



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area  
**Store 8 - Pikeville**  
Machine Id  
**JOHN DEERE 210G 1FF210GXENF530294**  
Component  
**Diesel Engine**  
Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (6 GAL)**

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>LEC0049782</b>	LEC0042292	LEC0038848
Sample Date		Client Info		<b>01 Jul 2024</b>	07 Jun 2023	25 Jan 2023
Machine Age	hrs	Client Info		<b>1929</b>	1401	805
Oil Age	hrs	Client Info		<b>528</b>	596	351
Filter Age	hrs	Client Info		<b>528</b>	596	351
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	NORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	<b>4</b>	33	17
Chromium	ppm	ASTM D5185m	>11	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	6	1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>31	<b>4</b>	2	3
Lead	ppm	ASTM D5185m	>26	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>26	<b>3</b>	29	▲ 119
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

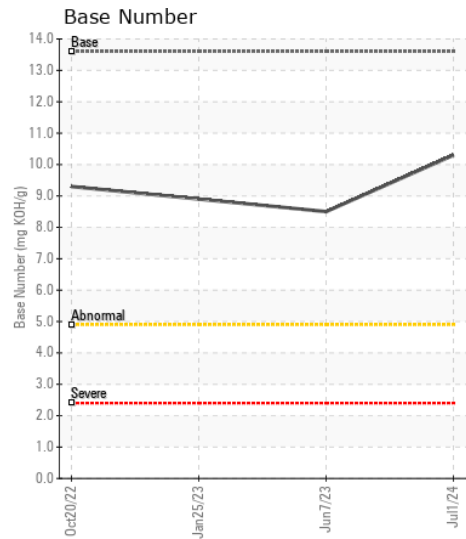
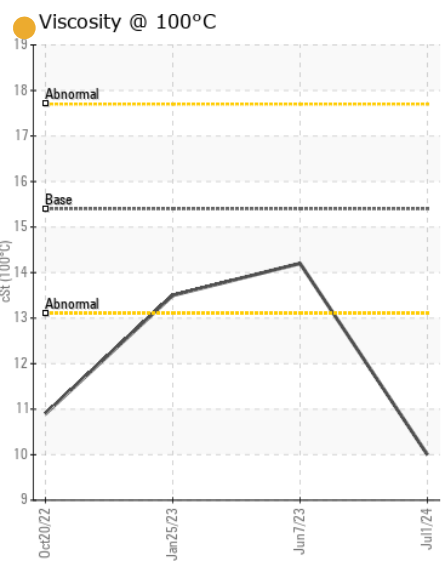
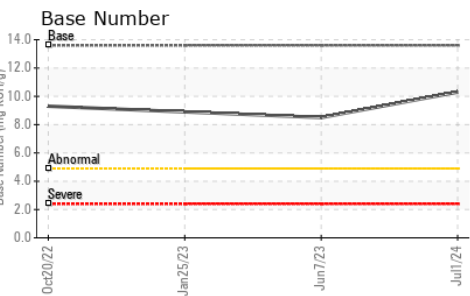
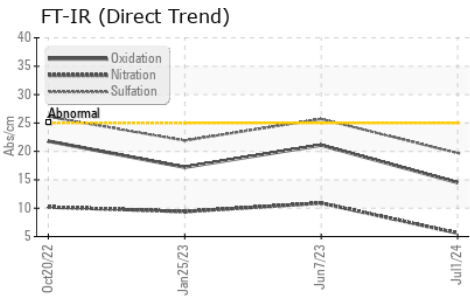
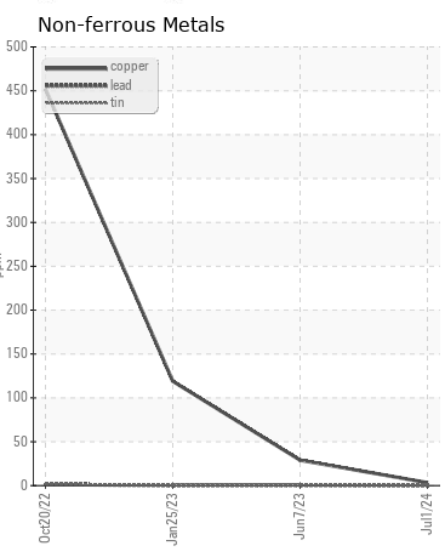
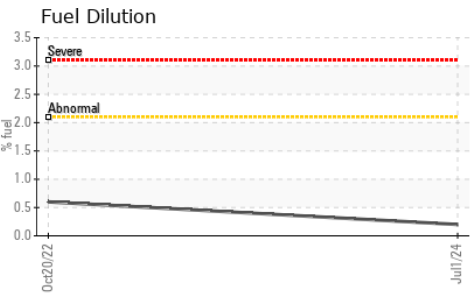
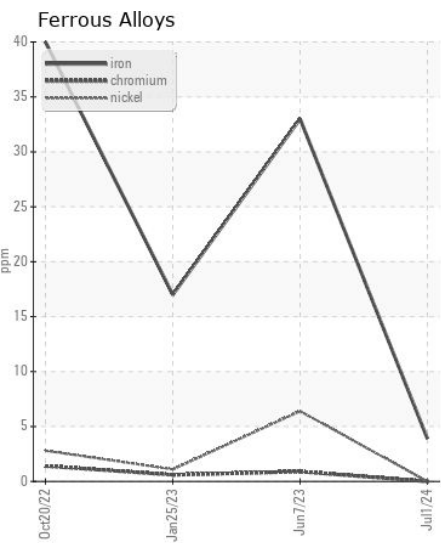
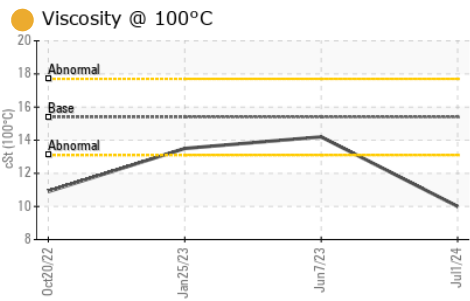
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	<b>9</b>	7	8
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	<1
Fuel	%	ASTM D3524	>2.1	<b>0.2</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>0.1</b>	0.8	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.6</b>	10.9	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.7</b>	25.7	21.9
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>31	<b>2</b>	5	4
Boron	ppm	ASTM D5185m		<b>291</b>	118	232
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>232</b>	250	242
Manganese	ppm	ASTM D5185m		<b>2</b>	1	1
Magnesium	ppm	ASTM D5185m		<b>849</b>	819	802
Calcium	ppm	ASTM D5185m		<b>1341</b>	1613	1400
Phosphorus	ppm	ASTM D5185m		<b>887</b>	853	851
Zinc	ppm	ASTM D5185m		<b>1049</b>	1128	1027
Sulfur	ppm	ASTM D5185m		<b>3477</b>	3437	3254
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.5</b>	21.1	17.2
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	<b>10.3</b>	8.5	8.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>10.0</b>	14.2	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0049782 **Received** : 05 Jul 2024  
**Lab Number** : 06228244 **Tested** : 09 Jul 2024  
**Unique Number** : 11111737 **Diagnosed** : 09 Jul 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

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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)