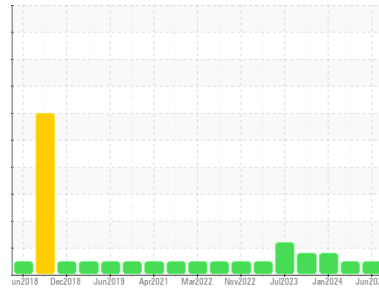




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**901075**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON HP 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>GFL0112439</b>	GFL0117332	GFL0099551
Sample Date	Client Info		<b>27 Jun 2024</b>	02 Apr 2024	10 Jan 2024
Machine Age	hrs	Client Info	<b>15601</b>	15019	27501
Oil Age	hrs	Client Info	<b>0</b>	587	550
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	MARGINAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	▲ 2.4
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>16</b>	15	12
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	3	3
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	1	1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
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)	0	<b>7</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>61</b>	61	58
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>955</b>	984	922
Calcium	ppm	ASTM D5185(m)	1070	<b>1085</b>	1076	1101
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1006</b>	1023	1010
Zinc	ppm	ASTM D5185(m)	1270	<b>1196</b>	1205	1214
Sulfur	ppm	ASTM D5185(m)	2060	<b>2542</b>	2495	2671
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

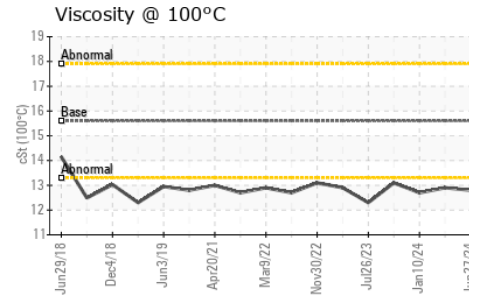
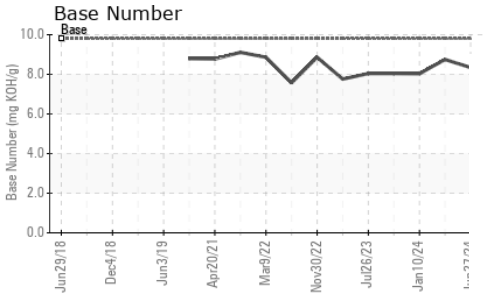
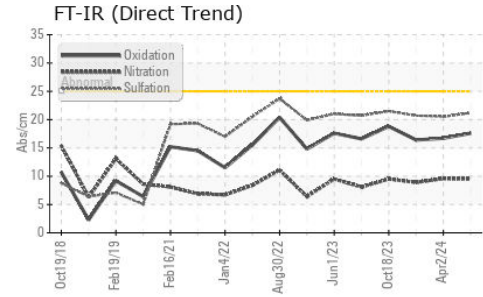
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>9</b>	6	4
Sodium	ppm	ASTM D5185(m)		<b>6</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.7</b>	0.7	0.6
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.5</b>	9.6	8.9
Sulfation	Abs.1mm	ASTM D7415*	>30	<b>21.2</b>	20.5	20.7



# OIL ANALYSIS REPORT

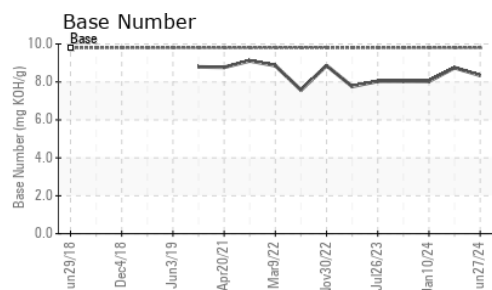
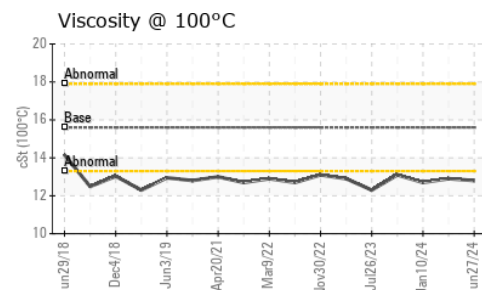
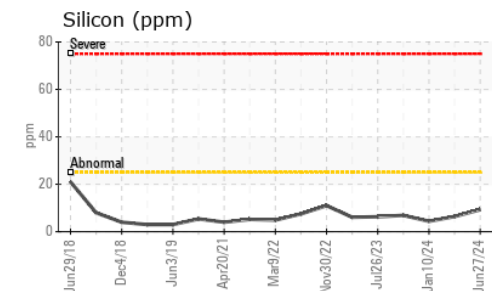
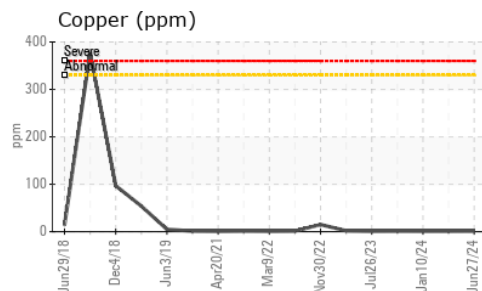
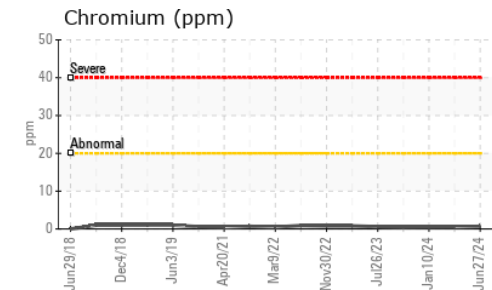
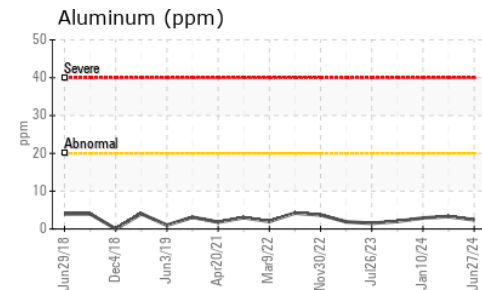
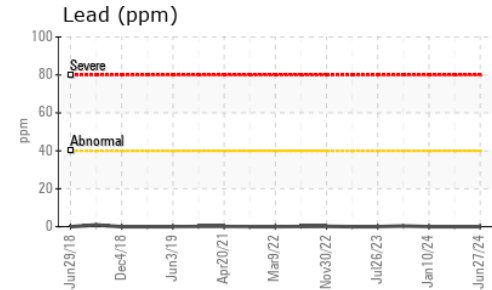
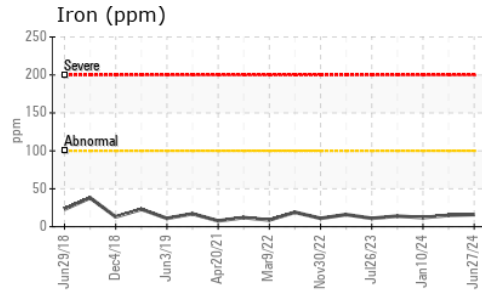


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>17.6</b>	16.7	16.4
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	<b>8.34</b>	8.75	8.03

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)	15.6	<b>12.8</b>	12.9	12.7

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 550 - Rocky View County**  
**Sample No.** : GFL0112439 **Received** : 05 Jul 2024 **220 Carmek Blvd**  
**Lab Number** : **02645719** **Tested** : 05 Jul 2024 **Rocky View County, AB**  
**Unique Number** : 5803258 **Diagnosed** : 05 Jul 2024 - 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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