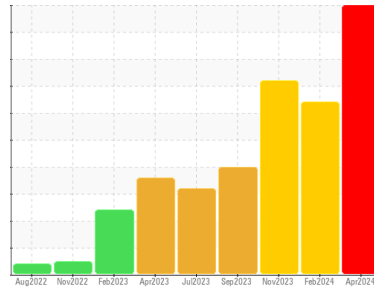


PROBLEM SUMMARY

Sample Rating Trend

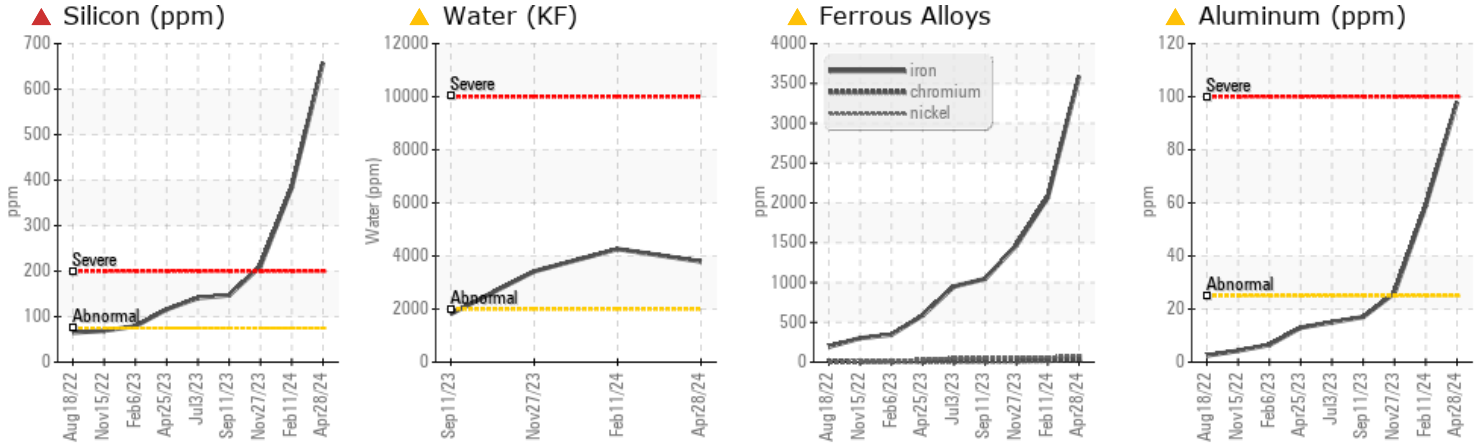


WATER



Machine Id
2126944
 Component
Rear Differential
 Fluid
GEAR OIL SAE 75W90 (--- QTS)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the 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	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>500	▲ 3592	▲ 2067	▲ 1469
Chromium	ppm	ASTM D5185m	>10	▲ 32	▲ 17	▲ 13
Nickel	ppm	ASTM D5185m	>10	▲ 81	▲ 62	▲ 60
Aluminum	ppm	ASTM D5185m	>25	▲ 98	● 59	● 26
Silicon	ppm	ASTM D5185m	>75	▲ 658	▲ 384	▲ 211
Water	%	ASTM D6304	>.2	▲ 0.379	▲ 0.426	▲ 0.342
ppm Water	ppm	ASTM D6304	>2000	▲ 3790	▲ 4260	▲ 3420
Free Water	scalar	*Visual		▲ >10%	NEG	NEG

Customer Id: PERGEODE
 Sample No.: PCA0125029
 Lab Number: 06174450
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Angela Borella +1 800-237-1369
angela.borella@wearcheckusa.com

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	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

WATER



11 Feb 2024 Diag: Don Baldrige

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a moderate concentration of water present in the oil. The condition of the oil is acceptable for the time in service.

view report



WATER



27 Nov 2023 Diag: Jonathan Hester

We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a high amount of visible silt present in the sample. There is a light concentration of water present in the oil. The condition of the oil is acceptable for the time in service.

view report



DIRT



11 Sep 2023 Diag: Sean Felton

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor. The nickel level is abnormal. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.

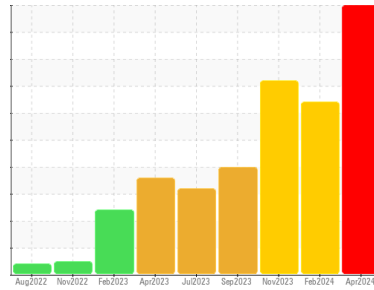
view report



OIL ANALYSIS REPORT

Machine Id
2126944
 Component
Rear Differential
 Fluid
GEAR OIL SAE 75W90 (--- QTS)

Sample Rating Trend



WATER



DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the 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

Gear wear is indicated.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Excessive free water present. There is a moderate concentration of water present in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0125029	PCA0114772	PCA0113246
Sample Date	Client Info		28 Apr 2024	11 Feb 2024	27 Nov 2023
Machine Age	mls	Client Info	195961	176450	153425
Oil Age	mls	Client Info	195961	176450	153425
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			SEVERE	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	3592	2067	1469
Chromium	ppm	ASTM D5185m >10	32	17	13
Nickel	ppm	ASTM D5185m >10	81	62	60
Titanium	ppm	ASTM D5185m	9	5	3
Silver	ppm	ASTM D5185m	0	<1	0
Aluminum	ppm	ASTM D5185m >25	98	59	26
Lead	ppm	ASTM D5185m >25	1	<1	<1
Copper	ppm	ASTM D5185m >100	44	32	31
Tin	ppm	ASTM D5185m >10	0	2	<1
Vanadium	ppm	ASTM D5185m	<1	<1	<1
Cadmium	ppm	ASTM D5185m	<1	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 400	36	23	37
Barium	ppm	ASTM D5185m 200	2	0	0
Molybdenum	ppm	ASTM D5185m 12	2	<1	1
Manganese	ppm	ASTM D5185m	59	36	32
Magnesium	ppm	ASTM D5185m 12	38	6	9
Calcium	ppm	ASTM D5185m 150	184	105	58
Phosphorus	ppm	ASTM D5185m 1650	1035	927	1031
Zinc	ppm	ASTM D5185m 125	97	52	48
Sulfur	ppm	ASTM D5185m 22500	26457	25218	26399

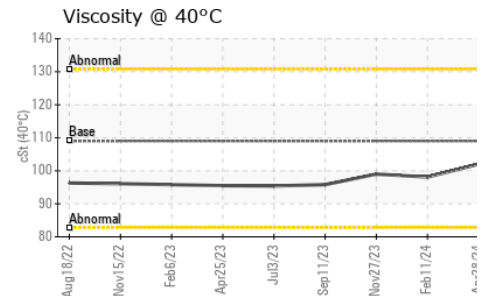
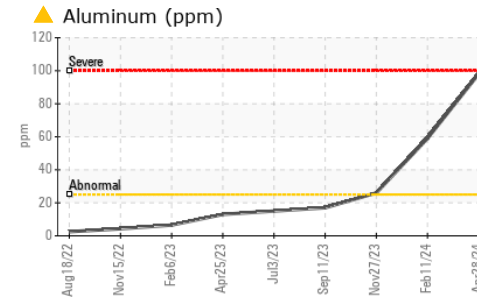
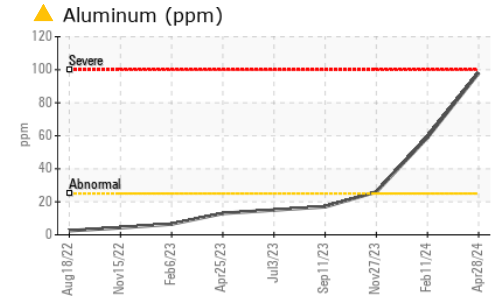
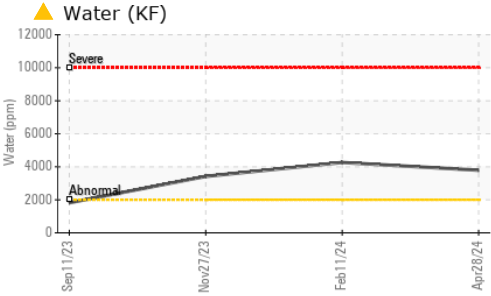
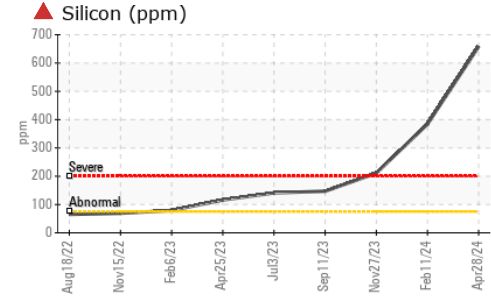
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	658	384	211
Sodium	ppm	ASTM D5185m	32	18	9
Potassium	ppm	ASTM D5185m >20	24	13	11
Water	%	ASTM D6304 >.2	0.379	0.426	0.342
ppm Water	ppm	ASTM D6304 >2000	3790	4260	3420

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	NONE	HEAVY
Debris	scalar	*Visual NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	NONE
Appearance	scalar	*Visual NORML	NORML	NORML	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >.2	0.2%	0.2%	0.2%
Free Water	scalar	*Visual	>10%	NEG	NEG

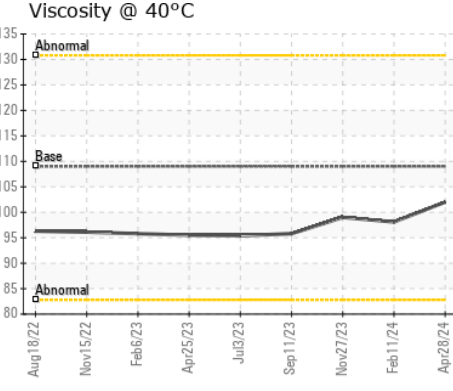
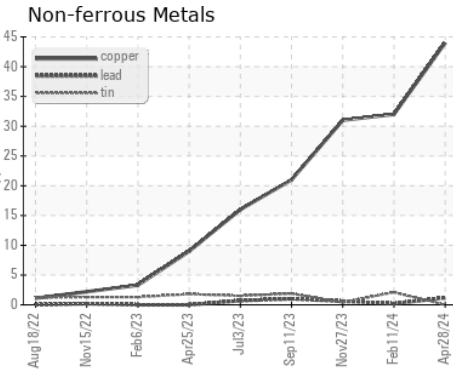
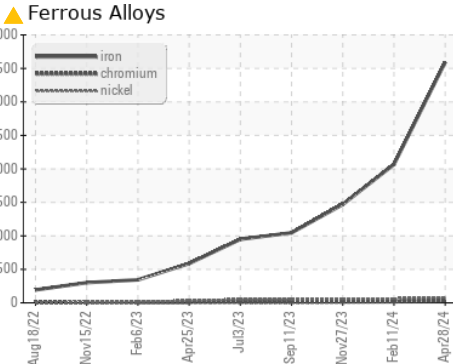
OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	109	102	98.1	99.0

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0125029
Lab Number : 06174450
Unique Number : 11020503
Test Package : FLEET (Additional Tests: KF)

Received : 09 May 2024
Tested : 13 May 2024
Diagnosed : 13 May 2024 - Angela Borella

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: