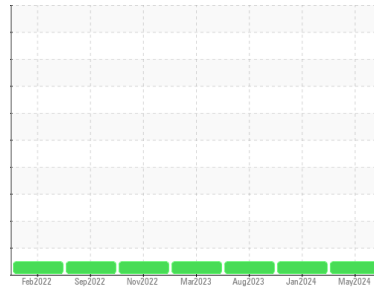




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

423049

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (--- GAL)

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			GFL0099500	GFL0099516	GFL0068055
Sample Date	Client Info			30 May 2024	08 Jan 2024	29 Aug 2023
Machine Age	hrs	Client Info		14865	14112	13406
Oil Age	hrs	Client Info		753	400	655
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	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
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>110	26	28	27
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	6	6	5
Lead	ppm	ASTM D5185(m)	>45	0	1	1
Copper	ppm	ASTM D5185(m)	>85	6	7	7
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

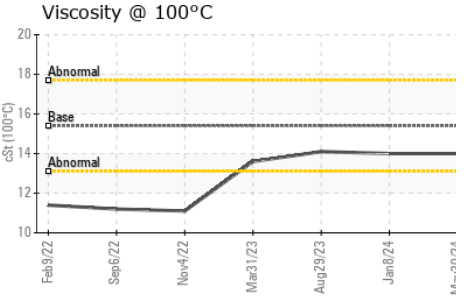
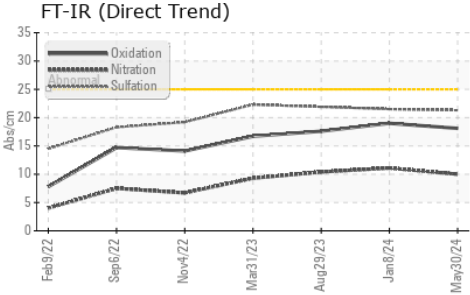
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	4	3	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	63	62	62
Manganese	ppm	ASTM D5185(m)	0	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	1017	989	1018
Calcium	ppm	ASTM D5185(m)	1070	1086	1096	1079
Phosphorus	ppm	ASTM D5185(m)	1150	1026	1007	1117
Zinc	ppm	ASTM D5185(m)	1270	1230	1215	1235
Sulfur	ppm	ASTM D5185(m)	2060	2466	2679	2523
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	7	8	9
Sodium	ppm	ASTM D5185(m)		2	2	2
Potassium	ppm	ASTM D5185(m)	>20	<1	1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.5	0.6	0.4
Nitration	Abs/cm	ASTM D7624*	>20	10.0	11.1	10.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.3	21.5	21.9



OIL ANALYSIS REPORT

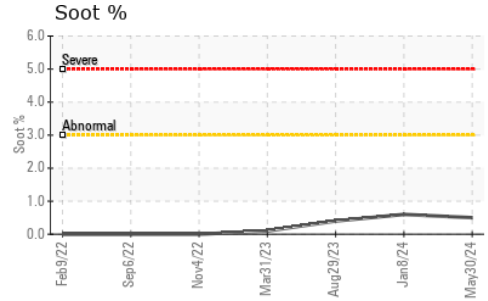
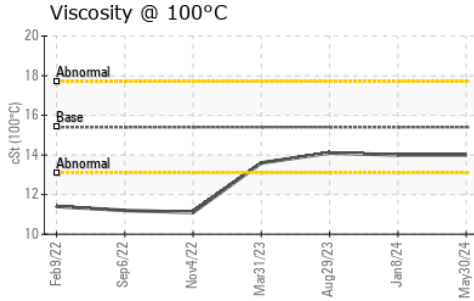
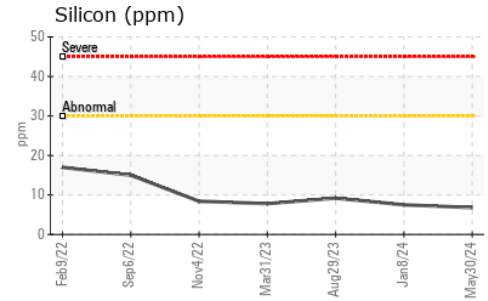
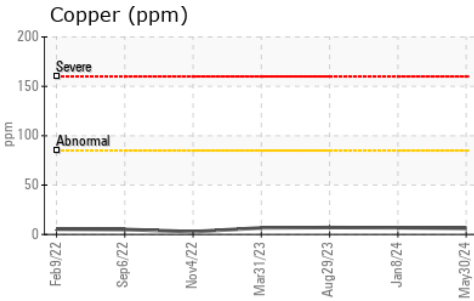
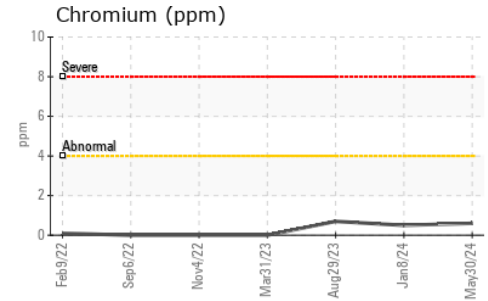
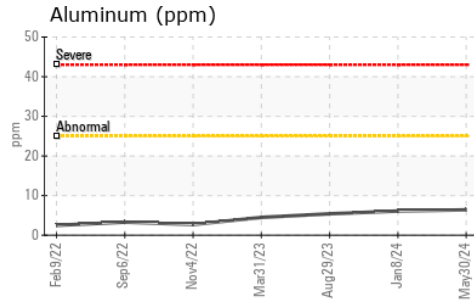
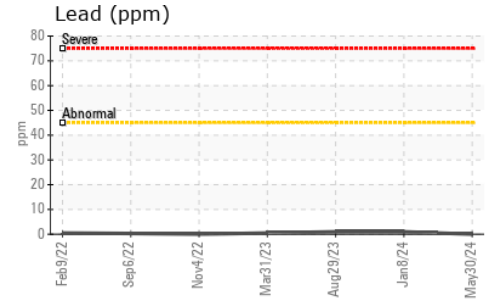
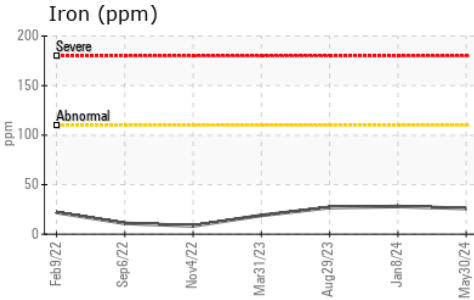


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	18.1	19.0	17.6

VISUAL	method	limit/base	current	history1	history2	
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)	15.4	14.0	14.0	14.1

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0099500 **Received** : 12 Jun 2024
Lab Number : **02641383** **Tested** : 12 Jun 2024
Unique Number : 5798922 **Diagnosed** : 12 Jun 2024 - Wes Davis
Test Package : MOB 1

GFL Environmental - 522
 175 MacAlpine Crescent
 Fort McMurray, AB
 CA T9H 4A5
 Contact: Brad Poole
 bradley.poole@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.