

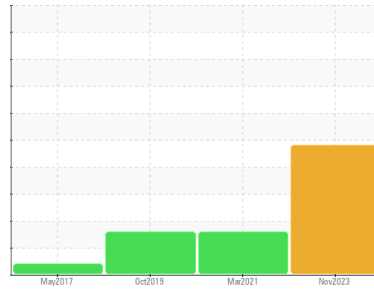


# PROBLEM SUMMARY



Area  
**OKLAHOMA/102/EG - OTHER SERVICE**  
 Machine Id  
**20.016L [OKLAHOMA^102^EG - OTHER SERVICE]**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL MOBILTRANS AST 30 (--- GAL)**

Sample Rating Trend

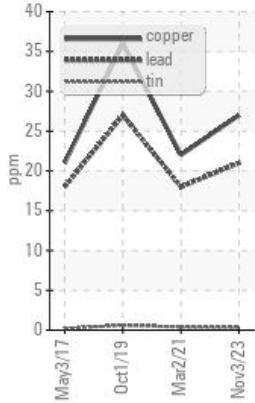


**DIRT**

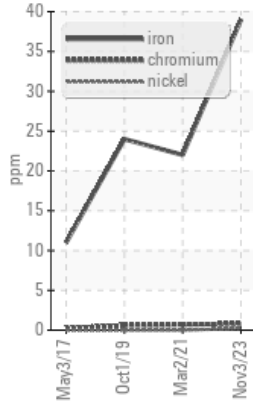


## COMPONENT CONDITION SUMMARY

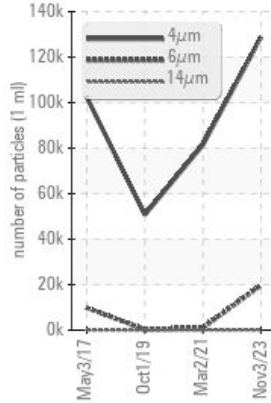
▲ Non-ferrous Metals



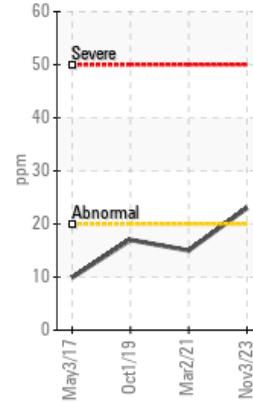
▲ Ferrous Alloys



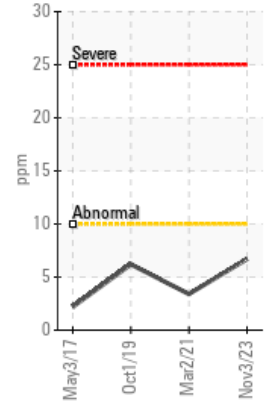
▲ Particle Trend



▲ Silicon (ppm)



▲ Aluminum (ppm)



## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>20	▲ <b>39</b>	▲ 22	▲ 24
Aluminum	ppm	ASTM D5185m	>10	▲ <b>7</b>	3	6
Lead	ppm	ASTM D5185m	>10	▲ <b>21</b>	▲ 18	▲ 27
Silicon	ppm	ASTM D5185m	>20	▲ <b>23</b>	15	17
Particles >6µm		ASTM D7647	>2500	▲ <b>19756</b>	1115	296
Oil Cleanliness		ISO 4406 (c)	>--/18/16	▲ <b>24/21/13</b>	24/17/13	23/15/11

Customer Id: SHEWIC  
 Sample No.: WC0857378  
 Lab Number: 06009057  
 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
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

## HISTORICAL DIAGNOSIS

### 02 Mar 2021 Diag: Jonathan Hester

#### WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. The iron level is abnormal. The lead level is abnormal. There is no indication of any contamination in the oil. 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](#)



### 01 Oct 2019 Diag: Jonathan Hester

#### WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. The iron level is abnormal. The lead level is abnormal. There is no indication of any contamination in the oil. 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](#)



### 03 May 2017 Diag: Wes Davis

#### ISO



We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. Particles >6µm are abnormally high. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



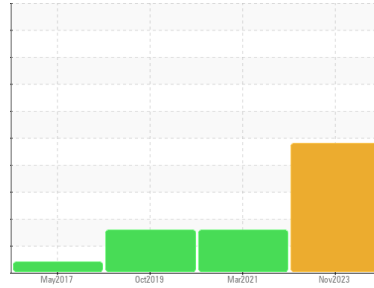


# OIL ANALYSIS REPORT



Area  
**OKLAHOMA/102/EG - OTHER SERVICE**  
 Machine Id  
**20.016L [OKLAHOMA^102^EG - OTHER SERVICE]**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL MOBILTRANS AST 30 (--- GAL)**

Sample Rating Trend



## DIAGNOSIS

### Recommendation

We advise that you check all areas where dirt can enter the system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

The iron level is abnormal. The lead level is abnormal.

### Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0857378</b>	WC0541391	WC04821840
Sample Date	Client Info		<b>03 Nov 2023</b>	02 Mar 2021	01 Oct 2019
Machine Age	hrs	Client Info	<b>2315</b>	1510	1107
Oil Age	hrs	Client Info	<b>2315</b>	500	500
Oil Changed	Client Info		<b>Changed</b>	Not Changd	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>▲ 39</b>	▲ 22	▲ 24
Chromium	ppm	ASTM D5185m >10	<1	<1	<1
Nickel	ppm	ASTM D5185m >10	<1	0	0
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	0	0	<1
Aluminum	ppm	ASTM D5185m >10	<b>▲ 7</b>	3	6
Lead	ppm	ASTM D5185m >10	<b>▲ 21</b>	▲ 18	▲ 27
Copper	ppm	ASTM D5185m >75	<b>27</b>	22	36
Tin	ppm	ASTM D5185m >10	<1	<1	<1
Antimony	ppm	ASTM D5185m	---	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>41</b>	29	30
Barium	ppm	ASTM D5185m	<b>6</b>	0	<1
Molybdenum	ppm	ASTM D5185m	<b>14</b>	8	15
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	<b>199</b>	144	171
Calcium	ppm	ASTM D5185m	<b>2208</b>	2156	2640
Phosphorus	ppm	ASTM D5185m	<b>834</b>	727	837
Zinc	ppm	ASTM D5185m	<b>917</b>	904	1018
Sulfur	ppm	ASTM D5185m	<b>4092</b>	3025	3693

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>▲ 23</b>	15	17
Sodium	ppm	ASTM D5185m	0	<1	4
Potassium	ppm	ASTM D5185m >20	<b>4</b>	2	4

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>128758</b>	81438	50688
Particles >6µm	ASTM D7647	>2500	<b>▲ 19756</b>	1115	296
Particles >14µm	ASTM D7647	>640	<b>50</b>	56	20
Particles >21µm	ASTM D7647	>160	<b>14</b>	13	5
Particles >38µm	ASTM D7647	>40	<b>0</b>	1	2
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	2
Oil Cleanliness	ISO 4406 (c)	>--/18/16	<b>▲ 24/21/13</b>	24/17/13	23/15/11

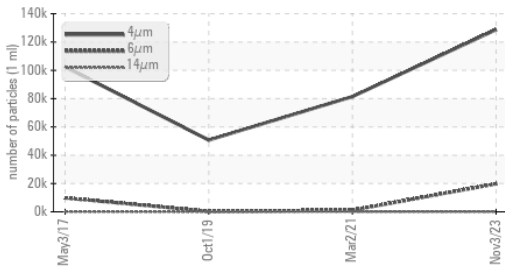
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.69</b>	0.852	0.974

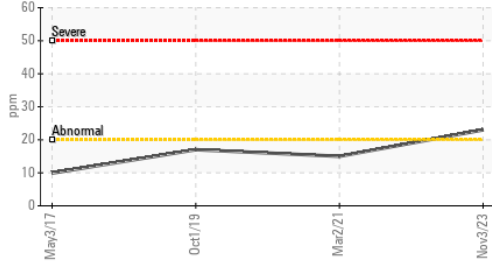


# OIL ANALYSIS REPORT

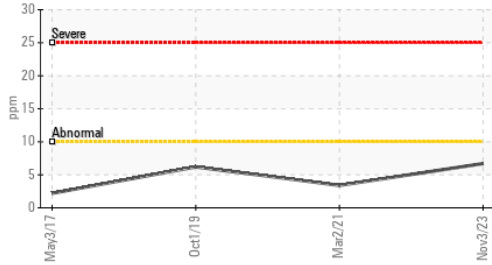
### ▲ Particle Trend



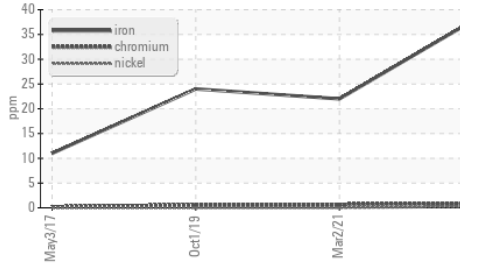
### ▲ Silicon (ppm)



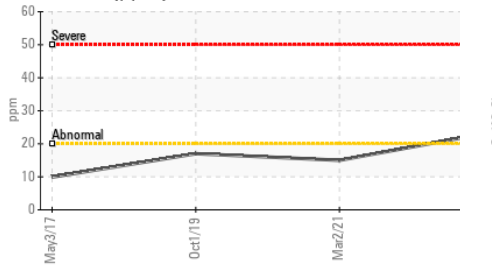
### ▲ Aluminum (ppm)



### ▲ Ferrous Alloys



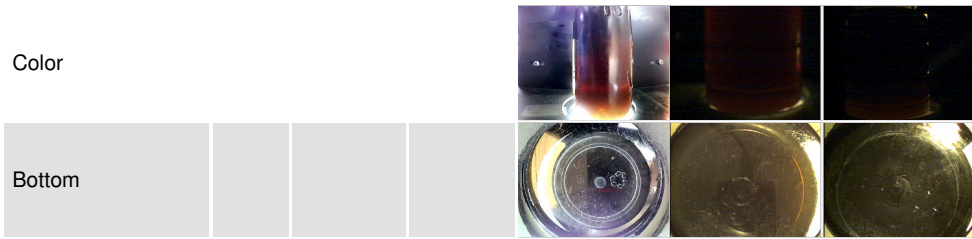
### ▲ Silicon (ppm)



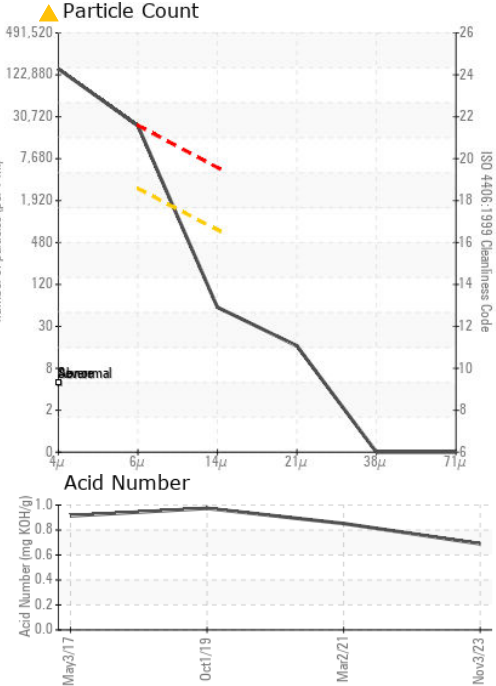
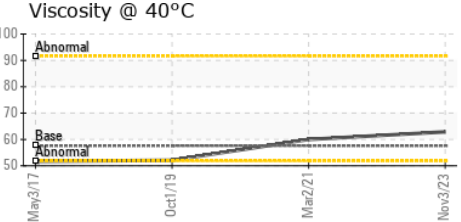
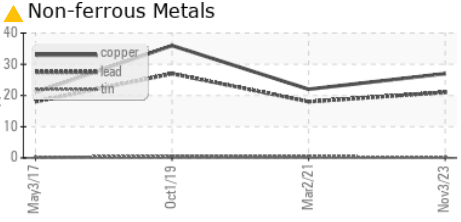
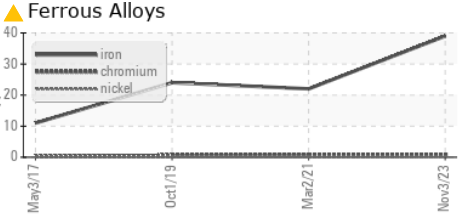
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	62.9	60.0

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0857378 **Received** : 15 Nov 2023  
**Lab Number** : 06009057 **Diagnosed** : 19 Nov 2023  
**Unique Number** : 10742819 **Diagnostician** : Don Baldrige  
**Test Package** : CONST ( Additional Tests: PrtCount )

**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)