



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Area

[46990]

Machine Id

JOHN DEERE 50G 1FF050GXTMH293996

Component

Hydraulic System

Fluid

JOHN DEERE HYDRAU (45 QTS)

RECOMMENDATION

Recommend drain oil if not already done. Reduce drain interval to 2000 hours or drain and flush and use recommended zinc free oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0214443	JR0196181	JR0176249
Sample Date		Client Info		22 May 2024	18 Dec 2023	29 Jun 2023
Machine Age	hrs	Client Info		2968	2430	1926
Oil Age	hrs	Client Info		2464	504	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	19	13	16
Iron	ppm	ASTM D5185m	>32	9	6	9
Chromium	ppm	ASTM D5185m	>9	<1	0	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>9	<1	<1	<1
Lead	ppm	ASTM D5185m	>28	<1	<1	0
Copper	ppm	ASTM D5185m	>50	4	3	5
Tin	ppm	ASTM D5185m	>5	0	<1	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

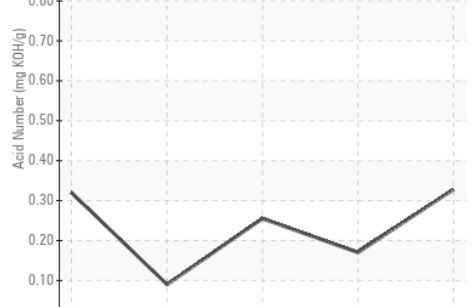
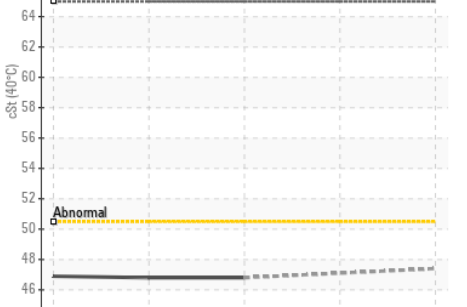
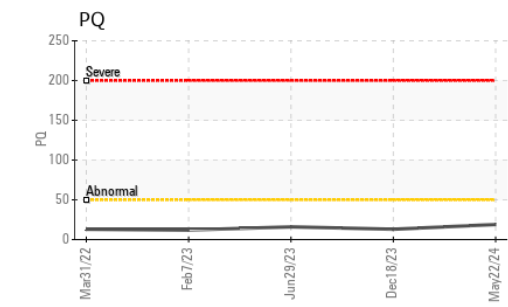
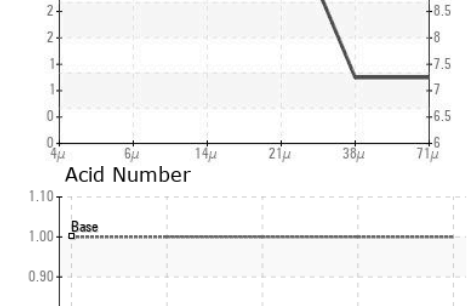
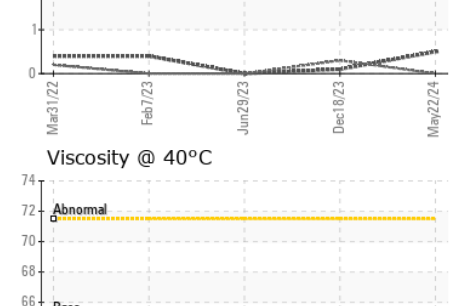
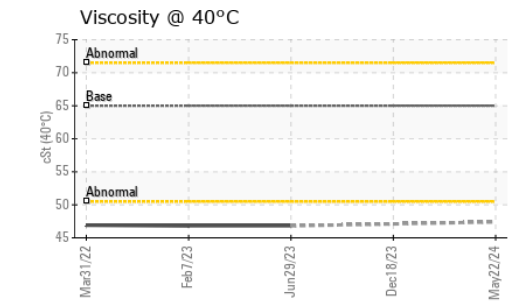
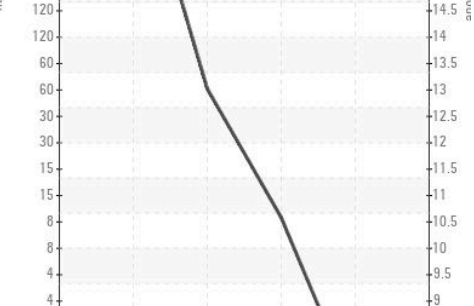
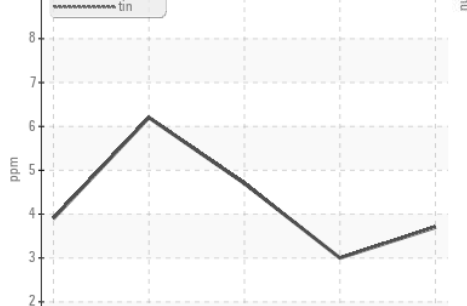
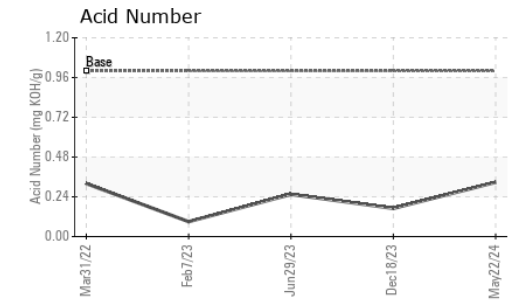
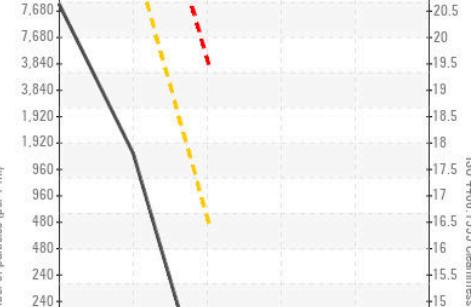
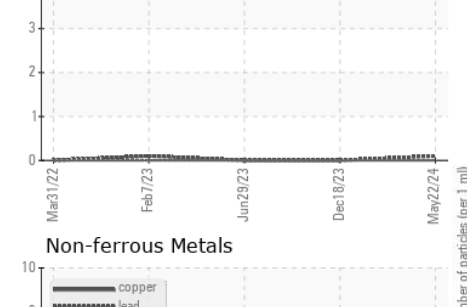
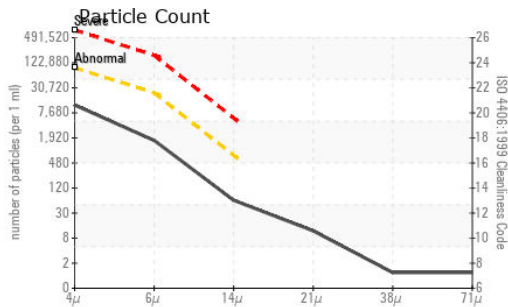
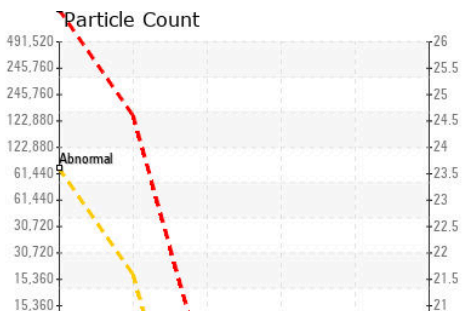
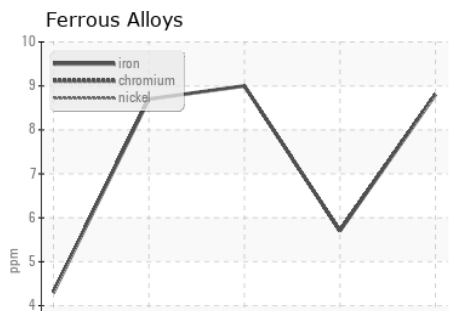
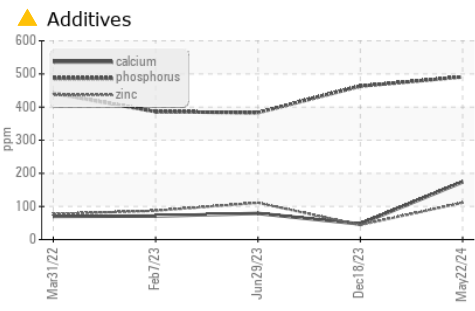
The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	3	2	2
Potassium	ppm	ASTM D5185m	>20	0	2	1
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	10303	18142	25174
Particles >6µm		ASTM D7647	>20000	1463	4517	6424
Particles >14µm		ASTM D7647	>640	54	308	296
Particles >21µm		ASTM D7647	>160	10	70	49
Particles >38µm		ASTM D7647	>40	1	1	1
Particles >71µm		ASTM D7647	>10	1	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	21/18/13	21/19/15	22/20/15
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

FLUID CONDITION

Zinc level above manufacturer's recommendations. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m	>21	1	<1	2
Boron	ppm	ASTM D5185m		2	4	10
Barium	ppm	ASTM D5185m		0	0	15
Molybdenum	ppm	ASTM D5185m		2	<1	3
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		10	13	37
Calcium	ppm	ASTM D5185m	87	174	47	79
Phosphorus	ppm	ASTM D5185m	727	491	463	383
Zinc	ppm	ASTM D5185m	900	▲ 111	44	▲ 111
Sulfur	ppm	ASTM D5185m	1500	797	552	1260
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.328	0.17	0.255
Visc @ 40°C	cSt	ASTM D445	65	47.4	---	46.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0214443
Lab Number : 06189709
Unique Number : 11046461
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)