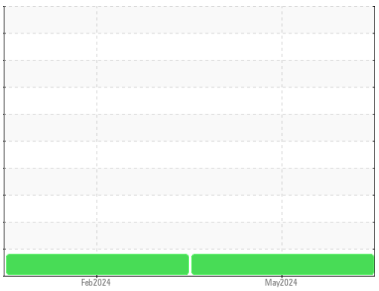
# OIL ANALYSIS REPORT

Sample Rating Trend




ADDITIVES

Machine Id
## INGERSOLL RAND AC-1 RS55I 75HP (S/N MOX1007727)
Component
**Air Compressor**
Fluid
**USPI MAX FG AIR 46 (--- GAL)**

## DIAGNOSIS

**Recommendation**
Resample at the next service interval to monitor.

**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**
Additive levels indicate the addition of a different brand or type of oil. Confirmed. The AN level is acceptable for this fluid.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **USPM36159** | USPM30083 | --- |
| Sample Date | | Client Info | | **15 May 2024** | 13 Feb 2024 | --- |
| Machine Age | hrs | Client Info | | **0** | 994 | --- |
| Oil Age | hrs | Client Info | | **0** | 994 | --- |
| Oil Changed | | Client Info | | **N/A** | N/A | --- |
| Sample Status | | | | **ATTENTION** | ATTENTION | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >50 | **0** | 0 | --- |
| Chromium | ppm | ASTM D5185m | >4 | **0** | 0 | --- |
| Nickel | ppm | ASTM D5185m | >4 | **0** | <1 | --- |
| Titanium | ppm | ASTM D5185m | | **0** | 0 | --- |
| Silver | ppm | ASTM D5185m | | **<1** | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >10 | **0** | <1 | --- |
| Lead | ppm | ASTM D5185m | >20 | **0** | 0 | --- |
| Copper | ppm | ASTM D5185m | >40 | **<1** | 0 | --- |
| Tin | ppm | ASTM D5185m | >5 | **0** | <1 | --- |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | --- |
| Cadmium | ppm | ASTM D5185m | | **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 | | **0** | <1 | --- |
| Magnesium | ppm | ASTM D5185m | 0 | **0** | <1 | --- |
| Calcium | ppm | ASTM D5185m | 0 | **6** | 8 | --- |
| Phosphorus | ppm | ASTM D5185m | 0 | **51** | 59 | --- |
| Zinc | ppm | ASTM D5185m | 0 | **3** | 0 | --- |
| Sulfur | ppm | ASTM D5185m | 0 | **80** | 85 | --- |

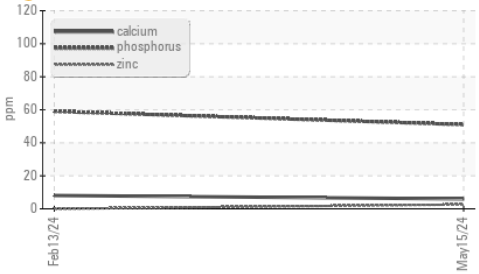
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >25 | **<1** | <1 | --- |
| Sodium | ppm | ASTM D5185m | | **1** | 2 | --- |
| Potassium | ppm | ASTM D5185m | >20 | **0** | 2 | --- |
| Water | % | ASTM D6304 | >0.6 | **0.012** | 0.002 | --- |
| ppm Water | ppm | ASTM D6304 | >6000 | **123** | 25 | --- |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >10000 | **267** | 789 | --- |
| Particles >6µm | | ASTM D7647 | >2500 | **32** | 192 | --- |
| Particles >14µm | | ASTM D7647 | >320 | **5** | 21 | --- |
| Particles >21µm | | ASTM D7647 | >80 | **1** | 6 | --- |
| Particles >38µm | | ASTM D7647 | >20 | **0** | 0 | --- |
| Particles >71µm | | ASTM D7647 | >4 | **0** | 0 | --- |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | **15/12/10** | 17/15/12 | --- |

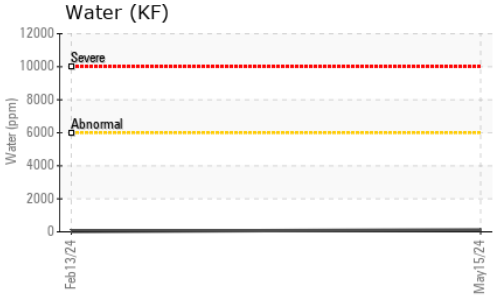
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.16 | **0.07** | 0.09 | --- |

# OIL ANALYSIS REPORT

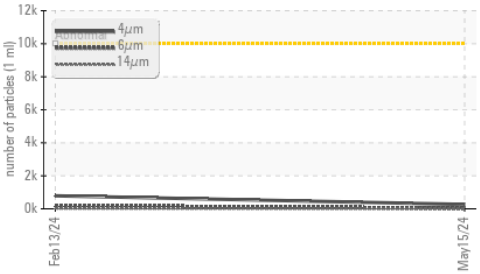
Additives



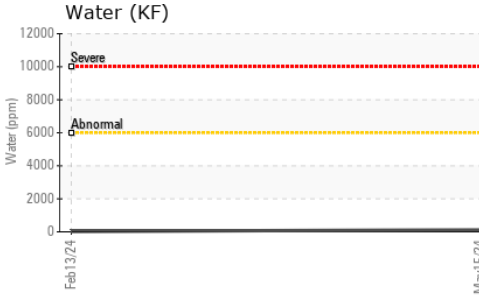

Water (KF)



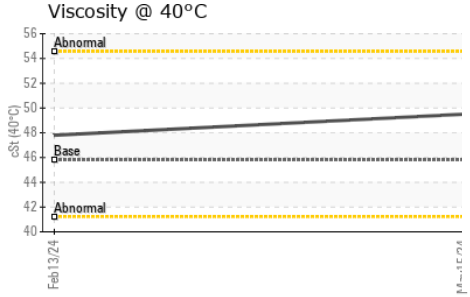

Particle Trend




Water (KF)

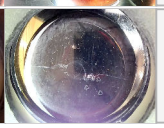



Viscosity @ 40°C



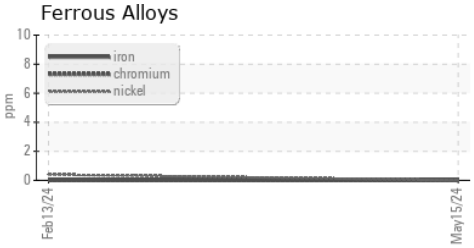

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Debris | scalar | *Visual | NONE | **LIGHT** | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Appearance | scalar | *Visual | NORML | **NORML** | NORML | --- |
| Odor | scalar | *Visual | NORML | **NORML** | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.6 | **NEG** | NEG | --- |
| Free Water | scalar | *Visual | | **NEG** | NEG | --- |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 45.8 | **49.5** | 47.8 | --- |

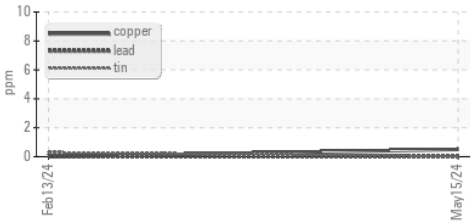
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  |  | *no image* |
| Bottom | | |  |  | *no image* |

## GRAPHS

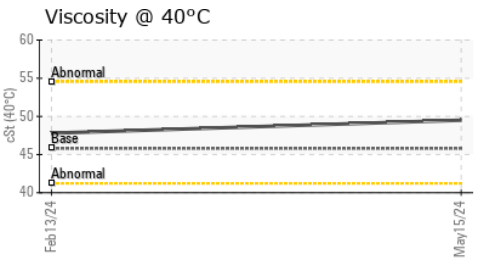
Ferrous Alloys



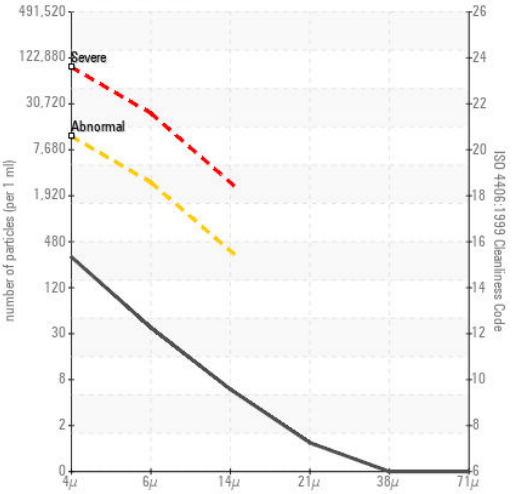

Non-ferrous Metals



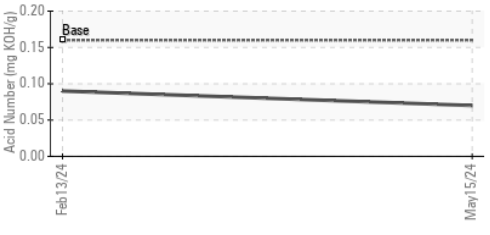

Viscosity @ 40°C




Particle Count




Acid Number




**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : USPM36159
**Lab Number** : 06181346
**Unique Number** : 11032672
**Test Package** : IND 2

**Received** : 16 May 2024
**Tested** : 17 May 2024
**Diagnosed** : 20 May 2024 - Jonathan Hester

Certificate L2367

**TYSON - BOWLING GREEN KY**
1388 PRODUCTION AVE
BOWLING GREEN, KY
US 42101
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: