



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 524K 1DW524KZHCE643734

Component
Front Differential

Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. 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		JR0199946	JR0125850	JR0088051
Sample Date		Client Info		05 Feb 2024	21 Jul 2022	07 Jun 2021
Machine Age	hrs	Client Info		16065	13720	11860
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

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

PQ		ASTM D8184		22	28	60
Iron	ppm	ASTM D5185m	>500	147	68	223
Chromium	ppm	ASTM D5185m	>10	1	<1	1
Nickel	ppm	ASTM D5185m	>10	<1	<1	1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	8	0	2
Lead	ppm	ASTM D5185m	>25	▲ 31	6	62
Copper	ppm	ASTM D5185m	>100	12	4	12
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

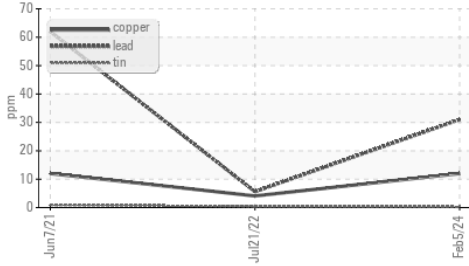
Silicon	ppm	ASTM D5185m	>75	71	7	15
Potassium	ppm	ASTM D5185m	>20	4	0	<1
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG

FLUID CONDITION

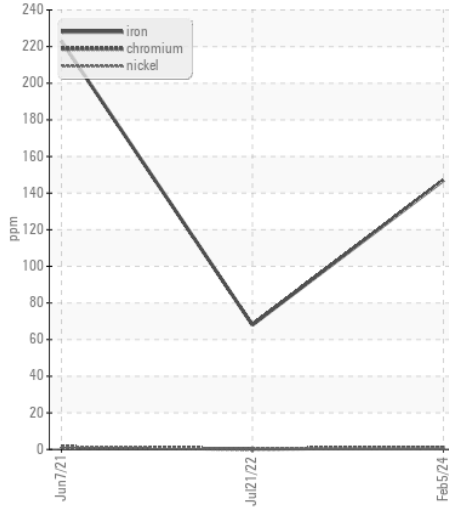
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		0	0	2
Boron	ppm	ASTM D5185m	6	6	5	42
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	<1	1
Manganese	ppm	ASTM D5185m		1	<1	2
Magnesium	ppm	ASTM D5185m	145	95	93	53
Calcium	ppm	ASTM D5185m	3570	3063	3513	2820
Phosphorus	ppm	ASTM D5185m	1290	886	995	862
Zinc	ppm	ASTM D5185m	1640	1237	1199	1038
Sulfur	ppm	ASTM D5185m		4020	3885	2769
Visc @ 40°C	cSt	ASTM D445	57.0	53.6	53.54	47.2

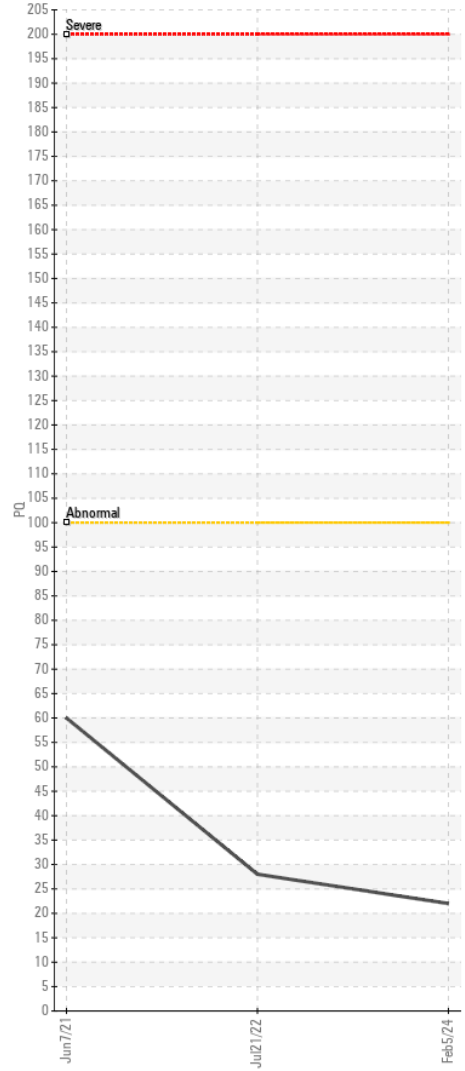
▲ Non-ferrous Metals



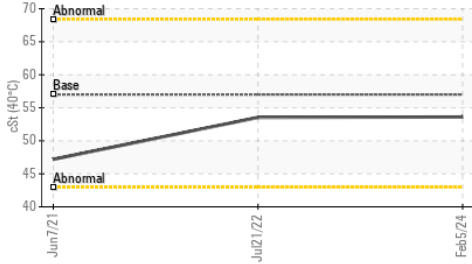
Ferrous Alloys



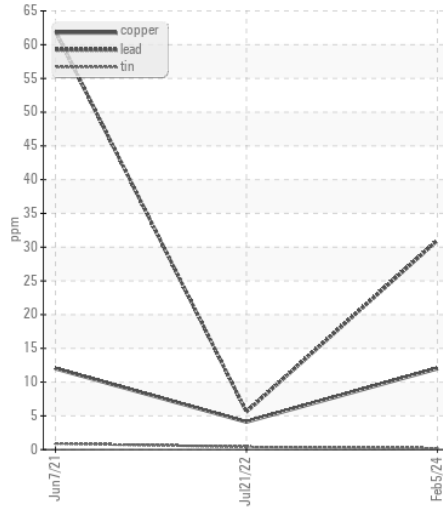
PQ



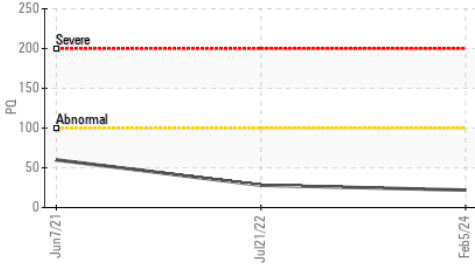
Viscosity @ 40°C



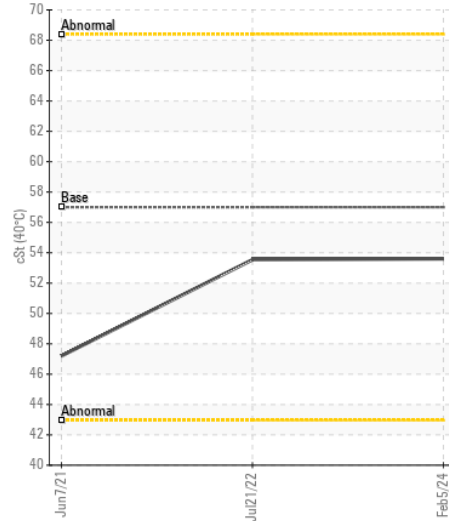
▲ Non-ferrous Metals



PQ



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0199946 **Received** : 07 Feb 2024
Lab Number : 06082738 **Tested** : 08 Feb 2024
Unique Number : 10870183 **Diagnosed** : 09 Feb 2024 - Sean Felton
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)