



WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
GFL207
Machine Id
800012
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (20 GAL)

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0102707	GFL0094501	GFL0082971
Sample Date		Client Info		03 Jan 2024	06 Oct 2023	15 Jul 2023
Machine Age	hrs	Client Info		18404	17827	17166
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				SEVERE	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>75	33	40	40
Chromium	ppm	ASTM D5185(m)	>5	1	1	2
Nickel	ppm	ASTM D5185(m)	>4	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>15	2	2	2
Lead	ppm	ASTM D5185(m)	>25	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>100	<1	1	<1
Tin	ppm	ASTM D5185(m)	>4	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

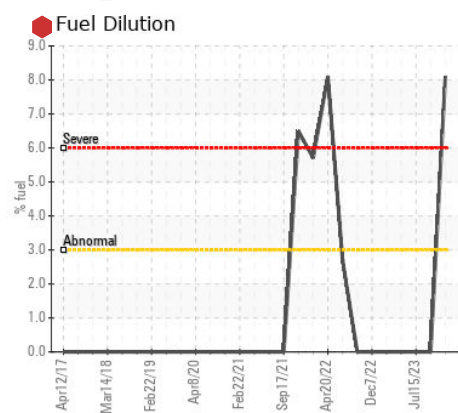
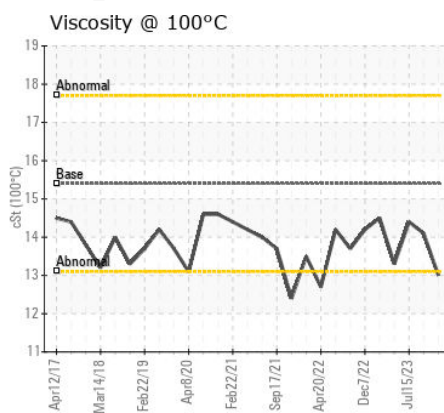
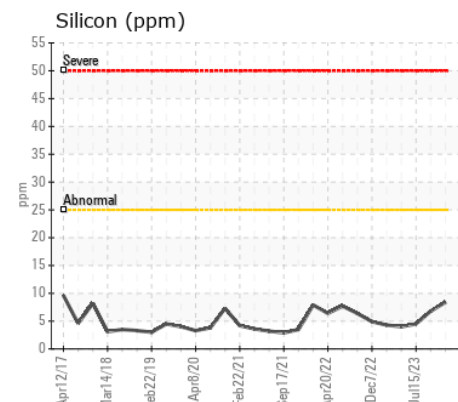
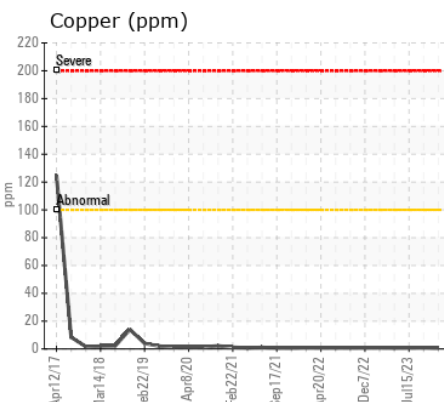
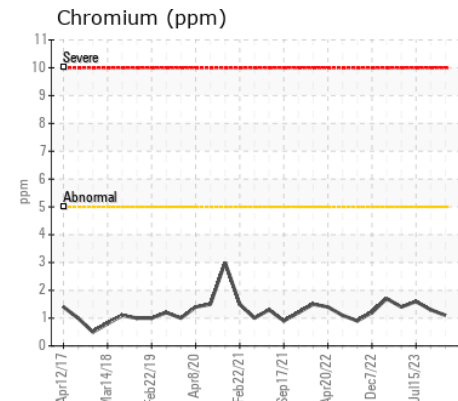
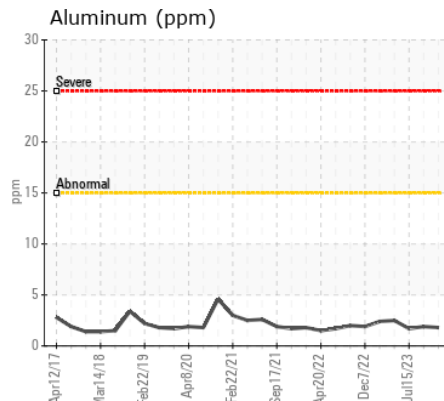
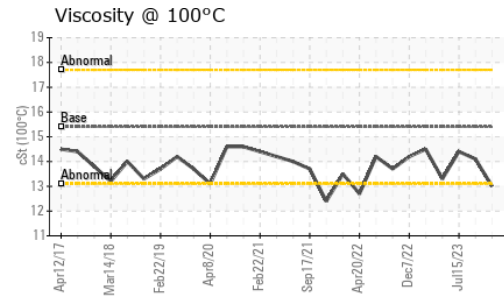
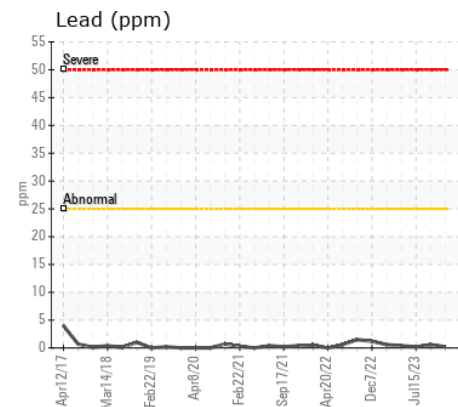
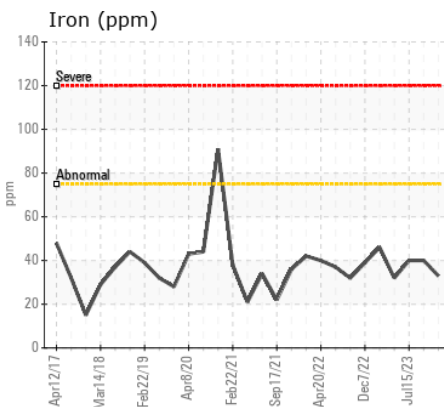
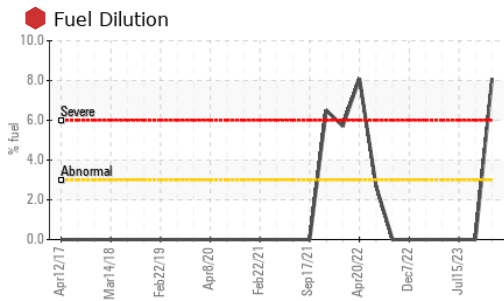
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	7	4
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel	%	ASTM D7593*	>3.0	8.1	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.5	0.6	0.8
Nitration	Abs/cm	ASTM D7624*	>20	13.5	13.1	14.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.5	28.4	28.5
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)		7	9	9
Boron	ppm	ASTM D5185(m)	0	1	3	4
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	54	59	59
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	884	936	964
Calcium	ppm	ASTM D5185(m)	1070	981	1029	1042
Phosphorus	ppm	ASTM D5185(m)	1150	916	960	1028
Zinc	ppm	ASTM D5185(m)	1270	1096	1171	1182
Sulfur	ppm	ASTM D5185(m)	2060	2287	2240	2325
Oxidation	Abs/.1mm	ASTM D7414*	>25	30.8	32.9	31.4
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.0	14.1	14.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 227 - Pickering MTCE
Sample No. : GFL0102707 **Received** : 05 Jan 2024
Lab Number : 02606716 **Diagnosed** : 08 Jan 2024
Unique Number : 5707802 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

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.