

## **OIL ANALYSIS REPORT**

Particles >21µm

Particles >38µm

Particles >71µm

**Oil Cleanliness** 

Acid Number (AN)

FLUID DEGRADATION

### INGERSOLL RAND BOX ROOM 100HP I/R (S/N NK3393U18115) Component

**Air Compressor** 

USPI MAX FG AIR 46 (--- LTR)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

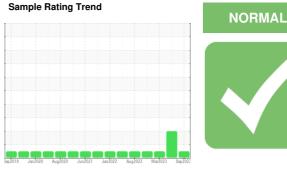
All component wear rates are normal.

#### 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

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



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|-----------------|---------------|-------------|------------|-----------------------|---------------|-------------|
| SAMPLE INFORM   | <b>MATION</b> | method      | limit/base | current               | history1      | history2    |
| Sample Number   |               | Client Info |            | USPM29782             | USPM27177     | USPM26847   |
| Sample Date     |               | Client Info |            | 28 Sep 2023           | 19 Jun 2023   | 06 Mar 2023 |
| 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   |               |             |            | NORMAL                | ABNORMAL      | NORMAL      |
| WEAR METALS     |               | method      | limit/base | current               | history1      | history2    |
| Iron            | ppm           | ASTM D5185m | >50        | 0                     | 0             | 0           |
| Chromium        | ppm           | ASTM D5185m | >4         | 0                     | 0             | 0           |
| Nickel          | ppm           | ASTM D5185m | >4         | 0                     | 0             | 1           |
| Titanium        | ppm           | ASTM D5185m |            | 0                     | <1            | 0           |
| Silver          | ppm           | ASTM D5185m |            | 0                     | 0             | 0           |
| Aluminum        | ppm           | ASTM D5185m | >10        | 0                     | <1            | 0           |
| Lead            | ppm           | ASTM D5185m | >20        | 0                     | 0             | 0           |
| Copper          | ppm           | ASTM D5185m | >40        | <1                    | 1             | <1          |
| Tin             | ppm           | ASTM D5185m | >5         | 0                     | 0             | 0           |
| Vanadium        | ppm           | ASTM D5185m |            | 0                     | 0             | <1          |
| Cadmium         | ppm           | ASTM D5185m |            | 0                     | <1            | 0           |
| ADDITIVES       |               | method      | limit/base | current               | history1      | history2    |
| Boron           | ppm           | ASTM D5185m | 0          | 0                     | 0             | 0           |
| Barium          | ppm           | ASTM D5185m | 0          | 0                     | 0             | 1           |
| Molybdenum      | ppm           | ASTM D5185m | 0          | 0                     | 0             | 0           |
| Manganese       | ppm           | ASTM D5185m |            | 0                     | <1            | 0           |
| Magnesium       | ppm           | ASTM D5185m | 0          | 0                     | <1            | 0           |
| Calcium         | ppm           | ASTM D5185m | 0          | 0                     | 0             | <1          |
| Phosphorus      | ppm           | ASTM D5185m | 0          | 3                     | 4             | 0           |
| Zinc            | ppm           | ASTM D5185m | 0          | 5                     | 0             | <1          |
| Sulfur          | ppm           | ASTM D5185m | 0          | 19                    | 0             | 2           |
| CONTAMINANTS    | ;             | method      | limit/base | current               | history1      | history2    |
| Silicon         | ppm           | ASTM D5185m | >25        | 2                     | 3             | 0           |
| Sodium          | ppm           | ASTM D5185m |            | 0                     | <1            | <1          |
| Potassium       | ppm           | ASTM D5185m | >20        | 0                     | 0             | 3           |
| Water           | %             | ASTM D6304  | >0.6       | 0.031                 | 0.007         | 0.00        |
| ppm Water       | ppm           | ASTM D6304  | >6000      | 311.8                 | 73.7          | 0.00        |
| FLUID CLEANLIN  | IESS          | method      | limit/base | current               | history1      | history2    |
| Particles >4µm  |               | ASTM D7647  | >10000     | 384                   | 18369         | 80          |
| Particles >6µm  |               | ASTM D7647  | >2500      | 68                    | <b>A</b> 7363 | 21          |
| Particles >14µm |               | ASTM D7647  | >320       | 12                    | <b>5</b> 88   | 1           |
|                 |               |             |            |                       |               |             |

4

0

0

0.16

16/13/11

**9**3

1

0

0.14

21/20/16

ASTM D7647 >80

ASTM D7647 >20

ASTM D7647 >4

mg KOH/g ASTM D8045 0.16

ISO 4406 (c) >20/18/15

0

0

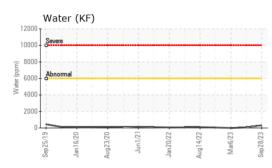
0

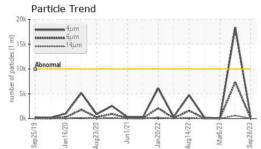
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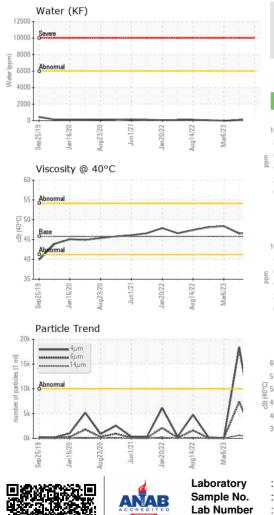
13/12/7



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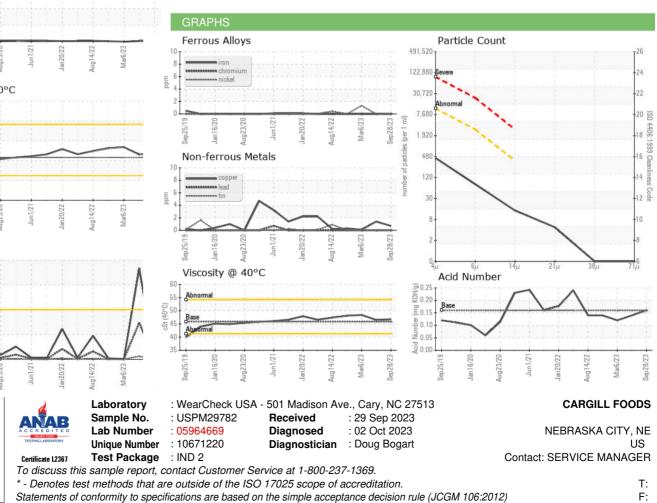






| VISUAL           |        | method    | limit/base | current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | NONE     | NONE                                        |
| Debris           | scalar | *Visual   | NONE       | NONE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | NONE     | 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 PROPERT    | IES    | method    | limit/base | current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | history1 | history2                                    |
| Visc @ 40°C      | cSt    | ASTM D445 | 45.8       | 46.8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 46.5     | 48.39                                       |
| SAMPLE IMAGES    | 3      | method    | limit/base | current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | history1 | history2                                    |
| Color            |        |           |            | Air -<br>Air - |          | Ability 1/R<br>Altality 1/R<br>Altality 1/R |

Bottom



Contact/Location: SERVICE MANAGER - CARNEB