



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

Machine Id  
**Volvo Vnr400 2026792**  
 Component  
**1 Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0123177</b>	PCA0114787	PCA0088754
Sample Date		Client Info		<b>28 Jun 2024</b>	21 Apr 2024	24 Jun 2023
Machine Age	mls	Client Info		<b>0</b>	456379	362971
Oil Age	mls	Client Info		<b>0</b>	40000	20000
Filter Age	mls	Client Info		<b>0</b>	20000	20000
Oil Changed		Client Info		<b>Not Chngd</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	>100	<b>18</b>	35	37
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	2
Titanium	ppm	ASTM D5185m		<b>14</b>	20	4
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	2	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	1	2
Copper	ppm	ASTM D5185m	>330	<b>3</b>	4	10
Tin	ppm	ASTM D5185m	>15	<b>0</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.

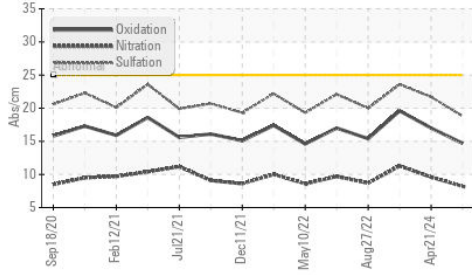
Silicon	ppm	ASTM D5185m	>25	<b>3</b>	6	5
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	2
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.4	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.2</b>	9.6	11.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.8</b>	21.7	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**

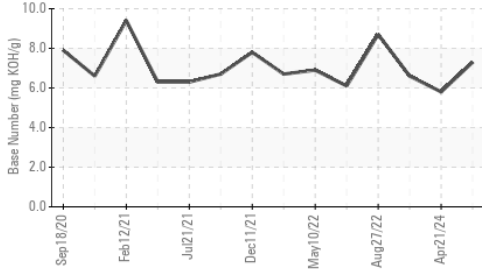
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	2	2
Boron	ppm	ASTM D5185m	2	<b>0</b>	6	4
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	50	<b>49</b>	47	56
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	950	<b>835</b>	830	780
Calcium	ppm	ASTM D5185m	1050	<b>1303</b>	1316	1289
Phosphorus	ppm	ASTM D5185m	995	<b>1004</b>	1026	902
Zinc	ppm	ASTM D5185m	1180	<b>1187</b>	1232	1163
Sulfur	ppm	ASTM D5185m	2600	<b>3572</b>	3585	2859
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.7</b>	17.0	19.6
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.3</b>	5.8	6.6
Visc @ 100°C	cSt	ASTM D445	12.00	<b>10.9</b>	10.7	11.3

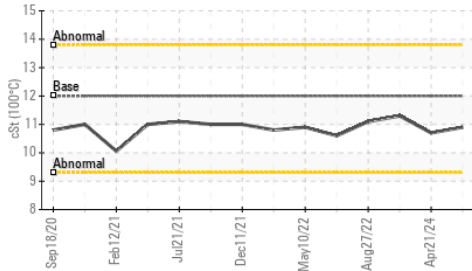
**FT-IR (Direct Trend)**



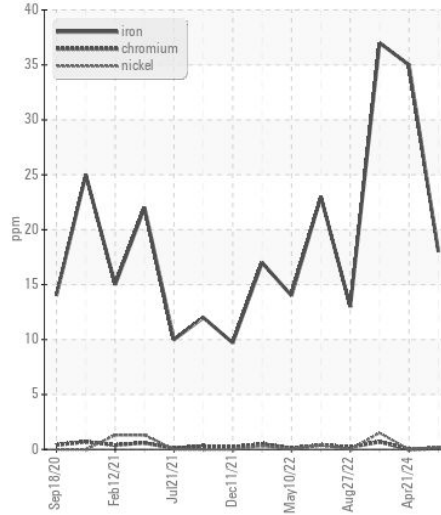
**Base Number**



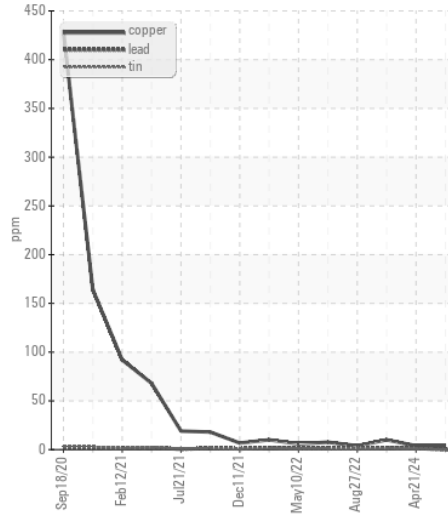
**Viscosity @ 100°C**



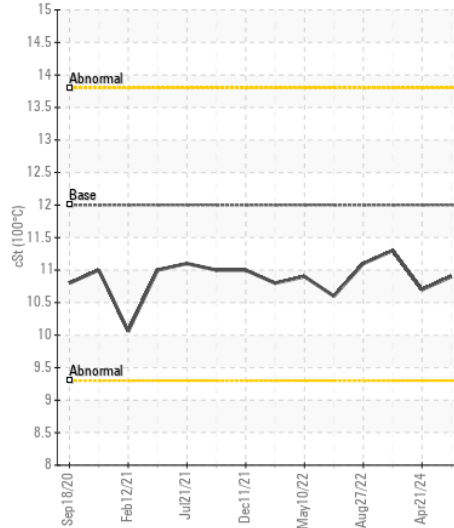
**Ferrous Alloys**



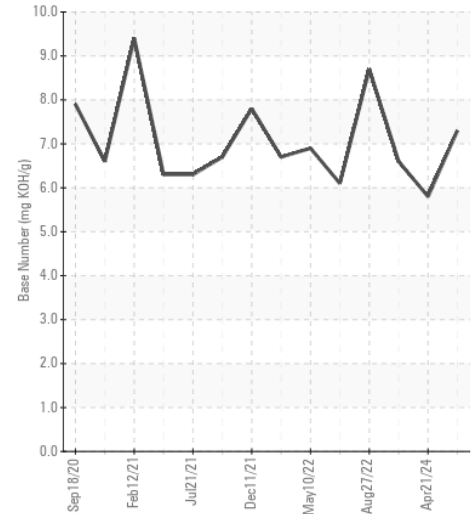
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0123177  
**Lab Number** : 06233114  
**Unique Number** : 11116607  
**Test Package** : FLEET  
**Received** : 11 Jul 2024  
**Tested** : 12 Jul 2024  
**Diagnosed** : 12 Jul 2024 - Wes Davis

**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)