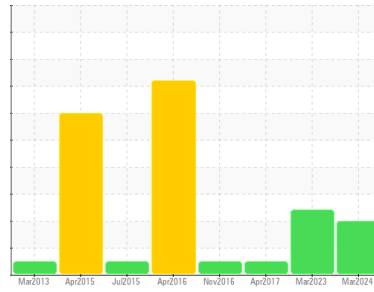




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

**CHW-039**

Component

**Hydraulic System**

Fluid

**MOBIL DTE 10 EXCEL 32 (--- GAL)**

## DIAGNOSIS

### Recommendation

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

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates 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>WC0925983</b>	WC0809814	MHI148404
Sample Date	Client Info		<b>19 Mar 2024</b>	31 Mar 2023	06 Apr 2017
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		---	31	---
Iron	ppm	ASTM D5185m >50	<b>6</b>	▲ 83	5
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	0	0
Lead	ppm	ASTM D5185m >20	<b>2</b>	2	5
Copper	ppm	ASTM D5185m >20	<b>1</b>	2	2
Tin	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m	---	---	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	<1
Barium	ppm	ASTM D5185m	<b>0</b>	0	<1
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>	2	2
Calcium	ppm	ASTM D5185m 120	<b>108</b>	112	94
Phosphorus	ppm	ASTM D5185m 475	<b>243</b>	414	534
Zinc	ppm	ASTM D5185m	<b>25</b>	17	171
Sulfur	ppm	ASTM D5185m 1275	<b>909</b>	1169	1286

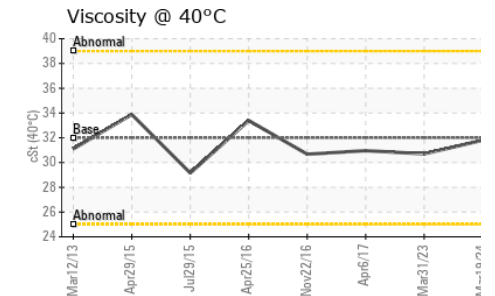
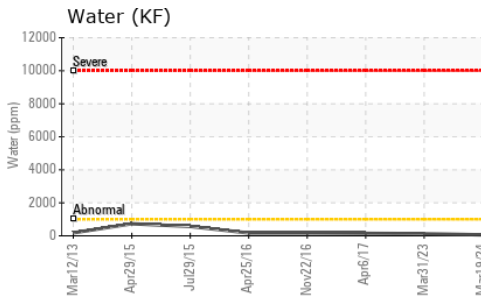
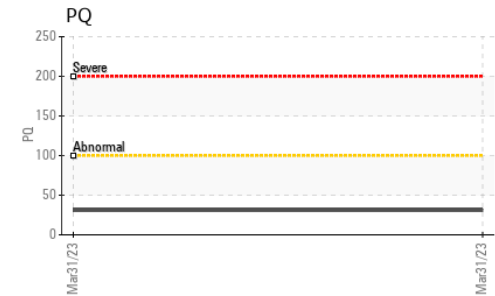
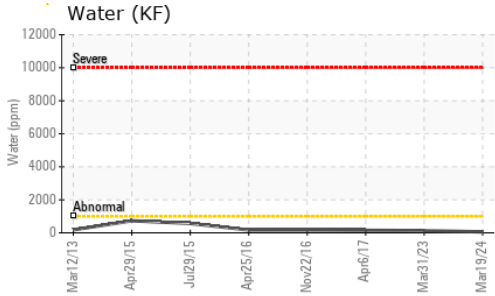
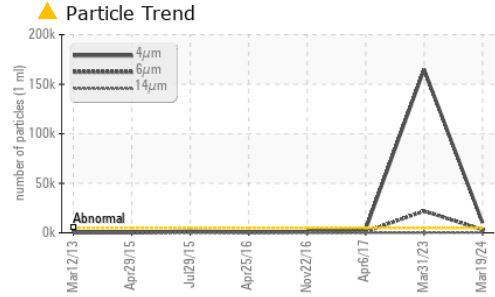
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+30	<b>0</b>	3	2
Sodium	ppm	ASTM D5185m	<b>2</b>	5	3
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	3
Water	%	ASTM D6304 >0.1	<b>0.006</b>	0.013	0.015
ppm Water	ppm	ASTM D6304 >1000	<b>57</b>	133.0	150

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ <b>10112</b>	▲ 164880	3492
Particles >6µm	ASTM D7647	>1300	▲ <b>3065</b>	▲ 21941	826
Particles >14µm	ASTM D7647	>160	▲ <b>231</b>	▲ 175	82
Particles >21µm	ASTM D7647	>40	▲ <b>44</b>	33	25
Particles >38µm	ASTM D7647	>10	<b>1</b>	0	6
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	4
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ <b>21/19/15</b>	▲ 25/22/15	19/17/14

# OIL ANALYSIS REPORT

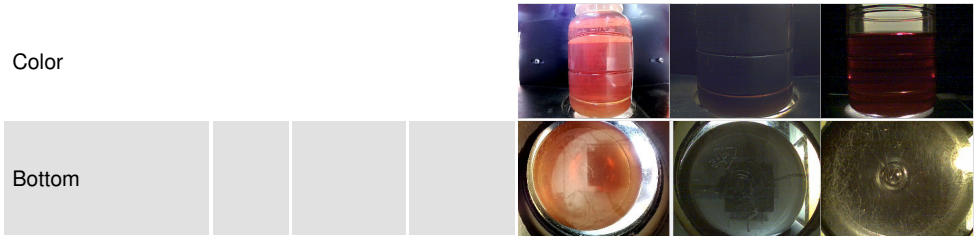


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.15</b>	0.07	0.369

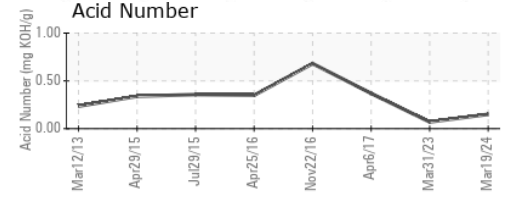
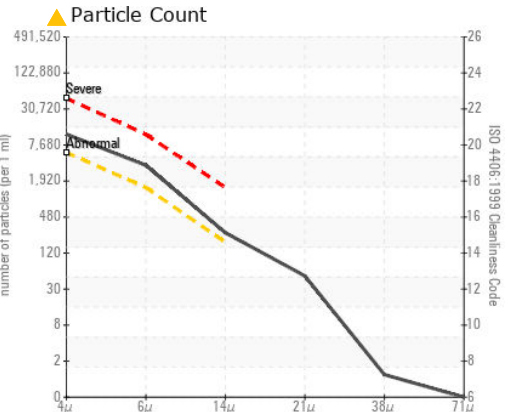
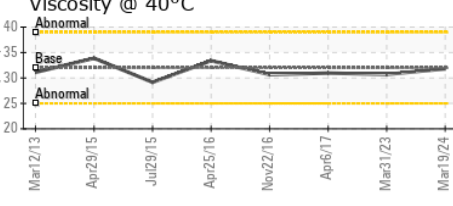
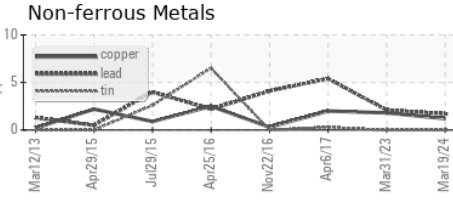
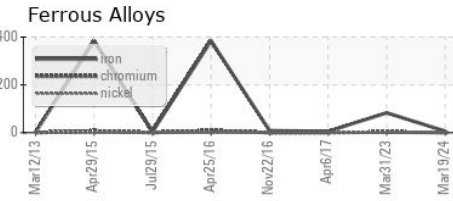
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	<b>31.8</b>	30.7	30.96

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0925983  
**Lab Number** : **06137357**  
**Unique Number** : 10956822  
**Test Package** : IND 2 ( Additional Tests: KF, PQ )  
**Received** : 03 Apr 2024  
**Tested** : 09 Apr 2024  
**Diagnosed** : 09 Apr 2024 - Jonathan Hester

**DEUTSCHE WINDTECHNIK - CANADIAN HILLS - MPS CH**  
 14730 EDMOND RD NW  
 CALUMET, OK  
 US 73014  
 Contact: ANGEL LAUZARA  
 a.lauzara@deutsche-windtechnik.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)