

## **OIL ANALYSIS REPORT**

#### Sample Rating Trend



Machine Id

# JOHN DEERE 624L 624L UNIT 11

**Transmission (Manual)** 

Fluid {not provided} (--- GAL)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

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

### Fluid Condition

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

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PE0003817	PE0003807	PE0003790
Sample Date		Client Info		05 Apr 2024	07 Mar 2024	08 Feb 2024
Machine Age	hrs	Client Info		10468	10261	9671
Oil Age	hrs	Client Info		10261	9962	9962
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>95	21	21	24
Iron	ppm	ASTM D5185m	>200	79	71	71
Chromium	ppm	ASTM D5185m	>5	0	<1	0
Nickel	ppm		>5	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	3	4	4
Lead	ppm	ASTM D5185m	>45	0	2	0
Copper	ppm	ASTM D5185m	>225	4	5	4
Tin	ppm		>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES	ppm	method	limit/base	0 current	0 history1	history2
	ppm ppm		limit/base	current 2	history1 1	history2 2
ADDITIVES Boron Barium		method ASTM D5185m ASTM D5185m	limit/base	current 2 0	history1 1 0	history2 2 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 2 0 <1	history1 1 0 1	history2 2 0 0
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 2 0 <1 1	history1 1 0 1 1	history2 2 0 0 1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 2 0 <1 1 70	history1 1 0 1 1 1 70	history2 2 0 0 1 77
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 2 0 <1 1 70 2654	history1 1 0 1 1 1 1 1 1 1 70 2577	history2 2 0 0 1 77 2731
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 2 0 <1 1 70 2654 954	history1 1 0 1 1 1 1 1 1 2 577 986	history2 2 0 0 1 77 2731 1052
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base	Current 2 0 <1 1 70 2654 954 994	history1	history2 2 0 0 1 77 2731 1052 1152
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		Current 2 0 <1 1 70 2654 954	history1	history2 2 0 0 1 77 2731 1052 1152 3691
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 2 0 <1 1 70 2654 954 954 994 3687 Current	history1	history2 2 0 0 1 77 2731 1052 1152 3691 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base	Current 2 0 <1 1 70 2654 954 954 994 3687 Current 26	history1           1           0           1           1           2577           986           904           3692           history1           22	history2           2           0           1           77           2731           1052           1152           3691           history2           27
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base >125	current           2           0           <1           1           70           2654           954           994           3687           current           26           0	history1           1           0           1           1           2577           986           904           3692           history1           22           1	history2         2         0         1         77         2731         1052         1152         3691         history2         27         41
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base >125 >20	Current           2           0           <1           1           70           2654           954           994           3687           Current           26           0           0	history1           1           0           1           1           2577           986           904           3692           history1           22	history2           2           0           1           77           2731           1052           1152           3691           history2           27
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base >125	Current           2           0           <1           1           70           2654           954           994           3687           Current           26           0           0	history1           1           0           1           1           2577           986           904           3692           history1           22           1	history2         2         0         1         77         2731         1052         1152         3691         history2         27         <1         0         history2         27         <1         0         history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base >125 >20	Current           2           0           <1           1           70           2654           954           994           3687           Current           26           0           0	history1         1         0         1         70         2577         986         904         3692         history1         22         1         0         history1         3692         history1         3693         1         3693	history2           2           0           1           77           2731           1052           1152           3691           history2           27           <1           0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base >125 >20 limit/base >10000 >2500	current           2           0           <1           1           70           2654           954           994           3687           current           26           0           26           0           0           current           1427           439	history1           1           0           1           70           2577           986           904           3692           history1           22           1           0           history1           3692           history1           322	history2         2         0         1         77         2731         1052         1152         3691         history2         27         <1         0         history2         1142         265
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base >125 >20 limit/base >20	Current           2           0           <1           1           70           2654           954           994           3687           Current           26           0           26           0           0           Current           1427           439           74	history1           1           0           1           70           2577           986           904           3692           history1           22           1           0           history1           3692           history1           322           18	history2           2           0           1           77           2731           1052           1152           3691           history2           27           <10           10           1152           3691           history2           21           265           35
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base >125 >20 limit/base >10000 >2500 >320	current           2           0           <1           1           70           2654           954           994           3687           current           26           0           26           0           0           current           1427           439	history1           1           0           1           70           2577           986           904           3692           history1           22           1           0           history1           3692           history1           322	history2         2         0         1         77         2731         1052         1152         3691         history2         27         <1         0         history2         1142         265
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m           ASTM D7647           ASTM D7647           ASTM D7647	limit/base >125 >20 limit/base >10000 >2500 >320 >80 >20	Current           2           0           <1           1           70           2654           954           994           3687           Current           26           0           26           0           0           Current           1427           439           74	history1           1           0           1           70           2577           986           904           3692           history1           22           1           0           history1           3692           history1           322           18	history2         2         0         1         77         2731         1052         1152         3691         history2         27         <10         history2         27         41         0         history2         1142         265         35

ISO 4406 (c) >20/18/15

18/16/13

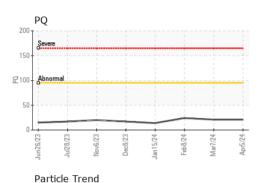
**Oil Cleanliness** 

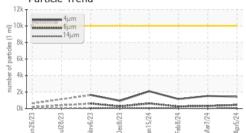
17/15/12

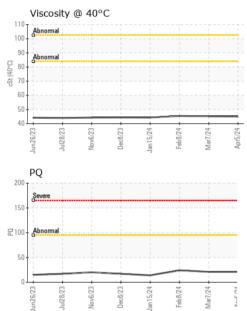
18/16/11

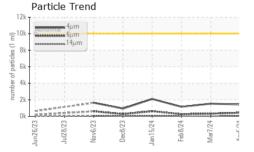


## **OIL ANALYSIS REPORT**





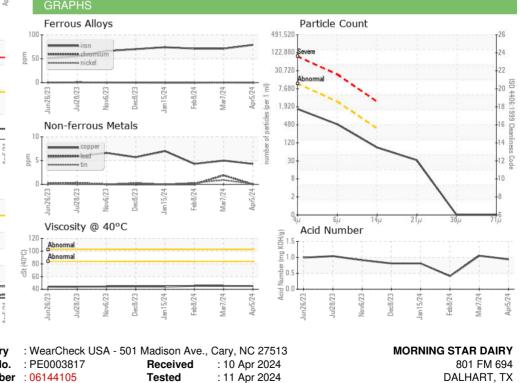




FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.94	1.05	0.41
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		45.1	45.2	45.4
SAMPLE IMAGES		method	limit/base	current	history1	history2

Color

Bottom







Tested Diagnosed : 12 Apr 2024 - Don Baldridge

Contact: JOHN DEVRIES johnidevries@gmail.com

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Report Id: MORDAL [WUSCAR] 06144105 (Generated: 04/12/2024 12:49:44) Rev: 1

Submitted By: ROCHELLE MENDOZA

US 79022

T: F: