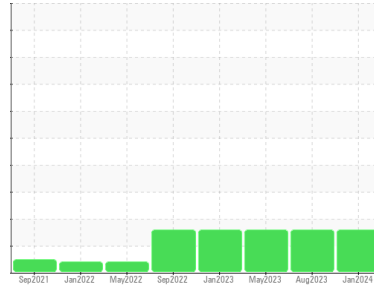


Machine Id
JOHN DEERE 624P 1DW624PAAMLZ11005
 Component
Hydraulic System
 Fluid
JOHN DEERE HYDRAU (--- GAL)


DIAGNOSIS
Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

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

Contamination

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

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			JR0200239	JR0164323	JR0164565
Sample Date	Client Info			04 Jan 2024	28 Aug 2023	09 May 2023
Machine Age	hrs	Client Info		3952	3447	2963
Oil Age	hrs	Client Info		3952	3447	2963
Oil Changed	Client Info			Changed	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		15	14	13
Iron	ppm	ASTM D5185m	>20	11	11	10
Chromium	ppm	ASTM D5185m	>10	▲ 27	▲ 25	▲ 23
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	3	0
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>75	<1	<1	<1
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

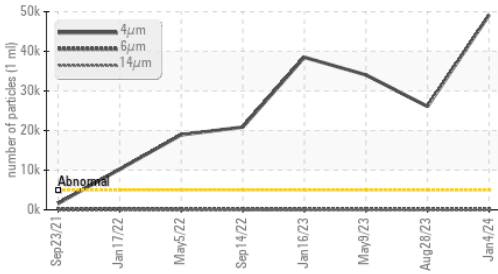
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		3	5	6
Calcium	ppm	ASTM D5185m	87	88	94	94
Phosphorus	ppm	ASTM D5185m	727	551	624	600
Zinc	ppm	ASTM D5185m	900	758	848	826
Sulfur	ppm	ASTM D5185m	1500	1287	2051	1710

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	1	1	2
Sodium	ppm	ASTM D5185m		4	3	2
Potassium	ppm	ASTM D5185m	>20	3	5	5

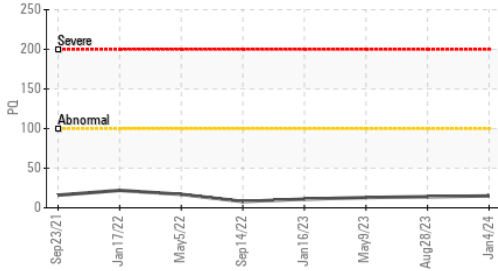
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ 49173	▲ 26095	▲ 34048
Particles >6µm		ASTM D7647	>1300	107	100	107
Particles >14µm		ASTM D7647	>160	10	16	8
Particles >21µm		ASTM D7647	>40	2	5	2
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 23/14/10	▲ 22/14/11	▲ 22/14/10

OIL ANALYSIS REPORT

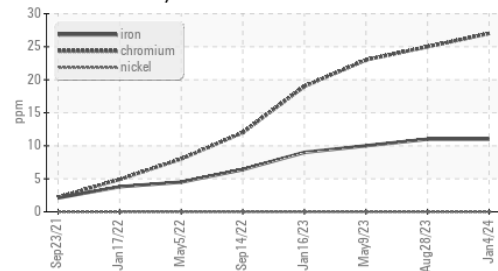
▲ Particle Trend



▲ PQ



▲ Ferrous Alloys

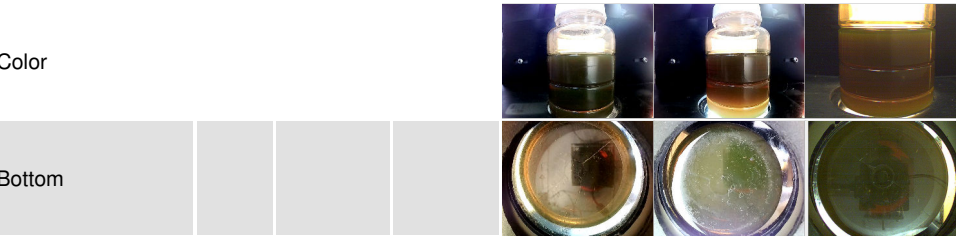


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.67	0.62	0.69

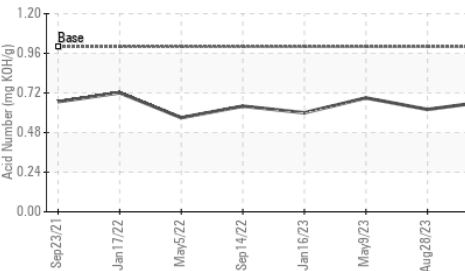
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65	54.8	54.4	54.1

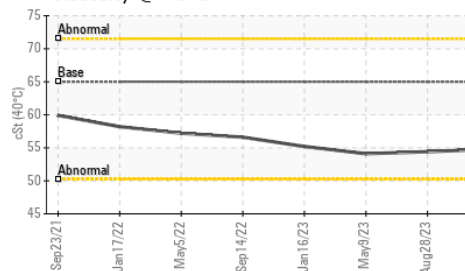
SAMPLE IMAGES



▲ Acid Number

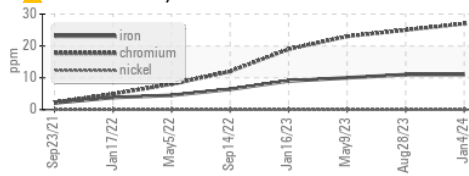


▲ Viscosity @ 40°C

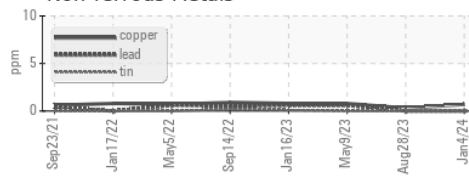


GRAPHS

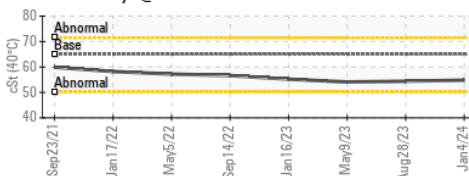
▲ Ferrous Alloys



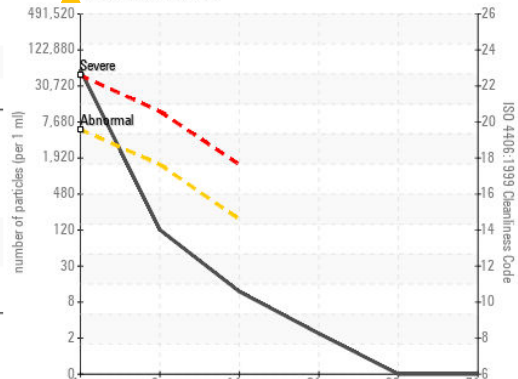
▲ Non-ferrous Metals



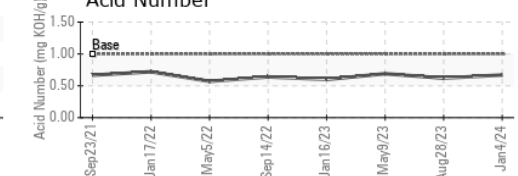
▲ Viscosity @ 40°C



▲ Particle Count



▲ Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0200239 **Received** : 09 Jan 2024
Lab Number : 06055326 **Diagnosed** : 10 Jan 2024
Unique Number : 10821275 **Diagnostician** : Angela Borella
Test Package : CONST (Additional Tests: PQ)

JRE - ASHLAND
 11047 LEADBETTER RD
 ASHLAND, VA
 US 23005
 Contact: DAVID ZIEG
 dzieg@jamesriverequipment.com
 T: (804)798-6001
 F: (804)798-0292

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)