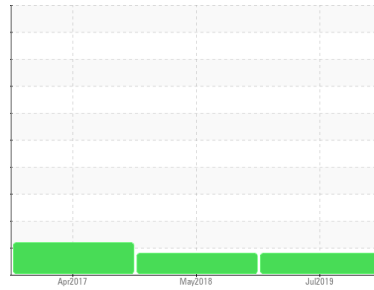


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

**TKS PRESS 6 UNIT 1**

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>TO5000401</b>	TO5010050	TO5007950
Sample Date	Client Info			<b>23 Jul 2019</b>	14 May 2018	03 Apr 2017
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>19</b>	14	17
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>1</b>	1	2
Lead	ppm	ASTM D5185m	>10	<b>2</b>	2	2
Copper	ppm	ASTM D5185m	>75	<b>15</b>	15	26
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

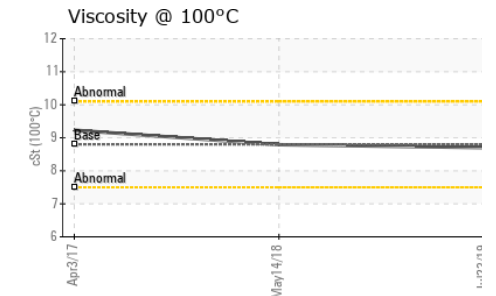
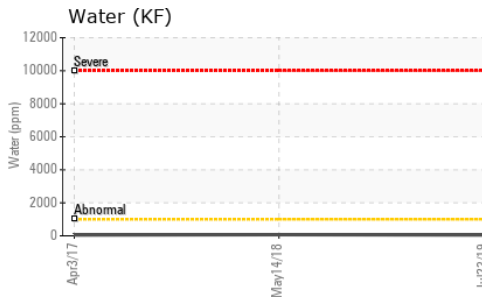
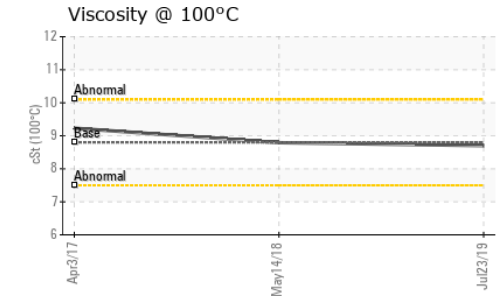
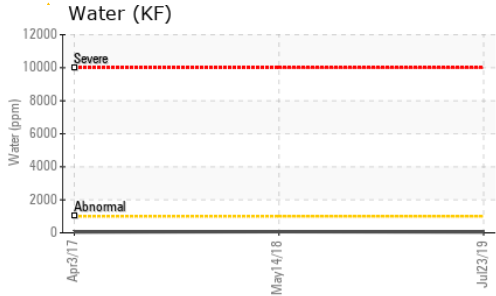
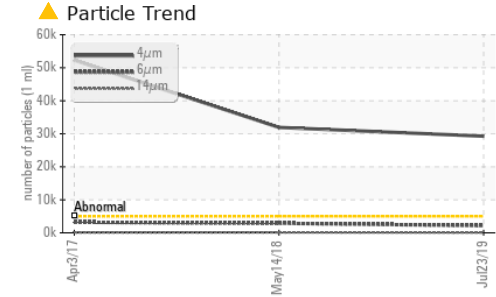
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>1</b>	1	<1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>4</b>	7	3
Calcium	ppm	ASTM D5185m		<b>3</b>	6	3
Phosphorus	ppm	ASTM D5185m	425	<b>145</b>	170	169
Zinc	ppm	ASTM D5185m	500	<b>82</b>	107	117
Sulfur	ppm	ASTM D5185m	1900	<b>6048</b>	3204	4330

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<b>10</b>	12	12
Sodium	ppm	ASTM D5185m		<b>3</b>	3	2
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	0
Water	%	ASTM D6304	>0.1	<b>0.005</b>	0.007	0.005
ppm Water	ppm	ASTM D6304	>1000	<b>50</b>	70	50

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>▲ 29269</b>	▲ 31921	▲ 52290
Particles >6µm		ASTM D7647	>1300	<b>● 2155</b>	▲ 2888	▲ 3212
Particles >14µm		ASTM D7647	>160	<b>42</b>	109	100
Particles >21µm		ASTM D7647	>40	<b>8</b>	37	31
Particles >38µm		ASTM D7647	>10	<b>0</b>	9	8
Particles >71µm		ASTM D7647	>3	<b>0</b>	2	2
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 22/18/13</b>	▲ 22/19/14	▲ 23/19/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.7	<b>0.267</b>	0.305	0.268

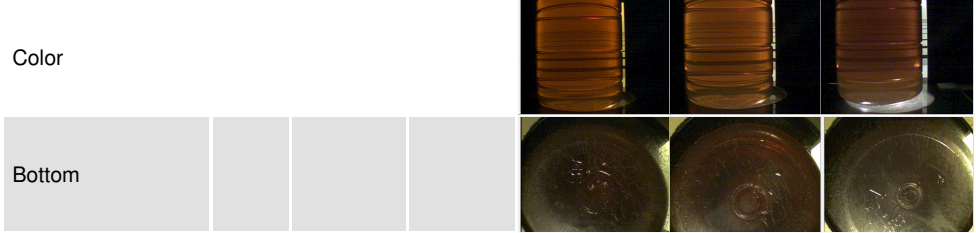
# OIL ANALYSIS REPORT



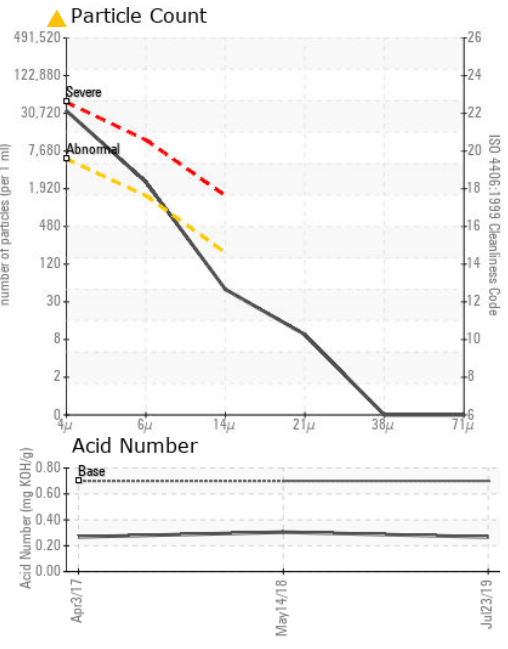
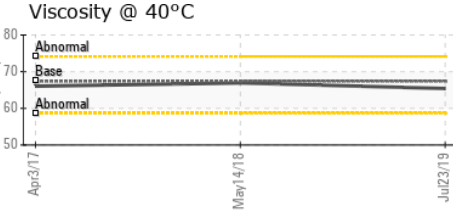
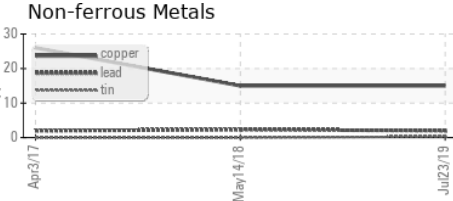
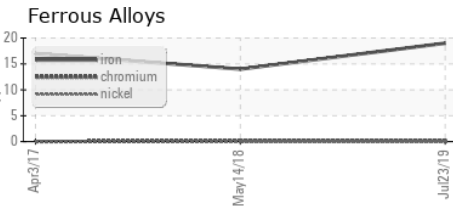
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	65.4	66.94
Visc @ 100°C	cSt	ASTM D445	8.8	8.7	8.79
Viscosity Index (VI)	Scale	ASTM D2270	102	105	103

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO5000401 **Received** : 24 Jul 2019  
**Lab Number** : **04761332** **Tested** : 25 Jul 2019  
**Unique Number** : 8674058 **Diagnosed** : 25 Jul 2019 - Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, VI )

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 F: (214)977-6888

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)