



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
8422
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- 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		GFL0097436	GFL0085687	GFL0059842
Sample Date		Client Info		04 Jan 2024	19 Sep 2023	22 Mar 2023
Machine Age	hrs	Client Info		535	0	535
Oil Age	hrs	Client Info		535	0	535
Filter Age	hrs	Client Info		535	0	535
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	6	17	18
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	1	<1	1
Lead	ppm	ASTM D5185(m)	>40	0	0	<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

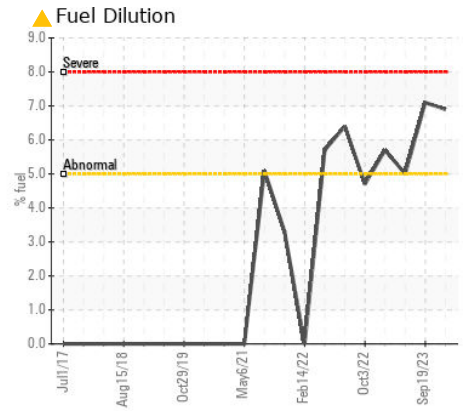
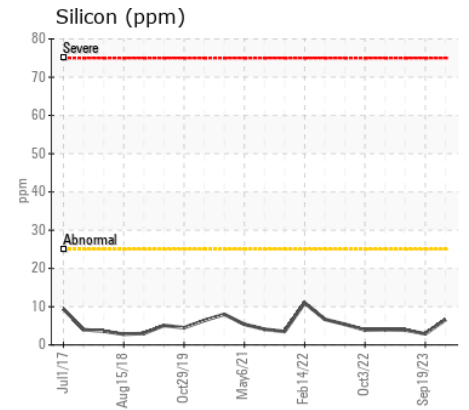
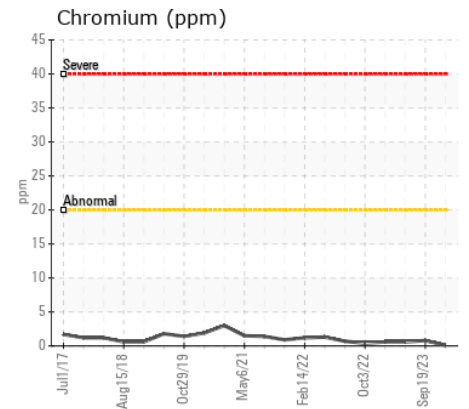
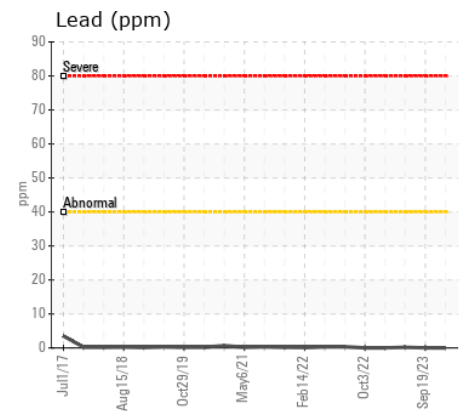
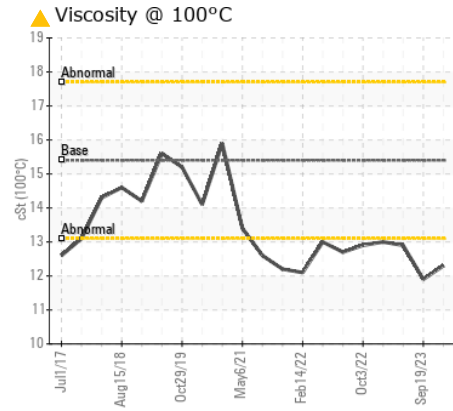
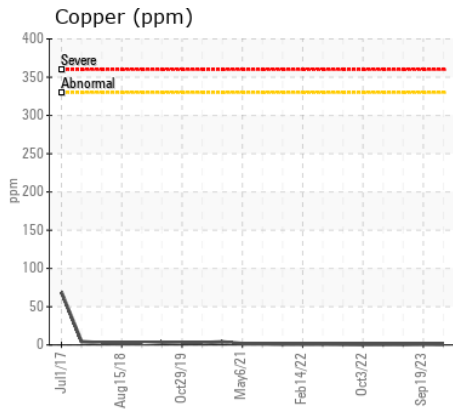
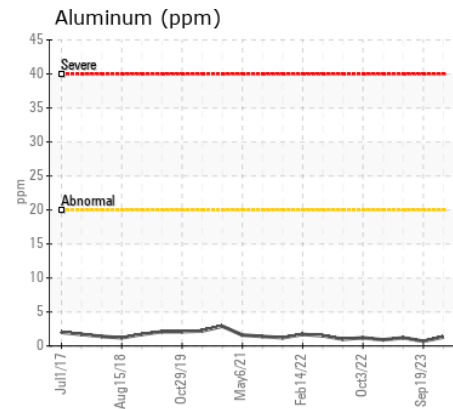
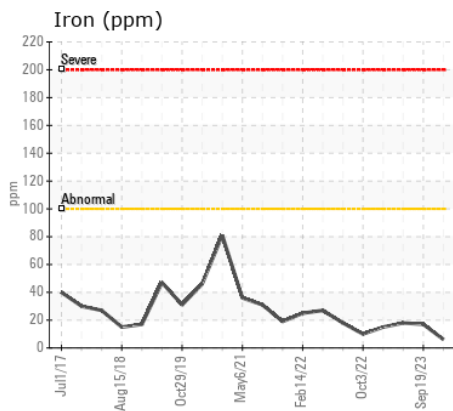
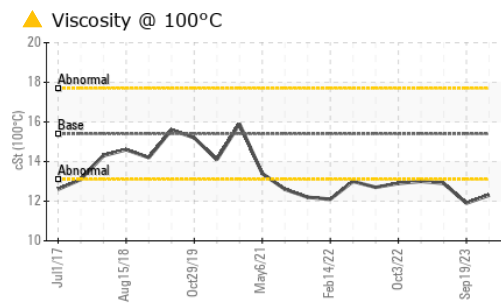
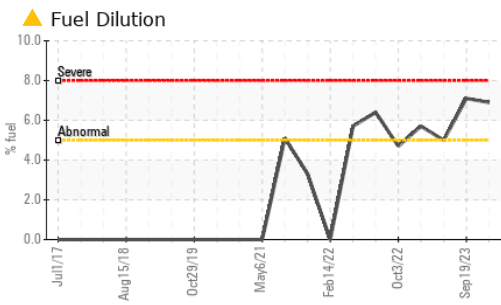
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	7	3	4
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
Fuel	%	ASTM D7593*	>5	▲ 6.9	▲ 7.1	▲ 5
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.1	0.2	0.1
Nitration	Abs/cm	ASTM D7624*	>20	9.3	11.7	11.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.4	22.7	23.7
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	3
Boron	ppm	ASTM D5185(m)	0	2	2	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	52	54	56
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	842	873	895
Calcium	ppm	ASTM D5185(m)	1070	925	943	1034
Phosphorus	ppm	ASTM D5185(m)	1150	900	942	1014
Zinc	ppm	ASTM D5185(m)	1270	1046	1069	1102
Sulfur	ppm	ASTM D5185(m)	2060	2351	2220	2345
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.6	22.2	22.3
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ 12.3	▲ 11.9	12.9



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 221 - Windsor**
Sample No. : GFL0097436 **Received** : 09 Jan 2024 905 Tecumseh Road W
Lab Number : 02607365 **Diagnosed** : 10 Jan 2024 Windsor, ON
Unique Number : 5708451 **Diagnostician** : Wes Davis CA N8W 4J5
Test Package : MOB 1 (Additional Tests: PercentFuel) 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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