



WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 317G 1T0317GJCKJ352818

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0198901	JR0096633	---
Sample Date		Client Info		27 Dec 2023	29 Jul 2021	---
Machine Age	hrs	Client Info		1415	732	---
Oil Age	hrs	Client Info		0	732	---
Filter Age	hrs	Client Info		0	732	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

Piston and cylinder wear is indicated.

Iron	ppm	ASTM D5185m	>51	▲ 71	91	---
Chromium	ppm	ASTM D5185m	>11	3	3	---
Nickel	ppm	ASTM D5185m	>5	1	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>31	▲ 35	15	---
Lead	ppm	ASTM D5185m	>26	7	13	---
Copper	ppm	ASTM D5185m	>26	23	▲ 81	---
Tin	ppm	ASTM D5185m	>4	1	1	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

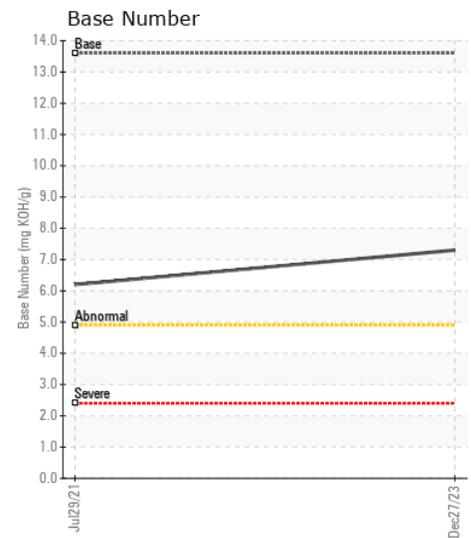
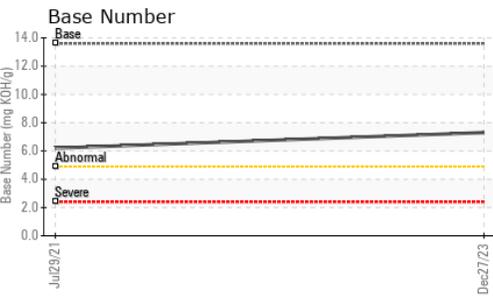
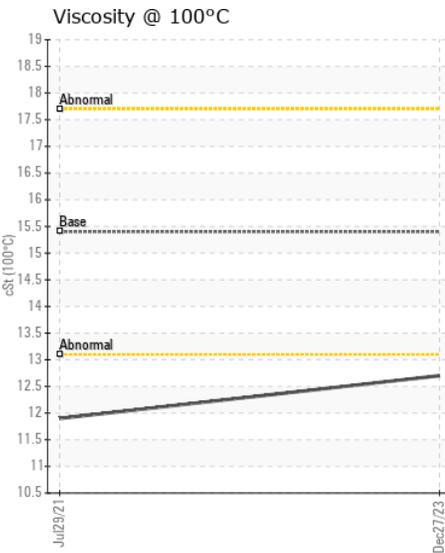
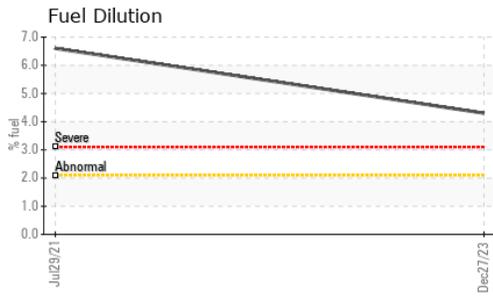
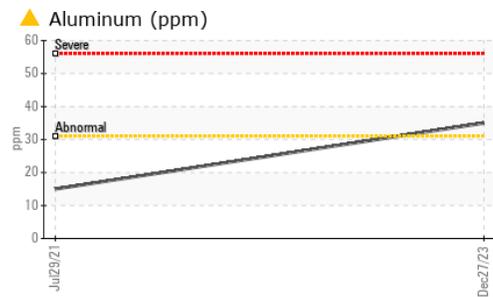
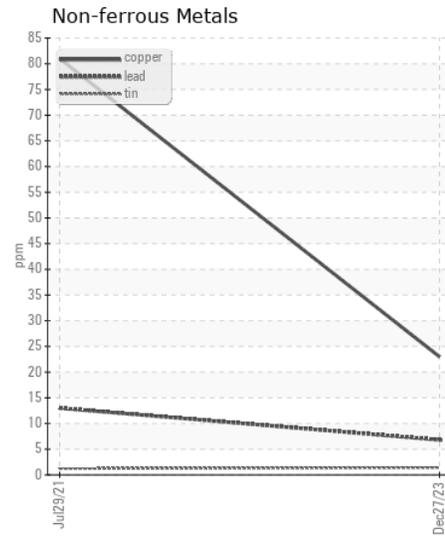
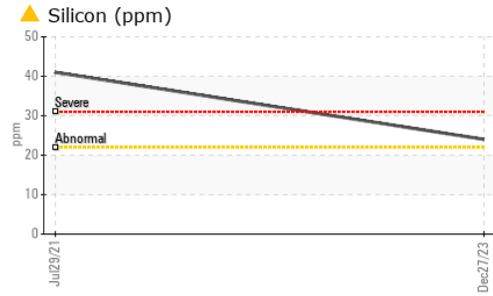
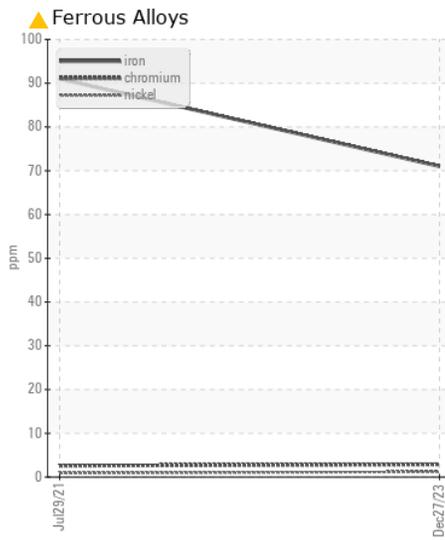
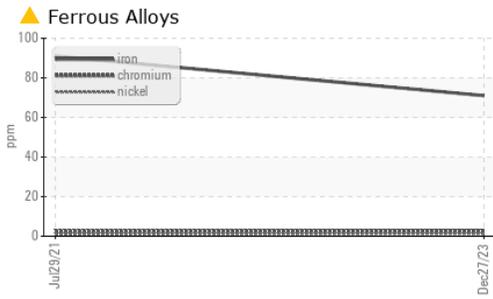
Light fuel dilution occurring. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>22	▲ 24	41	---
Potassium	ppm	ASTM D5185m	>20	<1	1	---
Fuel	%	ASTM D3524	>2.1	4.3	▲ 6.6	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	1.6	1	---
Nitration	Abs/cm	*ASTM D7624	>20	13.6	14.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	30.5	33	---
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	>0.21	NEG	NEG	---

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.

Sodium	ppm	ASTM D5185m	>31	9	12	---
Boron	ppm	ASTM D5185m		47	72	---
Barium	ppm	ASTM D5185m		1	2	---
Molybdenum	ppm	ASTM D5185m		250	261	---
Manganese	ppm	ASTM D5185m		1	2	---
Magnesium	ppm	ASTM D5185m		807	730	---
Calcium	ppm	ASTM D5185m		1560	1906	---
Phosphorus	ppm	ASTM D5185m		933	973	---
Zinc	ppm	ASTM D5185m		1115	1129	---
Sulfur	ppm	ASTM D5185m		2975	2958	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.1	32.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.3	6.2	---
Visc @ 100°C	cSt	ASTM D445	15.4	12.7	11.9	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0198901 **Received** : 29 Dec 2023
Lab Number : 06047649 **Diagnosed** : 08 Jan 2024
Unique Number : 10808257 **Diagnostician** : Doug Bogart
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

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)

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