



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
38851 TRACE PO 38138 [38851]
 Machine Id
JP8TS0001-06112024A
 Component
Hydraulic System
 Fluid
832020 JP8 MIL-DTL-83133 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

NAS 1638 Class: 8, Discrete particle counts [100 ml] 5-15µm = 33096, 15-25µm = 2686, 25-50µm = 460, 50-100µm = 18, >100µm = 0. There is a high amount of silt (particulates < 15 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target SAE AS4059 (replaces NAS 1638) cleanliness code.

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 | WC06209076 | --- | --- |
| Sample Date | Client Info | 13 Jun 2024 | --- | --- |
| 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 | >20 | 0 | --- | --- |
| Nickel ppm ASTM D5185m | >20 | <1 | --- | --- |
| Titanium ppm ASTM D5185m | | 0 | --- | --- |
| Silver ppm ASTM D5185m | | 0 | --- | --- |
| Aluminum ppm ASTM D5185m | >20 | 0 | --- | --- |
| Lead ppm ASTM D5185m | >20 | 0 | --- | --- |
| Copper ppm ASTM D5185m | >20 | 0 | --- | --- |
| Tin ppm ASTM D5185m | >20 | 0 | --- | --- |
| Vanadium ppm ASTM D5185m | | 0 | --- | --- |
| Cadmium ppm ASTM D5185m | | 2 | --- | --- |

ADDITIVES

| method | limit/base | current | history1 | history2 |
|----------------------------|------------|--------------|----------|----------|
| Boron ppm ASTM D5185m | | 0 | --- | --- |
| Barium ppm ASTM D5185m | | 0 | --- | --- |
| Molybdenum ppm ASTM D5185m | | 0 | --- | --- |
| Manganese ppm ASTM D5185m | | <1 | --- | --- |
| Magnesium ppm ASTM D5185m | | <1 | --- | --- |
| Calcium ppm ASTM D5185m | | <1 | --- | --- |
| Phosphorus ppm ASTM D5185m | | 0 | --- | --- |
| Zinc ppm ASTM D5185m | | 1 | --- | --- |
| Sulfur ppm ASTM D5185m | | 0 | --- | --- |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|---------------------------|------------|--------------|----------|----------|
| Silicon ppm ASTM D5185m | >15 | <1 | --- | --- |
| Sodium ppm ASTM D5185m | | 2 | --- | --- |
| Potassium ppm ASTM D5185m | >20 | 3 | --- | --- |
| Water % ASTM D6304 | >0.05 | 0.003 | --- | --- |
| ppm Water ppm ASTM D6304 | >500 | 39 | --- | --- |

FLUID CLEANLINESS

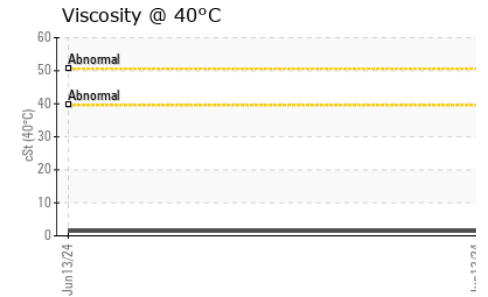
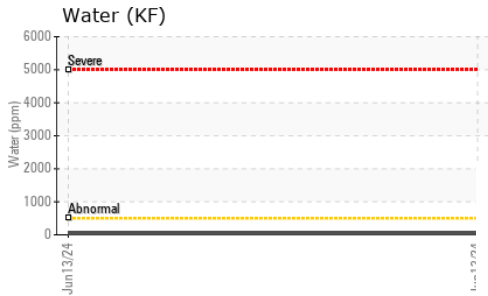
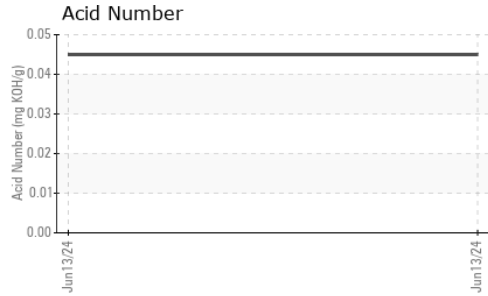
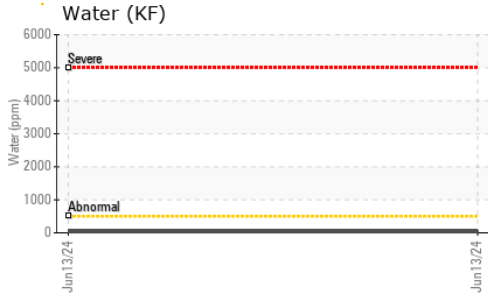
| method | limit/base | current | history1 | history2 |
|------------------------------------|------------|----------------|----------|----------|
| Particles 5-15µm count *NAS 1638 | >8000 | ▲ 33096 | --- | --- |
| Particles 15-25µm count *NAS 1638 | >1425 | 2686 | --- | --- |
| Particles 25-50µm count *NAS 1638 | >253 | 460 | --- | --- |
| Particles 50-100µm count *NAS 1638 | >45 | 18 | --- | --- |
| Particles >100µm count *NAS 1638 | >8 | 0 | --- | --- |
| NAS 1638 Class *NAS 1638 | >5 | 8 | --- | --- |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 |
|--------------------------------------|------------|--------------|----------|----------|
| Acid Number (AN) mg KOH/g ASTM D8045 | | 0.045 | --- | --- |



OIL ANALYSIS REPORT



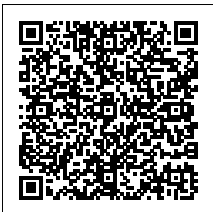
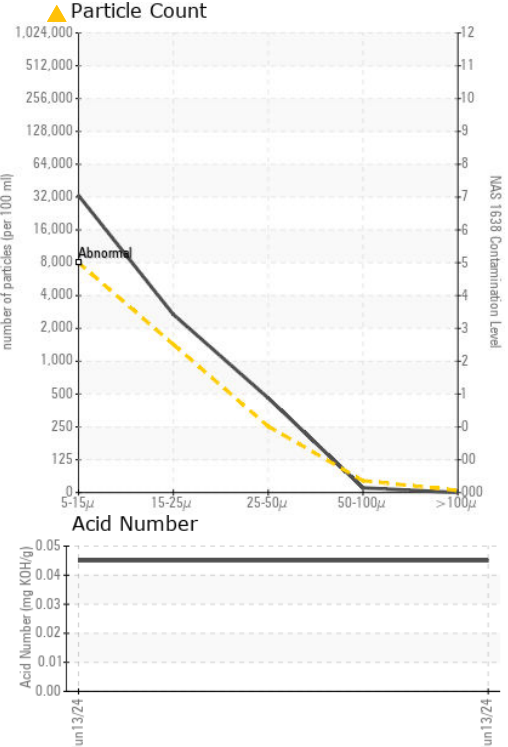
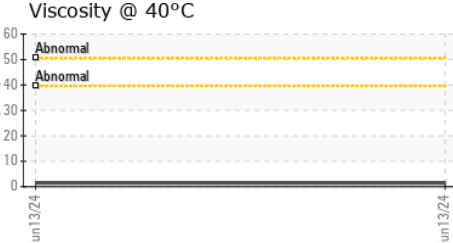
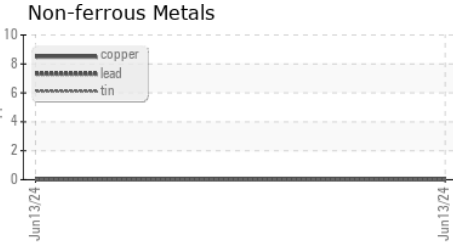
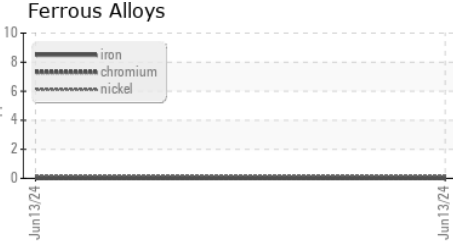
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE | --- |
| Silt | scalar | *Visual | NONE | NONE | --- |
| Debris | scalar | *Visual | NONE | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | --- |
| Appearance | scalar | *Visual | NORML | NORML | --- |
| Odor | scalar | *Visual | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.05 | NEG | --- |
| Free Water | scalar | *Visual | | NEG | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 1.44 | --- | --- |

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

| | | | | | |
|--------|--|--|--|----------|----------|
| Color | | | | no image | no image |
| Bottom | | | | no image | no image |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06209076 **Received** : 13 Jun 2024
Lab Number : 06209076 **Tested** : 11 Jul 2024
Unique Number : 11076537 **Diagnosed** : 11 Jul 2024 - Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCountNAS)

RIDGE ENGINEERING
 3987 HAMPSTEAD-MEXICO RD
 HAMPSTEAD, MD
 US 21074
 Contact: BETHANY HUGHES*
 bethany@ridgeeng.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)