



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**459544**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL 15W40 (44 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RPL06220789</b>	RPL05988959	RPL05919652
Sample Date		Client Info		<b>17 Jun 2024</b>	17 Oct 2023	23 Jul 2023
Machine Age	mls	Client Info		<b>298918</b>	257190	247452
Oil Age	mls	Client Info		<b>20000</b>	20000	20000
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	<b>20</b>	8	49
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	4	10
Lead	ppm	ASTM D5185m	>150	<b>&lt;1</b>	<1	21
Copper	ppm	ASTM D5185m	>90	<b>&lt;1</b>	<1	4
Tin	ppm	ASTM D5185m	>5	<b>0</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

There is no indication of any contamination in the oil.

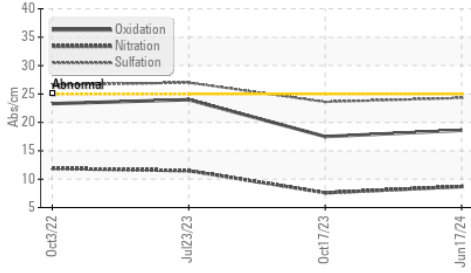
Silicon	ppm	ASTM D5185m	>35	<b>5</b>	7	12
Potassium	ppm	ASTM D5185m	>20	<b>7</b>	4	32
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	0.8
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	<b>0.3</b>	0.2	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.7</b>	7.6	11.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.3</b>	23.6	27.0
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

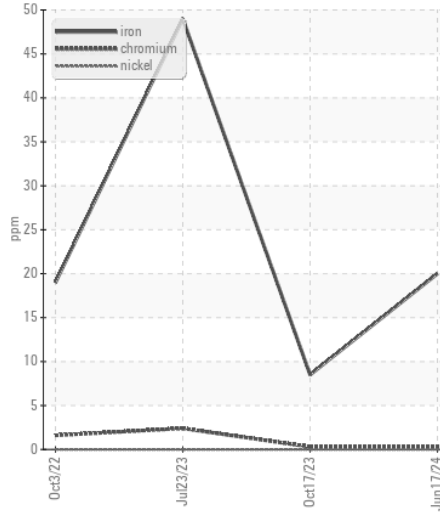
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>118	<b>&lt;1</b>	2	3
Boron	ppm	ASTM D5185m		<b>233</b>	265	17
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>126</b>	115	12
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>656</b>	674	806
Calcium	ppm	ASTM D5185m		<b>1528</b>	1544	1507
Phosphorus	ppm	ASTM D5185m		<b>658</b>	560	761
Zinc	ppm	ASTM D5185m		<b>877</b>	850	923
Sulfur	ppm	ASTM D5185m		<b>2396</b>	2542	3617
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.6</b>	17.5	24.0
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.3</b>	8.5	4.3
Visc @ 100°C	cSt	ASTM D445		<b>13.3</b>	13.2	11.6

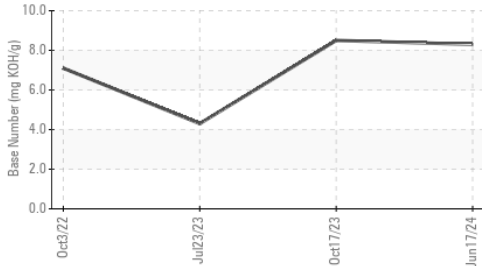
**FT-IR (Direct Trend)**



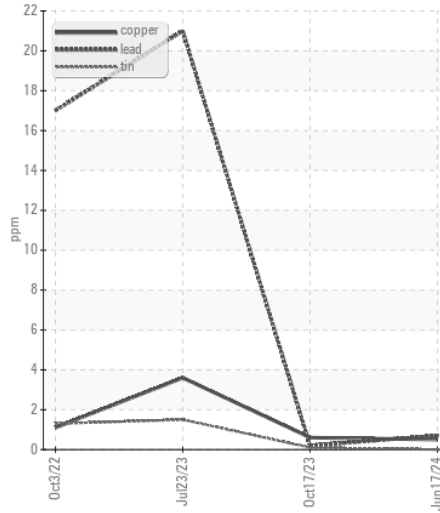
**Ferrous Alloys**



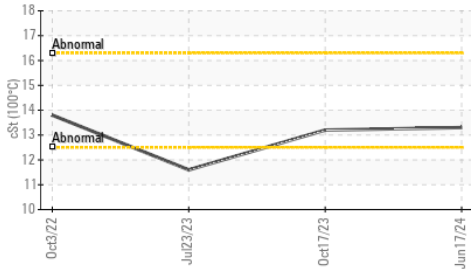
**Base Number**



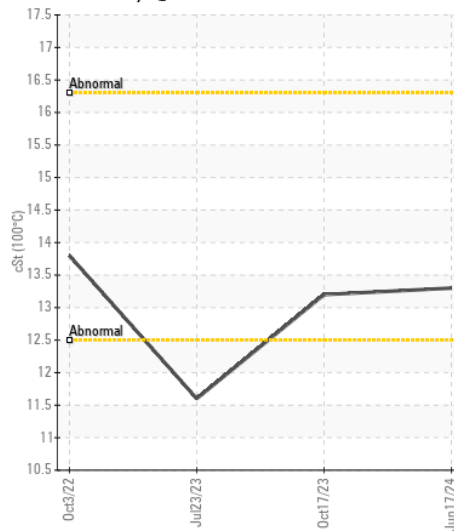
**Non-ferrous Metals**



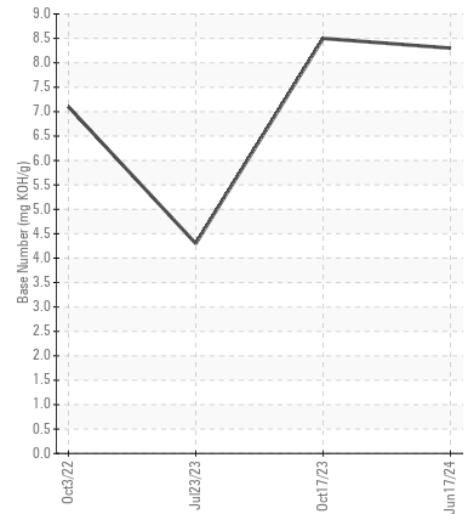
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RPL06220789  
**Lab Number** : 06220789  
**Unique Number** : 11098986  
**Test Package** : FLEET

**Received** : 26 Jun 2024  
**Tested** : 26 Jun 2024  
**Diagnosed** : 27 Jun 2024 - Angela Borella

**RTL PACLEASE - 7050 -Leasing Tyler**  
 10791 Hwy 69 North  
 Tyler, TX  
 US 75706

Contact: Justin Cooper  
 CooperJ1@RushEnterprises.Com

T: (903)405-3000

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)

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