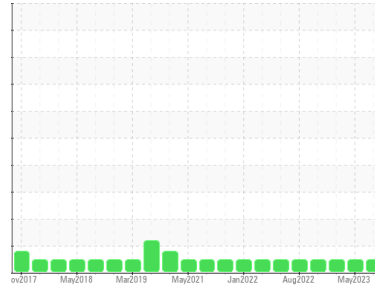




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**4497**  
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>GFL0091573</b>	GFL0077598	GFL0070708
Sample Date	Client Info		<b>18 Oct 2023</b>	03 May 2023	09 Feb 2023
Machine Age	hrs	Client Info	<b>695587</b>	657816	22319
Oil Age	hrs	Client Info	<b>0</b>	657816	473
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	>6.0	<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>7</b>	6	7
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m) >25	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m) >40	<b>1</b>	<1	<1
Copper	ppm	ASTM D5185(m) >330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185(m)	<b>0</b>	<1	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>	2	2
Barium	ppm	ASTM D5185(m) 1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>58</b>	58	56
Manganese	ppm	ASTM D5185(m) 1	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>959</b>	928	920
Calcium	ppm	ASTM D5185(m) 1070	<b>1066</b>	1094	1072
Phosphorus	ppm	ASTM D5185(m) 1150	<b>971</b>	1037	1022
Zinc	ppm	ASTM D5185(m) 1270	<b>1204</b>	1151	1145
Sulfur	ppm	ASTM D5185(m) 2060	<b>2397</b>	2453	2480
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

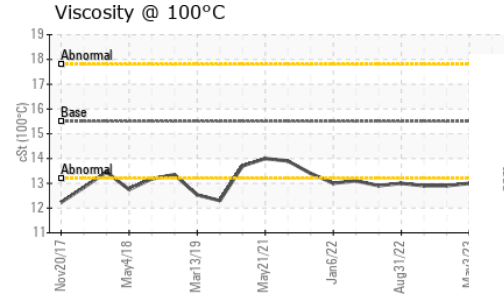
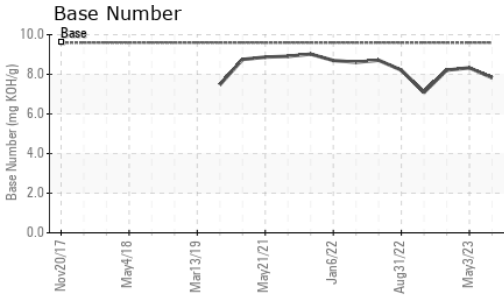
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>5</b>	5	4
Sodium	ppm	ASTM D5185(m)	<b>4</b>	3	3
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	1

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624* >20	<b>7.4</b>	7.2	7.7
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>19.9</b>	19.4	20.8



# OIL ANALYSIS REPORT

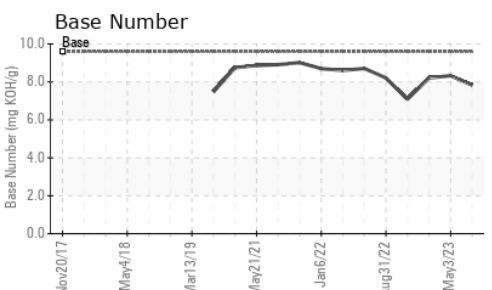
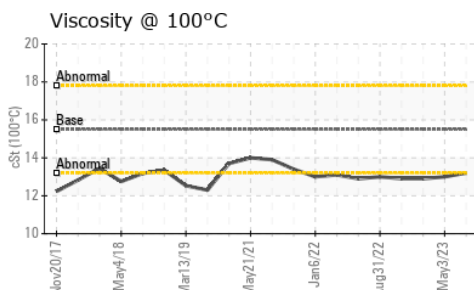
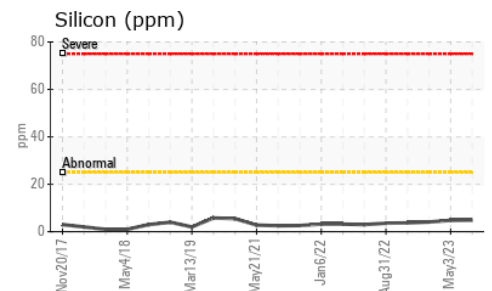
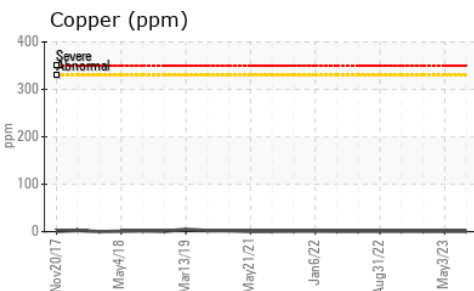
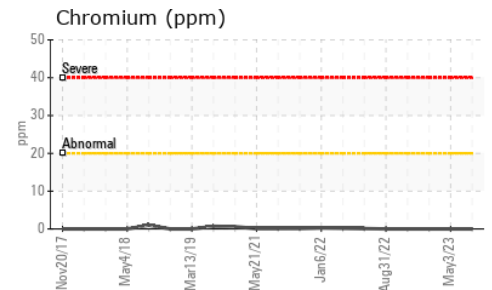
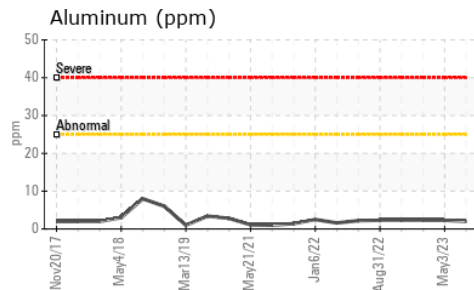
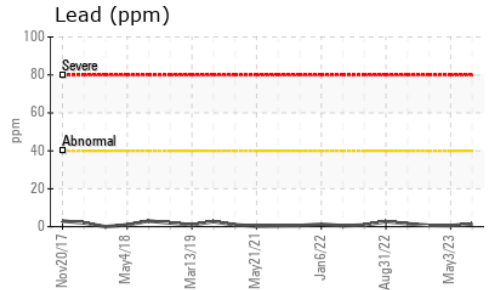
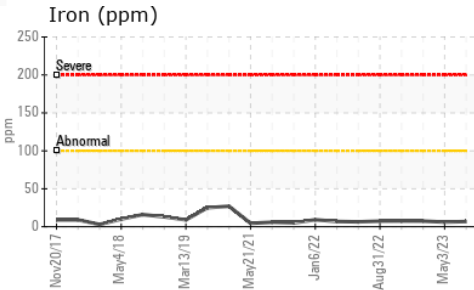


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>16.9</b>	15.6	16.0
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	<b>7.83</b>	8.33	8.21

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>13.2</b>	13.0	12.9

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County  
**Sample No.** : GFL0091573 **Received** : 24 Oct 2023 220 Carmek Blvd  
**Lab Number** : **02591237** **Diagnosed** : 25 Oct 2023 Rocky View County, AB  
**Unique Number** : 5668316 **Diagnostician** : Wes Davis 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.

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