



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**PG-46 [286910]**

Machine Id

**INGERSOLL RAND MDX1003828 - HARBOR FREIGHT**

Component

**Compressor**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) COMPRESSOR OIL (PAG) ISO 46. Please confirm.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info |             | <b>UFD0001527</b>  | ---      | ---      |
| Sample Date   | Client Info |             | <b>20 May 2024</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info | <b>6620</b>        | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>0</b>           | ---      | ---      |
| Oil Changed   | Client Info |             | <b>Changed</b>     | ---      | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | ---      | ---      |

## CONTAMINATION

|       | method    | limit/base | current    | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.8       | <b>NEG</b> | ---      | ---      |

## WEAR METALS

|          | method | limit/base      | current      | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >50 | <b>&lt;1</b> | ---      | ---      |
| Chromium | ppm    | ASTM D5185m >10 | <b>0</b>     | ---      | ---      |
| Nickel   | ppm    | ASTM D5185m     | <b>0</b>     | ---      | ---      |
| Titanium | ppm    | ASTM D5185m     | <b>0</b>     | ---      | ---      |
| Silver   | ppm    | ASTM D5185m     | <b>0</b>     | ---      | ---      |
| Aluminum | ppm    | ASTM D5185m >25 | <b>0</b>     | ---      | ---      |
| Lead     | ppm    | ASTM D5185m >25 | <b>&lt;1</b> | ---      | ---      |
| Copper   | ppm    | ASTM D5185m >50 | <b>&lt;1</b> | ---      | ---      |
| Tin      | ppm    | ASTM D5185m >15 | <b>&lt;1</b> | ---      | ---      |
| Vanadium | ppm    | ASTM D5185m     | <b>&lt;1</b> | ---      | ---      |
| Cadmium  | ppm    | ASTM D5185m     | <b>0</b>     | ---      | ---      |

## ADDITIVES

|            | method | limit/base      | current      | history1 | history2 |
|------------|--------|-----------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m 2   | <b>0</b>     | ---      | ---      |
| Barium     | ppm    | ASTM D5185m 525 | <b>816</b>   | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185m 10  | <b>0</b>     | ---      | ---      |
| Manganese  | ppm    | ASTM D5185m     | <b>&lt;1</b> | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185m 5   | <b>2</b>     | ---      | ---      |
| Calcium    | ppm    | ASTM D5185m 10  | <b>2</b>     | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185m 250 | <b>6</b>     | ---      | ---      |
| Zinc       | ppm    | ASTM D5185m 100 | <b>5</b>     | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185m 400 | <b>375</b>   | ---      | ---      |

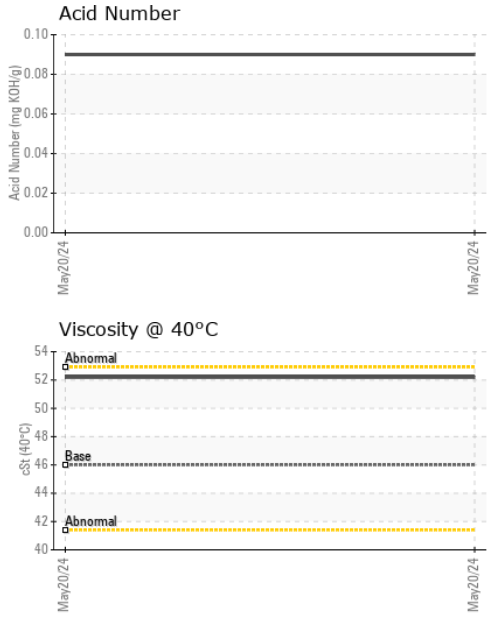
## CONTAMINANTS

|           | method | limit/base      | current   | history1 | history2 |
|-----------|--------|-----------------|-----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >25 | <b>1</b>  | ---      | ---      |
| Sodium    | ppm    | ASTM D5185m     | <b>18</b> | ---      | ---      |
| Potassium | ppm    | ASTM D5185m >20 | <b>4</b>  | ---      | ---      |

## FLUID DEGRADATION

|                  | method   | limit/base | current     | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | <b>0.09</b> | ---      | ---      |

# OIL ANALYSIS REPORT



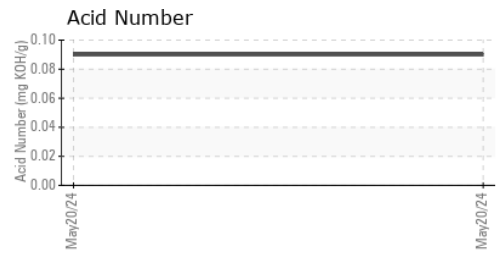
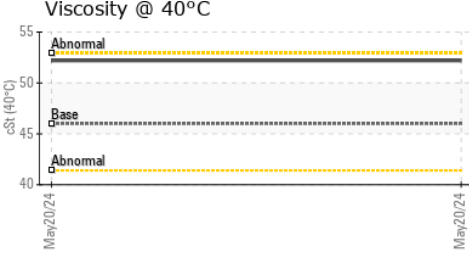
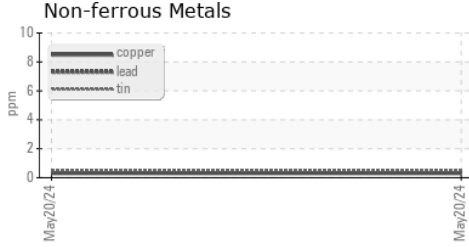
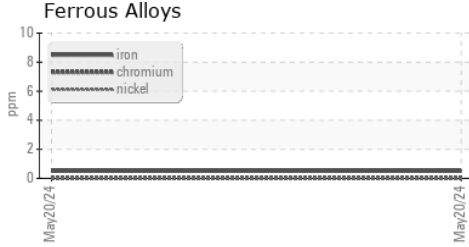
| VISUAL           | method | limit/base | current | history1     | history2 |     |
|------------------|--------|------------|---------|--------------|----------|-----|
| White Metal      | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      | --- |
| Yellow Metal     | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      | --- |
| Precipitate      | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      | --- |
| Silt             | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      | --- |
| Debris           | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      | --- |
| Sand/Dirt        | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      | --- |
| Appearance       | scalar | *Visual    | NORML   | <b>NORML</b> | ---      | --- |
| Odor             | scalar | *Visual    | NORML   | <b>NORML</b> | ---      | --- |
| Emulsified Water | scalar | *Visual    | >0.8    | <b>NEG</b>   | ---      | --- |
| Free Water       | scalar | *Visual    |         | <b>NEG</b>   | ---      | --- |

| FLUID PROPERTIES | method | limit/base   | current     | history1 | history2 |
|------------------|--------|--------------|-------------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445 46 | <b>52.2</b> | ---      | ---      |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

|        |  |  |  |          |          |
|--------|--|--|--|----------|----------|
| Color  |  |  |  | no image | no image |
| Bottom |  |  |  | no image | no image |

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : UFD0001527      **Received** : 07 Jun 2024  
**Lab Number** : **06202897**      **Tested** : 10 Jun 2024  
**Unique Number** : 11070358      **Diagnosed** : 10 Jun 2024 - Wes Davis  
**Test Package** : IND 2

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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)