



OIL ANALYSIS REPORT

| | |
|-----------------|--------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Machine Id
FORD 16-BEAS-01-001-M

Component
Front Gasoline Engine

Fluid
CASTROL EDGE FST 0W20 (PRODOT : ZP-700 ADDITIF MOTEUR - Cas d'étude Auto #102d / 4de4



RECOMMENDATION

Texte & Soulignement en bleu par Adrenalube

Resample at the next service interval to monitor. (Customer Sample Comment: Engine use engine oil additive ADRENALUBE ZP-700. Match history WC0479992, 355060)

History 1 : Taux d'usure acceptables pour les heures d'opération.
État de l'huile acceptable pour les heures de service.
Échantillonnez de nouveau dans 12000 kilomètres pour un suivi
Current : L'huile a été changée. Échantillonnez de nouveau dans 25 000 kilomètres pour un suivi.

WEAR

All component wear rates are normal.

History 1 & Current :
Taux d'usure acceptables pour les heures d'opération.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|--------|-----------|-------------|-------------|-------------|
| Sample Number | | | | WC0612826 | WC0479992 | WC0355050 |
| Sample Date | | | | 16 Sep 2021 | 17 Nov 2020 | 28 Aug 2019 |
| Machine Age | kms | | | 213350 | 202105 | 0 |
| Oil Age | kms | | | 28586 | 17341 | 45000 |
| Filter Age | kms | | | 28586 | 17341 | 45000 |
| Oil Changed | | | | Changed | Not Changd | Changed |
| Filter Changed | | | | Changed | Not Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

| | | | | | | |
|----------|-----|---------------|------|----|----|----|
| Iron | ppm | ASTM D5185(m) | >150 | 42 | 20 | 32 |
| Chromium | ppm | ASTM D5185(m) | >20 | 2 | 1 | 1 |
| Nickel | ppm | ASTM D5185(m) | >5 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | | 8 | 9 | 10 |
| Silver | ppm | ASTM D5185(m) | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >40 | 13 | 7 | 6 |
| Lead | ppm | ASTM D5185(m) | >50 | 8 | 2 | 8 |
| Copper | ppm | ASTM D5185(m) | >155 | 2 | 1 | 2 |
| Tin | ppm | ASTM D5185(m) | >10 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |

CONTAMINATION

There is no indication of any contamination in the oil.

History 1 & Current :
Contamination externe acceptable.

| | | | | | | |
|------------------|----------|---------------|------|------|------|------|
| Silicon | ppm | ASTM D5185(m) | >30 | 19 | 12 | 14 |
| Potassium | ppm | ASTM D5185(m) | >20 | 2 | 1 | 1 |
| Fuel | | ASTM D3524 | >4.0 | <1.0 | <1.0 | <1.0 |
| Glycol | | ASTM D2982 | | NEG | NEG | NEG |
| Soot % | % | ASTM D7686 | | 0 | 0 | 0 |
| Nitration | Abs/cm | ASTM D7624 | >20 | 20.2 | 16.3 | 16.9 |
| Sulfation | Abs/.1mm | ASTM D7415 | >30 | 34.3 | 27.5 | 29.5 |
| Emulsified Water | scalar | Visual | >0.2 | NEG | NEG | NEG |

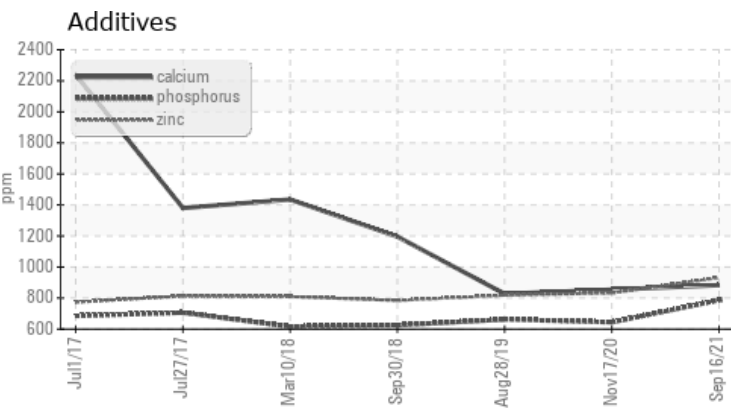
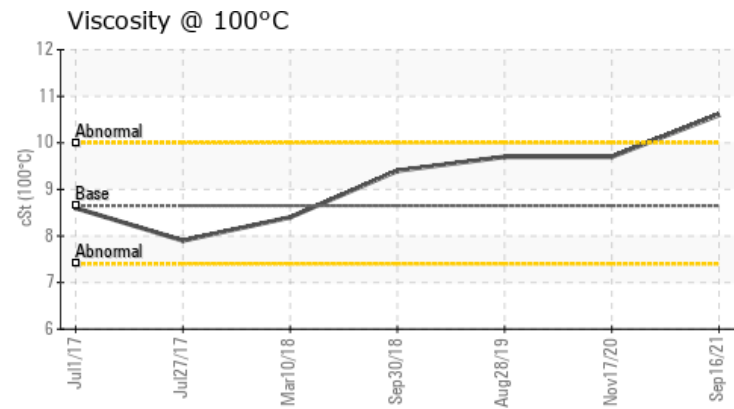
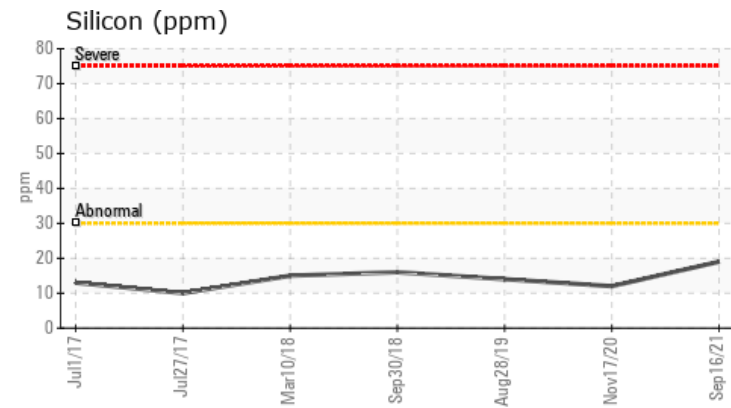
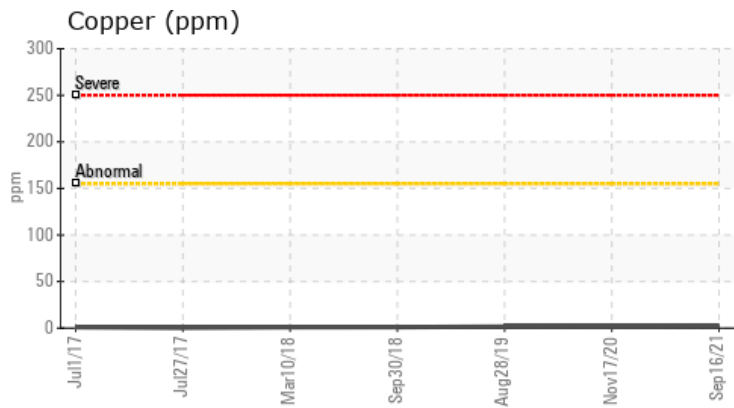
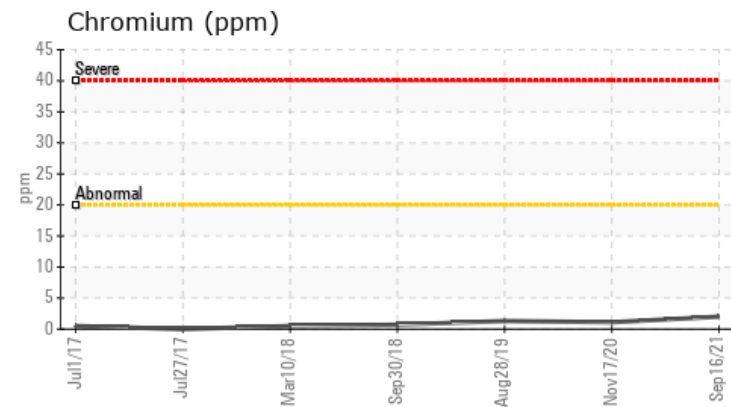
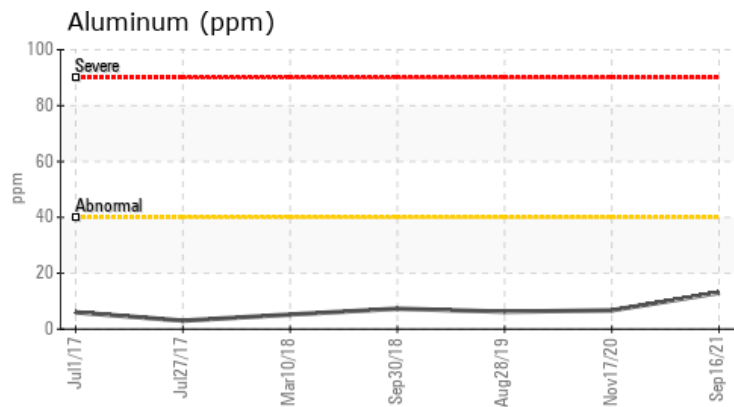
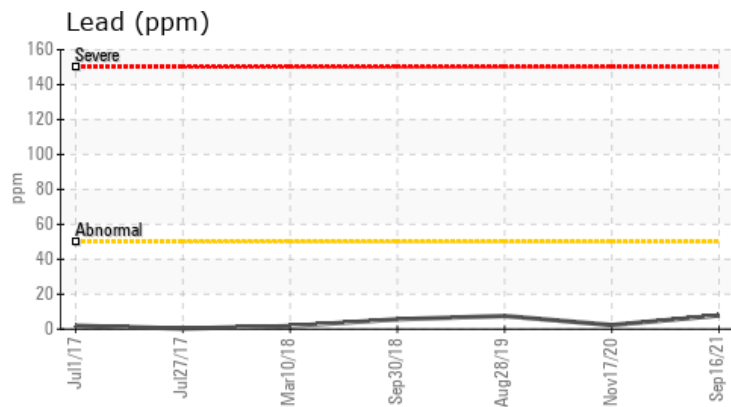
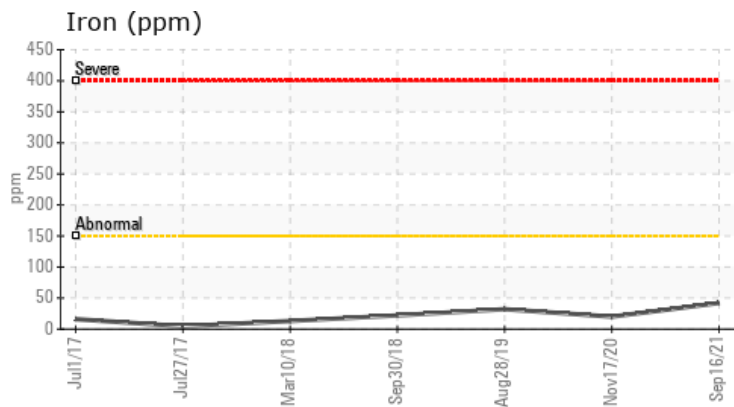
FLUID CONDITION

The condition of the oil is acceptable for the time in service.

History 1 & Current :
État de l'huile acceptable pour les heures de service.

Maintenez le traitement avec le produit Adrenalube ZP-700 pour une protection optimale.

| | | | | | | |
|--------------|----------|---------------|------|------|------|------|
| Sodium | ppm | ASTM D5185(m) | >400 | 14 | 9 | 11 |
| Boron | ppm | ASTM D5185(m) | | 20 | 22 | 21 |
| Barium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | | 90 | 82 | 128 |
| Manganese | ppm | ASTM D5185(m) | | 1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | | 1355 | 1234 | 1323 |
| Calcium | ppm | ASTM D5185(m) | 745 | 883 | 854 | 827 |
| Phosphorus | ppm | ASTM D5185(m) | | 786 | 644 | 662 |
| Zinc | ppm | ASTM D5185(m) | 840 | 932 | 832 | 818 |
| Sulfur | ppm | ASTM D5185(m) | | 2109 | 2126 | 2177 |
| Oxidation | Abs/.1mm | ASTM D7414 | >25 | 35.6 | 24.2 | 25.6 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 8.65 | 10.6 | 9.7 | 9.7 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0612826 **Received** : 28 Sep 2021
Lab Number : 02446724 **Diagnosed** : 29 Sep 2021
Unique Number : 5290259 **Diagnostician** : Kevin Marson
Test Package : MOB 1

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 (m) Denotes a modified test method, (e) Denotes a test conducted using an external laboratory.

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