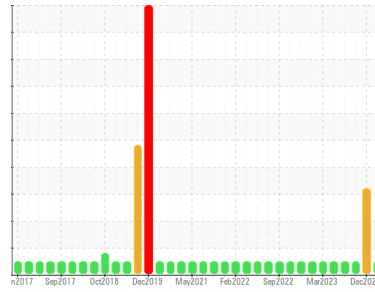




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**7178**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (18 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

Fuel content negligible. There is no indication of any contamination 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>GFL0126246</b>	GFL0097535	GFL0097547
Sample Date	Client Info		<b>16 Jul 2024</b>	19 Dec 2023	19 Oct 2023
Machine Age	hrs	Client Info	<b>24114</b>	22268	21709
Oil Age	hrs	Client Info	<b>1260</b>	559	543
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	SEVERE	NORMAL

## 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) >75	<b>57</b>	▲ 80	29
Chromium	ppm	ASTM D5185(m) >5	<b>2</b>	3	<1
Nickel	ppm	ASTM D5185(m) >4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >15	<b>4</b>	5	9
Lead	ppm	ASTM D5185(m) >25	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m) >100	<b>2</b>	2	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) 0	<b>4</b>	3	5
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m) 60	<b>62</b>	50	60
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185(m) 1010	<b>974</b>	786	946
Calcium	ppm	ASTM D5185(m) 1070	<b>1072</b>	890	1051
Phosphorus	ppm	ASTM D5185(m) 1150	<b>1023</b>	808	1000
Zinc	ppm	ASTM D5185(m) 1270	<b>1226</b>	978	1180
Sulfur	ppm	ASTM D5185(m) 2060	<b>2297</b>	1991	2473
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

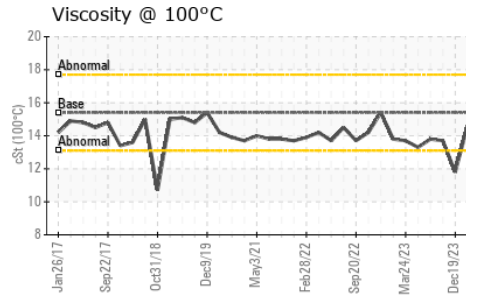
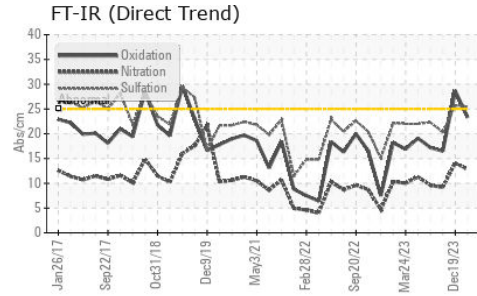
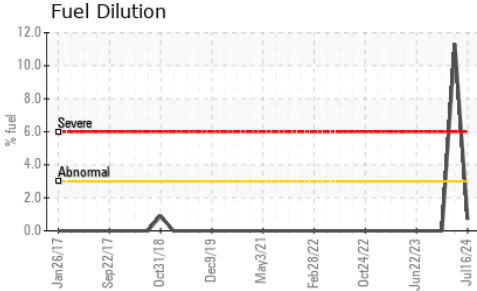
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>5</b>	7	5
Sodium	ppm	ASTM D5185(m)	<b>6</b>	8	6
Potassium	ppm	ASTM D5185(m) >20	<b>4</b>	6	19
Fuel	%	ASTM D7593* >3.0	<b>0.7</b>	▲ 11.3	<1.0

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >6	<b>1.5</b>	1	0.7
Nitration	Abs/cm	ASTM D7624* >20	<b>12.8</b>	14.1	9.2
Sulfation	Abs.1mm	ASTM D7415* >30	<b>25.5</b>	25.7	20.3



# OIL ANALYSIS REPORT

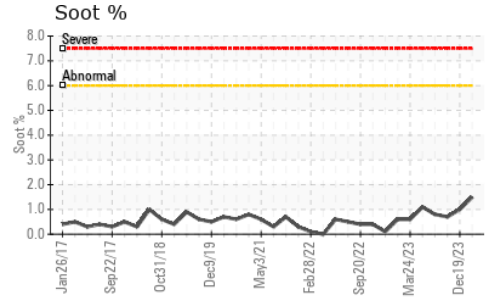
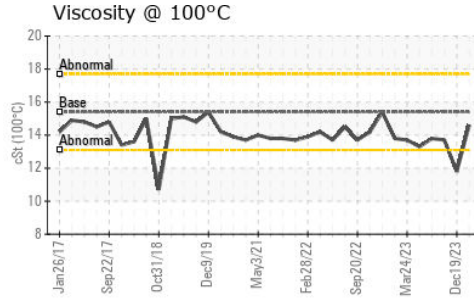
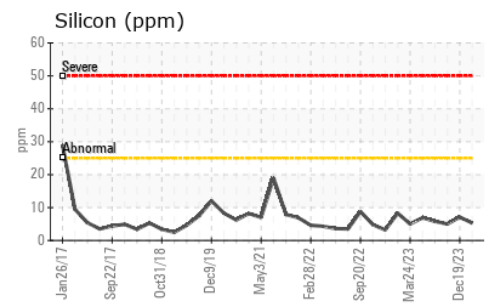
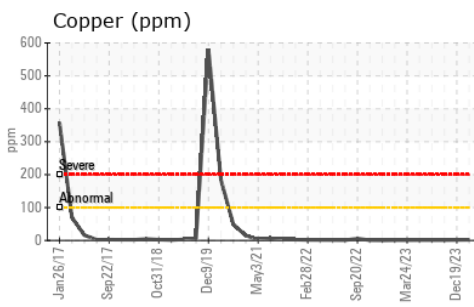
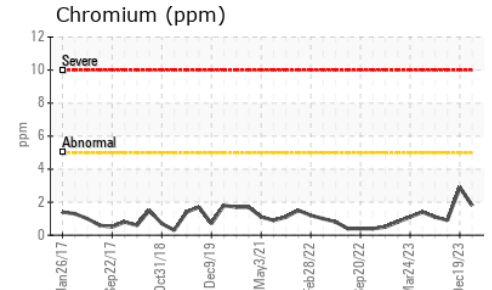
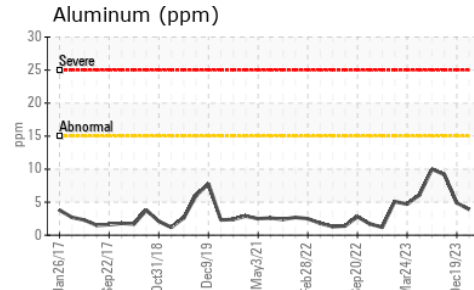
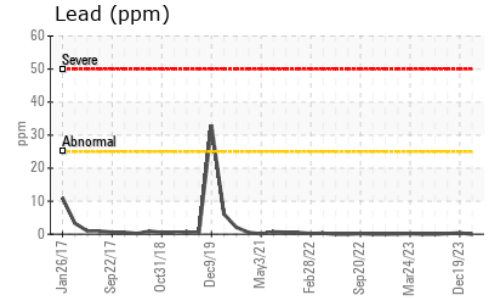
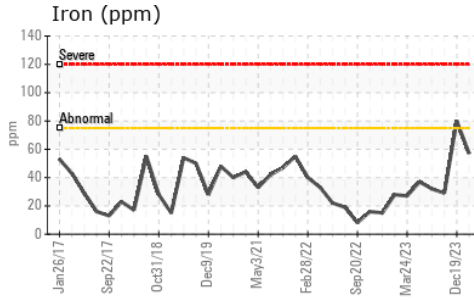


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>23.3</b>	28.7	16.5

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)	15.4	<b>14.6</b>	▲ 11.8	13.7

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0126246 **Received** : 18 Jul 2024  
**Lab Number** : **02648584** **Tested** : 19 Jul 2024  
**Unique Number** : 5814136 **Diagnosed** : 19 Jul 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel )

**GFL Environmental - 216**  
 15 Bermondsey Road  
 Toronto, ON  
 CA M4B 1Y9  
 Contact: Tom Hatzioannidis  
 thatzioannidis@gflenv.com  
 T: (416)678-9340  
 F:

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.