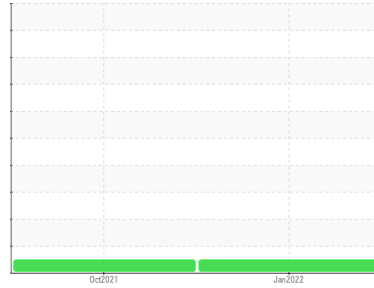




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
EXTRUDER-050

Component
Gearbox

Fluid
SHELL MORLINA S4 B 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|----------|
| Sample Number | Client Info | | WC0353857 | WC0568836 | --- |
| Sample Date | Client Info | | 18 Jan 2022 | 06 Oct 2021 | --- |
| Machine Age | mths | Client Info | 0 | 0 | --- |
| Oil Age | mths | Client Info | 0 | 0 | --- |
| Oil Changed | Client Info | | Not Changed | Not Changed | --- |
| Sample Status | | | NORMAL | NORMAL | --- |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.2 | NEG | NEG | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >200 | 2 | 3 | --- |
| Chromium | ppm | ASTM D5185m >15 | 0 | 0 | --- |
| Nickel | ppm | ASTM D5185m >15 | 0 | 0 | --- |
| Titanium | ppm | ASTM D5185m | 0 | 0 | --- |
| Silver | ppm | ASTM D5185m | <1 | <1 | --- |
| Aluminum | ppm | ASTM D5185m >25 | 0 | <1 | --- |
| Lead | ppm | ASTM D5185m >100 | <1 | <1 | --- |
| Copper | ppm | ASTM D5185m >200 | 73 | 69 | --- |
| Tin | ppm | ASTM D5185m >25 | <1 | <1 | --- |
| Antimony | ppm | ASTM D5185m | <1 | 0 | --- |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | --- |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | --- |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | <1 | 3 | --- |
| Barium | ppm | ASTM D5185m | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | 0 | <1 | --- |
| Manganese | ppm | ASTM D5185m | <1 | <1 | --- |
| Magnesium | ppm | ASTM D5185m | 0 | 0 | --- |
| Calcium | ppm | ASTM D5185m | <1 | 1 | --- |
| Phosphorus | ppm | ASTM D5185m | 270 | 274 | --- |
| Zinc | ppm | ASTM D5185m | 23 | 27 | --- |
| Sulfur | ppm | ASTM D5185m | 1654 | 1492 | --- |

CONTAMINANTS

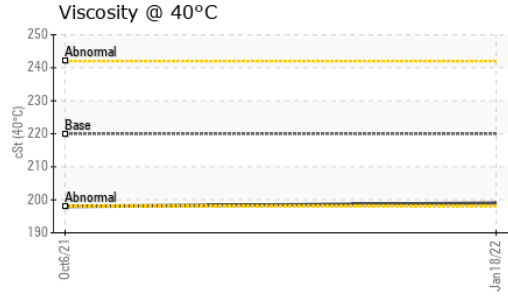
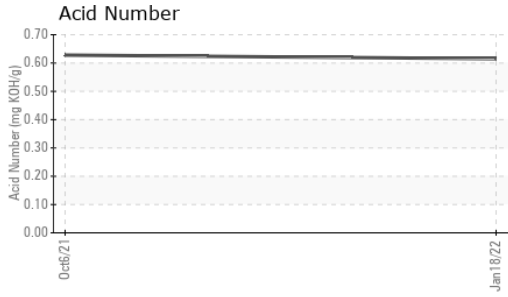
| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|----------|----------|----------|
| Silicon | ppm | ASTM D5185m >50 | 8 | 5 | --- |
| Sodium | ppm | ASTM D5185m | 0 | 2 | --- |
| Potassium | ppm | ASTM D5185m >20 | 0 | 0 | --- |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.615 | 0.628 | --- |



OIL ANALYSIS REPORT



| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE | --- |
| Silt | scalar | *Visual | NONE | NONE | --- |
| Debris | scalar | *Visual | NONE | NONE | VLITE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | --- |
| Appearance | scalar | *Visual | NORML | NORML | --- |
| Odor | scalar | *Visual | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | --- |
| Free Water | scalar | *Visual | | NEG | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 220 | 199 | 198 | --- |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

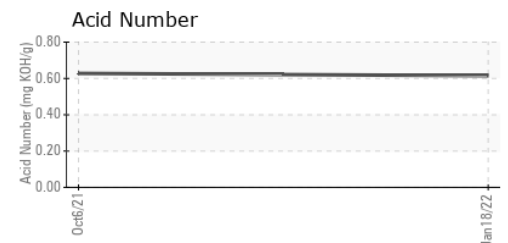
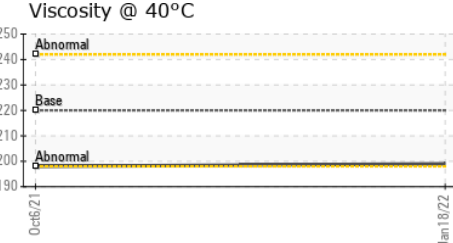
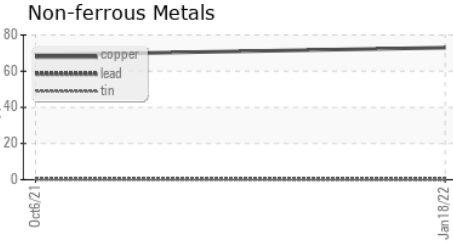
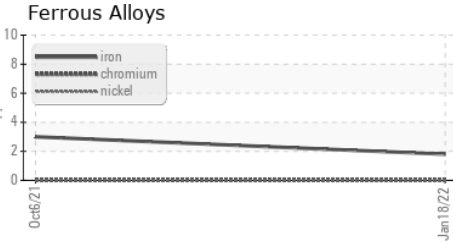
Color

no image

Bottom

no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0353857 **Received** : 20 Jan 2022
Lab Number : 05447857 **Diagnosed** : 21 Jan 2022
Unique Number : 9817051 **Diagnostician** : Wes Davis
Test Package : IND 2

PRINSCO - PRINSBURG
 PO BOX 265
 PRINSBURG, MN
 US 56281
 Contact: KYLE SPORTEL
 kyles@prinsco.com
 T: (320)978-4116
 F:

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)