MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
4421
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (40 LTR)

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

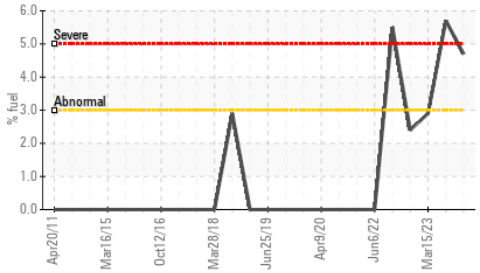
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

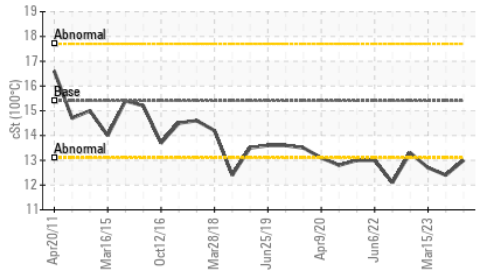
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**GFL0110247**	GFL0097759	GFL0064331
Sample Date		Client Info		**14 Feb 2024**	02 Nov 2023	15 Mar 2023
Machine Age	hrs	Client Info		**39973**	39398	38423
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	ABNORMAL
Iron	ppm	ASTM D5185(m)	>120	**16**	27	8
Chromium	ppm	ASTM D5185(m)	>20	**<1**	<1	0
Nickel	ppm	ASTM D5185(m)	>5	**<1**	<1	0
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	<1
Silver	ppm	ASTM D5185(m)	>2	**0**	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	**2**	2	1
Lead	ppm	ASTM D5185(m)	>40	**<1**	4	<1
Copper	ppm	ASTM D5185(m)	>330	**4**	7	3
Tin	ppm	ASTM D5185(m)	>15	**0**	<1	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Silicon	ppm	ASTM D5185(m)	>25	**2**	3	4
Potassium	ppm	ASTM D5185(m)	>20	**<1**	1	<1
Fuel	%	ASTM D7593*	>3.0	▲ **4.7**	⬢ 5.7	▲ 2.9
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	ASTM D7844*	>4	**1.7**	2.4	0.7
Nitration	Abs/cm	ASTM D7624*	>20	**8.5**	10.5	6.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	**21.3**	23.7	22.3
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185(m)		**1**	2	1
Boron	ppm	ASTM D5185(m)	0	**2**	2	9
Barium	ppm	ASTM D5185(m)	0	**0**	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	**55**	57	54
Manganese	ppm	ASTM D5185(m)	0	**0**	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	**906**	931	870
Calcium	ppm	ASTM D5185(m)	1070	**1024**	1012	1135
Phosphorus	ppm	ASTM D5185(m)	1150	**952**	923	1008
Zinc	ppm	ASTM D5185(m)	1270	**1102**	1131	1078
Sulfur	ppm	ASTM D5185(m)	2060	**2523**	2279	2500
Oxidation	Abs/.1mm	ASTM D7414*	>25	**14.7**	16.5	14.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ **13.0**	▲ 12.4	▲ 12.7

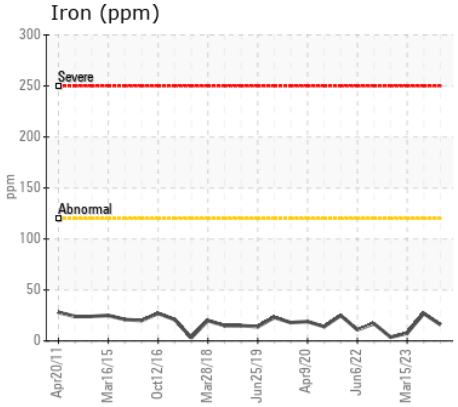
Fuel Dilution



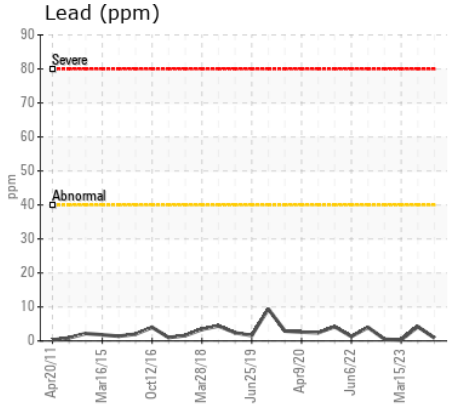
Viscosity @ 100°C



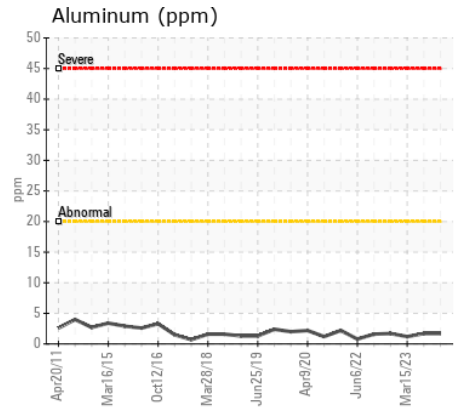
Iron (ppm)



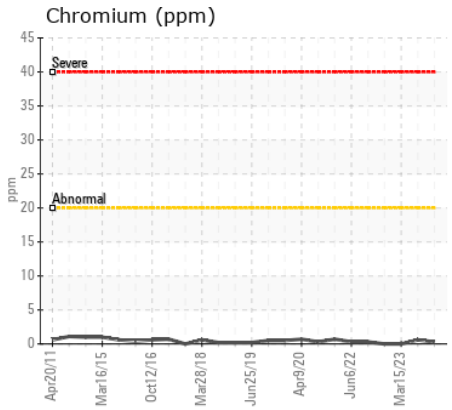
Lead (ppm)



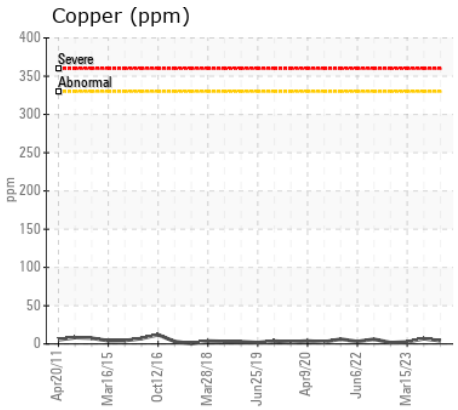
Aluminum (ppm)



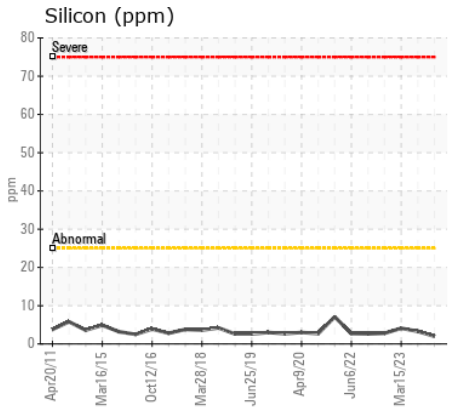
Chromium (ppm)



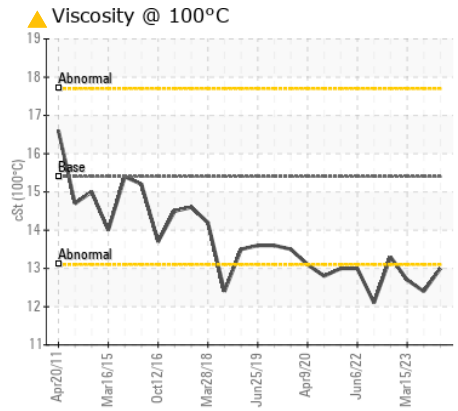
Copper (ppm)



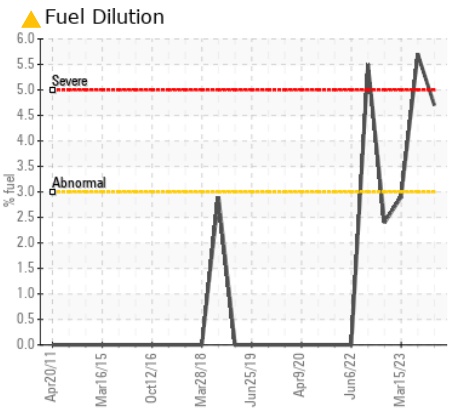
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0110247
Lab Number : 02617598
Unique Number : 5734708
Test Package : MOB 1 (Additional Tests: PercentFuel)

Received : 23 Feb 2024
Tested : 26 Feb 2024
Diagnosed : 26 Feb 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 - 209 - Hamilton
560 Seaman Street
Stoney Creek, ON
CA L8E 3X7
Contact: Fred Carleton
fred.carleton@gflenv.com
T: (289)925-6693
F: (905)664-9008