



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
781229
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 40 (--- LTR)

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		RPL06215258	RPL06041948	RPL05968663
Sample Date		Client Info		13 Jun 2024	14 Dec 2023	23 Sep 2023
Machine Age	mls	Client Info		268974	216750	204016
Oil Age	mls	Client Info		65000	23808	11450
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	60	12	7
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		1	0	0
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	8	6	6
Lead	ppm	ASTM D5185m	>40	2	<1	0
Copper	ppm	ASTM D5185m	>330	4	0	1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

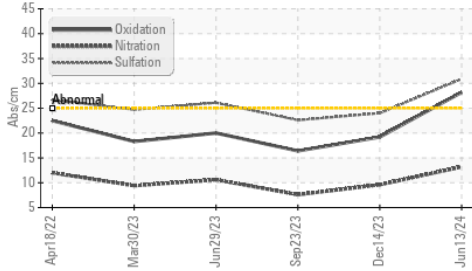
Silicon	ppm	ASTM D5185m	>25	12	10	8
Potassium	ppm	ASTM D5185m	>20	11	3	3
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.3	0.5	0.3
Nitration	Abs/cm	*ASTM D7624	>20	13.2	9.6	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	30.9	24.0	22.6
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

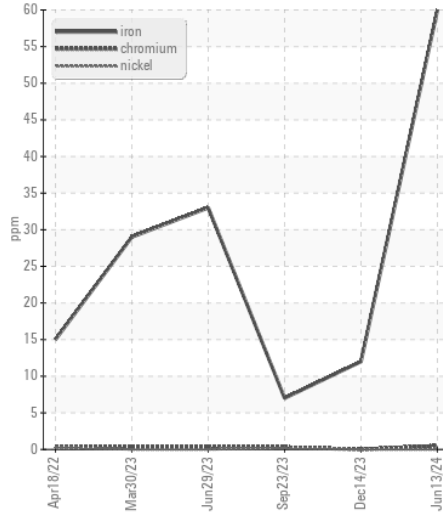
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>216	4	0	1
Boron	ppm	ASTM D5185m	250	18	162	254
Barium	ppm	ASTM D5185m	10	<1	0	0
Molybdenum	ppm	ASTM D5185m	100	125	126	124
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	696	665	687
Calcium	ppm	ASTM D5185m	3000	1846	1568	1679
Phosphorus	ppm	ASTM D5185m	1150	791	767	820
Zinc	ppm	ASTM D5185m	1350	969	905	1006
Sulfur	ppm	ASTM D5185m	4250	2994	2536	2891
Oxidation	Abs/.1mm	*ASTM D7414	>25	28.2	19.2	16.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	4.3	7.2	7.9
Visc @ 100°C	cSt	ASTM D445	14.4	14.8	13.9	13.7

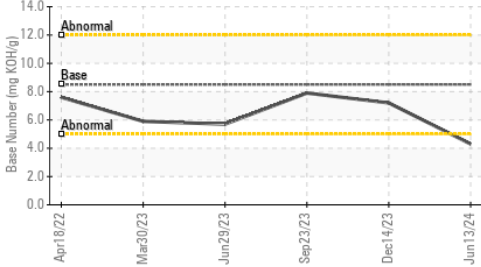
FT-IR (Direct Trend)



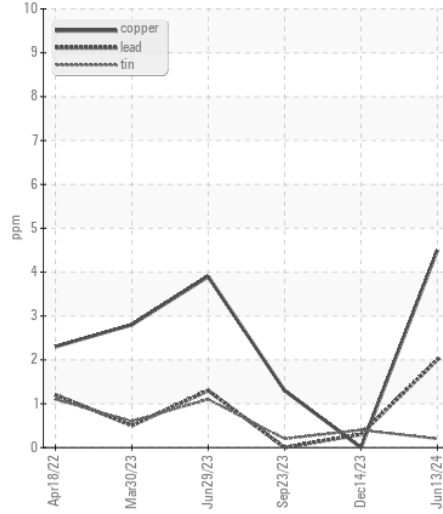
Ferrous Alloys



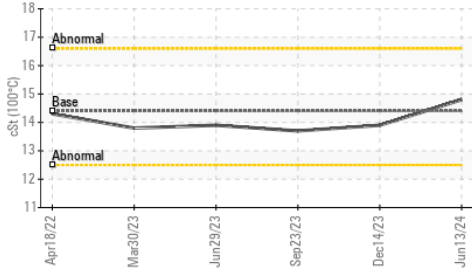
Base Number



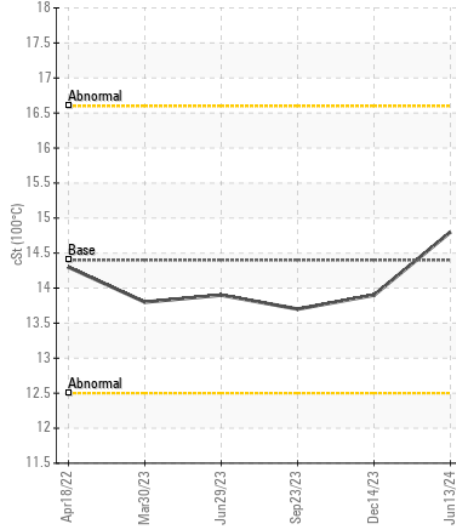
Non-ferrous Metals



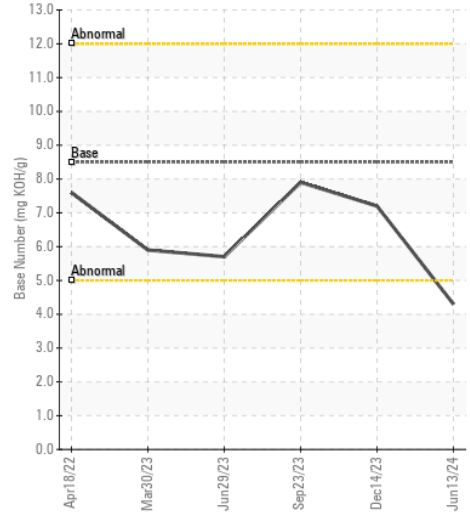
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL06215258
Lab Number : 06215258
Unique Number : 11088122
Test Package : FLEET

RTL PACLEASE - 7050 -Leasing Tyler
 10791 Hwy 69 North
 Tyler, TX
 US 75706
 Contact: Justin Cooper
 CooperJ1@RushEnterprises.Com
 T: (903)405-3000
 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)