



# ASCENDUM

## OIL ANALYSIS REPORT

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



Machine Id  
**VOLVO A25G 13204825 (S/N 740146)**  
Component  
**Diesel Engine**  
Fluid  
**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (11 GAL)**

### RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

| Test           | UOM | Method      | Limit/Abn | Current     | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number  |     | Client Info |           | ASC0006559  | ---      | ---      |
| Sample Date    |     | Client Info |           | 04 Apr 2024 | ---      | ---      |
| Machine Age    | hrs | Client Info |           | 7464        | ---      | ---      |
| Oil Age        | hrs | Client Info |           | 7464        | ---      | ---      |
| Filter Age     | hrs | Client Info |           | 0           | ---      | ---      |
| Oil Changed    |     | Client Info |           | Changed     | ---      | ---      |
| Filter Changed |     | Client Info |           | Changed     | ---      | ---      |
| Sample Status  |     |             |           | NORMAL      | ---      | ---      |

### WEAR

Metal levels are typical for a components first oil change.

|              |        |             |      |      |     |     |
|--------------|--------|-------------|------|------|-----|-----|
| Iron         | ppm    | ASTM D5185m | >100 | 9    | --- | --- |
| Chromium     | ppm    | ASTM D5185m | >20  | <1   | --- | --- |
| Nickel       | ppm    | ASTM D5185m | >2   | <1   | --- | --- |
| Titanium     | ppm    | ASTM D5185m |      | <1   | --- | --- |
| Silver       | ppm    | ASTM D5185m | >2   | 0    | --- | --- |
| Aluminum     | ppm    | ASTM D5185m | >25  | 2    | --- | --- |
| Lead         | ppm    | ASTM D5185m | >40  | <1   | --- | --- |
| Copper       | ppm    | ASTM D5185m | >330 | 1    | --- | --- |
| Tin          | ppm    | ASTM D5185m | >15  | 1    | --- | --- |
| Vanadium     | ppm    | ASTM D5185m |      | <1   | --- | --- |
| White Metal  | scalar | *Visual     | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual     | NONE | NONE | --- | --- |

### CONTAMINATION

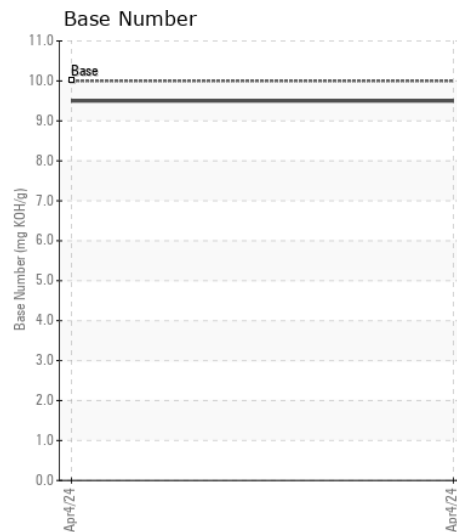
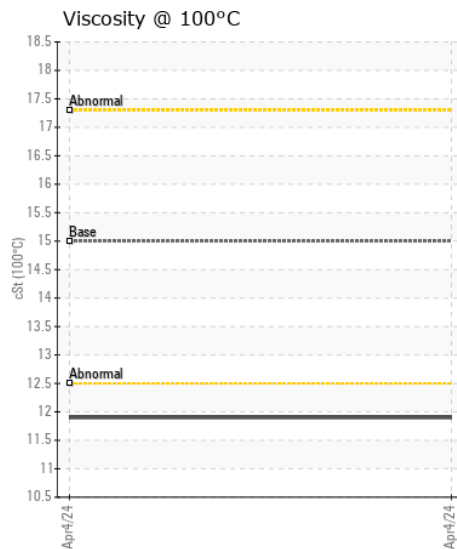
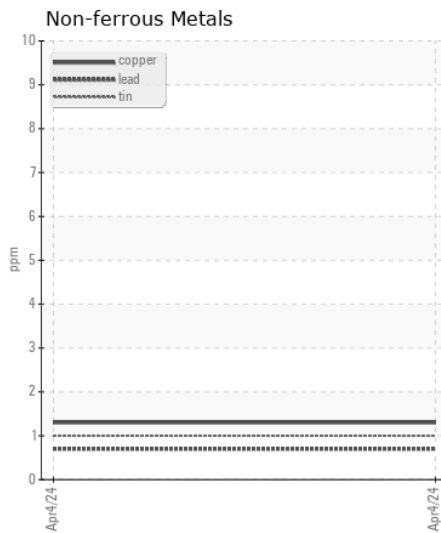
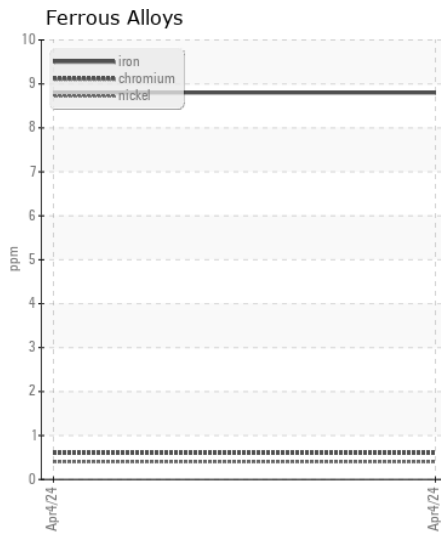
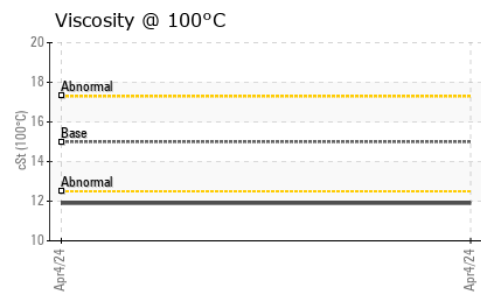
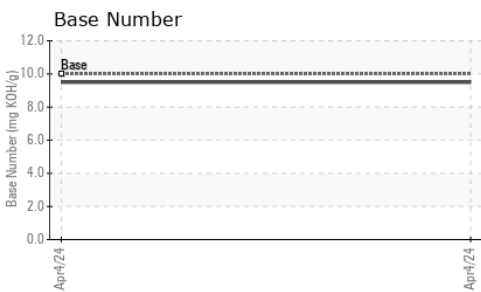
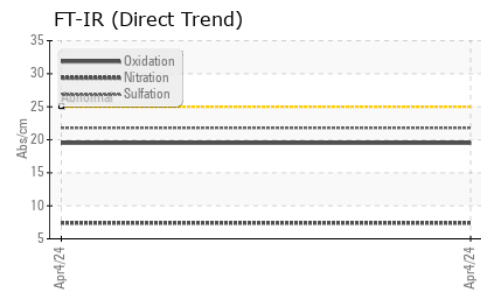
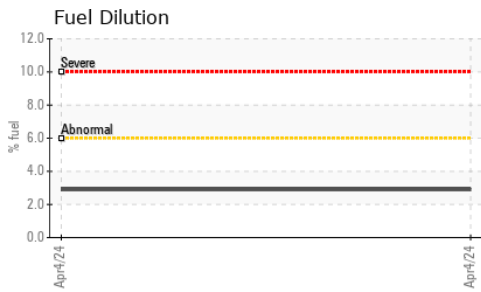
Light fuel dilution occurring. No other contaminants were detected in the oil.

|                  |          |             |       |       |     |     |
|------------------|----------|-------------|-------|-------|-----|-----|
| Silicon          | ppm      | ASTM D5185m | >25   | 8     | --- | --- |
| Potassium        | ppm      | ASTM D5185m | >20   | 1     | --- | --- |
| Fuel             | %        | ASTM D3524  | >6.0  | 2.9   | --- | --- |
| Water            |          | WC Method   | >0.2  | NEG   | --- | --- |
| Glycol           |          | WC Method   |       | NEG   | --- | --- |
| Soot %           | %        | *ASTM D7844 | >3    | 0.2   | --- | --- |
| Nitration        | Abs/cm   | *ASTM D7624 | >20   | 7.4   | --- | --- |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30   | 21.8  | --- | --- |
| Silt             | scalar   | *Visual     | NONE  | NONE  | --- | --- |
| Debris           | scalar   | *Visual     | NONE  | NONE  | --- | --- |
| Sand/Dirt        | scalar   | *Visual     | NONE  | NONE  | --- | --- |
| Appearance       | scalar   | *Visual     | NORML | NORML | --- | --- |
| Odor             | scalar   | *Visual     | NORML | NORML | --- | --- |
| Emulsified Water | scalar   | *Visual     | >0.2  | NEG   | --- | --- |

### 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.

|                  |          |             |      |      |     |     |
|------------------|----------|-------------|------|------|-----|-----|
| Sodium           | ppm      | ASTM D5185m |      | <1   | --- | --- |
| Boron            | ppm      | ASTM D5185m | 2.5  | 54   | --- | --- |
| Barium           | ppm      | ASTM D5185m | 0.0  | 1    | --- | --- |
| Molybdenum       | ppm      | ASTM D5185m | 0.7  | 42   | --- | --- |
| Manganese        | ppm      | ASTM D5185m | 0.0  | <1   | --- | --- |
| Magnesium        | ppm      | ASTM D5185m | 256  | 495  | --- | --- |
| Calcium          | ppm      | ASTM D5185m | 2057 | 1692 | --- | --- |
| Phosphorus       | ppm      | ASTM D5185m | 935  | 1002 | --- | --- |
| Zinc             | ppm      | ASTM D5185m | 1223 | 1139 | --- | --- |
| Sulfur           | ppm      | ASTM D5185m | 4079 | 3340 | --- | --- |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25  | 19.5 | --- | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896  | 10   | 9.5  | --- | --- |
| Visc @ 100°C     | cSt      | ASTM D445   | 15.0 | 11.9 | --- | --- |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0006559 **Received** : 16 Apr 2024  
**Lab Number** : 06149828 **Tested** : 19 Apr 2024  
**Unique Number** : 10979906 **Diagnosed** : 19 Apr 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

**364 - ASCENDUM MACHINERY INC - MACON**  
 4807 HARRISON RD  
 MACON, GA  
 US 31206  
 Contact: HALIE BAKER  
 halie.baker@ascendummachinery.com

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) F: (478)200-5859