



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



Machine Id  
**428123**  
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>GFL0100930</b>	GFL0086829	GFL0086897
Sample Date		Client Info		<b>06 Feb 2024</b>	28 Nov 2023	06 Oct 2023
Machine Age	mls	Client Info		<b>329171</b>	322136	317074
Oil Age	mls	Client Info		<b>0</b>	322136	317074
Filter Age	mls	Client Info		<b>0</b>	322136	0
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>4</b>	11	9
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185m	>40	<b>0</b>	2	2
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	2
Tin	ppm	ASTM D5185m	>15	<b>0</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**

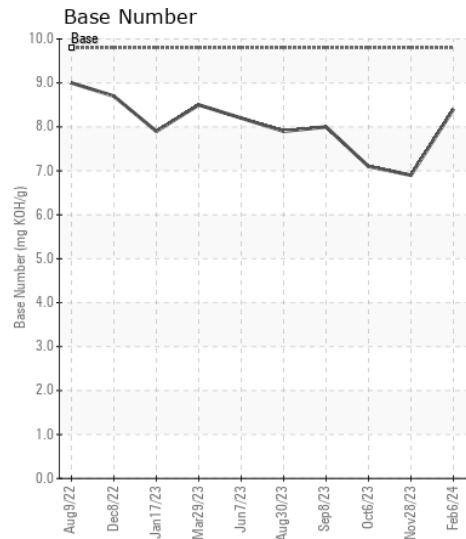
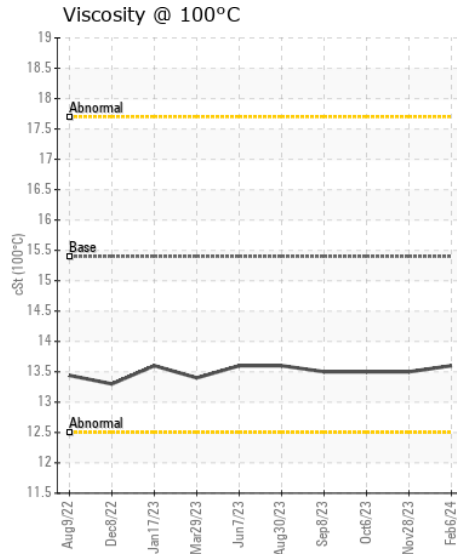
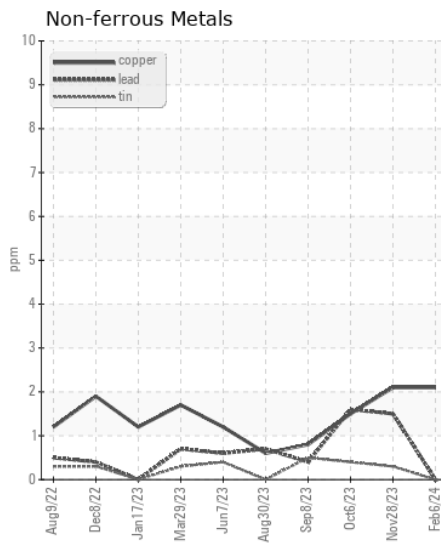
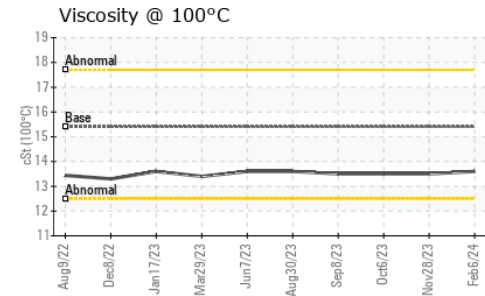
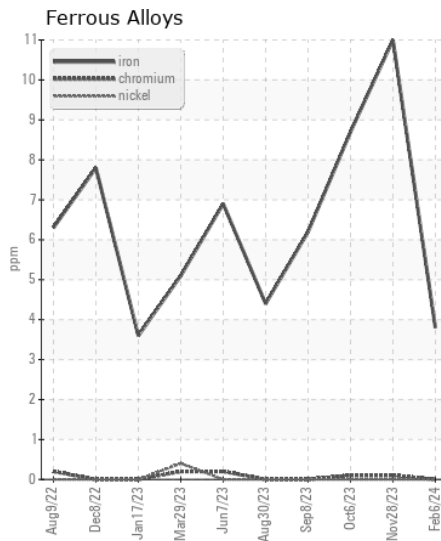
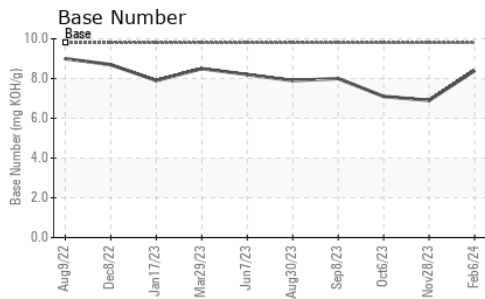
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	3	3
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	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>	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.2</b>	9.3	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.9</b>	20.9	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>2</b>	4	0
Boron	ppm	ASTM D5185m	0	<b>5</b>	2	2
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	60	<b>63</b>	57	62
Manganese	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>952</b>	844	895
Calcium	ppm	ASTM D5185m	1070	<b>1117</b>	1040	1072
Phosphorus	ppm	ASTM D5185m	1150	<b>1046</b>	894	987
Zinc	ppm	ASTM D5185m	1270	<b>1316</b>	1076	1236
Sulfur	ppm	ASTM D5185m	2060	<b>3173</b>	2420	3030
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.8</b>	16.4	15.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.4</b>	6.9	7.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.6</b>	13.5	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0100930 **Received** : 12 Feb 2024  
**Lab Number** : 06085621 **Tested** : 12 Feb 2024  
**Unique Number** : 10873066 **Diagnosed** : 12 Feb 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 419 - Metro Saginaw**  
 6950 N Michigan  
 Saginaw, MI  
 US 48604  
 Contact: Joseph Bicol  
 jbicoll@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)