



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area

[WR WELCH]

Machine Id

JOHN DEERE 6105M 1LV6105MCEG802592

Component

Diesel Engine

Fluid

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

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0196759	---	---
Sample Date		Client Info		23 Feb 2024	---	---
Machine Age	hrs	Client Info		1298	---	---
Oil Age	hrs	Client Info		146	---	---
Filter Age	hrs	Client Info		146	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		Not Chngd	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	19	---	---
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	5	---	---
Lead	ppm	ASTM D5185m	>26	<1	---	---
Copper	ppm	ASTM D5185m	>26	2	---	---
Tin	ppm	ASTM D5185m	>4	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

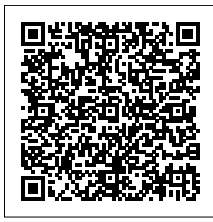
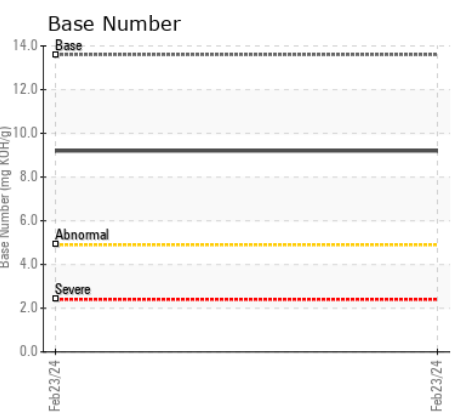
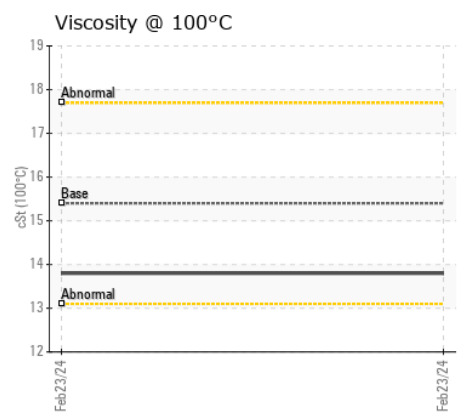
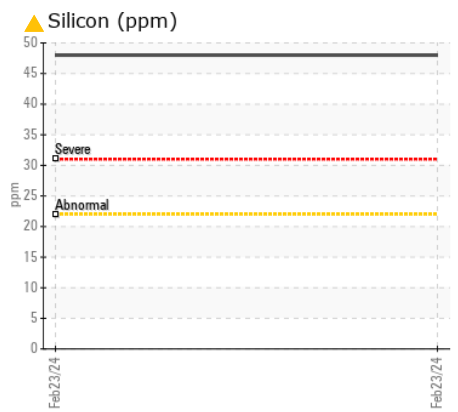
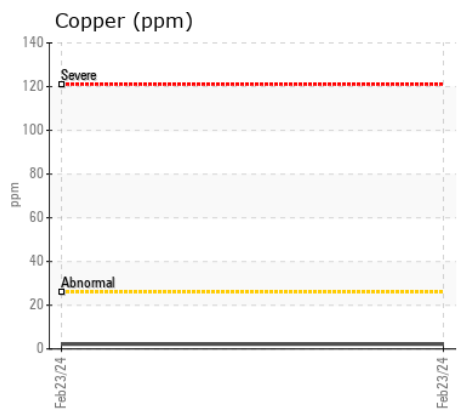
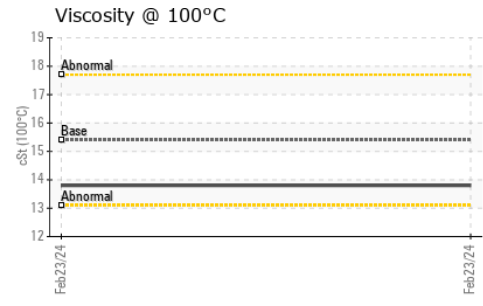
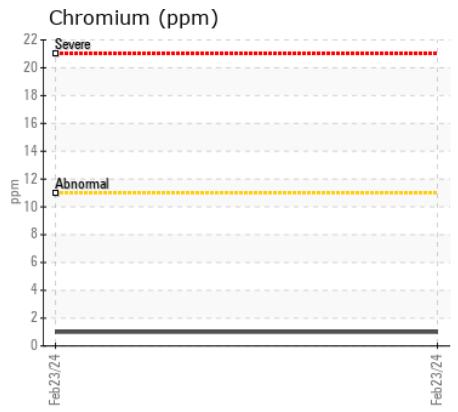
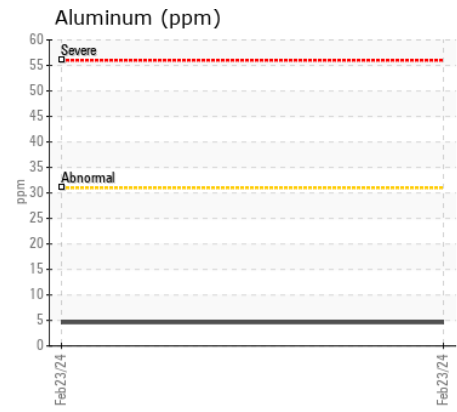
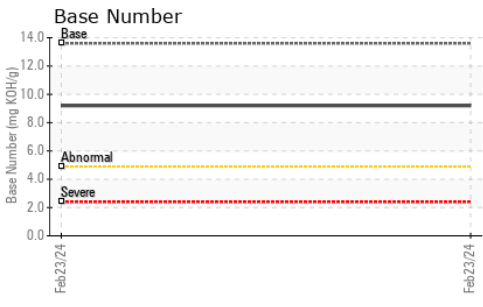
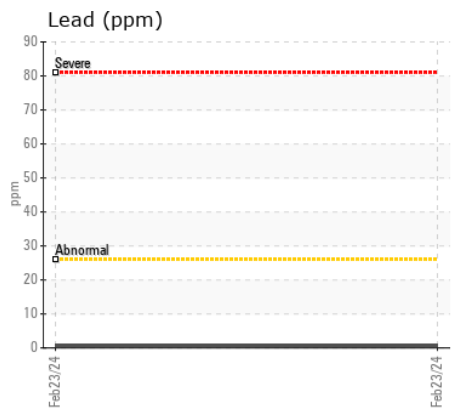
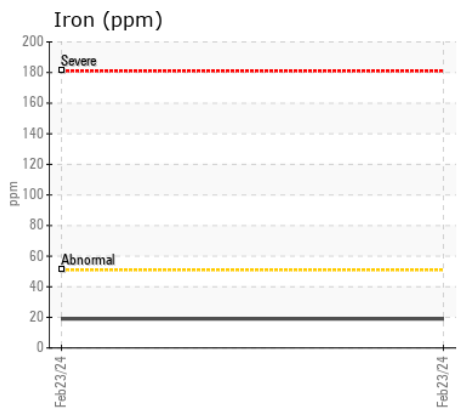
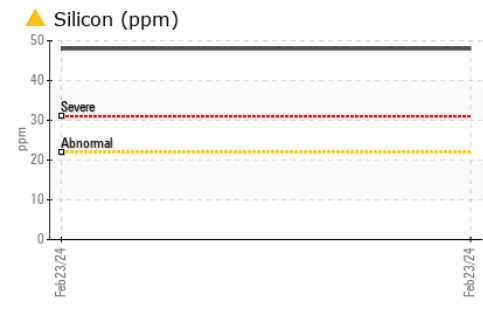
Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>22	▲ 48	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Fuel		WC Method	>2.1	<1.0	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.2	---	---
Nitration	Abs/cm	*ASTM D7624	>20	7.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.3	---	---
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

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	1	---	---
Boron	ppm	ASTM D5185m		227	---	---
Barium	ppm	ASTM D5185m		2	---	---
Molybdenum	ppm	ASTM D5185m		242	---	---
Manganese	ppm	ASTM D5185m		1	---	---
Magnesium	ppm	ASTM D5185m		733	---	---
Calcium	ppm	ASTM D5185m		1286	---	---
Phosphorus	ppm	ASTM D5185m		775	---	---
Zinc	ppm	ASTM D5185m		955	---	---
Sulfur	ppm	ASTM D5185m		2900	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	9.2	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0196759 **Received** : 28 Feb 2024
Lab Number : 06102719 **Tested** : 29 Feb 2024
Unique Number : 10900949 **Diagnosed** : 29 Feb 2024 - Don Baldrige
Test Package : MOBCE (Additional Tests: TBN)

JRE - EDINBURG
 601 NORTH MAIN ST
 WOODSTOCK, VA
 US 22664

Contact: MIKE SECHLER
 MSECHLER@JAMESRIVEREQUIPMENT.COM

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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F: