



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Machine Id
TOYOTA 8464629
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. 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		RPL0020401	RPL0017959	RPL0017901
Sample Date		Client Info		11 May 2024	04 Mar 2024	19 Feb 2024
Machine Age	mls	Client Info		144794	136294	134279
Oil Age	mls	Client Info		0	13634	11619
Filter Age	mls	Client Info		0	13634	11619
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	16	18	15
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	1	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	3	4	3
Copper	ppm	ASTM D5185m	>330	2	1	1
Tin	ppm	ASTM D5185m	>15	1	1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

Light fuel dilution occurring.

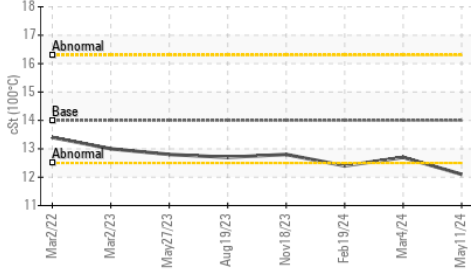
Silicon	ppm	ASTM D5185m	>25	5	5	3
Potassium	ppm	ASTM D5185m	>20	3	3	<1
Fuel	%	ASTM D3524	>5	▲ 2.4	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	9.4	10.1	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	21.6	21.6
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

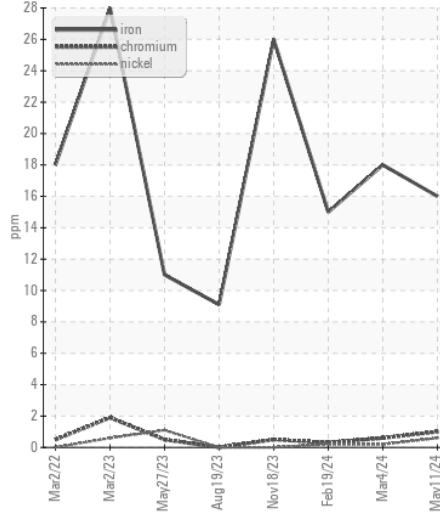
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity.

Sodium	ppm	ASTM D5185m		2	<1	2
Boron	ppm	ASTM D5185m	0	1	2	2
Barium	ppm	ASTM D5185m	0	1	0	0
Molybdenum	ppm	ASTM D5185m	0	66	70	64
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	1041	1018	1024
Calcium	ppm	ASTM D5185m		1172	1149	1095
Phosphorus	ppm	ASTM D5185m		1113	1069	1170
Zinc	ppm	ASTM D5185m		1312	1330	1389
Sulfur	ppm	ASTM D5185m		3420	3202	3352
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	18.9	19.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	8.6	8.2	7.4
Visc @ 100°C	cSt	ASTM D445	14	▲ 12.1	12.7	12.4

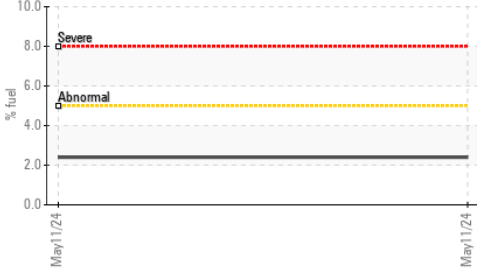
▲ Viscosity @ 100°C



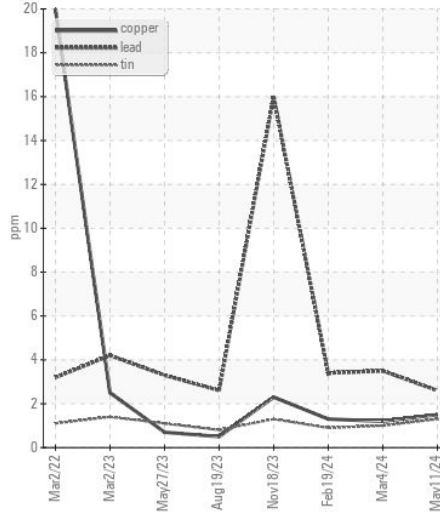
Ferrous Alloys



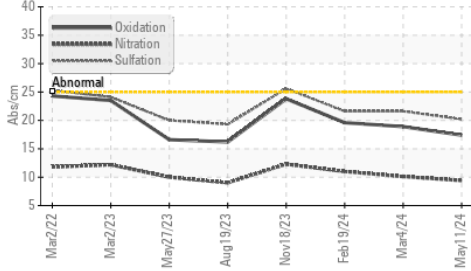
▲ Fuel Dilution



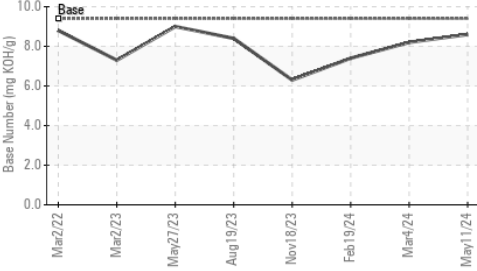
Non-ferrous Metals



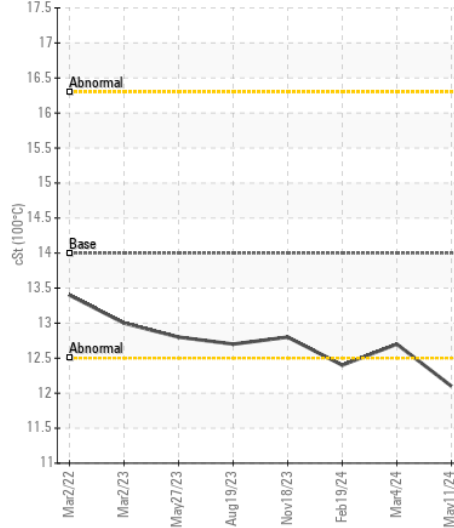
FT-IR (Direct Trend)



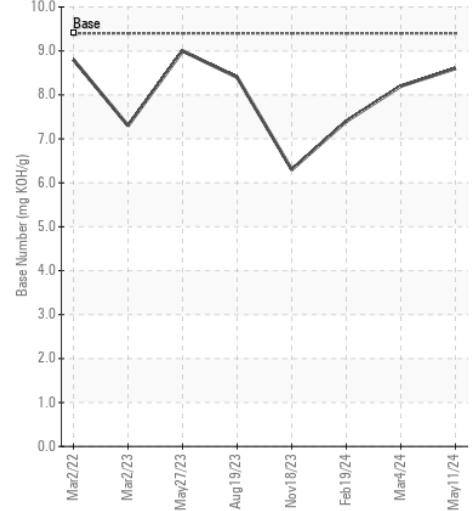
Base Number



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0020401
Lab Number : 06191910
Unique Number : 11048662
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

RTL PACLEASE - 7006 - Pico Rivera
 7837 Telegraph Rd
 Pico Rivera, CA
 US 90660
 Contact: GERARDO CARROLA
 carrolag@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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