



# OIL ANALYSIS REPORT

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



Machine Id  
**JOHN DEERE 624K 624K-3 (S/N THCE645113)**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL DELVAC SUPER 1400 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TLY0002436</b>	TLY0002036	TLY0001413
Sample Date		Client Info		<b>22 May 2024</b>	20 Oct 2023	10 May 2023
Machine Age	hrs	Client Info		<b>11702</b>	11181	10553
Oil Age	hrs	Client Info		<b>11181</b>	628	514
Filter Age	hrs	Client Info		<b>11181</b>	628	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>26</b>	31	33
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	1	2
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	2
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>26	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>26	<b>5</b>	3	5
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.

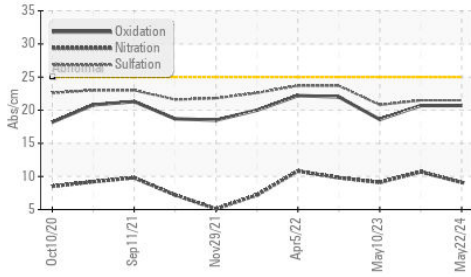
Silicon	ppm	ASTM D5185m	>22	<b>7</b>	8	8
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	1
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.9	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	10.7	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.5</b>	21.5	20.8
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

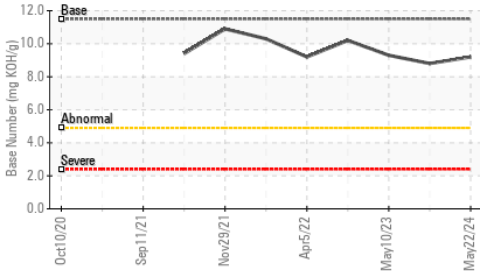
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<b>4</b>	4	4
Boron	ppm	ASTM D5185m		<b>41</b>	19	27
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>47</b>	57	56
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>564</b>	596	720
Calcium	ppm	ASTM D5185m		<b>1928</b>	1618	1539
Phosphorus	ppm	ASTM D5185m		<b>874</b>	813	926
Zinc	ppm	ASTM D5185m		<b>1004</b>	1015	1115
Sulfur	ppm	ASTM D5185m		<b>3134</b>	2618	2950
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.7</b>	20.7	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	11.5	<b>9.2</b>	8.8	9.3
Visc @ 100°C	cSt	ASTM D445	15.0	<b>13.3</b>	13.3	13.2

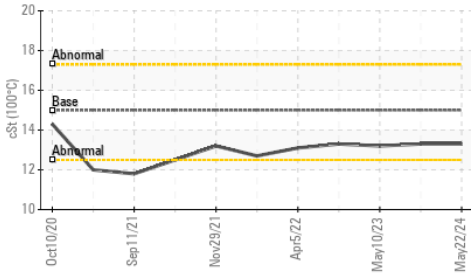
**FT-IR (Direct Trend)**



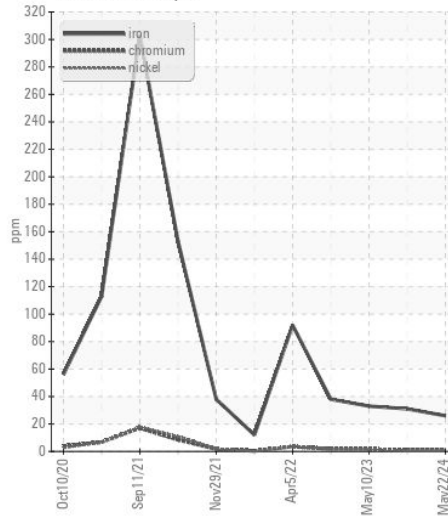
**Base Number**



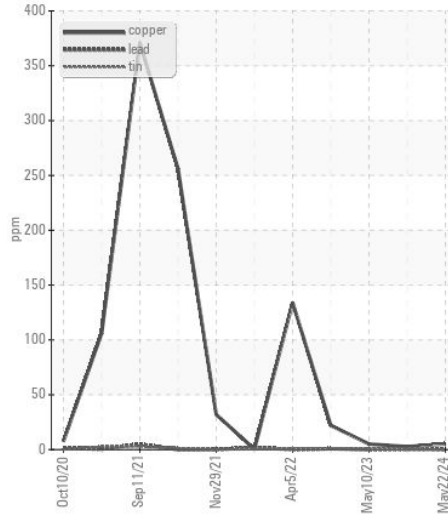
**Viscosity @ 100°C**



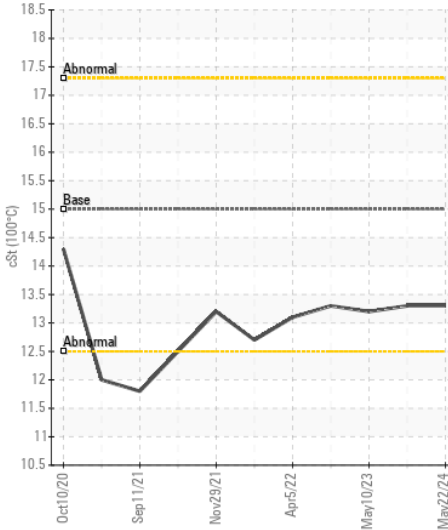
**Ferrous Alloys**



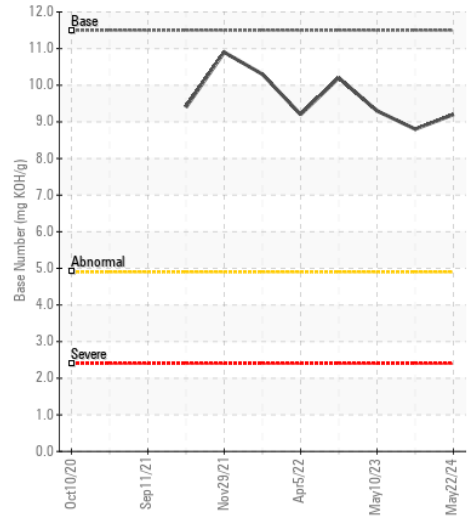
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TLY0002436 **Received** : 29 May 2024  
**Lab Number** : 06193547 **Tested** : 30 May 2024  
**Unique Number** : 11050299 **Diagnosed** : 30 May 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**GAINES & COMPANY**  
 112 WESTMINSTER RD  
 REISTERSTOWN, MD  
 US 21136

Contact: LANCE TANCRAITOR  
 ltancraitor@gainesandco.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: