



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area

**Store 1 - Cowen [146747]**

Machine Id

**JOHN DEERE 624P 1DW624PAJNLZ15097**

Component

**Diesel Engine**

Fluid

**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0041112</b>	LEC0044258	LEC0040281
Sample Date		Client Info		<b>12 Jan 2024</b>	20 Oct 2023	09 Aug 2023
Machine Age	hrs	Client Info		<b>2627</b>	2077	1595
Oil Age	hrs	Client Info		<b>550</b>	482	526
Filter Age	hrs	Client Info		<b>550</b>	482	526
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>12</b>	11	10
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>31	<b>2</b>	6	2
Lead	ppm	ASTM D5185m	>26	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>26	<b>1</b>	2	8
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

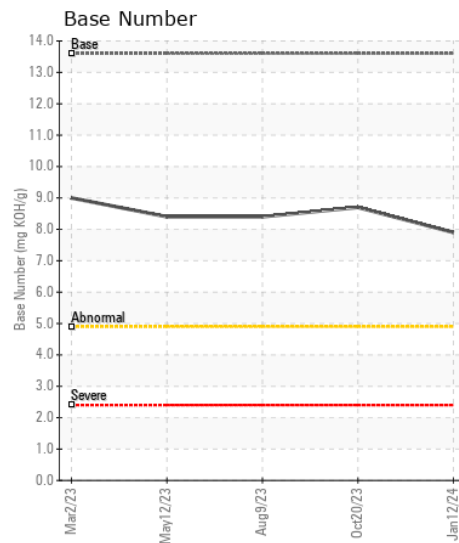
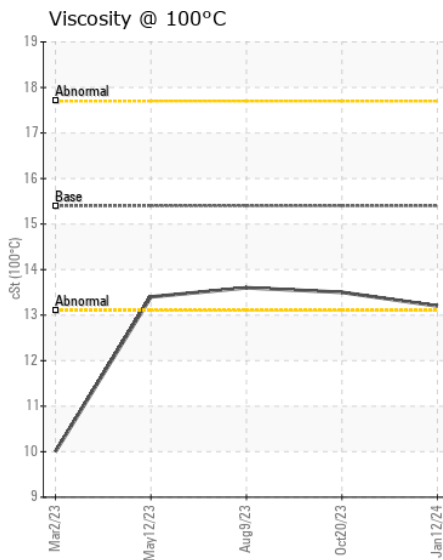
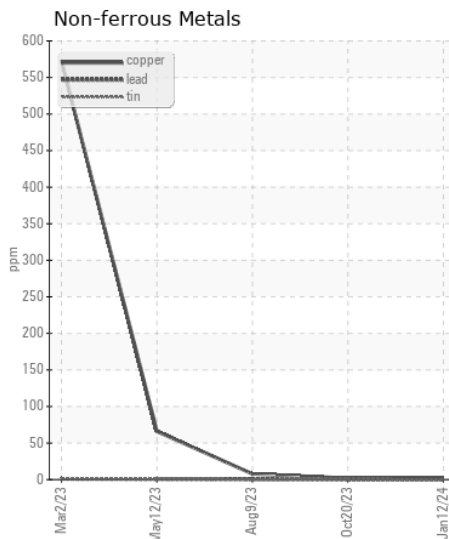
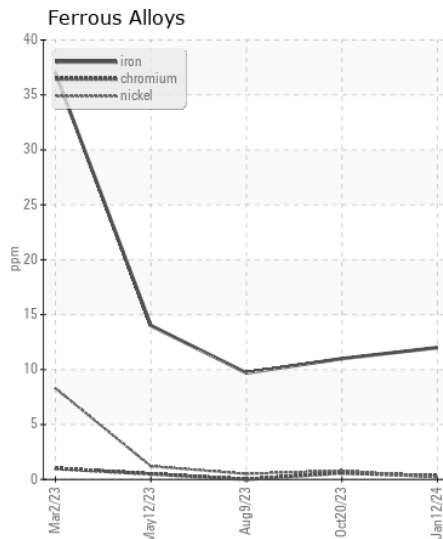
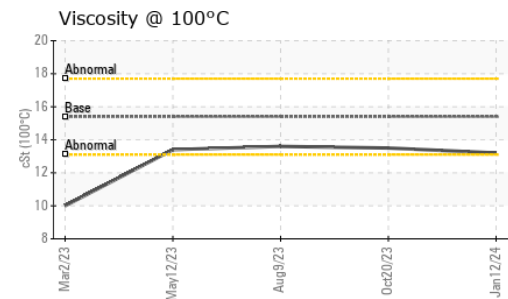
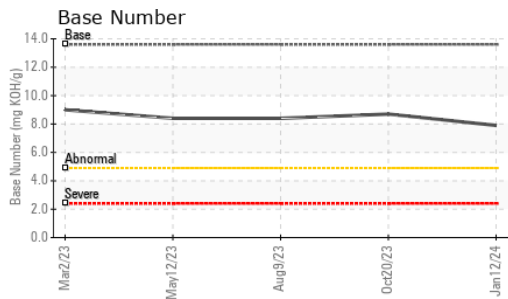
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	<b>7</b>	7	5
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	3	2
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.6</b>	8.5	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.4</b>	21.5	21.5
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	<b>NEG</b>	NEG	NEG

## 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.

Sodium	ppm	ASTM D5185m	>31	<b>0</b>	2	0
Boron	ppm	ASTM D5185m		<b>248</b>	238	201
Barium	ppm	ASTM D5185m		<b>4</b>	0	3
Molybdenum	ppm	ASTM D5185m		<b>262</b>	244	254
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>862</b>	767	667
Calcium	ppm	ASTM D5185m		<b>1363</b>	1397	1686
Phosphorus	ppm	ASTM D5185m		<b>920</b>	972	969
Zinc	ppm	ASTM D5185m		<b>1134</b>	1125	1179
Sulfur	ppm	ASTM D5185m		<b>3424</b>	3686	3566
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.9</b>	16.2	16.4
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>7.9</b>	8.7	8.4
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.2</b>	13.5	13.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0041112 **Received** : 18 Jan 2024  
**Lab Number** : 06064013 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10835395 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( 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.

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

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