



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id

8428

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (20 LTR)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0110717	GFL0097439	GFL0085673
Sample Date		Client Info		26 Mar 2024	10 Jan 2024	16 Oct 2023
Machine Age	hrs	Client Info		3237	3237	3237
Oil Age	hrs	Client Info		3237	3237	3237
Filter Age	hrs	Client Info		3237	3237	3237
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	4	21	23
Chromium	ppm	ASTM D5185(m)	>20	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<1	2	1
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
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

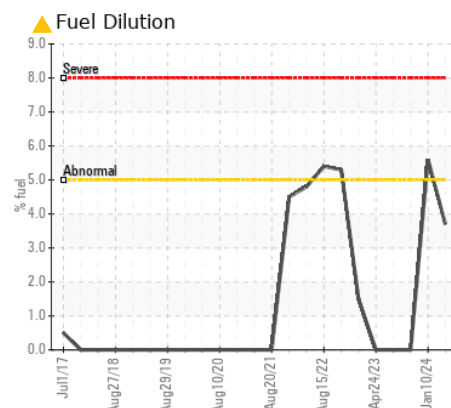
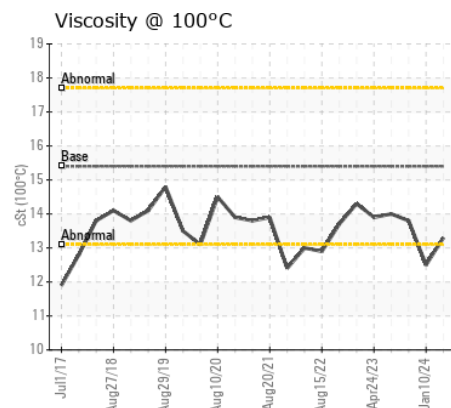
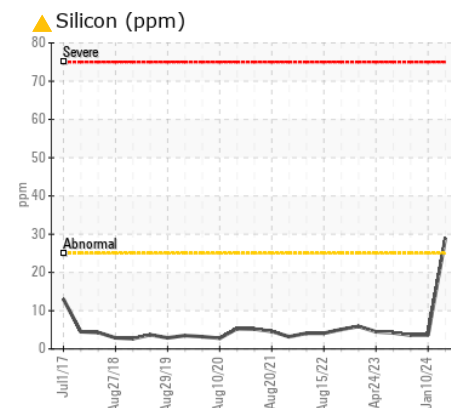
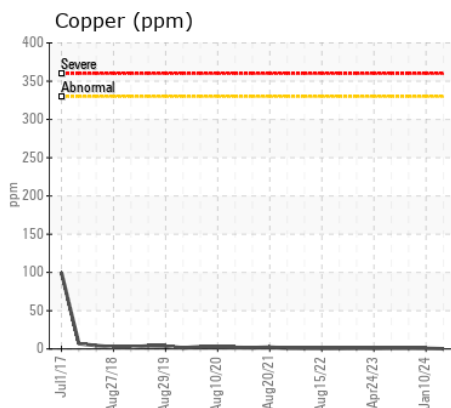
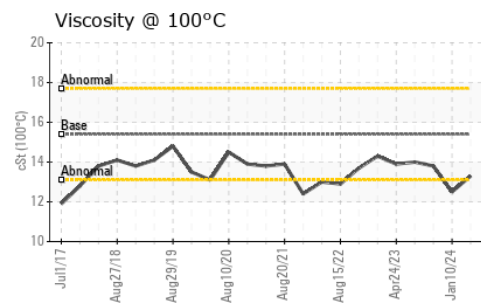
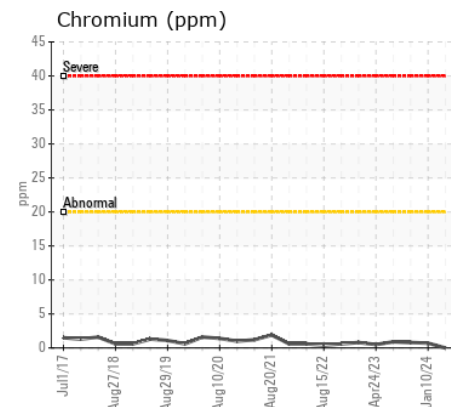
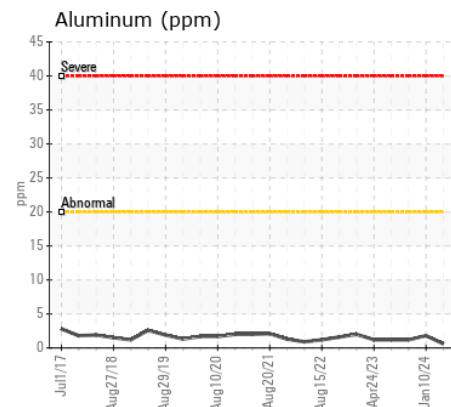
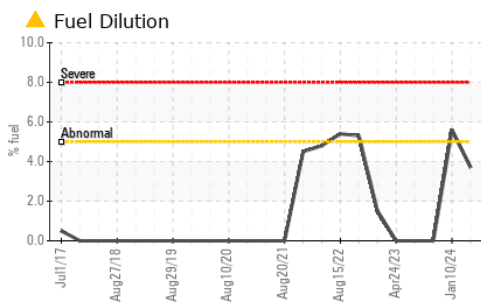
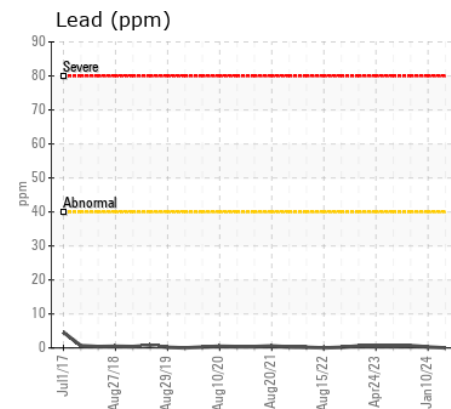
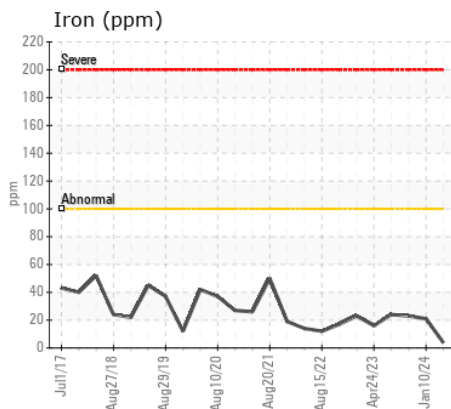
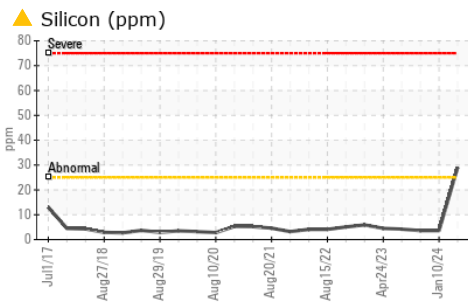
Light fuel dilution occurring. There is a moderate concentration of dirt present in the oil. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>25	▲ 29	4	4
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
Fuel	%	ASTM D7593*	>5	▲ 3.7	▲ 5.6	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0.5	0.6
Nitration	Abs/cm	ASTM D7624*	>20	7.2	11.7	11.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.9	23.4	23.3
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		<1	1	2
Boron	ppm	ASTM D5185(m)	0	3	2	1
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	55	55	58
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	1010	906	866	932
Calcium	ppm	ASTM D5185(m)	1070	971	965	1025
Phosphorus	ppm	ASTM D5185(m)	1150	942	910	945
Zinc	ppm	ASTM D5185(m)	1270	1109	1070	1161
Sulfur	ppm	ASTM D5185(m)	2060	2437	2285	2324
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.3	21.9	20.3
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.3	▲ 12.5	13.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0110717 **Received** : 28 Mar 2024
Lab Number : 02625149 **Tested** : 01 Apr 2024
Unique Number : 5750268 **Diagnosed** : 01 Apr 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: PercentFuel)

GFL Environmental - 221 - Windsor
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 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.

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