



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**CZM DVT 4 4850015**  
Component  
**Hydraulic System**  
Fluid  
**CAT HYDO (62 GAL)**

## RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0919232</b>	WCMC153574	---
Sample Date		Client Info		<b>15 Apr 2024</b>	02 Jun 2021	---
Machine Age	hrs	Client Info		<b>3875</b>	1017	---
Oil Age	hrs	Client Info		<b>0</b>	1017	---
Filter Age	hrs	Client Info		<b>0</b>	1017	---
Oil Changed		Client Info		<b>N/A</b>	Not Changd	---
Filter Changed		Client Info		<b>N/A</b>	Not Changd	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>4</b>	3	---
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	---
Silver	ppm	ASTM D5185m		<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	---
Lead	ppm	ASTM D5185m	>10	<b>1</b>	1	---
Copper	ppm	ASTM D5185m	>75	<b>7</b>	5	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

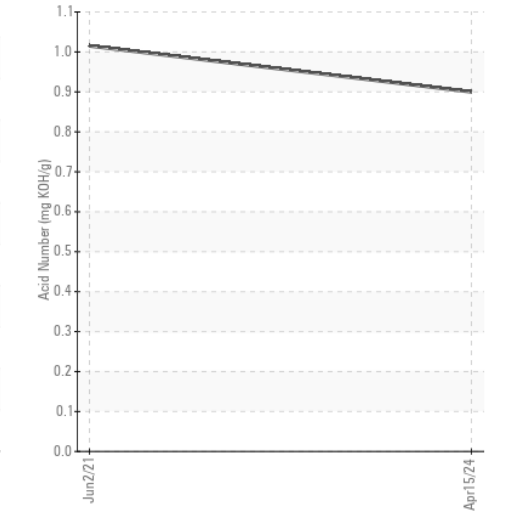
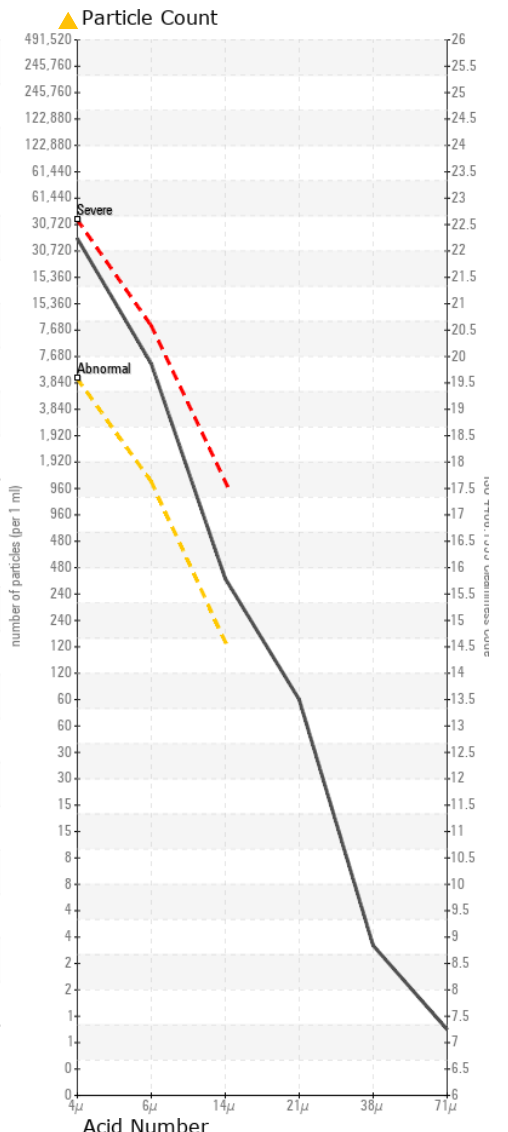
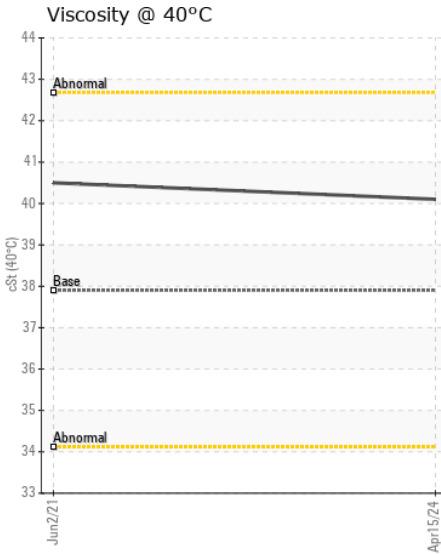
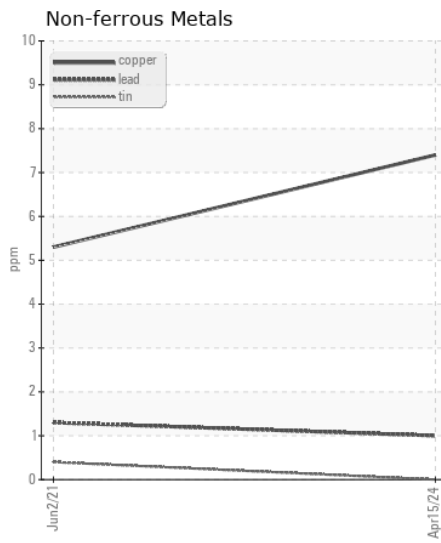
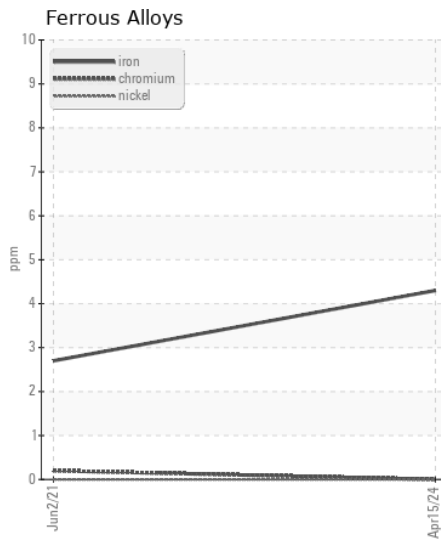
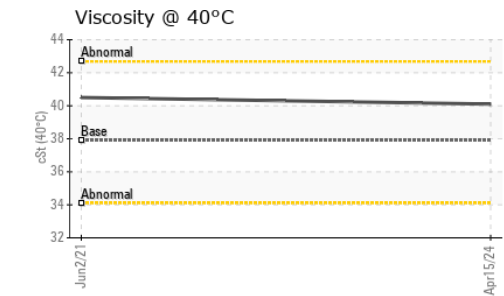
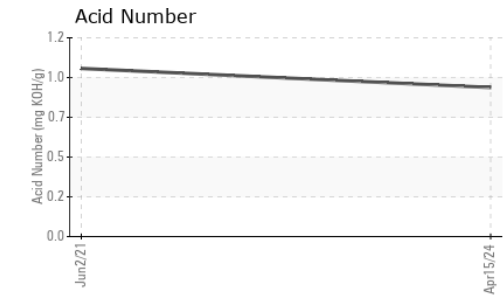
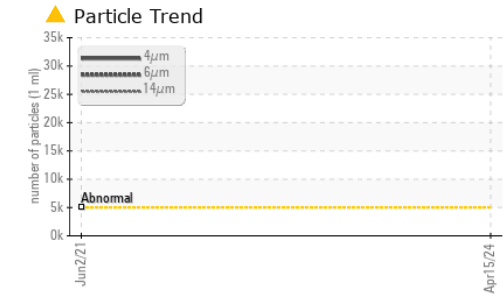
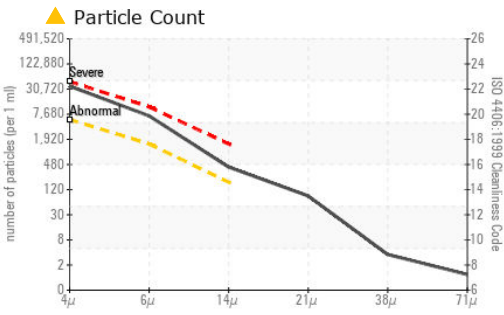
There is a high amount of particulates present in the oil. Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>4</b>	3	---
Potassium	ppm	ASTM D5185m	>20	<b>12</b>	<1	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>5000	<b>▲ 31260</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 6086</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>▲ 366</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>▲ 75</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>3</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>1</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 22/20/16</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>▲ MODER</b>	<b>▲ MODER</b>	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	---

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>3</b>	<1	---
Boron	ppm	ASTM D5185m		<b>0</b>	7	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	---
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>4</b>	8	---
Calcium	ppm	ASTM D5185m		<b>1751</b>	2524	---
Phosphorus	ppm	ASTM D5185m	1100	<b>653</b>	781	---
Zinc	ppm	ASTM D5185m	1210	<b>753</b>	999	---
Sulfur	ppm	ASTM D5185m		<b>2458</b>	2630	---
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.90</b>	1.015	---
Visc @ 40°C	cSt	ASTM D445	37.9	<b>40.1</b>	40.5	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0919232 **Received** : 17 Apr 2024  
**Lab Number** : 06151917 **Tested** : 18 Apr 2024  
**Unique Number** : 10981995 **Diagnosed** : 19 Apr 2024 - Don Baldrige  
**Test Package** : CONST

**KELLER-NA - KERNERSVILLE**  
 1024 EAST MOUNTAIN ST  
 KERNERSVILLE, NC  
 US 27284  
 Contact: BRENT SHIRLEY  
 BShirley@keller-na.com  
 T: (336)992-2300  
 F: (336)668-3259

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)