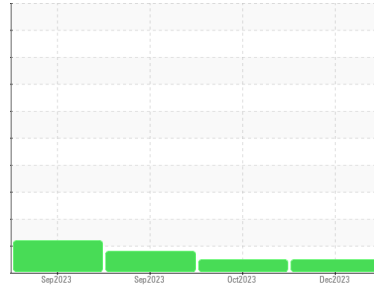




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
2220

Component
Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			GFL0101726	GFL0097596	GFL0093899
Sample Date	Client Info			06 Dec 2023	30 Oct 2023	19 Sep 2023
Machine Age	hrs	Client Info		25981	43020	25502
Oil Age	hrs	Client Info		0	0	90
Oil Changed	Client Info			Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	MARGINAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	▲ 3.9
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>110	19	14	6
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	0
Nickel	ppm	ASTM D5185(m)	>2	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	3	2	1
Lead	ppm	ASTM D5185(m)	>45	3	2	<1
Copper	ppm	ASTM D5185(m)	>85	9	6	3
Tin	ppm	ASTM D5185(m)	>4	<1	<1	<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

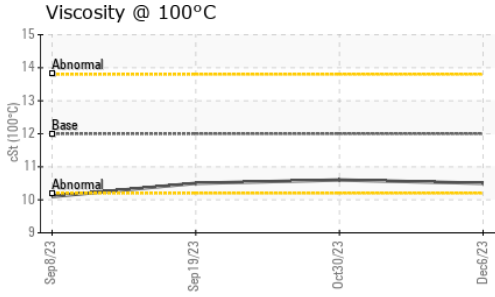
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	5	6	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	59	63	58
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	950	954	1005	948
Calcium	ppm	ASTM D5185(m)	1050	1110	1176	1032
Phosphorus	ppm	ASTM D5185(m)	995	991	1042	980
Zinc	ppm	ASTM D5185(m)	1180	1174	1255	1155
Sulfur	ppm	ASTM D5185(m)	2600	2505	2583	2489
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	4	4	3
Sodium	ppm	ASTM D5185(m)		2	5	2
Potassium	ppm	ASTM D5185(m)	>20	2	<1	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.1	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	10.3	8.7	6.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.6	21.4	19.9



OIL ANALYSIS REPORT

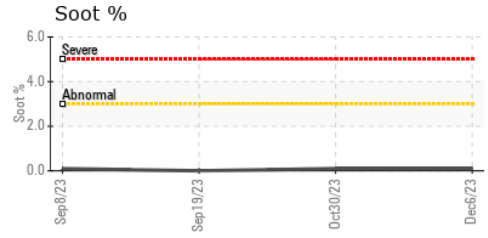
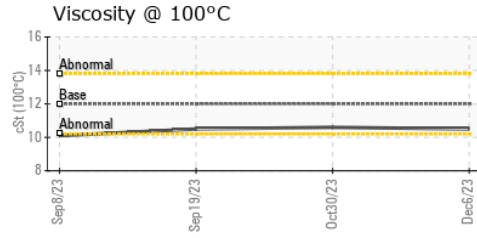
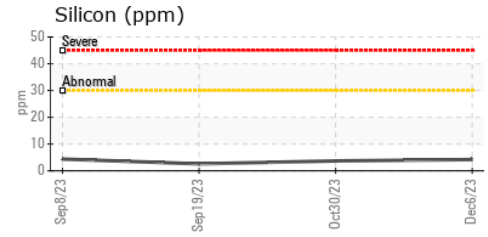
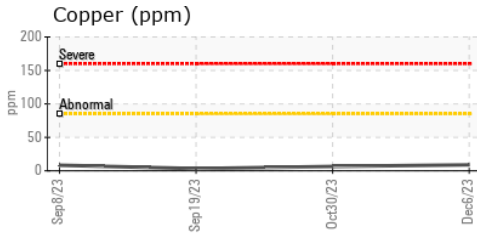
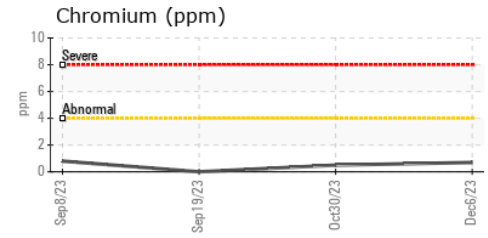
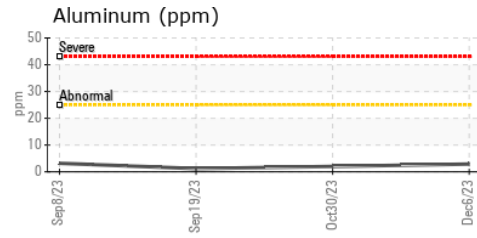
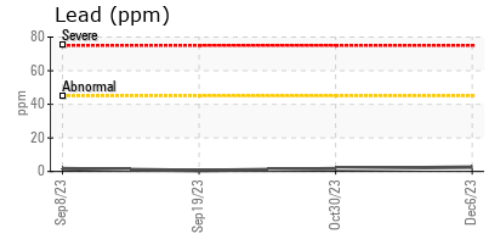
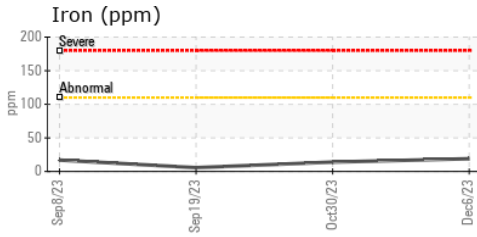


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	20.9	19.0	16.7

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	---	NONE
Precipitate	scalar	Visual*	NONE	NONE	---	NONE
Silt	scalar	Visual*	NONE	NONE	---	NONE
Debris	scalar	Visual*	NONE	NONE	---	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	---	NONE
Appearance	scalar	Visual*	NORML	NORML	---	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	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)	12.00	10.5	10.6	10.5

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 554 - Edmonton SW**
Sample No. : GFL0101726 **Received** : 27 Dec 2023
Lab Number : 02605173 **Diagnosed** : 27 Dec 2023
Unique Number : 5698258 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

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.

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