



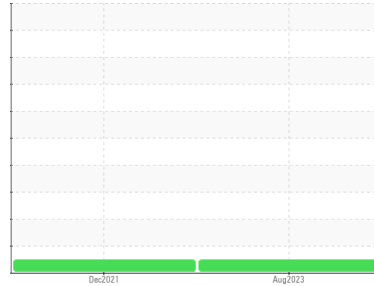
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
7797
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- 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		GFL0088955	GFL0037569	---
Sample Date	Client Info		31 Aug 2023	01 Dec 2021	---
Machine Age	hrs	Client Info	24166	20329	---
Oil Age	hrs	Client Info	576	0	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	<1.0	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>65	14	15	---
Chromium	ppm	ASTM D5185(m)	>5	1	<1	---
Nickel	ppm	ASTM D5185(m)	>3	0	<1	---
Titanium	ppm	ASTM D5185(m)	>5	0	0	---
Silver	ppm	ASTM D5185(m)	>2	0	0	---
Aluminum	ppm	ASTM D5185(m)	>35	8	8	---
Lead	ppm	ASTM D5185(m)	>10	0	0	---
Copper	ppm	ASTM D5185(m)	>180	1	1	---
Tin	ppm	ASTM D5185(m)	>8	0	<1	---
Antimony	ppm	ASTM D5185(m)	>35	0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	3	5	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	60	57	60	---
Manganese	ppm	ASTM D5185(m)	0	<1	<1	---
Magnesium	ppm	ASTM D5185(m)	1010	936	994	---
Calcium	ppm	ASTM D5185(m)	1070	993	1098	---
Phosphorus	ppm	ASTM D5185(m)	1150	994	1065	---
Zinc	ppm	ASTM D5185(m)	1270	1135	1219	---
Sulfur	ppm	ASTM D5185(m)	2060	2382	2511	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	4	4	---
Sodium	ppm	ASTM D5185(m)		3	3	---
Potassium	ppm	ASTM D5185(m)	>20	6	8	---
Glycol	%	ASTM D7922*		0.0	NEG	---

INFRA-RED

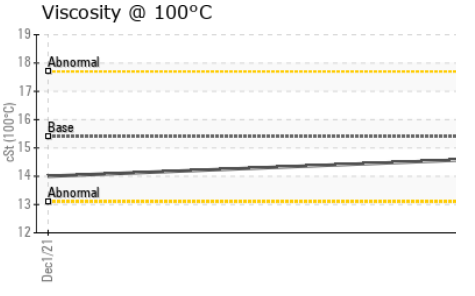
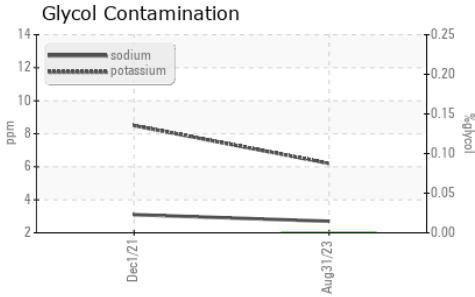
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.7	0	---
Nitration	Abs/cm	ASTM D7624*	>20	7.4	3.0	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.0	9.9	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.1	6.0	---



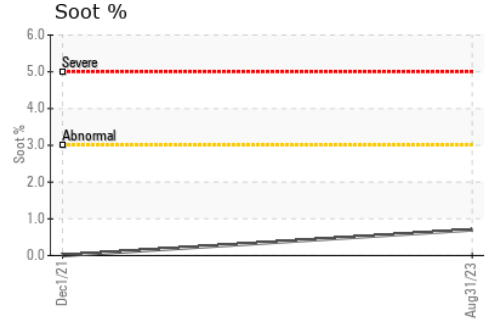
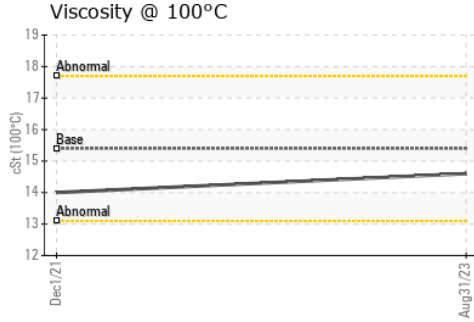
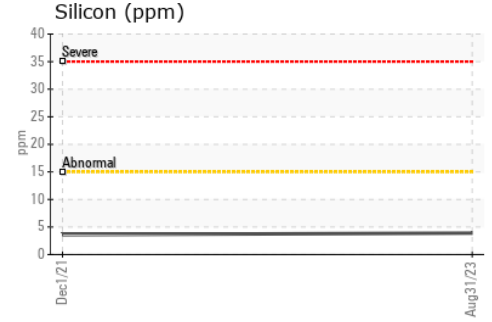
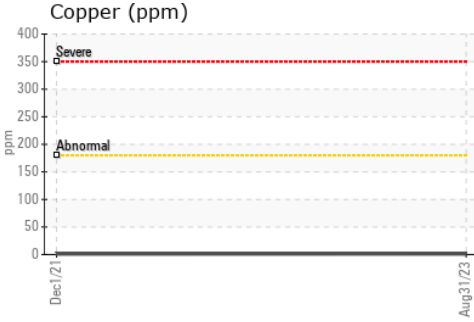
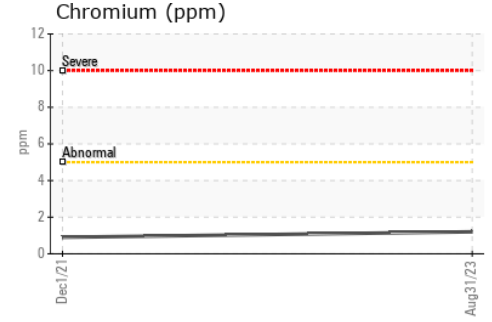
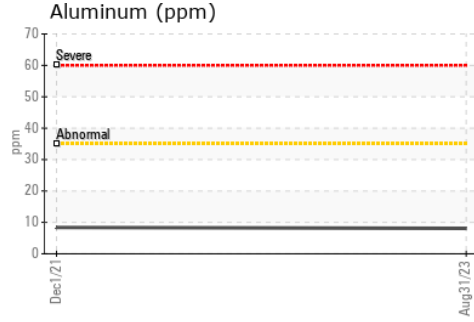
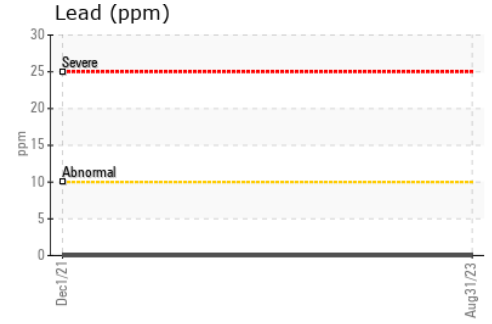
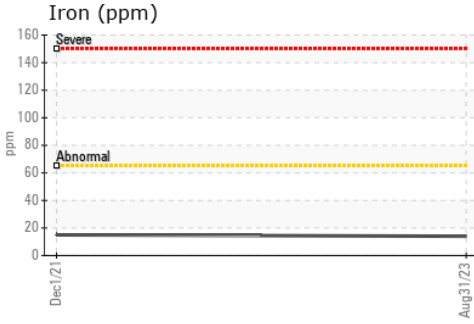
OIL ANALYSIS REPORT



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)	15.4	14.0	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0088955 **Received** : 01 Sep 2023
Lab Number : 02579931 **Diagnosed** : 01 Sep 2023
Unique Number : 5632991 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol)

GFL Environmental - 216
 15 Bermondsey Road
 Toronto, ON
 CA M4B 0A6
 Contact: Tom Hatzioannidis
 thatzioannidis@gflenv.com
 T: (416)678-9340
 F:

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.