



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

Area  
**(P638462)**

Machine Id  
**10812**

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>GFL0096916</b>	GFL0050913	GFL0050887
Sample Date		Client Info		<b>07 Feb 2024</b>	22 Nov 2023	21 Sep 2023
Machine Age	hrs	Client Info		<b>17428</b>	16831	16379
Oil Age	hrs	Client Info		<b>597</b>	16260	16260
Filter Age	hrs	Client Info		<b>0</b>	16260	16260
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	MARGINAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>27</b>	22	41
Chromium	ppm	ASTM D5185m	>5	<b>1</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>3</b>	5	<1
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	4
Copper	ppm	ASTM D5185m	>100	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
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**

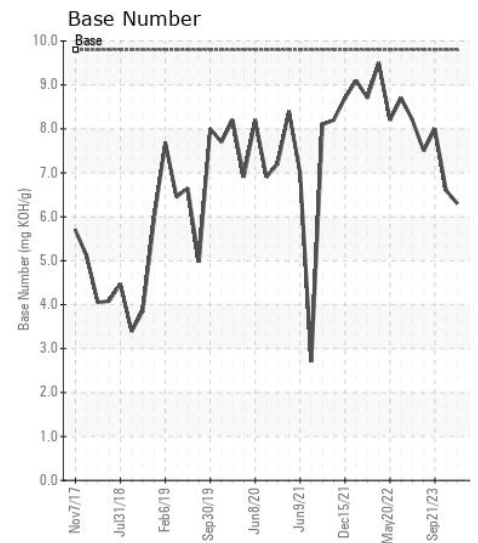
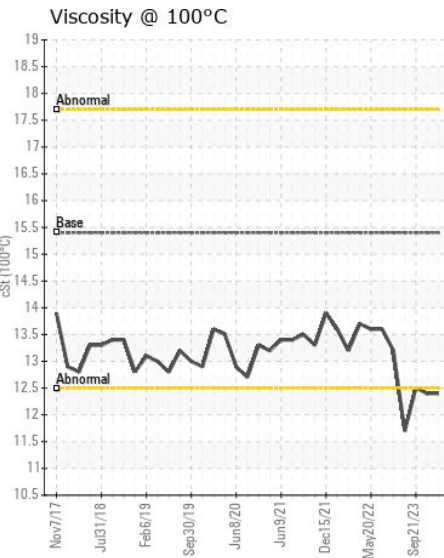
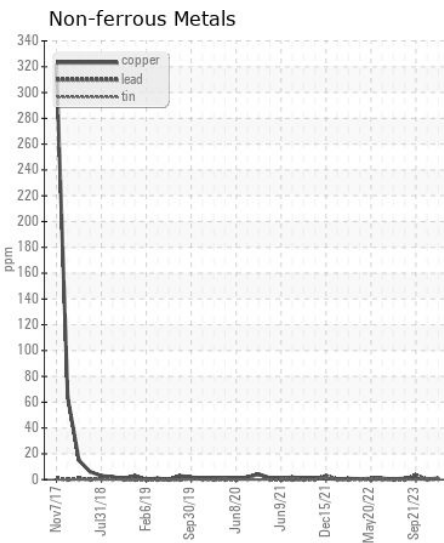
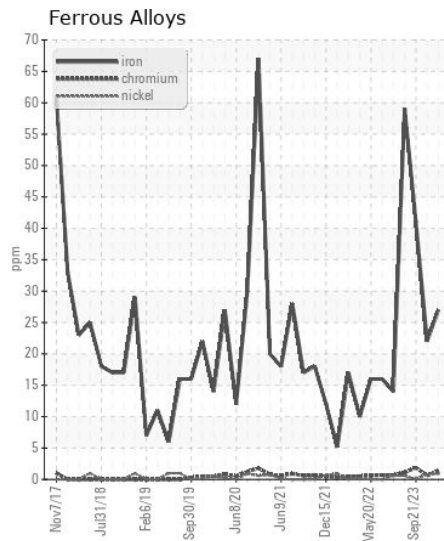
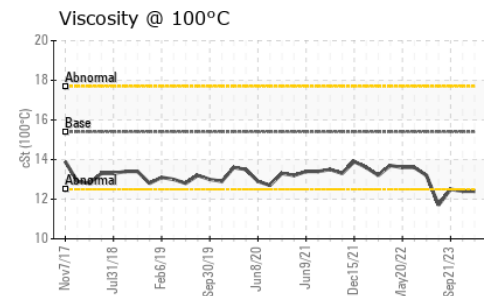
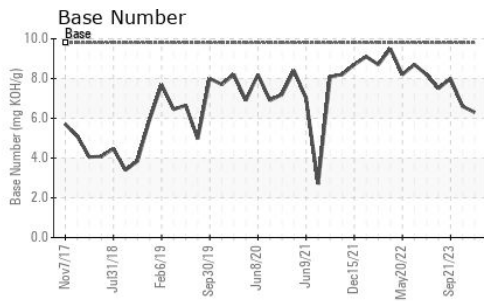
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>8</b>	6	8
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	4
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	▲ 2.3
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>0.7</b>	0.6	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.3</b>	11.3	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.8</b>	21.0	17.6
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>	9	10
Boron	ppm	ASTM D5185m	0	<b>9</b>	11	28
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>66</b>	57	64
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>910</b>	797	927
Calcium	ppm	ASTM D5185m	1070	<b>1096</b>	1009	1429
Phosphorus	ppm	ASTM D5185m	1150	<b>927</b>	953	1049
Zinc	ppm	ASTM D5185m	1270	<b>1230</b>	1092	1375
Sulfur	ppm	ASTM D5185m	2060	<b>2753</b>	2745	3613
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.5</b>	18.7	13.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.3</b>	6.6	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.4</b>	12.4	12.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0096916  
**Lab Number** : 06085281  
**Unique Number** : 10872726  
**Test Package** : FLEET

**Received** : 09 Feb 2024  
**Tested** : 12 Feb 2024  
**Diagnosed** : 12 Feb 2024 - Wes Davis

**GFL Environmental - 031 - Greenville/Spartanburg**  
 1635 Antioch Church Rd  
 Piedmont, SC  
 US 29673

Contact: TECHNICIAN ACCOUNT  
 catherine.anastasio@wearcheck.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: