

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

NOT GIVEN WC0841476

Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

Fluid Condition

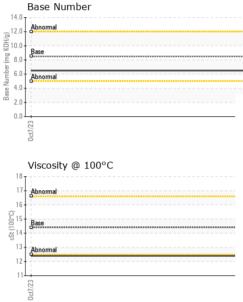
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

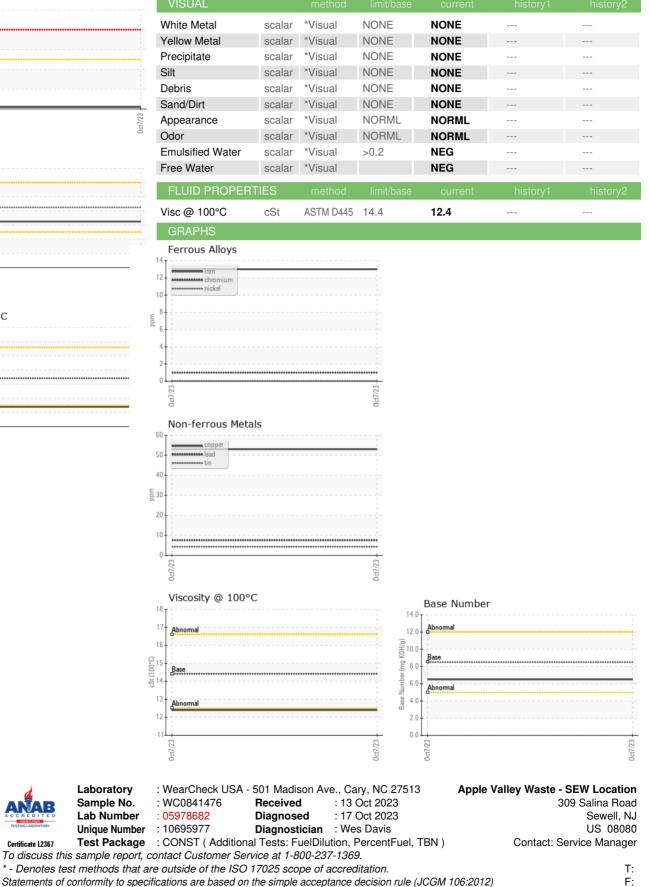
| | | | | 0ct2023 | | |
|---|--|---|---|--|--|--|
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
| | | Client Info | | WC0841476 | | |
| Sample Number Sample Date | | Client Info | | 07 Oct 2023 | | |
| Machine Age | hrs | Client Info | | 4228 | | |
| Oil Age | hrs | Client Info | | 4220 0 | | |
| - | 1115 | Client Info | | - | | |
| Oil Changed Sample Status | | Client Into | | Changed NORMAL | | |
| | | | | - | | |
| CONTAMINATION | N | method | limit/base | current | history1 | history2 |
| Glycol | | WC Method | | NEG | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >100 | 13 | | |
| Chromium | ppm | ASTM D5185m | >20 | 1 | | |
| Nickel | ppm | ASTM D5185m | >4 | 0 | | |
| Titanium | ppm | ASTM D5185m | | <1 | | |
| Silver | ppm | ASTM D5185m | >3 | 0 | | |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | | |
| Lead | ppm | ASTM D5185m | >40 | 8 | | |
| Copper | ppm | ASTM D5185m | >330 | 53 | | |
| Tin | ppm | ASTM D5185m | >15 | 4 | | |
| Vanadium | ppm | ASTM D5185m | | <1 | | |
| Cadmium | ppm | ASTM D5185m | | 0 | | |
| ADDITIVES | | | | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| | ppm | ASTM D5185m | limit/base | current 8 | history1 | history2 |
| Boron | ppm ppm | | | | | |
| Boron Barium | | ASTM D5185m | 250 | 8 | | |
| Boron Barium Molybdenum | ppm | ASTM D5185m ASTM D5185m | 250 10 | 8 12 | | |
| Boron Barium Molybdenum Manganese | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 | 8 12 73 | | |
| Boron Barium Molybdenum Manganese Magnesium | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 100 | 8 12 73 <1 752 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 100 450 | 8 12 73 <1 752 1371 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus | ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 100 450 3000 1150 | 8 12 73 <1 752 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 100 450 3000 | 8 12 73 <1 752 1371 972 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 100 450 3000 1150 1350 | 8 12 73 <1 752 1371 972 1236 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 limit/base | 8 12 73 <1 752 1371 972 1236 2590 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 limit/base >25 | 8 12 73 <1 752 1371 972 1236 2590 current | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method | 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 | 8 12 73 <1 752 1371 972 1236 2590 current 8 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 | 8 12 73 <1 752 1371 972 1236 2590 current 8 2 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 | 8 12 73 <1 752 1371 972 1236 2590 current 8 2 2 7 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 | 8 12 73 <1 752 1371 972 1236 2590 current 8 2 2 7 0.2 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 Imit/base >25 >158 >20 >5 | 8 12 73 <1 752 1371 972 1236 2590 current 8 2 7 0.2 current | history1 | history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 imit/base >25 >158 >20 >5 imit/base >3 | 8 12 73 <1 752 1371 972 1236 2590 current 8 2 7 0.2 current 0.4 | history1 | history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D3524 ASTM D3524 | 250 10 100 450 3000 1150 1350 4250 imit/base >25 >158 >20 imit/base >3 >20 | 8 12 73 <1 752 1371 972 1236 2590 current 8 2 7 0.2 current 0.4 9.3 | history1 | history2 history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 binit/base >25 >158 >20 >5 binit/base >3 >20 >3 >20 | 8 12 73 <1 752 1371 972 1236 2590 current 8 2 7 0.2 current 0.4 9.3 20.6 | history1 history1 history1 | history2 history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 imit/base >25 >158 >20 >5 imit/base >3 >20 >30 imit/base | 8 12 73 <1 752 1371 972 1236 2590 current 8 2 7 0.2 current 0.4 9.3 20.6 current | history1 history1 history1 | |



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Certificate L2367

Contact/Location: Service Manager - AVWSEW