



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



Machine Id  
**812062**  
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>GFL0092878</b>	GFL0092846	GFL0085636
Sample Date		Client Info		<b>09 Jan 2024</b>	13 Nov 2023	21 Aug 2023
Machine Age	hrs	Client Info		<b>3452</b>	3065	2490
Oil Age	hrs	Client Info		<b>387</b>	575	580
Filter Age	hrs	Client Info		<b>387</b>	575	580
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	>120	<b>9</b>	15	15
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	1
Lead	ppm	ASTM D5185m	>40	<b>0</b>	1	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	7	37
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	1
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**

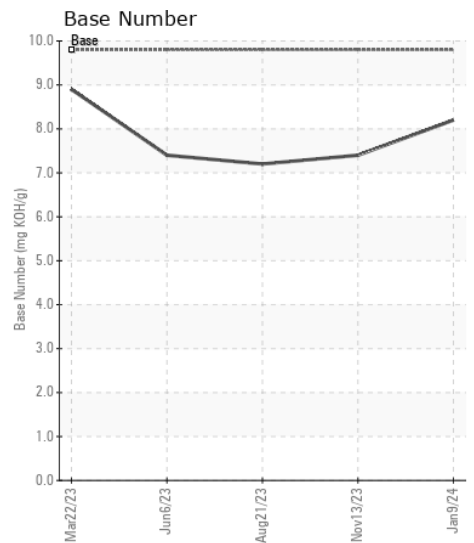
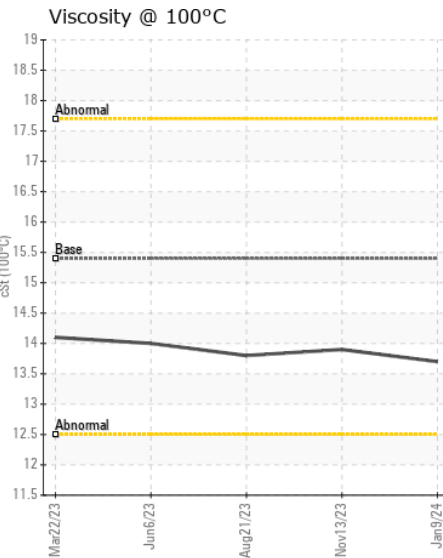
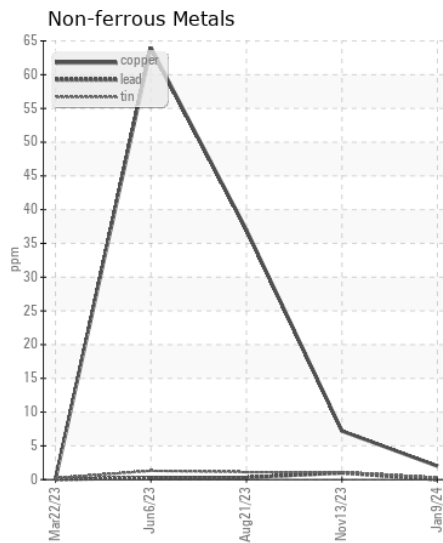
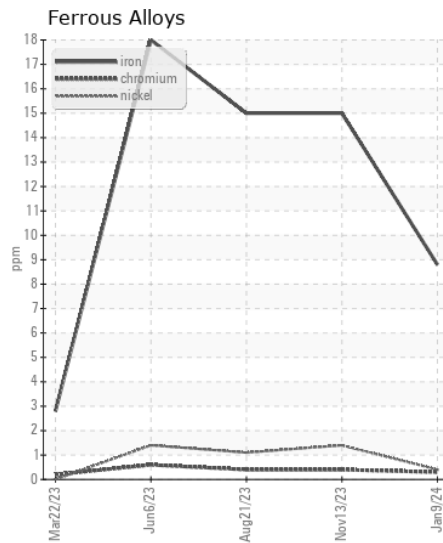
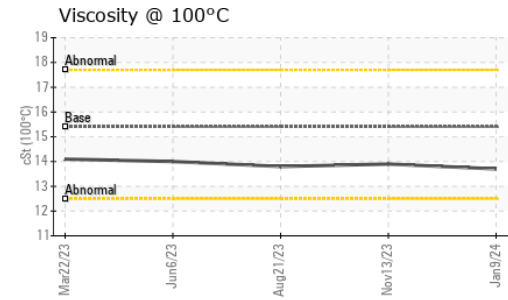
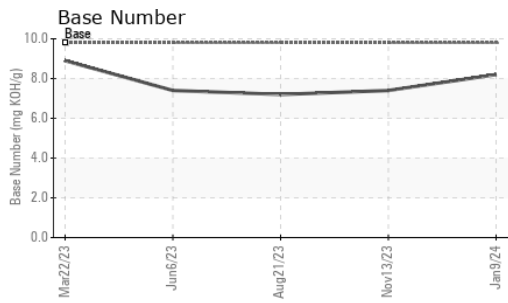
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	3	4
Potassium	ppm	ASTM D5185m	>20	<b>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>0.6</b>	1	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.8</b>	8.2	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.3</b>	20.7	20.6
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>3</b>	5	6
Boron	ppm	ASTM D5185m	0	<b>2</b>	5	3
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	60	<b>61</b>	58	62
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>978</b>	985	926
Calcium	ppm	ASTM D5185m	1070	<b>1115</b>	1096	1146
Phosphorus	ppm	ASTM D5185m	1150	<b>1034</b>	948	966
Zinc	ppm	ASTM D5185m	1270	<b>1250</b>	1241	1205
Sulfur	ppm	ASTM D5185m	2060	<b>2968</b>	2542	2596
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.2</b>	15.4	16.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.2</b>	7.4	7.2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.7</b>	13.9	13.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0092878 **Recieved** : 16 Jan 2024  
**Lab Number** : 06061647 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10833029 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 411 - Kingsford HC**  
 1001 E Blvd  
 Kingsford, MI  
 US 49802  
 Contact: Service 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: