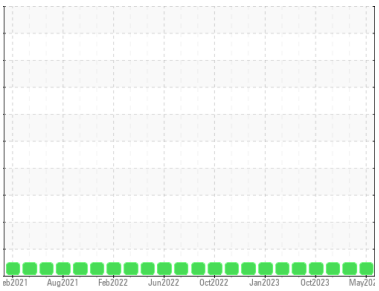
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
[W52104]
Machine Id
JOHN DEERE 824K 1DW824KXCGF674522
Component
Hydraulic System
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

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

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**JR0212213**	JR0200470	JR0180497
Sample Date		Client Info		**28 May 2024**	28 Feb 2024	01 Dec 2023
Machine Age	hrs	Client Info		**15488**	15022	14622
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**NORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.075	**NEG**	NEG	NEG

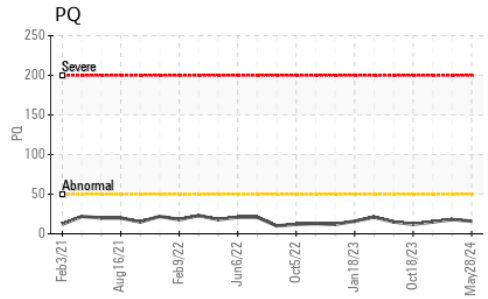
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>50	**16**	18	15
Iron	ppm	ASTM D5185m	>71	**19**	15	11
Chromium	ppm	ASTM D5185m	>11	**4**	5	6
Nickel	ppm	ASTM D5185m	>6	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	<1	<1
Aluminum	ppm	ASTM D5185m	>11	**1**	2	2
Lead	ppm	ASTM D5185m	>13	**<1**	0	0
Copper	ppm	ASTM D5185m	>21	**6**	4	7
Tin	ppm	ASTM D5185m	>5	**0**	0	0
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

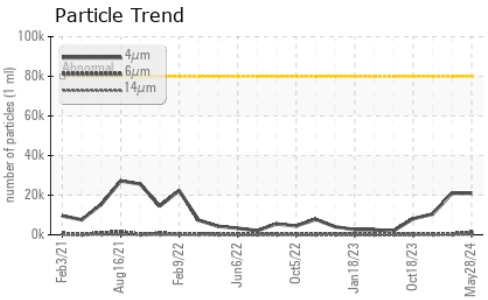
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**105**	131	105
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**72**	78	76
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**410**	435	405
Calcium	ppm	ASTM D5185m		**1584**	1309	1254
Phosphorus	ppm	ASTM D5185m		**886**	831	822
Zinc	ppm	ASTM D5185m		**1030**	972	973
Sulfur	ppm	ASTM D5185m		**3351**	2713	2735

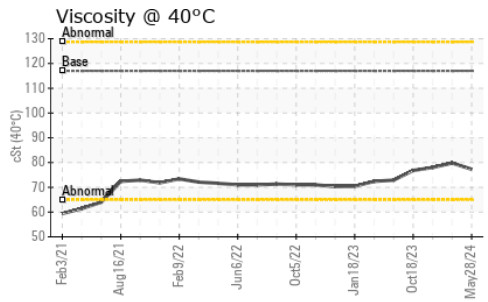
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>24	**7**	5	5
Sodium	ppm	ASTM D5185m	>21	**5**	2	7
Potassium	ppm	ASTM D5185m	>20	**0**	0	0

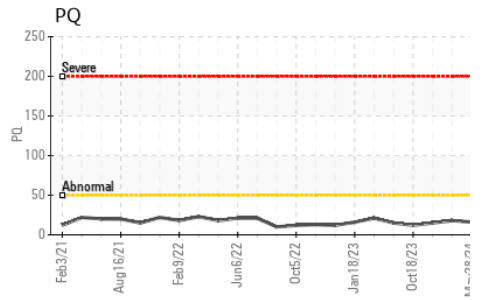
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>80000	**20996**	21012	10472
Particles >6µm		ASTM D7647	>5000	**1228**	392	339
Particles >14µm		ASTM D7647	>640	**84**	29	31
Particles >21µm		ASTM D7647	>160	**20**	10	10
Particles >38µm		ASTM D7647	>40	**0**	1	0
Particles >71µm		ASTM D7647	>10	**0**	1	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	**22/17/14**	22/16/12	21/16/12

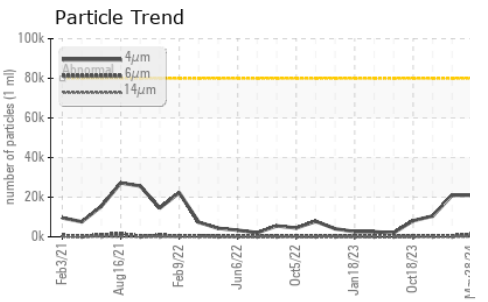
OIL ANALYSIS REPORT









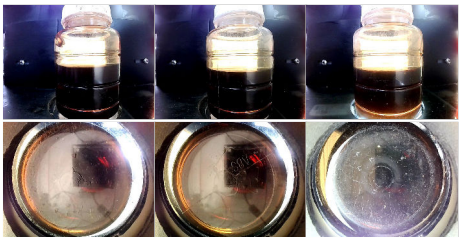


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**2.03**	1.14	1.00

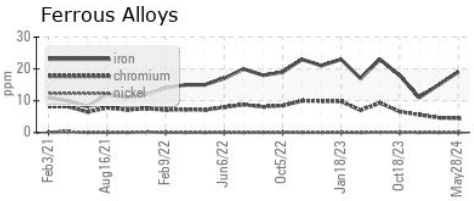
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

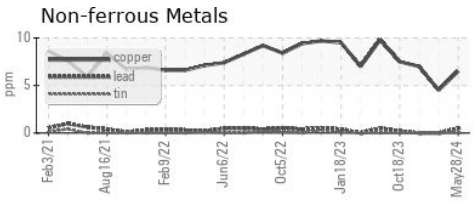
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	117	**77.3**	79.8	78.0

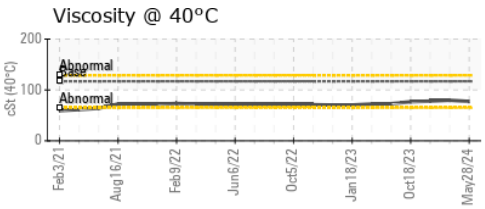
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

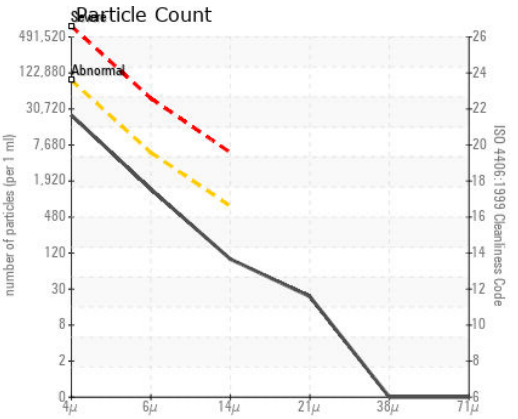


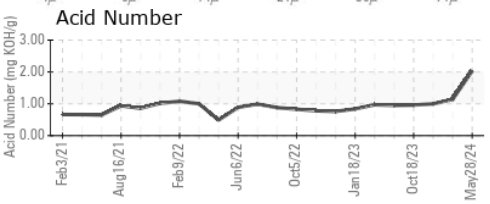
GRAPHS











Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212213
Lab Number : 06196572
Unique Number : 11058695
Test Package : CONST (Additional Tests: PQ)

Received : 31 May 2024
Tested : 03 Jun 2024
Diagnosed : 03 Jun 2024 - Don Baldridge

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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