	6773	Outside	4419.00	
Perforations	5.00			4424.00	
Change Over Sub	1.00			4425.00	
Blank Spacing	31.00			4456.00	
Change Over Sub	1.00			4457.00	
Perforations	29.00			4486.00	
Bullnose	3.00			4489.00	71.00 Bottom Packers & Anchor

**Total Tool Length: 91.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

R & B Oil & Gas

**23-32s-10w Barber,KS**

PO Box 195  
Attica, KS 67009

**Dohm B #1**

Job Ticket: 51942

**DST#: 3**

ATTN: Tim Pierce

Test Start: 2014.03.17 @ 11:16:42

## 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:

21000 ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.56 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
60.00	SOGWCM 8%o 15%g 35%m 42%w	0.295
60.00	SOGWCM 8%o 12%g 32%m 48%w	0.295
60.00	SOGWCM 2%o 22%w 33%m 43%g	0.842
0.00	GTS	0.000

Total Length: 180.00 ft      Total Volume: 1.432 bbl

Num Fluid Samples: 0

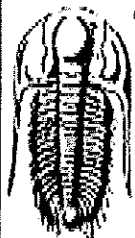
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .04 at 56 degrees



**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

**GAS RATES**

R & B Oil & Gas

**23-32s-10w Barber, KS**

PO Box 195  
Attica, KS 67009

**Dohm B #1**

Job Ticket: 51942

**DST#: 3**

ATTN: Tim Pierce

Test Start: 2014.03.17 @ 11:16:42

### Gas Rates Information

Temperature: 59 (deg F)

Relative Density: 0.65

Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
1	20	0.25	2.50	26.81
1	30	0.25	3.00	27.60
2	10	0.25	6.50	33.16
2	20	0.25	9.00	37.12
2	30	0.25	11.00	40.30

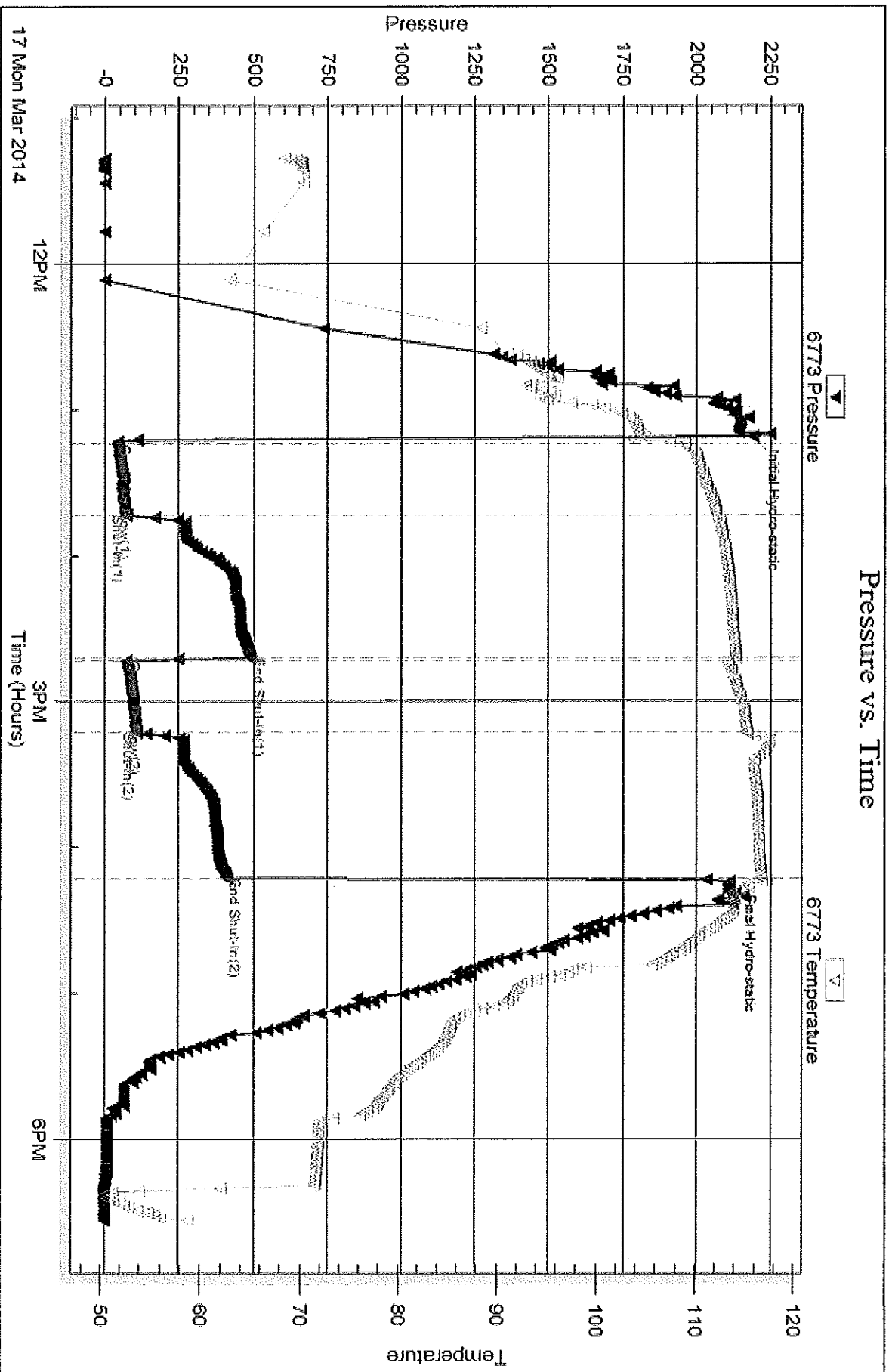
Serial #: 6773

Outside R & B Oil & Gas

Well B#1

DST Test Number 3

### Pressure vs. Time

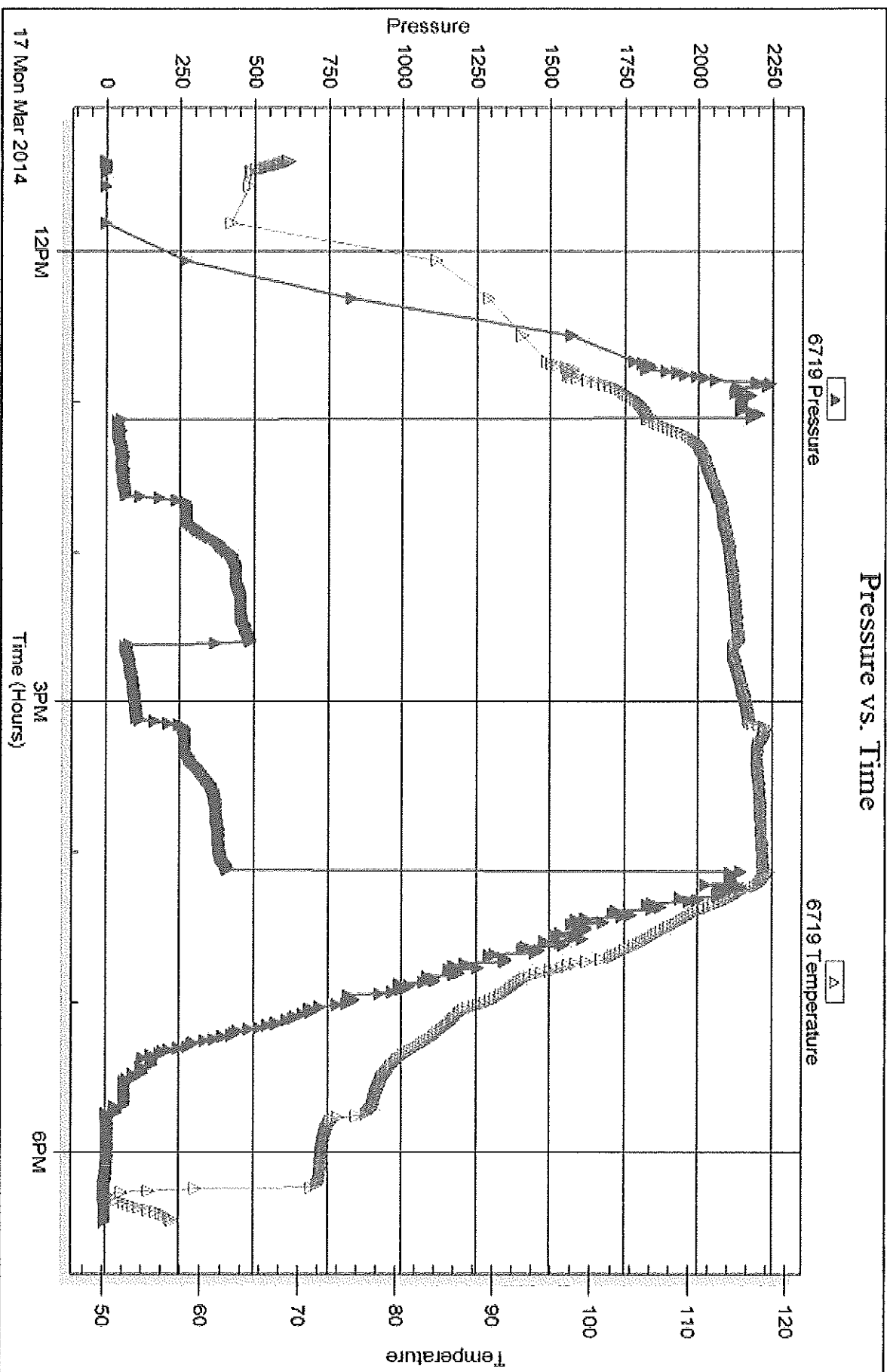


Serial #: 6719

Outside R & B Oil & Gas

Down B#1

DST Test Number: 3

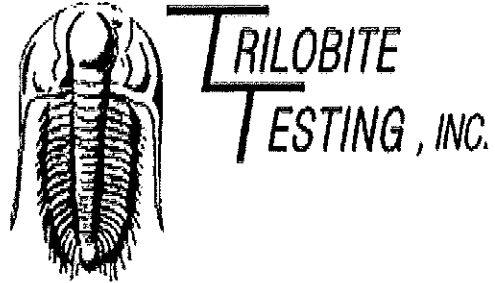


Triobite Testing, Inc

Ref. No: 51942

Printed: 2014.03.24 @ 11:54:36





## DRILL STEM TEST REPORT

Prepared For: **R & B Oil & Gas**

PO Box 195  
Attica, KS 67009

ATTN: Tim Pierce

**Dohm B #1**

**23-32s-10w Barber,KS**

Start Date: 2014.03.18 @ 11:32:17

End Date: 2014.03.18 @ 18:46:02

Job Ticket #: 51943                      DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.03.24 @ 11:52:29



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

R & B Oil & Gas

23-32s-10w Barber,KS

PO Box 195  
Attica, KS 67009

Dohm B #1

Job Ticket: 51943

DST#: 4

ATTN: Tim Pierce

Test Start: 2014.03.18 @ 11:32:17

## GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:35:32

Time Test Ended: 18:46:02

Interval: **4673.00 ft (KB) To 4707.00 ft (KB) (TVD)**

Total Depth: 4707.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 53

Reference Elevations: 1448.00 ft (KB)

1438.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: **6773**

Outside

Press@RunDepth: 25.92 psig @ 4674.00 ft (KB)

Start Date: 2014.03.18

End Date:

2014.03.18

Start Time: 11:32:22

End Time:

18:46:01

Capacity: 8000.00 psig

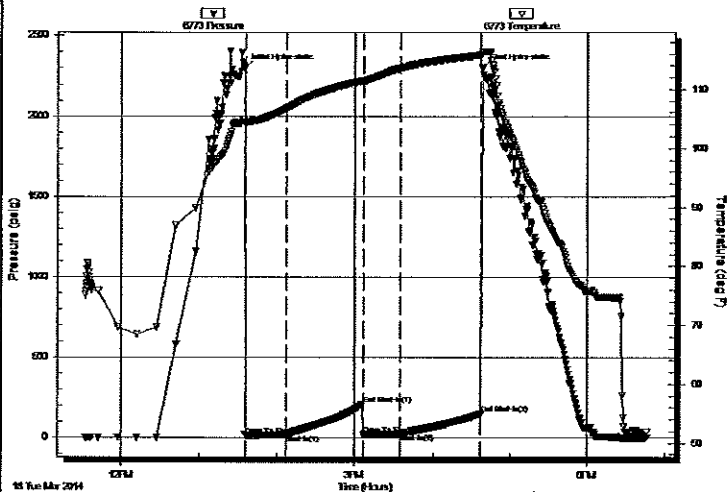
Last Calib.: 2014.03.18

Time On Btm: 2014.03.18 @ 13:34:32

Time Off Btm: 2014.03.18 @ 16:38:17

TEST COMMENT: IF: Weak blow . Surf., to 3 1/4".  
IS: No blow.  
FF: Weak blow . Surf., to 1 1/4"  
FS: No blow.

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2298.97	104.86	Initial Hydro-static
1	16.24	104.44	Open To Flow (1)
32	20.21	106.72	Shut-In(1)
92	208.70	111.50	End Shut-In(1)
93	18.83	111.47	Open To Flow (2)
121	25.92	113.62	Shut-In(2)
183	150.33	115.88	End Shut-In(2)
184	2299.45	116.48	Final Hydro-static

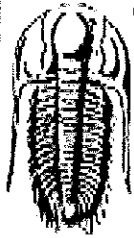
## Recovery

Length (ft)	Description	Volume (bbl)
20.00	Drig mud trc oil 100% <sup>m</sup>	0.10

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

R & B Oil & Gas

23-32s-10w Barber,KS

PO Box 195  
Attica, KS 67009

Dohm B #1

Job Ticket: 51943

DST#: 4

ATTN: Tim Pierce

Test Start: 2014.03.18 @ 11:32:17

### GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:35:32

Time Test Ended: 18:46:02

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 53

Interval: 4673.00 ft (KB) To 4707.00 ft (KB) (TVD)

Total Depth: 4707.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1448.00 ft (KB)

1438.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6719

Outside

Press@RunDepth: psig @ 4674.00 ft (KB)

Start Date: 2014.03.18

End Date:

2014.03.18

Start Time: 11:36:31

End Time:

18:49:25

Capacity:

8000.00 psig

Last Calib.:

2014.03.18

Time On Btm:

Time Off Btm:

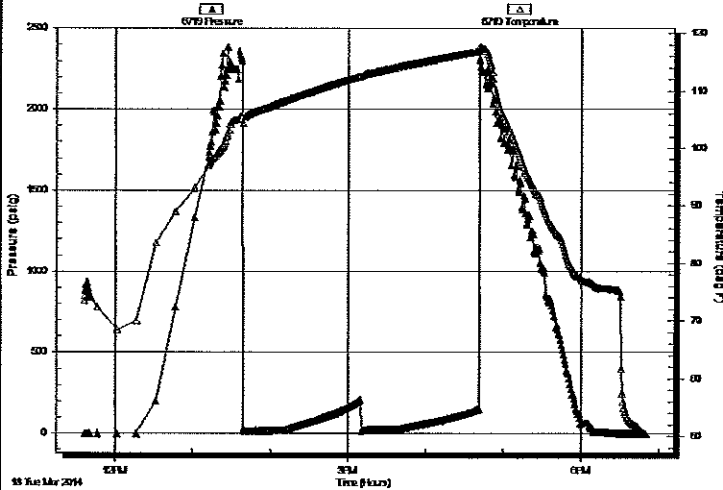
TEST COMMENT: IF: Weak blow . Surf., to 3 1/4".

IS: No blow .

FF: Weak blow . Surf., to 1 1/4"

FS: No blow .

Pressure vs. Time



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
20.00	Drig mud trc oil 100%m	0.10

### Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

TOOL DIAGRAM

R & B Oil & Gas

23-32s-10w Barber,KS

PO Box 195  
Attica, KS 67009

Dohm B #1

Job Ticket: 51943

DST#: 4

ATTN: Tim Pierce

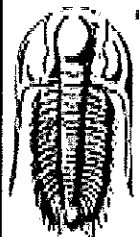
Test Start: 2014.03.18 @ 11:32:17

## Tool Information

Drill Pipe:	Length: 4552.00 ft	Diameter: 3.80 inches	Volume: 63.85 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 76000.00 lb
			<u>Total Volume: 64.44 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4673.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	54.00 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			4654.00	
Shut In Tool	5.00			4659.00	
Hydraulic tool	5.00			4664.00	
Packer	4.00			4668.00	20.00 Bottom Of Top Packer
Packer	5.00			4673.00	
Stubb	1.00			4674.00	
Recorder	0.00	6719	Outside	4674.00	
Recorder	0.00	6773	Outside	4674.00	
Perforations	30.00			4704.00	
Bullnose	3.00			4707.00	34.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>54.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

R & B Oil & Gas

23-32s-10w Barber,KS

PO Box 195  
Attica, KS 67009

Dohm B #1

Job Ticket: 51943

DST#: 4

ATTN: Tim Pierce

Test Start: 2014.03.18 @ 11:32:17

## 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:

6000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.08 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
20.00	Drig mud trc oil 100%m	0.098

Total Length: 20.00 ft

Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

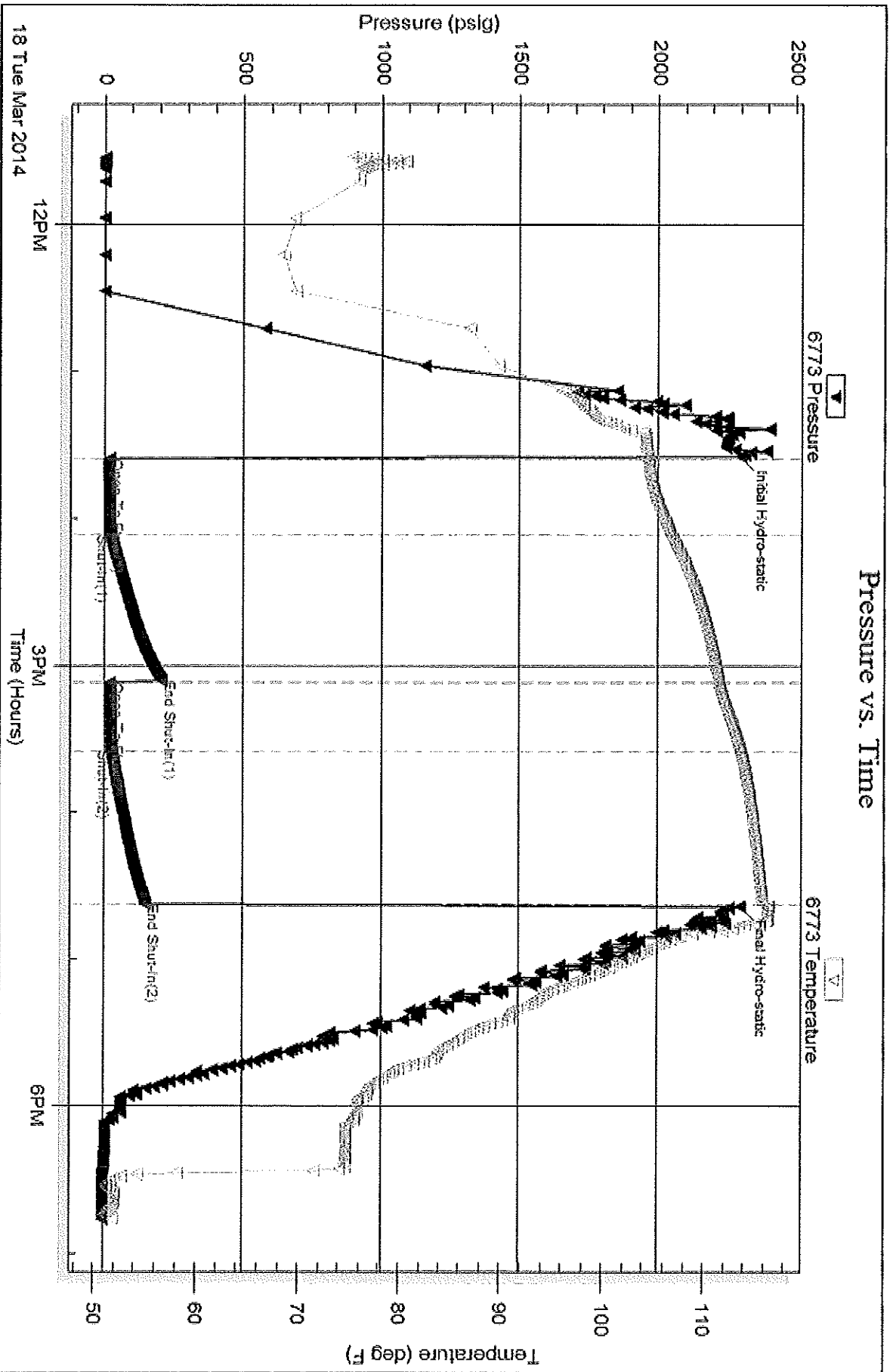
Recovery Comments:

Serial #: 6773

Outside R & B Oil & Gas

Well B#1

DST Test Number 4



Triobite Testing, Inc

Ref. No: 51943

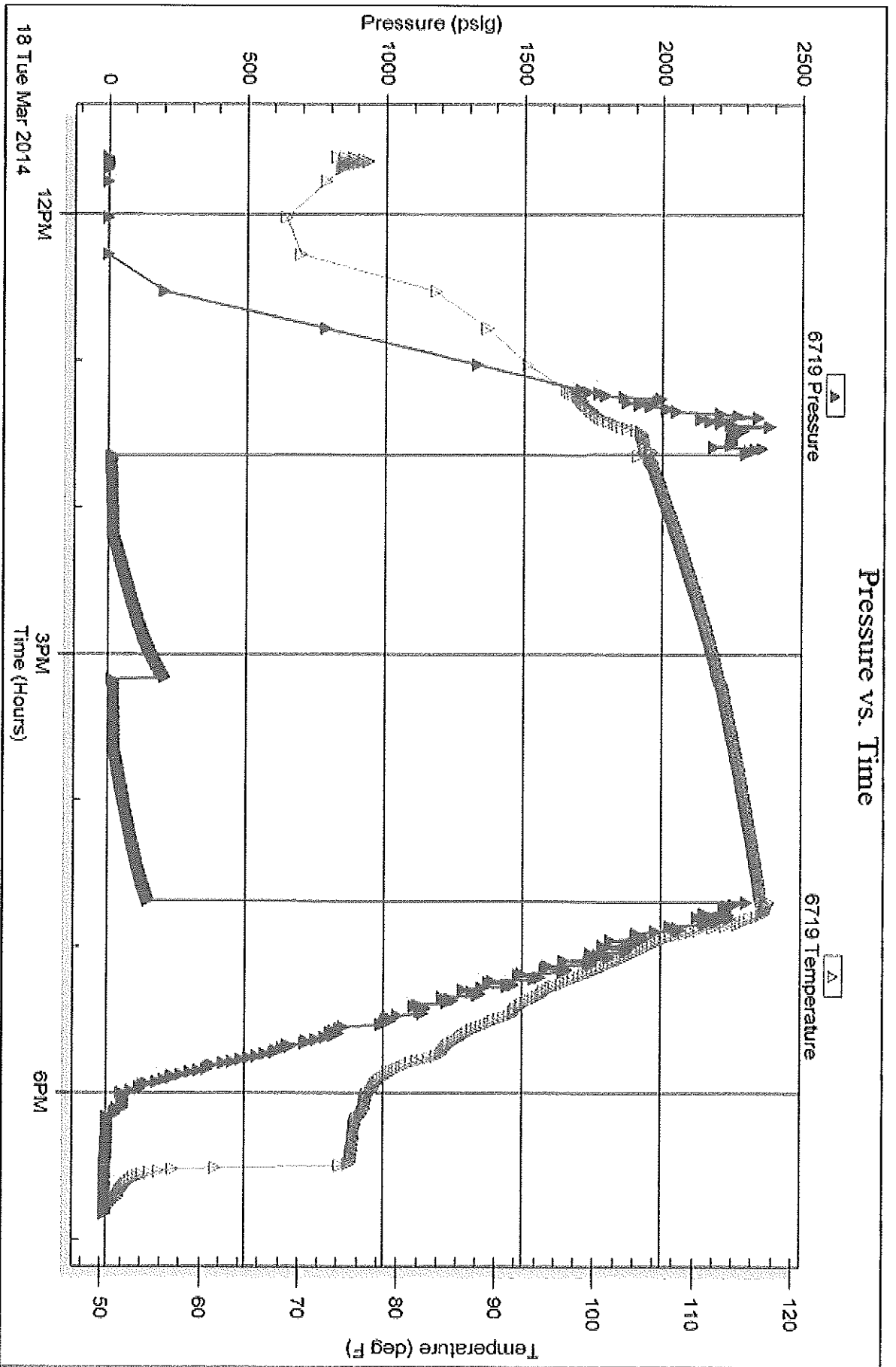
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Serial #: 6719

Outside R & B Oil & Gas

Doim B#1

OST Test Number 4



Tribble Testing, Inc

Ref. No: 51943

Printed: 2014.03.24 @ 11:52:52