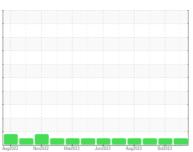


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Harris Baler Machine Id Harris Baler

Component **Hydraulic System**

SHELL AW HYDRAULIC S2 46 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

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.

| SAMPLE INFORMA | ATION | method | limit/base | current | history1 | history2 |
|--|--|---|---|---|---|---|
| Sample Number | | Client Info | | PE0000727 | PE0000617 | PE0000612 |
| Sample Date | | Client Info | | 21 Nov 2023 | 13 Oct 2023 | 13 Sep 2023 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINATION | | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.05 | NEG | NEG | NEG |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| PQ | | ASTM D8184 | | 18 | 18 | 14 |
| Iron | ppm | ASTM D5185m | >20 | 13 | 12 | 14 |
| Chromium | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | 2 | <1 |
| Lead | ppm | ASTM D5185m | >20 | 4 | 3 | 3 |
| Copper | ppm | ASTM D5185m | >20 | 28 | 28 | 28 |
| Tin | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| 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 |
| Darium | | | | • | | |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | ppm ppm | ASTM D5185m ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | | | | | | |
| Molybdenum Manganese | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum Manganese Magnesium | ppm ppm | ASTM D5185m ASTM D5185m | | 0 | 0 <1 | 0 <1 |
| Molybdenum Manganese Magnesium Calcium | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | | 0 0 5 | 0 <1 <1 | 0 <1 9 |
| Molybdenum Manganese Magnesium Calcium Phosphorus | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 0 0 5 47 | 0 <1 <1 47 | 0 <1 9 50 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 0 0 5 47 331 | 0 <1 <1 47 266 | 0 <1 9 50 211 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 0 0 5 47 331 397 | 0 <1 <1 47 266 360 | 0 <1 9 50 211 357 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 0 0 5 47 331 397 1037 | 0 <1 <1 47 266 360 843 | 0 <1 9 50 211 357 1017 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 0 0 5 47 331 397 1037 | 0 <1 <1 <1 47 266 360 843 history1 | 0 <1 9 50 211 357 1017 history2 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium | pppm pppm pppm pppm pppm pppm pppm | ASTM D5185m | >15 | 0 0 5 47 331 397 1037 current | 0 <1 <1 <1 <47 266 360 843 history1 2 | 0 <1 9 50 211 357 1017 history2 2 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium | pppm pppm pppm pppm pppm pppm pppm | ASTM D5185m | >15 | 0 0 5 47 331 397 1037 current 1 | 0 <1 <1 <1 <47 266 360 843 history1 2 | 0 <1 9 50 211 357 1017 history2 2 1 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium | pppm pppm pppm pppm pppm pppm pppm | ASTM D5185m | >15 >20 | 0 0 5 47 331 397 1037 current 1 2 | 0 <1 <1 <1 <47 266 360 843 history1 2 1 <1 | 0 <1 9 50 211 357 1017 history2 2 1 0 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE | pppm pppm pppm pppm pppm pppm pppm | ASTM D5185m | >15 >20 limit/base | 0 0 5 47 331 397 1037 current 1 2 2 | 0 <1 <1 <1 <47 266 360 843 history1 2 1 <1 history1 | 0 <1 9 50 211 357 1017 history2 2 1 0 history2 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm | pppm pppm pppm pppm pppm pppm pppm | ASTM D5185m | >15 >20 limit/base >5000 | 0 0 5 47 331 397 1037 current 1 2 2 current 1097 | 0 <1 <1 <1 <47 266 360 843 history1 2 1 <1 history1 356 | 0 <1 9 50 211 357 1017 history2 2 1 0 history2 363 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >6µm | pppm pppm pppm pppm pppm pppm pppm | ASTM D5185m method ASTM D5185m | >15 >20 limit/base >5000 >1300 | 0 0 5 47 331 397 1037 current 1 2 2 current 1097 246 | 0 <1 <1 <1 <47 266 360 843 history1 2 1 <1 history1 356 126 | 0 <1 9 50 211 357 1017 history2 2 1 0 history2 363 115 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >14µm Particles >21µm | pppm pppm pppm pppm pppm pppm pppm | ASTM D5185m Method ASTM D5185m | >15 >20 limit/base >5000 >1300 >160 | 0 0 5 47 331 397 1037 current 1 2 2 current 1097 246 15 | 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 | 0 <1 9 50 211 357 1017 history2 2 1 0 history2 363 115 17 |
| Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >6µm Particles >14µm | pppm pppm pppm pppm pppm pppm pppm | ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 | >15 >20 limit/base >5000 >1300 >160 >40 | 0 0 5 47 331 397 1037 current 1 2 2 current 1097 246 15 | 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 | 0 <1 9 50 211 357 1017 history2 2 1 0 history2 363 115 17 6 |

ISO 4406 (c) >19/17/14

17/15/11

Oil Cleanliness

16/14/11

16/14/11



OIL ANALYSIS REPORT







Lab Number **Unique Number**

: 06017235 : 10756379

Diagnosed

Diagnostician : Jonathan Hester Test Package : PLANT (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

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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