



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
JOHN DEERE 470G 1FF470GXLJF236036
 Component
Hydraulic System
 Fluid
HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)

RECOMMENDATION

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0214059	JR0213885	JR0200807
Sample Date		Client Info		26 Jun 2024	20 May 2024	22 Feb 2024
Machine Age	hrs	Client Info		5696	5542	5149
Oil Age	hrs	Client Info		5696	5542	5149
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

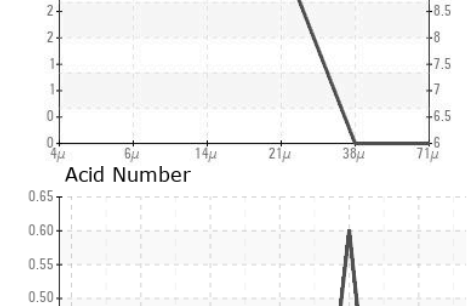
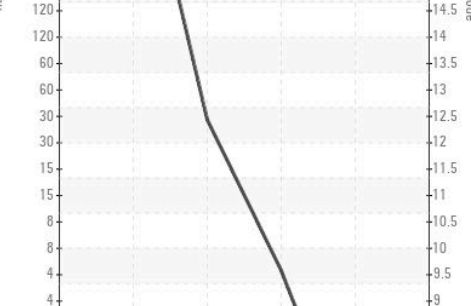
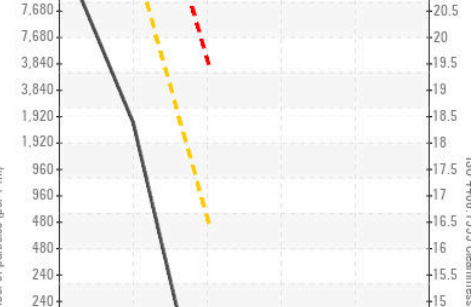
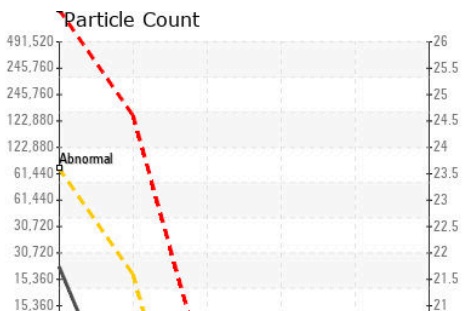
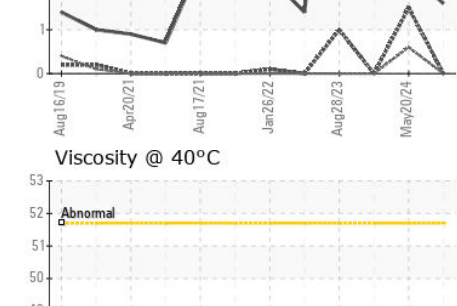
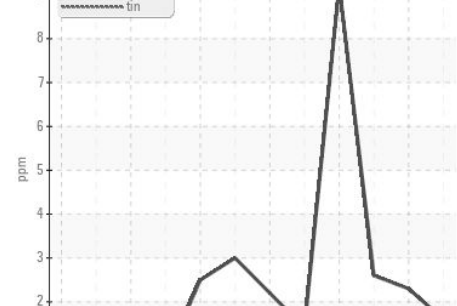
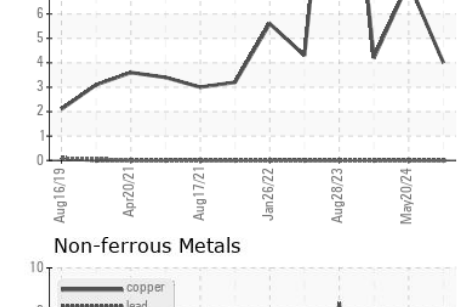
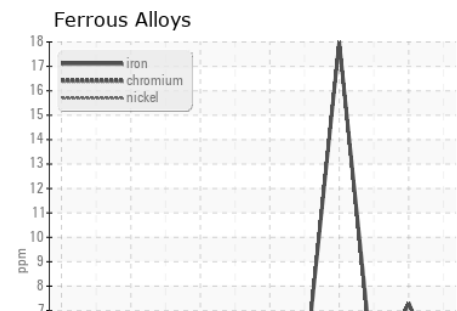
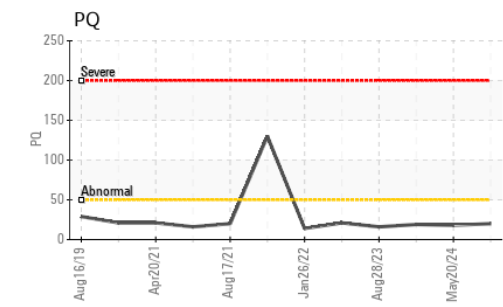
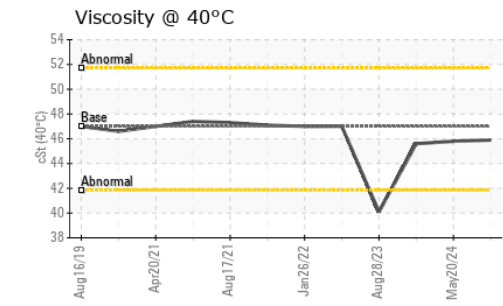
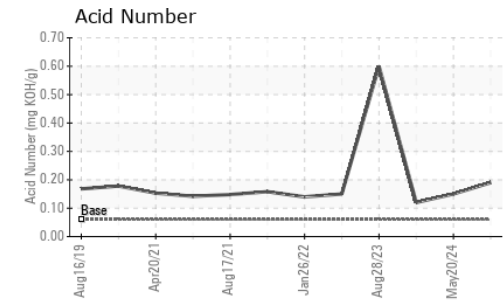
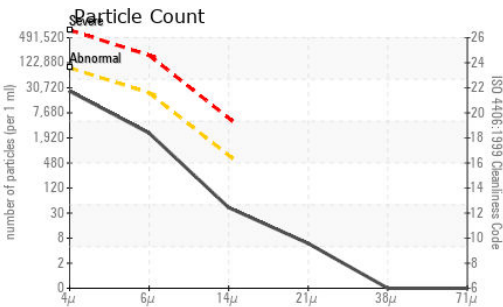
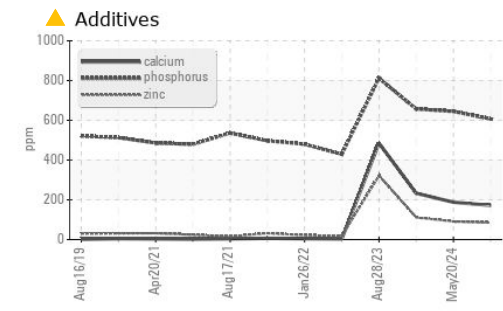
PQ		ASTM D8184	>50	20	18	19
Iron	ppm	ASTM D5185m	>32	4	7	4
Chromium	ppm	ASTM D5185m	>9	0	0	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>9	0	<1	0
Lead	ppm	ASTM D5185m	>28	0	2	0
Copper	ppm	ASTM D5185m	>50	2	2	3
Tin	ppm	ASTM D5185m	>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

Silicon	ppm	ASTM D5185m	>11	1	2	1
Potassium	ppm	ASTM D5185m	>20	<1	2	0
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	22125	34288	▲ 30746
Particles >6µm		ASTM D7647	>20000	2188	1634	1175
Particles >14µm		ASTM D7647	>640	36	23	10
Particles >21µm		ASTM D7647	>160	5	4	3
Particles >38µm		ASTM D7647	>40	0	0	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	22/18/12	22/18/12	▲ 22/17/10
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

Sodium	ppm	ASTM D5185m	>21	<1	<1	0
Boron	ppm	ASTM D5185m		5	5	7
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		0	1	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		0	3	4
Calcium	ppm	ASTM D5185m		172	188	233
Phosphorus	ppm	ASTM D5185m	827	607	645	657
Zinc	ppm	ASTM D5185m	0	▲ 85	▲ 91	111
Sulfur	ppm	ASTM D5185m	13	264	305	285
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.19	0.15	0.12
Visc @ 40°C	cSt	ASTM D445	47	45.9	45.8	45.6



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0214059 **Received** : 27 Jun 2024
Lab Number : 06222254 **Tested** : 28 Jun 2024
Unique Number : 11100451 **Diagnosed** : 28 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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 F:

Certificate L2367
 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)