



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
INTERNATIONAL 52919
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0893710	WC0847659	WC0720930
Sample Date		Client Info		03 Apr 2024	26 Dec 2023	25 Aug 2023
Machine Age	kms	Client Info		94159	63573	55901
Oil Age	kms	Client Info		30585	28831	0
Filter Age	kms	Client Info		30585	28831	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	27	34	63
Chromium	ppm	ASTM D5185(m)	>20	1	2	3
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	10	25	40
Lead	ppm	ASTM D5185(m)	>40	2	3	5
Copper	ppm	ASTM D5185(m)	>330	2	5	18
Tin	ppm	ASTM D5185(m)	>15	1	2	4
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

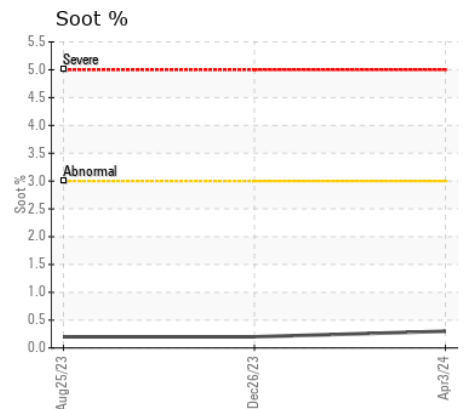
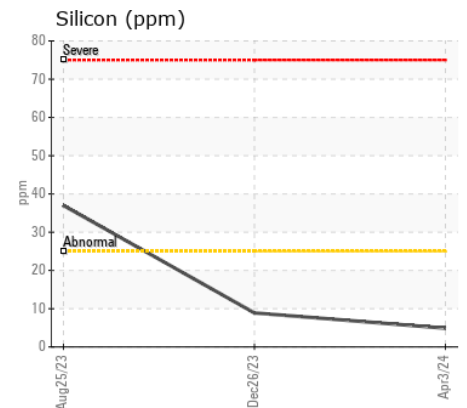
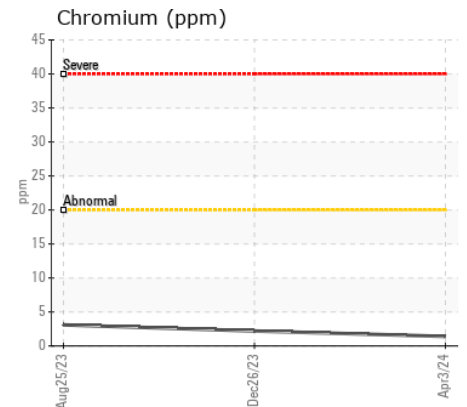
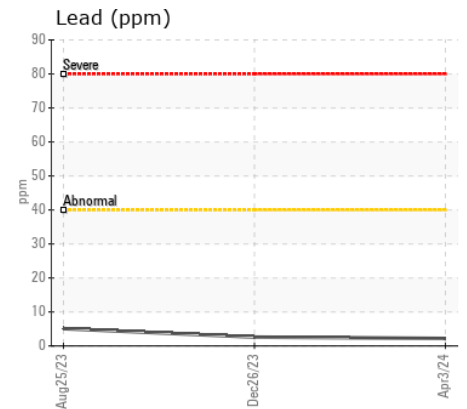
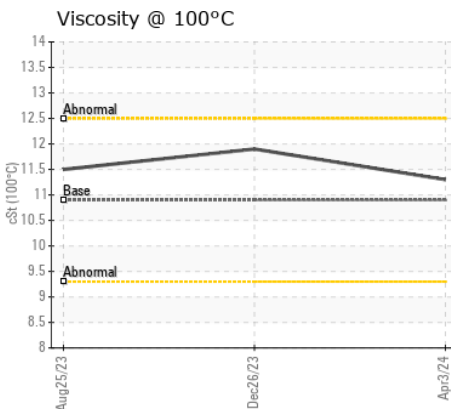
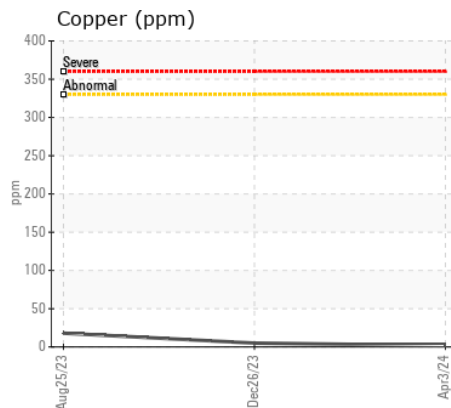
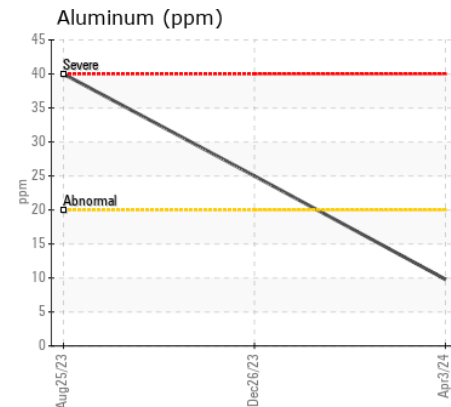
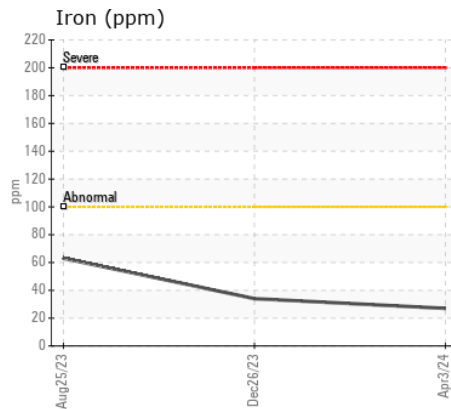
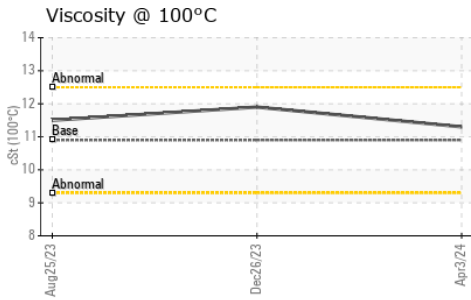
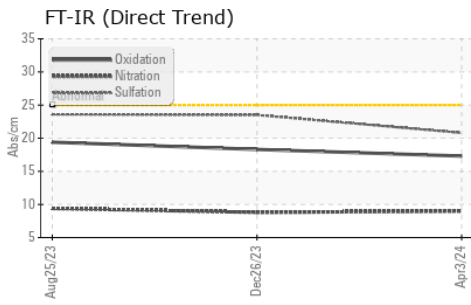
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	9	37
Potassium	ppm	ASTM D5185(m)	>20	18	68	110
Fuel		WC Method	>2.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.3	0.2	0.2
Nitration	Abs/cm	ASTM D7624*	>20	9.0	8.8	9.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.8	23.5	23.6
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
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	4
Boron	ppm	ASTM D5185(m)	250	10	72	42
Barium	ppm	ASTM D5185(m)	10	<1	<1	4
Molybdenum	ppm	ASTM D5185(m)	100	51	5	62
Manganese	ppm	ASTM D5185(m)		<1	<1	7
Magnesium	ppm	ASTM D5185(m)	450	825	48	441
Calcium	ppm	ASTM D5185(m)	3000	1258	2139	1681
Phosphorus	ppm	ASTM D5185(m)	1150	969	902	934
Zinc	ppm	ASTM D5185(m)	1350	1173	1123	1156
Sulfur	ppm	ASTM D5185(m)	4250	2362	2730	2185
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.3	18.3	19.4
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.3	11.9	11.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0893710 **Received** : 03 Jun 2024
Lab Number : 02639374 **Tested** : 03 Jun 2024
Unique Number : 5788536 **Diagnosed** : 03 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: 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.