

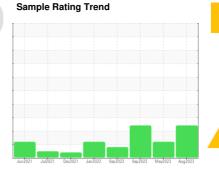
# **PROBLEM SUMMARY**

Element 13

EL-SP-SHRD-0001-MILL-LUBE-SYST EL-SP-SHRD-0001-MILL-LUBE-SYST

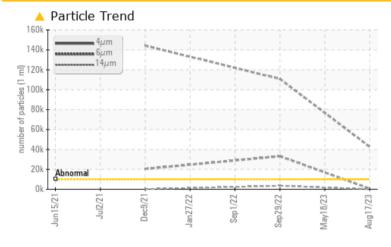
**Journal Bearing** 

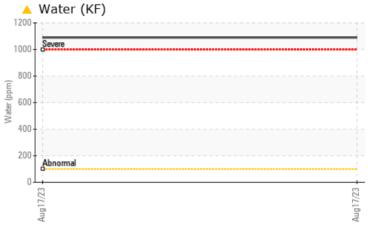
**QUAKER CHEMICAL QUINTOLUBRIC 888-68 (50 GAL)** 





### **COMPONENT CONDITION SUMMARY**





### **RECOMMENDATION**

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

PROBLEMATIC TEST RESULTS										
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL				
Water	%	ASTM D6304	>2	<u> </u>						
ppm Water	ppm	ASTM D6304		<b>1090</b>						
Particles >4µm		ASTM D7647	>10000	<b>42628</b>		<u>▲</u> 110778				
Oil Cleanliness		ISO 4406 (c)	>20/18/14	<b>23/16/12</b>		<u>4</u> 24/22/19				
Emulsified Water	scalar	*Visual	>2	<b>0.2%</b>	NEG	NEG				

Customer Id: CONMUSAL Sample No.: KFS0003888 Lab Number: 05938830 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

### **RECOMMENDED ACTIONS**

There are no recommended actions for this sample.

### HISTORICAL DIAGNOSIS

### 18 May 2023 Diag: Don Baldridge

### **VISUAL METAL**



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample. Moderate concentration of visible metal present. All component wear rates are normal. No other contaminants were detected in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



### 29 Sep 2022 Diag: Don Baldridge

ISO



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



### 01 Sep 2022 Diag: Angela Borella

WEAR



We advise that you inspect for the source(s) of wear. Resample at the next service interval to monitor. The tin level is abnormal. Bearing wear is indicated. All other component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.





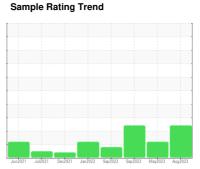
# **OIL ANALYSIS REPORT**

Element 13

# EL-SP-SHRD-0001-MILL-LUBE-SYST EL-SP-SHRD-0001-MILL-LUBE-SYST

Journal Bearing

**QUAKER CHEMICAL QUINTOLUBRIC 888-68 (50 GAL)** 





### **DIAGNOSIS**

### Recommendation

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

All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 6 microns in size) present in the oil. There is a trace of moisture present in the oil.

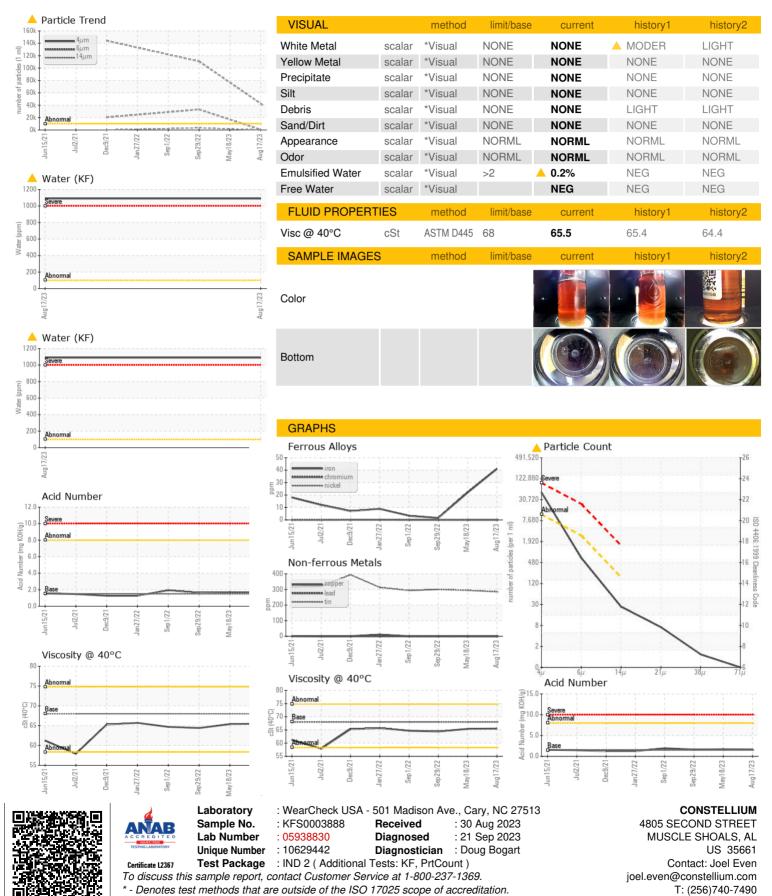
### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

68 (50 GAL)		Jun2021	Jul2021 Dec2021 Jan20	22 Sep2022 Sep2022 May2023	Aug2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KFS0003888	KFS0003753	KFS0001848
Sample Date		Client Info		17 Aug 2023	18 May 2023	29 Sep 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>60	41	22	2
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>4	2	2	<1
Lead	ppm	ASTM D5185m	>250	0	0	<1
Copper	ppm	ASTM D5185m	>125	<1	<1	<1
Tin	ppm	ASTM D5185m	>80	285	294	300
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	<1	0
Magnesium	ppm	ASTM D5185m	0	<1	0	0
Calcium	ppm	ASTM D5185m	10	5	3	0
Phosphorus	ppm	ASTM D5185m	200	101	118	114
Zinc	ppm	ASTM D5185m	125	0	0	0
Sulfur	ppm	ASTM D5185m	1000	612	634	715
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	4	4	2
Sodium	ppm	ASTM D5185m		4	3	2
Potassium	ppm	ASTM D5185m	>20	3	<1	0
Water	%	ASTM D6304	>2	<b>△</b> 0.109		
ppm Water	ppm	ASTM D6304		<b>1090</b>		
FLUID CLEANLIN	NESS	method	limit/base	current	history1	history2
Particles >4μm		ASTM D7647	>10000	<b>42628</b>		<u> </u>
Particles >6µm		ASTM D7647	>2500	575		<u>△</u> 33205
Particles >14µm		ASTM D7647	>160	23		<b>▲</b> 3490
Particles >21µm		ASTM D7647	>40	6		<u>▲</u> 1073
Particles >38µm		ASTM D7647	>10	1		<b>▲</b> 39
Particles >71µm		ASTM D7647	>3	0		3
Oil Cleanliness		ISO 4406 (c)	>20/18/14	<b>23/16/12</b>		<u>4</u> 24/22/19
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	1.67	1.70	1.64



## **OIL ANALYSIS REPORT**



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)