

#### Machine Id CHEVROLET 12346 Component Gasoline Engine Fluid CHEVRON SUPREME MOTOR OIL 5W30 (--- QTS)

## RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### **WEAR**

All component wear rates are normal.

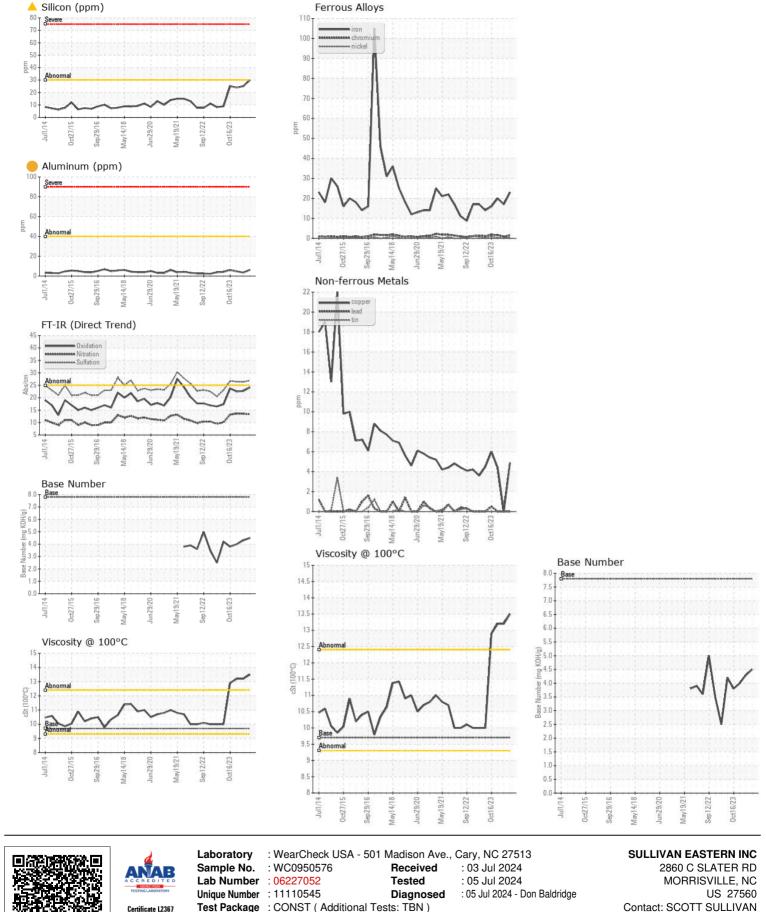
# CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress.

### FLUID CONDITION

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

| Test            | UOM      | Method                  | Limit/Abn | Current     | History1    | History2    |
|-----------------|----------|-------------------------|-----------|-------------|-------------|-------------|
| Sample Numbe    | r        | Client Info             |           | WC0950576   | WC0924524   | WC0882875   |
| Sample Date     |          | Client Info             |           | 02 Jul 2024 | 10 Apr 2024 | 11 Jan 2024 |
| Machine Age     | mls      | Client Info             |           | 277995      | 271131      | 265072      |
| Oil Age         | mls      | Client Info             |           | 0           | 0           | 0           |
| Filter Age      | mls      | Client Info             |           | 0           | 0           | 0           |
| Oil Changed     |          | Client Info             |           | Changed     | Changed     | Changed     |
| Filter Changed  | ł        | Client Info             |           | Changed     | Changed     | Changed     |
| Sample Status   | 3        |                         |           | ABNORMAL    | NORMAL      | NORMAL      |
|                 |          |                         |           |             |             |             |
| Iron            | ppm      | ASTM D5185m             | >150      | 23          | 17          | 20          |
| Chromium        | ppm      | ASTM D5185m             | >20       | 2           | <1          | 2           |
| Nickel          | ppm      | ASTM D5185m             | >5        | <1          | 0           | <1          |
| Titanium        | ppm      | ASTM D5185m             |           | <1          | <1          | <1          |
| Silver          | ppm      | ASTM D5185m             | >2        | 0           | 0           | 0           |
| Aluminum        | ppm      | ASTM D5185m             | >40       | 6           | 4           | 5           |
| Lead            | ppm      | ASTM D5185m             | >50       | 0           | 0           | 0           |
| Copper          | ppm      | ASTM D5185m             | >155      | 5           | 0           | 4           |
| Tin             | ppm      | ASTM D5185m             | >10       | 0           | 0           | 0           |
| Vanadium        | ppm      | ASTM D5185m             |           | 0           | 0           | <1          |
| White Metal     | scalar   | *Visual                 | NONE      | NONE        | NONE        | NONE        |
| Yellow Metal    | scalar   | *Visual                 | NONE      | NONE        | NONE        | NONE        |
|                 |          |                         |           |             |             |             |
| Silicon         | ppm      | ASTM D5185m             | >30       | <b>▲</b> 30 | 25          | 24          |
| Potassium       | ppm      | ASTM D5185m             | >20       | 5           | 1           | 2           |
| Fuel            |          | WC Method               | >4.0      | <1.0        | <1.0        | <1.0        |
| Water           |          | WC Method               | >0.2      | NEG         | NEG         | NEG         |
| Glycol          |          | WC Method               |           | NEG         | NEG         | NEG         |
| Soot %          | %        | *ASTM D7844             |           | 0           | 0.1         | 0           |
| Nitration       | Abs/cm   | *ASTM D7624             | >20       | 13.4        | 13.5        | 13.6        |
| Sulfation       | Abs/.1mm | *ASTM D7415             | >30       | 26.9        | 26.3        | 26.4        |
| Silt            | scalar   | *Visual                 | NONE      | NONE        | NONE        | NONE        |
| Debris          | scalar   | *Visual                 | NONE      | NONE        | NONE        | NONE        |
| Sand/Dirt       | scalar   | *Visual                 | NONE      | NONE        | NONE        | NONE        |
| Appearance      | scalar   | *Visual                 | NORML     | NORML       | NORML       | NORML       |
| Odor            | scalar   | *Visual                 | NORML     | NORML       | NORML       | NORML       |
| Emulsified Wate | r scalar | *Visual                 | >0.2      | NEG         | NEG         | NEG         |
| Sodium          | ppm      | ASTM D5185m             | >400      | 5           | 2           | 4           |
| Boron           | ppm      | ASTM D5185m             |           | 23          | 20          | 32          |
| Barium          | ppm      | ASTM D5185m             |           | 0           | 0           | 0           |
| Molybdenum      | ppm      | ASTM D5185m             |           | 9           | 9           | 19          |
| Manganese       | ppm      | ASTM D5185m             |           | 15          | 4           | 3           |
| Magnesium       | ppm      | ASTM D5185m             |           | 851         | 716         | 703         |
| Calcium         | ppm      | ASTM D5185m             |           | 1512        | 1278        | 1280        |
| Phosphorus      | ppm      | ASTM D5185m             | 780       | 824         | 701         | 727         |
| Zinc            | ppm      | ASTM D5185m             | 860       | 990         | 776         | 852         |
| Sulfur          | ppm      | ASTM D5185m             |           | 3090        | 2947        | 2768        |
| Oxidation       | Abs/.1mm | *ASTM D7414             | >25       | 24.1        | 22.7        | 22.5        |
| Base Number (BN |          | ASTM D2896              | 7.8       | 4.5         | 4.3         | 4.0         |
| Visc @ 100°C    | , , ,    | ASTM D2030<br>ASTM D445 | 9.7       | 13.5        | 13.2        | 13.2        |
|                 | 001      | 10 I W D44J             | 5.7       | 13.0        | 10.2        | 10.4        |



 Certificate L2367
 Test Package
 : CONST (Additional Tests: TBN )

 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)

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