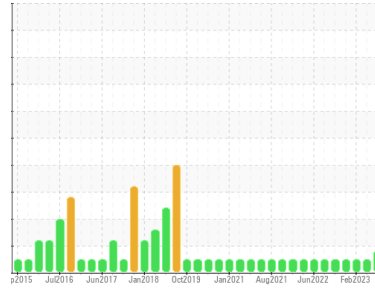




# PROBLEM SUMMARY

Sample Rating Trend



WEAR



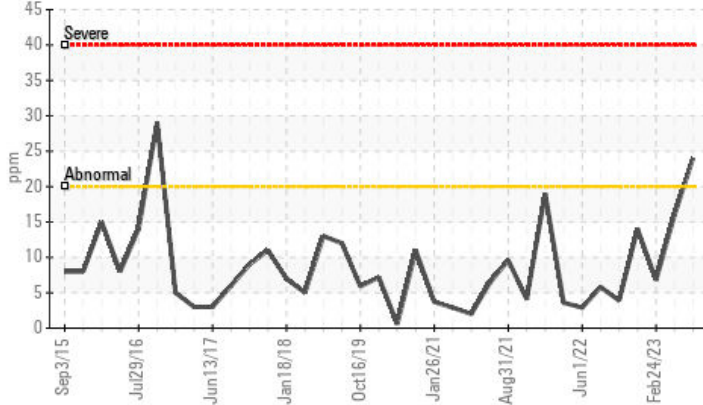
Machine Id  
**10619E**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (6 GAL)**

## COMPONENT CONDITION SUMMARY

▲ Aluminum (ppm)



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: Oil change )

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	NORMAL
Aluminum	ppm	ASTM D5185m	>20	▲ 24	16	7

Customer Id: GFL331  
Sample No.: GFL0071818  
Lab Number: 05897175  
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Sean Felton +1 919-379-4092  
[sfelton@wearcheckusa.com](mailto:sfelton@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS

### 25 Apr 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



### 24 Feb 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



### 02 Feb 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

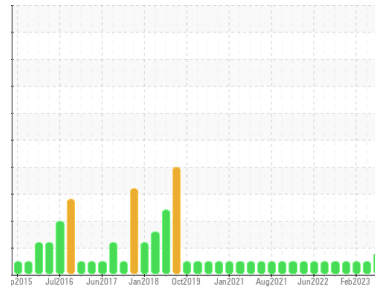
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**10619E**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (6 GAL)**

## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: Oil change )

### ▲ Wear

The aluminum level is abnormal. All other component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0071818</b>	GFL0071840	GFL0071811
Sample Date	Client Info		<b>12 Jul 2023</b>	25 Apr 2023	24 Feb 2023
Machine Age	hrs	Client Info	<b>8883</b>	8308	7906
Oil Age	hrs	Client Info	<b>575</b>	548	146
Oil Changed	Client Info		<b>Changed</b>	Changed	Not Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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 D5185m >90	<b>29</b>	27	9
Chromium	ppm	ASTM D5185m >20	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>▲ 24</b>	16	7
Lead	ppm	ASTM D5185m >40	<b>1</b>	0	<1
Copper	ppm	ASTM D5185m >330	<b>23</b>	33	2
Tin	ppm	ASTM D5185m >15	<b>3</b>	1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>6</b>	8	10
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>61</b>	63	62
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>948</b>	946	876
Calcium	ppm	ASTM D5185m 1070	<b>1230</b>	1197	1195
Phosphorus	ppm	ASTM D5185m 1150	<b>996</b>	1016	1017
Zinc	ppm	ASTM D5185m 1270	<b>1301</b>	1303	1252
Sulfur	ppm	ASTM D5185m 2060	<b>3133</b>	3199	3173

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	4	4
Sodium	ppm	ASTM D5185m	<b>4</b>	2	1
Potassium	ppm	ASTM D5185m >20	<b>4</b>	0	<1

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	<b>1.7</b>	1.4	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.8</b>	10.0	6.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.9</b>	21.3	19.0

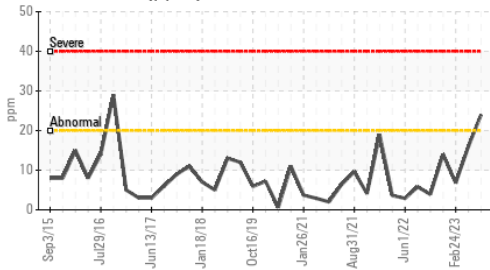
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.9</b>	18.1	14.2
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.0</b>	6.4	8.8

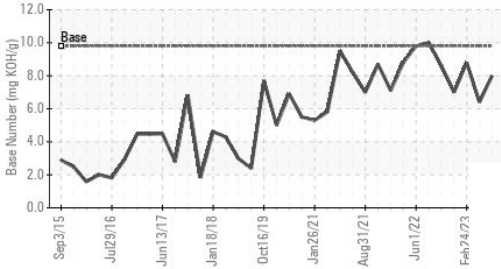


# OIL ANALYSIS REPORT

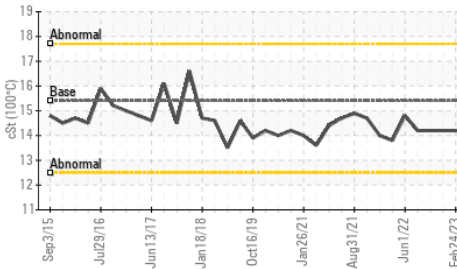
## ▲ Aluminum (ppm)



## Base Number



## Viscosity @ 100°C

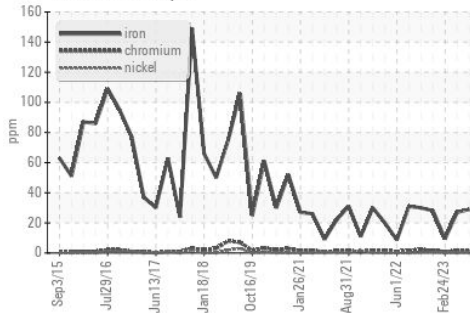


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

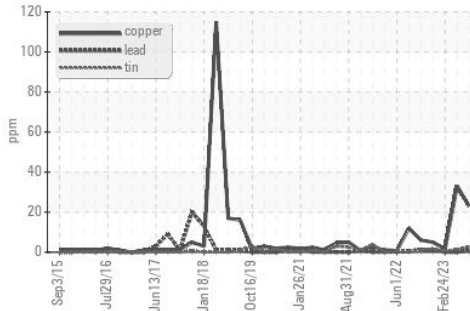
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.3	14.1

## GRAPHS

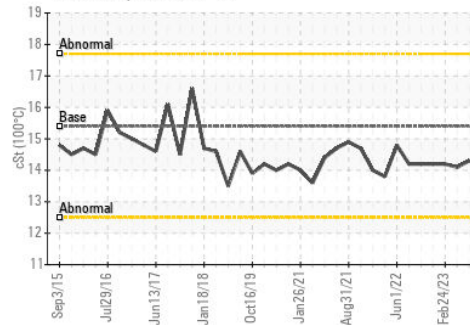
### Ferrous Alloys



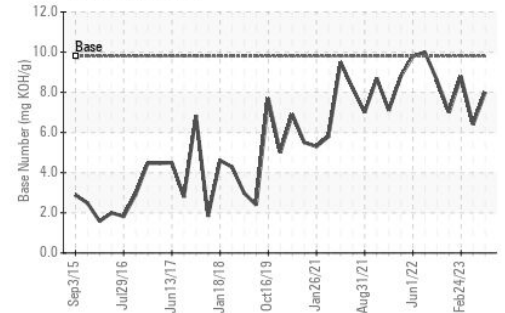
### Non-ferrous Metals



### Viscosity @ 100°C



### Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0071818  
 Lab Number : 05897175  
 Unique Number : 10552985  
 Test Package : FLEET

**GFL Environmental - 331 - Columbus**  
 180 Ada Moore Rd  
 Columbus, NC  
 US 28722  
 Contact: Matt Segars  
 matt.segars@gflenv.com  
 T: (800)207-6618  
 F: (252)617-2494

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)