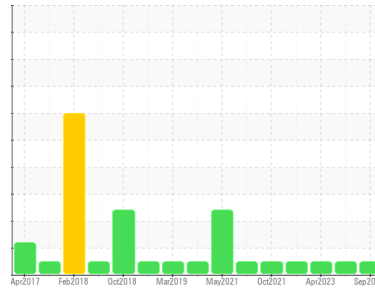




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

9131

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 10W30 (--- 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		GFL0093915	GFL0085930	GFL0077964
Sample Date	Client Info		21 Sep 2023	07 Jul 2023	02 Apr 2023
Machine Age	kms	Client Info	0	734012	19188
Oil Age	kms	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	0.0	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>110	51	48	36
Chromium	ppm	ASTM D5185(m)	>4	2	2	2
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	8	15	9
Lead	ppm	ASTM D5185(m)	>45	<1	1	1
Copper	ppm	ASTM D5185(m)	>85	5	10	33
Tin	ppm	ASTM D5185(m)	>4	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		0	<1	<1
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	3	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	58	58	59
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	961	925	971
Calcium	ppm	ASTM D5185(m)	1050	1046	971	1105
Phosphorus	ppm	ASTM D5185(m)	995	975	953	1038
Zinc	ppm	ASTM D5185(m)	1180	1171	1107	1143
Sulfur	ppm	ASTM D5185(m)	2600	2343	2194	2422
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>30	9	10	7
Sodium	ppm	ASTM D5185(m)		9	8	7
Potassium	ppm	ASTM D5185(m)	>20	0	9	0

INFRA-RED

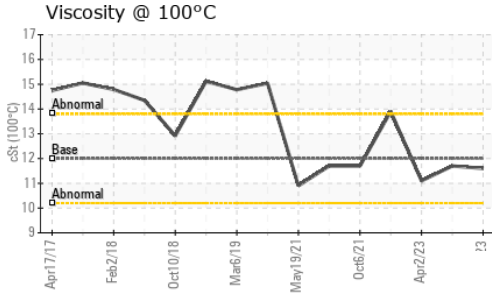
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	1.1	1.2	0.8
Nitration	Abs/cm	ASTM D7624*	>20	11.9	11.0	9.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.4	23.6	21.3

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	23.6	20.3	16.6



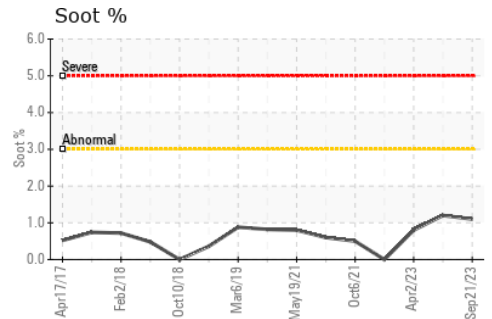
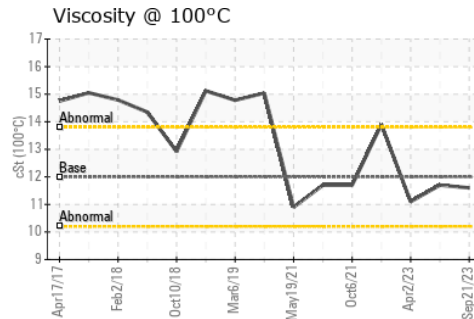
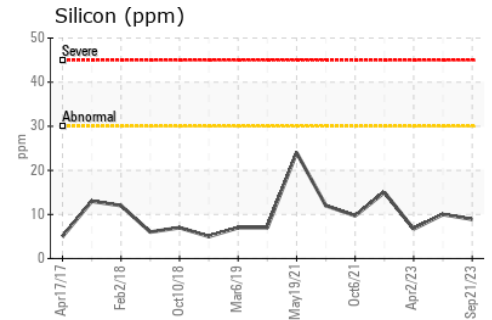
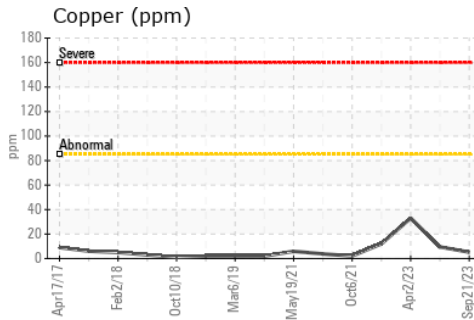
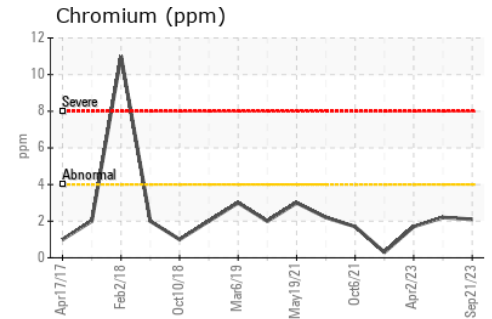
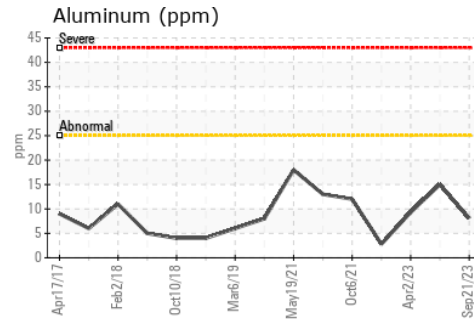
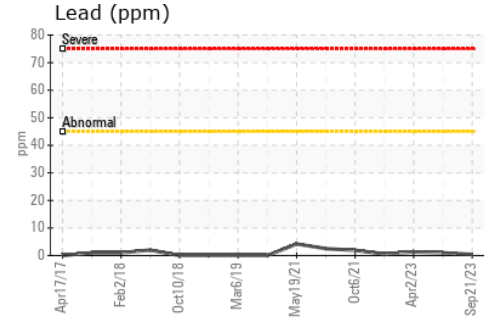
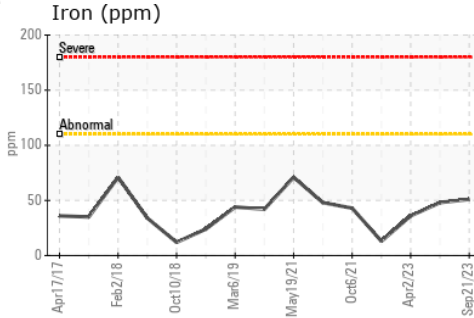
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.6	11.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW
Sample No. : GFL0093915 **Received** : 22 Sep 2023
Lab Number : 02584601 **Diagnosed** : 22 Sep 2023
Unique Number : 5645666 **Diagnostician** : Wes Davis
Test Package : MOB 1

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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