



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
51506
 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		WC0935013	WC0915508	WC0892096
Sample Date		Client Info		07 Jun 2024	07 Apr 2024	03 Feb 2024
Machine Age	mls	Client Info		100565	33376	35235
Oil Age	mls	Client Info		37955	33376	34935
Filter Age	mls	Client Info		37955	33376	34935
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	38	40	48
Chromium	ppm	ASTM D5185(m)	>20	3	4	4
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	<1	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	33	55	60
Lead	ppm	ASTM D5185(m)	>40	1	3	4
Copper	ppm	ASTM D5185(m)	>330	61	165	192
Tin	ppm	ASTM D5185(m)	>15	0	<1	3
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

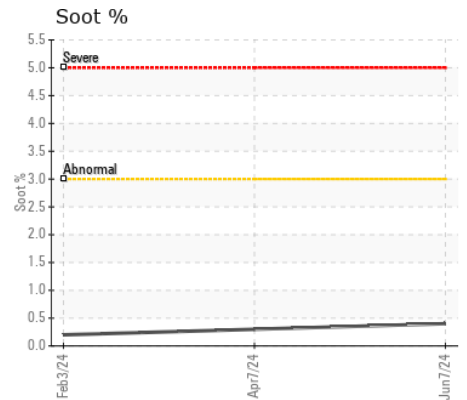
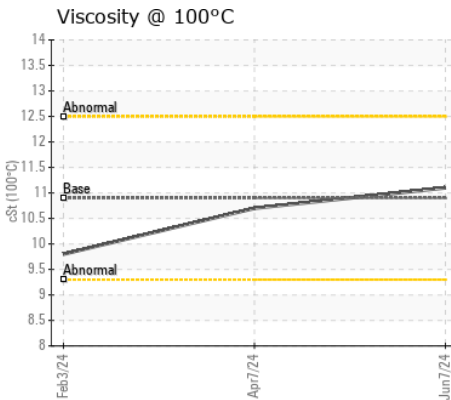
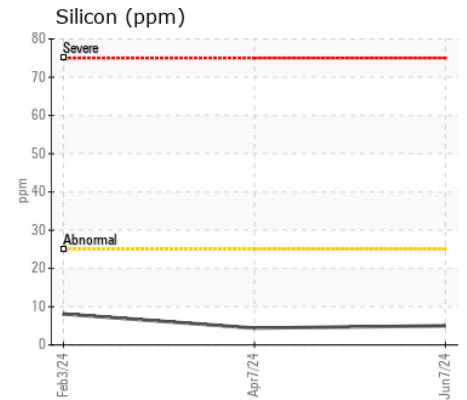
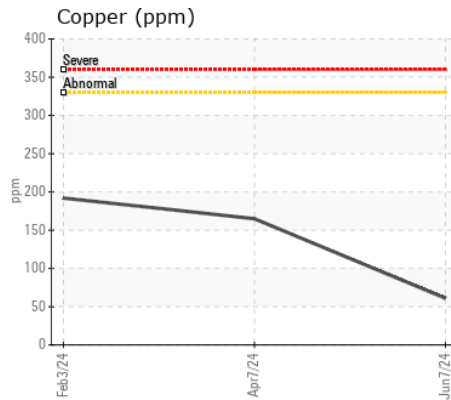
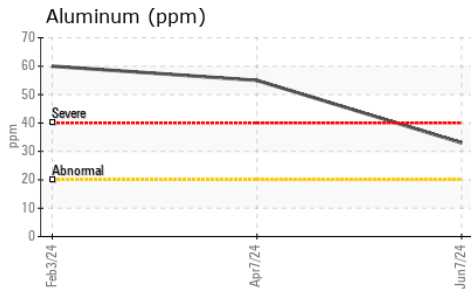
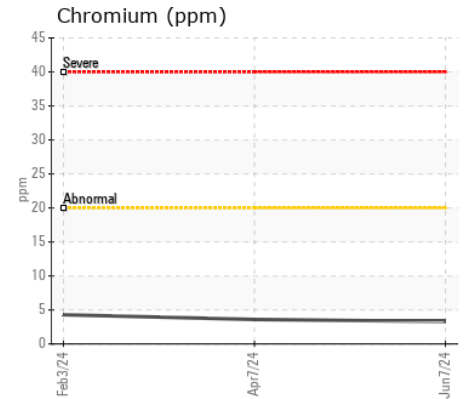
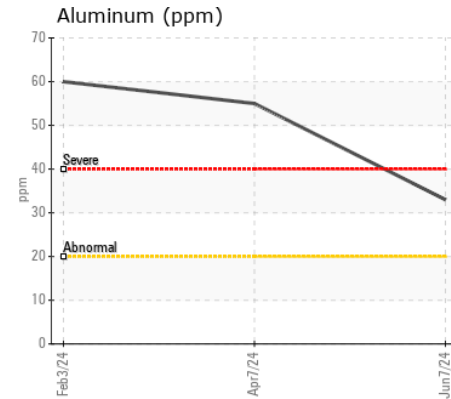
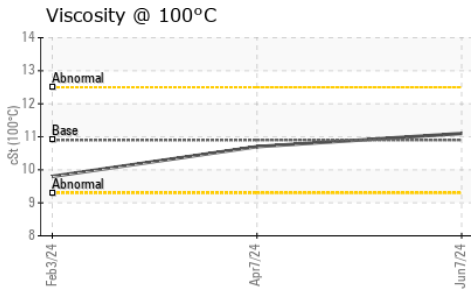
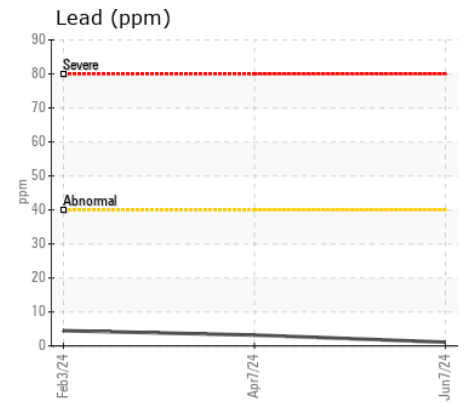
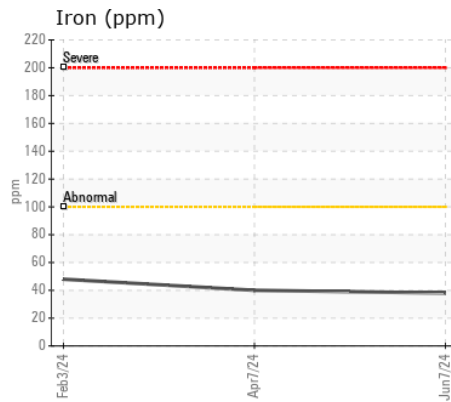
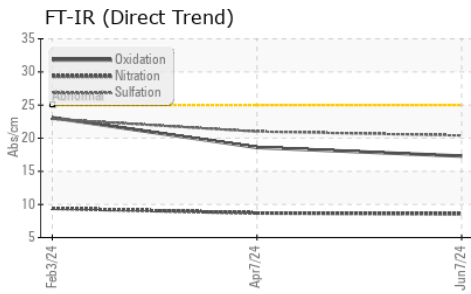
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	4	8
Potassium	ppm	ASTM D5185(m)	>20	68	107	139
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	0.4	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	8.6	8.7	9.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.4	21.0	22.9
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	6
Boron	ppm	ASTM D5185(m)	250	5	8	29
Barium	ppm	ASTM D5185(m)	10	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	100	60	59	42
Manganese	ppm	ASTM D5185(m)		1	2	4
Magnesium	ppm	ASTM D5185(m)	450	937	928	553
Calcium	ppm	ASTM D5185(m)	3000	1104	1246	1695
Phosphorus	ppm	ASTM D5185(m)	1150	899	907	724
Zinc	ppm	ASTM D5185(m)	1350	1164	1134	834
Sulfur	ppm	ASTM D5185(m)	4250	1747	1713	1790
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.3	18.6	23.1
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.1	10.7	9.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0935013 **Received** : 05 Jul 2024
Lab Number : 02645788 **Tested** : 05 Jul 2024
Unique Number : 5803327 **Diagnosed** : 05 Jul 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.