



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
FOR418 (S/N 100013696)

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0902348	WC0835137	WC0826294
Sample Date		Client Info		20 Feb 2024	22 Aug 2023	07 Jul 2023
Machine Age	hrs	Client Info		12922	12184	12142
Oil Age	hrs	Client Info		0	250	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	MARGINAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	7	9	8
Chromium	ppm	ASTM D5185(m)	>20	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	3
Lead	ppm	ASTM D5185(m)	>40	<1	<1	0
Copper	ppm	ASTM D5185(m)	>330	<1	2	1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

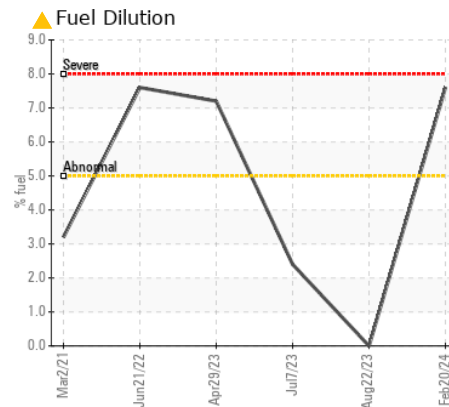
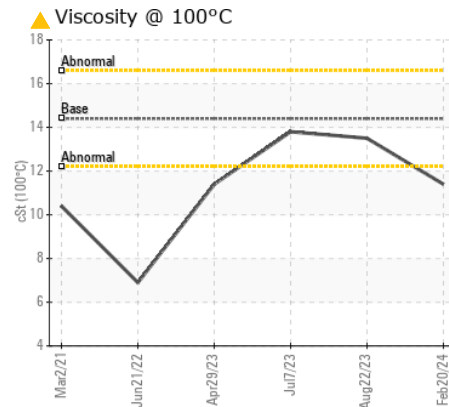
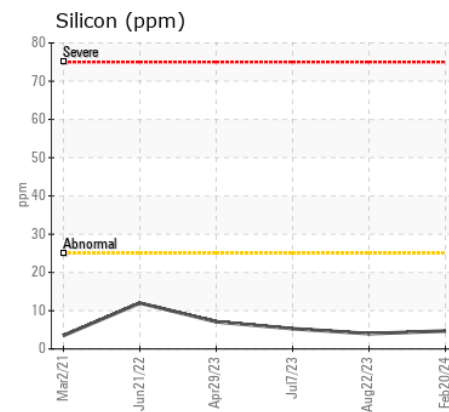
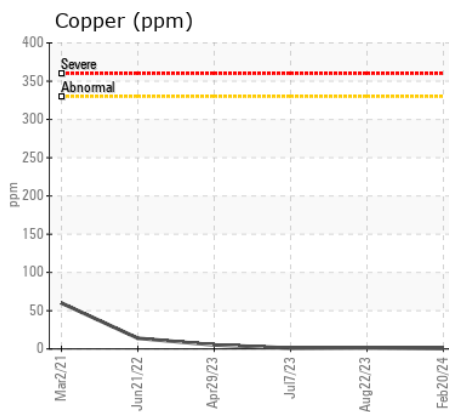
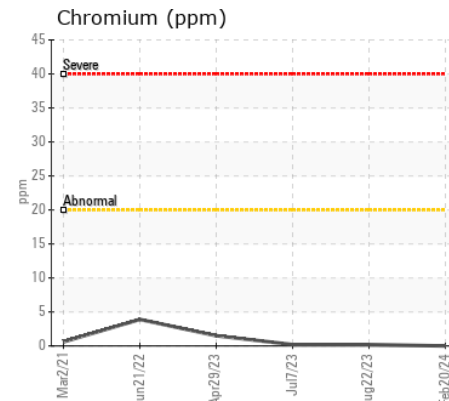
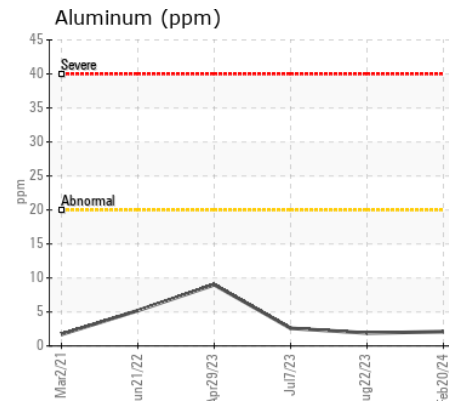
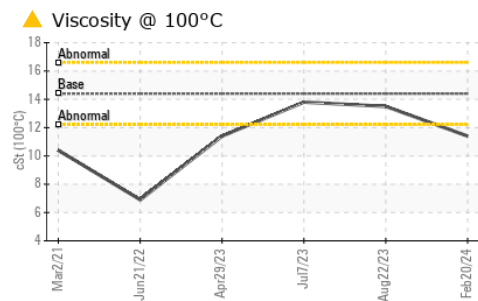
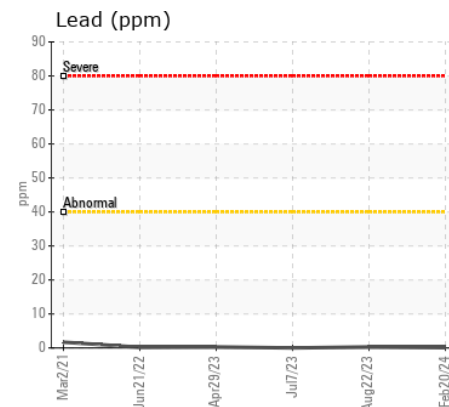
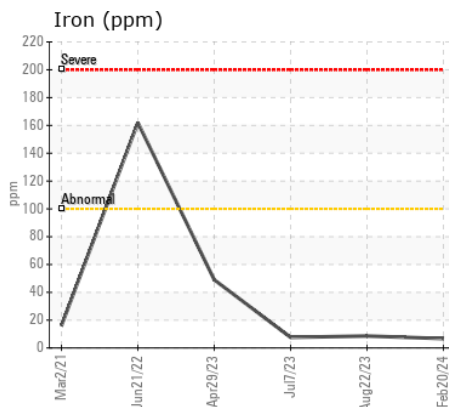
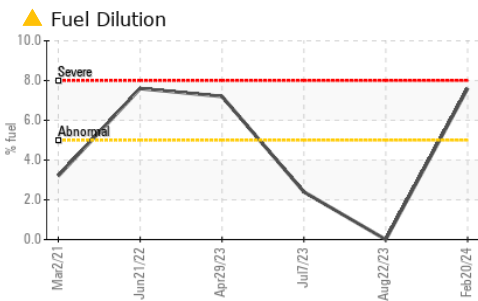
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	4	5
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel	%	ASTM D7593*	>5	▲ 7.6	<1.0	▲ 2.4
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	8.2	6.8	6.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.8	20.8	19.6
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)	>158	2	4	2
Boron	ppm	ASTM D5185(m)	250	34	6	4
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	35	57	58
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	451	971	988
Calcium	ppm	ASTM D5185(m)	3000	1549	1043	1037
Phosphorus	ppm	ASTM D5185(m)	1150	692	1082	1095
Zinc	ppm	ASTM D5185(m)	1350	789	1176	1191
Sulfur	ppm	ASTM D5185(m)	4250	2164	2657	2633
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.2	17.0	16.3
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	▲ 11.4	13.5	13.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0902348 **Received** : 28 Feb 2024
Lab Number : 02618646 **Tested** : 29 Feb 2024
Unique Number : 5735756 **Diagnosed** : 29 Feb 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

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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.