U.S. Department of Justice
Drug Enforcement Administration

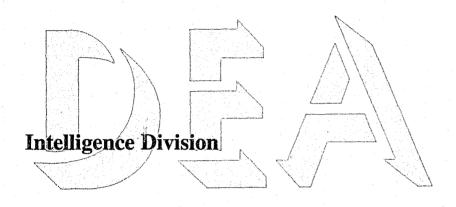






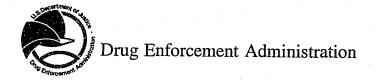
Domestic Monitor Program April - June 1993

Drug Intelligence Report





The Attorney General has determined that publication of this periodical is necessary in the transaction of the publication business required by law of the Department of Justice.



Domestic Monitor Program April-June 1993

Drug Intelligence Report

This report was prepared by the Strategic Intelligence Section. Comments and requests for copies are welcome and may be directed to the Publications Unit, Intelligence Division, DEA Headquarters on (202) 307-8100.

148020

U.S. Department of Justice National Institute of Justice

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this amaterial has been granted by

Public Domain/Drug Enforcement Admn./U.S. Dept. of Justice

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the region of

January 1994

ADMINISTRATOR'S MESSAGE

The Drug Enforcement Administration's Domestic Monitor Program (DMP) provides intelligence regarding the source area, cost, and purity of heroin being sold at the retail or "street" level in 19 continental U.S. cities and San Juan, Puerto Rico. The data contained in this report are based on actual undercover heroin purchases made by DEA on the streets of these cities during the second quarter of Calendar Year 1993.

The national average purity of heroin for April-June 1993 was 36.1 percent. This continues the trend of unusually high national average purities that have been reported in the DMP over the past year. The high average purity is at least partially due to the newly classified South American heroin, which averaged 62.1 percent pure during the April-June 1993 period. The development of this signature has resulted in a decrease in the number and purity of heroin samples classified as Southwest Asian, since many suspected South American samples were previously classified as Southwest Asian.

Sincerely,

Stephen H. Greene

Acting Administrator of

Drug Enforcement

CONTENTS

iii	Administrator's Message
vii	Executive Summary
1	Overview: April - June 1993
7	Adulterants and Diluents
9	Brand Names
12	Appendix A: Individual City Sampling
36	Appendix B: Exhibit Data by City
51	Appendix C: Definitions
54	Distribution
	TABLES AND GRAPHS
ix	DMP City Summary Data
1	DMP Average Heroin Purity by Source Area
3	DMP Average Heroin Purity by Source Area and City
4 ,	DMP Heroin Dominance by Source Area
5	DMP Heroin Prices
5	DMP Average Heroin Cost by Source Area
6	DMP Average Heroin Prices and Purities by City
7	Adulterants by Source Area
8	Diluents by Source Area
9	Brand Names and Logos by DMP City

EXECUTIVE SUMMARY

The Domestic Monitor Program (DMP) is a quarterly Special Field Intelligence Program (SFIP) designed, funded, and administered by the Drug Enforcement Administration (DEA). The objective of the DMP is to monitor the retail-level heroin situation. This objective is accomplished by making undercover heroin purchases that are analyzed for price, purity, adulterants, diluents, and geographic source area. The results are then reported to Federal, State, and local authorities.

During the second quarter of Calendar Year 1993, the DMP collected samples in 20 metropolitan areas: Atlanta, Boston, Chicago, Dallas, Denver, Detroit, Houston, Los Angeles, Miami, Newark, New Orleans, New York City, Philadelphia, Phoenix, San Diego, San Francisco, San Juan, Seattle, St. Louis, and Washington, D.C. The following summarizes the collected samples:

- During this quarter, 183 exhibits were purchased, 175 (96%) of which contained heroin. Of these 175 exhibits, none were classified as outliers.
- The purity of these exhibits averaged 36.1 percent (for all exhibits containing heroin) with a low of 2.4 percent in Seattle, and a high of 93.8 percent in New York City.
- A total of 22 exhibits (23% of the exhibits that could be classified) were of Southeast Asian origin (SEA) with an average purity of 28.6 percent.
- A total of 4 exhibits (4% of the exhibits that could be classified) were of Southwest Asian origin (SWA) with an average purity of 13.0 percent. This represents a substantial decrease in both number and purity of SWA exhibits compared with the January-March 1993 DMP, which is due in part to the development of the South American (SA) heroin signature. Previously, the generally high purity SA heroin often was classified as SWA.
- A total of 51 exhibits (52% of the exhibits that could be classified) were of Mexican origin (MEX) with an average purity of 24.2 percent.
- A total of 20 exhibits (21% of the exhibits that could be classified) were of South American origin (SA) with an average purity of 62.1 percent. The April-June 1993 DMP is the first to include heroin classified with the newly developed SA signature.
- A total of 78 exhibits were of unclassifiable origin (UNC) with an average purity of 40.6 percent.

• The average cost per milligram of pure heroin by source area was:

Southeast Asian (SEA)	\$1.30
Southwest Asian (SWA)	\$1.54
Mexican (MEX)	\$1.51
South American (SA)	\$0.66
All classifiable sources combined	\$1.29
Unclassifiable	\$1.76
All heroin combined	\$1.50

In order to achieve maximum benefit from this report, it should be used in conjunction with other available intelligence indicators. The DMP represents a limited view of the heroin situation due to its concentration in only 20 cities. This report makes no quarter-to-quarter comparisons due to the limited number of samples purchased in each city during each quarter nor does it represent a comprehensive view of the overall national situation. A calendar-year summary, which includes year-to-year DMP city comparisons, is issued when all individual quarterly data are complete. DMP results concerning heroin by geographic source area may differ somewhat from those calculated in the Heroin Signature Program (HSP). The HSP is an annual DEA program analyzing random samples of domestic purchases and seizures as well as all seizures made at U.S. ports of entry and, as such, involves a much broader and more extensive data base.¹

¹ For more information on DEA's Heroin Signature Program and Heroin Signature Classification, see appendix C.

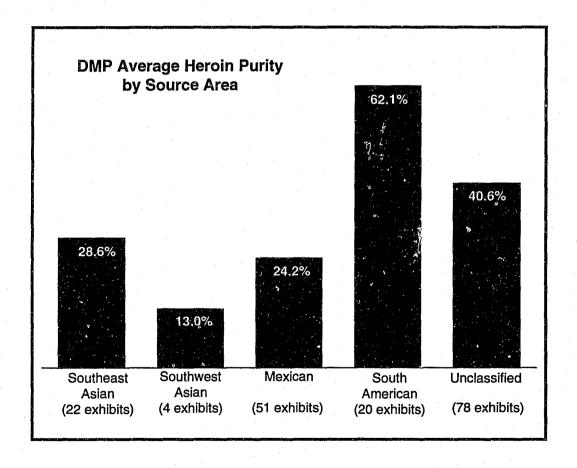
DMP CITY SUMMARY DATA						
City	Average Purity (percent)	Average Cost (dollar/milligram)				
Atlanta	32.5	1.80				
Boston	62.3	1.26				
Chicago	34.6	0.48				
Dallas	10.8	1.37				
Denver	37.2	3.12				
Detroit	20.0	1.53				
Houston	9.0	1.11				
Los Angeles	24.9	0.71				
Miami	8.9	1.18				
Newark	65.2	0.70				
New Orleans	30.1	3.03				
New York	66.1	0.72				
Philadelphia	80.0	0.39				
Phoenix	12.1	5.56				
San Diego	53.3	0.45				
San Francisco	27.7	1.11				
San Juan	49.9	0.48				
Seattle	13.2	5.02				
St. Louis	8.4	2.79				
Washington, D.C.	24.5	1.24				
DMP Average	36.1	1.50				

OVERVIEW: APRIL - JUNE 1993

The Domestic Monitor Program (DMP) is a retail-level heroin purchase program designed to provide Federal, State, and local authorities with intelligence relating to heroin purity, price, availability, adulterants, diluents, and geographic source areas (Signature analysis¹). The DMP collected samples in 20 metropolitan areas: Atlanta, Boston, Chicago, Dallas, Denver, Detroit, Houston, Los Angeles, Miami, Newark, New Orleans, New York City, Philadelphia, Phoenix, San Diego, San Francisco, San Juan, Seattle, St. Louis, and Washington, D.C.

The following information is a result of the analysis of DMP exhibits for the second quarter of 1993:

A total of 183 exhibits were submitted to DEA's Special Testing and Research Laboratory for Signature analysis. Of these exhibits, 8 (4%) did not contain heroin. Of the 175 exhibits that did contain heroin, none were classified as "outliers." Outliers are those samples that have a purity of less than 0.5 percent or a price greater than \$16.00 per milligram pure. Outliers are not used in the calculation of DMP averages or trends.



¹ For an explanation of Signature analysis and other terms used in this report, see appendix C.

The purity of the remaining 175 heroin exhibits ranged from a low of 2.4 percent in Seattle to a high of 93.8 percent in New York City. Of the 175 exhibits, 78 (45%) were unusable for source area identification. Submissions are unusable when there is insufficient weight to perform all the required tests or when test results are inconsistent. A test result is considered inconsistent when it matches more than one existing profile or when it does not match any of the currently used profiles.

South American Heroin

The April-June 1993 DMP includes a new heroin signature classification which identifies heroin produced in South America, generally referred to as Colombian heroin. Before DEA's Special Testing and Research Laboratory developed the South American (SA) signature, heroin from this region was usually either unclassified or, because of chemical similarities, classified as Southwest Asian (SWA). This indicates that the extremely high average purity of SWA heroin reported in the DMP over the past year was inflated due to the inclusion of the suspected SA heroin samples under the SWA signature. For example, during January-March 1993, the 25 exhibits classified as SWA averaged 56.8 percent pure. In contrast, during April-June 1993, the four exhibits classified as SWA averaged just 13.0 percent pure, while the 20 exhibits classified as SA averaged 62.1 percent pure. In addition, SA heroin may be partially responsible for the high number and purity of unclassified heroin samples, although it is expected that refinements to the SA signature should make it possible to classify more heroin samples in future reports.

DMP AVERAGE HEROIN PURITY by Source Area and City Southeast Southwest Mexican South American Asian **Asian** Number Average Number Number Number Average Average Average of purity Purity Purity Purity of of of exhibits (percent) **Exhibits** (percent) Exhibits **Exhibits** (percent) (percent) City Atlanta 2 27.7 2 43.4 **Boston** 2 46.9 Chicago 3 34.6 Dallas 8 10.8 --Denver 3 30.3 Detroit 5 23.9 9 9.0 Houston -----Los Angeles 8 24.4 1 Miami 12.9 2 11.5 2 8.0 Newark 4 72.1 **New Orleans** 2 9.8 1 62.7 New York 1 58.1 1 6.9 4 80.7 Philadelphia 4 89.1 ------15.7 Phoenix 4 San Diego 8 55.1 San Francisco 32.3 San Juan 27.2 60.1 1 1 Seattle 3 13.2 St. Louis --1 10.7 ----Washington, D.C. 5 27.6 21.9 2 24.7 1 **Totals** 22 4 51 20

13.0

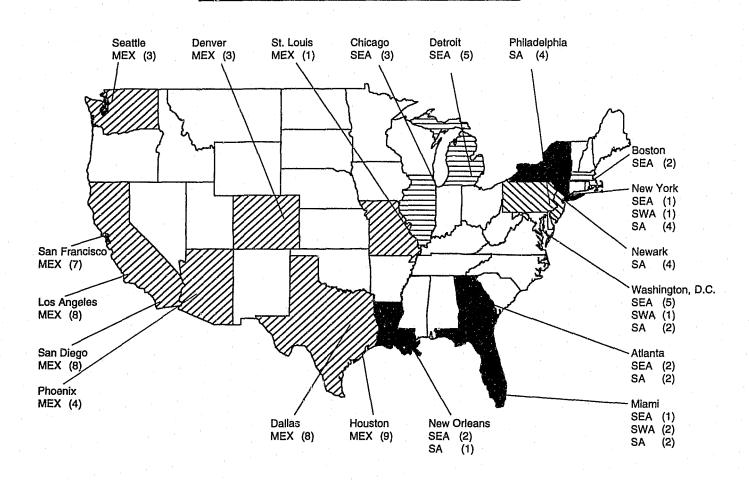
28.6

24.2

62.1

National Average

DMP Heroin Dominance by Source Area

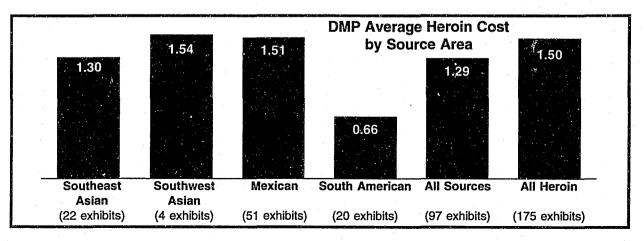




	Legend
DMP	City
()	Number of Exhibits
SEA	Southeast Asian Heroin
SWA	Southwest Asian Heroin
MEX	Mexican Heroin
SA	South American Heroin
UNC	Unclassified Heroin



DMP HEROIN PRICES (U.S. dollars/milligram pure)								
City	Southeast Asian	Southwest Asian	Mexican	South American	Average			
Atlanta	0.71	-	u-	1.47	1.80			
Boston	0.89		•		1.26			
Chicago	0.48				0.48			
Dallas		. 	1.37		1.37			
Denver	•		2.13	:	3.12			
Detroit	1.16		48.44		1.53			
Houston			1.11		1.11			
Los Angeles	***		0.53		0.71			
Miami	0.68	0.70		1.38	1.18			
Newark				0.52	0.70			
New Orleans	5.49		Marie Control	0.72	3.03			
New York	0.55	3.70		0.33	0.72			
Philadelphia				0.35	0.39			
Phoenix		••	3.42		5.56			
San Diego			0.45		0.45			
San Francisco	••		0.78		1.11			
San Juan	0.61			0.36	0.48			
Seattle			5.02		5.02			
St. Louis		***	7.42		2.79			
Washington, D.C.	1.07	1.05		0.84	1.24			
DMP Average	1.30	1.54	1.51	0.66	1.50			



DMP Average Heroin Prices and Purities by City¹

Purity (%) Price (Dollars) Atlanta 1.80 32.5 **Boston** 62.3 1.26 Chicago 34.6 0.48 Dallas 1.37 10.8 Denver 37.2 3.12 Detroit 20.0 1.53 Houston 9.0 Los Angeles 24.9 0.71 Miami 8.9 1.18 Newark 0.70 65.2 **New Orleans** 30.1 3.03 New York 66.1 0.72 Philadelphia 80.0 0.39 **Phoenix** 12.1 5.56 San Diego 0.45 53.3 San Francisco 27.7 1.11 San Juan 49.9 0.48 Seattle 13.2 5.02 St. Louis 8.4 2.79 Washington, D.C. 24.5 1.24 **DMP** Average 36.1 1.50

¹ Based on 175 exhibits.

ADULTERANTS AND DILUENTS

Heroin (diacetylmorphine) is produced from morphine by a chemical process known as acetylation. The morphine is extracted from opium, which comes from the opium poppy plant (*Papaver somniferum L*.). Adulterants are impurities in the final product that are carried over from the opium poppy plant or the extracted opium (such as morphine), substances that are produced as by-products during heroin processing (such as monoacetylmorphine), or substances that are added during heroin processing to modify the character of the heroin (such as quinine). Adulterants have physiological effects of their own.

Monoacetylmorphine is an impurity from the heroin-manufacturing process; it results from incomplete acetylation or conversion of morphine to heroin, and is a direct result of heroin decomposition or reversion to its original state, morphine. This decomposition can be caused by prolonged exposure to moisture or acid.

Diluents are substances that are added to the heroin to extend its bulk. Unlike adulterants, diluents are inert substances with no physiological effects.

The following tables list adulterants and diluents found in second quarter 1993 DMP exhibits:

ADULTERANTS BY SOURCE AREA Number of Occurrences (Percent of Source Area's Exhibits)										
Adulterant	Southeast Asian ¹		Southwest Asian ²		Mexican ³		South American		Total ⁵	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Acetylcodeine	19	86			27	53	13	65	59	61
Monoacetylmorphine	4	18			23	45	14	70	41	42
Diphenhydramine	3	14			11	22			14	14
Quinine	6	27	1	25			4	20	11	11
Acetaminophen	5	23			1	2	1	5	7	8
Noscapine					7	14			7	8
Papaverine					7	14			7	8
Caffeine	5	23					1	5	6	6
Cocaine					4	8	- 1	5	5	5
Procaine	2	9					3	15	5	5
Aspirin	3	14							3	3
Nicotinamide	2	9			1	2			3	3
Lidocaine					2	4			2	2
Acetylprocaine	1	5							1	1

¹ Based on 22 exhibits.

²Based on 4 exhibits.

³Based on 51 exhibits.

⁴Based on 20 exhibits.

⁵Based on 97 exhibits.

DILUENTS BY SOURCE AREA Number of Occurrences (Percent of Source Area's Exhibits)										
Diluent	Southeast Asian ¹		Southwest Asian ²		Mexican ³		South American ⁴		Total ⁵	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Lactose	9	41	1	25	23	45	4	20	37	38
Mannitol	15	68	3	75	3	6	9	45	30	31
Starch	5	23	1	25	2	4	8	40	16	16
Amorphous Material					11	22			11	11
Dextrose	2	9							2	2
Calcium Carbonate							1	5	1	1
Flour							1	5	1	1
Inositol	1	5							1	1
Sodium Chloride							1	5	1	1

¹Based on 22 exhibits. ²Based on 4 exhibits. ³Based on 51 exhibits. ⁴Based on 20 exhibits. ⁵Based on 97 exhibits.

BRAND NAMES

Retail packages bearing brand names are encountered frequently in DMP samples. A brand name denotes the trafficking organization or the cutting house where the drug was diluted and repackaged. Within the heroin trade, the use of brand names has become so extensive that some organizations conduct business using counterfeit brand names. When the counterfeit products begin to erode the business of a group, they will change the name of their product, conduct an extensive advertising campaign, and begin again.

During second quarter 1993, brand names were encountered on DMP exhibits obtained in Atlanta, Boston, Detroit, Newark, New York City, and Philadelphia.

	BRAND NAMES AND LOGOS by DMP City						
City	Source	Purity (%)	Brand Name/Logo (Description)				
Atlanta	UNC	65.4	Big				
Boston	SEA	48.7	#1				
	SEA	45.0	DOA				
	UNC	87.0	Crush				
	UNC	74.7	Superstar				
	UNC	73.9	Braves 94				
	UNC	73.2	Hard to Kill				
	UNC	69.5	X Rec'd				
	UNC	57.7	(Unicorn design stamp)				
	UNC	47.4	Top Gun				
	UNC	45.9	(White and blue playboy symbol)				
Detroit	SEA	33.9	Chronic I				
	SEA	23.7	Apache				
	SEA	18.7	Kro\$\$ Over				
	UNC	8.0	Lace				
	UNC	5.0	Bronco (over likeness of a horse)				

BRAND NAMES AND LOGOS by DMP City						
City	Source	Purity (%)	Brand Name/Logo (Description)			
Newark	SA	86.8	Foxy Brown			
	SA	76.5	New Jack City			
	SA	73.8	Wall St.			
	SA	51.2	9999 Be Back			
	UNC	91.5	All Mighty			
·	UNC	89.4	Good Job (with a ring of stars)			
·	UNC	78.6	Under Seige (with rows of stars)			
	UNC	49.3	New Jack City			
	UNC	34.0	Good Job (with ring of stars)			
	UNC	21.0	Star Trek			
New York City	SEA	58.1	Violator II			
	SWA	6.9	(Logo of a face)			
	SA	93.8	Hockey (below logo of a hockey player)			
	SA	84.3	Hockey (below logo of a hockey player)			
	SA	72.9	Mishelin			
	SA	71.7	Explosion 2000 (with logo of four-legged creature)			
	UNC	90.7	Good Job (below a circle of stars)			
	UNC	89.8	Royal Flush (with a spade logo)			
	UNC	77.3	Monster			
	UNC	71.6	TKO (below logo of man with a boxing glove)			
	UNC	69.3	Full Force			
	UNC	50.5	Good Job (below a circle of stars)			

	BRAND NAMES AND LOGOS by DMP City							
City	Source	Purity (%)	Brand Name/Logo (Description)					
Philadelphia	SA	93.5	X-men					
	SA	92	Cobra					
	SA	87.6	Concord (with a picture of an airplane)					
	SA	83.1	MTV					
	UNC	89.6	Class of 93					
	UNC	73.9	Back Off					
	UNC	73.1	Rapid Power					
	UNC	72.4	Hurricane Andrew					
	UNC	54.7	(440)					

APPENDIX A: INDIVIDUAL CITY SAMPLING

Atlanta

Heroin Purities								
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)					
Heroin	18	10.6 - 65.4	32.5					
Southeast Asian	2	23.3 - 32.1	27.7					
South American	2	36.8 - 39.5	43.4					
Unclassified	14	10.6 - 65.4	31.5					

Adulterants (Number of Occurrences)									
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Acetylcodeine	1				10	11			
Monoacetylmorphine	1			1	7.	9			
Quinine	. 1				5	6			
Acetaminophen	1				3	4			
Cocaine		 .	-		2	2			
Acetylprocaine					1	1			
Aspirin					1	1			
Caffeine					1	1			
Diphenhydramine					1	1			
Morphine				<u></u>	1	1			
Nicotinamide	1					1			
Procaine					1	1			

Note: All samples are heroin hydrochloride unless otherwise noted. The purities of all DMP samples determined to be heroin base were recalculated as heroin hydrochloride for purposes of comparison. Samples that were bought on the same day and have nearly identical compositions are treated as one exhibit in this part of the report. Appendix B contains details on each separate exhibit.

Atlanta (continued)

Diluents (Number of Occurrences)									
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Starch	1				9	10			
Mannitol	1				8	9			
Lactose	1			1	6	8			
Inositol	1				2	3			
Sucrose					1	1			

Heroin Price per Milligram Pure (Dollars)								
	Southeast Southwest Mexican South American Unclassified							
	0.71	-		1.47	2.00	1.80		

Boston

Heroin Purities								
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)					
Heroin	10	45.0 - 87.0	62.3					
Southeast Asian ¹	2	45.0 - 48.7	46.9					
Unclassified ¹	8	45.9 - 87.0	66.2					

Adulterants (Number of Occurrences)									
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Acetylcodeine	2				5	7			
Monoacetylmorphine	2				5	7			
Quinine	2				4	6			
Acetaminophen	2				2	4			
Aspirin	2				1	3			
Caffeine	2				i 	2			
Lidocaine					1	. 1			
Phenylpropanolamine		, - -	-		1	1			
Procaine					1	1			

¹ Composition of one of the Southeast Asian heroin exhibits and one of the Unclassified exhibits was mixed heroin base and heroin hydrochloride.

Boston (continued)

Diluents (Number of Occurrences)									
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Mannitol	2				6	8			
Starch	2				3	5			
Dextrose					1	1			

Heroin Price per Milligram Pure (Dollars)								
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average		
	0.89		-		1.35	1.26		

Chicago

Heroin Purities								
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)					
Heroin	3	27.1 - 45.8	34.6					
Southeast Asian	3	27.1 - 45.8	34.6					

Adulterants (Number of Occurrences)								
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total		
Acetylcodeine	3					3		
Diphenhydramine	3	aj, uz	: 44.44			3		

Diluents (Number of Occurrences)							
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total	
Lactose	3					3	

Heroin Price per Milligram Pure (Dollars)								
Southeast Southwest Mexican South And Andrea Unclassified Avera								
	0.48		pa 48			0.48		

Dallas

Heroin Purities								
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)					
Heroin	8	3.4 - 23.0	10.8					
Mexican	8	3.4 - 23.0	10.8					

Adulterants (Number of Occurrences)									
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Diphenhydramine			8			8			
Cocaine			4			4			
Monoacetylmorphine			2	19		2			
Acetaminophen			1	·		1			
Acetylcodeine			1			1			
Nicotinamide			1			1			

Diluents (Number of Occurrences)							
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total	
Lactose			8			8	
Mannitol			1	**		1	

Heroln Price per Millîgram Pure (Dollars)								
Southeast Southwest Mexican South And American Unclassified								
			1.37		64 See	1.37		

Denver

Heroin Purities							
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)				
Heroin	9	21.3 - 83.2	37.2				
Mexican	3	21.3 - 38.4	30.3				
Unclassified	6	23.3 - 83.2	40.6				

Adulterants (Number of Occurrences)								
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total		
Acetylcodeine			2		6	8		
Monoacetylmorphine			1		6	7		
Noscapine	Ma har				3	3		
Morphine					1	1		
Papaverine				-	1	1		

			luents f Occurrences)			
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Amorphous Material			1		3	4

Heroin Price per Milligram Pure (Dollars)									
Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average				
. ·		2.13		3.62	3.12				

Detroit

Heroin Purity							
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)				
Heroin	8	5.0 - 33.9	20.0				
Southeast Asian	5	18.0 - 33.9	23.9				
Unclassified	3	5.0 - 23.9	13.3				

Adulterants (Number of Occurrences)								
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total		
Acetylcodeine	4					4		
Diphenhydramine					2	2		
Quinine					2	2		
Acetaminophen	1					1		
Caffeine	1			-		1		

Diluents (Number of Occurrences)								
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total		
Lactose	4				2	6		
Mannitol	2				2	4		
Starch	1				1	2		
Dextrose	1					1		

Heroin Price per Milligram Pure (Dollars)							
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average	
	1.16				2.14	1.53	

Houston

Heroin Purities							
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)				
Heroin	9	6.1 - 28.5	9.0				
Mexican	9	6.1 - 28.5	9.0				

Adulterants (Number of Occurrences)								
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total		
Acetylcodeine			1	-		1		
Monoacetylmorphine		, 	1			1		
Noscapine			1			1		
Papaverine			1			1		

Diluents (Number of Occurrences)							
Diluent	Unclassified	Total					
Lactose			8		. · · ·	8	

Heroin Price per Milligram Pure (Dollars)								
Southeast Southwest Asian Mexican South American Unclassified Average								
		1.11			1.11			

Los Angeles

Heroin Purities							
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)				
Heroin	9	10.8 - 42.1	24.9				
Moxican	8	10.8 - 42.1	24.4				
Unclassified	1	-	28.6				

Adulterants (Number of Occurrences)									
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Acetylcodeine			7		1	8			
Monoacetylcodeine			4		1	5			
Diphenhydramine			2			2			
Papaverine			1			1			
Lidocaine			1			1			
Noscapine			1			, 1			

Diluents (Number of Occurrences)							
Diluent Southeast Southwest Mexican South Asian Asian Mexican American Unclassified Total							
Lactose			4			4	

Heroin Price per Milligram Pure (Dollars)								
Southeast Southwest Mexican South American Unclassified Average								
		0.53		2.16	0.71			

Miami

Heroin Purities							
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)				
Heroin	9	4.0 - 12.9	8.9				
Southeast Asian	1		12.9				
Southwest Asian	2	11.3 - 11.7	11.5				
South American	2	6.4 - 9.5	8.0				
Unclassified	4	4.0 - 10.0	7.0				

Adulterants (Number of Occurrences)									
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Acetylcodeine	1				1	2			
Caffeine				1		1			
Monoacetylmorphine					1	1			
Noscapine				-	1	1			
Procaine					1	1			
Quinine				1		1			

Diluents (Number of Occurrences)										
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total				
Mannitol	1	1		2	3	7				
Lactose		1			, 1 ·	2				
Starch	-			1		1				

	Heroin Price per Milligram Pure (Dollars)								
Southeast Southwest Mexican South Asian Asian Mexican American							Average		
		0.68	0.70		1.38	1.45	1.18		

Newark

Heroin Purity							
Source Composition Occurrences Purity Range (%) Average Purity (%)							
Heroin	10	21.0 - 91.5	65.2				
South American ¹	4	51.2 - 86.8	72.1				
Unclassified ¹	6	21.0 - 91.5	60.6				

Adulterants (Number of Occurrences)									
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Acetylcodeine			<u></u>	3	5	8			
Monoacetylmorphine			•••	3	4	7			
Acetaminophen				1		1			
Morphine					1	1			
Procaine				1		1			

Diluents (Number of Occurrences)									
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Mannitol			***	4	4	8			
Starch				2	1	3			
Cellulose					1	1			
Flour			:	1		1.			
Lactose		, :			1	1			

Heroin Price per Milligram Pure (Dollars)							
Souteast Asian	Southwest Asian	Mexican	South American	Unclassified	Average		
, ·			0.52	0.82	0.70		

¹ Composition of one of the South American heroin exhibits and one of the Unclassified exhibits was mixed heroin base and heroin hydrochloride.

New Orleans

Heroin Purities							
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)				
Heroin	7	9.5 - 62.7	30.1				
Southeast Asian	2	9.5 - 10.0	9.8				
South American	1		62.7				
Unclassified	4	10.3 - 48.5	32.2				
Non-heroin	6	-					

Adulterants (Number of Occurrences)										
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total				
Acetylcodeine	2			1	3	6				
Monoacetylmorphine				1	3	4				
Nicotinamide	1			= -	1	2				
Acetaminophen	1					1				
Aspirin	1					1				
Caffeine	1					1				

			uents Occurrences			
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Mannitol	2			1	4	7

Heroin Price per Milligram Pure (Dollars)								
Southeast Southwest Mexican South American Unclassified								
5.49			0.72	2.38	3.03			

New York City

Heroin Purity								
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)					
Heroin	13	6.9 - 93.8	66.1					
Southeast Asian	1	-	58.1					
Southwest Asian	1		6.9					
South American	4	71.7 - 93.8	80.7					
Unclassified ¹	7	23.0 - 90.7	67.5					

Adulterants (Number of Occurrences)									
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Acetylcodeine	1			4	5	10			
Monoacetylmorphine				4	4	8			
Procaine	1			1	2	4			
Quinine				2	1	3			
Caffeine	1					1			
Doxepin					1	1 .			
Nabumetone	₩₩	•		. . .	1	1			

¹ Composition of three of the Unclassified exhibits was mixed heroin base and heroin hydrochloride.

New York City (continued)

Diluents (Number of Occurrences)									
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Mannitol	1	1		3	6	11			
Starch		1			1	2			
Flour					1	1			
Lactose				1		1			

	Heroin Price p (D	oer Milligram P ollars)	ure		:
Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average
0.55	3.70		0.33	0.55	0.72

Philadelphia

Heroin Purities								
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)					
Heroin	9	54.7 - 93.5	80.0					
South American	4.	83.1 - 93.5	89.1					
Unclassified	5	54.7 - 89.6	72.7					

Adulterants (Number of Occurrences)										
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total				
Monoacetylmorphine				4	5	9				
Acetylcodeine				4	4	. 8				
Diphenhydramine					3	3				
Quinine					1	1				

Diluents (Number of Occurrences)							
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total	
Lactose				1	4	5	
Mannitol				1	4	5	
Starch			: 44 44	2 .	2	4	
Calcium Carbonate				1		1	
Sodium Chloride				1		, 1	

Heroin Price per Miliigram Pure (Dollars)							
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average	
				0.35	0.43	0.39	

Phoenix

Heroin Purities							
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)				
Heroin	6	4.5 - 37.1					
Mexican	4	5.7 - 37.1	15.7				
Unclassified	2	4.5 - 5.6	5.1				

Adulterants (Number of Occurrences)							
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total	
Monoacetylmorphine			2		2	4	
Acetylcodeine			1			1	
Lidocaine					1	1	
Noscapine			1			1	

Diluents (Number of Occurrences)								
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total		
Amorphous Material			2		2	, 4		
Mannitol			2			2		

Heroin Price per Milligram Pure (Dollars)								
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average		
	-		3.42	-	9.83	5.56		

San Diego

Heroin Purities							
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)				
Heroin	9	38.9 - 67.9	53.3				
Mexican	8	38.9 - 67.9	55.1				
Unclassified	1		39.0				

Adulterants (Number of Occurrences)										
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total				
Acetylcodeine			8		1	9				
Monoacetylmorphine			5		1	6				
Papaverine			6			6				
Noscapine			3			3				
Lidocaine			1			1				
Morphine					1	1				

Diluents (Number of Occurrences)									
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Amorphous Material			7	-	1	8			
Lactose			1			1			
Starch			1			1			

Heroin Price per Milligram Pure (Dollars)									
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average			
	••		0.45		0.45	0.45			

San Francisco

Heroin Purities								
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)					
Heroin	10	10.2 - 39.0	27.7					
Mexican	7	14.1 - 39.0	32.3					
Unclassified	3	10.2 - 27.6	17.1					
Non-heroin	1		••					

Adulterants (Number of Occurrences)									
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Monoacetylmorphine			6		2	8			
Acetylcodeine			6		1	7			
Noscapine			1		1	2			

Diluents (Number of Occurrences)								
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total		
Amorphous Material			1	-		1		

Heroin Price per Milligram Pure (Dollars)								
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average		
		-	0.78		1.89	1.11		

San Juan

Heroin Purities								
Source Composition	Occurrences	Purity Range (%)	Average Purity (%) 49.9					
Heroin	8	27.2 - 68.5						
Southeast Asian	1		27.2					
South American	1		60.1					
Unclassified ¹	6	39.3 - 68.5	52.0					

Adulterants (Number of Occurrences)									
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Monoacetylmorphine	1			1	5	7			
Acetylcodeine	1		***	1	3	5			
Quinine					3	3			
Diphenhydramine					2	2			
Procaine	1			1		2			
Acetylprocaine	1					1			
Cocaine				1		1			
Lidocaine		<u>.</u>			1	. 1			
Phenylpropanolamine					1	1			

¹Composition of one of the Unclassified exhibits was mixed heroin base and heroin hydrochloride.

San Juan (continued)

Diluents (Number of Occurrences)										
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total				
Mannitol	1	***			5	6				
Lactose	1			1	3	5				
Starch	1		2 =			1				

Heroin Price per Milligram Pure (Dollars)								
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average		
	0.61			0.36	0.49	0.48		

Seattle

Heroin Purities							
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)				
Heroin	3	2.4 - 23.3	13.2				
Mexican	3	2.4 - 23.3	13.2				

			Iterants Occurrences)		
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total
Monoacetylmorphine			2			2
Acetylcodeine	-		1			1

Diluents (Number of Occurrences)							
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total	
Lactose		••	1			1	

Heroin Price per Milligram Pure (Dollars)								
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average		
			5.02			5.02		

St. Louis

Heroin Purities								
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)					
Heroin	5	5.5 - 10.7	8.4					
Mexican	1		10.7					
Unclassified	4	5.5 - 10.4	7.9					

Adulterants (Number of Occurrences)								
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total		
Diphenhydramine	-		1		4	5		
Acetylcodeine					1	1		
Quinine			- -		1	1		

Diluents (Number of Occurrences)									
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Lactose			1		4	5			
Starch			1		3	4			
Amorphous Material			1			1			

Heroin Price per Milligram Pure (Dollars)								
	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Average		
			7.42		1.64	2.79		

Washington, D.C.

Heroin Purity								
Source Composition	Occurrences	Purity Range (%)	Average Purity (%)					
Heroin	12	13.2 - 34.7	24.5					
Southeast Asian	5	13.2 - 34.7	27.6					
Southwest Asian	1		21.9					
South American	2	24.6 - 24.7	24.7					
Unclassified	4	16.9 - 31.2	21.1					

Adulterants (Number of Occurrences)									
Adulterant	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total			
Quinine	3	1	**	1	. 3	8			
Acetylcodeine	4	. 			1	5			
Cocaine			,		1	, 1			
Monoacetylmorphine					1	1			

Diluents (Number of Occurrences)								
Diluent	Southeast Asian	Southwest Asian	Mexican	South American	Unclassified	Total		
Mannitol	5	1		1	4	11		
Starch					1	1		

Heroin Price per Milligram Pure (Dollars)								
	South American	Southwest Asian	Mexican	South American	Unclassified	Average		
	1.07	1.05		0.84	1.68	1.24		

APPENDIX B: EXHIBIT DATA BY CITY

Atlanta

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
13	Boulevard & Confederate Ave.	10.6	UNC	100.00	2.000	05-10	
14	Tennessee Ave.	29.3	UNC	100.00	0.952	04-30	
15	Mayson & MLK St.	65.4	UNC	100.00	0.400	04-30	Big
16	MLK St.	32.7	UNC	100.00	2.000	04-30	
17	J.P. Brawley St.	30.7	UNC	100.00	1.818	05-10	
18.1	Sells Ave.	10.8	UNC	34.00	3.400	05-07	
18.2	Sells Ave.	32.7	UNC	66.00	1.065	05-07	
19	MLK Ave & Myson Turner Ave.	30.5	UNC	100.00	1.695	05-07	
20	Sells Ave.	36.9	UNC	100.00	1.818	06-08	
21	John St. & Northside Dr.	31.7	UNC	100.00	1.587	06-08	
22	Proctor St.	36.8	SA	100.00	1.667	06-15	
23	Hilltop Circle	23.3	SEA	100.00	1.042	06-15	
24	MLK Dr. & Jeputta St.	32.1	SEA	100.00	0.382	06-28	
25	J.P. Brawley St.	22.7	UNC	100.00	3.169	06-28	
26	J.P. Brawley St.	27.9	UNC	90.00	3.000	06-28	
27	Proctor & Oliver Sts.	50.1	SA	100.00	1.282	06-28	
28	Ashby & Simpson St.	39.5	UNC	100.00	3.226	06-30	
29	J.P. Brawley St.	40.9	UNC	80.00	1.818	06-30	

Note: All samples are heroin hydrochloride unless otherwise noted. All samples marked N/A are not heroin unless otherwise noted. In addition, exhibits whose numbers have decimal points (for example, 3.1, 3.2, 3.3) are each one sample that was analyzed in several parts due to differences in composition.

Boston

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
20	Washington St., Roslindale	69.5	UNC	200.00	1.242	05-10	X Rec'd
21	Calendar St.	47.4	UNC	100.00	2.500	06-01	Top Gun
22	Washington St., Dorchester	73.2	UNC	100.00	1.235	06-01	Hard to Kill
23	Central Sq.	73.9	UNC	75.00	0.721	05-11	Braves 94
24	Cottage St.	57.7	UNC	75.00	0.974	05-11	Unicorn design stamp
25	Hanover St.	45.9	UNC	35.00	2.059	05-11	White and blue playboy symbol
26	Starr King Court, Charlestown	74.7	UNC	100.00	1.430	05-12	Superstar
27	Ruggles & Washington Sts., Roxbury	45.0	SEA	100.00	0.893	05-18	DOA
28	Field's Corner, Ashmont	87.0¹	UNC	100.00	0.637	05-18	Crush
29	Dudley Station	48.7 ¹	SEA	100.00	0.885	05-18	#1

¹Composition was mixed heroin base and heroin hydrochloride.

Chicago

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	ldentifying Marks or Brand Name
5	Karlov & Lake	30.9	SEA	250.00	0.419	06-25	
6	N. Pulaski	45.8	SEA	200.00	0.357	06-30	
7	W. Lake	27.1	SEA	100.00	0.649	06-30	

Dallas

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
18	Gaston	9.4	MEX	125.00	1.543	06-09	
19	S. Oakland	23.0	MEX	125.00	0.665	06-09	:
20	Carpenter	5.4	MEX	125.00	1.866	06-17	
21	Morris	4.0	MEX	125.00	2.997	06-18	
22	Toronto	3.4	MEX	120.00	1.846	06-18	
23	Atlanta	16.4	MEX	120.00	0.449	06-23	
24	Hooper	10.1	MEX	120.00	1.111	06-23	
25	Eleventh St.	14.8	MEX	120.00	0.504	06-29	

Denver

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
20	Williams St.	26.4	UNC	80.00	4.706	06-07	
21	S. Federal	21.3	MEX	100.00	2.941	06-07	
22	Curtis St.	83.2	UNC	100.00	1.493	06-14	
23	31st & Arapahoe	23.3	UNC	100.00	4.167	06-14	
24	Larimer St.	39.1	MEX	100.00	2.041	06-15	
25	25th St. & Curtis	37.7	MEX	100.00	1.754	06-15	
26	30th St. & California	39.7	UNC	100.00	2.000	06-15	
27	32nd & Curtis St.	31.3	MEX	100.00	1.563	06-28	
28	26th & Larimer St.	37.9	UNC	80.00	5.333	06-28	
29	20th & Larimer St.	33.3	UNC	100.00	4.000	06-28	:

Detroit

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
21	Linwood & Ferry Park	23.7	SEA	130.00	1.121	05-03	Apache
22	Marquette	24.0	SEA	130.00	1.057	05-03	:
23	Lawton	25.2	SEA	120.00	1.212	05-03	
24	Martindale	23.9	UNC	125.00	1.050	05-03	
25	John R. & Alfred Sts.	5.0	UNC	120.00	1.463	05-04	Bronco over likeness of a horse
26	Alfred	8.0	UNC	105.00	0.700	05-04	Lace
27	Nebraska & Linwood	33.9	SEA	130.00	1.083	05-13	Chronic I
28	15th St.	18.0	SEA	120.00	1.290	05-13	
29	John R. & Adelaide Sts.	9.5	UNC	120.00	4.286	06-08	
30	Brush & Alfred Sts.	18.7	SEA	115.00	1.117	06-08	Kro\$\$ Over

Houston

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Mark or Brand Name
1	Dewberry St.	6.8	MEX	100.00	0.870	06-14	
2	Yellowstone St.	6.6	MEX	100.00	0.806	06-14	
3	Cullen Blvd.	5.8	MEX	100.00	0.943	06-15	
4	Cullen Blvd.	6.3	MEX	100.00	0.877	06-16	
5	Van Fleet St.	6.4	MEX	100.00	0.794	06-15	
6	Winton & Yellowstone St.	6.3	MEX	100.00	0.826	06-15	
7	Delano & Tuam St.	28.5	MEX	600.00	0.948	06-22	
8	Lee & Lockwood	6.3	MEX	100.00	1.389	06-22	
9	Reed Rd. & Cullen Blvd.	6.6	MEX	100.00	1.250	06-22	
10	Yellowstone & Scott	6.5	MEX	100.00	1.370	06-28	
11	Bellfort & Scott	6.7	MEX	100.00	1.075	06-28	
12	Yellowstone	7.0	MEX	100.00	0.806	06-29	
13	Good Hope St.	6.9	MEX	100.00	1.149	06-30	
14	Winton	6.9	MEX	200.00	1.163	06-30	

Los Angeles

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
18	50th & Avalon	10.8	MEX	60.00	0.952	05-03	
19	Valencia	26.3	MEX	80.00	0.879	05-13	
20	Olympic & Alvarado Sts.	28.6	UNC	80.00	2.162	06-04	
21	45th & Morgan Sts.	20.3	MEX	60.00	0.408	06-08	
22	Wilmington & 115th Sts.	23.3	MEX	60.00	0.353	06-08	
23	W. 40th St.	31.7	MEX	60.00	0.302	06-28	
24	Central Ave. & 22nd St.	42.1	MEX	80.00	0.471	06-28	
25	Imperial & Wilmington	22.7	MEX	60.00	0.380	06-29	
26	115th St.	22.3	MEX	60.00	0.370	06-29	
27	50th & Avalon Sts.	18.5	MEX	80.00	0.494	06-29	

Miami

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
18	Ali Baba Ave., Opa Locka	4.0	UNC	100.00	2.326	05-17	
19	NW 61st St., Liberty City	11.7	SWA	100.00	0.775	05-17	
20	NW 62nd St & 13th Ave.	11.3	SWA	100.00	0.629	05-17	
21	13th Ave., Liberty City	4.7	UNC	100.00	1.695	05-17	
22	NW 62 St.	12.9	SEA	110.00	0.679	05-17	
23	Ali Baba Ave., Opa Locka	8.7	SA	100.00	0.870	05-26	
24	Ali Baba Ave., Opa Locka	10.3	SA	100.00	0.746	05-26	
25	61st St., Liberty City	9.2	UNC	90.00	0.756	05-26	
26	13th Ave., Liberty City	6.4	SA	100.00	1.149	05-26	
27	62nd Ave., Liberty City	10.0	UNC	100.00	1.020	05-26	

Newark

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
21	Elizabeth Ave.	78.6	UNC	150.00	0.676	04-28	Under Seige with rows of stars
22	Broadway	34.0	UNC	150.00	1.339	04-28	Good Job with a ring of stars
23	Clifton Ave.	89.4	UNC	135.00	0.308	04-29	Good Job with a ring of stars
24	South St.	76.5 ¹	SA	145.00	0.403	04-29	New Jack City
25	Concord & Elizabeth Ave.	73.8	SA	145.00	0.569	04-29	Wall St.
26	Broad St.	51.2	SA	150.00	0.718	06-02	9999 Be Back
27	Vincent Ct.	21.0	UNC	150.00	1.630	06-02	Star Trek
28	Orange St.	86.8	SA	150.00	0.381	06-02	Foxy Brown
29	James St.	91.5	UNC	150.00	0.489	06-02	All Mighty
30	Parkhurst St.	49.3 ¹	UNC	135.00	0.458	06-02	New Jack City

¹Composition was mixed heroin base and heroin hydrochloride.

New Orleans

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
7	Erato & S. Dorgenois Sts.	45.5	UNC	160.00	1.928	04-05	
8.1	Canal St.	N/A	N/A	139.00	N/A	04-06	
8.2	Canal St.	48.5	UNC	21.00	1.400	04-06	ı
9	Olive St. & Pine St.	9.5	SEA	200.00	3.571	05-26	
10	Pine & Olive Sts.	N/A	N/A	200.00	N/A	06-08	
11	Broadway & Coolidge Sts.	N/A	N/A	180.00	N/A	06-08	
12	Dauphine St. & Delery St.	24.4	UNC	200.00	2.105	06-10	
13	Caliope Projects	10.0	SEA	200.00	7.407	06-15	
14	Caliope Projects	10.3	UNC	100.00	4.082	06-16	
15	Felicity St.	N/A	N/A	200.00	N/A	06-16	
16	St. Roch St.	N/A	N/A	200.00	N/A	06-17	
17	Carrolton & Olive Aves.	N/A	N/A	200.00	N/A	06-17	
18	Caliope Projects	62.7	SA	200.00	0.719	06-22	
19	Collapissa St.	N/A	N/A	200.00	N/A	06-23	:

New York City

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
25	Bronx	77.3 ¹	UNC	100.00	0.397	05-18	Monster
26	Bronx	72.9	SA	100.00	0.408	05-18	Mishelin
27	East Harlem	89.8	UNC	100.00	0.329	05-18	Royal Flush with a spade logo
28	East Harlem	69.3	UNC	100.00	0.279	05-18	Full Force
29	Bronx	71.6 ¹	UNC	100.00	0.383	05-26	TKO below logo of man with a boxing glove
30	East Harlem	71.7	SA	100.00	0.368	05-25	Explosion 2000 with logo of four- legged creature between words
31	East Harlem	58.1	SEA	100.00	0.552	05-25	Violator II
32.1	Lower East Side	90.7 ¹	UNC	84.00	0.391	05-25	Good Job below a circle of stars
32.2	Lower East Side	50.5	UNC	16.00	0.727	05-25	Good Job below a circle of stars
33	Bronx	6.9	SWA	100.00	3.704	06-02	Logo of a face
34	Lower East Side	84.3	SA	100.00	0.264	06-02	Hockey below logo of a hockey player
35	Brooklyn	93.8	SA	100.00	0.262	06-02	Hockey below logo of a hockey player
36	Brooklyn	23.0	UNC	100.00	1.333	06-02	Heavy D

¹ Composition was mixed heroin base and heroin hydrochloride.

Philadelphia

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
12	3rd St.	54.7	UNC	100.00	0.670	04-08	(440)
13	N. Orkney St.	89.6	UNC	120.00	0.429	04-08	Class of 93
14	Hutchinson St.	93.5	SA	100.00	0.288	05-21	X-Men
15	N. Darien St.	73.1	UNC	100.00	0.420	05-21	Rapid Power
16	Third & Birch Sts.	83.1	SA	100.00	0.412	05-26	MTV
17	Mutter & Cambria Sts.	72.4	UNC	200.00	0.349	05-26	Hurricane Andrew
18	A & Somerset Sts.	87.6	SA	240.00	0.296	06-10	Concord with a picture of an airplane
19	Eller St.	73.9	UNC	160.00	0.283	06-10	Back Off
20	N. Darien St.	92.0	SA	110.00	0.394	06-08	Cobra

Phoenix

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
21	12th St. & Mohave	9.9	MEX	60.00	5.455	04-28	
22	7th Ave. & Buckeye	9.4	MEX	50.00	4.545	04-28	
23	19th Ave. & Buckeye Rd.	9.8	MEX	40.00	4.000	04-28	
24	25th Ave. & Buckeye Rd.	10.1	MEX	70.00	3.333	04-28	
25	Central Ave. & Gateway St.	5.5	UNC	60.00	8.571	05-03	
26	Third & Roger Sts.	5.6	UNC	45.00	11.250	05-03	
27	24th & Roger Sts.	5.7	MEX	60.00	5.000	05-03	
28	18th St. & Cherrylynn Rd.	37.1	MEX	40.00	0.678	06-22	
29	17th St. & McDowell Rd.	4.8	UNC	60.00	7.500	06-22	
30	16th St. & Indian School Rd.	4.2	UNC	60.00	12.000	06-22	

San Diego

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
18	19th & K Sts.	48.2	MEX	160.00	0.372	05-03	
19	Broadway	39.0	UNC	150.00	0.450	05-04	
20	25th & L Sts.	63.2	MEX	140.00	0.247	05-06	
21	19th & Market Sts.	67.9	MEX	150.00	0.321	05-06	
22	30th & Oceanview Blvd.	47.8	MEX	150.00	1.531	05-10	
23	Bancroft	45.1	MEX	140.00	0.373	05-14	
24	37th St.	38.9	MEX	120.00	0.295	05-27	
25	42nd & El Cajon Blvd.	62.8	MEX	170.00	0.251	05-26	
26	Beta	67.1	MEX	160.00	0.236	05-28	

San Francisco

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
19	Jones & Eddy	31.0	MEX	47.00	2.136	05-04	
20	Turk & Leavenworth Sts.	14.1	MEX	55.00	0.948	05-13	
21	None given	38.7	MEX	20.00	0.370	05-28	
22	18th & Mission Sts.	27.6	UNC	20.00	0.769	05-28	
23	18th & Capp Sts.	28.4	MEX	25.00	0.463	05-28	
24	Jones & Eddy Sts.	N/A	N/A	20.00	N/A	06-02	
25	Eddy & Polk Sts.	13.5	UNC	25.00	1.786	06-02	:
26	Turk & Leavenworth Sts.	10.2	UNC	25.00	3.125	06-02	
27	35th Ave. & E. 14th St., Oakland	46.0	MEX	20.00	0.417	06-23	
28	E. 14th St., Oakland	28.9	MEX	25.00	0.463	06-23	
29	E. 17th St. & 34th Ave., Oakland	39.0	MEX	40.00	0.656	06-23	

San Juan

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
23	Trujillo Alto	59.4 ¹	UNC	100.00	0.556	05-20	
24	Jardines de Berwind PHP, Rio Piedras	60.1	SA	100.00	0.360	05-28	
25	San Jose PHP, Rio Piedras	27.2	SEA	100.00	0.613	05-28	
26	Quintana PHP, Rio Piedras	39.3	UNC	160.00	0.325	05-28	
27	Christiansted, USVI	68.5	UNC	200.00	0.758	06-17	
28	Monte Llanos PH, Cayey	52.4	UNC	100.00	0.633	06-25	
29	Barriada Morales housing area, Caguas	42.8	UNC	95.00	0.328	06-25	
30	Jose Jiminez Garcia housing area, Caguas	49.6	UNC	100.00	0.321	06-30	

¹Composition was mixed heroin base and heroin hydrochloride.

Seattle

Exhibit Number	l .	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	ldentifying Marks or Brand Name
19	1st & Lander	23.3	MEX	180.00	0.874	05-12	
20	2nd & Pike St.	2.4	MEX	100.00	12.500	05-14	
21	Western Ave. & Union St.	14.0	MEX	100.00	1.695	06-02	

St. Louis

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
15	Chouteau	10.7	MEX	150.00	7.417	06-09	
16	Chouteau	6.3	UNC	150.00	1.923	06-10	
17	Webster St.	10.4	UNC	150.00	1.172	06-10	
18	Chouteau	9.2	UNC	150.00	1.071	06-11	
19	Page & Taylor	5.5	UNC	150.00	2.381	06-11	

Washington, D.C.

Exhibit Number	Location	Purity (%)	Source Area	Price (\$)	Price/mg (\$)	Purchase Date	Identifying Marks or Brand Name
19	9th St. & Florida Ave.	34.7	SEA	100.00	0.719	04-23	
20	7th & T Sts.	28.8	SEA	150.00	0.980	04-29	
21	Martin Luther King Ave.	21.9	SWA	85.00	1.049	04-30	•
22	King Ave. & Talbert St.	13.2	SEA	80.00	2.424	05-04	
23	Georgia Ave. & Park Rd.	18.8	UNC	80.00	1.000	05-06	
24	Georgia Ave.	32.9	SEA	80.00	0.376	05-06	
25	11th & P Sts., NW	24.6	SA	90.00	0.763	07-01	· · · · · · · · · · · · · · · · · · ·
26	9th & U Sts.	28.2	SEA	100.00	0.862	05-11	
27	Martin Luther King Ave. & Talbert St., SE	31.2	UNC	60.00	1.277	06-24	
28	7th & T St., NW	16.9	UNC	50.00	2.273	05-26	•
29	Georgia Ave.	24.7	SA	50.00	0.926	05-26	
30	1st & M St.	17.5	UNC	50.00	2.174	05-26	

APPENDIX C: DEFINITIONS

Adulterants: Pharmacologically active substances—such as caffeine, monoacetylmorphine, procaine, and quinine—that remain in or are added to the final heroin product at the completion of the heroin conversion process.

Alkaloids: Naturally occurring constituents of opium such as codeine, morphine, noscapine, and thebaine.

Black Tar Heroin: A relatively high-purity heroin made from opium poppies grown in Mexico using techniques classified as Mexican in origin. It may be brown to black in color and sticky like roofing tar or hard like coal. Typically, black tar heroin is a hydrochloride salt and is taken by injection.

DAWN: See Drug Abuse Warning Network.

Diluents: Pharmacologically inactive substances added to increase bulk—such as lactose, mannitol, starch, and sucrose.

Drug Abuse Warning Network (DAWN): A program—sponsored jointly by DEA and the National Institute on Drug Abuse (NIDA)—to gather, interpret, and disseminate data on drug abuse and overdose deaths. The data are obtained primarily from hospitals and medical examiners in 26 cities.

Gross Weight: The total weight of an exhibit including its packaging material.

Heroin Hydrochloride: A salt of heroin that is water soluble and suitable for injection. This is the type most commonly available to abusers.

Heroin Color: The actual color of the heroin after it has been separated from its adulterants and diluents.

Heroin Signature Classification: The result of Heroin Signature Program analysis. Classifications currently defined include Southeast Asian (SEA), Southwest Asian (SWA), and Mexican (MEX). Also known as Heroin Signature Profiles. When the results of a Signature analysis are inconclusive, the sample may be listed as "unknown" or "insufficient weight." For the purposes of this report, the latter two classifications are grouped together under the heading of Unclassified (UNC).

Heroin Signature Program: A program developed by DEA to identify the geographic source area of a heroin sample through the detection of specific chemical characteristics in the sample peculiar to its source area. This program employs special chemical analyses to identify and quantitate selected chemical characteristics and secondary constituents of an exhibit—which ideally is at least 1.5 grams net weight and which has a purity of at least 3.0 percent.

Impurities: Naturally occurring constituents of opium or processing chemicals that remain in heroin after the conversion process is completed.

Insufficient Weight: A sample of heroin that is too small for Signature analysis. Ideally, each sample should be at least 1.5 grams net weight (including adulterants and diluents) and should have a purity of at least 3.0 percent. A sample of this minimum weight and purity has a pure heroin weight of at least 45 milligrams. A smaller sample is not classifiable by means of Signature analysis and is labeled as "insufficient weight."

Mexican Heroin: A type of heroin made from opium poppies grown in Mexico using techniques developed by Mexican chemists. This type of heroin is typically the hydrochloride salt form. The purity is usually low and suitable for injection. Mexican heroin appears in several shades of brown and is powdery in consistency. Black tar heroin is also Mexican in origin and typically much higher in purity.

Net Weight: The total weight of the heroin excluding its packaging.

Outlier: Generally speaking, a number or value that is so far removed from others in its category that it is considered to be invalid for inclusion in the calculation of averages. DMP exhibits that are classified as "outliers" are those exhibits that have a purity of less than 0.5 percent or a price greater than \$16.00 per milligram pure. DMP averages do not include outliers.

Pure Weight: The weight of the heroin as determined by multiplying the purity of an exhibit by its net weight.

Purity: The amount of heroin present compared to all other substances in the sample. Purity is expressed as a percent. Purity and salt type are listed in the DMP report when available.

Southeast Asian no. 3 (SEA #3): Heroin made in Southeast Asia that is not as highly refined as SEA #4 heroin; its color ranges from tan to off-white. Although considered a smoking heroin, it also may be injected intravenously. Caffeine and strychnine usually are added to SEA #3 before the heroin manufacturing process is completed.

Southeast Asian no. 4 (SEA #4): Heroin that is made from Southeast Asian opium and produced in the "Golden Triangle" (Burma, Laos, and Thailand). It is usually encountered as a fine, white powder.

Southwest Asian Heroin (SWA): Heroin made from opium grown in Afghanistan, Iran, or Pakistan. The quality of this heroin ranges from a highly refined white heroin produced in the European-Mediterranean area to a less refined tan heroin produced in Afghanistan, Iran, Pakistan, and Turkey. Pakistani traffickers also produce a highly refined, white heroin for the North American market.

System to Retrieve Information from Drug Evidence (STRIDE): A computerized data base program to record, collate, and display the results of qualitative and quantitative chemical analyses as well as the physical circumstances surrounding the acquisition of all drug evidence submitted to the DEA laboratory system. STRIDE data are used to monitor drug prices and potencies, to enumerate the number of exhibits examined, and to provide a comprehensive accounting of drug removals.

DISTRIBUTION

The White House National Security Council Office of National Drug Control Policy

Department of Justice
Federal Bureau of Investigation/DIU
Federal Bureau of Prisons
Immigration and Naturalization Service
INTERPOL/USNCB
Organized Crime Drug Enforcement Task Forces
U.S. Marshals Service

Department of the Treasury
Bureau of Alcohol, Tobacco and Firearms
Internal Revenue Service
U.S. Customs Service
U.S. Secret Service

Department of Defense Defense Intelligence Agency National Security Agency

Central Intelligence Agency/CNC

Department of State

U.S. Coast Guard

DEA Headquarters DEA Field Offices DEA Laboratories

El Paso Intelligence Center Financial Crimes Enforcement Network National Drug Intelligence Center

International Association of Chiefs of Police (Narcotics Committee)
National Alliance of State Drug Enforcement Agencies
National Sheriffs' Association

