LIEBHERR

CONSTRUCTION EQUIPMENT

LIEBHERR R918LC 047212-1721 - Left Final Drive

Sample No: LH0284033

Oil Type: PETRO CANADA TRAXON 75W90 SYNTHETIC

| SAMPLE INFORMATION | | | | | | | |
|--------------------|-------------|-------------|-------------|--|--|--|--|
| Sample Number | LH0284033 | LH0192469 | LH0185906 | | | | |
| Sample Date | 01 Mar 2024 | 10 Sep 2021 | 10 Feb 2021 | | | | |
| Machine Hours | 3066 | 1047 | 491 | | | | |
| Oil Hours | 0 | 0 | 0 | | | | |
| Oil Changed | Changed | Changed | Changed | | | | |
| Sample Status | ABNORMAL | NORMAL | NORMAL | | | | |
| A | | | | | | | |



WESTERRA ENTERPRISES INC.

33171 2ND AVENUE MISSION, BC CA V2V 6T8

Contact: Service Manager

T: F:

|) | OIL CO | NDITION | | | | |
|---|--------|----------------|-------------|-----|-------|--|
| @ | 40°C | cSt | 96.2 | 192 | O 196 | |
| | | | | | | |

CONTAMINATION Water

| Water | % | NEG | NEG | NEG | |
|-----------|-----|------------|-----------|------|--|
| Silicon | ppm | 554 | 37 | O 71 | |
| Sodium | ppm | 43 | 6 | O 11 | |
| Potassium | ppm | 29 | 3 | 0 8 | |

| PQ | | 113 | | | |
|------------|-----|-------------|-----------|------------|--|
| Iron | ppm | <u> </u> | 90 | 150 | |
| Copper | ppm | 1 | O <1 | O <1 | |
| Lead | ppm | ○ <1 | O <1 | 0 | |
| Tin | ppm | 0 | O 0 | O 0 | |
| Aluminum | ppm | 173 | 10 | 18 | |
| Chromium | ppm | <u>14</u> | 1 | O 2 | |
| Molybdenum | ppm | ○ <1 | O 0 | O 0 | |
| Nickel | ppm | 2 | <1 | <1 | |
| Titanium | ppm | 8 | <1 | 1 | |
| Silver | ppm | 0 | <1 | <1 | |
| Manganese | ppm | 11 | O <1 | O 2 | |
| Vanadium | ppm | 0 | 0 | <1 | |
| | | | | | |

Diagnosis

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for topup/fill. We recommend an early resample to monitor this condition.Chromium and iron ppm levels are abnormal. Aluminum ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. Elemental levels of silicon (Si) and aluminum (AI) indicate aluminasilicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component. Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

| ADDITIVES | | | | | | | |
|------------|-----|-------------|----------|------------|--|--|--|
| Calcium | ppm | 165 | O 14 | 29 | | | |
| Magnesium | ppm | 41 | O 3 | o 5 | | | |
| Zinc | ppm | 32 | O 15 | 18 | | | |
| Phosphorus | ppm | 1479 | 2380 | 2273 | | | |
| Barium | ppm | 3 | 3 | O 12 | | | |
| Boron | ppm | 189 | 3 | 6 | | | |

Depot: SUMMIS
Unique No: 5746346
Signed: Kevin Marson
Report Date: 12 Mar 2024

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GRAPHS

