



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

Machine Id  
**1926724**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA06220724</b>	PCA0088734	PCA0099507
Sample Date		Client Info		<b>25 Jun 2024</b>	13 Aug 2023	29 May 2023
Machine Age	mls	Client Info		<b>347000</b>	339364	317882
Oil Age	mls	Client Info		<b>0</b>	20000	40000
Filter Age	mls	Client Info		<b>0</b>	20000	20000
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Not Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>59</b>	20	47
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	0	1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	1	4
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	25	▲ 36
Lead	ppm	ASTM D5185m	>40	<b>1</b>	1	3
Copper	ppm	ASTM D5185m	>330	<b>10</b>	4	8
Tin	ppm	ASTM D5185m	>15	<b>1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>0</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.

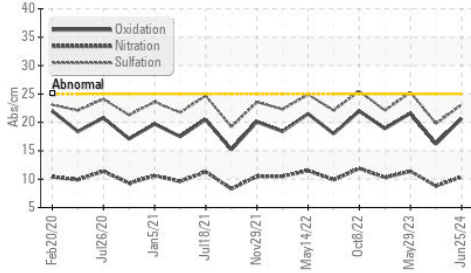
Silicon	ppm	ASTM D5185m	>25	<b>7</b>	4	6
Potassium	ppm	ASTM D5185m	>20	<b>15</b>	60	▲ 90
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.4	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.4</b>	8.8	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.1</b>	19.8	25.3
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**

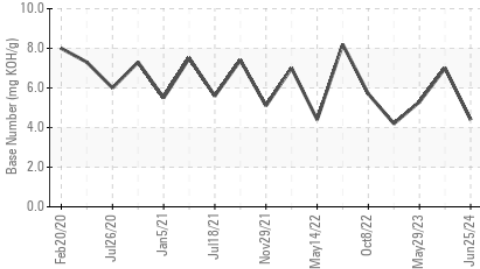
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>15</b>	6	18
Boron	ppm	ASTM D5185m	2	<b>1</b>	0	4
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>60</b>	60	60
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	950	<b>928</b>	897	972
Calcium	ppm	ASTM D5185m	1050	<b>1124</b>	1099	1158
Phosphorus	ppm	ASTM D5185m	995	<b>938</b>	1007	1023
Zinc	ppm	ASTM D5185m	1180	<b>1289</b>	1211	1287
Sulfur	ppm	ASTM D5185m	2600	<b>2601</b>	3133	3328
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.7</b>	16.2	21.6
Base Number (BN)	mg KOH/g	ASTM D2896		<b>4.4</b>	7.0	5.3
Visc @ 100°C	cSt	ASTM D445	12.00	<b>11.0</b>	11.0	10.9

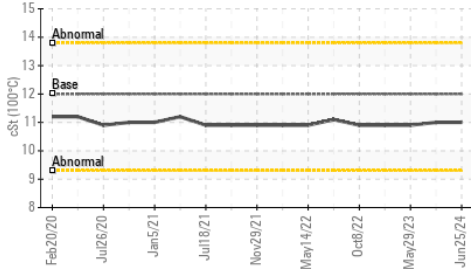
**FT-IR (Direct Trend)**



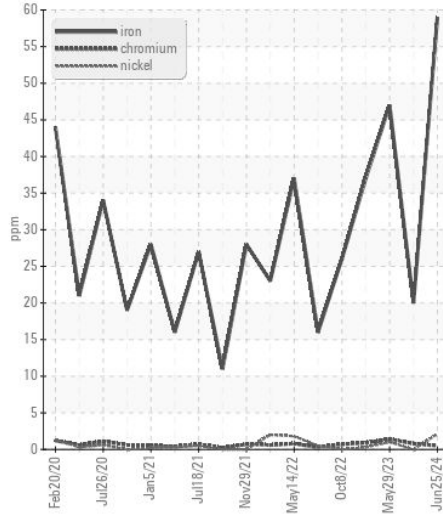
**Base Number**



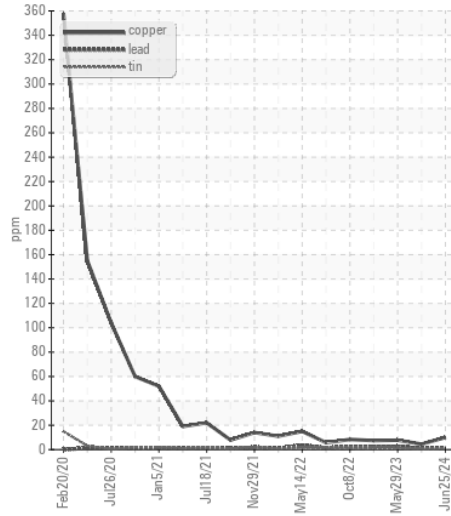
**Viscosity @ 100°C**



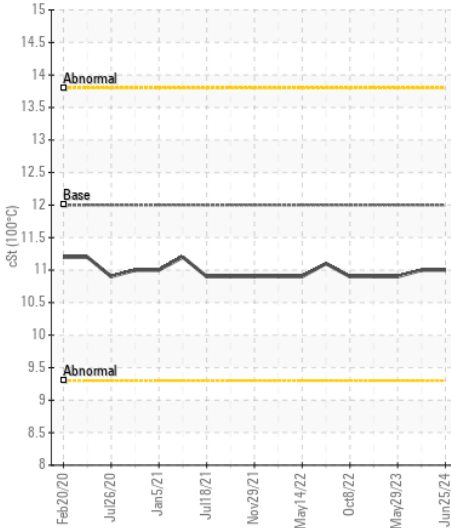
**Ferrous Alloys**



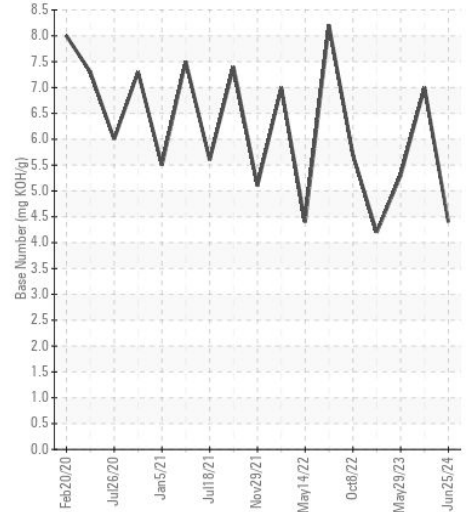
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA06220724 **Received** : 26 Jun 2024  
**Lab Number** : 06220724 **Tested** : 27 Jun 2024  
**Unique Number** : 11098921 **Diagnosed** : 27 Jun 2024 - Don Baldrige  
**Test Package** : FLEET

**PERDUE FARMS - SALISBURY**  
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 SALISBURY, MD  
 US 21802  
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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)