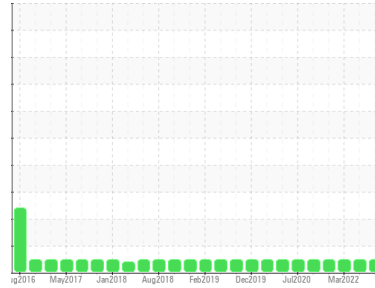


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
VOLVO 26438

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (33 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0094623	PCA0052346	PCA0052388
Sample Date	Client Info			13 Mar 2024	02 Jun 2023	07 Mar 2022
Machine Age	mls	Client Info		755435	705522	648259
Oil Age	mls	Client Info		59508	24803	25448
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	12	25	20
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	5	2
Lead	ppm	ASTM D5185m	>40	1	2	2
Copper	ppm	ASTM D5185m	>330	1	8	62
Tin	ppm	ASTM D5185m	>15	1	<1	<1
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	<1	0

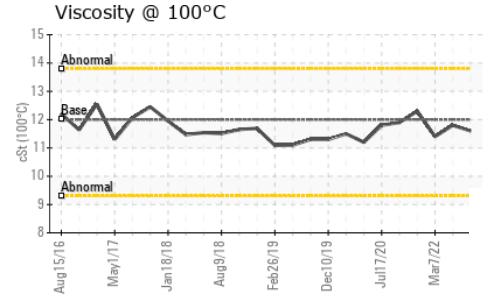
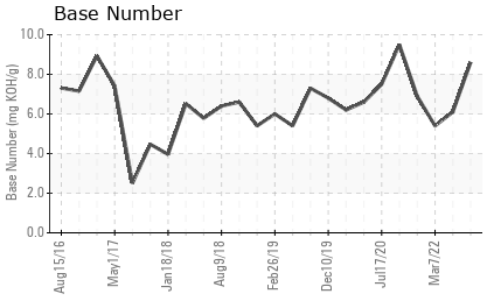
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	10	10	4
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	50	58	44	57
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	855	626	895
Calcium	ppm	ASTM D5185m	1050	1041	1470	1225
Phosphorus	ppm	ASTM D5185m	995	1014	749	879
Zinc	ppm	ASTM D5185m	1180	1131	986	1136
Sulfur	ppm	ASTM D5185m	2600	2982	2533	1829

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	6	4
Sodium	ppm	ASTM D5185m		1	5	0
Potassium	ppm	ASTM D5185m	>20	2	3	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.8	0.7
Nitration	Abs/cm	*ASTM D7624	>20	5.5	11.0	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	23.8	24.1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	23.6	21.9
Base Number (BN)	mg KOH/g	ASTM D2896		8.6	6.1	5.4

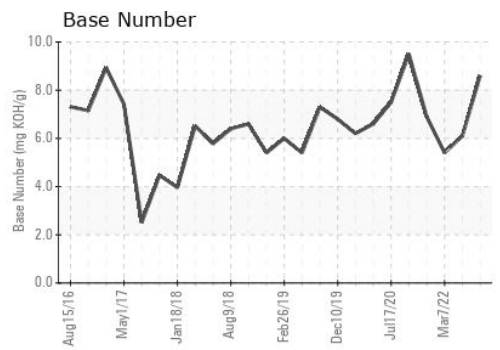
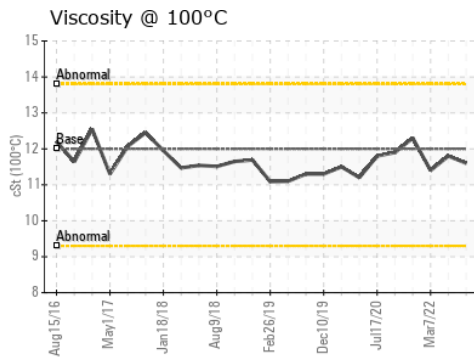
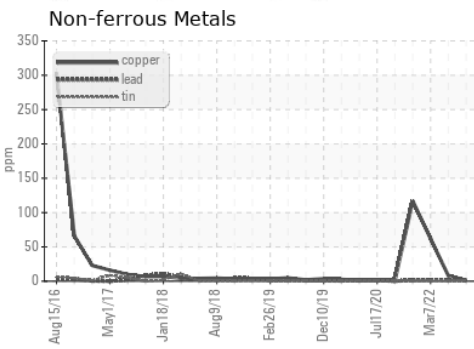
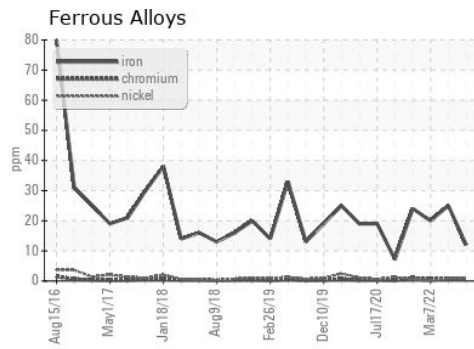
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	12.00	11.6	11.8	11.4

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0094623
Lab Number : **06130445**
Unique Number : 10949910
Test Package : FLEET

Received : 27 Mar 2024
Tested : 28 Mar 2024
Diagnosed : 28 Mar 2024 - Wes Davis

PERDUE FARMS - WASHINGTON
P.O. BOX 539
WASHINGTON, IN
US 47501
Contact: DEREK RYAN
derek.ryan@perdue.com
T: (812)257-3023
F:

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)