



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

Area  
**(10A80900)**  
Machine Id  
**410017**  
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>GFL0105545</b>	GFL0105553	GFL0101103
Sample Date		Client Info		<b>15 Feb 2024</b>	19 Jan 2024	19 Dec 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	600
Filter Age	hrs	Client Info		<b>0</b>	0	600
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>7</b>	4	9
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	3	5
Lead	ppm	ASTM D5185m	>40	<b>1</b>	1	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	4
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</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**

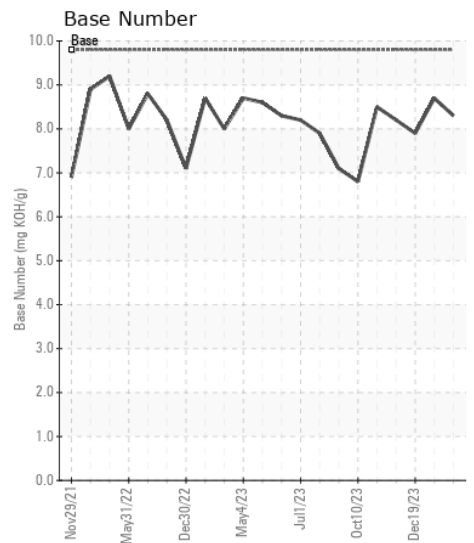
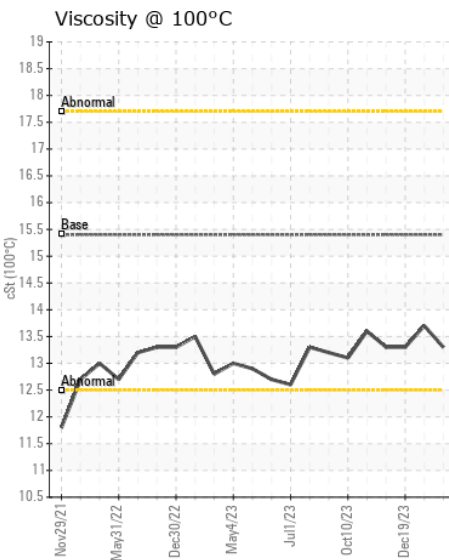
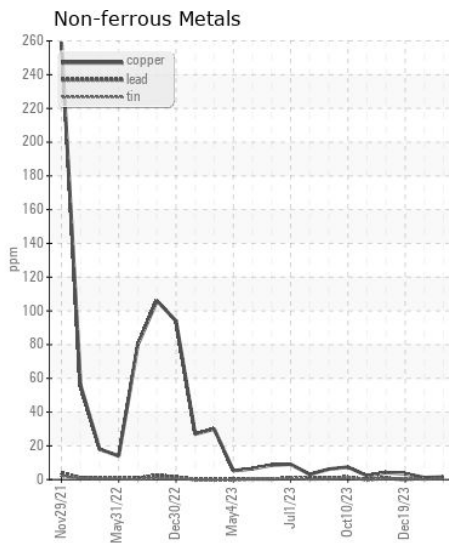
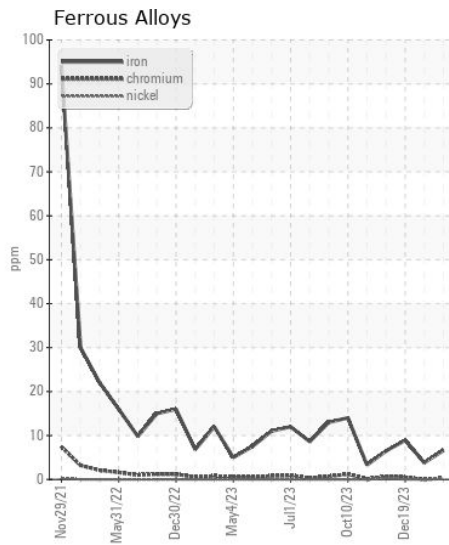
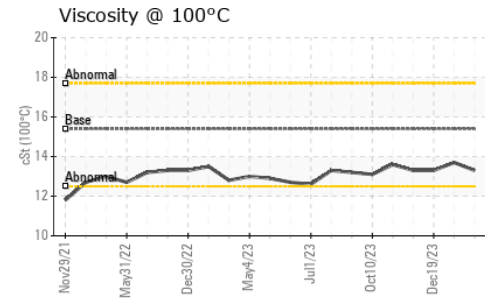
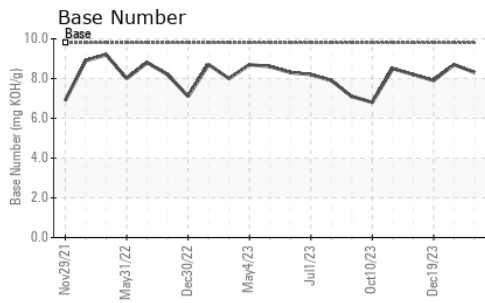
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	3	4
Potassium	ppm	ASTM D5185m	>20	<b>10</b>	8	14
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	>6	<b>0.2</b>	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.4</b>	5.4	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.2</b>	17.7	19.2
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>	3	4
Boron	ppm	ASTM D5185m	0	<b>4</b>	3	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>67</b>	60	58
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>1236</b>	943	946
Calcium	ppm	ASTM D5185m	1070	<b>1394</b>	1082	1173
Phosphorus	ppm	ASTM D5185m	1150	<b>1249</b>	1044	1096
Zinc	ppm	ASTM D5185m	1270	<b>1643</b>	1262	1300
Sulfur	ppm	ASTM D5185m	2060	<b>3957</b>	3194	3344
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.0</b>	13.4	15.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.3</b>	8.7	7.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.3</b>	13.7	13.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0105545  
**Lab Number** : 06104113  
**Unique Number** : 10902343  
**Test Package** : FLEET

**Received** : 29 Feb 2024  
**Tested** : 29 Feb 2024  
**Diagnosed** : 29 Feb 2024 - Wes Davis

**GFL Environmental - 846 - Mayfield Hauling**  
 3426 State Route 45  
 Mayfield, KY  
 US 42066  
 Contact: Jack Lindsey  
 jack.lindsey@gflenv.com  
 T: (270)970-3690  
 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)