

# PROBLEM SUMMARY

Sample Rating Trend

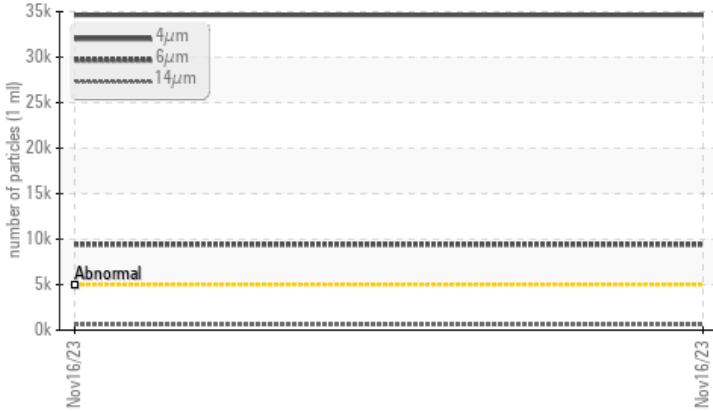
ISO



Machine Id  
**MCELROY 00116 - ROTARY UNION P1I4 - ISO 46**  
 Component  
**New (Unused) Oil**  
 Fluid  
**{not provided} (--- QTS)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

This is a baseline read-out on the submitted sample.

## PROBLEMATIC TEST RESULTS

Sample Status	ASTM D7647	ISO 4406 (c)	ABNORMAL	---	---
Particles >4µm	>5000		▲ 34629	---	---
Particles >6µm	>1300		▲ 9419	---	---
Particles >14µm	>160		▲ 609	---	---
Particles >21µm	>40		▲ 135	---	---
Oil Cleanliness	>19/17/14		▲ 22/20/16	---	---

Customer Id: UCTULTUL  
 Sample No.: TO10002644  
 Lab Number: 06012888  
 Test Package: IND 2



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To discuss the diagnosis or test data:  
 Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@wearcheckusa.com)

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

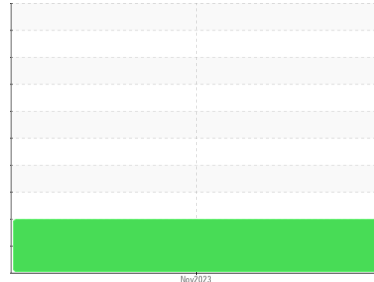
## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**MCELROY 00116 - ROTARY UNION P114 - ISO 46**  
 Component  
**New (Unused) Oil**  
 Fluid  
**{not provided} (--- QTS)**

## DIAGNOSIS

- Recommendation**  
This is a baseline read-out on the submitted sample.
- Contamination**  
There is a high amount of particulates present in the oil.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>TO10002644</b>	---	---
Sample Date	Client Info	<b>16 Nov 2023</b>	---	---
Machine Age	hrs Client Info	<b>0</b>	---	---
Oil Age	hrs 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
Iron	ppm ASTM D5185m >5	<b>0</b>	---	---
Chromium	ppm ASTM D5185m >5	<b>&lt;1</b>	---	---
Nickel	ppm ASTM D5185m >5	<b>&lt;1</b>	---	---
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Silver	ppm ASTM D5185m >5	<b>0</b>	---	---
Aluminum	ppm ASTM D5185m >5	<b>2</b>	---	---
Lead	ppm ASTM D5185m >5	<b>&lt;1</b>	---	---
Copper	ppm ASTM D5185m >5	<b>&lt;1</b>	---	---
Tin	ppm ASTM D5185m >5	<b>0</b>	---	---
Vanadium	ppm ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm ASTM D5185m	<b>&lt;1</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>0</b>	---	---
Barium	ppm ASTM D5185m	<b>9</b>	---	---
Molybdenum	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Manganese	ppm ASTM D5185m	<b>0</b>	---	---
Magnesium	ppm ASTM D5185m	<b>80</b>	---	---
Calcium	ppm ASTM D5185m	<b>64</b>	---	---
Phosphorus	ppm ASTM D5185m	<b>324</b>	---	---
Zinc	ppm ASTM D5185m	<b>379</b>	---	---
Sulfur	ppm ASTM D5185m	<b>670</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >15	<b>&lt;1</b>	---	---
Sodium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Potassium	ppm ASTM D5185m >20	<b>13</b>	---	---
Water	% ASTM D6304	<b>0.004</b>	---	---
ppm Water	ppm ASTM D6304	<b>44.6</b>	---	---

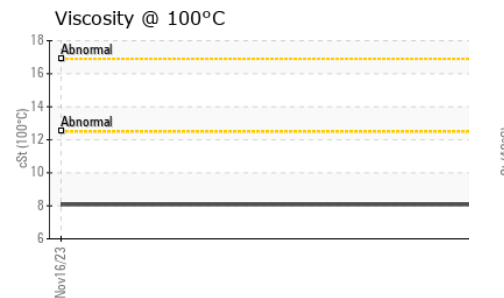
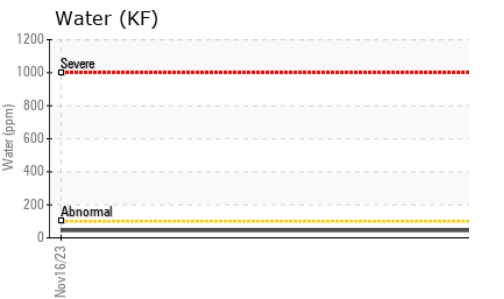
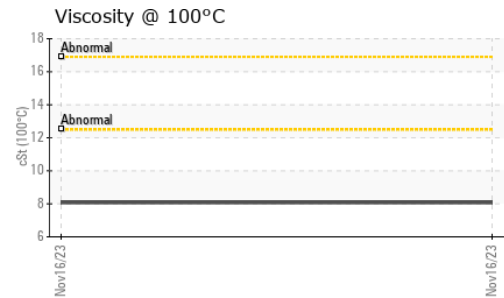
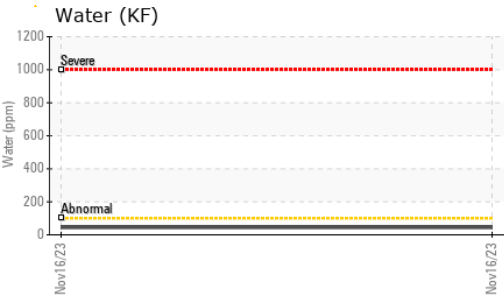
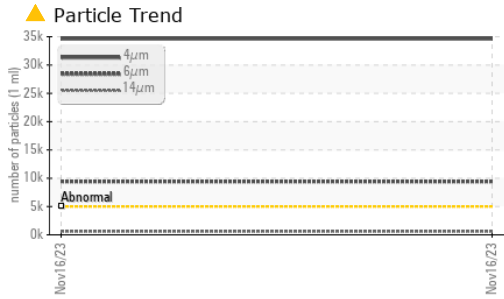
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>▲ 34629</b>	---	---
Particles >6µm	ASTM D7647 >1300	<b>▲ 9419</b>	---	---
Particles >14µm	ASTM D7647 >160	<b>▲ 609</b>	---	---
Particles >21µm	ASTM D7647 >40	<b>▲ 135</b>	---	---
Particles >38µm	ASTM D7647 >10	<b>7</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>1</b>	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>▲ 22/20/16</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.35</b>	---	---

# OIL ANALYSIS REPORT

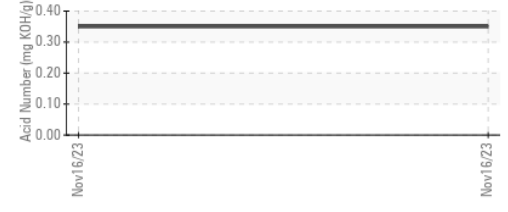
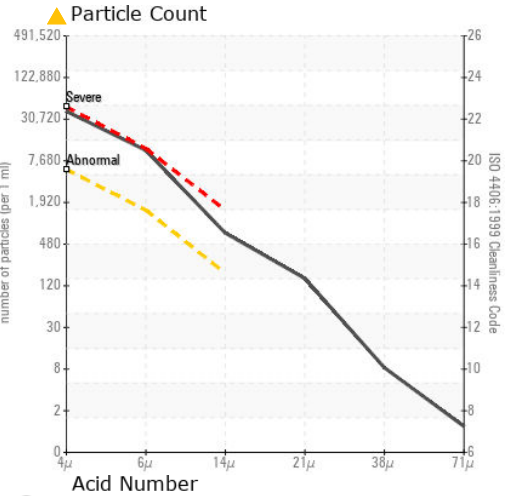
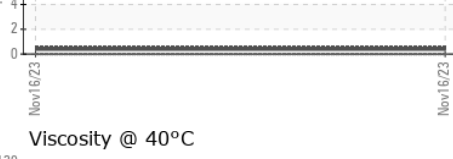


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.5	---	---
Visc @ 100°C	cSt	ASTM D445	8.07	---	---
Viscosity Index (VI)	Scale	ASTM D2270	146	---	---

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO10002644 **Received** : 20 Nov 2023  
**Lab Number** : 06012888 **Diagnosed** : 21 Nov 2023  
**Unique Number** : 10752032 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: FT-IR, ICP-NewOil, KF, KV100, PrtCount, VI )

**TULCO OILS INC (001-TULSA DIVISION)**  
 5240 EAST PINE  
 TULSA, OK  
 US 74115  
 Contact: DYLAN COPE  
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 T: (800)375-2347  
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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)