



# OIL ANALYSIS REPORT

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

Machine Id  
**JOHN DEERE 624L 624L UNIT 1**  
 Component  
**Transmission (Manual)**  
 Fluid  
**TDH FLUID SAE 75W80 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PE0003894</b>	PE0003889	PE0002529
Sample Date		Client Info		<b>08 Feb 2024</b>	15 Jan 2024	15 Nov 2023
Machine Age	hrs	Client Info		<b>6721</b>	6399	5959
Oil Age	hrs	Client Info		<b>6399</b>	5959	5740
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

PQ		ASTM D8184	>95	<b>19</b>	12	21
Iron	ppm	ASTM D5185m	>200	<b>21</b>	17	33
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>7	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	1	2
Lead	ppm	ASTM D5185m	>45	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>225	<b>&lt;1</b>	7	2
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

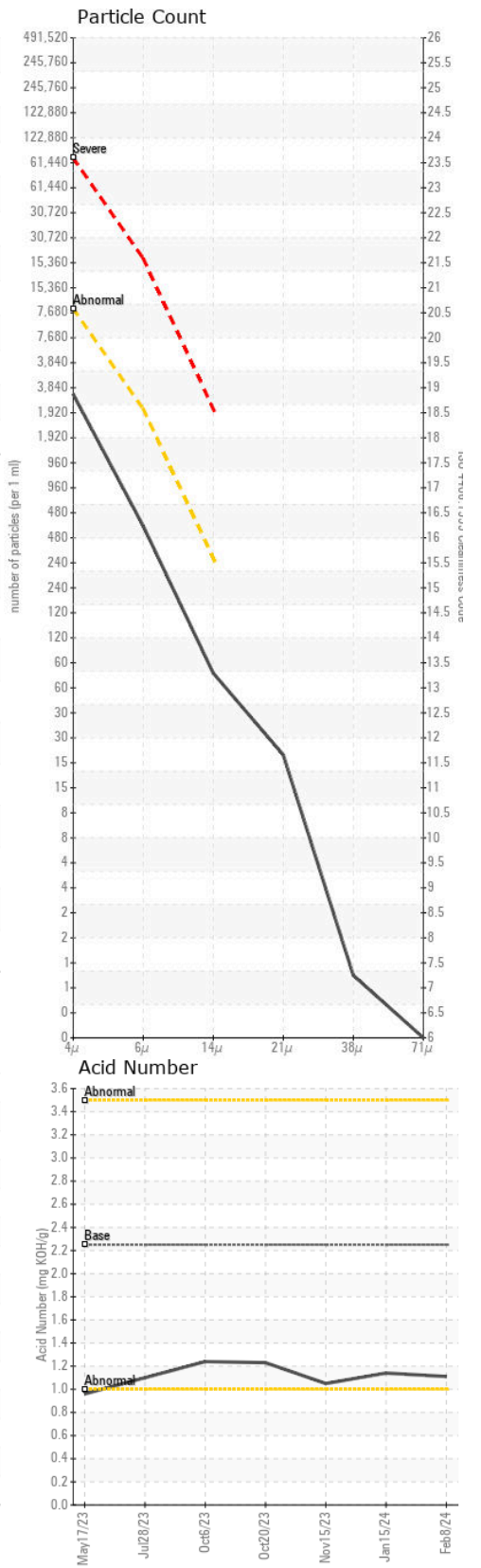
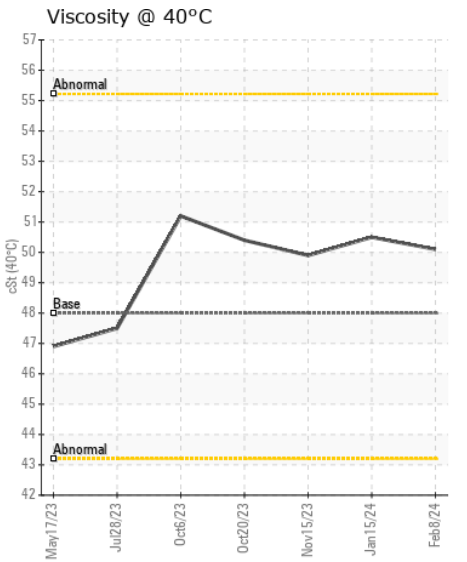
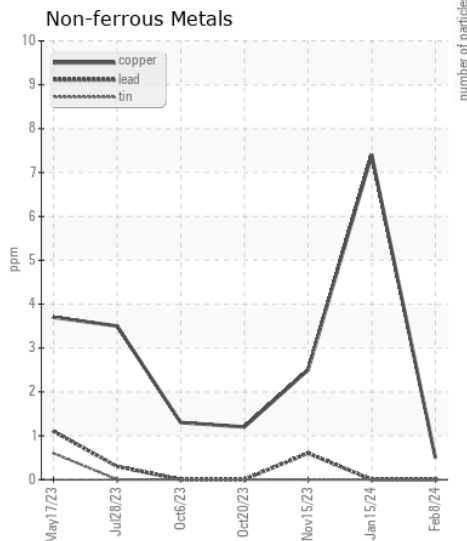
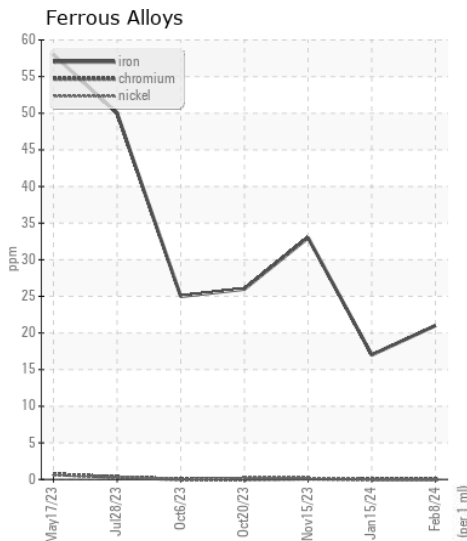
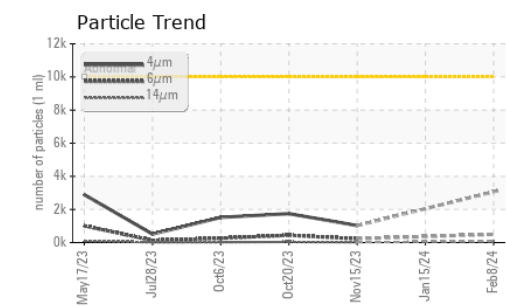
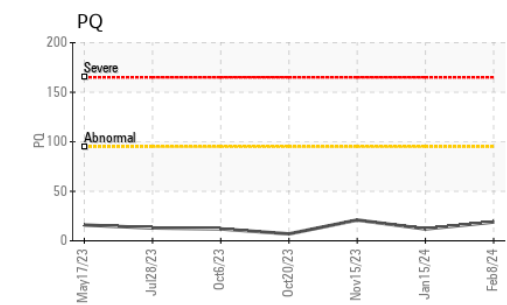
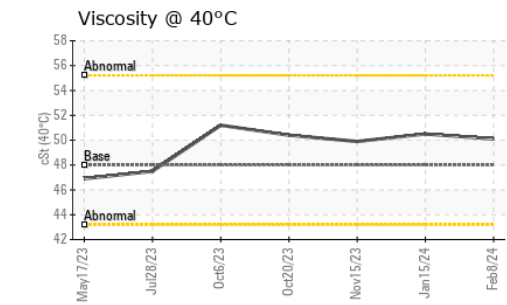
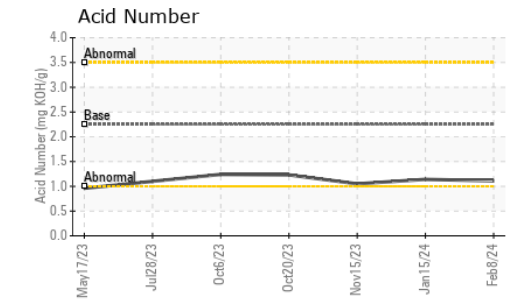
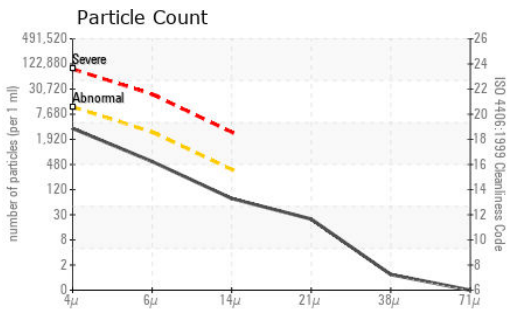
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>125	<b>11</b>	10	16
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	2
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>10000	<b>3066</b>	---	1026
Particles >6µm		ASTM D7647	>2500	<b>496</b>	---	228
Particles >14µm		ASTM D7647	>320	<b>65</b>	---	18
Particles >21µm		ASTM D7647	>80	<b>21</b>	---	5
Particles >38µm		ASTM D7647	>20	<b>1</b>	---	0
Particles >71µm		ASTM D7647	>4	<b>0</b>	---	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>19/16/13</b>	---	17/15/11
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	▲ MODER	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	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Boron	ppm	ASTM D5185m	10	<b>0</b>	0	1
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	9
Molybdenum	ppm	ASTM D5185m	10	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	100	<b>90</b>	88	83
Calcium	ppm	ASTM D5185m	3500	<b>3151</b>	3078	3107
Phosphorus	ppm	ASTM D5185m	1150	<b>1039</b>	992	1003
Zinc	ppm	ASTM D5185m	1150	<b>1189</b>	1129	1124
Sulfur	ppm	ASTM D5185m	5000	<b>3568</b>	3370	3809
Acid Number (AN)	mg KOH/g	ASTM D8045	2.25	<b>1.11</b>	1.14	1.05
Visc @ 40°C	cSt	ASTM D445	48	<b>50.1</b>	50.5	49.9



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PE0003894 **Received** : 14 Feb 2024  
**Lab Number** : 06088667 **Tested** : 15 Feb 2024  
**Unique Number** : 10876112 **Diagnosed** : 15 Feb 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN )

**MORNING STAR DAIRY**  
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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)