MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
801025
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (20 GAL)

RECOMMENDATION

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

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

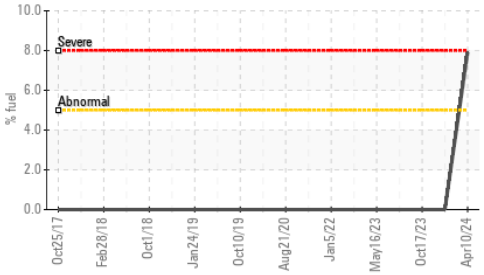
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

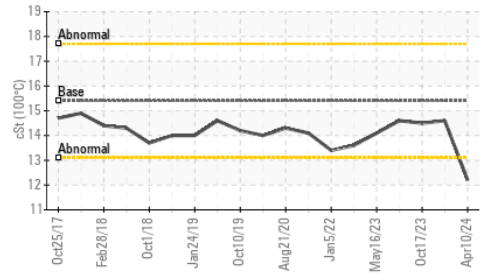
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**GFL0107135**	GFL0107126	GFL0094179
Sample Date		Client Info		**10 Apr 2024**	16 Jan 2024	17 Oct 2023
Machine Age	kms	Client Info		**81540**	81540	81540
Oil Age	kms	Client Info		**0**	0	0
Filter Age	kms	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	N/A
Sample Status				**ABNORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>80	**34**	7	31
Chromium	ppm	ASTM D5185(m)	>5	**1**	<1	1
Nickel	ppm	ASTM D5185(m)	>2	**<1**	<1	0
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)	>3	**0**	0	<1
Aluminum	ppm	ASTM D5185(m)	>30	**4**	2	2
Lead	ppm	ASTM D5185(m)	>30	**0**	0	<1
Copper	ppm	ASTM D5185(m)	>150	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>5	**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Silicon	ppm	ASTM D5185(m)	>20	**11**	5	4
Potassium	ppm	ASTM D5185(m)	>20	**5**	20	<1
Fuel	%	ASTM D7593*	>5	▲ **7.9**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	0.0	NEG
Soot %	%	ASTM D7844*	>3	**0.6**	0	0.4
Nitration	Abs/cm	ASTM D7624*	>20	**11.4**	5.7	10.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	**23.0**	18.9	22.8
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185(m)		**6**	2	6
Boron	ppm	ASTM D5185(m)	0	**7**	12	5
Barium	ppm	ASTM D5185(m)	0	**0**	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	**57**	56	65
Manganese	ppm	ASTM D5185(m)	0	**<1**	0	0
Magnesium	ppm	ASTM D5185(m)	1010	**912**	918	1035
Calcium	ppm	ASTM D5185(m)	1070	**990**	1018	1148
Phosphorus	ppm	ASTM D5185(m)	1150	**946**	991	1098
Zinc	ppm	ASTM D5185(m)	1270	**1129**	1133	1293
Sulfur	ppm	ASTM D5185(m)	2060	**2282**	2695	2460
Oxidation	Abs/.1mm	ASTM D7414*	>25	**21.3**	14.1	19.7
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ **12.2**	14.6	14.5

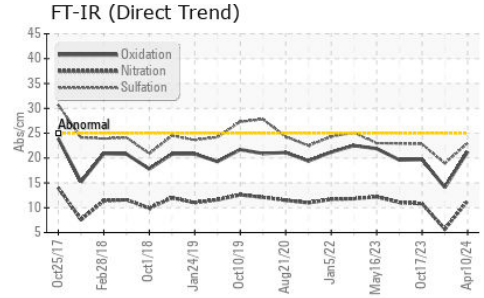
Fuel Dilution



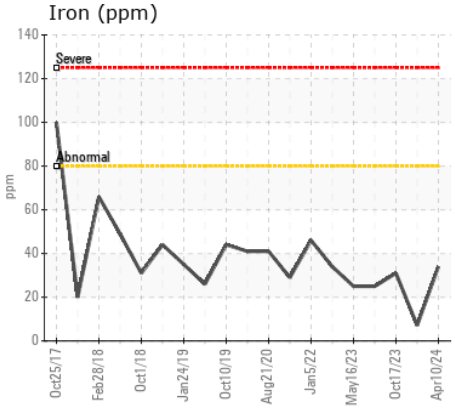
Viscosity @ 100°C



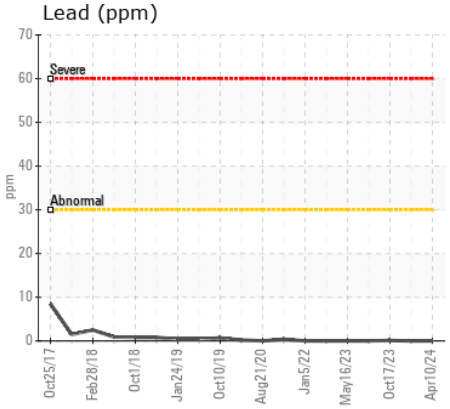
FT-IR (Direct Trend)



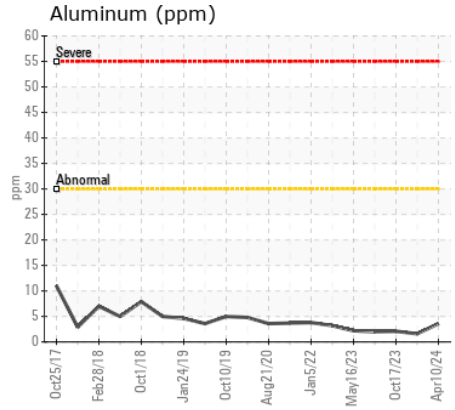
Iron (ppm)



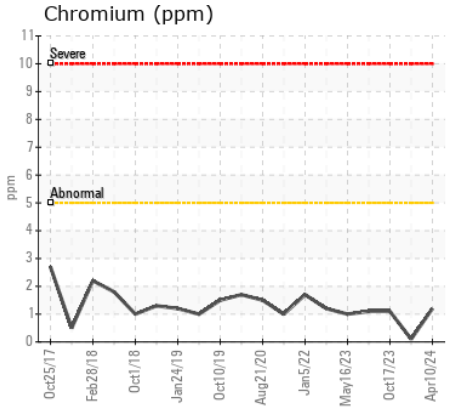
Lead (ppm)



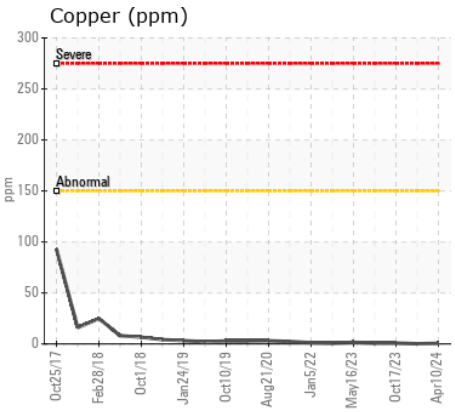
Aluminum (ppm)



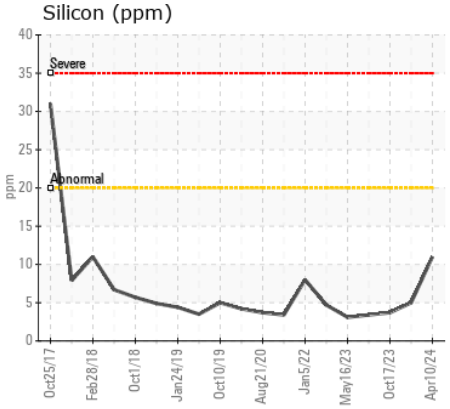
Chromium (ppm)



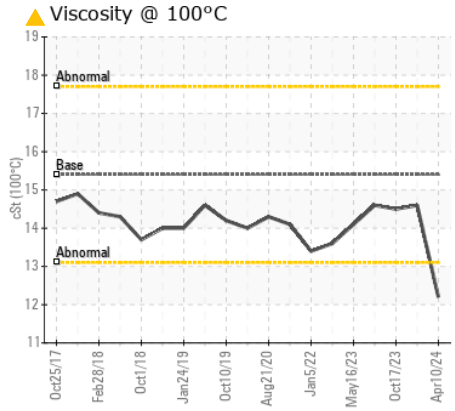
Copper (ppm)



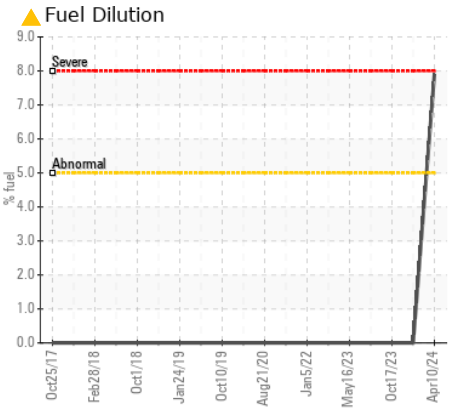
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0107135
Lab Number : 02628325
Unique Number : 5761457
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

Received : 12 Apr 2024
Tested : 15 Apr 2024
Diagnosed : 15 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 - 217 - Aurora
14131 BAYVIEW AVE, AURORA YARD
AURORA, ON
CA L4G 0K6
Contact: Mike Havens
MHavens@gflenv.com
T:
F: (905)713-2445