

OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id LINK-BELT 218V 218V (S/N V2L4-7706) Component Diesel Engine Fluid

DIESEL ENGINE OIL SAE 15W40 (7 GAL)

Dirtartoolo

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

Metal levels are typical for a components first oil change.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| SAMPLE INFORM | 1ATION | method | limit/base | current | history1 | history2 |
|------------------|----------|-------------|------------|-------------|----------|----------|
| Sample Number | | Client Info | | LBC0000028 | | |
| Sample Date | | Client Info | | 04 Apr 2024 | | |
| Machine Age | hrs | Client Info | | 100 | | |
| Oil Age | hrs | Client Info | | 100 | | |
| Oil Changed | | Client Info | | Not Changd | | |
| Sample Status | | | | NORMAL | | |
| CONTAMINATION | ١ | method | limit/base | current | history1 | history2 |
| Fuel | | WC Method | >5 | <1.0 | | |
| Water | | WC Method | >0.2 | NEG | | |
| Glycol | | WC Method | 20.2 | NEG | | |
| - | | | | - | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >100 | 7 | | |
| Chromium | ppm | ASTM D5185m | >20 | <1 | | |
| Nickel | ppm | ASTM D5185m | >4 | <1 | | |
| Titanium | ppm | ASTM D5185m | | 1 | | |
| Silver | ppm | ASTM D5185m | >3 | <1 | | |
| Aluminum | ppm | ASTM D5185m | >20 | 4 | | |
| Lead | ppm | ASTM D5185m | >40 | <1 | | |
| Copper | ppm | ASTM D5185m | >330 | 20 | | |
| Tin | ppm | ASTM D5185m | >15 | <1 | | |
| Vanadium | ppm | ASTM D5185m | | <1 | | |
| Cadmium | ppm | ASTM D5185m | | <1 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 250 | 145 | | |
| Barium | ppm | ASTM D5185m | 10 | 4 | | |
| Molybdenum | ppm | ASTM D5185m | 100 | 65 | | |
| Manganese | ppm | ASTM D5185m | | 4 | | |
| Magnesium | ppm | ASTM D5185m | 450 | 390 | | |
| Calcium | ppm | ASTM D5185m | 3000 | 1699 | | |
| Phosphorus | ppm | ASTM D5185m | 1150 | 1002 | | |
| Zinc | ppm | ASTM D5185m | 1350 | 1205 | | |
| Sulfur | ppm | ASTM D5185m | 4250 | 3566 | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 23 | | |
| Sodium | ppm | ASTM D5185m | >158 | 3 | | |
| Potassium | ppm | ASTM D5185m | >20 | 2 | | |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | *ASTM D7844 | >3 | 0.1 | | |
| Nitration | Abs/cm | *ASTM D7624 | | 4.2 | | |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 18.5 | | |
| FLUID DEGRADA | | method | limit/base | current | history1 | history2 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 13.9 | | |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 8.5 | 9.3 | | |
| | | | | | | |



35

30

25

20% 4ps/cm 10 5 0 Apr4/24

14.0

2.0 0.0 Apr4/24

18. 17 16 cSt (100°C)

Abnormal 12 11 Apr4/24

OIL ANALYSIS REPORT

| -IR (Direct Trend) | | VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------------|----------------------|-----------------------|----------------|-----------------------|---|-------------|----------|---------------------------------------|
| Oxidation Nitration | | White Metal | scalar | *Visual | NONE | NONE | | |
| normal-Sulfation | | 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 | | |
| | Apr4/24 - | Appearance | scalar | *Visual | NORML | NORML | | |
| | Api | Odor | scalar | *Visual | NORML | NORML | | |
| se Number | | Emulsified Water | scalar | *Visual | >0.2 | NEG | | |
| | | Free Water | scalar | *Visual | | NEG | | |
| nomal | | FLUID PROPERT | IFS | method | limit/base | current | history1 | history2 |
| 58 | | | | | | | | , , , , , , , , , , , , , , , , , , , |
| | | Visc @ 100°C | cSt | ASTM D445 | 14.4 | 14.2 | | |
| normal | | GRAPHS | | | | | | |
| | | Ferrous Alloys | | | | | | |
| | VC | iron | | | | | | |
| | C. Prov | 8 hickel | | | | | | |
| | | 6 | | | | | | |
| scosity @ 100°C | | | | | | | | |
| | | 4 | | | | | | |
| nomal | | 2 | | | | | | |
| | | 2 | | | | | | |
| 150 | | 0 4: | | | | | | |
| nomal | | Apr4/24 | | | Apr4/24 | | | |
| | | | | | A | | | |
| | VC | Non-ferrous Metal | S | | | | | |
| | And | copper | | | | | | |
| | | 15 - tin | | | | | | |
| | | | | | | | | |
| | | 톮 10- | | | | | | |
| | | | | | | | | |
| | | 5- | | | | | | |
| | | | | | | | | |
| | | 0 54 24 | | | 24 | | | |
| | | Apr4/2 | | | Apr4/2 | | | |
| | | Viscosity @ 100°C | | | | | | |
| | | ¹⁸ T | | | 14.0 | Base Number | | |
| | | 17 Abnormal | | | | Abnormal | | |
| | | 16 Abnormal | | | 12.0 | Q | | - |
| | i | | | | 0.0 (H/d) 0.0 (Md KOH/d) 0.0 (Md KOH/d) | Base | | |
| | | 5 15 - Base 3 14 - | | | ຍິ 8.0 ອ | | | |
| | ć | 1 | | | 4 6.0 | Abnormal | | |
| | | 13 Abnormal | | | 쁂 4.0 | | | |
| | | 12 | | | 2.0 | • | | |
| | | 11 | | | | ** | | |
| | | Apr4/24 | | | Apr4/24 | Apr4/24 | | Apr4/24 |
| | | 4 | | | A | A | | A |
| | | | | | | | | |
| | ratory : | WearCheck USA - 50 | 1 Madiso | | | Columbu | | Co P103900 |
| | | | Rece | ived : 08 | 8 Apr 2024 | | | formance Way |
| ANAR Samp | | LBC0000028 | | | | | | |
| Samp | lumber : | : 06140932 | Teste | ed : 08 | Apr 2024 | an Davia | | Columbus, OH |
| Samp Lab N Unique | Number : Number : | | Teste Diagr | ed : 08 nosed : 08 | | es Davis | | |

* - 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)

Submitted By: Brody Parsons Page 2 of 2

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