



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**162336**  
Component  
**Diesel Engine**  
Fluid  
**{not provided} (--- GAL)**

### RECOMMENDATION

We advise that you check the fuel injection system. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>IL06101386</b>	IL05902972	---
Sample Date		Client Info		<b>14 Feb 2024</b>	27 Jun 2023	---
Machine Age	mls	Client Info		<b>0</b>	40545	---
Oil Age	mls	Client Info		<b>30000</b>	0	---
Filter Age	mls	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	N/A	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>68</b>	▲ 141	---
Chromium	ppm	ASTM D5185m	>20	<b>3</b>	3	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185m	>20	<b>8</b>	● 16	---
Lead	ppm	ASTM D5185m	>40	<b>7</b>	11	---
Copper	ppm	ASTM D5185m	>330	<b>4</b>	26	---
Tin	ppm	ASTM D5185m	>15	<b>2</b>	5	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

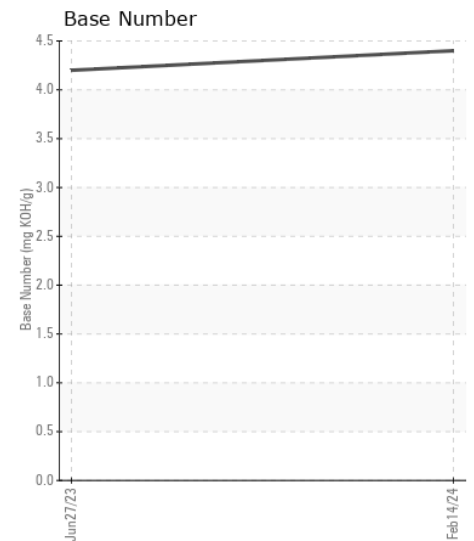
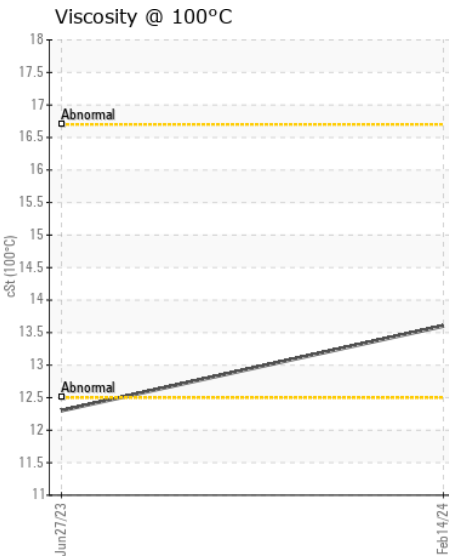
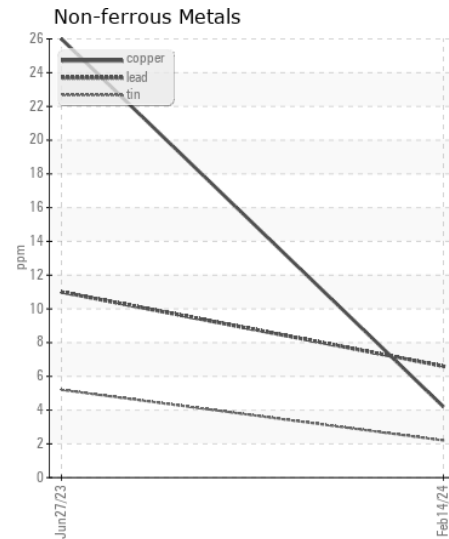
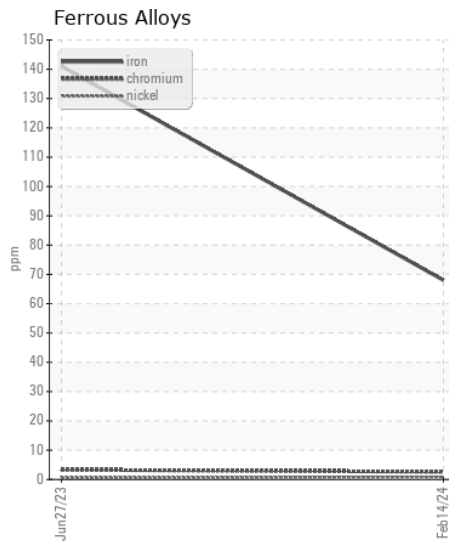
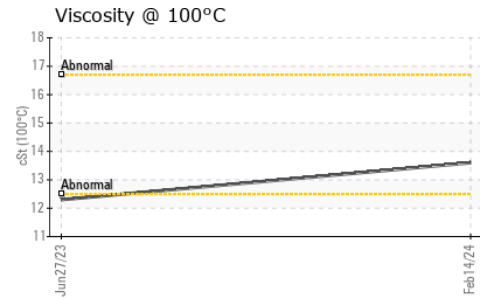
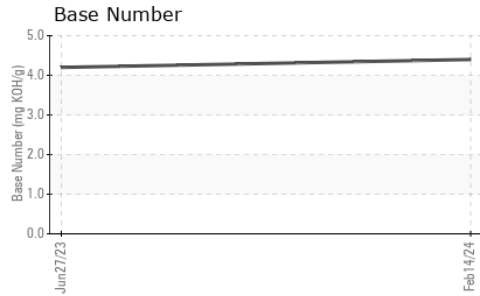
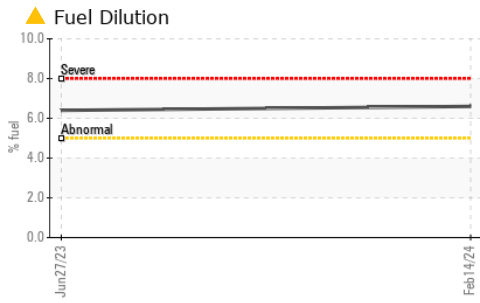
There is a moderate amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>10</b>	▲ 35	---
Potassium	ppm	ASTM D5185m	>20	<b>13</b>	30	---
Fuel	%	ASTM D3524	>5	▲ <b>6.6</b>	▲ 6.4	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.8</b>	0.9	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>14.7</b>	16.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>27.9</b>	30.1	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

### FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>1</b>	5	---
Boron	ppm	ASTM D5185m		<b>4</b>	40	---
Barium	ppm	ASTM D5185m		<b>2</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>58</b>	60	---
Manganese	ppm	ASTM D5185m		<b>2</b>	6	---
Magnesium	ppm	ASTM D5185m		<b>743</b>	432	---
Calcium	ppm	ASTM D5185m		<b>960</b>	1691	---
Phosphorus	ppm	ASTM D5185m		<b>861</b>	889	---
Zinc	ppm	ASTM D5185m		<b>1053</b>	1159	---
Sulfur	ppm	ASTM D5185m		<b>2593</b>	3098	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>32.5</b>	35.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>4.4</b>	4.2	---
Visc @ 100°C	cSt	ASTM D445		<b>13.6</b>	▲ 12.3	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : IL06101386

**Lab Number** : 06101386

**Unique Number** : 10899616

**Test Package** : FLEET ( Additional Tests: PercentFuel )

**Received** : 27 Feb 2024

**Tested** : 29 Feb 2024

**Diagnosed** : 29 Feb 2024 - Jonathan Hester

**RUSH TRUCK LEASING - CINCINNATI IDEALEASE**

11777 HIGHWAY DRIVE

CINCINNATI, OH

US 45241

Contact: ROBERT BAIER

baierr@rushenterprises.com

T: (513)657-7901

F: (513)733-0537

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)