



WEAR **NORMAL**

CONTAMINATION **NORMAL**

FLUID CONDITION **NORMAL**

OIL ANALYSIS REPORT

Area

[44983257]

Machine Id

9571593 Liberty Tire

Component

Diesel Engine

Fluid

MOBIL DELVAC MX 15W40 (23 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0016517	RPL0006806	---
Sample Date		Client Info		14 Jun 2024	11 Oct 2022	---
Machine Age	mls	Client Info		156674	89199	---
Oil Age	mls	Client Info		22341	19015	---
Filter Age	mls	Client Info		22341	19015	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	23	1	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	<1	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>20	8	4	---
Lead	ppm	ASTM D5185m	>40	<1	0	---
Copper	ppm	ASTM D5185m	>330	2	0	---
Tin	ppm	ASTM D5185m	>15	<1	0	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
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.

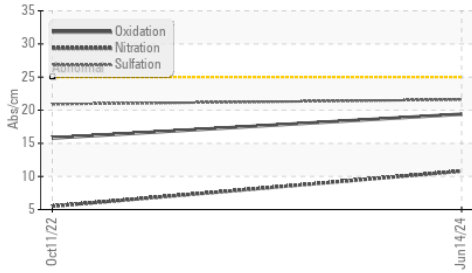
Silicon	ppm	ASTM D5185m	>25	5	7	---
Potassium	ppm	ASTM D5185m	>20	4	4	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.4	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	10.8	5.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	20.9	---
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

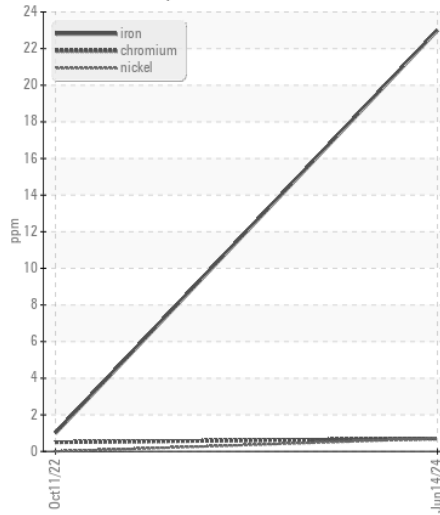
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	0	---
Boron	ppm	ASTM D5185m		5	73	---
Barium	ppm	ASTM D5185m		1	0	---
Molybdenum	ppm	ASTM D5185m		62	40	---
Manganese	ppm	ASTM D5185m		1	<1	---
Magnesium	ppm	ASTM D5185m		923	743	---
Calcium	ppm	ASTM D5185m		1234	1530	---
Phosphorus	ppm	ASTM D5185m		1047	844	---
Zinc	ppm	ASTM D5185m		1287	1086	---
Sulfur	ppm	ASTM D5185m		2960	3440	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.4	15.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	12	8.3	10.9	---
Visc @ 100°C	cSt	ASTM D445	14.4	13.1	13.4	---

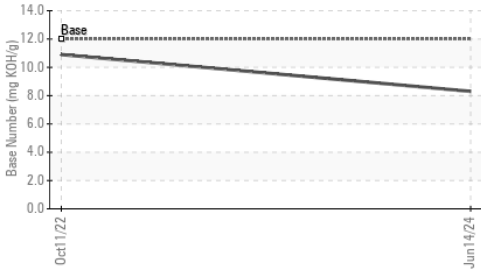
FT-IR (Direct Trend)



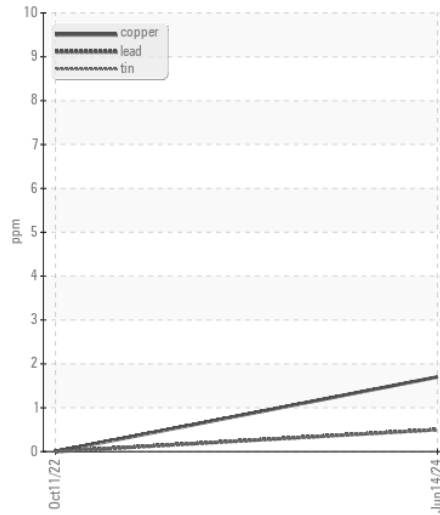
Ferrous Alloys



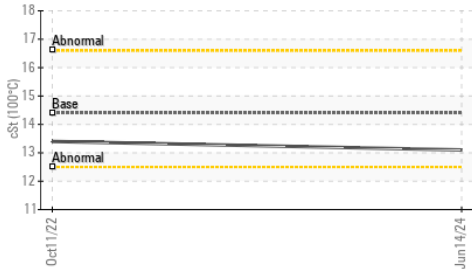
Base Number



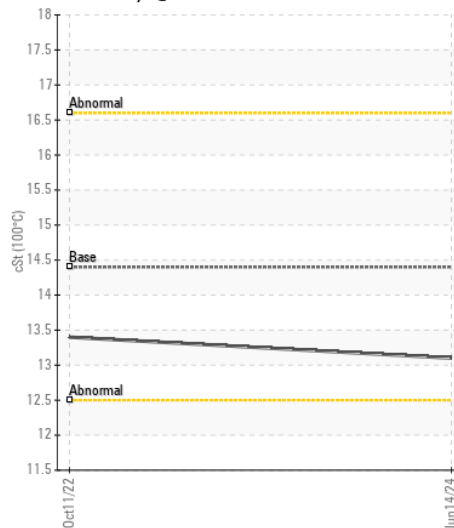
Non-ferrous Metals



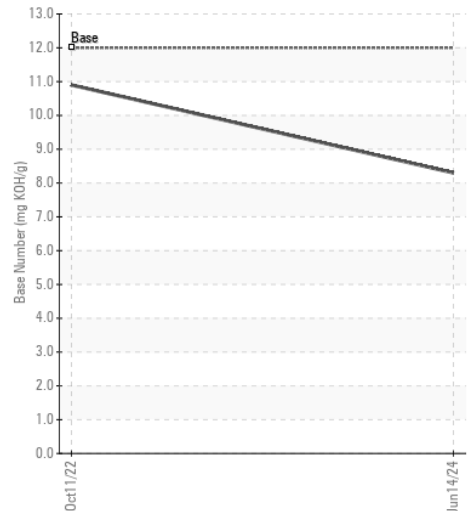
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : RPL0016517
 Lab Number : 06219338
 Unique Number : 11097535
 Test Package : FLEET

Received : 25 Jun 2024
 Tested : 25 Jun 2024
 Diagnosed : 25 Jun 2024 - Wes Davis

RTL PACLEASE - 7002 - San Antonio
 8810 IH-10 Frontage Road
 Converse, TX
 US 78109

Contact: Mike Friel
 FrielM@RushEnterprises.Com

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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F: