MOBIL LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Machine Id
701030
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (19 LTR)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

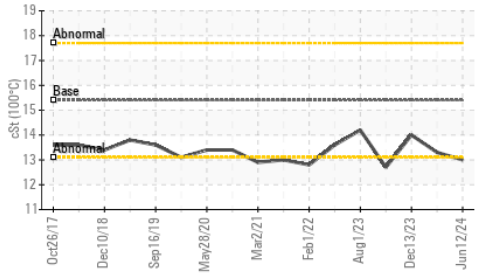
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Light fuel dilution occurring.

FLUID CONDITION

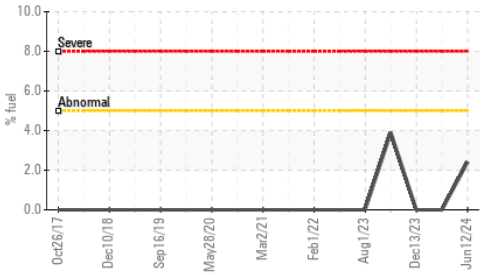
Fuel is present in the oil and is lowering the viscosity. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0122297	GFL0107125	WC0875106
Sample Date		Client Info		12 Jun 2024	17 Jan 2024	13 Dec 2023
Machine Age	hrs	Client Info		11361	0	106415
Oil Age	hrs	Client Info		600	0	106415
Filter Age	hrs	Client Info		600	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>100	25	12	7
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	0
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	7	7	3
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	2	<1	3
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	4	5	4
Potassium	ppm	ASTM D5185(m)	>20	10	8	2
Fuel	%	ASTM D7593*	>5	▲ 2.4	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.5	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	10.6	6.8	6.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.4	18.3	18.0
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		7	4	4
Boron	ppm	ASTM D5185(m)	0	6	15	20
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	60	57	59
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	1010	946	908	918
Calcium	ppm	ASTM D5185(m)	1070	1036	1023	1014
Phosphorus	ppm	ASTM D5185(m)	1150	946	991	962
Zinc	ppm	ASTM D5185(m)	1270	1166	1145	1170
Sulfur	ppm	ASTM D5185(m)	2060	2366	2688	2571
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.7	13.5	14.0
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ 13.0	13.3	14.0

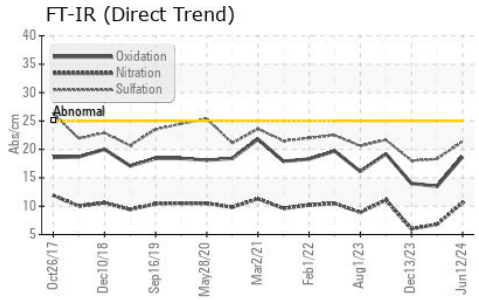
Viscosity @ 100°C



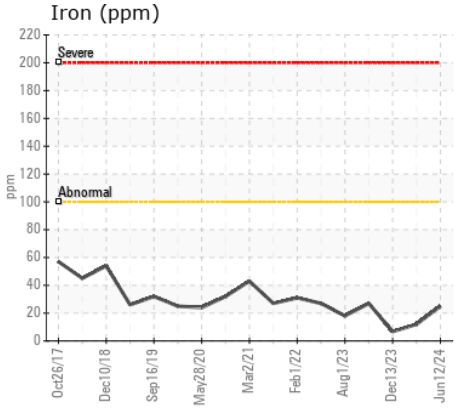
Fuel Dilution



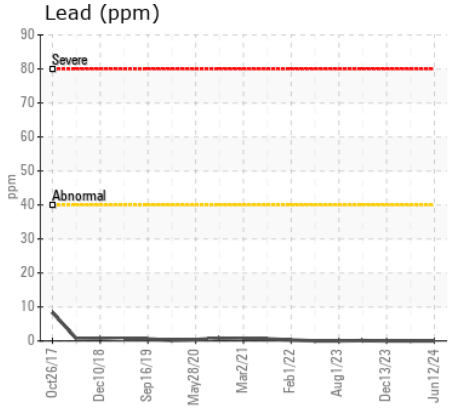
FT-IR (Direct Trend)



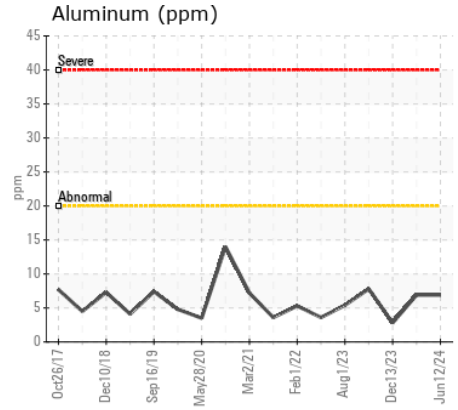
Iron (ppm)



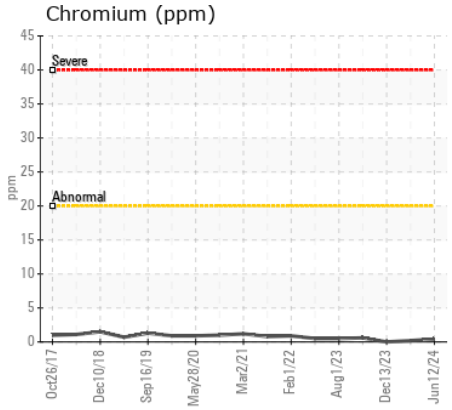
Lead (ppm)



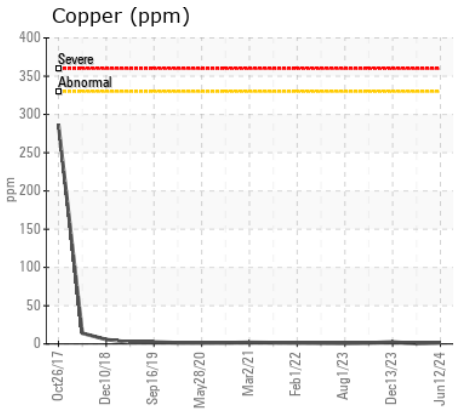
Aluminum (ppm)



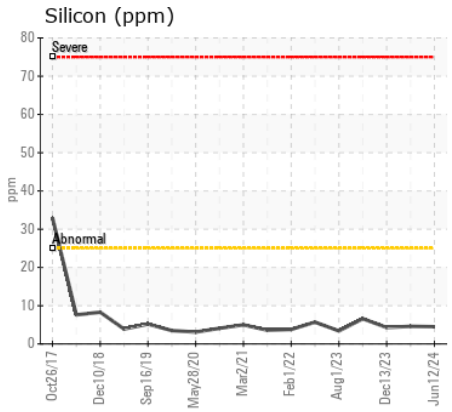
Chromium (ppm)



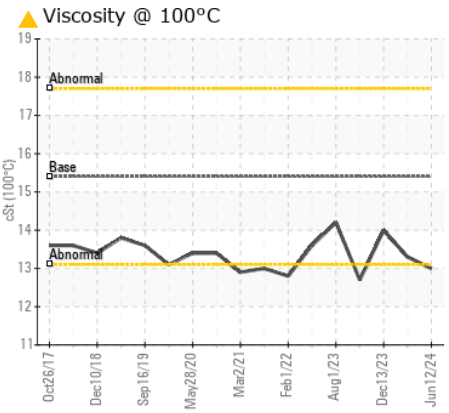
Copper (ppm)



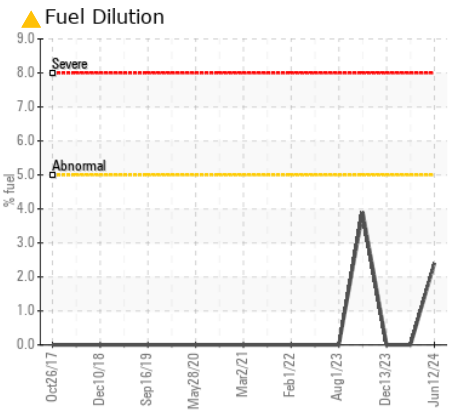
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0122297
Lab Number : 02641921
Unique Number : 5799460
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

Received : 14 Jun 2024
Tested : 17 Jun 2024
Diagnosed : 17 Jun 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 - 217 - Aurora
14131 BAYVIEW AVE, AURORA YARD
AURORA, ON
CA L4G 0K6
Contact: Mike Havens
MHavens@gflenv.com
T:
F: (905)713-2445