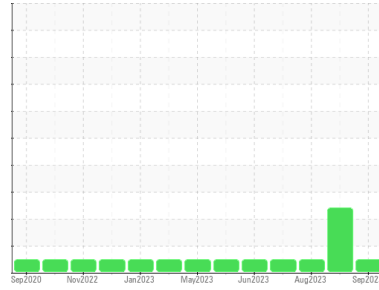




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**729069-362009**

Component  
**Diesel Engine**

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

## 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 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>GFL0090227</b>	GFL0083474	GFL0090242
Sample Date	Client Info		<b>13 Sep 2023</b>	26 Aug 2023	10 Aug 2023
Machine Age	hrs	Client Info	<b>12625</b>	12264	12480
Oil Age	hrs	Client Info	<b>150</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	SEVERE	NORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>13</b>	33	11
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>3</b>	8	0
Lead	ppm	ASTM D5185m >40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	2	2
Tin	ppm	ASTM D5185m >15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>&lt;1</b>	16	0
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m 60	<b>59</b>	36	59
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m 1010	<b>947</b>	454	910
Calcium	ppm	ASTM D5185m 1070	<b>1096</b>	1397	1084
Phosphorus	ppm	ASTM D5185m 1150	<b>1039</b>	629	1038
Zinc	ppm	ASTM D5185m 1270	<b>1269</b>	801	1233
Sulfur	ppm	ASTM D5185m 2060	<b>3087</b>	2283	3115

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	12	3
Sodium	ppm	ASTM D5185m	<b>7</b>	27	<1
Potassium	ppm	ASTM D5185m >20	<b>2</b>	7	1
Fuel	%	ASTM D3524 >5	<b>0.9</b>	16.5	<1.0

## INFRA-RED

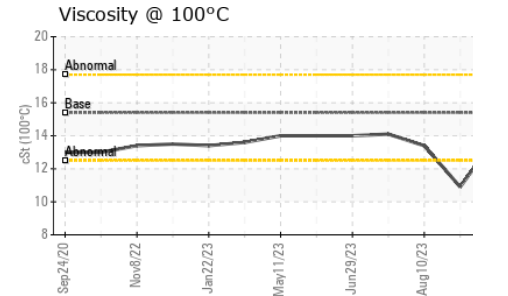
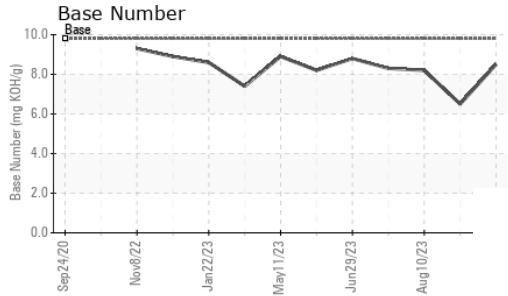
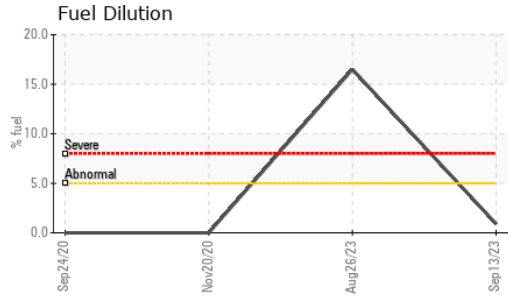
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.7</b>	2.3	0.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.9</b>	14.9	5.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.4</b>	26.7	17.9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.2</b>	25.8	13.7
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.5</b>	6.5	8.2



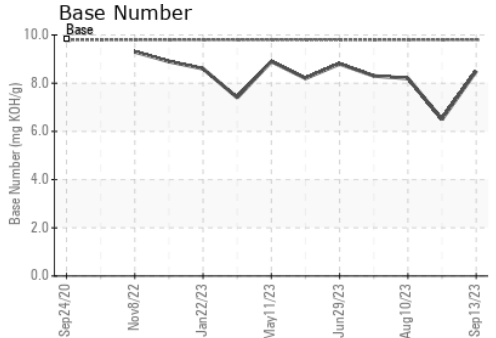
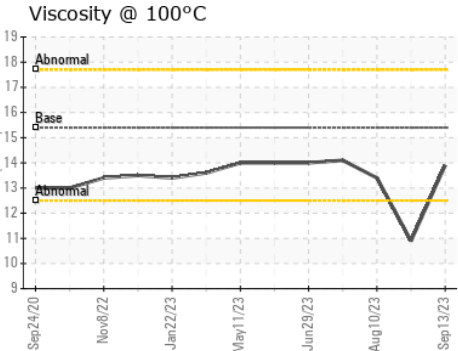
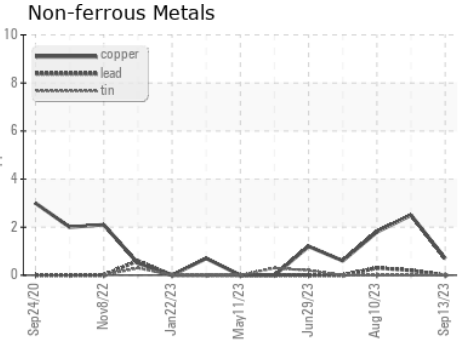
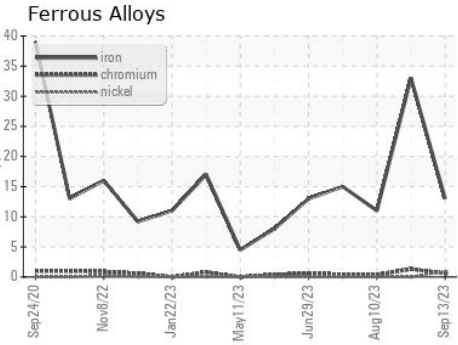
# OIL ANALYSIS REPORT



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	13.9	▲ 10.9

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0090227 **Received** : 18 Sep 2023  
**Lab Number** : 05953795 **Diagnosed** : 19 Sep 2023  
**Unique Number** : 10655008 **Diagnostician** : Wes Davis  
**Test Package** : FLEET ( Additional Tests: PercentFuel )

**GFL Environmental - 821 - Ozarks Hauling**  
 33924 Olath Drive  
 Lebanon, MO  
 US 65536  
 Contact: Landen Johnson  
 landen.johnson@gflenv.com  
 T: (417)664-0010  
 F:

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)