

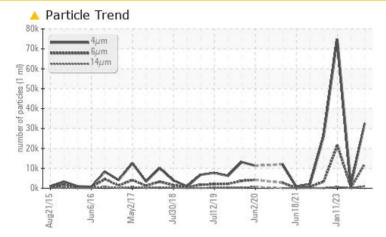
## **PROBLEM SUMMARY**

# KAESER ASD 30 5318863 (S/N 1165)

Compressor Fluid

KAESER SIGMA (OEM) S-460 (--- GAL)

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### **PROBLEMATIC TEST RESULTS** NORMAL Sample Status ABNORMAL ABNORMAL Particles >6µm ASTM D7647 >1300 12186 415 **A** 21639 -Particles >14µm ASTM D7647 >80 🔺 1016 36 ▲ 720 Particles >21µm ASTM D7647 >20 226 12 78 Particles >38µm ASTM D7647 >4 **5** 0 2 22/21/17 18/16/12 🔺 23/22/17 **Oil Cleanliness** ISO 4406 (c) >--/17/13 Debris scalar \*Visual NONE MODER LIGHT LIGHT

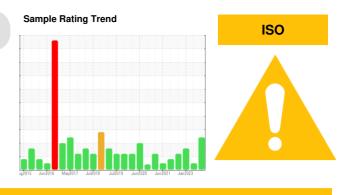
Customer Id: CREOAK Sample No.: KCPA005290 Lab Number: 06010839 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 don.b505@comcast.net

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**

## 26 Apr 2023 Diag: Don Baldridge



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. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report

### 11 Jan 2023 Diag: Don Baldridge



No corrective action is recommended at this time. The filter change at the time of sampling has been noted. 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.

14 Jul 2022 Diag: Don Baldridge



We recommend you service the filters on this component. 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.







## **OIL ANALYSIS REPORT**

# KAESER ASD 30 5318863 (S/N 1165)

**Compressor** Fluid

KAESER SIGMA (OEM) S-460 (--- GAL)

## DIAGNOSIS

## Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## Wear

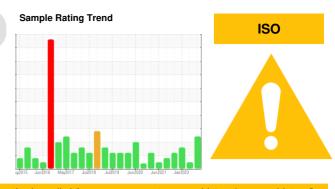
All component wear rates are normal.

## Contamination

There is a high amount of particulates present in the oil. Moderate concentration of visible dirt/debris present in the oil.

## Fluid Condition

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

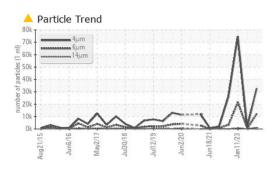


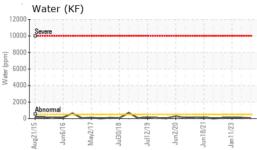
Sample Date         Client Info         31 Aug 2023         26 Apr 2023         11 Jan 2023           Machine Age         hrs         Client Info         69945         67024         64506           Oil Age         hrs         Client Info         0         6304         4300           Sample Status         Client Info         N/A         Changed         ABNORMAL         ABNORMAL           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM 05155m         >50         0         1         5           Chromium         ppm         ASTM 05155m         >3         0         0         0           Nickel         ppm         ASTM 05155m         >10         0         0         0           Auminum         ppm         ASTM 05155m         >10         0         0         0           Vanadium         ppm         ASTM 05155m         >10         0         0         0           Auminum         ppm         ASTM 05155m         0         0         0         0           Vanadium         ppm         ASTM 05155m         0         0         0         0	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2	
Machine Age         hrs         Client Info         69945         67024         64506           Oil Age         hrs         Client Info         N/A         Changed         4300           Oil Changed         Client Info         N/A         Changed         Not Changed           Sample Status         Imethod         Imit/base         current         history1         history2           Iron         ppm         ASTM 05185m         >50         0         1         5           Chromium         ppm         ASTM 05185m         >33         0         0         0           Titanium         ppm         ASTM 05185m         >22         0         0         0           Silver         ppm         ASTM 05185m         >10         0         0         0           Cadmium         ppm         ASTM 05185m         >10         0         0         0           Cadmium         ppm         ASTM 05185m         >10         0         0         0           Baron         ppm         ASTM 05185m         0         0         0         0           Manganese         ppm         ASTM 05185m         0         0         0         0	Sample Number		Client Info		KCPA005290	KC102740	KC105757	
Oil Age         hrs         Client Info         N/A         Changed         Not Changed           Sample Status         Client Info         N/A         Changed         Not Changed           Sample Status         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         0         1         5           Chromium         ppm         ASTM D5185m         >3         0         0         0           Nickel         ppm         ASTM D5185m         >2         0         0         0           Silver         ppm         ASTM D5185m         >10         0         0         0           ASTM D5185m         >10         0         0         0         0           Cadmium         ppm         ASTM D5185m         >10         0         0         0           ASTM D5185m         >10         0         0         0         0         0           ASTM D5185m         >10         0         0         0         0         0           ASTM D5185m         0         0         0         0         0         0           ASTM D5185m         0<	Sample Date		Client Info		31 Aug 2023	26 Apr 2023	11 Jan 2023	
Oil Changed     Client Info     N/A     Changed     Not Changed       Sample Status     Imaged     Imaged     ABNORMAL     NORMAL     ABNORMAL       WEAR METALS     method     Iimil/base     current     history1     history2       Iron     ppm     ASTN D5185     >50     0     1     5       Chromium     ppm     ASTN D5185     >30     0     0     0       Nickel     ppm     ASTN D5185     >33     0     0     0       Silver     ppm     ASTN D5185     >30     0     0     0       Lead     ppm     ASTN D5185     >10     0     0     0       Cadmium     ppm     ASTN D5185     >10     0     0     0       Cadmium     ppm     ASTN D5185     >10     0     0     0       Cadmium     ppm     ASTN D5185     0     0     0     0       Baron     ppm     ASTN D5185     0     0     0     0       Magnases     ppm     ASTN D5185     0     0     1     <1       Cadrium     ppm     ASTN D5185     0     0     1     <1       Cadrium     ppm     ASTN D5185     0     0 <t< th=""><th>Machine Age</th><th>hrs</th><th>Client Info</th><th></th><th>69945</th><th>67024</th><th>64506</th></t<>	Machine Age	hrs	Client Info		69945	67024	64506	
Sample Status         method         Imil/base         current         history1         ABNORMAL           WEAR METALS         method         Imil/base         current         history2           Iron         ppm         ASTM D5185m         >50         0         1         5           Chromium         ppm         ASTM D5185m         >30         0         0         0           Nickel         ppm         ASTM D5185m         >30         0         0         0           Titanium         ppm         ASTM D5185m         >20         0         0         0           Aluminum         ppm         ASTM D5185m         >10         0         0         0           Copper         ppm         ASTM D5185m         >10         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         1< <td>&lt;1</td> <td< th=""><th>Oil Age</th><th>hrs</th><th>Client Info</th><th></th><th>0</th><th>6304</th><th>4300</th></td<>	<1	Oil Age	hrs	Client Info		0	6304	4300
Sample Status         method         imit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         0         1         5           Chromium         ppm         ASTM D5185m         >30         0         0         0           Nickel         ppm         ASTM D5185m         >33         0         0         0           Silver         ppm         ASTM D5185m         >32         0         0         0           Silver         ppm         ASTM D5185m         >30         0         0         0           Lead         ppm         ASTM D5185m         >10         0         0         0           Copper         ppm         ASTM D5185m         >10         0         0         0           Cadmium         ppm         ASTM D5185m         >10         0         0         0           ADDITIVES         method         imit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         1< <td>1</td>	1	-		Client Info		N/A	Changed	Not Changd
Iron         ppm         ASTM D5185m         >50         0         1         5           Chromium         ppm         ASTM D5185m         >10         0         0         0           Nickel         ppm         ASTM D5185m         >3         0         0         0           Silver         ppm         ASTM D5185m         >3         0         0         0           Auminum         ppm         ASTM D5185m         >10         0         0         0           Lead         ppm         ASTM D5185m         >10         0         0         0           Copper         ppm         ASTM D5185m         >10         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Magaese         ppm         ASTM D5185m         0         0         0         0           Magaeses         ppm         ASTM D5185m         2         0         0         0 <th>Sample Status</th> <th></th> <th></th> <th></th> <th>ABNORMAL</th> <th></th> <th>ABNORMAL</th>	Sample Status				ABNORMAL		ABNORMAL	
Chromium         ppm         ASTM D5185m         >10         0         0         0           Nickel         ppm         ASTM D5185m         >3         0         0         0           Silver         ppm         ASTM D5185m         >2         0         0         0           Silver         ppm         ASTM D5185m         >10         0         0         0           Aduminum         ppm         ASTM D5185m         >10         0         0         0           Lead         ppm         ASTM D5185m         >10         0         0         0           Vanadium         ppm         ASTM D5185m         >10         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0         0         0         0           Calcium         ppm         ASTM D5185m         0         0         0         0           Calcium         ppm         ASTM D5185m         2         0         0         0     <	WEAR METALS		method	limit/base	current	history1	history2	
Chromium         ppm         ASTM D5185m         >10         0         0         0           Nickel         ppm         ASTM D5185m         >3         0         0         0           Silver         ppm         ASTM D5185m         >2         0         0         0           Silver         ppm         ASTM D5185m         >10         0         0         0           Aduminum         ppm         ASTM D5185m         >10         0         0         0           Lead         ppm         ASTM D5185m         >10         0         0         0           Vanadium         ppm         ASTM D5185m         >10         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0         0         0         0           Calcium         ppm         ASTM D5185m         0         0         0         0           Calcium         ppm         ASTM D5185m         2         0         0         0     <	Iron	maa	ASTM D5185m	>50	0	1	5	
Nickel         ppm         ASTM D5185m         >3         0         0         0           Titanium         ppm         ASTM D5185m         >3         0         0         0           Silver         ppm         ASTM D5185m         >10         0         0         0           Aluminum         ppm         ASTM D5185m         >10         0         0         0           Lead         ppm         ASTM D5185m         >10         0         0         0           Copper         ppm         ASTM D5185m         >10         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         90         0         1         <1           Calcium         ppm         ASTM D5185m         90         0         0         0           Molybdenum         ppm         ASTM D5185m         2         0         0         0	Chromium			>10	-	0		
Titanium         ppm         ASTM D5185m         >3         0         0         0           Silver         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >10         0         0         0           Lead         ppm         ASTM D5185m         >10         0         0         0           Copper         ppm         ASTM D5185m         >10         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0         0         0         0           Maganese         ppm         ASTM D5185m         0         0         0         0           Maganese         ppm         ASTM D5185m         2         0         0         0           Solfur         ppm         ASTM D5185m         2         0         0         0 <td></td> <td></td> <td></td> <td></td> <th>-</th> <td></td> <td></td>					-			
Silver         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >10         0         0         0           Lead         ppm         ASTM D5185m         >10         0         0         0           Copper         ppm         ASTM D5185m         >10         0         0         0           Vanadium         ppm         ASTM D5185m         10         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         1         <1					-			
Aluminum         ppm         ASTM D5185m         >10         0         0         0           Lead         ppm         ASTM D5185m         >10         0         0         0           Copper         ppm         ASTM D5185m         >50         13         11         16           Tin         ppm         ASTM D5185m         >10         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Magnese         ppm         ASTM D5185m         0         0         0         0           Actioum         ppm         ASTM D5185m         2         0         0         0           Calcium         ppm         ASTM D5185m         2         0         0         0           Sulfur         ppm         ASTM D5185m         22         0         0         0					-			
Lead         ppm         ASTM D5185m         >10         0         0         0           Copper         ppm         ASTM D5185m         >50         13         11         16           Tin         ppm         ASTM D5185m         >10         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           Malganese         ppm         ASTM D5185m         90         0         0         0           Manganese         ppm         ASTM D5185m         90         0         1         <1					-			
Copper         ppm         ASTM D5185m         >50         13         11         16           Tin         ppm         ASTM D5185m         >10         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         90         0         2         0           Molybdenum         ppm         ASTM D5185m         90         0         1         <1					-			
Tin         ppm         ASTM D5185m         >10         0         0         0           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           Maganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         2         0         0         0           Phosphorus         ppm         ASTM D5185m         237         22         28         28           Sulfur         ppm         ASTM D5185m         25         <1					-			
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         90         0         2         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Marganese         ppm         ASTM D5185m         0         0         0         0           Calcium         ppm         ASTM D5185m         2         0         0         0           Calcium         ppm         ASTM D5185m         2         0         0         0           Slifor         ppm         ASTM D5185m         2         0         0         0           Sodium         ppm         ASTM D5185m         2         0         0         0           Sodium         ppm         ASTM D5185m         >20         0         <11         1           Water					-			
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         90         0         2         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0         0           Galcium         ppm         ASTM D5185m         90         0         1         <11           Calcium         ppm         ASTM D5185m         2         0         0         0           Calcium         ppm         ASTM D5185m         2         0         0         37           Sulfur         ppm         ASTM D5185m         37         22         28         37           Sulfur         ppm         ASTM D5185m         25         <1         0         0           Soldium         ppm         ASTM D5185m         >20         0         <1				>10				
ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0           Barium         ppm         ASTM D5185m         90         0         2         0           Molybdenum         ppm         ASTM D5185m         90         0         0         0         0           Magnesium         ppm         ASTM D5185m         90         0         1         <1         0         0           Phosphorus         ppm         ASTM D5185m         90         0         1         <1         0         0           Phosphorus         ppm         ASTM D5185m         6         0         3         37         22         28           Sulfur         ppm         ASTM D5185m         15732         18769         17167           CONTAMINANTS         method         limit/base         current         history1         history2           Sulfur         ppm         ASTM D5185m         25         <1         0         0           Sodium         ppm         ASTM D5185m         20         0         <1         1           Water					-			
Boron         ppm         ASTM D5185m         0         0         0           Barium         ppm         ASTM D5185m         90         0         2         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         90         0         1         <1           Calcium         ppm         ASTM D5185m         90         0         1         <1           Calcium         ppm         ASTM D5185m         90         0         0         0           Calcium         ppm         ASTM D5185m         2         0         0         0           Calcium         ppm         ASTM D5185m         37         22         28           Sulfur         ppm         ASTM D5185m         37         22         28           Sulfur         ppm         ASTM D5185m         15732         18769         17167           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         0         <1         1           Water		ppm		limit/base	-	-	-	
Barium         ppm         ASTM D5185m         90         0         2         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Maganese         ppm         ASTM D5185m         90         0         1         <1				in the base				
Molybdenum         ppm         ASTM D5185m         0         0         0           Manganese         ppm         ASTM D5185m         90         0         1         <1				00				
Maganese       ppm       ASTM D5185m       0       0       0       0         Magnesium       ppm       ASTM D5185m       90       0       1       <1				90				
Magnesium       ppm       ASTM D5185m       90       0       1       <1	,							
Calcium         ppm         ASTM D5185m         2         0         0         0           Phosphorus         ppm         ASTM D5185m         6         0         3           Zinc         ppm         ASTM D5185m         37         22         28           Sulfur         ppm         ASTM D5185m         15732         18769         17167           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         <1	•							
Phosphorus         ppm         ASTM D5185m         6         0         3           Zinc         ppm         ASTM D5185m         37         22         28           Sulfur         ppm         ASTM D5185m         15732         18769         17167           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         <1         0         0           Sodium         ppm         ASTM D5185m         >25         <1         0         0           Sodium         ppm         ASTM D5185m         >20         0         <11         0         0           Potassium         ppm         ASTM D5185m         >20         0         <11         0.012           ppm Water         ppm         ASTM D6304         >0.05         0.006         0.011         0.012           particles >4µm         ASTM D7647         32622         1456         74741           Particles >4µm         ASTM D7647         >1300         12186         415         21639           Particles >14µm         ASTM D7647         >20         226         12         78	•							
Zinc         ppm         ASTM D5185m         37         22         28           Sulfur         ppm         ASTM D5185m         15732         18769         17167           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         <1         0         0           Sodium         ppm         ASTM D5185m         >20         0         <1         1           Vater         %         ASTM D5385m         >20         0         <1         0         0.012           ppm Water         %         ASTM D6304         >0.05         0.006         0.011         0.012           ppm Water         ppm         ASTM D6304         >500         60.8         112.2         121.4           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         >1300         12186         415         21639           Particles >21µm         ASTM D7647         >80         1016         36         720           Particles >21µm         ASTM D7647         >20         226         12 <th></th> <th>ppm</th> <th></th> <th>2</th> <th></th> <th></th> <th></th>		ppm		2				
Sulfur         ppm         ASTM D5185m         15732         18769         17167           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         <1		ppm						
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         <1         0         0           Sodium         ppm         ASTM D5185m         >20         0         <1         1           Potassium         ppm         ASTM D5185m         >20         0         <1         1           Water         %         ASTM D6304         >0.05         0.006         0.011         0.012           ppm Water         ppm         ASTM D6304         >500         60.8         112.2         121.4           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         32622         1456         74741           Particles >6µm         ASTM D7647         >1300         12186         415         21639           Particles >1µm         ASTM D7647         >20         226         12         78           Particles >21µm         ASTM D7647         >20         226         12         78           Particles >38µm         ASTM D7647         3         0         0         0 <td< th=""><th></th><th>ppm</th><th>ASTM D5185m</th><th></th><th>37</th><th>22</th><th>28</th></td<>		ppm	ASTM D5185m		37	22	28	
Silicon       ppm       ASTM D5185m       >25       <1	Sulfur	ppm	ASTM D5185m		15732	18769	17167	
Sodium         ppm         ASTM D5185m         2         0         0           Potassium         ppm         ASTM D5185m         >20         0         <1         1           Water         %         ASTM D6304         >0.05         0.006         0.011         0.012           ppm Water         ppm         ASTM D6304         >500         60.8         112.2         121.4           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         32622         1456         74741           Particles >6µm         ASTM D7647         >1300         12186         415         21639           Particles >6µm         ASTM D7647         >80         1016         36         720           Particles >14µm         ASTM D7647         >20         226         12         78           Particles >38µm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >/17/13         22/21/17         18/16/12         23/22/17           FLUID DEGRADATION         method         limit/base         current         history1         history2  <	CONTAMINANTS		method	limit/base	current	history1	history2	
Potassium         ppm         ASTM D5185m         >20         0         <1         1           Water         %         ASTM D6304         >0.05         0.006         0.011         0.012           ppm Water         ppm         ASTM D6304         >500         60.8         112.2         121.4           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         32622         1456         74741           Particles >6µm         ASTM D7647         >1300         12186         415         21639           Particles >14µm         ASTM D7647         >20         226         12         78           Particles >21µm         ASTM D7647         >20         226         12         78           Particles >38µm         ASTM D7647         >3         0         0         2           Particles >71µm         ASTM D7647         >3         0         0         2           Oil Cleanliness         ISO 4406 (c)        /17/13         22/21/17         18/16/12         23/22/217           FLUID DEGRADATION         method         limit/base         current         history1         history2     <	Silicon	ppm	ASTM D5185m	>25	<1	0	0	
Water         %         ASTM D6304         >0.05         0.006         0.011         0.012           ppm Water         ppm         ASTM D6304         >500         60.8         112.2         121.4           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         32622         1456         74741           Particles >6µm         ASTM D7647         >1300         12186         415         21639           Particles >14µm         ASTM D7647         >80         1016         36         720           Particles >21µm         ASTM D7647         >20         226         12         78           Particles >38µm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >/17/13         22/21/17         18/16/12         23/22/17           FLUID DEGRADATION         method         limit/base         current         history1         history2	Sodium	ppm	ASTM D5185m		2	0	0	
ppm Water         ppm         ASTM D6304         >500         60.8         112.2         121.4           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         32622         1456         74741           Particles >6µm         ASTM D7647         >1300         12186         415         21639           Particles >6µm         ASTM D7647         >80         1016         36         720           Particles >14µm         ASTM D7647         >20         226         12         78           Particles >21µm         ASTM D7647         >4         5         0         2           Particles >38µm         ASTM D7647         >4         5         0         2           Particles >71µm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)        /17/13         22/21/17         18/16/12         23/22/17           FLUID DEGRADATION         method         limit/base         current         history1         history2	Potassium	ppm	ASTM D5185m	>20	0	<1	1	
FLUID CLEANLINESS       method       limit/base       current       history1       history2         Particles >4µm       ASTM D7647       32622       1456       74741         Particles >6µm       ASTM D7647       >1300       12186       415       21639         Particles >14µm       ASTM D7647       >80       1016       36       720         Particles >21µm       ASTM D7647       >20       226       12       78         Particles >38µm       ASTM D7647       >4       5       0       2         Particles >71µm       ASTM D7647       >3       0       0       0         Oil Cleanliness       ISO 4406 (c)       >/17/13       22/21/17       18/16/12       23/22/17         FLUID DEGRADATION       method       limit/base       current       history1       history2	Water	%	ASTM D6304	>0.05	0.006	0.011	0.012	
Particles >4µm       ASTM D7647       32622       1456       74741         Particles >6µm       ASTM D7647       >1300       12186       415       21639         Particles >14µm       ASTM D7647       >80       1016       36       720         Particles >21µm       ASTM D7647       >20       226       12       78         Particles >38µm       ASTM D7647       >4       5       0       2         Particles >71µm       ASTM D7647       >3       0       0       0         Oil Cleanliness       ISO 4406 (c)       >/17/13       22/21/17       18/16/12       23/22/17	ppm Water	ppm	ASTM D6304	>500	60.8	112.2	121.4	
Particles >6µm       ASTM D7647       >1300       ▲ 12186       415       ▲ 21639         Particles >14µm       ASTM D7647       >80       ▲ 1016       36       ▲ 720         Particles >21µm       ASTM D7647       >20       ▲ 226       12       ▲ 78         Particles >38µm       ASTM D7647       >4       ▲ 5       0       2         Particles >71µm       ASTM D7647       >3       0       0       0         Oil Cleanliness       ISO 4406 (c)       >/17/13       ▲ 22/21/17       18/16/12       ▲ 23/22/17         FLUID DEGRADATION       method       limit/base       current       history1       history2	FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2	
Particles >14µm       ASTM D7647       >80       ▲ 1016       36       ▲ 720         Particles >21µm       ASTM D7647       >20       ▲ 226       12       ▲ 78         Particles >38µm       ASTM D7647       >4       ▲ 5       0       2         Particles >71µm       ASTM D7647       >3       0       0       0         Oil Cleanliness       ISO 4406 (c)       >/17/13       ▲ 22/21/17       18/16/12       ▲ 23/22/17         FLUID DEGRADATION       method       limit/base       current       history1       history2	Particles >4µm		ASTM D7647		32622	1456	74741	
Particles >21μm         ASTM D7647         >20         ▲ 226         12         ▲ 78           Particles >38μm         ASTM D7647         >4         ▲ 5         0         2           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >/17/13         ▲ 22/21/17         18/16/12         ▲ 23/22/17           FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >6µm		ASTM D7647	>1300	<u> </u>	415	<b>A</b> 21639	
Particles >21μm         ASTM D7647         >20         ▲ 226         12         ▲ 78           Particles >38μm         ASTM D7647         >4         ▲ 5         0         2           Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >/17/13         ▲ 22/21/17         18/16/12         ▲ 23/22/17           FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >14µm		ASTM D7647	>80	<b>1016</b>	36	<b>A</b> 720	
Particles >38µm         ASTM D7647         >4         ▲ 5         0         2           Particles >71µm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >/17/13         ▲ 22/21/17         18/16/12         ▲ 23/22/17           FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >21µm		ASTM D7647	>20		12	<u> </u>	
Particles >71μm         ASTM D7647         >3         0         0         0           Oil Cleanliness         ISO 4406 (c)         >/17/13         22/21/17         18/16/12         23/22/17           FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >38µm			>4		0	2	
Oil Cleanliness         ISO 4406 (c)         >/17/13         22/21/17         18/16/12         23/22/17           FLUID DEGRADATION         method         limit/base         current         history1         history2	1		ASTM D7647	>3		0	0	
	Oil Cleanliness					18/16/12		
	FLUID DEGRADA	TION	method	limit/base	current	history1	history2	
	Acid Number (AN)		ASTM D8045	0.4	0.32	0.35	0.33	

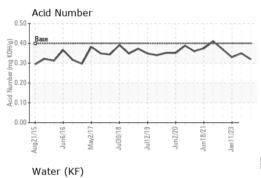
Page 3 of 4

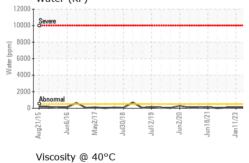


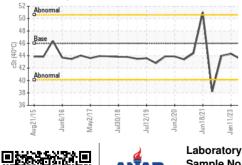
# **OIL ANALYSIS REPORT**





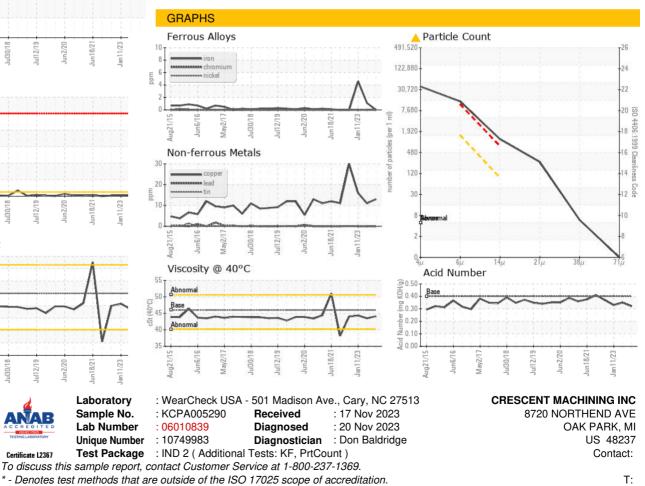






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	A MODER	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	44.1	43.5	44.3
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						

Bottom



\* - 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)

Certificate L2367

F: