



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



Machine Id  
**814021**  
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>GFL0078302</b>	GFL0078312	GFL0078298
Sample Date		Client Info		<b>20 May 2024</b>	16 Apr 2024	12 Feb 2024
Machine Age	hrs	Client Info		<b>801</b>	608	151
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ATTENTION	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>11</b>	43	21
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	2	1
Nickel	ppm	ASTM D5185m	>5	<b>3</b>	12	3
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>2</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	7	5
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>57</b>	199	11
Tin	ppm	ASTM D5185m	>15	<b>2</b>	4	3
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

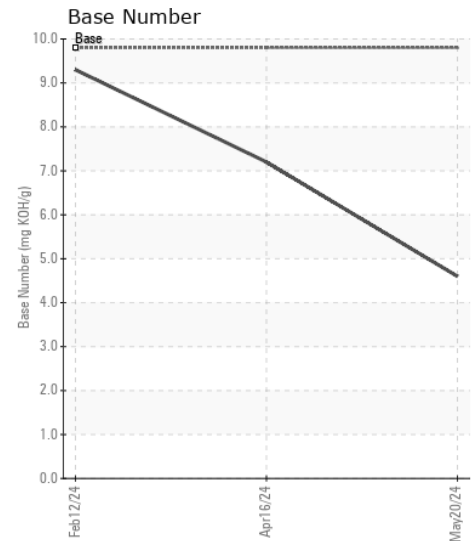
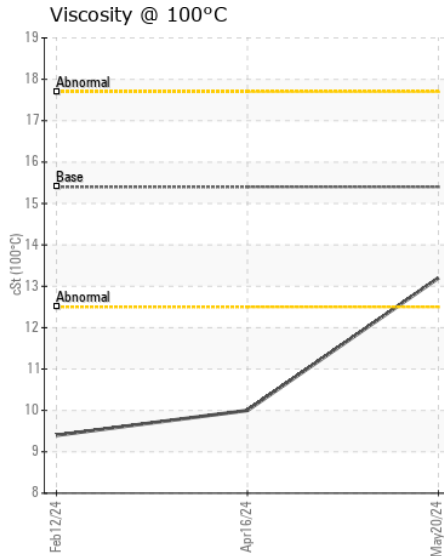
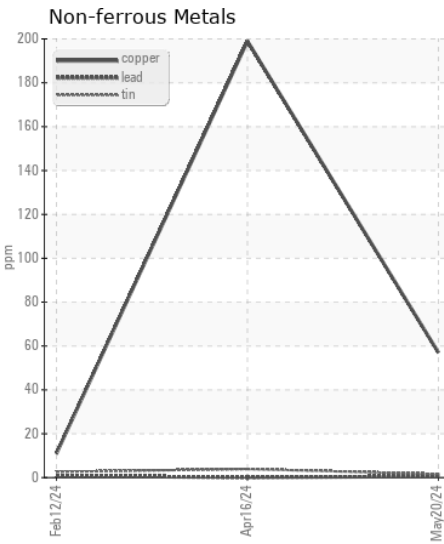
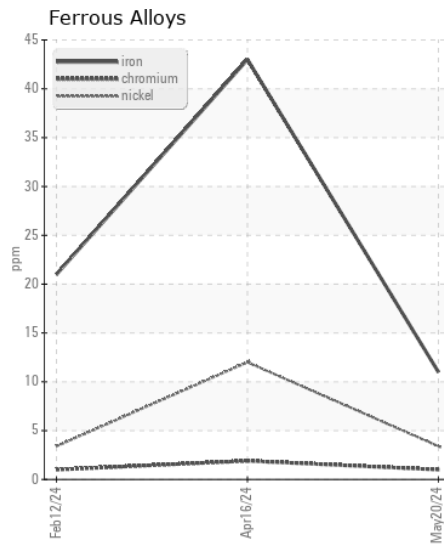
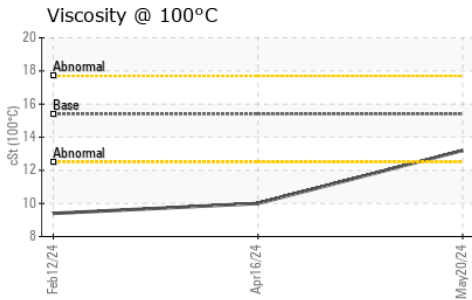
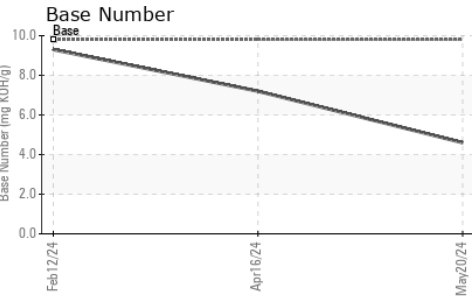
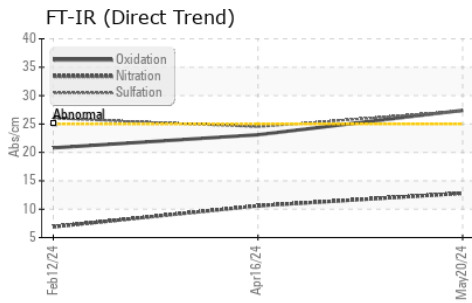
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>10</b>	68	▲ 88
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	7	7
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	0.4
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>4	<b>0.7</b>	0.5	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.8</b>	10.6	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>27.3</b>	24.5	26.0
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>	4	0
Boron	ppm	ASTM D5185m	0	<b>10</b>	160	425
Barium	ppm	ASTM D5185m	0	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m	60	<b>70</b>	123	125
Manganese	ppm	ASTM D5185m	0	<b>1</b>	6	5
Magnesium	ppm	ASTM D5185m	1010	<b>938</b>	687	656
Calcium	ppm	ASTM D5185m	1070	<b>1141</b>	1398	1379
Phosphorus	ppm	ASTM D5185m	1150	<b>954</b>	667	686
Zinc	ppm	ASTM D5185m	1270	<b>1235</b>	837	779
Sulfur	ppm	ASTM D5185m	2060	<b>3217</b>	2271	2676
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>27.4</b>	23.1	20.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>4.6</b>	7.2	9.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.2</b>	● 10.0	● 9.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0078302  
**Lab Number** : 06190008  
**Unique Number** : 11046760  
**Test Package** : FLEET

**Received** : 23 May 2024  
**Tested** : 25 May 2024  
**Diagnosed** : 29 May 2024 - Don Baldrige

**GFL Environmental - 844 - Princeton Hauling**  
 10129 Highway 62 West  
 Princeton, KY  
 US 42445

Contact: ROBERT THIBAUT  
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F:

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)