



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**7366R**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL 15W40 (--- QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>IL06214154</b>	IL0028041	---
Sample Date		Client Info		<b>15 May 2024</b>	31 Jan 2023	---
Machine Age	mls	Client Info		<b>40000</b>	49970	---
Oil Age	mls	Client Info		<b>0</b>	49970	---
Filter Age	mls	Client Info		<b>0</b>	49970	---
Oil Changed		Client Info		<b>N/A</b>	Changed	---
Filter Changed		Client Info		<b>N/A</b>	Changed	---
Sample Status				<b>NORMAL</b>	ATTENTION	---

### WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>25</b>	58	---
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	3	---
Nickel	ppm	ASTM D5185m	>4	<b>0</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>9</b>	31	---
Lead	ppm	ASTM D5185m	>40	<b>5</b>	12	---
Copper	ppm	ASTM D5185m	>330	<b>6</b>	26	---
Tin	ppm	ASTM D5185m	>15	<b>2</b>	5	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

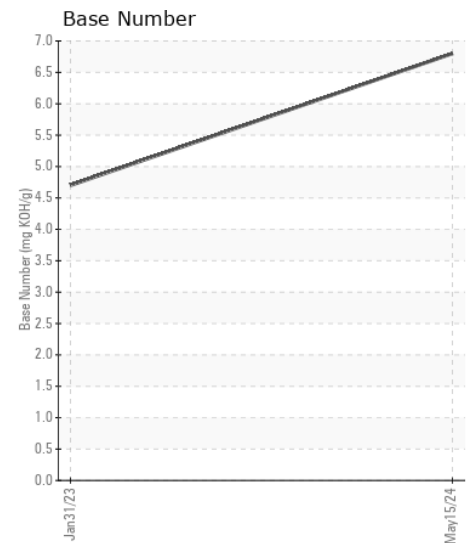
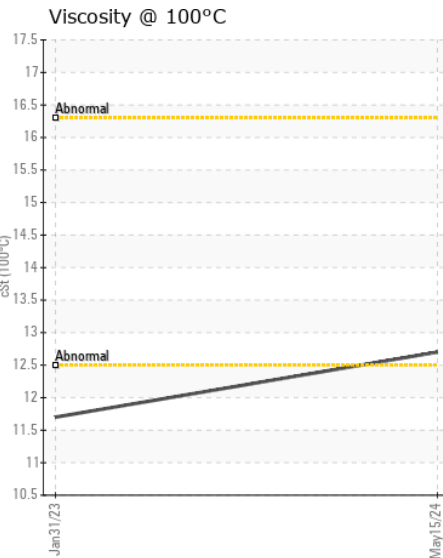
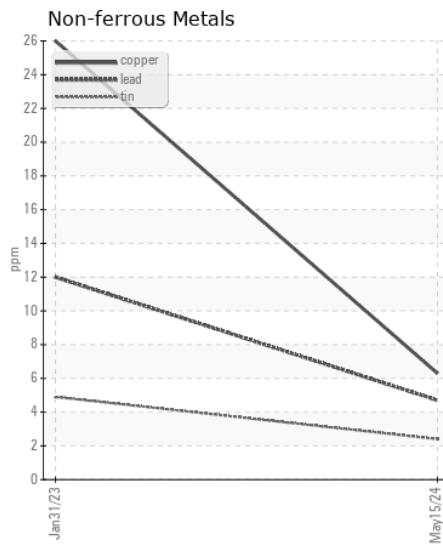
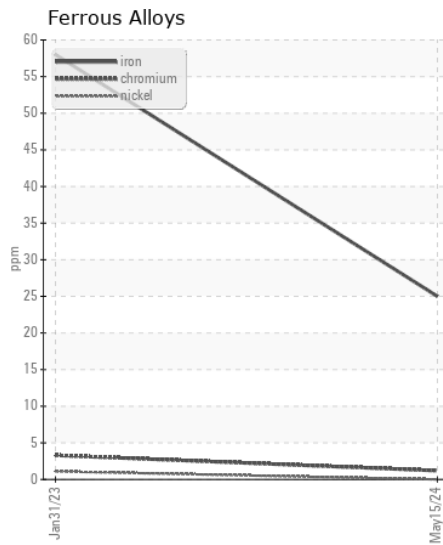
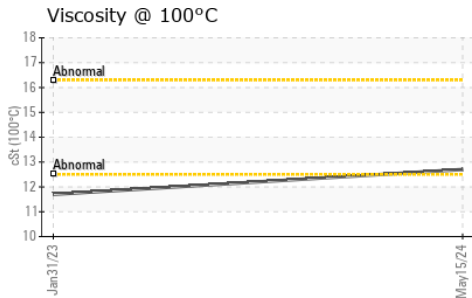
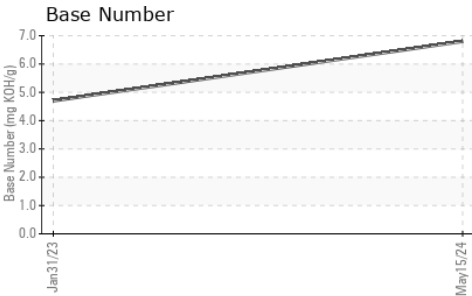
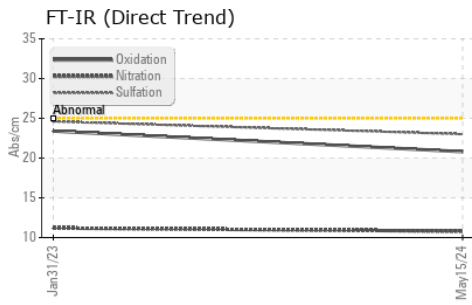
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>14</b>	41	---
Potassium	ppm	ASTM D5185m	>20	<b>17</b>	72	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.8</b>	11.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.0</b>	24.6	---
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	>118	<b>3</b>	4	---
Boron	ppm	ASTM D5185m		<b>8</b>	25	---
Barium	ppm	ASTM D5185m		<b>0</b>	4	---
Molybdenum	ppm	ASTM D5185m		<b>60</b>	66	---
Manganese	ppm	ASTM D5185m		<b>2</b>	7	---
Magnesium	ppm	ASTM D5185m		<b>924</b>	504	---
Calcium	ppm	ASTM D5185m		<b>1166</b>	2002	---
Phosphorus	ppm	ASTM D5185m		<b>1070</b>	1007	---
Zinc	ppm	ASTM D5185m		<b>1239</b>	1345	---
Sulfur	ppm	ASTM D5185m		<b>3544</b>	3239	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.8</b>	23.4	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.8</b>	4.7	---
Visc @ 100°C	cSt	ASTM D445		<b>12.7</b>	11.7	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL06214154  
**Lab Number** : 06214154  
**Unique Number** : 11087018  
**Test Package** : FLEET

**Received** : 18 Jun 2024  
**Tested** : 20 Jun 2024  
**Diagnosed** : 20 Jun 2024 - Wes Davis

**RUSH TRUCK CENTER - CHICAGO IDEALEASE**  
 4655 SOUTH CENTRAL AVENUE  
 CHICAGO, IL  
 US 60638  
 Contact: BRUCE VAUGHN  
 VaughnB@RushEnterprises.com

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)

F: (708)496-8818