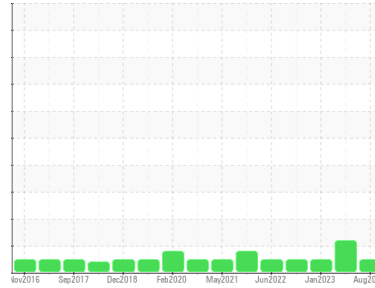




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**L-15**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**USPI 1009-68 SC (--- QTS)**

## 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 component. The amount and size of particulates present in the system is 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>USP0000538</b>	USP248947	USP244363
Sample Date	Client Info	<b>19 Aug 2023</b>	03 May 2023	16 Jan 2023
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	ATTENTION	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >8	<b>11</b>	6	8
Chromium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<b>1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >3	<b>0</b>	0	0
Lead	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >8	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m >4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
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>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>0</b>	1	0
Calcium	ppm	ASTM D5185m	<b>5</b>	4	5
Phosphorus	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Zinc	ppm	ASTM D5185m	<b>1</b>	0	<1
Sulfur	ppm	ASTM D5185m 50	<b>0</b>	0	0

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>1</b>	<1	<1
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Water	%	ASTM D6304 >0.01	<b>0.002</b>	0.004	0.003
ppm Water	ppm	ASTM D6304 >100	<b>19.3</b>	47.1	34.9

## FLUID CLEANLINESS

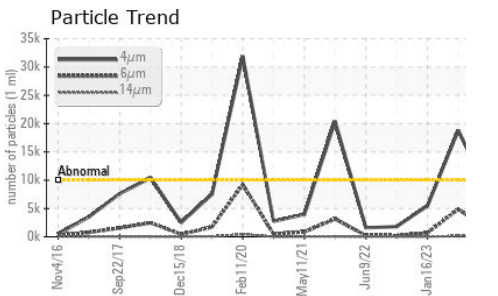
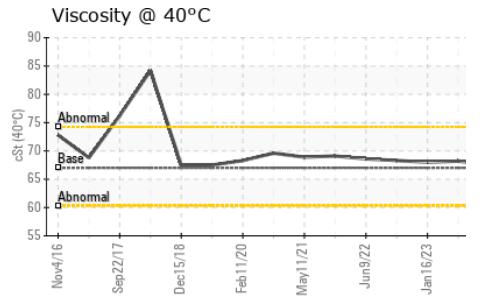
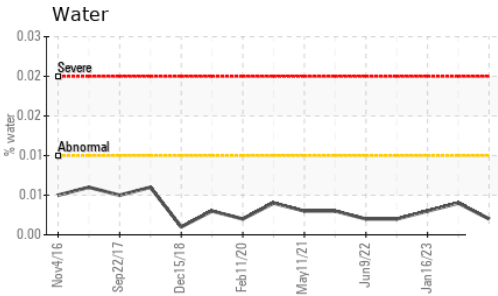
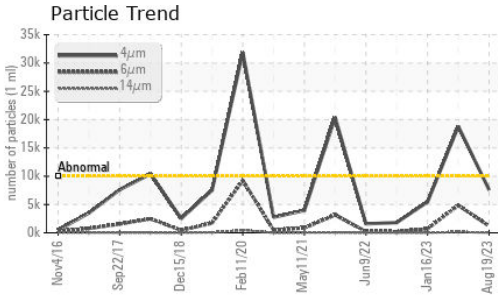
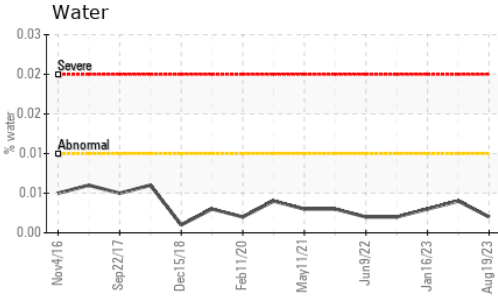
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>7599</b>	▲ 18810	5460
Particles >6µm	ASTM D7647 >2500	<b>1201</b>	▲ 4864	688
Particles >14µm	ASTM D7647 >320	<b>32</b>	144	27
Particles >21µm	ASTM D7647 >80	<b>5</b>	18	7
Particles >38µm	ASTM D7647 >20	<b>0</b>	0	0
Particles >71µm	ASTM D7647 >4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >20/18/15	<b>20/17/12</b>	▲ 21/19/14	20/17/12

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974 0.005	<b>0.029</b>	0.015	0.015



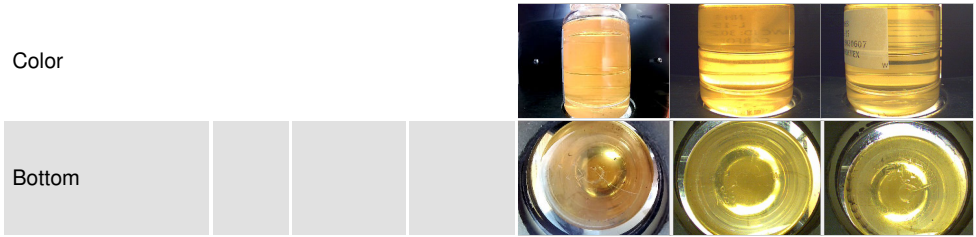
# OIL ANALYSIS REPORT



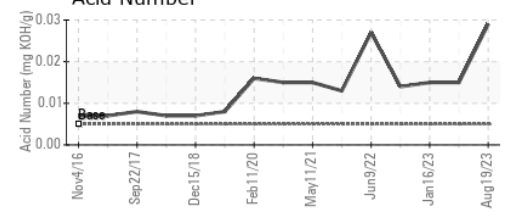
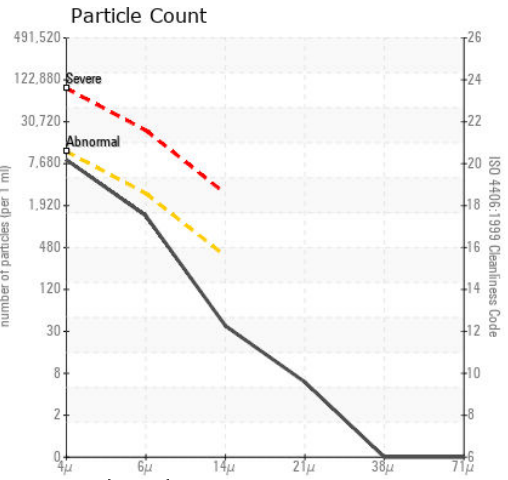
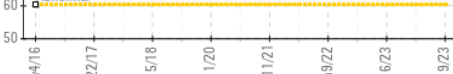
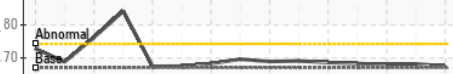
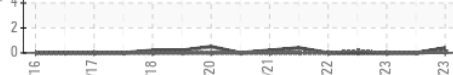
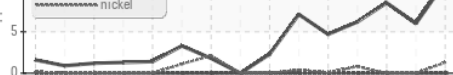
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67	<b>67.5</b>	68.2

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0000538 **Received** : 18 Aug 2023  
**Lab Number** : **05928818** **Diagnosed** : 21 Aug 2023  
**Unique Number** : 10608765 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**CARGILL INC - FORT WORTH**  
 3709 EAST 1ST ST  
 FORT WORTH, TX  
 US 76111  
 Contact:

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)

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