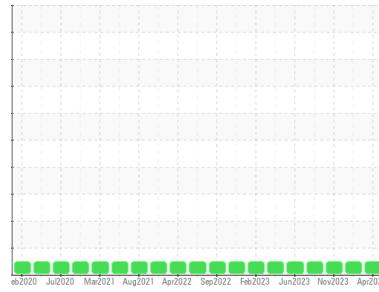


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
1926735
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (36 GAL)

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		PCA0124559	PCA0114757	PCA0110969
Sample Date	Client Info		13 Apr 2024	30 Jan 2024	08 Nov 2023
Machine Age	mls	Client Info	447616	0	0
Oil Age	mls	Client Info	0	20000	40000
Oil Changed	Client Info		Changed	Not Changd	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	31	15	24
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >2	<1	0	<1
Titanium	ppm	ASTM D5185m	10	1	<1
Silver	ppm	ASTM D5185m >2	<1	<1	0
Aluminum	ppm	ASTM D5185m >25	3	2	2
Lead	ppm	ASTM D5185m >40	2	2	1
Copper	ppm	ASTM D5185m >330	6	3	5
Tin	ppm	ASTM D5185m >15	1	1	1
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	<1	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	18	4	0
Barium	ppm	ASTM D5185m 0	1	0	12
Molybdenum	ppm	ASTM D5185m 50	55	51	60
Manganese	ppm	ASTM D5185m 0	1	<1	<1
Magnesium	ppm	ASTM D5185m 950	812	847	915
Calcium	ppm	ASTM D5185m 1050	1129	1007	1057
Phosphorus	ppm	ASTM D5185m 995	889	946	948
Zinc	ppm	ASTM D5185m 1180	1166	1077	1218
Sulfur	ppm	ASTM D5185m 2600	2669	3146	2822

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	5	3	5
Sodium	ppm	ASTM D5185m	11	8	8
Potassium	ppm	ASTM D5185m >20	4	3	4

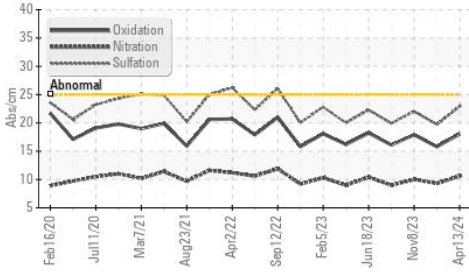
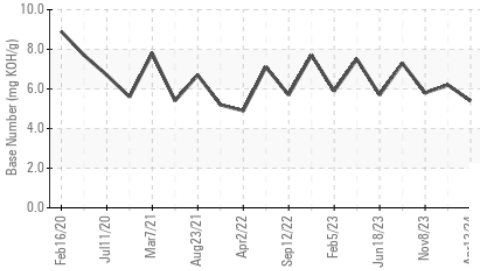
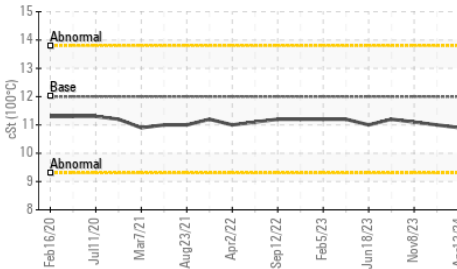
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.6	0.4	0.5
Nitration	Abs/cm	*ASTM D7624 >20	10.6	9.3	10.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.9	19.7	22.0

FLUID DEGRADATION

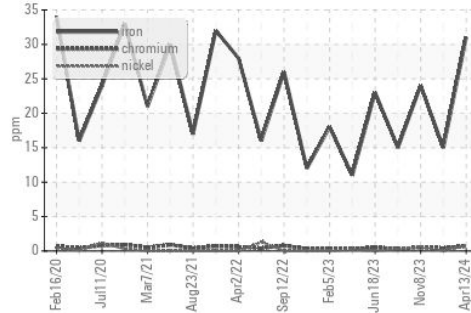
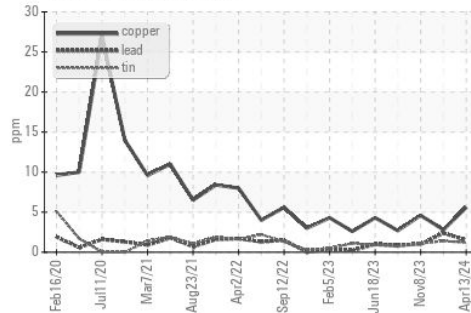
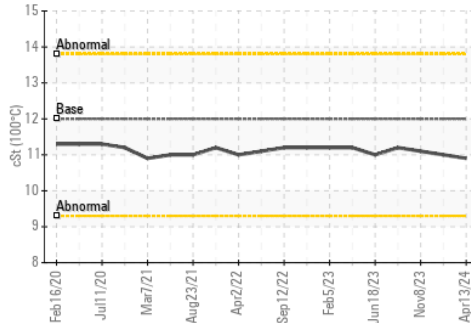
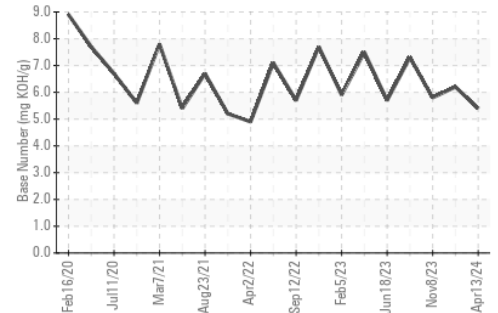
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.0	15.8	17.9
Base Number (BN)	mg KOH/g	ASTM D2896	5.4	6.2	5.8

OIL ANALYSIS REPORT

FT-IR (Direct Trend)

Base Number

Viscosity @ 100°C


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	10.9	11.0

GRAPHS
Ferrous Alloys

Non-ferrous Metals

Viscosity @ 100°C

Base Number


Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0124559
Lab Number : 06219444
Unique Number : 11097641
Test Package : FLEET

Received : 25 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 26 Jun 2024 - Wes Davis

PERDUE FARMS - GEORGETOWN
 20621 SAVANAH RD
 GEORGETOWN, DE
 US 19947

Contact: ROBERT LOCKWOOD
 Robert.Lockwood@Perdue.com

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)

T:
F: