



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

Area  
**(40957HA)**  
Machine Id  
**826028-1018**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0111905</b>	GFL0116574	GFL0111836
Sample Date		Client Info		<b>03 May 2024</b>	08 Apr 2024	01 Mar 2024
Machine Age	hrs	Client Info		<b>18248</b>	18138	18046
Oil Age	hrs	Client Info		<b>17861</b>	17843	295
Filter Age	hrs	Client Info		<b>0</b>	0	0
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	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>21</b>	16	34
Chromium	ppm	ASTM D5185m	>4	<b>1</b>	2	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>2</b>	2	9
Lead	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	3
Copper	ppm	ASTM D5185m	>55	<b>2</b>	2	3
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
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.

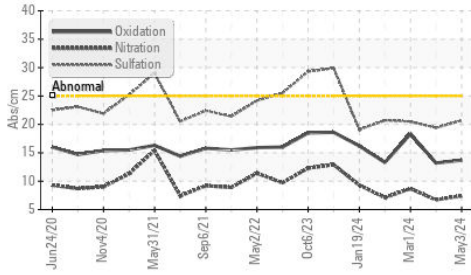
Silicon	ppm	ASTM D5185m	>15	<b>6</b>	6	▲ 22
Potassium	ppm	ASTM D5185m	>20	<b>11</b>	20	2
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	0.3	▲ 5.3
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>1.4</b>	1	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.4</b>	6.7	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.7</b>	19.4	20.5
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**

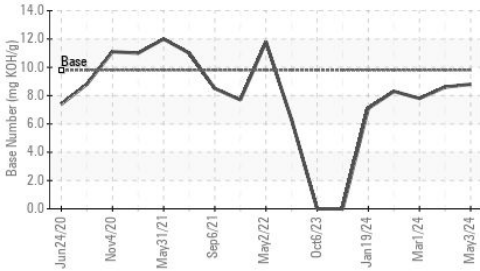
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>4</b>	6	3
Boron	ppm	ASTM D5185m	0	<b>13</b>	11	20
Barium	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	60	<b>61</b>	57	45
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>930</b>	941	841
Calcium	ppm	ASTM D5185m	1070	<b>1162</b>	1167	1698
Phosphorus	ppm	ASTM D5185m	1150	<b>1109</b>	1116	1073
Zinc	ppm	ASTM D5185m	1270	<b>1251</b>	1253	1307
Sulfur	ppm	ASTM D5185m	2060	<b>3353</b>	3591	3169
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.7</b>	13.2	18.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.8</b>	8.6	7.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.8</b>	13.9	▲ 12.4

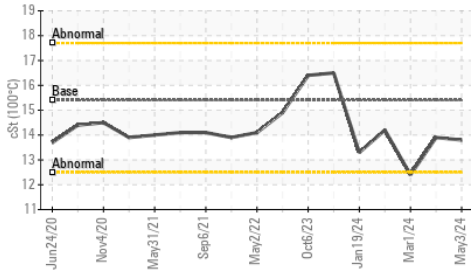
**FT-IR (Direct Trend)**



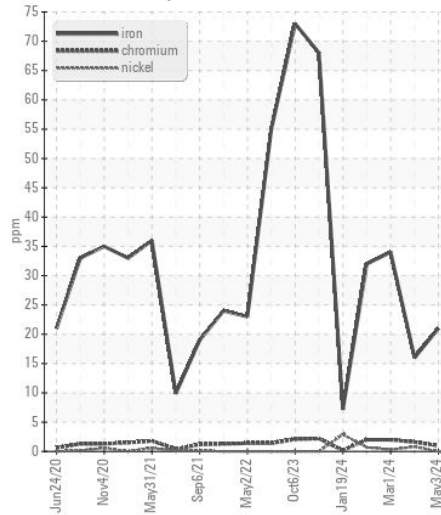
**Base Number**



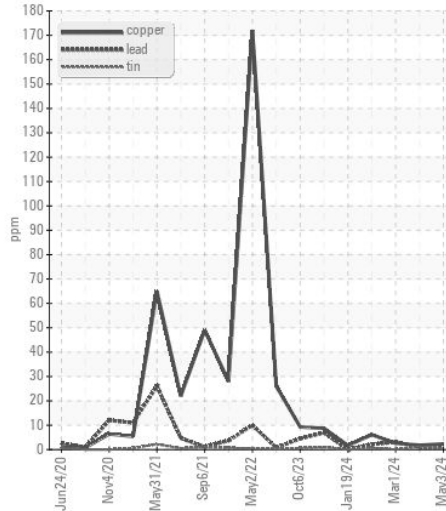
**Viscosity @ 100°C**



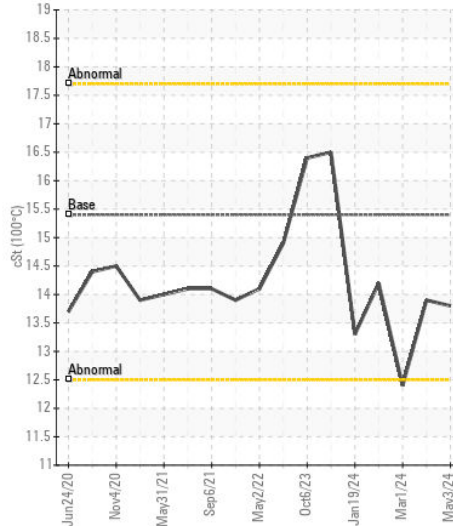
**Ferrous Alloys**



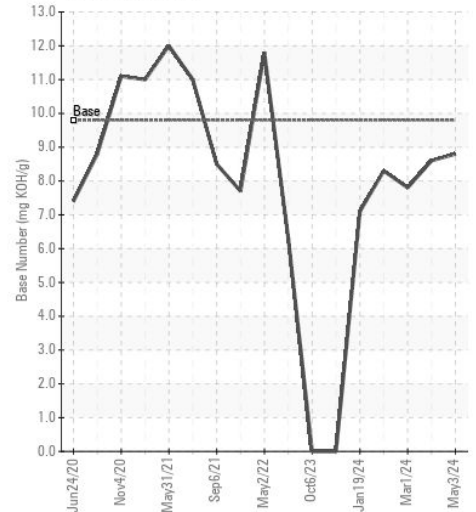
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0111905  
**Lab Number** : 06174938  
**Unique Number** : 11020991  
**Test Package** : FLEET

**Received** : 09 May 2024  
**Tested** : 10 May 2024  
**Diagnosed** : 10 May 2024 - Wes Davis

**GFL Environmental - 652 - Fredericksburg Hauling**  
 10954 Houser Drive  
 Fredericksburg, VA  
 US 22408  
 Contact: WILLIAM MILO  
 wmilo@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)