



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



Area  
**(50032Z)**  
Machine Id  
**412059**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (11 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0107494</b>	GFL0107500	GFL0064700
Sample Date		Client Info		<b>14 Mar 2024</b>	17 Jan 2024	06 Dec 2023
Machine Age	hrs	Client Info		<b>4516</b>	4056	3746
Oil Age	hrs	Client Info		<b>609</b>	310	609
Filter Age	hrs	Client Info		<b>609</b>	310	609
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>12</b>	1	9
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	2
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	2	3
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>3</b>	<1	4
Tin	ppm	ASTM D5185m	>15	<b>1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

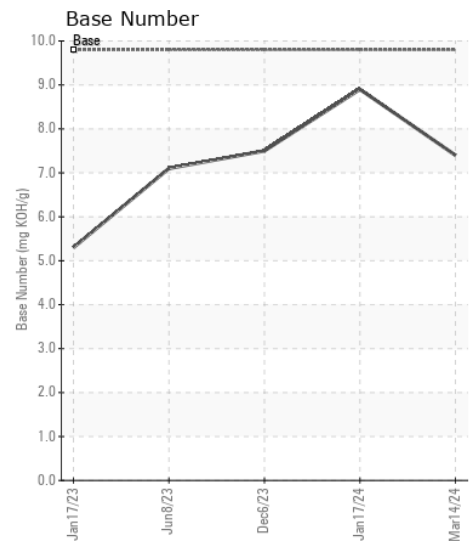
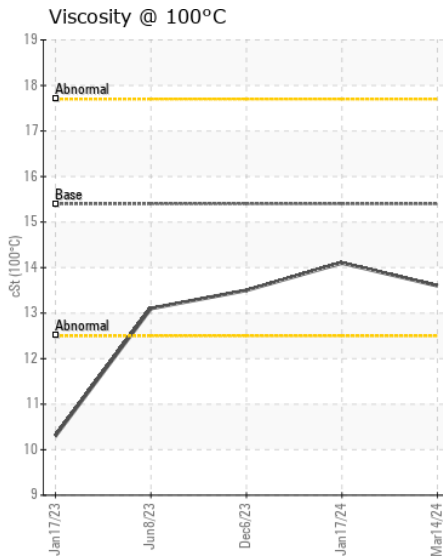
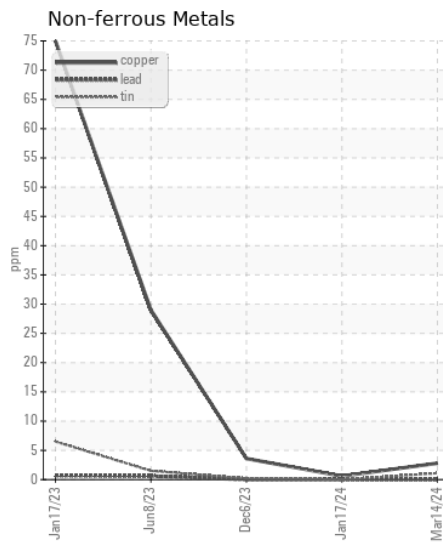
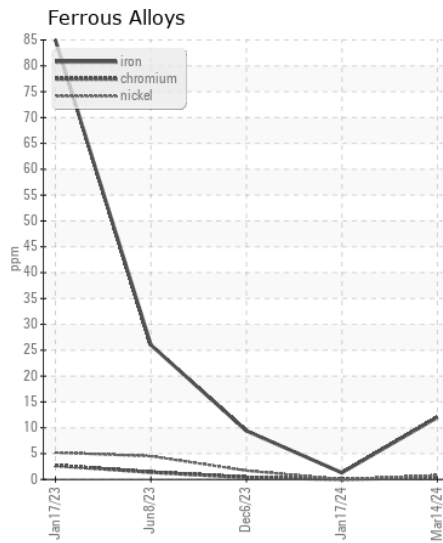
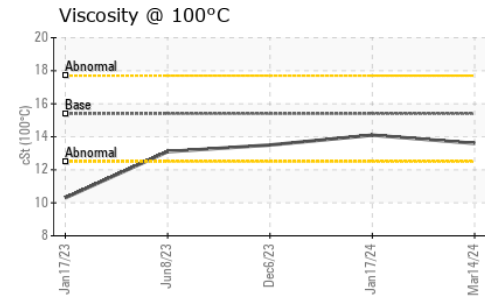
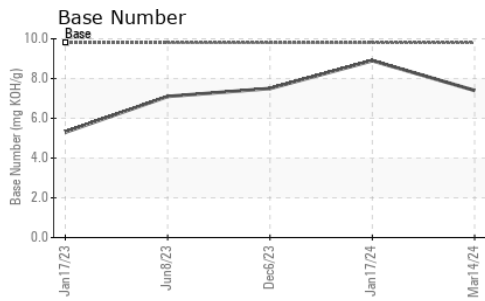
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	3	6
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	<1	3
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>0.4</b>	0.1	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.1</b>	5.3	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.6</b>	18.0	20.4
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>1</b>	<1	4
Boron	ppm	ASTM D5185m	0	<b>15</b>	31	20
Barium	ppm	ASTM D5185m	0	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>67</b>	59	61
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>907</b>	855	848
Calcium	ppm	ASTM D5185m	1070	<b>1242</b>	1025	1136
Phosphorus	ppm	ASTM D5185m	1150	<b>939</b>	892	963
Zinc	ppm	ASTM D5185m	1270	<b>1205</b>	1154	1154
Sulfur	ppm	ASTM D5185m	2060	<b>3069</b>	2958	2719
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.0</b>	13.9	16.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.4</b>	8.9	7.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.6</b>	14.1	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0107494  
**Lab Number** : 06125377  
**Unique Number** : 10939528  
**Test Package** : FLEET

**Received** : 21 Mar 2024  
**Tested** : 24 Mar 2024  
**Diagnosed** : 24 Mar 2024 - Wes Davis

**GFL Environmental - 912 - Fort Atkinson HC**  
 1215 Klement St.  
 Fort Atkinson, WI  
 US 53538

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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)