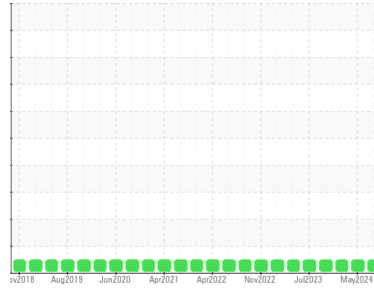




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
[1313064]

Machine Id  
**101045**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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>GFL0124701</b>	GFL0118520	GFL0102722
Sample Date	Client Info		<b>17 Jul 2024</b>	07 May 2024	30 Jan 2024
Machine Age	hrs	Client Info	<b>15033</b>	14559	14058
Oil Age	hrs	Client Info	<b>600</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

### CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

### WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>65	<b>19</b>	20	15
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>35	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>10	<b>5</b>	8	6
Copper	ppm	ASTM D5185(m)	>180	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>8	<b>&lt;1</b>	0	<1
Antimony	ppm	ASTM D5185(m)	>35	<b>&lt;1</b>	0	0
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>2</b>	3	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>68</b>	68	64
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>1120</b>	1123	1045
Calcium	ppm	ASTM D5185(m)	1070	<b>1216</b>	1219	1175
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1127</b>	1106	1055
Zinc	ppm	ASTM D5185(m)	1270	<b>1411</b>	1347	1285
Sulfur	ppm	ASTM D5185(m)	2060	<b>2676</b>	2603	2732
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

### CONTAMINANTS

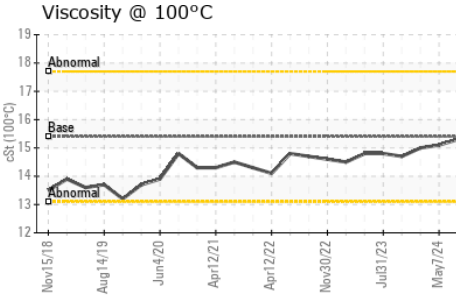
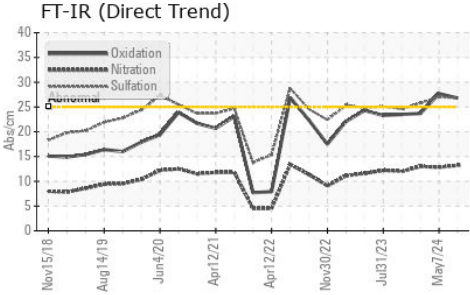
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	<b>3</b>	2	3
Sodium	ppm	ASTM D5185(m)		<b>6</b>	6	4
Potassium	ppm	ASTM D5185(m)	>20	<b>9</b>	3	2

### INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.2</b>	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>13.2</b>	12.8	13.0
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>26.8</b>	27.0	25.8



# OIL ANALYSIS REPORT

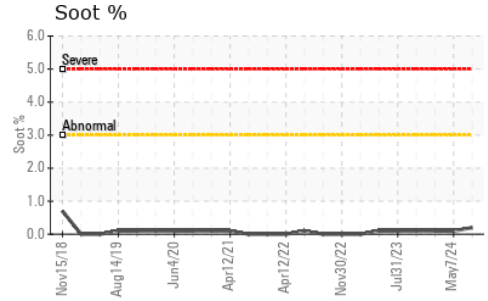
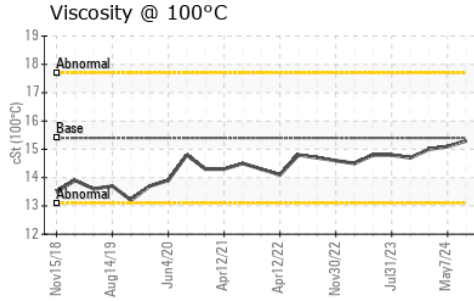
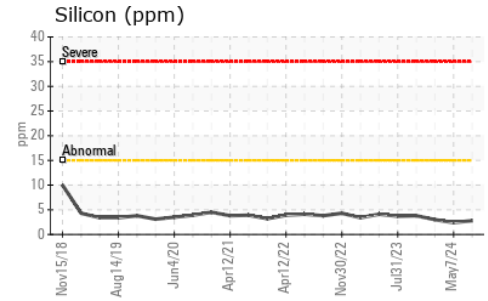
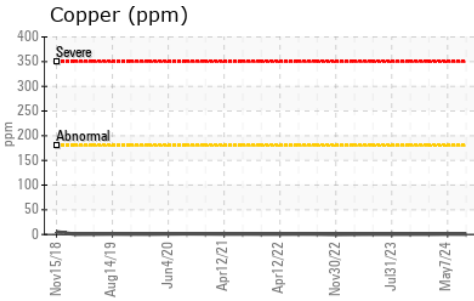
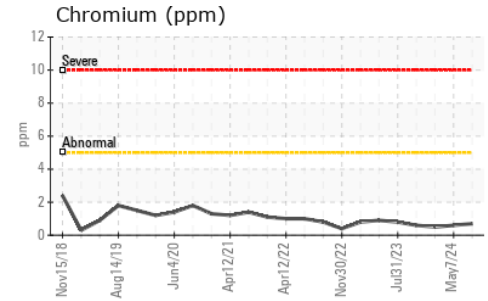
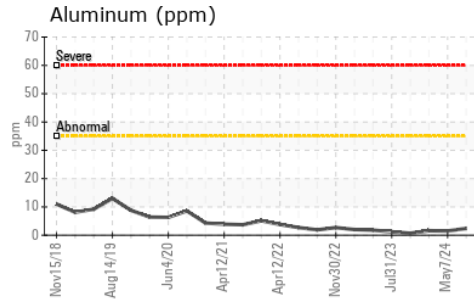
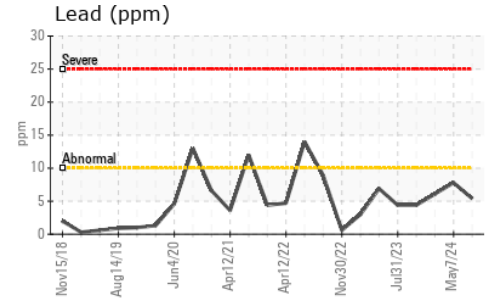
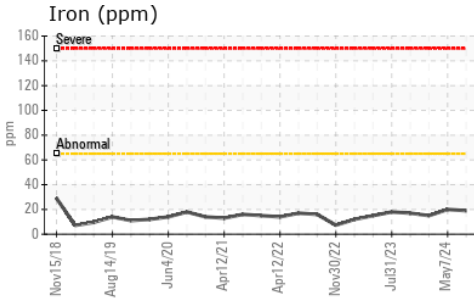


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>26.8</b>	27.7	23.7

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>15.3</b>	15.1	15.0

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0124701  
**Lab Number** : **02648882**  
**Unique Number** : 5814434  
**Test Package** : MOB 1

**GFL Environmental - 207 - Pickering SW**  
 1034 TOY AVENUE, PICKERING YARD  
 PICKERING, ON  
 CA L1W 3P1  
 Contact: Ian Patton  
 ipatton@gflenv.com  
 T: (905)831-6297  
 F: (905)426-3577

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.