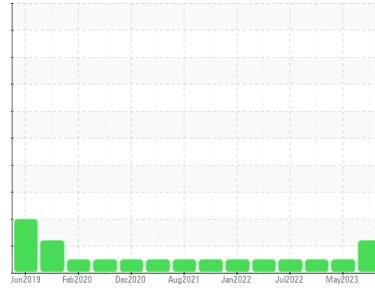


OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Machine Id
1926718
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

Recommendation

The oil is near the end of its useful service life, recommend schedule an oil change. 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 level is low. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0116305	PCA0099509	PCA0079851
Sample Date	Client Info			29 Jan 2024	31 May 2023	25 Sep 2022
Machine Age	mls	Client Info		494298	360412	40000
Oil Age	mls	Client Info		494298	20000	40000
Oil Changed	Client Info			N/A	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<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	78	37	63
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	1
Titanium	ppm	ASTM D5185m		2	2	13
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	2	<1	5
Lead	ppm	ASTM D5185m	>40	1	0	3
Copper	ppm	ASTM D5185m	>330	13	6	14
Tin	ppm	ASTM D5185m	>15	<1	<1	2
Vanadium	ppm	ASTM D5185m		0	0	1
Cadmium	ppm	ASTM D5185m		0	0	0

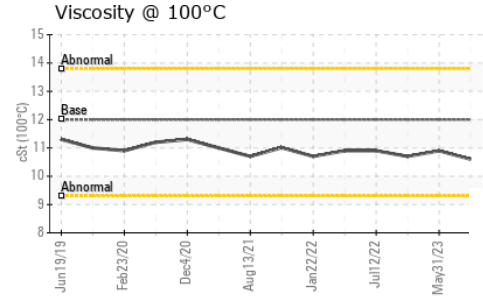
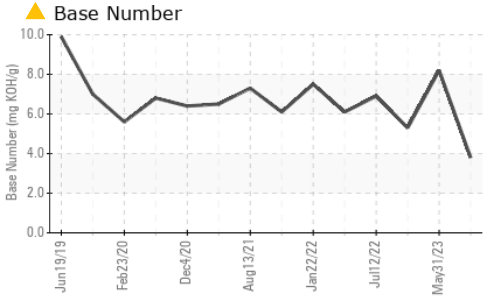
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	0	3	0
Barium	ppm	ASTM D5185m	0	9	0	0
Molybdenum	ppm	ASTM D5185m	50	58	57	43
Manganese	ppm	ASTM D5185m	0	<1	1	2
Magnesium	ppm	ASTM D5185m	950	827	965	752
Calcium	ppm	ASTM D5185m	1050	995	1094	1136
Phosphorus	ppm	ASTM D5185m	995	737	1018	835
Zinc	ppm	ASTM D5185m	1180	1095	1263	1078
Sulfur	ppm	ASTM D5185m	2600	2274	3643	2543

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	5	7
Sodium	ppm	ASTM D5185m		7	7	14
Potassium	ppm	ASTM D5185m	>20	4	2	1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.6	0.3	0.7
Nitration	Abs/cm	*ASTM D7624	>20	10.8	7.5	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.3	19.3	26.0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.6	15.0	22.0
Base Number (BN)	mg KOH/g	ASTM D2896		▲ 3.8	8.2	5.3

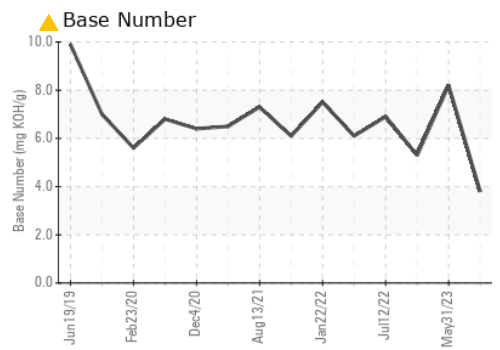
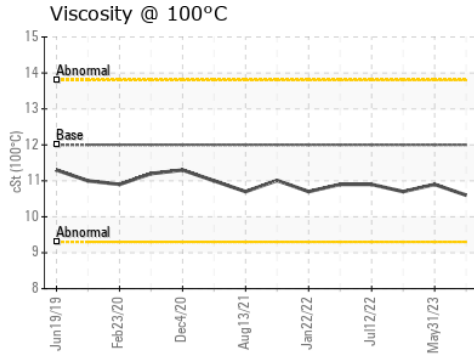
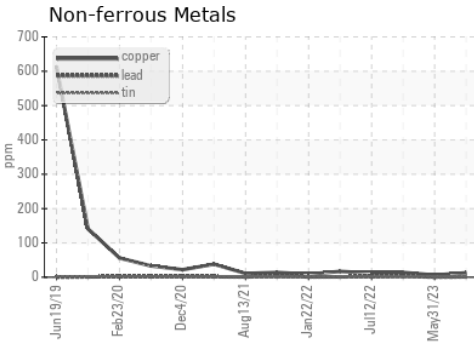
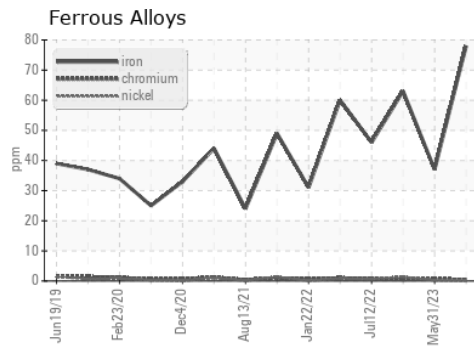
OIL ANALYSIS REPORT



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	10.6	10.9

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0116305 **Received** : 14 Feb 2024
Lab Number : 06088557 **Tested** : 15 Feb 2024
Unique Number : 10876002 **Diagnosed** : 15 Feb 2024 - Jonathan Hester
Test Package : FLEET

PERDUE FARMS - SALISBURY
 7036 ZION CHURCH ROAD
 SALISBURY, MD
 US 21802
 Contact: RICHARD O'NEAL
 richard.oneal@perdue.com
 T: (410)543-3628
 F: (410)341-2164

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)