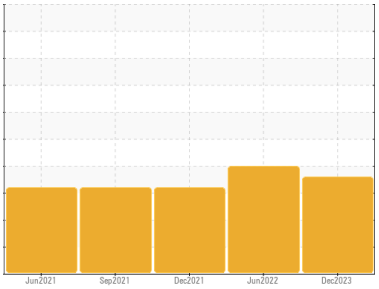
PROBLEM SUMMARY

Sample Rating Trend

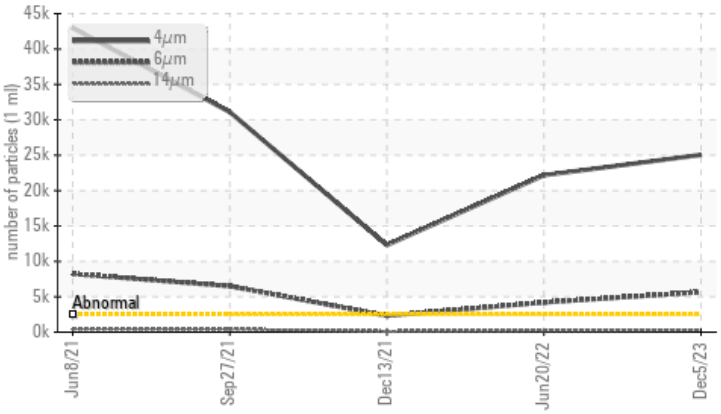


WATER

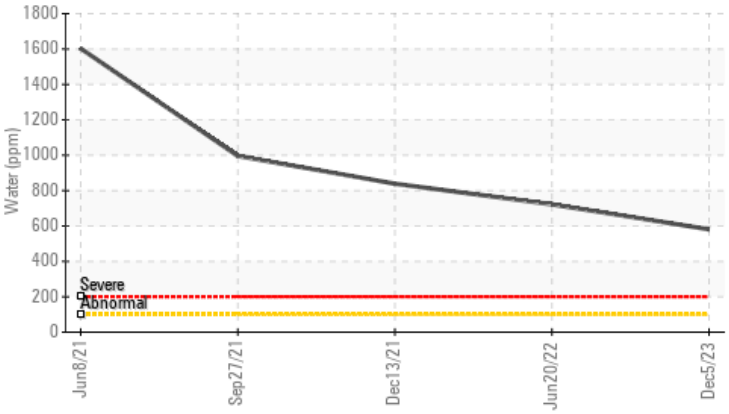
Area
Jackson County 1 Plant/Cryogenic/Compressor
Machine Id
C-1163 (S/N 10241N10655623)
Component
Refrigeration Compressor
Fluid
SUMMIT PGS-100 (250 GAL)

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				**ABNORMAL**	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.01	▲ **0.058**	▲ 0.072	▲ 0.083
ppm Water	ppm	ASTM D6304	>100	▲ **581**	▲ 722.2	▲ 839.0
Particles >4µm		ASTM D7647	>2500	▲ **25044**	▲ 22170	▲ 12296
Particles >6µm		ASTM D7647	>320	▲ **5659**	▲ 4203	▲ 2316
Particles >14µm		ASTM D7647	>80	▲ **313**	▲ 233	▲ 97
Particles >21µm		ASTM D7647	>20	▲ **74**	▲ 55	23
Oil Cleanliness		ISO 4406 (c)	>18/15/13	▲ **22/20/15**	▲ 22/19/15	▲ 21/18/14

Customer Id: ETCJCTY
Sample No.: TO90002477
Lab Number: 06026526
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

To change component or sample information:
Customer Service +1 1-800-237-1369
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 Baldridge

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: Angela Borella

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: Don Baldridge

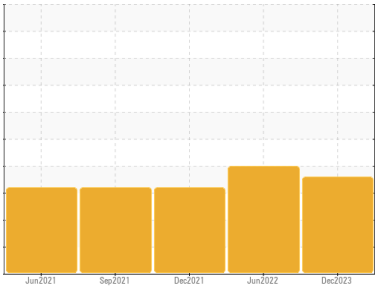
WATER

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

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
Jackson County 1 Plant/Cryogenic/Compressor
Machine Id
C-1163 (S/N 10241N10655623)
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		**TO90002477**	TO90001759	TO90000758
Sample Date		Client Info		**05 Dec 2023**	20 Jun 2022	13 Dec 2021
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	**5**	6	5
Chromium	ppm	ASTM D5185m	>2	**0**	0	0
Nickel	ppm	ASTM D5185m		**<1**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	<1
Aluminum	ppm	ASTM D5185m	>3	**<1**	<1	0
Lead	ppm	ASTM D5185m	>2	**0**	0	<1
Copper	ppm	ASTM D5185m	>8	**<1**	0	<1
Tin	ppm	ASTM D5185m	>4	**2**	2	1
Antimony	ppm	ASTM D5185m		**---**	---	6
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	**0**	3	2
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**0**	0	0
Manganese	ppm	ASTM D5185m	0	**0**	<1	<1
Magnesium	ppm	ASTM D5185m	0	**0**	0	0
Calcium	ppm	ASTM D5185m	0	**<1**	9	9
Phosphorus	ppm	ASTM D5185m	0	**154**	7	13
Zinc	ppm	ASTM D5185m	0	**46**	47	26
Sulfur	ppm	ASTM D5185m	5	**0**	13	0

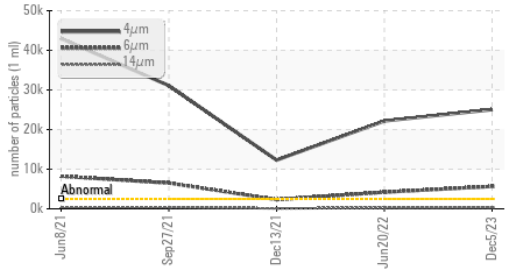
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**1**	3	2
Sodium	ppm	ASTM D5185m		**6**	5	13
Potassium	ppm	ASTM D5185m	>20	**0**	0	<1
Water	%	ASTM D6304	>0.01	▲ **0.058**	▲ 0.072	▲ 0.083
ppm Water	ppm	ASTM D6304	>100	▲ **581**	▲ 722.2	▲ 839.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	▲ **25044**	▲ 22170	▲ 12296
Particles >6µm		ASTM D7647	>320	▲ **5659**	▲ 4203	▲ 2316
Particles >14µm		ASTM D7647	>80	▲ **313**	▲ 233	▲ 97
Particles >21µm		ASTM D7647	>20	▲ **74**	▲ 55	23
Particles >38µm		ASTM D7647	>4	**3**	▲ 5	▲ 7
Particles >71µm		ASTM D7647	>3	**0**	1	4
Oil Cleanliness		ISO 4406 (c)	>18/15/13	▲ **22/20/15**	▲ 22/19/15	▲ 21/18/14

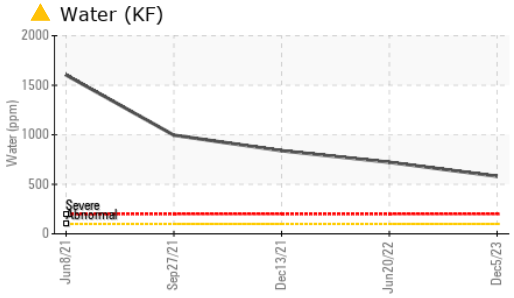
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.1	**0.052**	0.072	0.028

OIL ANALYSIS REPORT

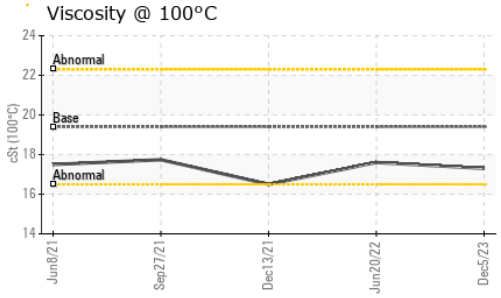
Particle Trend



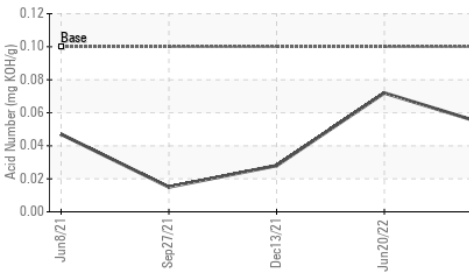
Water (KF)



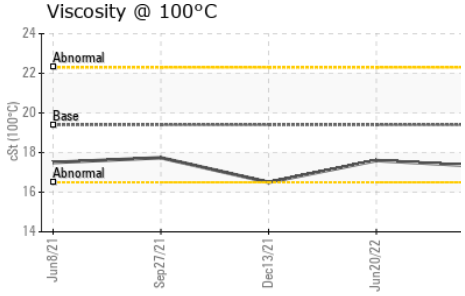
Viscosity @ 100°C



Acid Number

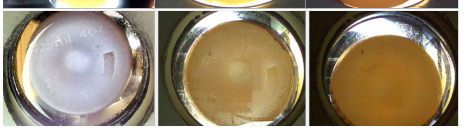


Viscosity @ 100°C



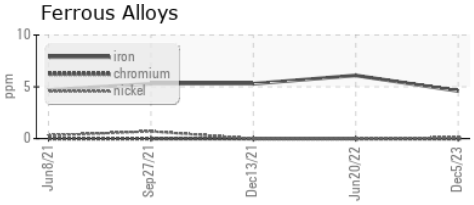
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	100	**93.0**	98.3	92.8
Visc @ 100°C	cSt	ASTM D445	19.4	**17.3**	17.6	16.5
Viscosity Index (VI)	Scale	ASTM D2270	218	**203**	197	192

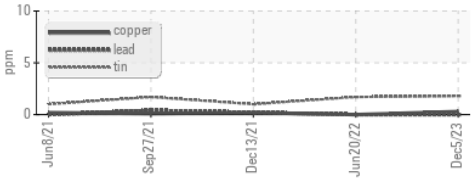
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						

GRAPHS

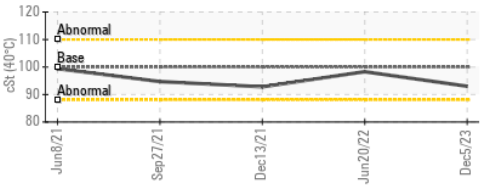
Ferrous Alloys



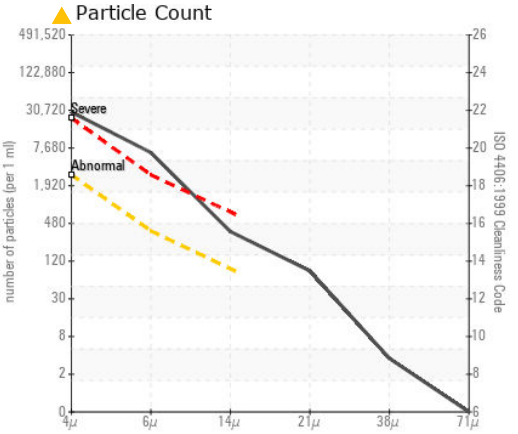
Non-ferrous Metals



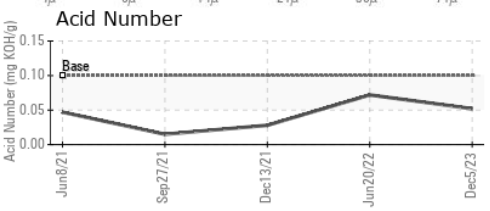
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO90002477
Lab Number : 06026526
Unique Number : 10776317
Test Package : IND 2 (Additional Tests: KV100, PrtCount, VI)

Certificate L2367

Received : 06 Dec 2023
Diagnosed : 07 Dec 2023
Diagnostician : Jonathan Hester

ETC - JACKSON COUNTY

,
US
Contact: Service Manager

T:
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)