

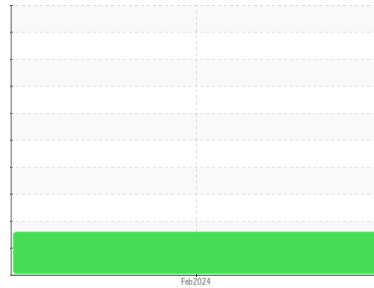


OIL ANALYSIS REPORT



Machine Id
JOHN DEERE 670G 106
 Component
Diesel Engine
 Fluid
DEZOL 15W40 (--- GAL)

Sample Rating Trend



WEAR



DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

▲ Wear

The copper level is abnormal. Cylinder, crank, or cam shaft wear is indicated. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core).

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 acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		SBP06178319	---	---
Sample Date	Client Info		02 Feb 2024	---	---
Machine Age	hrs	Client Info	8500	---	---
Oil Age	hrs	Client Info	560	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.1	<1.0	---	---
Water	WC Method	>0.21	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	▲ 45	---
Chromium	ppm	ASTM D5185m	>11	<1	---
Nickel	ppm	ASTM D5185m	>5	2	---
Titanium	ppm	ASTM D5185m		1	---
Silver	ppm	ASTM D5185m	>3	0	---
Aluminum	ppm	ASTM D5185m	>31	5	---
Lead	ppm	ASTM D5185m	>26	<1	---
Copper	ppm	ASTM D5185m	>26	▲ 69	---
Tin	ppm	ASTM D5185m	>4	0	---
Vanadium	ppm	ASTM D5185m		<1	---
Cadmium	ppm	ASTM D5185m		0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		198	---
Barium	ppm	ASTM D5185m		0	---
Molybdenum	ppm	ASTM D5185m		236	---
Manganese	ppm	ASTM D5185m		<1	---
Magnesium	ppm	ASTM D5185m		871	---
Calcium	ppm	ASTM D5185m		1542	---
Phosphorus	ppm	ASTM D5185m		922	---
Zinc	ppm	ASTM D5185m		1105	---
Sulfur	ppm	ASTM D5185m		3372	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>22	8	---
Sodium	ppm	ASTM D5185m	>31	14	---
Potassium	ppm	ASTM D5185m	>20	2	---

INFRA-RED

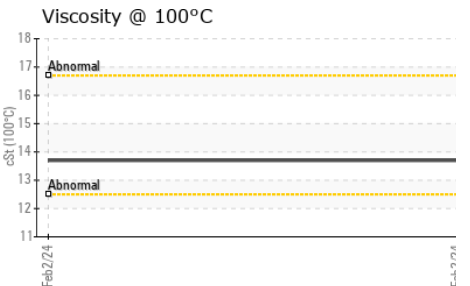
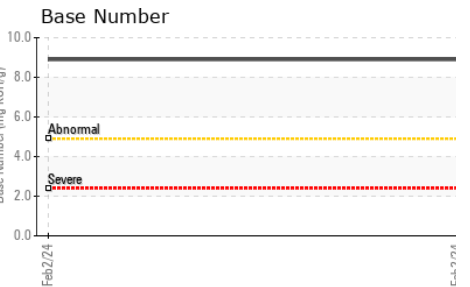
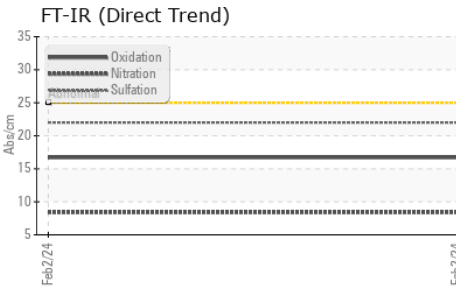
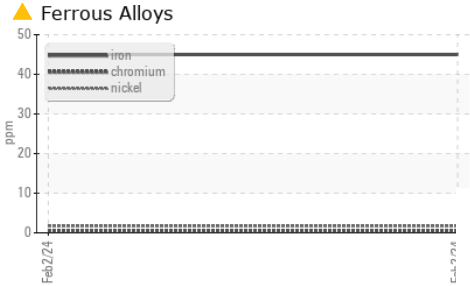
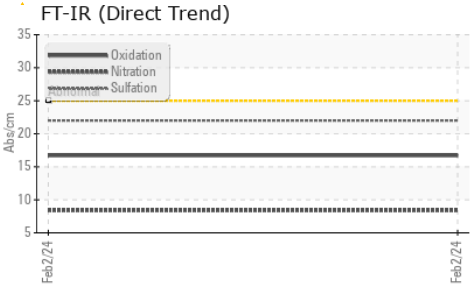
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	8.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.9	---



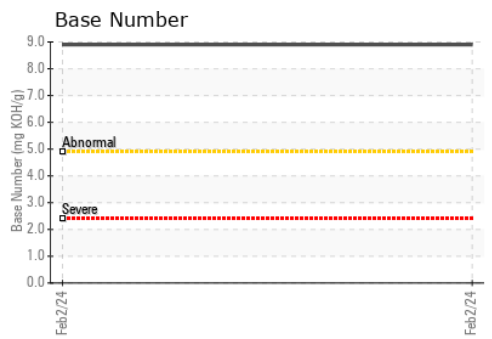
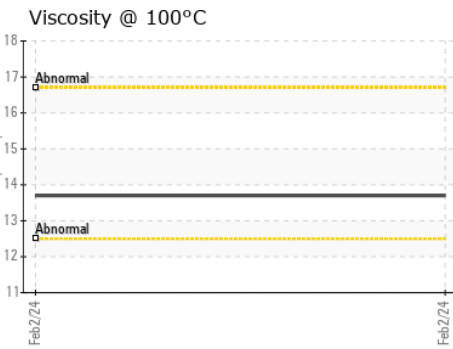
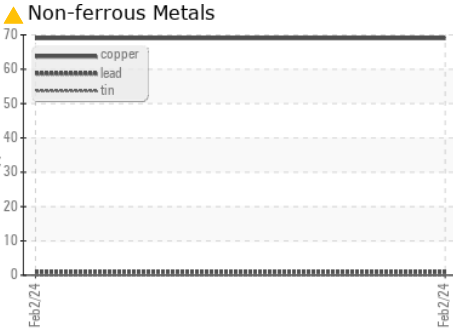
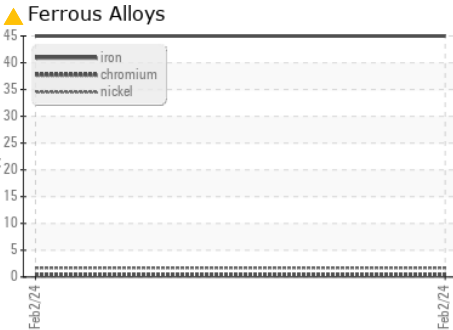
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
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	>0.21	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	13.7	---	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP06178319 **Received** : 14 May 2024
Lab Number : 06178319 **Tested** : 14 May 2024
Unique Number : 11029645 **Diagnosed** : 16 May 2024 - Sean Felton
Test Package : FLEET

WASHINGTON COUNTY PUBLIC WORKS
 1561 RAINBOW RD
 WASHINGTON, KS
 US 66968
 Contact: KELSIE BEIKMANN
 wcpw@bluevalley.net

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)