



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**7716L**  
Component  
**Front 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>IL0032481</b>	IL0028912	---
Sample Date		Client Info		<b>21 Mar 2024</b>	17 Mar 2023	---
Machine Age	mls	Client Info		<b>35123</b>	23213	---
Oil Age	mls	Client Info		<b>40000</b>	23213	---
Filter Age	mls	Client Info		<b>40000</b>	23213	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Not Changed</b>	Not Changed	---
Sample Status				<b>NORMAL</b>	MARGINAL	---

### WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>36</b>	100	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	9	---
Lead	ppm	ASTM D5185m	>40	<b>3</b>	6	---
Copper	ppm	ASTM D5185m	>330	<b>4</b>	36	---
Tin	ppm	ASTM D5185m	>15	<b>1</b>	3	---
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

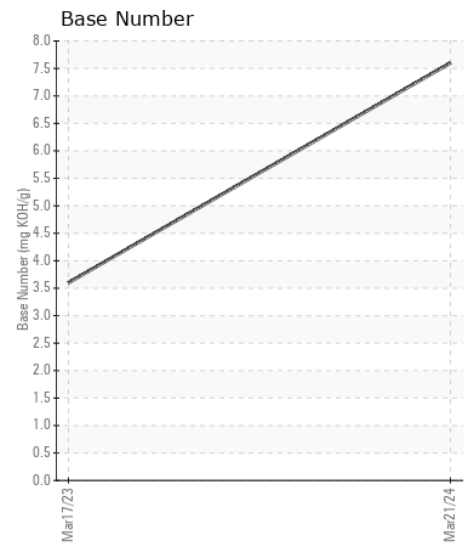
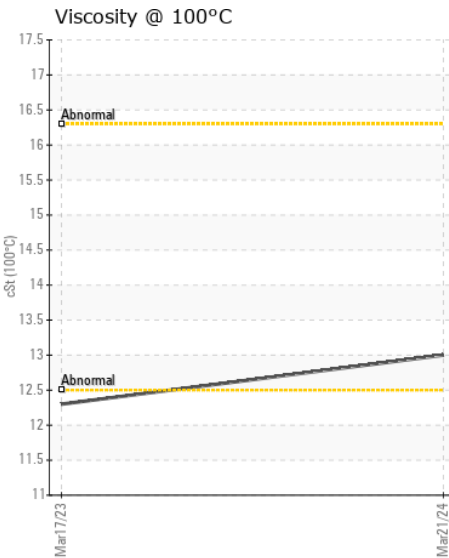
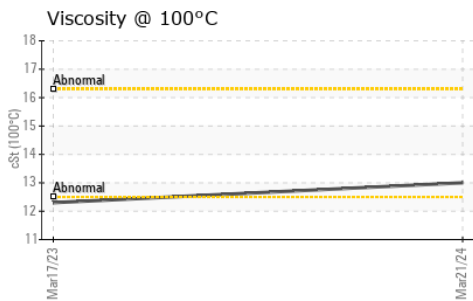
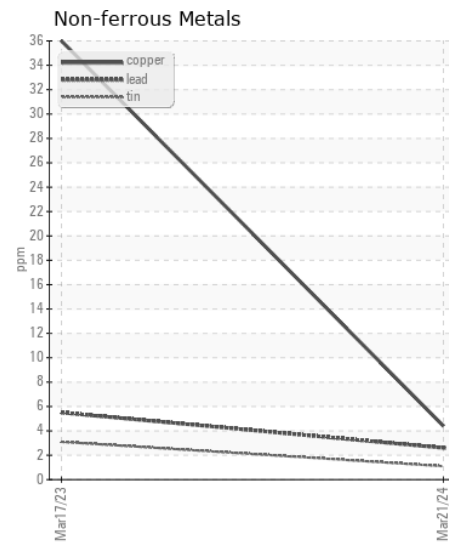
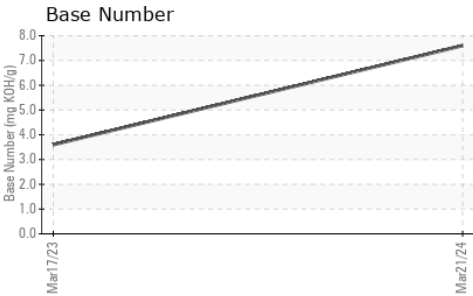
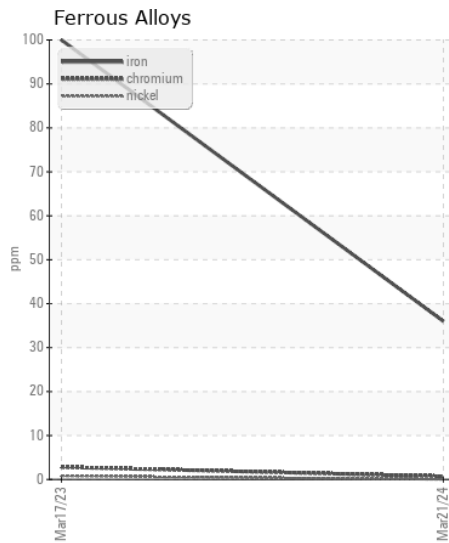
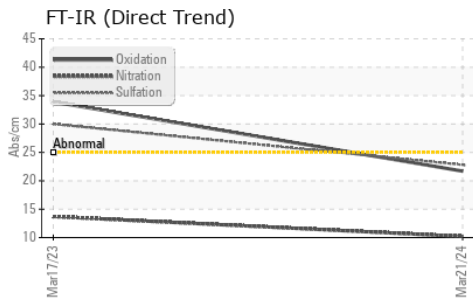
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>11</b>	43	---
Potassium	ppm	ASTM D5185m	>20	<b>11</b>	29	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	▲ 3.0	---
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>10.2</b>	13.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.8</b>	30.0	---
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>2</b>	3	---
Boron	ppm	ASTM D5185m		<b>7</b>	31	---
Barium	ppm	ASTM D5185m		<b>0</b>	2	---
Molybdenum	ppm	ASTM D5185m		<b>61</b>	64	---
Manganese	ppm	ASTM D5185m		<b>1</b>	5	---
Magnesium	ppm	ASTM D5185m		<b>891</b>	420	---
Calcium	ppm	ASTM D5185m		<b>1139</b>	1754	---
Phosphorus	ppm	ASTM D5185m		<b>1075</b>	965	---
Zinc	ppm	ASTM D5185m		<b>1250</b>	1216	---
Sulfur	ppm	ASTM D5185m		<b>3691</b>	2773	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.7</b>	33.9	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.6</b>	3.6	---
Visc @ 100°C	cSt	ASTM D445		<b>13.0</b>	▲ 12.3	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL0032481  
**Lab Number** : 06175157  
**Unique Number** : 11021210  
**Test Package** : FLEET

**Received** : 10 May 2024  
**Tested** : 11 May 2024  
**Diagnosed** : 11 May 2024 - Wes Davis

**RUSH TRUCK CENTER - CHICAGO IDEALEASE**  
 4655 SOUTH CENTRAL AVENUE  
 CHICAGO, IL  
 US 60638

Contact: MIKE LINLEY  
 linleym@rushtruckcenters.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)

T: (708)496-7500  
 F: (708)496-8818