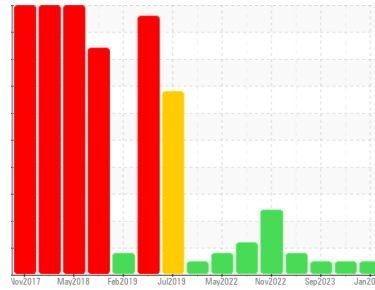




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**401022**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON XL SYN BLEND 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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0099607</b>	GFL0091571	GFL0091628
Sample Date	Client Info		<b>22 Jan 2024</b>	17 Oct 2023	21 Sep 2023
Machine Age	kms	Client Info	<b>736223</b>	714260	20140
Oil Age	kms	Client Info	<b>0</b>	0	632
Oil Changed	Client Info		<b>Changed</b>	Changed	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	0.0

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	<b>40</b>	22	63
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	<1	2
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>8</b>	3	8
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>3</b>	2	6
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<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)	1	<b>2</b>	3	2
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>56</b>	59	61
Manganese	ppm	ASTM D5185(m)	1	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>880</b>	936	925
Calcium	ppm	ASTM D5185(m)	1070	<b>1048</b>	1057	1040
Phosphorus	ppm	ASTM D5185(m)	1150	<b>906</b>	975	925
Zinc	ppm	ASTM D5185(m)	1270	<b>1053</b>	1184	1160
Sulfur	ppm	ASTM D5185(m)	2060	<b>2210</b>	2435	2164
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

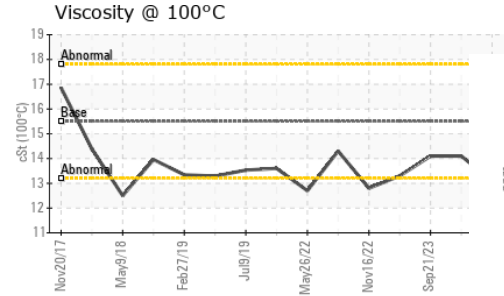
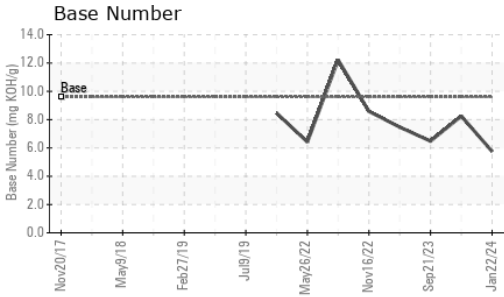
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>7</b>	6	9
Sodium	ppm	ASTM D5185(m)		<b>29</b>	24	86
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	<1	12

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>2.2</b>	0.8	2.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.0</b>	7.7	12.5
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>27.9</b>	20.8	28.0



# OIL ANALYSIS REPORT

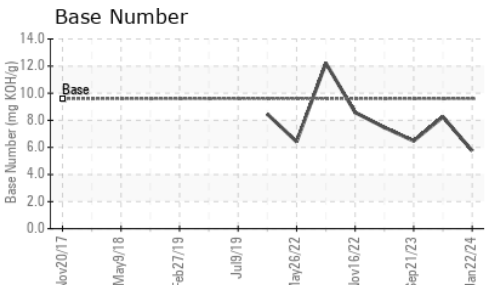
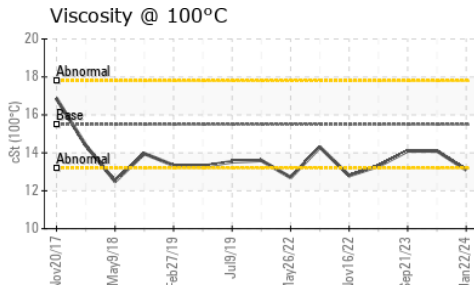
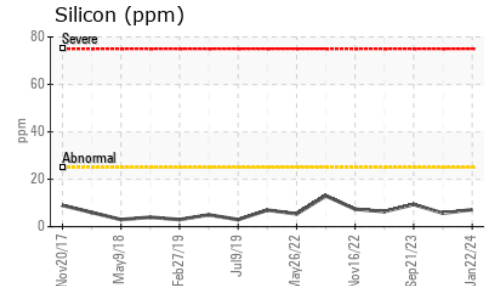
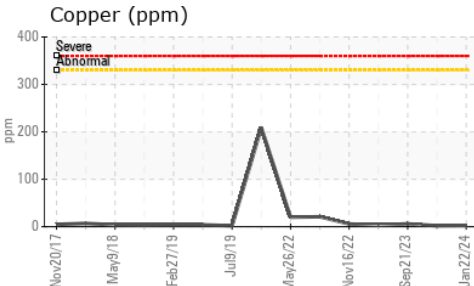
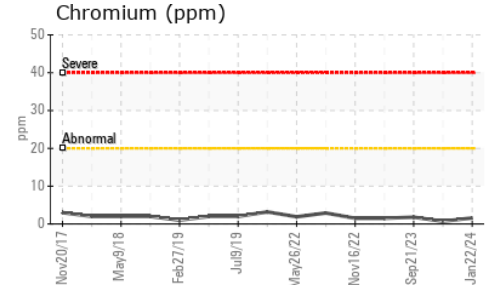
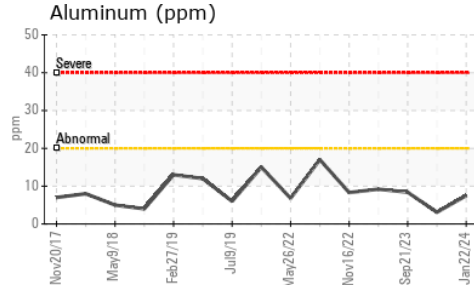
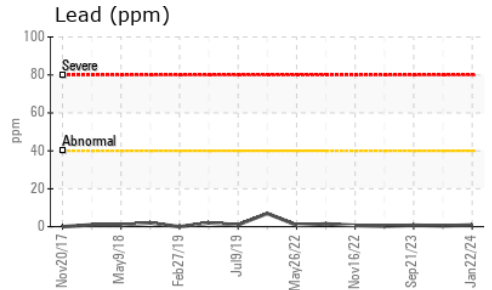
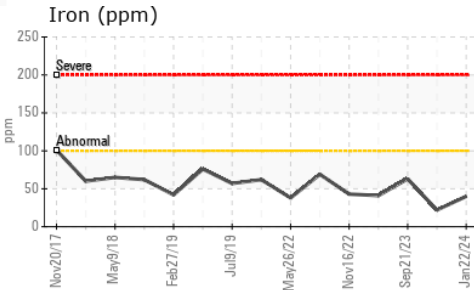


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>22.8</b>	16.2	24.9
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	<b>5.75</b>	8.25	6.48

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)	15.5	<b>13.1</b>	14.1	14.1

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County  
**Sample No.** : GFL0099607 **Received** : 31 Jan 2024  
**Lab Number** : 02612328 **Diagnosed** : 01 Feb 2024  
**Unique Number** : 5721423 **Diagnostician** : Bill Quesnel  
**Test Package** : MOB 2

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.

Contact: GFL Calgary  
 calgarymaintenance@gflenv.com  
 T: (403)369-6163