



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

Machine Id  
**VERMEER TG-7000 TG-6 (S/N X71000144)**  
 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>JR06239926</b>	JR0173377	JR0160804
Sample Date		Client Info		<b>17 Jul 2024</b>	16 Nov 2023	13 Apr 2023
Machine Age	hrs	Client Info		<b>10048</b>	9300	8790
Oil Age	hrs	Client Info		<b>748</b>	264	303
Filter Age	hrs	Client Info		<b>0</b>	264	303
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>24</b>	30	54
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>5</b>	5	0
Lead	ppm	ASTM D5185m	>40	<b>1</b>	2	6
Copper	ppm	ASTM D5185m	>330	<b>5</b>	▲ 255	27
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	6
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

There is no indication of any contamination in the oil.

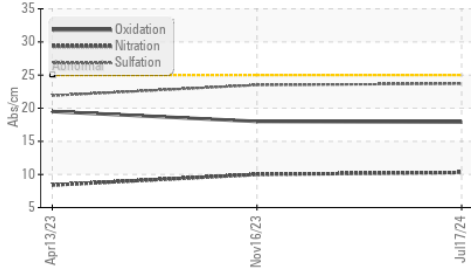
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	6	8
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	0	5
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.9	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.3</b>	10.0	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.7</b>	23.5	21.9
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	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

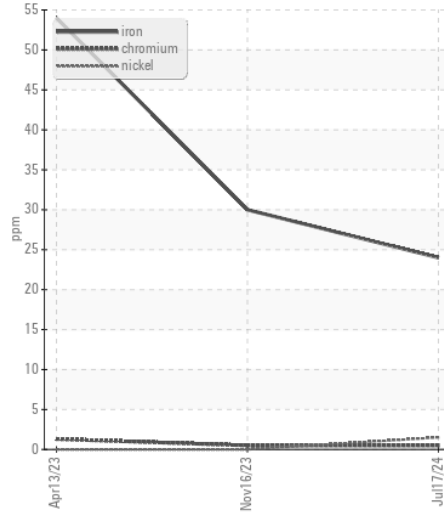
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>4</b>	<1	13
Boron	ppm	ASTM D5185m		<b>144</b>	206	102
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>237</b>	268	107
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m		<b>797</b>	901	599
Calcium	ppm	ASTM D5185m		<b>1396</b>	1499	1644
Phosphorus	ppm	ASTM D5185m		<b>896</b>	979	931
Zinc	ppm	ASTM D5185m		<b>1008</b>	1161	1123
Sulfur	ppm	ASTM D5185m		<b>3086</b>	2942	2878
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.9</b>	18.0	19.5
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>8.2</b>	8.0	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.7</b>	14.1	13.6

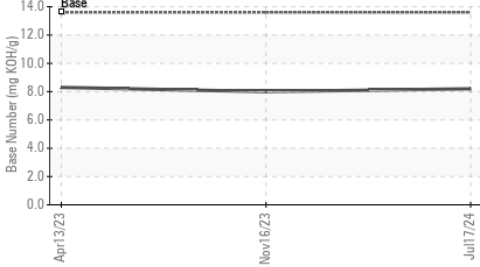
**FT-IR (Direct Trend)**



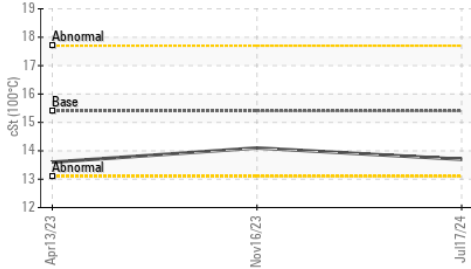
**Ferrous Alloys**



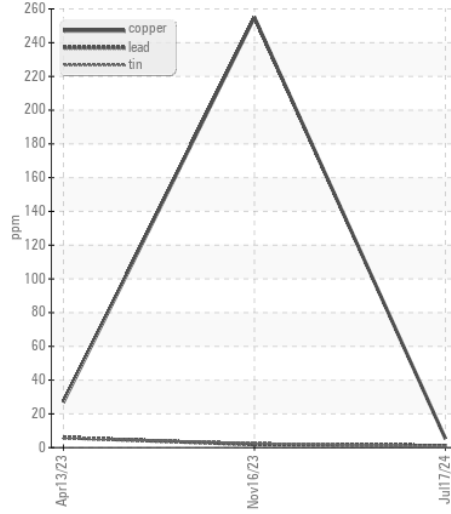
**Base Number**



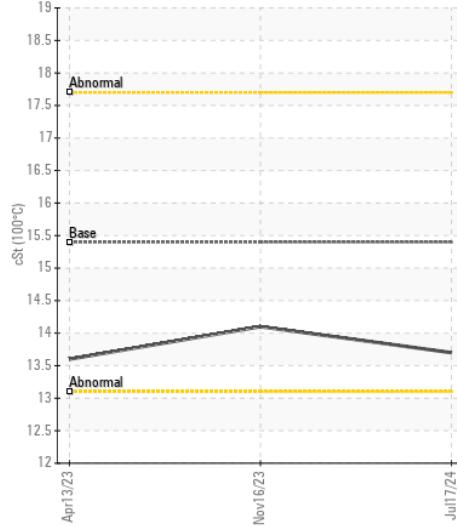
**Viscosity @ 100°C**



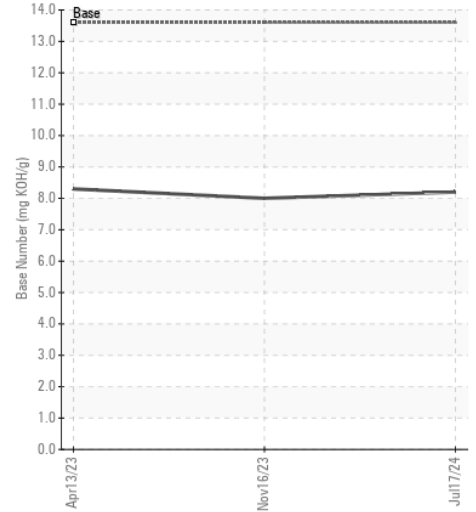
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR06239926 **Received** : 18 Jul 2024  
**Lab Number** : 06239926 **Tested** : 18 Jul 2024  
**Unique Number** : 11128760 **Diagnosed** : 18 Jul 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**DIVERSIFIED BIO-MASS**  
 606 SUNYDALE DR  
 WILMINGTON, NC  
 US 28412  
 Contact: CHRIS DAWSON  
 chris@tubgrinding.com  
 T: (914)279-6817  
 F: (910)793-6227

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)