



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[1206327]
 Machine Id
5544
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0102712	GFL0082958	GFL0077837
Sample Date		Client Info		08 Jan 2024	05 Jul 2023	21 Apr 2023
Machine Age	hrs	Client Info		10297	9123	8552
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	15	14	17
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	4	2	6
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	4	3	3
Lead	ppm	ASTM D5185(m)	>40	2	2	2
Copper	ppm	ASTM D5185(m)	>330	2	2	2
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

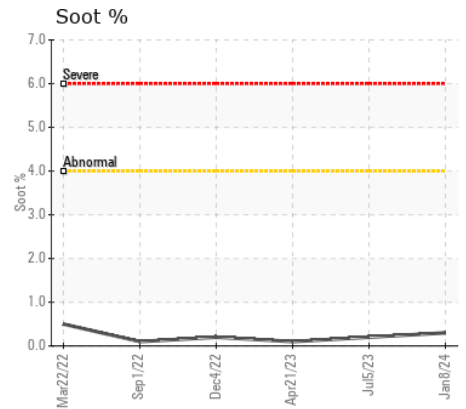
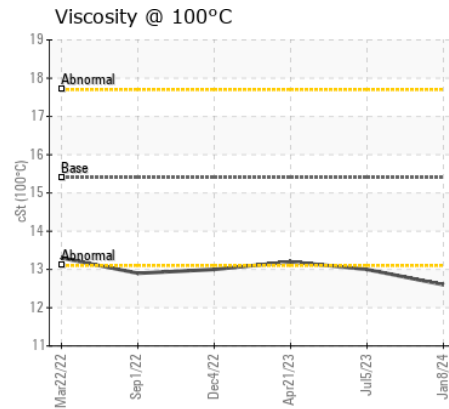
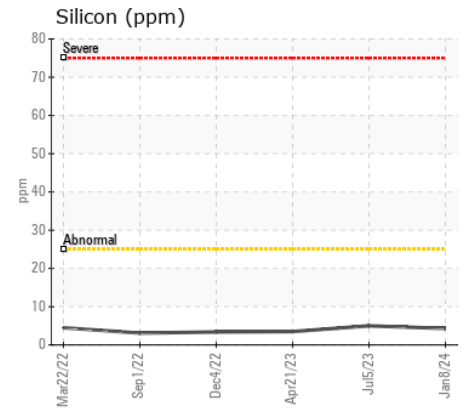
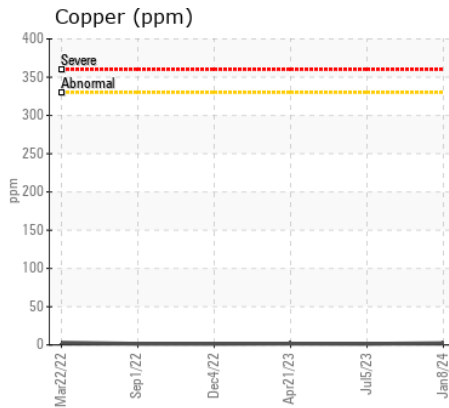
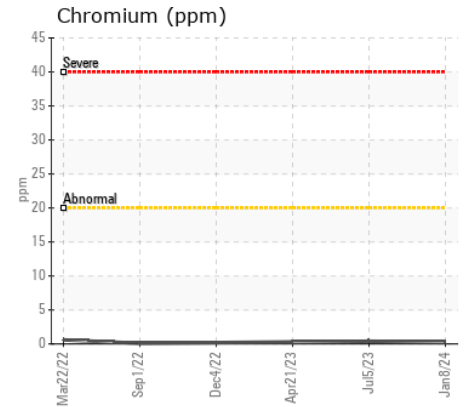
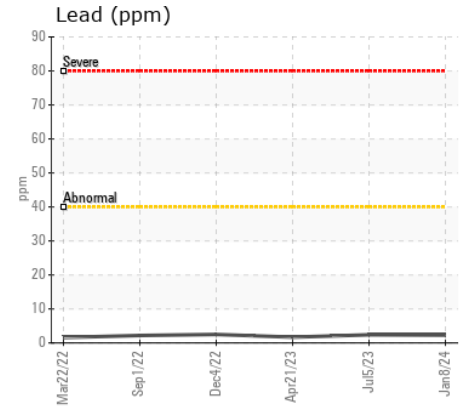
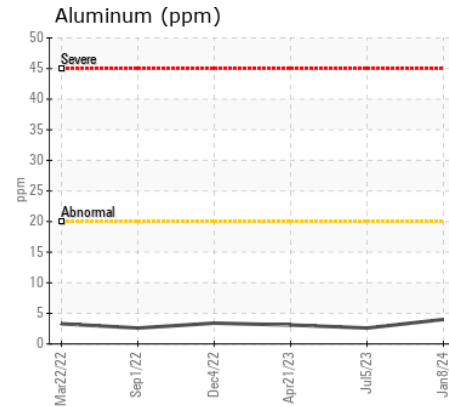
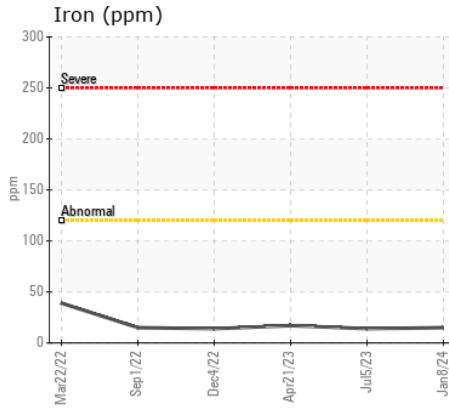
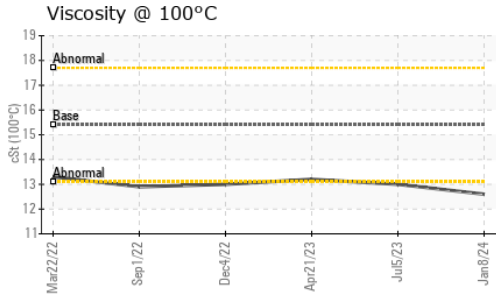
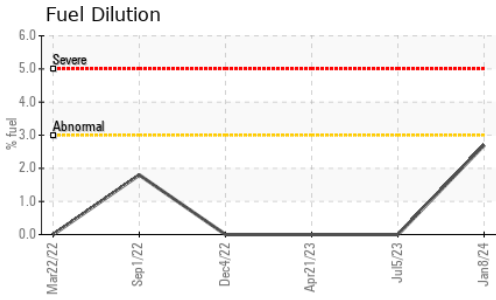
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	5	4
Potassium	ppm	ASTM D5185(m)	>20	2	<1	1
Fuel	%	ASTM D7593*	>3.0	2.7	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.3	0.2	0.1
Nitration	Abs/cm	ASTM D7624*	>20	9.6	9.0	9.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.6	19.7	18.8
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)		3	2	3
Boron	ppm	ASTM D5185(m)	0	2	3	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	56	59	59
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	912	949	970
Calcium	ppm	ASTM D5185(m)	1070	1028	1047	1115
Phosphorus	ppm	ASTM D5185(m)	1150	961	1069	1107
Zinc	ppm	ASTM D5185(m)	1270	1146	1165	1207
Sulfur	ppm	ASTM D5185(m)	2060	2601	2507	2727
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.0	16.7	16.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	12.6	13.0	13.2



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 207 - Pickering SW**
Sample No. : GFL0102712 **Received** : 10 Jan 2024 **1034 TOY AVENUE, PICKERING YARD**
Lab Number : 02607671 **Diagnosed** : 11 Jan 2024 **PICKERING, ON**
Unique Number : 5708757 **Diagnostician** : Wes Davis **CA L1W 3P1**
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel) **Contact: Ian Patton**

*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.*

ipatton@gflenv.com
T: (905)831-6297
F: (905)426-3577