

15-141-20389

23-10s-15w

IND

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TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Scheck Oil Operations Inc**

225 N Main
Russell KS 67665

ATTN: Tim Scheck

23 10 15 Osbone KS

Ruggels # A-9

Start Date: 2008.05.25 @ 05:15:11

End Date: 2008.05.25 @ 12:16:11

Job Ticket #: 31932 DST #: 1

15-141-20389-0000

Scheck Oil Operations Inc

Ruggels # A-9

23 10 15 Osbone KS

DST # 1

Toronto/A

LK

2008.05.25

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Scheck Oil Operations Inc
225 N Main
Russell KS 67665
ATTN: Tim Scheck

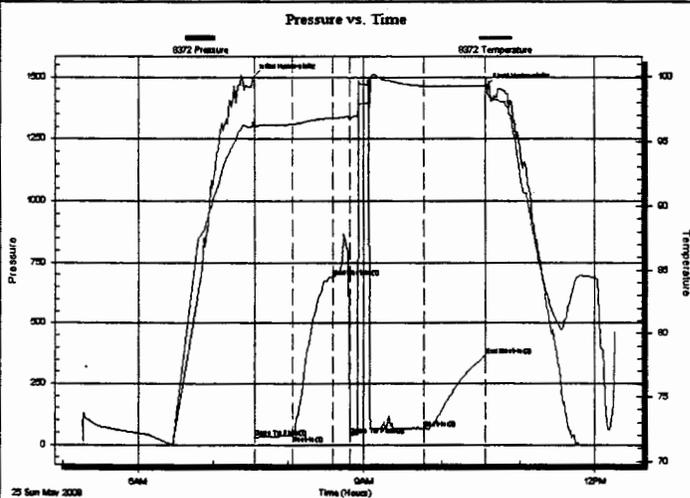
Ruggels # A-9
23 10 15 Osborne KS
Job Ticket: 31932 DST#: 1
Test Start: 2008.05.25 @ 05:15:11

GENERAL INFORMATION:

Formation: **Toronto/A LK**
Deviated: **No Whipstock:** ft (KB)
Time Tool Opened: 07:33:41
Time Test Ended: 12:16:11
Test Type: **Conventional Bottom Hole**
Tester: **Dan Bangle**
Unit No: **38**
Interval: **2990.00 ft (KB) To 3050.00 ft (KB) (TVD)**
Reference Elevations: **1878.00 ft (KB)**
1870.00 ft (CF)
Total Depth: **3050.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Good**
KB to GR/CF: **8.00 ft**

Serial #: 8372 **Inside**
Press@RunDepth: **65.56 psig @ 2993.00 ft (KB)** Capacity: **7000.00 psig**
Start Date: **2008.05.25** End Date: **2008.05.25** Last Calib.: **2008.05.25**
Start Time: **05:15:12** End Time: **12:16:11** Time On Btrr: **2008.05.25 @ 07:31:41**
Time Off Btrr: **2008.05.25 @ 10:33:41**

TEST COMMENT: IF Slid tool 10' to bottom tool slid t/o test weak building to 1/2"
FF Slid tool 10' made connection weak building to 3/4"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1498.16	96.20	Initial Hydro-static
2	29.54	96.10	Open To Flow (1)
33	37.37	96.29	Shut-in(1)
65	690.45	96.77	End Shut-in(1)
78	39.36	96.65	Open To Flow (2)
134	65.56	99.25	Shut-in(2)
182	362.25	99.26	End Shut-in(2)
182	1460.99	99.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	DM	0.91

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Scheck Oil Operations Inc

Ruggels # A-9

225 N Main
Russell KS 67665

23 10 15 Osbone KS

Job Ticket: 31932

DST#: 1

ATTN: Tim Scheck

Test Start: 2008.05.25 @ 05:15:11

Tool Information

Drill Pipe:	Length: 2992.00 ft	Diameter: 3.80 inches	Volume: 41.97 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: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 41.97 bbl</u>	Tool Chased 20.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 32000.00 lb
Depth to Top Packer:	2990.00 ft			Final 32000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	81.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:
Tool 20' from bottom on IF

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2970.00	
Shut In Tool	5.00			2975.00	
Hydraulic tool	5.00			2980.00	
Packer	5.00			2985.00	21.00 Bottom Of Top Packer
Packer	5.00			2990.00	
Stubb	1.00			2991.00	
Perforations	1.00			2992.00	
Change Over Sub	1.00			2993.00	
Recorder	0.00	8372	Inside	2993.00	
Recorder	0.00	8368	Outside	2993.00	
Drill Pipe	30.00			3023.00	
Change Over Sub	1.00			3024.00	
Perforations	23.00			3047.00	
Bullnose	3.00			3050.00	60.00 Bottom Packers & Anchor

Total Tool Length: 81.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Scheck Oil Operations Inc

Ruggels # A-9

225 N Main
Russell KS 67665

23 10 15 Osbone KS

Job Ticket: 31932 **DST#: 1**

ATTN: Tim Scheck

Test Start: 2008.05.25 @ 05:15:11

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: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	DM	0.912

Total Length: 65.00 ft

Total Volume: 0.912 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

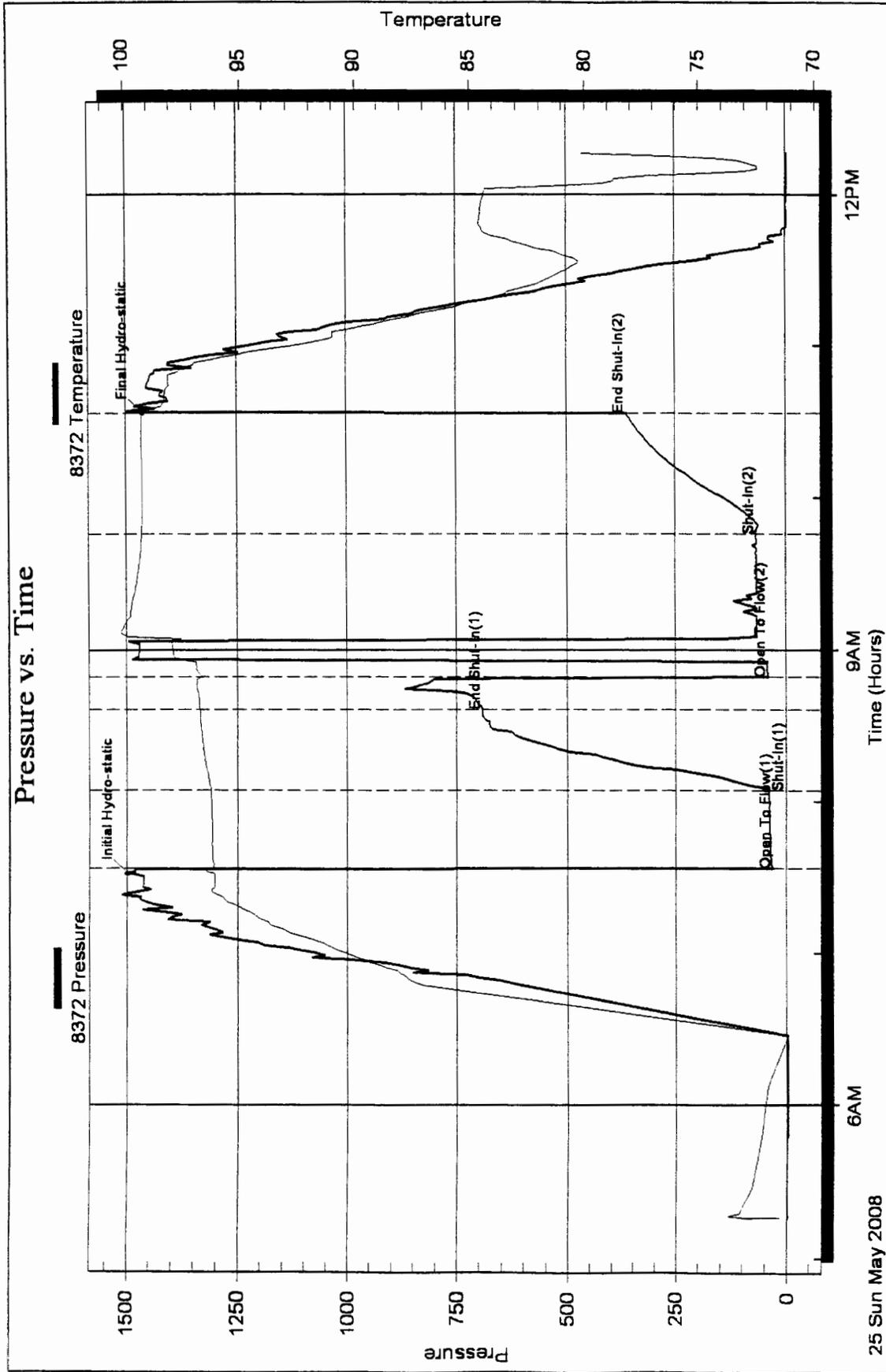
Serial #:

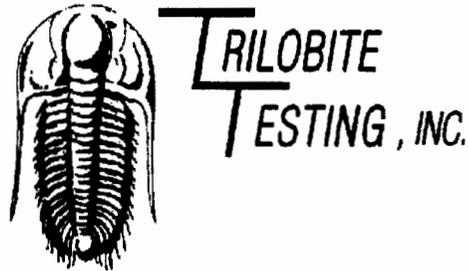
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Scheck Oil Operations Inc**

225 N Main
Russell KS 67665

ATTN: Tim Scheck

23 10 15 Osbone KS

Ruggels # A-9

Start Date: 2008.05.25 @ 22:20:18

End Date: 2008.05.26 @ 05:13:18

Job Ticket #: 31933 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Scheck Oil Operations Inc

Ruggels # A-9

23 10 15 Osbone KS

DST # 2

B

LKC

2008.05.25



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Scheck Oil Operations Inc

Ruggels # A-9

225 N Main
Russell KS 67665

23 10 15 Osbone KS

Job Ticket: 31933

DST#: 2

ATTN: Tim Scheck

Test Start: 2008.05.25 @ 22:20:18

Tool Information

Drill Pipe:	Length: 3051.00 ft	Diameter: 3.80 inches	Volume: 42.80 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: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 35000.00 lb
			<u>Total Volume: 42.80 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 32000.00 lb
Depth to Top Packer:	3059.00 ft			Final 32000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	21.00 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			3039.00	
Shut In Tool	5.00			3044.00	
Hydraulic tool	5.00			3049.00	
Packer	5.00			3054.00	21.00 Bottom Of Top Packer
Packer	5.00			3059.00	
Stubb	1.00			3060.00	
Recorder	0.00	8372	Inside	3060.00	
Recorder	0.00	8368	Outside	3060.00	
Perforations	17.00			3077.00	
Bullnose	3.00			3080.00	21.00 Bottom Packers & Anchor
Total Tool Length:	42.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Scheck Oil Operations Inc

Ruggels # A-9

225 N Main
Russell KS 67665

23 10 15 Osbone KS

Job Ticket: 31933 **DST#: 2**

ATTN: Tim Scheck

Test Start: 2008.05.25 @ 22:20:18

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:	ppm
Viscosity: 47.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.59 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1800.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

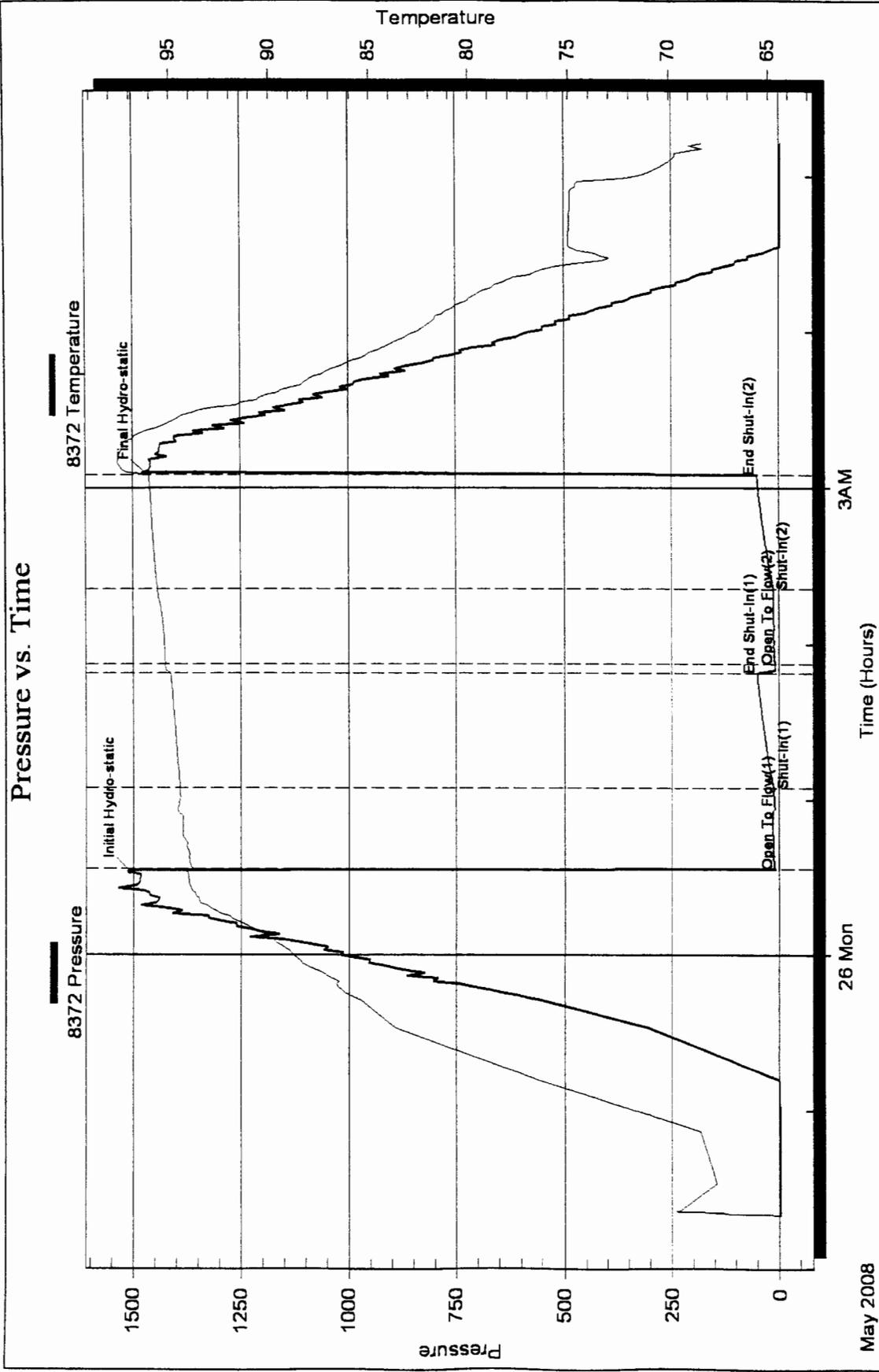
Length ft	Description	Volume bbl
25.00	DMw/show O in tool	0.351

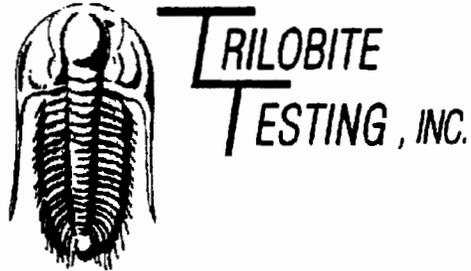
Total Length: 25.00 ft Total Volume: 0.351 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Scheck Oil Operations Inc**

225 N Main
Russell KS 67665

ATTN: Tim Scheck

23 10 15 Osbone KS

Ruggels # A-9

Start Date: 2008.05.26 @ 14:40:54

End Date: 2008.05.26 @ 20:52:24

Job Ticket #: 31934 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Scheck Oil Operations Inc

Ruggels # A-9

23 10 15 Osbone KS

DST # 3

C

LKC

2008.05.26



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Scheck Oil Operations Inc
225 N Main
Russell KS 67665
ATTN: Tim Scheck

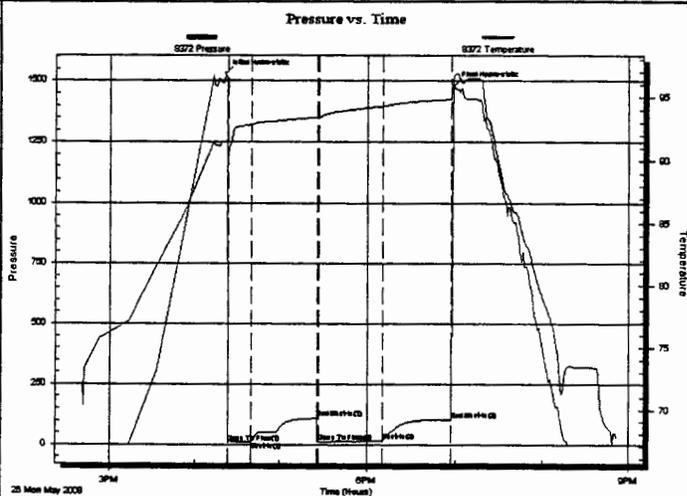
Ruggels # A-9
23 10 15 Osbone KS
Job Ticket: 31934 **DST#: 3**
Test Start: 2008.05.26 @ 14:40:54

GENERAL INFORMATION:

Formation: **C LKC**
Deviated: **No Whipstock** ft (KB)
Time Tool Opened: 16:23:24
Time Test Ended: 20:52:24
Test Type: **Conventional Bottom Hole**
Tester: **Dan Bangle**
Unit No: **38**
Interval: **3078.00 ft (KB) To 3100.00 ft (KB) (TVD)**
Reference Elevations: **1878.00 ft (KB)**
Total Depth: **3100.00 ft (KB) (TVD)** **1870.00 ft (CF)**
Hole Diameter: **7.88 inches** Hole Condition: **Good** **KB to GR/CF: 8.00 ft**

Serial #: 8372 **Inside**
Press@RunDepth: **14.41 psig @ 3080.00 ft (KB)** Capacity: **7000.00 psig**
Start Date: **2008.05.26** End Date: **2008.05.26** Last Calib.: **2008.05.26**
Start Time: **14:40:55** End Time: **20:52:24** Time On Btrr: **2008.05.26 @ 16:21:24**
Time Off Btrr: **2008.05.26 @ 18:58:24**

TEST COMMENT: **IF Strong BB in 15 min**
FF Strong BB in 10 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1529.89	91.48	Initial Hydro-static
2	8.99	90.40	Open To Flow (1)
19	10.88	92.83	Shut-In(1)
65	108.78	93.39	End Shut-In(1)
66	9.79	93.35	Open To Flow (2)
109	14.41	94.27	Shut-In(2)
156	103.03	94.83	End Shut-In(2)
157	1479.86	96.61	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
25.00	OCGsyM 5%G 25%O 70%M	0.35
0.00	515 GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Scheck Oil Operations Inc

Ruggels # A-9

225 N Main
Russell KS 67665

23 10 15 Osbone KS

Job Ticket: 31934 **DST#: 3**

ATTN: Tim Scheck

Test Start: 2008.05.26 @ 14:40:54

Tool Information

Drill Pipe:	Length: 3082.00 ft	Diameter: 3.80 inches	Volume: 43.23 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: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 35000.00 lb
			<u>Total Volume: 43.23 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 32000.00 lb
Depth to Top Packer:	3078.00 ft			Final 32000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	44.00 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			3058.00	
Shut In Tool	5.00			3063.00	
Hydraulic tool	5.00			3068.00	
Packer	5.00			3073.00	21.00 Bottom Of Top Packer
Packer	5.00			3078.00	
Stubb	1.00			3079.00	
Perforations	1.00			3080.00	
Recorder	0.00	8372	Inside	3080.00	
Recorder	0.00	8368	Outside	3080.00	
Perforations	18.00			3098.00	
Bullnose	3.00			3101.00	23.00 Bottom Packers & Anchor

Total Tool Length: 44.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Scheck Oil Operations Inc

Ruggels # A-9

225 N Main
Russell KS 67665

23 10 15 Osbone KS

Job Ticket: 31934

DST#: 3

ATTN: Tim Scheck

Test Start: 2008.05.26 @ 14:40:54

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: 39.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.39 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 bbbl
25.00	OCGsyM 5%G 25%O 70%M	0.351
0.00	515 GIP	0.000

Total Length: 25.00 ft

Total Volume: 0.351 bbl

Num Fluid Samples: 0

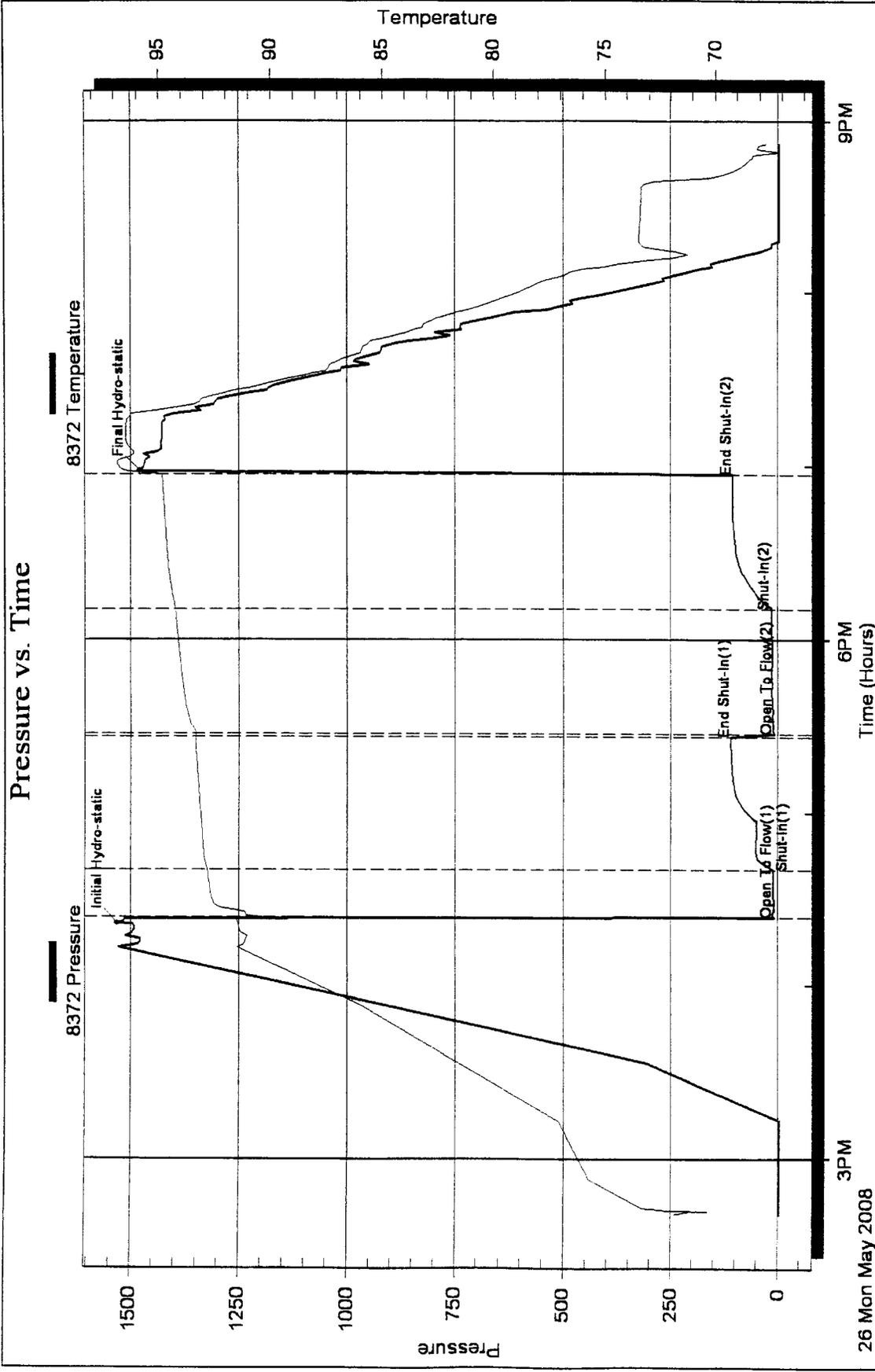
Num Gas Bombs: 0

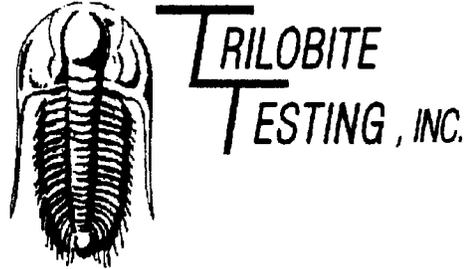
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Scheck Oil Operations Inc**

225 N Main
Russell KS 67665

ATTN: Tim Scheck

23 10 15 Osbone KS

Ruggels # A-9

Start Date: 2008.05.27 @ 05:41:49

End Date: 2008.05.27 @ 11:44:49

Job Ticket #: 31935 DST #: 4

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Scheck Oil Operations Inc

Ruggels # A-9

225 N Main
Russell KS 67665

23 10 15 Osbone KS

Job Ticket: 31935 **DST#: 4**

ATTN: Tim Scheck

Test Start: 2008.05.27 @ 05:41:49

GENERAL INFORMATION:

Formation: **G LKC**
 Deviated: **No Whipstock** ft (KB)
 Time Tool Opened: 07:42:19
 Time Test Ended: 11:44:49

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

Interval: **3135.00 ft (KB) To 3143.00 ft (KB) (TVD)**
 Total Depth: 3143.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1878.00 ft (KB)
 1870.00 ft (CF)
 KB to GR/CF: 8.00 ft

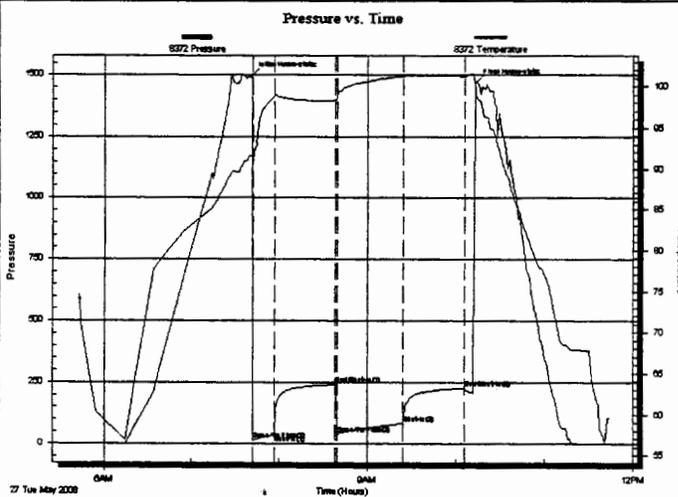
Serial #: 8372

Inside

Press@RunDepth: 82.11 psig @ 3136.00 ft (KB)
 Start Date: 2008.05.27 End Date: 2008.05.27
 Start Time: 05:41:50 End Time: 11:44:49

Capacity: 7000.00 psig
 Last Calib.: 2008.05.27
 Time On Btrr: 2008.05.27 @ 07:41:49
 Time Off Btrr: 2008.05.27 @ 10:13:19

TEST COMMENT: IF Strong building to 11 "
 FF Strong BB in 35 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1498.51	91.61	Initial Hydro-static
1	14.82	90.98	Open To Flow (1)
15	36.01	98.81	Shut-In(1)
57	241.28	98.34	End Shut-In(1)
58	39.57	98.76	Open To Flow (2)
103	82.11	101.22	Shut-In(2)
144	227.14	101.21	End Shut-In(2)
152	1470.12	99.61	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
155.00	MWw/O spots on top	2.17

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Scheck Oil Operations Inc

Ruggels # A-9

225 N Main
Russell KS 67665

23 10 15 Osbone KS

Job Ticket: 31935

DST#: 4

ATTN: Tim Scheck

Test Start: 2008.05.27 @ 05:41:49

Tool Information

Drill Pipe:	Length: 3126.00 ft	Diameter: 3.80 inches	Volume: 43.85 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: 20000.00 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: 43.85 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 32000.00 lb
Depth to Top Packer:	3135.00 ft			Final 34000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	8.00 ft			
Tool Length:	29.00 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			3115.00	
Shut In Tool	5.00			3120.00	
Hydraulic tool	5.00			3125.00	
Packer	5.00			3130.00	21.00 Bottom Of Top Packer
Packer	5.00			3135.00	
Stubb	1.00			3136.00	
Recorder	0.00	8372	Inside	3136.00	
Recorder	0.00	8368	Outside	3136.00	
Perforations	4.00			3140.00	
Bullnose	3.00			3143.00	8.00 Bottom Packers & Anchor
Total Tool Length:	29.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Scheck Oil Operations Inc

Ruggels # A-9

225 N Main
Russell KS 67665

23 10 15 Osbone KS

Job Ticket: 31935 **DST#: 4**

ATTN: Tim Scheck

Test Start: 2008.05.27 @ 05:41:49

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API: deg API

Mud Weight: lb/gal

Cushion Length: ft

Water Salinity: 90000 ppm

Viscosity: sec/qt

Cushion Volume: bbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
155.00	MWw/O spots on top	2.174

Total Length: 155.00 ft Total Volume: 2.174 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW .08 @ 80 =90000ppm

Pressure vs. Time

