



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

Area

**(YA144618)**

Machine Id

**2722**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (10 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0123374</b>	GFL0082484	GFL0082492
Sample Date		Client Info		<b>27 Jun 2024</b>	05 Jan 2024	09 Aug 2023
Machine Age	hrs	Client Info		<b>12782</b>	12782	12782
Oil Age	hrs	Client Info		<b>12782</b>	12782	626
Filter Age	hrs	Client Info		<b>12782</b>	12782	626
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	>165	<b>20</b>	18	12
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>150	<b>8</b>	6	4
Copper	ppm	ASTM D5185m	>90	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

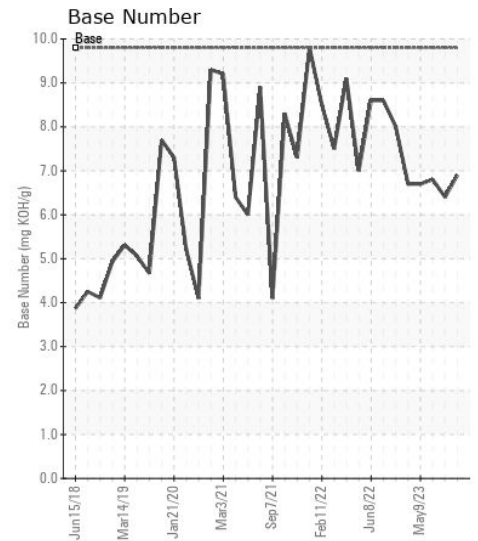
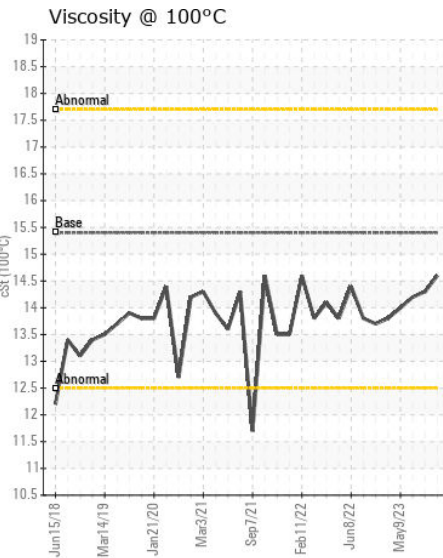
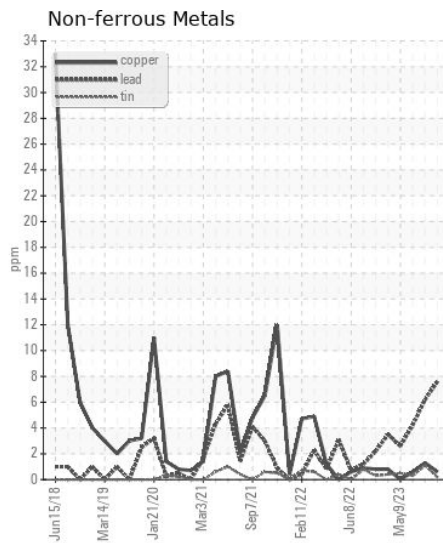
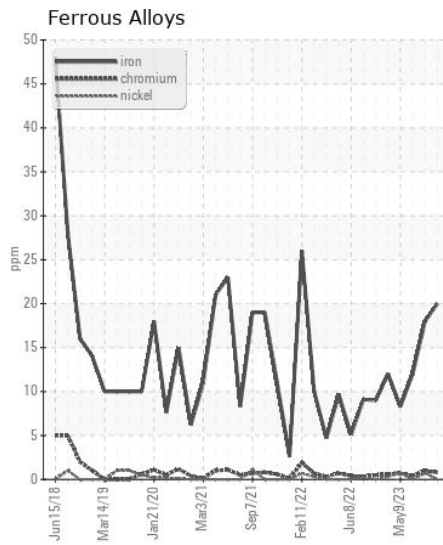
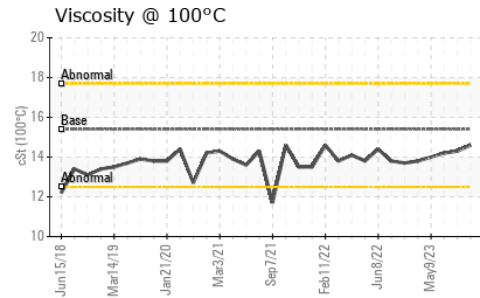
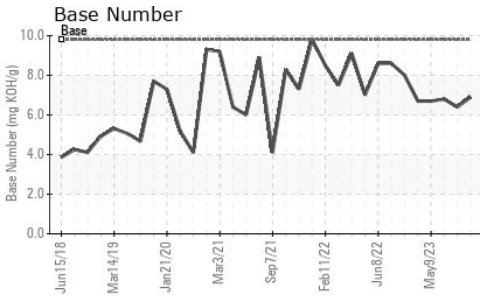
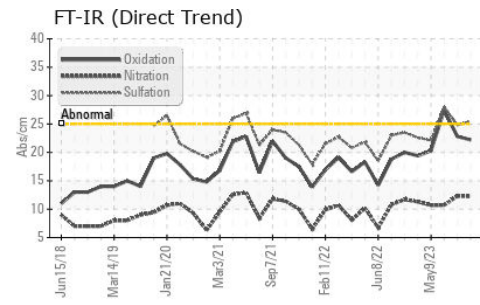
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	<b>6</b>	8	4
Potassium	ppm	ASTM D5185m	>20	<b>13</b>	5	4
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	>7.5	<b>0.6</b>	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.2</b>	12.3	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.5</b>	24.8	28.0
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>6</b>	3	5
Boron	ppm	ASTM D5185m	0	<b>11</b>	2	15
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>61</b>	63	59
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>929</b>	1011	965
Calcium	ppm	ASTM D5185m	1070	<b>1207</b>	1125	1182
Phosphorus	ppm	ASTM D5185m	1150	<b>1079</b>	964	1067
Zinc	ppm	ASTM D5185m	1270	<b>1309</b>	1278	1257
Sulfur	ppm	ASTM D5185m	2060	<b>2773</b>	3249	4245
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>22.2</b>	22.8	27.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.9</b>	6.4	6.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.6</b>	14.3	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0123374  
**Lab Number** : 06227089  
**Unique Number** : 11110582  
**Test Package** : FLEET

**Received** : 03 Jul 2024  
**Tested** : 05 Jul 2024  
**Diagnosed** : 05 Jul 2024 - Wes Davis

**GFL Environmental - 007 - Brunswick**  
 2809 Galloway Road  
 Bolivia, NC  
 US 28422  
 Contact: DONALD CRAVEN  
 dcraven@gflenv.com

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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