



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
501110
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0115532	GFL0090889	GFL0067056
Sample Date		Client Info		27 Mar 2024	04 Oct 2023	14 Dec 2022
Machine Age	kms	Client Info		632489	585076	500172
Oil Age	kms	Client Info		190419	143006	58102
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	62	▲ 107	47
Chromium	ppm	ASTM D5185(m)	>20	1	2	1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	4	5	4
Lead	ppm	ASTM D5185(m)	>40	2	6	4
Copper	ppm	ASTM D5185(m)	>330	11	21	8
Tin	ppm	ASTM D5185(m)	>15	<1	2	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

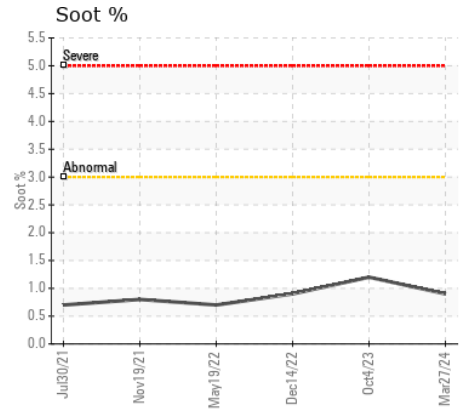
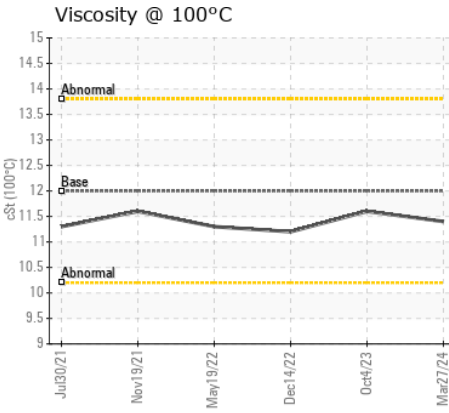
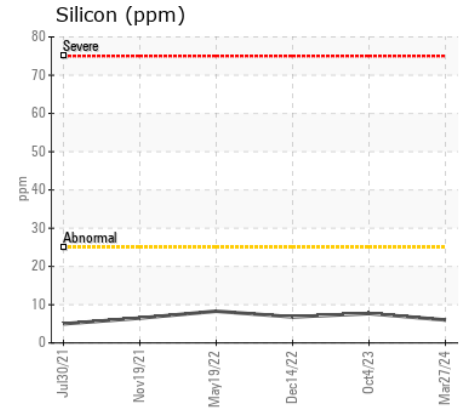
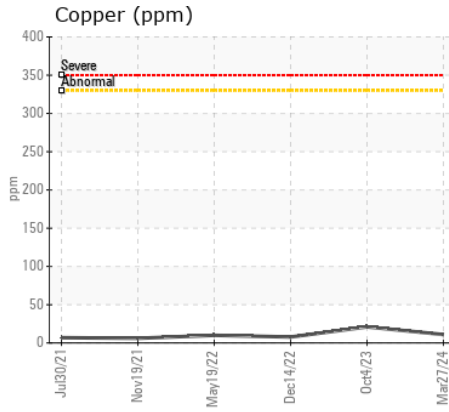
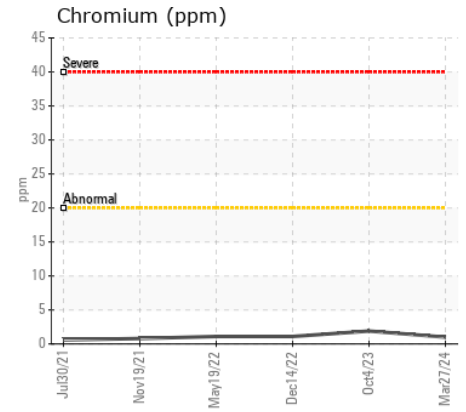
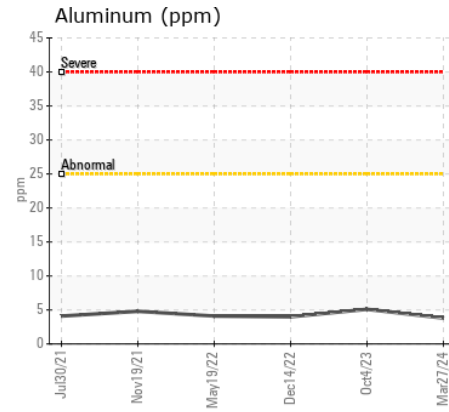
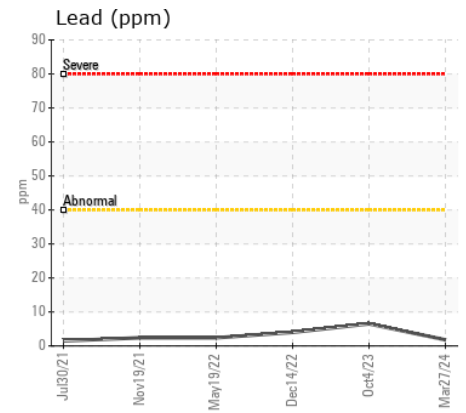
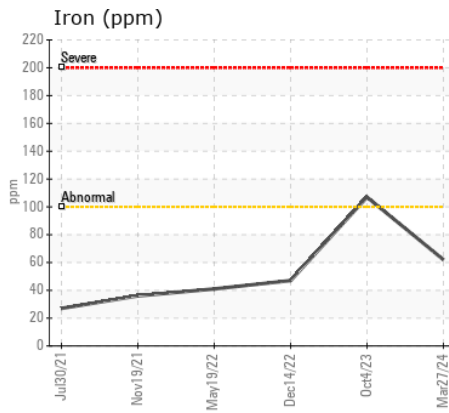
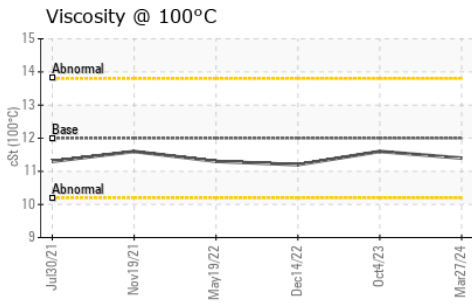
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	8	7
Potassium	ppm	ASTM D5185(m)	>20	2	4	3
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.9	1.2	0.9
Nitration	Abs/cm	ASTM D7624*	>20	11.9	13.2	11.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.8	26.4	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)		6	11	7
Boron	ppm	ASTM D5185(m)	2	1	2	2
Barium	ppm	ASTM D5185(m)	0	<1	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	64	65	63
Manganese	ppm	ASTM D5185(m)	0	0	1	<1
Magnesium	ppm	ASTM D5185(m)	950	1005	1032	1002
Calcium	ppm	ASTM D5185(m)	1050	1114	1250	1177
Phosphorus	ppm	ASTM D5185(m)	995	978	1081	1059
Zinc	ppm	ASTM D5185(m)	1180	1223	1318	1220
Sulfur	ppm	ASTM D5185(m)	2600	2099	2023	2219
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.1	22.9	21.3
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.4	11.6	11.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0115532 **Received** : 01 Apr 2024
Lab Number : 02625506 **Tested** : 01 Apr 2024
Unique Number : 5750625 **Diagnosed** : 01 Apr 2024 - Wes Davis
Test Package : MOB 1

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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.