



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

Machine Id  
**1926726**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- QTS)**

**RECOMMENDATION**

The oil change at the time of sampling has been noted. 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>PCA0114788</b>	PCA0101151	PCA0076928
Sample Date		Client Info		<b>21 Apr 2024</b>	10 Sep 2023	24 Mar 2023
Machine Age	mls	Client Info		<b>438000</b>	0	354869
Oil Age	mls	Client Info		<b>20000</b>	40000	44869
Filter Age	mls	Client Info		<b>20000</b>	40000	20164
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>27</b>	37	34
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>16</b>	2	8
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>5</b>	4	6
Lead	ppm	ASTM D5185m	>40	<b>1</b>	2	1
Copper	ppm	ASTM D5185m	>330	<b>8</b>	6	8
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

Light fuel dilution occurring.

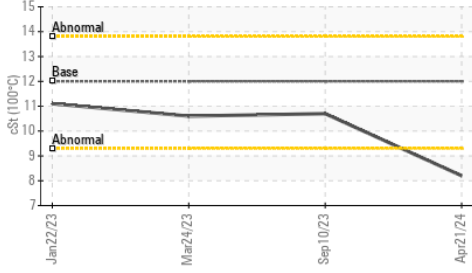
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	4	6
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	1	2
Fuel	%	ASTM D3524	>5	<b>▲ 2.5</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.0</b>	11.2	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.6</b>	23.6	23.6
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**

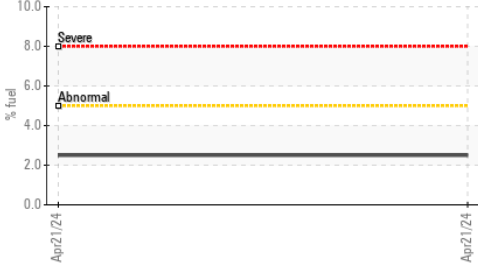
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>7</b>	17	15
Boron	ppm	ASTM D5185m	2	<b>7</b>	<1	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>36</b>	57	51
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	950	<b>649</b>	924	800
Calcium	ppm	ASTM D5185m	1050	<b>1068</b>	1108	1159
Phosphorus	ppm	ASTM D5185m	995	<b>827</b>	979	881
Zinc	ppm	ASTM D5185m	1180	<b>988</b>	1254	1175
Sulfur	ppm	ASTM D5185m	2600	<b>2957</b>	2715	2639
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.5</b>	20.6	19.7
Base Number (BN)	mg KOH/g	ASTM D2896		<b>5.5</b>	3.0	5.1
Visc @ 100°C	cSt	ASTM D445	12.00	<b>▲ 8.2</b>	10.7	10.6

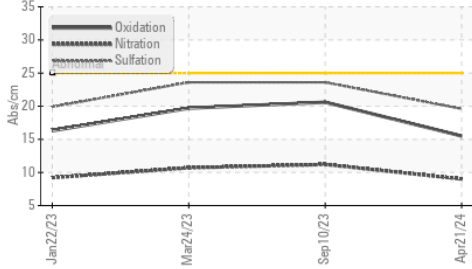
▲ Viscosity @ 100°C



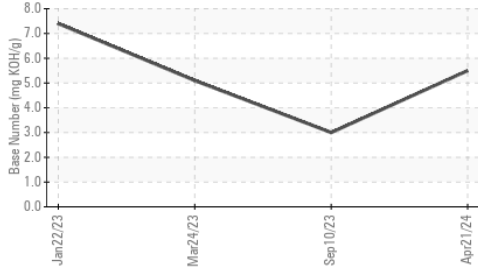
▲ Fuel Dilution



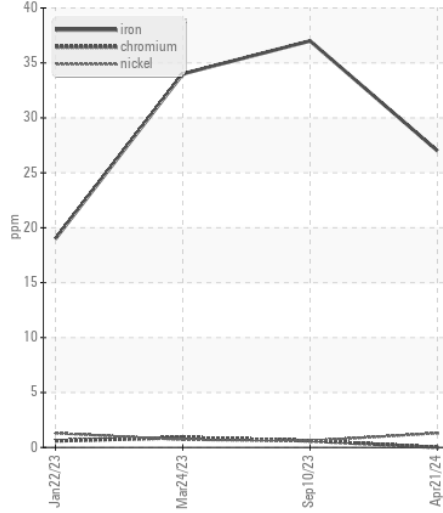
FT-IR (Direct Trend)



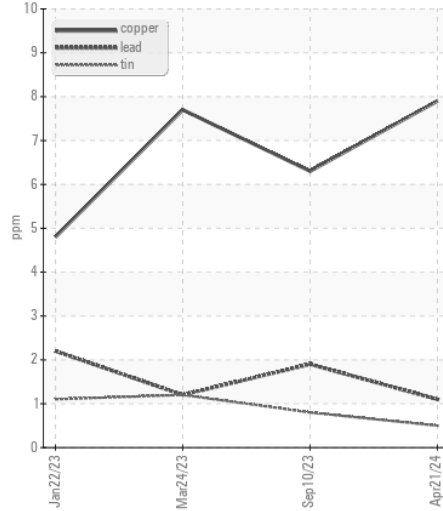
Base Number



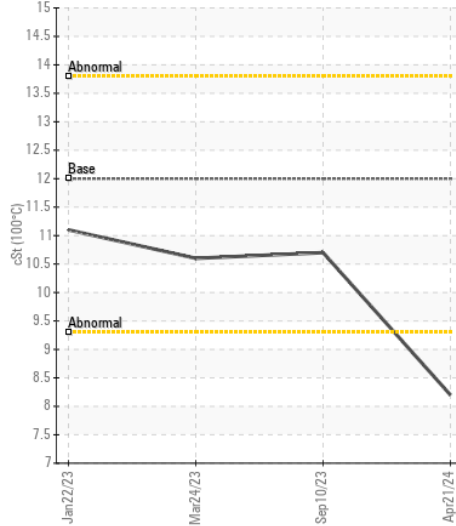
Ferrous Alloys



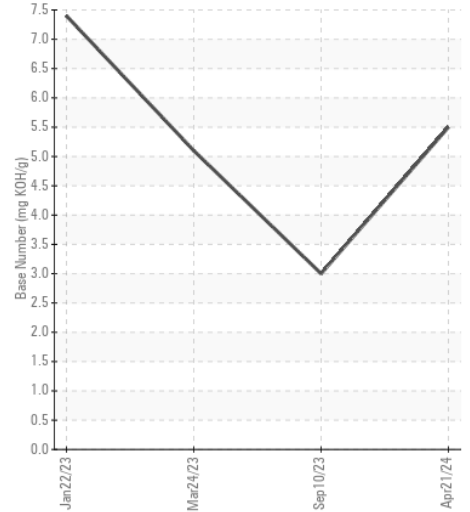
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : PCA0114788

Lab Number : 06175291

Unique Number : 11021344

Test Package : FLEET ( Additional Tests: FuelDilution, PercentFuel )

Received : 10 May 2024

Tested : 15 May 2024

Diagnosed : 15 May 2024 - Wes Davis

PERDUE FARMS - SALISBURY

7036 ZION CHURCH ROAD

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)