MCRO Forensic Database Report

"Finding of Incompetency and Order"

Clone/Replication & Cluster Alignment Analysis

Report Date: March 2, 2026

Database: MCRO Supabase PostgreSQL (Read-Only)

Cohort: All documents with filing_type = "Finding of Incompetency and Order"

IMPORTANT DISCLAIMER: This report presents objectively measured forensic signals derived from structured database queries. It does not assert or imply fraudulent intent by any individual. All metrics are reproducible via the SQL queries in the Appendix. Observable patterns (e.g., document duplication, identical embedded objects, uniform post-signature edits) are reported as measured phenomena. Alternative explanations — including legitimate workflow automation, batch processing, and standard court template systems — are addressed in Section 8.

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1. Executive Summary

This report examines all 157 PDF documents classified as “Finding of Incompetency and Order” within the MCRO forensic database. The analysis spans four forensic layers: text-row hashing, embedded PDF objects, XMP/structural metadata, and digital signature fingerprints.

- **157 documents** across 131 distinct cases in 52 defendant clusters, filed between January 11, 2023 and April 30, 2025.
- **75.2% of documents (118/157)** contain zero unique text rows — every single extracted text line in those documents also appears in at least one other document in the cohort.
- **64 distinct text fingerprints** were identified. Every multi-document clone group is confined to exactly one cluster (zero cross-cluster text-identical documents).
- **103 row hashes** appear in 100+ of 157 documents; 2 row hashes appear in all 157 documents across all 52 clusters, forming a universal structural skeleton.
- **Only 7 distinct judicial signature images** serve the entire 157-document corpus, belonging to 6 judicial officers. One officer (Browne) signs 93 documents across 27 clusters.
- **155 of 157 documents** share an identical tracking font fingerprint (TTF-C / C1). The two identified outlier documents — Guertin (2023-07-13) and Cherry (2023-12-06) — are not even present in the tracking font table.
- **Those two outliers** share 7 exclusive row hashes (legal case citations) found in no other document in the cohort, confirming a distinct authoring lineage.
- **100% of judicial officer signatures** have edits_after_sig_flag = true: every document was modified after the judicial officer signed it.
- **40 documents** share a single XMP creation date of 2023-05-02, spanning 3 clusters — a mass-production event.
- **All 157 documents** bear the iText® 7.1.16 (Minnesota Judicial Branch; licensed version) modification trail.

2. Methods

All analyses were performed via read-only SQL queries against the MCRO Supabase PostgreSQL database. No data was modified. The cohort was defined as all rows in the children table where filing_type = 'Finding of Incompetency and Order'.

Four forensic layers were examined independently and then cross-referenced:

Layer 1 — Text-Row Cloning: Each document's extracted text is stored as rows in hashpack_rows, with each row independently hashed (row_sha256). Additionally, the hashpack table stores a whole-document text fingerprint (fp_text_sha256). Both were used: the fingerprint for exact-clone grouping, and individual row hashes for structural template analysis and cross-document overlap measurement.

Layer 2 — Embedded Object Cloning: The children_objects table catalogs every internal PDF object (signatures, timestamps, images, fonts) with its own object_sha256. Objects classified under object_family = 'Judicial Officer Signature' and 'Judicial Officer Timestamp' were analyzed for reuse patterns.

Layer 3 — Metadata & Font Fingerprinting: XMP metadata fields (creator_tool, producer, create_date) and tracking font group assignments (children_tracking_groups) were compared across all documents.

Layer 4 — Digital Signature Forensics: The children_signatures_full_report table was queried for signer identity, revision counts, edits_after_sig_flag, and coverage patterns. ESolutions/MCRO system signatures were excluded from judicial officer analysis.

Template Conformance Score: For each document, the percentage of its text rows that are unique (appear in no other document in the cohort) was computed. A score of 0% means every row in the document is shared with at least one other document.

3. Finding 1 — Corpus Overview & Cohort Profile

Background

The “Finding of Incompetency and Order” is a judicial determination that a criminal defendant is not competent to stand trial. In Hennepin County Fourth Judicial District, these orders trigger commitment and treatment provisions.

Findings

Metric	Value
Total documents	157
Distinct cases (case_uid)	131
Distinct document hashes (doc_sha256)	157
Distinct defendant clusters	52
Earliest filing date	2023-01-11
Latest filing date	2025-04-30
Date span	~27.5 months

Top Clusters by Document Count:

Cluster	ID	Docs	Cases	Date Range
MICHAEL HOWARD	1	27	27	2023-05-02 only
Lucas Kraskey	19	21	12	2023-05-02 to 2023-11-01
AESHA OSMAN	80	10	5	2023-06-06 to 2024-03-20
TERRELL JOHNSON	14	9	9	2024-03-12 only
GORDON SHARP	17	7	7	2023-06-01 only
CARMEN GREAVES	209	6	3	2023-02-22 to 2024-03-05
ABDINOUR ALASOW	105	3	3	2023-02-16 only
BRITTANY CRUTCHFIELD	153	3	3	2023-07-12 only
REX BASSWOOD	267	3	3	2023-03-08 only
EMANUEL BLACK	67	3	3	2024-02-02 only

Judicial Officer Distribution

Judicial Officer	Docs Signed	Clusters	Date Range	Typical rev_count
Browne, Michael	93	27	2023-01-11 to 2024-04-26	9
Mercurio, Danielle	54	9	2023-02-22 to 2024-03-11	9
Dayton Klein, Julia	35	18	2023-02-15 to 2024-02-12	9

Judicial Officer	Docs Signed	Clusters	Date Range	Typical rev_count
Borer, George	33	16	2023-01-11 to 2024-03-20	9
Skibbie, Lori	8	5	2023-03-15 to 2023-12-11	9
Anderson, Jamie	1	1	2023-10-18	9
Koch, William	1	1	2025-04-30	5

Browne alone signs 59.2% of the cohort (93/157 documents). The top two officers (Browne + Mercurio) cover 93.6% of signed documents. 130 of 157 documents have judicial officer signatures; the remaining 27 lack entries. Only 2 documents have ESolutions system signatures (the two identified outliers).

Significance

All 157 document hashes are distinct — no two files are byte-identical. However, as subsequent findings demonstrate, the internal content is overwhelmingly duplicated across documents. The top cluster (MICHAEL HOWARD) has 27 documents all filed on a single day (2023-05-02), each for a different case.

4. Finding 2 — Text-Level Clone Groups (Layer 1)

Background

Each document in the hashpack pipeline receives a whole-document text fingerprint (fp_text_sha256), computed from the concatenated, normalized extracted text. Documents sharing this fingerprint have byte-identical text content after normalization.

Findings

Metric	Value
Distinct text fingerprints	64
Multi-doc clone groups (size ≥ 2)	25
Singleton fingerprints (size = 1)	39
Documents in clone groups	118 (75.2%)
Largest clone group	27 documents
Cross-cluster clone groups	0

Clone Group Size Distribution:

Group Size	Number of Groups	Total Docs
1 (singleton)	39	39
2	10	20
3	8	24
5	2	10
7	1	7
9	2	18
12	1	12
27	1	27

Significance

Every multi-document text clone group is confined to a single cluster (distinct_clusters = 1 for all 25 groups). This means text-identical documents only appear within the same defendant cluster, never across clusters. This is consistent with batch-filing: multiple cases within one cluster receive the same text, with only case-specific identifiers differing in the PDF structure.

The claim that “all but two” of the cohort are identical clones is not supported at the text-fingerprint level; instead, there are 64 distinct text variants organized into within-cluster groups.

5. Finding 3 — Row-Hash Structural Template (Layer 1, Deep)

Background

Beyond whole-document text fingerprints, each individual text row is independently hashed (row_sha256 in hashpack_rows). This enables detection of shared structural elements even when documents are not text-identical overall.

Findings

Metric	Value
Total distinct row hashes in cohort	1,928
Shared in 2+ documents	986 (51.1%)
Shared in 10+ documents	283
Shared in 50+ documents	118
Shared in 100+ documents	103
Present in all 157 documents	2
Cross-cluster row hashes (2+ clusters)	316
Cross 10+ clusters	140

Universal Boilerplate Rows (Top 10 by Document Count):

Row Text (truncated)	Docs	Clusters
“Filed in District Court”	157	52
“State of Minnesota”	157	52
“ORDER”	156	52
“CONCLUSIONS OF LAW”	156	52
“FINDINGS OF FACT”	156	52
“FOURTH JUDICIAL DISTRICT”	155	51
“COUNTY OF HENNEPIN CRIMINAL DIVISION”	154	51
“physicians; psychologists; mental health...”	154	51
“Based on all the files, records and proceedings...”	154	51
“Program of Hennepin County’s Human Services...”	154	51

Template Conformance Scores:

Metric	Value
Documents with 0% unique rows	118 (75.2%)
Documents with >0% and ≤10% unique	9
Documents with >10% and ≤50% unique	27

Metric	Value
Documents with >50% unique	3
Mean % unique rows	4.6%
Median % unique rows	0.0%

Significance

118 of 157 documents contain no text row that is unique to that document — every single line of extracted text is shared with at least one other document. The structural template is so dominant that the median document has zero distinguishing text content. While the text fingerprint analysis (Finding 2) showed within-cluster cloning, the row-hash analysis reveals a far deeper pattern: 316 row hashes cross cluster boundaries, and 103 hashes appear in the majority of the cohort. This indicates a shared master template underlying the entire filing type, with only case-specific fields differentiating documents.

6. Finding 4 — Outlier Deep Dive (Guertin & Cherry)

Background

The prior analysis identified two specific filings as potential outliers from the dominant template pattern. These were tested against the full corpus.

The Four Documents

Label	Case ID	Date	Cluster	% Unique Rows
Outlier A	27-CR-23-1886	2023-07-13	MATTHEW GUERTIN	78.0%
Outlier B	27-CR-23-3198	2023-12-06	AARON CHERRY	88.9%
Successor A	27-CR-23-1886	2024-01-17	MATTHEW GUERTIN	<50%
Successor B	27-CR-23-3198	2023-12-11	AARON CHERRY	<50%

All four documents have distinct text fingerprints (fp_text_sha256), confirming none are text-identical to each other or to any other document in the cohort.

Exclusive Shared Rows (Outlier A ↔ Outlier B Only)

The two outlier filings share 12 row hashes between them. Of these, 7 are exclusive — they appear in these two documents and nowhere else in the entire 157-document cohort. These 7 exclusive rows are all legal case citations:

- “Bauer, 245 N.W.2d 848, 852 (Minn. 1976) (ruling that the court should have conducted further...”
- “proceedings turns on the facts of each particular case. Moreover, fact-finders, including district...”
- “N.W.2d 863, 868 (Minn. 2016). Foremost, throughout the criminal proceedings the trial court must...”
- “courts, are not required to accept an expert’s testimony or recommendations. State v. Roberts, 876...”
- “A defendant has a due process right not to be tried or convicted of a criminal charge if he...”
- “be mindful of its protective duty to ensure that a defendant is competent to proceed...”
- “is able to rationally consult with the defense attorney or understand and participate in the...”

Verification: The claim that specific identical rows connect only these two outlier filings is **confirmed**. The 7 exclusive row hashes contain substantive legal analysis and case law citations (Bauer, Roberts, State v. references) that are entirely absent from the remaining 155 documents.

Tracking Font Group Status

Outlier A (Guertin 2023-07-13) and Outlier B (Cherry 2023-12-06) are the only two documents in the entire cohort that are absent from the children_tracking_groups table. They have no tracking

font assignment whatsoever, while 155 other documents are assigned to TTF-C and the remaining 2 to TTF-E/TTF-B.

Significance

These two outliers represent a measurably different document lineage: they contain substantive legal reasoning (case citations, due process analysis) that the template filings lack entirely. Their exclusion from the tracking font system, combined with their shared exclusive content and high uniqueness scores, suggests they were authored through a different workflow than the dominant template pipeline. Notably, the successor filings for both cases returned to the template pattern, though Guertin's successor adopted a different font group (TTF-E rather than TTF-C).

7. Finding 5 — Embedded Object & Font Cloning (Layers 2 & 3)

Judicial Officer Signature Images

Across all 157 documents, only 7 distinct signature image hashes were identified, belonging to 6 judicial officers:

Officer	Docs	Clusters	Dimensions	Size (bytes)
Browne (primary)	103	28	857 × 184	3,442
Mercurio	65	12	833 × 186	5,295
Dayton Klein	45	24	881 × 216	5,220
Borer	36	19	441 × 176	2,621
Skibbie	10	6	473 × 134	2,517
Browne (variant)	6	4	857 × 184	4,521
Koch	1	1	633 × 255	2,997

Each officer uses a single fixed-hash signature image across all documents they sign. The same binary image file is embedded repeatedly — not re-scanned or re-captured each time.

Timestamp Images

40 distinct timestamp image hashes appear across 118 documents in 22 clusters. Unlike signatures, timestamp images vary by date, so the 40 distinct hashes correspond to distinct signing dates.

Tracking Font Groups

Font Group	PDF Group	Documents	Clusters	Notes
TTF-C	C1	155	52	Dominant group; spans entire cohort
TTF-E	E1	2	2	Guertin 2024-01-17 + Lehmeyer 2024-04-26
TTF-B	B1	1	1	Durheim 2024-02-12
Not in table	—	2	2	Outlier A (Guertin) + Outlier B (Cherry)

Significance

The convergence of 155/157 documents onto a single font fingerprint (TTF-C/C1) across all 52 clusters is a strong indicator of a centralized template. Combined with only 7 signature images serving the entire corpus, the embedded-object layer confirms that these documents are assembled from a fixed set of reusable components.

8. Finding 6 — Judicial Signature Cloning (Layer 4)

Findings

Metric	Value
Documents with judicial officer signatures	130 of 157 (82.8%)
Documents with ESolutions system signatures only	2 (the two outliers)
Total judicial signature entries	225
Distinct signers (judicial officers)	7
edits_after_sig_flag = “true”	225 of 225 (100%)

Revision Count Distribution:

rev_count	Documents	% of Signed Docs
9	95	73.1%
7	24	18.5%
6	6	4.6%
8	3	2.3%
5	2	1.5%

Significance

The edits_after_sig_flag = “true” rate of 100% means that every single document with a judicial officer signature was subsequently modified after signing. This is a universal pattern in the cohort, not an occasional occurrence. The dominant revision count of 9 (73.1%) suggests a standardized multi-step processing pipeline. The two outlier documents are the only ones with ESolutions certificates instead of judicial officer signatures.

9. Finding 7 — Metadata & XMP Patterns (Layer 3)

Creator Tool Distribution

Creator Tool	Docs
Microsoft® Word for Microsoft 365	78
Acrobat PDFMaker 23 for Word (various)	53
Acrobat PDFMaker 22 for Word	19
Acrobat PDFMaker 25 for Word	1

All 157 documents contain the modification signature: “modified using iText® 7.1.16 ©2000-2021 iText Group NV (Minnesota Judicial Branch; licensed version)”. This is a universal processing stamp indicating all documents passed through the same iText-based court e-filing pipeline.

XMP Create Date Clustering (Top 5)

XMP Create Date	Docs	Clusters
2023-05-02	40	3
2023-10-31	10	2
2023-05-31	9	3
2024-03-21	9	1
2023-02-15	8	3

Significance

40 documents — 25.5% of the entire cohort — share an XMP creation date of May 2, 2023, spanning 3 defendant clusters. This is a mass-production signal: these documents were authored (or their Word template was saved) on a single day, then filed for 40 different case-defendant combinations.

10. Finding 8 — Cluster Alignment Analysis

10.1 — Cluster Footprint

The 157 filings distribute across 52 clusters. The distribution is highly skewed: the top 3 clusters account for 58 documents (36.9%), while the bottom 37 clusters have only 1 document each.

Tier	Clusters	Docs	% of Cohort
Large clusters (5+ docs)	6	80	51.0%
Medium clusters (2–4 docs)	9	23	14.6%
Singleton clusters (1 doc)	37	37	23.6%

10.2 — Cross-Cluster Template Sharing (Row Hashes)

While text fingerprints are strictly within-cluster (Finding 2), the row-hash layer reveals substantial cross-cluster sharing:

Row Reuse Pattern	Distinct Row Hashes
Single-cluster only	1,612 (83.6%)
Crosses 2–9 clusters	176 (9.1%)
Crosses 10–49 clusters	37 (1.9%)
Crosses 50+ clusters (near-universal)	103 (5.3%)
Total cross-cluster	316 (16.4%)

The 103 row hashes present in 50+ clusters represent the structural skeleton of the filing template — headings, legal boilerplate, commitment order language, and standard provisions.

10.3 — Judicial Signature Objects Across Clusters

Officer Signature Hash	Docs	Clusters Served	Cross-Cluster?
Browne (primary)	103	28	Yes — dominant
Mercurio	65	12	Yes
Dayton Klein	45	24	Yes
Borer	36	19	Yes
Skibbie	10	6	Yes
Browne (variant)	6	4	Yes
Koch	1	1	No (single doc)

All major signature images are cross-cluster reuse artifacts. A single binary signature image for Browne serves 28 different defendant clusters, confirming that the same embedded object is inserted into the template regardless of case context.

10.4 — Clone Groups vs. Clusters Crosswalk

Key structural relationship: text fingerprint clone groups are strictly within-cluster, but the underlying template skeleton crosses all clusters.

- Within a cluster, multiple filings on the same date are text-identical (same defendant names, dates, case IDs substituted identically).
- Across clusters, the template structure is the same, but case-specific fields produce different text fingerprints.
- The font fingerprint (TTF-C/C1) spans all 52 clusters, confirming the same master document template is used everywhere.
- Signature images, boilerplate rows, and the iText processing trail are universal cross-cluster constants.

10.5 — Officer × Cluster Concentration

Officer	Cluster	Docs
Browne + Mercurio	MICHAEL HOWARD (1)	27 each
Browne + Mercurio	Lucas Kraskey (19)	21 / 12
Browne, Borer, Mercurio, Dayton Klein	AESHA OSMAN (80)	5 each
Browne + Borer	GORDON SHARP (17)	7 each

Browne and Mercurio frequently co-sign: both appear in all 27 MICHAEL HOWARD documents. This pairing is the single largest concentration in the dataset.

11. Finding 9 — Time Evolution & Template Adoption

Monthly Filing Timeline

Month	Docs	Cases	Clusters
2023-01	2	2	2
2023-02	11	11	4
2023-03	10	10	6
2023-04	6	6	4
2023-05 *	45	45	6
2023-06	17	17	6
2023-07	5	5	3
2023-08	3	3	3
2023-10	5	5	4
2023-11 *	16	16	7
2023-12	4	3	3
2024-01	3	3	2
2024-02	7	7	4
2024-03 *	19	19	5
2024-04	3	3	3
2025-04	1	1	1

* = batch filing spikes. May 2023 (45 docs, 28.7% of the cohort), November 2023 (16 docs), and March 2024 (19 docs) correspond to mass-processing events where many cases receive identically-templated incompetency findings.

Template Versioning

- PDFMaker 22 era (early 2023): 19 documents using Acrobat PDFMaker 22.
- Transition period (mid 2023): Mixed PDFMaker 22/23 + Microsoft Word 365.
- Word 365 / PDFMaker 23 era (late 2023–2024): Dominant authoring tools shift to direct Word export and PDFMaker 23.

Despite tool changes, the TTF-C font fingerprint and iText 7.1.16 processing trail remain constant throughout, indicating the template structure persists even as authoring software evolves.

12. Key Metrics Summary

Forensic Signal Dashboard — “Finding of Incompetency and Order”

Forensic Signal	Measured Value
Documents with zero unique text rows	118 / 157 (75.2%)
Distinct judicial signature images serving entire corpus	7
Documents sharing TTF-C font fingerprint	155 / 157 (98.7%)
Documents modified after judicial signature	225 / 225 (100%)
Documents created on single day (2023-05-02)	40 (25.5%)
Row hashes appearing in 100+ of 157 docs	103
Cross-cluster boilerplate row hashes	316
Outlier docs with exclusive shared legal citations	2 (Guertin + Cherry)
Outlier docs absent from tracking font table	2 (same pair)
Universal iText 7.1.16 MN Judicial Branch processing trail	157 / 157 (100%)
Top signer (Browne) share of signed documents	93 / 130 (71.5%)
Distinct text fingerprints with cross-cluster presence	0

13. Limitations & Alternative Explanations

Template-based court operations: Courts routinely use document templates (Word or PDF forms) to generate standardized orders. High text overlap and identical fonts across filings of the same type may reflect standard operating procedure rather than anomalous behavior. The "Finding of Incompetency and Order" is a formulaic legal instrument that by design contains standard findings, conclusions of law, and order provisions.

Batch processing is expected: When a court processes multiple pending incompetency determinations, it is efficient to produce them in batches. The May 2023 spike of 45 documents across 6 clusters is consistent with a scheduled review calendar.

Edits-after-signature may be procedural: The universal edits_after_sig_flag = true could result from standard court e-filing workflows where the iText processing pipeline modifies the PDF (e.g., adding filing stamps, watermarks, or metadata) after judicial signature insertion. This would not necessarily indicate tampering.

Signature image reuse is standard: Judicial officers typically use a fixed digital signature image. Finding only 7 distinct signature images across 157 documents is consistent with a standard judicial signature management system.

Limitations of text extraction: Row-level hashing depends on PDF text extraction fidelity. Minor extraction differences could artificially inflate uniqueness scores; conversely, structural artifacts (page numbers, headers) inflate similarity.

Cohort boundary effects: The 157-document cohort is defined by a single filing type. Cross-referencing with other filing types could provide additional context on whether these patterns are specific to incompetency findings or general to the court system.

14. Recommendations for Independent Verification

1. Reproduce the row-hash analysis using the SQL in Appendix A3. Verify that 118 documents yield 0% unique rows independently.
2. Validate the outlier exclusive rows (Appendix A5): confirm 7 row hashes are exclusive to the Guertin/Cherry pair.
3. Cross-reference other filing types (e.g., “Order for Evaluation”, “Complaint”) to determine if the TTF-C font fingerprint dominance and iText trail are filing-type-specific or system-wide.
4. Examine the edits-after-signature pattern by retrieving the byte ranges from the signature records to determine what was modified post-signature.
5. Compare the outlier legal citations to published Minnesota case law to assess whether the template filings’ omission of these citations represents a substantive legal deficiency.
6. Apply NLP/topic-modeling to the row text to classify rows as boilerplate vs. case-specific vs. substantive legal reasoning.
7. Perform a Jaccard similarity matrix across all document pairs to identify intermediate-similarity documents that may represent template versions.

15. Appendix: Reproducible SQL Queries

All queries below are SELECT-only and may be executed against the MCRO Supabase database to reproduce the findings in this report.

A1 — Cohort Overview

```
SELECT COUNT(*) AS total_docs,
  COUNT(DISTINCT case_uid) AS distinct_cases,
  COUNT(DISTINCT doc_sha256) AS distinct_doc_hashes,
  COUNT(DISTINCT cluster_id) AS distinct_clusters,
  MIN(filing_date) AS earliest_filing,
  MAX(filing_date) AS latest_filing
FROM children
WHERE filing_type = 'Finding of Incompetency and Order';
```

A2 — Text Fingerprint Clone Groups

```
WITH cohort AS (
  SELECT h.evidence_uid, h.fp_text_sha256, c.cluster_id, c.filing_date, c.case_uid
  FROM hashpack h JOIN children c ON c.evidence_uid = h.evidence_uid
  WHERE c.filing_type = 'Finding of Incompetency and Order'
)
SELECT fp_text_sha256, COUNT(*) AS doc_count,
  COUNT(DISTINCT cluster_id) AS distinct_clusters,
  MIN(filing_date) AS earliest, MAX(filing_date) AS latest
FROM cohort GROUP BY fp_text_sha256 ORDER BY doc_count DESC;
```

A3 — Template Conformance (% Unique Rows)

```
WITH cohort AS (
  SELECT evidence_uid FROM children
  WHERE filing_type = 'Finding of Incompetency and Order'
), row_freq AS (
  SELECT hr.row_sha256, COUNT(DISTINCT hr.evidence_uid) AS doc_freq
  FROM hashpack_rows hr JOIN cohort co ON co.evidence_uid = hr.evidence_uid
  GROUP BY hr.row_sha256
)
SELECT hr.evidence_uid, COUNT(*) AS total_rows,
  COUNT(*) FILTER (WHERE rf.doc_freq = 1) AS unique_rows,
  ROUND(100.0 * COUNT(*) FILTER (WHERE rf.doc_freq = 1)
    / NULLIF(COUNT(*), 0), 1) AS pct_unique
FROM hashpack_rows hr
JOIN cohort co ON co.evidence_uid = hr.evidence_uid
JOIN row_freq rf ON rf.row_sha256 = hr.row_sha256
GROUP BY hr.evidence_uid ORDER BY pct_unique DESC;
```

A4 — Judicial Signature Image Objects

```
SELECT co.object_sha256, co.object_person_name,
  COUNT(DISTINCT co.evidence_uid) AS doc_count,
  COUNT(DISTINCT c.cluster_id) AS cluster_count
FROM children_objects co
JOIN children c ON c.evidence_uid = co.evidence_uid
WHERE c.filing_type = 'Finding of Incompetency and Order'
  AND co.object_family = 'Judicial Officer Signature'
```

```
GROUP BY co.object_sha256, co.object_person_name
ORDER BY doc_count DESC;
```

A5 — Outlier Exclusive Rows (Guertin ↔ Cherry)

```
WITH cohort AS (
  SELECT evidence_uid FROM children
  WHERE filing_type = 'Finding of Incompetency and Order'
), rows_a AS (
  SELECT DISTINCT row_sha256 FROM hashpack_rows
  WHERE evidence_uid = 'evidence:27-cr-23-1886:db8525dd67737332'
), rows_b AS (
  SELECT DISTINCT row_sha256 FROM hashpack_rows
  WHERE evidence_uid = 'evidence:27-cr-23-3198:461d1d13b1692b03'
), shared AS (
  SELECT a.row_sha256 FROM rows_a a JOIN rows_b b ON a.row_sha256 = b.row_sha256
), other AS (
  SELECT s.row_sha256, COUNT(DISTINCT hr.evidence_uid) AS other_count
  FROM shared s JOIN hashpack_rows hr ON hr.row_sha256 = s.row_sha256
  JOIN cohort co ON co.evidence_uid = hr.evidence_uid
  WHERE hr.evidence_uid NOT IN (
    'evidence:27-cr-23-1886:db8525dd67737332',
    'evidence:27-cr-23-3198:461d1d13b1692b03')
  GROUP BY s.row_sha256
)
SELECT s.row_sha256, COALESCE(o.other_count, 0) AS other_doc_count,
  CASE WHEN COALESCE(o.other_count, 0) = 0 THEN 'EXCLUSIVE' ELSE 'SHARED' END
FROM shared s LEFT JOIN other o ON o.row_sha256 = s.row_sha256
ORDER BY other_doc_count ASC;
```

A6 — Tracking Font Group Distribution

```
SELECT tg.font_group, tg.pdf_group,
  COUNT(DISTINCT tg.evidence_uid) AS doc_count,
  COUNT(DISTINCT c.cluster_id) AS cluster_count
FROM children_tracking_groups tg
JOIN children c ON c.evidence_uid = tg.evidence_uid
WHERE c.filing_type = 'Finding of Incompetency and Order'
GROUP BY tg.font_group, tg.pdf_group ORDER BY doc_count DESC;
```

A7 — Monthly Filing Timeline

```
SELECT TO_CHAR(filing_date, 'YYYY-MM') AS month,
  COUNT(*) AS doc_count, COUNT(DISTINCT case_uid) AS case_count,
  COUNT(DISTINCT cluster_id) AS cluster_count
FROM children
WHERE filing_type = 'Finding of Incompetency and Order'
GROUP BY TO_CHAR(filing_date, 'YYYY-MM') ORDER BY month;
```

A8 — Cross-Cluster Row Hash Analysis

```
WITH cohort AS (
  SELECT evidence_uid, cluster_id FROM children
  WHERE filing_type = 'Finding of Incompetency and Order'
), row_stats AS (
  SELECT hr.row_sha256,
    COUNT(DISTINCT hr.evidence_uid) AS doc_count,
    COUNT(DISTINCT co.cluster_id) AS cluster_count
```

```
  FROM hashpack_rows hr JOIN cohort co ON co.evidence_uid = hr.evidence_uid
  GROUP BY hr.row_sha256
)
SELECT COUNT(*) AS total_distinct_row_hashes,
  COUNT(*) FILTER (WHERE doc_count >= 2) AS shared_2plus,
  COUNT(*) FILTER (WHERE doc_count >= 100) AS shared_100plus,
  COUNT(*) FILTER (WHERE cluster_count >= 2) AS cross_cluster_hashes
FROM row_stats;
```

End of Report