



Machine Id
320E CAT
Component
Diesel Engine
Fluid
CAT DIESEL ENGINE OIL 15W40 (23 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0124534	---	---
Sample Date		Client Info		26 Jun 2024	---	---
Machine Age	hrs	Client Info		11423	---	---
Oil Age	hrs	Client Info		485	---	---
Filter Age	hrs	Client Info		485	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	55	---	---
Chromium	ppm	ASTM D5185(m)	>20	3	---	---
Nickel	ppm	ASTM D5185(m)	>2	<1	---	---
Titanium	ppm	ASTM D5185(m)	>2	0	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>25	24	---	---
Lead	ppm	ASTM D5185(m)	>40	0	---	---
Copper	ppm	ASTM D5185(m)	>330	4	---	---
Tin	ppm	ASTM D5185(m)	>15	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	LIGHT	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

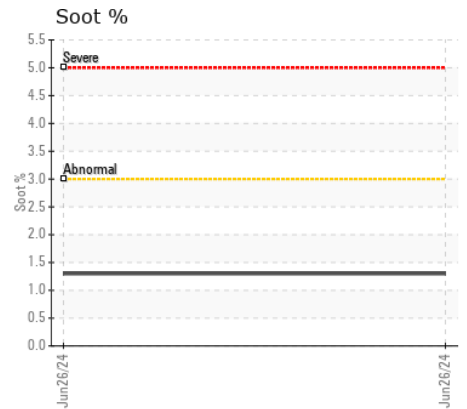
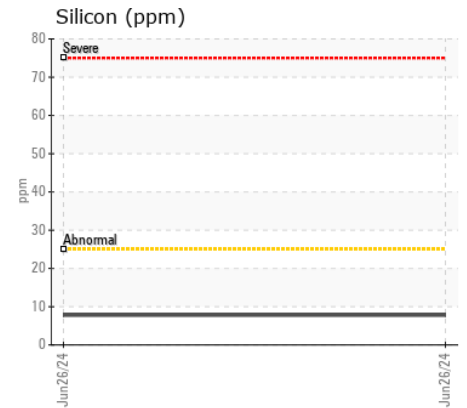
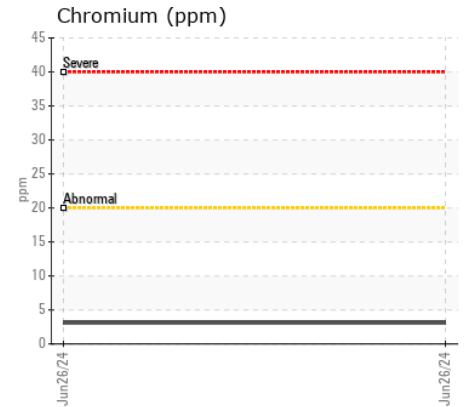
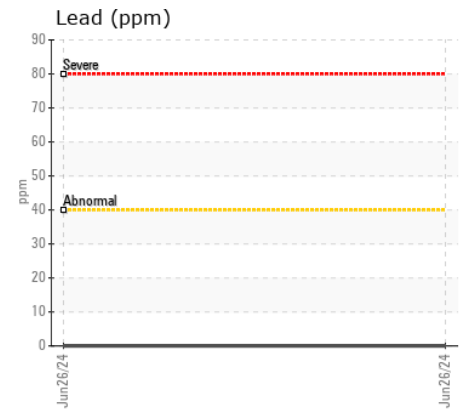
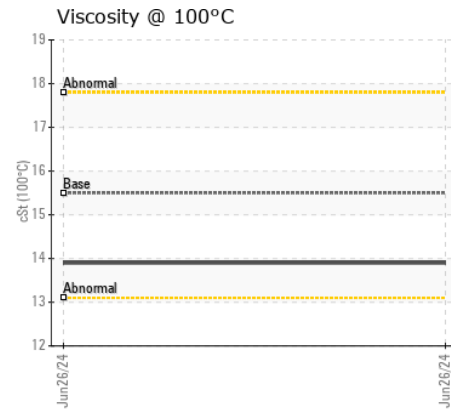
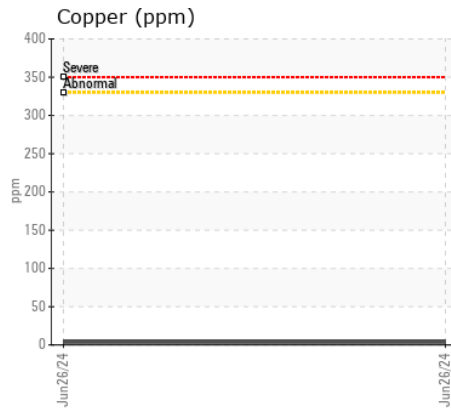
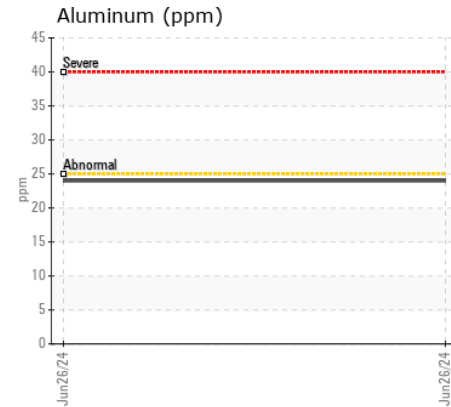
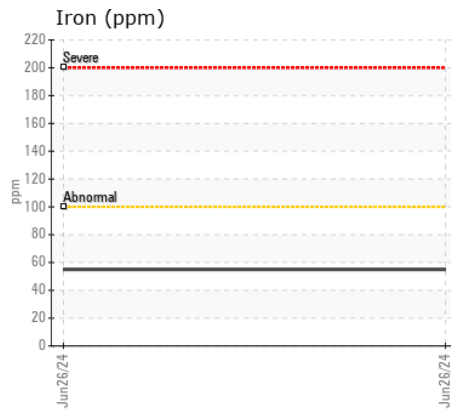
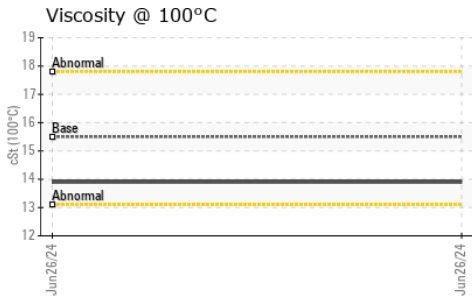
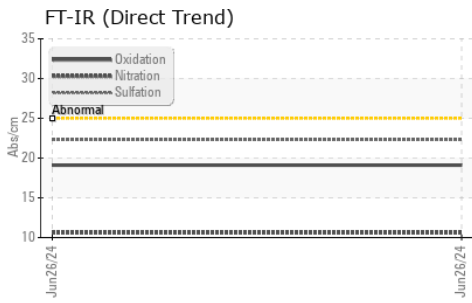
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	---	---
Potassium	ppm	ASTM D5185(m)	>20	1	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	1.3	---	---
Nitration	Abs/cm	ASTM D7624*	>20	10.6	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.3	---	---
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

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		22	---	---
Boron	ppm	ASTM D5185(m)		7	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		55	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)		806	---	---
Calcium	ppm	ASTM D5185(m)		1352	---	---
Phosphorus	ppm	ASTM D5185(m)		944	---	---
Zinc	ppm	ASTM D5185(m)	1460	1188	---	---
Sulfur	ppm	ASTM D5185(m)		2373	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.1	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	13.9	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0124534 **Received** : 02 Jul 2024
Lab Number : 02644779 **Tested** : 02 Jul 2024
Unique Number : 5802318 **Diagnosed** : 02 Jul 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Visual)

GFL Environmental - 720 - Lafleche - Landfill
 17125 Lafleche Road,
 Moose Creek, ON
 CA K0C 1W0
 Contact: Charles Bergeron
 cbergeron@gflenv.com
 T: (613)538-4853
 F:

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.