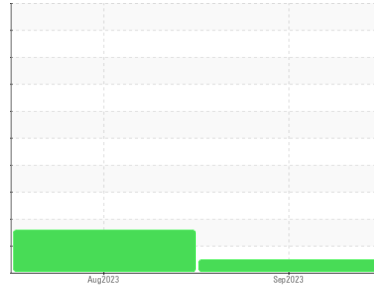




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
401190

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (12 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		GFL0097568	GFL0088932	---
Sample Date	Client Info		29 Sep 2023	17 Aug 2023	---
Machine Age	hrs	Client Info	0	24930	---
Oil Age	hrs	Client Info	0	2000	---
Oil Changed	Client Info		N/A	Changed	---
Sample Status			NORMAL	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	1.2	---
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	10	34	---
Chromium	ppm	ASTM D5185(m)	>20	<1	2	---
Nickel	ppm	ASTM D5185(m)	>4	<1	0	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)	>3	0	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	2	4	---
Lead	ppm	ASTM D5185(m)	>40	<1	<1	---
Copper	ppm	ASTM D5185(m)	>330	2	13	---
Tin	ppm	ASTM D5185(m)	>15	0	<1	---
Antimony	ppm	ASTM D5185(m)		0	0	---
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	4	9	---
Barium	ppm	ASTM D5185(m)	0	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	60	60	24	---
Manganese	ppm	ASTM D5185(m)	0	0	<1	---
Magnesium	ppm	ASTM D5185(m)	1010	976	300	---
Calcium	ppm	ASTM D5185(m)	1070	1100	1945	---
Phosphorus	ppm	ASTM D5185(m)	1150	1054	990	---
Zinc	ppm	ASTM D5185(m)	1270	1193	1100	---
Sulfur	ppm	ASTM D5185(m)	2060	2868	2920	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS

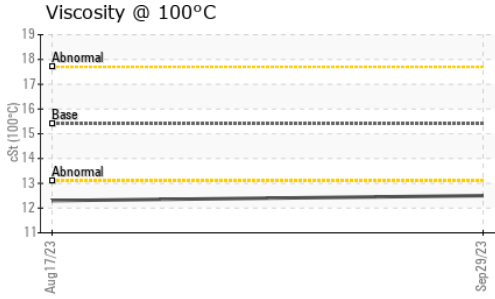
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	4	▲ 35	---
Sodium	ppm	ASTM D5185(m)		1	6	---
Potassium	ppm	ASTM D5185(m)	>20	<1	2	---

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.1	0.4	---
Nitration	Abs/cm	ASTM D7624*	>20	6.6	8.7	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.3	20.4	---



OIL ANALYSIS REPORT



FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	14.8	12.1

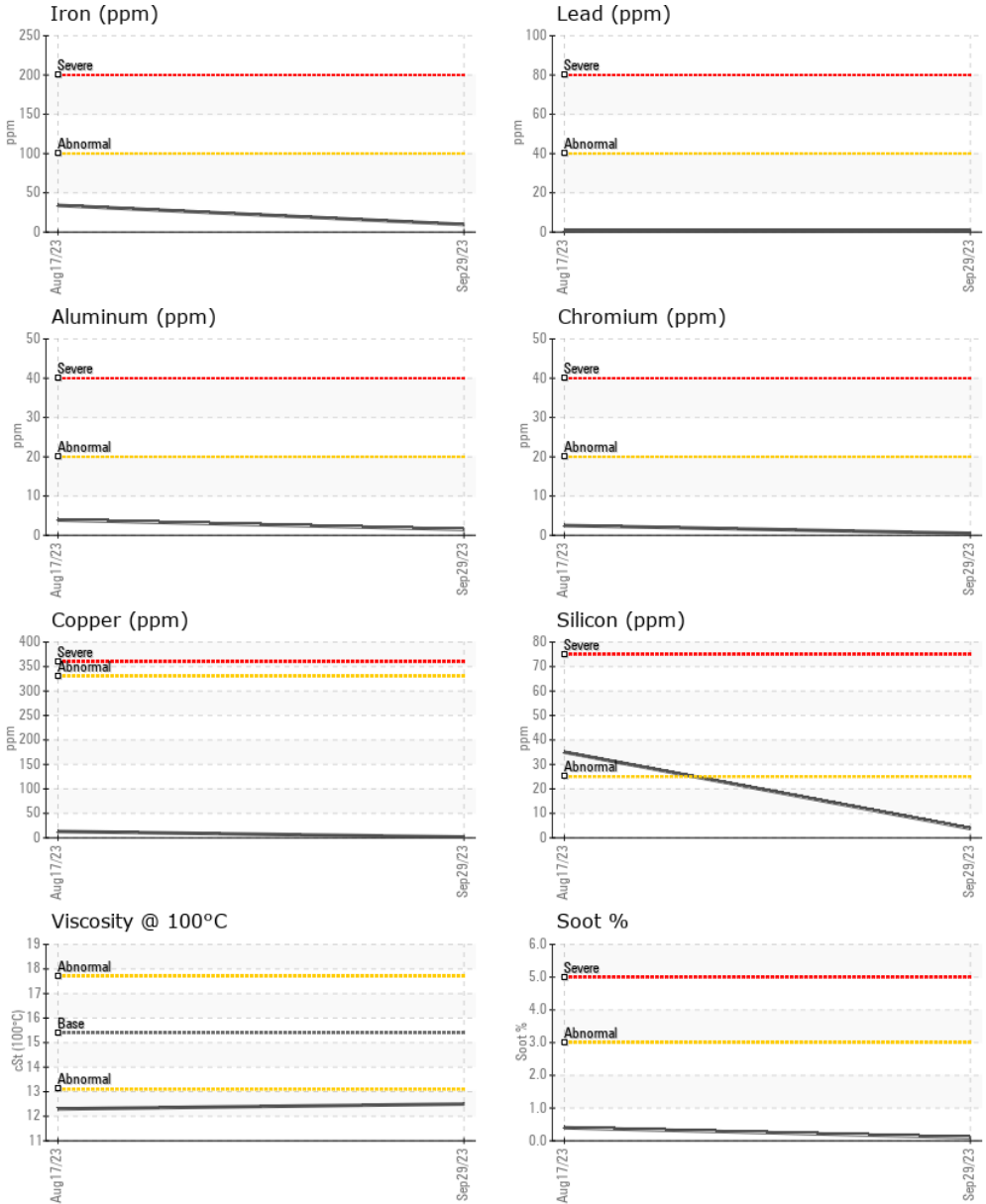
VISUAL

	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	12.5	12.3

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0097568 **Received** : 02 Feb 2024
Lab Number : **02613038** **Diagnosed** : 02 Feb 2024
Unique Number : 5722133 **Diagnostician** : Wes Davis
Test Package : MOB 1

GFL Environmental - 216
 15 Bermondsey Road
 Toronto, ON
 CA M4B 1Y9
 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.