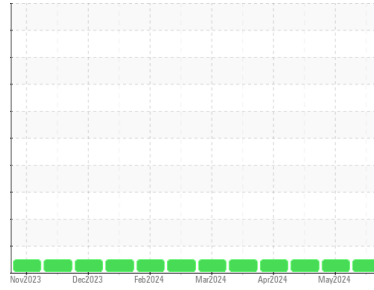




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**(58C686)**

Machine Id  
**814050**

Component  
**Diesel Engine**

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

## 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>GFL0122572</b>	GFL0117942	GFL0117932
Sample Date	Client Info	<b>17 Jun 2024</b>	28 May 2024	16 May 2024
Machine Age	hrs Client Info	<b>1755</b>	1617	1533
Oil Age	hrs Client Info	<b>138</b>	588	504
Oil Changed	Client Info	<b>Not Changed</b>	Changed	Not Changed
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<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 >100	<b>4</b>	14	11
Chromium	ppm ASTM D5185m >20	<b>0</b>	<1	<1
Nickel	ppm ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	<1	<1
Aluminum	ppm ASTM D5185m >20	<b>9</b>	21	15
Lead	ppm ASTM D5185m >40	<b>0</b>	<1	0
Copper	ppm ASTM D5185m >330	<b>2</b>	1	<1
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	<1	0
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	<1
Cadmium	ppm ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>10</b>	5	0
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>57</b>	66	62
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>968</b>	948	1035
Calcium	ppm ASTM D5185m 1070	<b>1077</b>	1140	1154
Phosphorus	ppm ASTM D5185m 1150	<b>1055</b>	1044	1067
Zinc	ppm ASTM D5185m 1270	<b>1221</b>	1219	1313
Sulfur	ppm ASTM D5185m 2060	<b>3604</b>	3405	3729

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	4	5
Sodium	ppm ASTM D5185m	<b>4</b>	6	5
Potassium	ppm ASTM D5185m >20	<b>22</b>	51	37

## INFRA-RED

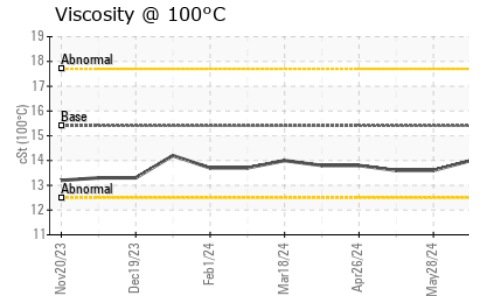
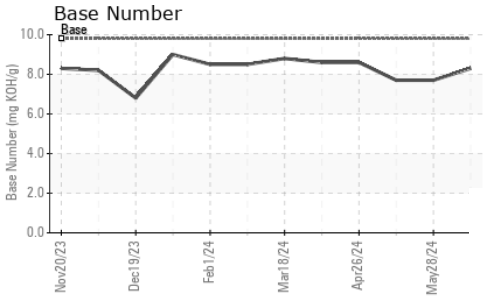
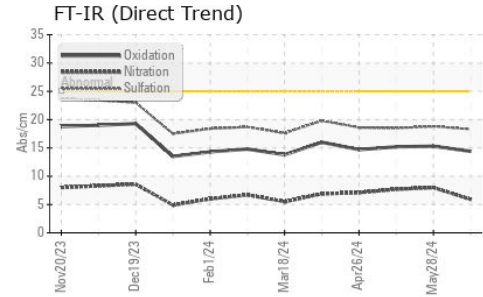
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.1</b>	0.2	0.2
Nitration	Abs/cm *ASTM D7624 >20	<b>5.9</b>	8.0	7.7
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.3</b>	18.8	18.5

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.4</b>	15.3	15.2
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.3</b>	7.7	7.7



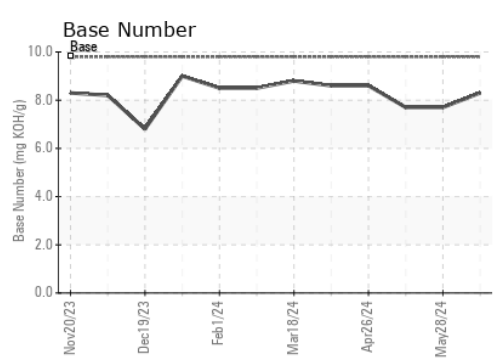
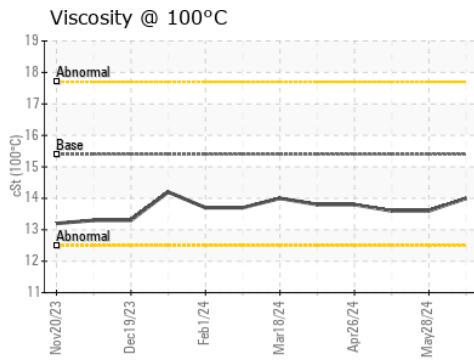
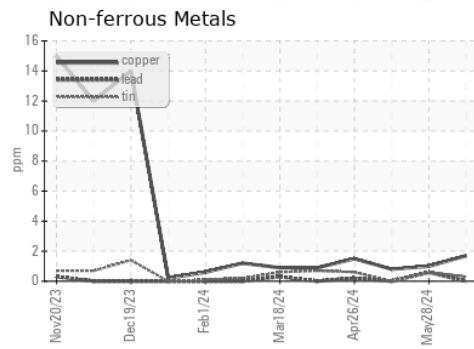
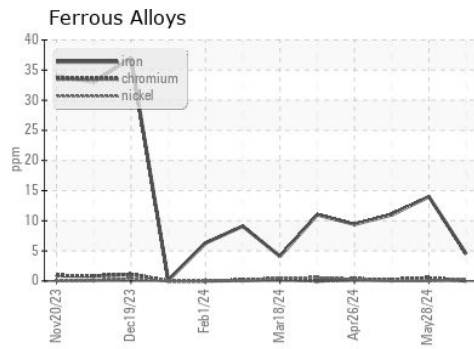
# OIL ANALYSIS REPORT



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	<b>14.0</b>	13.6	13.6

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0122572      **Received** : 18 Jun 2024  
**Lab Number** : **06213261**      **Tested** : 19 Jun 2024  
**Unique Number** : 11086125      **Diagnosed** : 19 Jun 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 892 - Pauls Valley Hauling**  
 1910 S CHICKASAW STREET  
 Pauls Valley, OK  
 US 73075  
 Contact: Tony Graham  
 tgraham2@wcamerica.com

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)