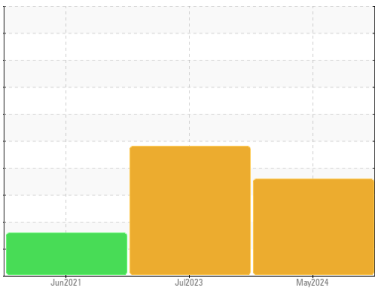
PROBLEM SUMMARY

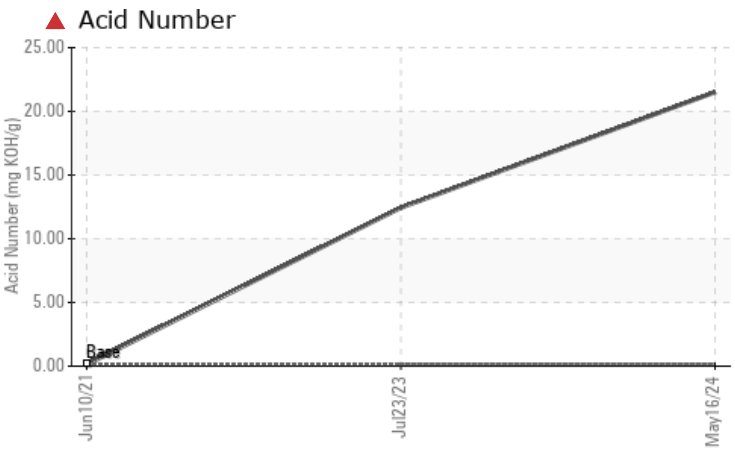
Sample Rating Trend

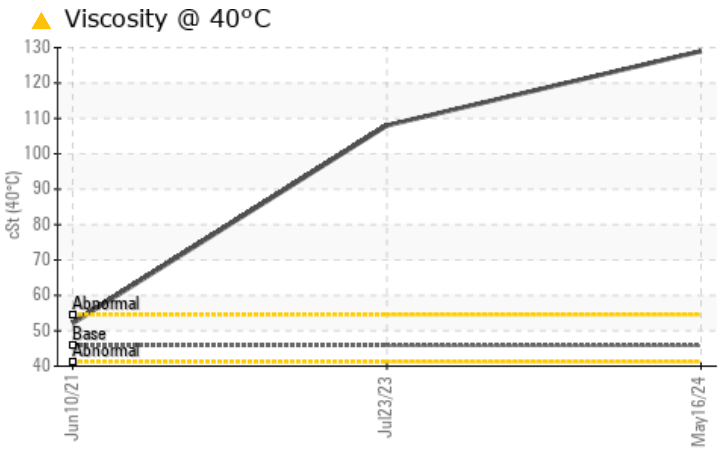


DEGRADATION

Machine Id
INGERSOLL RAND 3 (100HP) (S/N MOX1002606)
Component
Air Compressor
Fluid
USPI MAX FG AIR 46 (--- GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

Recommend drain oil if not already done and flush with cleaner before refilling with oil. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	ABNORMAL
Acid Number (AN)	mg KOH/g	ASTM D8045	0.16	▲ **21.51**	▲ 12.44	0.132
Visc @ 40°C	cSt	ASTM D445	45.8	▲ **129**	▲ 108	52.1

Customer Id: TYSNORTX
Sample No.: USPM36169
Lab Number: 06182868
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 Fluid	---	---	?	Recommend drain oil if not already done and flush with cleaner before refilling with oil.
Flush System	---	---	?	Recommend drain oil if not already done and flush with cleaner before refilling with oil.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

DEGRADATION

23 Jul 2023 Diag: Doug Bogart

Recommend drain oil if not already done and flush with cleaner before refilling with oil. We were unable to perform a particle count due to a high concentration of particles present in this sample.All component wear rates are normal. There is a high amount of visible silt present in the sample. Moderate concentration of visible dirt/debris present in the oil. The AN level is above the recommended limit. The oil viscosity is higher than normal. Confirmed.

view report

WATER

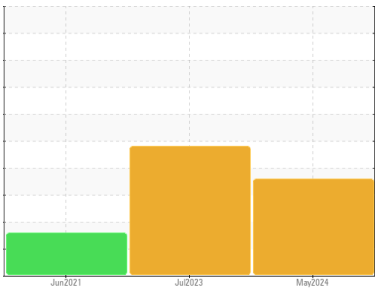
10 Jun 2021 Diag: Doug Bogart

We advise that you follow the water drain-off procedure for this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. 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



DEGRADATION

Machine Id
INGERSOLL RAND 3 (100HP) (S/N MOX1002606)
Component
Air Compressor
Fluid
USPI MAX FG AIR 46 (--- GAL)

DIAGNOSIS

▲ Recommendation
Recommend drain oil if not already done and flush with cleaner before refilling with oil. We recommend an early resample to monitor this condition.

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

▲ Fluid Condition
The AN level is well above the recommended limit. The oil viscosity is higher than normal.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USPM36169**	USPM27432	USP224229
Sample Date		Client Info		**16 May 2024**	23 Jul 2023	10 Jun 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				**SEVERE**	SEVERE	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**22**	12	<1
Chromium	ppm	ASTM D5185m	>4	**0**	0	0
Nickel	ppm	ASTM D5185m	>4	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**<1**	0	0
Aluminum	ppm	ASTM D5185m	>10	**0**	0	0
Lead	ppm	ASTM D5185m	>20	**0**	0	<1
Copper	ppm	ASTM D5185m	>40	**1**	5	<1
Tin	ppm	ASTM D5185m	>5	**0**	<1	0
Antimony	ppm	ASTM D5185m		**---**	---	0
Vanadium	ppm	ASTM D5185m		**<1**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

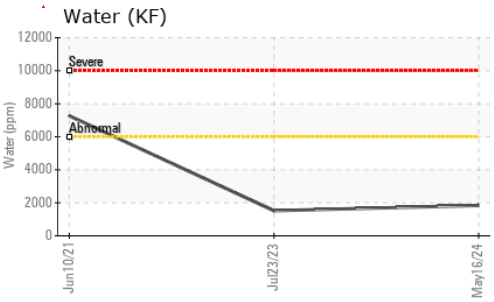
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**<1**	0	5
Barium	ppm	ASTM D5185m	0	**0**	0	706
Molybdenum	ppm	ASTM D5185m	0	**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	<1	0
Magnesium	ppm	ASTM D5185m	0	**0**	1	<1
Calcium	ppm	ASTM D5185m	0	**0**	0	3
Phosphorus	ppm	ASTM D5185m	0	**0**	20	19
Zinc	ppm	ASTM D5185m	0	**0**	0	0
Sulfur	ppm	ASTM D5185m	0	**0**	0	41

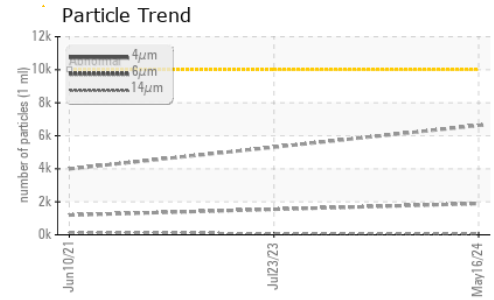
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**<1**	<1	<1
Sodium	ppm	ASTM D5185m		**2**	5	26
Potassium	ppm	ASTM D5185m	>20	**<1**	4	2
Water	%	ASTM D6304	>0.6	**0.183**	0.152	▲ 0.726
ppm Water	ppm	ASTM D6304	>6000	**1839**	1520.1	▲ 7268.6

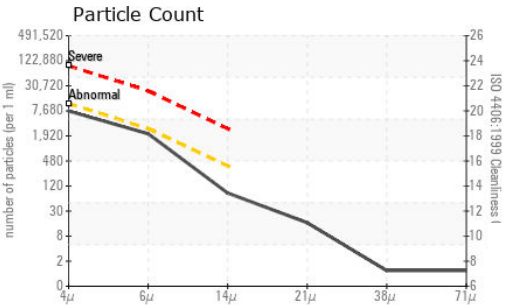
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**6629**	---	3993
Particles >6µm		ASTM D7647	>2500	**1892**	---	1197
Particles >14µm		ASTM D7647	>320	**72**	---	126
Particles >21µm		ASTM D7647	>80	**14**	---	34
Particles >38µm		ASTM D7647	>20	**1**	---	0
Particles >71µm		ASTM D7647	>4	**1**	---	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**20/18/13**	---	19/17/14

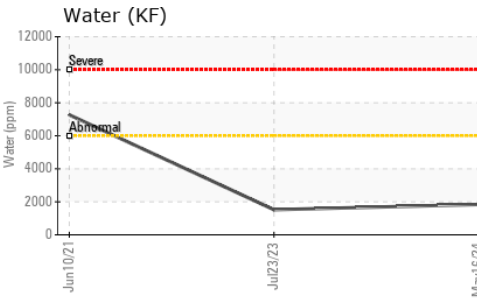
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.16	▲ **21.51**	▲ 12.44	0.132

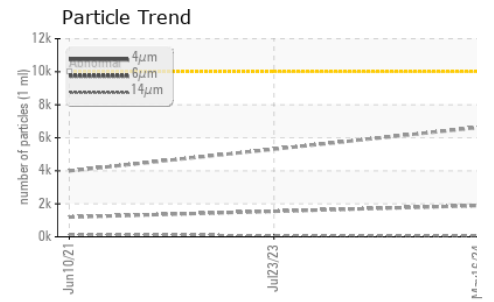
OIL ANALYSIS REPORT





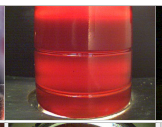
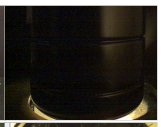
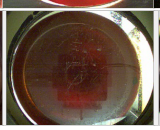
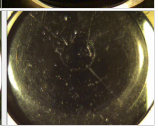




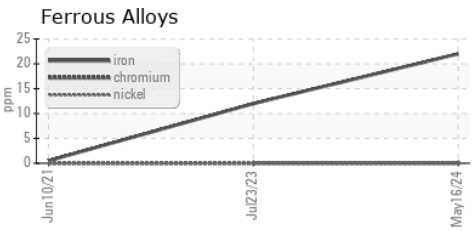


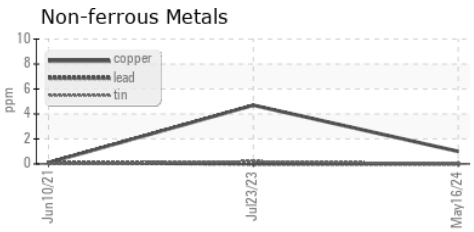
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	▲ HEAVY	NONE
Debris	scalar	*Visual	NONE	**NONE**	▲ MODER	NONE
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	>0.6	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

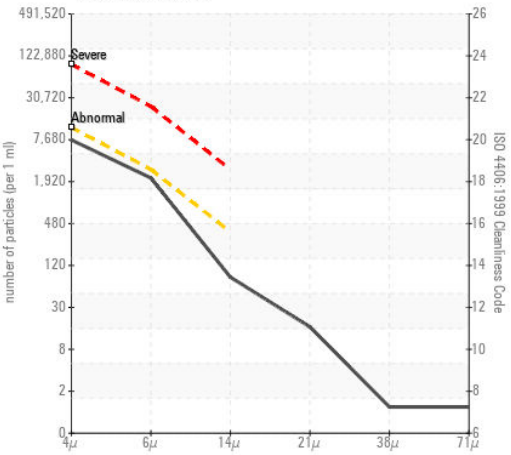
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45.8	▲ **129**	▲ 108	52.1

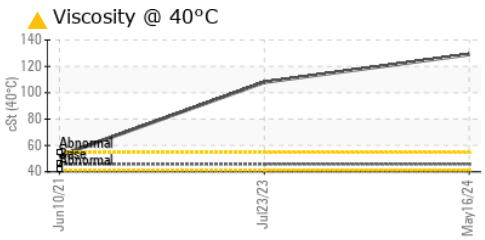
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

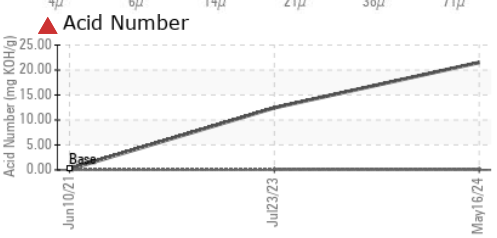
GRAPHS











Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM36169
Lab Number : 06182868
Unique Number : 11034194
Test Package : IND 2

Received : 17 May 2024
Tested : 21 May 2024
Diagnosed : 21 May 2024 - Jonathan Hester

Certificate L2367

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)

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