



# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id  
**KENWORTH 427209-SW4842**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

Light fuel dilution occurring.

### ▲ Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0095393</b>	---	---
Sample Date	Client Info	<b>11 Jan 2024</b>	---	---
Machine Age	hrs Client Info	<b>9653</b>	---	---
Oil Age	hrs Client Info	<b>600</b>	---	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>20</b>	---	---
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	---	---
Nickel	ppm ASTM D5185m >4	<b>&lt;1</b>	---	---
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Silver	ppm ASTM D5185m >3	<b>0</b>	---	---
Aluminum	ppm ASTM D5185m >20	<b>1</b>	---	---
Lead	ppm ASTM D5185m >40	<b>6</b>	---	---
Copper	ppm ASTM D5185m >330	<b>2</b>	---	---
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	---	---
Vanadium	ppm ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>0</b>	---	---
Barium	ppm ASTM D5185m 0	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185m 60	<b>45</b>	---	---
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	---	---
Magnesium	ppm ASTM D5185m 1010	<b>▲ 133</b>	---	---
Calcium	ppm ASTM D5185m 1070	<b>▲ 1938</b>	---	---
Phosphorus	ppm ASTM D5185m 1150	<b>923</b>	---	---
Zinc	ppm ASTM D5185m 1270	<b>1133</b>	---	---
Sulfur	ppm ASTM D5185m 2060	<b>2903</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>5</b>	---	---
Sodium	ppm ASTM D5185m	<b>0</b>	---	---
Potassium	ppm ASTM D5185m >20	<b>2</b>	---	---
Fuel	% ASTM D3524 >5	<b>▲ 4.8</b>	---	---

## INFRA-RED

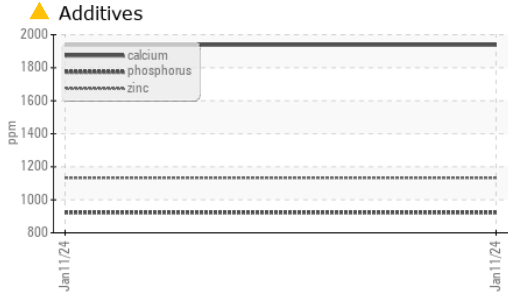
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.5</b>	---	---
Nitration	Abs/cm *ASTM D7624 >20	<b>7.9</b>	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.5</b>	---	---

## FLUID DEGRADATION

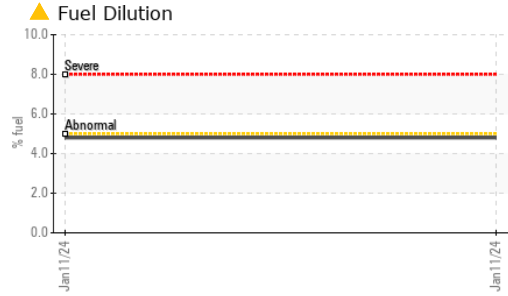
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>11.7</b>	---	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>6.1</b>	---	---



# OIL ANALYSIS REPORT

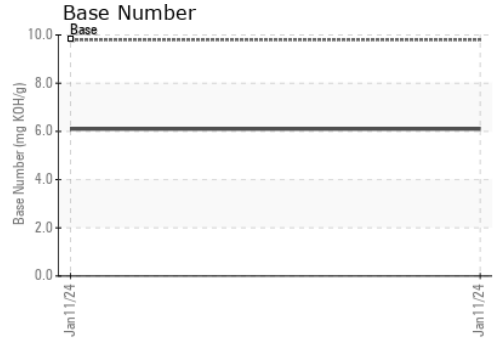
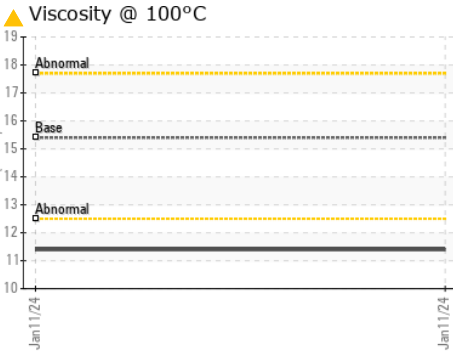
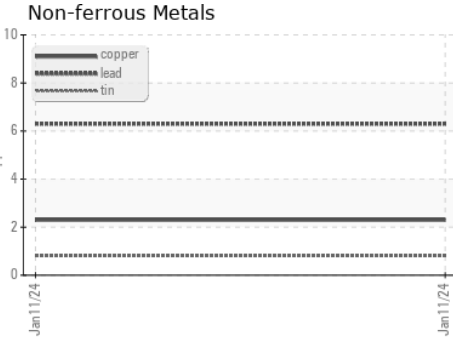
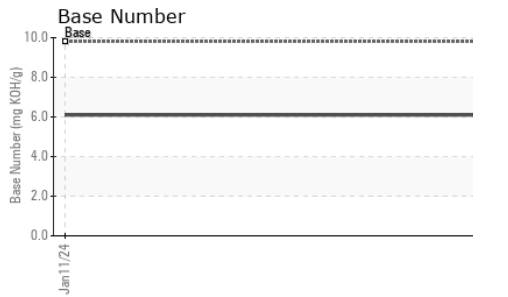
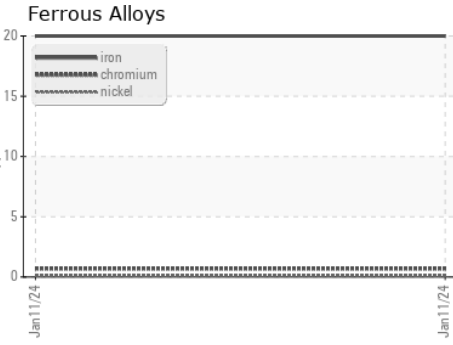
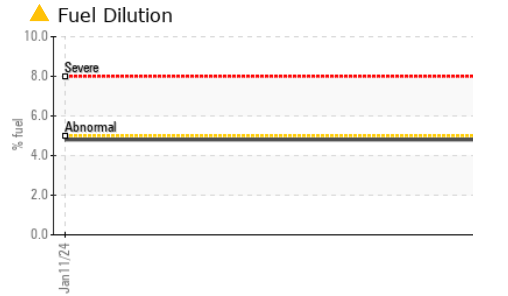


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.4	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0095393 **Received** : 24 Jan 2024  
**Lab Number** : 06069348 **Diagnosed** : 25 Jan 2024  
**Unique Number** : 10846025 **Diagnostician** : Wes Davis  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

**GFL Environmental - 982 - Texas City Hauling**  
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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)