



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

Area  
**(EPQ787)**  
Machine Id  
**911055**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (7 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0111435</b>	GFL0111420	GFL0111487
Sample Date		Client Info		<b>28 Jun 2024</b>	05 Jun 2024	17 Apr 2024
Machine Age	hrs	Client Info		<b>9076</b>	8948	8836
Oil Age	hrs	Client Info		<b>555</b>	427	315
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>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>15</b>	58	▲ 158
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	5	10
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
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>	5	15
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>0</b>	1	2
Tin	ppm	ASTM D5185m	>15	<b>0</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.

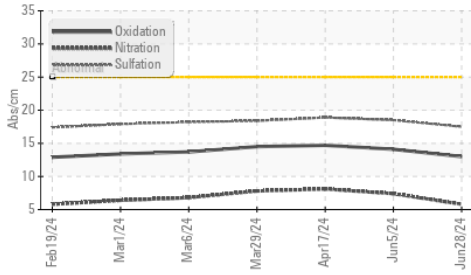
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	5	6
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	10	26
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>0.1</b>	0.3	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.8</b>	7.4	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.5</b>	18.5	18.9
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**

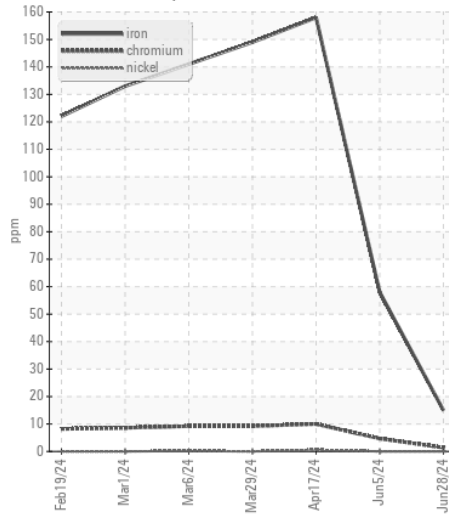
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	2	4
Boron	ppm	ASTM D5185m	0	<b>4</b>	3	5
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>62</b>	56	60
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	2
Magnesium	ppm	ASTM D5185m	1010	<b>1036</b>	884	912
Calcium	ppm	ASTM D5185m	1070	<b>1108</b>	991	1049
Phosphorus	ppm	ASTM D5185m	1150	<b>1154</b>	937	1015
Zinc	ppm	ASTM D5185m	1270	<b>1360</b>	1152	1180
Sulfur	ppm	ASTM D5185m	2060	<b>3365</b>	3221	3134
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.0</b>	14.1	14.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.7</b>	8.5	8.4
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.7</b>	13.4	13.8

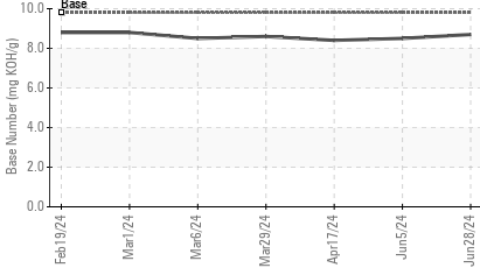
**FT-IR (Direct Trend)**



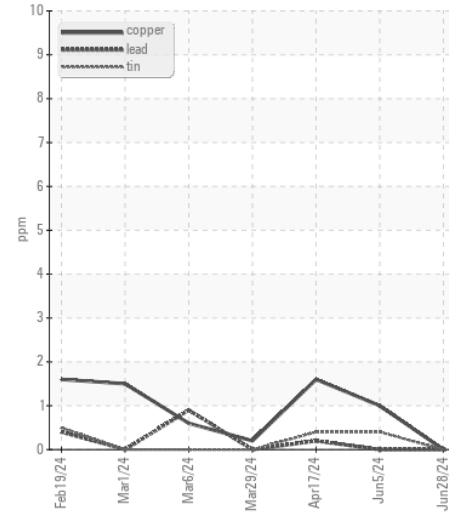
**Ferrous Alloys**



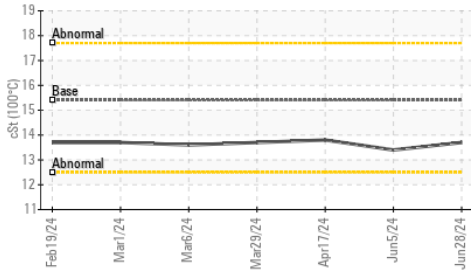
**Base Number**



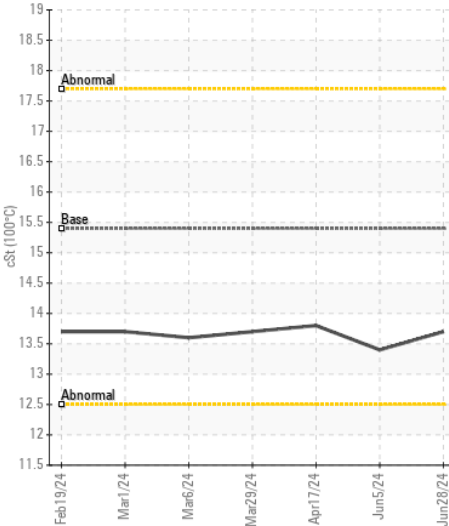
**Non-ferrous Metals**



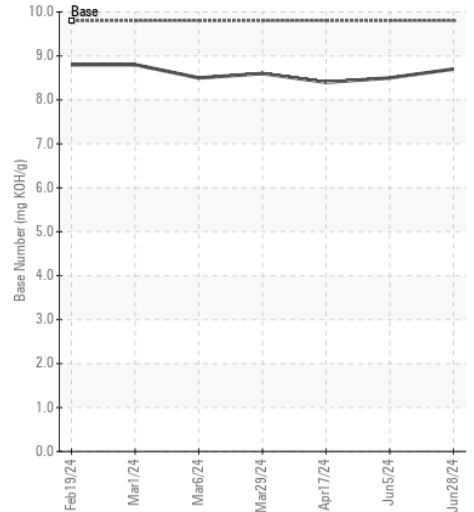
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0111435  
**Lab Number** : 06227082  
**Unique Number** : 11110575  
**Test Package** : FLEET

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

**GFL Environmental - 073 - Warner Robins - Transwaste**  
 155 Story Road  
 Warner Robins, GA  
 US 31093  
 Contact: JOSH MALONEY  
 jmaloney@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)

T:  
F: