

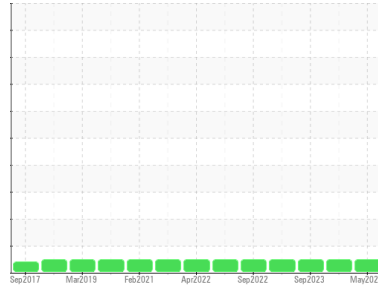


# OIL ANALYSIS REPORT



Area  
**KANSAS/44/EG - MOTOR GRADER**  
 Machine Id  
**78.254 [KANSAS^44^EG - 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>WC0914457</b>	WC0833843	WC0833841
Sample Date	Client Info	<b>01 May 2024</b>	03 Oct 2023	26 Sep 2023
Machine Age	hrs	Client Info	6370	6336
Oil Age	hrs	Client Info	5345	5345
Oil Changed	Client Info	<b>Not Chngd</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

### 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>4</b>	2	5
Chromium	ppm ASTM D5185m >10	<b>0</b>	0	<1
Nickel	ppm ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >10	<b>3</b>	2	3
Lead	ppm ASTM D5185m >10	<b>0</b>	0	<1
Copper	ppm ASTM D5185m >75	<b>3</b>	1	2
Tin	ppm ASTM D5185m >10	<b>&lt;1</b>	<1	0
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

### ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>17</b>	7	14
Barium	ppm ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm ASTM D5185m	<b>13</b>	8	10
Calcium	ppm ASTM D5185m	<b>1951</b>	1708	1687
Phosphorus	ppm ASTM D5185m	<b>890</b>	825	830
Zinc	ppm ASTM D5185m	<b>1119</b>	992	1045
Sulfur	ppm ASTM D5185m	<b>4246</b>	3082	3593

### CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	<b>8</b>	7	7
Sodium	ppm ASTM D5185m	<b>4</b>	1	<1
Potassium	ppm ASTM D5185m >20	<b>&lt;1</b>	0	2

### FLUID CLEANLINESS

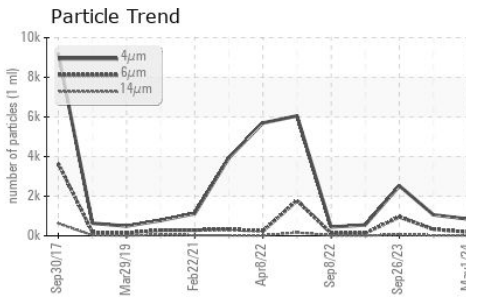
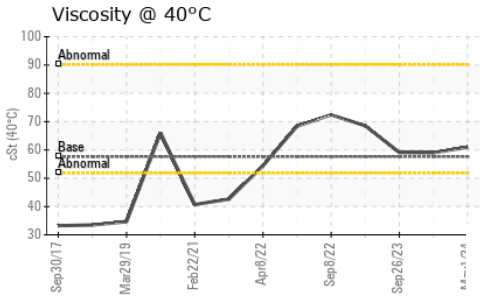
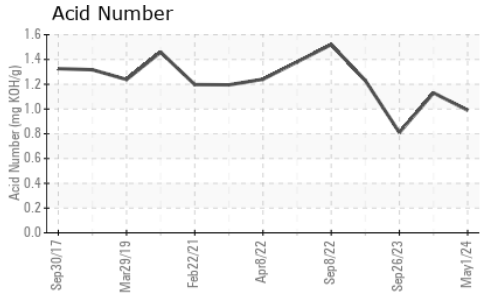
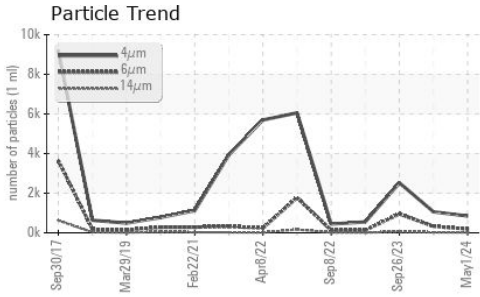
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>848</b>	1059	2521
Particles >6µm	ASTM D7647 >2500	<b>190</b>	327	955
Particles >14µm	ASTM D7647 >640	<b>16</b>	24	58
Particles >21µm	ASTM D7647 >160	<b>3</b>	7	11
Particles >38µm	ASTM D7647 >40	<b>0</b>	0	1
Particles >71µm	ASTM D7647 >10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >--/18/16	<b>17/15/11</b>	17/16/12	19/17/13

### FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.99</b>	1.13	0.81



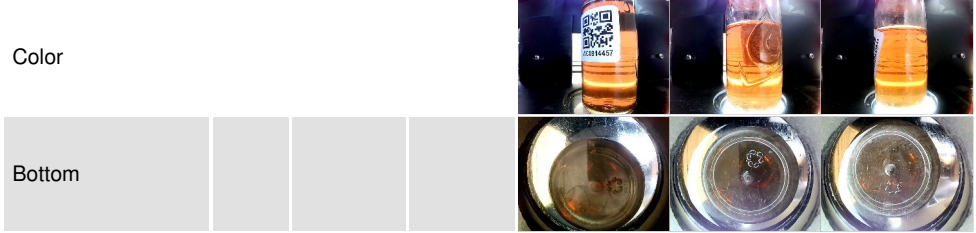
# OIL ANALYSIS REPORT



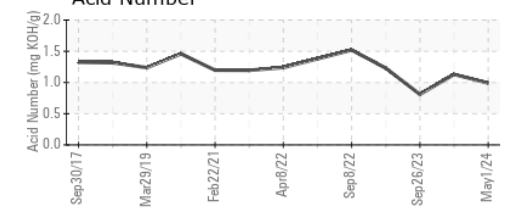
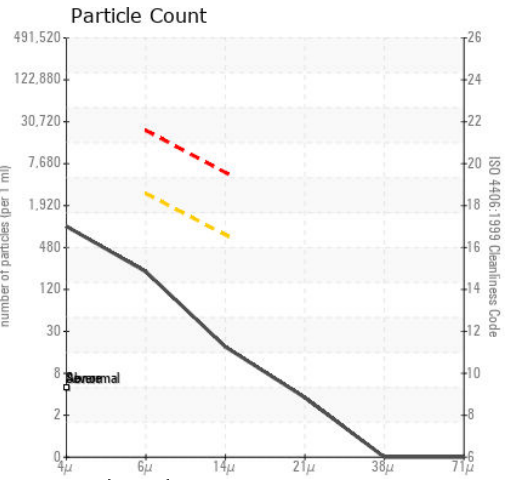
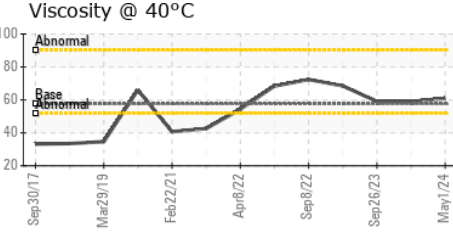
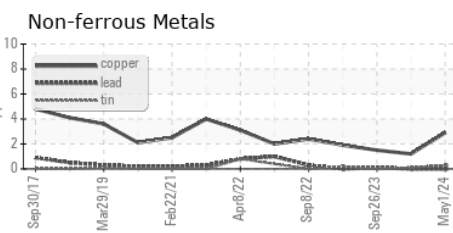
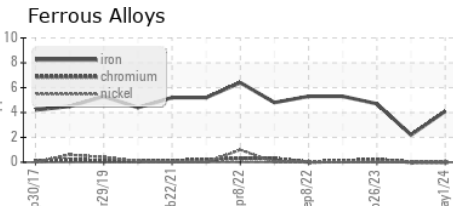
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	57.6	61.0	59.0

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0914457      **Received** : 20 May 2024  
**Lab Number** : 06184914      **Tested** : 22 May 2024  
**Unique Number** : 11036240      **Diagnosed** : 22 May 2024 - Wes Davis  
**Test Package** : CONST

**SHERWOOD CONSTRUCTION CO INC**  
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 WICHITA, KS  
 US 67213  
 Contact: DOUG KING  
 doug.king@sherwood.net  
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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)