



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[W64350]
 Machine Id
JOHN DEERE 544K 1DW544KZHJF687167
 Component
Hydraulic System
 Fluid
JOHN DEERE HYDRAU (31 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: W64350)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0204241	JR0151278	JR0119321
Sample Date		Client Info		22 Feb 2024	08 Dec 2022	15 Feb 2022
Machine Age	hrs	Client Info		2139	1515	1066
Oil Age	hrs	Client Info		2139	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	N/A	Not Changed
Filter Changed		Client Info		Not Changed	N/A	Not Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

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

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184	>50	16	14	15
Iron	ppm	ASTM D5185m	>71	11	0	1
Chromium	ppm	ASTM D5185m	>11	▲ 13	0	6
Nickel	ppm	ASTM D5185m	>6	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		<1	0	<1
Aluminum	ppm	ASTM D5185m	>11	<1	3	1
Lead	ppm	ASTM D5185m	>13	<1	0	1
Copper	ppm	ASTM D5185m	>21	3	0	3
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

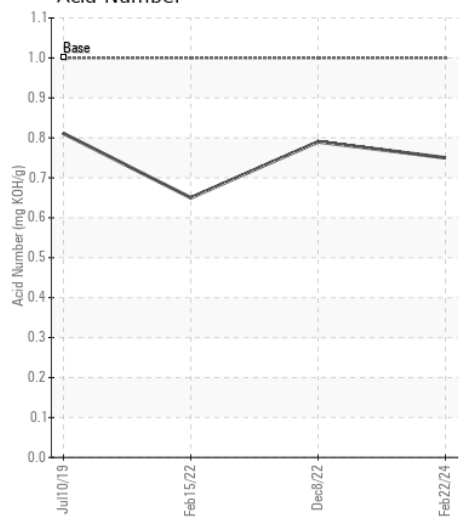
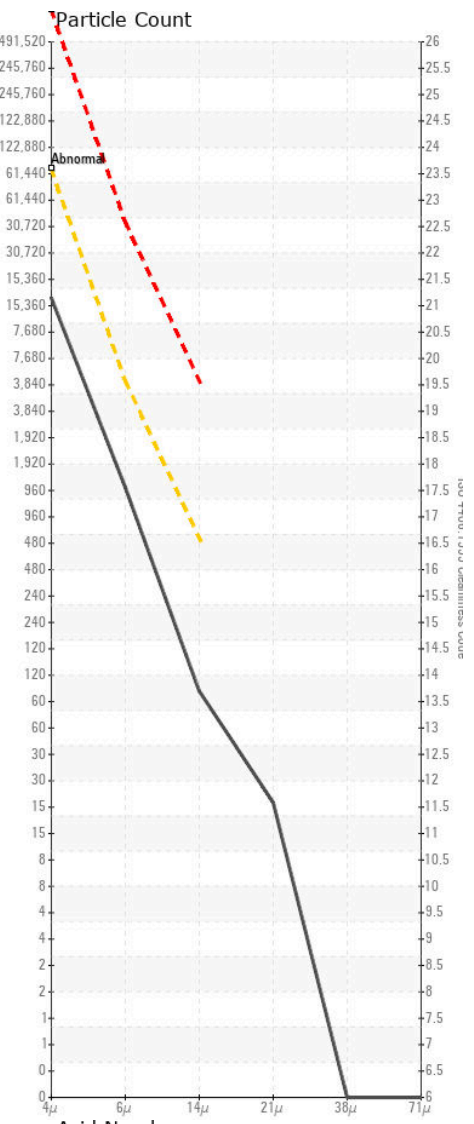
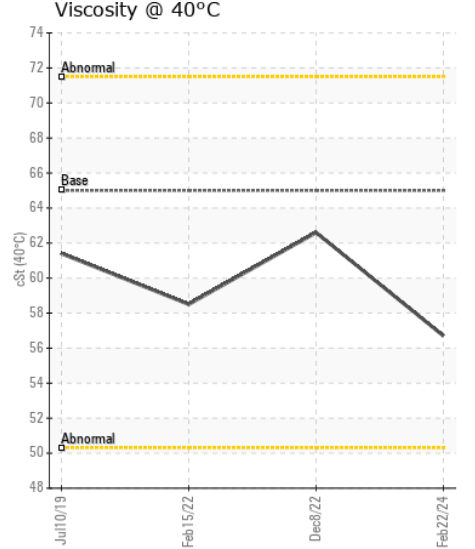
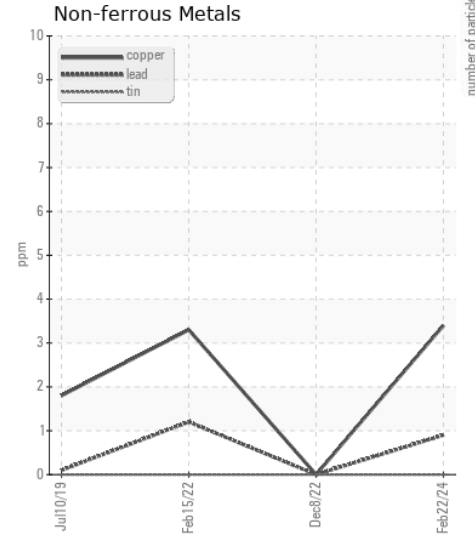
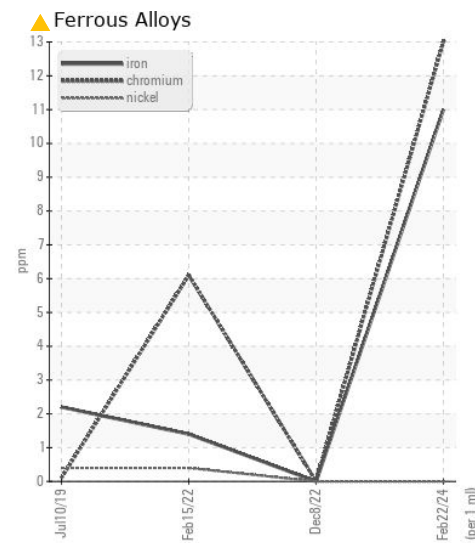
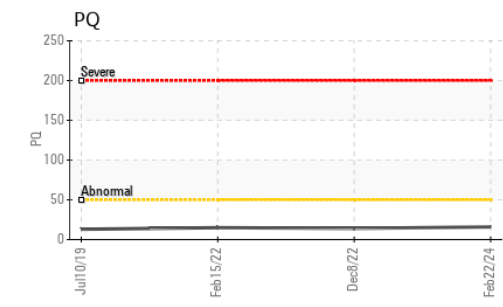
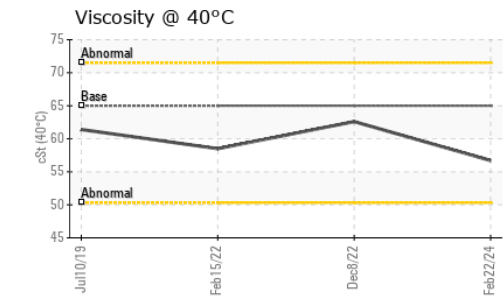
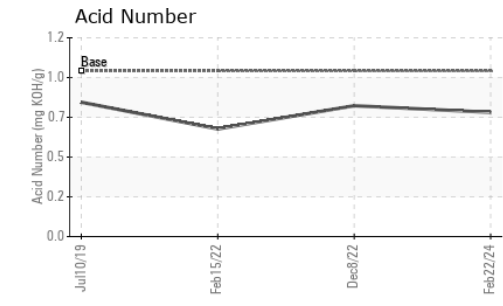
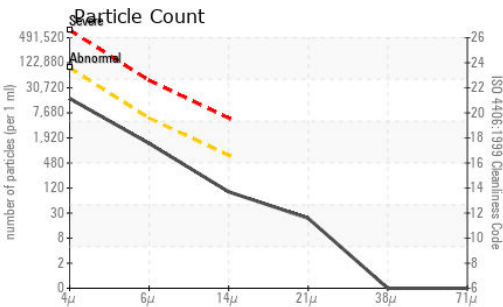
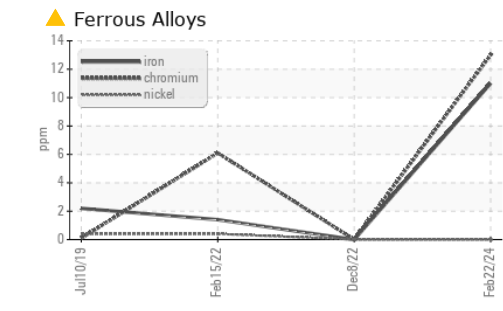
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>24	2	<1	2
Potassium	ppm	ASTM D5185m	>20	0	0	2
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	14795	21052	9646
Particles >6µm		ASTM D7647	>5000	1238	3361	497
Particles >14µm		ASTM D7647	>640	86	89	27
Particles >21µm		ASTM D7647	>160	20	16	4
Particles >38µm		ASTM D7647	>40	0	1	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/19/16	21/17/14	22/19/14	20/16/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>21	0	0	3
Boron	ppm	ASTM D5185m		0	8	0
Barium	ppm	ASTM D5185m		0	4	0
Molybdenum	ppm	ASTM D5185m		0	7	<1
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		16	22	16
Calcium	ppm	ASTM D5185m	87	421	132	452
Phosphorus	ppm	ASTM D5185m	727	605	669	667
Zinc	ppm	ASTM D5185m	900	908	874	917
Sulfur	ppm	ASTM D5185m	1500	1728	1691	1690
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.75	0.79	0.65
Visc @ 40°C	cSt	ASTM D445	65	56.7	62.6	58.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0204241 **Received** : 27 Feb 2024
Lab Number : 06101515 **Tested** : 28 Feb 2024
Unique Number : 10899745 **Diagnosed** : 29 Feb 2024 - Jonathan Hester
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)

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