



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
401142
 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		GFL0100598	GFL0100639	GFL0076995
Sample Date		Client Info		15 Jan 2024	25 Dec 2023	28 Jul 2023
Machine Age	hrs	Client Info		16964	16856	16178
Oil Age	hrs	Client Info		0	700	0
Filter Age	hrs	Client Info		0	700	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	8	22	31
Chromium	ppm	ASTM D5185(m)	>20	<1	1	2
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	1	2	2
Lead	ppm	ASTM D5185(m)	>40	<1	5	11
Copper	ppm	ASTM D5185(m)	>330	<1	1	2
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

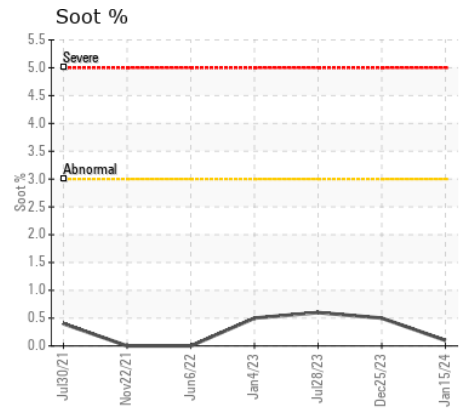
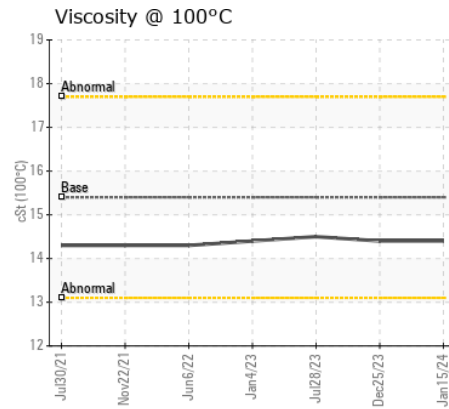
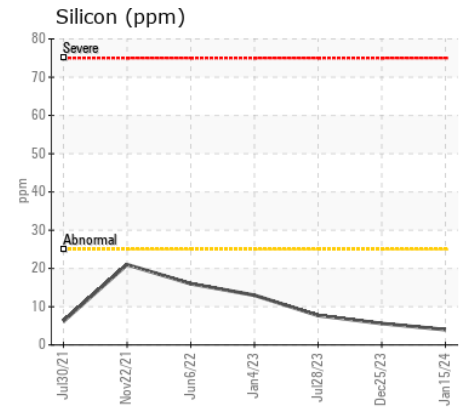
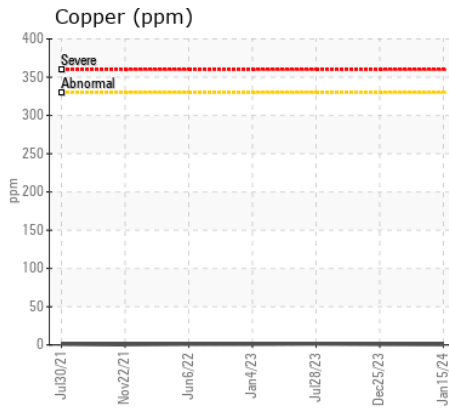
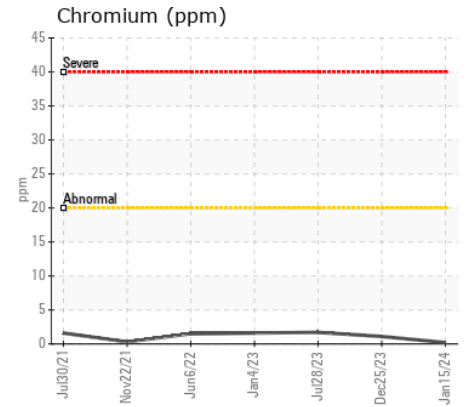
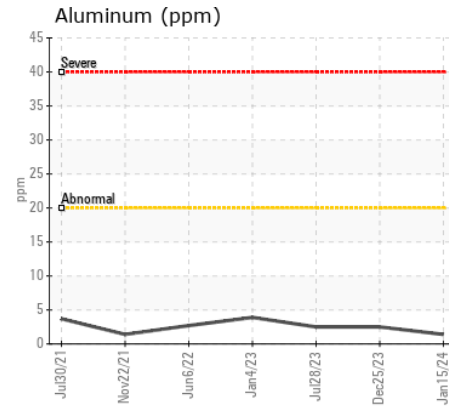
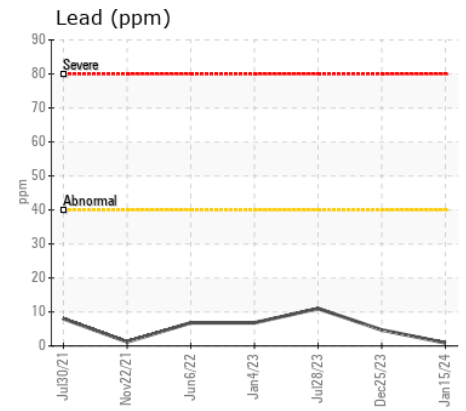
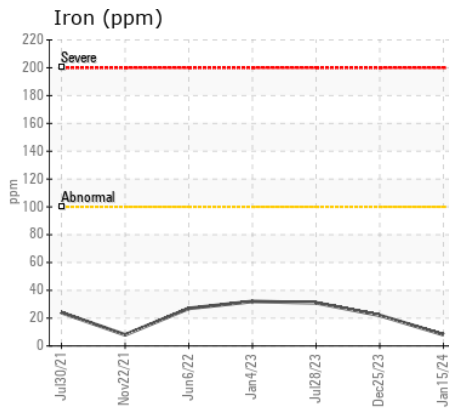
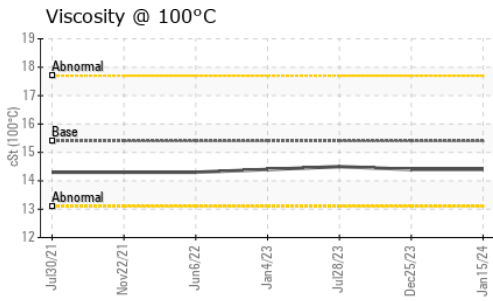
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	6	8
Potassium	ppm	ASTM D5185(m)	>20	<1	2	2
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	0.1	0.5	0.6
Nitration	Abs/cm	ASTM D7624*	>20	7.3	12.0	13.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.3	23.9	25.9
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	6	5
Boron	ppm	ASTM D5185(m)	0	3	2	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	60	66	67
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	977	1067	1101
Calcium	ppm	ASTM D5185(m)	1070	1087	1180	1172
Phosphorus	ppm	ASTM D5185(m)	1150	1032	1095	1159
Zinc	ppm	ASTM D5185(m)	1270	1191	1301	1341
Sulfur	ppm	ASTM D5185(m)	2060	2760	2721	2596
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.7	20.1	21.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.4	14.4	14.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 575 - Squamish Hauling
Sample No. : GFL0100598 **Received** : 23 Jan 2024 38950 Queens Way,
Lab Number : 02610497 **Diagnosed** : 23 Jan 2024 Squamish, BC
Unique Number : 5711583 **Diagnostician** : Wes Davis CA V8B 0K8
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.

Contact: Dean Imbeau
 dimbeau@gflenv.com
 T: (604)892-5604
 F: (604)892-5238