

OIL ANALYSIS REPORT

Sample Rating Trend



JOHN DEERE 843L 1DW843LBKMF710970

Hydraulic System

JOHN DEERE HYDRAU (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

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

			Aug2021	Feb2024		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
		Client Info		WE0006264	WE0000299	
Sample Number Sample Date		Client Info		22 Feb 2024	05 Aug 2021	
	hrs	Client Info		22 Feb 2024 5817	539	
Machine Age Oil Age	hrs	Client Info		0	539	
Oil Changed	1115	Client Info		U N/A	Not Changd	
Sample Status				NORMAL	NORMAL	
		and the set	l'actifica e c	-	-	
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		15		
Iron	ppm	ASTM D5185m	>20	<1	4	
Chromium	ppm	ASTM D5185m	>10	<1	<1	
Nickel	ppm	ASTM D5185m	>10	<1	0	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m		<1	<1	
Aluminum	ppm	ASTM D5185m	>10	<1	0	
Lead	ppm	ASTM D5185m	>10	<1	0	
Copper	ppm	ASTM D5185m	>75	<1	2	
Tin	ppm	ASTM D5185m	>10	<1	0	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		<1	0	
Cadmium ADDITIVES	ppm	ASTM D5185m method	limit/base	<1 current	0 history1	 history2
ADDITIVES	ppm ppm		limit/base		-	
ADDITIVES Boron		method	limit/base	current	history1	history2
ADDITIVES Boron Barium	ppm	method ASTM D5185m	limit/base	current	history1 3	history2
ADDITIVES Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current <1 5	history1 3 0	history2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current <1 5 1	history1 3 0 <1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		current <1 5 1 <1	history1 3 0 <1 <1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		current <1 5 1 <1 <1 4	history1 3 0 <1 <1 1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	87	current <1 5 1 <1 4 110	history1 3 0 <1 <1 <1 1 1 104	history2
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	87 727	Current <1 5 1 <1 4 110 560	history1 3 0 <1 <1 1 1 104 581	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	87 727 900	current <1 5 1 <1 4 110 560 769	history1 3 0 <1 <1 <1 1 1 104 581 737	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm 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	87 727 900 1500	<pre>current <1 5 1 <1 4 110 560 769 1550</pre>	history1 3 0 <1 <1 1 104 581 737 1259	history2
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 ASTM D5185m	87 727 900 1500 limit/base	Current <1 5 1 <1 <4 <10 <60 <769 <1550 Current	history1 3 0 <1 <1 1 104 581 737 1259 history1	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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	87 727 900 1500 limit/base >20	current <1 5 1 <1 4 110 560 769 1550 current 1	history1 3 0 <1 <1 104 581 737 1259 history1 8	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm 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 method ASTM D5185m	87 727 900 1500 limit/base >20	current <1 5 1 <1 4 110 560 769 1550 current 1 0	history1 3 0 <1 1 104 581 737 1259 history1 8 <1	history2
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	87 727 900 1500 limit/base >20	current <1 5 1 <1 4 110 560 769 1550 current 1 0 <1	history1 3 0 <1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium 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	87 727 900 1500 limit/base >20 >20 limit/base >20	current <1 5 1 <1 4 110 560 769 1550 current 1 0 <1 current	history1 3 0 <1	history2
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	87 727 900 1500 limit/base >20 >20 limit/base >20	current <1 5 1 <1 4 110 560 769 1550 current 1 0 <1 0 <1 2318	history1 3 0 <1	history2 history2 history2 history2 history2
ADDITIVES Boron 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 ppm ppm	method ASTM D5185m	87 727 900 1500 limit/base >20 limit/base >20 limit/base >5000 >1300 >160	current <1 5 1 <1 4 110 560 769 1550 current 1 0 <1 current 2318 665	history1 3 0 <1	history2 history2 history2 history2 history2 history2 history2
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	87 727 900 1500 limit/base >20 limit/base >20 limit/base >5000 >1300 >160	current <1 5 1 <1 4 110 560 769 1550 current 1 0 <1 current 2318 665 53	history1 3 0 <1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	87 727 900 1500 limit/base >20 >20 limit/base >5000 >1300 >160 >40 >10	current <1 5 1 <1 4 110 560 769 1550 current 1 0 <1 current 2318 665 53 14	history1 3 0 <1	history2
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 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	87 727 900 1500 limit/base >20 >20 limit/base >5000 >1300 >160 >40 >10	current <1 5 1 <1 4 110 560 769 1550 current 1 0 <1 current 2318 665 53 14 1	history1 3 0 <1	history2 history2 history2 <



OIL ANALYSIS REPORT

T	FLUID DEGRAD		method		current		history2
Severe	Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.73	0.648	
-	VISUAL		method	limit/base	current	history1	history2
Abnormal	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Precipitate	scalar	*Visual	NONE	NONE	NONE	
Feb 22/24 -	Silt	scalar	*Visual	NONE	NONE	NONE	
Feb 2 Feb 2	Debris	scalar	*Visual	NONE	NONE	NONE	
Particle Trend	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
ματοπηται 4μm	Odor	scalar	*Visual	NORML	NORML	NORML	
ματοποιοτία 14μm	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	
	FLUID PROPER	TIES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	65	63.9	60.3	
Aug5/21 -	SAMPLE IMAGE	S	method	limit/base	current	history1	history2
Viscosity @ 40°C	Color				•		no image
Abnormal	Bottom						no image
	GRAPHS						
Aug5/21	Ferrous Alloys				Particle Count		
Au Lith	10iron]			491,520	ľ		T ²
PQ	E 5-			122,880			-2
				30,720	pevere		-2
Severe				- 7,680	Abnormal		-2
-	Aug5/2			Feb 22/24 . (per 1 ml)	L		1
Abnormal	Au			Feb 22/24 -		1	-2
	Non-ferrous Meta	ls		D .			-1
	copper			jo nga 120		\	-1
24	E 5-			^E 30	-		-1
Feb 22/24				8	l_		+11
	0 2			24			
Particle Trend	Aug5/2			Feb22/24	-		
Aunonna 4µm	Viscosity @ 40°C			ш (4μ 6μ	14µ 21µ	38µ 71µ
αποιοιοιατία σματή τη μεταγραφική τα	80 T			₽1.50	Acid Number		
	G ⁷⁰ − Base			Ŕ	Base		
	G 70 Base Base Abnormal			ຍິ 1.00	-		
	3 50 - Abnormal			a 4 0.50			
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	40						
5.21	Aug5/2			Feb22/24	vug5/2		
Aug5/2	A			P	4		
TESTING LABORATORY Unique Numbe	: WearCheck USA - 50 : WE0006264 r : 06098291 r : 10896521 e : CONST (Additional 1	Recei Teste Diagr	ived : 23 d : 26 nosed : 26	, NC 27513 Feb 2024 Feb 2024 Feb 2024 Feb 2024 - W			MENT - NORTHPO P.O. BOX 4 RTHPORT, 1 US 354 SCOTT GOO

Contact/Location: SCOTT GOOD - WARNOR