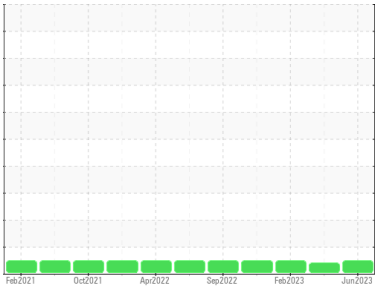
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
928002
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

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	history 1	history 2
Sample Number		Client Info		**GFL0082570**	GFL0082552	GFL0065874
Sample Date		Client Info		**22 Jun 2023**	22 May 2023	09 Feb 2023
Machine Age	kms	Client Info		**216495**	212143	7635
Oil Age	kms	Client Info		**0**	0	592
Oil Changed		Client Info		**N/A**	N/A	Changed
Sample Status				**NORMAL**	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history 1	history 2
Fuel		WC Method	>3.0	**<1.0**	1	<1.0
Glycol		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185(m)	>120	**5**	21	8
Chromium	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	**0**	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	**0**	<1	<1
Silver	ppm	ASTM D5185(m)	>2	**<1**	0	0
Aluminum	ppm	ASTM D5185(m)	>20	**1**	6	2
Lead	ppm	ASTM D5185(m)	>40	**0**	<1	<1
Copper	ppm	ASTM D5185(m)	>330	**<1**	2	<1
Tin	ppm	ASTM D5185(m)	>15	**0**	<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	history 1	history 2
Boron	ppm	ASTM D5185(m)	0	**7**	24	3
Barium	ppm	ASTM D5185(m)	0	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	60	**55**	43	60
Manganese	ppm	ASTM D5185(m)	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	**892**	530	965
Calcium	ppm	ASTM D5185(m)	1070	**1091**	1804	1139
Phosphorus	ppm	ASTM D5185(m)	1150	**999**	801	1065
Zinc	ppm	ASTM D5185(m)	1270	**1117**	916	1213
Sulfur	ppm	ASTM D5185(m)	2060	**2505**	2180	2484
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m)	>25	**2**	5	3
Sodium	ppm	ASTM D5185(m)		**2**	3	4
Potassium	ppm	ASTM D5185(m)	>20	**2**	11	2

INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	ASTM D7844*	>4	**0.1**	1.2	0.2
Nitration	Abs/cm	ASTM D7624*	>20	**5.9**	9.7	8.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	**18.6**	23.9	20.9

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**14.2**	20.7	15.1

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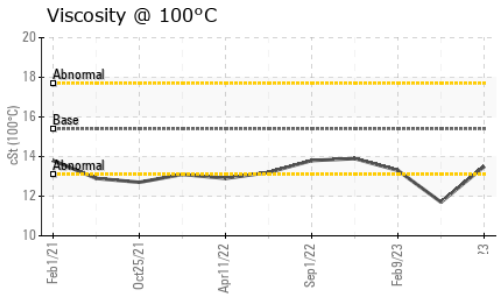
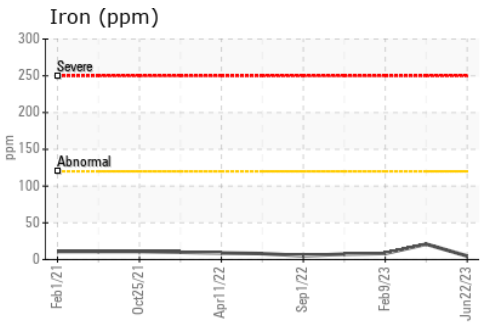
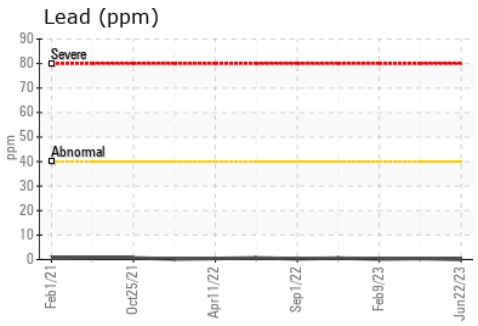


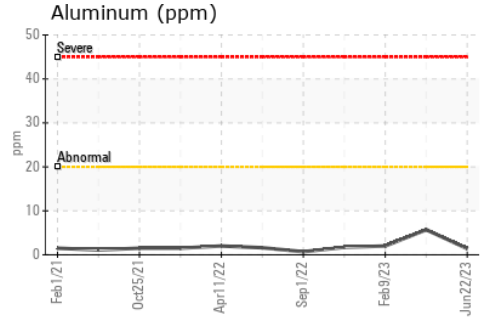
VISUAL		method	limit/base	current	history 1	history 2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

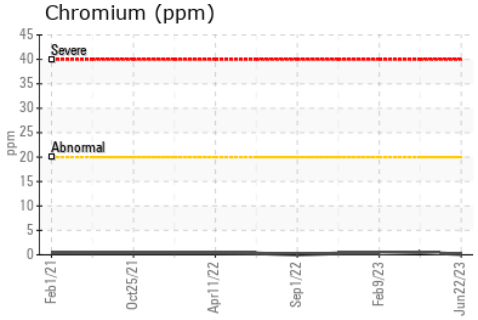
FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	**13.5**	▲ 11.7	13.3

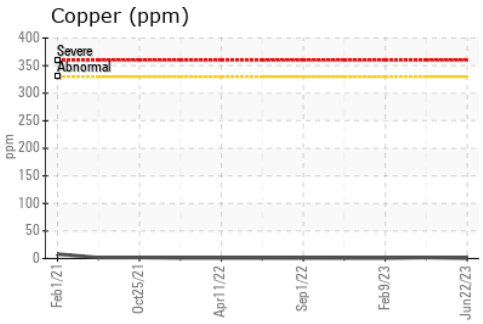
GRAPHS

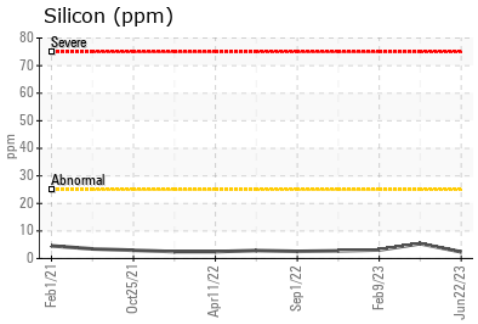


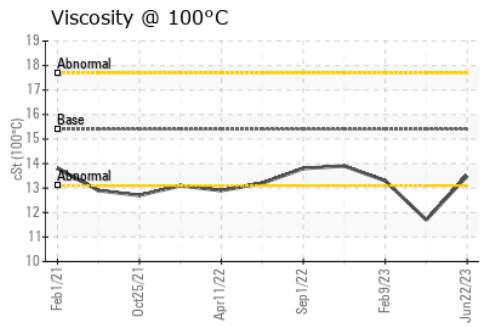


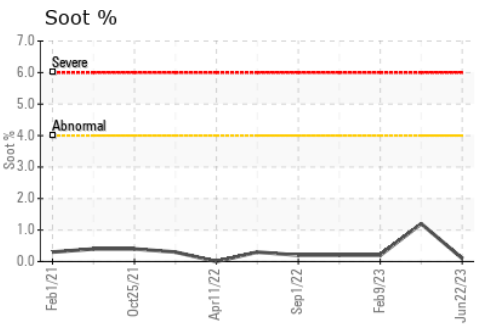












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0082570
Lab Number : 02567456
Unique Number : 5604502
Test Package : MOB 1

Received : 30 Jun 2023
Diagnosed : 30 Jun 2023
Diagnostician : Wes Davis

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.

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