



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
7233
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: Hours=2203)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL0033810	IL0026543	---
Sample Date		Client Info		04 Jun 2024	08 May 2023	---
Machine Age	mls	Client Info		86934	61282	---
Oil Age	mls	Client Info		86934	0	---
Filter Age	mls	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	21	34	---
Chromium	ppm	ASTM D5185m	>20	1	2	---
Nickel	ppm	ASTM D5185m	>4	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>20	6	7	---
Lead	ppm	ASTM D5185m	>40	<1	1	---
Copper	ppm	ASTM D5185m	>330	4	6	---
Tin	ppm	ASTM D5185m	>15	<1	1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

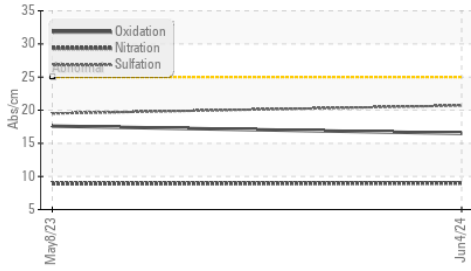
Silicon	ppm	ASTM D5185m	>25	7	8	---
Potassium	ppm	ASTM D5185m	>20	17	24	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.4	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	9.0	8.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	19.5	---
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

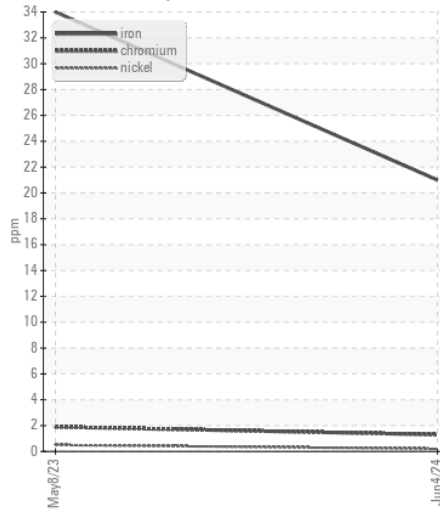
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>216	3	0	---
Boron	ppm	ASTM D5185m	250	6	4	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	64	61	---
Manganese	ppm	ASTM D5185m		1	1	---
Magnesium	ppm	ASTM D5185m	450	951	859	---
Calcium	ppm	ASTM D5185m	3000	1139	1193	---
Phosphorus	ppm	ASTM D5185m	1150	1049	985	---
Zinc	ppm	ASTM D5185m	1350	1260	1209	---
Sulfur	ppm	ASTM D5185m	4250	3715	3202	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	17.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.7	6.7	---
Visc @ 100°C	cSt	ASTM D445	14.4	12.9	12.9	---

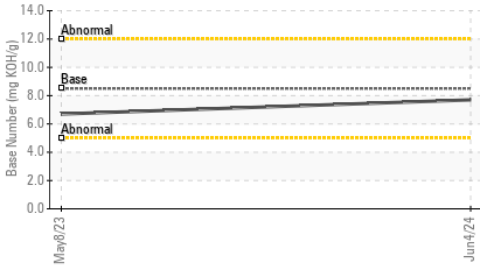
FT-IR (Direct Trend)



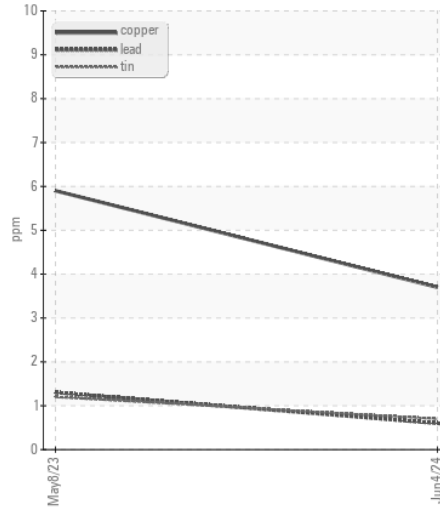
Ferrous Alloys



Base Number



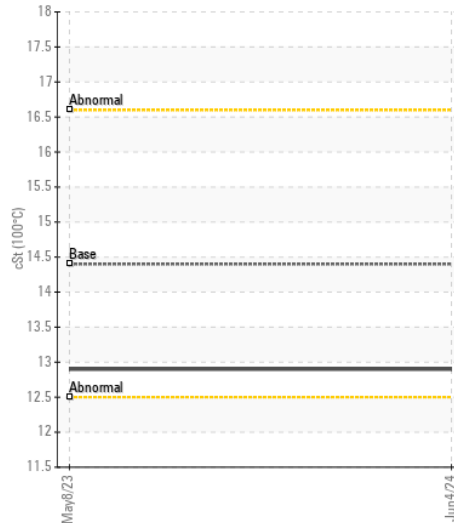
Non-ferrous Metals



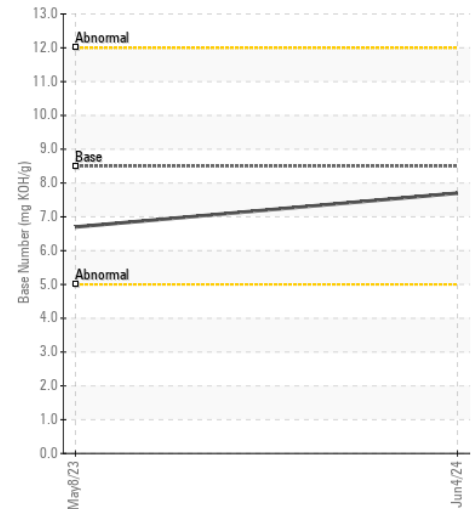
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : IL0033810

Lab Number : 06212838

Unique Number : 11085702

Test Package : FLEET

Received : 17 Jun 2024

Tested : 19 Jun 2024

Diagnosed : 19 Jun 2024 - Angela Borella

RUSH TRUCK LEASING - CHARLOTTE IDEALEASE

1333 AMERON DR

CHARLOTTE, NC

US 28206

Contact: JERRY DIXON

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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)