MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
7824
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- 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

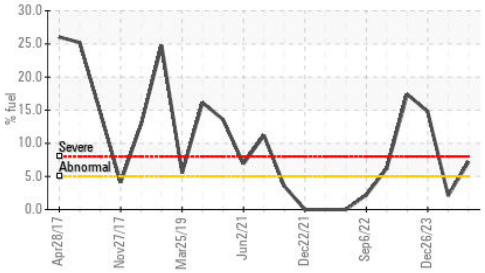
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

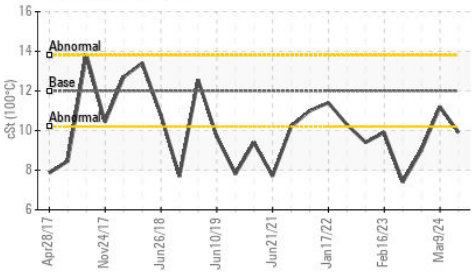
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0119009	GFL0102621	GFL0101741
Sample Date		Client Info		31 May 2024	09 Mar 2024	26 Dec 2023
Machine Age	hrs	Client Info		24144	23698	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				ABNORMAL	MARGINAL	SEVERE
Iron	ppm	ASTM D5185(m)	>110	15	11	37
Chromium	ppm	ASTM D5185(m)	>4	1	<1	3
Nickel	ppm	ASTM D5185(m)	>2	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<1	1	2
Lead	ppm	ASTM D5185(m)	>45	0	0	<1
Copper	ppm	ASTM D5185(m)	>85	<1	<1	2
Tin	ppm	ASTM D5185(m)	>4	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>30	4	6	6
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	1
Fuel	%	ASTM D7593*	>5	▲ 7.2	▲ 2.1	▲ 14.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	1	0.4	1.3
Nitration	Abs/cm	ASTM D7624*	>20	9.7	7.4	13.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.5	19.2	26.0
Silt	scalar	Visual*	NONE	VLITE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		6	4	7
Boron	ppm	ASTM D5185(m)	2	2	2	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	55	59	47
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	950	877	948	743
Calcium	ppm	ASTM D5185(m)	1050	974	1063	822
Phosphorus	ppm	ASTM D5185(m)	995	939	959	785
Zinc	ppm	ASTM D5185(m)	1180	1084	1156	917
Sulfur	ppm	ASTM D5185(m)	2600	2238	2437	2024
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.8	15.0	28.3
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	▲ 9.9	11.2	▲ 9

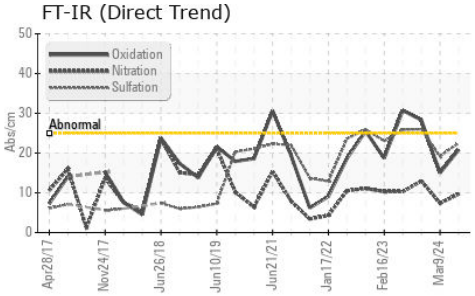
Fuel Dilution



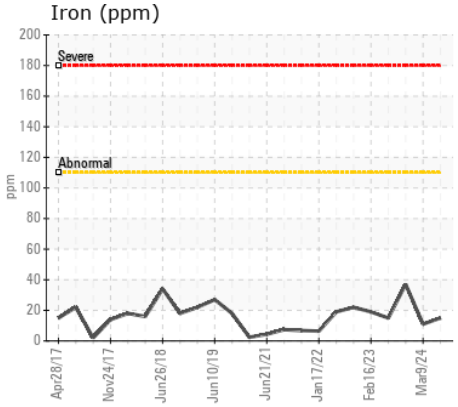
Viscosity @ 100°C



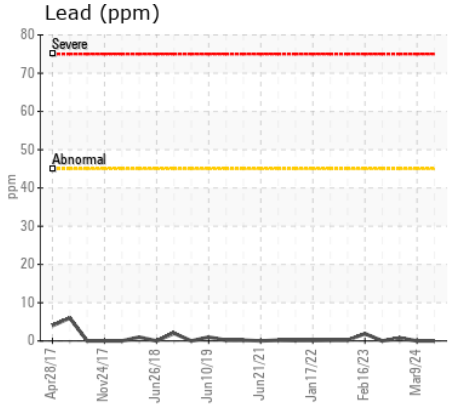
FT-IR (Direct Trend)



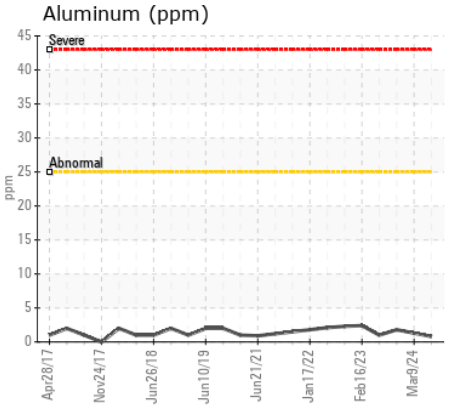
Iron (ppm)



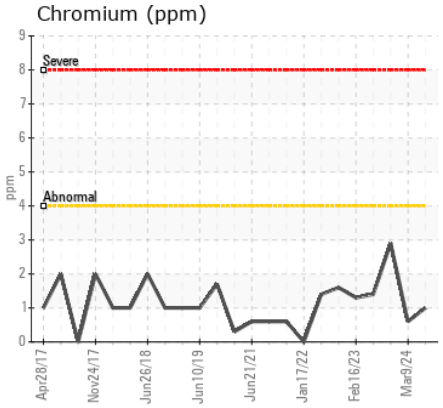
Lead (ppm)



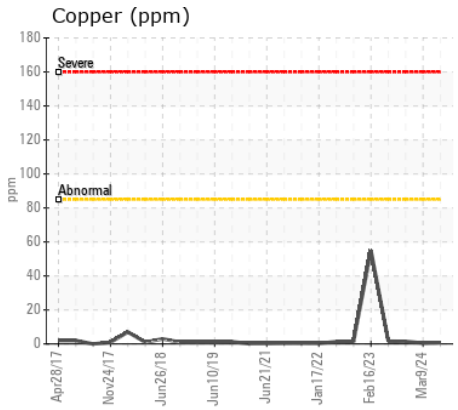
Aluminum (ppm)



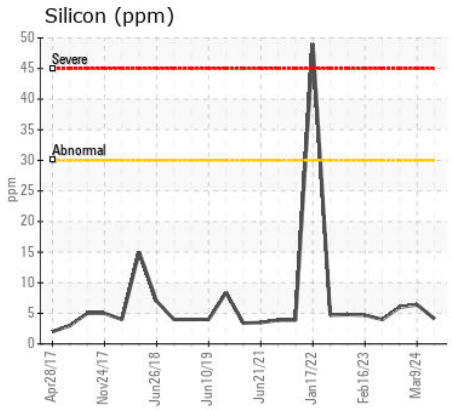
Chromium (ppm)



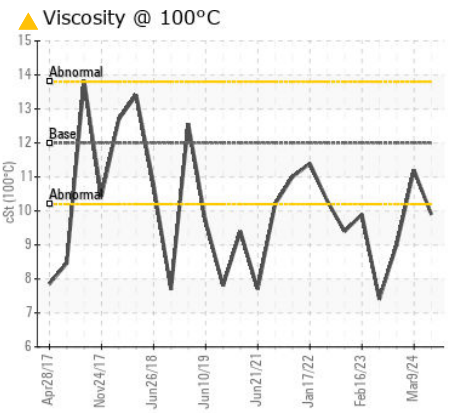
Copper (ppm)



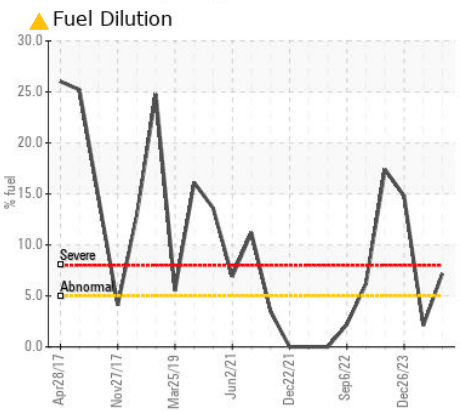
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0119009
Lab Number : 02639776
Unique Number : 5788938
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, Visual)

Received : 05 Jun 2024
Tested : 07 Jun 2024
Diagnosed : 07 Jun 2024 - Wes Davis

GFL Environmental - 554 - Edmonton SW
8409 -15th Street NW
Edmonton, AB
CA T6P 0B8
Contact: Tim Greig
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F:

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.