

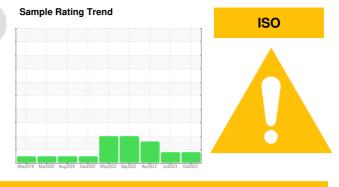
## **PROBLEM SUMMARY**

# ENGINE ROOM

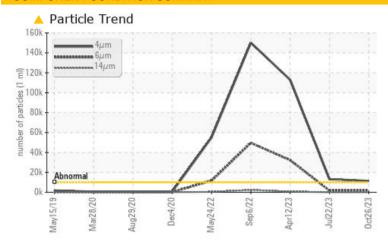
FRICK ROTARY SCREW C02-4 (S/N 10241D84979022)

**Refrigeration Compressor** 

FRICK COMPRESSOR OIL #11 (--- PNT)



## **COMPONENT CONDITION SUMMARY**



### RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS										
Sample Status			ATTENTION	ATTENTION	ABNORMAL					
Particles >4µm	ASTM D7647	>10000	<b>11357</b>	<u>▲</u> 13080	<u>▲</u> 112965					
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>21/18/13</b>	21/18/12	<b>2</b> 4/22/17					

**Customer Id: PERPERUSP** Sample No.: USP0002905 Lab Number: 05994429 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**

There are no recommended actions for this sample.

### HISTORICAL DIAGNOSIS

### 22 Jul 2023 Diag: Doug Bogart

ISO



Resample at the next service interval to monitor. 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.



### 12 Apr 2023 Diag: Doug Bogart

150



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



#### 06 Sep 2022 Diag: Doug Bogart

ISO



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





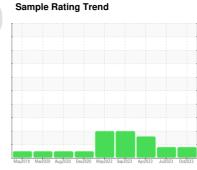
# **OIL ANALYSIS REPORT**

# ENGINE ROOM

FRICK ROTARY SCREW C02-4 (S/N 10241D84979022)

**Refrigeration Compressor** 

FRICK COMPRESSOR OIL #11 (--- PNT)





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#### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 6 microns in size) present in the oil.

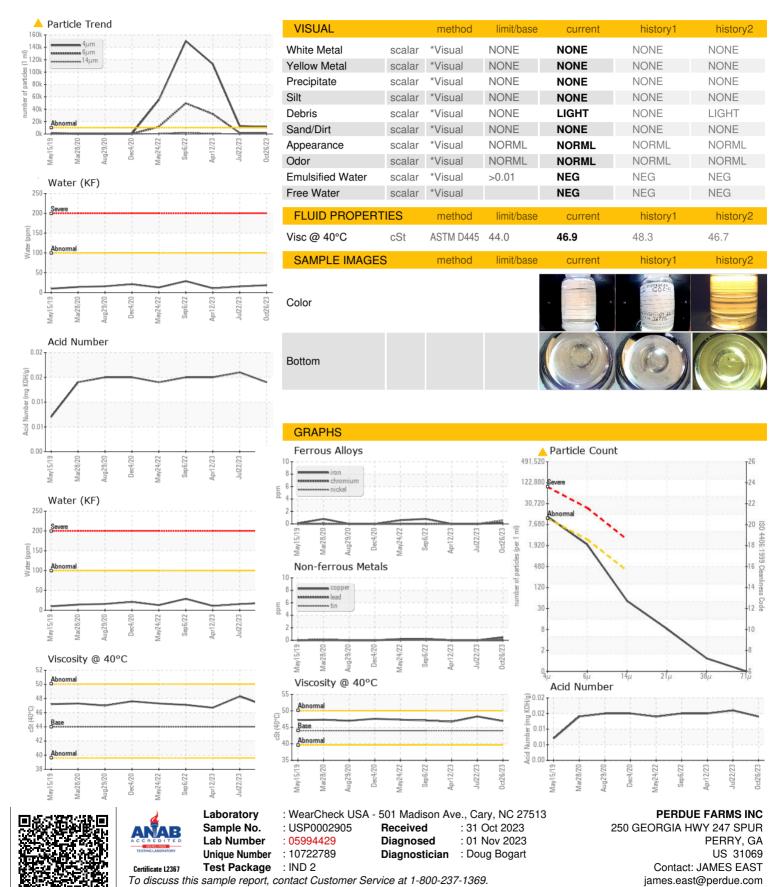
## **Fluid Condition**

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

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP0002905	USP0000527	USP245950
Sample Date		Client Info		26 Oct 2023	22 Jul 2023	12 Apr 2023
Machine Age	hrs	Client Info		28415	26775	25036
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	ATTENTION	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	<1	0	0
Chromium	ppm	ASTM D5185m	>2	<1	0	0
Nickel	ppm	ASTM D5185m	12	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>3	0	0	0
Lead			>2	0	0	0
	ppm	ASTM D5185m ASTM D5185m	>8	υ <1	0	0
Copper Tin	ppm	ASTM D5185m	>o >4	<1 <1	0	0
Vanadium	ppm		>4	<1	<1	0
Cadmium	ppm	ASTM D5185m				
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		0	0	0
Phosphorus	ppm	ASTM D5185m		0	0	0
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m		3	0	0
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	<1	<1
Sodium	ppm	ASTM D5185m		1	<1	0
Potassium	ppm	ASTM D5185m	>20	1	0	0
Water	%	ASTM D6304	>0.01	0.002	0.002	0.001
ppm Water	ppm	ASTM D6304	>100	18.5	15.5	10.7
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>11357</b>	<u> </u>	<u>▲</u> 112965
Particles >6µm		ASTM D7647	>2500	1790	1663	<b>▲</b> 32294
Particles >14µm		ASTM D7647	>320	44	23	<b>▲</b> 707
Particles >21µm		ASTM D7647	>80	7	5	70
Particles >38µm		ASTM D7647	>20	1	1	1
Particles >71µm		ASTM D7647	>4	0	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<u>^</u> 21/18/13	<u>^</u> 21/18/12	<b>4</b> 24/22/17
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974		0.014	0.016	0.015



## **OIL ANALYSIS REPORT**



\* - 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)

F:

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