MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
801069
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- LTR)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

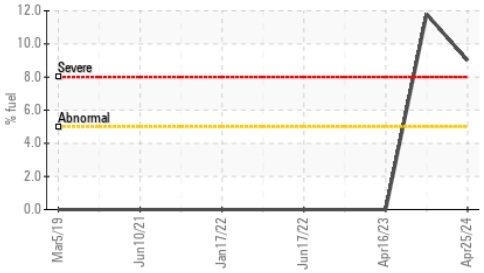
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

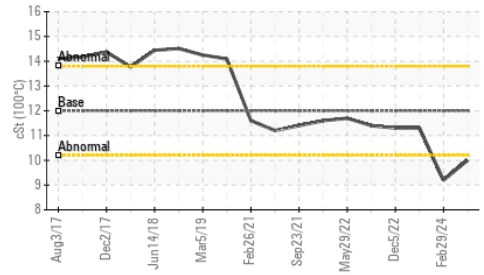
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0112487	GFL0102666	GFL0077955
Sample Date		Client Info		25 Apr 2024	29 Feb 2024	16 Apr 2023
Machine Age	hrs	Client Info		0	12743	11649
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	ATTENTION
Iron	ppm	ASTM D5185(m)	>100	52	80	22
Chromium	ppm	ASTM D5185(m)	>20	2	4	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	8	12	2
Lead	ppm	ASTM D5185(m)	>40	8	9	<1
Copper	ppm	ASTM D5185(m)	>330	158	65	4
Tin	ppm	ASTM D5185(m)	>15	<1	2	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	8	15	21
Potassium	ppm	ASTM D5185(m)	>20	6	10	2
Fuel	%	ASTM D7593*	>5	▲ 9	▲ 11.8	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	▲ 0.028
Soot %	%	ASTM D7844*	>3	0.5	0.6	0
Nitration	Abs/cm	ASTM D7624*	>20	10.7	12.0	5.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.6	21.7	18.2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		22	49	● 158
Boron	ppm	ASTM D5185(m)	2	2	2	2
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	53	54	62
Manganese	ppm	ASTM D5185(m)	0	1	2	<1
Magnesium	ppm	ASTM D5185(m)	950	861	826	952
Calcium	ppm	ASTM D5185(m)	1050	952	952	1079
Phosphorus	ppm	ASTM D5185(m)	995	888	812	1070
Zinc	ppm	ASTM D5185(m)	1180	1065	999	1155
Sulfur	ppm	ASTM D5185(m)	2600	1964	2104	2697
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.0	19.8	13.1
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	▲ 10.0	▲ 9.2	11.3

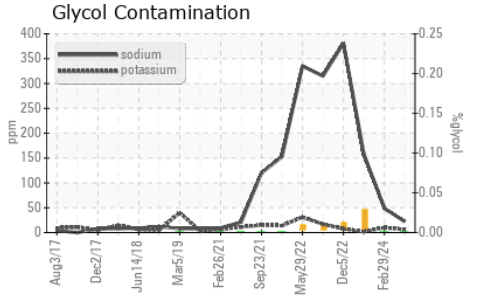
Fuel Dilution



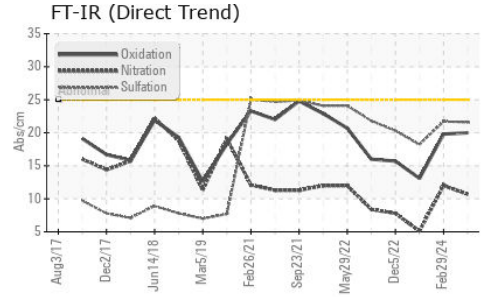
Viscosity @ 100°C



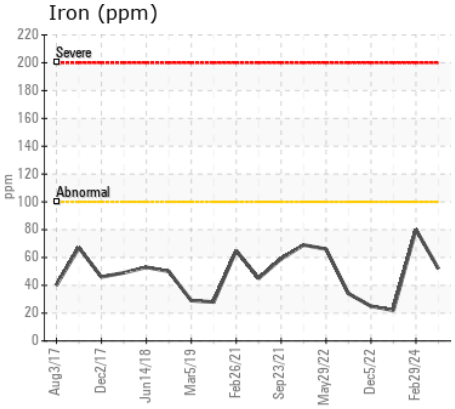
Glycol Contamination



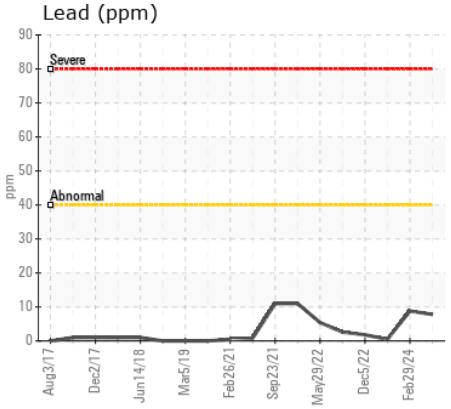
FT-IR (Direct Trend)



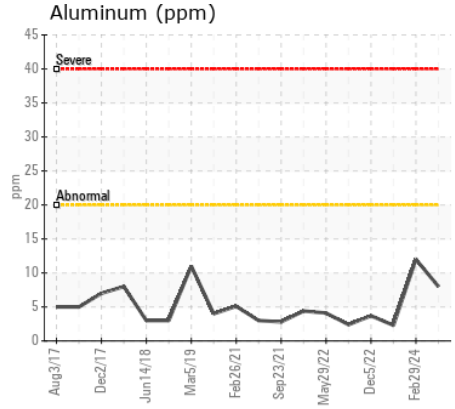
Iron (ppm)



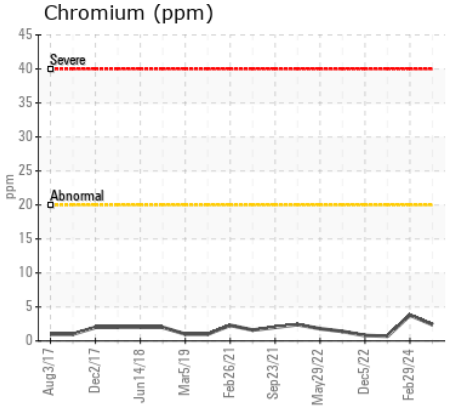
Lead (ppm)



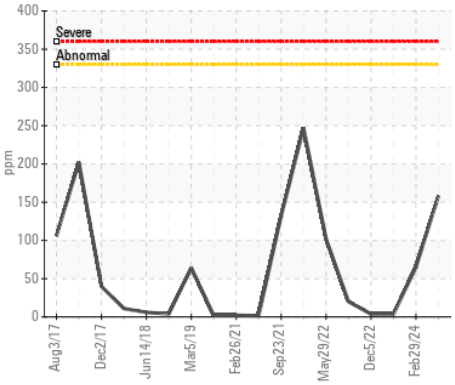
Aluminum (ppm)



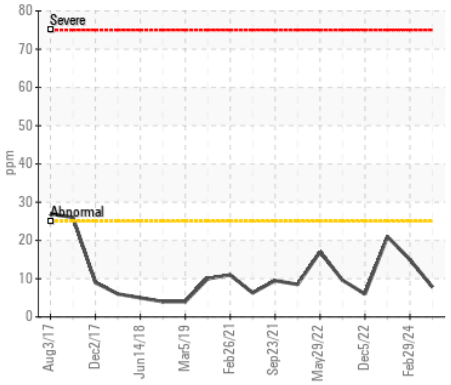
Chromium (ppm)



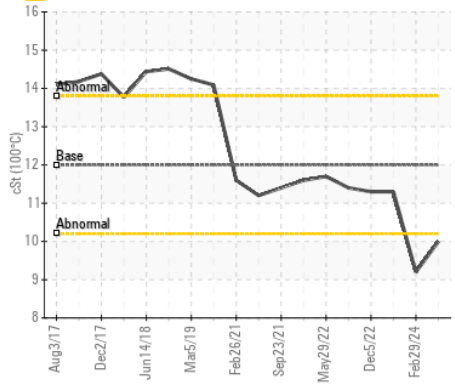
Copper (ppm)



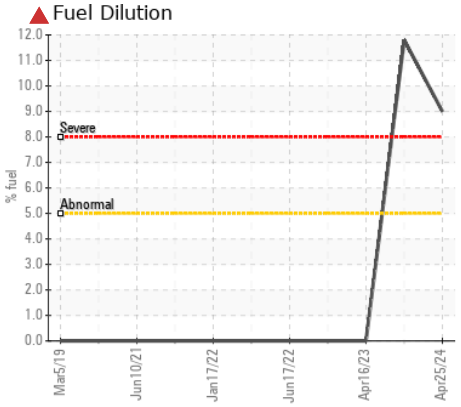
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112487
Lab Number : 02631564
Unique Number : 5772717
Test Package : MOB 1 (Additional Tests: Glycol, PercentFuel)

Received : 26 Apr 2024
Tested : 29 Apr 2024
Diagnosed : 29 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.

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