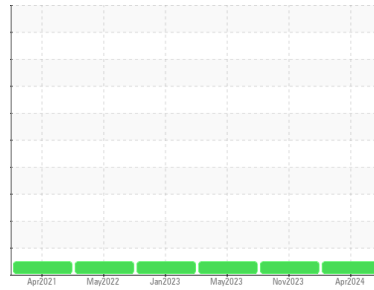




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**731010**  
 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		<b>GFL0100750</b>	GFL0100753	GFL0079568
Sample Date	Client Info		<b>19 Apr 2024</b>	28 Nov 2023	10 May 2023
Machine Age	hrs	Client Info	<b>136937</b>	121482	100260
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed		Client Info	<b>N/A</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	<b>10</b>	12	8
Chromium	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>9	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	2	<1
Copper	ppm	ASTM D5185(m)	>35	<b>1</b>	1	<1
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	<b>9</b>	7	9
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>53</b>	55	51
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>534</b>	584	549
Calcium	ppm	ASTM D5185(m)	1070	<b>1705</b>	1739	1626
Phosphorus	ppm	ASTM D5185(m)	1150	<b>705</b>	752	738
Zinc	ppm	ASTM D5185(m)	1270	<b>926</b>	959	918
Sulfur	ppm	ASTM D5185(m)	2060	<b>1992</b>	1956	2012
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>+100	<b>3</b>	5	3
Sodium	ppm	ASTM D5185(m)		<b>2</b>	3	2
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	0	0

## INFRA-RED

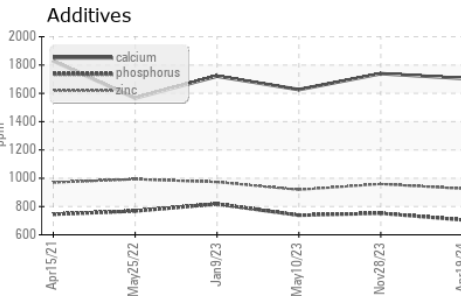
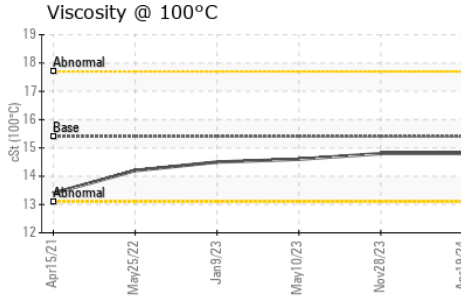
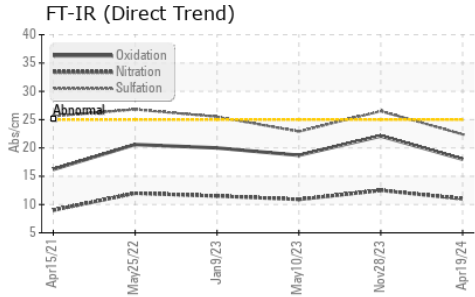
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.0</b>	12.5	10.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.4</b>	26.5	22.9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>18.0</b>	22.1	18.7



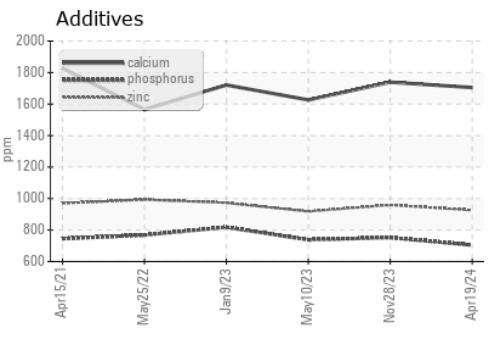
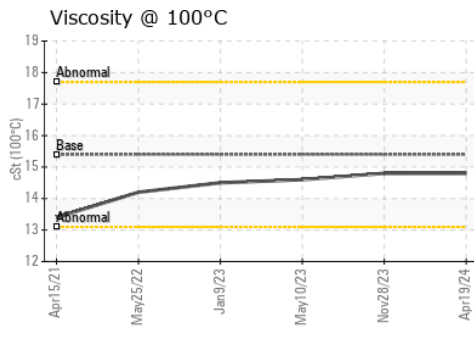
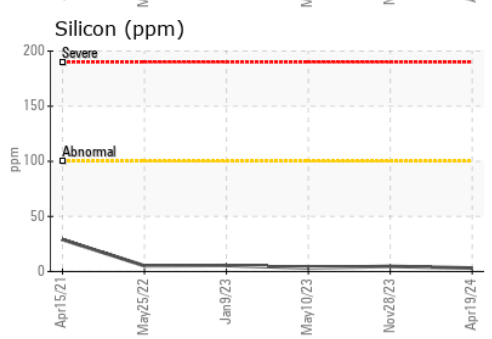
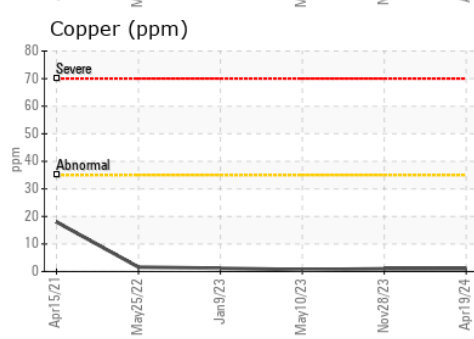
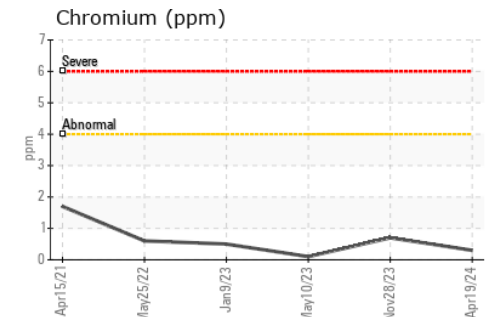
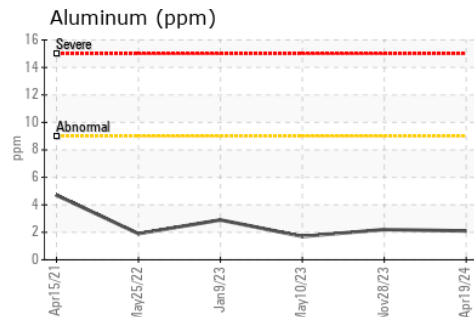
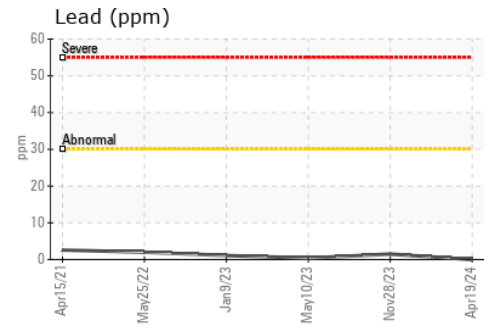
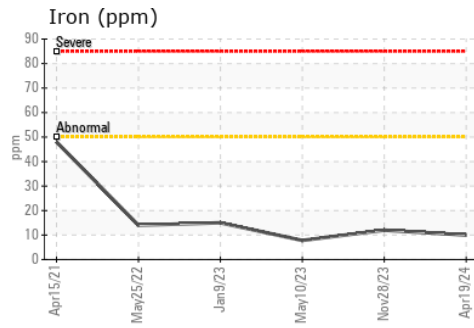
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.8	14.6

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0100750  
**Lab Number** : 02631859  
**Unique Number** : 5773012  
**Test Package** : MOB 1  
**Received** : 29 Apr 2024  
**Tested** : 29 Apr 2024  
**Diagnosed** : 29 Apr 2024 - Kevin Marson

**GFL Environmental - 277 - Niagara Regional**  
 C/O Metro Truck Niagara Inc., 411 Glendale Avenue  
 St. Catharines, ON  
 CA L2P 3Y1  
 Contact: Kelly Bremner  
 kbremner@gflenv.com  
 T: (437)235-6849  
 F:

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.