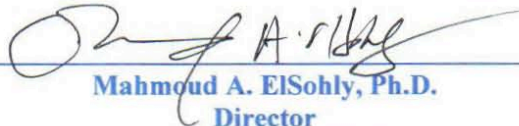


**QUARTERLY REPORT**  
**POTENCY MONITORING PROJECT**  
**REPORT 104**  
*December 16, 2008 thru March 15, 2009*

**National Institute on Drug Abuse**  
**Contract Number:**  
**N01DA-5-7746**



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**Mahmoud A. ElSohly, Ph.D.**  
**Director**  
**NIDA Marijuana Project**

**National Center for Natural Products Research**  
**a Division of the Research Institute of Pharmaceutical Sciences**  
**The School of Pharmacy**  
**University of Mississippi**  
**University, Mississippi 38677**

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## SUMMARY

As of March 15, 2009, the Project has analyzed and compiled data on 65,247 Cannabis, 1365 Hashish, and 476 Hash Oil samples. Thirty-three percent (33%) of the cannabis samples are from domestic seizures representing all fifty (50) states. The highest concentration of  $\Delta^9$ -THC found in a cannabis (marijuana) sample is thirty-seven and twenty hundredths percent (37.20%) from Southwestern Regional Laboratory (Vista, CA) of the Drug Enforcement Administration. The highest sample this quarter is twenty seven and thirty hundredths percent (27.30%) also from the Western Regional Laboratory (San Francisco, CA).

During this report period, samples from all Drug Enforcement Administration Regional Laboratories were analyzed with non-normalized THC concentrations of *Cannabis* ranging from 0.11% THC to 27.30% THC. The highest THC sample was from Western Regional Laboratory (San Francisco, CA). The number of domestic seizures for this report period was two hundred ten (210) of the seven hundred eighty-eight (788) *Cannabis* samples submitted.

For data collected prior to 1995, the designation of ditchweed is based on  $<1\%$  THC and  $\text{CBD} > \text{THC}$ . *Table 13* shows a list of ditchweed samples with  $\text{THC} > 1\%$ , but meeting the criteria based on  $\text{CBD} > \text{THC}$ . In addition, the frequency of seizures with THC levels exceeding 3%, 5% and 9% is shown in *Table 1* for the years 1989 to present. We will continue to update and revise the report to provide the most useful information.

## INTRODUCTION

As of March 15, 2009, samples from 67,088 seizures of cannabis (marijuana), hashish and hash oil have been analyzed. Of these 65,247 were marijuana, 1365 were hashish, and 476 were hash oil. Composite analytical data on these samples show the following:

**% of Dry Weight of Delta-9 THC  
In All Domestic and Non-Domestic Samples Analyzed by the Project  
As of March 15, 2009**

		# of samples	Arithmetic average	Highest concentration	Lowest concentration
All samples	Cannabis	65247	4.68	37.20	.00
	Hashish	1365	7.07	66.33	.01
	Hash Oil	476	16.57	81.70	.01
Domestic	Cannabis	21609	3.36	33.12	.00
	Hashish	10	12.14	52.87	.16
	Hash Oil	5	17.41	31.65	.21
Not domestic	Cannabis	43638	5.33	37.20	.01
	Hashish	1355	7.03	66.33	.01
	Hash Oil	471	16.56	81.70	.01

For this report period *December 16, 2008 through March 15, 2009*, samples from seizures have been analyzed, which are:

- 788 Cannabis
- 28 Hash
- 2 Hash Oil

Composite analytical data on the samples analyzed during this quarter are as follows:  
Cannabis plant material, categorized by physical description of the samples, showing the high and low  $\Delta^9$ -THC concentration is as follows

**% of Dry Weight of Delta-9 THC  
In All Domestic and Non-Domestic Samples Analyzed by the Project  
Between December 16, 2008 to March 15, 2009**

		# of samples	Arithmetic average	Highest concentration	Lowest concentration
All samples	Cannabis	788	8.52	27.30	.11
	Hashish	28	20.76	61.26	.72
	Hash Oil	2	15.64	18.43	12.85
Domestic	Cannabis	210	5.62	22.04	.11
	Hashish	1	44.11	44.11	44.11
Not domestic	Cannabis	578	9.57	27.30	.12
	Hashish	27	19.89	61.26	.72
	Hash Oil	2	15.64	18.43	12.85

**% of Dry Weight of Delta-9 THC  
In All Domestic and Non-Domestic Cannabis Samples Analyzed by the Project  
As of March 15, 2009**

		# of samples	Arithmetic average	Highest concentration	Lowest concentration
Ditch weed	Buds	455	.35	1.31	.01
	Kilobricks	24	.48	.95	.01
	Loose leaf	624	.40	2.40	.00
Marijuana	Loose other	1518	.36	1.17	.01
	Buds	8284	6.73	37.20	.01
	Kilobricks	15786	4.28	19.33	.02
	Loose leaf	7403	2.43	19.53	.01
	Loose other	23002	3.25	26.80	.01
	ST	3	2.42	2.76	2.13
	Thai Sticks	2	4.98	6.69	3.27
	UK	3	6.57	10.37	4.25
	Sinsemilla	Buds	8018	10.92	33.12
Loose leaf		45	4.12	22.32	.63
Loose other		32	9.39	18.16	.64
Thai Sticks	Thai Sticks	39	3.70	8.92	.05

**% of Dry Weight of Delta-9 THC  
In All Domestic and Non-Domestic Cannabis Samples Analyzed by the Project  
Between December 16, 2008 to March 15, 2009**

		# of samples	Arithmetic average	Highest concentration	Lowest concentration
Ditch weed	Buds	6	.26	.75	.11
	Loose leaf	4	.84	.94	.69
	Loose other	1	.17	.17	.17
Marijuana	Buds	160	6.89	19.48	.24
	Kilobricks	78	6.46	19.33	1.51
	Loose leaf	100	2.04	12.85	.11
	Loose other	19	8.44	19.11	1.34
Sinsemilla	Buds	414	11.32	27.30	.82
	Loose leaf	1	1.83	1.83	1.83
	Loose other	5	9.57	14.76	7.09

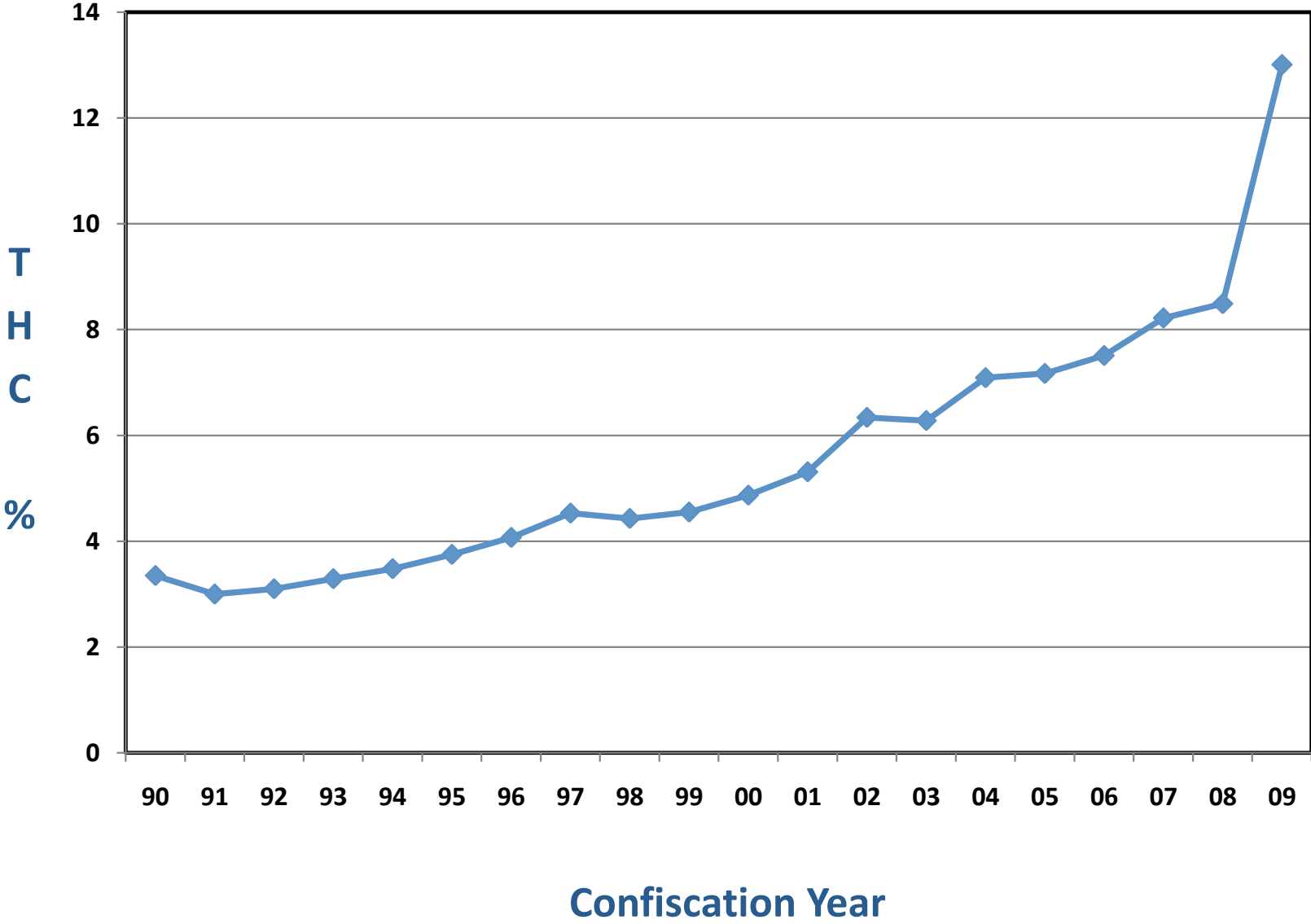
**Table 1. Prevalence of High Potency Marijuana (1989 - Current Report)  
Between December 16, 2008 to March 15, 2009**

		THC Level							
		less than 3%		3.0% - 4.9%		5.0% - 8.9%		9.0% or higher	
		n	%	n	%	n	%	n	%
Year	1989	669	1.2%	402	.7%	178	.3%	23	.0%
	1990	679	1.3%	350	.6%	169	.3%	65	.1%
	1991	1524	2.8%	639	1.2%	240	.4%	104	.2%
	1992	2133	3.9%	952	1.8%	349	.6%	106	.2%
	1993	1777	3.3%	1069	2.0%	386	.7%	124	.2%
	1994	1532	2.8%	1137	2.1%	511	.9%	104	.2%
	1995	1763	3.3%	2093	3.9%	784	1.4%	119	.2%
	1996	931	1.7%	843	1.6%	524	1.0%	137	.3%
	1997	874	1.6%	792	1.5%	564	1.0%	224	.4%
	1998	889	1.6%	649	1.2%	524	1.0%	201	.4%
	1999	1103	2.0%	761	1.4%	487	.9%	307	.6%
	2000	1142	2.1%	839	1.6%	718	1.3%	415	.8%
	2001	865	1.6%	670	1.2%	749	1.4%	412	.8%
	2002	657	1.2%	527	1.0%	657	1.2%	551	1.0%
	2003	655	1.2%	607	1.1%	681	1.3%	554	1.0%
	2004	640	1.2%	494	.9%	733	1.4%	741	1.4%
	2005	712	1.3%	494	.9%	857	1.6%	889	1.6%
	2006	738	1.4%	431	.8%	747	1.4%	939	1.7%
	2007	655	1.2%	331	.6%	887	1.6%	1136	2.1%
	2008	501	.9%	212	.4%	567	1.0%	917	1.7%
	2009	0	.0%	0	.0%	0	.0%	2	.0%

**Table 2. Non-Normalized Cannabinoid Averages of Illicit Cannabis Samples by Year Seized**

		# of seizures	% Delta-9 THC	% CBD	% CBC	% CBN
Year	1975	156	.74	.03	.10	.54
	1976	206	.71	.00	.09	.37
	1977	239	.90	.09	.10	.43
	1978	132	1.37	.01	.12	.67
	1979	221	1.67	.02	.12	.24
	1980	153	2.06	.10	.14	.47
	1981	260	2.28	.35	.16	.38
	1982	487	3.05	.34	.19	.33
	1983	1229	3.23	.22	.16	.30
	1984	1119	3.29	.24	.17	.34
	1985	1612	2.82	.28	.14	.23
	1986	1556	2.30	.29	.15	.21
	1987	1700	2.93	.30	.17	.30
	1988	1822	3.29	.28	.15	.30
	1989	1272	3.06	.37	.14	.22
	1990	1263	3.35	.38	.18	.19
	1991	2507	3.00	.45	.19	.16
	1992	3540	3.10	.24	.20	.36
	1993	3356	3.29	.28	.17	.23
	1994	3284	3.48	.34	.21	.20
	1995	4759	3.75	.31	.20	.31
	1996	2435	4.07	.42	.23	.23
	1997	2454	4.53	.40	.25	.20
	1998	2263	4.43	.41	.22	.23
	1999	2658	4.55	.43	.21	.38
	2000	3114	4.87	.45	.21	.34
	2001	2696	5.31	.47	.23	.28
	2002	2392	6.34	.42	.24	.22
	2003	2497	6.28	.46	.24	.23
	2004	2608	7.09	.46	.25	.28
	2005	2952	7.17	.46	.27	.32
	2006	2855	7.51	.53	.25	.28
	2007	3009	8.22	.48	.25	.24
	2008	2197	8.49	.41	.26	.27
	2009	2	13.01	.06	.58	.22
	Total	65005	4.69	.37	.21	.27

**FIGURE 1: NON-NORMALIZED AVERAGE THC % VS. YEAR OF CONFISCATION**



**Table 3. Comparison of Non-normalized Delta-9 THC Concentrations  
in Different Forms by Year Confiscated 1985 - Present**

		Type of Cannabis				Physical Description							type
		Ditch weed	Marijuana	Sinsemilla	Thai Sticks	Buds	Kilobricks	Loose leaf	Loose other	ST	Thai Sticks	UK	Cannabis
Year	1985	.48	2.83	7.28	6.26	5.67	3.80	.	2.44	.	6.26	.	2.82
	1986	.31	2.37	8.43	3.73	6.16	2.98	.51	1.96	.	4.22	.	2.30
	1987	.34	2.96	7.93	4.45	5.45	3.32	.	2.59	.	4.45	.	2.93
	1988	.39	3.18	7.62	3.36	6.13	3.53	.	2.77	.	3.36	.	3.29
	1989	.29	3.04	6.95	.	4.82	3.85	.	2.49	.	.	.	3.06
	1990	.33	3.24	10.10	.12	6.27	3.76	.	2.78	.	.12	.	3.35
	1991	.31	3.09	10.53	.	5.42	3.11	.	2.27	.	.	.	3.00
	1992	.31	3.08	8.57	.	6.50	3.07	.	2.65	.	.	.	3.10
	1993	.37	3.38	5.77	.	5.81	3.63	.61	2.77	.	.	.	3.29
	1994	.38	3.50	7.49	.	6.10	3.77	1.20	2.94	.	.	.	3.48
	1995	.41	3.73	7.51	4.52	6.01	3.84	2.01	4.17	.	4.52	.	3.75
	1996	.38	3.87	9.23	.	6.94	4.44	2.26	4.28	.	.	.	4.07
	1997	.49	4.26	11.62	.	8.71	4.66	2.79	4.93	.	.	4.66	4.53
	1998	.39	4.22	12.33	.	8.40	4.66	2.41	4.47	.	.	.	4.43
	1999	.37	4.18	13.38	.	9.97	3.84	2.24	4.11	.	.	.	4.55
	2000	.35	4.67	12.80	.	9.33	4.40	2.31	4.71	.	3.27	.	4.87
	2001	.43	5.02	9.55	.	8.88	4.99	2.30	5.01	.	.	.	5.31
	2002	.40	5.11	11.36	.	8.03	5.07	2.25	5.50	.	.	.	6.34
	2003	.35	4.97	11.59	.	8.39	5.13	2.18	4.03	.	.	.	6.28
	2004	.38	5.38	11.91	.	9.19	5.41	2.16	4.60	2.56	.	.	7.09
	2005	.37	5.25	11.63	.	9.81	5.67	2.19	5.83	2.13	.	.	7.17
	2006	.30	5.58	11.20	.	9.73	6.03	2.30	4.91	.	.	.	7.51
	2007	.39	6.11	11.08	.	9.81	6.73	2.09	8.22	.	.	10.37	8.22
	2008	.43	5.81	11.46	.	10.14	6.85	1.82	7.57	.	.	.	8.49
	2009	.	.	13.01	.	13.01	.	.	.	.	.	.	13.01

NOTES:

(1) All figures are given as percent of dry weight.

(2) Data on ditchweed prior to 1995 are based on samples with <1% THC and with CBD>THC.

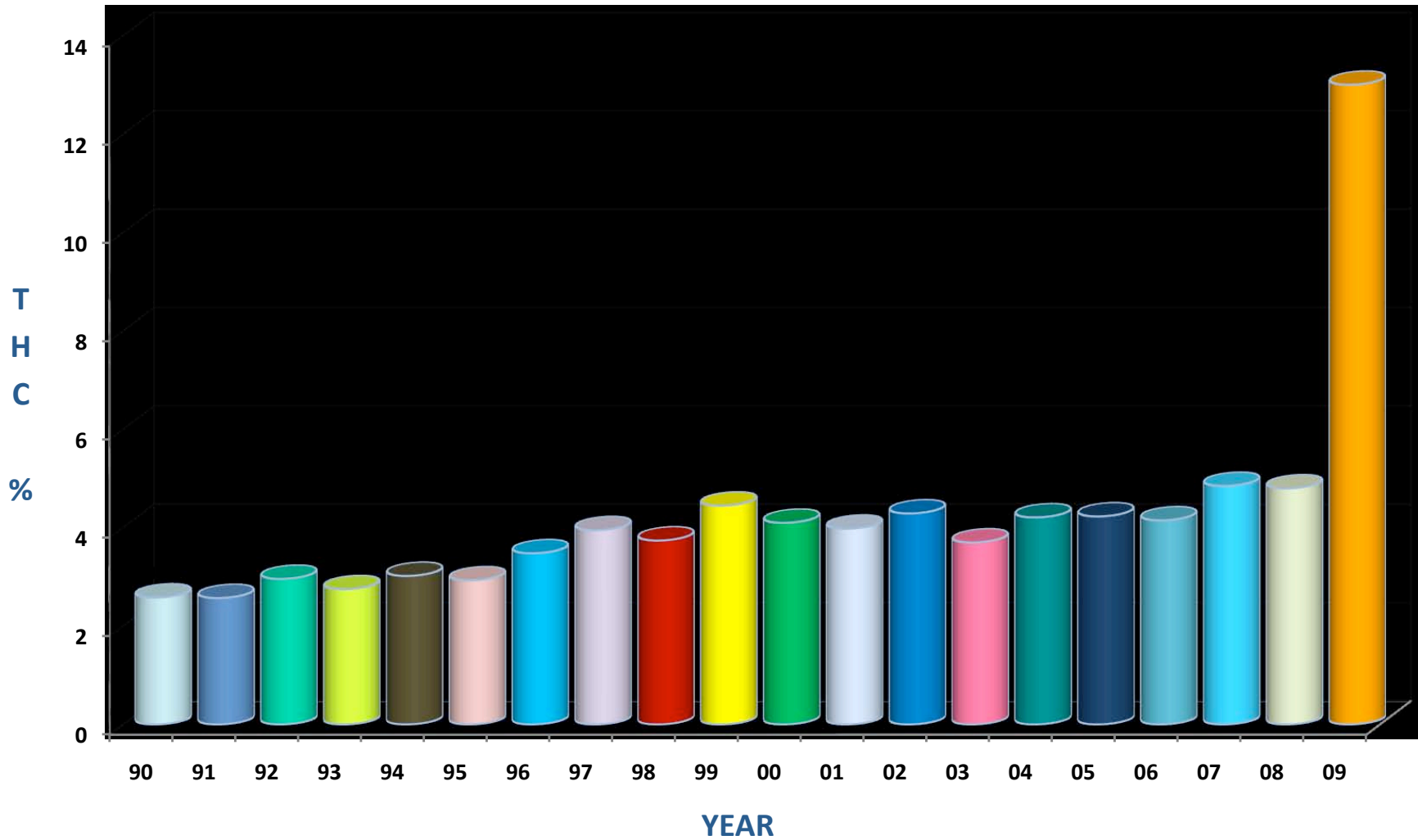
**Table 4. Non-normalized Delta-9 THC Averages of Illicit Cannabis Samples Analyzed Through March 15, 2009 by Year Seized and Source**

		Non-Domestic Samples		Domestic Samples		Yr/total	
		#	THC	#	THC	#	THC
yr_sz	<= 1976	203	.69	3	1.77	206	.71
	1977	232	.88	7	1.38	239	.90
	1978	114	1.22	18	2.32	132	1.37
	1979	212	1.59	9	3.50	221	1.67
	1980	80	1.40	73	2.78	153	2.06
	1981	179	2.57	81	1.64	260	2.28
	1982	343	3.39	144	2.22	487	3.05
	1983	823	3.82	406	2.02	1229	3.23
	1984	789	3.60	330	2.57	1119	3.29
	1985	767	3.48	845	2.22	1612	2.82
	1986	753	2.80	803	1.84	1556	2.30
	1987	1147	3.20	553	2.38	1700	2.93
	1988	1171	3.70	651	2.56	1822	3.29
	1989	761	3.78	511	2.00	1272	3.06
	1990	788	3.82	475	2.58	1263	3.35
	1991	1564	3.26	943	2.57	2507	3.00
	1992	2515	3.16	1025	2.96	3540	3.10
	1993	2010	3.65	1346	2.75	3356	3.29
	1994	2074	3.75	1210	3.02	3284	3.48
	1995	3762	3.96	997	2.93	4759	3.75
	1996	1405	4.50	1030	3.48	2435	4.07
	1997	1334	5.01	1120	3.95	2454	4.53
	1998	1342	4.91	921	3.74	2263	4.43
	1999	1828	4.59	830	4.45	2658	4.55
	2000	1930	5.34	1184	4.10	3114	4.87
	2001	1690	6.10	1006	3.98	2696	5.31
	2002	1690	7.20	702	4.29	2392	6.34
	2003	1871	7.14	626	3.70	2497	6.28
	2004	1916	8.13	692	4.21	2608	7.09
	2005	2295	8.01	657	4.23	2952	7.17
	2006	2080	8.76	775	4.15	2855	7.51
	2007	2127	9.61	882	4.85	3009	8.22
	2008	1544	10.05	653	4.80	2197	8.49
	2009	0	.	2	13.01	2	13.01
	Total	43339	5.37	21510	3.37	64849	4.70

NOTES:

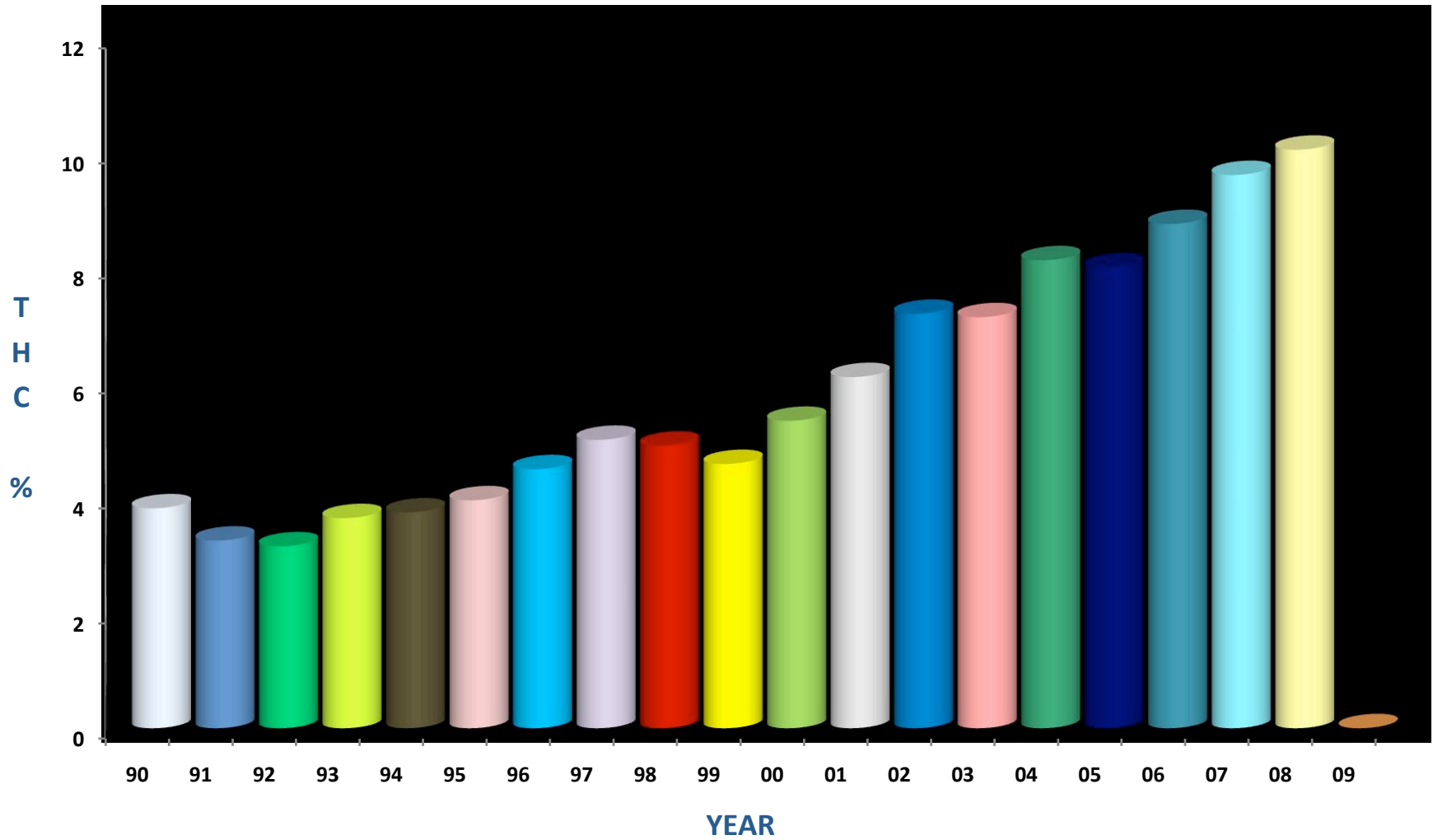
- (1) Potency Monitoring; designates those samples received through the DEA under the scope of the Potency Monitoring Program.
- (2) State Crime Labs; designates those samples received from state crime labs or other state agencies.
- (3) All figures are given as percent of dry weight.

**FIGURE 2: DOMESTIC CANNABIS THC% VS YEAR OF CONFISCATION**



(The number above the graph represents the number of seizures)

**FIGURE 3: NON-DOMESTIC CANNABIS THC%  
VS  
YEAR OF CONFISCATION**



(The number above the graph represents the number of seizures)

**Table 5. Domestic Cultivation  
Cannabis Samples Analyzed Through March 15, 2009**

		Domestic		Not domestic		TOTAL	
Yr. sz	0	.0%	0	100.0%	13	100.0%	13
	1967	50.0%	1	50.0%	1	100.0%	2
	1968	100.0%	1	.0%	0	100.0%	1
	1969	30.8%	4	69.2%	9	100.0%	13
	1970	67.9%	19	32.1%	9	100.0%	28
	1971	53.3%	8	46.7%	7	100.0%	15
	1972	61.8%	21	38.2%	13	100.0%	34
	1973	27.3%	9	72.7%	24	100.0%	33
	1974	20.4%	21	79.6%	82	100.0%	103
	1975	10.9%	17	89.1%	139	100.0%	156
	1976	1.5%	3	98.5%	203	100.0%	206
	1977	2.9%	7	97.1%	232	100.0%	239
	1978	13.6%	18	86.4%	114	100.0%	132
	1979	4.1%	9	95.9%	212	100.0%	221
	1980	47.7%	73	52.3%	80	100.0%	153
	1981	31.2%	81	68.8%	179	100.0%	260
	1982	29.6%	144	70.4%	343	100.0%	487
	1983	33.0%	406	67.0%	823	100.0%	1229
	1984	29.5%	330	70.5%	789	100.0%	1119
	1985	52.4%	845	47.6%	767	100.0%	1612
	1986	51.6%	803	48.4%	753	100.0%	1556
	1987	32.5%	553	67.5%	1147	100.0%	1700
	1988	35.7%	651	64.3%	1171	100.0%	1822
	1989	40.2%	511	59.8%	761	100.0%	1272
	1990	37.6%	475	62.4%	788	100.0%	1263
	1991	37.6%	943	62.4%	1564	100.0%	2507
	1992	29.0%	1025	71.0%	2515	100.0%	3540
	1993	40.1%	1346	59.9%	2010	100.0%	3356
	1994	36.8%	1210	63.2%	2074	100.0%	3284
	1995	20.9%	997	79.1%	3762	100.0%	4759
	1996	42.1%	1025	57.9%	1410	100.0%	2435
	1997	45.5%	1117	54.5%	1337	100.0%	2454
	1998	40.7%	920	59.3%	1343	100.0%	2263
	1999	31.3%	831	68.7%	1827	100.0%	2658
	2000	38.1%	1186	61.9%	1928	100.0%	3114
	2001	37.4%	1007	62.6%	1689	100.0%	2696
	2002	29.3%	701	70.7%	1691	100.0%	2392
	2003	25.0%	625	75.0%	1872	100.0%	2497
	2004	26.6%	694	73.4%	1914	100.0%	2608
	2005	22.3%	657	77.7%	2295	100.0%	2952
	2006	27.3%	778	72.7%	2077	100.0%	2855
	2007	29.3%	882	70.7%	2127	100.0%	3009
	2008	29.7%	653	70.3%	1544	100.0%	2197
	2009	100.0%	2	.0%	0	100.0%	2
	TOTAL	33.1%	21609	66.9%	43638	100.0%	65247

NOTES:

(1) "Domestic" includes only those samples known to be domestically cultivated.

In many case, this is unknown; therefore, these figures represent low estimates.

(2) Percentages given are of the number of Cannabis samples analyzed by the Project which were seized in the given year.

**Table 6. Arithmetic Cannabinoid Averages of Domestic Cannabis Samples  
by Year Seized**

	# of Seizures	% Delta-9 THC	% CBD	% CBC	% CBN
yr_sz 1975	17	1.99	.28	.14	.25
1976	3	1.77	.19	.09	.22
1977	7	1.38	.00	.11	.81
1978	18	2.32	.01	.11	.34
1979	9	3.50	.02	.17	.97
1980	73	2.78	.20	.14	.28
1981	81	1.64	.69	.13	.31
1982	144	2.22	.81	.15	.08
1983	406	2.02	.46	.14	.09
1984	330	2.57	.48	.20	.17
1985	845	2.22	.44	.15	.10
1986	803	1.84	.43	.16	.08
1987	553	2.38	.66	.20	.12
1988	651	2.56	.43	.14	.14
1989	511	2.00	.59	.12	.08
1990	475	2.58	.67	.19	.03
1991	943	2.57	.87	.21	.03
1992	1025	2.96	.45	.30	.03
1993	1346	2.75	.48	.20	.01
1994	1210	3.02	.50	.25	.02
1995	997	2.93	.41	.25	.03
1996	1025	3.48	.49	.27	.02
1997	1117	3.95	.40	.32	.03
1998	920	3.76	.40	.26	.02
1999	831	4.45	.46	.29	.02
2000	1186	4.10	.33	.26	.06
2001	1007	3.98	.32	.28	.07
2002	701	4.30	.31	.32	.08
2003	625	3.65	.41	.31	.04
2004	694	4.20	.29	.30	.07
2005	657	4.23	.32	.30	.06
2006	778	4.16	.61	.26	.08
2007	882	4.85	.44	.26	.06
2008	653	4.80	.46	.29	.06
2009	2	13.01	.06	.58	.22
TOTAL	21525	3.36	.46	.24	.06

**Table 7. Non-normalized THC Averages for Domestic Cannabis Samples  
by Year Seized and Description**

	Type of Cannabis						Physical Description								All samples	
	Ditch weed		Marijuana		Sinsemilla		Buds		Kilobricks		Loose leaf		Loose other			
		#		#		#		#		#		#		#		#
1985	.50	102	2.19	703	7.07	40	5.78	75	.	0	.	0	1.87	770	2.22	845
1986	.32	124	1.95	661	8.16	18	7.32	35	.	0	.51	1	1.59	767	1.84	803
1987	.34	86	2.46	441	7.69	26	6.08	51	.	0	.	0	2.00	502	2.38	553
1988	.40	69	2.20	513	7.33	69	5.97	121	.	0	.	0	1.78	530	2.56	651
1989	.29	104	1.71	350	6.86	57	4.22	126	.	0	.	0	1.27	385	2.00	511
1990	.33	78	2.09	352	10.29	45	6.20	105	2.18	1	.	0	1.55	369	2.58	475
1991	.31	246	2.90	651	10.10	46	5.26	258	.	0	.	0	1.56	685	2.57	943
1992	.31	107	3.05	875	7.72	43	6.98	137	5.47	2	.	0	2.33	886	2.96	1025
1993	.37	189	2.83	1039	5.82	118	5.69	253	3.73	1	.61	1	2.07	1091	2.75	1346
1994	.39	136	2.95	980	7.55	94	6.04	208	.	0	1.37	10	2.40	992	3.02	1210
1995	.41	149	2.55	701	7.26	147	5.75	239	4.07	1	2.02	742	2.86	15	2.93	997
1996	.37	115	2.90	763	8.92	147	6.87	269	3.44	2	2.27	740	2.57	14	3.48	1025
1997	.48	57	3.34	958	11.61	102	8.60	211	.88	2	2.81	887	6.20	17	3.95	1117
1998	.40	81	3.38	775	12.58	64	8.47	189	8.66	2	2.44	703	4.86	26	3.76	920
1999	.33	59	3.76	691	13.31	81	9.61	233	.	0	2.23	542	4.47	56	4.45	831
2000	.34	69	3.94	1066	12.71	51	8.40	318	6.05	1	2.33	809	5.29	58	4.10	1186
2001	.42	59	3.56	808	7.86	140	7.57	302	.	0	2.29	618	3.44	87	3.98	1007
2002	.41	67	3.28	408	7.29	226	5.21	495	.	0	1.87	194	5.95	12	4.30	701
2003	.35	57	2.35	377	7.21	191	4.93	380	4.03	1	1.65	242	2.32	2	3.65	625
2004	.37	53	2.55	395	7.67	246	5.68	422	.	0	1.87	270	5.76	2	4.20	694
2005	.34	52	2.25	354	7.81	251	6.65	332	.	0	1.70	321	6.03	4	4.23	657
2006	.28	49	1.99	363	6.83	366	5.93	464	6.22	2	1.51	308	2.18	4	4.16	778
2007	.35	40	1.92	340	7.20	502	6.61	575	.	0	1.57	307	.	0	4.85	882
2008	.44	26	1.79	284	7.62	343	6.91	395	.	0	1.42	254	10.11	4	4.80	653
2009	.	0	.	0	13.01	2	13.01	2	.	0	.	0	.	0	13.01	2

NOTE: Figures are percent of dry weight.

**Table 8. Non-normalized THC Averages for Non-Domestic Cannabis Samples  
by Year Seized and Description**

	Type of Cannabis								Physical Description												All samples				
	Ditch weed		Marijuana		Sinsemilla		Thai Sticks		Buds		Kilobricks		Loose leaf		Loose other		ST		Thai Sticks		UK				
		#		#		#		#		#		#		#		#		#		#		#		#	
1985	.30	9	3.44	745	7.95	12	6.26	1	5.57	83	3.80	73	.	0	3.15	610	.	0	6.26	1	.	0	3.48	767	
1986	.30	23	2.75	711	8.78	14	3.73	5	5.53	65	2.98	97	.	0	2.45	585	.	0	4.22	6	.	0	2.80	753	
1987	.35	17	3.16	1110	8.29	17	4.45	3	5.13	101	3.32	194	.	0	2.94	849	.	0	4.45	3	.	0	3.20	1147	
1988	.39	13	3.62	1127	8.30	29	3.36	2	6.28	129	3.53	139	.	0	3.36	901	.	0	3.36	2	.	0	3.70	1171	
1989	.30	7	3.68	725	7.13	29	.	0	5.31	156	3.85	54	.	0	3.34	551	.	0	.	0	.	0	3.78	761	
1990	.33	15	3.78	756	9.59	16	.12	1	6.37	73	3.78	110	.	0	3.53	604	.	0	.12	1	.	0	3.82	788	
1991	.35	37	3.18	1498	11.20	29	.	0	5.64	192	3.11	507	.	0	2.82	865	.	0	.	0	.	0	3.26	1564	
1992	.27	21	3.09	2461	9.67	33	.	0	6.09	160	3.07	1055	.	0	2.87	1300	.	0	.	0	.	0	3.16	2515	
1993	.35	11	3.67	1994	4.64	5	.	0	6.63	37	3.63	1011	.	0	3.56	962	.	0	.	0	.	0	3.65	2010	
1994	.32	12	3.76	2052	6.92	10	.	0	6.36	43	3.77	1203	.63	3	3.60	825	.	0	.	0	.	0	3.75	2074	
1995	.44	14	3.95	3729	9.64	17	4.52	2	7.81	34	3.84	2714	1.76	16	4.19	996	.	0	4.52	2	.	0	3.96	3762	
1996	.62	3	4.40	1385	11.30	22	.	0	7.16	83	4.44	633	2.10	26	4.31	668	.	0	.	0	.	0	4.50	1410	
1997	.57	3	4.92	1315	11.62	19	.	0	8.96	91	4.68	510	2.43	48	4.90	686	.	0	.	0	4.66	2	5.00	1337	
1998	.18	6	4.71	1300	11.88	37	.	0	8.33	165	4.65	476	2.17	62	4.45	640	.	0	.	0	.	0	4.89	1343	
1999	.56	13	4.34	1759	13.49	55	.	0	10.42	186	3.84	587	2.33	61	4.09	986	.	0	.	0	.	0	4.59	1827	
2000	.54	4	5.10	1862	12.87	62	.	0	10.40	276	4.40	624	1.93	48	4.67	977	.	0	3.27	1	.	0	5.34	1928	
2001	.53	4	5.77	1590	12.05	95	.	0	9.96	364	4.99	617	2.44	29	5.21	679	.	0	.	0	.	0	6.11	1689	
2002	.30	8	5.66	1381	14.41	302	.	0	9.83	779	5.07	693	3.11	86	5.46	133	.	0	.	0	.	0	7.19	1691	
2003	.34	9	5.63	1516	14.00	347	.	0	9.99	817	5.14	910	3.63	88	4.09	57	.	0	.	0	.	0	7.15	1872	
2004	.43	9	6.17	1420	14.06	485	.	0	10.60	1047	5.41	748	3.20	76	4.54	41	2.56	2	.	0	.	0	8.14	1914	
2005	.79	4	5.91	1610	13.04	681	.	0	10.72	1155	5.67	929	3.10	175	5.81	35	2.13	1	.	0	.	0	8.01	2295	
2006	.50	4	6.50	1407	13.60	666	.	0	11.21	1194	6.02	653	3.58	189	5.17	41	.	0	.	0	.	0	8.77	2077	
2007	.62	7	7.22	1295	13.44	825	.	0	11.02	1517	6.73	457	3.33	126	8.22	26	.	0	.	0	10.37	1	9.61	2127	
2008	.17	1	7.21	818	13.27	725	.	0	11.18	1218	6.85	199	2.95	90	7.29	37	.	0	.	0	.	0	10.05	1544	

NOTE: Figures are percent of dry weight.

**Table 9. Arithmetic Cannabinoid Averages of Hashish Samples  
by Year Seized**

	# of Seizures	% Delta-9 THC	% CBD	% CBC	% CBN
1975	88	2.31	2.60	.38	1.67
1976	51	3.34	3.28	.37	2.55
1977	44	1.81	2.94	.22	1.72
1978	51	2.15	4.03	.23	2.07
1979	43	2.32	5.45	.16	1.76
1980	37	2.58	7.58	.38	1.88
1981	13	2.91	6.51	.28	1.91
1982	32	2.69	6.73	.10	1.45
1983	47	5.47	6.15	.13	1.62
1984	59	5.75	3.25	.31	1.59
1985	41	6.49	2.30	.34	1.33
1986	53	2.66	1.10	.30	1.27
1987	63	2.62	1.63	.19	1.24
1988	43	3.35	2.22	.21	1.70
1989	19	7.06	5.08	.32	1.56
1990	38	5.30	4.90	.42	1.50
1991	31	5.21	3.58	.50	1.78
1992	61	5.35	2.97	.62	3.20
1993	39	6.60	3.78	.70	2.32
1994	29	4.60	3.53	.49	1.71
1995	19	3.60	3.34	.51	1.70
1996	12	2.52	4.54	.70	2.43
1997	31	8.92	3.98	.75	2.13
1998	15	5.87	1.73	.80	2.04
1999	23	4.94	1.79	.59	2.07
2000	27	4.16	4.90	.59	2.31
2001	13	8.48	2.72	.58	1.54
2002	16	9.12	2.49	.60	1.38
2003	16	9.23	3.92	.68	1.85
2004	25	18.95	.76	.74	1.42
2005	47	11.98	1.67	.86	1.91
2006	32	29.33	1.62	.69	1.34
2007	70	27.71	1.24	.81	1.87
2008	50	23.14	2.33	.93	2.20
TOTAL	1278	7.49	3.24	.46	1.83

**Table 10. Arithmetic Cannabinoid Averages of Hash Oil Samples  
by Year Seized**

		# of Seizures	% Delta-9 THC	% CBD	% CBC	% CBN
yr_sz	1975	29	13.09	6.71	.86	4.21
	1976	18	18.82	10.25	1.16	5.07
	1977	17	18.89	6.83	.57	4.98
	1978	9	21.31	6.06	1.39	5.07
	1979	9	20.91	.57	1.54	6.00
	1980	8	16.56	8.67	1.02	5.30
	1981	5	17.45	10.16	1.35	3.63
	1982	8	19.88	8.28	1.58	4.34
	1983	30	21.36	3.25	1.47	4.57
	1984	33	16.75	1.36	1.06	4.31
	1985	25	15.08	.42	.96	5.08
	1986	23	16.51	2.10	1.52	3.18
	1987	22	13.36	.30	.99	3.95
	1988	16	8.52	1.46	.65	2.22
	1989	9	11.96	1.59	.85	4.85
	1990	12	16.60	.86	.74	1.81
	1991	10	13.07	3.26	.95	2.25
	1992	22	13.85	1.05	1.35	4.19
	1993	17	16.52	.11	.73	7.71
	1994	14	11.57	.18	.64	3.08
	1995	13	13.23	.72	1.00	4.24
	1996	8	12.82	1.27	1.09	3.99
	1997	10	18.20	.28	1.05	3.51
	1998	5	15.78	.21	.78	3.58
	1999	11	16.21	.38	1.34	4.83
	2000	7	28.58	.51	1.57	1.65
	2001	7	19.44	1.32	1.20	4.36
	2002	5	22.51	.33	.54	1.69
	2003	4	15.54	.19	.80	1.32
	2004	4	31.32	1.12	1.14	2.20
	2005	6	6.40	.52	.22	1.38
	2006	3	18.74	.20	.43	.59
	2007	18	24.85	.80	.95	1.72
	2008	12	6.54	.32	.34	.84
	TOTAL	449	16.33	2.57	1.03	3.94

**Table 11. Delta-9 THC Averages For All Samples  
Provided by DEA Labs and Analyzed Through March 15, 2009**

		Cannabis		Hashish		Hash Oil		Yr/total	
		# of samp.	THC	# of samp.	THC	# of samp.	THC	# of samp.	THC
dea_lab	STRL	567	2.47%	278	4.19%	30	18.39%	875	3.56%
	NERL	3,801	6.74%	223	4.20%	63	18.57%	4,087	6.78%
	MARL	2,638	6.18%	39	6.59%	13	21.99%	2,690	6.26%
	SERL	5,843	4.72%	192	6.30%	229	15.14%	6,264	5.15%
	NCRL	5,632	5.67%	63	5.26%	25	18.21%	5,720	5.72%
	SCRL	6,631	3.69%	49	5.37%	19	14.35%	6,699	3.73%
	SWRL	13,494	4.92%	264	12.65%	40	9.41%	13,798	5.08%
	WRL	5,021	7.78%	247	8.18%	52	23.44%	5,320	7.95%
	Total	43,627	5.34%	1,355	7.03%	471	16.56%	45,453	5.50%

KEY:

STRL - Special Testing and Research Laboratory  
 NERL - Northeast Regional Laboratory  
 MARL - Mid-Atlantic Regional Laboratory  
 SERL - Southeast Regional Laboratory  
 NCRL - North Central Regional Laboratory  
 SCRL - South Central Regional Laboratory  
 SWRL - Southwest Regional Laboratory  
 WRL - Western Regional Laboratory

**Table 12. Delta-9 THC Averages For All Samples  
Provided by DEA Labs and Analyzed Between December 16, 2008 to March 15, 2009**

		Cannabis		Hashish		Hash Oil		Yr/total	
		# of samp.	THC	# of samp.	THC	# of samp.	THC	# of samp.	THC
dea_lab	STRL	0	.	9	8.13%	0	.	9	8.13%
	NERL	56	11.72%	0	.	0	.	56	11.72%
	MARL	34	8.51%	0	.	0	.	34	8.51%
	SERL	52	7.37%	0	.	0	.	52	7.37%
	NCRL	105	8.12%	1	4.81%	1	12.85%	107	8.14%
	SCRL	25	6.55%	0	.	0	.	25	6.55%
	SWRL	174	11.46%	7	30.10%	0	.	181	12.18%
	WRL	133	9.04%	10	24.84%	1	18.43%	144	10.20%
	Total	579	9.57%	27	19.89%	2	15.64%	608	10.05%

KEY:

STRL - Special Testing and Research Laboratory  
 NERL - Northeast Regional Laboratory  
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 WRL - Western Regional Laboratory

Table 13. List of Ditchweed Description PM Numbers  
with THC Concentration More Than 1%  
and CBD Higher than THC

		# of Seizures	% Delta-9 THC	% CBD
pm_number	28607	1	1.13	1.22
	28608	1	1.14	1.62
	28609	1	1.04	2.19
	28617	1	1.43	1.87
	29099	1	2.40	2.70
	29385	1	1.31	3.60
	29393	1	1.32	1.36
	29395	1	1.26	2.81
	32630	1	1.19	4.22
	32702	1	1.28	2.74
	33490	1	1.23	1.52
	33497	1	1.18	1.90
	34045	1	1.07	1.39
	36450	1	1.14	1.20
	47078	1	1.17	1.87
	TOTAL	15	1.29	2.15