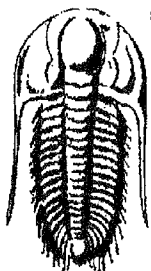


10-145-16w



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **DNOC**

P O Box 372
Hays Ks 67601

ORIGINAL

ATTN: Ron Nelson

10-14-16-Ellis-Ks

Goetz # 1-10

Start Date: 2005.09.14 @ 04:15:46

End Date: 2005.09.14 @ 11:36:46

Job Ticket #: 22191 DST #: 1

15-051-25439-00-00

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

DNOC

Goetz # 1-10

10-14-16-Ellis-Ks

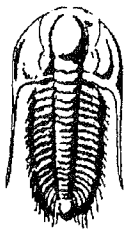
DST # 1

A-B-C

LK

2005.09.14

10-145-16w



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

DNOC

Goetz # 1-10

P O Box 372
Hays Ks 67601

10-14-16-Ellis-Ks

ATTN: Ron Nelson

Job Ticket: 22191

DST#: 1

Test Start: 2005.09.14 @ 04:15:46

GENERAL INFORMATION:

Formation: **A-B-C LK**
 Deviated: **No Whipstock:** ft (KB)
 Time Tool Opened: 06:39:16
 Time Test Ended: 11:36:46

Test Type: **Conventional Bottom Hole**
 Tester: **Dan Bangle**
 Unit No: **21**

Interval: **3147.00 ft (KB) To 3196.00 ft (KB) (TVD)**
 Total Depth: **3196.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **1929.00 ft (KB)**
1921.00 ft (CF)
 KB to GR/CF: **8.00 ft**

Serial #: 6672

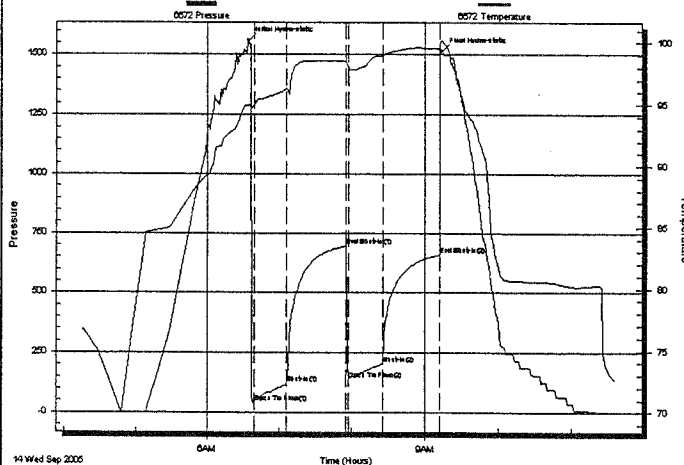
Inside

Press@RunDepth: **203.22 psig @ 3151.00 ft (KB)**
 Start Date: **2005.09.14** End Date: **2005.09.14**
 Start Time: **04:15:47** End Time: **11:36:46**

Capacity: **7000.00 psig**
 Last Calib.: **2005.09.14**
 Time On Btm: **2005.09.14 @ 06:34:46**
 Time Off Btm: **2005.09.14 @ 09:14:16**

TEST COMMENT: **IF-Strong B-B in 30 sec - GTS in 30 min - TSTM**
IS-Strong B-B in 4 min
FF-Strong B-B in 2 min
FSI-Strong B-B in 8 min

Pressure vs. Time



PRESSURE SUMMARY

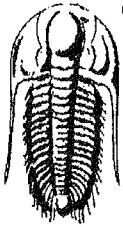
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1559.30	94.92	Initial Hydro-static
5	40.25	94.97	Open To Flow (1)
32	119.73	96.33	Shut-In(1)
81	695.09	98.49	End Shut-In(1)
83	139.38	98.04	Open To Flow (2)
111	203.22	98.97	Shut-In(2)
157	658.82	99.52	End Shut-In(2)
160	1515.73	100.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
186.00	M&GCO 20%g 60%o 20%m	2.34
372.00	CGsyO 20%g 80%o	5.22
0.00	GTS TSTM	0.00

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

DNOC

Goetz # 1-10

P O Box 372
Hays Ks 67601

10-14-16-Ellis-Ks

Job Ticket: 22191

DST#: 1

ATTN: Ron Nelson

Test Start: 2005.09.14 @ 04:15:46

Tool Information

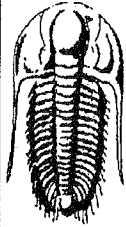
Drill Pipe:	Length: 3110.00 ft	Diameter: 3.80 inches	Volume: 43.63 bbl	Tool Weight: 1800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 43.78 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3147.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	49.00 ft			
Tool Length:	70.00 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			3127.00	
Shut In Tool	5.00			3132.00	
Hydraulic tool	5.00			3137.00	
Packer	5.00			3142.00	21.00 Bottom Of Top Packer
Packer	5.00			3147.00	
Stubb	1.00			3148.00	
Perforations	2.00			3150.00	
Change Over Sub	1.00			3151.00	
Recorder	0.00	6672	Inside	3151.00	
Drill Pipe	31.00			3182.00	
Change Over Sub	1.00			3183.00	
Recorder	0.00	13254	Outside	3183.00	
Perforations	10.00			3193.00	
Bullnose	3.00			3196.00	49.00 Bottom Packers & Anchor

Total Tool Length: 70.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC

Goetz # 1-10

P O Box 372
Hays Ks 67601

10-14-16-Ellis-Ks

Job Ticket: 22191

DST#: 1

ATTN: Ron Nelson

Test Start: 2005.09.14 @ 04:15:46

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.77 in³

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
186.00	M&GCO 20%g 60%o 20%m	2.336
372.00	CGsyO 20%g 80%o	5.218
0.00	GTS TSTM	0.000

Total Length: 558.00 ft

Total Volume: 7.554 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

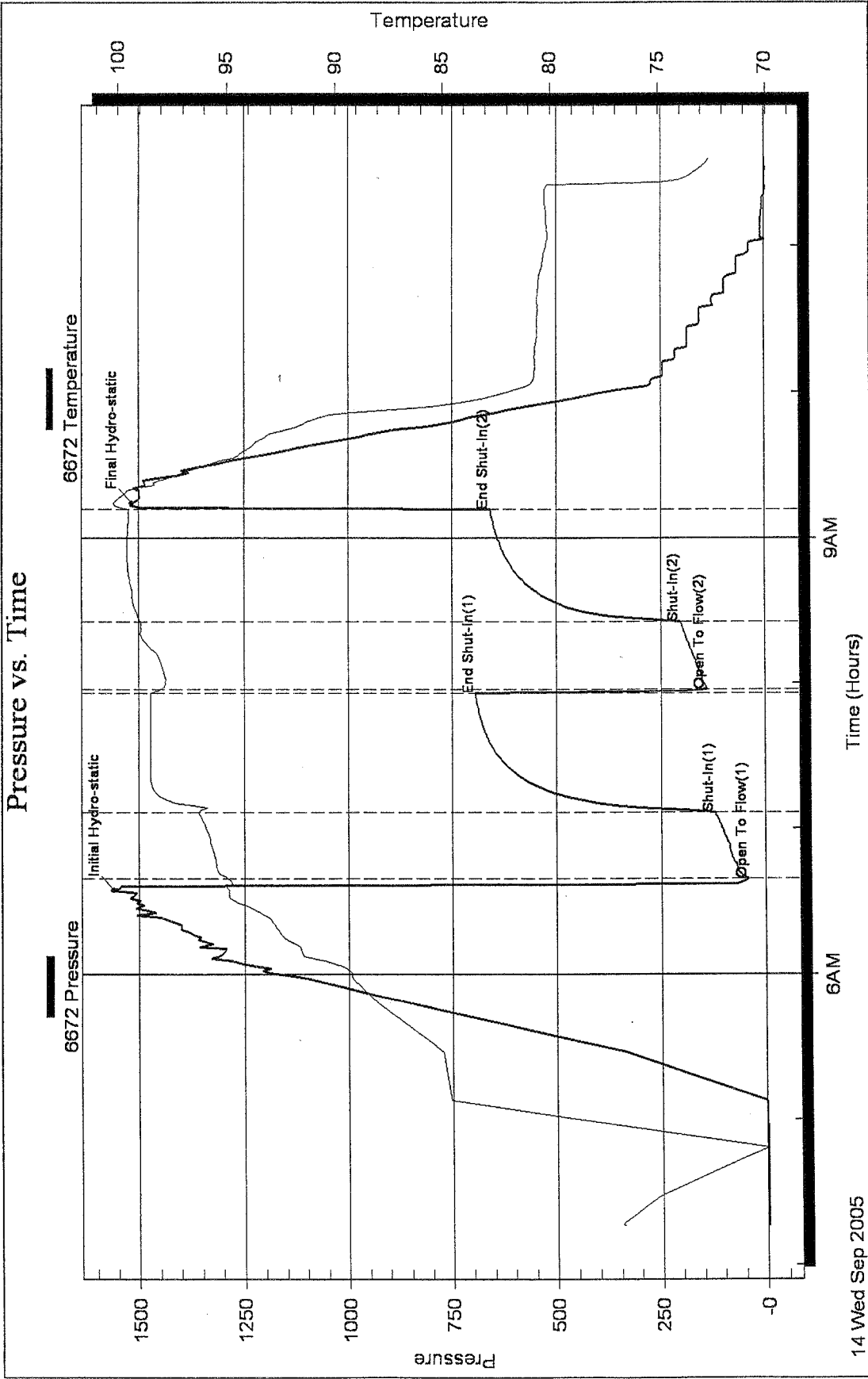
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

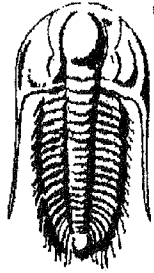


14 Wed Sep 2005

9AM

6AM

Time (Hours)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **DNOC**

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

10-14-16-Ellis-Ks

Goetz # 1-10

Start Date: 2005.09.14 @ 19:40:48

End Date: 2005.09.15 @ 01:57:48

Job Ticket #: 22192 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

DNOC

Goetz # 1-10

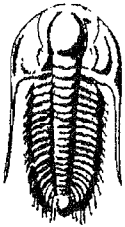
10-14-16-Ellis-Ks

DST # 2

D

LKC

2005.09.14



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

DNOC
 P O Box 372
 Hays Ks 67601
 ATTN: Ron Nelson

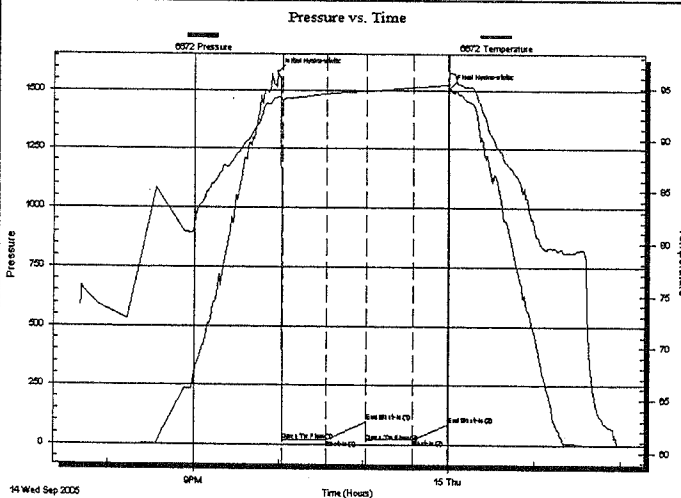
Goetz # 1-10
10-14-16-Ellis-Ks
 Job Ticket: 22192 **DST#: 2**
 Test Start: 2005.09.14 @ 19:40:48

GENERAL INFORMATION:

Formation: **D LKC**
 Deviated: **No** Whipstock: ft (KB)
 Time Tool Opened: 22:01:48
 Time Test Ended: 01:57:48
 Interval: **3200.00 ft (KB) To 3230.00 ft (KB) (TVD)**
 Total Depth: **3230.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Good**
 Test Type: **Conventional Bottom Hole**
 Tester: **Dan Bangle**
 Unit No: **21**
 Reference Elevations: **1929.00 ft (KB)**
1921.00 ft (CF)
 KB to GR/CF: **8.00 ft**

Serial #: 6672 **Inside**
 Press@RunDepth: **24.90 psig @ 3201.00 ft (KB)** Capacity: **7000.00 psig**
 Start Date: **2005.09.14** End Date: **2005.09.15** Last Calib.: **2005.09.15**
 Start Time: **19:40:49** End Time: **01:57:48** Time On Btm: **2005.09.14 @ 21:58:48**
 Time Off Btm: **2005.09.15 @ 00:00:48**

TEST COMMENT: IF-Weak steady surface blow
 FF-Weak steady surface blow
 Times-30-30-30-30



PRESSURE SUMMARY

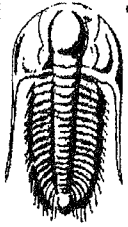
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1579.68	94.12	Initial Hydro-static
3	16.93	93.85	Open To Flow (1)
35	21.48	94.45	Shut-In(1)
63	96.67	94.72	End Shut-In(1)
64	12.76	94.71	Open To Flow (2)
97	24.90	95.11	Shut-In(2)
121	84.64	95.37	End Shut-In(2)
122	1512.83	96.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	OCM 20% @ 80% m	0.10

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

DNOG

Goetz # 1-10

P O Box 372
Hays Ks 67601

10-14-16-Ellis-Ks

Job Ticket: 22192

DST#: 2

ATTN: Ron Nelson

Test Start: 2005.09.14 @ 19:40:48

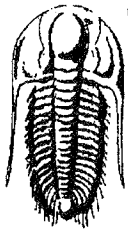
Tool Information

Drill Pipe:	Length: 3171.00 ft	Diameter: 3.80 inches	Volume: 44.48 bbl	Tool Weight: 1800.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 44.63 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3200.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	51.00 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			3180.00	
Shut In Tool	5.00			3185.00	
Hydraulic tool	5.00			3190.00	
Packer	5.00			3195.00	21.00 Bottom Of Top Packer
Packer	5.00			3200.00	
Stubb	1.00			3201.00	
Recorder	0.00	6672	Inside	3201.00	
Perforations	26.00			3227.00	
Recorder	0.00	13254	Outside	3227.00	
Bullnose	3.00			3230.00	30.00 Bottom Packers & Anchor
Total Tool Length:	51.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC

Goetz # 1-10

P O Box 372
Hays Ks 67601

10-14-16-Ellis-Ks

Job Ticket: 22192

DST#: 2

ATTN: Ron Nelson

Test Start: 2005.09.14 @ 19:40:48

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbl

Water Loss: 12.37 in³

Gas Cushion Type:

Gas Cushion Pressure:

psig

Resistivity: ohm.m

Salinity: 10000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	OCM 20%o 80%m	0.098

Total Length: 20.00ft Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

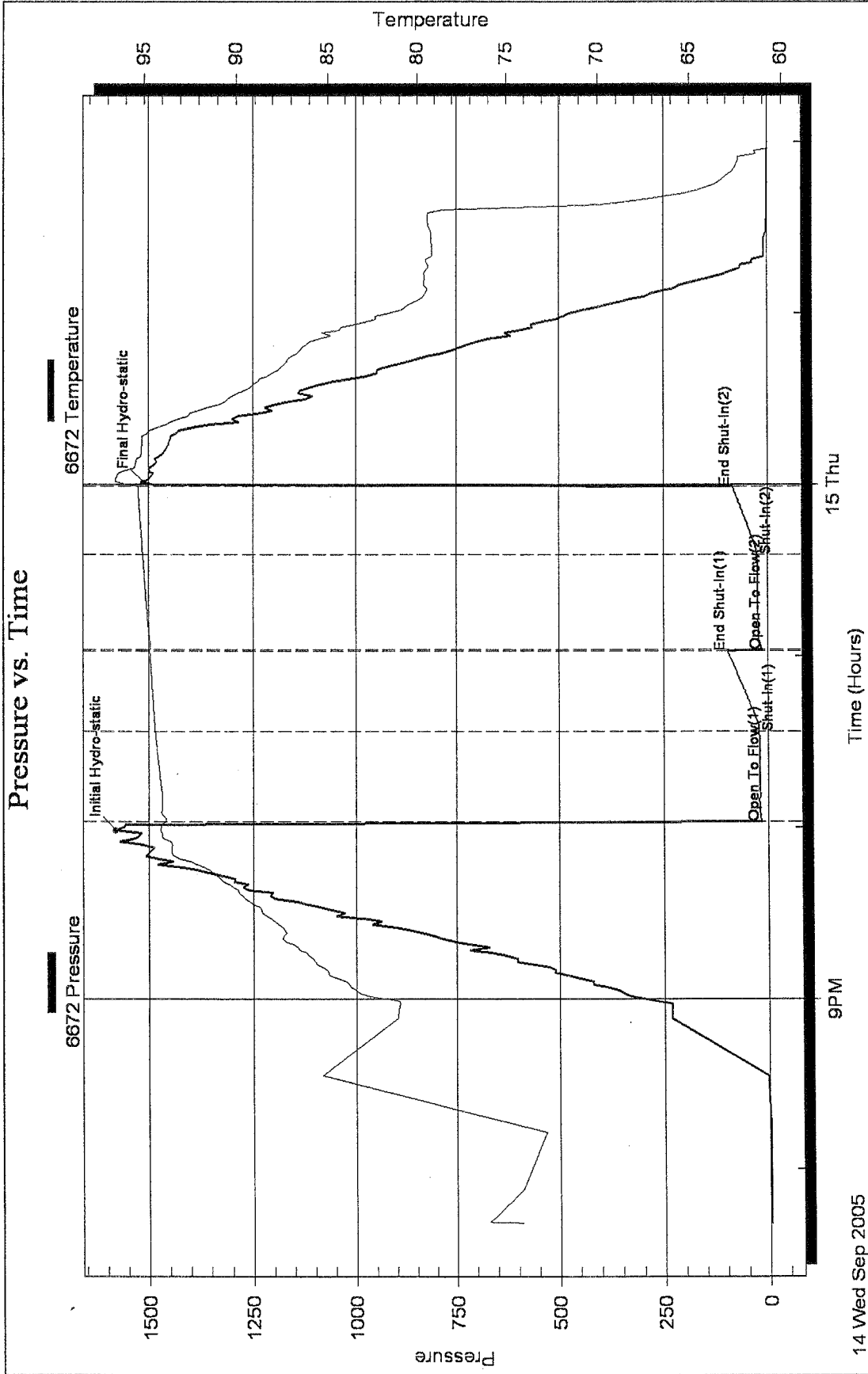
Serial #:

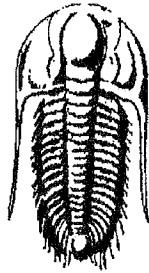
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **DNOC**

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

10-14-16-Ellis-Ks

Goetz # 1-10

Start Date: 2005.09.15 @ 09:30:39

End Date: 2005.09.15 @ 16:57:09

Job Ticket #: 22193 DST #: 3

DNOC

Goetz # 1-10

10-14-16-Ellis-Ks

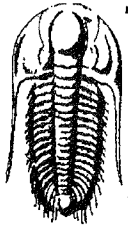
DST # 3

E-F

LK

2005.09.15

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

DNOC
P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Goetz # 1-10
10-14-16-Ellis-Ks
Job Ticket: 22193 **DST#: 3**
Test Start: 2005.09.15 @ 09:30:39

GENERAL INFORMATION:

Formation: **E-F LK**
Deviated: **No Whipstock:** ft (KB)
Time Tool Opened: 11:32:39
Time Test Ended: 16:57:09

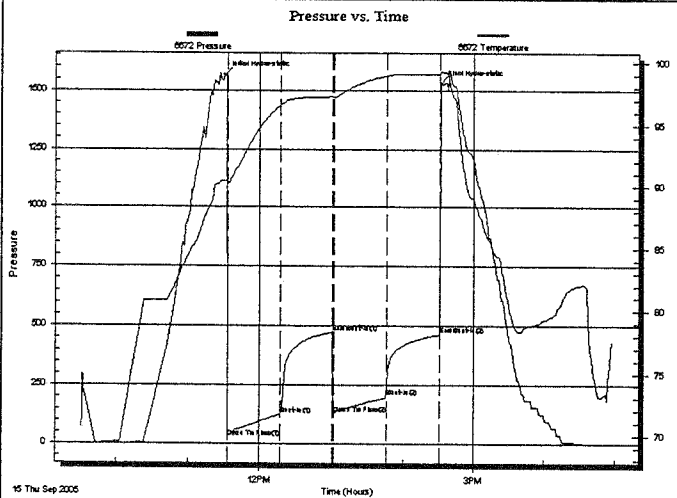
Interval: **3223.00 ft (KB) To 3270.00 ft (KB) (TVD)**
Total Depth: **3270.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Good**

Test Type: **Conventional Bottom Hole**
Tester: **Dan Bangle**
Unit No: **21**

Reference Elevations: **1929.00 ft (KB)**
1921.00 ft (CF)
KB to GR/CF: **8.00 ft**

Serial #: 6672 Inside
Press@RunDepth: **201.73 psig @ 3230.00 ft (KB)** Capacity: **7000.00 psig**
Start Date: **2005.09.15** End Date: **2005.09.15** Last Calib.: **2005.09.15**
Start Time: **09:30:40** End Time: **16:57:09** Time On Btm: **2005.09.15 @ 11:30:09**
Time Off Btm: **2005.09.15 @ 14:32:09**

TEST COMMENT: IF Strong B-B in 15 min
ISI-Weak steady surface blow
FF-Strong B-B in 10 min
FSI-Weak steady surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1565.82	90.46	Initial Hydro-static
3	26.90	90.20	Open To Flow (1)
47	124.26	96.60	Shut-In(1)
90	473.22	97.28	End Shut-In(1)
92	126.57	97.25	Open To Flow (2)
136	201.73	98.94	Shut-In(2)
181	463.38	99.08	End Shut-In(2)
182	1529.25	99.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
245.00	Mdy Wtr	3.16
60.00	Silty OCMdy W 5%o 70%w 25%m	0.84
60.00	OCCsy M 20%g 25%o 55%m	0.84
90.00	MCCsy O 20%g 50%o 20%m	1.26
0.00	370 GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

DNOC

Goetz # 1-10

P O Box 372
Hays Ks 67601

10-14-16-Ellis-Ks

Job Ticket: 22193

DST#: 3

ATTN: Ron Nelson

Test Start: 2005.09.15 @ 09:30:39

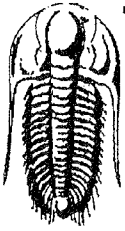
Tool Information

Drill Pipe:	Length: 3222.00 ft	Diameter: 3.80 inches	Volume: 45.20 bbl	Tool Weight: 1900.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			Total Volume: 45.35 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	50.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3223.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	47.00 ft			
Tool Length:	68.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3203.00	
Shut In Tool	5.00			3208.00	
Hydraulic tool	5.00			3213.00	
Packer	5.00			3218.00	21.00 Bottom Of Top Packer
Packer	5.00			3223.00	
Stubb	1.00			3224.00	
Perforations	5.00			3229.00	
Change Over Sub	1.00			3230.00	
Recorder	0.00	6672	Inside	3230.00	
Drill Pipe	31.00			3261.00	
Change Over Sub	1.00			3262.00	
Recorder	0.00	13254	Outside	3262.00	
Perforations	5.00			3267.00	
Bullnose	3.00			3270.00	47.00 Bottom Packers & Anchor

Total Tool Length: 68.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC

Goetz # 1-10

P O Box 372
Hays Ks 67601

10-14-16-Ellis-Ks

Job Ticket: 22193

DST#: 3

ATTN: Ron Nelson

Test Start: 2005.09.15 @ 09:30:39

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 47.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 9500.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
245.00	Mdy Wtr	3.163
60.00	SillyOCMdyW 5%o 70%w 25%m	0.842
60.00	OCGsyM 20%g 25%o 55%m	0.842
90.00	MCGsyO 20%g 50%o 20%m	1.262
0.00	370 GIP	0.000

Total Length: 455.00 ft Total Volume: 6.109 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

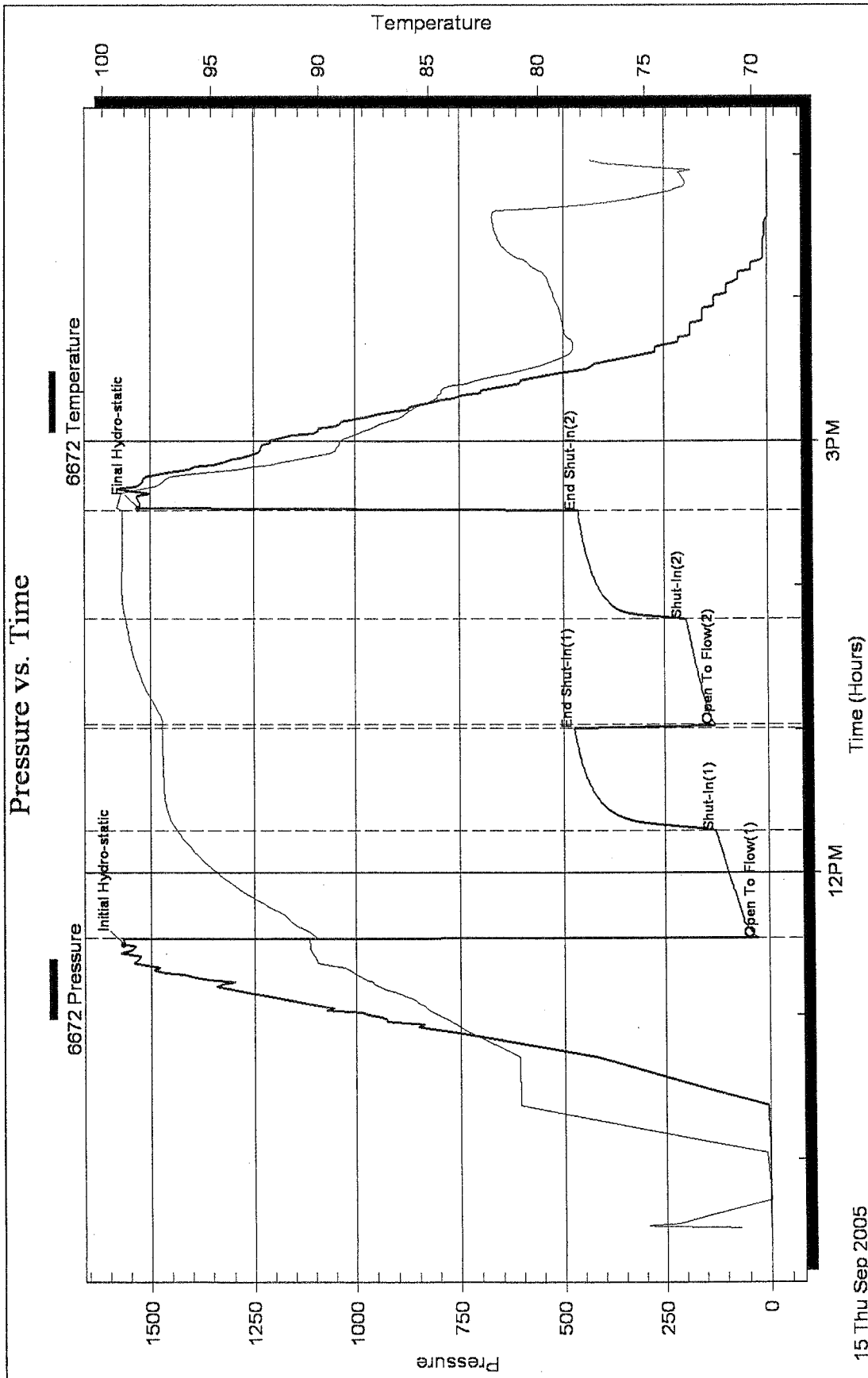
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

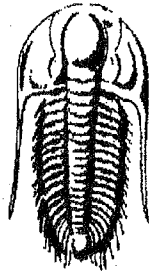
Pressure vs. Time



15 Thu Sep 2005

12PM

3PM



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **DNOC**

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

10-14-16-Ellis-Ks

Goetz # 1-10

Start Date: 2005.09.16 @ 08:55:36

End Date: 2005.09.16 @ 16:24:06

Job Ticket #: 22194 DST #: 4

DNOC

Goetz # 1-10

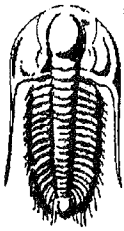
10-14-16-Ellis-Ks

DST # 4

Arbuckle

2005.09.16

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

DNOOC
P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Goetz # 1-10

10-14-16-Ellis-Ks

Job Ticket: 22194

DST#: 4

Test Start: 2005.09.16 @ 08:55:36

GENERAL INFORMATION:

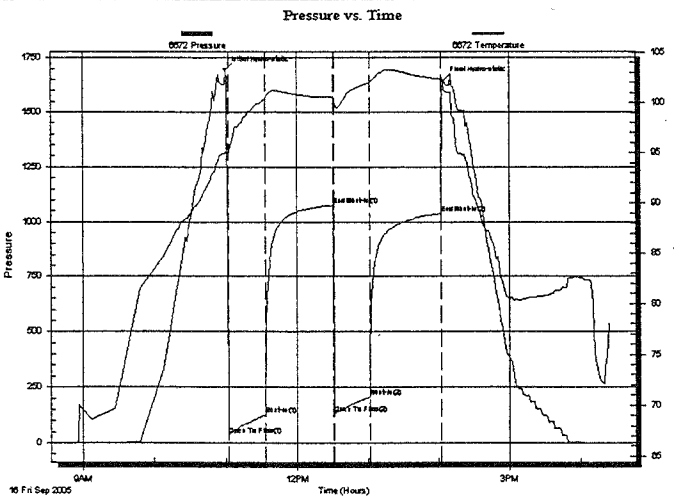
Formation: **Arbuckle**
 Deviated: **No** Whipstock: **ft (KB)**
 Time Tool Opened: 11:02:06
 Time Test Ended: 16:24:06
 Interval: **3394.00 ft (KB) To 3428.00 ft (KB) (TVD)**
 Total Depth: **3428.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Good**
 Test Type: **Conventional Bottom Hole**
 Tester: **Dan Bangle**
 Unit No: **21**
 Reference Elevations: **1929.00 ft (KB)**
1921.00 ft (CF)
 KB to GR/CF: **8.00 ft**

Serial #: 6672

Inside

Press@RunDepth: 205.73 psig @ 3395.00 ft (KB) Capacity: 7000.00 psig
 Start Date: 2005.09.16 End Date: 2005.09.16 Last Calib.: 2005.09.16
 Start Time: 08:55:37 End Time: 16:24:06 Time On Btrr: 2005.09.16 @ 10:59:36
 Time Off Btrr: 2005.09.16 @ 14:04:06

TEST COMMENT: IF-Strong B-B in 7 min
 IS-Weak building to 1/4"
 FF-Strong B-B in 13 min
 FS-Weak building to 1/2"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1694.42	94.98	Initial Hydro-static
3	33.42	94.82	Open To Flow (1)
34	126.63	100.36	Shut-In(1)
92	1076.53	100.58	End Shut-In(1)
93	132.60	100.11	Open To Flow (2)
122	205.73	101.95	Shut-In(2)
183	1036.86	102.35	End Shut-In(2)
185	1643.52	101.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
250.00	MCGsyO 10%g 80%o 10%m	3.23
248.00	CGsyO 10%g 90%o	3.48
0.00	180 GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

DNOC

Goetz # 1-10

P O Box 372
Hays Ks 67601

10-14-16-Ellis-Ks

Job Ticket: 22194

DST#: 4

ATTN: Ron Nelson

Test Start: 2005.09.16 @ 08:55:36

Tool Information

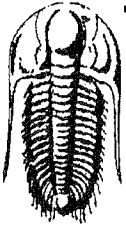
Drill Pipe:	Length: 3358.00 ft	Diameter: 3.80 inches	Volume: 47.10 bbl	Tool Weight: 1600.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 47.25 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3394.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	55.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3374.00	
Shut In Tool	5.00			3379.00	
Hydraulic tool	5.00			3384.00	
Packer	5.00			3389.00	21.00 Bottom Of Top Packer
Packer	5.00			3394.00	
Stubb	1.00			3395.00	
Recorder	0.00	6672	Inside	3395.00	
Perforations	30.00			3425.00	
Recorder	0.00	13254	Outside	3425.00	
Bullnose	3.00			3428.00	34.00 Bottom Packers & Anchor
Total Tool Length:	55.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC

Goetz # 1-10

P O Box 372
Hays Ks 67601

10-14-16-Ellis-Ks

Job Ticket: 22194

DST#: 4

ATTN: Ron Nelson

Test Start: 2005.09.16 @ 08:55:36

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 38 deg API
Mud Weight: 8.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.99 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 9000.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
250.00	MCGsyO 10%g 80%o 10%m	3.234
248.00	CGsyO 10%g 90%o	3.479
0.00	180 GIP	0.000

Total Length: 498.00 ft Total Volume: 6.713 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

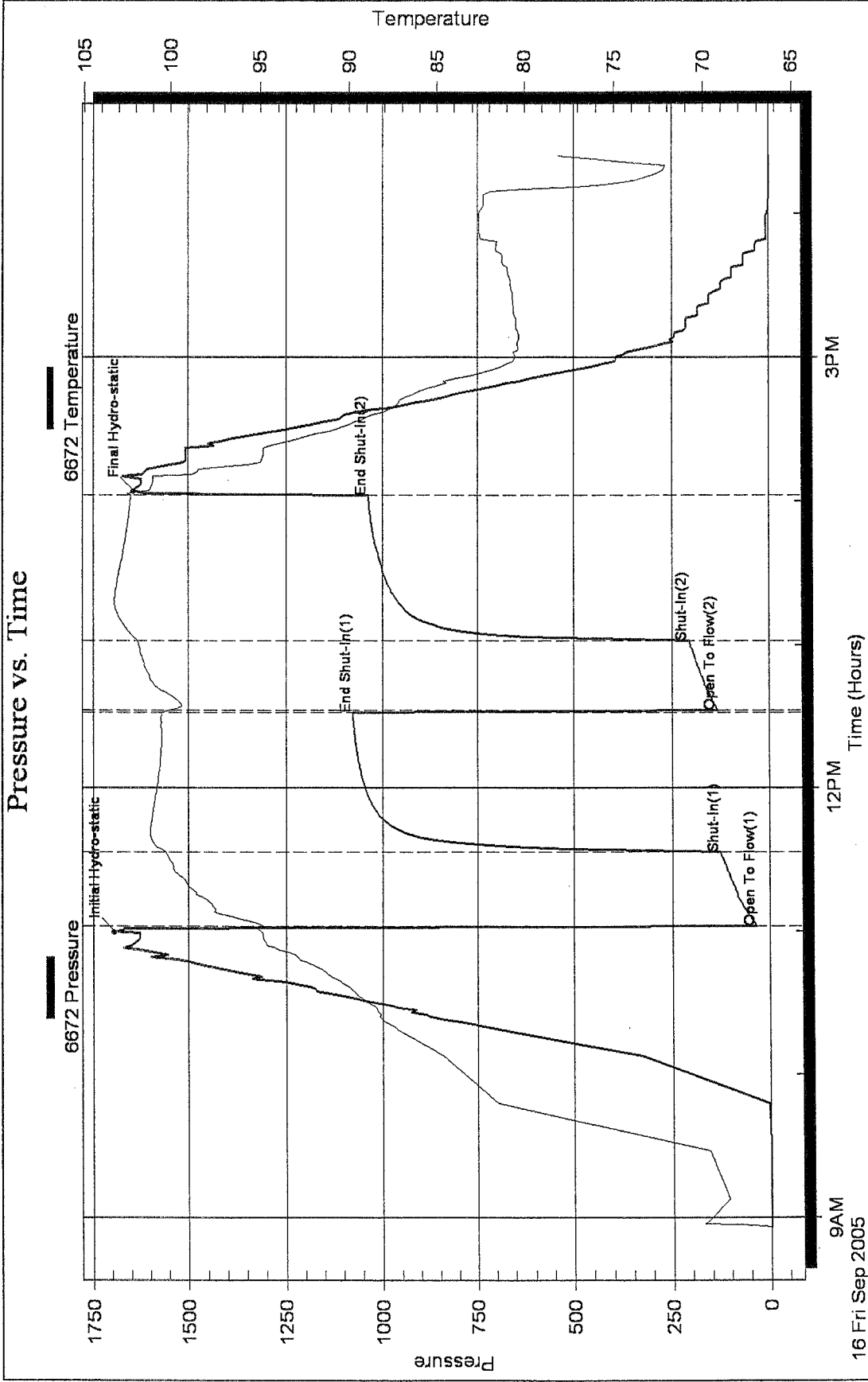
Serial #:

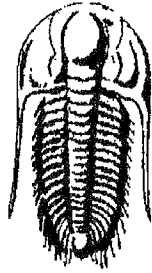
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **DNOC**

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

10-14-16-Ellis-Ks

Goetz # 1-10

Start Date: 2005.09.17 @ 00:10:34

End Date: 2005.09.17 @ 07:26:34

Job Ticket #: 22195 DST #: 5

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

DNOC

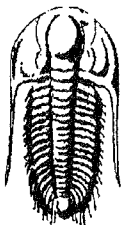
Goetz # 1-10

10-14-16-Ellis-Ks

DST # 5

Arbuckle

2005.09.17



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

DNOC
 P O Box 372
 Hays Ks 67601
 ATTN: Ron Nelson

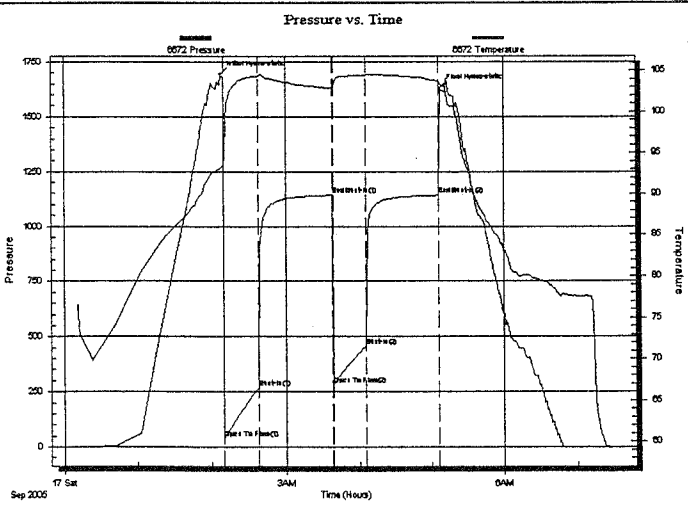
Goetz # 1-10
 10-14-16-Ellis-Ks
 Job Ticket: 22195 DST#: 5
 Test Start: 2005.09.17 @ 00:10:34

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: **No Whipstock** ft (KB)
 Test Type: **Conventional Bottom Hole**
 Time Tool Opened: 02:10:04
 Tester: **Dan Bangle**
 Time Test Ended: 07:26:34
 Unit No: **21**
 Interval: **3430.00 ft (KB) To 3445.00 ft (KB) (TVD)**
 Reference Elevations: **1929.00 ft (KB)**
 Total Depth: **3445.00 ft (KB) (TVD)**
1921.00 ft (CF)
 Hole Diameter: **7.88 inches** Hole Condition: **Good**
 KB to GR/CF: **8.00 ft**

Serial #: 6672 **Inside**
 Press@RunDepth: **459.54 psig @ 3431.00 ft (KB)** Capacity: **7000.00 psig**
 Start Date: **2005.09.17** End Date: **2005.09.17** Last Calib.: **2005.09.17**
 Start Time: **00:10:35** End Time: **07:26:34** Time On Btm: **2005.09.17 @ 02:07:34**
 Time Off Btm: **2005.09.17 @ 05:07:34**

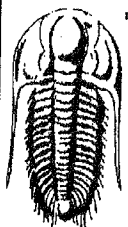
TEST COMMENT: IF-Strong B-B in 5 min
 FF-Strong B-B in 5 min
 Times-30-60-30-60



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1693.46	93.11	Initial Hydro-static
3	38.12	92.82	Open To Flow (1)
30	269.65	104.31	Shut-In(1)
90	1141.03	102.84	End Shut-In(1)
91	280.39	102.72	Open To Flow (2)
118	459.54	104.42	Shut-In(2)
179	1141.08	103.71	End Shut-In(2)
180	1630.58	103.31	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
956.00	Wtr Rw .10 @ 80 = 32000ppm	13.14
124.00	CO	1.74

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

DNOG **Goetz # 1-10**
 P O Box 372 **10-14-16-Ellis-Ks**
 Hays Ks 67601 Job Ticket: 22195 **DST#: 5**
 ATTN: Ron Nelson Test Start: 2005.09.17 @ 00:10:34

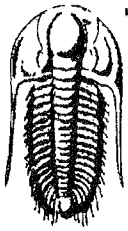
Tool Information

Drill Pipe:	Length: 3389.00 ft	Diameter: 3.80 inches	Volume: 47.54 bbl	Tool Weight: 1300.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 47.69 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3430.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	36.00 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			3410.00	
Shut In Tool	5.00			3415.00	
Hydraulic tool	5.00			3420.00	
Packer	5.00			3425.00	21.00 Bottom Of Top Packer
Packer	5.00			3430.00	
Stubb	1.00			3431.00	
Recorder	0.00	6672	Inside	3431.00	
Perforations	11.00			3442.00	
Recorder	0.00	13254	Outside	3442.00	
Bullnose	3.00			3445.00	15.00 Bottom Packers & Anchor
Total Tool Length:	36.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

DNOC

Goetz # 1-10

P O Box 372
Hays Ks 67601

10-14-16-Ellis-Ks

Job Ticket: 22195

DST#: 5

ATTN: Ron Nelson

Test Start: 2005.09.17 @ 00:10:34

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	38 deg API
Mud Weight:	8.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	54.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.99 in ³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	9000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
956.00	Wtr Fw .10 @ 80 = 32000ppm	13.137
124.00	CO	1.739

Total Length: 1080.00 ft Total Volume: 14.876 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

