



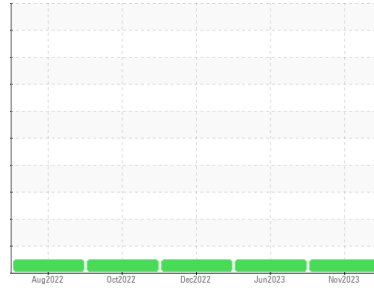
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
412025
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (24 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		GFL0094426	GFL0086758	GFL0063938
Sample Date	Client Info		17 Nov 2023	15 Jun 2023	07 Dec 2022
Machine Age	hrs	Client Info	5903	4500	2272
Oil Age	hrs	Client Info	0	4500	2272
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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)	>120	12	40	10
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	0
Nickel	ppm	ASTM D5185(m)	>5	<1	2	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	4	3
Lead	ppm	ASTM D5185(m)	>40	<1	2	<1
Copper	ppm	ASTM D5185(m)	>330	2	7	2
Tin	ppm	ASTM D5185(m)	>15	<1	2	<1
Antimony	ppm	ASTM D5185(m)		0	0	<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)	0	5	2	2
Barium	ppm	ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	60	60	63	59
Manganese	ppm	ASTM D5185(m)	0	0	1	<1
Magnesium	ppm	ASTM D5185(m)	1010	951	984	962
Calcium	ppm	ASTM D5185(m)	1070	1104	1167	1121
Phosphorus	ppm	ASTM D5185(m)	1150	977	1052	1050
Zinc	ppm	ASTM D5185(m)	1270	1182	1246	1186
Sulfur	ppm	ASTM D5185(m)	2060	2398	2275	2565
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

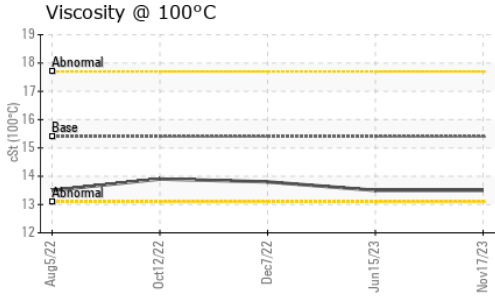
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	4	6	3
Sodium	ppm	ASTM D5185(m)		1	3	2
Potassium	ppm	ASTM D5185(m)	>20	2	7	4

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>4	0.4	0.9	0.2
Nitration	Abs/cm	ASTM D7624*	>20	9.5	12.3	8.7
Sulfation	Abs./1mm	ASTM D7415*	>30	20.2	25.8	20.5



OIL ANALYSIS REPORT



FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	15.7	20.6	15.8

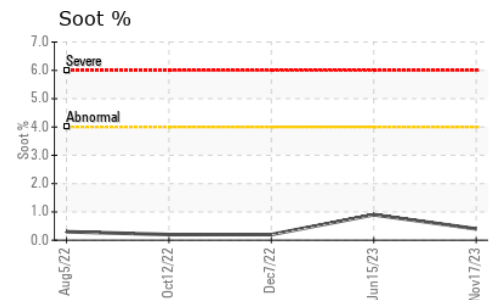
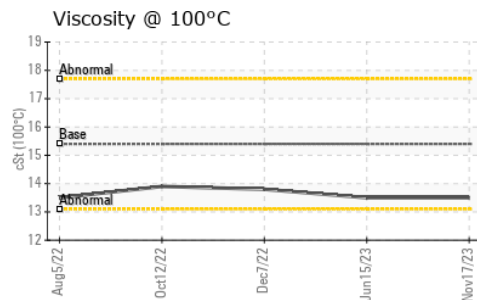
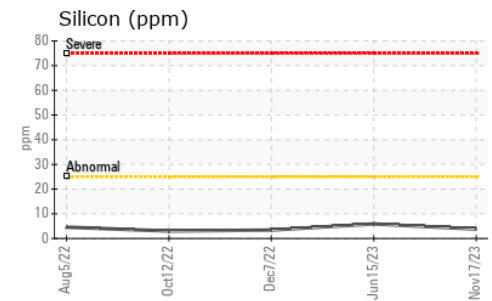
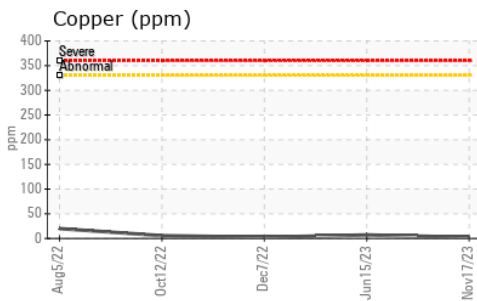
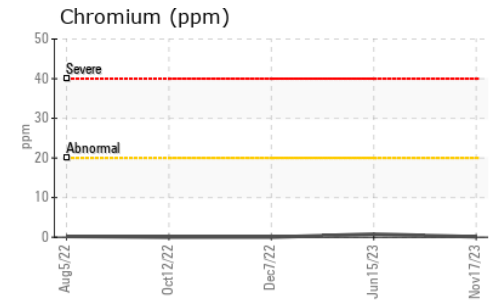
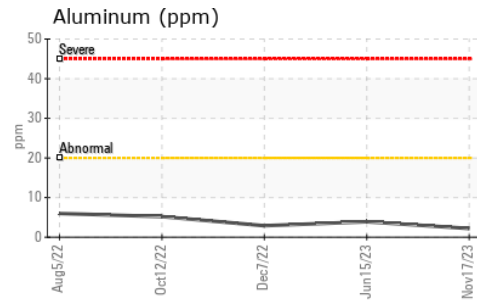
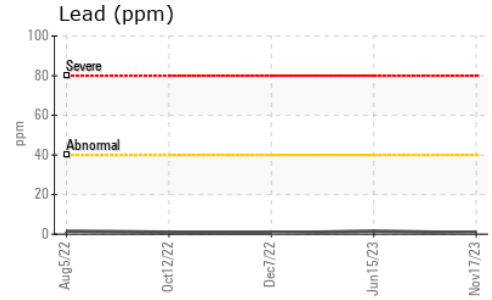
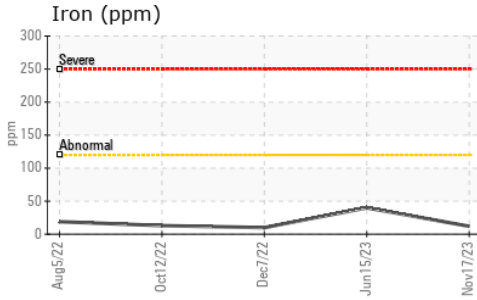
VISUAL

	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	13.5	13.8

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 222 - Sandhill**
Sample No. : GFL0094426 **Received** : 20 Nov 2023 **SANDHILL DISPOSAL & RECYCLING DIVIS, 19 COMMERCE ROAD**
Lab Number : 02597317 **Diagnosed** : 20 Nov 2023 **ORANGEVILLE, ON**
Unique Number : 5682397 **Diagnostician** : Wes Davis **CA L9W 3X5**
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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