

Machine Id
JOHN DEERE NO UNIT PC0084986
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0084986	---	---
Sample Date		Client Info		29 Apr 2024	---	---
Machine Age	kms	Client Info		21625	---	---
Oil Age	kms	Client Info		500	---	---
Filter Age	kms	Client Info		500	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		Not Chngd	---	---
Sample Status				SEVERE	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>51	4	---	---
Chromium	ppm	ASTM D5185(m)	>11	0	---	---
Nickel	ppm	ASTM D5185(m)	>5	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>31	1	---	---
Lead	ppm	ASTM D5185(m)	>26	5	---	---
Copper	ppm	ASTM D5185(m)	>26	77	---	---
Tin	ppm	ASTM D5185(m)	>4	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

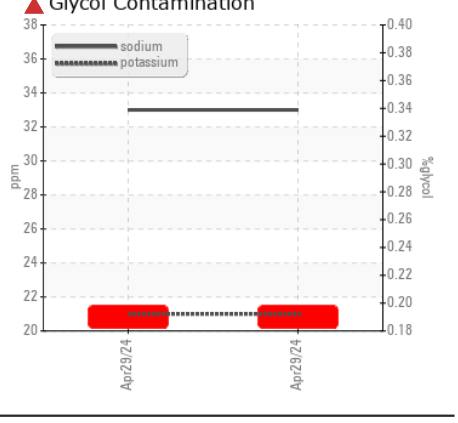
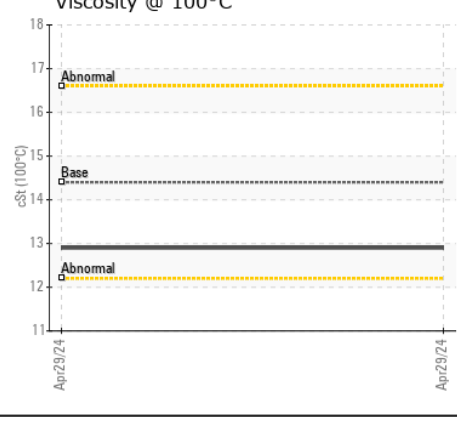
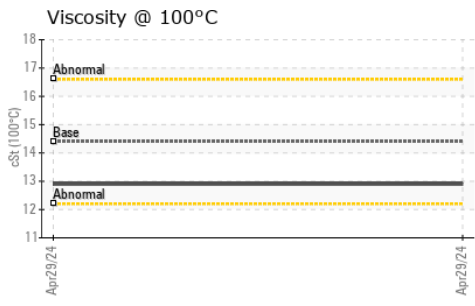
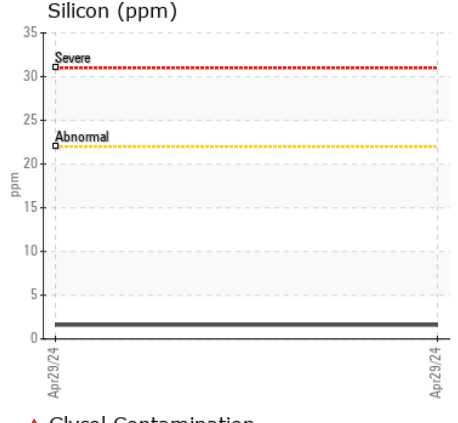
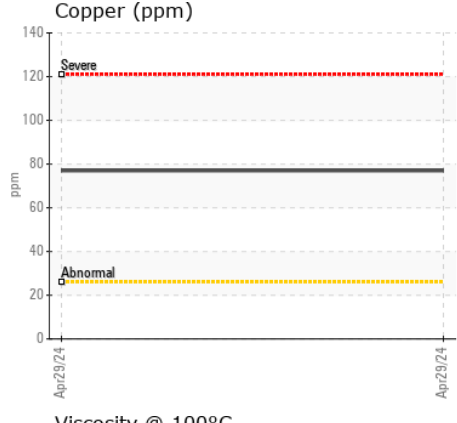
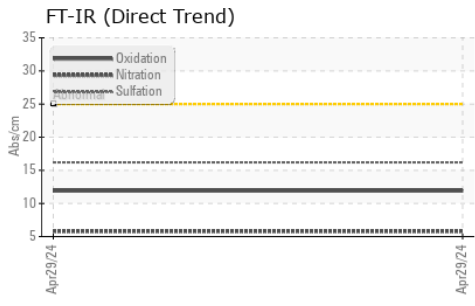
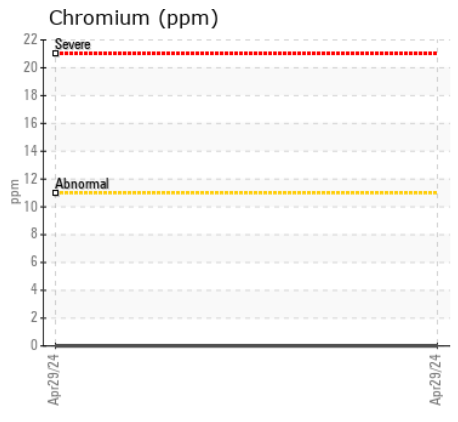
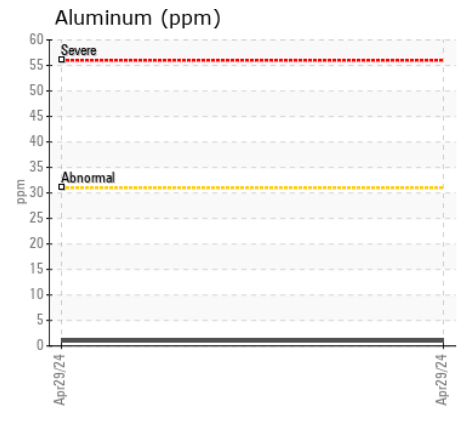
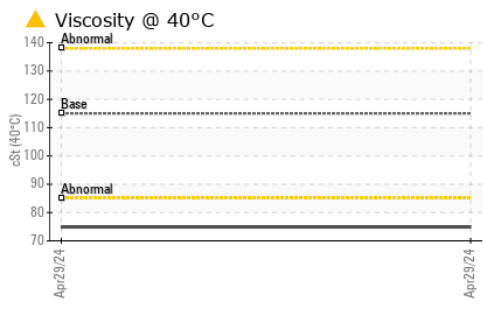
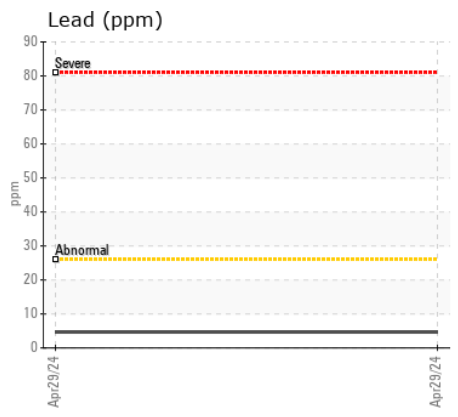
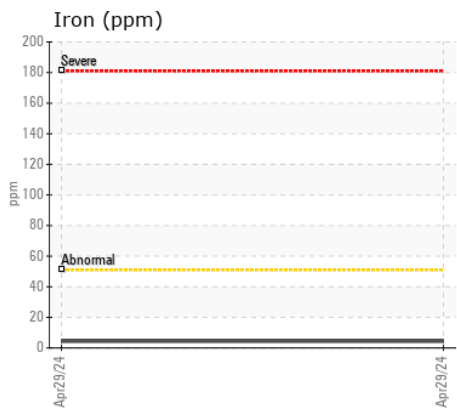
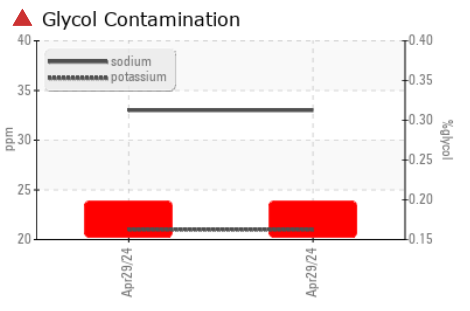
Test for glycol is positive. There is a high concentration of glycol present in the oil.

Silicon	ppm	ASTM D5185(m)	>22	2	---	---
Potassium	ppm	ASTM D5185(m)	>20	▲ 21	---	---
Fuel		WC Method	>2.1	<1.0	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol	%	ASTM D7922*		▲ 0.198	---	---
Soot %	%	ASTM D7844*	>3	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	5.8	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	16.2	---	---
Silt	scalar	Visual*	NONE	VLITE	---	---
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*	>0.21	NEG	---	---

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)	>158	● 33	---	---
Boron	ppm	ASTM D5185(m)	250	10	---	---
Barium	ppm	ASTM D5185(m)	10	0	---	---
Molybdenum	ppm	ASTM D5185(m)	100	<1	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)	450	27	---	---
Calcium	ppm	ASTM D5185(m)	3000	1926	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	884	---	---
Zinc	ppm	ASTM D5185(m)	1350	999	---	---
Sulfur	ppm	ASTM D5185(m)	4250	2906	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	11.9	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	115	▲ 74.9	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	12.9	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	126	174	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0084986 **Received** : 29 May 2024
Lab Number : 02638355 **Tested** : 29 May 2024
Unique Number : 5787517 **Diagnosed** : 29 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol, KV40, VI, Visual)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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