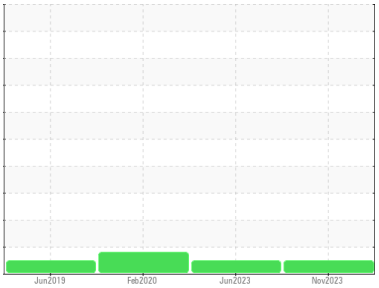
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
7112
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
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		**WC0875100**	GFL0086477	GFL0003300
Sample Date		Client Info		**27 Nov 2023**	09 Jun 2023	25 Feb 2020
Machine Age	hrs	Client Info		**12336**	0	0
Oil Age	hrs	Client Info		**220**	0	0
Oil Changed		Client Info		**Changed**	Changed	N/A
Sample Status				**NORMAL**	NORMAL	MARGINAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	**<1.0**	<1.0	▲ 2.7
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG

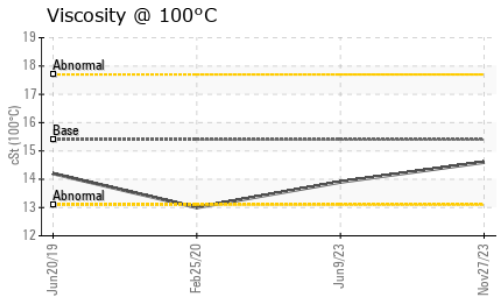
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>75	**45**	39	26
Chromium	ppm	ASTM D5185(m)	>5	**2**	2	1
Nickel	ppm	ASTM D5185(m)	>4	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	**0**	<1	<1
Silver	ppm	ASTM D5185(m)	>2	**<1**	0	<1
Aluminum	ppm	ASTM D5185(m)	>15	**7**	7	5
Lead	ppm	ASTM D5185(m)	>25	**<1**	<1	<1
Copper	ppm	ASTM D5185(m)	>100	**1**	1	1
Tin	ppm	ASTM D5185(m)	>4	**0**	<1	<1
Antimony	ppm	ASTM D5185(m)		**0**	0	<1
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**	10	6
Barium	ppm	ASTM D5185(m)	0	**<1**	0	0
Molybdenum	ppm	ASTM D5185(m)	60	**60**	60	57
Manganese	ppm	ASTM D5185(m)	0	**0**	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	**962**	925	903
Calcium	ppm	ASTM D5185(m)	1070	**1089**	1248	1172
Phosphorus	ppm	ASTM D5185(m)	1150	**1003**	1081	1003
Zinc	ppm	ASTM D5185(m)	1270	**1234**	1258	1207
Sulfur	ppm	ASTM D5185(m)	2060	**2387**	2556	2657
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**7**	7	3
Sodium	ppm	ASTM D5185(m)		**5**	8	1
Potassium	ppm	ASTM D5185(m)	>20	**9**	10	3

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	**1**	0.7	0.3
Nitration	Abs/cm	ASTM D7624*	>20	**11.0**	11.4	10.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	**23.2**	23.1	25.3

OIL ANALYSIS REPORT

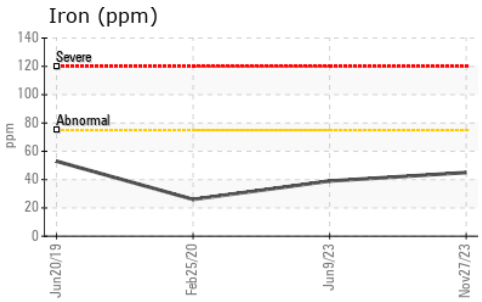


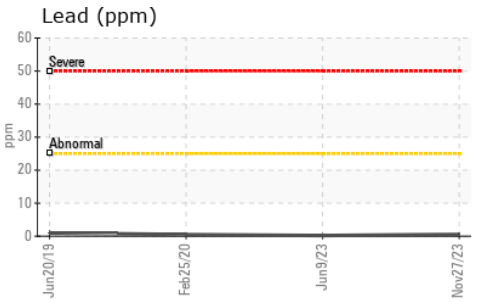
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**19.7**	20.2	18.7

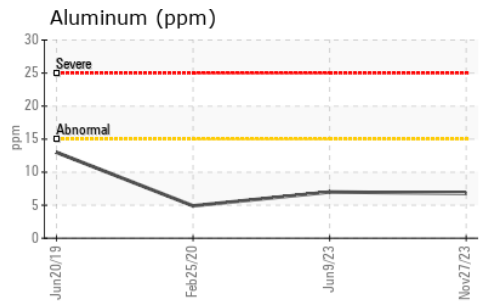
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

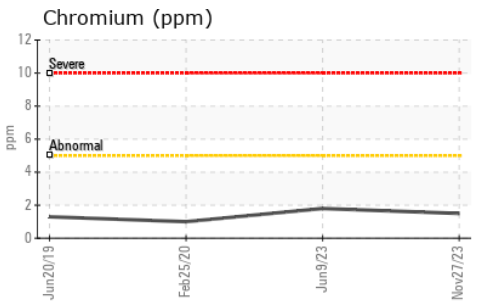
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	**14.6**	13.9	13.0

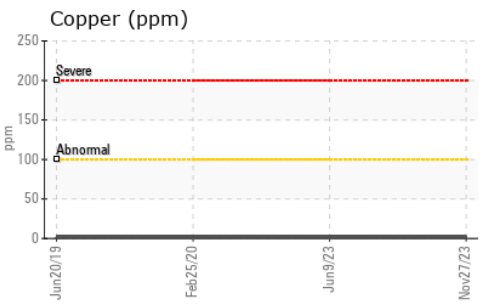
GRAPHS

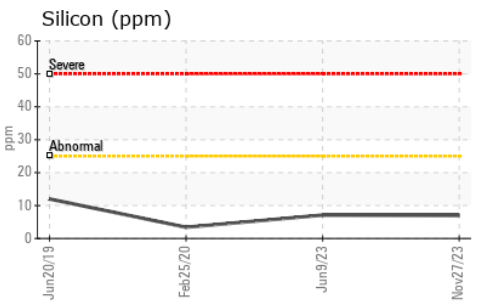


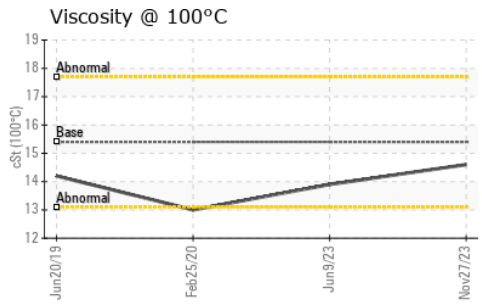


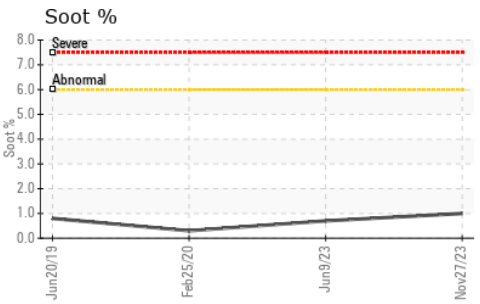












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0875100
Lab Number : 02600926
Unique Number : 5694011
Test Package : MOB 1

Received : 05 Dec 2023
Diagnosed : 05 Dec 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.

GFL Environmental - 217 - Aurora
14131 BAYVIEW AVE, AURORA YARD
AURORA, ON
CA L4G 0K6
Contact: Mike Havens
MHavens@gflenv.com
T:
F: (905)713-2445