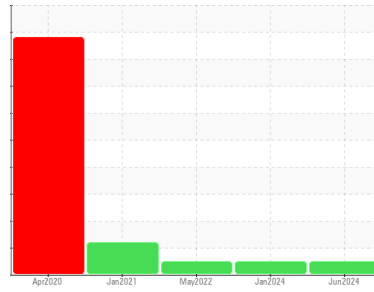




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

5634

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (42 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		GFL0124609	GFL0092295	GFL0030444
Sample Date	Client Info		20 Jun 2024	22 Jan 2024	20 May 2022
Machine Age	hrs	Client Info	22416	21909	0
Oil Age	hrs	Client Info	507	900	1000
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.0	<1.0	<1.0	1.9
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	0.0

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	6	9	13
Chromium	ppm	ASTM D5185(m) >20	<1	0	<1
Nickel	ppm	ASTM D5185(m) >4	0	<1	0
Titanium	ppm	ASTM D5185(m)	0	0	<1
Silver	ppm	ASTM D5185(m) >3	0	0	0
Aluminum	ppm	ASTM D5185(m) >20	4	9	9
Lead	ppm	ASTM D5185(m) >40	0	0	<1
Copper	ppm	ASTM D5185(m) >330	<1	1	6
Tin	ppm	ASTM D5185(m) >15	0	0	<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	2	2
Barium	ppm	ASTM D5185(m) 0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 60	55	56	58
Manganese	ppm	ASTM D5185(m) 0	0	0	<1
Magnesium	ppm	ASTM D5185(m) 1010	911	948	989
Calcium	ppm	ASTM D5185(m) 1070	1074	1057	1082
Phosphorus	ppm	ASTM D5185(m) 1150	955	968	1052
Zinc	ppm	ASTM D5185(m) 1270	1145	1117	1198
Sulfur	ppm	ASTM D5185(m) 2060	2454	2491	2478
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

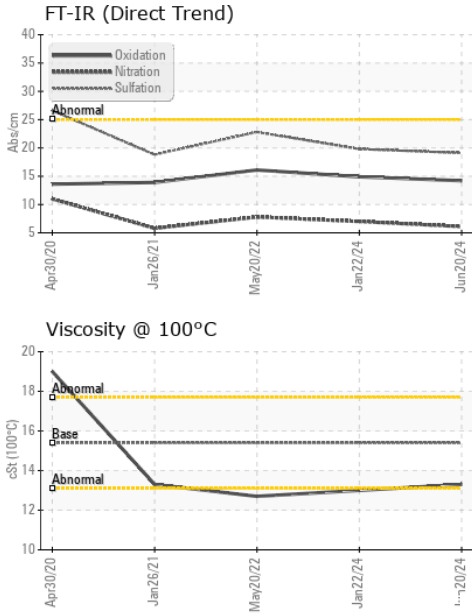
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	2	3	4
Sodium	ppm	ASTM D5185(m)	3	4	5
Potassium	ppm	ASTM D5185(m) >20	1	2	5

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0	0.1	0.1
Nitration	Abs/cm	ASTM D7624* >20	6.1	7.0	7.8
Sulfation	Abs./1mm	ASTM D7415* >30	19.1	19.8	22.8



OIL ANALYSIS REPORT

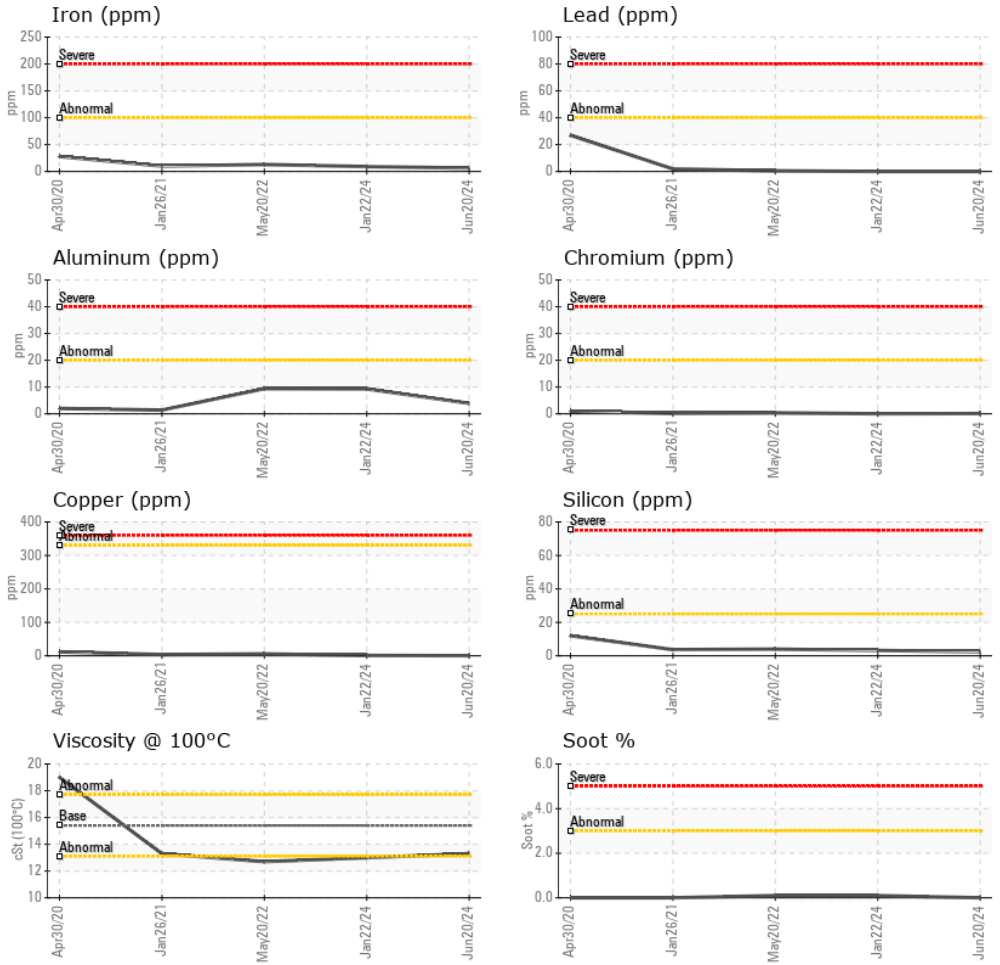


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	14.2	14.9	16.1

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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	13.3	13.0	12.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 720 - Lafleche - Landfill**
Sample No. : GFL0124609 **Received** : 25 Jun 2024 17125 Lafleche Road,
Lab Number : **02644011** **Tested** : 25 Jun 2024 Moose Creek, ON
Unique Number : 5801550 **Diagnosed** : 25 Jun 2024 - Wes Davis CA K0C 1W0
Test Package : MOB 1 (Additional Tests: Visual) Contact: Charles Bergeron
 cbergeron@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.