



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

Machine Id  
**727178**  
 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>GFL0084806</b>	GFL0116517	GFL0084853
Sample Date		Client Info		<b>27 Apr 2024</b>	16 Apr 2024	18 Sep 2023
Machine Age	hrs	Client Info		<b>16315</b>	16282	15260
Oil Age	hrs	Client Info		<b>16282</b>	20421	14833
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	SEVERE	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>9</b>	44	48
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	6	8
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>1</b>	3	2
Tin	ppm	ASTM D5185m	>15	<b>1</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**

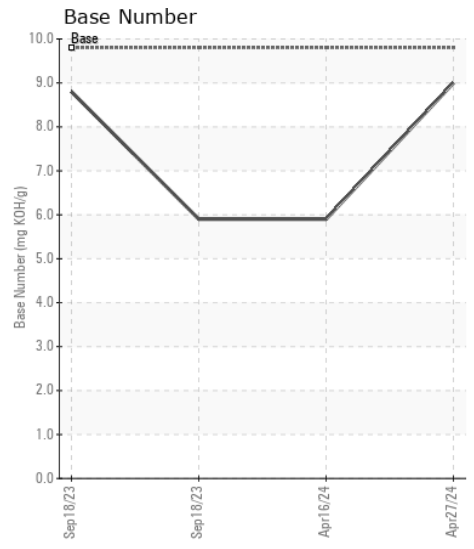
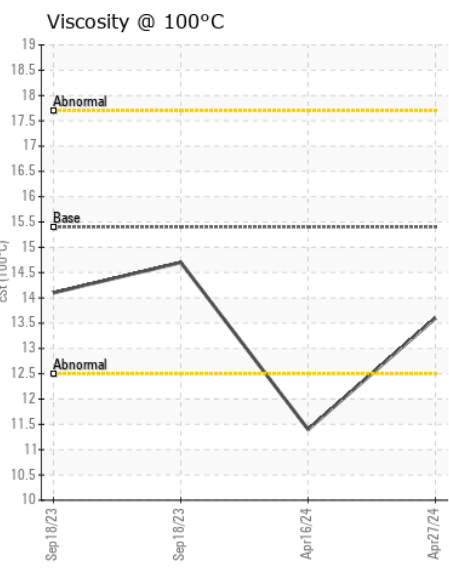
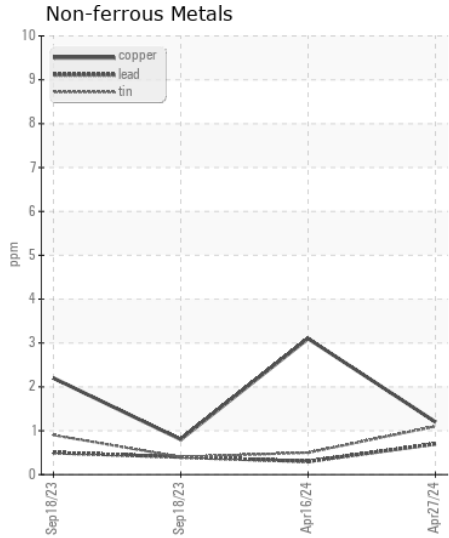
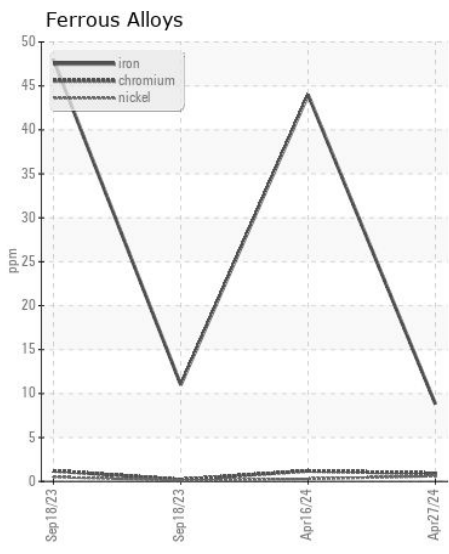
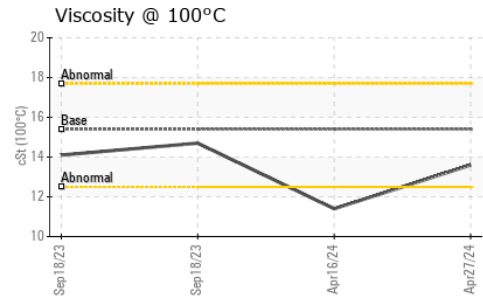
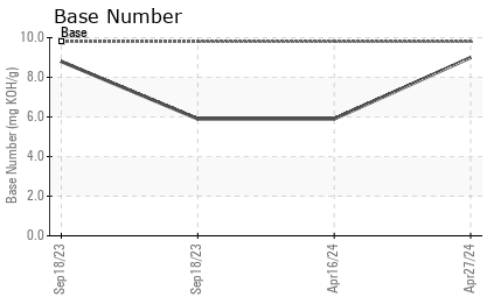
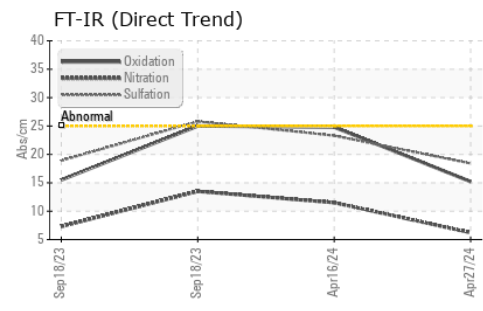
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	9	12
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	14	14
Fuel		WC Method	>2.0	<b>&lt;1.0</b>	▲ 10.8	<1.0
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>	0.4	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.2</b>	11.5	13.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.4</b>	23.3	25.8
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>4</b>	11	10
Boron	ppm	ASTM D5185m	0	<b>0</b>	7	7
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>57</b>	58	52
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>930</b>	835	942
Calcium	ppm	ASTM D5185m	1070	<b>1040</b>	1005	1122
Phosphorus	ppm	ASTM D5185m	1150	<b>1066</b>	888	1024
Zinc	ppm	ASTM D5185m	1270	<b>1197</b>	1105	1255
Sulfur	ppm	ASTM D5185m	2060	<b>3586</b>	2753	2870
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.2</b>	24.8	25.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.0</b>	5.9	5.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.6</b>	▲ 11.4	14.7



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0084806 **Received** : 22 May 2024  
**Lab Number** : 06187350 **Tested** : 23 May 2024  
**Unique Number** : 11044102 **Diagnosed** : 23 May 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 959A - Urbana HC**  
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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)