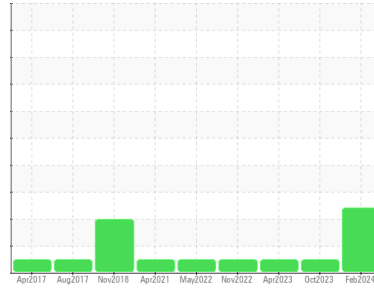




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
4506

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (--- LTR)

DIAGNOSIS

Recommendation

Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative.

Fluid Condition

The condition of the oil is acceptable for the time in service (see recommendation).

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0111777	GFL0081953	GFL0039065
Sample Date	Client Info		21 Feb 2024	02 Oct 2023	01 Apr 2023
Machine Age	hrs	Client Info	600	19949	19457
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	24	23	18
Chromium	ppm	ASTM D5185(m)	>20	1	1	1
Nickel	ppm	ASTM D5185(m)	>4	1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	1
Lead	ppm	ASTM D5185(m)	>40	19	3	6
Copper	ppm	ASTM D5185(m)	>330	23	1	2
Tin	ppm	ASTM D5185(m)	>15	<1	0	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	2	1	1	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	83	64	65
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	950	777	997	994
Calcium	ppm	ASTM D5185(m)	1050	885	1072	1058
Phosphorus	ppm	ASTM D5185(m)	995	971	1025	1095
Zinc	ppm	ASTM D5185(m)	1180	1052	1211	1227
Sulfur	ppm	ASTM D5185(m)	2600	2518	2591	2652
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

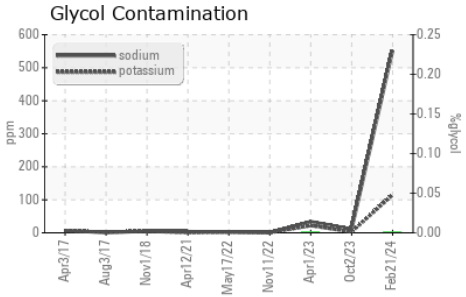
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Silicon	ppm	ASTM D5185(m)	>25	16	6	8
Sodium	ppm	ASTM D5185(m)		552	11	34
Potassium	ppm	ASTM D5185(m)	>20	115	3	22
Glycol	%	ASTM D7922*		0.0	NEG	0.0

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.1	0.5	0.4
Nitration	Abs/cm	ASTM D7624*	>20	9.2	7.8	9.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.0	19.9	20.1



OIL ANALYSIS REPORT



FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs./1mm ASTM D7414*	15.2	15.4	16.1

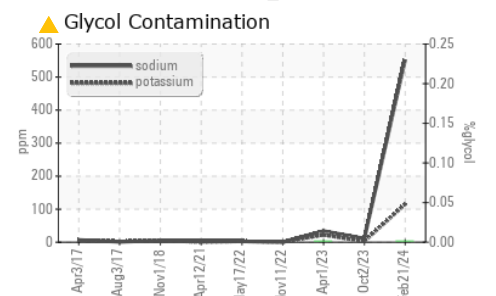
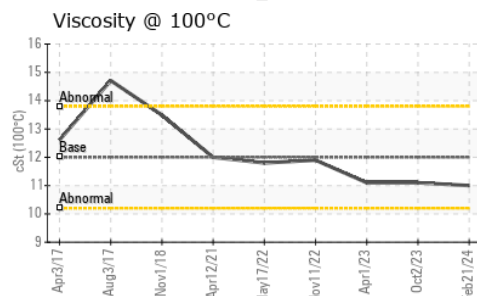
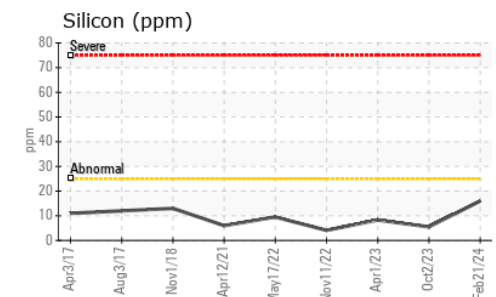
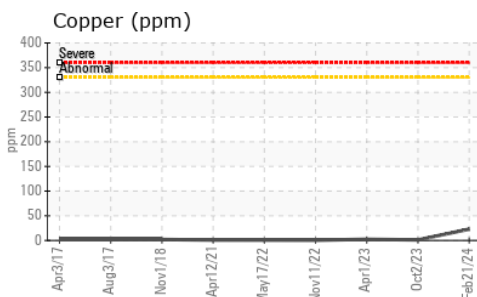
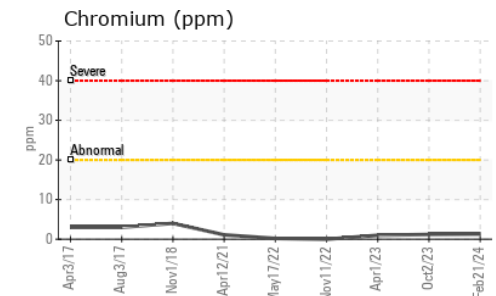
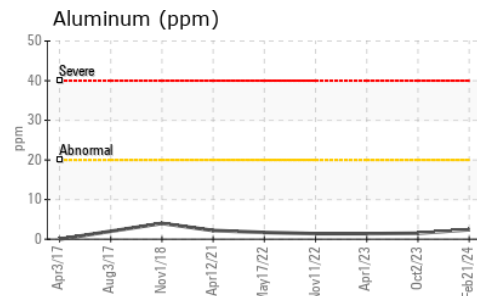
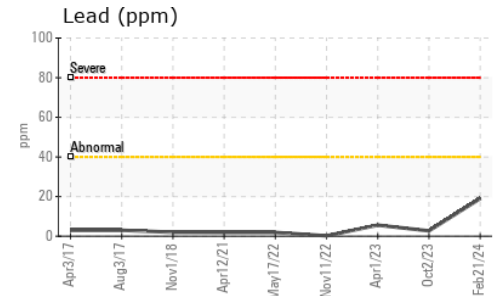
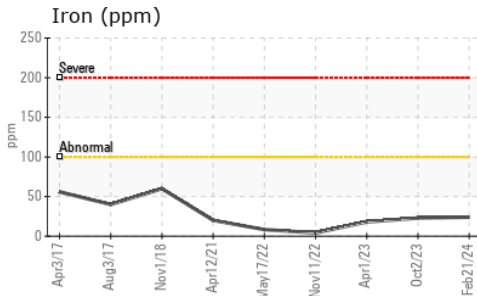
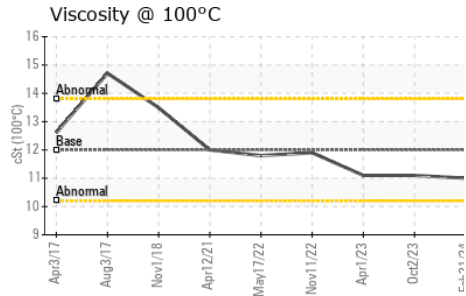
VISUAL

method	limit/base	current	history1	history2
Emulsified Water	scalar Visual*	NEG	NEG	NEG
Free Water	scalar Visual*	NEG	NEG	NEG

FLUID PROPERTIES

method	limit/base	current	history1	history2
Visc @ 100°C	cSt ASTM D7279(m)	11.0	11.1	11.1

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0111777 **Received** : 14 Mar 2024
Lab Number : 02621955 **Tested** : 14 Mar 2024
Unique Number : 5747074 **Diagnosed** : 15 Mar 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol)

GFL Environmental - 557 - Edson
 6615 - 4th Ave,
 Edson, AB
 CA T7E 1M5
 Contact: Charles Castro
 CCastro@gflenv.com

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.