



OIL ANALYSIS REPORT

| | |
|-----------------|---------------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Area
K5 CONSTRUCTION CORPORATION - HODGKINS IL

Machine Id
4124

Component
Diesel Engine

Fluid
LEAHY WOLF PREMIUM 15W40 (38 hrs)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | LW0008514 | LW0007158 | LW0006501 |
| Sample Date | | Client Info | | 01 Feb 2024 | 14 Jun 2023 | 01 Mar 2023 |
| Machine Age | hrs | Client Info | | 7552 | 6471 | 5932 |
| Oil Age | hrs | Client Info | | 1081 | 539 | 423 |
| Filter Age | hrs | Client Info | | 0 | 539 | 423 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >100 | 7 | 4 | 4 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >4 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 4 | 5 | 4 |
| Lead | ppm | ASTM D5185m | >40 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >330 | <1 | 0 | <1 |
| Tin | ppm | ASTM D5185m | >15 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

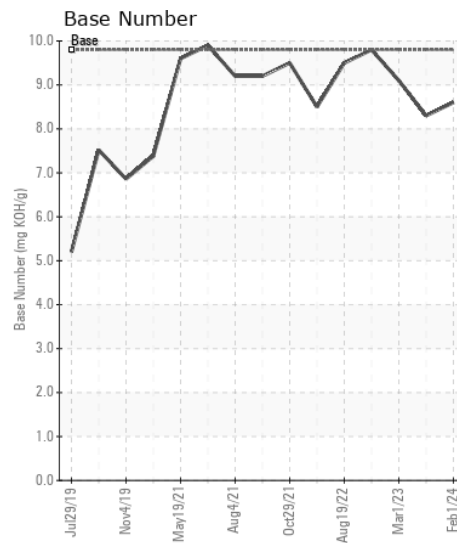
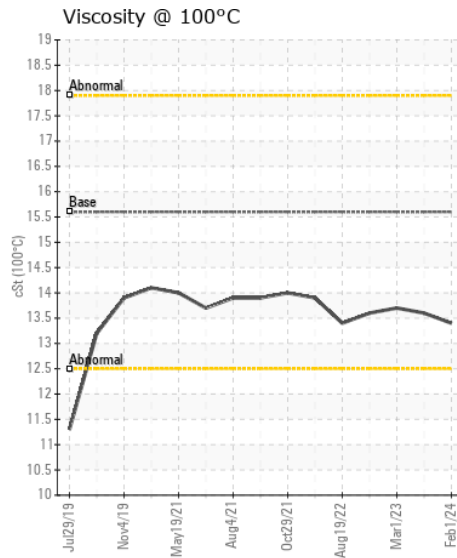
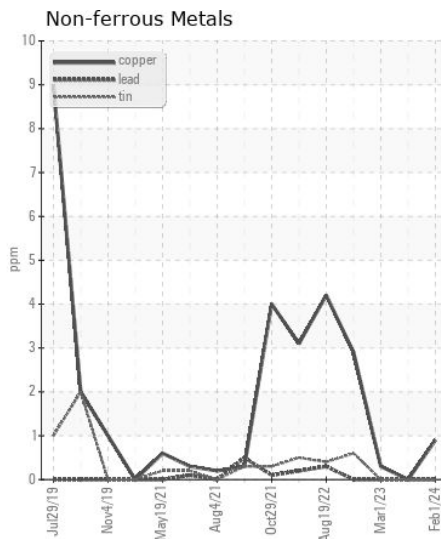
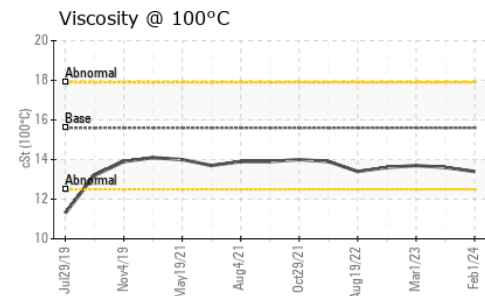
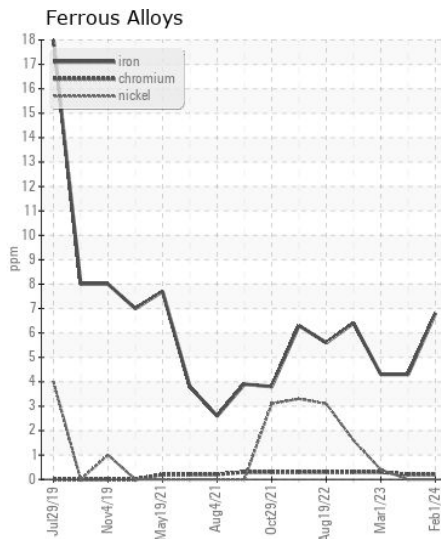
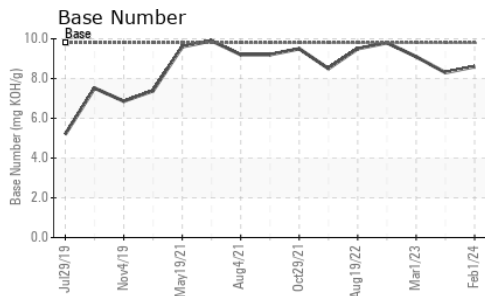
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >25 | 4 | 2 | 3 |
| Potassium | ppm | ASTM D5185m | >20 | 11 | 5 | 8 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.2 | 0.2 | 0.2 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 7.0 | 6.8 | 6.6 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 18.3 | 19.1 | 17.9 |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | NEG |

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.

| | | | | | | |
|------------------|----------|-------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Boron | ppm | ASTM D5185m | | 0 | 2 | 3 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 62 | 60 | 56 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 949 | 1016 | 875 |
| Calcium | ppm | ASTM D5185m | | 1104 | 1160 | 1209 |
| Phosphorus | ppm | ASTM D5185m | | 1043 | 1101 | 1037 |
| Zinc | ppm | ASTM D5185m | | 1240 | 1366 | 1259 |
| Sulfur | ppm | ASTM D5185m | | 3199 | 3930 | 3039 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 14.4 | 16.0 | 13.6 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 9.8 | 8.6 | 8.3 | 9.1 |
| Visc @ 100°C | cSt | ASTM D445 | 15.6 | 13.4 | 13.6 | 13.7 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LW0008514
Lab Number : 06087035
Unique Number : 10874480
Test Package : FLEET
Received : 13 Feb 2024
Tested : 14 Feb 2024
Diagnosed : 14 Feb 2024 - Wes Davis

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To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - 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)