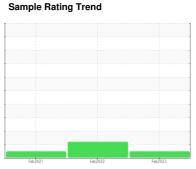


# **OIL ANALYSIS REPORT**

# **CURING** [CURING] LINE 1 HYDRAULIC CURING PRESS

Component Hydraulic System

**NOT GIVEN (500 LTR)** 





### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

|                  |          | Fel          | 2021       | Feb 2022 Feb 20 | 23                |             |
|------------------|----------|--------------|------------|-----------------|-------------------|-------------|
| SAMPLE INFORM    | MATION   | method       | limit/base | current         | history1          | history2    |
| Sample Number    |          | Client Info  |            | WC0752530       | WC0641705         | WC0512283   |
| Sample Date      |          | Client Info  |            | 05 Feb 2023     | 28 Feb 2022       | 18 Feb 2021 |
| Machine Age      |          | Client Info  |            | 0               | 0                 | 0           |
| Oil Age          |          | Client Info  |            | 0               | 0                 | 0           |
| Oil Changed      |          | Client Info  |            | N/A             | N/A               | N/A         |
| Sample Status    |          |              |            | NORMAL          | ABNORMAL          | NORMAL      |
| WEAR METALS      |          | method       | limit/base | current         | history1          | history2    |
| Iron             | ppm      | ASTM D5185m  | >20        | 2               | 2                 | <1          |
| Chromium         | ppm      | ASTM D5185m  | >20        | 2               | <1                | <1          |
| Nickel           | ppm      | ASTM D5185m  | >20        | 0               | 0                 | 0           |
| Titanium         | ppm      | ASTM D5185m  |            | 0               | 0                 | 0           |
| Silver           | ppm      | ASTM D5185m  |            | 0               | 0                 | <1          |
| Aluminum         | ppm      | ASTM D5185m  | >20        | 0               | 0                 | 0           |
| Lead             | ppm      | ASTM D5185m  | >20        | 0               | 0                 | <1          |
| Copper           | ppm      | ASTM D5185m  | >20        | 5               | 5                 | 3           |
| Tin              | ppm      | ASTM D5185m  | >20        | 0               | <1                | 0           |
| Antimony         | ppm      | ASTM D5185m  |            |                 | 0                 | 0           |
| Vanadium         | ppm      | ASTM D5185m  |            | 0               | 0                 | 0           |
| Cadmium          | ppm      | ASTM D5185m  |            | 0               | 0                 | 0           |
| ADDITIVES        |          | method       | limit/base | current         | history1          | history2    |
| Boron            | ppm      | ASTM D5185m  |            | 0               | 0                 | 0           |
| Barium           | ppm      | ASTM D5185m  |            | 0               | 0                 | 1           |
| Molybdenum       | ppm      | ASTM D5185m  |            | 0               | 0                 | 0           |
| Manganese        | ppm      | ASTM D5185m  |            | 0               | 0                 | 0           |
| Magnesium        | ppm      | ASTM D5185m  |            | 0               | 0                 | 0           |
| Calcium          | ppm      | ASTM D5185m  |            | 106             | 108               | 112         |
| Phosphorus       | ppm      | ASTM D5185m  |            | 445             | 443               | 469         |
| Zinc             | ppm      | ASTM D5185m  |            | 36              | 37                | 34          |
| Sulfur           | ppm      | ASTM D5185m  |            | 1867            | 1577              | 1793        |
| CONTAMINANTS     | 3        | method       | limit/base | current         | history1          | history2    |
| Silicon          | ppm      | ASTM D5185m  | >15        | <1              | 1                 | <1          |
| Sodium           | ppm      | ASTM D5185m  |            | 2               | <1                | 0           |
| Potassium        | ppm      | ASTM D5185m  | >20        | 0               | 0                 | 0           |
| Water            | %        | ASTM D6304   | >0.05      | NEG             | NEG               | NEG         |
| FLUID CLEANLIN   | IESS     | method       | limit/base | current         | history1          | history2    |
| Particles >4µm   |          | ASTM D7647   | >5000      | 4501            | <u>▲</u> 24788    | 1389        |
| Particles >6µm   |          | ASTM D7647   | >1300      | 667             | ▲ 3529            | 74          |
| Particles >14µm  |          | ASTM D7647   | >160       | 15              | <b>▲</b> 185      | 6           |
| Particles >21µm  |          | ASTM D7647   | >40        | 3               | 30                | 2           |
| Particles >38µm  |          | ASTM D7647   | >10        | 0               | 1                 | 0           |
| Particles >71µm  |          | ASTM D7647   | >3         | 0               | 0                 | 0           |
| Oil Cleanliness  |          | ISO 4406 (c) | >19/17/14  | 19/17/11        | <u>△</u> 22/19/15 | 18/13/10    |
| FLUID DEGRADA    | NOITA    | method       | limit/base | current         | history1          | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D8045   |            | 0.074           | 0.205             | 0.080       |



## **OIL ANALYSIS REPORT**







Certificate L2367

Laboratory Sample No.

Lab Number **Unique Number** 

: WC0752530 : 05759395 : 10324002 Test Package : PLANT

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 06 Feb 2023 Recieved : 07 Feb 2023

Diagnosed

Diagnostician : Jonathan Hester

Contact: CHRIS NAPIER To discuss this sample report, contact Customer Service at 1-800-237-1369.

christopher.napier@nokiantyres.com T: (423)457-3121

**NOKIAN TYRES US OPERATIONS LLC** 

520 NOKIAN TYRES DRIVE

\* - 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)

Report Id: NOKDAY [WUSCAR] 05759395 (Generated: 12/26/2023 15:04:02) Rev: 1

DAYTON, TN US 37321