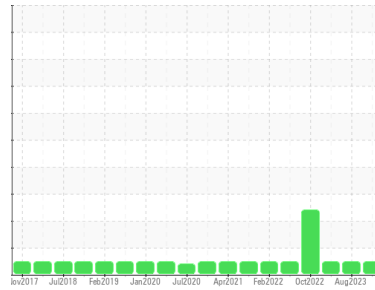




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**C-9 (S/N 10241E76358355)**

Component  
**Refrigeration Compressor**  
Fluid  
**USPI 1009-68 SC (45 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 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>USP249036</b>	USP249037	USP250643
Sample Date	Client Info			<b>24 Mar 2024</b>	25 Aug 2023	17 Mar 2023
Machine Age	hrs	Client Info		<b>59456</b>	54282	50500
Oil Age	hrs	Client Info		<b>47797</b>	42623	38841
Oil Changed	Client Info			<b>Not Changed</b>	Not Changed	Not Changed
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	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>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>8	<b>0</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>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>0</b>	1	0
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	0
Sulfur	ppm	ASTM D5185m	50	<b>0</b>	0	0

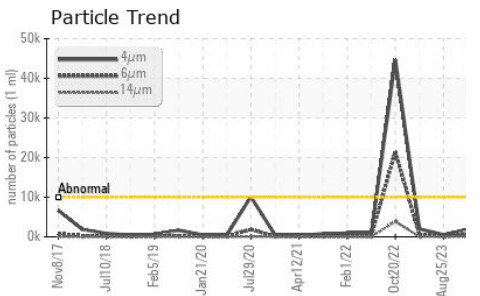
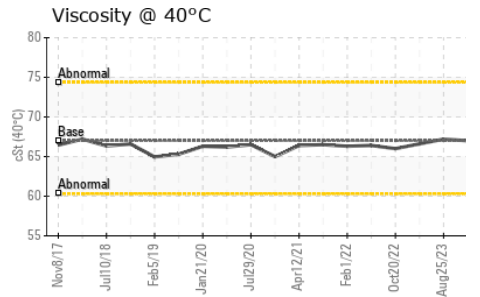
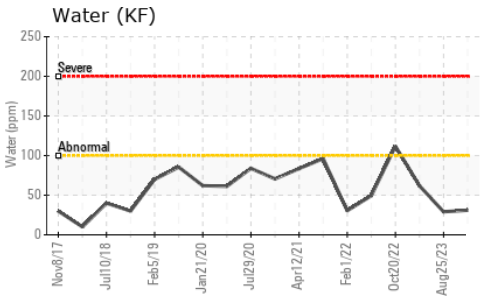
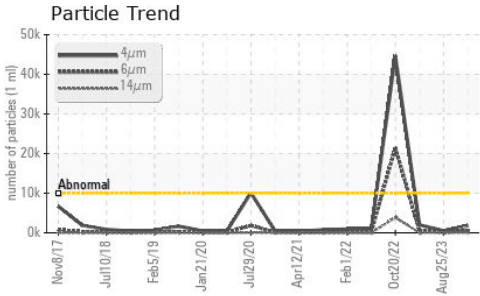
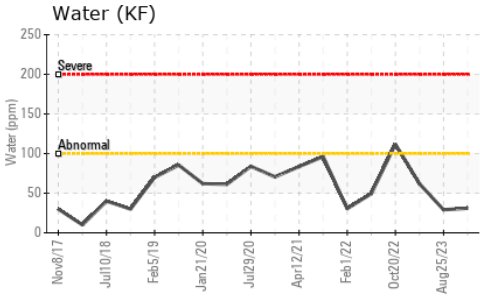
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	2
Sodium	ppm	ASTM D5185m		<b>0</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	0
Water	%	ASTM D6304	>0.01	<b>0.003</b>	0.003	0.006
ppm Water	ppm	ASTM D6304	>100	<b>31</b>	29.1	61.9

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>1771</b>	530	2012
Particles >6µm		ASTM D7647	>2500	<b>562</b>	145	526
Particles >14µm		ASTM D7647	>320	<b>56</b>	16	33
Particles >21µm		ASTM D7647	>80	<b>20</b>	4	9
Particles >38µm		ASTM D7647	>20	<b>2</b>	0	0
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>18/16/13</b>	16/14/11	18/16/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	<b>0.028</b>	0.016	0.018



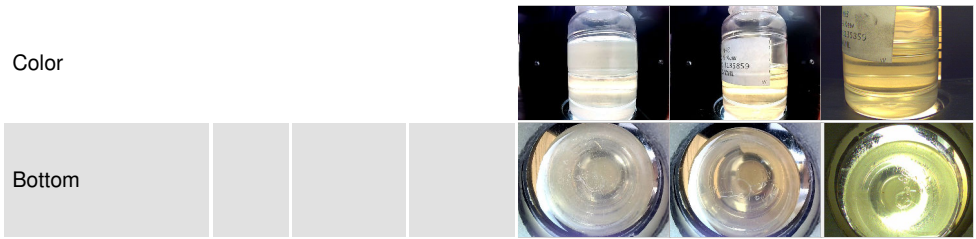
# OIL ANALYSIS REPORT



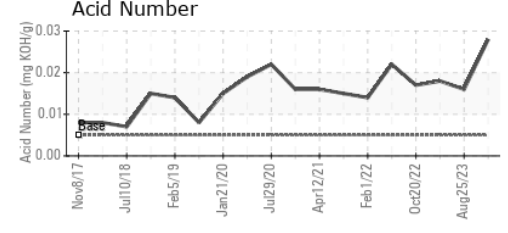
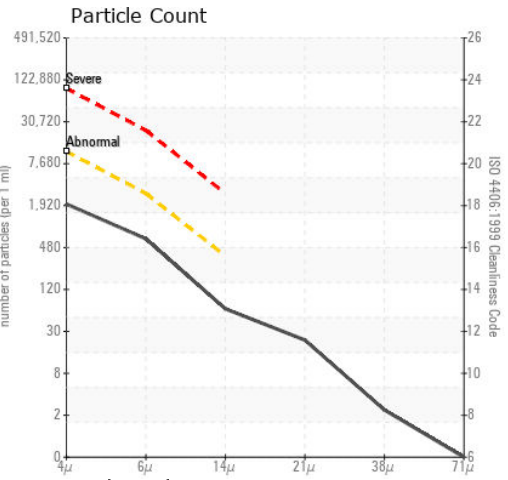
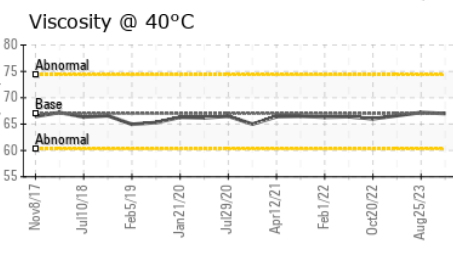
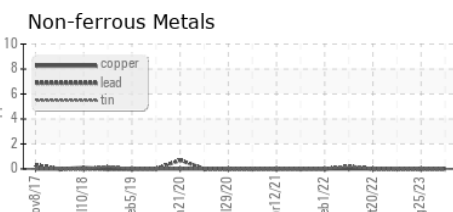
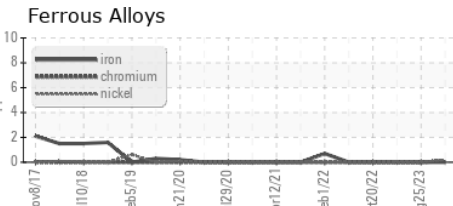
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	67.0	67.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP249036  
**Lab Number** : 06133459  
**Unique Number** : 10952924  
**Test Package** : IND 2  
**Received** : 29 Mar 2024  
**Tested** : 02 Apr 2024  
**Diagnosed** : 02 Apr 2024 - Doug Bogart

**SMITHFIELD PACKING**  
 2401 WILCO BLVD  
 WILSON, NC  
 US 27893  
 Contact: SHERRY STRONG

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)