



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 244J LU244JX722841

Component
Hydraulic System

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		JR0202698	JR0181440	JR0175167
Sample Date		Client Info		23 Feb 2024	18 Oct 2023	02 Jun 2023
Machine Age	hrs	Client Info		13165	12906	12603
Oil Age	hrs	Client Info		0	12906	12603
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ATTENTION

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>71	<1	21	23
Chromium	ppm	ASTM D5185m	>11	0	<1	1
Nickel	ppm	ASTM D5185m	>6	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>11	3	7	5
Lead	ppm	ASTM D5185m	>13	<1	3	1
Copper	ppm	ASTM D5185m	>21	0	10	9
Tin	ppm	ASTM D5185m	>5	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

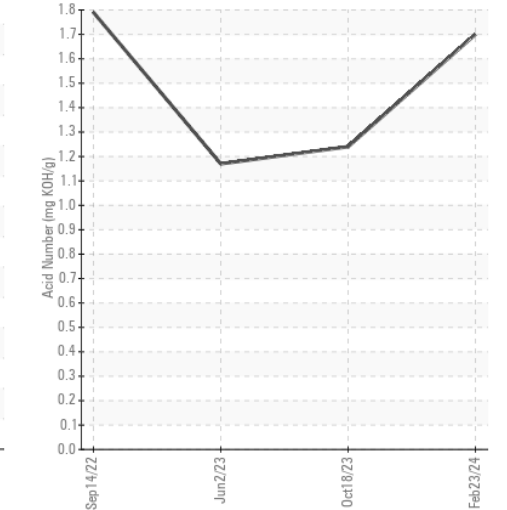
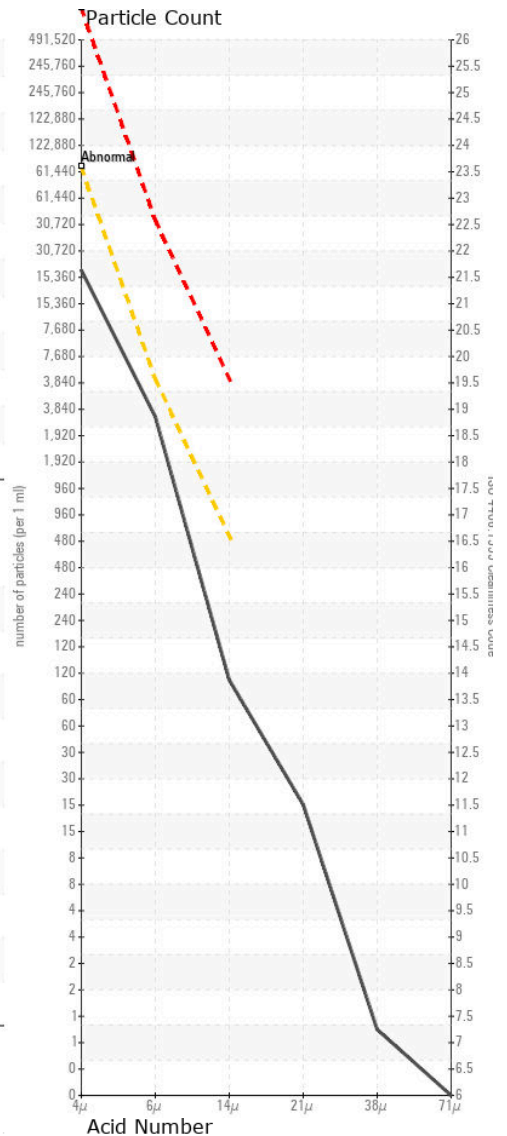
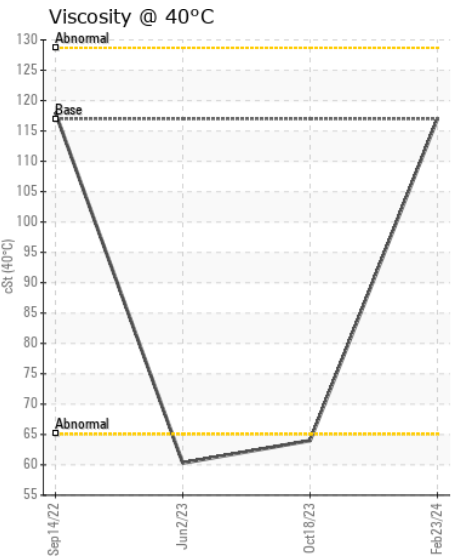
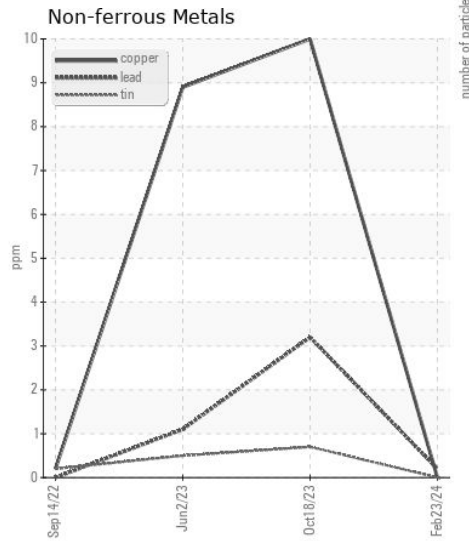
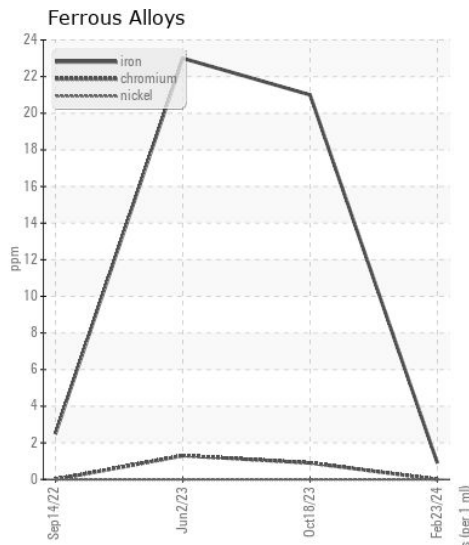
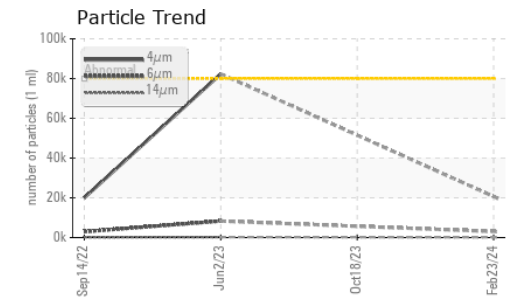
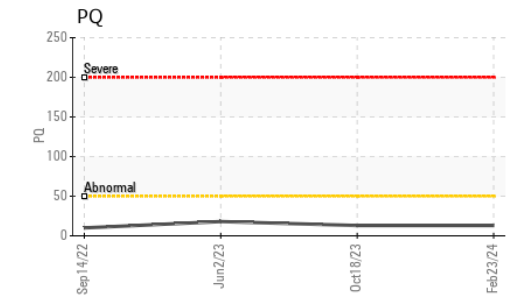
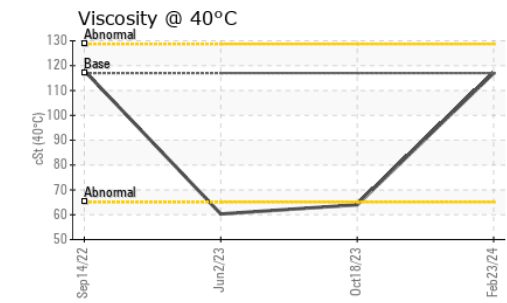
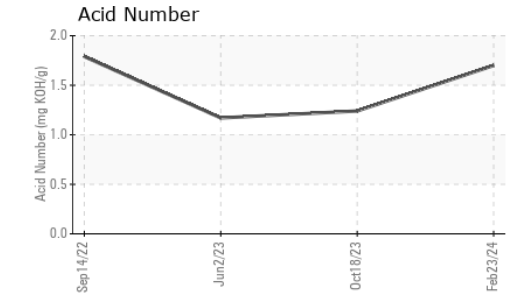
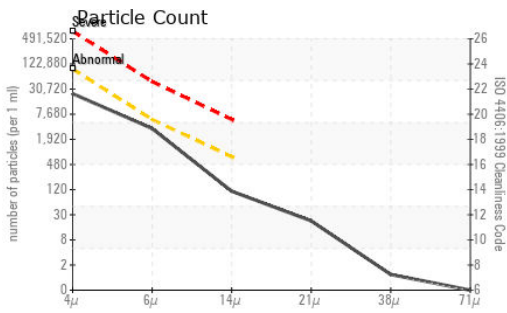
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>24	7	20	21
Potassium	ppm	ASTM D5185m	>20	<1	2	2
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	20670	---	▲ 82334
Particles >6µm		ASTM D7647	>5000	3043	---	▲ 8314
Particles >14µm		ASTM D7647	>640	97	---	189
Particles >21µm		ASTM D7647	>160	19	---	27
Particles >38µm		ASTM D7647	>40	1	---	1
Particles >71µm		ASTM D7647	>10	0	---	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	22/19/14	---	▲ 24/20/15
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER	LIGHT
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	NEG

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	2	4	2
Boron	ppm	ASTM D5185m		293	159	128
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		227	130	111
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m		729	425	380
Calcium	ppm	ASTM D5185m		1253	2214	2397
Phosphorus	ppm	ASTM D5185m		834	924	896
Zinc	ppm	ASTM D5185m		962	1067	1099
Sulfur	ppm	ASTM D5185m		2763	3258	4023
Acid Number (AN)	mg KOH/g	ASTM D8045		1.70	1.24	1.17
Visc @ 40°C	cSt	ASTM D445	117	117	64.0	60.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0202698
Lab Number : 06100041
Unique Number : 10898271
Test Package : CONST (Additional Tests: PQ)

GARNER - MARTIN MARIETTA
 1111 E GARNER RD
 GARNER, NC
 US 27529
 Contact: JASON GILMORE
 jason.gilmore@martinmarietta.com

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: