



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

Machine Id  
**420013**  
 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>GFL0107731</b>	GFL0096553	GFL0038677
Sample Date		Client Info		<b>30 Jan 2024</b>	28 Nov 2023	19 Sep 2023
Machine Age	hrs	Client Info		<b>4791</b>	4312	3803
Oil Age	hrs	Client Info		<b>600</b>	600	600
Filter Age	hrs	Client Info		<b>600</b>	600	600
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	SEVERE

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	<b>6</b>	5	9
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	3
Lead	ppm	ASTM D5185m	>45	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>85	<b>1</b>	2	1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<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**

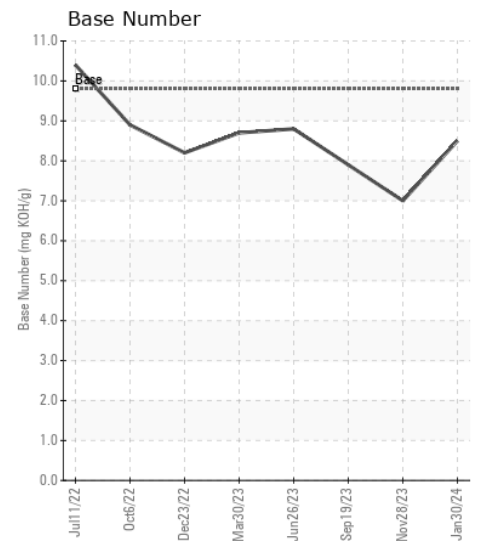
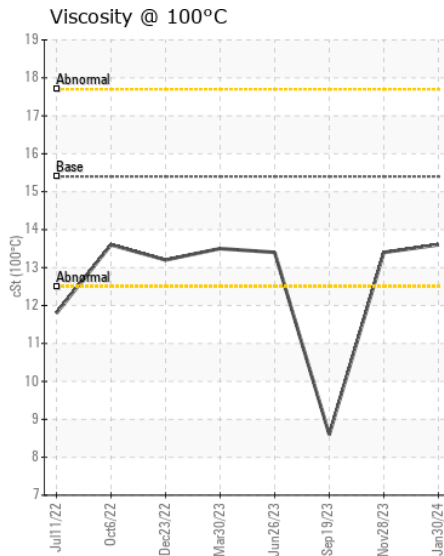
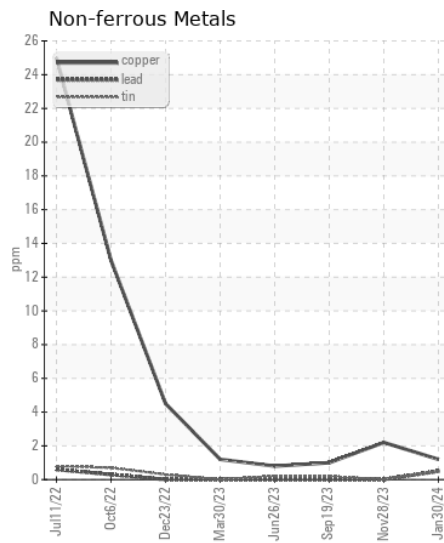
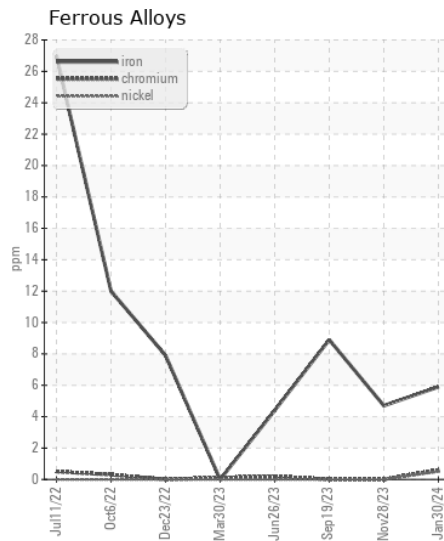
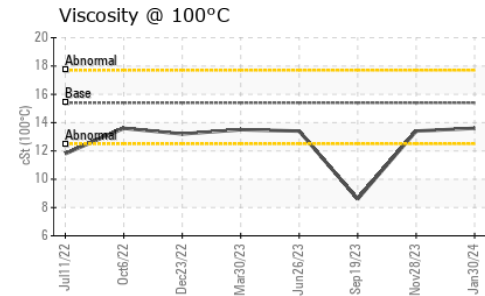
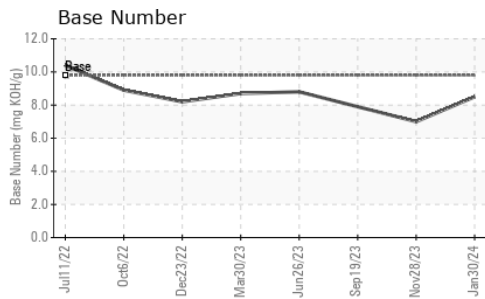
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>4</b>	1	4
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	4
Fuel		WC Method	>5	<b>&lt;1.0</b>	0.3	15.6
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.2</b>	9.2	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.6</b>	20.7	17.8
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>26</b>	<1	5
Boron	ppm	ASTM D5185m	0	<b>1</b>	0	1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>68</b>	59	46
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	1010	<b>1060</b>	990	764
Calcium	ppm	ASTM D5185m	1070	<b>1156</b>	1115	879
Phosphorus	ppm	ASTM D5185m	1150	<b>1062</b>	894	786
Zinc	ppm	ASTM D5185m	1270	<b>1373</b>	1268	1021
Sulfur	ppm	ASTM D5185m	2060	<b>3194</b>	2854	2676
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.6</b>	17.1	13.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.5</b>	7.0	7.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.6</b>	13.4	8.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0107731  
**Lab Number** : 06085272  
**Unique Number** : 10872717  
**Test Package** : FLEET  
**Received** : 09 Feb 2024  
**Tested** : 12 Feb 2024  
**Diagnosed** : 12 Feb 2024 - Wes Davis

**GFL Environmental - 465 - Pontiac**  
 888 Baldwin  
 Pontiac, MI  
 US 48340  
 Contact: Ricky Matthews  
 rickymathews@gflenv.com  
 T: (586)825-9514  
 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)