



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

Machine Id  
**101112**  
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>GFL0119058</b>	GFL0044032	GFL0039848
Sample Date		Client Info		<b>18 Apr 2024</b>	10 Mar 2022	24 Jan 2022
Machine Age	mls	Client Info		<b>185171</b>	185171	185171
Oil Age	mls	Client Info		<b>185171</b>	14929	14904
Filter Age	mls	Client Info		<b>0</b>	377	352
Oil Changed		Client Info		<b>N/A</b>	Changed	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>27</b>	10	8
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	0
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>30	<b>3</b>	10	7
Lead	ppm	ASTM D5185m	>30	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>150	<b>0</b>	<1	0
Tin	ppm	ASTM D5185m	>5	<b>0</b>	2	0
Vanadium	ppm	ASTM D5185m		<b>0</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.

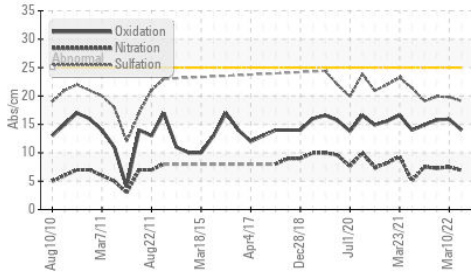
Silicon	ppm	ASTM D5185m	>20	<b>3</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	17	12
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.9</b>	7.5	7.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.1</b>	19.8	19.9
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**

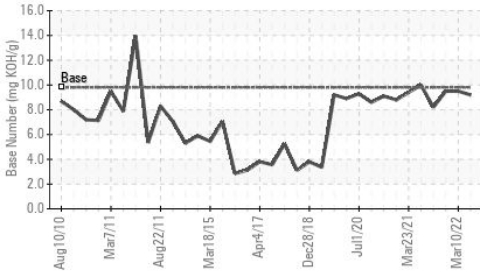
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	2
Boron	ppm	ASTM D5185m	0	<b>9</b>	7	6
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>64</b>	65	59
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>1033</b>	1098	955
Calcium	ppm	ASTM D5185m	1070	<b>1195</b>	1298	1163
Phosphorus	ppm	ASTM D5185m	1150	<b>1043</b>	1207	1051
Zinc	ppm	ASTM D5185m	1270	<b>1379</b>	1385	1257
Sulfur	ppm	ASTM D5185m	2060	<b>4013</b>	3024	3022
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.0</b>	15.9	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>9.2</b>	9.5	9.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.1</b>	14.4	14.3

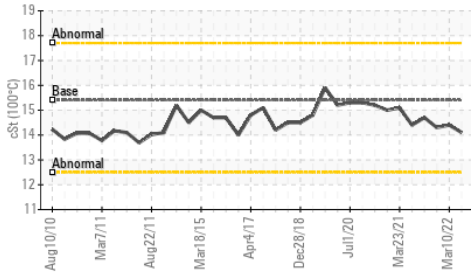
**FT-IR (Direct Trend)**



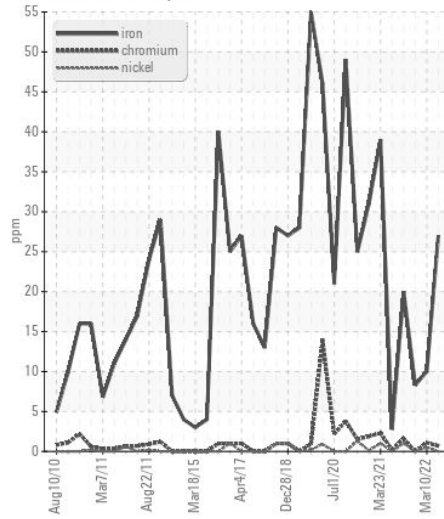
**Base Number**



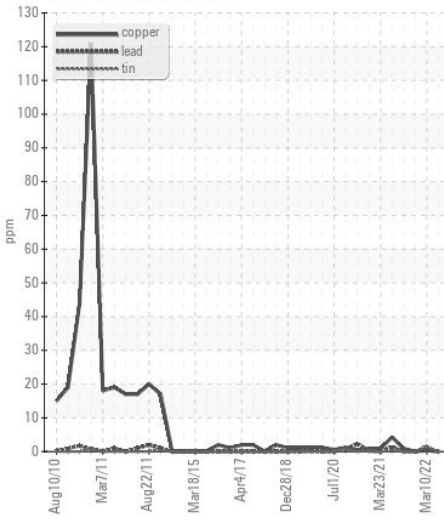
**Viscosity @ 100°C**



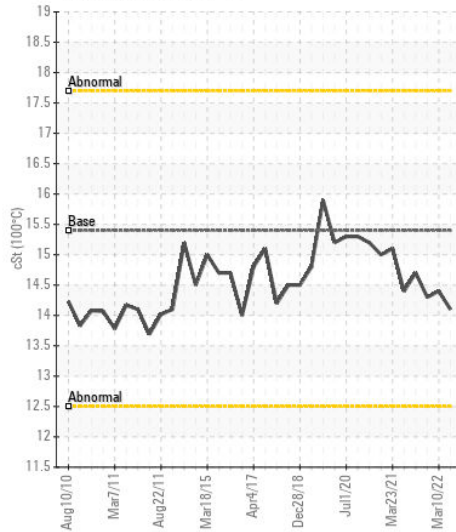
**Ferrous Alloys**



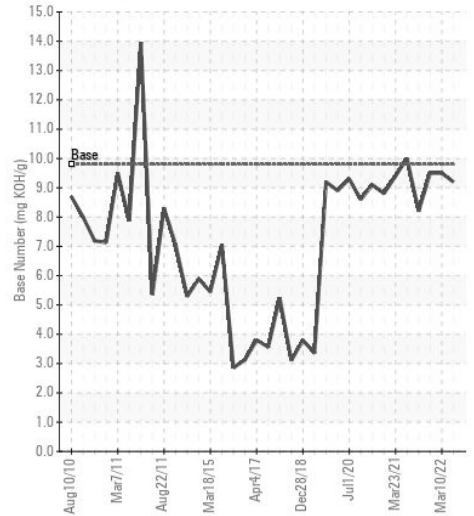
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0119058  
**Lab Number** : 06159644  
**Unique Number** : 10995067  
**Test Package** : FLEET

**Received** : 24 Apr 2024  
**Tested** : 29 Apr 2024  
**Diagnosed** : 29 Apr 2024 - Wes Davis

**GFL Environmental - 045 - Tidewater**  
 3821 Cook Blvd.  
 Chesapeake, VA  
 US 23323

Contact: ELVIN RODRIGUEZ  
 elvinrodriguez@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: