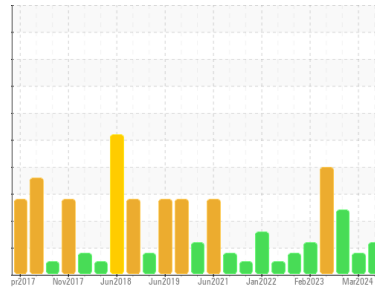




# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id

**7824**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 10W30 (--- LTR)**

## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

### Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0119009</b>	GFL0102621	GFL0101741
Sample Date	Client Info		<b>31 May 2024</b>	09 Mar 2024	26 Dec 2023
Machine Age	hrs	Client Info	<b>24144</b>	23698	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
Sample Status			<b>ABNORMAL</b>	MARGINAL	SEVERE

## 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)	>110	<b>15</b>	11	37
Chromium	ppm	ASTM D5185(m)	>4	<b>1</b>	<1	3
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	1	2
Lead	ppm	ASTM D5185(m)	>45	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>85	<b>&lt;1</b>	<1	2
Tin	ppm	ASTM D5185(m)	>4	<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)	2	<b>2</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>55</b>	59	47
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	950	<b>877</b>	948	743
Calcium	ppm	ASTM D5185(m)	1050	<b>974</b>	1063	822
Phosphorus	ppm	ASTM D5185(m)	995	<b>939</b>	959	785
Zinc	ppm	ASTM D5185(m)	1180	<b>1084</b>	1156	917
Sulfur	ppm	ASTM D5185(m)	2600	<b>2238</b>	2437	2024
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

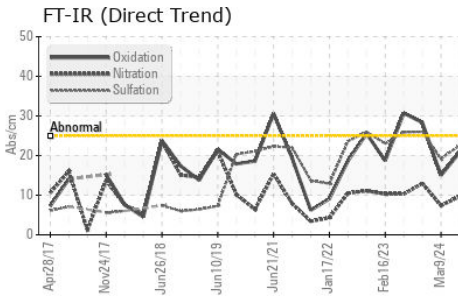
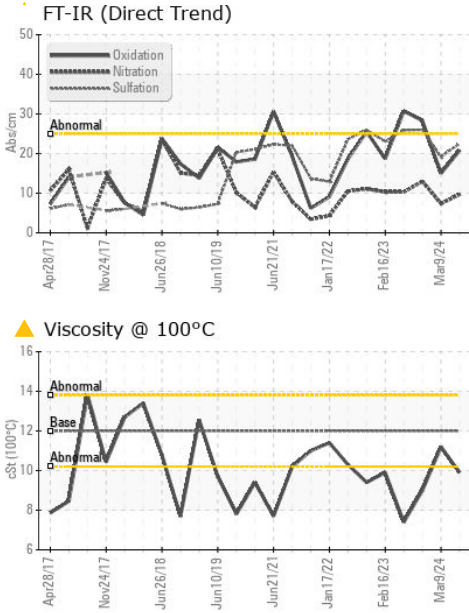
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>30	<b>4</b>	6	6
Sodium	ppm	ASTM D5185(m)		<b>6</b>	4	7
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	1
Fuel	%	ASTM D7593*	>5	<b>▲ 7.2</b>	▲ 2.1	▲ 14.8

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>1</b>	0.4	1.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.7</b>	7.4	13.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.5</b>	19.2	26.0



# OIL ANALYSIS REPORT

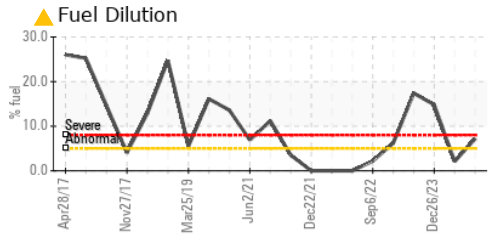
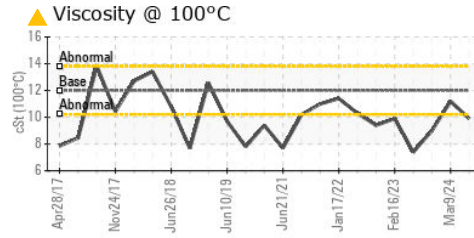
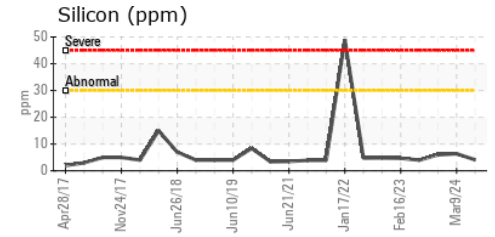
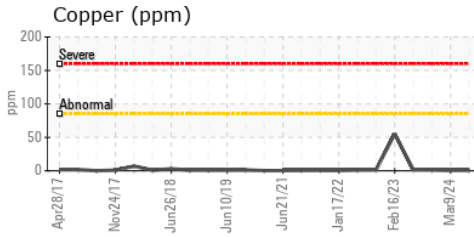
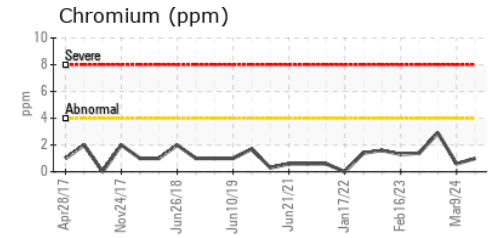
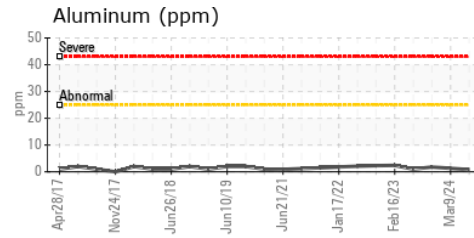
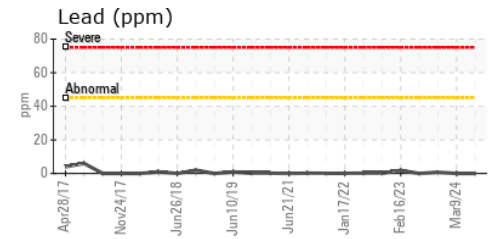
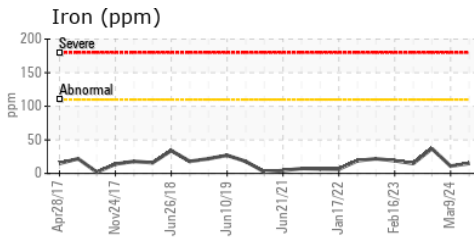


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	20.8	15.0	28.3

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	▲ 9.9	11.2	▲ 9

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 554 - Edmonton SW**  
**Sample No.** : GFL0119009 **Received** : 05 Jun 2024 **8409 -15th Street NW**  
**Lab Number** : 02639776 **Tested** : 07 Jun 2024 **Edmonton, AB**  
**Unique Number** : 5788938 **Diagnosed** : 07 Jun 2024 - Wes Davis **CA T6P 0B8**  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel, Visual ) **Contact: Tim Greig**  
**tgreg@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.