MOBIL LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area
GFL216
Machine Id
401081
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)

RECOMMENDATION

We advise that you check the fuel injection system. 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

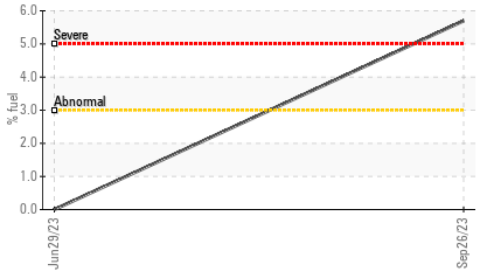
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

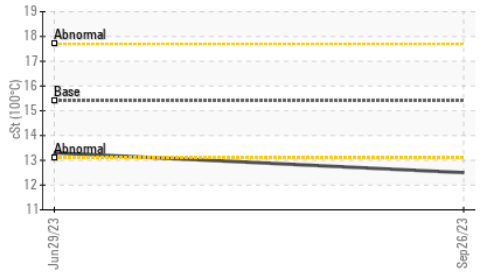
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**GFL0093792**	GFL0087420	---
Sample Date		Client Info		**26 Sep 2023**	29 Jun 2023	---
Machine Age	kms	Client Info		**362986**	357197	---
Oil Age	kms	Client Info		**0**	0	---
Filter Age	kms	Client Info		**0**	0	---
Oil Changed		Client Info		**Changed**	Changed	---
Filter Changed		Client Info		**Changed**	Changed	---
Sample Status				**SEVERE**	NORMAL	---
Iron	ppm	ASTM D5185(m)	>120	**30**	44	---
Chromium	ppm	ASTM D5185(m)	>20	**<1**	1	---
Nickel	ppm	ASTM D5185(m)	>5	**0**	<1	---
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	---
Silver	ppm	ASTM D5185(m)	>2	**<1**	0	---
Aluminum	ppm	ASTM D5185(m)	>20	**1**	1	---
Lead	ppm	ASTM D5185(m)	>40	**2**	7	---
Copper	ppm	ASTM D5185(m)	>330	**7**	16	---
Tin	ppm	ASTM D5185(m)	>15	**<1**	1	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Silicon	ppm	ASTM D5185(m)	>25	**2**	2	---
Potassium	ppm	ASTM D5185(m)	>20	**2**	<1	---
Fuel	%	ASTM D7593*	>3.0	▲ **5.7**	<1.0	---
Water		WC Method	>0.2	**NEG**	NEG	---
Glycol		WC Method		**NEG**	NEG	---
Soot %	%	ASTM D7844*	>4	**1.6**	2.7	---
Nitration	Abs/cm	ASTM D7624*	>20	**7.9**	9.6	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	**20.9**	24.4	---
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	---
Sodium	ppm	ASTM D5185(m)		**2**	2	---
Boron	ppm	ASTM D5185(m)	0	**4**	4	---
Barium	ppm	ASTM D5185(m)	0	**<1**	0	---
Molybdenum	ppm	ASTM D5185(m)	60	**58**	58	---
Manganese	ppm	ASTM D5185(m)	0	**0**	<1	---
Magnesium	ppm	ASTM D5185(m)	1010	**911**	937	---
Calcium	ppm	ASTM D5185(m)	1070	**1004**	998	---
Phosphorus	ppm	ASTM D5185(m)	1150	**954**	1001	---
Zinc	ppm	ASTM D5185(m)	1270	**1138**	1158	---
Sulfur	ppm	ASTM D5185(m)	2060	**2372**	2253	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	**13.8**	15.2	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ **12.5**	13.3	---

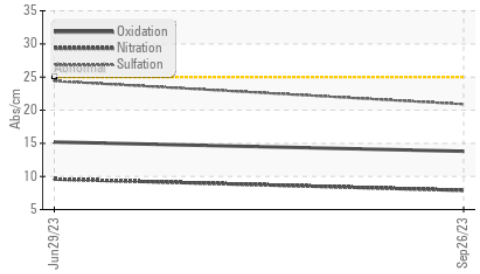
Fuel Dilution



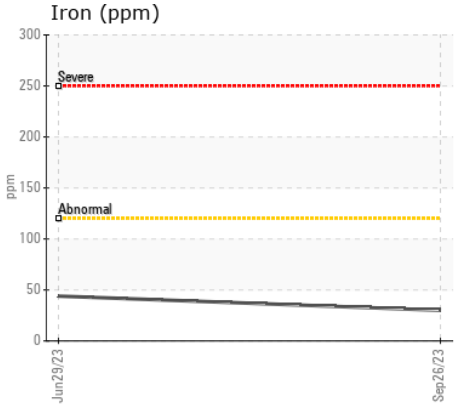
Viscosity @ 100°C



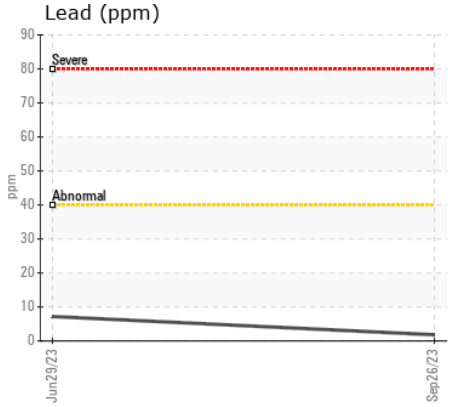
FT-IR (Direct Trend)



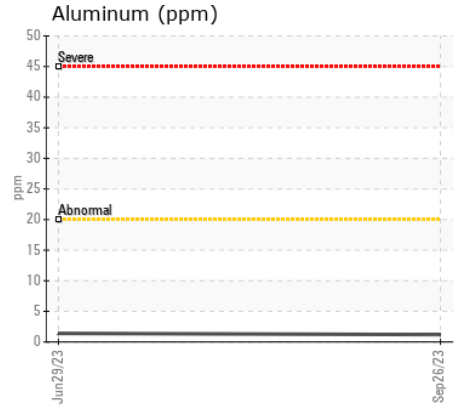
Iron (ppm)



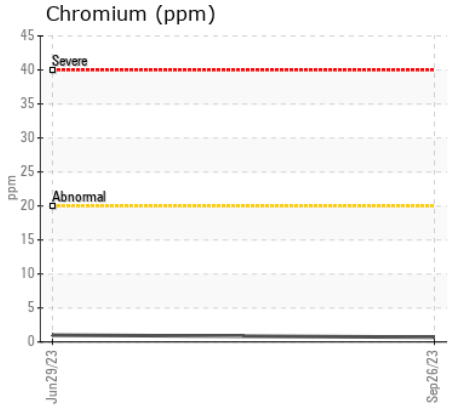
Lead (ppm)



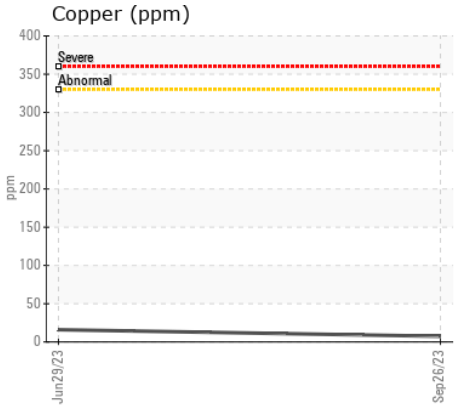
Aluminum (ppm)



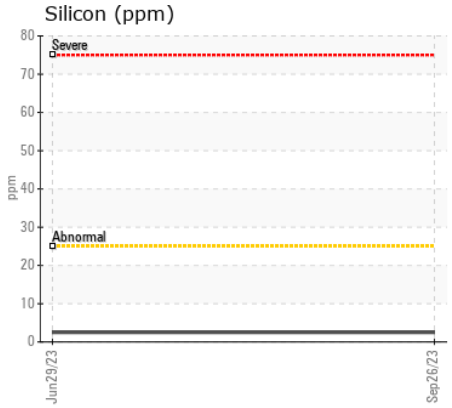
Chromium (ppm)



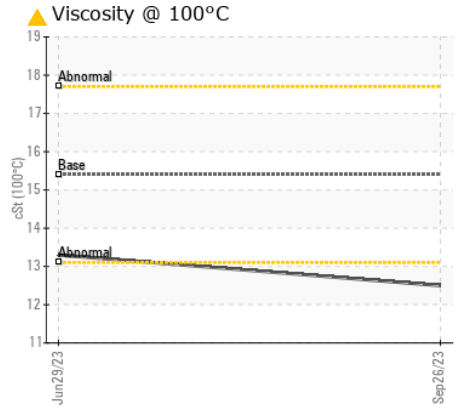
Copper (ppm)



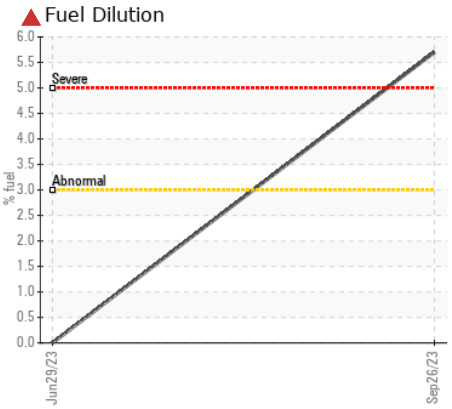
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0093792
Lab Number : 02590518
Unique Number : 5659584
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

Received : 20 Oct 2023
Tested : 23 Oct 2023
Diagnosed : 23 Oct 2023 - 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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