

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id

JOHN DEERE 624L 624L UNIT 9

Transmission (Manual)

Fluid TDH FLUID SAE 75W80 (--- 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 INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PE0003822	PE0003834	PE0002475
Sample Date		Client Info		05 Apr 2024	07 Mar 2024	28 Jul 2023
Machine Age	hrs	Client Info		3756	3473	1380
Oil Age	hrs	Client Info		3473	1380	1380
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	16	16	13
Iron	ppm	ASTM D5185m	>200	15	15	18
Chromium	ppm	ASTM D5185m	>5	0	0	<1
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>7	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	0	1	1
Lead	ppm	ASTM D5185m	>45	0	2	<1
Copper	ppm	ASTM D5185m	>225	2	3	4
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	10	4	4	<1
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	10 10	4 0	4	<1 0
				-		
Barium	ppm	ASTM D5185m	10	0	0	0
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10 10 100	0 2	0 3 <1 93	0 1 <1 79
Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	10 10	0 2 <1	0 3 <1	0 1 <1
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10 10 100	0 2 <1 97 3242 1020	0 3 <1 93 3168 1018	0 1 <1 79 3114 1017
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10 10 100 3500 1150 1150	0 2 <1 97 3242 1020 1166	0 3 <1 93 3168 1018 1038	0 1 <1 79 3114 1017 1208
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10 10 100 3500 1150	0 2 <1 97 3242 1020	0 3 <1 93 3168 1018	0 1 <1 79 3114 1017
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10 10 100 3500 1150 1150	0 2 <1 97 3242 1020 1166	0 3 <1 93 3168 1018 1038	0 1 <1 79 3114 1017 1208
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10 10 3500 1150 1150 5000	0 2 <1 97 3242 1020 1166 3867	0 3 <1 93 3168 1018 1038 3850	0 1 <1 79 3114 1017 1208 3916
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10 10 3500 1150 5000 limit/base	0 2 <1 97 3242 1020 1166 3867 current	0 3 <1 93 3168 1018 1038 3850 history1 10 1	0 1 <1 79 3114 1017 1208 3916 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	10 10 3500 1150 5000 limit/base	0 2 <1 97 3242 1020 1166 3867 current 10	0 3 <1 93 3168 1018 1038 3850 history1 10	0 1 <1 79 3114 1017 1208 3916 history2 17
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	10 10 3500 1150 5000 limit/base >125	0 2 <1 97 3242 1020 1166 3867 current 10 0	0 3 <1 93 3168 1018 1038 3850 history1 10 1	0 1 <1 79 3114 1017 1208 3916 history2 17 2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	10 10 3500 1150 1150 5000 limit/base >125 >20	0 2 <1 97 3242 1020 1166 3867 <i>current</i> 10 0 0	0 3 <1 93 3168 1018 1038 3850 history1 10 1 0	0 1 <1 79 3114 1017 1208 3916 history2 17 2 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	10 10 3500 1150 1150 5000 <i>limit/base</i> >20 <i>limit/base</i> >20	0 2 <1 97 3242 1020 1166 3867 current 10 0 0 0	0 3 <1 93 3168 1018 1038 3850 history1 10 1 0 1 0 history1	0 1 <1 79 3114 1017 1208 3916 history2 17 2 <1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	10 10 3500 1150 1150 5000 <i>limit/base</i> >20 <i>limit/base</i> >20	0 2 <1 97 3242 1020 1166 3867 <i>current</i> 10 0 0 <i>current</i> 1264	0 3 <1 93 3168 1018 1038 3850 history1 10 10 10 10 10 11 0 1322	0 1 <1 79 3114 1017 1208 3916 history2 17 2 <1 +istory2 4233
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	ASTM D5185m ASTM D5185m	10 10 3500 1150 1150 5000 limit/base >125 >20 limit/base >20 limit/base >20	0 2 <1 97 3242 1020 1166 3867 <u>current</u> 10 0 0 0 <u>current</u> 1264 294	0 3 <1 93 3168 1018 1038 3850 history1 10 10 10 10 1 0 <i>history1</i> 1322 230	0 1 <1 79 3114 1017 1208 3916 history2 17 2 <1 17 2 <1 history2 4233 1090
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	10 10 3500 1150 1150 5000 limit/base >125 >20 limit/base >20 limit/base >20	0 2 <1 97 3242 1020 1166 3867 <u>current</u> 10 0 0 0 <u>current</u> 1264 294 41	0 3 <1 93 3168 1018 1038 3850 history1 10 10 1 0 history1 1322 230 23	0 1 <1 79 3114 1017 1208 3916 history2 17 2 <1 history2 4233 1090 142
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Patticles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	10 10 3500 1150 1150 5000 *125 *125 *20 *10000 *2500 *320 *320 *80 *20	0 2 <1 97 3242 1020 1166 3867 current 10 0 0 0 current 1264 294 41 10	0 3 <1 93 3168 1018 1038 3850 history1 10 10 1 0 <i>history1</i> 1322 230 23 8	0 1 <1 79 3114 1017 1208 3916 history2 17 2 <1 history2 4233 1090 142 37



OIL ANALYSIS REPORT

PQ				FLUID DE
Severe				Acid Numbe
2100 - Abnormal				VISUAL
50 0 EZ/h7/kem	Jut28/23 -	Mar724 +	Apr5/24	White Metal Yellow Meta Precipitate Silt Debris
Particle 12k 12k 10k 10k 10k 10k 10k 10k 10k 10	Trend μm μμ μμm			Sand/Dirt Appearance Odor Emulsified V Free Water
2k 0k				FLUID PF Visc @ 40°0
May24/23	Jul28/23 .	Mar7/24 -	Apr5/24	SAMPLE
Viscosity	/ @ 40°C			Color
55 () () () () () () () () () ()				Bottom
40 40 40 40 40 40 40	Jul28/23	Mar7/24	Apr5/24	GRAPHS
PQ Severe				Ferrous Al
₽100 Abnormal				0

Aar7/24

Mar7/24

FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	2.25	1.05	1.19	1.257
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	48	45.6	45.5	42.3
SAMPLE IMAGES		method	limit/base	current	history1	history2



Alloys Particle Count 491,520 122,88 30,72 20 4406:1999 Cle Mar7/24 -Apr5/24 per 1 May2⁴ 1,920 articles 480 Non-ferrous Metals 120 30 12 8 Jul28/23 Mar7/24 Mav24/23 Viscosity @ 40°C Acid Number (B/HOX 60 Abnormal Abnormal () 55 () 50 Bu Bas Base à 령 ₄₅ Δŀ Abnorma Acid Nu 40 0.0 ul28/23 Jul28/23 Mar7/24 Mar7/24 May24/23 Mav24/23 .or5/24 **MORNING STAR DAIRY**



50

12

8k

6k

4k

21

0

Mav24/23

umber of particles (1 ml)

May24/23

Particle Trend



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : PE0003822 Received : 10 Apr 2024 Lab Number : 06144106 Tested : 11 Apr 2024 Unique Number : 10968914 : 12 Apr 2024 - Don Baldridge Diagnosed Test Package : CONST (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN) Contact: JOHN DEVRIES To discuss this sample report, contact Customer Service at 1-800-237-1369. johnidevries@gmail.com * - 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)

Report Id: MORDAL [WUSCAR] 06144106 (Generated: 04/12/2024 12:50:39) Rev: 1

Submitted By: ROCHELLE MENDOZA

801 FM 694

US 79022

T:

F:

DALHART, TX