



# PROBLEM SUMMARY

Sample Rating Trend



ISO



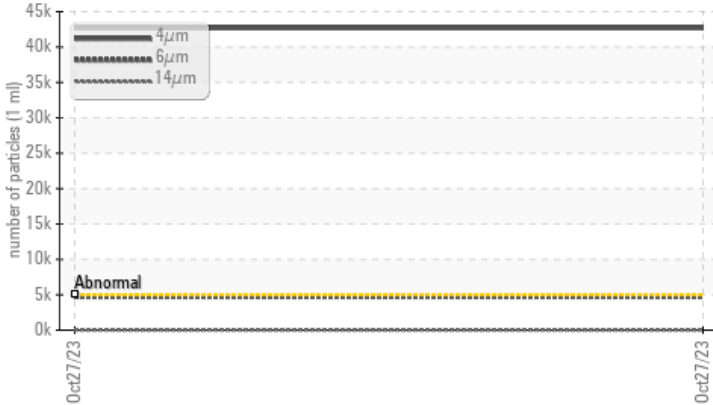
Machine Id  
**4AE4 4AE4**

Component  
**Hydraulic System**

Fluid  
**MOBIL DTE OIL EXTRA HEAVY (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	---	---
Particles >4µm	ASTM D7647	>5000	▲ <b>42679</b>	---	---
Particles >6µm	ASTM D7647	>1300	▲ <b>4700</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ <b>23/19/12</b>	---	---

Customer Id: TESAUSTLC  
Sample No.: TLC0001294  
Lab Number: 05998169  
Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

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 Filter	---	---	?	We recommend you service the filters on this component if applicable.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**4AE4 4AE4**

Component  
**Hydraulic System**

Fluid  
**MOBIL DTE OIL EXTRA HEAVY (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

### 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>TLC0001294</b>	---	---
Sample Date	Client Info		<b>27 Oct 2023</b>	---	---
Machine Age	mths	Client Info	<b>2</b>	---	---
Oil Age	mths	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>9</b>	---	---
Iron	ppm	ASTM D5185m >20	<b>&lt;1</b>	---	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m >20	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	---	---
Lead	ppm	ASTM D5185m >20	<b>3</b>	---	---
Copper	ppm	ASTM D5185m >20	<b>3</b>	---	---
Tin	ppm	ASTM D5185m >20	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	---	---
Barium	ppm	ASTM D5185m	<b>19</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>1</b>	---	---
Calcium	ppm	ASTM D5185m	<b>98</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>399</b>	---	---
Zinc	ppm	ASTM D5185m	<b>496</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>9143</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>7</b>	---	---
Sodium	ppm	ASTM D5185m	<b>0</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>1</b>	---	---

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 42679</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 4700</b>	---	---
Particles >14µm	ASTM D7647	>160	<b>23</b>	---	---
Particles >21µm	ASTM D7647	>40	<b>4</b>	---	---
Particles >38µm	ASTM D7647	>10	<b>1</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>1</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 23/19/12</b>	---	---

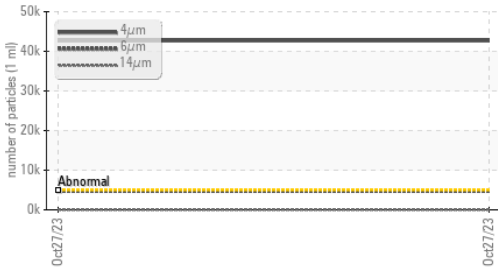
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.73</b>	---	---

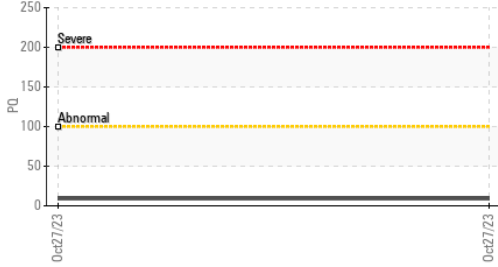


# OIL ANALYSIS REPORT

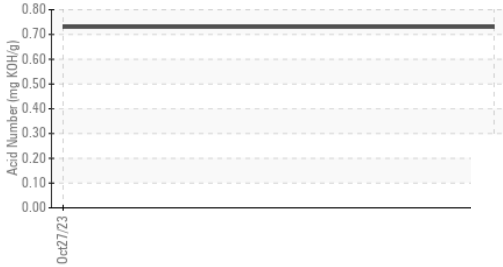
## ▲ Particle Trend



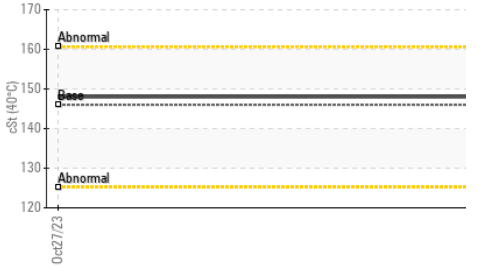
## PQ



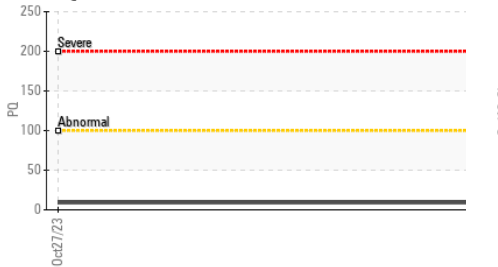
## Acid Number



## Viscosity @ 40°C



## PQ



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	146	148	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color				no image	no image
Bottom				no image	no image

## GRAPHS

### Ferrous Alloys



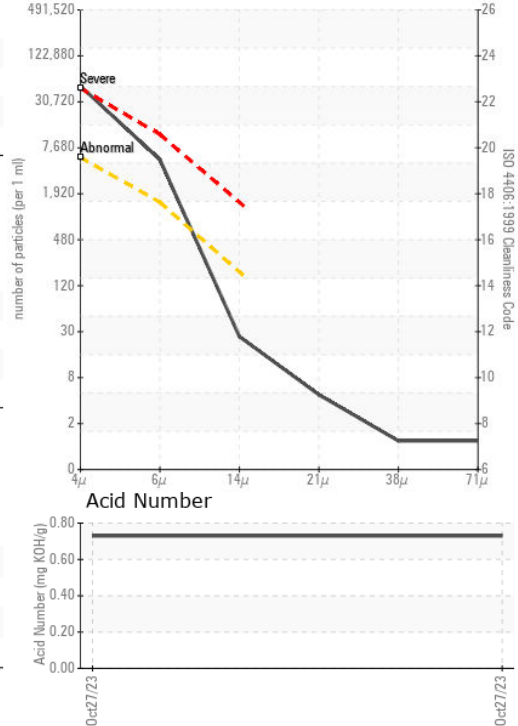
### Non-ferrous Metals



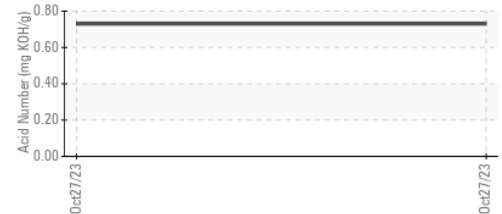
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : TLC0001294  
 Lab Number : 05998169  
 Unique Number : 10726529  
 Test Package : PLANT

Received : 03 Nov 2023  
 Diagnosed : 08 Nov 2023  
 Diagnostician : Jonathan Hester

**TESLA**  
 1 Tesla Road, BIW E58  
 Austin, TX  
 US 78725  
 Contact: Dave Mitchell  
 davmitchell@tesla.com

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)

T: (260)226-1968

F: