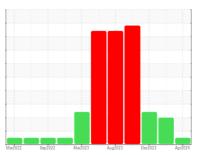


OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id

JOHN DEERE 409

Diesel Engine

MOBIL 15W40 (--- QTS)

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

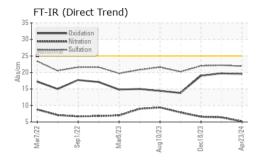
Fluid Condition

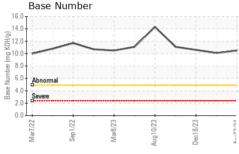
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

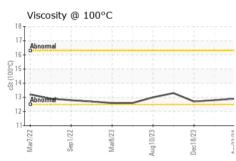
Sample Number Client Info JR0189718 JR0189881 JR0189721 Sample Date Client Info 23 Apr 2024 08 Mar 2024 18 Dec 2023 Machine Age hrs Client Info 218 5500 6004 Oil Age hrs Client Info N/A Changed Changed Oil Changed Client Info N/A Changed Changed Sample Status method Imilibase current history1 history2 Fuel WC Method VC Method VC Method VC Method VC Method VE MEG NEG NEG NEG Water WC Method WC Method NEG			Mar2022	Sep 2022 Mar 2023	Aug2023 Dec2023	Apr2024	
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 7218 6500 6004	Sample Number		Client Info		JR0189718	JR0189881	JR0189721
Oil Age hrs Client Info 218 500 500 Oil Changed Client Info N/A Changed ABNORMAL ABNORMAL <th< td=""><td>Sample Date</td><td></td><td>Client Info</td><td></td><th>23 Apr 2024</th><td>08 Mar 2024</td><td>18 Dec 2023</td></th<>	Sample Date		Client Info		23 Apr 2024	08 Mar 2024	18 Dec 2023
Oil Changed Sample Status Client Info N/A Changed ABNORMAL ABNO	Machine Age	hrs	Client Info		7218	6500	6004
Sample Status	Oil Age	hrs	Client Info		218	500	500
Fuel	Oil Changed		Client Info		N/A	Changed	Changed
Fuel	Sample Status				NORMAL	ABNORMAL	ABNORMAL
Water WC Method SO.21 NEG NEG NEG Glycol WC Method NEG NEG NEG 0.0 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >51 10 36 19 Chromium ppm ASTM D5185m >51 10 36 19 Chromium ppm ASTM D5185m >55 0 ▲ 11 2 Titanium ppm ASTM D5185m >5 0 0 0 Silver ppm ASTM D5185m >31 1 2 2 Aluminum ppm ASTM D5185m >26 0 0 0 Copper ppm ASTM D5185m >26 <1 <1 2 Tin ppm ASTM D5185m >4 0 <1 <1 Vanadium ppm ASTM D5185m 0 0 <1 <1	CONTAMINATION	٧	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
WEAR METALS	Water		WC Method	>0.21	NEG	NEG	NEG
Iron	Glycol		WC Method		NEG	NEG	0.0
Chromium ppm ASTM D5185m >11 0 <1 1 Nickel ppm ASTM D5185m >5 0 ▲ 11 2 Titanium ppm ASTM D5185m >5 0 △ 11 2 Silver ppm ASTM D5185m >31 1 2 2 Aluminum ppm ASTM D5185m >31 1 2 2 Lead ppm ASTM D5185m >26 0 0 0 Copper ppm ASTM D5185m >26 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>51	10	36	19
Titanium	Chromium	ppm	ASTM D5185m	>11	0	<1	1
Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >31 1 2 2 Lead ppm ASTM D5185m >26 0 0 0 Copper ppm ASTM D5185m >26 <1 <1 2 Tin ppm ASTM D5185m >4 0 <1 <1 Vanadium ppm ASTM D5185m 0 0 <1 <1 Vanadium ppm ASTM D5185m 0 0 <1 <1 Cadmium ppm ASTM D5185m 0 0 0 <1 Boron ppm ASTM D5185m 0	Nickel	ppm	ASTM D5185m	>5	0	<u> </u>	2
Aluminum ppm ASTM D5185m >31 1 2 2 Lead ppm ASTM D5185m >26 0 0 0 Copper ppm ASTM D5185m >26 <1	Titanium	ppm	ASTM D5185m		0	0	0
Lead ppm ASTM D5185m >26 0 0 0 Copper ppm ASTM D5185m >26 <1 <1 2 Tin ppm ASTM D5185m >4 0 <1 <1 Vanadium ppm ASTM D5185m 0 0 0 <1 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 49 42 42 42 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 41 46 63 Manganese ppm ASTM D5185m 527 542 564 Calcium ppm ASTM D5185m 527 542 564 Calcium ppm ASTM D5185m 978 956 929 Zinc p	Silver	ppm	ASTM D5185m	>3	0	0	0
Copper ppm ASTM D5185m >26 <1 <1 2 Tin ppm ASTM D5185m >4 0 <1	Aluminum	ppm	ASTM D5185m	>31	1	2	2
Tin ppm ASTM D5185m >4 0 <1 <1 <1	Lead	ppm	ASTM D5185m	>26	0	0	0
Vanadium ppm ASTM D5185m 0 0 <1 Cadmium ppm ASTM D5185m 0 0 0 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 49 42 42 42 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 41 46 63 Manganese ppm ASTM D5185m 527 542 564 Calcium ppm ASTM D5185m 527 542 564 Calcium ppm ASTM D5185m 978 956 929 Zinc ppm ASTM D5185m 1174 1150 1083 Sulfur ppm ASTM D5185m 3651 3445 2922 CONTAMINANTS method limit/base current history1 history2 Sodium ppm ASTM D5185m </td <td>Copper</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>26</td> <th><1</th> <td><1</td> <td>2</td>	Copper	ppm	ASTM D5185m	>26	<1	<1	2
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 49 42 42 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 41 46 63 Manganese ppm ASTM D5185m 0 1 <1	Tin	ppm	ASTM D5185m	>4	0	<1	<1
ADDITIVES	Vanadium	ppm	ASTM D5185m		0	0	<1
Boron ppm ASTM D5185m 49 42 42 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 41 46 63 Manganese ppm ASTM D5185m 0 1 <1 Magnesium ppm ASTM D5185m 527 542 564 Calcium ppm ASTM D5185m 1833 1687 1531 Phosphorus ppm ASTM D5185m 978 956 929 Zinc ppm ASTM D5185m 1174 1150 1083 Sulfur ppm ASTM D5185m 3651 3445 2922 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >22 5 5 5 Sodium ppm ASTM D5185m >20 0 50 △ 160 INFRA-RED method limit/base	Cadmium	ppm	ASTM D5185m		0	0	0
Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 41 46 63 Manganese ppm ASTM D5185m 0 1 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 41 46 63 Manganese ppm ASTM D5185m 0 1 <1 Magnesium ppm ASTM D5185m 527 542 564 Calcium ppm ASTM D5185m 1833 1687 1531 Phosphorus ppm ASTM D5185m 978 956 929 Zinc ppm ASTM D5185m 1174 1150 1083 Sulfur ppm ASTM D5185m 3651 3445 2922 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >22 5 5 5 Sodium ppm ASTM D5185m >118 2 54 178 Potassium ppm ASTM D5185m >20 0 50 160 INFRA-RED method limit/base current history1 history2 Soot % *ASTM D7844 <td>Boron</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <th>49</th> <td>42</td> <td>42</td>	Boron	ppm	ASTM D5185m		49	42	42
Manganese ppm ASTM D5185m 0 1 <1 Magnesium ppm ASTM D5185m 527 542 564 Calcium ppm ASTM D5185m 1833 1687 1531 Phosphorus ppm ASTM D5185m 978 956 929 Zinc ppm ASTM D5185m 1174 1150 1083 Sulfur ppm ASTM D5185m 3651 3445 2922 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >22 5 5 5 Sodium ppm ASTM D5185m >118 2 54 178 Potassium ppm ASTM D5185m >20 0 50 160 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.2 0.2 Nitration	Barium	ppm	ASTM D5185m		0	0	0
Magnesium ppm ASTM D5185m 527 542 564 Calcium ppm ASTM D5185m 1833 1687 1531 Phosphorus ppm ASTM D5185m 978 956 929 Zinc ppm ASTM D5185m 1174 1150 1083 Sulfur ppm ASTM D5185m 3651 3445 2922 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >22 5 5 5 Sodium ppm ASTM D5185m >118 2 54 178 Potassium ppm ASTM D5185m >20 0 50 △ 160 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.2 0.2 Nitration Abs/.1mm *ASTM D7415 >30 21.9 22.2 22.2	Molybdenum	ppm	ASTM D5185m		41	46	63
Calcium ppm ASTM D5185m 1833 1687 1531 Phosphorus ppm ASTM D5185m 978 956 929 Zinc ppm ASTM D5185m 1174 1150 1083 Sulfur ppm ASTM D5185m 3651 3445 2922 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >22 5 5 5 Sodium ppm ASTM D5185m >118 2 54 178 Potassium ppm ASTM D5185m >20 0 50 ▲ 160 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.2 0.2 Nitration Abs/.1mm *ASTM D7415 >30 21.9 22.2 22.0 FLUID DEGRADATION method limit/base current history1 history	Manganese	ppm	ASTM D5185m		0	1	<1
Phosphorus ppm ASTM D5185m 978 956 929 Zinc ppm ASTM D5185m 1174 1150 1083 Sulfur ppm ASTM D5185m 3651 3445 2922 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >22 5 5 5 Sodium ppm ASTM D5185m >118 2 54 178 Potassium ppm ASTM D5185m >20 0 50 ▲ 160 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.2 0.2 Nitration Abs/cm *ASTM D7624 >20 5.2 6.4 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 21.9 22.2 22.0 FLUID DEGRADATION method limit/base current <td>Magnesium</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <th>527</th> <td>542</td> <td>564</td>	Magnesium	ppm	ASTM D5185m		527	542	564
Zinc ppm ASTM D5185m 1174 1150 1083 Sulfur ppm ASTM D5185m 3651 3445 2922 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >22 5 5 5 Sodium ppm ASTM D5185m >118 2 54 178 Potassium ppm ASTM D5185m >20 0 50 ▲ 160 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.2 0.2 Nitration Abs/cm *ASTM D7624 >20 5.2 6.4 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 21.9 22.2 22.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25	Calcium	ppm	ASTM D5185m		1833	1687	1531
Sulfur ppm ASTM D5185m 3651 3445 2922 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >22 5 5 5 Sodium ppm ASTM D5185m >118 2 54 178 Potassium ppm ASTM D5185m >20 0 50 ▲ 160 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.2 0.2 Nitration Abs/cm *ASTM D7624 >20 5.2 6.4 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 21.9 22.2 22.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.5 19.7 19.0	Phosphorus	ppm	ASTM D5185m		978	956	929
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >22 5 5 5 Sodium ppm ASTM D5185m >118 2 54 178 Potassium ppm ASTM D5185m >20 0 50 ▲ 160 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.2 0.2 Nitration Abs/cm *ASTM D7624 >20 5.2 6.4 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 21.9 22.2 22.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.5 19.7 19.0	Zinc	ppm	ASTM D5185m		1174	1150	1083
Silicon ppm ASTM D5185m >22 5 5 5 Sodium ppm ASTM D5185m >118 2 54 178 Potassium ppm ASTM D5185m >20 0 50 ▲ 160 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.2 0.2 Nitration Abs/cm *ASTM D7624 >20 5.2 6.4 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 21.9 22.2 22.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.5 19.7 19.0	Sulfur	ppm	ASTM D5185m		3651	3445	2922
Sodium ppm ASTM D5185m >118 2 54 178 Potassium ppm ASTM D5185m >20 0 50 ▲ 160 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.2 0.2 Nitration Abs/cm *ASTM D7624 >20 5.2 6.4 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 21.9 22.2 22.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.5 19.7 19.0	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 0 50 ▲ 160 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 0.2 0.2 Nitration Abs/cm *ASTM D7624 >20 5.2 6.4 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 21.9 22.2 22.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.5 19.7 19.0		ppm	ASTM D5185m	>22			
INFRA-RED	Sodium	ppm	ASTM D5185m	>118	2	54	178
Soot % % *ASTM D7844 >3 0.1 0.2 0.2 Nitration Abs/cm *ASTM D7624 >20 5.2 6.4 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 21.9 22.2 22.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.5 19.7 19.0	Potassium	ppm	ASTM D5185m	>20	0	5 0	<u></u> 160
Nitration Abs/cm *ASTM D7624 >20 5.2 6.4 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 21.9 22.2 22.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.5 19.7 19.0	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 21.9 22.2 22.0 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.5 19.7 19.0	Soot %	%	*ASTM D7844	>3	0.1	0.2	0.2
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 19.5 19.7 19.0	Nitration	Abs/cm	*ASTM D7624	>20	5.2	6.4	6.6
Oxidation Abs/.1mm *ASTM D7414 >25 19.5 19.7 19.0	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	22.2	22.0
	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 10.5 10.1 10.6	Oxidation	Abs/.1mm	*ASTM D7414	>25	19.5	19.7	19.0
	Base Number (BN)	mg KOH/g	ASTM D2896		10.5	10.1	10.6

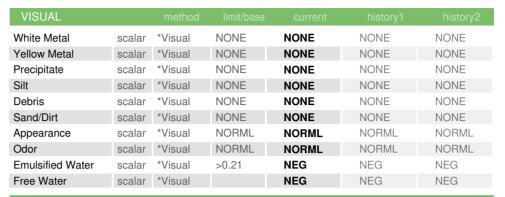


OIL ANALYSIS REPORT



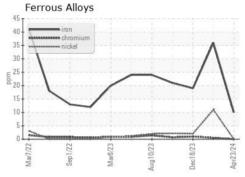




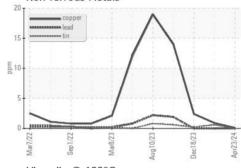


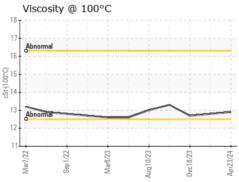
FLUID PROPER	RTIES	method			history2
Visc @ 100°C	cSt	ASTM D445	12.9	12.8	12.7

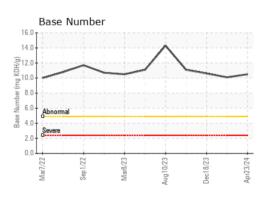
GRAPHS



Non-ferrous Metals











Laboratory Sample No.

: JR0189718 Lab Number : 06160063 Unique Number : 10995486

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 25 Apr 2024 **Tested** : 25 Apr 2024 : 25 Apr 2024 - Wes Davis

Diagnosed Test Package : CONST (Additional Tests: TBN)

Certificate 12367 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)

THE SCOTTS COMPANY

3175 BRIGHT LEAF RD LAWRENCEVILLE, VA US 23868

Contact: REX WATSON

T: (434)848-2727 F: (434)848-2250

Contact/Location: REX WATSON - SCOLAW