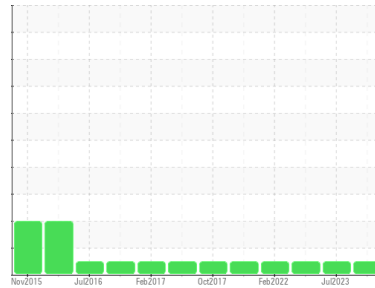


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
26332

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (--- 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	PCA0106133	PCA0102170	PCA0074911
Sample Date	Client Info	27 Sep 2023	17 Jul 2023	04 Jul 2022
Machine Age	mls Client Info	0	528615	0
Oil Age	mls Client Info	40000	528615	0
Oil Changed	Client Info	Changed	Not Changd	N/A
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	59	43	40
Chromium	ppm ASTM D5185m >20	1	1	<1
Nickel	ppm ASTM D5185m >2	2	<1	<1
Titanium	ppm ASTM D5185m	7	10	<1
Silver	ppm ASTM D5185m >2	0	0	0
Aluminum	ppm ASTM D5185m >25	5	4	5
Lead	ppm ASTM D5185m >40	6	4	6
Copper	ppm ASTM D5185m >330	4	3	5
Tin	ppm ASTM D5185m >15	2	1	2
Vanadium	ppm ASTM D5185m	<1	0	0
Cadmium	ppm ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 2	0	2	6
Barium	ppm ASTM D5185m 0	12	0	0
Molybdenum	ppm ASTM D5185m 50	55	70	56
Manganese	ppm ASTM D5185m 0	1	<1	<1
Magnesium	ppm ASTM D5185m 950	865	1126	868
Calcium	ppm ASTM D5185m 1050	1135	1484	1143
Phosphorus	ppm ASTM D5185m 995	985	1326	883
Zinc	ppm ASTM D5185m 1180	1210	1567	1107
Sulfur	ppm ASTM D5185m 2600	2665	3800	2660

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	7	7	6
Sodium	ppm ASTM D5185m	22	21	20
Potassium	ppm ASTM D5185m >20	4	2	<1

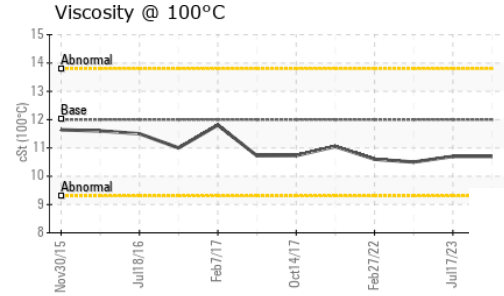
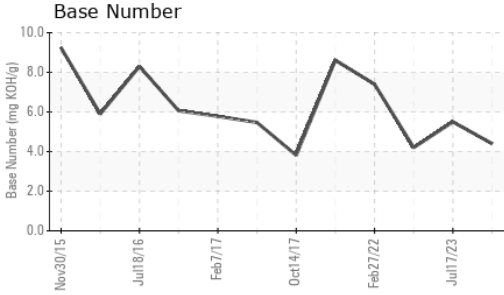
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.9	0.5	0.4
Nitration	Abs/cm *ASTM D7624 >20	11.2	10.0	12.2
Sulfation	Abs/.1mm *ASTM D7415 >30	25.1	22.2	24.2

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	21.7	18.6	22.8
Base Number (BN)	mg KOH/g ASTM D2896	4.4	5.5	4.2

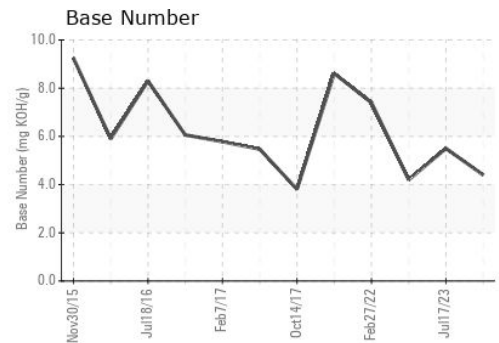
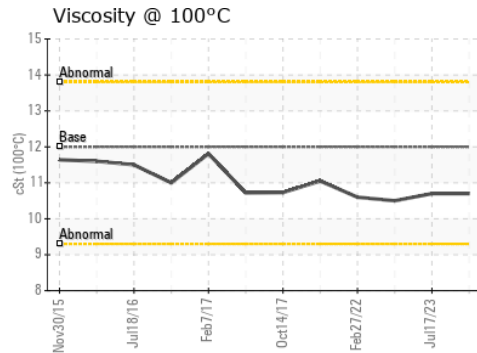
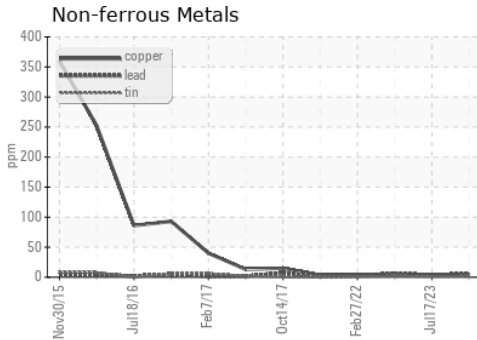
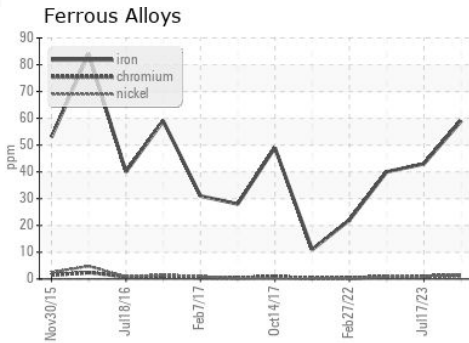
OIL ANALYSIS REPORT



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	10.7	10.7

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0106133 **Recieved** : 15 Dec 2023
Lab Number : **06036627** **Diagnosed** : 18 Dec 2023
Unique Number : 10791856 **Diagnostician** : Wes Davis
Test Package : FLEET

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: