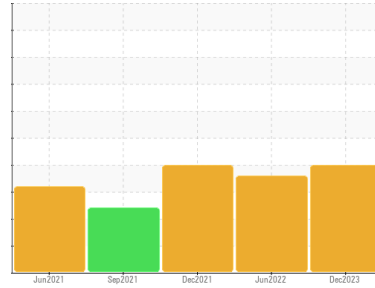


# PROBLEM SUMMARY

Sample Rating Trend

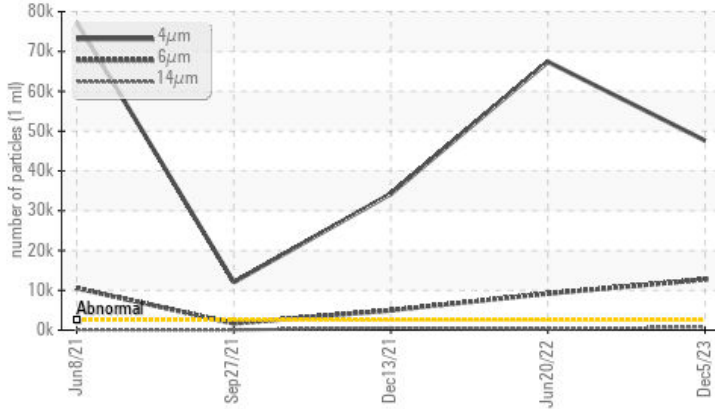
**WATER**

Area  
**Jackson County 1 Plant/Cryogenic/Compressor**  
 Machine Id  
**C-1161 (S/N 10241N10655621)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**SUMMIT PGS-100 (250 GAL)**

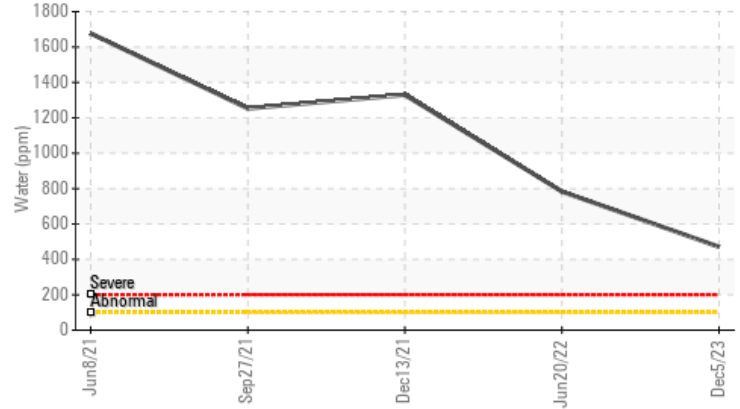


## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



### ▲ Water (KF)



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.01	▲ <b>0.047</b>	▲ 0.078	▲ 0.132
ppm Water	ppm	ASTM D6304	>100	▲ <b>471</b>	▲ 783.2	▲ 1329.9
Particles >4µm		ASTM D7647	>2500	▲ <b>47622</b>	▲ 67402	▲ 34242
Particles >6µm		ASTM D7647	>320	▲ <b>12714</b>	▲ 9192	▲ 4975
Particles >14µm		ASTM D7647	>80	▲ <b>752</b>	▲ 269	▲ 529
Particles >21µm		ASTM D7647	>20	▲ <b>182</b>	▲ 43	▲ 130
Particles >38µm		ASTM D7647	>4	▲ <b>7</b>	▲ 1	▲ 43
Oil Cleanliness		ISO 4406 (c)	>18/15/13	▲ <b>23/21/17</b>	▲ 23/20/15	▲ 22/19/16

Customer Id: ETCJCTY  
 Sample No.: TO90002479  
 Lab Number: 06026523  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

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

**RECOMMENDED ACTIONS**

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.

**HISTORICAL DIAGNOSIS**

**20 Jun 2022 Diag: Don Baldrige**

WATER



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



**13 Dec 2021 Diag: Doug Bogart**

WATER



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



**27 Sep 2021 Diag: Doug Bogart**

WATER



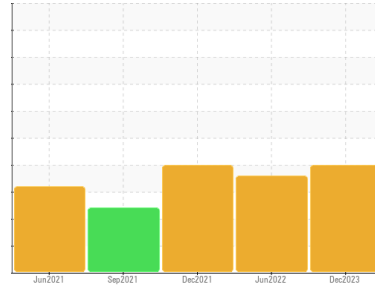
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. There is a light concentration of water present in the oil.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

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area  
**Jackson County 1 Plant/Cryogenic/Compressor**  
 Machine Id  
**C-1161 (S/N 10241N10655621)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**SUMMIT PGS-100 (250 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. There is a light concentration of water 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>TO90002479</b>	TO90001760	TO90000741
Sample Date	Client Info	<b>05 Dec 2023</b>	20 Jun 2022	13 Dec 2021
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>ABNORMAL</b>	ABNORMAL	ABNORMAL

**WEAR METALS**

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >8	<b>5</b>	4	4
Chromium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >3	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >8	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >4	<b>2</b>	1	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	5
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

**ADDITIVES**

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 2	<b>0</b>	2	2
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m 0	<b>10</b>	8	10
Phosphorus	ppm	ASTM D5185m 0	<b>357</b>	9	14
Zinc	ppm	ASTM D5185m 0	<b>68</b>	49	38
Sulfur	ppm	ASTM D5185m 5	<b>0</b>	2	0

**CONTAMINANTS**

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>3</b>	2	2
Sodium	ppm	ASTM D5185m	<b>5</b>	12	14
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	<1
Water	%	ASTM D6304 >0.01	<b>▲ 0.047</b>	▲ 0.078	▲ 0.132
ppm Water	ppm	ASTM D6304 >100	<b>▲ 471</b>	▲ 783.2	▲ 1329.9

**FLUID CLEANLINESS**

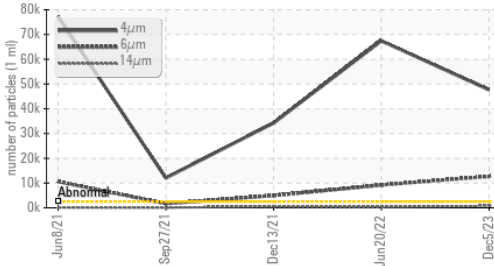
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >2500	<b>▲ 47622</b>	▲ 67402	▲ 34242
Particles >6µm	ASTM D7647 >320	<b>▲ 12714</b>	▲ 9192	▲ 4975
Particles >14µm	ASTM D7647 >80	<b>▲ 752</b>	▲ 269	▲ 529
Particles >21µm	ASTM D7647 >20	<b>▲ 182</b>	▲ 43	▲ 130
Particles >38µm	ASTM D7647 >4	<b>▲ 7</b>	1	▲ 43
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	▲ 11
Oil Cleanliness	ISO 4406 (c) >18/15/13	<b>▲ 23/21/17</b>	▲ 23/20/15	▲ 22/19/16

**FLUID DEGRADATION**

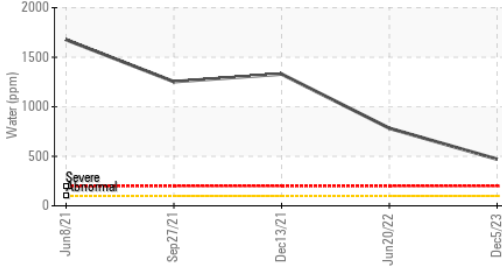
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974 0.1	<b>0.092</b>	0.027	0.028

# OIL ANALYSIS REPORT

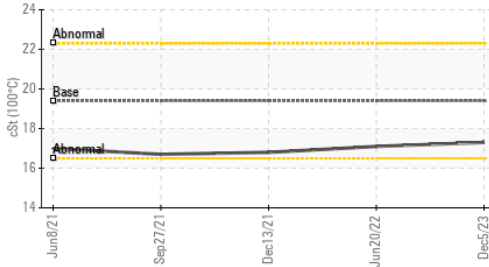
### ▲ Particle Trend



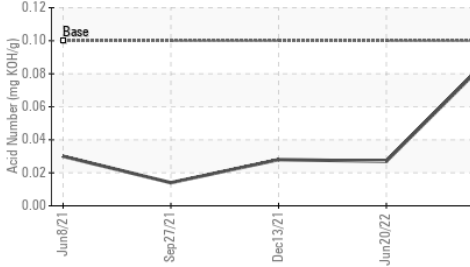
### ▲ Water (KF)



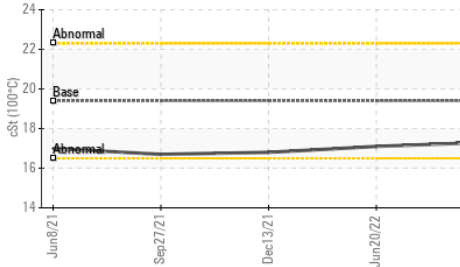
### ▲ Viscosity @ 100°C



### ▲ Acid Number



### ▲ Viscosity @ 100°C



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

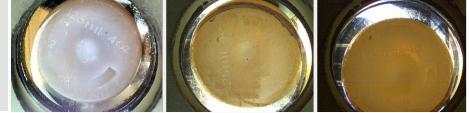
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	100	95.2	99.2
Visc @ 100°C	cSt	ASTM D445	19.4	17.3	17.1
Viscosity Index (VI)	Scale	ASTM D2270	218	199	188

### SAMPLE IMAGES

Color

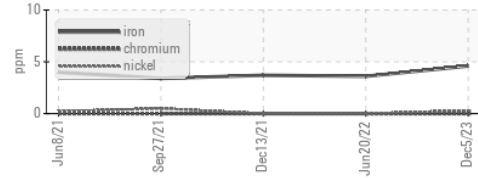


Bottom

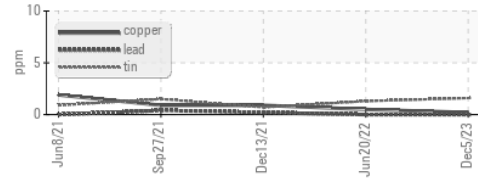


### GRAPHS

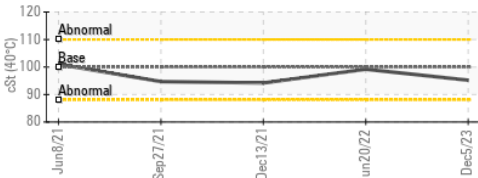
#### Ferrous Alloys



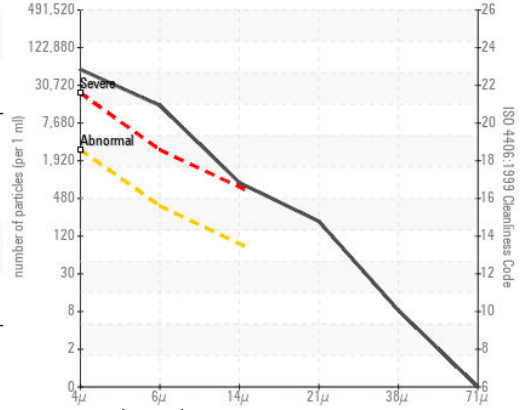
#### Non-ferrous Metals



#### Viscosity @ 40°C



#### ▲ Particle Count



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO90002479 **Received** : 06 Dec 2023  
**Lab Number** : 06026523 **Diagnosed** : 07 Dec 2023  
**Unique Number** : 10776314 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KV100, PrtCount, VI )

**ETC - JACKSON COUNTY**  
 US  
 Contact: Service Manager

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)