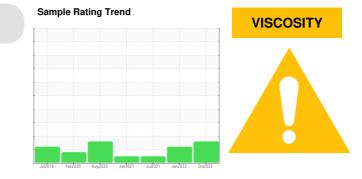


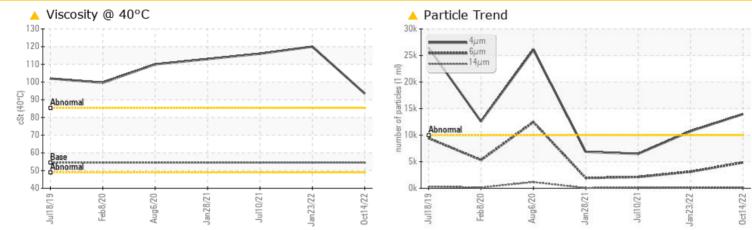
PROBLEM SUMMARY



Machine Id #3 NH3 Compressor Component

Screw Compressor Fluid NOCO NOCOCHILL OIL ISO 68 (200 LTR)

COMPONENT CONDITION SUMMARY



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	NORMAL
Particles >4µm		ASTM D7647	>10000	<u> </u>	10740	6487
Particles >6µm		ASTM D7647	>2500	🔺 4847	A 3117	2122
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<u> </u>	🔺 21/19/14	20/18/14
Visc @ 40°C	cSt	ASTM D7279(m)	54.4	A 93.5	<u> </u>	116

Customer Id: MOLETO Sample No.: PP Lab Number: 02518376 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 <u>gloria.gonzalez@wearcheck.com</u>

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

HISTORICAL DIAGNOSIS





23 Jan 2022 Diag: Kevin Marson

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 light amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible. Viscosity of sample indicates oil is within ISO 100 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report

10 Jul 2021 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable. Viscosity of sample indicates oil is within ISO 100 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

28 Jan 2021 Diag: Kevin Marson

Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable. Viscosity of sample indicates oil is within ISO 100 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

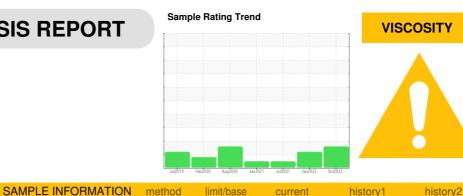








OIL ANALYSIS REPORT



#3 NH3 Compressor Component

Screw Compressor Fluid NOCO NOCOCHILL OIL ISO 68 (200 LTR)

DIAGNOSIS

Machine Id

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 light amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

Fluid Condition

Viscosity of sample indicates oil is within ISO 100 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

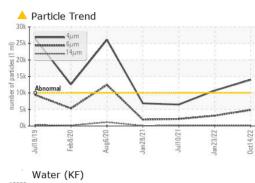
SAMPLE INFORM	/IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PP	PP	PP
Sample Date		Client Info		14 Oct 2022	23 Jan 2022	10 Jul 2021
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL
-						
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0		
Iron	ppm	ASTM D5185(m)	>60	2	3	2
Chromium	ppm	ASTM D5185(m)	>4	0	0	0
Nickel	ppm	ASTM D5185(m)		<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>5	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>10	0	<1	<1
Copper	ppm	ASTM D5185(m)	>30	0	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	<1	0
Antimony	ppm	ASTM D5185(m)		۲ <1	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium		ASTM D5185(m)		0	0	0
Caumum	ppm	ASTIVI D3103(III)		U		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		0	<1	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		0	0	0
Calcium	ppm	ASTM D5185(m)		3	5	5
Phosphorus	ppm	ASTM D5185(m)		0	<1	<1
Zinc	ppm	ASTM D5185(m)		1	2	2
Sulfur	ppm	ASTM D5185(m)		136	205	205
Lithium	ppm	ASTM D5185(m)				
		ASTIVI DOTOO(III)		<1	<1	<1
CONTANINANTO			limit/baca		<1	
CONTAMINANTS		method	limit/base	<1 current	<1 history1	<1 history2
Silicon		method ASTM D5185(m)	>50		<mark>history1</mark> <1	history2 <1
Silicon		method	>50	current	history1	history2
Silicon Sodium	ppm	method ASTM D5185(m)	>50	current <1	<mark>history1</mark> <1	history2 <1
Silicon Sodium Potassium	ppm ppm	method ASTM D5185(m) ASTM D5185(m)	>50	current <1 0	history1 <1 <1	<mark>history2</mark> <1 0
Silicon Sodium Potassium Water	ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>50 >20	current <1 0 0	history1 <1 <1 <1	history2 <1 0 <1
Silicon Sodium Potassium Water	ppm ppm ppm % ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D6304*	>50 >20 >0.1	current <1 0 0 0.001	history1 <1 <1 <1 <1 0.002	history2 <1 0 <1 0.002
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm % ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D6304* ASTM D6304* Method	>50 >20 >0.1 >1000 limit/base	current <1 0 0 0.001 1.4 current	history1 <1	history2 <1 0 <1 0.002 19.1 history2
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm % ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D6304* ASTM D6304* Method ASTM D7647	>50 >20 >0.1 >1000 limit/base >10000	 <1 0 0 0.001 1.4 current ▲ 13970 	history1 <1 <1 <1 0.002 20.3 history1 ▲ 10740	history2 <1
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm % ppm	methodASTM D5185(m)ASTM D5185(m)ASTM D5185(m)ASTM D6304*ASTM D6304*ASTM D6304*ASTM D6304*ASTM D7647ASTM D7647	>50 >20 >0.1 >1000 limit/base >10000 >2500	<1 0 0.001 1.4 current ▲ 13970 ▲ 4847	history1 <1	history2 <1 0 <1 0.002 19.1 history2 6487 2122
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm % ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D6304* ASTM D6304* ASTM D6304* ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 >0.1 >1000 limit/base >10000 >2500 >320	<1 0 0.001 1.4 current ▲ 13970 ▲ 4847 148	history1 <1 <1 <1 0.002 20.3 history1 ▲ 10740 ▲ 3117 108	history2 <1 0 <1 0.002 19.1 history2 6487 2122 143
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm % ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D6304* ASTM D6304* ASTM D6304* ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 >0.1 >1000 limit/base >10000 >2500 >320 >80	 <1 0 0.001 1.4 current ▲ 13970 ▲ 4847 148 15 	history1 <1	history2 <1 0 <1 0.002 19.1 history2 6487 2122 143 27
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm % ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D6304* ASTM D6304* ASTM D6304* ASTM D6304* ASTM D6304* ASTM D6304* ASTM D7647 ASTM D7647	>50 >20 >0.1 >1000 limit/base >10000 >2500 >320 >80 >20	<1 0 0.001 1.4 current 13970 ▲ 4847 148 15 1	history1 <1	history2 <1 0 <1 0.002 19.1 history2 6487 2122 143 27 3
Silicon Sodium Potassium Water ppm Water	ppm ppm ppm % ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D6304* ASTM D6304* ASTM D6304* ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>50 >20 >0.1 >1000 limit/base >10000 >2500 >320 >80	 <1 0 0.001 1.4 current ▲ 13970 ▲ 4847 148 15 	history1 <1	history2 <1 0 <1 0.002 19.1 history2 6487 2122 143 27

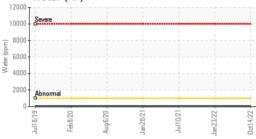


OIL ANALYSIS REPORT

Color

Bottom







FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.01	0.02	0.02
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	AMMON
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	54.4	<mark> </mark> 93.5	▲ 120	116
SAMPLE IMAGES		method	limit/base	current	history1	history2



