



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id  
**TOYOTA 8463999**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL DELVAC 1300 SUPER 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RPL0021922</b>	RPL0019425	RPL0016841
Sample Date		Client Info		<b>22 Jun 2024</b>	18 Mar 2024	18 Dec 2023
Machine Age	mls	Client Info		<b>211425</b>	208003	206676
Oil Age	mls	Client Info		<b>3422</b>	7359	6032
Filter Age	mls	Client Info		<b>3422</b>	7359	6032
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Sample Status				<b>ATTENTION</b>	ATTENTION	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>4</b>	10	5
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	1	1
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>1</b>	1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

There is no indication of any contamination in the oil.

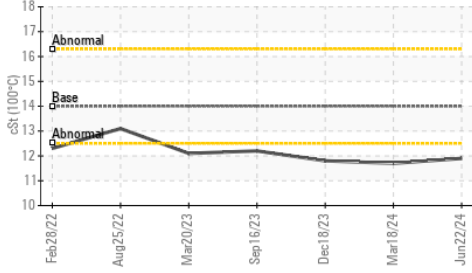
Silicon	ppm	ASTM D5185m	>25	<b>3</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	0
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.0</b>	10.0	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.9</b>	20.2	19.7
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

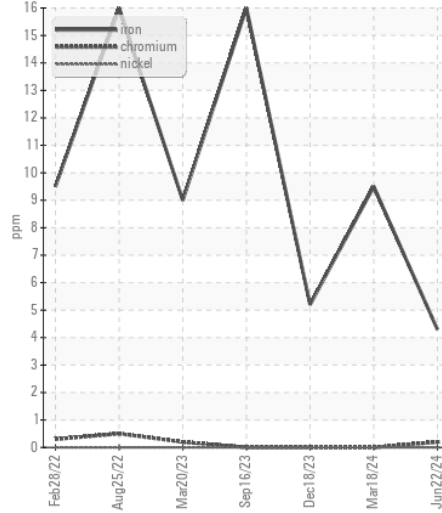
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		<b>2</b>	1	<1
Boron	ppm	ASTM D5185m	0	<b>2</b>	<1	3
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>60</b>	62	61
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	0	<b>960</b>	1080	969
Calcium	ppm	ASTM D5185m		<b>1097</b>	1168	1056
Phosphorus	ppm	ASTM D5185m		<b>1235</b>	1140	1114
Zinc	ppm	ASTM D5185m		<b>1311</b>	1359	1269
Sulfur	ppm	ASTM D5185m		<b>3445</b>	3937	3114
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.7</b>	18.3	17.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	<b>9.7</b>	8.2	8.6
Visc @ 100°C	cSt	ASTM D445	14	<b>11.9</b>	11.7	11.8

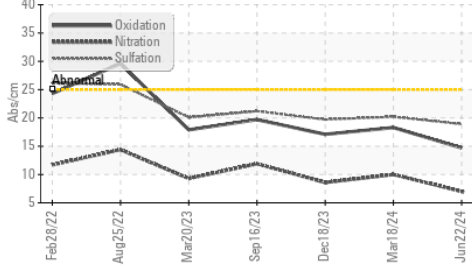
● Viscosity @ 100°C



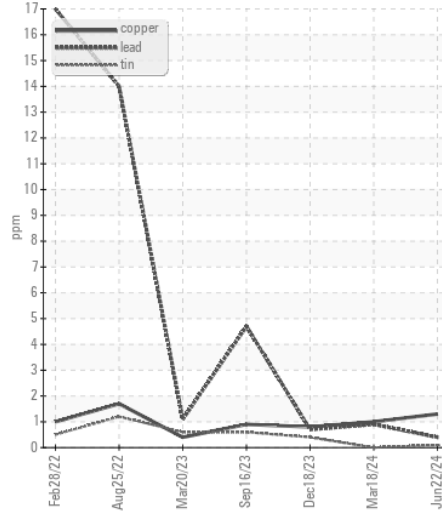
Ferrous Alloys



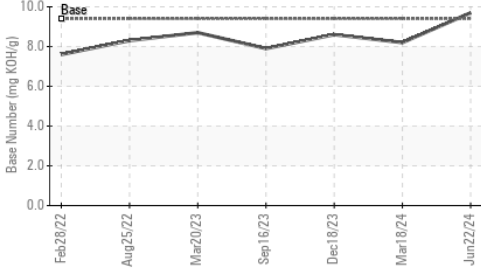
FT-IR (Direct Trend)



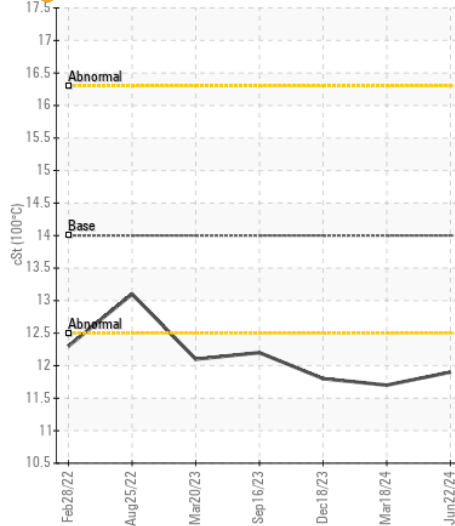
Non-ferrous Metals



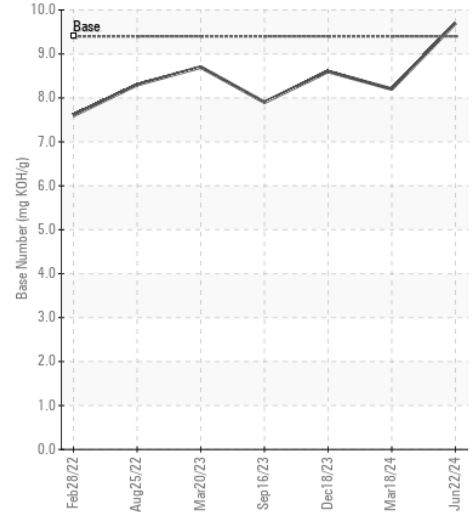
Base Number



● Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : RPL0021922

Lab Number : 06230036

Unique Number : 11113529

Test Package : FLEET

Received : 08 Jul 2024

Tested : 09 Jul 2024

Diagnosed : 09 Jul 2024 - Don Baldrige

RTL PACLEASE - 7006 - Pico Rivera

7837 Telegraph Rd

Pico Rivera, CA

US 90660

Contact: GERARDO CARROLA

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T:

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)