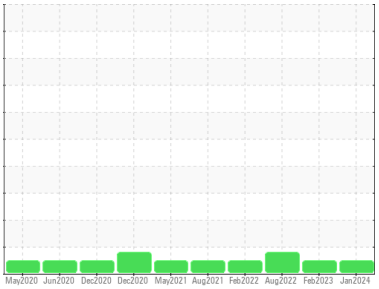
OIL ANALYSIS REPORT

Machine Id
525004
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

Sample Rating Trend



NORMAL

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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		**GFL0102853**	GFL0065876	GFL0057687
Sample Date		Client Info		**18 Jan 2024**	16 Feb 2023	23 Aug 2022
Machine Age	hrs	Client Info		**17412**	16629	16107
Oil Age	hrs	Client Info		**0**	16629	515
Oil Changed		Client Info		**N/A**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	ABNORMAL

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**	NEG	NEG

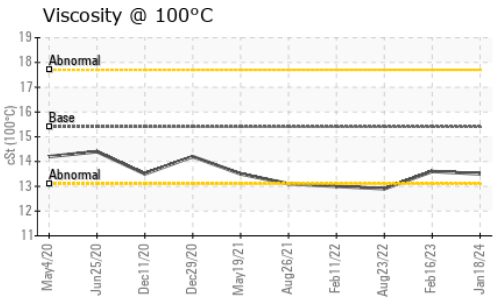
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>120	**52**	27	46
Chromium	ppm	ASTM D5185(m)	>20	**1**	<1	1
Nickel	ppm	ASTM D5185(m)	>5	**1**	<1	1
Titanium	ppm	ASTM D5185(m)	>2	**0**	<1	<1
Silver	ppm	ASTM D5185(m)	>2	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>20	**19**	26	▲ 30
Lead	ppm	ASTM D5185(m)	>40	**2**	2	3
Copper	ppm	ASTM D5185(m)	>330	**7**	5	15
Tin	ppm	ASTM D5185(m)	>15	**<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)	0	**2**	2	4
Barium	ppm	ASTM D5185(m)	0	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	60	**60**	60	60
Manganese	ppm	ASTM D5185(m)	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	**937**	961	932
Calcium	ppm	ASTM D5185(m)	1070	**1077**	1158	1104
Phosphorus	ppm	ASTM D5185(m)	1150	**952**	1060	935
Zinc	ppm	ASTM D5185(m)	1270	**1159**	1208	1169
Sulfur	ppm	ASTM D5185(m)	2060	**2293**	2509	2273
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**11**	7	15
Sodium	ppm	ASTM D5185(m)		**6**	5	7
Potassium	ppm	ASTM D5185(m)	>20	**28**	50	74

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>4	**0.7**	0.4	0.6
Nitration	Abs/cm	ASTM D7624*	>20	**11.8**	10.5	10.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	**23.3**	22.5	22.4

OIL ANALYSIS REPORT

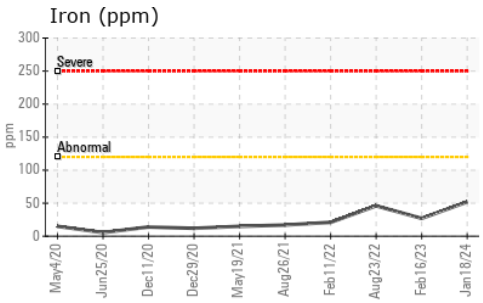


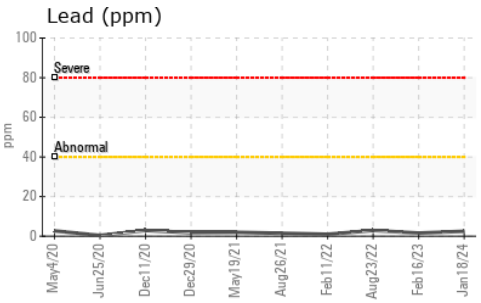
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**17.8**	17.2	17.4

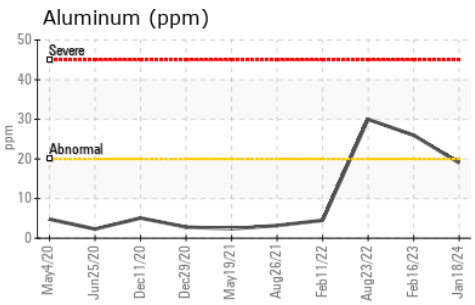
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

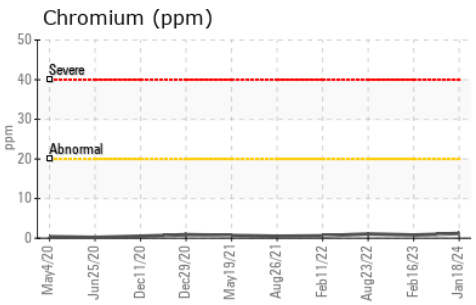
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	**13.5**	13.6	12.9

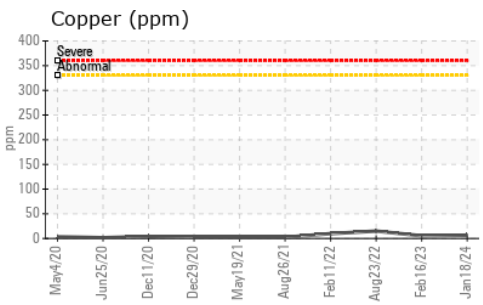
GRAPHS

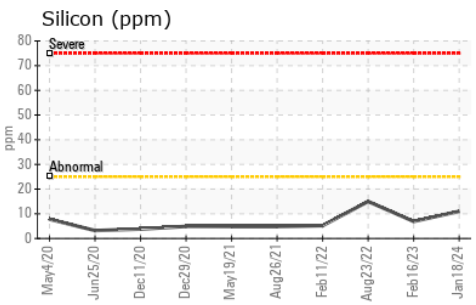


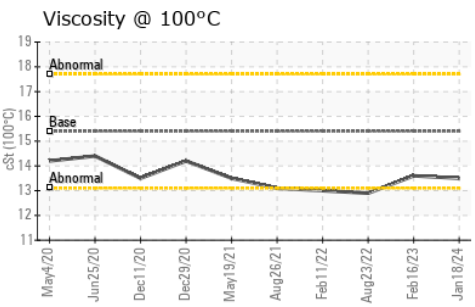


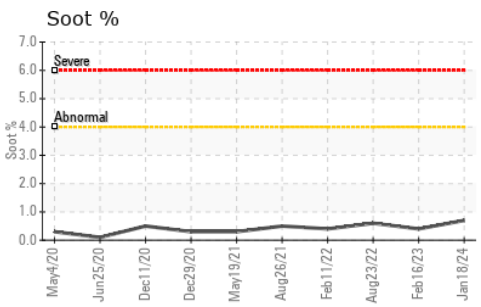












ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: GFL0102853	**Recieved**	: 19 Jan 2024
Lab Number	: 02609923	**Diagnosed**	: 19 Jan 2024
Unique Number	: 5711009	**Diagnostician**	: Wes Davis
Test Package	: MOB 1		

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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