



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**JOHN DEERE 744K 047-0043**  
Component  
**Diesel Engine**  
Fluid  
**SCHAEFFER SUPREME 7000 (9 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample  
Comment: Engine oil sample @ 16599 hrs. )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0868413</b>	WC0868371	WC0904089
Sample Date		Client Info		<b>03 Jul 2024</b>	18 May 2024	25 Apr 2024
Machine Age	hrs	Client Info		<b>16599</b>	16335	16233
Oil Age	hrs	Client Info		<b>16599</b>	16184	16184
Filter Age	hrs	Client Info		<b>16599</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>44</b>	42	16
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</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>5</b>	4	1
Lead	ppm	ASTM D5185m	>26	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>26	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
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

There is no indication of any contamination in the oil.

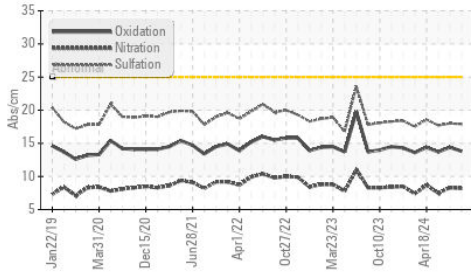
Silicon	ppm	ASTM D5185m	>22	<b>4</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	4	0
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.2</b>	8.3	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.9</b>	18.0	17.7
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

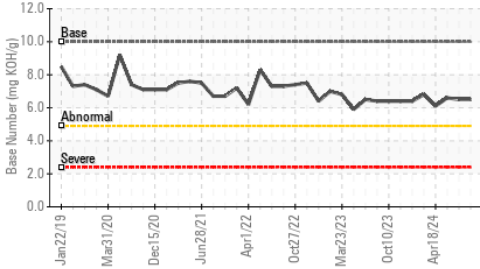
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>31	<b>38</b>	17	0
Boron	ppm	ASTM D5185m		<b>51</b>	74	98
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	50	<b>78</b>	72	77
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	1000	<b>32</b>	10	56
Calcium	ppm	ASTM D5185m	1400	<b>2263</b>	2119	2434
Phosphorus	ppm	ASTM D5185m	985	<b>1064</b>	1120	1118
Zinc	ppm	ASTM D5185m	1060	<b>1188</b>	1214	1407
Sulfur	ppm	ASTM D5185m	4000	<b>4589</b>	5773	6767
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.8</b>	14.4	13.7
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>6.5</b>	6.5	6.6
Visc @ 100°C	cSt	ASTM D445	15	<b>14.2</b>	14.2	14.6

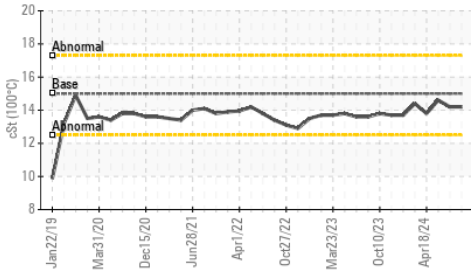
**FT-IR (Direct Trend)**



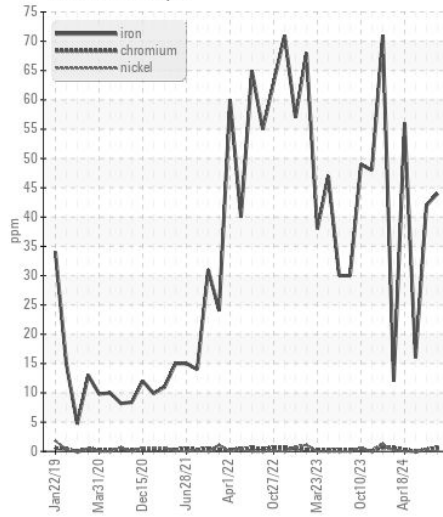
**Base Number**



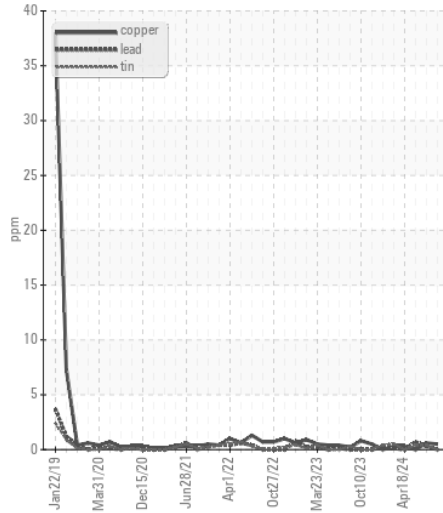
**Viscosity @ 100°C**



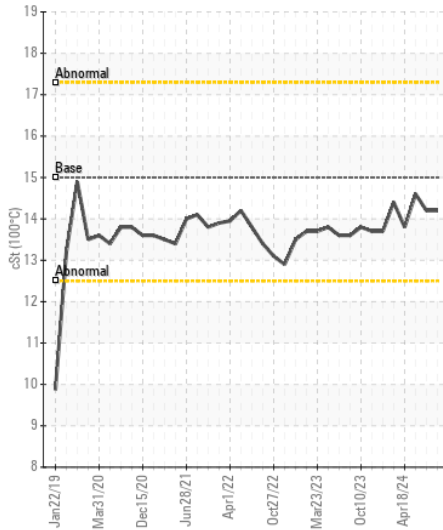
**Ferrous Alloys**



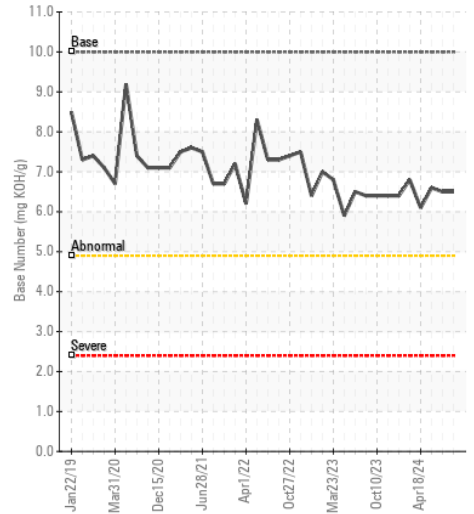
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0868413 **Received** : 12 Jul 2024  
**Lab Number** : 06234672 **Tested** : 15 Jul 2024  
**Unique Number** : 11123506 **Diagnosed** : 15 Jul 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: TBN )

**SHIMMICK CONSTRUCTION**  
 5535 TRAILHEAD DRIVE  
 CHATTANOOGA, TN  
 US 37415  
 Contact: DANIEL LISELLA  
 daniel.lisella@shimmick.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: