



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

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		PCA0114787	PCA0088754	PCA0075923
Sample Date		Client Info		21 Apr 2024	24 Jun 2023	27 Aug 2022
Machine Age	mls	Client Info		456379	362971	264268
Oil Age	mls	Client Info		40000	20000	20000
Filter Age	mls	Client Info		20000	20000	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	35	37	13
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	2	0
Titanium	ppm	ASTM D5185m		20	4	8
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	2	2	2
Lead	ppm	ASTM D5185m	>40	1	2	<1
Copper	ppm	ASTM D5185m	>330	4	10	4
Tin	ppm	ASTM D5185m	>15	<1	1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

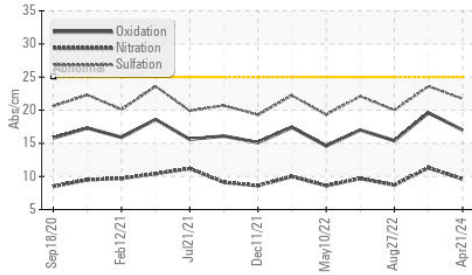
Silicon	ppm	ASTM D5185m	>25	6	5	3
Potassium	ppm	ASTM D5185m	>20	2	2	2
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.6	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.6	11.3	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	23.6	20.0
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

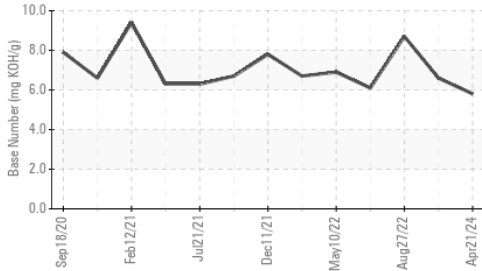
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	2	0
Boron	ppm	ASTM D5185m	2	6	4	5
Barium	ppm	ASTM D5185m	0	0	2	0
Molybdenum	ppm	ASTM D5185m	50	47	56	54
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	830	780	784
Calcium	ppm	ASTM D5185m	1050	1316	1289	1148
Phosphorus	ppm	ASTM D5185m	995	1026	902	989
Zinc	ppm	ASTM D5185m	1180	1232	1163	1176
Sulfur	ppm	ASTM D5185m	2600	3585	2859	3058
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0	19.6	15.4
Base Number (BN)	mg KOH/g	ASTM D2896		5.8	6.6	8.7
Visc @ 100°C	cSt	ASTM D445	12.00	10.7	11.3	11.1

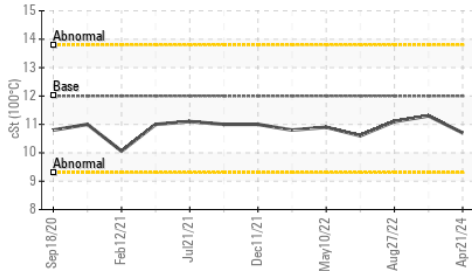
FT-IR (Direct Trend)



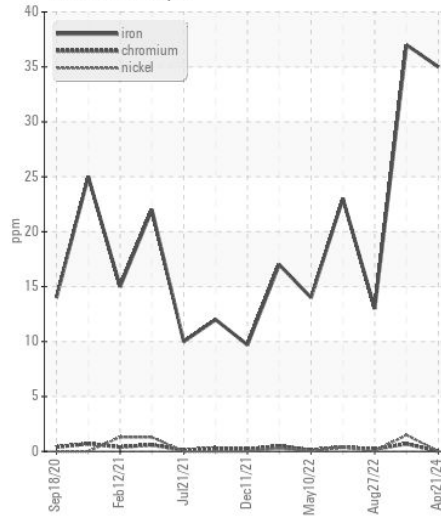
Base Number



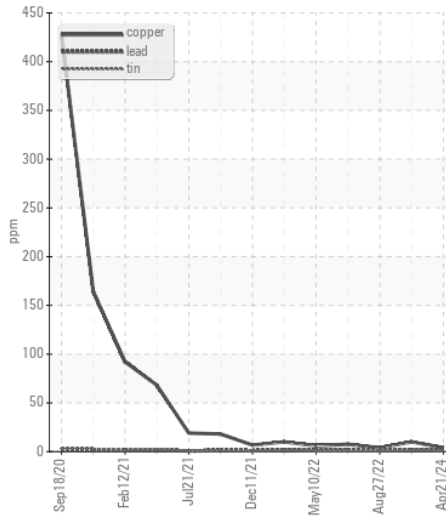
Viscosity @ 100°C



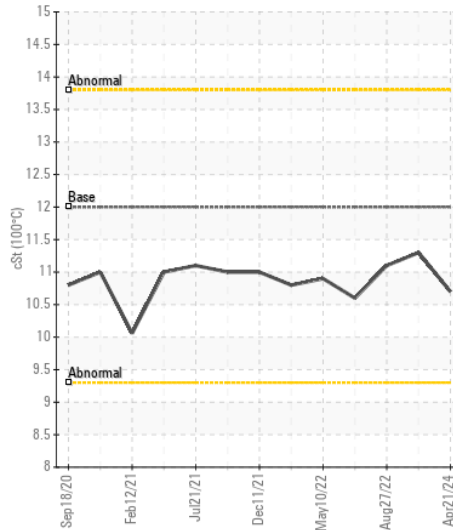
Ferrous Alloys



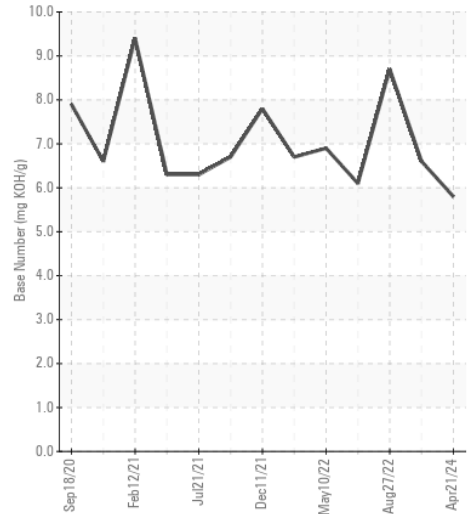
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0114787
Lab Number : 06175290
Unique Number : 11021343
Test Package : FLEET
Received : 10 May 2024
Tested : 13 May 2024
Diagnosed : 13 May 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)