



CONSTRUCTION EQUIPMENT

274 JOHN DEERE 524K-II 1DW524KZVHF679355 - DIESEL ENGINE



Sample No: VCP413814
Oil Type: SHELL ROTELLA T 15W40
Job No: 274



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-----|-----|
| Sample Number | VCP413814 | VCP217493 | --- | --- |
| Sample Date | 15 Nov 2023 | 26 Sep 2017 | --- | --- |
| Machine Hours | 5950 | 499 | --- | --- |
| Oil Hours | 500 | 499 | --- | --- |
| Oil Changed | Changed | Changed | --- | --- |
| Sample Status | NORMAL | ABNORMAL | --- | --- |

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OIL CONDITION

| | | | | | |
|------------------|----------|-------------|-------|-----|-----|
| Visc @ 100°C | cSt | 13.2 | 10.63 | --- | --- |
| Base Number (BN) | mg KOH/g | 4.9 | --- | --- | --- |
| Oxidation (PA) | % | 64 | 64 | --- | --- |

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



CONTAMINATION

| | | | | | |
|----------------|-----|----------------|------|-----|-----|
| Water | % | NEG | NEG | --- | --- |
| Soot % | % | 0.6 | 0.2 | --- | --- |
| Nitration (PA) | % | 78 | 67 | --- | --- |
| Sulfation (PA) | % | 58 | 61 | --- | --- |
| Glycol | % | NEG | NEG | --- | --- |
| Fuel | % | <1.0 | <1.0 | --- | --- |
| Silicon | ppm | 8 | 9 | --- | --- |
| Sodium | ppm | 2 | 11 | --- | --- |
| Potassium | ppm | 6 | 4 | --- | --- |



WEAR METALS

| | | | | | |
|------------|-----|--------------|-----|-----|-----|
| Iron | ppm | 18 | 56 | --- | --- |
| Copper | ppm | 1 | 576 | --- | --- |
| Lead | ppm | <1 | 0 | --- | --- |
| Tin | ppm | <1 | 10 | --- | --- |
| Aluminum | ppm | 2 | 6 | --- | --- |
| Chromium | ppm | <1 | <1 | --- | --- |
| Molybdenum | ppm | 38 | 280 | --- | --- |
| Nickel | ppm | 1 | 2 | --- | --- |
| Titanium | ppm | <1 | 0 | --- | --- |
| Silver | ppm | 0 | 0 | --- | --- |
| Manganese | ppm | <1 | 4 | --- | --- |
| Vanadium | ppm | <1 | 0 | --- | --- |



ADDITIVES

| | | | | | |
|------------|-----|-------------|------|-----|-----|
| Calcium | ppm | 1795 | 1429 | --- | --- |
| Magnesium | ppm | 282 | 876 | --- | --- |
| Zinc | ppm | 1156 | 1018 | --- | --- |
| Phosphorus | ppm | 956 | 846 | --- | --- |
| Barium | ppm | 12 | 0 | --- | --- |
| Boron | ppm | 53 | 161 | --- | --- |

Depot: TOTGAI
Unique No: 10791735
Signed: Wes Davis
Report Date: 18 Dec 2023



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GRAPHS

