



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area

**(YA169054)**

Machine Id

**812008**

Component

**Diesel Engine**

Fluid

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

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0109530</b>	GFL0058872	GFL0072410
Sample Date		Client Info		<b>08 Jul 2024</b>	03 Jan 2024	07 Sep 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>22</b>	14	5
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	1	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>15</b>	9	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>1</b>	1	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

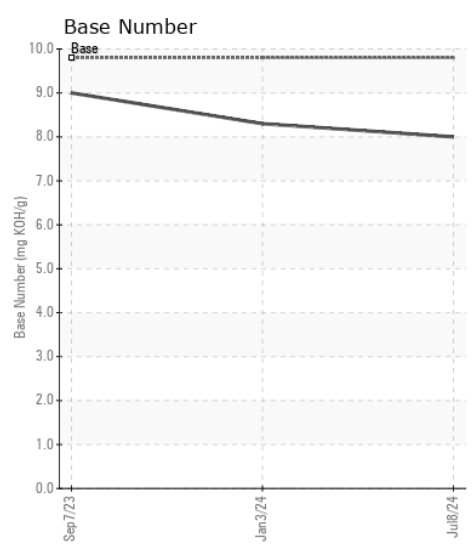
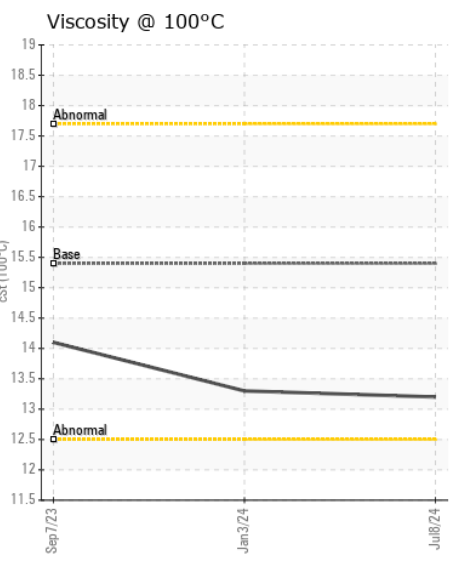
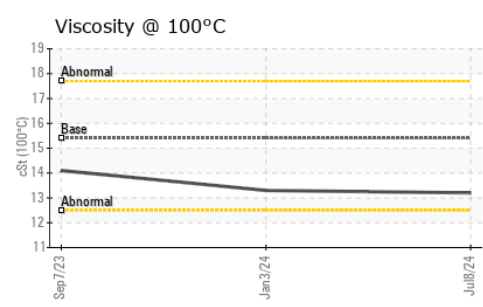
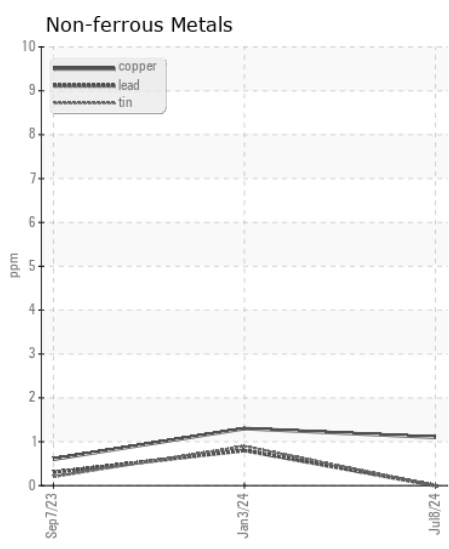
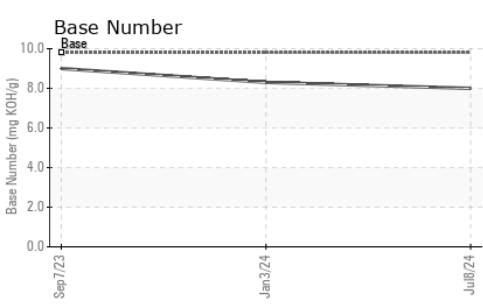
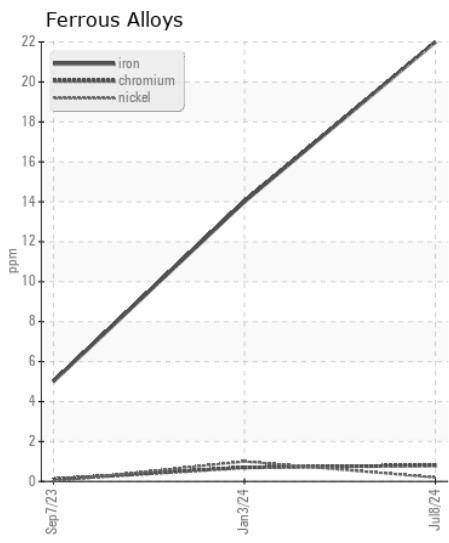
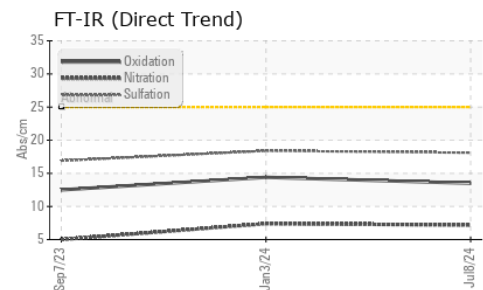
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>19</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>13</b>	17	10
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
Soot %	%	*ASTM D7844	>6	<b>0.3</b>	0.3	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.2</b>	7.4	5.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.1</b>	18.4	16.9
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**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.

Sodium	ppm	ASTM D5185m		<b>4</b>	<1	3
Boron	ppm	ASTM D5185m	0	<b>2</b>	7	3
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	60	59
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>892</b>	944	1044
Calcium	ppm	ASTM D5185m	1070	<b>1133</b>	1077	1306
Phosphorus	ppm	ASTM D5185m	1150	<b>1026</b>	898	1097
Zinc	ppm	ASTM D5185m	1270	<b>1204</b>	1212	1334
Sulfur	ppm	ASTM D5185m	2060	<b>2743</b>	3200	4017
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.5</b>	14.4	12.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.0</b>	8.3	9.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.2</b>	13.3	14.1



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109530 **Received** : 12 Jul 2024  
**Lab Number** : 06234611 **Tested** : 15 Jul 2024  
**Unique Number** : 11123445 **Diagnosed** : 15 Jul 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 119 - Williamston Hauling/TriEast**  
 1805 West Main Street  
 Williamston, NC  
 US 27892  
 Contact: Spencer Ligon  
 spencer.ligon@gflenv.com  
 T: (800)207-6618  
 F:

Certificate L2367  
 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)