



Machine Id  
**731024**  
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		<b>GFL0100740</b>	GFL0079589	GFL0041648
Sample Date		Client Info		<b>06 Mar 2024</b>	20 Oct 2023	20 Mar 2023
Machine Age	kms	Client Info		<b>70927</b>	64090	52342
Oil Age	kms	Client Info		<b>0</b>	0	0
Filter Age	kms	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>50	<b>9</b>	11	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>	0	0
Aluminum	ppm	ASTM D5185(m)	>9	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185(m)	>35	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

### CONTAMINATION

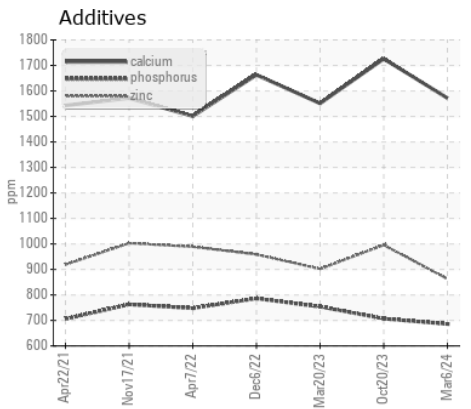
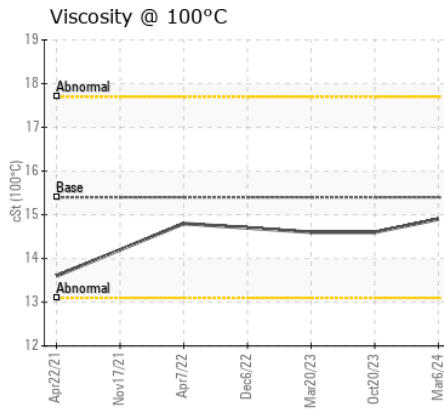
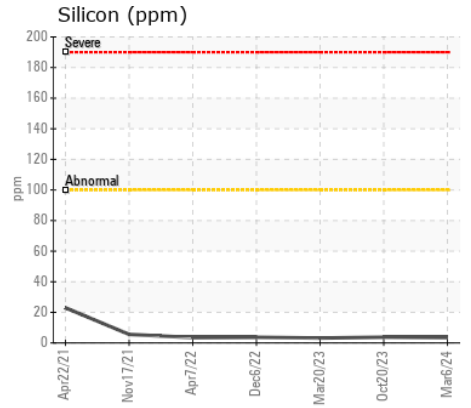
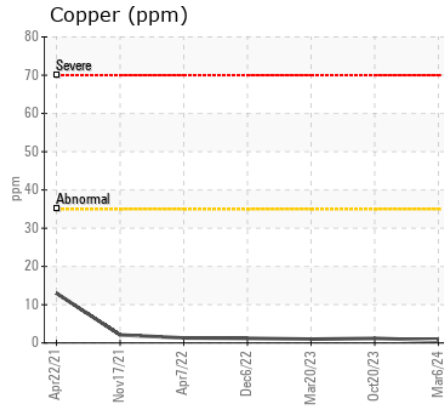
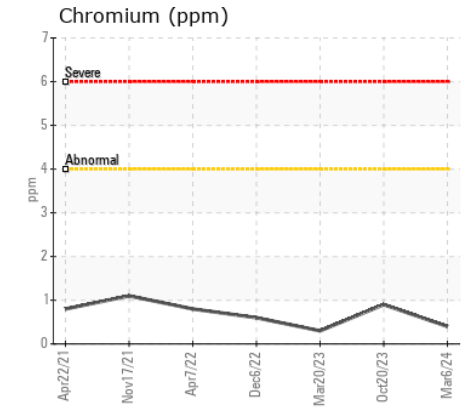
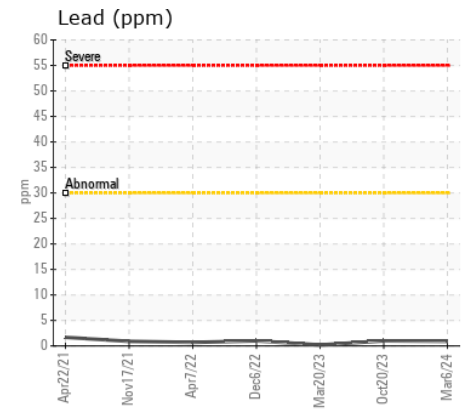
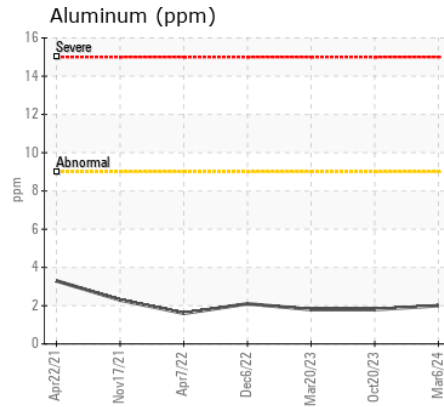
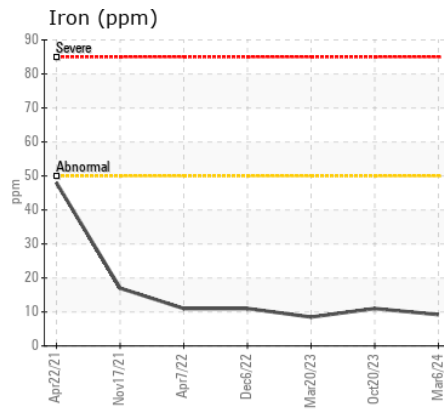
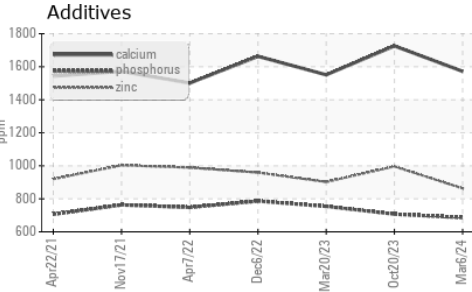
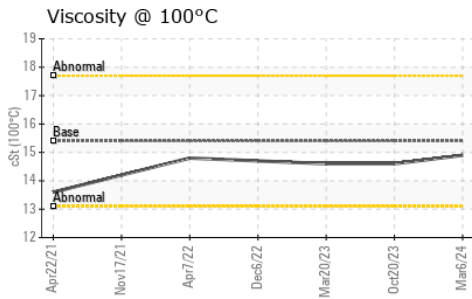
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	<b>3</b>	4	3
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.8</b>	11.7	7.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.4</b>	24.3	18.8
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	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)		<b>2</b>	3	3
Boron	ppm	ASTM D5185(m)	0	<b>12</b>	7	10
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>50</b>	57	50
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>524</b>	592	527
Calcium	ppm	ASTM D5185(m)	1070	<b>1572</b>	1726	1551
Phosphorus	ppm	ASTM D5185(m)	1150	<b>686</b>	707	754
Zinc	ppm	ASTM D5185(m)	1270	<b>863</b>	996	902
Sulfur	ppm	ASTM D5185(m)	2060	<b>2045</b>	2090	2087
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.7</b>	20.0	11.4
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>14.9</b>	14.6	14.6



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0100740  
**Lab Number** : 02620770  
**Unique Number** : 5737880  
**Test Package** : MOB 1

**Received** : 08 Mar 2024  
**Tested** : 08 Mar 2024  
**Diagnosed** : 08 Mar 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  
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 T: (437)235-6849

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.

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