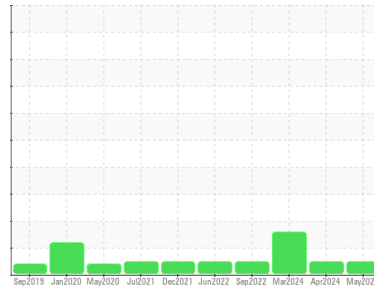




# OIL ANALYSIS REPORT

Area  
**OKLAHOMA/102/EG - EXCAVATOR**  
 Machine Id  
**20.409L [OKLAHOMA^102^EG - EXCAVATOR]**  
 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>WC0908853</b>	WC0886862	WC0887020
Sample Date	Client Info		<b>13 May 2024</b>	05 Apr 2024	05 Mar 2024
Machine Age	hrs	Client Info	<b>5838</b>	5752	5600
Oil Age	hrs	Client Info	<b>2732</b>	3020	525
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status			<b>NORMAL</b>	NORMAL	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>12</b>	13	13
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	<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>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>2</b>	2	2
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	2
Copper	ppm	ASTM D5185m >75	<b>11</b>	11	10
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>34</b>	33	26
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	<1	1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m	<b>24</b>	25	16
Calcium	ppm	ASTM D5185m	<b>2852</b>	2998	2557
Phosphorus	ppm	ASTM D5185m	<b>980</b>	1054	898
Zinc	ppm	ASTM D5185m	<b>1165</b>	1240	926
Sulfur	ppm	ASTM D5185m	<b>5174</b>	5592	4465

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>6</b>	5	6
Sodium	ppm	ASTM D5185m	<b>3</b>	3	3
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	0

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>20473</b>	46449	92030
Particles >6µm	ASTM D7647	>2500	<b>132</b>	90	▲ 15737
Particles >14µm	ASTM D7647	>640	<b>7</b>	8	▲ 1286
Particles >21µm	ASTM D7647	>160	<b>2</b>	3	▲ 255
Particles >38µm	ASTM D7647	>40	<b>0</b>	1	2
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/18/16	<b>22/14/10</b>	23/14/10	▲ 24/21/17

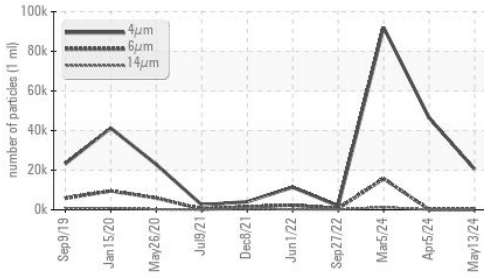
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>1.23</b>	1.32	1.37

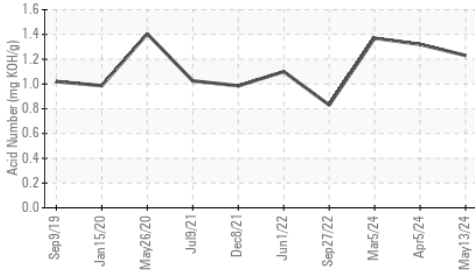


# OIL ANALYSIS REPORT

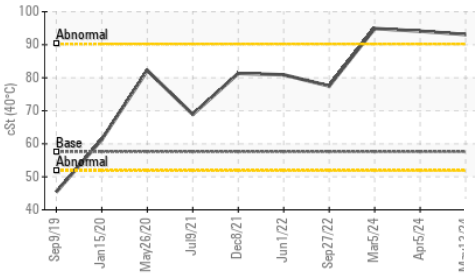
Particle Trend



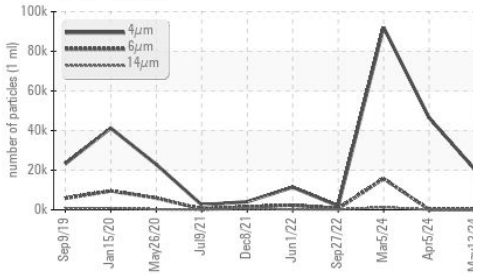
Acid Number



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	NONE	LIGHT
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	93.1	94.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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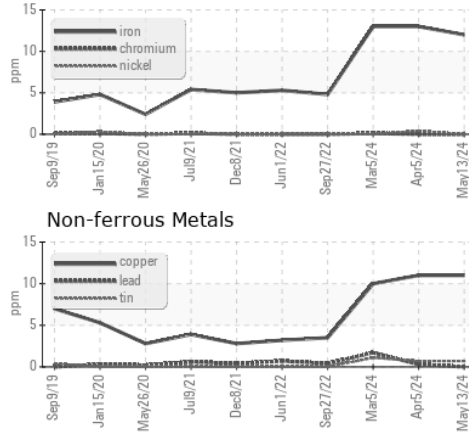
Color



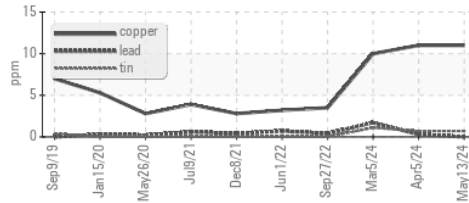
Bottom

## GRAPHS

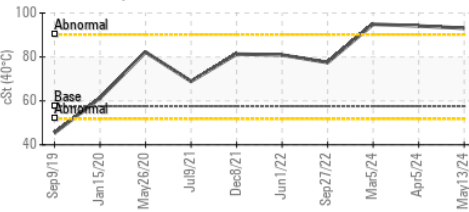
Ferrous Alloys



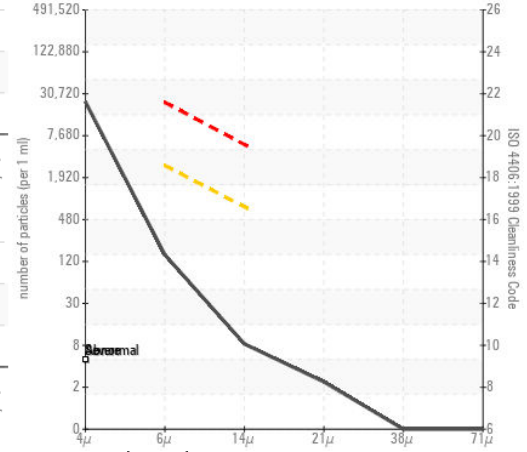
Non-ferrous Metals



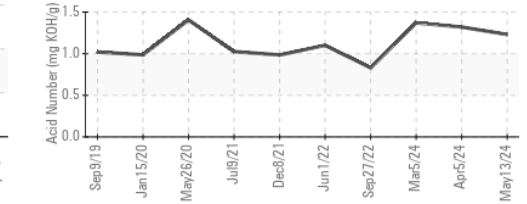
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0908853  
 Lab Number : 06184911  
 Unique Number : 11036237  
 Test Package : CONST

Received : 20 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: DOUG KING  
 doug.king@sherwood.net  
 T: (316)617-3161  
 F: x:

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)