

LIEBHERR A934 038332-1006 - Front Differential

Sample No: VCE215350

Oil Type: GEAR OIL SAE 80W90

SAMPLE INFORMATION

| Sample Number | | VCE215350 | DJJ009552 | DJJ009259 | LHMC040549 |
|---------------|----------------|-------------|-------------|-------------|-------------|
| Sample Date | | 01 May 2019 | 23 Jan 2013 | 28 Mar 2012 | 28 Jul 2011 |
| Machine Hours | | 13156 | 7377 | 6219 | 5209 |
| Oil Hours | | 0 | 1000 | 2000 | 1000 |
| Oil Changed | | N/A | Changed | Changed | Not Changd |
| Sample Status | | NORMAL | ABNORMAL | NORMAL | ABNORMAL |
| OIL CO | NDITION | | | | |
| Visc @ 40°C | cSt | 0 126 | 0 163.9 | 136.6 | 0 136.7 |
| | AMINATIO | ON | | | |
| 0111-0-0 | | | 0 0 | | |

| Silicon | ppm | ○ <1 | 03 | 01 | ○ 5 | |
|-----------|-----|------------------|------|----|------|--|
| Sodium | ppm | <mark></mark> <1 | 0 | 0 | ◯ <1 | |
| Potassium | ppm | 0 15 | ◯ <1 | 2 | ◯ <1 | |
| Õ | | | | | | |

| WEAI | R METALS | | | | |
|------------|----------|-------------------|------|------|------|
| Iron | ppm | 04 | 6 | 6 | 07 |
| Copper | ppm | 01 | 2 | 3 | 02 |
| Lead | ppm | 01 | ○ <1 | 0 | 0 () |
| Tin | ppm | 0 () | 0 | 0 0 | 0 0 |
| Aluminum | ppm | ○ <1 | 0 | ◯ <1 | 01 |
| Chromium | ppm | <mark>○</mark> <1 | ○ <1 | ○ <1 | ○ <1 |
| Molybdenum | ppm | 01 | ○ <1 | 0 | ○ <1 |
| Nickel | ppm | ○ <1 | <1 | 0 | 0 |
| Titanium | ppm | 0 | 0 | 0 | 0 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | 0 🔘 | ○ <1 | 0 | ○ <1 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |

ADDITIVES Calcium 09 ppm 16 0 10 0 15 Magnesium ppm ○ <1 ○ <1 $\bigcirc 0$ 1 Zinc 06 $\bigcirc 7$ 5 8 🔘 ppm Phosphorus 0704 0 951 0 972 0 1007 ppm Barium ppm 0 0 0 $\bigcirc 0$ Boron ppm 04 228 0214 227





AMERICAN STATE EQUIPMENT CO.

2400 NORTH 14TH AVENUE WAUSAU, WI US 54401 Contact: CHRIS BARTNIK cbartnik@amstate.com T: (715)675-6900 F: (715)675-9748

Diagnosis

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL SAE 80W90. Please confirm.

All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

| Depot: | LEC0008 |
|--------------|-------------|
| Unique No: | 8618296 |
| Signed: | Wes Davis |
| Report Date: | 05 Jun 2019 |





GRAPHS

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