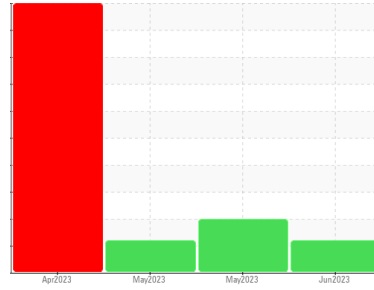




# PROBLEM SUMMARY

Machine Id  
**HCTS (S/N CB105-BL)**  
 Component  
**Servo Valve Upstream Hydraulic System**  
 Fluid  
**DEXRON-VI (--- GAL)**

Sample Rating Trend



## VISUAL METAL



### COMPONENT CONDITION SUMMARY

No relevant graphs to display


### RECOMMENDATION

We recommend you service the filters on this component. We advise that you inspect for the source(s) of metal. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.

### PROBLEMATIC TEST RESULTS

Sample Status	ABNORMAL	ABNORMAL	ABNORMAL
White Metal	scalar	*Visual	NONE
	▲ MODER	NONE	▲ MODER

**Customer Id:** DUNAUS  
**Sample No.:** WC0806732  
**Lab Number:** 05870870  
**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

Action	Status	Date	Done By	Description
Inspect Wear Source	MISSED	Jul 07 2023	?	We advise that you inspect for the source(s) of wear.
Change Filter	MISSED	Jul 07 2023	?	We recommend you service the filters on this component.
Alert	---	---	?	We were unable to perform a particle count due to metal particles present in this sample.

## HISTORICAL DIAGNOSIS

### 25 May 2023 Diag: Don Baldrige

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 02 May 2023 Diag: Don Baldrige

VISUAL METAL



We recommend you service the filters on this component. We advise that you inspect for the source(s) of metal. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample. Moderate concentration of visible metal present. All component wear rates are normal. No other contaminants were detected in the oil. The AN level is acceptable for this fluid.

view report



### 24 Apr 2023 Diag: Doug Bogart

VISUAL METAL



We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data updates for particle count. Moderate concentration of visible metal present. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

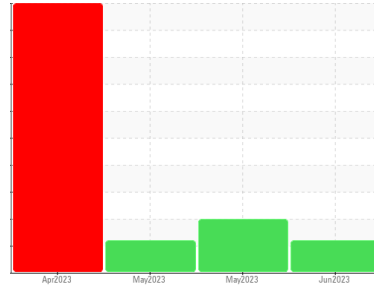
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**VISUAL METAL**



Machine Id  
**HCTS (S/N CB105-BL)**  
 Component  
**Servo Valve Upstream Hydraulic System**  
 Fluid  
**DEXRON-VI (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

We recommend you service the filters on this component. We advise that you inspect for the source(s) of metal. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.

### ▲ Wear

Moderate concentration of visible metal present. All component wear rates are normal.

### Contamination

No other contaminants were detected in the oil.

### Fluid Condition

The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0806732</b>	WC0806748	WC0806749
Sample Date	Client Info		<b>06 Jun 2023</b>	25 May 2023	02 May 2023
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	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>3</b>	5	3
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >20	<b>4</b>	4	4
Lead	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m >20	<b>1</b>	1	<1
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 75	<b>13</b>	17	15
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 0	<b>0</b>	12	0
Calcium	ppm	ASTM D5185m 200	<b>77</b>	146	76
Phosphorus	ppm	ASTM D5185m 300	<b>196</b>	208	182
Zinc	ppm	ASTM D5185m 25	<b>5</b>	52	0
Sulfur	ppm	ASTM D5185m 1200	<b>2010</b>	1845	1536

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>&lt;1</b>	2	<1
Sodium	ppm	ASTM D5185m	<b>2</b>	2	<1
Potassium	ppm	ASTM D5185m >20	<b>2</b>	3	1

## FLUID CLEANLINESS

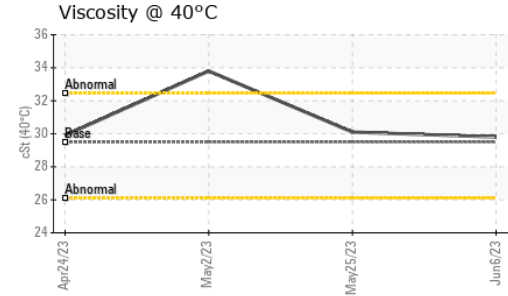
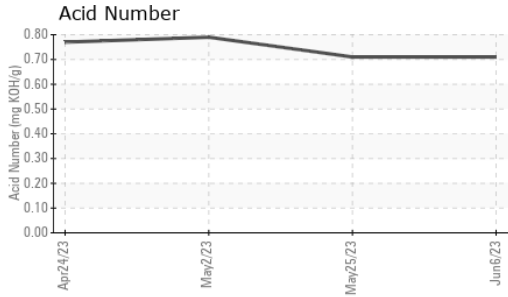
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	---	▲ 75520	---
Particles >6µm	ASTM D7647	>1300	---	▲ 17437	---
Particles >14µm	ASTM D7647	>160	---	▲ 595	---
Particles >21µm	ASTM D7647	>40	---	▲ 84	---
Particles >38µm	ASTM D7647	>10	---	0	---
Particles >71µm	ASTM D7647	>3	---	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	---	▲ 23/21/16	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.71</b>	0.71	0.79



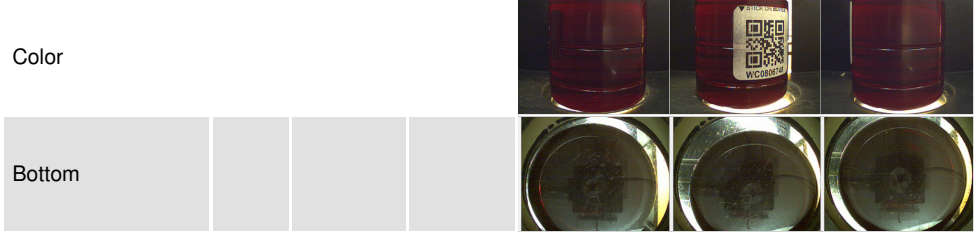
# OIL ANALYSIS REPORT



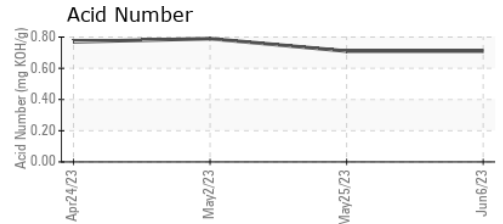
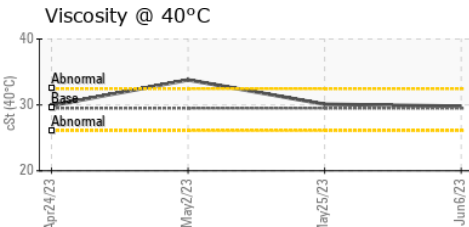
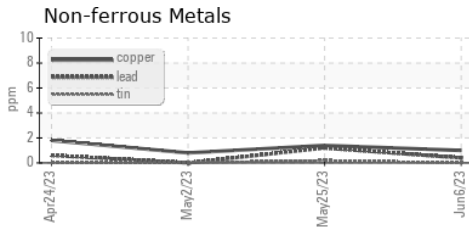
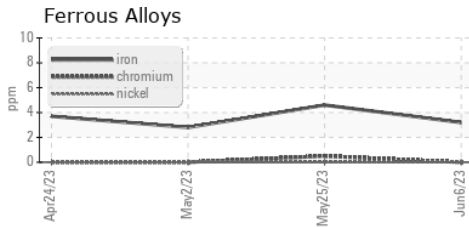
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	▲ MODER	▲ MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	29.5	29.8	30.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0806732  
**Lab Number** : 05870870  
**Unique Number** : 10510654  
**Test Package** : PLANT  
**Received** : 12 Jun 2023  
**Diagnosed** : 14 Jun 2023  
**Diagnostician** : Don Baldrige

**DUNAN MICROSTAQ INC**  
 4120 FREIDRICH LANE SUITE 225  
 AUSTIN, TX  
 US 78744  
 Contact: Wes Davis  
 wes.davis@wearcheck.com  
 T: (512)628-2890 x:115  
 F: (512)628-2897

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)