



# OIL ANALYSIS REPORT

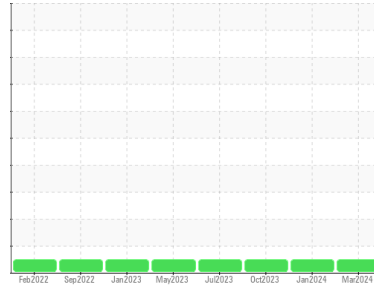
Sample Rating Trend

**NORMAL**



Machine Id  
**KR-FA-005275 - PUMP OUT-11566687 (S/N 32638)**

Component  
**Refrigeration Compressor**  
Fluid  
**USPI 1009-68 SC (5 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>USP0008255</b>	USP0005267	USP0001139
Sample Date	Client Info			<b>30 Mar 2024</b>	10 Jan 2024	15 Oct 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>0</b>	0	0
Chromium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
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>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>8	<b>0</b>	0	<1
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	2
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	<1
Calcium	ppm	ASTM D5185m		<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>0</b>	0	0
Zinc	ppm	ASTM D5185m		<b>0</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>0</b>	0	0
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Water	%	ASTM D6304	>0.01	<b>0.003</b>	0.003	0.003
ppm Water	ppm	ASTM D6304	>100	<b>33</b>	29	27.9

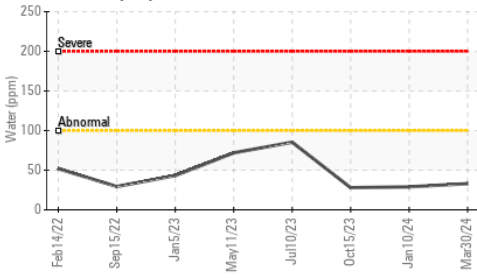
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>8122</b>	1186	1952
Particles >6µm		ASTM D7647	>2500	<b>954</b>	263	280
Particles >14µm		ASTM D7647	>640	<b>26</b>	14	10
Particles >21µm		ASTM D7647	>160	<b>5</b>	3	3
Particles >38µm		ASTM D7647	>40	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/16	<b>20/17/12</b>	17/15/11	18/15/10

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	<b>0.028</b>	0.014	0.014

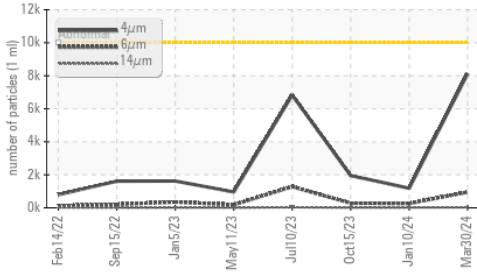


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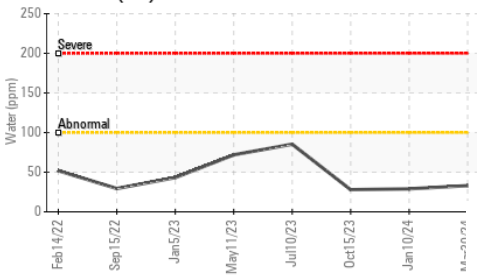
## Water (KF)



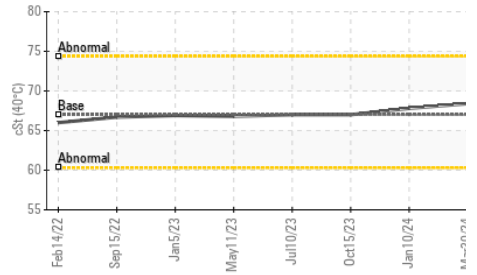
## Particle Trend



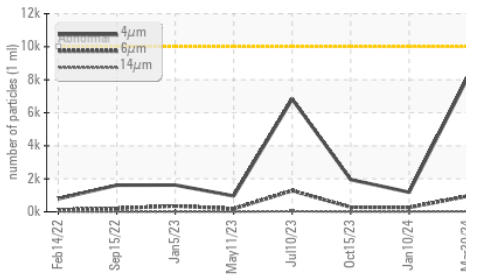
## Water (KF)



## Viscosity @ 40°C



## Particle Trend

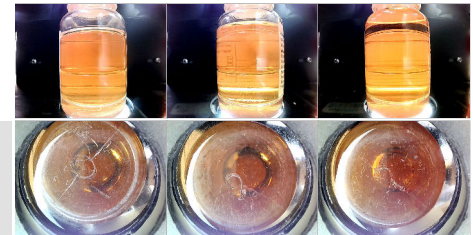
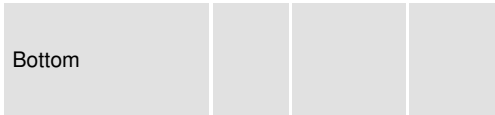


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	68.4	67.8	67.0

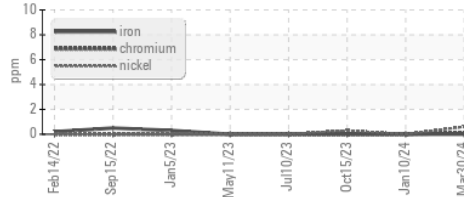
SAMPLE IMAGES	method	limit/base	current	history1	history2
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## Color

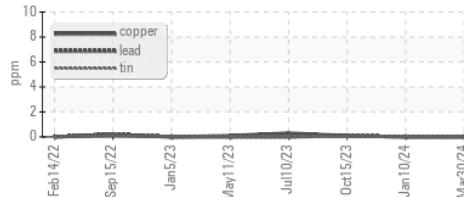


## GRAPHS

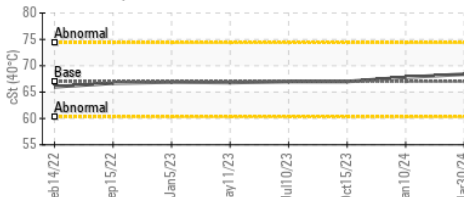
### Ferrous Alloys



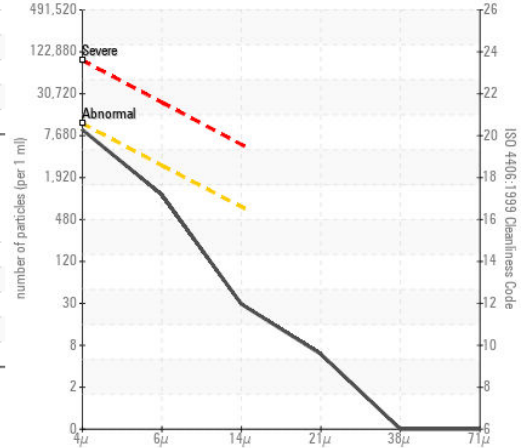
### Non-ferrous Metals



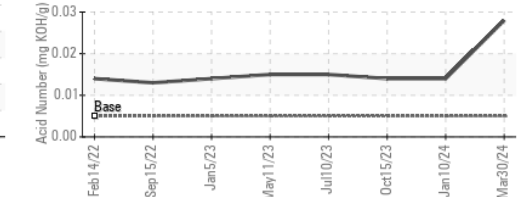
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : USP0008255  
 Lab Number : 06133418  
 Unique Number : 10952883  
 Test Package : IND 2

Received : 29 Mar 2024  
 Tested : 01 Apr 2024  
 Diagnosed : 01 Apr 2024 - Doug Bogart

**KraftHeinz - Kirksville - Plant 8333 USP**  
 2504 INDUSTRIAL RD  
 KIRKSVILLE, MO  
 US 63501  
 Contact: LARRY WISKIRCHEN  
 larry.wiskirchen@kraftfoods.com  
 T: (660)627-1031  
 F:

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)