



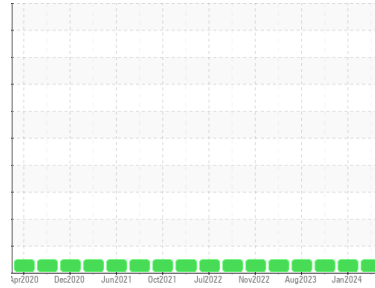
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
401150
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (35 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		GFL0094413	GFL0086798	GFL0094399
Sample Date	Client Info		13 Mar 2024	04 Jan 2024	13 Oct 2023
Machine Age	hrs	Client Info	12595	12145	8629
Oil Age	hrs	Client Info	12595	600	8629
Oil Changed	Client Info		Changed	Changed	N/A
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	0.0	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >120	6	7	9
Chromium	ppm	ASTM D5185(m) >20	0	0	0
Nickel	ppm	ASTM D5185(m) >15	<1	<1	0
Titanium	ppm	ASTM D5185(m) >2	<1	0	0
Silver	ppm	ASTM D5185(m) >3	0	0	<1
Aluminum	ppm	ASTM D5185(m) >20	2	2	2
Lead	ppm	ASTM D5185(m) >40	<1	<1	2
Copper	ppm	ASTM D5185(m) >330	2	2	2
Tin	ppm	ASTM D5185(m) >15	<1	0	0
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	10	19	7
Barium	ppm	ASTM D5185(m) 0	0	0	<1
Molybdenum	ppm	ASTM D5185(m) 60	59	53	61
Manganese	ppm	ASTM D5185(m) 0	0	0	0
Magnesium	ppm	ASTM D5185(m) 1010	901	626	945
Calcium	ppm	ASTM D5185(m) 1070	1103	1411	1083
Phosphorus	ppm	ASTM D5185(m) 1150	960	746	976
Zinc	ppm	ASTM D5185(m) 1270	1108	936	1154
Sulfur	ppm	ASTM D5185(m) 2060	2557	2211	2386
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

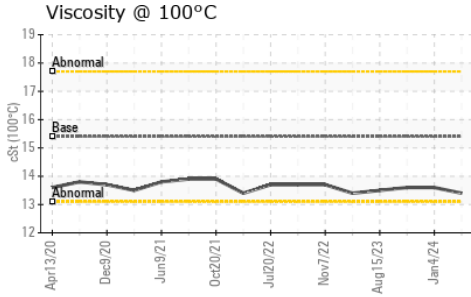
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	3	4	4
Sodium	ppm	ASTM D5185(m)	2	3	2
Potassium	ppm	ASTM D5185(m) >20	<1	12	<1

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	0.1	0.1	0.2
Nitration	Abs/cm	ASTM D7624* >20	7.8	8.6	7.9
Sulfation	Abs./1mm	ASTM D7415* >30	18.9	19.1	19.7



OIL ANALYSIS REPORT



FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs./1mm ASTM D7414*	>25	15.0	14.9

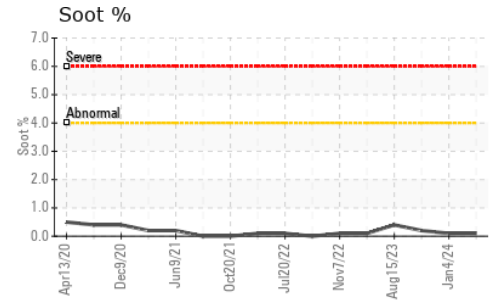
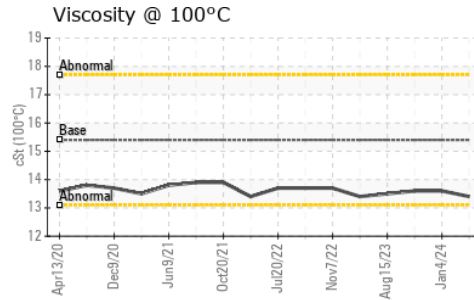
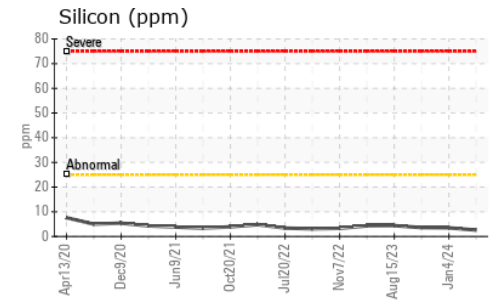
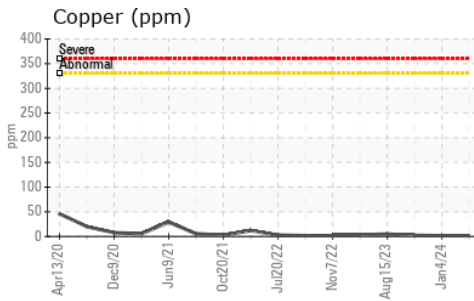
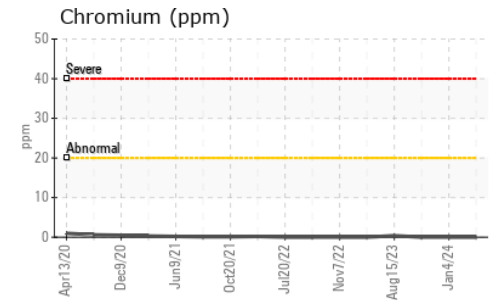
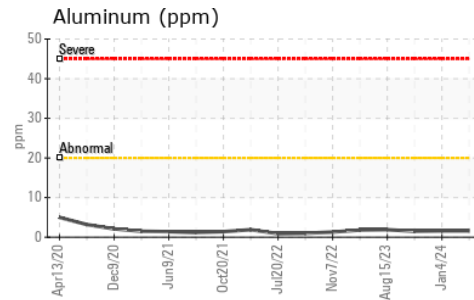
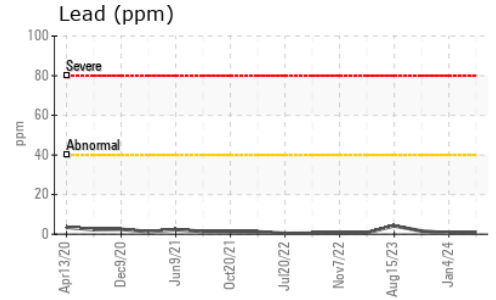
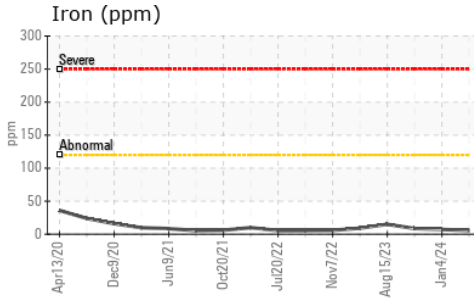
VISUAL

method	limit/base	current	history1	history2
Emulsified Water	scalar Visual*	>0.2	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	13.6	13.6

GRAPHS



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0094413
Lab Number : 02621927
Unique Number : 5747046
Test Package : MOB 1

Received : 14 Mar 2024
Tested : 14 Mar 2024
Diagnosed : 14 Mar 2024 - Wes Davis

GFL Environmental - 222 - Sandhill
 SANDHILL DISPOSAL & RECYCLING DIVIS, 19 COMMERCE ROAD
 ORANGEVILLE, ON
 CA L9W 3X5
 Contact: GLENN COOK
 gcook@gflenv.com
 T: (519)940-4167
 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.