

OIL ANALYSIS REPORT

Area (16074Z) Walgreens - Tractor Machine Id [Walgreens - Tractor] 136A61413 Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

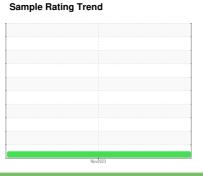
All component wear rates are normal.

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.





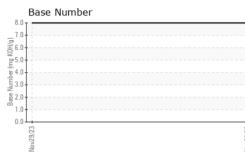
NORMAL

| SAMPLE INFORI | MATION | method | limit/base | current | history1 | history2 | | | | | | | |
|--|--|--|--|---|--|---|--|--|--|--|--|--|---|
| Sample Number | | Client Info | | PCA0105385 | | | | | | | | | |
| Sample Date | | Client Info | | 29 Nov 2023 | | | | | | | | | |
| Machine Age | mls | Client Info | | 298381 | | | | | | | | | |
| Oil Age | mls | Client Info | | 18000 | | | | | | | | | |
| Oil Changed | | Client Info | | Not Changd | | | | | | | | | |
| Sample Status | | | | NORMAL | | | | | | | | | |
| CONTAMINAT | ION | method | limit/base | current | history1 | history2 | | | | | | | |
| Fuel | | WC Method | >5 | <1.0 | | | | | | | | | |
| Water | | WC Method | >0.2 | NEG | | | | | | | | | |
| Glycol | | WC Method | | NEG | | | | | | | | | |
| WEAR METAL | S | method | limit/base | current | history1 | history2 | | | | | | | |
| Iron | ppm | ASTM D5185m | >80 | 11 | | | | | | | | | |
| Chromium | ppm | ASTM D5185m | >5 | <1 | | | | | | | | | |
| Nickel | ppm | ASTM D5185m | >2 | 0 | | | | | | | | | |
| Titanium | ppm | ASTM D5185m | | 0 | | | | | | | | | |
| Silver | ppm | ASTM D5185m | >3 | 0 | | | | | | | | | |
| Aluminum | ppm | ASTM D5185m | >30 | 3 | | | | | | | | | |
| Lead | ppm | ASTM D5185m | >30 | 0 | | | | | | | | | |
| Copper | ppm | ASTM D5185m | >150 | 4 | | | | | | | | | |
| Tin | ppm | ASTM D5185m | >5 | 0 | | | | | | | | | |
| Vanadium | ppm | ASTM D5185m | | 0 | | | | | | | | | |
| | | | | - | | | | | | | | | |
| Cadmium | ppm | ASTM D5185m | | 0 | | | | | | | | | |
| ADDITIVES | ppm | ASIM D5185m method | limit/base | 0 current | history1 | history2 | | | | | | | |
| | ppm ppm | | limit/base | | | | | | | | | | |
| ADDITIVES | | method | | current | history1 | history2 | | | | | | | |
| ADDITIVES Boron | ppm | method ASTM D5185m | 2 | current 5 | history1 | history2 | | | | | | | |
| ADDITIVES Boron Barium | ppm ppm | method ASTM D5185m ASTM D5185m | 2 0 | current 5 2 | history1 | history2 | | | | | | | |
| ADDITIVES Boron Barium Molybdenum | ppm ppm ppm | method ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 | current 5 2 60 | history1 | history2 | | | | | | | |
| ADDITIVES Boron Barium Molybdenum Manganese | ppm ppm ppm ppm | method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 | current 5 2 60 0 | history1 | history2 | | | | | | | |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium | ppm ppm ppm ppm ppm ppm | method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 950 | current 5 2 60 0 891 | history1 | history2 | | | | | | | |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm ppm ppm ppm | method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 | current 5 2 60 0 891 1029 | history1 | history2 | | | | | | | |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus | ppm ppm ppm ppm ppm ppm ppm | method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 995 | current 5 2 60 0 891 1029 916 | history1 | history2 | | | | | | | |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm ppm ppm ppm | method ASTM D5185m | 2 0 50 0 950 1050 995 1180 | current 5 2 60 0 891 1029 916 1156 | history1 | history2 | | | | | | | |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur | ppm ppm ppm ppm ppm ppm ppm ppm | method ASTM D5185m | 2 0 50 0 950 1050 995 1180 2600 | Current 5 2 60 0 891 1029 916 1156 2891 | history1 | history2 | | | | | | | |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN | ppm ppm ppm ppm ppm ppm ppm ppm ppm | method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 2 0 50 950 1050 995 1180 2600 | current 5 2 60 0 891 1029 916 1156 2891 current | history1 | history2 history2 | | | | | | | |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon | ppm ppm ppm ppm ppm ppm ppm ppm ppm | method ASTM D5185m | 2 0 50 950 1050 995 1180 2600 | current 5 2 60 0 891 1029 916 1156 2891 current 4 | history1 history1 | history2 history2 | | | | | | | |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | method ASTM D5185m | 2 0 50 950 1050 995 1180 2600 limit/base >20 | current 5 2 60 0 891 1029 916 1156 2891 current 4 0 | history1 history1 | history2 | | | | | | | |
| ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | method ASTM D5185m | 2 0 50 0 950 1050 995 1180 2600 limit/base >20 | current 5 2 60 0 891 1029 916 1156 2891 current 4 0 4 0 4 0 4 | history1 | history2 history2 history2 | | | | | | | |
| ADDITIVES 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 | method ASTM D5185m | 2 0 50 0 950 1050 995 1180 2600 imit/base >20 imit/base | current 5 2 60 0 891 1029 916 1156 2891 current 4 0 4 0 4 current | history1 history1 history1 history1 history1 | history2 history2 history2 history2 | | | | | | | |
| ADDITIVES 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 TS ppm ppm | method ASTM D5185m | 2 0 50 0 950 1050 995 1180 2600 Imit/base >20 20 Imit/base >3 | current 5 2 60 0 891 1029 916 1156 2891 current 4 0 4 0 4 0 4 0.4 | history1 history1 history1 history1 history1 history1 | history2 history2 history2 history2 | | | | | | | |
| ADDITIVES 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 | method ASTM D5185m | 2 0 50 0 950 1050 995 1180 2600 imit/base >20 imit/base >20 | current 5 2 60 0 891 1029 916 1156 2891 current 4 0 4 0 4 0 4 0.4 7.3 | history1 | history2 <tr th="" tt<=""></tr> <tr><th>ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation</th><th>ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm</th><th>method ASTM D5185m ASTM D5185m</th><th>2 0 50 0 950 1050 995 1180 2600 imit/base >20 imit/base >3 >20 >30</th><th>current 5 2 60 0 891 1029 916 1156 2891 current 4 0 4 0 4 0.4 7.3 19.4</th><th>history1 history1 history1 history1 history1 </th><th>history2 history2 history2 </th></tr> | ADDITIVES 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 | method ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 995 1180 2600 imit/base >20 imit/base >3 >20 >30 | current 5 2 60 0 891 1029 916 1156 2891 current 4 0 4 0 4 0.4 7.3 19.4 | history1 history1 history1 history1 history1 | history2 history2 history2 |
| | | | | | | | | | | | | | |
| ADDITIVES 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 | method ASTM D5185m ASTM D5185m | 2 0 50 0 950 1050 995 1180 2600 imit/base >20 imit/base >3 >20 >30 | current 5 2 60 0 891 1029 916 1156 2891 current 4 0 4 0 4 0.4 7.3 19.4 | history1 history1 history1 history1 history1 | history2 history2 history2 | | | | | | | |



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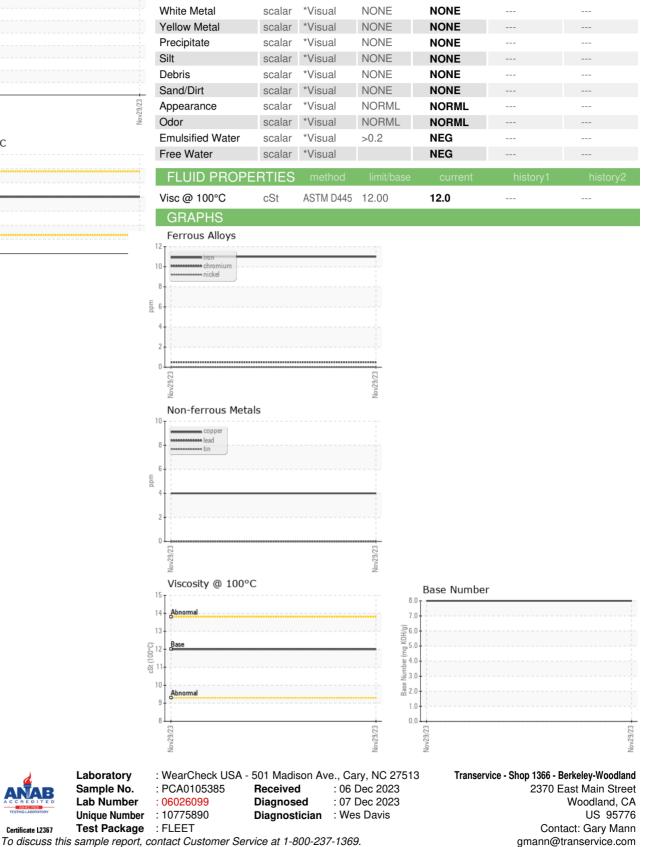
VISUAL







Certificate L2367



* - 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)

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