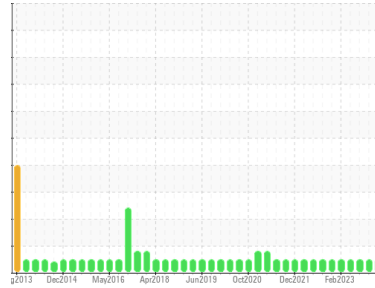




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**NH3 Compressor**  
 Machine Id  
**CARCAL-B3 RDB-222 BOOSTER (S/N S0069)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**USPI 1009-68 SC (--- GAL)**

## DIAGNOSIS

### 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. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>USP0005068</b>	USP0003173	USP243269
Sample Date	Client Info		<b>15 Jan 2024</b>	19 Oct 2023	30 Jul 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	<b>4</b>	2	3
Chromium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >3	<b>1</b>	0	0
Lead	ppm	ASTM D5185m >2	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >8	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m >4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>0</b>	0	0
Zinc	ppm	ASTM D5185m	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m 50	<b>1278</b>	1212	1357

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>4</b>	0	<1
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	<1
Water	%	ASTM D6304 >0.01	<b>0.003</b>	0.004	0.002
ppm Water	ppm	ASTM D6304 >100	<b>39</b>	47.1	21.2

## FLUID CLEANLINESS

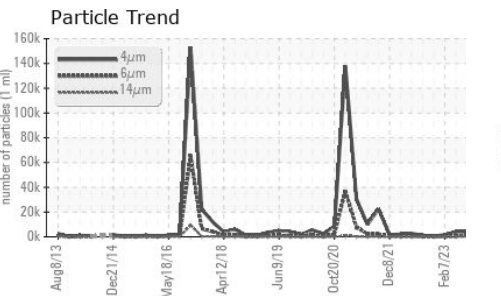
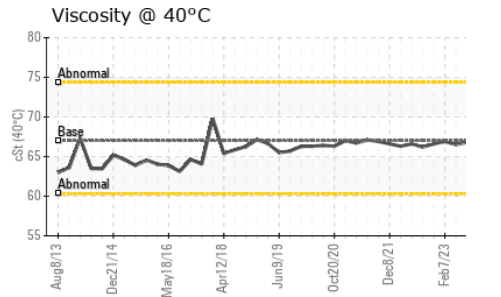
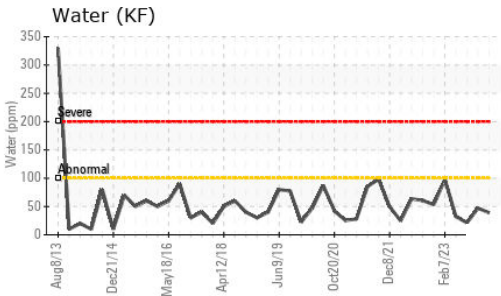
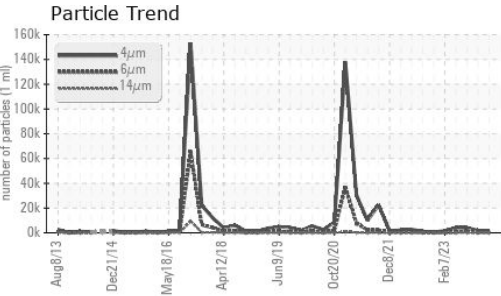
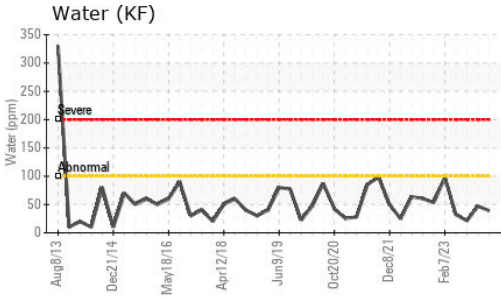
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>1159</b>	1899	3941
Particles >6µm	ASTM D7647 >2500		<b>319</b>	488	973
Particles >14µm	ASTM D7647 >320		<b>18</b>	20	42
Particles >21µm	ASTM D7647 >80		<b>5</b>	5	6
Particles >38µm	ASTM D7647 >20		<b>1</b>	0	0
Particles >71µm	ASTM D7647 >4		<b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/18/15	<b>17/15/11</b>	18/16/11	19/17/13

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974 0.005	<b>0.014</b>	0.013	0.015



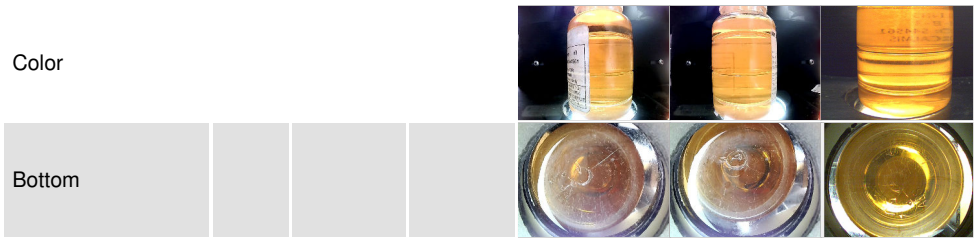
# OIL ANALYSIS REPORT



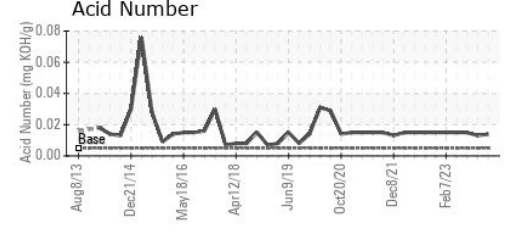
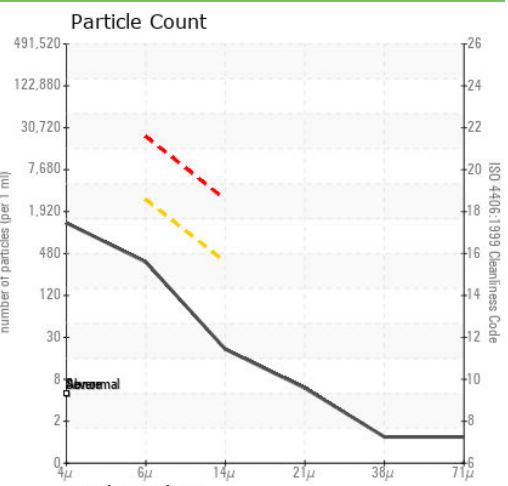
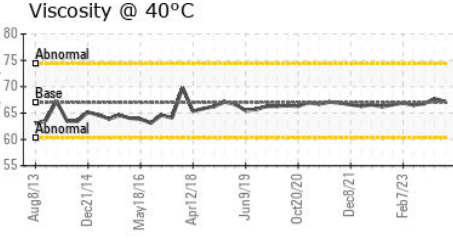
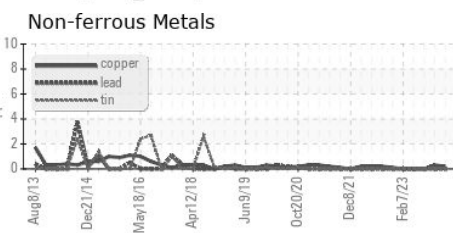
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 67	<b>67.2</b>	67.7	66.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0005068 **Received** : 16 Jan 2024  
**Lab Number** : **06062038** **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10833420 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2

**CARGILL-CALIFORNIA**  
 1001 E. SMITH STREET  
 CALIFORNIA, MO  
 US 65018  
 Contact: REFRIGERATION DEPT.

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

T: (573)796-7154  
 F: (573)796-3661