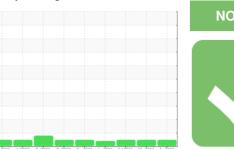


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

JOHN DEERE 624L 624L UNIT 1

Hydraulic System

{not provided} (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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 INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PE0003809	PE0003827	PE0003892
Sample Date		Client Info		05 Apr 2024	07 Mar 2024	08 Feb 2024
Machine Age	hrs	Client Info		7316	7000	6721
Oil Age	hrs	Client Info		7000	6721	6399
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		14	10	16
Iron	ppm	ASTM D5185m	>20	3	5	4
Chromium	ppm	ASTM D5185m	>10	4	4	4
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm		>10	0	<1	1
Lead	ppm	ASTM D5185m	>10	0	2	1
Copper	ppm	ASTM D5185m	>75	0	1	<1
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
	ppm	method ASTM D5185m	limit/base	current 2	history1	history2
Boron	ppm		limit/base			
ADDITIVES Boron Barium Molybdenum		ASTM D5185m	limit/base	2	3	3
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m	limit/base	2 0	3 0 1 <1	3 0 0
Boron Barium Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 0 <1 10	3 0 1 <1 4	3 0 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 0 <1 10 1422	3 0 1 <1 4 1394	3 0 0 0 8 1260
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 0 <1 10 1422 811	3 0 1 <1 4 1394 817	3 0 0 0 0 8 1260 805
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 0 <1 10 1422 811 963	3 0 1 <1 4 1394 817 844	3 0 0 0 0 8 1260 805 997
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m		2 0 0 <1 10 1422 811	3 0 1 <1 4 1394 817 844 2722	3 0 0 0 8 1260 805 997 2539
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	2 0 0 <1 10 1422 811 963 2789	3 0 1 <1 4 1394 817 844 2722 history1	3 0 0 0 8 1260 805 997 2539
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	2 0 0 <1 10 1422 811 963 2789 current	3 0 1 <1 4 1394 817 844 2722 history1	3 0 0 0 8 1260 805 997 2539 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >20	2 0 0 -<1 10 1422 811 963 2789 current 2	3 0 1 <1 4 1394 817 844 2722 history1 3	3 0 0 0 8 1260 805 997 2539 history2 3 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >20 >20	2 0 0 <1 10 1422 811 963 2789 current 2 0	3 0 1 <1 4 1394 817 844 2722 history1 3 2	3 0 0 0 8 1260 805 997 2539 history2 3 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >20 >20 limit/base	2 0 0 -<1 10 1422 811 963 2789 current 2 0 0	3 0 1 <1 4 1394 817 844 2722 history1 3 2 0	3 0 0 0 8 1260 805 997 2539 history2 3 <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium FLUID CLEANLI Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >20 >20 limit/base >5000	2 0 0 -<1 10 1422 811 963 2789 current 2 0 0	3 0 1 <1 4 1394 817 844 2722 history1 3 2 0 history1 775	3 0 0 0 8 1260 805 997 2539 history2 3 <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium FLUID CLEANLI Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >20	2 0 0 -<1 10 1422 811 963 2789 current 2 0 0	3 0 1 <1 4 1394 817 844 2722 history1 3 2 0 history1 775 204	3 0 0 0 8 1260 805 997 2539 history2 3 <1 <1 1 1872
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium FLUID CLEANLI Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647	limit/base >20	2 0 0 -<1 10 1422 811 963 2789 current 2 0 0 current 701 181 21	3 0 1 <1 4 1394 817 844 2722 history1 3 2 0 history1 775 204 17	3 0 0 0 8 1260 805 997 2539 history2 3 <1 <1 history2 1872 191
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium FLUID CLEANLI Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	limit/base >20 >20 limit/base >5000 >1300 >160 >40	2 0 0 -<1 10 1422 811 963 2789 current 2 0 0 current 701 181 21 6	3 0 1 <1 4 1394 817 844 2722 history1 3 2 0 history1 775 204 17	3 0 0 0 8 1260 805 997 2539 history2 3 <1 <1 history2 1872 191 14 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium FLUID CLEANLI Particles >4µm Particles >6µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m MEthod ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >20 >20 limit/base >5000 >1300 >160 >40 >10	2 0 0 0 <1 10 1422 811 963 2789 current 2 0 0 current 701 181 21 6 0	3 0 1 <1 4 1394 817 844 2722 history1 3 2 0 history1 775 204 17 4	3 0 0 0 8 1260 805 997 2539 history2 3 <1 <1 history2 1872 191 14 3 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium FLUID CLEANLI Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	limit/base >20 >20 limit/base >5000 >1300 >160 >40 >10	2 0 0 -<1 10 1422 811 963 2789 current 2 0 0 current 701 181 21 6	3 0 1 <1 4 1394 817 844 2722 history1 3 2 0 history1 775 204 17	3 0 0 0 8 1260 805 997 2539 history2 3 <1 <1 1 14 3



OIL ANALYSIS REPORT







Certificate 12367

Laboratory

Sample No.

: PE0003809

Lab Number : 06144114 Unique Number : 10968922

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 10 Apr 2024 **Tested** : 11 Apr 2024

Diagnosed : 12 Apr 2024 - Don Baldridge Test Package : CONST (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN) 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)

MORNING STAR DAIRY 801 FM 694

DALHART, TX US 79022 Contact: JOHN DEVRIES

johnidevries@gmail.com

T: F: