

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR A904IND 054434 - Hydraulic System

Sample No: LH0260562

Oil Type: PETRO CANADA ENVIRON MV 46



Radius Recycling Canada Ltd.
 12195 Musqueam Dr.
 Surrey, BC
 CA V3V 3T2
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SAMPLE INFORMATION

| Sample Number | LH0260562 | LH0260506 | LH0250511 | LH0250500 |
|---------------|-------------|-------------|-------------|-------------|
| Sample Date | 07 Feb 2024 | 17 Nov 2023 | 30 Aug 2023 | 01 Jun 2023 |
| Machine Hours | 15288 | 15049 | 14788 | 14536 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Not Changd | Not Changd | Not Changd | Not Changd |
| Sample Status | NORMAL | NORMAL | NORMAL | NORMAL |



OIL CONDITION

| Visc @ 40°C | cSt | 40.9 | 40.4 | 40.6 | 40.8 |
|-------------|-----|------|------|------|------|
| | | | | | |



CONTAMINATION

| Water | % | NEG | NEG | NEG | NEG |
|-------------------|-----|----------|---------|----------|----------|
| Particles >4µm | | 2868 | 1685 | 908 | 4691 |
| Particles >6µm | | 158 | 111 | 116 | 731 |
| Particles >14µm | | 9 | 4 | 7 | 57 |
| ISO 4406:1999 (c) | | 19/14/10 | 18/14/9 | 17/14/10 | 19/17/13 |
| Silicon | ppm | <1 | <1 | 1 | 1 |
| Sodium | ppm | 1 | 1 | 2 | 2 |
| Potassium | ppm | 1 | 0 | <1 | <1 |



WEAR METALS

| | | | | | |
|------------|-----|----|----|----|----|
| Iron | ppm | 20 | 25 | 21 | 25 |
| Copper | ppm | 1 | 1 | 1 | 2 |
| Lead | ppm | <1 | <1 | <1 | 0 |
| Tin | ppm | 0 | 0 | 0 | 0 |
| Aluminum | ppm | <1 | <1 | <1 | <1 |
| Chromium | ppm | 3 | 4 | 3 | 4 |
| Molybdenum | ppm | 0 | 0 | 0 | <1 |
| Nickel | ppm | 0 | <1 | <1 | 0 |
| Titanium | ppm | 0 | 0 | 0 | 0 |
| Silver | ppm | 0 | <1 | <1 | 0 |
| Manganese | ppm | 0 | 0 | 0 | <1 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



ADDITIVES

| | | | | | |
|------------|-----|-----|-----|-----|-----|
| Calcium | ppm | 19 | 27 | 27 | 32 |
| Magnesium | ppm | 3 | 4 | 4 | 4 |
| Zinc | ppm | 22 | 30 | 30 | 33 |
| Phosphorus | ppm | 614 | 608 | 597 | 636 |
| Barium | ppm | 0 | <1 | <1 | 0 |
| Boron | ppm | <1 | <1 | <1 | <1 |

Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Depot: AMISUR
 Unique No: 5735505
 Signed: Kevin Marson
 Report Date: 28 Feb 2024

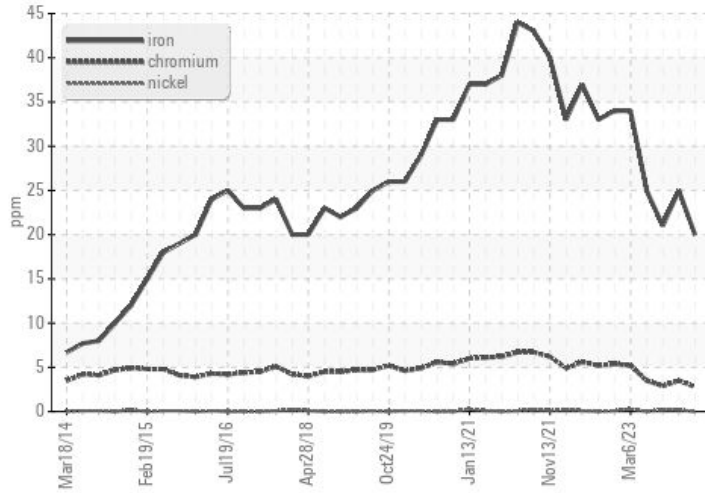
LIEBHERR

CONSTRUCTION EQUIPMENT

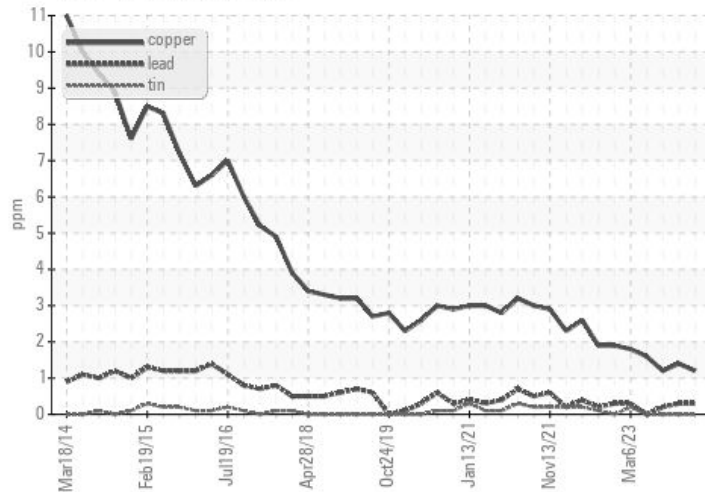


GRAPHS

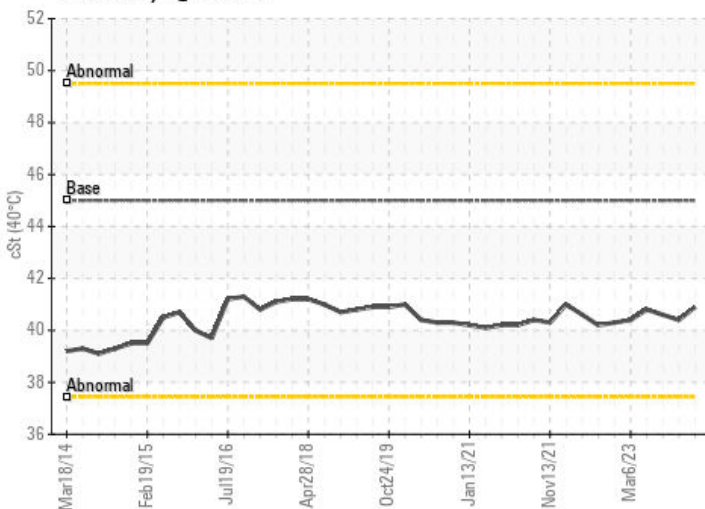
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

