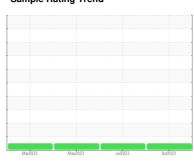


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



JOHN DEERE 136

Component **Hydraulic System**

JOHN DEERE (--- QTS)

DIAGNOSIS

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.

Fluid Condition

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

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		JR0135339	JR0135382	JR0135389
Sample Date		Client Info		25 Oct 2023	18 Jul 2023	11 May 2023
Machine Age	hrs	Client Info		2000	1500	1006
Oil Age	hrs	Client Info		2000	1500	1006
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		8	14	12
Iron	ppm	ASTM D5185m	>20	<1	<1	<1
Chromium	ppm	ASTM D5185m	>10	2	1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	<1	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	<1	0	<1
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 25	history1	history2
	ppm		limit/base			
Boron		ASTM D5185m	limit/base	25	2	3
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	25 0	2	3
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	25 0 <1	2 0 <1	3 0 <1
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	25 0 <1 0	2 0 <1 <1	3 0 <1 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	25 0 <1 0	2 0 <1 <1 7	3 0 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	25 0 <1 0 0 839	2 0 <1 <1 7 250	3 0 <1 0 1 255
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	25 0 <1 0 0 839 719	2 0 <1 <1 7 250 679	3 0 <1 0 1 255 662
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	25 0 <1 0 0 839 719 926	2 0 <1 <1 7 250 679 906	3 0 <1 0 1 255 662 895
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	25 0 <1 0 0 839 719 926 2611	2 0 <1 <1 7 250 679 906 2347	3 0 <1 0 1 255 662 895 2389
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	25 0 <1 0 0 839 719 926 2611	2 0 <1 <1 7 250 679 906 2347 history1	3 0 <1 0 1 255 662 895 2389 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >20	25 0 <1 0 0 839 719 926 2611 current	2 0 <1 <1 7 250 679 906 2347 history1	3 0 <1 0 1 255 662 895 2389 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm	ASTM D5185m	limit/base >20	25 0 <1 0 0 839 719 926 2611 current 2	2 0 <1 <1 7 250 679 906 2347 history1 <1	3 0 <1 0 1 255 662 895 2389 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185m	limit/base >20 >20	25 0 <1 0 0 839 719 926 2611 current 2 2	2 0 <1 <1 7 250 679 906 2347 history1 <1	3 0 <1 0 1 255 662 895 2389 history2 1 2 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm	ASTM D5185m	limit/base >20 >20 limit/base	25 0 <1 0 0 839 719 926 2611 current 2 2 0	2 0 <1 <1 7 250 679 906 2347 history1 <1 1	3 0 <1 0 1 255 662 895 2389 history2 1 2 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm	ASTM D5185m	limit/base >20 >20 limit/base >5000	25 0 <1 0 0 839 719 926 2611 current 2 2 0 current 1809	2 0 <1 <1 7 250 679 906 2347 history1 <1 1 <1	3 0 <1 0 1 255 662 895 2389 history2 1 2 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm	ASTM D5185m Method ASTM D5185m	limit/base >20 >20 limit/base >5000 >1300	25 0 <1 0 0 839 719 926 2611 current 2 2 0 current 1809 88	2 0 <1 <1 7 250 679 906 2347 history1 <1 1 <1 history1	3 0 <1 0 1 255 662 895 2389 history2 1 2 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >6µm Particles >14µm	ppm	ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647	limit/base >20 >20 limit/base >5000 >1300 >160	25 0 <1 0 0 839 719 926 2611 current 2 2 0 current 1809 88 10	2 0 <1 <1 7 250 679 906 2347 history1 <1 1 <1 history1 607 149 18	3 0 <1 0 1 255 662 895 2389 history2 1 2 <1 history2 1067 234 14
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm	ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	limit/base >20 >20 limit/base >5000 >1300 >160 >40	25 0 <1 0 0 839 719 926 2611 current 2 2 0 current 1809 88 10 3	2 0 <1 <1 7 250 679 906 2347 history1 <1 1 <1 history1 607 149 18	3 0 <1 0 1 255 662 895 2389 history2 1 2 <1 history2 1067 234 14

ISO 4406 (c) >19/17/14

Oil Cleanliness

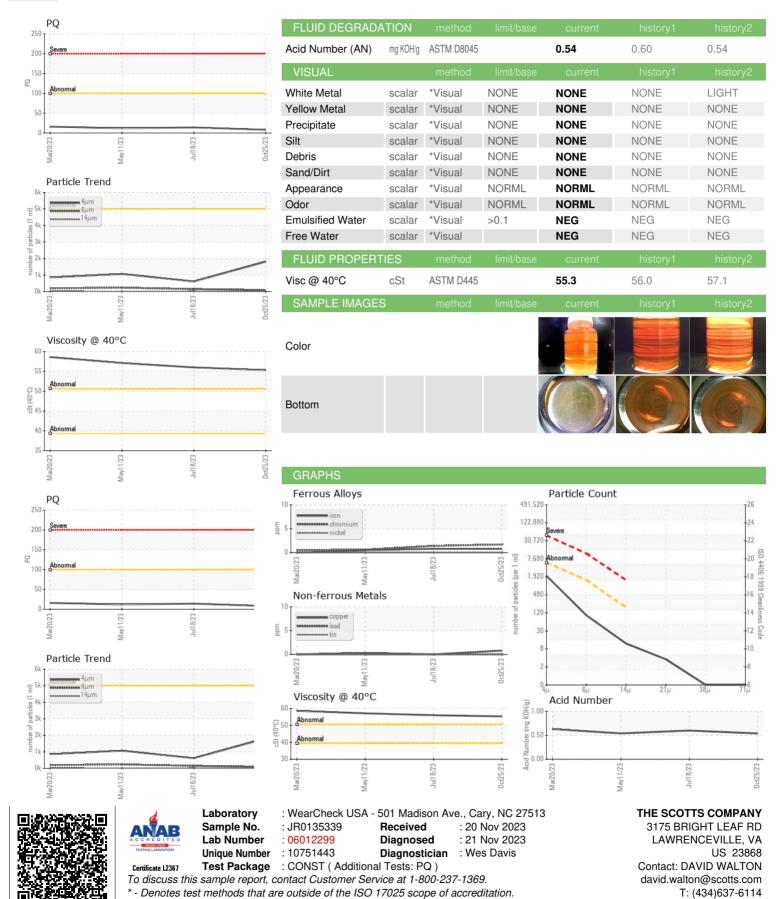
16/14/11

18/14/10

17/15/11



OIL ANALYSIS REPORT



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (434)848-2250