

## **OIL ANALYSIS REPORT**

### Area **ULTRA COOLANT SSR INGERSOLL RAND CBV660915 - WASHINGTON UNIVERSITY**

Component Compressor

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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



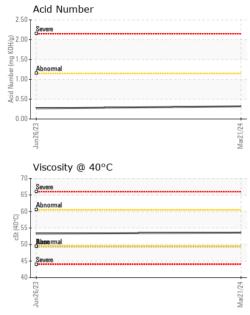
Sample Rating Trend



SAMPLE INFORM	<b>MATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		UCH06141465	UCH05889138	
Sample Date		Client Info		21 Mar 2024	26 Jun 2023	
Machine Age	hrs	Client Info		7415	4437	
Oil Age	hrs	Client Info		7415	4437	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				NORMAL	NORMAL	
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	1	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m		0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	0	0	
Lead	ppm	ASTM D5185m	>25	0	0	
Copper	ppm	ASTM D5185m	>50	0	<1	
Tin	ppm	ASTM D5185m	>15	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	
Barium	ppm	ASTM D5185m	500	552	599	
Molybdenum	ppm	ASTM D5185m	0	0	0	
Manganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m	0	0	<1	
Calcium	ppm	ASTM D5185m	0	0	3	
Phosphorus	ppm	ASTM D5185m	20	0	<1	
Zinc	ppm	ASTM D5185m	0	0	5	
Sulfur	ppm	ASTM D5185m	200	348	348	
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	<1	
Sodium	ppm	ASTM D5185m		40	34	
Potassium	ppm	ASTM D5185m	>20	3	4	
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.32	0.27	



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	VISUAL		method	limit/base	current	history1	history2	
	White Metal	scalar	*Visual	NONE	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE	NONE		
· · · · · · · · · · · · · · · · · · ·	Silt	scalar	*Visual	NONE	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE		
1/24 -	Appearance	scalar	*Visual	NORML	NORML	NORML		
Mar21/24	Odor	scalar	*Visual	NORML	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG		
	Free Water	scalar	*Visual		NEG	NEG		
	FLUID PROPERT		method	limit/base	current	history1	history2	
							mstoryz	
	Visc @ 40°C	cSt	ASTM D445	49.4	53.6	53.3		
	SAMPLE IMAGES	\$	method	limit/base	current	history1	history2	
Mar21/24	Color					J	no image	
	Bottom				· E.		no image	
	Non-ferrous Metals	5		Mai21/24 Mai21/24				
	Viscosity @ 40°C				Acid Number			
	<sup>70</sup> <sub>65</sub> Severe			@ <sup>2.5</sup>				
	Abnormal			(B)HOX BU HOX BU U Jack Control (B) (B)HOX BU U Jack Control (B) (B) (B)HOX BU U Jack Control (B) (B) (B)HOX BU U Jack Control (B) (B) (B) (B) (B) (B) (B) (B) (B) (B)	0 -			
	(2) 60 + <b>0</b> -0 49 55 - 			<u>ق</u> 1.5	Abnormal			
				4 1.0 Z	0+			
	45 Severe 40			4 0.5 V 0.0				
					0			
	Jun26/23			Mar21/24	Jun26/23			
Laboratory Sample No. Lab Number Unique Number								

VISUAI method limit/base current history1 history2

Contact/Location: RACHEL VON HATTEN - UCJOHSAI

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