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| Handläggare, cahet / Handled by, department | Datum <i> Date</i> | Beteckning / Reference | Sid n / Page |
|---------------------------------------------|---------------------|------------------------|---------------------|
| Chemistry and Materials Technology | Feb 18, 2000 | FO 00617 | 1 (2) |
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Amalgam separator. Efficiency test according to ISO/ FDIS 1143

Amalgam separator, forwarded by the client.

| Marking: | 15 2000 (According to the client) | | |
|------------------|------------------------------------------|--|--|
| C | The tested Amalgam separator was marked | | |
| | "Amalganfilter Type - 151191" and a hand | | |
| | written number 3. | | |
| Arrival at SP: | 2000-01-18 | | |
| Date of testing: | 2000-01-1926 | | |

Project

Test of separation efficiency. Three tests with an empty amalgam separator (0%) and three tests with a separator filled to the maximum filling level (100%).

Method

ISO/FDIS 11143:1999-07-15 ("Final Draft International Standard"). Standard amalgam samples were used (10 g - ISO 11143 January 2000).

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Uppgift om mätosäkorhot kan fås på begäran. Resultatet avser onbart det provade objektot. Information about measurement uncertainty will be given on request. The result concernes the tested object only. FO 00617 ang

Detta dokument får endast återges i sin helhet, om inte SP i förväg skriftligen godkänt annat.

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REPORT





| Results |
|---------|
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| Test | Flow (L/min | Filling level (%) | Amount passing separator (g) | Degree of separation (%) |
|-------------|----------------|----------------------|---------------------------------|--------------------------|
| "1" | approx.3 | 0 | 0.347 | 96.5 |
| "2" | 3,0* | 0 | 0.419 | 95.8 |
| "3" | 3,0* | 0 | 0.443 | 95.6 |
| "4" | 3.0* | 100** | 0.477 | 95.2 |
| "5" | 3.0* | 100** | 0.492 | 95.1 |
| " 6" | 3.0* | 100** | 0.490 | 95.1 |

*The flow was set to 2.5 L/min during the first two minutes of the test. This gives a total of 3.0 L/min including the amalgam sample (1.0 L during 2 min) during the first 2 min of the test. During the last 8 min the flow was set to 3.0 L/min.

**The filling material consisted of 150 mL lead powder (0.040 mm < x < 0.200 mm), 150 mL lead powder (0.200 < x < 0.280 mm) supplied by the client, and glass pellets 700 mL with 1 mm diameter. The total volume was 1000 mL according to the client.

Before the tests 1 L "Filterhjaelp" was poured into the amalgam separator. The solution was supplied by the client.

During the Test-1 the flow was unstable.

After filling the amalgam separator to 100%, 18.7 L of water which had passed the separator at a flow of 2.0 L/min was filtered. The weight of the material collected on the filter was 0.0041 g.

The efficiency of the amalgam separator is defined as the lowest mean value from the two test series at different filling levels (0% respectively 100%). The test shows an efficiency of 95.1%.

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