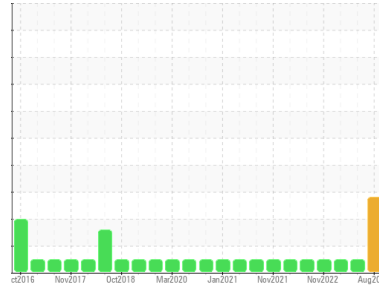


PROBLEM SUMMARY

Area
FLEET
 Machine Id
26375
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- QTS)

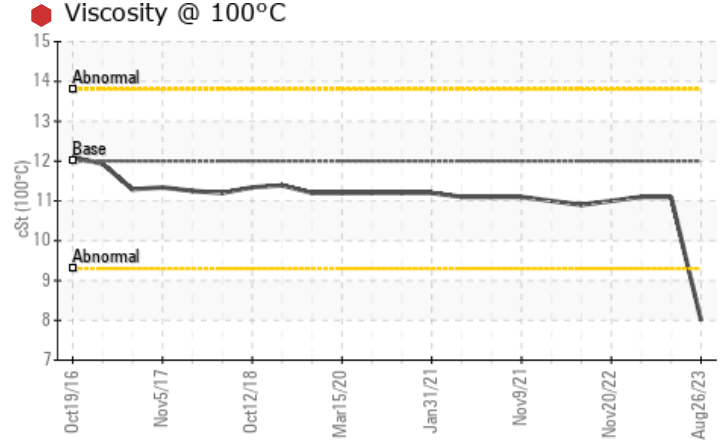
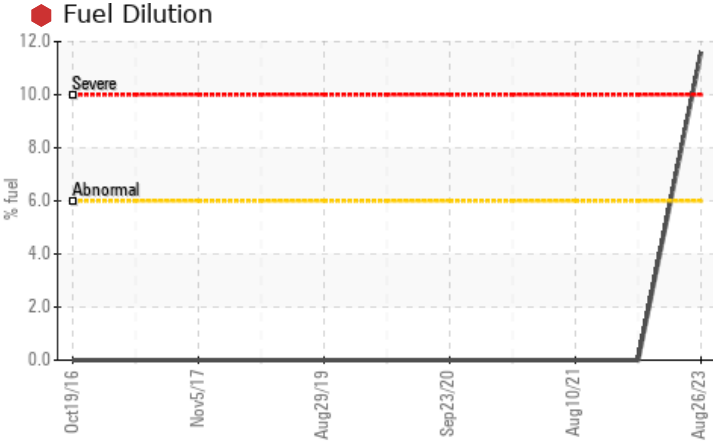
Sample Rating Trend



FUEL



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	NORMAL
Fuel	%	ASTM D3524	>6.0	11.6	<1.0	<1.0
Visc @ 100°C	cSt	ASTM D445	12.00	8	11.1	11.1

Customer Id: PERGEODE
 Sample No.: PCA0104344
 Lab Number: 06031148
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	MISSED	Dec 18 2023	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	MISSED	Dec 18 2023	?	We recommend an early resample to monitor this condition.
Check Fuel/injector System	MISSED	Dec 18 2023	?	We advise that you check the fuel injection system.

HISTORICAL DIAGNOSIS

04 Jun 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



01 Mar 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



20 Nov 2022 Diag: Sean Felton

NORMAL



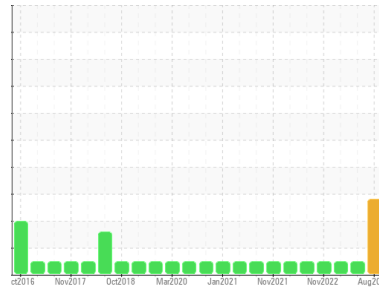
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area
FLEET
Machine Id
26375
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0104344	PCA0099755	PCA0094137
Sample Date	Client Info	26 Aug 2023	04 Jun 2023	01 Mar 2023
Machine Age	mls	464731	441977	0
Oil Age	mls	22754	441977	20000
Oil Changed	Client Info	Not Changed	Changed	Not Changed
Sample Status		SEVERE	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
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	17	35	16
Chromium	ppm ASTM D5185m >20	<1	<1	0
Nickel	ppm ASTM D5185m >2	<1	<1	0
Titanium	ppm ASTM D5185m	1	8	9
Silver	ppm ASTM D5185m >2	0	0	0
Aluminum	ppm ASTM D5185m >25	3	3	2
Lead	ppm ASTM D5185m >40	3	2	0
Copper	ppm ASTM D5185m >330	2	3	<1
Tin	ppm ASTM D5185m >15	<1	<1	0
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 2	<1	<1	3
Barium	ppm ASTM D5185m 0	0	0	0
Molybdenum	ppm ASTM D5185m 50	50	56	49
Manganese	ppm ASTM D5185m 0	<1	<1	<1
Magnesium	ppm ASTM D5185m 950	781	851	832
Calcium	ppm ASTM D5185m 1050	923	1245	1236
Phosphorus	ppm ASTM D5185m 995	851	1024	949
Zinc	ppm ASTM D5185m 1180	1078	1223	1214
Sulfur	ppm ASTM D5185m 2600	2681	3103	3371

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	3	5	4
Sodium	ppm ASTM D5185m	11	15	6
Potassium	ppm ASTM D5185m >20	2	2	<1
Fuel	% ASTM D3524 >6.0	11.6	<1.0	<1.0

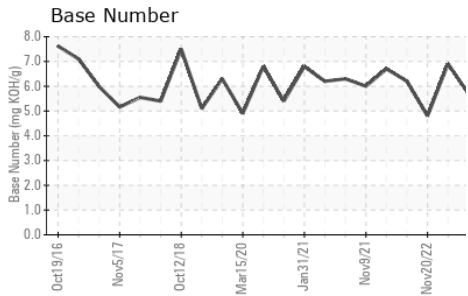
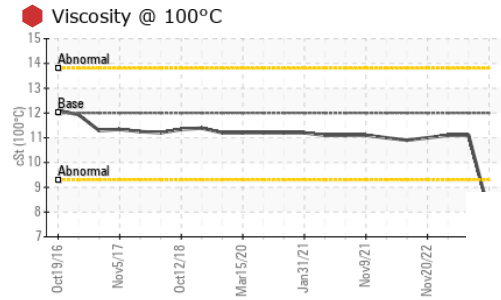
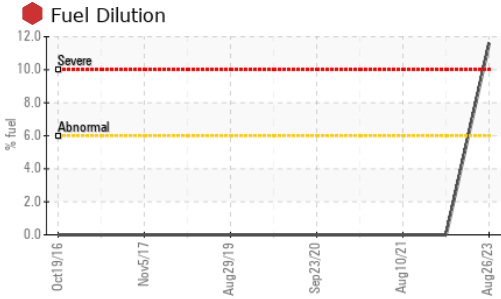
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.4	0.6	0.4
Nitration	Abs/cm *ASTM D7624 >20	8.6	10.4	9.8
Sulfation	Abs/.1mm *ASTM D7415 >30	19.1	22.2	20.1

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	15.1	18.2	16.5
Base Number (BN)	mg KOH/g ASTM D2896	6.9	5.7	6.9

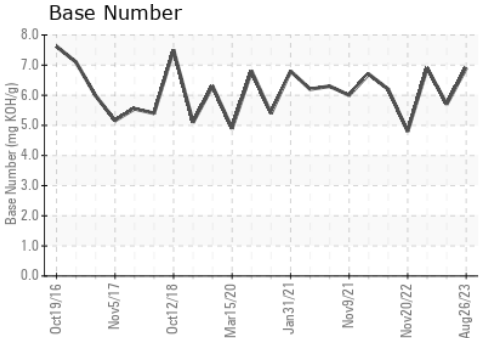
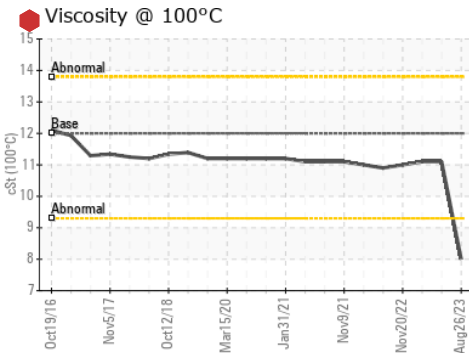
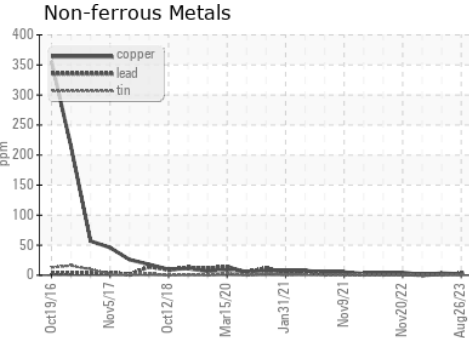
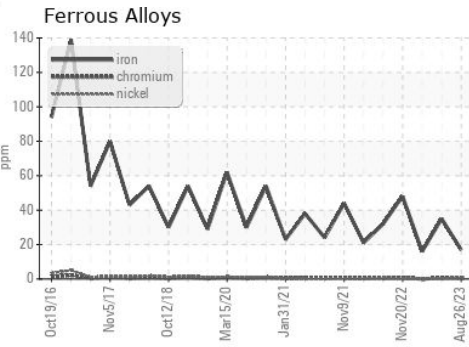
OIL ANALYSIS REPORT



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 8	11.1	11.1

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0104344 **Received** : 11 Dec 2023
Lab Number : 06031148 **Diagnosed** : 18 Dec 2023
Unique Number : 10780939 **Diagnostician** : Wes Davis
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

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: