

Machine Id  
**TKO PRESS 6 UNIT 8**

Component  
**Hydraulic System**

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

**DIAGNOSIS**

**Recommendation**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

There is a moderate 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>TO50000779</b>	TO5000406	TO5010046
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>ATTENTION</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>20</b>	22	18
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>&lt;1</b>	2	<1
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	2	<1
Copper	ppm	ASTM D5185m	>75	<b>13</b>	12	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	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	<1	1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
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	4
Calcium	ppm	ASTM D5185m		<b>2</b>	2	2
Phosphorus	ppm	ASTM D5185m	425	<b>142</b>	151	158
Zinc	ppm	ASTM D5185m	500	<b>123</b>	93	80
Sulfur	ppm	ASTM D5185m	1900	<b>5663</b>	5927	3294

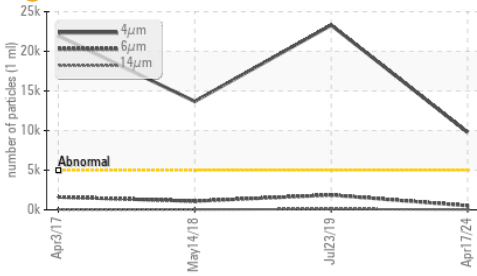
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<b>15</b>	14	11
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	<1
Water	%	ASTM D6304	>0.1	<b>0.00</b>	0.006	0.005
ppm Water	ppm	ASTM D6304	>1000	<b>0</b>	60	50

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>9773</b>	23299	13678
Particles >6µm		ASTM D7647	>1300	<b>518</b>	1866	1097
Particles >14µm		ASTM D7647	>160	<b>40</b>	92	44
Particles >21µm		ASTM D7647	>40	<b>13</b>	22	24
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	6
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	2
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>20/16/12</b>	22/18/14	21/17/13

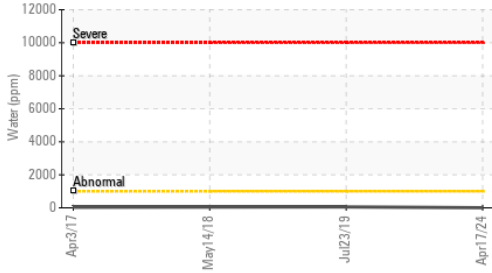
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.7	<b>0.272</b>	0.302	0.320

# OIL ANALYSIS REPORT

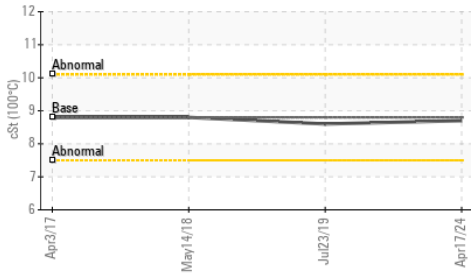
## Particle Trend



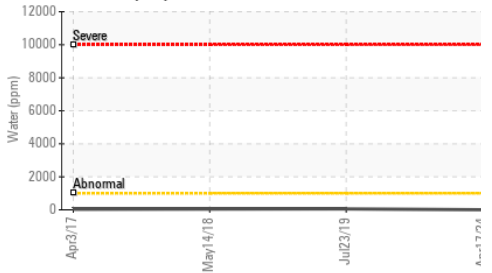
## Water (KF)



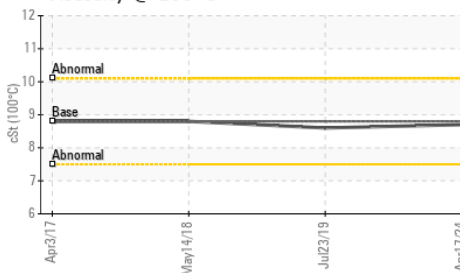
## Viscosity @ 100°C



## Water (KF)



## Viscosity @ 100°C

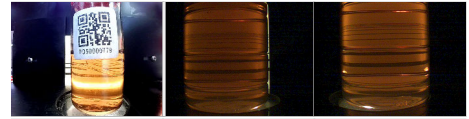


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	65.9	65.63
Visc @ 100°C	cSt	ASTM D445	8.8	8.7	8.8
Viscosity Index (VI)	Scale	ASTM D2270	102	101	107

## SAMPLE IMAGES

Color

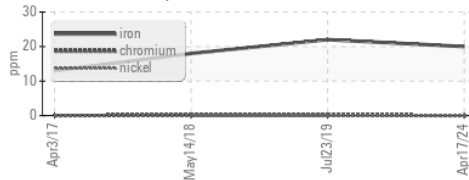


Bottom

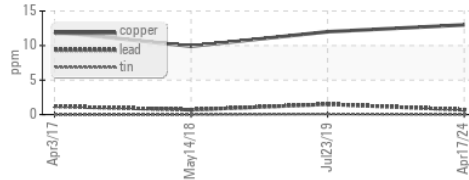


## GRAPHS

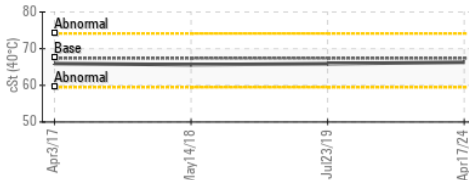
### Ferrous Alloys



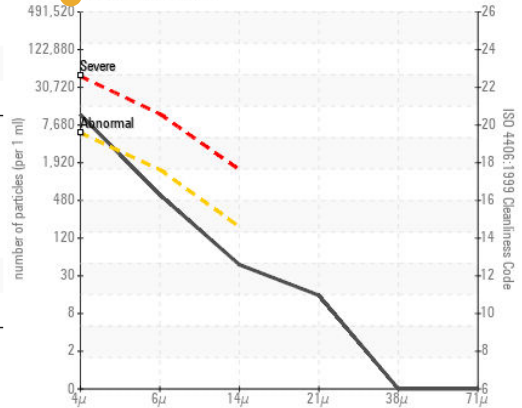
### Non-ferrous Metals



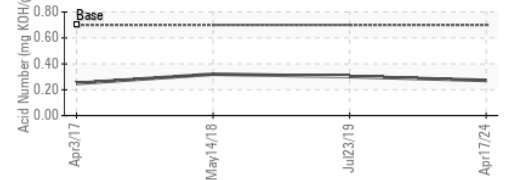
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50000779 **Received** : 22 Apr 2024  
**Lab Number** : 06155901 **Tested** : 23 Apr 2024  
**Unique Number** : 10991324 **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