

## **OIL ANALYSIS REPORT**

#### Sample Rating Trend



#### Area BOILERS Machine Id AC 3 (S/N M59780) Component

Air Compressor

### USPI MAX FG AIR 46 (5 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.

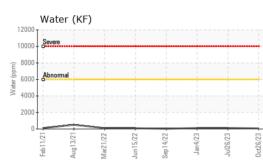
#### Fluid Condition

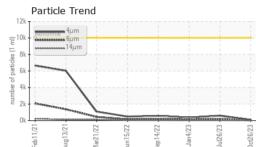
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

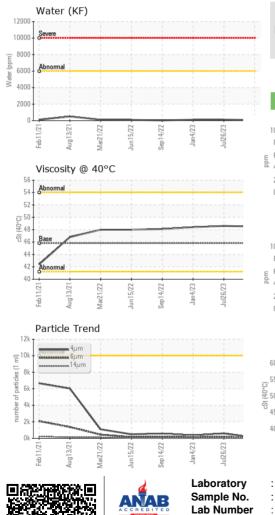
|                  |               | Feb2021 A    | ug2021 Mar2022 Jun20 | 22 Sep2022 Jan2023 Jul2023 | 0ct2023     |             |
|------------------|---------------|--------------|----------------------|----------------------------|-------------|-------------|
| SAMPLE INFORM    | <b>MATION</b> | method       | limit/base           | current                    | history1    | history2    |
| Sample Number    |               | Client Info  |                      | USPM31217                  | USPM25505   | USPM23329   |
| Sample Date      |               | Client Info  |                      | 26 Oct 2023                | 26 Jul 2023 | 04 Jan 2023 |
| Machine Age      | hrs           | Client Info  |                      | 29956                      | 29596       | 29531       |
| Oil Age          | hrs           | Client Info  |                      | 642                        | 281         | 216         |
| Oil Changed      |               | Client Info  |                      | N/A                        | Not Changd  | N/A         |
| Sample Status    |               |              |                      | NORMAL                     | NORMAL      | NORMAL      |
| WEAR METALS      |               | method       | limit/base           | current                    | history1    | history2    |
| Iron             | ppm           | ASTM D5185m  | >50                  | 0                          | 0           | 0           |
| Chromium         | ppm           | ASTM D5185m  | >4                   | <1                         | 0           | 0           |
| Nickel           | ppm           | ASTM D5185m  | >4                   | 0                          | 0           | 0           |
| Titanium         | ppm           | ASTM D5185m  |                      | 0                          | 0           | 0           |
| Silver           | ppm           | ASTM D5185m  |                      | 0                          | 0           | 0           |
| Aluminum         | ppm           | ASTM D5185m  | >10                  | 0                          | 0           | 0           |
| Lead             | ppm           | ASTM D5185m  | >20                  | 0                          | 0           | 0           |
| Copper           | ppm           | ASTM D5185m  |                      | 0                          | 0           | 0           |
| Tin              | ppm           | ASTM D5185m  | >5                   | 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                    | 0                          | 0           | 0           |
| Magnesium        | ppm           | ASTM D5185m  | 0                    | ۰<br><1                    | 0           | 0           |
| Calcium          | ppm           | ASTM D5185m  |                      | 0                          | 0           | 0           |
| Phosphorus       | ppm           | ASTM D5185m  | 0                    | 0                          | 0           | 2           |
| Zinc             |               |              | 0                    | 0                          | 0           | 0           |
| Sulfur           | ppm           | ASTM D5185m  | 0                    | 0                          | 0           | 4           |
|                  | ppm           |              |                      | -                          | -           |             |
| CONTAMINANTS     |               | method       | limit/base           | current                    | history1    | history2    |
| Silicon          | ppm           | ASTM D5185m  | >25                  | <1                         | 0           | <1          |
| Sodium           | ppm           | ASTM D5185m  |                      | 0                          | 0           | <1          |
| Potassium        | ppm           | ASTM D5185m  | >20                  | 1                          | <1          | 0           |
| Water            | %             | ASTM D6304   |                      | 0.006                      | 0.011       | 0.010       |
| ppm Water        | ppm           | ASTM D6304   | >6000                | 69.4                       | 117.2       | 108.3       |
| FLUID CLEANLIN   | IESS          | method       | limit/base           | current                    | history1    | history2    |
| Particles >4µm   |               | ASTM D7647   | >10000               | 89                         | 601         | 368         |
| Particles >6µm   |               | ASTM D7647   | >2500                | 30                         | 193         | 129         |
| Particles >14µm  |               | ASTM D7647   | >640                 | 6                          | 21          | 13          |
| Particles >21µm  |               | ASTM D7647   |                      | 3                          | 6           | 3           |
| Particles >38µm  |               | ASTM D7647   | >40                  | 0                          | 0           | 0           |
| Particles >71µm  |               | ASTM D7647   | >10                  | 0                          | 0           | 0           |
| Oil Cleanliness  |               | ISO 4406 (c) | >20/18/16            | 14/12/10                   | 16/15/12    | 16/14/11    |
| FLUID DEGRADA    | ATION         | method       | limit/base           | current                    | history1    | history2    |
| Acid Number (AN) | mg KOH/g      | ASTM D8045   | 0.16                 | 0.088                      | 0.05        | 0.06        |



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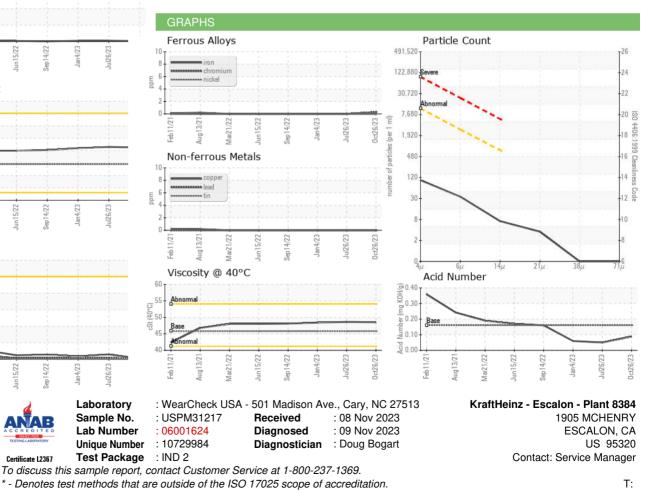








Bottom



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: Service Manager - KRAESC