



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



Area  
**(ML7082)**  
Machine Id  
**427101-54**  
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>GFL0110596</b>	GFL0100185	GFL0091247
Sample Date		Client Info		<b>27 Feb 2024</b>	11 Dec 2023	13 Nov 2023
Machine Age	hrs	Client Info		<b>600</b>	665084	660870
Oil Age	hrs	Client Info		<b>600</b>	0	600
Filter Age	hrs	Client Info		<b>600</b>	0	600
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**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>120	<b>2</b>	5	7
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	3	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>5</b>	31	32
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	2
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

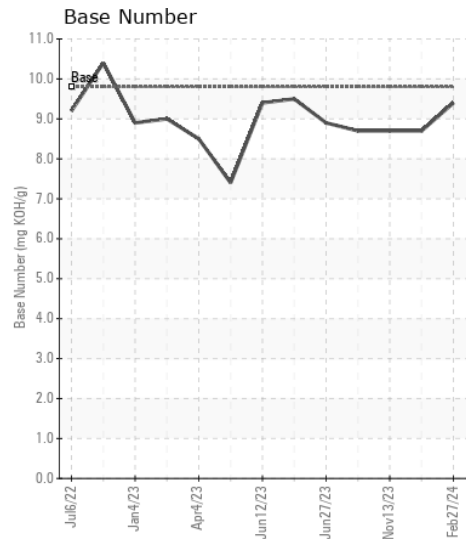
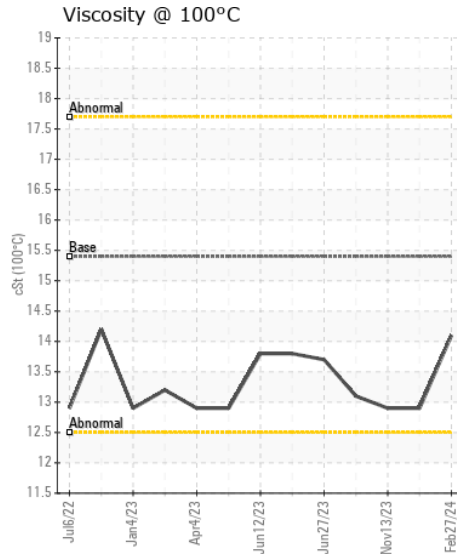
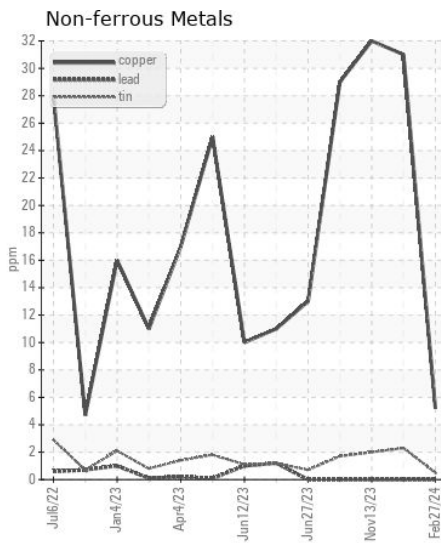
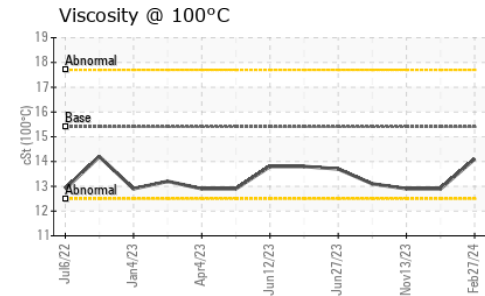
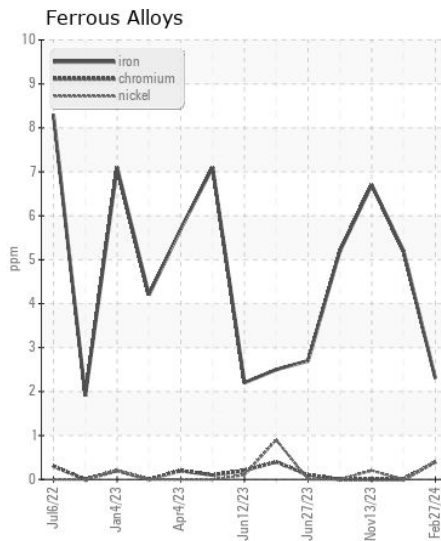
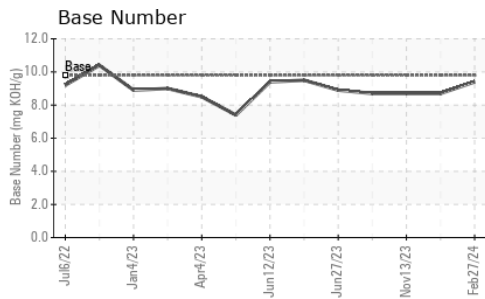
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	5
Potassium	ppm	ASTM D5185m	>20	<b>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</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.4</b>	6.1	6.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.4</b>	18.7	18.8
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>1</b>	0	0
Boron	ppm	ASTM D5185m	0	<b>5</b>	30	31
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	65	64
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>965</b>	934	864
Calcium	ppm	ASTM D5185m	1070	<b>1033</b>	1065	1053
Phosphorus	ppm	ASTM D5185m	1150	<b>1112</b>	1058	987
Zinc	ppm	ASTM D5185m	1270	<b>1263</b>	1273	1150
Sulfur	ppm	ASTM D5185m	2060	<b>3459</b>	3206	3164
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.2</b>	14.2	14.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.4</b>	8.7	8.7
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.1</b>	12.9	12.9



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0110596 **Received** : 01 Mar 2024  
**Lab Number** : **06105726** **Tested** : 01 Mar 2024  
**Unique Number** : 10903956 **Diagnosed** : 01 Mar 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 166 - Phenix City**  
 18 Old Brickyard Rd  
 Phenix City, AL  
 US 36869  
 Contact: DEAN PEACE JR  
 dean.peace@gflenv.com  
 T:  
 F:

Certificate L2367  
 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)