



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
MX-13 8464659
Component
Diesel Engine
Fluid
MOBIL 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0022082	RPL0018065	RPL0017410
Sample Date		Client Info		26 Jun 2024	26 Mar 2024	05 Jan 2024
Machine Age	mls	Client Info		95999	89063	81833
Oil Age	mls	Client Info		95999	23860	81833
Filter Age	mls	Client Info		95999	23860	81833
Oil Changed		Client Info		Changed	N/A	Not Changd
Filter Changed		Client Info		Changed	N/A	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	86	71	51
Chromium	ppm	ASTM D5185m	>20	<1	2	<1
Nickel	ppm	ASTM D5185m	>4	<1	1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	26	23	18
Lead	ppm	ASTM D5185m	>40	3	3	2
Copper	ppm	ASTM D5185m	>330	10	9	8
Tin	ppm	ASTM D5185m	>15	2	3	2
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

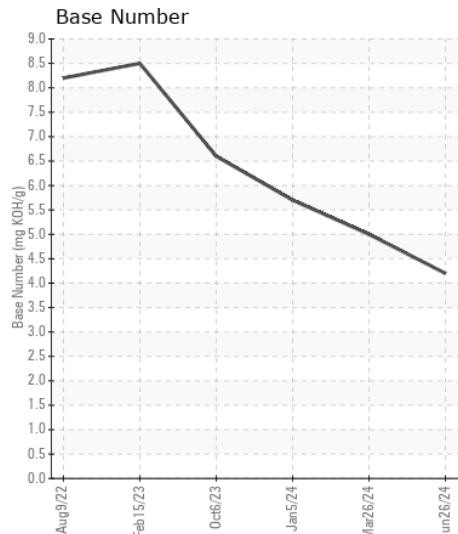
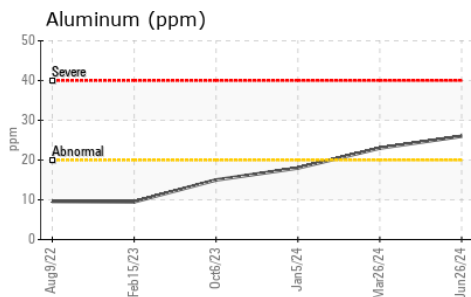
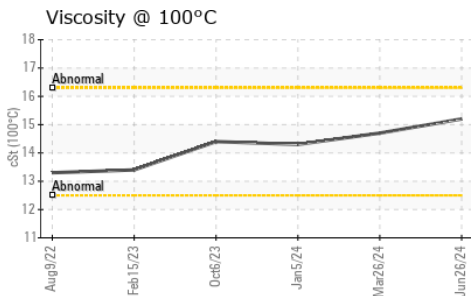
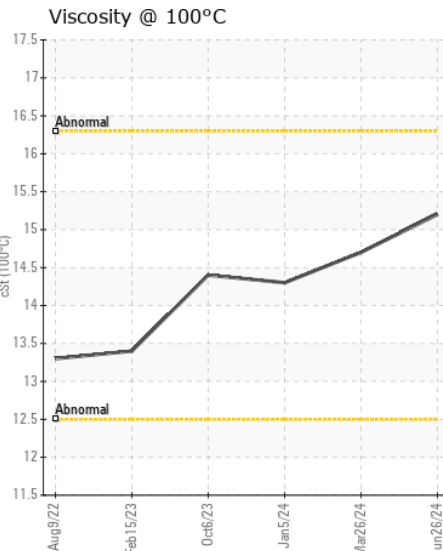
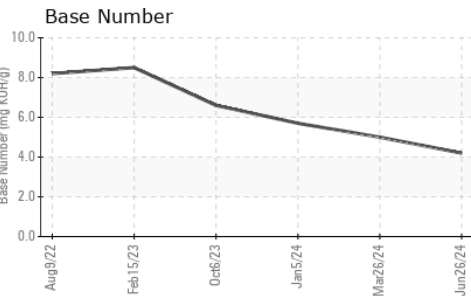
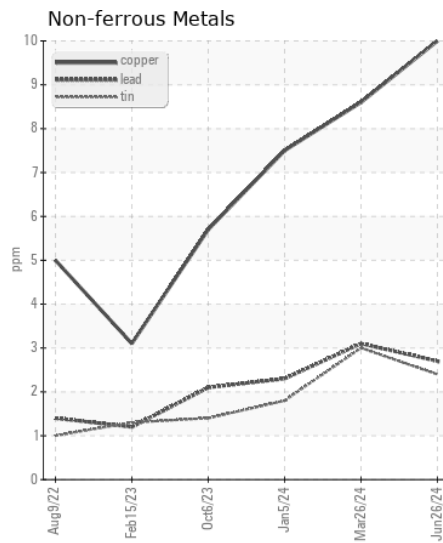
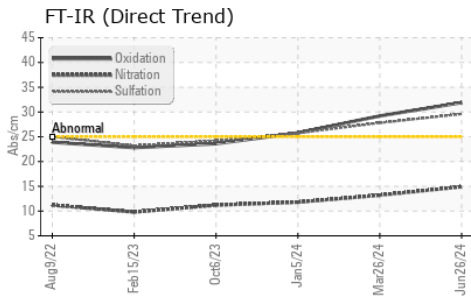
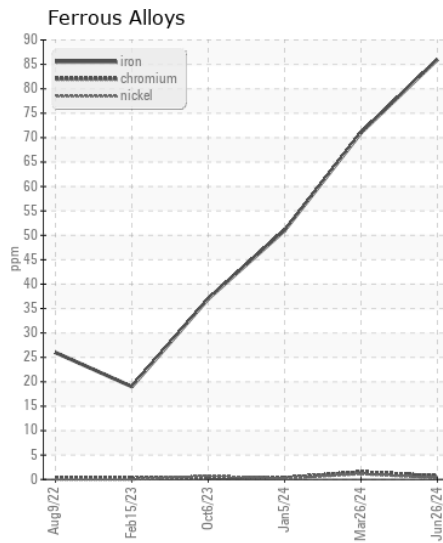
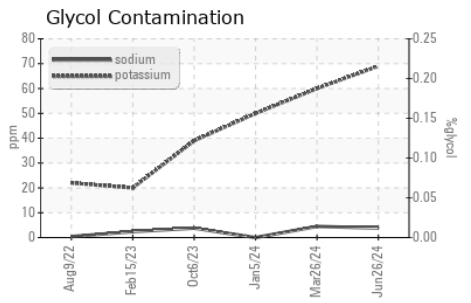
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	7	8	7
Potassium	ppm	ASTM D5185m	>20	69	60	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	1.3	1.1	0.9
Nitration	Abs/cm	*ASTM D7624	>20	14.9	13.2	11.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.6	27.8	25.7
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>118	4	4	0
Boron	ppm	ASTM D5185m		20	18	23
Barium	ppm	ASTM D5185m		0	<1	3
Molybdenum	ppm	ASTM D5185m		40	36	37
Manganese	ppm	ASTM D5185m		<1	2	<1
Magnesium	ppm	ASTM D5185m		591	564	561
Calcium	ppm	ASTM D5185m		1827	1687	1640
Phosphorus	ppm	ASTM D5185m		829	798	744
Zinc	ppm	ASTM D5185m		1017	964	938
Sulfur	ppm	ASTM D5185m		2429	2709	2679
Oxidation	Abs/.1mm	*ASTM D7414	>25	31.9	29.2	25.8
Base Number (BN)	mg KOH/g	ASTM D2896		4.2	5.0	5.7
Visc @ 100°C	cSt	ASTM D445		15.2	14.7	14.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0022082
Lab Number : 06234508
Unique Number : 11123342
Test Package : FLEET

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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