



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
CJ412652 LIMERICK
 Component
Diesel Engine
 Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. We advise that you check for faulty combustion, plugged air filters, or aftercoolers. 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 brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0554133	---	---
Sample Date		Client Info		25 Jun 2024	---	---
Machine Age	kms	Client Info		275264	---	---
Oil Age	kms	Client Info		0	---	---
Filter Age	kms	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				SEVERE	---	---

WEAR

Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated.

PQ		ASTM D8184*		3	---	---
Iron	ppm	ASTM D5185(m)	>127	▲ 145	---	---
Chromium	ppm	ASTM D5185(m)	>3	2	---	---
Nickel	ppm	ASTM D5185(m)	>30	2	---	---
Titanium	ppm	ASTM D5185(m)	>2	<1	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>59	15	---	---
Lead	ppm	ASTM D5185(m)	>29	7	---	---
Copper	ppm	ASTM D5185(m)	>135	2	---	---
Tin	ppm	ASTM D5185(m)	>2	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

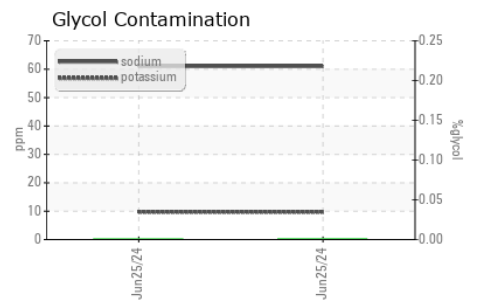
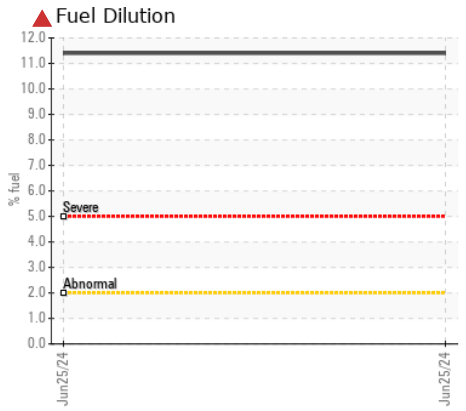
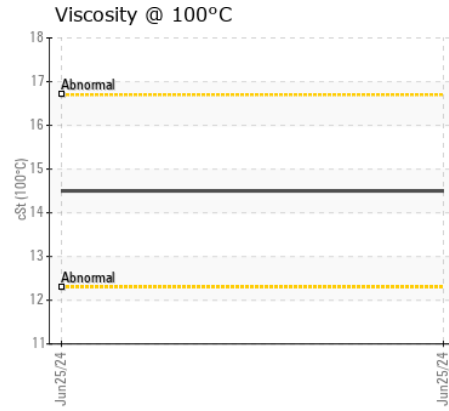
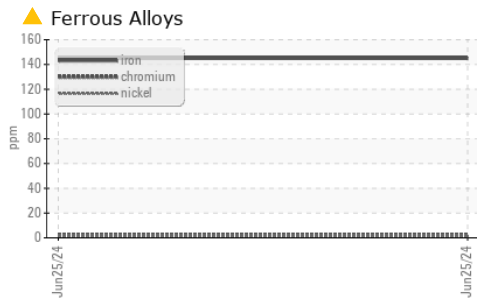
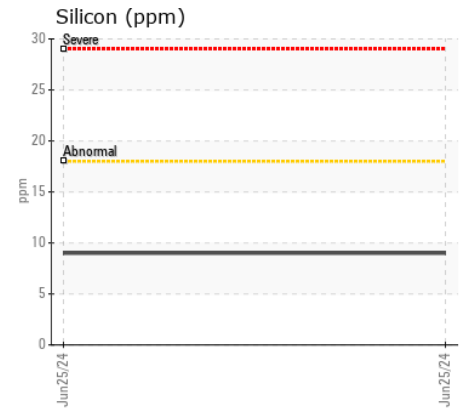
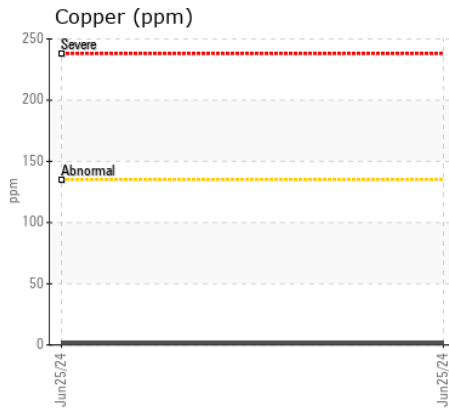
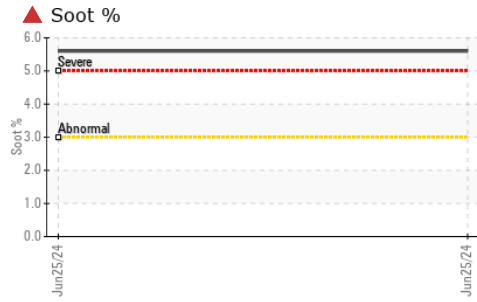
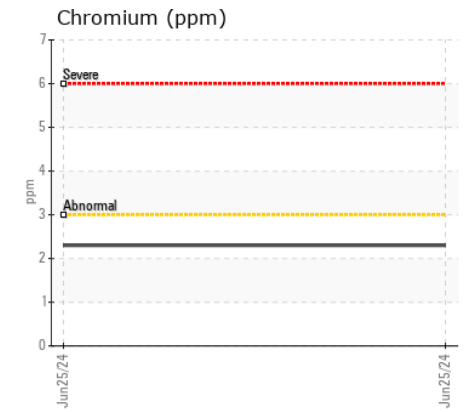
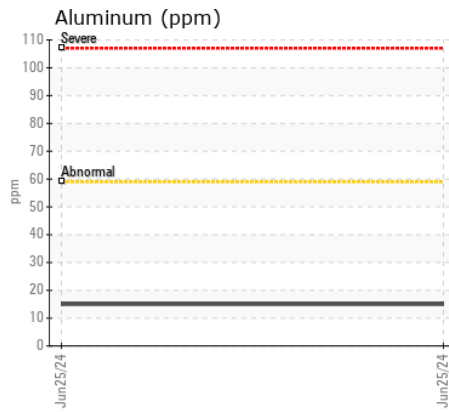
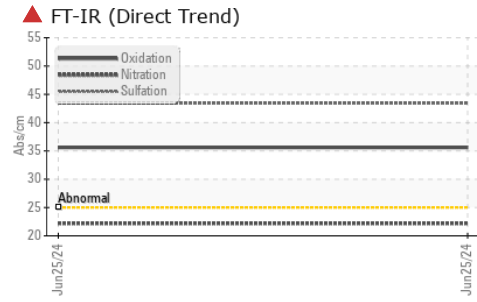
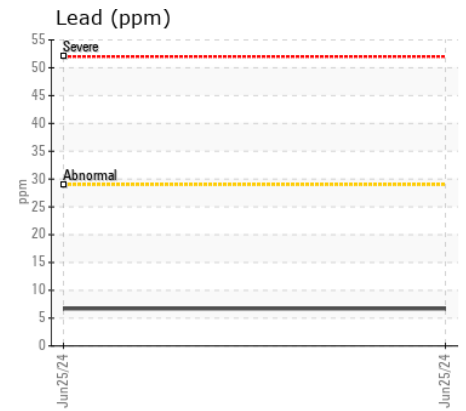
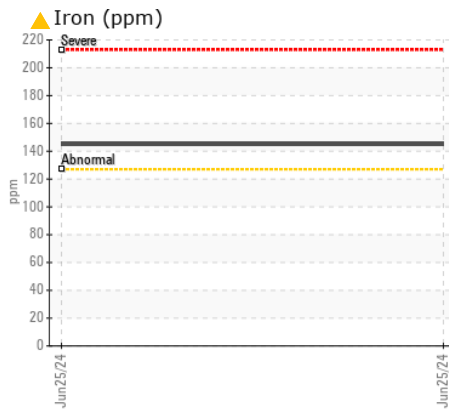
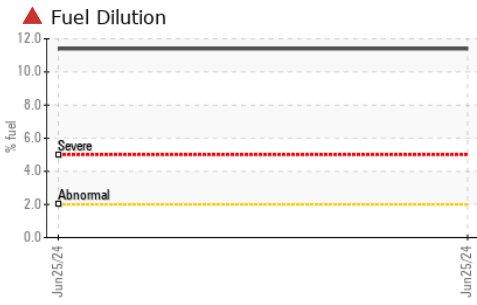
There is a high amount of fuel present in the oil. There is an abnormal amount of solids and carbon present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>18	9	---	---
Potassium	ppm	ASTM D5185(m)	>20	10	---	---
Fuel	%	ASTM D7593*	>2.0	▲ 11.4	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol	%	ASTM D7922*		0.0	---	---
Soot %	%	ASTM D7844*	>3	▲ 5.6	---	---
Nitration	Abs/cm	ASTM D7624*	>20	22.2	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	43.4	---	---
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	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 15W40 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		61	---	---
Boron	ppm	ASTM D5185(m)		51	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		12	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)		17	---	---
Calcium	ppm	ASTM D5185(m)		1835	---	---
Phosphorus	ppm	ASTM D5185(m)		745	---	---
Zinc	ppm	ASTM D5185(m)		932	---	---
Sulfur	ppm	ASTM D5185(m)		2228	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	35.6	---	---
Visc @ 40°C	cSt	ASTM D7279(m)		99.6	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		14.5	---	---
Viscosity Index (VI)	Scale	ASTM D2270*		150	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0554133 **Received** : 27 Jun 2024
Lab Number : 02644288 **Tested** : 28 Jun 2024
Unique Number : 5801827 **Diagnosed** : 02 Jul 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, KV40, PercentFuel, PQ, VI, 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.