



WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 1023E 1LV1023EALK137387

Component
Hydraulic System

Fluid
JOHN DEERE HY-GARD HYD/TRANS LOW VIS (--- QTS)

RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0189708	JR0135432	JR0093392
Sample Date		Client Info		13 Dec 2023	12 Dec 2022	01 Nov 2021
Machine Age	hrs	Client Info		23	49	8
Oil Age	hrs	Client Info		0	49	8
Filter Age	hrs	Client Info		0	49	8
Oil Changed		Client Info		N/A	Changed	Not Changed
Filter Changed		Client Info		N/A	Changed	Not Changed
Sample Status				SEVERE	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	7	19	8
Chromium	ppm	ASTM D5185m	>10	<1	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	2	<1
Lead	ppm	ASTM D5185m	>10	<1	2	2
Copper	ppm	ASTM D5185m	>75	8	29	18
Tin	ppm	ASTM D5185m	>10	<1	1	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

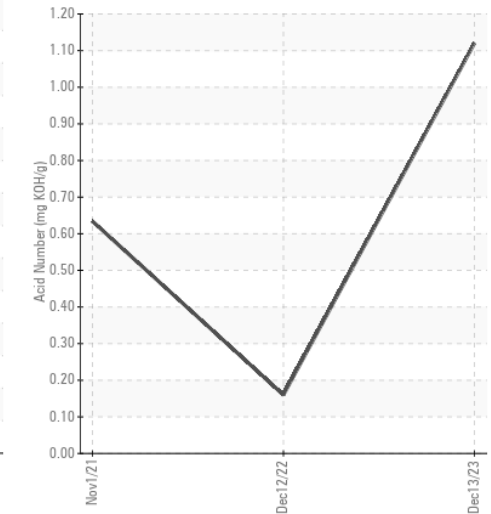
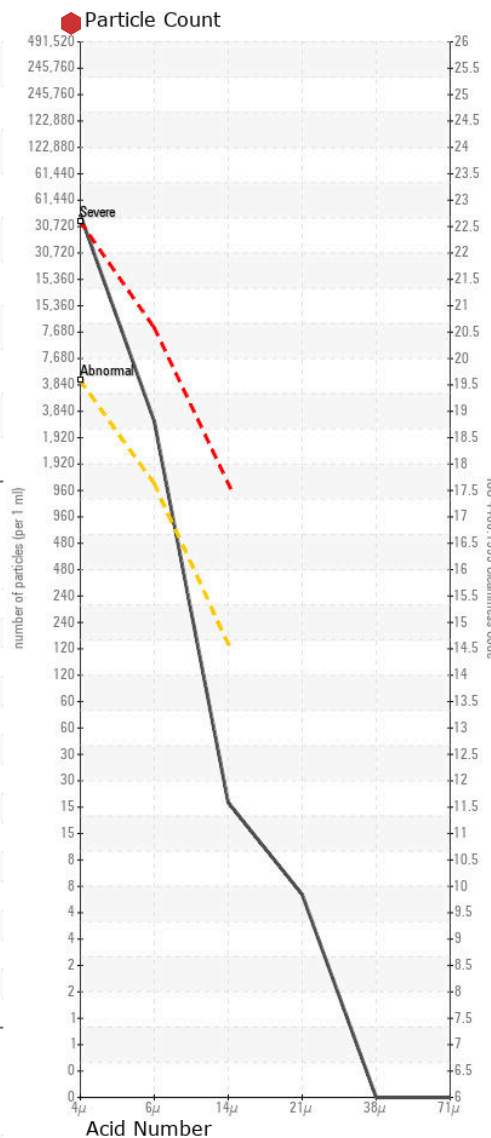
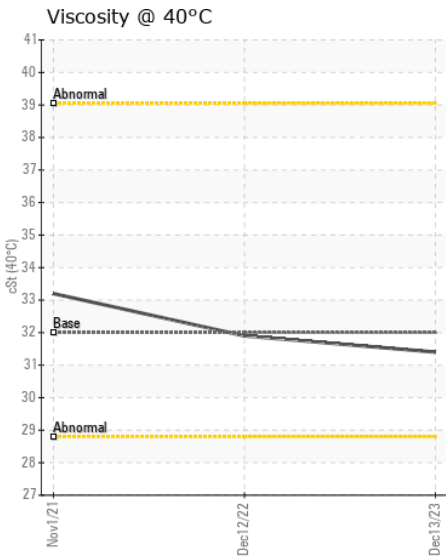
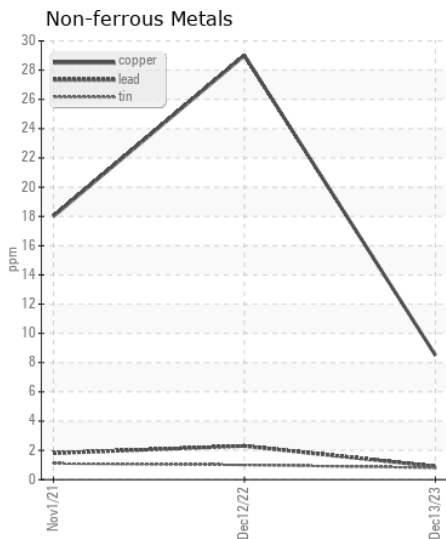
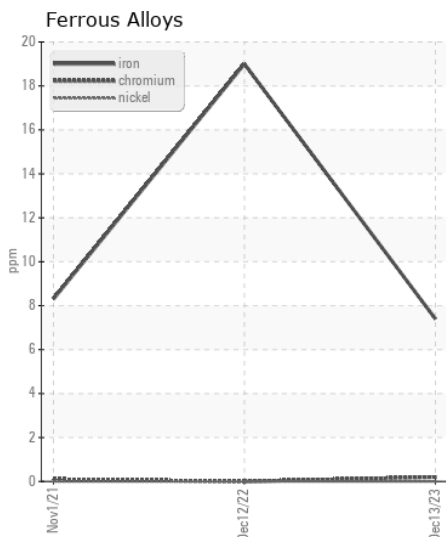
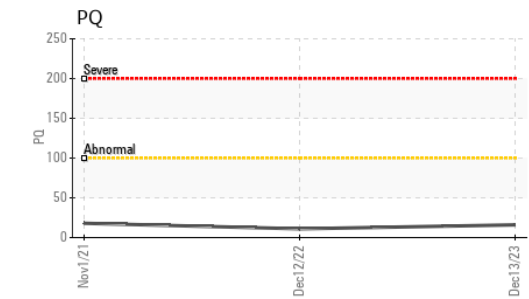
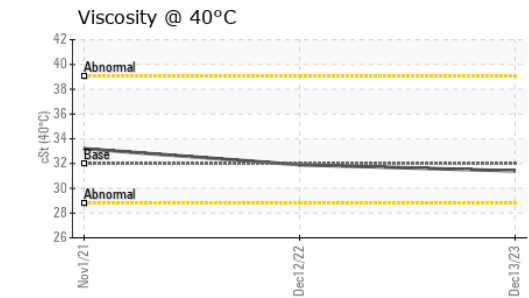
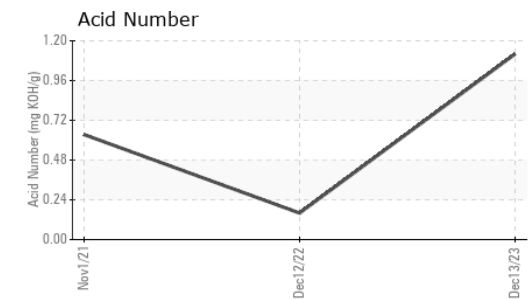
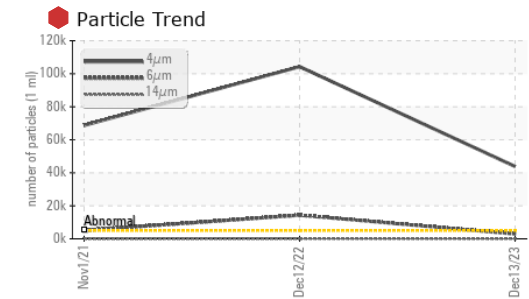
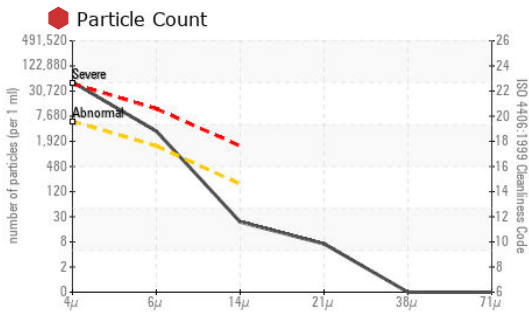
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	10	21	16
Potassium	ppm	ASTM D5185m	>20	3	4	3
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	43825	104298	68685
Particles >6µm		ASTM D7647	>1300	2939	14323	5084
Particles >14µm		ASTM D7647	>160	20	96	30
Particles >21µm		ASTM D7647	>40	6	19	4
Particles >38µm		ASTM D7647	>10	0	4	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	23/19/11	24/21/14	23/20/12
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185m		0	0	1
Boron	ppm	ASTM D5185m		2	5	7
Barium	ppm	ASTM D5185m		<1	0	1
Molybdenum	ppm	ASTM D5185m		<1	0	<1
Manganese	ppm	ASTM D5185m		<1	1	1
Magnesium	ppm	ASTM D5185m		97	95	97
Calcium	ppm	ASTM D5185m		3359	3711	3613
Phosphorus	ppm	ASTM D5185m		1013	1041	1018
Zinc	ppm	ASTM D5185m		1180	1258	1223
Sulfur	ppm	ASTM D5185m		3927	4307	2960
Acid Number (AN)	mg KOH/g	ASTM D8045		1.12	0.16	0.634
Visc @ 40°C	cSt	ASTM D445	32	31.4	31.9	33.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0189708 **Received** : 11 Jan 2024
Lab Number : 06057995 **Diagnosed** : 12 Jan 2024
Unique Number : 10829377 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: PQ)

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)

JRE - LA CROSSE

38431 HWY 58
 LA CROSSE, VA
 US 23950-1807

Contact: HUNTER GREEN
 hgreen@jamesriverequipment.com

T: (434)447-4325
 F: (434)447-1329