

31-10s-22w

15-065-23549



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Russell Oil Inc**

PO Box 1469
Plainfield IL 60544

ATTN: LeRoy Holt

31 10 22 Graham Ks

Lloyd C # 1-31

Start Date: 2009.10.03 @ 08:11:58

End Date: 2009.10.03 @ 15:33:58

Job Ticket #: 36560 DST #: 1

**KCC
JAN 20 2010
CONFIDENTIAL**

RECEIVED

FEB 18 2010

KCC WICHITA

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

Russell Oil Inc

Lloyd C # 1-31

31 10 22 Graham Ks

DST # 1

A

KC

2009.10.03



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Russell Oil Inc

Lloyd C # 1-31

PO Box 1469
Plainfield L 60544

31 10 22 Graham Ks

Job Ticket: 36560

DST#: 1

ATTN: LeRoy Holt

Test Start: 2009.10.03 @ 08:11:58

Tool Information

Drill Pipe:	Length: 3564.00 ft	Diameter: 3.80 inches	Volume: 49.99 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 40000.00 lb
			Total Volume: 49.99 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3557.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	54.00 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			3538.00	
Shut In Tool	5.00			3543.00	
Hydraulic tool	5.00			3548.00	
Packer	5.00			3553.00	20.00 Bottom Of Top Packer
Packer	4.00			3557.00	
Stubb	1.00			3558.00	
Recorder	0.00	8354	Inside	3558.00	
Recorder	0.00	8520	Outside	3558.00	
Perforations	30.00			3588.00	
Bullnose	3.00			3591.00	34.00 Bottom Packers & Anchor
Total Tool Length:	54.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russel Oil Inc

Lloyd C # 1-31

PO Box 1469
Plainfield IL 60544

31 10 22 Graham Ks

Job Ticket: 36560

DST#: 1

ATTN: LeRoy Holt

Test Start: 2009.10.03 @ 08:11:58

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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	OCM 20%o 80%m	0.842

Total Length: 60.00 ft Total Volume: 0.842 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8354

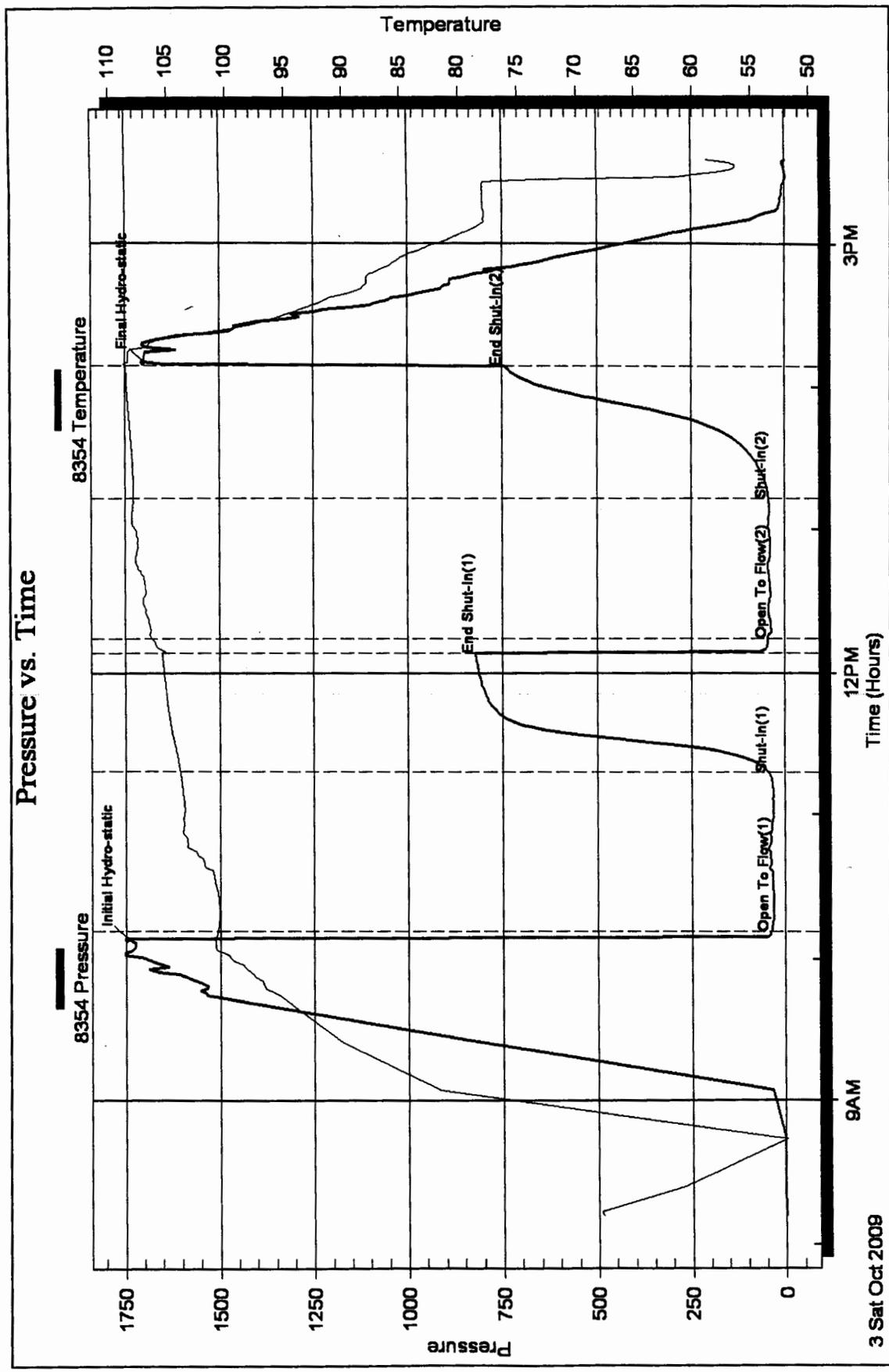
Inside

Russell Oil Inc

31 10 22 Graham Ks

DST Test Number: 1

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Russell Oil Inc**

PO Box 1469
Plainfield IL 60544

ATTN: LeRoy Holt

31 10 22 Graham Ks

Lloyd C # 1-31

Start Date: 2009.10.04 @ 00:43:31

End Date: 2009.10.04 @ 05:21:31

Job Ticket #: 36561 DST #: 2

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

RECEIVED
FEB 18 2010
KCC WICHITA

Russell Oil Inc

Lloyd C # 1-31

31 10 22 Graham Ks

DST # 2

B

KC

2009.10.04



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Russell Oil Inc

Lloyd C # 1-31

PO Box 1469
Plainfield IL 60544

31 10 22 Graham Ks

Job Ticket: 36561

DST#: 2

ATTN: LeRoy Holt

Test Start: 2009.10.04 @ 00:43:31

Tool Information

Drill Pipe:	Length: 3595.00 ft	Diameter: 3.80 inches	Volume: 50.43 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
		Total Volume:	50.43 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3588.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	46.00 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			3569.00	
Shut In Tool	5.00			3574.00	
Hydraulic tool	5.00			3579.00	
Packer	5.00			3584.00	20.00 Bottom Of Top Packer
Packer	4.00			3588.00	
Stubb	1.00			3589.00	
Recorder	0.00	8354	Inside	3589.00	
Recorder	0.00	8520	Outside	3589.00	
Perforations	22.00			3611.00	
Bullnose	3.00			3614.00	26.00 Bottom Packers & Anchor
Total Tool Length:	46.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil Inc

Lloyd C # 1-31

PO Box 1469
Plainfield IL 60544

31 10 22 Graham Ks

Job Ticket: 36561

DST#: 2

ATTN: LeRoy Holt

Test Start: 2009.10.04 @ 00:43:31

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: 58.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	DM	0.028

Total Length: 2.00 ft Total Volume: 0.028 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8354

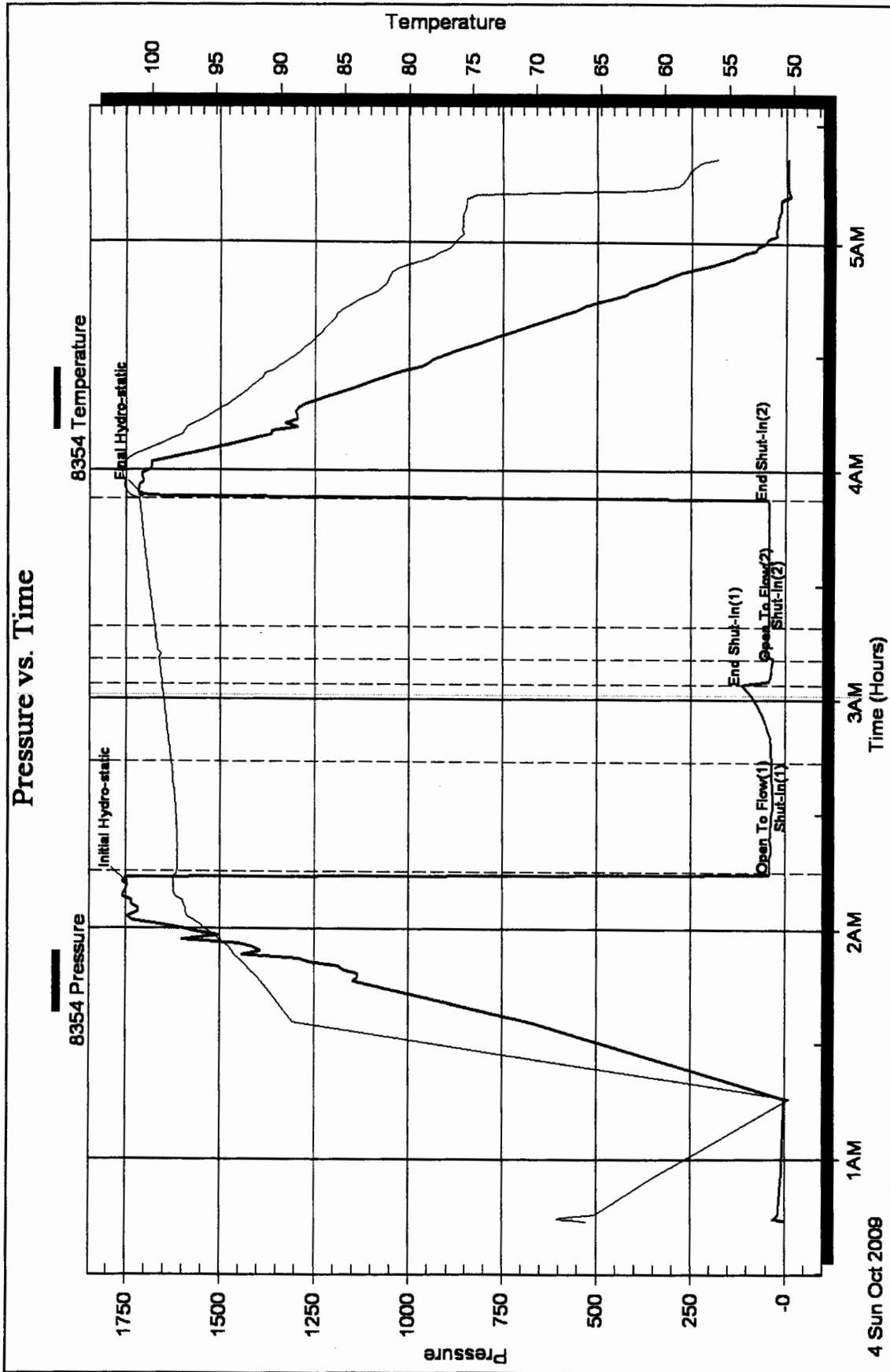
Inside

Russell Oil Inc

31 10 22 Graham Ks

DST Test Number: 2

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Russell Oil Inc**

PO Box 1469
Plainfield IL 60544

ATTN: LeRoy Holt

31 10 22 Graham Ks

Lloyd C # 1-31

Start Date: 2009.10.04 @ 14:00:54

End Date: 2009.10.04 @ 21:01:24

Job Ticket #: 36562 DST #: 3

RECEIVED

FEB 18 2010

KCC WICHITA

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Russell Oil Inc

Lloyd C # 1-31

31 10 22 Graham Ks

DST # 3

KC

2009.10.04



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Russell Oil Inc
PO Box 1469
Plainfield IL 60544
ATTN: LeRoy Holt

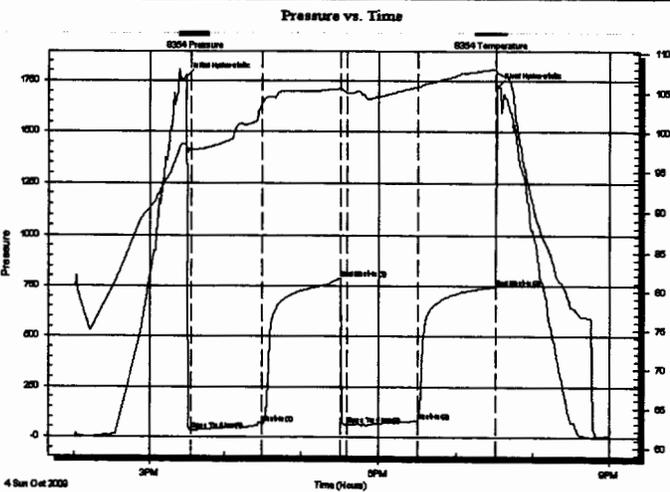
Lloyd C # 1-31
31 10 22 Graham Ks
Job Ticket: 36562 **DST#: 3**
Test Start: 2009.10.04 @ 14:00:54

GENERAL INFORMATION:

Formation: **KC**
Deviated: **No** Whipstock: **ft (KB)**
Time Tool Opened: **15:32:54**
Time Test Ended: **21:01:24**
Test Type: **Conventional Bottom Hole**
Tester: **Dan Bangle**
Unit No: **38**
Interval: **3608.00 ft (KB) To 3662.00 ft (KB) (TVD)**
Reference Elevations: **2292.00 ft (KB)**
Total Depth: **3662.00 ft (KB) (TVD)**
2282.00 ft (CF)
Hole Diameter: **7.88 inches** Hole Condition: **Good**
KB to GR/CF: **10.00 ft**

Serial #: 8354 **Inside**
Press@RunDepth: **80.54 psig @ 3615.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2009.10.04** End Date: **2009.10.04** Last Calib.: **2009.10.04**
Start Time: **14:00:55** End Time: **21:01:24** Time On Btm: **2009.10.04 @ 15:29:24**
Time Off Btm: **2009.10.04 @ 19:31:54**

TEST COMMENT: IF-Weak building to 3/4"
FF-Weak steady surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1770.63	98.42	Initial Hydro-static
4	31.82	97.88	Open To Flow (1)
60	65.19	103.46	Shut-in(1)
121	789.24	105.54	End Shut-in(1)
126	58.97	105.01	Open To Flow (2)
181	80.54	105.75	Shut-in(2)
241	747.24	108.01	End Shut-in(2)
243	1722.29	107.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
130.00	Mud w/scum of oil	1.82

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Russell Oil Inc

Lloyd C # 1-31

PO Box 1469
Plainfield IL 60544

31 10 22 Graham Ks

Job Ticket: 36562

DST#: 3

ATTN: LeRoy Holt

Test Start: 2009.10.04 @ 14:00:54

Tool Information

Drill Pipe:	Length: 3595.00 ft	Diameter: 3.80 inches	Volume: 50.43 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 40000.00 lb
			<u>Total Volume: 50.43 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 39000.00 lb
Depth to Top Packer:	3608.00 ft			Final 39000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.00 ft			
Tool Length:	74.00 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			3589.00	
Shut In Tool	5.00			3594.00	
Hydraulic tool	5.00			3599.00	
Packer	5.00			3604.00	20.00 Bottom Of Top Packer
Packer	4.00			3608.00	
Stubb	1.00			3609.00	
Perforations	5.00			3614.00	
Change Over Sub	1.00			3615.00	
Recorder	0.00	8354	Inside	3615.00	
Recorder	0.00	8520	Outside	3615.00	
Drill Pipe	29.00			3644.00	
Change Over Sub	1.00			3645.00	
Perforations	14.00			3659.00	
Bullnose	3.00			3662.00	54.00 Bottom Packers & Anchor

Total Tool Length: 74.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil Inc

Lloyd C # 1-31

PO Box 1469
Plainfield IL 60544

31 10 22 Graham Ks

Job Ticket: 36562

DST#: 3

ATTN: LeRoy Holt

Test Start: 2009.10.04 @ 14:00:54

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:

bbbl

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
130.00	Mud w/scum of oil	1.824

Total Length: 130.00 ft Total Volume: 1.824 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

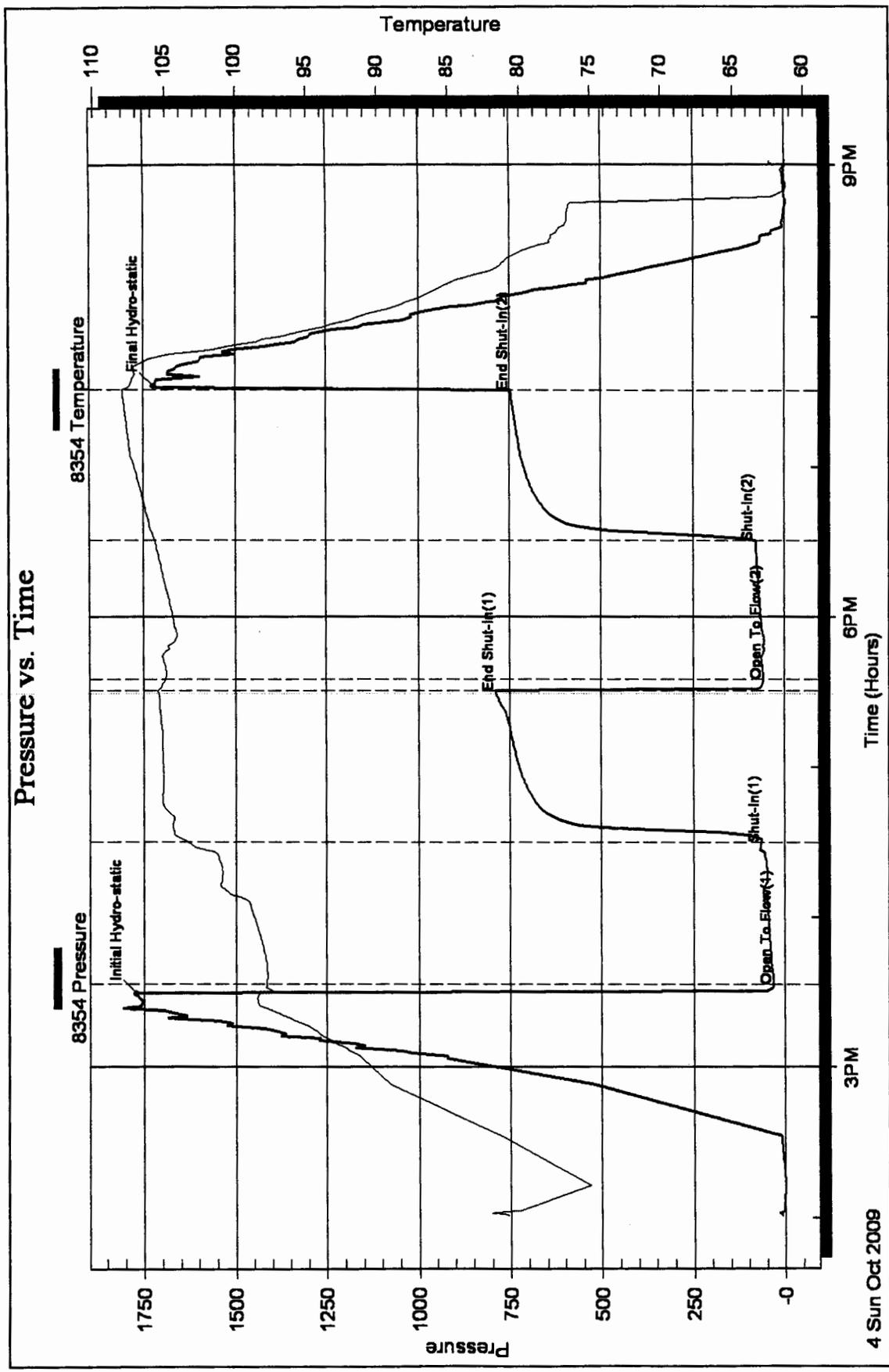
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



4 Sun Oct 2008



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Russell Oil Inc**

PO Box 1469
Plainfield IL 60544

ATTN: LeRoy Holt

31 10 22 Graham Ks

Lloyd C # 1-31

Start Date: 2009.10.05 @ 15:54:11

End Date: 2009.10.05 @ 21:35:41

Job Ticket #: 36563 DST #: 4

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

RECEIVED
FEB 18 2010
KCC WICHITA



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Russell Oil Inc

Lloyd C # 1-31

PO Box 1469
Plainfield IL 60544

31 10 22 Graham Ks

Job Ticket: 36563

DST#: 4

ATTN: LeRoy Holt

Test Start: 2009.10.05 @ 15:54:11

GENERAL INFORMATION:

Formation: **KC**
 Deviated: **No** Whipstock: **ft (KB)**
 Time Tool Opened: 17:22:11
 Time Test Ended: 21:35:41

Test Type: **Conventional Bottom Hole**
 Tester: **Dan Bangle**
 Unit No: **38**

Interval: **3656.00 ft (KB) To 3778.00 ft (KB) (TVD)**
 Total Depth: **3778.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2292.00 ft (KB)**
2282.00 ft (CF)
 KB to GR/CF: **10.00 ft**

Serial #: **8354**

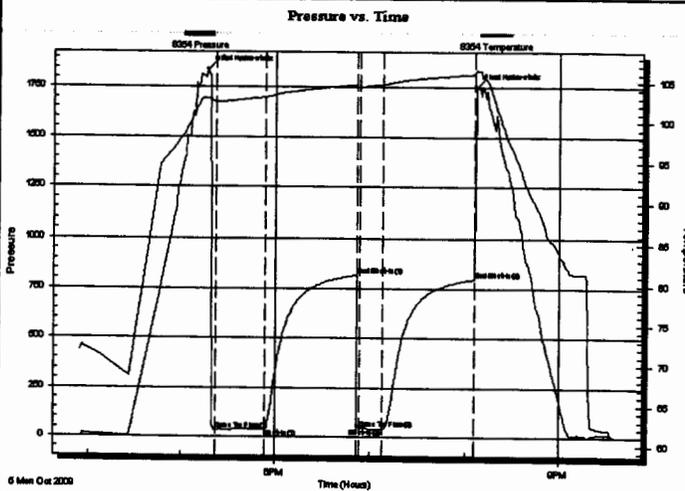
Inside

Press@RunDepth: **40.51 psig @ 3663.00 ft (KB)**
 Start Date: **2009.10.05** End Date: **2009.10.05**
 Start Time: **15:54:12** End Time: **21:35:41**

Capacity: **8000.00 psig**
 Last Calib.: **2009.10.05**
 Time On Btm: **2009.10.05 @ 17:16:41**
 Time Off Btm: **2009.10.05 @ 20:06:41**

TEST COMMENT: IF-Weak died in 30 min

FF-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1838.92	102.99	Initial Hydro-static
6	34.36	102.55	Open To Flow (1)
37	39.33	103.12	Shut-in(1)
95	815.96	104.69	End Shut-in(1)
97	45.13	104.44	Open To Flow (2)
111	40.51	104.70	Shut-in(2)
169	797.00	106.03	End Shut-in(2)
170	1754.06	106.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	DM	0.28

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Russell Oil Inc

Lloyd C # 1-31

PO Box 1469
Plainfield L 60544

31 10 22 Graham Ks

Job Ticket: 36563

DST#: 4

ATTN: LeRoy Holt

Test Start: 2009.10.05 @ 15:54:11

Tool Information

Drill Pipe:	Length: 3657.00 ft	Diameter: 3.80 inches	Volume: 51.30 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 51.30 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3656.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	122.00 ft			
Tool Length:	142.00 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			3637.00	
Shut In Tool	5.00			3642.00	
Hydraulic tool	5.00			3647.00	
Packer	5.00			3652.00	20.00 Bottom Of Top Packer
Packer	4.00			3656.00	
Stubb	1.00			3657.00	
Perforations	5.00			3662.00	
Change Over Sub	1.00			3663.00	
Recorder	0.00	8354	Inside	3663.00	
Recorder	0.00	8520	Outside	3663.00	
Drill Pipe	92.00			3755.00	
Change Over Sub	1.00			3756.00	
Perforations	19.00			3775.00	
Bullnose	3.00			3778.00	122.00 Bottom Packers & Anchor

Total Tool Length: 142.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russel Oil Inc

Lloyd C # 1-31

PO Box 1469
Plainfield L 60544

31 10 22 Graham Ks

Job Ticket: 36563

DST#: 4

ATTN: LeRoy Holt

Test Start: 2009.10.05 @ 15:54:11

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.79 in³

Gas Cushion Type:

Gas Cushion Pressure:

psig

Resistivity: ohm.m

Salinity: 2300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	DM	0.281

Total Length: 20.00 ft Total Volume: 0.281 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8354

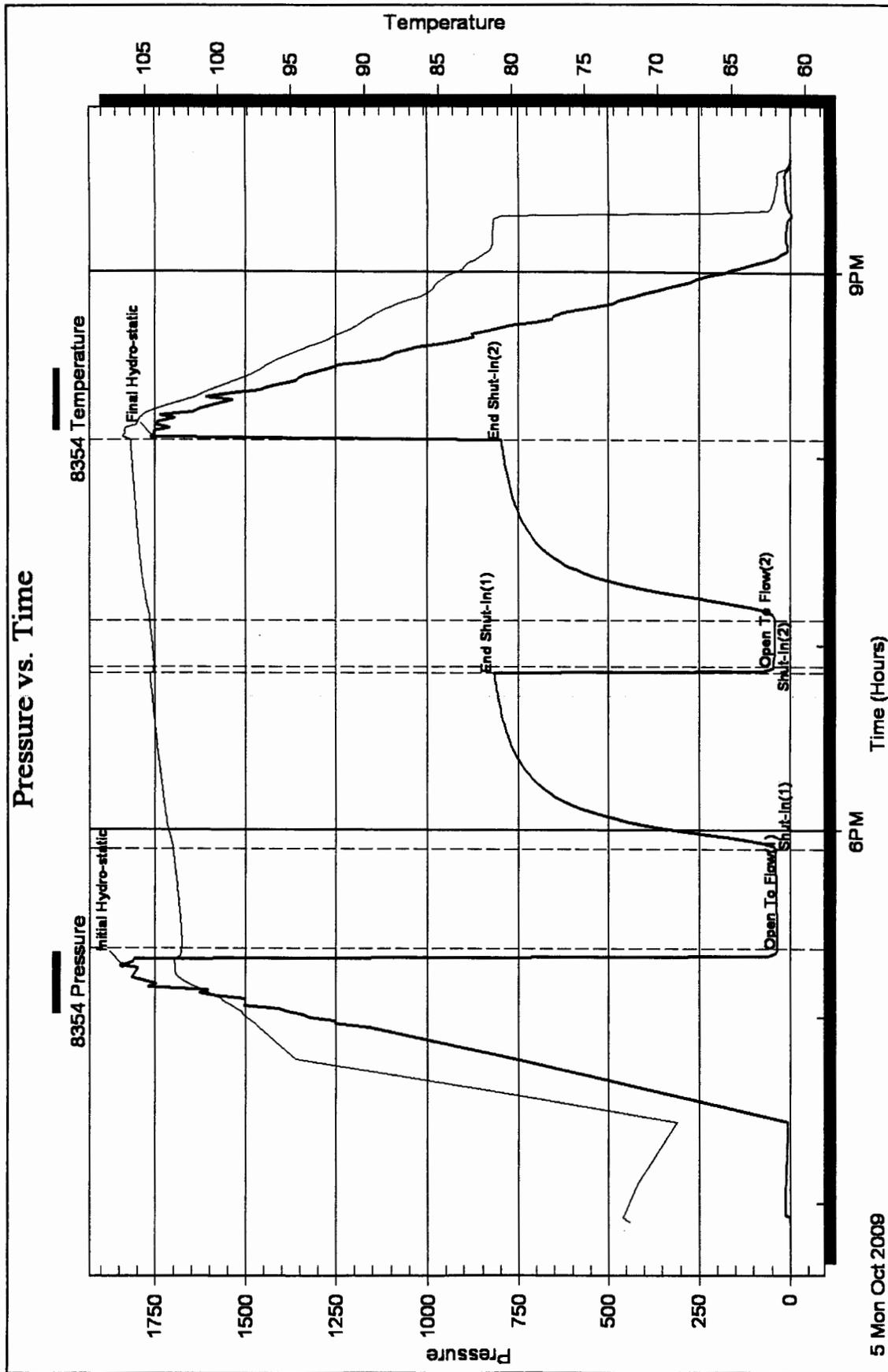
Inside

Russell Oil Inc

31 10 22 Graham Ks

DST Test Number: 4

Pressure vs. Time



5 Mon Oct 2009

9PM

6PM

Time (Hours)