



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

Machine Id  
**522020-120**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0120601</b>	GFL0066146	GFL0066121
Sample Date		Client Info		<b>06 May 2024</b>	27 Nov 2023	01 Sep 2023
Machine Age	hrs	Client Info		<b>0</b>	21064	20503
Oil Age	hrs	Client Info		<b>0</b>	600	500
Filter Age	hrs	Client Info		<b>0</b>	600	500
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>8</b>	<1	6
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>&lt;1</b>	2	3
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	0	3
Copper	ppm	ASTM D5185m	>150	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

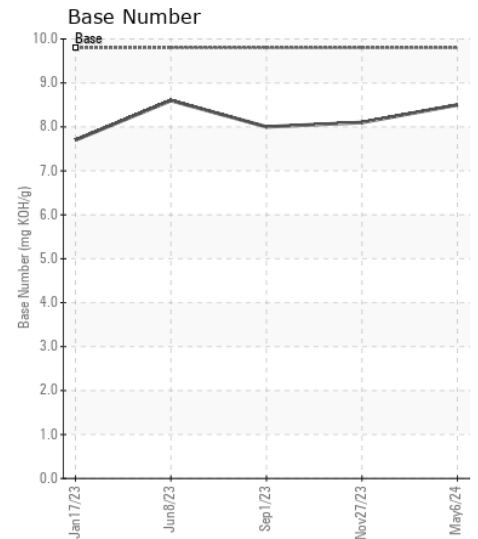
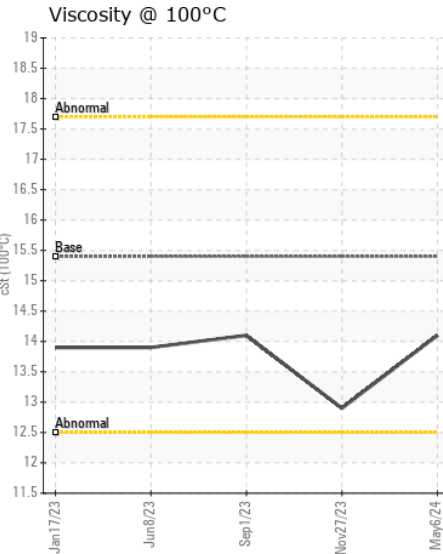
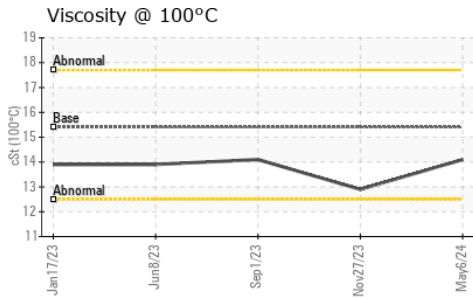
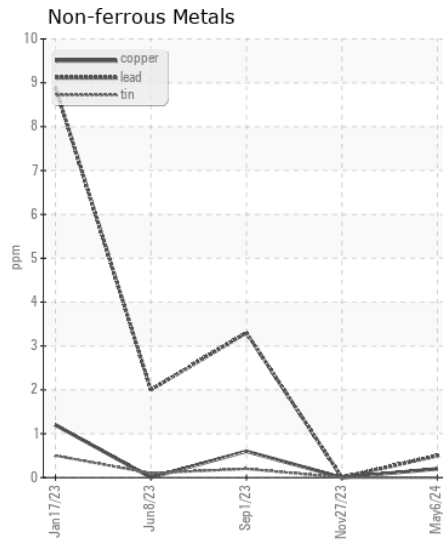
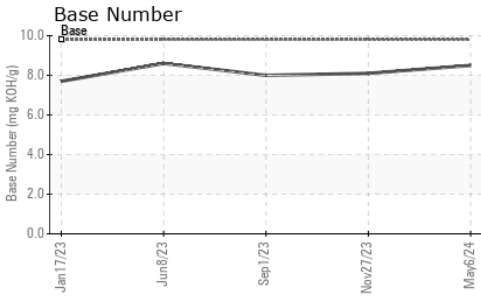
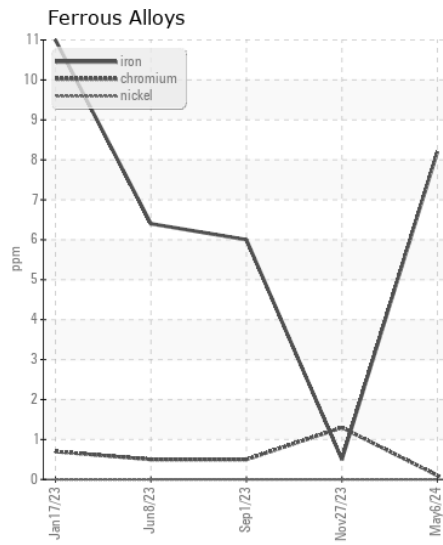
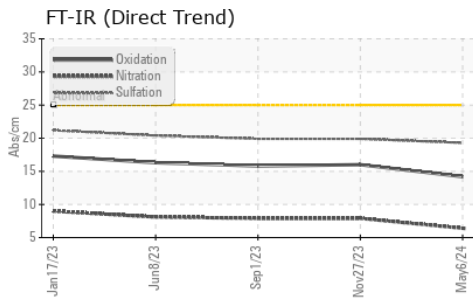
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>3</b>	0	8
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	31	2
Fuel		WC Method	>5	<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	>3	<b>0.5</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.4</b>	7.9	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.3</b>	19.9	19.9
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>5</b>	19	3
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	7
Barium	ppm	ASTM D5185m	0	<b>0</b>	4	0
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	65	67
Manganese	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>1029</b>	906	938
Calcium	ppm	ASTM D5185m	1070	<b>1158</b>	1056	1138
Phosphorus	ppm	ASTM D5185m	1150	<b>1060</b>	1011	1039
Zinc	ppm	ASTM D5185m	1270	<b>1247</b>	1187	1263
Sulfur	ppm	ASTM D5185m	2060	<b>3498</b>	3289	3201
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.2</b>	16.0	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.5</b>	8.1	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.1</b>	12.9	14.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0120601  
**Lab Number** : 06178364  
**Unique Number** : 11029690  
**Test Package** : FLEET

**Received** : 14 May 2024  
**Tested** : 14 May 2024  
**Diagnosed** : 14 May 2024 - Wes Davis

**GFL Environmental - 904A - Thorpe**  
 N14985 Tieman Ave  
 Thorp, WI  
 US 54771  
 Contact: Andy Kane  
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 T: (715)202-3420  
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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)