

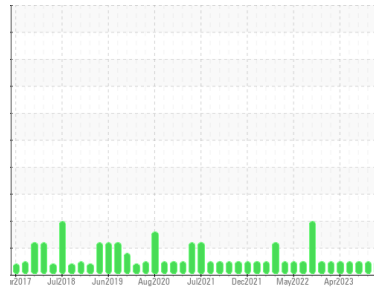


# OIL ANALYSIS REPORT



Area  
**(YA113965) [E Service]**  
 Machine Id  
**2467**  
 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>GFL0124461</b>	GFL0098507	GFL0087752
Sample Date	Client Info		<b>05 Jun 2024</b>	22 Nov 2023	19 Sep 2023
Machine Age	hrs	Client Info	<b>26942</b>	25747	25300
Oil Age	hrs	Client Info	<b>900</b>	600	400
Oil Changed	Client Info		<b>Changed</b>	Changed	Not Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
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>7</b>	3	<1
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>4</b>	<1	<1
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m >330	<b>2</b>	1	0
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	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>1</b>	<1	0
Barium	ppm	ASTM D5185m 0	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>65</b>	58	60
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>915</b>	918	1020
Calcium	ppm	ASTM D5185m 1070	<b>1149</b>	1073	1152
Phosphorus	ppm	ASTM D5185m 1150	<b>988</b>	1035	1062
Zinc	ppm	ASTM D5185m 1270	<b>1264</b>	1232	1296
Sulfur	ppm	ASTM D5185m 2060	<b>3333</b>	2896	3791

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	3	2
Sodium	ppm	ASTM D5185m	<b>20</b>	24	4
Potassium	ppm	ASTM D5185m >20	<b>8</b>	9	3

## INFRA-RED

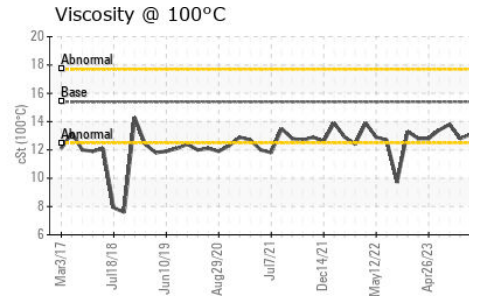
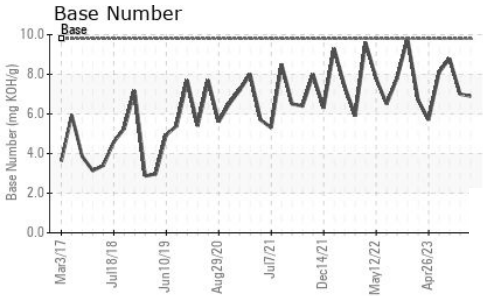
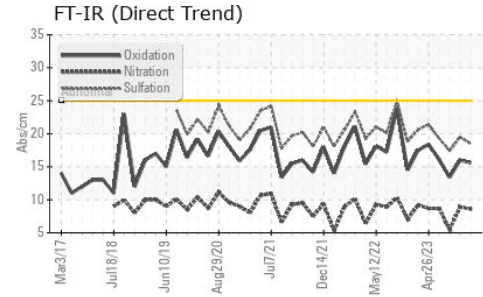
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.2</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.6</b>	8.9	5.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.5</b>	19.5	17.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.6</b>	16.0	13.4
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>6.9</b>	7.0	8.8



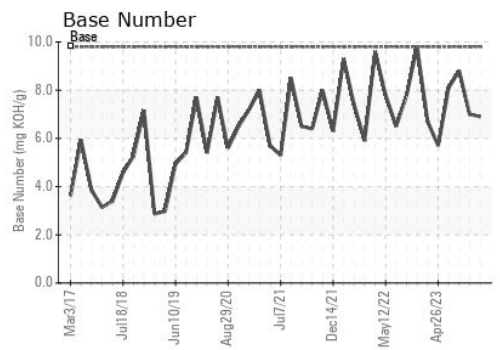
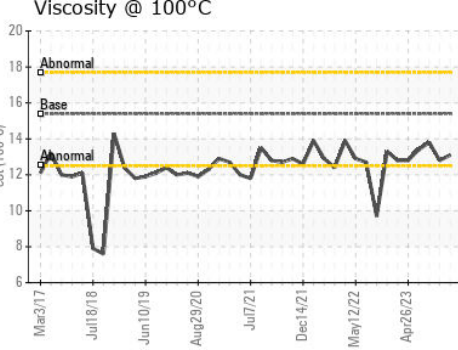
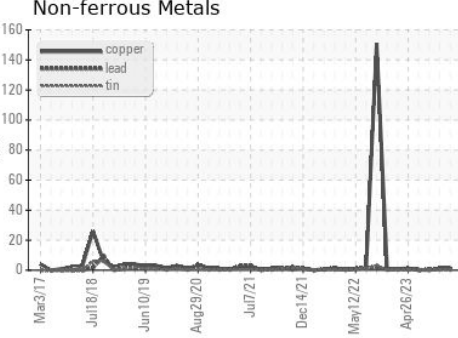
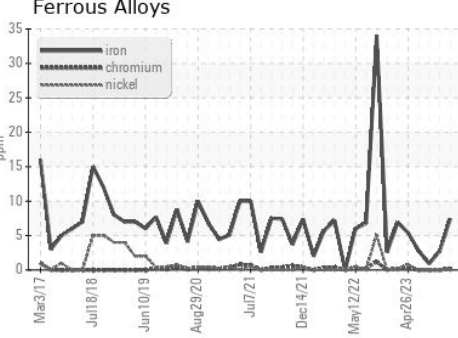
# OIL ANALYSIS REPORT



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	13.1	12.8

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0124461  
**Lab Number** : 06201338  
**Unique Number** : 11063461  
**Test Package** : FLEET

**Received** : 06 Jun 2024  
**Tested** : 07 Jun 2024  
**Diagnosed** : 07 Jun 2024 - Wes Davis

**GFL Environmental - 006 - Wilmington**  
 3618 US Highway 421 N  
 Wilmington, NC  
 US 28401  
 Contact: Eric Wood  
 eric.wood@gflenv.com  
 T: (717)723-1956  
 F: (910)762-6880

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)