



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

[W8904]

Machine Id

JOHN DEERE 624K C137436 (S/N 1DW624KZJCD642523)

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (22 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: W8904)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0196976	JR0183155	JR0141193
Sample Date		Client Info		20 Jun 2024	04 Dec 2023	13 May 2023
Machine Age	hrs	Client Info		14187	13166	11693
Oil Age	hrs	Client Info		1021	1473	963
Filter Age	hrs	Client Info		1021	0	963
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	26	37	40
Chromium	ppm	ASTM D5185m	>11	<1	1	1
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	4	6	5
Lead	ppm	ASTM D5185m	>26	2	13	16
Copper	ppm	ASTM D5185m	>26	1	3	3
Tin	ppm	ASTM D5185m	>4	0	<1	<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

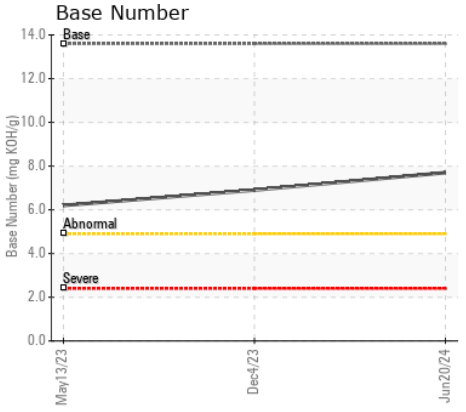
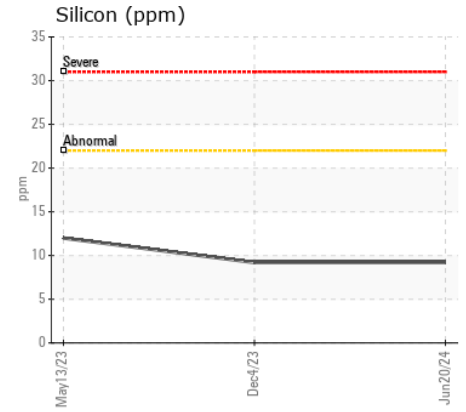
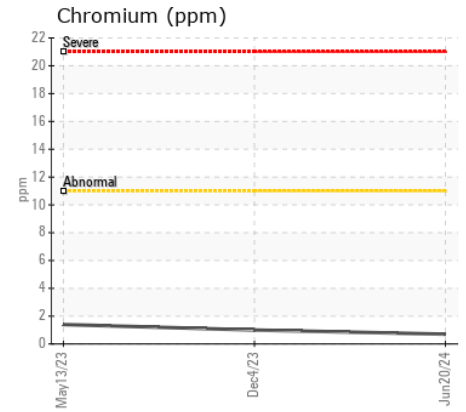
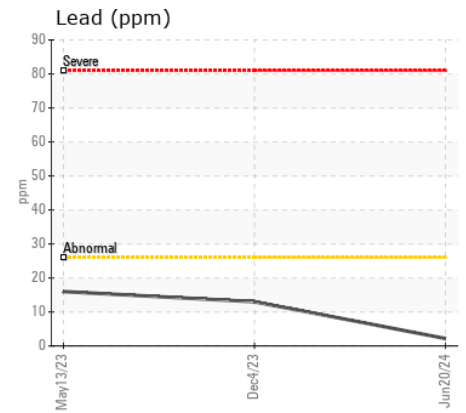
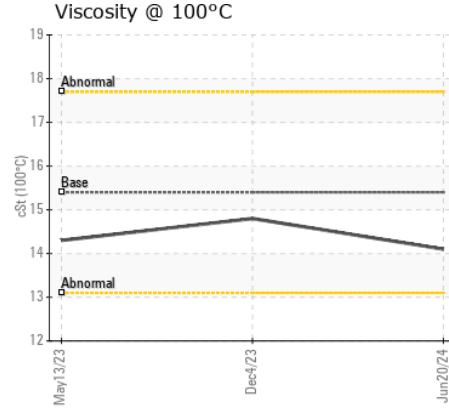
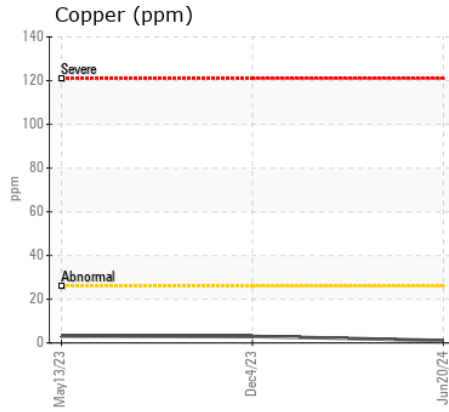
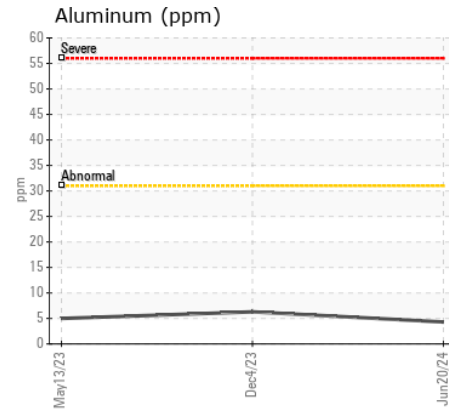
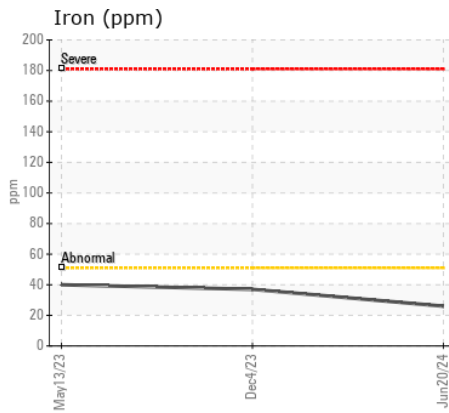
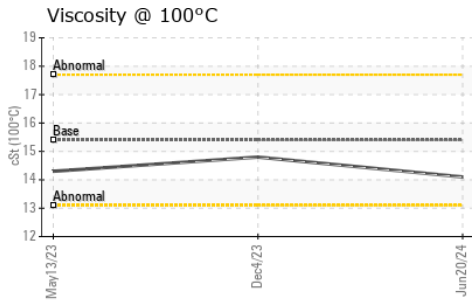
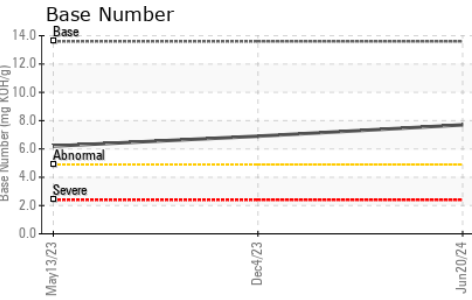
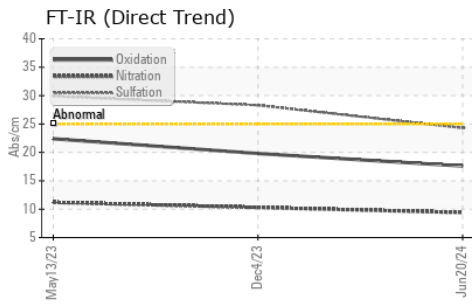
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>22	9	9	12
Potassium	ppm	ASTM D5185m	>20	<1	1	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	1	2.2	1.6
Nitration	Abs/cm	*ASTM D7624	>20	9.4	10.3	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.3	28.3	29.9
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	2	2	3
Boron	ppm	ASTM D5185m		150	76	46
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		245	255	238
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m		813	907	819
Calcium	ppm	ASTM D5185m		1466	1553	1383
Phosphorus	ppm	ASTM D5185m		880	869	751
Zinc	ppm	ASTM D5185m		1063	1083	972
Sulfur	ppm	ASTM D5185m		3486	3214	4350
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.6	19.8	22.4
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.7	6.9	6.2
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	14.8	14.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0196976 **Received** : 24 Jun 2024
Lab Number : 06218019 **Tested** : 25 Jun 2024
Unique Number : 11096216 **Diagnosed** : 25 Jun 2024 - Don Baldrige
Test Package : MOBCE (Additional Tests: TBN)

JRE - HOPE MILLS/FAYETTEVILLE
 5039 HWY 301 SOUTH
 HOPE MILLS, NC
 US 28348
 Contact: FAYETTEVILLE SHOP
 stephen.mullis@jamesriverequipment.com; canastasio@wearcheck.com
 T:
 F:

Certificate L2367
 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)