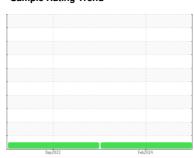


# **OIL ANALYSIS REPORT**

## Sample Rating Trend







# JOHN DEERE 243

Component

**Diesel Engine** 

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

## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil

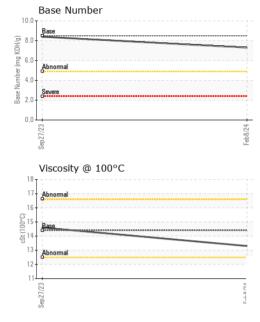
## **Fluid Condition**

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

			Sep 2023	Feb2024				
SAMPLE INFORM	ΛΔΤΙΩΝ	method	limit/base	current	history1	history2		
	IATION	Client Info	IIIIIIIIIIII	PCA0107160	PCA0105095			
Sample Number Sample Date		Client Info		08 Feb 2024	27 Sep 2023			
Machine Age	hrs	Client Info		2779	2454			
Oil Age	hrs	Client Info		325	625			
Oil Changed	1110	Client Info		Changed	Changed			
Sample Status				NORMAL	NORMAL			
CONTAMINATI	ON	method	limit/base	current	history1	history2		
Fuel		WC Method	>2.1	<1.0	<1.0			
Water		WC Method	>0.21	NEG	NEG			
Glycol		WC Method		NEG	NEG			
WEAR METALS	3	method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>51	19	14			
Chromium	ppm	ASTM D5185m	>11	<1	<1			
Nickel	ppm	ASTM D5185m	>5	3	2			
Titanium	ppm	ASTM D5185m		0	0			
Silver	ppm	ASTM D5185m	>3	0	0			
Aluminum	ppm	ASTM D5185m	>31	<1	3			
Lead	ppm	ASTM D5185m	>26	0	1			
Copper	ppm	ASTM D5185m	>26	4	1			
Tin	ppm	ASTM D5185m	>4	<1	<1			
Vanadium	ppm	ASTM D5185m		0	<1			
Cadmium	ppm	ASTM D5185m		0	0			
ADDITIVES		method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	250	5	83			
Barium	ppm	ASTM D5185m	10	0	0			
Molybdenum	ppm	ASTM D5185m	100	65	190			
Manganese	ppm	ASTM D5185m		<1	<1			
Magnesium	ppm	ASTM D5185m	450	929	975			
Calcium	ppm	ASTM D5185m	3000	1056	1371			
Phosphorus	ppm	ASTM D5185m	1150	984	1087			
Zinc Sulfur	ppm	ASTM D5185m ASTM D5185m	1350 4250	1225 2568	1313 3346			
CONTAMINAN		method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>22	4	10			
Sodium	ppm	ASTM D5185m	>158	13	<1			
Potassium	ppm	ASTM D5185m	>20	1	<1			
INFRA-RED		method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>3	0.8	0.4			
Nitration	Abs/cm	*ASTM D7624	>20	8.7	7.8			
Sulfation	Abs/.1mm	*ASTM D7415		20.6	21.9			
FLUID DEGRADATION method limit/base current history1 history2								
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	16.9			
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.3	8.4			
(2.4)	.59	222000						



# **OIL ANALYSIS REPORT**



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	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
<b>Emulsified Water</b>	scalar	*Visual	>0.21	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.3	14.6	

Visc @ 100	°C cSt	ASTM D445	14.4	13.3	14.6	
GRAPH	S					
Iron (ppm	1)			Lead (ppm)		
Severe				Severe	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
150				00		
Abnormal				40 Abnormal		
			-	20		
1,23			Feb8/24	1/23 0		42/
Sep27/23			Feb	Sep27/23		Feb8/24
Aluminum	(ppm)			Chromium	(ppm)	
60 Severe				Severe		 
40 Abnormal				15		
Abnormal				Abnormal		 
10				5+		 
Sep27/23			Feb8/24	Sep27/23		Feb8/24
			먐			昰
Copper (p	pm)			Silicon (ppn	n)	
Severe				Severe		 
100+				Abnormal		 
Abnormal				10		
O				0		=
Sep27/23			Feb8/24	Sep27/23		Feb8/24
ॐ Viscosity (	a 1000C		Œ			Œ.
18 <sub>T</sub>	@ 100°C			Base Numb	er 	
Abnormal				8.0 Base		
Base Abnormal				Abnormal		 
প্র Abnormal				Base Abnormal Severe		 
10				0.0		 -
Sep27/23			Feb8/24 -	Sep27/23		Feb 8/24
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Laboratory

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

Lab Number : 06097581 Unique Number : 10890434

**Sample No.** : PCA0107160

Received **Tested** Diagnosed

: 22 Feb 2024 : 23 Feb 2024

: 23 Feb 2024 - Wes Davis

Test Package : MOB 1 ( Additional Tests: TBN ) 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.

**CENTRAL VALLEY AG** 

5707 LANGWORTH OAKDALE, CA US 95361

Contact: S MCHENRY smchenry@cv-ag.com T: (209)630-8094

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)