MOBIL LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
427014
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

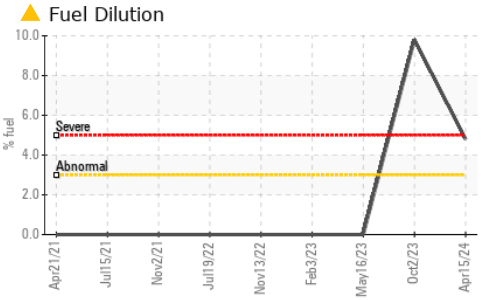
CONTAMINATION

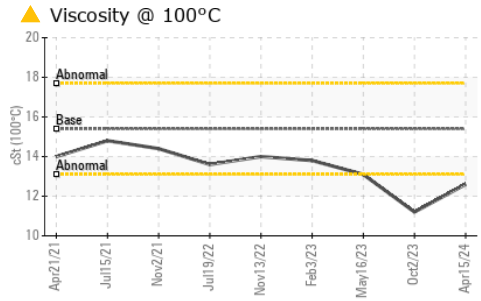
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

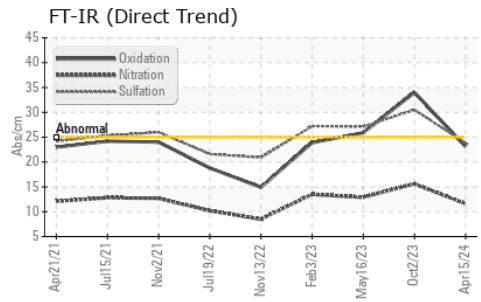
FLUID CONDITION

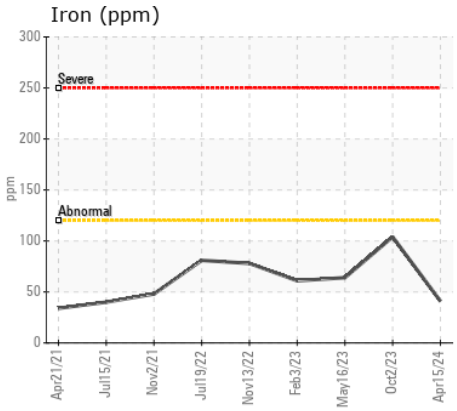
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

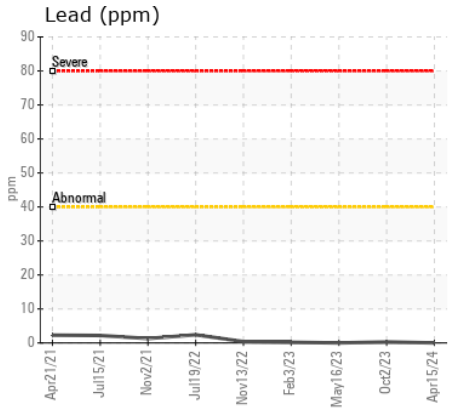
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0080170	GFL0095035	GFL0044703
Sample Date		Client Info		15 Apr 2024	02 Oct 2023	16 May 2023
Machine Age	hrs	Client Info		16163	15266	14366
Oil Age	hrs	Client Info		600	600	600
Filter Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	SEVERE	NORMAL
Iron	ppm	ASTM D5185(m)	>120	41	104	64
Chromium	ppm	ASTM D5185(m)	>20	<1	3	2
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	4	12	6
Lead	ppm	ASTM D5185(m)	>40	0	<1	0
Copper	ppm	ASTM D5185(m)	>330	2	4	4
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	6	15	19
Potassium	ppm	ASTM D5185(m)	>20	12	20	2
Fuel	%	ASTM D7593*	>3.0	▲ 4.8	▲ 9.8	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.6	1.2	1.1
Nitration	Abs/cm	ASTM D7624*	>20	11.6	15.6	12.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.8	30.5	27.1
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		10	9	9
Boron	ppm	ASTM D5185(m)	0	1	3	10
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	57	50	47
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	916	805	895
Calcium	ppm	ASTM D5185(m)	1070	975	895	1181
Phosphorus	ppm	ASTM D5185(m)	1150	885	837	954
Zinc	ppm	ASTM D5185(m)	1270	1092	997	1082
Sulfur	ppm	ASTM D5185(m)	2060	2303	2150	2394
Oxidation	Abs/.1mm	ASTM D7414*	>25	23.1	34.0	25.9
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ 12.6	▲ 11.2	13.1

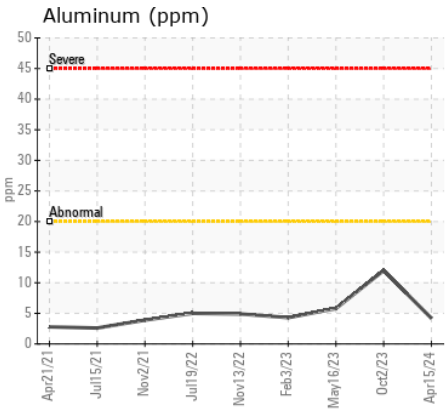


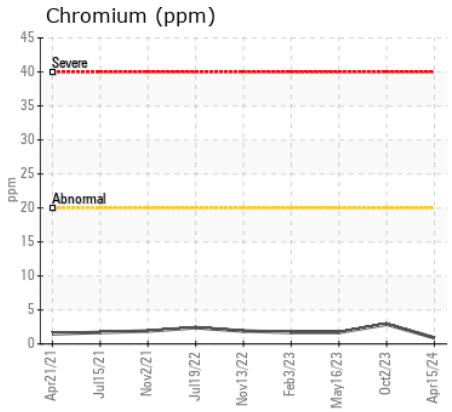


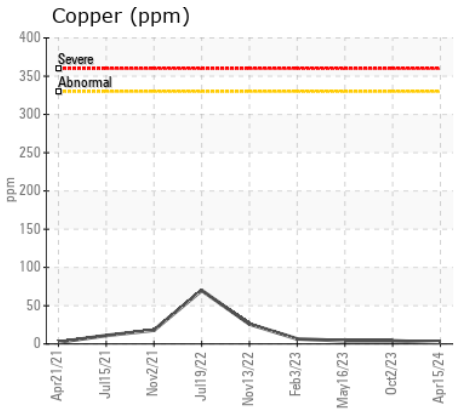


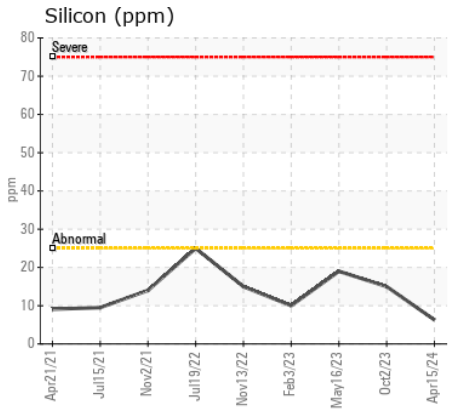


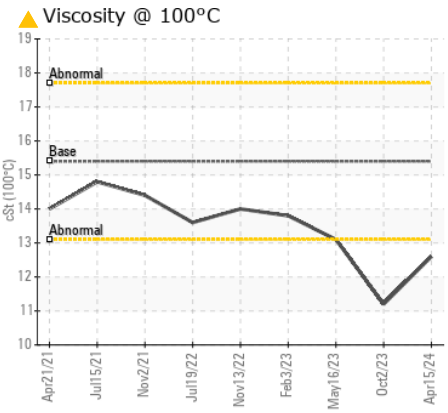


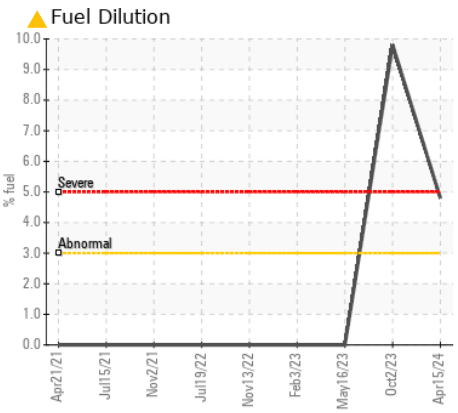












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0080170
Lab Number : 02636840
Unique Number : 5786002
Test Package : MOB 1 (Additional Tests: PercentFuel)

Received : 22 May 2024
Tested : 23 May 2024
Diagnosed : 23 May 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 - 577 - First Class
8540 Chilliwack Mountain Rd,
Chilliwack, BC
CA V2R 3W8
Contact: Derek Jessop
djessop@gflenv.com
T: (604)798-5301
F: