



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
7209
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0924018	WC0853445	WC0796331
Sample Date		Client Info		23 Apr 2024	24 Oct 2023	25 Jun 2023
Machine Age	kms	Client Info		378606	369086	237638
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				SEVERE	SEVERE	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	40	63	25
Chromium	ppm	ASTM D5185(m)	>20	2	2	1
Nickel	ppm	ASTM D5185(m)	>2	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	3	2
Lead	ppm	ASTM D5185(m)	>40	1	2	<1
Copper	ppm	ASTM D5185(m)	>330	2	5	2
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

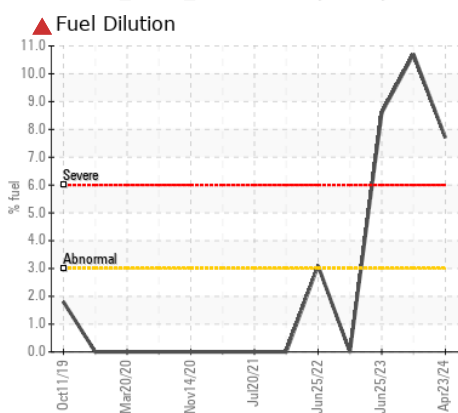
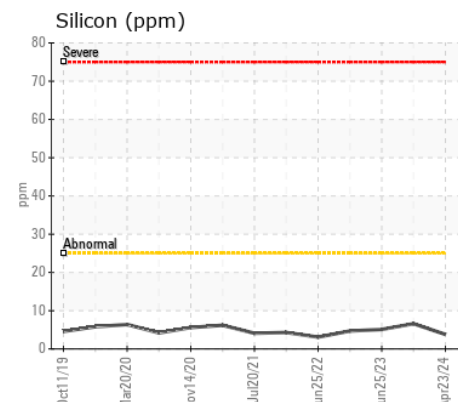
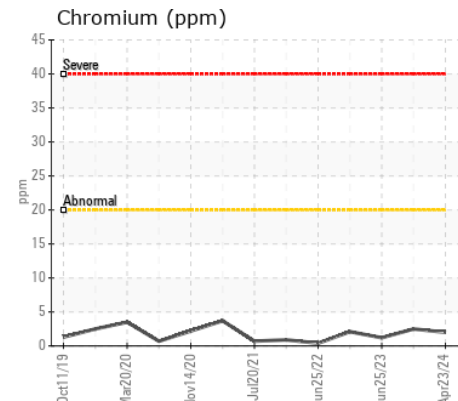
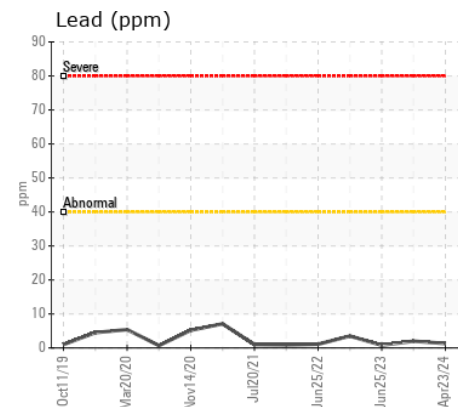
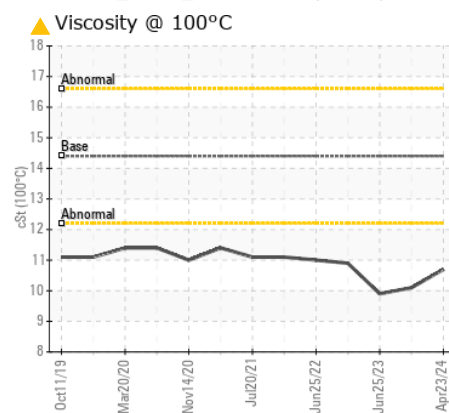
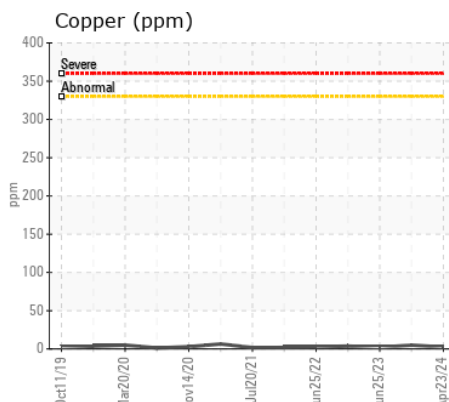
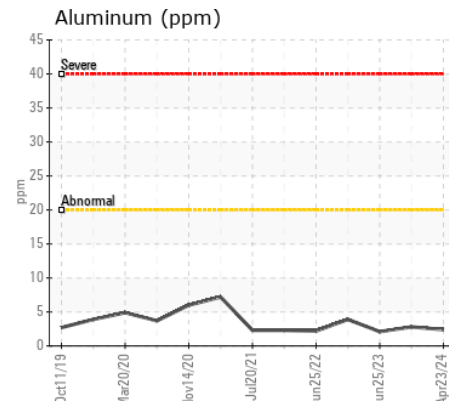
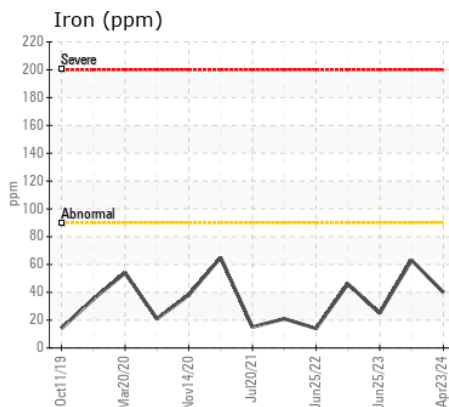
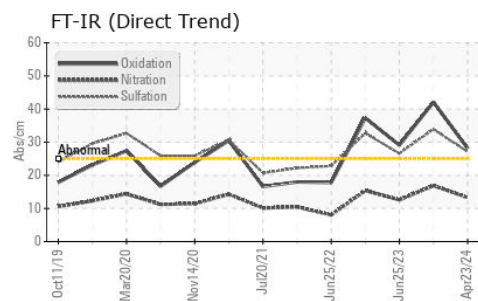
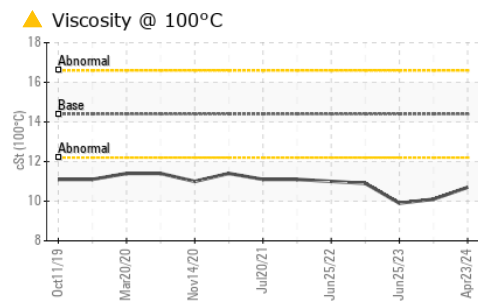
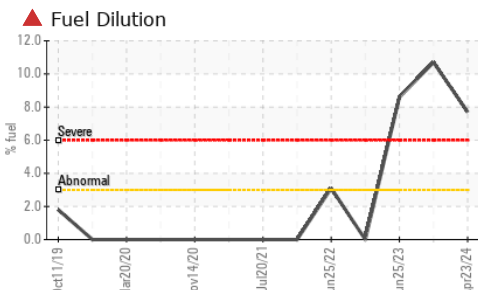
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	7	5
Potassium	ppm	ASTM D5185(m)	>20	5	6	5
Fuel	%	ASTM D7593*	>3.0	▲ 7.7	▲ 10.7	▲ 8.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.6	0.5	0.2
Nitration	Abs/cm	ASTM D7624*	>20	13.3	16.9	12.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.1	33.9	26.6
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	3	3	3
Boron	ppm	ASTM D5185(m)	250	44	31	39
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	1	5	5
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	660	618	644
Calcium	ppm	ASTM D5185(m)	3000	1210	1183	1215
Phosphorus	ppm	ASTM D5185(m)	1150	613	612	667
Zinc	ppm	ASTM D5185(m)	1350	694	701	724
Sulfur	ppm	ASTM D5185(m)	4250	2216	2109	2254
Oxidation	Abs/.1mm	ASTM D7414*	>25	28.1	42.1	▲ 29.1
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	▲ 10.7	▲ 10.1	▲ 9.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0924018 **Received** : 29 Apr 2024
Lab Number : 02631815 **Tested** : 30 Apr 2024
Unique Number : 5772968 **Diagnosed** : 30 Apr 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: 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.