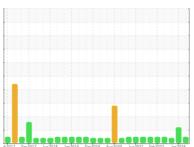


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

INGERSOLL RAND PRO 1 I/R (S/N HE2548U09316)

Compressor

USPI FG AIR 46 (--- GAL)

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|----|-------------|----|--------|---|--------------|

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

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

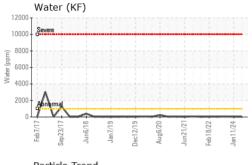
Fluid Condition

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

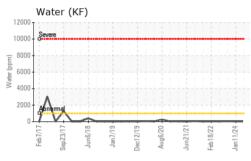
| 6:2017 Sep2017 Jun2018 Jan2019 On:2019 Aug2020 Jun2021 Feb2022 Jan2024 | | | | | | | | | | | |
|--|-------------|--------------|------------|-------------|-------------|-------------|--|--|--|--|--|
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 | | | | | |
| Sample Number | | Client Info | | USPM36661 | USPM30043 | USPM26027 | | | | | |
| Sample Date | | Client Info | | 22 Feb 2024 | 11 Jan 2024 | 13 Apr 2023 | | | | | |
| Machine Age | hrs | Client Info | | 101115 | 100456 | 0 | | | | | |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 | | | | | |
| Oil Changed | Oil Changed | | | N/A | N/A | N/A | | | | | |
| Sample Status | | | | NORMAL | ATTENTION | ABNORMAL | | | | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 | | | | | |
| Iron | ppm | ASTM D5185m | >50 | 0 | 0 | 0 | | | | | |
| Chromium | ppm | ASTM D5185m | >10 | <1 | 0 | 0 | | | | | |
| Nickel | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | | |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | | |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | | |
| Aluminum | ppm | ASTM D5185m | >25 | 0 | 0 | <1 | | | | | |
| Lead | ppm | ASTM D5185m | >25 | 0 | <1 | 0 | | | | | |
| Copper | ppm | ASTM D5185m | >50 | 0 | <1 | 0 | | | | | |
| Tin | ppm | ASTM D5185m | >15 | 0 | 0 | 0 | | | | | |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | | |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 | | | | | |
| Boron | ppm | ASTM D5185m | 0 | 0 | 0 | 0 | | | | | |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 | | | | | |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 | 0 | | | | | |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 | | | | | |
| Magnesium | ppm | ASTM D5185m | 0 | 0 | <1 | <1 | | | | | |
| Calcium | ppm | ASTM D5185m | 0 | 0 | 1 | 0 | | | | | |
| Phosphorus | ppm | ASTM D5185m | 0 | 0 | 0 | 2 | | | | | |
| Zinc | ppm | ASTM D5185m | 0 | 0 | 0 | 0 | | | | | |
| Sulfur | ppm | ASTM D5185m | 0 | 16 | 0 | 0 | | | | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 | | | | | |
| Silicon | ppm | ASTM D5185m | >25 | 7 | 7 | 0 | | | | | |
| Sodium | ppm | ASTM D5185m | | <1 | <1 | 0 | | | | | |
| Potassium | ppm | ASTM D5185m | >20 | 0 | <1 | 0 | | | | | |
| Water | % | ASTM D6304 | >0.1 | 0.001 | 0.002 | 0.005 | | | | | |
| ppm Water | ppm | ASTM D6304 | >1000 | 15 | 18 | 52.8 | | | | | |
| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 | | | | | |
| Particles >4μm | | ASTM D7647 | >10000 | 1900 | 12128 | | | | | | |
| Particles >6µm | | ASTM D7647 | >2500 | 484 | 3519 | | | | | | |
| Particles >14μm | | ASTM D7647 | >320 | 46 | 226 | | | | | | |
| Particles >21µm | | ASTM D7647 | >80 | 14 | 40 | | | | | | |
| Particles >38µm | | ASTM D7647 | >20 | 0 | 1 | | | | | | |
| Particles >71µm | | ASTM D7647 | >4 | 0 | 0 | | | | | | |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | 18/16/13 | 21/19/15 | | | | | | |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 | | | | | |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.15 | 0.092 | 0.192 | 0.49 | | | | | |

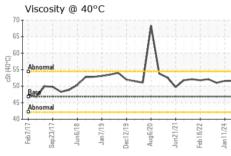


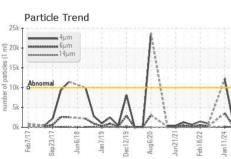
OIL ANALYSIS REPORT



| = 20k - ■ | 4, | um um | | | 1 | | | |
|---|--------|----------|-----|----------|---|-------------------|-------------|----|
| 20k + 15k + 10k + | | ŧμm | | | 1 | | | |
| 10k - At | normal | - | | | | | | A |
| 5k | / | 1 | | ٨ | | | | /1 |
| | / | | 1 | M | 1 | | | 1 |
| Ok JIL | | | 200 | Mary and | - | C. Street Billion | CHIEF ARTES | |



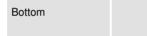




| VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------------|--------|------------|------------|----------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | LIGHT | ▲ MODER |
| 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 | >0.1 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPERT | method | limit/base | current | history1 | history2 | |

| Visc @ 40°C | cSt | ASTM D445 | 46.8 | 51.6 | 51.6 | 51.0 |
|--------------|-----|-----------|------|------|------|----------|
| SAMPLE IMAGI | ES | method | | | | history2 |

Color







| | GR. | APH | S | | | | | | | | | | | | | | | |
|-------------|---------|------------|------------------------|---------|------------|---------|-----------|------------|-----------|---|----------|-----------|---------|------------|---------|----------|-----------|--------------------------------|
| | Feri | ous | Alloy | S | | | | | | Р | article | Coun | t | | | | | |
| 10 | | | | | | | | | | 491,520 | | | | | | | | T ²⁶ |
| 6 udd | | eeeeeee Cl | on hromium ickel | | | | | | | 122,880 Se | vere | | | | | | | +24 |
| 2 | | | | | | | | | | 30,720- | 175 | | | | | | | -22 |
| 0 | | <u> </u> | - 81 | - 61 | 6 | | - 12 | 22 | 24 | 7.680 I | normal | 1 | | | | | | -20 IS |
| | Feb7/17 | Sep23/1 | Jun6/18 | Jan7/19 | Dec12/19 | Aug6/20 | Jun21/21 | Feb18/22 | Jan11/24 | 1,920 | | | ` | | | | | 18 199 |
| | Non | -ferr | ous I | Metal | s | | | | | 岩 480- | | 1 | | | | | | 16 Ce |
| 10- 8- | _ | CI | opper | | | A | ٨ | | | 1,920 480 120 120 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | 1 | | | | | | 180 4406:1999 Cleanliness Code |
| Edd 4 | ***** | assassa tj | n | | | | /\ | | | 30- | | | | \ | | | | -12 g |
| 2 | V | _ | | | | | 1 | | | . 8- | | | | | 1 | | | -10 |
| | Feb7/17 | Sep23/17 | Jun6/18 | Jan7/19 | Dec12/19 | Aug6/20 | Jun21/21 | Feb 18/22 | Jan 11/24 | 2- | | | | | ` | / | | -8 |
| | Visc | osity | @ 4 | 0°C | | | | | | 04,4 | cid Nu | μ | 14μ | 2 | 1μ | 38μ | | 71μ |
| 70 | | | | | | | | | | ₽1.50 _T - | icia ivu | mber | | | | | | |
| | | | | | | Λ | | | | KOH | | | | | ٨ | | | |
| (3°C)+(3°C) | Abno | rmal | | | | 11 | | | | £ 1.00+ | | | | | 1 | | | |
| ₹ 50 | Base | ~ | | | | 7 | ~ | | | Acid Number (mg KOH/g) 00.00 00.00 | | | | ۸ | 11 | | 144 | ^ |
| 40 | Abno | rmal | | | | | | 100 | | 2 2 | Base | | | _ | 11 | | | 7 |
| ,0 | Feb7/17 | Sep23/17 | Jun6/18 - | Jan7/19 | Dec12/19 - | Aug6/20 | Jun21/21- | Feb18/22 - | 1/24 | A Feb7/17 | Sep23/17 | Jun6/18 - | Jan7/19 | Dec12/19 - | Aug6/20 | 1/21 | 8/22 | 1/24 |
| | Rep | Sep2 | Jun | Jan | Decl | Aug | Jun2 | Feb1 | Jan11/24 | -6 | Sep2 | Jun | Jan | Dec1, | Aug | Jun21/21 | Feb 18/22 | Jan11/24 |





Certificate 12367

Laboratory Sample No.

Lab Number : 06143733

: USPM36661 Unique Number : 10968541 Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 09 Apr 2024 **Tested** : 10 Apr 2024

Diagnosed : 11 Apr 2024 - Doug Bogart **TYSON - PASCO WALLULA -USP**

DODD RD WALLULA, WA US 99363

T: (402)423-6375

F: (402)423-6661

Contact: RICK DUVALL

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)