GAS Leak Detector — Operational Diagnostic Report

Report ID: **RPT-3AABA1A38F** | Generated: 2026-11-20 15:13 UTC | Source: Synthetic Agency Example (30 tasks, 4 projects) | Mode: deterministic | Configured Rate: $125/hr

1. Dataset Coverage & Verification Summary

Analyzed **30** task records. Evidence verification: **5/5** candidate findings verified against uploaded records (0 removed).

Detector	Status	Populated Rows	Notes
excessive_task_age	ENABLED	30/30	Enabled using created_at across 30 tasks (24 with completed_at for cycle-time).
repeated_reassignment	ENABLED	30/30	Enabled (30/30 rows have assignee_changes).
reopened_tasks	ENABLED	30/30	Enabled (30/30 rows have reopen_count).
approval_review_delay	ENABLED	24/30	Enabled (24/30 rows have both review_requested_at and review_completed_at).
recurring_pattern	ENABLED	30/30	Enabled across 4 projects (30 tasks).

2. Evidence-Backed Findings & 7-Day Experiments

1. Approval and review queues exceed 48 hours (FND-APPROVAL-DELAY) [TOP 3 PRIORITY]

Observation (measured): Observed 10 tasks waiting longer than 48 hours between review_requested_at and review_completed_at (mean wait 203.9 hours; 1559.0 excess waiting hours above the 48h threshold) across projects: PRJ-ATLAS-REBRAND, PRJ-BEACON-SITE, PRJ-DELTA-CONTENT.

Hypothesis (to validate): Client or internal sign-off lacks a scheduled review SLA or single accountable approver, causing completed work to sit idle and trigger follow-up status chasing.

Recommendation: Introduce a fixed 24-hour review SLA with a designated backup approver and batch pending approvals into a twice-weekly 15-minute sign-off block.

Scope: 3 project(s): PRJ-ATLAS-REBRAND, PRJ-BEACON-SITE, PRJ-DELTA-CONTENT | **Timeframe:** 2026-08-10 to 2026-10-03 | **Confidence:** high | **Verification step:** Audit the top 3 delayed tasks in your PM tool to confirm whether wait time was client-side sign-off or internal review backlog.

Financial Opportunity (modeled hypothesis): $1,562 - $6,238 (12.5-49.9 recoverable hrs at $125/hr; observed 1559.0 excess review wait hours (>48h)). *Hypothetical opportunity range based on user-configured hourly rate and explicit assumptions. Not demonstrated or guaranteed cost savings.*

7-Day Experiment — 7-Day Approval SLA & Escalation Experiment (Owner: Operations Director / Account Lead): (1) Pick the single project with the longest review delays from the evidence table. (2) Set a 24-hour review timer when any task enters in_review; escalate to a backup reviewer at hour 24. (3) Log actual review turnaround for every task submitted this week and compare to the observed baseline. Success signal: Median review turnaround drops below 48 hours on the target project.

Supporting Task IDs (10): TSK-023, TSK-022, TSK-005, TSK-006, TSK-004, TSK-030, TSK-002, TSK-001, TSK-003, TSK-011

2. Completed tasks reopened for rework (FND-REOPENED-REWORK) [TOP 3 PRIORITY]

Observation (measured): Observed 11 tasks reopened at least once (17 total reopen events) across projects: PRJ-ATLAS-REBRAND, PRJ-BEACON-SITE, PRJ-DELTA-CONTENT.

Hypothesis (to validate): Acceptance criteria or QA checks are happening after tasks are marked done, creating avoidable rework loops and schedule slippage.

Recommendation: Attach a 3-item pre-completion checklist (acceptance criteria, link to preview, peer spot-check) required before any task moves to completed.

Scope: 3 project(s): PRJ-ATLAS-REBRAND, PRJ-BEACON-SITE, PRJ-DELTA-CONTENT | **Timeframe:** 2026-08-10 to 2026-10-03 | **Confidence:** high | **Verification step:** Check whether reopened tasks failed internal QA, client expectation alignment, or scope creep added after delivery.

Financial Opportunity (modeled hypothesis): $525 - $2,650 (4.2-21.2 recoverable hrs at $125/hr; observed 17.0 recorded reopen events). *Hypothetical opportunity range based on user-configured hourly rate and explicit assumptions. Not demonstrated or guaranteed cost savings.*

7-Day Experiment — 7-Day Pre-Done Checklist Pilot (Owner: QA / Creative Director): (1) Add a mandatory 3-bullet Definition of Done comment before closing tasks on the highest-reopen project. (2) Require a 5-minute peer spot-check on deliverables before client handoff. (3) Track reopen count on all tasks closed during the 7-day pilot. Success signal: Reopen rate drops by at least 50% compared to the historical export.

Supporting Task IDs (11): TSK-010, TSK-004, TSK-009, TSK-011, TSK-013, TSK-002, TSK-005, TSK-012, TSK-022, TSK-023, TSK-027

3. Tasks repeatedly changing owners before completion (FND-REPEATED-REASSIGN) [TOP 3 PRIORITY]

Observation (measured): Observed 8 tasks with 2+ assignee changes (24 total handoffs) across projects: PRJ-BEACON-SITE, PRJ-DELTA-CONTENT.

Hypothesis (to validate): Tasks are entering execution without clear scoping or skill-match ownership, forcing repeated context-transfer handoffs between team members.

Recommendation: Require a 3-line definition-of-ready and explicit single-owner assignment during weekly intake before moving tasks into active sprint columns.

Scope: 2 project(s): PRJ-BEACON-SITE, PRJ-DELTA-CONTENT | **Timeframe:** 2026-08-10 to 2026-10-03 | **Confidence:** high | **Verification step:** Inspect the comment thread on the top 3 reassigned tasks to distinguish planned role handoffs (e.g., design -> dev) from unplanned bouncing.

Financial Opportunity (modeled hypothesis): $375 - $2,250 (3.0-18.0 recoverable hrs at $125/hr; observed 24.0 recorded assignee changes). *Hypothetical opportunity range based on user-configured hourly rate and explicit assumptions. Not demonstrated or guaranteed cost savings.*

7-Day Experiment — 7-Day Single-Owner Intake Gate (Owner: Project Manager / Delivery Lead): (1) For one week on the most affected project, disallow moving a task to in_progress until one owner accepts scope. (2) Split multi-role tasks into explicit subtasks instead of reassigning one ticket. (3) Count assignee changes at day 7 against the baseline. Success signal: Zero unplanned reassignments on newly started tasks during the 7-day window.

Supporting Task IDs (8): TSK-010, TSK-013, TSK-009, TSK-011, TSK-012, TSK-027, TSK-015, TSK-025

4. Aged open backlog and extended cycle-time tasks (>21 days) (FND-EXCESSIVE-AGE)

Observation (measured): Observed 11 tasks exceeding 21 calendar days (136.2 total excess days above 21d threshold) across projects: PRJ-ATLAS-REBRAND, PRJ-BEACON-SITE, PRJ-DELTA-CONTENT.

Hypothesis (to validate): Stalled or oversized tasks remain active on boards without explicit parking or decomposition, inflating standup overhead and hiding true WIP.

Recommendation: Run a 20-minute WIP triage: archive obsolete tickets, split tasks older than 14 days into concrete deliverables, and cap active tasks per owner.

Scope: 3 project(s): PRJ-ATLAS-REBRAND, PRJ-BEACON-SITE, PRJ-DELTA-CONTENT | **Timeframe:** 2026-08-10 to 2026-10-03 | **Confidence:** high | **Verification step:** Review the oldest 5 tasks to confirm whether they are genuinely blocked, abandoned, or already completed outside the PM tool.

Financial Opportunity (modeled hypothesis): $200 - $862 (1.6-6.9 recoverable hrs at $125/hr; observed 136.21 excess task days (>21d)). *Hypothetical opportunity range based on user-configured hourly rate and explicit assumptions. Not demonstrated or guaranteed cost savings.*

7-Day Experiment — 7-Day Stale-WIP Purge & Cap (Owner: Agency Owner / Operations Director): (1) Triage every open task older than 21 days: close, park in Icebox, or assign a 48h next step. (2) Set a soft WIP cap of 3 active tasks per person for one week. (3) Measure how many tasks remain stalled at day 7. Success signal: Zero unreviewed open tasks older than 21 days remaining in active status.

Supporting Task IDs (11): TSK-025, TSK-026, TSK-024, TSK-027, TSK-015, TSK-013, TSK-010, TSK-007, TSK-009, TSK-012, TSK-011

5. Compounding friction hotspot in PRJ-ATLAS-REBRAND (FND-PATTERN-PRJ-ATLAS-REBRAND)

Observation (measured): Observed 9 distinct tasks in project PRJ-ATLAS-REBRAND exhibiting multiple overlapping friction categories (approval_review_delay, excessive_task_age, reopened_tasks).

Hypothesis (to validate): Friction in PRJ-ATLAS-REBRAND is structural to that engagement's delivery cadence or client communication loop rather than isolated individual task slips.

Recommendation: Hold a focused 30-minute delivery reset on PRJ-ATLAS-REBRAND addressing handoff ownership and sign-off cadence before starting the next milestone.

Scope: Project PRJ-ATLAS-REBRAND (9 tasks) | **Timeframe:** 2026-08-10 to 2026-10-03 | **Confidence:** high | **Verification step:** Compare margin and hours logged on PRJ-ATLAS-REBRAND against a lower-friction project in the same export to validate whether this account is eroding profitability.

Financial Estimate: Suppressed — Suppressed for project-level recurring pattern to avoid double-counting specific friction estimates above.

7-Day Experiment — 7-Day Delivery Reset on PRJ-ATLAS-REBRAND (Owner: Agency Owner / Client Partner): (1) Share the evidence list for PRJ-ATLAS-REBRAND with the project lead. (2) Lock one weekly approval slot and one owner per active deliverable for 7 days. (3) Re-export the project CSV after 7 days to check whether reopens and handoffs decline. Success signal: No new multi-signal friction tasks created in PRJ-ATLAS-REBRAND during the 7-day window.

Supporting Task IDs (9): TSK-001, TSK-002, TSK-003, TSK-004, TSK-005, TSK-006, TSK-007, TSK-026, TSK-030

3. Explicit Limitations

• Diagnostic detectors only evaluate columns present in your CSV export; missing fields suppress detectors rather than inventing events.

• Financial opportunity ranges are modeled hypotheses based on your configured hourly rate—not demonstrated or guaranteed cost savings.

• This tool does not rank individual employee performance or recommend HR actions.

• Explanation mode is currently 'deterministic' (rule-based templates; no external LLM inference).