



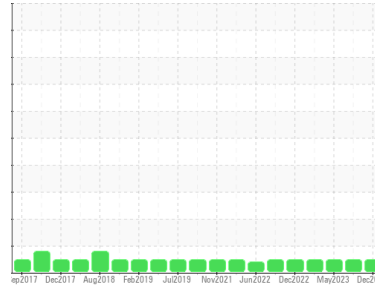
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**4490**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)**



## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

### Wear

All component wear rates are normal.

### Contamination

Light fuel dilution occurring. No other contaminants were detected 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>GFL0099530</b>	GFL0084358	GFL0077610
Sample Date	Client Info	<b>18 Dec 2023</b>	24 Aug 2023	25 May 2023
Machine Age	kms Client Info	<b>1120848</b>	1109579	1100364
Oil Age	kms Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
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>3</b>	3	4
Chromium	ppm ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm ASTM D5185(m) >2	<b>&lt;1</b>	0	0
Titanium	ppm ASTM D5185(m)	<b>0</b>	0	<1
Silver	ppm ASTM D5185(m) >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185(m) >25	<b>2</b>	<1	2
Lead	ppm ASTM D5185(m) >40	<b>&lt;1</b>	<1	<1
Copper	ppm ASTM D5185(m) >330	<b>&lt;1</b>	<1	<1
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) 1	<b>4</b>	2	2
Barium	ppm ASTM D5185(m) 1	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m) 60	<b>56</b>	53	55
Manganese	ppm ASTM D5185(m) 1	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 1010	<b>918</b>	913	908
Calcium	ppm ASTM D5185(m) 1070	<b>1047</b>	972	1048
Phosphorus	ppm ASTM D5185(m) 1150	<b>986</b>	991	1045
Zinc	ppm ASTM D5185(m) 1270	<b>1126</b>	1103	1117
Sulfur	ppm ASTM D5185(m) 2060	<b>2674</b>	2466	2593
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

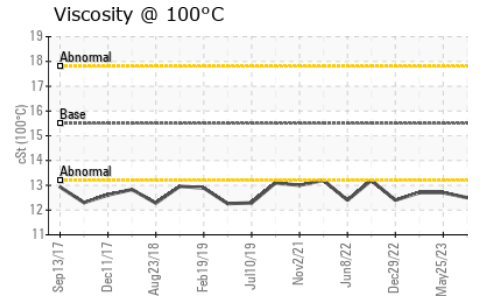
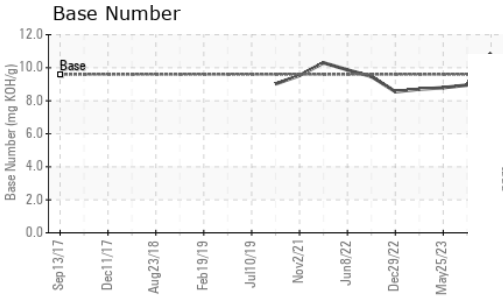
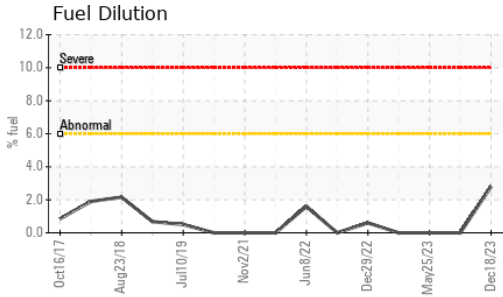
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	<b>4</b>	5	3
Sodium	ppm ASTM D5185(m)	<b>2</b>	3	9
Potassium	ppm ASTM D5185(m) >20	<b>2</b>	0	0
Fuel	% ASTM D7593* >6.0	<b>2.8</b>	<1.0	<1.0

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0</b>	0	0
Nitration	Abs/cm ASTM D7624* >20	<b>5.7</b>	5.7	5.4
Sulfation	Abs./1mm ASTM D7415* >30	<b>18.6</b>	20.2	18.4



# OIL ANALYSIS REPORT

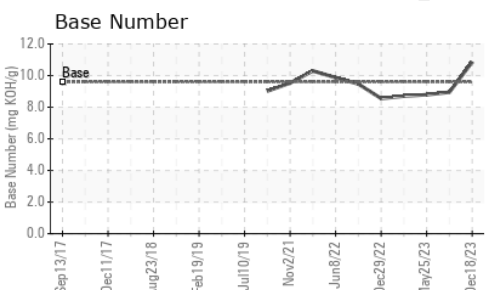
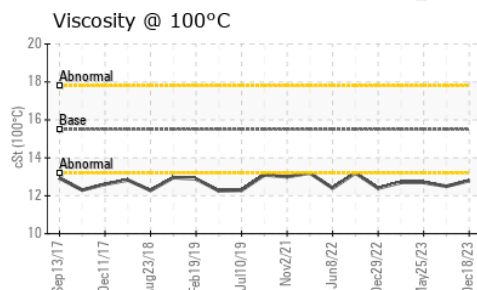
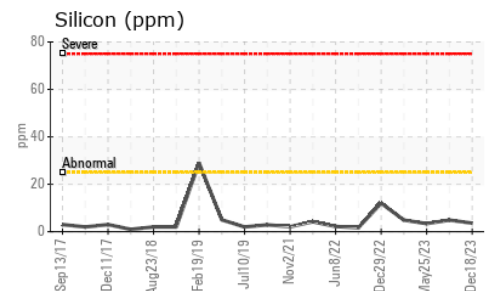
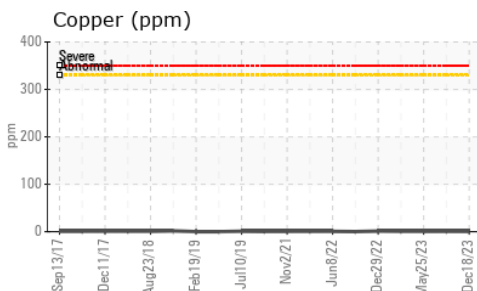
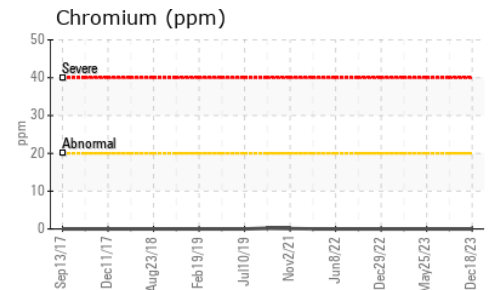
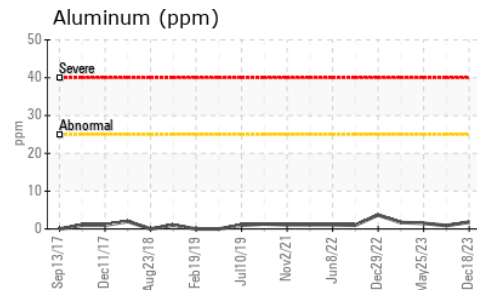
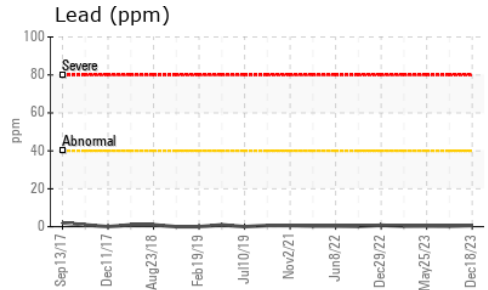
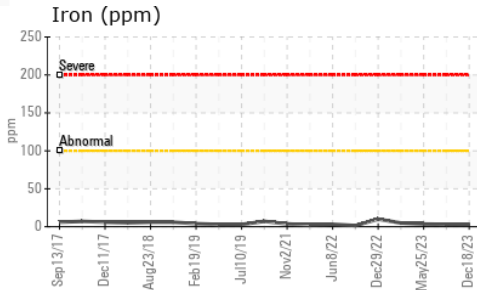


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.0</b>	15.4	14.3
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	<b>10.86</b>	8.95	8.79

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>12.8</b>	12.5	12.7

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County  
**Sample No.** : GFL0099530 **Received** : 02 Jan 2024  
**Lab Number** : **02605740** **Diagnosed** : 04 Jan 2024  
**Unique Number** : 5698825 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, PercentFuel )

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.

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