MOBIL LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
522004
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

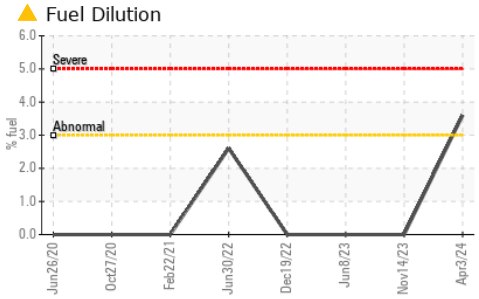
CONTAMINATION

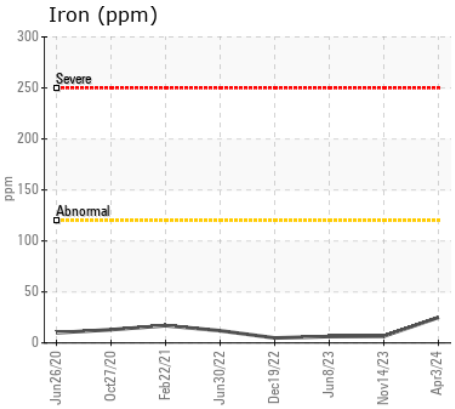
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

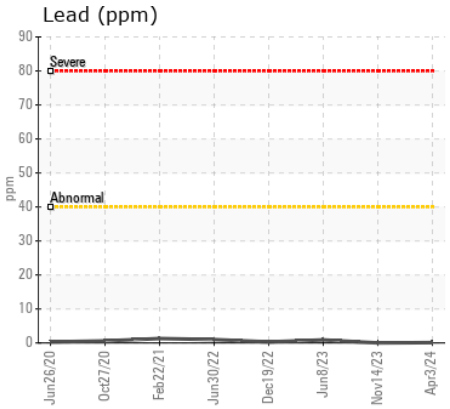
FLUID CONDITION

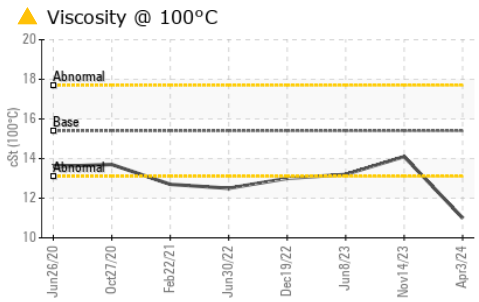
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

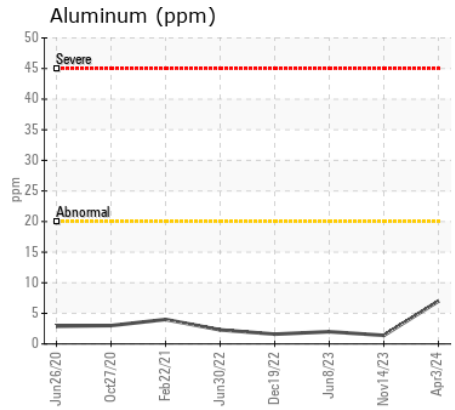
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**GFL0102917**	GFL0097316	GFL0082565
Sample Date		Client Info		**03 Apr 2024**	14 Nov 2023	08 Jun 2023
Machine Age	kms	Client Info		**0**	0	0
Oil Age	kms	Client Info		**21129**	70620	548712
Filter Age	kms	Client Info		**0**	70620	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Filter Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>120	**25**	7	6
Chromium	ppm	ASTM D5185(m)	>20	**<1**	0	0
Nickel	ppm	ASTM D5185(m)	>5	**3**	<1	2
Titanium	ppm	ASTM D5185(m)	>2	**<1**	0	<1
Silver	ppm	ASTM D5185(m)	>2	**0**	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	**7**	1	2
Lead	ppm	ASTM D5185(m)	>40	**<1**	0	<1
Copper	ppm	ASTM D5185(m)	>330	**2**	<1	1
Tin	ppm	ASTM D5185(m)	>15	**0**	<1	<1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Silicon	ppm	ASTM D5185(m)	>25	**4**	2	4
Potassium	ppm	ASTM D5185(m)	>20	**9**	6	<1
Fuel	%	ASTM D7593*	>3.0	▲ **3.6**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	0.0	NEG
Soot %	%	ASTM D7844*	>4	**0.2**	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	**10.8**	8.4	7.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	**22.2**	21.6	18.5
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185(m)		**3**	4	3
Boron	ppm	ASTM D5185(m)	0	**21**	114	4
Barium	ppm	ASTM D5185(m)	0	**0**	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	**43**	6	58
Manganese	ppm	ASTM D5185(m)	0	**0**	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	**442**	95	943
Calcium	ppm	ASTM D5185(m)	1070	**1715**	2084	1128
Phosphorus	ppm	ASTM D5185(m)	1150	**737**	955	1061
Zinc	ppm	ASTM D5185(m)	1270	**869**	1142	1186
Sulfur	ppm	ASTM D5185(m)	2060	**2116**	2825	2652
Oxidation	Abs/.1mm	ASTM D7414*	>25	**22.1**	17.6	15.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ **11.0**	14.1	13.2

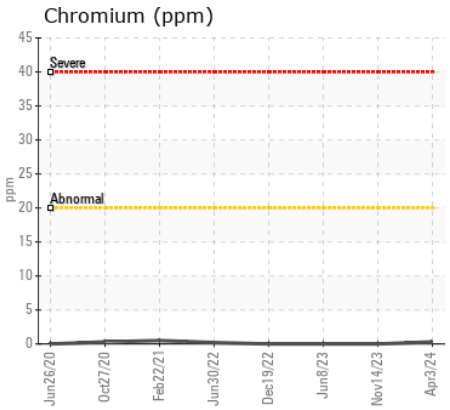


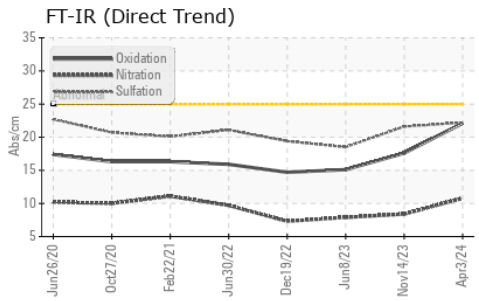


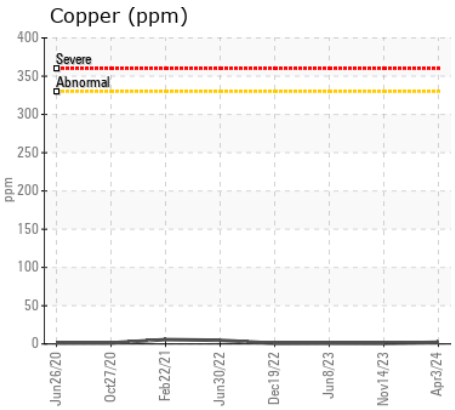


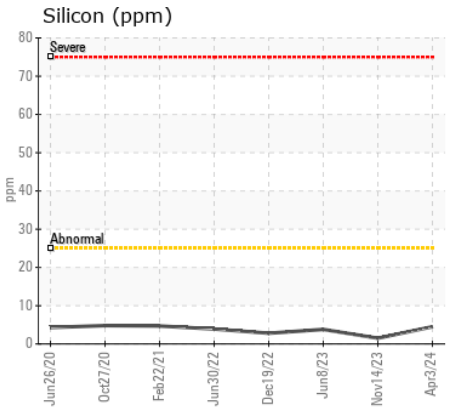


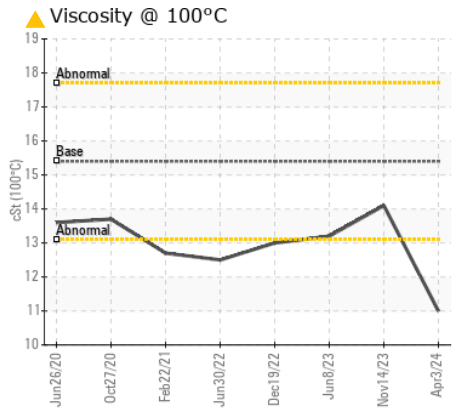


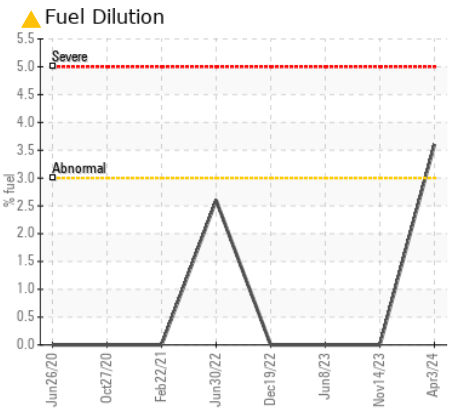












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0102917
Lab Number : 02626528
Unique Number : 5759660
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

Received : 04 Apr 2024
Tested : 05 Apr 2024
Diagnosed : 05 Apr 2024 - 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 - 246 - Windsor
2700 Deziel Dr
Windsor, ON
CA N8W 5H8
Contact: Dave Varga
dvarga@gflenv.com
T: (519)944-8009
F: