

JOHN DEERE 644P 1DW644PATPLZ18039

Component Brake Fluid

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

JOHN DELNE HT-GAND HTD/ I		(13)					
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WE0006288	WE0005737	
	Sample Date		Client Info		23 Feb 2024	20 Nov 2023	
	Machine Age	hrs	Client Info		1559	1043	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Not Changd	Changed	
	Sample Status				NORMAL	ABNORMAL	
WEAD						~=	
WEAR	PQ		ASTM D8184		13	27	
All component wear rates are normal.	Iron	ppm	ASTM D5185m		2	33	
	Chromium	ppm	ASTM D5185m		0	0	
	Nickel	ppm	ASTM D5185m	>5	0	<1	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m		<1	2	
	Lead	ppm	ASTM D5185m		2	<u> </u>	
	Copper	ppm	ASTM D5185m		5	2	
	Tin	ppm	ASTM D5185m	>5	<1	0	
	Vanadium	ppm	ASTM D5185m		0	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>400	5	237	
There is no indication of any contamination in the fluid.	Potassium	ppm	ASTM D5185m		0	0	
	Water	1-1-	WC Method	>0.2	NEG	NEG	
	Silt	scalar	*Visual	NONE	NONE	MODER	
	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	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1	12	
The condition of the fluid is acceptable for the time in service.	Boron	ppm	ASTM D5185m		0	125	
	Barium	ppm	ASTM D5185m		0	2	
	Molybdenum	ppm	ASTM D5185m	0	0	267	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m		108	482	
	Calcium	ppm	ASTM D5185m	3570	3445	1390	
	Phosphorus	ppm	ASTM D5185m		1069	752	
	Zinc	ppm	ASTM D5185m	1640	1284	821	
	Sulfur	ppm	ASTM D5185m		3546	2245	

Visc @ 40°C

cSt

ASTM D445 57.0

Contact/Location: PAMELA CLARK - WARNOR

45.3

60.7

