



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
139523
Component
Diesel Engine
Fluid
MOBIL 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0008089	RPL0008137	RPL0008164
Sample Date		Client Info		28 Nov 2023	07 Aug 2023	18 May 2023
Machine Age	hrs	Client Info		5259	155805	117706
Oil Age	hrs	Client Info		1044	38099	36679
Filter Age	hrs	Client Info		1044	38099	36679
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	19	35	35
Chromium	ppm	ASTM D5185m	>20	1	3	2
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	12	47	58
Lead	ppm	ASTM D5185m	>40	3	6	6
Copper	ppm	ASTM D5185m	>330	<1	1	2
Tin	ppm	ASTM D5185m	>15	1	1	2
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

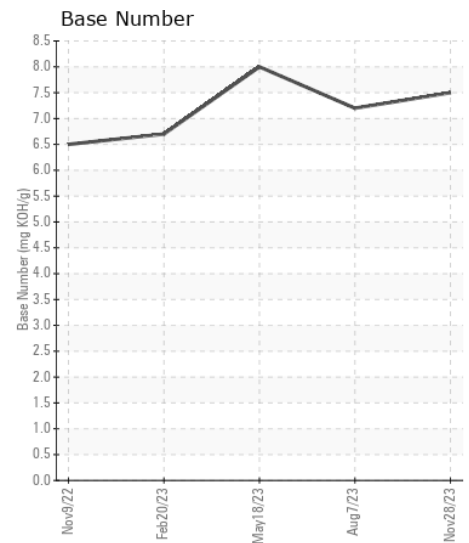
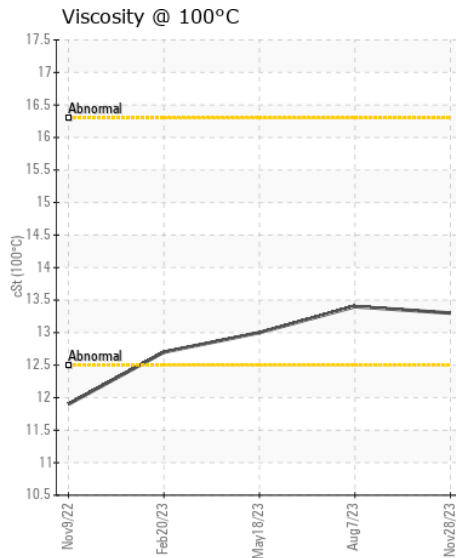
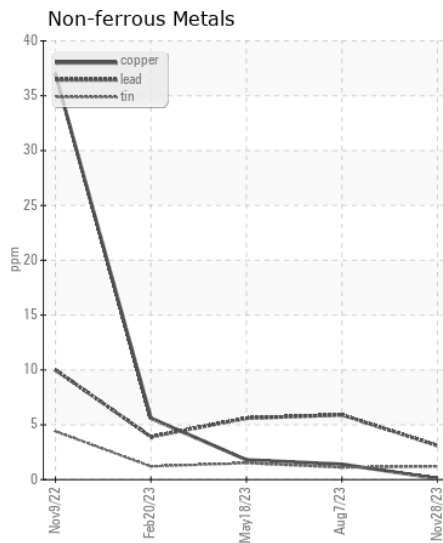
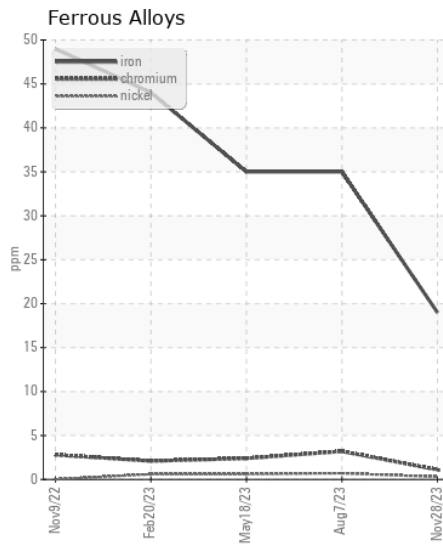
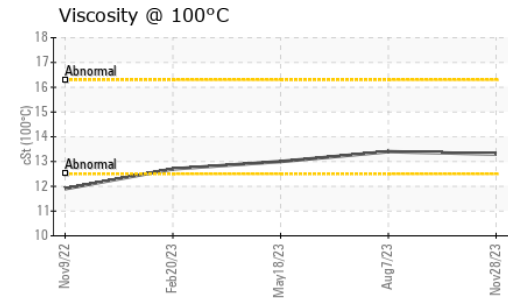
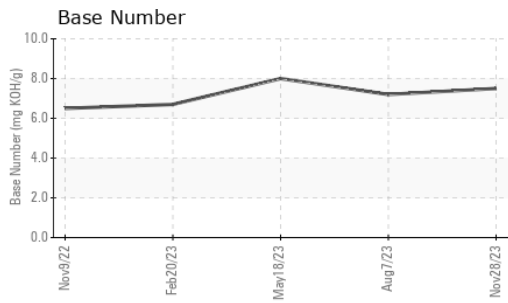
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	9	8
Potassium	ppm	ASTM D5185m	>20	32	109	149
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	0.6	0.7	0.7
Nitration	Abs/cm	*ASTM D7624	>20	9.8	10.6	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.1	23.3	23.0
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 suitable for further service.

Sodium	ppm	ASTM D5185m	>118	<1	4	3
Boron	ppm	ASTM D5185m		4	2	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		65	65	64
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m		980	1100	1025
Calcium	ppm	ASTM D5185m		1048	1265	1200
Phosphorus	ppm	ASTM D5185m		1052	1120	1061
Zinc	ppm	ASTM D5185m		1279	1444	1336
Sulfur	ppm	ASTM D5185m		2862	3836	3560
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.1	19.5	18.6
Base Number (BN)	mg KOH/g	ASTM D2896		7.5	7.2	8.0
Visc @ 100°C	cSt	ASTM D445		13.3	13.4	13.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0008089 **Received** : 16 Jan 2024
Lab Number : 06060840 **Diagnosed** : 17 Jan 2024
Unique Number : 10832222 **Diagnostician** : Wes Davis
Test Package : FLEET

RTL PACLEASE - 7017 - Oklahoma City
 8700 West I-40
 Oklahoma City, OK
 US 73128
 Contact: TECHNICIAN ACCOUNT
 catherine.anastasio@wearcheck.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: