



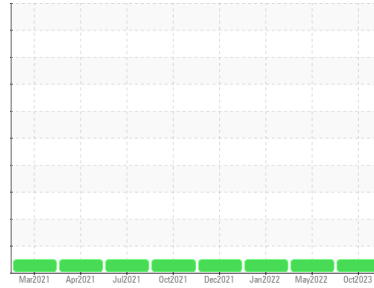
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**OR896**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**



## 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>GFL0093894</b>	GFL0038961	GFL0041409
Sample Date	Client Info		<b>01 Oct 2023</b>	04 May 2022	17 Jan 2022
Machine Age	hrs	Client Info	<b>20370</b>	15917	0
Oil Age	hrs	Client Info	<b>0</b>	500	0
Oil Changed	Client Info		<b>N/A</b>	Not Changd	Changed
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) >100	<b>4</b>	19	8
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m) >25	<b>&lt;1</b>	2	2
Lead	ppm	ASTM D5185(m) >40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185(m) >330	<b>&lt;1</b>	3	<1
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	<1	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>6</b>	3	3
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 50	<b>59</b>	60	59
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 950	<b>943</b>	974	994
Calcium	ppm	ASTM D5185(m) 1050	<b>1049</b>	1043	1040
Phosphorus	ppm	ASTM D5185(m) 995	<b>1007</b>	1019	1074
Zinc	ppm	ASTM D5185(m) 1180	<b>1148</b>	1209	1217
Sulfur	ppm	ASTM D5185(m) 2600	<b>2606</b>	2505	2679
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>3</b>	4	3
Sodium	ppm	ASTM D5185(m)	<b>2</b>	14	6
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	2	1

## INFRA-RED

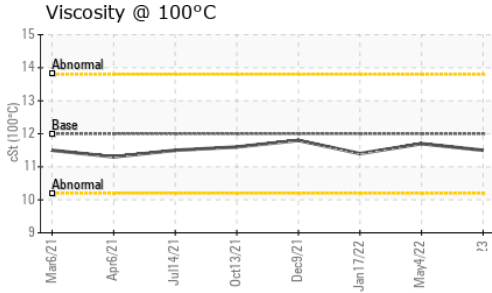
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0.2</b>	1.3	0.9
Nitration	Abs/cm	ASTM D7624* >20	<b>4.8</b>	7.0	7.0
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>18.1</b>	22.1	20.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>13.1</b>	13.9	14.1



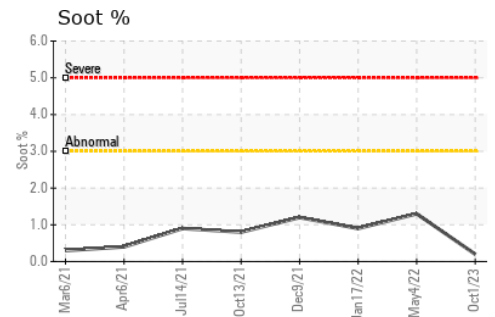
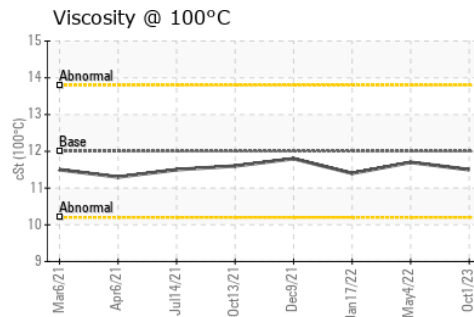
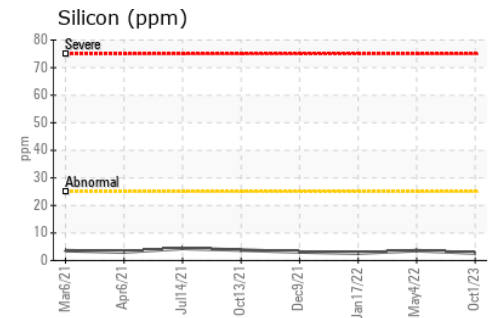
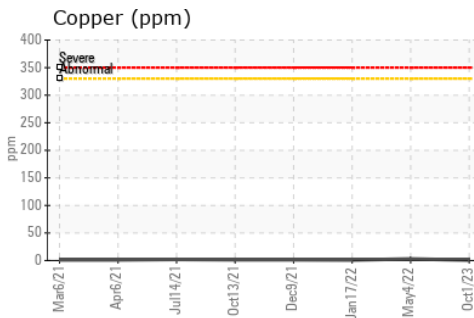
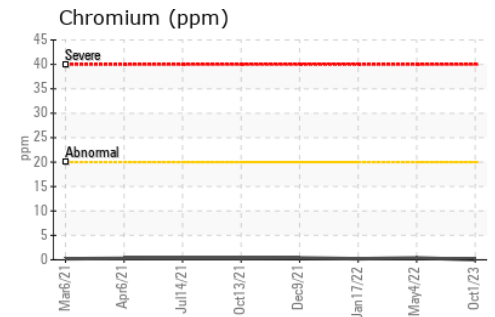
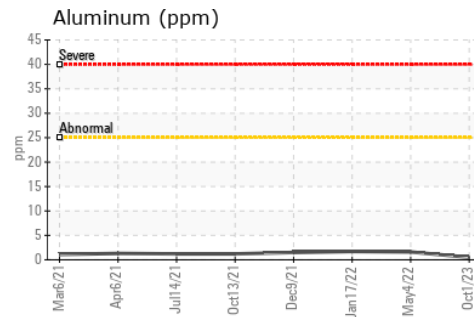
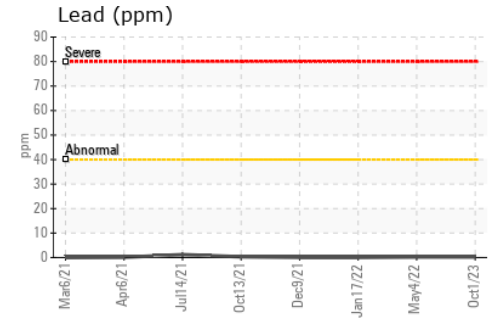
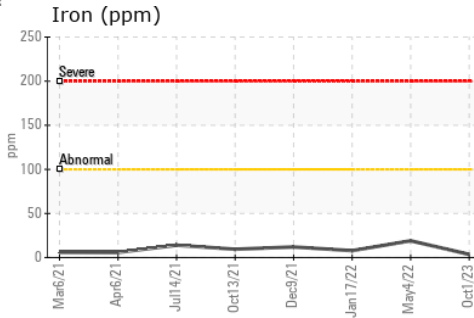
# OIL ANALYSIS REPORT



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>11.5</b>	11.7	11.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW  
**Sample No.** : GFL0093894 **Received** : 06 Oct 2023  
**Lab Number** : 02587530 **Diagnosed** : 06 Oct 2023  
**Unique Number** : 5656596 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

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

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