

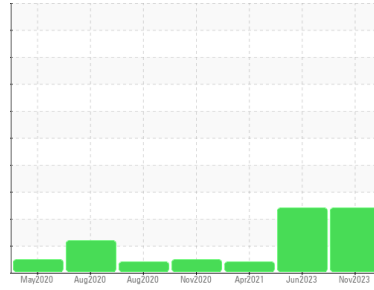


# PROBLEM SUMMARY



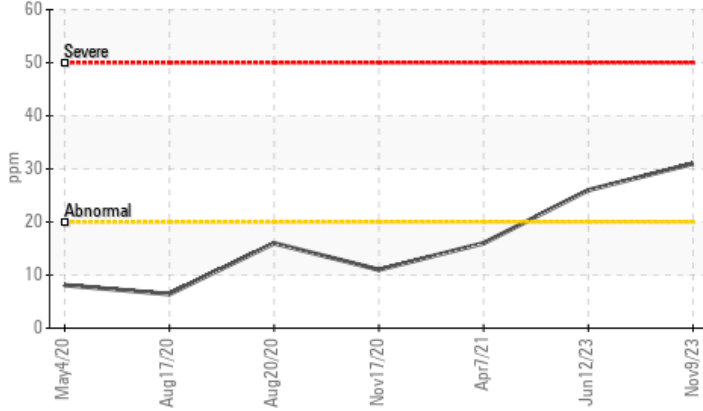
Area  
**KANSAS/44/EG - DOZER**  
 Machine Id  
**36.21L [KANSAS^44^EG - DOZER]**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL MOBILTRANS AST 30 (--- GAL)**

Sample Rating Trend

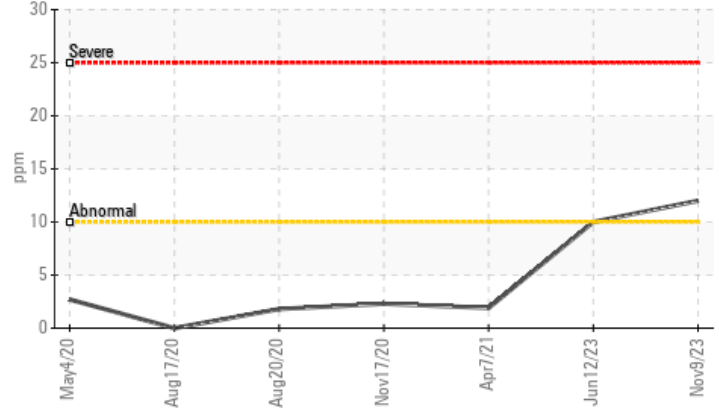


## COMPONENT CONDITION SUMMARY

▲ Silicon (ppm)



▲ Aluminum (ppm)



## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor. ( Customer Sample Comment: 7784 hrs )

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Aluminum	ppm	ASTM D5185m	>10	▲ 12	▲ 10	2
Silicon	ppm	ASTM D5185m	>20	▲ 31	▲ 26	16

Customer Id: SHEWIC  
 Sample No.: WC0819893  
 Lab Number: 06015019  
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

## HISTORICAL DIAGNOSIS

### 12 Jun 2023 Diag: Jonathan Hester

#### DIRT



We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor. All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



### 07 Apr 2021 Diag: Don Baldrige

#### VIS DEBRIS



No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



### 17 Nov 2020 Diag: Don Baldrige

#### NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



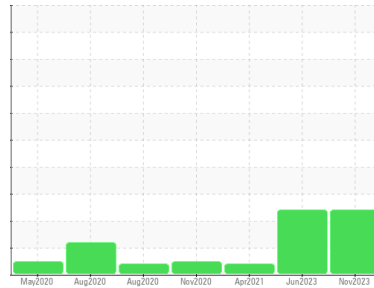


# OIL ANALYSIS REPORT



Area  
**KANSAS/44/EG - DOZER**  
 Machine Id  
**36.21L [KANSAS^44^EG - DOZER]**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL MOBILTRANS AST 30 (--- GAL)**

Sample Rating Trend



**DIRT**



## DIAGNOSIS

### Recommendation

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor. ( Customer Sample Comment: 7784 hrs )

### Wear

All component wear rates are normal for time on oil.

### Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. 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>WC0819893</b>	WC0746864	WC0562712
Sample Date	Client Info		<b>09 Nov 2023</b>	12 Jun 2023	07 Apr 2021
Machine Age	hrs	Client Info	<b>7633</b>	7278	3849
Oil Age	hrs	Client Info	<b>3849</b>	3225	800
Oil Changed	Client Info		<b>N/A</b>	N/A	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	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>27</b>	23	21
Chromium	ppm	ASTM D5185m	>10	<b>2</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>▲ 12</b>	▲ 10	2
Lead	ppm	ASTM D5185m	>10	<b>2</b>	2	3
Copper	ppm	ASTM D5185m	>75	<b>12</b>	11	13
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>15</b>	13	6
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>13</b>	11	7
Calcium	ppm	ASTM D5185m		<b>1850</b>	1825	644
Phosphorus	ppm	ASTM D5185m		<b>964</b>	871	772
Zinc	ppm	ASTM D5185m		<b>1140</b>	1089	979
Sulfur	ppm	ASTM D5185m		<b>3087</b>	3746	1984

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>20	<b>▲ 31</b>	▲ 26	16
Sodium	ppm	ASTM D5185m		<b>2</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	5	3

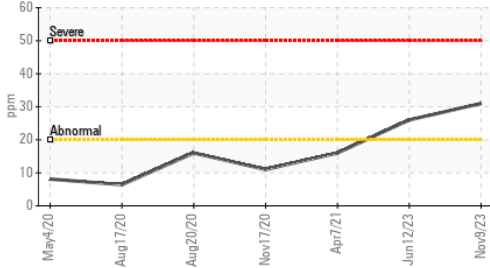
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>25696</b>	13680	---
Particles >6µm	ASTM D7647	>2500	<b>461</b>	874	---
Particles >14µm	ASTM D7647	>640	<b>11</b>	59	---
Particles >21µm	ASTM D7647	>160	<b>3</b>	16	---
Particles >38µm	ASTM D7647	>40	<b>0</b>	1	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>--/18/16	<b>22/16/11</b>	21/17/13	---

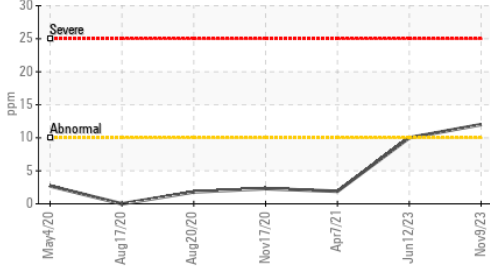


# OIL ANALYSIS REPORT

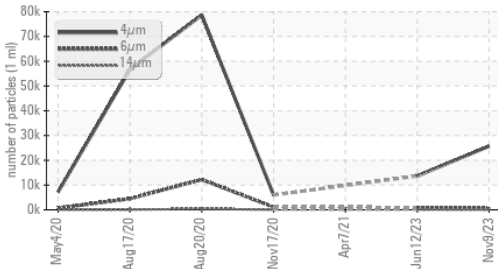
## ▲ Silicon (ppm)



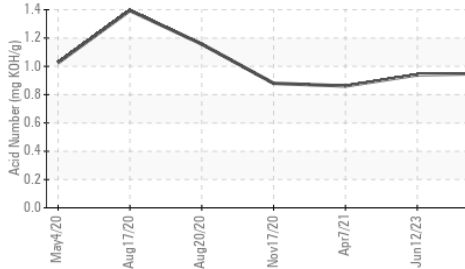
## ▲ Aluminum (ppm)



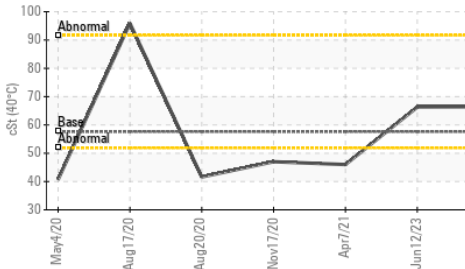
## Particle Trend



## Acid Number



## Viscosity @ 40°C



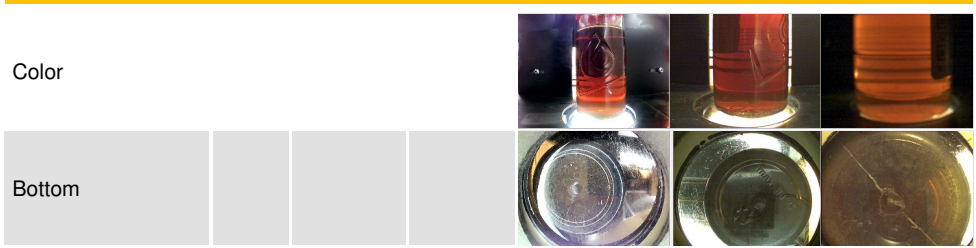
## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN) mg KOH/g ASTM D8045		<b>0.95</b>	0.94	0.861		
VISUAL						
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

## FLUID PROPERTIES

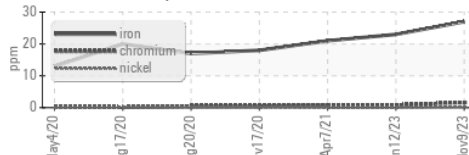
method	limit/base	current	history1	history2
Visc @ 40°C cSt ASTM D445	57.6	<b>66.4</b>	66.3	46.0

## SAMPLE IMAGES

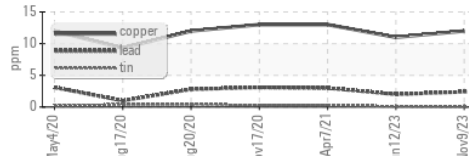


## GRAPHS

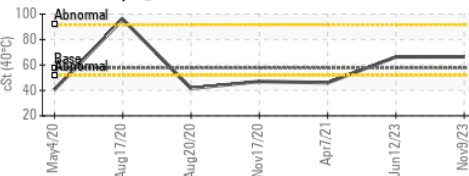
### Ferrous Alloys



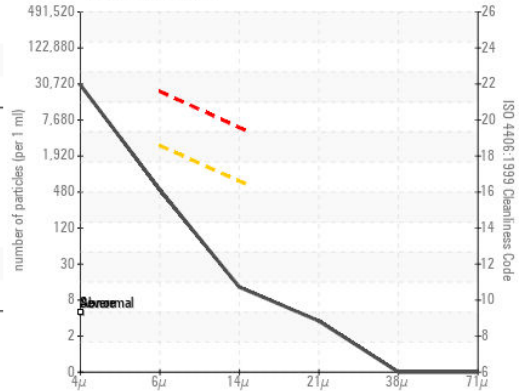
### Non-ferrous Metals



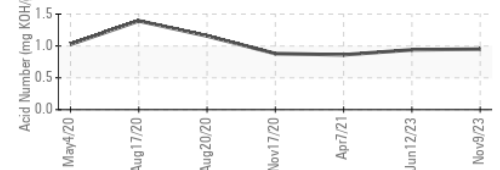
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0819893  
 Lab Number : 06015019  
 Unique Number : 10754163  
 Test Package : CONST  
 Received : 22 Nov 2023  
 Diagnosed : 26 Nov 2023  
 Diagnostician : Don Baldrige

**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)