



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

Machine Id  
**914032**  
 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>GFL0090974</b>	GFL0102998	GFL0103012
Sample Date		Client Info		<b>05 Jan 2024</b>	14 Dec 2023	22 Nov 2023
Machine Age	hrs	Client Info		<b>1130</b>	966	818
Oil Age	hrs	Client Info		<b>164</b>	0	108
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>25</b>	16	14
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>4</b>	3	2
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	3	<1
Copper	ppm	ASTM D5185m	>330	<b>304</b>	212	94
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

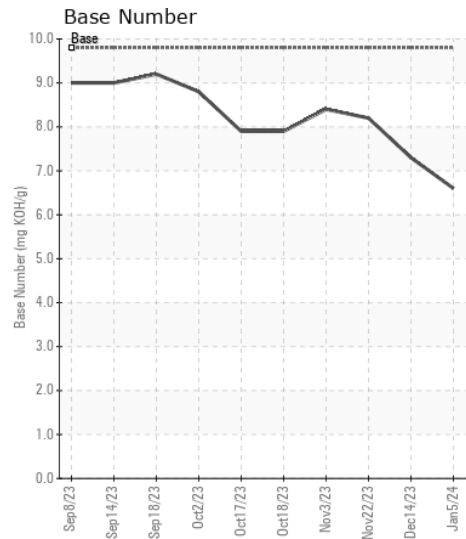
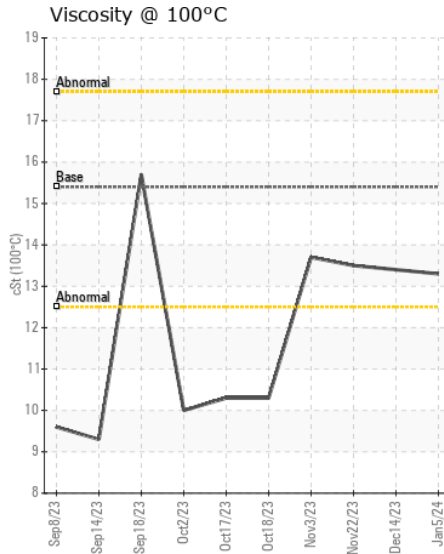
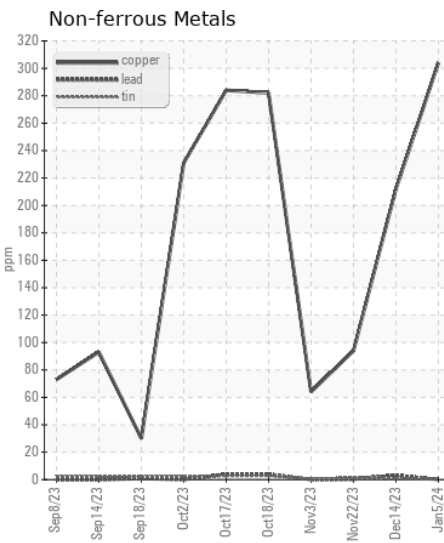
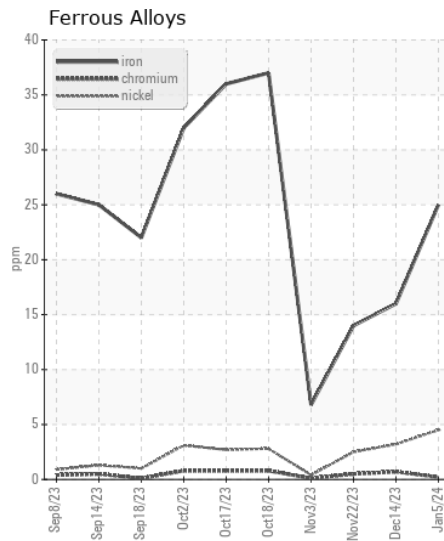
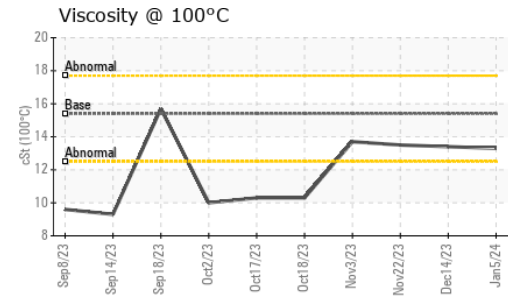
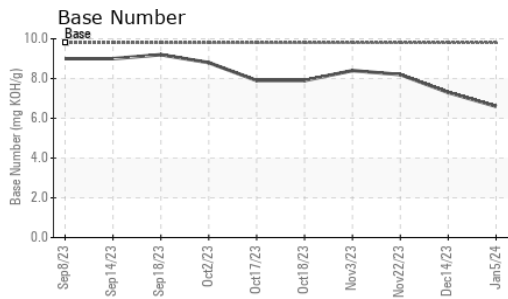
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>12</b>	11	14
Potassium	ppm	ASTM D5185m	>20	<b>7</b>	6	7
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>0.5</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	7.4	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.1</b>	19.9	19.5
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>2</b>	2	0
Boron	ppm	ASTM D5185m	0	<b>4</b>	8	11
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>63</b>	61	66
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	1010	<b>939</b>	920	941
Calcium	ppm	ASTM D5185m	1070	<b>1047</b>	1005	1082
Phosphorus	ppm	ASTM D5185m	1150	<b>1008</b>	884	968
Zinc	ppm	ASTM D5185m	1270	<b>1165</b>	1211	1196
Sulfur	ppm	ASTM D5185m	2060	<b>2807</b>	2720	2716
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.2</b>	15.5	15.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.6</b>	7.3	8.2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.3</b>	13.4	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0090974 **Received** : 09 Jan 2024  
**Lab Number** : 06055780 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821729 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 814 - Little Rock Hauling**  
 4005 Hwy 161 N.  
 Little Rock, AR  
 US 72117  
 Contact: Brad Manager

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: