

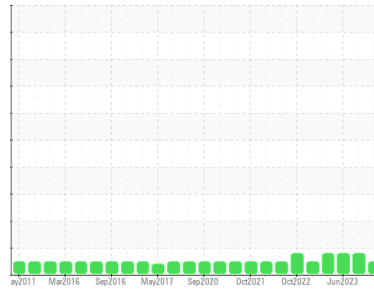


# OIL ANALYSIS REPORT



Area  
**KANSAS/44/TR - MOTOR GRADER**  
 Machine Id  
**78.69 [KANSAS^44^TR - MOTOR GRADER]**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL MOBILTRANS AST 30 (--- GAL)**

Sample Rating Trend



**NORMAL**



## 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>WC0918399</b>	WC0821601	WC0781260
Sample Date	Client Info		<b>09 May 2024</b>	18 Oct 2023	02 Jun 2023
Machine Age	hrs	Client Info	<b>11104</b>	11027	10784
Oil Age	hrs	Client Info	<b>4477</b>	6627	6627
Oil Changed	Client Info		<b>Not Chngd</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	ATTENTION	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>10</b>	11	9
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m >10	<b>5</b>	5	4
Lead	ppm	ASTM D5185m >10	<b>2</b>	1	1
Copper	ppm	ASTM D5185m >75	<b>14</b>	15	13
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>28</b>	33	31
Barium	ppm	ASTM D5185m	<b>0</b>	3	0
Molybdenum	ppm	ASTM D5185m	<b>2</b>	2	2
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	<b>35</b>	37	35
Calcium	ppm	ASTM D5185m	<b>2783</b>	2741	2910
Phosphorus	ppm	ASTM D5185m	<b>991</b>	994	984
Zinc	ppm	ASTM D5185m	<b>1089</b>	1189	1171
Sulfur	ppm	ASTM D5185m	<b>5974</b>	5650	5319

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>12</b>	14	12
Sodium	ppm	ASTM D5185m	<b>2</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	3	3

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>36339</b>	40618	77062
Particles >6µm	ASTM D7647	>2500	<b>2112</b>	● 2920	▲ 10243
Particles >14µm	ASTM D7647	>640	<b>31</b>	55	219
Particles >21µm	ASTM D7647	>160	<b>9</b>	9	44
Particles >38µm	ASTM D7647	>40	<b>4</b>	0	1
Particles >71µm	ASTM D7647	>10	<b>4</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/18/16	<b>22/18/12</b>	● 23/19/13	▲ 23/21/15

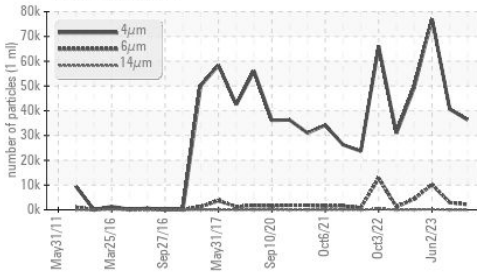
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>1.44</b>	1.53	1.31

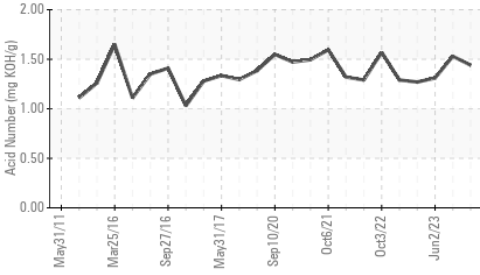


# OIL ANALYSIS REPORT

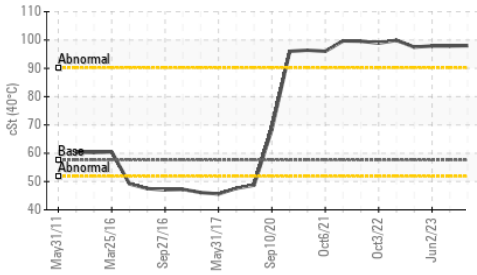
Particle Trend



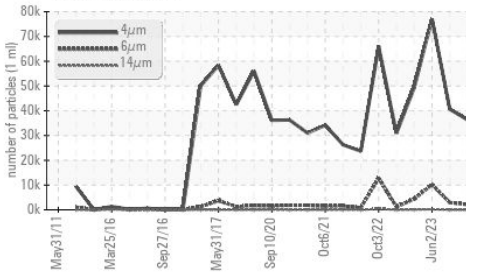
Acid Number



Viscosity @ 40°C



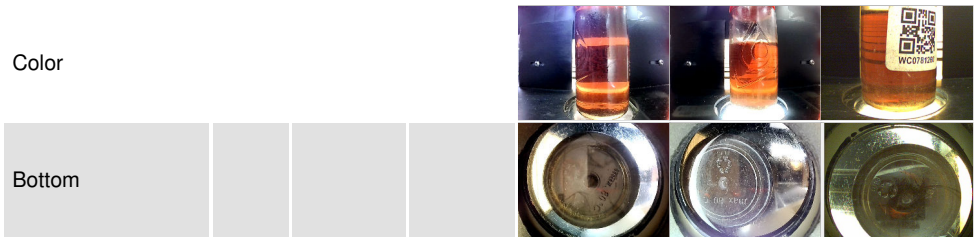
Particle Trend



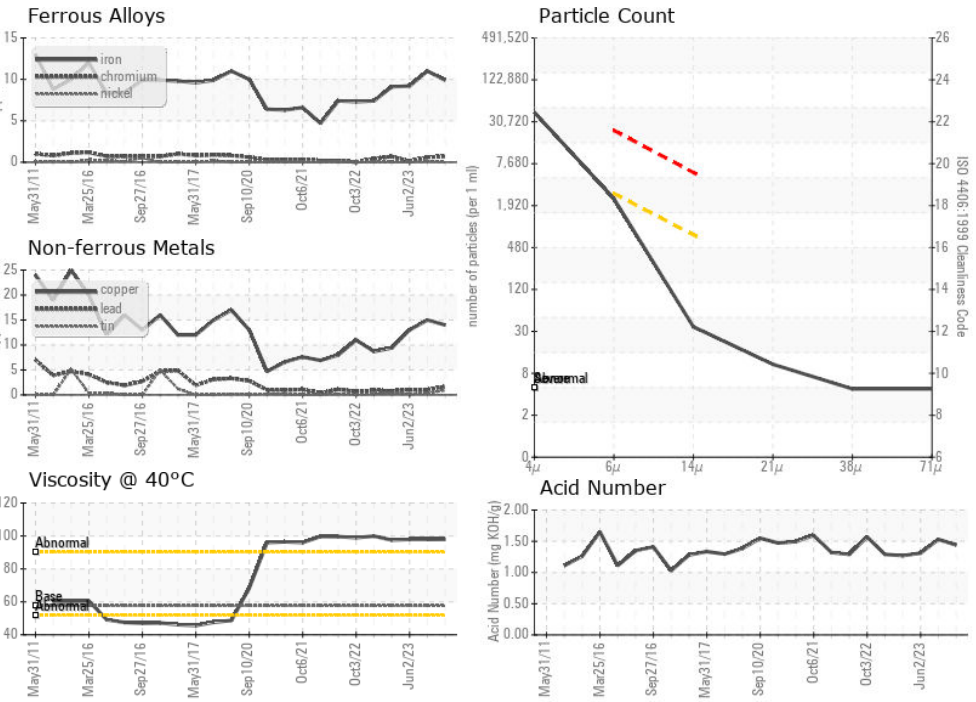
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	57.6	98.0	97.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0918399  
 Lab Number : 06182728  
 Unique Number : 11034054  
 Test Package : CONST

Received : 17 May 2024  
 Tested : 22 May 2024  
 Diagnosed : 22 May 2024 - Wes Davis

**SHERWOOD CONSTRUCTION CO INC**  
 3219 WEST MAY ST  
 WICHITA, KS  
 US 67213  
 Contact: TRENTON HAJEK  
 Trenton.hajek@wildcat.net

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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

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F: