

OIL ANALYSIS REPORT

WEAR NORMAL CONTAMINATION NORMAL **FLUID CONDITION** NORMAL

[127465] **JOHN DEERE 648L 1DW648LBHNF715682** Hydraulic System

JOHN DEERE HYDRAU (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

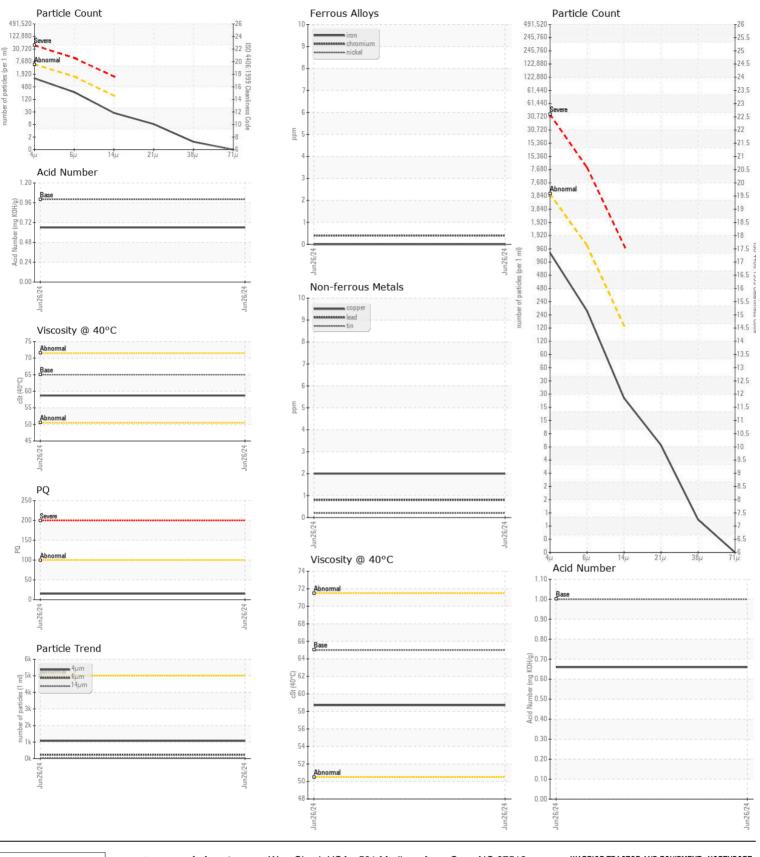
CONTAMINATION

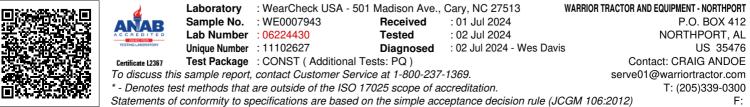
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

UID CONDITION FI.

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0007943		
Sample Date		Client Info		26 Jun 2024		
Machine Age	hrs	Client Info		440		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		Changed		
Sample Status				NORMAL		
PQ		ASTM D8184		15		
Iron	ppm	ASTM D5185m	>20	0		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>10	<1		
Lead	ppm	ASTM D5185m	>10	<1		
Copper	ppm	ASTM D5185m	>75	2		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
0'''			00			
Silicon	ppm	ASTM D5185m	>20	4		
Potassium	ppm	ASTM D5185m	>20	3		
Water		WC Method	>0.1	NEG		
Particles >4µm			>5000	1072		
Particles >6µm		ASTM D7647	>1300	235		
Particles >14µm		ASTM D7647	>160 >40	24 7		
Particles >21µm		ASTM D7647		1		
Particles >38µm		ASTM D7647	>10			
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness	a a a la v	ISO 4406 (c)	>19/17/14	17/15/12		
Silt Debris	scalar scalar	*Visual *Visual	NONE NONE	NONE NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water		*Visual	>0.1	NEG		
	Jouran					
Sodium	ppm	ASTM D5185m		<1		
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m		0		
Calcium	ppm	ASTM D5185m	87	124		
Phosphorus	ppm	ASTM D5185m	727	711		
Zinc	ppm	ASTM D5185m	900	945		
Sulfur	ppm	ASTM D5185m	1500	2085		
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.66		
Visc @ 40°C	cSt	ASTM D445	65	58.7		





Contact/Location: CRAIG ANDOE - WARNOR Page 2 of 2