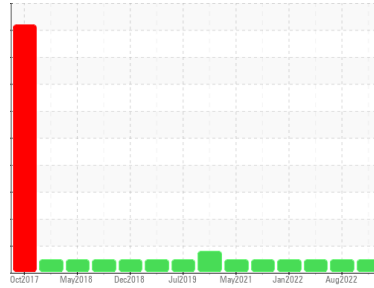




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**801071**  
 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>GFL0063754</b>	GFL0057788	GFL0052679
Sample Date	Client Info		<b>24 Jan 2023</b>	26 Aug 2022	06 Jun 2022
Machine Age	hrs	Client Info	<b>13004</b>	12531	510
Oil Age	hrs	Client Info	<b>437</b>	605	0
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
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	<b>72</b>	55	57
Chromium	ppm	ASTM D5185(m) >20	<b>2</b>	2	2
Nickel	ppm	ASTM D5185(m) >4	<b>1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185(m) >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >20	<b>9</b>	6	5
Lead	ppm	ASTM D5185(m) >40	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m) >330	<b>2</b>	1	1
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)	<b>&lt;1</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>4</b>	4	4
Barium	ppm	ASTM D5185(m) 1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>64</b>	68	70
Manganese	ppm	ASTM D5185(m) 1	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>1038</b>	1114	1186
Calcium	ppm	ASTM D5185(m) 1070	<b>1209</b>	1250	1243
Phosphorus	ppm	ASTM D5185(m) 1150	<b>1123</b>	1101	1205
Zinc	ppm	ASTM D5185(m) 1270	<b>1300</b>	1365	1438
Sulfur	ppm	ASTM D5185(m) 2060	<b>2424</b>	2477	2623
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0

## CONTAMINANTS

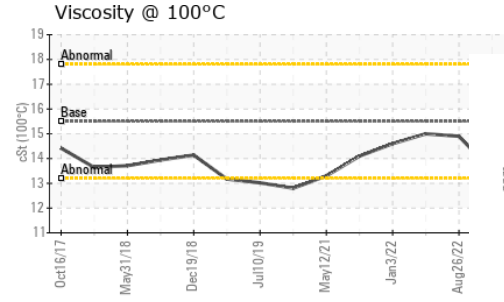
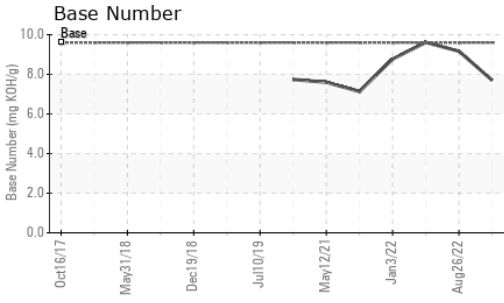
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>15</b>	10	12
Sodium	ppm	ASTM D5185(m)	<b>5</b>	5	5
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	18	1

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>1.2</b>	1.4	1.3
Nitration	Abs/cm	ASTM D7624* >20	<b>14.1</b>	12.0	12.1
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>28.3</b>	26.1	27.0



# OIL ANALYSIS REPORT

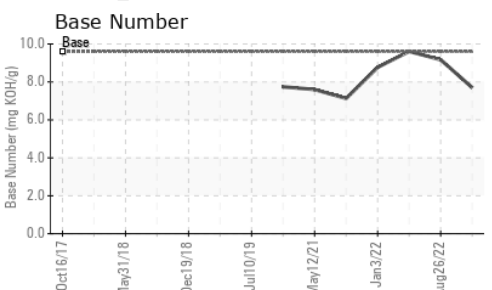
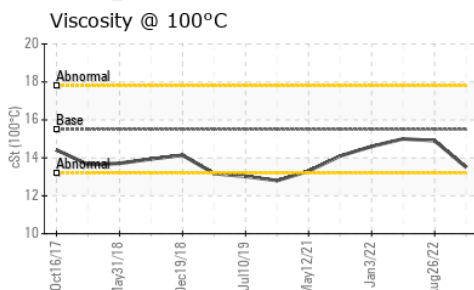
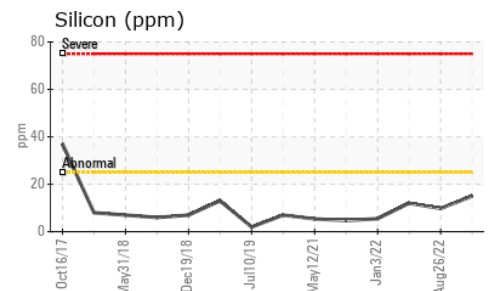
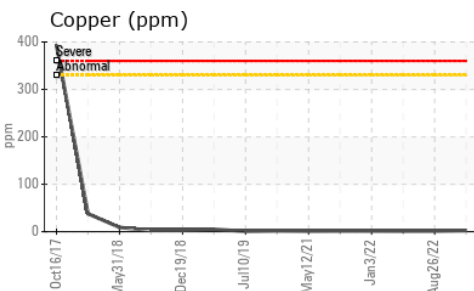
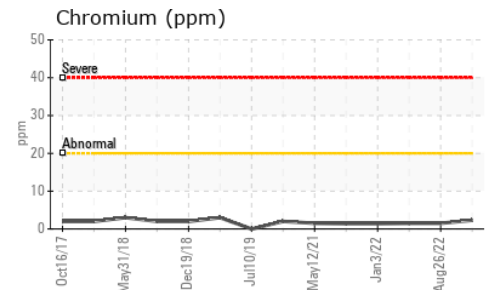
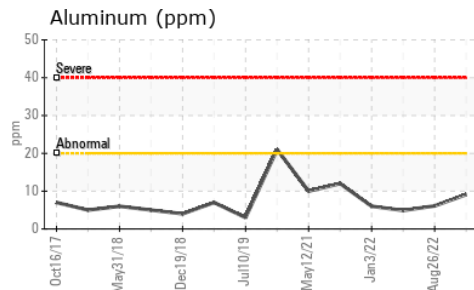
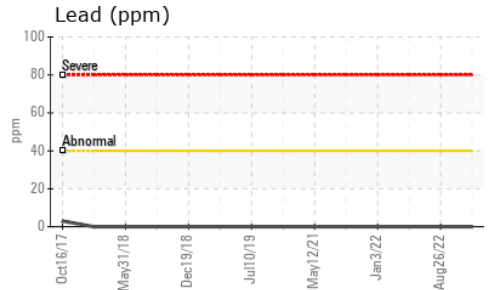
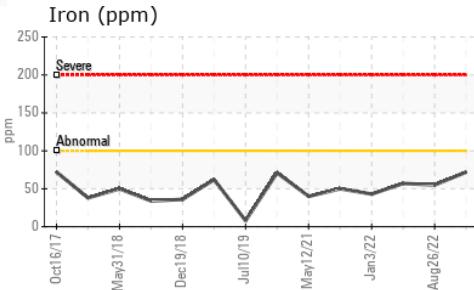


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>26.3</b>	22.8	22.4
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	<b>7.70</b>	9.17	9.61

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>13.5</b>	14.9	15.0

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County  
**Sample No.** : GFL0063754 **Received** : 06 Feb 2023 220 Carmek Blvd  
**Lab Number** : **02537530** **Diagnosed** : 07 Feb 2023 Rocky View County, AB  
**Unique Number** : 5526530 **Diagnostician** : Kevin Marson CA T1X 1X1  
**Test Package** : MOB 2 **Contact:** GFL Calgary calgarymaintenance@gflenv.com

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.

T:  
 F: (403)369-6163