



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**139-514**  
Component  
**Diesel Engine**  
Fluid  
**NOT GIVEN (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RPL0019538</b>	RPL0016704	RPL0015224
Sample Date		Client Info		<b>10 Jun 2024</b>	01 Mar 2024	19 Dec 2023
Machine Age	hrs	Client Info		<b>36480</b>	27563	17263
Oil Age	hrs	Client Info		<b>26180</b>	10300	17263
Filter Age	hrs	Client Info		<b>0</b>	0	17263
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>23</b>	▲ 101	54
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>9</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	● 17	● 7
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>4</b>	33	20
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

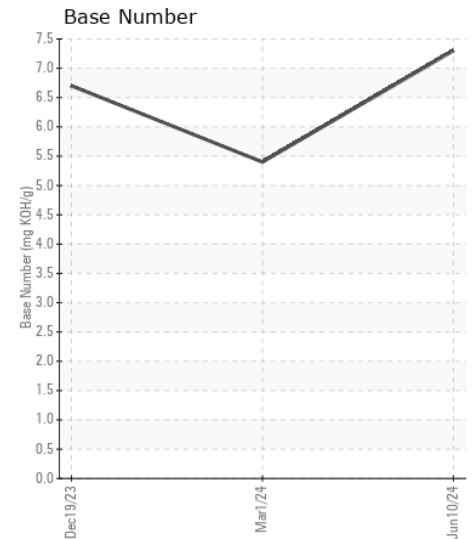
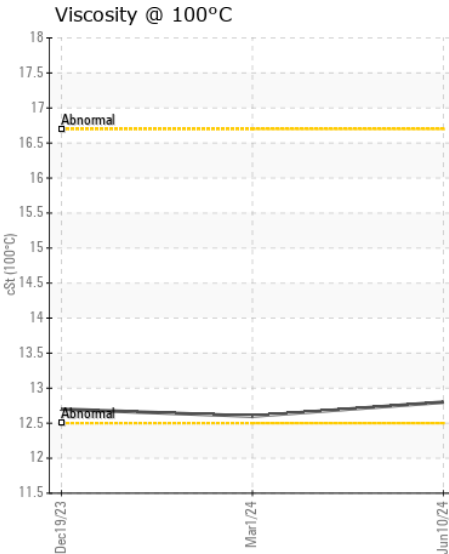
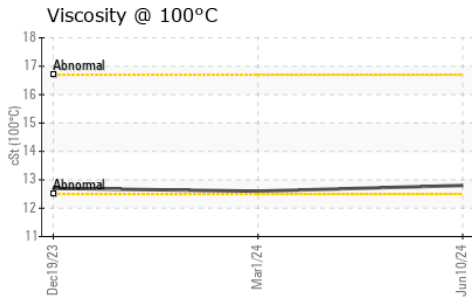
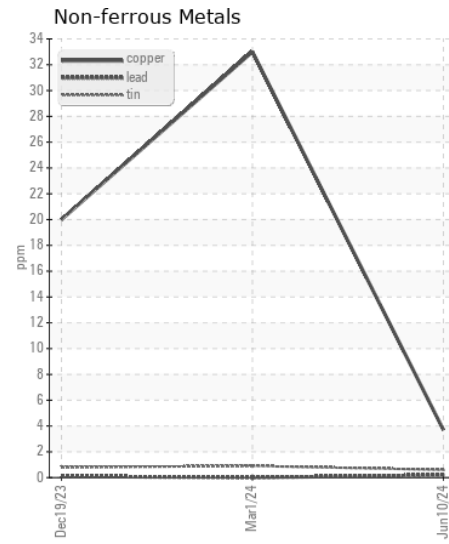
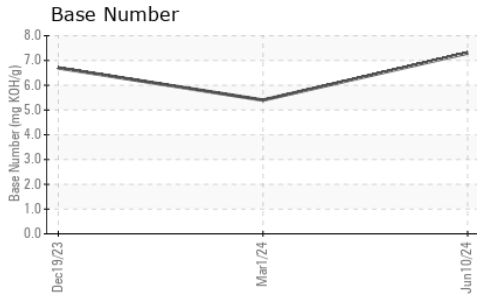
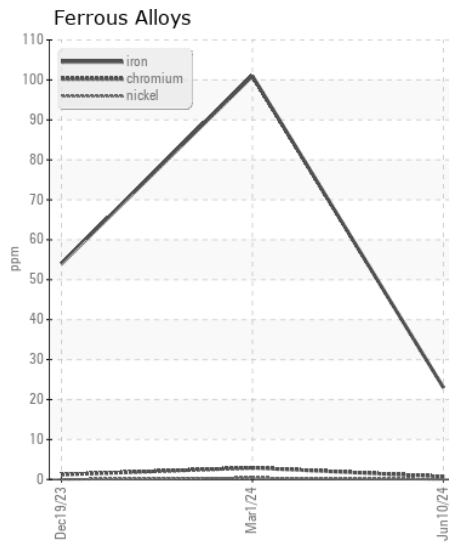
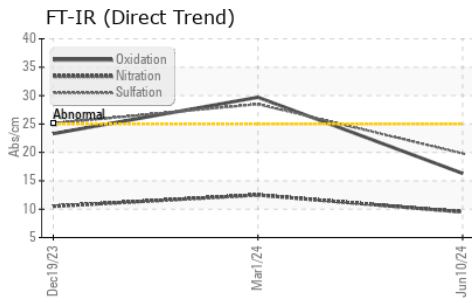
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>10</b>	▲ 38	▲ 29
Potassium	ppm	ASTM D5185m	>20	<b>13</b>	34	16
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
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.8	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.5</b>	12.5	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.8</b>	28.5	25.1
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		<b>3</b>	8	4
Boron	ppm	ASTM D5185m		<b>75</b>	108	125
Barium	ppm	ASTM D5185m		<b>0</b>	3	2
Molybdenum	ppm	ASTM D5185m		<b>33</b>	116	92
Manganese	ppm	ASTM D5185m		<b>1</b>	8	5
Magnesium	ppm	ASTM D5185m		<b>699</b>	671	615
Calcium	ppm	ASTM D5185m		<b>1431</b>	1521	1048
Phosphorus	ppm	ASTM D5185m		<b>737</b>	639	498
Zinc	ppm	ASTM D5185m		<b>809</b>	754	600
Sulfur	ppm	ASTM D5185m		<b>3442</b>	2158	1799
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.3</b>	29.7	23.3
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.3</b>	5.4	6.7
Visc @ 100°C	cSt	ASTM D445		<b>12.8</b>	12.6	12.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RPL0019538 **Received** : 10 Jul 2024  
**Lab Number** : 06231941 **Tested** : 10 Jul 2024  
**Unique Number** : 11115434 **Diagnosed** : 10 Jul 2024 - Wes Davis  
**Test Package** : FLEET

**RTL PACLEASE - 7005 - Arlington**  
 1900 E Division  
 Arlington, TX  
 US 76011  
 Contact: Ricardo Ronquillo  
 ronquillor@rushenterprises.com  
 T: (469)203-8172  
 F:

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)