

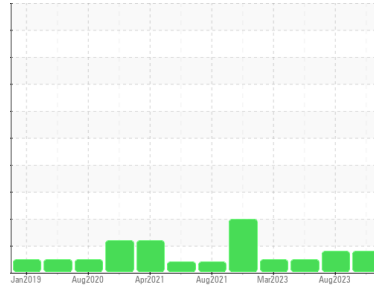


# PROBLEM SUMMARY



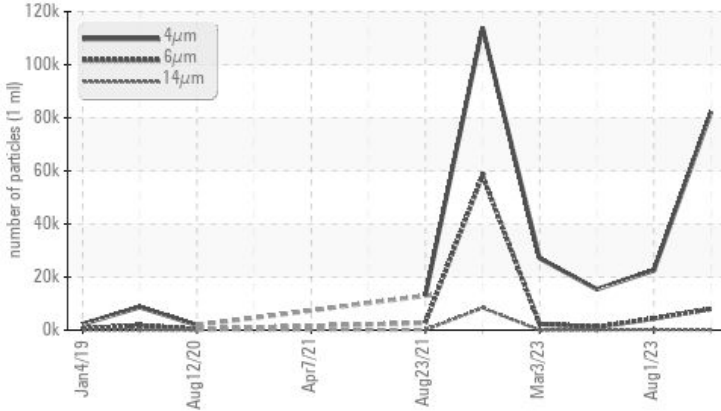
Area  
**OKLAHOMA/3/EG - EXCAVATOR**  
 Machine Id  
**20.72L [OKLAHOMA^3^EG - EXCAVATOR]**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL MOBILTRANS AST 30 (--- GAL)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status		<b>ABNORMAL</b>	ATTENTION	NORMAL
Particles >6µm	ASTM D7647 >2500	▲ <b>8013</b>	▲ 4389	1161
Oil Cleanliness	ISO 4406 (c) >-/18/16	▲ <b>24/20/14</b>	▲ 22/19/15	21/17/13

Customer Id: SHEWIC  
 Sample No.: WC0848991  
 Lab Number: 05962189  
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Wes Davis +1 905-569-8600 x223  
[wesd@wearcheck.ca](mailto:wesd@wearcheck.ca)

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
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

01 Aug 2023 Diag: Wes Davis

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



06 Apr 2023 Diag: Jonathan Hester

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



03 Mar 2023 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.

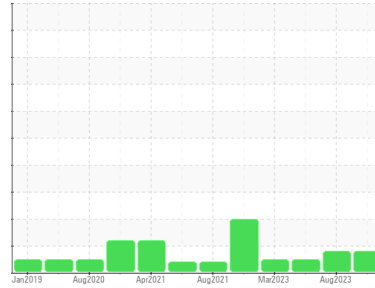
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**OKLAHOMA/3/EG - EXCAVATOR**  
Machine Id  
**20.72L [OKLAHOMA^3^EG - EXCAVATOR]**  
Component  
**Hydraulic System**  
Fluid  
**MOBIL MOBILTRANS AST 30 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

### Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0848991</b>	WC0834148	WC0800811
Sample Date	Client Info		<b>20 Sep 2023</b>	01 Aug 2023	06 Apr 2023
Machine Age	hrs	Client Info	<b>9508</b>	9421	8877
Oil Age	hrs	Client Info	<b>6848</b>	6761	8000
Oil Changed	Client Info		<b>Changed</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ATTENTION	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>15</b>	11	10
Chromium	ppm	ASTM D5185m >10	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m >10	<b>0</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>4</b>	4	4
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >75	<b>2</b>	2	1
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>66</b>	65	61
Barium	ppm	ASTM D5185m	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>19</b>	23	18
Calcium	ppm	ASTM D5185m	<b>3200</b>	2928	3278
Phosphorus	ppm	ASTM D5185m	<b>1014</b>	952	1061
Zinc	ppm	ASTM D5185m	<b>1256</b>	1176	1306
Sulfur	ppm	ASTM D5185m	<b>4567</b>	4832	5642

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>16</b>	14	13
Sodium	ppm	ASTM D5185m	<b>5</b>	4	3
Potassium	ppm	ASTM D5185m >20	<b>1</b>	1	0

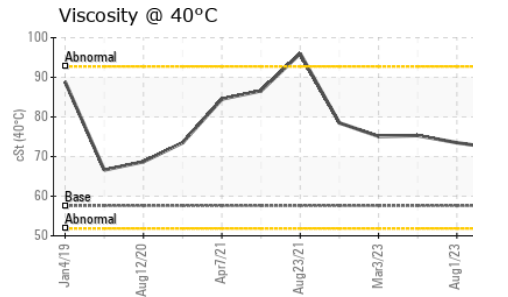
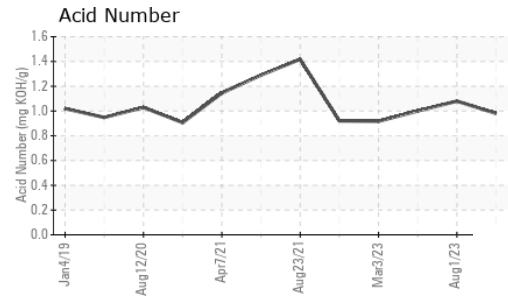
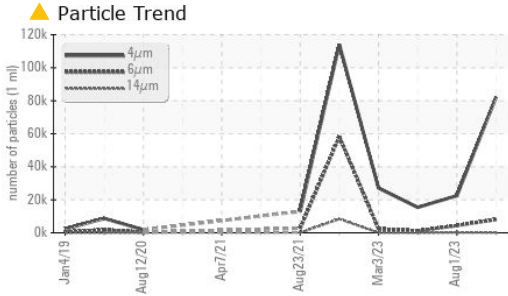
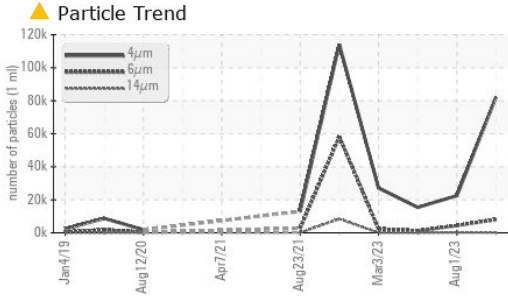
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>82176</b>	22490	15407
Particles >6µm	ASTM D7647	>2500	▲ <b>8013</b>	▲ 4389	1161
Particles >14µm	ASTM D7647	>640	<b>112</b>	187	48
Particles >21µm	ASTM D7647	>160	<b>18</b>	42	9
Particles >38µm	ASTM D7647	>40	<b>0</b>	2	0
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/18/16	▲ <b>24/20/14</b>	▲ 22/19/15	21/17/13

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.98</b>	1.08	1.00

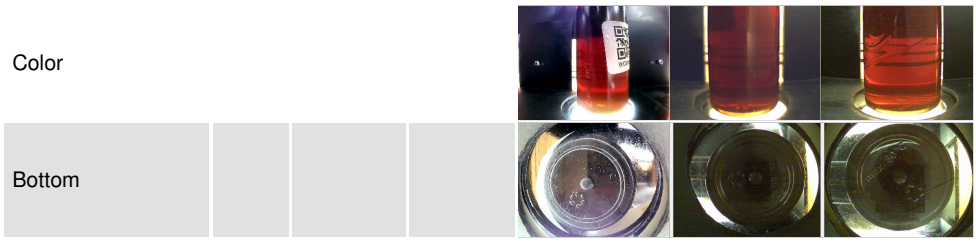
# OIL ANALYSIS REPORT



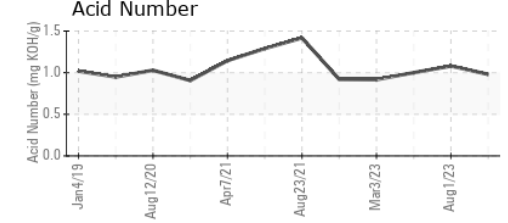
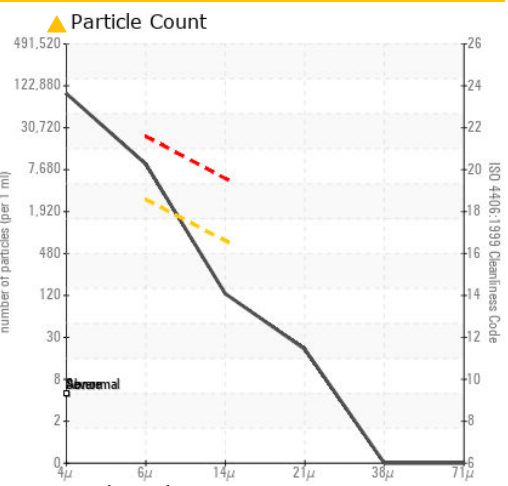
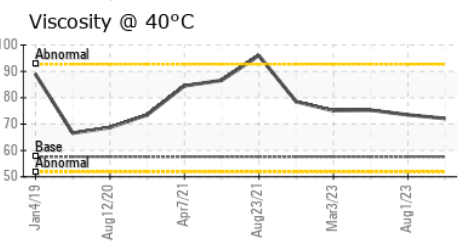
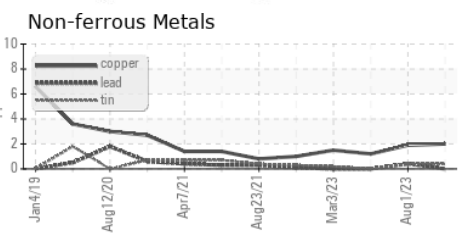
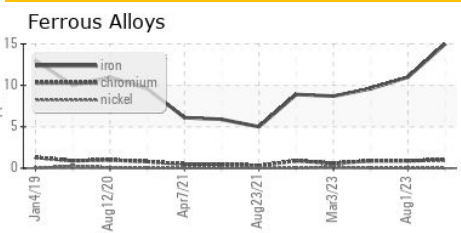
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	72.1	73.5

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0848991 **Received** : 27 Sep 2023  
**Lab Number** : 05962189 **Diagnosed** : 28 Sep 2023  
**Unique Number** : 10668740 **Diagnostician** : Wes Davis  
**Test Package** : CONST

**SHERWOOD CONSTRUCTION CO INC**  
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 US 67213  
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 doug.king@sherwood.net  
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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)