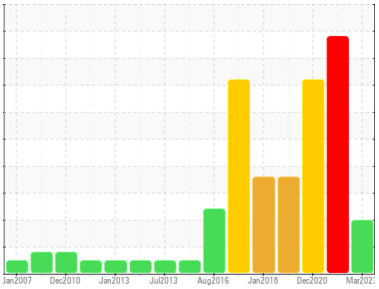
PROBLEM SUMMARY

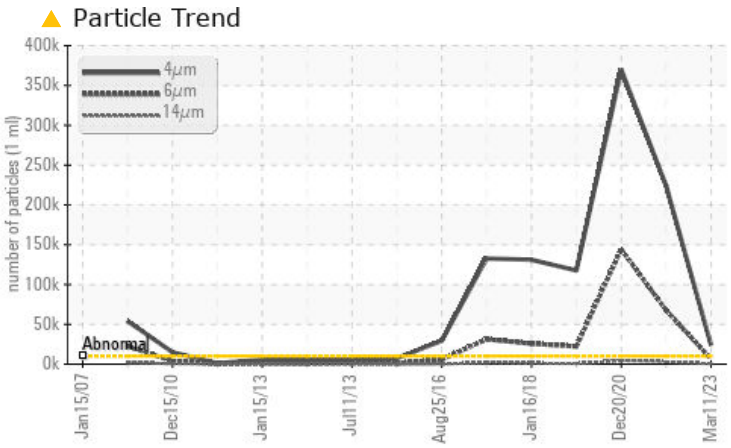
Sample Rating Trend



OFF SPEC

Area
1480
Machine Id
1480-5433-4009 - INSTRUMENT AIR COMPRESSOR
Component
Air Compressor
Fluid
INGERSOLL-RAND SSR ULTRA COOLANT (87 LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	SEVERE	SEVERE
Particles >4µm		ASTM D7647	>10000	**24065**	224044	369816
Particles >6µm		ASTM D7647	>2500	**6688**	67539	144162
Particles >14µm		ASTM D7647	>320	**394**	2836	4430
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**22/20/16**	25/23/19	26/24/19
Viscosity Index (VI)	Scale	ASTM D2270*	161	**261**	91	148

Customer Id: INCVOS
Sample No.: PC0040300
Lab Number: 02548033
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
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

WATER

24 Jun 2021 Diag: Kevin Marson

Check seals and/or filters for points of contaminant entry. We advise that you check all areas where contaminants can enter the system. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Confirm the source of the lubricant being utilized for top-up/fill. Resample in 30-45 days to monitor this situation.All component wear rates are normal. Water and ppm water contamination levels are severe. Particles >14µm are severely high. Particles >6µm are severely high. Particles >4µm are severely high. Particles >4µm are severely high.. Particles >21µm are abnormally high. There is a high concentration of water present in the oil. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid.

view report

ISO

20 Dec 2020 Diag: Wes Davis

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.All component wear rates are normal. Particles >14µm are severely high. Particles >21µm are severely high. Particles >6µm are severely high. Particles >4µm are severely high. Particles >38µm are abnormally high. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

ISO

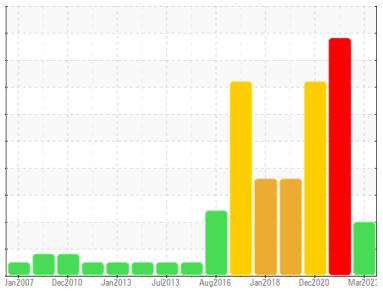
03 Dec 2018 Diag: Wes Davis

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.All component wear rates are normal. Particles >6µm are severely high. Particles >4µm are severely high. Particles >14µm are abnormally high. Particles >21µm are notably high. 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



OFF SPEC

Area
1480
Machine Id
1480-5433-4009 - INSTRUMENT AIR COMPRESSOR
Component
Air Compressor
Fluid
INGERSOLL-RAND SSR ULTRA COOLANT (87 LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Oil Cleanliness are abnormally high. Particles >4µm are abnormally high. Particles >6µm are abnormally high. Particles >14µm are notably high. The water content is negligible.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC0040300**	PC0030078	PC0006132
Sample Date		Client Info		**11 Mar 2023**	24 Jun 2021	20 Dec 2020
Machine Age	yrs	Client Info		**0**	0	0
Oil Age	yrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	SEVERE	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**0**	0	0
Iron	ppm	ASTM D5185(m)	>70	**1**	2	8
Chromium	ppm	ASTM D5185(m)	>15	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>6	**0**	0	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	<1	<1
Aluminum	ppm	ASTM D5185(m)	>10	**<1**	<1	<1
Lead	ppm	ASTM D5185(m)	>20	**<1**	1	3
Copper	ppm	ASTM D5185(m)	>80	**1**	1	8
Tin	ppm	ASTM D5185(m)	>15	**0**	<1	0
Antimony	ppm	ASTM D5185(m)		**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

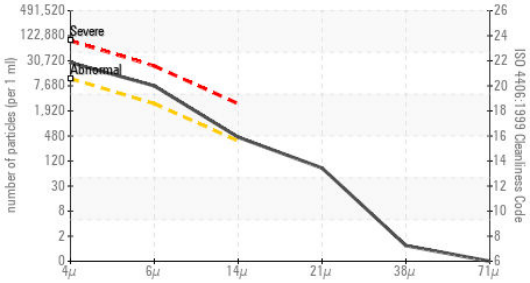
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**<1**	▲ 25	2
Barium	ppm	ASTM D5185(m)	500	**995**	596	884
Molybdenum	ppm	ASTM D5185(m)	0	**0**	<1	0
Manganese	ppm	ASTM D5185(m)		**0**	0	<1
Magnesium	ppm	ASTM D5185(m)	0	**<1**	<1	<1
Calcium	ppm	ASTM D5185(m)	0	**1**	5	6
Phosphorus	ppm	ASTM D5185(m)	20	**0**	<1	<1
Zinc	ppm	ASTM D5185(m)	0	**9**	3	12
Sulfur	ppm	ASTM D5185(m)	200	**380**	279	360
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>12	**2**	5	3
Sodium	ppm	ASTM D5185(m)		**19**	10	22
Potassium	ppm	ASTM D5185(m)	>20	**1**	2	2
Water	%	ASTM D6304*	>0.1	**0.095**	⬢ 4.404	---
ppm Water	ppm	ASTM D6304*	>1000	**952.5**	⬢ 44044.9	---

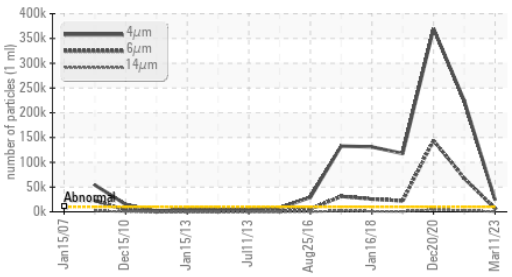
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ **24065**	⬢ 224044	⬢ 369816
Particles >6µm		ASTM D7647	>2500	▲ **6688**	⬢ 67539	⬢ 144162
Particles >14µm		ASTM D7647	>320	▲ **394**	⬢ 2836	⬢ 4430
Particles >21µm		ASTM D7647	>80	**72**	▲ 612	⬢ 862
Particles >38µm		ASTM D7647	>20	**1**	26	▲ 53
Particles >71µm		ASTM D7647	>4	**0**	0	5
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ **22/20/16**	⬢ 25/23/19	⬢ 26/24/19

OIL ANALYSIS REPORT

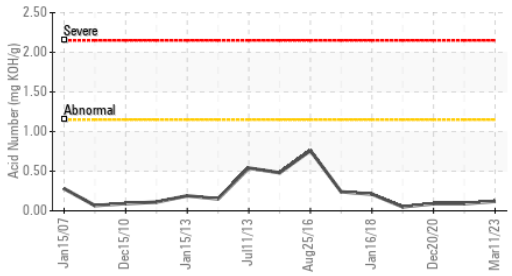
Particle Count



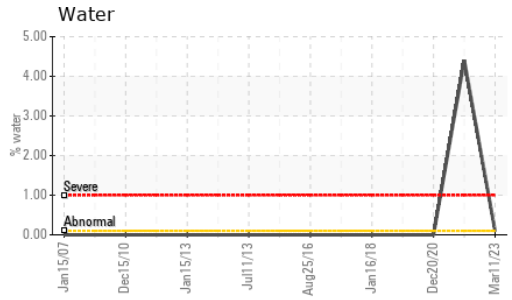
Particle Trend



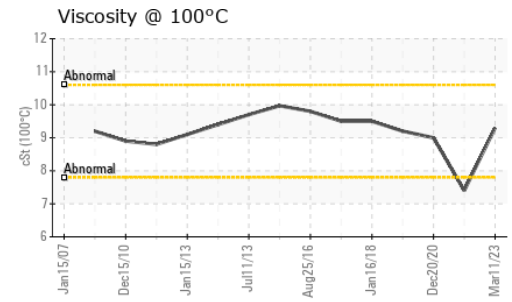
Acid Number



Water



Viscosity @ 100°C



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.12**	0.09	0.09

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**VLITE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	LIGHT	NONE
Debris	scalar	Visual*	NONE	**NONE**	LIGHT	NONE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	LTMOD
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	**NEG**	▲ 1%	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	49.4	**35.5**	55.8	53.4
Visc @ 100°C	cSt	ASTM D7279(m)		**9.3**	7.4	9.0
Viscosity Index (VI)	Scale	ASTM D2270*	161	▲ **261**	91	148

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0040300 **Received** : 28 Mar 2023
Lab Number : 02548033 **Diagnosed** : 29 Mar 2023
Unique Number : 5553043 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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