



DRILL STEM TEST REPORT

Prepared For: **Dane G. Hansen Trust**

PO Box 187
Logan, KS. 67646

ATTN: Dave Goldak

31-10s-32w-Thomas

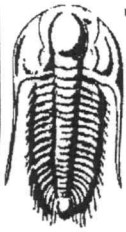
#8 Hecker

Start Date: 2003.11.17 @ 20:25:04

End Date: 2003.11.18 @ 03:37:49

Job Ticket #: 18453 DST #: 1

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

ATTN: Dave Goldak

Job Ticket: 18453

DST#: 1

Test Start: 2003.11.17 @ 20:25:04

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:28:34

Time Test Ended: 03:37:49

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 24

Interval: **4190.00 ft (KB) To 4224.00 ft (KB) (TVD)**

Total Depth: 4224.00 ft (KB) (TVD)

Hole Diameter: 6.80 inches Hole Condition: Good

Reference Elevations: 3112.00 ft (KB)

3102.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6627 Inside

Press@RunDepth: 25.48 psig @ 4193.00 ft (KB)

Start Date: 2003.11.17

End Date:

2003.11.18

Start Time: 20:25:19

End Time:

03:37:49

Capacity: 7000.00 psig

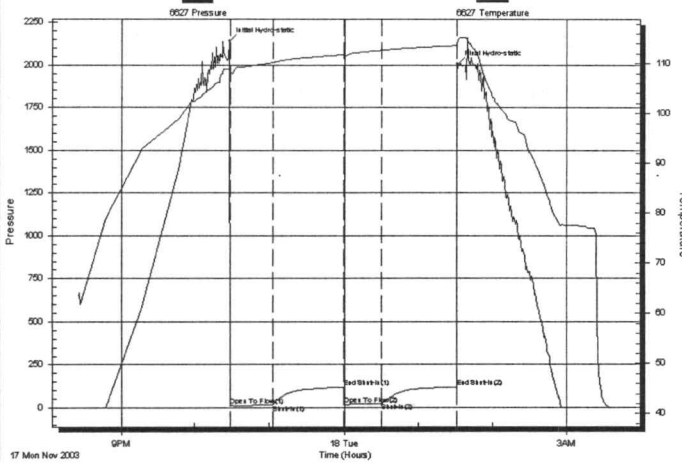
Last Calib.: 1899.12.30

Time On Btm: 2003.11.17 @ 22:28:19

Time Off Btm: 2003.11.18 @ 01:31:49

TEST COMMENT: IFP- Good Blow , Built to 7-1/2", No Blow back
FFP- Good Blow , Built to 7", No Blow back

Pressure vs. Time



PRESSURE SUMMARY

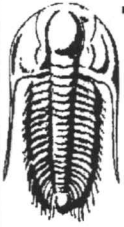
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2139.44	108.97	Initial Hydro-static
1	11.26	108.46	Open To Flow (1)
35	17.63	110.23	Shut-In(1)
92	118.64	111.76	End Shut-In(1)
92	16.81	111.72	Open To Flow (2)
122	25.48	112.66	Shut-In(2)
183	118.16	113.63	End Shut-In(2)
184	2006.36	114.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
32.00	Oil Specked Mud	0.45

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18453

DST#: 1

ATTN: Dave Goldak

Test Start: 2003.11.17 @ 20:25:04

Tool Information

Drill Pipe:	Length: 4200.00 ft	Diameter: 3.80 inches	Volume: 58.91 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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: 58.91 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4190.00 ft			Final 52000.00 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
Change Over Sub	1.00			4170.00	
Shut In Tool	5.00			4175.00	
Hydraulic tool	5.00			4180.00	
Packer	5.00			4185.00	21.00 Bottom Of Top Packer
Packer	5.00			4190.00	
Stubb	1.00			4191.00	
Perforations	2.00			4193.00	
Recorder	0.00	6627	Inside	4193.00	
Perforations	28.00			4221.00	
Recorder	0.00	13252	Outside	4221.00	
Bullnose	3.00			4224.00	34.00 Bottom Packers & Anchor

Total Tool Length: 55.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18453

DST#: 1

ATTN: Dave Goldak

Test Start: 2003.11.17 @ 20:25:04

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: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.57 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3500.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
32.00	Oil Specked Mud	0.449

Total Length: 32.00 ft Total Volume: 0.449 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 208' GIP

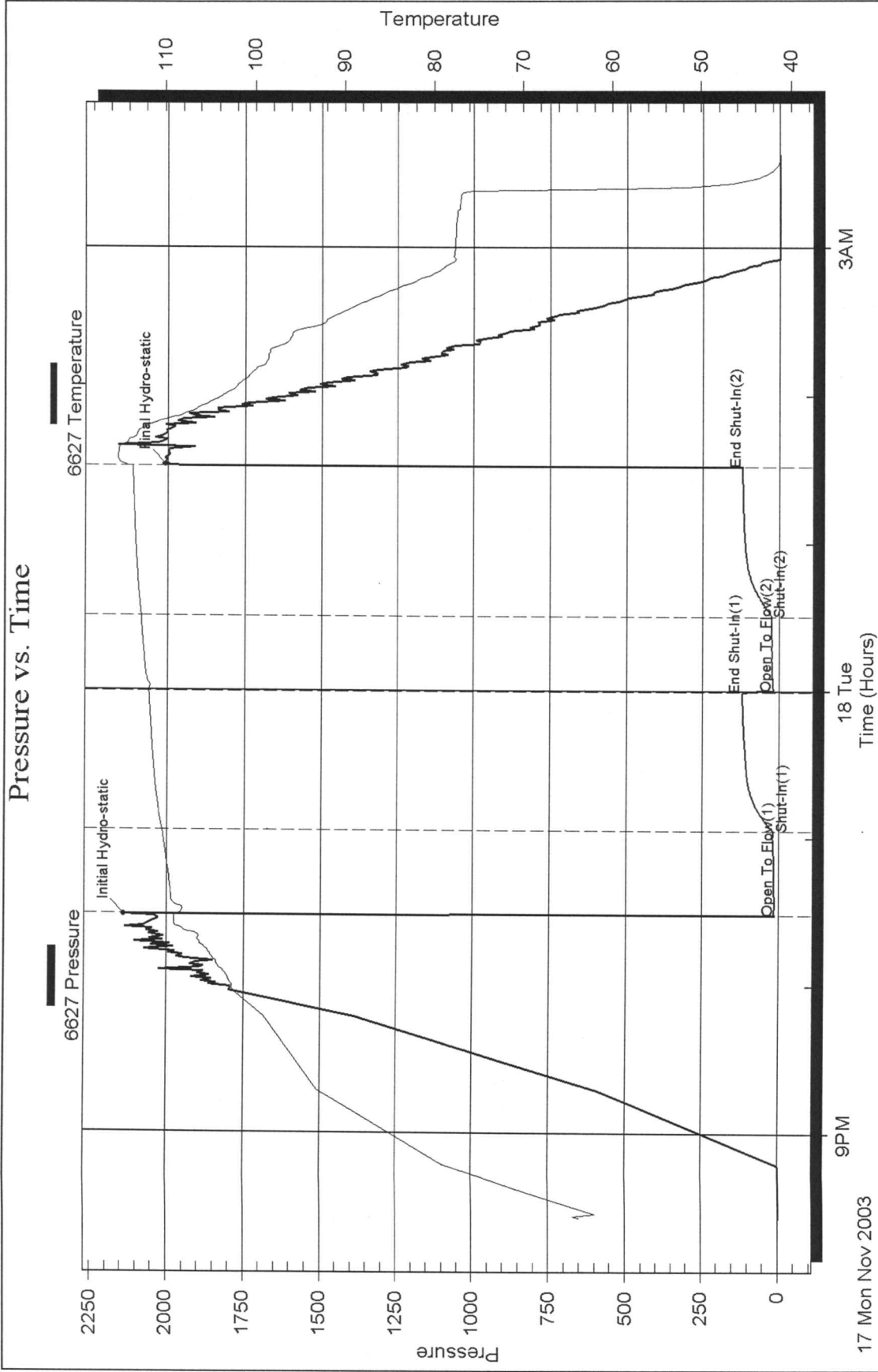
Serial #: 6627

Inside

Dane G. Hansen Trust

31-10s-32w - Thomas

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Dane G. Hansen Trust**

PO Box 187
Logan, KS. 67646

ATTN: Dave Goldak

31-10s-32w-Thomas

#8 Hecker

Start Date: 2003.11.18 @ 12:11:30

End Date: 2003.11.18 @ 18:37:45

Job Ticket #: 18454 . DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Dane G. Hansen Trust

#8 Hecker

31-10s-32w-Thomas

DST # 2

LKC

2003.11.18



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18454

DST#: 2

ATTN: Dave Goldak

Test Start: 2003.11.18 @ 12:11:30

GENERAL INFORMATION:

Formation: **LKC**

Deviated: **No Whipstock:** ft (KB)

Time Tool Opened: 13:50:30

Time Test Ended: 18:37:45

Test Type: **Conventional Bottom Hole**

Tester: **Jason McLemore**

Unit No: **24**

Interval: 4228.00 ft (KB) To 4252.00 ft (KB) (TVD)

Total Depth: **4252.00 ft (KB) (TVD)**

Hole Diameter: **6.80 inches** Hole Condition: **Good**

Reference Elevations: **3112.00 ft (KB)**

3102.00 ft (CF)

KB to GR/CF: **10.00 ft**

Serial #: 6627

Inside

Press@RunDepth: **13.42 psig @ 4231.00 ft (KB)**

Start Date: **2003.11.18**

End Date:

2003.11.18

Capacity: **7000.00 psig**

Last Calib.: **1899.12.30**

Start Time: **12:11:45**

End Time:

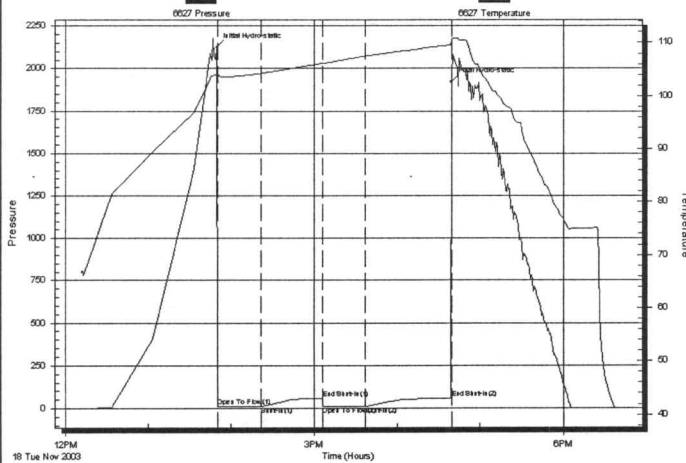
18:37:45

Time On Btm: **2003.11.18 @ 13:50:00**

Time Off Btm: **2003.11.18 @ 16:39:15**

TEST COMMENT: IFF- Weak Blow , 1/8", No Blow back
FFP- Weak Surface Blow , No Blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2123.62	104.07	Initial Hydro-static
1	11.14	103.22	Open To Flow (1)
32	12.82	104.24	Shut-In(1)
76	58.05	106.11	End Shut-In(1)
77	12.43	106.08	Open To Flow (2)
107	13.42	107.43	Shut-In(2)
169	55.58	109.53	End Shut-In(2)
170	1921.73	110.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud / Oil Specks	0.03

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18454

DST#: 2

ATTN: Dave Goldak

Test Start: 2003.11.18 @ 12:11:30

Tool Information

Drill Pipe:	Length: 4231.00 ft	Diameter: 3.80 inches	Volume: 59.35 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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: 60000.00 lb
			<u>Total Volume: 59.35 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	4228.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	45.00 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			4208.00	
Shut In Tool	5.00			4213.00	
Hydraulic tool	5.00			4218.00	
Packer	5.00			4223.00	21.00 Bottom Of Top Packer
Packer	5.00			4228.00	
Stubb	1.00			4229.00	
Perforations	2.00			4231.00	
Recorder	0.00	6627	Inside	4231.00	
Perforations	18.00			4249.00	
Recorder	0.00	13252	Outside	4249.00	
Bullnose	3.00			4252.00	24.00 Bottom Packers & Anchor

Total Tool Length: 45.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18454 **DST#: 2**

ATTN: Dave Goldak

Test Start: 2003.11.18 @ 12:11:30

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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.37 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4500.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Mud / Oil Specks	0.028

Total Length: 2.00 ft Total Volume: 0.028 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 6627

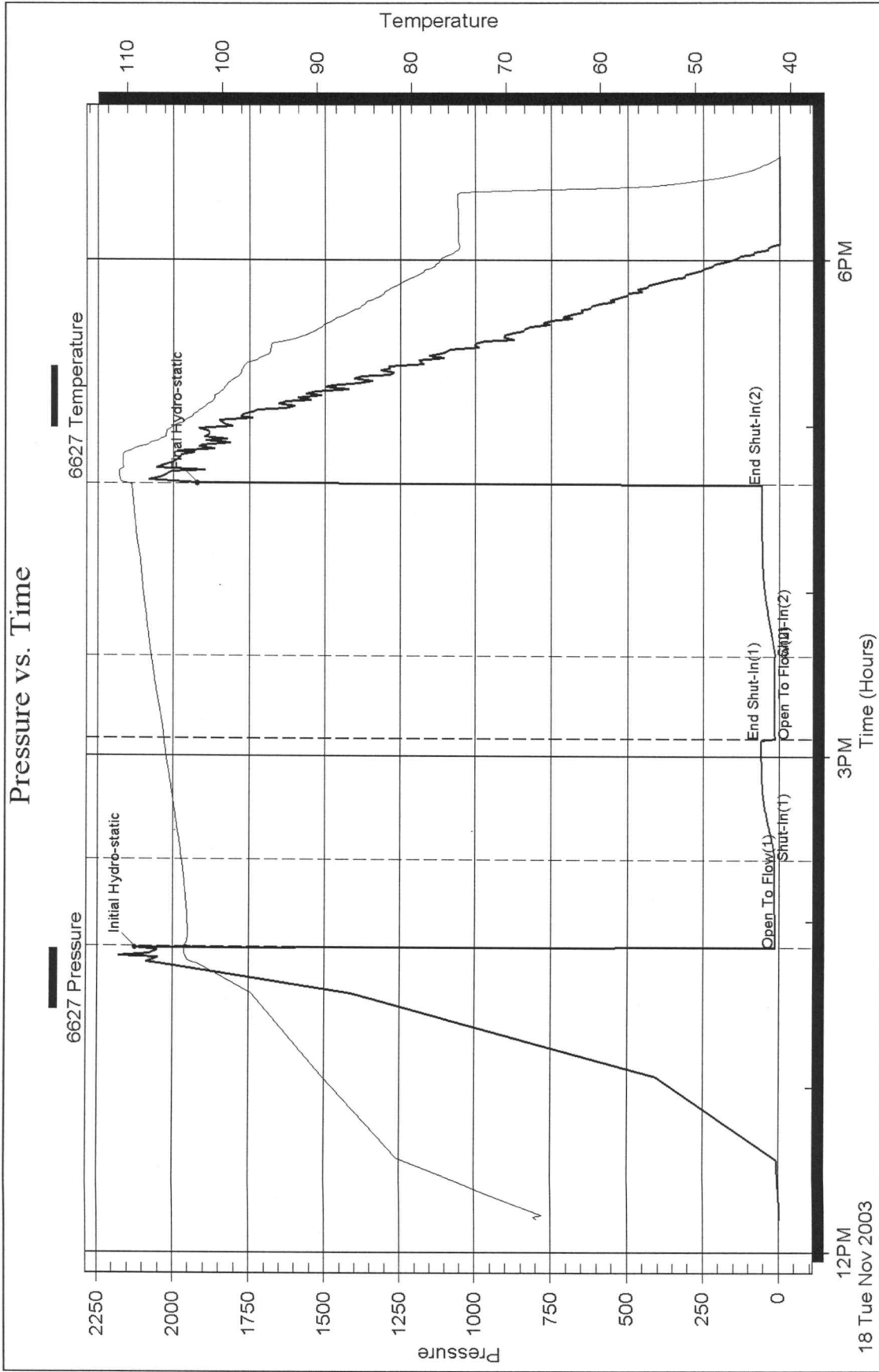
Inside

Dane G. Hansen Trust

31-10s-32w - Thomas

DST Test Number: 2

Pressure vs. Time



12PM
18 Tue Nov 2003

3PM

6PM



DRILL STEM TEST REPORT

Prepared For: **Dane G. Hansen Trust**

PO Box 187
Logan, KS. 67646

ATTN: Dave Goldak

31-10s-32w-Thomas

#8 Hecker

Start Date: 2003.11.19 @ 03:09:10

End Date: 2003.11.19 @ 09:17:40

Job Ticket #: 18455 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Dane G. Hansen Trust

#8 Hecker

31-10s-32w-Thomas

DST # 3

LKC

2003.11.19



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18455

DST#: 3

ATTN: Dave Goldak

Test Start: 2003.11.19 @ 03:09:10

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:55:55

Time Test Ended: 09:17:40

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 24

Interval: **4255.00 ft (KB) To 4276.00 ft (KB) (TVD)**

Reference Elevations: 3112.00 ft (KB)

Total Depth: 4276.00 ft (KB) (TVD)

3102.00 ft (CF)

Hole Diameter: 6.80 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 6627 Inside

Press@RunDepth: 13.11 psig @ 4258.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2003.11.19

End Date:

2003.11.19

Last Calib.: 1899.12.30

Start Time: 03:09:25

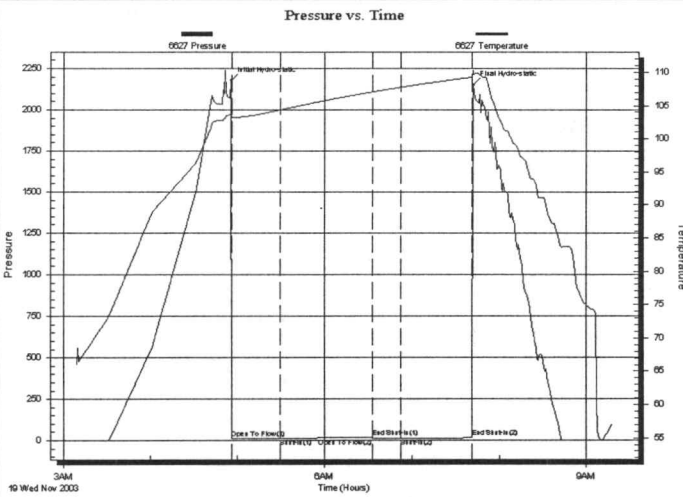
End Time:

09:17:40

Time On Btm: 2003.11.19 @ 04:55:25

Time Off Btm: 2003.11.19 @ 07:41:55

TEST COMMENT: IFF- Weak Surface Blow , No Blow back
FFP- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2175.47	103.56	Initial Hydro-static
1	11.52	103.19	Open To Flow (1)
34	13.30	104.34	Shut-In (1)
98	18.36	107.05	End Shut-In (1)
98	12.34	107.06	Open To Flow (2)
117	13.11	107.76	Shut-In (2)
166	15.78	109.29	End Shut-In (2)
167	2149.47	109.72	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Recovered Mud in Tool Only	0.01

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18455

DST#: 3

ATTN: Dave Goldak

Test Start: 2003.11.19 @ 03:09:10

Tool Information

Drill Pipe:	Length: 4260.00 ft	Diameter: 3.80 inches	Volume: 59.76 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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: 60000.00 lb
			<u>Total Volume: 59.76 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4255.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	21.00 ft			
Tool Length:	42.00 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			4235.00	
Shut In Tool	5.00			4240.00	
Hydraulic tool	5.00			4245.00	
Packer	5.00			4250.00	21.00 Bottom Of Top Packer
Packer	5.00			4255.00	
Stubb	1.00			4256.00	
Perforations	2.00			4258.00	
Recorder	0.00	6627	Inside	4258.00	
Perforations	15.00			4273.00	
Recorder	0.00	13252	Outside	4273.00	
Bullnose	3.00			4276.00	21.00 Bottom Packers & Anchor

Total Tool Length: 42.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18455

DST#: 3

ATTN: Dave Goldak

Test Start: 2003.11.19 @ 03:09:10

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: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.56 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3500.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Recovered Mud in Tool Only	0.014

Total Length: 1.00 ft Total Volume: 0.014 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

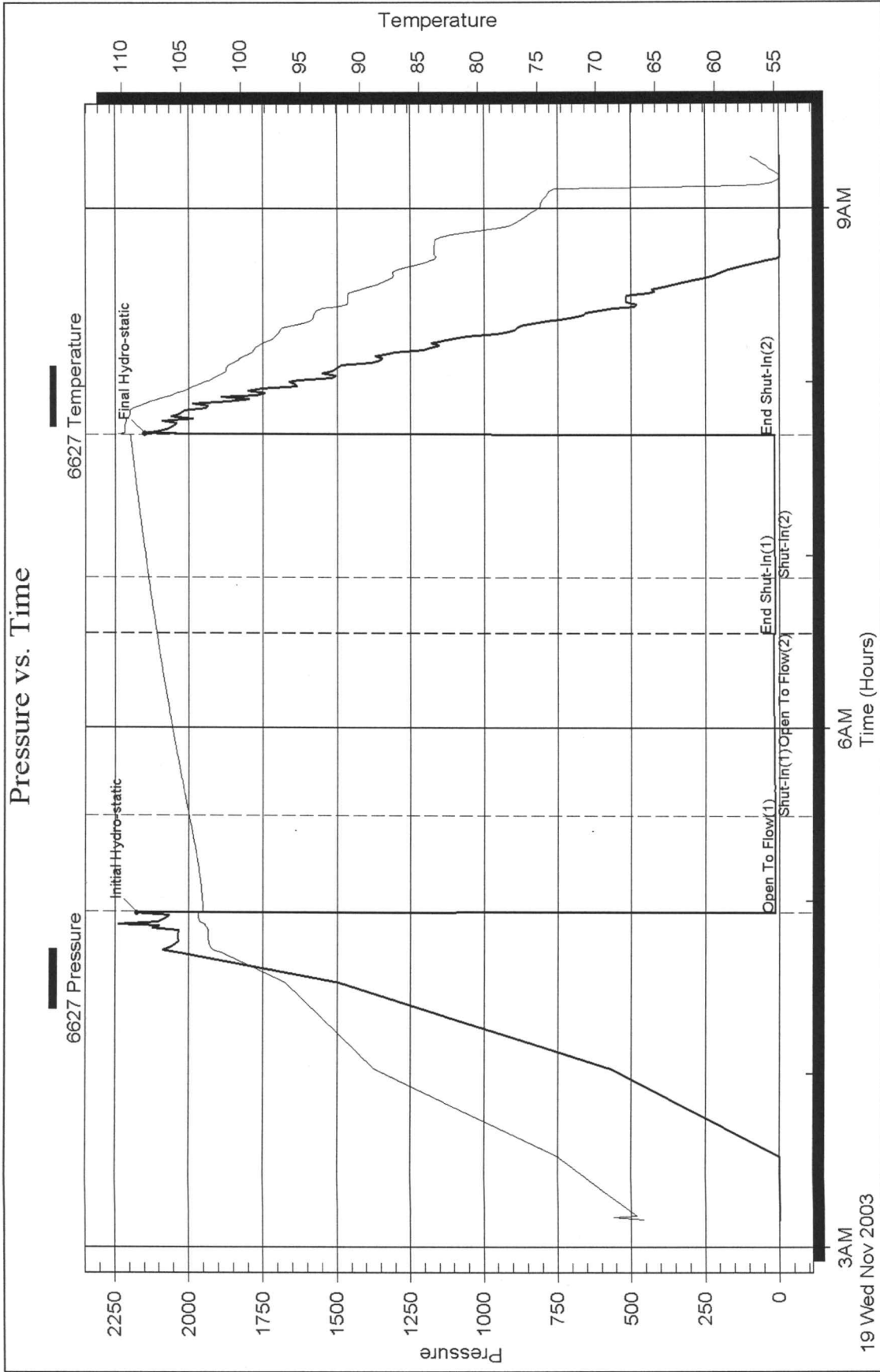
Serial #: 6627

Inside

Dane G. Hansen Trust

31-10s-32w - Thomas

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Dane G. Hansen Trust**

PO Box 187
Logan, KS. 67646

ATTN: Dave Goldak

31-10s-32w-Thomas

#8 Hecker

Start Date: 2003.11.19 @ 17:29:49

End Date: 2003.11.20 @ 00:09:49

Job Ticket #: 18456 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Dane G. Hansen Trust

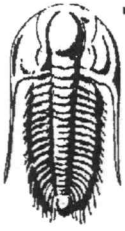
#8 Hecker

31-10s-32w-Thomas

DST # 4

Swope

2003.11.19



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18456

DST#: 4

ATTN: Dave Goldak

Test Start: 2003.11.19 @ 17:29:49

GENERAL INFORMATION:

Formation: **Swope**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:05:49

Time Test Ended: 00:09:49

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 24

Interval: **4274.00 ft (KB) To 4304.00 ft (KB) (TVD)**

Total Depth: 4304.00 ft (KB) (TVD)

Hole Diameter: 6.80 inches Hole Condition: Good

Reference Elevations: 3112.00 ft (KB)

3102.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6627

Inside

Press@RunDepth: 30.27 psig @ 4277.00 ft (KB)

Start Date: 2003.11.19

End Date:

2003.11.20

Start Time: 17:30:04

End Time:

00:09:49

Capacity: 7000.00 psig

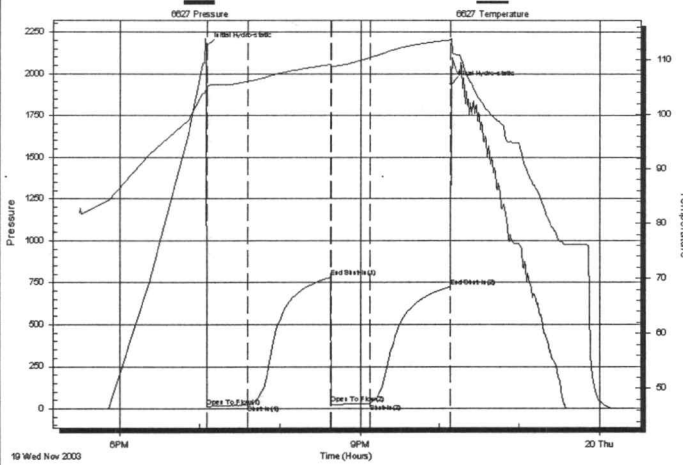
Last Calib.: 1899.12.30

Time On Btm: 2003.11.19 @ 19:05:34

Time Off Btm: 2003.11.19 @ 22:08:34

TEST COMMENT: IFP- Weak Blow , Built to 4" , Weak Surface Blow back
FFP- Weak Blow , Built to 2-1/4" , No Blow back

Pressure vs. Time



PRESSURE SUMMARY

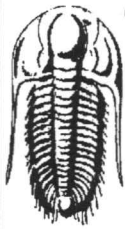
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2164.43	104.83	Initial Hydro-static
1	13.57	103.99	Open To Flow (1)
31	21.46	106.01	Shut-In(1)
93	781.27	109.11	End Shut-In(1)
93	26.95	108.75	Open To Flow (2)
122	30.27	110.39	Shut-In(2)
183	725.06	113.61	End Shut-In(2)
183	1937.36	113.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	Oil Cut Mud 10%Oil, 8%Water	0.63

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18456

DST#: 4

ATTN: Dave Goldak

Test Start: 2003.11.19 @ 17:29:49

Tool Information

Drill Pipe:	Length: 4262.00 ft	Diameter: 3.80 inches	Volume: 59.78 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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: 58000.00 lb
			<u>Total Volume: 59.78 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4274.00 ft			Final 52000.00 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	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4254.00	
Shut In Tool	5.00			4259.00	
Hydraulic tool	5.00			4264.00	
Packer	5.00			4269.00	21.00 Bottom Of Top Packer
Packer	5.00			4274.00	
Stubb	1.00			4275.00	
Perforations	2.00			4277.00	
Recorder	0.00	6627	Inside	4277.00	
Perforations	24.00			4301.00	
Recorder	0.00	13252	Outside	4301.00	
Bullnose	3.00			4304.00	30.00 Bottom Packers & Anchor

Total Tool Length: 51.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18456

DST#: 4

ATTN: Dave Goldak

Test Start: 2003.11.19 @ 17:29:49

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.58 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
45.00	Oil Cut Mud 10%Oil, 8%Water	0.631

Total Length: 45.00 ft Total Volume: 0.631 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 45' GIP

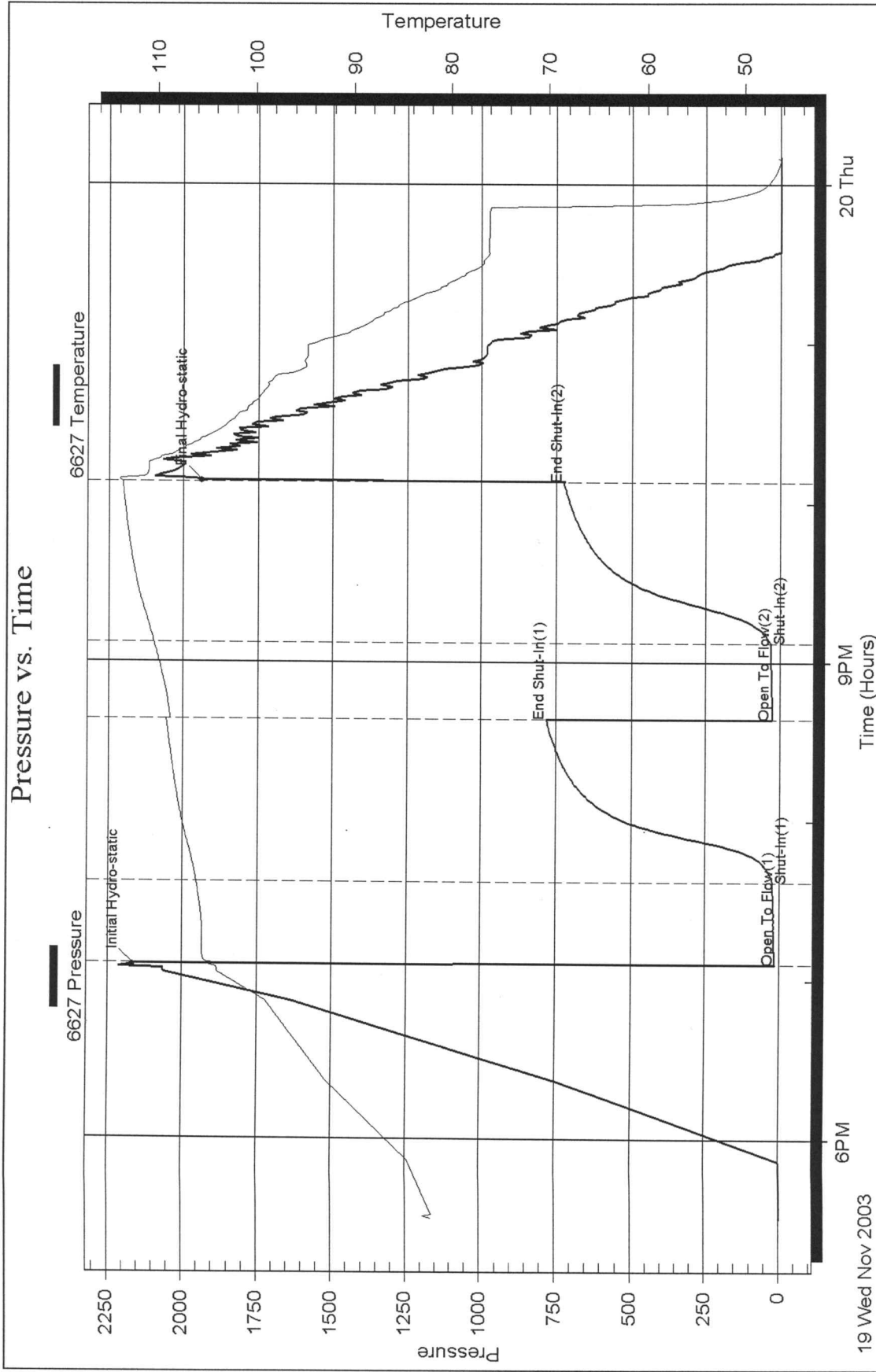
Serial #: 6627

Inside

Dane G. Hansen Trust

31-10s-32w-Thomas

DST Test Number: 4





DRILL STEM TEST REPORT

Prepared For: **Dane G. Hansen Trust**

PO Box 187
Logan, KS. 67646

ATTN: Dave Goldak

31-10s-32w-Thomas

#8 Hecker

Start Date: 2003.11.20 @ 08:59:51

End Date: 2003.11.20 @ 14:39:36

Job Ticket #: 18557 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Dane G. Hansen Trust

#8 Hecker

31-10s-32w-Thomas

DST # 5

LKC

2003.11.20



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

ATTN: Dave Goldak

Job Ticket: 18557 **DST#: 5**

Test Start: 2003.11.20 @ 08:59:51

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:33:06

Time Test Ended: 14:39:36

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 24

Interval: **4305.00 ft (KB) To 4342.00 ft (KB) (TVD)**

Total Depth: 4342.00 ft (KB) (TVD)

Hole Diameter: 6.80 inches Hole Condition: Good

Reference Elevations: 3112.00 ft (KB)

3102.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6627 Inside

Press@RunDepth: 16.07 psig @ 4309.00 ft (KB)

Start Date: 2003.11.20

Start Time: 09:00:06

End Date: 2003.11.20

End Time: 14:39:36

Capacity: 7000.00 psig

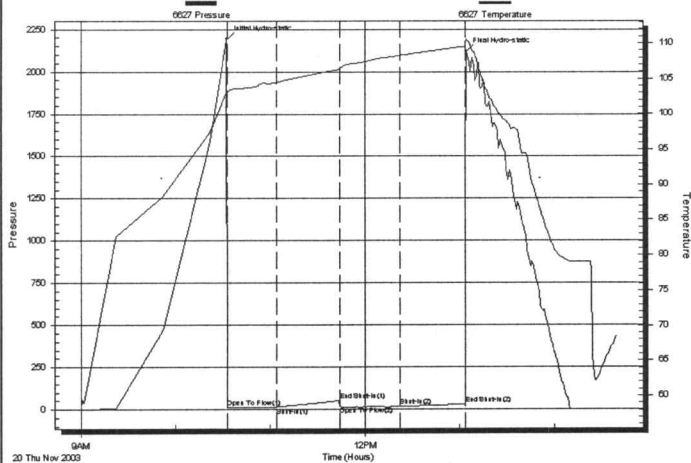
Last Calib.: 1899.12.30

Time On Btm: 2003.11.20 @ 10:32:36

Time Off Btm: 2003.11.20 @ 13:04:21

TEST COMMENT: IFP- Weak Surface Blow ,Blow back After 15 min
FFP- Weak Surface Blow , No Blow back

Pressure vs. Time



PRESSURE SUMMARY

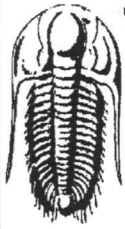
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2191.96	103.12	Initial Hydro-static
1	12.97	103.05	Open To Flow (1)
32	14.42	104.48	Shut-In(1)
72	52.20	106.31	End Shut-In(1)
72	15.39	106.32	Open To Flow (2)
110	16.07	108.25	Shut-In(2)
151	29.88	109.52	End Shut-In(2)
152	2117.35	110.54	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Oil Cut Mud 2% Oil	0.07

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18557

DST#: 5

ATTN: Dave Goldak

Test Start: 2003.11.20 @ 08:59:51

Tool Information

Drill Pipe:	Length: 4293.00 ft	Diameter: 3.80 inches	Volume: 60.22 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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: 60.22 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	4305.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	37.00 ft			
Tool Length:	58.00 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			4285.00	
Shut In Tool	5.00			4290.00	
Hydraulic tool	5.00			4295.00	
Packer	5.00			4300.00	21.00 Bottom Of Top Packer
Packer	5.00			4305.00	
Stubb	1.00			4306.00	
Perforations	3.00			4309.00	
Recorder	0.00	6627	Inside	4309.00	
Perforations	30.00			4339.00	
Recorder	0.00	13252	Outside	4339.00	
Bullnose	3.00			4342.00	37.00 Bottom Packers & Anchor

Total Tool Length: 58.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18557

DST#: 5

ATTN: Dave Goldak

Test Start: 2003.11.20 @ 08:59:51

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: 9.58 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
5.00	Oil Cut Mud 2% Oil	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6627

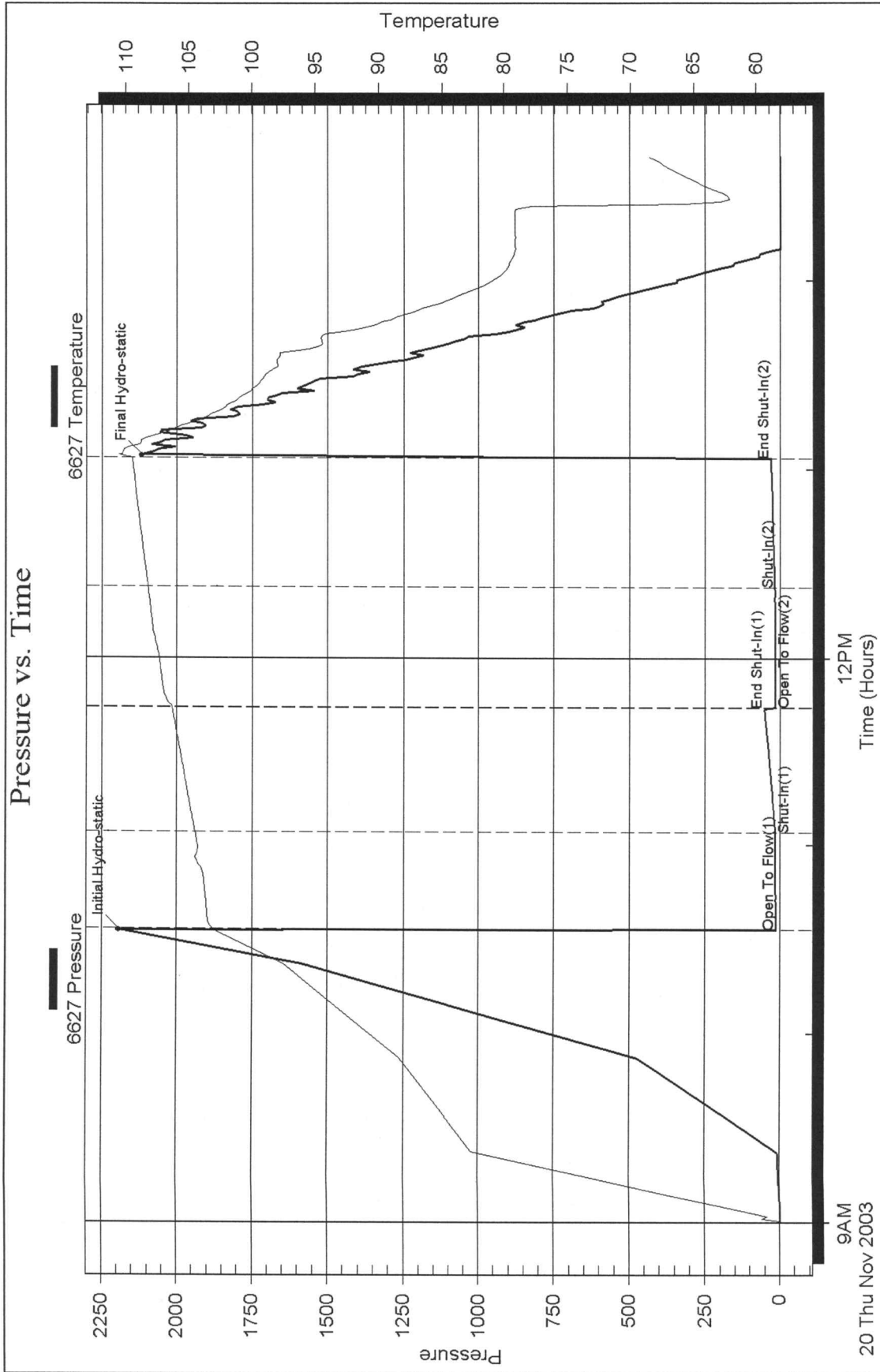
Inside

Dane G. Hansen Trust

31-10s-32w - Thomas

DST Test Number: 5

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Dane G. Hansen Trust**

PO Box 187
Logan, KS. 67646

ATTN: Dave Goldak

31-10s-32w-Thomas

#8 Hecker

Start Date: 2003.11.21 @ 16:24:39

End Date: 2003.11.21 @ 23:15:24

Job Ticket #: 18458 DST #: 6

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18458 **DST#: 6**

ATTN: Dave Goldak

Test Start: 2003.11.21 @ 16:24:39

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:30:09

Time Test Ended: 23:15:24

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 24

Interval: 4579.00 ft (KB) To 4610.00 ft (KB) (TVD)

Total Depth: 4610.00 ft (KB) (TVD)

Hole Diameter: 6.80 inches Hole Condition: Good

Reference Elevations: 3112.00 ft (KB)

3102.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6627 Inside

Press@RunDepth: 14.67 psig @ 4582.00 ft (KB)

Start Date: 2003.11.21

End Date: 2003.11.21

Start Time: 16:24:54

End Time: 23:15:24

Capacity: 7000.00 psig

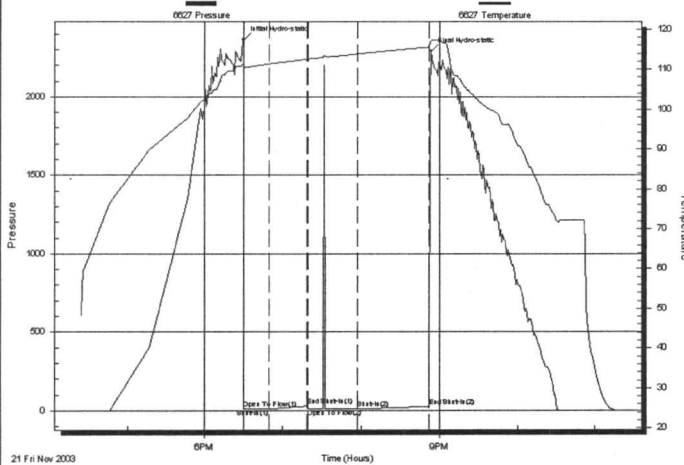
Last Calib.: 1899.12.30

Time On Btm: 2003.11.21 @ 18:29:54

Time Off Btm: 2003.11.21 @ 20:53:39

TEST COMMENT: IFP-No Blow
FFP-No Blow, Flush Tool After 5 Min, Initial Surge, Then No Blow

Pressure vs. Time



PRESSURE SUMMARY

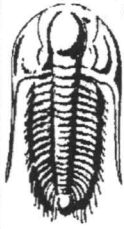
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2361.49	111.40	Initial Hydro-static
1	12.03	110.90	Open To Flow (1)
20	11.99	111.31	Shut-In(1)
49	28.66	112.49	End Shut-In(1)
50	12.30	112.49	Open To Flow (2)
88	14.67	113.81	Shut-In(2)
143	25.23	115.50	End Shut-In(2)
144	2289.23	117.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3.00	Mud	0.04

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18458

DST#: 6

ATTN: Dave Goldak

Test Start: 2003.11.21 @ 16:24:39

Tool Information

Drill Pipe:	Length: 4571.00 ft	Diameter: 3.80 inches	Volume: 64.12 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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: 60000.00 lb
			<u>Total Volume: 64.12 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4579.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	31.00 ft			
Tool Length:	52.00 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			4559.00	
Shut In Tool	5.00			4564.00	
Hydraulic tool	5.00			4569.00	
Packer	5.00			4574.00	21.00 Bottom Of Top Packer
Packer	5.00			4579.00	
Stubb	1.00			4580.00	
Perforations	2.00			4582.00	
Recorder	0.00	6627	Inside	4582.00	
Perforations	25.00			4607.00	
Recorder	0.00	13252	Outside	4607.00	
Bullnose	3.00			4610.00	31.00 Bottom Packers & Anchor

Total Tool Length: 52.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dane G. Hansen Trust

#8 Hecker

PO Box 187
Logan, KS. 67646

31-10s-32w-Thomas

Job Ticket: 18458

DST#: 6

ATTN: Dave Goldak

Test Start: 2003.11.21 @ 16:24:39

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: 63.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2800.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
3.00	Mud	0.042

Total Length: 3.00 ft Total Volume: 0.042 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6627

Inside

Dane G. Hansen Trust

31-10s-32w - Thomas

DST Test Number: 6

