

## NORMAL WEAR NORMAL CONTAMINATION FLUID CONDITION NORMAL



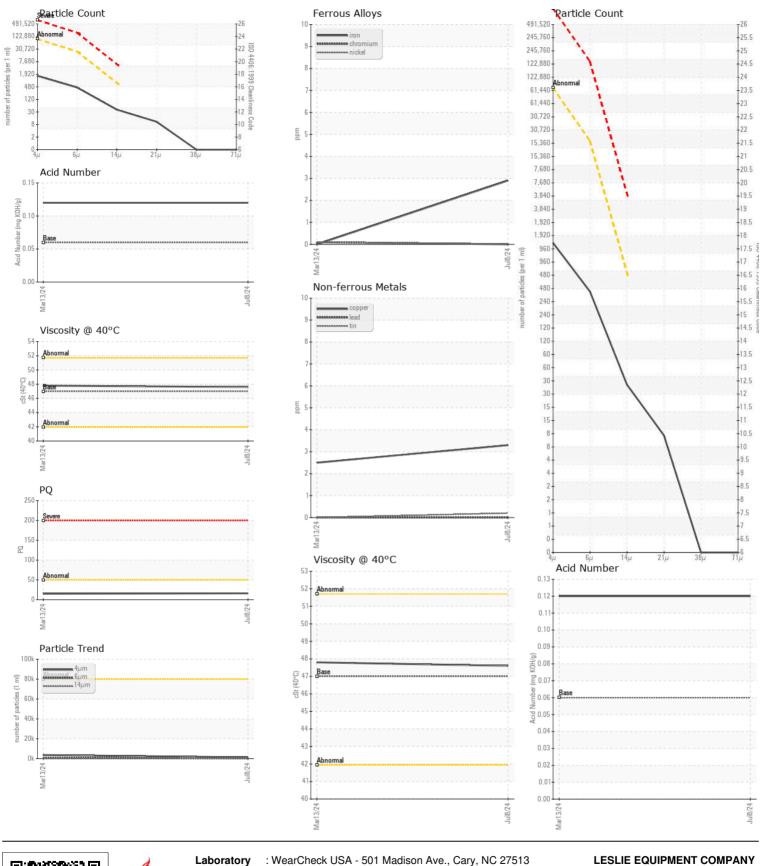
DECOMMENDATION

## Store 4 - Fairmont JOHN DEERE 210P 1FF210PALPF000788 Hydraulic System

HITACHI HYDRAULIC SUPER EX 46HN (63 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn
	Sample Number		Client Info	
Resample at the next service interval to monitor.	Sample Date		Client Info	
	Machine Age	hrs	Client Info	
	Oil Age	hrs	Client Info	
	Filter Age	hrs	Client Info	
	Oil Changed		Client Info	
	Filter Changed		Client Info	
	Sample Status			
WEAR	PQ		ASTM D8184	>50
	Iron	ppm	ASTM D5185m	>32
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>9
	Nickel	ppm	ASTM D5185m	
	Titanium	ppm	ASTM D5185m	
	Silver	ppm	ASTM D5185m	
	Aluminum	ppm	ASTM D5185m	>9
	Lead	ppm	ASTM D5185m	>28
	Copper	ppm	ASTM D5185m	>50
	Tin	ppm	ASTM D5185m	>5
	Vanadium	ppm	ASTM D5185m	
	White Metal	scalar	*Visual	NONE
	Yellow Metal	scalar	*Visual	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>11
The system cleanliness is acceptable for your target ISO 4406	Potassium	ppm	ASTM D5185m	
cleanliness code. The system and fluid cleanliness is acceptable.	Water		WC Method	>0.075
	Particles >4µm		ASTM D7647	
	Particles >6µm		ASTM D7647	>20000
	Particles >14µm		ASTM D7647	
	Particles >21µm		ASTM D7647	>160
	Particles >38µm		ASTM D7647	
	Particles >71µm		ASTM D7647	>10
	Oil Cleanliness		ISO 4406 (c)	
	Silt	scalar	*Visual	NONE
	Debris	scalar	*Visual	NONE
	Sand/Dirt	scalar	*Visual	NONE
	Appearance Odor	scalar scalar	*Visual	NORML
			*Visual	NORML
	Emulsified Water	scalar	*Visual	>0.075
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>21
	Boron	ppm	ASTM D5185m	
The AN level is acceptable for this fluid. The condition of the oil is	Barium	ppm	ASTM D5185m	
suitable for further service.	Molybdenum	ppm	ASTM D5185m	
	Manganese	ppm	ASTM D5185m	
	Magnesium	ppm	ASTM D5185m	
	Calcium	ppm	ASTM D5185m	

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0050222	LEC0046734	
Sample Date		Client Info		08 Jul 2024	13 Mar 2024	
Machine Age	hrs	Client Info		583	488	
Oil Age	hrs	Client Info		583	488	
Filter Age	hrs	Client Info		583	488	
Oil Changed		Client Info		Not Changd	Not Changd	
Filter Changed		Client Info		Not Changd	Not Changd	
Sample Status				NORMAL	NORMAL	
PQ		ASTM D8184	>50	16	15	
Iron	ppm	ASTM D5185m	>32	3	0	
Chromium	ppm	ASTM D5185m	>9	0	<1	
Nickel	ppm	ASTM D5185m	>5	0	<1	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>9	<1	0	
Lead	ppm	ASTM D5185m	>28	0	0	
Copper	ppm	ASTM D5185m	>50	3	2	
Tin	ppm	ASTM D5185m	>5	<1	0	
Vanadium	ppm	ASTM D5185m		0	0	
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Silicon	ppm	ASTM D5185m	>11	1	<1	
Potassium	ppm	ASTM D5185m	>20	2	<1	
Water	ppm	WC Method	>0.075	– NEG	NEG	
Particles >4µm		ASTM D7647	>80000	1393	3674	
Particles >6µm		ASTM D7647	>20000	388	990	
Particles >14µm		ASTM D7647	>640	34	86	
Particles >21µm		ASTM D7647	>160	9	21	
Particles >38µm		ASTM D7647	>40	0	0	
Particles >71µm		ASTM D7647	>10	0	0	
Oil Cleanliness		ISO 4406 (c)	>23/21/16	18/16/12	19/17/14	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.075	NEG	NEG	
Sodium	nom	ASTM D5185m	<b>_</b> 21	2	2	
Boron	ppm ppm	ASTM D5185m	>21	6	0	
Barium		ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		1	0	
	ppm	ASTM D5185m		0	<1	
Manganese Magnesium	ppm ppm	ASTM D5185m		11	2	
Calcium	ppm	ASTM D5185m		79	42	
Phosphorus	ppm	ASTM D5185m	827	587	587	
Zinc	ppm	ASTM D5185m	027	61	33	
Sulfur	ppm	ASTM D5185m	13	362	158	
Acid Number (AN)	mg KOH/g	ASTM D3103III	0.06	0.12	0.12	
Visc @ 40°C	cSt	ASTM D445	47	47.6	47.8	



Sample No. 105 TENNIS CENTER DR. : LEC0050222 Received : 10 Jul 2024 Œ Lab Number : 06232221 : 11 Jul 2024 MARIETTA, OH Tested : 11 Jul 2024 - Wes Davis US 45750-9765 Unique Number : 11115714 Diagnosed Test Package : CONST (Additional Tests: PQ) Contact: LEANNE KENDALL Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. KendalLeanne@lec1.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (740)373-5570

Submitted By: JOHN MARTIN Page 2 of 2