



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
56172
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 10W30 (--- 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		WC0934984	WC0899668	WC0864537
Sample Date		Client Info		16 Jun 2024	31 Mar 2024	10 Dec 2023
Machine Age	mls	Client Info		99617	69292	35342
Oil Age	mls	Client Info		30325	33950	34410
Filter Age	mls	Client Info		30325	33950	34410
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 D5185(m)	>100	33	43	90
Chromium	ppm	ASTM D5185(m)	>20	2	2	2
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	16	11	24
Lead	ppm	ASTM D5185(m)	>40	<1	1	4
Copper	ppm	ASTM D5185(m)	>330	26	71	123
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

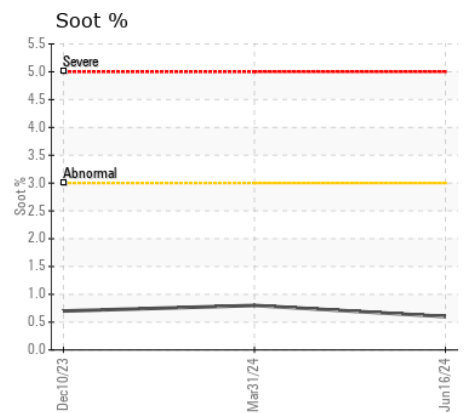
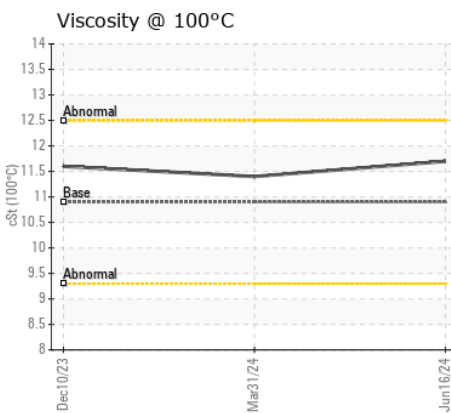
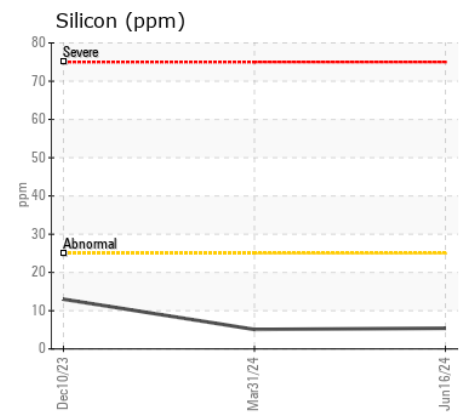
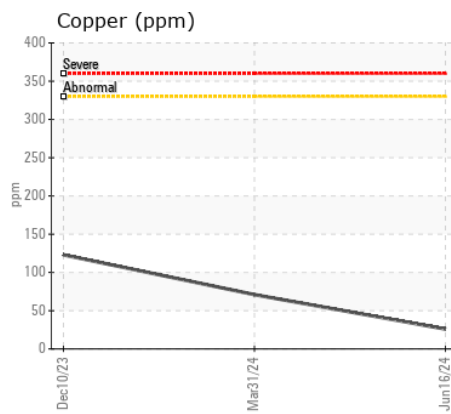
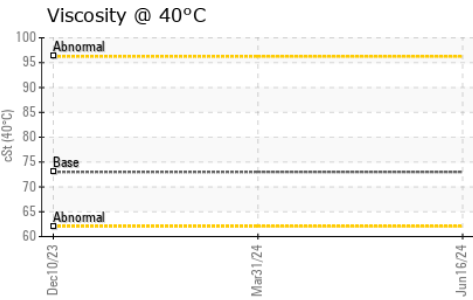
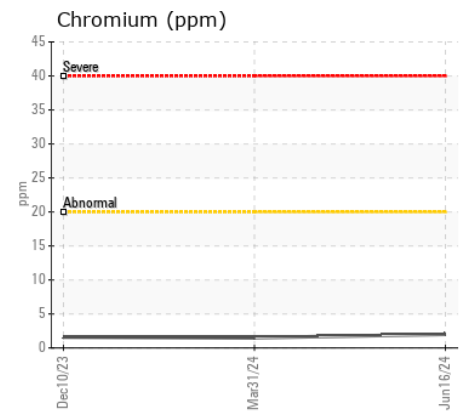
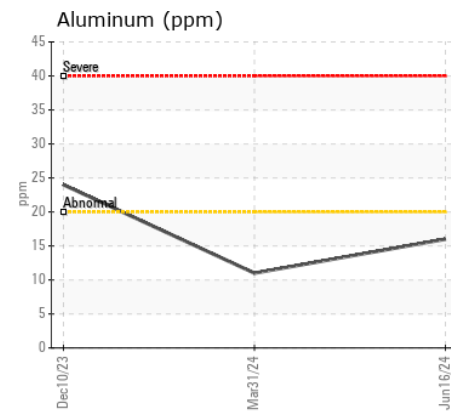
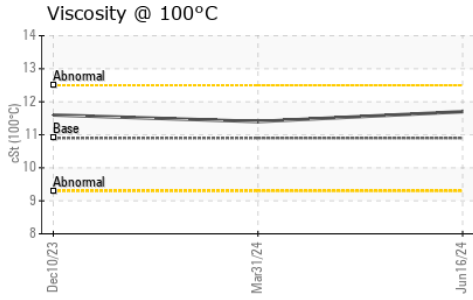
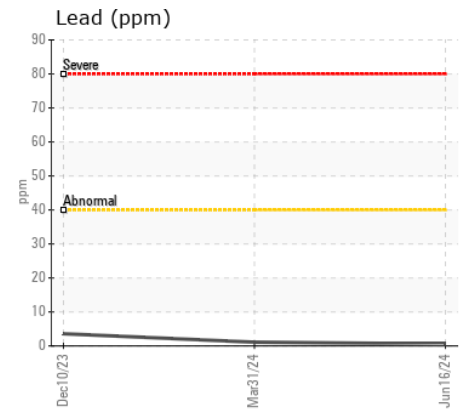
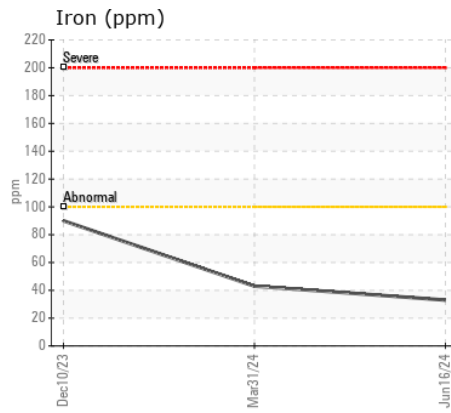
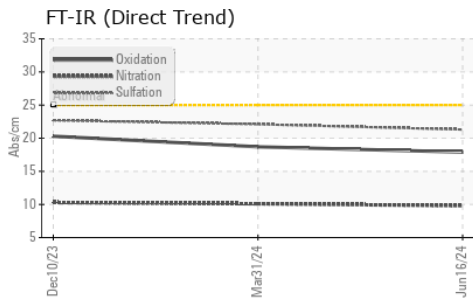
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	5	13
Potassium	ppm	ASTM D5185(m)	>20	20	13	51
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	0.8	0.7
Nitration	Abs/cm	ASTM D7624*	>20	9.8	10.1	10.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.3	22.1	22.7
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		2	2	5
Boron	ppm	ASTM D5185(m)	250	1	3	27
Barium	ppm	ASTM D5185(m)	10	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	62	65	66
Manganese	ppm	ASTM D5185(m)		<1	0	4
Magnesium	ppm	ASTM D5185(m)	450	985	993	483
Calcium	ppm	ASTM D5185(m)	3000	1097	1187	1812
Phosphorus	ppm	ASTM D5185(m)	1150	960	938	984
Zinc	ppm	ASTM D5185(m)	1350	1204	1215	1252
Sulfur	ppm	ASTM D5185(m)	4250	2118	1952	2230
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.9	18.7	20.3
Visc @ 40°C	cSt	ASTM D7279(m)	73	79.4	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.7	11.4	11.6
Viscosity Index (VI)	Scale	ASTM D2270*	138	140	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0934984 **Received** : 05 Jul 2024
Lab Number : 02645807 **Tested** : 08 Jul 2024
Unique Number : 5803346 **Diagnosed** : 08 Jul 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.