

July 2013

Methamphetamine Profiling Program

Executive Summary for the Second Quarter of CY 2013

The information presented in this report is derived from samples analyzed as part of the Methamphetamine Profiling Program (MPP) during the 2nd quarter of CY 2013 (2Q-2013), and is not representative of all methamphetamine samples submitted to the DEA Laboratory System. Detailed information is contained in the body of this report. All prior MPP reports may be accessed at:

http://intranet/sites/sf/Pages/publications.aspx

<u>Methamphetamine Hydrochloride Purity (% by weight)</u> <u>Information</u>

- Overall average purity for 2Q-2013 was 95.2% (536 samples for the Domestic and Mexico Regions). These samples represented 1.37 metric tons of seized methamphetamine.
- Overall average potency for 2Q-2013 was 93.0%, 2.2% lower than the overall average purity. Overall average potency was the same as the previous quarter. However, the disparity between purity and potency of 2.2% was determined to be a record low, since it was first quarterly reported in 1Q-2011.
- Overall average purity for samples obtained from small seizures for the Domestic and Mexico Regions (6 g to 100 g) was 91.7% (70 samples). This category attempts to represent the range of seizure amounts from street level (6 g) to amounts approaching distribution levels (100 g).
- Overall average purity for samples obtained from medium-sized seizures for the Domestic and Mexico, Regions (101 g to 999 g) was 94.1% (91 samples). This represents the average purity for distribution level methamphetamine with a seizure weight ranging from approximately 1/4 pound up to 2.2 pounds (1000 g).
- Overall average purity for the samples obtained from large seizures for the Domestic and Mexico Regions (1000 g to 4000 g) was 97.8% (55 samples). This represents the average purity for wholesale methamphetamine with a seizure weight from 2.2 pounds up to 8.6 pounds.
- Overall average purity for samples obtained from bulk seizures for the Domestic and Mexico Regions (seizures > 4000 g) was 97.0% (320 samples). This For Official Use Only

category primarily consists of multiple exhibit samples (3 samples submitted from seizures over 4000 g).

- The Mexico Region overall average purity was 97.3%, while the overall average potency was only 95.0%.
- Liquid methamphetamine trends from samples analyzed from 1Q-2011 to 2Q-2013 were summarized in the **Featured Topic Section**.

Isomer Determination Information

- 84% of the samples analyzed were the more potent *dextro* (*d*) isomer of methamphetamine. The same percentage as the previous quarter.
- No samples analyzed were the less potent racemic (*d*,*l*) methamphetamine.
- 14% of the samples contained an unequal mixture of *d*- with *l*- isomers (*d*-isomer as the majority).
- 1% of the samples contained an unequal mixture of *I*-with *d* isomers (*I*-isomer as the majority).
- 1% of the samples analyzed were the much less potent *levo (I)* isomer of methamphetamine.

Cutting Agents and Precursor Material

- 16% of the submissions contained dimethylsulfone (DMS), a 1% decrease from the previous quarter.
- The overall average DMS purity was 14.4%, a 3.6% increase from the previous quarter.

Synthetic Methamphetamine Production Routes

- Reductive amination production starting from Phenyl-2-Propanone (P2P) was identified for 91% of the samples, a 4% decrease from the previous quarter.
- The phosphorus-iodine method was identified in approximately 1% of the samples.
- Samples placed in the mixed synthetic route category, a combination of methamphetamine produced by two or more synthetic methods, accounted for only 1% of the submissions.

The synthetic route was assigned as Unknown for 6% of the samples due to the lack of sufficient amounts of key impurities necessary to assign a synthetic method used for production. This was a 4% increase from the previous quarter. Approximately half of the unknown samples had pseudoephedrine or ephedrine precursor characteristics, which suggests a slight uptick in their usage as precursors.

Introduction

The MPP conducts an in-depth chemical analysis of selected methamphetamine samples to establish trends associated with the manufacture of methamphetamine mainly seized in the United States, to track purity and other related trends, and to establish the method(s) of manufacture used to produce the samples.

The information obtained from the MPP is derived from samples obtained and analyzed from a sampling plan first established in 1998, modified in the 4Q-2003 and 4Q-2008, and most recently updated in the 1Q-2011. The current sampling plan was implemented in an attempt to obtain a noncomposited sample with continued distribution of sample submissions from each region, including samples representing small, medium, and largesized seizures. This sampling plan continues to use random number approach to select а methamphetamine samples from each DEA regional laboratory to be submitted for MPP analysis. This random selection ensures a steady flow of samples from each region regardless of seizure weight. This approach also allows for differentiating purity results by seizure weight. Purity trends representing small or street type seizures (6 g to 100 g), medium or distribution level seizures (101 g to 999 g), and large or wholesale type seizures (> 1000 g to 4000 g), will continue to be reported (See Page 4). Three samples from each seizure greater than 4000 g will be analyzed and placed in the bulk seizure category which is used to track intra-seizure data on very large seizures.

A selected domestic sample must be powdered or crystalline with a purity of at least 10% methamphetamine, amphetamine, or dimethylamphetamine, as determined by the DEA regional laboratories. All POE methamphetamine samples are submitted for analysis, and foreign methamphetamine samples are always accepted for analysis, as well.

The results presented in this report are only reflective of the MPP sampling plan, and are not representative of all methamphetamine samples submitted to the DEA laboratory system.

Results of Analysis – National Overview

Methamphetamine manufacturing and trafficking in the United States are regional in both characteristics and trends. To more accurately illustrate and track these patterns, the seizure locations are separated into 10 regions (Figure 1). The continental United States is into Region 1 (Northwest), divided Region 2 (Southwest), Region 3 (North Central), Region 4 (South Central), Region 5 (Northeast), and Region 6 (Southeast). Alaska is included in Region 1, while Hawaii and Guam are covered in Region 7 (Pacific). Because they border the U.S., Region 8 (Mexico) and Region 9 (Canada) are treated as their own regions. All U.S.-Mexico or U.S.-Canada border seizures are also placed in Regions 8 and 9, respectively. All other countries are covered under Region 10 (Foreign).

Figure 1: MPP Regional Map



2Q-2013 MPP RESULTS

This report details the results and conclusions derived from the analysis of 540 methamphetamine hydrochloride samples during the 2Q-2013 (Table 1). There were 314 samples from the 6 domestic regions, 217 samples from the Mexico Region (all from CA, AZ, and TX POE seizures) and 5 samples from the Pacific Region. There were 4 samples from the Foreign Region which consisted of samples seized in Afghanistan, The Philippines, and Liberia.

There were 320 samples placed in the bulk category for the quarter. Three MPP samples were removed from 103 different seizures. There were two samples taken from 2 additional seizures, and 7 single exhibit samples placed in the bulk category.

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Region	Total	S*	M*	L*	B*
Northwest	23	11	8	1	3
Southwest	173	18	22	11	122
North Central	17	6	2	0	9
South Central	56	6	5	6	39
Northeast	15	9	6	0	0
Southeast	30	13	6	4	7
Pacific	5	2	2	1	0
Mexico	217	5	40	32	140
Canada	0	0	0	0	0
Foreign	4	4	0	0	0
Totals	540	74	91	55	320

Table 1: Number of Methamphetamine SamplesAnalyzed for 2Q-2013

*S = Small Seizures (6 g to 100 g), M = Medium Seizures (101 g to 999 g), L = Large Seizures (1000 g to 4000 g), B = Bulk Seizures (> 4000 g).

Purity Levels

Overall methamphetamine purity levels continue to be extremely high, with an average purity of 95.2% for the 536 Domestic and Mexico Region samples analyzed. This was a 1.0% decrease from the previous quarter. These analyzed samples represented 1.37 metric tons of seized methamphetamine. Purity levels for small, medium, and large samples for the Domestic and Mexico Regions were 91.7%, 94.1%, and 97.8%, respectively. The overall average purity for the 320 bulk samples for the Domestic and Mexico Regions was 97.0%, a 0.5% decrease from the previous quarter. A summary of the overall average purity and regional purity for the Domestic and Mexico Regions for the 1Q-2013 is shown on page 4.

Two hundred seventeen samples representing the Mexico Region were obtained at POE locations along the California, Arizona, and Texas borders, with an average purity of 97.3%, a 0.7% decrease from the previous quarter (see synthetic route section for manufacturing results). This average purity result came from 0.57 metric tons of seized methamphetamine.

Potency Levels

Potency calculations were based on the assumption that the *d*-isomer only samples are 100% potent and *l*-isomer only samples are 0% potent. An unequal *d*- with *l*- sample or an *l*- with *d*- sample would have potency between 0% and 100%, depending on the amount of lower potency *l*-isomer present.

For this quarter, overall methamphetamine potency levels were calculated for all categories, with an overall average potency of 93.0%, the same average potency as the previous quarter and a 2.6% increase since 4Q-2012. This was also 2.2% lower than the reported overall average purity, and the lowest reported disparity (purity%–potency%) for a quarter since the calculation started in 2011. The narrowing overall disparity indicates that the unwanted *I*-isomer from the P2P process is routinely removed and not a significant part of the finished drug substance.

Potency levels for small, medium, large, and bulk samples for the Domestic and Mexico Regions were 89.5%, 90.3%, 97.5%, and 95.1%, respectively. A summary of the overall average potency and regional potency for the 2Q-2013 is shown on page 4.

Overall potency disparities (purity%-potency%) are for the most part still narrowing for the reported seizure categories. Potency disparities of 2.2%, 3.8%, 0.3% for small, medium, and large categories were measured for the Domestic and Mexico Regions compared to disparities of 2.6%, 4.8%, and 6.2% for small, medium, and large categories reported for the previous quarter. A 5.9% decrease in disparity for the large seizure category was noticed for the quarter, as compared to the previous quarter. The potency disparity of 1.9% for the bulk seizure in the Domestic and Mexico Regions was slightly more than than the previous quarter reported at a record low of 0.5%. The largest regional disparities were noticed in the small and medium seizure categories, with the largest disparity of 19.7% for the 5 medium category seizures for the South Central Region. For small seizures, other noticeable disparities were 5.0% and 3.1% for the Southeast and Northeast Regions, repectively, and 4.0% and 3.4% for medium seizures for the Mexcio and Southwest Regions, respectively. The 3 samples from one bulk seizure from the Northwest Region had a large disparity of 7.2%.

The Mexico Region had disparities for small, medium, large, and bulk samples of 0.1%, 4.0%, 0.1%, and 2.2%, respectively. The 2.2% disparity for the bulk Mexico Region samples is a slight increase from the very low 0.4% disparity reported in the previous quarter.

The 217 Mexico Region samples obtained from locations along the California, Arizona, and Texas borders had an average potency of 95.0%, 2.3% lower than the reported overall average purity for these samples. This purity versus potency difference was 2.0% for the previous quarter.

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2Q-2013 MPP Purity and Potency Results

Overall Average Purity: 95.2%

Overall Average Potency: 93.0%

Small Seizures (6 g - 100 g)

<u>Medium Seizures (101 g – 999 g)</u>

Average Purity for Small Seizures: 91.7%

Average Purity for Medium Seizures: 94.1%

Average Potency for Small Seizures: 89.5%

Average Potency for Medium Seizures: 90.3%

Region	Samples	Ave. Purity (%)	Ave. Potency (%)	Region	Samples	Ave. Purity (%)	Ave. Potency (%)
Northwest	11	96.1	94.7	Northwest	8	97.7	95.7
Southwest	18	93.6	90.9	Southwest	22	93.6	90.2
North Central	6	74.9	74.9	North Central	2	99.4	99.4
South Central	6	83.8	83.8	South Central	5	97.4	77.7
Northeast	9	94.8	91.7	Northeast	6	70.3	70.3
Southeast	13	91.1	86.1	Southeast	6	84.8	84.7
Pacific	2	96.4	96.4	Pacific	2	97.3	97.3
Mexico	5	99.1	99.0	Mexico	40	97.9	93.9

Large Seizures (1000 g - 4000 g)

Average Purity for Large Seizures: 97.8%

Average Potency for Large Seizures: 97.5%

Region	Samples	Ave. Purity (%)	Ave. Potency (%)
Northwest	1	83.7	83.3
Southwest	11	98.0	97.8
North Central	0	NA	NA
South Central	6	92.3	91.5
Northeast	0	NA	NA
Southeast	4	99.3	99.3
Pacific	1	99.0	98.7
Mexico	32	98.9	98.8

Bulk Seizures (>4000 g)

Average Purity for Bulk Seizures: 97.0%

Average Potency for Large Seizures: 95.1%

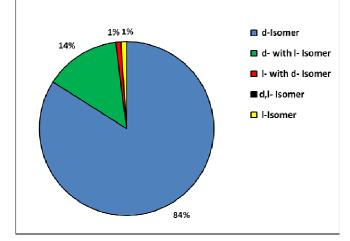
Region	Samples	Ave. Purity (%)	Ave. Potency (%)
Northwest	3	94.6	87.4
Southwest	122	98.2	96.1
North Central	9	98.8	97.5
South Central	39	98.9	97.5
Northeast	0	NA	NA
Southeast	7	99.1	98.2
Pacific	0	NA	NA
Mexico	140	95.3	93.1

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Isomer Content

Isomer results were obtained on all of the methamphetamine samples analyzed with 84% (448 samples) being *d*- isomer only (Figure 2). This same percentage as the previous quarter. There were no racemic (*d*,*l*) methamphetamine samples analyzed. The were 76 *d*- with *l*- unequal ratio isomer samples (14%) and 5 *l*- with *d*- unequal ratio isomer samples (1%). There were 7 *l*- isomer only samples (1%) analyzed which is the same percentage as the previous quarter. The *l*-isomer only samples have almost disappeared from a high of 13% reported in the 3Q-2011.

Figure 2: Isomer Results for the 2Q-2013



Adulterants and Diluents (Cutting Agents)

For this reporting period, 85 out of 536 domestic and Mexico Region methamphetamine samples (16%) were cut with dimethylsulfone (DMS), with purities ranging from trace levels to 89.0% for a sample from Pennsylvania. The overall average DMS purity was 14.4%. This is a 3.6% increase from the previous quarter. The influence of DMS as a cutting agent on the MPP regions is shown below in Table 2. The average DMS purity calculations include average values from multiple samples from bulk seized exhibits.

There were 15 samples from 10 seizures at the US-Mexico border that contained DMS, all seized at the California-Mexico border, with an average DMS purity of 10.2%. This included 6 samples from 4 seizures at a CA-POE location with average DMS purity of 3.9%, 8 samples from 5 seizures at a AZ-POE location with average DMS purity of 20.7%, and 1 sample from a TX-POE location with trace levels of DMS. San Ysidro with average DMS purity of 13.7%. All 6 samples from For Official Use Only the AZ-POE category came from the San Luis border crossing. The high average DMS purity for these San Luis samples were attributed to 1 bulk 8.9 kg nonhomogenous seizure, where the samples contained 83.8%, 74.4%, and 55.4% DMS, respectively. There were 5 samples from 2 bulk seizures (8.6 kg and 4.1 kg) from Glendale, AZ that all contained lidocaine, with an average lidocaine purity of 3.9%. One other sample from the 4.1 kg seizure was uncut with a methamphetamine purity of 99.3% indicating a nonhomogenous seizure. These were unusual seizures that contained forensic evidence that indicated they were produced by a pseudoephedrine or ephedrine precursor, but both were assigned with unknown synthetic route calls. There was 1 sample from Kalispell, MT that contained 3.1% mannitol, and 1 sample from Carrollton, IL that contained a mix cut of 32.2% DMS and 1.1% caffeine. There were no other cutting agents detected during the quarter.

Region Samples containing DMS		Avg. DMS Purity (%)	Max. Observed DMS Purity (%)
Northwest	9	4.5	13.8
Southwest	33	9.4	45.4
North Central	8	24.2	46.0
South Central	5	19.8	49.1
Northeast	6	34.5	89.0
Southeast	7	26.8	52.6
Pacific	2	4.0	7.0
Mexico	15	10.2	83.8
Overall	85	14.4	89.0

Table 2: DMS Results for 2Q-2013

Tablet Precursors and Co-ingredients

The crude isolation procedures used in clandestine laboratories to extract *l*-ephedrine or *d*-pseudoephedrine from multi-component tablets and capsules usually co-extract some of the other active ingredients in those preparations, and the active ingredients are often carried through to the final methamphetamine product. Many analyzed samples contain detectable amounts of one or more of the following antihistamine ingredients: brompheniramine, chlorpheniramine, triprolidine, loratadine,

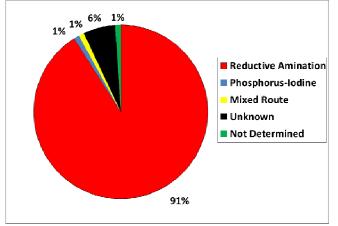
carbinoxamine, and/or their respective reaction by-products.

Due to the continued increase of P2P-produced methamphetamine for this reporting period, only 4 samples analyzed (<1%) contained tablet coingredient impurities. Three samples from seizures in CA, PA, TX were all assigned as mixed route samples that contained chlorpheniramine, loratadine, and triprolidine, respectively. One sample from Wrightstown, NJ was a clear pseudoephedrine or ephedrine-based sample made from a phosphorusiodine route. This sample contained evidence of loratadine commonly present in tablet formulations.

Synthetic Route Determination

The analytical protocol adopted by the MPP has resulted in a high percentage of samples that can be associated with a specific synthetic route of manufacture. Synthetic route assignments were made on all of the methamphetamine samples submitted for analysis. The results for the 2Q-2013 are shown in Figure 3.

Figure 3: Synthetic Route Determination Results for 2Q-2013



Methamphetamine produced by the reductive amination method is normally a racemic mixture and is prepared using P2P as the starting material. For this reporting period, reductive amination samples again dominated the data set at 91% (490 samples).

The phosphorus-iodine method, which is comprised of ephedrine and pseudoephedrine reactions using red phosphorus and iodine, hypophosphorous acid and iodine, or red phosphorus and hydriodic acid, accounted for approximately 1% of the samples analyzed for this reporting period (3 samples).

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There were 7 mixed route samples (1%) that were either samples with small amounts of reductive amination material mixed into the main phosphorus-iodine produced sample or samples with small amounts of phosphorus-iodine material mixed into the main reductive amination produced sample. There were no Birch reduction samples analyzed. There were 31 unknown synthetic route samples (6%), a 4% increase from the previous quarter. Sixteen or 52% of the 31 unknown calls appeared to be pseudoephedrine or ephedrine-based methamphetamine, but a synthetic route could not be determined for thes samples. The other half of the unknown samples showed unusual profiles, some with P2P characteristics, but they could not be placed in any category. There were also 4 other samples that had insufficient amounts of material to determine a synthetic route. There was one additional liquid sample from Laredo, TX where the synthetic route was not determined.

For the 217 Mexico Region samples, 88.9% were reductive amination (P2P) samples and 7.3% were unknown samples. There were only 4 mixed route samples (1.8%), and 3 samples where a synthetic route was not determined. There was 1 sample from a 7.5 kg seizure from San Luis, AZ-POE that was produced from a phosphorus-iodine method.

Foreign Region Section

There were 4 methamphetamine HCl samples analyzed from Afghanistan, The Philippines, and Liberia. The 99.0% d- isomer (with trace I- isomer) sample from The Philippines was made from a pseudoephedrine or ephedrine source, and contained an unusual organic impurity profile assigned as an unknown. This profile matched the sample from Taiwan discussed in the previous report, and also appears similar to the forensic profiles for the samples from Liberia shown in Table 3. The sample from Afghanistan was completely different than the other 3 mentioned samples. This was a 99.9% pure d- isomer only sample also made from a pseudoephedrine or ephedrine source, but the synthetic route was unknown due to an unusual set of impurities either linked to a phosphorus-iodine method or the metal hydrogenation method or a combination of both as a mixed route.

Table 3: Foreign Region Forensic Results

Country	Exhibits Analyzed	Purity (%)	Potency (%)	Synthetic Route
Afghanistan	1	99.9	99.9	UNK
Philippines	1	99.0	99.0	UNK
Liberia	1	98.4	97.7	UNK
Liberia	1	96.8	96.8	UNK

UNK: Unknown

Featured Topic Section

The number of liquid methamphetamine seizures has increased in recent years, due to the increased supply of methamphetamine, and the need to find alternative smuggling methods. The liquid form of methamphetamine HCI offers additional concealment opportunities that can increase the probability that the drug shipment will elude law enforcement. Тο illustrate the increase in recent liquid methamphetmiane seizures, STRIDE results showing the number of liquid samples analyzed by the DEA laboratory system from 2005 to 2013 are shown in Table 4. The number of liquid samples entering the DEA laboratory system has surged since 2005, with a noticeable increase starting around 2010. The increase in numbers also translates to a increase in the amount of calculated pure methamphetamine available from these liquid samples. This trend is very apparent now only half way through 2013, where the number of liquid methamphetamine samples analzyed and the amount of available pure methamphetamine has already surpassed 2012 levels.

Table 4: Liquid Sample Analyzed (2005 to 2013)	Table 4:	Liquid	Sample	Analyz	ed (2005	to 2013))
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Year	Liquid Samples	Amount of Pure Meth
	Analyzed	(kg)
2005	14	3.7
2006	6	0.5
2007	7	3.3
2008	6	0.08
2009	16	3.1
2010	20	10.7
2011	61	45.4
2012	66	45.1
2013 (to date)	72	52.4

The concealment opportunities are endless when considering different liquid packaging possibilities. Examples of packaging for 6 featured liquid methamphetamine seizures from 2011 to 2013 (Table 5) included: Liquid found in the windshield washer fluid reservoir inside a car (seizure 1), liquid concealed in Dole cans found in a car (seizure 2), liquid found in Arizona Ice Tea, Tree Top apple juice, and water bottles (seizure 3), liquid found in tequila bottles (seizure 4), liquid found in plastic bottles located in luggage (seizure 5), and liquid found in apparently an unmarked plastic container (seizure 6).

iquid Seizure eizure Location		Color of Clear Liquid	Samples Analyzed
Otay Mesa, CA	4/2011	Tan	1
Calexico, CA	8/2011	L. Brown	1
McAllen, TX	9/2011	Brown	1
Cottage Grove, OR	4/2012	Amber	3
Hildalgo, TX	2/2013	Yellow	1
Laredo, TX	5/2013	Amber	1
			8
	Location Otay Mesa, CA Calexico, CA McAllen, TX Cottage Grove, OR Hildalgo, TX	Location Analyzed Otay Mesa, CA 4/2011 Calexico, CA 8/2011 McAllen, TX 9/2011 Cottage Grove, OR 4/2012 Hildalgo, TX 2/2013 Laredo, TX 5/2013	Seizure LocationDate AnalyzedClear LiquidOtay Mesa, CA4/2011TanCalexico, CA8/2011L. BrownMcAllen, TX9/2011BrownCottage Grove, OR4/2012AmberHildalgo, TX2/2013YellowLaredo, TX5/2013Amber

Table 5: Liquid Sample Summary (2011 to 2013)

*DEA-Southwest Lab Results **DEA-South Central Lab Results

Forensic results shown for seizures 1, 4, 5, and 6 were produced by the MPP group, while results from seizures 2 and 3 came from DEA field laboratories, with the results showing consistency ranging over a 2 year time period (Tables 5, 6, and 7). With the exception of seizure 4 being seized in Oregon, the other 5 seizures occurred on or near the Mexico border in Texas and California. The liquids from all 6 seizures were clear with colors ranging from yellow to light brown or tan to a darker amber color (Table 5). Water was used as the liquid medium for all the seizures, except for seizure 4, where ethanol was used to dissolve the methamphetamine in tequila bottles (Table 6), and in all the form was determined to be the cases, methamphetamine HCI salt, not the possible liquid methamphetamine base. The predominant d-isomer results, coupled with the P2P-based synthetic route assignments for seizures 1, 4, and 6, indicates that the these liquid samples have similar profiles to crystalline samples for the time period of 2011 to 2013.

The average purity of each liquid was remarkably similar with the average methamphetamine purity of the 6 seizures at 55.5%, with total volumes ranging from approximately 2L up to approximately 23L (Table 7). These purity results translated to similar calculated concentrations ranging from 0.5 kg/L to 0.6 kg/L which indicates very concentrated liquid solutions that can easily precipitate product with minimal removal of liquid.

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Once these concentrated liquids are moved to recovery laboratories located in the United States, they are easily transformed into final products using metal pots, heat, acetone, and the proper amount of time to produce large lce-like crystals. In summary from Table 7, for every 1L bottle seized, approximately 0.56 kg (1.2 lbs) of methamphetamine HCl is available for recovery.

Liquid Seizures	Liquid Medium	Meth Form	lsomer Results	Syn. Route
1	Water	HCI	d	RA
2	Water	HCI	ND	ND
3	Water	HCI	ND	ND
4	EtOH	HCI	d	RA
5	Water	HCI	d with l	RA
6	Water	HCI	d with l	ND

Table 6: Liquid Sample Summary (Continued)

EtOH: Ethanol

RA: Reductive Amination using P2P

ND: Not Determined

Table 7: Liquid Sample Summary (Continued)

Liquid Seizure	Avg. Purity (%)	Total Volume Seized (L)	Ave. Calculated Concentration (kg/L)	Calculated Meth Weight (kg)
1	51.8	4.37	0.535	2.3
2	58.2	12.84	0.608	7.8
3	55.6	23.08	0.580	13.3
4	53.3	22.53	0.545	12.2
5	57.9	1.91	0.608	1.1
6	58.4	2.40	0.576	1.3
Overall	55.5	67.13	0.568	38.0