



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
801188
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (20 LTR)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0110733	GFL0097454	GFL0085685
Sample Date		Client Info		20 Feb 2024	27 Nov 2023	05 Sep 2023
Machine Age	hrs	Client Info		5982	5982	5982
Oil Age	hrs	Client Info		5982	5982	5982
Filter Age	hrs	Client Info		5982	5982	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	16	13	15
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	1	<1
Lead	ppm	ASTM D5185(m)	>40	<1	0	0
Copper	ppm	ASTM D5185(m)	>330	1	1	1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

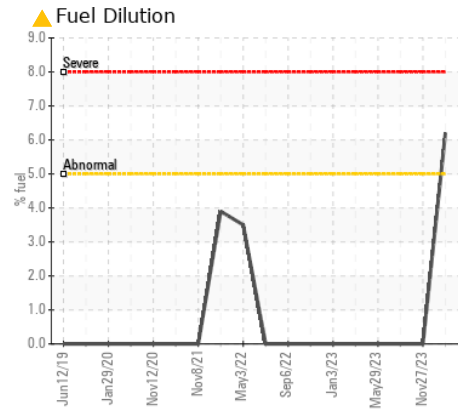
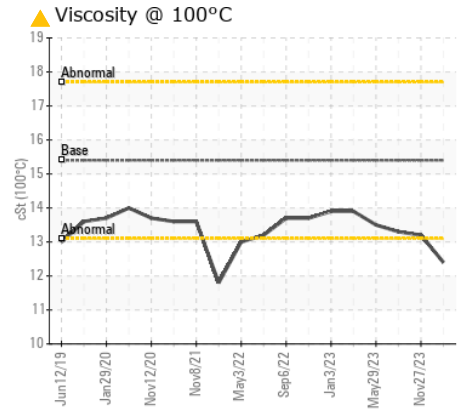
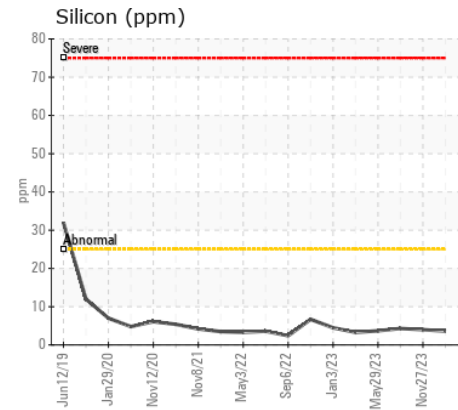
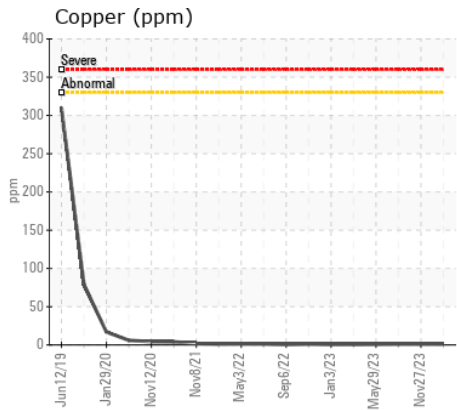
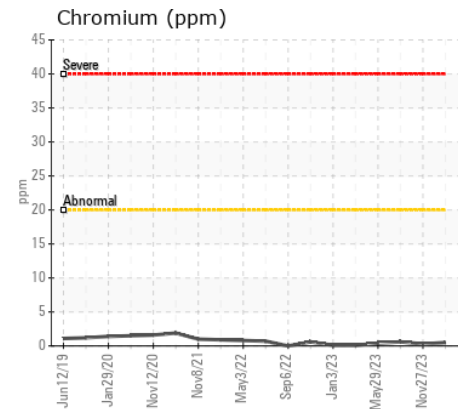
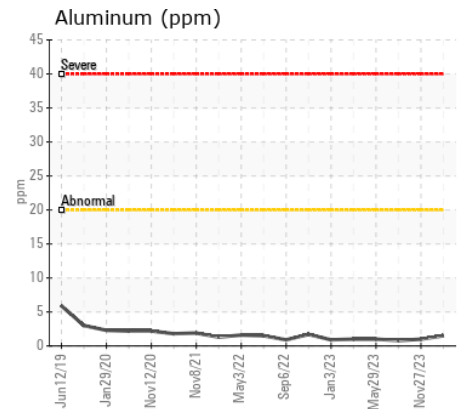
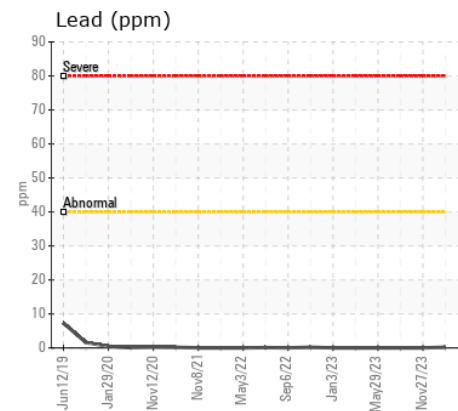
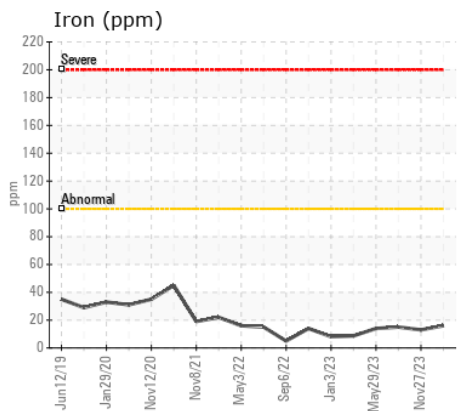
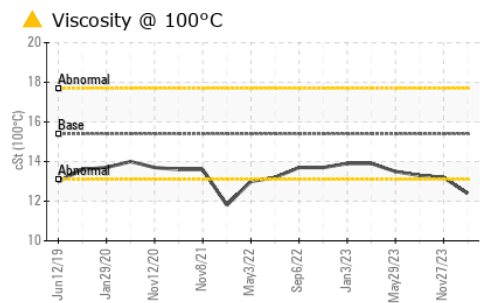
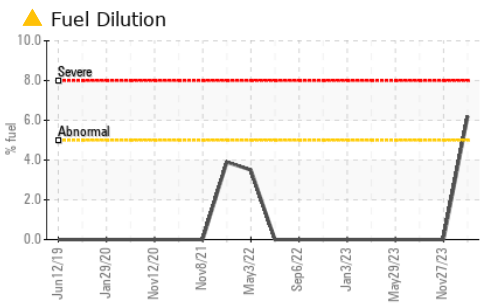
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	4	4
Potassium	ppm	ASTM D5185(m)	>20	2	<1	<1
Fuel	%	ASTM D7593*	>5	▲ 6.2	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.5	0.4	0.5
Nitration	Abs/cm	ASTM D7624*	>20	10.4	9.6	10.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.1	20.7	22.6
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

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.

Sodium	ppm	ASTM D5185(m)		1	2	2
Boron	ppm	ASTM D5185(m)	0	2	2	2
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	55	57	56
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	888	931	907
Calcium	ppm	ASTM D5185(m)	1070	979	1020	983
Phosphorus	ppm	ASTM D5185(m)	1150	931	976	956
Zinc	ppm	ASTM D5185(m)	1270	1106	1175	1134
Sulfur	ppm	ASTM D5185(m)	2060	2389	2395	2304
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.2	17.8	18.6
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ 12.4	13.2	13.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0110733 **Received** : 22 Feb 2024
Lab Number : 02617396 **Tested** : 23 Feb 2024
Unique Number : 5734506 **Diagnosed** : 23 Feb 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 221 - Windsor
 905 Tecumseh Road W
 Windsor, ON
 CA N8W 4J5
 Contact: Rhys Marotte
 rmarotte@gflenv.com

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.

T:
 F: