



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area

**[BENCHMARK]**

Machine Id

**SAKAI SV540J 3SV53-10360**

Component

**Diesel Engine**

Fluid

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

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0203206</b>	JRMC398527	---
Sample Date		Client Info		<b>06 Feb 2024</b>	02 Sep 2016	---
Machine Age	hrs	Client Info		<b>2204</b>	618	---
Oil Age	hrs	Client Info		<b>0</b>	618	---
Filter Age	hrs	Client Info		<b>0</b>	618	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>71</b>	32	---
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	1	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	18	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>8</b>	4	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185m	>330	<b>7</b>	▲ 384	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	12	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

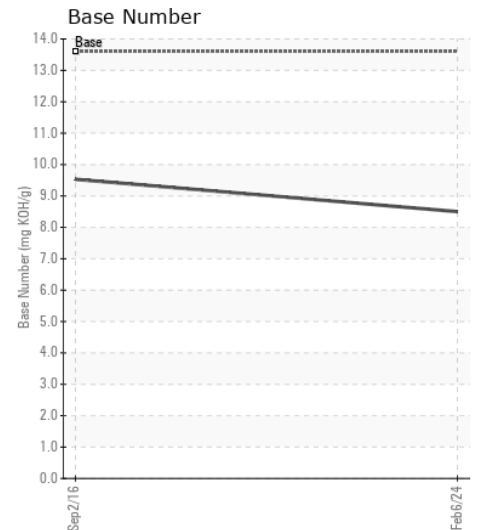
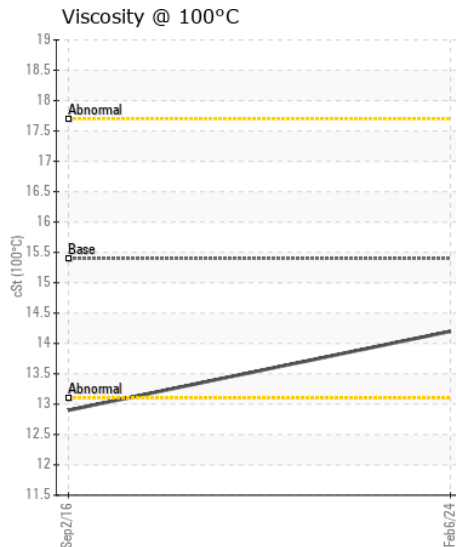
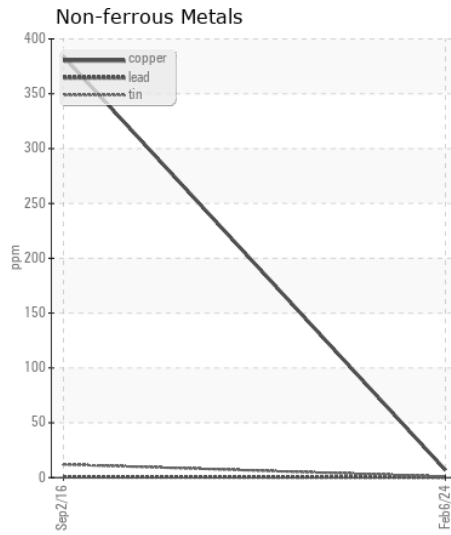
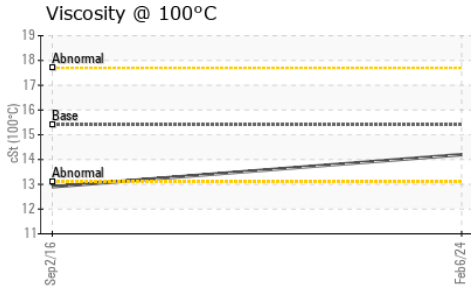
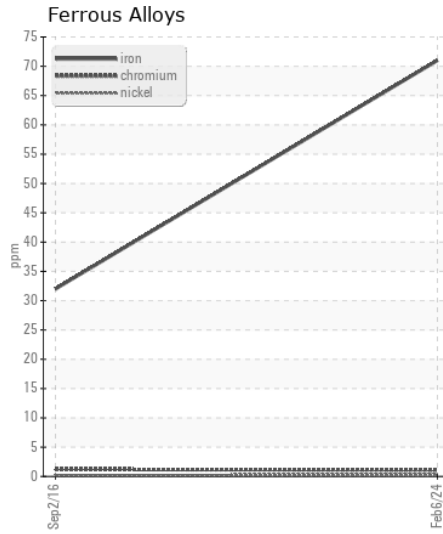
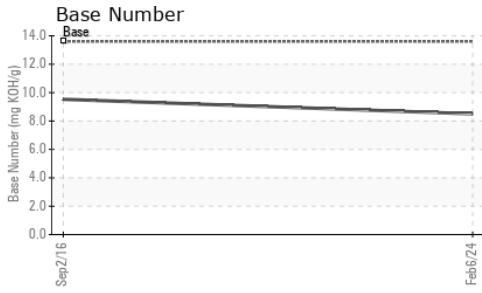
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>12</b>	14	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	2	---
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>6	<b>0.3</b>	0	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.8</b>	9.	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.8</b>	20.	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

**FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	10	---
Boron	ppm	ASTM D5185m		<b>127</b>	32	---
Barium	ppm	ASTM D5185m		<b>0</b>	4	---
Molybdenum	ppm	ASTM D5185m		<b>199</b>	67	---
Manganese	ppm	ASTM D5185m		<b>2</b>	5	---
Magnesium	ppm	ASTM D5185m		<b>735</b>	857	---
Calcium	ppm	ASTM D5185m		<b>1342</b>	1406	---
Phosphorus	ppm	ASTM D5185m		<b>837</b>	930	---
Zinc	ppm	ASTM D5185m		<b>995</b>	1140	---
Sulfur	ppm	ASTM D5185m		<b>2565</b>	2575	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.4</b>	16.	---
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.5</b>	9.53	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.2</b>	12.9	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0203206 **Received** : 14 Feb 2024  
**Lab Number** : 06089435 **Tested** : 15 Feb 2024  
**Unique Number** : 10876880 **Diagnosed** : 16 Feb 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - MANASSAS PARK**  
 9107 OWENS DRIVE  
 MANASSAS PARK, VA  
 US 20111

Contact: DON VEST  
 dvest@jamesriverequipment.com  
 T: (703)631-8500  
 F: (703)631-4715

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)