MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[1280204]
Machine Id
350594
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

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

Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated.

CONTAMINATION

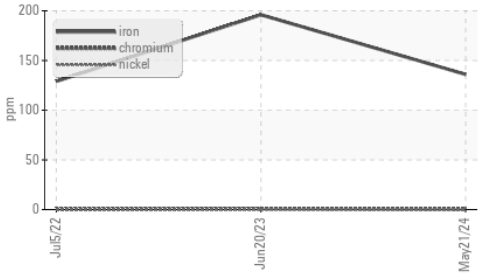
There is no indication of any contamination in the oil.

FLUID CONDITION

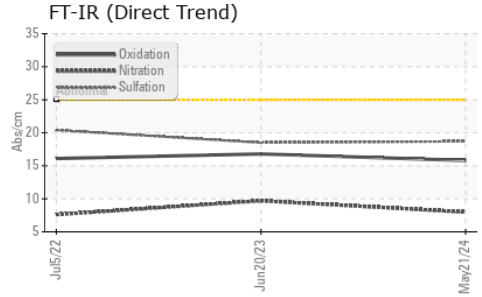
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0118523	GFL0082940	GFL0043771
Sample Date		Client Info		21 May 2024	20 Jun 2023	05 Jul 2022
Machine Age	hrs	Client Info		1857	1585	1305
Oil Age	hrs	Client Info		0	1585	0
Filter Age	hrs	Client Info		0	1585	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
PQ		ASTM D8184*		1	2	0
Iron	ppm	ASTM D5185(m)	>100	▲ 136	▲ 196	▲ 129
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	9	6	5
Lead	ppm	ASTM D5185(m)	>40	<1	3	1
Copper	ppm	ASTM D5185(m)	>330	6	68	9
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	6	11	7
Potassium	ppm	ASTM D5185(m)	>20	3	2	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.2	0.2	0
Nitration	Abs/cm	ASTM D7624*	>20	8.0	9.7	7.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.7	18.5	20.4
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		1	2	2
Boron	ppm	ASTM D5185(m)	0	4	8	23
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	58	59	50
Manganese	ppm	ASTM D5185(m)	0	1	2	1
Magnesium	ppm	ASTM D5185(m)	1010	961	953	785
Calcium	ppm	ASTM D5185(m)	1070	1053	1102	1262
Phosphorus	ppm	ASTM D5185(m)	1150	1001	1098	997
Zinc	ppm	ASTM D5185(m)	1270	1187	1185	1156
Sulfur	ppm	ASTM D5185(m)	2060	2565	2663	2827
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.8	16.8	16.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.8	13.5	13.7

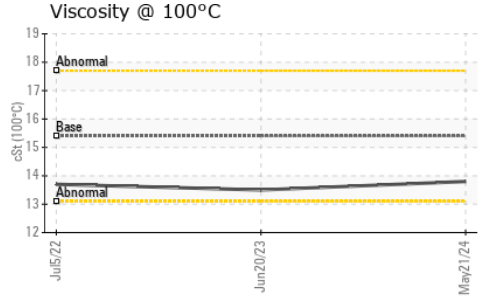
Ferrous Alloys



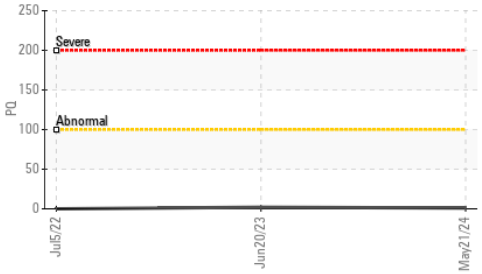
FT-IR (Direct Trend)



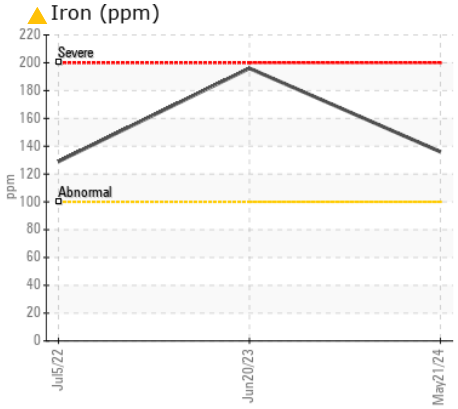
Viscosity @ 100°C



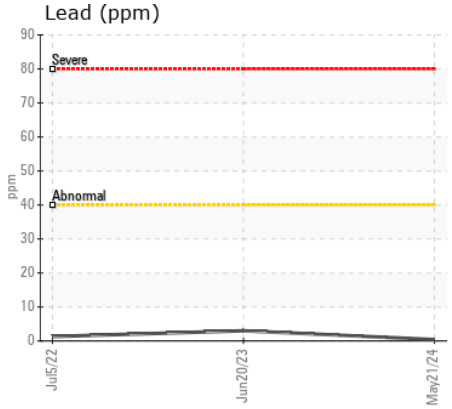
PQ



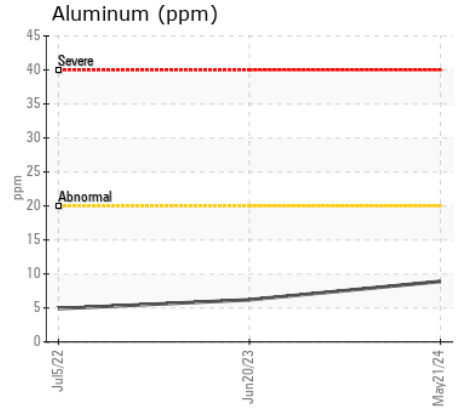
Iron (ppm)



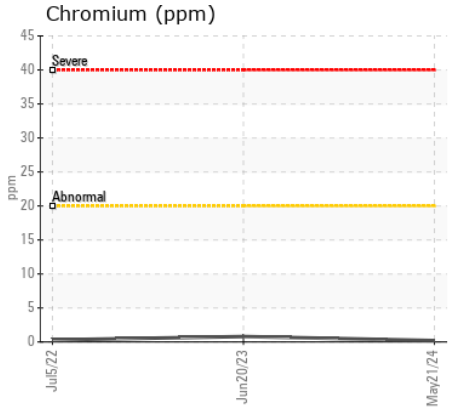
Lead (ppm)



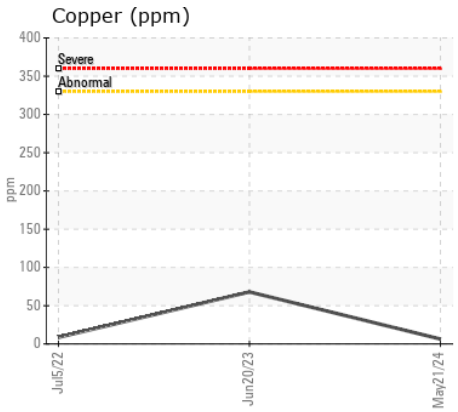
Aluminum (ppm)



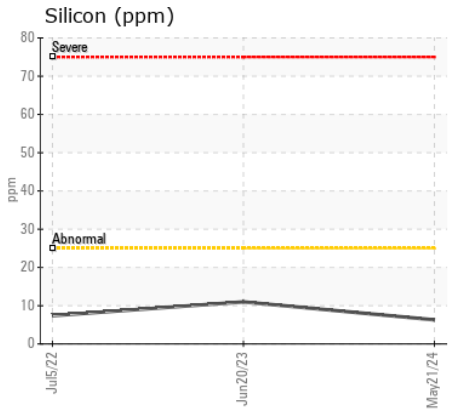
Chromium (ppm)



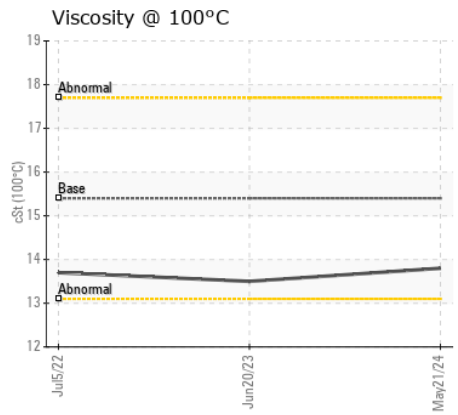
Copper (ppm)



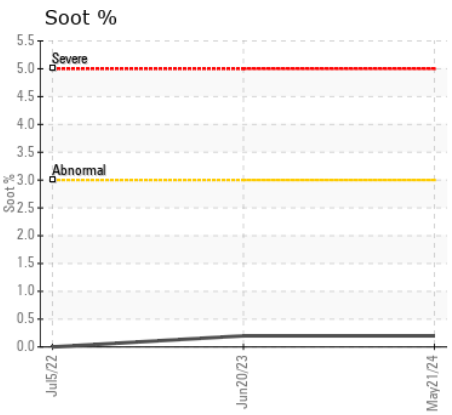
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0118523
Lab Number : 02637057
Unique Number : 5786219
Test Package : MOB 1 (Additional Tests: PQ)

Received : 23 May 2024
Tested : 23 May 2024
Diagnosed : 23 May 2024 - Kevin Marson

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 - 207 - Pickering SW
1034 TOY AVENUE, PICKERING YARD
PICKERING, ON
CA L1W 3P1
Contact: Ian Patton
ipatton@gflenv.com
T: (905)831-6297
F: (905)426-3577