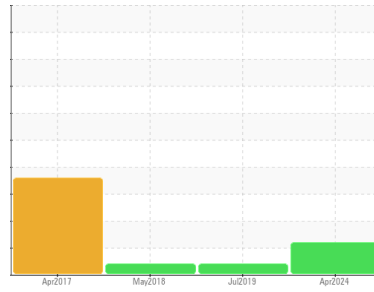


# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**TKS PRESS 1 UNIT 7**

Component  
**Hydraulic System**

Fluid  
**TULCO LUBSOIL SUPER HYDRAULIC AW 68 (50 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>TO50000868</b>	TO5000396	TO5010026
Sample Date	Client Info	<b>17 Apr 2024</b>	23 Jul 2019	14 May 2018
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>Not Chngd</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ATTENTION

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >20	<b>17</b>	20	16
Chromium ppm	ASTM D5185m >10	<b>0</b>	<1	<1
Nickel ppm	ASTM D5185m >10	<b>0</b>	<1	<1
Titanium ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum ppm	ASTM D5185m >10	<b>0</b>	<1	<1
Lead ppm	ASTM D5185m >10	<b>4</b>	4	5
Copper ppm	ASTM D5185m >75	<b>33</b>	14	13
Tin ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Antimony ppm	ASTM D5185m	<b>---</b>	0	0
Vanadium ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium ppm	ASTM D5185m	<b>0</b>	<1	<1

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm	ASTM D5185m	<b>0</b>	<1	<1
Barium ppm	ASTM D5185m	<b>0</b>	0	<1
Molybdenum ppm	ASTM D5185m	<b>0</b>	<1	<1
Manganese ppm	ASTM D5185m	<b>&lt;1</b>	<1	1
Magnesium ppm	ASTM D5185m	<b>3</b>	6	8
Calcium ppm	ASTM D5185m	<b>4</b>	6	6
Phosphorus ppm	ASTM D5185m 425	<b>164</b>	221	226
Zinc ppm	ASTM D5185m 500	<b>155</b>	225	218
Sulfur ppm	ASTM D5185m 1900	<b>5309</b>	4801	2619

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >20	<b>15</b>	25	23
Sodium ppm	ASTM D5185m	<b>&lt;1</b>	2	2
Potassium ppm	ASTM D5185m >20	<b>&lt;1</b>	1	1
Water %	ASTM D6304 >0.1	<b>0.001</b>	0.005	0.003
ppm Water	ASTM D6304 >1000	<b>11</b>	50	30

## FLUID CLEANLINESS

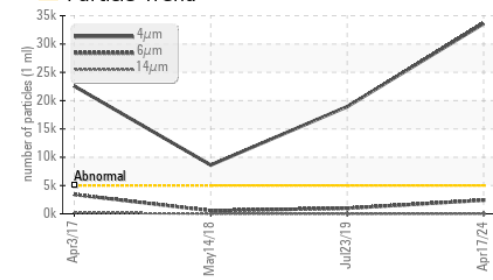
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>▲ 33598</b>	▲ 18932	● 8619
Particles >6µm	ASTM D7647 >1300	<b>▲ 2407</b>	981	551
Particles >14µm	ASTM D7647 >160	<b>23</b>	4	23
Particles >21µm	ASTM D7647 >40	<b>7</b>	0	14
Particles >38µm	ASTM D7647 >10	<b>0</b>	0	3
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	1
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>▲ 22/18/12</b>	▲ 21/17/9	● 20/16/12

## FLUID DEGRADATION

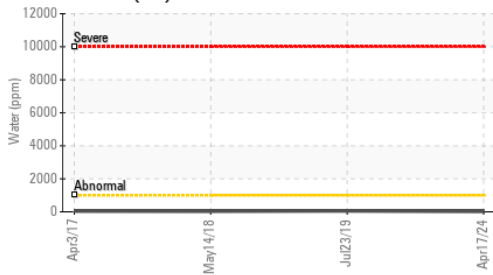
method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D8045 0.7	<b>0.37</b>	0.463	0.458

# OIL ANALYSIS REPORT

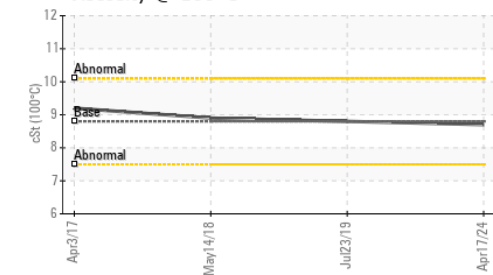
## ▲ Particle Trend



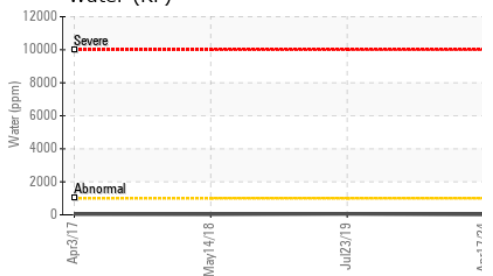
## Water (KF)



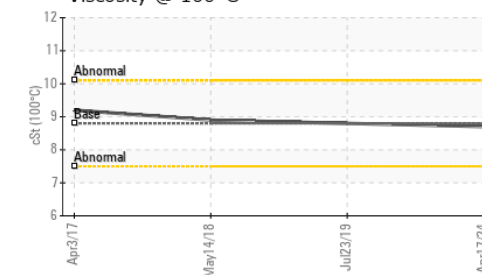
## Viscosity @ 100°C



## Water (KF)



## Viscosity @ 100°C

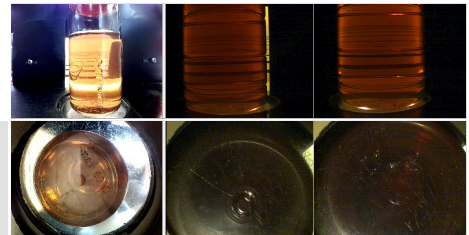


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67.4	66.5	67.3
Visc @ 100°C	cSt	ASTM D445	8.8	8.7	8.9
Viscosity Index (VI)	Scale	ASTM D2270	102	103	104

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

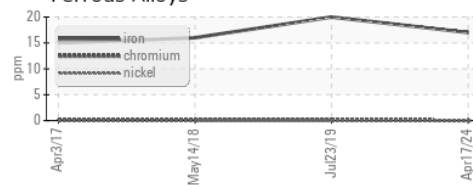
Color



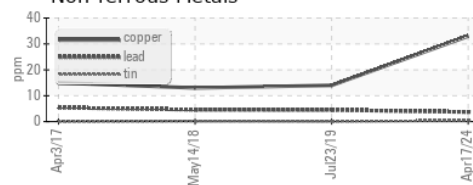
Bottom

## GRAPHS

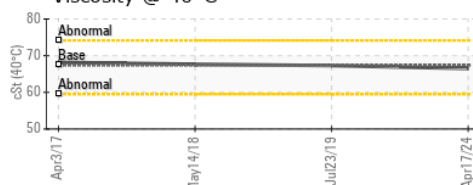
### Ferrous Alloys



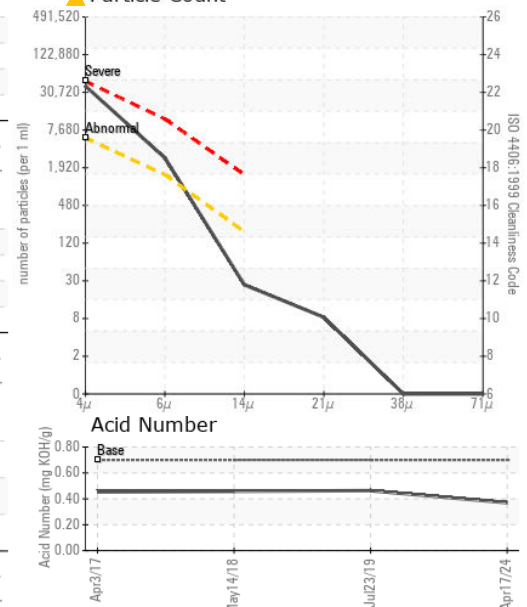
### Non-ferrous Metals



### Viscosity @ 40°C



### ▲ Particle Count



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50000868 **Received** : 22 Apr 2024  
**Lab Number** : 06155911 **Tested** : 23 Apr 2024  
**Unique Number** : 10991334 **Diagnosed** : 24 Apr 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, VI )

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)

**DALLAS MORNING NEWS**  
 3900 W PLANO PKWY  
 PLANO, TX  
 US 75075  
 Contact: KENNY CLARK  
 kclark@dallasnews.com  
 T: (214)977-6929  
 F: (214)977-6888