

## **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

#### Machine Id

### BUSCH CARNEB 15 VAC (S/N 6050642) Pump

Fluid USPI VAC 100 (--- 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.

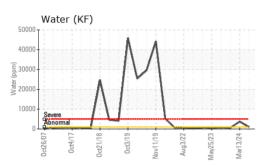
### Fluid Condition

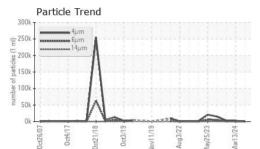
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

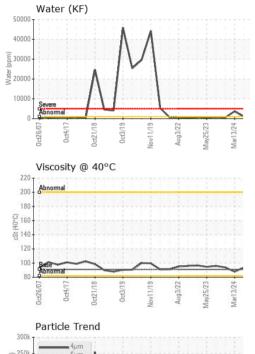
| SAMPLE INFORM   | IATION | method       | limit/base | current     | history1    | history2    |
|-----------------|--------|--------------|------------|-------------|-------------|-------------|
| Sample Number   |        | Client Info  |            | USPM37753   | USPM30409   | USPM31552   |
| Sample Date     |        | Client Info  |            | 16 Jun 2024 | 13 Mar 2024 | 03 Dec 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  | >90        | 0           | 0           | 0           |
| Chromium        | ppm    | ASTM D5185m  | >5         | 0           | <1          | 0           |
| Nickel          | ppm    | ASTM D5185m  | >5         | 0           | 0           | 0           |
| Titanium        | ppm    | ASTM D5185m  | >3         | <1          | <1          | <1          |
| Silver          | ppm    | ASTM D5185m  | >3         | 0           | <1          | 0           |
| Aluminum        | ppm    | ASTM D5185m  | >7         | 0           | 0           | 1           |
| Lead            | ppm    | ASTM D5185m  | >12        | 0           | 1           | 0           |
| Copper          | ppm    | ASTM D5185m  |            | ۰<br><1     | 0           | <1          |
| Tin             | ppm    | ASTM D5185m  | >9         | 0           | 1           | 0           |
| Vanadium        | ppm    | ASTM D5185m  | 20         | ۰<br><1     | <1          | 0           |
| Cadmium         | ppm    | ASTM D5185m  |            | 0           | <1          | 0           |
| ADDITIVES       | le le  | method       | limit/base | current     | history1    | history2    |
| Boron           | ppm    | ASTM D5185m  | 0          | 2           | 5           | 3           |
| Barium          | ppm    | ASTM D5185m  | 0          | 0           | 0           | 0           |
| Molybdenum      | ppm    | ASTM D5185m  | 0          | 0           | 0           | 0           |
| Manganese       | ppm    | ASTM D5185m  |            | <1          | <1          | 0           |
| Magnesium       | ppm    | ASTM D5185m  | 0          | <1          | 0           | 0           |
| Calcium         | ppm    | ASTM D5185m  |            | 0           | <1          | 0           |
| Phosphorus      | ppm    | ASTM D5185m  | 1800       | 1084        | 1299        | 1548        |
| Zinc            | ppm    | ASTM D5185m  | 0          | <1          | 0           | 0           |
| Sulfur          | ppm    | ASTM D5185m  | 0          | 0           | 0           | 0           |
| CONTAMINANTS    | le le  | method       | limit/base | current     | history1    | history2    |
| Silicon         | ppm    | ASTM D5185m  | >60        | 4           | 4           | 6           |
| Sodium          | ppm    | ASTM D5185m  |            | <1          | 2           | 0           |
| Potassium       | ppm    | ASTM D5185m  | >20        | <1          | 2           | 1           |
| Water           | %      | ASTM D6304   |            | 0.093       | ▲ 0.374     | 0.061       |
| ppm Water       | ppm    | ASTM D6304   |            | 933         | ▲ 3740      | 617         |
| FLUID CLEANLIN  | ESS    | method       | limit/base | current     | history1    | history2    |
| Particles >4µm  |        | ASTM D7647   |            | 121         | 2795        | 2930        |
| Particles >6µm  |        | ASTM D7647   | >2500      | 39          | 459         | 963         |
| Particles >14µm |        | ASTM D7647   | >320       | 3           | 39          | 100         |
| Particles >21µm |        | ASTM D7647   | >80        | 1           | 12          | 34          |
| Particles >38µm |        | ASTM D7647   | >20        | 0           | 0           | 4           |
| Particles >71µm |        | ASTM D7647   | >4         | 0           | 0           | 1           |
| Oil Cleanliness |        | ISO 4406 (c) | >/18/15    | 14/12/9     | 19/16/12    | 19/17/14    |
|                 |        |              |            |             |             |             |
| FLUID DEGRADA   | TION   | method       |            |             |             | history2    |

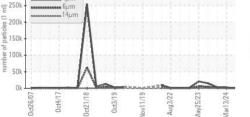


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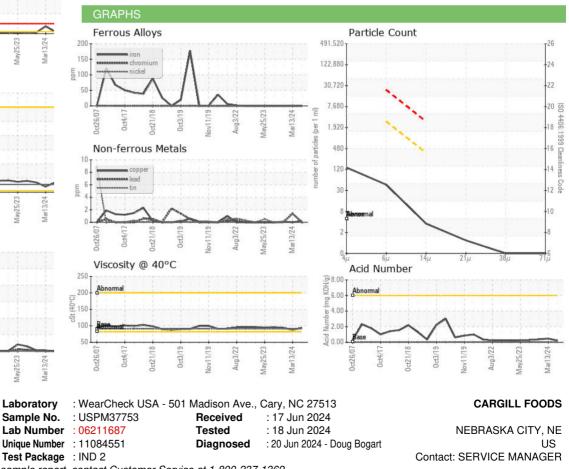






| VISUAL           |        | method    | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual   | 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   | >.1        | NEG     | ▲ 0.2%   | NEG      |
| Free Water       | scalar | *Visual   |            | NEG     | NEG      | NEG      |
| FLUID PROPERT    | IES    | method    | limit/base | current | history1 | history2 |
| Visc @ 40°C      | cSt    | ASTM D445 | 91         | 93.7    | 87.8     | 93.9     |
| SAMPLE IMAGES    | S      | method    | limit/base | current | history1 | history2 |
| Color            |        |           |            | •       |          |          |

Bottom



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:

Report Id: CARNEB [WUSCAR] 06211687 (Generated: 06/23/2024 02:18:21) Rev: 2

Certificate 12367

Contact/Location: SERVICE MANAGER - CARNEB