



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id

8464951

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL 10W40 (--- 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		RPL0020545	RPL0020579	RPL0015150
Sample Date		Client Info		07 Jun 2024	29 May 2024	14 Sep 2023
Machine Age	mls	Client Info		3003	112300	0
Oil Age	mls	Client Info		354	43348	0
Filter Age	mls	Client Info		354	43348	0
Oil Changed		Client Info		Not Chngd	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	5	31	29
Chromium	ppm	ASTM D5185m	>20	<1	3	3
Nickel	ppm	ASTM D5185m	>4	0	1	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	11	18
Lead	ppm	ASTM D5185m	>40	<1	7	4
Copper	ppm	ASTM D5185m	>330	<1	3	7
Tin	ppm	ASTM D5185m	>15	0	2	2
Vanadium	ppm	ASTM D5185m		0	0	0
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.

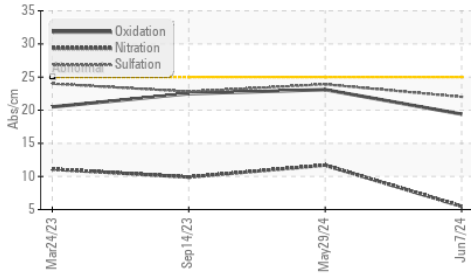
Silicon	ppm	ASTM D5185m	>25	6	13	18
Potassium	ppm	ASTM D5185m	>20	3	50	50
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.8	0.6
Nitration	Abs/cm	*ASTM D7624	>20	5.5	11.7	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	23.9	22.8
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

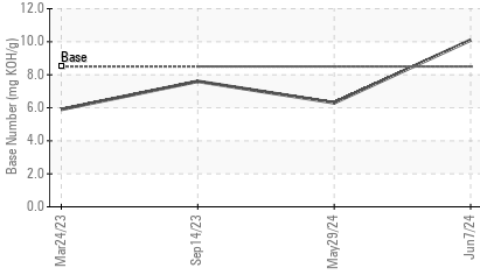
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	23	4
Boron	ppm	ASTM D5185m	250	60	27	25
Barium	ppm	ASTM D5185m	10	0	0	2
Molybdenum	ppm	ASTM D5185m	100	43	80	42
Manganese	ppm	ASTM D5185m		0	<1	2
Magnesium	ppm	ASTM D5185m	450	504	570	532
Calcium	ppm	ASTM D5185m	3000	1564	1517	1630
Phosphorus	ppm	ASTM D5185m	1150	768	746	755
Zinc	ppm	ASTM D5185m	1350	891	925	962
Sulfur	ppm	ASTM D5185m	4250	2348	2920	2724
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.4	23.1	22.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	10.1	6.3	7.6
Visc @ 100°C	cSt	ASTM D445	14.4	13.1	12.9	12.7

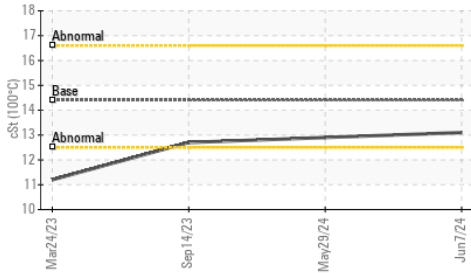
FT-IR (Direct Trend)



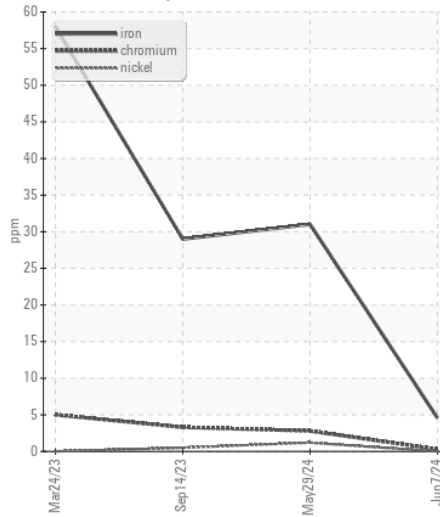
Base Number



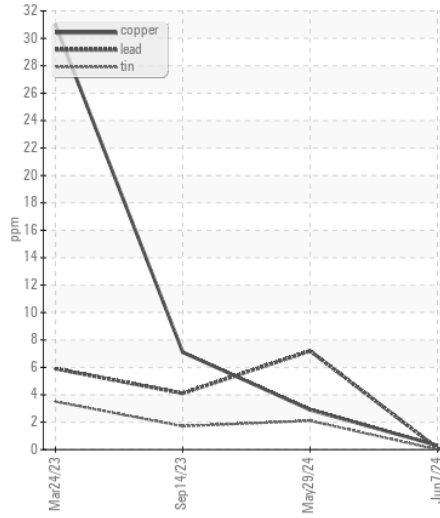
Viscosity @ 100°C



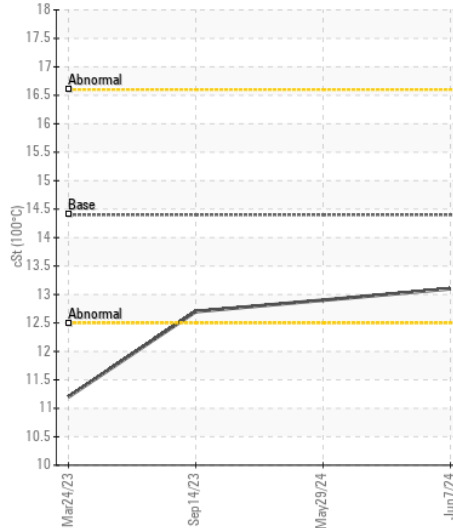
Ferrous Alloys



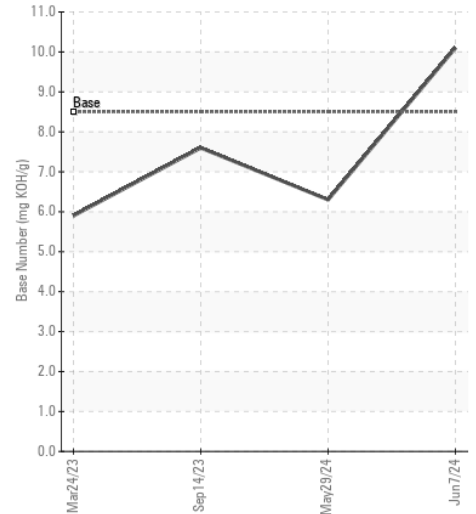
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0020545
Lab Number : 06214183
Unique Number : 11087047
Test Package : FLEET

Received : 19 Jun 2024
Tested : 20 Jun 2024
Diagnosed : 20 Jun 2024 - Wes Davis

RTL PACLEASE - 7007 - Fontana
 3121 South Riverside
 Bloomington, CA
 US 92316
 Contact: Rudy Trevizo
 TrevizoR@RushEnterprises.Com
 T: (909)829-1044
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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)