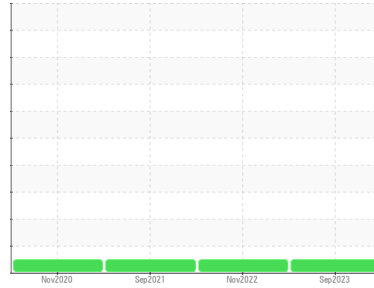




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**2351**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

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

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>GFL0086772</b>	GFL0063955	GFL0032451
Sample Date	Client Info		<b>01 Sep 2023</b>	07 Nov 2022	21 Sep 2021
Machine Age	hrs	Client Info	<b>3927</b>	3927	3927
Oil Age	hrs	Client Info	<b>3927</b>	3927	600
Oil Changed	Client Info		<b>N/A</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	<b>6</b>	10	9
Chromium	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>9	<b>1</b>	2	2
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185(m)	>35	<b>9</b>	15	19
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>&lt;1</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)	50	<b>30</b>	8	7
Barium	ppm	ASTM D5185(m)	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>50</b>	53	50
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	560	<b>509</b>	486	373
Calcium	ppm	ASTM D5185(m)	1510	<b>1504</b>	1596	1661
Phosphorus	ppm	ASTM D5185(m)	780	<b>770</b>	705	710
Zinc	ppm	ASTM D5185(m)	870	<b>867</b>	905	915
Sulfur	ppm	ASTM D5185(m)	2040	<b>1996</b>	2022	1946
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>	4	3
Sodium	ppm	ASTM D5185(m)		<b>3</b>	3	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.8</b>	12.0	9.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.8</b>	23.4	21.6

## FLUID DEGRADATION

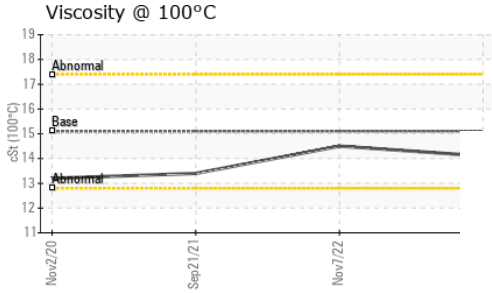
	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>16.7</b>	18.8	15.9

## VISUAL

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

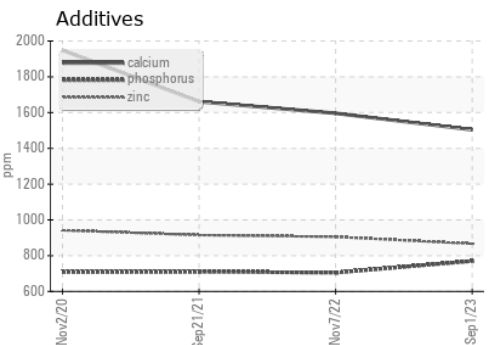
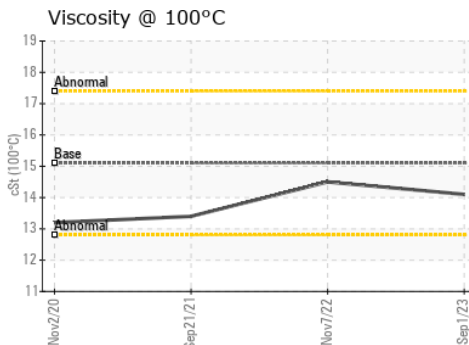
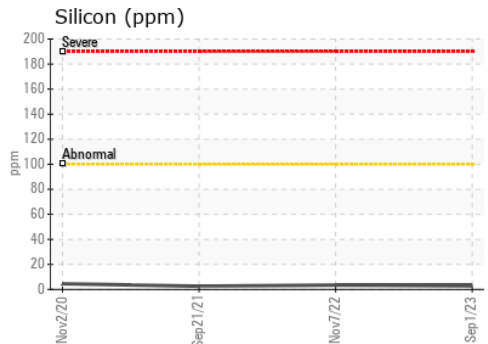
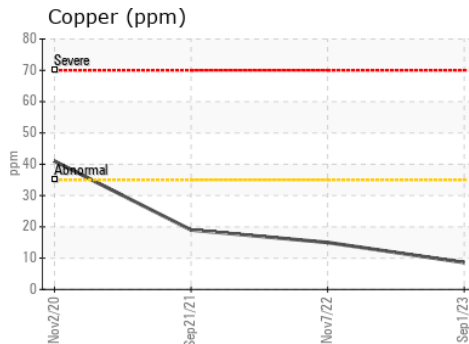
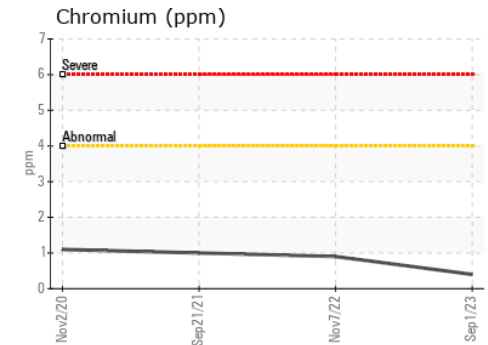
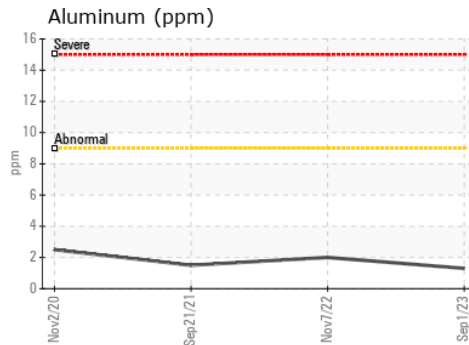
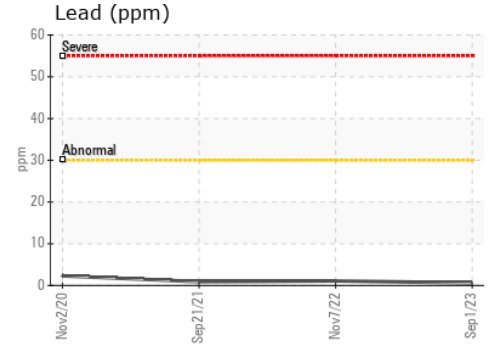
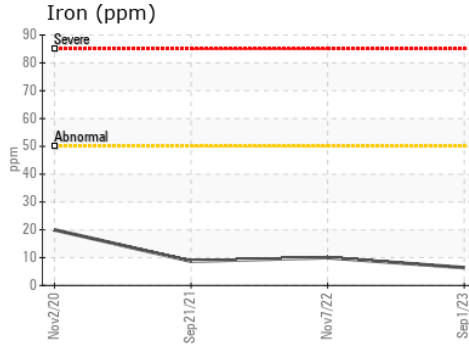


# OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	<b>14.1</b>	14.5	13.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0086772  
**Lab Number** : 02580326  
**Unique Number** : 5633386  
**Test Package** : MOB 1

**GFL Environmental - 222 - Sandhill**  
 SANDHILL DISPOSAL & RECYCLING DIVIS, 19 COMMERCE ROAD  
 ORANGEVILLE, ON  
 CA L9W 3X5  
 Contact: GLENN COOK  
 gcook@gflenv.com  
 T: (519)940-4167  
 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.