



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
401198
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		GFL0090404	GFL0090417	GFL0084132
Sample Date		Client Info		22 Jan 2024	03 Nov 2023	28 Aug 2023
Machine Age	hrs	Client Info		430886	18985	13249
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	600
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	12	27	7
Chromium	ppm	ASTM D5185(m)	>20	<1	2	<1
Nickel	ppm	ASTM D5185(m)	>15	<1	2	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	8	▲ 28	1
Lead	ppm	ASTM D5185(m)	>40	<1	2	0
Copper	ppm	ASTM D5185(m)	>330	1	2	3
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

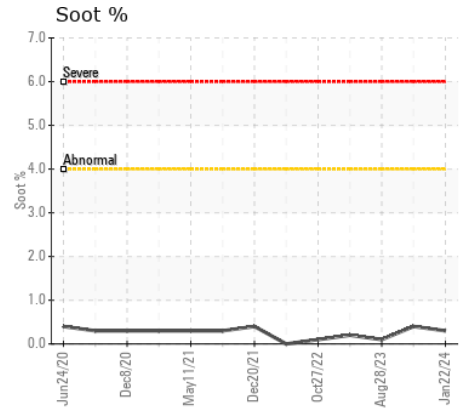
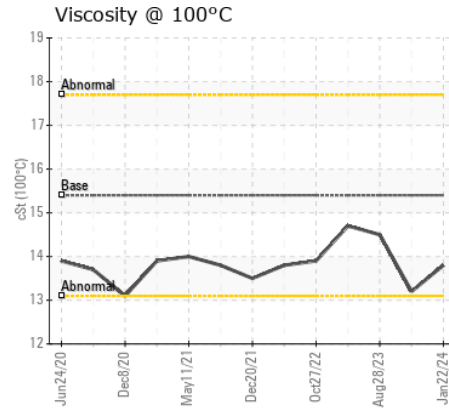
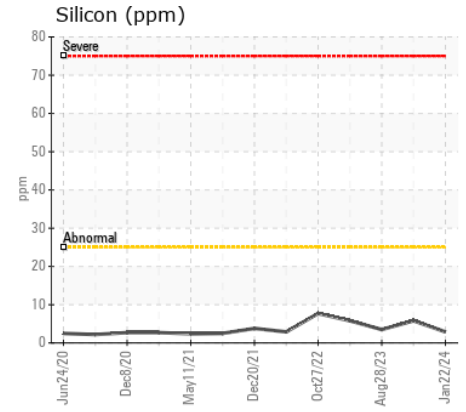
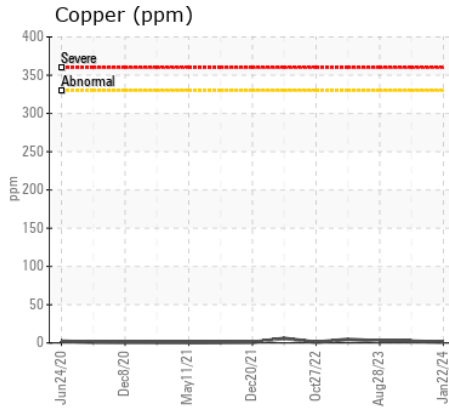
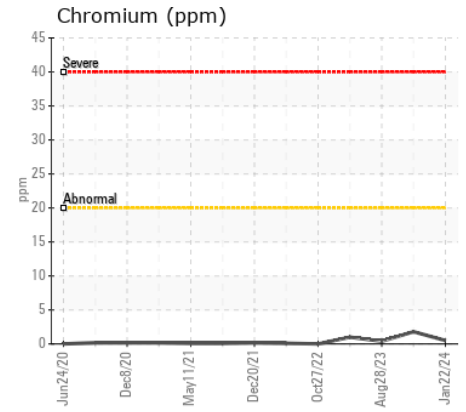
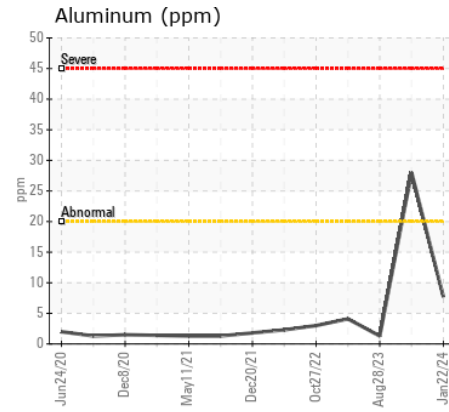
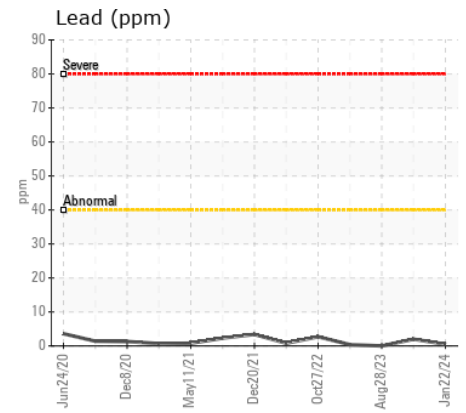
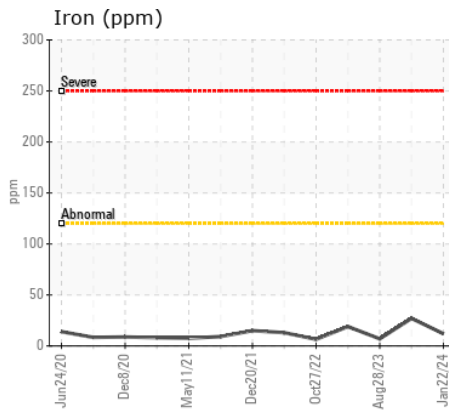
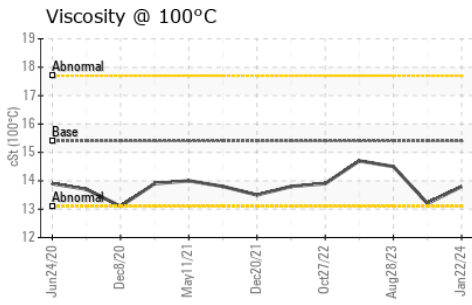
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	6	4
Potassium	ppm	ASTM D5185(m)	>20	2	2	<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*	>4	0.3	0.4	0.1
Nitration	Abs/cm	ASTM D7624*	>20	9.6	10.2	7.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.3	23.2	20.7
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)		4	6	2
Boron	ppm	ASTM D5185(m)	0	4	32	4
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	59	64	58
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	955	977	959
Calcium	ppm	ASTM D5185(m)	1070	1038	1112	1026
Phosphorus	ppm	ASTM D5185(m)	1150	1009	966	1018
Zinc	ppm	ASTM D5185(m)	1270	1151	1184	1159
Sulfur	ppm	ASTM D5185(m)	2060	2590	2503	2447
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.6	20.1	15.0
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.8	13.2	14.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0090404
Lab Number : 02617584
Unique Number : 5734694
Test Package : MOB 1
Received : 23 Feb 2024
Tested : 23 Feb 2024
Diagnosed : 23 Feb 2024 - Kevin Marson

GFL Environmental - 216M
 2475 Beryl Drive
 Oakville, ON
 CA L6J 7X4
 Contact: Matthew Gunness
 mgunness@gflenv.com

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.

T:
F: