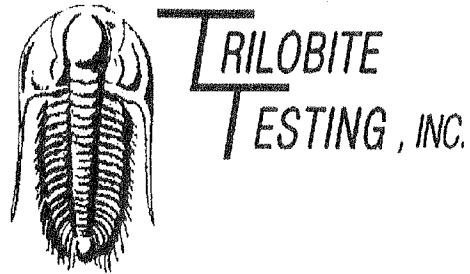


15-109-20841

12-14s-32w



DRILL STEM TEST REPORT

Prepared For: **Pioneer Resources**

177 W Limestone Rd
Phillipsburg KS 67661

ATTN: Steve Murphy/ Roger W

12 14S 32W Logan KS

Ottley # 1

Start Date: 2008.07.07 @ 13:15:10

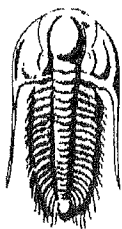
End Date: 2008.07.07 @ 18:48:34

Job Ticket #: 31347 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Pioneer Resources

177 W Limestone Rd
Phillipsburg KS 67661

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.07 @ 13:15:10

Ottley # 1

12 14S 32W Logan KS

Job Ticket: 31347

DST#: 1

GENERAL INFORMATION:

Formation: **LKC I-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:58:50

Time Test Ended: 18:48:34

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: **4112.00 ft (KB) To 4160.00 ft (KB) (TVD)**

Total Depth: 4160.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2887.00 ft (KB)

2882.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6772 Outside

Press@RunDepth: 68.61 psig @ 4113.00 ft (KB)

Start Date: 2008.07.07

End Date:

2008.07.07

Capacity: 7000.00 psig

Last Calib.: 2008.07.07

Start Time: 13:15:10

End Time:

18:48:34

Time On Btm: 2008.07.07 @ 14:56:50

Time Off Btm: 2008.07.07 @ 16:44:50

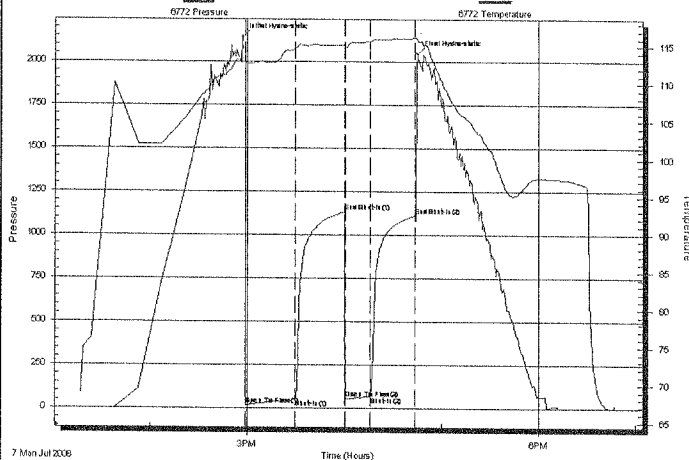
TEST COMMENT: IF Surface blow built to 1 1/2 in 30 min.

IS No return

FF No blow

FS No return

Pressure vs. Time



PRESSURE SUMMARY

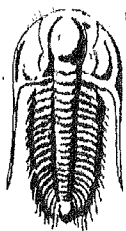
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2139.70	113.37	Initial Hydro-static
2	17.60	112.88	Open To Flow (1)
33	51.52	114.69	Shut-In (1)
63	1131.47	115.15	End Shut-In (1)
63	55.81	114.93	Open To Flow (2)
79	68.61	115.71	Shut-In (2)
107	1111.41	116.14	End Shut-In (2)
108	2045.17	115.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	MsomeOspots 100%M	0.30

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Pioneer Resources

Ottley # 1

177 W Limestone Rd
Phillipsburg KS 67661

12 14S 32W Logan KS

Job Ticket: 31347

DST#: 1

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.07 @ 13:15:10

Tool Information

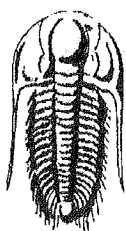
Drill Pipe:	Length: 3978.00 ft	Diameter: 3.80 inches	Volume: 55.80 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	70000.00 lb
		Total Volume:	56.40 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial	45000.00 lb
Depth to Top Packer:	4112.00 ft			Final	45000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	48.00 ft				
Tool Length:	75.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4086.00	
Shut In Tool	5.00			4091.00	
Hydraulic tool	5.00			4096.00	
Jars	5.00			4101.00	
Safety Joint	2.00			4103.00	
Packer	5.00			4108.00	27.00 Bottom Of Top Packer
Packer	4.00			4112.00	
Stubb	1.00			4113.00	
Recorder	0.00	6769	Inside	4113.00	
Recorder	0.00	6772	Outside	4113.00	
Perforations	10.00			4123.00	
Change Over Sub	1.00			4124.00	
Drill Pipe	30.00			4154.00	
Change Over Sub	1.00			4155.00	
Bullnose	5.00			4160.00	48.00 Bottom Packers & Anchor

Total Tool Length: 75.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Pioneer Resources

Ottley # 1

177 W Limestone Rd
Phillipsburg KS 67661

12 14S 32W Logan KS

Job Ticket: 31347

DST#: 1

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.07 @ 13:15:10

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.74 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	MsomeOspots 100%M	0.295

Total Length: 60.00 ft

Total Volume: 0.295 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

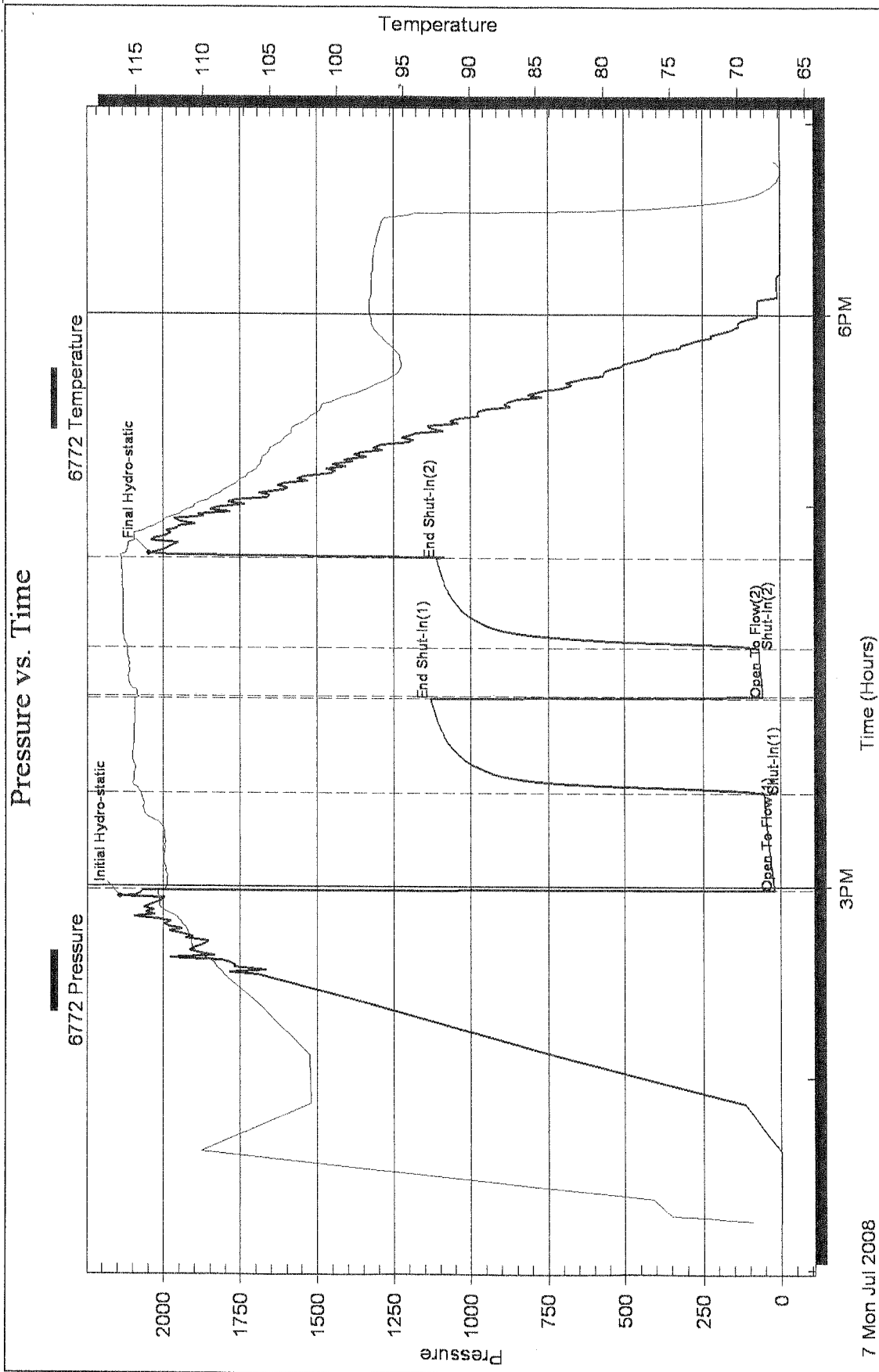
Serial #: 6772

Outside Pioneer Resources

12 14S 32W Logan KS

DST Test Number: 1

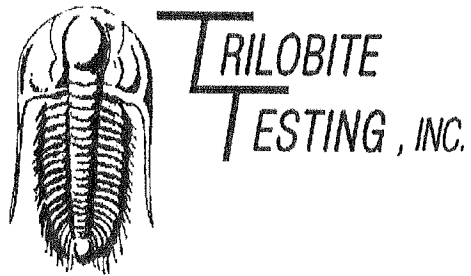
Pressure vs. Time



Ref. No: 31347

Trilobite Testing, Inc

Printed: 2008.07.15 @ 09:41:23 Page 5



DRILL STEM TEST REPORT

Prepared For: **Pioneer Resources**

177 W Limestone Rd
Phillipsburg KS 67661

ATTN: Steve Murphy/ Roger W

12 14S 32W Logan KS

Ottley # 1

Start Date: 2008.07.08 @ 03:08:51

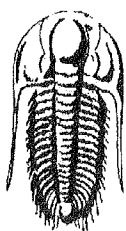
End Date: 2008.07.08 @ 08:21:30

Job Ticket #: 31348 DST #: 2

Trilobite Testing, Inc

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Pioneer Resources

177 W Limestone Rd
Phillipsburg KS 67661

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.08 @ 03:08:51

Ottley # 1

12 14S 32W Logan KS

Job Ticket: 31348

DST#: 2

GENERAL INFORMATION:

Formation: LKC-K

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:36:01

Time Test Ended: 08:21:30

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: 4155.00 ft (KB) To 4200.00 ft (KB) (TVD)

Total Depth: 4160.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2887.00 ft (KB)

2882.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6772 Outside

Press@RunDepth: 51.35 psig @ 4156.00 ft (KB)

Start Date: 2008.07.08

End Date: 2008.07.08

Start Time: 03:08:51

End Time: 08:21:30

Capacity: 7000.00 psig

Last Calib.: 2008.07.08

Time On Btm: 2008.07.08 @ 04:34:01

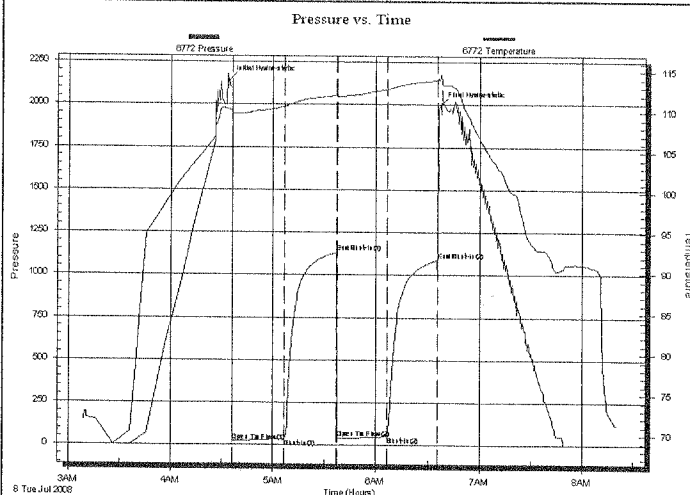
Time Off Btm: 2008.07.08 @ 06:37:31

TEST COMMENT: IF 1/4 blow built to 1 1/2 in 30 min.

IS No return

FF No blow

FS No return



PRESSURE SUMMARY

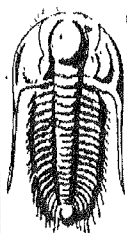
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2141.90	110.37	Initial Hydro-static
2	21.71	109.84	Open To Flow (1)
33	36.35	110.71	Shut-In(1)
63	1129.83	112.08	End Shut-In(1)
64	38.78	111.90	Open To Flow (2)
93	51.35	112.85	Shut-In(2)
122	1087.16	114.00	End Shut-In(2)
124	1996.44	114.61	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	100%M	0.30

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Pioneer Resources

Ottley # 1

177 W Limestone Rd
Phillipsburg KS 67661

12 14S 32W Logan KS

Job Ticket: 31348

DST#: 2

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.08 @ 03:08:51

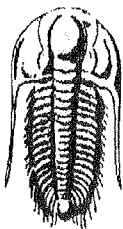
Tool Information

Drill Pipe:	Length: 4010.00 ft	Diameter: 3.80 inches	Volume: 56.25 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume: 56.85 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	4155.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	44.00 ft			
Tool Length:	71.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4129.00	
Shut In Tool	5.00			4134.00	
Hydraulic tool	5.00			4139.00	
Jars	5.00			4144.00	
Safety Joint	2.00			4146.00	
Packer	5.00			4151.00	27.00 Bottom Of Top Packer
Packer	4.00			4155.00	
Stubb	1.00			4156.00	
Recorder	0.00	6769	Inside	4156.00	
Recorder	0.00	6772	Outside	4156.00	
Perforations	6.00			4162.00	
Change Over Sub	1.00			4163.00	
Drill Pipe	30.00			4193.00	
Change Over Sub	1.00			4194.00	
Bullnose	5.00			4199.00	44.00 Bottom Packers & Anchor

Total Tool Length: 71.00



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TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Pioneer Resources

Ottley # 1

177 W Limestone Rd
Phillipsburg KS 67661

12 14S 32W Logan KS

Job Ticket: 31348

DST#: 2

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.08 @ 03:08:51

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.73 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	100%M	0.295

Total Length: 60.00 ft

Total Volume: 0.295 bbl

Num Fluid Samples: 0

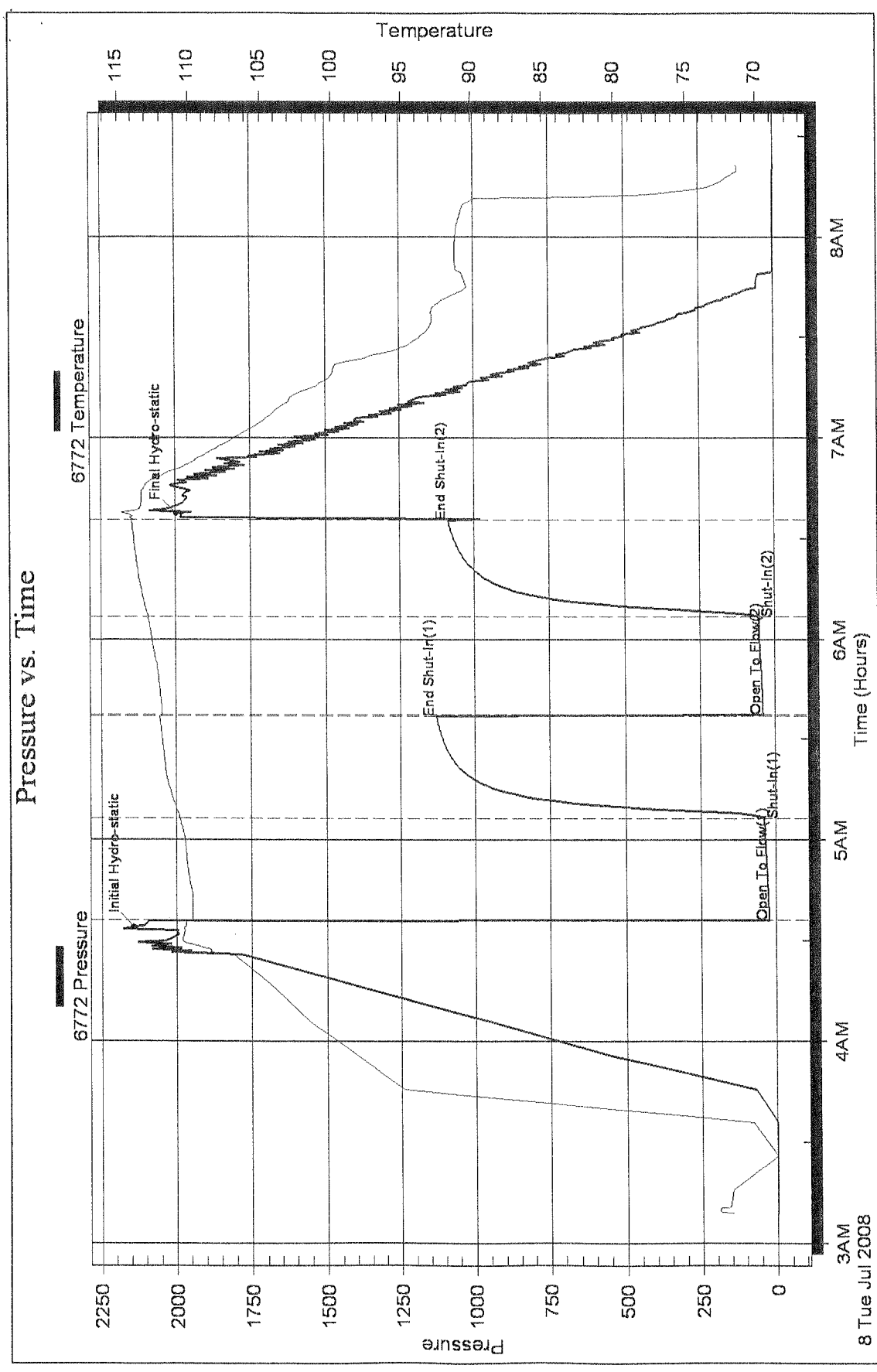
Num Gas Bombs: 0

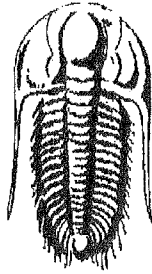
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Pioneer Resources**

177 W Limestone Rd
Phillipsburg KS 67661

ATTN: Steve Murphy/ Roger W

12 14S 32W Logan KS

Ottley # 1

Start Date: 2008.07.08 @ 16:25:06

End Date: 2008.07.08 @ 21:38:30

Job Ticket #: 31349 DST #: 3

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Pioneer Resources

177 W Limestone Rd
Phillipsburg KS 67661

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.08 @ 16:25:06

Ottley # 1

12 14S 32W Logan KS

Job Ticket: 31349

DST#: 3

GENERAL INFORMATION:

Formation: **LKC-L**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:52:16

Time Test Ended: 21:38:30

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: **4198.00 ft (KB) To 4240.00 ft (KB) (TVD)**

Total Depth: 4240.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2887.00 ft (KB)

2882.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6772 Outside

Press@RunDepth: 26.14 psig @ 4199.00 ft (KB)

Start Date: 2008.07.08

End Date: 2008.07.08

Capacity: 7000.00 psig

Last Calib.: 2008.07.08

Start Time: 16:25:06

End Time: 21:38:30

Time On Btm: 2008.07.08 @ 18:49:31

Time Off Btm: 2008.07.08 @ 19:53:01

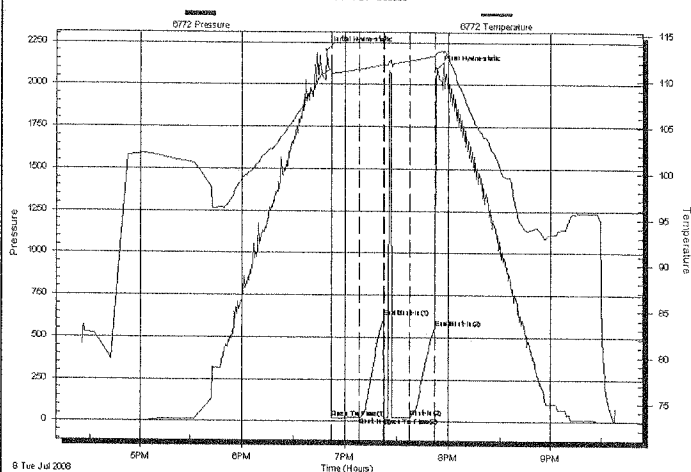
TEST COMMENT: IF Weak surfac blow died in 3 min.

IS No return

FF No blow flushed tool no blow

FS No return

Pressure vs. Time



PRESSURE SUMMARY

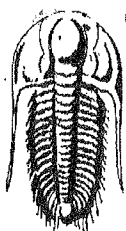
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2203.51	111.03	Initial Hydro-static
3	19.66	110.86	Open To Flow (1)
19	21.85	111.30	Shut-In(1)
33	620.02	111.86	End Shut-In(1)
34	22.60	111.77	Open To Flow (2)
48	26.14	112.26	Shut-In(2)
63	555.18	112.79	End Shut-In(2)
64	2095.06	113.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100%M	0.02

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Pioneer Resources

Ottley # 1

177 W Limestone Rd
Phillipsburg KS 67661

12 14S 32W Logan KS

Job Ticket: 31349

DST#: 3

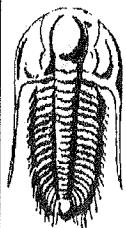
ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.08 @ 16:25:06

Tool Information

Drill Pipe:	Length: 4072.00 ft	Diameter: 3.80 inches	Volume: 57.12 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	70000.00 lb
		Total Volume:	57.72 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	4198.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	42.00 ft				
Tool Length:	69.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4172.00	
Shut In Tool	5.00			4177.00	
Hydraulic tool	5.00			4182.00	
Jars	5.00			4187.00	
Safety Joint	2.00			4189.00	
Packer	5.00			4194.00	27.00 Bottom Of Top Packer
Packer	4.00			4198.00	
Stubb	1.00			4199.00	
Recorder	0.00	6769	Inside	4199.00	
Recorder	0.00	6772	Outside	4199.00	
Perforations	4.00			4203.00	
Change Over Sub	1.00			4204.00	
Drill Pipe	30.00			4234.00	
Change Over Sub	1.00			4235.00	
Bullnose	5.00			4240.00	42.00 Bottom Packers & Anchor
Total Tool Length:		69.00			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Pioneer Resources

Ottley # 1

177 W Limestone Rd
Phillipsburg KS 67661

12 14S 32W Logan KS

Job Ticket: 31349

DST#: 3

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.08 @ 16:25:06

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 47.00 sec/qt

Water Loss: 7.17 in³

Resistivity: 0.00 ohm.m

Salinity: 3700.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

0 deg API

0 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	100%M	0.025

Total Length: 5.00 ft

Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

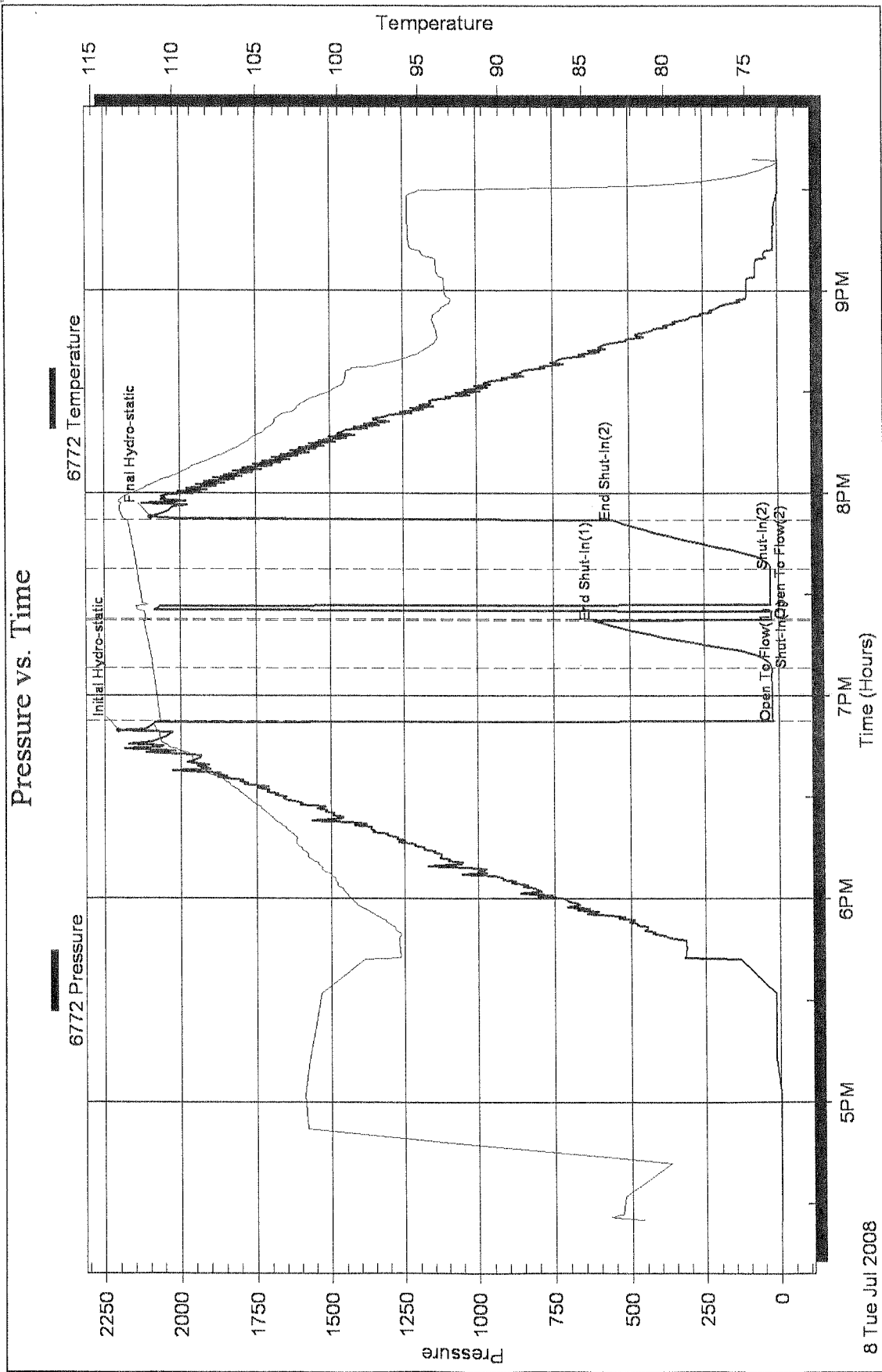
Serial #:

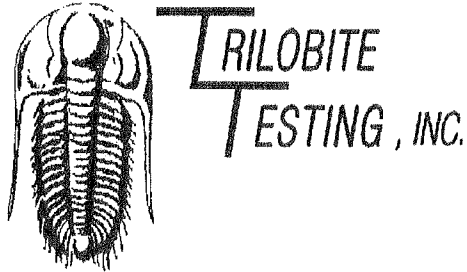
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Pioneer Resources**

177 W Limestone Rd
Phillipsburg KS 67661

ATTN: Steve Murphy/ Roger W

12 14S 32W Logan KS

Ottley # 1

Start Date: 2008.07.09 @ 17:14:23

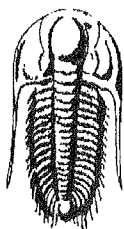
End Date: 2008.07.09 @ 21:49:47

Job Ticket #: 31350 DST #: 4

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TRILOBITE
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DRILL STEM TEST REPORT

Pioneer Resources

Ottley # 1

177 W Limestone Rd
Phillipsburg KS 67661

12 14S 32W Logan KS

Job Ticket: 31350

DST#: 4

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.09 @ 17:14:23

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:03:48

Time Test Ended: 21:49:47

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: **4457.00 ft (KB) To 4480.00 ft (KB) (TVD)**

Total Depth: 4480.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2887.00 ft (KB)

2882.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: **6772** Outside

Press@RunDepth: 18.21 psig @ 4458.00 ft (KB)

Start Date: 2008.07.09

End Date: 2008.07.09

Capacity: 7000.00 psig

Last Calib.: 2008.07.09

Start Time: 17:14:23

End Time: 21:49:47

Time On Btm: 2008.07.09 @ 19:01:03

Time Off Btm: 2008.07.09 @ 20:06:18

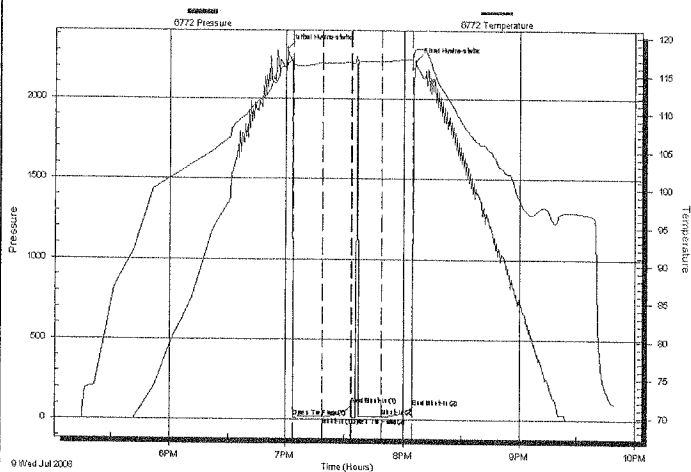
TEST COMMENT: IF Weak surface blow died in 5 min.

IS No return

FF No blow flushed tool no blow

FS No return

Pressure vs. Time



PRESSURE SUMMARY

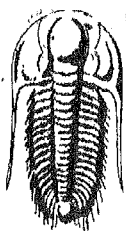
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2312.88	116.57	Initial Hydro-static
3	16.26	116.44	Open To Flow (1)
18	16.86	116.67	Shut-In (1)
33	91.10	116.71	End Shut-In (1)
33	14.81	116.67	Open To Flow (2)
48	18.21	116.86	Shut-In (2)
64	78.82	117.17	End Shut-In (2)
66	2232.70	118.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100%M	0.02

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Pioneer Resources

Ottley # 1

177 W Limestone Rd
Phillipsburg KS 67661

12 14S 32W Logan KS

Job Ticket: 31350

DST#: 4

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.09 @ 17:14:23

Tool Information

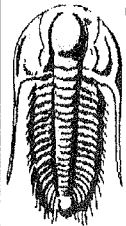
Drill Pipe:	Length: 4317.00 ft	Diameter: 3.80 inches	Volume: 60.56 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	70000.00 lb
		Total Volume:	61.16 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	4457.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	23.00 ft				
Tool Length:	50.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4431.00	
Shut In Tool	5.00			4436.00	
Hydraulic tool	5.00			4441.00	
Jars	5.00			4446.00	
Safety Joint	2.00			4448.00	
Packer	5.00			4453.00	27.00 Bottom Of Top Packer
Packer	4.00			4457.00	
Stubb	1.00			4458.00	
Recorder	0.00	6769	Inside	4458.00	
Recorder	0.00	6772	Outside	4458.00	
Perforations	17.00			4475.00	
Bullnose	5.00			4480.00	23.00 Bottom Packers & Anchor

Total Tool Length: 50.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Pioneer Resources

Ottley # 1

177 W Limestone Rd
Phillipsburg KS 67661

12 14S 32W Logan KS

Job Ticket: 31350

DST#: 4

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.09 @ 17:14:23

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 46.00 sec/qt

Water Loss: 10.36 in³

Resistivity: 0.00 ohm.m

Salinity: 4600.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

Water Salinity:

0 deg API

0 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	100%M	0.025

Total Length: 5.00 ft

Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

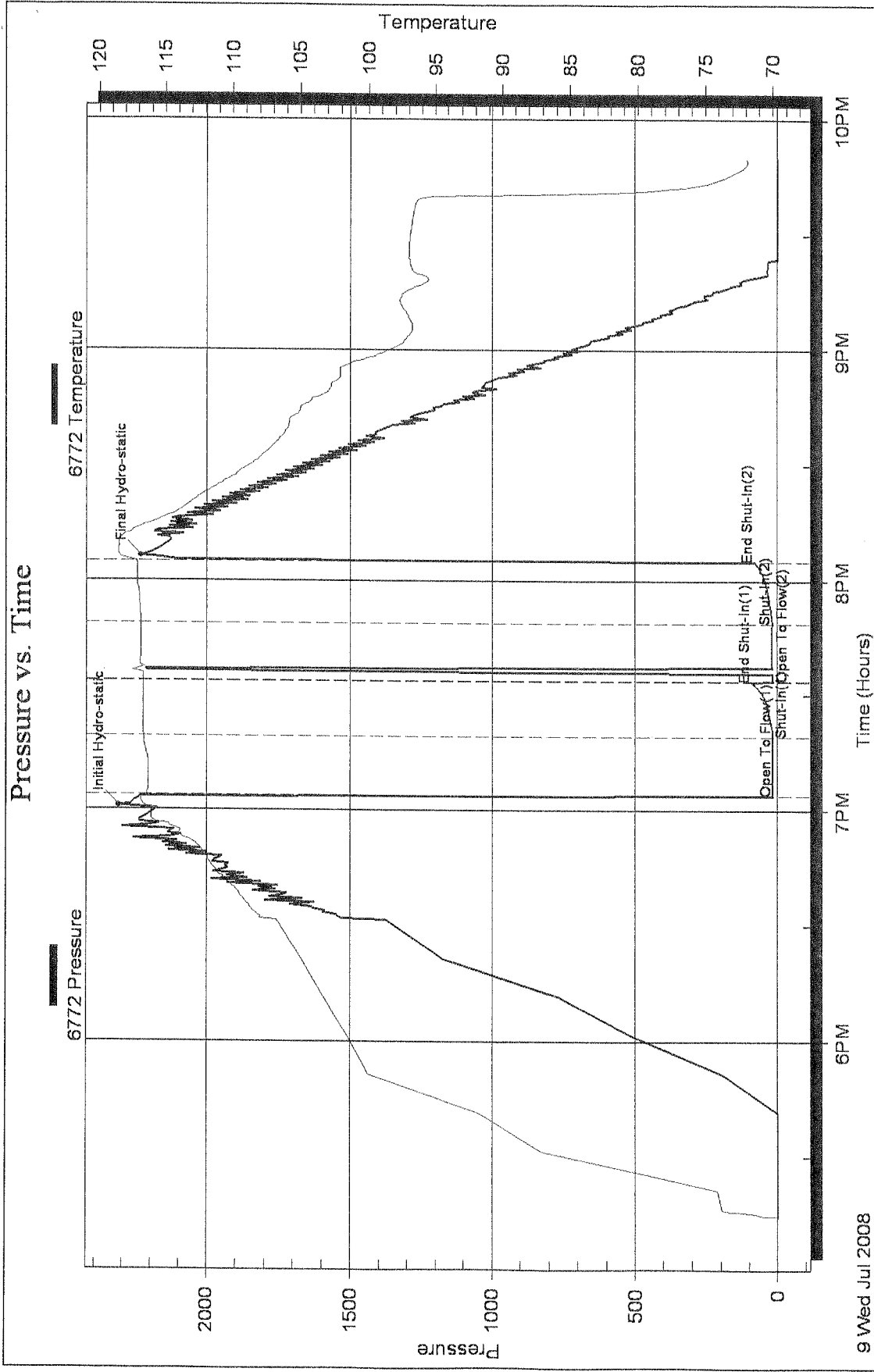
Recovery Comments:

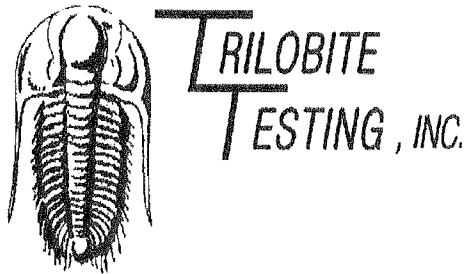
Serial #: 6772

Outside Pioneer Resources

12 14S32W Logan KS

DST Test Number: 4





DRILL STEM TEST REPORT

Prepared For: **Pioneer Resources**

177 W Limestone Rd
Phillipsburg KS 67661

ATTN: Steve Murphy/ Roger W

12 14S 32W Logan KS

Ottley # 1

Start Date: 2008.07.10 @ 08:41:01

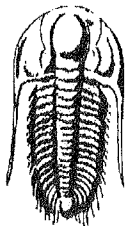
End Date: 2008.07.10 @ 12:44:11

Job Ticket #: 29976 DST #: 5

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Pioneer Resources

177 W Limestone Rd
Phillipsburg KS 67661

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.10 @ 08:41:01

Ottley # 1

12 14S 32W Logan KS

Job Ticket: 29976

DST#: 5

GENERAL INFORMATION:

Formation: **Marrow**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:20:56

Time Test Ended: 12:44:11

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: **4551.00 ft (KB) To 4580.00 ft (KB) (TVD)**

Total Depth: 4580.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2887.00 ft (KB)

2882.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6772 Outside

Press@RunDepth: psig @ 4552.00 ft (KB)

Start Date: 2008.07.10

End Date: 2008.07.10

Start Time: 08:41:01

End Time: 12:44:11

Capacity: 7000.00 psig

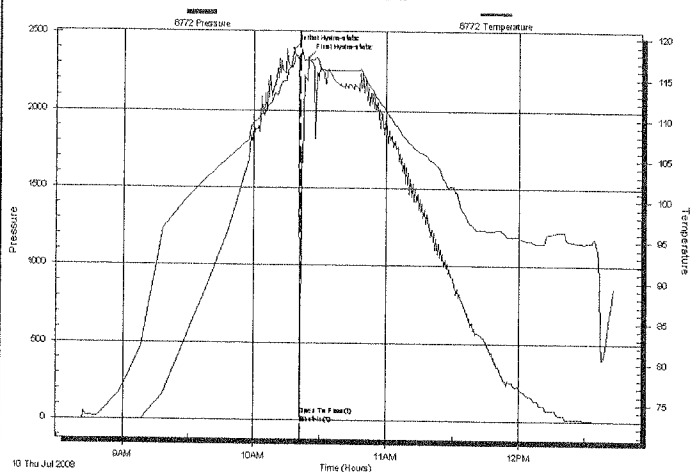
Last Calib.: 2008.07.10

Time On Btm: 2008.07.10 @ 10:18:11

Time Off Btm: 2008.07.10 @ 10:24:56

TEST COMMENT: IF Packer failed @open

Pressure vs. Time



PRESSURE SUMMARY

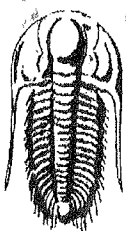
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2396.75	116.99	Initial Hydro-static
3	30.68	116.86	Open To Flow (1)
4	35.88	117.27	Shut-In (1)
7	2337.39	117.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
434.00	100%M	4.97

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Pioneer Resources

Ottley # 1

177 W Limestone Rd
Phillipsburg KS 67661

12 14S 32W Logan KS

Job Ticket: 29976

DST#: 5

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.10 @ 08:41:01

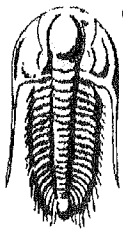
Tool Information

Drill Pipe:	Length: 4411.00 ft	Diameter: 3.80 inches	Volume: 61.87 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	50000.00 lb
		Total Volume:	62.47 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	4551.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	29.00 ft				
Tool Length:	56.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4525.00	
Shut In Tool	5.00			4530.00	
Hydraulic tool	5.00			4535.00	
Jars	5.00			4540.00	
Safety Joint	2.00			4542.00	
Packer	5.00			4547.00	27.00 Bottom Of Top Packer
Packer	4.00			4551.00	
Stubb	1.00			4552.00	
Recorder	0.00	6769	Inside	4552.00	
Recorder	0.00	6772	Outside	4552.00	
Perforations	23.00			4575.00	
Bullnose	5.00			4580.00	29.00 Bottom Packers & Anchor

Total Tool Length: 56.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Pioneer Resources

Ottley # 1

177 W Limestone Rd
Phillipsburg KS 67661

12 14S 32W Logan KS

Job Ticket: 29976

DST#: 5

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.10 @ 08:41:01

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 46.00 sec/qt

Water Loss: 10.37 in³

Resistivity: 0.00 ohm.m

Salinity: 4600.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

Water Salinity:

0 deg API

0 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
434.00	100%M	4.967

Total Length: 434.00 ft

Total Volume: 4.967 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

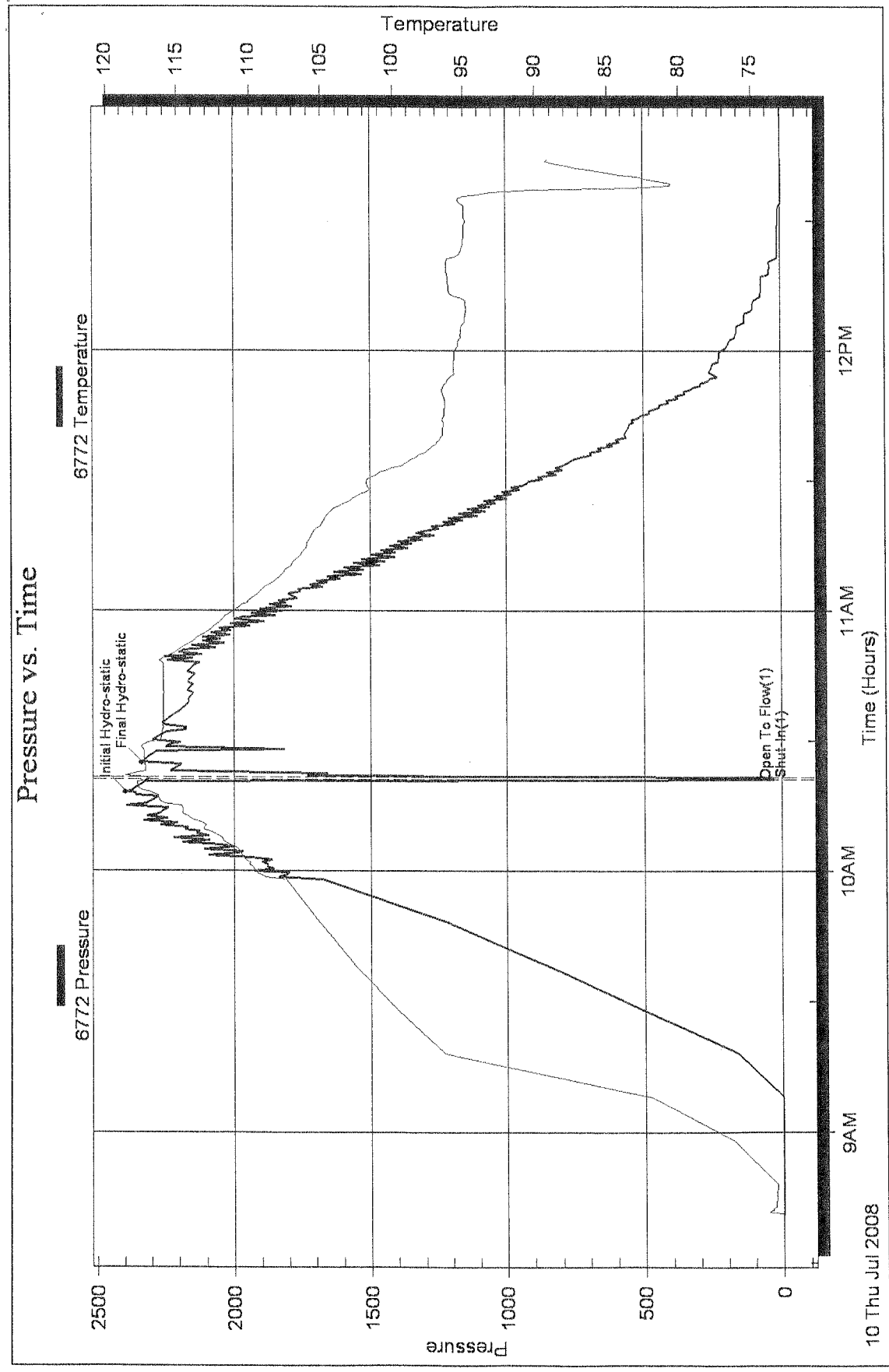
Serial #:

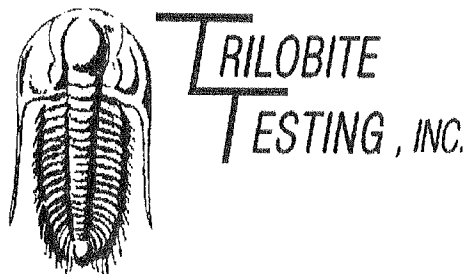
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Pioneer Resources**

177 W Limestone Rd
Phillipsburg KS 67661

ATTN: Steve Murphy/ Roger W

12 14S 32W Logan KS

Ottley # 1

Start Date: 2008.07.10 @ 13:00:55

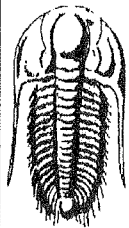
End Date: 2008.07.10 @ 20:10:34

Job Ticket #: 29977 DST #: 6

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Pioneer Resources

177 W Limestone Rd
Phillipsburg KS 67661

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.10 @ 13:00:55

Ottley # 1

12 14S 32W Logan KS

Job Ticket: 29977

DST#: 6

GENERAL INFORMATION:

Formation: **Marrow**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:28:35

Time Test Ended: 20:10:34

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: 4537.00 ft (KB) To 4580.00 ft (KB) (TVD)

Total Depth: 4580.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2887.00 ft (KB)

2882.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6772 Outside

Press@RunDepth: 108.85 psig @ 4538.00 ft (KB)

Start Date: 2008.07.10

End Date:

2008.07.10

Start Time: 13:00:55

End Time:

20:10:34

Capacity: 7000.00 psig

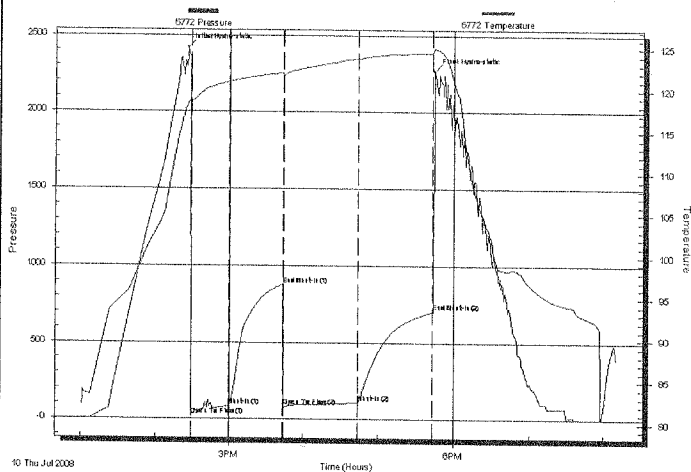
Last Calib.: 2008.07.10

Time On Btm: 2008.07.10 @ 14:25:50

Time Off Btm: 2008.07.10 @ 17:44:34

TEST COMMENT: IF 1/4 blow BOB in 20 min.
IS Weak surface blow died in 15 min.
FF 1/4 blow BOB in 10 min.
FS Surface blow died in 25 min.

Pressure vs. Time



PRESSURE SUMMARY

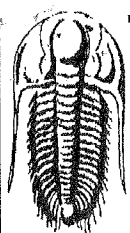
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2416.59	118.48	Initial Hydro-static
3	22.67	118.49	Open To Flow (1)
33	81.59	120.97	Shut-In (1)
78	875.64	122.05	End Shut-In (1)
79	80.92	121.86	Open To Flow (2)
138	108.85	123.78	Shut-In (2)
198	701.88	124.51	End Shut-In (2)
199	2268.06	125.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	GOCM 10%G 30%O 60%M	0.30
62.00	MCOG 30%G 60%O 10%M	0.30
104.00	GOCM 10%G 30%O 60%M	1.46
20.00	Free Oil 100%O	0.28
0.00	GIP 372	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Pioneer Resources

Ottley # 1

177 W Limestone Rd
Phillipsburg KS 67661

12 14S 32W Logan KS

Job Ticket: 29977

DST#: 6

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.10 @ 13:00:55

Tool Information

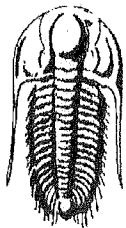
Drill Pipe:	Length: 4411.00 ft	Diameter: 3.80 inches	Volume: 61.87 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 123.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	70000.00 lb
		Total Volume:	62.47 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	4537.00 ft			Final	51000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	43.00 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
Stubb	1.00			4511.00	
Shut In Tool	5.00			4516.00	
Hydraulic tool	5.00			4521.00	
Jars	5.00			4526.00	
Safety Joint	2.00			4528.00	
Packer	5.00			4533.00	27.00 Bottom Of Top Packer
Packer	4.00			4537.00	
Stubb	1.00			4538.00	
Recorder	0.00	6769	Inside	4538.00	
Recorder	0.00	6772	Outside	4538.00	
Perforations	3.00			4541.00	
Change Over Sub	1.00			4542.00	
Drill Pipe	32.00			4574.00	
Change Over Sub	1.00			4575.00	
Bullnose	5.00			4580.00	43.00 Bottom Packers & Anchor

Total Tool Length: 70.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Pioneer Resources

Ottley # 1

177 W Limestone Rd
Phillipsburg KS 67661

12 14S 32W Logan KS

Job Ticket: 29977

DST#: 6

ATTN: Steve Murphy/ Roger Whillipsburg KS 67661 Test Start: 2008.07.10 @ 13:00:55

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 46.00 sec/qt

Water Loss: 10.37 in³

Resistivity: 0.00 ohm.m

Salinity: 4600.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

31 deg API

Water Salinity:

0 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
61.00	GOCM 10%G 30%O 60%M	0.300
62.00	MCOG 30%G 60%O 10%M	0.305
104.00	GOCM 10%G 30%O 60%M	1.459
20.00	Free Oil 100%O	0.281
0.00	GIP 372	0.000

Total Length: 247.00 ft

Total Volume: 2.345 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 34@90=31

Pressure vs. Time

