

# **OIL ANALYSIS REPORT**



Machine Id 8575

#### Component Diesel Engine Fluid CHEVRON DELO 400 SAE 10W30 (--- QTS)

## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with 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.

|                  |          | Aug2021     | Nov2021 Feb2022 | Jun2022 Aug2022 Jan2023 | Dec2023     |             |
|------------------|----------|-------------|-----------------|-------------------------|-------------|-------------|
| SAMPLE INFOR     | MATION   | method      | limit/base      | current                 | history1    | history2    |
| Sample Number    |          | Client Info |                 | PCA0073336              | PCA0073415  | PCA0073417  |
| Sample Date      |          | Client Info |                 | 22 Dec 2023             | 26 Jan 2023 | 31 Aug 2022 |
| Machine Age      | mls      | Client Info |                 | 314715                  | 262130      | 151816      |
| Oil Age          | mls      | Client Info |                 | 40000                   | 45380       | 30186       |
| Oil Changed      |          | Client Info |                 | Changed                 | Changed     | Changed     |
| Sample Status    |          |             |                 | NORMAL                  | NORMAL      | NORMAL      |
| CONTAMINAT       | ION      | method      | limit/base      | current                 | history1    | history2    |
| Fuel             |          | WC Method   | >5              | <1.0                    | <1.0        | <1.0        |
| Water            |          | WC Method   | >0.2            | NEG                     | NEG         | NEG         |
| Glycol           |          | WC Method   |                 | NEG                     | NEG         | NEG         |
| WEAR METAL       | S        | method      | limit/base      | current                 | history1    | history2    |
| Iron             | ppm      | ASTM D5185m | >100            | 30                      | 36          | 25          |
| Chromium         | ppm      | ASTM D5185m | >20             | 2                       | 2           | 1           |
| Nickel           | ppm      | ASTM D5185m | >4              | <1                      | 1           | 1           |
| Titanium         | ppm      | ASTM D5185m |                 | 0                       | 0           | <1          |
| Silver           | ppm      | ASTM D5185m | >3              | 0                       | <1          | 1           |
| Aluminum         | ppm      | ASTM D5185m | >20             | 6                       | 6           | 5           |
| Lead             | ppm      | ASTM D5185m | >40             | 2                       | 5           | 4           |
| Copper           | ppm      | ASTM D5185m | >330            | 4                       | 2           | 2           |
| Tin              | ppm      | ASTM D5185m | >15             | <1                      | 2           | 2           |
| Vanadium         | ppm      | ASTM D5185m |                 | 0                       | 0           | 2           |
| Cadmium          | ppm      | ASTM D5185m |                 | 0                       | 0           | 0           |
| ADDITIVES        |          | method      | limit/base      | current                 | history1    | history2    |
| Boron            | ppm      | ASTM D5185m |                 | <1                      | 0           | 0           |
| Barium           | ppm      | ASTM D5185m |                 | 0                       | 0           | 0           |
| Molybdenum       | ppm      | ASTM D5185m |                 | 61                      | 68          | 66          |
| Manganese        | ppm      | ASTM D5185m |                 | <1                      | <1          | 1           |
| Magnesium        | ppm      | ASTM D5185m |                 | 968                     | 1030        | 1029        |
| Calcium          | ppm      | ASTM D5185m |                 | 1029                    | 1185        | 1114        |
| Phosphorus       | ppm      | ASTM D5185m | 1260            | 981                     | 1011        | 1023        |
| Zinc             | ppm      | ASTM D5185m | 1400            | 1255                    | 1353        | 1281        |
| Sulfur           | ppm      | ASTM D5185m |                 | 2340                    | 2881        | 2906        |
| CONTAMINAN       | ITS      | method      | limit/base      | current                 | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m | >25             | 6                       | 6           | 8           |
| Sodium           | ppm      | ASTM D5185m |                 | 2                       | 2           | 2           |
| Potassium        | ppm      | ASTM D5185m | >20             | 3                       | 8           | 7           |
| INFRA-RED        |          | method      | limit/base      | current                 | history1    | history2    |
| Soot %           | %        | *ASTM D7844 | >3              | 1.7                     | 0.1         | 1.9         |
| Nitration        | Abs/cm   | *ASTM D7624 | >20             | 11.2                    | 5.8         | 11.0        |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30             | 24.8                    | 17.4        | 24.3        |
| FLUID DEGRA      | DATION   | method      | limit/base      | current                 | history1    | history2    |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25             | 19.9                    | 12.8        | 17.7        |
| Base Number (BN) | mg KOH/g | ASTM D2896  | 10.1            | 5.9                     | 9.7         | 8.7         |
|                  |          |             |                 |                         |             |             |



Ba

Ab

Aug31/21

10100vn

<sup>-eb8/22</sup>

1777 Pull



scalar

scalar

\*Visual

\*Visual

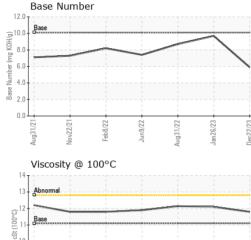
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NONE

VISUAL

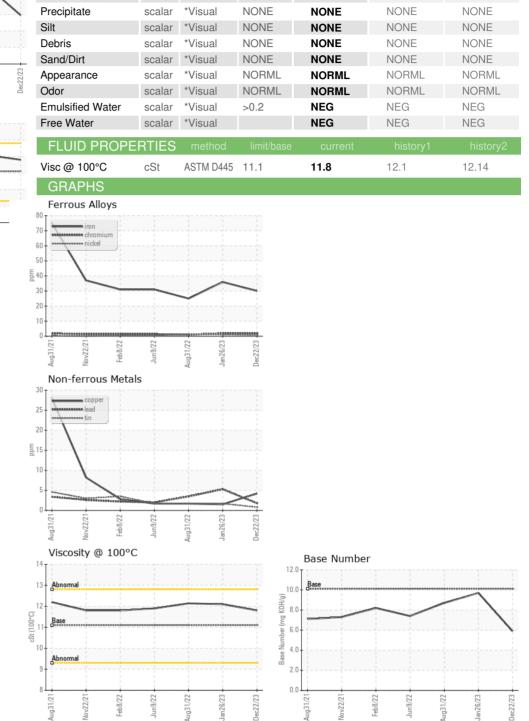
White Metal

Yellow Metal



Aug31/22

lan26/23



NONE

NONE

NONE

NONE

NONE

NONE



: Wes Davis Unique Number : 10831983 Diagnostician Test Package : FLEET Certificate L2367 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)

: PCA0073336

: 06060601

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Recieved

Diagnosed

: 16 Jan 2024

: 16 Jan 2024

Laboratory

Sample No.

Lab Number

MIDWEST MOTOR EXPRESS

2169 MUSTANG DR

MOUNDS VIEW, MN

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