



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1094509
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

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

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

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

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

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

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

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

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

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

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

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

1094509

Operator Name: _____ Lease Name: _____ Well #: _____

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

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

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

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

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

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

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

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

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

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

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

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

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

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> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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DRILL STEM TEST REPORT

Prepared For: **TDI Inc.**

1310 Bison Rd.
Hays, KS 67601

ATTN: Herb Dienes

Bieker #2

24-15s-19w Ellis,KS

Start Date: 2012.07.16 @ 01:15:30

End Date: 2012.07.16 @ 07:58:00

Job Ticket #: 47966 DST #: 1

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

Printed: 2012.07.24 @ 10:16:21

TDI Inc. 24-15s-19w Ellis,KS Bieker #2 DST # 1 LKC "H,I,&J" 2012.07.16



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison Rd.
Hays, KS 67601
ATTN: Herb Dienes

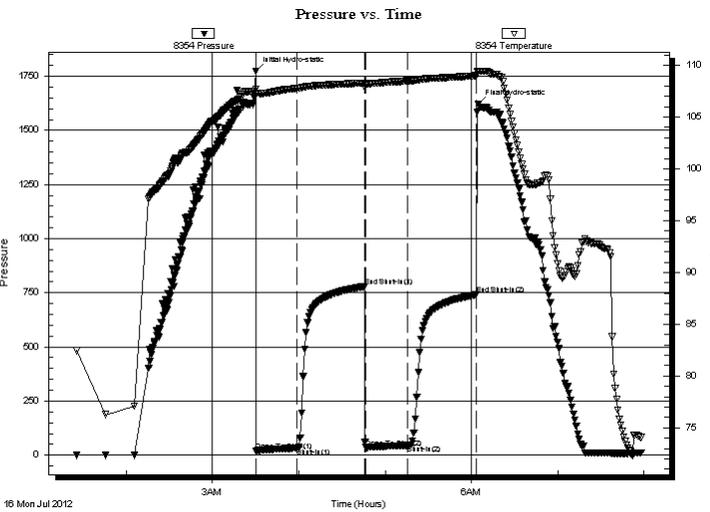
24-15s-19w Ellis,KS
Bieker #2
Job Ticket: 47966 **DST#: 1**
Test Start: 2012.07.16 @ 01:15:30

GENERAL INFORMATION:

Formation: **LKC "H,I,&J"**
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 03:30:30 Tester: Dustin Rash
 Time Test Ended: 07:58:00 Unit No: 38
Interval: 3386.00 ft (KB) To 3475.00 ft (KB) (TVD) Reference Elevations: 1989.00 ft (KB)
 Total Depth: 3475.00 ft (KB) (TVD) 1980.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 9.00 ft

Serial #: 8354 Inside
 Press @ RunDepth: 45.50 psig @ 3457.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.07.16 End Date: 2012.07.16 Last Calib.: 2012.07.16
 Start Time: 01:25:30 End Time: 07:58:00 Time On Btm: 2012.07.16 @ 03:30:00
 Time Off Btm: 2012.07.16 @ 06:05:00

TEST COMMENT: IF-Very weak building blow . Built to 1&1/2 inches.
 IS-No Return.
 FF-Very weak surface blow . Built to 1/4 inch.
 FS-No Return.



PRESSURE SUMMARY

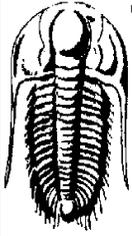
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1774.38	107.69	Initial Hydro-static
1	20.71	107.33	Open To Flow (1)
29	32.49	107.80	Shut-In(1)
76	778.85	108.30	End Shut-In(1)
77	35.45	108.19	Open To Flow (2)
106	45.50	108.52	Shut-In(2)
154	741.83	109.01	End Shut-In(2)
155	1619.68	109.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	100%Mud	0.70

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 Dienes

24-15s-19w Ellis,KS
Bieker #2
Job Ticket: 47966 **DST#: 1**
Test Start: 2012.07.16 @ 01:15:30

Tool Information

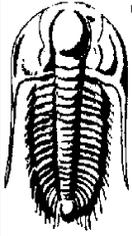
Drill Pipe:	Length: 3393.00 ft	Diameter: 3.80 inches	Volume: 47.59 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 5000.00 lb
			<u>Total Volume: 47.59 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 32000.00 lb
Depth to Top Packer:	3386.00 ft			Final 32000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	89.00 ft			
Tool Length:	109.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3367.00	
Shut In Tool	5.00			3372.00	
Hydraulic tool	5.00			3377.00	
Packer	5.00			3382.00	20.00 Bottom Of Top Packer
Packer	4.00			3386.00	
Stubb	1.00			3387.00	
Perforations	5.00			3392.00	
Change Over Sub	1.00			3393.00	
Drill Pipe	63.00			3456.00	
Change Over Sub	1.00			3457.00	
Recorder	0.00	8354	Inside	3457.00	
Recorder	0.00	8520	Outside	3457.00	
Perforations	15.00			3472.00	
Bullnose	3.00			3475.00	89.00 Bottom Packers & Anchor

Total Tool Length: 109.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc. **24-15s-19w Ellis,KS**
 1310 Bison Rd. **Bieker #2**
 Hays, KS 67601 Job Ticket: 47966 **DST#: 1**
 ATTN: Herb Dienes Test Start: 2012.07.16 @ 01:15:30

Mud and Cushion Information

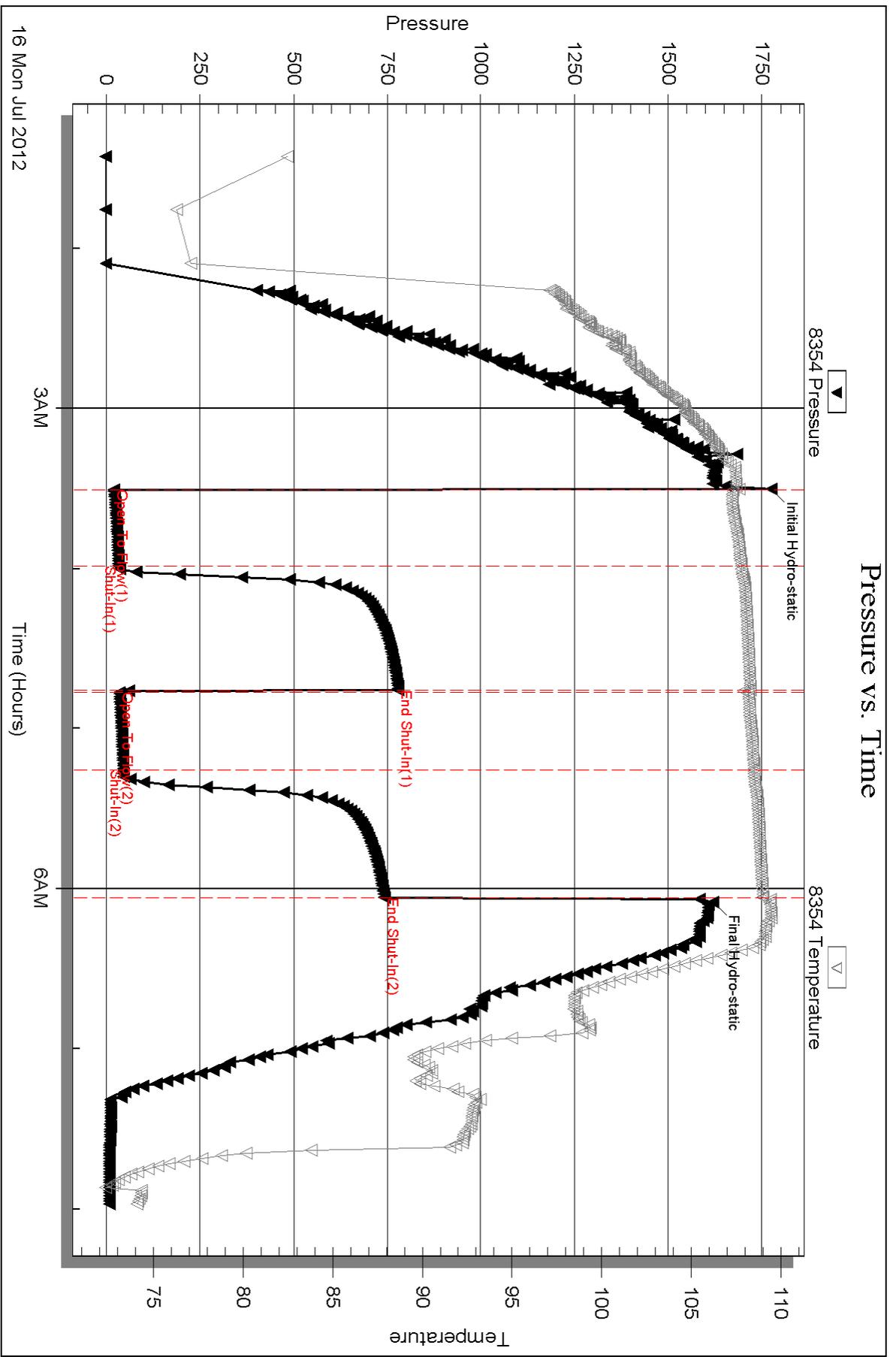
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 44.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.38 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2100.00 ppm			
Filter Cake: inches			

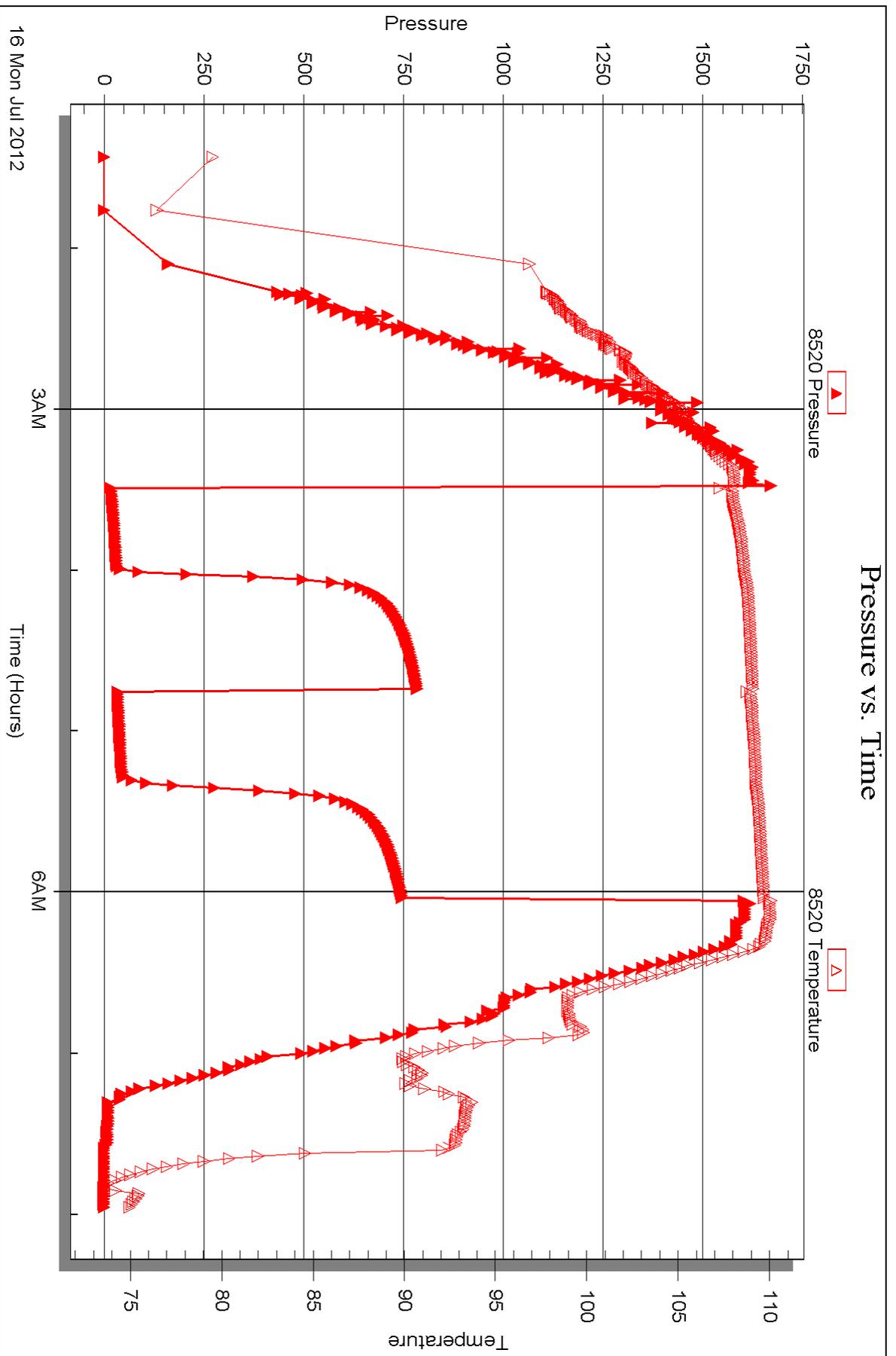
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	100%Mud	0.701

Total Length: 50.00 ft Total Volume: 0.701 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **TDI Inc.**

1310 Bison Rd.
Hays, KS 67601

ATTN: Herb Dienes

Bieker #2

24-15s-19w Ellis,KS

Start Date: 2012.07.16 @ 19:10:30

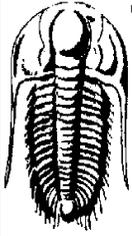
End Date: 2012.07.17 @ 01:06:00

Job Ticket #: 47967 DST #: 2

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

Printed: 2012.07.24 @ 10:14:39

TDI Inc. 24-15s-19w Ellis,KS Bieker #2 DST # 2 Cong. Sand 2012.07.16



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison Rd.
Hays, KS 67601
ATTN: Herb Dienes

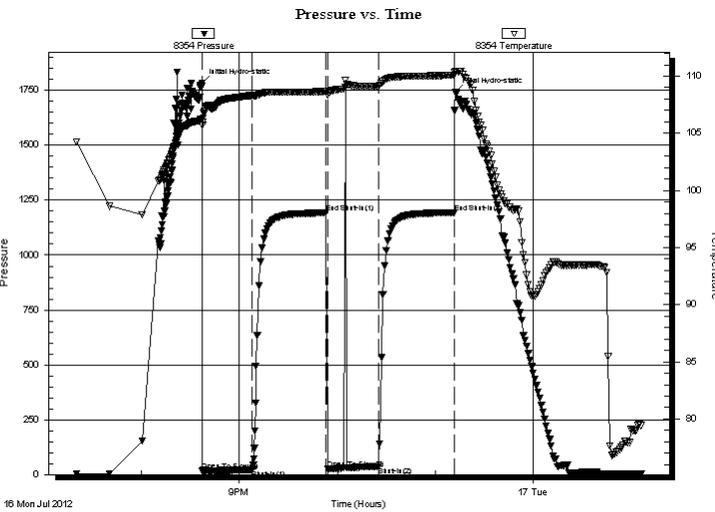
24-15s-19w Ellis, KS
Bieker #2
Job Ticket: 47967 **DST#: 2**
Test Start: 2012.07.16 @ 19:10:30

GENERAL INFORMATION:

Formation: **Cong. Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:37:30
Time Test Ended: 01:06:00
Interval: **3575.00 ft (KB) To 3592.00 ft (KB) (TVD)**
Total Depth: 3592.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Rash
Unit No: 38
Reference Elevations: 1989.00 ft (KB)
1980.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8354 Inside
Press @ Run Depth: 36.80 psig @ 3577.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.07.16 End Date: 2012.07.17 Last Calib.: 2012.07.17
Start Time: 19:20:30 End Time: 01:06:00 Time On Btm: 2012.07.16 @ 20:37:20
Time Off Btm: 2012.07.16 @ 23:12:30

TEST COMMENT: IF-Very weak building blow . Built to 2 inches.
IS-No Return.
FF-No Blow . Flushed tool. Very weak building blow . Built to 1 inches.
FS-No Return.



PRESSURE SUMMARY

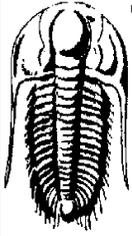
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1781.94	106.27	Initial Hydro-static
1	17.76	105.71	Open To Flow (1)
31	22.79	108.34	Shut-In(1)
76	1192.19	108.68	End Shut-In(1)
77	25.05	108.37	Open To Flow (2)
108	36.80	109.14	Shut-In(2)
155	1193.34	110.10	End Shut-In(2)
156	1742.03	110.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	30%Oil/70%Mud	0.28
47.00	60%Gas/40%Oil	0.66

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 Dienes

24-15s-19w Ellis,KS
Bieker #2
Job Ticket: 47967 **DST#: 2**
Test Start: 2012.07.16 @ 19:10:30

Tool Information

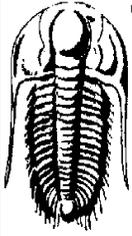
Drill Pipe:	Length: 3579.00 ft	Diameter: 3.80 inches	Volume: 50.20 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	5000.00 lb
			<u>Total Volume: 50.20 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial	32000.00 lb
Depth to Top Packer:	3575.00 ft			Final	32000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	17.00 ft				
Tool Length:	37.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3556.00	
Shut In Tool	5.00			3561.00	
Hydraulic tool	5.00			3566.00	
Packer	5.00			3571.00	20.00 Bottom Of Top Packer
Packer	4.00			3575.00	
Stubb	1.00			3576.00	
Perforations	1.00			3577.00	
Recorder	0.00	8354	Inside	3577.00	
Recorder	0.00	8520	Outside	3577.00	
Perforations	12.00			3589.00	
Bullnose	3.00			3592.00	17.00 Bottom Packers & Anchor

Total Tool Length: 37.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc. **24-15s-19w Ellis,KS**
 1310 Bison Rd. **Bieker #2**
 Hays, KS 67601 Job Ticket: 47967 **DST#: 2**
 ATTN: Herb Dienes Test Start: 2012.07.16 @ 19:10:30

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 39 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 55.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.19 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 2100.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	30%Oil/70%Mud	0.281
47.00	60%Gas/40%Oil	0.659

Total Length: 67.00 ft Total Volume: 0.940 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

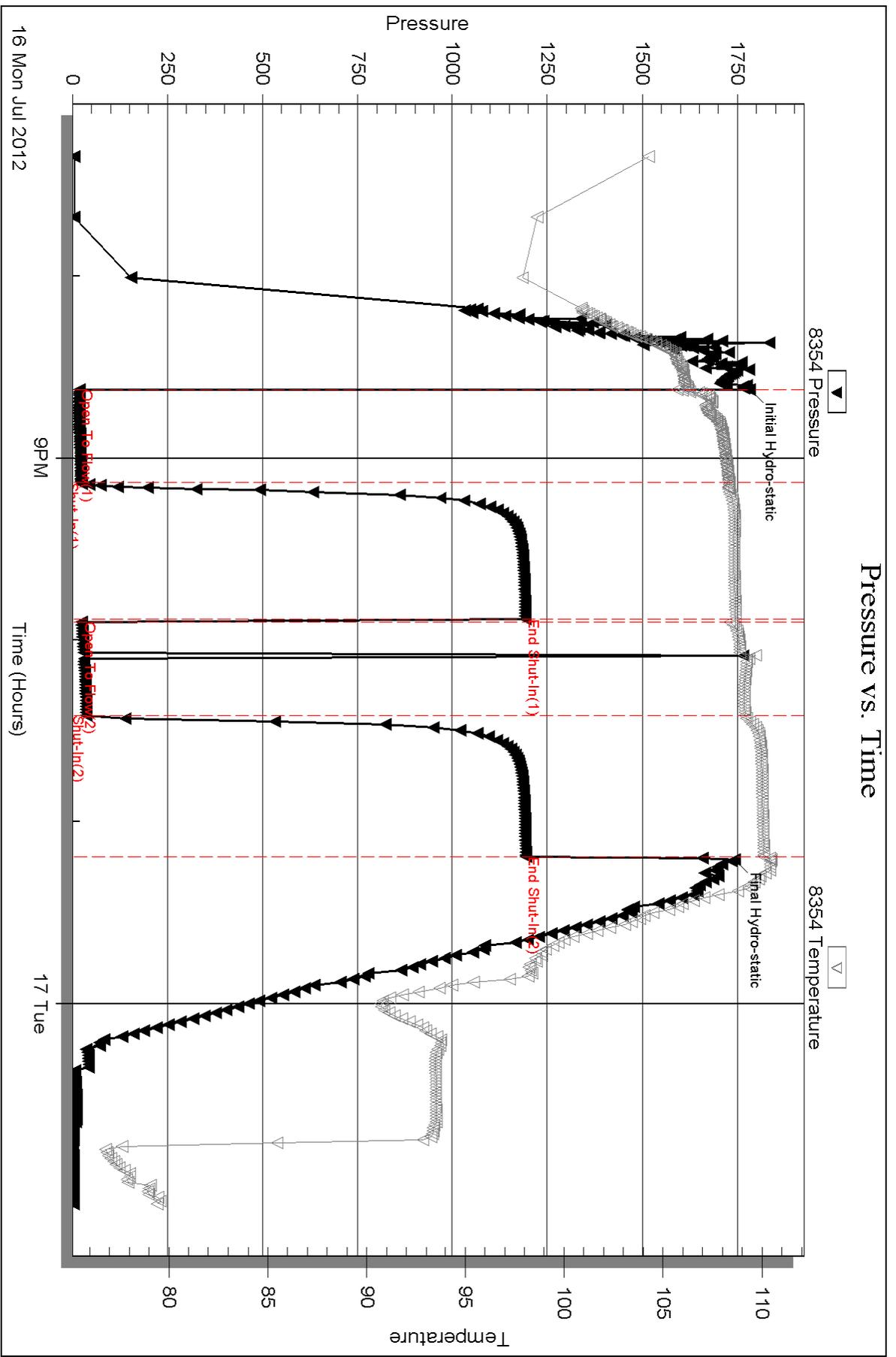
Serial #: 8354

Inside

TDI Inc.

Bleker #2

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 47967

Printed: 2012.07.24 @ 10:14:41



DRILL STEM TEST REPORT

Prepared For: **TDI Inc.**

1310 Bison Rd.
Hays, KS 67601

ATTN: Herb Dienes

Bieker #2

24-15s-19w Ellis,KS

Start Date: 2012.07.17 @ 18:04:15

End Date: 2012.07.17 @ 21:55:15

Job Ticket #: 47968 DST #: 3

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

Printed: 2012.07.24 @ 10:13:51

TDI Inc. 24-15s-19w Ellis,KS Bieker #2 DST # 3 LKC "C" 2012.07.17



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI Inc.
1310 Bison Rd.
Hays, KS 67601
ATTN: Herb Dienes

24-15s-19w Ellis,KS
Bieker #2
Job Ticket: 47968 **DST#: 3**
Test Start: 2012.07.17 @ 18:04:15

Tool Information

Drill Pipe:	Length: 3274.00 ft	Diameter: 3.80 inches	Volume: 45.93 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 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: 5000.00 lb
			<u>Total Volume: 45.93 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 34000.00 lb
Depth to Top Packer:	3284.00 ft			Final 37000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	467.00 ft			
Tool Length:	487.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3265.00	
Shut In Tool	5.00			3270.00	
Hydraulic tool	5.00			3275.00	
Packer	5.00			3280.00	20.00 Bottom Of Top Packer
Packer	4.00			3284.00	
Stubb	1.00			3285.00	
Recorder	0.00	8354	Inside	3285.00	
Recorder	0.00	8520	Outside	3285.00	
Perforations	20.00			3305.00	
Blank Off Sub	1.00			3306.00	467.00 Tool Interval
Packer	4.00			3310.00	
Stubb	1.00			3311.00	
Change Over Sub	1.00			3312.00	
Recorder	0.00	8653	Below	3312.00	
Drill Pipe	345.00			3747.00	
Change Over Sub	1.00			3748.00	
Bullnose	3.00			3751.00	1000486.00 Bottom Packers & Anchor
Total Tool Length:	487.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc. **24-15s-19w Ellis,KS**
 1310 Bison Rd. **Bieker #2**
 Hays, KS 67601 Job Ticket: 47968 **DST#: 3**
 ATTN: Herb Dienes Test Start: 2012.07.17 @ 18:04:15

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: bbl		
Water Loss: 6.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl

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

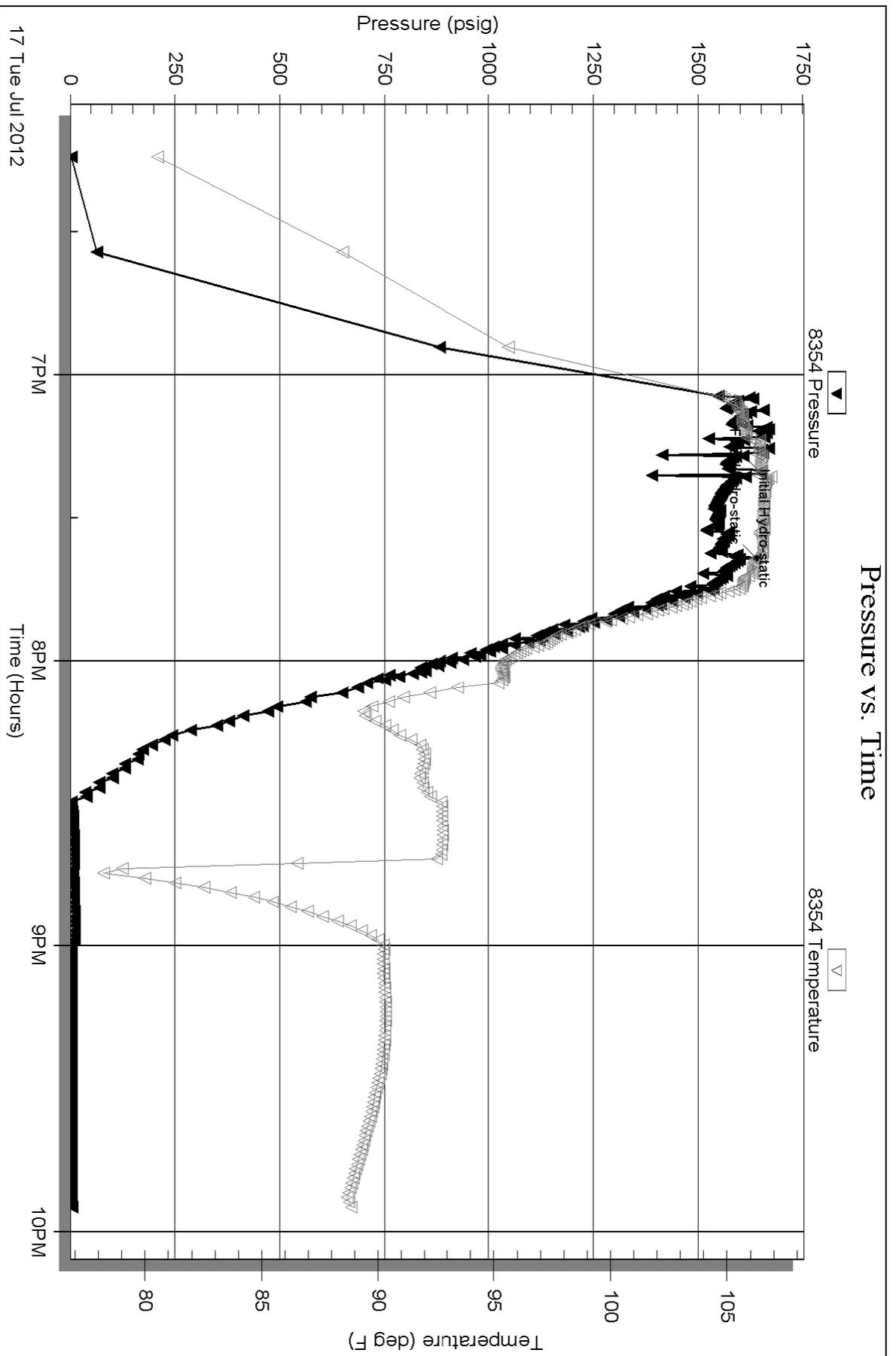
Serial #: 8354

Inside

TDI Inc.

Bleker #2

DST Test Number: 3

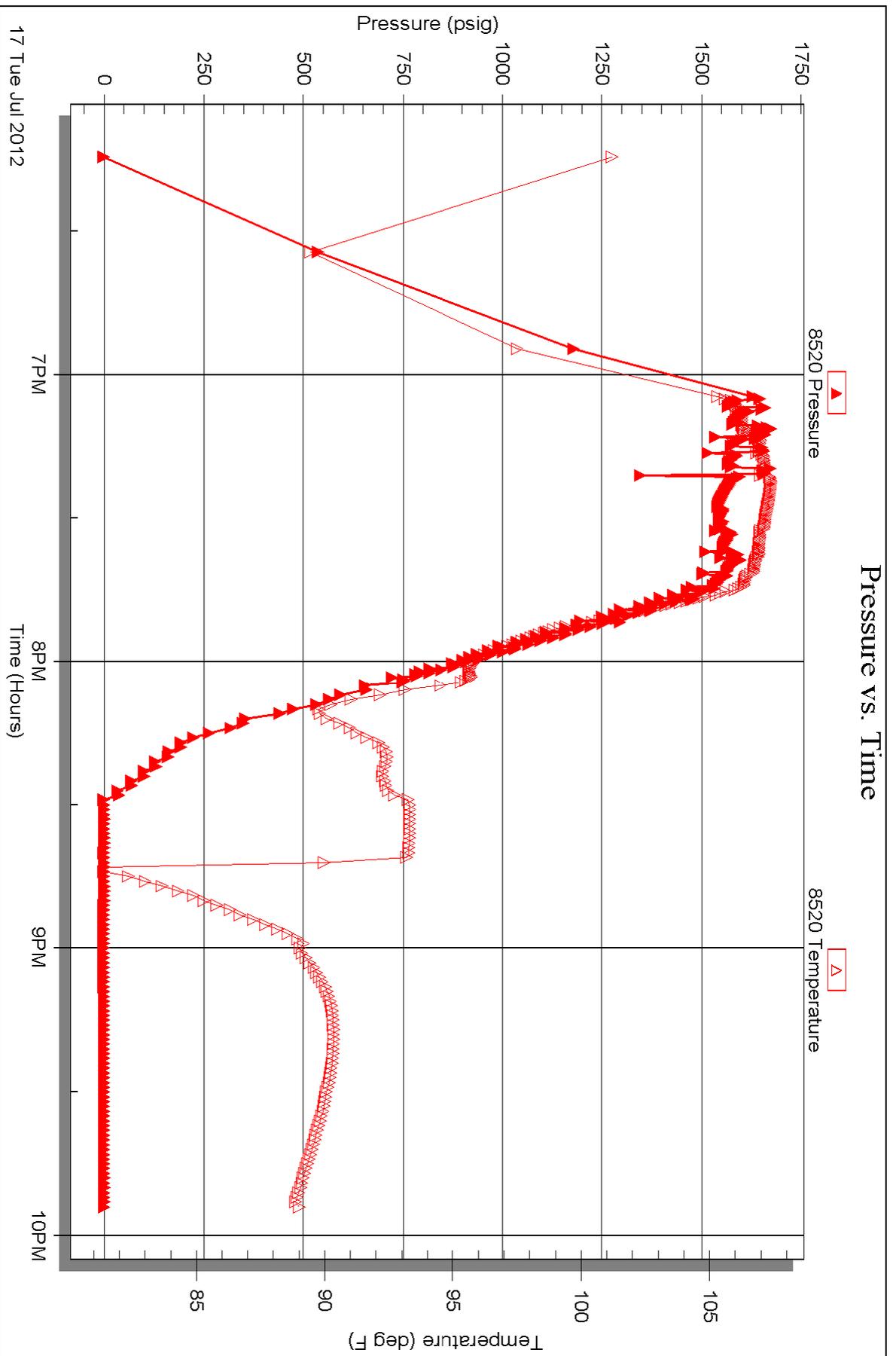


Serial #: 8520

Outside TDI Inc.

Bleker #2

DST Test Number: 3

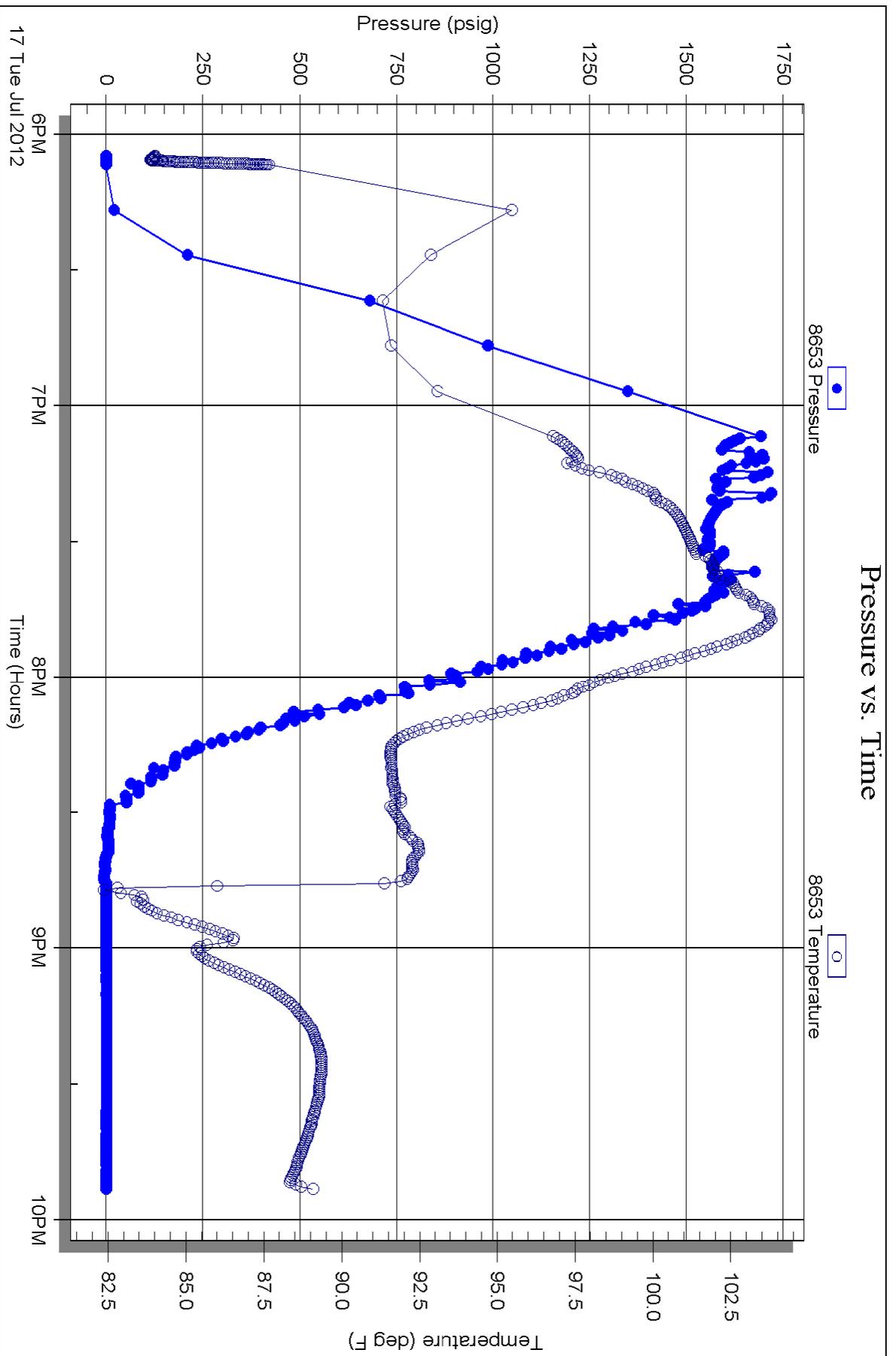


Serial #: 8653

Below (Straddling)

Bleker #2

DST Test Number: 3





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47966

Well Name & No. Bieber #2 Test No. 2 Date 7-16-12
 Company TOT, Inc. Elevation 1989 KB 1980 GL
 Address 1310 Bison Rd. Hays, KS 67601
 Co. Rep / Geo. Herb Dienes Rig Southward 1
 Location: Sec. 24 Twp. 15S Rge. 19W Co. Ellis State KS

Interval Tested 3386-3475 Zone Tested LKC "H,I,J"
 Anchor Length 89' Drill Pipe Run 3393 Mud Wt. 8.7
 Top Packer Depth 3381 Drill Collars Run 0 Vis 44
 Bottom Packer Depth 3386 Wt. Pipe Run 0 WL 6.4
 Total Depth 3475 Chlorides 2100 ppm System LCM 1#

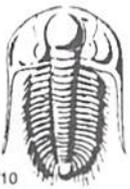
Blow Description IF - Very weak building blow, Built to 1 1/2 inches,
ISI - No Return,
FF - Very weak surface blow, Built to 1/4 inch,
FBI - No Return,

Rec	Feet of	%gas	%oil	%water	%mud
<u>50</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 50 BHT 109 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1774 Test 1150 T-On Location 0015
 (B) First Initial Flow 21 Jars _____ T-Started 0130
 (C) First Final Flow 32 Safety Joint _____ T-Open 0330
 (D) Initial Shut-In 779 Circ Sub _____ T-Pulled 0605
 (E) Second Initial Flow 35 Hourly Standby _____ T-Out 0800
 (F) Second Final Flow 46 Mileage 14X2 43.40 Comments Bot - 0115
 (G) Final Shut-In 742 Sampler _____
 (H) Final Hydrostatic 1620 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1193.40
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 45 Sub Total 1193.40

Approved By _____ Our Representative [Signature]
 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.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47967

Well Name & No. Bieker #2 Test No. 2 Date 7-16-12
 Company TAT, Inc. Elevation 1989 KB 1980 GL
 Address 1310 Bison Rd. Hays, KS 67601
 Co. Rep / Geo. Herb Dienes Rig Southward 1
 Location: Sec. 24 Twp. 15S Rge. 19W Co. Ellis State KS

Interval Tested 3575-3592 Zone Tested Cong. Sand
 Anchor Length 17' Drill Pipe Run 3579 Mud Wt. 9.0
 Top Packer Depth 3570 Drill Collars Run 0 Vis 55
 Bottom Packer Depth 3575 Wt. Pipe Run 0 WL 7.2
 Total Depth 3592 Chlorides 2100 ppm System LCM 1

Blow Description IF - Very weak building blow, Built to 2 inches, ISE - No Return.
FF - No Blow, Flushed rod, Very weak building blow, Built to 1 inch, FSI - No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>47</u>	<u>Gassy Oil</u>	<u>60</u>	<u>40</u>		
<u>20</u>	<u>HOCM</u>		<u>30</u>		<u>70</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 67 BHT 110 Gravity 39 API RW @ _____ °F Chlorides _____ ppm

- (A) Initial Hydrostatic 1782
- (B) First Initial Flow 18
- (C) First Final Flow 23
- (D) Initial Shut-In 1192
- (E) Second Initial Flow 25
- (F) Second Final Flow 37
- (G) Final Shut-In 1193
- (H) Final Hydrostatic 1742

- Test 1150
- Jars
- Safety Joint
- Circ Sub
- Hourly Standby
- Mileage 1482 43.40
- Sampler
- Straddle
- Shale Packer
- Extra Packer
- Extra Recorder
- Day Standby
- Accessibility

T-On Location 1830
 T-Started 1930
 T-Open 2037
 T-Pulled 2310
 T-Out 0100
 Comments Best - 1910

Initial Open 30
 Initial Shut-In 4.5
 Final Flow 30
 Final Shut-In 4.5

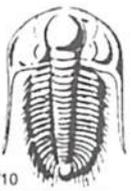
Ruined Shale Packer
 Ruined Packer
 Extra Copies
 Sub Total 0
 Total 1193.40

Approved By _____

Our Representative _____

D. Rash

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.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47968

Well Name & No. Bieker #2 Test No. 3 Date 7-17-12
 Company VTL, Inc. Elevation 1989 KB 1980 GL
 Address 1310 Bison Rd. Hays, KS 67601
 Co. Rep / Geo. Herb Dienes Rig Southwind 2
 Location: Sec. 24 Twp. 15S Rge. 19W Co. Ellis State KS

Interval Tested 3284-3310 Zone Tested LKC "C"
 Anchor Length 26' Drill Pipe Run _____ Mud Wt. 92
 Top Packer Depth 3279 Drill Collars Run 0 Vis 57
 Bottom Packer Depth 3284 SP-3310 Wt. Pipe Run 0 WL 6.8
 Total Depth 3750-RTD 3749-TD Chlorides 2000 ppm System LCM 2#
 Blow Description IF- Packer Failure.

Rec	Feet of	%gas	%oil	%water	%mud

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

(A) Initial Hydrostatic _____ Test 950 T-On Location 1600
 (B) First Initial Flow _____ Jars _____ T-Started 1815
 (C) First Final Flow _____ Safety Joint _____ T-Open _____
 (D) Initial Shut-In _____ Circ Sub _____ T-Pulled _____
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out 2345
 (F) Second Final Flow _____ Mileage 14X2 43.40 Comments Best-1804
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic _____ Straddle 600 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Initial Open _____ Extra Packer _____ Extra Copies _____
 Initial Shut-In _____ Extra Recorder _____ Sub Total 0
 Final Flow _____ Day Standby _____ Total 1593.40
 Final Shut-In _____ Accessibility _____ MP/DST Disc't _____
 Sub Total 1593.40

Approved By _____ Our Representative D. Rash

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.

OPERATOR

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

Contact Geologist: TOM DENNING
 Contact Phone Nbr: 785-259-3141
 Well Name: BIEKER # 2
 Location: W2 NW NE SE Sec.24-15s-19w
 Pool: INFIELD
 State: KANSAS
 API: 15-051-26315-00-00
 Field: UNNAMED
 Country: USA



TDI, Inc.
 1310 BISON ROAD
 HAYS, KANSAS 67601
 (785) 628-2593

Scale 1:240 Imperial

Well Name: BIEKER # 2
 Surface Location: W2 NW NE SE Sec.24-15s-19w
 Bottom Location:
 API: 15-051-26315-00-00
 License Number: 4787
 Spud Date: 7/11/2012
 Region: ELLIS COUNTY
 Drilling Completed: 7/17/2012
 Surface Coordinates: 2310' FSL & 1265' FEL
 Bottom Hole Coordinates:
 Ground Elevation: 1979.00ft
 K.B. Elevation: 1989.00ft
 Logged Interval: 2600.00ft
 Total Depth: 3750.00ft
 Formation: LANSING-KANSAS
 Drilling Fluid Type: GEL/CHEMICAL
 Time: 1:00 PM
 Time: 8:18 AM
 To: 3750.00ft

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude:
 N/S Co-ord: 2310' FSL
 E/W Co-ord: 1265' FEL
 Latitude:

LOGGED BY

Company: SOLUTIONS CONSULTING
 Address: 108 W 35TH
 HAYS, KS 67601
 Phone Nbr: (785) 639-1337
 Logged By: Geologist
 Name: HERB DEINES

CONTRACTOR

Contractor: SOUTHWIND DRILLING, INC.
 Rig #: 1
 Rig Type: MUD ROTARY
 Spud Date: 7/11/2012
 TD Date: 7/17/2012
 Rig Release: 7/18/2012
 Time: 1:00 PM
 Time: 8:18 AM
 Time: 10:00 PM

ELEVATIONS

K.B. Elevation: 1989.00ft
 K.B. to Ground: 10.00ft
 Ground Elevation: 1979.00ft

NOTES

RECOMMENDATION TO RUN PRODUCTION CASING BASED ON FAVORABLE STRUCTURE AND SIMILIARITY OF DEVELOPMENT TO BIEKER #1.

FORMATION TOPS AND DAILY PROGRESS SUMMARY

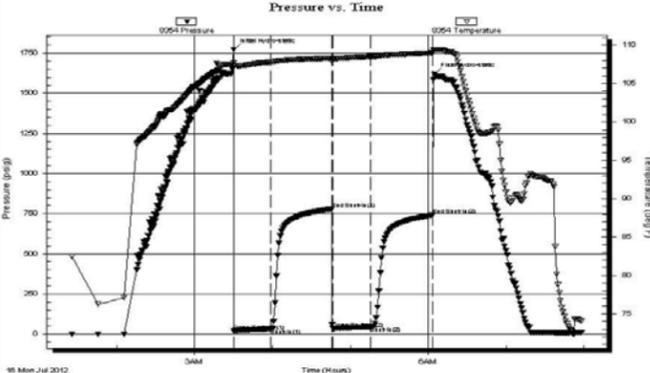
BIEKER # 2

2310' FSL & 1265' FEL, SE/4
 Sec.24-15s-19w
 1979' GL 1989' KB

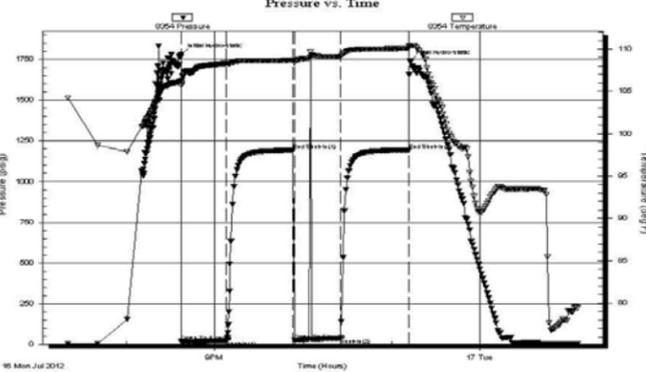
<u>FORMATION</u>	<u>SAMPLE TOPS</u>	<u>LOG TOPS</u>
Anhydrite	1163+ 826	1163+ 826
B-Anhydrite	1199+ 790	1198+ 791
Topeka	2952- 963	2948- 959
Heebner Shale	3236-1247	3230-1241
Toronto	3257-1268	3252-1263
LKC	3280-1291	3276-1287
BKC	3525-1536	3520-1531
CONGLOMERATE SAND		3586-1597
Arbuckle	3601-1612	3602-1613
RTD	3750-1761	
LTD		3748-1759

7-11-12 RU, Spud 6-26-12 580', drilling
 7-12-12 1174', set surface casing to 1173 w/350 sxs. SMD, Slope survey 1 degree, WOC 12 hrs. Plug down 3:15PM, Swift Cementing Ticket # 71809
 7-13-12 1330', drilling
 7-14-12 2428', drilling
 7-15-12 3183', drilling,
 7-16-12 3475', drilling, DST # 1, DST # 2
 7-17-12 3695', drilling, RTD, Logs, DST # 3 – misrun, run production casing
 7-18-12 3750' finish cementing production casing, RD

DST # 1 SUMMARY

		DRILL STEM TEST REPORT																																										
TDI, Inc. 1310 Bison Rd. Hays, KS 67601 ATTN: Herb Dienes		24/15S/19W-Ellis Bieker #2 Job Ticket: 47966 DST#: 1 Test Start: 2012.07.16 @ 01:15:30																																										
GENERAL INFORMATION:																																												
Formation: LKC "H,I,&J"		Test Type: Conventional Bottom Hole (Initial)																																										
Deviated: No Whipstock: ft (KB)		Tester: Dustin Rash																																										
Time Tool Opened: 03:30:30		Unit No: 38																																										
Time Test Ended: 07:58:00		Reference Elevations: 1989.00 ft (KB)																																										
Interval: 3386.00 ft (KB) To 3475.00 ft (KB) (TVD)		1980.00 ft (CF)																																										
Total Depth: 3475.00 ft (KB) (TVD)		KB to GR/CF: 9.00 ft																																										
Hole Diameter: 7.88 inches		Hole Condition: Poor																																										
Serial #: 8354 Inside																																												
Press@RunDepth: 45.50 psig @ 3457.00 ft (KB)		Capacity: 8000.00 psig																																										
Start Date: 2012.07.16		End Date: 2012.07.16																																										
Start Time: 01:25:30		End Time: 07:58:00																																										
		Last Calib.: 2012.07.16																																										
		Time On Btm: 2012.07.16 @ 03:30:00																																										
		Time Off Btm: 2012.07.16 @ 06:05:00																																										
TEST COMMENT: IF-Very weak building blow . Built to 1&1/2 inches. ISI-No Return. FF-Very weak surface blow . Built to 1/4 inch. FSI-No Return.																																												
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DST # 2 SUMMARY

 <p>TRILOBITE TESTING, INC.</p>	DRILL STEM TEST REPORT																																						
	TDI, Inc. 1310 Bison Rd. Hays, KS 67601 ATTN: Herb Dienes	24/15S/19W-Ellis Bieker #2 Job Ticket: 47967 DST#: 2 Test Start: 2012.07.16 @ 19:10:30																																					
GENERAL INFORMATION:																																							
Formation: Cong. Sand Deviated: No Whipstock: ft (KB) Time Tool Opened: 20:37:30 Time Test Ended: 01:06:00		Test Type: Conventional Bottom Hole (Initial) Tester: Dustin Rash Unit No: 38																																					
Interval: 3575.00 ft (KB) To 3592.00 ft (KB) (TVD) Total Depth: 3592.00 ft (KB) (TVD) Hole Diameter: 7.88 inches Hole Condition: Fair		Reference Elevations: 1989.00 ft (KB) 1980.00 ft (CF) KB to GR/CF: 9.00 ft																																					
Serial #: 8354 Inside Press@RunDepth: 36.80 psig @ 3577.00 ft (KB) Capacity: 8000.00 psig Start Date: 2012.07.16 End Date: 2012.07.17 Last Calib.: 2012.07.17 Start Time: 19:20:30 End Time: 01:06:00 Time On Btm: 2012.07.16 @ 20:37:20 Time Off Btm: 2012.07.16 @ 23:12:30																																							
TEST COMMENT: IF-Very weak building blow . Built to 2 inches. ISI-No Return. FF-No Blow . Flushed tool. Very weak building blow . Built to 1 inches. FSI-No Return.																																							
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Trilobite Testing, Inc

Ref. No: 47967

Printed: 2012.07.17 @ 04:15:17

ROCK TYPES

 Dolprim	 Lmst fw<7	 shale, grn	 shale, red
 Dolsec	 Lmst fw7>	 shale, gry	 Ss
 Dol Lime	 Lscongl	 Carbon Sh	

ACCESSORIES

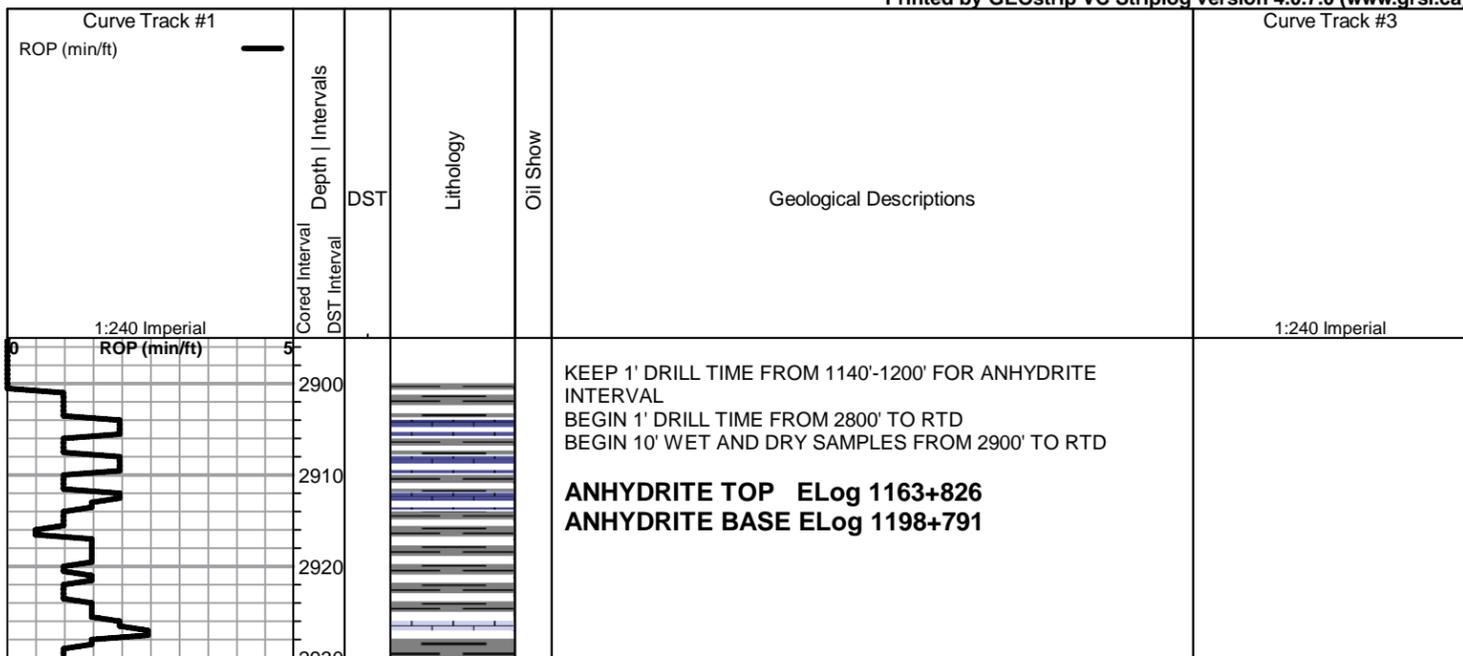
MINERAL	FOSSIL
Z Nodules	o Oolite
P Pyrite	o Oomoldic
* Sandy	
o Varicolored chert	
△ Chert White	

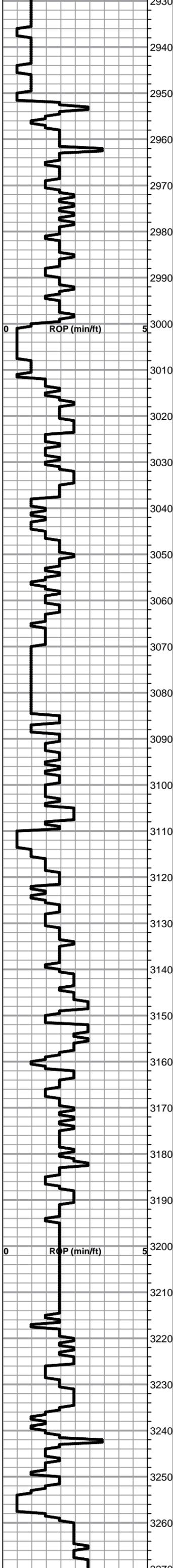
OTHER SYMBOLS

DST

 DST Int
 DST alt

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)





Shale, lt-med gray, soft blocky

TOPEKA SPL 2952-963 ELog 2948-959

Lime, lt-dark brn, fnxn, fossiliferous

Lime, lt brn-gray, fnxn with gray mottling, slightly chalky in part

Lime, crm-lt brn, fnxn

Lime, lt-med brn, fnxn-granular in part, slightly fossiliferous

Lime, lt-med brn-grayish brn, fnxn, fusulinids

Lime, crm, med to cxln granular, mostly barren with 1 piece with light staining, no odor, NFO

Lime, lt brn, fnxn-granular, slightly fossiliferous

Lime, lt-dark brn-gray, fnxn

Lime, lt brn-lt gray, fnxn to granular, slightly fossiliferous

Lime, lt brn-lt grayish brn, fnxn-granular in part

Lime, lt brn-lt grayish brn, fnxn, slightly fossiliferous, fusulinids

Lime, lt-med brn-lt grayish brn, fnxn-granular, slightly fossiliferous

Lime, lt-med brn, granular, slightly fossiliferous

Lime, lt-med brn fnxn-granular, slightly fossiliferous

Shale, gray to black carbonaceous

Lime, crm-lt brn, fnxn

Lime, crm-lt brn, fn-vfxn, bedded chalk in part, brittle on break

Lime, lt brn, fnxn

Lime, lt brn, fnxn

Lime, crm-lt brn-lt gray, fnxn

Shale, black carbonaceous

Lime, lt-med brn-lt gray, fnxn

Lime, crm-lt brn, fnxn, slightly chalky

Lime, crm-lt brn, fnxn, slightly chalky

Lime, lt-med brn, fnxn

Lime, lt-med brn, fnxn-granular in part

Lime, lt-med brn, fnxn, slightly fossiliferous

Lime, crm-lt brn, fnxn, slightly fossiliferous

Lime, lt-med brn, fnxn-granular in part, slightly fossiliferous

Lime, lt-med brn, fnxn

HEEBNER SHALE SPL 3236-1247 ELog 3230-1241

Shale, black carbonaceous

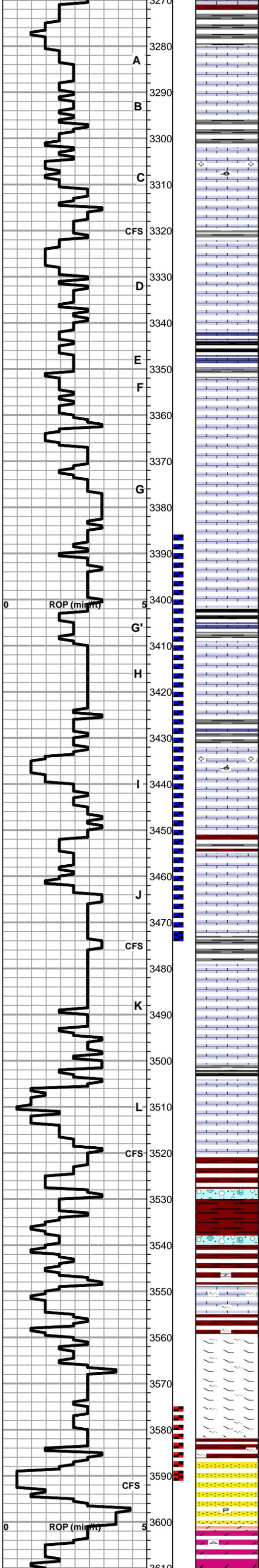
Lime, med-dark brn fn-vfxn

Shale, lime green to dove gray, forming soft mud balls

TORONTO SPL 3257-1268 ELog 3252-1263

Lime, fnxn-granular, lot bedded chalk, NS, No odor, NFO

Lime, crm, fn-vfxn, bedded chalk in part, NS



LKC SPL 3280-1291 ELog 3276-1287

Lime, lt-med brn, fnxn

Lime, lt-dark brn, fnxn-granular, slight chalkiness

Lime, crm-lt brn,fnxn, few pieces oolitic/oolmoldic with scattered to saturated stain, light odor, NFO noted

Lime, lt brn, fnxn with bedded chalk

Lime, crm-tan-gray, fnxn, chaky white wash, few pieces with cxln lime with trace of staining

Lime, crm-tan, fnxn, chalk

Lime, gray, fnxn

Shale, gray-black carbonaceous
Lime, lt gray, fnxn with microfossils

Lime, crm-tan, mostly fnxn with few chips of oolitic-fossil fragment mix, trace oil stain, interoolitic porosity

Lime, crm-tan, fnxn-granular with chalk, 2 pieces with spotty stain, no odor, NFO

Lime, crm-tan,fnxn-cryptoxln in part.

Lime, crm-tan, fnxn, brittle on break, chalk in part

Lime, crm-tan, fnxn with chalk in part

Lime, crm-tyan fnxn grading into med brn, fnxn lime

Lime, crm-tan, mostly fnxn with lt scattered to saturated stain, no detectable odor, NFO. Fine interxln porosity, no vugs noted.

Lime, crm-tan, fnxn

Lime, crm-tan, fnxn, with few pieces with trace staining, very lite odor, NFO

Lime, crm-tan, fnxn

Lime, crm-tan, fnxn, scattered fine intercrystalline porosity, trace of staining, no odor, NFO

Lime, crm, fnxn with bedded chalk

Lime, crm-tan, fnxn, chalk in part, no odor, no staining, NFO

Lime, crm-tan, fnxn, bedded chalk in part

Shale, dove gray, soft

Lime, crm, fnxn, chalky, NS

BKC SPL 3525-1536 ELog 3520-1531

Shale, red wash with clastic lime mix in part

Shale, red wash, clastic lime mix in aprt

Lime, crm, fnxn, cherty

Lime, dolomitic, crm-lt brn, fnxn, hard, orange chert fragments

Lime, dolomitic, crm, fnxn, hard, cherty

Lime, dolomitic, fnxn, cherty, vari colored with red shale in part

CONGLOMERATE SAND ELog 3586-1597

Sandstone, qtz,poorly sorted, angular, polished surfaces, lt odor with SFO on break, scattered to saturated staining. Top and bottom cemented and fused, spotty effervescense, very little dolomite in mix

ARBUCKLE SPL 3601-1612 ELog 3602-1613

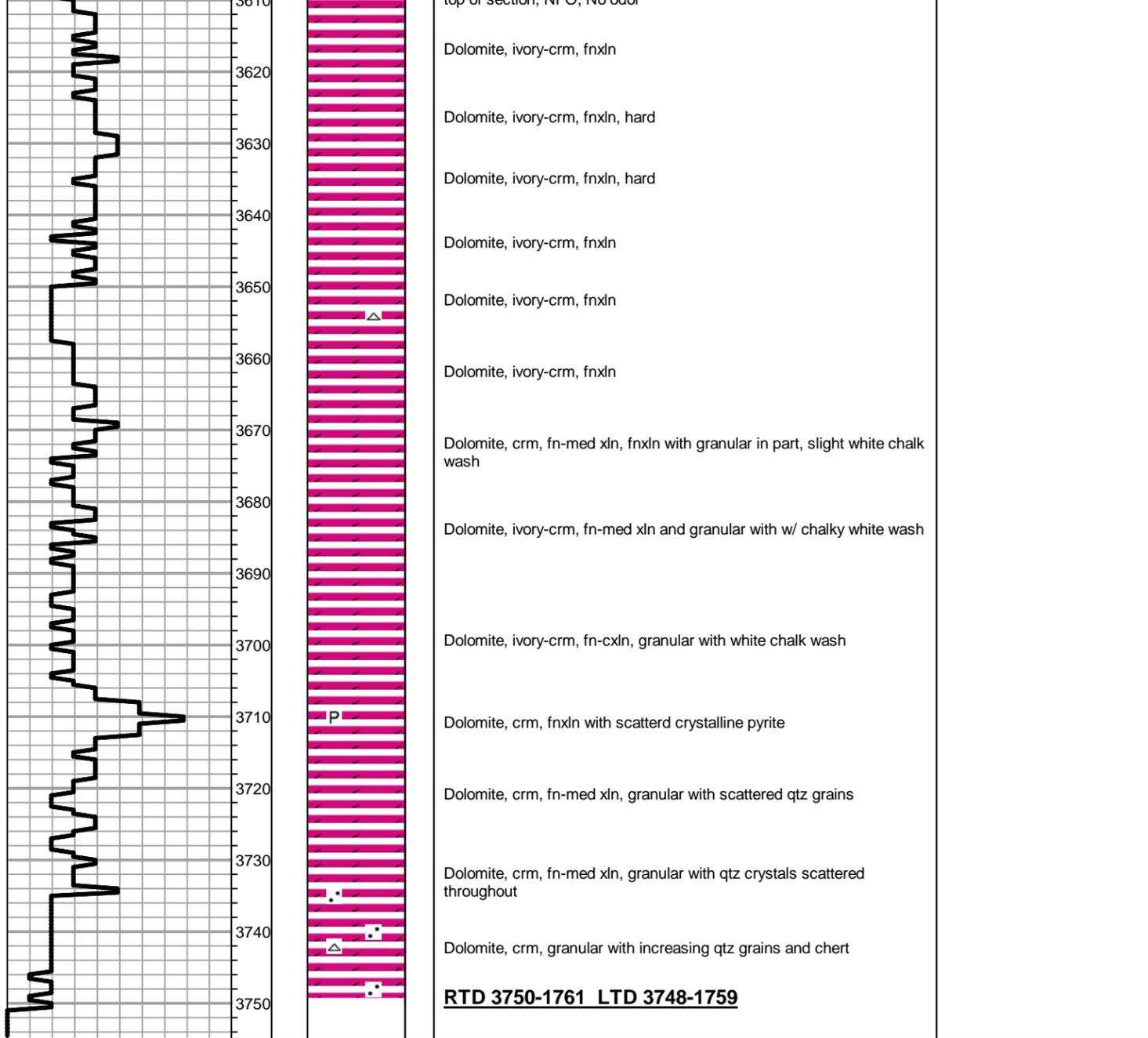
Dolomite, lt brn, fnxn with fine specks of gilsonite scattered throughout top of section, NFO, No odor

DST # 3 3284'-3310'
STRADDLE TEST OF "C"
ZONE. PACKER
FAILURE. ATTEMPTED
TO RESET 3 TIMES W/O
SUCCESS

Problems with clock for 10'

DST #1 3386'-3475'
SEE HEADER FOR TEST
SUMMARY

DST # 2 3575'-3592'
SEE HEADER FOR TEST
SUMMARY



JOB LOG

SWIFT Services, Inc.

DATE 07-12-12 PAGE NO. 7

CUSTOMER TDI WELL NO. 2 LEASE BENTON JOB TYPE DEEP SURFACE TICKET NO. 21809

CHART NO.	TIME	RATE (BPM)	VOLUME (BBU) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0900							ON LOCATION
								CMT: 375 SB 5WD 1/4" FLO.
								1 1/4 RD 1174, SET PIPE 1173, Baffle Rate 1161
								8 5/8 23" CMT 1, 3, 12
	1215							START C&LIFE
	1415							BREAK C&L
	1440	5.5	10				300	SODIUM MUD PUSH
		5.5	10				300	10 bbls MLL FURSH
		6.0	0				300	100 SB @ 11.4"/sm
		6.0	52				300	100 SB @ 12.5"/sm
		6.0	90				300	100 SB @ 13.0"/sm
		6.0	124				300	75 SB @ 14.5"/sm
	1510	5.5	144				300	END
								RELEASE PLUG
	1512	5.5	0				300	START D&P
		5.5	54				500	CIRC GOOD CMT TO PIT!!
								75 SB TO PIT!
	1525	5.5	74.2				700	LAND PLUG
	1530							CLOSE IR.
								JOB COMPLETE
								THANK YOU!
								DAVE JOSH TJ FLINT

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

September 24, 2012

Tom Denning
TDI, Inc.
1310 BISON RD
HAYS, KS 67601-9696

Re: ACO1
API 15-051-26315-00-00
Bieker 2
SE/4 Sec.24-15S-19W
Ellis County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Tom Denning