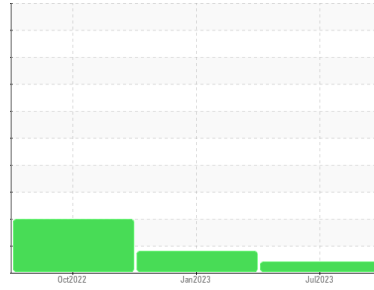




PROBLEM SUMMARY

Area
[41001394]
 Machine Id
PLANT 5 DVT 11
 Component
Refrigeration Compressor
 Fluid
NOT GIVEN (--- GAL)

Sample Rating Trend



VIS DEBRIS



COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ATTENTION	ABNORMAL
Debris	scalar	*Visual	NONE	▲ MODER	NONE	LIGHT

Customer Id: HILDAL
Sample No.: USP255410
Lab Number: 05901304
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
dougb@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.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

17 Jan 2023 Diag: Jonathan Hester

ISO



Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is a moderate amount of silt (particulates < 6 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



25 Oct 2022 Diag: Doug Bogart

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. Please specify the brand and viscosity of the oil on your next sample. All component wear rates are normal. There is a high amount of particulates present in the oil. The oil viscosity is confirmed. The AN level is acceptable for this fluid.

view report



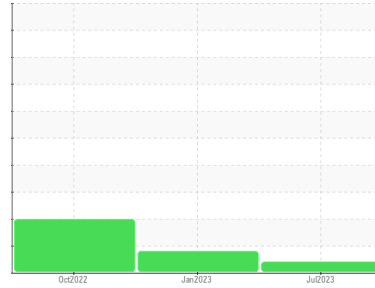


OIL ANALYSIS REPORT

Sample Rating Trend

VIS DEBRIS

Area
[41001394]
 Machine Id
PLANT 5 DVT 11
 Component
Refrigeration Compressor
 Fluid
NOT GIVEN (--- GAL)



DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

▲ Contamination

Moderate concentration of visible dirt/debris 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		USP255410	USP245511	USP242711
Sample Date	Client Info		13 Jul 2023	17 Jan 2023	25 Oct 2022
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	ATTENTION	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	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >3	<1	0	0
Lead	ppm	ASTM D5185m >2	0	0	0
Copper	ppm	ASTM D5185m >8	<1	<1	<1
Tin	ppm	ASTM D5185m >4	0	0	0
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	0	0	0
Barium	ppm	ASTM D5185m	0	1	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m	<1	<1	0
Calcium	ppm	ASTM D5185m	0	0	0
Phosphorus	ppm	ASTM D5185m	118	119	134
Zinc	ppm	ASTM D5185m	0	4	0
Sulfur	ppm	ASTM D5185m	58	49	105

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	0	0	<1
Sodium	ppm	ASTM D5185m	<1	0	<1
Potassium	ppm	ASTM D5185m >20	0	<1	0
Water	%	ASTM D6304 >0.01	0.002	0.007	0.005
ppm Water	ppm	ASTM D6304 >100	18.2	74.0	58.7

FLUID CLEANLINESS

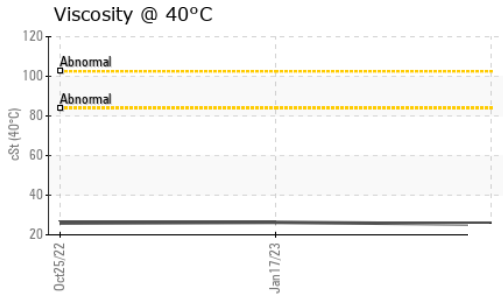
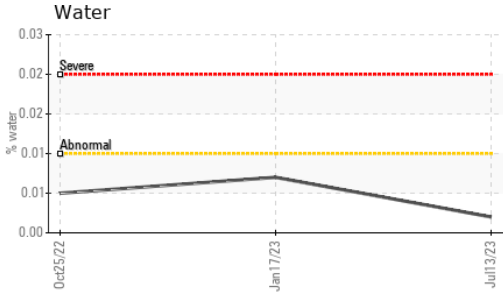
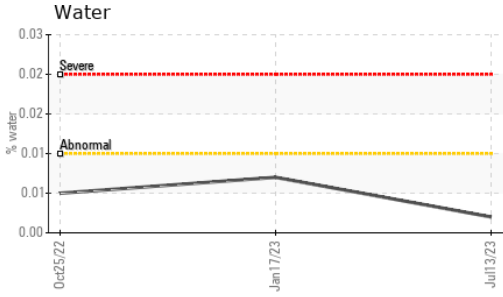
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	---	▲ 12140	▲ 30510
Particles >6µm	ASTM D7647	>2500	---	2242	▲ 5191
Particles >14µm	ASTM D7647	>320	---	92	▲ 336
Particles >21µm	ASTM D7647	>80	---	33	▲ 111
Particles >38µm	ASTM D7647	>20	---	3	6
Particles >71µm	ASTM D7647	>4	---	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	---	▲ 21/18/14	▲ 22/20/16

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.37	0.38	0.40



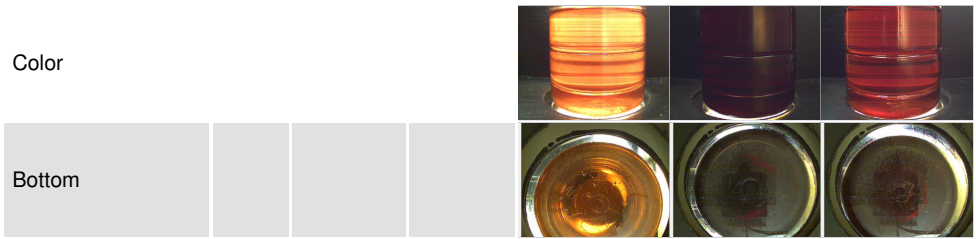
OIL ANALYSIS REPORT



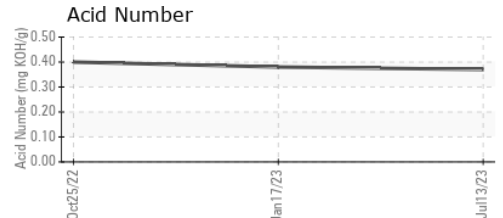
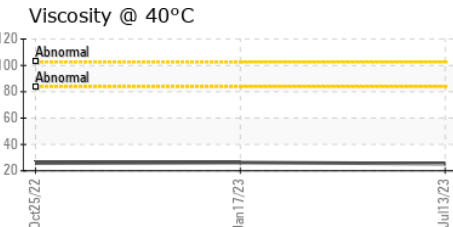
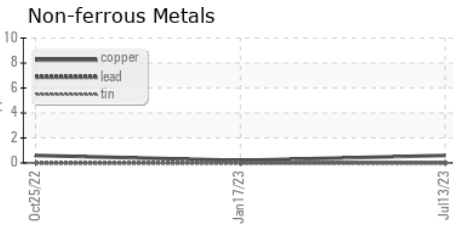
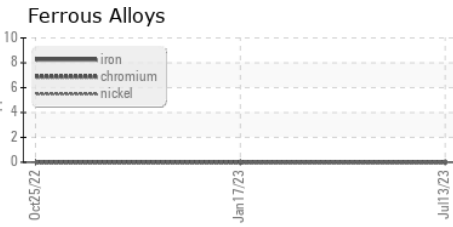
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ MODER	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	25.4	26.3	25.95

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP255410 **Received** : 18 Jul 2023
Lab Number : 05901304 **Diagnosed** : 19 Jul 2023
Unique Number : 10562660 **Diagnostician** : Doug Bogart
Test Package : IND 2

HILMAR CHEESE

DALHART, TX
 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)

T:
F: