MOB LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
401105
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for faulty combustion and a possible overheat condition. We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill.

WEAR

All component wear rates are normal.

CONTAMINATION

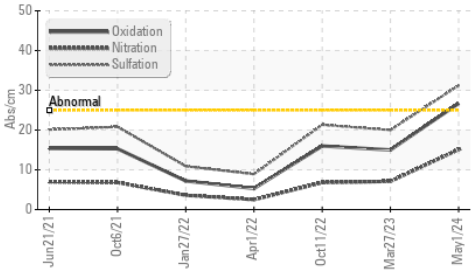
There is an abnormal level of sulfation indicated.

FLUID CONDITION

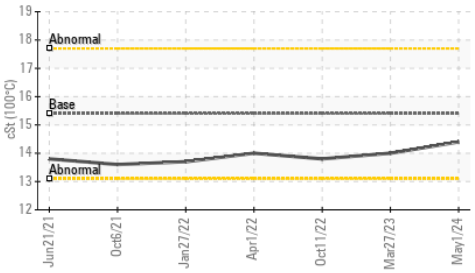
A small degree of oil oxidation was indicated. Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0096841	GFL0073132	GFL0057476
Sample Date		Client Info		01 May 2024	27 Mar 2023	11 Oct 2022
Machine Age	hrs	Client Info		33977	30989	29937
Oil Age	hrs	Client Info		600	600	600
Filter Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>100	27	27	16
Chromium	ppm	ASTM D5185(m)	>20	2	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	1	<1	0
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	1
Lead	ppm	ASTM D5185(m)	>40	16	4	4
Copper	ppm	ASTM D5185(m)	>330	2	3	2
Tin	ppm	ASTM D5185(m)	>15	1	<1	<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)	>25	4	3	3
Potassium	ppm	ASTM D5185(m)	>20	3	<1	1
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	0.4	0.3
Nitration	Abs/cm	ASTM D7624*	>20	15.1	7.1	6.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	▲ 31.2	20.0	21.3
Silt	scalar	Visual*	NONE	NONE	---	---
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)		12	3	2
Boron	ppm	ASTM D5185(m)	0	9	6	4
Barium	ppm	ASTM D5185(m)	0	<1	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	61	61	58
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	647	992	955
Calcium	ppm	ASTM D5185(m)	1070	1896	1122	1098
Phosphorus	ppm	ASTM D5185(m)	1150	805	1103	1058
Zinc	ppm	ASTM D5185(m)	1270	1033	1210	1172
Sulfur	ppm	ASTM D5185(m)	2060	2236	2618	2566
Oxidation	Abs/.1mm	ASTM D7414*	>25	▲ 26.7	15.0	16.0
Visc @ 40°C	cSt	ASTM D7279(m)	113.9	115	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.4	14.0	13.8
Viscosity Index (VI)	Scale	ASTM D2270*	142	126	---	---

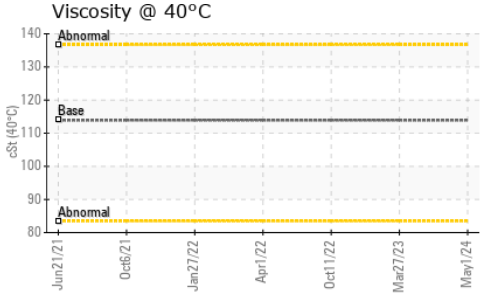
FT-IR (Direct Trend)



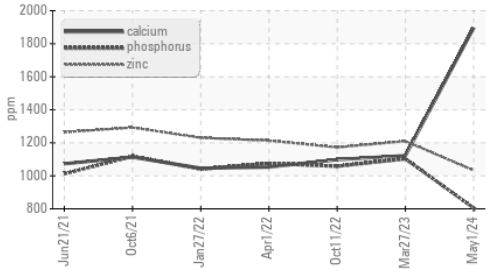
Viscosity @ 100°C



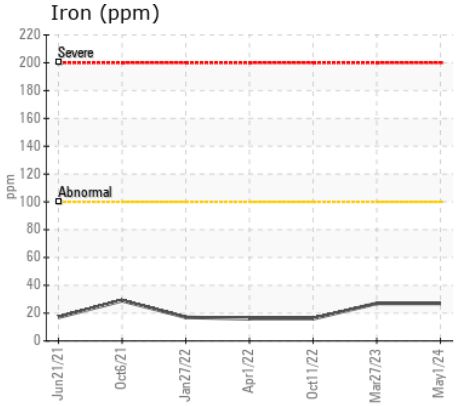
Viscosity @ 40°C



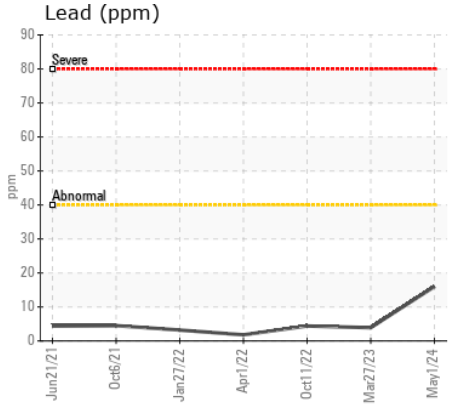
Additives



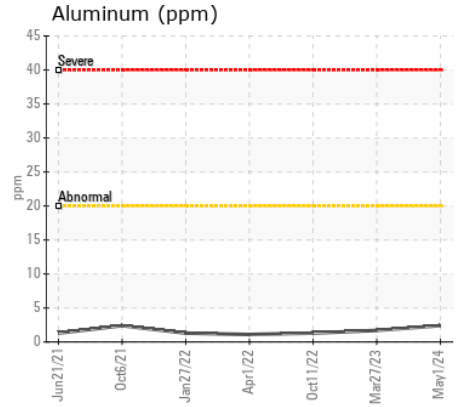
Iron (ppm)



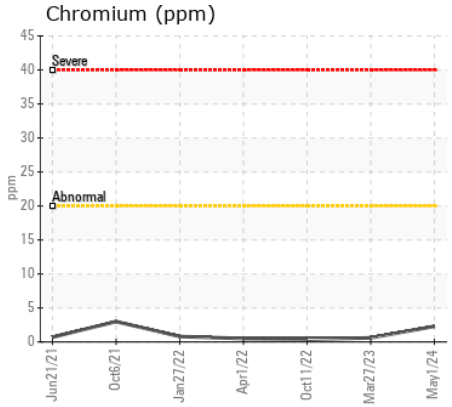
Lead (ppm)



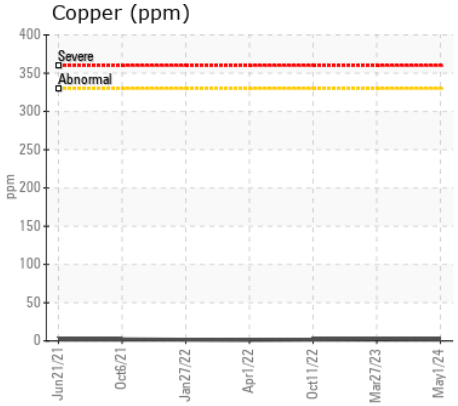
Aluminum (ppm)



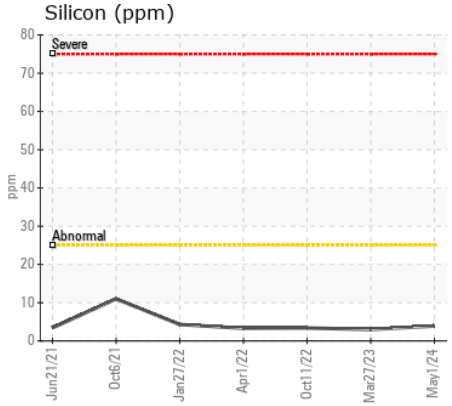
Chromium (ppm)



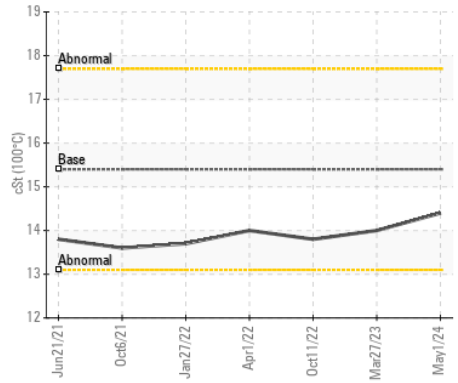
Copper (ppm)



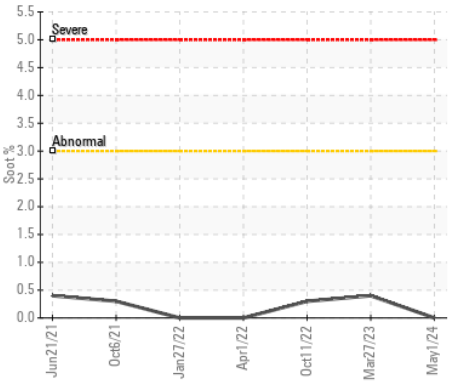
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0096841
Lab Number : 02642254
Unique Number : 5799793
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

Received : 17 Jun 2024
Tested : 18 Jun 2024
Diagnosed : 18 Jun 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 - 574 - Coquitlam
70 Golden Drive,
Coquitlam, BC
CA V3K 6B5
Contact: Sanjay Kisun
skisun@gflenv.com
T: (604)529-4030
F: (604)529-4026