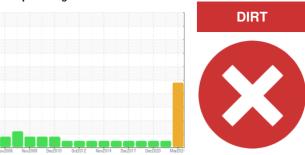


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

JOHN DEERE M0611

Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (10 LTR)

DIAGNOSIS

Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. The filter 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 new component breaking in.

Contamination

High concentration of dirt present in the oil.

Fluid Condition

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

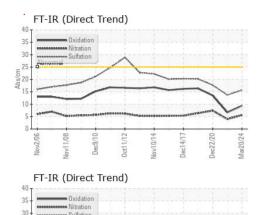
\$6\\2006 No\\2008 De\2010 0\\2012 N\\2014 De\2017 De\2020 M\\2014 De\2017 De\2020 M\\2014 De\2017									
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2			
Sample Number		Client Info		WC0836729	WC0581994	WC0510701			
Sample Date		Client Info		20 Mar 2024	14 Mar 2022	22 Dec 2020			
Machine Age	hrs	Client Info		428	412	401			
Oil Age	hrs	Client Info		9	21	11			
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd			
Sample Status				SEVERE	NORMAL	NORMAL			
CONTAMINATION	١	method	limit/base	current	history1	history2			
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0			
Water		WC Method	>0.21	NEG	NEG	NEG			
Glycol		WC Method		NEG	NEG	NEG			
WEAR METALS		method	limit/base	current	history1	history2			
Iron	ppm	ASTM D5185(m)	>51	1	1	2			
Chromium	ppm	ASTM D5185(m)	>11	0	0	0			
Nickel	ppm	ASTM D5185(m)	>5	0	<1	0			
Titanium	ppm	ASTM D5185(m)		0	0	0			
Silver	ppm	ASTM D5185(m)	>3	0	0	0			
Aluminum	ppm	ASTM D5185(m)	>31	<1	<1	1			
Lead	ppm	ASTM D5185(m)	>26	2	<1	5			
Copper	ppm	ASTM D5185(m)	>26	1	<1	1			
Tin	ppm	ASTM D5185(m)	>4	0	0	<1			
Antimony	ppm	ASTM D5185(m)		0	<1	<1			
Vanadium	ppm	ASTM D5185(m)		0	0	0			
Beryllium	ppm	ASTM D5185(m)		0	0	0			
Cadmium	ppm	ASTM D5185(m)		0	0	<1			
ADDITIVES		method	limit/base	current	history1	history2			
Boron	ppm	ASTM D5185(m)	250	9	6	69			
Barium	ppm	ASTM D5185(m)	10	0	0	0			
Molybdenum	ppm	ASTM D5185(m)	100	4	4	66			
Manganese	ppm	ASTM D5185(m)	450	0	0	<1			
Magnesium	ppm	ASTM D5185(m)	450	20	13	16			
Calcium	ppm	ASTM D5185(m) ASTM D5185(m)	3000 1150	2064 761	2075 850	1992 879			
Phosphorus Zinc	ppm	ASTM D5185(m)		850	950	1050			
Sulfur	ppm	ASTM D5185(m)	4250	2638	2924	3099			
Lithium	ppm	ASTM D5185(m)	4230	<1	0	<1			
CONTAMINANTS		method	limit/base	current	history1	history2			
Silicon	ppm	ASTM D5185(m)	>22	<u>^</u> 218	9	15			
Sodium	ppm	ASTM D5185(m)	>158	2	1	3			
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1			
INFRA-RED		method	limit/base	current	history1	history2			
Soot %	%	ASTM D7844*	>3	0	0	0			
Nitration	Abs/cm	ASTM D7624*		5.6	4.0	7.4			
Sulfation	Abs/.1mm	ASTM D7415*	>30	15.7	13.7	17.7			

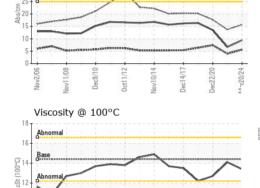


OIL ANALYSIS REPORT

cSt

ASTM D7279(m) 14.4





FLUID DEGRADATION		method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	9.4	6.7	13.5	
VISUAL		method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE		NONE	
Yellow Metal	scalar	Visual*	NONE	NONE		NONE	
Precipitate	scalar	Visual*	NONE	NONE		NONE	
Silt	scalar	Visual*	NONE	NONE		NONE	
Debris	scalar	Visual*	NONE	VLITE		VLITE	
Sand/Dirt	scalar	Visual*	NONE	NONE		NONE	
Appearance	scalar	Visual*	NORML	NORML		NORML	
Odor	scalar	Visual*	NORML	NORML	NORML	NORML	
Emulsified Water	scalar	Visual*	>0.21	NEG	NEG	NEG	
Free Water	scalar	Visual*		NEG	NEG	NEG	
FLUID PROPERTIES		method	limit/base	current	history1	history2	

13.4

14.1

GRAP															
Iron (ppm)						Lead (ppm)									
Severe							80	Severe							
)							E 60								
Abnormal				***************************************			70	Abno	mal						
							20								
Nov2/06	Dec9/10	0ct11/12	Nov10/14	Dec14/17	Dec22/20	Mar20/24		Nov2/06	Nov11/08	Dec9/10	0ct11/12	Nov10/14	Dec14/17	Dec22/20	Mar20/24
No.	De De	Oct	Nov	Dec	Dec	Mar						Nov	Dec	Dec	Mar
Alumin	ium (ppr	n)					25 _T	Chr	omiun	n (ppr	n)				
Gevele				***************************************			20	Severe							
Abnormal							E 15	Abno	mal						
							101	0							
							5-								
Nov2/06	Dec9/10	Oct11/12	Nov10/14	Dec14/17	Dec22/20	Mar20/24		Nov2/06	Nov11/08	Dec9/10	Oct11/12	Nov10/14	Dec14/17	Dec22/20	Mar20/24
Nov	Nov.	Octi	Nov	Dec	Dec	Marí		No.	Nov	De	Octi	Nov	Dec	Dec	Mar
	r (ppm)						250	Silic	on (pp	om)					
Severe]				250 200								i
							E 150								1
Ab							I								1
Abnormal		-					50 - 0 -	PEARE	mal						
Nov2/06	Dec9/10	0ct11/12	Nov10/14	Dec14/17 -	Dec22/20	Mar20/24	0-	Nov2/06	Nov11/08	Dec9/10 -	Oct11/12	Nov10/14	Dec14/17 -	Dec22/20	Mar20/24
Nov.	Dec Dec	Oct1	Nov1	Decl	Dec2	Mar2		Nov	Nov1	Dec	0ct1	Nov1	Decl	Dec2	Mar2
	ty @ 100	0°C						Soo	t %						
Abnormal		1	1				6.0 T	Severe					1 1	1111	
Base			~				4.0 -	Abno	mal						

: 19 Apr 2024

: 19 Apr 2024

: 22 Apr 2024 - Kevin Marson



CALA ISO 17025:2017 Accredited Laboratory

Sample No.

Laboratory

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0836729 Lab Number : 02630090 Unique Number : 5763222

Visc @ 100°C

Received **Tested** Diagnosed

Test Package : MOB 1 (Additional Tests: Visual)

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

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