
Arson Laboratory Improvement Program Report - 2006

12 Month Analysis

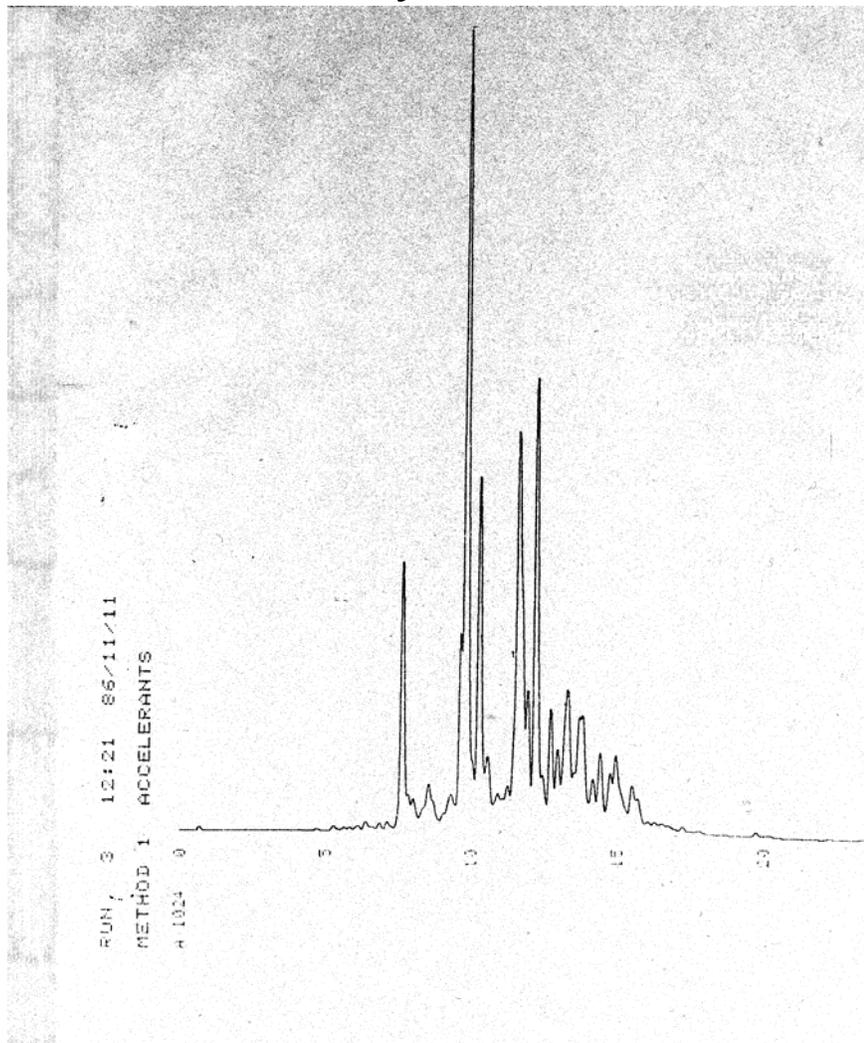


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Section 1 - INTRODUCTION

Arson is a crime if left unchecked, is allowed to wreak havoc and terrorize citizens throughout the state. The legislature in 1979 charged the New York State Department of State, Office of Fire Prevention and Control with the responsibility for administering a coordinated, state wide arson control program. A component of this anti-arson effort includes the Arson Laboratory Improvement Program (ALIP). This program utilizes data specifically related to the analysis of fire debris by forensic laboratories. Over the past 25 years the ALIP has helped strengthen the role of fire debris analysis in support of police and fire investigations conducted in fighting the crime of arson in our state. Today more so than ever, the role of the Forensic Laboratory has become vital to the preparation and successful prosecution of Arson Crimes. The ALIP has also proven to be an asset in identifying training needs to mutually benefit both the laboratory and the fire investigation community.

The ALIP currently includes 10 laboratories in New York State that provide forensic services to local fire and law enforcement agencies. As part of this program, each laboratory submits data monthly to the Office of Fire Prevention and Control's Arson Bureau where it is reviewed and tabulated. This data is then jointly shared with the New York State Division of Criminal Justice Services, the New York State Crime Laboratory Advisory Committee (CLAC), and the Laboratories through an annual report reflecting the year's activity.

The 2006 ALIP report tracks several data elements including a five year comparison of total fire debris cases examined, by number of positives found, broken down by category of ignitable liquid, total number of samples examined, and case processing time. An additional element of the report allows for general comments which often provide valuable feed back from the Laboratories relative to proper evidence packaging and submission by the investigation community.

The crime Laboratories participating in ALIP also receive financial support through a grant program coordinated by the New York State Office of Fire Prevention and Control's Arson Bureau. This program provides laboratories with annual funding to be applied towards the

cost of fire debris analysis conducted by the laboratories. ALIP grant contracts were renewed during 2006 for the period continuing through 2010.

A beneficial addition to the ALIP program has been the development of the Arson Technical Working Group, ATWG. This group established through NYS-CLAC is co-chaired by the OFPC Arson Bureau and includes representatives from each of the ten crime labs comprising the ALIP. The ATWG meets to review current issues specific to fire debris analysis as well as providing a medium for discussion and education focused on improving aspects of fire debris analysis.



Arson Laboratory Improvement Project

Participating Laboratories

2006

| | |
|--|---|
| <p>Erie County Dept. of Central Police Services Forensic Laboratory Public Safety Campus Building 45 Elm Street Buffalo NY 14203 Mike Dujanovich, Director</p> | <p>New York City Forensic Investigations Division 150-14 Jamaica Avenue Jamaica NY 11432 Dr. Peter Pizzola, Director</p> |
| <p>Monroe County Rm 524 Public Safety Building 150 Plymouth Avenue So. Rochester NY 14614 Harvey VanHoven, Director</p> | <p>Niagara County P.O. Box 496 5526 Niagara Extension Lockport NY 14095 Al Mack, Director</p> |
| <p>Nassau County 1490 Franklin Avenue Mineola NY 11501 Lt. Granelle, Director</p> | <p>Onondaga County Center for Forensic Sciences 100 Elizabeth Blackwell Street Syracuse NY 13210 Dr. Kathy Corrado, Director</p> |
| <p>New York State Police Albany Lab 1220 Washington Avenue Albany NY 12226-3000 Inspector Gerald Zeosky, Director</p> | <p>Suffolk County Crime Laboratory Forensic Sciences Building #487 725 Veterans Memorial Highway P.O. Box 6100 Hauppauge NY 11787-0099 Robert Genna, Director</p> |
| <p>New York State Police Western Regional Crime Lab 722 Homer Street Olean NY 14760-1130 Lt. Campbell, Supervisor</p> | <p>Westchester County 10 Dana Road Valhalla NY 10595 Fred Drummond, Director</p> |

Section 2 – STATISTICAL SUMMARIES

This report reflects the annual summary of the laboratories analysis of fire debris evidence.

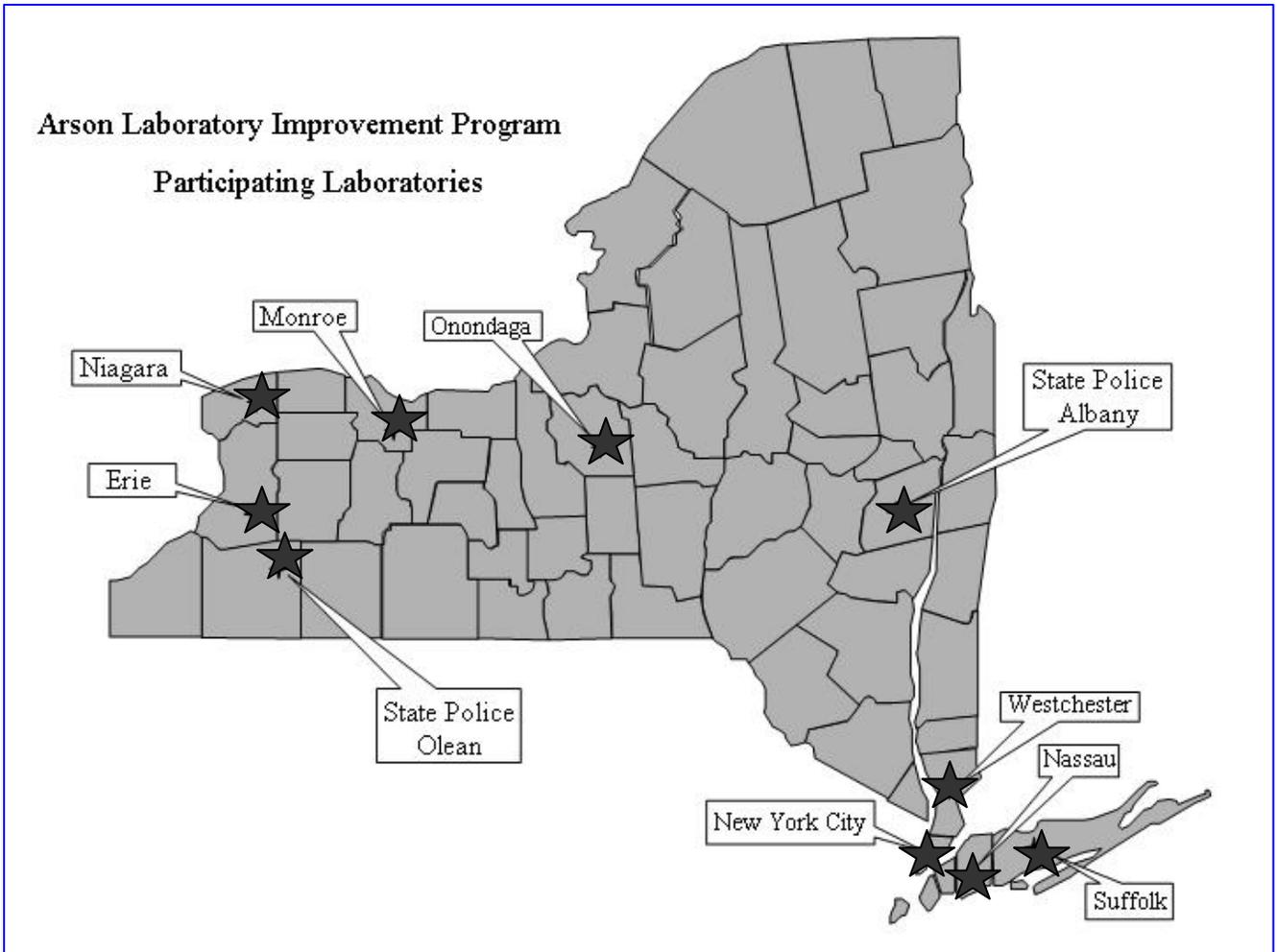
Statewide Annual Averages 2002 - 2006

| Year | Total Fire Debris Cases Examined | Percent Cases Positive for Ignitable Liquids | Total Fire Debris Samples Examined | Percent of Samples Positive for Ignitable Liquids |
|------|----------------------------------|--|------------------------------------|---|
| 2006 | 1031 | 59.4% | 1967 | 47.4% |
| 2005 | 847 | 55.3% | 1919 | 45.5% |
| 2004 | 860 | 50.2% | 2006 | 39.4% |
| 2003 | 1132 | 56.5% | 2450 | 48.5% |
| 2002 | 914 | 54.4% | 2142 | 46.4% |

2006 ALIP Summary Data by Laboratory

| Laboratory | Total Months Reported | Cases Submitted | Cases Examined | Total Cases Percentage Positive | Total Samples Examined | Percentage of Positive Samples |
|------------------------|-----------------------|-----------------|----------------|---------------------------------|------------------------|--------------------------------|
| State Police | | | | | | |
| Headquarters - Albany | 12 | 135 | 134 | 87% | 405 | 41% |
| Western Region - Olean | 12 | 84 | 84 | 55% | 284 | 53% |
| City Labs | | | | | | |
| New York City | 12 | 187 | 125 | 69% | 298 | 60% |
| Counties | | | | | | |
| Erie | 12 | 181 | 158 | 50% | 324 | 54% |
| Monroe | 12 | 94 | 92 | 52% | 195 | 47% |
| Nassau | 0 | 0 | 0 | 0 | 0 | 0 |
| Niagara | 12 | 31 | 33 | 70% | 65 | 52% |
| Onondaga | 12 | 32 | 32 | 66% | 98 | 39% |
| Suffolk | 12 | 103 | 126 | 52% | 219 | 62% |
| Westchester | 12 | 35 | 36 | 34% | 88 | 19% |

Section 3 – INDIVIDUAL LABORATORY DATA



State Police Laboratory Summary

Laboratory: Headquarters, Albany

Total Cases Submitted: 135

Total Samples Examined: 405

Total analytical Procedures Completed for:

GC/MS 385 Other 19

Percentage of Positive Cases 87%

Percentage of Positive Samples 41%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

| Gasoline All Brands | Petroleum Distillates | Isoparaffinic Products | Aromatic Products | Napthenic Paraffnic |
|-------------------------------|--------------------------|---------------------------|----------------------|------------------------|
| 45% | 15% | 0% | 0% | 0% |
| De-Arornatized Distillates | N-Alkanes | Oxygenated Solvents | Other | |
| 0% | 1% | 3% | 30% | |

CASE TURN AROUND TIME

| | |
|--|-------|
| Total Number of Cases Completed | 134 |
| Completed in 7 days | 11.9% |
| Completed in 8-14 days | 67.2% |
| Completed in 15 – 21 days | 41.0% |
| Completed in 22-28 days | 37.3% |
| Completed in more than 28 days | 0.0% |
| Average number of days for case completion | 32.43 |

Total work hours 276

Yearly testimony total 0

State Police Laboratory Summary

Laboratory: Western Regional, Olean

Total Cases Submitted: 84
 Total Samples Examined: 284

Total analytical Procedures Completed for:
 GC/MS 174 Other 1

Percentage of Positive Cases 55%
 Percentage of Positive Samples 53%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

| Gasoline All Brands | Petroleum Distillates | Isoparaffinic Products | Aromatic Products | Napthenic Paraffnic |
|---------------------|----------------------------|------------------------|-------------------|---------------------|
| 43% | 22% | 0% | 6% | 0% |
| N-Alkanes Products | De-Arornatized Distillates | Oxygenated Solvents | Other | |
| 1% | 0% | 2% | 27% | |

CASE TURN AROUND TIME

Total Number of Cases Completed 84
 Completed in 7 days 19.0%
 Completed in 8-14 days 40.5%
 Completed in 15 – 21 days 20.2%
 Completed in 22-28 days 6.0%
 Completed in more than 28 days 10.7%
 Average number of days for case completion 13.98

Total work hours 584

Yearly testimony total 0

City Laboratory Summary

Laboratory: New York

Total Cases Submitted: 187

Total Samples Examined: 298

Total analytical Procedures Completed for:

GC/MS 294 Other 4

Percentage of Positive Cases 69%

Percentage of Positive Samples 60%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

| Gasoline All Brands | Petroleum Distillates | Isoparaffinic Products | Aromatic Products | Napthenic Paraffnic |
|---------------------|----------------------------|------------------------|-------------------|---------------------|
| 43% | 33% | 11% | 3% | 0% |
| N-Alkanes Products | De-Arornatized Distillates | Oxygenated Solvents | Other | |
| 0% | 0% | 4% | 0% | |

CASE TURN AROUND TIME

Total Number of Cases Completed 125
Completed in 7 days 29.6%
Completed in 8-14 days 12.0%
Completed in 15 – 21 days 05.6%
Completed in 22-28 days 7.2%
Completed in more than 28 days 44.8%
Average number of days for case completion 19.6

Total number of person hours 0

Yearly testimony total 0

County Laboratory Summary

Laboratory: Erie

Total Cases Submitted: 181
Total Samples Examined: 324

Total analytical Procedures Completed for:
GC/MS 324 Other 0
Percentage of Positive Cases 50%
Percentage of Positive Samples 54%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

| Gasoline All Brands | Petroleum Distillates | Isoparaffinic Products | Aromatic Products | Napthenic Paraffnic |
|---------------------|----------------------------|------------------------|-------------------|---------------------|
| 52% | 22% | 2% | 2% | 0% |
| N-Alkanes Products | De-Aronnatized Distillates | Oxygenated Solvents | Other | |
| 0% | 20% | 1% | 0% | |

CASE TURN AROUND TIME

| | |
|---|--------------|
| Total Number of Cases Completed | 121 |
| Completed in 7 days | 25.3% |
| Completed in 8-14 days | 40.5% |
| Completed in 15 – 21 days | 27.2% |
| Completed in 22-28 days | 3.8% |
| Completed in more than 28 days | 6.3% |
| Average number of days for case completion | 12.63 |
| | |
| Total work hours | 951 |
| | |
| Yearly testimony total | 0 |

County Laboratory

Laboratory: Monroe

Total Cases Submitted: 94
Total Samples Examined: 195

Total analytical Procedures Completed for:
GC/MS 209 Other 4
Percentage of Positive Cases 52%
Percentage of Positive Samples 47%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

| Gasoline All Brands | Petroleum Distillates | Isoparaffinic Products | Aromatic Products | Napthenic Paraffnic |
|---------------------|---------------------------|------------------------|-------------------|---------------------|
| 51% | 36% | 0% | 9% | 0% |
| N-Alkanes Products | De-Aronatized Distillates | Oxygenated Solvents | Other | |
| 1% | 0% | 0% | 0% | |

CASE TURN AROUND TIME

Total Number of Cases Completed 92
Completed in 7 days 15.2%
Completed in 8-14 days 34.8%
Completed in 15 – 21 days 29.3%
Completed in 22-28 days 10.9%
Completed in more than 28 days 9.8%
Average number of days for case completion 15.32

Total work hours 0

Yearly testimony total 0

County Laboratory

Laboratory: Nassau

Total Cases Submitted: 0

Total Samples Examined: 0

Total analytical Procedures Completed for:

GC/MS 0 Other 0

Percentage of Positive Cases 0%

Percentage of Positive Samples 0%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

| Gasoline All Brands | Petroleum Distillates | Isoparaffinic Products | Aromatic Products | Napthenic Paraffnic |
|---------------------|----------------------------|------------------------|-------------------|---------------------|
| 0% | 0% | 0% | 0% | 0% |
| N-Alkanes Products | De-Arornatized Distillates | Oxygenated Solvents | Other | |
| 0% | 0% | 0% | 0% | |

CASE TURN AROUND TIME

| | |
|--|----|
| Total Number of Cases Completed | 0 |
| Completed in 7 days | 0% |
| Completed in 8-14 days | 0% |
| Completed in 15 – 21 days | 0% |
| Completed in 22-28 days | 0% |
| Completed in more than 28 days | 0% |
| Average number of days for case completion | 0 |

Total work hours 0

Yearly testimony total 0

No data reported this period – Fire debris samples submitted to
 **** for analysis

County Laboratory

Laboratory: Niagara

Total Cases Submitted: 31

Total Samples Examined: 65

Total analytical Procedures Completed for:

GC/MS 66 Other 0

Percentage of Positive Cases 70%

Percentage of Positive Samples 52%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

| Gasoline All Brands | Petroleum Distillates | Isoparaffinic Products | Aromatic Products | Napthenic Paraffnic |
|---------------------|----------------------------|------------------------|-------------------|---------------------|
| 71% | 12% | 0% | 15% | 0% |
| N-Alkanes Products | De-Arornatized Distillates | Oxygenated Solvents | Other | |
| 0% | 0% | 0% | 6% | |

CASE TURN AROUND TIME

Total Number of Cases Completed 37

Completed in 7 days 27.3%

Completed in 8-14 days 27.3%

Completed in 15 – 21 days 24.2%

Completed in 22-28 days 0.0%

Completed in more than 28 days 6.1%

Average number of days for case completion 11.86

Total work hours 0

Yearly testimony total 0

County Laboratory Summary

Laboratory: Onondaga County

Total Cases Submitted: 32

Total Samples Examined: 98

Total analytical Procedures Completed for:

GC/MS 98 Other 0

Percentage of Positive Cases 66%

Percentage of Positive Samples 39%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

| Gasoline All Brands | Petroleum Distillates | Isoparaffinic Products | Aromatic Products | Napthenic Paraffnic |
|---------------------|----------------------------|------------------------|-------------------|---------------------|
| 53% | 18% | 0% | 8% | 0% |
| N-Alkanes Products | De-Arornatized Distillates | Oxygenated Solvents | Other | |
| 3% | 8% | 5% | 8% | |

CASE TURN AROUND TIME

| | |
|--|--------|
| Total Number of Cases Completed | 32 |
| Completed in 7 days | 12.5% |
| Completed in 8-14 days | 18.8% |
| Completed in 15 – 21 days | 15.6% |
| Completed in 22-28 days | 6.3% |
| Completed in more than 28 days | 50.0% |
| Average number of days for case completion | 21..64 |

Total work hours 0

Yearly testimony total 0

County Laboratory

Laboratory: Westchester

Total Cases Submitted: 35

Total Samples Examined: 88

Total analytical Procedures Completed for:

GC/MS 88 Other 0

Percentage of Positive Cases 34

Percentage of Positive Samples 19

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

| Gasoline All Brands | Petroleum Distillates | Isoparaffinic Products | Aromatic Products | Napthenic Paraffnic |
|---------------------|----------------------------|------------------------|-------------------|---------------------|
| 76% | 18% | 0% | 0% | 6% |
| N-Alkanes Products | De-Arornatized Distillates | Oxygenated Solvents | Other | |
| 0% | 0% | 0% | 0% | |

CASE TURN AROUND TIME

| | |
|--|-------|
| Total Number of Cases Completed | 41 |
| Completed in 7 days | 0% |
| Completed in 8-14 days | 0% |
| Completed in 15 – 21 days | 0% |
| Completed in 22-28 days | 2.4% |
| Completed in more than 28 days | 97.6% |
| Average number of days for case completion | 30.85 |

Total work hours 78

Yearly testimony total 0

The New York State Office of Fire Prevention and Control by executive order, Section 156-1-19 shall advise and assist in coordination and strengthening the activities, programs and services, rules and regulations of these departments and agencies of the state, which have functions, powers and duties relating to arson suppression, detection, investigation and prosecution and to the end of providing more effective services to the public and strengthening governmental programs relating to such matters.

The Office of Fire Prevention and Control is committed to supporting arson evidence analysis and testing through the Arson laboratory Improvement Program and working with the DCJS and NYCLAC to improve such services aimed at combating the crime of arson.

Eliot L. Spitzer
Governor

Lorraine Cortés-Vázquez
Secretary of State



John F. Mueller
Acting State Fire Administrator

Arson Bureau
Chief
Rich Barlette

Arson Bureau
Deputy Chief
Randi Shadic