

## Machine Id JOHN DEERE 644P 1DW644PAJMLZ13178 Component Rear Differential

## JOHN DEERE HY-GARD HYD/TRANS (--- QTS)

JOHN DEERE HY-GARD HYD/IRANS ( Q	IS)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WE0006275	WE0001052	
	Sample Date		Client Info		26 Feb 2024	17 Jan 2022	
	Machine Age	hrs	Client Info		6442	653	
	Oil Age	hrs	Client Info		1	653	
	Filter Age	hrs	Client Info		1	653	
	Oil Changed		Client Info		Changed	Not Changd	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	ABNORMAL	
WEAR	PQ		ASTM D8184		9		
All component wear rates are normal.	Iron	ppm	ASTM D5185m	>500	<1	161	
	Chromium	ppm	ASTM D5185m	>10	0	<1	
	Nickel	ppm	ASTM D5185m	>10	0	<1	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m	>25	<1	3	
	Lead	ppm	ASTM D5185m	>25	<1	<b>1</b>	
	Copper	ppm	ASTM D5185m	>100	0	🔺 153	
	Tin	ppm	ASTM D5185m	>10	0	8	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>75	6	7	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	<1	2	
	Water		WC Method	>.2	NEG	NEG	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	A MODER	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>.2	NEG	NEG	
LUID CONDITION	Sodium	ppm	ASTM D5185m		<1	0	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m	6	6	2	
	Barium	ppm	ASTM D5185m	0	0	6	
	Molybdenum	ppm	ASTM D5185m	0	0	<1	
	Manganese	ppm	ASTM D5185m		<1	4	
	Magnesium	ppm	ASTM D5185m	145	112	90	
	Calcium	ppm	ASTM D5185m	3570	3382	3173	
	Phosphorus	ppm	ASTM D5185m	1290	1105	984	
	Zinc	ppm	ASTM D5185m	1640	1315	1180	
	Sulfur	ppm	ASTM D5185m		3871	2959	
		-					

Visc @ 40°C

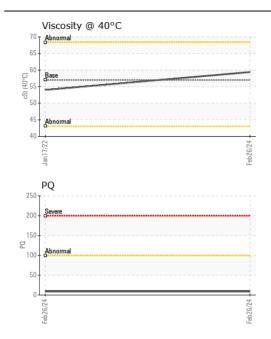
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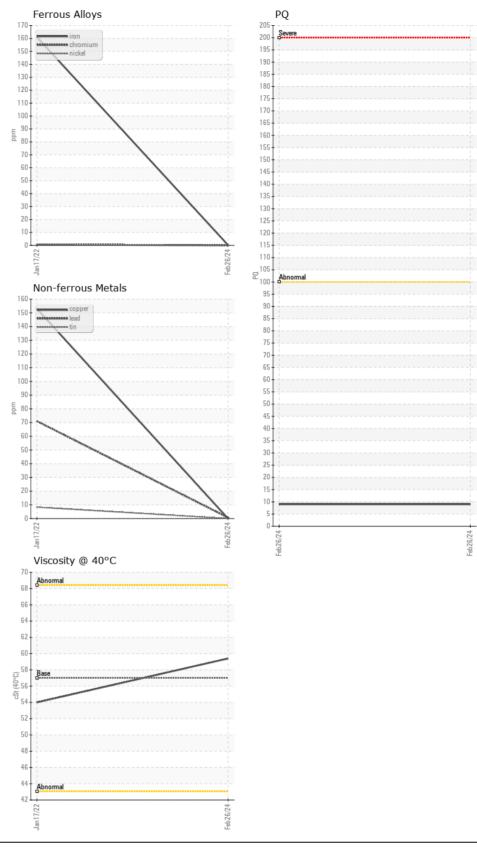
Contact/Location: PAMELA CLARK - WARNOR

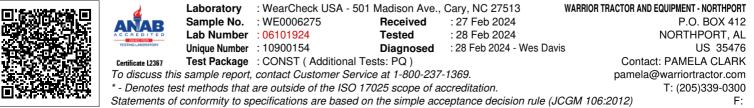
59.4

54.0

ASTM D445 57.0







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