



Machine Id
7953
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0118940	---	---
Sample Date		Client Info		04 Mar 2024	---	---
Machine Age	mls	Client Info		984600	---	---
Oil Age	mls	Client Info		30000	---	---
Filter Age	mls	Client Info		30000	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				SEVERE	---	---

WEAR

Valve wear is indicated.

Iron	ppm	ASTM D5185m	>100	57	---	---
Chromium	ppm	ASTM D5185m	>20	2	---	---
Nickel	ppm	ASTM D5185m	>4	▲ 25	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	10	---	---
Lead	ppm	ASTM D5185m	>40	4	---	---
Copper	ppm	ASTM D5185m	>330	6	---	---
Tin	ppm	ASTM D5185m	>15	2	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

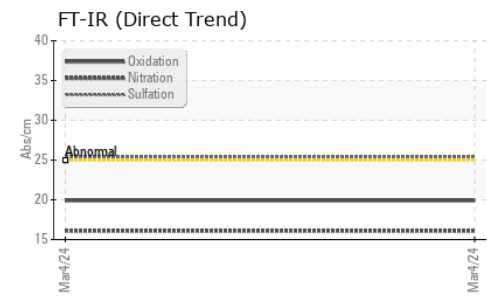
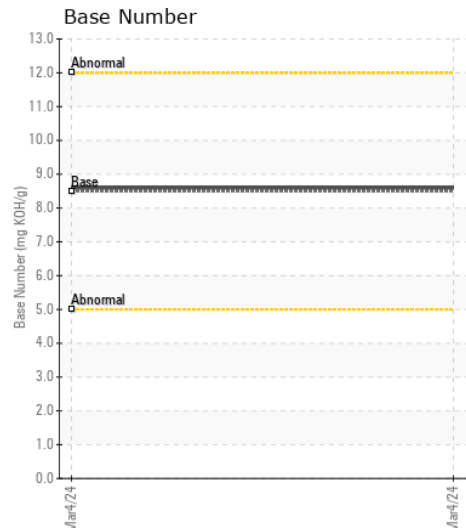
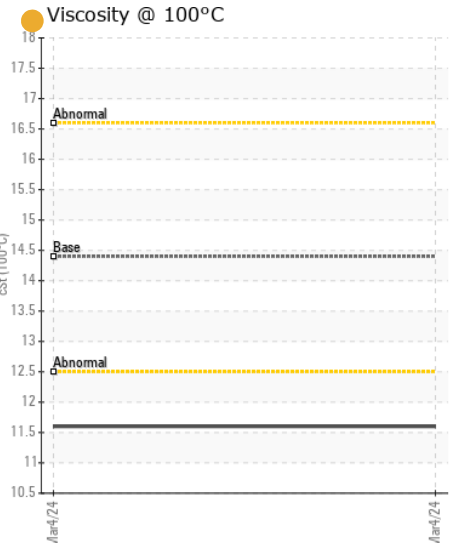
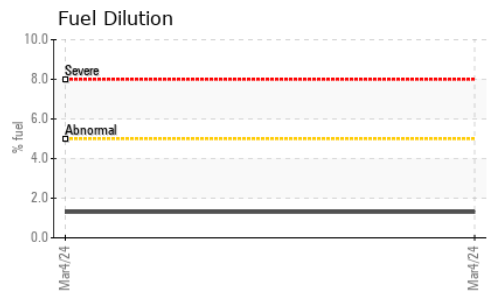
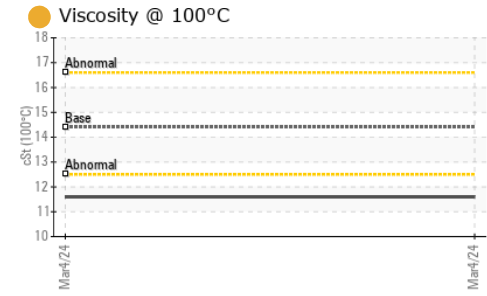
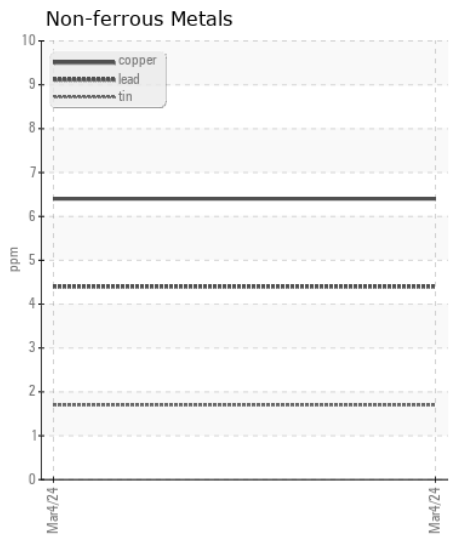
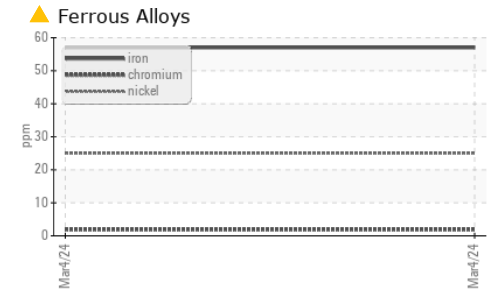
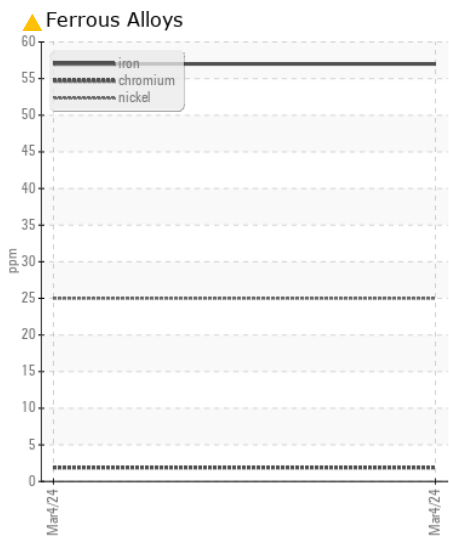
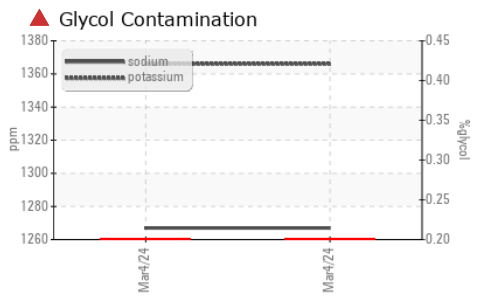
Sodium and/or potassium levels are high. Fuel content negligible. There is a high concentration of glycol present in the oil.

Silicon	ppm	ASTM D5185m	>25	11	---	---
Potassium	ppm	ASTM D5185m	>20	▲ 1366	---	---
Fuel	%	ASTM D3524	>5	1.3	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol	%	*ASTM D2982		▲ 0.20	---	---
Soot %	%	*ASTM D7844	>3	0.5	---	---
Nitration	Abs/cm	*ASTM D7624	>20	16.1	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.4	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>158	▲ 1267	---	---
Boron	ppm	ASTM D5185m	250	5	---	---
Barium	ppm	ASTM D5185m	10	0	---	---
Molybdenum	ppm	ASTM D5185m	100	140	---	---
Manganese	ppm	ASTM D5185m		3	---	---
Magnesium	ppm	ASTM D5185m	450	880	---	---
Calcium	ppm	ASTM D5185m	3000	1094	---	---
Phosphorus	ppm	ASTM D5185m	1150	964	---	---
Zinc	ppm	ASTM D5185m	1350	1239	---	---
Sulfur	ppm	ASTM D5185m	4250	3215	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.9	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.6	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	● 11.6	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0118940 **Received** : 10 Apr 2024
Lab Number : 06145211 **Tested** : 15 Apr 2024
Unique Number : 10970019 **Diagnosed** : 15 Apr 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, Glycol, PercentFuel)

PERDUE FARMS INC - GARAGE
 189 PERDUE WAY
 CANDOR, NC
 US 27229
 Contact: Service Manager

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)