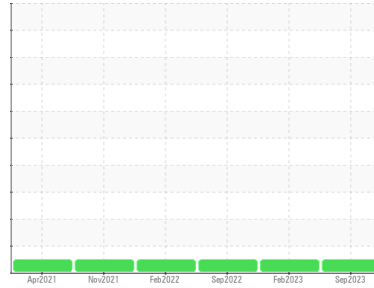




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
731030
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0079573	GFL0041632	GFL0041662
Sample Date	Client Info		08 Sep 2023	09 Feb 2023	08 Sep 2022
Machine Age	kms	Client Info	2226566	2226566	72845
Oil Age	kms	Client Info	0	2226566	0
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	12	9	10
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>9	2	2	2
Lead	ppm	ASTM D5185(m)	>30	11	2	3
Copper	ppm	ASTM D5185(m)	>35	1	<1	<1
Tin	ppm	ASTM D5185(m)	>4	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	5	6	5
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	57	54	52
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	629	574	578
Calcium	ppm	ASTM D5185(m)	1070	1688	1641	1551
Phosphorus	ppm	ASTM D5185(m)	1150	814	765	737
Zinc	ppm	ASTM D5185(m)	1270	993	940	916
Sulfur	ppm	ASTM D5185(m)	2060	2076	2064	1984
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>+100	4	4	5
Sodium	ppm	ASTM D5185(m)		4	3	2
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	11.8	8.5	5.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.7	21.7	16.4

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.6	13.9	9.5

VISUAL

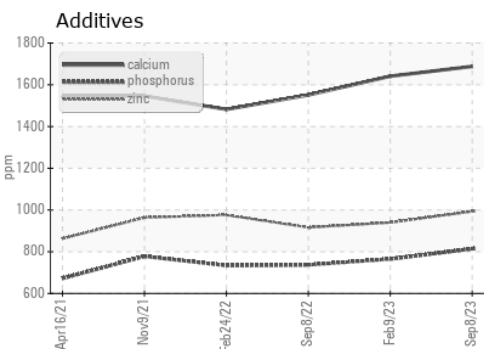
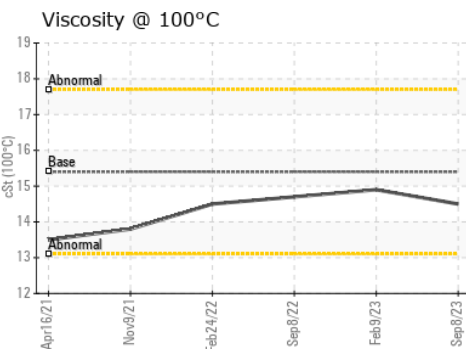
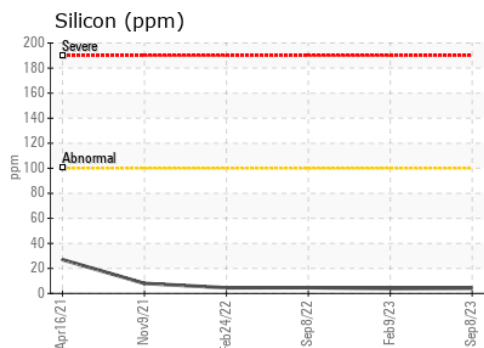
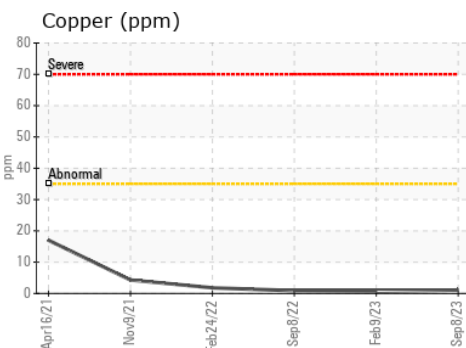
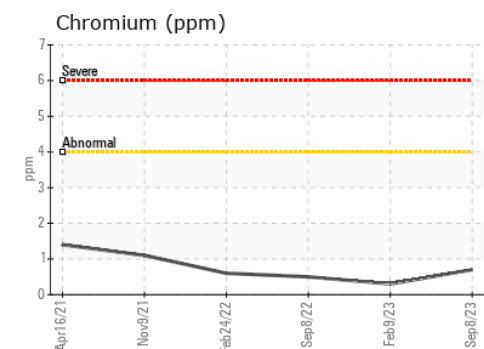
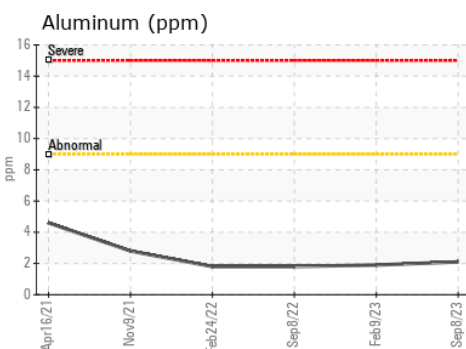
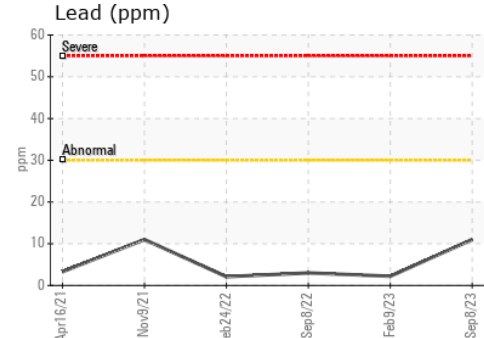
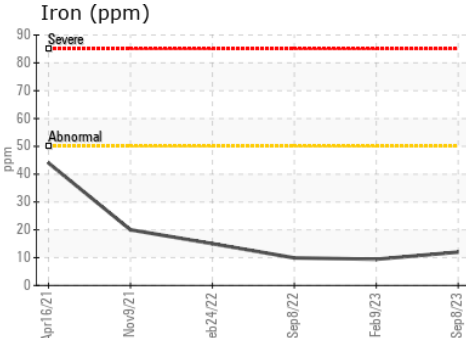
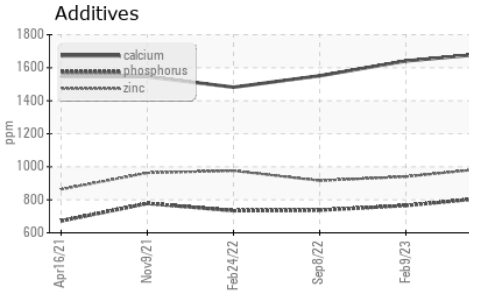
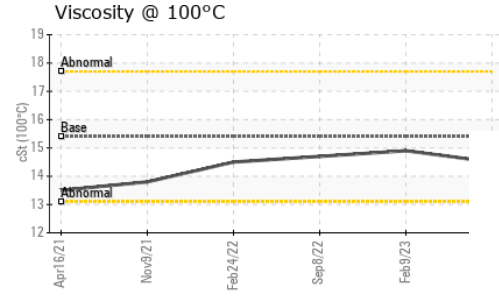
	method	limit/base	current	history1	history2	
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG



OIL ANALYSIS REPORT

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.5	14.9	14.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 277 - Niagara Regional**
Sample No. : GFL0079573 **Received** : 12 Sep 2023 **C/O Metro Truck Niagara Inc., 411 Glendale Avenue**
Lab Number : 02581728 **Diagnosed** : 12 Sep 2023 **St. Catharines, ON**
Unique Number : 5642793 **Diagnostician** : Wes Davis **CA L2P 3Y1**
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: Kelly Bremner
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F: