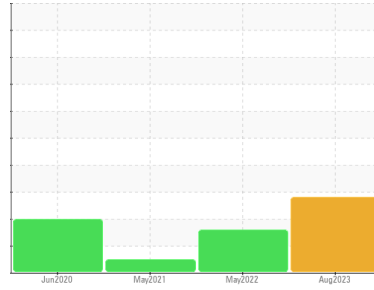




# PROBLEM SUMMARY

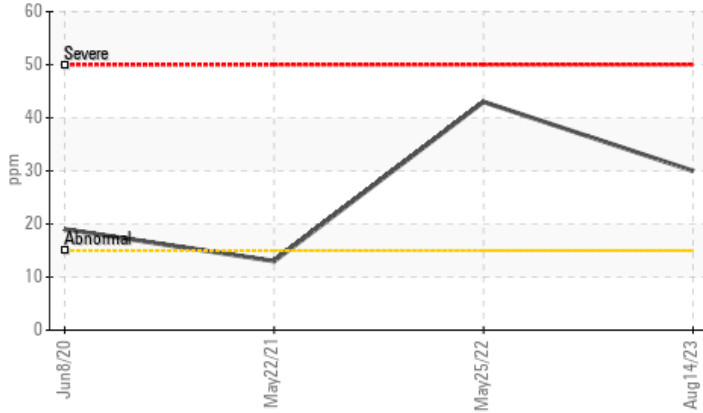
Area  
**[2871511]**  
 Machine Id  
**77AY05**  
 Component  
**Hydraulic System**  
 Fluid  
**KLUBER KLUBEROIL 4 UH1-68 N (--- GAL)**

Sample Rating Trend

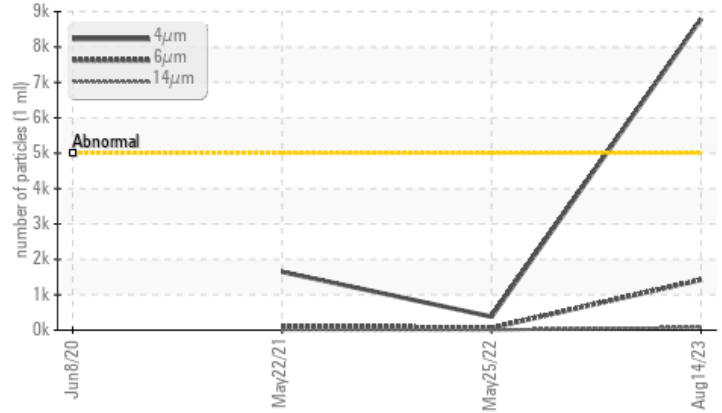


## COMPONENT CONDITION SUMMARY

▲ Silicon (ppm)



▲ Particle Trend



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	ABNORMAL	NORMAL
Silicon	ppm	ASTM D5185m >15	▲ <b>30</b>	▲ 43	13
Particles >4µm		ASTM D7647 >5000	▲ <b>8791</b>	380	1647
Particles >6µm		ASTM D7647 >1300	▲ <b>1422</b>	65	122
Oil Cleanliness		ISO 4406 (c) >19/17/14	▲ <b>20/18/13</b>	16/13/10	18/14/11

Customer Id: TALCLA  
 Sample No.: WC0840228  
 Lab Number: 05928786  
 Test Package: IND 2



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

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 25 May 2022 Diag: Doug Bogart

DIRT



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of seal material. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 22 May 2021 Diag: Angela Borella

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 08 Jun 2020 Diag: Don Baldrige

DIRT



We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

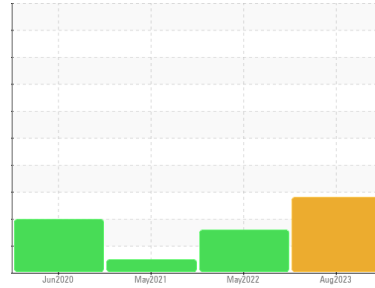
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Area  
**[2871511]**  
 Machine Id  
**77AY05**

Component  
**Hydraulic System**

Fluid  
**KLUBER KLUBEROIL 4 UH1-68 N (--- 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. Elemental level of silicon (Si) above normal.

### 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>WC0840228</b>	WC0688437	WC0520241
Sample Date	Client Info		<b>14 Aug 2023</b>	25 May 2022	22 May 2021
Machine Age	yrs	Client Info	<b>0</b>	0	0
Oil Age	yrs	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	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m >20	<b>0</b>	0	1
Lead	ppm	ASTM D5185m >20	<b>3</b>	0	4
Copper	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>0</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>	1	6
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Phosphorus	ppm	ASTM D5185m	<b>644</b>	636	642
Zinc	ppm	ASTM D5185m	<b>1</b>	0	0
Sulfur	ppm	ASTM D5185m	<b>900</b>	649	1784

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>▲ 30</b>	▲ 43	13
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Water	%	ASTM D6304 >0.05	<b>0.001</b>	0.00	0.001
ppm Water	ppm	ASTM D6304 >500	<b>5.8</b>	0.00	1.4

## FLUID CLEANLINESS

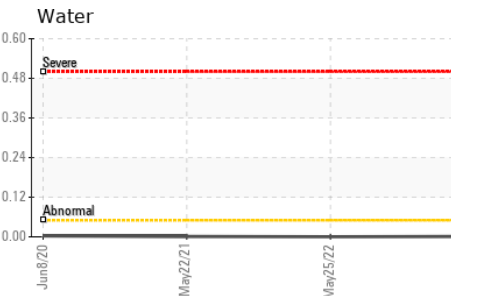
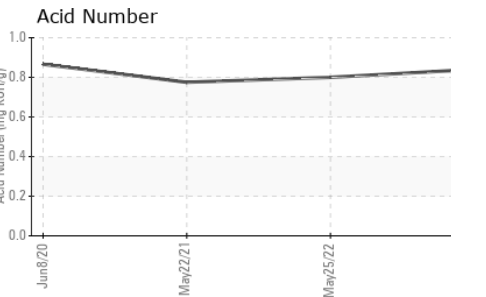
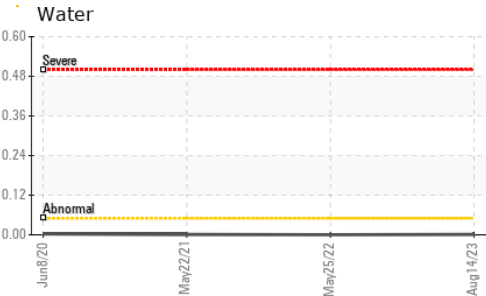
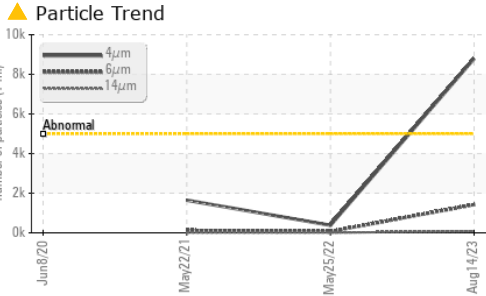
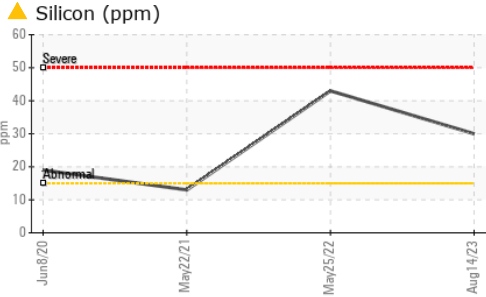
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 8791</b>	380	1647
Particles >6µm	ASTM D7647	>1300	<b>▲ 1422</b>	65	122
Particles >14µm	ASTM D7647	>160	<b>79</b>	7	11
Particles >21µm	ASTM D7647	>40	<b>24</b>	2	3
Particles >38µm	ASTM D7647	>10	<b>2</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 20/18/13</b>	16/13/10	18/14/11

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.84</b>	0.80	0.775



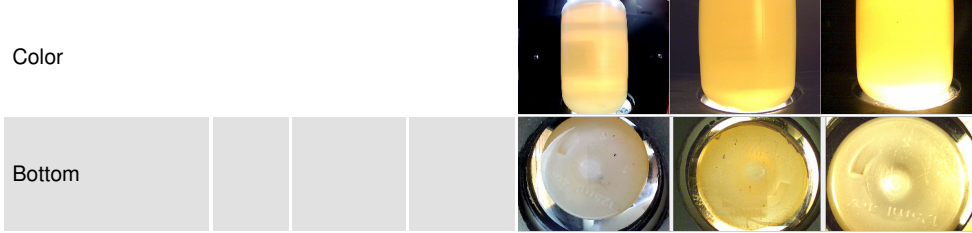
# OIL ANALYSIS REPORT



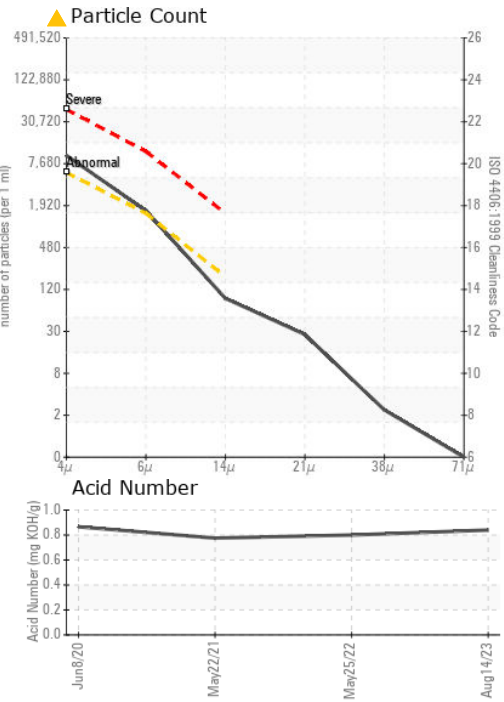
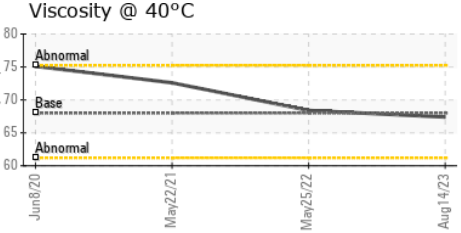
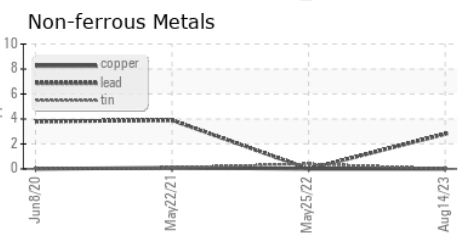
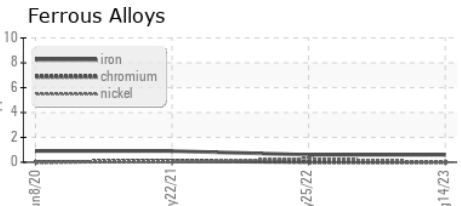
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 68	67.4	68.4	72.6

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0840228 **Received** : 18 Aug 2023  
**Lab Number** : 05928786 **Diagnosed** : 22 Aug 2023  
**Unique Number** : 10608733 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF )

**GRIFOLS TALECRIS PHARMACEUTICAL**  
 8368 US 70 WEST  
 CLAYTON, NC  
 US 27520  
 Contact: KEN TERRY  
 kenneth.terry@grifols.com  
 T: (919)359-4362  
 F: (919)359-4767

Certificate L2367  
 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)