



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id  
**813537**  
 Component  
**Diesel Engine**  
 Fluid  
 {not provided} (--- GAL)

## RECOMMENDATION

The oil is near the end of it's useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RPL06151639</b>	RPL06079641	RPL0002978
Sample Date		Client Info		<b>11 Apr 2024</b>	30 Jan 2024	25 Jul 2022
Machine Age	hrs	Client Info		<b>328772</b>	302700	7935
Oil Age	hrs	Client Info		<b>50000</b>	22348	1488
Filter Age	hrs	Client Info		<b>0</b>	0	1488
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>ABNORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>58</b>	26	16
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>14</b>	8	9
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>0</b>	1	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
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

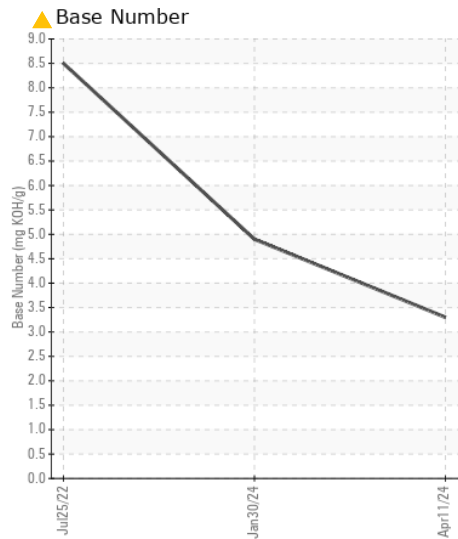
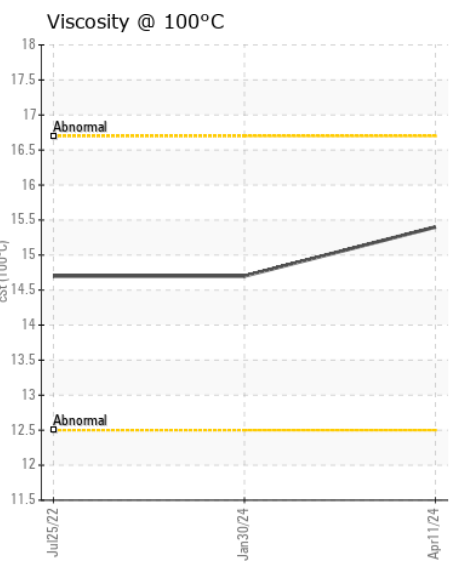
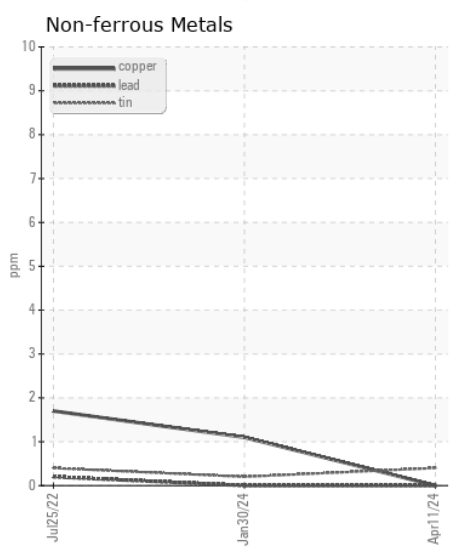
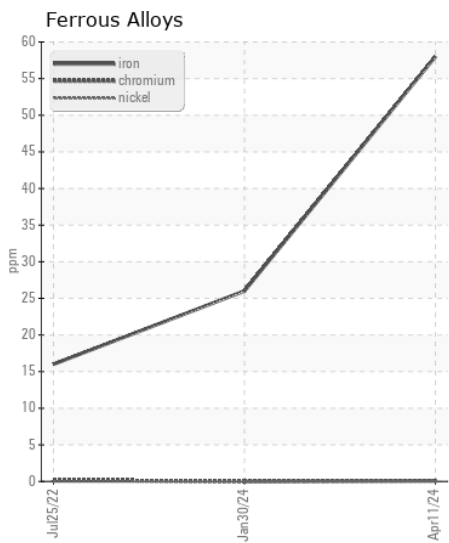
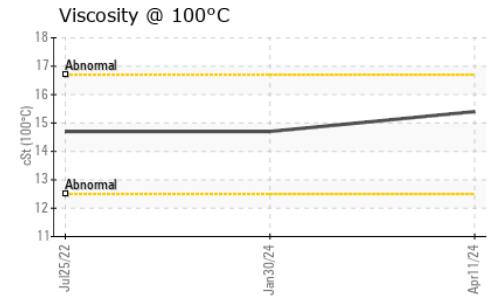
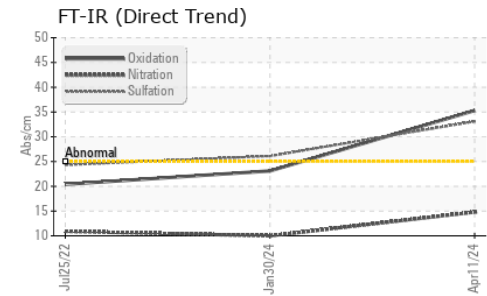
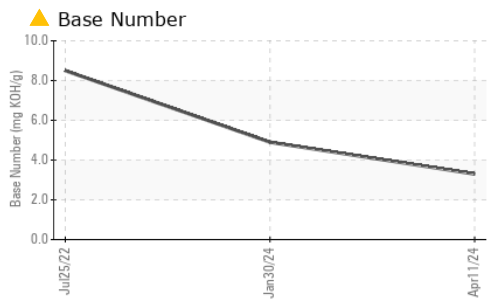
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>14</b>	14	7
Potassium	ppm	ASTM D5185m	>20	<b>17</b>	10	14
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>1.1</b>	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>14.8</b>	10.0	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>33.1</b>	26.1	24.3
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 level is low. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>2</b>	2	<1
Boron	ppm	ASTM D5185m		<b>41</b>	81	4
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>137</b>	135	63
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>641</b>	637	947
Calcium	ppm	ASTM D5185m		<b>1523</b>	1542	1200
Phosphorus	ppm	ASTM D5185m		<b>903</b>	931	1041
Zinc	ppm	ASTM D5185m		<b>1089</b>	1138	1318
Sulfur	ppm	ASTM D5185m		<b>2980</b>	2950	3164
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>35.3</b>	23.1	20.4
Base Number (BN)	mg KOH/g	ASTM D2896		<b>▲ 3.3</b>	4.9	8.50
Visc @ 100°C	cSt	ASTM D445		<b>15.4</b>	14.7	14.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RPL06151639 **Received** : 17 Apr 2024  
**Lab Number** : 06151639 **Tested** : 18 Apr 2024  
**Unique Number** : 10981717 **Diagnosed** : 22 Apr 2024 - Jonathan Hester  
**Test Package** : FLEET

**RTL PACLEASE - 7050 -Leasing Tyler**  
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 Tyler, TX  
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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)