



Machine Id  
**933036**  
Component  
**Natural Gas Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (5 GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0103420</b>	GFL0074640	---
Sample Date		Client Info		<b>21 Feb 2024</b>	10 Nov 2023	---
Machine Age	hrs	Client Info		<b>1143</b>	1143	---
Oil Age	hrs	Client Info		<b>762</b>	1143	---
Filter Age	hrs	Client Info		<b>762</b>	1143	---
Oil Changed		Client Info		<b>Not Changed</b>	Changed	---
Filter Changed		Client Info		<b>Not Changed</b>	Changed	---
Sample Status				<b>MARGINAL</b>	ABNORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>26</b>	▲ 60	---
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	2	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	2	---
Titanium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	19	---
Lead	ppm	ASTM D5185m	>40	<b>1</b>	2	---
Copper	ppm	ASTM D5185m	>150	<b>5</b>	12	---
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	2	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

There is no indication of any contamination in the oil.

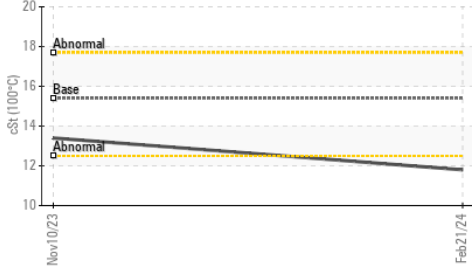
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	18	---
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	52	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844		<b>0.1</b>	0	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.7</b>	10.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.0</b>	22.9	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	---

**FLUID CONDITION**

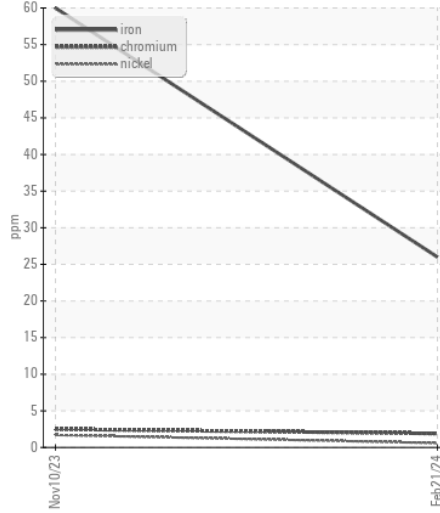
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		<b>7</b>	3	---
Boron	ppm	ASTM D5185m	0	<b>3</b>	5	---
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m	60	<b>68</b>	63	---
Manganese	ppm	ASTM D5185m	0	<b>2</b>	12	---
Magnesium	ppm	ASTM D5185m	1010	<b>840</b>	911	---
Calcium	ppm	ASTM D5185m	1070	<b>1067</b>	1042	---
Phosphorus	ppm	ASTM D5185m	1150	<b>891</b>	891	---
Zinc	ppm	ASTM D5185m	1270	<b>1133</b>	1181	---
Sulfur	ppm	ASTM D5185m	2060	<b>2392</b>	2425	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.1</b>	19.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>5.0</b>	3.9	---
Visc @ 100°C	cSt	ASTM D445	15.4	▲ <b>11.8</b>	13.4	---

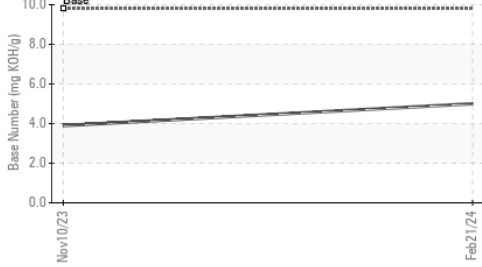
▲ Viscosity @ 100°C



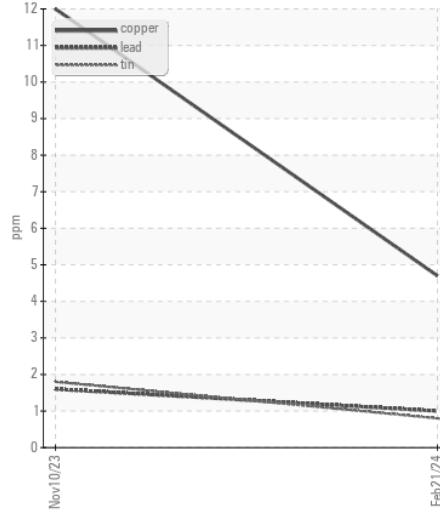
Ferrous Alloys



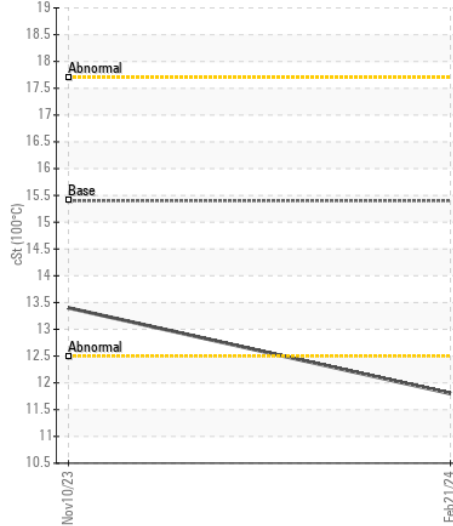
Base Number



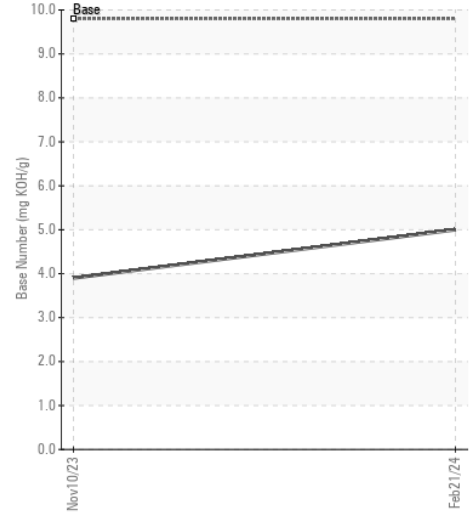
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0103420  
**Lab Number** : 06099827  
**Unique Number** : 10898057  
**Test Package** : FLEET

**Received** : 26 Feb 2024  
**Tested** : 27 Feb 2024  
**Diagnosed** : 28 Feb 2024 - Jonathan Hester

**GFL Environmental - 095 - Atlanta West**

2699 Cochran Industrial Blvd  
 Douglasville, GA  
 US 30127-1332

Contact: Darrell Welch  
 darrell.welch@gflenv.com

T: (800)207-6618

F:

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)