



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
GFL227
Machine Id
0515
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (18 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0113276	GFL0097521	GFL0088947
Sample Date		Client Info		29 Feb 2024	14 Nov 2023	18 Sep 2023
Machine Age	hrs	Client Info		26439	25862	25546
Oil Age	hrs	Client Info		566	316	576
Filter Age	hrs	Client Info		566	316	576
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	MARGINAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>130	23	16	26
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	3	2	3
Lead	ppm	ASTM D5185(m)	>20	<1	<1	0
Copper	ppm	ASTM D5185(m)	>125	<1	<1	1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

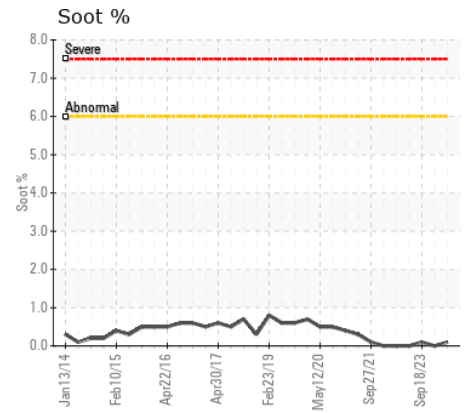
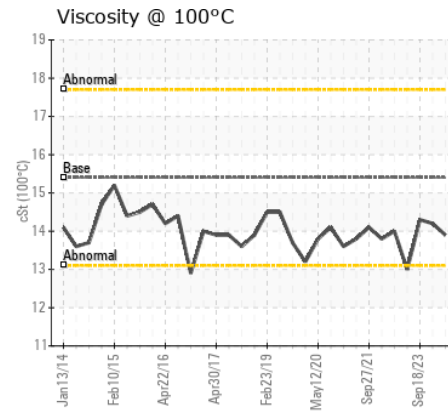
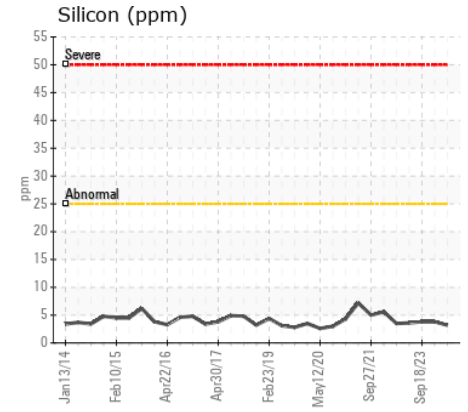
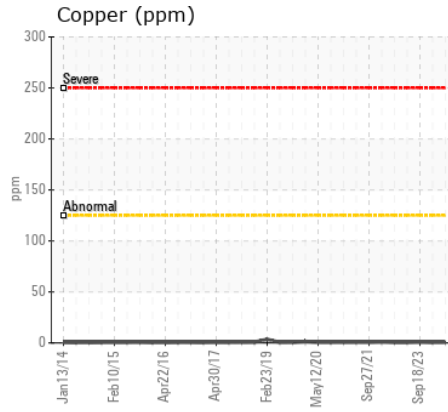
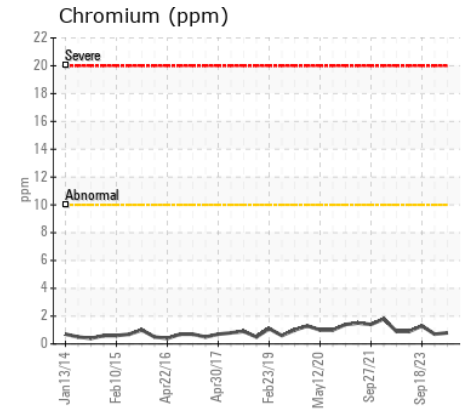
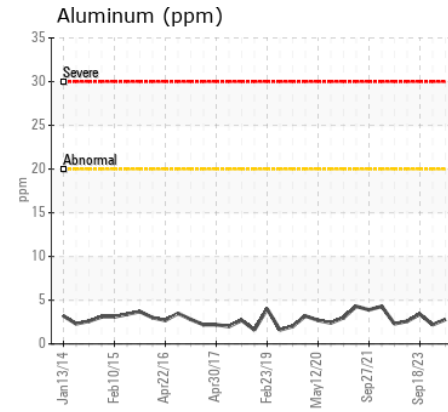
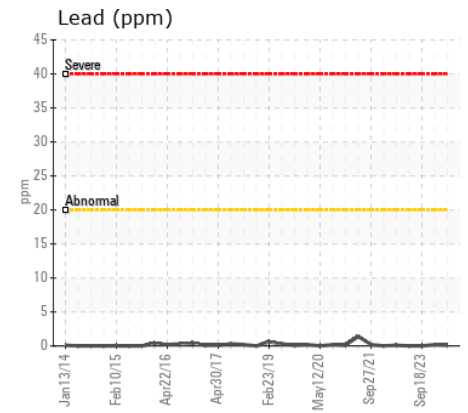
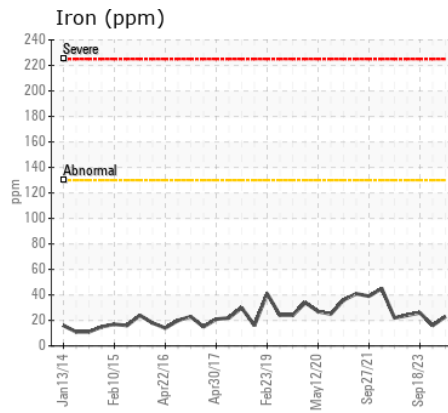
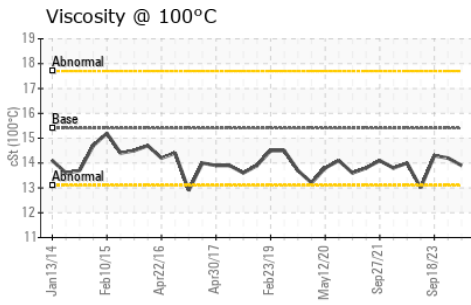
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	4	4
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel		WC Method	>3.0	<1.0	<1.0	▲ 1.9
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.1	0	0.1
Nitration	Abs/cm	ASTM D7624*	>20	9.7	7.8	9.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.9	20.5	21.4
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)		1	2	2
Boron	ppm	ASTM D5185(m)	0	4	7	8
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	62	62	66
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	1029	1009	1061
Calcium	ppm	ASTM D5185(m)	1070	1148	1126	1165
Phosphorus	ppm	ASTM D5185(m)	1150	1048	1003	1129
Zinc	ppm	ASTM D5185(m)	1270	1263	1235	1296
Sulfur	ppm	ASTM D5185(m)	2060	2634	2461	2464
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.3	17.3	19.4
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.9	14.2	14.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113276 **Received** : 04 Mar 2024
Lab Number : 02619477 **Tested** : 04 Mar 2024
Unique Number : 5736587 **Diagnosed** : 04 Mar 2024 - Wes Davis
Test Package : MOB 1

GFL Environmental - 216
 15 Bermondsey Road
 Toronto, ON
 CA M4B 1Y9
 Contact: Tom Hatzioannidis
 thatzioannidis@gflenv.com
 T: (416)678-9340
 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.