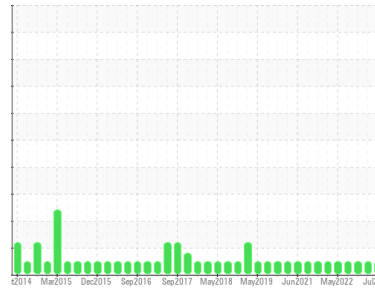




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**4431**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (20 LTR)**

## 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	history 1	history 2
Sample Number	Client Info		<b>GFL0074303</b>	GFL0074261	GFL0049991
Sample Date	Client Info		<b>04 Jul 2023</b>	17 Apr 2023	27 Jan 2023
Machine Age	hrs	Client Info	<b>0</b>	26612	26049
Oil Age	hrs	Client Info	<b>0</b>	563	474
Oil Changed	Client Info		<b>N/A</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history 1	history 2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185(m)	>120	<b>8</b>	2	6
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	<1	2
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</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	history 1	history 2	
Boron	ppm	ASTM D5185(m)	0	<b>3</b>	6	3
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>58</b>	59	57
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>943</b>	962	926
Calcium	ppm	ASTM D5185(m)	1070	<b>1007</b>	1077	1059
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1030</b>	1101	1062
Zinc	ppm	ASTM D5185(m)	1270	<b>1158</b>	1184	1166
Sulfur	ppm	ASTM D5185(m)	2060	<b>2511</b>	2705	2599
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	3	2
Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1

## INFRA-RED

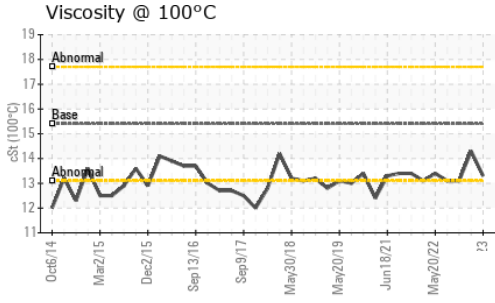
	method	limit/base	current	history 1	history 2	
Soot %	%	ASTM D7844*	>4	<b>0.7</b>	0	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.2</b>	5.3	9.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.5</b>	17.6	20.1

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.9</b>	13.1	16.0



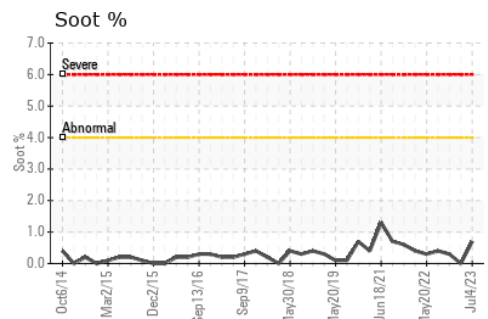
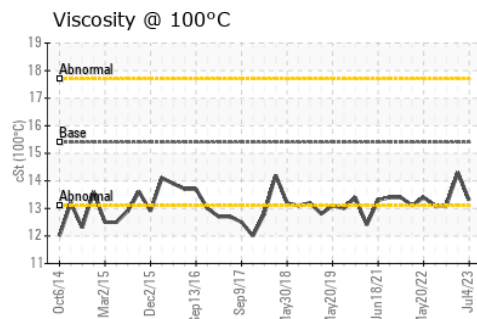
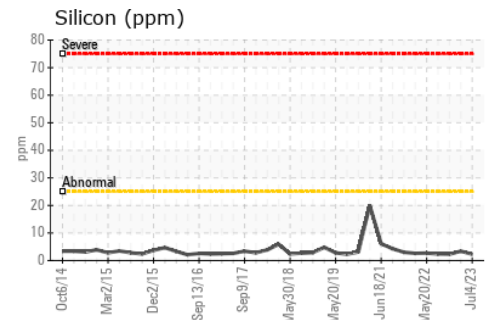
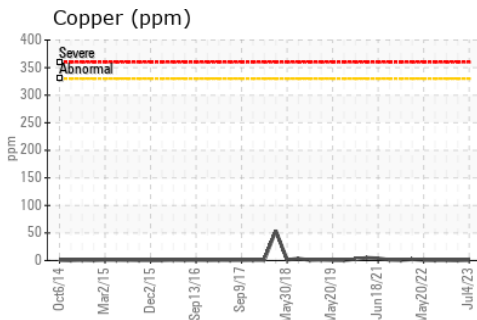
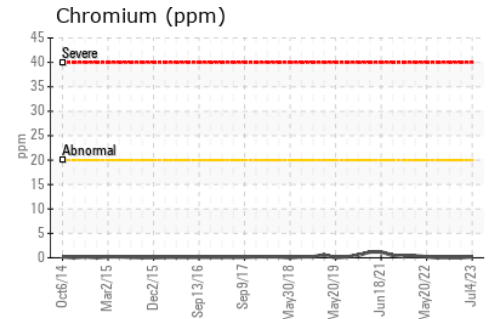
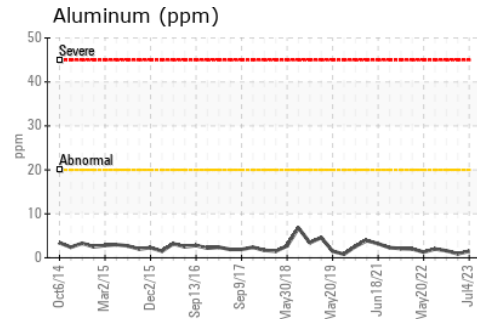
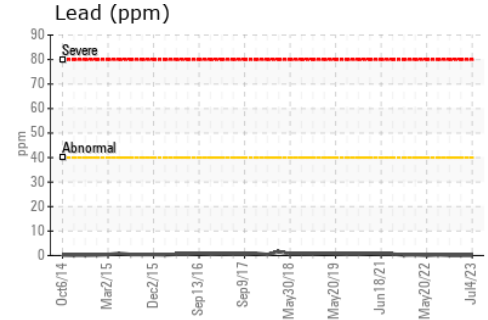
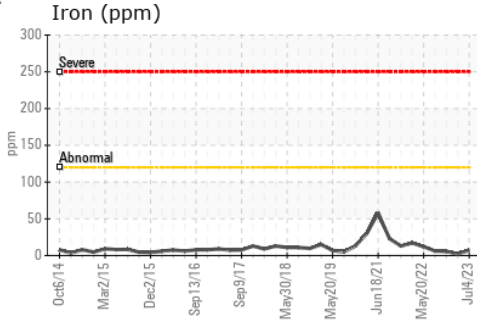
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2	
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.3</b>	14.3	13.1

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0074303 **Received** : 05 Jul 2023  
**Lab Number** : **02567889** **Diagnosed** : 05 Jul 2023  
**Unique Number** : 5604935 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

15 Bermondsey Road  
 Toronto, ON  
 CA M4B 0A6  
 Contact: Tom Hatzioannidis  
 thatzioannidis@gflenv.com  
 T: (416)678-9340  
 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.