



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
4587
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0102605	GFL0097634	GFL0090590
Sample Date		Client Info		13 Feb 2024	16 Nov 2023	17 Sep 2023
Machine Age	hrs	Client Info		0	2717	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>110	49	53	56
Chromium	ppm	ASTM D5185(m)	>4	2	2	3
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	4	3	3
Lead	ppm	ASTM D5185(m)	>45	5	11	17
Copper	ppm	ASTM D5185(m)	>85	3	4	4
Tin	ppm	ASTM D5185(m)	>4	<1	1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	---	NONE

CONTAMINATION

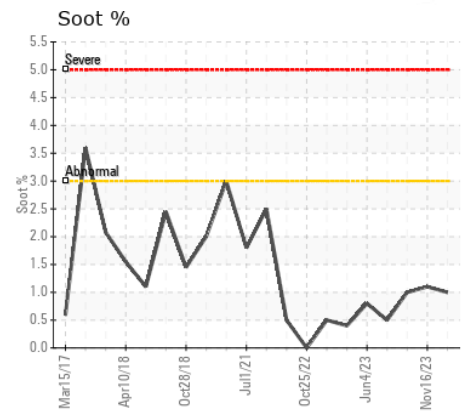
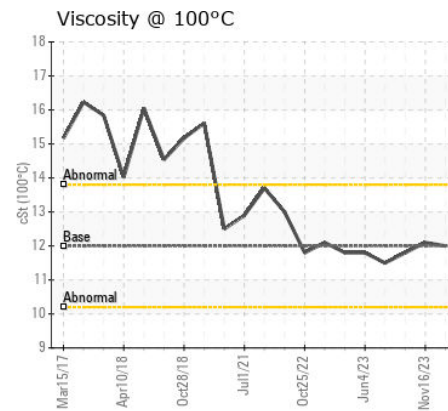
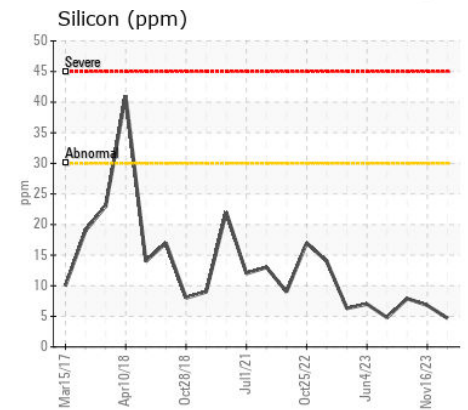
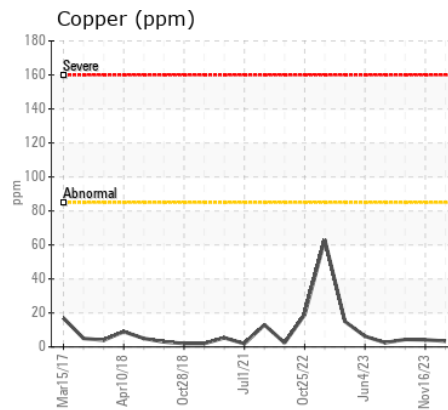
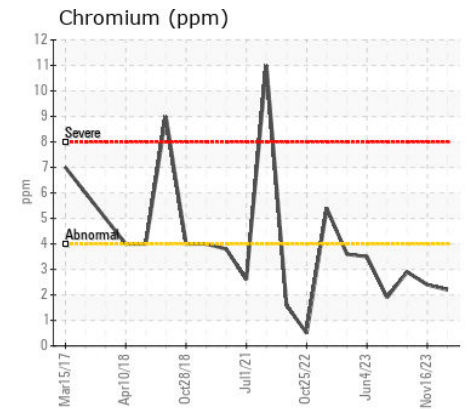
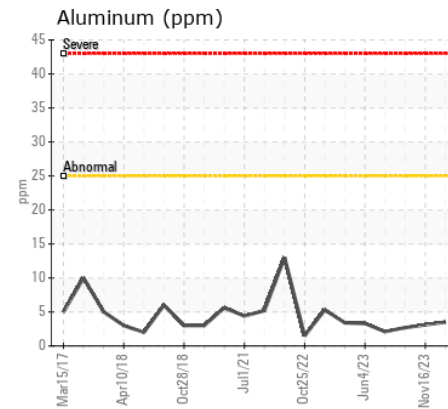
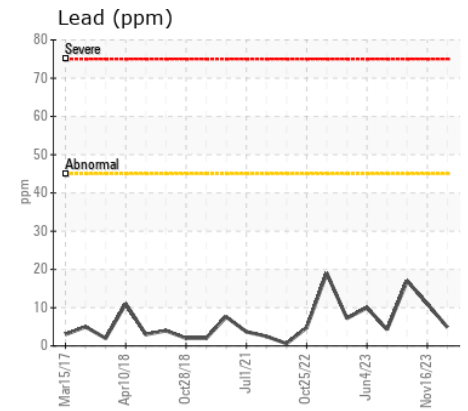
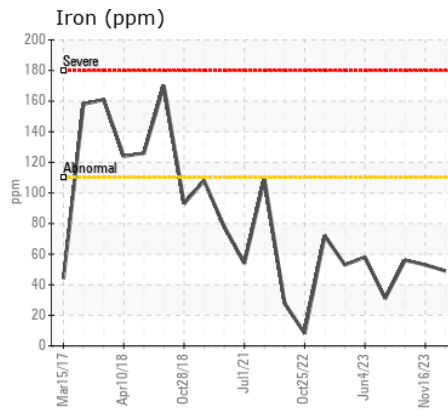
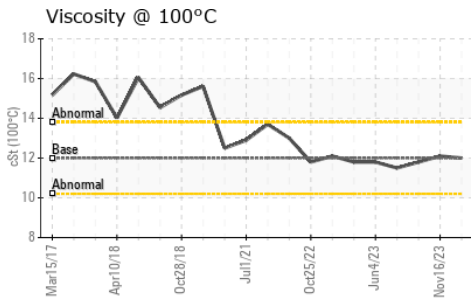
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>30	5	7	8
Potassium	ppm	ASTM D5185(m)	>20	1	<1	1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	1	1.1	1
Nitration	Abs/cm	ASTM D7624*	>20	11.8	12.1	12.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.8	25.0	25.6
Silt	scalar	Visual*	NONE	NONE	---	NONE
Debris	scalar	Visual*	NONE	NONE	---	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	---	NONE
Appearance	scalar	Visual*	NORML	NORML	---	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		7	8	9
Boron	ppm	ASTM D5185(m)	2	2	2	2
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	61	62	59
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	994	1001	966
Calcium	ppm	ASTM D5185(m)	1050	1113	1103	1053
Phosphorus	ppm	ASTM D5185(m)	995	1027	1015	1033
Zinc	ppm	ASTM D5185(m)	1180	1225	1246	1201
Sulfur	ppm	ASTM D5185(m)	2600	2554	2401	2325
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.7	23.3	25.0
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	12.0	12.1	11.8



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0102605
Lab Number : 02616557
Unique Number : 5733667
Test Package : MOB 1 (Additional Tests: Visual)

GFL Environmental - 554 - Edmonton SW
 8409 -15th Street NW
 Edmonton, AB
 CA T6P 0B8
 Contact: Tim Greig
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 T: (780)231-0521
 F:

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.