



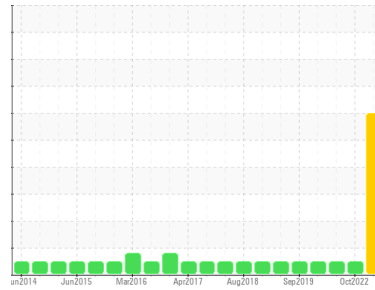
OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Machine Id
7887
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (24 LTR)



DIAGNOSIS

▲ Recommendation

We advise that you monitor for an abnormal oil pressure drop and noise. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

▲ Wear

Lead ppm levels are severe. Bearing wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0086786	GFL0055408	GFL0032442
Sample Date	Client Info		04 Mar 2024	12 Oct 2022	16 Sep 2021
Machine Age	hrs	Client Info	24098	21839	19991
Oil Age	hrs	Client Info	24098	21839	600
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			SEVERE	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	35	10	26
Chromium	ppm	ASTM D5185(m)	>4	2	0	2
Nickel	ppm	ASTM D5185(m)	>2	1	0	<1
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>9	3	2	2
Lead	ppm	ASTM D5185(m)	>30	▲ 88	<1	<1
Copper	ppm	ASTM D5185(m)	>35	9	<1	7
Tin	ppm	ASTM D5185(m)	>4	1	<1	<1
Antimony	ppm	ASTM D5185(m)		0	<1	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)	50	22	78	18
Barium	ppm	ASTM D5185(m)	5	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	64	110	85
Manganese	ppm	ASTM D5185(m)	0	1	<1	<1
Magnesium	ppm	ASTM D5185(m)	560	621	628	415
Calcium	ppm	ASTM D5185(m)	1510	1788	1248	1902
Phosphorus	ppm	ASTM D5185(m)	780	847	727	803
Zinc	ppm	ASTM D5185(m)	870	991	746	1017
Sulfur	ppm	ASTM D5185(m)	2040	2212	2356	2186
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>+100	10	23	4
Sodium	ppm	ASTM D5185(m)		12	2	6
Potassium	ppm	ASTM D5185(m)	>20	1	<1	1

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	13.1	5.5	9.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.2	21.6	20.5

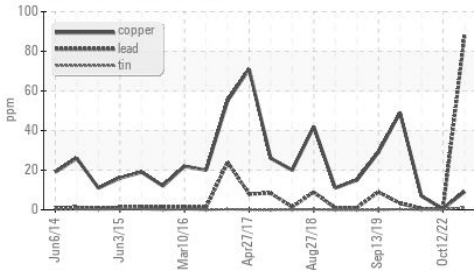
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.0	14.6	15.1

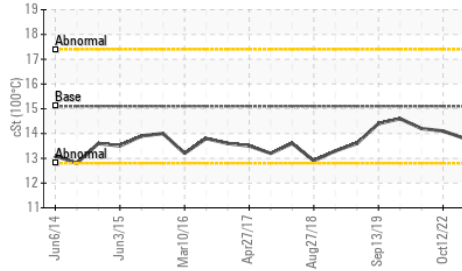


OIL ANALYSIS REPORT

Non-ferrous Metals



Viscosity @ 100°C

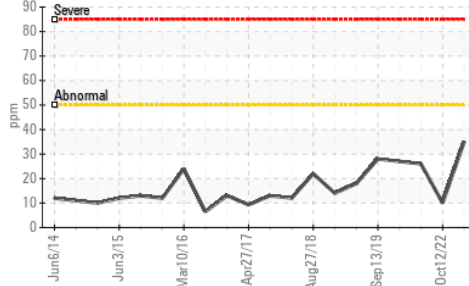


VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

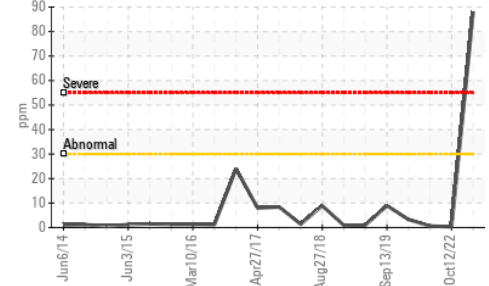
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	13.8	14.1

GRAPHS

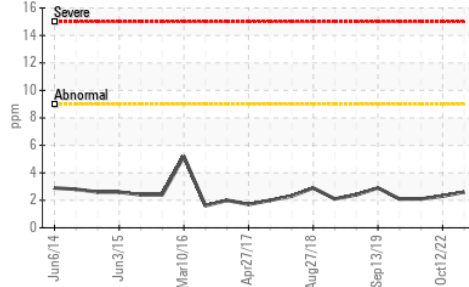
Iron (ppm)



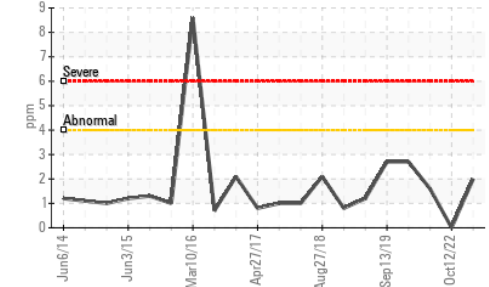
Lead (ppm)



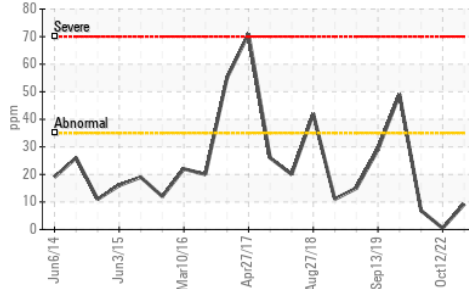
Aluminum (ppm)



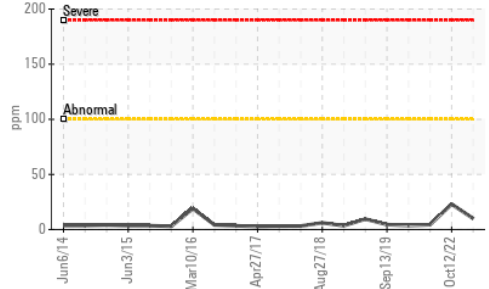
Chromium (ppm)



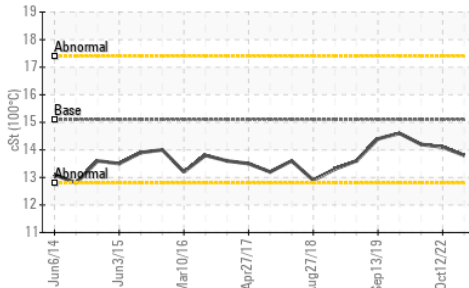
Copper (ppm)



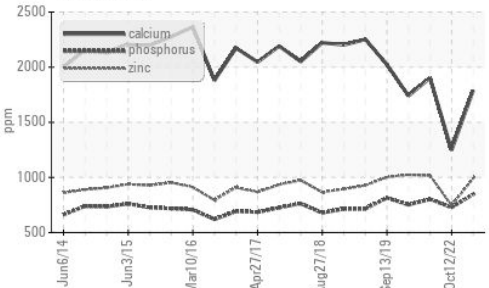
Silicon (ppm)



Viscosity @ 100°C



Additives



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
 Sample No. : GFL0086786
 Lab Number : 02619915
 Unique Number : 5737025
 Test Package : MOB 1

Received : 05 Mar 2024
 Tested : 05 Mar 2024
 Diagnosed : 05 Mar 2024 - Kevin Marson

GFL Environmental - 222 - Sandhill
 SANDHILL DISPOSAL & RECYCLING DIVIS, 19 COMMERCER 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.