

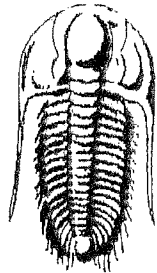
15-101-22068

2-19s-29w

CONFIDENTIAL

MAR 04 2008

KCC



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Northern Lights Oil Co**

PO Box 164
Andover KS 67002

ATTN: Jeff Christian

2 19S 29W Lane KS

Mumma Trust #1

Start Date: 2008.01.16 @ 17:43:29

End Date: 2008.01.17 @ 01:52:53

Job Ticket #: 29572 DST #: 1

*15-101-22068
NW NW NW SE
2530 FSL 2400 FEL*

RECEIVED
KANSAS CORPORATION COMMISSION

MAR 04 2008

CONSERVATION DIVISION
WICHITA, KS

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

Northern Lights Oil Co

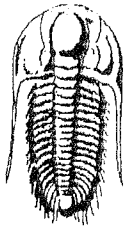
Mumma Trust #1

2 19S 29W Lane KS

DST # 1

Lans. J

2008.01.16



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Northern Lights Oil Co

Mumma Trust #1

PO Box 164
Andover KS 67002

2 19S 29W Lane KS

Job Ticket: 29572

DST#: 1

ATTN: Jeff Christian

Test Start: 2008.01.16 @ 17:43:29

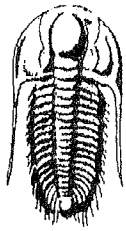
Tool Information

Drill Pipe:	Length: 3986.00 ft	Diameter: 3.80 inches	Volume: 55.91 bbl	Tool Weight: 1500.00 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: 247.00 ft	Diameter: 2.25 inches	Volume: 1.21 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 57.12 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4243.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	17.00 ft			
Tool Length:	40.00 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			4221.00	
Shut In Tool	5.00			4226.00	
Hydraulic tool	5.00			4231.00	
Safety Joint	3.00			4234.00	
Packer	5.00			4239.00	23.00 Bottom Of Top Packer
Packer	4.00			4243.00	
Stubb	1.00			4244.00	
Recorder	0.00	6625	Inside	4244.00	
Recorder	0.00	6741	Inside	4244.00	
Perforations	11.00			4255.00	
Bullnose	5.00			4260.00	17.00 Bottom Packers & Anchor
Total Tool Length:	40.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Northern Lights Oil Co

Mumma Trust #1

PO Box 164
Andover KS 67002

2 19S 29W Lane KS

Job Ticket: 29572

DST#: 1

ATTN: Jeff Christian

Test Start: 2008.01.16 @ 17:43:29

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:

45000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.05 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
60.00	100%M	0.295
374.00	MCW 90%W 10%M	3.543
45.00	WCM 20%W 80%M	0.631

Total Length: 479.00 ft

Total Volume: 4.469 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

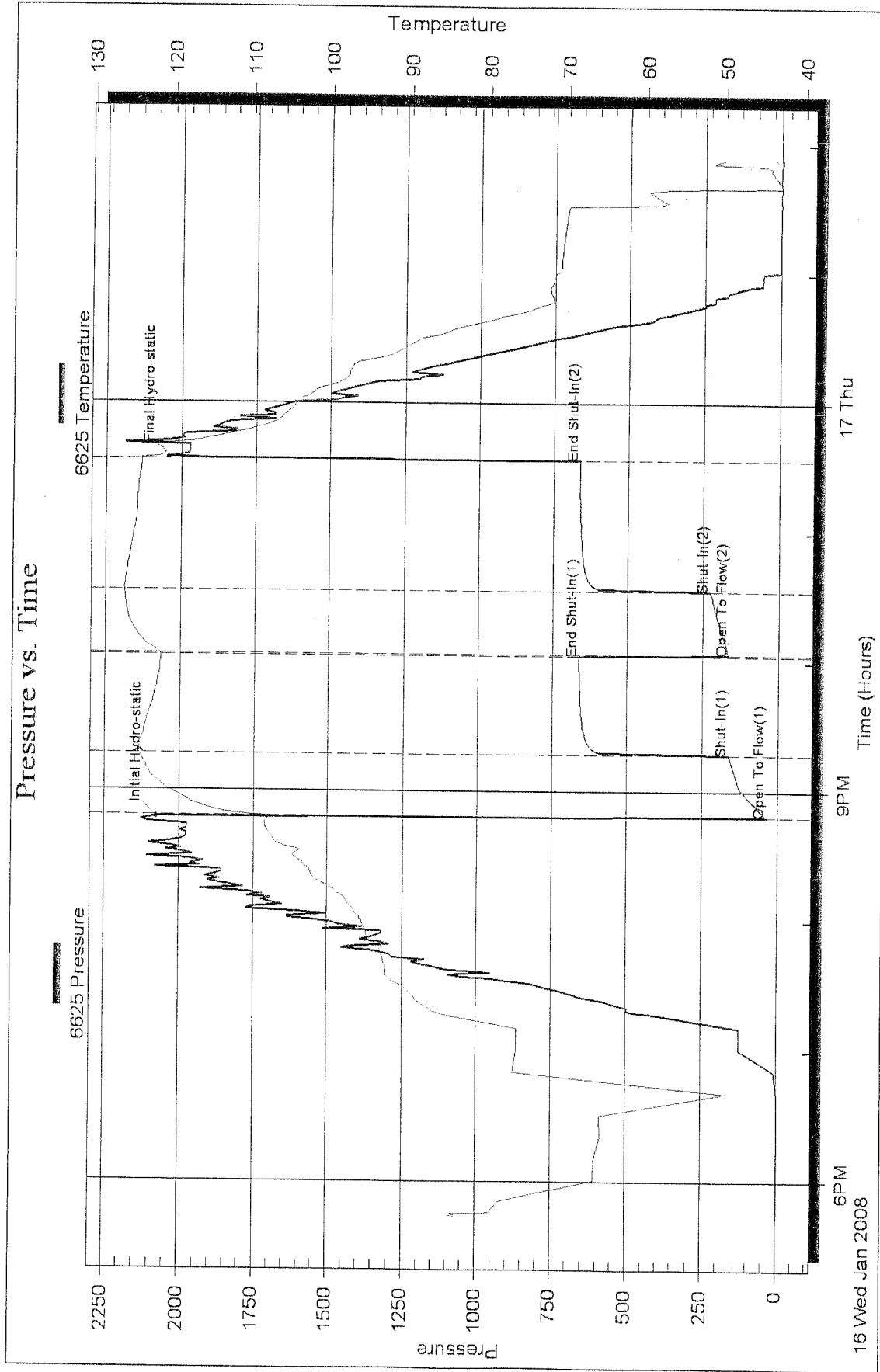
Serial #: 6625

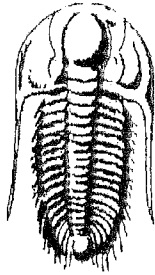
Inside

Northern Lights Oil Co

2 19S 29W Lane KS

DST Test Number: 1





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Northern Lights Oil Co**

PO Box 164
Andover KS 67002

ATTN: Jeff Christian

2 19S 29W Lane KS

Mumma Trust #1

Start Date: 2008.01.18 @ 08:39:05

End Date: 2008.01.18 @ 14:40:59

Job Ticket #: 29573 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Northern Lights Oil Co

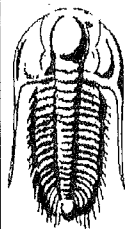
Mumma Trust #1

2 19S 29W Lane KS

DST # 2

Marmaton - Altamont

2008.01.18



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Northern Lights Oil Co

Mumma Trust #1

PO Box 164
Andover KS 67002

2 19S 29W Lane KS

ATTN: Jeff Christian

Job Ticket: 29573

DST#: 2

Test Start: 2008.01.18 @ 08:39:05

GENERAL INFORMATION:

Formation: **Marmaton - Altamont**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:30:30

Time Test Ended: 14:40:59

Test Type: Conventional Bottom Hole

Tester: Brandon Domsch

Unit No: 25

Interval: **4377.00 ft (KB) To 4456.00 ft (KB) (TVD)**

Total Depth: 4456.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2812.00 ft (KB)

2807.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: **6625**

Inside

Press@RunDepth: 14.56 psig @ 4378.00 ft (KB)

Start Date: 2008.01.18

End Date:

2008.01.18

Start Time: 08:39:05

End Time:

14:40:59

Capacity: 7000.00 psig

Last Calib.: 2008.01.18

Time On Btm: 2008.01.18 @ 10:29:00

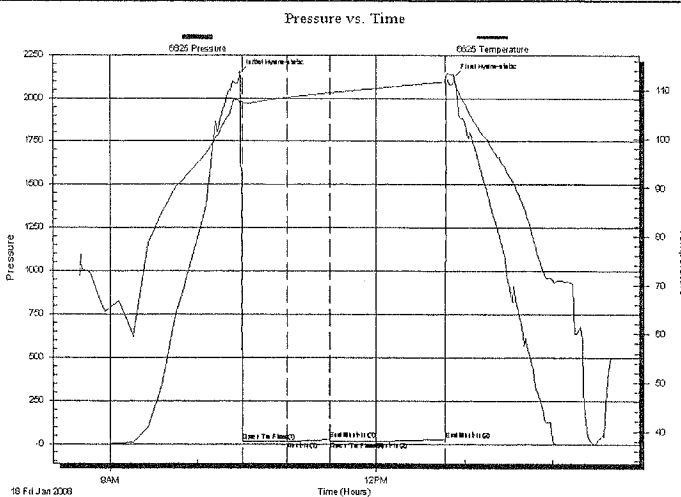
Time Off Btm: 2008.01.18 @ 12:52:30

TEST COMMENT: IF Built to 3/4 " died back to 1/2 "

IS No return

FF Surface blow for 4 mins.

FS No return



PRESSURE SUMMARY

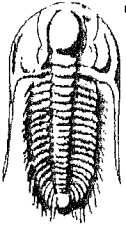
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2143.37	107.72	Initial Hydro-static
2	13.57	107.49	Open To Flow (1)
32	14.33	108.46	Shut-In (1)
61	24.50	109.43	End Shut-In (1)
61	13.72	109.44	Open To Flow (2)
91	14.56	110.41	Shut-In (2)
138	27.34	111.77	End Shut-In (2)
144	2121.36	113.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	100%M	0.05

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Northern Lights Oil Co

Mumma Trust #1

PO Box 164
Andover KS 67002

2 19S 29W Lane KS

Job Ticket: 29573

DST#: 2

ATTN: Jeff Christian

Test Start: 2008.01.18 @ 08:39:05

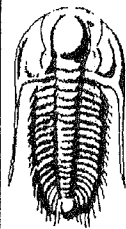
Tool Information

Drill Pipe:	Length: 4113.00 ft	Diameter: 3.80 inches	Volume: 57.69 bbl	Tool Weight: 1500.00 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: 247.00 ft	Diameter: 2.25 inches	Volume: 1.21 bbl	Weight to Pull Loose: 55000.00 lb
			Total Volume: 58.90 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	4377.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	79.00 ft			
Tool Length:	102.00 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			4355.00	
Shut In Tool	5.00			4360.00	
Hydraulic tool	5.00			4365.00	
Safety Joint	3.00			4368.00	
Packer	5.00			4373.00	23.00 Bottom Of Top Packer
Packer	4.00			4377.00	
Stubb	1.00			4378.00	
Recorder	0.00	6625	inside	4378.00	
Recorder	0.00	6741	inside	4378.00	
Perforations	9.00			4387.00	
Change Over Sub	1.00			4388.00	
Drill Pipe	62.00			4450.00	
Change Over Sub	1.00			4451.00	
Bullnose	5.00			4456.00	79.00 Bottom Packers & Anchor

Total Tool Length: 102.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Northern Lights Oil Co

Mumma Trust #1

PO Box 164
Andover KS 67002

2 19S 29W Lane KS

Job Ticket: 29573

DST#: 2

ATTN: Jeff Christian

Test Start: 2008.01.18 @ 08:39:05

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 12.95 in³

Resistivity: 0.00 ohm.m

Salinity: 2800.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	100%M	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

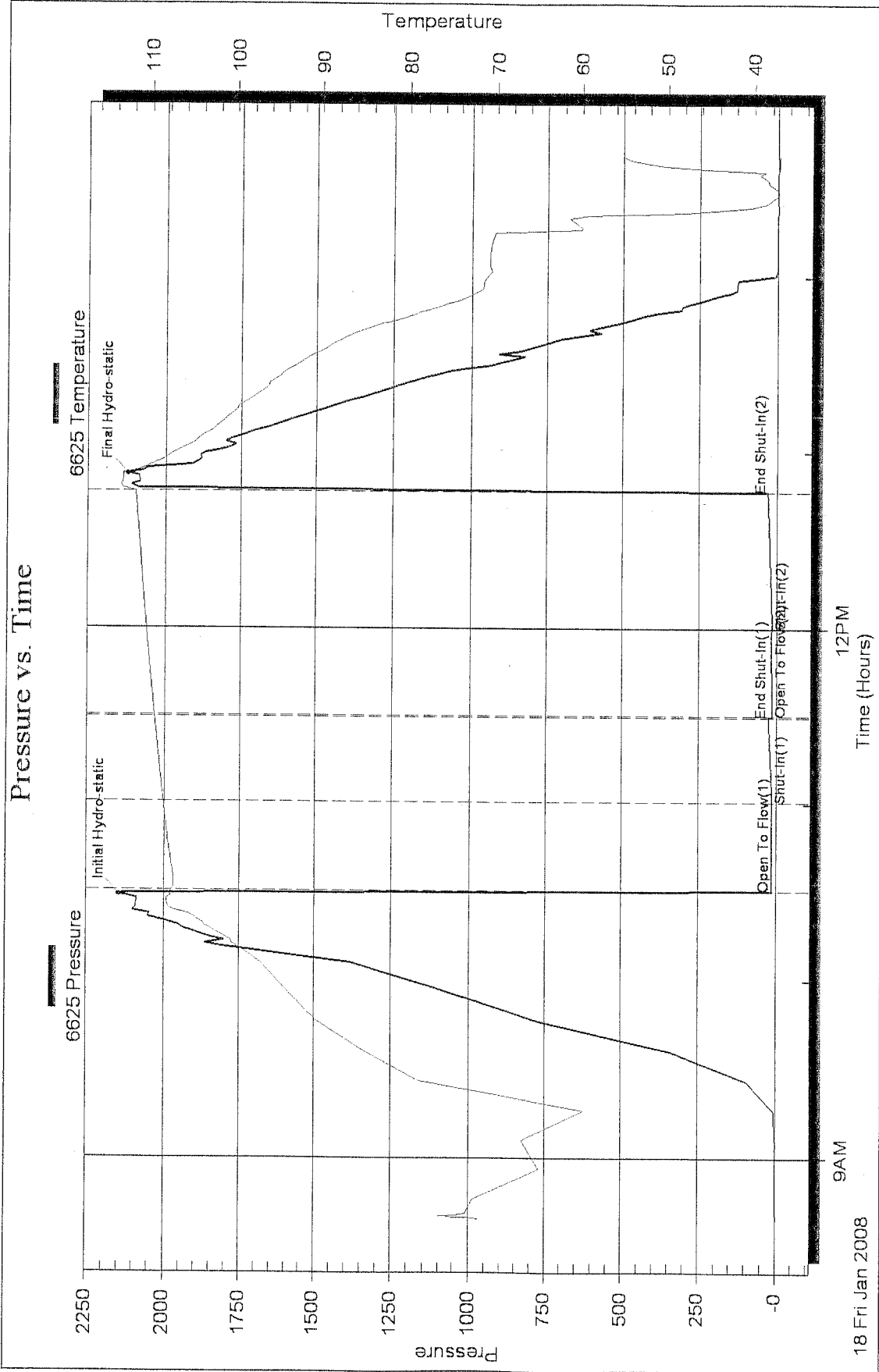
Serial #:

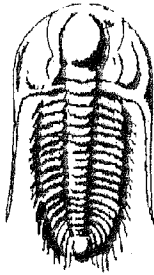
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Northern Lights Oil Co**

PO Box 164
Andover KS 67002

ATTN: Jeff Christian

2 19S 29W Lane KS

Mumma Trust #1

Start Date: 2008.01.19 @ 13:57:05

End Date: 2008.01.19 @ 22:40:30

Job Ticket #: 29574 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Northern Lights Oil Co

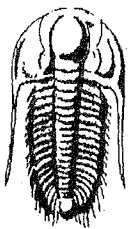
Mumma Trust #1

2 19S 29W Lane KS

DST # 3

Lans, K

2008.01.19



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Northern Lights Oil Co

Mumma Trust #1

PO Box 164
Andover KS 67002

2 19S 29W Lane KS

ATTN: Jeff Christian

Job Ticket: 29574 **DST#: 3**

Test Start: 2008.01.19 @ 13:57:05

GENERAL INFORMATION:

Formation: **Lans. K**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 17:01:00
 Time Test Ended: 22:40:30

Test Type: Conventional Straddle
 Tester: Brandon Domsch
 Unit No: 25

Interval: **4273.00 ft (KB) To 4297.00 ft (KB) (TVD)**
 Total Depth: 4633.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2812.00 ft (KB)
 2807.00 ft (CF)
 KB to GR/CF: 5.00 ft

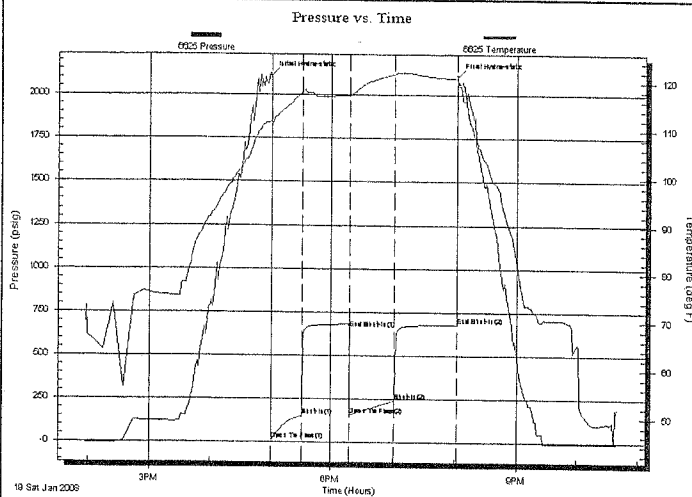
Serial #: 6625

Inside

Press@RunDepth: 241.51 psig @ 4274.00 ft (KB)
 Start Date: 2008.01.19 End Date: 2008.01.19
 Start Time: 13:57:05 End Time: 22:40:30

Capacity: 7000.00 psig
 Last Calib.: 2008.01.19
 Time On Btm: 2008.01.19 @ 17:00:30
 Time Off Btm: 2008.01.19 @ 20:02:59

TEST COMMENT: IF BOB in 18 mins.
 IS No return
 FF BOB in 27 mins.
 FS No return



PRESSURE SUMMARY

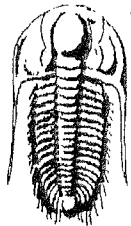
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2111.27	111.85	Initial Hydro-static
1	14.74	111.27	Open To Flow (1)
31	153.80	118.05	Shut-In(1)
77	655.38	117.12	End Shut-In(1)
78	156.99	117.26	Open To Flow (2)
121	241.51	121.76	Shut-In(2)
182	678.66	120.74	End Shut-In(2)
183	2107.00	120.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbt)
25.00	100%M	0.12
409.00	SMCW 90%W 10%M	3.71
82.00	MCW 60%W 40%M	1.15

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Northern Lights Oil Co

Mumma Trust #1

PO Box 164
Andover KS 67002

2 19S 29W Lane KS

Job Ticket: 29574

DST#: 3

ATTN: Jeff Christian

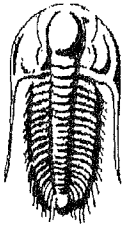
Test Start: 2008.01.19 @ 13:57:05

Tool Information

Drill Pipe:	Length: 4019.00 ft	Diameter: 3.80 inches	Volume: 56.38 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 247.00 ft	Diameter: 2.25 inches	Volume: 1.21 bbl	Weight to Pull Loose: 55000.00 lb
			Total Volume: 57.59 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4273.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	4297.00 ft			
Interval between Packers:	24.00 ft			
Tool Length:	380.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4251.00	
Shut In Tool	5.00			4256.00	
Hydraulic tool	5.00			4261.00	
Safety Joint	3.00			4264.00	
Packer	5.00			4269.00	23.00 Bottom Of Top Packer
Packer	4.00			4273.00	
Stubb	1.00			4274.00	
Recorder	0.00	6625	Inside	4274.00	
Perforations	19.00			4293.00	
Blank Off Sub	1.00			4294.00	
Top of Packer	3.00			4297.00	24.00 Tool Interval
Packer	0.00			4297.00	
Stubb	1.00			4298.00	
Blank Spacing	12.00			4310.00	
Change Over Sub	1.00			4311.00	
Drill Pipe	313.00			4624.00	
Recorder	0.00	6741	Outside	4624.00	
Change Over Sub	1.00			4625.00	
Bullnose	5.00			4630.00	333.00 Bottom Packers & Anchor
Total Tool Length:	380.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Northern Lights Oil Co
PO Box 164
Andover KS 67002
ATTN: Jeff Christian

Mumma Trust #1
2 19S 29W Lane KS
Job Ticket: 29574 DST#: 3
Test Start: 2008.01.19 @ 13:57:05

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 56.00 sec/qt
Water Loss: 8.02 in³
Resistivity: 0.00 ohm.m
Salinity: 3000.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: 25000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	100%M	0.123
409.00	SMCW 90%W 10%M	3.715
82.00	MCW 60%W 40%M	1.150

Total Length: 516.00 ft Total Volume: 4.988 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

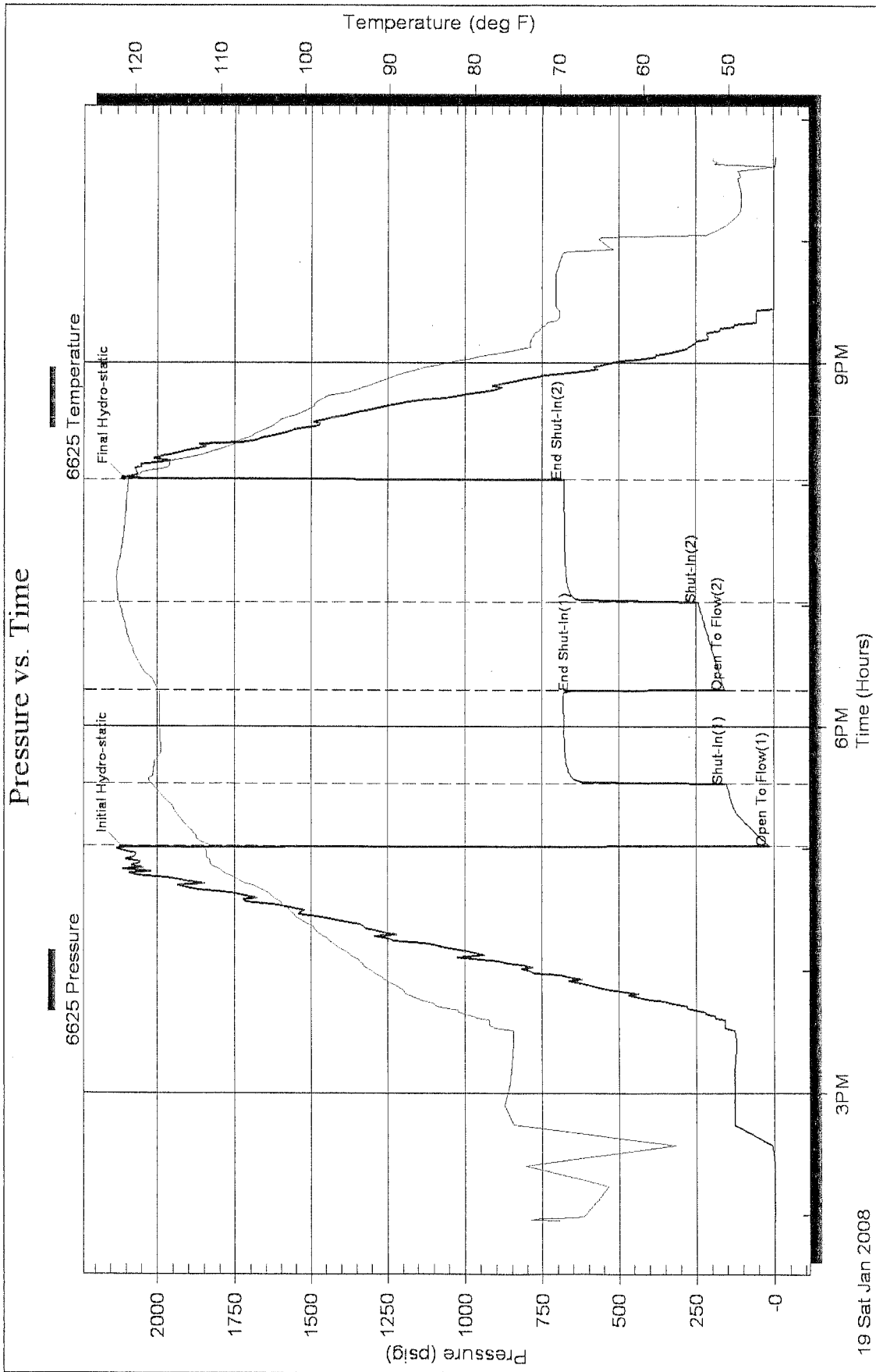
Serial #: 6625

Inside

Northern Lights Oil Co

2 19S 29W Lane KS

DST Test Number: 3



19 Sat Jan 2008

3 PM

6 PM

9 PM

Time (Hours)