

# **OIL ANALYSIS REPORT**

### Area TANNER LEANDER Machine Id 17-046S14-9 PRE

Component Hydraulic System Fluid NOT GIVEN (--- QTS)

#### DIAGNOSIS

#### Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

## 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 at the top-end of the recommended limit.

|  |   |  |  | Oct2023   |  |  |
|--|---|--|--|---|--|--|
| SAMPLE INFORM  | MATION  | method   | limit/base   | current   | history1   | history2   |
| Sample Number  |   | Client Info  |  | WC0837666   |  |  |
| Sample Date  |   | Client Info  |  | 12 Oct 2023   |  |  |
| Machine Age  | hrs   | Client Info  |  | 0   |  |  |
| Oil Age  | hrs   | Client Info  |  | 0   |  |  |
| Oil Changed  |   | Client Info  |  | N/A   |  |  |
| Sample Status  |   |  |  | ABNORMAL  |  |  |
| WEAR METALS  |   | method   | limit/base   | current   | history1   | history2   |
| Iron   | ppm   | ASTM D5185m  | >20  | 0   |  |  |
| Chromium   | ppm   | ASTM D5185m  | >10  | 0   |  |  |
| Nickel   | ppm   | ASTM D5185m  | >10  | 0   |  |  |
| Titanium   | ppm   | ASTM D5185m  |  | 0   |  |  |
| Silver   | ppm   | ASTM D5185m  |  | 0   |  |  |
| Aluminum   | ppm   | ASTM D5185m  | >10  | 0   |  |  |
| Lead   | ppm   | ASTM D5185m  | >10  | 0   |  |  |
| Copper   | ppm   | ASTM D5185m  | >75  | 0   |  |  |
| Tin  | ppm   | ASTM D5185m  | >10  | 0   |  |  |
| Vanadium   | ppm   | ASTM D5185m  |  | 0   |  |  |
| Cadmium  | ppm   | ASTM D5185m  |  | 0   |  |  |
| ADDITIVES  |   | method   | limit/base   | current   | history1   | history2   |
| Boron  | ppm   | ASTM D5185m  |  | 298   |  |  |
| Barium   | ppm   | ASTM D5185m  |  | 0   |  |  |
| Molybdenum   | ppm   | ASTM D5185m  |  | 0   |  |  |
| Manganese  | ppm   | ASTM D5185m  |  | <1  |  |  |
| Magnesium  | ppm   | ASTM D5185m  |  | 0   |  |  |
|  |   |  |  |   |  |  |
| -  | ppm   | ASTM D5185m  |  | 46  |  |  |
| Calcium  |   | ASTM D5185m<br>ASTM D5185m   |  | 46<br>1174  |  |  |
| Calcium<br>Phosphorus  | ppm   |  |  | -   |  |  |
| Calcium<br>Phosphorus<br>Zinc  | ppm<br>ppm  | ASTM D5185m  |  | 1174  |  |  |
| Calcium<br>Phosphorus<br>Zinc  | ppm<br>ppm<br>ppm<br>ppm  | ASTM D5185m<br>ASTM D5185m   | limit/base   | 1174<br>0   |  |  |
| Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS  | ppm<br>ppm<br>ppm<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  |  | 1174<br>0<br>10783  |  |  |
| Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon   | ppm<br>ppm<br>ppm<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>method  |  | 1174<br>0<br>10783<br>current   | <br><br>history1   |  |
| Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium   | ppm<br>ppm<br>ppm<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br><b>method</b><br>ASTM D5185m  |  | 1174<br>0<br>10783<br>current<br>0  | <br><br>history1   | <br><br>history2   |
| Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm              | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>Method<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | >20<br>>20   | 1174<br>0<br>10783<br><u>current</u><br>0<br>1<br><1  | <br><br>history1<br>   | <br><br>history2   |
| Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water   | ppm<br>ppm<br>ppm<br>ppm<br>ppm                                   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>Method<br>ASTM D5185m<br>ASTM D5185m  | >20<br>>20<br>>0.1   | 1174<br>0<br>10783<br>current<br>0<br>1   | <br><br>history1<br>   | <br><br>history2   |
| Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water   | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>%<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>Method<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304   | >20<br>>20<br>>0.1   | 1174<br>0<br>10783<br>current<br>0<br>1<br><1<br><1<br>0.098  | <br><br>history1<br>   | <br><br>history2   |
| Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>%<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304<br>ASTM D6304   | >20<br>>20<br>>0.1<br>>1000  | 1174<br>0<br>10783<br>current<br>0<br>1<br><1<br><1<br>0.098<br>989.9   | <br><br>history1<br><br><br><br>                                     | <br>history2   |
| Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN<br>Particles >4µm  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>%<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304<br>ASTM D6304<br>Method   | >20<br>>20<br>>0.1<br>>1000<br>limit/base<br>>5000                                       | 1174<br>0<br>10783<br>current<br>0<br>1<br><1<br><1<br>0.098<br>989.9<br>current  | <br>history1<br><br><br><br>history1                                 | <br>history2   |
| Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >6µm  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>%<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304<br>ASTM D6304<br>Method<br>ASTM D7647   | >20<br>>20<br>>0.1<br>>1000<br>limit/base<br>>5000                                       | 1174<br>0<br>10783<br>current<br>0<br>1<br><1<br><1<br>0.098<br>989.9<br>current<br>402                                 | <br><br>history1<br><br><br><br>history1<br>                         | <br>history2<br><br><br><br>history2                     |
| Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >6µm<br>Particles >14µm                                       | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>%<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304<br>ASTM D6304<br>ASTM D6304<br>ASTM D7647<br>ASTM D7647   | >20<br>>20<br>>0.1<br>>1000<br>limit/base<br>>5000<br>>1300                              | 1174<br>0<br>10783<br>current<br>0<br>1<br><1<br><1<br>0.098<br>989.9<br>current<br>402<br>108                          | <br>history1<br><br><br><br><br>history1<br>                         | <br>history2   |
| Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >6µm<br>Particles >14µm<br>Particles >21µm                    | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>%<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304<br>ASTM D6304<br>ASTM D6304<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647   | >20<br>>20<br>>0.1<br>>1000<br>limit/base<br>>5000<br>>1300<br>>160                      | 1174<br>0<br>10783<br>current<br>0<br>1<br><1<br><1<br>0.098<br>989.9<br>current<br>402<br>108<br>9                     | <br>history1<br><br><br><br>history1<br><br>history1                 | <br>history2   |
| Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >4µm<br>Particles >14µm<br>Particles >21µm<br>Particles >38µm | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>%<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304<br>ASTM D6304<br>ASTM D6304<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647   | >20<br>>20<br>>0.1<br>>1000<br>limit/base<br>>5000<br>>1300<br>>160<br>>40<br>>10        | 1174<br>0<br>10783<br>current<br>0<br>1<br><1<br><1<br>0.098<br>989.9<br>current<br>402<br>108<br>9<br>3                | <br>history1<br><br><br><br>history1<br><br>history1<br>             | <br>history2<br><br><br><br>history2<br><br>history2     |
| Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>%<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304<br>ASTM D6304<br>ASTM D6304<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647                             | >20<br>>20<br>>0.1<br>>1000<br>limit/base<br>>5000<br>>1300<br>>160<br>>40<br>>10        | 1174<br>0<br>10783<br>current<br>0<br>1<br>3<br>4<br>0.098<br>989.9<br>current<br>402<br>108<br>9<br>3<br>3<br>1        | <br>history1<br><br><br><br><br>history1<br><br><br>                 | <br>history2<br><br><br><br><br>history2<br><br>history2 |
| Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water<br>ppm Water<br>FLUID CLEANLIN<br>Particles >4µm<br>Particles >6µm<br>Particles >21µm<br>Particles >38µm<br>Particles >71µm | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>%<br>ppm<br>VESS | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D6304<br>ASTM D6304<br>ASTM D6304<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647<br>ASTM D7647 | >20<br>>20<br>>0.1<br>>1000<br>limit/base<br>>5000<br>>1300<br>>160<br>>40<br>>40<br>>10 | 1174<br>0<br>10783<br>current<br>0<br>1<br><1<br><1<br>0.098<br>989.9<br>current<br>402<br>108<br>9<br>3<br>3<br>1<br>0 | <br>history1<br><br><br><br><br>history1<br><br>history1<br><br><br> | <br>history2<br><br><br><br><br>history2<br><br>history2 |

Sample Rating Trend

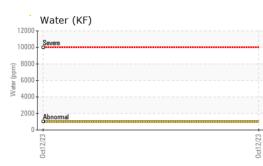
DEGRADATION

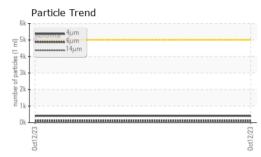
# Report Id: BASTAR [WUSCAR] 05978894 (Generated: 10/24/2023 09:55:34) Rev: 1

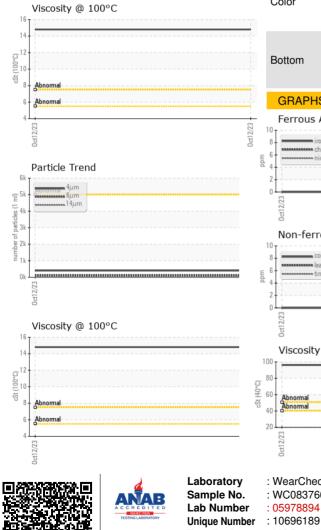
Contact/Location: TANNER LEANDER - BASTAR

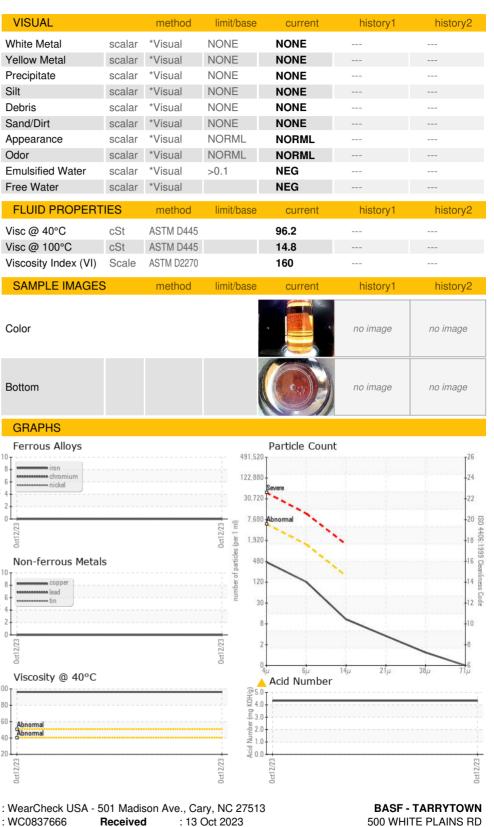


# **OIL ANALYSIS REPORT**









Diagnostician : Jonathan Hester Test Package : MOB 2 (Additional Tests: KF, KV100, VI) Contact: TANNER LEANDER leander.tanner@basf.com 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)

: 17 Oct 2023

Diagnosed

Report Id: BASTAR [WUSCAR] 05978894 (Generated: 10/24/2023 09:55:34) Rev: 1

Certificate L2367

Contact/Location: TANNER LEANDER - BASTAR

US 10591

Т:

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