FORENSIC ANALYSIS REPORT

Distracted Driving Investigation

Report Generated: July 17, 2025 at 01:13:18

EXECUTIVE SUMMARY

Key Findings:

* Total digital events analyzed: 1871
* High-priority phone interactions: 120
* Phone usage while driving detected: 34 instances
* Maximum recorded speed: 81.4 mph

Analysis Methodology:

* Digital evidence extracted from mobile device using Cellebrite forensic tools
* Timeline analysis of phone usage events correlated with location data
* Movement pattern analysis using GPS tracking data
* App usage session duration analysis from system logs
* Forensic priority classification based on interaction type and timing

EVENT ANALYSIS

Event Priority Distribution

Total Events Analyzed: 1871

High Priority (Active Use): 120

Medium Priority (Notifications): 86

Low Priority (Background): 1665

Most Frequently Used Apps

Network: 1055 events

Unknown: 276 events

System: 267 events

Maps: 123 events

Notifications: 86 events

Messages: 42 events

Spotify: 22 events

MOVEMENT ANALYSIS

Total Location Points: 1823
Average Speed: 35.7 mph
Maximum Speed: 81.4 mph
Median Speed: 19.0 mph

Speed Distribution

Stationary (< 3.0 mph): 792 points
Slow Driving (3.0-35.0 mph): 157 points
Fast Driving (> 35.0 mph): 874 points

Phone Usage While Driving

Instances of phone use while driving: 34
  12:42:34 - Unknown at 71.8 mph
  12:45:12 - Unknown at 63.6 mph
  12:58:11 - Spotify at 50.6 mph
  12:58:34 - Spotify at 72.4 mph
  13:01:24 - Spotify at 71.2 mph

CONCLUSIONS AND FINDINGS

* Analysis identified 120 high-priority phone interactions indicating active device usage during the analyzed timeframe.

* Evidence shows 34 instances of phone usage while the vehicle was in motion above driving threshold speed.

* Vehicle movement analysis shows maximum speed of 81.4 mph with average speed of 35.7 mph during the analyzed period.

* The digital evidence analysis provides objective data regarding phone usage patterns and vehicle movement that can be correlated with the incident timeline for forensic investigation purposes.

Technical Notes

* Data was extracted using Cellebrite forensic tools and validated for integrity.
* Timeline analysis correlates phone usage events with location and movement data.
* Speed calculations use GPS coordinates and may be affected by GPS accuracy.
* App usage sessions are identified from system start/end time annotations.
* Priority classifications are based on forensic significance and user interaction level.