

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR A934C 057446-1007 - Hydraulic System

Sample No: LH0276179
 Oil Type: KLONDIKE AW 46



ABC RECYCLING
 8081 MEADOW AVE.
 BURNABY, BC
 CA V3N 2V9
 Contact: John Anderson
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 T: (778)988-9944
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Sample Information

| Sample Number | LH0276179 | LH0281186 | LH0213842 | LH0213847 |
|---------------|-------------|-------------|-------------|-------------|
| Sample Date | 21 Apr 2024 | 22 Jan 2024 | 11 Jul 2023 | 24 Apr 2023 |
| Machine Hours | 26815 | 26482 | 25673 | 25419 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Not Changd | Changed | Not Changd | Not Changd |
| Sample Status | ABNORMAL | ABNORMAL | NORMAL | NORMAL |



Oil Condition

| Visc @ 40°C | cSt | 33.5 | 36.3 | 42.0 | 42.1 |
|-------------|-----|------|------|------|------|
| | | | | | |



Contamination

| Water | % | NEG | NEG | NEG | NEG |
|-------------------|-----|----------|----------|----------|----------|
| Particles >4µm | | 68742 | 1302 | 5258 | 4338 |
| Particles >6µm | | 11457 | 88 | 969 | 595 |
| Particles >14µm | | 176 | 11 | 77 | 25 |
| ISO 4406:1999 (c) | | 23/21/15 | 18/14/11 | 20/17/13 | 19/16/12 |
| Silicon | ppm | 0 | <1 | <1 | <1 |
| Sodium | ppm | <1 | <1 | <1 | <1 |
| Potassium | ppm | 0 | <1 | <1 | <1 |



Wear Metals

| | | | | | |
|------------|-----|----|----|----|----|
| Iron | ppm | 4 | 4 | 5 | 9 |
| Copper | ppm | <1 | 2 | 3 | 6 |
| Lead | ppm | 0 | <1 | <1 | <1 |
| Tin | ppm | 0 | 0 | 0 | 0 |
| Aluminum | ppm | <1 | <1 | <1 | 0 |
| Chromium | ppm | <1 | <1 | <1 | <1 |
| Molybdenum | ppm | <1 | <1 | 0 | 0 |
| Nickel | ppm | 0 | 0 | 0 | 0 |
| Titanium | ppm | 0 | 0 | 0 | 0 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | 0 | 0 | 0 | <1 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



Additives

| | | | | | |
|------------|-----|-----|-----|-----|-----|
| Calcium | ppm | 29 | 49 | 56 | 46 |
| Magnesium | ppm | 5 | 6 | 2 | 1 |
| Zinc | ppm | 261 | 275 | 408 | 426 |
| Phosphorus | ppm | 215 | 225 | 347 | 381 |
| Barium | ppm | 0 | 0 | 0 | 0 |
| Boron | ppm | <1 | <1 | <1 | <1 |

Diagnosis

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. The fluid was specified as KLONDIKE AW 46, however, a fluid match indicates that this fluid is ISO 32 AW Hydraulic Oil. Please confirm the oil type and grade on your next sample. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. Viscosity of sample indicates oil is within ISO 32 range, advise investigate. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Depot: ABCBUR
 Unique No: 5772136
 Signed: Kevin Marson
 Report Date: 24 Apr 2024

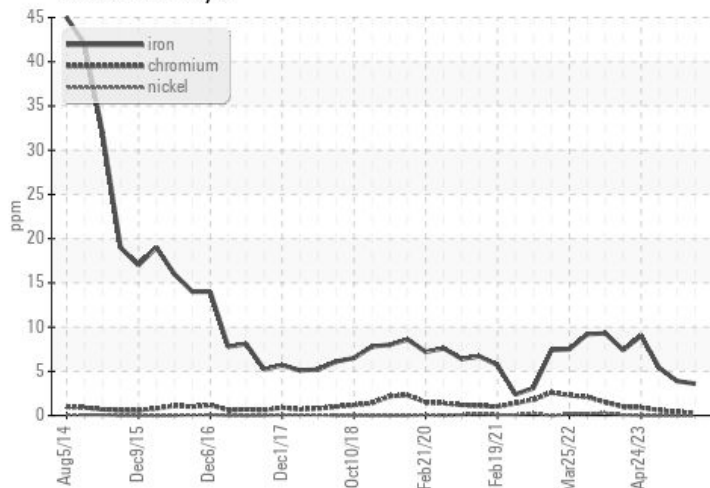
LIEBHERR

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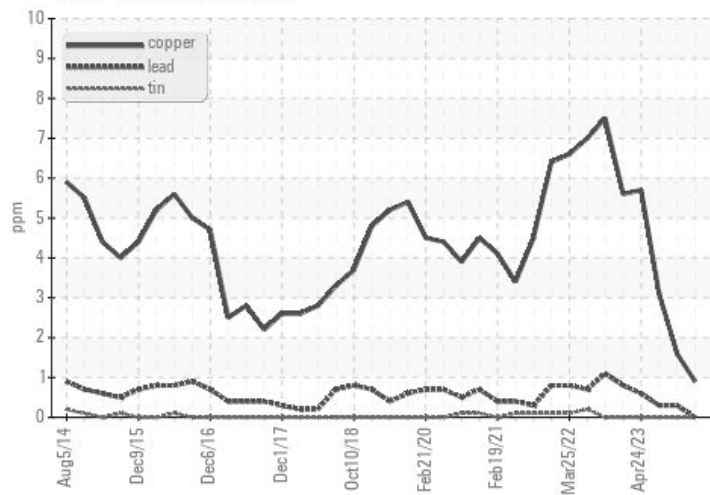


Graphs

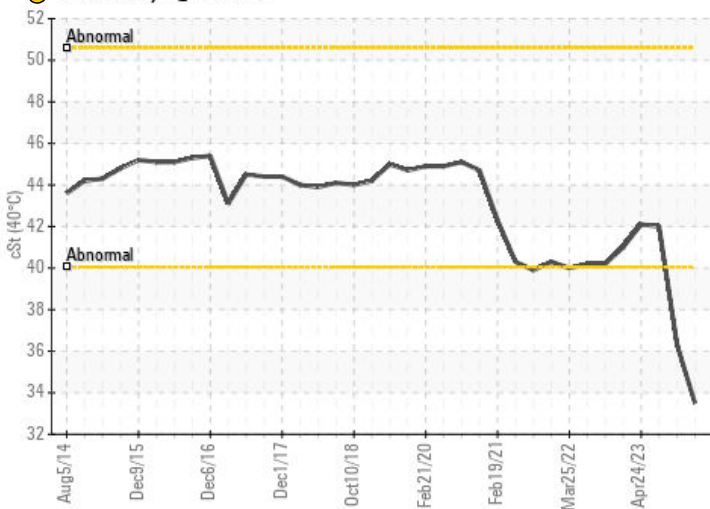
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

