



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

Machine Id  
**728021-1148**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (24 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0103051</b>	GFL0102778	GFL0090496
Sample Date		Client Info		<b>25 Jan 2024</b>	21 Nov 2023	03 Aug 2023
Machine Age	hrs	Client Info		<b>14259</b>	14259	13732
Oil Age	hrs	Client Info		<b>580</b>	527	594
Filter Age	hrs	Client Info		<b>580</b>	527	594
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>14</b>	11	56
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>3</b>	6	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>30	<b>1</b>	3	3
Lead	ppm	ASTM D5185m	>30	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>150	<b>&lt;1</b>	0	2
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

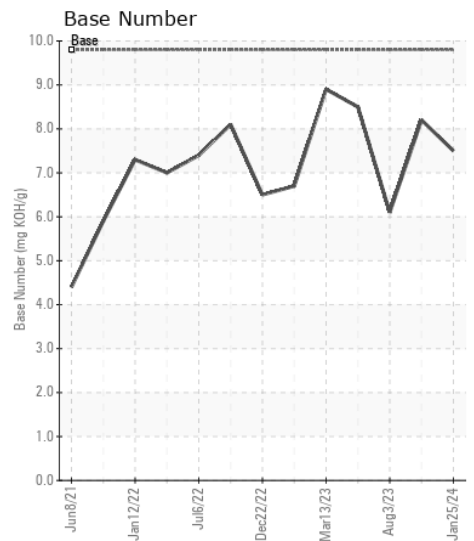
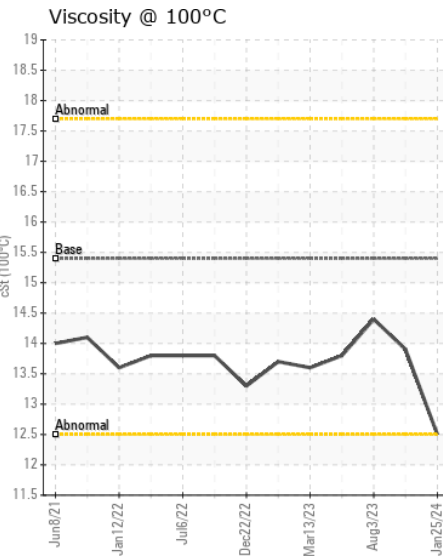
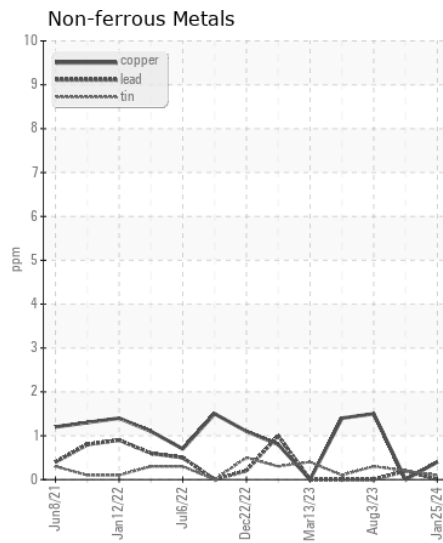
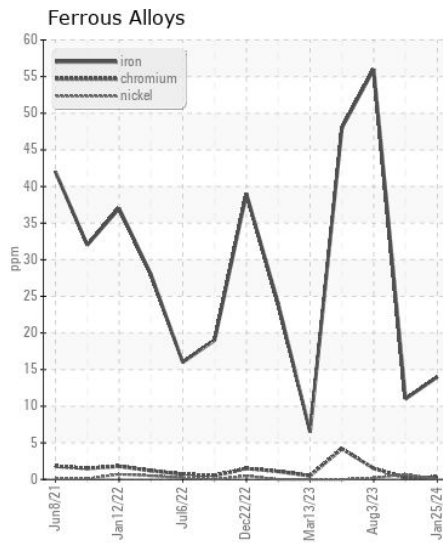
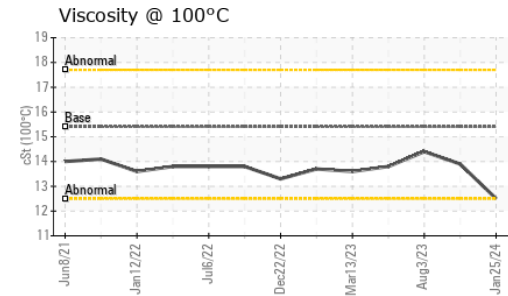
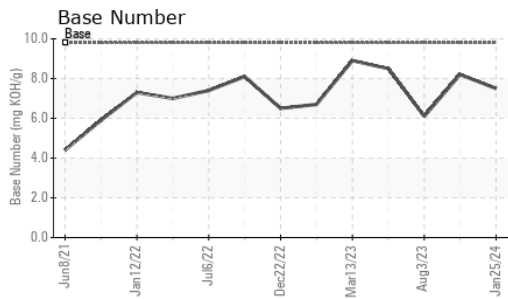
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>3</b>	8	7
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	5	2
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
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.3	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.3</b>	9.6	13.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.8</b>	19.9	23.9
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>2</b>	3	8
Boron	ppm	ASTM D5185m	0	<b>17</b>	53	4
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>48</b>	46	69
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>810</b>	781	1043
Calcium	ppm	ASTM D5185m	1070	<b>1101</b>	1198	1254
Phosphorus	ppm	ASTM D5185m	1150	<b>839</b>	896	1115
Zinc	ppm	ASTM D5185m	1270	<b>1087</b>	1009	1354
Sulfur	ppm	ASTM D5185m	2060	<b>2739</b>	2914	3503
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.1</b>	15.7	23.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.5</b>	8.2	6.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.5</b>	13.9	14.4



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0103051 **Received** : 30 Jan 2024  
**Lab Number** : 06074494 **Diagnosed** : 31 Jan 2024  
**Unique Number** : 10856585 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 622 - Traverse City Hauling**  
 160 Hughes Dr  
 Traverse City, MI  
 US 49686  
 Contact: GARY BREWER

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)

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F: