

OIL ANALYSIS REPORT

Sample Rating Trend



PETERBILT 005

Component Diesel Engine Fluid NOT GIVEN (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

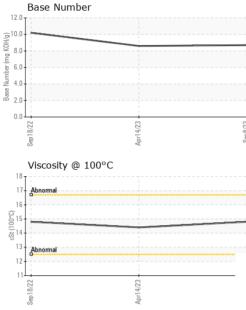
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| Say2022 Apr2023 Say2023 | | | | | | | | | | | |
|---|--|---|---|--|---|---|--|--|--|--|--|
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 | | | | | |
| Sample Number | | Client Info | | WC0838324 | WC0724739 | WC0724813 | | | | | |
| Sample Date | | Client Info | | 08 Sep 2023 | 14 Apr 2023 | 18 Sep 2022 | | | | | |
| Machine Age | mls | Client Info | | 0 | 1093368 | 1024780 | | | | | |
| Oil Age | mls | Client Info | | 0 | 0 | 0 | | | | | |
| Oil Changed | | Client Info | | N/A | N/A | N/A | | | | | |
| Sample Status | | | | NORMAL | NORMAL | NORMAL | | | | | |
| CONTAMINATION | J | method | limit/base | current | history1 | history2 | | | | | |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 | | | | | |
| Glycol | | WC Method | | NEG | NEG | NEG | | | | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 | | | | | |
| Iron | ppm | ASTM D5185m | >100 | 3 | 6 | 6 | | | | | |
| Chromium | ppm | ASTM D5185m | >20 | <1 | 1 | <1 | | | | | |
| Nickel | ppm | ASTM D5185m | >4 | <1 | 0 | 0 | | | | | |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 | | | | | |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 | | | | | |
| Aluminum | ppm | ASTM D5185m | >20 | 1 | <1 | 1 | | | | | |
| Lead | ppm | ASTM D5185m | >40 | 0 | 0 | 1 | | | | | |
| Copper | ppm | ASTM D5185m | >330 | <1 | <1 | <1 | | | | | |
| Tin | ppm | ASTM D5185m | >15 | <1 | <1 | <1 | | | | | |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 | | | | | |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | | |
| | | | | | | | | | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 | | | | | |
| ADDITIVES Boron | ppm | method ASTM D5185m | limit/base | current 67 | history1 63 | history2 44 | | | | | |
| | ppm ppm | | limit/base | | | | | | | | |
| Boron | | ASTM D5185m | limit/base | 67 | 63 | 44 | | | | | |
| Boron Barium | ppm | ASTM D5185m ASTM D5185m | limit/base | 67 12 | 63 0 | 44 0 | | | | | |
| Boron Barium Molybdenum | ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 67 12 43 | 63 0 41 | 44 0 40 | | | | | |
| Boron Barium Molybdenum Manganese | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 67 12 43 <1 | 63 0 41 <1 | 44 0 40 <1 | | | | | |
| Boron Barium Molybdenum Manganese Magnesium | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 67 12 43 <1 478 | 63 0 41 <1 478 | 44 0 40 <1 458 | | | | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 67 12 43 <1 478 1443 | 63 0 41 <1 478 1617 | 44 0 40 <1 458 1560 | | | | | |
| 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 | limit/base | 67 12 43 <1 478 1443 680 | 63 0 41 <1 478 1617 762 | 44 0 40 <1 458 1560 690 | | | | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 67 12 43 <1 478 1443 680 839 | 63 0 41 <1 478 1617 762 914 | 44 0 40 <1 458 1560 690 850 | | | | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur | ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 67 12 43 <1 478 1443 680 839 2650 | 63 0 41 <1 478 1617 762 914 3000 | 44 0 40 <1 458 1560 690 850 2935 | | | | | |
| 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 | limit/base | 67 12 43 <1 478 1443 680 839 2650 current | 63 0 41 <1 478 1617 762 914 3000 history1 | 44 0 40 <1 458 1560 690 850 2935 history2 | | | | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon | ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method | limit/base | 67 12 43 <1 478 1443 680 839 2650 current 7 | 63 0 41 <1 478 1617 762 914 3000 history1 5 | 44 0 40 <1 458 1560 690 850 2935 history2 6 | | | | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium | ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m | limit/base | 67 12 43 <1 478 1443 680 839 2650 current 7 2 | 63 0 41 <1 478 1617 762 914 3000 history1 5 3 | 44 0 40 <1 458 1560 690 850 2935 history2 6 2 | | | | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium | ppm | ASTM D5185m ASTM D5185m | limit/base >25 >20 | 67 12 43 <1 478 1443 680 839 2650 current 7 2 3 | 63 0 41 <1 478 1617 762 914 3000 history1 5 3 3 <1 | 44 0 40 <1 458 1560 690 850 2935 history2 6 2 2 2 | | | | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | limit/base >25 >20 limit/base >3 | 67 12 43 <1 478 1443 680 839 2650 current 7 2 3 3 | 63 0 41 <71 478 1617 762 914 3000 history1 5 3 <1 history1 | 44 0 40 <1 458 1560 690 850 2935 history2 6 2 2 2 history2 | | | | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % | ppm | ASTM D5185m ASTM D5185m | limit/base >25 >20 limit/base >3 | 67 12 43 <1 478 1443 680 839 2650 <u>current</u> 7 2 3 3 <u>current</u> 0 | 63 0 41 <1 478 1617 762 914 3000 history1 5 3 <1 5 3 <1 bistory1 0 | 44 0 40 <1 458 1560 690 850 2935 history2 6 2 2 2 history2 0.1 | | | | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | limit/base >25 >20 limit/base >3 >20 | 67 12 43 <1 478 1443 680 839 2650 <i>current</i> 7 2 3 <i>current</i> 0 6.4 | 63 0 41 <1 478 1617 762 914 3000 history1 5 3 3 <1 history1 0 7.0 | 44 0 40 <1 458 1560 690 850 2935 history2 6 2 2 2 history2 0.1 7.5 | | | | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | Imit/base >25 >20 Imit/base >3 >20 >30 | 67 12 43 <1 478 1443 680 839 2650 <u>current</u> 7 2 3 <u>current</u> 0 6.4 20.7 | 63 0 41 <78 1617 762 914 3000 history1 5 3 <1 5 3 <1 history1 0 7.0 21.1 | 44 0 40 <1 458 1560 690 850 2935 history2 6 2 2 2 history2 0.1 7.5 23.6 | | | | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844 | limit/base >25 >20 limit/base >3 >20 >30 >30 | 67 12 43 <1 478 1443 680 839 2650 Current 7 2 3 Current 0 6.4 20.7 Current | 63 0 41 <1 478 1617 762 914 3000 history1 5 3 3 <1 history1 0 7.0 21.1 history1 | 44 0 40 <1 458 1560 690 850 2935 history2 6 2 2 history2 0.1 7.5 23.6 history2 | | | | | |



OIL ANALYSIS REPORT

VISUAL



| | Laboratory Sample No. Lab Number Unique Number Test Package | : WC : <mark>059</mark> : 106 | 0838324 1 <mark>78784</mark> 96079 | Received Diagnos | 01 Madison Ave., Cary, NC 27513 eceived : 13 Oct 2023 iagnosed : 16 Oct 2023 iagnostician : Wes Davis re at 1-800-237-1369. 025 scope of accreditation. | | | REDLAND FARMS TRUCKING LLC 653 DAVE DUCK RD JONESBORO, LA US 71251 Contact: Service Manager redlandfarmstruckingllc@gmail.com T: | | |
|----------|---|-------------------------------------|--|---------------------|--|--|----------------|--|---|--|
| | | Sep18/22 | | Apr14/23 | | .2 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 | | Apr14/23 | 0 20 20 20 20 20 20 20 20 20 20 20 20 20 | |
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| | | 17- Ab | normal | | | 12. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10 | 0 | | | |
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| Apr14/23 | | 6- | nickel | | | | | | | |
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| | | | : @ 100℃ RAPHS | cSt | ASTM D445 | | 14.8 | 14.4 | 14.8 | |
| | | | UID PROPER | | method | limit/base | current | history1 | history2 | |
| | | | ulsified Water e Water | scalar scalar | *Visual *Visual | >0.2 | NEG NEG | NEG NEG | NEG NEG | |
| Apr14/23 | Sep 8/23 | App Odo | earance or | scalar scalar | *Visual *Visual | NORML NORML | NORML NORML | NORML NORML | NORML NORML | |
| | | Deb San | oris d/Dirt | scalar scalar | *Visual *Visual | NONE | NONE NONE | NONE | NONE NONE | |
| | | Silt | cipitate | scalar scalar | | NONE | NONE NONE | NONE | NONE | |
| | | Prec | rinitate | | | | | | NONE | |

Contact/Location: Service Manager - REDJON