



Machine Id
731009
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0100726	GFL0079569	GFL0079560
Sample Date		Client Info		09 Jan 2024	02 Jun 2023	12 May 2023
Machine Age	kms	Client Info		110752	90610	88574
Oil Age	kms	Client Info		0	2299	0
Filter Age	kms	Client Info		0	2299	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		N/A	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>50	12	6	21
Chromium	ppm	ASTM D5185(m)	>4	0	0	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>9	2	1	3
Lead	ppm	ASTM D5185(m)	>30	<1	<1	5
Copper	ppm	ASTM D5185(m)	>35	1	<1	3
Tin	ppm	ASTM D5185(m)	>4	0	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

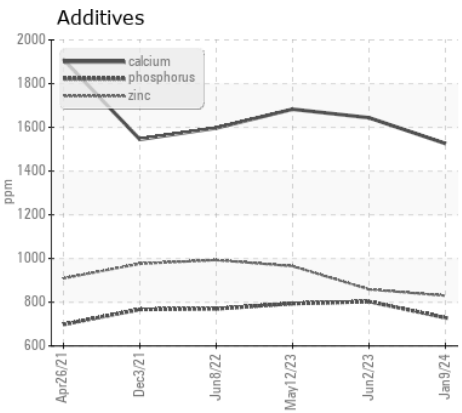
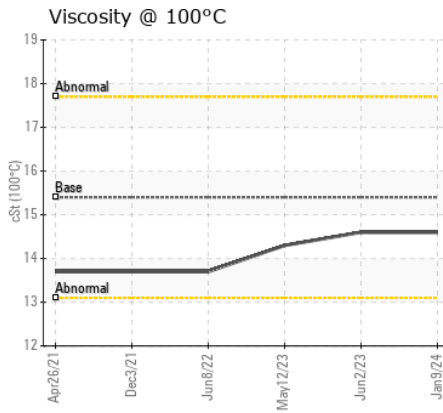
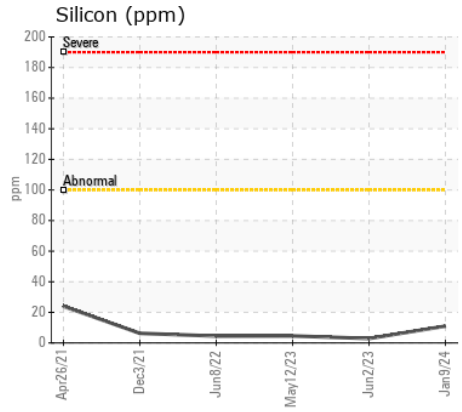
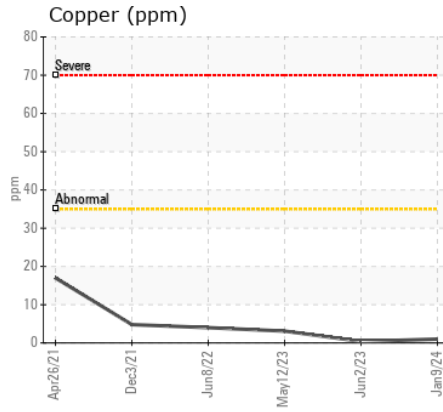
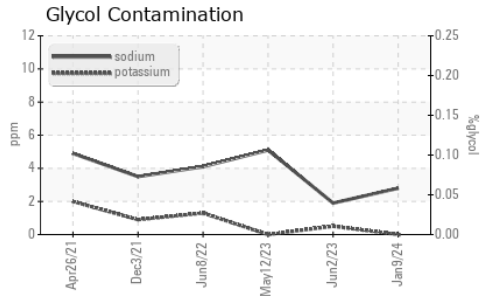
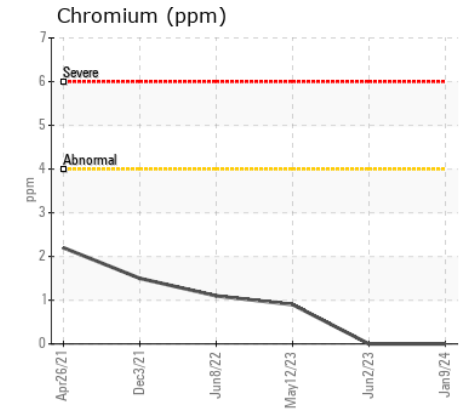
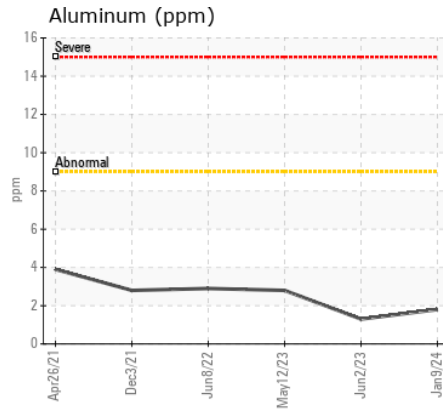
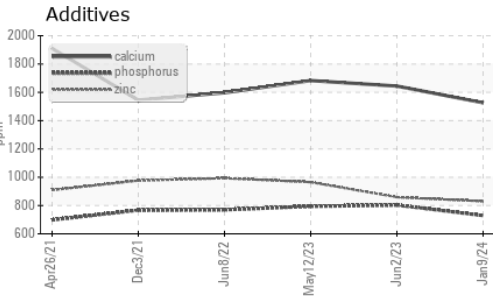
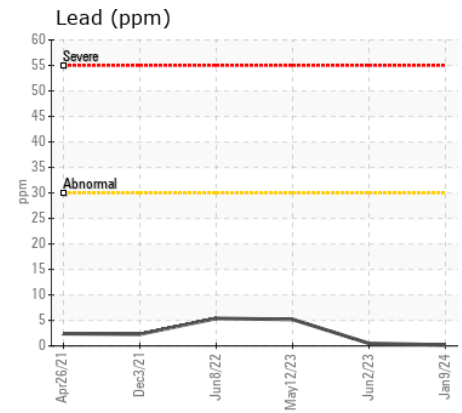
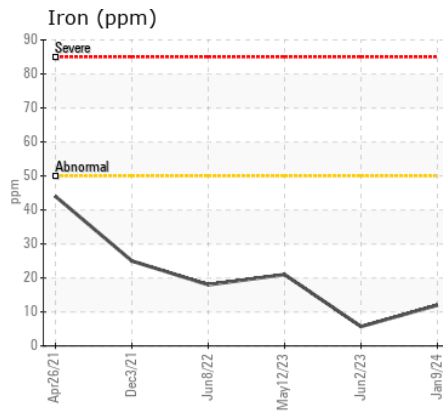
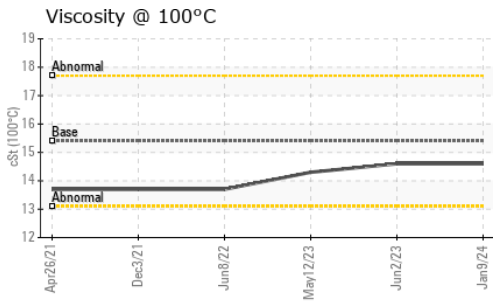
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	11	3	5
Potassium	ppm	ASTM D5185(m)	>20	0	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	7.3	7.8	12.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.5	20.0	25.6
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		3	2	5
Boron	ppm	ASTM D5185(m)	0	30	25	7
Barium	ppm	ASTM D5185(m)	0	5	0	0
Molybdenum	ppm	ASTM D5185(m)	60	47	48	56
Manganese	ppm	ASTM D5185(m)	0	2	<1	2
Magnesium	ppm	ASTM D5185(m)	1010	528	540	578
Calcium	ppm	ASTM D5185(m)	1070	1526	1644	1683
Phosphorus	ppm	ASTM D5185(m)	1150	729	803	794
Zinc	ppm	ASTM D5185(m)	1270	830	859	965
Sulfur	ppm	ASTM D5185(m)	2060	2075	2065	2069
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.2	16.7	20.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.6	14.6	14.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 277 - Niagara Regional**
Sample No. : GFL0100726 **Received** : 12 Jan 2024 **C/O Metro Truck Niagara Inc., 411 Glendale Avenue**
Lab Number : 02608356 **Diagnosed** : 15 Jan 2024 **St. Catharines, ON**
Unique Number : 5709442 **Diagnostician** : Kevin Marson **CA L2P 3Y1**
Test Package : MOB 1 (Additional Tests: Glycol) **Contact: Kelly Bremner**
kbremner@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.