



NYS DIVISION OF HOMELAND SECURITY AND EMERGENCY SERVICES
OFFICE OF FIRE PREVENTION & CONTROL

ONE COMMERCE PLAZA • 99 WASHINGTON AVENUE • ALBANY, NY 12210-2833

Arson Laboratory Improvement Program [ALIP] - 2011 Report

12 Month Analysis

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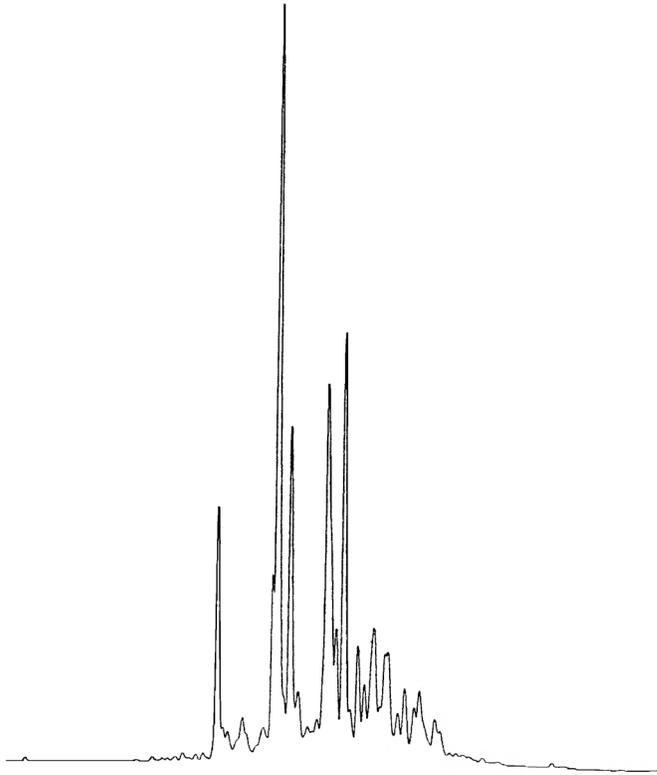


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Section 1 - INTRODUCTION

The state legislature in 1979 charged the New York State Department of State, Office of Fire Prevention and Control (OFPC) with the responsibility for administering a coordinated, statewide arson control program. In 2010 the New York State Division of Homeland Security and Emergency was established and the Office of Fire Prevention and Control became part of this new state agency. The commitment to the legislation remains today the same as in 1979. A component of this anti-arson effort includes the Arson Laboratory Improvement Program (ALIP). This program utilizes facts specifically related to the analysis of fire debris by public agency forensic crime laboratories. Over the past 32 years, the ALIP has helped fortify the role of fire debris analysis in collaboration with 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 successful prosecution of Arson Crimes. The ALIP, in addition to serving as a common database for fire debris analysis, has also proven to be an asset in identifying training needs benefiting both the laboratory and the fire investigation community.

The ALIP includes nine municipal laboratories in New York State that provide forensic services to local fire and law enforcement agencies through the conduction of fire debris analysis. Each laboratory submits data monthly to OFPC Inspection and Investigation branch (IIB) for review and tabulation. The IIB provides the data to the New York State Division of Criminal Justice Services, the participating Laboratories, and the New York State Crime Laboratory Advisory Committee (CLAC).



The 2011 ALIP report tracks several data elements including a five-year comparison of the total fire debris cases examined by the number of positive samples found, broken down by category of ignitable liquid, the total number of samples examined, and the case processing time. An additional element of the report allows for general comments that often provide valuable feedback from the Laboratories relative to proper evidence packaging and submission by the investigation community.

A vital element of the ALIP is a financial assistance grant program as administered by the New York State Office of Fire Prevention and Control. This program provides laboratories with annual funding specific to supporting their work associated with the analysis of fire debris. The

current ALIP grant program covers the period of 2011 – 2015 with a total annual allotment of \$42,000.00.

Arson Technical Work Group: ATWG

The Arson Technical Working Group supports the ALIP program. This group established through NYS-CLAC, is currently chaired by the OFPC Inspection and Investigation Branch, and includes representatives from each of the nine crime labs comprising the ALIP as well as from the NYS Division of Criminal Justice Services. The ATWG generally meets twice a year to review current issues specific to fire debris analysis, as well as providing a medium for discussion and education focused on improving aspects of analyzing fire debris evidence in support of arson prosecutions. The ATWG also undertakes projects that benefit the process of evidence identification, collection and analysis.

As a function of the ALIP, the ATWG reviews the data collected from the laboratories and from this analysis prepares improvement strategies and identifies trends or areas of concern for study as a means to foster improvements in handling and analyzing fire debris evidence.

Training Highlights

In 2011 Niagara County ATWG Member Al Mack along with his colleague Mark Henderson presented to the annual Fire Investigators Seminar as conducted at the NYS Fire Academy in Montour Falls. This annual seminar is attended by 350 fire/arson investigators from across the state. The 2011 presentation covered topics pertaining to fire debris evidence containers and DNA evidence at fire scenes.

The ATWG was also able to attend a training session offered at the federal Bureau of Alcohol Tobacco & Firearms Crime Lab in Beltsville Maryland. This program was possible as a result of a grant from New York State Division of Criminal Justice. Members attending were able to spend two days at the BATF facility discussing and learning about fire debris



topics from the nation's top forensic facility on fire behavior and analysis. Because of these training opportunities the ATWG was instrumental in areas such as the 2009 and 2010 pilot to study both K9 and vehicle fire case impact on laboratory workload. Because of the success of the early data, the pilot fields became a standard reporting requirement for 2011 and beyond. In 2010, the ATWG put forth a Pilot to track separately both suspect and control samples. Previous years ALIP data has combined these fields and by separating, the data provided a

more accurate way of interpreting positive sample results. In 2011 a pilot was also established for collecting data to illustrate a time frame from when the case samples were collected to when they are logged in at the intake desk of the lab, hence beginning the phase of laboratory analysis. This provided valuable information to better understand how long evidence remains in agency control before placed in the laboratory for analysis. Fire debris needs to move to the laboratory in an expedient fashion to increase the probability of determining positive results.

2010 Pilot: Suspect Sample Type vs. Comparison Sample results

Reporting Laboratory	Suspect Samples Analyzed	Positive Suspect Samples	Comparison Samples Analyzed	Positive Comparison Samples
NYSP HQ	346	144	21	1
NYSP WRCL	213	120	27	9
Erie County	360	179	15	3
Monroe County	372	136	40	5
Niagara County	36	17	6	1
Onondaga County	87	45	8	3
Suffolk County	180	111	20	4
Westchester	49	12	8	0
	1643	764	145	26
		47%		18%

2011 Pilot: Evidence Submission Timeline

Reporting Lab	Average Days to Submit Evidence for Analysis
NYSP HQ	15
NYSP WRCL	16
Erie County	7
Niagara County	5
Onondaga County	5
Suffolk County	11
Westchester County	12

Arson Laboratory Improvement Project Participating Laboratories 2011

<p>Erie County Dept. of Central Police Services Forensic Laboratory Public Safety Campus Building 45 Elm Street Buffalo NY 14203 John Simich, Director</p>	<p>New York City Forensic Investigations Division 150-14 Jamaica Avenue Jamaica NY 11432 Dr. Scott O'Neill, Director</p>
<p>Monroe County Rm 500 Public Safety Building 150 Plymouth Avenue So. Rochester NY 14614 Janet Anderson-Seaquist, Administrator</p>	<p>Niagara County P.O. Box 496 5526 Niagara Extension Lockport NY 14095 Al Mack, Director</p>
<p>New York State Police Albany Lab 1220 Washington Avenue Albany NY 12226-3000 Inspector Gerald Zeosky, 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 Western Regional Crime Lab 722 Homer Street Olean NY 14760-1130 Lt. David Gresham, Supervisor</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>Nassau County Crime Laboratory <i>Currently under re-development</i></p>	<p>Westchester County 10 Dana Road Valhalla NY 10595 Robert Adamo, Director</p>

Section 2 – Statistical Summaries

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

Statewide Annual Averages 2007 - 2011

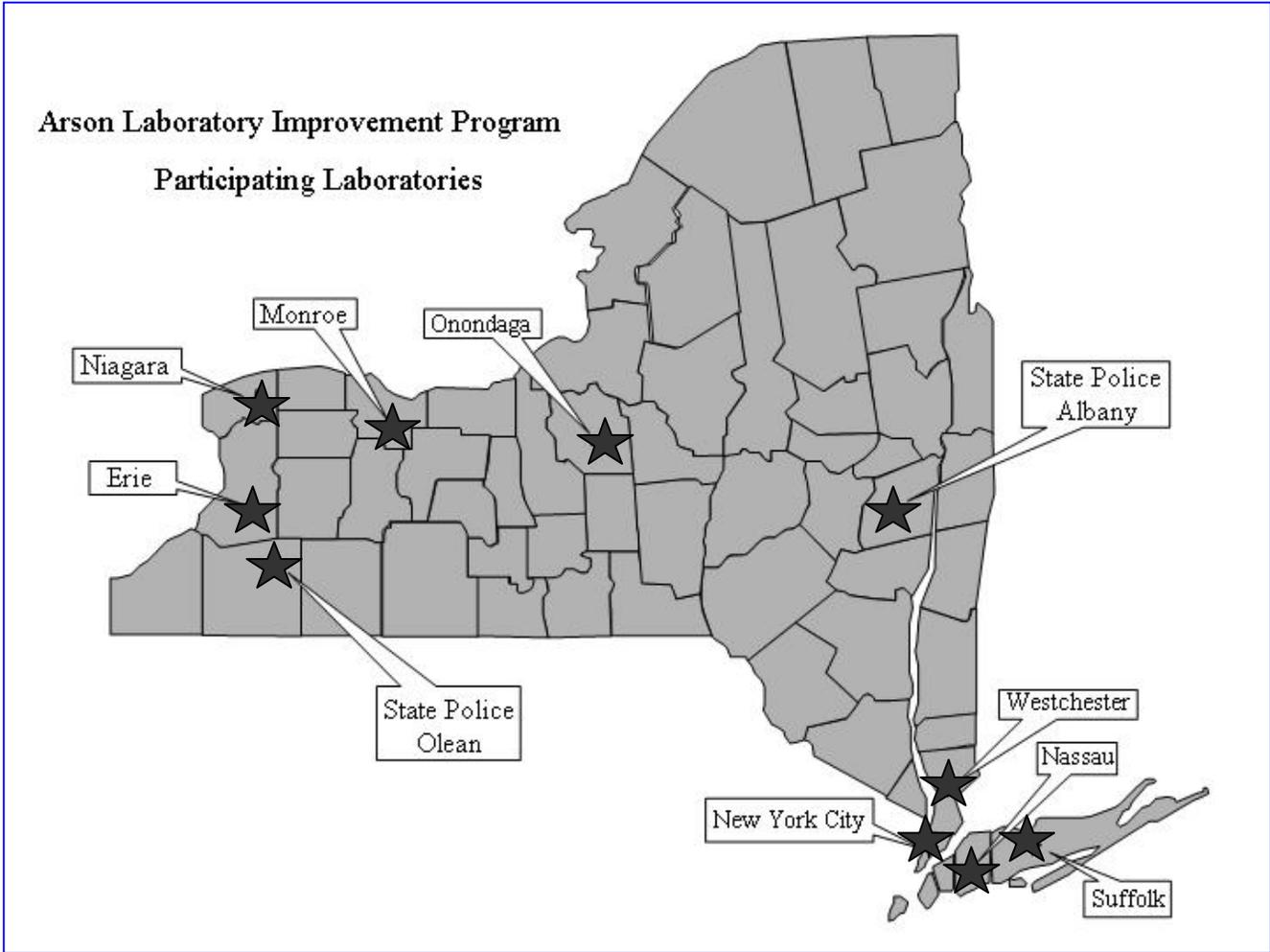
Year	Total Fire Debris Cases Examined	Percent Cases Positive for Ignitable Liquids	Total Fire Debris Samples Examined	Percent of Samples Positive for Ignitable Liquids
2011	836 ↓	57.1%	1810 ↓	49.0%
2010	1228 ↑	59.7%	2435 ↑	46.0%
2009	1228 ↑	62.4%	1870 ↓	48.3%
2008	870 ↓	53.0%	2432 ↑	44.8%
2007	807 ↓	65.6%	2249 ↑	56.8%
5 Yr Average	994	59.6%	2159	49.0%

↓ Indicates whether above or below five year average

2011 ALIP Summary Data by Laboratory

Laboratory	Months Reported	Cases Received	Cases Examined	Total Cases Percentage Positive	Total Samples Examined	Percentage of Positive Samples
State Police						
Headquarters - Albany	12	102	99	52%	346	42%
Western Region - Olean	12	85	82	54%	213	56%
City Labs						
New York City	12	167	79	71%	156	73%
Counties						
Erie	12	208	208	48%	360	50%
Monroe	12	137	127	50%	372	37%
Niagara	12	16	16	81%	36	47%
Onondaga	12	27	28	61%	87	52%
Suffolk	12	77	97	71%	180	62%
Westchester	12	17	19	26%	49	24%

Section 3 – INDIVIDUAL LABORATORY DATA



State Police Laboratory Summary

Laboratory: Headquarters, Albany

Year	Months Reported	Total Work Hours	Yearly Testimony
2011	12	*35%	2

Cases Received	Cases Completed	Cases Positive	% of Positive Cases
102	99	51	52%
Samples Received	Samples Examined	Samples Positive	% of Positive Samples
368	346	144	42%
Comparison Samples Received	Comparison Samples Examined	Comparison Samples Positive	% of Positive Comparison Samples
21	21	1	5%
K9 Cases	K9 Cases % Positive	Vehicle Cases	Vehicle Cases % Positive
28	61%	16	44%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

Gasoline All Brands	Petroleum Distillates	Isoparalfinic Products	Aromatic Products	Napthenic Paraffnic
44%	26%	0%	0%	0%
	N-Alkanes	Oxygenated Solvents	Other	
	0%	0%	30%	

CASE SUBMISSION FROM TIME OF COLLECTION		CASE TURN AROUND TIME	
Completed in 7 days	21%	Completed in 7 days	11%
Completed in 8-14 days	45%	Completed in 8-14 days	32%
Completed in 15-21 days	7%	Completed in 15-21 days	39%
Completed in 22-28 days	7%	Completed in 22-28 days	9%
Completed in more than 28 days	19%	Completed in more than 28 days	9%
Average days for case submission	15	Average days for case submission	13

Comment Section

*This reports total work hours in percentage of hours based on laboratory policy.

State Police Laboratory Summary

Laboratory: Western Regional Crime lab, Olean

Year	Months Reported	Total Work Hours	Yearly Testimony
2011	12	*35%	0

Cases Received	Cases Completed	Cases Positive	% of Positive Cases
85	82	44	54%
Samples Received	Samples Examined	Samples Positive	% of Positive Samples
229	213	120	56%
Comparison Samples Received	Comparison Samples Examined	Comparison Samples Positive	% of Positive Comparison Samples
28	27	9	33%
K9 Cases	K9 Cases % Positive	Vehicle Cases	Vehicle Cases % Positive
28	64%	25	56%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

Gasoline All Brands	Petroleum Distillates	Isoparalfinic Products	Aromatic Products	Napthenic Paraffnic
46%	24%	1%	2%	1%
	N-Alkanes	Oxygenated Solvents	Other	
	0%	3%	23%	

CASE SUBMISSION FROM TIME OF COLLECTION		CASE TURN AROUND TIME	
Completed in 7 days	39%	Completed in 7 days	38%
Completed in 8-14 days	15%	Completed in 8-14 days	45%
Completed in 15-21 days	7%	Completed in 15-21 days	15%
Completed in 22-28 days	4%	Completed in 22-28 days	2%
Completed in more than 28 days	35%	Completed in more than 28 days	0%
Average days for case submission	16	Average days for case submission	9

Comment Section

City Laboratory Summary

Laboratory: New York City

Reporting Year	Number of Months Reported	Total Work Hours	Yearly Testimony
2011	12	*10%	0

Cases Received	Cases Completed	Cases Positive	% of Positive Cases
167	79	56	71%
Samples Received	Samples Examined	Samples Positive	% of Positive Samples
383	156	114	73%
K9 Cases	K9 Cases % Positive	Vehicle Cases	Vehicle Cases % Positive
0	0	0	0

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

Gasoline All Brands	Petroleum Distillates	Isoparaffinic Products	Aromatic Products	Napthenic Paraffinic
64%	29%	1%	0%	0%
	N-Alkanes	Oxygenated Solvents	Other	
	0%	0%	6%	

CASE TURN AROUND TIME

Completed in 7 days	5.1%
Completed in 8-14 days	8.9%
Completed in 15 – 21 days	10.1%
Completed in 22-28 days	3.8%
Completed in more than 28 days	72.2%
Average number of days for case completion	26

Comment Section

*This reports total work hours in percentage of hours based on laboratory policy. The lab has been processing a backlog of cases. This backlog has caused the data to be out of balance in some categories.

County Laboratory Summary

Laboratory: Erie

Reporting Year	Number of Months Reported	Total Work Hours	Yearly Testimony
2011	12	1137	1

Cases Received	Cases Completed	Cases Positive	% of Positive Cases
208	208	99	48%
Samples Received	Samples Examined	Samples Positive	% of Positive Samples
360	360	179	50%
Comparison Samples Received	Comparison Samples Examined	Comparison Samples Positive	% of Positive Comparison Samples
15	15	3	20%
K9 Cases	K9 Cases % Positive	Vehicle Cases	Vehicle Cases % Positive
5	60%	49	57%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

Gasoline All Brands	Petroleum Distillates	Isoparaffinic Products	Aromatic Products	Napthenic Paraffinic
79%	19%	0%	0%	1%
	N-Alkanes	Oxygenated Solvents	Other	
	0%	1%	0%	

CASE SUBMISSION FROM TIME OF COLLECTION		CASE TURN AROUND TIME	
Completed in 7 days	70%	Completed in 7 days	1%
Completed in 8-14 days	16%	Completed in 8-14 days	17%
Completed in 15-21 days	7%	Completed in 15-21 days	42%
Completed in 22-28 days	2%	Completed in 22-28 days	19%
Completed in more than 28 days	4%	Completed in more than 28 days	21%
Average days for case submission	7	Average days for case submission	21

Comment Section: The lab has been processing a backlog of cases. This backlog has caused the data to be out of balance in some categories.

County Laboratory Summary

Laboratory: Monroe

Reporting Year	Number of Months Reported	Total Work Hours	Yearly Testimony
2011	12	1848	0

Cases Received	Cases Completed	Cases Positive	% of Positive Cases
137	127	63	50%
Samples Received	Samples Examined	Samples Positive	% of Positive Samples
388	372	136	37%
Comparison Samples Received	Comparison Samples Examined	Comparison Samples Positive	% of Positive Comparison Samples
22	22	5	23%
K9 Cases	K9 Cases % Positive	Vehicle Cases	Vehicle Cases % Positive
0	0%	0	0%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

Gasoline All Brands	Petroleum Distillates	Isoparaflinic Products	Aromatic Products	Napthenic Paraffnic
56%	32%	1%	3%	0%
	N-Alkanes	Oxygenated Solvents	Other	
	1%	7%	0%	

CASE SUBMISSION FROM TIME OF COLLECTION		CASE TURN AROUND TIME	
Completed in 7 days	0%	Completed in 7 days	28%
Completed in 8-14 days	0%	Completed in 8-14 days	39%
Completed in 15-21 days	0%	Completed in 15-21 days	30%
Completed in 22-28 days	0%	Completed in 22-28 days	8%
Completed in more than 28 days	0%	Completed in more than 28 days	8%
Average days for case submission	0	Average days for case submission	13

Comment Section

County Laboratory Summary

Laboratory: Niagara

Reporting Year	Number of Months Reported	Total Work Hours	Yearly Testimony
2011	12	Not Reported	0

Cases Received	Cases Completed	Cases Positive	% of Positive Cases
16	16	13	81%
Samples Received	Samples Examined	Samples Positive	% of Positive Samples
37	36	17	47%
Comparison Samples Received	Comparison Samples Examined	Comparison Samples Positive	% of Positive Comparison Samples
6	6	1	17%
K9 Cases	K9 Cases % Positive	Vehicle Cases	Vehicle Cases % Positive
1	0%	5	100%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

Gasoline All Brands	Petroleum Distillates	Isoparaffinic Products	Aromatic Products	Napthenic Paraffnic
66%	17%	0%	11%	0%
	N-Alkanes	Oxygenated Solvents	Other	
	0%	6%	0%	

CASE SUBMISSION FROM TIME OF COLLECTION		CASE TURN AROUND TIME	
Completed in 7 days	81%	Completed in 7 days	31%
Completed in 8-14 days	19%	Completed in 8-14 days	69%
Completed in 15-21 days	0%	Completed in 15-21 days	0%
Completed in 22-28 days	0%	Completed in 22-28 days	0%
Completed in more than 28 days	0%	Completed in more than 28 days	0%
Average days for case submission	5	Average days for case submission	9

Comment Section

County Laboratory Summary

Laboratory: Onondaga

Reporting Year	Number of Months Reported	Total Work Hours	Yearly Testimony
2011	12	Not Reported	0

Cases Received	Cases Completed	Cases Positive	% of Positive Cases
27	28	17	61%
Samples Received	Samples Examined	Samples Positive	% of Positive Samples
69	87	45	52%
Comparison Samples Received	Comparison Samples Examined	Comparison Samples Positive	% of Positive Comparison Samples
8	8	3	37.50%
K9 Cases	K9 Cases % Positive	Vehicle Cases	Vehicle Cases % Positive
3	67%	5	80%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

Gasoline All Brands	Petroleum Distillates	Isoparaflinic Products	Aromatic Products	Napthenic Paraffnic
67%	19%	0%	0%	0%
	N-Alkanes	Oxygenated Solvents	Other	
	6%	8%	0%	

CASE SUBMISSION FROM TIME OF COLLECTION		CASE TURN AROUND TIME	
Completed in 7 days	75%	Completed in 7 days	25%
Completed in 8-14 days	0%	Completed in 8-14 days	29%
Completed in 15-21 days	0%	Completed in 15-21 days	21%
Completed in 22-28 days	7%	Completed in 22-28 days	7%
Completed in more than 28 days	0%	Completed in more than 28 days	7%
Average days for case submission	5	Average days for case submission	13

Comment Section

County Laboratory Summary

Laboratory: Suffolk

Reporting Year	Number of Months Reported	Total Work Hours	Yearly Testimony
2011	12	945	0

Cases Received	Cases Completed	Cases Positive	% of Positive Cases
77	97	69	71%
Samples Received	Samples Examined	Samples Positive	% of Positive Samples
155	180	111	62%
Comparison Samples Received	Comparison Samples Examined	Comparison Samples Positive	% of Positive Comparison Samples
20	20	4	20%
K9 Cases	K9 Cases % Positive	Vehicle Cases	Vehicle Cases % Positive
8	38%	34	74%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

Gasoline All Brands	Petroleum Distillates	Isoparaffinic Products	Aromatic Products	Napthenic Paraffnic
76%	13%	1%	0%	0%
	N-Alkanes	Oxygenated Solvents	Other	
	0%	5%	5%	

CASE SUBMISSION FROM TIME OF COLLECTION		CASE TURN AROUND TIME	
Completed in 7 days	41%	Completed in 7 days	9%
Completed in 8-14 days	26%	Completed in 8-14 days	10%
Completed in 15-21 days	9%	Completed in 15-21 days	6%
Completed in 22-28 days	9%	Completed in 22-28 days	9%
Completed in more than 28 days	8%	Completed in more than 28 days	69%
Average days for case submission	11	Average days for case submission	25

Comment Section

The lab has been processing a backlog of cases. This backlog has caused the data to be out of balance in some categories.

County Laboratory Summary

Laboratory: Westchester

Reporting Year	Number of Months Reported	Total Work Hours	Yearly Testimony
2011	12	*12%	1

Cases Received	Cases Completed	Cases Positive	% of Positive Cases
17	19	5	26%
Samples Received	Samples Examined	Samples Positive	% of Positive Samples
37	49	12	24%
Comparison Samples Received	Comparison Samples Examined	Comparison Samples Positive	% of Positive Comparison Samples
7	7	0	0%
K9 Cases	K9 Cases % Positive	Vehicle Cases	Vehicle Cases % Positive
2	50%	1	100%

% OF IGNITABLE LIQUID IDENTIFIED BY ASTM CLASSIFICATION

Gasoline All Brands	Petroleum Distillates	Isoparaflinic Products	Aromatic Products	Napthenic Paraffnic
58%	25%	0%	0%	0%
	N-Alkanes	Oxygenated Solvents	Other	
	0%	17%	0%	

CASE SUBMISSION FROM TIME OF COLLECTION		CASE TURN AROUND TIME	
Completed in 7 days	48%	Completed in 7 days	0%
Completed in 8-14 days	26%	Completed in 8-14 days	5%
Completed in 15-21 days	0%	Completed in 15-21 days	0%
Completed in 22-28 days	0%	Completed in 22-28 days	0%
Completed in more than 28 days	26%	Completed in more than 28 days	95%
Average days for case submission	12	Average days for case submission	30

Comment Section: *This reports total work hours in percentage of hours based on laboratory policy. The lab has been processing a backlog of cases. This backlog has caused the data to be out of balance in some categories.

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 sustaining 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 in our state.

Andrew M. Cuomo
Governor
State of New York

Jerome M. Hauer
Commissioner
Division of Homeland
Security and Emergency
Services



Bryant Stevens
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