



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



Machine Id  
**426051-402441**  
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>GFL0109422</b>	GFL0109245	GFL0109325
Sample Date		Client Info		<b>18 Apr 2024</b>	01 Apr 2024	07 Mar 2024
Machine Age	hrs	Client Info		<b>22135</b>	21994	21861
Oil Age	hrs	Client Info		<b>428</b>	573	440
Filter Age	hrs	Client Info		<b>428</b>	573	440
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>19</b>	9	4
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>1</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>12</b>	8	8
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>8</b>	4	2
Lead	ppm	ASTM D5185m	>40	<b>1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	<1	0
Tin	ppm	ASTM D5185m	>15	<b>2</b>	0	<1
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**

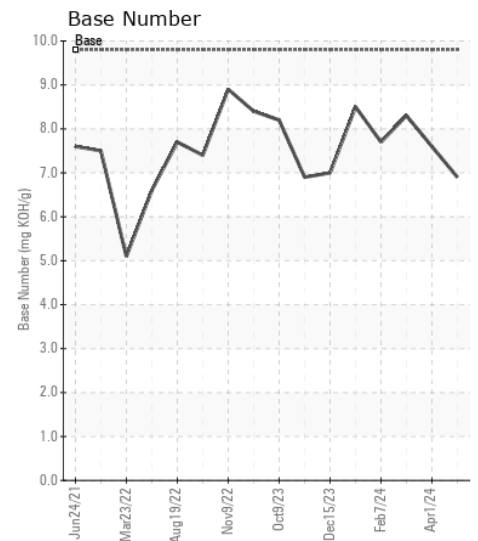
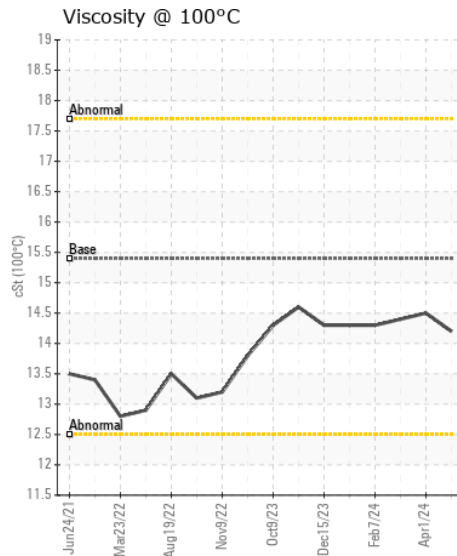
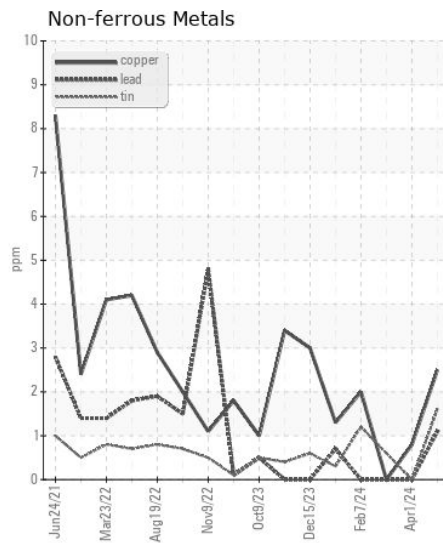
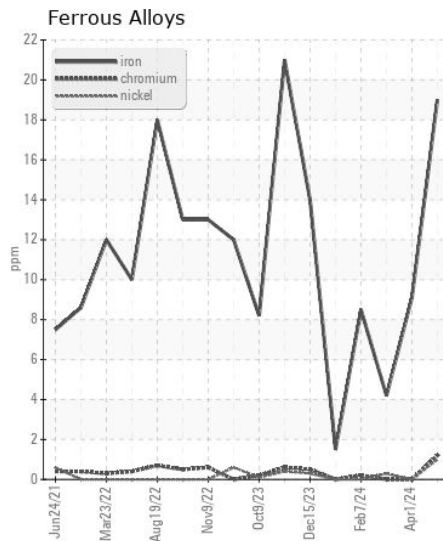
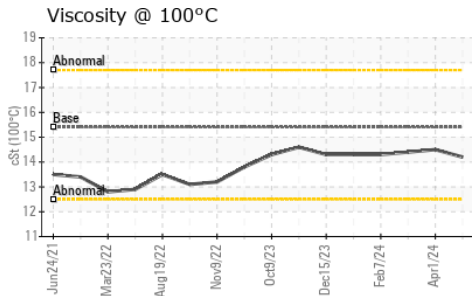
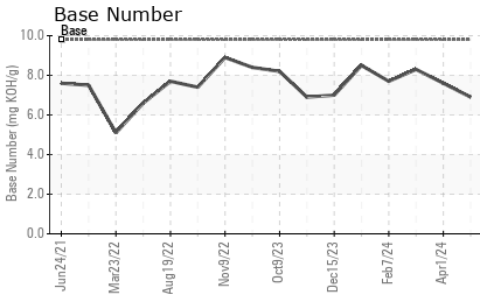
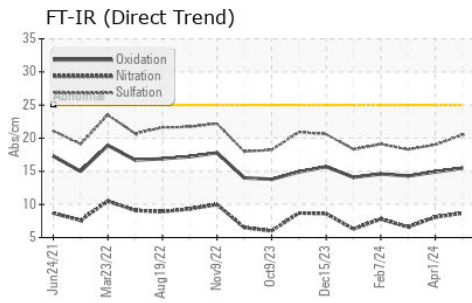
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>11</b>	8	6
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	<1	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>0.9</b>	0.7	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.7</b>	8.1	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.5</b>	19.0	18.3
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>	3	2
Boron	ppm	ASTM D5185m	0	<b>7</b>	6	14
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>76</b>	56	51
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>1230</b>	963	875
Calcium	ppm	ASTM D5185m	1070	<b>1485</b>	1191	1016
Phosphorus	ppm	ASTM D5185m	1150	<b>1458</b>	1044	1031
Zinc	ppm	ASTM D5185m	1270	<b>1697</b>	1322	1213
Sulfur	ppm	ASTM D5185m	2060	<b>4431</b>	3761	3120
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.5</b>	14.9	14.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.9</b>	7.6	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.2</b>	14.5	14.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109422  
**Lab Number** : 06156688  
**Unique Number** : 10992111  
**Test Package** : FLEET

**Received** : 22 Apr 2024  
**Tested** : 23 Apr 2024  
**Diagnosed** : 24 Apr 2024 - Sean Felton

**GFL Environmental - 891 - Oklahoma City Hauling**  
 1001 South Rockwell  
 Oklahoma City, OK  
 US 73128

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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)