



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
52932
 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		WC0935021	WC0854851	WC0813086
Sample Date		Client Info		24 May 2024	13 Sep 2023	24 May 2023
Machine Age	kms	Client Info		113972	53095	41769
Oil Age	kms	Client Info		28353	27142	0
Filter Age	kms	Client Info		28353	27142	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>90	28	44	57
Chromium	ppm	ASTM D5185(m)	>20	1	3	2
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	10	42	12
Lead	ppm	ASTM D5185(m)	>40	1	6	5
Copper	ppm	ASTM D5185(m)	>330	1	10	28
Tin	ppm	ASTM D5185(m)	>15	<1	2	4
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

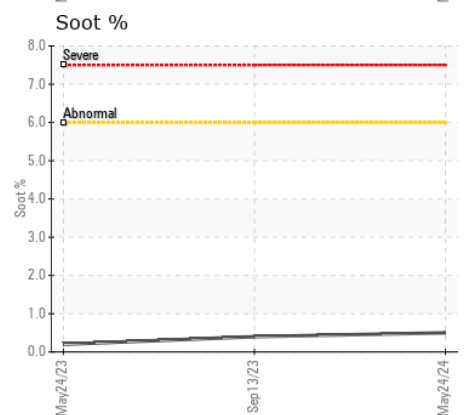
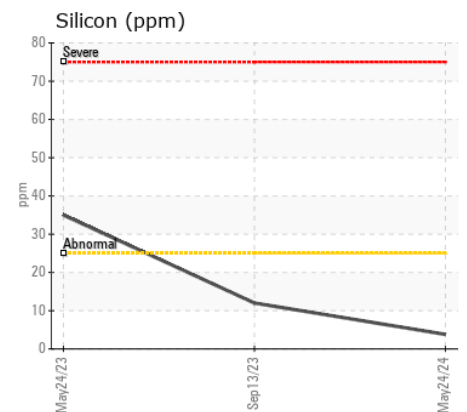
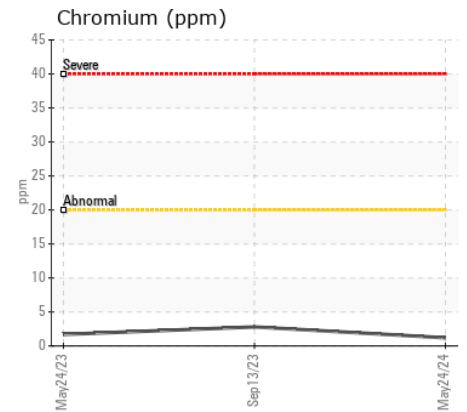
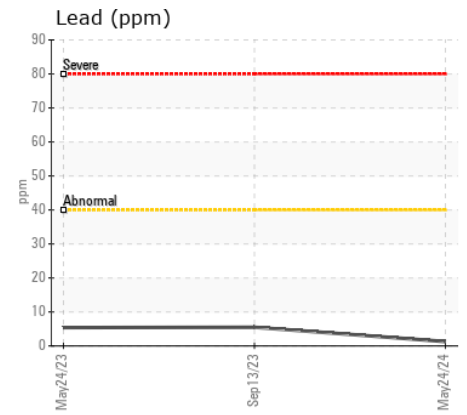
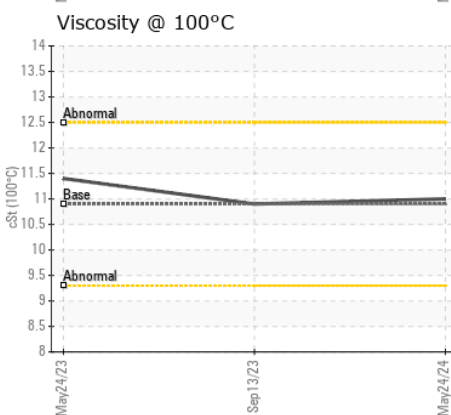
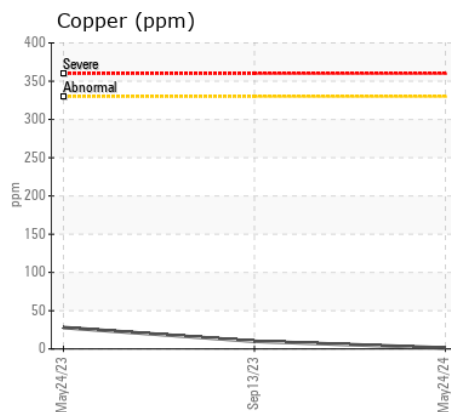
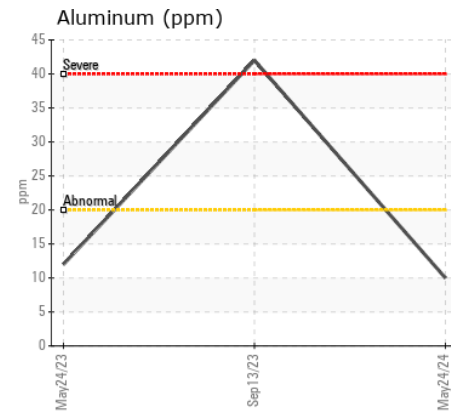
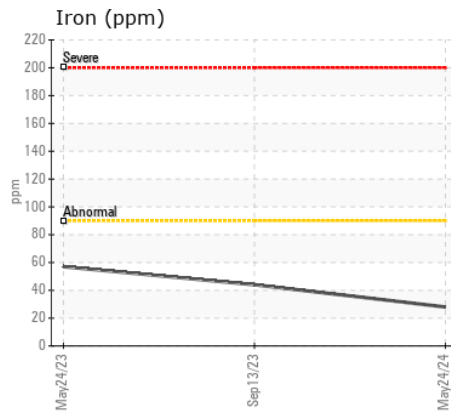
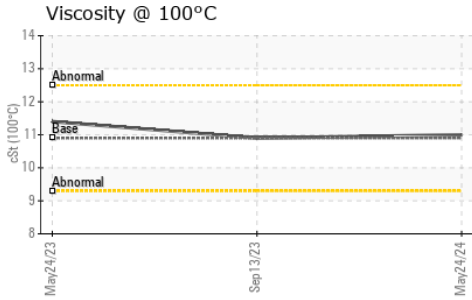
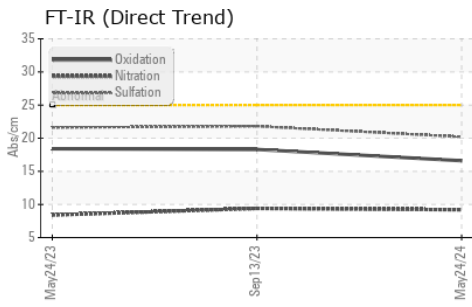
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	12	35
Potassium	ppm	ASTM D5185(m)	>20	22	127	32
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.5	0.4	0.2
Nitration	Abs/cm	ASTM D7624*	>20	9.2	9.4	8.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.2	21.8	21.6
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	3	4
Boron	ppm	ASTM D5185(m)	250	5	6	55
Barium	ppm	ASTM D5185(m)	10	0	<1	5
Molybdenum	ppm	ASTM D5185(m)	100	62	64	65
Manganese	ppm	ASTM D5185(m)		<1	2	6
Magnesium	ppm	ASTM D5185(m)	450	997	923	441
Calcium	ppm	ASTM D5185(m)	3000	1099	1185	1741
Phosphorus	ppm	ASTM D5185(m)	1150	1007	1001	1006
Zinc	ppm	ASTM D5185(m)	1350	1234	1235	1136
Sulfur	ppm	ASTM D5185(m)	4250	2482	2358	2420
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.6	18.3	18.4
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.0	10.9	11.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0935021 **Received** : 06 Jun 2024
Lab Number : 02640066 **Tested** : 06 Jun 2024
Unique Number : 5789228 **Diagnosed** : 06 Jun 2024 - Wes Davis
Test Package : MOB 1

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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.