

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

VOLVO VNL 760 149

Diesel Engine

Fluid PETRO CANADA DURON SHP 10W30 (12 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.

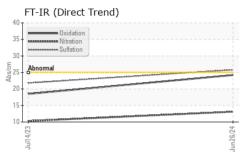
Fluid Condition

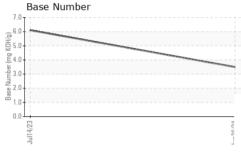
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

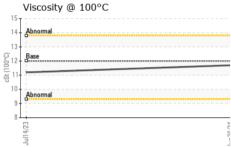
| SAMPLE INFORI | MATION | method | limit/base | current | history1 | history2 |
|---|---|---|---|--|---|--|
| Sample Number | | Client Info | | PCA0117382 | PCA0100671 | |
| Sample Date | | Client Info | | 26 Jun 2024 | 14 Jul 2023 | |
| Machine Age | mls | Client Info | | 295402 | 180181 | |
| Oil Age | mls | Client Info | | 40000 | 42613 | |
| Oil Changed | | Client Info | | Changed | Changed | |
| Sample Status | | | | NORMAL | NORMAL | |
| CONTAMINAT | ION | method | limit/base | current | history1 | history2 |
| Fuel | | WC Method | >6.0 | <1.0 | <1.0 | |
| Water | | WC Method | >0.2 | NEG | NEG | |
| Glycol | | WC Method | | NEG | NEG | |
| WEAR METAL | S | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >100 | 53 | 22 | |
| Chromium | ppm | ASTM D5185m | >20 | <1 | 0 | |
| Nickel | ppm | ASTM D5185m | >2 | 1 | <1 | |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | |
| Aluminum | ppm | ASTM D5185m | >25 | 3 | <1 | |
| Lead | ppm | ASTM D5185m | >40 | 2 | 0 | |
| Copper | ppm | ASTM D5185m | >330 | 5 | 4 | |
| Tin | ppm | ASTM D5185m | >15 | <1 | <1 | |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | |
| Cadmium | ppm | ASTM D5185m | | <1 | 0 | |
| | | | | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| ADDITIVES Boron | ppm | method ASTM D5185m | limit/base | current 0 | history1 0 | history2 |
| | ppm ppm | | | | | |
| Boron | | ASTM D5185m ASTM D5185m ASTM D5185m | 2 | 0 | 0 | |
| Boron Barium | ppm | ASTM D5185m ASTM D5185m | 2 0 | 0 <1 | 0 | |
| Boron Barium Molybdenum | ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 | 0 <1 58 | 0 0 62 | |
| Boron Barium Molybdenum Manganese | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 | 0 <1 58 1 | 0 0 62 <1 | |
| Boron Barium Molybdenum Manganese Magnesium | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 950 | 0 <1 58 1 791 | 0 0 62 <1 953 | |
| Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 | 0 <1 58 1 791 1065 | 0 0 62 <1 953 1142 | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 995 | 0 <1 58 1 791 1065 933 | 0 0 62 <1 953 1142 1001 | |
| 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 | 2 0 50 950 1050 995 1180 | 0 <1 58 1 791 1065 933 983 | 0 0 62 <1 953 1142 1001 1259 | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 950 1050 995 1180 2600 | 0 <1 58 1 791 1065 933 983 2392 | 0 0 62 <1 953 1142 1001 1259 3484 | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 950 1050 995 1180 2600 | 0 <1 58 1 791 1065 933 983 2392 current | 0 0 62 <1 953 1142 1001 1259 3484 history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon | ppm ppm ppm ppm ppm ppm ppm ppm TS | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method | 2 0 50 950 1050 995 1180 2600 | 0 <1 58 1 791 1065 933 983 2392 current 9 | 0 0 62 <1 953 1142 1001 1259 3484 history1 5 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium | ppm ppm ppm ppm ppm ppm ppm ppm TS | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m | 2 0 50 0 950 1050 995 1180 2600 limit/base >25 | 0 <1 58 1 791 1065 933 983 2392 current 9 5 | 0 0 62 <1 953 1142 1001 1259 3484 history1 5 3 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm ppm ppm TS | ASTM D5185m ASTM D5185m | 2 0 50 950 1050 995 1180 2600 limit/base >25 | 0 <1 58 1 791 1065 933 983 2392 current 9 5 6 | 0 0 62 <1 953 1142 1001 1259 3484 history1 5 3 0 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED | ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm | ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 995 1180 2600 limit/base >25 -20 limit/base | 0 <1 58 1 791 1065 933 983 2392 current 9 5 6 6 | 0 0 62 <1 953 1142 1001 1259 3484 history1 5 3 0 bistory1 | history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 | 0 <1 58 1 791 1065 933 983 2392 current 9 5 6 current 0.6 | 0 0 62 <1 953 1142 1001 1259 3484 history1 5 3 0 history1 0.4 | history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | 2 0 50 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> >3 >20 | 0 <1 58 1 791 1065 933 983 2392 current 9 5 6 current 0.6 13.1 | 0 0 62 <1 953 1142 1001 1259 3484 history1 5 3 3 0 history1 0.4 10.3 | history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation | ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm | ASTM D5185m ASTM D7844 *ASTM D7844 | 2 0 0 50 0 950 1050 995 1180 2600 imit/base >25 >20 >20 >30 >30 imit/base | 0 <1 58 1 791 1065 933 983 2392 current 9 5 6 current 0.6 13.1 25.8 current | 0 0 62 <1 953 1142 1001 1259 3484 history1 5 3 0 history1 0.4 10.3 21.8 history1 | history2 history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 995 1180 2600 imit/base >25 imit/base >3 >20 | 0 <1 58 1 791 1065 933 983 2392 current 9 5 6 current 0.6 13.1 25.8 | 0 0 62 <1 953 1142 1001 1259 3484 history1 5 3 0 history1 0.4 10.3 21.8 | history2 history2 history2 history2 |



OIL ANALYSIS REPORT







VISUAL NONE White Metal *Visual NONE NONE scalar Yellow Metal *Visual NONE NONE NONE scalar NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE NONE Debris *Visual NONE scalar NONE NONE Sand/Dirt NONE NONE NONE scalar *Visual NORML NORML Appearance scalar *Visual NORML Odor *Visual NORML NORML NORML scalar **Emulsified Water** scalar *Visual >0.2 NEG NEG Free Water scalar *Visual NEG NEG **FLUID PROPERTIES** Visc @ 100°C cSt ASTM D445 12.00 11.7 11.2 GRAPHS Ferrous Alloys 60 nicke 40 E 30 20 10 Jul14/23 Non-ferrous Metals Viscosity @ 100°C Base Number 14 6. (B/HO) 5.0 13 St (100°C) E 4.0 - e 3.0 器 2.0 Abnorma 1.0 0.0 Jul14/23 Jul14/23 Jun26/24 Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 A Truck Repair Sample No. : PCA0117382 Received : 18 Jul 2024 9349 China Grove Church Road Lab Number : 06240003 Tested : 18 Jul 2024

: 18 Jul 2024 - Wes Davis



 Certificate 12367
 Test Package
 : FLEET
 (C

 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)

Diagnosed

Unique Number : 11128837

9349 China Grove Church Road Pineville, NC US 28134 Contact: Vlad Melnichuk shop@migway.com T: (980)255-3200 6:2012) F:

Report Id: ATRPIN [WUSCAR] 06240003 (Generated: 07/18/2024 16:36:24) Rev: 1

Submitted By: Vlad Melnichuk

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