



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[W52467 ADVANSIX]
 Machine Id
JOHN DEERE 824K 1DW824KXPKF694323
 Component
Hydraulic System
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)

RECOMMENDATION

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		JR0212060	JR0199620	JR0200308
Sample Date		Client Info		14 Jun 2024	08 Apr 2024	21 Feb 2024
Machine Age	hrs	Client Info		5975	5487	5029
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

The chromium level is abnormal. All other component wear rates are normal.

PQ		ASTM D8184	>50	23	22	15
Iron	ppm	ASTM D5185m	>71	41	36	33
Chromium	ppm	ASTM D5185m	>11	▲ 19	▲ 16	▲ 14
Nickel	ppm	ASTM D5185m	>6	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	<1	<1
Aluminum	ppm	ASTM D5185m	>11	2	3	2
Lead	ppm	ASTM D5185m	>13	1	0	<1
Copper	ppm	ASTM D5185m	>21	11	11	9
Tin	ppm	ASTM D5185m	>5	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

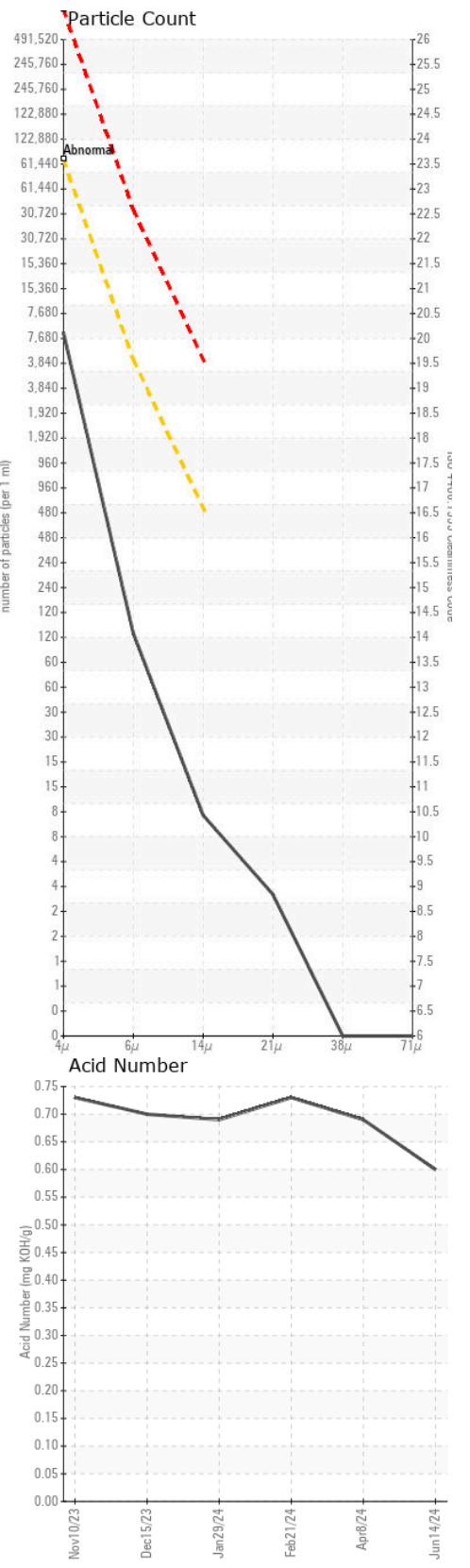
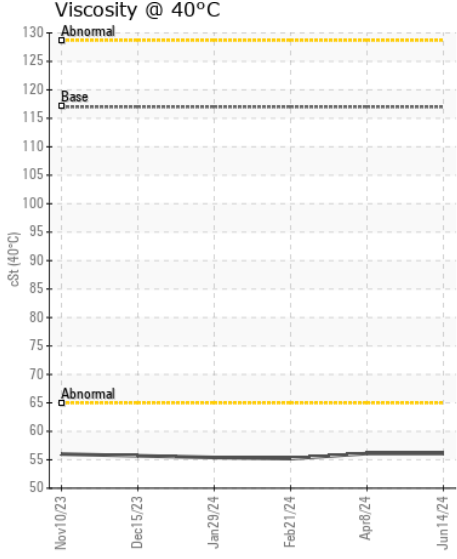
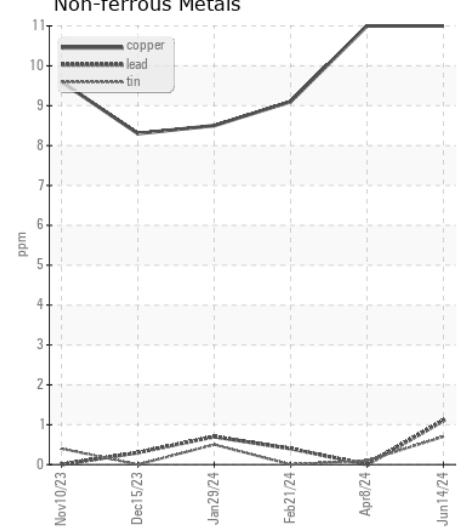
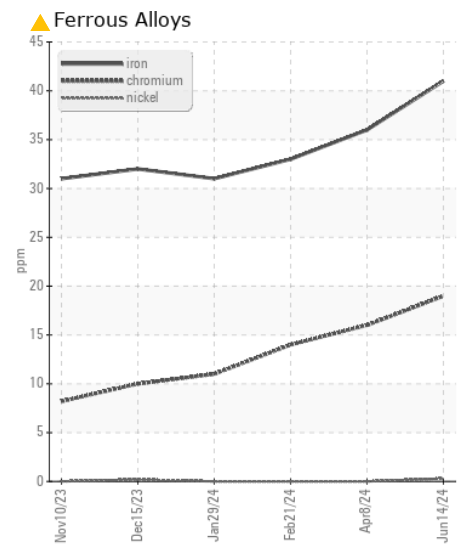
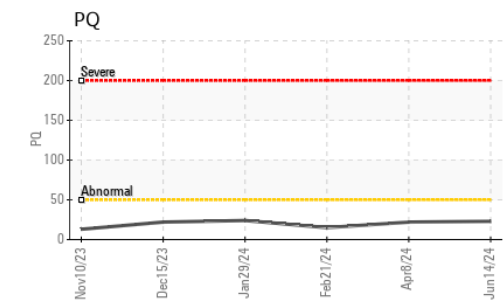
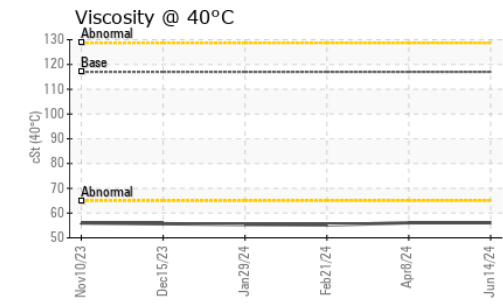
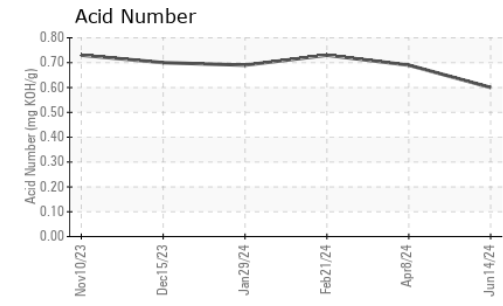
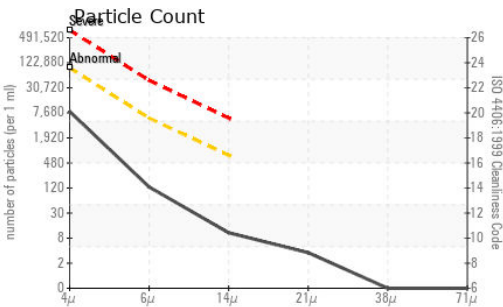
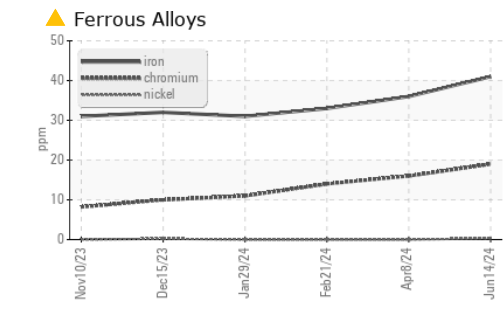
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>24	7	6	5
Potassium	ppm	ASTM D5185m	>20	4	2	0
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	7231	7791	19727
Particles >6µm		ASTM D7647	>5000	112	133	112
Particles >14µm		ASTM D7647	>640	9	11	7
Particles >21µm		ASTM D7647	>160	3	3	2
Particles >38µm		ASTM D7647	>40	0	1	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	20/14/10	20/14/11	21/14/10
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	>0.075	NEG	NEG	▲ 0.2%

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	4	5	<1
Boron	ppm	ASTM D5185m		5	6	0
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		5	3	2
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		24	25	15
Calcium	ppm	ASTM D5185m		144	151	105
Phosphorus	ppm	ASTM D5185m		519	616	566
Zinc	ppm	ASTM D5185m		798	808	809
Sulfur	ppm	ASTM D5185m		1499	1826	1488
Acid Number (AN)	mg KOH/g	ASTM D8045		0.60	0.69	0.73
Visc @ 40°C	cSt	ASTM D445	117	56.1	56.1	55.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212060 **Received** : 18 Jun 2024
Lab Number : 06213378 **Tested** : 19 Jun 2024
Unique Number : 11086242 **Diagnosed** : 20 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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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)