



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

Machine Id  
**HAMM HC 120iP WGH0H252HHAA00249**

Component  
**Hydraulic System**

Fluid  
**{not provided} (--- GAL)**

### RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current     | History1    | History2 |
|----------------|-----|-------------|-----------|-------------|-------------|----------|
| Sample Number  |     | Client Info |           | JR0219700   | JR0203679   | ---      |
| Sample Date    |     | Client Info |           | 24 Jun 2024 | 30 Jan 2024 | ---      |
| Machine Age    | hrs | Client Info |           | 1139        | 570         | ---      |
| Oil Age        | hrs | Client Info |           | 1139        | 570         | ---      |
| Filter Age     | hrs | Client Info |           | 0           | 570         | ---      |
| Oil Changed    |     | Client Info |           | Not Changd  | Not Changd  | ---      |
| Filter Changed |     | Client Info |           | Not Changd  | Not Changd  | ---      |
| Sample Status  |     |             |           | ABNORMAL    | NORMAL      | ---      |

### WEAR

All component wear rates are normal.

| PQ           | UOM    | Method      | Limit/Abn | Current | History1 | History2 |
|--------------|--------|-------------|-----------|---------|----------|----------|
| PQ           |        | ASTM D8184  |           | 22      | 15       | ---      |
| Iron         | ppm    | ASTM D5185m | >20       | 0       | 5        | ---      |
| Chromium     | ppm    | ASTM D5185m | >10       | 0       | 0        | ---      |
| Nickel       | ppm    | ASTM D5185m | >10       | 0       | <1       | ---      |
| Titanium     | ppm    | ASTM D5185m |           | 0       | 0        | ---      |
| Silver       | ppm    | ASTM D5185m |           | 0       | <1       | ---      |
| Aluminum     | ppm    | ASTM D5185m | >10       | <1      | <1       | ---      |
| Lead         | ppm    | ASTM D5185m | >10       | <1      | 2        | ---      |
| Copper       | ppm    | ASTM D5185m | >75       | 0       | 3        | ---      |
| Tin          | ppm    | ASTM D5185m | >10       | 0       | <1       | ---      |
| Vanadium     | ppm    | ASTM D5185m |           | 0       | 0        | ---      |
| White Metal  | scalar | *Visual     | NONE      | NONE    | NONE     | ---      |
| Yellow Metal | scalar | *Visual     | NONE      | NONE    | NONE     | ---      |

### CONTAMINATION

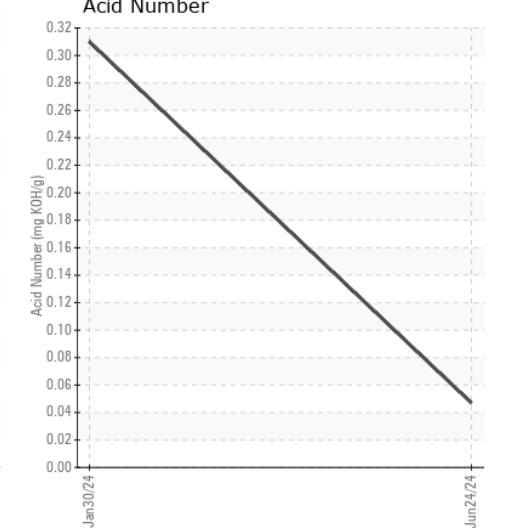
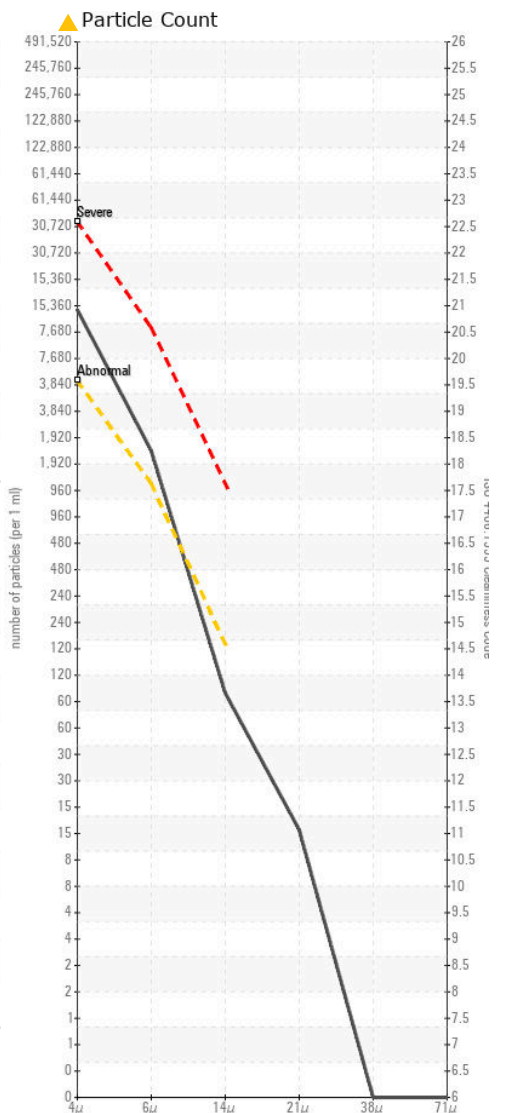
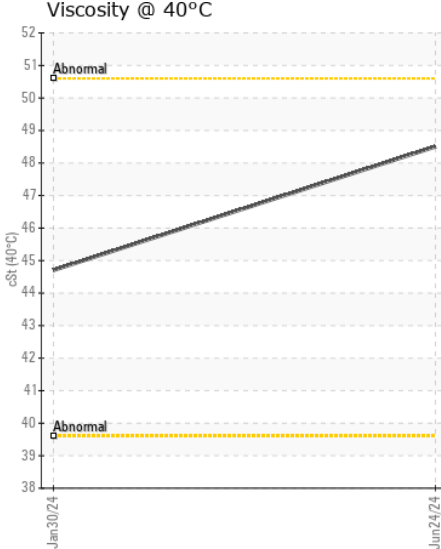
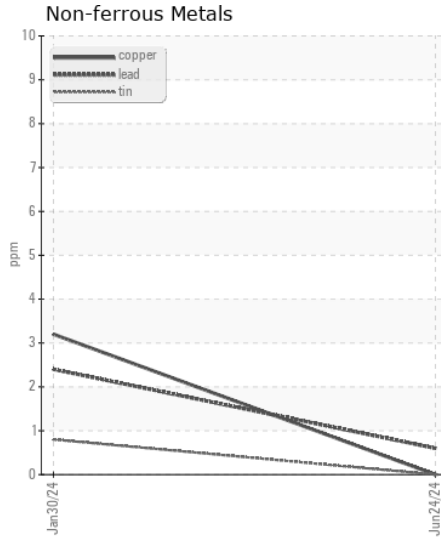
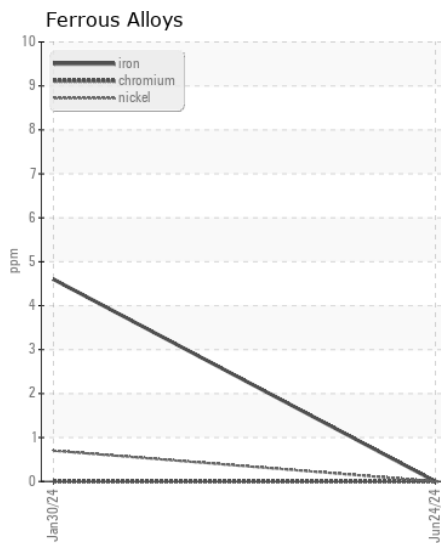
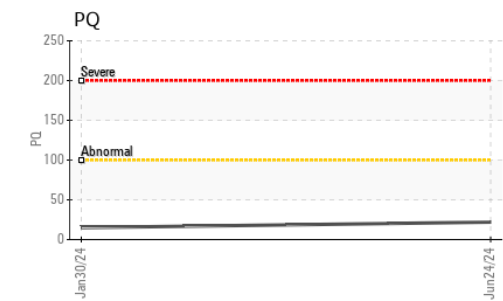
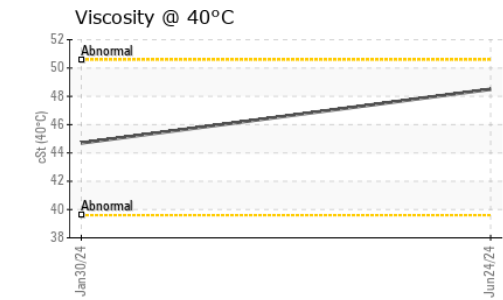
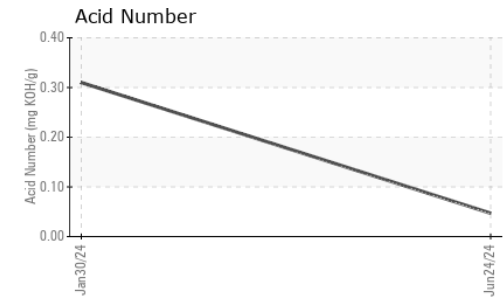
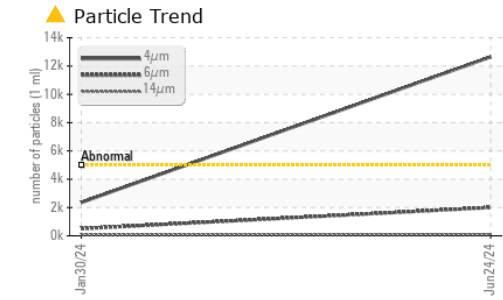
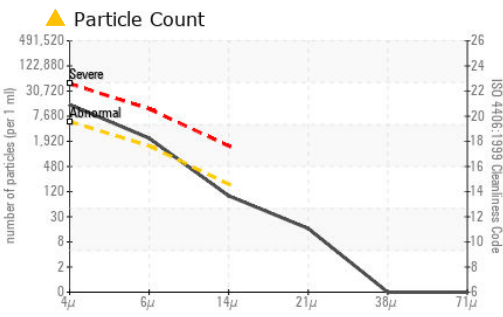
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

|                  |        |              |           |            |          |     |
|------------------|--------|--------------|-----------|------------|----------|-----|
| Silicon          | ppm    | ASTM D5185m  | >20       | 1          | 4        | --- |
| Potassium        | ppm    | ASTM D5185m  | >20       | <1         | 3        | --- |
| Water            |        | WC Method    | >0.1      | NEG        | NEG      | --- |
| Particles >4µm   |        | ASTM D7647   | >5000     | ▲ 12644    | 2360     | --- |
| Particles >6µm   |        | ASTM D7647   | >1300     | ● 1998     | 508      | --- |
| Particles >14µm  |        | ASTM D7647   | >160      | 84         | 56       | --- |
| Particles >21µm  |        | ASTM D7647   | >40       | 14         | 19       | --- |
| Particles >38µm  |        | ASTM D7647   | >10       | 0          | 1        | --- |
| Particles >71µm  |        | ASTM D7647   | >3        | 0          | 0        | --- |
| Oil Cleanliness  |        | ISO 4406 (c) | >19/17/14 | ▲ 21/18/14 | 18/16/13 | --- |
| Silt             | scalar | *Visual      | NONE      | NONE       | NONE     | --- |
| Debris           | scalar | *Visual      | NONE      | NONE       | NONE     | --- |
| Sand/Dirt        | scalar | *Visual      | NONE      | NONE       | NONE     | --- |
| Appearance       | scalar | *Visual      | NORML     | NORML      | NORML    | --- |
| Odor             | scalar | *Visual      | NORML     | NORML      | NORML    | --- |
| Emulsified Water | scalar | *Visual      | >0.1      | NEG        | NEG      | --- |

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

|                  |          |             |  |       |      |     |
|------------------|----------|-------------|--|-------|------|-----|
| Sodium           | ppm      | ASTM D5185m |  | 0     | 2    | --- |
| Boron            | ppm      | ASTM D5185m |  | <1    | 0    | --- |
| Barium           | ppm      | ASTM D5185m |  | 0     | 0    | --- |
| Molybdenum       | ppm      | ASTM D5185m |  | <1    | <1   | --- |
| Manganese        | ppm      | ASTM D5185m |  | <1    | 2    | --- |
| Magnesium        | ppm      | ASTM D5185m |  | 0     | 66   | --- |
| Calcium          | ppm      | ASTM D5185m |  | 7     | 22   | --- |
| Phosphorus       | ppm      | ASTM D5185m |  | 704   | 272  | --- |
| Zinc             | ppm      | ASTM D5185m |  | 24    | 349  | --- |
| Sulfur           | ppm      | ASTM D5185m |  | 0     | 860  | --- |
| Acid Number (AN) | mg KOH/g | ASTM D8045  |  | 0.047 | 0.31 | --- |
| Visc @ 40°C      | cSt      | ASTM D445   |  | 48.5  | 44.7 | --- |



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0219700 **Received** : 01 Jul 2024  
**Lab Number** : 06224461 **Tested** : 02 Jul 2024  
**Unique Number** : 11102658 **Diagnosed** : 02 Jul 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: PQ )

**CARLTON'S BACKHOE**  
 9550 STATESVILLE ROAD  
 CHARLOTTE, NC  
 US 28269  
 Contact: LEO

Certificate L2367  
 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)

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