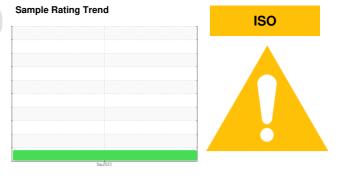


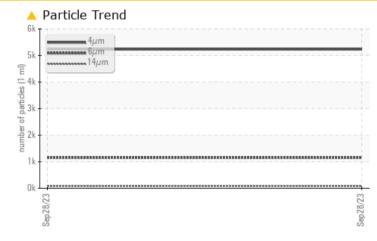
# **PROBLEM SUMMARY**



#### Machine Id 4289330 (S/N 1074) Component

Compressor Fluid KAESER SIGMA (OEM) M-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									
Sample Status			ATTENTION						
Particles >14µm	ASTM D7647	>80	<u> </u>						
Oil Cleanliness	ISO 4406 (c)	>/17/13	<b>A</b> 20/17/14						

Customer Id: ABSLASNV Sample No.: KCPA003873 Lab Number: 05964647 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 jhester@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS



## **OIL ANALYSIS REPORT**





**4289330 (S/N 1074)** Component

Compressor Fluid KAESER SIGMA (OEM) M-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 moderate amount of particulates present in the oil.

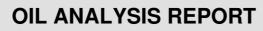
#### Fluid Condition

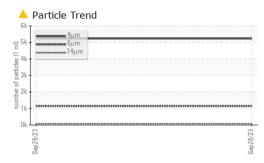
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sample NumberClient InfoKCPA003873Sample DateClient Info28 Sep 2023Machine AgehrsClient Info0Oil AgehrsClient InfoN/ASample StatusClient InfoMIAMIAWEAR METALSmethodImitoryMathoffMistoryMistoryInonppmASTM 05156 <td< th=""><th>SAMPLE INFORM</th><th><b>/IATION</b></th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></td<>	SAMPLE INFORM	<b>/IATION</b>	method	limit/base	current	history1	history2
Machine Age       hrs       Client Info       53993           Oil Age       irs       Client Info       N/A           Sample Status       Client Info       N/A           WEAR METALS       method       limit/base       current       history1          WEAR METALS       method       limit/base       current       history1          Nickel       ppm       ASTM D5185m       >30       0           Nickel       ppm       ASTM D5185m       >30       0           Silver       ppm       ASTM D5185m       >30       0           Copper       ppm       ASTM D5185m       >10       0           Lead       ppm       ASTM D5185m       >10       0           Cadmium       ppm       ASTM D5185m       0       0           Molybdenum       ppm       ASTM D5185m       0       0           Manganese       ppm       ASTM D5185m       0       2 <td>Sample Number</td> <td></td> <td>Client Info</td> <td></td> <td>KCPA003873</td> <td></td> <td></td>	Sample Number		Client Info		KCPA003873		
Oil Age         hrs         Client Info         N/A             Sample Status         I         Imilibase         current         History1            WEAR METALS         method         limilibase         current         history1            Chromium         ppm         ASTM D5185m         >50         0             Nickel         ppm         ASTM D5185m         >3         0             Nickel         ppm         ASTM D5185m         >2         0             Aluminum         ppm         ASTM D5185m         >10         0             Aluminum         ppm         ASTM D5185m         >10         0             Aduminum         ppm         ASTM D5185m         >10         0             Aduminum         ppm         ASTM D5185m         >10         0             ASTM D5185m         0         0               ASTM D5185m         0         0	Sample Date		Client Info		28 Sep 2023		
Oil Changed         Client Info         N/A	Machine Age	hrs	Client Info		53993		
Sample Status         Imath method         ATTENTION             WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         0             Nickel         ppm         ASTM D5185m         >30         0             Nickel         ppm         ASTM D5185m         >30         0             Silver         ppm         ASTM D5185m         >20         0             Aluminum         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >10         0             Cadmium         ppm         ASTM D5185m         >10         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Magnaese         ppm         ASTM D5185m         0         2	Oil Age	hrs	Client Info		0		
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         0             Nickel         ppm         ASTM D5185m         >3         0             Nickel         ppm         ASTM D5185m         >3         0             Aluminum         ppm         ASTM D5185m         >3         0             Aluminum         ppm         ASTM D5185m         >10         0             Lead         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >10         0             Yanadium         ppm         ASTM D5185m         0         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0              Molybdenum         ppm         ASTM D5185m	Oil Changed		Client Info		N/A		
Iron         ppm         ASTM D5185m         >50         0             Nickel         ppm         ASTM D5185m         >3         0             Nickel         ppm         ASTM D5185m         >3         0             Silver         ppm         ASTM D5185m         >3         0             Aluminum         ppm         ASTM D5185m         >10         0             Lead         ppm         ASTM D5185m         >50         7             Copper         ppm         ASTM D5185m         >50         7             Yanadium         ppm         ASTM D5185m         >10         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Magnese         ppm         ASTM D5185m         0         22             Magnese         ppm         ASTM D5185m         0 <td>Sample Status</td> <td></td> <td></td> <td></td> <td>ATTENTION</td> <td></td> <td></td>	Sample Status				ATTENTION		
Chromium         ppm         ASTM D5185m         >10         0             Nickel         ppm         ASTM D5185m         >3         0             Silver         ppm         ASTM D5185m         >2         0             Aluminum         ppm         ASTM D5185m         >10         0             Lead         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >10         0             Vanadium         ppm         ASTM D5185m         >10         0             Vanadium         ppm         ASTM D5185m         0         0             Vanadium         ppm         ASTM D5185m         0         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         2             Magneseum         ppm         ASTM D5185m         0         2<	WEAR METALS		method	limit/base	current	history1	history2
Nickel         ppm         ASTM D5185m         >3         0             Titanium         ppm         ASTM D5185m         >3         0             Silver         ppm         ASTM D5185m         >2         0             Aluminum         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >50         7             Cadmium         ppm         ASTM D5185m         >10         0             ADDTIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Marganese         ppm         ASTM D5185m         0         0             Marganese         ppm         ASTM D5185m         100         21             Marganese         ppm         ASTM D5185m         0         22             Sulfur         ppm         ASTM D5185m         23500	Iron	ppm	ASTM D5185m	>50	0		
Titanium       ppm       ASTM D5185m       >3       0           Silver       ppm       ASTM D5185m       >2       0           Aluminum       ppm       ASTM D5185m       >10       0           Lead       ppm       ASTM D5185m       >10       0           Copper       ppm       ASTM D5185m       >10       0           Vanadium       ppm       ASTM D5185m       >10       0           ADDITIVES       method       limit/base       current       history1       history2         Boron       ppm       ASTM D5185m       0       0           Molybdenum       ppm       ASTM D5185m       0       0           Maganese       ppm       ASTM D5185m       0       2           Magnesium       ppm       ASTM D5185m       0       2           Magnesium       ppm       ASTM D5185m       0       2           Sulfur       ppm       ASTM D5185m       0	Chromium	ppm	ASTM D5185m	>10	0		
Silver     ppm     ASTM D5185m     >2     0         Aluminum     ppm     ASTM D5185m     >10     0         Lead     ppm     ASTM D5185m     >10     0         Copper     ppm     ASTM D5185m     >10     0         Vanadium     ppm     ASTM D5185m     >10     0         Vanadium     ppm     ASTM D5185m     0     0         ADDITIVES     method     imit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0     0         Molybdenum     ppm     ASTM D5185m     0     0         Magnesium     ppm     ASTM D5185m     0     2         Galcium     ppm     ASTM D5185m     0     2         Galcium     ppm     ASTM D5185m     0     2         Galcium     ppm     ASTM D5185m     0     2         Sulfur     ppm     ASTM D5185m     0     2         Sulfur     ppm <td>Nickel</td> <td>ppm</td> <td>ASTM D5185m</td> <td>&gt;3</td> <td>0</td> <td></td> <td></td>	Nickel	ppm	ASTM D5185m	>3	0		
Aluminum         ppm         ASTM D5185m         >10         0             Lead         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >50         7             Tin         ppm         ASTM D5185m         >10         0             Vanadium         ppm         ASTM D5185m         0         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Molybdenum         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         0         2             Sulfur         ppm         ASTM D5185m         0         2             Sulfur         ppm         ASTM D5185m         0         28             Sulfur         ppm         ASTM D5185m         23500         19712<	Titanium	ppm	ASTM D5185m	>3	0		
Lead         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >50         7             Tin         ppm         ASTM D5185m         >10         0             Vanadium         ppm         ASTM D5185m         >10         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Molybdenum         ppm         ASTM D5185m         0         0             Manganese         ppm         ASTM D5185m         0         2             Galcium         ppm         ASTM D5185m         0         2             Galcium         ppm         ASTM D5185m         0         2             Sulfur         ppm         ASTM D5185m         0         2             Sulfur         ppm         ASTM D5185m         23500         19712 </td <td>Silver</td> <td>ppm</td> <td>ASTM D5185m</td> <td>&gt;2</td> <td>0</td> <td></td> <td></td>	Silver	ppm	ASTM D5185m	>2	0		
Lead         ppm         ASTM D5185m         >10         0             Copper         ppm         ASTM D5185m         >50         7             Tin         ppm         ASTM D5185m         >10         0             Cadmium         ppm         ASTM D5185m         >10         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Malganese         ppm         ASTM D5185m         0         0             Manganese         ppm         ASTM D5185m         0         2             Galcium         ppm         ASTM D5185m         0         2             Galcium         ppm         ASTM D5185m         0         2             Sulfur         ppm         ASTM D5185m         2.5         0             Sulfur         ppm         ASTM D5185m         2.5 <td>Aluminum</td> <td>ppm</td> <td>ASTM D5185m</td> <td>&gt;10</td> <td>0</td> <td></td> <td></td>	Aluminum	ppm	ASTM D5185m	>10	0		
Copper         ppm         ASTM D5185m         >50         7             Tin         ppm         ASTM D5185m         >10         0             Vanadium         ppm         ASTM D5185m         >10         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Molybdenum         ppm         ASTM D5185m         0         0             Manganese         ppm         ASTM D5185m         0         21             Qalcaium         ppm         ASTM D5185m         0         28             Calcium         ppm         ASTM D5185m         0         28             Sulfur         ppm         ASTM D5185m         0         28             Sulfur         ppm         ASTM D5185m         23500         19712             Sulfur         ppm         ASTM D5185m         >20	Lead			>10	0		
Tin       ppm       ASTM D5185m       >10       0           Vanadium       ppm       ASTM D5185m       0           ADDITIVES       method       limit/base       current       history1       history2         Boron       ppm       ASTM D5185m       0       0           Barium       ppm       ASTM D5185m       0       0           Molybdenum       ppm       ASTM D5185m       0       0           Maganese       ppm       ASTM D5185m       0       21           Magnesium       ppm       ASTM D5185m       0       2           Calcium       ppm       ASTM D5185m       0       2           Sulfur       ppm       ASTM D5185m       0       2           Sulfur       ppm       ASTM D5185m       20       0           Sulfur       ppm       ASTM D5185m       20       0           Sulfur       ppm       ASTM D5185m       20 <t< td=""><td>Copper</td><td></td><td></td><td>&gt;50</td><td></td><td></td><td></td></t<>	Copper			>50			
Vanadium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Barium         ppm         ASTM D5185m         0         0             Magnese         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         0         2             Magnesium         ppm         ASTM D5185m         0         2             Calcium         ppm         ASTM D5185m         0         28            Zinc         ppm         ASTM D5185m         0         28             Sulfur         ppm         ASTM D5185m         25         0             Sodium         ppm         ASTM D5185m         20         0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0             Barium         ppm         ASTM D5185m         0         0             Molybdenum         ppm         ASTM D5185m         0         0             Magnesium         ppm         ASTM D5185m         100         21             Calcium         ppm         ASTM D5185m         0         2             Magnesium         ppm         ASTM D5185m         0         2             Calcium         ppm         ASTM D5185m         0         2             Sulfur         ppm         ASTM D5185m         0         2             Sulfur         ppm         ASTM D5185m         >25         0             Sulfur         ppm         ASTM D5185m         >20         0 </td <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>					-		
Boron         ppm         ASTM D5185m         0         0             Barium         ppm         ASTM D5185m         90         4             Molybdenum         ppm         ASTM D5185m         0         0             Manganese         ppm         ASTM D5185m         100         21             Magnesium         ppm         ASTM D5185m         0         2             Calcium         ppm         ASTM D5185m         0         2             Calcium         ppm         ASTM D5185m         0         2             Zinc         ppm         ASTM D5185m         0         28             Sulfur         ppm         ASTM D5185m         23500         19712             Sodium         ppm         ASTM D5185m         >25         0             Sodium         ppm         ASTM D5185m         >20         0             Vater         %6         ASTM D5185m         >2	Cadmium				0		
Barium         ppm         ASTM D5185m         90         4             Molybdenum         ppm         ASTM D5185m         0         0             Magnesse         ppm         ASTM D5185m         100         21             Magnesium         ppm         ASTM D5185m         100         2             Calcium         ppm         ASTM D5185m         0         2             Phosphorus         ppm         ASTM D5185m         0         28             Sulfur         ppm         ASTM D5185m         0         28             Sulfur         ppm         ASTM D5185m         23500         19712             Sulfur         ppm         ASTM D5185m         >25         0             Sodium         ppm         ASTM D5185m         >20         0             Vater         %         ASTM D6304         >0.05         0.00             Particles >4µm         ASTM D7647         >130	ADDITIVES		method	limit/base	current	history1	history2
Barium         ppm         ASTM D5185m         90         4             Molybdenum         ppm         ASTM D5185m         0         0             Manganese         ppm         ASTM D5185m         100         21             Magnesium         ppm         ASTM D5185m         100         2             Calcium         ppm         ASTM D5185m         0         2             Phosphorus         ppm         ASTM D5185m         0         28             Sulfur         ppm         ASTM D5185m         0         28             Sulfur         ppm         ASTM D5185m         23500         19712             Sulfur         ppm         ASTM D5185m         >25         0             Sodium         ppm         ASTM D5185m         >20         0             Vater         %         ASTM D6304         >0.05         0.00             Particles >4µm         ASTM D7647         >130	Boron	ppm	ASTM D5185m	0	0		
Molybdenum         ppm         ASTM D5185m         0         0             Manganese         ppm         ASTM D5185m         100         21             Magnesium         ppm         ASTM D5185m         100         21             Calcium         ppm         ASTM D5185m         0         2             Calcium         ppm         ASTM D5185m         0         28             Zinc         ppm         ASTM D5185m         23500         19712             Sulfur         ppm         ASTM D5185m         23500         19712             Sodium         ppm         ASTM D5185m         >25         0             Sodium         ppm         ASTM D5185m         >20         0             Vater         %         ASTM D6185m         >20         0             ppm Water         ppm         ASTM D6180         >20         0.000             Particles >4µm         ASTM D7647         >1300	Barium		ASTM D5185m				
Marganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         100         21             Calcium         ppm         ASTM D5185m         0         2             Phosphorus         ppm         ASTM D5185m         0         2             Zinc         ppm         ASTM D5185m         0         28             Sulfur         ppm         ASTM D5185m         23500         19712             Solium         ppm         ASTM D5185m         23500         19712             Solium         ppm         ASTM D5185m         >25         0             Sodium         ppm         ASTM D5185m         >20         0             Vater         %         ASTM D5185m         >20         0.00             ppm Water         ppm         ASTM D6304         >0.05         0.000             Particles >4µm         ASTM D7647         >5230	Molvbdenum				0		
Magnesium       ppm       ASTM D5185m       100       21           Calcium       ppm       ASTM D5185m       0       2           Phosphorus       ppm       ASTM D5185m       0       28           Sulfur       ppm       ASTM D5185m       0       28           Sulfur       ppm       ASTM D5185m       23500       19712           CONTAMINANTS       method       limit/base       current       history1       history2         Silicon       ppm       ASTM D5185m       >25       0           Sodium       ppm       ASTM D5185m       >20       0           Potassium       ppm       ASTM D6304       >0.05       0.00           Water       %       ASTM D6304       >500       0.00           Particles >4µm       ASTM D7647       5230            Particles >4µm       ASTM D7647       >1300       1149           Particles >4µm       ASTM D7647       >20	,			-			
Calcium         ppm         ASTM D5185m         0         2             Phosphorus         ppm         ASTM D5185m         0         28             Zinc         ppm         ASTM D5185m         0         28             Sulfur         ppm         ASTM D5185m         23500         19712             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         0             Sodium         ppm         ASTM D5185m         >20         0             Potassium         ppm         ASTM D5185m         >20         0             Water         %         ASTM D5304         >0.05         0.00             Puticles >4µm         ASTM D7647         >1300         1149             Particles >6µm         ASTM D7647         >20         19             Particles >1µm         ASTM D7647         3         0	•			100	-		
Phosphorus         ppm         ASTM D5185m         0         2             Zinc         ppm         ASTM D5185m         0         28             Sulfur         ppm         ASTM D5185m         23500         19712             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         0             Sodium         ppm         ASTM D5185m         >25         0             Sodium         ppm         ASTM D5185m         >20         0             Vater         %         ASTM D6304         >0.05         0.000             ppm Water         ppm         ASTM D7647         5230              Particles >4µm         ASTM D7647         >1300         1149             Particles >14µm         ASTM D7647         >80         82             Particles >21µm         ASTM D7647         >20         19 <td< td=""><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	•						
Zinc         ppm         ASTM D5185m         0         28             Sulfur         ppm         ASTM D5185m         23500         19712             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         0             Sodium         ppm         ASTM D5185m         >25         0             Potassium         ppm         ASTM D5185m         >20         0             Water         %         ASTM D6304         >0.05         0.000             ppm Water         ppm         ASTM D6304         >500         0.00             Particles >4µm         ASTM D7647         5230              Particles >6µm         ASTM D7647         >1300         1149             Particles >14µm         ASTM D7647         >80         82             Particles >21µm         ASTM D7647         20         19							
SulfurppmASTM D5185m2350019712CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>250SodiumppmASTM D5185m>200PotassiumppmASTM D6304>0.050.00Water%ASTM D6304>0.050.00pm WaterppmASTM D6304>5000.00FLUID CLEANLINESSmethodlimit/basecurrenthistory1history2Particles >4µmASTM D7647>13001149Particles >6µmASTM D7647>80<							
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>250SodiumppmASTM D5185m>200PotassiumppmASTM D5185m>200Water%ASTM D6304>0.050.00ppm WaterppmASTM D6304>5000.00FLUID CLEANLINESSmethodlimit/basecurrenthistory1history2Particles >4µmASTM D7647>13001149Particles >6µmASTM D7647>8082Particles >14µmASTM D7647>2019Particles >38µmASTM D7647>30Particles >71µmASTM D7647>30Oil CleanlinessISO 4406 (c)>/17/1320/17/14FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2					-		
Silicon       ppm       ASTM D5185m       >25       0           Sodium       ppm       ASTM D5185m       4           Potassium       ppm       ASTM D5185m       >20       0           Water       %       ASTM D6304       >0.05       0.00           pm Water       pm       ASTM D6304       >500       0.00           FLUID CLEANLINESS       method       limit/base       current       history1       history2         Particles >4µm       ASTM D7647       >1300       1149           Particles >6µm       I       ASTM D7647       >80       82           Particles >14µm       ASTM D7647       >20       19            Particles >38µm       ASTM D7647       >3       0            Particles >71µm       I       STM D7647       >3       0            Oil Cleanliness       ISO 4406 (c)       >/17/13       20/17/14            FLUID DEGRADATION <th></th> <th></th> <th></th> <th></th> <th>-</th> <th>history1</th> <th>history?</th>					-	history1	history?
Sodium         ppm         ASTM D5185m         4             Potassium         ppm         ASTM D5185m         >20         0             Water         %         ASTM D6304         >0.05         0.00             ppm Water         ppm         ASTM D6304         >500         0.00             FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         >5230              Particles >6µm         ASTM D7647         >1300         1149             Particles >14µm         ASTM D7647         >80         82             Particles >21µm         ASTM D7647         >20         19             Particles >38µm         ASTM D7647         >3         0             Oil Cleanliness         ISO 4406 (c)         >/17/13         20/17/14             FLUID DEGRADATION         method         limit/base         current         history1         history2							
Potassium         ppm         ASTM D5185m         >20         0             Water         %         ASTM D6304         >0.05         0.00             ppm Water         ppm         ASTM D6304         >500         0.00             FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         5230             Particles >6µm         ASTM D7647         >1300         1149             Particles >14µm         ASTM D7647         >80         82             Particles >21µm         ASTM D7647         >20         19             Particles >38µm         ASTM D7647         >3         0             Particles >71µm         ASTM D7647         >3         0             Gli Cleanliness         ISO 4406 (c)         >/17/13         20/17/14             FLUID DEGRADATION         method         limit/base         current         history1         history2				>25			
Water       %       ASTM D6304       >0.05       0.00           ppm Water       ppm       ASTM D6304       >500       0.00           FLUID CLEANLINESS       method       limit/base       current       history1       history2         Particles >4µm       ASTM D7647       >1300       1149           Particles >6µm       ASTM D7647       >80       & 82           Particles >14µm       ASTM D7647       >20       19           Particles >21µm       ASTM D7647       >4       1           Particles >38µm       ASTM D7647       >4       1           Particles >71µm       ASTM D7647       >3       0           Oil Cleanliness       ISO 4406 (c)       >/17/13       20/17/14           FLUID DEGRADATION       method       limit/base       current       history1       history2							
ppm Water         ppm         ASTM D6304         >500         0.00             FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         5230             Particles >6µm         ASTM D7647         >1300         1149             Particles >6µm         ASTM D7647         >80         82             Particles >14µm         ASTM D7647         >20         19             Particles >21µm         ASTM D7647         >4         1             Particles >38µm         ASTM D7647         >3         0             Particles >71µm         ASTM D7647         >3         0             Oil Cleanliness         ISO 4406 (c)         >/17/13         20/17/14             FLUID DEGRADATION         method         limit/base         current         history1         history2							
FLUID CLEANLINESSmethodlimit/basecurrenthistory1history2Particles >4 $\mu$ mASTM D76475230Particles >6 $\mu$ mASTM D7647>13001149Particles >14 $\mu$ mASTM D7647>8082Particles >21 $\mu$ mASTM D7647>2019Particles >38 $\mu$ mASTM D7647>41Particles >71 $\mu$ mASTM D7647>30Oil CleanlinessISO 4406 (c)>/17/1320/17/14FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2							
Particles >4μm       ASTM D7647 <b>5230</b> Particles >6μm       ASTM D7647       >1300 <b>1149</b> Particles >14μm       ASTM D7647       >80 <b>82</b> Particles >21μm       ASTM D7647       >20 <b>19</b> Particles >21μm       ASTM D7647       >4 <b>1</b> Particles >38μm       ASTM D7647       >4 <b>1</b> Particles >71μm       ASTM D7647       >3 <b>0</b> Oil Cleanliness       ISO 4406 (c)       >/17/13 <b>20/17/14</b> FLUID DEGRADATION       method       Imit/base       current       history1       history2	ppm Water	ppm	ASTM D6304	>500	0.00		
Particles >6μm       ASTM D7647       >1300       1149           Particles >14μm       ASTM D7647       >80       ▲ 82           Particles >21μm       ASTM D7647       >20       19           Particles >21μm       ASTM D7647       >20       19           Particles >38μm       ASTM D7647       >4       1           Particles >71μm       ASTM D7647       >3       0           Oil Cleanliness       ISO 4406 (c)       >/17/13       ▲ 20/17/14           FLUID DEGRADATION       method       limit/base       current       history1       history2	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >14μm       ASTM D7647       >80       ▲ 82           Particles >21μm       ASTM D7647       >20       19           Particles >28μm       ASTM D7647       >4       1           Particles >38μm       ASTM D7647       >4       1           Particles >71μm       ASTM D7647       >3       0           Oil Cleanliness       ISO 4406 (c)       >/17/13       ▲ 20/17/14           FLUID DEGRADATION       method       limit/base       current       history1       history2							
Particles >21μm         ASTM D7647         >20         19             Particles >38μm         ASTM D7647         >4         1             Particles >38μm         ASTM D7647         >4         1             Particles >71μm         ASTM D7647         >3         0             Oil Cleanliness         ISO 4406 (c)         >/17/13         20/17/14             FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >6µm		ASTM D7647	>1300	1149		
Particles >38μm         ASTM D7647         >4         1             Particles >71μm         ASTM D7647         >3         0             Oil Cleanliness         ISO 4406 (c)         >/17/13         20/17/14             FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >14µm		ASTM D7647	>80	<mark>/</mark> 82		
Particles >71μm         ASTM D7647         >3         0             Oil Cleanliness         ISO 4406 (c)         >/17/13         ▲ 20/17/14             FLUID DEGRADATION         method         limit/base         current         history1         history2	Particles >21µm		ASTM D7647	>20	19		
Oil Cleanliness       ISO 4406 (c) >/17/13 ▲ 20/17/14           FLUID DEGRADATION       method       limit/base       current       history1       history2	Particles >38µm		ASTM D7647	>4	1		
FLUID DEGRADATION method limit/base current history1 history2	Particles >71µm		ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>/17/13	<b>20/17/14</b>		
Acid Number (AN) mg KOH/g ASTM D8045 1.0 0.39	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.39		

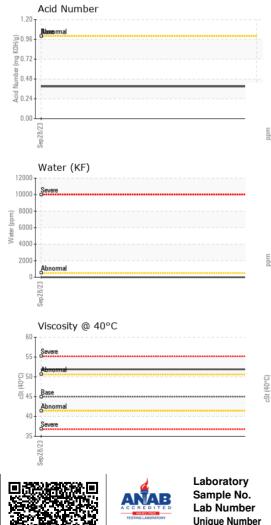


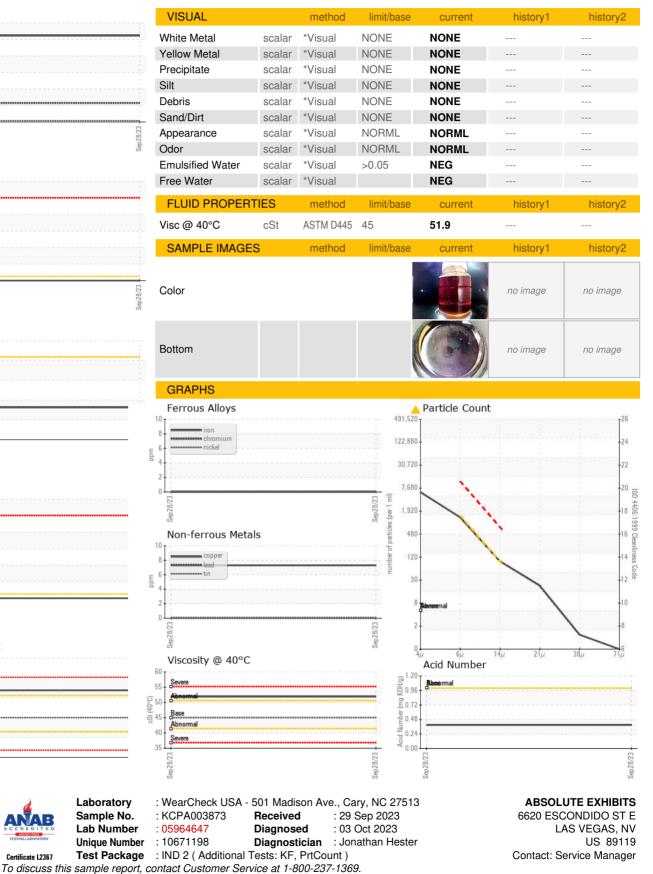
#### Built for a lifetime











\* - 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

T:

F: