

Current

JR0217606

History1

History2

JOHN DEERE 644 P 1DW644PALPLX18577

Hydraulic System

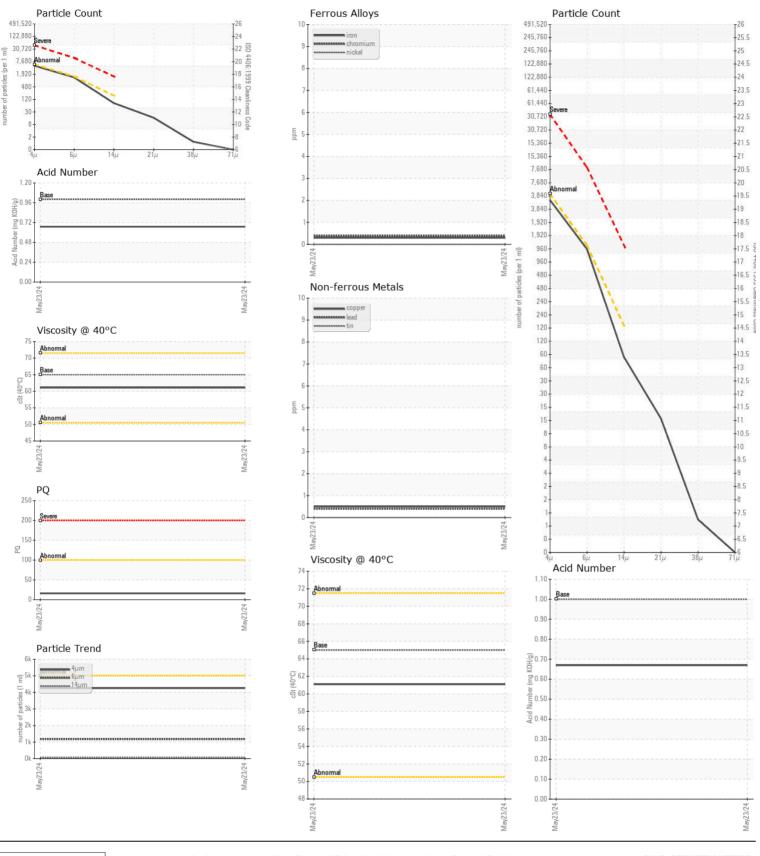
JOHN DEERE HYDRAU (--- GAL)

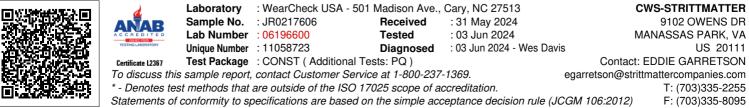
RECOMMENDATION	Test	UOM	Method	Limit/Abn
Description of the most service interval to manifest	Sample Number		Client Info	
Resample at the next service interval to monitor.	Sample Date		Client Info	
	Machine Age	hrs	Client Info	
	Oil Age	hrs	Client Info	
	Filter Age	hrs	Client Info	
	Oil Changed		Client Info	
	Filter Changed		Client Info	
	Sample Status			
WEAR	PQ		ASTM D8184	
	Iron	ppm	ASTM D5185m	>20
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>10
	Nickel	ppm	ASTM D5185m	>10
	Titanium	ppm	ASTM D5185m	
	Silver	ppm	ASTM D5185m	
	Aluminum	ppm	ASTM D5185m	>10
	Lead	ppm	ASTM D5185m	>10
	Copper	ppm	ASTM D5185m	>75
	Tin	ppm	ASTM D5185m	>10
	Vanadium			
	vanadium	ppm	ASTM D5185m	
	White Metal	ppm scalar	*Visual	NONE
				NONE NONE
CONTAMINATION	White Metal Yellow Metal	scalar scalar	*Visual	-
CONTAMINATION	White Metal	scalar	*Visual *Visual	NONE >20
The system cleanliness is acceptable for your target ISO 4406	White Metal Yellow Metal Silicon	scalar scalar ppm	*Visual *Visual ASTM D5185m	NONE >20 >20
	White Metal Yellow Metal Silicon Potassium	scalar scalar ppm	*Visual *Visual ASTM D5185m ASTM D5185m	NONE >20 >20 >0.1
The system cleanliness is acceptable for your target ISO 4406	White Metal Yellow Metal Silicon Potassium Water	scalar scalar ppm	*Visual *Visual ASTM D5185m ASTM D5185m WC Method	NONE >20 >20 >0.1 >5000
The system cleanliness is acceptable for your target ISO 4406	White Metal Yellow Metal Silicon Potassium Water Particles >4µm	scalar scalar ppm	*Visual *Visual ASTM D5185m ASTM D5185m WC Method ASTM D7647	NONE >20 >20 >0.1 >5000 >1300
The system cleanliness is acceptable for your target ISO 4406	White Metal Yellow Metal Silicon Potassium Water Particles >4µm Particles >6µm Particles >14µm	scalar scalar ppm	*Visual *Visual ASTM D5185m ASTM D5185m WC Method ASTM D7647 ASTM D7647	NONE >20 >20 >0.1 >5000 >1300
The system cleanliness is acceptable for your target ISO 4406	White Metal Yellow Metal Silicon Potassium Water Particles >4µm Particles >6µm Particles >14µm Particles >21µm	scalar scalar ppm	*Visual *Visual ASTM D5185m ASTM D5185m WC Method ASTM D7647 ASTM D7647	NONE >20 >20 >0.1 >5000 >1300 >160 >40
The system cleanliness is acceptable for your target ISO 4406	White Metal Yellow Metal Silicon Potassium Water Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	scalar scalar ppm	*Visual *Visual ASTM D5185m WC Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	NONE >20 >20 >0.1 >5000 >1300 >160 >40 >10
The system cleanliness is acceptable for your target ISO 4406	White Metal Yellow Metal Silicon Potassium Water Particles >4µm Particles >6µm Particles >14µm Particles >21µm	scalar scalar ppm	*Visual *Visual ASTM D5185m ASTM D5185m WC Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	NONE >20 >20 >0.1 >5000 >1300 >160 >40 >10 >3
The system cleanliness is acceptable for your target ISO 4406	White Metal Yellow Metal Silicon Potassium Water Particles >4µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	scalar scalar ppm	*Visual *Visual ASTM D5185m ASTM D5185m WC Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	NONE >20 >20 >0.1 >5000 >1300 >160 >40 >10 >3
The system cleanliness is acceptable for your target ISO 4406	White Metal Yellow Metal Silicon Potassium Water Particles >4µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness	scalar scalar ppm ppm	*Visual *Visual ASTM D5185m ASTM D5185m WC Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c)	NONE >20 >0.1 >5000 >1300 >160 >40 >10 >3 >19/17/14
The system cleanliness is acceptable for your target ISO 4406	White Metal Yellow Metal Silicon Potassium Water Particles >4µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness Silt	scalar scalar ppm ppm scalar	*Visual *Visual ASTM D5185m ASTM D5185m WC Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual	NONE >20 >0.1 >5000 >1300 >160 >40 >10 >3 >19/17/14 NONE
The system cleanliness is acceptable for your target ISO 4406	White Metal Yellow Metal Silicon Potassium Water Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness Silt Debris	scalar scalar ppm ppm scalar scalar	*Visual *Visual ASTM D5185m ASTM D5185m WC Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual	NONE >20 >0.1 >5000 >1300 >160 >40 >10 >3 >19/17/14 NONE NONE
The system cleanliness is acceptable for your target ISO 4406	White Metal Yellow Metal Silicon Potassium Water Particles >4µm Particles >14µm Particles >14µm Particles >38µm Particles >71µm Oil Cleanliness Silt Debris Sand/Dirt	scalar scalar ppm ppm scalar scalar scalar	*Visual *Visual ASTM D5185m ASTM D5185m WC Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual *Visual	NONE >20 >20 >0.1 >5000 >1300 >160 >40 >10 >3 >19/17/14 NONE NONE NONE
The system cleanliness is acceptable for your target ISO 4406	White Metal Yellow Metal Silicon Potassium Water Particles >4µm Particles >14µm Particles >14µm Particles >14µm Particles >38µm Particles >71µm Oil Cleanliness Silt Debris Sand/Dirt Appearance	scalar scalar ppm ppm scalar scalar scalar scalar	*Visual *Visual ASTM D5185m ASTM D5185m WC Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) *Visual *Visual *Visual	NONE >20 >20 >0.1 >5000 >1300 >160 >40 >10 >3 >19/17/14 NONE NONE NONE NONE

FLUID CONDITION

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

Sample Date		Client Info		23 May 2024	
Machine Age	hrs	Client Info		457	
Oil Age	hrs	Client Info		0	
Filter Age	hrs	Client Info		0	
Oil Changed		Client Info		Not Changd	
Filter Changed		Client Info		Not Changd	
Sample Status				NORMAL	
PQ		ASTM D8184		16	
Iron	ppm	ASTM D5185m	>20	<1	
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	0	
Lead	ppm	ASTM D5185m	>10	<1	
Copper	ppm	ASTM D5185m	>75	<1	
Tin	ppm	ASTM D5185m	>10	0	
Vanadium	ppm	ASTM D5185m		0	
White Metal	scalar	*Visual	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	
Silicon	ppm	ASTM D5185m	>20	<1	
Potassium	ppm	ASTM D5185m	>20	5	
Water		WC Method	>0.1	NEG	
Particles >4µm		ASTM D7647	>5000	4254	
Particles >6µm		ASTM D7647	>1300	1179	
Particles >14µm		ASTM D7647	>160	70	
Particles >21µm		ASTM D7647	>40	14	
Particles >38µm		ASTM D7647	>10	1	
Particles >71µm		ASTM D7647	>3	0	
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/13	
Silt	scalar	*Visual	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.1	NEG	
Sodium	nom	ASTM D5185m		3	
Boron	ppm	ASTM D5185m		0	
Barium	ppm	ASTM D5185m		0	
Molybdenum	ppm ppm	ASTM D5185m		0	
•				0	
Manganese Magnesium	ppm	ASTM D5185m		1	
Calcium	ppm	ASTM D5185m	87		
	ppm	ASTM D5185m		145 679	
Phosphorus	ppm	ASTM D5185m ASTM D5185m	727 900	679 969	
Zinc Sulfur	ppm	ASTM D5185m		868 1931	
Acid Number (AN)	ppm mg KOH/g	ASTM D5185III ASTM D8045	1500 1.0		
Visc @ 40°C	cSt	ASTM D6045 ASTM D445	65	0.67 61.1	
130 @ 40 0	001	A011W D440	00		





Contact/Location: EDDIE GARRETSON - CWSMAS

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