

# WEAR NORMAL CONTAMINATION ATTENTION FLUID CONDITION NORMAL

#### AIRLUBE 228 [CSA589] Machine Id KAESER 1364 - PENSKE Component Compressor

### RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### WEAR

All component wear rates are normal.

#### **CONTAMINATION**

Excessive free water present.

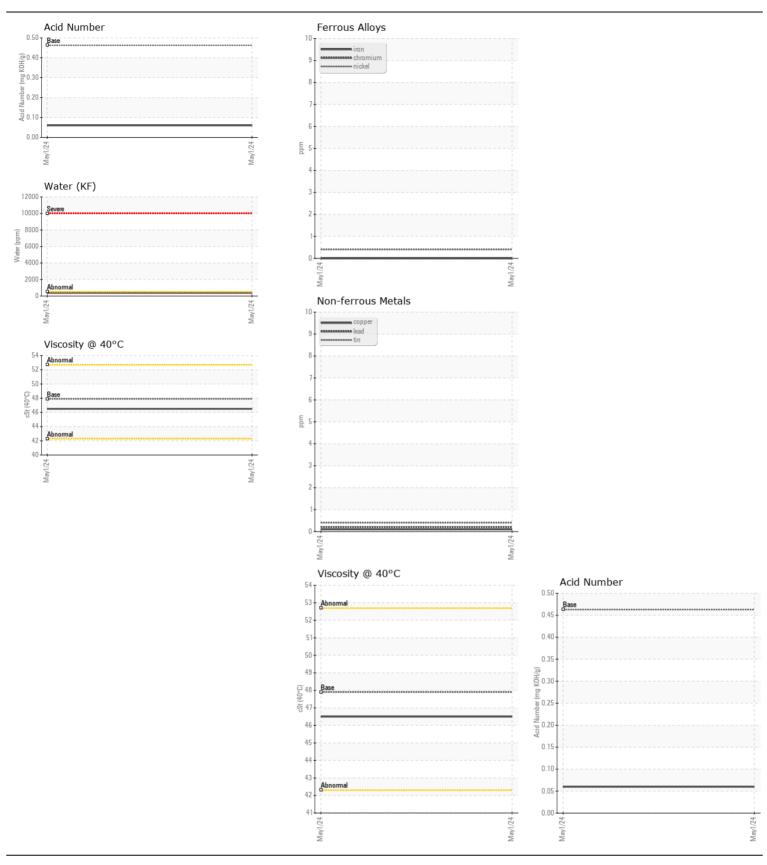
## FLUID CONDITION

The AN level is acceptable for this fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		UCH06189388		
Sample Date		Client Info		01 May 2024		
Machine Age	hrs	Client Info		42921		
Oil Age	hrs	Client Info		6663		
Filter Age	hrs	Client Info		2684		
Oil Changed		Client Info		Not Changd		
Filter Changed		Client Info		Changed		
Sample Status				ATTENTION		
				•		
Iron	ppm	ASTM D5185m	>50	0		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>3	<1		
Titanium	ppm	ASTM D5185m	>3	0		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>10	<1		
Lead	ppm	ASTM D5185m	>10	<1		
Copper	ppm	ASTM D5185m	>50	<1		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	nnm	ASTM D5185m	>25	2		
Silicon Potassium	ppm ppm	ASTM D5185m	>25 >20	2 <1		
Potassium	ppm	ASTM D5185m	>20	<1		
Potassium Water	ppm %	ASTM D5185m ASTM D6304	>20 >0.05	<1 0.038		
Potassium Water ppm Water	ppm % ppm	ASTM D5185m ASTM D6304 ASTM D6304	>20 >0.05 >500	<1 0.038 380		
Potassium Water ppm Water Silt	ppm % ppm scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual	>20 >0.05 >500 NONE	<1 0.038 380 NONE		
Potassium Water ppm Water Silt Debris	ppm % ppm scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual	>20 >0.05 >500 NONE NONE	<1 0.038 380 NONE NONE	 	  
Potassium Water ppm Water Silt Debris Sand/Dirt	ppm % ppm scalar scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual	>20 >0.05 >500 NONE NONE NONE	<1 0.038 380 NONE NONE NONE	  	   
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance	ppm % ppm scalar scalar scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual	>20 >0.05 >500 NONE NONE NONE NORML	<pre>&lt;1 0.038 380 NONE NONE NONE NONE NONE</pre>	   	  
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor	ppm % ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual	>20 >0.05 >500 NONE NONE NONE NORML	<ul> <li>&lt;1</li> <li>0.038</li> <li>380</li> <li>NONE</li> <li>NONE</li> <li>NORE</li> <li>NORML</li> <li>NORML</li> </ul>	    	    
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance	ppm % ppm scalar scalar scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual	>20 >0.05 >500 NONE NONE NONE NORML	<pre>&lt;1 0.038 380 NONE NONE NONE NONE NONE</pre>		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor	ppm % ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual	>20 >0.05 >500 NONE NONE NONE NORML	<ul> <li>&lt;1</li> <li>0.038</li> <li>380</li> <li>NONE</li> <li>NONE</li> <li>NORE</li> <li>NORML</li> <li>NORML</li> </ul>		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm % ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual	>20 >0.05 >500 NONE NONE NONE NORML	<1 0.038 380 NONE NONE NORE NORML 0.2%		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm % ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >0.05 >500 NONE NONE NORML NORML >0.05	<1 0.038 380 NONE NONE NORE NORML 0.2% 1		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm % ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.05</li> <li>1.5</li> </ul>	<pre>&lt;1 0.038 380 NONE NONE NONE NORML 0.2% 1 0</pre>		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm % ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.05</li> <li>1.5</li> <li>0</li> </ul>	<pre>&lt;1 0.038 380 NONE NONE NONE NORML 0.2% 1 0 0 0</pre>		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm % ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.05 >500 NONE NONE NORML NORML >0.05	<pre>&lt;1     0.038     380     NONE     NONE     NONE     NORML     0.2%     1     0     0     0</pre>		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.05 >500 NONE NONE NORML NORML >0.05	<pre>&lt;1     0.038     380     NONE     NONE     NONE     NORML     0.2%     1     0     0     0     &lt;1 </pre>		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.05</li> <li>1.5</li> <li>0</li> <li>0.3</li> <li>0</li> <li>3</li> </ul>	<pre>&lt;1 0.038 380 NONE NONE NONE NORML 0.2% 1 0 0 </pre>		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.05</li> <li>1.5</li> <li>0</li> <li>0.3</li> <li>0</li> </ul>	<pre>&lt;1 0.038 380 NONE NONE NONE NORML 0.2% 1 0 0 </pre>		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.05</li> <li>1.5</li> <li>0</li> <li>0.3</li> <li>0</li> <li>0</li> <li>406</li> </ul>	<pre>&lt;1 0.038 380 NONE NONE NONE NONE NORML 0.2% 1 0 0 0 &lt;1 0 0 0 &lt;1 0 190</pre>		-
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm % scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NORME</li> <li>NORML</li> <li>&gt;0.05</li> <li>1.5</li> <li>0</li> <li>0</li> <li>0.3</li> <li>0</li> <li>0</li> <li>406</li> <li>0</li> </ul>	<pre>&lt;1 0.038 380 NONE NONE NONE NORML 0.2% 1 0 0 0 </pre> <pre>1 0 0 0 </pre> <pre>1 0 0 0 190 0 0 </pre>		-
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.05</li> <li>1.5</li> <li>0</li> <li>0</li> <li>0.3</li> <li>0</li> <li>0</li> <li>406</li> <li>0</li> <li>1283</li> </ul>	<pre>&lt;1 0.038 380 NONE NONE NONE NORML 0.2% 1 0 0 0 </pre> <pre>1 0 0 0 1 0 0 190 0 299</pre>		

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Contact/Location. FRED BERGSMA - UCAIRGRA



**AIR COMPONENTS INC** Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : UCH06189388 Received : 23 May 2024 1181 58TH STREET SW Tested Lab Number : 06189388 GRAND RAPIDS, MI : 28 May 2024 Unique Number : 11046140 : 28 May 2024 - Don Baldridge US 49509 Diagnosed Test Package : IND 2 (Additional Tests: KF) Contact: FRED BERGSMA Certificate L2367 FBERGSMA@AIR-COMPONENTSINC.COM 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. T: (800)383-2234 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (616)532-0099

Contact/Location: FRED BERGSMA - UCAIRGRA Page 2 of 2