

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. 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
--	---

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) (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 <i>(Amount and Kind of Material Used)</i>

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

OPERATOR

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

Contact Geologist: TOM DENNING
 Contact Phone Nbr: 785-628-2593
 Well Name: SCHUSTER UNIT # 1
 Location: SE NE SE SW, SEC. 1-T13S-R20W
 API: 15-051-27,000-00-00
 Pool:
 State: KANSAS

Field: UNNAMED
 Country: USA



Scale 1:240 Imperial

Well Name: SCHUSTER UNIT # 1
 Surface Location: SE NE SE SW, SEC. 1-T13S-R20W
 Bottom Location:
 API: 15-051-27,000-00-00
 License Number: 4787
 Spud Date: 6/10/2021 Time: 4:00 PM
 Region: ELLIS
 Drilling Completed: 6/15/2021 Time: 10:47 PM
 Surface Coordinates: 780' FSL & 2535' FWL
 Bottom Hole Coordinates:
 Ground Elevation: 2103.00ft
 K.B. Elevation: 2113.00ft
 Logged Interval: 3000.00ft To: 3900.00ft
 Total Depth: 3900.00ft
 Formation: LANSING-KANSAS
 Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: -99.4930256
 Latitude: 38.9452907
 N/S Co-ord: 780' FSL
 E/W Co-ord: 2535' FWL

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 #: RIG # 1
 Rig Type: MUD ROTARY
 Spud Date: 6/10/2021 Time: 4:00 PM
 TD Date: 6/15/2021 Time: 10:47 PM

ELEVATIONS

K.B. Elevation: 2113.00ft
K.B. to Ground: 10.00ft

Ground Elevation: 2103.00ft

NOTES

DECISION MADE TO PLUG AND ABANDON WELL AFTER LOG ANALYSIS AND NEGATIVE RESULTS OF THREE DRILL STEM TESTS.

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

DRILL TESTING BY TRILOBITE TESTING INC: TWO (2) CONVENTIONAL TESTS AND ONE (1) STRADDLE TEST

SCHUSTER UNIT # 1	ARMBRUSTER # 1	ARMBRUSTER # 1
SE NE SE SW	SE NE SW	SE NE NE NW
SEC.1-13S-20W	SEC. 1-13S-20W	SEC.12-13S-20W
KB 2113'	KB 2105'	KB 2101'

	LOG TOPS		
Anhydrite-top	1442 +671	+665	+659
Anhydrite-base	1482 +631	+628	+623
Topeka	3143-1030	-1043	-1035
Heebner Shale	3379-1266	-1279	-1275
Toronto	3398-1285	-1301	-1298
LKC	3420-1307	-1319	-1318
BKC	3665-1552	-1568	-1559
Marmaton	3715-1602	-1615	-1613
Conglomerate	3749-1636	-1637	-1649
Arbuckle	3780-1667	-1703	-1667
RTD	3900-1787	-1748	-1520

6-10-21 Spud 4:00 PM. Set 8 5/8" surface casing to 213.89' w 150 sks 80/20 pos 3%CC 2%gel, plug down 9:30 PM, slope 1/2 degree @214'. WOC 8 hours, drilled plug at 11:00 AM with PDC bit.

6-11-21 394', drill plug at 5:30AM

6-12-21 2382', drilling

6-13-21 3060', drilling, pulled PDC bit at 2710', displaced 2898-2920

6-14-21 3500', drilling, CFS 3490', short trip, drilling, CFS 3640' DST # 1 3546-3640', slope 3/4 degree @ 3640'

6-15-21 3746', drilling, CFS 3770', TOWB DST # 2 3728'to 3770', TIWB, drilling, RTD at 3900' at 10:47 PM.

6-16-21 3900', TOWB, logs, straddle test 3357' to 3525', decision to plug and abandon



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison RD
Hays, KS 67601-9696
ATTN: Herb Dienes

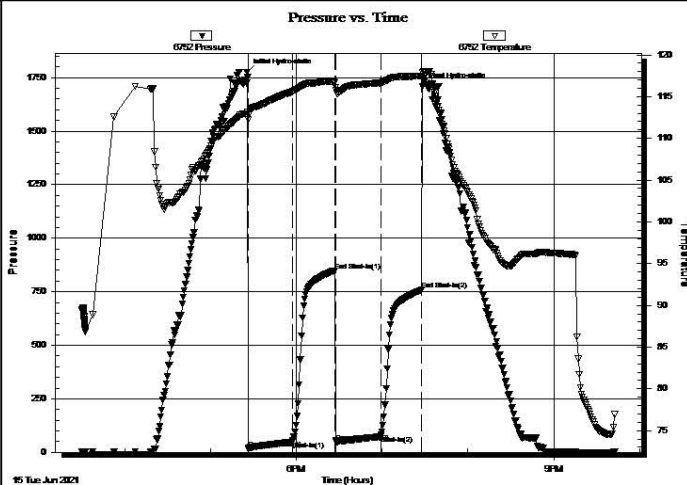
1-13s-20w Ellis, KS
Schuster Unit #1
Job Ticket: 61772 **DST#: 1**
Test Start: 2021.06.15 @ 15:30:00

GENERAL INFORMATION:

Formation: **LKC H,I,J,K**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 17:26:17
 Time Test Ended: 21:43:02
 Interval: **3546.00 ft (KB) To 3640.00 ft (KB) (TVD)**
 Total Depth: 3640.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Kevin Webster
 Unit No: 72
 Reference Elevations: 2113.00 ft (KB)
 2100.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 6752 **Inside**
 Press@RunDepth: 79.89 psig @ 3547.00 ft (KB) Capacity: psig
 Start Date: 2021.06.15 End Date: 2021.06.15 Last Calib.: 2021.06.15
 Start Time: 15:30:01 End Time: 21:43:02 Time On Btm: 2021.06.15 @ 17:25:32
 Time Off Btm: 2021.06.15 @ 19:28:17

TEST COMMENT: If-Strong blow built to bob in 5 min
 IS-Weak blow back at end of shut in
 FF- Strong blow Bob in 3 min
 FS-blow back built to 3 in



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1775.94	112.97	Initial Hydro-static
1	16.34	112.21	Open To Flow (1)
32	53.37	115.61	Shut-In(1)
62	848.20	116.68	End Shut-In(1)
63	49.25	115.75	Open To Flow (2)
94	79.89	116.67	Shut-In(2)
122	758.04	117.48	End Shut-In(2)
123	1709.73	117.92	Final Hydro-static

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
0.00	GIP 100% Gas	0.00
31.00	Gassy Oil 40% Gas 60% OIL	0.56
124.00	Gassy Mud Cut Oil 20% Gas 60% Oil 20%	2.23

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

Trilobite Testing, Inc

Ref. No: 61772

Printed: 2021.06.15 @ 16:54:53



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison RD
Hays, KS 67601-9696
ATTN: Herb Dienes

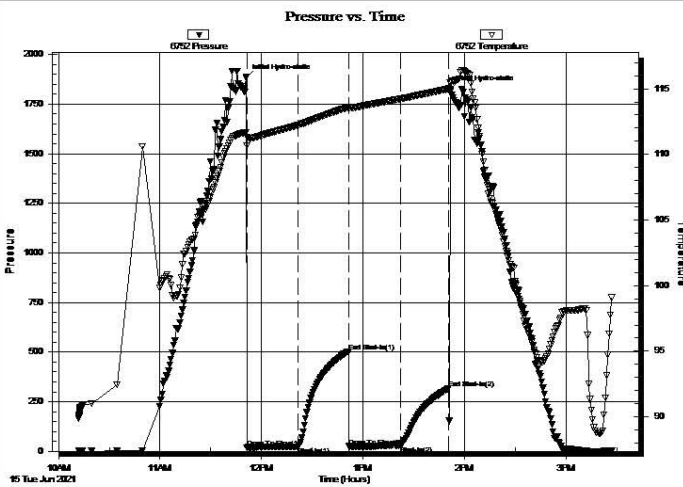
1-13s-20w Ellis, KS
Schuster Unit #1
Job Ticket: 61773 **DST#: 2**
Test Start: 2021.06.15 @ 10:12:00

GENERAL INFORMATION:

Formation: **Conglomerate**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:51:17
Time Test Ended: 15:27:02
Interval: **3728.00 ft (KB) To 3770.00 ft (KB) (TVD)**
Total Depth: 3770.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 2113.00 ft (KB)
2100.00 ft (CF)
KB to GR/CF: 13.00 ft
Test Type: Conventional Bottom Hole (Reset)
Tester: Kevin Webster
Unit No: 72

Serial #: 6752 Inside
Press@RunDepth: 25.51 psig @ 3729.00 ft (KB) Capacity: psig
Start Date: 2021.06.15 End Date: 2021.06.15 Last Calib.: 2021.06.15
Start Time: 10:12:01 End Time: 15:27:02 Time On Btm: 2021.06.15 @ 11:51:02
Time Off Btm: 2021.06.15 @ 13:51:17

TEST COMMENT: IF-WSB built to 1.5 in
ISI- No blow back
FF- No blow
ISI- No blow back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1884.01	111.69	Initial Hydro-static
1	18.92	110.69	Open To Flow (1)
31	22.57	112.24	Shut-In(1)
61	500.45	113.53	End Shut-In(1)
61	24.47	113.53	Open To Flow (2)
91	25.51	114.22	Shut-In(2)
120	317.09	115.03	End Shut-In(2)
121	1823.26	115.47	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	VSOCM 1% OIL 99% MUD	0.21

Gas Rates

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

* Recovery from multiple tests

Trilobite Testing, Inc

Ref. No: 61773

Printed: 2021.06.15 @ 16:52:51



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison RD
Hays, KS 67601-9696
ATTN: Herb Dienes

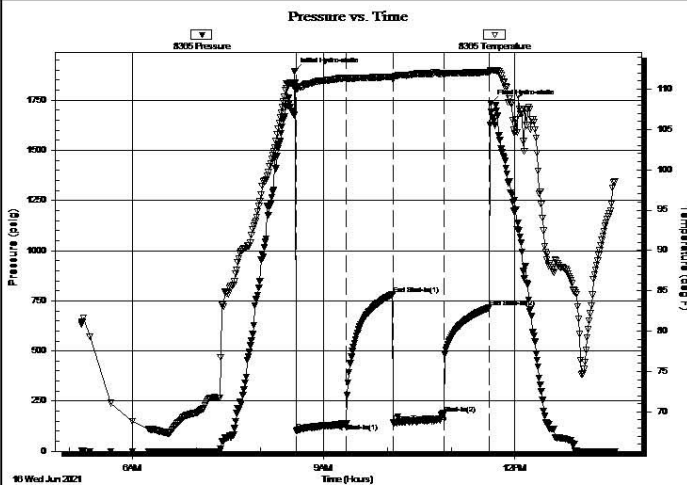
1-13s-20w Ellis,KS
Schuster Unit #1
Job Ticket: 61774 **DST#: 3**
Test Start: 2021.06.16 @ 05:12:00

GENERAL INFORMATION:

Formation: **Toronto - LKC G**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:33:47
Time Test Ended: 13:34:02
Test Type: Conventional Straddle (Reset)
Tester: Kevin Webster
Unit No: 72
Interval: **3357.00 ft (KB) To 3525.00 ft (KB) (TVD)**
Reference Elevations: 2113.00 ft (KB)
Total Depth: 3900.00 ft (KB) (TVD) 2100.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 13.00 ft

Serial #: 8365 Outside
Press@RunDepth: 188.69 psig @ 3359.00 ft (KB) Capacity: psig
Start Date: 2021.06.16 End Date: 2021.06.16 Last Calib.: 2021.06.16
Start Time: 05:12:01 End Time: 13:34:02 Time On Btm: 2021.06.16 @ 08:32:32
Time Off Btm: 2021.06.16 @ 11:37:02

TEST COMMENT: IF- Slow ly building blow built to 9"
IS- no blow back
FF-WSB slow ly built to 3"
FS- no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1894.97	110.82	Initial Hydro-static
2	102.70	109.98	Open To Flow (1)
49	138.79	111.29	Shut-In(1)
93	782.52	111.50	End Shut-In(1)
93	142.45	111.17	Open To Flow (2)
141	188.69	111.89	Shut-In(2)
184	717.53	112.11	End Shut-In(2)
185	1733.85	112.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
108.00	Mud 100% mud	1.51

Gas Rates

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









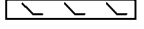


* Recovery from multiple tests

Trilobite Testing, Inc

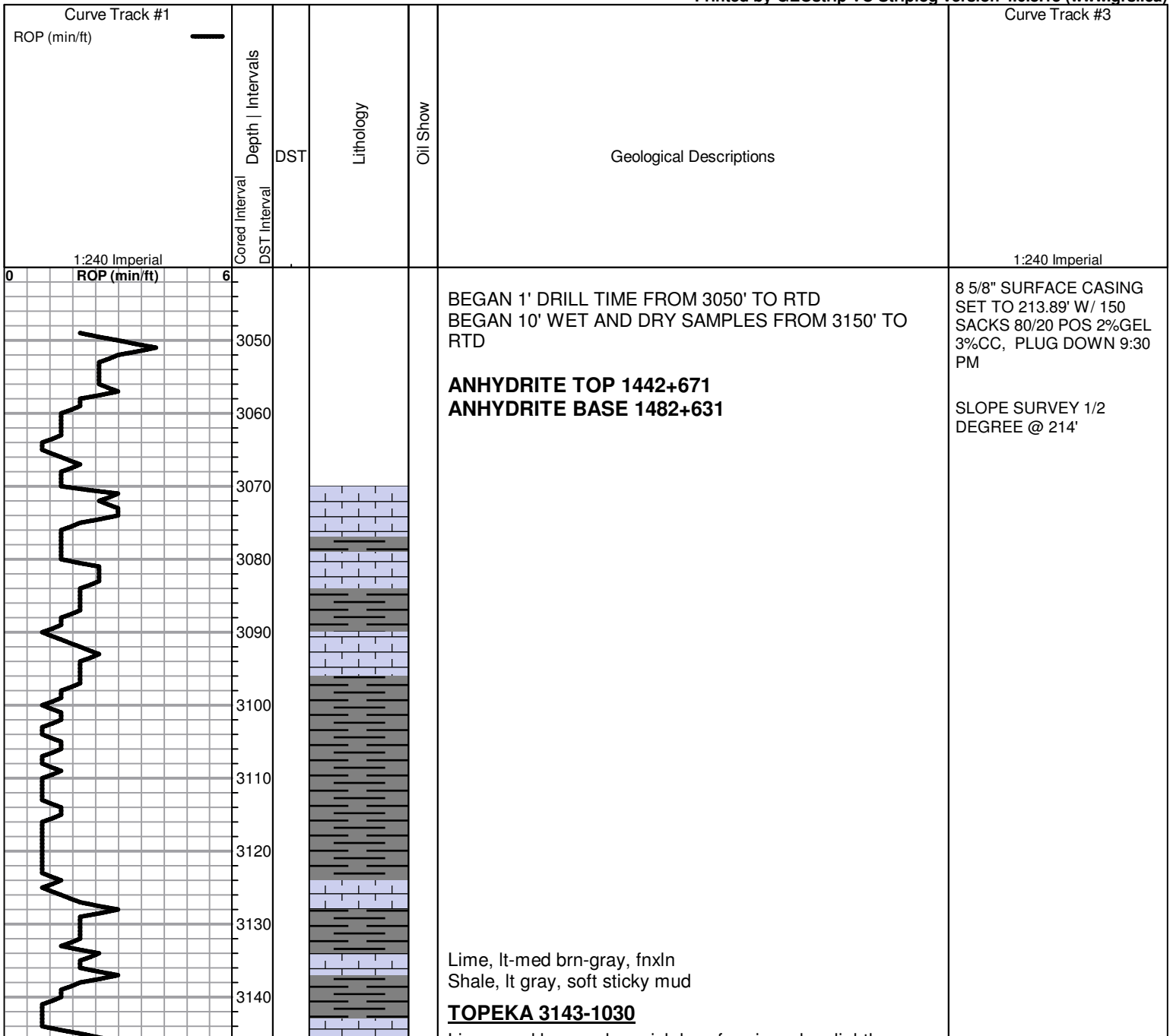
Ref. No: 61774

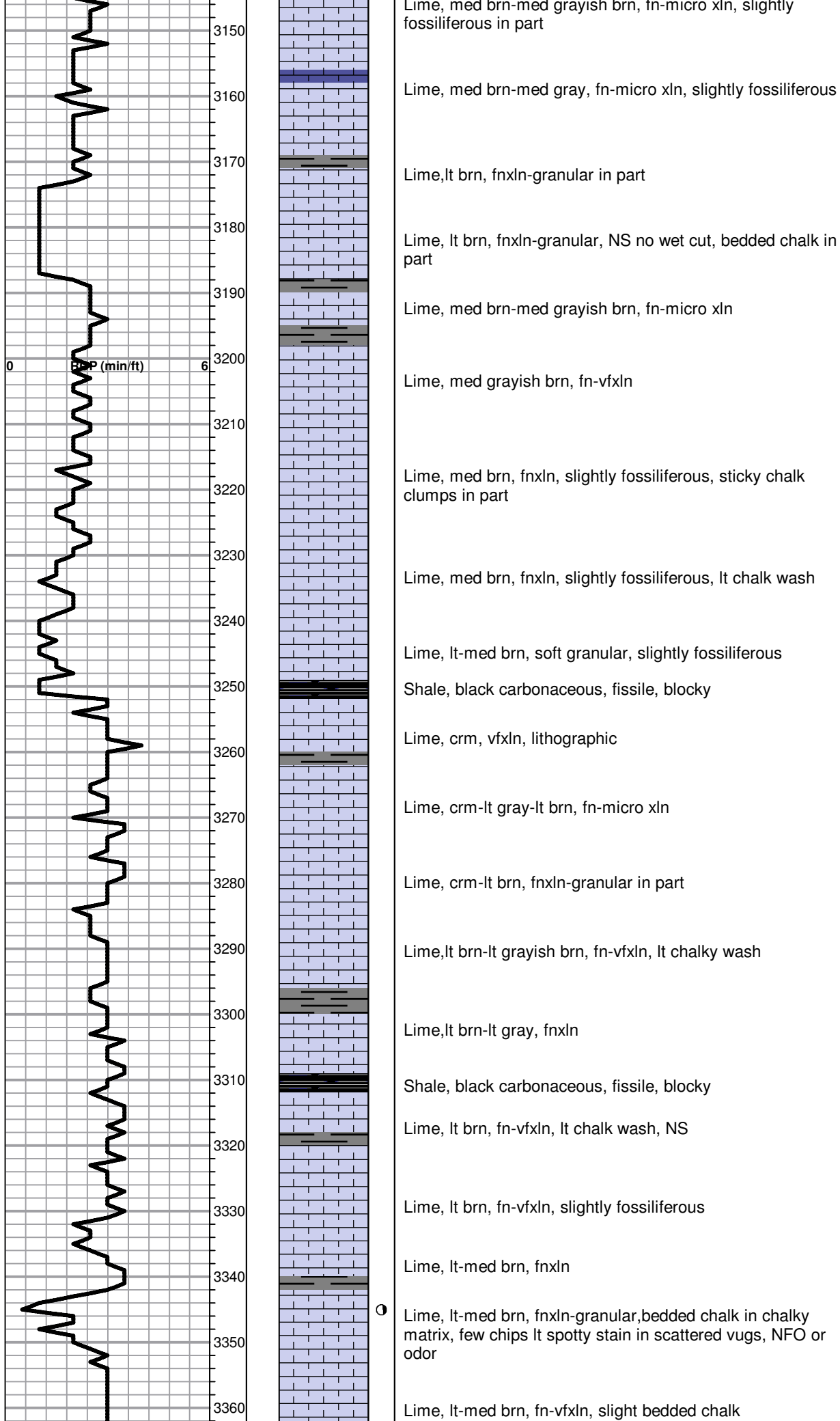
Printed: 2021.06.16 @ 15:17:36

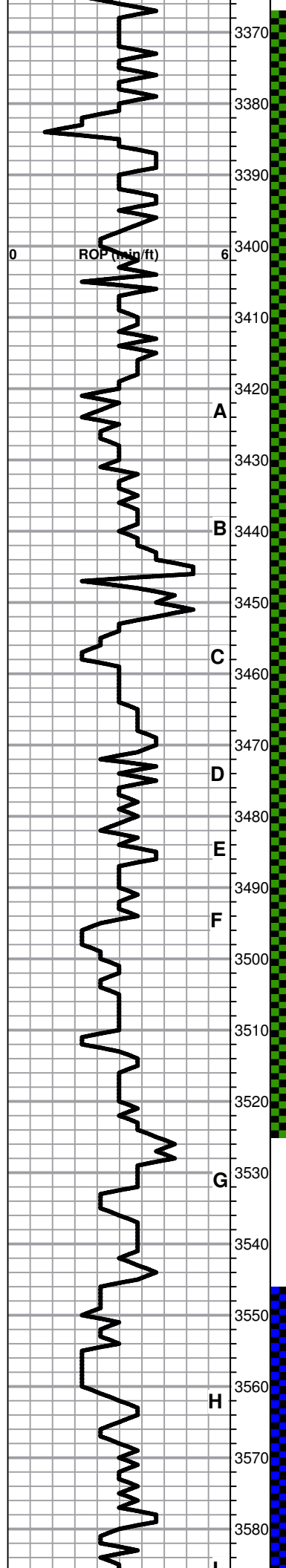
ROCK TYPES

-  Chtcongl
-  Lmst fw<7
-  shale, grn
-  shale, red
-  Dolprim
-  Lmst fw>7
-  shale, gry
-  Ss
-  Dol Lime
-  Lscongl
-  Carbon Sh

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







Lime, lt-med brn, fn-vfxln

HEEBNER SHALE 3379-1266

Shale, black carbonaceous, fissile, blocky
Lime, med brn, vf-micro xln

Shale, lime green, soft sticky

TORONTO 3398-1285

Lime, white-crm, fn-vfxln, light spotty stain in scattered pinpoint porosity, NFO or odor

Lime, crm-lt brn, fn-vfxln

LKC3420-1307

Lime, lt-med brn, fn-micro xln

Lime, lt-med brn, fn-micro xln

Lime, lt-med brn, fn-micro xln

Lime lt brn, fn-micro xln

Lime, lt brn, fnxln, mix of foss fragments and oolites with scattered to sat staining, NFO with very lt odor

Lime, crm, fn-micro xln , NS

Lime, crm-lt gray, fn-vfxln
Shale, black carbonaceous

Lime, lt brn, fossiliferous and oolitic mix, scattered to lt sat staining, NFO, very lt odor

Lime, lt brn-lt gray, fn-vfxln

Lime, offwhite-lt brn,fn-micro xln

Lime, lt brn, fn-vfxln, few chips with dark spotty staining, lt odor, NFO

Lime, crm-med gray, fn-vfxln

Lime, med brn, fn-vfxln, oolitic in part with lt staining, NFO or odor, interoolitic and scattered vuggy porosity

Lime, offwhite-lt brn, fn-vfxln, slight bedded chalk

Lime, offwhite, fn-vfxln, white chalk wash

Lime, crm-lt brn, fn-micro xln, few chips, trace of staining,NFO or odor

A

B

C

D

E

F

G

H

ROP (ft/min)

0

6

3370

3380

3390

3400

3410

3420

3430

3440

3450

3460

3470

3480

3490

3500

3510

3520

3530

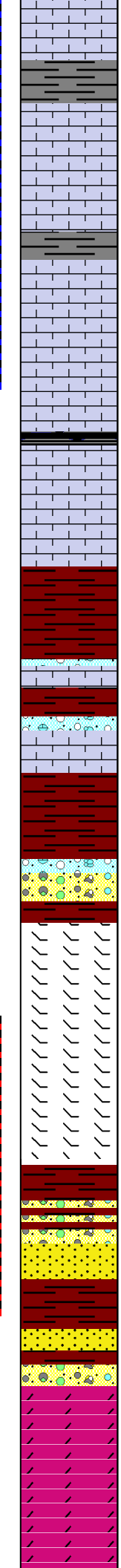
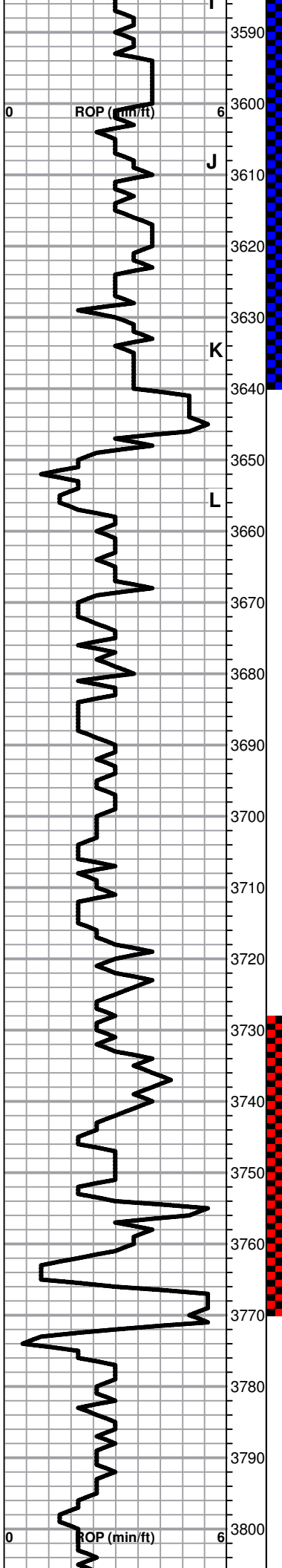
3540

3550

3560

3570

3580



Lime, lt brn-micro xln, bedded chalk

Lime, white, fn-vfxln, scattered pinpt vuggy porosity, NFO or odor, oolitic in part

Lime, white, fn-vfxln, white chalk wash

Lime, white-crm, fn-micro xln, white chalk wash

Lime, lt brn, fn-vfxln

Lime, white-crm, fn-micro xln, white chalk wash

Lime, lt gray, fnxln, NS

Lime, lt brn, fnxln-granular, soft on cursh, NS

BKC 3665-1552

Shale, red, soft, sticky

Shale, red-tan, soft sticky with fine chert rubble content

Shale, red wash, soft

Lime, crm, fnxln-granular, red staining in part

Shale, red with vari color content, soft sticky

Chert, vari color with red shale

MARMATON 3715-1602

Lime, dolomitic, fnxln, hard on crush, orange chert

Lime, dolomitic, fnxln, lt brn, hard on crush, orange chert

Lime, dolomitic, fn-vfxln, orange chert content

CONGLOMERATE 3749-1636

Cherts and shale, soft-firm waxy

Sandstone and weathered chert fragments, contact staining from low gravity oil, very lt odor, scattered floating oil globules in tray

Shale, red-lt gray, soft sticky

Sandstone, poorly sorted mixed with weathered chert fragments

ARBUCKLE 3780-1667

Dolomite, lt brn, fnxln, NS

Dolomite, lt brn-tan, fnxln, oolitic chert in part

Dolomite, ivy lt brn salmon, fnxln granular

DST # 2 3728' TO 3770'
SEE HEADER FOR TEST SUMMARY

1st plug @3760'w/50 sxs
2nd plug@1450'w/50 sxs
3rd plug@725'w/100 sxs
4th plug@275'w/50 sxs
5th plug@40'w/ 10 sxs
Rathole w/ 30 sxs
Mousehole w/ 15 sxs
Plug down 10:00PM
6/16/21
Copeland tic # C-60339
Ordered 305 sxs 60/40 nos

3810
3820
3830
3840
3850
3860
3870
3880
3890
3900



Dolomite, ivory-lt brn-salmon, fnxn-granular

Dolomite, crm-lt brn, fn-vfxln, hard on crush

Dolomite, crm-lt brn, fxl-granular

Dolomite, crm-lt brn, few white chert chips and sticky clumps of dolomitic chalk

Dolomite, crm-lt brn-lt green stained, fnxln-granular

Dolomite, ivory, fnxln-granular

Dolomite, ivory-lt brn, fnxl-granular

Dolomite, ivory-lt brn, fnxln-granular

Dolomite, ivory-lt brn, fnxln-granular

RTD 3900-1787 LTD 3898-1785



DRILL STEM TEST REPORT

Prepared For: **TDI Inc.**

1310 Bison RD
Hays, KS 67601-9696

ATTN: Herb Dienes

Schuster Unit #1

1-13s-20w Ellis,KS

Start Date: 2021.06.15 @ 15:30:00

End Date: 2021.06.15 @ 21:43:02

Job Ticket #: 61772 DST #: 1

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

Printed: 2021.06.17 @ 13:42:23



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison RD
Hays, KS 67601-9696
ATTN: Herb Dienes

1-13s-20w Ellis,KS
Schuster Unit #1
Job Ticket: 61772 **DST#: 1**
Test Start: 2021.06.15 @ 15:30:00

GENERAL INFORMATION:

Formation: **LKC H - K**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:26:17
Time Test Ended: 21:43:02
Interval: **3546.00 ft (KB) To 3640.00 ft (KB) (TVD)**
Total Depth: 3640.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Kevin Webster
Unit No: 72
Reference Elevations: 2113.00 ft (KB)
2100.00 ft (CF)
KB to GR/CF: 13.00 ft

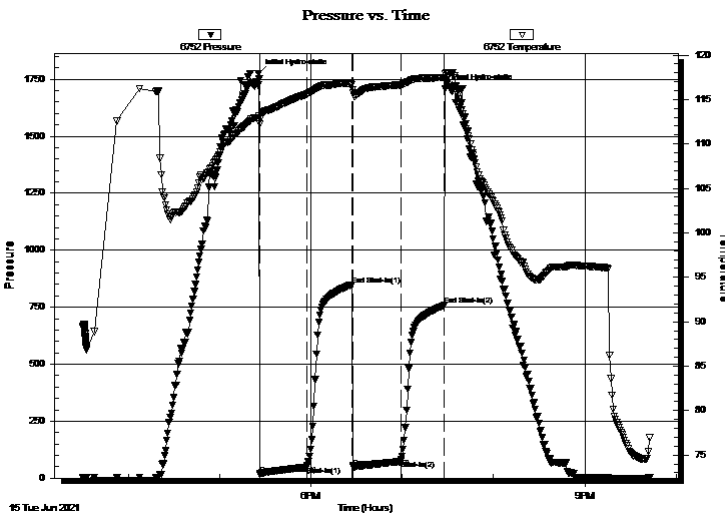
Serial #: 6752

Inside

Press@RunDepth: 79.89 psig @ 3547.00 ft (KB) Capacity: psig
Start Date: 2021.06.15 End Date: 2021.06.15 Last Calib.: 2021.06.15
Start Time: 15:30:01 End Time: 21:43:02 Time On Btm: 2021.06.15 @ 17:25:32
Time Off Btm: 2021.06.15 @ 19:28:17

TEST COMMENT: If-BOB in 5 min
IS-Weak blow back at end of shut in
FF- BOB in 3 min
FS-Blow back built to 3"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1775.94	112.97	Initial Hydro-static
1	16.34	112.21	Open To Flow (1)
32	53.37	115.61	Shut-In(1)
62	848.20	116.68	End Shut-In(1)
63	49.25	115.75	Open To Flow (2)
94	79.89	116.67	Shut-In(2)
122	758.04	117.48	End Shut-In(2)
123	1709.73	117.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
496.00	GIP 100% Gas	8.91
31.00	Gassy Oil 40% Gas 60% OIL	0.56
62.00	Gassy Mud Cut Oil 20% Gas 60% Oil 20%	1.11

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison RD
Hays, KS 67601-9696
ATTN: Herb Dienes

1-13s-20w Ellis, KS
Schuster Unit #1
Job Ticket: 61772 **DST#: 1**
Test Start: 2021.06.15 @ 15:30:00

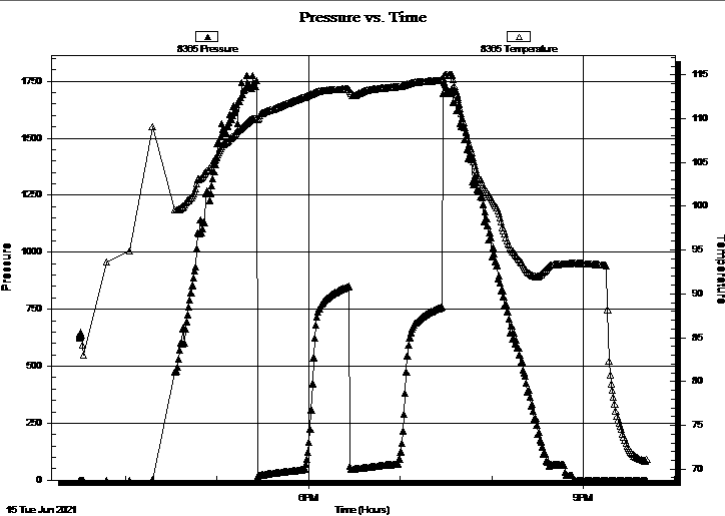
GENERAL INFORMATION:

Formation: **LKC H - K**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 17:26:17 Tester: Kevin Webster
Time Test Ended: 21:43:02 Unit No: 72
Interval: 3546.00 ft (KB) To 3640.00 ft (KB) (TVD) Reference Elevations: 2113.00 ft (KB)
Total Depth: 3640.00 ft (KB) (TVD) 2100.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 13.00 ft

Serial #: 8365 Outside

Press@RunDepth: psig @ 3547.00 ft (KB) Capacity: psig
Start Date: 2021.06.15 End Date: 2021.06.15 Last Calib.: 1899.12.30
Start Time: 15:30:01 End Time: 21:42:02 Time On Btm:
Time Off Btm:

TEST COMMENT: ff-BOB in 5 min
IS-Weak blow back at end of shut in
FF- BOB in 3 min
FS-Blow back built to 3"



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
496.00	GIP 100% Gas	8.91
31.00	Gassy Oil 40% Gas 60% OIL	0.56
62.00	Gassy Mud Cut Oil 20% Gas 60% Oil 20%	1.11

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 67601-9696
ATTN: Herb Dienes

1-13s-20w Ellis,KS
Schuster Unit #1
Job Ticket: 61772 **DST#: 1**
Test Start: 2021.06.15 @ 15:30:00

Tool Information

Drill Pipe:	Length: 3549.00 ft	Diameter: 4.30 inches	Volume: 63.75 bbl	Tool Weight:	2000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	52000.00 lb
			<u>Total Volume: 63.75 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial	49000.00 lb
Depth to Top Packer:	3546.00 ft			Final	49000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	94.00 ft				
Tool Length:	113.00 ft				
Number of Packers:	1	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Shut-In Tool	5.00			3532.00	
Hydraulic tool	5.00			3537.00	
Top Packer	5.00			3542.00	
Packer	4.00			3546.00	19.00 Bottom Of Top Packer
Perforations	1.00			3547.00	
Recorder	0.00	6752	Inside	3547.00	
Recorder	0.00	8365	Outside	3547.00	
Change Over Sub	1.00			3548.00	
Drill Pipe	63.00			3611.00	
Change Over Sub	1.00			3612.00	
Perforations	25.00			3637.00	
Bullnose	3.00			3640.00	94.00 Anchor Tool

Total Tool Length: 113.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc. **1-13s-20w Ellis,KS**
 1310 Bison RD **Schuster Unit #1**
 Hays, KS 67601-9696 Job Ticket: 61772 **DST#: 1**
 ATTN: Herb Dienes Test Start: 2021.06.15 @ 15:30:00

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: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.38 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5300.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
496.00	GIP 100% Gas	8.909
31.00	Gassy Oil 40% Gas 60% OIL	0.557
62.00	Gassy Mud Cut Oil 20% Gas 60% Oil 20% M	1.114

Total Length: 589.00 ft Total Volume: 10.580 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: 1# LCM

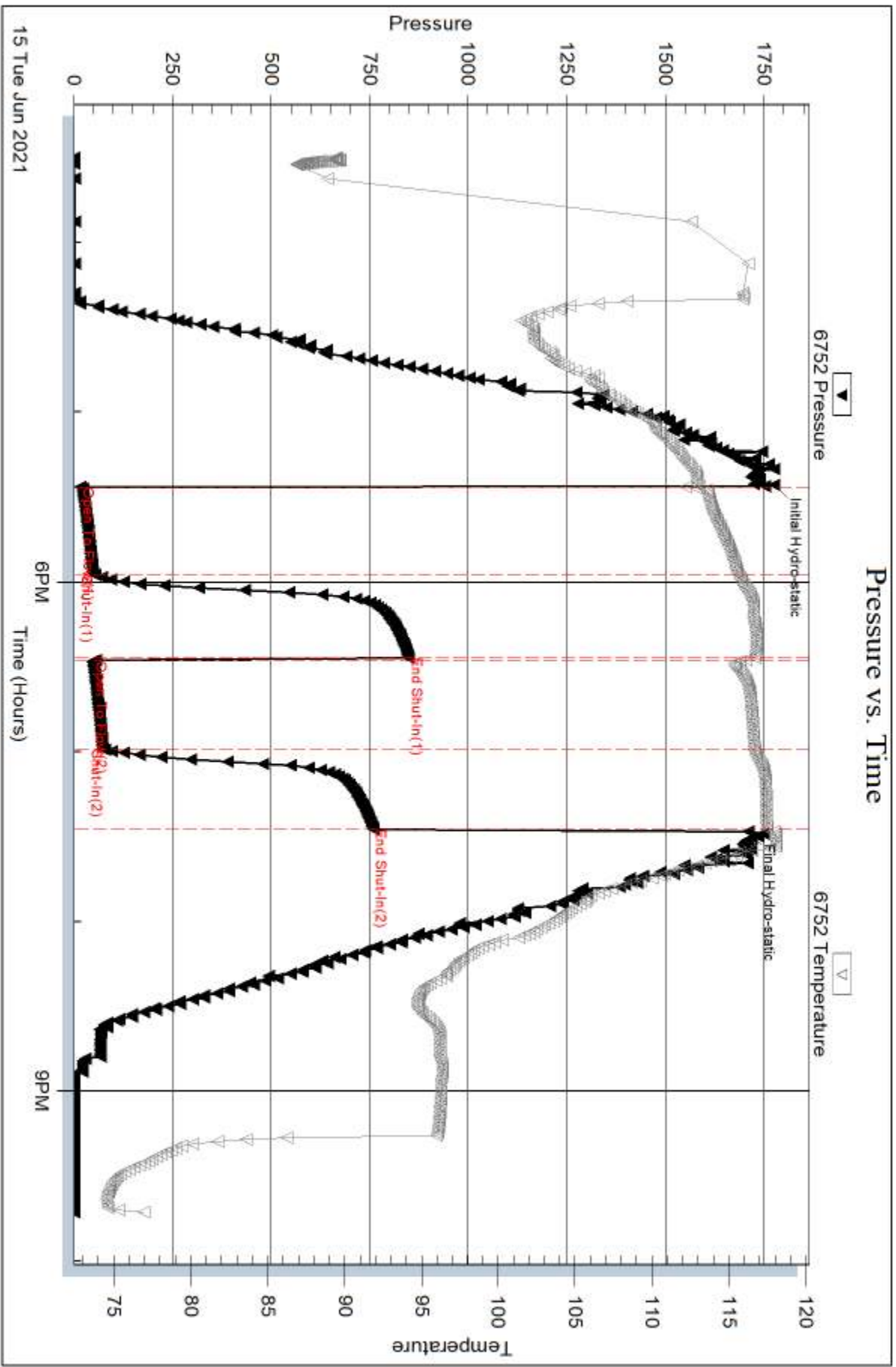
Serial #: 6752

Inside

TDI Inc.

Schuster Unit #1

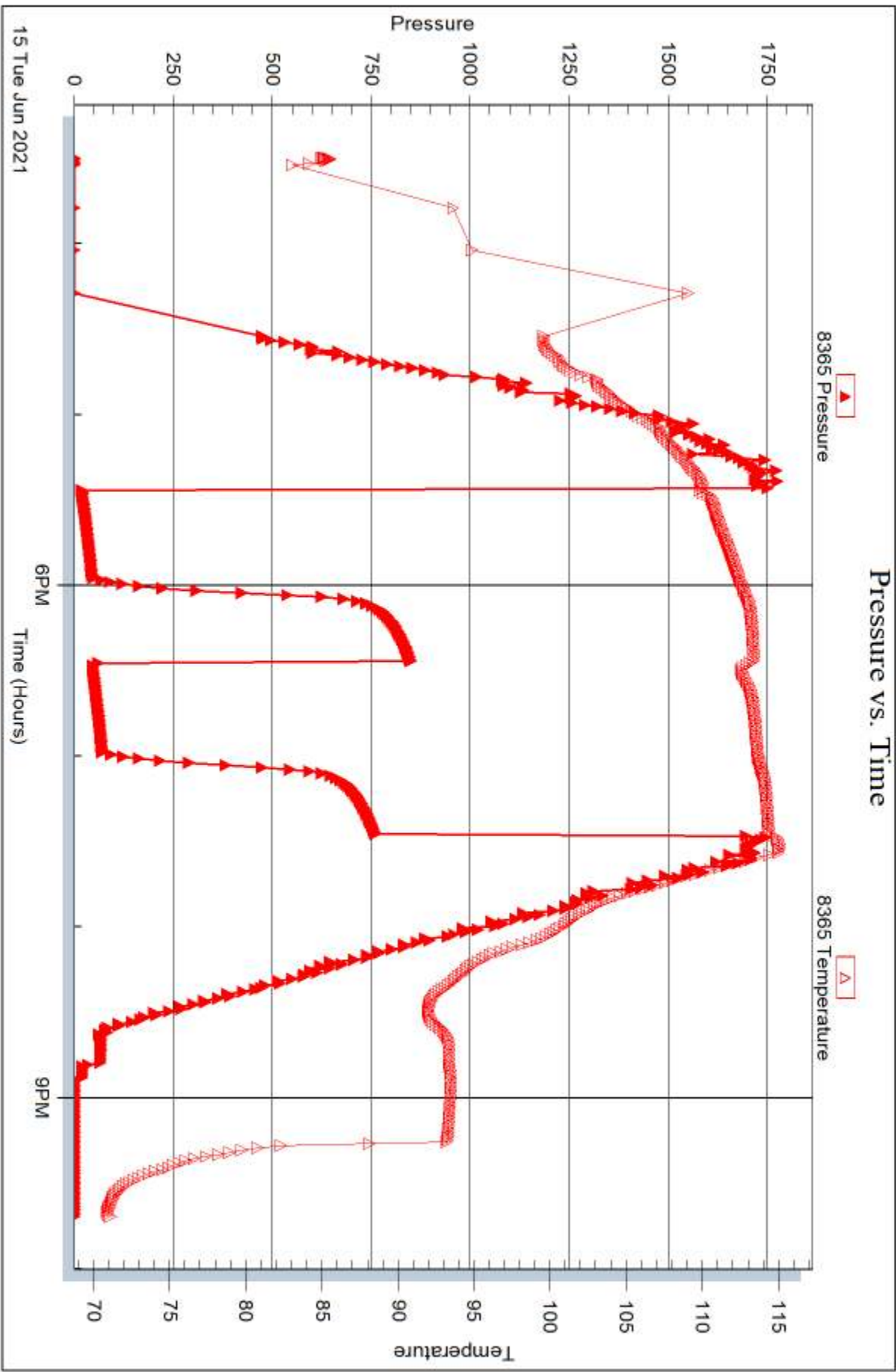
DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 61772

Printed: 2021.06.17 @ 13:42:23





DRILL STEM TEST REPORT

Prepared For: **TDI Inc.**

1310 Bison RD
Hays, KS 67601-9696

ATTN: Herb Dienes

Schuster Unit #1

1-13s-20w Ellis,KS

Start Date: 2021.06.15 @ 10:12:00

End Date: 2021.06.15 @ 15:27:02

Job Ticket #: 61773 DST #: 2

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

Printed: 2021.06.17 @ 13:41:17

TDI Inc. 1-13s-20w Ellis,KS Schuster Unit #1 DST # 2 Conglomerate 2021.06.15



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison RD
Hays, KS 67601-9696
ATTN: Herb Dienes

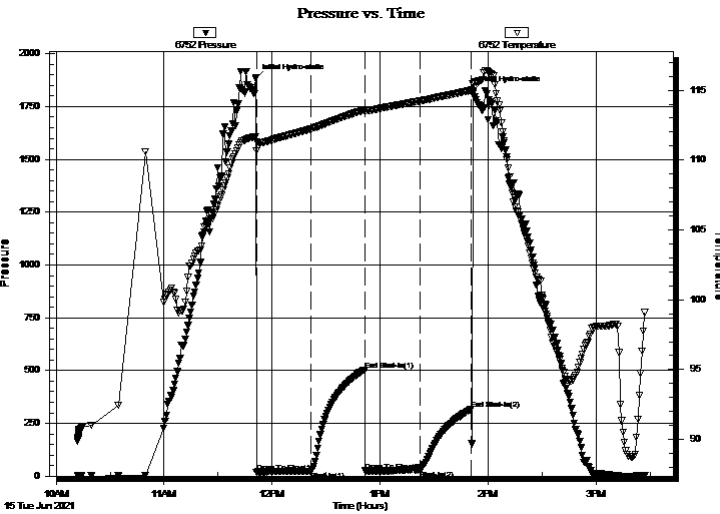
1-13s-20w Ellis,KS
Schuster Unit #1
Job Ticket: 61773 **DST#: 2**
Test Start: 2021.06.15 @ 10:12:00

GENERAL INFORMATION:

Formation: **Conglomerate**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:51:17
Time Test Ended: 15:27:02
Interval: **3728.00 ft (KB) To 3770.00 ft (KB) (TVD)**
Total Depth: 3770.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Kevin Webster
Unit No: 72
Reference Elevations: 2113.00 ft (KB)
2100.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6752 **Inside**
Press@RunDepth: 25.51 psig @ 3729.00 ft (KB) Capacity: psig
Start Date: 2021.06.15 End Date: 2021.06.15 Last Calib.: 2021.06.15
Start Time: 10:12:01 End Time: 15:27:02 Time On Btm: 2021.06.15 @ 11:51:02
Time Off Btm: 2021.06.15 @ 13:51:17

TEST COMMENT: IF-WSB built to 1 1/2"
IS- No blow back
FF- No blow
IS-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1884.01	111.69	Initial Hydro-static
1	18.92	110.69	Open To Flow (1)
31	22.57	112.24	Shut-In(1)
61	500.45	113.53	End Shut-In(1)
61	24.47	113.53	Open To Flow (2)
91	25.51	114.22	Shut-In(2)
120	317.09	115.03	End Shut-In(2)
121	1823.26	115.47	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	VSOCM 1% OIL 99% MUD	0.21

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison RD
Hays, KS 67601-9696
ATTN: Herb Dienes

1-13s-20w Ellis, KS
Schuster Unit #1
Job Ticket: 61773 **DST#: 2**
Test Start: 2021.06.15 @ 10:12:00

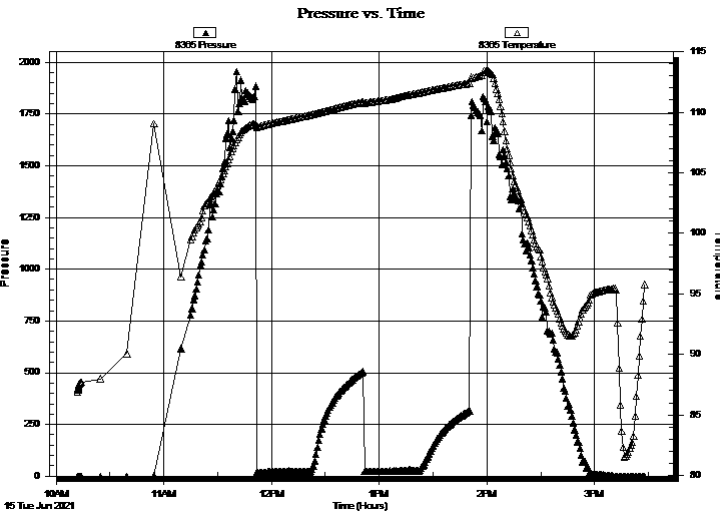
GENERAL INFORMATION:

Formation: **Conglomerate**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 11:51:17 Tester: Kevin Webster
Time Test Ended: 15:27:02 Unit No: 72

Interval: 3728.00 ft (KB) To 3770.00 ft (KB) (TVD) Reference Elevations: 2113.00 ft (KB)
Total Depth: 3770.00 ft (KB) (TVD) 2100.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 13.00 ft

Serial #: 8365 Outside
Press@RunDepth: psig @ 3729.00 ft (KB) Capacity: psig
Start Date: 2021.06.15 End Date: 2021.06.15 Last Calib.: 2021.06.15
Start Time: 10:12:01 End Time: 15:28:02 Time On Btm: Time Off Btm:

TEST COMMENT: IF-WSB built to 1 1/2"
IS- No blow back
FF- No blow
IS-No blow back



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

Recovery		
Length (ft)	Description	Volume (bbl)
15.00	VSOCM 1% OIL 99% MUD	0.21

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 67601-9696
ATTN: Herb Dienes

1-13s-20w Ellis,KS
Schuster Unit #1
Job Ticket: 61773 **DST#: 2**
Test Start: 2021.06.15 @ 10:12:00

Tool Information

Drill Pipe:	Length: 3738.00 ft	Diameter: 3.80 inches	Volume: 52.43 bbl	Tool Weight: 2000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 54000.00 lb
			<u>Total Volume: 52.43 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	3728.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.00 ft			
Tool Length:	61.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Shut-In Tool	5.00			3714.00	
Hydraulic tool	5.00			3719.00	
Top Packer	5.00			3724.00	
Packer	4.00			3728.00	19.00 Bottom Of Top Packer
Perforations	1.00			3729.00	
Recorder	0.00	6752	Inside	3729.00	
Recorder	0.00	8365	Outside	3729.00	
Change Over Sub	1.00			3730.00	
Drill Pipe	31.00			3761.00	
Change Over Sub	1.00			3762.00	
Perforations	5.00			3767.00	
Bullnose	3.00			3770.00	42.00 Anchor Tool

Total Tool Length: 61.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc. **1-13s-20w Ellis,KS**
 1310 Bison RD **Schuster Unit #1**
 Hays, KS 67601-9696 Job Ticket: 61773 **DST#: 2**
 ATTN: Herb Dienes Test Start: 2021.06.15 @ 10:12:00

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: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.98 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: inches			

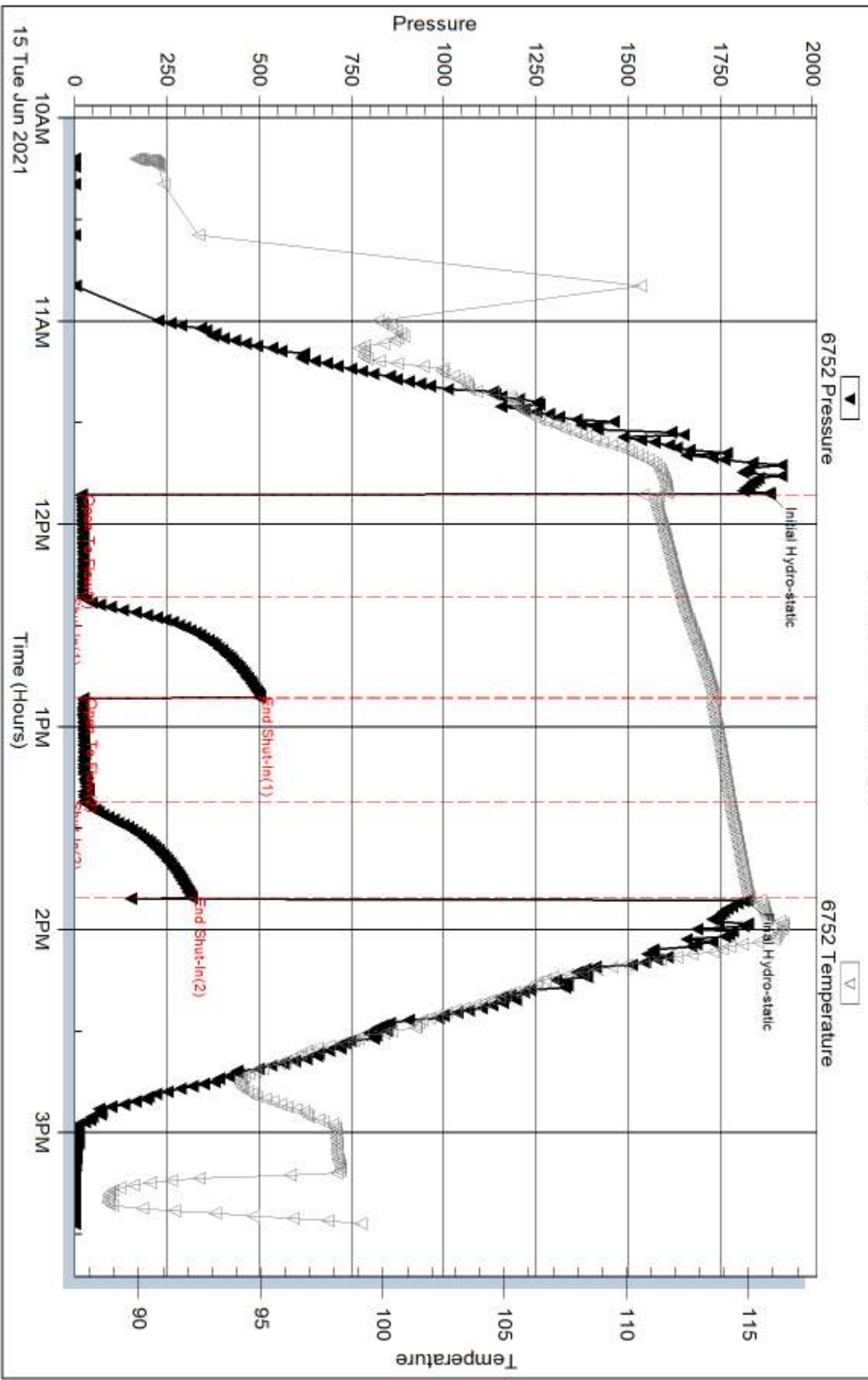
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	VSOCM 1% OIL 99% MUD	0.210

Total Length: 15.00 ft Total Volume: 0.210 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: 3# LCM

Pressure vs. Time

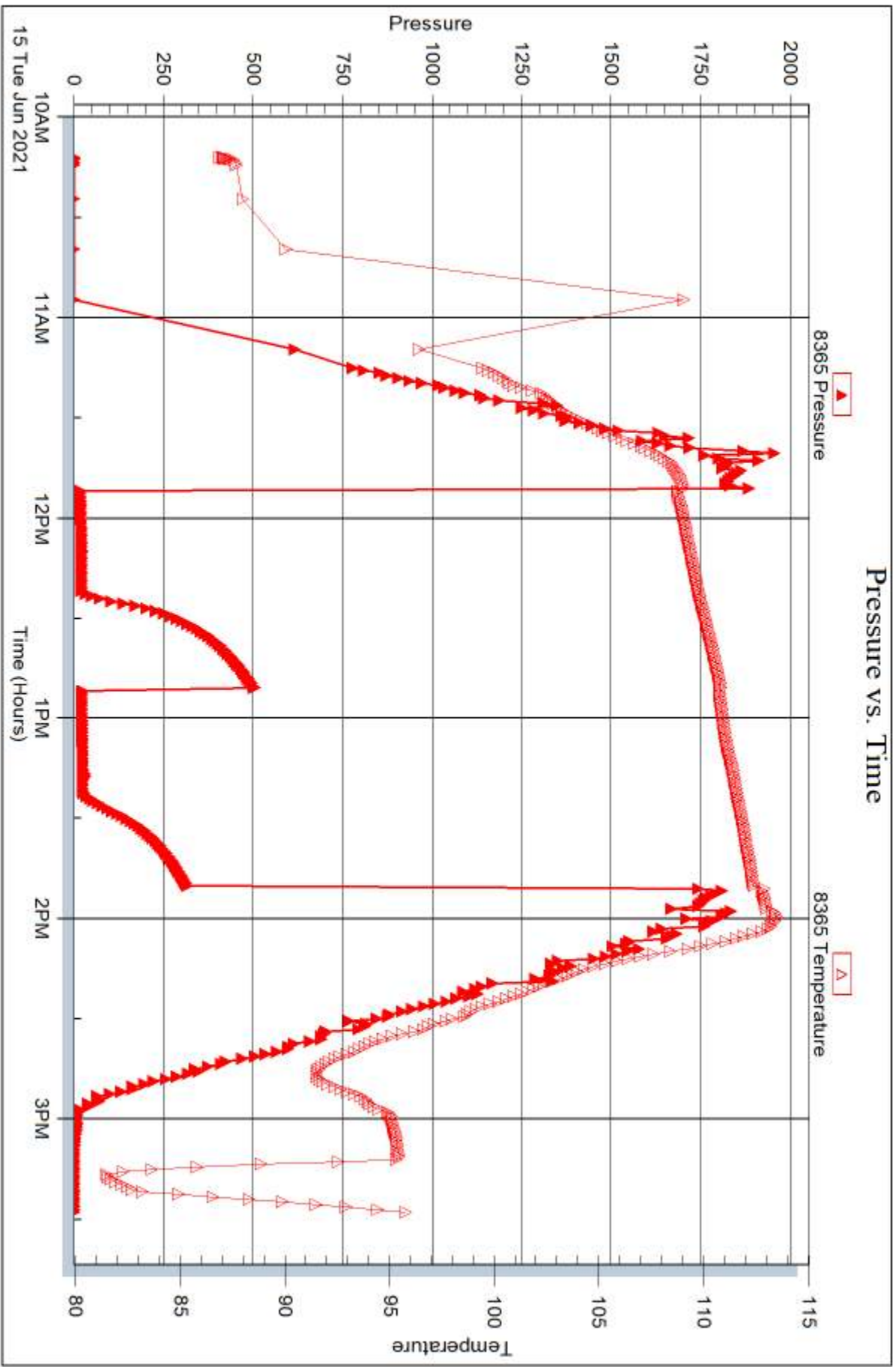


Serial #: 8365

Outside TDI Inc:

Schuster Unit #1

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **TDI Inc.**

1310 Bison RD
Hays, KS 67601-9696

ATTN: Herb Dienes

Schuster Unit #1

1-13s-20w Ellis,KS

Start Date: 2021.06.16 @ 05:12:00

End Date: 2021.06.16 @ 13:34:02

Job Ticket #: 61774 DST #: 3

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

Printed: 2021.06.17 @ 13:40:27



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison RD
Hays, KS 67601-9696
ATTN: Herb Dienes

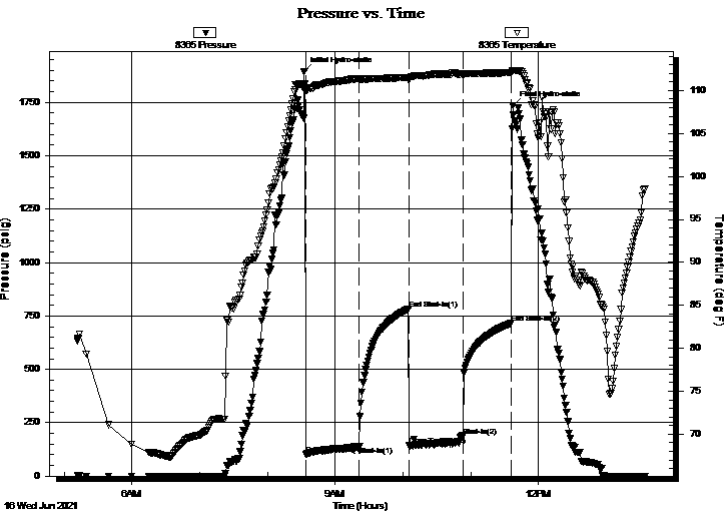
1-13s-20w Ellis,KS
Schuster Unit #1
Job Ticket: 61774 **DST#: 3**
Test Start: 2021.06.16 @ 05:12:00

GENERAL INFORMATION:

Formation: **Toronto - LKC G**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:33:47
 Time Test Ended: 13:34:02
 Interval: **3357.00 ft (KB) To 3525.00 ft (KB) (TVD)**
 Total Depth: 3900.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Reset)
 Tester: Kevin Webster
 Unit No: 72
 Reference Elevations: 2113.00 ft (KB)
 2100.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 8365 Outside
 Press@RunDepth: 188.69 psig @ 3359.00 ft (KB) Capacity: psig
 Start Date: 2021.06.16 End Date: 2021.06.16 Last Calib.: 2021.06.16
 Start Time: 05:12:01 End Time: 13:34:02 Time On Btm: 2021.06.16 @ 08:32:32
 Time Off Btm: 2021.06.16 @ 11:37:02

TEST COMMENT: IF- Slow ly building blow built to 9"
 IS- no blow back
 FF-WSB slow ly built to 3"
 FS- no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1894.97	110.82	Initial Hydro-static
2	102.70	109.98	Open To Flow (1)
49	138.79	111.29	Shut-In(1)
93	782.52	111.50	End Shut-In(1)
93	142.45	111.17	Open To Flow (2)
141	188.69	111.89	Shut-In(2)
184	717.53	112.11	End Shut-In(2)
185	1733.85	112.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
108.00	Mud 100% mud	1.51

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TDI Inc.
 1310 Bison RD
 Hays, KS 67601-9696
 ATTN: Herb Dienes

1-13s-20w Ellis, KS
Schuster Unit #1
 Job Ticket: 61774 **DST#: 3**
 Test Start: 2021.06.16 @ 05:12:00

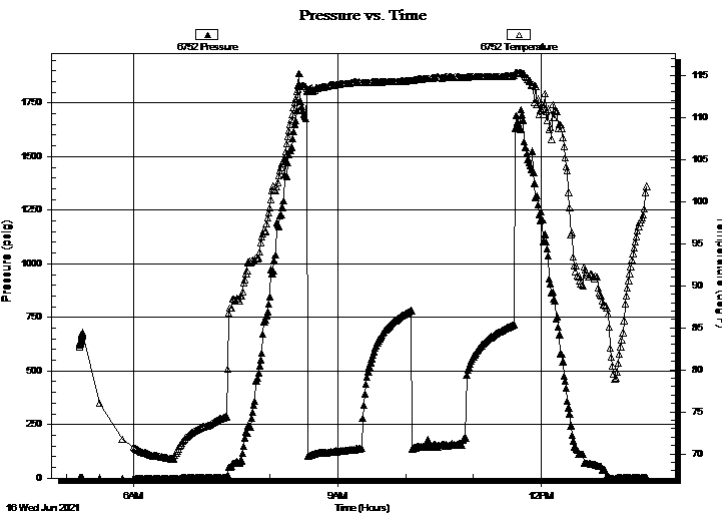
GENERAL INFORMATION:

Formation: **Toronto - LKC G**
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Straddle (Reset)
 Time Tool Opened: 08:33:47 Tester: Kevin Webster
 Time Test Ended: 13:34:02 Unit No: 72
 Interval: **3357.00 ft (KB) To 3525.00 ft (KB) (TVD)** Reference Elevations: 2113.00 ft (KB)
 Total Depth: 3900.00 ft (KB) (TVD) 2100.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 13.00 ft

Serial #: 6752 Outside

Press@RunDepth: psig @ 3359.00 ft (KB)	Capacity: psig
Start Date: 2021.06.16 End Date: 2021.06.16	Last Calib.: 2021.06.16
Start Time: 05:12:01 End Time: 13:33:02	Time On Btm: Time Off Btm:

TEST COMMENT: IF- Slow ly building blow built to 9"
 IS- no blow back
 FF-WSB slow ly built to 3"
 FS- no blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
108.00	Mud 100% mud	1.51

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 67601-9696
ATTN: Herb Dienes

1-13s-20w Ellis, KS
Schuster Unit #1
Job Ticket: 61774 **DST#: 3**
Test Start: 2021.06.16 @ 05:12:00

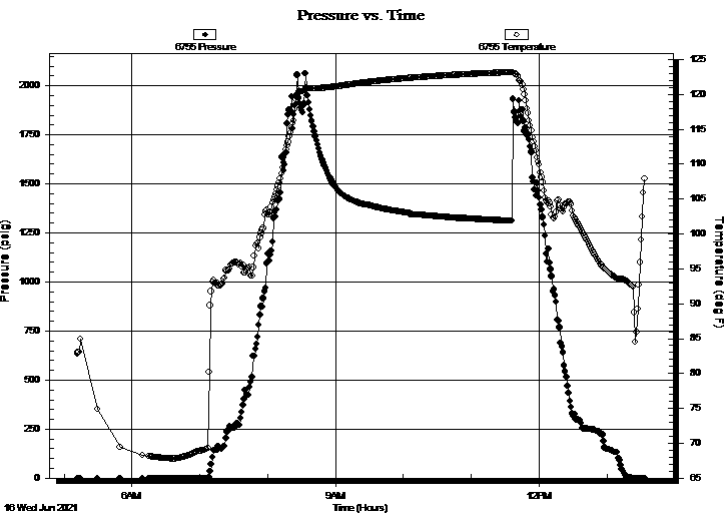
GENERAL INFORMATION:

Formation: **Toronto - LKC G**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:33:47
 Time Test Ended: 13:34:02
 Interval: **3357.00 ft (KB) To 3525.00 ft (KB) (TVD)**
 Total Depth: 3900.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Reset)
 Tester: Kevin Webster
 Unit No: 72
 Reference Elevations: 2113.00 ft (KB)
 2100.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 6755 Below (Straddle)

Press@RunDepth: psig @ 3881.00 ft (KB) Capacity: psig
 Start Date: 2021.06.16 End Date: 2021.06.16 Last Calib.: 2021.06.16
 Start Time: 05:12:01 End Time: 13:34:02 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF- Slow ly building blow built to 9"
 IS- no blow back
 FF-WSB slow ly built to 3"
 FS- no blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
108.00	Mud 100% mud	1.51

* Recovery from multiple tests

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 67601-9696
ATTN: Herb Dienes

1-13s-20w Ellis,KS
Schuster Unit #1
Job Ticket: 61774 **DST#: 3**
Test Start: 2021.06.16 @ 05:12:00

Tool Information

Drill Pipe:	Length: 3366.00 ft	Diameter: 3.80 inches	Volume: 47.22 bbl	Tool Weight:	2000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	56000.00 lb
			<u>Total Volume: 47.22 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	3357.00 ft			Final	53000.00 lb
Depth to Bottom Packer:	3525.00 ft				
Interval between Packers:	168.00 ft				
Tool Length:	546.00 ft				
Number of Packers:	1	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Shut In Tool	5.00			3343.00	
Hydraulic tool	5.00			3348.00	
Packer	5.00			3353.00	19.00 Bottom Of Top Packer
Packer	4.00			3357.00	
Stubb	1.00			3358.00	
Perforations	1.00			3359.00	
Recorder	0.00	8365	Outside	3359.00	
Recorder	0.00	6752	Outside	3359.00	
Change Over Sub	1.00			3360.00	
Drill Pipe	156.00			3516.00	
Change Over Sub	1.00			3517.00	
Perforations	8.00			3525.00	168.00 Tool Interval
Packer	4.00			3529.00	
Stubb	1.00			3530.00	
Blank Off Sub	1.00			3531.00	
Perforations	0.00			3531.00	
Change Over Sub	1.00			3532.00	
Drill Pipe	348.00			3880.00	
Change Over Sub	1.00			3881.00	
Recorder	0.00	6755	Below	3881.00	
Bullnose	3.00			3884.00	359.00 Bottom Packers & Anchor

Total Tool Length: 546.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc. **1-13s-20w Ellis,KS**
 1310 Bison RD **Schuster Unit #1**
 Hays, KS 67601-9696 Job Ticket: 61774 **DST#: 3**
 ATTN: Herb Dienes Test Start: 2021.06.16 @ 05:12:00

Mud and Cushion Information

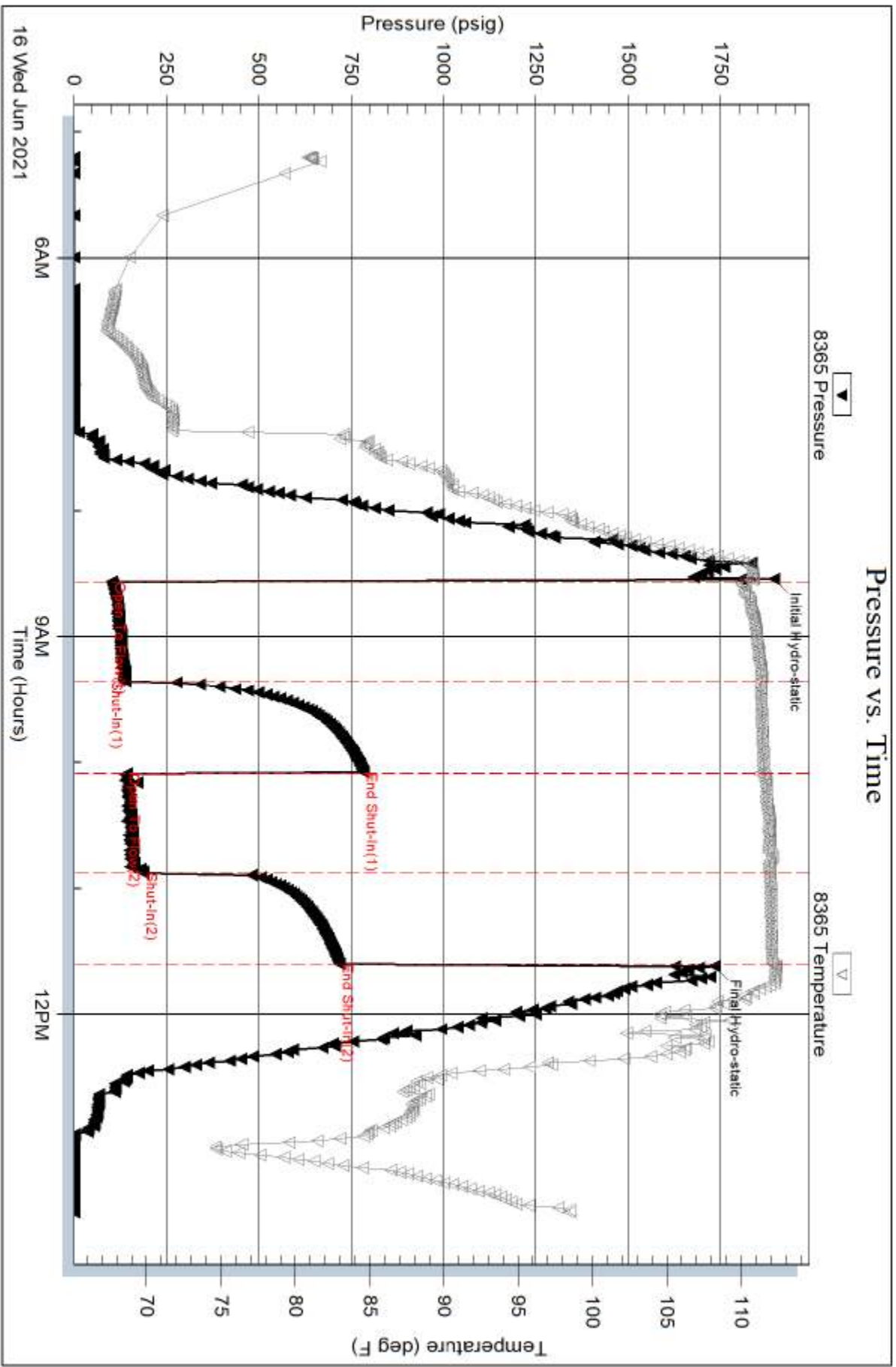
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4800.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
108.00	Mud 100% mud	1.515

Total Length: 108.00 ft Total Volume: 1.515 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: 3# LCM

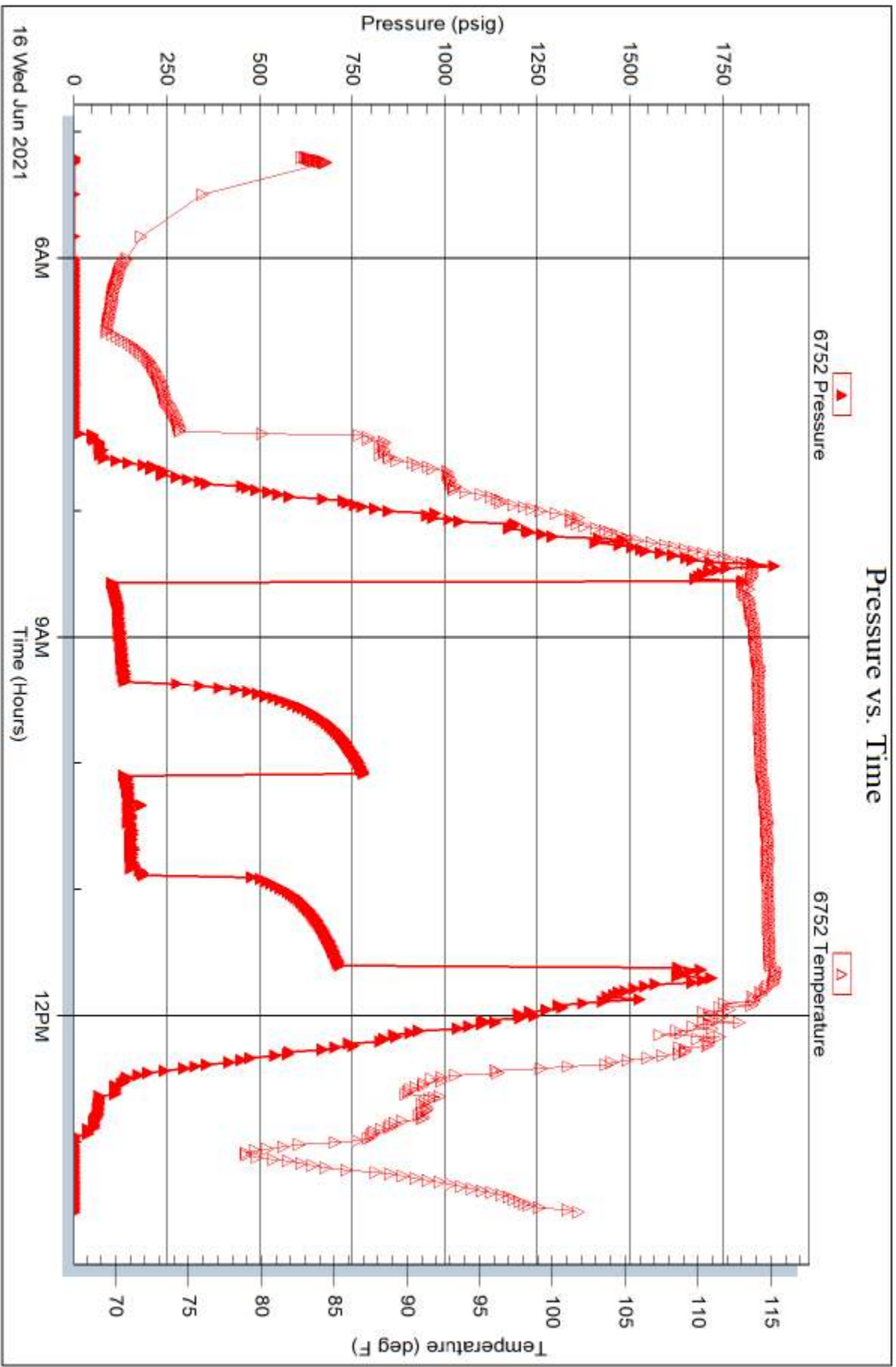


Serial #: 6752

Outside TDI Inc.

Schuster Unit #1

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 61774

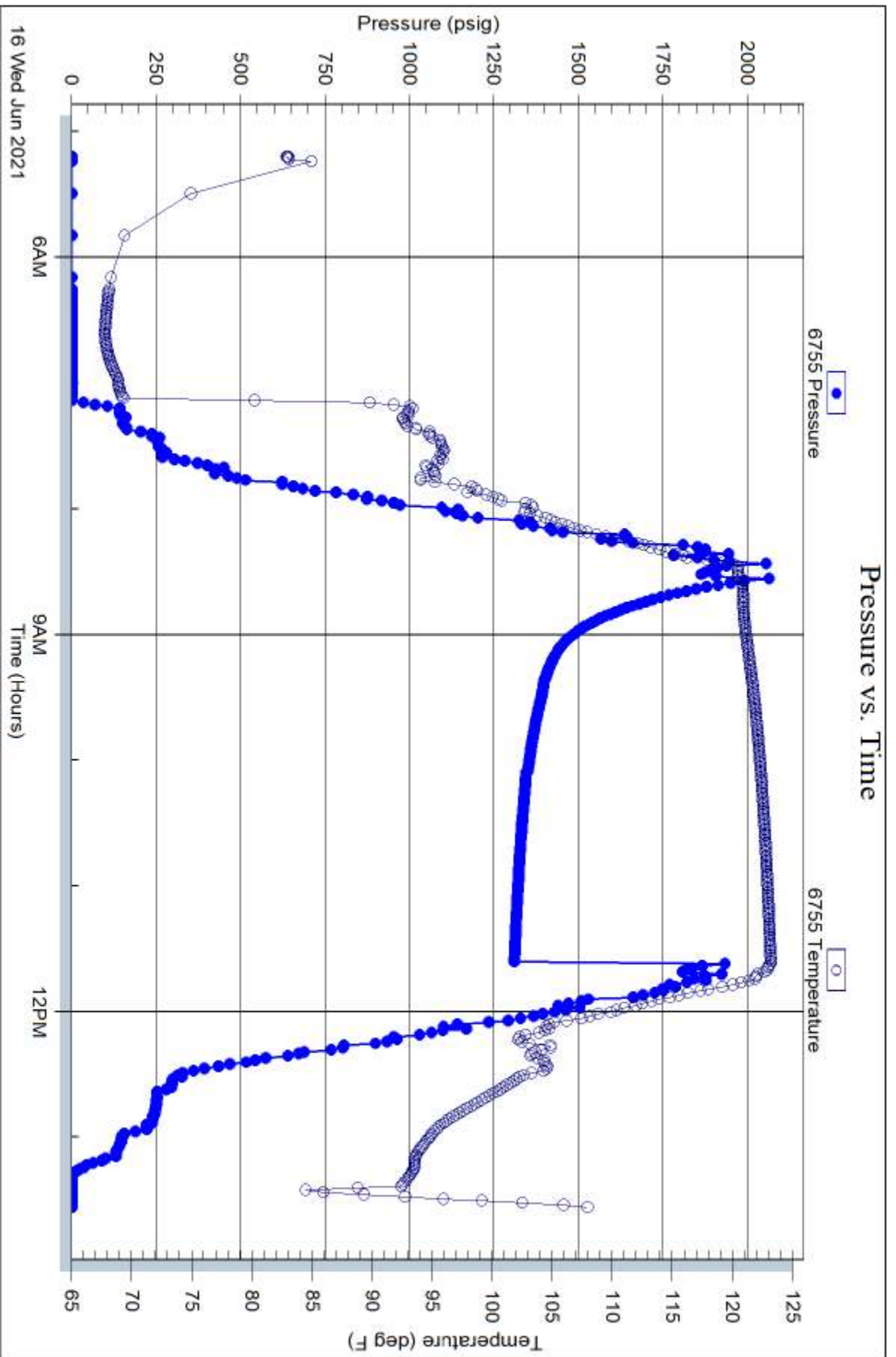
Printed: 2021.06.17 @ 13:40:31

Serial #: 6755

Below (Straddle)

Schuster Unit #1

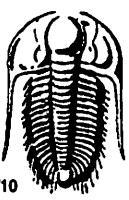
DST Test Number: 3



Triobite Testing, Inc

Ref. No: 61774

Printed: 2021.06.17 @ 13:40:32



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 61772

Well Name & No. Schuster unit #1 Test No. 1 Date 4/14/21
 Company TDI Inc. Elevation 2113 KB 2100 GL
 Address 1310 Bison Rd Hays, KS 67601-9696
 Co. Rep / Geo. Herb Dienes Rig Southwind #1
 Location: Sec. 1 Twp. 13 S Rge. 20 W Co. Ellis State KS

Interval Tested 3546 - 3640 Zone Tested Lke HI, J, K
 Anchor Length 94' Drill Pipe Run 3549 Mud Wt. 9.4
 Top Packer Depth 3541 Drill Collars Run 0 Vis 51
 Bottom Packer Depth 3546 Wt. Pipe Run 0 WL 5.4
 Total Depth 3640 Chlorides 5300 ppm System LCM 1

Blow Description IF - strong blow built to bob in 5 min
IST - No blow but weak blowback at end of shut in
FF - strong blow, bob in 3 min
FST - Blow back built to 3 in

Rec	Feet of	%gas	%oil	%water	%mud
496	Gr. P	100			
497 31	gassy oil	40	60		
498 124	gassy oil cut mud mud cut	10	60		20
		20			
651					

Rec Total ~~651~~ BHT 115 Gravity 39 @ 79°F API RW @ _____ °F Chlorides _____ ppm

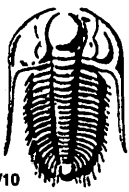
(A) Initial Hydrostatic 1775 Test 1200 T-On Location 10:30
 (B) First Initial Flow 16 Jars T-Started 17:30
 (C) First Final Flow 53 Safety Joint T-Open 19:27
 (D) Initial Shut-In 848 Circ Sub T-Pulled 21:27
 (E) Second Initial Flow 49 Hourly Standby T-Out 23:35
 (F) Second Final Flow 79 Mileage 32rt 40 Comments _____
 (G) Final Shut-In 758 Sampler _____
 (H) Final Hydrostatic 1709 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

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

Sub Total 1240

Total 1240
 MP/DST Disc't _____

Approved By _____ Our Representative _____
 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.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 61773

Well Name & No. Schuster unit #1 Test No. 2 Date 6/15/25
 Company TDI Inc. Elevation 2113 KB 2100 GL
 Address 1310 Bison Rd Hays, KS 67601-9696
 Co. Rep / Geo. Herb Dienes Rig Southwind #2
 Location: Sec. 1 Twp. 13S Rge. 20W Co. Ellis State KS

Interval Tested 3728 - 3770 Zone Tested conglomerate
 Anchor Length 42 Drill Pipe Run 3738 Mud Wt. 9.3
 Top Packer Depth 3723 Drill Collars Run 0 Vis 54
 Bottom Packer Depth 3728 Wt. Pipe Run 0 WL 6.0
 Total Depth 3770 Chlorides 5000 ppm System LCM 3

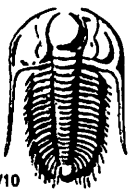
Blow Description FF - W96 built to 1.5"
ISI - No blow back
FF - No blow
FST - No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>VS OCM</u>		<u>1</u>	<u>99</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 15 BHT 113 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm
 (A) Initial Hydrostatic 1884 Test 1200 T-On Location 9:30
 (B) First Initial Flow 18 Jars _____ T-Started 10:12
 (C) First Final Flow 22 Safety Joint _____ T-Open 11:52
 (D) Initial Shut-In 500 Circ Sub _____ T-Pulled 13:52
 (E) Second Initial Flow 24 Hourly Standby _____ T-Out _____
 (F) Second Final Flow 29 Mileage 40 Comments _____
 (G) Final Shut-In 317 Sampler _____
 (H) Final Hydrostatic 1823 Straddle _____
 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1240
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1240

Approved By _____ Our Representative Kevin Webster

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.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 61774

Well Name & No. Schuster unit #1 Test No. 3 Date 6/16/21
 Company TDI Inc. Elevation 2113 KB 2100 GL
 Address 1310 Bison Rd Hays, KS 67601-9696
 Co. Rep / Geo. Herb Dienes Rig Southern Ind #2
 Location: Sec. 1 Twp. 13S Rge. 20W Co. Ellis State KS

Interval Tested 3357-3525 Zone Tested TORONTO, A-G
 Anchor Length 168 Drill Pipe Run 3866 Mud Wt. 9.4
 Top Packer Depth 3357 Drill Collars Run 0 Vis 55
 Bottom Packer Depth 3525 Wt. Pipe Run 0 WL 6.0
 Total Depth 3900 Chlorides 4800 ppm System LCM 3

Blow Description FF - Building blow built to 9"
ISI - No blow back
FF - WSB built to
FSI - No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>109</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 _____ BHT 112 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

- (A) Initial Hydrostatic 1594
- (B) First Initial Flow 102
- (C) First Final Flow 138
- (D) Initial Shut-In 782
- (E) Second Initial Flow 142
- (F) Second Final Flow 188
- (G) Final Shut-In 717
- (H) Final Hydrostatic 1733

- Test 1200
- Jars _____
- Safety Joint _____
- Circ Sub _____
- Hourly Standby _____
- Mileage 40
- Sampler _____
- Straddle 600
- Shale Packer _____
- Extra Packer _____
- Extra Recorder _____
- Day Standby _____
- Accessibility _____
- Sub Total 1840

- T-On Location 04:30
- T-Started 05:12
- T-Open 08:35
- T-Pulled 11:35
- T-Out 13:33
- Comments _____
- Ruined Shale Packer _____
- Ruined Packer _____
- Extra Copies _____
- Sub Total 0
- Total 1840
- MP/DST Disc't _____

Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 45

Approved By _____ Our Representative Kevin Webster

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.

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. 1798

Date	6-10-21	Sec.	1	Twp.	13	Range	20	County	Ellis	State	Ks	On Location		Finish	9:30 AM
------	---------	------	---	------	----	-------	----	--------	-------	-------	----	-------------	--	--------	---------

Location *Yocemento 4W 2N 1W N1E*

Lease	<i>Schuster Unit</i>	Well No.	<i>1</i>	Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.	
Contractor	<i>Southwind</i>				Charge To	<i>T. D. I.</i>
Type Job	<i>SURFACE</i>				Street	
Hole Size	<i>12 1/8</i>	T.D.	<i>214</i>	City		State
Csg.	<i>8 1/8</i>	Depth	<i>213</i>	The above was done to satisfaction and supervision of owner agent or contractor.		
Tbg. Size		Depth		Cement Left in Csg.	<i>15</i>	Shoe Joint
Tool		Depth		Cement Amount Ordered	<i>150M 80/20 3-2</i>	
Meas Line		Displace	<i>12.6</i>			

EQUIPMENT

Pumptrk	<i>5</i>	No.	Cementer		Common	<i>120</i>
			Helper	<i>Bill Craig</i>	Poz. Mix	<i>30</i>
Bulktrk		No.	Driver	<i>Doug</i>	Gel.	<i>3</i>
Bulktrk	<i>14</i>	No.	Driver		Calcium	<i>6</i>

JOB SERVICES & REMARKS

Remarks:		Hulls	
Rat Hole		Salt	
Mouse Hole		Flowseal	
Centralizers		Kol-Seal	
Baskets		Mud CLR 48	
D/V or Port Collar		CFL-117 or CD110 CAF 38	
		Sand	
		Handling	<i>159</i>
		Mileage	

*RAN 5 JTS of 8 1/8 set @ 213
Cemt w/ 150M
pump plug w/ 12.6 bbls water
Cemt did circ*

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	

Pumptrk Charge	<i>Surface</i>	Tax	
Mileage	<i>15 (m.m.)</i>	Discount	
Signature	<i>Frank J. Rene</i>	Total Charge	

Thanks



TREATMENT REPORT

Acid Stage No. _____

Date 6/16/2021 District GB F.O. No. C60339
 Company TDI INC
 Well Name & No. SCHUSTER UNIT #1
 Location _____ Field _____
 County ELLIS State KS

Type Treatment: Amt. Type Fluid Sand Size Pounds of Sand
 Bkdown _____ Bbl./Gal. _____
 _____ Bbl./Gal. _____
 _____ Bbl./Gal. _____
 _____ Bbl./Gal. _____
 Flush _____ Bbl./Gal. _____

Treated from _____ ft. to _____ ft. No. ft. 0
 from _____ ft. to _____ ft. No. ft. 0
 from _____ ft. to _____ ft. No. ft. 0

Actual Volume of Oil / Water to Load Hole: _____ Bbl./Gal.

Pump Trucks. No. Used: Std. 320 Sp. _____ Twin _____
 Auxiliary Equipment 360-308T
 Personnel GREG CLARENCE JIM
 Auxiliary Tools _____

Plugging or Sealing Materials: Type 60/40 4% GEL 1/4# A SK CELLOFLAKE
 _____ Gals. _____ lb.

Casing: Size _____ Type & Wt. _____ Set at _____ ft.
 Formation: _____ Perf. _____ to _____
 Formation: _____ Perf. _____ to _____
 Formation: _____ Perf. _____ to _____
 Liner: Size _____ Type & Wt. _____ Top at _____ ft. Bottom at _____ ft.
 Cemented: Perf. from _____ ft. to _____ ft.
 Tubing: Size & Wt. _____ Swung at _____ ft.
 Perf. from _____ ft. to _____ ft.
 Open Hole Size _____ T.D. _____ ft. P.B. to _____ ft.

Company Representative TOM DENNING Treater GREG C.

TIME a.m./p.m.	PRESSURES		Total Fluid Pumped	REMARKS
	Tubing	Casing		
5:45				ON LOCATION
				PUMP 50 SKS @ 3760'
				PUMP 50 SKS @ 1450'
				PUMP 100 SKS @ 725'
				PUMP 50 SKS @ 275
				PUMP 10 SKS @ 40' WITH 8 5/8 WOODEN PLUG
				PLUG RATHOLE WITH 30 SKS
				PLUG MOUSEHOLE WITH 15 SKS
10:00				JOB COMPLETE
				THANK YOU!!!