



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

Machine Id  
**10875**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (9 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0113439</b>	PCA0113465	PCA0113428
Sample Date		Client Info		<b>12 Jul 2024</b>	15 Mar 2024	13 Feb 2024
Machine Age	hrs	Client Info		<b>12559</b>	12173	12063
Oil Age	hrs	Client Info		<b>386</b>	110	391
Filter Age	hrs	Client Info		<b>386</b>	110	391
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	>75	<b>9</b>	10	7
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>3</b>	3	2
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>100	<b>1</b>	1	1
Tin	ppm	ASTM D5185m	>4	<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.

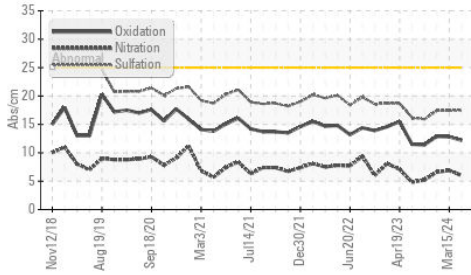
Silicon	ppm	ASTM D5185m	>25	<b>7</b>	7	6
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	4	2
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>0.4</b>	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.0</b>	6.9	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.5</b>	17.4	17.4
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**

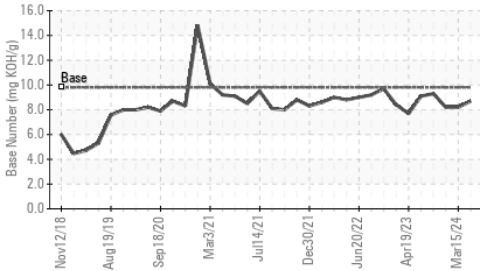
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>1</b>	3	6
Boron	ppm	ASTM D5185m	0	<b>17</b>	19	16
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>61</b>	67	60
Manganese	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>674</b>	704	748
Calcium	ppm	ASTM D5185m	1070	<b>1384</b>	1393	1205
Phosphorus	ppm	ASTM D5185m	1150	<b>881</b>	1084	947
Zinc	ppm	ASTM D5185m	1270	<b>1142</b>	1218	1162
Sulfur	ppm	ASTM D5185m	2060	<b>2909</b>	3509	3109
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.2</b>	12.8	12.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.7</b>	8.2	8.2
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.6</b>	13.1	12.5

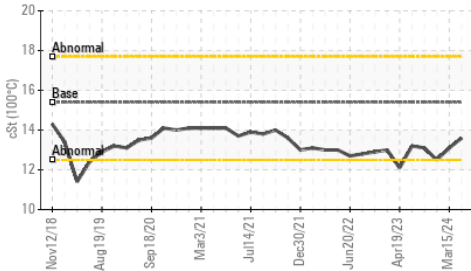
**FT-IR (Direct Trend)**



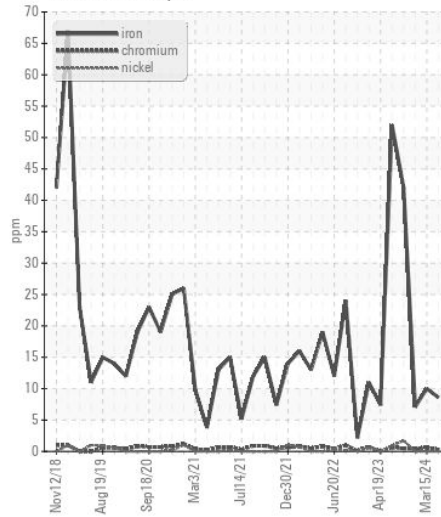
**Base Number**



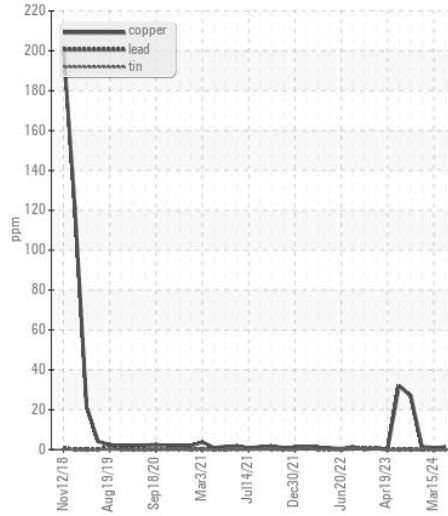
**Viscosity @ 100°C**



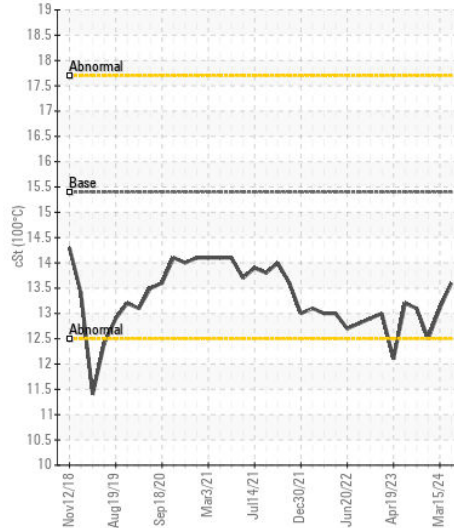
**Ferrous Alloys**



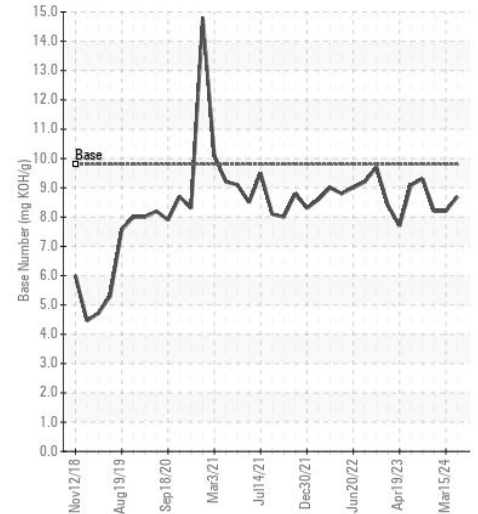
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0113439  
**Lab Number** : 06235557  
**Unique Number** : 11124391  
**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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 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)