

TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Russell Oil Inc.**

P.O.Box 1469
Plainfield IL. 60544

ATTN: Tod Morgenstern

31-20s-11w Barton Ks

Duncan #1

Start Date: 2003.05.31 @ 01:24:18

End Date: 2003.05.31 @ 06:51:33

Job Ticket #: 17883 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Russell Oil Inc.

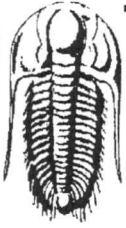
Duncan #1

31-20s-11w Barton Ks

DST # 1

Lans. A&B

2003.05.31



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Russell Oil Inc.

Duncan #1

P.O.Box 1469
Plainfield IL. 60544

31-20s-11w Barton Ks

Job Ticket: 17883

DST#: 1

ATTN: Tod Morgenstern

Test Start: 2003.05.31 @ 01:24:18

GENERAL INFORMATION:

Formation: **Lans. A&B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:05:03

Time Test Ended: 06:51:33

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 23

Interval: **3130.00 ft (KB) To 3170.00 ft (KB) (TVD)**

Reference Elevations: 1828.00 ft (KB)

Total Depth: 3170.00 ft (KB) (TVD)

1820.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 2342

Inside

Press@RunDepth: 24.16 psig @ 3131.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2003.05.31

End Date: 2003.05.31

Last Calib.: 2003.05.31

Start Time: 01:24:19

End Time: 06:51:33

Time On Btm: 2003.05.31 @ 03:04:48

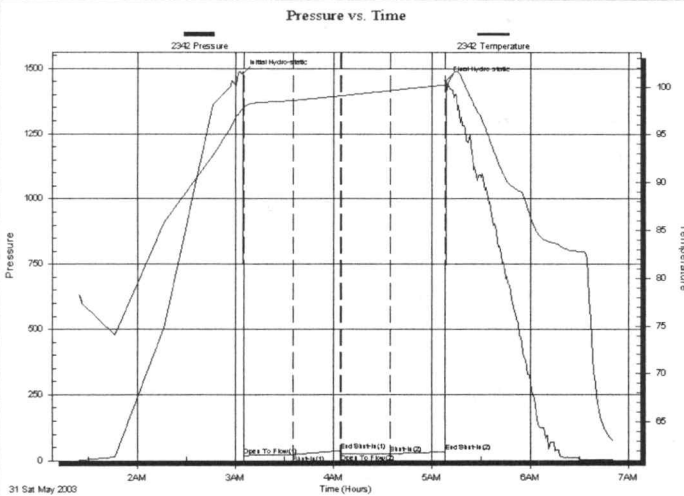
Time Off Btm: 2003.05.31 @ 05:08:33

TEST COMMENT: IF:Weak blow . 1/4" Dead in 20 mins.

IS:No blow .

FF:No blow .

FSI:No blow .



PRESSURE SUMMARY

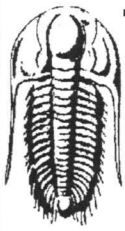
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1481.78	97.80	Initial Hydro-static
1	17.16	97.84	Open To Flow (1)
31	22.19	98.56	Shut-In(1)
60	36.80	99.06	End Shut-In(1)
60	23.70	99.06	Open To Flow (2)
90	24.16	99.61	Shut-In(2)
124	32.77	100.21	End Shut-In(2)
124	1454.17	100.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Drlg.mud.	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Russell Oil Inc.

Duncan #1

P.O.Box 1469
Plainfield IL. 60544

31-20s-11w Barton Ks

Job Ticket: 17883

DST#: 1

ATTN: Tod Morgenstern

Test Start: 2003.05.31 @ 01:24:18

Tool Information

Drill Pipe:	Length: 2876.00 ft	Diameter: 3.80 inches	Volume: 40.34 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 41.52 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3130.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 ft			
Tool Length:	60.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3111.00	
S.I. Tool	5.00			3116.00	
HMV	5.00			3121.00	
Packer	4.00			3125.00	20.00 Bottom Of Top Packer
Packer	5.00			3130.00	
Stubb	1.00			3131.00	
Recorder	0.00	2342	Inside	3131.00	
Perforations	34.00			3165.00	
Recorder	0.00	13222	Outside	3165.00	
Bullnose	5.00			3170.00	40.00 Bottom Packers & Anchor
Total Tool Length:	60.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil Inc.

Duncan #1

P.O.Box 1469
Plainfield IL. 60544

31-20s-11w Barton Ks

Job Ticket: 17883

DST#: 1

ATTN: Tod Morgenstern

Test Start: 2003.05.31 @ 01:24:18

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:

3000 ppm

Viscosity: 44.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Drlg.mud.	0.025

Total Length: 5.00 ft

Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 2342

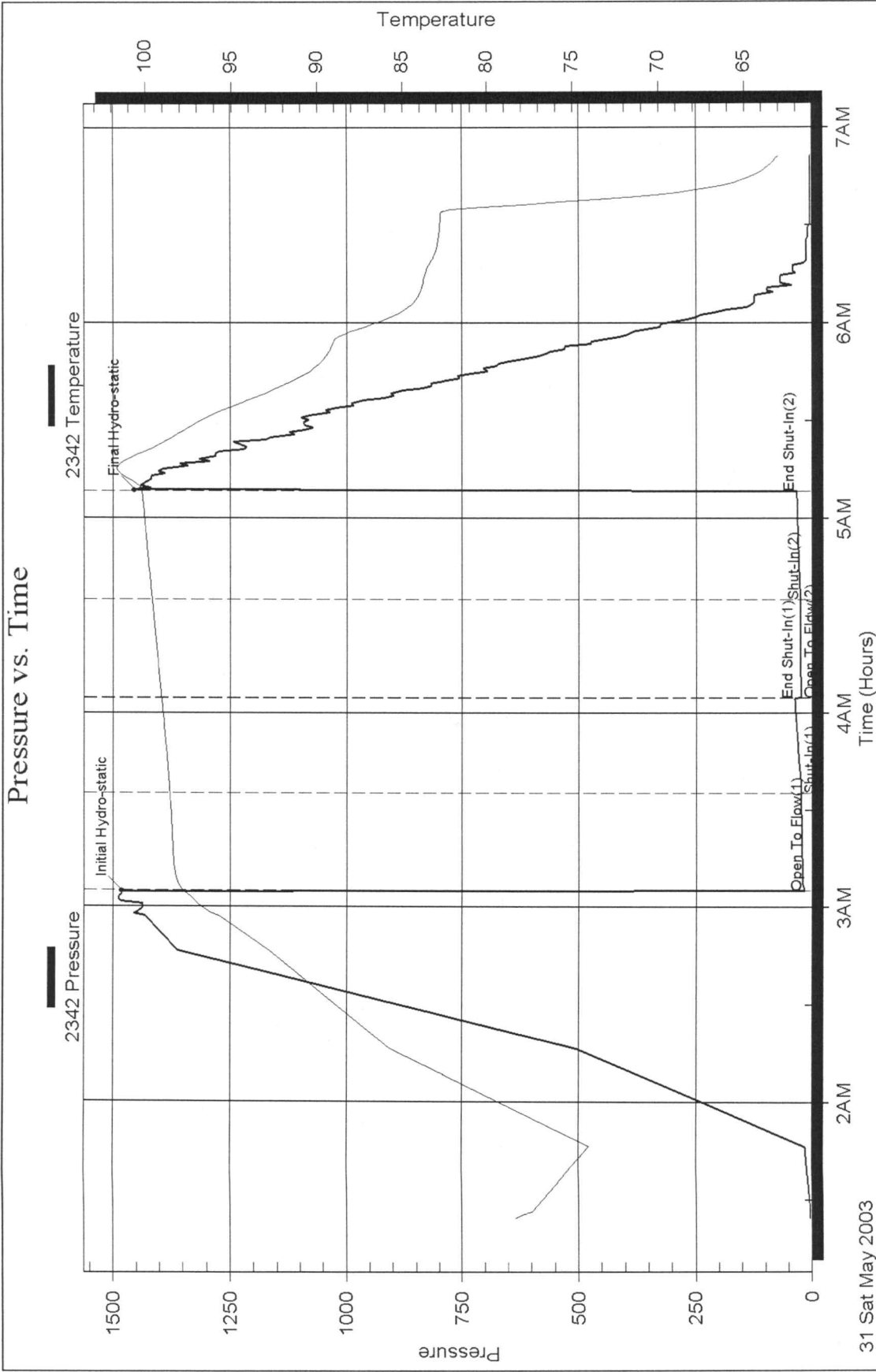
Inside

Russell Oil Inc.

31-20s-11w Barton Ks

DST Test Number: 1

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Russell Oil Inc.**

P.O.Box 1469
Plainfield IL. 60544

ATTN: Tod Morgenstern

31-20s-11w Barton Ks

Duncan #1

Start Date: 2003.05.31 @ 14:13:00

End Date: 2003.05.31 @ 19:21:45

Job Ticket #: 17884 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Russell Oil Inc.

Duncan #1

31-20s-11w Barton Ks

DST # 2

Lans c - f

2003.05.31



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Russell Oil Inc.

Duncan #1

P.O.Box 1469
Plainfield L. 60544

31-20s-11w Barton Ks

Job Ticket: 17884

DST#: 2

ATTN: Tod Morgenstern

Test Start: 2003.05.31 @ 14:13:00

GENERAL INFORMATION:

Formation: **Lans c - f**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:52:00

Time Test Ended: 19:21:45

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 23

Interval: **3173.00 ft (KB) To 3230.00 ft (KB) (TVD)**

Reference Elevations: 1828.00 ft (KB)

Total Depth: 3230.00 ft (KB) (TVD)

1820.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 2342

Inside

Press@RunDepth: 31.93 psig @ 3174.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2003.05.31

End Date:

2003.05.31

Last Calib.:

2003.06.01

Start Time: 14:13:01

End Time:

19:21:45

Time On Btm:

2003.05.31 @ 15:51:45

Time Off Btm:

2003.05.31 @ 17:56:30

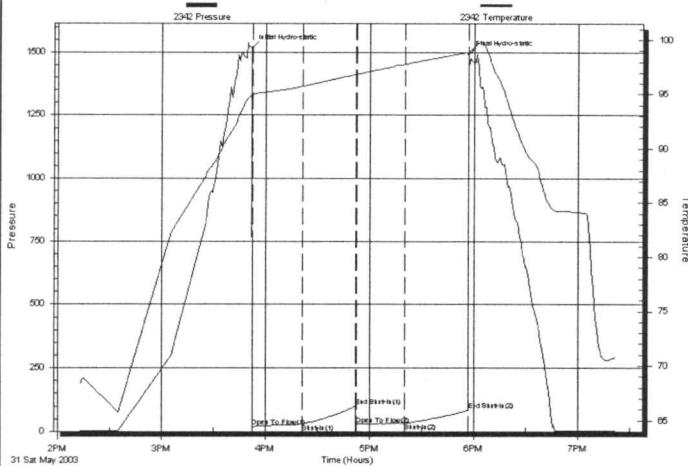
TEST COMMENT: IF:Weak blow . 1/4".

IS:No blow .

FF:Weak blow . 1/2 - 3/4".

FS:No blow .

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1514.76	94.92	Initial Hydro-static
1	19.21	94.94	Open To Flow (1)
30	30.33	95.74	Shut-In (1)
60	98.06	96.82	End Shut-In (1)
61	26.47	96.85	Open To Flow (2)
89	31.93	97.76	Shut-In (2)
125	82.54	98.84	End Shut-In (2)
125	1493.03	98.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	SOCM 4%o 96%m	0.07
0.00	75 ft. of gas in pipe	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Russell Oil Inc.

Duncan #1

P.O.Box 1469
Plainfield IL. 60544

31-20s-11w Barton Ks

Job Ticket: 17884

DST#: 2

ATTN: Tod Morgenstern

Test Start: 2003.05.31 @ 14:13:00

Tool Information

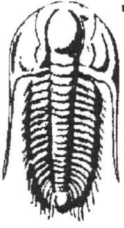
Drill Pipe:	Length: 2937.00 ft	Diameter: 3.80 inches	Volume: 41.20 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 63000.00 lb
			<u>Total Volume: 42.38 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3173.00 ft			Final 50500.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	57.00 ft			
Tool Length:	77.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3154.00	
S.I. Tool	5.00			3159.00	
HMV	5.00			3164.00	
Packer	4.00			3168.00	20.00 Bottom Of Top Packer
Packer	5.00			3173.00	
Stubb	1.00			3174.00	
Recorder	0.00	2342	Inside	3174.00	
Perforations	3.00			3177.00	
C.O. Sub	1.00			3178.00	
Blank Spacing	30.00			3208.00	
C.O. Sub	1.00			3209.00	
Perforations	16.00			3225.00	
Recorder	0.00	13222	Outside	3225.00	
Bullnose	5.00			3230.00	57.00 Bottom Packers & Anchor

Total Tool Length: 77.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil Inc.

Duncan #1

P.O.Box 1469
Plainfield IL. 60544

31-20s-11w Barton Ks

Job Ticket: 17884

DST#: 2

ATTN: Tod Morgenstern

Test Start: 2003.05.31 @ 14:13:00

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:

3000 ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	SOCM 4%o 96%m	0.074
0.00	75 ft. of gas in pipe	0.000

Total Length: 15.00 ft

Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

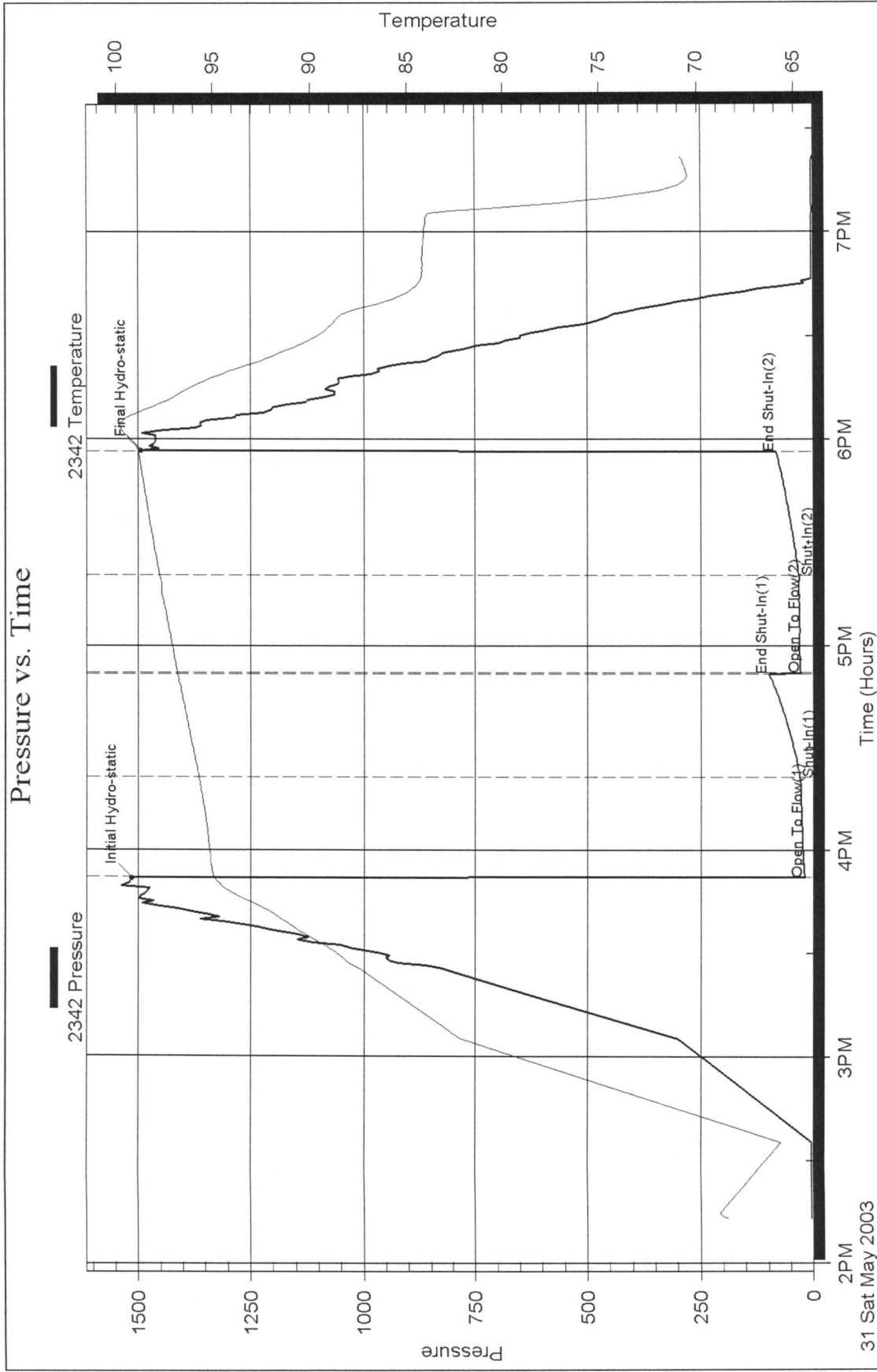
Serial #: 2342

Inside

Russell Oil Inc.

31-20s-11w Barton Ks

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Russell Oil Inc.**

P.O.Box 1469
Plainfield IL. 60544

ATTN: Tod Morgenstern

31-20s-11w Barton Ks

Duncan #1

Start Date: 2003.06.01 @ 10:40:18

End Date: 2003.06.01 @ 18:34:03

Job Ticket #: 17885 DST #: 3

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Russell Oil Inc.
P.O.Box 1469
Plainfield IL. 60544

Duncan #1

31-20s-11w Barton Ks

Job Ticket: 17885 **DST#: 3**

ATTN: Tod Morgenstern

Test Start: 2003.06.01 @ 10:40:18

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:53:48
Time Test Ended: 18:34:03

Test Type: Conventional Bottom Hole
Tester: Gary Pevoteaux
Unit No: 23

Interval: **3348.00 ft (KB) To 3380.00 ft (KB) (TVD)**
Total Depth: 3380.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1828.00 ft (KB)
1820.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 2342

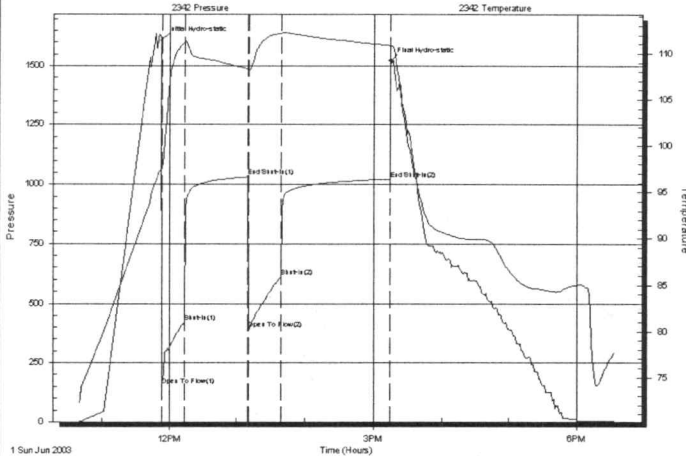
Inside

Press@RunDepth: 611.53 psig @ 3349.00 ft (KB)
Start Date: 2003.06.01 End Date: 2003.06.01
Start Time: 10:40:19 End Time: 18:34:03

Capacity: 7000.00 psig
Last Calib.: 2003.06.01
Time On Btm: 2003.06.01 @ 11:53:18
Time Off Btm: 2003.06.01 @ 15:14:18

TEST COMMENT: IF: Strong blow . B.O.B. in 75 secs.
IS: Weak blow . 1/2".
FF: Strong blow . B.O.B. in 70 secs.
FS: Weak blow . 1 - 3".

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1608.43	97.66	Initial Hydro-static
1	152.53	97.71	Open To Flow (1)
21	422.19	111.30	Shut-In(1)
77	1031.34	108.33	End Shut-In(1)
77	392.40	108.32	Open To Flow (2)
106	611.53	112.21	Shut-In(2)
201	1022.86	110.87	End Shut-In(2)
201	1520.72	110.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
300.00	Salt water with oil specs. Rw .174 ohms	2.02
0.00	@70 deg. F.	0.00
1010.00	O&WCG 38%o 20%w 42%g	14.17
190.00	MCO&G 10%m 25%o 65%g	2.67
70.00	MCO&G 20%m 20%o 60%g	0.98
0.00	1675 ft. of gas in pipe	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Russell Oil Inc.

Duncan #1

P.O.Box 1469
Plainfield IL. 60544

31-20s-11w Barton Ks

Job Ticket: 17885

DST#: 3

ATTN: Tod Morgenstern

Test Start: 2003.06.01 @ 10:40:18

Tool Information

Drill Pipe:	Length: 3091.00 ft	Diameter: 3.80 inches	Volume: 43.36 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 44.54 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3348.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	52.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3329.00	
S.I. Tool	5.00			3334.00	
HMV	5.00			3339.00	
Packer	4.00			3343.00	20.00 Bottom Of Top Packer
Packer	5.00			3348.00	
Stubb	1.00			3349.00	
Recorder	0.00	2342	Inside	3349.00	
Perforations	26.00			3375.00	
Recorder	0.00	13222	Outside	3375.00	
Bullnose	5.00			3380.00	32.00 Bottom Packers & Anchor
Total Tool Length:	52.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil Inc.

Duncan #1

P.O.Box 1469
Plainfield IL. 60544

31-20s-11w Barton Ks

Job Ticket: 17885

DST#: 3

ATTN: Tod Morgenstern

Test Start: 2003.06.01 @ 10:40:18

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:

41000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbf

Water Loss: 9.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
300.00	Salt water w with oil specs. Rw .174 ohms	2.022
0.00	@70 deg. F.	0.000
1010.00	O&WCG 38%o 20%w 42%g	14.168
190.00	MCO&G 10%m 25%o 65%g	2.665
70.00	MCO&G 20%m 20%o 60%g	0.982
0.00	1675 ft. of gas in pipe	0.000

Total Length: 1570.00 ft

Total Volume: 19.837 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

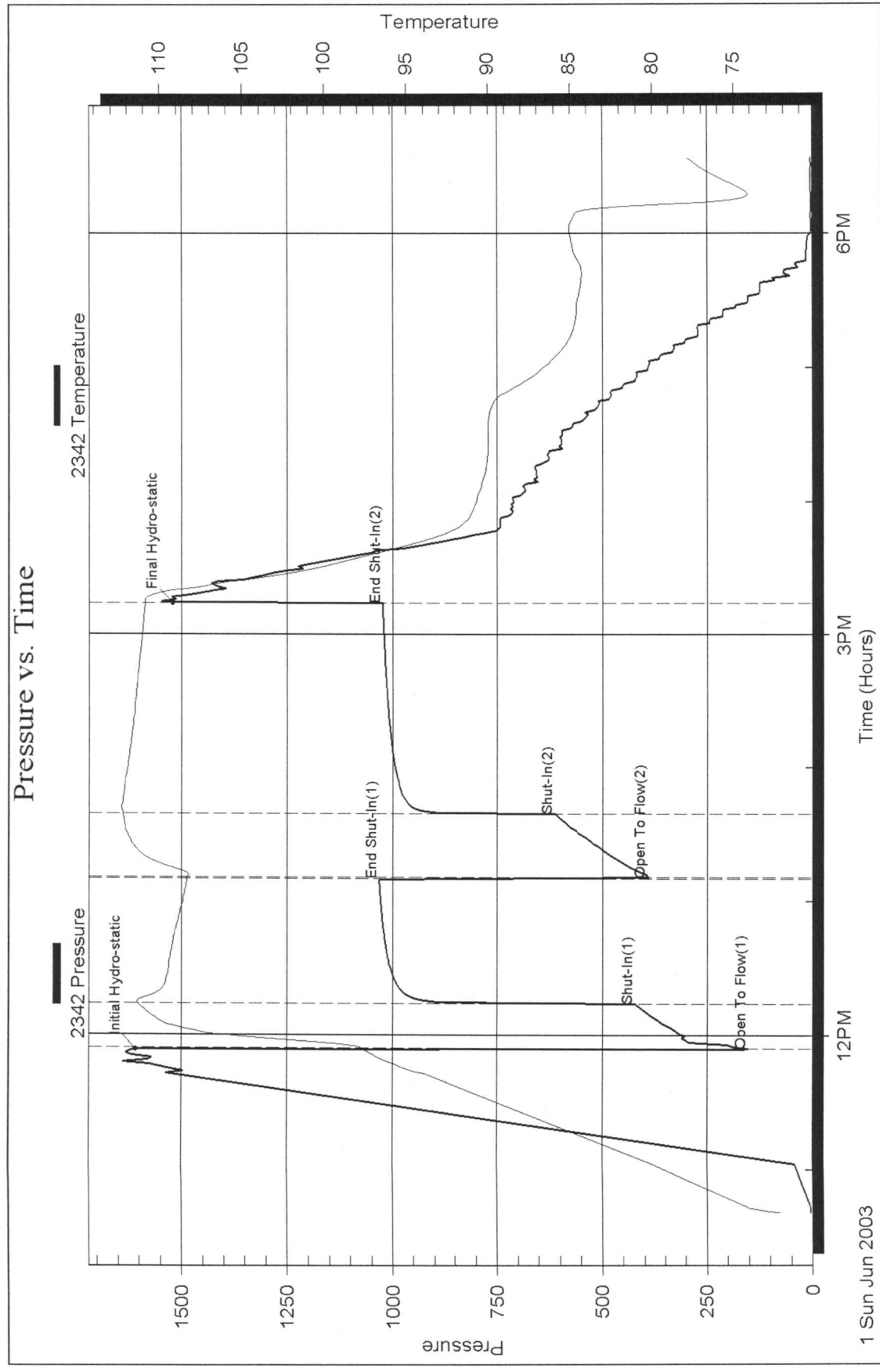
Serial #: 2342

Inside

Russell Oil Inc.

31-20s-11w Barton Ks

DST Test Number: 3





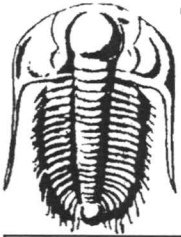
DRILL STEM TEST REPORT

Prepared for

Russell Oil, Inc.
PO Box 1469
Plainfield, IL 60544

Ducan #1
31-20S-11W
Barton Co Kansas

Trilobite Testing, Inc
PO Box 362 - Hays, Kansas - 67601
ph: 785-625-4778 fax: 785-625-5620
e-mail: trilobite@eaglecom.net



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT
 Russell Oil, Inc.
 PO Box 1469
 Plainfield, IL 60544

Well name#:	Ducan #1	Date:	6/2/2003
Location#:	31-20S-11W Barton Co Kansas	Ticket #:	17886
		DST#	4

General Informaion:

Formation:	Arbuckle	Test Type:	Conventional	BHT:	113
Interval:	3392-3399	Tester:	Gary Pevoteaux	OIL API:	
Total Depth:	3399	Elevation:	1828 ft(KB)	H2O Salinity:	
Hole Diameter:	7 7/8"		1820 ft(CF)		
Start Date:	6/2/2003	Tool Weight:	2100	Mud Type:	Gel Chem
Start Time:	0:35:00	Weight Set on Packers:	20000	Mud Weight:	8.9
Time tool opened:	2:20:00	Weight to Pull Loose:	70000	Viscosity:	49
Time Off Btm:	4:54:00	Initial String Weight:	52000	Water Loss:	10
End Date:	6/2/03	Final String Weight:	62000	Resistivity;	
End Time:	7:47:00	Drill Pipe Length:	3154	Salinity:	
		Drill Collar Length:			
		Wt. Pipe Length:			

Test Comment:	IF: Strong blow. BOB in 20 seconds. ISI: No blow. FF: Stong blow. BOB in 80 seconds. FSI: No blow.
---------------	---

Recovery Length(ft):	20 Salt water w/ oil specks. 2400 Salt water Trace of GIP
----------------------	---

Gas Volume Report

Recorder #:	13222	Min:	Ins. Of water PSIG	Orifice size	MCF/D
Pressure Summary:	Time:(min)				
Initial Hydro-static:	1627				
Open to Flow (1):	636	15			
Shut-in (1):	896	45			
End Shut-in (1):	1026				
Open to Flow (2):	986	30			
Shut-in (2):	1021	60			
End Shut-in (2):	1036				
Final Hydro-static:	1586				