



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
501123
 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		GFL0072266	GFL0056780	GFL0042428
Sample Date		Client Info		01 Mar 2023	01 Sep 2022	02 Mar 2022
Machine Age	kms	Client Info		414805	399323	375118
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	24	12	32
Chromium	ppm	ASTM D5185(m)	>5	3	4	3
Nickel	ppm	ASTM D5185(m)	>2	<1	0	<1
Titanium	ppm	ASTM D5185(m)		<1	<1	0
Silver	ppm	ASTM D5185(m)	>3	<1	<1	0
Aluminum	ppm	ASTM D5185(m)	>30	14	10	15
Lead	ppm	ASTM D5185(m)	>30	<1	0	<1
Copper	ppm	ASTM D5185(m)	>150	20	5	13
Tin	ppm	ASTM D5185(m)	>5	<1	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

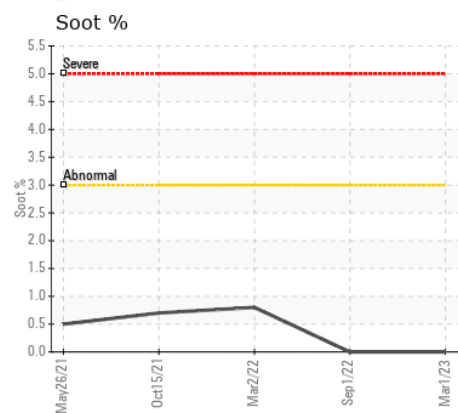
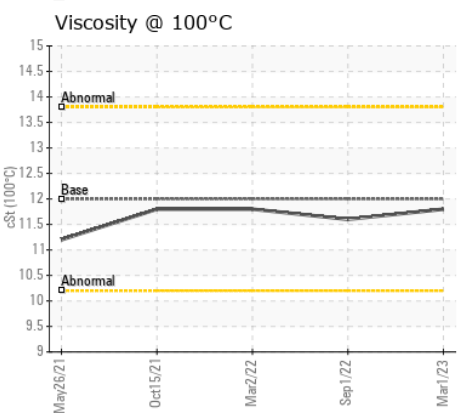
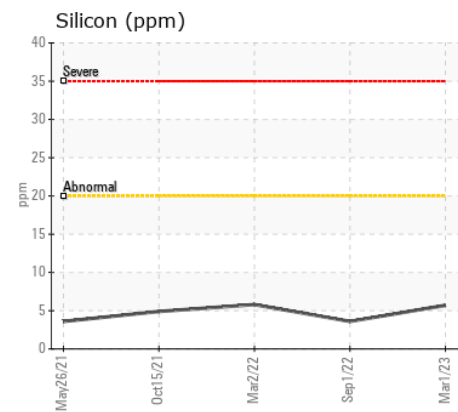
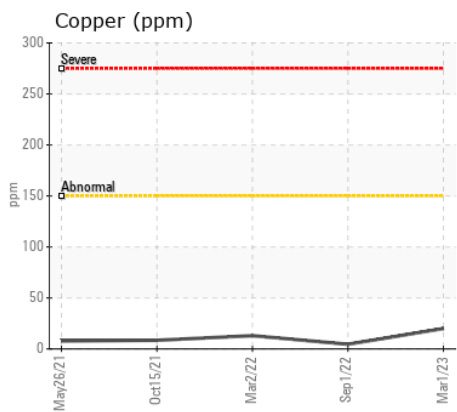
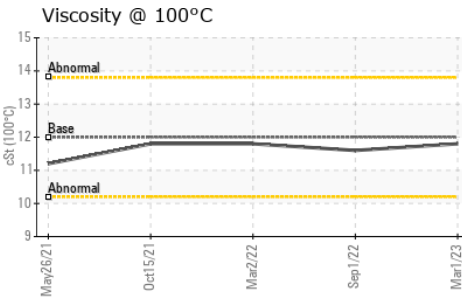
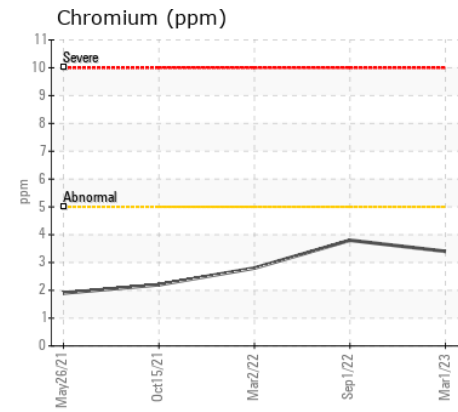
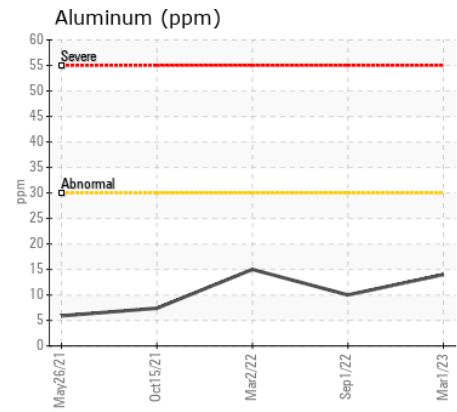
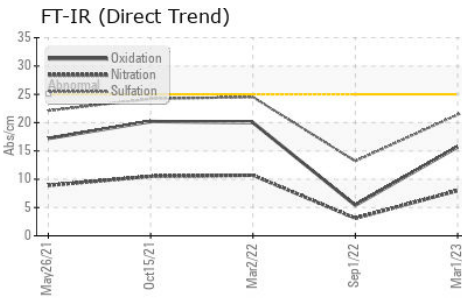
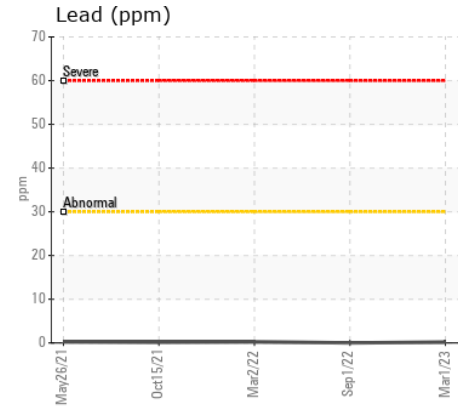
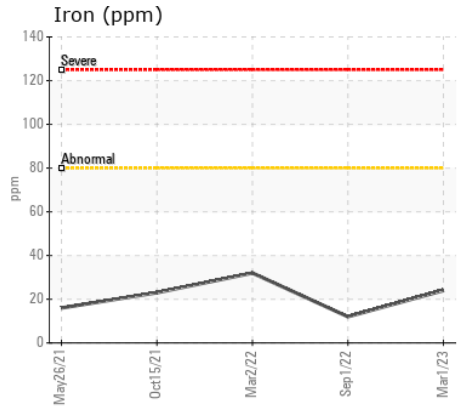
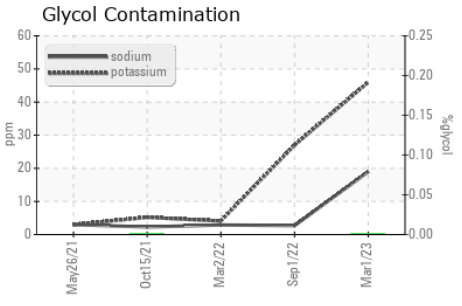
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	6	4	6
Potassium	ppm	ASTM D5185(m)	>20	46	27	4
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0.8
Nitration	Abs/cm	ASTM D7624*	>20	8.0	3.1	10.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.4	13.2	24.5
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)		19	3	3
Boron	ppm	ASTM D5185(m)	2	69	20	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	58	56	64
Manganese	ppm	ASTM D5185(m)	0	1	1	<1
Magnesium	ppm	ASTM D5185(m)	950	872	883	1045
Calcium	ppm	ASTM D5185(m)	1050	1332	1105	1111
Phosphorus	ppm	ASTM D5185(m)	995	1070	952	1055
Zinc	ppm	ASTM D5185(m)	1180	1175	1117	1276
Sulfur	ppm	ASTM D5185(m)	2600	2900	2663	2256
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.7	5.4	20.0
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.8	11.6	11.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0072266 **Received** : 06 Mar 2023
Lab Number : 02543100 **Tested** : 06 Mar 2023
Unique Number : 5540105 **Diagnosed** : 06 Mar 2023 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol)

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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.