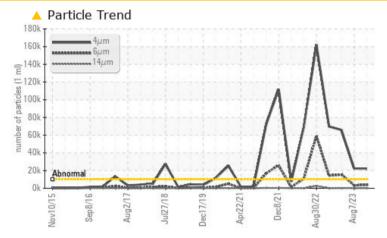


# **PROBLEM SUMMARY**

### Area SOUTH Machine Id SOUTH HS-9 (S/N MK5E316)

Component Refrigeration Compressor Fluid REFRIG COMP OIL ISO 68 (55 GAL)

## COMPONENT CONDITION SUMMARY



### RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS									
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL				
Particles >4µm	ASTM D7647	>10000	<u> </u>	<u> </u>	65726				
Particles >6µm	ASTM D7647	>2500	<b>A</b> 3846	<b>A</b> 3281	🔺 15391				
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<u> </u>	<u> </u>	▲ 23/21/15				

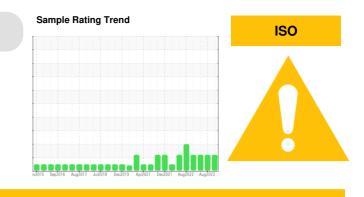
Customer Id: TYSTAR Sample No.: USP0003461 Lab Number: 06006398 Test Package: IND 2



To manage this report scan the QR code

*To discuss the diagnosis or test data:* Doug Bogart +1 (800)237-1369 x4016 <u>dougb@wearcheckusa.com</u>

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com



### **RECOMMENDED ACTIONS**

There are no recommended actions for this sample.

### HISTORICAL DIAGNOSIS

# 07 Aug 2023 Diag: Doug Bogart



Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report

### 09 May 2023 Diag: Doug Bogart

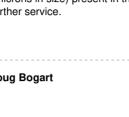
Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

04 Jan 2023 Diag: Doug Bogart



Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.







# **OIL ANALYSIS REPORT**

# Area SOUTH SOUTH HS-9 (S/N MK5E316) Component

# **Refrigeration Compressor**

Fluid **REFRIG COMP OIL ISO 68 (55 GAL)** 

## DIAGNOSIS

### A Recommendation

Resample at the next service interval to monitor.

### Wear

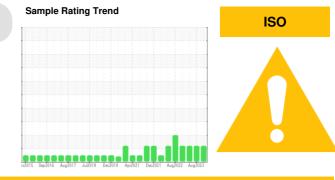
All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

## Fluid Condition

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

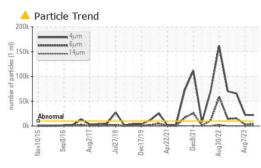


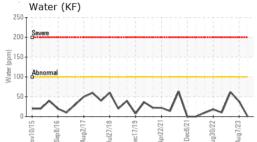
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0003461	USP248342	USP244232
Sample Date		Client Info		13 Nov 2023	07 Aug 2023	09 May 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	0	0	0
Chromium	ppm	ASTM D5185m	>2	0	0	0
Nickel	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>3	0	0	0
Lead	ppm	ASTM D5185m	>2	0	<1	0
Copper	ppm	ASTM D5185m		0	0	0
Tin	ppm	ASTM D5185m	>4	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	5	0	0	1
Calcium	ppm	ASTM D5185m	12	1	0	0
Phosphorus	ppm	ASTM D5185m	12	<1	0	0
Zinc	ppm	ASTM D5185m	12	0	0	0
Sulfur	ppm	ASTM D5185m	1000	0	0	7
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	0	0	<1
Sodium	ppm	ASTM D5185m		<1	0	2
Potassium	ppm	ASTM D5185m	>20	0	0	1
Water	%	ASTM D6304	>0.01	0.001	0.003	0.006
ppm Water	ppm	ASTM D6304	>100	0.00	38.3	62.0
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>A</b> 22033	▲ 22302	65726
Particles >6µm		ASTM D7647	>2500	<u> </u>	▲ 3281	<b>1</b> 5391
Particles >14µm		ASTM D7647	>320	121	23	228
Particles >21µm		ASTM D7647	>80	23	4	16
Particles >38µm		ASTM D7647	>20	0	0	0
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>A</b> 22/19/14	A 22/19/12	▲ 23/21/15
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.10	0.026	0.015	0.015

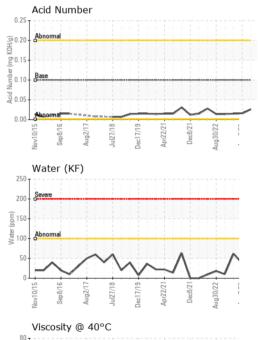
Contact/Location: ? ? - TYSTAR



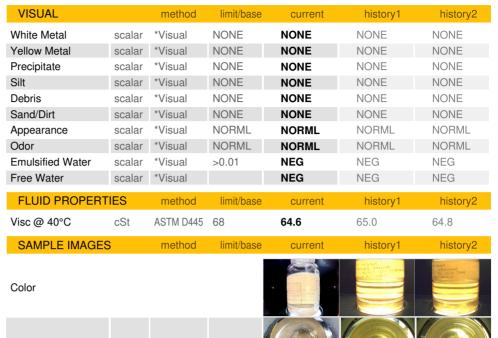
# **OIL ANALYSIS REPORT**



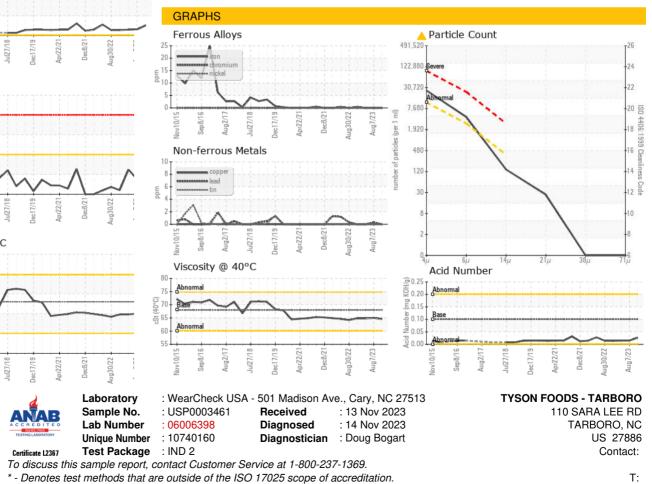




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Bottom



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

Report Id: TYSTAR [WUSCAR] 06006398 (Generated: 11/16/2023 04:29:10) Rev: 1

Contact/Location: ? ? - TYSTAR Page 4 of 4

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