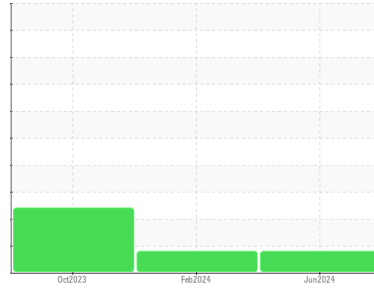


# OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id  
**KOMATSU WA600-6 6529**  
 Component  
**Front Differential**  
 Fluid  
**TULCO LUBSOIL SUPER HYDRAULIC HZ 46 (--- 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.
- Fluid Condition**  
The oil viscosity is higher than normal. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION method limit/base current history1 history2

|               |             |             |                    |             |             |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info |             | <b>TO10002113</b>  | TO10001707  | TO10002727  |
| Sample Date   | Client Info |             | <b>13 Jun 2024</b> | 20 Feb 2024 | 18 Oct 2023 |
| Machine Age   | hrs         | Client Info | <b>22846</b>       | 22323       | 21834       |
| Oil Age       | hrs         | Client Info | <b>2091</b>        | 1568        | 1079        |
| Oil Changed   |             | Client Info | <b>Not Chngd</b>   | Not Chngd   | Not Chngd   |
| Sample Status |             |             | <b>ATTENTION</b>   | ATTENTION   | ATTENTION   |

CONTAMINATION method limit/base current history1 history2

|       |           |     |            |     |     |
|-------|-----------|-----|------------|-----|-----|
| Water | WC Method | >.2 | <b>NEG</b> | NEG | NEG |
|-------|-----------|-----|------------|-----|-----|

WEAR METALS method limit/base current history1 history2

|          |     |             |      |              |    |    |
|----------|-----|-------------|------|--------------|----|----|
| PQ       |     | ASTM D8184  |      | <b>40</b>    | 47 | 16 |
| Iron     | ppm | ASTM D5185m | >500 | <b>66</b>    | 45 | 9  |
| Chromium | ppm | ASTM D5185m | >10  | <b>&lt;1</b> | 1  | <1 |
| Nickel   | ppm | ASTM D5185m | >10  | <b>0</b>     | 0  | 0  |
| Titanium | ppm | ASTM D5185m |      | <b>0</b>     | 0  | 0  |
| Silver   | ppm | ASTM D5185m |      | <b>0</b>     | 0  | 0  |
| Aluminum | ppm | ASTM D5185m | >25  | <b>2</b>     | 2  | 2  |
| Lead     | ppm | ASTM D5185m | >25  | <b>0</b>     | 0  | 0  |
| Copper   | ppm | ASTM D5185m | >100 | <b>1</b>     | 0  | <1 |
| Tin      | ppm | ASTM D5185m | >10  | <b>0</b>     | 0  | 0  |
| Vanadium | ppm | ASTM D5185m |      | <b>0</b>     | 0  | 0  |
| Cadmium  | ppm | ASTM D5185m |      | <b>0</b>     | 0  | 0  |

ADDITIVES method limit/base current history1 history2

|            |     |             |  |              |      |      |
|------------|-----|-------------|--|--------------|------|------|
| Boron      | ppm | ASTM D5185m |  | <b>0</b>     | 0    | 0    |
| Barium     | ppm | ASTM D5185m |  | <b>0</b>     | 0    | 0    |
| Molybdenum | ppm | ASTM D5185m |  | <b>0</b>     | 0    | 0    |
| Manganese  | ppm | ASTM D5185m |  | <b>&lt;1</b> | <1   | <1   |
| Magnesium  | ppm | ASTM D5185m |  | <b>17</b>    | 20   | 18   |
| Calcium    | ppm | ASTM D5185m |  | <b>4495</b>  | 4278 | 4216 |
| Phosphorus | ppm | ASTM D5185m |  | <b>881</b>   | 844  | 905  |
| Zinc       | ppm | ASTM D5185m |  | <b>1030</b>  | 1093 | 1085 |
| Sulfur     | ppm | ASTM D5185m |  | <b>5414</b>  | 4762 | 4872 |

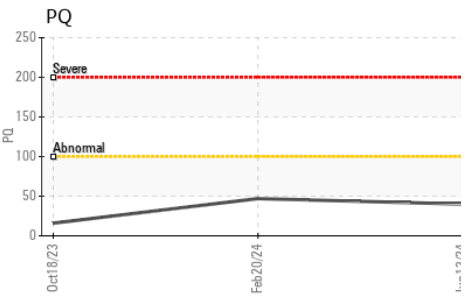
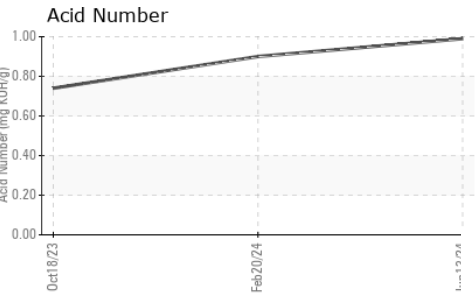
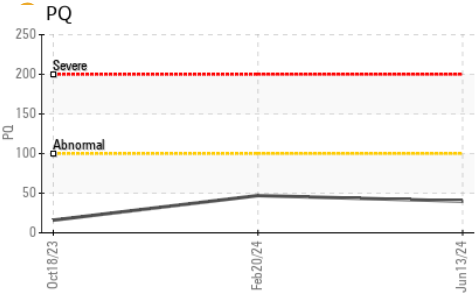
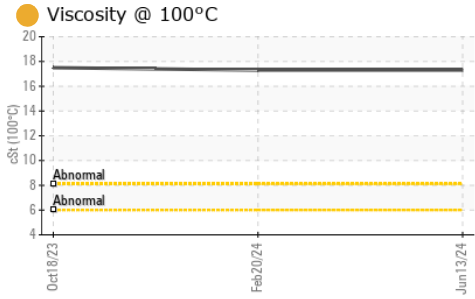
CONTAMINANTS method limit/base current history1 history2

|           |     |             |     |           |    |    |
|-----------|-----|-------------|-----|-----------|----|----|
| Silicon   | ppm | ASTM D5185m | >75 | <b>20</b> | 17 | 14 |
| Sodium    | ppm | ASTM D5185m |     | <b>4</b>  | 0  | 2  |
| Potassium | ppm | ASTM D5185m | >20 | <b>0</b>  | 0  | <1 |

FLUID DEGRADATION method limit/base current history1 history2

|                  |          |            |  |             |      |      |
|------------------|----------|------------|--|-------------|------|------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 |  | <b>0.99</b> | 0.90 | 0.74 |
|------------------|----------|------------|--|-------------|------|------|

# OIL ANALYSIS REPORT

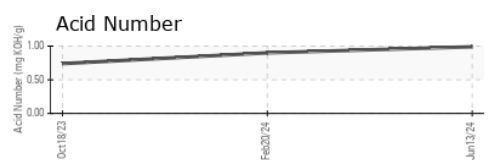
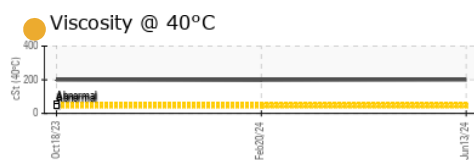
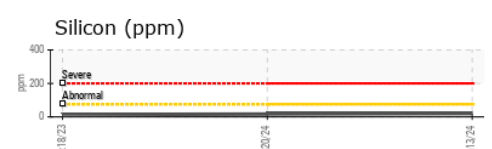
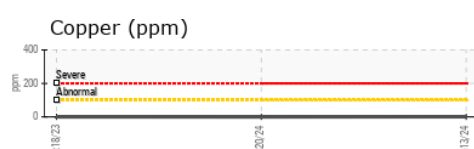
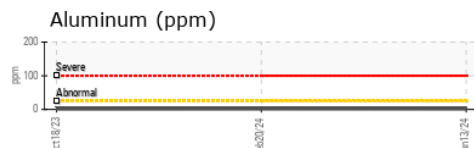
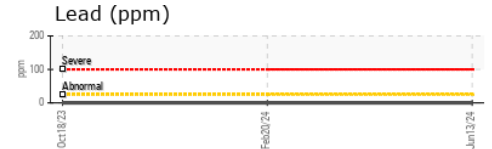
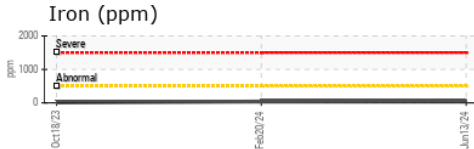


| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | NONE    | NONE     | NONE     |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | NONE     |
| Appearance       | scalar | *Visual    | NORML   | NORML    | NORML    |
| Odor             | scalar | *Visual    | NORML   | NORML    | NORML    |
| Emulsified Water | scalar | *Visual    | >.2     | NEG      | 0.2%     |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES     | method | limit/base | current | history1 | history2 |
|----------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C          | cSt    | ASTM D445  | ● 200   | ● 198    | ● 200    |
| Visc @ 100°C         | cSt    | ASTM D445  | ● 17.3  | ● 17.3   | ● 17.5   |
| Viscosity Index (VI) | Scale  | ASTM D2270 | 92      | 93       | 94       |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
| Color         |        |            |         |          |          |
| Bottom        |        |            |         |          |          |

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO10002113      **Received** : 18 Jun 2024  
**Lab Number** : 06213638      **Tested** : 20 Jun 2024  
**Unique Number** : 11086502      **Diagnosed** : 20 Jun 2024 - Don Baldrige  
**Test Package** : MOB 2 ( Additional Tests: KV100, PQ, VI )

**ANCHOR STONE TULSA ROCK**  
 TULSA ROCK QUARRY, 66TH ST N 145TH AVENUE  
 TULSA, OK 74137  
 Contact: SKIP SAENGERHAUSEN  
 skip@anchorstoneco.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)