



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[05W48196]
 Machine Id
JOHN DEERE 624L L-227 (S/N 1DW624LZTMF709007)
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (21 QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0226803	JR0196042	JR0126507
Sample Date		Client Info		15 Jul 2024	09 Jan 2024	16 May 2022
Machine Age	hrs	Client Info		9909	9079	3098
Oil Age	hrs	Client Info		830	5981	0
Filter Age	hrs	Client Info		830	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	SEVERE	NORMAL

WEAR

Valve wear is indicated. Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>51	▲ 154	▲ 241	7
Chromium	ppm	ASTM D5185m	>11	6	7	<1
Nickel	ppm	ASTM D5185m	>5	▲ 15	▲ 7	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	13	5	2
Lead	ppm	ASTM D5185m	>26	0	1	<1
Copper	ppm	ASTM D5185m	>26	5	3	10
Tin	ppm	ASTM D5185m	>4	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

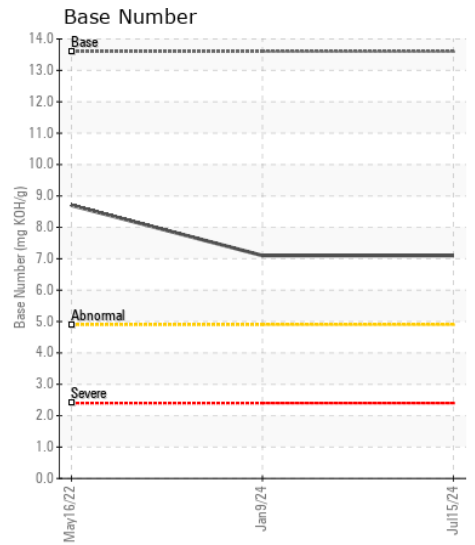
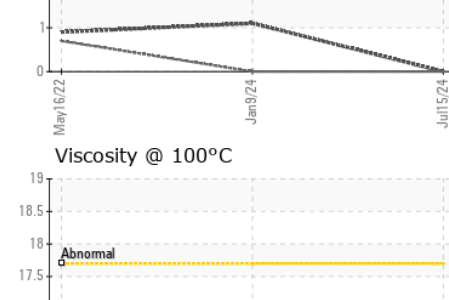
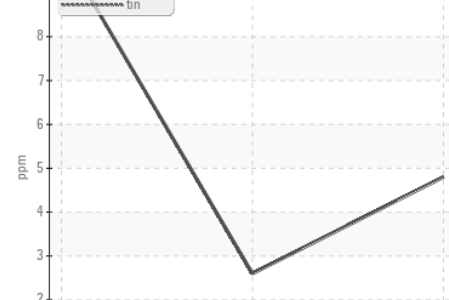
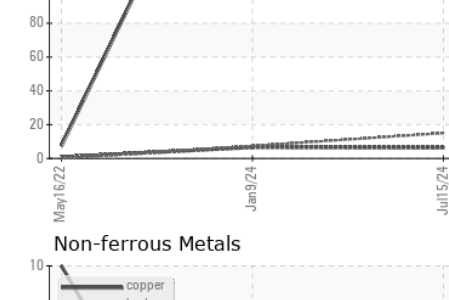
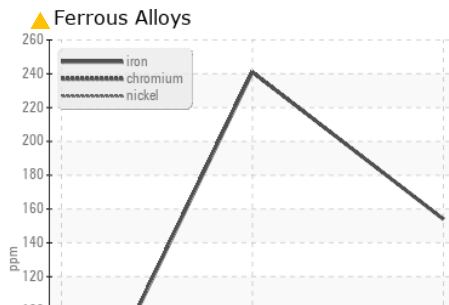
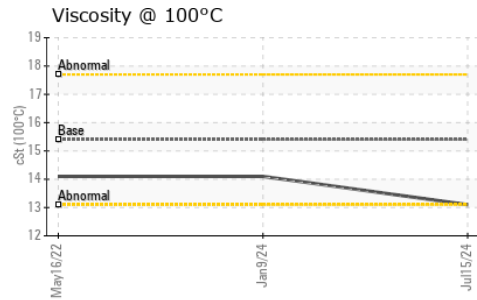
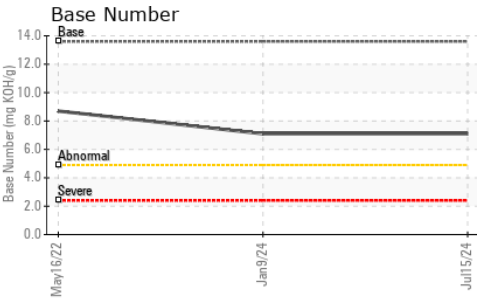
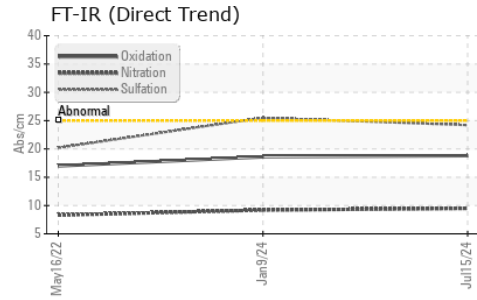
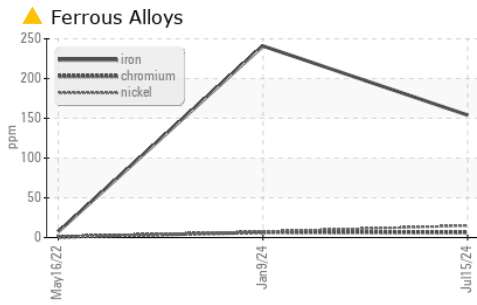
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	12	14	8
Potassium	ppm	ASTM D5185m	>20	1	3	<1
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
Soot %	%	*ASTM D7844	>3	0.7	1	0
Nitration	Abs/cm	*ASTM D7624	>20	9.5	9.2	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.2	25.5	20.2
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>31	5	<1	18
Boron	ppm	ASTM D5185m		73	72	31
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		211	242	48
Manganese	ppm	ASTM D5185m		2	3	<1
Magnesium	ppm	ASTM D5185m		767	806	577
Calcium	ppm	ASTM D5185m		1508	1357	1560
Phosphorus	ppm	ASTM D5185m		830	891	769
Zinc	ppm	ASTM D5185m		987	1033	909
Sulfur	ppm	ASTM D5185m		3201	2941	2166
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.8	18.6	17.0
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.1	7.1	8.7
Visc @ 100°C	cSt	ASTM D445	15.4	13.1	14.1	14.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0226803 **Received** : 16 Jul 2024
Lab Number : 06237552 **Tested** : 17 Jul 2024
Unique Number : 11126386 **Diagnosed** : 18 Jul 2024 - Sean Felton
Test Package : CONST (Additional Tests: TBN)

C & D RECOVERY
 24024 FREDERICK RD
 CLARKSBURG, MD
 US 20871
 Contact: HERBIE TRENT

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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F: