

OIL ANALYSIS REPORT

Sample Rating Trend

JOHN DEERE 4052R

Component

Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

Metal levels are typical for a components first oil change.

▲ Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

▲ Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sample Number Client Info PCA0105117							
Sample Number Client Info PCA0105117					Feb2024		
Client Info Client Info S2 Client Info S3 Client Info S4 Changed Client Info Changed	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Date Client Info 27 Feb 2024	Sample Number		Client Info		PCA0105117		
Oil Age hrs Client Info 82 Oil Changed Client Info Changed Sample Status SEVERE CONTAMINATION method limit/base current history1 history2 Water WC Method >0.21 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >51 13 Ohromium ppm ASTM D5185m >51 13 Chromium ppm ASTM D5185m >11 <1 Chromium ppm ASTM D5185m >3 <1 Silver ppm ASTM D5185m >31 6 Silver ppm ASTM D5185m >26 2 Copper ppm	Sample Date		Client Info		27 Feb 2024		
Contact Con	Machine Age	hrs	Client Info		82		
CONTAMINATION method limit/base current history1 history2	Oil Age	hrs	Client Info		82		
CONTAMINATION method limit/base current history1 history2	Oil Changed		Client Info		Changed		
Water WC Method >0.21 NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >51 13 Chromium ppm ASTM D5185m >51 13 Chromium ppm ASTM D5185m >55 <1 Sliver ppm ASTM D5185m >55 <1 Sliver ppm ASTM D5185m >31 6 Sliver ppm ASTM D5185m >31 6 Sliver ppm ASTM D5185m >26 2 Aluminum ppm ASTM D5185m >26 2 Aluminum ppm ASTM D5185m >26 2 Tin ppm ASTM D5185m >4 2	Sample Status				SEVERE		
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WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >51 13 Chromium ppm ASTM D5185m >1 Nickel ppm ASTM D5185m >5 <1	Water		WC Method	>0.21	NEG		
Chromium	Glycol		WC Method				
Chromium	WEAR METAL	S	method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >11 <1 Nickel ppm ASTM D5185m >5 <1	Iron	ppm	ASTM D5185m	>51	13		
Nickel	-				_		
Silver	Nickel	ppm	ASTM D5185m	>5	<1		
Aluminum	Titanium		ASTM D5185m		<1		
Aluminum	Silver	ppm	ASTM D5185m	>3	<1		
Copper ppm ASTM D5185m >26 44 Tin ppm ASTM D5185m >4 2 Vanadium ppm ASTM D5185m <1	Aluminum		ASTM D5185m	>31	6		
Tin ppm ASTM D5185m >4 2	Lead	ppm	ASTM D5185m	>26	2		
Vanadium ppm ASTM D5185m <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 250 258 Barium ppm ASTM D5185m 10 10 Molybdenum ppm ASTM D5185m 100 226 Manganese ppm ASTM D5185m 100 226 Magnesium ppm ASTM D5185m 100 226 Calcium ppm ASTM D5185m 3000 1929 Phosphorus ppm ASTM D5185m 1350 1074 Sulfur ppm ASTM D5185m 4250 3799 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >22	Copper	ppm	ASTM D5185m	>26	44		
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Silicon ppm ASTM D5185m >22 57 Sodium ppm ASTM D5185m >158 14 Potassium ppm ASTM D5185m >20 3 Fuel % ASTM D3524 >2.1 4.9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 Nitration Abs/cm *ASTM D7624 >20 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2							
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Potassium ppm ASTM D5185m >20 3 Fuel % ASTM D3524 >2.1 ▲ 4.9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.1 Nitration Abs/cm *ASTM D7624 >20 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2							
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Soot % *ASTM D7844 >3 0.1 Nitration Abs/cm *ASTM D7624 >20 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2		%	ASTM D3524	>2.1	4.9		
Nitration Abs/cm *ASTM D7624 >20 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 20.4 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2	Soot %		*ASTM D7844	>3	0.1		
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 18.2	Nitration	Abs/cm	*ASTM D7624	>20	6.6		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4		
	FLUID DEGRA	OATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 8.5 11.74	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.2		
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	11.74		



OIL ANALYSIS REPORT





Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: PCA0105117 Lab Number : 06128835 **Unique Number** : 10942986

Received

Tested Diagnosed : 25 Mar 2024

: 28 Mar 2024

: 28 Mar 2024 - Wes Davis

Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel) 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)

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