



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

Machine Id  
**1926732**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0121400</b>	PCA0114126	PCA0106398
Sample Date		Client Info		<b>17 Mar 2024</b>	17 Dec 2023	26 Sep 2023
Machine Age	mls	Client Info		<b>307344</b>	287344	0
Oil Age	mls	Client Info		<b>41000</b>	18555	40000
Filter Age	mls	Client Info		<b>0</b>	0	20000
Oil Changed		Client Info		<b>Changed</b>	Not 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	>100	<b>33</b>	17	35
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>10</b>	1	4
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	2	3
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	3	2
Copper	ppm	ASTM D5185m	>330	<b>6</b>	4	8
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	2
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	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.

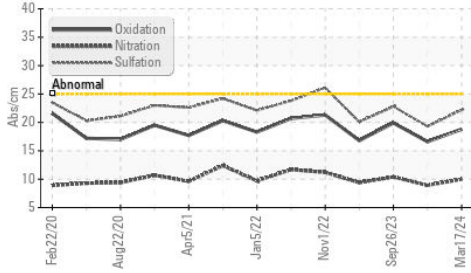
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	3	6
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	4
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.0</b>	8.9	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.2</b>	19.3	22.8
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**

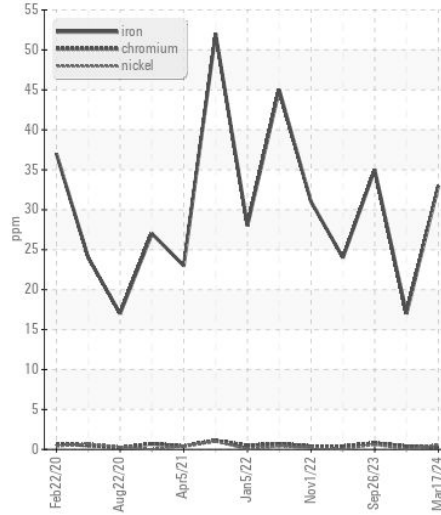
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>12</b>	7	11
Boron	ppm	ASTM D5185m	2	<b>6</b>	1	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	12
Molybdenum	ppm	ASTM D5185m	50	<b>51</b>	50	58
Manganese	ppm	ASTM D5185m	0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	950	<b>924</b>	833	904
Calcium	ppm	ASTM D5185m	1050	<b>1230</b>	1025	1123
Phosphorus	ppm	ASTM D5185m	995	<b>1056</b>	959	969
Zinc	ppm	ASTM D5185m	1180	<b>1314</b>	1092	1223
Sulfur	ppm	ASTM D5185m	2600	<b>3439</b>	3176	2967
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.8</b>	16.6	19.9
Base Number (BN)	mg KOH/g	ASTM D2896		<b>4.7</b>	6.6	4.9
Visc @ 100°C	cSt	ASTM D445	12.00	<b>10.7</b>	10.9	11.1

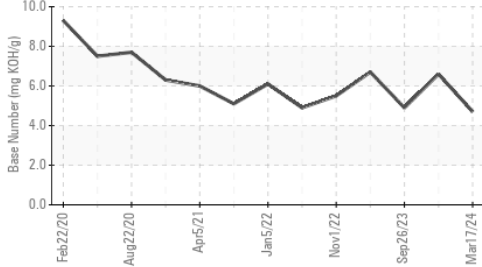
**FT-IR (Direct Trend)**



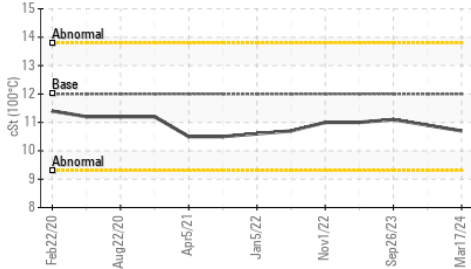
**Ferrous Alloys**



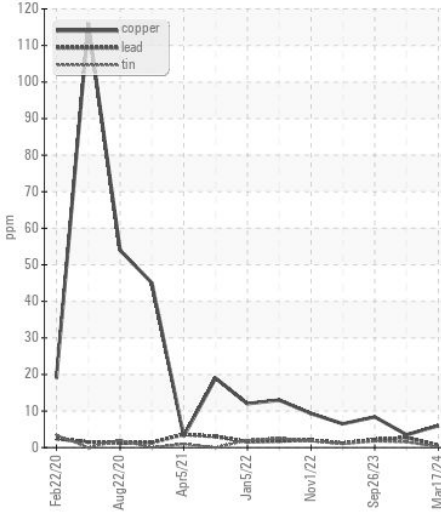
**Base Number**



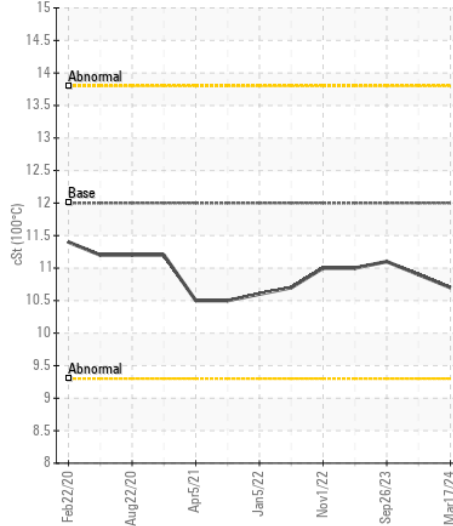
**Viscosity @ 100°C**



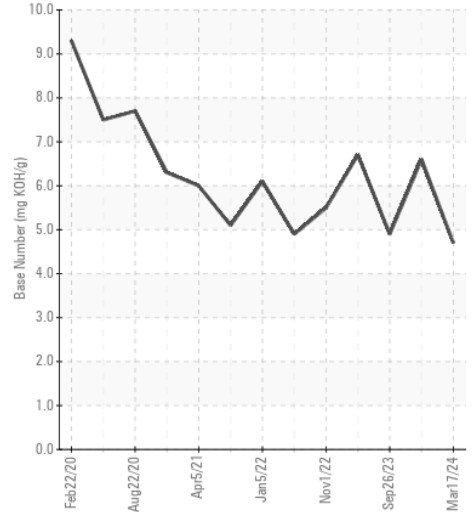
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0121400  
**Lab Number** : 06219390  
**Unique Number** : 11097587  
**Test Package** : FLEET

**Received** : 25 Jun 2024  
**Tested** : 25 Jun 2024  
**Diagnosed** : 25 Jun 2024 - Wes Davis

**PERDUE FARMS - GEORGETOWN**  
 20621 SAVANAH RD  
 GEORGETOWN, DE  
 US 19947

Contact: ROBERT LOCKWOOD  
 Robert.Lockwood@Perdue.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: