



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
781280
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 40 (--- LTR)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. 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		RPL06215260	RPL06041950	---
Sample Date		Client Info		11 Jun 2024	12 Dec 2023	---
Machine Age	mls	Client Info		142261	93355	---
Oil Age	mls	Client Info		48906	48860	---
Filter Age	mls	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	48	65	---
Chromium	ppm	ASTM D5185m	>20	<1	1	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	<1	<1	---
Aluminum	ppm	ASTM D5185m	>20	20	70	---
Lead	ppm	ASTM D5185m	>40	<1	0	---
Copper	ppm	ASTM D5185m	>330	4	4	---
Tin	ppm	ASTM D5185m	>15	0	1	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

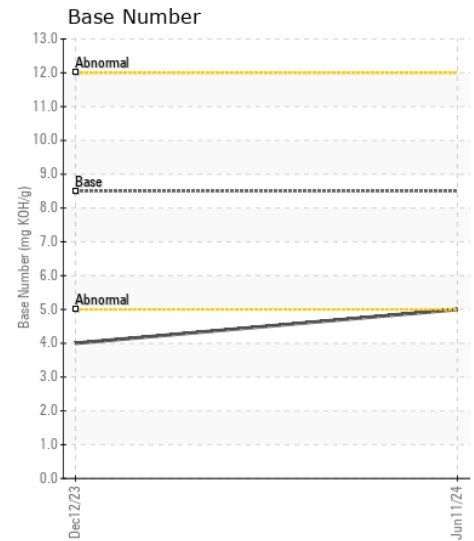
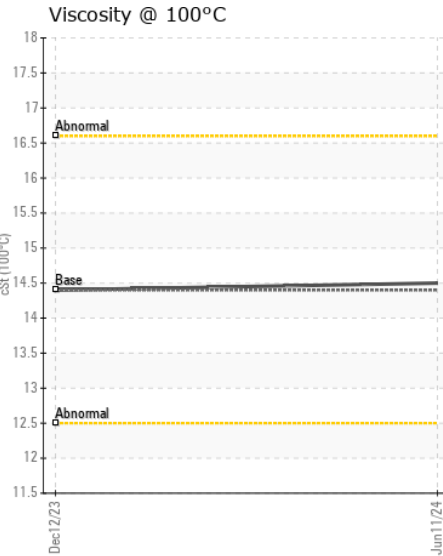
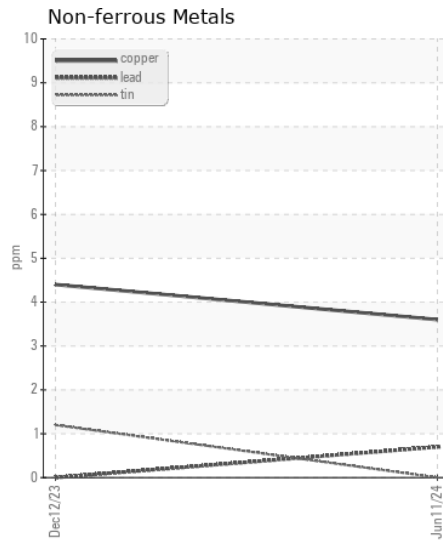
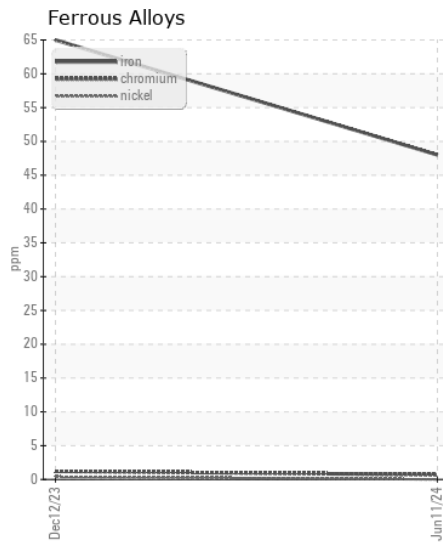
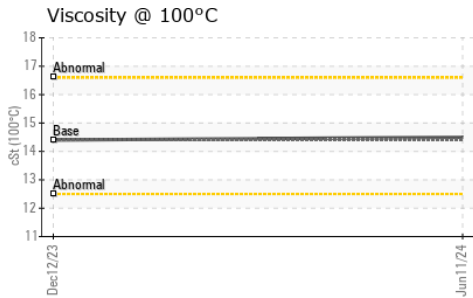
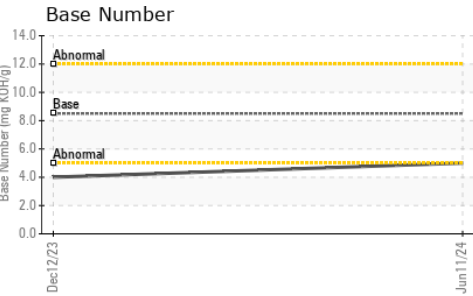
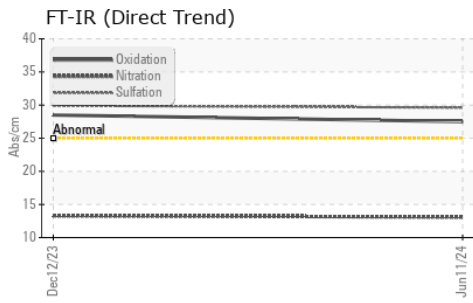
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	14	21	---
Potassium	ppm	ASTM D5185m	>20	42	169	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.6	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	13.1	13.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.6	29.9	---
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	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>216	3	2	---
Boron	ppm	ASTM D5185m	250	30	27	---
Barium	ppm	ASTM D5185m	10	<1	<1	---
Molybdenum	ppm	ASTM D5185m	100	135	131	---
Manganese	ppm	ASTM D5185m		1	1	---
Magnesium	ppm	ASTM D5185m	450	764	787	---
Calcium	ppm	ASTM D5185m	3000	1939	1757	---
Phosphorus	ppm	ASTM D5185m	1150	815	825	---
Zinc	ppm	ASTM D5185m	1350	1003	983	---
Sulfur	ppm	ASTM D5185m	4250	3128	2697	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.5	28.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.0	4.0	---
Visc @ 100°C	cSt	ASTM D445	14.4	14.5	14.4	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL06215260
Lab Number : 06215260
Unique Number : 11088124
Test Package : FLEET

Received : 20 Jun 2024
Tested : 21 Jun 2024
Diagnosed : 21 Jun 2024 - Sean Felton

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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