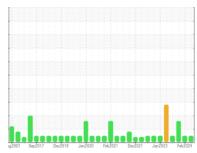


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
2 PRE-BREAK
Component

Component Gearbox

USPI 3206 EP (--- 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.

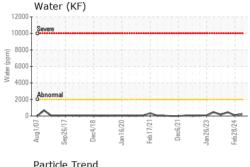
Fluid Condition

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

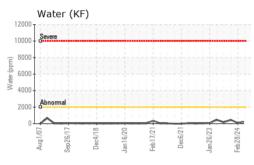
| | | ig2007 Sep2 | 017 Dec2018 Jan2020 | Feb2021 Dec2021 Jan202 | 3 Feb2024 | |
|------------------|----------|--------------|---------------------|------------------------|-------------|-------------|
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | USPM37618 | USPM30290 | USPM31370 |
| Sample Date | | Client Info | | 09 Jun 2024 | 28 Feb 2024 | 26 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 | | | | NORMAL | NORMAL | ABNORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >200 | 0 | 0 | 0 |
| Chromium | ppm | ASTM D5185m | >15 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >15 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Lead | ppm | ASTM D5185m | >100 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >200 | <1 | 0 | 0 |
| Tin | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| 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 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Calcium | ppm | ASTM D5185m | | 0 | 0 | 2 |
| Phosphorus | ppm | ASTM D5185m | | 144 | 124 | 149 |
| Zinc | ppm | ASTM D5185m | | 0 | 2 | 0 |
| Sulfur | ppm | ASTM D5185m | | 10197 | 8436 | 9004 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >50 | 1 | 2 | 1 |
| Sodium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | 1 |
| Water | % | ASTM D6304 | >0.2 | 0.021 | 0.007 | 0.045 |
| ppm Water | ppm | ASTM D6304 | >2000 | 214 | 75 | 450 |
| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >20000 | 3579 | 804 | 1508 |
| Particles >6µm | | ASTM D7647 | >5000 | 1674 | 220 | 271 |
| Particles >14µm | | ASTM D7647 | >640 | 302 | 19 | 14 |
| Particles >21µm | | ASTM D7647 | >160 | 73 | 7 | 5 |
| Particles >38µm | | ASTM D7647 | >40 | 8 | 1 | 1 |
| Particles >71µm | | ASTM D7647 | >10 | 2 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >21/19/16 | 19/18/15 | 17/15/11 | 18/15/11 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.17 | 0.18 | 0.14 |

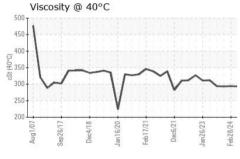


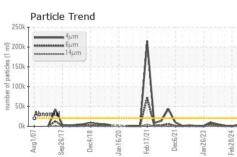
OIL ANALYSIS REPORT

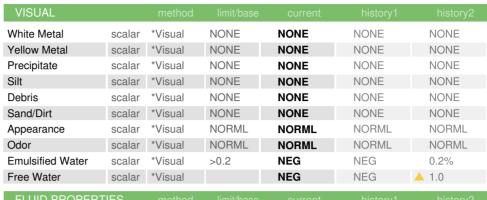


| | lμm Sμm | | 1 | | | |
|---------|------------|--------------------|---|---|---|--|
| | 4μm | | 1 | | | |
| | | | 1 | | | |
| Abnorma | | | A | ٨ | | |
| | - Alien | | | | _ | |
| | Abnorm | 4μm 6μm 14μm | | | | |





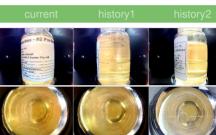




| FLUID FROFER | TILO | memou | | HISTOLAL | HISTOLYZ |
|--------------|------|-----------|-----|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 293 | 294 | 293 |

| OMMI EL IMMALO | |
|----------------|--|
| | |
| | |
| | |
| Color | |





| G | RAPHS | S | | | | | | | |
|-----------------|-----------------|---------|-----------|----------|---------|----------|----------|---|--------------------------|
| | errous A | Alloys | | | | | | Particle Count | |
| ⁴⁰ T | | . 1 | | | | | | 491,520 Rayana | T ²⁶ |
| 8.6 | manananan ch | romium | | Λ | | | | 122,880 | -24 |
| 40 | 30,720 Abnormal | -22 | | | | | | | |
| 0 | ~ | 00 | | | - | | 4 | € 7.680 · | -20 |
| Aug1/0 | Sep26/1 | Dec4/1 | Jan 16/2 | Feb17/2 | Dec6/2 | Jan26/2 | Feb28/2 | <u>a</u> 1,920 | -20 -18 -16 -14 |
| | | ous M | | | | | | 00 ineq 480 | 16 |
| 8 | | PP- | | | | | | 120- | -14 |
| C | | | | | | | | 30 | -12 |
| 2 - I | Δ | A | Δ | | | | | 8- | -10 |
| . 70/1g | 26/17 | ec4/18 | 16/20 | 17/21 | ec6/21- | 126/23 | 28/24 | 2+ | -8 |
| | | | | 골 | O | Jan | 是 | 04μ 6μ 14μ 21μ 38μ | 71 _µ |
| | iscosity | @ 40 | °C | | | | | Acid Number | |
| 1 | | | | | | | | NO.00 | |
| 100+ | | | | ~ | | | | E 0.40 \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ | |
| 00- | ~ | | 1 | | V | \sim | _ | g _{0.20} V V | ~ |
| 00 | | | V | | | | | Page 0.00 | |
| Aug1/07 | Sep26/17 | Dec4/18 | Jan 16/20 | Feb17/21 | Dec6/21 | Jan26/23 | Feb28/24 | Aug1/07 Sep26/17 Dec4/18 Jan16/20 Dec6/21 | Feb28/24 |





Certificate 12367

Laboratory Sample No.

Lab Number : 06205463

Test Package : IND 2

: USPM37618 Unique Number : 11072924

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 10 Jun 2024 **Tested** : 18 Jun 2024

Diagnosed : 18 Jun 2024 - Doug Bogart TYSON-DAKOTA CITY-PRO

P.O. BOX 515 DAKOTA CITY, NE US 68731

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)

F: (605)235-2960

T: