



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

Machine Id  
**2227012**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0123176</b>	PCA0123203	PCA0106376
Sample Date		Client Info		<b>28 Jun 2024</b>	24 May 2024	06 Apr 2024
Machine Age	mls	Client Info		<b>206545</b>	190479	167898
Oil Age	mls	Client Info		<b>30000</b>	15000	30000
Filter Age	mls	Client Info		<b>15000</b>	15000	15000
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Cleaned</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>24</b>	10	20
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	2
Titanium	ppm	ASTM D5185m		<b>16</b>	16	25
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	1	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>8</b>	5	8
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<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.

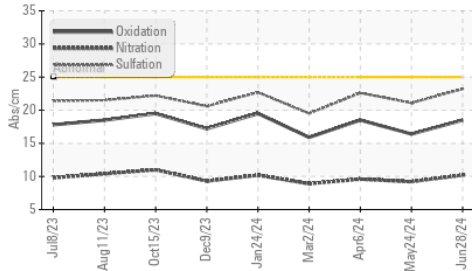
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	2	5
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	3	4
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.2</b>	9.2	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.2</b>	21.1	22.6
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**

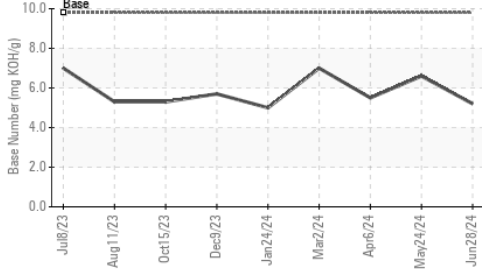
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>4</b>	2	2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	7
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>50</b>	46	44
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>829</b>	794	780
Calcium	ppm	ASTM D5185m	1070	<b>1355</b>	1321	1290
Phosphorus	ppm	ASTM D5185m	1150	<b>955</b>	1027	959
Zinc	ppm	ASTM D5185m	1270	<b>1182</b>	1204	1174
Sulfur	ppm	ASTM D5185m	2060	<b>3124</b>	3464	3236
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.5</b>	16.4	18.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>5.2</b>	6.6	5.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>11.1</b>	11.0	11.1

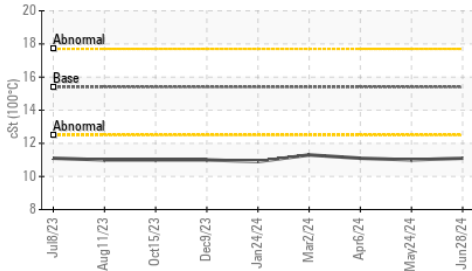
**FT-IR (Direct Trend)**



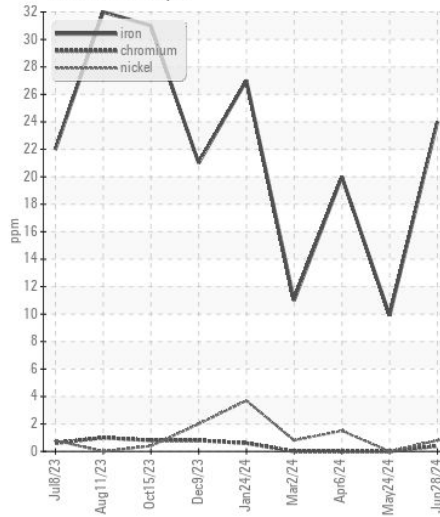
**Base Number**



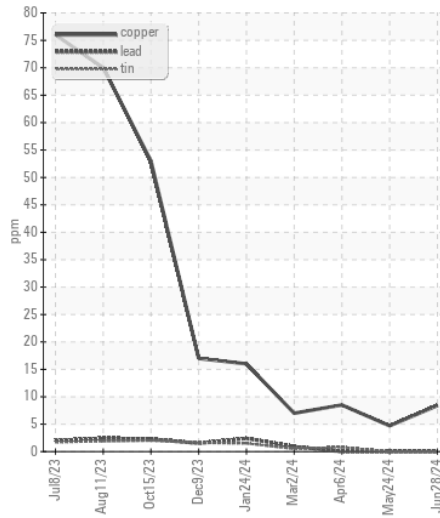
**Viscosity @ 100°C**



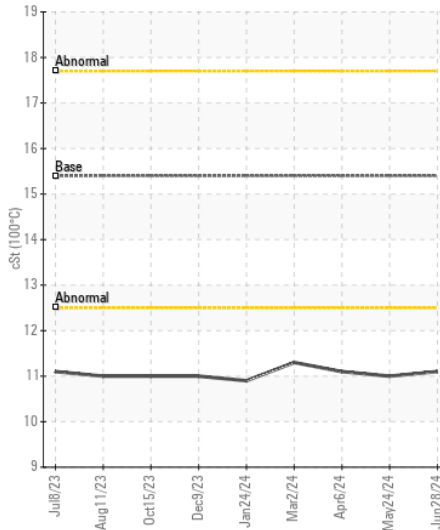
**Ferrous Alloys**



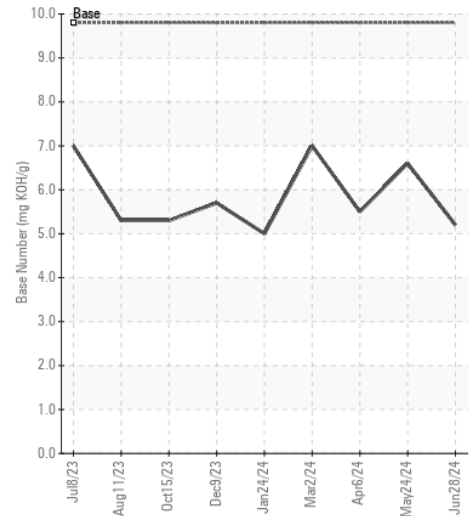
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0123176  
**Lab Number** : 06233118  
**Unique Number** : 11116611  
**Test Package** : FLEET  
**Received** : 11 Jul 2024  
**Tested** : 12 Jul 2024  
**Diagnosed** : 12 Jul 2024 - Don Baldridge

**PERDUE FARMS - SALISBURY**  
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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)