



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

Area

**(YA130589)**

Machine Id

**2626**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (10 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0124213</b>	PCA0124249	PCA0113419
Sample Date		Client Info		<b>12 Jul 2024</b>	14 May 2024	13 Feb 2024
Machine Age	hrs	Client Info		<b>22526</b>	21949	21355
Oil Age	hrs	Client Info		<b>577</b>	594	451
Filter Age	hrs	Client Info		<b>577</b>	594	451
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	<b>30</b>	15	13
Chromium	ppm	ASTM D5185m	>5	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	4	4
Lead	ppm	ASTM D5185m	>150	<b>3</b>	<1	<1
Copper	ppm	ASTM D5185m	>90	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	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.

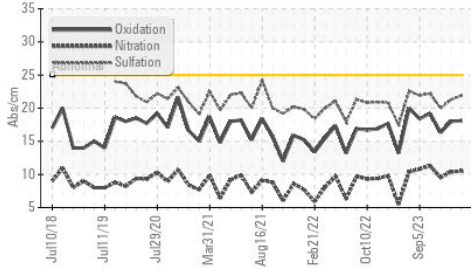
Silicon	ppm	ASTM D5185m	>35	<b>10</b>	8	5
Potassium	ppm	ASTM D5185m	>20	<b>10</b>	6	5
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	<b>0.4</b>	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.5</b>	10.4	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.9</b>	21.3	20.0
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	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

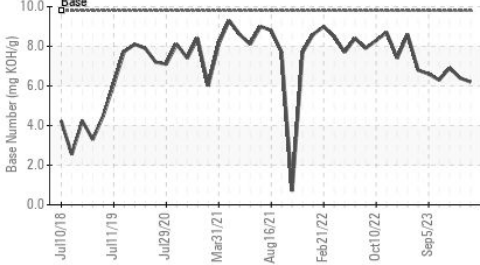
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	3	3
Boron	ppm	ASTM D5185m	0	<b>10</b>	6	14
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>65</b>	64	65
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>699</b>	786	716
Calcium	ppm	ASTM D5185m	1070	<b>1416</b>	1495	1345
Phosphorus	ppm	ASTM D5185m	1150	<b>936</b>	1051	993
Zinc	ppm	ASTM D5185m	1270	<b>1206</b>	1295	1203
Sulfur	ppm	ASTM D5185m	2060	<b>2918</b>	3764	3194
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.1</b>	18.0	16.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.2</b>	6.4	6.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.8</b>	13.0	12.6

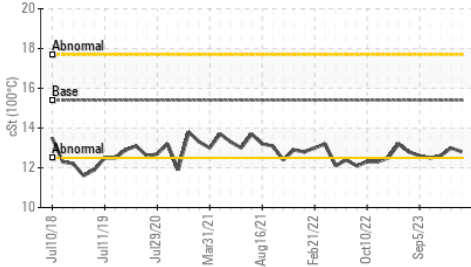
FT-IR (Direct Trend)



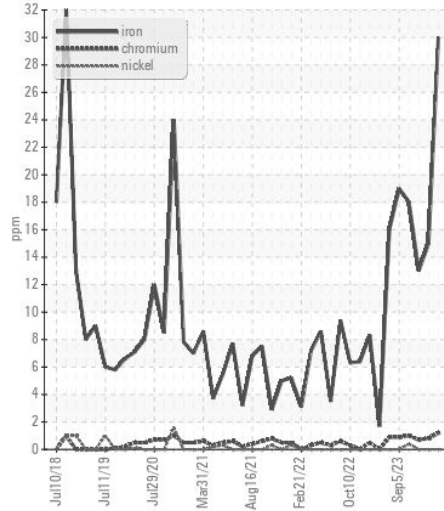
Base Number



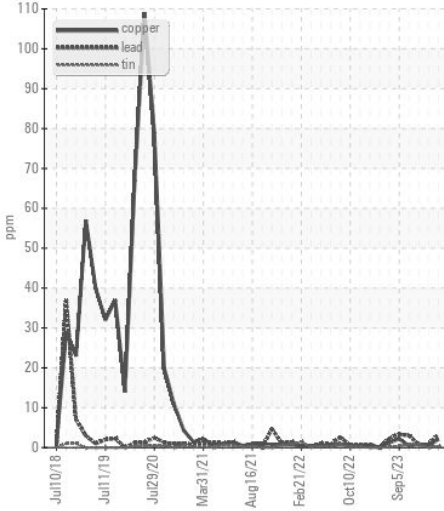
Viscosity @ 100°C



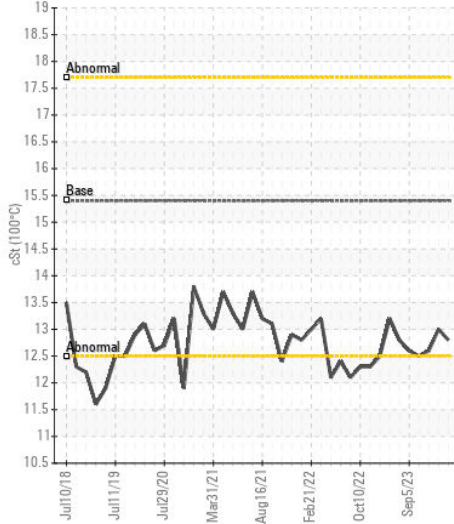
Ferrous Alloys



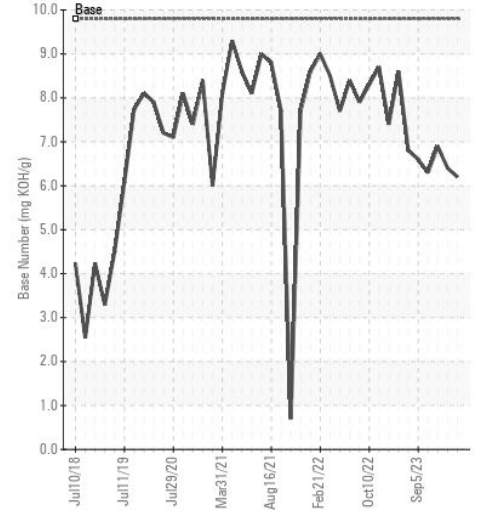
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0124213  
**Lab Number** : 06235561  
**Unique Number** : 11124395  
**Test Package** : FLEET

**Received** : 15 Jul 2024  
**Tested** : 15 Jul 2024  
**Diagnosed** : 15 Jul 2024 - Wes Davis

**GFL Environmental - 002 - Vance-Granville**  
 241 Vanco Mill Rd  
 Henderson, NC  
 US 27537  
 Contact: Cameron King  
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 T: (252)438-5333  
 F: (252)431-1635

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)