



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

Area  
**MONTGOMERY**

Machine Id  
**MACK 920107**

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>GFL0127234</b>	GFL0118421	GFL0088018
Sample Date		Client Info		<b>24 Jun 2024</b>	05 Jun 2024	10 May 2024
Machine Age	hrs	Client Info		<b>9482</b>	9313	9155
Oil Age	hrs	Client Info		<b>572</b>	403	245
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</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>3</b>	38	19
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	4	3
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	2	1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<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.

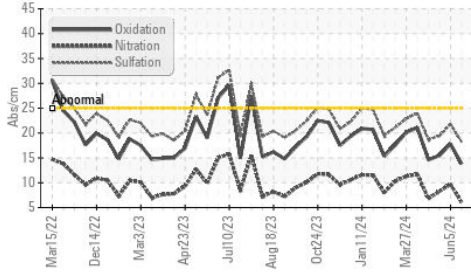
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	11	6
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	6	3
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>4	<b>0.2</b>	0.9	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.0</b>	9.7	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.2</b>	21.8	19.4
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**

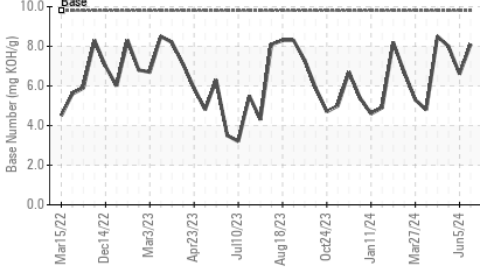
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	4	4
Boron	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>57</b>	64	57
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>954</b>	949	894
Calcium	ppm	ASTM D5185m	1070	<b>1048</b>	1112	1025
Phosphorus	ppm	ASTM D5185m	1150	<b>1018</b>	1177	1059
Zinc	ppm	ASTM D5185m	1270	<b>1294</b>	1291	1235
Sulfur	ppm	ASTM D5185m	2060	<b>3532</b>	3247	3272
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.8</b>	17.8	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.1</b>	6.6	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.4</b>	13.9	14.0

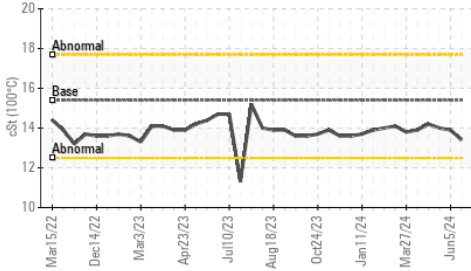
**FT-IR (Direct Trend)**



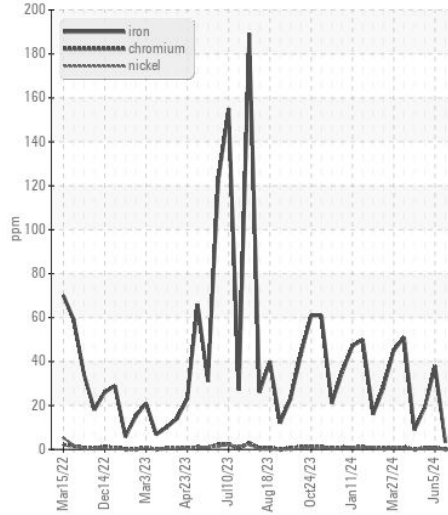
**Base Number**



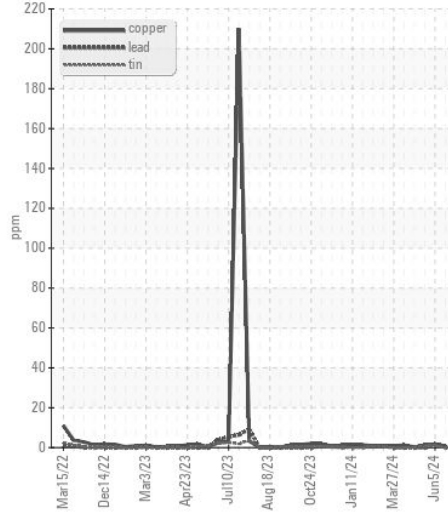
**Viscosity @ 100°C**



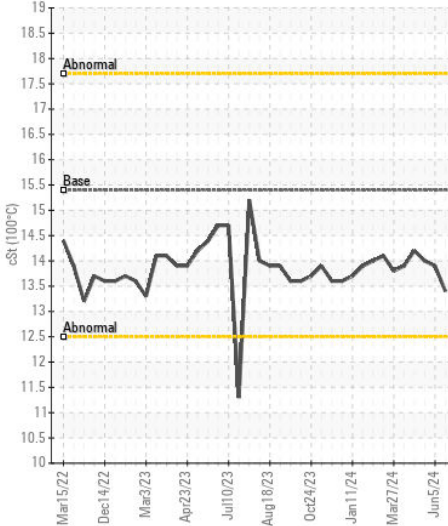
**Ferrous Alloys**



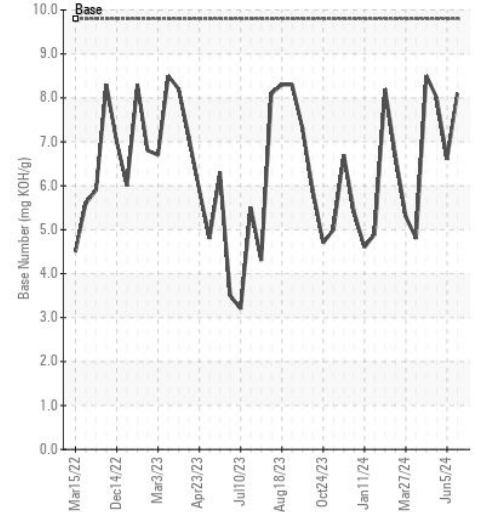
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0127234  
**Lab Number** : 06223326  
**Unique Number** : 11101523  
**Test Package** : FLEET

**Received** : 28 Jun 2024  
**Tested** : 01 Jul 2024  
**Diagnosed** : 01 Jul 2024 - Wes Davis

**GFL Environmental - 955 - Montgomery**  
 1121 Wilbanks St  
 Montgomery, AL  
 US 36108  
 Contact: LISA REEVES

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)

T:  
F: