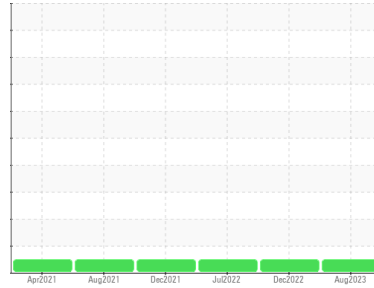




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**ER1 H/LSSC-14 (S/N S0320HFMPHAA3)**

Component  
**Refrigeration Compressor**  
Fluid  
**USPI ALT-68 SC (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates present in the oil.

### 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>USP0000614</b>	USP247966	USP240309
Sample Date	Client Info			<b>15 Aug 2023</b>	01 Dec 2022	27 Jul 2022
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>&lt;1</b>	0	0
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>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>8	<b>0</b>	0	0
Tin	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	---
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>&lt;1</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>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>3</b>	19	21

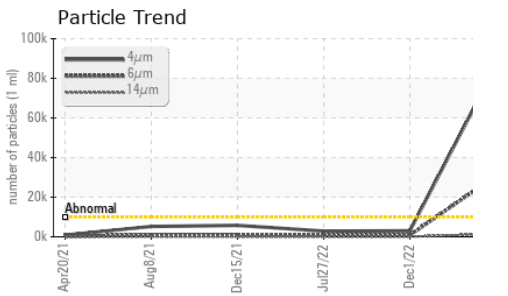
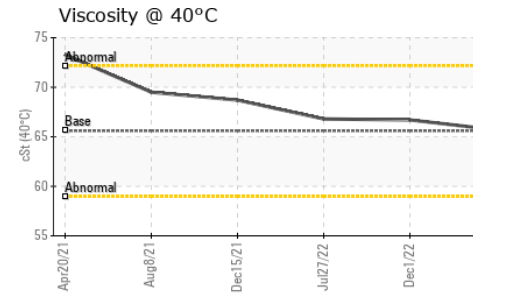
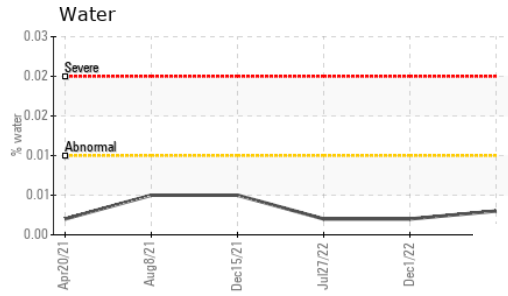
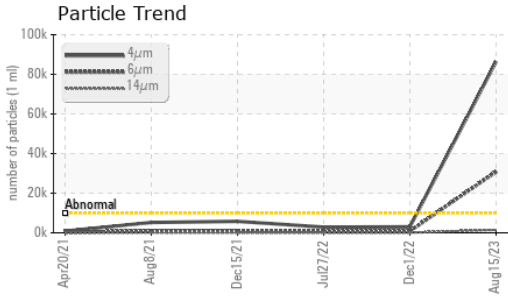
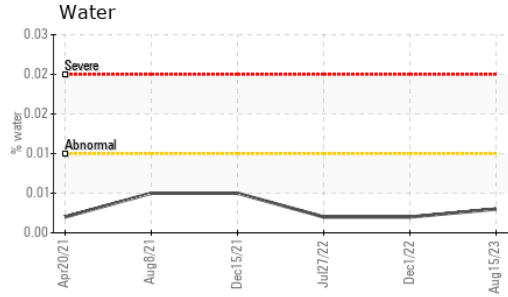
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Sodium	ppm	ASTM D5185m		<b>0</b>	<1	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Water	%	ASTM D6304	>0.01	<b>0.003</b>	0.002	0.002
ppm Water	ppm	ASTM D6304	>100	<b>31.5</b>	23.1	16.5

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>86397</b>	3050	2889
Particles >6µm		ASTM D7647	>2500	<b>30820</b>	882	729
Particles >14µm		ASTM D7647	>320	<b>1448</b>	56	37
Particles >21µm		ASTM D7647	>80	<b>151</b>	9	8
Particles >38µm		ASTM D7647	>20	<b>0</b>	0	1
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>24/22/18</b>	19/17/13	19/17/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.005	<b>0.013</b>	0.016	0.016



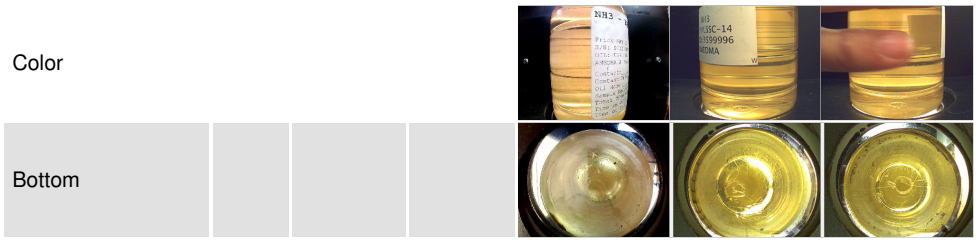
# OIL ANALYSIS REPORT



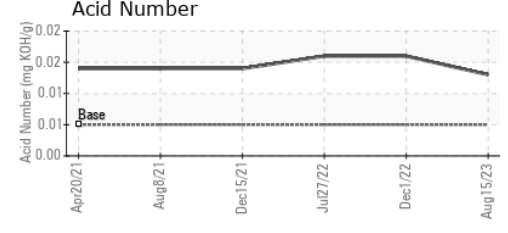
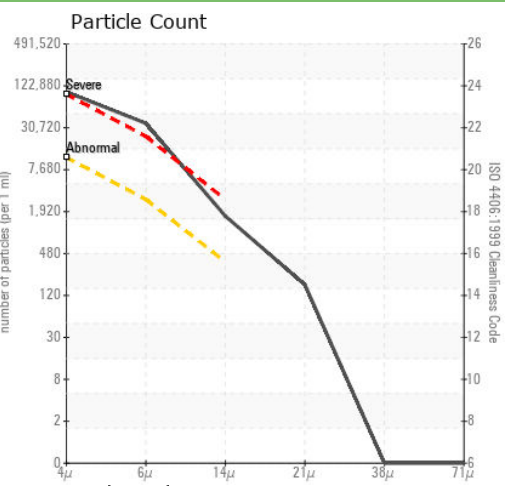
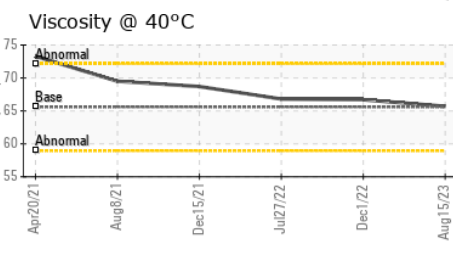
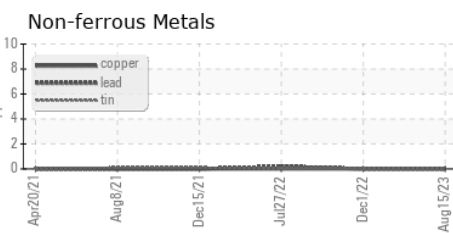
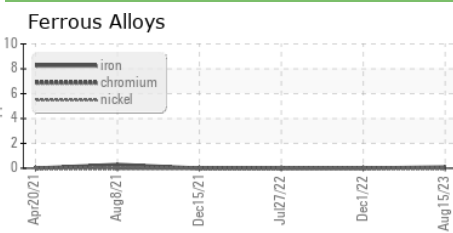
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	65.6	<b>65.7</b>	66.7	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.** : USP0000614  
**Lab Number** : 05926157  
**Unique Number** : 10606104  
**Test Package** : IND 2  
**Received** : 16 Aug 2023  
**Diagnosed** : 17 Aug 2023  
**Diagnostician** : Doug Bogart

**AMERICAN FOODS GROUP**  
 4430 S 110TH ST  
 OMAHA, NE  
 US 68137  
 Contact: Service Manager

Certificate L2367  
 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)