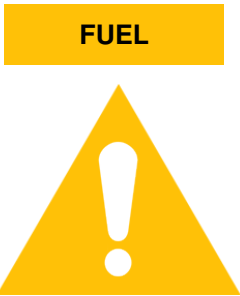
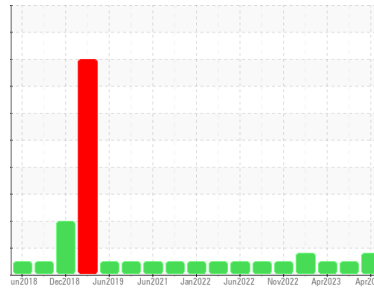




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**201073**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON HP 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

Metal levels are typical for a new component breaking in.

### 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>GFL0117269</b>	GFL0084289	GFL0077576
Sample Date	Client Info		<b>24 Apr 2024</b>	21 Jul 2023	24 Apr 2023
Machine Age	kms	Client Info	<b>724</b>	244358	9095
Oil Age	kms	Client Info	<b>724</b>	0	459
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>MARGINAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>80	<b>67</b>	21	22
Chromium	ppm	ASTM D5185(m)	>5	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>16</b>	9	15
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>150	<b>2</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)	0	<b>3</b>	3	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>60</b>	58	58
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>952</b>	958	939
Calcium	ppm	ASTM D5185(m)	1070	<b>1054</b>	1072	1111
Phosphorus	ppm	ASTM D5185(m)	1150	<b>963</b>	1034	1061
Zinc	ppm	ASTM D5185(m)	1270	<b>1173</b>	1196	1181
Sulfur	ppm	ASTM D5185(m)	2060	<b>2209</b>	2445	2523
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

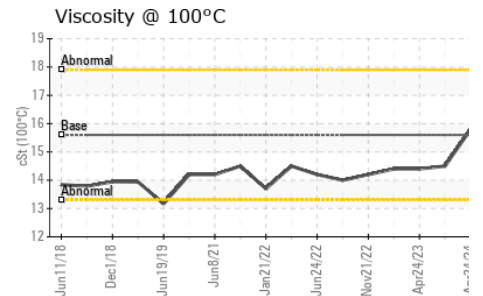
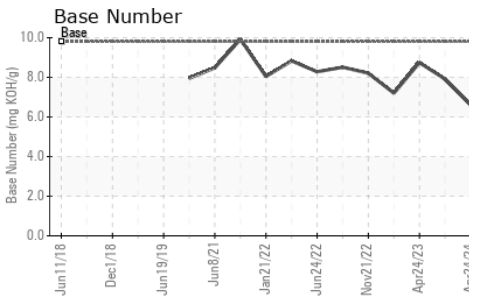
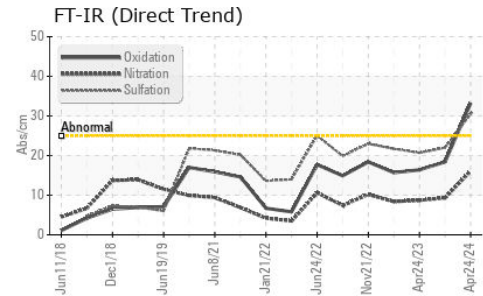
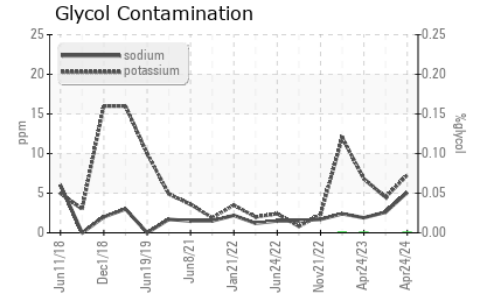
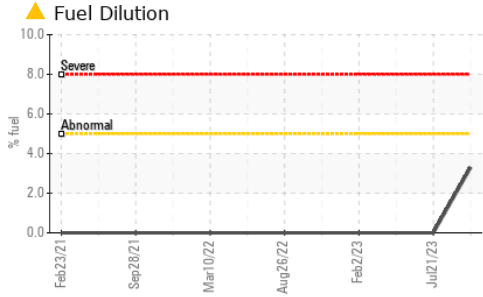
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	<b>6</b>	10	5
Sodium	ppm	ASTM D5185(m)		<b>5</b>	3	2
Potassium	ppm	ASTM D5185(m)	>20	<b>7</b>	4	7
Fuel	%	ASTM D7593*	>5	<b>▲ 3.3</b>	<1.0	<1.0
Glycol	%	ASTM D7922*		<b>0.0</b>	NEG	0.0

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>1.7</b>	0.6	0.8
Nitration	Abs/cm	ASTM D7624*	>20	<b>16.1</b>	9.3	8.7
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>30.5</b>	22.0	20.7



# OIL ANALYSIS REPORT

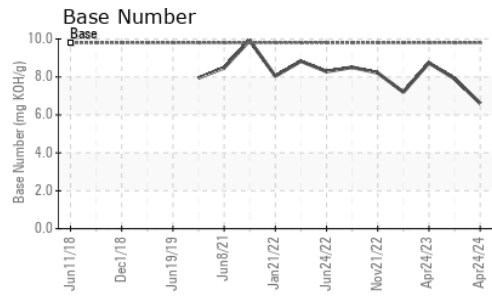
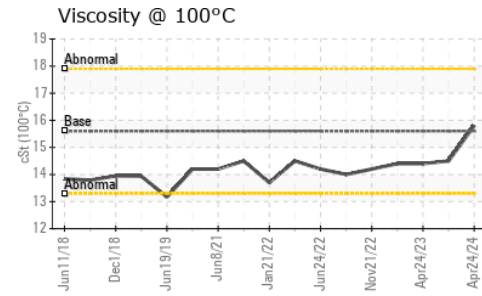
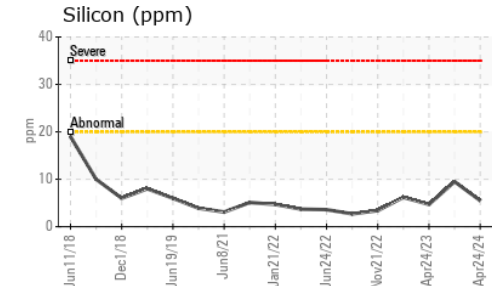
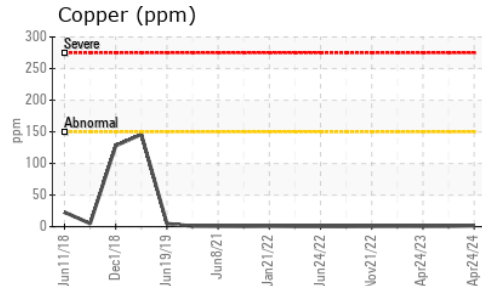
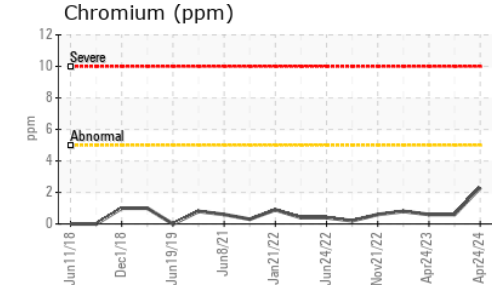
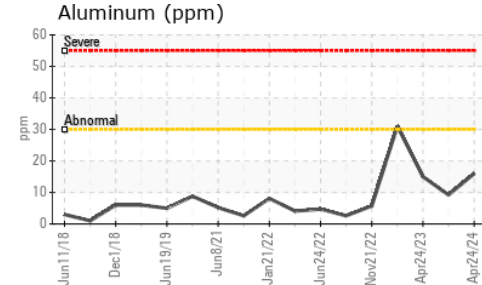
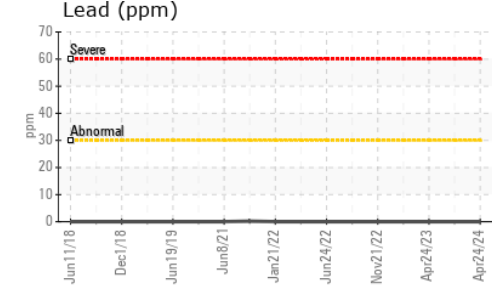
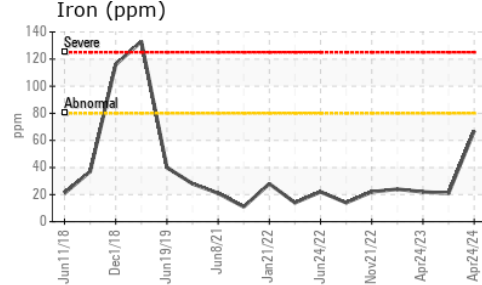


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>33.2</b>	18.4	16.4
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	<b>6.61</b>	7.91	8.74

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>15.8</b>	14.5	14.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0117269  
**Lab Number** : 02632479  
**Unique Number** : 5773632  
**Test Package** : MOB 2 ( Additional Tests : FUELDILUTION, Glycol, PercentFuel )

**GFL Environmental - 550 - Rocky View County**  
 220 Carmek Blvd  
 Rocky View County, AB  
 CA T1X 1X1  
 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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