



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



Area  
**{UNASSIGNED}**  
Machine Id  
**934031**  
Component  
**Natural Gas Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (8)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0122198</b>	GFL0112374	GFL0115716
Sample Date		Client Info		<b>23 May 2024</b>	06 May 2024	01 Apr 2024
Machine Age	hrs	Client Info		<b>1907</b>	1766	1484
Oil Age	hrs	Client Info		<b>141</b>	566	284
Filter Age	hrs	Client Info		<b>141</b>	566	284
Oil Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>9</b>	27	16
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>2</b>	6	4
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	3	<1
Copper	ppm	ASTM D5185m	>35	<b>1</b>	3	2
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</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.

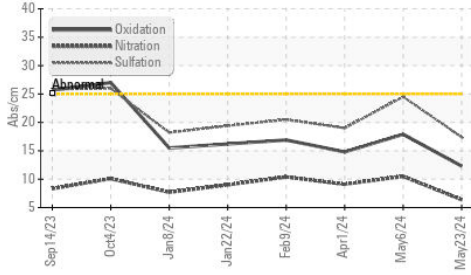
Silicon	ppm	ASTM D5185m	>+100	<b>3</b>	6	4
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	20	12
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.4</b>	10.5	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.4</b>	24.5	19.0
Silt	scalar	*Visual	NONE	<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	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

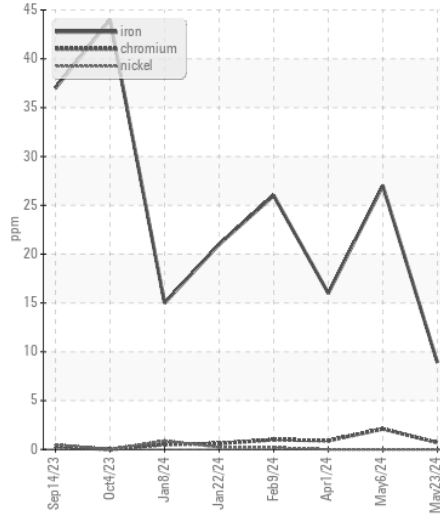
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	8	6
Boron	ppm	ASTM D5185m	0	<b>5</b>	0	2
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>66</b>	77	68
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>915</b>	1162	1036
Calcium	ppm	ASTM D5185m	1070	<b>1117</b>	1383	1239
Phosphorus	ppm	ASTM D5185m	1150	<b>1000</b>	1126	1016
Zinc	ppm	ASTM D5185m	1270	<b>1218</b>	1497	1275
Sulfur	ppm	ASTM D5185m	2060	<b>3415</b>	3483	3530
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.3</b>	17.9	14.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.0</b>	3.2	5.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.9</b>	13.7	13.7

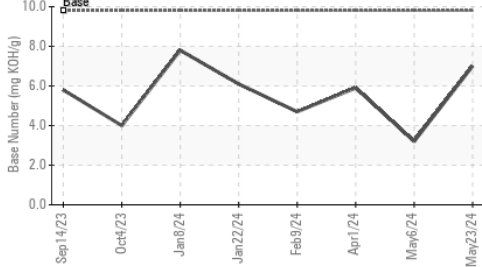
**FT-IR (Direct Trend)**



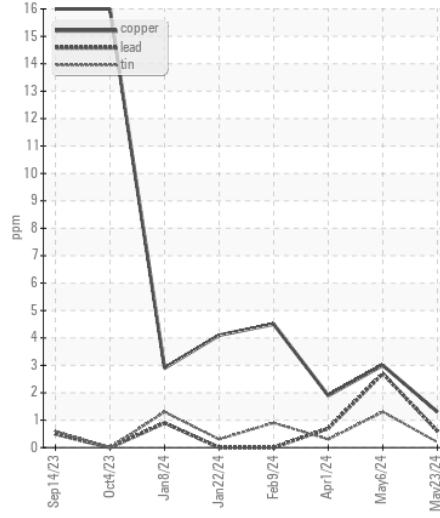
**Ferrous Alloys**



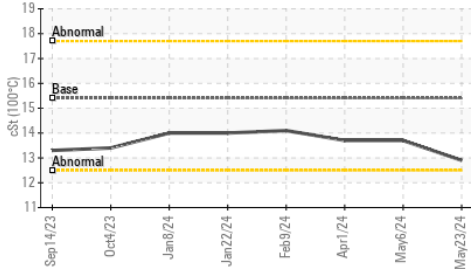
**Base Number**



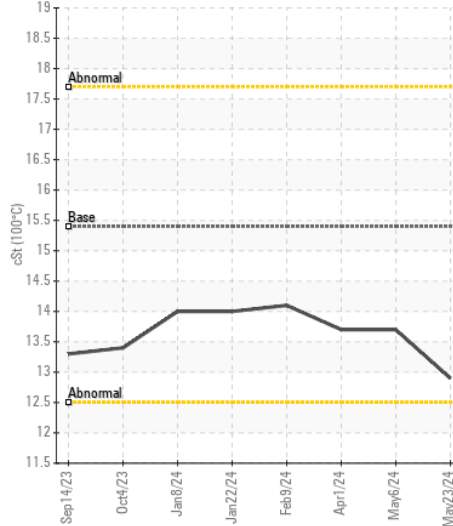
**Non-ferrous Metals**



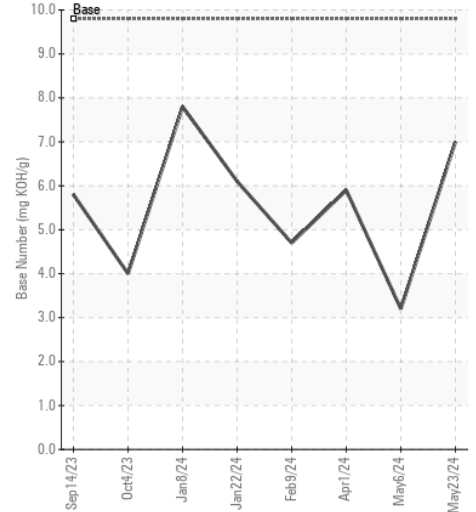
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0122198  
**Lab Number** : 06191499  
**Unique Number** : 11048251  
**Test Package** : FLEET  
**Received** : 24 May 2024  
**Tested** : 29 May 2024  
**Diagnosed** : 29 May 2024 - Wes Davis

**GFL Environmental - 010 - Stockbridge**  
 1280 Rum Creek Parkway  
 Stockbridge, GA  
 US 30281  
 Contact: JOSHUA TINKER  
 joshuatinker@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: