



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

Area

**[45497]**

Machine Id

**JOHN DEERE 700L 1T0700LXLNF422061**

Component

**Diesel Engine**

Fluid

**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (28 GAL)**

### RECOMMENDATION

We advise that you check for possible coolant leak. Check for low coolant level. 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		<b>JR0208432</b>	JR0196106	JR0183854
Sample Date		Client Info		<b>18 Mar 2024</b>	13 Dec 2023	11 Sep 2023
Machine Age	hrs	Client Info		<b>2445</b>	2445	1951
Oil Age	hrs	Client Info		<b>2445</b>	494	0
Filter Age	hrs	Client Info		<b>0</b>	494	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ATTENTION	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>8</b>	10	11
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>2</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>2</b>	2	8
Lead	ppm	ASTM D5185m	>26	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>26	<b>3</b>	1	2
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

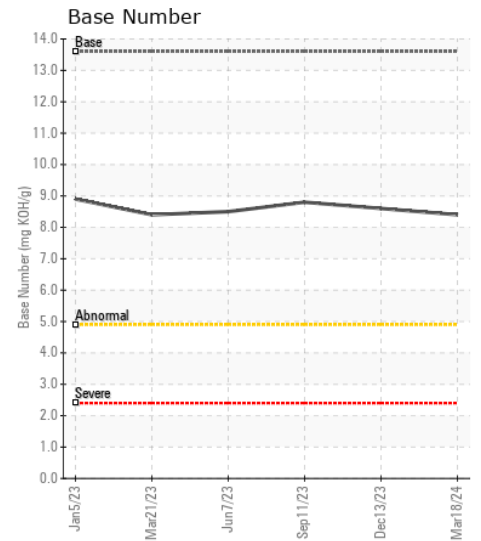
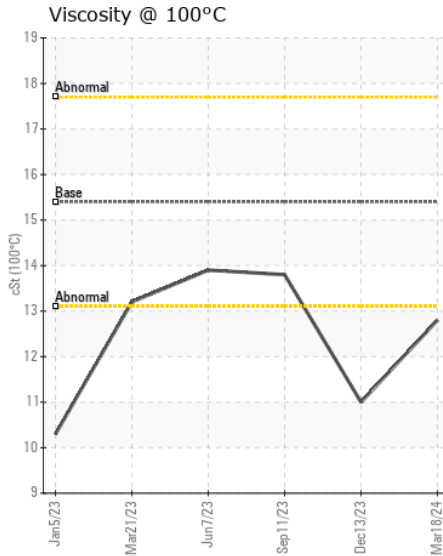
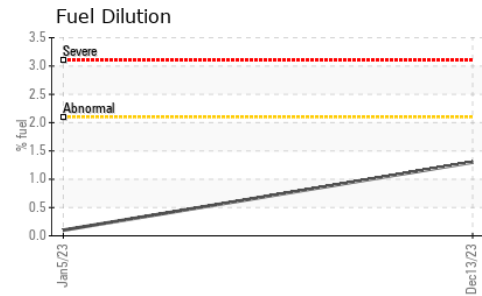
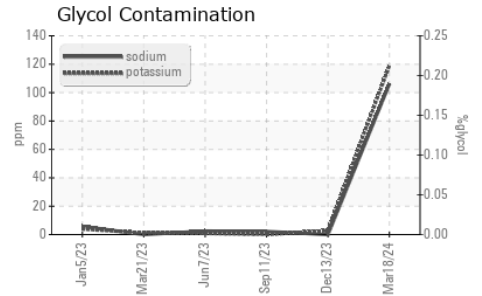
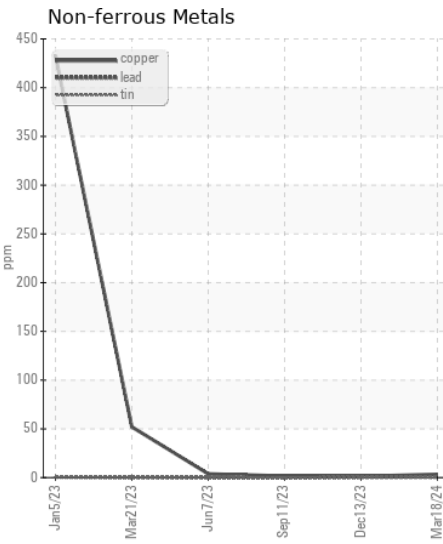
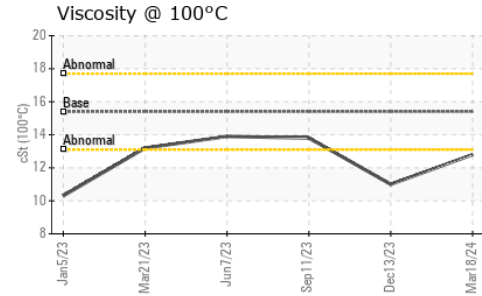
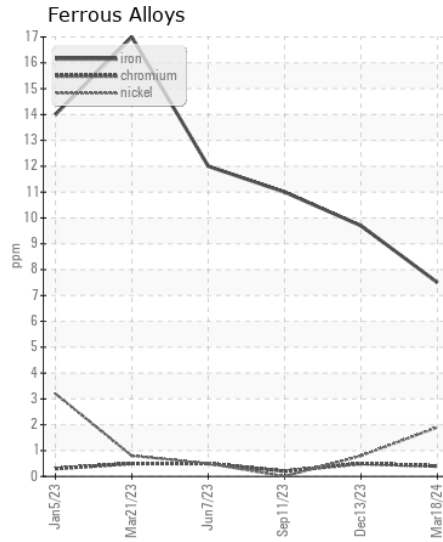
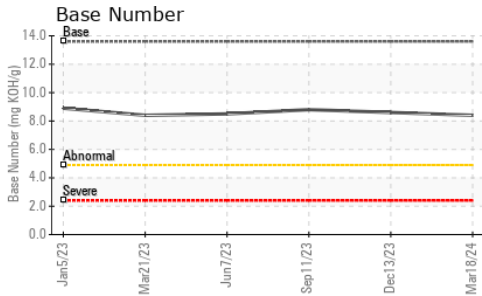
Sodium and/or potassium levels are high.

Silicon	ppm	ASTM D5185m	>22	<b>8</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>▲ 119</b>	3	0
Fuel	%	ASTM D3524	>2.1	<b>&lt;1.0</b>	1.3	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol	%	*ASTM D2982		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.9</b>	7.1	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.9</b>	21.3	22.9
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m	>31	<b>▲ 106</b>	0	2
Boron	ppm	ASTM D5185m		<b>17</b>	137	234
Barium	ppm	ASTM D5185m		<b>0</b>	13	0
Molybdenum	ppm	ASTM D5185m		<b>34</b>	143	243
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>263</b>	484	808
Calcium	ppm	ASTM D5185m		<b>1021</b>	2560	1399
Phosphorus	ppm	ASTM D5185m		<b>572</b>	1035	823
Zinc	ppm	ASTM D5185m		<b>660</b>	1233	997
Sulfur	ppm	ASTM D5185m		<b>1842</b>	3459	3118
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.5</b>	14.7	17.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.4</b>	8.6	8.8
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.8</b>	● 11.0	13.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0208432 **Received** : 20 Mar 2024  
**Lab Number** : 06123516 **Tested** : 25 Mar 2024  
**Unique Number** : 10937667 **Diagnosed** : 25 Mar 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FuelDilution, Glycol, TBN )

**B & S SITE DEVELOPMENT**  
 7800 PINEY BRANCH LANE  
 BRISTOW, VA  
 US 20136  
 Contact: DANNY HUFF  
 dhuff@bandssite.com  
 T: (540)270-3203  
 F: (703)753-0605

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)