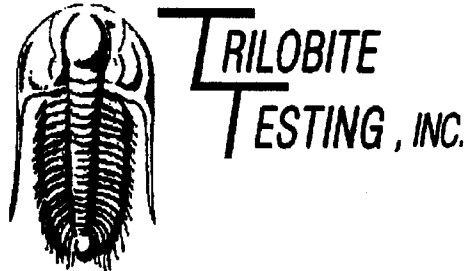


15-065-23565

20-7s-2lw



DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

PO Box 352
Russell KS 67665

ATTN: Steve Murphy

20-7-21 Graham KS

Johnson #1

Start Date: 2009.08.08 @ 15:54:25

End Date: 2009.08.08 @ 21:11:55

Job Ticket #: 35529 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

John O Farmer

Johnson #1

20-7-21 Graham KS

DST # 1

LKC "C"

2009.08.08



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

John O Farmer
 PO Box 352
 Russell KS 67665
 ATTN: Steve Murphy

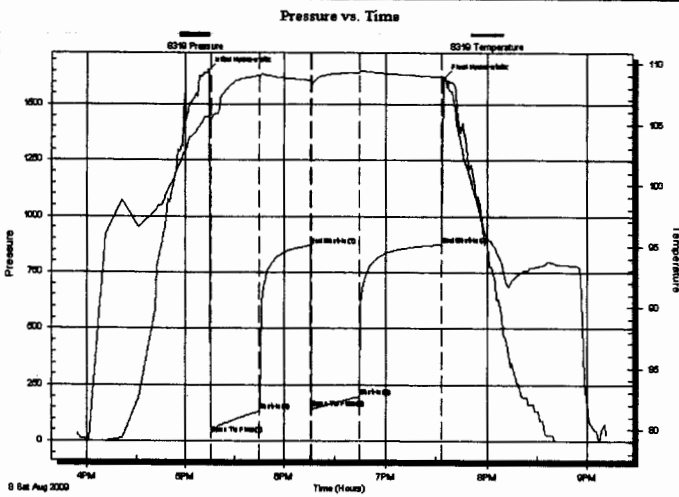
Johnson #1
20-7-21 Graham KS
 Job Ticket: 35529 **DST#: 1**
 Test Start: 2009.08.08 @ 15:54:25

GENERAL INFORMATION:

Formation: **LKC "C"**
 Deviated: **No Whipstock** ft (KB)
 Time Tool Opened: 17:15:25
 Time Test Ended: 21:11:55
 Interval: **3354.00 ft (KB) To 3375.00 ft (KB) (TVD)**
 Total Depth: **3375.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**
 Test Type: **Conventional Bottom Hole**
 Tester: **Kyle Kinderknecht**
 Unit No: **47**
 Reference Elevations: **2102.00 ft (KB)**
 2097.00 ft (CF)
 KB to GR/CF: **5.00 ft**

Serial #: 8319 **Inside**
 Press@RunDepth: **197.36 psig @ 3357.00 ft (KB)**
 Start Date: **2009.08.08** End Date: **2009.08.08**
 Start Time: **15:54:30** End Time: **21:11:54**
 Capacity: **7000.00 psig**
 Last Calib.: **2009.08.08**
 Time On Btm: **2009.08.08 @ 17:13:55**
 Time Off Btm: **2009.08.08 @ 19:34:55**

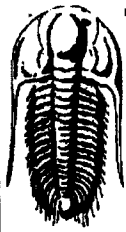
TEST COMMENT: IF BOB 8 min
 ISI 1 3/4"
 FF BOB 10min
 FSI 1"



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1650.93	105.63	Initial Hydro-static
2	29.53	105.28	Open To Flow (1)
31	132.47	108.97	Shut-In(1)
62	870.19	108.61	End Shut-In(1)
62	144.95	108.22	Open To Flow (2)
91	197.36	109.25	Shut-In(2)
140	875.05	108.90	End Shut-In(2)
141	1619.91	108.71	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
295.00	Mdy Wtr Scum of Oil 90%W 10%M	3.05
30.00	GsyOWCM 10%G 10%O 20%W 60%M	0.43
75.00	Gsy Clean Oil 10%G 90%O	1.06
0.00	400' GP	0.00

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer

Johnson #1

PO Box 352
Russell KS 67665

20-7-21 Graham KS

Job Ticket: 35529

DST#: 1

ATTN: Steve Murphy

Test Start: 2009.08.08 @ 15:54:25

Tool Information

Drill Pipe:	Length: 3233.00 ft	Diameter: 3.82 inches	Volume: 45.83 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: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 50000.00 lb
		Total Volume: 46.43 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3354.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	21.00 ft			
Tool Length:	48.00 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			3328.00	
Shut In Tool	5.00			3333.00	
Hydraulic tool	5.00			3338.00	
Jars	4.00			3342.00	
Safety Joint	3.00			3345.00	
Packer	4.00			3349.00	27.00 Bottom Of Top Packer
Packer	5.00			3354.00	
Stubb	1.00			3355.00	
Perforations	2.00			3357.00	
Recorder	0.00	8319	Inside	3357.00	
Recorder	0.00	8369	Inside	3357.00	
Perforations	15.00			3372.00	
Bullnose	3.00			3375.00	21.00 Bottom Packers & Anchor

Total Tool Length: 48.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

Johnson #1

PO Box 352
Russell KS 67665

20-7-21 Graham KS

Job Ticket: 35529

DST#: 1

ATTN: Steve Murphy

Test Start: 2009.08.08 @ 15:54:25

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

35 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

60000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
295.00	Mdy Wtr Scum of Oil 90%W 10%M	3.052
30.00	Gsy ONCM 10%G 10%O 20%W 60%M	0.425
75.00	Gsy Clean Oil 10%G 90%O	1.063
0.00	400' GIP	0.000

Total Length: 400.00 ft

Total Volume: 4.540 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .1 @ 90 DEG

Serial #: 8319

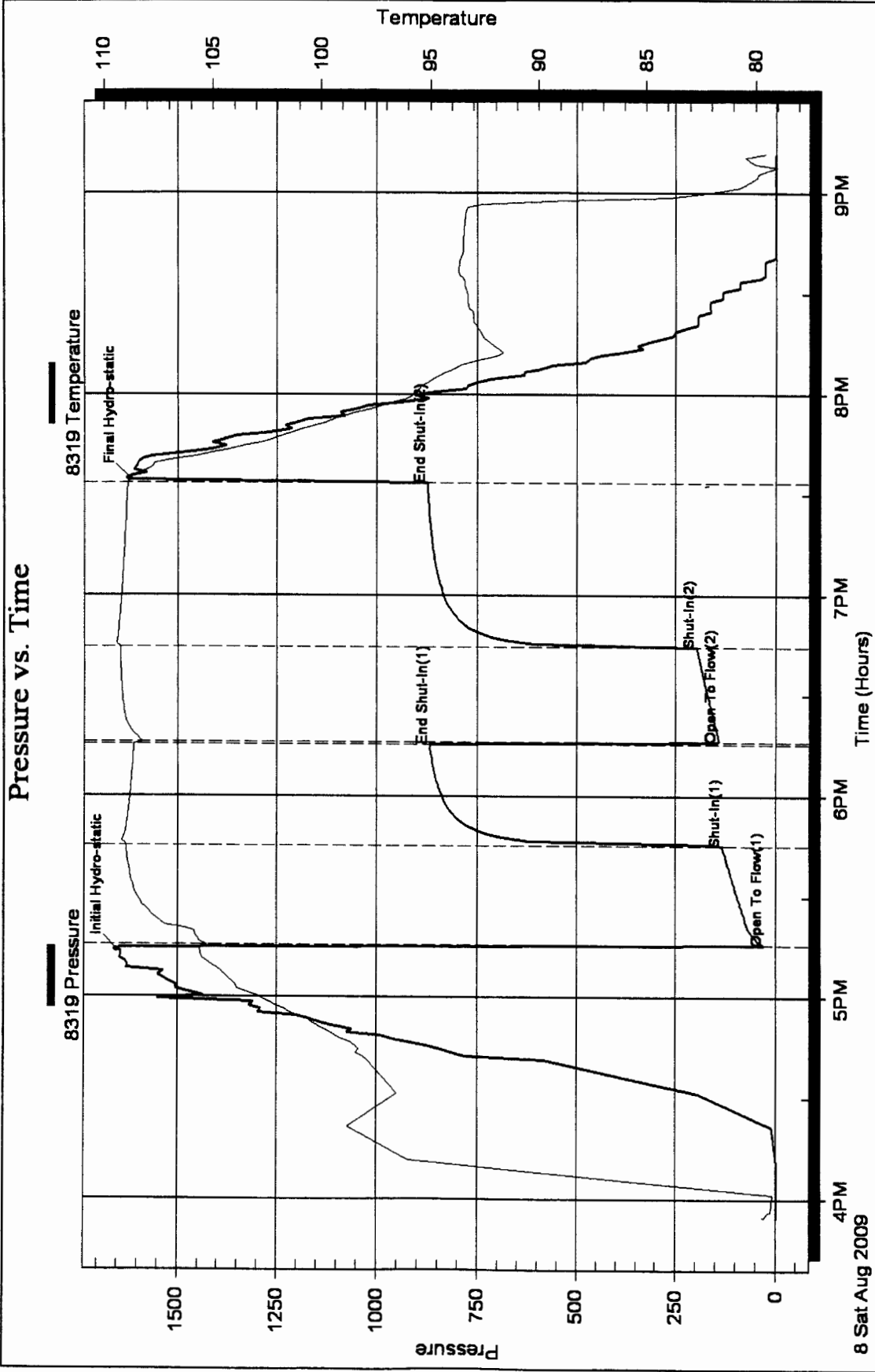
Inside

John O Farmer

20-7-21 Graham KS

DST Test Number: 1

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

PO Box 352
Russell KS 67665

ATTN: Steve Murphy

20-7-21 Graham KS

Johnson #1

Start Date: 2009.08.09 @ 02:32:22

End Date: 2009.08.09 @ 08:29:52

Job Ticket #: 35530 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

John O Farmer

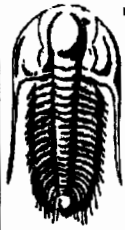
Johnson #1

20-7-21 Graham KS

DST # 2

LKC "D"

2009.08.09



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

John O Farmer
PO Box 352
Russell KS 67665
ATTN: Steve Murphy

Johnson #1
20-7-21 Graham KS
Job Ticket: 35530 **DST#: 2**
Test Start: 2009.08.09 @ 02:32:22

GENERAL INFORMATION:

Formation: **LKC "D"**
Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Bottom Hole**
Time Tool Opened: **03:52:52** Tester: **Kyle Kinderknecht**
Time Test Ended: **08:29:52** Unit No: **47**
Interval: **3379.00 ft (KB) To 3394.00 ft (KB) (TVD)** Reference Elevations: **2102.00 ft (KB)**
Total Depth: **3394.00 ft (KB) (TVD)** **2097.00 ft (CF)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair** KB to GR/CF: **5.00 ft**

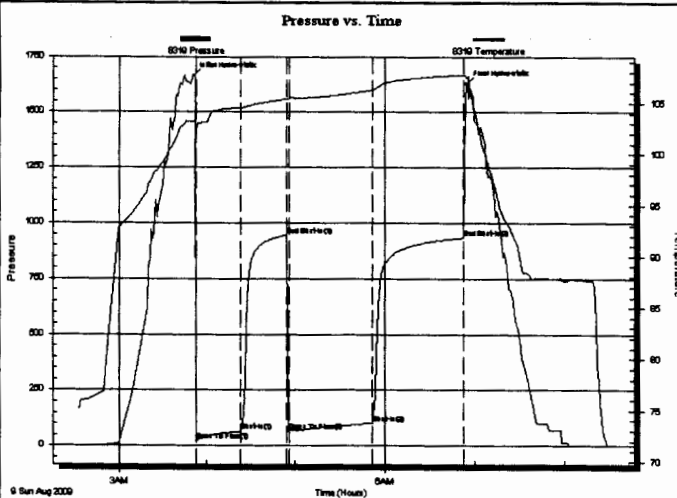
Serial #: 8319

Inside

Press@RunDepth: **101.80 psig @ 3381.00 ft (KB)** Capacity: **7000.00 psig**
Start Date: **2009.08.09** End Date: **2009.08.09** Last Calib.: **2009.08.09**
Start Time: **02:32:27** End Time: **08:29:51** Time On Btrn: **2009.08.09 @ 03:51:22**
Time Off Btrn: **2009.08.09 @ 06:53:52**

TEST COMMENT: **IF BOB 29 min**

FF BOB 34 min



PRESSURE SUMMARY

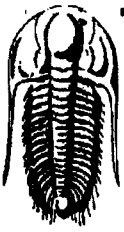
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1663.81	103.25	Initial Hydro-static
2	21.23	102.17	Open To Flow (1)
32	63.76	104.57	Shut-In(1)
63	945.53	105.39	End Shut-In(1)
65	67.37	105.50	Open To Flow (2)
120	101.80	106.28	Shut-In(2)
181	933.80	107.74	End Shut-In(2)
183	1627.90	107.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (tbi)
120.00	MCO 70%O 30%M	0.59
100.00	Clean Oil	1.40

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer
 PO Box 352
 Russell KS 67665
 ATTN: Steve Murphy

Johnson #1
20-7-21 Graham KS
 Job Ticket: 35530 **DST#: 2**
 Test Start: 2009.08.09 @ 02:32:22

Tool Information

Drill Pipe:	Length: 3233.00 ft	Diameter: 3.82 inches	Volume: 45.83 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: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 45000.00 lb
		Total Volume: 46.43 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3379.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 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			3353.00	
Shut In Tool	5.00			3358.00	
Hydraulic tool	5.00			3363.00	
Jars	4.00			3367.00	
Safety Joint	3.00			3370.00	
Packer	4.00			3374.00	27.00 Bottom Of Top Packer
Packer	5.00			3379.00	
Stubb	1.00			3380.00	
Perforations	1.00			3381.00	
Recorder	0.00	8319	inside	3381.00	
Recorder	0.00	8369	inside	3381.00	
Perforations	10.00			3391.00	
Bullnose	3.00			3394.00	15.00 Bottom Packers & Anchor

Total Tool Length: 42.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

Johnson #1

PO Box 352
Russell KS 67665

20-7-21 Graham KS

Job Ticket: 35530

DST#: 2

ATTN: Steve Murphy

Test Start: 2009.08.09 @ 02:32:22

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.76 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	MCO 70%O 30%M	0.590
100.00	Clean Oil	1.399

Total Length: 220.00 ft

Total Volume: 1.989 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

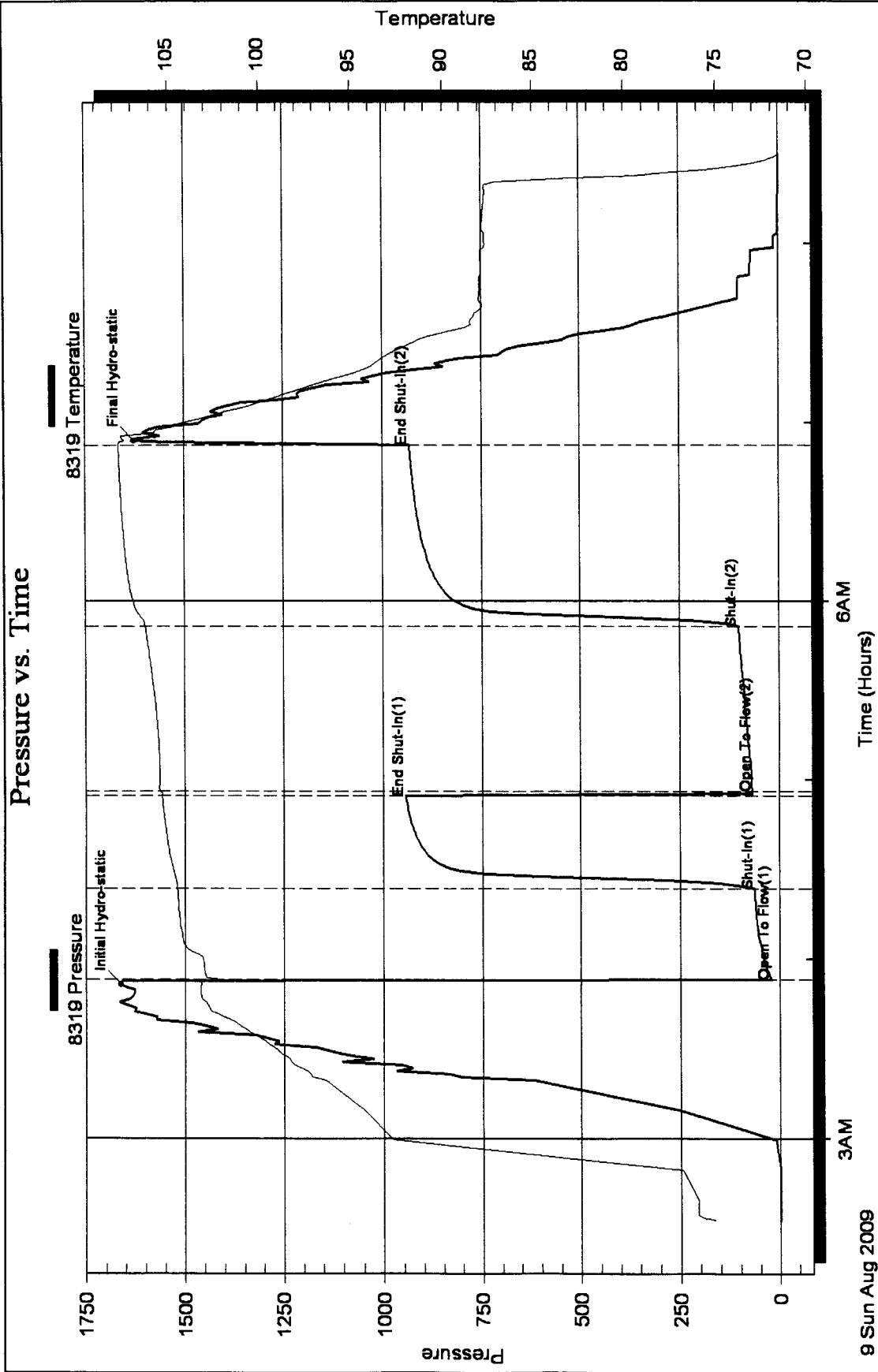
Serial #:

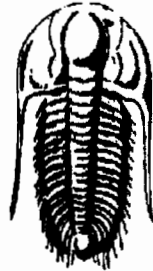
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

PO Box 352
Russell KS 67665

ATTN: Steve Murphy

20-7-21 Graham KS

Johnson #1

Start Date: 2009.08.09 @ 13:51:02

End Date: 2009.08.09 @ 19:16:32

Job Ticket #: 35531 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

John O Farmer

Johnson #1

20-7-21 Graham KS

DST # 3

LKC "E"

2009.08.09



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

John O Farmer
PO Box 352
Russell KS 67665
ATTN: Steve Murphy

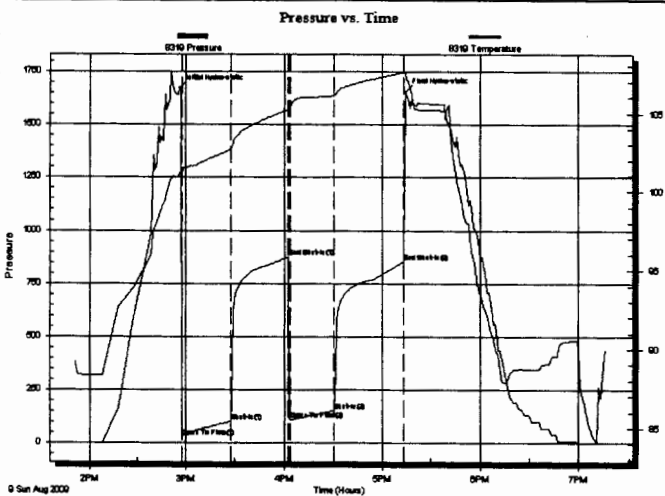
Johnson #1
20-7-21 Graham KS
Job Ticket: 35531 **DST#: 3**
Test Start: 2009.08.09 @ 13:51:02

GENERAL INFORMATION:

Formation: **LKC "E"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:57:32
Time Test Ended: 19:16:32
Interval: **3396.00 ft (KB) To 3405.00 ft (KB) (TVD)**
Total Depth: 3405.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Kyle Kinderknecht
Unit No: 47
Reference Elevations: 2102.00 ft (KB)
2097.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8319 **Inside**
Press@RunDepth: 152.27 psig @ 3399.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2009.08.09 End Date: 2009.08.09 Last Calib.: 2009.08.09
Start Time: 13:51:07 End Time: 19:16:31 Time On Btm: 2009.08.09 @ 14:56:02
Time Off Btm: 2009.08.09 @ 17:14:02

TEST COMMENT: IF BOB 5 min
ISI 4"
FF BOB 10 min
FSI 5 1/2"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1670.26	101.18	Initial Hydro-static
2	26.39	100.97	Open To Flow (1)
32	101.89	102.74	Shut-In(1)
67	874.29	105.22	End Shut-In(1)
68	110.30	105.37	Open To Flow (2)
94	152.27	106.11	Shut-In(2)
137	851.95	107.60	End Shut-In(2)
138	1653.14	107.57	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
400.00	Gsy Clean Oil 15%G 85%O	4.54
0.00	530' GP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer

Johnson #1

PO Box 352
Russell KS 67665

20-7-21 Graham KS

Job Ticket: 35531

DST#: 3

ATTN: Steve Murphy

Test Start: 2009.08.09 @ 13:51:02

Tool Information

Drill Pipe:	Length: 3263.00 ft	Diameter: 3.82 inches	Volume: 46.25 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: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 46.85 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3396.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	9.00 ft			
Tool Length:	36.00 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			3370.00	
Shut In Tool	5.00			3375.00	
Hydraulic tool	5.00			3380.00	
Jars	4.00			3384.00	
Safety Joint	3.00			3387.00	
Packer	4.00			3391.00	27.00 Bottom Of Top Packer
Packer	5.00			3396.00	
Stubb	1.00			3397.00	
Perforations	2.00			3399.00	
Recorder	0.00	8319	Inside	3399.00	
Recorder	0.00	8369	Inside	3399.00	
Perforations	3.00			3402.00	
Bullnose	3.00			3405.00	9.00 Bottom Packers & Anchor
Total Tool Length:		36.00			



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

Johnson #1

PO Box 352
Russell KS 67665

20-7-21 Graham KS

Job Ticket: 35531

DST#: 3

ATTN: Steve Murphy

Test Start: 2009.08.09 @ 13:51:02

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
400.00	Gsy Clean Oil 15%G 85%O	4.541
0.00	530' GIP	0.000

Total Length: 400.00 ft

Total Volume: 4.541 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

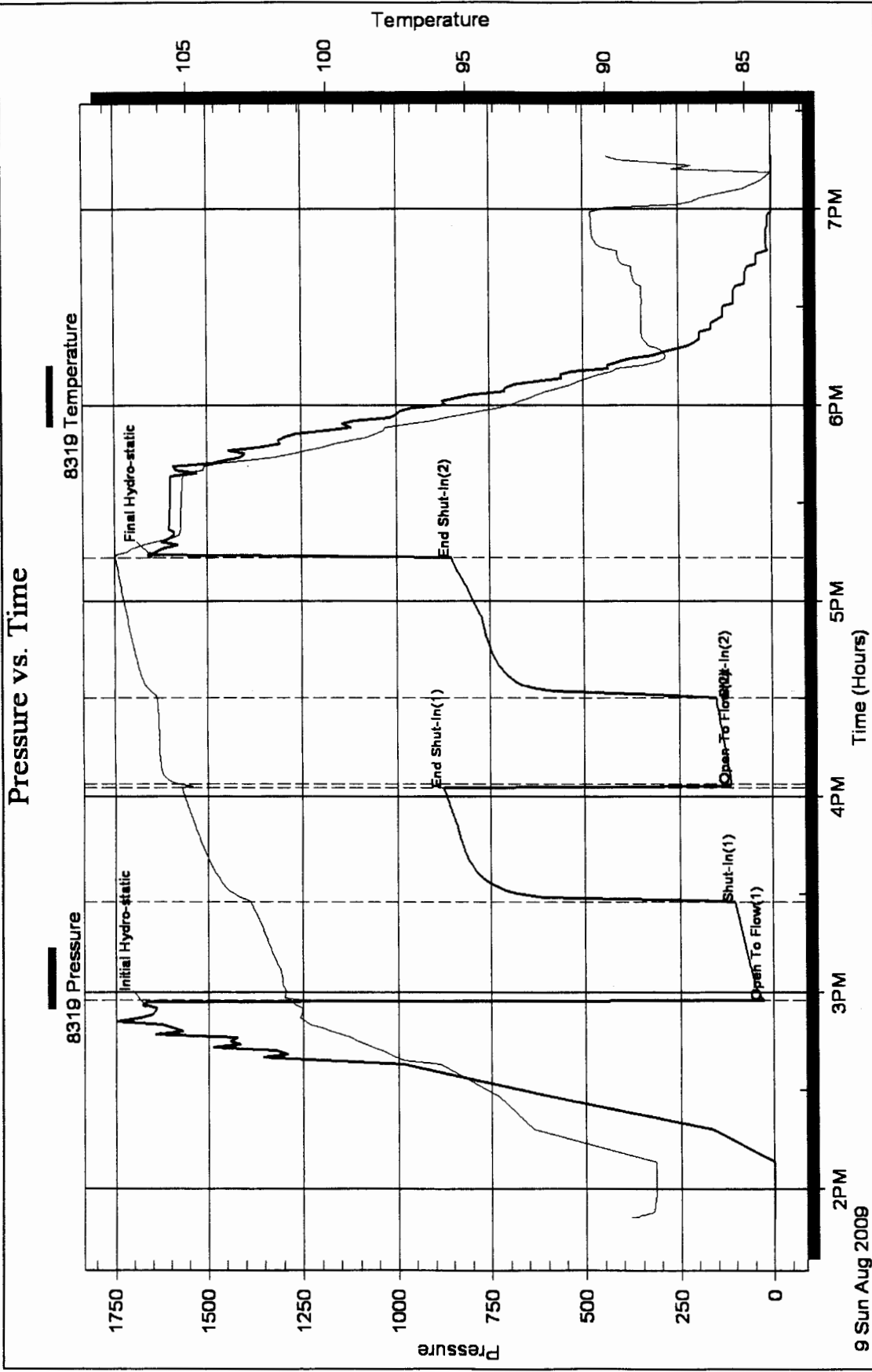
Serial #:

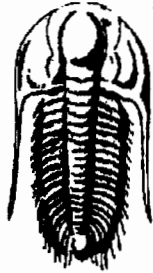
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

PO Box 352
Russell KS 67665

ATTN: Steve Murphy

20-7-21 Graham KS

Johnson #1

Start Date: 2009.08.09 @ 23:24:34

End Date: 2009.08.10 @ 05:54:04

Job Ticket #: 35532 DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

John O Farmer

Johnson #1

20-7-21 Graham KS

DST # 4

LKC "F"

2009.08.09



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer
PO Box 352
Russell KS 67665
ATTN: Steve Murphy

Johnson #1
20-7-21 Graham KS
Job Ticket: 35532 **DST#: 4**
Test Start: 2009.08.09 @ 23:24:34

Tool Information

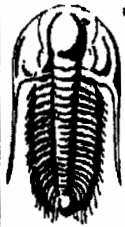
Drill Pipe:	Length: 3263.00 ft	Diameter: 3.82 inches	Volume: 46.25 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 40000.00 lb
		Total Volume:	46.85 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3410.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	6.00 ft			
Tool Length:	33.00 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			3384.00	
Shut In Tool	5.00			3389.00	
Hydraulic tool	5.00			3394.00	
Jars	4.00			3398.00	
Safety Joint	3.00			3401.00	
Packer	4.00			3405.00	27.00 Bottom Of Top Packer
Packer	5.00			3410.00	
Stubb	1.00			3411.00	
Recorder	0.00	8319	Inside	3411.00	
Recorder	0.00	8369	Inside	3411.00	
Perforations	2.00			3413.00	
Bullnose	3.00			3416.00	6.00 Bottom Packers & Anchor

Total Tool Length: 33.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

Johnson #1

PO Box 352
Russell KS 67665

20-7-21 Graham KS

Job Ticket: 35532

DST#: 4

ATTN: Steve Murphy

Test Start: 2009.08.09 @ 23:24:34

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:

55000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
185.00	Mdy Wtr 80%w 20%m	1.493
45.00	Clean Oil	0.638

Total Length: 230.00 ft

Total Volume: 2.131 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

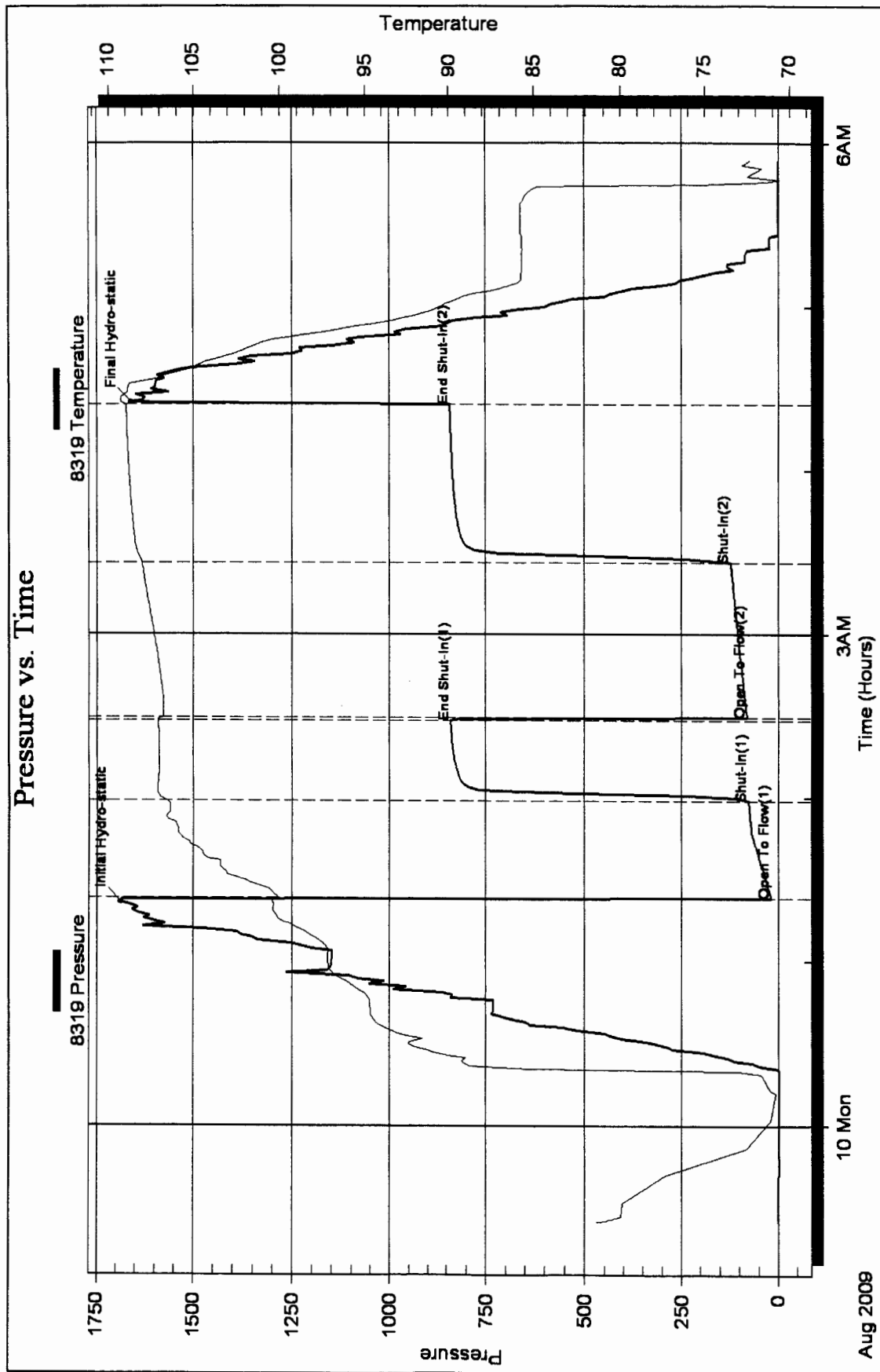
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw .13 @ 80 deg.

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

PO Box 352
Russell KS 67665

ATTN: Steve Murphy

20-7-21 Graham KS

Johnson #1

Start Date: 2009.08.10 @ 14:27:20

End Date: 2009.08.10 @ 20:02:50

Job Ticket #: 35533 DST #: 5

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

John O Farmer

Johnson #1

20-7-21 Graham KS

DST # 5

LKC "L,J"

2009.08.10



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

John O Farmer

Johnson #1

PO Box 352
Russell KS 67665

20-7-21 Graham KS

Job Ticket: 35533

DST#: 5

ATTN: Steve Murphy

Test Start: 2009.08.10 @ 14:27:20

GENERAL INFORMATION:

Formation: **LKC "I,J"**

Deviated: No Whipstock ft (KB)

Time Tool Opened: 15:48:50

Time Test Ended: 20:02:50

Test Type: Conventional Bottom Hole

Tester: Kyle Kinderknecht

Unit No: 47

Interval: **3470.00 ft (KB) To 3510.00 ft (KB) (TVD)**

Reference Elevations: 2102.00 ft (KB)

Total Depth: 3510.00 ft (KB) (TVD)

2097.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8319

Inside

Press@RunDepth: 239.68 psig @ 3474.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2009.08.10

End Date: 2009.08.10

Last Calib.: 2009.08.10

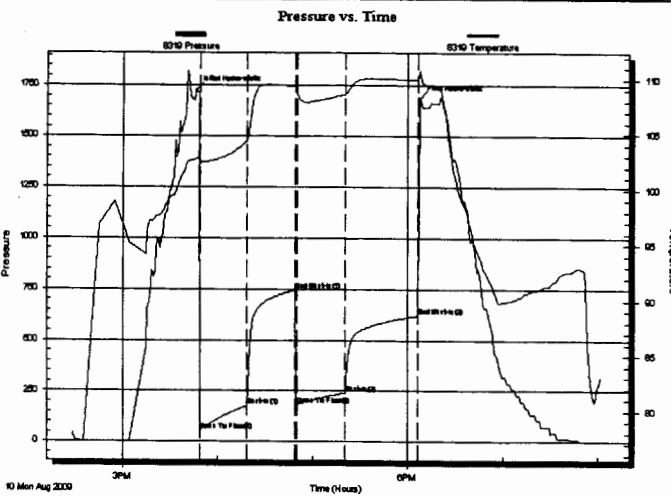
Start Time: 14:27:25

End Time: 20:02:49

Time On Btrr: 2009.08.10 @ 15:46:50

Time Off Btrr: 2009.08.10 @ 18:07:20

TEST COMMENT: IF BOB 3 min
ISI BOB 23 min
FF BOB 3 min
FSI BOB 20 min



PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1725.68	102.81	Initial Hydro-static
2	52.19	102.38	Open To Flow (1)
32	174.63	104.40	Shut-In (1)
62	745.41	109.37	End Shut-In (1)
63	183.58	108.73	Open To Flow (2)
93	239.68	108.63	Shut-In (2)
140	620.71	109.95	End Shut-In (2)
141	1687.37	110.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
640.00	Gey Free Oil 15%G 85%O	7.94
0.00	880' GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer

Johnson #1

PO Box 352
Russell KS 67665

20-7-21 Graham KS

Job Ticket: 35533

DST#: 5

ATTN: Steve Murphy

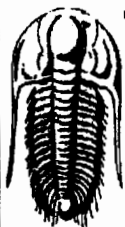
Test Start: 2009.08.10 @ 14:27:20

Tool Information

Drill Pipe:	Length: 3325.00 ft	Diameter: 3.82 inches	Volume: 47.13 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:	25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	45000.00 lb
			<u>Total Volume: 47.73 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3470.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	40.00 ft				
Tool Length:	67.00 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			3444.00	
Shut In Tool	5.00			3449.00	
Hydraulic tool	5.00			3454.00	
Jars	4.00			3458.00	
Safety Joint	3.00			3461.00	
Packer	4.00			3465.00	27.00 Bottom Of Top Packer
Packer	5.00			3470.00	
Stubb	1.00			3471.00	
Perforations	2.00			3473.00	
Change Over Sub	1.00			3474.00	
Recorder	0.00	8319	Inside	3474.00	
Recorder	0.00	8369	Inside	3474.00	
Blank Spacing	32.00			3506.00	
Change Over Sub	1.00			3507.00	
Bullhose	3.00			3510.00	40.00 Bottom Packers & Anchor
Total Tool Length:	67.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

Johnson #1

PO Box 352
Russell KS 67665

20-7-21 Graham KS

Job Ticket: 35533

DST#: 5

ATTN: Steve Murphy

Test Start: 2009.08.10 @ 14:27:20

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
640.00	Gsy Free Oil 15%G 85%O	7.943
0.00	880' GIP	0.000

Total Length: 640.00 ft

Total Volume: 7.943 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

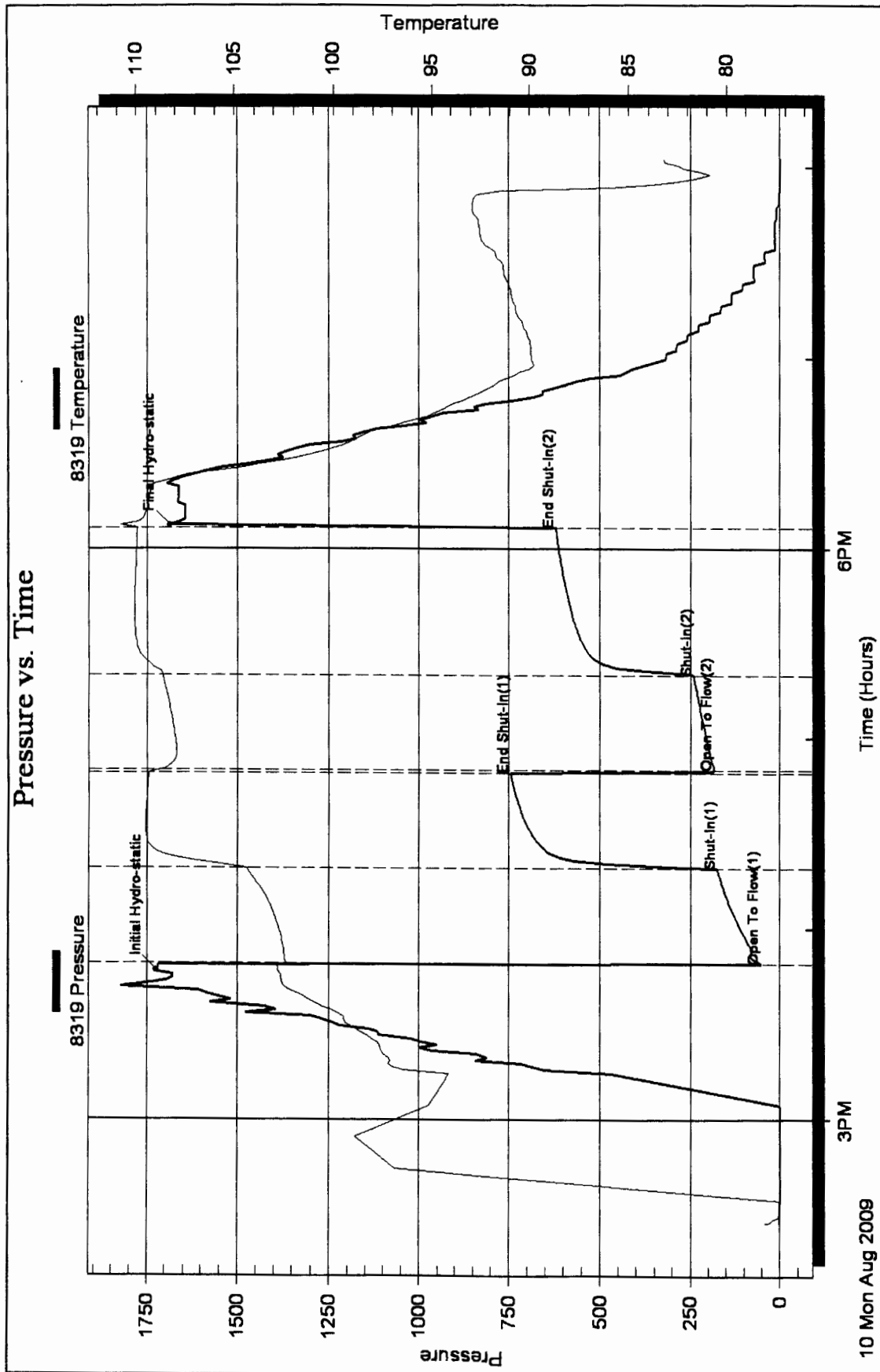
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

PO Box 352
Russell KS 67665

ATTN: Steve Murphy

20-7-21 Graham KS

Johnson #1

Start Date: 2009.08.11 @ 15:02:06

End Date: 2009.08.11 @ 19:54:36

Job Ticket #: 35534 DST #: 6

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

John O Farmer

Johnson #1

20-7-21 Graham KS

DST # 6

Arb

2009.08.11



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O Farmer
 PO Box 352
 Russell KS 67665
 ATTN: Steve Murphy

Johnson #1
20-7-21 Graham KS
 Job Ticket: 35534 **DST#: 6**
 Test Start: 2009.08.11 @ 15:02:06

GENERAL INFORMATION:

Formation: **Arb**
 Deviated: **No Whipstock:** ft (KB)
 Time Tool Opened: 16:30:36
 Time Test Ended: 19:54:36

Test Type: **Conventional Straddle**
 Tester: **Kyle Kinderknecht**
 Unit No: **47**

Interval: **3610.00 ft (KB) To 3625.00 ft (KB) (TVD)**
 Total Depth: **3687.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2102.00 ft (KB)**
2097.00 ft (CF)
 KB to GR/CF: **5.00 ft**

Serial #: 8319

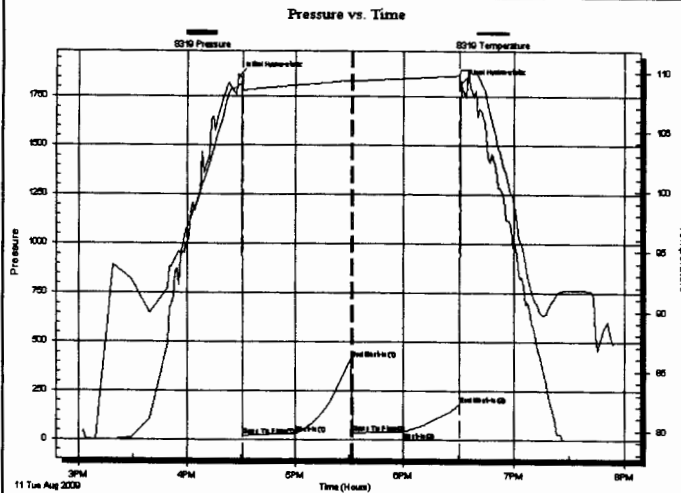
Inside

Press@RunDepth: **41.67 psig @ 3611.00 ft (KB)**
 Start Date: **2009.08.11** End Date:
 Start Time: **15:02:11** End Time:

Capacity: **7000.00 psig**
 Last Calib.: **2009.08.11**
 Time On Btrn: **2009.08.11 @ 16:28:36**
 Time Off Btrn: **2009.08.11 @ 18:31:36**

TEST COMMENT: IF 1 3/4"

FF Weak died 23 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1855.93	108.91	Initial Hydro-static
2	21.18	108.52	Open To Flow (1)
32	32.80	108.87	Shut-in(1)
63	414.76	109.31	End Shut-in(1)
64	37.35	109.23	Open To Flow (2)
92	41.67	109.47	Shut-in(2)
122	181.30	109.73	End Shut-in(2)
123	1822.05	110.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	HOCM 30%O 70%M	0.15
30.00	Heavy Clean Oil	0.15

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer

Johnson #1

PO Box 352
Russell KS 67665

20-7-21 Graham KS

Job Ticket: 35534

DST#: 6

ATTN: Steve Murphy

Test Start: 2009.08.11 @ 15:02:06

Tool Information

Drill Pipe:	Length: 3481.00 ft	Diameter: 3.82 inches	Volume: 49.34 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:	25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	43000.00 lb
			<u>Total Volume: 49.94 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3610.00 ft			Final	40000.00 lb
Depth to Bottom Packer:	3625.00 ft				
Interval between Packers:	15.00 ft				
Tool Length:	104.00 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			3584.00	
Shut In Tool	5.00			3589.00	
Hydraulic tool	5.00			3594.00	
Jars	4.00			3598.00	
Safety Joint	3.00			3601.00	
Packer	4.00			3605.00	27.00 Bottom Of Top Packer
Packer	5.00			3610.00	
Stubb	1.00			3611.00	
Recorder	0.00	8319	Inside	3611.00	
Perforations	10.00			3621.00	
Recorder	0.00	13308	Inside	3621.00	
Blank Off Sub	1.00			3622.00	
Blank Spacing	3.00			3625.00	15.00 Tool Interval
Packer	0.00			3625.00	
Stubb	1.00			3626.00	
Perforations	24.00			3650.00	
Change Over Sub	1.00			3651.00	
Recorder	0.00	8369	Below	3651.00	
Blank Spacing	32.00			3683.00	
Change Over Sub	1.00			3684.00	
Bullnose	3.00			3687.00	62.00 Bottom Packers & Anchor

Total Tool Length: 104.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

Johnson #1

PO Box 352
Russell KS 67665

20-7-21 Graham KS

Job Ticket: 35534

DST#: 6

ATTN: Steve Murphy

Test Start: 2009.08.11 @ 15:02:06

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: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	HOCM 30%O 70%M	0.148
30.00	Heavy Clean Oil	0.148

Total Length: 60.00 ft

Total Volume: 0.296 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

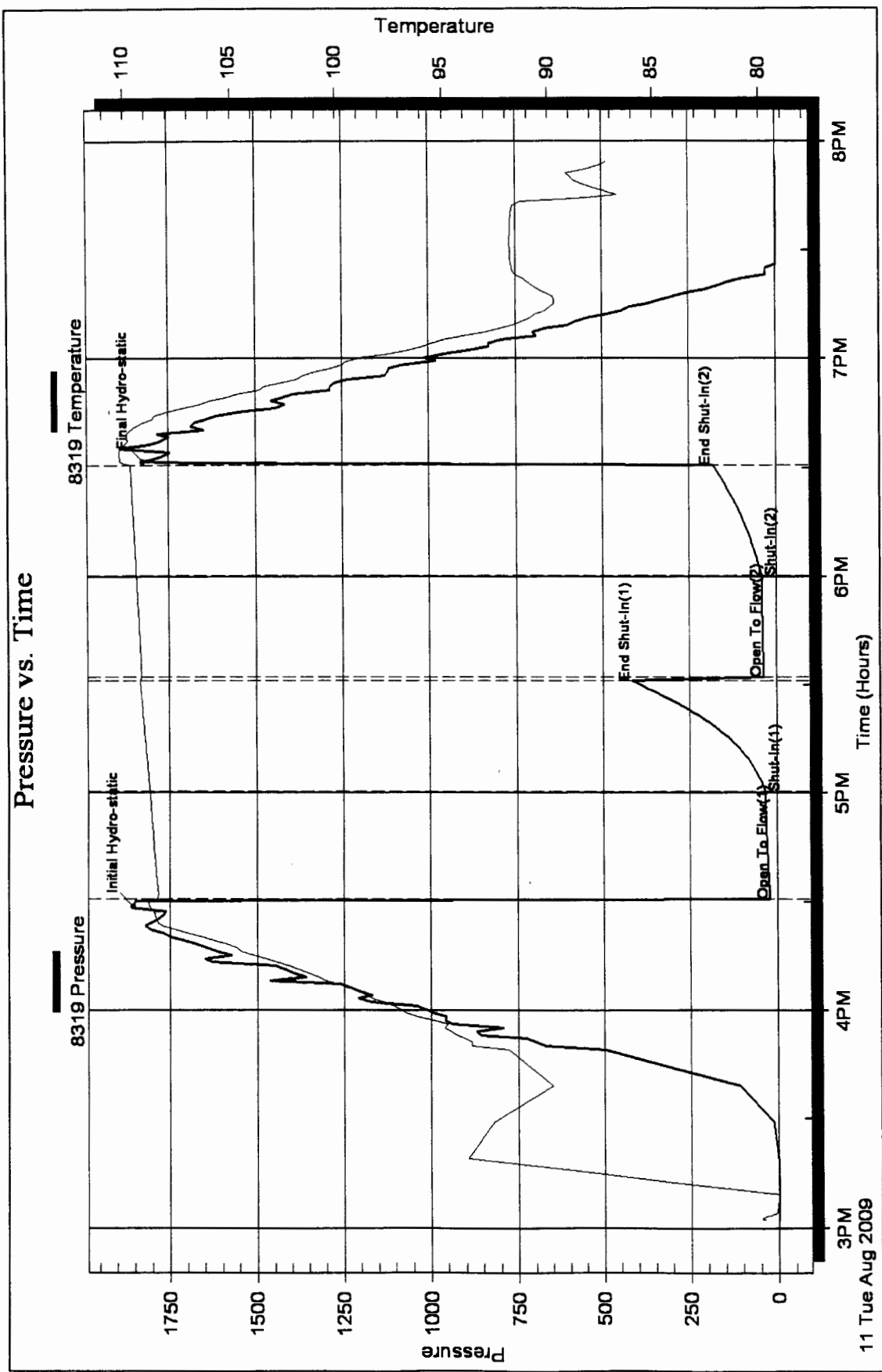
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



11 Tue Aug 2009