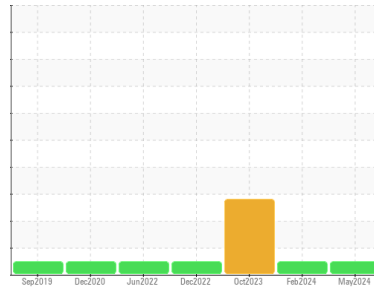




# OIL ANALYSIS REPORT

Area  
**(77J8TV)**  
 Machine Id  
**921042-205212**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (12 GAL)**

Sample Rating Trend



**NORMAL**



## 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 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>GFL0118241</b>	GFL0109206	GFL0090149
Sample Date	Client Info		<b>09 May 2024</b>	01 Feb 2024	05 Oct 2023
Machine Age	hrs	Client Info	<b>24048</b>	23746	23232
Oil Age	hrs	Client Info	<b>700</b>	700	600
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Changed
Sample Status			<b>NORMAL</b>	NORMAL	SEVERE

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	0.8	▲ 11.9
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >120	<b>12</b>	15	27
Chromium	ppm	ASTM D5185m >20	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185m >5	<b>2</b>	<1	0
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>1</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	3	8
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m >330	<b>2</b>	<1	3
Tin	ppm	ASTM D5185m >15	<b>1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	5
Barium	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>59</b>	66	52
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>949</b>	1012	786
Calcium	ppm	ASTM D5185m 1070	<b>1077</b>	1099	854
Phosphorus	ppm	ASTM D5185m 1150	<b>979</b>	1027	859
Zinc	ppm	ASTM D5185m 1270	<b>1229</b>	1306	1064
Sulfur	ppm	ASTM D5185m 2060	<b>2974</b>	3052	2923

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	6	9
Sodium	ppm	ASTM D5185m	<b>3</b>	30	41
Potassium	ppm	ASTM D5185m >20	<b>3</b>	4	7

## INFRA-RED

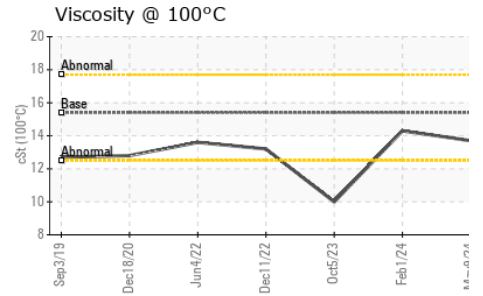
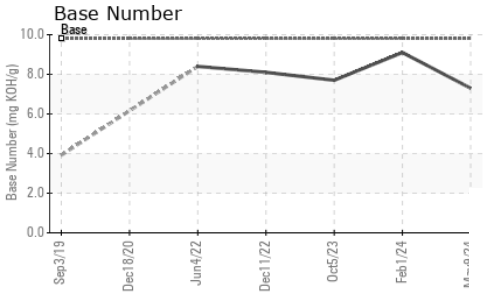
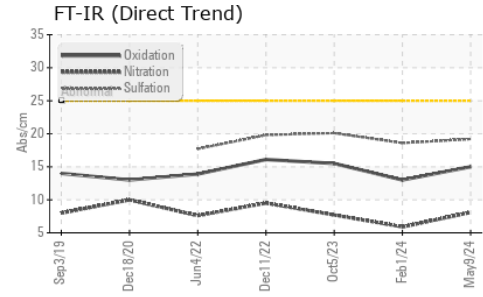
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.6</b>	0.7	0.9
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.1</b>	5.9	7.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.2</b>	18.6	20.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.0</b>	13.0	15.5
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.3</b>	9.1	7.7



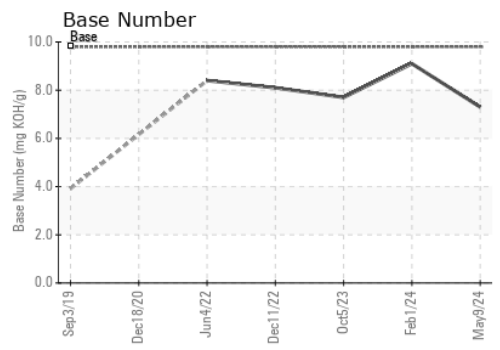
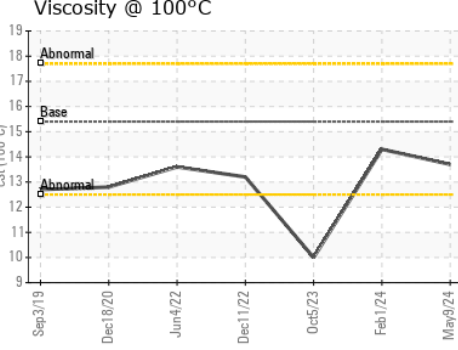
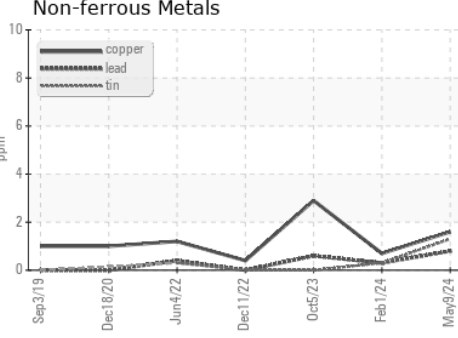
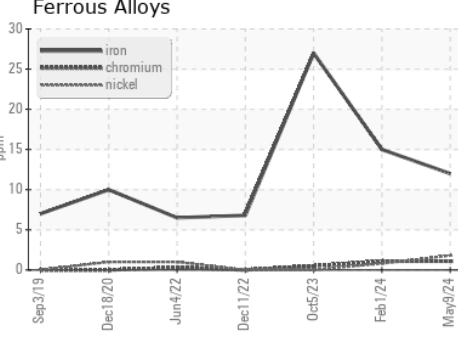
# OIL ANALYSIS REPORT



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	13.7	14.3 ▲ 10.0

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0118241      **Received** : 28 May 2024  
**Lab Number** : **06191834**      **Tested** : 29 May 2024  
**Unique Number** : 11048586      **Diagnosed** : 29 May 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 822 - Springfield Hauling**  
 2120 West Bennett Street  
 Springfield, MO  
 US 65807  
 Contact: Dennis Moore  
 dennis.moore@gflenv.com  
 T: (417)403-3641  
 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)