

Machine Id
QL6 BRUSH OFF
 Component
Hydraulic System
 Fluid
MOBIL DTE 25 (50 GAL)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

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

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | ST43195 | ST43805 | ST43875 |
| Sample Date | Client Info | | 05 Jan 2024 | 30 Oct 2023 | 11 Sep 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 | ATTENTION | NORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|----------|----------|----------|
| Iron | ppm | ASTM D5185m >40 | 0 | 2 | 2 |
| Chromium | ppm | ASTM D5185m >4 | 0 | <1 | 0 |
| Nickel | ppm | ASTM D5185m >20 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >4 | 0 | <1 | <1 |
| Lead | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >60 | 2 | 3 | 2 |
| Tin | ppm | ASTM D5185m >4 | 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 | <1 | 0 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | <1 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | 0 | 1 | 1 |
| Calcium | ppm | ASTM D5185m | 150 | 157 | 163 |
| Phosphorus | ppm | ASTM D5185m | 506 | 474 | 513 |
| Zinc | ppm | ASTM D5185m | 719 | 733 | 711 |
| Sulfur | ppm | ASTM D5185m | 3755 | 4258 | 4535 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >20 | 2 | 2 | 2 |
| Sodium | ppm | ASTM D5185m | 3 | 0 | 2 |
| Potassium | ppm | ASTM D5185m >20 | <1 | 2 | 0 |
| Water | % | ASTM D6304 >0.05 | 0.016 | 0.015 | 0.015 |
| ppm Water | ppm | ASTM D6304 >500 | 164 | 153.3 | 153.4 |

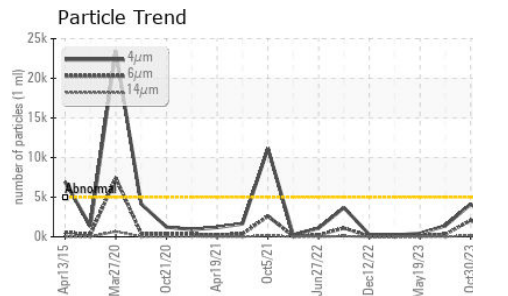
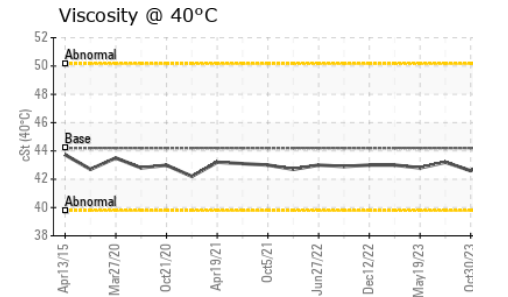
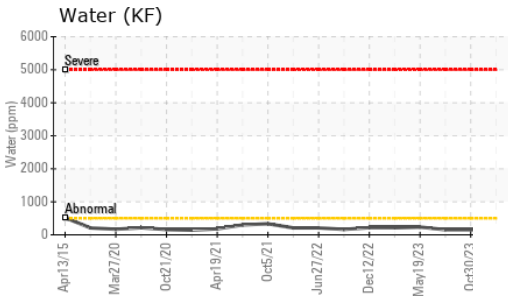
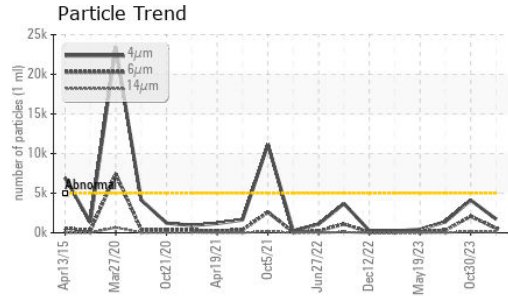
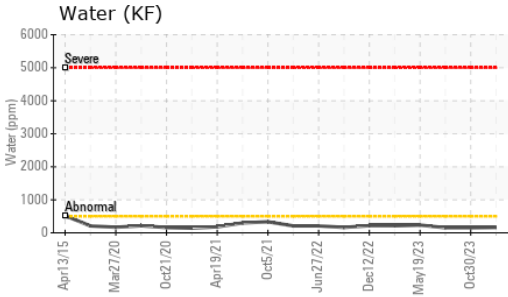
FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-----------------|------------|----------|
| Particles >4µm | ASTM D7647 | >5000 | 1730 | 4127 | 1393 |
| Particles >6µm | ASTM D7647 | >1300 | 591 | ▲ 2080 | 317 |
| Particles >14µm | ASTM D7647 | >160 | 80 | 149 | 19 |
| Particles >21µm | ASTM D7647 | >40 | 25 | 38 | 3 |
| Particles >38µm | ASTM D7647 | >10 | 1 | 0 | 0 |
| Particles >71µm | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14 | 18/16/13 | ▲ 19/18/14 | 18/15/11 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.94 | 0.76 | 0.83 |

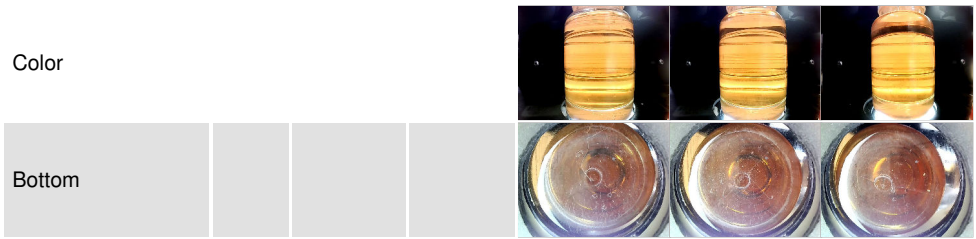
OIL ANALYSIS REPORT



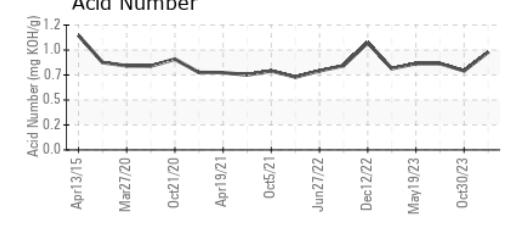
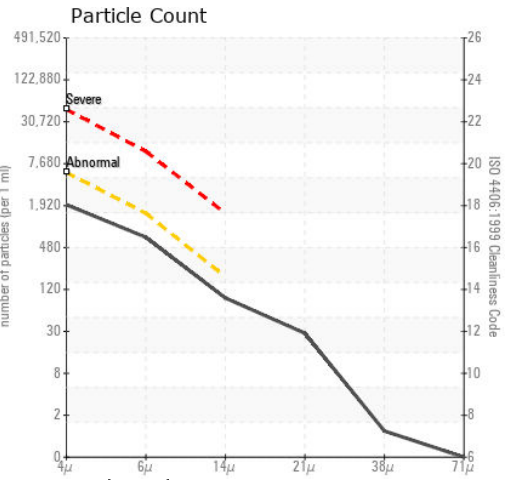
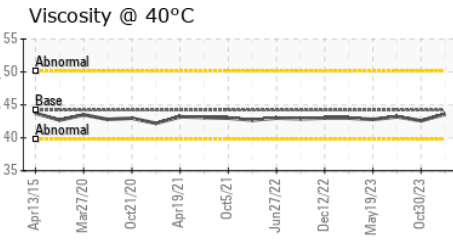
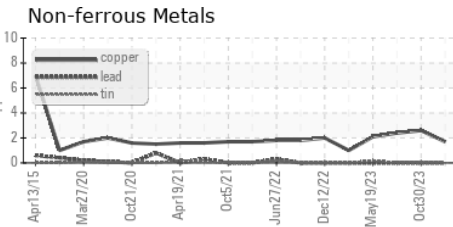
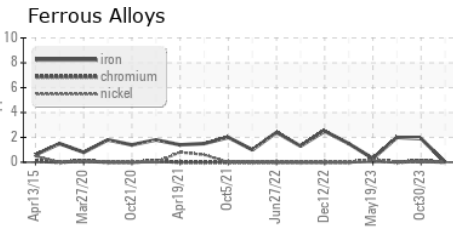
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | 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 | >0.05 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 44.2 | 43.6 | 42.6 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ST43195 **Received** : 10 Jan 2024
Lab Number : 06056645 **Diagnosed** : 11 Jan 2024
Unique Number : 10822594 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: KF)

SSAB STEEL
 12400 HWY 43 NORTH
 AXIS, AL
 US 36505
 Contact: JON HUNN
 jon.hunn@ssab.com
 T: (251)662-4409
 F: (251)662-4784

Certificate L2367
 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)