



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL



Machine Id
8138
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

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		GFL0112570	GFL0102617	GFL0093876
Sample Date		Client Info		06 Apr 2024	07 Mar 2024	29 Oct 2023
Machine Age	hrs	Client Info		17607	17462	16955
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		N/A	Changed	N/A
Sample Status				ABNORMAL	SEVERE	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	14	19	14
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>30	1	1	<1
Lead	ppm	ASTM D5185(m)	>30	<1	<1	3
Copper	ppm	ASTM D5185(m)	>150	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>5	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

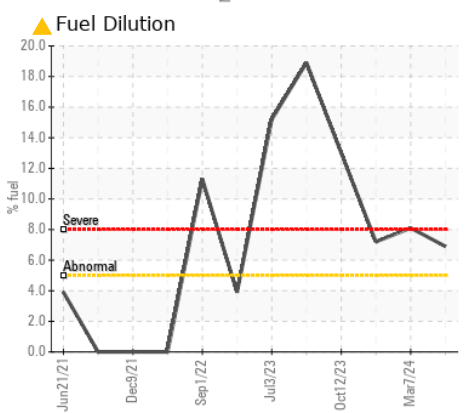
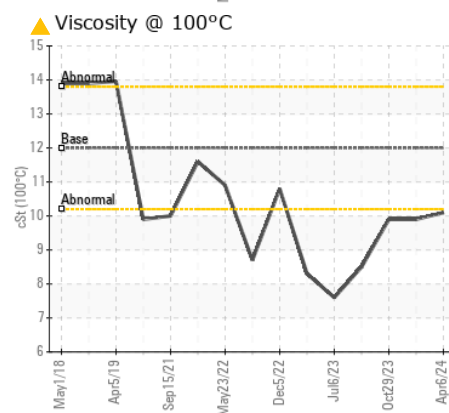
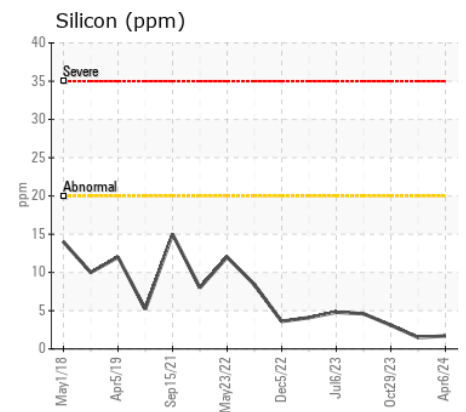
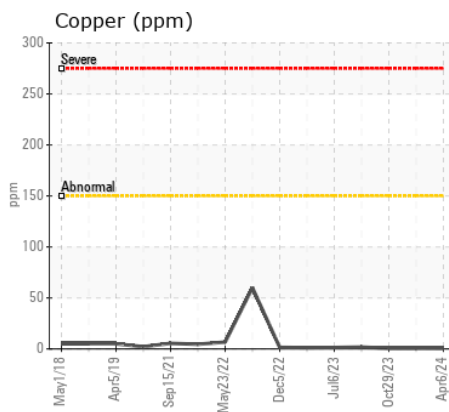
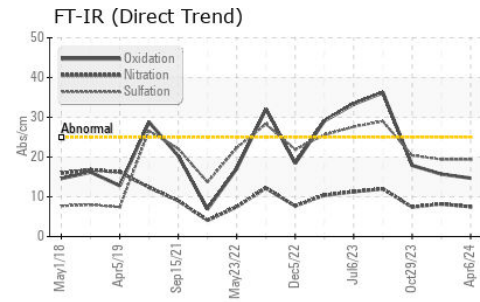
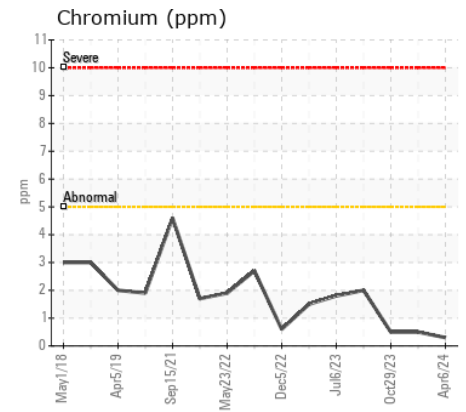
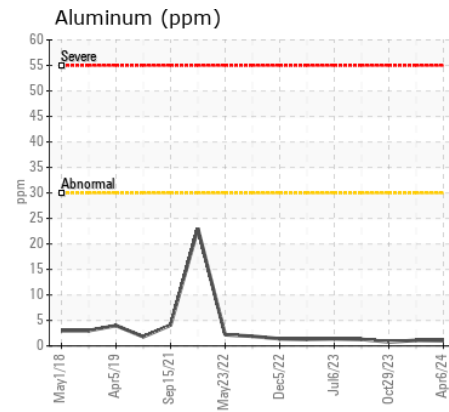
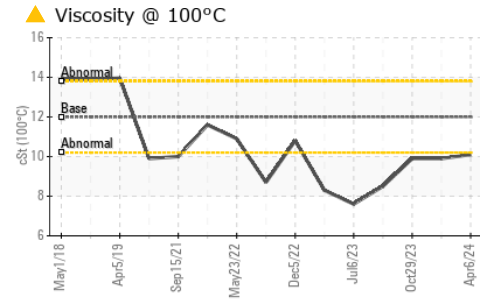
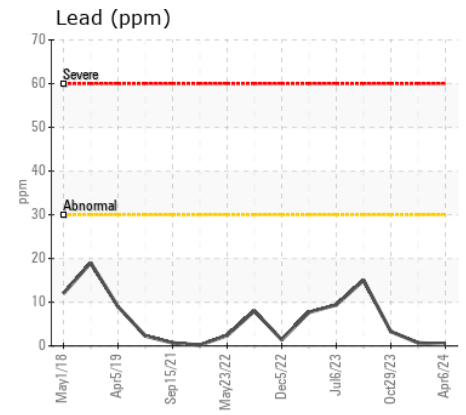
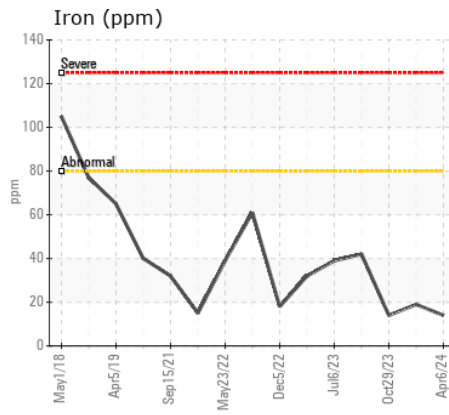
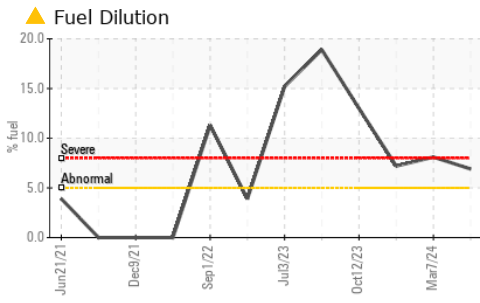
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>20	2	2	3
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0
Fuel	%	ASTM D7593*	>5	▲ 6.9	▲ 8.1	▲ 7.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.5	0.5	0.4
Nitration	Abs/cm	ASTM D7624*	>20	7.5	8.2	7.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.4	19.4	20.4
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)		4	5	4
Boron	ppm	ASTM D5185(m)	2	4	8	7
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	50	51	53	53
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	950	840	845	833
Calcium	ppm	ASTM D5185(m)	1050	919	942	931
Phosphorus	ppm	ASTM D5185(m)	995	857	854	888
Zinc	ppm	ASTM D5185(m)	1180	1019	1023	1034
Sulfur	ppm	ASTM D5185(m)	2600	2214	2189	2273
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.7	15.7	17.9
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	▲ 10.1	▲ 9.9	▲ 9.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112570 **Received** : 18 Apr 2024
Lab Number : 02629873 **Tested** : 19 Apr 2024
Unique Number : 5763005 **Diagnosed** : 19 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: PercentFuel)

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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.