

OIL ANALYSIS REPORT

VIS DEBRIS

Machine Id

R1 RESTRAINER ROOM

Component Hydraulic System USPI FG HYD 46 (--- LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

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

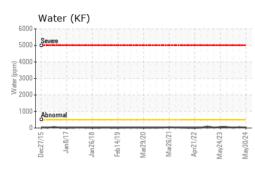
| | | c2015 Jan20 | 17 Jan2018 Feb2019 | Mar2020 Mar2021 Apr2022 Ma | y2023 May20 | |
|------------------|----------|--------------|---------------------------|----------------------------|-------------|-------------|
| SAMPLE INFORM | | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | USPM36420 | USPM30213 | USPM31460 |
| Sample Date | | Client Info | | 30 May 2024 | 27 Feb 2024 | 27 Nov 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 | | | | ABNORMAL | NORMAL | NORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| ron | ppm | ASTM D5185m | >20 | 0 | 0 | <1 |
| Chromium | ppm | | >20 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| Lead | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >20 | 0 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >20 | 0 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 0 | 1 | <1 |
| Calcium | ppm | ASTM D5185m | | 0 | 2 | 2 |
| Phosphorus | ppm | ASTM D5185m | 725 | 547 | 532 | 461 |
| Zinc | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | 625 | 577 | 549 | 511 |
| CONTAMINANTS | ; | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >15 | 2 | 2 | 3 |
| Sodium | ppm | ASTM D5185m | | 1 | 1 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | 1 | <1 | 1 |
| Water | % | ASTM D6304 | >0.05 | 0.003 | 0.004 | 0.003 |
| ppm Water | ppm | ASTM D6304 | >500 | 27 | 43 | 26 |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >5000 | | 402 | 671 |
| Particles >6µm | | ASTM D7647 | >1300 | | 105 | 211 |
| Particles >14µm | | ASTM D7647 | >160 | | 10 | 20 |
| Particles >21µm | | ASTM D7647 | >40 | | 2 | 5 |
| Particles >38µm | | ASTM D7647 | >10 | | 0 | 0 |
| Particles >71µm | | ASTM D7647 | | | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | | 16/14/10 | 17/15/11 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.36 | 0.37 | 0.45 | 0.33 |

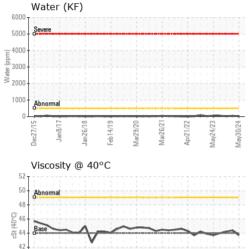
Report Id: TYSDAKSLA [WUSCAR] 06199227 (Generated: 06/09/2024 19:00:45) Rev: 1

Contact/Location: - TYSDAKSLA Page 1 of 2



OIL ANALYSIS REPORT





eb14/19 lan26/18

1=r29/20

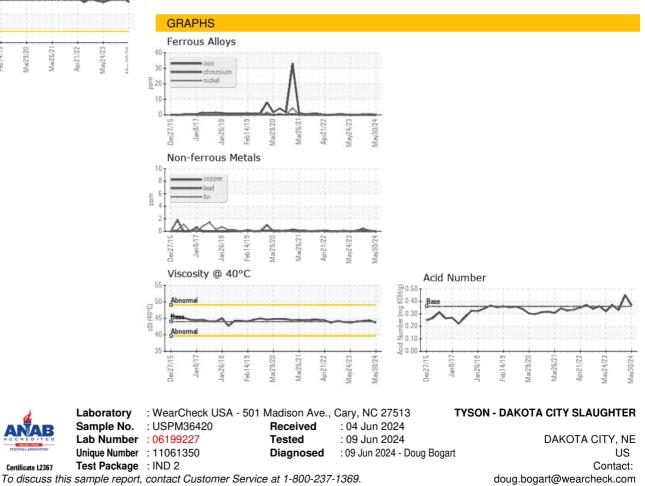
Mar26/21

| scalar | *Visual | | | | |
|------------------|--|--|---|--|---|
| | visudi | NONE | NONE | NONE | NONE |
| scalar | *Visual | NONE | NONE | NONE | NONE |
| scalar | *Visual | NONE | NONE | NONE | NONE |
| scalar | *Visual | NONE | NONE | NONE | NONE |
| scalar | *Visual | NONE | A MODER | NONE | NONE |
| scalar | *Visual | NONE | NONE | NONE | NONE |
| scalar | *Visual | NORML | NORML | NORML | NORML |
| scalar | *Visual | NORML | NORML | NORML | NORML |
| scalar | *Visual | >0.05 | NEG | NEG | NEG |
| scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPERTIES | | limit/base | current | history1 | history2 |
| cSt | ASTM D445 | 44 | 43.7 | 44.4 | 44.2 |
| SAMPLE IMAGES | | limit/base | current | history1 | history2 |
| | | | | A. | • |
| | scalar scalar scalar scalar scalar scalar scalar scalar scalar | scalar *Visual scalar *Visual scalar *Visual scalar *Visual scalar *Visual scalar *Visual scalar *Visual scalar *Visual scalar *Visual scalar *Xisual | scalar *Visual NONE scalar *Visual NONE scalar *Visual NONE scalar *Visual NONE scalar *Visual NORML scalar *Visual NORML scalar *Visual >0.05 scalar *Visual IES method limit/base cSt ASTM D445 44 | scalar*VisualNONENONEscalar*VisualNONENONEscalar*VisualNONEMODERscalar*VisualNONENONEscalar*VisualNORMLNORMLscalar*VisualNORMLNORMLscalar*VisualNORMLNORMLscalar*VisualNORMLNORMLscalar*Visual>0.05NEGscalar*VisualImit/basecurrentcStASTM D4454443.7methodlimit/basecurrent | scalar*VisualNONENONENONEscalar*VisualNONENONENONEscalar*VisualNONEMODERNONEscalar*VisualNONENONENONEscalar*VisualNORMLNORMLNORMLscalar*VisualNORMLNORMLNORMLscalar*VisualNORMLNORMLNORMLscalar*Visual>0.05NEGNEGscalar*VisualNORMLNEGNEGscalar*VisualImit/basecurrenthistory1cStASTM D4454443.744.4scalar*Imit/basecurrenthistory1 |

Bottom

* - 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)





40 Abnorma

38

Dec27/15

lan 8/1

Report Id: TYSDAKSLA [WUSCAR] 06199227 (Generated: 06/09/2024 19:00:45) Rev: 1

Certificate 12367

Contact/Location: - TYSDAKSLA

Page 2 of 2

T:

F: