



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



Area  
**(ML7045)**  
Machine Id  
**413029**  
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>GFL0104083</b>	GFL0068104	GFL0068138
Sample Date		Client Info		<b>26 Feb 2024</b>	02 Nov 2023	25 Sep 2023
Machine Age	hrs	Client Info		<b>2614</b>	1934	1580
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	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>14</b>	5	9
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>5</b>	<1	1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	3	9
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>7</b>	39	219
Tin	ppm	ASTM D5185m	>15	<b>2</b>	<1	1
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**

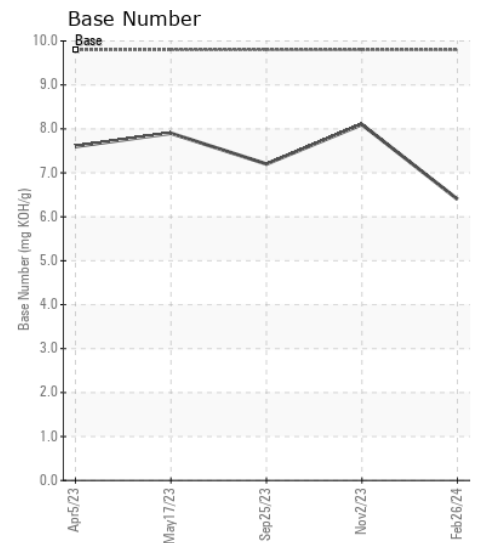
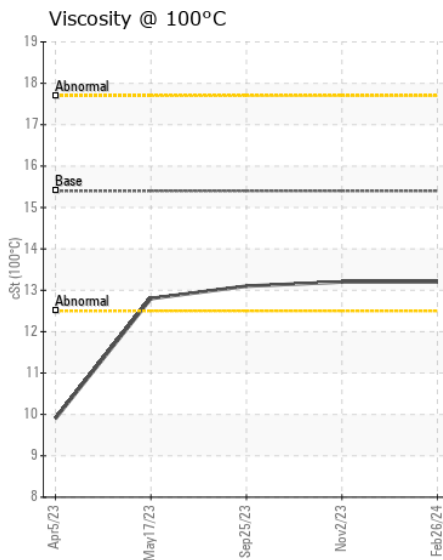
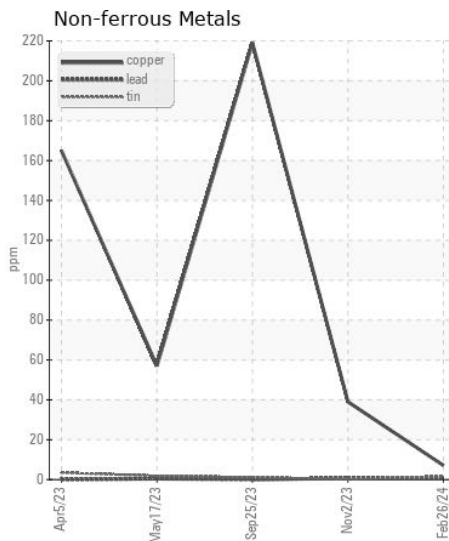
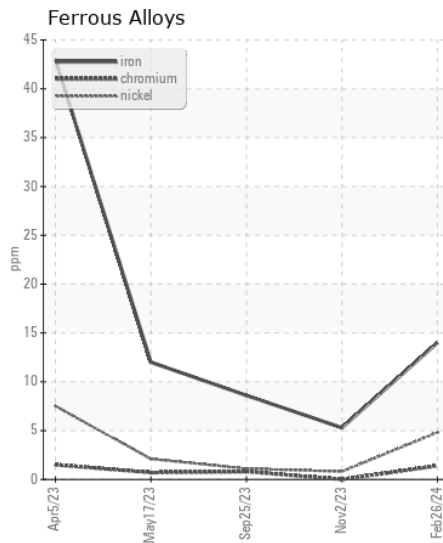
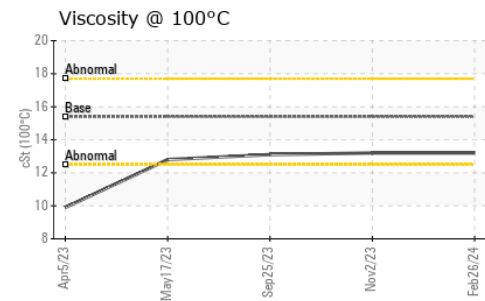
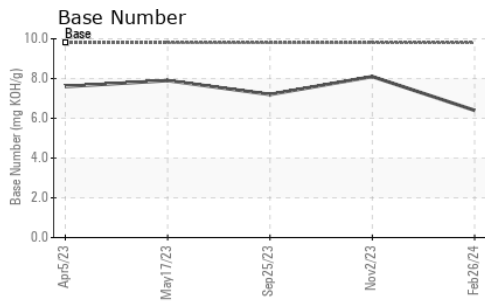
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	5	6
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	7	14
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>0.4</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.8</b>	7.0	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.3</b>	18.9	18.6
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>2</b>	3	3
Boron	ppm	ASTM D5185m	0	<b>4</b>	5	5
Barium	ppm	ASTM D5185m	0	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>62</b>	61	62
Manganese	ppm	ASTM D5185m	0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>832</b>	965	998
Calcium	ppm	ASTM D5185m	1070	<b>941</b>	1088	1145
Phosphorus	ppm	ASTM D5185m	1150	<b>870</b>	1021	1130
Zinc	ppm	ASTM D5185m	1270	<b>1096</b>	1236	1393
Sulfur	ppm	ASTM D5185m	2060	<b>2762</b>	2981	3254
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.2</b>	14.6	14.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.4</b>	8.1	7.2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.2</b>	13.2	13.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0104083  
**Lab Number** : 06101471  
**Unique Number** : 10899701  
**Test Package** : FLEET

**Received** : 27 Feb 2024  
**Tested** : 28 Feb 2024  
**Diagnosed** : 28 Feb 2024 - Wes Davis

**GFL Environmental - 028 - Weldon**  
 2211 US Highway 301  
 Halifax, NC  
 US 27839

Contact: TRAVIS PORCH  
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T: (252)532-3344

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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