



Machine Id
JOHN DEERE 560E GC-4 (S/N EAHKM020292)

Component
Gasoline Engine

Fluid
GASOLINE ENGINE OIL SAE 10W30 (--- 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		JR0173420	---	---
Sample Date		Client Info		09 Jan 2024	---	---
Machine Age	hrs	Client Info		1125	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	76	---	---
Chromium	ppm	ASTM D5185m	>20	2	---	---
Nickel	ppm	ASTM D5185m	>5	<1	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>40	▲ 15	---	---
Lead	ppm	ASTM D5185m	>50	2	---	---
Copper	ppm	ASTM D5185m	>155	28	---	---
Tin	ppm	ASTM D5185m	>10	4	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

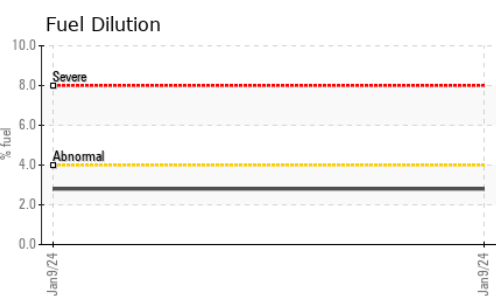
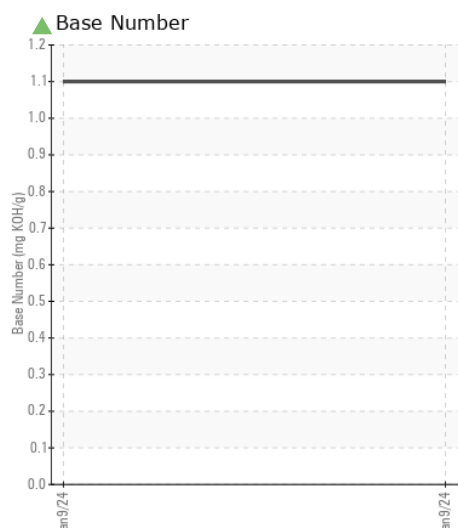
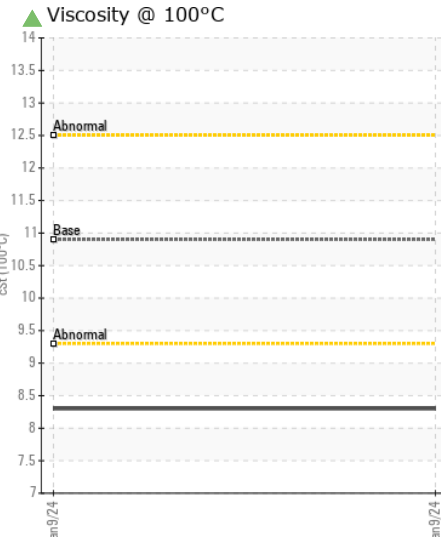
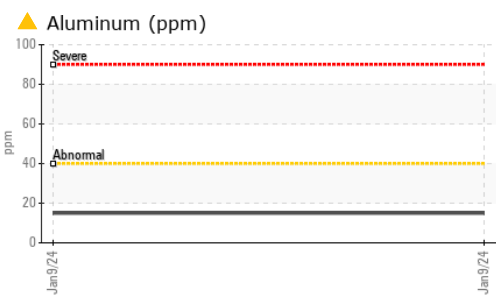
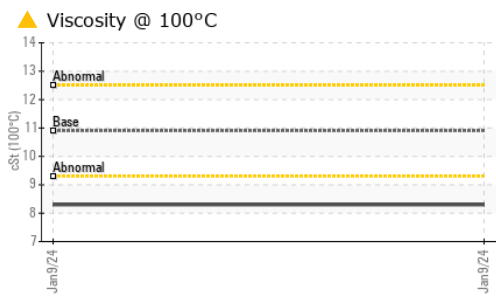
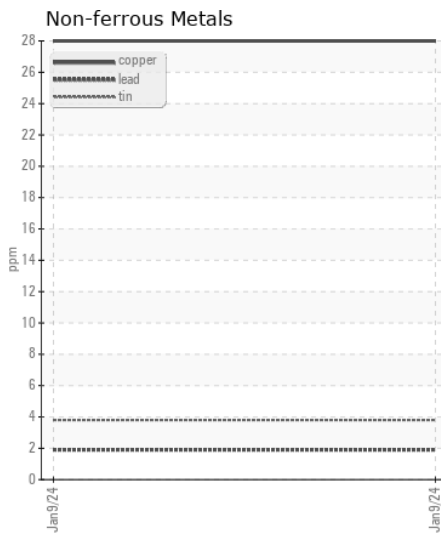
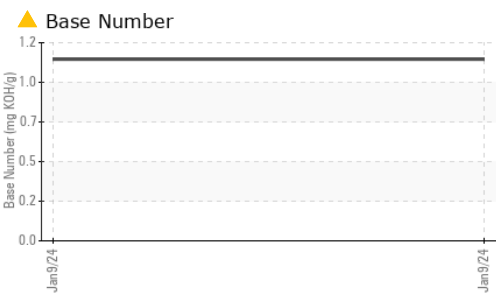
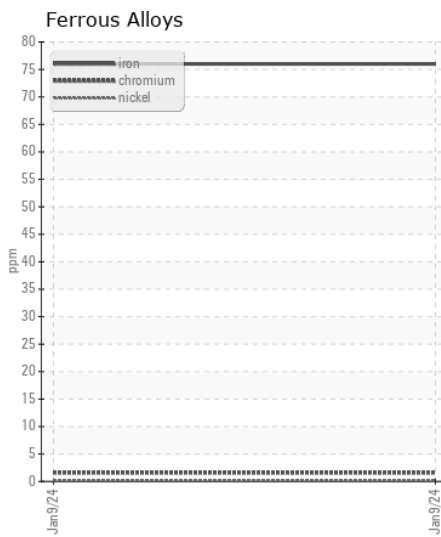
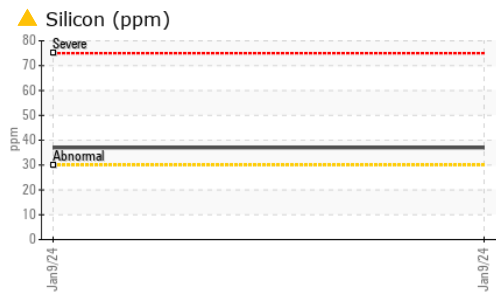
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Light fuel dilution occurring.

Silicon	ppm	ASTM D5185m	>30	▲ 37	---	---
Potassium	ppm	ASTM D5185m	>20	3	---	---
Fuel	%	ASTM D3524	>4.0	2.8	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844		0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	16.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	32.0	---	---
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

Fuel is present in the oil and is lowering the viscosity. The BN level is low.

Sodium	ppm	ASTM D5185m	>400	17	---	---
Boron	ppm	ASTM D5185m	75	36	---	---
Barium	ppm	ASTM D5185m	5	4	---	---
Molybdenum	ppm	ASTM D5185m	100	63	---	---
Manganese	ppm	ASTM D5185m		26	---	---
Magnesium	ppm	ASTM D5185m	12	68	---	---
Calcium	ppm	ASTM D5185m	2100	1821	---	---
Phosphorus	ppm	ASTM D5185m	650	695	---	---
Zinc	ppm	ASTM D5185m	850	844	---	---
Sulfur	ppm	ASTM D5185m	2500	3014	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	32.5	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		▲ 1.1	---	---
Visc @ 100°C	cSt	ASTM D445	10.9	▲ 8.3	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0173420 **Received** : 18 Jan 2024
Lab Number : 06064064 **Diagnosed** : 02 Feb 2024
Unique Number : 10835446 **Diagnostician** : Doug Bogart
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

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Certificate L2367
 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)