

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

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

Gas  DH  EOR

OG  GSW

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 EOR  Conv. to SWD

Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: \_\_\_\_\_

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  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

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](mailto:kcc-well-logs@kcc.ks.gov). Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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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
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	THERON 1-17
Doc ID	1411762

All Electric Logs Run

Radiation Guard Log
Microresistivity Log
Dual Induction Log
Dual Compensated Porosity Log

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	THERON 1-17
Doc ID	1411762

Tops

Name	Top	Datum
Anhydrite (top)	3305	108
Anhydrite (base)	3334	79
Foraker	3881	-468
Topeka	4119	-706
Oread	4259	-846
LKC A	4338	-925
LKC B	4398	-985
LKC C	4462	-1049
LKC D	4503	-1090
LKC E	4548	-1135
LKC F	4588	-1175
Pawnee	4704	-1291
Ft. Scott	4746	-1333
Cherokee	4816	-1403
RTD	5050	-1637
LTD	5048	-1635



# LITHOLOGY STRIP LOG

## WellSight Systems

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

Measured Depth Log

Well Name: THERON #1-17

Well Id:

Location: NWSESESW 17- 2S-37W Cheyenne County, Kansas

License Number: 15-023-21476

Region: Midcontinent

Spud Date: 1-3-2018

Drilling Completed: 2-13-2018

Surface Coordinates: 550' FSL & 2190' FWL

Bottom Hole

Coordinates:

Ground Elevation (ft): 3405

K.B. Elevation (ft): 3413

Logged Interval (ft): 3500

To: 5050

Total Depth (ft): 5050

Formation: LKC,Pawnee, Fort Scott & Cherokee

Type of Drilling Fluid: WBM

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

### OPERATOR

Company: Berexco, LLC.

Address: 2020 N. Bramblewood

Wichita, Kansas 67206

### GEOLOGIST

Name: William B. Bynog

Company:

Address: P.O.Box 687

Pinecliffe, Co. 80471

### Survey's

DEPTH	ANGLE
3473'	3/4
4430'	3/4

### DSTs

DST#1 4290-4380, DST#2 4355-4430, DST#3 4430-4490, DST#4 4470-4560, DST#5 4725-4800, DST#6 4814-60

### Comments

SET PRODUCTION PIPE, RIG TOTAL DEPTH 2' DEEPER THAN LOG DEPTH

### ROCK TYPES

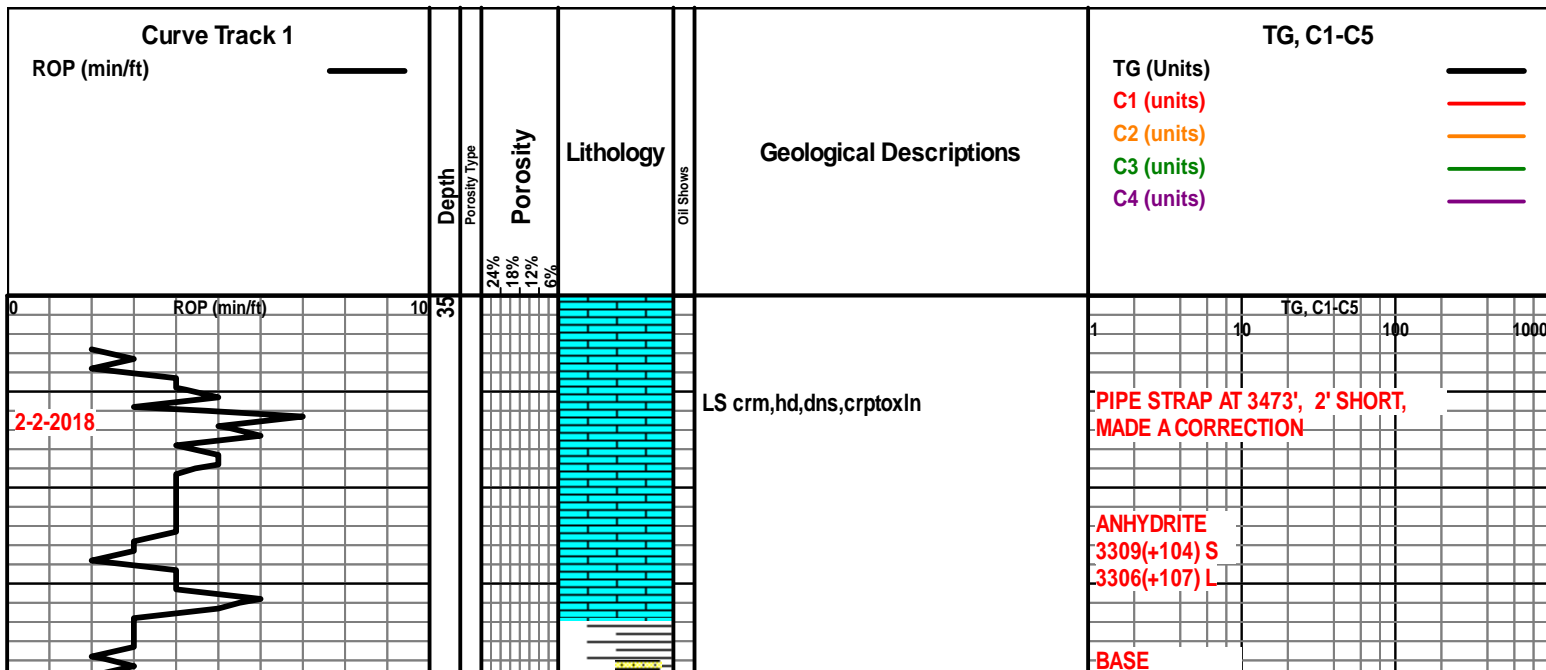
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	Bent		Congl		Meta		Shgy
	Brec		Dol		Mrlst		Sltst
	Cht		Gyp		Salt		Ss
	Clyst		Igne		Shale		Till

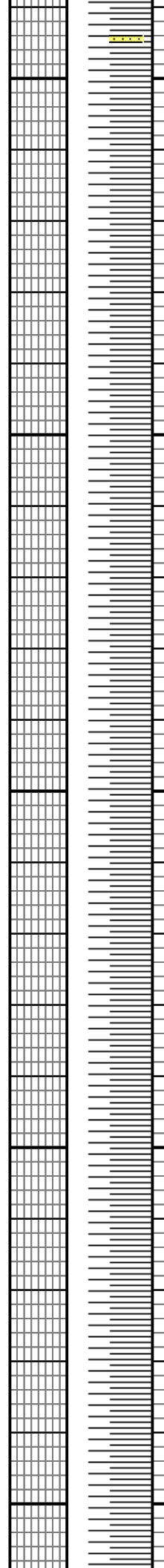
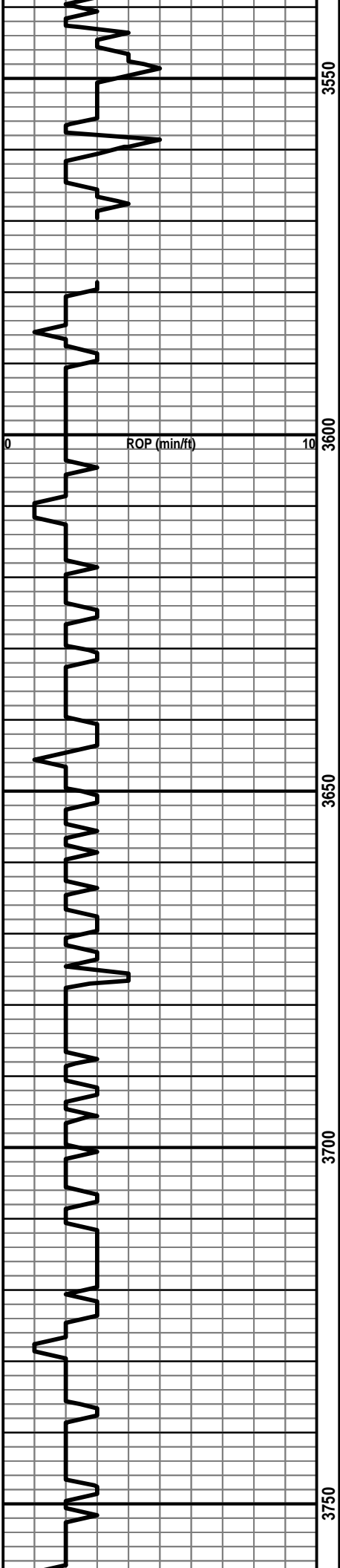
### ACCESSORIES

<b>MINERAL</b>		Minxl		Crin		Gyp	
	Anhy		Nodule		Echin		Ls
	Arggrn		Phos		Fish		Mrst
	Arg		Pyr		Foram		Sltstrg
	Bent		Salt		Fossil		Ssstrg
	Bit		Sandy		Gastro		
	Brecfrag		Silt		Oolite	<b>TEXTURE</b>	
	Calc		Sil		Ostra		Boundst
	Carb		Sulphur		Pelec		Chalky
	Chtdk				Pellet		Cryxln
	Chtlt	<b>FOSIL</b>			Pisolite		Earthy
	Dol		Algae		Plant		Finexln
	Feldspar		Amph		Strom		Grainst
	Ferrpel		Belm	<b>STRINGER</b>			Lithogr
	Ferr		Bioclst		Anhy		Microxln
	Glau		Brach		Arg		Mudst
	Gyp		Bryozoa		Bent		Packst
	Hvymn		Cephal		Coal		Wackst
	Kaol		Coral		Dol		
	Marl						

### OTHER SYMBOLS

<b>POROSITY</b>		Earthy		Angular	<b>INTERVAL</b>		Dst	
	Fenest	<b>SORTING</b>		Well		Dst		
	Fracture		Moderate	<b>OIL SHOW</b>		Even	<b>EVENT</b>	
	Inter		Poor		Spotted		Ques	
	Moldic	<b>ROUNDING</b>		Rounded		Dead		Rft
	Organic		Subrnd					Sidewall
	Pinpoint		Subang					
	Vuggy							





SH red,frm,sdy ip

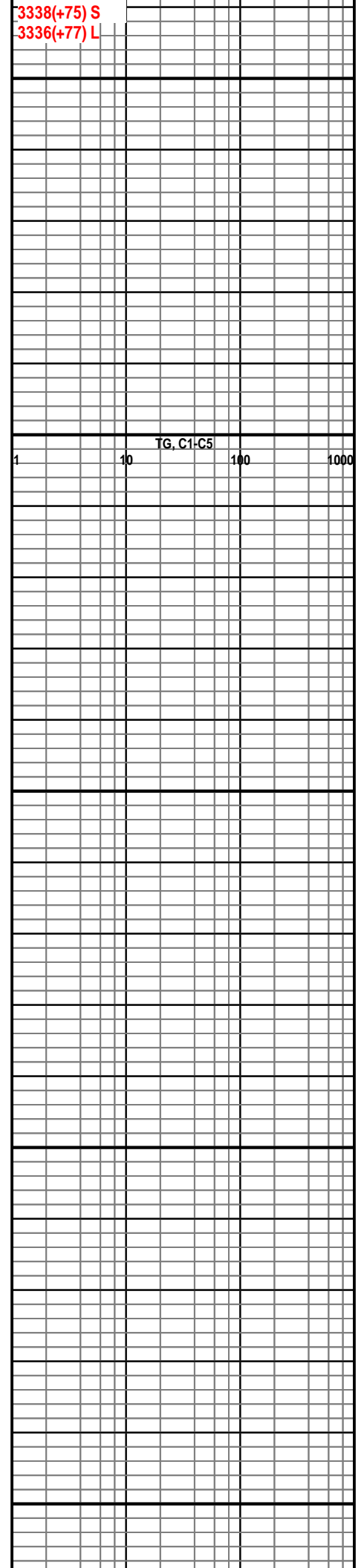
SH red,sft,v arg

SH red,frm,sdy ip

SH aa bcmg slty ip

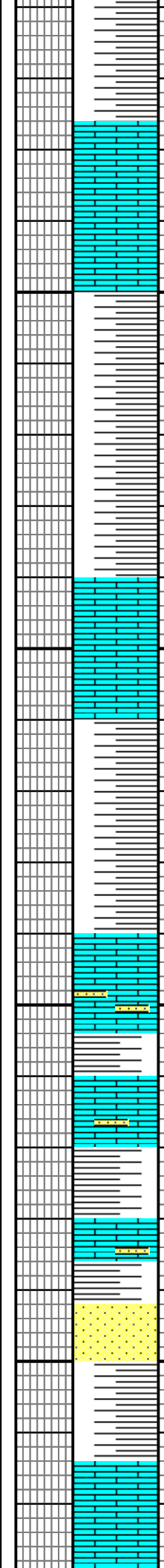
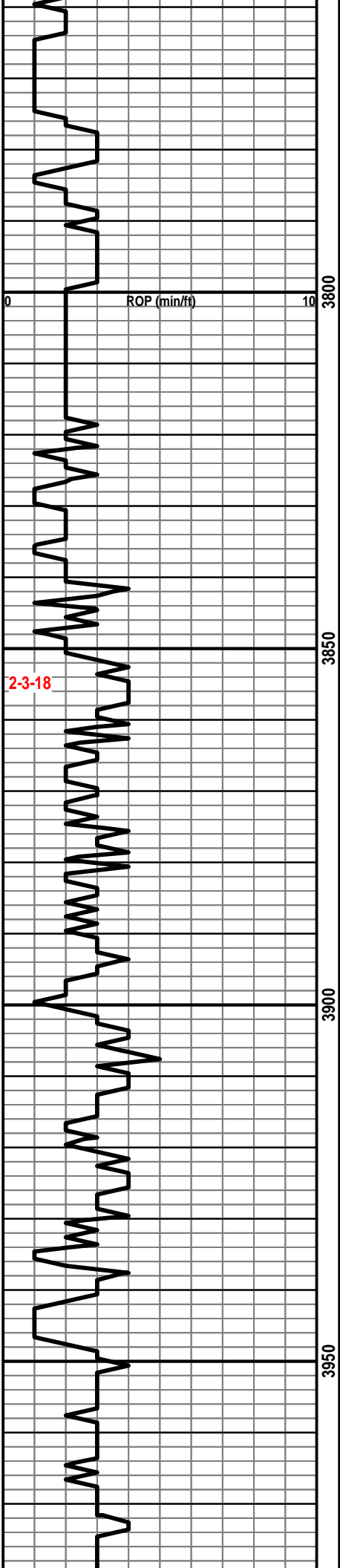
SH red,sft,v arg

Detailed description: A vertical column of text labels, likely representing different geological or operational zones. The labels are: 'SH red,frm,sdy ip' (top), 'SH red,sft,v arg', 'SH red,frm,sdy ip', 'SH aa bcmg slty ip', and 'SH red,sft,v arg' (bottom).



3338(+75) S  
3336(+77) L





LS crm-pale gy,hd,blky, chky ip,p vis por,ns

SH aa

LS crm,hd,crptoxln,sl foss, p por,ns

LS wh,frm,chky

SH red,sft,v arg

LS crm,hd,chky ip bcmg sdy at base

LS pale gy,frm,chky,sdy ip,p por,ns with thin SH gy,frm

SS crm,frm,vfg,p por,calc,ns

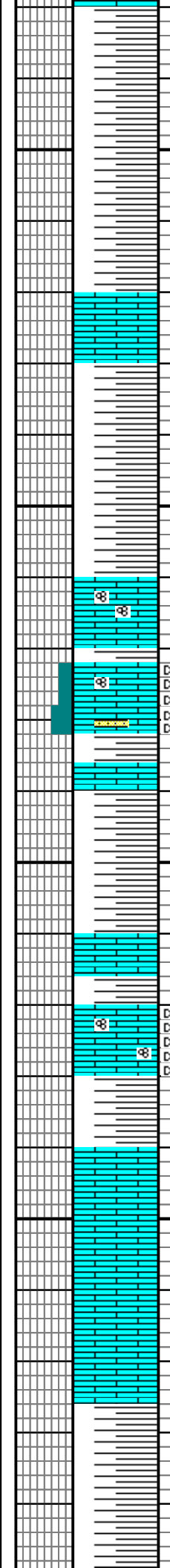
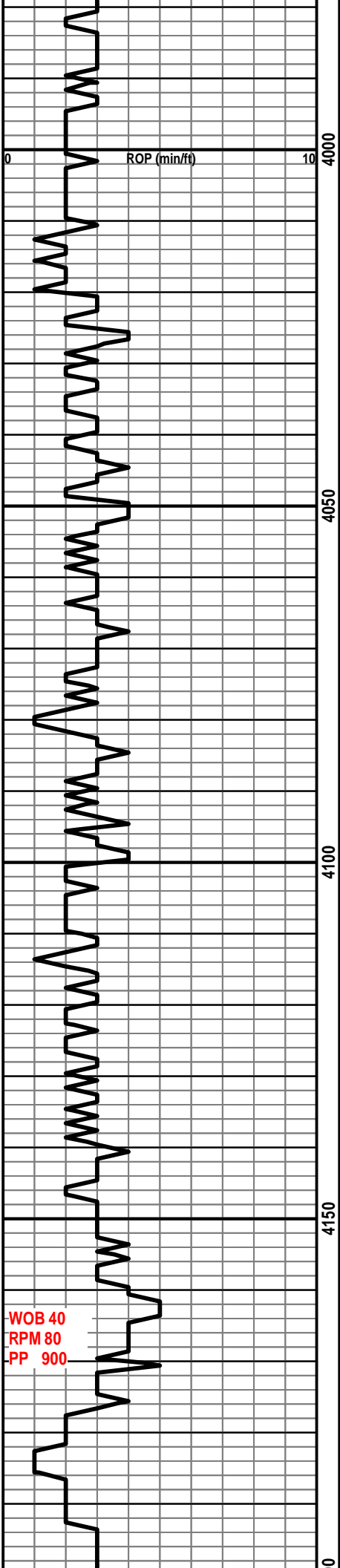
SH red,sft,v arg

LS pale gy,hd,foss,chky ip,p por,ns

TG, C1-C5

FORAKER  
3890(-477) S  
3882(-469) L

MUD DATA 3891'  
WT 8.9 VIS 68 FL 7.2  
PH 11.5 CK 2 CL 800  
LCM 2.0



SH aa

LS pale gy,v hd,dns,blk,ns

SH red,v sft,v arg

LS wh,pale gy,frm,foss, chky ip,p vis por,ns

LS pale gy,frm,foss,chky ip, bcmg v sdy at base,p por,spty blk dd stn,nfo

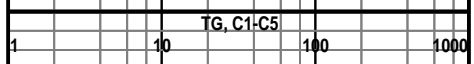
SH aa

LS crm,v hd,crptoxln,chky ip, p vis por,ns

LS crm,frm,chky,foss,ool, p por,v spty blk dd stn,nfo with thin SH aa

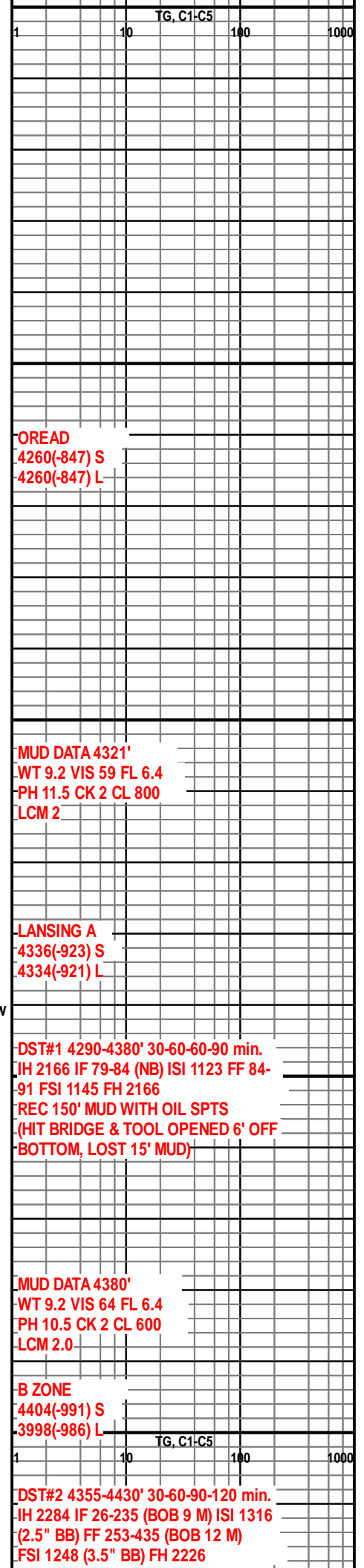
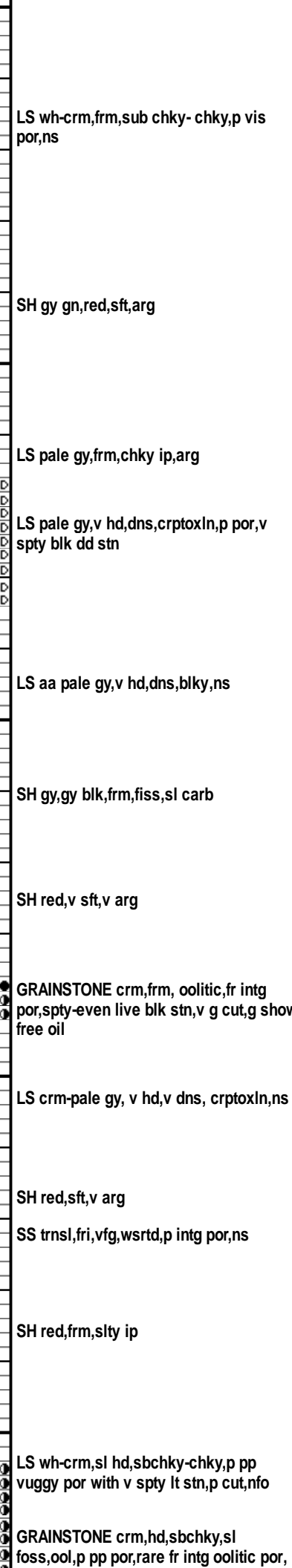
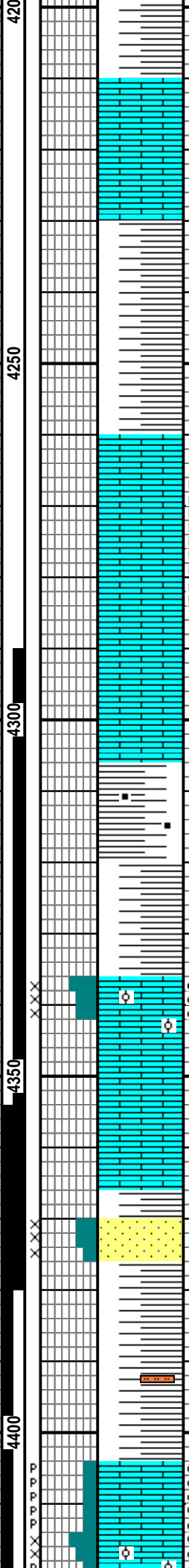
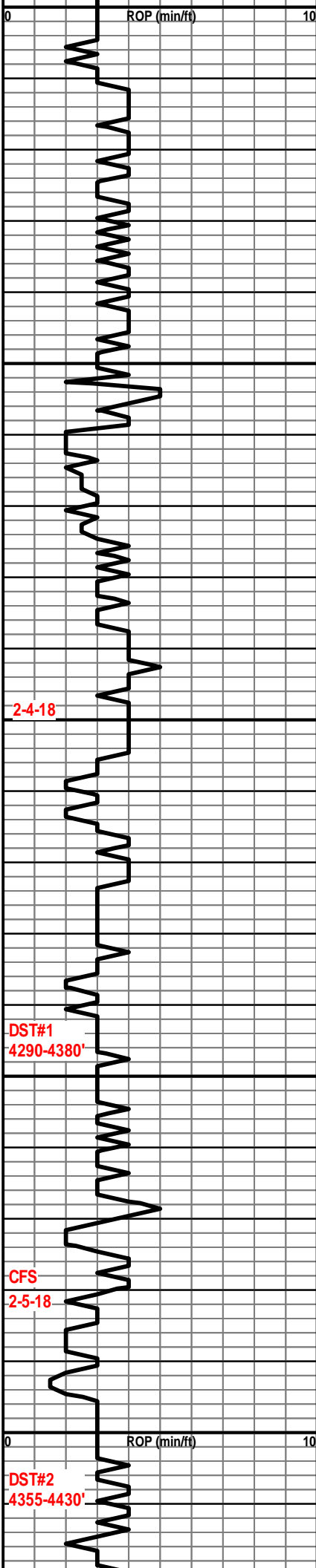
LS wh-crm,frm,chky-sb chky,p vis por,ns

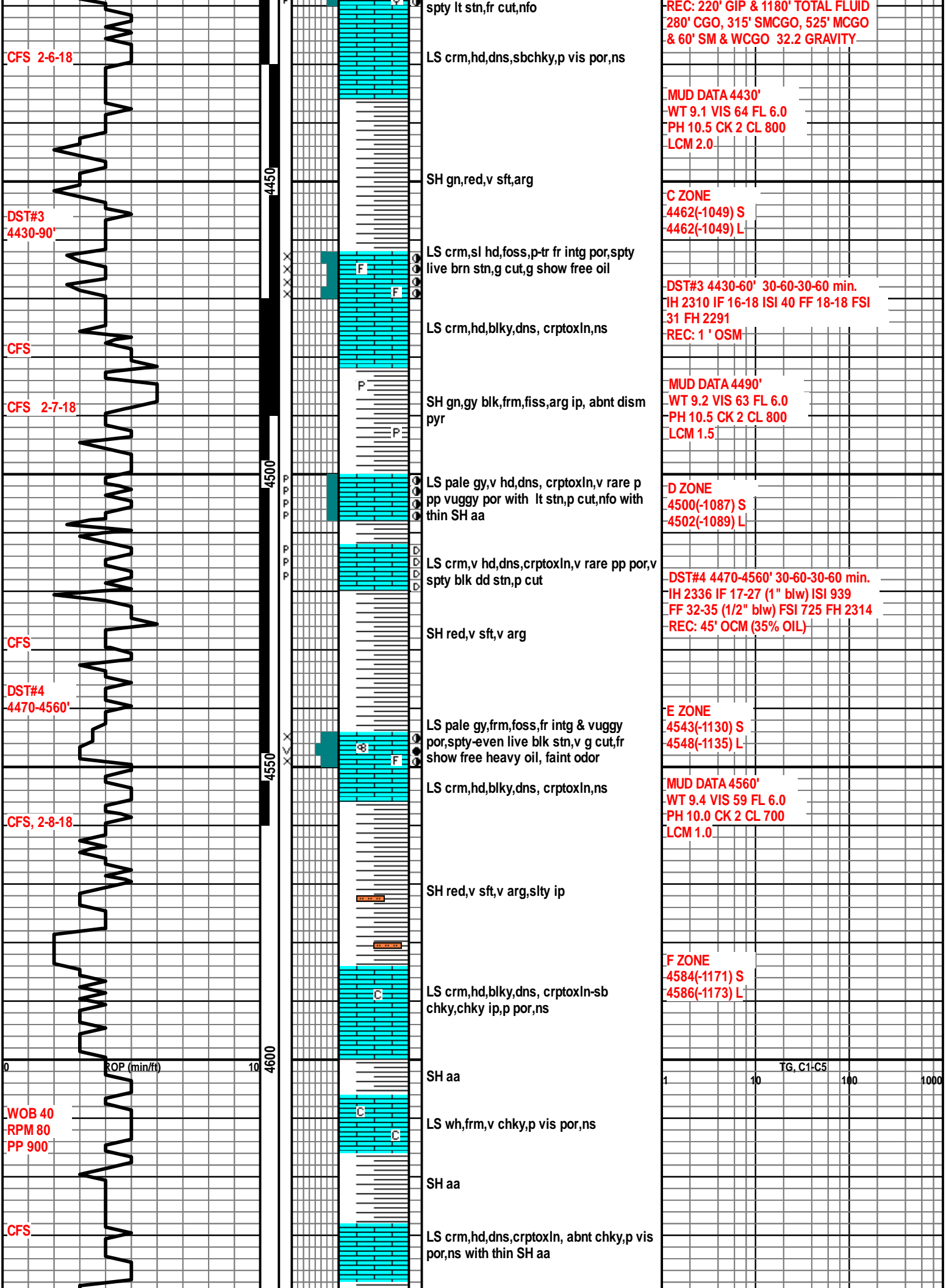
SH red,v sft,v arg



TOPEKA  
4110(-697) S  
4118(-705) L

WOB 40  
RPM 80  
PP 900





CFS 2-6-18

DST#3 4430-90'

CFS

CFS 2-7-18

CFS

DST#4 4470-4560'

CFS, 2-8-18

WOB 40  
RPM 80  
PP 900

CFS

spty lt stn, fr cut, nfo

LS crm, hd, dns, sbchky, p vis por, ns

SH gn, red, v sft, arg

LS crm, sl hd, foss, p-tr fr intg por, spty live brn stn, g cut, g show free oil

LS crm, hd, blk, dns, crptoxIn, ns

SH gn, gy blk, frm, fiss, arg ip, abnt dism pyr

LS pale gy, v hd, dns, crptoxIn, v rare p pp vuggy por with lt stn, p cut, nfo with thin SH aa

LS crm, v hd, dns, crptoxIn, v rare pp por, v spty blk dd stn, p cut

SH red, v sft, v arg

LS pale gy, frm, foss, fr intg & vuggy por, spty-even live blk stn, v g cut, fr show free heavy oil, faint odor

LS crm, hd, blk, dns, crptoxIn, ns

SH red, v sft, v arg, slty ip

LS crm, hd, blk, dns, crptoxIn-sb chky, chky ip, p por, ns

SH aa

LS wh, frm, v chky, p vis por, ns

SH aa

LS crm, hd, dns, crptoxIn, abnt chky, p vis por, ns with thin SH aa

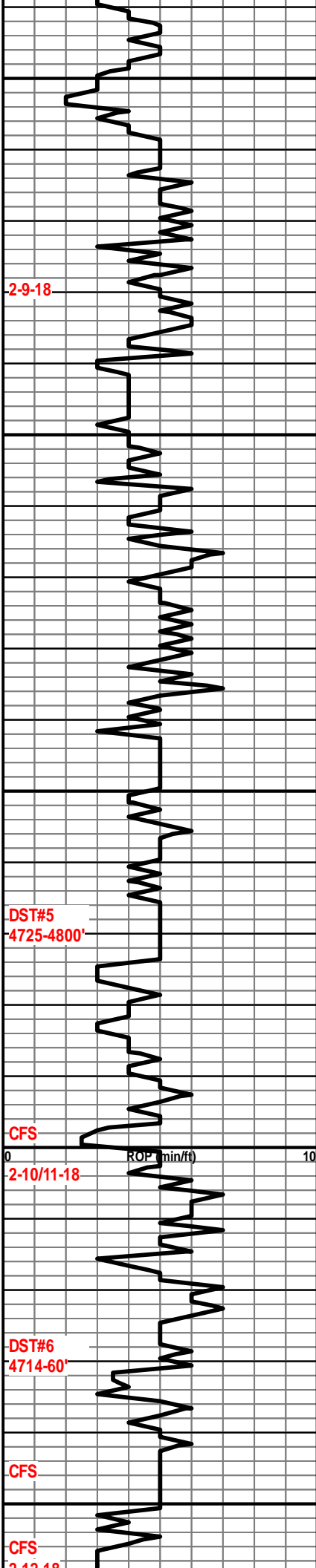
ROP (min/ft) 0 10

4450

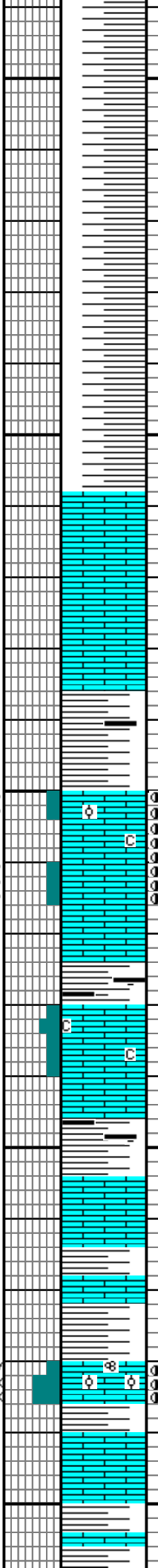
4500

4550

4600



4650  
4700  
4750  
4800  
4850



SH dk red,red brn,v sft,v arg,gummy

2-9-18

MUD DATA 4708'  
WT 9.1 VIS 64 FL 6.8  
PH 11.0 CK 2 CL 700  
LCM 2.0

LS pale gy,hd,v arg,chky ip,p por,ns

PAWNEE  
4707(-1294) S  
4704(-1291) L

SH gy,gn,gy blk,frm,fiss,sl carb

FT SCOTT  
4750(-1337) S  
4746(-1333) L

LS wh-frm,frm,chky, oolitic,v pp intg por,v spty live brn stn,g cut,nfo

DST#5  
4725-4800'

DST#5 4725-4800 30-60-30-615 min.  
IH 2458 IF 17-20 ISI 421 FF 20-22  
FSI 1381(rig repair) FH 2431  
REC: 5' MUD, TR OIL

LS crm,hd,blky,v fnly microIn,chky ip,p por,v rare lt brn stn,p cut

LS crm,v hd,dns,crptoxIn, ns

SH dk gy blk,blk,frm,fiss, carb

LS wh-frm,frm,chky,p vis por,ns

LS crm,v hd,dns,crptoxIn, blky,chky ip,ns

MUD DATA 4819'  
WT 9.3 VIS 52 FL 7.2  
PH 10.0 CK 2 CL 600  
LCM 2.0

CFS

2-10/11-18

SH dk gy blk,blk,frm,fiss,carb

TG, C1-C5  
1 10 100 1000

LS pale gy,hd,dns,crptoxIn, p por,ns with thin SH aa

CHEROKEE  
4822(-1409) S  
4816(-1403) L

SH gy,gy gn,frm,fiss

DST#6  
4714-60'

DST#6 4814-60' 30-60-90-120 min.  
IH 2555 IF 19-57 (8" blw) ISI 1338  
(wk surf. blw) FF 65-168 (5.25" blw)  
FSI 1324 (wk surf. blw) FH 2466  
REC: 310' GIP, 350' CGO & 50' OCM

GRAINSTONE off wh,frm,sl oolitic,foss, gran tex,fr intg-vuggy por, spty live brn stn,g cut,fr show free oil,g odor with thin SH aa

LS crm,v hd,dns,crptoxIn, ns

CFS

CFS  
2-12-18

SH red,gn,sft,arg with thin LS aa dns,ns

2-12-18

AFTER TEST RAN IN WITH PDC BIT TO MAKE BETTER HOLE

2-13-18

ROP (min/ft)

0

10

5000

5050

4900

4950

5000

5050

5100

5150

5200

5250

5300

5350

5400

5450

5500

5550

5600

5650

5700

5750

5800

5850

5900

5950

6000

6050

6100

6150

6200

6250

6300

6350

6400

6450

6500

6550

6600

6650

6700

6750

6800

6850

6900

6950

7000

7050

7100

7150

7200

7250

7300

7350

7400

7450

7500

7550

7600

7650

7700

7750

7800

7850

7900

7950

8000

8050

8100

8150

8200

8250

8300

8350

8400

8450

8500

8550

8600

8650

8700

8750

8800

8850

8900

8950

9000

9050

9100

9150

9200

9250

9300

9350

9400

9450

9500

9550

9600

9650

9700

9750

9800

9850

9900

9950

10000



SH red,sft,v arg



SS trnsi,fri,f-c gr,p srted, sb ang-rnd,fr por,sileous cmt,abnt uncon,ns



SH dk red brn,frm,fiss with thin stringers SS aa



SH & SS aa,ns



SS wh,fri,f-c gr,sb ang-rnd, p srted,cly filled,p por,ns with SH aa



LS off wh-pale gy,frm,blk,cky ip,p por,ns



RTD 5050'  
LTD 5048'

MUD DATA 4860'  
WT 9.4 VIS 58 FL 6.8  
PH 10.0 CK 2 CL 600  
LCM 2.0

TG, C1-C5

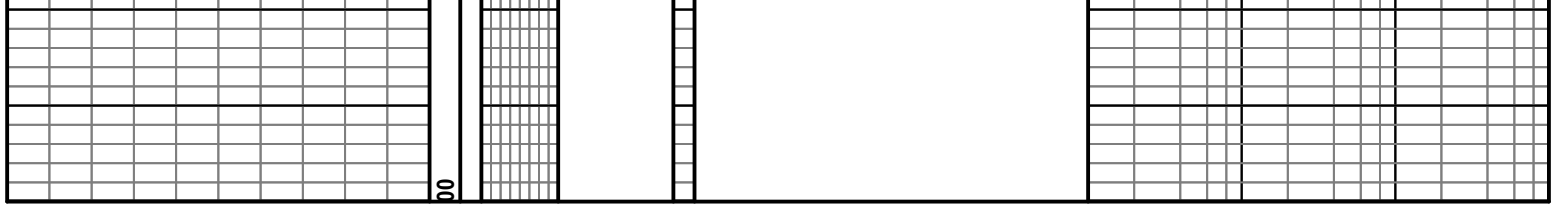
1

10

100

1000

MISS.  
5030(-1617) S  
5024(-1611) L



00



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco, LLC

**17/2s/37w Cheyenne KS**

2020 N Bramblewood  
Wichita, KS 67206

**Theron #1-17**

Job Ticket: 63450

**DST#: 1**

ATTN: Bryan Bynog

Test Start: 2018.02.04 @ 22:22:00

## GENERAL INFORMATION:

Formation: **Lans. "A"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:33:30

Time Test Ended: 12:18:30

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 83

**Interval: 4290.00 ft (KB) To 4380.00 ft (KB) (TVD)**

Reference Elevations: 3413.00 ft (KB)

Total Depth: 4380.00 ft (KB) (TVD)

3405.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8017 Outside**

Press@RunDepth: 91.12 psig @ 4291.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.02.04

End Date: 2018.02.05

Last Calib.: 2018.02.05

Start Time: 22:22:05

End Time: 12:18:30

Time On Btm: 2018.02.05 @ 05:33:15

Time Off Btm: 2018.02.05 @ 09:35:45

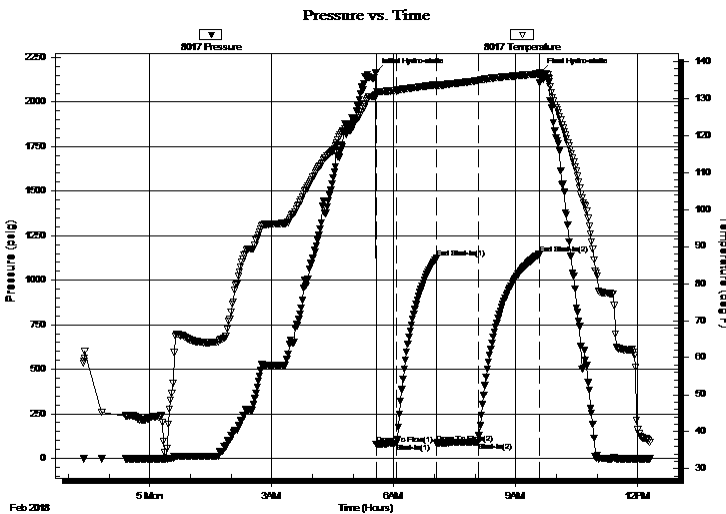
**TEST COMMENT:** 30 - IF: 4" Surge blow at open, bled off, No blow (diesel in bucket)

60 - IS: No blow

60 - FF: No blow

90 - FS: No blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2165.97	130.93	Initial Hydro-static
1	79.08	130.62	Open To Flow (1)
31	84.09	132.13	Shut-In(1)
90	1123.28	133.64	End Shut-In(1)
90	84.45	133.18	Open To Flow (2)
151	91.12	134.77	Shut-In(2)
241	1144.81	136.54	End Shut-In(2)
243	2165.59	136.77	Final Hydro-static

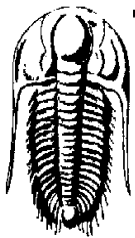
## Recovery

Length (ft)	Description	Volume (bbl)
150.00	Mud w /Oil spots 99% <sub>m</sub> , 1% <sub>o</sub>	0.74

## Gas Rates

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





# TRILOBITE TESTING, INC.

## DRILL STEM TEST REPORT

Berexco, LLC

2020 N Bramblewood  
Wichita, KS 67206

ATTN: Bryan Bynog

**17/2s/37w Cheyenne KS**

**Theron #1-17**

Job Ticket: 63450

**DST#: 1**

Test Start: 2018.02.04 @ 22:22:00

### GENERAL INFORMATION:

Formation: **Lans. "A"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:33:30

Time Test Ended: 12:18:30

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 83

**Interval: 4290.00 ft (KB) To 4380.00 ft (KB) (TVD)**

Reference Elevations: 3413.00 ft (KB)

Total Depth: 4380.00 ft (KB) (TVD)

3405.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 6625**

**Inside**

Press@RunDepth: psig @ 4291.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.02.04

End Date:

2018.02.05

Last Calib.:

2018.02.05

Start Time: 22:22:05

End Time:

12:19:00

Time On Btm:

Time Off Btm:

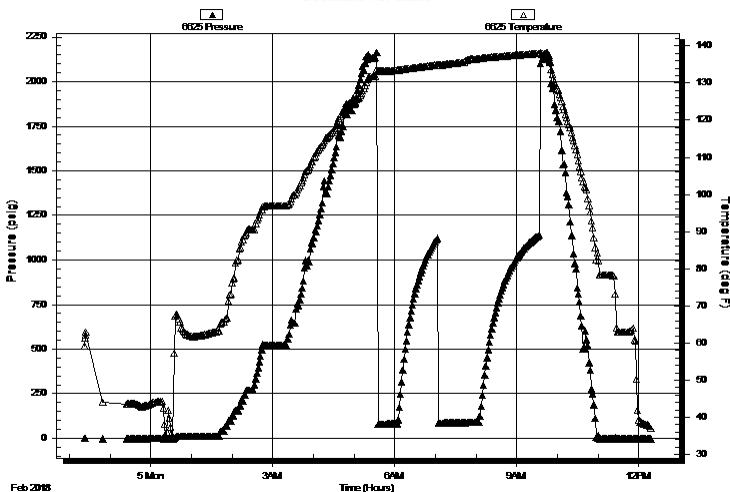
**TEST COMMENT:** 30 - IF: 4" Surge blow at open, bled off, No blow (diesel in bucket)

60 - IS: No blow

60 - FF: No blow

90 - FS: No blow

Pressure vs. Time



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
150.00	Mud w /Oil spots 99%, 1%	0.74

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Berexco, LLC

**17/2s/37w Cheyenne KS**

2020 N Bramblewood  
Wichita, KS 67206

**Theron #1-17**

Job Ticket: 63450

**DST#: 1**

ATTN: Bryan Bynog

Test Start: 2018.02.04 @ 22:22:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.40 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	Mud w /Oil spots 99% <sub>m</sub> , 1% <sub>o</sub>	0.738

Total Length: 150.00 ft      Total Volume: 0.738 bbl

Num Fluid Samples: 0

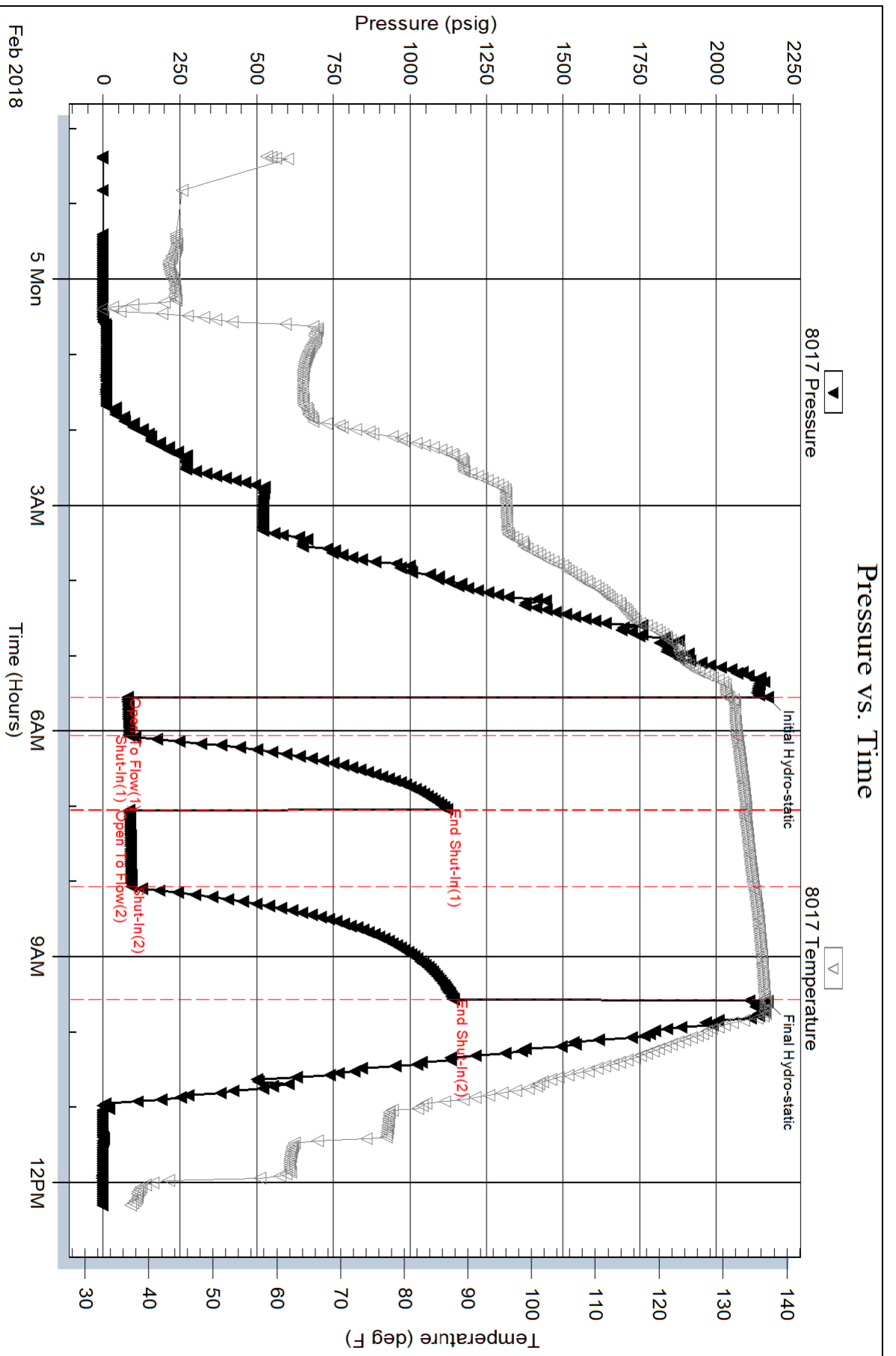
Num Gas Bombs: 0

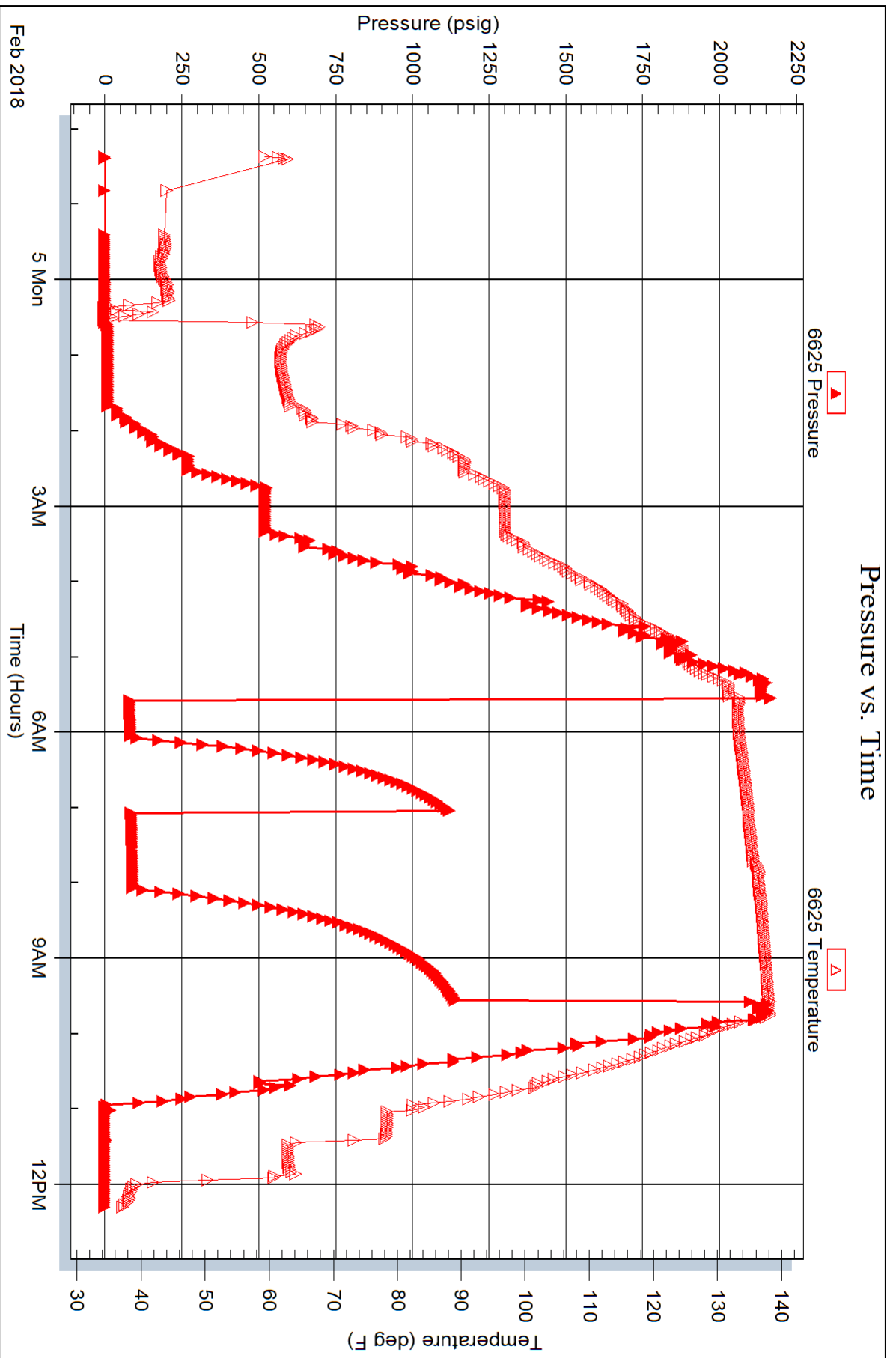
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco, LLC

**17/2s/37w Cheyenne KS**

2020 N Bramblewood  
Wichita, KS 67206

**Theron #1-17**

Job Ticket: 63351

**DST#: 2**

ATTN: Bryan Bynog

Test Start: 2018.02.06 @ 00:15:00

## GENERAL INFORMATION:

Formation: **Lans. "B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:32:15

Time Test Ended: 13:57:15

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 83

**Interval: 4355.00 ft (KB) To 4430.00 ft (KB) (TVD)**

Reference Elevations: 3413.00 ft (KB)

Total Depth: 4430.00 ft (KB) (TVD)

3405.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8017 Outside**

Press@RunDepth: 435.17 psig @ 4356.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.02.06 End Date: 2018.02.06

Last Calib.: 2018.02.06

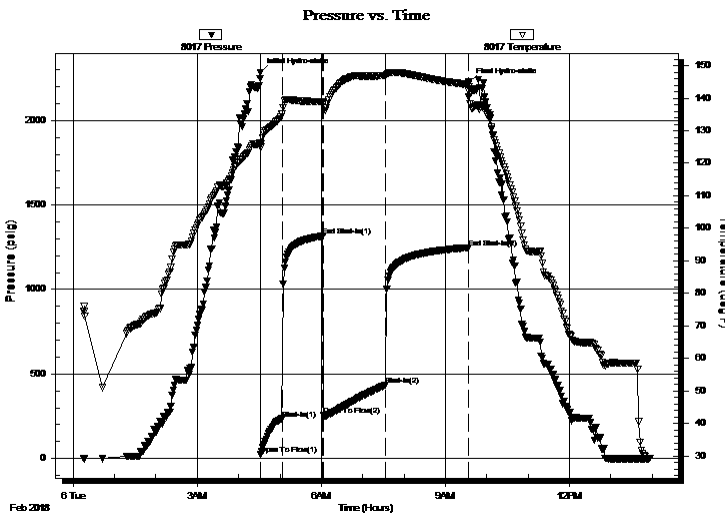
Start Time: 00:15:05 End Time: 13:57:15

Time On Btm: 2018.02.06 @ 04:31:45

Time Off Btm: 2018.02.06 @ 09:34:15

**TEST COMMENT:** 30 - IF: Blow built to BOB (11") at 9 min. (Diesel in bucket)  
60 - IS: Blow back built to 2 1/2"  
90 - FF: Blow built to BOB at 12 min.  
120 - FS: Blow back built to 3 1/2"

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2284.21	126.20	Initial Hydro-static
1	25.66	124.94	Open To Flow (1)
32	234.95	135.29	Shut-In(1)
91	1316.44	138.91	End Shut-In(1)
91	253.07	138.50	Open To Flow (2)
182	435.17	146.94	Shut-In(2)
302	1247.58	144.17	End Shut-In(2)
303	2226.40	142.28	Final Hydro-static

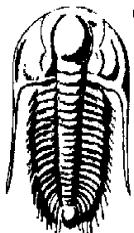
## Recovery

Length (ft)	Description	Volume (bbl)
60.00	SMW/GO 46%o, 45%g, 5%w, 4%m	0.30
525.00	MCGO 65%o, 20%g, 15%m	3.43
315.00	SMCGO 72%o, 22%g, 6%m	4.42
280.00	CGO 85%o, 15%g	3.93
0.00	GIP = 220'	0.00

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Berexco, LLC  
 2020 N Bramblewood  
 Wichita, KS 67206  
 ATTN: Bryan Bynog

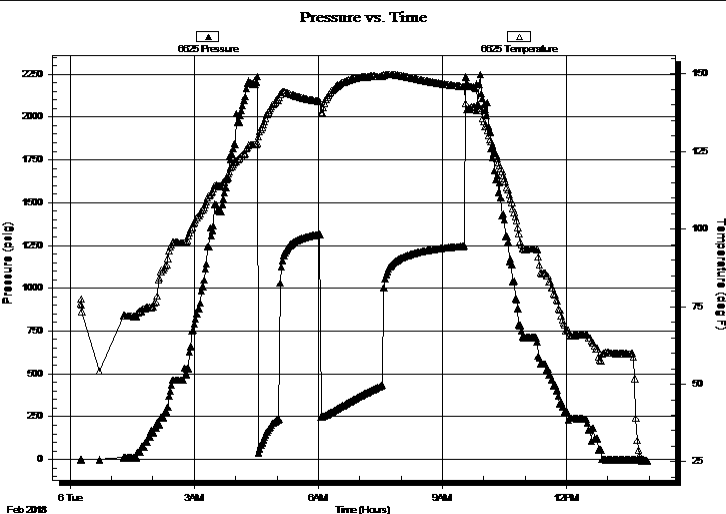
**17/2s/37w Cheyenne KS**  
**Theron #1-17**  
 Job Ticket: 63351      **DST#: 2**  
 Test Start: 2018.02.06 @ 00:15:00

**GENERAL INFORMATION:**

<b>Formation:</b> <b>Lans. "B"</b>	
<b>Deviated:</b> No      Whipstock:                      ft (KB)	<b>Test Type:</b> Conventional Bottom Hole (Reset)
<b>Time Tool Opened:</b> 04:32:15	<b>Tester:</b> James Winder
<b>Time Test Ended:</b> 13:57:15	<b>Unit No:</b> 83
<b>Interval:</b> <b>4355.00 ft (KB) To 4430.00 ft (KB) (TVD)</b>	<b>Reference Elevations:</b> 3413.00 ft (KB)
<b>Total Depth:</b> 4430.00 ft (KB) (TVD)	3405.00 ft (CF)
<b>Hole Diameter:</b> 7.88 inches <b>Hole Condition:</b> Fair	<b>KB to GR/CF:</b> 8.00 ft

<b>Serial #: 6625</b> <b>Inside</b>		<b>Capacity:</b> 8000.00 psig
<b>Press@RunDepth:</b> psig @ 4356.00 ft (KB)	<b>Start Date:</b> 2018.02.06	<b>Last Calib.:</b> 2018.02.06
<b>Start Time:</b> 00:15:05	<b>End Date:</b> 2018.02.06	<b>Time On Btm:</b> 13:57:45
	<b>End Time:</b> 13:57:45	<b>Time Off Btm:</b>

**TEST COMMENT:** 30 - IF: Blow built to BOB (11") at 9 min. (Diesel in bucket)  
 60 - IS: Blow back built to 2 1/2"  
 90 - FF: Blow built to BOB at 12 min.  
 120 - FS: Blow back built to 3 1/2"



**PRESSURE SUMMARY**

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

**Recovery**

Length (ft)	Description	Volume (bbl)
60.00	SMW/GO 46%o, 45%g, 5%w , 4%m	0.30
525.00	MCGO 65%o, 20%g, 15%m	3.43
315.00	SMCGO 72%o, 22%g, 6%m	4.42
280.00	CGO 85%o, 15%g	3.93
0.00	GIP = 220'	0.00

**Gas Rates**

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Berexco, LLC

**17/2s/37w Cheyenne KS**

2020 N Bramblewood  
Wichita, KS 67206

**Theron #1-17**

Job Ticket: 63351

**DST#: 2**

ATTN: Bryan Bynog

Test Start: 2018.02.06 @ 00:15:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

32.2 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	SMW/GO 46%o, 45%g, 5%w, 4%m	0.295
525.00	MCGO 65%o, 20%g, 15%m	3.429
315.00	SMCGO 72%o, 22%g, 6%m	4.419
280.00	CGO 85%o, 15%g	3.928
0.00	GIP = 220'	0.000

Total Length: 1180.00 ft      Total Volume: 12.071 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

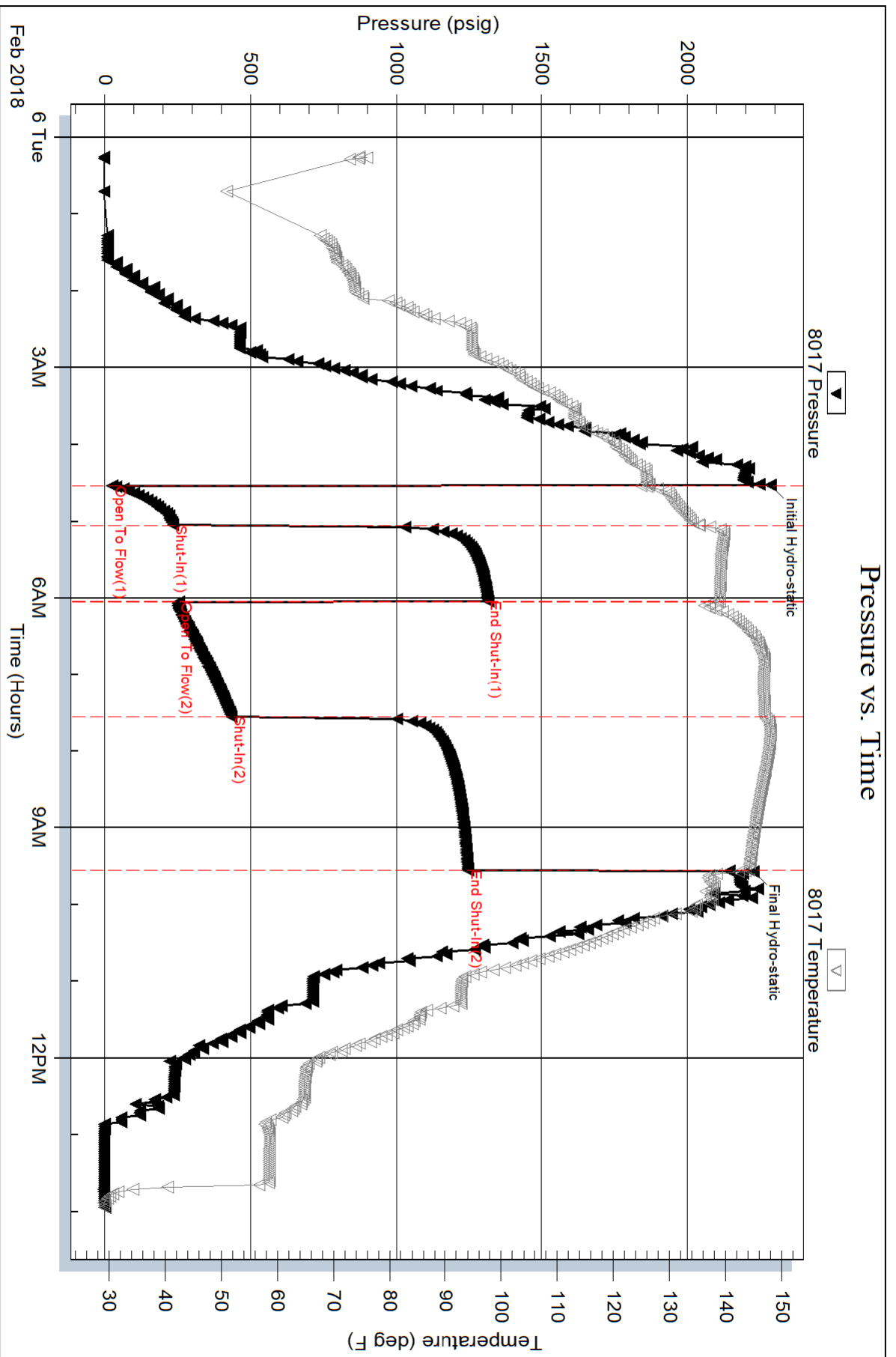
Serial #:

Laboratory Name:

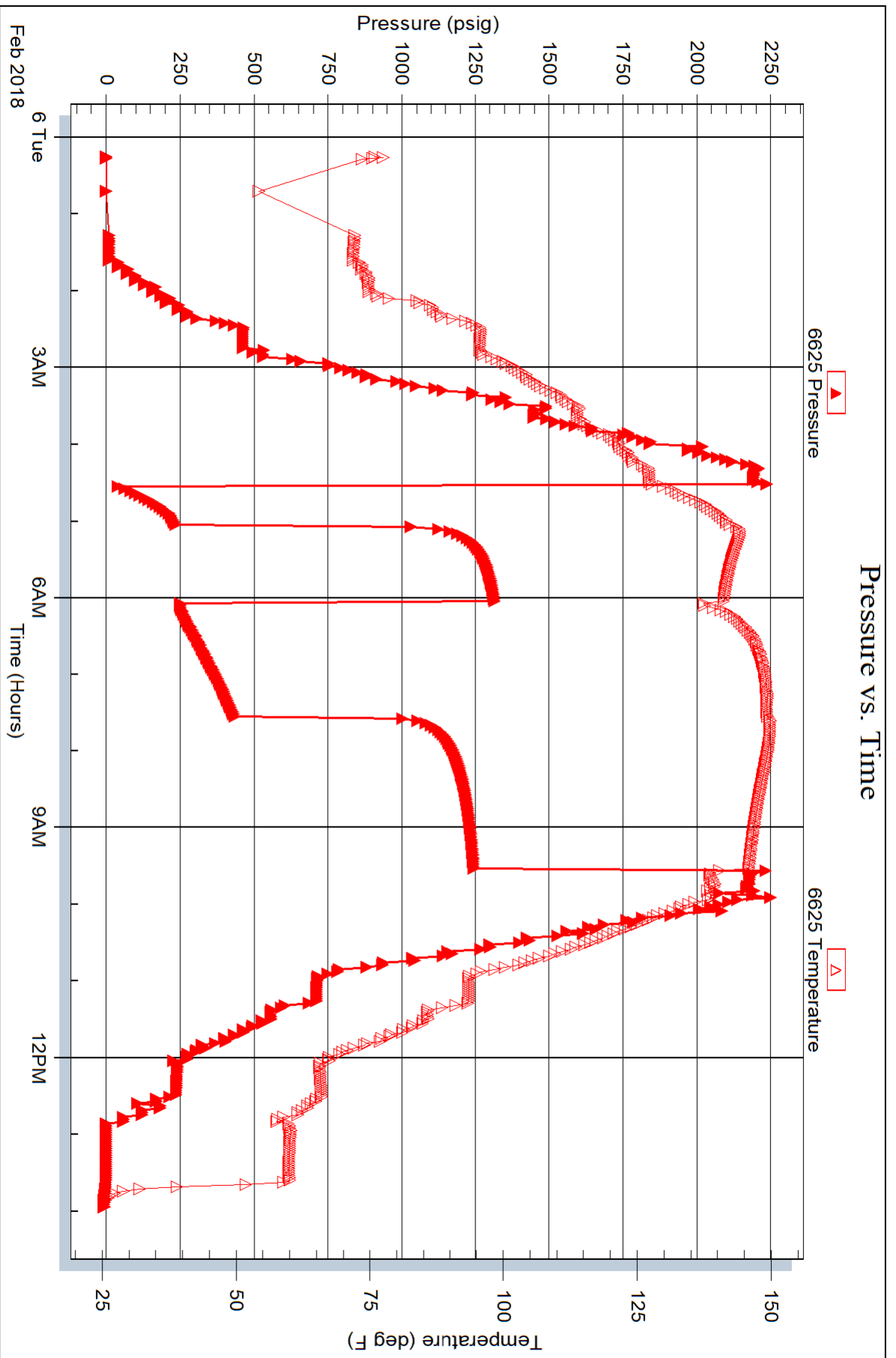
Laboratory Location:

Recovery Comments: Gravity = 29 api @ 28 deg F

Corrected Gravity = 32.2 api









**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco, LLC

**17/2s/37w Cheyenne KS**

2020 N Bramblewood  
Wichita, KS 67206

**Theron #1-17**

Job Ticket: 63352

**DST#: 3**

ATTN: Bryan Bynog

Test Start: 2018.02.07 @ 07:04:00

## GENERAL INFORMATION:

Formation: **Lans. "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:20:30

Time Test Ended: 16:56:15

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 83

**Interval: 4430.00 ft (KB) To 4490.00 ft (KB) (TVD)**

Reference Elevations: 3413.00 ft (KB)

Total Depth: 4490.00 ft (KB) (TVD)

3405.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8017 Outside**

Press@RunDepth: 18.22 psig @ 4431.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.02.07 End Date: 2018.02.07

Last Calib.: 2018.02.07

Start Time: 07:04:05 End Time: 16:56:15

Time On Btm: 2018.02.07 @ 10:20:15

Time Off Btm: 2018.02.07 @ 13:25:30

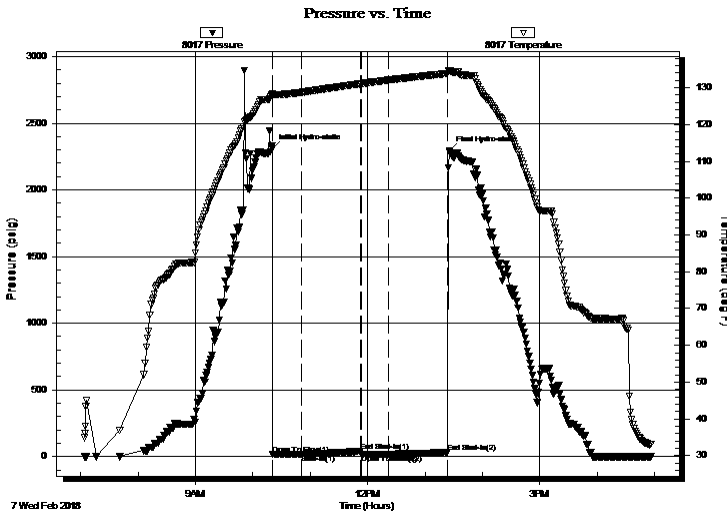
**TEST COMMENT:** 30 - IF: 1/4" Blow at open, Built slightly then died back, Dead at 20 min.

60 - IS: No blow (Diesel in bucket)

30 - FF: No blow

60 - FS: No blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2309.73	128.34	Initial Hydro-static
1	16.49	127.51	Open To Flow (1)
31	17.90	128.74	Shut-In(1)
93	39.70	131.09	End Shut-In(1)
93	17.87	131.08	Open To Flow (2)
122	18.22	132.07	Shut-In(2)
184	30.77	133.89	End Shut-In(2)
186	2291.10	134.70	Final Hydro-static

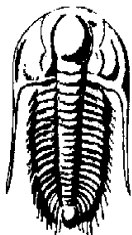
## Recovery

Length (ft)	Description	Volume (bbl)
1.00	Mud w /Oil spots 98%m, 2%o	0.00

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Berexco, LLC

**17/2s/37w Cheyenne KS**

2020 N Bramblewood  
Wichita, KS 67206

**Theron #1-17**

Job Ticket: 63352

**DST#: 3**

ATTN: Bryan Bynog

Test Start: 2018.02.07 @ 07:04:00

**GENERAL INFORMATION:**

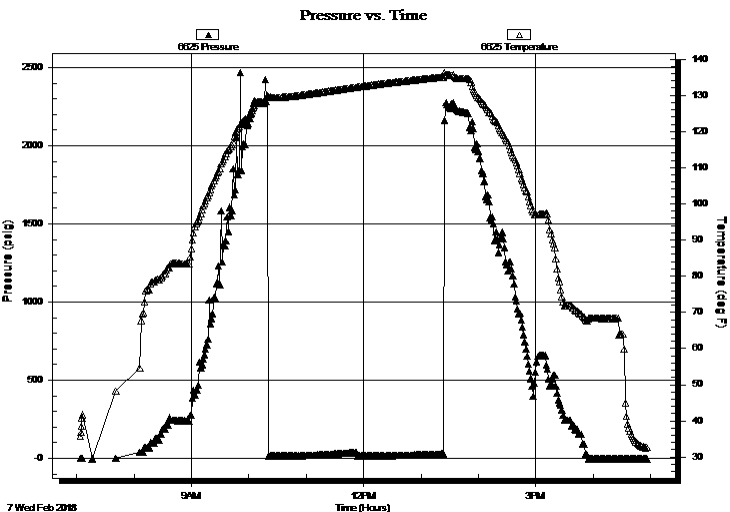
Formation: **Lans. "C"**  
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 10:20:30 Tester: James Winder  
 Time Test Ended: 16:56:15 Unit No: 83  
**Interval: 4430.00 ft (KB) To 4490.00 ft (KB) (TVD)** Reference Elevations: 3413.00 ft (KB)  
 Total Depth: 4490.00 ft (KB) (TVD) 3405.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

**Serial #: 6625**

**Inside**

Press@RunDepth: psig @ 4431.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2018.02.07 End Date: 2018.02.07 Last Calib.: 2018.02.07  
 Start Time: 07:04:05 End Time: 16:56:45 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** 30 - IF: 1/4" Blow at open, Built slightly then died back, Dead at 20 min.  
 60 - IS: No blow (Diesel in bucket)  
 30 - FF: No blow  
 60 - FS: No blow



**PRESSURE SUMMARY**

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

**Recovery**

Length (ft)	Description	Volume (bbl)
1.00	Mud w /Oil spots 98%m, 2%o	0.00

\* Recovery from multiple tests

**Gas Rates**

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Berexco, LLC

**17/2s/37w Cheyenne KS**

2020 N Bramblewood  
Wichita, KS 67206

**Theron #1-17**

Job Ticket: 63352

**DST#: 3**

ATTN: Bryan Bynog

Test Start: 2018.02.07 @ 07:04:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 63.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.00 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Mud w /Oil spots 98%w, 2%o	0.005

Total Length: 1.00 ft      Total Volume: 0.005 bbl

Num Fluid Samples: 0

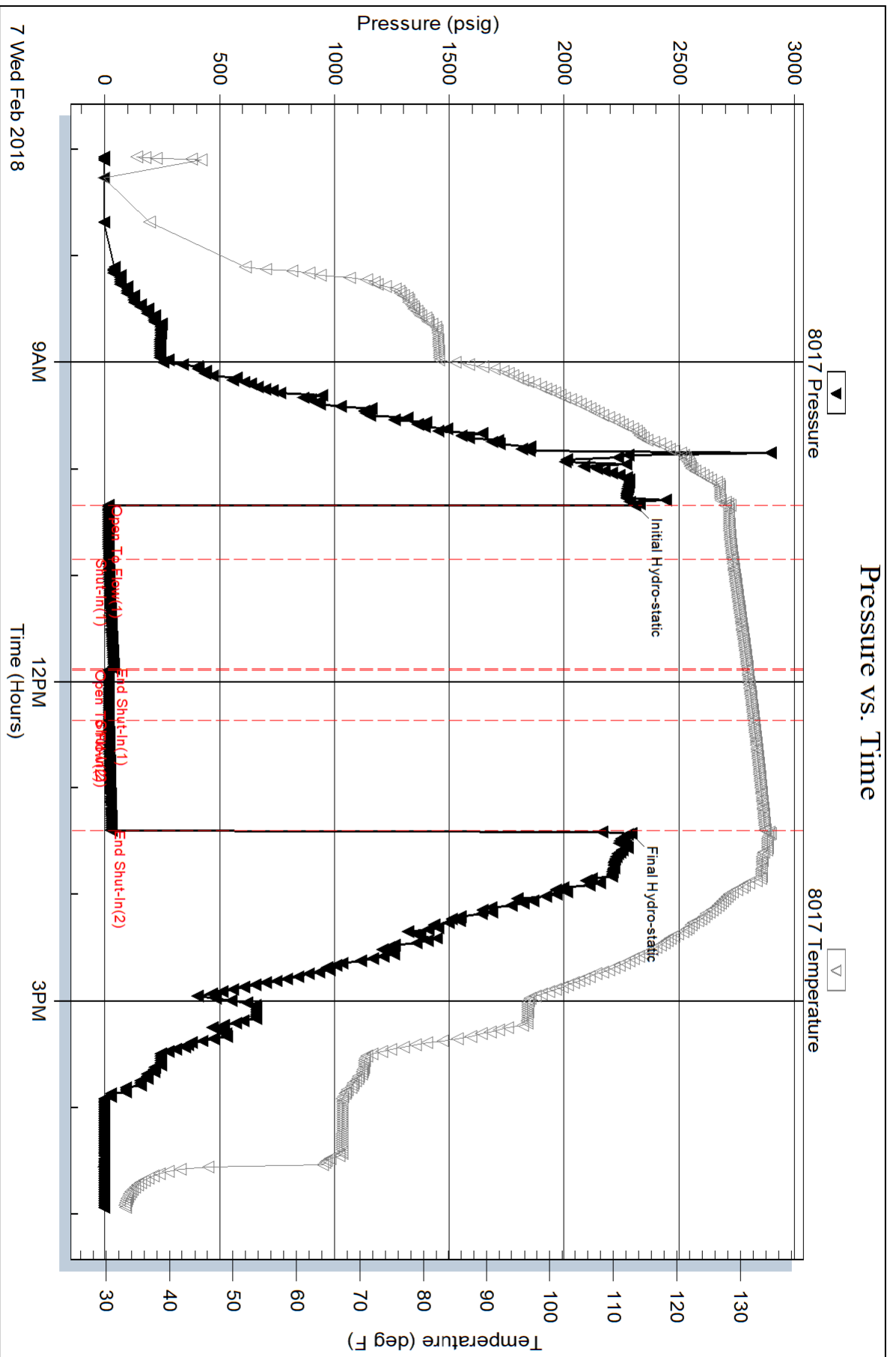
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



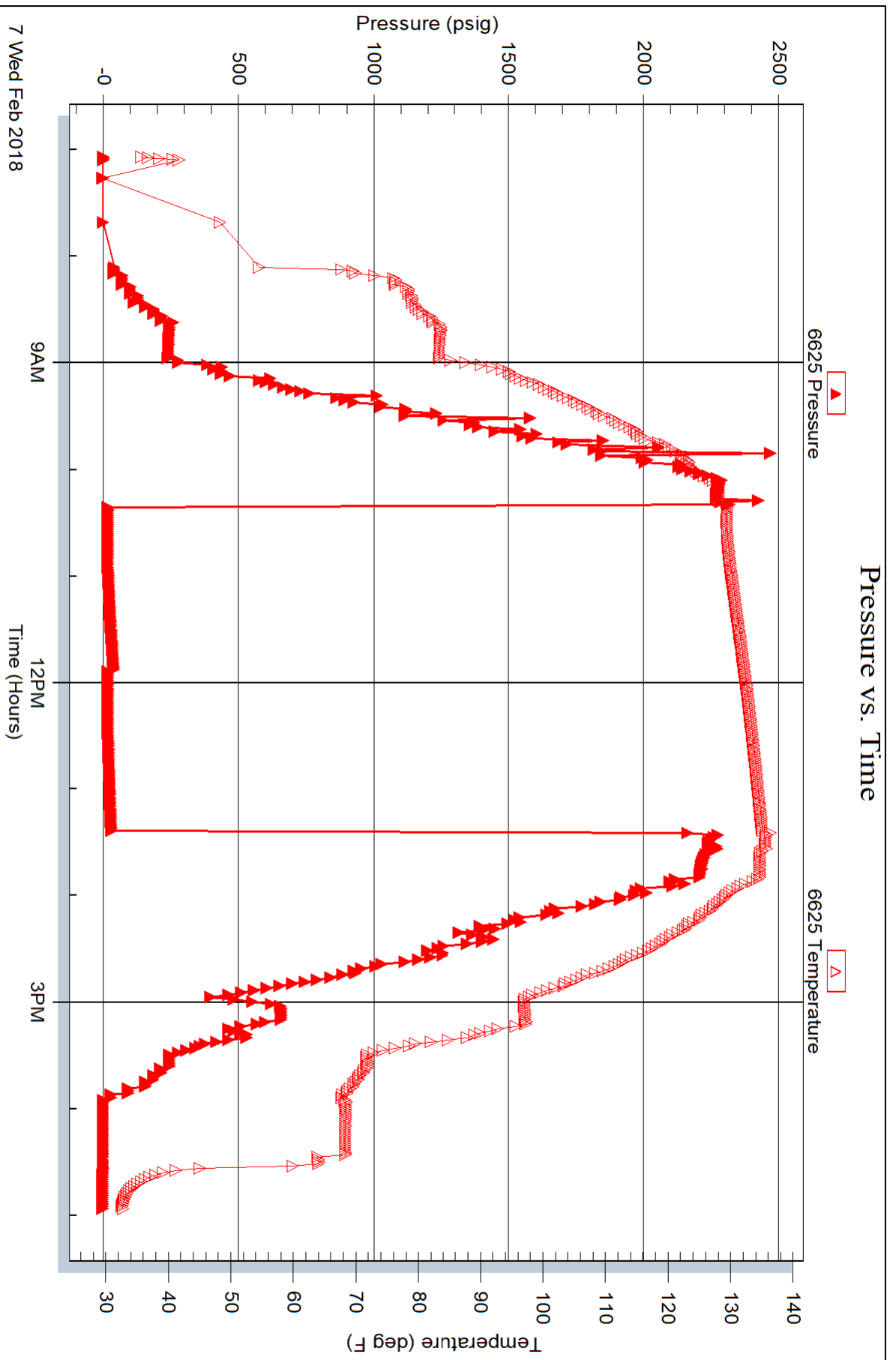
Serial #: 6625

Inside

Berexco, LLC

Theron #1-17

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 63352

Printed: 2018.02.07 @ 17:32:43



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco, LLC

**17/2s/37w Cheyenne KS**

2020 N Bramblewood  
Wichita, KS 67206

**Theron #1-17**

Job Ticket: 63353

**DST#: 4**

ATTN: Bryan Bynog

Test Start: 2018.02.08 @ 07:45:00

## GENERAL INFORMATION:

Formation: **Lans. "D - E"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:50:00

Time Test Ended: 17:05:15

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 83

**Interval: 4470.00 ft (KB) To 4560.00 ft (KB) (TVD)**

Total Depth: 4560.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3413.00 ft (KB)

3405.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 8017 Outside**

Press@RunDepth: 35.15 psig @ 4471.00 ft (KB)

Start Date: 2018.02.08

End Date: 2018.02.08

Start Time: 07:45:05

End Time: 17:05:15

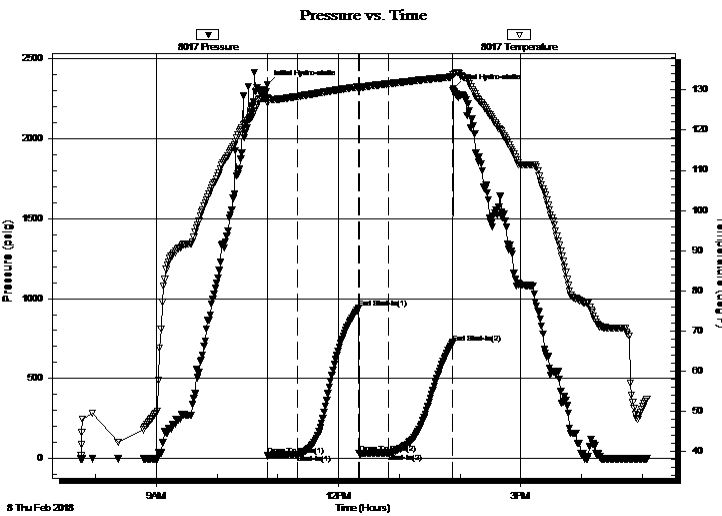
Capacity: 8000.00 psig

Last Calib.: 2018.02.08

Time On Btm: 2018.02.08 @ 10:49:45

Time Off Btm: 2018.02.08 @ 13:53:30

**TEST COMMENT:** 30 - IF: 1/4" Blow at open, built to 1"  
60 - IS: No blow back  
30 - FF: Blow built to 1/2"  
60 - FS: No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2335.85	128.02	Initial Hydro-static
1	17.37	126.91	Open To Flow (1)
30	26.51	128.38	Shut-In(1)
90	938.95	130.75	End Shut-In(1)
91	31.80	130.39	Open To Flow (2)
120	35.15	131.52	Shut-In(2)
183	725.16	133.29	End Shut-In(2)
184	2314.47	133.73	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
45.00	OCM 65% m, 35% o	0.22

\* Recovery from multiple tests

## Gas Rates

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







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Berexco, LLC

**17/2s/37w Cheyenne KS**

2020 N Bramblewood  
Wichita, KS 67206

**Theron #1-17**

Job Ticket: 63353

**DST#: 4**

ATTN: Bryan Bynog

Test Start: 2018.02.08 @ 07:45:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.00 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	OCM 65% <sub>m</sub> , 35% <sub>o</sub>	0.221

Total Length: 45.00 ft      Total Volume: 0.221 bbl

Num Fluid Samples: 0

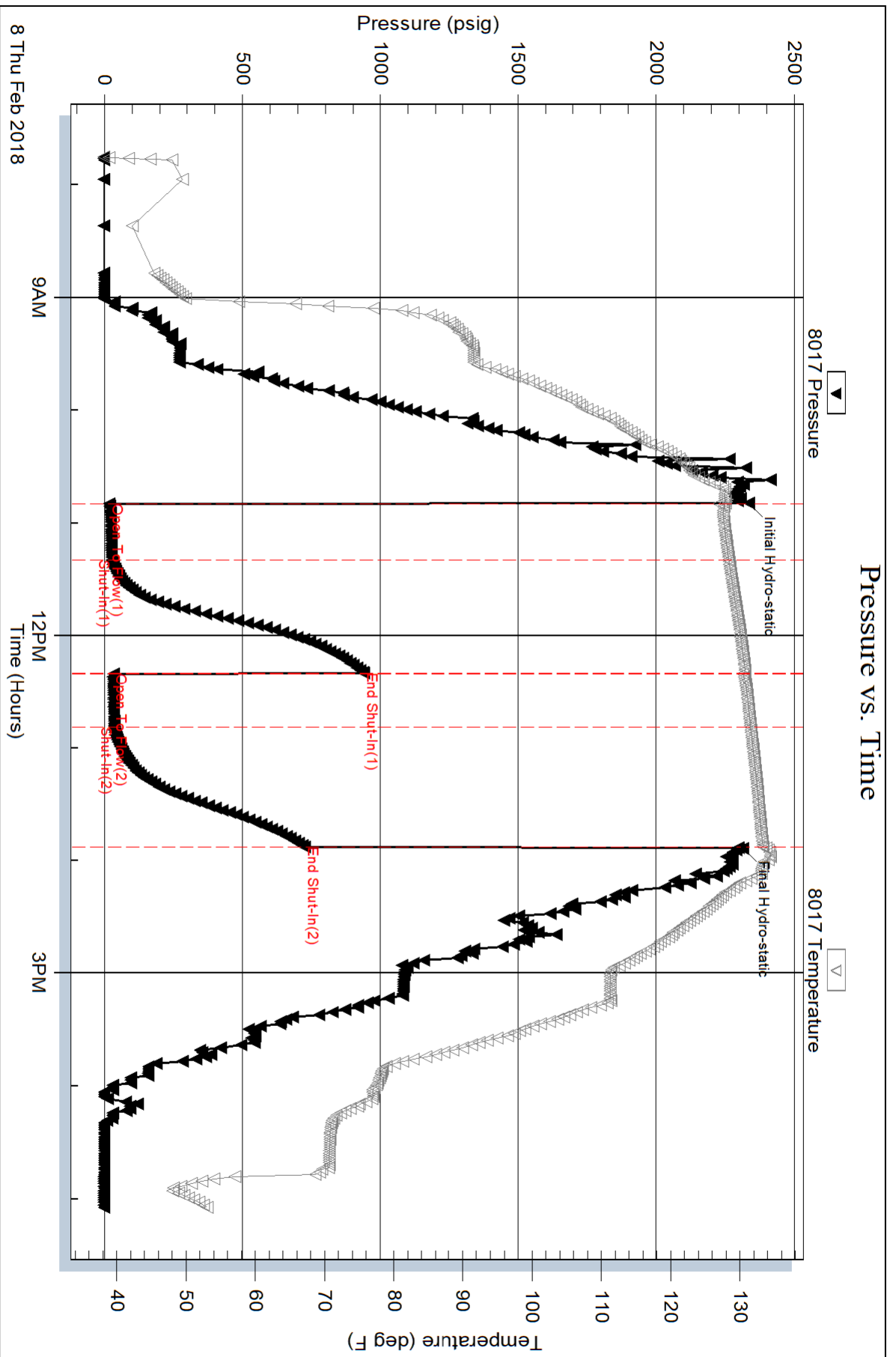
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



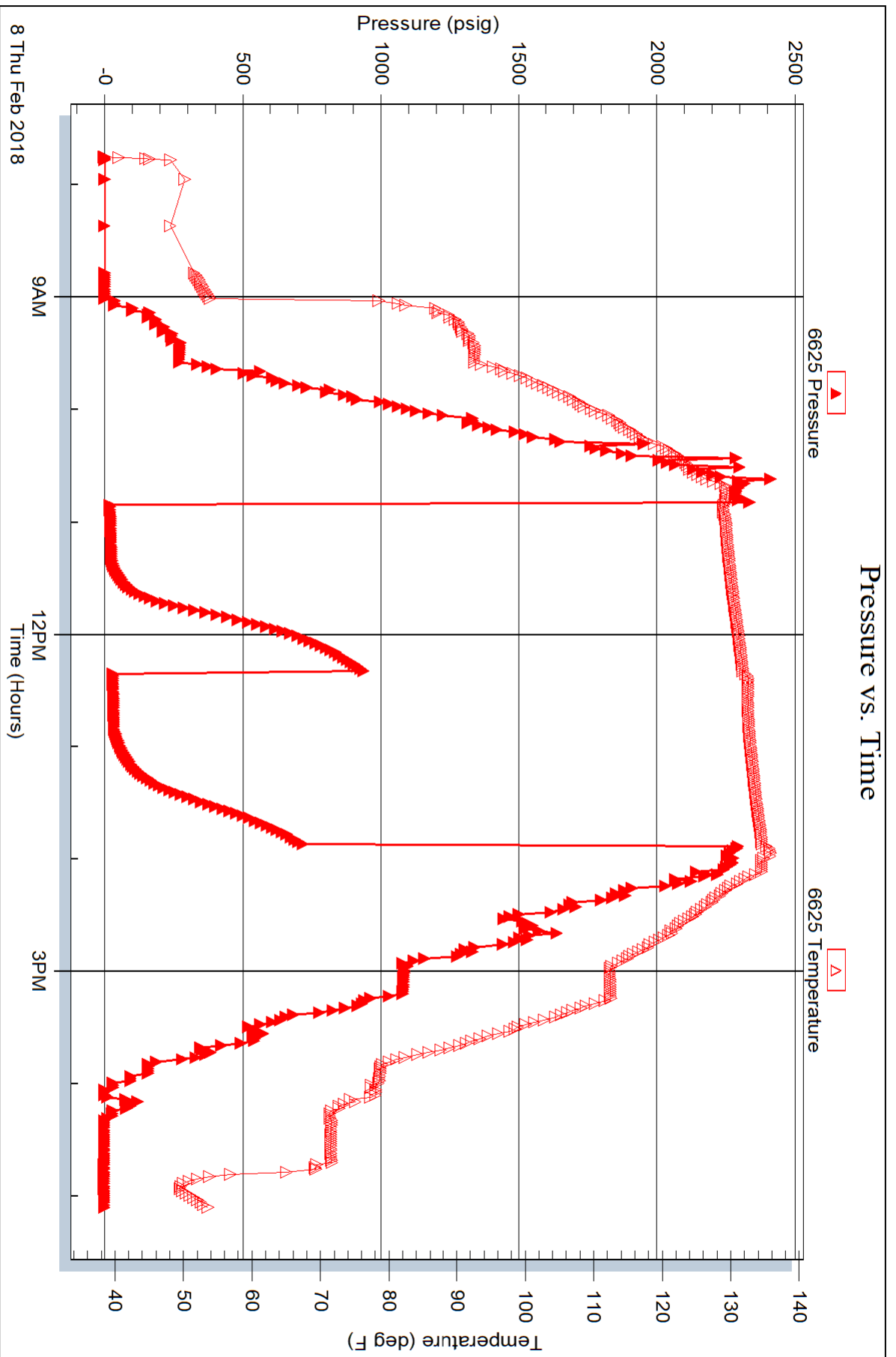
Serial #: 6625

Inside

Berexco, LLC

Theron #1-17

DST Test Number: 4





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco, LLC

**17/2s/37w Cheyenne KS**

2020 N Bramblewood  
Wichita, KS 67206

**Theron #1-17**

Job Ticket: 63354

**DST#: 5**

ATTN: Bryan Bynog

Test Start: 2018.02.10 @ 05:10:00

## GENERAL INFORMATION:

Formation: **Pawnee - Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:59:15

Time Test Ended: 03:34:15

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 83

Interval: **4725.00 ft (KB) To 4800.00 ft (KB) (TVD)**

Reference Elevations: 3413.00 ft (KB)

Total Depth: 4800.00 ft (KB) (TVD)

3405.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8017 Outside**

Press@RunDepth: 21.63 psig @ 4726.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.02.10

End Date:

2018.02.11

Last Calib.:

2018.02.11

Start Time:

05:10:05

End Time:

03:34:14

Time On Btm:

2018.02.10 @ 09:59:00

Time Off Btm:

2018.02.10 @ 22:22:30

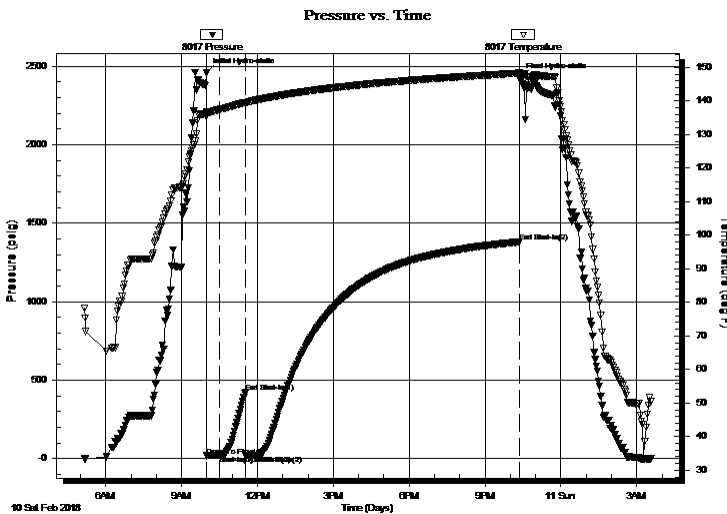
TEST COMMENT: 30 - IF: 1/8" Blow at open, built slightly then died back, Dead at 11 min.

60 - IS: No blow (Diesel in bucket)

30 - FF: No blow

60/10 1/4 hr - FSI: No blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2457.58	136.73	Initial Hydro-static
1	17.00	135.42	Open To Flow (1)
32	20.08	137.50	Shut-In(1)
93	421.18	139.56	End Shut-In(1)
93	19.84	139.35	Open To Flow (2)
122	21.63	140.42	Shut-In(2)
743	1380.53	148.33	End Shut-In(2)
744	2431.33	148.48	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud w /trace oil 100%m	0.02

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco, LLC

**17/2s/37w Cheyenne KS**

2020 N Bramblewood  
Wichita, KS 67206

**Theron #1-17**

Job Ticket: 63354

**DST#: 5**

ATTN: Bryan Bynog

Test Start: 2018.02.10 @ 05:10:00

## GENERAL INFORMATION:

Formation: **Pawnee - Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:59:15

Time Test Ended: 03:34:15

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 83

Interval: **4725.00 ft (KB) To 4800.00 ft (KB) (TVD)**

Total Depth: 4800.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3413.00 ft (KB)

3405.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 6625** Inside

Press@RunDepth: psig @ 4726.00 ft (KB)

Start Date: 2018.02.10

End Date: 2018.02.11

Start Time: 05:10:05

End Time: 03:34:44

Capacity: 8000.00 psig

Last Calib.: 2018.02.11

Time On Btm:

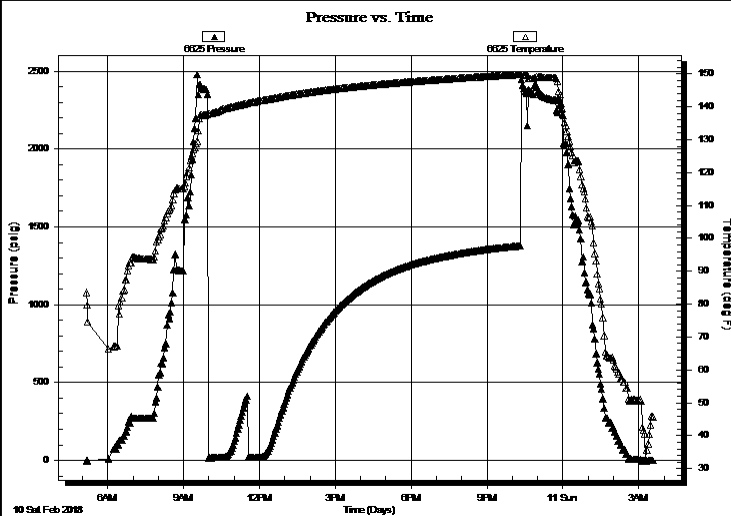
Time Off Btm:

TEST COMMENT: 30 - IF: 1/8" Blow at open, built slightly then died back, Dead at 11 min.

60 - IS: No blow (Diesel in bucket)

30 - FF: No blow

60/10 1/4 hr - FSI: No blow



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud w /trace oil 100%m	0.02

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Berexco, LLC

**17/2s/37w Cheyenne KS**

2020 N Bramblewood  
Wichita, KS 67206

**Theron #1-17**

Job Ticket: 63354

**DST#: 5**

ATTN: Bryan Bynog

Test Start: 2018.02.10 @ 05:10:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.80 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud w /trace oil 100%m	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

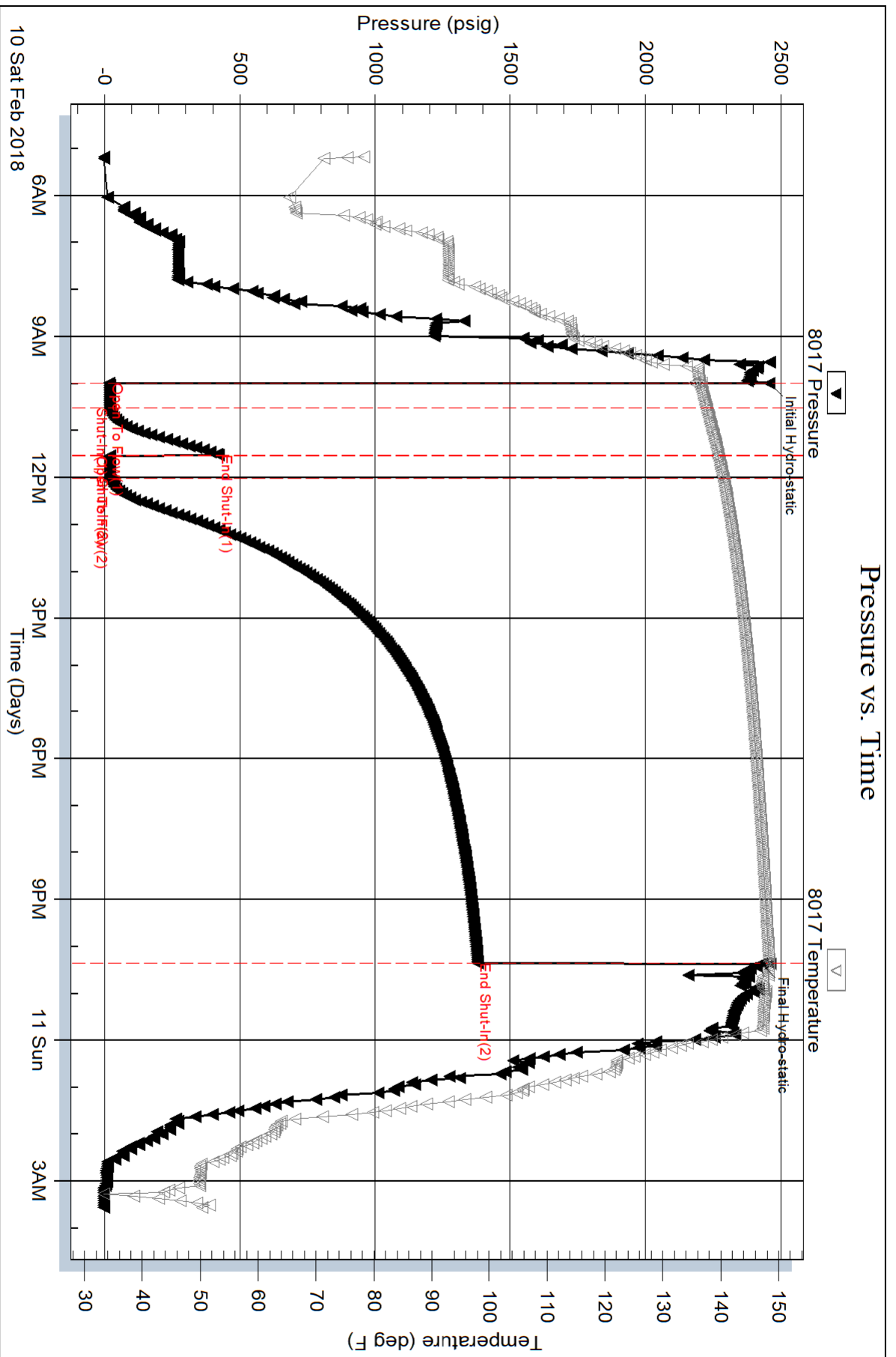
Recovery Comments:

Serial #: 8017

Outside Berexco, LLC

Theron #1-17

DST Test Number: 5



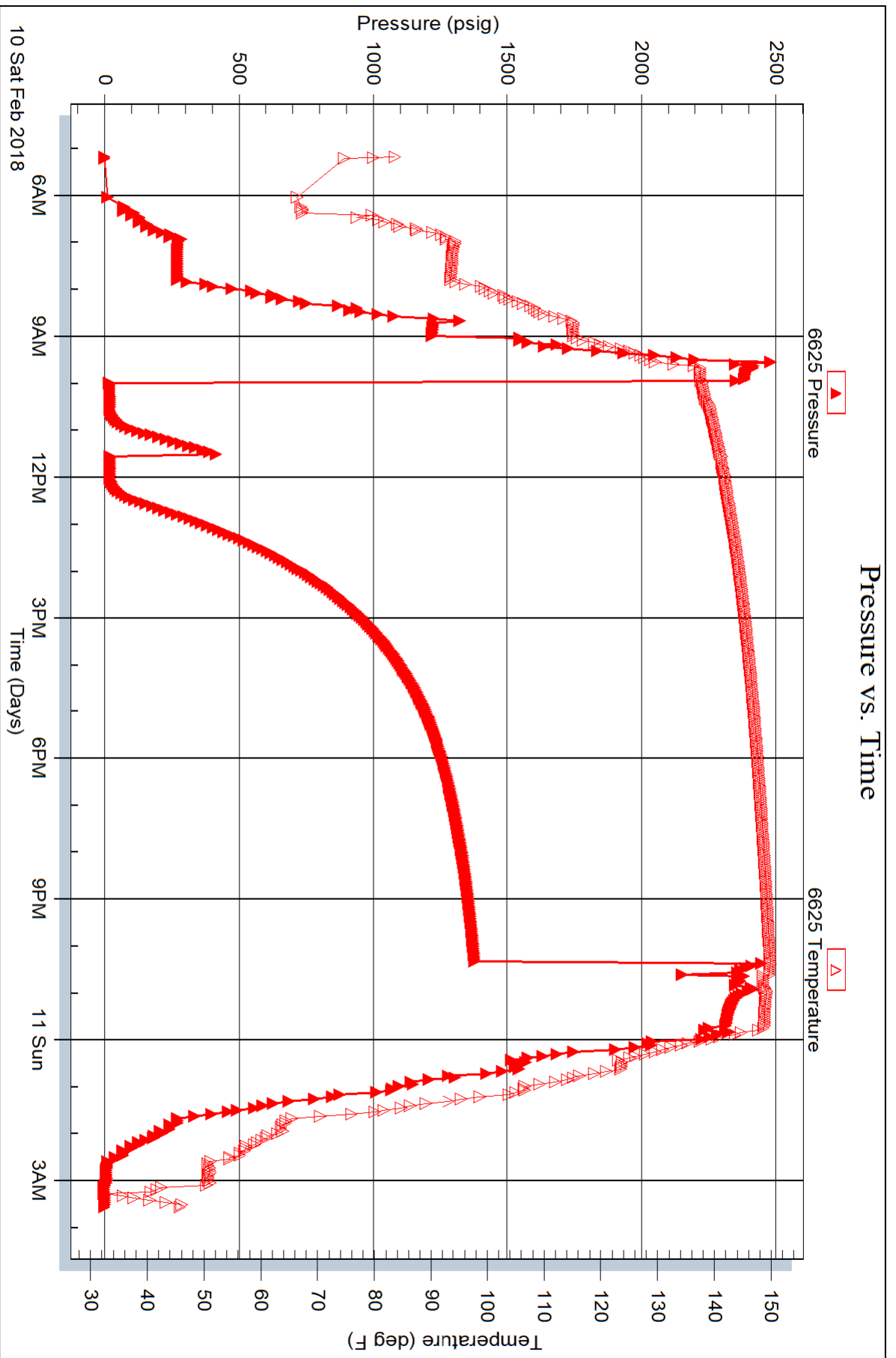
Serial #: 6625

Inside

Berexco, LLC

Theron #1-17

DST Test Number: 5







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco, LLC

**17/2s/37w Cheyenne KS**

2020 N Bramblewood  
Wichita, KS 67206

**Theron #1-17**

Job Ticket: 63355

**DST#: 6**

ATTN: Bryan Bynog

Test Start: 2018.02.11 @ 22:35:00

## GENERAL INFORMATION:

Formation: **Upper Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:37:30

Time Test Ended: 13:21:15

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 83

**Interval: 4814.00 ft (KB) To 4860.00 ft (KB) (TVD)**

Reference Elevations: 3413.00 ft (KB)

Total Depth: 4860.00 ft (KB) (TVD)

3405.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8017 Outside**

Press@RunDepth: 168.17 psig @ 4815.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.02.11

End Date:

2018.02.12

Last Calib.: 2018.02.12

Start Time: 22:35:05

End Time:

13:21:15

Time On Btm: 2018.02.12 @ 04:37:00

Time Off Btm: 2018.02.12 @ 09:42:30

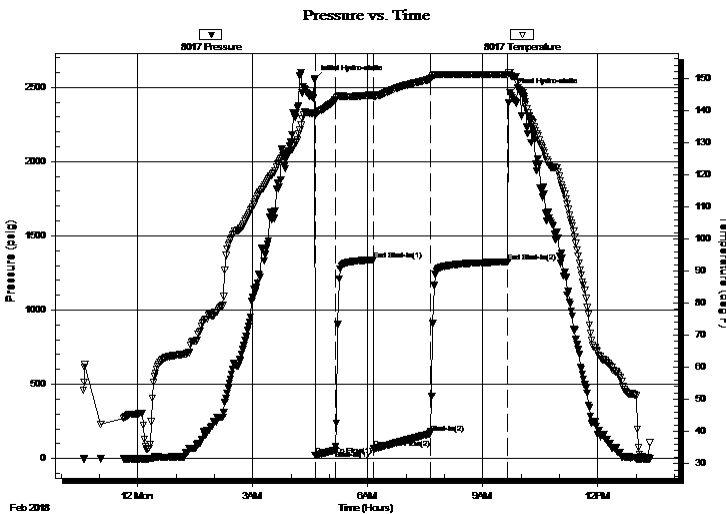
**TEST COMMENT:** 30 - IF: Blow built to 9" (Diesel in bucket)

60 - IS: Weak surface Blow back

90 - FF: Blow built to 5 1/4"

120 - FS: Weak surface blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2554.85	139.41	Initial Hydro-static
1	19.47	138.54	Open To Flow (1)
32	57.30	143.26	Shut-In(1)
92	1337.68	144.81	End Shut-In(1)
93	65.37	144.43	Open To Flow (2)
181	168.17	149.90	Shut-In(2)
302	1324.03	151.21	End Shut-In(2)
306	2465.96	151.82	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
50.00	OCM 65% <sub>m</sub> , 30% <sub>o</sub> , 5% <sub>g</sub>	0.25
350.00	CGO 85% <sub>o</sub> , 15% <sub>g</sub>	1.72
0.00	GIP = 310'	0.00

\* Recovery from multiple tests

## Gas Rates

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



# TRILOBITE TESTING, INC.

## DRILL STEM TEST REPORT

Berexco, LLC

17/2s/37w Cheyenne KS

2020 N Bramblewood  
Wichita, KS 67206

Theron #1-17

Job Ticket: 63355

DST#: 6

ATTN: Bryan Bynog

Test Start: 2018.02.11 @ 22:35:00

### GENERAL INFORMATION:

Formation: **Upper Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:37:30

Time Test Ended: 13:21:15

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 83

Interval: **4814.00 ft (KB) To 4860.00 ft (KB) (TVD)**

Reference Elevations: 3413.00 ft (KB)

Total Depth: 4860.00 ft (KB) (TVD)

3405.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 6625** **Inside**

Press@RunDepth: psig @ 4815.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.02.11

End Date:

2018.02.12

Last Calib.:

2018.02.12

Start Time: 22:35:05

End Time:

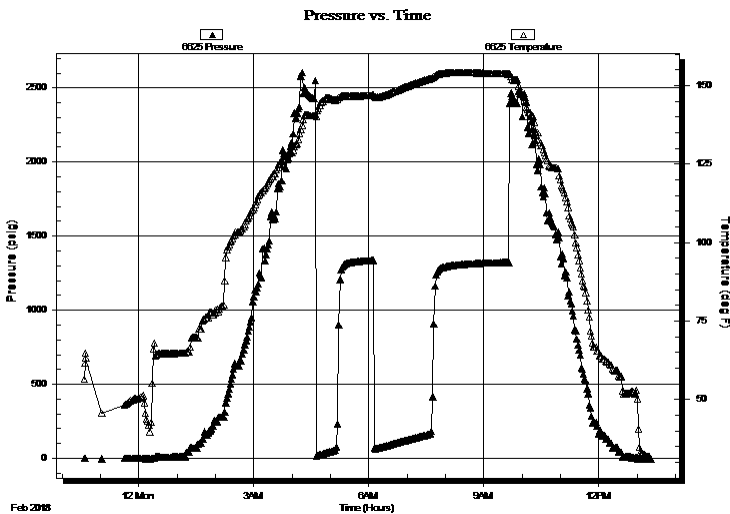
13:21:45

Time On Btm:

Time Off Btm:

**TEST COMMENT:** 30 - IF: Blow built to 9" (Diesel in bucket)  
60 - IS: Weak surface Blow back  
90 - FF: Blow built to 5 1/4"  
120 - FS: Weak surface blow back

### PRESSURE SUMMARY



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

### Recovery

Length (ft)	Description	Volume (bbl)
50.00	OCM 65% <sub>m</sub> , 30% <sub>o</sub> , 5% <sub>g</sub>	0.25
350.00	CGO 85% <sub>o</sub> , 15% <sub>g</sub>	1.72
0.00	GIP = 310'	0.00

### Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Berexco, LLC

**17/2s/37w Cheyenne KS**

2020 N Bramblewood  
Wichita, KS 67206

**Theron #1-17**

Job Ticket: 63355

**DST#: 6**

ATTN: Bryan Bynog

Test Start: 2018.02.11 @ 22:35:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

27.8 deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	OCM 65% <i>m</i> , 30% <i>o</i> , 5% <i>g</i>	0.246
350.00	CGO 85% <i>o</i> , 15% <i>g</i>	1.721
0.00	GIP = 310'	0.000

Total Length: 400.00 ft      Total Volume: 1.967 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

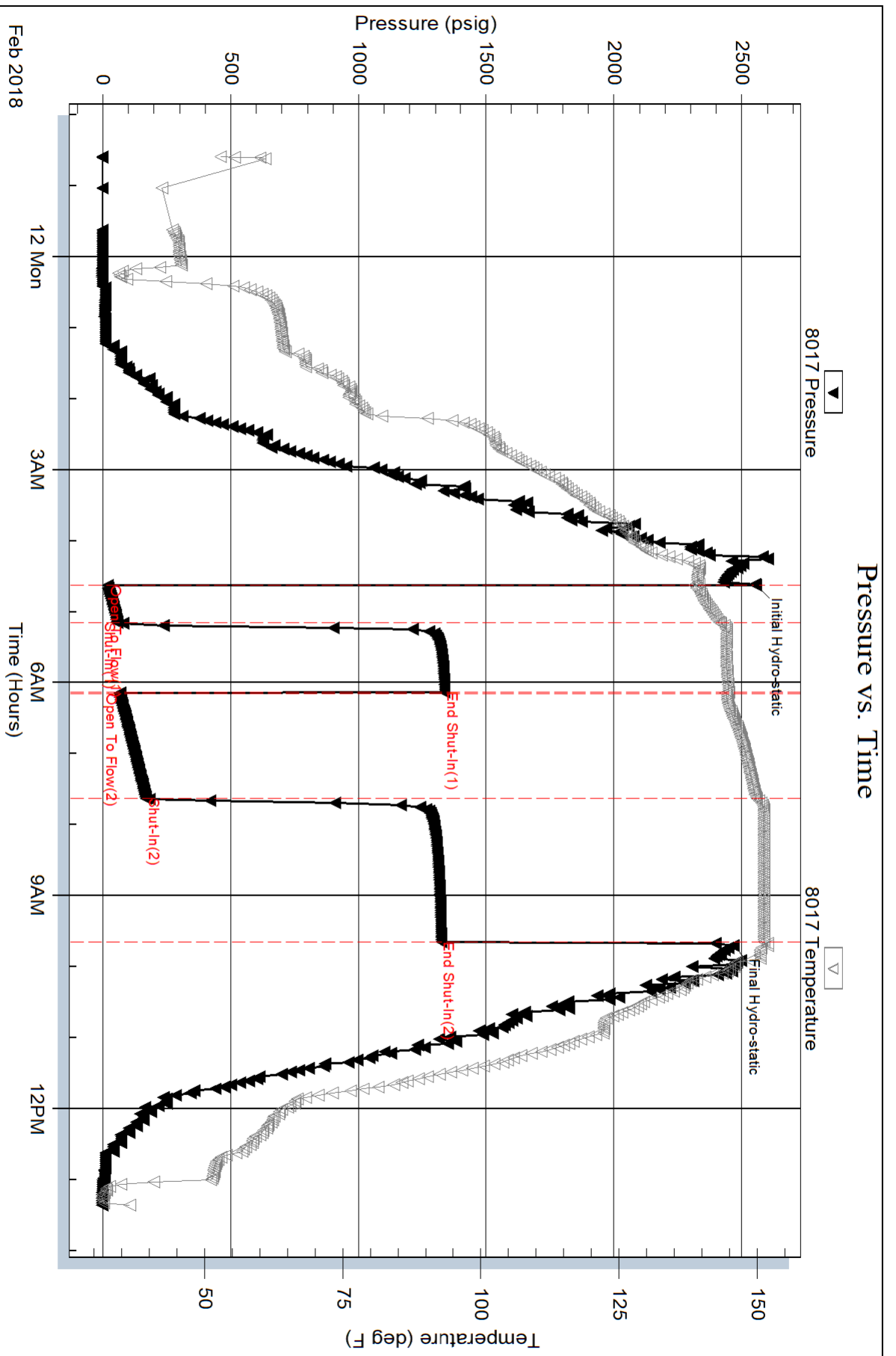
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 25 api @ 32 deg F

Corrected Gravity = 27.8 api



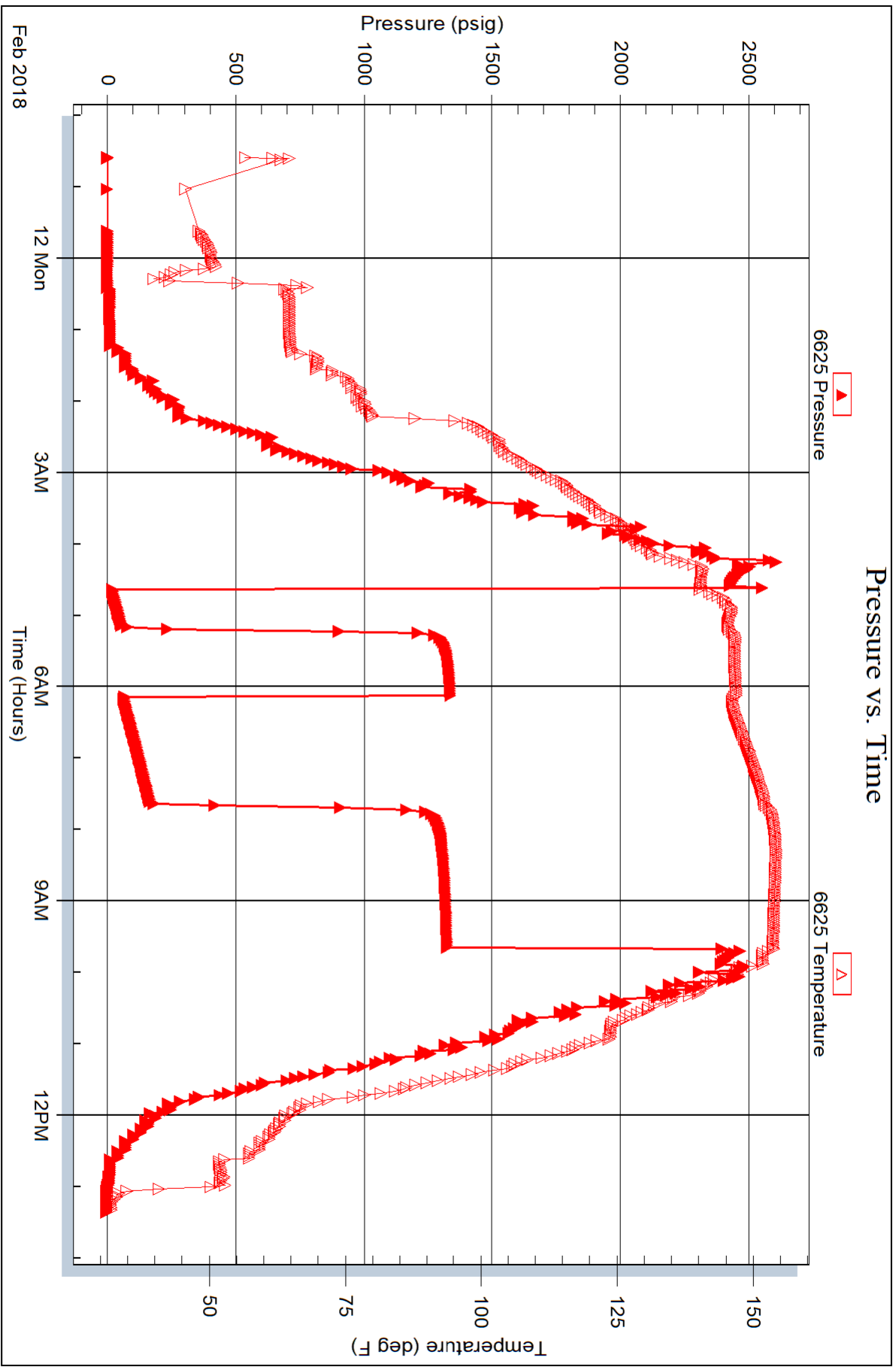
Serial #: 6625

Inside

Berexco, LLC

Theron #1-17

DST Test Number: 6





REMIT TO  
 QES Pressure Pumping LLC  
 Dept:970  
 P.O.Box 4346  
 Houston, TX 77210-4346

FEB 05 2018 MAIN OFFICE

P.O.Box884  
 Chanute,KS 66720  
 620/431-9210,1-800/467-8676  
 Fax 620/431-0012

Invoice

Invoice# 812327

Invoice Date: 01/31/18

Terms: Net 30

Page 1

BEREXCO, LLC  
 2020 N. Bramblewood Street  
 Wichita KS 67206  
 USA  
 3162653311

THERON 1-17

Part No	Description	Quantity	Unit Price	Discount(%)	Total
CE0471	Cement Pump Charge 301' - 500' (Coalbed/Methane)	1.000	1,150.0000	35.000	747.50
CE0002	Equipment Mileage Charge - Heavy Equipment	75.000	7.1500	35.000	348.56
CE0710	Cement Delivery Charge	1.000	1,974.0000	35.000	1,283.10
CC5871	Surface Blend II, 2% Gel/3% CaCl	320.000	24.0000	35.000	4,992.00
CC5326	Sodium Chloride, Salt	100.000	0.0000	0.000	0.00
CC6158A	Sugar	30.000	2.0000	35.000	39.00

Subtotal 11,400.25

Discounted Amount 3,990.09

SubTotal After Discount 7,410.16

Amount Due 12,058.15 If paid after 03/02/18

CORP # 333 GL DATE: 1/18  
 GLMAJR: 2090 GLMINR: 1000  
 A/C: \_\_\_\_\_ ENTITY: 1388201  
 V/P # 13005 C BY BN R BY \_\_\_\_\_  
 DESC: \_\_\_\_\_

Tax: 427.64

Total: 7,837.80

BCP

RKR





PRESSURE PUMPING LLC  
PO Box 884, Chanute, KS 66720  
620-431-9210 or 800-467-8676

9957  
9851

TICKET NUMBER 55001  
LOCATION Ogley Ks  
FOREMAN Jerry Y  
Miles Shaw  
Ks

FIELD TICKET & TREATMENT REPORT  
CEMENT

Invoice # 812327

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY			
1-30-18	1707	Theron 1-17	17	25	37W	Cheyenne			
CUSTOMER <u>Berexco</u>		Brid City <u>57030</u>							
MAILING ADDRESS <u>2020 N. Bramblewood Street</u>		<u>W8M</u>							
CITY <u>Wichita</u>		STATE <u>KS</u>		ZIP CODE <u>67206</u>					
		<u>info</u>							
		TRUCK #		DRIVER		TRUCK #		DRIVER	
		<u>753</u>		<u>PAW</u>					
		<u>772-7127</u>		<u>Seth O</u>					
		<u>9551T</u>		<u>Mikes S</u>					

JOB TYPE Surge HOLE SIZE 12 1/4 HOLE DEPTH 345 CASING SIZE & WEIGHT 8 5/8 20' RC  
 CASING DEPTH 345 DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 14.8 SLURRY VOL 1.29 WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 20'  
 DISPLACEMENT 21.661 DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: Salty meeting area up on Berexco Rig 2 circulate casing mix 3000sk  
com 3%CC 296gel was 4 up & displace with 21661 fresh water & shaker  
circulated approx 4561 to pit

Cement d. d  
circulate  
Thank you  
Jerry & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0471	1	PUMP CHARGE	1150.00	1150.00
CE0002	75	MILEAGE	7.15	536.25
CE0710	19.04	for mileage delivery	1.75	1974.00
CP5871	320 sks	Surface blend #	24.00	7680.00
CP5326	100 #	salt	NC	NC
CP6158	30 #	sugar	2.00	60.00
			subtotal	11400.25
			-358	3990.09
			Subtotal	7410.16
			SALES TAX	427.64
			ESTIMATED TOTAL	7837.80

AVIN 3737 AUTHORIZATION Walt Brown TITLE Tool Pusher DATE 1-30-18

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



PRESSURE PUMPING LLC

REMIT TO

QES Pressure Pumping LLC
Dept:970
P.O.Box 4346
Houston,TX 77210-4346

FEB 22 2018

MAIN OFFICE

P.O.Box884
Chanute,KS 66720
620/431-9210,1-800/467-8676
Fax 620/431-0012

Invoice Invoice# 812467

Invoice Date: 02/19/18 Terms: Net 30 Page 1

BEREXCO, LLC
2020 N. Bramblewood Street
Wichita KS 67206
USA
3162653311

THERON 1-17

Table with 6 columns: Part No, Description, Quantity, Unit Price, Discount(%), Total. Lists various equipment and materials with their respective quantities and prices.



RRR

Subtotal 34,693.80
Discounted Amount 12,142.83
SubTotal After Discount 22,550.97

Amount Due 36,834.02 If paid after 03/21/18

Tax: 1,391.14

Total: 23,942.11

Handwritten notes and stamps: 333, GL-DATE: 2/18, GLMAJR: 2356, GLMINR: 1000, ENT: 1388201, C BY: JH, R BY: [blank]





PRESSURE PUMPING LLC  
 PO Box 884, Chanute, KS 66720  
 620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT  
 CEMENT

TICKET NUMBER 55041

LOCATION Oakley, KS

FOREMAN Miles Shew

Invoice # 812467 *US*

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
2-14-18	1707	Theron 1-17	17	2 S	37 W	Cherokee
CUSTOMER <u>Berexo</u>			MCDONALD'S			
MAILING ADDRESS <u>2020 N. Bramblewood Street</u>			W face 30			
CITY <u>Wichita</u>			STATE <u>KS</u>			
STATE <u>KS</u>			ZIP CODE <u>67206</u>			
TRUCK #		DRIVER		TRUCK #		DRIVER
<u>753</u>		<u>Travis W</u>		<u>772/F-127</u>		<u>Ke.H C</u>
<u>530/F-129</u>		<u>Paul W</u>				

JOB TYPE long string HOLE SIZE 7 7/8" HOLE DEPTH 5050' CASING SIZE & WEIGHT 5 1/2" 15.5#  
 CASING DEPTH 4850' DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 12.5/13.8 SLURRY VOL. 1.9/1.4 WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING \_\_\_\_\_  
 DISPLACEMENT 11 1/2 bbls DISPLACEMENT PS 220/270 MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: Safety meetings and Rig up on Berexo RA #2 float equipment scratches on Sats #2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, #7, Centralizer on first 16 Sats marker sat between Sats 16 + 17 Basket on sat # 42 Run casing Circulate 1 hr pump mud flush mix 400sx 6040 895d 7/4" flo seal failed on with 350 sx OWC Shutdown Clear pump & lines release plug displace displace 11 1/2 bbls water with 2200 psi lift Plug landed @ 2700PSI

Comput did Circulate 20 bbls to pit

Thanks Miles Shew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0454	1	PUMP CHARGE	3900.00	3900.00
CE0002	80	MILEAGE	7.15	572.00
CE0710	36.02 Tons	Ton mileage delivery	1.75	5042.80
CC5831	450 Sx	Lite-weight blend III 100/40 895d	17.50	7875.00
CC5862	350 Sx	Thixo Blend III OWC	26.00	9100.00
CC5320	100#	Salt	N/A	N/A
CC6075	338#	Cello Blake / Flo seal	3.00	1014.00
CC6077	1750#	flo seal	.50	875.00
CC6125	15657 500gal	mud flush	1.65	325.00
CP8254	1	5 1/2" Latch down Plug + Assembly	400.00	400.00
CP8485	1	5 1/2" RFU float shoe	585.00	585.00
CP8554	20	5 1/2" Centralizer	81.00	1620.00
CP8629	1	5 1/2" Basket	385.00	385.00
CP8676	40	5 1/2" Scratchers	75.00	3000.00
			Subtotal	34693.80
			less 350 d discount	12142.83
			Subtotal	22550.97
			SALES TAX	1391.14
			ESTIMATED TOTAL	23,942.11

Ravin 3737  
 AUTHORIZATION [Signature] Hassan TITLE \_\_\_\_\_ DATE \_\_\_\_\_

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

# STATE OF KANSAS



CORPORATION COMMISSION  
CONSERVATION DIVISION  
266 N. MAIN ST., STE. 220  
WICHITA, KS 67202-1513

PHONE: 316-337-6200  
FAX: 316-337-6211  
<http://kcc.ks.gov/>

GOVERNOR JEFF COLYER, M.D.

SHARI FEIST ALBRECHT, CHAIR | JAY SCOTT EMLER, COMMISSIONER | DWIGHT D. KEEN, COMMISSIONER

June 08, 2018

Rodney Reynolds  
BEREXCO LLC  
2020 N. BRAMBLEWOOD  
WICHITA, KS 67206-1094

Re: ACO-1  
API 15-023-21476-00-00  
THERON 1-17  
SW/4 Sec.17-02S-37W  
Cheyenne County, Kansas

Dear Rodney Reynolds:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection(e)(2) of that regulation states "All rights to confidentiality shall be lost if the filings are not timely."

The above referenced well was spudded on 1/30/2018 and the ACO-1 was received on June 07, 2018 (not within the 120 days timely requirement).

Therefore, your request for confidential treatment of data contained within the ACO-1 filing cannot be granted at this time.

If you should have any questions, please do not hesitate to contact me at (316)337-6200.

Sincerely,

Production Department