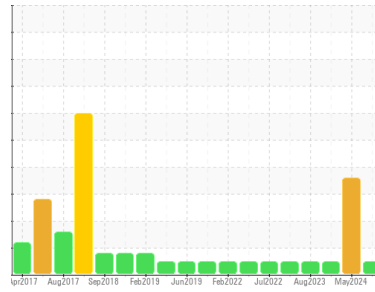




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**4531**

Component

**Diesel Engine**

Fluid

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

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

### Fluid Condition

The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0112528</b>	GFL0119006	GFL0102635
Sample Date	Client Info		<b>30 May 2024</b>	23 May 2024	04 Jan 2024
Machine Age	kms	Client Info	<b>209578</b>	24393	23913
Oil Age	kms	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	ABNORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	0.0	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>110	<b>6</b>	31	4
Chromium	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	4	0
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)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	3	2
Lead	ppm	ASTM D5185(m)	>45	<b>0</b>	4	<1
Copper	ppm	ASTM D5185(m)	>85	<b>13</b>	90	1
Tin	ppm	ASTM D5185(m)	>4	<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)	2	<b>2</b>	3	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>56</b>	67	59
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185(m)	950	<b>889</b>	851	931
Calcium	ppm	ASTM D5185(m)	1050	<b>977</b>	947	1001
Phosphorus	ppm	ASTM D5185(m)	995	<b>964</b>	881	991
Zinc	ppm	ASTM D5185(m)	1180	<b>1084</b>	1043	1124
Sulfur	ppm	ASTM D5185(m)	2600	<b>2385</b>	2025	2748
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

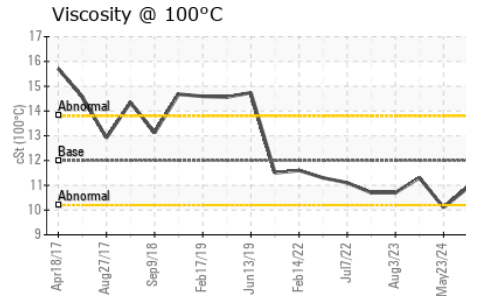
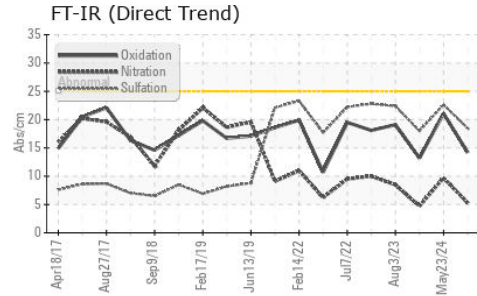
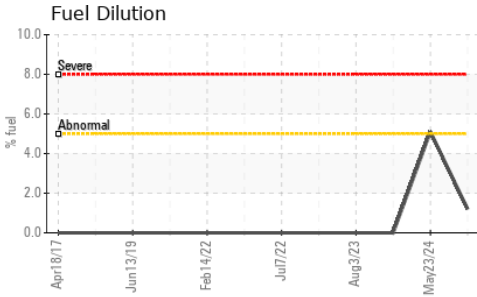
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>30	<b>2</b>	6	5
Sodium	ppm	ASTM D5185(m)		<b>42</b>	322	68
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	15	4
Fuel	%	ASTM D7593*	>5	<b>1.2</b>	5.1	<1.0

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0</b>	0.5	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.3</b>	9.7	4.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.5</b>	22.6	18.0



# OIL ANALYSIS REPORT

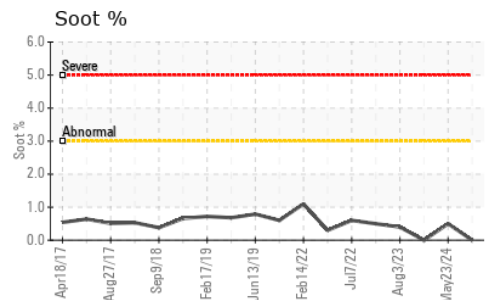
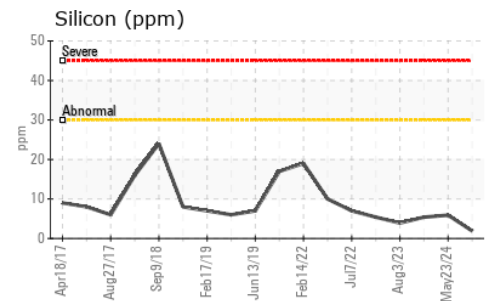
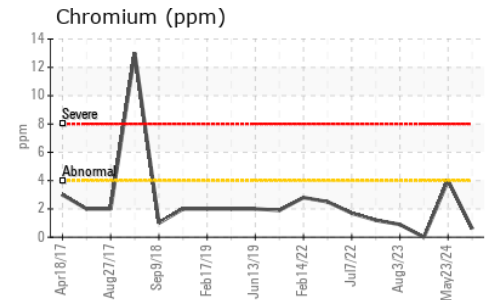
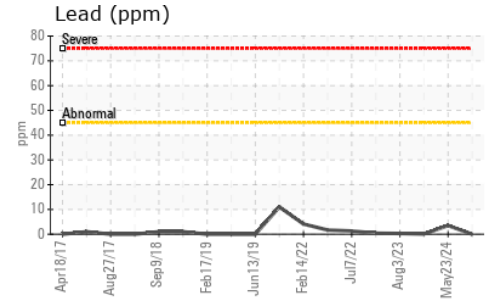
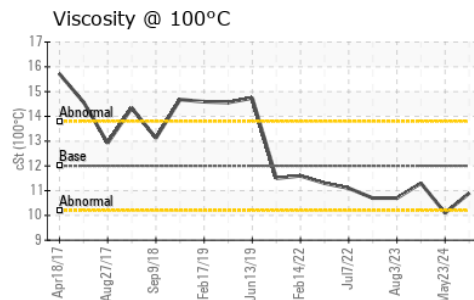
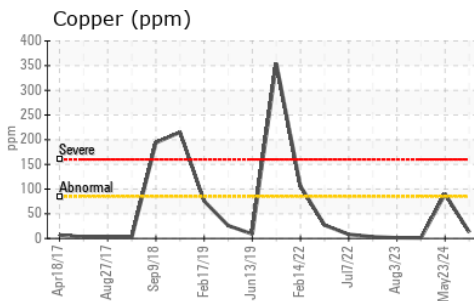
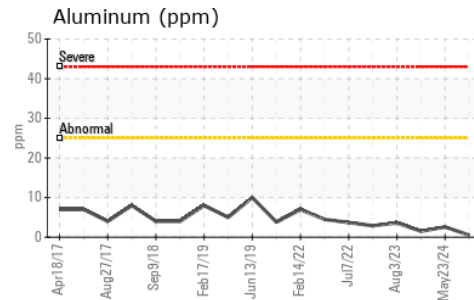
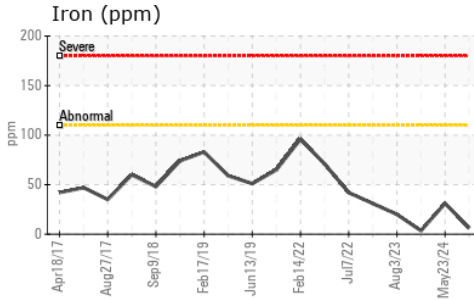


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>14.2</b>	21.1	13.2

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)	12.00	<b>10.9</b>	10.1	11.3

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0112528  
**Lab Number** : 02639775  
**Unique Number** : 5788937  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel )

**GFL Environmental - 554 - Edmonton SW**  
 8409 -15th Street NW  
 Edmonton, AB  
 CA T6P 0B8

**Received** : 05 Jun 2024  
**Tested** : 06 Jun 2024  
**Diagnosed** : 06 Jun 2024 - Wes Davis

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.

Contact: Tim Greig  
 tgreig@gflenv.com  
 T: (780)231-0521  
 F: