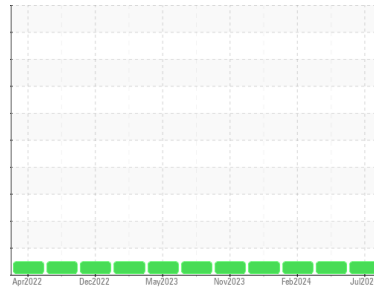




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**421051**

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>GFL0128175</b>	GFL0117266	GFL0112408
Sample Date	Client Info		<b>11 Jul 2024</b>	18 Apr 2024	13 Feb 2024
Machine Age	hrs	Client Info	<b>6107</b>	5444	4933
Oil Age	hrs	Client Info	<b>666</b>	0	308
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	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>80	<b>10</b>	8	6
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>3</b>	4	4
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185(m)	>150	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>5	<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)	1	<b>4</b>	4	3
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>59</b>	58	58
Manganese	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>938</b>	946	937
Calcium	ppm	ASTM D5185(m)	1070	<b>1045</b>	1045	1056
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1165</b>	990	1035
Zinc	ppm	ASTM D5185(m)	1270	<b>1197</b>	1164	1163
Sulfur	ppm	ASTM D5185(m)	2060	<b>2680</b>	2515	2739
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

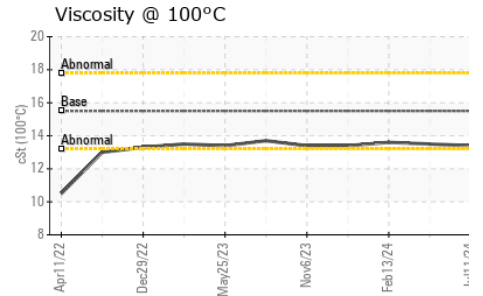
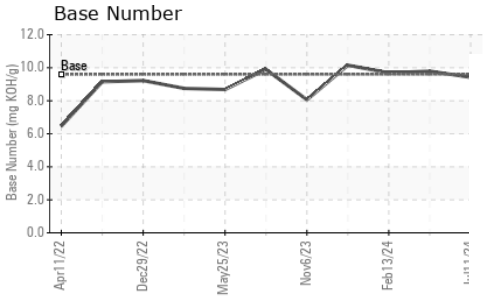
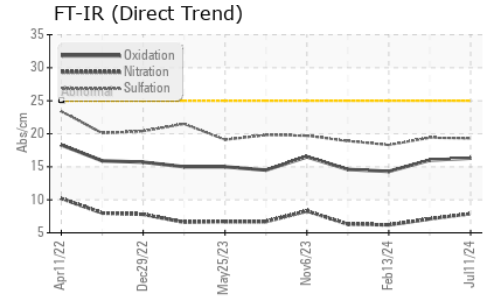
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	<b>3</b>	2	3
Sodium	ppm	ASTM D5185(m)		<b>1</b>	1	1
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	3	4

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.2</b>	0.2	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.9</b>	7.1	6.2
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>19.3</b>	19.4	18.3



# OIL ANALYSIS REPORT

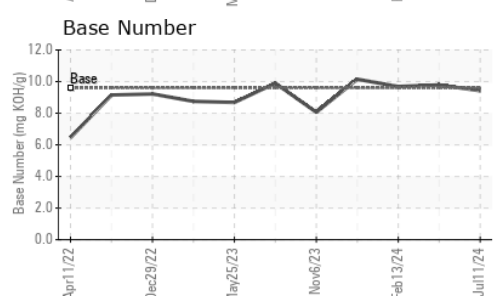
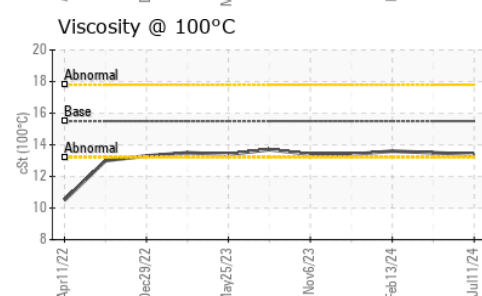
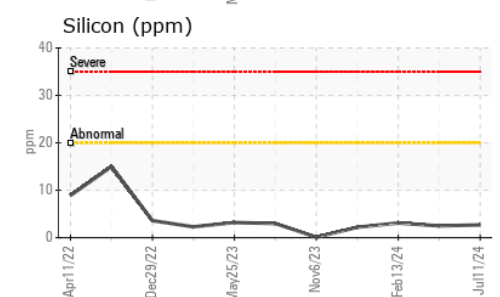
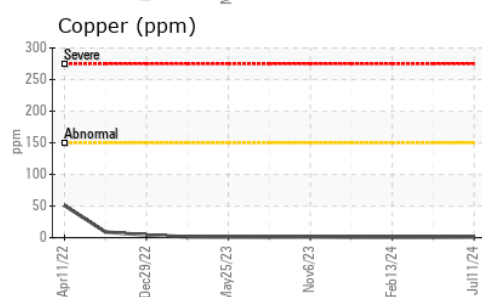
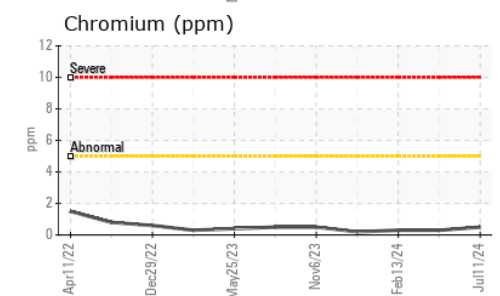
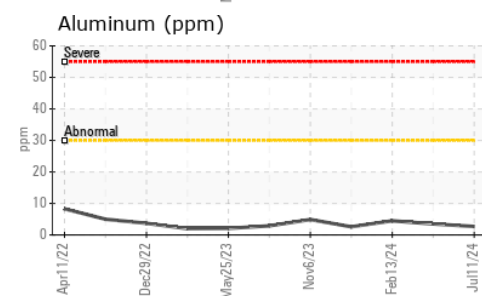
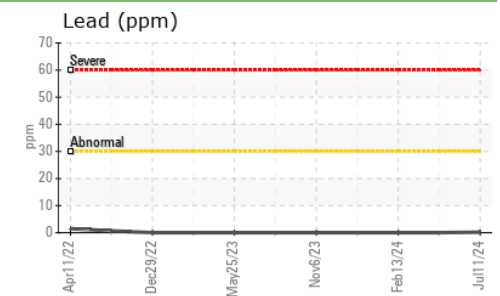
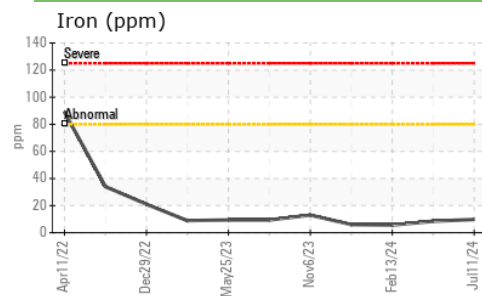


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>16.3</b>	16.0	14.3
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	<b>9.42</b>	9.79	9.69

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>13.4</b>	13.5	13.6

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 550 - Rocky View County**  
**Sample No.** : GFL0128175 **Received** : 16 Jul 2024 **220 Carmek Blvd**  
**Lab Number** : **02648044** **Tested** : 17 Jul 2024 **Rocky View County, AB**  
**Unique Number** : 5813596 **Diagnosed** : 17 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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**F: (403)369-6163**