



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

Machine Id  
**912088**  
 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>GFL0102770</b>	GFL0090488	GFL0090529
Sample Date		Client Info		<b>05 Jan 2024</b>	21 Nov 2023	09 Oct 2023
Machine Age	hrs	Client Info		<b>2922</b>	2624	2326
Oil Age	hrs	Client Info		<b>596</b>	298	615
Filter Age	hrs	Client Info		<b>596</b>	298	615
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>19</b>	7	17
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>13</b>	6	17
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	0	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

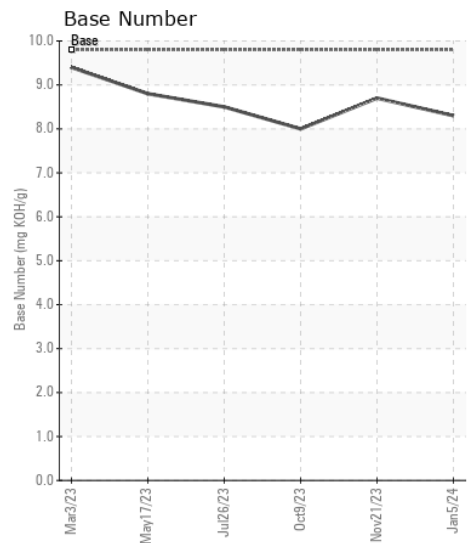
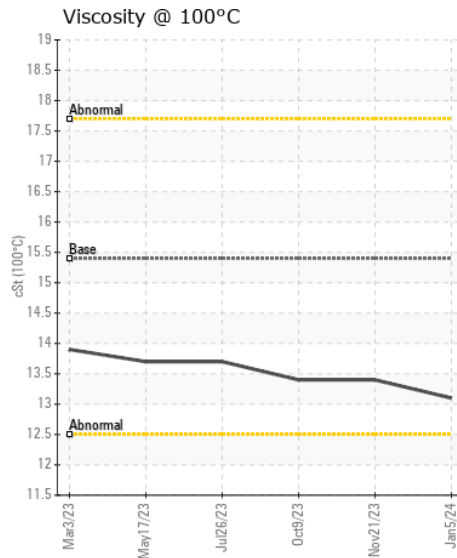
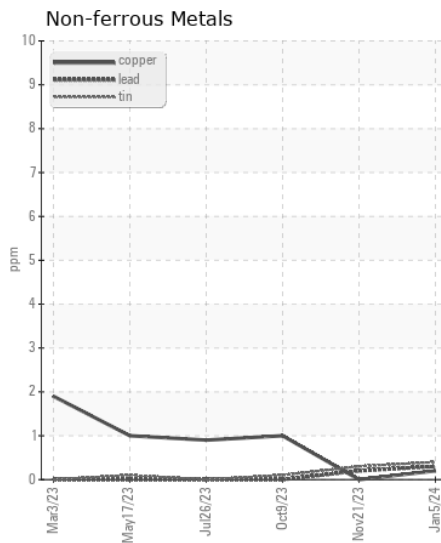
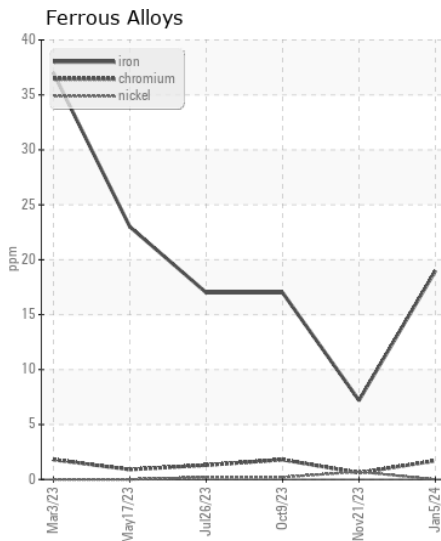
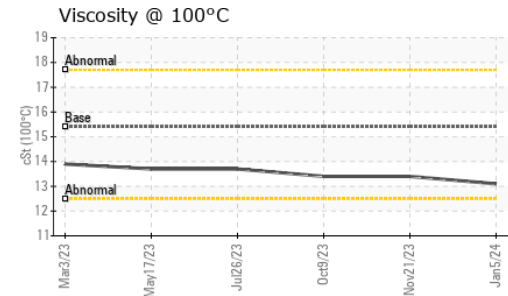
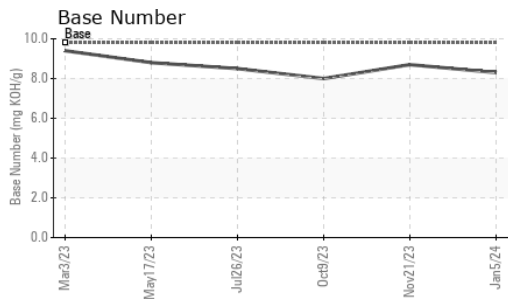
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	2	3
Potassium	ppm	ASTM D5185m	>20	<b>27</b>	17	43
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>0.6</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.5</b>	6.3	7.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.4</b>	18.2	18.5
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>	4	4
Boron	ppm	ASTM D5185m	0	<b>6</b>	6	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	3
Molybdenum	ppm	ASTM D5185m	60	<b>63</b>	55	57
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>948</b>	830	855
Calcium	ppm	ASTM D5185m	1070	<b>1098</b>	995	1003
Phosphorus	ppm	ASTM D5185m	1150	<b>1101</b>	1027	897
Zinc	ppm	ASTM D5185m	1270	<b>1334</b>	1147	1099
Sulfur	ppm	ASTM D5185m	2060	<b>3265</b>	2970	2674
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.1</b>	13.4	13.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.3</b>	8.7	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.1</b>	13.4	13.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0102770 **Received** : 08 Jan 2024  
**Lab Number** : 06054640 **Diagnosed** : 09 Jan 2024  
**Unique Number** : 10820589 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 622 - Traverse City Hauling**  
 160 Hughes Dr  
 Traverse City, MI  
 US 49686  
 Contact: TECHNICIAN ACCOUNT  
 aw.tc.maint@gflenv.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)