

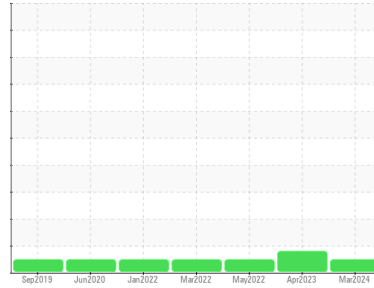


# OIL ANALYSIS REPORT



Area  
**OKLAHOMA/102/EG - MOTOR GRADER**  
 Machine Id  
**78.256 [OKLAHOMA^102^EG - MOTOR GRADER]**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL MOBILTRANS AST 30 (--- GAL)**

Sample Rating Trend



**NORMAL**



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. 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. The amount and size of particulates present in the system are 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>WC0886903</b>	WC0800899	WC0686875
Sample Date	Client Info		<b>14 Mar 2024</b>	17 Apr 2023	20 May 2022
Machine Age	hrs	Client Info	<b>7875</b>	6477	5860
Oil Age	hrs	Client Info	<b>1000</b>	500	170
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status			<b>NORMAL</b>	ATTENTION	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>8</b>	8	5
Chromium	ppm	ASTM D5185m >10	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>9</b>	4	4
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >75	<b>2</b>	2	2
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	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>36</b>	32	13
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>3</b>	<1	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>46</b>	15	14
Calcium	ppm	ASTM D5185m	<b>2706</b>	2700	2650
Phosphorus	ppm	ASTM D5185m	<b>936</b>	964	924
Zinc	ppm	ASTM D5185m	<b>1166</b>	1173	1126
Sulfur	ppm	ASTM D5185m	<b>4971</b>	4410	5096

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>17</b>	13	10
Sodium	ppm	ASTM D5185m	<b>5</b>	1	4
Potassium	ppm	ASTM D5185m >20	<b>2</b>	3	0

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>17044</b>	22504	492
Particles >6µm	ASTM D7647 >2500		<b>1121</b>	4363	67
Particles >14µm	ASTM D7647 >640		<b>39</b>	197	5
Particles >21µm	ASTM D7647 >160		<b>10</b>	41	2
Particles >38µm	ASTM D7647 >40		<b>0</b>	1	0
Particles >71µm	ASTM D7647 >10		<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >--/18/16		<b>21/17/12</b>	22/19/15	16/13/10

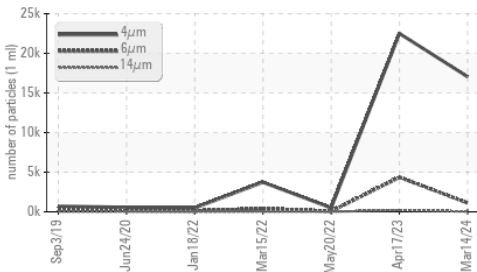
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>1.07</b>	1.19	1.28

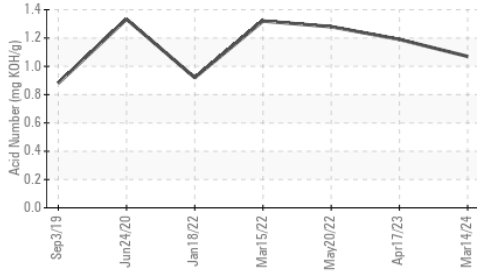


# OIL ANALYSIS REPORT

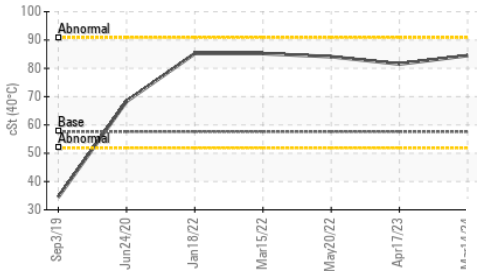
### Particle Trend



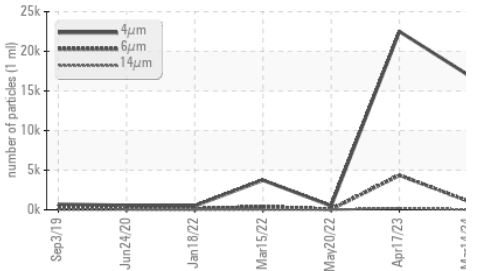
### Acid Number



### Viscosity @ 40°C



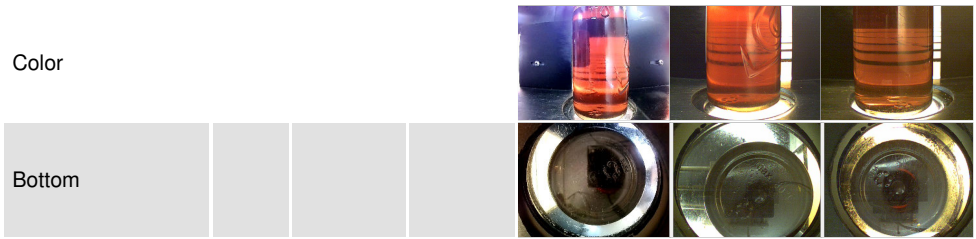
### Particle Trend



PARAMETER	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

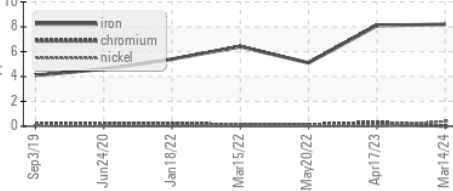
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	57.6	84.5	81.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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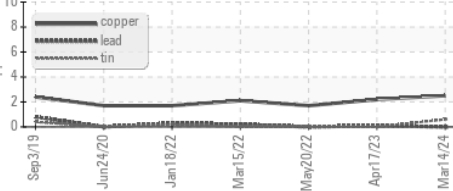


## GRAPHS

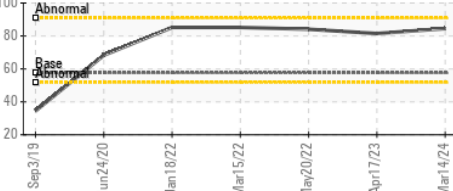
### Ferrous Alloys



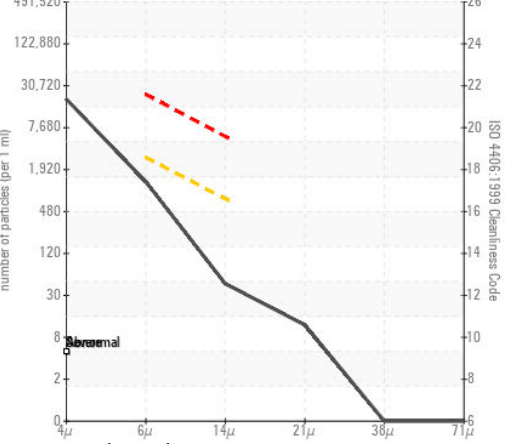
### Non-ferrous Metals



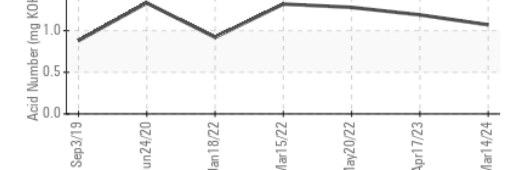
### Viscosity @ 40°C



### Particle Count



### Acid Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0886903  
**Lab Number** : 06131946  
**Unique Number** : 10951411  
**Test Package** : CONST  
**Received** : 28 Mar 2024  
**Tested** : 29 Mar 2024  
**Diagnosed** : 02 Apr 2024 - Jonathan Hester

**SHERWOOD CONSTRUCTION CO INC**  
 3219 WEST MAY ST  
 WICHITA, KS  
 US 67213  
 Contact: DOUG KING  
 doug.king@sherwood.net  
 T: (316)617-3161  
 F: x:

Certificate L2367  
 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)