



Machine Id  
**JOHN DEERE 38-20**  
Component  
**Hydraulic System**  
Fluid  
**JOHN DEERE HYDRAU (105 LTR)**

**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 INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PC0061422</b>	---	---
Sample Date	Client Info			<b>20 Jun 2023</b>	---	---
Machine Age	hrs	Client Info		<b>4343</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>Not Chngd</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<b>9</b>	---	---
Chromium	ppm	ASTM D5185(m)	>10	<b>5</b>	---	---
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185(m)	>75	<b>1</b>	---	---
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	---	---

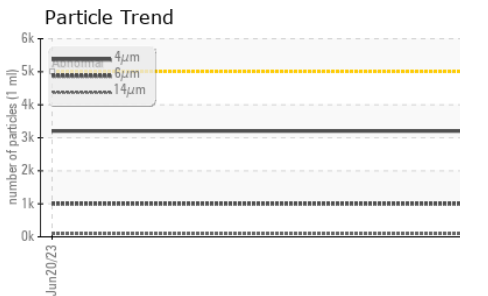
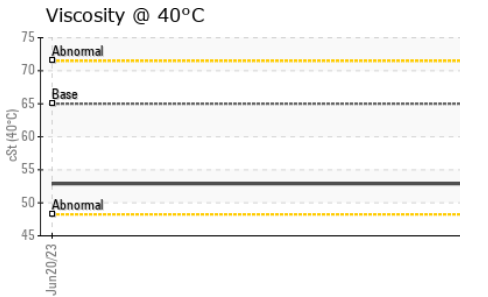
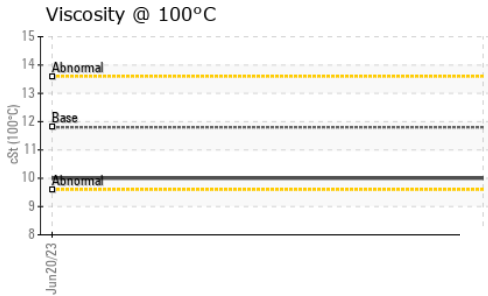
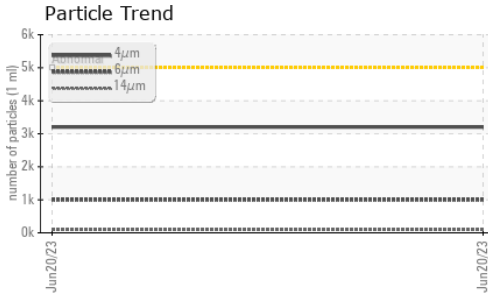
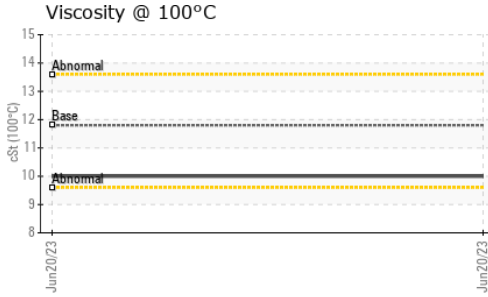
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>1</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>13</b>	---	---
Calcium	ppm	ASTM D5185(m)	87	<b>127</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	727	<b>690</b>	---	---
Zinc	ppm	ASTM D5185(m)	900	<b>820</b>	---	---
Sulfur	ppm	ASTM D5185(m)	1500	<b>1497</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185(m)		<b>2</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>3202</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>1001</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>90</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>27</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>1</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/17/14</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	1.0	<b>1.03</b>	---	---

# OIL ANALYSIS REPORT

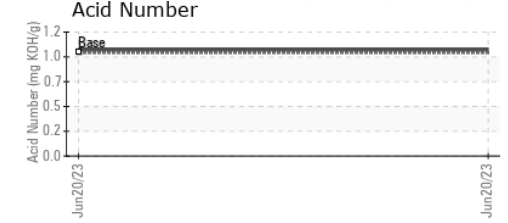
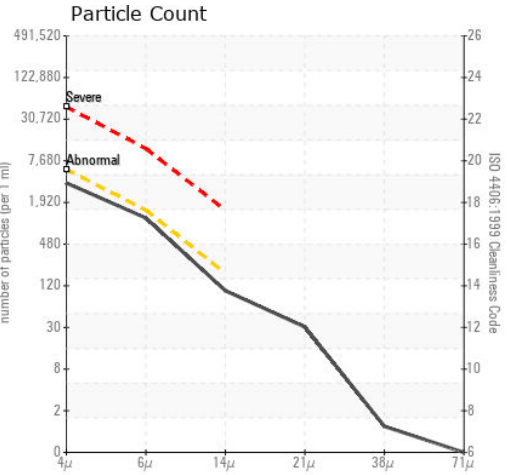
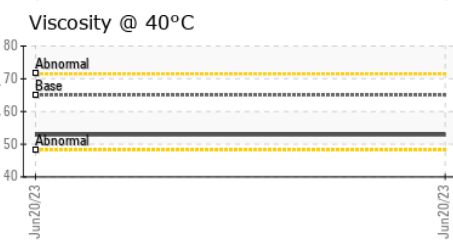
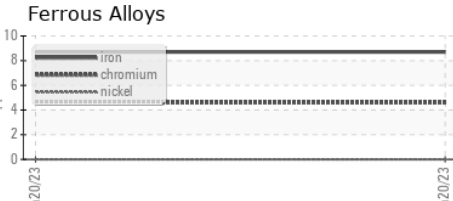


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	65	52.9	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.8	10.0	---
Viscosity Index (VI)	Scale	ASTM D2270*	178	179	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **TRUCK AND EQUIPMENT SOLUTION**  
**Sample No.** : PC0061422 **Received** : 26 Jul 2023 **2 BERTRAM INDUSTRIAL PKWY.**  
**Lab Number** : 02572395 **Diagnosed** : 27 Jul 2023 **MIDHURST, ON**  
**Unique Number** : 5617446 **Diagnostician** : Wes Davis **CA L9X 1L2**  
**Test Package** : IND 2 ( Additional Tests: KV100, TAN Man, VI ) **Contact: John Irwin**

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.  
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