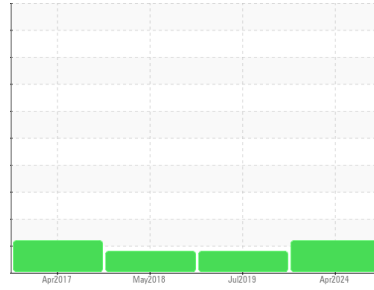


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**TKS PRESS 5 UNIT 8**

Component  
**Hydraulic System**

Fluid  
**TULCO LUBSOIL SUPER HYDRAULIC AW 68 (50 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

### 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>TO50000792</b>	TO5000417	TO5010006
Sample Date	Client Info		<b>17 Apr 2024</b>	23 Jul 2019	14 May 2018
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>18</b>	12	21
Chromium	ppm	ASTM D5185m >10	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	<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>&lt;1</b>	<1	1
Lead	ppm	ASTM D5185m >10	<b>1</b>	<1	1
Copper	ppm	ASTM D5185m >75	<b>13</b>	6	10
Tin	ppm	ASTM D5185m >10	<b>0</b>	<1	0
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>	0	<1

ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	2	<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>1</b>	4	5
Calcium	ppm	ASTM D5185m	<b>2</b>	1	3
Phosphorus	ppm	ASTM D5185m 425	<b>147</b>	146	186
Zinc	ppm	ASTM D5185m 500	<b>132</b>	63	127
Sulfur	ppm	ASTM D5185m 1900	<b>5363</b>	6164	3069

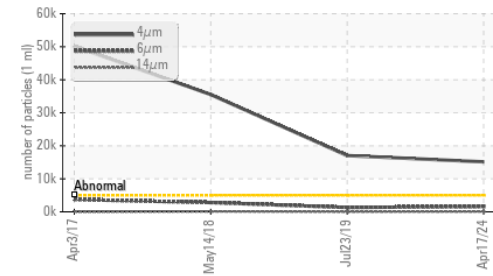
CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>13</b>	9	13
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	1	1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Water	%	ASTM D6304 >0.1	<b>0.00</b>	0.006	0.010
ppm Water	ppm	ASTM D6304 >1000	<b>0</b>	60	100

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 15128</b>	▲ 17036	▲ 35517
Particles >6µm	ASTM D7647	>1300	<b>● 1588</b>	● 1320	▲ 2805
Particles >14µm	ASTM D7647	>160	<b>47</b>	14	111
Particles >21µm	ASTM D7647	>40	<b>10</b>	2	39
Particles >38µm	ASTM D7647	>10	<b>0</b>	0	9
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	2
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 21/18/13</b>	▲ 21/18/11	▲ 22/19/14

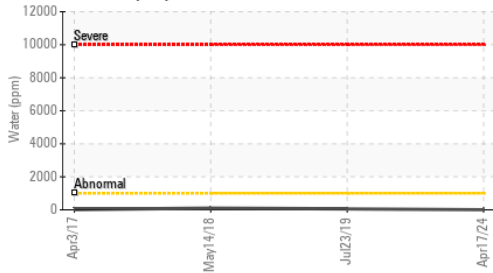
FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.7	<b>0.37</b>	0.313	0.368

# OIL ANALYSIS REPORT

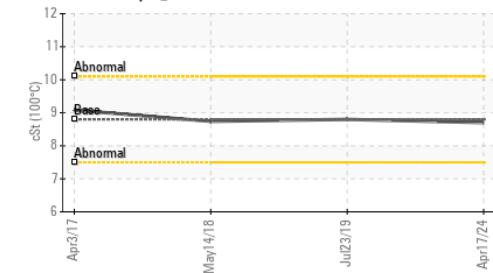
## Particle Trend



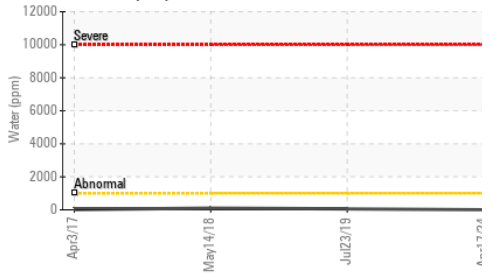
## Water (KF)



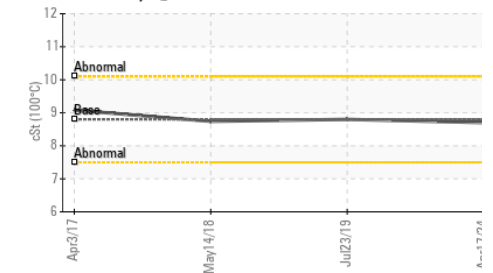
## Viscosity @ 100°C



## 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	LIGHT	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	65.4	66.13
Visc @ 100°C	cSt	ASTM D445	8.8	8.8	8.74
Viscosity Index (VI)	Scale	ASTM D2270	102	107	104

SAMPLE IMAGES	method	limit/base	current	history1	history2
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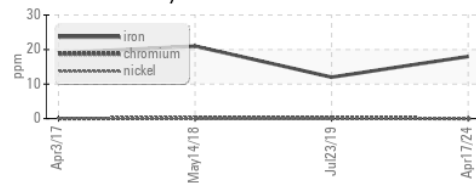
Color

Bottom

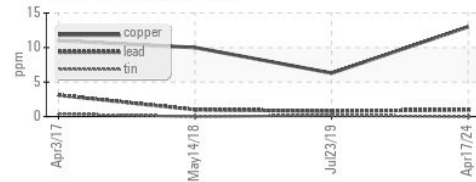


## GRAPHS

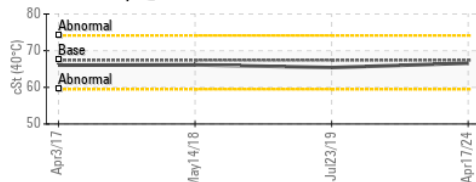
### Ferrous Alloys



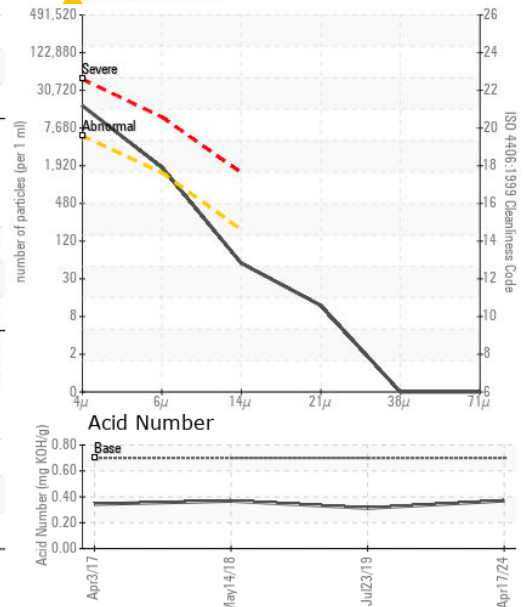
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50000792 **Received** : 22 Apr 2024  
**Lab Number** : 06155919 **Tested** : 23 Apr 2024  
**Unique Number** : 10991342 **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)

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