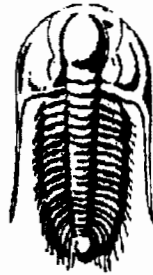


6-13s-17w

KCS

IND



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil**

PO Box 550
Hays, KS 67601

ATTN: Roger Fisher

6-13s-17w Ellis KS

M. Staab #5

Start Date: 2009.08.24 @ 21:21:43

End Date: 2009.08.25 @ 03:21:13

Job Ticket #: 36038

DST #: 1

15-051-25881-0000

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Dreiling Oil

M. Staab #5

6-13s-17w Ellis KS

DST # 1

Toronto-LKC "C"

2009.08.24



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Drilling Oil

PO Box 550
Hays, KS 67601

ATTN: Roger Fisher

M. Staab #5

6-13s-17w Ellis KS

Job Ticket: 36038

DST#: 1

Test Start: 2009.08.24 @ 21:21:43

GENERAL INFORMATION:

Formation: **Toronto- LKC "C"**

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

Time Tool Opened: 22:41:13

Time Test Ended: 03:21:13

Test Type: **Conventional Bottom Hole**

Tester: **Tyson Flax**

Unit No: **44**

Interval: **3272.00 ft (KB) To 3356.00 ft (KB) (TVD)**

Total Depth: **3356.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2071.00 ft (KB)**

206.00 ft (CF)

KB to GR/CF: **1865.00 ft**

Serial #: 6669 **Inside**

Press@RunDepth: **114.41 psig @ 3279.00 ft (KB)**

Start Date: **2009.08.24**

End Date:

2009.08.25

Start Time: **21:21:44**

End Time:

03:21:13

Capacity: **7000.00 psig**

Last Calib.: **2009.08.25**

Time On Btm: **2009.08.24 @ 22:40:58**

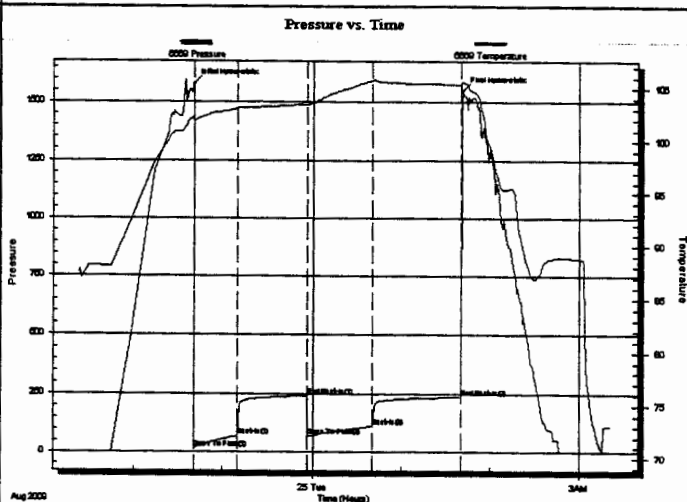
Time Off Btm: **2009.08.25 @ 01:41:58**

TEST COMMENT: **IFP- Weak blow built to 10"**

ISI-no blow back

FFP-Weak blow built to 9"

FSI-no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1577.87	102.35	Initial Hydro-static
1	16.04	101.79	Open To Flow (1)
30	70.01	103.08	Shut-in (1)
76	240.59	103.48	End Shut-in (1)
76	69.15	103.42	Open To Flow (2)
120	114.41	105.78	Shut-in (2)
180	237.26	105.39	End Shut-in (2)
181	1550.02	105.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MMV 80%W,20%M	1.42
60.00	WM 30%W,70%M	0.85
10.00	VSOCM 2%O,98%M	0.14

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Drilling Oil

M. Staab #5

PO Box 550
Hays, KS 67601

6-13s-17w Ellis KS

Job Ticket: 36038

DST#: 1

ATTN: Roger Fisher

Test Start: 2009.08.24 @ 21:21:43

Tool Information

Drill Pipe:	Length: 3235.00 ft	Diameter: 3.82 inches	Volume: 45.86 bbl	Tool Weight: 2200.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume: 46.01 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3272.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	84.00 ft			
Tool Length:	105.00 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			3252.00	
Shut In Tool	5.00			3257.00	
Hydraulic tool	5.00			3262.00	
Packer	5.00			3267.00	21.00 Bottom Of Top Packer
Packer	5.00			3272.00	
Stubb	1.00			3273.00	
Perforations	5.00			3278.00	
Change Over Sub	1.00			3279.00	
Recorder	0.00	6719	Inside	3279.00	
Recorder	0.00	6669	Inside	3279.00	
Blank Spacing	63.00			3342.00	
Change Over Sub	1.00			3343.00	
Perforations	10.00			3353.00	
Bullnose	3.00			3356.00	84.00 Bottom Packers & Anchor
Total Tool Length:		105.00			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Drilling Oil

M. Staab #5

PO Box 550
Hays, KS 67601

6-13s-17w Ellis KS

Job Ticket: 36038

DST#: 1

ATTN: Roger Fisher

Test Start: 2009.08.24 @ 21:21:43

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:

27000 ppm

Viscosity: 52.00 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
120.00	MW 80%W,20%M	1.423
60.00	WM 30%W,70%M	0.851
10.00	VSOCM 2%O,98%M	0.142

Total Length: 190.00 ft Total Volume: 2.416 bbl

Num Fluid Samples: 0

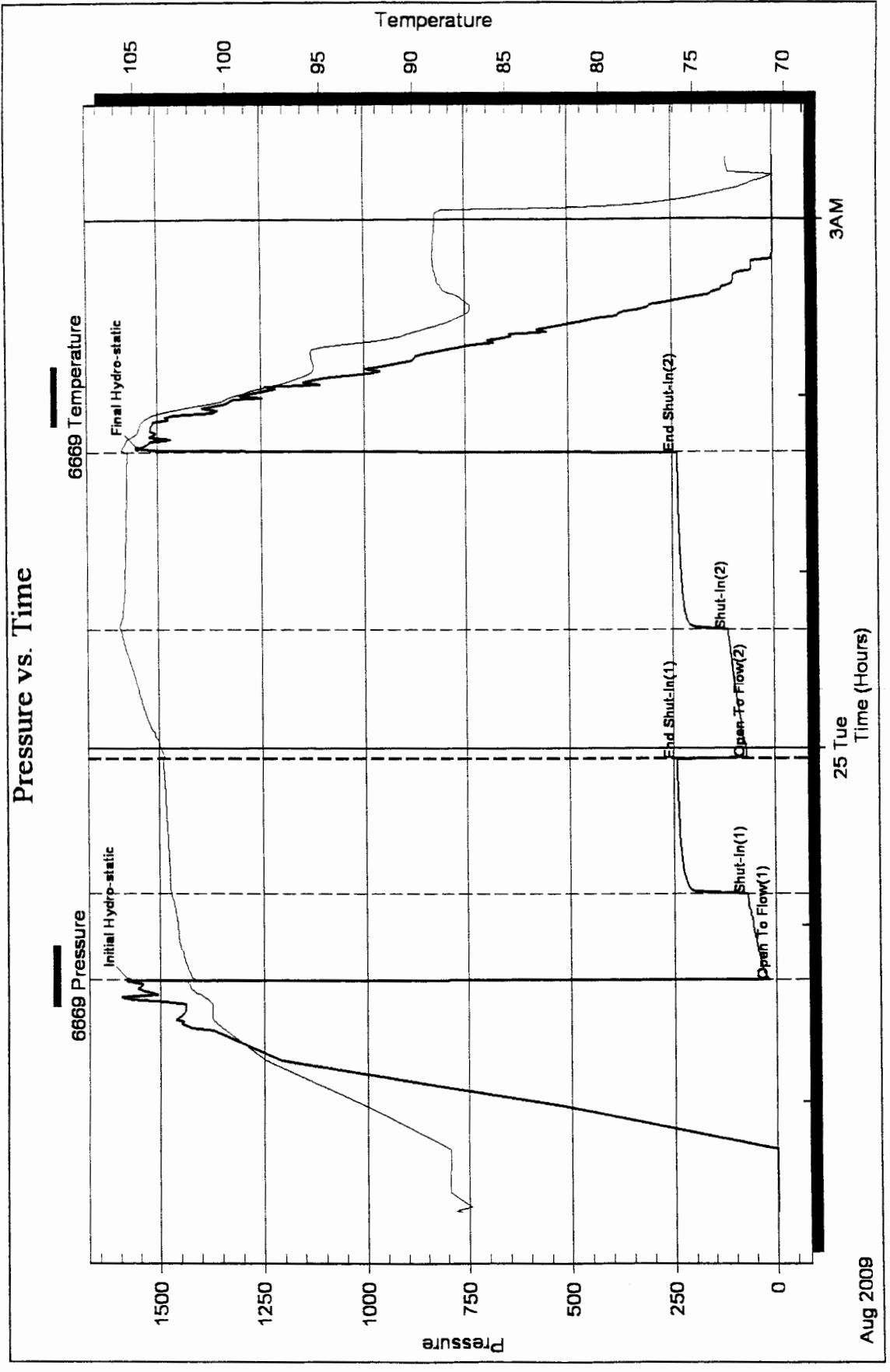
Num Gas Bombs: 0

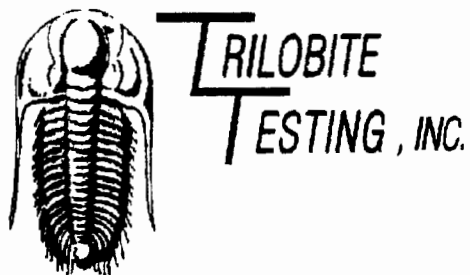
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .27 @ 66F = 27000 chlorides





DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil**

PO Box 550
Hays, KS 67601

ATTN: Roger Fisher

6-13s-17w Ellis KS

M. Staab #5

Start Date: 2009.08.25 @ 11:48:11

End Date: 2009.08.25 @ 17:10:41

Job Ticket #: 36039

DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Dreiling Oil

M. Staab #5

6-13s-17w Ellis KS

DST # 2

LKC "E-G"

2009.08.25



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Drilling Oil

PO Box 550
Hays, KS 67601

ATTN: Roger Fisher

M. Staab #5

6-13s-17w Ellis KS

Job Ticket: 36039

DST#: 2

Test Start: 2009.08.25 @ 11:48:11

GENERAL INFORMATION:

Formation: **LKC "E-G"**

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

Time Tool Opened: 12:52:11

Time Test Ended: 17:10:41

Test Type: **Conventional Bottom Hole**

Tester: **Tyson Flax**

Unit No: **44**

Interval: **3379.00 ft (KB) To 3420.00 ft (KB) (TVD)**

Total Depth: **3420.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2071.00 ft (KB)**

206.00 ft (CF)

KB to GR/CF: **1865.00 ft**

Serial #: 6669

Inside

Press@RunDepth: **35.69 psig @ 3384.00 ft (KB)**

Start Date: **2009.08.25**

End Date:

2009.08.25

Capacity: **7000.00 psig**

Last Calib.: **2009.08.25**

Start Time: **11:48:12**

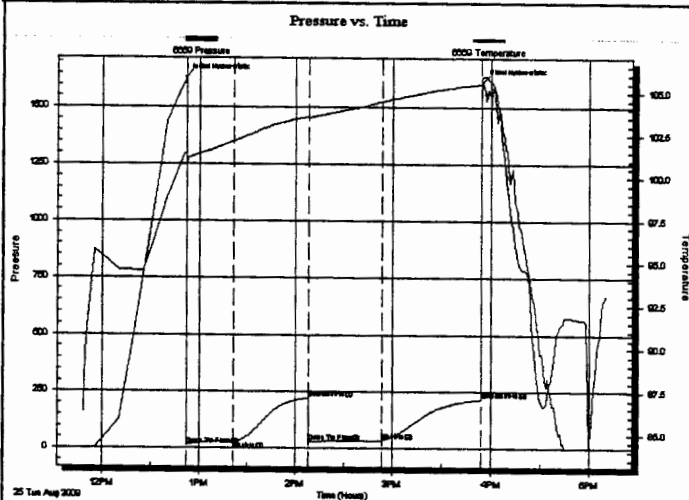
End Time:

17:10:41

Time On Btm: **2009.08.25 @ 12:51:41**

Time Off Btm: **2009.08.25 @ 15:54:41**

TEST COMMENT: IFR-Weak surface blow built to 2"
ISI-no blow back
FFP-Weak surface blow built to 1"
FSI-no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1630.47	101.43	Initial Hydro-static
1	15.05	100.56	Open To Flow (1)
30	29.70	102.15	Shut-In (1)
76	222.79	103.59	End Shut-In (1)
77	32.71	103.53	Open To Flow (2)
122	35.69	104.45	Shut-In (2)
183	215.99	105.49	End Shut-In (2)
183	1609.45	105.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	WM w / scum of oil 10%W,90%M	0.15
5.00	SOCM 10%O,90%M	0.07

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Drilling Oil

M. Staab #5

PO Box 550
Hays, KS 67601

6-13s-17w Ellis KS

Job Ticket: 36039

DST#: 2

ATTN: Roger Fisher

Test Start: 2009.08.25 @ 11:48:11

Tool Information

Drill Pipe: Length: 3359.00 ft Diameter: 3.82 inches Volume: 47.62 bbl
Heavy Wt. Pipe: Length: 0.00 ft Diameter: 2.25 inches Volume: 0.00 bbl
Drill Collar: Length: 30.00 ft Diameter: 2.25 inches Volume: 0.15 bbl
Total Volume: 47.77 bbl

Tool Weight: 2200.00 lb

Weight set on Packer: 25000.00 lb

Weight to Pull Loose: 70000.00 lb

Tool Chased 0.00 ft

String Weight: Initial 62000.00 lb

Final 62000.00 lb

Drill Pipe Above KB: 31.00 ft

Depth to Top Packer: 3379.00 ft

Depth to Bottom Packer: ft

Interval between Packers: 41.00 ft

Tool Length: 62.00 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			3359.00	
Shut In Tool	5.00			3364.00	
Hydraulic tool	5.00			3369.00	
Packer	5.00			3374.00	21.00 Bottom Of Top Packer
Packer	5.00			3379.00	
Stubb	1.00			3380.00	
Perforations	3.00			3383.00	
Change Over Sub	1.00			3384.00	
Recorder	0.00	6719	Inside	3384.00	
Recorder	0.00	6669	Inside	3384.00	
Blank Spacing	30.00			3414.00	
Change Over Sub	1.00			3415.00	
Perforations	2.00			3417.00	
Bullnose	3.00			3420.00	41.00 Bottom Packers & Anchor

Total Tool Length: 62.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Drilling Oil

M. Staab #5

PO Box 550
Hays, KS 67601

6-13s-17w Ellis KS

Job Ticket: 36039

DST#: 2

ATTN: Roger Fisher

Test Start: 2009.08.25 @ 11:48:11

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: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	WMw / scum of oil 10%W,90%M	0.148
5.00	SOCM 10%O,90%M	0.071

Total Length: 35.00 ft Total Volume: 0.219 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

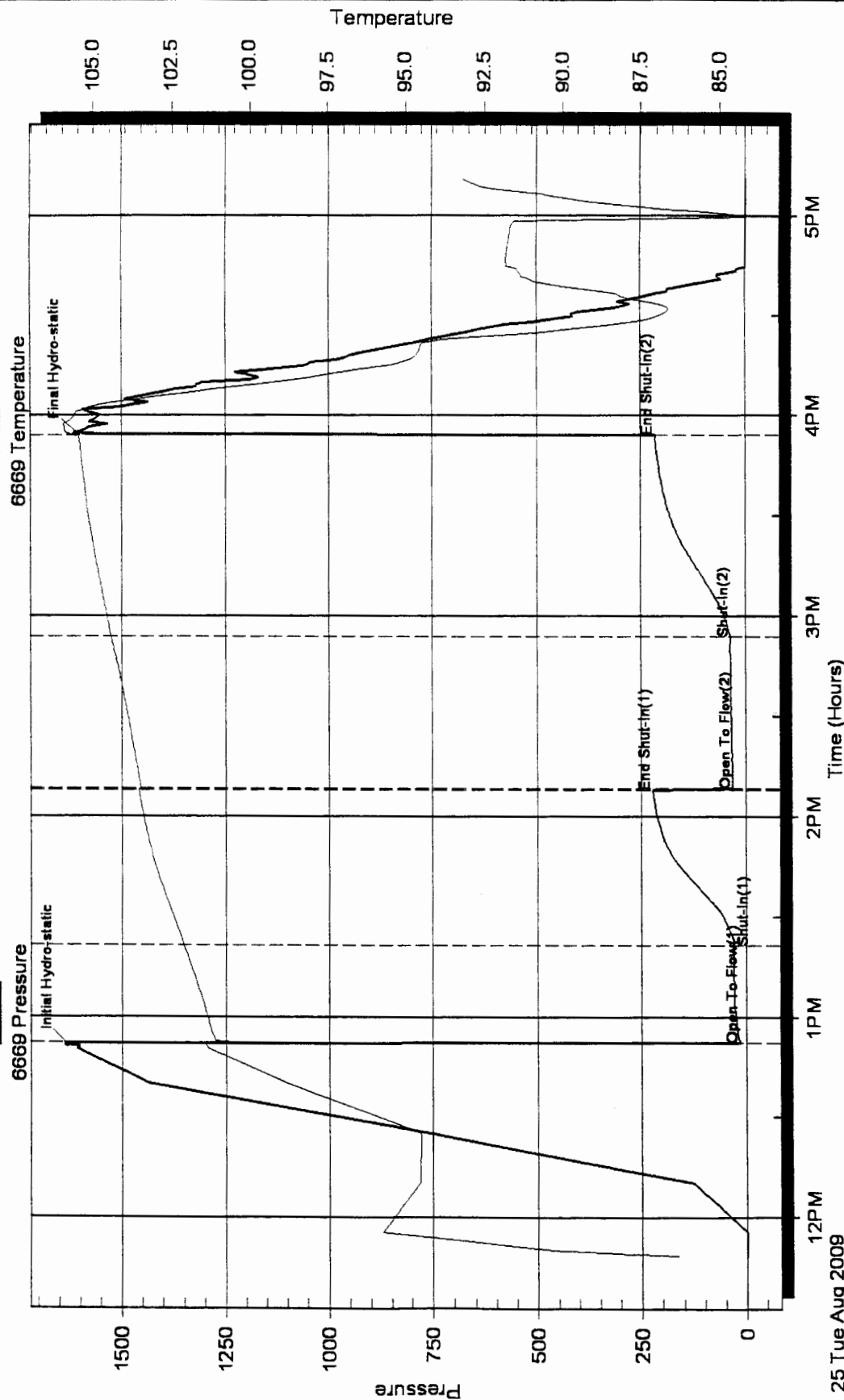
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil**

PO Box 550
Hays, KS 67601

ATTN: Roger Fisher

6-13s-17w Ellis KS

M. Staab #5

Start Date: 2009.08.26 @ 06:47:20

End Date: 2009.08.26 @ 13:24:50

Job Ticket #: 36040

DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Dreiling Oil

M. Staab #5

6-13s-17w Ellis KS

DST # 3

LKC "H-L"

2009.08.26



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Drilling Oil

M. Staab #5

PO Box 550
Hays, KS 67601

6-13s-17w Ellis KS

Job Ticket: 36040

DST#: 3

ATTN: Roger Fisher

Test Start: 2009.08.26 @ 06:47:20

GENERAL INFORMATION:

Formation: **LKC "H-L"**

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

Time Tool Opened: 08:40:20

Time Test Ended: 13:24:50

Test Type: **Conventional Bottom Hole**

Tester: **Tyson Flax**

Unit No: **44**

Interval: **3436.00 ft (KB) To 3557.00 ft (KB) (TVD)**

Total Depth: **3557.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2071.00 ft (KB)**

206.00 ft (CF)

KB to GR/CF: 1865.00 ft

Serial #: 6669

Inside

Press@RunDepth: **103.70 psig @ 3443.00 ft (KB)**

Start Date: **2009.08.26**

End Date:

2009.08.26

Capacity: **7000.00 psig**

Last Calib.: **2009.08.26**

Start Time: **06:47:21**

End Time:

13:24:50

Time On Btm: **2009.08.26 @ 08:39:50**

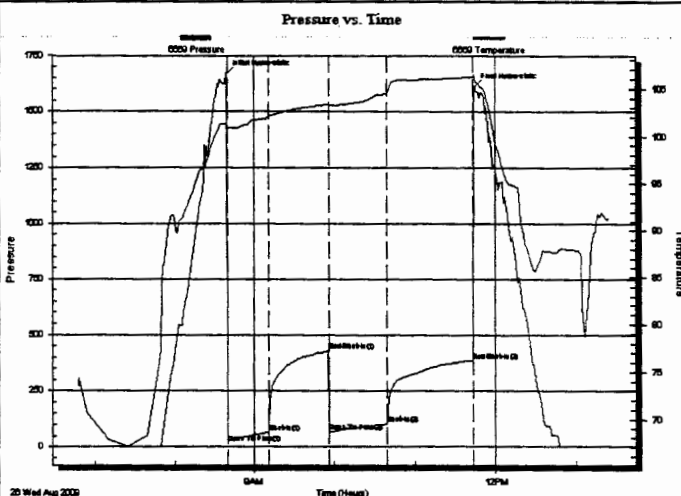
Time Off Btm: **2009.08.26 @ 11:44:20**

TEST COMMENT: **IFP-Weak blow built to 10"**

ISI-no blow back

FFP-Weak blow built to 10"

FSI-no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1666.27	101.36	Initial Hydro-static
1	18.50	101.01	Open To Flow (1)
32	67.21	102.02	Shut-In(1)
76	428.05	103.36	End Shut-In(1)
77	68.73	103.20	Open To Flow (2)
120	103.70	104.52	Shut-In(2)
184	387.69	106.20	End Shut-In(2)
185	1609.37	106.07	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	SOCWM 5%O,10%W,85%M	0.57
60.00	SOCM 5%O,95%M	0.85
60.00	OCM 20%O,80%M	0.85
5.00	CO	0.07

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dreiling Oil

M. Staab #5

PO Box 550
Hays, KS 67601

6-13s-17w Ellis KS

Job Ticket: 36040

DST#: 3

ATTN: Roger Fisher

Test Start: 2009.08.26 @ 06:47:20

Tool Information

Drill Pipe:	Length: 3389.00 ft	Diameter: 3.82 inches	Volume: 48.04 bbl	Tool Weight: 2200.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 90000.00 lb
		Total Volume: 48.19 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	3436.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	121.00 ft			
Tool Length:	142.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

q

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3416.00	
Shut In Tool	5.00			3421.00	
Hydraulic tool	5.00			3426.00	
Packer	5.00			3431.00	21.00 Bottom Of Top Packer
Packer	5.00			3436.00	
Stubb	1.00			3437.00	
Perforations	5.00			3442.00	
Change Over Sub	1.00			3443.00	
Recorder	0.00	6719	Inside	3443.00	
Recorder	0.00	6669	Inside	3443.00	
Blank Spacing	94.00			3537.00	
Change Over Sub	1.00			3538.00	
Perforations	16.00			3554.00	
Bullnose	3.00			3557.00	121.00 Bottom Packers & Anchor

Total Tool Length: 142.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Drilling Oil

M. Staab #5

PO Box 550
Hays, KS 67601

6-13s-17w Ellis KS

Job Ticket: 36040

DST#: 3

ATTN: Roger Fisher

Test Start: 2009.08.26 @ 06:47:20

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

36 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 65.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 14000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	SOCWM 5%O,10%W,85%M	0.573
60.00	SOCM 5%O,95%M	0.851
60.00	OCM 20%O,80%M	0.851
5.00	CO	0.071

Total Length: 185.00 ft

Total Volume: 2.346 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

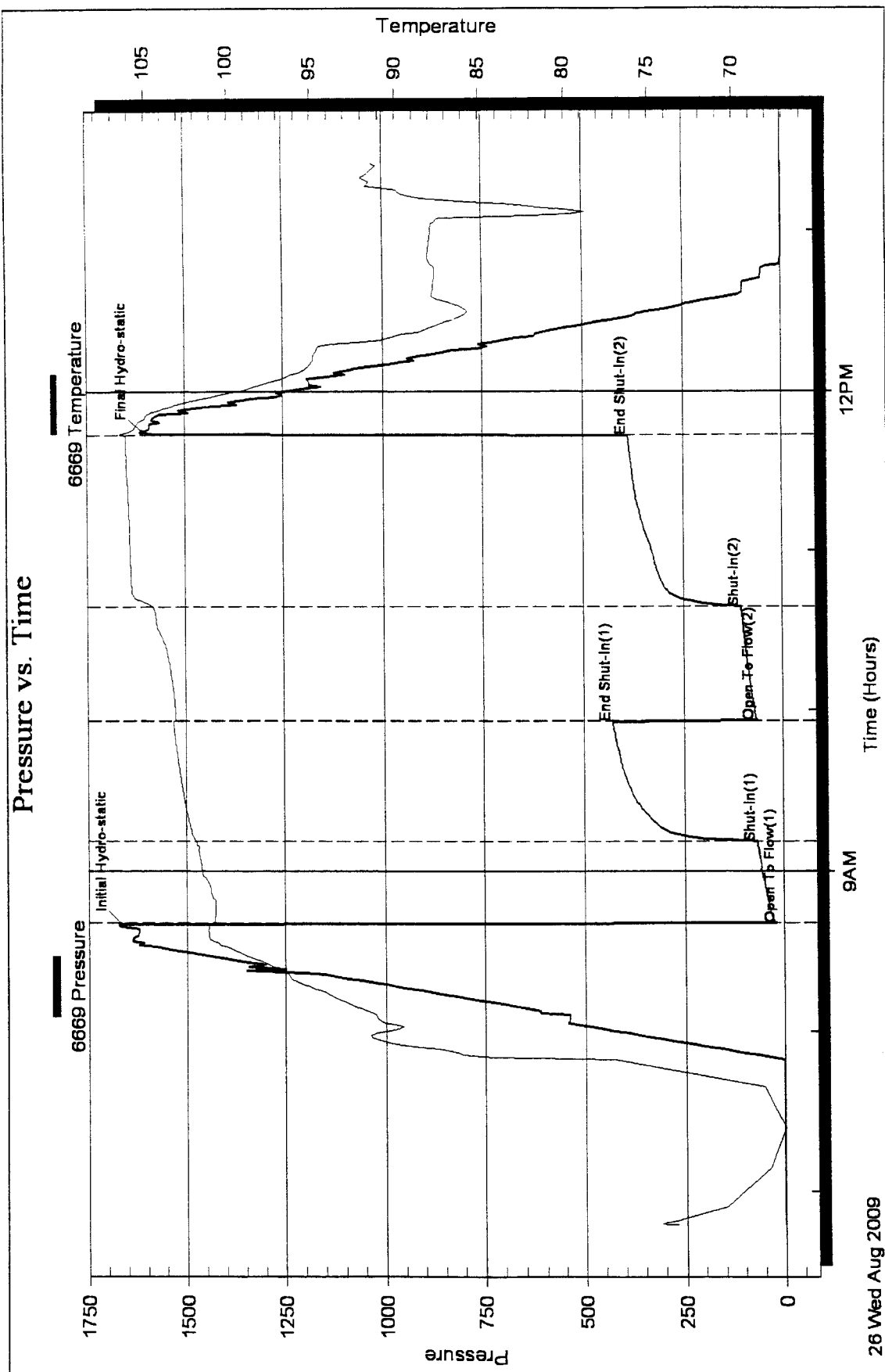
Serial #:

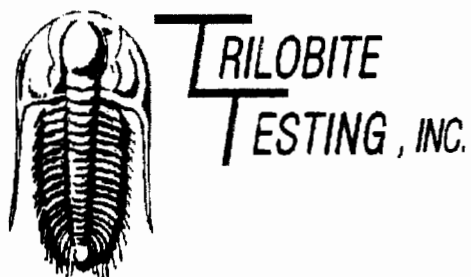
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil**

PO Box 550
Hays, KS 67601

ATTN: Roger Fisher

6-13s-17w Ellis KS

M. Staab #5

Start Date: 2009.08.26 @ 21:20:21

End Date: 2009.08.27 @ 02:34:21

Job Ticket #: 36041

DST #: 4

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Dreiling Oil

M. Staab #5

6-13s-17w Ellis KS

DST # 4

Arbuckle

2009.08.26



Dreiling Oil

ATTN: Roger Fisher

M. Staab #5

6-13s-17w Ellis KS

Job Ticket: 36041

DST#: 4

Test Start: 2009.08.26 @ 21:20:21

Formation: **Arbuckle**

Deviated:	No	Whipstock:	ft (KB)
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Time Tool Opened: 22:37:36

Time Test Ended: 02:34:21

Test Type: Conventional Bottom Hole

Tester: Tyson Flax

Unit No: 44

Interval: 3555.00 ft (KB) To 3594.00 ft (KB) (TVD)

Total Depth: 3594.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2071.00 ft (KB)

206.00 ft (CF)

KB to GR/CF: 1865.00 ft

Serial #: 6669 Inside

Press@RunDepth: 26.31 psig @ 3560.00 ft (KB)

Start Date: 2009.08.26

Start Time: 21:20:22

Capacity: 7000.00 psig

Last Calib.: 2009.08.27

Time On Btrr: 2009.08.26 @ 22:37:21

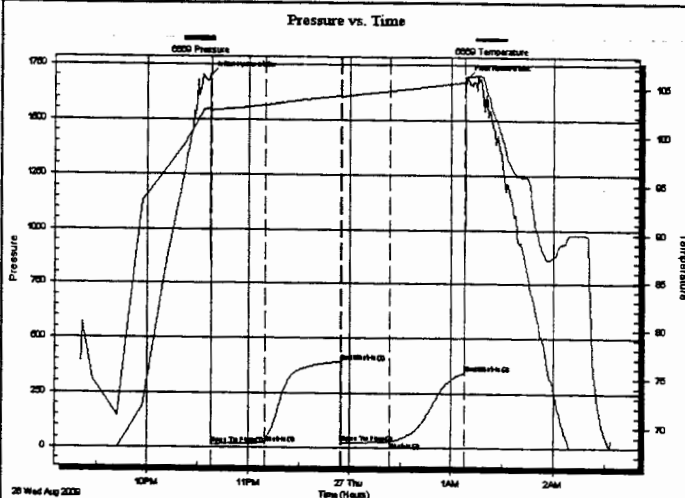
Time Off Btn: 2009.08.27 @ 01:08:51

TEST COMMENT: IFP-Weak surface blow built to 1/2" died to weak surface b

IS- no blow back

FFP-Weak surface blow died in 1 min

FST-no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1697.86	102.96	Initial Hydro-static
1	13.84	102.66	Open To Flow (1)
32	20.41	103.19	Shut-In(1)
77	390.50	104.20	End Shut-In(1)
78	23.16	104.01	Open To Flow(2)
107	26.31	104.67	Shut-In(2)
151	339.62	105.59	End Shut-In(2)
152	1688.50	106.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud	0.02
7.00	OCM 30%O,70%M	0.03
3.00	CO	0.01

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dreilling Oil

M. Staab #5

PO Box 550
Hays, KS 67601

6-13s-17w Ellis KS

Job Ticket: 36041

DST#: 4

ATTN: Roger Fisher

Test Start: 2009.08.26 @ 21:20:21

Tool Information

Drill Pipe:	Length: 3508.00 ft	Diameter: 3.82 inches	Volume: 49.73 bbl	Tool Weight:	2200.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	70000.00 lb
			Total Volume: 49.88 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial	64000.00 lb
Depth to Top Packer:	3555.00 ft			Final	64000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	39.00 ft				
Tool Length:	60.00 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			3535.00	
Shut In Tool	5.00			3540.00	
Hydraulic tool	5.00			3545.00	
Packer	5.00			3550.00	21.00 Bottom Of Top Packer
Packer	5.00			3555.00	
Stubb	1.00			3556.00	
Perforations	3.00			3559.00	
Change Over Sub	1.00			3560.00	
Recorder	0.00	6719	Inside	3560.00	
Recorder	0.00	6669	Inside	3560.00	
Blank Spacing	30.00			3590.00	
Change Over Sub	1.00			3591.00	
Bullnose	3.00			3594.00	39.00 Bottom Packers & Anchor

Total Tool Length: 60.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Drilling Oil

M. Staab #5

PO Box 550
Hays, KS 67601

6-13s-17w Ellis KS

Job Ticket: 36041

DST#: 4

ATTN: Roger Fisher

Test Start: 2009.08.26 @ 21:20:21

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: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 14000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud	0.025
7.00	OCM 30%O, 70%M	0.034
3.00	CO	0.015

Total Length: 15.00 ft

Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

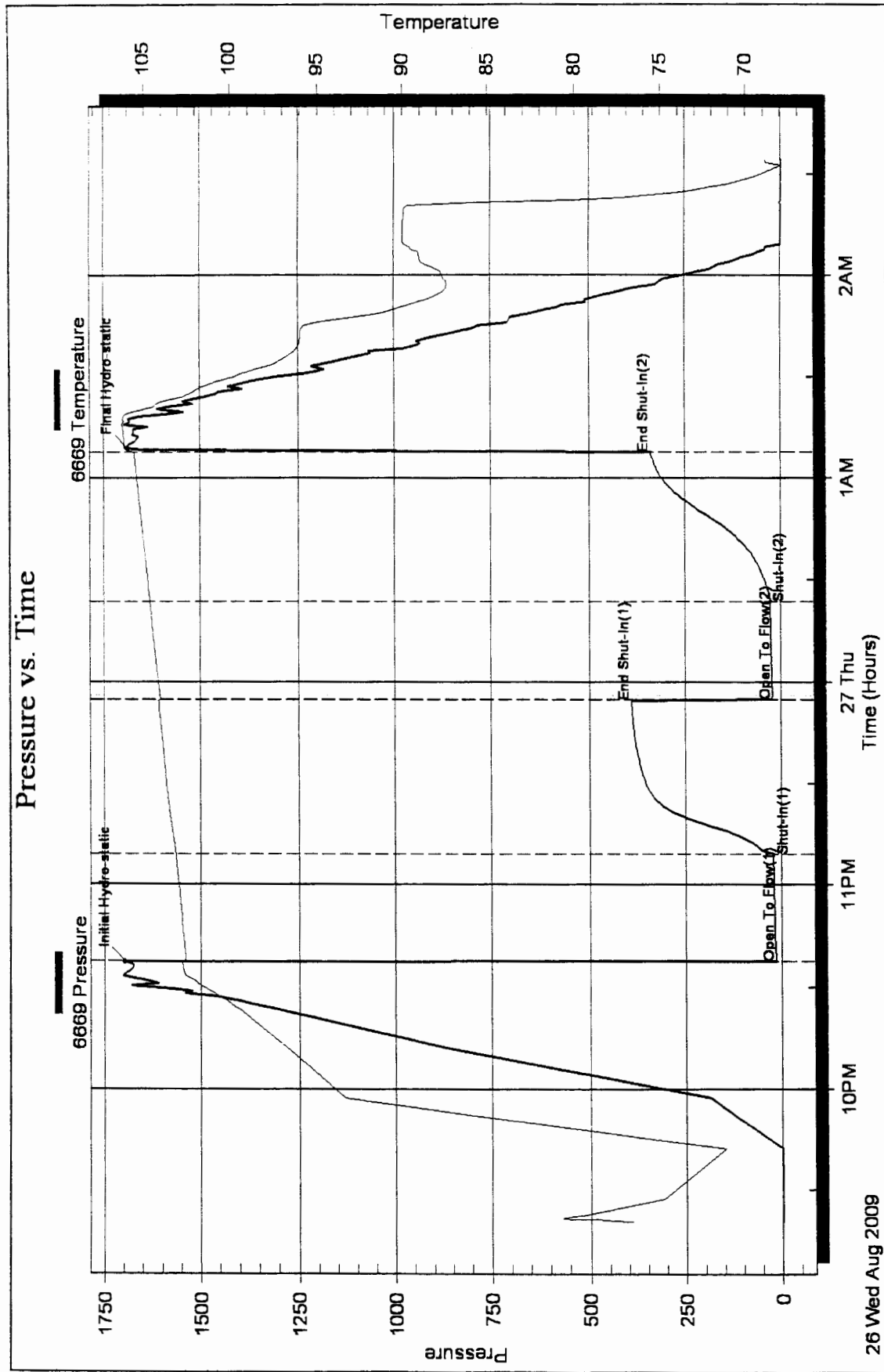
Serial #:

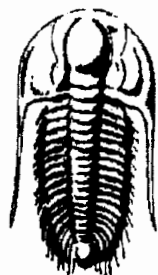
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Dreiling Oil**

PO Box 550
Hays, KS 67601

ATTN: Roger Fisher

6-13s-17w Ellis KS

M. Staab #5

Start Date: 2009.08.27 @ 08:58:25

End Date: 2009.08.27 @ 15:09:55

Job Ticket #: 36042 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

Drilling Oil

M. Staab #5

PO Box 550
Hays, KS 67601

6-13s-17w Ellis KS

ATTN: Roger Fisher

Job Ticket: 36042

DST#: 5

Test Start: 2009.08.27 @ 08:58:25

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:27:40

Time Test Ended: 15:09:55

Test Type: Conventional Bottom Hole

Tester: Tyson Flax

Unit No: 44

Interval: **3594.00 ft (KB) To 3604.00 ft (KB) (TVD)**

Total Depth: 3604.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2071.00 ft (KB)

206.00 ft (CF)

KB to GR/CF: 1865.00 ft

Serial #: 6669

Inside

Press@RunDepth: 233.99 psig @ 3601.00 ft (KB)

Start Date: 2009.08.27

End Date:

2009.08.27

Capacity: 7000.00 psig

Last Calib.: 2009.08.27

Start Time: 08:58:26

End Time:

15:09:55

Time On Btm: 2009.08.27 @ 10:27:25

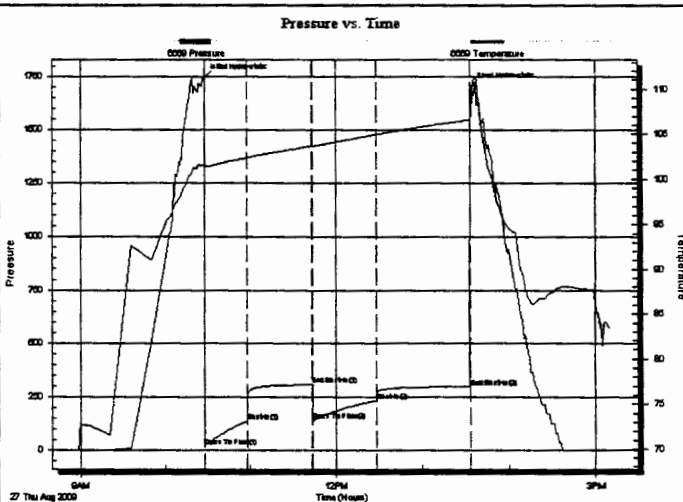
Time Off Btm: 2009.08.27 @ 13:34:25

TEST COMMENT: IFF-BOB in 8 min

ISI-Very weak intermittent blow back

FFP-BOB in 14 min

FSI-no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1743.86	101.48	Initial Hydro-static
1	18.22	101.00	Open To Flow (1)
30	138.45	102.33	Shut-In (1)
76	308.32	103.68	End Shut-In (1)
77	140.84	103.63	Open To Flow (2)
121	233.99	104.93	Shut-In (2)
186	296.49	106.55	End Shut-In (2)
187	1704.42	106.91	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
420.00	Water	5.68
55.00	SOCMV 5%O,85%W,10%M	0.78

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dreiling Oil

M. Staab #5

PO Box 550
Hays, KS 67601

6-13s-17w Ellis KS

Job Ticket: 36042

DST#: 5

ATTN: Roger Fisher

Test Start: 2009.08.27 @ 08:58:25

Tool Information

Drill Pipe:	Length: 3548.00 ft	Diameter: 3.82 inches	Volume: 50.29 bbl	Tool Weight: 2200.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 90000.00 lb
		Total Volume: 50.44 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3594.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	31.00 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			3574.00	
Shut In Tool	5.00			3579.00	
Hydraulic tool	5.00			3584.00	
Packer	5.00			3589.00	21.00 Bottom Of Top Packer
Packer	5.00			3594.00	
Stubb	1.00			3595.00	
Perforations	6.00			3601.00	
Recorder	0.00	6719	Inside	3601.00	
Recorder	0.00	6669	Inside	3601.00	
Bullnose	3.00			3604.00	10.00 Bottom Packers & Anchor
Total Tool Length:	31.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Drilling Oil

M. Staab #5

PO Box 550
Hays, KS 67601

6-13s-17w Ellis KS

Job Ticket: 36042

DST#: 5

ATTN: Roger Fisher

Test Start: 2009.08.27 @ 08:58:25

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:

9500 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
420.00	Water	5.676
55.00	SOCMW 5%O,85%W,10%M	0.780

Total Length: 475.00 ft Total Volume: 6.456 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .51 @ 88F = 9500 chlorides

