



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



Machine Id  
**212018**  
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>GFL0105131</b>	GFL0090338	GFL0090309
Sample Date		Client Info		<b>09 Jan 2024</b>	11 Dec 2023	22 Nov 2023
Machine Age	hrs	Client Info		<b>3970</b>	3838	3713
Oil Age	hrs	Client Info		<b>150</b>	150	600
Filter Age	hrs	Client Info		<b>150</b>	150	600
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	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	>80	<b>&lt;1</b>	1	23
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	1	10
Lead	ppm	ASTM D5185m	>30	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>150	<b>0</b>	<1	5
Tin	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

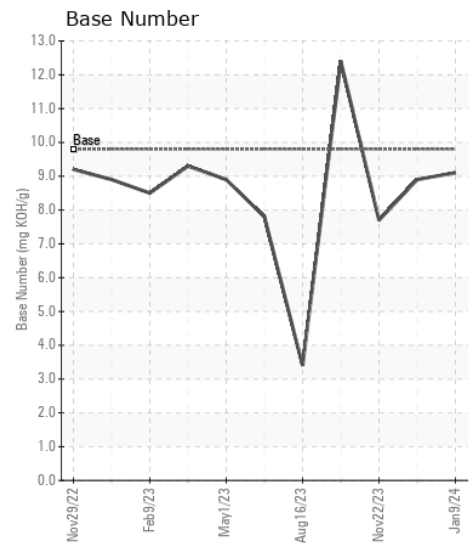
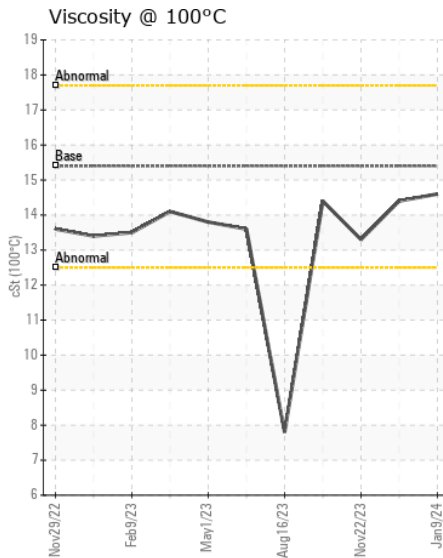
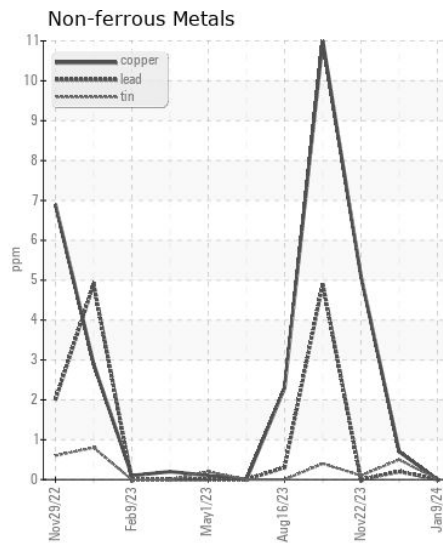
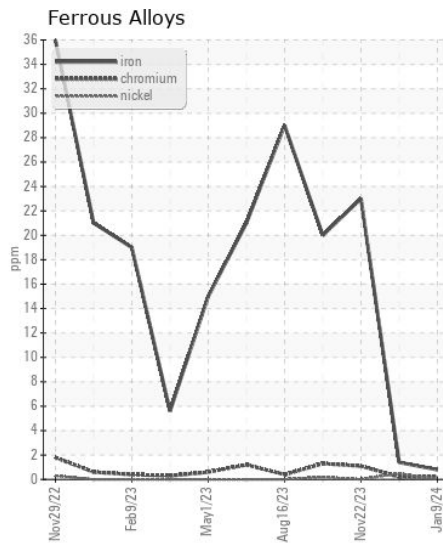
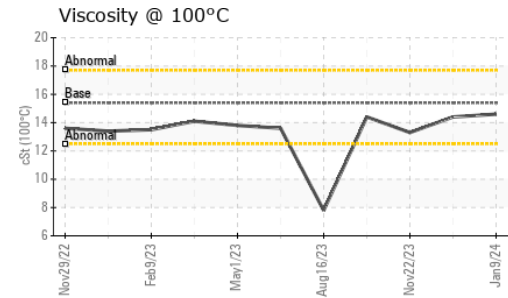
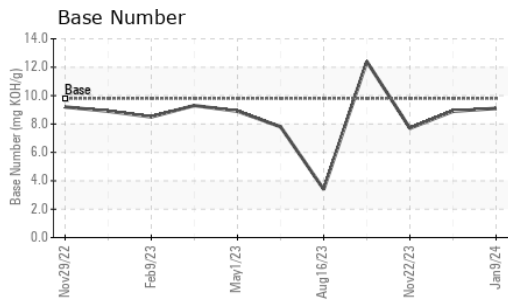
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>6</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	20
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</b>	0	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.0</b>	4.0	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.2</b>	17.3	19.1
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>&lt;1</b>	0	2
Boron	ppm	ASTM D5185m	0	<b>1</b>	2	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	11	0
Molybdenum	ppm	ASTM D5185m	60	<b>63</b>	57	56
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>1059</b>	884	881
Calcium	ppm	ASTM D5185m	1070	<b>1160</b>	982	1022
Phosphorus	ppm	ASTM D5185m	1150	<b>1181</b>	964	1014
Zinc	ppm	ASTM D5185m	1270	<b>1304</b>	1148	1207
Sulfur	ppm	ASTM D5185m	2060	<b>3959</b>	3475	2850
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.8</b>	12.7	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.1</b>	8.9	7.7
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.6</b>	14.4	13.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0105131 **Received** : 12 Jan 2024  
**Lab Number** : 06059910 **Diagnosed** : 16 Jan 2024  
**Unique Number** : 10831292 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 821 - Ozarks Hauling**  
 33924 Olath Drive  
 Lebanon, MO  
 US 65536

Contact: Landen Johnson  
 landen.johnson@gflenv.com  
 T: (417)664-0010

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)

F: