

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

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>	☐ Yes	☐ No	☐ Log	Formation (Top), Depth and Datum	☐ Sample
Samples Sent to Geological Survey	☐ Yes	☐ No	Name	Top	Datum
Cores Taken	☐ Yes	☐ No			
Electric Log Run	☐ Yes	☐ No			
Geologist Report / Mud Logs	☐ Yes	☐ No			
List All E. Logs Run:					

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

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

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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other (Explain) _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water	Bbls.	Gas-Oil Ratio Gravity

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. ☐ Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom	

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record (Amount and Kind of Material Used)

TUBING RECORD:	Size:	Set At:	Packer At:	
----------------	-------	---------	------------	--

Form	ACO1 - Well Completion
Operator	TDI, Inc.
Well Name	JEROME 2
Doc ID	1669859

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	225	Common	160	3% cc, 2% gel

OPERATOR

Company: TDI, INC.
Address: 1310 BISON ROAD
HAYS, KANSAS 67601-9696

Contact Geologist: TOM DENNING
Contact Phone Nbr: 785-628-2593
Well Name: JEROME # 2
Location: W2 SW SE SE, SEC.7-T15S-R18W
API: 15-051-27,036-00-00
Pool: IN FIELD
State: KANSAS

Field: RUDER
Country: USA



Scale 1:240 Imperial

Well Name: JEROME # 2
Surface Location: W2 SW SE SE, SEC.7-T15S-R18W
Bottom Location:
API: 15-051-27,036-00-00
License Number: 4787
Spud Date: 9/28/2022 Time: 10:00 PM
Region: ELLIS COUNTY
Drilling Completed: 10/4/2022 Time: 3:19 PM
Surface Coordinates: 330' FSL & 1035' FEL
Bottom Hole Coordinates:
Ground Elevation: 2026.00ft
K.B. Elevation: 2036.00ft
Logged Interval: 2900.00ft To: 3730.00ft
Total Depth: 3730.00ft
Formation: LANSING-KANSAS CITY
Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

SURFACE CO-ORDINATES

Well Type: Vertical
Longitude: -99.3596055
Latitude: 38.7558597
N/S Co-ord: 330' FSL
E/W Co-ord: 1035' FEL

LOGGED BY

Company: SOLUTIONS CONSULTING, INC.
Address: 108 W 35TH
HAYS, KS 67601

Phone Nbr: (785) 639-1337
Logged By: GEOLOGIST

Name: HERB DEINES

CONTRACTOR

Contractor: SOUTHWIND DRILLING, INC.
Rig #: 8
Rig Type: MUD ROTARY
Spud Date: 9/28/2022
TD Date: 10/4/2022

Time: 10:00 PM
Time: 3:19 PM

ELEVATIONS

K.B. Elevation: 2036.00ft
K.B. to Ground: 10.00ft

Ground Elevation: 2026.00ft

NOTES

RECOMMENDATION TO PLUG AND ABANDON WELL BASED ON LOG ANALYSIS, NEGATIVE RESULTS OF TWO STRADDLE TESTS AND LOW STRUCTURE.

OPEN HOLE LOGGING BY MIDWEST WIRELINE: DUAL INDUCTION LOG, DUAL COMPENSATED POROSITY LOG, MICRORESISTIVITY LOG.

DRILL STEM TESTING BY TRILOBITE TESTING INC: TWO (2) STRADDLE TESTS

FORMATION TOPS COMPARISON

JEROME # 2
W2 SW SE SE
SEC.7-15S-18W
KB 2036'

JEROME # 1
SW NE NW SE
SEC. 7-15S-18W
KB 2038'

ANNA RUDER #1
SE NE NE
SEC.18-15S-18W
KB 2025'

	LOG TOPS		
Anhydrite-top	1204 +832	+818	
Anhydrite-base	1240 +796	+782	
Topeka	3008 - 972	- 970	- 965
Heebner Shale	3269-1233	-1230	-1229
Toronto	3288-1252	-1251	
LKC	3316-1280	-1276	-1275
BKC	3551-1515	-1520	-1513
Arbuckle	3632-1596	-1602	-1582
RTD	3730-1694	-1686	-1583

09-28-22 Spud 10:00 PM.

09-29-22 228', set 8 5/8" surface pipe to 225' w/ 160 sxs common 3%CC 2%gel, plug down 6:00 AM, slope 1/4 degree @228'. WOC 8 hours drill plug at 2:00 PM with button bit

09-30-22 426', drilling

10-01-22 1755', drilling,

10-02-22 2572', drilling, displaced 2765'-2804'

10-03-22 3170', drilling

10-04-22 3560', CFS 3626', RTD 3730'@3:19PM, CFS, short trip, TOWB, logs,

10-05-22 3730', DST straddle test # 1 3435'-3520, DST straddle test # 2 3248'-3324', LDDP, P&A

DST # 1

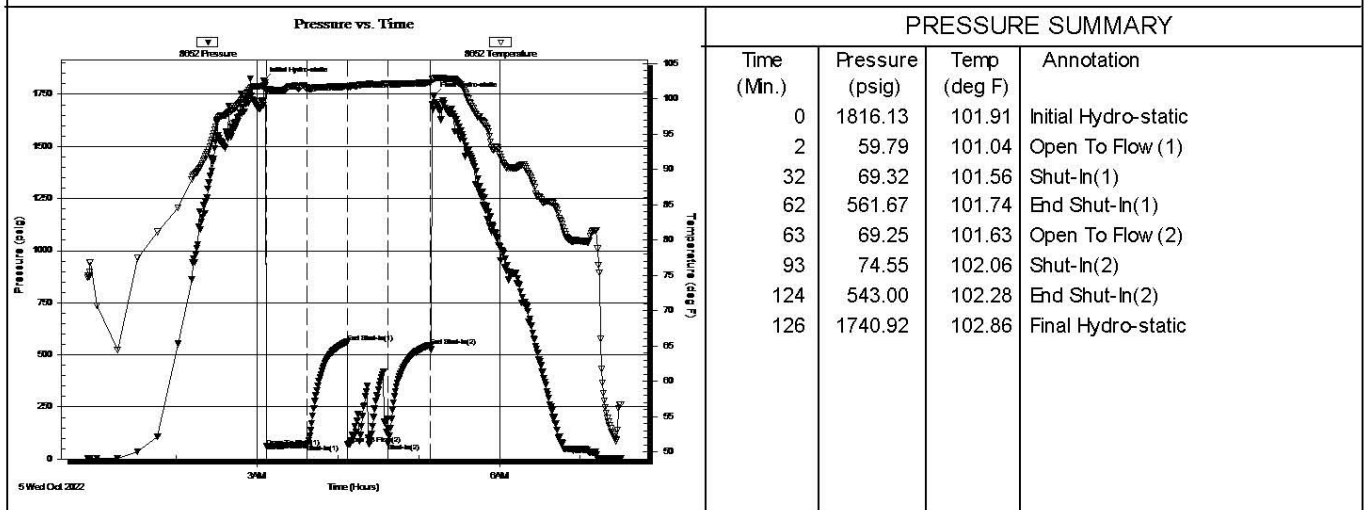
	DRILL STEM TEST REPORT	
	TDI Inc 1310 Bison Rd. Hays, KS 67601 ATTN: Herb Deines	7-15S-18W Ellis, KS Jerome #1 Job Ticket: 69839 DST#: 1 Test Start: 2022.10.05 @ 00:54:00

GENERAL INFORMATION:

Formation: LKC H-K Deviated: No Whipstock: ft (KB) Time Tool Opened: 03:06:45 Time Test Ended: 07:30:00 Interval: 3435.00 ft (KB) To 3520.00 ft (KB) (TVD) Total Depth: 3730.00 ft (KB) (TVD) Hole Diameter: 7.88 inches Hole Condition: Good	Test Type: Conventional Straddle (Initial) Tester: Dustin Day Unit No: 70 Reference Elevations: 2036.00 ft (KB) 2026.00 ft (CF) KB to GR/CF: 10.00 ft
--	--

Serial #: 8652 Outside Press@RunDepth: 74.55 psig @ 3506.00 ft (KB) Start Date: 2022.10.05 End Date: 2022.10.05 Start Time: 00:54:05 End Time: 07:29:59	Capacity: 8000.00 psig Last Calib.: 2022.10.05 Time On Btm: 2022.10.05 @ 03:05:00 Time Off Btm: 2022.10.05 @ 05:11:00
--	--

TEST COMMENT: IF-30- Built to 1 1/2"
 SI1-30- No return
 FF-30- No Blow
 SI2-30- No return



Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
25.00	M 100% m	0.35

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

Trilobite Testing, Inc

Ref. No: 69839

Printed: 2022.10.05 @ 09:32:28

DST # 2 TEST SUMMARY

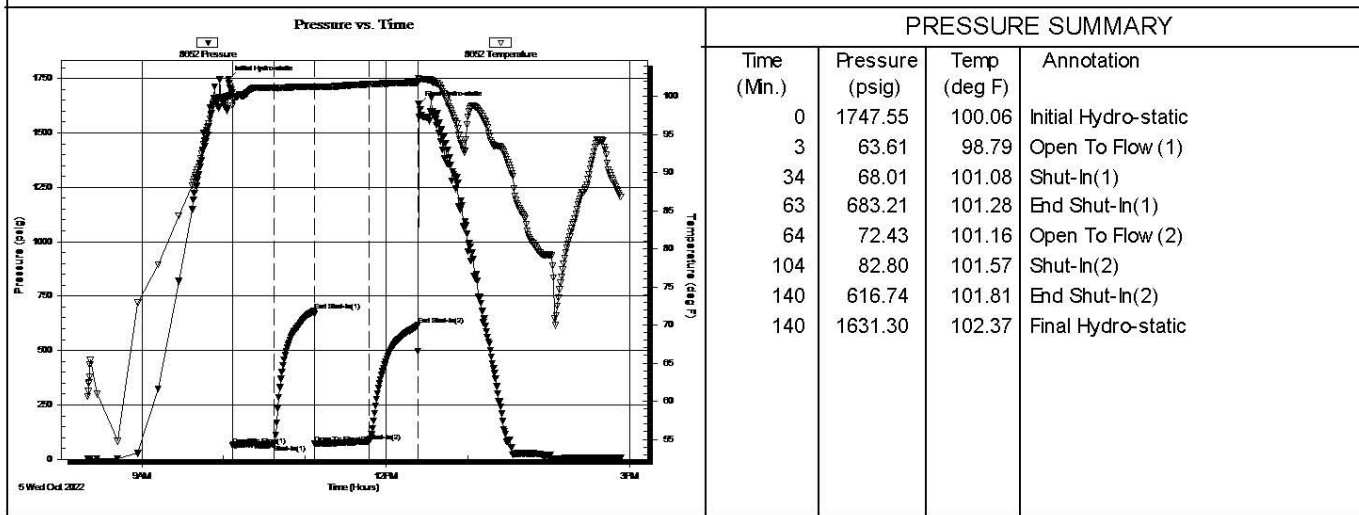
 TRILOBITE TESTING, INC	DRILL STEM TEST REPORT	
	TDI Inc	7-15S-18W Ellis, KS
	1310 Bison Rd. Hays, KS 67601	Jerome #1
	ATTN: Herb Deines	Job Ticket: 69840 DST#: 2 Test Start: 2022.10.05 @ 08:20:00

GENERAL INFORMATION:

Formation: **Toronto& LKC A**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:07:00
 Time Test Ended: 14:53:00
 Interval: **3248.00 ft (KB) To 3324.00 ft (KB) (TVD)**
 Total Depth: 3730.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition:
 Test Type: Conventional Straddle (Reset)
 Tester: Dustin Day
 Unit No: 70
 Reference Elevations: 2036.00 ft (KB)
 2026.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8652 **Outside**
 Press@RunDepth: 82.80 psig @ 3315.00 ft (KB)
 Start Date: 2022.10.05 End Date: 2022.10.05 Capacity: 8000.00 psig
 Start Time: 08:20:05 End Time: 14:52:59 Last Calib.: 2022.10.05
 Time On Btm: 2022.10.05 @ 10:04:00
 Time Off Btm: 2022.10.05 @ 12:24:00

TEST COMMENT: IF-30- Built to 1 3/4"
 SI1-30- No return
 FF-35- Built to 1 3/4"
 SI2-30- No return



Recovery

Length (ft)	Description	Volume (bbl)
00.00	CMCM 100% m	0.04

Gas Rates

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

60.00	GvwCm 10% gas 40% water 50% mud	0.84

* Recovery from multiple tests

Trilobite Testing, Inc

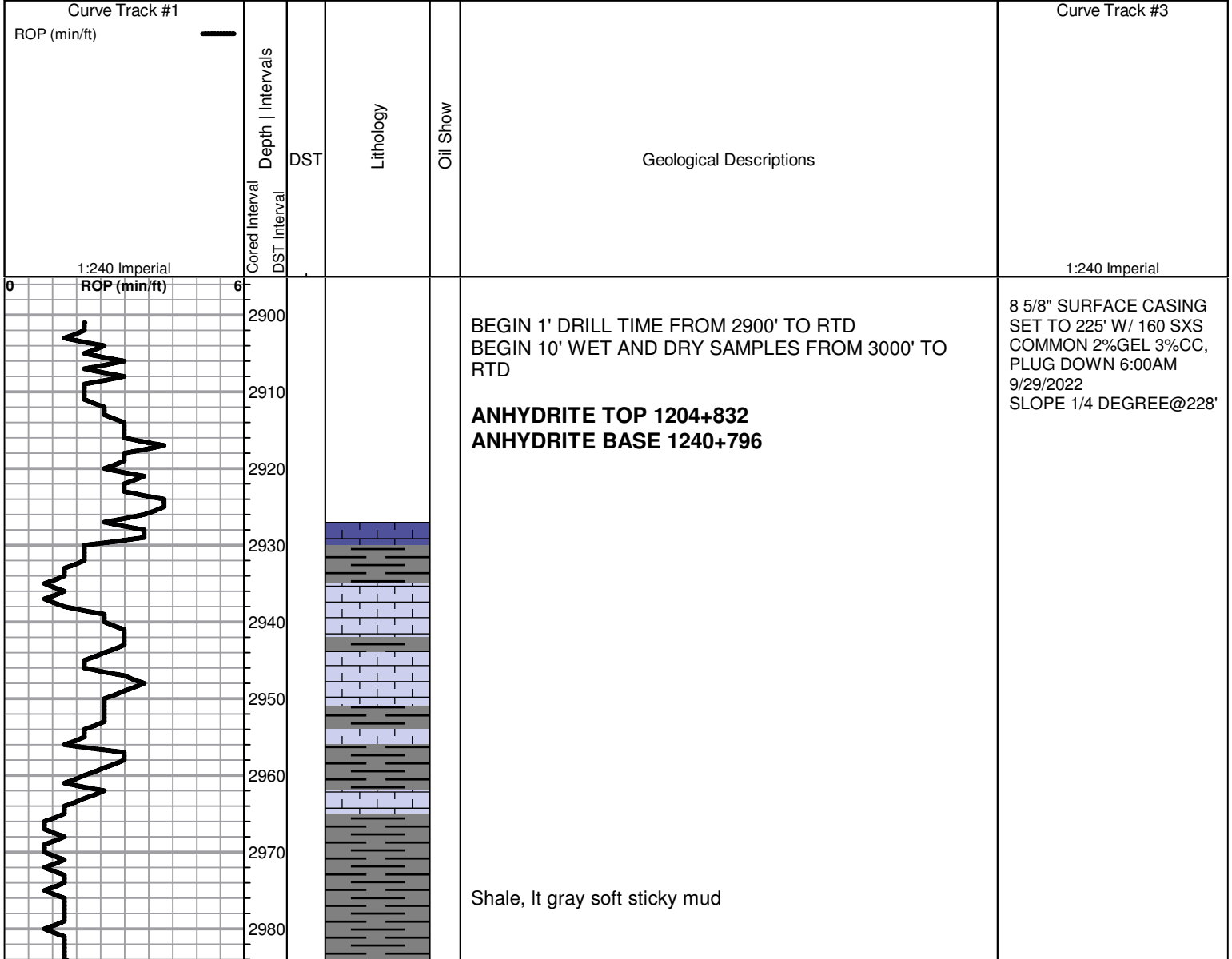
Ref. No: 69840

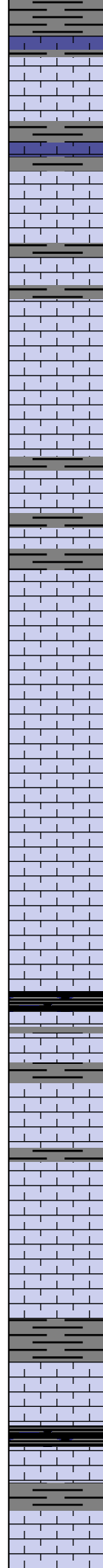
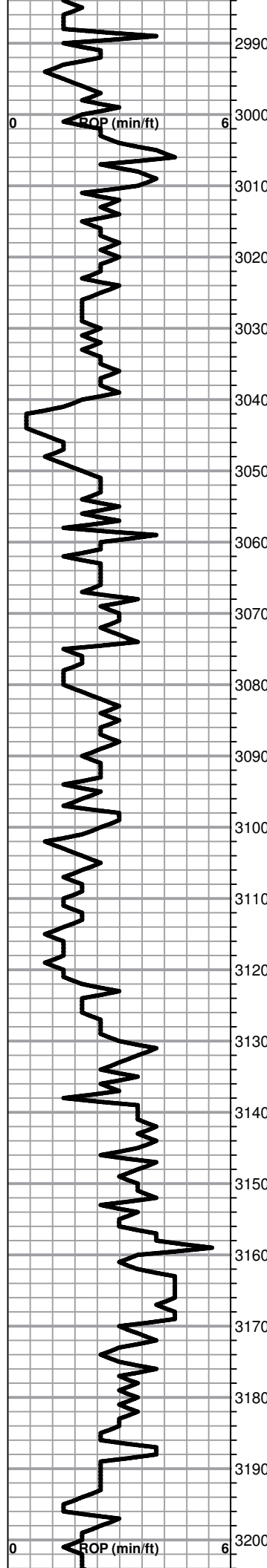
Printed: 2022.10.05 @ 15:20:50

ROCK TYPES

	Clystgy		Dolprim		Lscongl		Carbon Sh
	Clystcol		Lmst fw<7		shale, grn		shale, red
	Congl		Lmst fw7>		shale, gry		

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)





Lime, med-dark , fnxln, slightly fossiliferous

Lime, lt-dark brn, fnxln, slightly fossiliferous

TOPEKA 3008-972

Lime, crm-lt brn, fnxln, slight bedded chalk

Lime, crm-lt brn, fnxln

Lime, lt-med brn-med grayish brn, fnxln, slightly fossiliferous

Lime, lt-med brn-med grayish brn, fnxln

Lime, crm, granular with a chalky matrix, NS

Lime, med brn, fn-vfxln

Lime, lt brn-lt grayish brn, fn-vfxln

Lime, crm-lt brn, fnxln, bedded chalk.

Lime, crmlt brn, fn-vfxln, fusulinids

Lime, lt-med brn-med grayish brn, fn-vfxln, slight bed chalk

Lime, crm, fnxln, lot of chalk in chalk matrix, soft on crush

Shale, black carbonaceous, blocky

Shale, med gray, soft blocky

Lime, crm-lt brn, fnxln, chalky

Lime, lt-med brn, fn-micro xln

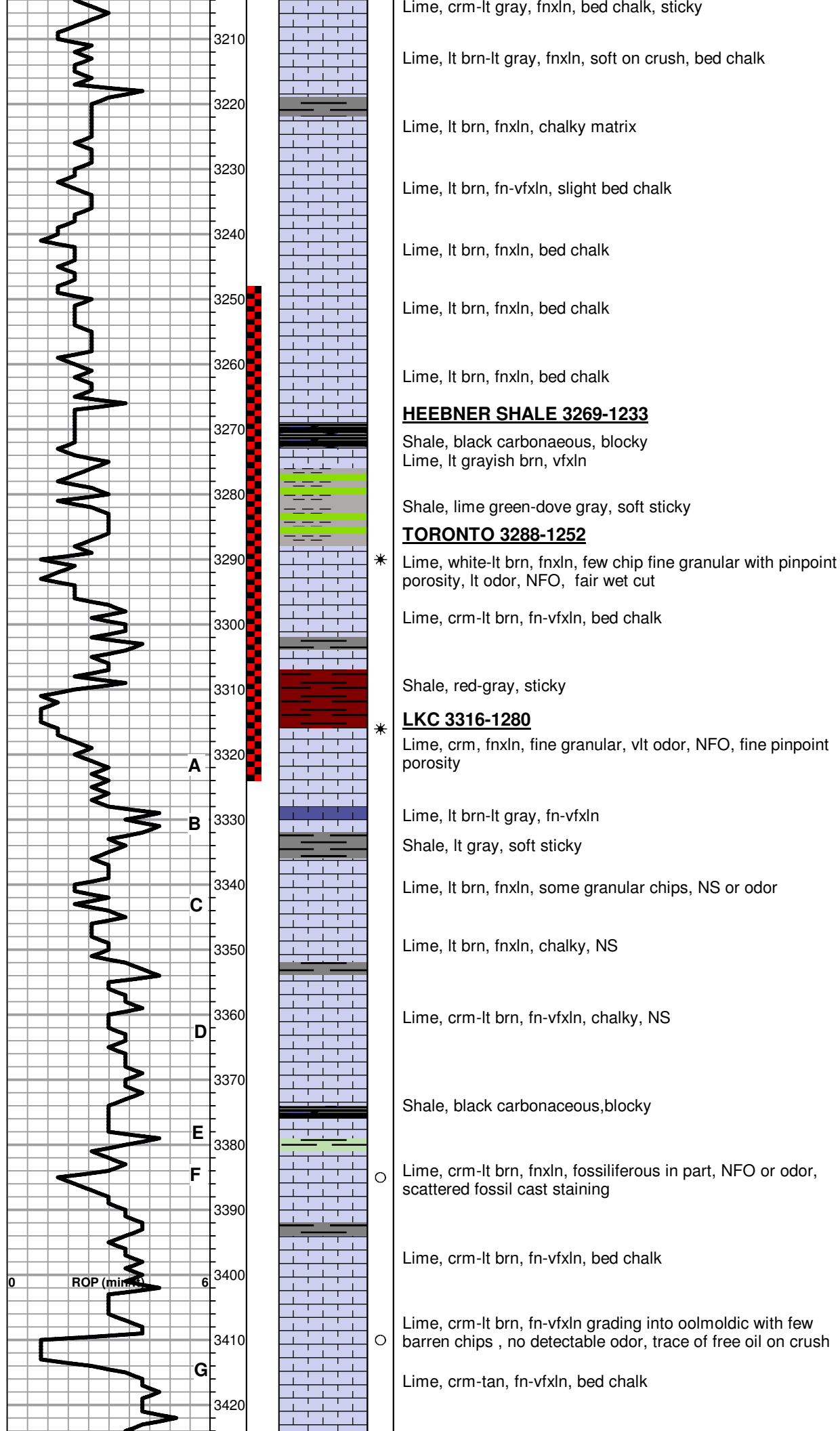
Lime, crm, fn-micro xln, bedded chalk

Lime, crm0lt brn-lt grayish brn, fn-vfxln

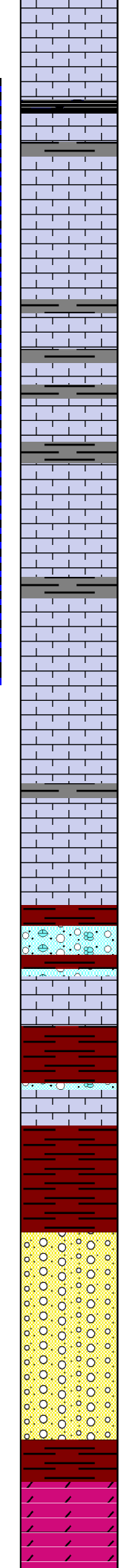
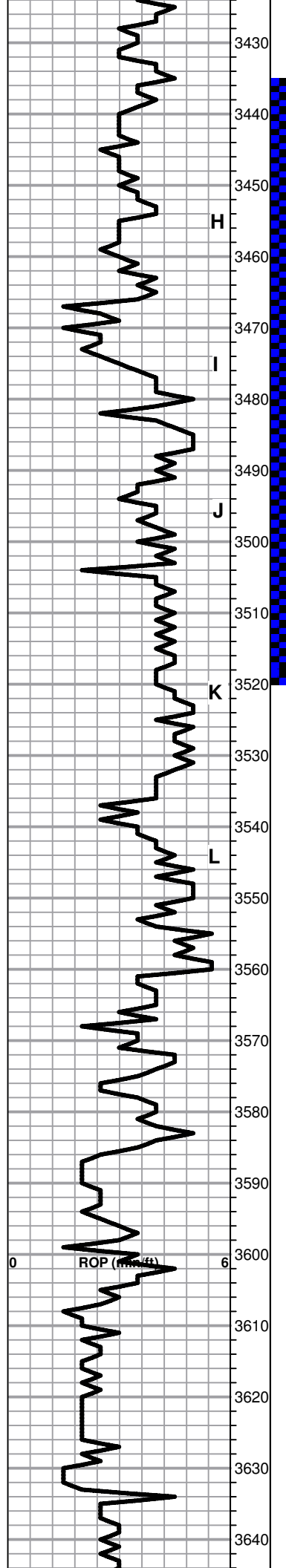
Lime, lt-med brn, fnxln

Shale, black carbonaceous, blocky
Lime, lt brn-lt gray, vfxln

Lime, med brn-med gray, fn-vfxln



STRADDLE TEST # 2
3248'-3324' SEE HEADER
FOR TEST SUMMARY



Lime, crm, fn-micro xln, bed chalk

Lime, crm, fnxln, chalky
Shale, black carbonaceous, blocky

Lime, crm-lt brn, fn-micro xln, bedded chalk, spotty stain in few chips NFO or odor

Lime, mostly crm, fn-micro xln
Chert, white, fresh, sharp

Lime, crm-lt brn-lt gray, fn-micro xln

Lime, crm-lt brn, micro xln, slight bed chalk, hard on crush

Lime, crm-lt brn, fn-micro xln, NFO or odor

Lime, crm-lt brn, fn-micro xln

Lime crm-lt brn, fn-micro xln, dead oil stain in poorly developed porosity zone

Lime, lt brn, micro xln, NS

Lime, crm-lt brn, fn-micro xln, bed chalk

Lime, crm-lt brn, fn-vfxln, hard bed chalk

Lime, crm-lt brn, fn-micro xln, bed chalk
BKC 3551-1515

Shale, red-reddish brn, soft blocky

Lime, lt gray, fn-micro xln, some clastic lime in mix.

Shale, lt red mud, lt red wash

Lime, clastic mix, crm-brn, fn-micro xln with red stain in part

Shale, red wash, soft mud

Clastic lime and red shale mix with red wash and cherts

Lime and shale mix, red wash

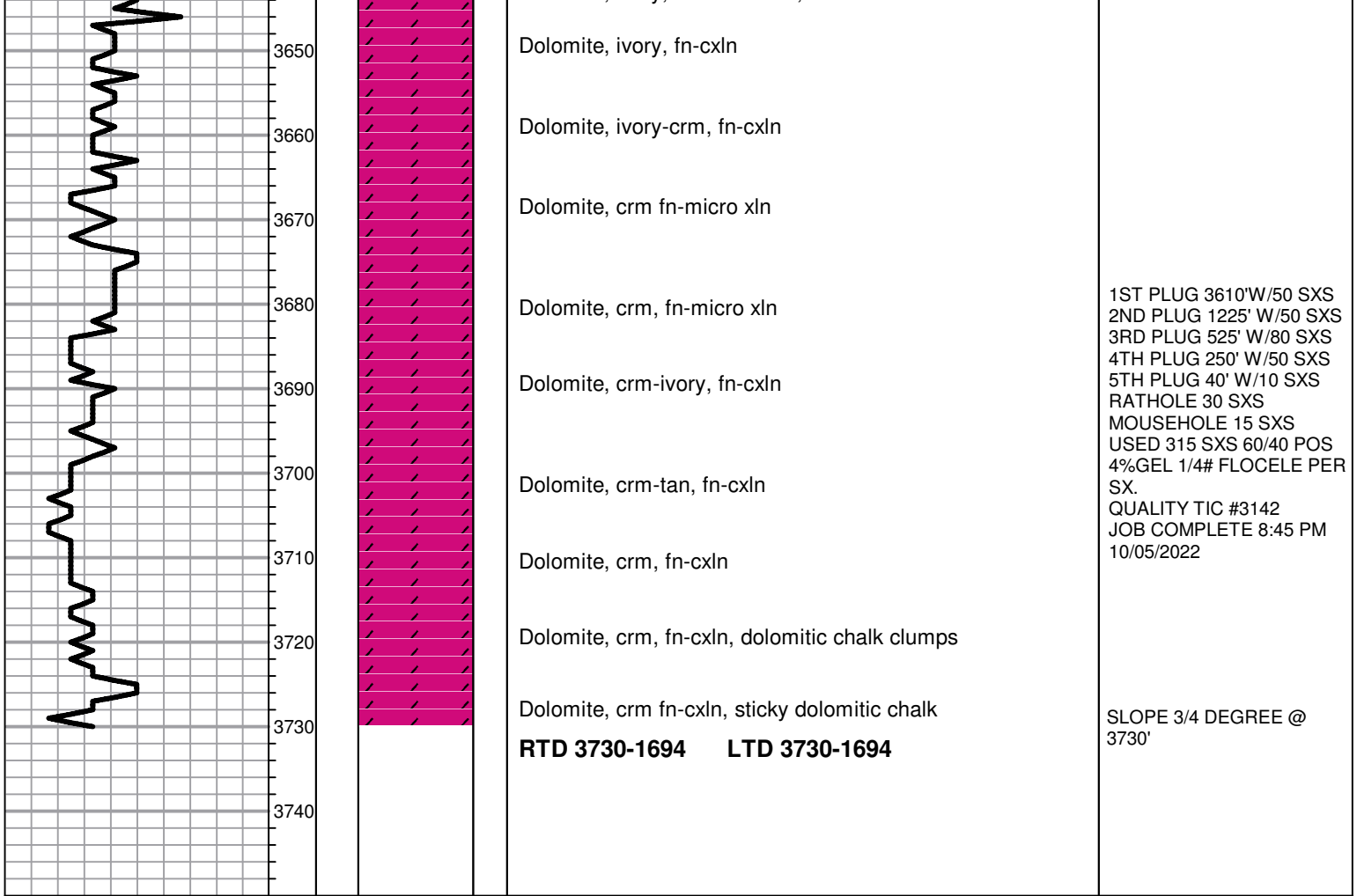
Shale, red soft mud-reddish brn blocky
ARBUCKLE 3632-1596

Dolomite, ivory, fine-coarse xln, rhombic, scattered to sat staining, lt odor

Dolomite, ivory, fn-coarse xln, lt sulfur odor

STRADDLE TEST # 1
3435'-3520' SEE HEADER
FOR TEST SUMMARY

CFS 3626'



◆ 815 Main Street Victoria, KS 67671 ◆ 24 Hour Phone (785) 639-7269
◆ Office Phone (785) 639-3949 ◆ Email: franksoilfield@yahoo.com

FOREMAN *Tom Williams*

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
9-29-22	4787	Jerome 2	7	15	18W	Ellis
CUSTOMER TDL Inc.						
MAILING ADDRESS 1310 Bison Rd						
CITY Hays	STATE KS	ZIP CODE 67601				

TRUCK #	DRIVER	TRUCK #	DRIVER
102	Tom W		
201	Jack T		

JOB TYPE	Surface	HOLE SIZE		HOLE DEPTH	228'	CASING SIZE & WEIGHT	8 7/8"
CASING DEPTH	228'	DRILL PIPE		TUBING		OTHER	
SLURRY WEIGHT	14.8	SLURRY VOL	1.4	WATER gal/sk		CEMENT LEFT in CASING	
DISPLACEMENT	1.312	DISPLACEMENT PSI		MIX PSI		RATE	

REMARKS: Safety meeting & set up on Southwind Drilling Circular Pad.
Mix 1603p surface blend & displaced 13.2 Bm. 1st shot in 5:45 am.

Lement d-d clovate

Thanks Tom & Jack

[illegible]

AUTHORIZATION 1/1 Jax [Signature] 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.

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

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

No. 3142

Date <u>10-5-22</u>	Sec. <u>7</u>	Twp. <u>15</u>	Range <u>18</u>	County <u>Ellis</u>	State <u>KS</u>	On Location	Finish <u>8:30pm</u>
Lease <u>JEROME</u>				Well No. <u>2</u>		Owner	
Contractor <u>Southwind</u>				To Quality Oilwell Cementing, Inc.		You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.	
Type Job <u>PTA</u>				Charge To <u>T.D.I., INC.</u>			
Hole Size <u>7 7/8</u>				T.D. <u>3730</u>			
Csg.				Depth		Street	
Tbg. Size				Depth		City State	
Tool				Depth		The above was done to satisfaction and supervision of owner agent or contractor.	
Cement Left in Csg.				Shoe Joint		Cement Amount Ordered <u>285.469/40 47.64 + # FLO</u>	
Meas Line				Displace			
EQUIPMENT				Common <u>170</u>			
Pumptrk <u>17</u>	No.	Cementor		Poz. Mix <u>115</u>			
		Helper	<u>BILL</u>				
Bulktrk	No.	Driver	<u>NICK</u>	Gel. <u>10</u>			
		Driver					
Bulktrk <u>21</u>	No.	Driver	<u>ROSS</u>	Calcium			
		Driver					
JOB SERVICES & REMARKS				Hulls			
Remarks:				Salt			
Rat Hole <u>30</u>				Flowseal <u>75#</u>			
Mouse Hole <u>15</u>				Kol-Seal			
Centralizers				Mud CLR 48			
Baskets				CFL-117 or CD110 CAF 38			
D/V or Port Collar				Sand			
<u>3610 - 50#</u>				Handling <u>295</u>			
<u>1225 - 50#</u>				Mileage			
<u>525 - 80#</u>				FLOAT EQUIPMENT			
<u>250 - 50#</u>				Guide Shoe			
<u>40 - 10#</u>				Centralizer			
				Baskets			
				AFU Inserts			
				Float Shoe			
				Latch Down			
				<u>1- 8" Wood Plug</u>			
				Pumptrk Charge <u>plug</u>			
				Mileage <u>15</u>			
Signature <u>Doug Roberts</u>				Thanks		Tax	
						Discount	
						Total Charge	



DRILL STEM TEST REPORT

Prepared For: **TDI Inc**

1310 Bison Rd.
Hays, KS 67601

ATTN: Herb Deines

Jerome #1

7-15S-18W Ellis,KS

Start Date: 2022.10.05 @ 00:54:00

End Date: 2022.10.05 @ 07:30:00

Job Ticket #: 69839 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2022.10.06 @ 14:02:47



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI Inc

1310 Bison Rd.
Hays, KS 67601

ATTN: Herb Deines

7-15S-18W Ellis,KS

Jerome #1

Job Ticket: 69839

DST#: 1

Test Start: 2022.10.05 @ 00:54:00

GENERAL INFORMATION:

Formation: **LKC H-K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:06:45

Time Test Ended: 07:30:00

Test Type: Conventional Straddle (Initial)

Tester: Dustin Day

Unit No: 70

Interval: 3435.00 ft (KB) To 3520.00 ft (KB) (TVD)

Total Depth: 3730.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 2036.00 ft (KB)

2026.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8652 Outside

Press@RunDepth: 74.55 psig @ 3506.00 ft (KB)

Start Date: 2022.10.05

End Date:

2022.10.05

Start Time: 00:54:05

End Time:

07:29:59

Capacity: 8000.00 psig

Last Calib.: 2022.10.05

Time On Btm: 2022.10.05 @ 03:05:00

Time Off Btm: 2022.10.05 @ 05:11:00

TEST COMMENT: IF-30- Built to 1 1/2"

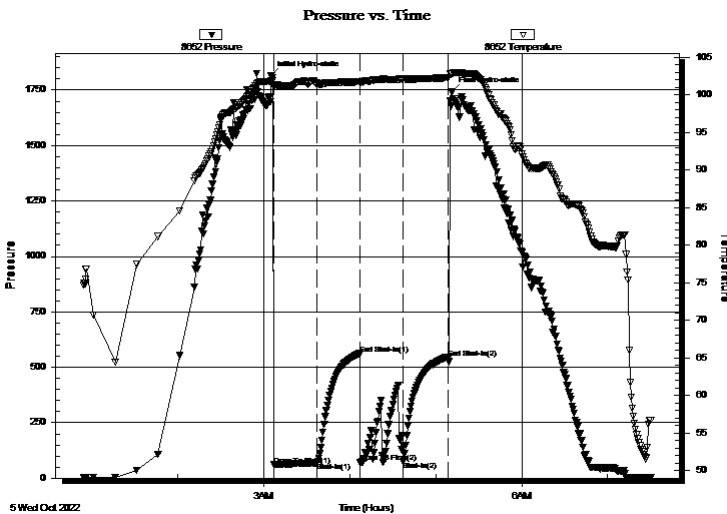
SI1-30- No return

FF-30- No Blow

SI2-30- No return

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1816.13	101.91	Initial Hydro-static
2	59.79	101.04	Open To Flow (1)
32	69.32	101.56	Shut-In(1)
62	561.67	101.74	End Shut-In(1)
63	69.25	101.63	Open To Flow (2)
93	74.55	102.06	Shut-In(2)
124	543.00	102.28	End Shut-In(2)
126	1740.92	102.86	Final Hydro-static



Recovery

Length (ft)	Description	Volume (bbl)
25.00	mud 100%	0.35

Gas Rates

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



TDI Inc

ATTN: Herb Deines

Jerome #1

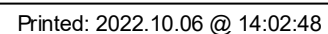
DST#: 1

Test Start: 2022.10.05 @ 00:54:00

KB to GR/CF: 10.00 ft

Time Off Btm:

SI2-30- No return





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TDI Inc

1310 Bison Rd.
Hays, KS 67601

ATTN: Herb Deines

7-15S-18W Ellis,KS

Jerome #1

Job Ticket: 69839

DST#: 1

Test Start: 2022.10.05 @ 00:54:00

GENERAL INFORMATION:

Formation: **LKC H-K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:06:45

Time Test Ended: 07:30:00

Test Type: Conventional Straddle (Initial)

Tester: Dustin Day

Unit No: 70

Interval: 3435.00 ft (KB) To 3520.00 ft (KB) (TVD)

Total Depth: 3730.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 2036.00 ft (KB)

2026.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8167 Below (Straddle)

Press@RunDepth: psig @ 3534.00 ft (KB)

Start Date: 2022.10.05

End Date:

2022.10.05

Start Time: 00:54:05

End Time:

07:30:14

Capacity: 8000.00 psig

Last Calib.: 2022.10.05

Time On Btm:

Time Off Btm:

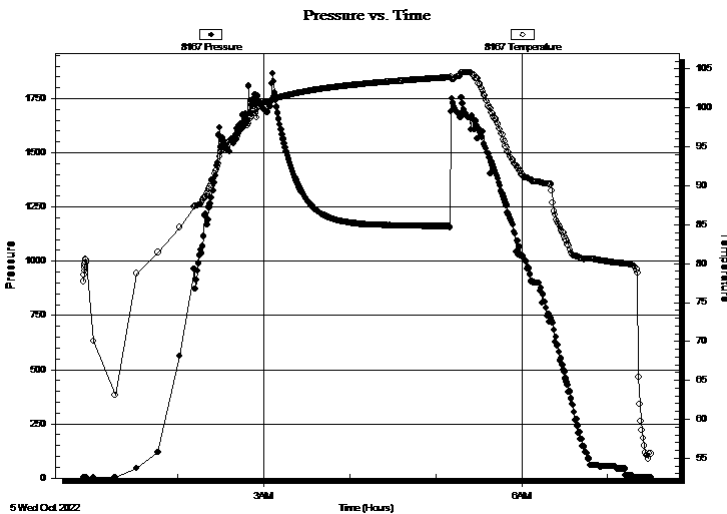
TEST COMMENT: IF-30- Built to 1 1/2"

SI1-30- No return

FF-30- No Blow

SI2-30- No return

PRESSURE SUMMARY



Time
(Min.)

Pressure
(psig)

Temp
(deg F)

Annotation

Recovery

Length (ft)	Description	Volume (bbl)
25.00	mud 100%	0.35

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI Inc

1310 Bison Rd.
Hays, KS 67601

ATTN: Herb Deines

7-15S-18W Ellis,KS

Jerome #1

Job Ticket: 69839

DST#: 1

Test Start: 2022.10.05 @ 00:54:00

Tool Information

Drill Pipe:	Length:	3430.00 ft	Diameter:	3.80 inches	Volume:	48.11 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:	20000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	48000.00 lb
					Total Volume:	48.11 bbl	Tool Chased	ft
Drill Pipe Above KB:	21.00 ft						String Weight: Initial	42000.00 lb
Depth to Top Packer:	3435.00 ft						Final	42000.00 lb
Depth to Bottom Packer:	3517.00 ft							
Interval between Packers:	82.00 ft							
Tool Length:	321.00 ft							
Number of Packers:	3		Diameter:	6.75 inches				
Tool Comments:								

Tool Description

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

Change Over Sub	1.00			3410.00		
shut In Tool	5.00			3415.00		
hydraulic tool	5.00			3420.00		
EM Tool	3.00			3423.00		
Safety Joint	3.00			3426.00		
Packer	5.00			3431.00	26.00	Bottom Of Top Packer
Packer	4.00			3435.00		
Stubb	1.00			3436.00		
perforations	4.00			3440.00		
change Over Sub	1.00			3441.00		
drill Pipe	64.00			3505.00		
change Over Sub	1.00			3506.00		
Recorder	0.00	6625	Inside	3506.00		
Recorder	0.00	8652	Outside	3506.00		
perforations	10.00			3516.00		
Blank Off Sub	1.00			3517.00		
Packer	3.00			3520.00	82.00	Tool Interval
Packer	1.00			3521.00		
stubb	1.00			3522.00		
perforations	11.00			3533.00		
Change Over Sub	1.00			3534.00		
Recorder	0.00	8167	Below	3534.00		
Drill Pipe	191.00			3725.00		
change Over Sub	1.00			3726.00		
bullnose	4.00			3730.00	213.00	Bottom Packers & Anchor

Total Tool Length: 321.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc

7-15S-18W Ellis,KS

1310 Bison Rd.
Hays, KS 67601

Jerome #1

Job Ticket: 69839

DST#: 1

ATTN: Herb Deines

Test Start: 2022.10.05 @ 00:54:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 5.80 in³

Resistivity: ohm.m

Salinity: 4600.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	mud 100%	0.351

Total Length: 25.00 ft

Total Volume: 0.351 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

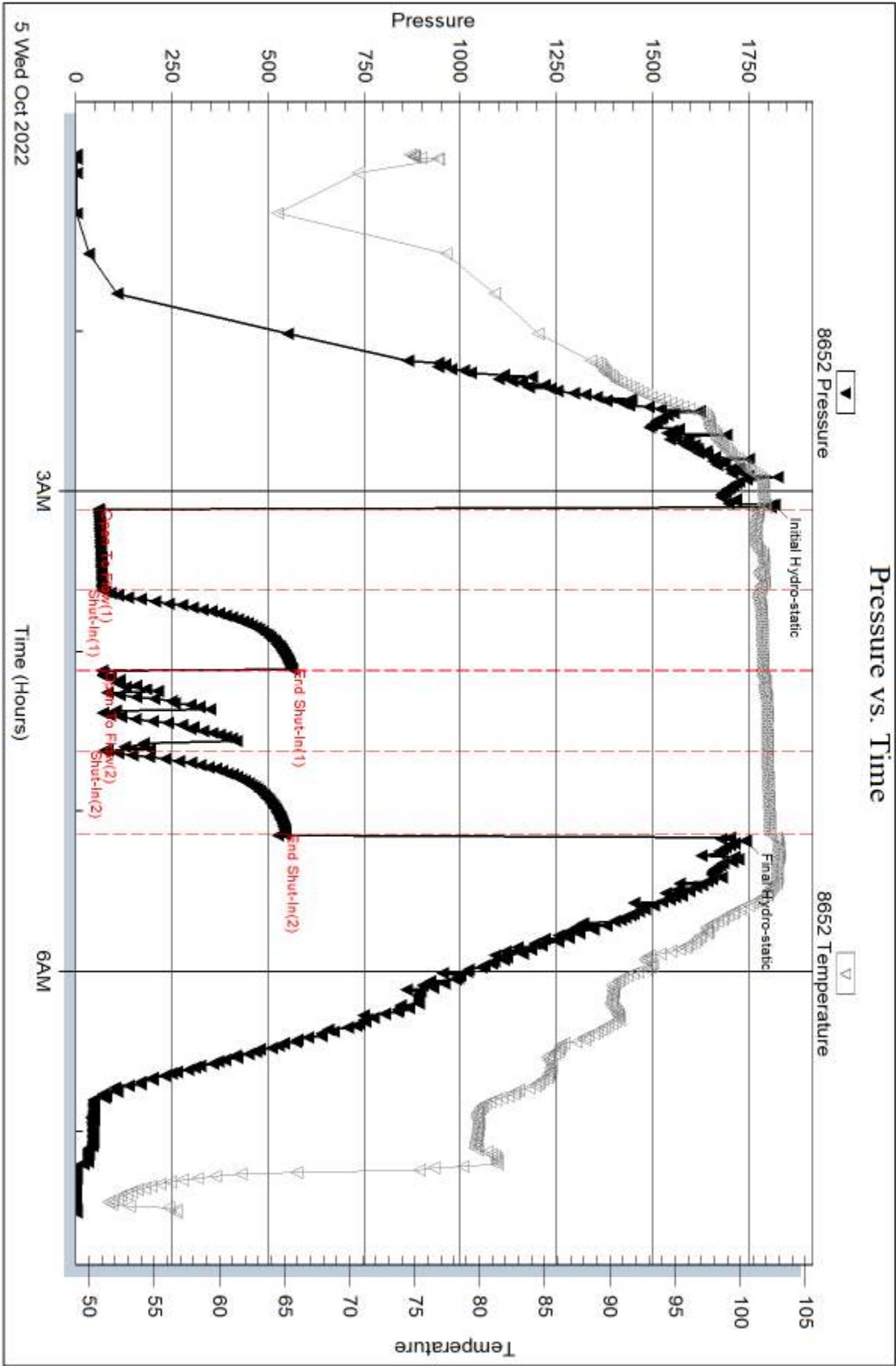
Recovery Comments: 3# LCM

Serial #: 8652

Outside TDI Inc

Jerome #1

DST Test Number: 1



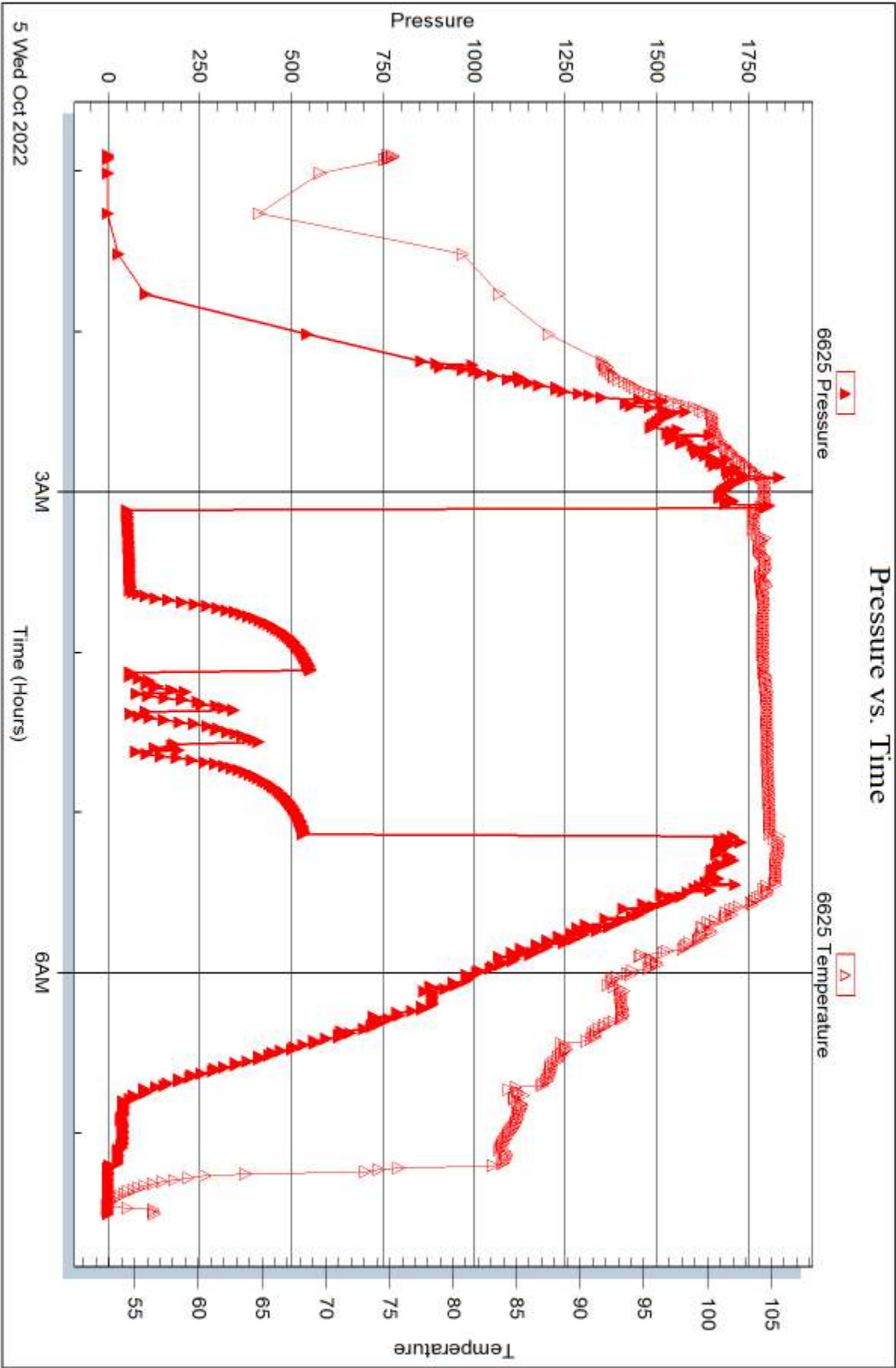
Serial #: 6625

Inside

TDI Inc

Jerome #1

DST Test Number: 1

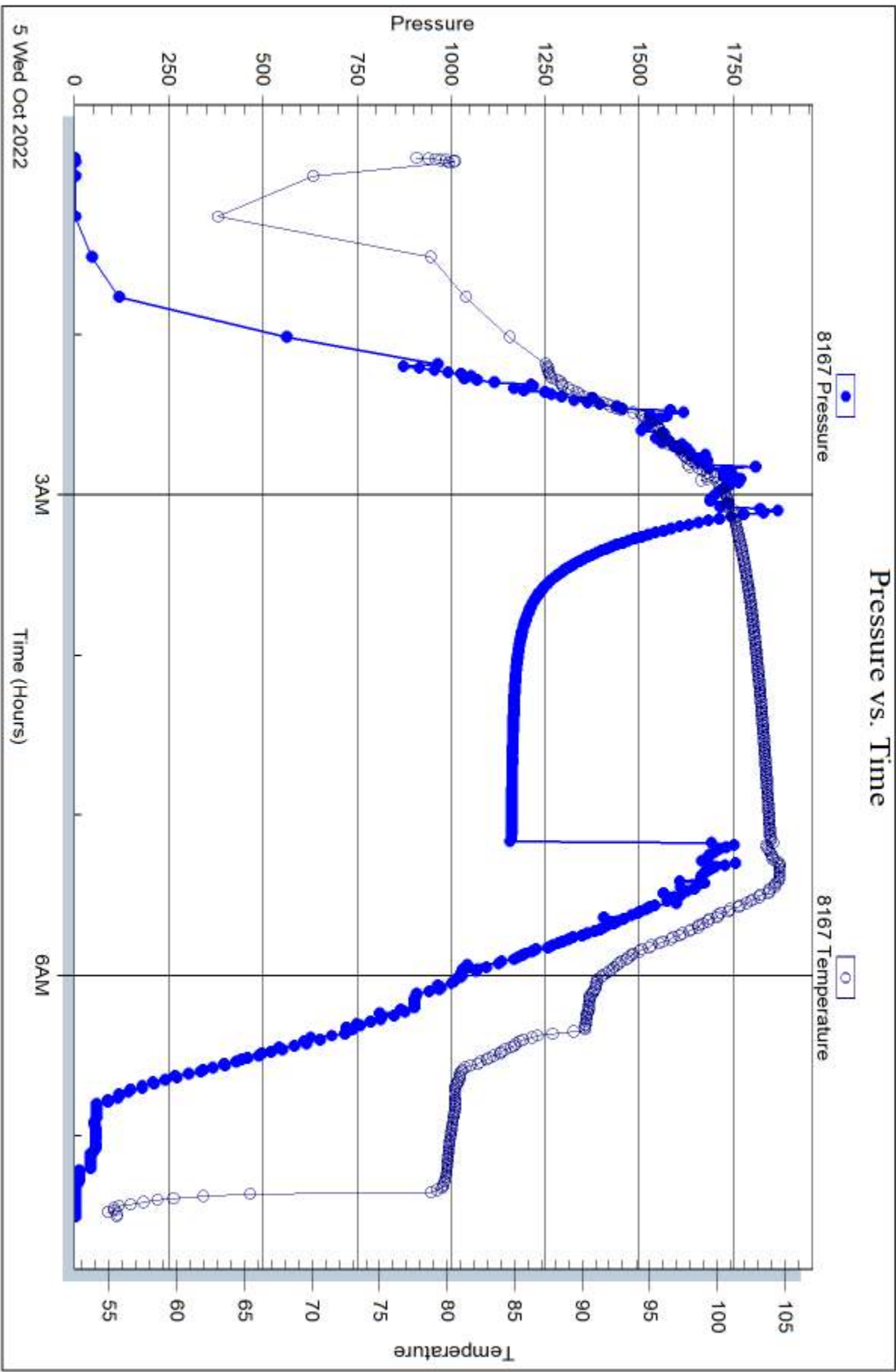


Serial #: 8167

Below (Straddle)

Jerome #1

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **TDI Inc**

1310 Bison Rd.
Hays, KS 67601

ATTN: Herb Deines

Jerome #1

7-15S-18W Ellis,KS

Start Date: 2022.10.05 @ 08:20:00

End Date: 2022.10.05 @ 14:53:00

Job Ticket #: 69840 DST #: 2

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

Printed: 2022.10.06 @ 14:02:21



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TDI Inc

1310 Bison Rd.
Hays, KS 67601

ATTN: Herb Deines

7-15S-18W Ellis,KS

Jerome #1

Job Ticket: 69840

DST#: 2

Test Start: 2022.10.05 @ 08:20:00

GENERAL INFORMATION:

Formation: **Toronto& LKC A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:07:00

Time Test Ended: 14:53:00

Test Type: Conventional Straddle (Reset)

Tester: Dustin Day

Unit No: 70

Interval: 3248.00 ft (KB) To 3324.00 ft (KB) (TVD)

Total Depth: 3730.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 2036.00 ft (KB)

2026.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8652 Outside

Press@RunDepth: 82.80 psig @ 3315.00 ft (KB)

Start Date: 2022.10.05

End Date:

2022.10.05

Start Time: 08:20:05

End Time:

14:52:59

Capacity: 8000.00 psig

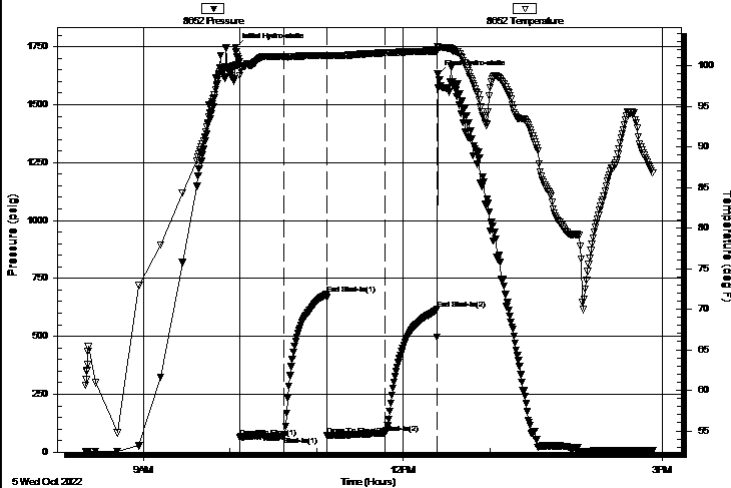
Last Calib.: 2022.10.05

Time On Btm: 2022.10.05 @ 10:04:00

Time Off Btm: 2022.10.05 @ 12:24:00

TEST COMMENT: IF-30- Built to 1 3/4"
SI1-30- No return
FF-35- Built to 1 3/4"
SI2-30- No return

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1747.55	100.06	Initial Hydro-static
3	63.61	98.79	Open To Flow (1)
34	68.01	101.08	Shut-In(1)
63	683.21	101.28	End Shut-In(1)
64	72.43	101.16	Open To Flow (2)
104	82.80	101.57	Shut-In(2)
140	616.74	101.81	End Shut-In(2)
140	1631.30	102.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GWCM 10%gas 40% water 50% mud	0.84

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI Inc

1310 Bison Rd.
Hays, KS 67601

ATTN: Herb Deines

7-15S-18W Ellis,KS

Jerome #1

Job Ticket: 69840

DST#: 2

Test Start: 2022.10.05 @ 08:20:00

GENERAL INFORMATION:

Formation: **Toronto& LKC A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:07:00

Time Test Ended: 14:53:00

Test Type: Conventional Straddle (Reset)

Tester: Dustin Day

Unit No: 70

Interval: 3248.00 ft (KB) To 3324.00 ft (KB) (TVD)

Total Depth: 3730.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 2036.00 ft (KB)

2026.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6625 Inside

Press@RunDepth: psig @ 3315.00 ft (KB)

Start Date: 2022.10.05

End Date:

2022.10.05

Start Time: 08:20:05

End Time:

14:52:59

Capacity: 8000.00 psig

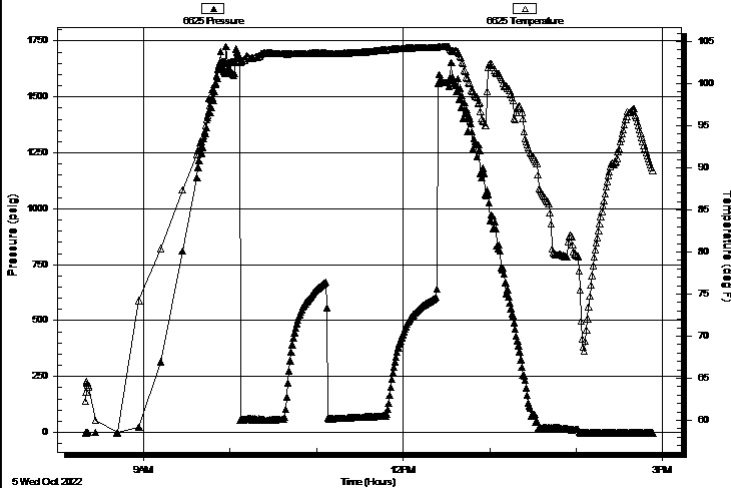
Last Calib.: 2022.10.05

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-30- Built to 1 3/4"
SI1-30- No return
FF-35- Built to 1 3/4"
SI2-30- No return

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GWCM 10%gas 40% water 50% mud	0.84

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI Inc

1310 Bison Rd.
Hays, KS 67601

ATTN: Herb Deines

7-15S-18W Ellis,KS

Jerome #1

Job Ticket: 69840

DST#: 2

Test Start: 2022.10.05 @ 08:20:00

GENERAL INFORMATION:

Formation: **Toronto& LKC A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:07:00

Time Test Ended: 14:53:00

Test Type: Conventional Straddle (Reset)

Tester: Dustin Day

Unit No: 70

Interval: 3248.00 ft (KB) To 3324.00 ft (KB) (TVD)

Total Depth: 3730.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 2036.00 ft (KB)

2026.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8167 Below (Straddle)

Press@RunDepth: psig @ 3345.00 ft (KB)

Start Date: 2022.10.05

End Date:

2022.10.05

Start Time: 08:20:05

End Time:

14:53:14

Capacity: 8000.00 psig

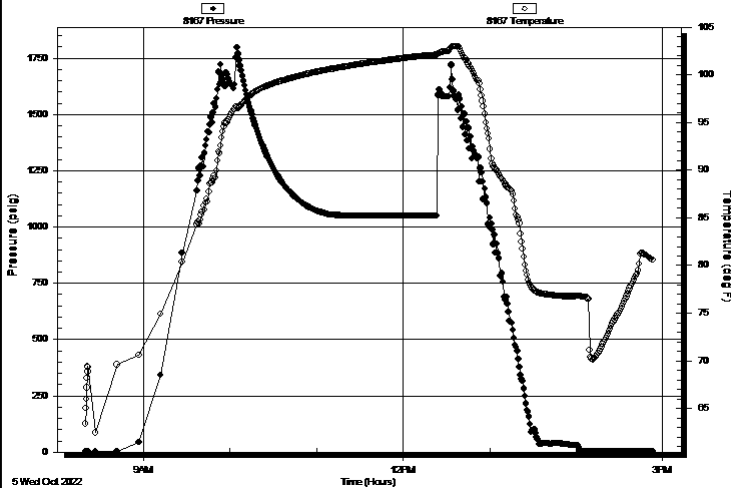
Last Calib.: 2022.10.05

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-30- Built to 1 3/4"
SI1-30- No return
FF-35- Built to 1 3/4"
SI2-30- No return

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GWCM 10%gas 40% water 50% mud	0.84

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI Inc

1310 Bison Rd.
Hays, KS 67601

ATTN: Herb Deines

7-15S-18W Ellis,KS

Jerome #1

Job Ticket: 69840

DST#: 2

Test Start: 2022.10.05 @ 08:20:00

Tool Information

Drill Pipe:	Length:	3242.00 ft	Diameter:	3.80 inches	Volume:	45.48 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:	20000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:	48000.00 lb
					Total Volume:	45.48 bbl	Tool Chased	ft
Drill Pipe Above KB:	20.00 ft							
Depth to Top Packer:	3248.00 ft							
Depth to Bottom Packer:	3321.00 ft							
Interval between Packers:	73.00 ft							
Tool Length:	510.00 ft							
Number of Packers:	3		Diameter:	6.75 inches				
Tool Comments:								

Tool Description

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

Change Over Sub	1.00			3223.00		
shut In Tool	5.00			3228.00		
hydraulic tool	5.00			3233.00		
EM Tool	3.00			3236.00		
Safety Joint	3.00			3239.00		
Packer	5.00			3244.00	26.00	Bottom Of Top Packer
Packer	4.00			3248.00		
Stubb	1.00			3249.00		
perforations	1.00			3250.00		
change Over Sub	1.00			3251.00		
drill Pipe	63.00			3314.00		
change Over Sub	1.00			3315.00		
Recorder	0.00	6625	Inside	3315.00		
Recorder	0.00	8652	Outside	3315.00		
perforations	5.00			3320.00		
Blank Off Sub	1.00			3321.00		
Packer	3.00			3324.00	73.00	Tool Interval
Packer	1.00			3325.00		
stubb	1.00			3326.00		
perforations	18.00			3344.00		
Change Over Sub	1.00			3345.00		
Recorder	0.00	8167	Below	3345.00		
Drill Pipe	382.00			3727.00		
change Over Sub	1.00			3728.00		
bullnose	4.00			3732.00	411.00	Bottom Packers & Anchor

Total Tool Length: 510.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc

7-15S-18W Ellis,KS

1310 Bison Rd.
Hays, KS 67601

Jerome #1

Job Ticket: 69840

DST#: 2

ATTN: Herb Deines

Test Start: 2022.10.05 @ 08:20:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 5.80 in³

Resistivity: ohm.m

Salinity: 4600.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

deg API

Water Salinity: 32000 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GWCM 10%gas 40% w ater 50% mud	0.842

Total Length: 60.00 ft

Total Volume: 0.842 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

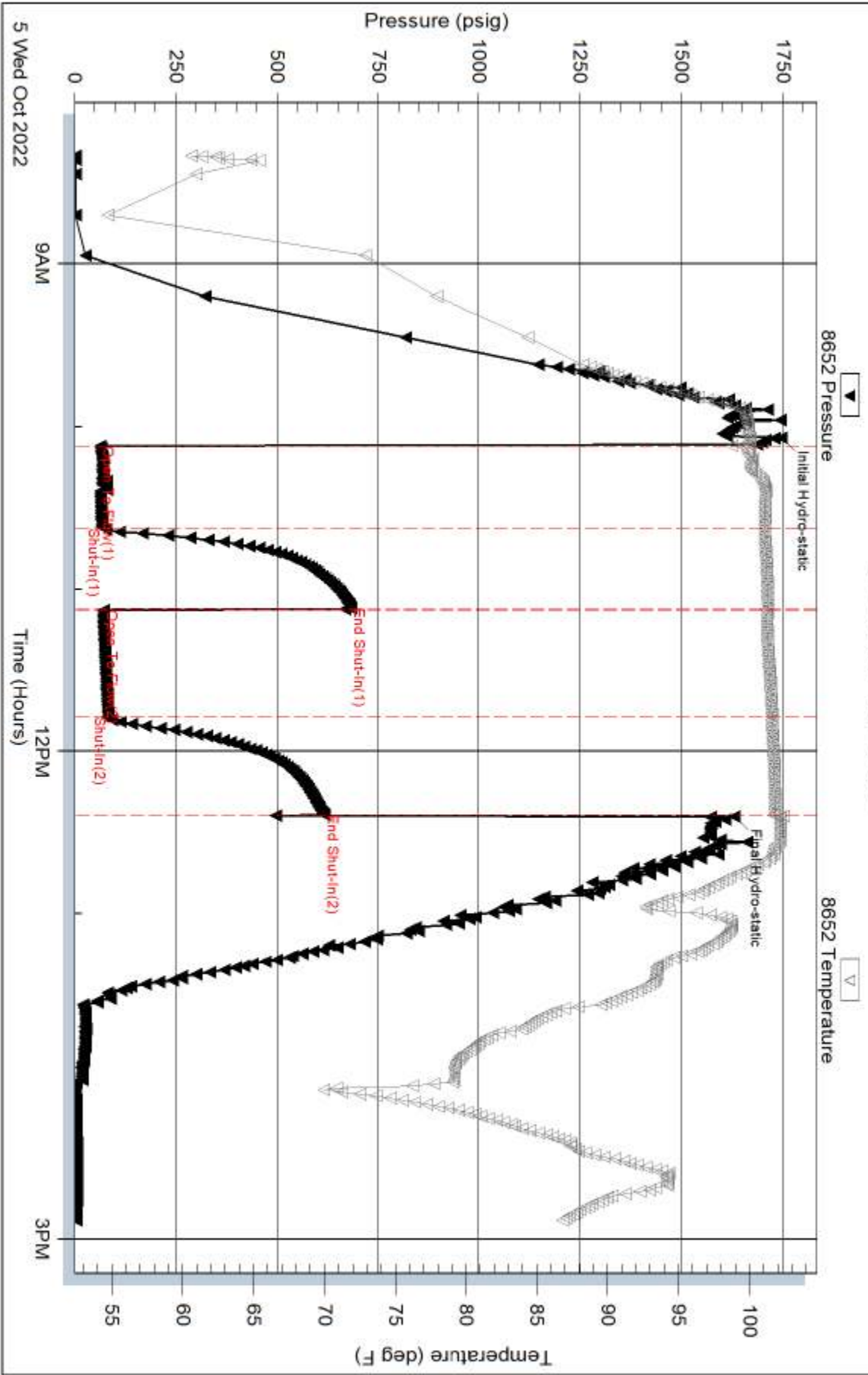
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



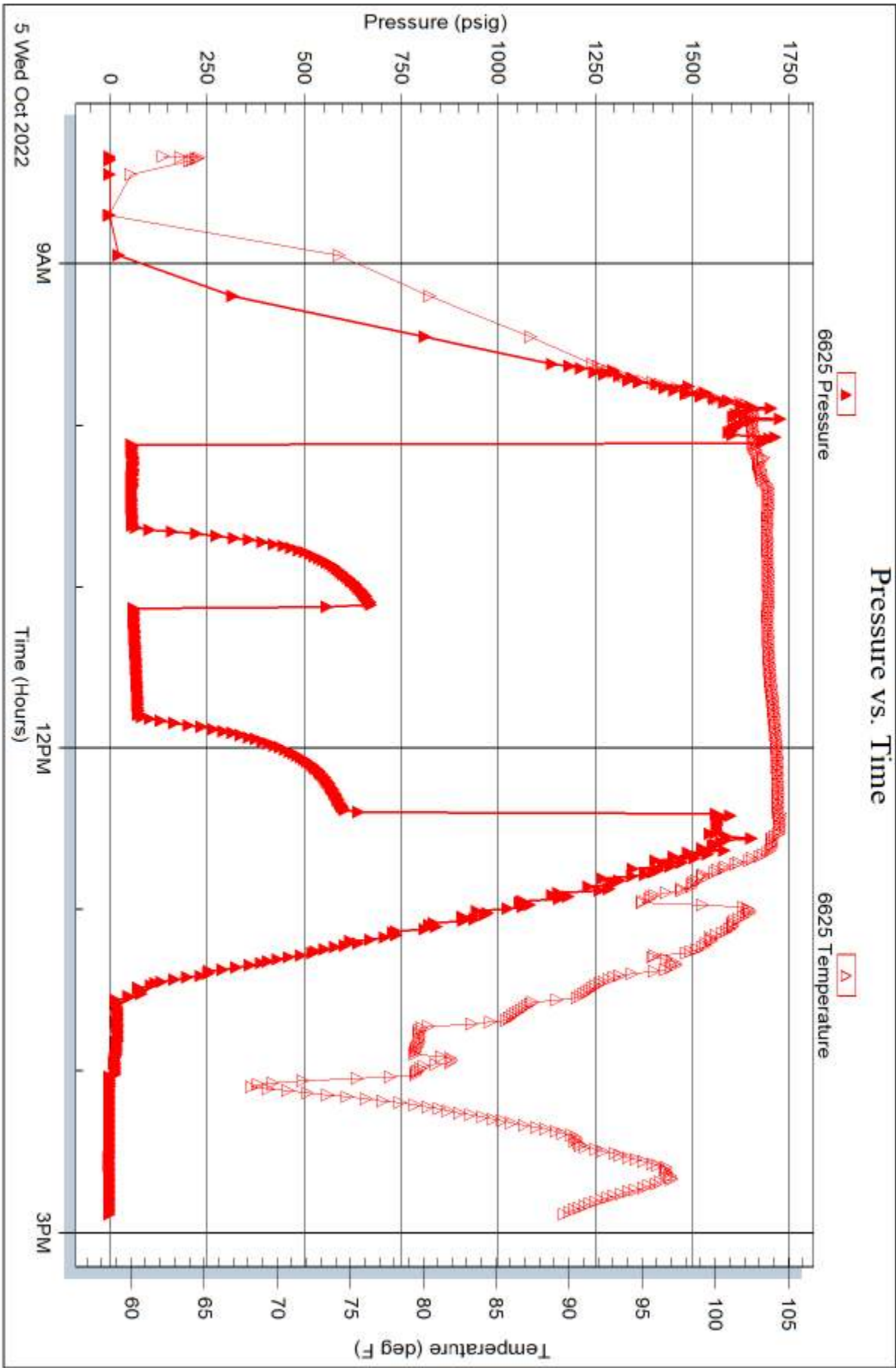
Serial #: 6625

Inside

TDI Inc

Jerome #1

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 69840

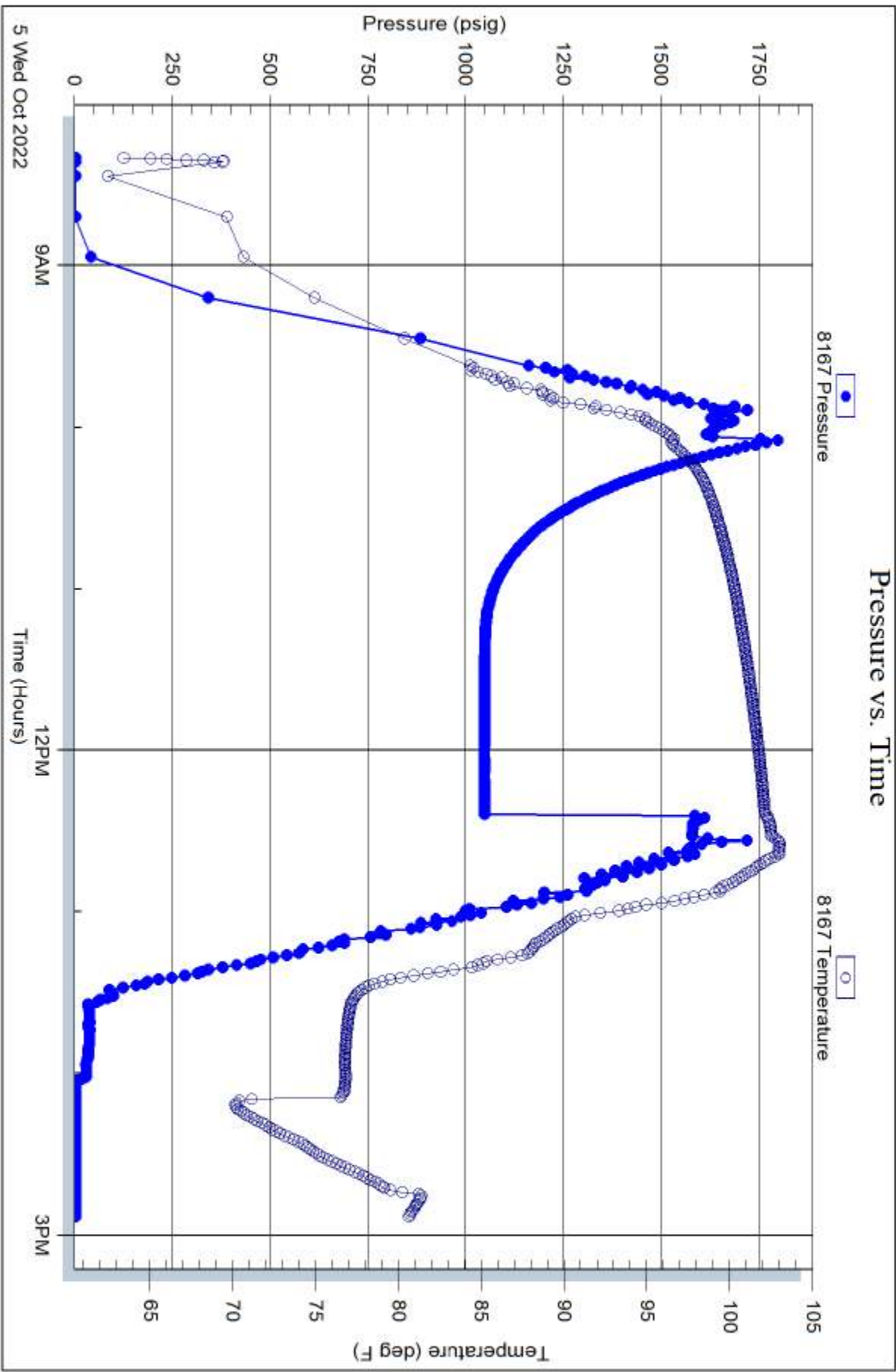
Printed: 2022.10.06 @ 14:02:22

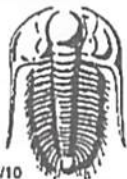
Serial #: 8167

Below (Straddle)

Jerome #1

DST Test Number: 2





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **69839**

Well Name & No. Jerome #2 Test No. 1 Date 10/5/22
 Company TDI Inc Elevation 2036 KB 2026 GL
 Address 1310 Bison RD Hays, KS 67601
 Co. Rep / Geo. Herb Deines Rig Southwind Rig #8
 Location: Sec. 7 Twp 15S Rge. 18W Co. Ellis State KS

Interval Tested 3435-3520 Zone Tested LKC H-K
 Anchor Length 85 Drill Pipe Run 3430 Mud Wt. 9.2
 Top Packer Depth 3430 Drill Collars Run 0 Vis 58
 Bottom Packer Depth 3435 SP-3520 Wt. Pipe Run 0 WL 5.8
 Total Depth 3730 Chlorides 4000 ppm System LCM 3#

Blow Description 1F-Built to 1 1/2"

S12- No return

FF- No blow

S12- No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>25</u>	<u>Mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 25' BHT 102 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1816
 (B) First Initial Flow 60
 (C) First Final Flow 69
 (D) Initial Shut-In 562
 (E) Second Initial Flow 69
 (F) Second Final Flow 75
 (G) Final Shut-In 543
 (H) Final Hydrostatic 1741

☒ Test 1800
☐ Jars _____
☒ Safety Joint _____
☒ Circ Sub N/A
☐ Hourly Standby _____
☒ Mileage 26 39
☐ Sampler _____
☒ Straddle 600
☐ Shale Packer _____
☐ Extra Packer _____
☐ Extra Recorder _____
☐ Day Standby _____
☐ Accessibility _____
 Sub Total 2439

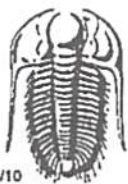
T-On Location 23:45
 T-Started 00:54
 T-Open 03:07
 T-Pulled 05:07
 T-Out 07:30
 Comments _____
☒ EM Tool -350
☐ Ruined Shale Packer _____
☐ Ruined Packer _____
☐ Extra Copies _____
 Sub Total -350
 Total 2089
 MP/DST Disc't _____

Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30

Approved By _____

Our Representative Dust Ds

TriLOBITE TESTING Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRIBOLITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **69840**

Well Name & No. Jerome #2 Test No. 2 Date 10/5/22
 Company TDI Inc Elevation 2034 KB 2024 GL
 Address 1310 Bison Rd Hays, KS 67601
 Co. Rep / Geo. Herb Deines Rig Southwind Rig #8
 Location: Sec. 7 Twp 15S Rge. 18W Co. Ellis State KS

Interval Tested 3248-3324 Zone Tested Toronto + LKC A
 Anchor Length 76' Drill Pipe Run 3242 Mud Wt. 9.3
 Top Packer Depth 3245 Drill Collars Run 0 Vls 55
 Bottom Packer Depth 3250 SP-3324 Wt. Pipe Run 0 WL 8-0
 Total Depth 3730 Chlorides 5000 ppm System LCM 2#

Blow Description IF Built to 134"

S12- No return

FF- Built to 134"

S12- No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>9WCM</u>	<u>10</u>	<u>40</u>	<u>50</u>	<u>50</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 60 BHT 102 Gravity 1800 API RW 20 @ 80 °F Chlorides 32000 ppm

(A) Initial Hydrostatic <u>1748</u>	☒ Test <u>1800</u>	T-On Location <u>Stayed on location</u>
(B) First Initial Flow <u>64</u>	☒ Jars <u>N/A</u>	T-Started <u>08:20</u>
(C) First Final Flow <u>68</u>	☒ Safety Joint	T-Open <u>10:08</u>
(D) Initial Shut-In <u>683</u>	☒ Circ Sub <u>N/A</u>	T-Pulled <u>12:08</u>
(E) Second Initial Flow <u>72</u>	☐ Hourly Standby	T-Out <u>14:53</u>
(F) Second Final Flow <u>83</u>	☒ Mileage <u>N/A</u>	Comments
(G) Final Shut-In <u>607</u>	☐ Sampler	
(H) Final Hydrostatic <u>1631</u>	☒ Straddle <u>600</u>	☒ EM Tool

Initial Open <u>30</u>	☐ Shale Packer	☐ Ruined Shale Packer
Initial Shut-In <u>30</u>	☐ Extra Packer	☐ Ruined Packer
Final Flow <u>30</u>	☐ Extra Recorder	☐ Extra Copies
Final Shut-In <u>30</u>	☐ Day Standby	Sub Total <u>0</u>
	☐ Accessibility	Total <u>2400</u>
	Sub Total <u>2400</u>	MP/DST Disc't

Approved By

Our Representative Duffy

Tribolite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.