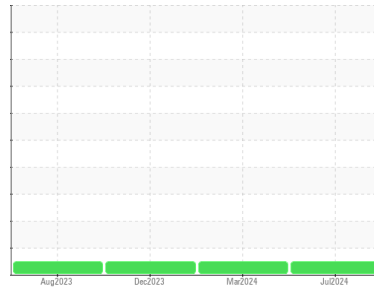




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**[1311274]**

Machine Id  
**518006**

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

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>GFL0124695</b>	GFL0110675	GFL0094553
Sample Date	Client Info			<b>15 Jul 2024</b>	27 Mar 2024	13 Dec 2023
Machine Age	hrs	Client Info		<b>12207</b>	11725	11234
Oil Age	hrs	Client Info		<b>600</b>	0	11234
Oil Changed	Client Info			<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<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)	>100	<b>9</b>	10	19
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	10
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	2	3
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	3	8
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)		<b>0</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

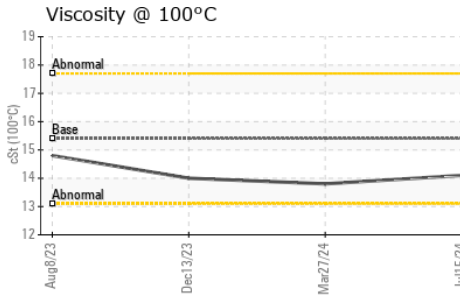
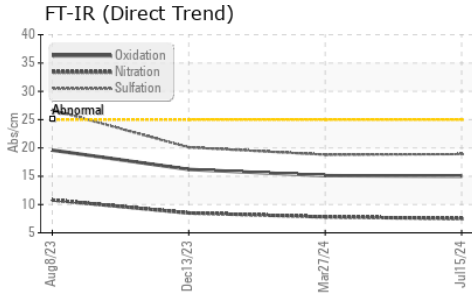
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	3	5
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>57</b>	56	52
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>936</b>	953	880
Calcium	ppm	ASTM D5185(m)	1070	<b>1008</b>	1045	1107
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1013</b>	968	963
Zinc	ppm	ASTM D5185(m)	1270	<b>1154</b>	1163	1157
Sulfur	ppm	ASTM D5185(m)	2060	<b>2519</b>	2474	2529
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	2	5
Sodium	ppm	ASTM D5185(m)		<b>3</b>	2	4
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	1	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.2</b>	0.2	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.5</b>	7.8	8.5
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>18.9</b>	18.8	20.1



# OIL ANALYSIS REPORT

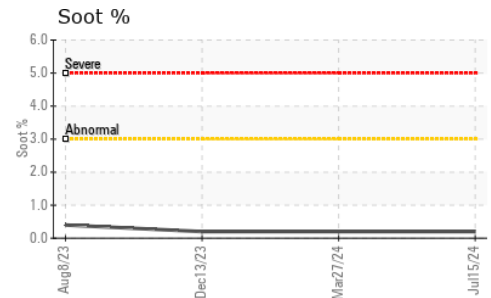
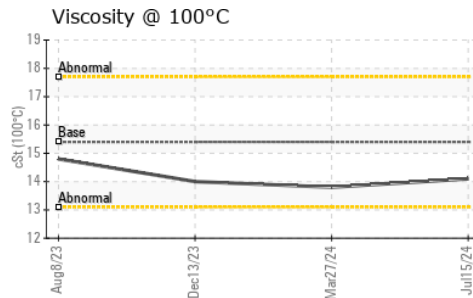
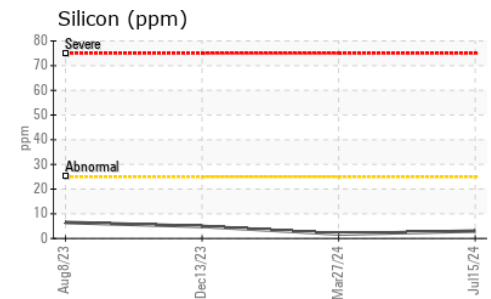
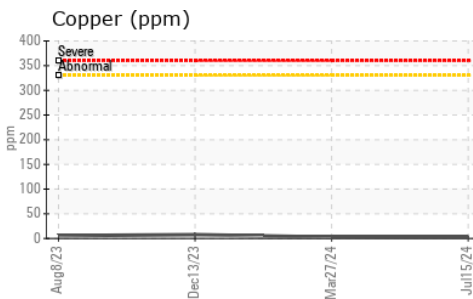
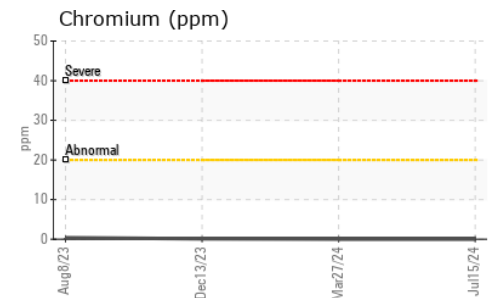
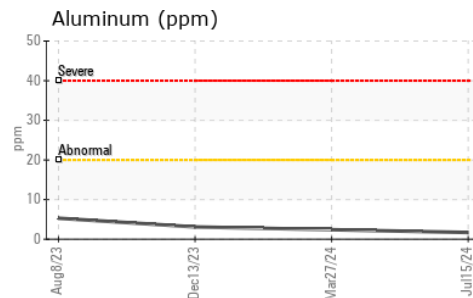
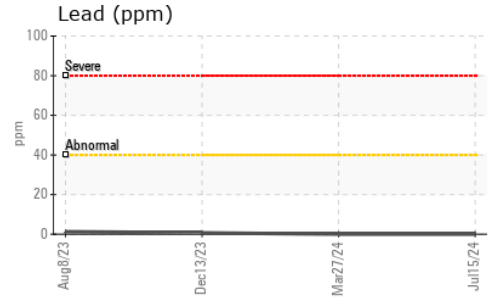
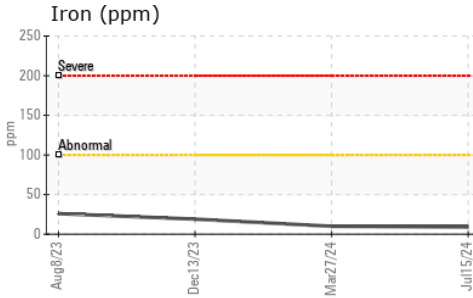


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>15.0</b>	15.1	16.2

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>14.1</b>	13.8	14.0

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0124695  
**Lab Number** : **02648590**  
**Unique Number** : 5814142  
**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.