

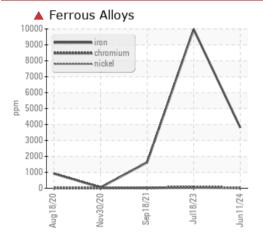
PROBLEM SUMMARY

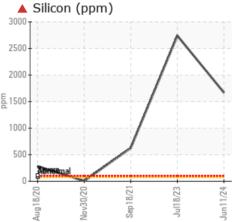
Machine Id

JOHN DEERE 250G 1FF250GXJJF610863

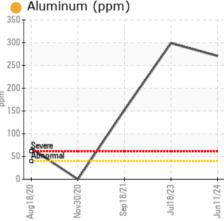
Right Final Drive Fluid GEAR OIL SAE 80W90 (--- GAL)

COMPONENT CONDITION SUMMARY









RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS							
Sample Status				SEVERE	SEVERE	SEVERE	
Iron	ppm	ASTM D5185m	>750	<u> </u>	4 9981	1 624	
Chromium	ppm	ASTM D5185m	>9	4 23	8 7	1 6	
Silicon	ppm	ASTM D5185m	>75	1670	A 2741	▲ 627	

Sample Rating Trend

Customer Id: JAMCHA Sample No.: JR0219325 Lab Number: 06208972 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED	ACTIONS			
Action	Status	Date	Done By	Description
Change Fluid			?	We recommend that you drain the oil from the component if this has not already been done.
Resample			?	We recommend an early resample to monitor this condition.
Check Dirt Access			?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS



WEAR

18 Jul 2023 Diag: Don Baldridge

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (AI) indicate alumina-silicate (coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.







30 Nov 2020 Diag: Don Baldridge

18 Sep 2021 Diag: Don Baldridge

ORMAL



Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the fluid. The condition of the fluid is acceptable for the time in service.

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has

been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate

(coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.





OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

 \mathbf{X}

Machine Id

JOHN DEERE 250G 1FF250GXJJF610863

Right Final Drive GEAR OIL SAE 80W90 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

A Wear

Gear wear is indicated.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION method limit/base current history1 history2 Sample Number Client Info JR0219325 JR0141039 JR0096238 Sample Date Client Info 11 Jun 2024 18 Jul 2023 18 Sep 2021 Machine Age hrs Client Info 5021 4502 2212 Oil Age hrs Client Info 5021 4502 2212 Oil Age hrs Client Info Not Changd N/A Changed Sample Status SEVERE SEVERE SEVERE SEVERE CONTAMINATION method limit/base current history1 history2 Water WC Method >0.075 NEG NEG NEG WeAR METALS method limit/base current history1 history2 PQ ASTM D5185m >1061 4201 1083 16 Nickel ppm ASTM D5185m >40 271 299 1524 Silver			Aug2020	Nev2020	Sep2021 Jul2022	1002024	
Sample Number Client Info JR0219325 JR014109 JR0096238 Sample Date Client Info 11 Jun 2024 18 Jul 2023 18 Sep 2021 Machine Age hrs Client Info 5021 4502 2212 Oil Age hrs Client Info 2731 2290 500 Oil Changed Client Info Not Changd N/A Changed Sample Status Evernet Nistory1 Nistory2 Water WC Method >0.075 NEG NEG WEAR METALS method Imit/base current history1 history2 PQ ASTM DB188 >750 3810 9981 1624 Chromium ppm ASTM DB185 1061 4201 1083 Silver ppm ASTM DB185 170 4 12 16 Silver ppm ASTM DB185 0 0 0 0 Autimium ppm ASTM DB185 >40 7 25 <			Pageoco	1042020	0002021 0002020	0002024	
Sample Date Client Info 11 Jun 2024 18 Jul 2023 18 Sep 2021 Machine Age hrs Client Info 5021 4502 2212 Oil Age hrs Client Info 2731 2290 500 Oil Changed Client Info Not Changed SEVERE SEVERE SEVERE CONTAMINATION method imit/base current history1 history2 Water WC Method >0.075 NEG NEG NEG VEAR METALS method imit/base current history1 history2 PQ ASTM D8186 >750 3810 9981 1624 Chromium ppm ASTM D5185 >9 23 877 16 Nickel ppm ASTM D5185 >10 4 12 11 Silver ppm ASTM D5185 >10 2 0 0 Aluminum ppm ASTM D5185 >10 2 152 4 N	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 5021 4502 2212 Oil Age hrs Client Info 2731 2290 500 Oil Changed Client Info Not Changed N/A Changed Sample Status Client Info Not Changed SEVERE SEVERE SEVERE CONTAMINATION method imit/base current history1 history2 Water WC Method >0.075 NEG NEG NEG WEAR METALS method imit/base current history1 history2 PQ ASTM D8184 >1250 1061 4201 1083 Iron ppm ASTM D5185m >9 23 4 16 Nickel ppm ASTM D5185m >10 4 12 16 Silver ppm ASTM D5185m >40 7 25 4 Tin ppm ASTM D5185m >10 0 1 <1	Sample Number		Client Info		JR0219325	JR0141039	JR0096238
Oil Age hrs Client Info 2731 2290 500 Oil Changed Client Info Not Changed N/A Changed Sample Status Imit/base current history1 history2 Water WC Method >0.075 NEG NEG NEG WEAR METALS method imit/base current history1 history2 PQ ASTM D8184 >1250 1061 4201 1083 Iron ppm ASTM D5185m >750 3810 9981 1624 Chromium ppm ASTM D5185m >750 3810 9981 1624 Chromium ppm ASTM D5185m >10 4 19 1 Titanium ppm ASTM D5185m 17 44 12 2 Aluminum ppm ASTM D5185m >40 7 25 4 Titanium ppm ASTM D5185m >10 1 <1	Sample Date		Client Info		11 Jun 2024	18 Jul 2023	18 Sep 2021
Oil Changed Sample Status Client Info Not Changed SEVERE N/A Changed SEVERE CONTAMINATION method imit/base current history1 history2 Water WC Method >0.075 NEG NEG NEG WEAR METALS method imit/base current history1 history2 PQ ASTM D8184 >1250 1061 4201 1083 Iron ppm ASTM D5185m >750 A 3810 9981 A 1624 Chromium ppm ASTM D5185m >10 4 19 1 Nickel ppm ASTM D5185m >10 4 19 1 Aluminum ppm ASTM D5185m >40 2271 299 152 Lead ppm ASTM D5185m >40 7 25 4 Antimony ppm ASTM D5185m 0 1 <1	Machine Age	hrs	Client Info		5021	4502	2212
Sample Status Imathod SEVERE SEVERE SEVERE SEVERE SEVERE CONTAMINATION method limit/base current history1 history2 Water WC Method >0.075 NEG NEG NEG WEAR METALS method limit/base current history1 history2 PQ ASTM D8184 >1250 1061 4201 1083 Iron ppm ASTM D5185m >750 A 3810 9981 A 1624 Chromium ppm ASTM D5185m >750 A 3810 9981 A 1624 Chromium ppm ASTM D5185m >10 4 19 1 Nickel ppm ASTM D5185m >10 0 0 0 Aluminum ppm ASTM D5185m >40 7 25 4 Tin ppm ASTM D5185m >10 0 1 <1	Oil Age	hrs	Client Info		2731	2290	500
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Water WC Method >0.075 NEG NEG NEG WEAR METALS method limil/base current history1 history2 PQ ASTM D8184 >1250 1061 4201 1083 Iron ppm ASTM D5185n >750 ▲ 3810 9981 ▲ 1624 Chromium ppm ASTM D5185n >9 ▲ 23 ▲ 87 ▲ 16 Nickel ppm ASTM D5185n >10 4 ▲ 19 1 Silver ppm ASTM D5185n >10 0 0 0 Aluminum ppm ASTM D5185n >40 ?7 25 4 Tin ppm ASTM D5185n >10 0 1 <1	Sample Status				SEVERE	SEVERE	SEVERE
WEAR METALS method limit/base current history1 history2 PQ ASTM D8184 >1250 1061 4201 1083 Iron ppm ASTM D8186 >750 ▲ 3810 ▲ 9981 ▲ 1624 Chromium ppm ASTM D5185m >9 ▲ 23 ▲ 87 ▲ 16 Nickel ppm ASTM D5185m >9 ▲ 23 ▲ 87 ▲ 16 Titanium ppm ASTM D5185m >0 4 ▲ 19 1 Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m >10 0 1 <1	CONTAMINATIO	DN	method	limit/base	current	history1	history2
PQ ASTM D8184 >1250 1061 4201 1083 Iron ppm ASTM D5185m >750 ▲ 3810 4 9981 1 624 Chromium ppm ASTM D5185m >9 ▲ 23 ▲ 877 ▲ 16 Nickel ppm ASTM D5185m >10 4 19 1 Titanium ppm ASTM D5185m >10 4 19 1 Silver ppm ASTM D5185m >10 4 19 1 Silver ppm ASTM D5185m >40 271 299 152 Lead ppm ASTM D5185m >40 7 25 4 Tin ppm ASTM D5185m >40 7 25 4 Antimony ppm ASTM D5185m >10 0 1 <1 Antimony ppm ASTM D5185m 0 2 <1 Qadmium ppm ASTM D5185m 0 2 <1 2 Katti D5185m Qo 0 0 0 0 0	Water		WC Method	>0.075	NEG	NEG	NEG
Iron ppm ASTM D5185m >750 ▲ 3810 ▲ 9981 ▲ 1624 Chromium ppm ASTM D5185m >9 ▲ 23 ▲ 87 ▲ 16 Nickel ppm ASTM D5185m >10 4 ▲ 19 1 Titanium ppm ASTM D5185m 17 44 12 Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >40 271 299 0 Lead ppm ASTM D5185m >40 7 25 4 Copper ppm ASTM D5185m >10 0 1 <1	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >9 ▲ 23 ▲ 87 ▲ 16 Nickel ppm ASTM D5185m >10 4 ▲ 19 1 Titanium ppm ASTM D5185m >10 4 ▲ 19 1 Silver ppm ASTM D5185m >10 0 0 0 Aluminum ppm ASTM D5185m >40 ● 271 ● 299 ● 152 Lead ppm ASTM D5185m >40 ● 271 ● 299 ● 152 Lead ppm ASTM D5185m >40 ● 7 25 4 Tin ppm ASTM D5185m >40 7 25 4 Antimony ppm ASTM D5185m >10 0 1 <1	PQ		ASTM D8184	>1250	1061	4201	1083
Nickel ppm ASTM D5185m >10 4 19 1 Titanium ppm ASTM D5185m 17 44 12 Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >40 271 299 152 Lead ppm ASTM D5185m >40 7 25 4 Tin ppm ASTM D5185m >10 0 1 <1	Iron	ppm	ASTM D5185m	>750	A 3810	▲ 9981	▲ 1624
Instruct ppm ASTM D5185m 17 44 12 Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >40 271 299 152 Lead ppm ASTM D5185m >40 7 25 4 Copper ppm ASTM D5185m >10 0 1 <1	Chromium	ppm	ASTM D5185m	>9	4 23	a 87	1 6
Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >40 271 299 152 Lead ppm ASTM D5185m >15 0 2 0 Copper ppm ASTM D5185m >15 0 1 <1	Nickel	ppm	ASTM D5185m	>10	4	1 9	1
Aluminum ppm ASTM D5185m >40 271 299 152 Lead ppm ASTM D5185m >15 0 2 0 Copper ppm ASTM D5185m >15 0 1 <1	Titanium	ppm	ASTM D5185m		17	44	12
Lead ppm ASTM D5185m >15 0 2 0 Copper ppm ASTM D5185m >40 7 255 4 Tin ppm ASTM D5185m >10 0 1 <1	Silver	ppm	ASTM D5185m		0	0	0
Copper ppm ASTM D5185m >40 7 25 4 Tin ppm ASTM D5185m >10 0 1 <1	Aluminum	ppm	ASTM D5185m	>40	e 271	299	152
Tin ppm ASTM D5185m >10 0 1 <1 Antimony ppm ASTM D5185m >5 0 Vanadium ppm ASTM D5185m >5 0 2 <1	Lead	ppm	ASTM D5185m	>15	0	2	0
Antimony ppm ASTM D5185m >5 0 Vanadium ppm ASTM D5185m >5 0 2 <1	Copper	ppm	ASTM D5185m	>40	7	25	4
Vanadium ppm ASTM D5185m 0 2 <1 Cadmium ppm ASTM D5185m 0 1 <1	Tin	ppm	ASTM D5185m	>10	0	1	<1
Cadmium ppm ASTM D5185m 0 1 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 400 4 32 57 Barium ppm ASTM D5185m 200 0 0 0 0 Molybdenum ppm ASTM D5185m 200 0 0 0 0 Manganese ppm ASTM D5185m 12 <1 9 <1 Magnesium ppm ASTM D5185m 12 34 21 12 Calcium ppm ASTM D5185m 150 614 30 27 Phosphorus ppm ASTM D5185m 125 256 177 22 Sulfur ppm ASTM D5185m 25.00 17244 26995 18071 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m	Antimony	ppm	ASTM D5185m	>5			0
ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m40043257BariumppmASTM D5185m200000MolybdenumppmASTM D5185m12<1	Vanadium	ppm	ASTM D5185m		0	2	<1
Boron ppm ASTM D5185m 400 4 32 57 Barium ppm ASTM D5185m 200 0 0 0 Molybdenum ppm ASTM D5185m 200 0 0 0 Manganese ppm ASTM D5185m 12 <1 9 <1 Magnesium ppm ASTM D5185m 12 34 21 12 Calcium ppm ASTM D5185m 150 614 30 27 Phosphorus ppm ASTM D5185m 1650 473 367 359 Zinc ppm ASTM D5185m 125 256 17 22 Sulfur ppm ASTM D5185m 22500 17244 26995 18071 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 1670 2741 627 Sodium ppm ASTM D5185m 170 </td <td>Cadmium</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <td>0</td> <td>1</td> <td><1</td>	Cadmium	ppm	ASTM D5185m		0	1	<1
Barium ppm ASTM D5185m 200 0 0 0 Molybdenum ppm ASTM D5185m 12 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 12 <1 9 <1 Manganese ppm ASTM D5185m 12 25 78 17 Magnesium ppm ASTM D5185m 12 34 21 12 Calcium ppm ASTM D5185m 150 614 30 27 Phosphorus ppm ASTM D5185m 1650 473 367 359 Zinc ppm ASTM D5185m 125 256 17 22 Sulfur ppm ASTM D5185m 22500 17244 26995 18071 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 1670 2741 627 Sodium ppm ASTM D5185m >170 47 18 6	Boron	ppm	ASTM D5185m	400	4	32	57
Manganese ppm ASTM D5185m 25 78 17 Magnesium ppm ASTM D5185m 12 34 21 12 Calcium ppm ASTM D5185m 150 614 30 27 Phosphorus ppm ASTM D5185m 1650 473 367 359 Zinc ppm ASTM D5185m 125 256 17 22 Sulfur ppm ASTM D5185m 22500 17244 26995 18071 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 1670 2741 627 Sodium ppm ASTM D5185m >170 47 18 6	Barium	ppm	ASTM D5185m	200	0	0	0
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Calcium ppm ASTM D5185m 150 614 30 27 Phosphorus ppm ASTM D5185m 1650 473 367 359 Zinc ppm ASTM D5185m 125 256 17 22 Sulfur ppm ASTM D5185m 22500 17244 26995 18071 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 1670 2741 627 Sodium ppm ASTM D5185m >170 47 18 6	Manganese	ppm	ASTM D5185m		25	78	17
Phosphorus ppm ASTM D5185m 1650 473 367 359 Zinc ppm ASTM D5185m 125 256 17 22 Sulfur ppm ASTM D5185m 22500 17244 26995 18071 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 1670 2741 627 Sodium ppm ASTM D5185m >170 47 18 6	Magnesium	ppm	ASTM D5185m	12	34	21	
Zinc ppm ASTM D5185m 125 256 17 22 Sulfur ppm ASTM D5185m 22500 17244 26995 18071 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 1670 2741 627 Sodium ppm ASTM D5185m >170 47 18 6	Calcium	ppm	ASTM D5185m	150	-	30	27
Sulfur ppm ASTM D5185m 22500 17244 26995 18071 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >75 1670 2741 627 Sodium ppm ASTM D5185m >170 47 18 6	Phosphorus	ppm			-		
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>75▲ 1670▲ 2741▲ 627SodiumppmASTM D5185m>17047186	Zinc	ppm					
Silicon ppm ASTM D5185m >75 1670 2741 627 Sodium ppm ASTM D5185m >170 47 18 6	Sulfur	ppm	ASTM D5185m	22500	17244	26995	18071
Sodium ppm ASTM D5185m >170 47 18 6	CONTAMINANT	S	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185m	>75	1670	2 741	▲ 627
Potassium ppm ASTM D5185m >20 59 44 21	Sodium	ppm	ASTM D5185m	>170	47	18	6
	Potassium	ppm	ASTM D5185m	>20	59	44	21



OIL ANALYSIS REPORT



NONE NONE NONE *Visual LIGHT *Visual NONE NONE NONE NONE NONE *Visua NONE NONE NONE scalar *Visual NONE NONE NONE NONE *Visual NONE NONE NONE NONE NONE *Visual NONE NONE NONE NORML *Visual NORML NORML NORML *Visual NORML NORML NORML NORML *Visual >0.075 NEG NEG NEG scalar *Visual NEG NEG NEG limit/base 299 224 ASTM D445 143 128 no image no image no image no image no image no imade PQ 450 4000 3500 3000 Jun11/24 2500 Q 2000 1500 1000 500 Jun11/24 Sep18/21 Aug 18/20 Jun11/24 : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **JRE - CHARLOTTE** : 13 Jun 2024 9550 STATESVILLE ROAD : 14 Jun 2024 CHARLOTTE, NC : 15 Jun 2024 - Don Baldridge US 28269

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)

Report Id: JAMCHA [WUSCAR] 06208972 (Generated: 06/25/2024 10:43:09) Rev: 1

Submitted By: Mike Young - CHARLOTTE SHOP

Page 4 of 4

T: (704)597-0211

F: (704)596-6198

Contact: CHARLOTTE SHOP

myoung@jamesriverequipment.com