



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



Machine Id  
**729059-361496**  
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>GFL0098718</b>	GFL0065468	GFL0065486
Sample Date		Client Info		<b>16 Jan 2024</b>	27 Oct 2023	23 Oct 2023
Machine Age	hrs	Client Info		<b>19774</b>	150	16459
Oil Age	hrs	Client Info		<b>150</b>	150	150
Filter Age	hrs	Client Info		<b>150</b>	150	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>4</b>	3	2
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	3	2
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

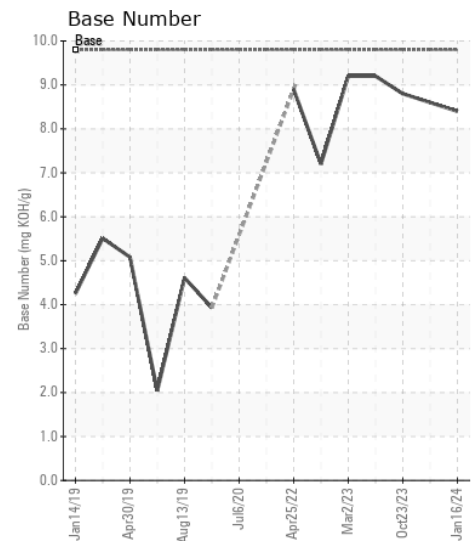
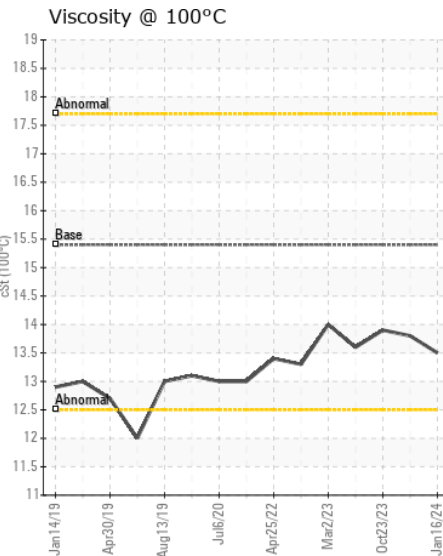
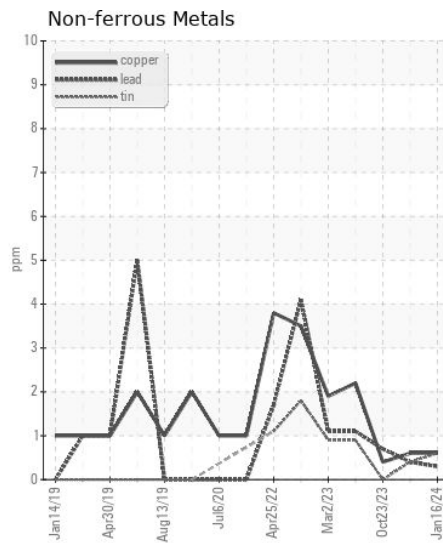
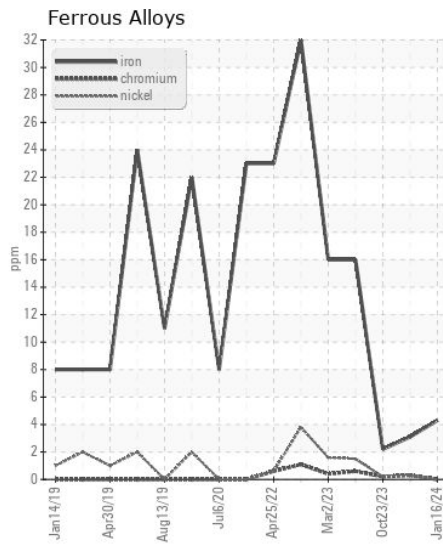
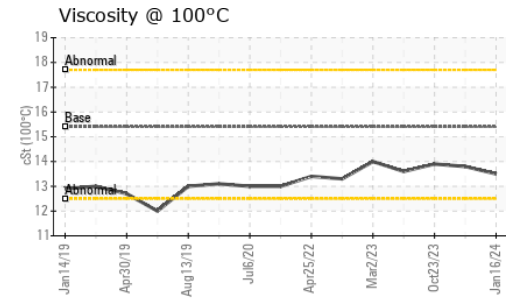
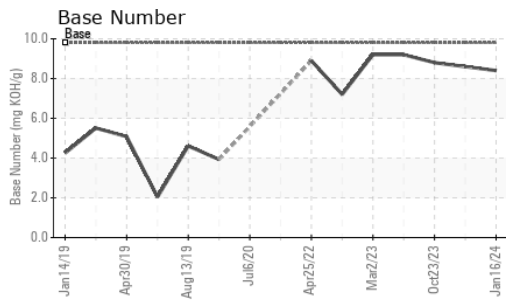
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	2
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	>4	<b>0.2</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.4</b>	5.5	5.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.9</b>	17.9	17.7
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	0
Boron	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	1
Barium	ppm	ASTM D5185m	0	<b>0</b>	<1	3
Molybdenum	ppm	ASTM D5185m	60	<b>57</b>	59	59
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	1010	<b>987</b>	932	883
Calcium	ppm	ASTM D5185m	1070	<b>995</b>	1016	1012
Phosphorus	ppm	ASTM D5185m	1150	<b>1078</b>	1019	1062
Zinc	ppm	ASTM D5185m	1270	<b>1265</b>	1220	1193
Sulfur	ppm	ASTM D5185m	2060	<b>3142</b>	3530	3305
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.3</b>	14.1	13.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.4</b>	8.6	8.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.5</b>	13.8	13.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0098718 **Received** : 18 Jan 2024  
**Lab Number** : 06064857 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10836239 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 829 - Wilco Hauling**  
 5054 Highway HH  
 Hartville, MO  
 US 65667  
 Contact: James Jones  
 james.jones@gflenv.com  
 T: (417)349-5006  
 F:

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)