

OIL ANALYSIS REPORT



history1

history2

current

Machine Id

JOHN DEERE 844K 1DW844KXLFD672634 Front Differential Fluic JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

SAMPLE INFORMATION

ppm

method

limit/base

JR0212329 JR0147248 JR0105546 Sample Number **Client Info** 12 Dec 2022 Sample Date Client Info 13 May 2024 10 Jan 2022 11959 9957 Machine Age hrs **Client Info** 7960 Oil Age hrs Client Info 0 0 0 Oil Changed **Client Info** Changed Changed Changed ABNORMAL Sample Status MARGINAL ABNORMAL CONTAMINATION method limit/base current history1 history2 Water NEG NEG WC Method >0.1 NEG WEAR METALS method limit/base current history1 history2 PQ ASTM D8184 64 55 61 Iron ASTM D5185m >1501 184 162 175 ppm Chromium ppm ASTM D5185m >11 <1 1 1 Nickel ASTM D5185m >10 0 ppm <1 1 0 <1 <1 Titanium ppm ASTM D5185m Silver ppm ASTM D5185m 0 0 0 Aluminum ASTM D5185m >21 2 4 2 ppm 8 Lead ASTM D5185m >51 13 10 ppm 247 Copper ASTM D5185m >101 193 **2**39 ppm ASTM D5185m >10 4 5 Tin ppm 5 0 Antimony ppm ASTM D5185m >5 ---Vanadium ppm ASTM D5185m <1 0 <1 0 0 0 Cadmium ASTM D5185m ppm **ADDITIVES** method limit/base current history1 historv2 Boron mag ASTM D5185m 6 0 0 6 Barium ASTM D5185m 0 0 0 0 ppm 5 2 2 Molybdenum ASTM D5185m 0 ppm 2 3 Manganese ASTM D5185m 2 ppm Magnesium ppm ASTM D5185m 145 104 100 107 Calcium ppm ASTM D5185m 3570 3498 3526 3507 Phosphorus ppm ASTM D5185m 1290 1028 990 1019 Zinc ppm ASTM D5185m 1640 1191 1249 1216 Sulfur ASTM D5185m 3920 4079 3245 ppm CONTAMINANTS method limit/base current history1 history2 8 7 Silicon ppm ASTM D5185m >31 13 0 Sodium ASTM D5185m >51 0 ppm 4 Potassium ASTM D5185m >20 0 0

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

A Wear

The copper level is abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

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Nhite Metal	scalar	*Visual	NONE	NONE	LIGHT	LIGHT
ellow 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	VLITE	VLITE
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
/isc @ 40°C	cSt	ASTM D445	57.0	52.0	52.0	52.1
SAMPLE IMAGES	;	method	limit/base	current	history1	history2
			[
Color				no imago	no imago	no imago
				no intage	nomage	no image
Bottom				no image	no image	no image
СПАРИС						
GNAFNS						
Ferrous Allovs				PO		
Ferrous Alloys			26	PQ		
Ferrous Alloys			26	PQ		
Ferrous Alloys			26 24 22	PQ		
Ferrous Alloys			26i 24i 22i 20i	PQ		
Ferrous Alloys			26 24 22 20 18	PQ		
Ferrous Alloys	07	22	26 24 22 20 18 5 16	PQ		
	n29/20	m10/22	26 24 22 20 18 4722 16 16 14	PQ	\	
Ferrous Alloys	Jun29/20	Jan 10/22	26 24 20 18 16/ 16/ 16/ 12/ 14/ 20 11/ 12/ 12/ 12/ 12/ 12/ 12/ 12/ 12/ 12/	PQ		
Ferrous Alloys	Jun29/20	Jan 10/22	26 24 20 18 +20 10 10 10 10	PQ		
Ferrous Alloys	02/62unr	Jan10/22 Dec12/22	26 24 20 18 500 16 500 16 10 10 10 8	PQ		
Ferrous Alloys	oziszung	Jan 10/22 Deci 2/22	266 244 220 188 47212 189 189 189 189 189 189 189 190 190 190 190 190 190 190 190 190 19	PQ		
Ferrous Alloys	Jun 29/20	Jan 10/22	266 244 221 200 181 467 161 121 100 81 66	PQ		
Ferrous Alloys	OZ/6Zunf	Jan 10/22 Jan 10/22	266 244 221 200 188 47200 189 180 180 180 180 180 180 180 180 180 180	PQ		
Ferrous Alloys	OZ/6Zunf	Jan10/22	266 244 222 200 188 4720 160 189 180 180 180 180 180 180 180 180 180 180	PQ		
Ferrous Alloys	02/62/unf	1022 Jan 1022 Deci 222	266 244 222 200 186 4727 167 174 127 100 100 100 100 100 100 100 100 100 10	PQ Abnormal	/18 (20	122
Ferrous Alloys	Jun29/20	Jan 1022 Jan 1022 Deci 222 Deci 222	26 24 22 20 18 47 77 77 70 10 10 10 10 10 10 10 10 10 10 10 10 10	PQ Abnormal	10/13/18 	bel 222
Ferrous Alloys	Jun29/20	Jan10/22 Jan10/22 Jan10/22 Dec12/22 Dec12/22	26 24 22 20 18 57 57 57 57 57 57 57 57 57 57 57 57 57	PQ Abnormal o o o o o o o o o o o o o o o o o o o	Nov13/18 Jun29/20 Jar 10/22	Dec12/22
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Ferrous Alloys	02/62/un	Jan 10/22 Jan 10	26 24 20 18 60 60 16 16 16 16 16 16 16 16 16 16 16 16 16	PQ Abnormal Abnormal CLISI Ibny	Jun29/20 Jun29/20	Dect 2/22
Ferrous Alloys	02/62/un	Jan 10/22 Jan 10/22 Jan 10/22 Deci 2/22 Deci 2/22	26 24 20 18 60 60 60 18 16 16 10 10 8 8 6 4 4 2 10 10 10 10 10 10 10 10 10 10 10 10 10	PQ Abnormal Abnormal CI/S10ny	Jun29/20 Jun29/20	Dect 2/2
Ferrous Alloys	02/62/un	Jan 10/22 Jan 10/22 Jan 10/22 Deci 2/22 Deci 2/22 Deci 2/22	26 24 20 18 502E (Aerw 16 16 16 16 16 16 16 16 16 16 16 16 16	PQ Abnomal Abnomal (LI/S1 löny	Jun29/20 Jun29/20	Deci 2/22
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Ferrous Alloys		Jan10/22 Jan10/22 Jan10/22 Deci 2/22 Deci 2/22 Deci 2/22	26 24 20 18 70 70 70 10 8 10 10 8 10 10 8 10 10 10 10 10 10 10 10 10 10 10 10 10	PQ Abnomal Abnomal (LUS1 löny		Deci 222
Ferrous Alloys	02/62/un	022 Jan1022 Jan1022 Jan1022 Jan1022 Jan1022 Jan1022 Jan1022	26 24 20 18 75/21/20 18 16 16 12 10 8 10 8 10 10 10 8 10 10 10 10 10 10 10 10 10 10 10 10 10	PQ Abnomal Abnomal CLUSI IBny	Jun29/20 Jun29/20	Deci 222



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