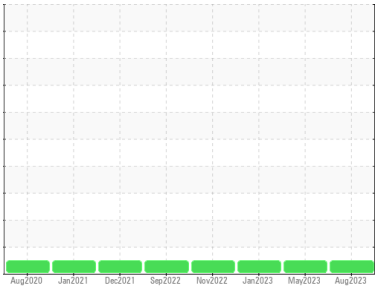
# OIL ANALYSIS REPORT

Sample Rating Trend




**NORMAL**

Machine Id
## KOBELCO 350HP (S/N 09H6111767)
Component
**Air Compressor**
Fluid
**USPI OFS AIR 68 (--- 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 INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **USPM29225** | USPM28338 | USPM26430 |
| Sample Date | | Client Info | | **16 Aug 2023** | 25 May 2023 | 30 Jan 2023 |
| Machine Age | hrs | Client Info | | **0** | 0 | 25933 |
| Oil Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Changed | | Client Info | | **N/A** | N/A | N/A |
| Sample Status | | | | **NORMAL** | NORMAL | NORMAL |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >50 | **1** | 1 | <1 |
| Chromium | ppm | ASTM D5185m | >4 | **0** | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >4 | **0** | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | **<1** | <1 | 0 |
| Silver | ppm | ASTM D5185m | | **0** | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | **0** | 2 | 0 |
| Lead | ppm | ASTM D5185m | >20 | **0** | <1 | 0 |
| Copper | ppm | ASTM D5185m | >40 | **2** | 1 | <1 |
| Tin | ppm | ASTM D5185m | >5 | **0** | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | **<1** | <1 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | <1 | 0 |

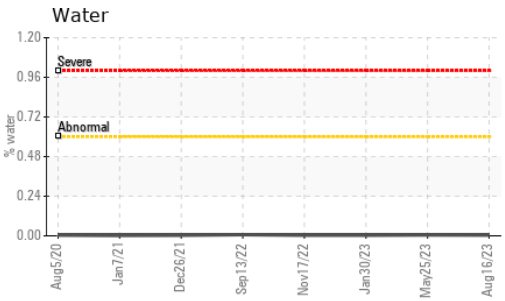
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Barium | ppm | ASTM D5185m | | **0** | 0 | 2 |
| Molybdenum | ppm | ASTM D5185m | | **0** | <1 | 0 |
| Manganese | ppm | ASTM D5185m | | **<1** | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | **2** | 6 | <1 |
| Calcium | ppm | ASTM D5185m | | **4** | <1 | 2 |
| Phosphorus | ppm | ASTM D5185m | | **639** | 617 | 628 |
| Zinc | ppm | ASTM D5185m | | **13** | 16 | 17 |
| Sulfur | ppm | ASTM D5185m | | **1016** | 626 | 775 |

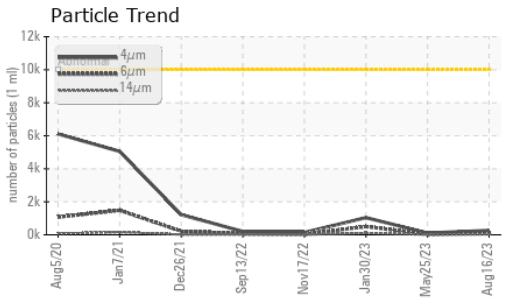
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >25 | **1** | 2 | 2 |
| Sodium | ppm | ASTM D5185m | | **1** | 1 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | **2** | <1 | 1 |
| Water | % | ASTM D6304 | >0.6 | **0.004** | 0.005 | 0.003 |
| ppm Water | ppm | ASTM D6304 | >6000 | **43.8** | 55.8 | 36.4 |

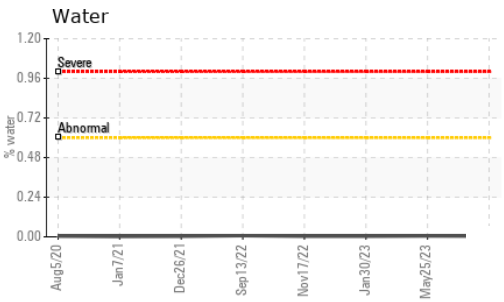
| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >10000 | **263** | 107 | 1041 |
| Particles >6µm | | ASTM D7647 | >2500 | **123** | 35 | 497 |
| Particles >14µm | | ASTM D7647 | >640 | **29** | 3 | 109 |
| Particles >21µm | | ASTM D7647 | >160 | **10** | 1 | 24 |
| Particles >38µm | | ASTM D7647 | >40 | **2** | 0 | 2 |
| Particles >71µm | | ASTM D7647 | >10 | **1** | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/16 | **15/14/12** | 14/12/9 | 17/16/14 |

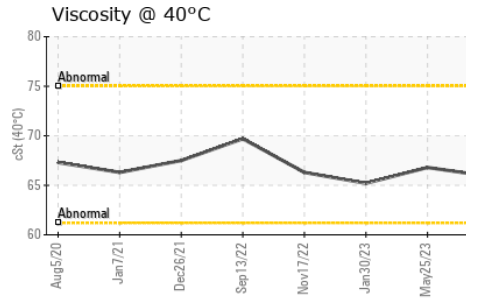
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **0.49** | 0.51 | 0.44 |

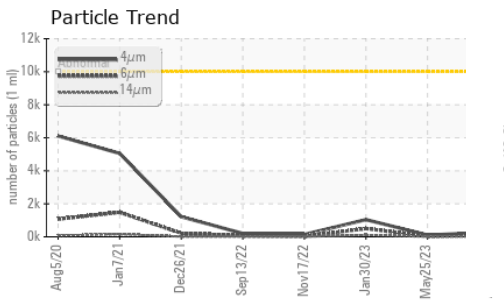
# OIL ANALYSIS REPORT



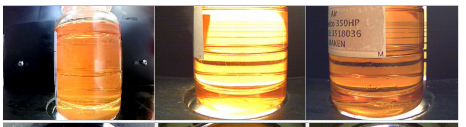
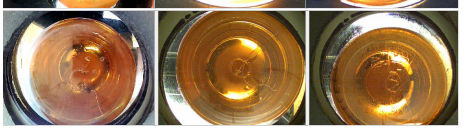



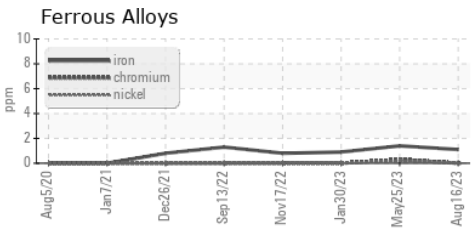



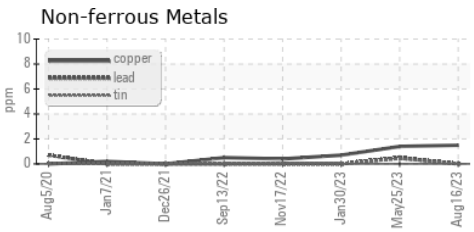

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| 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 | >0.6 | **NEG** | NEG | NEG |
| Free Water | scalar | *Visual | | **NEG** | NEG | NEG |

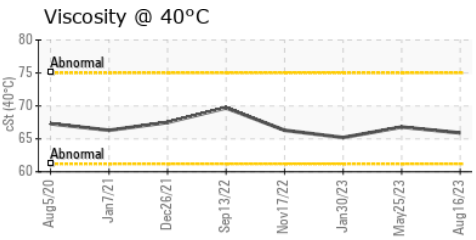
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | | **65.9** | 66.8 | 65.2 |

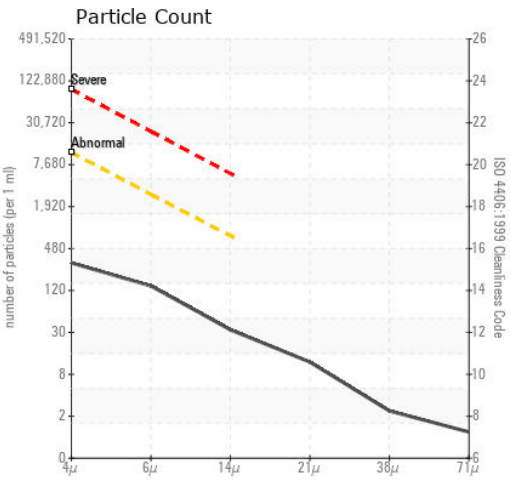
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

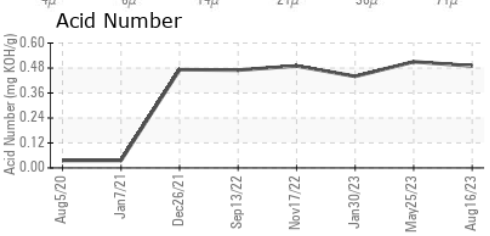
## GRAPHS




**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : USPM29225
**Lab Number** : 05927282
**Unique Number** : 10607229
**Test Package** : IND 2

**Received** : 17 Aug 2023
**Diagnosed** : 21 Aug 2023
**Diagnostician** : Doug Bogart

Certificate L2367

**KraftHeinz - Kendallville - Plant 8378**
151 W OHIO ST
KENDALLVILLE, IN
US 46755
Contact: Service Manager

*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)*

T:
F: