



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
801114
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0107320	GFL0079204	GFL0079210
Sample Date		Client Info		03 Jan 2024	22 Sep 2023	11 Jul 2023
Machine Age	hrs	Client Info		600	11312	78746
Oil Age	hrs	Client Info		600	600	600
Filter Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>165	11	11	9
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	3	3	2
Lead	ppm	ASTM D5185(m)	>150	0	<1	0
Copper	ppm	ASTM D5185(m)	>90	1	1	1
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

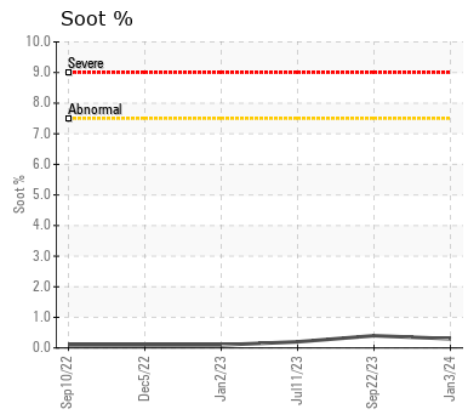
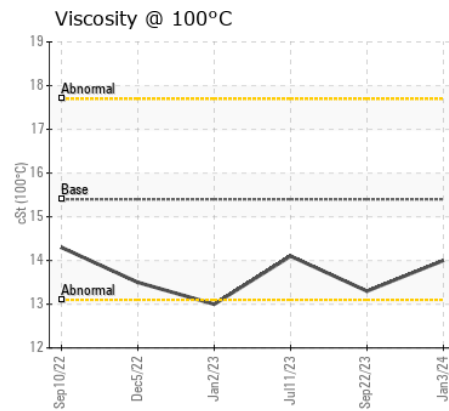
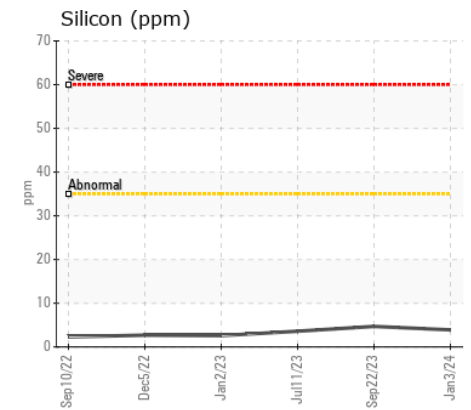
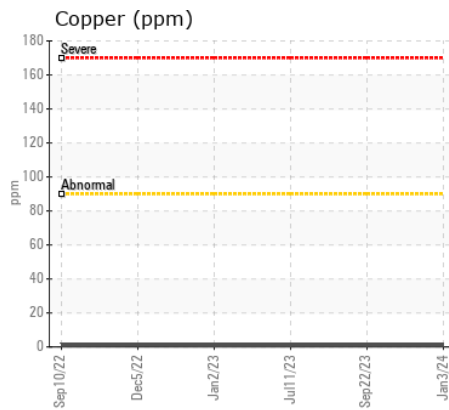
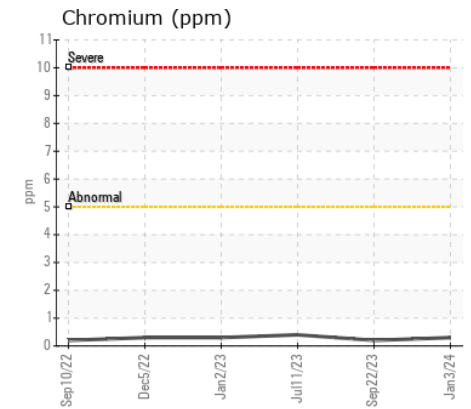
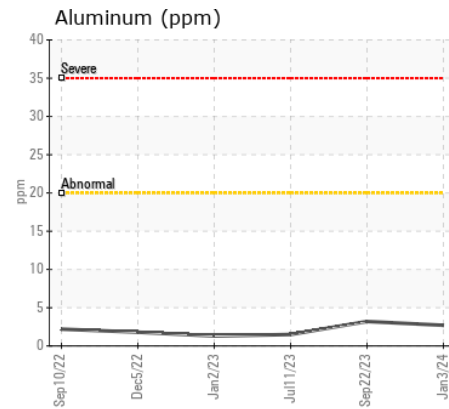
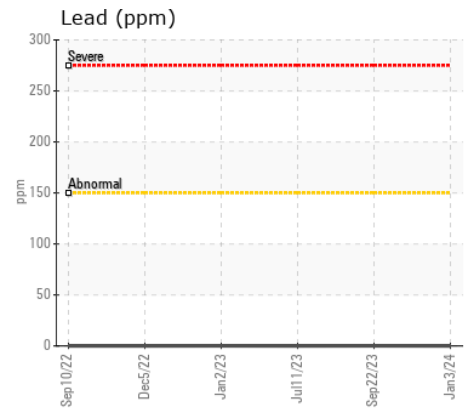
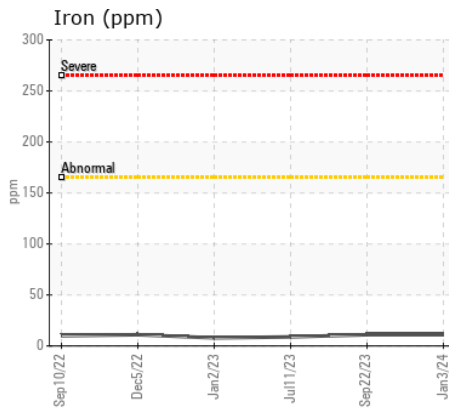
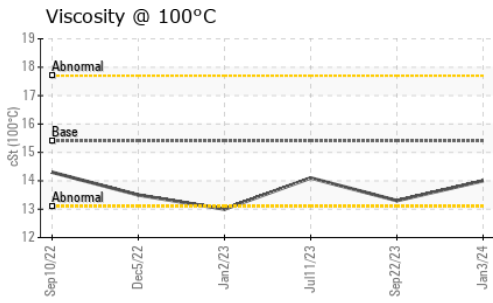
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	4	5	4
Potassium	ppm	ASTM D5185(m)	>20	3	6	1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>7.5	0.3	0.4	0.2
Nitration	Abs/cm	ASTM D7624*	>20	9.0	7.9	7.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.9	19.3	19.7
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	6	6
Boron	ppm	ASTM D5185(m)	0	2	11	6
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	60	61	60
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	956	904	970
Calcium	ppm	ASTM D5185(m)	1070	1059	1065	1045
Phosphorus	ppm	ASTM D5185(m)	1150	973	931	1037
Zinc	ppm	ASTM D5185(m)	1270	1180	1131	1174
Sulfur	ppm	ASTM D5185(m)	2060	2555	2432	2503
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.8	15.5	15.9
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.0	13.3	14.1



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 250 - Sault Ste Marie Hauling + MRF
Sample No. : GFL0107320 **Received** : 04 Jan 2024
Lab Number : 02606458 **Diagnosed** : 05 Jan 2024
Unique Number : 5707544 **Diagnostician** : Wes Davis
Test Package : MOB 1

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.

86 Sackville Rd,
 Sault Ste. Marie, ON
 CA P6B 4T6
 Contact: Mike Pelletier
 mpelletier@gflenv.com
 T: (705)945-7554
 F: (705)945-7857