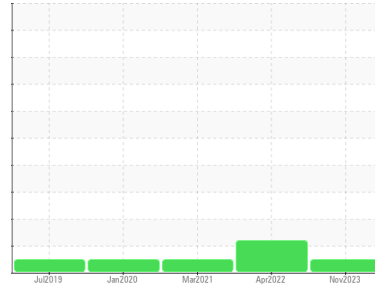




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**4163L**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### 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.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>IL0034350</b>	IL0023837	IL0015292
Sample Date	Client Info		<b>21 Nov 2023</b>	28 Apr 2022	10 Mar 2021
Machine Age	mls	Client Info	<b>243155</b>	221774	196342
Oil Age	mls	Client Info	<b>15000</b>	15000	10000
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	ABNORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>60</b>	178	76
Chromium	ppm	ASTM D5185m >20	<b>1</b>	4	2
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	1	1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>8</b>	29	27
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >330	<b>2</b>	13	11
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	1	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>5</b>	38	35
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>63</b>	51	8
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	2	1
Magnesium	ppm	ASTM D5185m	<b>1034</b>	738	679
Calcium	ppm	ASTM D5185m	<b>1145</b>	2291	1256
Phosphorus	ppm	ASTM D5185m	<b>1012</b>	998	620
Zinc	ppm	ASTM D5185m	<b>1296</b>	1211	762
Sulfur	ppm	ASTM D5185m	<b>3078</b>	2432	2020

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	15	9
Sodium	ppm	ASTM D5185m >118	<b>&lt;1</b>	6	5
Potassium	ppm	ASTM D5185m >20	<b>4</b>	5	8

## INFRA-RED

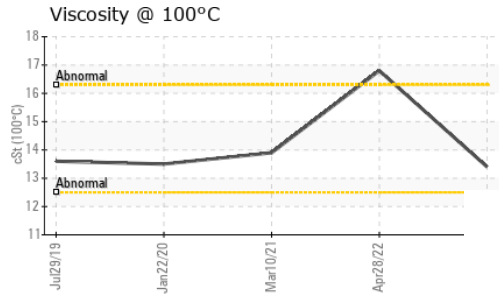
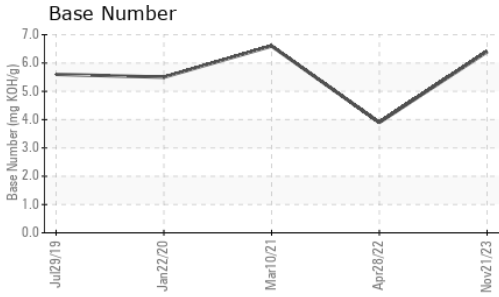
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.6</b>	1.2	1.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.1</b>	24.3	15.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>24.8</b>	43.3	29.3

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>25.4</b>	60.9	25.9
Base Number (BN)	mg KOH/g	ASTM D2896	<b>6.4</b>	▲ 3.9	6.6



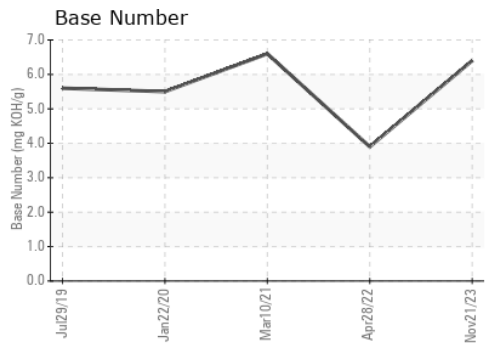
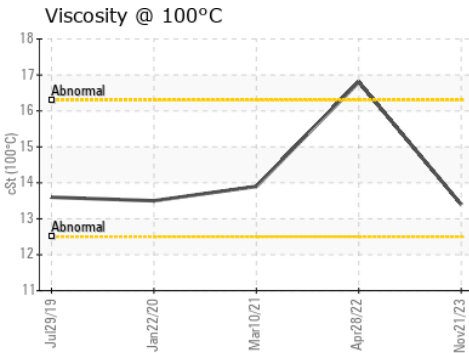
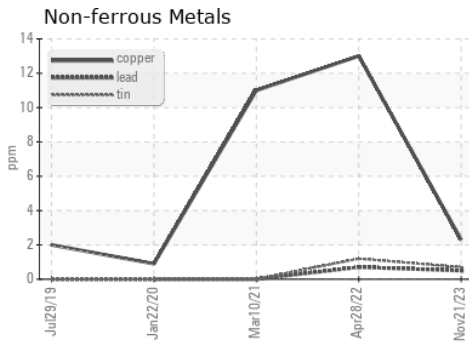
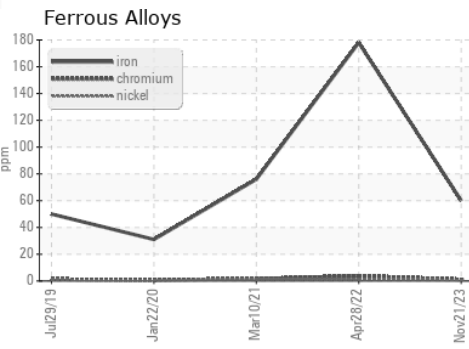
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	<b>13.4</b>	16.8	13.9

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL0034350      **Received** : 06 Dec 2023  
**Lab Number** : **06026037**      **Diagnosed** : 07 Dec 2023  
**Unique Number** : 10775828      **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**RUSH TRUCK CENTER - CHICAGO IDEALEASE**  
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 F: (708)496-8818

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)