



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

Area  
**(D582HW)**  
Machine Id  
**10681**  
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>GFL0098920</b>	GFL0098900	GFL0098891
Sample Date		Client Info		<b>30 May 2024</b>	06 May 2024	15 Apr 2024
Machine Age	hrs	Client Info		<b>19845</b>	17242	19504
Oil Age	hrs	Client Info		<b>16955</b>	19664	19347
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>Not Changd</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>34</b>	19	12
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>15	<b>4</b>	0	2
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	1
Copper	ppm	ASTM D5185m	>100	<b>1</b>	0	1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	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**

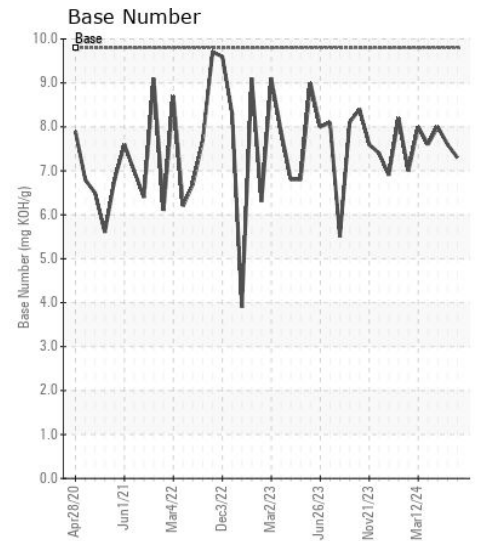
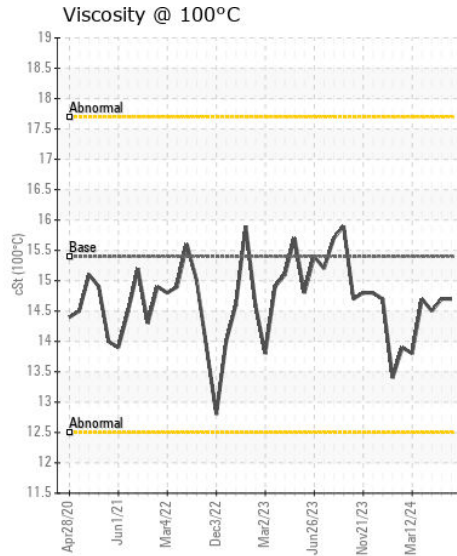
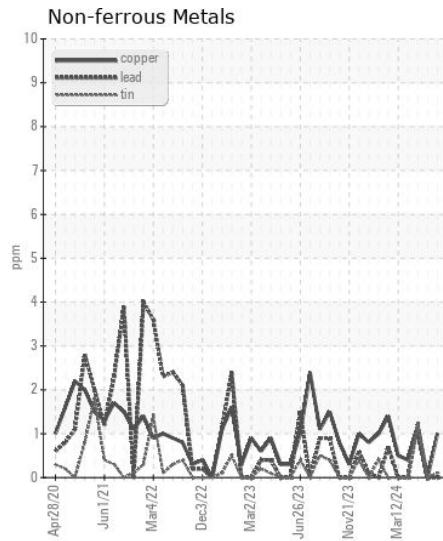
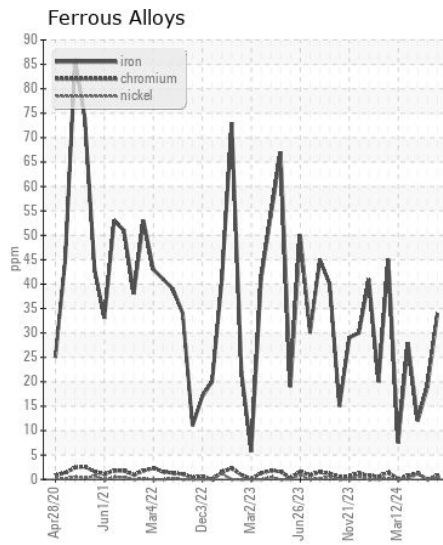
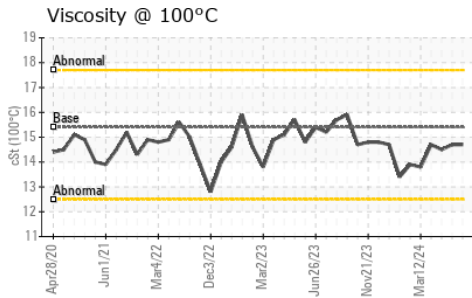
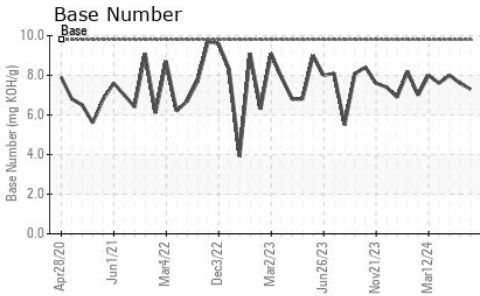
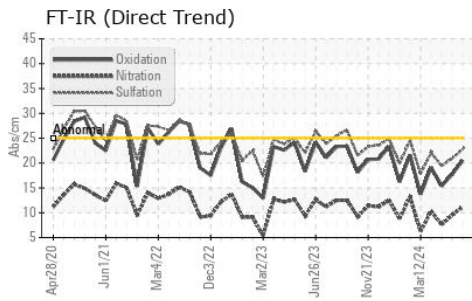
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>8</b>	5	8
Potassium	ppm	ASTM D5185m	>20	<b>16</b>	8	10
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>0.8</b>	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.2</b>	9.5	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.8</b>	20.9	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>24</b>	18	14
Boron	ppm	ASTM D5185m	0	<b>3</b>	0	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	60	59
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	1
Magnesium	ppm	ASTM D5185m	1010	<b>963</b>	968	880
Calcium	ppm	ASTM D5185m	1070	<b>1134</b>	1154	1051
Phosphorus	ppm	ASTM D5185m	1150	<b>1089</b>	1053	937
Zinc	ppm	ASTM D5185m	1270	<b>1291</b>	1280	1143
Sulfur	ppm	ASTM D5185m	2060	<b>3389</b>	3313	3116
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.5</b>	17.7	15.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.3</b>	7.6	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.7</b>	14.7	14.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0098920  
**Lab Number** : 06212757  
**Unique Number** : 11085621  
**Test Package** : FLEET

**Received** : 17 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Wes Davis

**GFL Environmental - 084 - Clarksville**  
 699 Jack Miller Boulevard  
 Clarksville, TN  
 US 37042

Contact: ROBERT THIBAUT  
 robert.thibault@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: (931)552-7276  
 F: (931)572-9674