



WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area
[W20956-QUINN]
 Machine Id
JOHN DEERE 3025E 1LV3025EEHH103206
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. 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		JR0204400	---	---
Sample Date		Client Info		02 Jan 2024	---	---
Machine Age	hrs	Client Info		44	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				SEVERE	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	12	---	---
Chromium	ppm	ASTM D5185m	>11	<1	---	---
Nickel	ppm	ASTM D5185m	>5	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>31	3	---	---
Lead	ppm	ASTM D5185m	>26	4	---	---
Copper	ppm	ASTM D5185m	>26	13	---	---
Tin	ppm	ASTM D5185m	>4	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

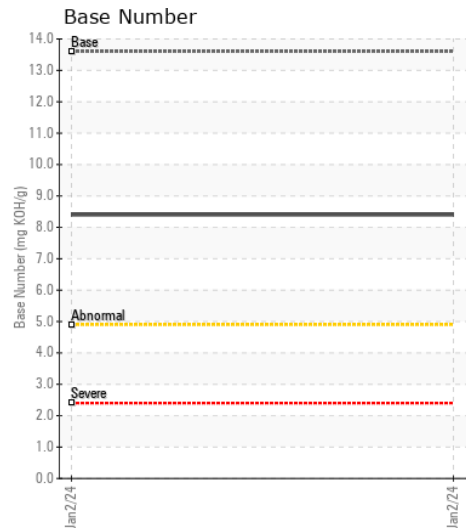
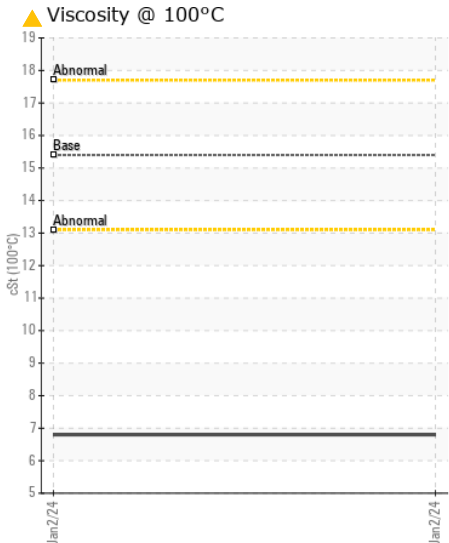
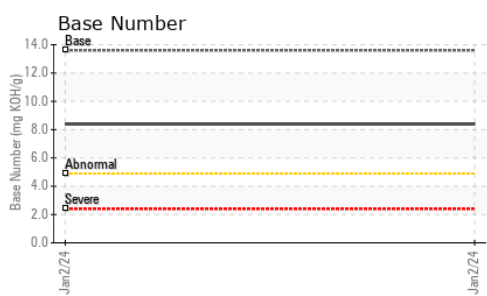
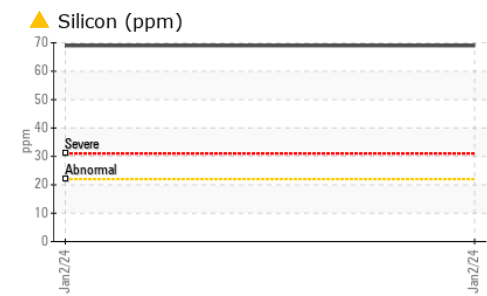
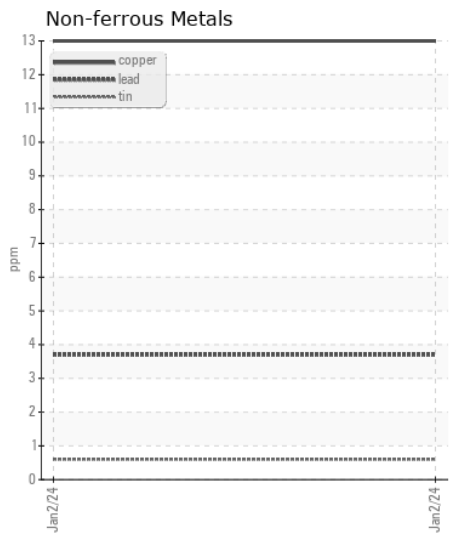
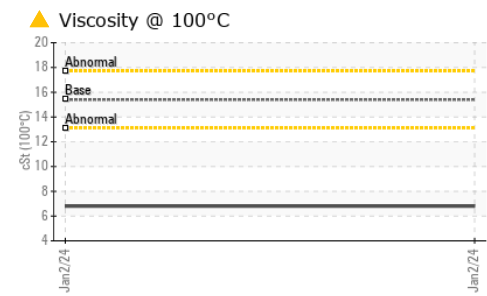
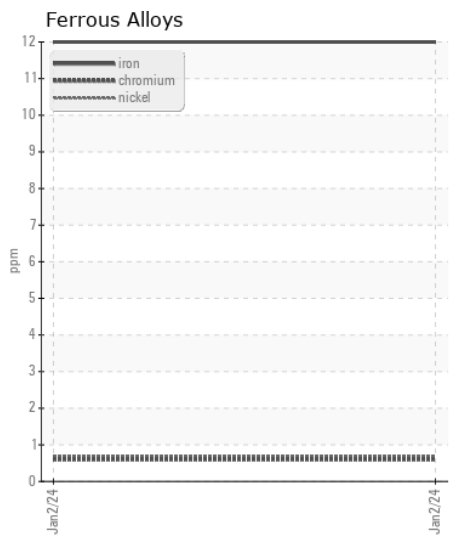
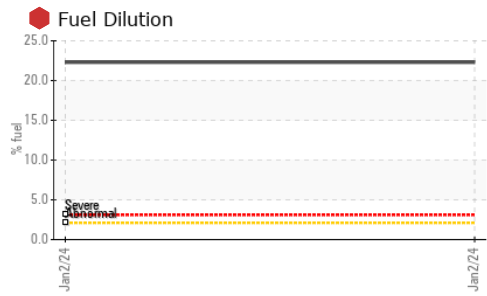
There is a high amount of fuel present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>22	▲ 69	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Fuel	%	ASTM D3524	>2.1	◆ 22.3	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	6.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	---	---
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	>0.21	NEG	---	---

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>31	4	---	---
Boron	ppm	ASTM D5185m		196	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		182	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m		519	---	---
Calcium	ppm	ASTM D5185m		1459	---	---
Phosphorus	ppm	ASTM D5185m		738	---	---
Zinc	ppm	ASTM D5185m		891	---	---
Sulfur	ppm	ASTM D5185m		2804	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.4	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 6.8	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0204400 **Received** : 09 Feb 2024
Lab Number : 06085343 **Tested** : 13 Feb 2024
Unique Number : 10872788 **Diagnosed** : 13 Feb 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

JRE - BURKEVILLE
 510 WEST COLONIAL DR
 BURKEVILLE, VA
 US 23922
 Contact: RACHEL HARRIS
 RACHEL.HARRIS@JAMESRIVEREQUIPMENT.COM
 T: (434)767-5578
 F: (434)767-3774

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)