



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 624 P 1DW624PALNLZ14554

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0218702	JR0201327	JR0185032
Sample Date		Client Info		04 Jun 2024	09 Feb 2024	10 Oct 2023
Machine Age	hrs	Client Info		3547	2994	2451
Oil Age	hrs	Client Info		553	543	466
Filter Age	hrs	Client Info		553	543	466
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

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

CONTAMINATION

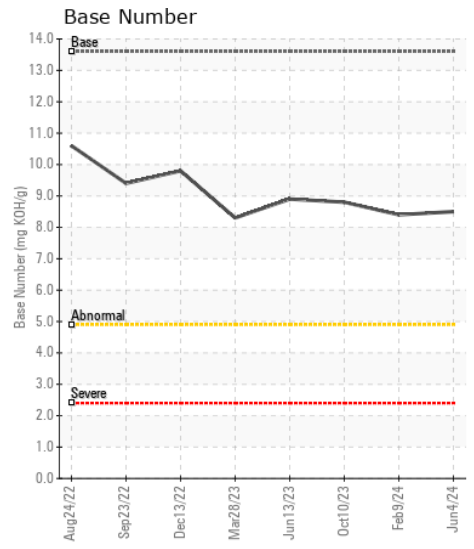
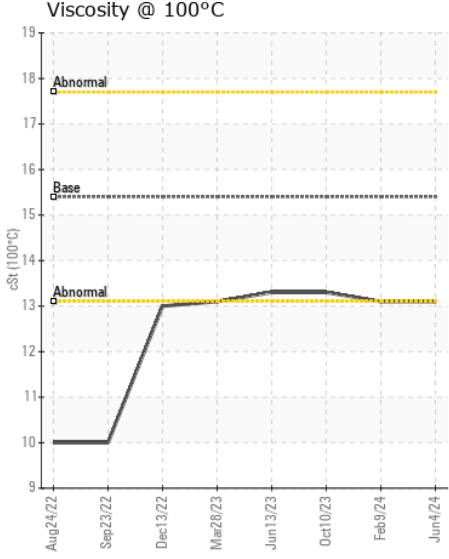
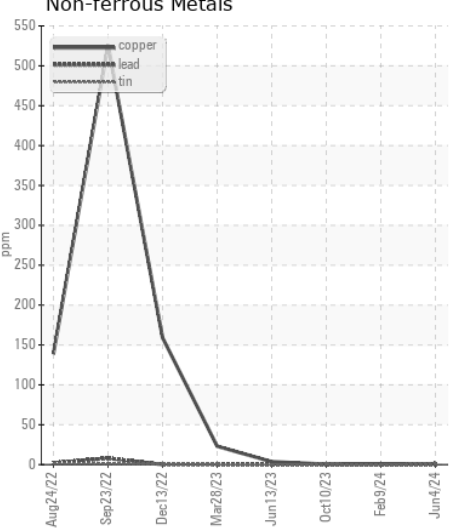
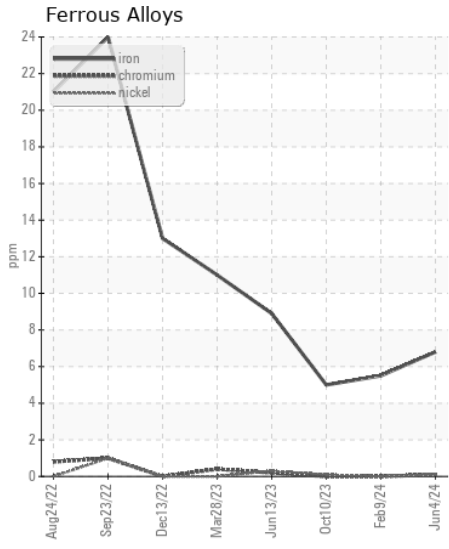
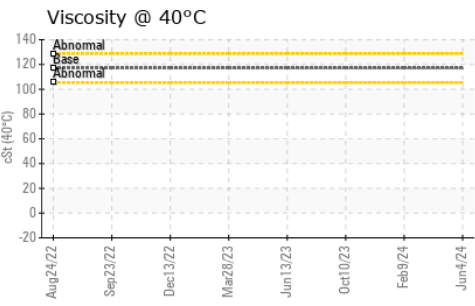
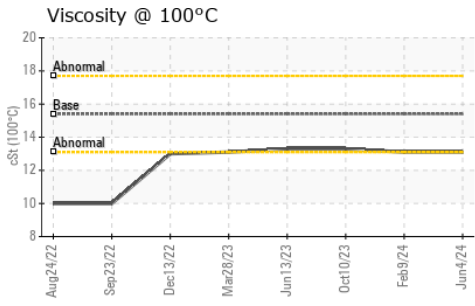
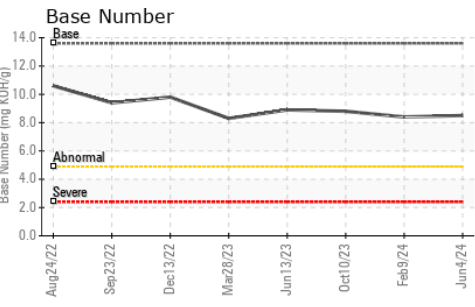
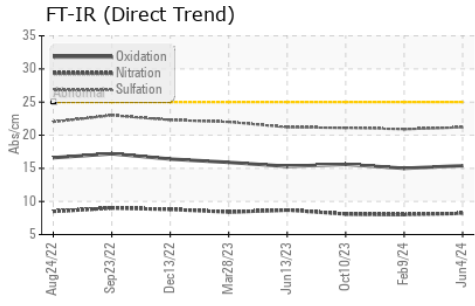
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	6	7	7
Potassium	ppm	ASTM D5185m	>20	2	0	2
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	0.2	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.2	8.0	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.2	20.9	21.1
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 suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<1	2	1
Boron	ppm	ASTM D5185m		268	252	236
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		250	233	246
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		781	800	839
Calcium	ppm	ASTM D5185m		1365	1396	1374
Phosphorus	ppm	ASTM D5185m		786	881	873
Zinc	ppm	ASTM D5185m		1058	1047	1087
Sulfur	ppm	ASTM D5185m		3113	2839	3000
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.4	15.0	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.5	8.4	8.8
Visc @ 100°C	cSt	ASTM D445	15.4	13.1	13.1	13.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0218702 **Received** : 14 Jun 2024
Lab Number : 06209872 **Tested** : 17 Jun 2024
Unique Number : 11082736 **Diagnosed** : 17 Jun 2024 - Angela Borella
Test Package : CONST (Additional Tests: KV40, TBN)

JRE - ASHEVILLE
 101 BRUCE DRIVE
 ASHEVILLE, NC
 US 28806
 Contact: Randy Warren
 randy.warren@jamesriverequipment.com
 T: (528)667-0176
 F: (828)667-4865

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)