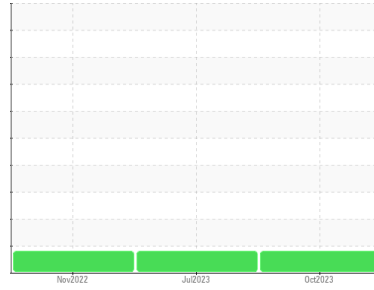




# PROBLEM SUMMARY

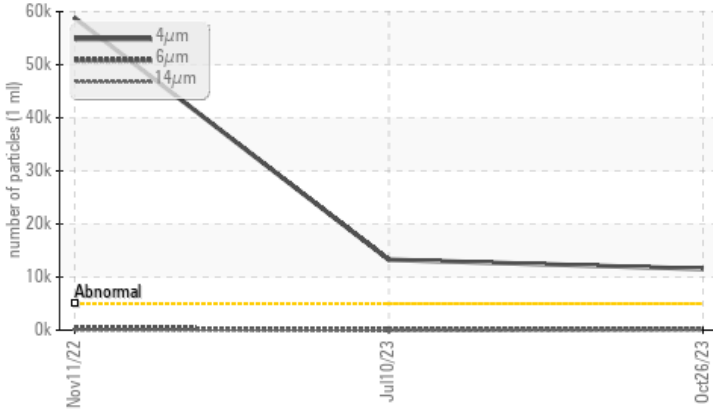
## Sample Rating Trend



Machine Id  
**AF12-110-2125-0000 EAST TRUCK DUMP HYDRAULIC UNIT**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL DTE 10 EXCEL 46 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

No corrective action is recommended at this time.  
 Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647 >5000	▲ <b>11529</b>	▲ 13268	▲ 58806
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ <b>21/15/11</b>	▲ 21/13/9	▲ 23/16/10

Customer Id: ARAGRAUS  
 Sample No.: WC0862254  
 Lab Number: 05996690  
 Test Package: PLANT



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

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 10 Jul 2023 Diag: Doug Bogart

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 6 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



---

### 11 Nov 2022 Diag: Angela Borella

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a high 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 acceptable for the time in service.

view report

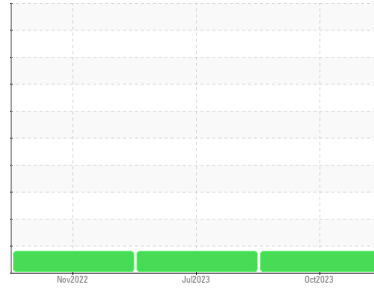




# OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Machine Id  
**AF12-110-2125-0000 EAST TRUCK DUMP HYDRAULIC UNIT**

Component  
**Hydraulic System**

Fluid  
**MOBIL DTE 10 EXCEL 46 (--- GAL)**

## 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 a high amount of silt (particulates < 6 microns in size) present in the oil.

### 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>WC0862254</b>	WC0818989	WC0761373
Sample Date	Client Info		<b>26 Oct 2023</b>	10 Jul 2023	11 Nov 2022
Machine Age	yrs	Client Info	<b>4</b>	0	4
Oil Age	yrs	Client Info	<b>4</b>	0	4
Oil Changed	Client Info		<b>N/A</b>	Filtered	Filtered
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>4</b>	17	7
Iron	ppm	ASTM D5185m >20	<b>23</b>	26	27
Chromium	ppm	ASTM D5185m >20	<b>3</b>	3	2
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >20	<b>4</b>	4	3
Tin	ppm	ASTM D5185m >20	<b>0</b>	<1	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>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Calcium	ppm	ASTM D5185m	<b>112</b>	113	142
Phosphorus	ppm	ASTM D5185m	<b>384</b>	450	447
Zinc	ppm	ASTM D5185m	<b>14</b>	18	24
Sulfur	ppm	ASTM D5185m	<b>1567</b>	1658	1895

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>1</b>	1	1
Sodium	ppm	ASTM D5185m	<b>2</b>	8	12
Potassium	ppm	ASTM D5185m >20	<b>2</b>	1	0
Water	%	ASTM D6304 >0.05	<b>0.006</b>	0.008	0.008
ppm Water	ppm	ASTM D6304 >500	<b>62.9</b>	80.7	85.1

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 11529</b>	▲ 13268	▲ 58806
Particles >6µm	ASTM D7647	>1300	<b>248</b>	61	431
Particles >14µm	ASTM D7647	>160	<b>14</b>	4	5
Particles >21µm	ASTM D7647	>40	<b>6</b>	2	2
Particles >38µm	ASTM D7647	>10	<b>1</b>	1	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 21/15/11</b>	▲ 21/13/9	▲ 23/16/10

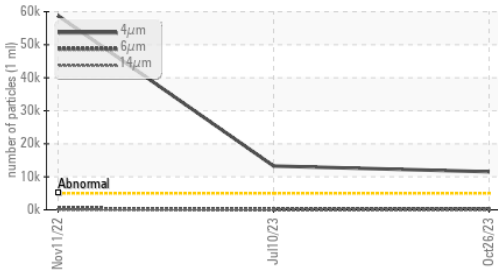
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.113</b>	0.139	0.08

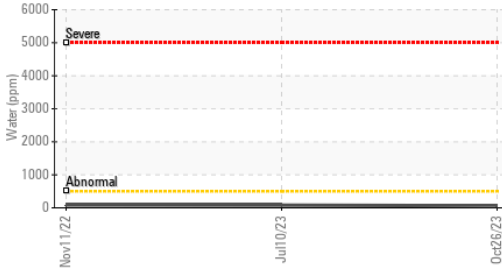


# OIL ANALYSIS REPORT

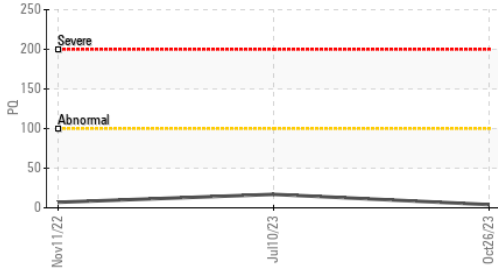
## Particle Trend



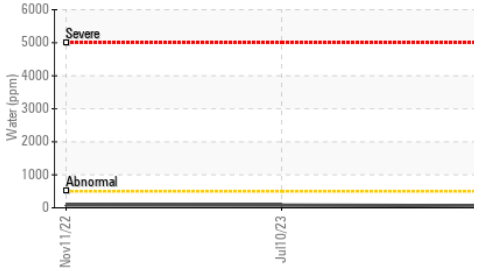
## Water (KF)



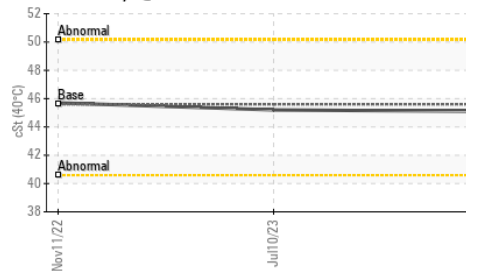
## PQ



## Water (KF)



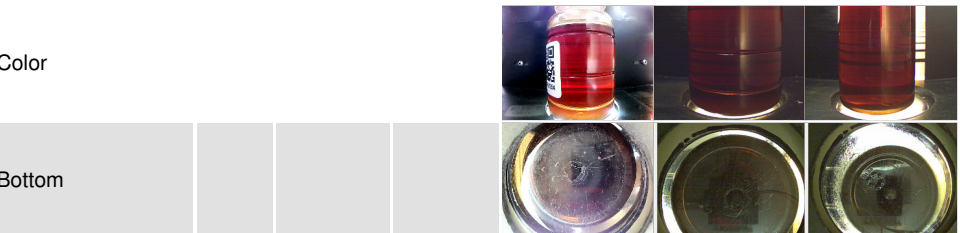
## Viscosity @ 40°C



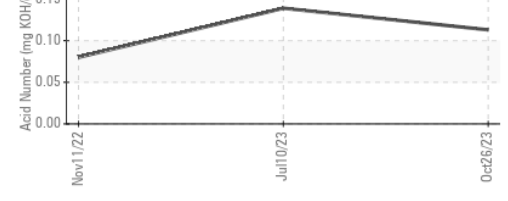
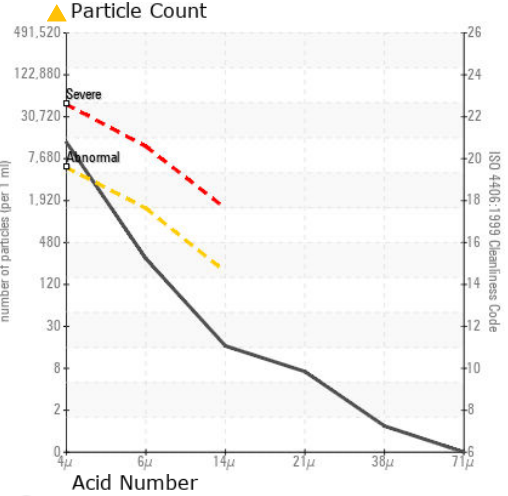
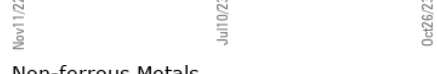
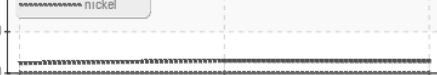
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45.6	45.1	45.2

## SAMPLE IMAGES



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0862254 **Received** : 02 Nov 2023  
**Lab Number** : 05996690 **Diagnosed** : 04 Nov 2023  
**Unique Number** : 10725050 **Diagnostician** : Don Baldrige  
**Test Package** : PLANT

**ARAUCO - GRAYLING**  
 5851 ARAUCO ROAD  
 GRAYLING, MI  
 US 49738  
 Contact: JOSEPH GREEN  
 joseph.green@arauco.com  
 T:  
 F:

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)