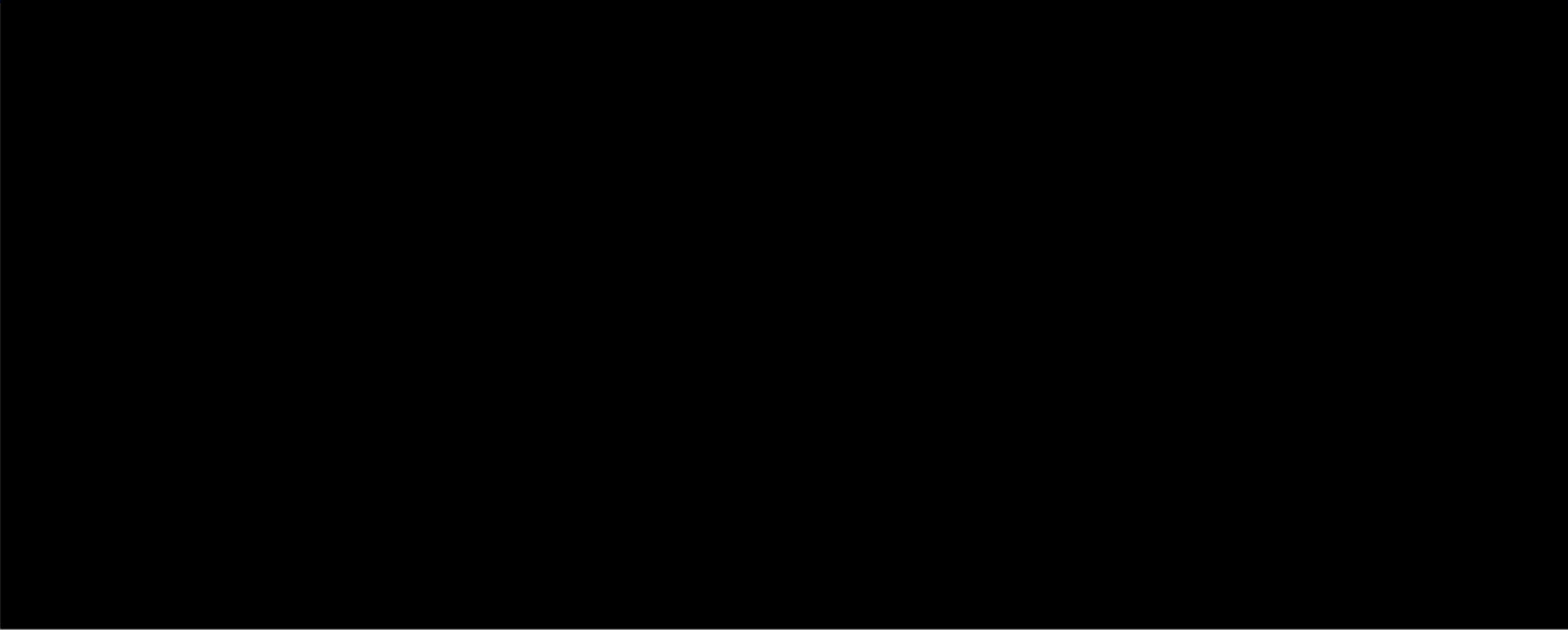


Diesel Systems

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INFORMATION Redacted PURSUANT TO THE FREEDOM OF INFORMATION ACT (FOIA), 5 U.S.C. 552(B)(6)

Diesel Systems

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BOSCH

From: Non-responsive content removed

To:

CC:

Date: 6/6/2008, 3:55:24 PM

Subject: Cleanliness status of MU4 from the Waiblingen plant (as of Wk 22)

Attachments: [Sauberkeitsstatus WaP ZME4 KW22.pdf](#)

Dear Sir/Madam,

Attached please find the status report on the cleanliness of MU4 from the WaP as of

Wk22 .

<<Sauberkeitsstatus WaP ZME4 KW22.pdf>>

Note: At the next update on 06/13/2008, the status of MU4 will contain additional data.

Notes on this set of slides:

The cleanliness status of the following product is presented: **MU4**
The status up to and including the status for the previous Week (Monday to Friday) is presented.
Slide 1: Residual dirt on MU4, irrespective of the customer
- Result of residual dirt inspections of the MU as average values for the respective Wk
- Particle categories 50µm - 100µm, 100µm - 200µm, 200µm - 400µm, >400µm with upper limits
Slide 2: Measures for reducing the residual dirt, irrespective of the customer
- Planned and implemented measures with a daily deadline and a defined Wk of implementation
The relevant set of slides will be distributed every Friday.

Best regards

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Non-responsive content removed

Robert Bosch GmbH

Non-responsive content removed

EA11003EN-00395[1]

*Management: Franz Fehrenbach, Siegfried Dais; Bernd Bohr,
Wolfgang Chur, Rudolf Colm, Gerhard Kümmel, Wolfgang Malchow,
Peter Marks; Volkmar Denner, Peter Tyroller*

From: Non-responsive content removed

To:

CC:

Date: 11/13/2008, 11:35:00 AM

Subject: ANS: CP4 cleanliness status FeP/JhP as of Wk 44

Dear Mr. [REDACTED]

Since Mr. [REDACTED] promised the topic for yesterday and I did not want to take advantage of the CT analysis time, I have promised to inform you about the status of "IV filter screen for CP4.1" this coming Wednesday.

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Please schedule 10 minutes for this, thank you.

With best regards

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Bernd Bohr, Rudolf Colm, Gerhard Kümmel, Wolfgang Malchow, Peter Marks;
Volkmar Denner, Uwe Raschke, Peter Tyroller

From: Non-responsive content removed

Sent: Thursday, November 13, 2008, 11:16 AM

Non-responsive content removed

Subject: ANS: CP4 cleanliness status FeP/JhP as of Wk 44

Dear [REDACTED]

[REDACTED] did not mean the particle limit values, but rather the topic of an IV filter screen. Yesterday, [REDACTED] promised this for Wednesday.

With best regards

Non-responsive content removed

From: Non-responsive content removed

Sent: Thursday, November 13, 2008, 10:22 AM

Non-responsive content removed

Subject: ANS: CP4 cleanliness status FeP/JhP as of Wk 44

Dear Non-responsive content removed

Yesterday, we Non-responsive content removed briefly discussed the topic. Non-responsive content removed is tracking the topic for VW and Audi. Yesterday, we therefore discussed arranging a special meeting for VW, Audi and Bosch.

Consequently, we should not include the topic in a specialist meeting. We will organize this special meeting.

Agreed?

With best regards

Non-responsive content removed

Robert Bosch GmbH

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Bernd Bohr, Rudolf Colm, Gerhard Kümmel, Wolfgang Malchow, Peter Marks;
Volkmar Denner, Uwe Raschke, Peter Tyroller

From: Non-responsive content removed

Sent: Thursday, November 13, 2008, 10:11 AM

Non-responsive content removed

Subject: ANS: CP4 cleanliness status FeP/JhP as of Wk 44

Dear Non-responsive content removed

Please add this topic to the agenda for the next specialist meeting.

With best wishes

Non-responsive content removed

AUDI AG

Non-responsive content removed

Sitz/Domicile: Ingolstadt
Registergericht/Court of Registry: Local District Court Ingolstadt
HRB Nr./Commercial Register No.: 1

EA11003EN-00429[2]

Vorsitzender des Aufsichtsrats/Chairman of the Supervisory Board: Martin Winterkorn

Vorstand/Board of Management: Rupert Stadler (Vorsitzender/Chairman), Ulf Berkenhagen, Michael Dick, Frank Dreves, Peter Schwarzenbauer, Axel Strotbek,
Werner Widuckel

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From: Non-responsive content removed
Sent: Tuesday, November 11, 2008, 4:14 PM

Non-responsive content removed

Subject: ANS: CP4 cleanliness status FeP/JhP as of Wk 44

That's fine

However, why have there not been any failures recently (as far as I know) even though particles > 200 µm continue to be detected during the residual dirt test?

Was the culprit removed from the IV area, in particular?

With best regards

Non-responsive content removed

From: Non-responsive content removed
Sent: Tuesday, November 11, 2008, 4:08 PM

Non-responsive content removed

Subject: ANS: CP4 cleanliness status FeP/JhP as of Wk 44

Dear

Non-responsive content removed will inform you about the status of the "intake value screen" topic (CT analysis) tomorrow.

With best regards

Non-responsive content removed

Robert Bosch GmbH

Non-responsive content removed

From: Non-responsive content removed
Sent: Friday, November 07, 2008, 2:17 PM

Non-responsive content removed

Subject: ANS: CP4 cleanliness status FeP/JhP as of Wk 44

Dear [Redacted]

I hereby ask you for the long overdue adjustment to the particle limit values.
Please make a proposal and arrange a teleconference for next week.

With best regards

[Redacted]

From: [Redacted]

Sent: Friday, November 07, 2008, 2:05 PM

[Redacted]

Subject: CP4 cleanliness status FeP/JhP as of Wk 44

Dear Sir/Madam,

Attached please find the updated status report on the cleanliness of CP4 from the Feuerbach plant as of Wk 44.
Since the Jihlava plant was closed in Wk 44, there are no current values.

<<Status Sauberkeit CP4 FeP und JhP Stand_2008-KW44.pdf>>

Notes on this set of slides:

The status of the product CP4 up to and including the previous week (Monday to Saturday) is presented. The VW/Audi-specific quality situation in terms of cleanliness (0km/field failures) accompanies the status and occurs on a monthly basis. The relevant set of slides will be distributed every Friday.

Due to a plant vacation shutdown, no data is available for the JhP in Wk 32/33 2008. Please read the comments below the diagrams.

Slides 2/3 : Residual dirt on CP4 in FeP and JhP, irrespective of the customer

- Result of the residual dirt tests of the overall product CP4 in each case in the low and high pressure areas as mean values for the respective Wk
- Particle categories 50µm - 100µm, 100µm - 200µm, 200µm - 400µm, >400µm with upper limits

Slides 4/5: Results of the 100% visual inspection of the MU in FeP and JhP

- Percentage failure rate over the weeks, starting with Wk 25 (when the visual inspection was implemented in Waiblingen)

Slides 6/7: Bosch CP4 failures (internal) due to particle problems in relation to the date of manufacture, irrespective of the customer

- right-hand scale: No. of particles detected each wk
- left-hand scale/bar: internal ppm of no. of complaints concerning CP4 each wk

Slides 8/9: No. of confirmed CP4 customer failures (VW/Audi 0km/field) caused by particles in relation to the date of manufacture

- right-hand scale: No. of CP4 failures each month
- left-hand scale: Production volumes or ppm

Slides 10/11: Measures for reducing the residual dirt, irrespective of the customer

- Planned and implemented measures in production and assembly with a daily deadline and a defined Wk of implementation

With best regards

[Redacted]

Robert Bosch GmbH

[Redacted]

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Bernd Bohr, Rudolf Colm, Gerhard Kümmel, Wolfgang Malchow, Peter Marks;
Volkmar Denner, Uwe Raschke, Peter Tyroller

From: Non-responsive content removed

To:

CC:

Date: 11/27/2008, 4:04:46 PM

Subject: Spa. RE: CP4 cleanliness status FeP/JhP as of Wk 44 v_27_11_08

Hello gentlemen, hello [redacted]

The specifications for existing CP4.x projects are defined: no particles > 200µm.

However, Bosch is not complying with this.

As was also the case at the discussion on changes, we expressly demand a concept that Bosch will comply with.

- Information from [redacted], internal agreement with Bosch, Jan. 09

- VW /Audi requirement for a status or presentation of concept in Wk06/09

- If necessary, if Development also demand a reduction in particles and particle categories for **new projects** .

With best wishes

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Volkswagen AG

Non-responsive content removed

From: Non-responsive content removed

Sent: Thursday, November 27, 2008, 2:29 PM

To: Non-responsive content removed

Cc: Non-responsive content removed

Subject: ANS: CP4 cleanliness status FeP/JhP as of Wk 44

Of course, with Non-responsive content removed

With best regards

Non-responsive content removed

From: Non-responsive content removed

Sent: Thursday, November 27, 2008, 2:21 PM

Non-responsive content removed

Subject: ANS: CP4 cleanliness status FeP/JhP as of Wk 44

Dear Mr. [redacted]

I agree with you.

The only plan was to discuss the values internally and then to reach agreement with you. However, we should also involve [redacted] as he is responsible for VW and Audi.

Non-responsive content removed

With best regards

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Robert Bosch GmbH

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Bernd Bohr, Rudolf Colm, Gerhard Kümmel, Wolfgang Malchow, Peter Marks;
Volkmar Denner, Uwe Raschke, Peter Tyroller

From: Non-responsive content removed

Sent: Thursday, November 27, 2008, 2:15 PM

Non-responsive content removed

Subject: ANS: CP4 cleanliness status FeP/JhP as of Wk 44

Dear [redacted]

I also include [redacted] and myself among "everyone involved".
(Of course, I understand that agreement will first be reached internally within RB.)
Agreed?

With best regards

Non-responsive content removed

From: Non-responsive content removed

Sent: Thursday, November 27, 2008, 2:07 PM

Non-responsive content removed

Subject: ANS: CP4 cleanliness status FeP/JhP as of Wk 44

Dear [redacted]

As expressed by the term "adjustment", the particle limit values must be adjusted to achievable values or the objectives need to be realistic and achievable. I am currently in the process of organizing an appointment with our specialist so that we can define agreed limit values. I need to involve the specialists **so that everyone involved supports the limit values** and consequently implements the associated measures.

I will contact you again after our internal discussion.

With best regards

Non-responsive content removed

Robert Bosch GmbH

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Volkmar Denner, Uwe Raschke, Peter Tyroller

From: Non-responsive content removed

Sent: Friday, November 21, 2008, 2:47 PM

Non-responsive content removed

Subject: ANS: CP4 cleanliness status FeP/JhP as of Wk 44

Dear Non-responsive content removed

Non-responsive content removed disapproved" yesterday.
Please make a proposal.

With best regards

Non-responsive content removed

From: Non-responsive content removed

Sent: Friday, November 07, 2008, 2:17 PM

Non-responsive content removed

Subject: ANS: CP4 cleanliness status FeP/JhP as of Wk 44

Dear Non-responsive content removed

I hereby ask you for the long overdue adjustment to the particle limit values.
Please make a proposal and arrange a teleconference for next week.

With best regards

Non-responsive content removed

From: Non-responsive content removed

Sent: Friday, November 07, 2008, 2:05 PM

Non-responsive content removed

Subject: CP4 cleanliness status FeP/JhP as of Wk 44

Dear Sir/Madam,

Attached please find the updated status report on the cleanliness of CP4 from FeP as of Wk 44 .
Since the Jihlava plant was closed in Wk 44, there are no current values.

<<Status Sauberkeit CP4 FeP und JhP Stand_2008-KW44.pdf>>

Notes on this set of slides:

The status of the **product CP4** up to and including the previous W ee k (Monday to Saturday) is presented. The VW/Audi-specific quality situation in terms of cleanliness (0km/field failures) accompanies the status and occurs on a monthly basis. The relevant set of slides will be distributed every Friday.

Due to a plant vacation shutdown, no data is available for the JhP in Wk 32/33 2008. Please read the comments below the diagrams.

Slides 2/3 : Residual dirt on CP4 in FeP and JhP, irrespective of the customer

- Result of the residual dirt tests of the overall product CP4 in each case in the low and high pressure areas as mean values for the respective Wk
- Particle categories 50µm - 100µm, 100µm - 200µm, 200µm - 400µm, >400µm with upper limits

Slides 4/5: Results of the 100% visual inspection of the MU in the FeP and JhP

- Percentage failure rate over the weeks, starting with Wk 25 (when the visual inspection was implemented in Waiblingen)

Slides 6/7: Bosch CP4 failures (internal) due to particle problems in relation to the date of manufacture, irrespective of the customer

- right-hand scale: No. of particles detected each wk
- left-hand scale/bar: internal ppm of no. of complaints concerning CP4 each wk

Slides 8/9: No. of confirmed CP4 customer failures (VW/Audi 0km/field) caused by particles in relation to the date of manufacture

- right-hand scale: No. of CP4 failures each month
- left-hand scale: Production volumes or ppm

Slides 10/11: Measures for reducing the residual dirt, irrespective of the customer

- Planned and implemented measures in production and assembly with a daily deadline and a defined Wk of implementation

With best regards

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Robert Bosch GmbH

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Volkmar Denner, Uwe Raschke, Peter Tyroller

From: Non-responsive content removed
To:
CC:

Date: 01.30.2009 06:00:15 PM

Subject: Cleaning work CP4 and Q-meeting on 02.06.2009

Attachments: [Zusammenfassung Workshop Sauberkeit.pdf](#)
[Ausfälle Partikel extern.pdf](#)
[VW_090206_Agendavorschlag.pdf](#)

Good morning 

As agreed the summary of our workshop on cleanliness on 01.23.2009.

<<Zusammenfassung_Workshop_Sauberkeit.pdf>>
We would like to present the topics during your visit to the FeP on 02.06.2009.

Has this been planned? Report the sponsor / initiator for the respective topic.

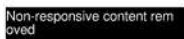
You will also receive a detailed overview of the internal and external failures; as an extract from this the overview of external failures in 2007 and 2008 for all CP4.

<<Ausfälle_Partikel_extern.pdf>>

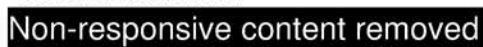
Below the proposed agenda; we are happy to discuss the preferred changes, additions on Monday

<<VW_090206_Agendavorschlag.pdf>>

Best regards / mit freundlichen Grüßen



Robert Bosch GmbH



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Peter Tyroller; Uwe Raschke

VW CP4 Quality meeting on 02.06.09 in Feb

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Proposed agenda

Time	Topic	Responsible
8:30 -10:00 am	Modification package 3+4, viewing of the endurance run pumps	Non-responsive content removed
10:00-12:00 am	Presentation of the results from the cleanliness workshop, next steps	Non-responsive content removed
12:00-12:45 pm	Lunch	Non-responsive content removed
12:45-02:00 pm	Overview of Q-Situation CP4 Analysis topics (Sequence, approach not OK, specification)	Non-responsive content removed



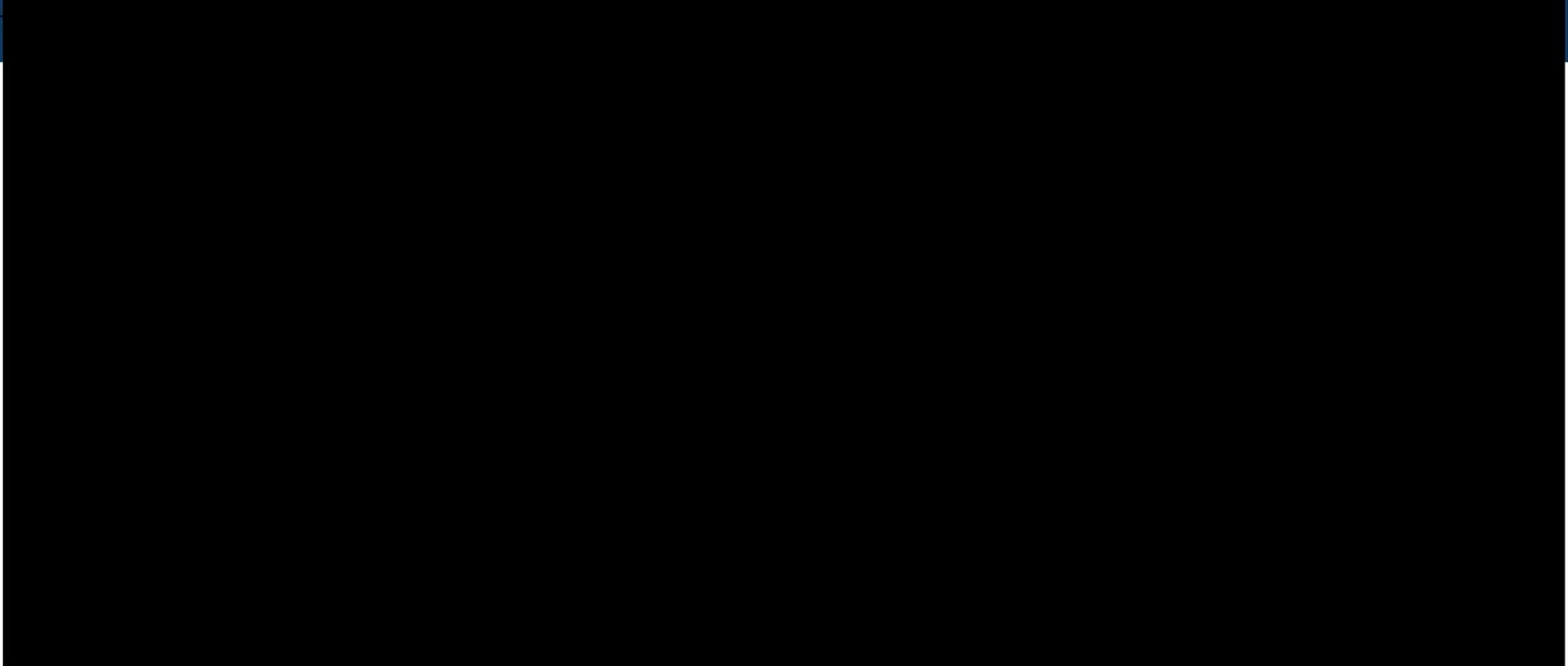


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From: Non-responsive content removed

To:

CC:

Date: 04.02.2009, 5:23:40 PM

Subject: Cleanliness status MU4 from WaP, Status as on WK13

Attachments: [Sauberkeitsstatus WaP ZME4 KW14 2009.pdf](#)

Dear Sir/Madam,

attached is the status report on the cleaning topic MU4 from Waiblingen (WaP), version WK 13/2009
From 2009 onwards the report will be distributed every 2 weeks (in the even numbered calendar weeks) as agreed.

Explanations for the slides:

Shown is the cleaning status of the **product MU4** up to and including the previous calendarweek (Monday to Friday) The set of slides will be distributed every 2 weeks on Fridays

Slide 1: Residual contamination MU4, customer-independent

- Result of residual contamination tests of the MU4 as average values of the respective WK
- Particle classes 50-100 µm, 100-200 µm, 200-400 µm, > 400 µm with upper limits

Slide 2: Results of the 100% visual check MU in WaP

- Percentage of failure rates over calendar weeks, starting with WK25 (introduction of the visual check in WaP)

Slides 3 to 8: Measures to reduce residual contamination, customer-independent

- implemented and planned measures with date and WK of implementation

Best regards / mit freundlichen Grüßen

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Volkmar Denner, Uwe Raschke, Peter Tyroller

Non-responsive content removed
From:
To:

CC:

Date: 05.07.2009, 6:46:43 PM

Subject: Minutes of CP4 cleaning meeting at VW on 04.27.2009 in Salzgitter

Attachments: [Anlage 1 090427 Q-Gespräch Sauberkeit CP4 VW-Bosch Ohne Backup.pdf](#)
[Anlage 2 Sauberkeitsstatus WaP ZME4 VW Q Gespräch 27 04 2009.pdf](#)
[Anlage 3 0674 \[REDACTED\] Anforderungen Entwicklungsziele Sieb vor Saugventil.pdf](#)
[09 1916 d F QMC Protokoll VW TecSa HDP 2.0I C 27.04.2009.pdf](#)
[Anlage 4 2009 04 23 Handlungsfelder VSS.pdf](#)
[Anlage 5 090420 Restschmutzreduzierungs Gehäuse MOE11.pdf](#)
[Anlage 6 Handlungsfeld ZK \(3\).pdf](#)
[Anlage 7 MK VARIANTE 090121 Wr 01.pdf](#)
[Anlage 8 Sauberkeitsarbeit Kunststoff.pdf](#)
[Anlage 9 Zerlegeaudit durch VW.pdf](#)

Hello,

attached the minutes of the CP4 cleaning meeting with appendices.

Best regards / mit freundlichen Grüßen

Non-responsive content removed

Robert Bosch GmbH

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From: Non-responsive content removed

To:

CC:

Date: 5/27/2009, 3:37:47 PM

Subject: FW: High pressure fuel pump (HPP) no pressure 03L130755

Attachments: [Status Sauberkeit CP4 FeP und JhP Stand 2009-KW11.pdf](#)

Hello Non-responsive content removed

I meant the inquiry as in the pages 12-13 of this presentation, but updated for the two sites with customer distribution

>
Thank you

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AUDI HUNGARIA MOTOR Kft.

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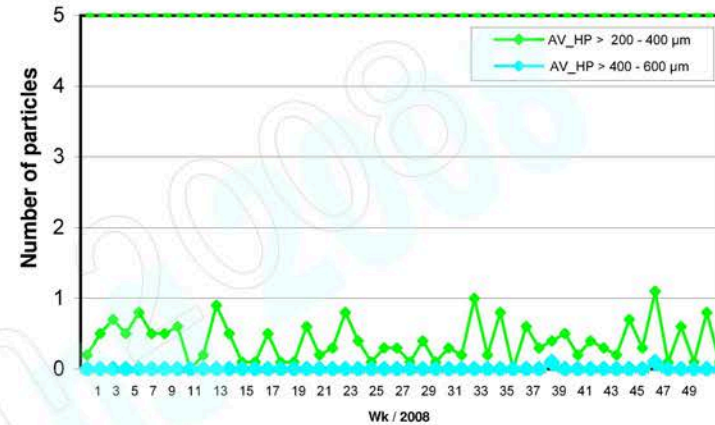
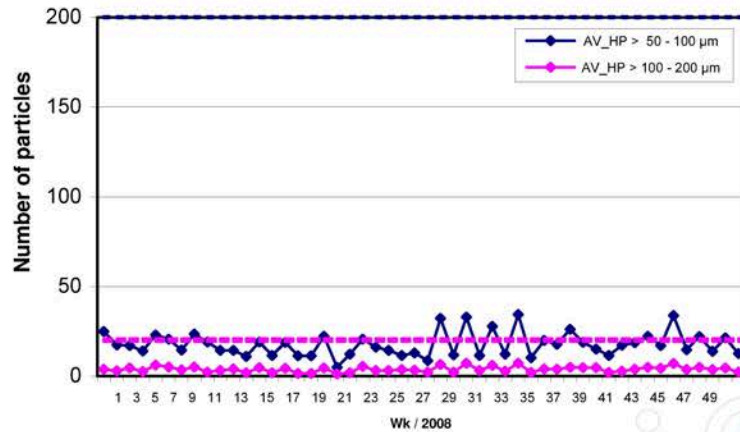
Cleanliness status FeP/JhP CP4, Status WK11/2009

Cleanliness status CP4 FeP/JhP

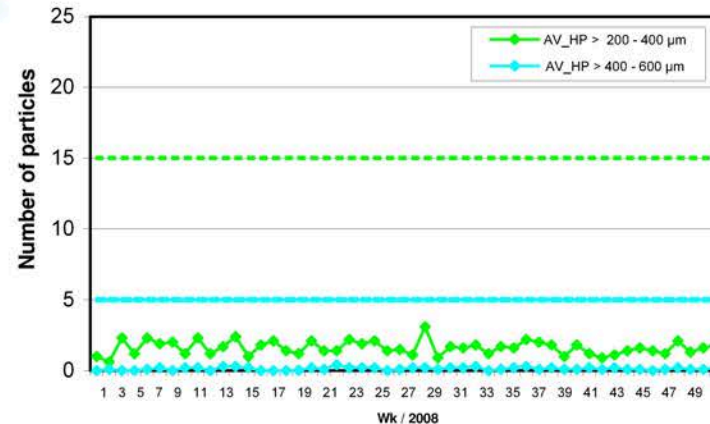
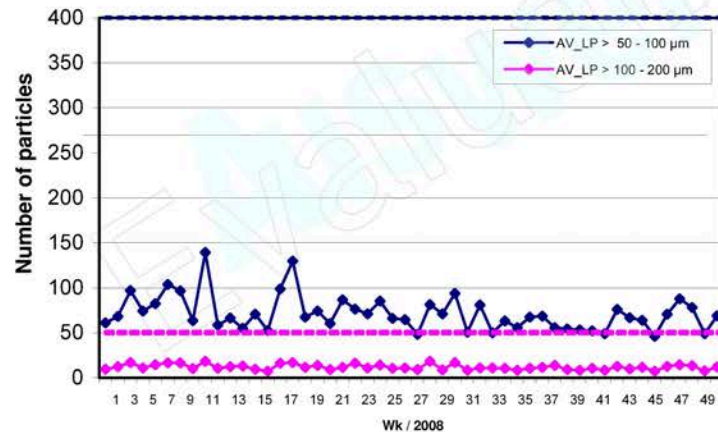


Cleanliness status FeP/JhP CP4, Status WK11/2009

FeP: Residual contamination CP4 in the high-pressure range according to particle classes

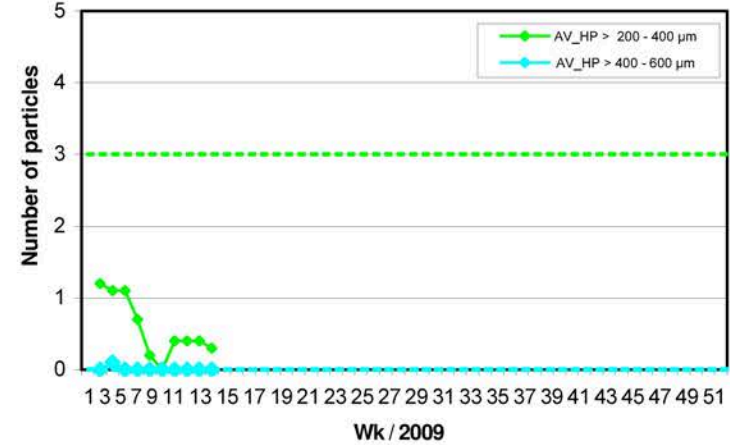
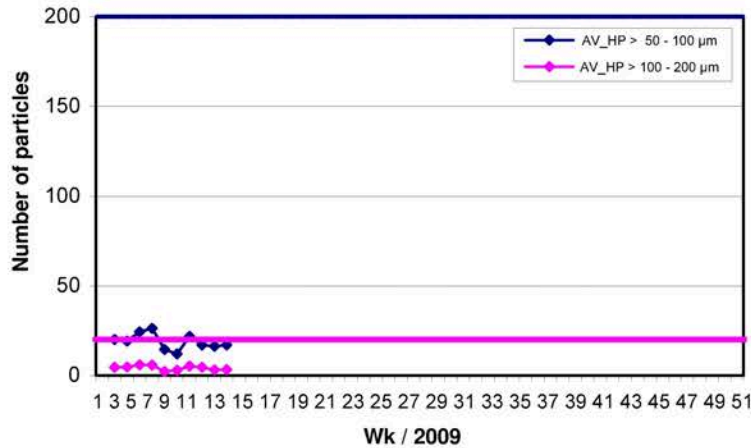


FeP: Residual contamination CP4 in the low-pressure range according to particle classes

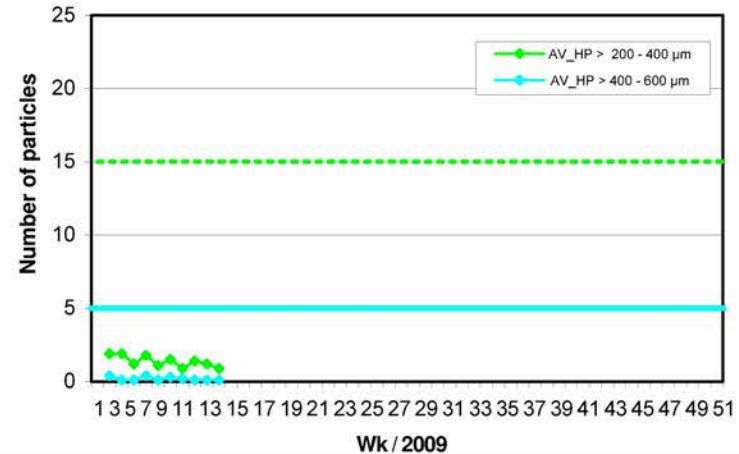
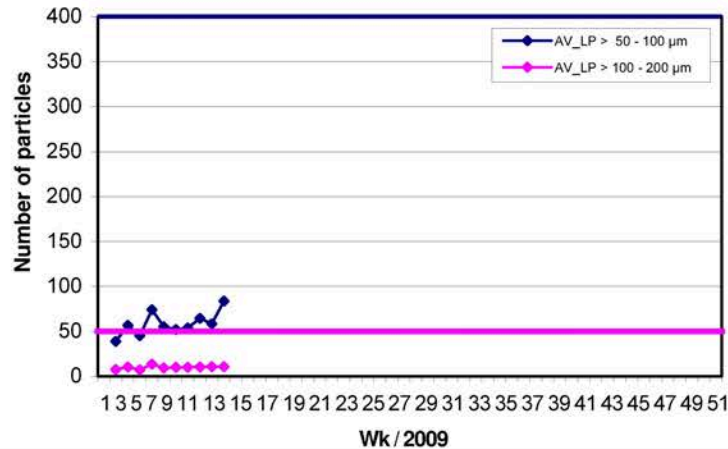


Cleanliness status FeP/JhP CP4, Status WK11/2009

FeP: Residual contamination CP4 in the high-pressure range according to particle classes

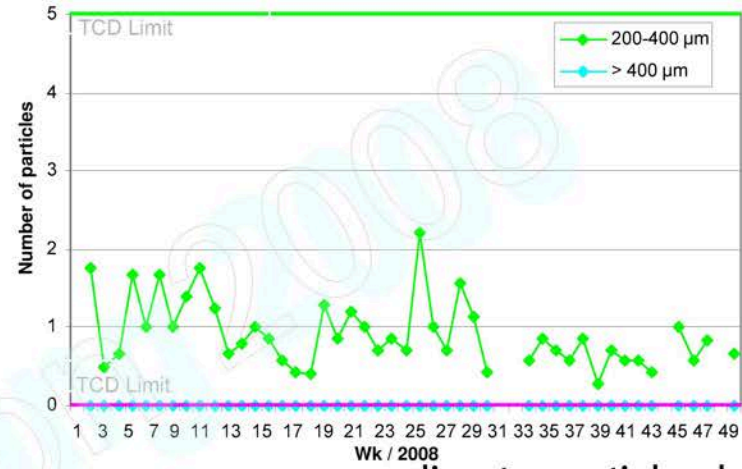
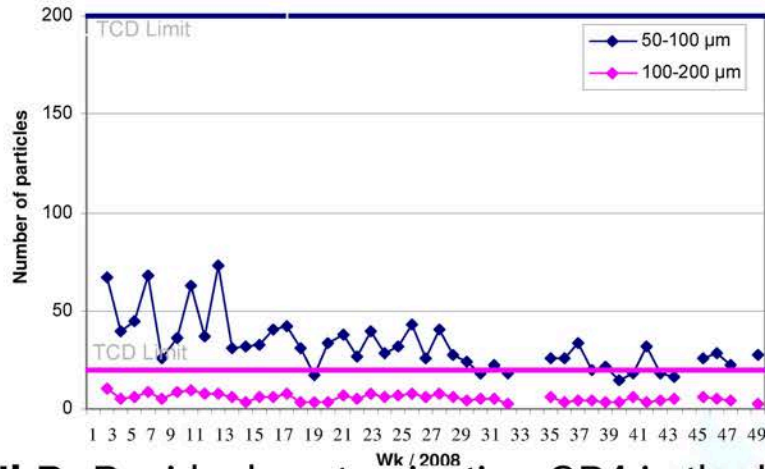


FeP: Residual contamination CP4 in the low-pressure range according to particle classes

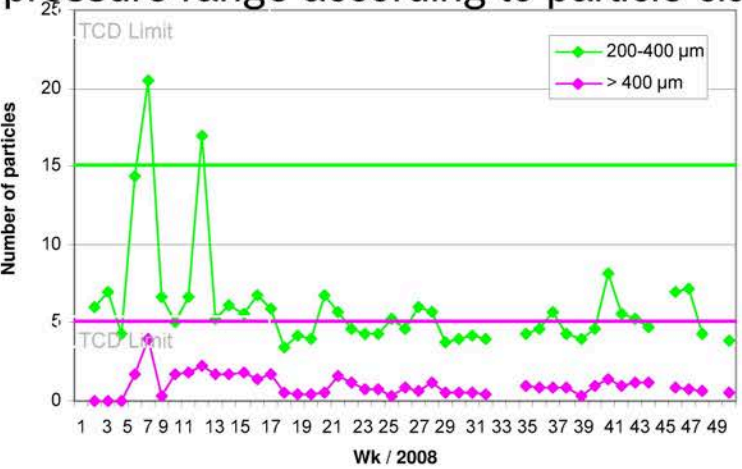
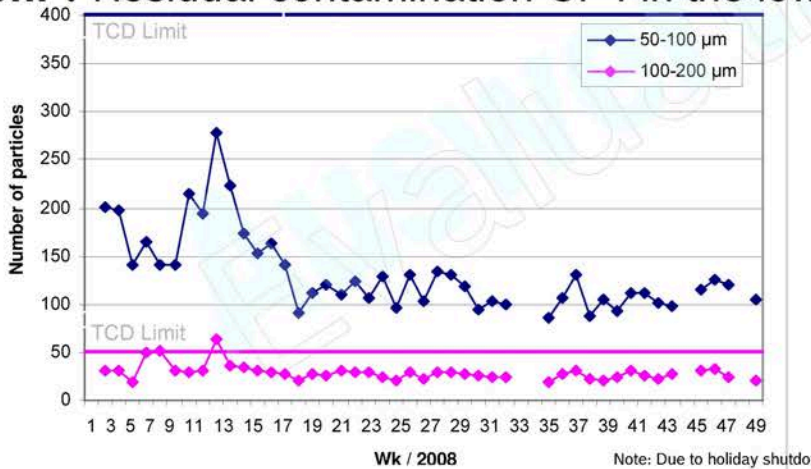


Cleanliness status FeP/JhP CP4, Status WK11/2009

JhP: Residual contamination CP4 in the high-pressure range according to particle classes

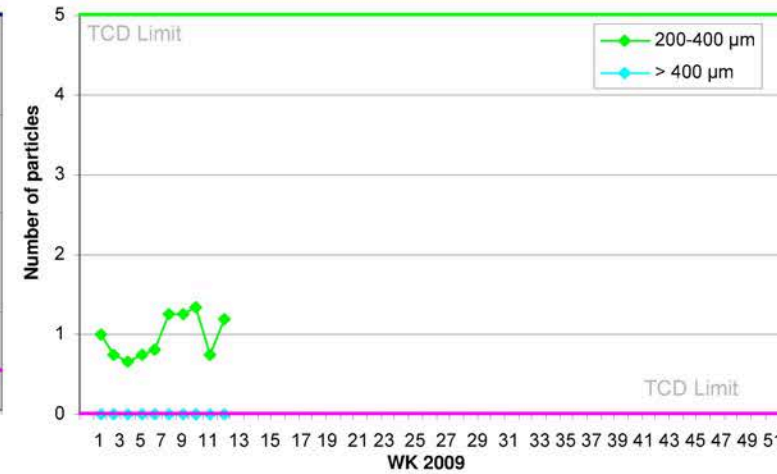
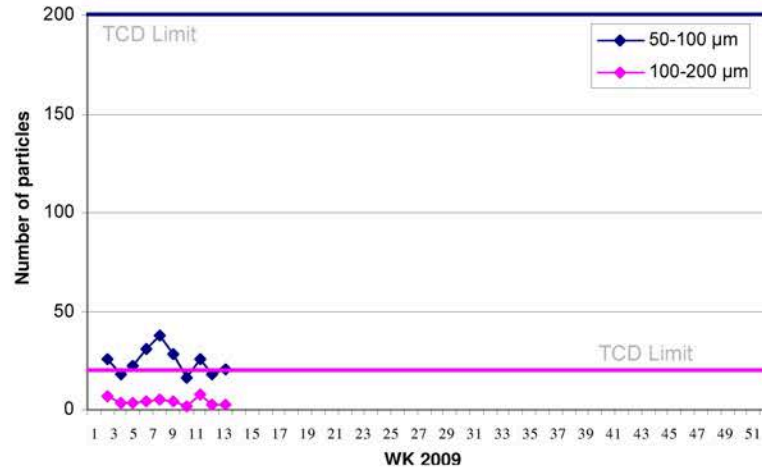


JhP: Residual contamination CP4 in the low-pressure range according to particle classes

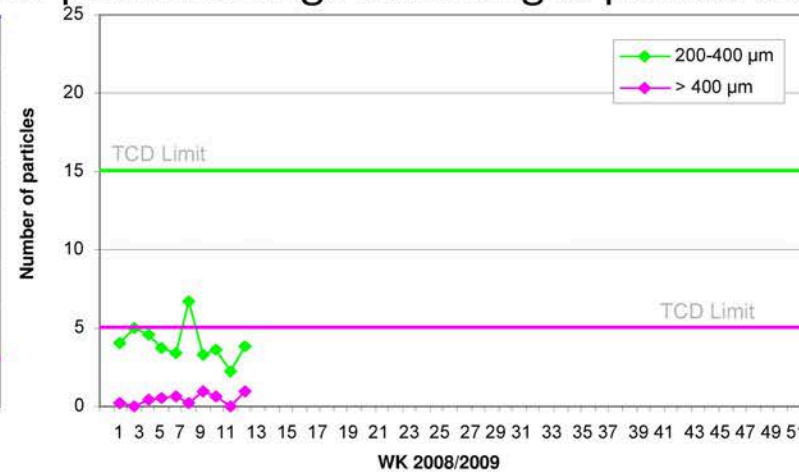
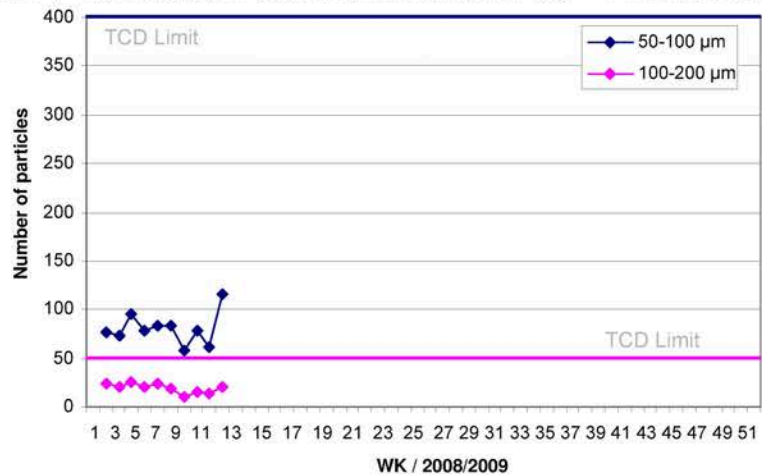


Cleanliness status Bosch FeP/JhP CP4, Status WK11

JhP: Residual contamination CP4 in the high-pressure range according to particle classes

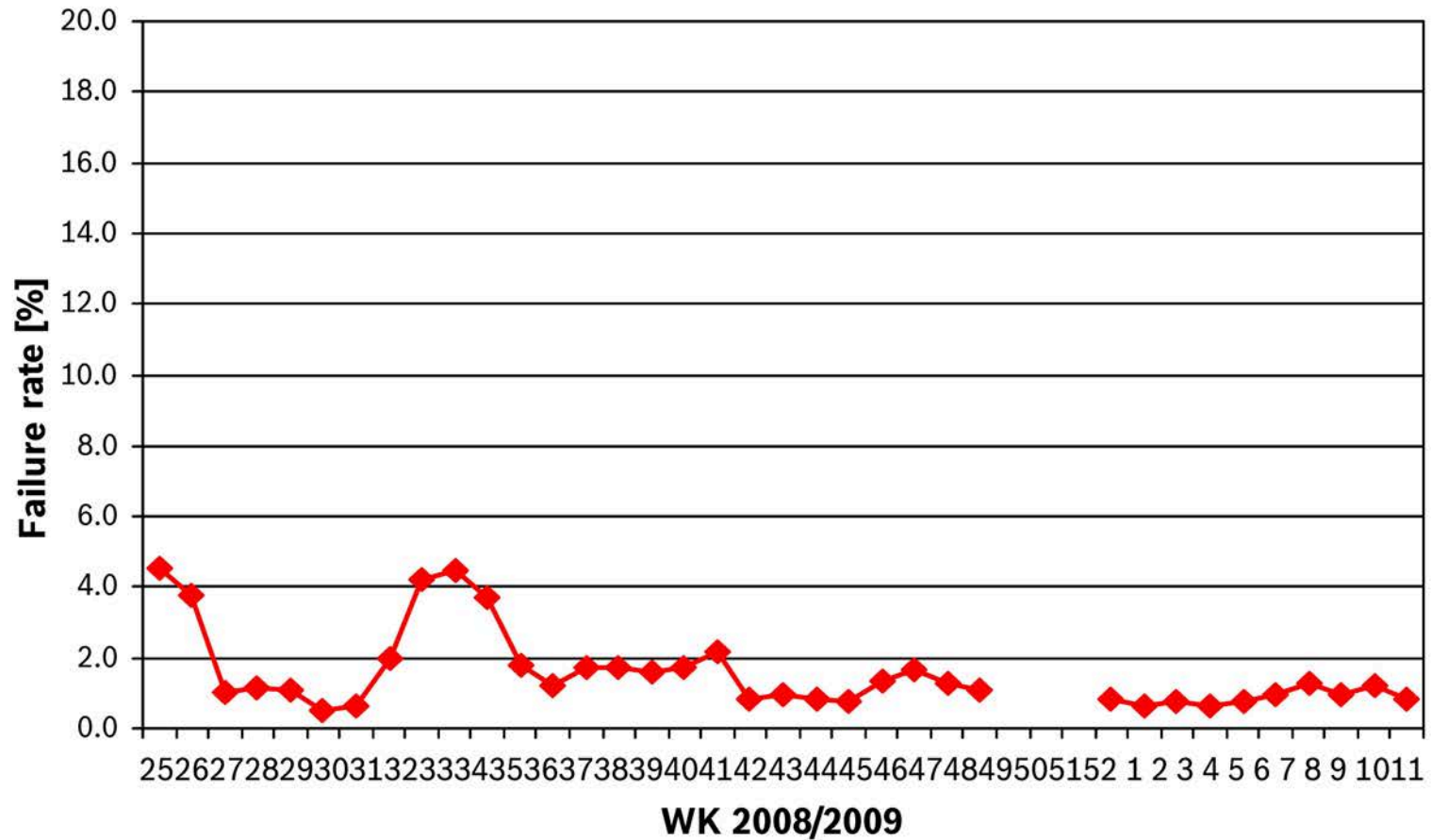


JhP: Residual contamination CP4 in the low-pressure range according to particle classes



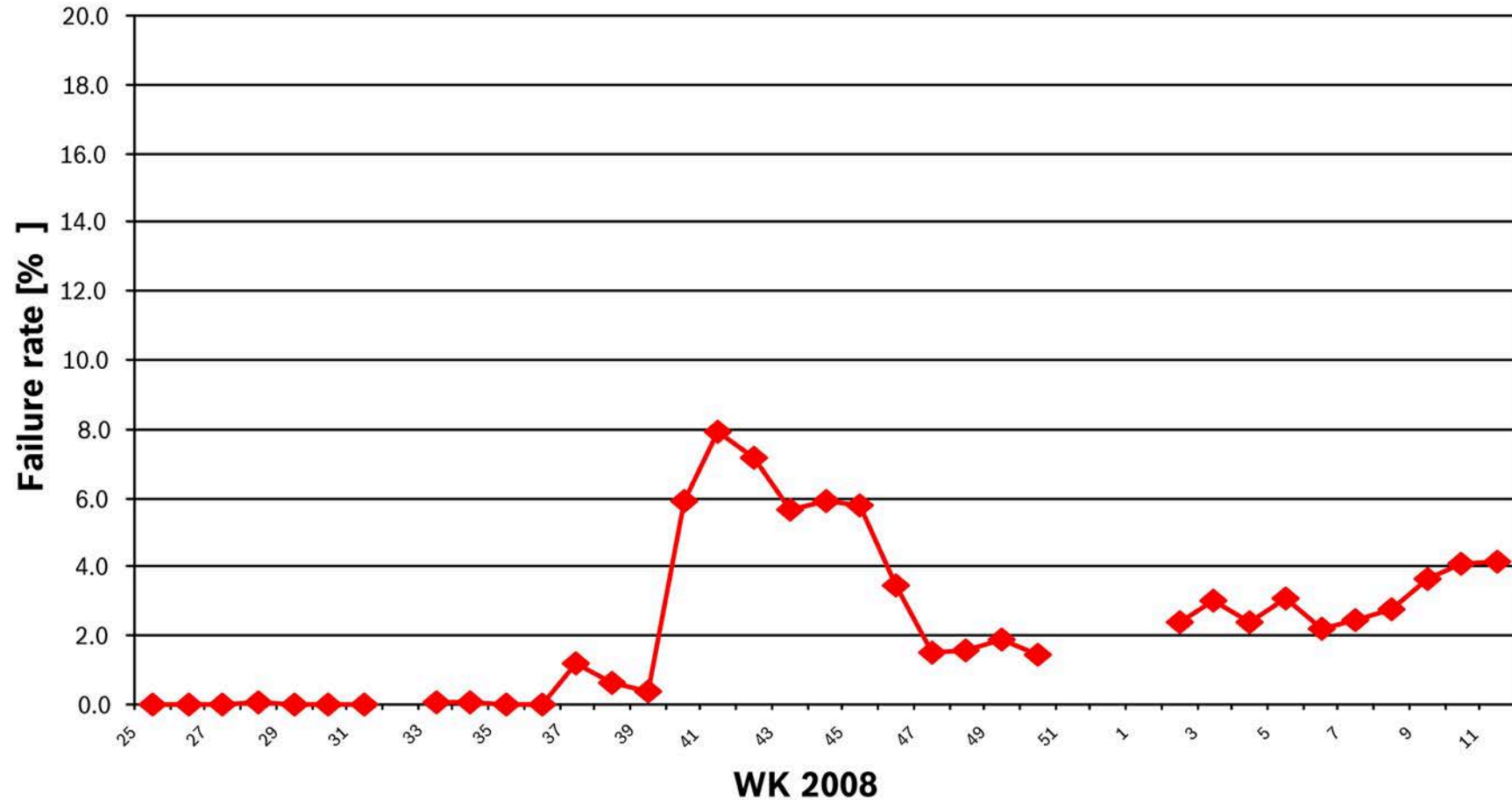
Cleanliness status FeP/JhP CP4, Status WK11/2009

FeP: Visual check of MU4 (Failure rate due to particles in %)



Cleanliness status Bosch FeP/JhP CP4, Status WK11

JhP: Visual check of MU4 (Failure rate due to particles in %)

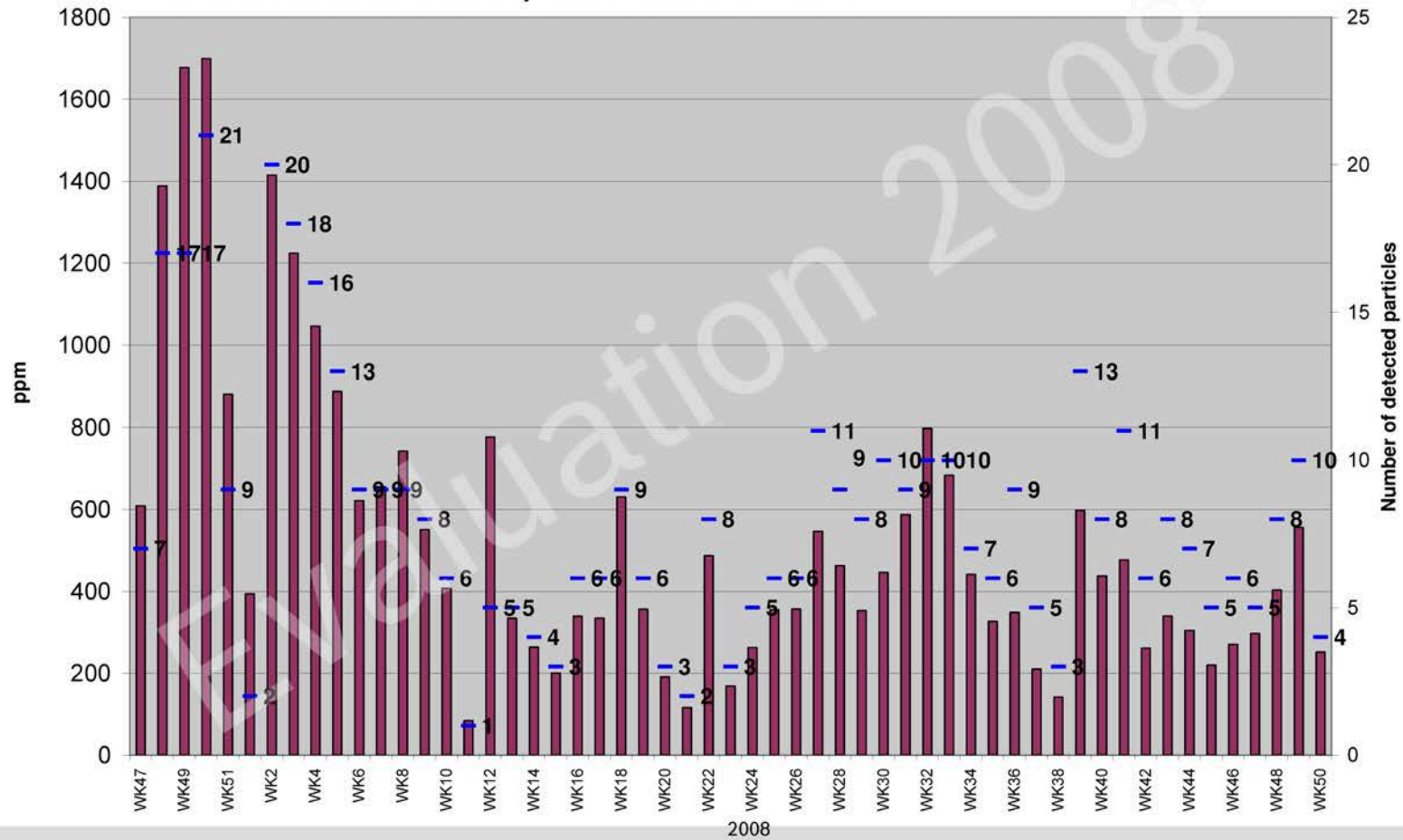


Note: Due to holiday shutdown, there is no data available for WK 32-33.



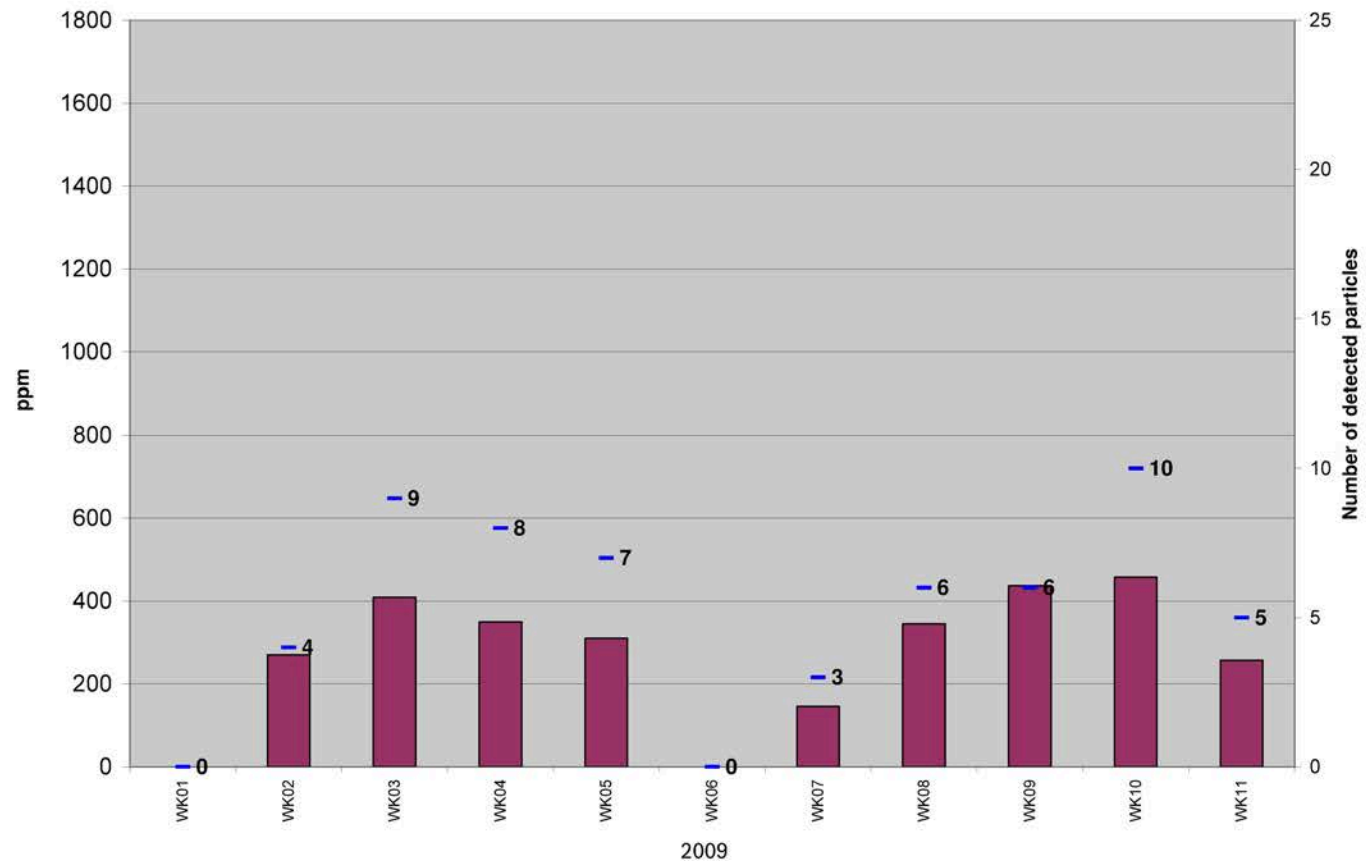
Cleanliness status FeP/JhP CP4, Status WK11/2009

FeP: CP4 product, internal rail pressure failures with particles detected in the intake valve / non-return valve



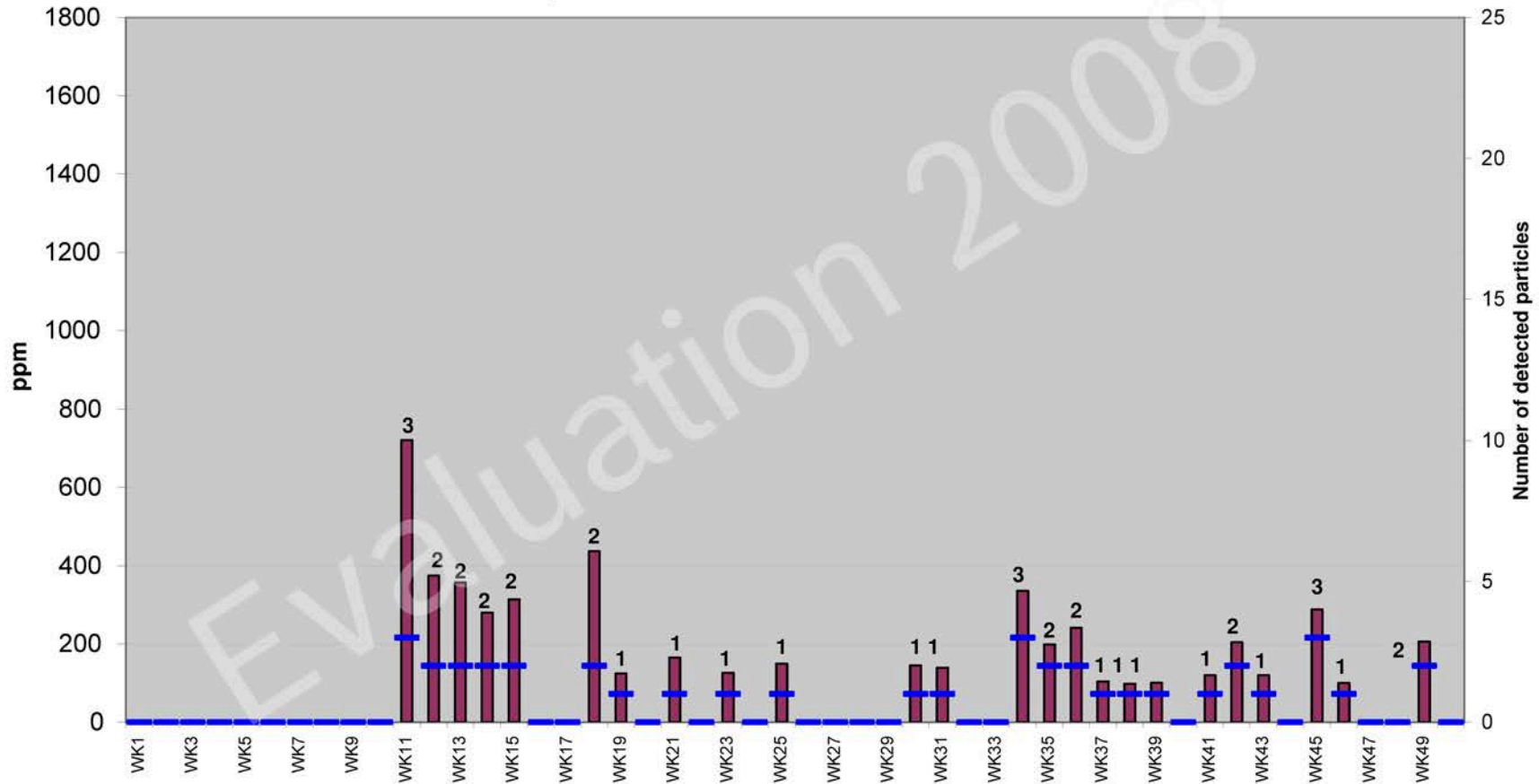
Cleanliness status FeP/JhP CP4, Status WK11/2009

FeP: CP4 product, internal rail pressure failures with particles detected in the intake valve / non-return valve



Cleanliness status FeP/JhP CP4, Status WK11/2009

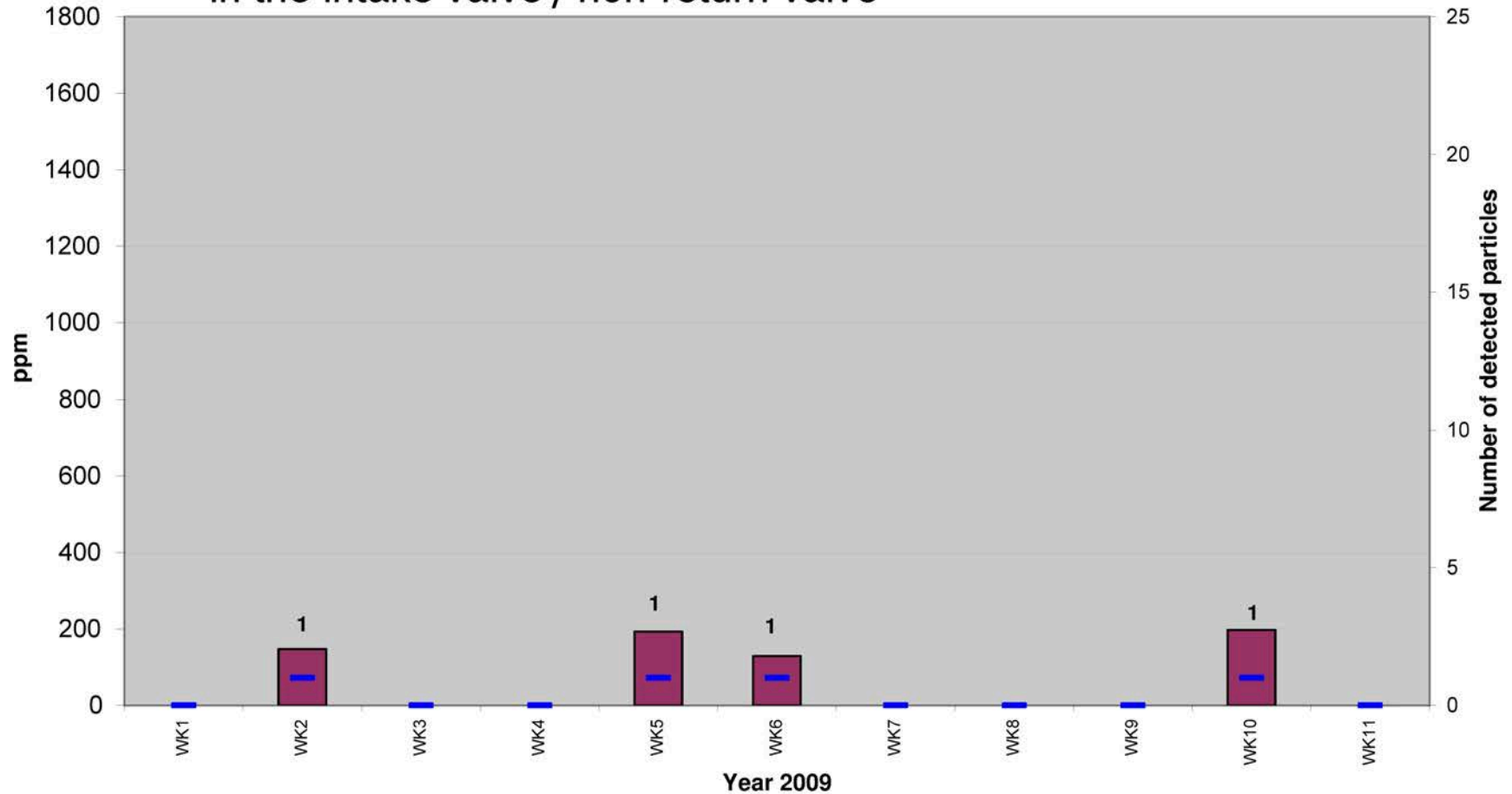
JhP: CP4 product, internal rail pressure failures with particles detected in the intake valve / non-return valve



Note: Due to holiday shutdown, there is no data available for WK 32-33.

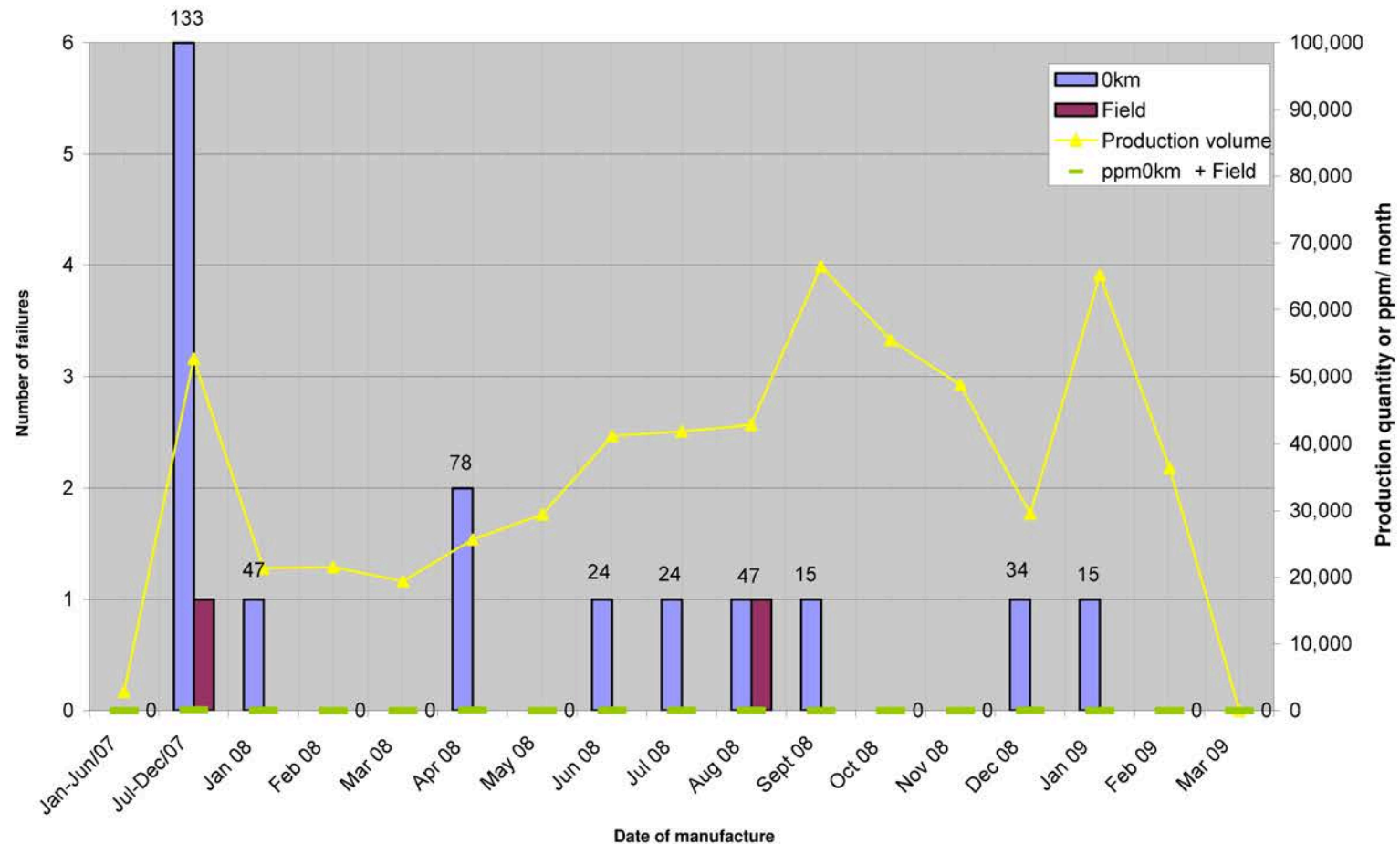
Cleanliness status Bosch FeP/JhP CP4, Status WK11

JhP: CP4 product, internal rail pressure failures with particles detected in the intake valve / non-return valve



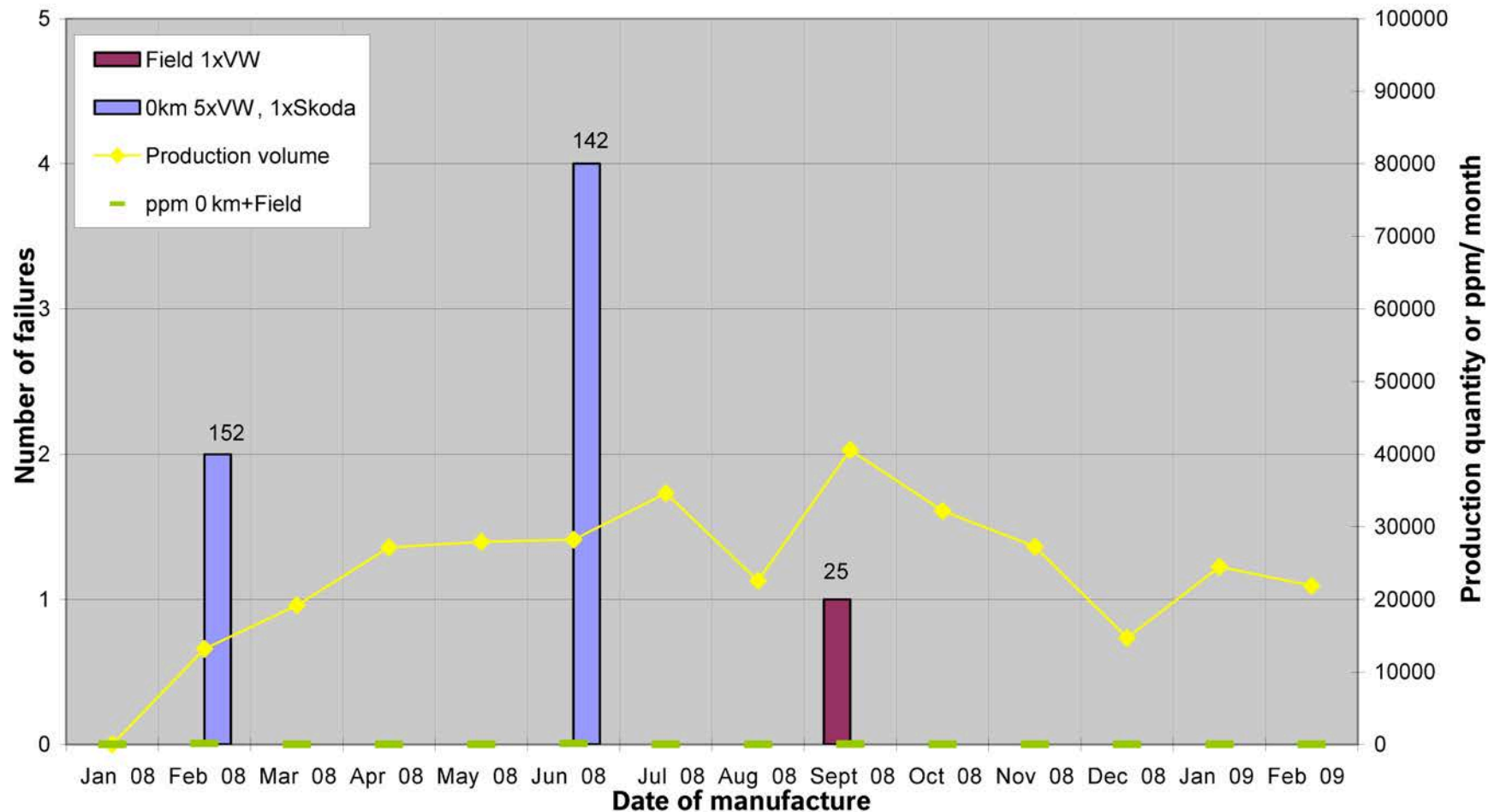
Cleanliness status FeP/JhP CP4, Status WK11/2009

FeP: Particle complaints confirmed in CP4 at VW/Audi



Cleanliness status Bosch FeP/JhP CP4, Status WK11

JhP: Particle complaints confirmed in CP4 at VW/Audi



Cleanliness status FeP/JhP CP4, Status WK11/2009

FeP/JhP: Measures for reducing residual contamination: Housing and flange manufacturing for CP4

No.	Measure to reduce residual dirt	Housing	Flange	Introduction FeP		Introduction JhP	
				Date	WK	Date	WK
1	Detachment of joint bore Metering unit CH	x		2/7/2008	6	2/18/2008	8
2	Housing holder on robot gripper	x		2/15/2008	7	2/20/2008	8
3	Ventilation of vacuum chamber, dry cleaning system	x		2/14/2008	7	3/3/2008	10
4	Housing holder on onward transport	x		2/15/2008	7	2/22/2008	8
5	Processing, clamping concept	x		02/8/2008	10	2/20/2008	8
6	Chamfer on 90 degree cutting (external contour)	x		02/8/2008	10	2/20/2008	8
7	Outlet, processing of clamping concept (external contour)	x		02/8/2008	10	2/20/2008	8
8	Optimized version of gripper pins (housing holder in dry cleaning system)	x		2/6/2008	10	3/10/2008	11
9	Floating housing holder (in x, y and z direction in the dry cleaning system)	x		2/15/2008	7	3/10/2008	11
10	MU barreling out "acute-angled" intersection	x		4/10/2008	15	6/15/2008	24
11	O-ring recess, cyl. intake Head	x		4/10/2008	15	4/18/2008	16
12	Axial "lubrication indent with inclined cast	x		1.Q. 2009		1.Q. 2009	
13	Processing of installation clamping surface	x		Q3 2009		Q3 2009	
14	Chamfer towards tappet	x		3/10/2008	11	3/3/2008	10
15	"Press" chamfer to the sleeve	x		3/12/2008	11	3/12/2008	11
16	Incorporation of a radial groove		x	postponed		postponed	
17	Deburring of the outward size 19 chamfer edge		x	2/15/2008	7	3/12/2008	11
18	Replacement of the cast casting stamp in "embossed"	x		5/5/2008	19	5/5/2008	19
19	Cleaning chamber is flushed after every cleaning process (3 cleaning levels)		x	2/15/2008	7	2/20/2008	8
20	Application of 45 degree chamfer to blank	x		1.Q. 2009		1.Q. 2009	
21	Cast optimization in clamping concept	x		1.Q. 2009		1.Q. 2009	
22	Cast chamfer on DMC surface	x		Q1 2009		Q1 2009	
23	Discharge treatment Clamping concept	x		Q1 2009		Q1 2009	
24	Use of ball cutter to improve burr situation, cylinder head intake for MU	x		4/20/2009	17	4/20/2009	17

Legend: Introduced Introduction to plan Introduction date has passed Implementation is not effective/ effectiveness will be checked



Cleanliness status FeP/JhP CP4, Status WK11/2009

FeP/JhP: Measures for reducing residual contamination: Assembly and preassembly of CP4

No.	Statement	Measure to reduce residual dirt	Pre-assembly cylinder head	Assembly	Introduction FeP		Introduction JhP	
					Deadline	WK	Deadline	WK
1	Optimization of the press stamp to avoid particles as the stamp moves backwards			x	2/18/2008	8	3/27/2008	13
2	Milk runner: Statement concerning empty gripper container from filling with suction gun			x	2/23/2008	8	3/5/2008	10
3	Clearing of the metering unit support in the area of the MU strainer to avoid picking up particles			x	2/18/2008	8	3/5/2008	10
4	Reduction of the area of the support of the MU lubrication unit to avoid picking up particles			x	2/18/2008	8	3/5/2008	10
5	Masking MU and intake bore to avoid particles from being picked up during transport and handling in main assembly			x	12/19/2007	51	1/31/2008	5
6	Remove pinch points on housing supports to prevent production of particles			x	3/18/2008	12	4/16/2008	16
7	Reduction flange surface for avoiding absorption of particles			x	3/10/2008	11	3/5/2008	10
8	Workpiece support: Reduction of the area of the support of the roller tappet as a mandrel to avoid picking up particles			x	2/29/2008	9	3/14/2008	11
9	Housing delivered in a blister pack instead of steel frame to avoid producing particles			x	3/14/2008	11	3/7/2008	10
10	Fix the control console position to avoid collisions with the station frame			x	3/14/2008	11	4/4/2008	14
11	Clad the guide rails of the safety door to avoid carrying particles on roller tappets			x	3/7/2008	10	4/17/2008	16
12	Masking intake bore in the cylinder head to avoid particles from being picked up during transport and handling in main assembly		x		2/19/2008	8	3/5/2008	10
13	Pneumatic purging of pre-assembled cylinder head to remove particles from assembly processes in return intake valve and intake valve		x		3/5/2008	10	4/17/2008	16
14	Optimize the cylinder head geometry to avoid the creation of splintering during the screwing process		x		6/18/2008 9/15/2008 partial from Wk 40 complete from 10/13/2008	25 -38 40	6/18/2008 9/15/2008 partial from Wk 40 complete from 10/13/2008	25 -38 40
15	Optimize the EOL test (better detection of functional testing)			x	6/9/2008	24	7/21/2008	30
16	Improved bolting process locking screw> monitoring by the laser measurement system		x		4/30/2009	18	4/30/2009	18
17	Addition of the MU with reduced degree of freedom			x	5/31/2009	22	5/31/2009	22

Legend: Introduced Introduction to plan Introduction date has passed Implementation is not effective/ effectiveness will be checked



From: Non-responsive content removed
To: [Redacted]
CC: [Redacted]
Date: 5/27/2009, 4:35:00 PM
Subject: Re: CoD breakdown 2.0 L R4 TDI 05.27.09
Attachments: [SF LB KW21 09 HDP baut keinen Druck auf.ppt](#)

FYI, if [Redacted] etc. ask. (Factory breakdowns)
Analysis tomorrow at the vehicle with Bosch.

>With best regards

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>

>From: [Redacted]

>Sent: Wednesday, May 27, 2009, 5:23 PM

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>Subject: CoD breakdown 2.0 L R4 TDI 05.27.09

>

Dear Sirs,

>

>Attached the status of the current CoD breakdown:

>

>

>

>

>

>Best wishes,

>

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>AUDI HUNGARIA MOTOR Kft.

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>

>

>

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>Sent: Wednesday, May 27, 2009 11:07 AM

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>Subject: CoD breakdown 2.0 L R4 TDI 05.27.09
>
>Dear colleagues,
>
>Today, we have received a vehicle from the A4 road run test with "engine function not OK, not running any more". Error level: Road run breakdowns
>
>DSP entry: Fuel rail system pressure too low
>
>Engine data:
>
>Type: 4215
>Engine number: 051 751 CAH
>Engine build date: 5/18/2009
>Vehicle: Q5
>Mileage: 8 km
>
>
>
>After the analysis, it was found that the HP fuel pump does not produce pressure in some cases.>
>
>We should get 100 cars (50 before, 50 after) checked in the yard.
>
>Should we dismantle the pump or do you want to perform further analysis with Bosch?
>
>
>Kind regards,

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Audi Hungaria Motor Kft.

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Straßenfahrt abgebrochen

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Straßenfahrprüfung Fehleranalyse


Audi

Fg.Nr.: 8277 001690 Typ: PERO RY Datum: 26.05.09

Fehlerbeschreibung:

Motor Funktion n.o. (läuft nicht mehr)

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Road test terminated

Audi

**Road run test
Fault analysis**

Vehicle No.:

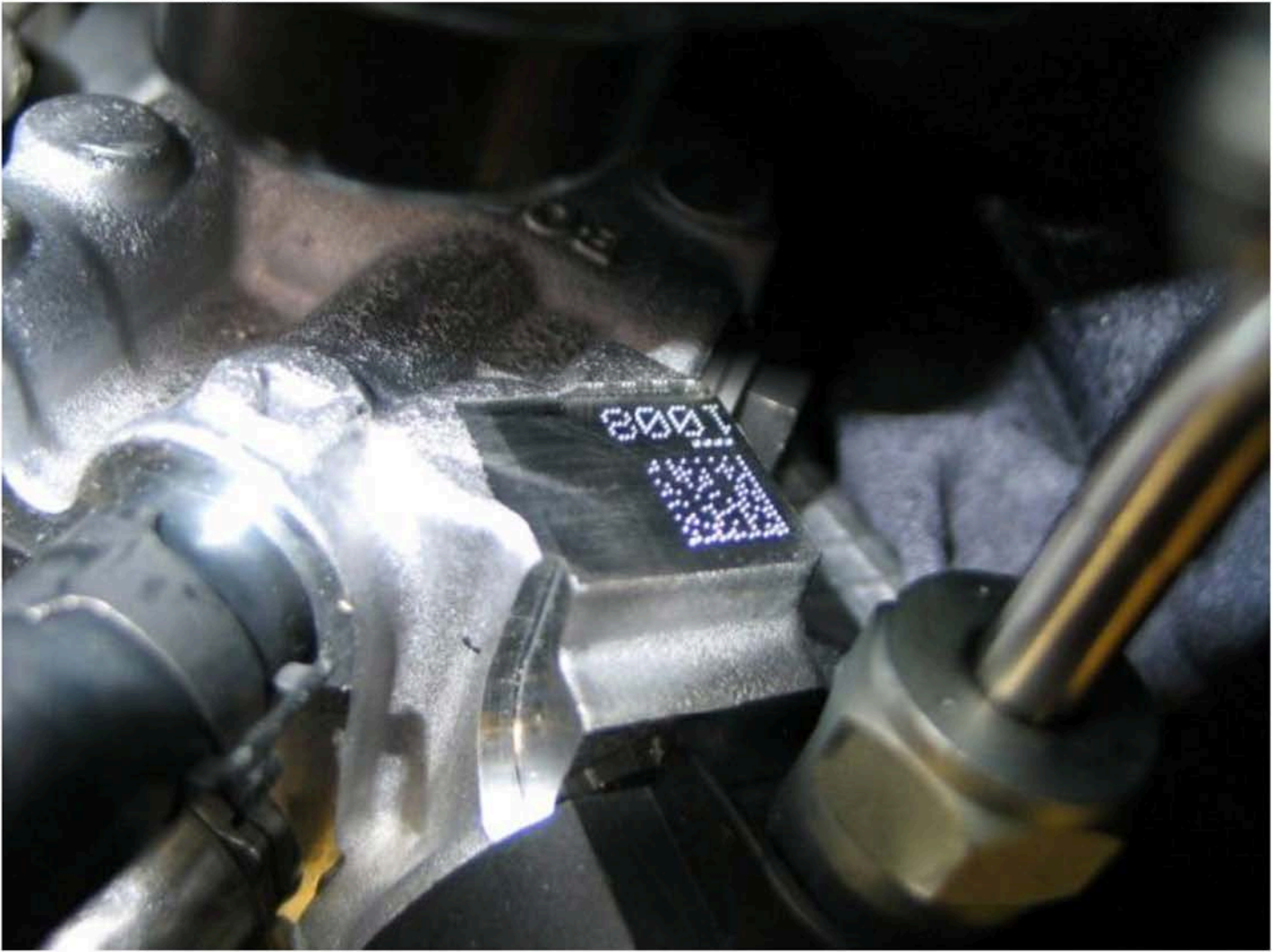
Type:

Date:

Description of the errors:

Engine function not in order (not running any more)

Tester:





CAUTION! Note the engine code letters ***CAH 051 751*** during all testing and installation work!





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0 bar

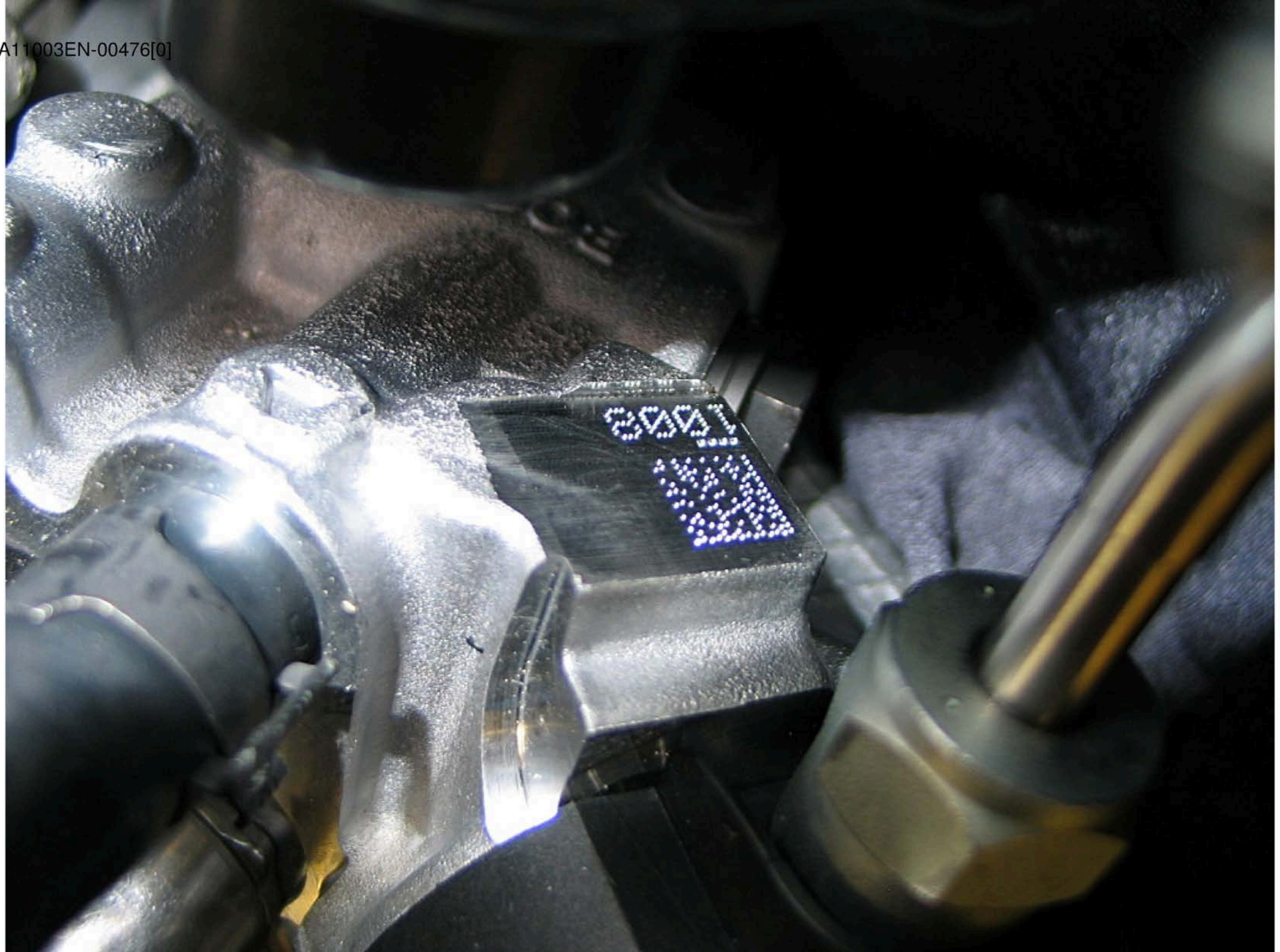
0...200 MPa / 0...2000 bar $\pm 2\%$

ON OFF



MPa \leftrightarrow bar
3 sec \rightarrow OFF

0 986 613 163



Strassen fahrt abgebrochen




Straßenfahrprüfung Fehleranalyse

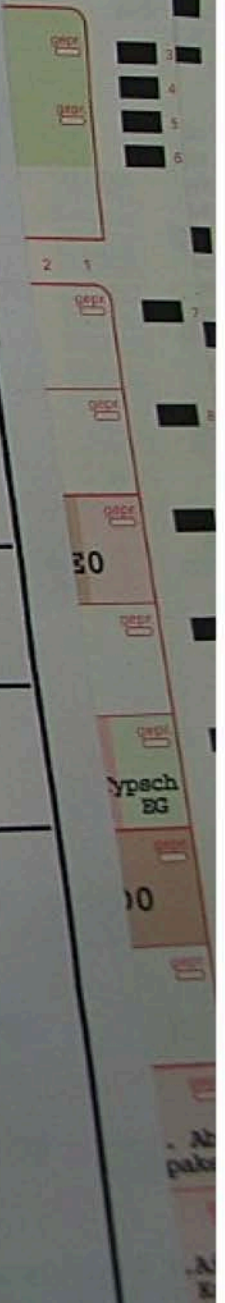


Fg.Nr.: SA 77 001690 Typ: SE 30 R4 Datum: ~~26~~ 26.05.09

Fehlerbeschreibung:

Motor Funktion n.o. (läuft nicht mehr)

Prüfer: 



ACHTUNG! Bei allen Pruef-und Einstellarbeiten
Motor-Kennbuchstaben ***CAH 051751*** beachten!

09.05.18
09:07



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Cleanliness Project

Status

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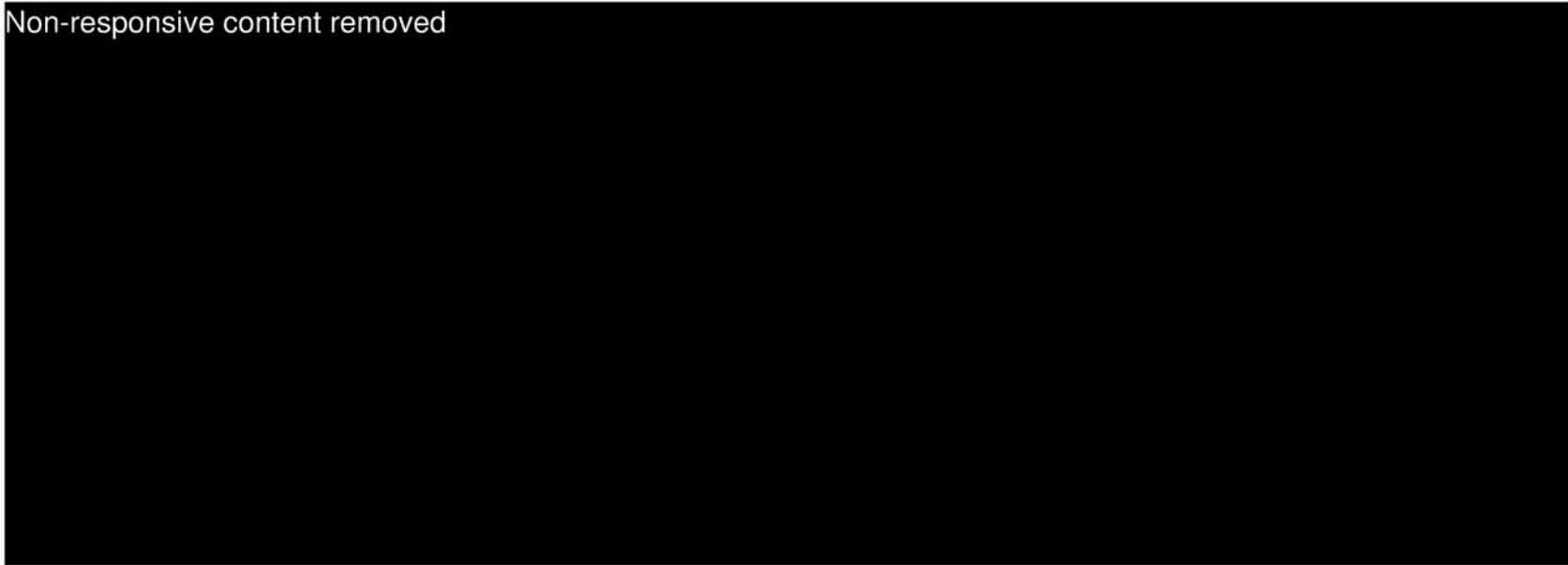


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Cleanliness Project

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Assembly Line

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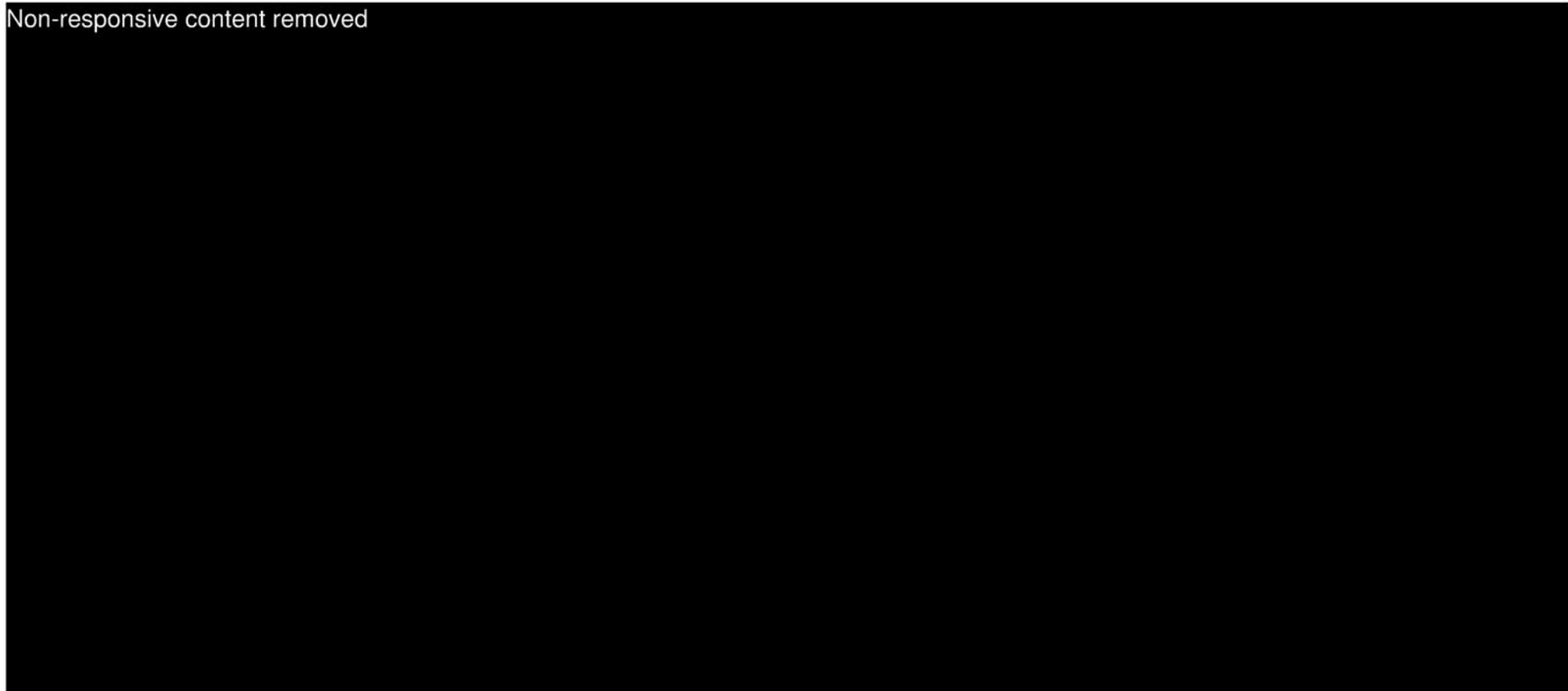


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Assembly Line

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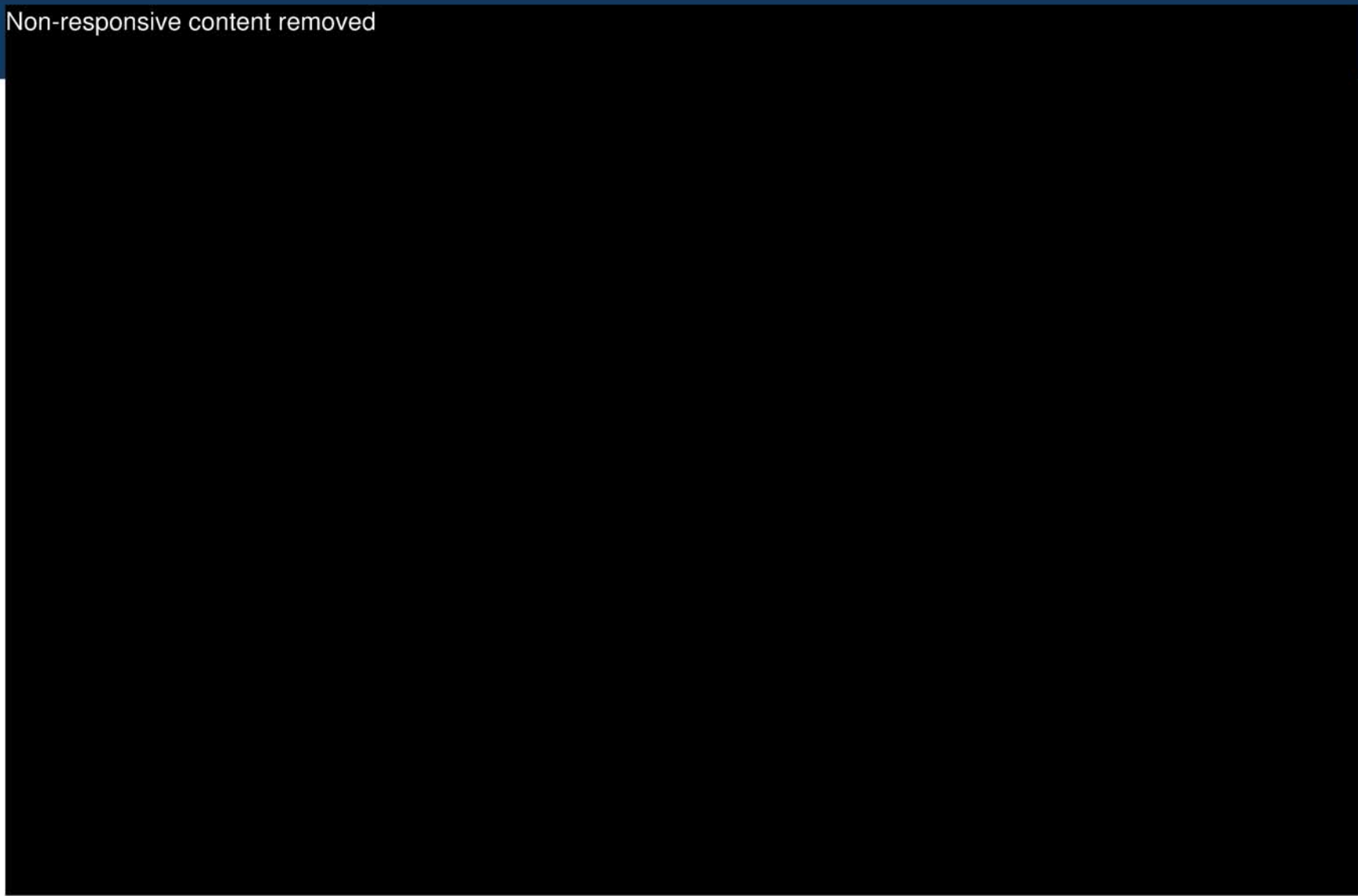
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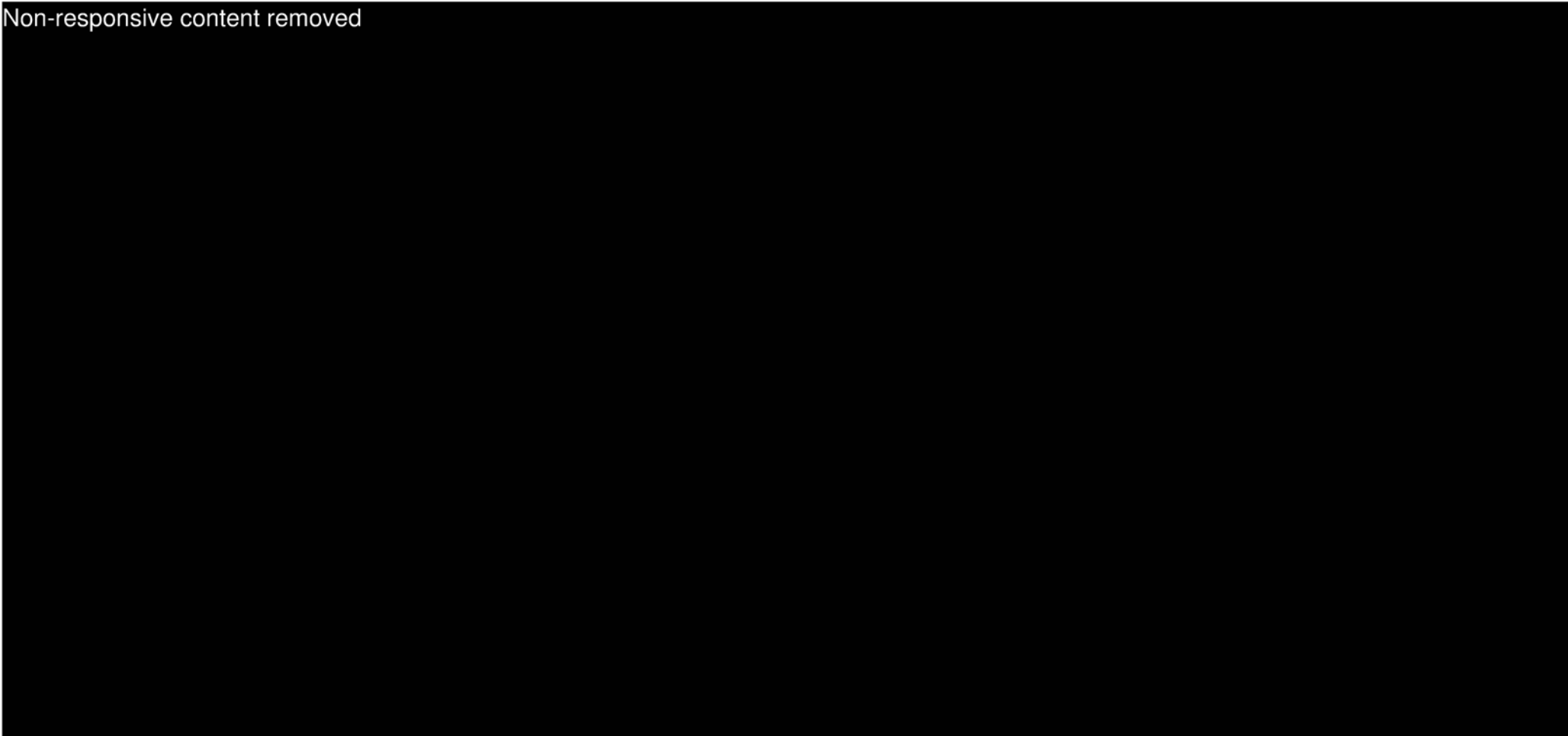


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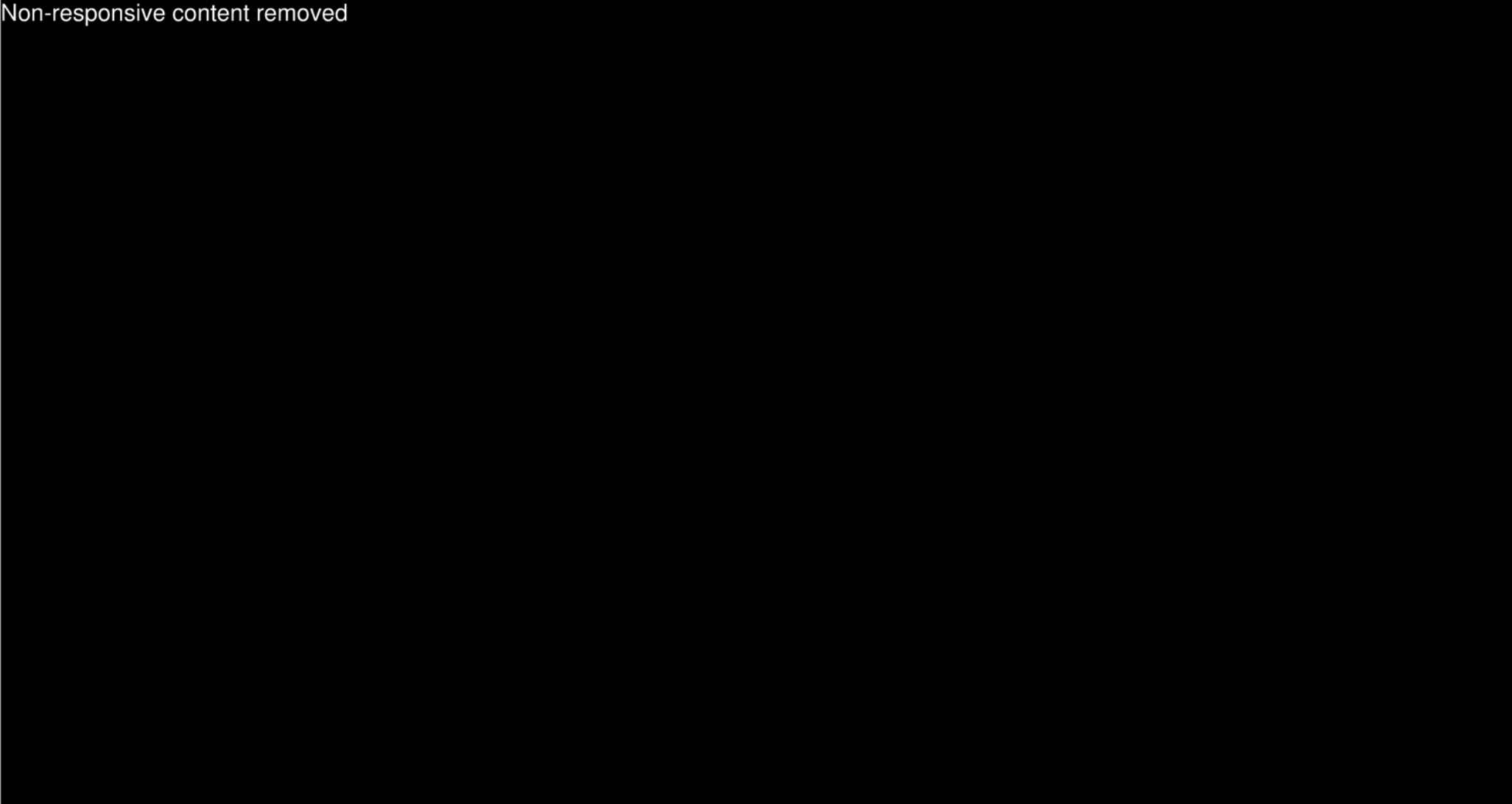
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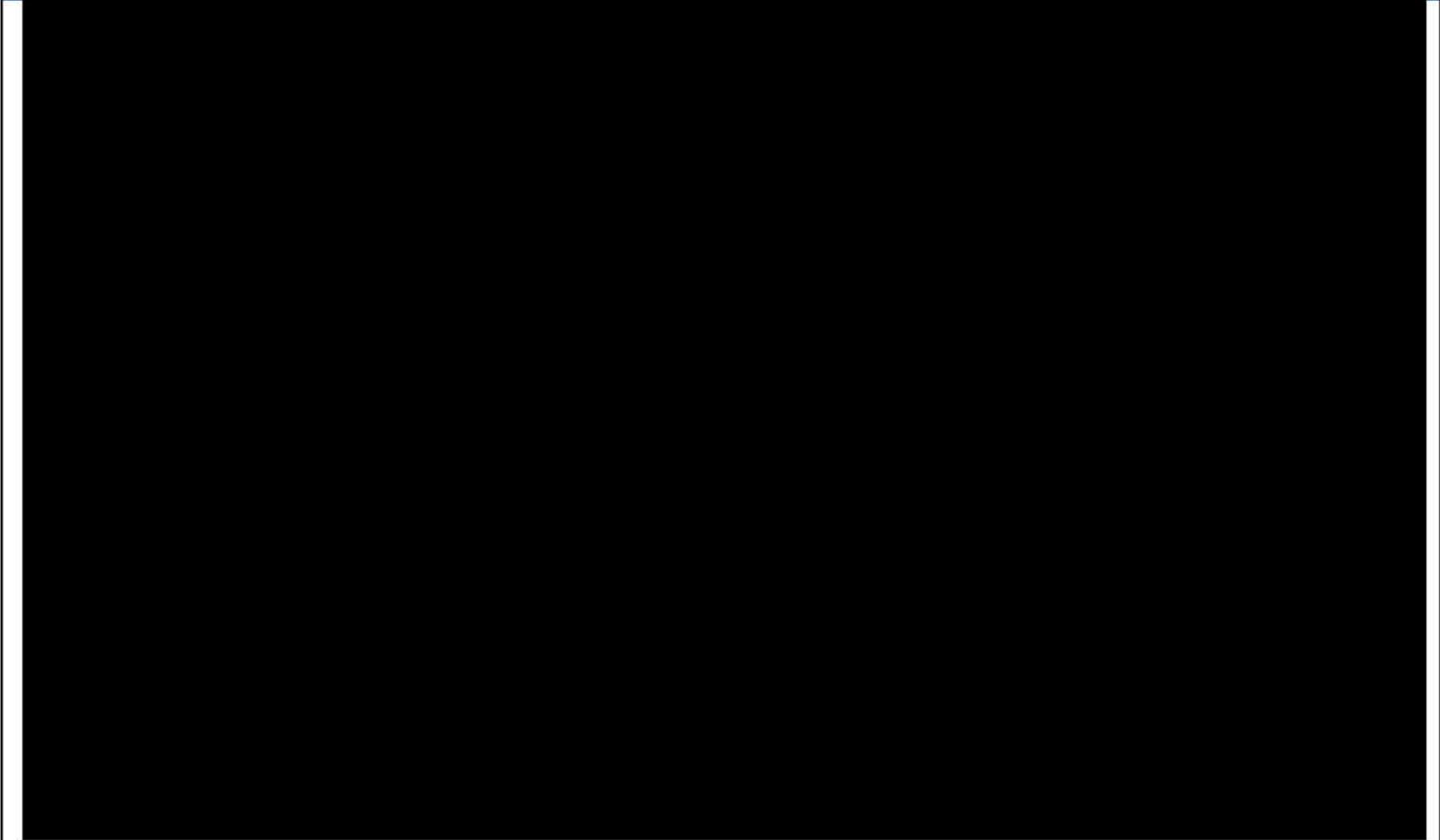
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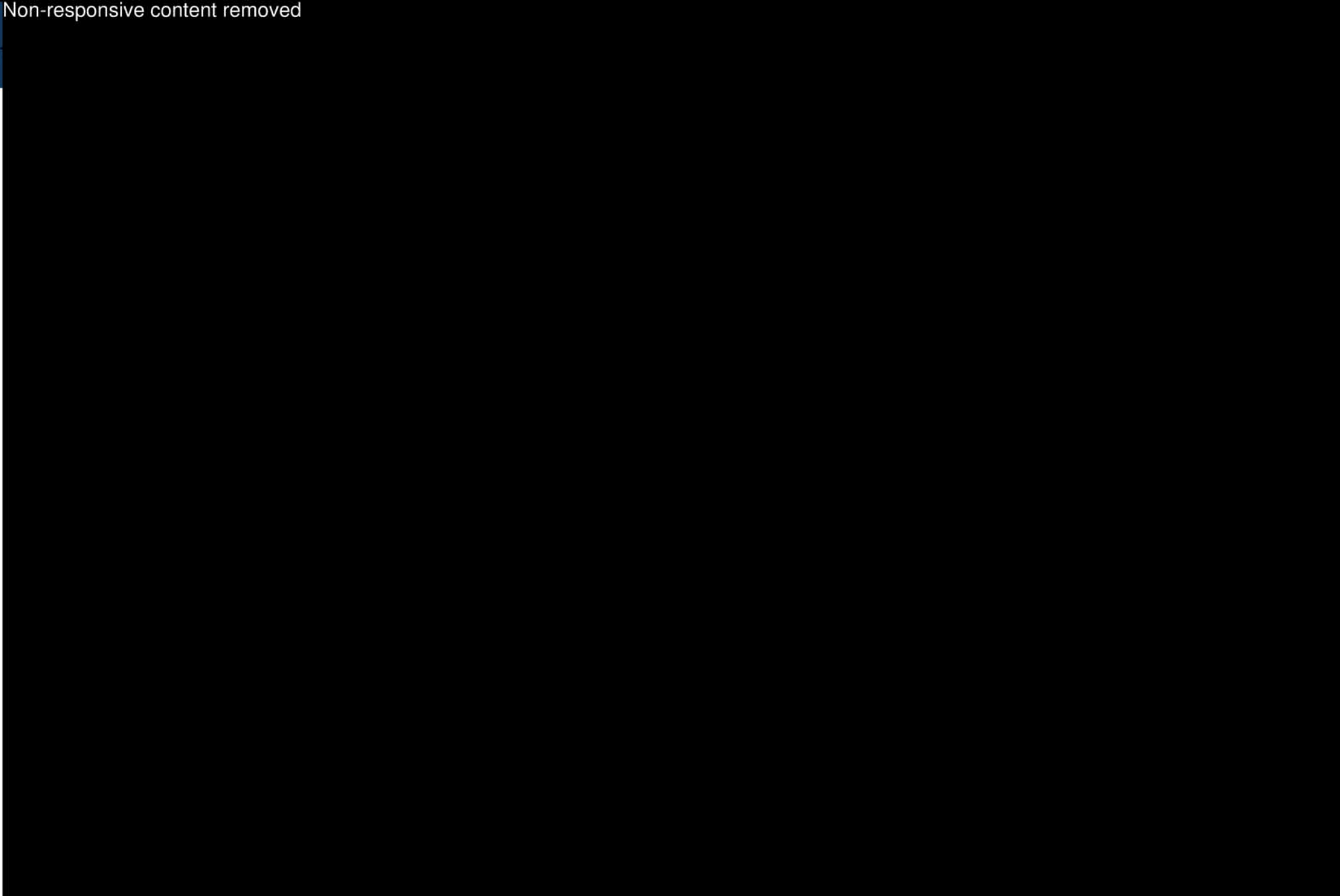
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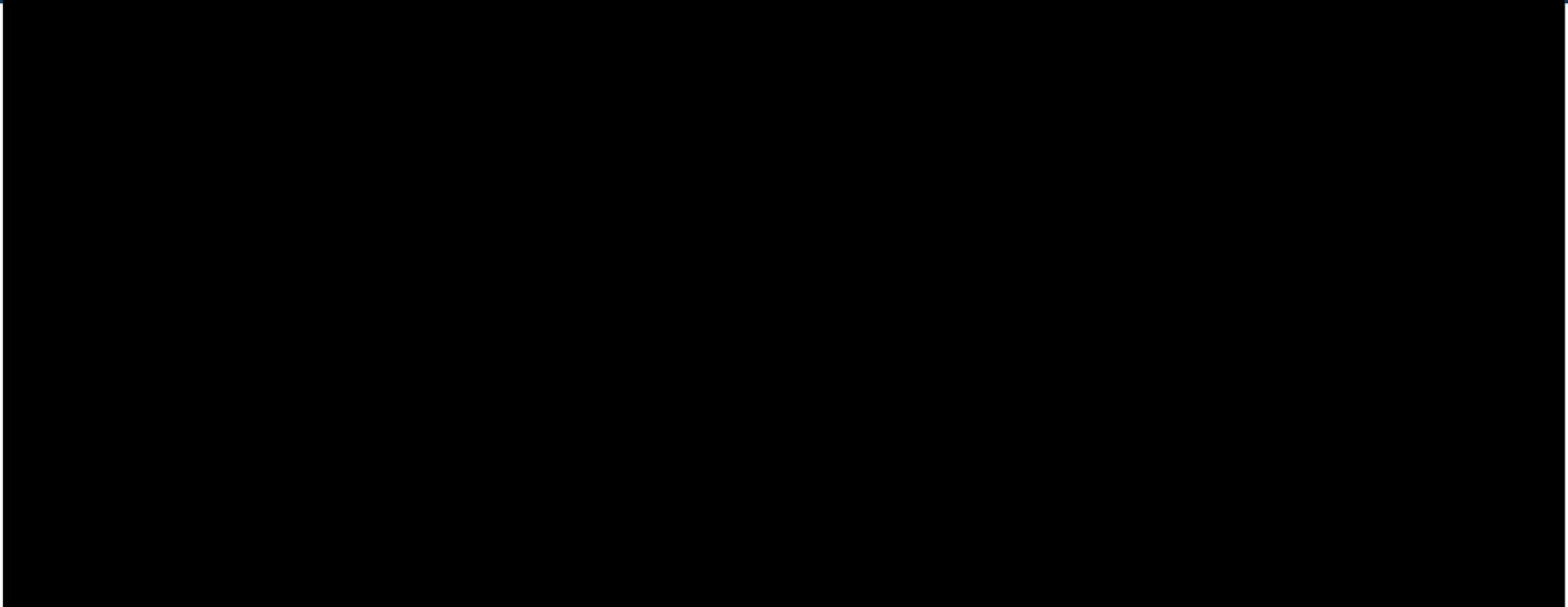


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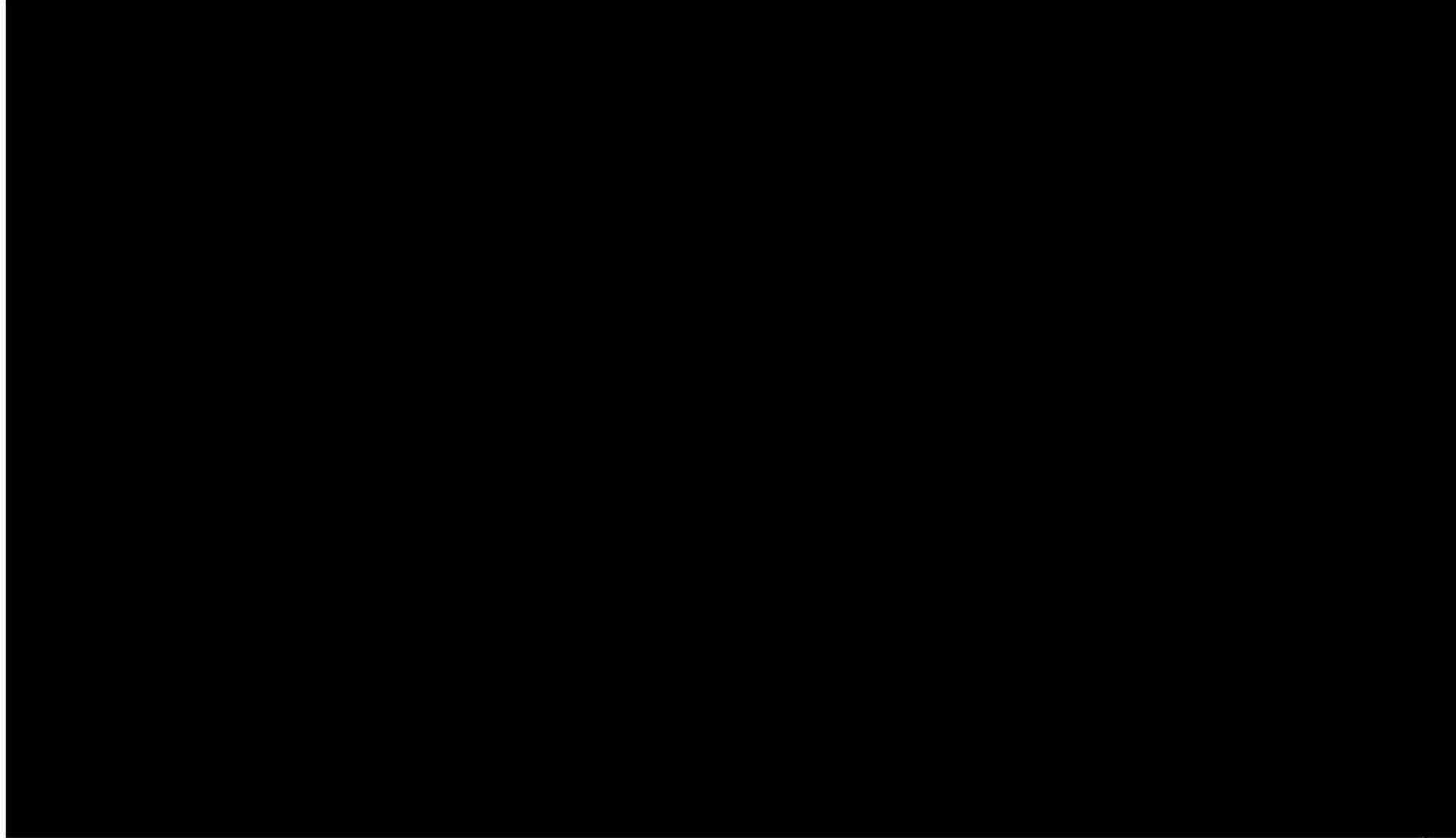
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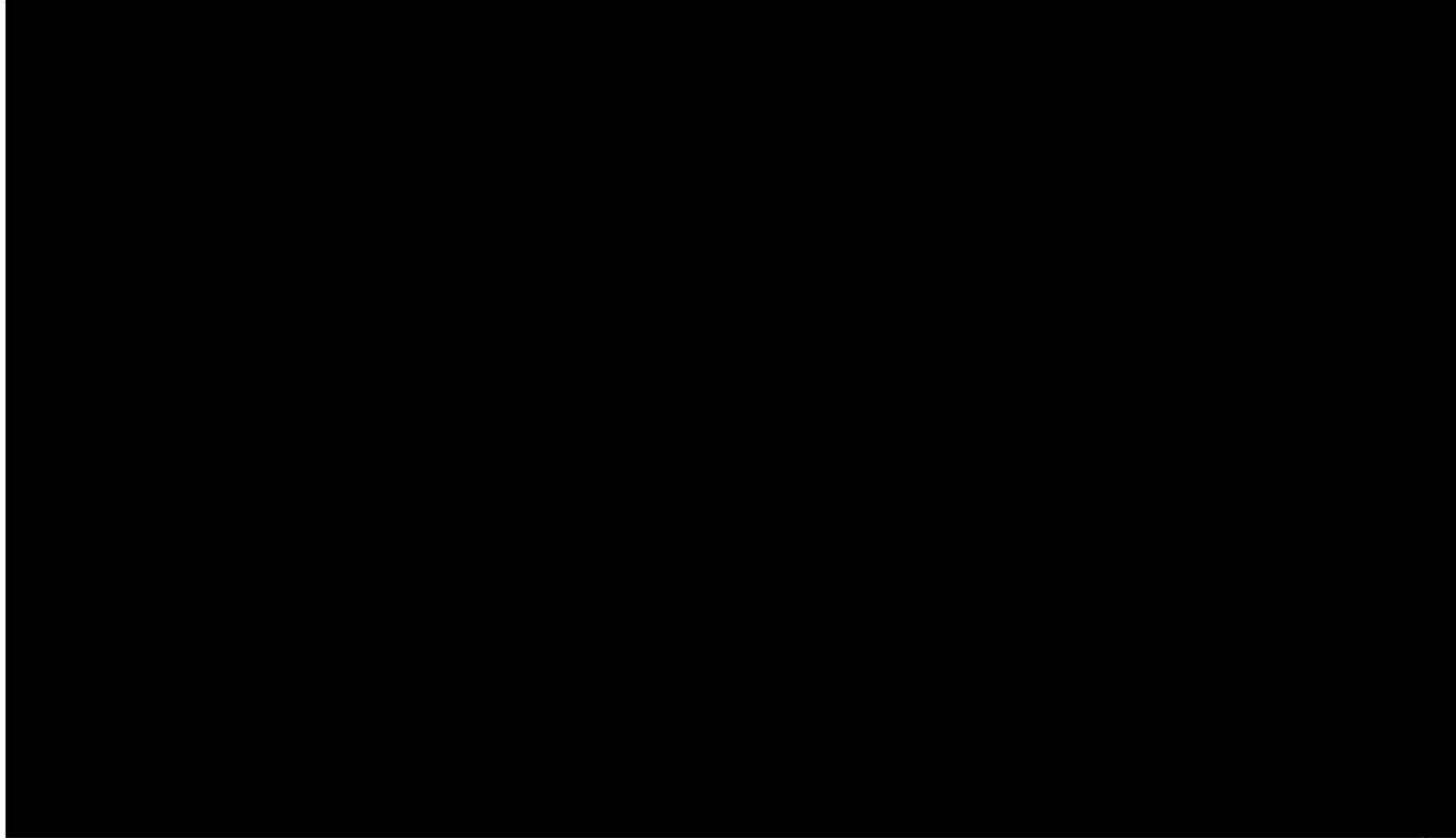
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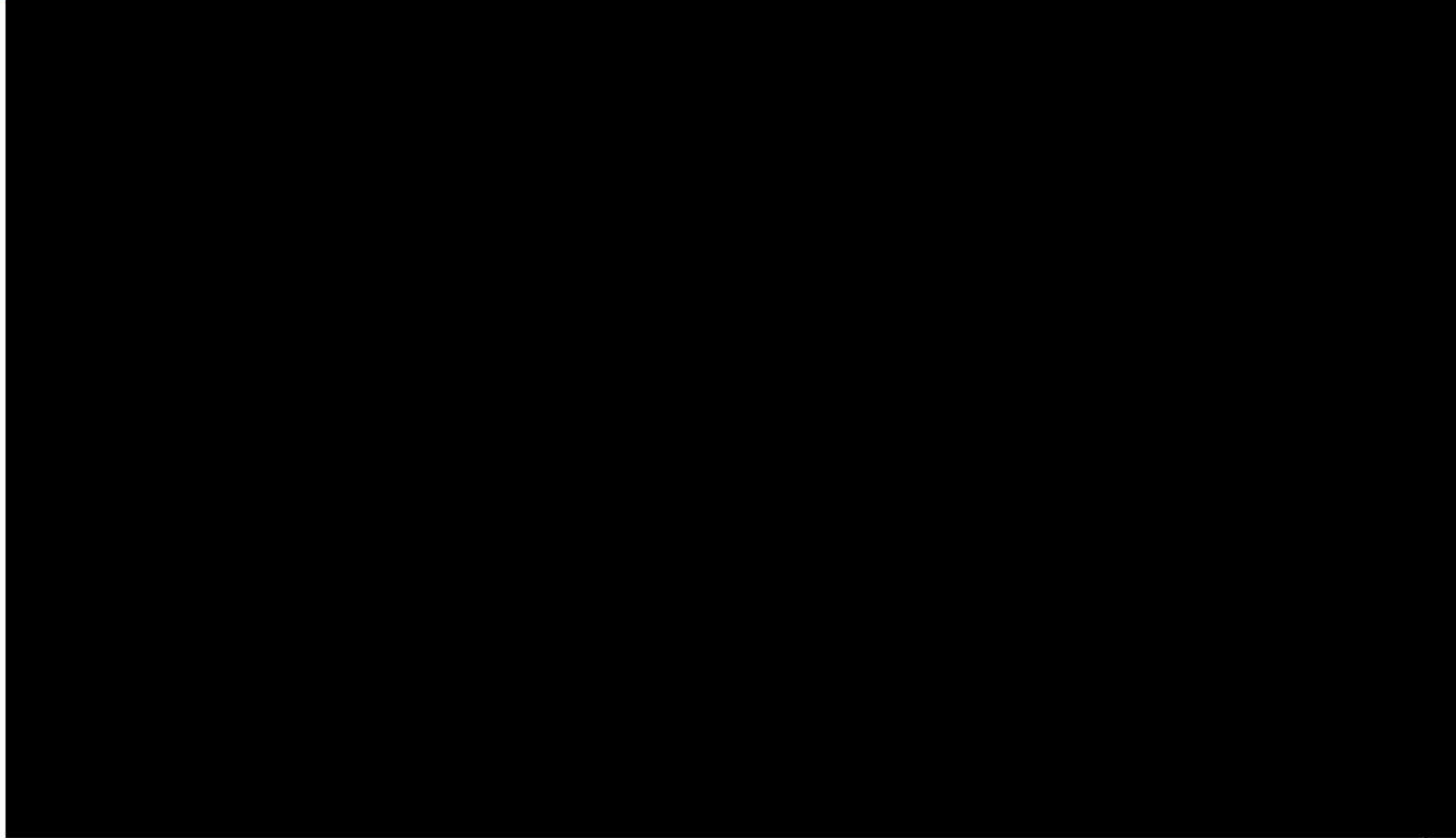
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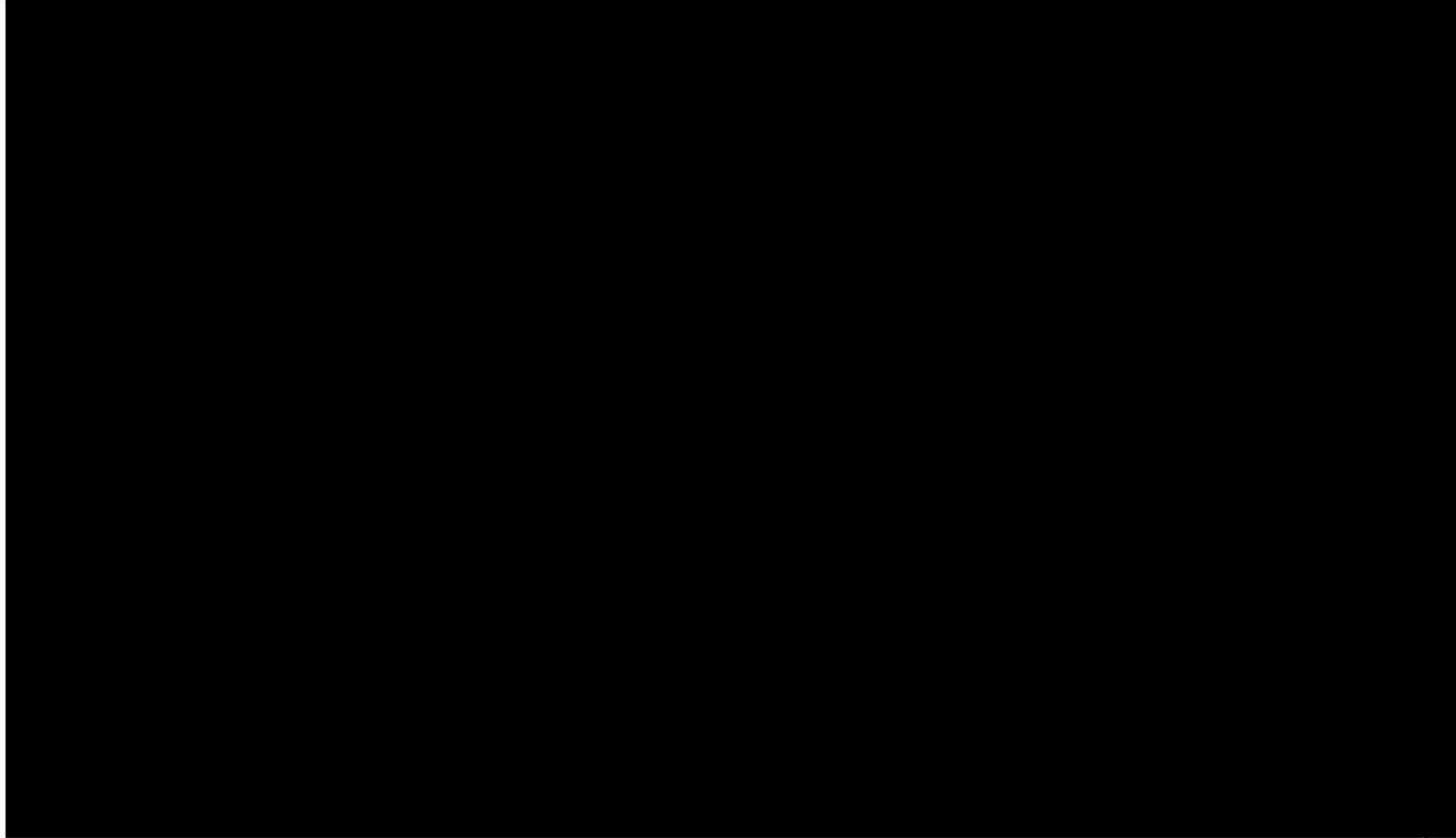
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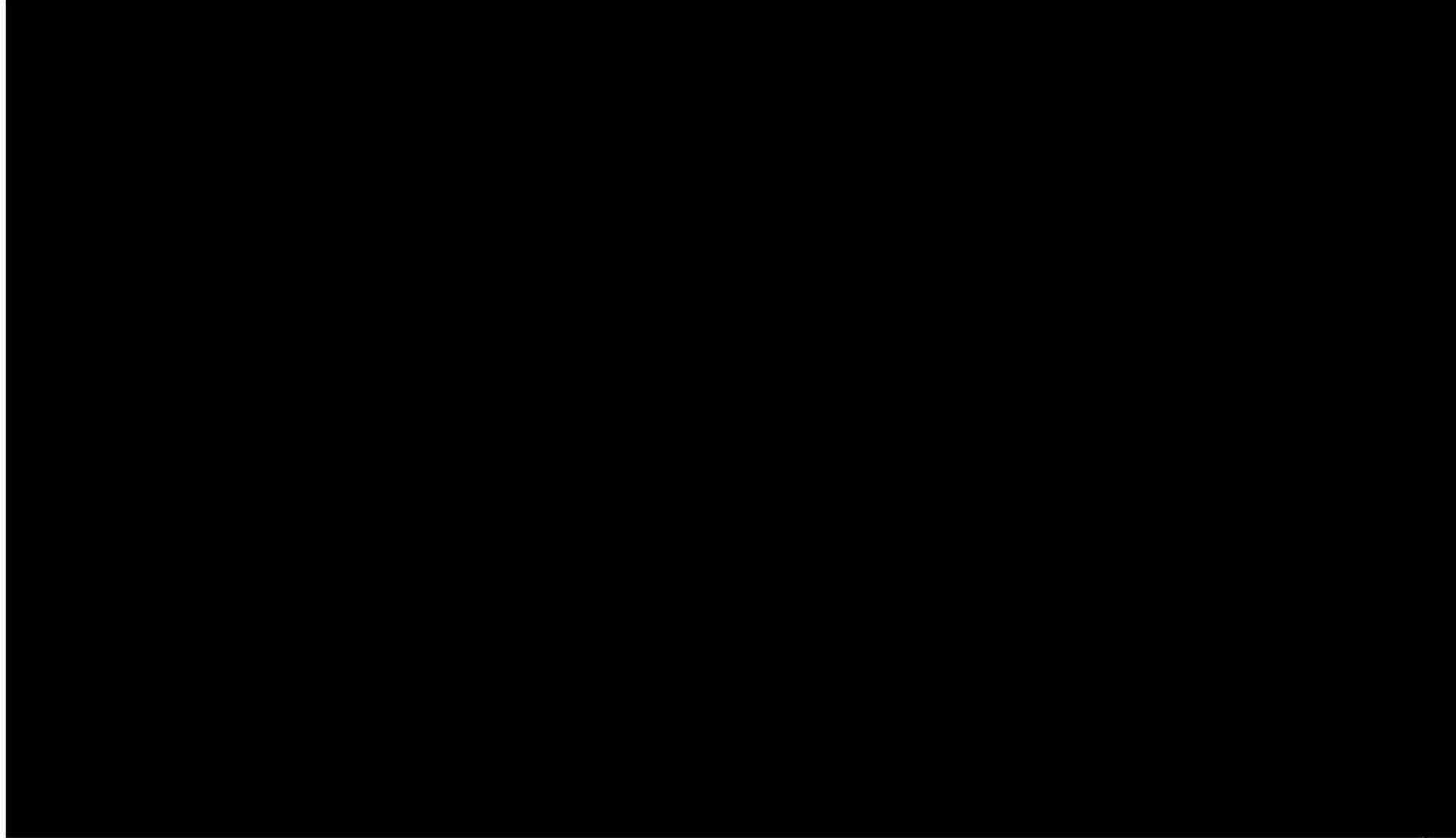
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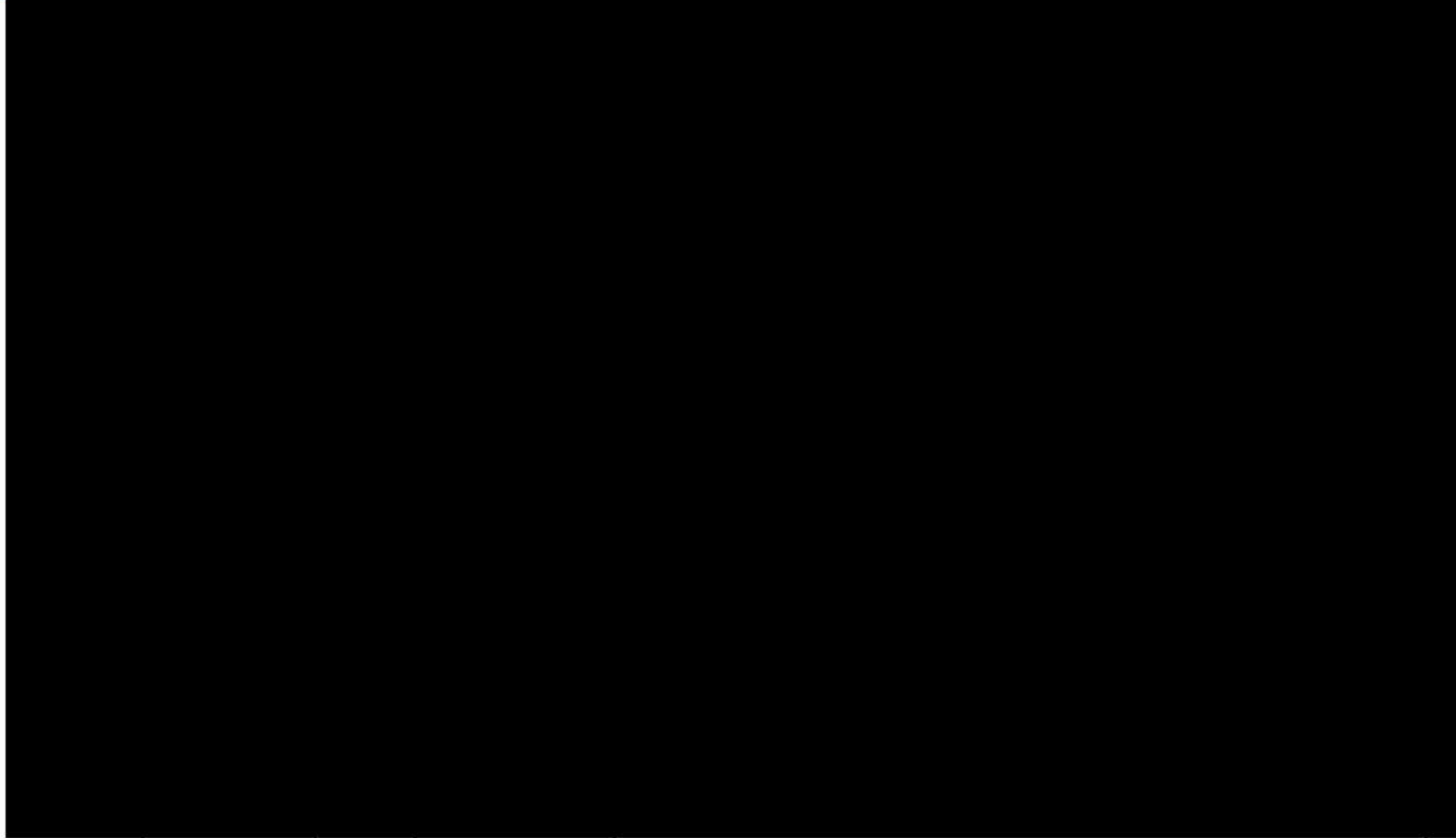
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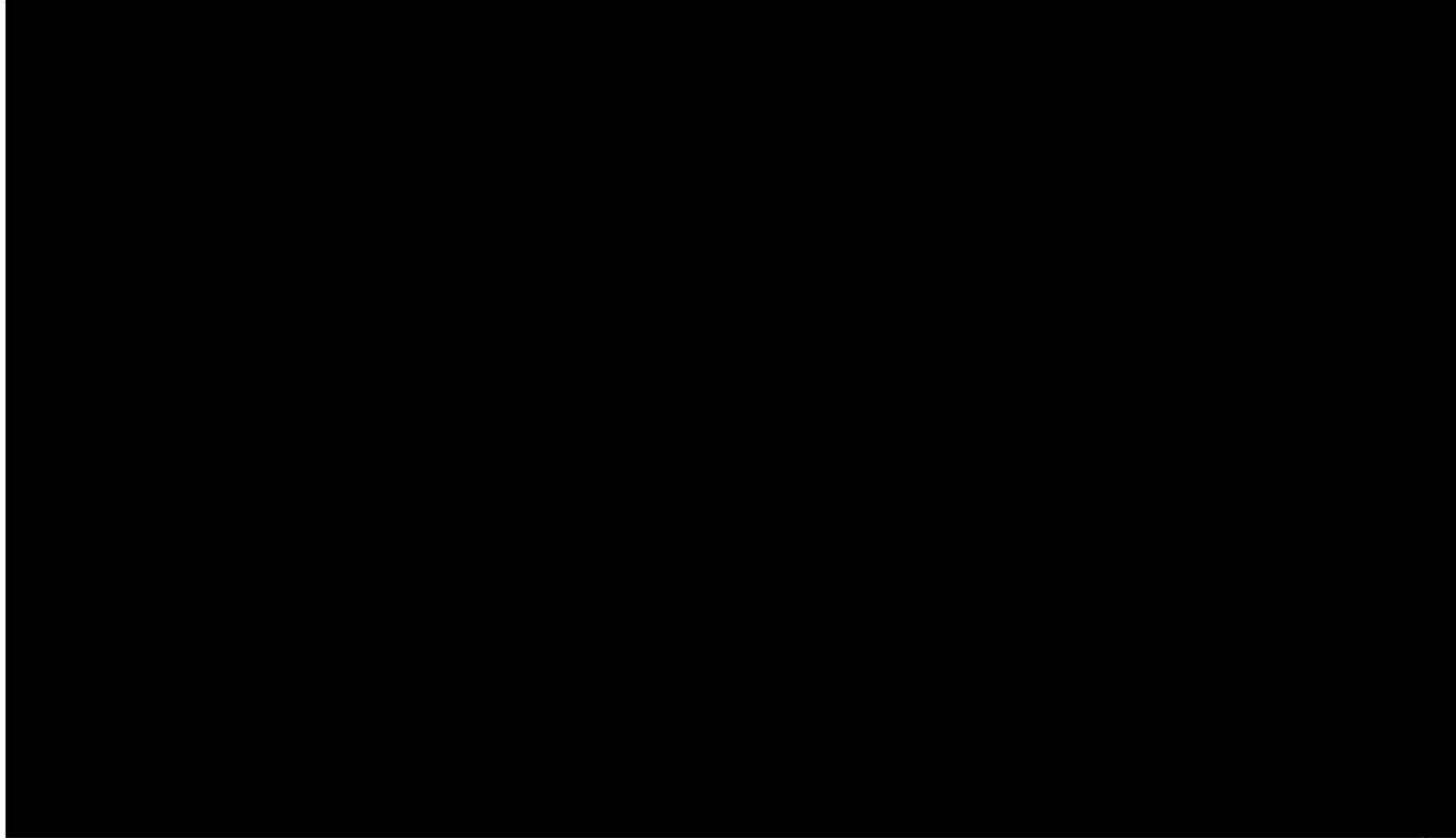
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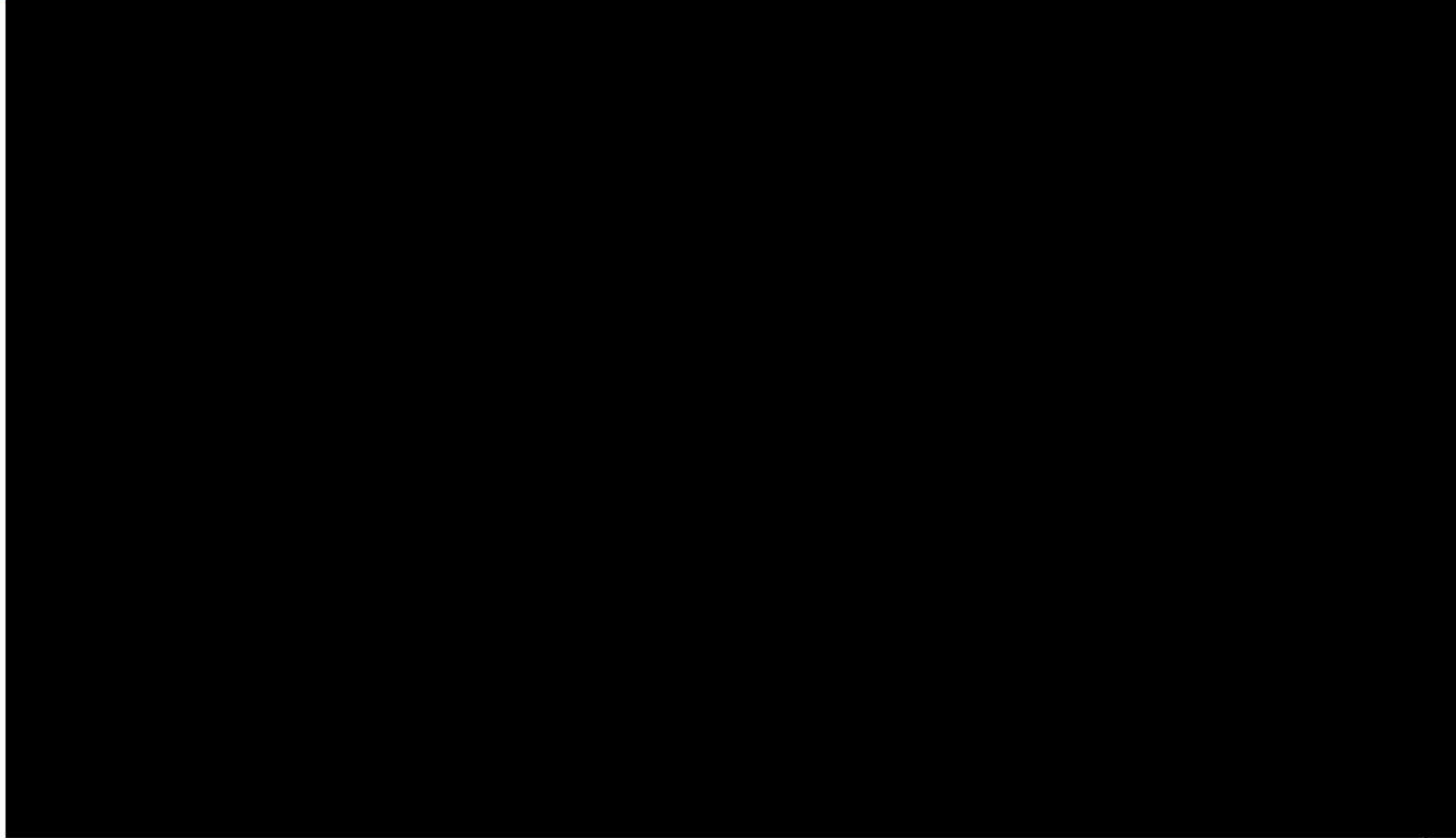
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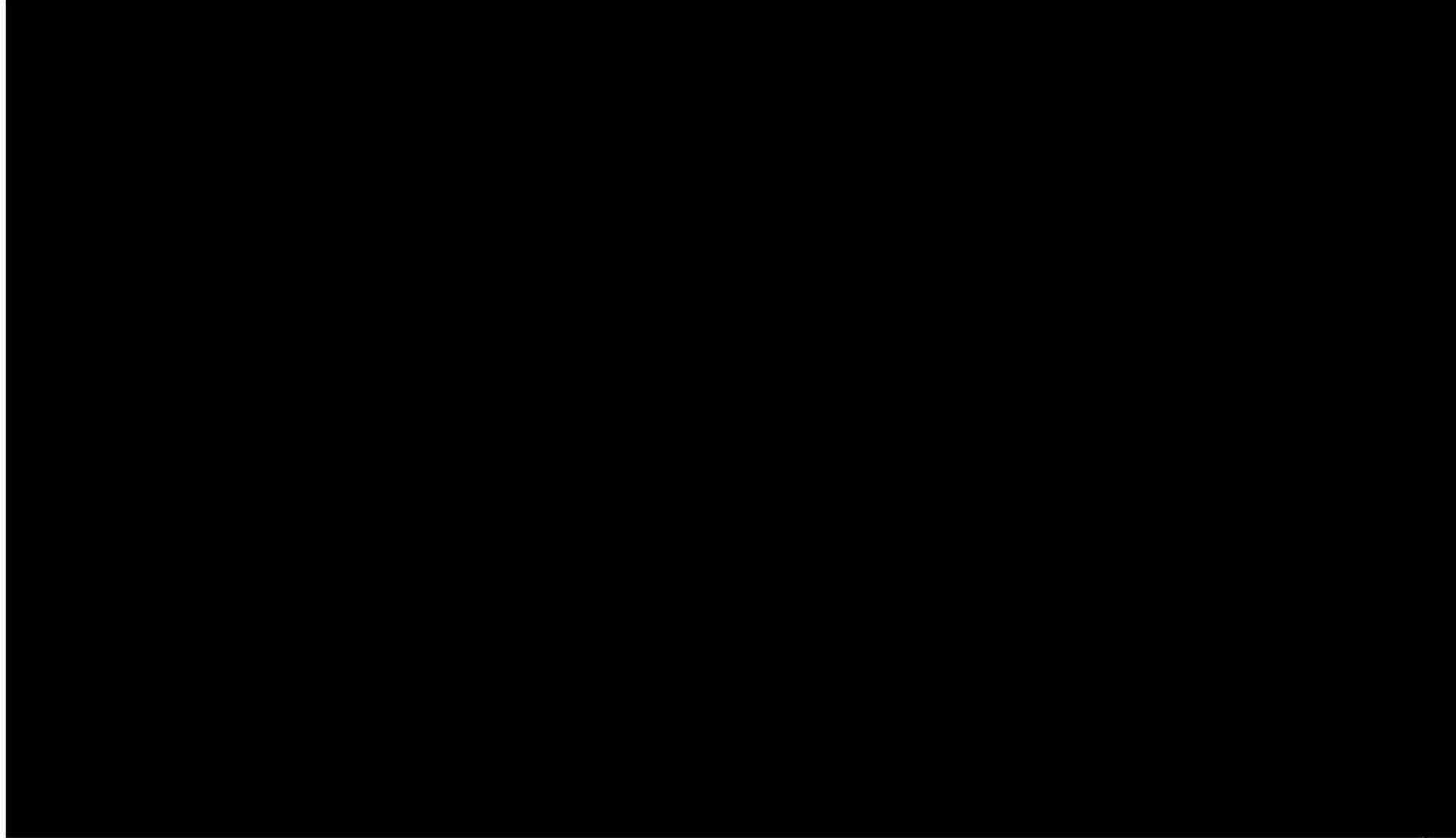
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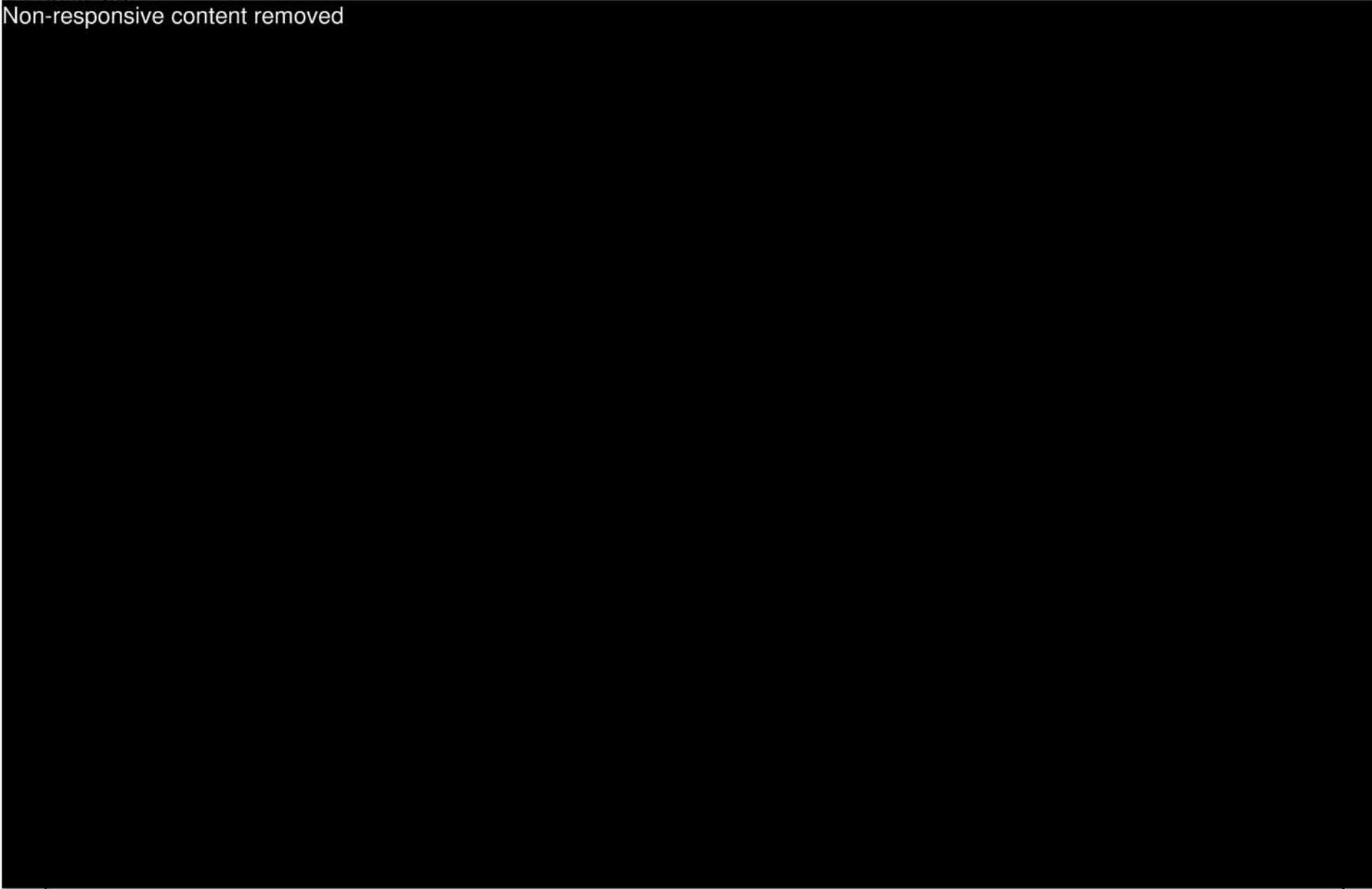
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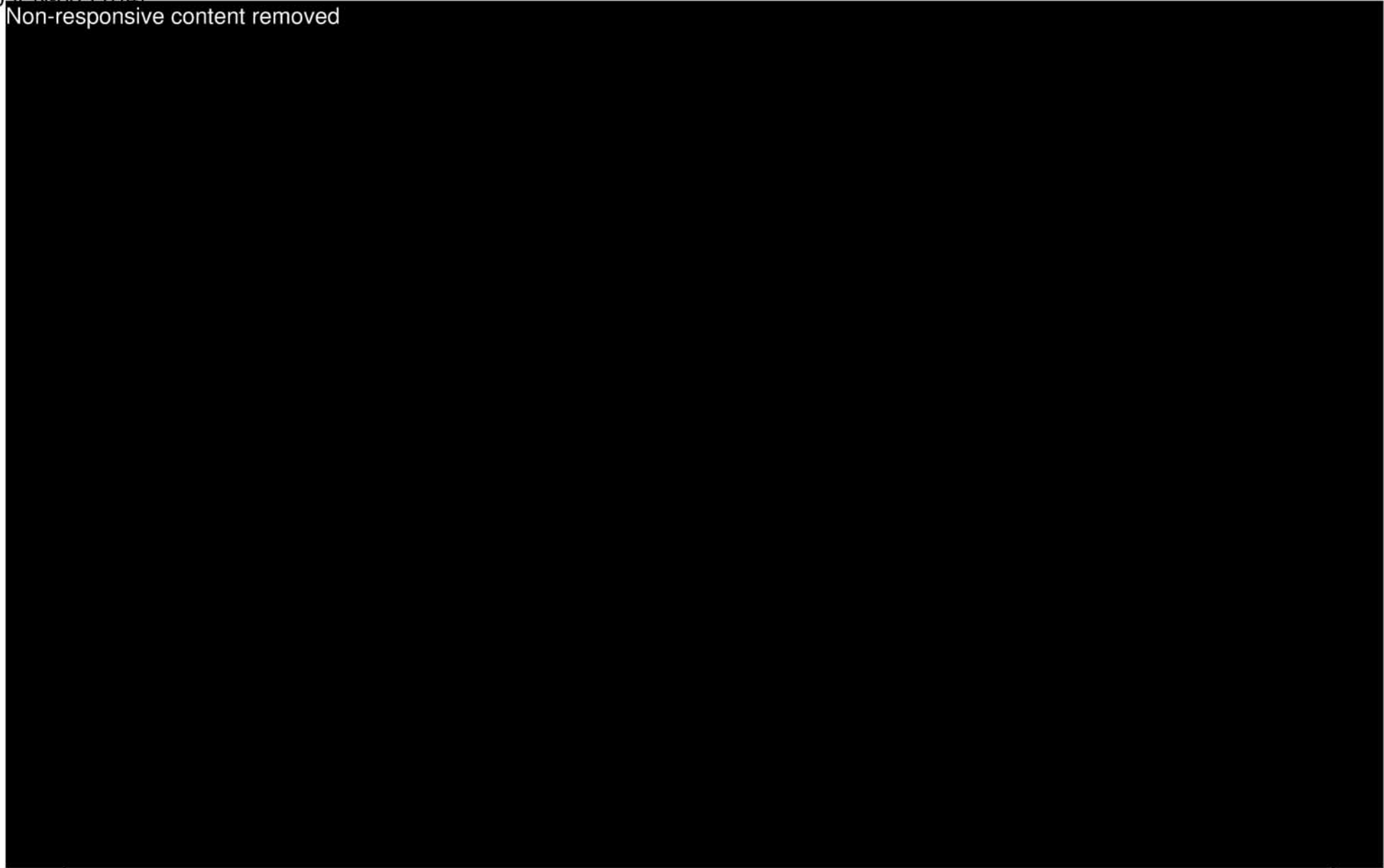
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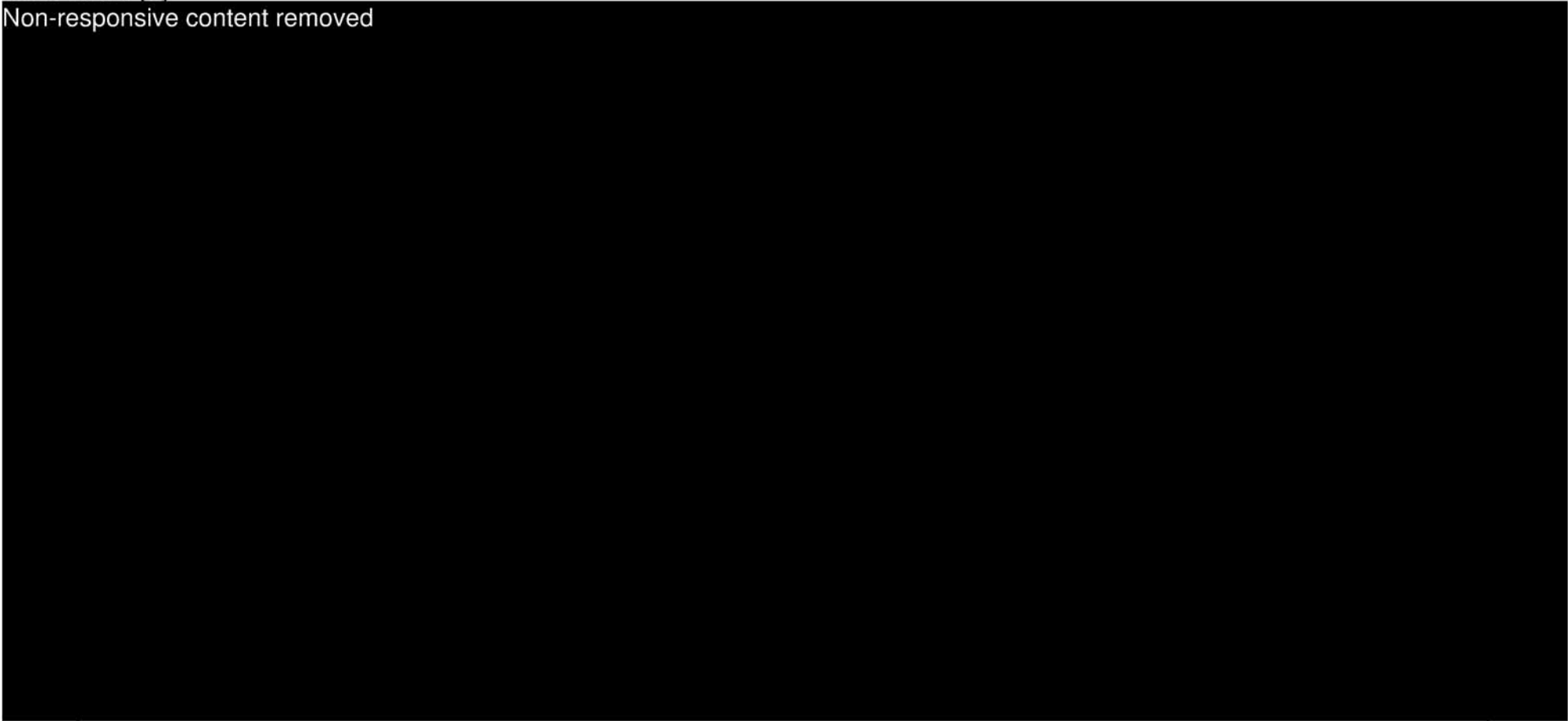
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2007		2008			
Q3	Q4	Q1	Q2	Q3	Q4

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