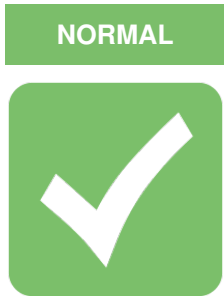
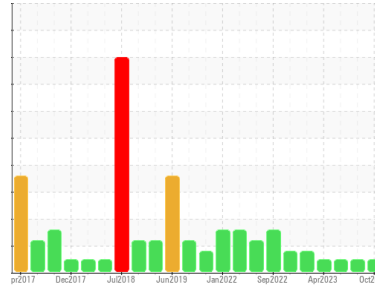




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**4532**

Component  
**Diesel Engine**

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

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0093895</b>	GFL0085964	GFL0072816
Sample Date	Client Info		<b>05 Oct 2023</b>	19 Jul 2023	23 May 2023
Machine Age	hrs	Client Info	<b>26233</b>	25698	25373
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	Changed	N/A
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
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>110	<b>66</b>	40	32
Chromium	ppm	ASTM D5185(m)	>4	<b>2</b>	2	1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>4</b>	3	3
Lead	ppm	ASTM D5185(m)	>45	<b>2</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>85	<b>2</b>	1	<1
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<1
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>7</b>	2	1
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>62</b>	58	57
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>939</b>	965	934
Calcium	ppm	ASTM D5185(m)	1050	<b>1071</b>	1012	1040
Phosphorus	ppm	ASTM D5185(m)	995	<b>969</b>	1047	1029
Zinc	ppm	ASTM D5185(m)	1180	<b>1171</b>	1173	1134
Sulfur	ppm	ASTM D5185(m)	2600	<b>2239</b>	2385	2430
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>9</b>	7	6
Sodium	ppm	ASTM D5185(m)		<b>8</b>	6	3
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1

## INFRA-RED

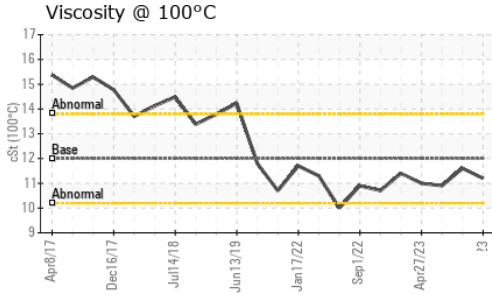
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.9</b>	0.7	0.6
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.7</b>	10.7	9.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>27.7</b>	24.2	22.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>30.0</b>	22.7	21.8



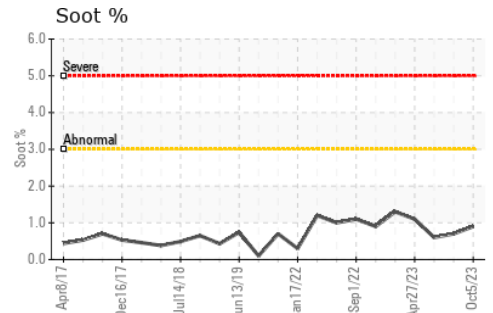
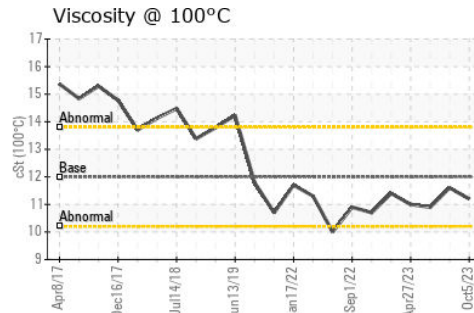
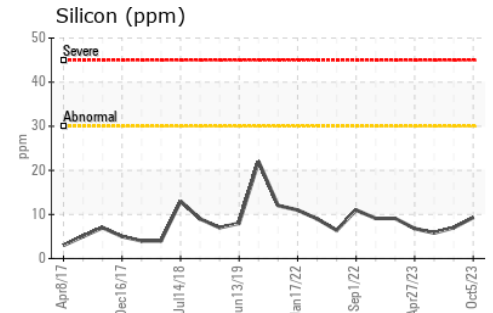
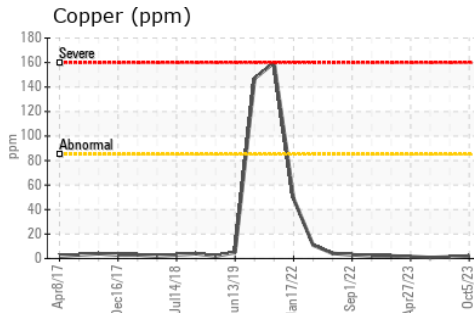
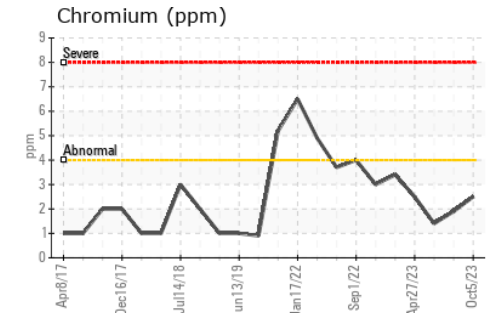
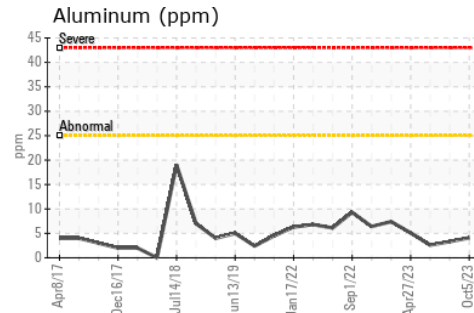
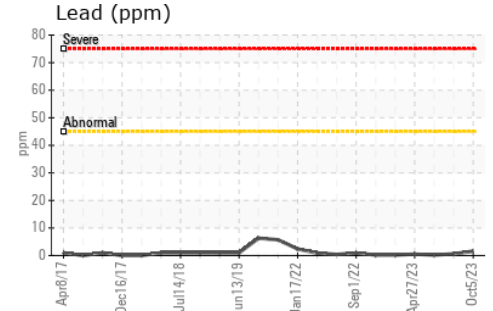
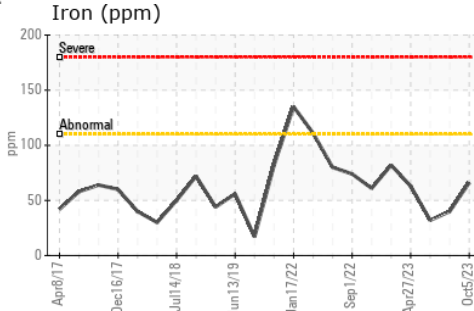
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.2	11.6

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 554 - Edmonton SW**  
**Sample No.** : GFL0093895 **Received** : 06 Oct 2023 **8409 - 15th Street NW**  
**Lab Number** : 02587532 **Diagnosed** : 06 Oct 2023 **Edmonton, AB**  
**Unique Number** : 5656598 **Diagnostician** : Kevin Marson **CA T6P 0B8**  
**Test Package** : MOB 1 **Contact:** Tim Greig **tgreig@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.

T:  
F: