

OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id JOHN DEERE 670G 106 Component Diesel Engine

Fluid DEZOL 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP06178324	SBP06178319	
Sample Date		Client Info		09 Apr 2024	02 Feb 2024	
Machine Age	hrs	Client Info		8725	8500	
Oil Age	hrs	Client Info		235	560	
Oil Changed		Client Info		N/A	Changed	
Sample Status				NORMAL	ABNORMAL	
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>2.1	<1.0	<1.0	
Water		WC Method	>0.21	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	24	4 5	
Chromium	ppm	ASTM D5185m	>11	<1	<1	
Nickel	ppm	ASTM D5185m	>5	0	2	
Titanium	ppm	ASTM D5185m		0	1	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>31	<1	5	
Lead	ppm	ASTM D5185m	>26	0	<1	
Copper	ppm	ASTM D5185m	>26	21	<u> </u>	
Tin	ppm	ASTM D5185m	>4	0	0	
Vanadium	ppm	ASTM D5185m		0	<1	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES			1			le la trave O
//BBIII/E0		method				history2
Boron	ppm	ASTM D5185m	limit/base	current 2	history1 198	nistory2
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	2	198	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	2 0	198 0	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 83	198 0 236	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 83 <1	198 0 236 <1	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 83 <1 1035	198 0 236 <1 871	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		2 0 83 <1 1035 1223	198 0 236 <1 871 1542	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		2 0 83 <1 1035 1223 1076	198 0 236 <1 871 1542 922	
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	limit/base	2 0 83 <1 1035 1223 1076 1271	198 0 236 <1 871 1542 922 1105	
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		2 0 83 <1 1035 1223 1076 1271 3662	198 0 236 <1 871 1542 922 1105 3372	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	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	2 0 83 <1 1035 1223 1076 1271 3662 current	198 0 236 <1 871 1542 922 1105 3372 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	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	2 0 83 <1 1035 1223 1076 1271 3662 current 2	198 0 236 <1 871 1542 922 1105 3372 history1 8	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base >22 >31	2 0 83 <1 1035 1223 1076 1271 3662 <u>current</u> 2 8	198 0 236 <1 871 1542 922 1105 3372 history1 8 14	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >22 >31 >20	2 0 83 <1 1035 1223 1076 1271 3662 <u>current</u> 2 8 0	198 0 236 <1 871 1542 922 1105 3372 history1 8 14 2	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >22 >31 >20 limit/base	2 0 83 <1 1035 1223 1076 1271 3662 current 2 8 0 0	198 0 236 <1 871 1542 922 1105 3372 history1 8 14 2 history1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	limit/base >22 >31 >20 limit/base >3	2 0 83 <1 1035 1223 1076 1271 3662 current 2 8 0 current 0.3	198 0 236 <1 871 1542 922 1105 3372 history1 8 14 2 history1 0.5	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >22 >31 >20 limit/base >3 >20	2 0 83 <1 1035 1223 1076 1271 3662 <i>current</i> 2 8 0 <i>current</i> 0.3 6.0	198 0 236 <1 871 1542 922 1105 3372 history1 8 14 2 history1 0.5 8.4	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844	imit/base >22 >31 >20 imit/base >3 >20 >30 imit/base	2 0 83 <1 1035 1223 1076 1271 3662 current 2 8 0 0 current 0.3 6.0 19.2 current	198 0 236 <1 871 1542 922 1105 3372 history1 8 14 2 history1 0.5 8.4 22.0 history1	 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >22 >31 >20 limit/base >3 >20 >3 >20 >30	2 0 83 <1 1035 1223 1076 1271 3662 current 2 8 0 current 0.3 6.0 19.2	198 0 236 <1 871 1542 922 1105 3372 history1 8 14 2 history1 0.5 8.4 22.0	 history2 history2 history2 history2



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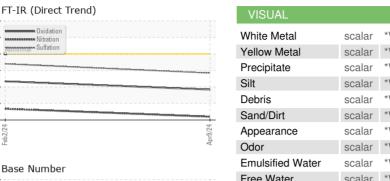
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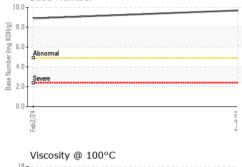
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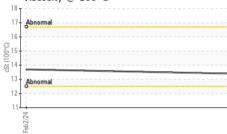
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OIL ANALYSIS REPORT

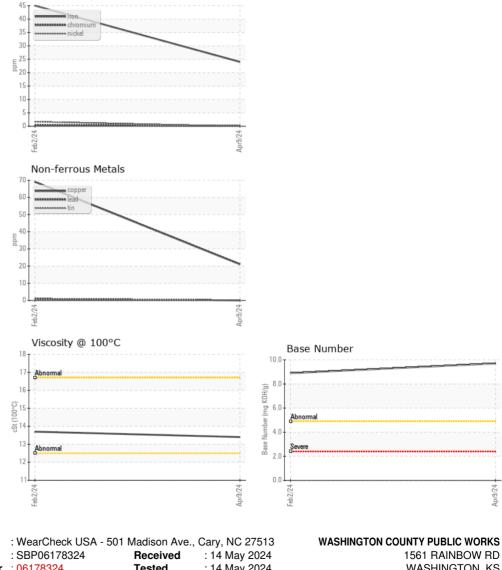


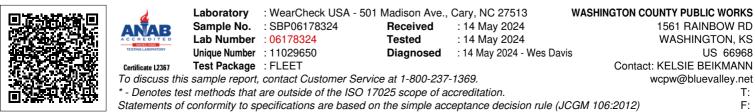




100/ LE		mounou		Garront	motory	inotory -
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPERT		method	limit/base	current	history1	history2
I LOID I HOI LITI		method	mmbase	Current	mistory	Thatoryz
Visc @ 100°C	cSt	ASTM D445		13.4	13.7	







Contact/Location: KELSIE BEIKMANN - WASWASUS

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