Document Control No.: 4200-22-AHZJ

FINAL
SITE INSPECTION PRIORITIZATION REPORT
SPECTRUM FINISHING CORPORATION
BABYLON, SUFFOLK COUNTY, NEW YORK

CERCLIS I.D. No.: NYD044466910

OCTOBER 1998

Volume 2 of 3

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by:

ROY F. WESTON, INC.
Raritan Plaza III, Suite 2B
101 Fieldcrest Avenue
Edison, New Jersey 08837

W.O. No.: 04200-022-081-0132

355906

REFERENCE NO. 23

TOTAL ANALYTICAL SERVICES FOR A SAFE ENVIRONMENT

nytest environmental inc.

REPORT OF TESTS

Date: May 27, 1987

Lab. No.: 87-13417(B)

Client	Spectrum Finishing Corp.
Material	Five (5) Water Samples
Identification	See The Following Pages (Samples Received 4/30/87)
Client's Order No.	Pending
Submitted for	Chemical Analysis

(For Results, see the following pages)

CERTIFICATION

We certify that this report is a true report of results obtained from our tests of this material.

Respectfully submitted,

Nytest Environmental Inc.

Remo Gigante
Laboratory Director

To:

Spectrum Finishing Corp.
50 Dale St.
Babylon, N.Y. 11704
Att: Mr. W. DeChirico

jw

Report on sample(s) furnished by client applies to sample(s). Report on sample(s) obtained by us applies only to lot sampled. Information contained herein is not to be used for reproduction except by special permission. Sample(s) will be retained for thirty days maximum after date of report unless specifically requested otherwise by client. In the event that there are portions or parts of sample(s) remaining after Nytest has completed the required tests, Nytest shall have the option of returning such sample(s) to the client at the client's expense.

call box 1021 ▫ 75 urban avenue, westbury, n.y. 11590 ▫ (516) 334/7770, (718) 297/1449

Lab. No.: 87-13417(B)

Sample Identification	pH @ 20°C	Specific Conductance umhos/cm @ 20°C	Chloride (mg/l)	Cyanide (mg/l)
MW 1-DO	5.82	186	21	< 0.01
MW 2-SO	5.60	156	11	< 0.01
MW 1-SO	4.96	308	32	< 0.01
Trip Blank	6.01	4	< 1	< 0.01
Field Blank	5.90	4	< 1	< 0.01

< = Less than

Lab. No.: 87-13417(B)

Parameters	Sample ID.	Sample Results	Duplicate Results	RPD (%)
pH	MW-3 SO	5.64	5.65	0.1
Specific Conductance	Field Blank	4	4	0.0
Chloride	MW-1 DO	20	21	4.9
Cyanide	MW-4 SO	< 0.01	< 0.01	0.0

< = Less than

Lab. No.: 87-13417(B)

Parameters	Spiked Sample Results	Sample Results	Spiked Added	% R
Chloride	54	20	30	113.3
Cyanide	0.18	< 0.01	0.20	90.0

< = Less than

5/8/87 Project No. _____ Book No. _____ TITLE PH Elsinore

From Page No. _____

Date	Client	Lab #	Sample ID	PH	Sp. cond.	Color ed.
	Standards					
	PH 7			7.00		
	PH 4			4.01		
	PH 10			10.00		
	DI water			6.64		
4/30 5/1	Spectrum	87-13417	Trip blank	6.01		
			Field blank	5.90		
			MW-2 DO	6.06		
			MW-4 DO	5.78		
			MW-2-50	5.60		
			MW-1 DO	5.82		
			MW-3 DO	5.84		
			MW-150	4.96		
			MW-450	6.33		
			MW-350	5.64		
			MW-350 (Dupe)	5.65		

To Page No. _____

Witnessed & Understood by me,	Date	Invented by	Date
		Recorded by	

5/

SPECIFIC CONDUCTANCE

CLIENT	ID	DATE	LAB	Sp. Cond
Spectrum Finishing	SS1-MW1	4/29	87-13417	119
	SS1-MW3			146
	SS11-MW1			36
	SS11 MW2			18
	SS 11-MW3			19
	SS11-MW4			18
	SS5-MW1			21
	SS5-MW2			104
	SS5-MW3			32
	SS5-MW4			20
	SS5-MW4			21
	MW1-DO	4/30		156
	MW2-SC			156
	MW15-SO			308
	TRIP BLANK			4
	FIELD BLANK			4
	FIELD BLANK DUPLICATE			4
	MW2-DO	5/1		173
	MW 3-DO			166
	MW3-SC			125
	MW4-DO			166
	MW4-SC			500
	MW4-SC DUPLICATE			499

5/14/87

Project No. _____ Lachat #8705140

TITLE Chlorides Book No. _____ LeRoue 17

From Page No. _____

Rcd.	Client	Sample ID	Lab #	Dil	ppm
4-30	Spectrum Finishing	MW2-SO	87-13417	1:2	11
		MW4-SO		1:2	11
		MW3-SO		1:2	11
		MW3-DO		1:2	24
		Trip blank		1	<1
		MW2-DO		1:2	19
		MW4-DO		1:2	19
		Field Blank		1	<1
		~~MW1-SO~~		~~1:2~~	~~32~~
		MW1-DO		1:2	21
		Dup		1:2	20
		Spike (60 ppm) (1:2)		1	34
		Std (60 ppm)		1	64
		EPA (52 ppm)		1	55 pp
1	Town Brookhaven	73752-87	87-13348	1	8
		72827-11		1	23
		73760-65		1	47
		73751-56		1	30
		72132-55		1	6
		72820-40		1	34
		72819-20		1	320
		73750-26		1	86
		72828-31		1	33
		72823-8		1	25
		Dup		1	27
		Spike (60 ppm)		1	42
		Std (60 ppm)		1	58
5-1	Town Brookhaven	73955-61		1	92
		73761-80		1	131
-27	Town of Teaneck	070	87-13207	1	186

To Page No.

Invented by | Date

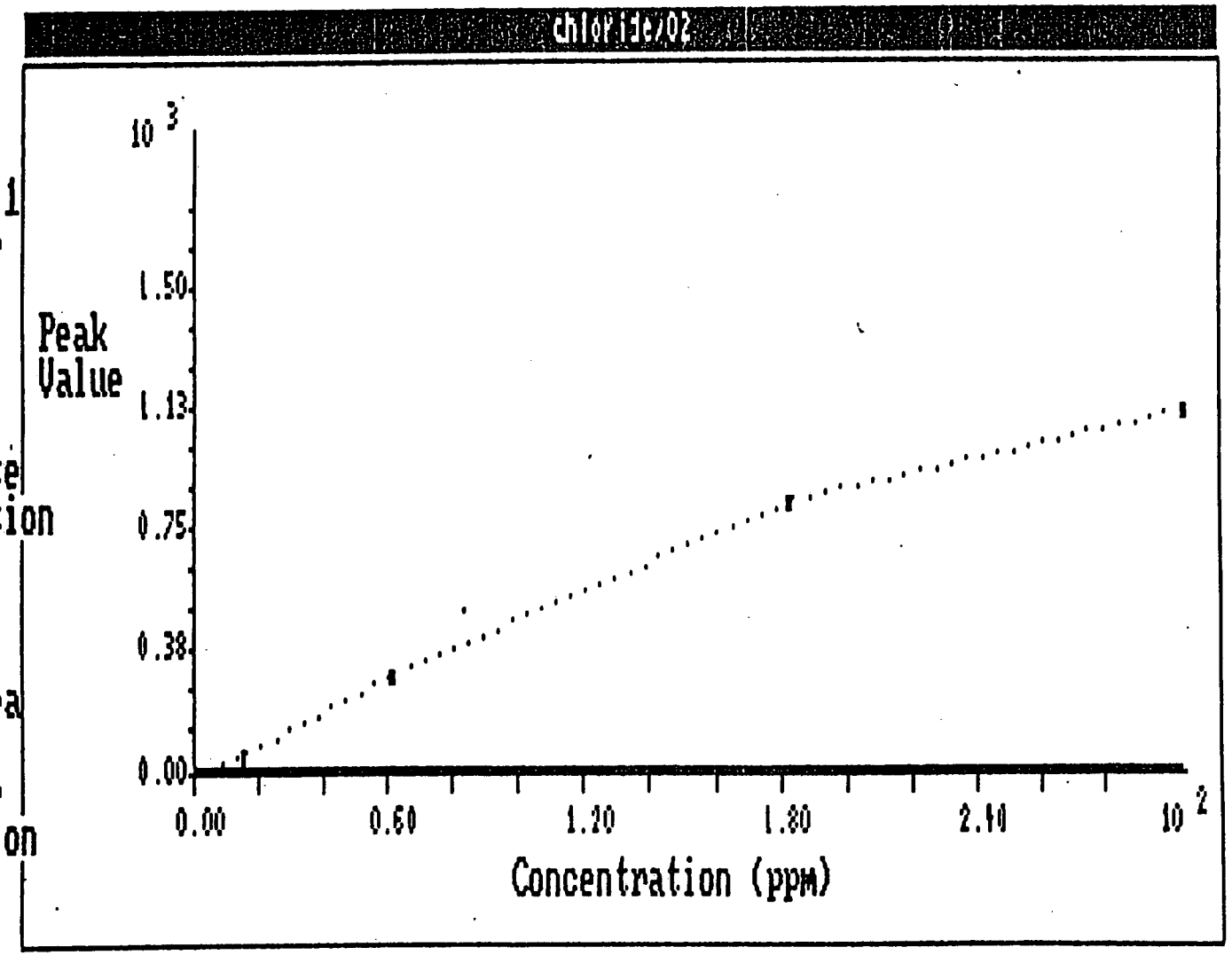
QuikCalc II Calibration

Channel 1
chloride

Piecewise
Calibration

using

Peak Area
with
Baseline
Correction



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10 dan 26 1 1.0000

TITLE CYANIDE Project No. P.7. TECHNICON
Book No. 5/16 27

From Page No.

RECD.	CLIENT	LAB	SAMPLE	DILUTIONS	RD. OUT	CONC
	S1	.4		corr = .99712	91.9	
	S2	.3			69.0	
	S3	.2			40.5	
	S4	.1			23.5	
	S5	.05			9.5	
① EPA [0.500]				1:2	58.4	.516
4/30	SPECTRUM	13417	MW-1	1:4	—	<.01
"	"	"	MW-2.50	1:4	—	<.01
"	"	"	MW-15-0	1:4	—	<.01
"	"	"	TRIP	1:4	—	<.01
"	"	"	FIELD	1:4	—	<.01
"	"	"	MW-2-DO	1:4	—	<.01
"	"	"	MW-3-DO	1:4	—	<.01
"	"	"	MW-3-50	1:4	—	<.01
"	"	"	MW-4-DO	1:4	—	<.01
"	"	"	MW-4-50	1:4	—	<.01
"	"	"	DUPE	1:4	—	<.01
"	"	"	SPIKE	1:4/.4	39.9	0.18
"	"	"	STANDARD [.4] ST.		90.9	0.399
② EPA				1:2	53.5	.473

To Page No.

Witnessed & Understood by me. Date SPK%R = 90% Invented by RPD = 0.0 Date

① EPA %R = 103.2

② EPA SLR = 94.6

Recorded by

NICON™ CHART NO. 011-0937-01

1980 by TECHNICON INSTRUMENTS CORPORATION TECHNICON™ CHART NO. 011-0937-01

TOTAL ANALYTICAL SERVICES FOR A SAFE ENVIRONMENT

nytest environmental inc.

REPORT OF TESTS

Date: May 27, 1987

Lab. No.: 87-13417(C)

Client	Spectrum Finishing Corp.
Material	Six (6) Water Samples
Identification	See The Following Pages (Samples Received 5/1/87)
Client's Order No.	Pending
Submitted for	Chemical Analysis

(For Results, see the following pages)

CERTIFICATION

We certify that this report is a true report of results obtained from our tests of this material.

Respectfully submitted,

Nytest Environmental Inc.

Remo Gigante
Laboratory Director

To:

Spectrum Finishing Corp.
50 Dale St.
Babylon, N.Y. 11704
Att: Mr. W. DeChirico

jw

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call box 1021 ▫ 75 urban avenue, westbury, n.y. 11590 ▫ (516) 334/7770, (718) 297/1449

Page: 2

Lab. No.: 87-13417(C)

Parameters	Sample ID.	Sample Results	Duplicate Results	RPD (%)
pH	MW-3 SO	5.64	5.65	0.1
Specific Conductance	MW-4 S	500	499	0.2
Chloride	MW-1 DO	20	21	4.9
Cyanide	MW-4 SO	< 0.01	< 0.01	0.0

< = Less than

Page: 3

Lab. No.: 87-13417(C)

Parameters	Spike Sample Results	Sample Results	Spiked Added	% R
Chloride	54	20	30	113.3
Cyanide	0.18	< 0.01	0.20	90.0

< = Less than

Page: 4

Lab. No.:87-13417 (C)

EPA Ampule	Parameters	True Value	Found	% R
WP-1185	Chloride	51.7	55	106.4
WP-586	Cyanide	0.500	0.473	94.6

call box 1021 ▫ 75 urban avenue, westbury, n.y. 11590 ▫ (516) 334/7770, (718) 297/1449

Lab. No.: 87-13417 (C)

TOTAL ANALYTICAL SERVICES FOR A SAFE ENVIR MENT

nytest environmental inc.

Sample Identification	pH @ 20°C	Specific Conductance umhos/cm @ 20°C	Chloride (mg/l)	Cyanide (mg/l)
MW-2 DO	6.06	173	19	< 0.01
MW-3 DO	5.84	156	24	< 0.01
MW-3 SO	5.64	120	11	< 0.01
MW-4 DO	5.78	166	19	< 0.01
MW-4 SO	6.33	500	11	< 0.01

< = Less than

5/8/87 Project No. _____ Book No. _____ TITLE PH Elsamore

From Page No. ____

Date	Client	Lab#	Sample ID	PH	Sp. cond.	Color ode
	Standards					
	PH 7			7.00		
	PH 4			4.01		
	PH 10			10.00		
	DI water			6.64		
4/30 5/1	Spectrum	87-13417	Trip blank	6.01		
			Field blank	5.90		
			MW-2 DO	6.06		
			MW-4 DO	5.78		
			MW-2-50	5.60		
			MW-1 DO	5.82		
			MW-3 DO	5.84		
			MW-150	4.96		
			MW-450	6.33		
			MW-350	5.64		
			MW-350 (Dupe)	5.65		

To Page No. ____

Witnessed & Understood by me,	Date	Invented by	Date
		Recorded by	

SPECIFIC CONDUCTANCE

CLIENT	ID	DATE	LAB	Sp. cond
Spectrum Finishing	SS1-MW1	4/29	87-13417	119
	SS1-MW3			146
	SS11-MW1			36
	SS11 MW2			18
	SS 11-MW3			19
	SS11-MW4			18
	SS5-MW1			21
	SS5-MW2			104
	SS5-MW3			32
	SS5-MW4			20
	SS5-MW4			21
	MW1-DO	4/30		156
	MW1-SC			156
	MW15-DO			308
	TRIP BLANK			4
	FIELD BLANK			4
	FIELD BLANK DUPLICATE			4
	MW2-DO	5/1		173
	MW 3-DO			166
	MW3-SC			120
	MW 4-DO			166
	MW4-SC			500
	MW4-SC DUPLICATE			499

5/14/87

Project No. _____ Lachat #8705140A

Book No. _____ [signature] 17

TITLE Chlorides

From Page No. ____

Rcd.	Client	Sample ID	Lab #	Dil	ppm
4-30	Spectrum Finishing	MW2-SO	87-13417	1:2	11
		MW4-SO		1:2	11
		MW3-SO		1:2	11
		MW3-DO		1:2	24
		Trip blank		1	<1
		MW2-DO		1:2	19
		MW4-DO		1:2	19
		Field Blank		1	<1
		MW1-SO		1:2	32
		MW1-DO		1:2	21
		Dup		1:2	20
		Spike (60 ppm)		1	34
		Std (60 ppm)		1	64
		EPA (52 ppm)		1	55 ppm
-1	Town Brookhaven	73752-87	87-13348	1	8
		72827-11		1	23
		73760-65		1	47
		73751-56		1	30
		72132-55		1	6
		72820-40		1	34
		72819-20		1	320
		73750-26		1	86
		72828-31		1	33
		72823-8		1	25
		Dup		1	27
		Spike (60ppm)		1	42
		Std (60ppm)		1	58
-1	Town Brookhaven	73955-61		1	92
		73761-80		1	131
-27	Town of Teaneck	070	87-13207	1	186

To Page No.

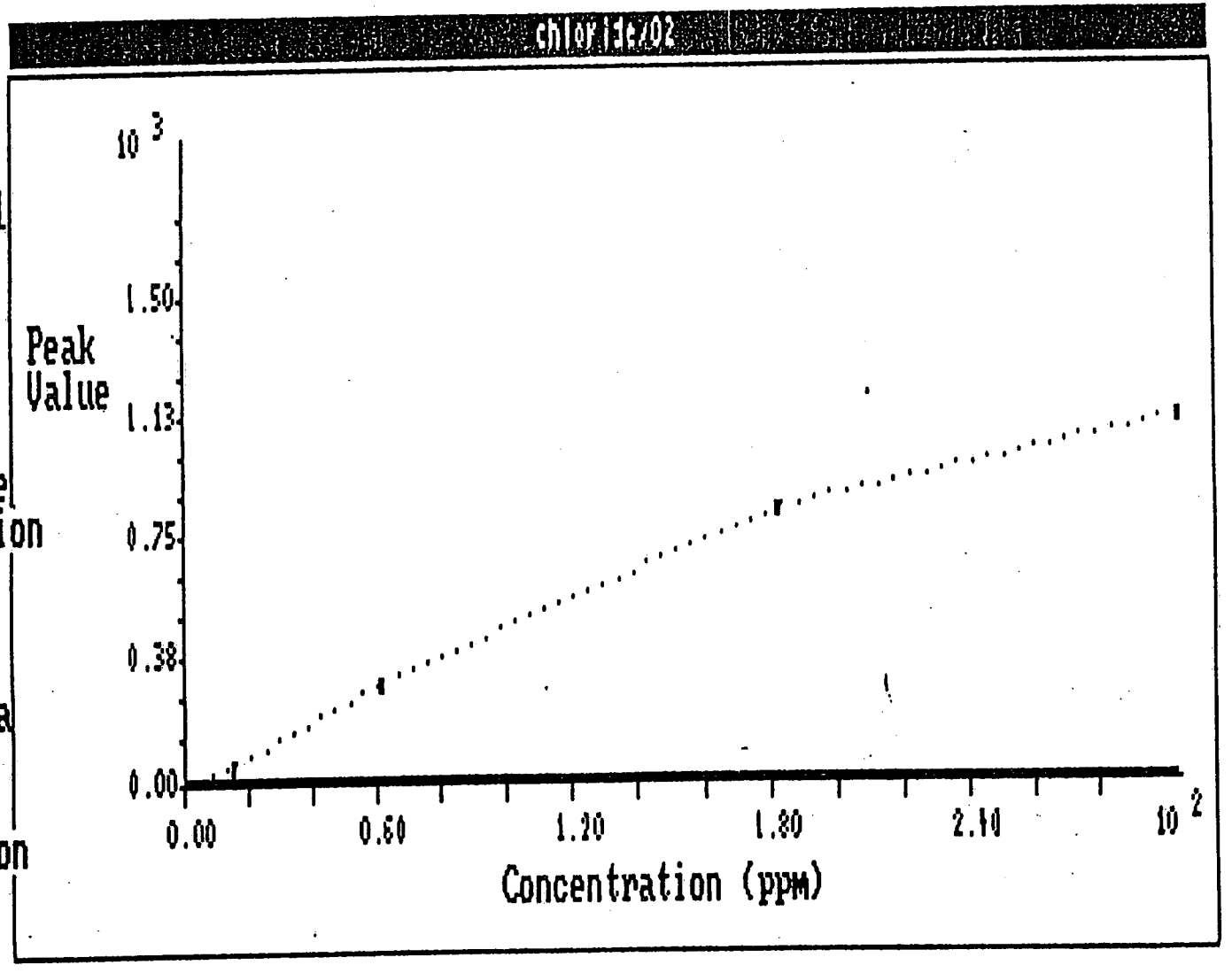
QuikCalc II Calibration

Channel 1
chloride

Piecewise
Calibration

using

Peak Area
with
Baseline
Correction



Press the [Esc] key to continue.

9 Bhaven 11 23 1 1.0000
10 dan 26 1 1.0000

TITLE CYANIDE Project No. P.7. Book No. 5/16 TECHNICON

From Page No.

RECD.	CLIENT	LAB SAMPLE	DILUTIONS	RD.OUT	CONC
		S1 .4	CORR= .99712	91.9	
		S2 .3		69.0	
		S3 .2		40.5	
		S4 .1		23.5	
		S5 .04		9.5	
①	EPA [0.500]		1:2	58.4	.516
b 4/30	SPECTRUM	13417 MW-1	1:4	—	<.01
b	"	" MW-2.50	1:4	—	<.01
b	"	" MW-15-0	1:4	—	<.01
b	"	" TRIP	1:4	—	<.01
b	"	" FIELD	1:4	—	<.01
b	"	" MW-2-DO	1:4	—	<.01
b	"	" MW-3-DO	1:4	—	<.01
b	"	" MW-3-50	1:4	—	<.01
b	"	" MW-4-DO	1:4	—	<.01
b	"	" MW-4-50	1:4	—	<.01
b	"	" DUPE	1:4	—	<.01
b	"	" SPIKE	1:4/.4	39.9	0.18
b	"	" STANDARD [.4] SJ		90.9	0.399
②	EPA		1:2	53.5	.473

To Page No.

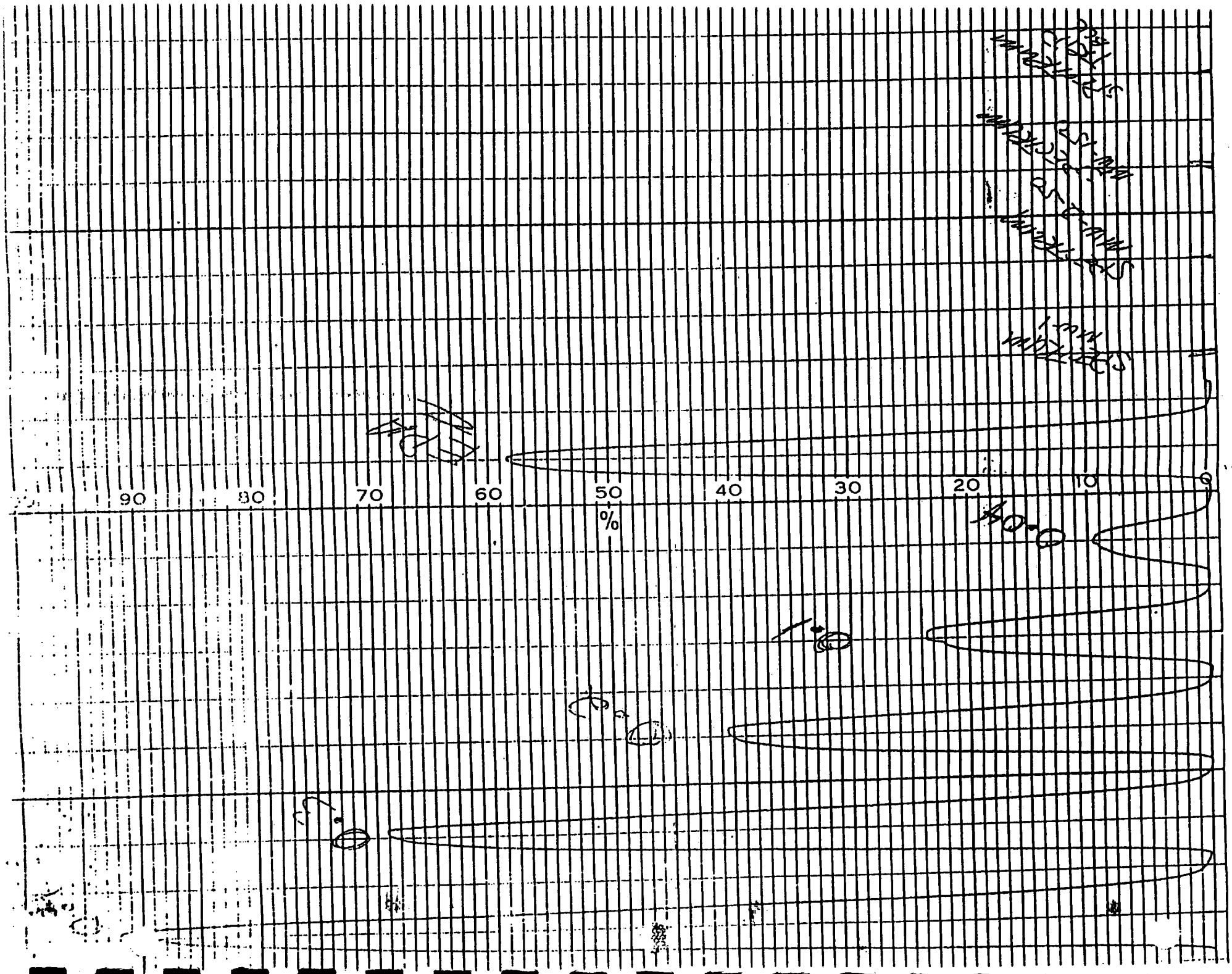
Witnessed & Understood by me. ① EPA %R= 103.2 ② EPA %R- 94.6

Date SPK%R= 88.9% STD%R=

Invented by RPD= 0.0

Recorded by

Date



NICON™ CHART NO. 011-0937-01

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REFERENCE NO. 24

WESTON

PROJECT NOTE

TO: Spectrum Project File DATE:

FROM: Tonya Balla W.O. NO.: 04220-022-081-0132-05

SUBJECT: SFC water service information

Information pertaining to municipal water supply in the 4-mile radius surrounding SFC was obtained from the Suffolk County Water Authority (SCWA) & Nassau County Department of Health. Information was also received from the South Farmingdale Water Authority & the Massapequa Water District. This information expands on the information provided by the SCWA and NCDOH.

SCWA information:
There are a total of 316,067 service connections in Suffolk County. There are 416 active wells that service these connections. Based on 1990 census data, there are 3.04 persons per household for Suffolk County. Using the above information, it works out to 2310 persons per well. (Suffolk county does not break down connections served by each well). In the SFC study area there are 38 wells of the SCWA system. All of these wells except one (Circle Dr well 1) are screened in the Magothy aquifer. SCWA wells are summarized below:

0-1/4 = 0
1/4-1/2 = 0
1/2-1 = 0
1-2

NAME	MILES	WELL #	AQUIFER
12th St.	1.2	2,3,4	m
Gordon Ave	1.4	1,2	m
Tenefly	1.5	2,3	m
Circle Dr	1.8	3,4 (1)	m (G)

G = glacial aquifer
m = magothy aquifer

WESTON

PROJECT NOTE

TO: _____ DATE: _____

FROM: _____ W.O. NO.: _____

SUBJECT: _____

SCWA info. cont.

~~[illegible]~~	NAME	MILES	WELL#	AQUIFER
2-3	- Wyandanch	2.2	2	m
	- Albany	2.25	4,5,6,9,10,11	m
	- Great Neck	2.3	1,2	m
	- Adams Ave	2.8	1,2	m
	- Prospect	2.9	1,2,3	m
	- Sawyer	2.9	2,2A,3,4	m
	- Albin	2.8	9,10,11	m
	N. 5th	2.9	1	m
3-4	- Lambert Ave	3.4	1,2	m
	- August Rd	3.5	2,3,4	m
	Greene Ave	3.9	7,8	m

Nassau County Dept. of Health

Farmingdale - there are 3 of 4 farmingdale wells within the SFC 4-mile radius. The estimated population for the Farmingdale district is 8804 people or 2201 persons per well. The farmingdale wells are located approximately 3.2 miles west of SFC. All well in magothy aquifer.

South Farmingdale - there are 8 of 11 S. farmingdale wells within the SFC 4-mile radius. The estimated population for the S. Farmingdale district is 44700 people or 4064 persons per well.

3-4 miles		MILES	# of wells	AQUIFER
	- S.F	3.1	2	m
	- S.F	3.2	2	m
	- S.F	3.8	3	m
	- S.F	3.9	1	m

WESTON

PROJECT NOTE

TO: Spectrum Project File DATE:

FROM: Tonya Balla W.O. NO.: 04200-022-081-0132-05

SUBJECT: SFC water service information

Nassau County Dept. of Health cont.

Plainview - there are 4 of 10 Plainview wells within the SFC 4-mile radius. All wells are screened in the Magothy aquifer. The estimated population for the Plainview district is 35,000 people or 3500 per well. The plainview wells are located approximately 3.9 miles northwest of the site.

Massapequa - there are 4 of 8 Massapequa wells within the SFC 4-mile radius. All wells are screened in the Magothy aquifer. No well serves 40% or more. There are ~~12500~~ 13,750 service connections with a total estimated population of 46,000 people or 5750 persons per well. The wells within the study are are located approximately 3.3 miles southwest of the site.

Total of 58 wells within 4-miles.

THOMAS S. GULOTTA
COUNTY EXECUTIVE

KATHLEEN A. GAFFNEY, M.D., M.P.H.
COMMISSIONER

COUNTY OF NASSAU
DEPARTMENT OF HEALTH
240 OLD COUNTRY ROAD
MINEOLA, N.Y. 11501-4250

RECEIVED
SEP 3 1996

August 28, 1996

Tonya Balla
Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 60061-1450

Re: Foil Request

Dear Ms. Balla:

Per your request, enclosed is a listing of public supply wells within a four (4) mile radius of the approximate site you selected and a copy of the 1996 "Ground Water Facts Report". The actual radius was calculated from supply well number N-08778. Information which was available from our database is included on the well listings and any additional information which you require should be available in the "Ground Water Facts Report".

If you have any questions regarding this material or require additional assistance, please contact me at (516) 571-3323.

Very truly yours,

Donald Irwin
Public Health Sanitarian
Bureau of Water Supply Protection

NASSAU COUNTY DEPARTMENT OF HEALTH

BUREAU OF WATER SUPPLY PROTECTION

N.Y. STATE DEC WELL NUMBER	LOCAL WELL NUMBER	WATER SYSTEM NAME	COMMUNITY	TOWN	LATITUDE (Approx.)	LONGITUDE (Approx.)	AUTHORIZED CAPACITY	AQUIFER	BOTTOM SCREEN DEPTH	TOP SCREEN DEPTH	LAND SURFACE ELEVATION
N-08956	1	BOWLGRN	BOWL GR	TOH	404509	733334	1400	MAGOTHY	530	470	120
N-08957	2	BOWLGRN	BOWL GR	TOH	404509	733334	1400	MAGOTHY	584	524	120
N-03142	4	BTHPG	BTHPG	TOB	404545	732841	700	MAGOTHY	163	122	137
N-03147	5	BTHPG	BTHPG	TOB	404547	732849	500	MAGOTHY	233	192	137
N-03876	6-1	BTHPG	PLNEDGE	TOB	404353	732912	1400	MAGOTHY	386	328	90
N-06078	9	BTHPG	BTHPG	TOB	404537	732848	1400	MAGOTHY	275	225	125
N-06915	10	BTHPG	BTHPG	TOB	404400	732832	1400	MAGOTHY	608	558	85
N-06915A	10	BTHPG	BTHPG	TOB	404403	732831	1400	MAGOTHY	475	422	85
N-06916	11	BTHPG	BTHPG	TOB	404400	732832	1400	MAGOTHY	611	563	85
N-08004	5-1	BTHPG	BTHPG	TOB	404343	732843	1400	MAGOTHY	740	679	80
N-08767	7	BTHPG	BTHPG	TOB	404532	732848	1400	MAGOTHY	233	145	125
N-08767A	7-A	BTHPG	BTHPG	TOB	404532	732848	1400	MAGOTHY	640	579	125
N-08768	8	BTHPG	BTHPG	TOB	404533	732848	1400	MAGOTHY	235	153	125
N-08768A	8-A	BTHPG	BTHPG	TOB	404533	732848	1400	MAGOTHY	678	605	125
N-08941	6-2	BTHPG	PLNEDGE	TOB	404354	732912	1400	MAGOTHY	770	700	90
N-09591	BGD-1	BTHPG	BTHPG	TOB	404524	732826	1380	MAGOTHY	682	616	120
N-03456	1	E MEAD	E MEAD	TOH	404302	733325	1500	MAGOTHY	555	494	85
N-03456A	1	E MEAD	E MEAD	TOH	404303	733033	910	MAGOTHY	320	280	85
N-03457	2	E MEAD	E MEAD	TOH	404310	733316	1050	MAGOTHY	320	280	85
N-03465	3	E MEAD	E MEAD	TOH	404305	733331	1500	MAGOTHY	580	519	85
N-03465A	3	E MEAD	E MEAD	TOH	404306	733330	810	MAGOTHY	297	268	85
N-04447	4	E MEAD	E MEAD	TOH	404311	733327	1200	MAGOTHY	330	280	85
N-04448	5	E MEAD	E MEAD	TOH	404306	733329	1200	MAGOTHY	550	500	85
N-05321	9	E MEAD	E MEAD	TOH	404245	733202	1200	MAGOTHY	509	449	65
N-05322	10	E MEAD	E MEAD	TOH	404243	733158	1200	MAGOTHY	510	470	65
N-07797	11	E MEAD	E MEAD	TOH	404310	733316	1450	MAGOTHY	545	485	85
N-01937	2-1	FRMGDL	FRMGDL	TOB	404409	732711	800	MAGOTHY	146	121	120
N-06644	2-2	FRMGDL	FRMGDL	TOB	404409	732713	1400	MAGOTHY	222	175	120
N-11004	2-3	FRMGDL	FRMGDL	TOB	404409	732711	NA	NA	NA	NA	NA
N-00148	2-1	HKSVL	HKSVL	TOB	404441	733207	650	MAGOTHY	153	133	120
N-00149	1-1	HKSVL	HKSVL	TOB	404626	733112	640	MAGOTHY	152	127	165

NASSAU COUNTY DEPARTMENT OF HEALTH

BUREAU OF WATER SUPPLY PROTECTION

N.Y. STATE DEC WELL NUMBER	LOCAL WELL NUMBER	WATER SYSTEM NAME	COMMUNITY	TOWN	LATITUDE (Approx.)	LONGITUDE (Approx.)	AUTHORIZED CAPACITY	AQUIFER	BOTTOM SCREEN DEPTH	TOP SCREEN DEPTH	LAND SURFACE ELEVATION
N-02072	1-3	HKSVL	HKSVL	TOB	404639	733111	600	MAGOTHY	159	138	165
N-03488	3-1	HKSVL	HKSVL	TOB	404445	733104	1200	MAGOTHY	169	116	115
N-03552	4-1	HKSVL	HKSVL	TOB	404454	733203	1200	MAGOTHY	169	116	120
N-03553	5-1	HKSVL	HKSVL	TOB	404453	733246	1200	MAGOTHY	152	99	115
N-03878	6-2	HKSVL	HKSVL	TOB	404624	733233	1200	MAGOTHY	428	375	145
N-03953	6-1	HKSVL	HKSVL	TOB	404628	733237	1200	MAGOTHY	419	169	145
N-05336	2-2	HKSVL	HKSVL	TOB	404441	733207	1200	MAGOTHY	523	472	120
N-06190	7-1	HKSVL	HKSVL	TOB	404707	733053	1200	MAGOTHY	600	550	175
N-06191	7-2	HKSVL	HKSVL	TOB	404707	733049	1200	MAGOTHY	550	489	175
N-06192	8-1	HKSVL	HKSVL	TOB	404517	733102	1400	MAGOTHY	626	575	135
N-06193	8-2	HKSVL	HKSVL	TOB	404517	733105	1400	MAGOTHY	467	396	135
N-07561	5-2	HKSVL	HKSVL	TOB	404455	733249	1400	MAGOTHY	550	463	115
N-07562	1-4	HKSVL	HKSVL	TOB	404639	733111	1400	MAGOTHY	545	458	165
N-08249	1-5	HKSVL	HKSVL	TOB	404639	733111	1400	MAGOTHY	490	400	165
N-08525	3-2	HKSVL	HKSVL	TOB	404446	733057	1400	MAGOTHY	503	432	115
N-08526	4-2	HKSVL	HKSVL	TOB	404455	733203	1400	MAGOTHY	601	520	120
N-08778	9-1	HKSVL	HKSVL	TOB	404537	733046	1400	MAGOTHY	590	529	140
N-08779	9-2	HKSVL	HKSVL	TOB	404537	733046	1400	MAGOTHY	585	524	140
N-09180	8-3	HKSVL	HKSVL	TOB	404517	733102	1400	MAGOTHY	630	545	135
N-09212	5-3	HKSVL	HKSVL	TOB	404453	733246	1400	MAGOTHY	604	538	115
N-09463	10-1	HKSVL	HKSVL	TOB	404601	733150	1380	MAGOTHY	638	560	140
N-09488	1-6	HKSVL	HKSVL	TOB	404628	733112	1380	MAGOTHY	575	515	165
N-10208	9-3	HKSVL	HKSVL	TOB	404537	733046	1750	MAGOTHY	649	572	140
N-10555	11-1	HKSVL	HKSVL	TOB	404606	733015	NA	NA	NA	NA	NA
N-06745	44C	JAMAICA	ELMONT	TOH	404311	733025	1400	MAGOTHY	344	304	75
N-04133	8	JERICHO	LOC GRV	TOB	404805	733030	1200	MAGOTHY	450	400	195
N-04245	9	JERICHO	JERICHO	TOB	404736	733212	1200	MAGOTHY	565	525	220
N-04246	10	JERICHO	JERICHO	TOB	404802	733132	1200	MAGOTHY	453	403	195
N-06651	14	JERICHO	JERICHO	TOB	404757	733154	1200	MAGOTHY	610	560	240
N-07030	15	JERICHO	JERICHO	TOB	404635	733310	1200	MAGOTHY	530	480	160
N-07781	22	JERICHO	JERICHO	TOB	404751	733220	1200	MAGOTHY	454	394	215
N-08043	23	JERICHO	WDBRY	TOB	404757	732833	1200	MAGOTHY	688	515	220

NASSAU COUNTY DEPARTMENT OF HEALTH

BUREAU OF WATER SUPPLY PROTECTION

N.Y. STATE DEC WELL NUMBER	LOCAL WELL NUMBER	WATER SYSTEM NAME	COMMUNITY	TOWN	LATITUDE (Approx.)	LONGITUDE (Approx.)	AUTHORIZED CAPACITY	AQUIFER	BOTTOM SCREEN DEPTH	TOP SCREEN DEPTH	LAND SURFACE ELEVATION
N-08355	25	JERICHO	MUTNTWN	TOB	404837	733158	1400	MAGOTHY	590	530	260
N-02402	1	LEVITT	LEVITT	TOH	404401	733149	800	MAGOTHY	206	164	100
N-02403	2	LEVITT	LEVITT	TOH	404400	733142	800	GLACIAL	84	59	100
N-02580	3	LEVITT	LEVITT	TOH	404323	733144	800	MAGOTHY	357	321	85
N-02581	4	LEVITT	LEVITT	TOH	404324	733126	800	GLACIAL	80	54	85
N-03193	5	LEVITT	LEVITT	TOH	404339	733040	1000	MAGOTHY	316	274	90
N-03194	6	LEVITT	LEVITT	TOH	404338	733047	1000	MAGOTHY	256	219	90
N-03312	8	LEVITT	LEVITT	TOH	404315	733035	800	MAGOTHY	304	252	75
N-03313	7	LEVITT	LEVITT	TOH	404309	733026	1000	MAGOTHY	95	64	75
N-03618	6A	LEVITT	LEVITT	TOH	404340	733147	1000	MAGOTHY	418	317	90
N-04450	9	LEVITT	LEVITT	TOH	404323	733146	1200	MAGOTHY	466	415	85
N-04451	10	LEVITT	LEVITT	TOH	404429	733055	1200	MAGOTHY	403	353	110
N-05301	11	LEVITT	LEVITT	TOH	404427	733150	1200	MAGOTHY	377	324	105
N-05302	12	LEVITT	LEVITT	TOH	404246	733143	1200	MAGOTHY	484	431	65
N-05303	13	LEVITT	NO WTGH	TOH	404253	733006	1200	MAGOTHY	506	454	65
N-05303A	13	LEVITT	NO WTGH	TOH	404257	733006	1200	MAGOTHY	512	454	65
N-05304	14	LEVITT	LEVITT	TOH	404225	733043	1200	MAGOTHY	467	415	60
N-07076	5A	LEVITT	LEVITT	TOH	404339	733044	1200	MAGOTHY	674	569	90
N-07523	8A	LEVITT	LEVITT	TOH	404311	733025	1200	MAGOTHY	684	590	75
N-08279	7A	LEVITT	LEVITT	TOH	404309	733029	1200	MAGOTHY	547	389	75
N-08321	2A	LEVITT	LEVITT	TOH	404401	733151	1200	MAGOTHY	674	574	100
N-03780	1S	NYWS	NO WTGH	TOH	404228	732935	1400	MAGOTHY	142	89	60
N-03893	2S	NYWS	NO WTGH	TOH	404228	732934	1400	MAGOTHY	151	98	60
N-08480	3S	NYWS	NO WTGH	TOH	404228	732933	1550	MAGOTHY	656	569	60
N-09338	4S	NYWS	NO WTGH	TOH	404228	732935	2100	MAGOTHY	649	585	60
N-00152	1	O WSTBY	O WSTBY	TNH	404628	733418	500	MAGOTHY	478	438	140
N-04095	1-1	PLNVIEW	PLNVIEW	TOB	404636	732807	1200	MAGOTHY	490	440	170
N-04096	1-2	PLNVIEW	PLNVIEW	TOB	404639	732802	1200	MAGOTHY	494	444	170
N-04097	3-1	PLNVIEW	PLNVIEW	TOB	404631	732939	1200	MAGOTHY	465	413	175
N-06076	4-1	PLNVIEW	PLNVIEW	TOB	404650	732911	1200	MAGOTHY	358	296	160
N-06077	4-2	PLNVIEW	PLNVIEW	TOB	404649	732910	1200	MAGOTHY	460	398	160

NASSAU COUNTY DEPARTMENT OF HEALTH

BUREAU OF WATER SUPPLY PROTECTION

N.Y. STATE DEC WELL NUMBER	LOCAL WELL NUMBER	WATER SYSTEM NAME	COMMUNITY	TOWN	LATITUDE (Approx.)	LONGITUDE (Approx.)	AUTHORIZED CAPACITY	AQUIFER	BOTTOM SCREEN DEPTH	TOP SCREEN DEPTH	LAND SURFACE ELEVATION
N-06580	3-2	PLNVIEW	PLNVIEW	TOB	404630	732938	1200	MAGOTHY	596	523	175
- N-06956	5-1	PLNVIEW	PLNVIEW	TOB	404557	732705	1400	MAGOTHY	597	514	180
- N-07421	5-2	PLNVIEW	PLNVIEW	TOB	404557	732705	1400	MAGOTHY	559	482	180
N-07526	2-1	PLNVIEW	PLNVIEW	TOB	404703	732801	1400	MAGOTHY	688	570	240
- N-08054	5-3	PLNVIEW	PLNVIEW	TOB	404557	732705	1400	MAGOTHY	580	510	180
- N-08595	5-4	PLNVIEW	PLNVIEW	TOB	404557	732705	1350	MAGOTHY	610	540	180
N-04042	1-1	S FMGDL	PLNEDGE	TOB	404309	732745	1100	MAGOTHY	154	96	60
N-04043	1-2	S FMGDL	PLNEDGE	TOB	404309	732749	1200	MAGOTHY	374	322	60
N-05148	1-3	S FMGDL	PLNEDGE	TOB	404311	732747	1200	MAGOTHY	369	298	60
N-06150	3-1	S FMGDL	MSPQ E	TOB	404245	732903	1400	MAGOTHY	607	545	60
N-07377	1-4	S FMGDL	PLNEDGE	TOB	404312	732748	1400	MAGOTHY	758	607	60
N-07515	5-1	S FMGDL	S FMGDL	TOB	404337	732711	1400	MAGOTHY	347	289	65
N-07516	5-2	S FMGDL	S FMGDL	TOB	404337	732711	1400	MAGOTHY	584	494	65
N-02236	8	WSTBY	NEW CSL	TNH	404519	733427	750	MAGOTHY	565	520	110
N-02602	9	WSTBY	NEW CSL	TNH	404516	733434	950	LLOYD	853	760	110
N-05007	10	WSTBY	WSTBY	TNH	404552	733420	1350	MAGOTHY	494	428	120
N-05655	12	WSTBY	NEW CSL	TNH	404541	733335	1050	MAGOTHY	255	205	130
N-06819	12A	WSTBY	NEW CSL	TNH	404537	733335	1050	MAGOTHY	265	215	130
N-07353	14	WSTBY	NEW CSL	TNH	404555	733411	1400	MAGOTHY	390	300	120
N-08497	16	WSTBY	NEW CSL	TNH	404519	733429	1400	MAGOTHY	539	456	110

COMMUNITY PUBLIC WATER SYSTEM ESTIMATED POPULATION, ANNUAL PUMPAGE AND PER CAPITA DAILY CONSUMPTION IN 1995 NASSAU COUNTY, NEW YORK

WATER SYSTEM	ESTIMATED POPULATION (a)	ANNUAL PUMPAGE (Galx1000) (b)	IMPORTED OR (EXPORTED) (Galx1000) (a)	GALLONS PER CAPITA DAY (GPCD)
ALBERTSON WD	13,500	659,738		134
BAYVILLE (V)	8,800	283,362		88
BETHPAGE WD	32,500	1,207,325		102
BOWLING GREEN WD	12,000	482,989		110
CARLE PLACE WD	8,950	482,147		148
GREAT NECK NO. WA of	31,301	1,521,847		133
DEFOREST DR ASSOC.	21	(c)		(c)
EAST MEADOW WD	50,000	2,474,048		136
EAST WILLISTON (V)	2,515	0	188,060	205
FARMINGDALE (V)	8,804	359,980		112
FRANKLIN SQUARE WD	20,000	675,837		93
FREEPORT (V)	40,000	1,687,795		116
GARDEN CITY PARK WD	21,000	1,167,108		152
GARDEN CITY SOUTH WD	1,500	0	(c)	(c)
GARDEN CITY (V)	21,686	1,315,775		166
GLEN COVE CITY	28,000	1,401,856		137
GLENWOOD WD	640	0	69,311	297
HEMPSTEAD (V)	50,500	2,133,050		116
HICKSVILLE WD	47,810	2,189,679		125
JAMAICA WS CO	130,000	3,408,160		72
JERICHO WD	58,000	4,628,000		219
LEVITTOWN WD	50,000	2,038,235		112
LIDO-PT LOOKOUT WD	4,500	300,752		183
LOCUST VALLEY WD	7,500	547,392		200
LONG BEACH CITY	35,000	1,206,385		94
LONG IS WATER CORP	230,800	9,709,489		115
MANHASSET-LAKEV WD	43,000	2,167,972	(191,057)	126
MASSAPEQUA WD	46,000	1,941,390		116
MILL NECK EST WS	240	(c)		(c)
MINEOLA (V)	21,500	1,006,060		128
N/E FARMINGDALE WD	300	INCLUDED IN VILLAGE OF FARMINGDALE		
NY WATER SERVICE CORP	173,000	4,958,328		79
OLD WESTBURY (V)	3,100	588,690		520
OYSTER BAY WD	8,500	390,316		126
PLAINVIEW WD	35,000	1,678,126		131
PLANDOME (V)	1,450	0	90,967	172
PORT WASHINGTON WD	30,000	1,279,197	100,090	126
ROCKVILLE CENTRE (V)	28,000	1,322,979		129
ROOSEVELT FIELD WD	1,900	893,758		(d)
ROSLYN WD	17,000	1,210,162	(69,311)	184
SAGAMORE HILL N.H.S.	12	(c)		
SANDS POINT (V)	2,500	288,100		316
SEA CLIFF WATER CO	17,500	443,300		69
SWAN COVE WS	51	(c)		(c)
SO FARMINGDALE WD	44,700	1,545,376		95
SPLIT ROCK WS	25	(c)		(c)
UNIONDALE WD	23,000	859,897		102
WESTBURY WD	30,000	1,061,990		97
WEST HEMPSTEAD WD	32,000	1,002,019		86
WILLISTON PARK (V)	7,500	202,580	(188,060)	5
TOTAL	1,481,605	62,721,189		116

(a) Reported by public water systems in Annual Water Supply Statements or monthly operation reports for 1995.
(b) Total pumpage from NYSDEC.
(c) Not Available
(d) Not Applicable. Transient Population; water used mainly for cooling and industrial use.

NASSAU COUNTY DEPARTMENT OF HEALTH

PUBLIC WATER SUPPLY INFORMATION
COMMUNITY WATER SYSTEMS IN NASSAU COUNTY
1995

WATER SYSTEM	WELLS		TANKS		INTER-CONNECT-IONS	SERVICES	
	No. (1)	AUTH CAPACITY (MGD) (2)	No.	STORAGE CAPACITY (MG)		No.	METERED (%)
ALBERTSON W.D.	5	7.95	3	3.50	6	4,005	100%
BAYVILLE (V)	4	5.76	1	0.60	2	2,440	100%
BETHPAGE W.D.	9	18.11	2	2.75	14	8,137	100%
BOWLING GREEN W.D.	2	4.03	1	2.00	3	3,014	100%
CARLE PLACE W.D.	5	7.80	1	0.50	5	2,930	100%
GREAT NECK NORTH, W.A. of	11	16.78	3	2.00	2	7,655	100%
DeFOREST DRIVE ASSOC	1	0.06	1	0.02	0	9	0%
EAST MEADOW W.D.	11	20.00	2	2.75	11	12,935	100%
EAST WILLISTON (V)	0	-	0	-	4	856	100%
FARMINGDALE (V)	4	5.54	2	0.90	5	2,240	100%
FRANKLIN SQUARE W.D.	5	8.64	2	1.00	6	5,136	100%
FREEPORT (V)	9	17.39	2	1.50	4	10,000	100%
GARDEN CITY (V)	10	19.05	5	5.10	21	6,686	100%
GARDEN CITY PARK W.D.	10	16.42	2	2.50	9	6,543	100%
GARDEN CITY SOUTH W.D.	0	-	0	-	5	352	100%
GLEN COVE CITY	8	13.74	3	4.25	3	7,388	100%
GLENWOOD W.D.	0	-	0	-	4	181	100%
HEMPSTEAD (V)	9	15.70	4	3.75	13	8,889	100%
HICKSVILLE W.D.	20	39.33	5	7.25	10	15,570	100%
JAMAICA WATER SUPPLY CO	24	40.47	7	11.85	9	27,794	100%
JERICHO W.D.	22	37.50	6	8.79	18	18,226	100%
LEVITTOWN W.D.	12	19.87	2	2.50	5	11,910	100%
LIDO-PT LOOKOUT W.D.	3	4.90	2	1.50	1	1,884	100%
LOCUST VALLEY W.D.	5	8.66	1	1.00	5	2,379	100%
LONG BEACH CITY	8	14.18	3	3.83	2	7,560	100%
LONG ISLAND WATER CORP	38	84.14	11	13.65	13	72,283	100%
MANHASSET-LAKEVILLE W.D.	18	33.74	6	8.50	11	9,914	100%
MASSAPEQUA W.D.	8	16.50	4	4.00	7	13,750	100%
MILL NECK ESTATES W.S.	2	0.32	1	0.06	0	85	0%
MINEOLA (V)	6	9.00	2	2.00	12	5,440	100%
NEW YORK W.S. CORP	18	49.46	5	5.75	9	44,000	100%
N/E FARMINGDALE W.D.	0	-	0	-	1	108	100%
OLD WESTBURY (V)	5	6.92	2	2.00	10	1,450	100%
OYSTER BAY W.D.	4	7.20	4	1.80	2	2,410	100%
PLAINVIEW W.D.	10	20.43	3	4.75	9	10,185	100%
PLANDOME (V)	0	2.09	1	0.02	2	430	100%
PORT WASHINGTON W.D.	13	14.85	4	22.38	9	8,589	100%
ROCKVILLE CENTRE (V)	11	19.30	4	3.75	4	7,291	81%
ROOSEVELT FIELD W.D.	3	10.19	1	1.00	7	177	100%
ROSLYN W.D.	8	13.97	4	6.30	10	5,743	100%
SAGAMORE HILL N.H.S.	3	0.29	3	0.02	0	5	
SANDS POINT (V)	6	5.11	3	0.65	3	1,245	100%
SEA CLIFF WATER CO	3	6.52	2	0.74	5	4,348	100%
SOUTH FARMINGDALE W.D.	11	20.74	4	3.20	17	12,500	100%
SPLIT ROCK W.S.	2	0.04	1	<0.01	0	9	0%
SWAN COVE W.S.	1	0.14	1	0.13	0	20	0%
UNIONDALE W.D.	6	10.80	1	1.25	16	5,761	100%
WESTBURY W.D.	11	19.80	2	2.50	5	5,853	100%
W HEMP-HEMP GARDENS W.D.	10	16.92	3	2.65	9	8,366	100%
WILLISTON PARK (V)	4	7.31	2	2.00	9	2,400	100%
NASSAU COUNTY TOTAL	398	717.66	134	158.94	337	397,201	99.6%

(1) Includes wells not used, but not abandoned.
(2) Capacity authorized by NYSDEC as part of well permit. All may not be usable.

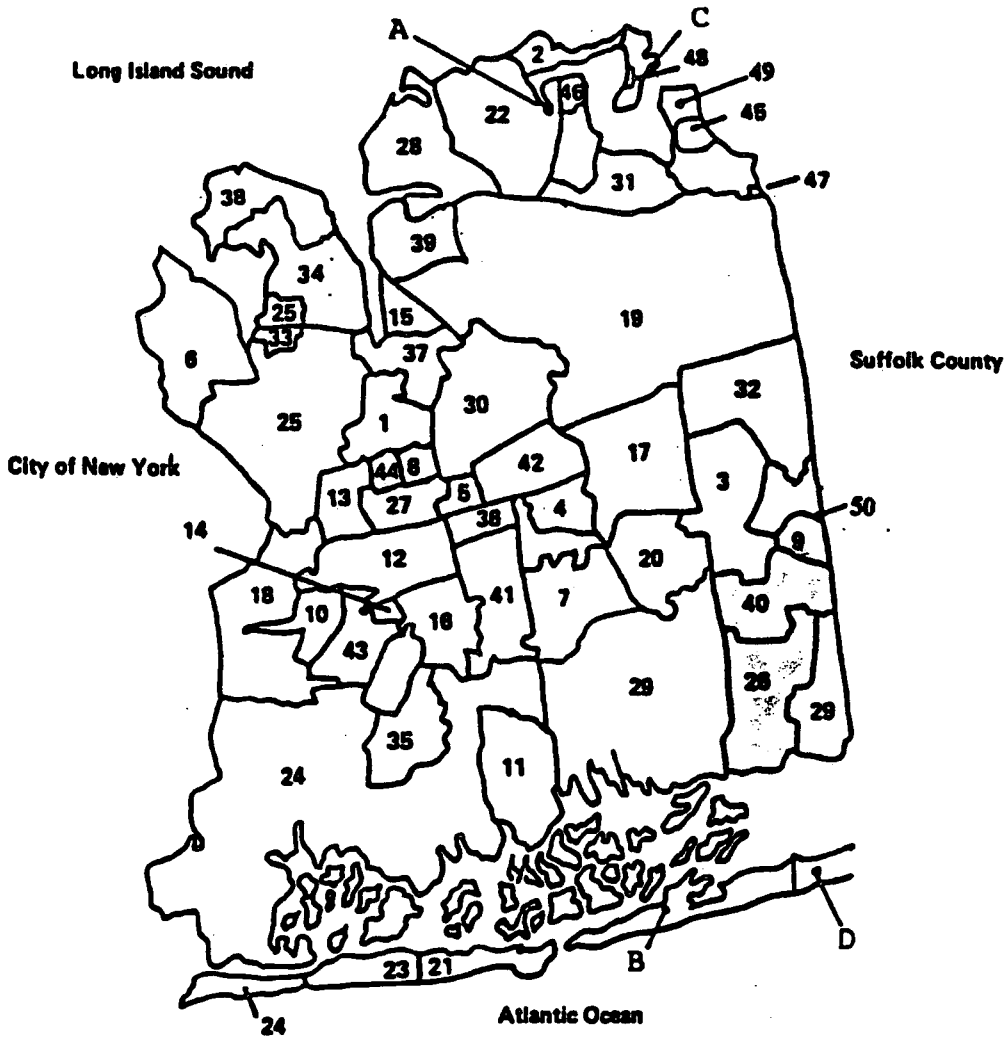
SOURCES:
NCDH records, 1995
NCDH records, includes wells not used but not abandoned.
1991 Water Supply Emergency Plan.
Community Water System Sampling Site Plans, 1995.
Public Water System Annual Inspection Reports, NCDH, 1995

NASSAU COUNTY DEPARTMENT OF HEALTH

COMMUNITY PUBLIC WATER SYSTEMS
DEPTH, AQUIFER AND TREATMENT PROVIDED BY WELL
1995

WATER SYSTEM	LOCAL WELL NO.	NYSDEC WELL NO.	DEPTH (ft)	AQUIFER	TREATMENT
ROOSEVELT FIELD W.D.	5	7957	519	Magothy	1a,3a
	7	9521	603	Magothy	1a,3a
	10	9846	594	Magothy	1a,3b
ROSLYN W.D.	1-8	1870	260	Magothy	1a
	2	2400	439	Magothy	2a,3a
	3	4265	485	Magothy	2a
	4	4623	498	Magithy	2a,3a
	5	5852	482	Magothy	2a,3a
	6	7104	431	Magothy	2a,3a
	7	7873	530	Magothy	2a,3a
	8	8010	448	Magothy	2a,3a
SAGAMORE HILL N.H.S.	1	9068	170	Glacial	1a
	1R	9076	200	Glacial	1a
	2	570	150	Glacial	1a
SANDS POINT (V)	1	36	214	Port Wash	2a
	2	37	140	Glacial	2a,3a
	3	4389	225	Magothy	2a,3a
	4	7157	240	Magothy	2a,3a
	5	8313	165	Glacial	2a,3a
	6	9446	368	Lloyd	2a,3a
SEA CLIFF WATER CO	GH	5792	295	Magothy	1a,3a,4d
	SC	7857	614	Lloyd	1a,3a,4d
	D	901	68	Glacial	1a,4d
SOUTH FARMINGDALE W.D.	1-2 3.6	4043	374	Magothy	1a,3b,4b
	1-3	5148	369	Magothy	1a,3b,4b
	1-4	7377	758	Magothy	1a,3b,4b
	2-1 3.1	5147	219	Magothy	1a,3b,4b,8a,8b
	2-2	6149	640	Magothy	1a,3b,4b,8a,8b
	3-1	6150	612	Magothy	1a,3b,4b
	4-1 3.9	6148	566	Magothy	1a,3b,4b
	5-1 3.2	7515	347	Magothy	1a,3b,4b
	5-2	7516	584	Magothy	1a,3b,4b
	6-1	8664	610	Magothy	1a,3b,4b
	6-2	8665	580	Magothy	1a,3b,4b
SPLITROCK W.S.	1	UNK 2	-	Lloyd	2a
	2	12525	405	Lloyd	2a
SWAN COVE W.S.	1	2920	515	Lloyd	1a

PUBLIC WATER SYSTEMS IN NASSAU COUNTY



COMMUNITY WATER SYSTEMS

1. Albertson Water District
2. Bayville Village
3. Bethpage Water District
4. Bowling Green Water District
5. Carle Place Water District
6. Great Neck North Water Authority
7. East Meadow Water District
8. East Williston Village
9. Farmingdale Village
10. Franklin Square Water District
11. Freeport Village
12. Garden City Village
13. Garden City Park Water District
14. Garden City South Water District
15. Glenwood Water District
16. Hempstead Village
17. Hicksville Water District
18. Jamaica Water Supply Co.
19. Jericho Water District
20. Levittown Water District
21. Lido-Pt. Lookout
22. Locust Valley Water District
23. City of Long Beach
24. Long Island Water Corporation
25. Manhasset-Lakeville Water District
26. Massapequa Water District
27. Mineola Village
28. City of Glen Cove
29. New York Water Service Corp.
30. Old Westbury Village
31. Oyster Bay Water District
32. Plainview Water District
33. Plandome Village
34. Port Washington Water District
35. Rockville Centre Village
36. Roosevelt Field Water District
37. Roslyn Water District
38. Sands Point Village
39. Sea Cliff Water Company
40. South Farmingdale Water District
41. Uniondale Water District
42. Westbury Water District
43. West Hempstead Water District
44. Williston Park Village
45. Swan Cove Water Supply
46. Mill Neck Estates Water Supply
47. Deforest Drive Ass'n Water Supply
48. Split Rock Water Supply
49. Sagamore Hill National Historic Site
50. Northeast Farmingdale Water District

NON-COMMUNITY WATER SYSTEMS

A. Beaver Dam Winter Sports Club
B. Jones Beach State Park
C. Seawanhaka Yacht Club
D. Tobay Beach

Blank Areas - Parks, Lakes or Served by Private Wells

NASSAU COUNTY DEPARTMENT OF HEALTH

COMMUNITY PUBLIC WATER SYSTEMS
DEPTH, AQUIFER AND TREATMENT PROVIDED BY WELL
1995

WATER SYSTEM	LOCAL WELL NO.	NYSDEC WELL NO.	DEPTH (ft)	AQUIFER	TREATMENT
MASSAPEQUA W.D.	1	4602	444	Magothy	1a,3a,4b,10a
	2R	9173	850	Magothy	1a,3a,4b,10a
	3	5703	459	Magothy	1a,3a,4b,10a
	4	6442	612	Magothy	1a,3a,4b,10a
	5	6443	268	Magothy	1a,3a,4b,10a
	6	6866	626	Magothy	1a,3a,4b,10a
	7	6867	492	Magothy	1a,3a,4b,10a
	8	8214	686	Magothy	1a,3a,4b,10a
MILL NECK ESTATES W.S.	1	6042	340	Lloyd	1a
	2	8426	360	Lloyd	1a
MINEOLA (V)	1	97	355	Magothy	2a,3a
	3	578	407	Magothy	2a,3a
	4	3185	463	Magothy	2b,3a,6a
	5	4082	462	Magothy	2a,3a
	6	5596	468	Magothy	2a,3a
	7	8576	505	Magothy	2a,3a
N.Y. WATER SERVICE CORP					
NEWBRIDGE ROAD	1N	3895	349	Magothy	1a,3a,4a
	3N	8976	700	Magothy	1a,3a,4a
	4N	9878	664	Magothy	1a,3a,4a
SEAMANS NECK ROAD	2S	3893	151	Magothy	1a,3a,4a
	3S	8480	656	Magothy	1a,3a,4a
	4S	9338	649	Magothy	1a,3a,4a
JERUSALEM AVE	4J	9514	660	Magothy	1a,3a,4a
	5J	10195	585	Magothy	1a,3a,4a
CHARLES ST	2C	9976	567	Magothy	1a,3a,4a
JEFFERSON ST	11J	7407	645	Magothy	1a,3a,4a
	12J	8253	597	Magothy	1a,3a,4a
DE MOTT AVE	4D	5767	384	Magothy	1a,3a,4a
	5D	8837	681	Magothy	1a,3a,4a
	6D	9910	774	Magothy	1a,3a,4a
MASSAPEQUA	6M	7414	530	Magothy	1a,3a,4a
	7M	8603	893	Magothy	1a,3a,4a
	8M	10863	685	Magothy	1a,3a,4a
OLD MILL ROAD	1O	8031	509	Magothy	1a,3a,4a
N/E FARMINGDALE W.D.	-	-	-	-	2a,13d
OLD WESTBURY (V)	1A	152	478	Magothy	2a,3a
	2A	7513	470	Magothy	2a,3a
	3R	11909	506	Magothy	2a,3a
	4	7549	499	Magothy	2a,3a
	5	8658	610	Magothy	2a,3a

(URL reload)

1990 US Census Data
Database: **C90STF3A**
Summary Level: **State--County**

Nassau County: FIPS.STATE=36, FIPS.COUNTY90=059

PERSONS
Universe: Persons
Total.....1287348
IMPUTATION OF POPULATION ITEMS
Universe: Persons
Filler.....587256
  No items allocated.....700092
  One or more items allocated.....0

(URL reload)

1990 US Census Data
Database: **C90STF1A**
Summary Level: **State--County**

Nassau County: FIPS.STATE=36, FIPS.COUNTY90=059

HOUSEHOLDS
Universe: Households
Total.....431515

(URL reload)

1990 US Census Data
Database: **C90STF1A**
Summary Level: **State--County**

Nassau County: FIPS.STATE=36, FIPS.COUNTY90=059

FAMILIES
Universe: Families
Total.....**344502**
HOUSEHOLDS
Universe: Households
Total.....**431515**
PERSONS PER FAMILY
Universe: Families
Persons per family.....**3.30**

South Farmingdale Water District

40 Langdon Road
Farmingdale, N.Y. 11735

Telephone 516-249-3330

Fax 516-249-9053

Commissioners

Gerard F. McCormack
~~John H. Bates~~
Robert J. Steiner

Edoardo Licci, Superintendent
Leonard Constantinopoli, Business Manager
Joseph G. Timpe, Office Manager

FAX TRANSMITTAL COVER SHEET

DATE: 8/8/96 TIME: 10:40 AM PM

NUMBER OF PAGES INCLUDING COVER SHEET: _____

RECIPIENT NAME: Robin Schilling

COMPANY: WESTON

FAX NUMBER: 847-918-4055

SENDER NAME: Al Licci

COMPANY: S. Farmingdale WATER

COMMENTS: Hope this helps.

Al.

PLEASE CONTACT SENDER IF YOU DO NOT RECEIVE ALL PAGES OR IF COPIES ARE NOT LEGIBLE.

CONSERVE NOW - FOR FUTURE GENERATIONS

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

WESTON
MANAGERS DESIGNERS CONSULTANTS
Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 60061-1450
847-918-4000 • Fax 847-918-4055

RECEIVED
JUN 19 1996

11 June 1996

South Farmingdale Water District
Farmingdale, New York (516) 249-3330

Subject: Municipal water system information

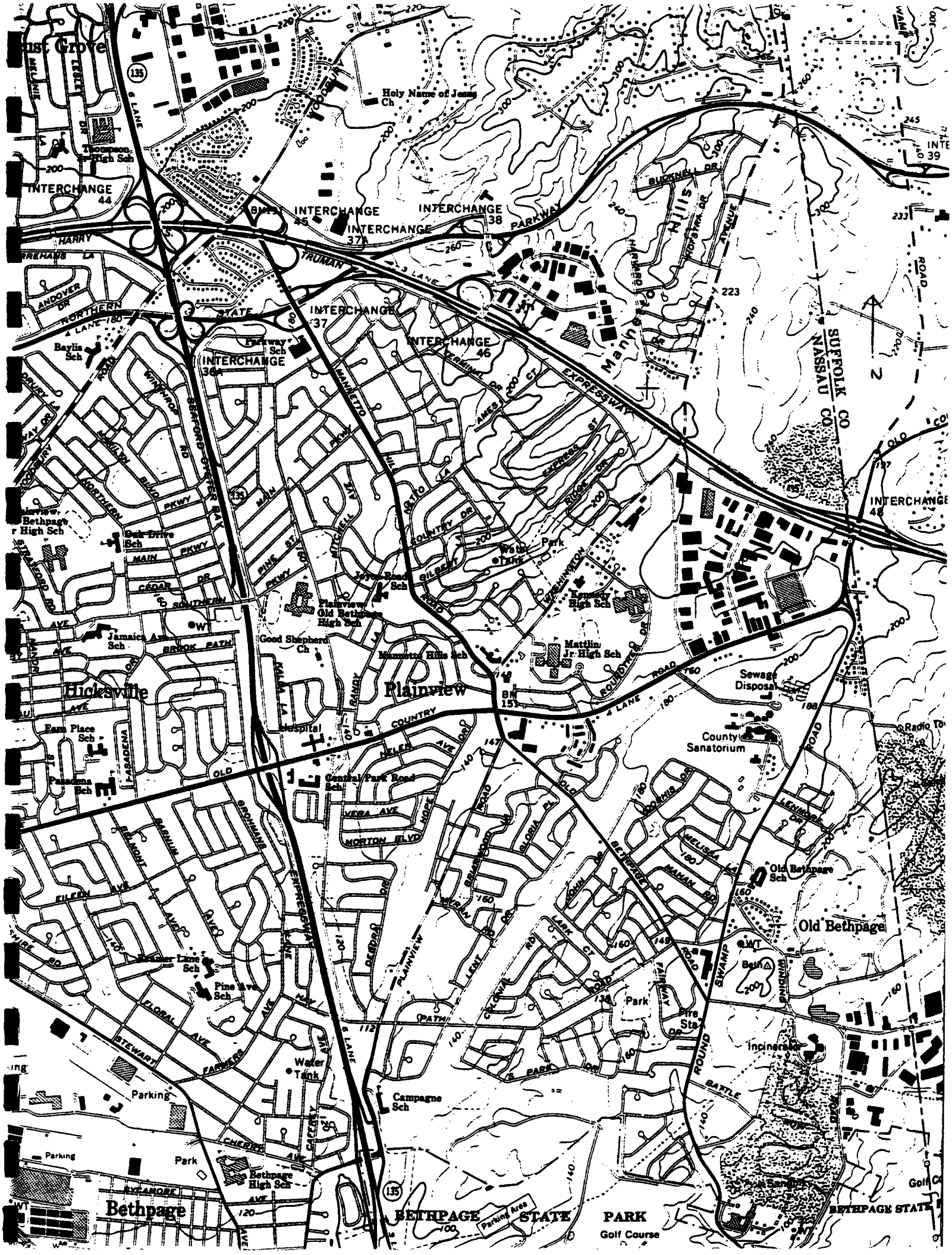
Gentlemen:

Roy F. Weston, Inc. (WESTON) is under contract to the U.S. EPA to perform a water supply study of the southwestern Suffolk County and southeastern Nassau County, New York area. We are required to collect information concerning all municipal water distribution systems in these areas.

Please mark on the enclosed topographic map the approximate boundaries of your service area and the locations of any municipal wells or surface water intakes operated by your department. Please also provide the following information, where applicable:

- Total number of service connections on the distribution system.
  12,500
- Names and telephone numbers of any water systems you purchase water from or sell water to, and the total gallons purchased from/sold to each system in 1994.
  NONE
- The aquifer from which each municipal well draws from (Deep Flow aquifer or glacial aquifer), or the depth at which each well is screened.
  MAGOTHY
- Indicate whether any of your wells or surface intakes are standby wells/intakes and, if so, whether they have been operated at least one time per year during each of the last five years.
  NONE
- Indicate whether any single well provides 40% or more of the water supply for the distribution system, and if so, identify this well.
  NO
- Description of any significant changes to your supply in the first six months of 1996, as compared to 1995 (e.g., addition of new supply sources, termination of existing sources, or significant changes in pumpage from existing sources).
  NONE

Please return this information (including the completed drawing) to my attention at the above address. If you have any questions, please contact me at (847) 918-4091. Thank you in advance for your assistance.



Holy Name of Jesus Ch
Thompson Jr High Sch
INTERCHANGE 44
INTERCHANGE 45
INTERCHANGE 37A
INTERCHANGE 38
INTERCHANGE 37
INTERCHANGE 36A
INTERCHANGE 46
INTERCHANGE 48
PARKWAY
TRUMAN
NORTHERN
STATE
EXPRESSWAY
Baylis Sch
Parkway Sch
Oak Drive Sch
Joyce Road Sch
Plainview Old Bethpage High Sch
Good Shepherd Ch
Mannetto Hills Sch
Mattlin Jr High Sch
Kennedy High Sch
Water Tank
Park
Jamaica Ave Sch
Hicksville
Plainview
Hospital
Farm Place Sch
Pasadena Sch
Central Park Road Sch
Sewage Disposal
County Sanatorium
Old Bethpage Sch
Old Bethpage
Kramer Lane Sch
Pine Ave Sch
Water Tank
Campagne Sch
Parking
Park
Bethpage High Sch
Bethpage
BETHPAGE STATE PARK
Golf Course
Parking Area
Incinerator
Fire Sta
SUFFOLK CO
NASSAU CO
N

WESTON
MANAGERS DESIGNERS/CONSULTANTS

Very truly yours,

ROY F. WESTON, INC.

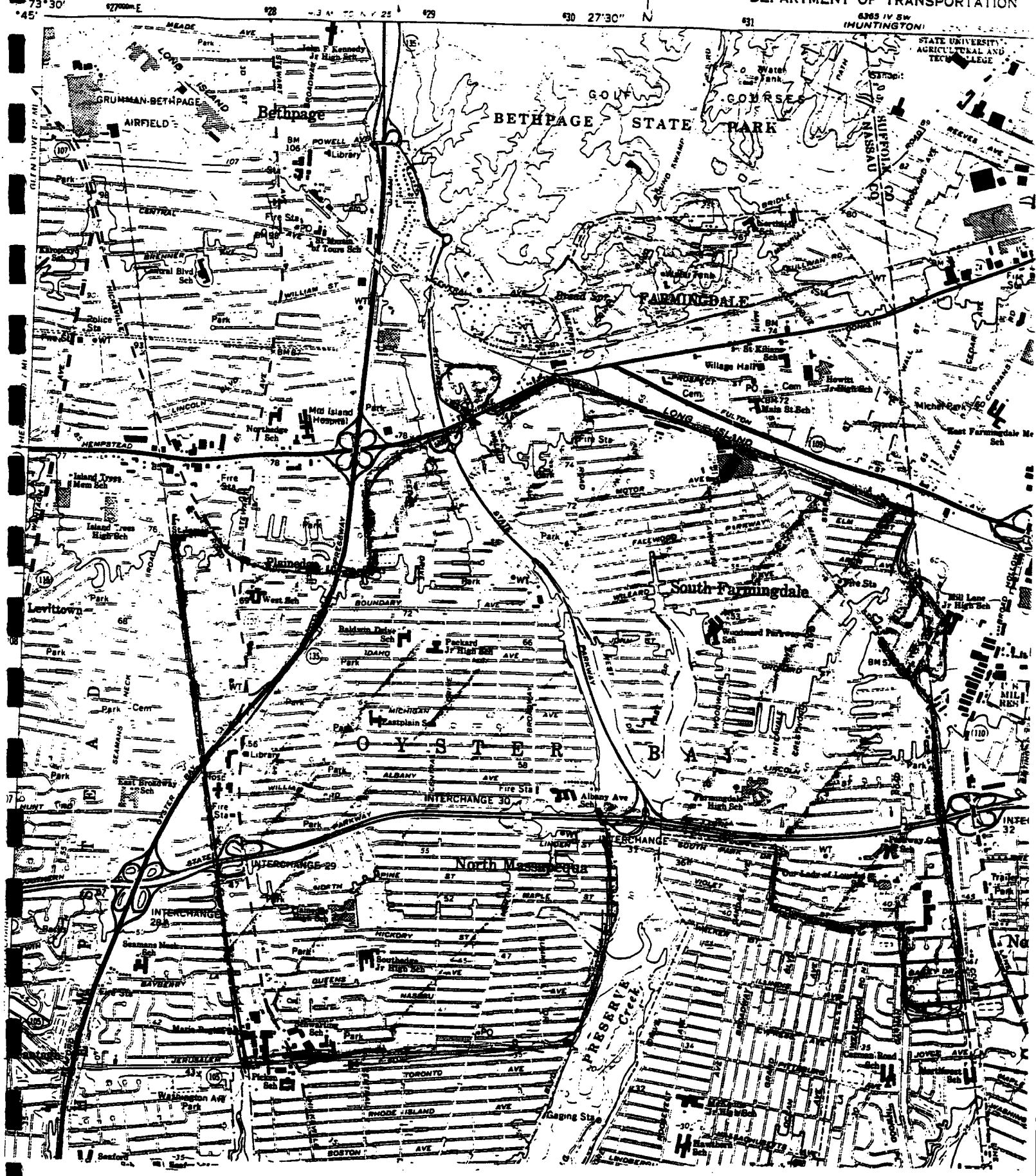
Kevin R. Kumrow

Kevin R. Kumrow
Assistant Engineer

Enclosure

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION



MASSAPEQUA WATER DISTRICT

84 GRAND AVENUE
MASSAPEQUA, NEW YORK 11758-4990

PHONE 516-798-5266 • FAX 516-798-0279

June 14, 1996

JUN 17

Kevin R. Kumrow
Roy F. Weston, Inc.
Suite 400
3 Hawthorn Parkway
Vernon Hills, Illinois 600061-1450

Dear Sir: Re: Water System Data

Listed below is the information you requested along with the enclosed map marked up as you requested.

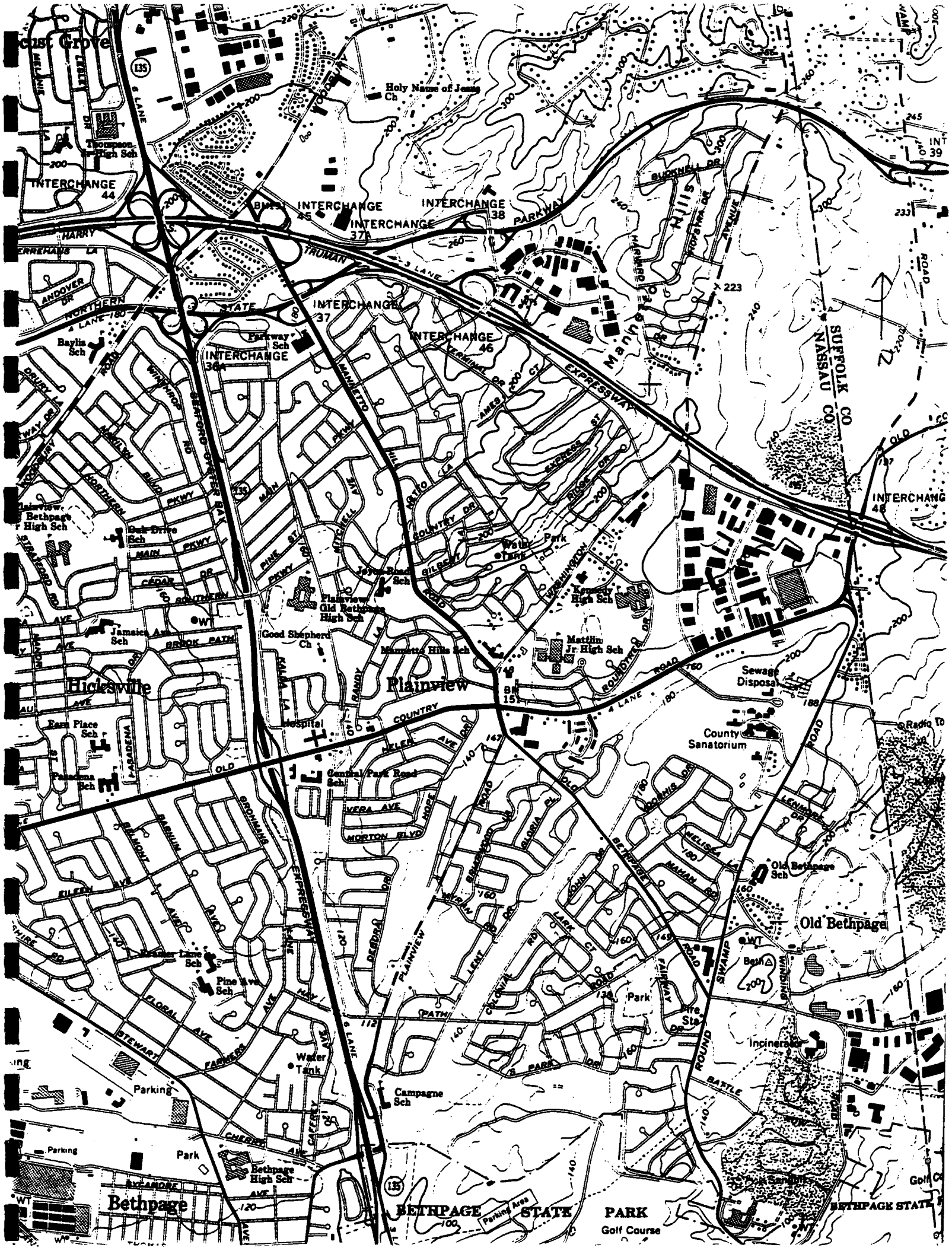
* Service Connections 13,750
* Systems water purchased from - none
* Aquifer Magothy (all wells)
* No surface water intakes
* No well provides 40 % of production
* No significant changes in 1996

Feel free to call if any further information is required.

Very truly yours,

Donald F. Farley

Donald F. Farley, P.E.
Superintendent



Holy Name of Jesus Ch
Thompson Jr High Sch
INTERCHANGE 44
INTERCHANGE 45
INTERCHANGE 37A
INTERCHANGE 38
INTERCHANGE 37
INTERCHANGE 36A
INTERCHANGE 46
INTERCHANGE 48
Parkway Sch
Baylis Sch
Plainview Old Bethpage High Sch
Joyce Road Sch
Kennedy High Sch
Mattlin Jr High Sch
Mannetto Hills Sch
Good Shepherd Ch
Jamaica Ave Sch
Hicksville
Plainview
Hospital
Farm Place Sch
Pasadena Sch
Central Park Road Sch
Kramer Lane Sch
Pine Ave Sch
Water Tank
Campagne Sch
Bethpage High Sch
Bethpage
BETHPAGE STATE PARK
Golf Course
Sewage Disposal
County Sanatorium
Old Bethpage Sch
Old Bethpage
Incinerator
Park
Parking
Parking Area
SUFFOLK CO
NASSAU CO
Manne Hills
HARRY S. TRUMAN
NORTHERN STATE PARKWAY
EXPRESSWAY
SEAFORD OYSTER BAY
MANNETTO HILL
COUNTRY
OLD COUNTRY ROAD
BETHPAGE ROAD
ROUND SWAMP ROAD
BETHPAGE STATE

Property ID:	17
Station Name:	Adams Avenue Well Field & Pump Station
District:	Babylon
Well No:	1
Structure Type:	1-story Masonry
Test Boring No:	
DEC Ref:	S-34030
W&A Ref:	5593
Decision Date:	10/ 3/63
Pressure Zone:	Zone: 03 Wyandanch Int

Well Construction

Well Driller:	MATHIES
Well Type:	ROTARY
Well Started:	12/ 3/68
First Test:	2/13/68
Final Test:	3/ 5/69
Accepted:	3/ 5/69
Construction Completed:	5/ 2/69

Miscellaneous Data

Well Dwg No:	ABL-4362-19
Aquifer:	MAGOTHY
Date In Service:	3/2/70
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	538.17
Top of Casing to Packer (ft):	469.5
Top of Casing to Floor (ft):	
Top of Casing to Screen (ft):	474
Top/Casing to Bottom Telepipe (ft):	541.58
Casing Diameter (in):	16

Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,200
Max Production (gpm):	1,585
Normal Prod Drawdown (ft):	26.67

Max Prod Drawdown (ft):	35.25
Normal Prod Pumping Level (ft):	36.17
Max Prod Pumping Level (ft):	44.67
Original Specific Capacity (gpm/ft Drawdown):	44.9

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
9.42	11/20/69

Elevation Top/Casing (MSL): 57.42

Orig Grade Elevation (MSL): 54.05

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	59.75
Screen Assembly Length (ft):	72.08
Orig Grade to Top Gravel (ft):	425
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	76
Slave Size:	65
UC:	

Next Record | Previous Record | Close Form | Next Page | Previous Page

Property ID:	17
Station Name:	Adams Avenue Well Field & Pump Station
District:	Babylon
Well No:	2
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-34031
WBA No:	5593
Decision Date:	10/ 3/68
Pressure Zone:	Zone: 03 Wyandanch Int

Well Construction

Well Driller:	Mathies
Well Type:	ROTARY
Well Started:	10/15/68
First Test:	3/10/69
Final Test:	3/27/69
Accepted:	3/27/69
Construction Completed:	5/13/69

Miscellaneous Data

Well Dwg No:	ABL-4408-6
Aquifer:	MAGOTHY
Date In Service:	7/5/69
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	515.47
Top of Casing to Packer (ft):	447.5
Top of Casing to Floor (ft):	
Top of Casing to Screen (ft):	204.58
Top of Casing to Bottom Tailpipe (ft):	514.25
Casing Diameter (in):	16

Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,200
Max Production (gpm):	1,529
Normal Prod Drawdown (ft):	33.92

Max Prod Drawdown (ft):	
Normal Prod Pumping Level (ft):	32.4
Max Prod Pumping Level (ft):	39.58
Original Specific Capacity (gpm/ft Drawdown):	45.06

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
5.67	6/26/69

Elevation Top/Casing (MSL):	52.85
Orig Grade Elevation (MSL):	54.06

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	Cook
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	55.1
Screen Assembly Length (ft):	66.75
Orig Grade to Top Gravel (ft):	405
Gravel Type:	Morie
Gravel Size:	2&3
Percent Retained (+/-5%):	76
Sieve Size:	12
UC:	1.7

Next Record | Previous Record | Close Form | Next Page | Previous Page

Property ID:	4
Station Name:	Albany Avenue Well Field, Pump Station & Elevated Tank

District:	Babylon
Well No:	4
Structure Type:	Underground Concrete
Test Boring No:	
DEC Id:	S-34595
WBA No:	5634
Decision Date:	12/ 5/68
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	STRATA
Well Type:	ROTARY
Well Started:	1/23/69
Pump Test:	3/12/69
Final Test:	3/31/69
Accepted:	3/31/69
Construction Completed:	4/18/69

Miscellaneous Data

Well Dwg No:	AAM-4466-17
Aquifer:	MAGOTHY
Date In Service:	12/22/70
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth Below Grade (ft):	482.17
Top of Casing to Packer (ft):	399.97
Top of Casing to Floor (ft):	
Top of Casing to Screen (ft):	404.875
Top of Casing to Bottom Telltale (ft):	475
Casing Diameter (in):	16

Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,200
Max Production (gpm):	1,543
Normal Prod Drawdown (ft):	39.1

Max Prod Drawdown (ft):	50.25
Normal Prod Pumping Level (ft):	51.16
Max Prod Pumping Level (ft):	62.33
Original Specific Capacity (gpm/ft Drawdown):	30.68

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
12	9/18/89

Elevation Top/Casing (MSL): 36.44
Orig Grade Elevation (MSL): 37.65

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	64.83
Screen Assembly Length (ft):	75.01
Orig Grade to Top Gravel (ft):	363
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-10%):	76
Sieve Size:	12
UC:	1.7

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	TENTATIVELY SCHEDULED FOR REITIREMENT SUMMER 1992

Next Record | Previous Record | Close Form | Next Page | Previous Page

Property ID:	4	Station Name:	Albany Avenue Well Field, Pump Station & Elevated Tank

District:	Babylon
Well No:	5
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-47886
WSA No:	6250
Decision Date:	3/29/73
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	STRATA
Well Type:	ROTARY
Well Started:	5/31/73
First Test:	7/ 3/73
Final Test:	8/13/73
Accepted:	8/15/73
Construction Completed:	9/ 5/73

Miscellaneous Data

Well Dwg No:	AAM-6248-7
Aquifer:	MAGOTHY
Date In Service:	5/14/74
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Normal Cap (gpm):	1,400
Authorized Cap (gpm):	1,400
Max Production (gpm):	1,529
Normal Prod Drawdown (ft):	48.95

Well Depth below Grade (ft):	522.6
Top of Casing to Packer (ft):	
Top of Casing to Riser (ft):	347.15
Top of Casing to Screen (ft):	420.35
Top Casing to Bottom Tailpipe (ft):	508.6
Casing Diameter (in):	20
Max Prod Drawdown (ft):	53.41
Normal Prod Pumping Level (ft):	61.78
Max Prod Pumping Level (ft):	66.29
Original Specific Capacity (gpm/ft Drawdown):	28.6

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
12.83	10/27/73

Elevation Top/Casing (MSL): 44.07

Orig Grade Elevation (MSL): 42.9

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	5060
Net Length of Slots (ft):	50.33
Screen Assembly Length (ft):	154.17
Orig Grade to Top Gravel (ft):	359
Gravel Type:	MORIE
Gravel Size:	1&2
Percent Retained (+/-5%):	62
Sieve Size:	12
UC:	1.7

Next Record | Previous Record | Close Form | Next Page | Previous Page

Property ID:	4	Station Name:	Albany Avenue Well Field, Pump Station & Elevated Tank

[redacted]

District:	Babylon
Well No:	6
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-63205
WBA No:	6791
Decision Date:	10/ 5/77
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	LAYNE
Well Type:	ROTARY
Well Started:	12/15/77
First Test:	3/27/78
Final Test:	3/29/78
Accepted:	3/29/78
Construction Completed:	4/27/78

Miscellaneous Data

Well Dwg No:	ABL-7993-6
Aquifer:	MAGOTHY
Date In Service:	6/5/79
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	551.92
Top of Casing to Packer (ft):	
Top of Casing to Riser (ft):	280.39
Top of Casing to Screen (ft):	352.1
Top/Casing to Bottom Tailpipe (ft):	418.92
Casing Diameter (in):	20

Normal Cap (gpm):	1,300
Authorized Cap (gpm):	1,300
Max Production (gpm):	1,571
Normal Prod Drawdown (ft):	67.5

Max Prod Drawdown (ft):	69.5
Normal Prod Pumping Level (ft):	75.67
Max Prod Pumping Level (ft):	87.67
Original Specific Capacity (gpm/ft Drawdown):	22.6

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
18.17	11/29/78

Elevation Top/Casing (MSL):	45.46
Orig Grade Elevation (MSL):	44.32

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	40
Net Length of Slots (ft):	55.08
Screen Assembly Length (ft):	131.5
Orig Grade to Top Gravel (ft):	297
Gravel Type:	MORIE
Gravel Size:	1&2
Percent Retained (+/-4%):	71
Sieve Size:	18
UC:	1.7

Next Record | Previous Record | Close Form | Next Page | Previous Page

Property ID:	11
Station Name:	Albin Avenue Well Field, Pump Station & Elevated Tank
Division:	Babylon
Well No:	9
Structure Type:	
Test Boring No:	
DEC - No:	S-20955
WSA No:	4144
Decision Date:	3/ 1/62
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	MATHIES
Well Type:	ROTARY
Well Started:	5/ 7/62
First Test:	5/29/62
Final Test:	6/19/62
Accepted:	6/19/62
Construction Completed:	6/29/62

Miscellaneous Data

Well Dwg No:	BL-1378-8
Aquifer:	MAGOTHY
Date In Service:	6/19/63
Active:	Yes
Status:	RETIRED
Retirement Date:	

Well Depth below Grade (ft):	633
Top of Casing to Packer (ft):	557.33
Top of Casing to Filter (ft):	
Top of Casing to Screen (ft):	563
Top/Casing to Bottom Tailpipe (ft):	628
Casing Diameter (in):	16

Normal Cap (gpm):	950
Authorized Cap (gpm):	1,000
Max Production (gpm):	1,571
Normal Prod Drawdown (ft):	36.25

Max Prod Drawdown (ft):	65.78
Normal Prod Pumping Level (ft):	42.07
Max Prod Pumping Level (ft):	65.78
Original Specific Capacity (gpm/ft Drawdown):	26.2

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
5.75	5/16/63

Elevation Top/Casing (MSL): 22.76
Orig Grade Elevation (MSL): 19.78

Screen + Gravel

Screen Mfr:	Johnson
Screen Dia (ID) in:	
Slot Size:	70
Net Length of Slots (ft):	60.3
Screen Assembly Length (ft):	
Orig Grade to Top Gravel (ft):	
Gravel Type:	Morie
Gravel Size:	2,3
Percent Retained (+/-5%):	50
Slave Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	6" ID "AQUA STREAM" LINER INSTALLED JUNE, 1991

Next Record | Previous Record | Close Form | Next Page | Previous Page

Property ID: 11

Station Name: Albin Avenue Well Field, Pump Station & Elevated Tank

District: Babylon

Well No: 10

Structure Type: 1-story Masonry

Test Boring No:

DEC No: S-31038

W&A No: 5368

Decision Date: 6/ 8/67

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: MATHIES

Well Type: ROTARY

Well Started: 7/ 5/67

First Test: 11/15/67

Final Test: 11/30/67

Accepted: 11/30/67

Construction Completed: 12/20/67

Well Depth below Grade (ft): 543.5

Top of Casing to Packer (ft): 421.67

Top of Casing to Riser (ft):

Top of Casing to Screen (ft): 426.01

Top Casing to Bottom Telepipe (ft): 531.58

Casing Diameter (in): 16

Max Prod Drawdown (ft): 43.01

Normal Prod Pumping Level (ft): 36.01

Max Prod Pumping Level (ft): 51.33

Original Specific Capacity (gpm/ft Drawdown): 43.34

Miscellaneous Data

Well Dwg No: ABL-3714-11

Aquifer: MAGOTHY

Date in Service: 7/17/68

Active: Yes

Status: PERMANENT

Retirement Date:

Normal Cap (gpm): 1,200

Authorized Cap (gpm): 1,200

Max Production (gpm): 1,865

Normal Prod Drawdown (ft): 27.69

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
8.33	5/22/68

Elevation Top/Casing (MSL):	21.92
Orig Grade Elevation (MSL):	18.83

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) In:	10
Slot Size:	60
Net Length of Slots (ft):	69.83
Screen Assembly Length (ft):	109.92
Orig Grade to Top Gravel (ft):	367
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	76
Slave Size:	12
UC:	

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Property ID:	11
Station Name:	Albin Avenue Well Field, Pump Station & Elevated Tank
District:	Babylon
Well No:	11
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-66657
WBA No:	6935
Decision Date:	1/26/79
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	LAYNE
Well Type:	ROTARY
Well Started:	8/13/79
First Test:	11/19/79
Final Test:	11/30/79
Approved:	12/ 3/79
Construction Completed:	12/ 5/79

Miscellaneous Data

Well Dwg No:	ABL-8263-7
Aquifer:	MAGOTHY
Date In Service:	6/10/81
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	559.58
Top of Casing to Packer (ft):	
Top of Casing to Floor (ft):	371
Top of Casing to Screen (ft):	441.01
Top/Casing to Bottom Tailpipe (ft):	554.5
Casing Diameter (in):	20

Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,300
Max Production (gpm):	1,500
Normal Prod Drawdown (ft):	41.92

Max Prod Drawdown (ft):	52.48
Normal Prod Pumping Level (ft):	50.01
Max Prod Pumping Level (ft):	60.58
Original Specific Capacity (gpm/ft Drawdown):	28.6

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
8.17	12/23/80

Elevation Top/Casing (MSL): 26.93

Orig Grade Elevation (MSL): 14.6

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia. (ID) in:	10
Slot Size:	50
Net Length of Slots (ft):	70.25
Screen Assembly Length (ft):	183.5
Orig Grade to Top Gravel (ft):	373
Gravel Type:	MORIE
Gravel Size:	1&2
Percent Rounded (+/-5%):	75
Sand Size:	16
UC:	1.7

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Property ID: 20 Station Name: August Road Well Field & Pump Station

Division: Babylon
Well No: 2
Structure Type: Underground Concrete
Test Boring No:
DEC No: S-16256
WSA No: 3417
Decision Date: 5/ 6/58
Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: LAYNE
Well Type: ROTARY
Well Started: 5/30/58
First Test: 7/ 8/58
Final Test: 7/16/58
Accepted: 7/16/58
Construction Completed: 8/ 6/58

Miscellaneous Data

Well Dwg No: BL-952-2
Aquifer: MAGOTHY
Date In Service: 12/10/58
Active: Yes
Status: PERMANENT
Retirement Date:

Normal Cap (gpm): 1,050
Authorized Cap (gpm): 1,050
Max Production (gpm): 1,585
Normal Prod Drawdown (ft): 30.97

Well Depth below Grade (ft): 605
Top of Casing to Packer Unit: 541.17
Top of Casing to Riser (ft):
Top of Casing to Screen (ft): 546.17
Top/Casing to Bottom Tailpipe (ft): 600.1
Casing Diameter (in): 16

Max Prod Drawdown (ft): 46.76
Normal Prod Pumping Level (ft): 36.3
Max Prod Pumping Level (ft): 52.09
Original Specific Capacity (gpm/ft Drawdown): 33.9

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
5.33	11/12/58

Elevation Top/Casing (MSL): 43.43
Orig Grade Elevation (MSL): 37.14

Screen + Gravel

Screen Mfr:	COOK
Screen Dia RDI in:	10
Slot Size:	50
Net Length of Slots (ft):	49.83
Screen Assembly Length (ft):	60.83
Orig Grade to Top Gravel (ft):	473
Gravel Type:	LAYNE
Gravel Size:	2,3
Percent Retained (+/-5%):	50
Sieve Size:	
UC:	

Revision History

Number:	Reviewed by:	Date:	Notes:

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Property ID: 20

Station Name: August Road Well Field & Pump Station

Click to Change Station Name

District: Babylon

Well No: 3

Structure Type: Underground SubStructure & Prefab SuperStructure

Test Boring No:

DEC No: S-20635

WSA No: 4138

Decision Date: 2/ 1/62

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: MATHIES

Well Type: ROTARY

Well Started: 3/ 1/62

First Test: 3/29/62

Final Test: 5/16/62

Accepted: 5/16/62

Construction Completed: 5/22/62

Miscellaneous Data

Well Dwg No: BL-1366-5

Aquifer: MAGOTHY

Date In Service: 6/19/62

Active: Yes

Status: PERMANENT

Retirement Date:

Normal Cap (gpm): 1,100

Authorized Cap (gpm): 1,200

Max Production (gpm): 1,515

Normal Prod Drawdown (ft): 17.68

Well Depth below Grade (ft): 633

Top of Casing to Packer (ft): 550

Top of Casing to Floor (ft):

Top of Casing to Screen (ft): 554.83

Top/Casing to Bottom Tailpipe (ft): 630.17

Casing Diameter (in): 16

Max Prod Drawdown (ft): 24.36

Normal Prod Pumping Level (ft): 32.77

Max Prod Pumping Level (ft): 39.45

Original Specific Capacity (gpm/ft Drawdown): 62.2

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
15.08	6/12/62

Elevation Top/Casing (MSL): 42.25

Orig Grade Elevation (MSL): 39.78

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	70.33
Screen Assembly Length (ft):	80.08
Orig Grade to Top Gravel (ft):	494
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	50
Slave Size:	
UC:	

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Property ID: 20

Station Name: August Road Well Field & Pump Station

[redacted]

District: Babylon

Well No: 4

Structure Type: Underground Concrete

Test Boring No:

DEC No: S-37861

WSA No: 5843

Decision Date: 7/17/70

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: STRATA

Well Type: ROTARY

Well Started: 7/20/70

First Test: 8/18/70

Final Test: 9/23/70

Accepted: 9/25/70

Construction Completed: 10/ 8/70

Miscellaneous Data

Well Dwg No: ABL-5071-7

Aquifer: MAGOTHY

Date in Service: 7/16/71

Active: Yes

Status: PERMANENT

Retirement Date:

Well Depth below Grade (ft): 683.08

Top of Casing to Packer (ft):

Top of Casing to Floor (ft): 486.17

Top of Casing to Screen (ft): 542

Top Casing to Bottom Tailpipe (ft): 636.08

Casing Diameter (in): 20

Normal Cap (gpm): 1,200

Authorized Cap (gpm): 1,200

Max Production (gpm): 1,711

Normal Prod Drawdown (ft): 17.83

Max Prod Drawdown (ft): 25.33

Normal Prod Pumping Level (ft): 26.25

Max Prod Pumping Level (ft): 33.83

Original Specific Capacity (gpm/ft Drawdown): 67.33

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
8.5	5/14/71

Elevation Top/Casing (MSL): 43.08
Orig Grade Elevation (MSL): 41.8

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	70.15
Screen Assembly Length (ft):	143.08
Orig Grade to Top Gravel (ft):	497
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-#%):	76
Slave Size:	0.065
UC:	1.7

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Property ID:	21
Station Name:	Brook Avenue Well Field & Pump Station

Click to Search Station Name

District:	Babylon
Well No:	1
Structure Type:	Underground SubStructure & Prefab SuperStructure
Test Boring No:	
DEC No:	S-23046
WSA No:	4673
Decision Date:	6/11/64
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	LAYNE
Well Type:	ROTARY
Well Started:	7/15/64
First Test:	11/ 4/64
Final Test:	11/19/64
Accepted:	11/23/64
Construction Completed:	11/30/64

Miscellaneous Data

Well Dwg No:	BL-1774-22
Aquifer:	MAGOTHY
Date In Service:	11/9/65
Active:	Yes
Status:	RETIRED
Retirement Date:	

Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,200
Max Production (gpm):	1,557
Normal Prod Drawdown (ft):	29.6

Well Depth below Grade (ft):	450
Top of Casing to Packer (ft):	383
Top of Casing to Riser (ft):	
Top of Casing to Screen (ft):	389
Top/Casing to Bottom Tailpipe (ft):	449.5
Casing Diameter (in):	8
Max Prod Drawdown (ft):	38.41
Normal Prod Pumping Level (ft):	57.85
Max Prod Pumping Level (ft):	66.66
Original Specific Capacity (gpm/ft Drawdown):	40.54

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
28.25	5/11/65

Elevation Top/Casing (MSL): 66.89
Orig Grade Elevation (MSL): 64.31

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	55.17
Screen Assembly Length (ft):	
Orig Grade to Top Gravel (ft):	330
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	
Sieve Size:	
UC:	

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Property ID:	21	Station Name:	Brook Avenue Well Field & Pump Station

District:	Babylon
Well No:	1A
Structure Type:	
Test Boring No:	
DEC No:	S-98523
W&A No:	8573
Decision Date:	11/15/90
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	
Well Type:	ROTARY
Well Started:	
First Test:	
Final Test:	
Accepted:	
Construction Completed:	

Miscellaneous Data

Well Dwg No:	
Aquifer:	MAGOTHY
Date In Service:	
Active:	Yes
Status:	PERMANENT
Retirement Date:	
Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,200
Max Production (gpm):	
Normal Prod Drawdown (ft):	

Well Depth Below Grade (ft):	445
Top of Casing to Packer (ft):	
Top of Casing to Floor (ft):	
Top of Casing to Screen (ft):	
Top of Casing to Screen Top (ft):	
Casing Diameter (in):	20
Max Prod Drawdown (ft):	
Normal Prod Pumping Level (ft):	
Max Prod Pumping Level (ft):	
Original Specific Capacity (gpm/ft Drawdown):	46.08

Static Water Level History

(Ft Below Top of Baseplate)

Measurement:	Date:
21	

Elevation Top/Casing (MSL):

Orig Grade Elevation (MSL):

Screen + Gravel

Screen Mfr:

Screen Dia (ID) in:

Slot Size:

Net Length of Slots (ft):

Screen Assembly Length (ft):

Orig Grade to Top Gravel (ft):

Gravel Type:

Gravel Size:

Percent Retained (+/-#50):

Sieve Size:

UC:

Revision History

Number:	Reviewed by:	Date:	Notes:
1	SRD	6/14/91	REPLACES WELL NO 1

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Property ID: 21 **Station Name:** Brook Avenue Well Field & Pump Station

Click to Search Station Name

District:	Babylon
Well No:	2
Structure Type:	Underground SubStructure & Prefab SuperStructure
Test Boring No:	
DEC No:	S-25617
WSA No:	4958
Decision Date:	7/22/65
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	MATHIES
Well Type:	ROTARY
Well Started:	8/31/65
First Test:	9/22/65
Final Test:	10/13/65
Accepted:	10/13/65
Construction Completed:	10/20/65

Miscellaneous Data

Well Dwg No:	ABL-3063-5
Aquifer:	MAGOTHY
Date In Service:	5/20/66
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	454.98
Top of Casing to Packer (ft):	360.67
Top of Casing to Riser (ft):	
Top of Casing to Screen (ft):	366.75
Top/Casing to Bottom Tailpipe (ft):	440.42
Casing Diameter (in):	16

Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,200
Max Production (gpm):	1,515
Normal Prod Drawdown (ft):	22.14

Max Prod Drawdown (ft):	27.95
Normal Prod Pumping Level (ft):	61.87
Max Prod Pumping Level (ft):	67.68
Original Specific Capacity (gpm/ft Drawdown):	54.2

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
39.73	4/23/66

Elevation Top/Casing (MSL): 66.71
Orig Grade Elevation (MSL): 67.62

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	60
Screen Assembly Length (ft):	75.67
Orig Grade to Top Gravel (ft):	308
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-#%):	
Sieve Size:	
U/C:	

Revision History

Number:	Revised by:	Date:	Notes:

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Property ID: 21

Station Name: Brook Avenue Well Field & Pump Station

Click to Select Station Name

District: Babylon

Well No: 3

Structure Type: Underground Concrete

Test Boring No:

DEC No: S-36714

WSA No: 5789

Decision Date: 1/ 8/70

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: DELTA

Well Type: ROTARY

Well Started: 1/16/70

First Test: 2/10/70

Final Test: 3/ 6/70

Accepted: 3/ 6/70

Construction Completed: 3/16/70

Well Depth below Grade (ft): 357.5

Top of Casing to Packer (ft):

Top of Casing to Riser (ft): 171

Top of Casing to Screen (ft): 237.33

Top/Casing to Bottom Tailpipe (ft): 307.5

Casing Diameter (in): 20

Max Prod Drawdown (ft): 39.67

Normal Prod Pumping Level (ft): 48.33

Max Prod Pumping Level (ft): 59.75

Original Specific Capacity (gpm/ft Drawdown): 42.41

Miscellaneous Data

Well Dwg No: ABL-4913-7

Aquifer: MAGOTHY

Date In Service: 7/31/70

Active: Yes

Status: PERMANENT

Retirement Date:

Normal Cap (gpm): 1,200

Authorized Cap (gpm): 1,200

Max Production (gpm): 1,683

Normal Prod Drawdown (ft): 28.25

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
20	6/17/70

Elevation Top/Casing (MSL): 62.27
Orig Grade Elevation (MSL): 57.17

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	60.18
Screen Assembly Length (ft):	130.17
Orig Grade to Top Gravel (ft):	181
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	76
Sieve Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Notes:

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Property ID: 21

Station Name: Brook Avenue Well Field & Pump Station

[redacted]

District: Babylon

Well No: 4

Structure Type: Underground Concrete

Test Boring No:

DEC No: S-55463

WSA No: 6539

Decision Date: 5/15/75

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: LAYNE

Well Type: ROTARY

Well Started: 7/17/75

First Test: 8/29/75

Final Test: 10/17/75

Accepted: 10/20/75

Construction Completed: 11/ 5/75

Well Depth below Grade (ft): 372.5

Top of Casing to Packer (ft):

Top of Casing to Floor (ft): 189.67

Top of Casing to Screen (ft): 261.83

Top Casing to Bottom Telltale (ft): 362.5

Casing Diameter (in): 20

Max Prod Drawdown (ft): 33.33

Normal Prod Pumping Level (ft): 47.75

Max Prod Pumping Level (ft): 53.17

Original Specific Capacity (gpm/ft Drawdown): 50.1

Miscellaneous Data

Well Dwg No: ABL-7030-6

Aquifer: MAGOTHY

Date In Service: 10/12/76

Active: Yes

Status: PERMANENT

Retirement Date:

Normal Cap (gpm): 1,400

Authorized Cap (gpm): 1,400

Max Production (gpm): 1,669

Normal Prod Drawdown (ft): 27.92

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
19.83	11/ 5/76

Elevation Top/Casing (MSL):	62.4
Orig Grade Elevation (MSL):	56.32

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	50
Net Length of Slots (ft):	59.92
Screen Assembly Length (ft):	165.67
Orig Grade to Top Gravel (ft):	207
Gravel Type:	MORIE
Gravel Size:	1&2
Percent Retained (+/-5%):	75
Sieve Size:	16
UC:	1.7

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Property ID:	19	Station Name:	Circle Drive Well Field & Pump Station

[redacted]

Division:	Babylon
Well No:	1
Structure Type:	
Test Boring No:	
DEC No:	S-20057
WSA No:	5343
Decision Date:	5/ 4/67
Pressure Zone:	Zone: 03 Wyandanch Int

Well Construction

Well Driller:	LAUMAN
Well Type:	ROTARY
Well Started:	8/ 7/61
Field Test:	
Field Test:	
Accepted:	12/26/61
Construction Completed:	12/26/61

Miscellaneous Data

Well Dwg No:	ABL-3849-1
Aquifer:	GLACIAL
Date In Service:	4/20/68
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth Below Grade (ft):	200.67
Top of Casing to Packer (ft):	
Top of Casing to Floor (ft):	
Top of Casing to Screen (ft):	170.5
Top Casing to Bottom Tailpipe (ft):	200.67
Casing Diameter (in):	12
Max Prod Drawdown (ft):	
Normal Prod Pumping Level (ft):	51.88
Max Prod Pumping Level (ft):	
Original Specific Capacity (gpm/ft Drawdown):	30.94

Normal Cap (gpm):	650
Authorized Cap (gpm):	700
Max Production (gpm):	
Normal Prod Drawdown (ft):	21

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
30.88	5/ 7/68

Elevation Top/Casing (MSL):
Orig Grade Elevation (MSL): 81.01

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	50
Net Length of Slots (ft):	
Screen Assembly Length (ft):	30
Orig Grade to Top Gravel (ft):	150
Gravel Type:	
Gravel Size:	
Percent Retained (+/-4%):	
Sieve Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	SMALL FRAME STRUCTURE, ACQUIRED 1-31-66 FORMER WSA 4969 REFERENCE DRAWING NOS. XBL-1952-7 & XBL-1952-9 FURNISHED BY C.W. LAUMAN & CO.

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Property ID:	19
Station Name:	Circle Drive Well Field & Pump Station

District:	Babylon
Well No:	2
Structure Type:	
Test Boring No:	
DEC No:	S-20300
WSA No:	5343
Decision Date:	5/ 4/67
Pressure Zone:	Zone: 03 Wyandanch Int

Well Construction

Well Driller:	LAUMAN
Well Type:	ROTARY
Well Started:	10/21/61
First Test:	
Final Test:	
Accepted:	
Construction Completed:	11/20/61

Miscellaneous Data

Well Dwg No:	ABL-3849-2
Aquifer:	GLACIAL
Date In Service:	2/1/66
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	233.67
Top of Casing to Packer (ft):	
Top of Casing to Riser (ft):	
Top of Casing to Screen (ft):	203.25
Top/Casing to Bottom Tailpipe (ft):	233.67
Casing Diameter (in):	12
Max Prod Drawdown (ft):	
Normal Prod Pumping Level (ft):	52.2
Max Prod Pumping Level (ft):	
Original Specific Capacity (gpm/ft Drawdown):	20.52

Normal Cap (gpm):	650
Authorized Cap (gpm):	700
Max Production (gpm):	
Normal Prod Drawdown (ft):	31.68

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
18	4/19/67

Elevation Top/Casing (MSL):

Orig Grade Elevation (MSL): 66.64

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	50
Net Length of Slots (ft):	
Screen Assembly Length (ft):	31
Orig Grade to Top Gravel (ft):	172
Gravel Type:	MORIE
Gravel Size:	2
Percent Retained (+/-5%):	
Sieve Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	4. ACQUIRED 1-31-66 FORMER WSA 4969 SMALL FRAME STRUCTURE, REFERENCE DRAWING NOS. XBL-1952-7 & XBL-1952-9 FURNISHED BY C.W. LAUMAN & CO. INCREASED CAPACITY TO 700 GPM

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Property ID:	19
Station Name:	Circle Drive Well Field & Pump Station
District:	Babylon
Well No:	3
Structure Type:	1-story Masonry
Test Boring No:	
DEC No:	S-30506
WSA No:	5343
Decision Date:	5/ 4/67
Pressure Zone:	Zone: 03 Wyandanch Int

Well Construction

Well Driller:	STRATA
Well Type:	ROTARY
Well Started:	5/ 3/67
First Test:	7/ 7/67
Final Test:	7/25/67
Accepted:	7/25/67
Construction Completed:	8/ 2/67

Miscellaneous Data

Well Dwg No:	ABL-3680-21
Aquifer:	MAGOTHY
Date In Service:	4/23/68
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	630
Top of Casing to Packer (ft):	541.08
Top of Casing to Floor (ft):	
Top of Casing to Screen (ft):	547.33
Top Casing to Screen Tailpipe (ft):	621.25
Casing Diameter (in):	16

Normal Cap (gpm):	1,000
Authorized Cap (gpm):	1,000
Max Production (gpm):	1,557
Normal Prod Drawdown (ft):	24.04

Max Prod Drawdown (ft):	37.43
Normal Prod Pumping Level (ft):	51.25
Max Prod Pumping Level (ft):	64.64
Original Specific Capacity (gpm/ft Drawdown):	41.6

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
27.214	3/ 4/68

Elevation Top/Casing (MSL): 76.44
Orig Grade Elevation (MSL): 75.08

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	59.83
Screen Assembly Length (ft):	81.5
Orig Grade or Top Gravel (ft):	490
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-4%):	50
Slurry Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	INCREASED CAPACITY TO 700 GPM

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Property ID:	19	Station Name:	Circle Drive Well Field & Pump Station

[illegible]

District:	Babylon
Well No:	4
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-48193
WBA No:	6144
Decision Date:	8/24/72
Pressure Zone:	Zone: 03 Wyandanch Int

Well Construction

Well Driller:	DELTA
Well Type:	ROTARY
Well Started:	
First Test:	
Final Test:	12/19/73
Accepted:	
Construction Completed:	

Miscellaneous Data

Well Dwg No:	ABL-5917-7
Aquifer:	MAGOTHY
Date In Service:	7/2/74
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	545
Top of Casing to Packer (ft):	
Top of Casing to Riser (ft):	399.75
Top of Casing to Screen (ft):	469.92
Top/Casing to Bottom Tailpipe (ft):	533.75
Casing Diameter (in):	20

Normal Cap (gpm):	1,000
Authorized Cap (gpm):	1,400
Max Production (gpm):	
Normal Prod Drawdown (ft):	

Max Prod Drawdown (ft):	
Normal Prod Pumping Level (ft):	
Max Prod Pumping Level (ft):	
Original Specific Capacity (gpm/ft Drawdown):	40.1

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
55.25	1/ 4/74

Elevation Top/Casing (MSL): 81.25
Orig Grade Elevation (MSL): 79.5

Screen + Gravel

Screen Mfr:	Johnson
Screen Dia (ID) In:	
Slot Size:	60
Net Length of Slots (ft):	60
Screen Assembly Length (ft):	
Orig Grade to Top Gravel (ft):	405.92
Gravel Type:	MORIE
Gravel Size:	2.3
Percent Retained (+/-#30):	62
Sieve Size:	12
UC:	1.7

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	TWO 15,000 GALLON HYDROPNEUMATIC UNDERGROUND STORAGE TANKS LOCATED ON THIS SITE.

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Property ID:	18	Station Name:	Gordon Avenue Well Field & Pump Station

District:	Babylon
Well No:	1
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-51298
WBA No:	6337
Decision Date:	10/ 5/73
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	LAUMAN
Well Type:	ROTARY
Well Started:	2/12/74
Pump Tests:	3/29/74
Final Tests:	4/25/74
Abandoned:	4/29/74
Construction Completed:	5/ 3/74

Miscellaneous Data

Well Dwg No:	ABL-6356-21
Aquifer:	MAGOTHY
Date In Service:	3/27/75
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth (Hard Rock) (ft):	659.33
Top of Casing to Packer (ft):	
Top of Casing to Floor (ft):	501
Top of Casing to Screen (ft):	571.58
Top of Casing to Screen Tailpipe (ft):	652.33
Casing Diameter (in):	20

Normal Cap (gpm):	1,400
Authorized Cap (gpm):	1,400
Max Production (gpm):	
Normal Prod Drawdown (ft):	

Max Prod Drawdown (ft):	
Normal Prod Pumping Level (ft):	
Max Prod Pumping Level (ft):	
Original Specific Capacity (gpm/ft Drawdown):	30.1

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
37.53	5/ 1/74

Elevation Top/Casing (MSL): 48.65

Orig Grade Elevation (MSL): 54.3

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	50
Net Length of Slots (ft):	69.92
Screen Assembly Length (ft):	144.67
Orig Grade to Top Gravel (ft):	516
Gravel Type:	MORIE
Gravel Size:	1&2
Percent Retained (+/-5%):	75
Sieve Size:	16
UC:	1.7

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Property ID:	18
Station Name:	Gordon Avenue Well Field & Pump Station
District:	Babylon
Well No:	2
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-65505
WSA No:	6337
Decision Date:	10/ 5/73
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	STRATA
Well Type:	ROTARY
Well Started:	3/28/78
First Test:	12/11/78
Final Test:	5/ 8/79
Accepted:	5/19/79
Date Construction Completed:	5/14/79

Miscellaneous Data

Well Dwg No:	ABL-8123-7
Aquifer:	MAGOTHY
Date In Service:	6/1/81
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	664.08
Top of Casing to Packer (ft):	
Top of Casing to Pump (ft):	510.67
Top of Casing to Screen (ft):	580.5
Top of Casing to Screen Tailpipe (ft):	660.1
Casing Diameter (in):	20

Normal Cap (gpm):	1,400
Authorized Cap (gpm):	1,400
Max Production (gpm):	1,837
Normal Prod Drawdown (ft):	19.92

Max Prod Drawdown (ft):	26.1
Normal Prod Pumping Level (ft):	30.83
Max Prod Pumping Level (ft):	37.08
Original Specific Capacity (gpm/ft Drawdown):	70.2

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
10.92	4/30/80

Elevation Top/Casing (MSL):	50.71
Orig Grade Elevation (MSL):	53.83

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) In:	10
Slot Size:	50
Net Length of Slots (ft):	69.92
Screen Assembly Length (ft):	75.33
Orig Grade to Top Gravel (ft):	518
Gravel Type:	MORIE
Gravel Size:	1&2
Percent Retained (+/-5%):	75
Slurry Size:	16
UC:	1.7

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Property ID: 5

Station Name: Great Neck Road Well Field & Pump Station

[redacted]

District: Babylon

Well No: 1

Structure Type: Underground Concrete

Test Boring No: S-49542T

DEC No: S-51214

WSA No: 6381

Decision Date: 2/15/74

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller:	STRATA
Well Type:	ROTARY
Well Started:	2/ 7/74
First Test:	3/ 6/74
Final Test:	3/12/74
Accepted:	3/14/74
Operationally Completed:	3/28/74

Miscellaneous Data

Well Dwg No:	ABL-6355-20
Aquifer:	MAGOTHY
Date In Service:	1/13/75
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	402.5
Top of Casing to Packer (ft):	
Top of Casing to Floor (ft):	252.75
Top of Casing to Screen (ft):	322.67
Top/Casing to Bottom Telspipe (ft):	394.5
Casing Diameter (in):	20

Normal Cap (gpm):	1,400
Authorized Cap (gpm):	1,400
Max Production (gpm):	1,529
Normal Prod Drawdown (ft):	39.83

Max Prod Drawdown (ft):	43.5
Normal Prod Pumping Level (ft):	50.75
Max Prod Pumping Level (ft):	54.5
Original Specific Capacity (gpm/ft Drawdown):	35.1

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
10.92	10/ 9/74

Elevation Top/Casing (MSL): 37.7

Orig Grade Elevation (MSL): 43.23

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	PERMANENT OBSERVATION WELL (S-35670T) LOCATED ON SITE- DEPTH 154'-5-7/8"

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	50
Net Length of Slots (ft):	60.41
Screen Assembly Length (ft):	135.17
Orig Grade to Top Gravel (ft):	265
Gravel Type:	MORIE
Gravel Size:	1&2
Percent Retained (+/-5%):	75
Sieve Size:	16
UC:	1.7

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Property ID:	5	Station Name:	Great Neck Road Well Field & Pump Station

Well Construction

Well Driller:	LAYNE
Well Type:	ROTARY
Well Started:	3/12/75
First Test:	4/28/75
Final Test:	5/12/75
Accepted:	5/14/75
Construction Completed:	6/ 3/75

District:	Babylon
Well No:	2
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-54568
WBA No:	6513
Decision Date:	3/14/75
Pressure Zone:	Zone: 01 South Shore Low

Miscellaneous Data

Well Dwg No:	ABL-7033-6
Aquifer:	MAGOTHY
Date In Service:	4/1/76
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	425
Top of Casing to Packer (ft):	
Top of Casing to Riser (ft):	258.67
Top of Casing to Screen (ft):	328.67
Top/Casing to Bottom Tailpipe (ft):	422
Casing Diameter (in):	20

Normal Cap (gpm):	1,400
Authorized Cap (gpm):	1,400
Max Production (gpm):	1,511
Normal Prod Drawdown (ft):	33.94

Max Prod Drawdown (ft):	36.58
Normal Prod Pumping Level (ft):	43.08
Max Prod Pumping Level (ft):	45.75
Original Specific Capacity (gpm/ft Drawdown):	41.3

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
9.17	12/ 1/75

Elevation Top/Casing (MSL): 37.41

Orig Grade Elevation (MSL): 44

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	60
Net Length of Slots (ft):	60.1
Screen Assembly Length (ft):	155.58
Orig Grade to Top Gravel (ft):	272.83
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-8%):	82
Sieve Size:	12
UC:	1.7

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Property ID:	23	Station Name:	Plymouth Street Well Field, Pump Station & Elevated Tank

District:	Babylon
Well No:	1
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-18261
WSA No:	3565
Decision Date:	3/ 3/59
Pressure Zone:	Zone: 03 Wyandanch Int

Well Construction

Well Driller:	MATHIES
Well Type:	ROTARY
Well Started:	12/ 1/59
First Test:	1/ 4/60
Final Test:	1/13/60
Accepted:	1/13/60
Construction Completed:	2/ 8/60

Miscellaneous Data

Well Dwg No:	BL-1079-22
Aquifer:	MAGOTHY
Date In Service:	5/13/60
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	377.33
Top of Casing to Packer (ft):	275.75
Top of Casing to Floor (ft):	
Top of Casing to Screen (ft):	281.83
Top/Casing to Screen Tailpipe (ft):	371
Casing Diameter (in):	16

Normal Cap (gpm):	950
Authorized Cap (gpm):	1,000
Max Production (gpm):	1,550
Normal Prod Drawdown (ft):	31.88

Max Prod Drawdown (ft):	52.01
Normal Prod Pumping Level (ft):	79.11
Max Prod Pumping Level (ft):	99.24
Original Specific Capacity (gpm/ft Drawdown):	29.8

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
47.23	4/ 7/60

Elevation Top/Casing (MSL):

Orig Grade Elevation (MSL): 113.3

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) In:	10
Slot Size:	70
Net Length of Slots (ft):	54.94
Screen Assembly Length (ft):	95.25
Orig Grade to Top Gravel (ft):	234
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	
Sieve Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Notes:

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Property ID:	23
Station Name:	Plymouth Street Well Field, Pump Station & Elevated Tank
Division:	Babylon
Well No:	2
Structure Type:	Underground Concrete
Test Boring No:	
DEC File:	S-18621
WSA No:	3565
Decision Date:	3/ 3/59
Pressure Zone:	Zone: 03 Wyandanch Int

Well Construction

Well Driller:	MATHIES
Well Type:	ROTARY
Well Started:	3/ 9/60
Pilot Test:	4/28/60
Final Test:	5/24/60
Accepted:	5/24/60
Construction Completed:	5/31/60

Miscellaneous Data

Well Dwg No:	BL-1114-3
Aquifer:	GLACIAL
Date In Service:	7/3/60
Active:	No
Status:	RETIRED
Retirement Date:	10/18/93

Well Depth below Grade (ft):	201
Top of Casing to Packer (ft):	135.33
Top of Casing to Floor (ft):	
Top of Casing to Screen (ft):	141
Top/Casing to Screen Tailpipe (ft):	195.42
Casing Diameter (in):	16

Normal Cap (gpm):	950
Authorized Cap (gpm):	1,000
Max Production (gpm):	1,500
Normal Prod Drawdown (ft):	26

Max Prod Drawdown (ft):	41.1
Normal Prod Pumping Level (ft):	74.56
Max Prod Pumping Level (ft):	89.66
Original Specific Capacity (gpm/ft Drawdown):	36.5

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
48.56	6/30/60

Elevation Top/Casing (MSL): 110

Orig Grade Elevation (MSL): 115.49

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	500,000 GALLON ELEVATED TANK LOCATED ON SITE

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	75
Net Length of Slots (ft):	50.5
Screen Assembly Length (ft):	60
Orig Grade to Top Gravel (ft):	116
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	
Sieve Size:	
UC:	

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Property ID: 23

Station Name: Plymouth Street Well Field, Pump Station & Elevated Tank

[illegible]

District: Babylon

Well No: 2A

Structure Type: PRECAST CONC

Test Boring No:

DEC No: S-100453

WBA No: 8758

Decision Date: 1/17/91

Pressure Zone: Zone: 12 Central Island Int

Well Construction

Well Driller:

Well Type: ROTARY

Well Started:

First Test:

Final Test:

Accepted:

Construction Completed:

Miscellaneous Data

Well Dwg No:

Aquifer: GLACIAL

Date In Service:

Active: Yes

Status: PERMANENT

Retirement Date:

Normal Cap (gpm): 0

Authorized Cap (gpm): 1,000

Max Production (gpm):

Normal Prod Drawdown (ft):

Well Depth below Grade (ft): 225

Top of Casing to Packer (ft):

Top of Casing to Riser (ft):

Top of Casing to Screen (ft):

Top/Casing to Bottom Tailpipe (ft):

Casing Diameter (in): 0

Max Prod Drawdown (ft):

Normal Prod Pumping Level (ft):

Max Prod Pumping Level (ft):

Original Specific Capacity (gpm/ft Drawdown): 39.3

Static Water Level History
(Ft Below Top of Baseplate)

Measurement:	Date:
60	

Elevation Top/Casing (MSL):
Orig Grade Elevation (MSL):

Screen + Gravel

Screen Mfr:
Screen Dia (ID) In:
Slot Size:
Net Length of Slots (Ft):
Screen Assembly Length (Ft):
Orig Grade to Top Gravel (Ft):
Gravel Type:
Gravel Size:
Percent Retained (+/-4%):
Sieve Size:
UC:

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	REPLACES WELL NO 2

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Property ID:	23
Station Name:	Plymouth Street Well Field, Pump Station & Elevated Tank

Division:	Babylon
Well No:	3
Structure Type:	Underground SubStructure & Prefab SuperStructure
Test Boring No:	
DEC No:	S-22548
WSA No:	4578
Decision Date:	1/ 9/64
Pressure Zone:	Zone: 03 Wyandanch Int

Well Construction

Well Driller:	LAUMAN
Well Type:	ROTARY
Well Started:	3/12/64
First Test:	5/13/64
Final Test:	3/24/65
Accepted:	3/24/65
Construction Completed:	6/30/64

Miscellaneous Data

Well Dwg No:	BL-1707-7
Aquifer:	MAGOTHY
Date In Service:	9/25/64
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	415.5
Top of Casing to Packer (ft):	341.75
Top of Casing to Riser (ft):	
Top of Casing to Screen (ft):	345.94
Top of Casing to Bottom Telescope (ft):	417.08
Casing Diameter (in):	16

Normal Cap (gpm):	950
Authorized Cap (gpm):	1,000
Max Production (gpm):	1,564
Normal Prod Drawdown (ft):	30.72

Max Prod Drawdown (ft):	50.58
Normal Prod Pumping Level (ft):	92.7
Max Prod Pumping Level (ft):	112.56
Original Specific Capacity (gpm/ft Drawdown):	30.92

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
61.94	

Elevation Top/Casing (MSL): 116.68
Orig Grade Elevation (MSL):

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) Inz:	12
Slot Size:	70
Net Length of Slots (ft):	65.17
Screen Assembly Length (ft):	75.33
Orig Grade to Top Gravel (ft):	289
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Rounded (+/-5%):	
Sieve Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Notes:

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Property ID:	10
Station Name:	Prospect Avenue Well Field & Pump Station
District:	Babylon
Well No:	1
Structure Type:	1-story Masonry
Test Boring No:	
DEC No:	S-28503
WBA No:	4940
Decision Date:	6/10/65
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	MATHIES
Well Type:	ROTARY
Well Spudded:	7/18/66
First Test:	10/24/66
Final Test:	11/16/66
Accepted:	11/16/66
Construction Completed:	12/ 5/66
Well Depth below Grade (ft):	675.5
Top of Casing to Packer (ft):	602.25
Top of Casing to Riser (ft):	
Top of Casing to Screen (ft):	608.25
Top Casing to Bottom Tailpipe (ft):	678.92
Casing Diameter (in):	16
Max Prod Drawdown (ft):	26.93
Normal Prod Pumping Level (ft):	23.98
Max Prod Pumping Level (ft):	33.32
Original Specific Capacity (gpm/ft Drawdown):	68.22

Miscellaneous Data

Well Dwg No:	BL-1887-19
Aquifer:	MAGOTHY
Date In Service:	1/22/68
Active:	Yes
Status:	PERMANENT
Retirement Date:	
Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,200
Max Production (gpm):	1,837
Normal Prod Drawdown (ft):	17.59

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
6.39	9/19/67

Elevation Top/Casing (MSL): 29.92
Orig Grade Elevation (MSL): 26.5

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) In:	10
Slot Size:	65
Net Length of Slots (ft):	64.83
Screen Assembly Length (ft):	76.67
Orig Grade to Top Gravel (ft):	550
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-#30):	
Slurry Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Notes:
1	ISRD	6/14/91	REDEVELOPED 1973-1974

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Property ID: 10

Station Name: Prospect Avenue Well Field & Pump Station

District:	Babylon
Well No:	2
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-33005
WSA No:	5491
Decision Date:	2/ 1/68
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	MATHIES
Well Type:	ROTARY
Well Started:	5/20/68
First Test:	8/22/68
Final Test:	9/12/68
Approved:	9/12/68
Construction Completed:	9/26/68

Miscellaneous Data

Well Dwg No:	ABL-4072-6
Aquifer:	MAGOTHY
Date in Service:	4/18/69
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	673.83
Top of Casing to Packer (ft):	599.48
Top of Casing to Riser (ft):	
Top of Casing to Screen (ft):	604.17
Top/Casing to Bottom Tailpipe (ft):	676.25
Casing Diameter (in):	16

Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,200
Max Production (gpm):	1,557
Normal Prod Drawdown (ft):	19.08

Max Prod Drawdown (ft):	24.83
Normal Prod Pumping Level (ft):	29.94
Max Prod Pumping Level (ft):	35.58
Original Specific Capacity (gpm/ft Drawdown):	62.84

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
10.83	12/12/68

Elevation Top/Casing (MSL): 27.67
Orig Grade Elevation (MSL): 25.24

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) In:	10
Slot Size:	60
Net Length of Slots (ft):	65
Screen Assembly Length (ft):	76.75
Orig Grade to Top Gravel (ft):	560
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	60
Sieve Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Notes:

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Property ID: 10

Station Name: Prospect Avenue Well Field & Pump Station

Division: Babylon

Well No: 3

Structure Type:

Test Boring No:

DEC No: S-47435

WSA No: 6141

Decision Date: 8/24/72

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: LAUMAN

Well Type: ROTARY

Well Started: 3/14/73

First Test: 6/ 6/73

Final Test: 6/13/73

Accepted: 6/13/73

Construction Completed: 6/22/73

Well Depth below Grade (ft): 441.8

Top of Casing to Packer (ft):

Top of Casing to Floor (ft): 245.25

Top of Casing to Screen (ft): 316.48

Top/Casing to Bottom Tailpipe (ft): 447.58

Casing Diameter (in): 20

Miscellaneous Data

Well Dwg No: ABL-5916-10

Aquifer: MAGOTHY

Date In Service: 7/29/74

Active: Yes

Status: PERMANENT

Retirement Date:

Max Prod Drawdown (ft): 64.25

Normal Prod Pumping Level (ft): 37.3

Max Prod Pumping Level (ft): 71.58

Original Specific Capacity (gpm/ft Drawdown): 46.7

Normal Cap (gpm): 1,400

Authorized Cap (gpm): 1,400

Max Production (gpm): 3,002

Normal Prod Drawdown (ft): 29.94

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
7.33	6/24/74

Elevation: Top/Casing (MSL): 29.37
Orig Grade Elevation (MSL): 22.87

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	40
Net Length of Slots (ft):	100
Screen Assembly Length (ft):	202.33
Orig Grade to Top Gravel (ft):	241
Gravel Type:	MORIE
Gravel Size:	1&2
Percent Retained (+ #8 %):	71
Sieve Size:	18
UC:	1.7

Revision History

Number:	Revised by:	Date:	Notes:

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Property ID:	9
Station Name:	Sawyer Avenue Well Field & Pump Station
District:	Babylon
Well No:	2
Structure Type:	Underground SubStructure & Prefab SuperStructure
Test Boring No:	
DEC No:	S-18003
WSA No:	3647
Decision Date:	7/ 7/59
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	LAUMAN
Well Type:	ROTARY
Well Started:	8/19/59
First Test:	10/13/59
Final Test:	10/30/59
Accepted:	10/30/59
Construction Completed:	11/20/59

Miscellaneous Data

Well Dwg No:	BL-1049-5
Aquifer:	MAGOTHY
Date In Service:	5/12/60
Active:	Yes
Status:	RETIRED
Retirement Date:	

Well Depth below Grade (ft):	668.58
Top of Casing to Packer (ft):	605.67
Top of Casing to Floor (ft):	
Top of Casing to Screen (ft):	610.58
Top/Casing to Bottom Tailpipe (ft):	671.58
Casing Diameter (inl):	16

Normal Cap (gpm):	1,080
Authorized Cap (gpm):	1,080
Max Production (gpm):	1,580
Normal Prod Drawdown (ft):	26.66

Max Prod Drawdown (ft):	39.01
Normal Prod Pumping Level (ft):	31.97
Max Prod Pumping Level (ft):	44.32
Original Specific Capacity (gpm/ft Drawdown):	40.5

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
5.31	3/ 3/60

Elevation Top/Casing (MSL): 26.11
Orig Grade Elevation (MSL):

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) In:	10
Slot Size:	60
Net Length of Slots (ft):	55.48
Screen Assembly Length (ft):	65.92
Orig Grade to Top Gravel (ft):	491
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (++FS%):	
Slave Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Noted:
1	SRD	6/14/91	REDELEVELOPED - SPRING ?, 6" ID LINE INSTALLED

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Property ID: 9

Station Name: Sawyer Avenue Well Field & Pump Station

Division: Babylon

Well No: 2A

Structure Type:

Test Boring No:

DEC No: S-101655

WRA No: 8849

Decision Date: 7/21/92

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller:

Well Type: ROTARY

Well Started:

First Test:

Final Test:

Accepted:

Construction Completed:

Well Depth Below Grade (ft): 633

Top of Casing to Packer (ft):

Top of Casing to Riser (ft):

Top of Casing to Screen (ft):

Top Casing to Bottom Tailpipe (ft):

Casing Diameter (in): 20

Max Prod Drawdown (ft):

Normal Prod Pumping Level (ft):

Max Prod Pumping Level (ft):

Original Specific Capacity (gpm/ft Drawdown): 48.65

Miscellaneous Data

Well Dwg No: ABL-93-37

Aquifer: MAGOTHY

Date In Service:

Active: Yes

Status: PERMANENT

Retirement Date:

Normal Cap (gpm): 1,300

Authorized Cap (gpm): 0

Max Production (gpm):

Normal Prod Drawdown (ft):

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
18.17	11/29/78

Elevation Top/Casing (MSL):	45.46
Orig Grade Elevation (MSL):	44.32

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	40
Net Length of Slots (ft):	55.08
Screen Assembly Length (ft):	131.5
Orig Grade to Top Gravel (ft):	297
Gravel Type:	MORIE
Gravel Size:	1&2
Percent Retained (+/-%):	71
Slave Size:	18
UC:	1.7

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Property ID: 9

Station Name: Sawyer Avenue Well Field & Pump Station

District: Babylon

Well No: 3

Structure Type: Underground Concrete

Test Boring No:

SED No: S-40498

WSA No: 5971

Decision Date: 7/19/71

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: LAYNE

Well Type: ROTARY

Well Started: 1/17/72

First Test: 4/11/72

Final Test: 5/ 8/72

Accepted: 5/12/72

Construction Completed: 7/25/72

Miscellaneous Data

Well Drwg No: ABL-5452-10

Aquifer: MAGOTHY

Date In Service: 12/7/72

Active: Yes

Status: PERMANENT

Retirement Date:

Well Depth Below Grade (ft): 746.48

Top of Casing to Packer (ft):

Top of Casing to Pump (ft): 600.17

Top of Casing to Screen (ft): 667.75

Top of Casing to Bottom Tailpipe (ft): 743.94

Casing Diameter (in): 20

Normal Cap (gpm): 1,200

Authorized Cap (gpm): 1,200

Max Production (gpm): 1,529

Normal Prod Drawdown (ft): 22

Max Prod Drawdown (ft): 28

Normal Prod Pumping Level (ft): 30.48

Max Prod Pumping Level (ft): 36.48

Original Specific Capacity (gpm/ft Drawdown): 54.5

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
8.48	9/12/72

Elevation Top/Casing (MSL):	21.33
Orig Grade Elevation (MSL):	23.83

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) In:	10
Slot Size:	60
Net Length of Slots (ft):	70.33
Screen Assembly Length (ft):	143.75
Orig Grade to Top Gravel (ft):	608
Gravel Type:	MORIE
Gravel Size:	2&3
Pounds Required (+/-5%):	62
Sieve Size:	
UC:	1.7

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Property ID:	9	Station Name:	Sawyer Avenue Well Field & Pump Station

[illegible]

District:	Babylon
Well No:	4
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-51673
WSA No:	6374
Decision Date:	2/15/74
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	
Well Type:	ROTARY
Well Started:	
Final Test:	
Final Test:	
Accepted:	
Construction Completed:	

Miscellaneous Data

Well Dwg No:	ABL-6612-6
Aquifer:	MAGOTHY
Date In Service:	12/13/74
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	760
Top of Casing to Packer (ft):	
Top of Casing to Riser (ft):	
Top of Casing to Screen (ft):	
Top/Casing to Bottom Tailpipe (ft):	
Casing Diameter (in):	20

Normal Cap (gpm):	2,100
Authorized Cap (gpm):	2,400
Max Production (gpm):	
Normal Prod Drawdown (ft):	

Max Prod Drawdown (ft):	
Normal Prod Pumping Level (ft):	
Max Prod Pumping Level (ft):	
Original Specific Capacity (gpm/ft Drawdown):	61.3

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
13.37	

Elevation Top/Casing (MSL):

Orig Grade Elevation (MSL):

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:

Screen Dia (ID) in:

Slot Size:

Net Length of Slots (ft):

Screen Assembly Length (ft):

Orig Grade to Top Gravel (ft):

Gravel Type:

Gravel Size:

Percent Retained (+/-5%):

Sieve Size:

UC:

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Property ID: 11

Station Name: Albin Avenue Well Field, Pump Station & Elevated Tank

District: Babylon

Well No: 9

Structure Type:

Test Boring No:

DEC No: S-20955

WSA No: 4144

Decision Date: 3/ 1/62

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: MATHIES

Well Type: ROTARY

Well Started: 5/ 7/62

Pump Tests: 5/29/62

Final Tests: 6/19/62

Accepted: 6/19/62

Construction Completed: 6/29/62

Miscellaneous Data

Well Dwg No: BL-1378-8

Aquifer: MAGOTHY

Date In Service: 6/19/63

Active: Yes

Status: RETIRED

Retirement Date:

Well Depth Below Grade (ft): 633

Top of Casing to Packer (ft): 557.33

Top of Casing to Floor (ft):

Top of Casing to Screen (ft): 563

Top Casing to Screen Tailpipe (ft): 628

Casing Diameter (in): 16

Normal Cap (gpm): 950

Authorized Cap (gpm): 1,000

Max Production (gpm): 1,571

Normal Prod Drawdown (ft): 36.25

Max Prod Drawdown (ft): 65.78

Normal Prod Pumping Level (ft): 42.07

Max Prod Pumping Level (ft): 65.78

Original Specific Capacity (gpm/ft Drawdown): 26.2

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
5.75	5/16/63

Elevation Top/Casing (MSL): 22.76

Orig Grade Elevation (MSL): 19.78

Screen + Gravel

Screen Mfr:	Johnson
Screen Dia (ID) in:	
Slot Size:	70
Net Length of Slots (ft):	60.3
Screen Assembly Length (ft):	
Orig Grade to Top Gravel (ft):	
Gravel Type:	Morie
Gravel Size:	2,3
Percent Retained (+/-5%):	50
Sieve Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	6" ID "AQUA STREAM" LINER INSTALLED JUNE, 1991

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Property ID#:	11
Station Name:	Albin Avenue Well Field, Pump Station & Elevated Tank
Division:	Babylon
Well No:	10
Structure Type:	1-story Masonry
Test Boring No:	
DEC No:	S-31038
WRA No:	5368
Decision Date:	6/ 8/67
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	MATHIES
Well Type:	ROTARY
Drill Started:	7/ 5/67
First Test:	11/15/67
Final Test:	11/30/67
Accepted:	11/30/67
Construction Completed:	12/20/67

Miscellaneous Data

Well Drag No:	ABL-3714-11
Aquifer:	MAGOTHY
Date In Service:	7/17/68
Active:	Yes
Status:	PERMANENT
Retirement Date:	
Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,200
Max Production (gpm):	1,865
Normal Prod Drawdown (ft):	27.69

Well Depth below Grade (ft):	543.5
Top of Casing to Packer (ft):	421.67
Top of Casing to Floor (ft):	
Top of Casing to Screen (ft):	426.01
Top/Casing to Bottom Tailpipe (ft):	531.58
Casing Diameter (in):	16
Max Prod Drawdown (ft):	43.01
Normal Prod Pumping Level (ft):	36.01
Max Prod Pumping Level (ft):	51.33
Original Specific Capacity (gpm/ft Drawdown):	43.34

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
8.33	5/22/68

Elevation Top/Casing (MSL): 21.92

Orig Grade Elevation (MSL): 18.83

Revision History

Number:	Reviewed by:	Date:	Notes:

Screen + Gravel

Screen Mfg:	JOHNSON
Screen Dia. (ID) in:	10
Slot Size:	60
Net Length of Slots (ft):	69.83
Screen Assembly Length (ft):	109.92
Orig Grade to Top Gravel (ft):	367
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-85%):	76
Slurry Size:	12
UC:	

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Property ID:	12	Station Name:	12th Street Well Field & Pump Station

District:	Babylon
Well No:	2
Structure Type:	
Test Boring No:	
DEC No:	S-21487
PWA No:	4286
Decision Date:	10/ 4/62
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	MATHIES
Well Type:	ROTARY
Well Started:	1/ 3/63
Well Total:	4/ 3/63
Well Tested:	4/12/63
Accepted:	4/12/63
Construction Completed:	4/19/63

Miscellaneous Data

Well Dwg No:	BL-1493-4
Aquifer:	MAGOTHY
Date In Service:	11/18/63
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth, below Grade (ft):	337.33
Top of Casing to Packer (ft):	265.08
Top of Casing to Pump (ft):	
Top of Casing to Screen (ft):	270.83
Top Casing to Screen Tailpipe (ft):	342.17
Casing Diameter (in):	16
Max Prod Drawdown (ft):	35.98
Normal Prod Pumping Level (ft):	39.52
Max Prod Pumping Level (ft):	49.62
Original Specific Capacity (gpm/ft Drawdown):	42.5

Normal Cap (gpm):	1,100
Authorized Cap (gpm):	1,200
Max Production (gpm):	1,529
Normal Prod Drawdown (ft):	25.88

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
13.64	3/ 6/63

Elevation Top/Casing (MSL): 47.91

Orig Grade Elevation (MSL):

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	65
Net Length of Slots (ft):	65
Screen Assembly Length (ft):	77.08
Orig Grade to Top Gravel (ft):	215
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	50
Slave Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	NEW PUMP (6-5-72), RECASED WITH 14" SIDE 16"- JULY 1970

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Property ID:	12	Station Name:	12th Street Well Field & Pump Station

Division:	Babylon
Well No:	3
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-40330
WSA No:	5972
Decision Date:	7/ 9/71
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	STRATA
Well Type:	ROTARY
Well Started:	6/19/71
First Test:	7/28/71
Final Test:	8/11/71
Accepted:	8/13/71
Construction Completed:	8/16/71

Miscellaneous Data

Well Dwg No:	ABL-5456-7
Aquifer:	MAGOTHY
Date In Service:	4/28/72
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	348
Top of Casing to Packer (ft):	
Top of Casing to Riser (ft):	187.83
Top of Casing to Screen (ft):	257.83
Top/Casing to Bottom Tailpipe (ft):	328.33
Casing Diameter (in):	20

Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,200
Max Production (gpm):	2,160
Normal Prod Drawdown (ft):	32.33

Max Prod Drawdown (ft):	58.17
Normal Prod Pumping Level (ft):	36.17
Max Prod Pumping Level (ft):	62.08
Original Specific Capacity (gpm/ft Drawdown):	37.1

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
3.75	3/23/72

Elevation Top/Casing (MSL):	39.43
Orig Grade Elevation (MSL):	42.72

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) In:	10
Slot Size:	65
Net Length of Slots (ft):	60.58
Screen Assembly Length (ft):	66.08
Orig Grade to Top Gravel (ft):	199
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-8%):	69
Sieve Size:	
UC:	

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Property ID: 12

Property Name: 12th Street Well Field & Pump Station

Division: Babylon

Well No: 4

Structure Type: Underground Concrete

Test Boring No:

SBC No: S-51457

WSA No: 6373

Decision Date: 2/15/74

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller:	STRATA
Drill Type:	ROTARY
Well Started:	4/ 9/74
Well Finished:	5/30/74
Well Tested:	6/ 6/74
Approved:	6/14/74
Construction Completed:	7/ 5/64

Miscellaneous Data

Well Drop No:	ABL-6623-8
Aquifer:	MAGOTHY
Date In Service:	5/1/75
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth Below Grade (ft):	598
Top of Casing to Packer (ft):	
Top of Casing to Floor (ft):	454.83
Top of Casing to Screen (ft):	524.83
Top Casing to Bottom Telescope (ft):	624.92
Casing Diameter (in):	20

Normal Cap (gpm):	1,400
Authorized Cap (gpm):	2,400
Max Production (gpm):	3,068
Normal Prod Drawdown (ft):	28.92

Max Prod Drawdown (ft):	63.5
Normal Prod Pumping Level (ft):	36.58
Max Prod Pumping Level (ft):	71
Original Specific Capacity (gpm/ft Drawdown):	48.3

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
7.5	10/17/74

Elevation Top/Casing (MSL): 32.41

Orig Grade Elevation (MSL): 35.02

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	50
Net Length of Slots (ft):	90.42
Screen Assembly Length (ft):	166.25
Orig Grade to Top Gravel (ft):	466
Gravel Type:	MORIE
Gravel Size:	1&2
Percent Retained (+/-8%):	75
Sieve Size:	16
UC:	1.7

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Property ID: 15

Station Name: Wyandanch Avenue Well Field, Pump Station & Elevated Tank

[redacted]

District: Babylon

Well No: 1

Structure Type: Underground SubStructure & Prefab SuperStructure

Test Boring No:

DEC No: S-23848

WBA No: 4710

Decision Date: 9/ 3/64

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: MATHIES

Well Type: ROTARY

Well Started: 4/14/65

First Test: 5/ 3/65

Final Test: 5/18/65

Accepted: 5/18/65

Construction Completed: 5/21/65

Well Depth below Grade (ft): 634.42

Top of Casing to Packer (ft): 555.5

Top of Casing to Riser (ft):

Top of Casing to Screen (ft): 559.92

Top Casing to Bottom Telltale (ft): 638

Casing Diameter (in): 16

Max Prod Drawdown (ft): 44.23

Normal Prod Pumping Level (ft): 43.3

Max Prod Pumping Level (ft): 58.19

Original Specific Capacity (gpm/ft Drawdown): 40.9

Miscellaneous Data

Well Dwg No: BL-1802-25

Aquifer: MAGOTHY

Date In Service: 2/3/66

Active: No

Status: RETIRED

Retirement Date: 9/21/93

Normal Cap (gpm): 1,200

Authorized Cap (gpm): 1,200

Max Production (gpm): 1,809

Normal Prod Drawdown (ft): 29.34

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
13.96	11/10/65

Elevation Top/Casing (MSL): 51.36
Orig Grade Elevation (MSL): 47.75

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) In:	10
Slot Size:	70
Net Length of Slots (ft):	70
Screen Assembly Length (ft):	82.5
Orig Grade to Top Gravel (ft):	510
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	
Slurry Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	REDEVELOPED 1972-73

Property ID:	15
Station Name:	Wyandanch Avenue Well Field, Pump Station & Elevated Tank
District:	Babylon
Well No:	2
Structure Type:	Underground SubStructure & Prefab SuperStructure
Test Boring No:	
OEC No:	S-25674
WSA No:	4710
Decision Date:	9/ 3/64
Pressure Zone:	Zone: 01 South Shore Low

[redacted]

Well Construction

Well Driller:	LAUMAN
Well Type:	ROTARY
Well Started:	8/25/65
Final Test:	10/ 5/65
Final Test:	10/27/65
Accepted:	10/27/65
Construction Completed:	11/ 5/65

Miscellaneous Data

Well Dwg No:	ABL-3001-4
Aquifer:	MAGOTHY
Date In Service:	5/27/66
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth Below Grade (ft):	625.42
Top of Casing to Packer (ft):	552
Top of Casing to Riser (ft):	
Top of Casing to Screen (ft):	556.67
Top Casing to Bottom Telpipe (ft):	627.08
Casing Diameter (in):	16

Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,200
Max Production (gpm):	1,641
Normal Prod Drawdown (ft):	29.7

Max Prod Drawdown (ft):	40.62
Normal Prod Pumping Level (ft):	50.62
Max Prod Pumping Level (ft):	61.54
Original Specific Capacity (gpm/ft Drawdown):	40.4

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
20.92	5/11/66

Elevation Top/Casing (MSL): 53.3

Orig Grade Elevation (MSL):

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	REDEVELOPED 1972-1973 S &

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	65.25
Screen Assembly Length (ft):	75
Orig Grade to Top Gravel (ft):	500
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	
Slave Size:	
UC:	

Property ID: 13

Station Name: North Fifth Street Well Field & Pump Station

Division: Babylon

Well No: 1

Structure Type: 1-story Masonry

Test Boring No:

DEC No: S-29491

SWA No: 5240

Decision Date: 10/ 4/66

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: STRATA

Well Type: ROTARY

Well Started: 11/ 1/66

First Test: 12/27/66

Final Test: 1/20/67

Accepted: 1/20/67

Construction Completed: 1/27/67

Miscellaneous Data

Well Dwg No: ABL-3553-19

Aquifer: MAGOTHY

Date In Service: 11/29/67

Active: Yes

Status: PERMANENT

Retirement Date:

Normal Cap (gpm): 1,200

Authorized Cap (gpm): 1,200

Max Production (gpm): 1,683

Normal Prod Drawdown (ft): 39.02

Well Depth below Grade (ft): 506.67

Top of Casing to Packer (ft): 386.58

Top of Casing to Floor (ft):

Top of Casing to Screen (ft): 392.33

Top Casing to Screen Tailpipe (ft): 501.5

Casing Diameter (in): 20

Max Prod Drawdown (ft): 54.73

Normal Prod Pumping Level (ft): 97.44

Max Prod Pumping Level (ft): 63.15

Original Specific Capacity (gpm/ft Drawdown): 30.75

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
8.48	

Elevation Top/Casing (MSL): 22.5

Orig Grade Elevation (MSL): 20.7

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	65
Net Length of Slots (ft):	69.5
Screen Assembly Length (ft):	114.83
Orig Grade to Top Gravel (ft):	340
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	
Slave Size:	
UC:	

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Property ID:	3
Station Name:	Lambert Avenue Well Field, Pump Station & Elevated Tank
Division:	Betsytown
Well No:	1
Structure Type:	Underground SubStructure & Prefab SuperStructure
Test Boring No:	
DED No:	S-22351
WSA No:	4507
Decision Date:	11/ 7/63
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	MATHIES
Well Type:	ROTARY
Well Started:	11/26/63
First Tests:	3/17/64
Final Tests:	3/24/64
Accepted:	3/24/64
Construction Completed:	3/31/64

Miscellaneous Data

Well Dwg No:	ZA-1079-21
Aquifer:	MAGOTHY
Date In Service:	5/29/64
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth Below Grade (ft):	559
Top of Casing to Packer (ft):	471.5
Top of Casing to Filter (ft):	
Top of Casing to Screen (ft):	475.25
Top/Casing to Bottom Tailpipe (ft):	558.94
Casing Diameter (in):	16

Normal Cap (gpm):	1,150
Authorized Cap (gpm):	1,800
Max Production (gpm):	1,683
Normal Prod Drawdown (ft):	39.93

Max Prod Drawdown (ft):	58.44
Normal Prod Pumping Level (ft):	50.16
Max Prod Pumping Level (ft):	68.67
Original Specific Capacity (gpm/ft Drawdown):	28.8

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
10.23	5/19/64

Elevation Top/Casing (MSL): 23.68
Orig Grade Elevation (MSL):

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) In:	10
Slot Size:	70
Slot Length of Slots (In):	74.75
Screen Assembly Length (Ft):	87.48
Orig Grade to Top Gravel (Ft):	417
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	
Slurry Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	INCREASED RATE-PUMP, REPLACED 3-21-72, 6" WELL SCEEN LINER INSTALLED MARCH 1990

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Property ID:	200	Station Name:	Lambert Avenue Well Field & Pump Station

District:	Westhampton		
Well No:	2		
Structure Type:			
Test Boring No:			
DEC Air:	S-71882		
WBA No:	7178		
Decision Date:	9/11/81		
Pressure Zone:	Zone: 20 Mor-Westhampton Low		

Well Construction

Well Driller:	
Well Type:	ROTARY
Well Started:	
First Test:	
Final Test:	
Accepted:	
Construction Completed:	

Miscellaneous Data

Well Dwg No:	
Aquifer:	MAGOTHY
Date In Service:	4/27/82
Active:	Yes
Status:	TEMPORARY
Retirement Date:	

Well Depth Below Grade (ft):	318
Top of Casing to Packer (ft):	
Top of Casing to Riser (ft):	
Top of Casing to Screen (ft):	
Top of Casing to Screen Tailpipe (ft):	
Casing Diameter (in):	20

Normal Cap (gpm):	1,300
Authorized Cap (gpm):	1,300
Max Production (gpm):	
Normal Prod Drawdown (ft):	

Max Prod Drawdown (ft):	
Normal Prod Pumping Level (ft):	
Max Prod Pumping Level (ft):	
Original Specific Capacity (gpm/ft Drawdown):	36.7

Property ID:	231	Station Name:	Sunrise Highway Well Field & Pump Station

District:	Bay Shore
Well No:	1
Structure Type:	Underground Concrete
Test Boring No:	S-54155T.
DEC No:	S-55733
WBA No:	6552
Decision Date:	6/16/75
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	DELTA
Well Type:	ROTARY
Well Started:	6/24/75
First Test:	9/15/75
Final Test:	9/25/75
Accepted:	9/26/75
Construction Completed:	10/ 7/75

Miscellaneous Data

Well Drwg No:	ABS-7069-19
Aquifer:	MAGOTHY
Date in Service:	7/16/76
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth Below Grade (ft):	241
Top of Casing to Packer (ft):	
Top of Casing to Pump (ft):	115.58
Top of Casing to Screen (ft):	170.75
Top/Casing to Bottom Tailpipe (ft):	224.75
Casing Diameter (in):	20

Normal Cap (gpm):	1,300
Authorized Cap (gpm):	1,400
Max Production (gpm):	1,500
Normal Prod Drawdown (ft):	23.08

Max Prod Drawdown (ft):	26.67
Normal Prod Pumping Level (ft):	30.5
Max Prod Pumping Level (ft):	34.08
Original Specific Capacity (gpm/ft Drawdown):	56.2

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
7.42	4/ 9/76

Elevation Top/Casing (MSL): 30.59

Orig Grade Elevation (MSL): 38.5

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	60
Net Length of Slots (ft):	50.08
Screen Assembly Length (ft):	54
Orig Grade to Top Gravel (ft):	125
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-250):	62
Sieve Size:	12
UC:	1.7

Revision History

Number:	Revised by:	Date:	Notes:

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Property ID: 231 Station Name: Sunrise Highway Well Field & Pump Station

Division: Bay Shore

Well No: 2

Structure Type: Underground Concrete

Test Boring No:

DEC No: S-55734

WSA No: 6552

Decision Date: 6/16/75

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: DELTA

Well Type: ROTARY

Well Started: 6/24/75

First Test: 8/ 7/75

Final Test: 8/28/75

Accepted: 8/29/75

Construction Completed: 10/ 7/75

Miscellaneous Data

Well Dwg No: ABS-7198-7

Aquifer: MAGOTHY

Date In Service: 7/16/76

Active: Yes

Status: PERMANENT

Retirement Date:

Well Depth Below Grade (ft): 346

Top of Casing to Packer (ft):

Top of Casing to Floor (ft): 130.58

Top of Casing to Screen (ft): 211.25

Top/Casing to Bottom Telpipe (ft): 308

Casing Diameter (in): 20

Normal Cap (gpm): 1,400

Authorized Cap (gpm): 1,400

Max Production (gpm): 1,725

Normal Prod Drawdown (ft): 23.08

Max Prod Drawdown (ft): 28.5

Normal Prod Pumping Level (ft): 29.67

Max Prod Pumping Level (ft): 35.08

Original Specific Capacity (gpm/ft Drawdown): 60.5

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
5.33	11/12/58

Elevation Top/Casing (MSL): 43.43

Orig Grade Elevation (MSL): 37.14

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	50
Net Length of Slots (ft):	49.83
Screen Assembly Length (ft):	60.83
Orig Grade to Top Gravel (ft):	473
Gravel Type:	LAYNE
Gravel Size:	2,3
Percent Retained (+/-5%):	50
Sieve Size:	
UC:	

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Property ID: 231

Station Name: Sunrise Highway Well Field & Pump Station

District: Bay Shore

Well No: 3

Structure Type: Underground Concrete

Test Boring No:

DEC No: S-66429

WRA No: 6915

Decision Date: 10/30/78

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: LAYNE

Well Type: ROTARY

Spud Date: 6/15/79

First Test: 9/ 5/79

Final Test: 9/26/79

Accepted: 9/28/79

Construction Completed: 10/30/79

Well Depth below Grade (ft): 718.17

Top of Casing to Packer (ft):

Top of Casing to Riser (ft): 532.25

Top of Casing to Screen (ft): 602.33

Top Casing to Screen Tailpipe (ft): 709.33

Casing Diameter (in): 20

Miscellaneous Data

Well Dwg No: ABS-8206-7

Aquifer: MAGOTHY

Date in Service: 12/4/80

Active: Yes

Status: PERMANENT

Retirement Date:

Max Prod Drawdown (ft): 48

Normal Prod Pumping Level (ft): 27.08

Max Prod Pumping Level (ft): 56.33

Original Specific Capacity (gpm/ft Drawdown): 69.04

Normal Cap (gpm): 1,300

Authorized Cap (gpm): 1,300

Max Production (gpm): 3,316

Normal Prod Drawdown (ft): 18.75

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
8.25	3/20/80

Elevation Top/Casing (MSL): 28.77

Orig Grade Elevation (MSL): 37.6

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	50
Net Length of Slots (ft):	90
Screen Assembly Length (ft):	177.08
Orig Grade to Top Gravel (ft):	551
Gravel Type:	MORIE
Gravel Size:	1&2
Percent Retained (+/-5%):	75
Sieve Size:	16
UC:	1.7

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Property ID:	24
Station Name:	Harvest Lane Well Field & Pump Station
District:	Bay Shore
Well No:	1
Structure Type:	
Test Boring No:	
DEC No:	S-21366
WSA No:	4278
Decision Date:	10/ 4/62
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	LAYNE
Well Type:	ROTARY
Well Started:	10/31/62
First Test:	2/15/63
Final Test:	3/ 6/63
Accepted:	3/ 7/63
Construction Completed:	3/18/63

Miscellaneous Data

Well Dwg No:	ZA-864-18
Aquifer:	MAGOTHY
Date In Service:	6/4/63
Active:	No
Status:	RETIRED
Retirement Date:	11/ 1/94

Well Depth below Grade (ft):	455.33
Top of Casing to Pump (ft):	402.17
Top of Casing to Floor (ft):	
Top of Casing to Screen (ft):	416.5
Top Casing to Bottom Telpipe (ft):	457.92
Casing Diameter (in):	16
Max Prod Drawdown (ft):	47.6
Normal Prod Pumping Level (ft):	50.35
Max Prod Pumping Level (ft):	64.92
Original Specific Capacity (gpm/ft Drawdown):	33.3

Normal Cap (gpm):	1,100
Authorized Cap (gpm):	1,200
Max Production (gpm):	1,585
Normal Prod Drawdown (ft):	33.03

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
17.32	5/ 6/63

Elevation Top/Casing (MSL): 46.52

Orig Grade Elevation (MSL):

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	44.75
Screen Assembly Length (ft):	55.75
Orig Grade to Top Gravel (ft):	365
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-8%):	
Sieve Size:	
UC:	

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	6" LINER INSTALLED MAY 1992

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Property ID: 24

Station Name: Harvest Lane Well Field & Pump Station

District: Bay Shore

Well No: 2

Structure Type: Underground SubStructure & Prefab SuperStructure

Test Boring No:

DEC No: S-22389

WSA No: 4534

Decision Date: 12/ 5/63

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: LAUMAN

Well Type: ROTARY

Well Started: 12/23/63

First Test: 3/ 2/64

Final Test: 3/17/64

Accepted: 3/17/64

Construction Completed: 4/ 2/64

Miscellaneous Data

Well Dwg No: ZA-1081-4

Aquifer: MAGOTHY

Date In Service: 6/12/64

Active: Yes

Status: PERMANENT

Retirement Date:

Normal Cap (gpm): 1,100

Authorized Cap (gpm): 1,200

Max Production (gpm): 1,500

Normal Prod Drawdown (ft): 22.04

Well Depth below Grade (ft): 465.33

Top of Casing to Packer (ft): 373

Top of Casing to Floor (ft):

Top of Casing to Screen (ft): 378.67

Top of Casing to Bottom Tailpipe (ft): 466.83

Casing Diameter (in): 16

Max Prod Drawdown (ft): 30.05

Normal Prod Pumping Level (ft): 40.52

Max Prod Pumping Level (ft): 48.53

Original Specific Capacity (gpm/ft Drawdown): 49.92

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
18.48	5/22/64

Elevation Top/Casing (MSL): 47.44

Orig Grade Elevation (MSL):

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	65.25
Screen Assembly Length (ft):	93.75
Orig Grade to Top Gravel (ft):	322
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	
Sieve Size:	
UC:	

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Property ID:	24
Station Name:	Harvest Lane Well Field & Pump Station
District:	Bay Shore
Well No:	3
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-39024
WSA No:	5901
Decision Date:	12/15/70
Pressure Zone:	Zone: 01 South Shore Low

[redacted]

Well Construction

Well Driller:	STRATA
Well Type:	ROTARY
Well Started:	1/ 7/71
Pump Tests:	2/19/71
Final Test:	3/16/71
Accepted:	3/18/71
Construction Completed:	3/29/71

Miscellaneous Data

Well Dwg No:	ABS-5236-8
Aquifer:	MAGOTHY
Date In Service:	7/7/71
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth Below Grade (ft):	640
Top of Casing to Packer (ft):	
Top of Casing to Riser (ft):	432.75
Top of Casing to Screen (ft):	502.75
Top of Casing to Bottom Tailpipe (ft):	611.25
Casing Diameter (inch):	20

Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,200
Max Production (gpm):	3,068
Normal Prod Drawdown (ft):	20.25

Max Prod Drawdown (ft):	51.75
Normal Prod Pumping Level (ft):	33
Max Prod Pumping Level (ft):	64.58
Original Specific Capacity (gpm/ft Drawdown):	59.2

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
12.75	7/ 8/71

Elevation Top/Casing (MSL): 33.7

Orig Grade Elevation (MSL): 44.94

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	REDRILLED JANUARY 1992

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	50
Net Length of Slots (ft):	90.75
Screen Assembly Length (ft):	108.5
Orig Grade to Top Gravel (ft):	445
Gravel Type:	MORIE
Gravel Size:	1&2
Percent Retained (+/-5%):	75
Sieve Size:	16
UC:	1.7

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Property ID:	1	Station Name:	Greene Avenue Well Field, Pump Station

Division:	Babylon		
Well No:	7		
Structure Type:	Underground Concrete		
Test Boring No:			
DED No:	S-32501		
WSA No:	5476		
Decision Date:	1/ 4/68		
Pressure Zone:	Zone: 01 South Shore Low		

Well Construction

Well Driller:	STRATA
Well Type:	ROTARY
Well Started:	2/26/68
Final Test:	4/23/68
Final Test:	5/ 6/68
Accepted:	5/ 6/68
Construction Completed:	5/20/68

Miscellaneous Data

Well Dwg No:	AAM-4068-18
Aquifer:	MAGOTHY
Date in Service:	6/6/69
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	641.75
Top of Casing to Packer (ft):	546.75
Top of Casing to Pump (ft):	
Top of Casing to Screen (ft):	546.75
Top Casing to Screen Tailpipe (ft):	624.17
Casing Diameter (in):	16

Normal Cap (gpm):	1,000
Authorized Cap (gpm):	1,000
Max Production (gpm):	1,500
Normal Prod Drawdown (ft):	25.2

Max Prod Drawdown (ft):	1500
Normal Prod Pumping Level (ft):	31.89
Max Prod Pumping Level (ft):	44.49
Original Specific Capacity (gpm/ft Drawdown):	39.68

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
5.11	5/17/68

Elevation Top/Casing (MSL): 19.67

Orig Grade Elevation (MSL): 25.94

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) In:	10
Slot Size:	60
Slot Length of Slots (In):	65.33
Screen Assembly Length (In):	77.48
Orig Grade to Top Gravel (In):	502
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-#30):	60
Sieve Size:	
UC:	

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Property ID:	1	Station Name:	Greene Avenue Well Field, Pump Station

[redacted]

District:	Babylon
Well No:	8
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-47887
NWA No:	6251
Decision Date:	3/29/73
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	
Well Type:	ROTARY
Well Started:	
Pump Tested:	
Final Exam:	
Accepted:	
Documentation Completed:	

Miscellaneous Data

Well Dwg No:	AAM-6249-6
Aquifer:	MAGOTHY
Date In Service:	8/25/75
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	648
Top of Casing to Packer (ft):	
Top of Casing to Pump (ft):	
Top of Casing to Screen (ft):	
Top Casing to Screen Telpipe (ft):	
Casing Diameter (in):	20

Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,400
Max Production (gpm):	
Normal Prod Drawdown (ft):	

Max Prod Drawdown (ft):	
Normal Prod Pumping Level (ft):	
Max Prod Pumping Level (ft):	
Original Specific Capacity (gpm/ft Drawdown):	34.8

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
4.21	

Elevation Top/Casing (MSL):

Orig Grade Elevation (MSL):

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:

Screen Dia (ID) in:

Slot Size:

Net Length of Slots (ft):

Screen Assembly Length (ft):

Orig Grade to Top Gravel (ft):

Gravel Type:

Gravel Size:

Percent Retained (+/-5%):

Sieve Size:

UC:

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Property ID:	22
Station Name:	Industry Court Well Field, Pump Station & Standpipe
District:	Babylon
Well No:	1
Structure Type:	1-story Masonry
Test Boring No:	
DEC No:	S-40497
WBA No:	5973
Decision Date:	7/19/71
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	LAYNE
Well Type:	ROTARY
Well Started:	9/27/71
First Test:	10/ 4/71
Final Test:	11/ 9/71
Accepted:	12/ 1/71
Construction Completed:	11/29/71

Miscellaneous Data

Well Dwg No:	ABL-5457-18
Aquifer:	MAGOTHY
Date In Service:	11/6/71
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth Below Grade (ft):	288.33
Top of Casing to Packer (ft):	
Top of Casing to Riser (ft):	147.48
Top of Casing to Screen (ft):	220.58
Top Casing to Bottom Tailpipe (ft):	283.33
Casing Diameter (in):	20

Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,200
Max Production (gpm):	1,585
Normal Prod Drawdown (ft):	26.67

Max Prod Drawdown (ft):	35.25
Normal Prod Pumping Level (ft):	58.08
Max Prod Pumping Level (ft):	66.67
Original Specific Capacity (gpm/ft Drawdown):	44.9

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
31.33	3/28/72

Elevation Top/Casing (MSL): 75.44

Orig Grade Elevation (MSL): 74.28

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	59.92
Screen Assembly Length (ft):	136.94
Orig Grade or Top Gravel (ft):	153
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	76
Slave Size:	0.066
UC:	1.7

Revision History

Number:	Revised by:	Date:	Notes:

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Property ID: 22

Station Name: Industry Court Well Field, Pump Station & Standpipe

District: Babylon

Well No: 2

Structure Type: Underground Concrete

Test Boring No:

DEC Rec: S-46830

WSA No: 6143

Decision Date: 8/24/72

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller: STRATA

Well Type: ROTARY

Well Started: 1/ 3/73

First Test: 3/21/73

Final Test: 10/16/73

Accepted: 10/18/73

Construction Completed: 11/ 2/73

Well Depth below Grade (ft): 663.33

Top of Casing to Packer (ft):

Top of Casing to Riser (ft): 470

Top of Casing to Screen (ft): 539.94

Top Casing to Screen Telltale (ft): 654.33

Casing Diameter (in): 20

Max Prod Drawdown (ft): 61.94

Normal Prod Pumping Level (ft): 41.67

Max Prod Pumping Level (ft): 82.33

Original Specific Capacity (gpm/ft Drawdown): 56.1

Miscellaneous Data

Well Dug No: ABL-5915-17

Aquifer: MAGOTHY

Date In Service: 10/10/74

Active: Yes

Status: PERMANENT

Retirement Date:

Normal Cap (gpm): 1,200

Authorized Cap (gpm): 1,400

Max Production (gpm): 3,477

Normal Prod Drawdown (ft): 21.33

Static Water Level History
(Ft Below Top of Baseplate)

Measurement	Date
20.33	6/20/74

Elevation Top/Casing (MSL): 66.53
Orig Grade Elevation (MSL): 76

Revision History

Number:	Revised by:	Date:	Notes:
1	SRD	6/14/91	1,900,000 GALLON STANDPIPE LOCATED ON SITE.

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	81.17
Screen Assembly Length (ft):	174.94
Orig Grade to Top Gravel (ft):	483
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	76
Slave Size:	0.0661
UC:	1.7

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Property ID:	8	Station Name:	Smith Street Well Field, Pump Station & Proposed Elevated Tank

District:	Babylon
Well No:	7
Structure Type:	Underground Concrete
Test Boring No:	
DEC No:	S-36748
WBA No:	5782
Decision Date:	12/ 4/69
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	LAYNE
Well Type:	ROTARY
Well Started:	2/16/70
First Test:	4/20/70
Final Test:	5/ 4/70
Approved:	5/ 6/70
Construction Completed:	5/27/70

Miscellaneous Data

Well Dwg No:	ABL-4716
Aquifer:	MAGOTHY
Date in Service:	11/9/70
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	337
Top of Casing to Packer (ft):	
Top of Casing to Filter (ft):	200.75
Top of Casing to Screen (ft):	271.33
Top/Casing to Screen Tailpipe (ft):	335.67
Casing Diameter (in):	20

Normal Cap (gpm):	1,200
Authorized Cap (gpm):	1,571
Max Production (gpm):	1,200
Normal Prod Drawdown (ft):	32.17

Max Prod Drawdown (ft):	42.17
Normal Prod Pumping Level (ft):	38.83
Max Prod Pumping Level (ft):	48.83
Original Specific Capacity (gpm/ft Drawdown):	37.27

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
6.48	11/ 9/70

Elevation Top/Casing (MSL):

Orig Grade Elevation (MSL): 14.09

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	60
Net Length of Slots (ft):	60.08
Screen Assembly Length (ft):	134.5
Orig Grade to Top Gravel (ft):	203
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-5%):	50
Sieve Size:	0.065
UC:	

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Property ID:	14	Station Name:	Tenety Avenue Well Field & Pump Station

District:	Babylon
Well No:	2
Structure Type:	Underground SubStructure & Prefab SuperStructure
Test Boring No:	
DEC No:	S-20460
WSA No:	4101
Decision Date:	11/ 2/61
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	MATHIES
Well Type:	ROTARY
Well Started:	12/ 8/61
First Test:	1/19/62
Final Test:	2/ 7/62
Approved:	2/ 2/62
Construction Completed:	3/ 2/62

Miscellaneous Data

Well Dwg No:	BL-1358-4
Aquifer:	MAGOTHY
Date In Service:	5/20/62
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth Below Grade (ft):	494.67
Top of Casing to Packer (ft):	426.42
Top of Casing to Slot (ft):	
Top of Casing to Screen (ft):	432
Total Casing or Screen Tubular (ft):	496.58
Casing Diameter (in):	16

Normal Cap (gpm):	1,100
Authorized Cap (gpm):	1,641
Max Production (gpm):	1,641
Normal Prod Drawdown (ft):	35.64

Max Prod Drawdown (ft):	53.18
Normal Prod Pumping Level (ft):	53.01
Max Prod Pumping Level (ft):	70.53
Original Specific Capacity (gpm/ft Drawdown):	30.86

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
10.33	5/11/71

Elevation Top/Casing (MSL):	36.38
Orig Grade Elevation (MSL):	42.28

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	70.75
Screen Assembly Length (ft):	77.58
Orig Grade to Top Gravel (ft):	431
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+/-4%):	76
Sieve Size:	
UC:	

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Property ID: 14

Station Name: Tenety Avenue Well Field & Pump Station

District: Babylon

Well No: 2

Structure Type: Underground SubStructure & Prefab SuperStructure

Test Barley No:

DEC No: S-20460

WSA No: 4101

Decision Date: 11/ 2/61

Pressure Zone: Zone: 01 South Shore Low

Well Construction

Well Driller:	MATHIES
Well Type:	ROTARY
Well Started:	12/ 8/61
Pump Tested:	1/19/62
Final Tested:	2/ 7/62
Approved:	2/ 2/62
Construction Completed:	3/ 2/62

Miscellaneous Data

Well Owg No:	BL-1358-4
Aquifer:	MAGOTHY
Date In Service:	5/20/62
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth Below Grade (ft):	494.67
Top of Casing to Packer (ft):	426.42
Top of Casing to Floor (ft):	
Top of Casing to Screen (ft):	432
Top of Casing to Screen Telephone (ft):	496.58
Casing Diameter (in):	16

Normal Cap (gpm):	1,100
Authorized Cap (gpm):	1,641
Max Production (gpm):	1,641
Normal Prod Drawdown (ft):	35.64

Max Prod Drawdown (ft):	53.18
Normal Prod Pumping Level (ft):	53.01
Max Prod Pumping Level (ft):	70.53
Original Specific Capacity (gpm/ft Drawdown):	30.86

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
10.33	5/11/71

Elevation Top/Casing (MSL):	36.38
Orig Grade Elevation (MSL):	42.28

Revision History

Number:	Revised by:	Date:	Notes:

Screen + Gravel

Screen Mfr:	COOK
Screen Dia (ID) In:	10
Slot Size:	70
Net Length of Slots (ft):	70.75
Screen Assembly Length (ft):	77.58
Orig Grade to Top Gravel (ft):	431
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+7/8%):	76
Sieve Size:	
UC:	

Next Record | Previous Record | Close Form | Next Page | Previous Page

Static Water Level History

(Ft Below Top of Baseplate)

Measurement	Date
17.33	4/30/62

Elevation Top/Casing (MSL):

Orig Grade Elevation (MSL): 44.26

Revision History

Number	Revised by	Date	Notes

Screen + Gravel

Screen Mfr:	JOHNSON
Screen Dia (ID) in:	10
Slot Size:	70
Net Length of Slots (ft):	60
Screen Assembly Length (ft):	70.17
Orig Grade to Top Gravel (ft):	374
Gravel Type:	MORIE
Gravel Size:	2&3
Percent Retained (+ #%):	50
Slots Size:	
UC:	

Next Record | Previous Record | Close Form | Next Page | Previous Page

REFERENCE NO. 25

SEQUENCE: REG, ST, SITE NAME
REGION: 02

EPA IDENTIFICATION NUMBER	SITE NAME/ALIAS NAME STREET/ALIAS STREET CITY/ALIAS CITY COUNTY NAME	STATE/ALIAS STATE COUNTY CODE	ZIP CODE	ALIAS SEQ. #	NAME SOURCE	FEDERAL FACILITY FLAG	CONGRESSIONAL DISTRICT (S)
NYD986910560	SPCE, INC. 214 CANDLEWOOD ROAD BRENTWOOD SUFFOLK	NY 103	11717			N	NY-02
	SPCE SCH SUPPLIES 214 CANDLEWOOD RD BAY SHORE	NY	11706	01			
	SPORTS PICTURE CARD MANUFACTURER			02			
NYD002241669	SPECIAL METALS CORP MIDDLE SETTLEMENT RD NEW HARTFORD ONEIDA	NY 065	13413		HWDMS	N	NY-31
	SPECIAL METALS CORP			01			
	ONEIDA	NY					
NYD044466910	SPECTRUM FINISHING CORP 50 DALE ST WEST BABYLON SUFFOLK	NY 103	11704		EPA	N	NY-02
	NTU CIRCUITS, INC.			01			
NYD983762488	SPENCERPORT DUMP 500 WEST AVE OGDEN MONROE	NY 055	14559		EPA	N	NY-35
NYD980532592	SPERRY UNIVAC 7 SPRUCE ST ILION HERKIMER	NY 043	13357		NOTIS	N	NY-31
NYD003631960	SPRAYLAT CORPORATION 117 ANDERSON AVE. MOUNT VERNON WESTCHESTER	NY 119	10550			N	NY-20

SELECTION:
SEQUENCE: REGION, STATE, SITE NAME

EVENTS: ALL

EPA ID NO.	SITE NAME / STREET / CITY / COUNTY CODE AND NAME / (ASSOCIATED NPL SITE) (ASSOCIATED NPL ID)	STATE	ZIP CONG DIST.	OPRBLE UNIT	EVENT TYPE	EVENT QUAL	ACTUAL START DATE	ACTUAL COMPL DATE	EVENT LEAD
NYD980762603	SOUTHOLD LF			00	DS1			05/01/83	EPA (FUND)
	NORTH RD - RTE 27				PA1			05/01/83	EPA (FUND)
	CUTCHOGUE	NY	11935		PA2			03/03/87	STATE(FUND)
	103 SUFFOLK				HR1			05/01/83	OTHER
					SI1		01/01/91	03/28/91	EPA (FUND)
NYD986910560	SPCE, INC.			00	DS1			07/06/95	STATE(FUND)
	214 CANDLEWOOD ROAD								
	BRENTWOOD	NY	11717						
	103 SUFFOLK								
NYD002241669	SPECIAL METALS CORP			00	DS1			02/25/87	EPA (FUND)
	MIDDLE SETTLEMENT RD				PA1		03/25/87	03/30/87	EPA (FUND)
	NEW HARTFORD	NY	13413						
	065 ONEIDA								
NYD044466910	SPECTRUM FINISHING CORP			00	DS1			08/01/83	STATE(FUND)
	50 DALE ST				PA1			08/01/83	STATE(FUND)
	WEST BABYLON	NY	11704		PA2			03/27/86	STATE(FUND)
	103 SUFFOLK				SI1		05/01/85	05/31/85	STATE(FUND)
NYD980762488	SPENCERPORT DUMP			00	DS1			06/01/83	EPA (FUND)
	500 WEST AVE				PA1			06/01/83	EPA (FUND)
	OGDEN	NY	14559		HR1			05/01/83	OTHER
	055 MONROE				SI1		02/25/87	03/09/87	EPA (FUND)
					SP1			11/09/95	
NYD980532592	SPERRY UNIVAC			00	DS1			06/09/81	EPA (FUND)
	7 SPRUCE ST				PA1		08/26/87	09/02/87	EPA (FUND)
	ILION	NY	13357		SI1		07/01/90	09/25/90	EPA (FUND)
	043 HERKIMER				SP1			09/29/95	
NYD000531960	SPRAYLAT CORPORATION			00	DS1			06/06/89	EPA (FUND)
	117 ANDERSON AVE.				PA1			07/20/89	EPA (FUND)
	MOUNT VERNON	NY	10550						
	119 WESTCHESTER								

REFERENCE NO. 26

WESTON

TCB
Originator

PHONE CONVERSATION RECORD

Conversation with:
Name ~~Jim~~ Bob Stuart
Company NYDEC
Address
Phone (516) 444-0244
Subject Spectrum Finishing

Date 6, 26, 97
Time 1022 (AM)/PM

☐ Originator Placed Call
☐ Originator Received Call
W.O. No.

Notes:
Bob was the former site manager for the NYSDEC, for the Spectrum Finishing site

- Spectrum filed bankruptcy (Chapter 7 or 11) The State & Spectrum went in front of a judge because the state wanted funds/assests to start a removal at the facility. The company assests were so small compared to the clean up costs that no action was assigned.

- As far as Bob knows, Spectrum is not operating nor is anyone at the site. The ~~site~~ owner does not have enough funds to clean up the site

- The NYSDEC has ~~applied~~ referred the site for a state funded clean-up.

- The current ~~pro~~ site manager, Jaime, is in the field. Bob will leave him a message to call me when he returns. (Return date not known)

☐ File
☐ Tickle File ___/___/___
☐ Follow-Up By:
☐ Copy/Route To:

Follow-Up-Action:

Originator's Initials TCB

RFW 110-4-83

1423-1823 4/16/93

REFERENCE NO. 27

WESTON

TCB
Originator

PHONE CONVERSATION RECORD

Conversation with:

Name

Company Suffolk City Clerk

Address - Property Records

Phone (516) 852-2000

Date 6/26/97

Time (AM)/PM

☐ Originator Placed Call

☐ Originator Received Call

W.O. No.

Subject Owner information for 50 Dale St. West Babylon

Notes:

50 Dale St.
West Babylon, NY 11704

current owner as of Aug 93
Joseph Vazzana
493 18th St.
West Babylon, NY 11704

Plot info:
Dist 0100 Sec 74 Block 2 Lot 11

Mr. Vazzana was part owner with William Dichirico prior to 1993. Mr. Dichirico sold his ~~part~~ half to Mr. Vazzana in 8/93.

☐ File

☐ Tickle File ___/___/___

☐ Follow-Up By:

☐ Copy/Route To:

Follow-Up-Action:

Originator's Initials

REFERENCE NO. 28

WESTON

TCBalla
Originator

PHONE CONVERSATION RECORD

Conversation with:
Name Jaime Asher
Company NYDEC
Address
Phone (516) 444-0246
Subject Spectrum Status

Date 7, 10, 97
Time AM/PM

☐ Originator Placed Call
☐ Originator Received Call
W.O. NO.

Notes:

Spectrum has not been operating for several years However, there are several hundred drums inside the facility and numerous open vats. Contents include liquids, dyes, electroplating materials etc.

Due to a concern by the local health department over the drums & vats (someone could come in contact with the material or intruders could cause an explosion) the State (NYSDEC), U.S. EPA and U.S. EPA emergency response contractor (WESTON) visited the site approximately two months ago. U.S. EPA contact - Jeff Bechtel

According to Mr. Asher, the US EPA is pursuing an emergency response cleanup at the site and the state is pursuing RCRA closure. Also, the state is trying for a state-lead (funded) clean-up of the facility. The current owners do not have money to fund a clean up or remedial investigation.

Weston TAT (START) personel: Rodolfo Hafner
Mike Mankoff, Adley Michael

☐ **File**
☐ **Tickle File** / /
☐ **Follow-Up By:**
☐ **Copy/Route To:**

Follow-Up-Action:

Originator's Initials TCB

REV 11/9-4-93

REFERENCE NO. 29

WESTON
MANAGERS DESIGNERS/CONSULTANTS

T. Balla
Originator

PHONE CONVERSATION RECORD

Conversation with:
Name Adley Michael
Company WESTON - TAT
Address
Phone (908) 321-4434
Subject Spectrum Finishing

Date July 10, 97
Time 3 AM/PM

☒ Originator Placed Call
☐ Originator Received Call
W.O. NO.

Notes:

WESTON TAT provided air monitoring and hazardous characterization during a recent site inspection by U.S. EPA / NYSDEC

- numerous drums & vats inside the building spills noted inside the building.

- industrial area, most of the surrounding is paved, little or no soil, no material flowing out of buildin

- only HAZCAT sampling conducted on several vats, no specific login of materials or quantities, no other analytical collected

- U.S. EPA On Scene Coordinator
  Jeff Bechtel
  (908) 906-6807

☐ **File**
☐ **Tickle File** / /
☐ **Follow-Up By:**
☐ **Copy/Route To:**

Follow-Up-Action:

Originator's Initials

REW 110-4-83

REFERENCE NO. 30

WESTON
MANAGERS DESIGNERS/CONSULTANTS

T. Balla
Originator

PHONE CONVERSATION RECORD

Conversation with:
Name Jeff Bechtel
Company U.S. EPA - On Scene Coordinator
Address Edison, NJ

Phone (908) 906-6807
Subject Spectrum Finishing

Date 7 / 10 / 97
Time 3:15 CST AM/PM

☒ Originator Placed Call
☐ Originator Received Call
W.O. NO.

Notes:
- left message

- 7/24
  - Approximately 20 vats of electroplating waste,
  - gaylord boxes of sludge
  - bulk tank materials
  - numerous drums
  - site visit in Spring 1997 with NYSDEC & WESTON REAC

  } heavy metals, wastewater cont. with cyanide

  ~~EPA working on 104 E letter~~

- Spectrum currently moving waste from vats, boxes & tanks to drums. All materials inside the facility. Inside sumps & trenches are ~~filled~~ full. Lots of floor spillage. Only secondary containment around tank. Large spill could flow outside.

- Former office area (1/3 of building) leased to a Door manufacturer for office space. It is not known if any full time employees. State okayed leasing.
- State and US EPA working on funding removal action.

☐ **File**
☐ **Tickle File** / /
☐ **Follow-Up By:**
☐ **Copy/Route To:**

Follow-Up-Action:

Originator's Initials

REV 110.4.92

REFERENCE NO. 31

Water-Transmitting Properties of Aquifers on Long Island, New York

By N. E. McCLYMONDS *and* O. L. FRANKE

HYDROLOGY AND SOME EFFECTS OF URBANIZATION ON LONG ISLAND, NEW YORK

GEOLOGICAL SURVEY PROFESSIONAL PAPER 627-E

Prepared in cooperation with the New York State Department of Conservation, Division of Water Resources; the Nassau County Department of Public Works; the Suffolk County Board of Supervisors; and the Suffolk County Water Authority

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UNITED STATES DEPARTMENT OF THE INTERIOR

ROGERS C. B. MORTON, *Secretary*

GEOLOGICAL SURVEY

W. A. Radlinski, *Acting Director*

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WATER-TRANSMITTING PROPERTIES OF AQUIFERS ON LONG ISLAND, NEW YORK

By N. E. McClymonds and O. L. Franke

ABSTRACT

Data on the aquifers of Long Island, N.Y., have been collected for the past 30 years as part of a series of studies conducted by the U.S. Geological Survey in cooperation with New York State and county agencies. Since 1900, more than 50,000 wells have been constructed on Long Island. For at least 2,500 of these wells, some information was recorded that is of value in interpreting the hydrologic character of one or more of the four principal aquifers—the upper glacial, the Jameco, the Magothy, and the Lloyd. Although the data for the deeper aquifers—the Magothy and Lloyd—are concentrated largely in the western part of Long Island, enough information is available to make a general interpretation of the hydraulic conductivity and the transmissivity of all aquifers throughout most of the island.

Estimates of the average hydraulic conductivity of the screened interval in the aquifers were obtained by multiplying the specific capacity of the well by the inverse of the well-screen length and by a constant which was estimated from the Theis nonequilibrium formula. Based on the estimated average hydraulic conductivities of different lithologies in many screened intervals, a value of hydraulic conductivity was assigned to each lithology in each aquifer. Using these values, an average aquifer hydraulic conductivity was obtained from drillers' logs, and maps of average hydraulic conductivity were developed for each aquifer on Long Island. Maps of total aquifer transmissivity were developed by combining maps of average aquifer hydraulic conductivity and total aquifer thickness.

The estimated average hydraulic conductivity values obtained in this study were about 1,700 gpd per sq ft (gallons per day per square foot), for the upper glacial aquifer, about 1,300 gpd per sq ft for the Jameco, about 420 gpd per sq ft for the Magothy, and about 360 gpd per sq ft for the Lloyd. Average transmissivity values were about 200,000 gpd per ft (gallons per day per foot) for the upper glacial aquifer, about 100,000 gpd per ft for the Jameco, about 240,000 gpd per ft for the Magothy, and about 90,000 gpd per ft for the Lloyd.

INTRODUCTION

BACKGROUND, PURPOSE, AND SCOPE OF THE WATER-BUDGET STUDY

Long Island, which extends from the southeastern part of the mainland of New York State eastward about 120 miles into the Atlantic Ocean, has a total area of about 1,400 square miles (fig. 1). Kings and Queens Counties, which are part of New York City, occupy slightly less than 200 square miles of the western part of the island and have a combined population of about 4.5 million people. Nassau and Suffolk Counties, with areas of about 290 and 920 square miles, respectively, had a population of about 2.5 million people in 1965.

Although Kings and Queens Counties obtain most of their water supply from New York City's system, which is derived from parts of the Delaware and Hudson River basins in upstate New York, Nassau and tapping the underlying ground-water reservoir. Because of present large demands on the local ground-water system and because of the prospect of increased demands as the population of Long Island continues to grow, knowledge about the hydrologic system—with special emphasis on that needed for water conservation and management purposes—is a matter of vital concern now as well as in the future.

Considerable information on the water resources of Long Island is available as a result of more than 30 years of study by the U.S. Geological Survey in cooperation with New York State and county agencies. Although the studies met many of the needs for information on specific problems and areas of Long Island, more quantitative information about the island-wide hydrologic system and the relations between the various components of the system is needed for water-management purposes. To provide that information, a comprehensive water-budget study presently is being made by the Geological Survey in cooperation with the New York State Department of Conservation, Division of Water Resources; the Nassau County Department of Public Works; the Suffolk County Board of Supervisors; and the Suffolk County Water Authority.

The major objectives of the water-budget study are (1) to summarize and interpret pertinent existing in-

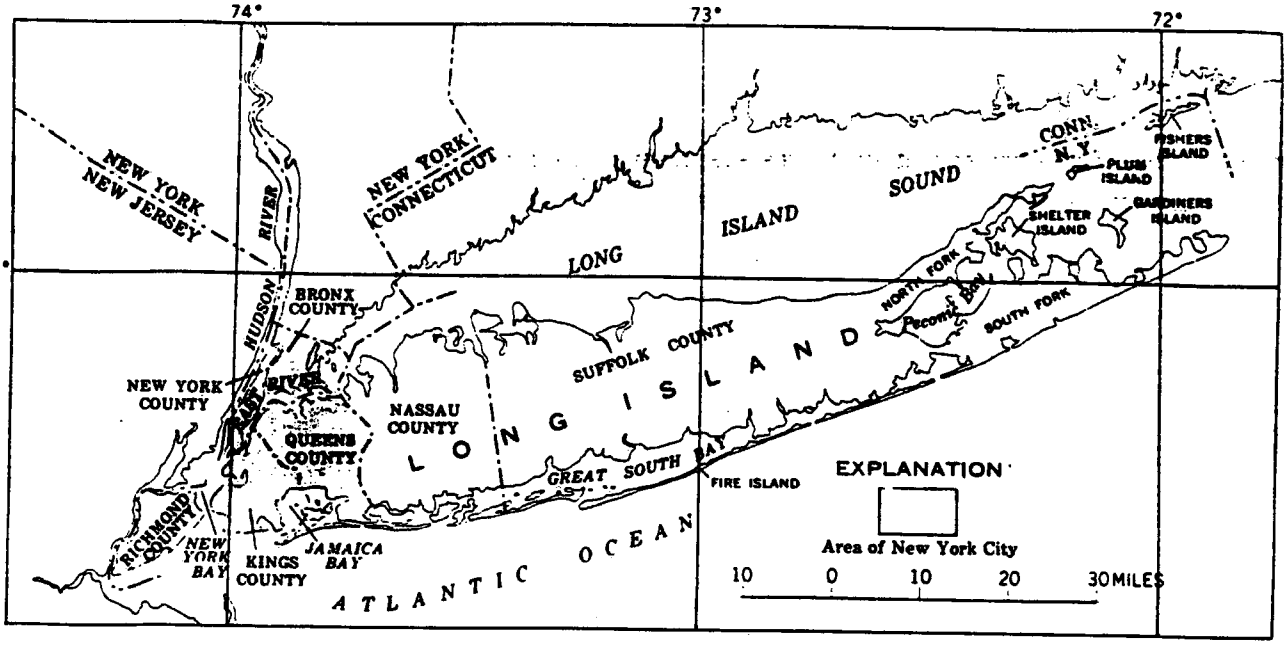


FIGURE 1.—Location and political boundaries of Long Island.

formation about the hydrologic system of Long Island and (2) to fill several gaps in the knowledge of the hydrologic system. The results of these studies are being published in a series of coordinated reports. In some of the reports, including this one, information is developed for all of Long Island; in others the primary area of concern is limited to Nassau and Suffolk Counties.

PURPOSE AND SCOPE OF THIS REPORT

To evaluate, by means of mathematical or physical models, the response of a ground-water flow system to either natural or manmade changes in the hydrologic regimen, a knowledge of the three-dimensional variation in transmissivity is essential. In addition, a knowledge of transmissivity is necessary to calculate the quantities of ground water flowing in the subsurface. Calculating subsurface flow is particularly important on Long Island because a significant percentage of the total natural outflow of water from the hydrologic system occurs as subsurface outflow to the sea.

The purpose of this report is (1) to summarize existing information on the transmissivity and hydraulic conductivity of Long Island's aquifers and (2) to prepare, for the first time, preliminary maps showing the estimated average hydraulic conductivity and transmissivity of each of the principal aquifers.

LOCATION AND GENERAL GEOGRAPHIC FEATURES OF THE AREA

Long Island is bounded on the north by Long Island Sound, on the east and south by the Atlantic Ocean, and on the west by New York Bay and the East River (fig. 1). Several smaller islands are included in the political boundaries of Long Island; the larger of these are Shelter, Gardiners, Fishers, and Plum Islands. The total land area of Long Island is about 1,400 square miles, including the smaller islands within the political boundaries of the island. The four counties—Kings, Queens, Nassau, and Suffolk—have areas of 78 square miles, 115 square miles, 291 square miles, and 922 square miles, respectively.

Several barrier beaches extend along the south shore of Long Island; the longest of these is Fire Island in southern Suffolk County. The northern and eastern coast lines of the island are indented by deep bays that form excellent harbors. Peconic Bay, which is about 30 miles long, divides the eastern end of the island into two long, narrow peninsulas that are locally referred to as the north and south forks.

PHYSIOGRAPHIC FEATURES

Most of the major features of the present-day topography of Long Island (fig. 2) are related to Pleistocene glaciation. The most prominent physiographic features are (1) the east-trending hills in the northern and central parts of the island and their eastward extensions, which form the north and south forks, (2) the gently sloping plain that extends southward from the hills, (3) the deeply eroded headlands along the north shore, and (4) the barrier beaches along the south shore.

The Harbor Hill Moraine forms the northern line of east-trending hills, which extend from Kings County to northern Nassau County and eastward to the north fork. The Ronkonkoma Moraine forms the southern line of

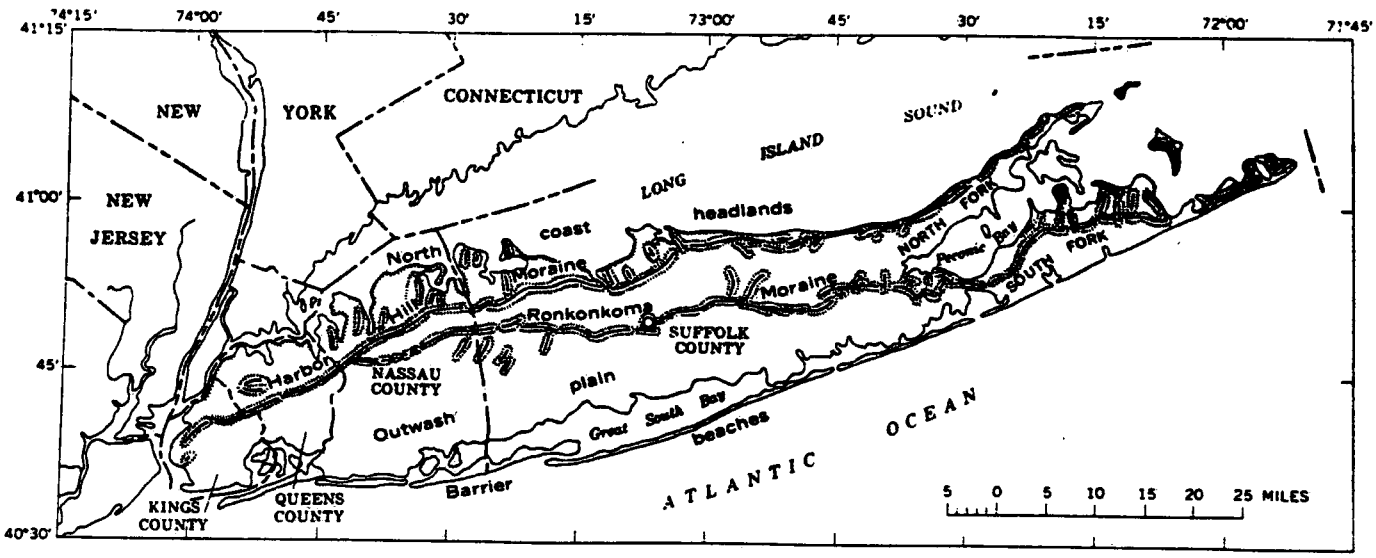


FIGURE 2.—Major physiographic features.

hills and extends from northwestern Nassau County eastward across central Suffolk County to the south fork. These moraines were deposited at the southernmost extension of the glacial ice sheets and have an altitude of about 200 to 300 feet in most of Long Island. The Ronkonkoma Moraine has a maximum altitude of about 400 feet in western Suffolk County.

The moderately even, gently sloping surface that extends southward to the south-shore bays from the Harbor Hill Moraine in Kings and Queens Counties and from the Ronkonkoma Moraine in Nassau and Suffolk Counties is underlain by glacial outwash deposits. This surface has an altitude of about 100 to 150 feet along its inland border and slopes southward at about 20 feet per mile.

The eroded headlands along the north coast are composed mainly of sand, gravel, and clayey till of glacial origin. Wave action has steepened the slopes and cut into the headlands, so that nearly vertical bluffs now exist, some as much as 100 feet high. The bays and harbors of the western part of the north shore were formed during glacial advance and retreat (fig. 2).

Along the south shore, waves and ocean currents formed offshore bars (barrier beaches). Sand and silt, as well as organic deposits, have partly filled and are continuing to fill the shallow bays behind the barrier beaches.

ACKNOWLEDGMENTS

Most of the lithologic and well data in this report were obtained from the files of the New York Water Resources Commission. The authors wish to express their thanks to Walter G. Waterman, associate engineer of the Water Resources Commission, and his colleagues for making these records available.

The report was prepared under the immediate supervision of B. L. Foxworthy, former hydrologist-in-charge, and Philip Cohen, hydrologist-in-charge of the Geological Survey subdistrict office on Long Island; and under the general supervision of Ralph C. Heath and Garald G. Parker, former district chiefs, and Robert J. Dingman, district chief, U.S. Geological Survey, Albany, N.Y.

HYDROGEOLOGIC SETTING

The hydrogeologic setting of Long Island was described in comprehensive reports by several authors (Veatch and others, 1906; Fuller, 1914; Suter and others 1949). In addition, the geology and hydrology of several smaller areas of Long Island were studied in detail by Isbister (1966), Lubke (1964), Lusczynski and Swarzenski (1966), Perlmutter and Geraghty (1963), Pluhowski and Kantrowitz (1964), and Swarzenski (1963). The general hydrologic situation on Long Island was reviewed by Cohen, Franke, and Foxworthy (1968).

Long Island is underlain by consolidated bedrock (fig. 3), which in turn is overlain by a wedge-shaped mass of unconsolidated sedimentary materials. The top of the bedrock, which is at or near the land surface in the northwestern part of the island, slopes to the southeast to a depth of about 2,000 feet below sea level in south-central Suffolk County (fig. 4). The average slope of the bedrock surface is about 65 feet per mile.

The materials that overlie the bedrock and constitute the ground-water reservoir consist of Pleistocene deposits and Cretaceous unconsolidated fluvial and deltaic deposits composed of gravel, sand, silt, clay, and mixtures thereof. The Cretaceous deposits were moderately

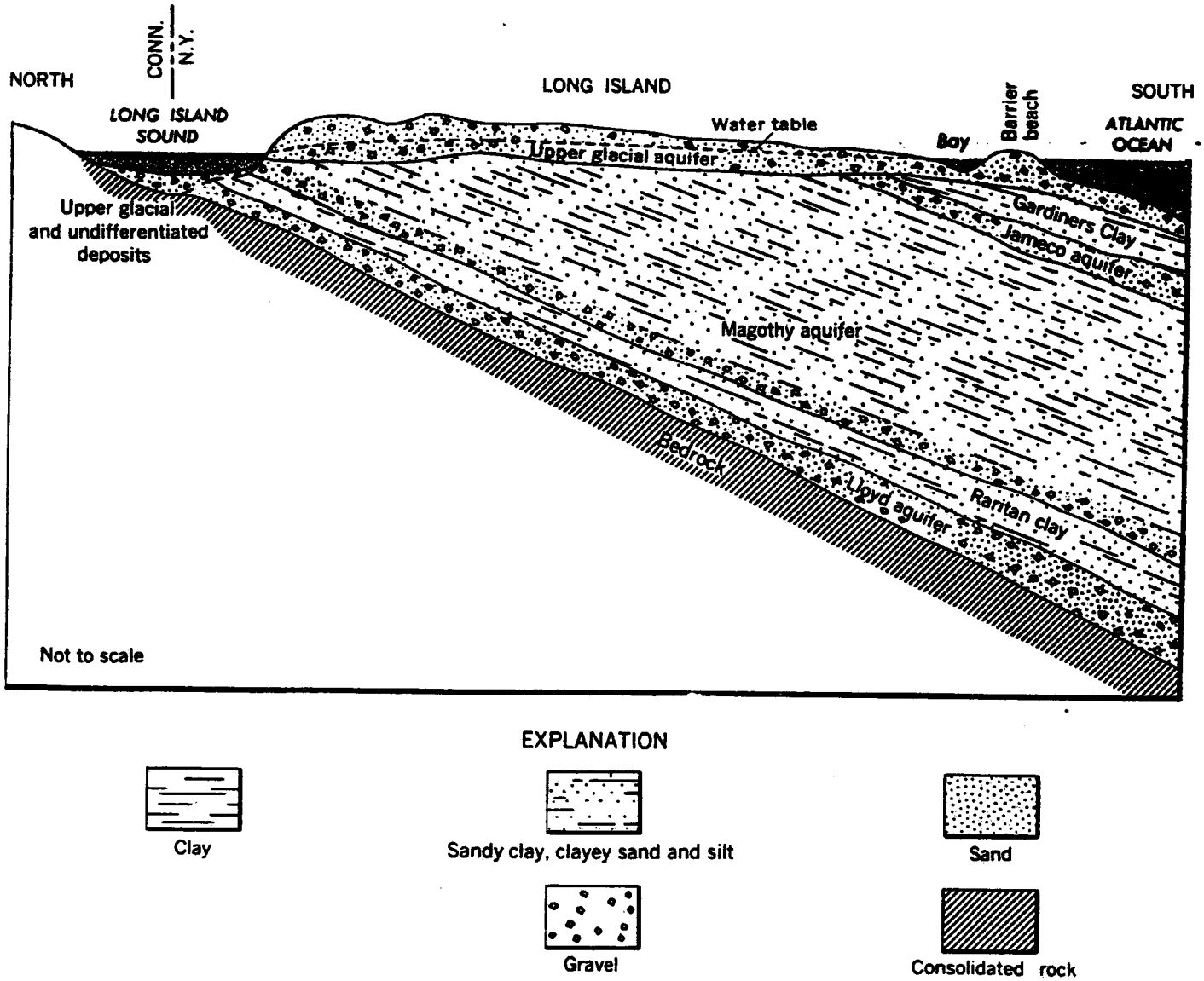


FIGURE 3.—Generalized geologic section showing relative positions of four principal aquifers.

to deeply eroded by streams and glaciers, and therefore, the Pleistocene materials were deposited on an irregular surface that locally was characterized by moderate relief. Data from the numerous wells drilled in Kings, Queens, Nassau, and northwestern Suffolk Counties are sufficient to define the general outlines of the preglacial valleys. In central and eastern Suffolk County, however, the valleys are less well defined.

The upper surface of the Cretaceous deposits generally is below sea level except in several areas in northeastern Nassau and northwestern Suffolk Counties. In all but a few small areas the Pleistocene deposits cover the Cretaceous deposits.

Pertinent information concerning the principal hydrogeologic units of Long Island's ground-water reservoir is summarized in table 1.

Ground water in the uppermost part of the zone of saturation on Long Island, mainly in the upper glacial aquifer but locally also in the Magothy aquifer, is generally under water-table (unconfined) conditions. Artesian (confined) conditions predominate in most of the other parts of the ground-water reservoir of Long Island, where the saturated deposits are overlain by silty and clayey layers of low hydraulic conductivity. Locally, the hydraulic head in the confined aquifers ranges from 30 to 40 feet below the water table in the central part of the island to nearly 20 feet above the water table near the margins of the island. At places along the north and south shores and on the barrier beaches, the head in the Lloyd aquifer is high enough to cause wells that tap the aquifer to flow.

The most significant confining layers in the ground-water reservoir are the Raritan clay, which overlies the Lloyd aquifer; the many discontinuous clay and silt

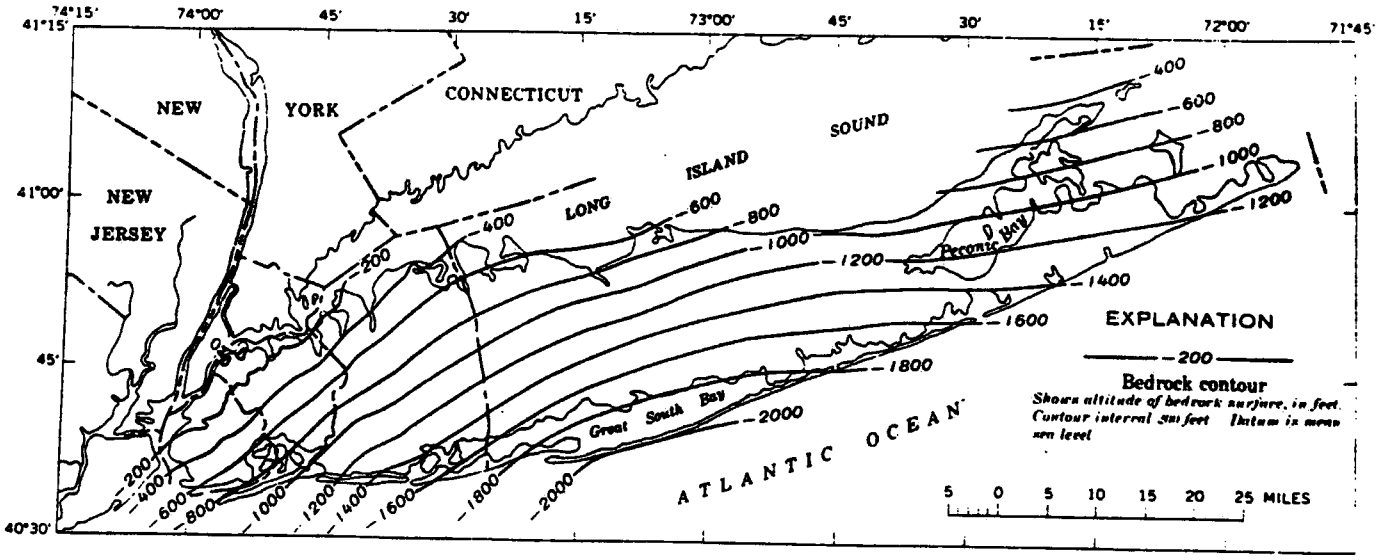


FIGURE 4.—Contour map of the bedrock surface. (Modified from Suter and others, 1949, pls. 8, 9, and 10.)

TABLE 1.—*Summary of the rock units and their water-bearing properties, Long Island*

System	Series	Geologic unit [1]	Hydrogeologic unit	Approximate maximum thickness (feet)	Depth from land surface to top (feet)	Character of deposits	Water-bearing properties
Quaternary	Holocene	Recent deposits: Artificial fill, salt marsh deposits, stream alluvium, and shoreline deposits.	Recent deposits	50	0	Sand, gravel, clay, silt, organic mud, peat, loam, and shells. Colors are gray, brown, green, black, and yellow. Recent artificial-fill deposits of gravel, sand, clay, and rubbish.	Permeable sandy beds beneath barrier beaches yield fresh water at shallow depths, brackish to salty water at greater depth. Clay and silt beneath bays retard salt-water encroachment and confine underlying aquifers. Stream flood plain and marsh deposits may yield small quantities of water but are generally clayey or silty and much less permeable than the underlying upper glacial aquifer.
	Pleistocene	Upper Pleistocene deposits	Upper glacial aquifer	600	0–50	Till (mostly along north shore and in moraines) composed of clay, sand, gravel, and boulders forms Harbor Hill and Ronkonkoma terminal moraines. Outwash deposits (mostly between and south of terminal moraines, but also interlayered with till) consist of quartzose sand, fine to very coarse, and gravel, pebble to boulder sized. Glaciolacustrine deposits (mostly in central and eastern Long Island) and marine clay (locally along south shore) consist of silt, clay, and some sand and gravel layers; includes the "20-foot clay" in southern Nassau and Queens Counties. Colors are mainly gray, brown, and yellow; silt and clay locally are grayish green. Contains shells and plant remains, generally in finer grained beds; also contains Foraminifera. Contains chlorite, biotite, muscovite, hornblende, olivine, and feldspar as accessory minerals; "20-foot clay" commonly contains glauconite.	Till is poorly permeable; commonly causes perched-water bodies and impedes downward percolation of water to underlying beds. Outwash deposits are moderately to highly permeable; specific capacities of wells tapping them range from about 10 to more than 200 gpm per ft (gallons per minute per foot) of drawdown. Good to excellent infiltration characteristics. Glaciolacustrine and marine clay deposits are mostly poorly permeable but locally have thin, moderately permeable layers of sand and gravel; generally retard downward percolation of ground water. Contains fresh water except near the shore lines. Till and marine deposits locally retard salt-water encroachment.
		Unconformity?					
		Gardiners Clay	Gardiners Clay	300	50–400	Clay, silt, and few layers of sand and gravel. Colors are grayish green and brown. Contains marine shells, Foraminifera, and lignite; also locally contains glauconite. Altitude of top generally is 50–80 feet below mean sea level. Occurs in Kings, Queens, and southern Nassau and Suffolk Counties; similar clay occurs in buried valleys near north shore.	Poorly permeable; constitutes confining layer for underlying Jameco aquifer. Locally, sand layers yield small quantities of water.
		Unconformity?					
		Jameco Gravel	Jameco aquifer	300	50–550	Sand, fine to very coarse, and gravel to large-pebble size; few layers of clay and silt. Gravel is composed of crystalline and sedimentary rocks. Color is mostly dark brown. Contains chlorite, biotite, muscovite, hornblende, and feldspar as accessory minerals. Occurs in Kings, Queens, and southern Nassau Counties; similar deposits occur in buried valleys near north shore.	Moderately to highly permeable; contains mostly fresh water, but brackish water and water with high iron content occurs locally in southeastern Nassau and southern Queens Counties. Specific capacities of wells in the Jameco range from about 20 to 150 gpm per ft of drawdown.

See footnotes at end of table.

TABLE 1.—*Summary of the rock units and their water-bearing properties, Long Island*—Continued

System	Series	Geologic unit [1]	Hydrogeologic unit	Approximate maximum thickness (feet)	Depth from land surface to top (feet)	Character of deposits	Water-bearing properties
		Unconformity					
Tertiary (?)	Pliocene(?)	Mannetto Gravel	(Commonly included with upper glacial aquifer.)	300	0–120	Gravel, fine to coarse, and lenses of sand; scattered clay lenses. Colors are white, yellow, and brown. Occurs only near Nassau-Suffolk County border near center of island.	Highly permeable, but occurs mostly above water table. Excellent infiltration characteristics.
		Unconformity					
Cretaceous	Upper Cretaceous	Magothy(?) Formation [2]	Magothy aquifer	1,100	0–600	Sand, fine to medium, clayey in part; interbedded with lenses and layers of coarse sand and sandy and solid clay. Gravel is common in basal 50–200 feet. Sand and gravel are quartzose. Lignite, pyrite, and iron oxide concretions are common; contains muscovite, magnetite, rutile, and garnet as accessory minerals. Colors are gray, white, red, brown, and yellow.	Most layers are poorly to moderately permeable; some are highly permeable locally. Specific capacities of wells in the Magothy generally range from 1 to about 30 gpm per ft of drawdown, rarely are as much as 80 gpm per ft of drawdown. Water is unconfined in uppermost parts, elsewhere is confined. Water is generally of excellent quality but has high iron content locally along north and south shores. Constitutes principal aquifer for public-supply wells in western Long Island except Kings County, where it is mostly absent. Has been invaded by salty ground water locally in southwestern Nassau and southern Queens Counties and in small areas along north shore.
		Unconformity					
		Raritan Formation: Clay member	Raritan clay	300	70–1,500	Clay, solid and silty; few lenses and layers of sand; little gravel. Lignite and pyrite are common. Colors are gray, red, and white, commonly variegated.	Poorly to very poorly permeable; constitutes confining layer for underlying Lloyd aquifer. Very few wells produce appreciable water from these deposits.
		Raritan Formation: Lloyd Sand Member	Lloyd aquifer	500	200–1,800	Sand, fine to coarse, and gravel, commonly with clayey matrix; some lenses and layers of solid and silty clay; locally contains thin lignite layers and iron concretions. Locally has gradational contact with overlying Raritan clay. Sand and most of gravel are quartzose. Colors are yellow, gray, and white; clay is red locally.	Poorly to moderately permeable. Specific capacities of wells in the Lloyd generally range from 1 to about 25 gpm per ft of drawdown, rarely are as much as 50 gpm per ft of drawdown. Water is confined under artesian pressure by overlying Raritan clay; generally of excellent quality but locally has high iron content. Has been invaded by salty ground water locally in necks near north shore, where aquifer is mostly shallow and overlying clay is discontinuous. Called "deep confined aquifer" in some earlier reports.
		Unconformity					
Precambrian		Bedrock	Bedrock		0–2,700	Crystalline metamorphic and igneous rocks; muscovite-biotite schist, gneiss, and granite. A soft, clayey zone of weathered bedrock locally is more than 100 feet thick.	Poorly permeable to virtually impermeable; constitutes virtually the lower boundary of ground-water reservoir. Some hard, fresh water is contained in joints and fractures but is impractical to develop at most places; however, a few wells near the western edges of Queens and Kings Counties obtain water from the bedrock.

[1] Names are those used in reports by the Geological Survey.
[2] The use of the term "Magothy(?) Formation" has been abandoned. The post-Raritan Cretaceous deposits are divided into the Magothy Formation and Matawan Group undifferentiated and the Monmouth Group undifferentiated.

lenses in the Magothy deposits; and the Gardiners Clay, which overlies the Jameco aquifer and locally overlies the Magothy aquifer. The clayey and silty layers in the Magothy aquifer become increasingly effective as confining layers with depth, particularly in the southern part of Long Island where the Magothy reaches its maximum thickness—about 1,100 feet in southern Suffolk County. Clayey beds in the upper glacial aquifer are found mainly in the northern part of the island and in parts of central Suffolk County; some are interbedded with glacial outwash deposits near the south shore.

DEFINITION OF HYDRAULIC CONDUCTIVITY AND TRANSMISSIVITY

The hydraulic conductivity, K, of material comprising an aquifer is a measure of the material's capacity to transmit water. In units of meinzers, commonly used by the Geological Survey, hydraulic conductivity is defined as the rate of flow of water in gallons per day through a cross-sectional area of 1 square foot under a hydraulic gradient of 1 foot per foot at a temperature of 60° F. In field practice the adjustment to the standard temperature of 60° F commonly is ignored, and hydraulic conductivity is then understood to be related to the prevailing water temperature.

The transmissivity of material comprising an aquifer is defined as the number of gallons of water that will move in 1 day through a vertical strip of the aquifer having a width of 1 foot and having the height of the aquifer, when the hydraulic gradient is unity. It is equal to the hydraulic conductivity multiplied by the

TABLE 7.—*Assigned range of Q/sL numbers and calculated hydraulic conductivity values for selected lithologic classes in the Jameco aquifer*

Lithologic class		Number of wells	Median Q/sL number of screened intervals (gpm per sq ft)	Assigned range of Q/sL numbers (gpm per sq ft)	Calculated range of hydraulic conductivity (gpd per sq ft)
No.	Description				
1	Gravel, sand and gravel, and coarse sand	37	1.1	0.8–1.1	1,600–2,200
2	Medium, fine, and very fine sand, and sand with silt or clay layers.	19	.9	0.1–0.7	200–1,400
3	Clay, sandy clay, and silty clay			[1] 0	0

[1] Assumed; see text discussion.

central and eastern Kings County than in southeastern Queens and southwestern Nassau Counties.

The computed average hydraulic conductivity of the Jameco aquifer (fig. 14) generally is slightly more than 1,000 gpd per sq ft. However, in several small areas near the northern boundary of the aquifer, the average hydraulic conductivity is about 1,500 gpd per sq ft. These areas with more permeable material probably reflect the somewhat coarser materials deposited in the narrower part of the buried valley.

Because the estimated average hydraulic conductivity of the Jameco aquifer shows very little areal variation, the gross pattern of the lines of equal transmissivity (fig. 15) closely reflects the pattern of the thickness map (fig. 13). The maximum transmissivity is about 300,000 gpd per ft and occurs in southwestern Queens County.

The average thickness, hydraulic conductivity, and transmissivity of the Jameco aquifer in subareas of Long Island, derived from figures 13, 14, and 15, are listed in table 8. The greatest average thickness and greatest average transmissivity of the Jameco aquifer occur in Kings County, although the maximum transmissivity occurs in Queens County.

TABLE 8.—*Average thickness, hydraulic conductivity, and transmissivity of the Jameco aquifer in subareas of Long Island*

Subarea	Area (sq mi)	Average total thickness (feet)	Average hydraulic conductivity (gpd per sq ft)	Average transmissivity (gpd per ft)
Kings County	60	95	1,300	120,000
Queens County	28	80	1,200	100,000
Southern Nassau County	14	35	1,400	50,000
Three subareas	102	80	1,300	110,000

MAGOTHY AQUIFER

Q/sL numbers of wells screened in the Magothy aquifer range from less than 0.1 to 3.2 gpm per sq ft (fig. 16). This compilation includes more than 85 percent of all wells screened in the Magothy aquifer for which test data are available. More than 90 percent of the Q/sL numbers are less than 1.7 gpm per sq ft, and the median Q/sL number is 0.6 gpm per sq ft. The screen

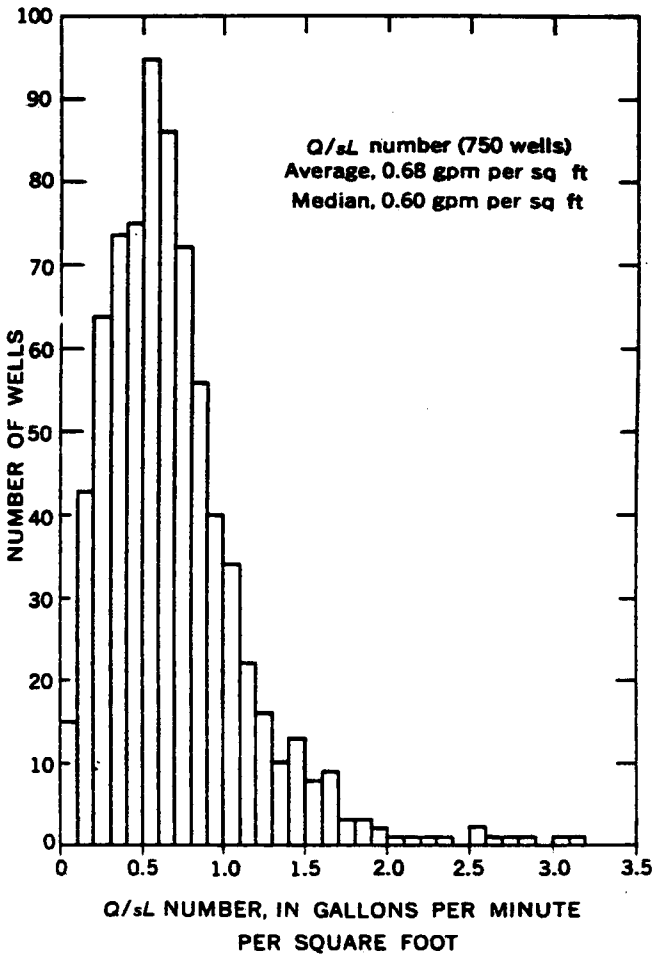


FIGURE 16.—Distribution of Q/sL numbers for wells screened in the Magothy aquifer. (Average hydraulic conductivity of screened intervals approximates 2,000 Q/sL; see text discussion.)

lengths in many of the Magothy wells are greater than 50 feet (fig. 17), and the average screen length is about 40 feet. Therefore, the effects of across-bed flow on the Q/sL numbers of most wells screened in this aquifer are probably less than in the upper glacial aquifer.

Lithologic descriptions of the screened intervals were available for all 750 Magothy wells with test data. More than half of these descriptions consisted of a single lithology, and many of the remaining screened intervals

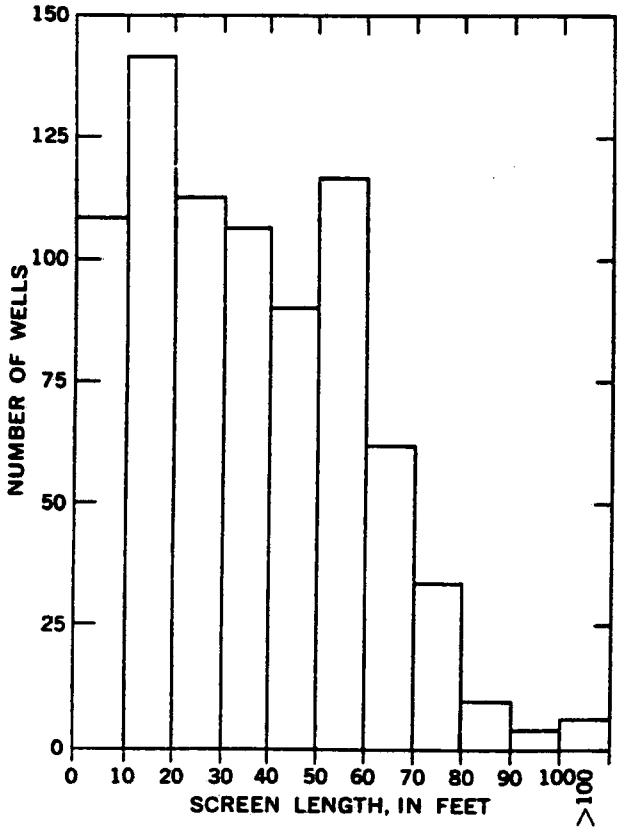


FIGURE 17.—Distribution of screen lengths of wells in the Magothy aquifer.

were described as predominantly one lithology. The median Q/sL numbers determined for each lithologic class from the descriptions of the screened intervals, the range in Q/sL numbers assigned to each lithologic class, and the corresponding range of calculated hydraulic conductivity values for each class are listed in table 9.

Lithologic logs describing the Magothy aquifer in 300 wells were analyzed to determine point values of average hydraulic conductivity. The distribution of these wells (fig. 18) was fairly uniform in Queens, Nassau, and western Suffolk Counties, but the number of wells for which logs were available is much less in central Suffolk County. In addition, the proportion of wells penetrating the entire Magothy aquifer becomes progressively smaller proceeding eastward in Suffolk County.

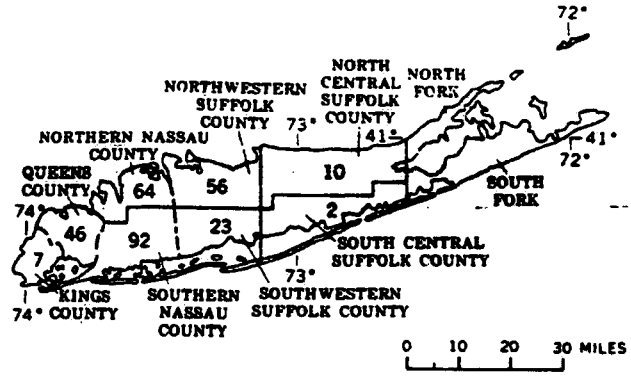


FIGURE 18.—Number of wells for which lithologic logs were available for the Magothy aquifer in the indicated subareas in 1967.

A map showing thickness of the saturated Magothy aquifer (pl. 2*A*) was prepared from an unpublished map of the September 1965 water table, from well logs, and from maps and data contained in several reports (Isbister, 1966; Lubke, 1964; Perlmutter and Geraghty, 1963; Pluhowski and Kantrowitz, 1964; Swarzenski, 1963; Julian Soren, written commun., 1968). Maps showing lines of equal average hydraulic conductivity (pl. 2*B*) and equal transmissivity (pl. 2*C*) were constructed according to the procedures outlined previously.

The Magothy aquifer thickens gradually toward the southeast and attains its maximum recorded thickness of about 1,000 feet beneath the barrier beaches in south-central and southeastern Suffolk County (pl. 2*A*). The aquifer thins markedly and locally is absent in buried valleys along the northern shore and in western Long Island.

The lines designating the highest values of estimated average hydraulic conductivity generally occur in the northern and northwestern parts of the island (pl. 2*B*) where the aquifer is thinnest and where a basal gravel deposit makes up most of the section. The smallest values of average hydraulic conductivity occur in the south-central and southeastern parts of the island, where the aquifer is thickest. The decrease in average hydraulic conductivity towards the southeast is related to an increase in the percentage of fine materials such as silt and clay in the aquifer in those areas.

TABLE 9.—*Assigned range of Q/sL numbers and calculated hydraulic conductivity values for selected lithologic classes in the Magothy aquifer*

Lithologic class		Number of wells	Median Q/sL number of screened intervals (gpm per sq ft)	Assigned range of Q/sL numbers (gpm per sq ft)	Calculated range of hydraulic conductivity (gpd per sq ft)
No.	Description				
1	Gravel, sand and gravel, and coarse sand	219	0.7	0.6–0.8	1,200–1,600
2	Medium, fine, and very fine sand, and sand with silt or clay layers.	531	.5	0.1–0.5	200–1,000
3	Clay, sandy clay, and silty clay			[1] 0	0

[1] Assumed; see text discussion.

The transmissivity of the Magothy aquifer (pl. 2*C*) tends to increase towards the south and southeast. Although the estimated average hydraulic conductivity tends to decrease in this direction, the greater percentage increase in aquifer thickness results in an increased transmissivity. The estimated maximum transmissivity of the Magothy aquifer is about 400,000 gpd per ft near the barrier beach in south-central Suffolk County.

Average thickness, hydraulic conductivity, and transmissivity of the Magothy aquifer in subareas of Long Island are derived from plate 2*A*, *B*, and *C* and are listed in table 10. The average hydraulic conductivity for each subarea is lowest in south-central Suffolk County (360 gpd per sq ft) and is highest in Kings County (over 600 gpd per sq ft). The average transmissivity by subarea is highest in south-central Suffolk County (320,000 gpd per ft), where the Magothy aquifer is thickest.

TABLE 10.—*Average thickness, hydraulic conductivity, and transmissivity of the Magothy aquifer in subareas of Long Island*

Subarea	Area (sq mi)	Average total thickness (feet)	Average hydraulic conductivity (gpd per sq ft)	Average transmissivity (gpd per ft)
Kings County	18	140	630	85,000
Queens County	61	170	460	80,000
Northern Nassau County	93	300	450	140,000
Southern Nassau County	154	600	420	250,000
Northwestern Suffolk County	150	430	420	180,000
Southwestern Suffolk County	115	770	410	320,000
North central Suffolk County	254	650	400	260,000
South central Suffolk County	141	900	360	320,000
Subareas studied	986	560	410	240,000

LLOYD AQUIFER

Q/sL numbers of wells screened in the Lloyd aquifer range from less than 0.1 to 2.1 gpm per sq ft (fig. 19). This compilation includes virtually all the wells screened in the Lloyd aquifer for which test data are available. About four-fifths of the *Q/sL* numbers are between 0.1 and 0.6 gpm per sq ft and the median *Q/sL* number for all wells is 0.35 gpm per sq ft. Screens of wells in this aquifer range from less than 10 to 90 feet in length (fig. 20). About one-third of the screens are short (15 feet or less), which suggests that vertical flow components may have materially affected the discharge of some of these wells.

Lithologic descriptions of the screened interval were available for all 94 Lloyd wells with test data. Almost half the screened intervals were described as one lithology, and most of the remaining screened intervals were described as predominantly one lithology. The

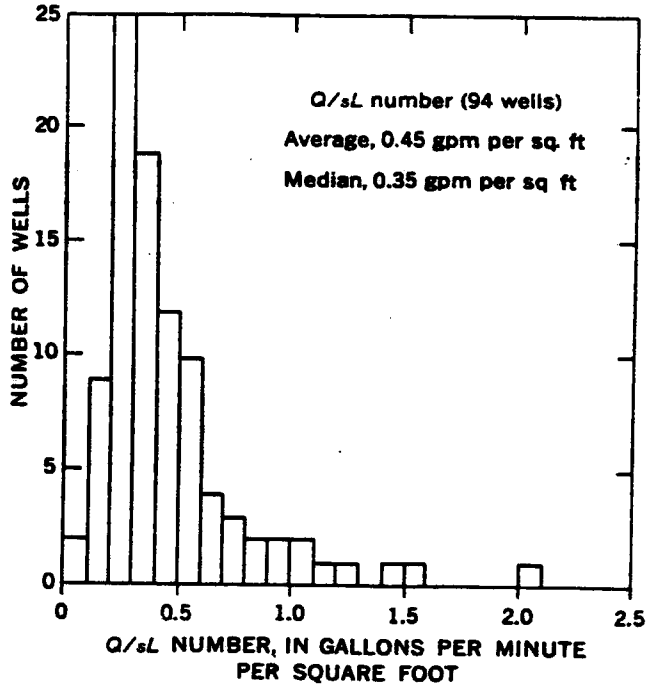


FIGURE 19.—Distribution of *Q/sL* numbers for wells screened in the Lloyd aquifer. (Average hydraulic conductivity of screened intervals approximates 2,000 *Q/sL*; see text discussion.)

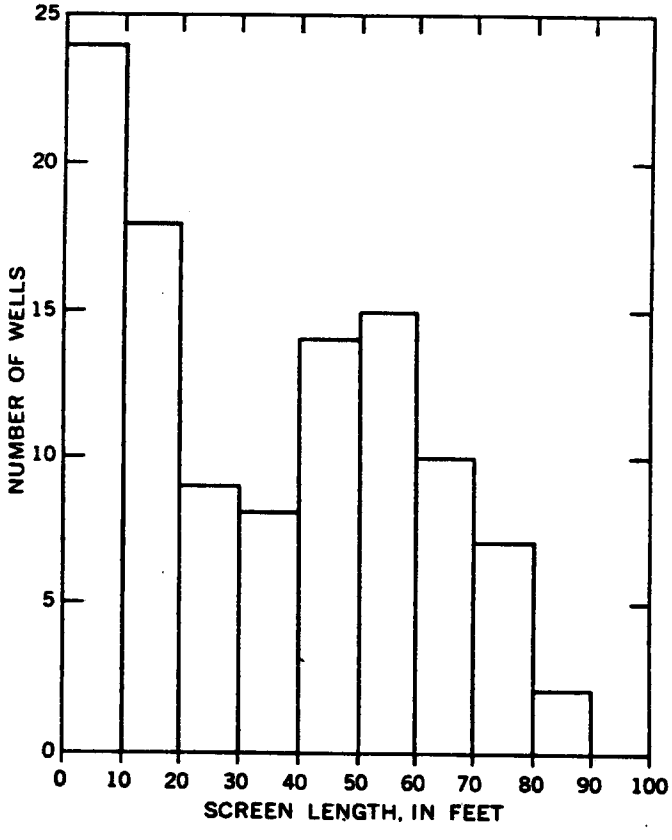


FIGURE 20.—Distribution of screen lengths of wells in the Lloyd aquifer.

REFERENCE NO. 32

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

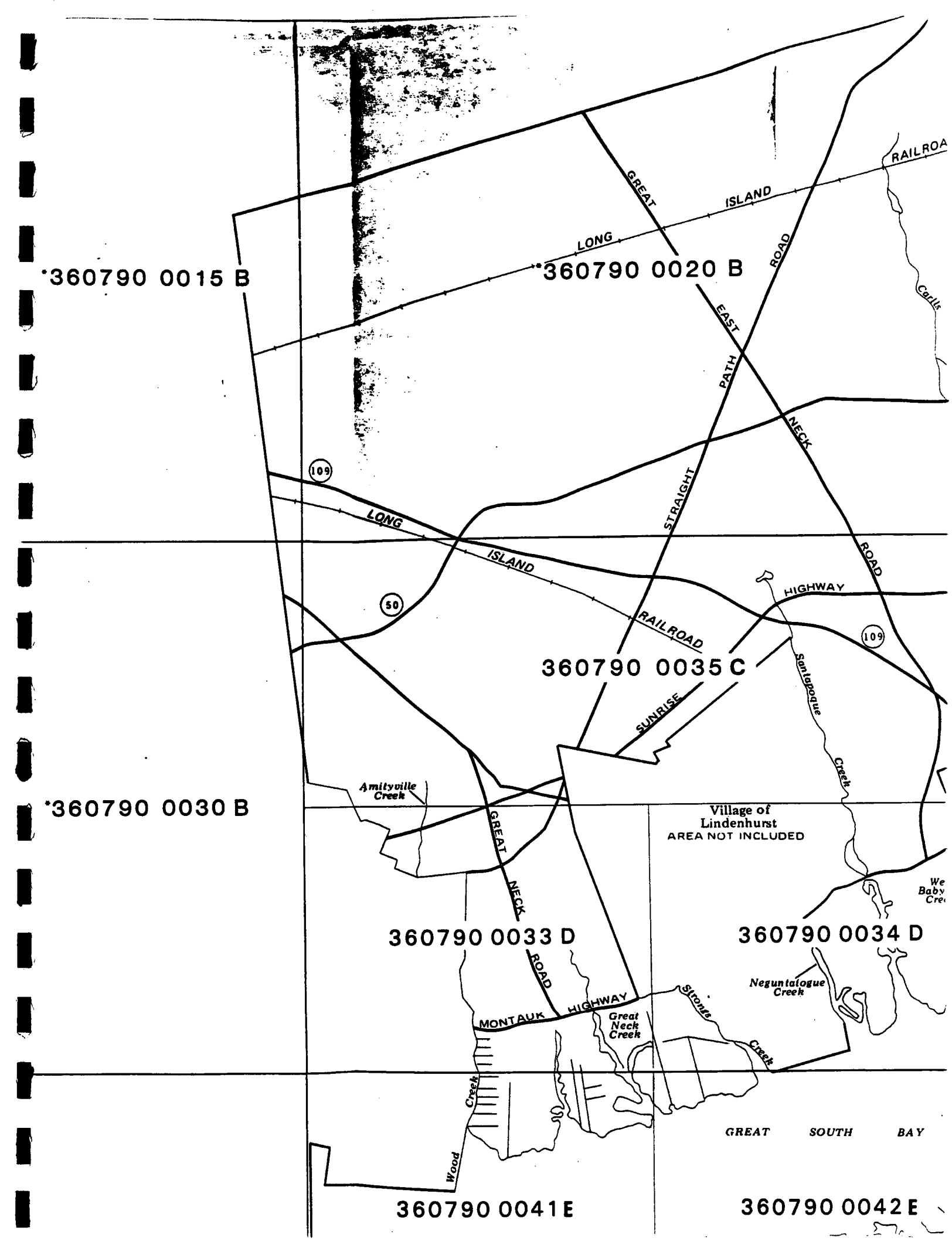
TOWN OF
BABYLON,
NEW YORK
SUFFOLK COUNTY

MAP INDEX

PANELS PRINTED: 25, 33, 34, 35, 40, 41, 42, 43, 44, 46, 47, 48, 49

COMMUNITY-PANEL NUMBERS
360790 0001-0050

MAP REVISED:
MAY 18, 1992



*360790 0015 B
*360790 0020 B
*360790 0030 B
360790 0035 C
360790 0033 D
360790 0034 D
360790 0041 E
360790 0042 E
LONG ISLAND RAILROAD
GREAT NECK ROAD
EAST PATH ROAD
STRAIGHT PATH ROAD
SUNRISE HIGHWAY
MONTAUK HIGHWAY
109
50
Carlls
Santapoque Creek
Amityville Creek
Village of Lindenhurst
AREA NOT INCLUDED
Neguntatogue Creek
Strongs Creek
Great Neck Creek
Wood Creek
GREAT SOUTH BAY

REFERENCE NO. 33

WESTON

PROJECT NOTE

TO: Project File - Spectrum DATE: 7/97

FROM: Tonya Balla W.O. NO.: 04200-022-081-0132-05

SUBJECT: Sensitive Environments with 4-mile radius of SFC

Sensitive environment information was obtained from the NYSDept. of Environmental Conservation Wildlife Resources Center for the area surrounding the SFC site (4-mile radius). There are four NYS-listed endangered species, ~~and~~ one federal-listed endangered species, and ~~six~~ five state-listed threatened species within a four mile radius of the site. The information was provided in August 1996.

State-Listed Endangered Species
- Carex Barrattii (plant), Hypercum Adpressum (plant), Polygala Lutea (plant) and Hypercium Hypericoides SSP multicau (plant)

Federal-listed Endangered Species
- Agalinis Acuta (plant)

~~Six~~ State-listed threatened species
- ~~Sterna Hirundo (Bird)~~
- Helianthus Angusifolius (plant)
- Linum Medum var Texanum (plant)
- Platanthera Ciliaris (plant)
- Scleria Pauciflora var Carolliniana (plant)
- and Desmodium Ciliare (plant)

REFERENCE NO. 34

11/21/97

1145 S. Klepacki, J. Hinge calibrate OVM Model No. 580B, Serial No. RFW07490 at WESTON Carle Place office
Calibrated with zero gas & 254 ppm. Isobutylene

1215 S. Klepacki, J. Hinge arrive on-site. Meet Patrick Austin of WESTON START in field trailer.
Per Patrick Austin, when he first arrived at the site, drums were piled on top of each other inside the facility. Two sumps, each approximately 3' x 3' x 3', are located inside the facility. Patrick Austin has taken photos inside the facility, which he shared us. He will forward prints after he has gone through and labeled them all.
ECRS contractor has bulked liquids with like characteristics together. ECCRS brought in four large poly tanks. ECRS ~~br~~ spread lime on floor to ~~contract~~ neutralize acids. ECRS mobilized on 11/6/97 and demobilized on 11/14/97.

1245 Begin walk around building. (See map). Storm drains noted on ~~west~~ north side of building. Stained asphalt noted near eastern more storm drain. Locations of additional storm drains noted.

1300 West side of Spectrum building is now occupied by Unique Door Gallery (516-847-0589). An alleyway, approximately 6' wide, runs between Spectrum building, and building immediately south of Spectrum building. Stained soil noted near west end of alley way.

1310 Continue walk-through around front (east end) of Spectrum building. A small lawn is in between east end of building and Dale Street.

1400 Spoke to Eric at Art Tradition, 40 Dale Avenue, re permission to open well cover in his parking lot. Open well cover. Two wells noted inside, in generally good condition, although tops are covered by dirt. Both wells are locked, and string is coming from wells (bailers still inside?). OVM: background.

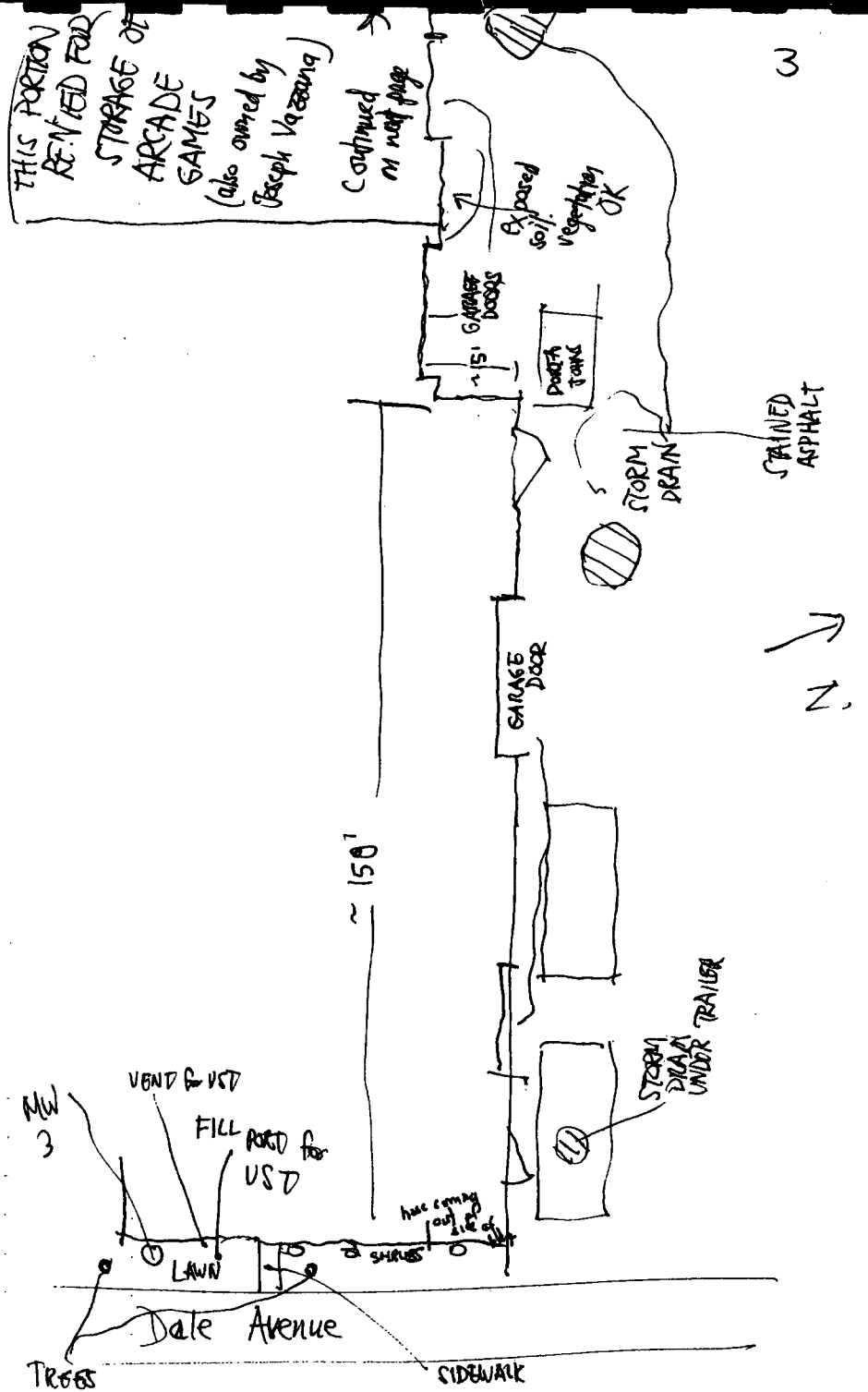
1410 Noted hose coming out of building on east side (along Dale Avenue). Hose goes into Y fitting leading to 2 other hoses going into ground.

1415 MW-3 location: OVM at background
one well at 22' below ground surface, bottom at 50' below ground surface; other well water level at 22' bgs, bottom at 24'4" bgs.
MW-3 approximately 10' north of tree on lawn along Dale Avenue, 27' northwest of telephone pole. Bailers still in wells

1430 Open well cover of MW-1. Located on west end of AAA Couriers building, approximately 2' from sidewalk. Wells were locked w/ padlocks. String coming from wells indicating bailers inside.

1435 Attempt to open cover of what may be MW-2. (in parking lot near Dale Street). Cover could not be opened with available tools

1440 Well cover, also in parking lot approximately 50 feet west of above location, opened. Well cover is tied down with two approx. 1/2 inch hex bolts. Only 1 well ~~visible~~ found inside cover. Cover reads "Monitoring well" (different cover from other wells). Well is padlocked, but with different lock than other wells.



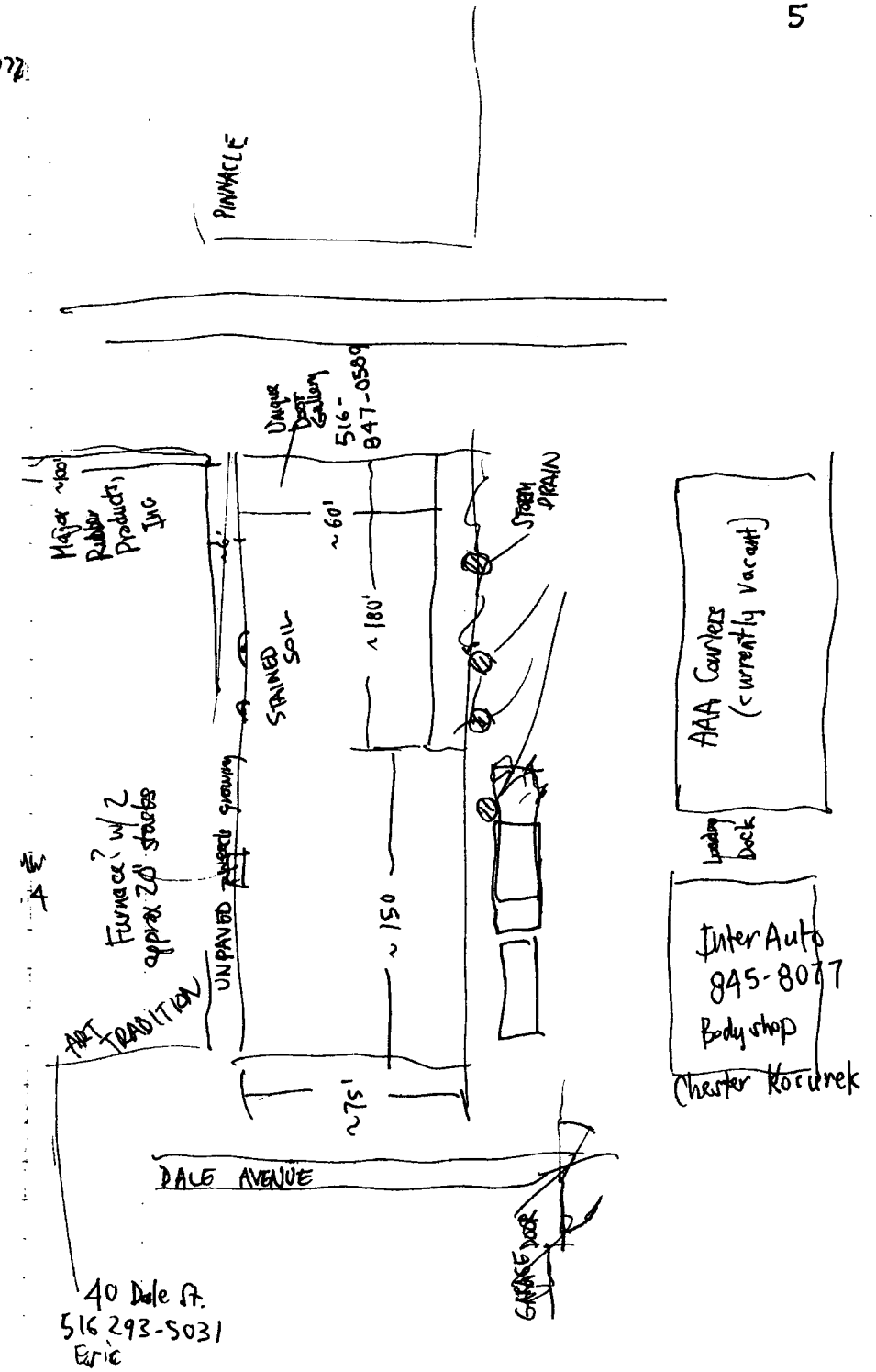
1445 Spoke to Chester Kocurek, owner of Inter Auto, body shop located in building to north of Spectrum building (516-845-8077)

1455 Structure noted (furnace? with two stacks) in alley to south of building. Structure noted on site map.

1505 S. Klepacki, J. Hinge leave site.

SUMMARY INFORMATION

- No residences, schools, or day care centers were located within 200 feet of the site.
- No terrestrial sensitive environments or wetlands were observed on-site.
- Most of the area around the Spectrum building was paved, with the following exceptions:
  - small lawn areas near the streets on the eastern and western ends of the building;
  - an unpaved alley, approximately 6 feet wide, between the Spectrum building and the building to the south;
  - some small "flower bed" areas (approximately 2 feet wide, maximum) at the northern edge of the building, adjacent to paved areas.
- No fences around the building. Outside areas are accessible to the public.



ON-SITE RECON PHOTO LOG

Photo #	Time	Description
1	1245	Looking east on north side of building (door with windows is end of Spectrum space).
2	1245	Looking east along north side of building.
3	1250	Storm drain on north side of building by Porta-John
4	1255	North side of building looking west
5	1255	Storm drain west of storm drain shown in Photo # 3
6	1300	West side of building, occupied by Unique Door Gallery (516-847-0589)
7	1305	Alley way behind Spectrum building, as viewed from east side of building.
8	1305	Buildings to the north (across from) Spectrum building, ~~as viewed from~~ JH looking east.
9	1310	East side (front) of Spectrum building.
10	1310	Looking west down alley way behind Spectrum building.
11	1400	Location of monitoring well MW-4 (S&D) on south side of adjacent building south of Spectrum building (building occupied by Art Tradition).
12	1415	Location of monitoring well MW-3 (S&D) in front (east side) of building.
13	1430	Location of monitoring well MW-1 on west side of building (~~now~~ JH most recently occupied by AAA Couriers) to the north of Spectrum building.

Photo #	Time	Description
14	1435	Location of monitoring well believed to be MW-2, close to auto body shop immediately north of Spectrum bldg.
15	1435	Landfill in distance (looking east from site).
16	1440	~~Site~~ JH Location of single monitoring well near body shop, approximately 50' west of location shown in Photo # 14
17	1500	Structure in alley to south of Spectrum building, looking west.
18	1500	Area of stained soil near west end of Spectrum building (west of Spectrum-occupied section of building) in alley to south of building.

Sampling event 4/7/93

0700 C. Guder, S Klepacki, M. Stenskuck, J. Hinge arrive on site.
C Guder, J. Hinge inspect site, check well locations. Unload van and suburban, set up decon area.

0800 S Klepacki calibrates OVM Model 580B, Serial # RFW07865 and OVM Model 580B, Serial # RFW07490, using 250 ppm isobutylene.
Calibrated dissolved oxygen meter (7 - 75) SN 97B0597 AH
Calibrated water quality meters (7 - 75) RFW 26311 and 1097
Conductivity 1000 µS/cm [illegible] read 0.963 @ 11.5°C 0.987 @ 15°C
- Checked pH to standards of 7 + 10 units adjusted Cal and slope on both meters to correct readings.
Continue setting up. Charlie Guder, J. Hinge cut locks, remove caps from wells. J. Hinge marks out sampling locations inside building on concrete floor.

0830 Representative from Zebra (subcontractor for coring holes) arrives on site. J. Hinge goes over sampling locations with him, helps him get set up.

0920 S. Klepacki sets up at location of sample GW01, begins bailing well (see other logbook).

Notes: Depth 0-6' for SS01, SS02 and SS03

0945 C Guder, J. Hinge to location of SS01, in alleyway south of Spectrum Building. SS01 collected from stained soil area just west of easternmost door on south side of building. (According to operating plan, this door led from former degreaser area.) SS01 is MS/MSD sample. No reading above background on OVM

1005 C. Guder, J. Hinge move to location of sample SS02, collected from just east of second door on south side of building. No reading above background on OVM

1015 C Guder collects sample SS03, from area of stained soil approximately 20 feet east of second door on south side of building. No reading above background on OVM.

1030 C Guder, J Hinge remove manhole cover at location of SW04, east-central storm drain in parking lot north of Spectrum building. Collect water from storm drain using 1 foot bailer.

Temp = 9.6°C
pH = 5.45
.014 mU/cm
D.O = 80.6%
} SW04

C. Guder, S. Klepacki collect sample SW04

T. Varner, J. Hinge go to former degreaser area (location of samples SS11 and SS12). Area is now occupied by Unique Door Gallery. Concrete floor in this area is observed to be in good condition with no signs of corrosion. Following discussion with Unique Door Gallery representatives, who state the floor has not been repaired or replaced, decision is made not to collect subsurface samples from the former degreaser area.

1130 T. Varner, J. Hinge review subsurface sample locations in former painting area and former plating area. Add two sample locations where floor has corroded.

* Photo did not come out

Photo log	Date	Time
1 Location of SS01, facing east.	4/7/98	0945
2 Location of SS02, facing east	4/7/98	1015
3 Location of SS03, facing east.	4/7/98	[illegible]
4 Location of SW04, facing northwest.	4/7/98	1100
5 Location of GW01, facing north.	4/7/98	1130
6 Location of GW05, facing north.	4/7/98	1140
7 Location of SW03, facing southeast.	4/7/98	1205
8 Location of SS09	4/7/98	1220
* 9 Location of SS08	4/7/98	[illegible]
new camera * 10 Location of SW05	4/7/98	[illegible]
11 Location of SS10/SS22, facing east	4/7/98	1405
12 Location of GW03, facing north.	4/7/98	1400
13 Location of GW07, facing north.	4/7/98	1410
14 Location of SW01, facing north.	4/7/98	1445
15 Location of SS06 (placard flew up) facing south.	4/7/98	1540
16 Location of SS06, facing south.	4/7/98	1540
17 Location of SW02, facing southeast.	4/7/98	1605

18 Location of SS07, facing south (toward Spectrum Hdq).	4/7/98	1625
19 Location of GW04	4/7/98	1650
20 Location of GW08	4/7/98	1700
4/8/98 21 Location of SS17, facing west. Date incorrect on placard.	4/8/98	1010
22 Location of SS16, facing west. Date incorrect on placard.	4/8/98	1030
23 Location of SS11, facing west.	4/8/98	1055
24 Location of SS05, facing northwest.	4/8/98	1135
* 25 Location of SS12, facing north.	4/8/98	1200
26 Location of SS04, facing north.	4/8/98	1255
27 Location of SS18,	4/8/98	1315
28 Location of GW02/GW09, facing east.	4/8/98	1325
29 Former wastewater treatment area, looking west	4/8/98	1410
30 Location of SS15, facing east	4/8/98	1425
31 Location of SS19, facing east.	4/8/98	1450
32 Location of SS20, facing east.	4/8/98	1510
* 33 Inside former painting area, looking east.		1530
* 34 Inside former plating room, looking NE		1535

1200 C. Guder, J. Hinge to location of SW03 (west central storm drain).
Temp: 10.4°C
0.39 mU/cm
pH: 6.64
DO: 69.4%

1205 Collect sample SW03.

1220 T. Varner, C. Guder collect sample SS09 (same location as SW04). Sediment is blackish brown silt and sand, no readings above background on OVM. No odor noted. Sample collected from 0 to first 6 inches of sediment in the bottom of the dry well.

1235 TV, C.G. finish collecting SS09 sediment [illegible] to dry well to collect SS08 sediment.

1240 Sheen observed on drywell water during SS08 & SS09 collection.

1255 [illegible] finish SS08 collection

1340 J. Hinge, C. Guder to easternmost dry well, remove manhole cover. Water has oily sheen
Temp: 9.2°C
.035 mU/cm
6.28 pH
67.2% D.O.

1345 Sample SW05. Sediment is black with mild petroleum odor.

1405 Sample SS10/SS22 from same location.

1440 C.G & JH move to westernmost dry well (location of SW01). Remove manhole cover. Water level is near bottom of dry well (approx. 10-12 feet below ground surface).

1445 Collect sample SW01. (Collect samples before recording parameters to ensure enough water volume for sample collection.)

1510 Joseph Vazzana Jr. arrives on site to check status of sampling.

1520 Parameters for SW01
10.9°C
0.40 mU/cm — 3 auger extensions were used.
D.O. 67.7%
pH 6.92

1550 T. Varner, J. Hinge survey possible sites for background samples.

1600 C. Guder, J. Hinge to location of SW02 (west central storm drain).
Temp: 11.6°C
.020 mU — 4 auger extensions were used
6.40 pH
D.O. 66.7

1605 Collect SW02.

1625 Collect SS07 from same location.

1645 J. Hinge starts augering soil from former leaching pool (location of SS21/SS23). Approximately 3 inches below surface, encounter metal — assumed to be manhole.

1710 T. Varner, M. Stensrud collect field blank from bailer, FB02.

1750 C. Guder, J. Hinge collect field blank from trowel, FB01.

4/8/98

0840 Arrive on site. Attempt to open outer cap for wells GW02/GW06. Could not open outer cap after repeated attempts. Instead, decided to sample from other monitoring well (history unknown) located approximately 50 feet west of location of GW02/GW06. Well is constructed of 2" PVC with pad locked inner cap. A bailer is located inside well.

0950 After applying WD-40 to outer cap, a representative of Inter Auto is able to open outer cap for wells GW02/GW06. JH cuts padlocks, opens wells. Note possible contamination from WD-40.

1010 T.V., JH collect soil sample SS17 from northern former paint booth. Sample consists of moist brown sand with trace gravel. Depth 0-6" for VOAs, 6"-12" for other parameters. OVM reads approximately 0.6 ppm in hole

1030 Collect soil sample SS16 from southern former paint booth. Sample consists of moist brown sand with trace gravel. Depth 0-6" for VOAs and other parameters. Refusal at approximately 8" appears to be another concrete floor. Berm approximately 2" high is located at perimeter of paint booth area, an apparent attempt to contain materials. Maximum OVM reading of 0.5 ppm in sample hole

1055 Collect soil sample SS11 from center of former painting area room. Sample, which consists of moist brown sand with trace gravel, is collected from adjacent to seam in concrete floor that shows signs of corrosion. Depth 0-6" for VOAs, 6-12" for other parameters

Refusal at approximately 12" may be another concrete floor. No reading above background on OVM.

1115 Move to location of SS05, immediately (approximately 6" east of east side of western sump in former plating area). Bottom of sump, which is filled with water, is approximately 5'4" below ground surface. Concrete floor, as in other areas, is approximately 6" thick. Immediately below ground surface encounter moist brown sand with trace gravel. At approximately 1' below ground surface encounter wet blue-green clayey material, approximately 1" layer. More moist brown sand encountered below clayey material. OVM reads approximately 4 ppm in hole.

1135 Collect soil sample SS05, VOA samples, collected from depth of 5'6"-6' below floor. Other fractions from 6'-7' below floor. Sampled soil appeared slightly damper and darker than soil above it. OVM reads approximately 5 ppm during sampling of VOAs. (immediately next to soil in auger)

1150 Move to location of SS12, in center of former plating area. Sample location, which has changed from sampling plan is location near the end of a rectangular shaped area that has been corroded 2-3" below floor. Corroded concrete is color red and orange. Soil below corroded concrete floor is stained blue.

1200 Collect soil sample SS12. Sampled soil is sand with traces of gravel stained blue. Blue sand extends to approximately 8" below floor depth. VOAs collected from 0-6".

other parameters collected from 0-10". OVM reads approximately 0.7 ppm in area of sample collection.

1220 Move to location of SS04, immediately (approximately 6" south) south of eastern sump in former plating area. Sump is approximate 51" deep and is filled with water. Soil below floor is light brown sand; approximately 2' below ground surface, sand turns noticeably darker.

1255 Collect sample SS04 from depth of approximately 60" below floor surface. Sample is generally tan brown sand with little gravel, with clump of dark brown soil. OVM reads below 0.5 ppm during placement of samples into bottles.

1315 Move to sample location SS18, in southwest corner of former plating area. Floor is stained green, red & white in this area, and surface of floor is corroded and pocked. Collect VOA sample from depth of 0-6". Sample is light brown sand with traces of green staining at top of sample. Core from concrete floor shows that green staining originated at the floor surface and migrated through a crack in the floor. No readings above background on OVM. Other parameters collected from 0-12".

1400 Attempt to collect sample from location of SS14 (eastern coring location in former wastewater treatment area. Below core, encounter gravel/crushed stone for a depth of at least 4". Note that

floor of wastewater treatment area does not show signs of corrosion and is in good condition in comparison to floor of plating area. Since no sample can be collected, decide to abandon sample

1410 Attempt to collect sample from location SS13 (western coring location in former wastewater treatment area). Wet greyish clayey material noted below floor. Approximately 6" below floor surface, hit refusal, apparently another concrete floor, or possibly asphalt. (Wastewater treatment area was part of an addition constructed after Spectrum had already been operating)

1420 Move to sample location SS15, in former polishing area. Note that floor in this area is in relatively good condition. Immediately below concrete floor, hit wet sand and gravel. Approximately 2" below top of sand and gravel, hit refusal, believed to be asphalt layer. Because of extremely small volume of sample material, only VOAs are collected.

1450 Move to west end of Spectrum building for collection of background samples. Sample SS19 (MS/MSD) collected from area where shrubs are planted, approximately 2 feet west of the western wall of the building and approx. 15' south of northern wall. - Sampled soil is brown sand with little gravel, little silt and little clay. No readings above background on OVM. Roots noted in soil where samples were collected. VOAs collected from 0-6" below ground surface. Other parameters collected from 0-12" below ground surface.

1510 Collect background soil sample SS20 from lawn west of AAA Couriers. Sample, dark brown silty sand with trace gravel. No readings above background on OVM. and trace root, trace clay. VOAs collected from 0-6". Below 6" is brown sand. Other parameters collected from 0-12". Sample location is approximately 16' west of western wall of AAA Couriers building and approximately 14' north of southern wall of same building.

SUMMARY NOTES

- Rich Faborow of NYSDEC visited site during sampling event to check status of site, sampling event
- Per Joseph Vazzana Jr., no manufacturing activities took place at the AAA Couriers Building
- The west end of the Spectrum building was used only for offices, per Joseph Vazzana, Jr.
- All stormwater sediment samples collected from the top 6" of sediments.
- A total of five people work at Unique Door Gallery.
- Depth to water in storm drains was generally approximately 5 to 8 feet.
- Distance between soil samples SS16 and SS17 (in former paint booths) is approximately 12 feet.
- Distance from sample SS05 to SS13 is approximately 20 feet; distance from sample SS13 to SS04 is also approximately 20 feet.
- Sumps, which had been cleaned and emptied to the bottom during the removal action, were full of liquid again, apparently due to roof leaks.

April 7, 1998

0920 At Wells in front of AAA

Couriers to bail & sample

Shallow Well (GW01)	Deep Well (GW05)
DTB 24.60	DTB 49.30
DTW 16.30	DTW 16.30
8.30	33.00
x.16	x.16
4980	19800
8300	33000
13280 1vol	52800 1vol
3	3
3.9840 3vol	15.8400 3vol

Shallow Well (GW01)

Time	Gal	Temp	pH	cond	EH
0945	2	12.2	5.77	0.286	160
0950	4	12.1	5.78	0.278	121
0955	6	12.2	5.79	0.270	083

Deep Well (GW05)

Time	Gal	Temp	pH	cond	EH
1020	5.0	13.1	5.85	0.171	054
1035	10.0	13.3	5.77	0.170	-090
1050	15.0	13.3	5.66	0.170	034

1130 Sampled GW01 (MS/MSD)
1140 Sampled GW05
1200 At Wells in front of Spectrum to sample

Shallow Well (GW03)		DEEP Well (GW07)	
DTB	23.4	DTB	48.6
DTW	16.2	DTW	16.2
	7.2		32.4
	.16		.16
	432		1944
	720		3240
	1.152 1vol		5.184 1vol
	3		3
	3.456 3vol		15.554 3vol

Shallow Well (GW03)

TIME	GAL	TEMP	pH	COND	EL
1220	2.0	11.7	5.57	0.167	0.49
1225	4.0	12.1	5.79	0.187	-0.73
1235	6.0	11.8	5.79	0.188	-0.48

DEEP WELL (GW07)

TIME	GAL	TEMP	pH	COND	EL
1300	5.0	13.0	5.60	0.243	0.55
1315	10.0	13.4	5.57	0.263	-0.27
1330	15.0	13.4	5.64	0.262	-1.43

1400 Sample GW03
1410 Sampled GW07
1440 At wells on south side of bldg.

Shallow		DEEP	
DTB	23.5	DTB	48.7
DTW	15.6	DTW	15.5
	7.9		33.2
	.16		.16
	474		1992
	790		3320
	1.264 1vol		5.312 (1vol)
	3		3
	3.792 (3vol)		15.936 (3vol)

Shallow -

Time	Gal	Temp	pH	Cond	Eh
1500	2.0	12.6	5.88	0.255	-069
1515	4.0	12.1	6.21	0.232	-042
1530	6.0	12.2	6.26	0222	-043

Deep

Time	Gal	Temp	pH	Cond	Eh
1550	5	13.5	5.71	0.219	065
1610	10	13.8	5.61	0.212	024
1620	15	14.0	5.62	0.209	032

April 8, 1998
Calibrated OVM (RFW 07865) to 250 ppm isobutylene (calibrated YSI 3500 with Quality meter (7843) Conductivity read 0.940 @ 8.7°C. Checked pH calibration to standards of 7 and 10. Tried to open well cover from wells located adjacent to site body shop - no luck instead will use well located approximately 20 ft west of wells.

DTB 25.9
DTW 16.0
9.9
.16
594
990
1.584 1vol
3
4.752 3vol

Time	Gal	Temp	pH	Cond	EH
0950	2.0	12.4	5.37	0.161	-118

Autobody business owner removed well casing cover at original well location. Stopped purging and moved to new location which contains two wells. (Owner used WD-40 to loosen well cap)

Shallow		Deep	
DTB	24.9	DTB	48.3
DTW	16.3	DTW	16.3
	8.6		32.0
	.16		.16
	516		1920
	860		3200
	1.376 1 vol		5.120 1 vol
	.3		.3
	4.128 3 vol		15.360 3 vol

Shallow well (GW02)

Time	Gal	Temp	pH	Cond	EL
1200	2.0	12.5	5.68	0.167	-122
1210	4.0	12.3	5.75	0.191	-0[illegible]
1215	6.0	12.2	5.75	0.188	-149

DEEP WELL (GW06)

Time	Gal	Temp	pH	Cond	EL
1230	5.0	13.2	5.49	0.212	-140
1245	10.0	13.5	5.50	0.215	-187
1300	15.0	13.5	5.50	0.217	-183

Sample GW02 & GW09 (DUP) at 1220 & 1325 resp.
Sampled GW06 at 1330.

REFERENCE NO. 35

WESTON
MANAGERS DESIGNERS/CONSULTANTS
Roy F. Weston, Inc.
Raritan Plaza III, Suite 2B
101 Fieldcrest Avenue
Edison, New Jersey 08837-3622
908-417-5800 • Fax 908-417-5801

ISO 9002 CERTIFIED

15 October 1997

Mr. Juan Davila
U.S. Environmental Protection Agency
Work Assignment Manager
Room E27, 18th Floor
290 Broadway
New York, NY 10007-1866

CONTRACT NO.: 68-W9-0022
WORK ASSIGNMENT NO.: 022-2JZZ
DOCUMENT CONTROL NO.: 4200-22-AIKL
SUBJECT: SPECTRUM FINISHING CORPORATION

Dear Mr. Davila:

Roy F. Weston, Inc. (WESTON®) prepared a Site Inspection Prioritization (SIP) Report for the Spectrum Finishing Corporation site for delivery to you prior to 30 September 1997; however, during the internal review process, it was determined that there is no U.S. Environmental Protection Agency (EPA) Contract Laboratory Program (CLP)-quality data available for this site. The available analytical data, which indicate a release of hazardous substances from the site to groundwater, would be rejected or qualified as unusable if it were validated using Region 2 CLP methods. Therefore, based on our understanding of current U.S EPA policy which dictates that an observed release cannot be documented without CLP-quality data, the overall site score is below 28.5, the National Priorities List eligibility score. Since a release is suspected, WESTON plans to conduct a sampling event at the Spectrum Finishing Corporation site within the next two months in order to generate CLP-quality data that should document an observed release to groundwater from the site, raise the overall site score above 28.5, and provide sufficient documentation for the preparation of a Hazard Ranking System package. The Sampling SIP Report is expected to be delivered by 30 June 1998.

If you have any questions, please do not hesitate to contact me at (732) 417-5829.

Very truly yours,

ROY F. WESTON, INC.

Diane D. Minsavage
Associate Project Engineer

cc: K. Moncino, EPA
T. Varner, WESTON
ARCS Document Control

np\wp\arcs\sep_fin\jdspec.doc

REFERENCE NO. 36

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION REPORT

I. HEADING

Date: November 14, 1997

From: Jeff M. Bechtel, OSC
Response and Prevention Branch

To:

B. Sprague, 2ERR-RPB	J. Daloia, 2ERR-RPB
B. Bellow, 2CD	T. Johnson, 5202G
R. Cahill, 2CD-PAT	R. Byrnes, EPA, 2OIG
E. Schaaf, 2ORC-NYCSFB	J. LaPadula, 2ERRD-NYRB
M. Emile, EPA	L. Davis, 2ORC
M. O'Toole, NYSDEC	T. Vickerson, NYSDEC
R. Gabrow, NYSDEC	J. Ascher, NYSDEC
K. Murphy, NYSDEC	START

Subject: Spectrum Finishing Site
West Babylon, Suffolk County, NY

POLREP NO.: One (1)

II. BACKGROUND

Site No:	JQ
Delivery Order No:	2101-02-010
Response Authority:	CERCLA
NPL Status:	N/A
State Notification:	NYSDEC
Action Memorandum Status:	August 28, 1997
Start Date:	November 4, 1997
Completion Date:	Pending
RCRA ID:	Pending

III. SITE INFORMATION

The Spectrum Finishing Company electroplated aerospace components and operated until 1993 when it filed for Chapter 11 bankruptcy. Subsequently, the company filed for Chapter 7.

The Site is located at 50 Dale Street, West Babylon, Suffolk County, New York. The Site occupies one acre and is situated in an industrial/commercial area.

Within one mile of the Site are residential areas, light industry, commercial properties, public cemeteries and major arterials.

A preliminary assessment of the Site determined that eighteen vats of electroplating wastes, approximately two hundred drums, 10,200 gallons of bulk waste in aboveground storage tanks and some smaller containers of waste chemicals are present on the Site. There are approximately thirty (30) one cubic yard boxes of sludges from the wastewater treatment system. There are also sumps with electroplating wastes located within the building. The floor is covered with spilled material which was tested and found to be either acidic or caustic. The vats and drums are unlabeled.

Two portions of the building have been partitioned off and are leased to local businesses. The Site is not fenced. The utilities are turned off. The building has no functional fire suppression systems.

IV. RESPONSE INFORMATION

A. Situation

1. Current situation

Neither the PRP nor the state or local agencies have the ability to perform a mitigation. EPA has initiated a CERCLA Removal Action.

2. Removal activities to date

On 5/22/97, EPA performed a site assessment at this inactive electroplating facility.

An ORC attorney assignment was requested. External Programs was updated about the Site.

EPA obtained funding for a CERCLA removal action under authority of the Director on 8/28/97. This action memorandum authorized a total project ceiling of $573,000, with a mitigation ceiling of $350,000.

On 10/24/97, the PRP granted access to EPA to perform a removal action at the site. EPA obtained the site keys from the PRP's attorney and conducted a site walkthrough with the ERRS contractor on 10/31/97.

Site activities commenced the week of 11/3/97. EPA mobilized the ERRS contractor, Earth Tech Remediation Services and START. The support zone was set up with command post trailers and utilities. Twenty-four hour security was implemented.

EPA met with the PRP on 11/6/97, and obtained approval to dispose of debris to clear room to work in the building. Two 20 cubic yard rolloffs of debris were loaded out to the Alder Street Recycling Center in West Babylon, NY on 11/7 and 11/10/97.

Forty-five vats and 25 boxes containing electroplating chemicals were sampled and hazcatted. Seven partial vats were bulked together following compatability testing. Two hundred and seventy-seven 55 gallon drums were staged for sampling. Numerous smaller drums and containers remain to be inventoried.

Nine composite samples of the bulk waste streams were assembled and shipped to an off-site lab for disposal analysis.

The site was demobed on 11/14/97 for two weeks while awaiting the results of the bulk waste analysis.

3. Enforcement

EPA ORC will pursue negotiations with the PRP for cost recovery.

B. Planned removal activities

Identification, sampling, and disposal of all containerized materials and decontamination of the building.

C. Next Steps

The site will re-mobilize on 12/1/97.

Drum sampling and hazcatting will be performed. Composite samples will be sent out for analysis.

Bulk wastes will be shipped off-site for disposal.

D. Key Issues

None

V. COST INFORMATION

The following table contains information on estimated costs for the removal action as of November 14, 1997.

	Amount Budgeted	Cost to Date	Remaining Project Funds
ERCS	$ 200,000	$ 54,000	$ 146,000
START	$ 40,000	$ 3,000	$ 37,000
EPA	$ 105,000	$ 11,000	$ 94,000
TOTAL	$ 345,000	$ 68,000	$ 277,000

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure, which the EPA may include in any claims for cost recovery.

Final Polrep:___ Further Polreps Forthcoming: X

REFERENCE NO. 37

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION REPORT

I. HEADING

Date: December 12, 1997

From: Jeff M. Bechtel, OSC
Response and Prevention Branch

To:

B. Sprague, 2ERR-RPB	J. Daloia, 2ERR-RPB
B. Bellow, 2CD	T. Johnson, 5202G
R. Cahill, 2CD-PAT	R. Byrnes, EPA, 2OIG
E. Schaaf, 2ORC-NYCSFB	J. LaPadula, 2ERRD-NYRB
M. Emile, EPA	L. Davis, 2ORC
M. O'Toole, NYSDEC	T. Vickerson, NYSDEC
R. Gabrow, NYSDEC	J. Ascher, NYSDEC
K. Murphy, NYSDEC	START

Subject: Spectrum Finishing Site
West Babylon, Suffolk County, NY

POLREP NO.: Two (2)

II. BACKGROUND

Site No:	JQ
Delivery Order No:	2101-02-010
Response Authority:	CERCLA
NPL Status:	N/A
State Notification:	NYSDEC
Action Memorandum Status:	August 28, 1997
Start Date:	November 4, 1997
Completion Date:	Pending
RCRA ID:	NYD044466910

III. SITE INFORMATION

The Spectrum Finishing Company electroplated aerospace components and operated until 1993 when it filed for Chapter 11 bankruptcy. Subsequently, the company filed for Chapter 7.

The Site is located at 50 Dale Street, West Babylon, Suffolk County, New York. The Site occupies one acre and is situated in an industrial/commercial area.

Within one mile of the Site are residential areas, light industry, commercial properties, public cemeteries and major arterials.

A preliminary assessment of the Site determined that eighteen vats of electroplating wastes, approximately two hundred drums, 10,200 gallons of bulk waste in aboveground storage tanks and some smaller containers of waste chemicals are present on the Site. There are approximately thirty (30) one cubic yard boxes of sludges from the wastewater treatment system. There are also sumps with electroplating wastes located within the building. The floor is covered with spilled material which was tested and found to be either acidic or caustic. The vats and drums are unlabeled.

Two portions of the building have been partitioned off and are leased to local businesses. The Site is not fenced. The utilities are turned off. The building has no functional fire suppression systems.

IV. RESPONSE INFORMATION

A. Situation

1. Current situation

Neither the PRP nor the state or local agencies have the ability to perform a mitigation. EPA has initiated a CERCLA Removal Action.

2. Removal activities to date

The Site was re-mobilized the week of 12/1/97.

Four hundred and twenty five drums containing waste chemicals were sampled, hazcatted and staged on site.

Three containers of radioactive Thorium were identified on site.

T&D bids and waste profiles for the bulk solids were generated. Re-packaging of the bulk solids from the existing boxes, which were no longer shippable, into new cubic yard shipping boxes was initiated.

EPA obtained approval from the PRP to remove a portion of the retention wall around the waste water treatment system and to cut open the treatment tank to facilitate the removal of approximately 1500 gallons of cyanide/metal sludge from the system.

Approximately 100 gallons of waste were drained from the remaining process equipment.

3. Enforcement

EPA ORC will pursue negotiations with the PRP for cost recovery.

B. Planned removal activities

Identification, sampling, and disposal of all containerized materials and decontamination of the building.

C. Next Steps

Bids and profiles for the T&D of the bulk liquids will be generated.

Drum waste streams will be compiled.
Composite samples will be sent out for analysis.

Bulk solids will be shipped off-site for disposal.

D. Key Issues

None

V. COST INFORMATION

The following table contains information on estimated costs for the removal action as of November 14, 1997.

	Amount Budgeted	Cost to Date	Remaining Project Funds
ERCS	$ 200,000	$ 138,000	$ 62,000
START	$ 40,000	$ 5,000	$ 35,000
EPA	$ 105,000	$ 20,200	$ 84,800
TOTAL	$ 345,000	$ 163,000	$ 182,000

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure, which the EPA may include in any claims for cost recovery.

Final Polrep:___ Further Polreps Forthcoming: X

REFERENCE NO. 38

WESTON

John Hinge
Originator

PHONE CONVERSATION RECORD

Conversation with:
Name Patrick Austin
Company WESTON - START
Address
Phone 516-755-1193 (site)
732-225-6116 (permanent)

Date Feb. 17, 98
Time 11:45 AM/PM

☒ Originator Placed Call
☐ Originator Received Call
W.O. No. 04200-022-031-0132

Subject Status of Removal Action at Spectrum Finishing

Notes: The three containers of radioactive Thorium mentioned in the 12/12/97 U.S. EPA Pollution Report can be further described as follows:
- one jar containing liquid, approximately one quart, approx. 3/4 filled.
- one jar containing liquid, slightly less than one quart, approx. 3/4 filled.
- one small (approx. 3 gallon) metal pail, covered.

All three containers had handwritten markings indicating they contained Thorium.

One sump is approximately 4' x 4' x 5' deep. The other sump is approximately 5' x 4' x 5' deep. Both sumps have concrete bottoms, and have been cleaned out to the bottom of the concrete. No cracks were noted in the sumps.

Patrick expects that the removal contractor will be demoing within the next few weeks.

☐ File
☐ Tickle File ___/___/___
☐ Follow-Up By:
☐ Copy/Route To:

Follow-Up-Action:

Originator's Initials JH

RFW 110-4-83

1423-1823 4/16/93

REFERENCE NO. 39

WESTON

John Hinge
Originator

PHONE CONVERSATION RECORD

Conversation with:
Name Richard Gaborow
Company NYSDEC
Address
Phone 518-457-1708

Date 11 / 20 / 97
Time 2 AM/PM

☐ Originator Placed Call
☒ Originator Received Call
W.O. No. 04200-022-081-0132

Subject Spectrum Finishing – NYSDEC Plans

Notes: NYSDEC intends to do a full Remedial Investigation/Feasibility Study (RI/FS) in early 1998. Richard Gaborow expects State Superfund referral for the RI/FS by the end of 1997, but the work would probably not begin until a month or two later.

He asked that we let him know if we plan to go ahead with sampling at site, as NYSDEC may want to split samples.

☐ File
☐ Tickle File ___/___/___
☐ Follow-Up By:
☐ Copy/Route To:

Follow-Up-Action:

Originator's Initials

RFW 110-4-83

1423-1823 4/16/93

REFERENCE NO. 40

SAMPLING TRIP REPORT

SITE NAME: Spectrum Finishing Corp.
SAMPLING DATE: 7-8 April 1998
EPA CASE NO.: 26114

1. **SITE LOCATION:** West Babylon, New York

2. **SAMPLE DESCRIPTIONS:** See Table 1

3. **LABORATORIES RECEIVING SAMPLES:**

SAMPLE TYPE	NAME & ADDRESS OF LABORATORY
Organic	American Analytical & Technical Services, Inc. 11950 Industriplex Blvd. Baton Rouge, LA 70809
Inorganic	American Analytical & Technical Services, Inc. 1700 West Albany, Suite C Broken Arrow, OK 74012
Low Concentration Organic	PDP Analytical Services 1680 Lakefront Circle, Suite B The Woodlands, TX 77380

4. **SAMPLE DISPATCH DATA:**

Thirteen aqueous samples for low concentration TCL volatiles analysis were shipped to PDP Analytical Services on 4/7/98 at 1845 hours via Fed Ex (Airbill No. 803269342140).

Nine soil samples and one aqueous sample for TCL volatiles, BNA and Pesticides/PCB analyses were shipped to American Analytical & Technical Services, Inc., in Baton Rouge, LA, on 4/7/98 at 1845 hours via Fed Ex (Airbill No. 803269342129). Twelve aqueous samples for BNA and Pesticides/PCB analyses only were shipped to the same lab at the same date and time on the same airbill.

Nine soil samples and thirteen aqueous samples for TAL metals and cyanide analyses were shipped to American Analytical & Technical Services, Inc., in Broken Arrow, OK, on 4/7/98 at 1845 hours via Fed Ex (Airbill No. 803269341898).

Five aqueous samples for low concentration TCL volatiles analysis were shipped to PDP Analytical Services on 4/8/98 at 1700 hours via Fed Ex (Airbill No. 803269342130).

Nine soil samples and one aqueous samples for TCL volatiles, BNA and Pesticides/PCB analyses were shipped to American Analytical & Technical Services, Inc., in Baton Rouge, LA, on 4/8/98 at 1700 hours via Fed Ex (Airbill No. 803269341902). Four aqueous samples for BNA and Pesticides/PCB analyses only were shipped to the same lab at the same date and time on the same airbill. One soil sample for TCL volatiles analysis only was shipped to the same lab at the same date and time on the same airbill.

Nine soil samples and five aqueous samples for TAL metals and cyanide analyses were shipped to American Analytical & Technical Services, Inc., in Broken Arrow, OK, on 4/8/98 at 1700 hours via Fed Ex (Airbill No. 803269341887).

5. **ON-SITE PERSONNEL:**

Name	Organization	Duties on Site
Thomas Varner	Roy F. Weston, Inc.	Project Manager
John Hinge	Roy F. Weston, Inc.	Task Manager
Sandra Klepacki	Roy F. Weston, Inc.	Site Health and Safety Coordinator
Michelle Stensrud	Roy F. Weston, Inc.	Sample Management Officer
Charles Guder	Roy F. Weston, Inc.	Sampler

6. **ADDITIONAL COMMENTS:**

Samples collected by WESTON were analyzed for Target Compound List organics and Target Analyte List metals and cyanide through the U.S. Environmental Protection Agency Contract Laboratory Program.

7. **REPORT PREPARED BY:** John Hinge — 4/15/98 Date

8. **REPORT APPROVED BY:** Richard M. Settino — 4/15/98 Date

TABLE 1

CLP SAMPLE DESCRIPTIONS
SPECTRUM FINISHING CORP.
WEST BABYLON, NEW YORK
SCREENING SITE INSPECTION

7-8 APRIL 1998

CASE NO.: 26114

Sample Number	Organic CLP#	Inorganic CLP#	Date Collected	Time Collected	Sample Type/Location
22-0132-SS01	BMM-33	MBKL-09	4/7/98	0945	Grab; soil sample collected from stained soil in alleyway south of Spectrum building adjacent to former degreaser area, just west of easternmost door; Depth: 0-6 inches (matrix spike/matrix spike duplicate).
22-0132-SS02	BMM-34	MBKL-10	4/7/98	1005	Grab; soil sample collected from soil in alleyway south of Spectrum building, just east of second door from east building wall; Depth: 0-6 inches.
22-0132-SS03	BMM-35	MBKl-11	4/7/98	1015	Grab; soil sample collected from stained soil in alleyway south of Spectrum building, approximately 20 feet east of second door from east building wall; Depth: 0-6 inches.
22-0132-SS04	BMM-36	MBKL-12	4/8/98	1255	Grab; soil sample collected from beneath concrete floor adjacent to eastern sump in former plating area inside Spectrum building; Depth: 60-66 inches below floor.
22-0132-SS05	BMM-37	MBKL-13	4/8/98	1135	Grab; soil sample collected from beneath concrete floor adjacent to western sump in former plating area inside Spectrum building; Depth: 66-84 inches below floor.
22-0132-SS06	BMM-38	MBKL-14	4/7/98	1540	Grab; sediment sample collected from bottom of western storm drain in parking lot north of Spectrum building; sample collected from first 6 inches of sediment in the bottom of the dry well.

TABLE 1 (CONTINUED)

CLP SAMPLE DESCRIPTIONS
SPECTRUM FINISHING CORP.
WEST BABYLON, NEW YORK
SCREENING SITE INSPECTION

7-8 APRIL 1998

CASE NO.: 26114

Sample Number	Organic CLP#	Inorganic CLP#	Date Collected	Time Collected	Sample Type/Location
22-0132-SS07	BMM-39	MBKL-15	4/7/98	1625	Grab; sediment sample collected from bottom of west-central storm drain in parking lot north of Spectrum building; sample collected from first 6 inches of sediment in the bottom of the dry well.
22-0132-SS08	BMM-40	MBKL-16	4/7/98	1240	Grab; sediment sample collected from bottom of central storm drain in parking lot north of Spectrum building; sample collected from first 6 inches of sediment in the bottom of the dry well.
22-0132-SS09	BMM-41	MBKL-17	4/7/98	1220	Grab; sediment sample collected from bottom of east-central storm drain in parking lot north of Spectrum building; sample collected from first 6 inches of sediment in the bottom of the dry well.
22-0132-SS10	BMM-42	MBKL-18	4/7/98	1405	Grab; sediment sample collected from bottom of eastern storm drain in parking lot north of Spectrum building; sample collected from first 6 inches of sediment in the bottom of the dry well.
22-0132-SS11	BMM-43	MBKL-19	4/8/98	1055	Grab; soil sample collected from beneath concrete floor in center of former painting area room in Spectrum building; Depth: 0-12 inches below floor.
22-0132-SS12	BMM-44	MBKL-20	4/8/98	1200	Grab; soil sample collected from beneath concrete floor in center of former plating room in Spectrum building; Depth: 0-10 inches below floor.

TABLE 1 (CONTINUED)

CLP SAMPLE DESCRIPTIONS
SPECTRUM FINISHING CORP.
WEST BABYLON, NEW YORK
SCREENING SITE INSPECTION

7-8 APRIL 1998

CASE NO.: 26114

Sample Number	Organic CLP#	Inorganic CLP#	Date Collected	Time Collected	Sample Type/Location
22-0132-SS15	BMM-47	only volatiles were collected	4/8/98	1435	Grab; soil sample collected from beneath concrete floor in former polishing area in Spectrum building; Depth: 0-10 inches below floor.
22-0132-SS16	BMM-48	MBKL-24	4/8/98	1030	Grab; soil sample collected from beneath concrete floor in southern former paint booth in Spectrum building; Depth: 0-6 inches below floor.
22-0132-SS17	BMM-49	MBKL-25	4/8/98	1010	Grab; soil sample collected from beneath concrete floor in northern former paint booth in Spectrum building; Depth: 0-12 inches below floor.
22-0132-SS18	BMM-50	MBKL-26	4/8/98	1315	Grab; soil sample collected from beneath concrete floor in southwest corner of former plating room in Spectrum building; Depth: 0-12 inches below floor.
22-0132-SS19	BMM-51	MBKL-27	4/8/98	1450	Grab; background soil sample collected from area where shrubs are planted, approximately 2 feet west of the western wall of the Spectrum building; Depth: 0-12 inches (matrix spike/matrix spike duplicate).
22-0132-SS20	BMM-52	MBKL-28	4/8/98	1510	Grab; background soil sample collected from lawn area approximately 16 feet west of western wall of AAA Couriers building, which is next building north of Spectrum building; Depth: 0-12 inches.
22-0132-SS22	BMM-54	MBKL-30	4/7/98	1405	Duplicate of 22-0132-SS10 for quality control.

TABLE 1 (CONTINUED)

CLP SAMPLE DESCRIPTIONS
SPECTRUM FINISHING CORP.
WEST BABYLON, NEW YORK
SCREENING SITE INSPECTION

7-8 APRIL 1998

CASE NO.: 26114

Sample Number	Organic CLP#	Inorganic CLP#	Date Collected	Time Collected	Sample Type/Location
22-0132-SW01	BMM-56	MBKL-32	4/7/98	1445	Stormwater/runoff sample collected from water pooled in dry well below the western storm drain in parking lot north of Spectrum building.
22-0132-SW02	BMM-57	MBKL-33	4/7/98	1605	Stormwater/runoff sample collected from water pooled in dry well below the west-central storm drain in parking lot north of Spectrum building.
22-0132-SW03	BMM-58	MBKL-34	4/7/98	1205	Stormwater/runoff sample collected from water pooled in dry well below the central storm drain in parking lot north of Spectrum building.
22-0132-SW04	BMM-59	MBKL-35	4/7/98	1100	Stormwater/runoff sample collected from water pooled in dry well below the east-central storm drain in parking lot north of Spectrum building.
22-0132-SW05	BMM-60	MBKL-36	4/7/98	1345	Stormwater/runoff sample collected from water pooled in dry well below the eastern storm drain in parking lot north of Spectrum building.
22-0132-GW01	BMM-61	MBKL-37	4/7/98	1130	Groundwater sample collected from existing upgradient shallow monitoring well MW-1S (Matrix spike/matrix spike duplicate).
22-0132-GW02	BMM-62	MBKL-38	4/8/98	1320	Groundwater sample collected from existing sidegradient shallow monitoring well MW-2S.

TABLE 1 (CONTINUED)

CLP SAMPLE DESCRIPTIONS
SPECTRUM FINISHING CORP.
WEST BABYLON, NEW YORK
SCREENING SITE INSPECTION

7-8 APRIL 1998

CASE NO.: 26114

Sample Number	Organic CLP#	Inorganic CLP#	Date Collected	Time Collected	Sample Type/Location
22-0132-GW03	BMM-63	MBKL-39	4/7/98	1400	Groundwater sample collected from existing downgradient shallow monitoring well MW-3S.
22-0132-GW04	BMM-64	MBKL-40	4/7/98	1650	Groundwater sample collected from existing downgradient shallow monitoring well MW-4S.
22-0132-GW05	BMM-65	MBKL-41	4/7/98	1140	Groundwater sample collected from existing upgradient deep monitoring well MW-1D.
22-0132-GW06	BMM-66	MBKL-42	4/8/98	1330	Groundwater sample collected from existing sidegradient deep monitoring well MW-2D.
22-0132-GW07	BMM-67	MBKL-43	4/7/98	1410	Groundwater sample collected from existing downgradient deep monitoring well MW-3D.
22-0132-GW08	BMM-68	MBKL-44	4/7/98	1700	Groundwater sample collected from existing downgradient deep monitoring well MW-4D.
22-0132-GW09	BMM-69	MBKL-45	4/8/98	1325	Duplicate of 22-0132-GW02 for quality control.
22-0132-FB01	BMM-70	MBKL-46	4/7/98	1750	Field blank for quality control (trowel).
22-0132-FB02	BMM-71	MBKL-47	4/7/98	1710	Field blank for quality control (bailer).
22-0132-FB03	BMM-72	MBKL-48	4/8/98	1455	Field blank for quality control (bailer).

TABLE 1 (CONTINUED)

CLP SAMPLE DESCRIPTIONS
SPECTRUM FINISHING CORP.
WEST BABYLON, NEW YORK
SCREENING SITE INSPECTION

7-8 APRIL 1998

CASE NO.: 26114

Sample Number	Organic CLP#	Inorganic CLP#	Date Collected	Time Collected	Sample Type/Location
22-0132-FB04	BMM-73	MBKL-49	4/8/98	1515	Field blank for quality control (bowl/trowel).
22-0132-TB01	BMM-74	-------	4/7/98	0800	Trip blank for quality control.
22-0132-TB02	BMM-75	--------	4/8/98	0845	Trip blank for quality control.

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

SAS No. (if applicable):

Case No.: 26114

1. Project Code:
Account Code:
2. Region No.: 2
Sampling Co.: ROYF Weston
4. Date Shipped: 4/7/98
Carrier: Federal Express

Regional Information:
Sampler (Name): Michelle Stensrud
Airbill Number: 8032693 42140

Non-Superfund Program:
Sampler Signature: Michelle Stensrud
5. Ship To: PDP Analytical Services, 1680 Lakefront Circle, Suite B, The Woodlands, TX 77380
ATTN: Sachin Kudchadkar

Site Name: Spectrum Finishing Corp
City, State: West Babylon NY
Site Spill ID:

3. Type of Activity: SF, PRP, ST, FED; Lead: PA, SSI, LSI; Pre-Remedial: RIFS, RD, RA, O&M, NPLD; Remedial: CLEM, REMA, REM, OIL, UST; Removal: X

6. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Other (Specify) 6. Ice only N. Not preserved

7. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E RAS Analysis: VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Inorg. Samp. No.	K Enter Appropriate Qualifier for Designated Field QC (B = Blank S = Spike D = Duplicate PE = Perform. Eval. — = Not a QC Sample)
BMM 59	1	Low	Grab	—	X				483	22-0132-SW01	4/7/98 1100	MLS	MBKL 35	MS/MSD
BMM 61	2		Grab	—	X				497, 498, 499	22-0132-GW01	4/7/98 1130	MLS	MBKL 37	MSD
BMM 58	1		Grab	—	X				476	22-0132-SW03	4/7/98 1205	MLS	MBKL 34	
BMM 65	2		Grab	—	X				539	22-0132-GW05	4/7/98 1140	MLS	MBKL 41	
BMM 60	1		Grab	—	X				490	22-0132-SW05	4/7/98 1345	MLS	MBKL 36	
BMM 74	8		Grab	—	X				602	22-0132-TB01	4/7/98 800	MLS	—	Trip Blank
BMM 63	2		Grab	—	X				525	22-0132-GW03	4/7/98 1400	MLS	MBKL 39	
BMM 67	2		Grab	—	X				553	22-0132-GW07	4/7/98 1410	MLS	MBKL 43	
BMM 56	1		Grab	—	X				462	22-0132-SW01	4/7/98 1445	MLS	MBKL 32	
BMM 57	1		Grab		X				469	22-0132-SW02	4/7/98 1605	MLS	MBKL 33	

Shipment for Case complete? (Y/N): Y
Page 1 of 2
Sample used for a spike and/or duplicate: BMM 59, BMM 61,
Additional Sampler Signatures:
Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Michelle Stensrud	4/7/98 1845				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	

Split Samples: ☐ Accepted (Signature) ☐ Declined

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United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

SAS No. (if applicable):

Case No.: 26114

1. Project Code:
Account Code:
2. Region No.: 2
Sampling Co.: Roy F. Weston
4. Date Shipped: 4/7/98
Carrier: Federal Express

Regional Information:
Sampler (Name): Michelle Stenstrud
Airbill Number: 8032693421 40

Non-Superfund Program:
Sampler Signature: Michelle Stenstrud
5. Ship To: PDP Analytical Services, 1680 Lakefront Circle, Suite B, The Woodlands, TX 77380, Attn: Suchin Kulkarnikar

Site Name: Spectrum Finishing Corp.
City, State: West Babylon NY
Site Spill ID:

3. Type of Activity:

	Lead	Pre-Remedial		Remedial	Removal
SF			RIFS		CLEM
PRP		PA	RD		REMA
ST		SSI	RA		REM
FED		LSI	O&M		OIL
			NPLD		UST

6. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Other (SAS) (Specify) 6. Ice only N. Not preserved

7. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (SAS) 7. Waste (SAS) 8. Other (SAS) (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./ Grab	D Preservative from Box 6	E RAS Analysis VOA	BNA	Pest/ PCB	High ARO/ TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/ Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Inorg. Samp. No.	K Designated Field QC
BMM71	4	Low	Grab	—	X				581	22-0132 FBD	4/7/98 1710	MLS	MBKL47	Field Blank
BMM64	2	Low	Grab	—	X				532	22-0132 GW	4/7/98 1650	MLS	MBKL40	
BMM68	2	Low	Grab	—	X				560	22-0132 GW	4/7/98 1700	MLS	MBKL44	

Shipment for Case complete? (Y/N): Y

Page 1 of 2

Sample used for a spike and/or duplicate:

Additional Sampler Signatures:

Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Michelle Stenstrud	4/7/98 1845				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	

Split Samples: ☐ Accepted (Signature) ☐ Declined

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Contract Laboratory Program Sample Management Office
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703-557-2490 FTS 557-2490

Organic Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

SAS No. (if applicable)

Case No. 26114

1. Project Code	Account Code	2. Region No. 2	Sampling Co. Roy F Weston
4. Date Shipped 4/7/98	Carrier Federal Express		
Regional Information		Sampler (Name) Michelle Stensrud	Airbill Number 803269 342129
Non-Superfund Program		Sampler Signature Michelle L. Stensrud	5. Ship To American Analytical & Technical Services, Inc 11950 Industriplex Blvd. Baton Rouge, LA 70809
Site Name Spectrum Finishing Corp		3. Type of Activity: Lead / Pre-Remedial / Remedial / Removal	
City, State West Babylon NY	Site Spill ID	SF / PRP / ST / FED / PA / SSI / LSI / RIFS / RD / RA / O&M / NPLD / CLEM / REMA / REM / OIL / UST	ATTN: Nancy Le Blanc

6. Preservative (Enter in Column D)
1. HCl
2. HNO3
3. $NaHSO_4$
4. H_2SO_4
5. Other (Specify)
6. Ice only
N. Not preserved

7. Sample Description (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Inorg. Samp. No.	K Enter Appropriate Qualifier for Designated Field QC (B = Blank S = Spike D = Duplicate PE = Perform. Eval. — = Not a QC Sample)
BMM 68	2	Low	Grab	—		X	X		561-564	22-0132-GW08	4/7/98 1700	MLS	MBKL 44	
BMM 70	4	Low	Grab	-	X	X	X		574, 575-578	22-0132 FB01	4/7/98 1750	MLS	MBKL 46	Field Blank 01
														(Bowl + trowel)

Shipment for Case complete? (Y/N)	Page 1 of 3	Sample used for a spike and/or duplicate	Additional Sampler Signatures	Chain of Custody Seal Number

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Michelle L. Stensrud	4/7/98 1845				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

Split Samples ☐ Accepted (Signature)
☐ Declined

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Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

SAS No. (if applicable)

Case No. 26114

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
		2	Roy F. Weston	4/7/98	Federal Express

Regional Information

Sampler (Name): Michelle Stensrud

Airbill Number: 8032693421 4029 (MCS)

Non-Superfund Program

Sampler Signature: Michelle Stensrud

5. Ship To: American Analytical & Technical Services, Inc. 11950 Industriplex Blvd. Baton Rouge, LA 70809

ATTN: Nancy LeBlanc

Site Name: Spectrum Finishing Corp

City, State: West Babylon NY

Site Spill ID

3. Type of Activity: Lead: SF, PRP, ST, FED; Pre-Remedial: PA, SSI, LSI [X]; Remedial: RIFS, RD, RA, O&M, NPLD; Removal: CLEM, REMA, REM, OIL, UST

6. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. $NaHSO_4$ 4. H_2SO_4 5. Other (Specify) 6. Ice only N. Not preserved

7. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Inorg. Samp. No.	K Enter Appropriate Qualifier for Designated Field QC (B = Blank S = Spike D = Duplicate PE = Perform. Eval. — = Not a QC Sample)
BMM 42	5	low	Grab	—	X	X	X		417, 418	22-0132 SS10	4/7/98 1405	MCS	MBKL 18	
BMM 54	5		Grab	—	X	X	X		456, 457	22-0132 SS22	4/7/98 1405	MCS	MBKL 30	Dup
BMM 63	2		Grab	—	MCS	X	X		528, 529, 526, 527	22-0132-GW03	4/7/98 1400	MCS	MBKL 39	
BMM 67	2		Grab	—		X	X		556, 555, 554, 557	22-0132 GW07	4/7/98 1410	MCS	MBKL 43	
BMM 56	1		Grab	—		X	X		466, 463, 464, 465	22-0132-SW01	4/7/98 1445	MCS	MBKL 32	
BMM 38	5		Grab	—	X	X	X		405, 406	22-0132-SS06	4/7/98 1540	MCS	MBKL 14	
BMM 57	1		Grab	—	-	X	X		470, 472, 473, 471	22-0132-SW02	4/7/98 1605	MCS	MBKL 33	
BMM 39	5		Grab	—	X	X	X		409, 408	22-0132-SS07	4/7/98 1625	MCS	MBKL 15	
BMM 71	4		Grab	—		X	X		582, 583, 585, 584	22-0132-FB02	4/7/98 1710	MCS	MBKL 47	Field Blank Bulk
BMM 64	2		Grab	—		X	X		533-536	22-0132-GW04	4/7/98 1640	MCS	MBKL 40	

Shipment for Case complete? (Y/N) N

Page ~~1~~ 2 of 3

Sample used for a spike and/or duplicate: BMM 54

Additional Sampler Signatures

Chain of Custody Seal Number

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Michelle L. Stensrud	4/7/98 1845				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

Split Samples ☐ Accepted (Signature) ☐ Declined

EPA Form 9110-2 (Rev. 5-91) Replaces EPA Form (2075-7), previous edition which may be used

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O347255

Org-1

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

SAS No. (if applicable):

Case No.: 26114

1. Project Code:
Account Code:
2. Region No.: 2
Sampling Co.: Roy F. Weston
4. Date Shipped: 4/7/98
Carrier: Federal Express

Regional Information:
Sampler (Name): Michelle Stensrud
Airbill Number: 8032693421 40

Non-Superfund Program:
Sampler Signature: Michelle L Stensrud
5. Ship To: American Analytical & Technical Svc, Inc
11950 Industriplex Blvd.
Baton Rouge, LA 70809
ATTN: Nancy Le Blanc

Site Name: Spectrum Finishing Corp
City, State: West Babylon NY
Site Spill ID:

3. Type of Activity:
Lead: SF, PRP, ST, FED
Pre-Remedial: PA, SSI (X), LSI
Remedial: RIFS, RD, RA, O&M, NPLD
Removal: CLEM, REMA, REM, OIL, UST

6. Preservative (Enter in Column D):
1. HCl
2. HNO3
3. NaHSO4
4. H2SO4
5. Other (Specify)
6. Ice only
N. Not preserved

7. Sample Description (Enter in Column A):
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./ Grab	D Preservative from Box 6	E RAS Analysis: VOA	BNA	Pest/ PCB	High only ARO/ TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/ Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Inorg. Samp. No.	K Enter Appropriate Qualifier for Designated Field QC (B = Blank S = Spike D = Duplicate PE = Perform. Eval. — = Not a QC Sample)
BMM33	5	Low	Grab	—	X	X	X		389, 390	22-0132 SS01	4/7/98 945	MLS	MBKL 09	MS/MSD
BMM34	5		Grab	—	X	X	X		394, 393	22-0132 SS02	4/7/98 1005	MLS	MBKL 10	
BMM35	5		Grab	—	X	X	X		396, 397	22-0132 SS03	4/7/98 1015	MLS	MBKL 11	
BMM54	1		Grab	—		X	X		484, 485, 486, 487	22-0132 SW04	4/7/98 1100	MLS	MBKL 35	
BMM61	2		Grab	—		X	X		500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510	22-0132-GW01	4/7/98 1130	MLS	MBKL 37	MS/MSD
BMM58	1		Grab	—		X	X		477, 478, 479, 480	22-0132 SW03	4/7/98 1205	MLS	MBKL 34	
BMM65	1		Grab	—		X	X		540, 541, 542, 543	22-0132 GW05	4/7/98 1140	MLS	MBKL 41	
BMM40	5		Grab	—	X	X	X		411, 412	22-0132 SS08	4/7/98 1240	MLS	MBKL 16	
BMM41	5		Grab	—	X	X	X		414, 415	22-0132 SS09	4/7/98 1220	MLS	MBKL 17	
BMM60	1		Grab	—		X	X		491, 492, 493, 494	22-0132-SW02	4/7/98 1345	MLS	MBKL 36	

Shipment for Case complete? (Y/N): Y
Page 1 of 3
Sample used for a spike and/or duplicate: BMM33, BMM61
Additional Sampler Signatures:
Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Michelle L Stensrud	4/7/98 1845				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

Split Samples: ☐ Accepted (Signature) ☐ Declined

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EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

SAS No. (if applicable):

Case No.: 26114

1. Project Code:
Account Code:
2. Region No.: 2
Sampling Co.: Roy F. Weston
4. Date Shipped: 4/8/98
Carrier: Federal Express

Regional Information:
Sampler (Name): Michelle Stensrod
Airbill Number: 8032694342130

Non-Superfund Program:
Sampler Signature: Michelle Stensrod
5. Ship To: PDP Analytical Services, 1680 Lakefront Circle, Suite B, The Woodlands, TX 77380, Attn: Sachin Kudchadkar

Site Name: Spectrum Finishing Corp
City, State: West Babylon NY
Site Spill ID:

3. Type of Activity:
Lead: SF, PRP, ST, FED
Pre-Remedial: PA, SSI [X], LSI
Remedial: RIFS, RD, RA, O&M, NPLD
Removal: CLEM, REMA, REM, OIL, UST

6. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Other (SAS) (Specify) 6. Ice only N. Not preserved

7. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (SAS) 7. Waste (SAS) 8. Other (SAS) (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E RAS Analysis: VOA	BNA	Pest/PCB	High ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Inorg. Samp. No.	K Designated Field QC
BMM75	8	Low	Grab	1	X				603	22-0132-TB02	4/8/98 0845	MLS	~~MBKL~~ MLS	Trip Blank
BMM62	2	Low	Grab	1	X				518	22-0132-GW02	4/8/98 1320	MLS	MBKL38	
BMM69	2	Low	Grab	1	X				567	22-0132-GW09	4/8/98 1325	MLS	MBKL45	Dup
BMM66	2	Low	Grab	1	X				546	22-0132-GW06	4/8/98 1330	MLS	MBKL42	
BMM72	24 (MLS)	Low	Grab	1	X				588	22-0132-FB03	4/8/98 1455	MLS	MBKL48	Field Blnk - Deuter

Shipment for Case complete? (Y/N): Y

Page 1 of 1

Sample used for a spike and/or duplicate: BMM69

Additional Sampler Signatures:

Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Michelle L. Stensrod	4/8/98 1700				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	

Split Samples: ☐ Accepted (Signature) ☐ Declined

EPA Form 9110-2 (Rev. 5-91) Replaces EPA Form (2075-7), previous edition which may be used

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United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

SAS No. (if applicable):

Case No.: 26114

1. Project Code	
Account Code	
2. Region No.	2
Sampling Co.	Roy F. Weston
4. Date Shipped	4/8/98
Carrier	Federal Express
Regional Information	
Sampler (Name)	Michelle Stransud
Airbill Number	8032693419 02
Non-Superfund Program	
Sampler Signature	Michelle Stransud
5. Ship To	American Analytical & Technical Services, Inc. 11950 Industriplex Blvd. Baton Rouge, LA 70809
Site Name	Spectrum Finishing Corp
City, State	West Babylon NY
Site Spill ID	
3. Type of Activity	SF, PRP, ST, FED; Lead: RIFS, RD, RA, O&M, NPLD; Pre-Remedial: PA, SSI (X), LSI; Remedial: CLEM, REMA, REM, OIL, UST; Removal
ATTN:	Nancy Le Blanc

6. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Other (Specify) 6. Ice only N. Not preserved

7. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./ Grab	D Preservative from Box 6	E RAS Analysis VOA	BNA	Pest/ PCB	High only ARO/ TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/ Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Inorg. Samp. No.	K Enter Appropriate Qualifier for Designated Field QC (B = Blank S = Spike D = Duplicate PE = Perform. Eval. — = Not a QC Sample)
BMM49	5	Low	Grab	—	X	X	X		438, 439	22-0132-5517	4/8/98 1010	MLS	MBKL25	
BMM48	5	Low	Grab	—	X	X	X		435, 436	22-0132-5516	4/8/98 1030	MLS	MBKL24	
BMM43	5	Low	Grab	—	X	X	X		420, 421	22-0132-5511	4/8/98 1055	MLS	MBKL19	
BMM37	5	Low	Grab	—	X	X	X		402, 403	22-0132-5505	4/8/98 1135	MLS	MBKL13	
BMM44	5	Low	Grab	—	X	X	X		423, 424	22-0132-5512	4/8/98 1200	MLS	MBKL20	
BMM36	5	Low	Grab	—	X	X	X		399, 400	22-0132-5504	4/8/98 1255	MLS	MBKL12	
BMM50	5	Low	Grab	—	X	X	X		441, 442	22-0132-5518	4/8/98 1315	MLS	MBKL26	
BMM62	2	Low	Grab	—		X	X		519-522	22-0132 GW02	4/8/98 1320	MLS	MBKL38	
BMM69	2	Low	Grab	—		X	X		568-571	22-0132 GW09	4/8/98 1325	MLS	MBKL45	DUP
BMM66	2	Low	Grab	—		X	X		547-550	22-0132 GW06	4/8/98 1330	MLS	MBKL42	

Shipment for Case complete? (Y/N)	Page 1 of 2	Sample used for a spike and/or duplicate: BMM69,	Additional Sampler Signatures:
Chain of Custody Seal Number			

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Michelle L. Stransud	4/8/98 1700				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

Split Samples ☐ Accepted (Signature) ☐ Declined

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EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

SAS No. (if applicable):

Case No.: 26114

1. Project Code:
Account Code:
2. Region No.: 2
Sampling Co.: Roy F. Weston
4. Date Shipped: 4/8/98
Carrier: Federal Express

Regional Information:
Sampler (Name): Michelle Stensrud
Airbill Number: 8032693 4 1902

Non-Superfund Program:
Sampler Signature: Michelle Stensrud
5. Ship To: American Analytical & Technical Services, Inc. 11950 Industriplex Blvd Baton Rouge, LA 70809 Attn: Nancy LeBlanc

Site Name: Spectrum Finishing Corp
City, State: West Babylon NY
Site Spill ID:

3. Type of Activity:
Lead: SF, PRP, ST, FED
Pre-Remedial: PA, SSI [X], LSI
Remedial: RIFS, RD, RA, O&M, NPLD
Removal: CLEM, REMA, REM, OIL, UST

6. Preservative (Enter in Column D):
1. HCl
2. HNO3
3. $NaHSO_4$
4. H_2SO_4
5. Other (SAS) (Specify)
6. Ice only
N. Not preserved

7. Sample Description (Enter in Column A):
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (SAS)
7. Waste (SAS)
8. Other (SAS) (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E RAS Analysis: VOA	BNA	Pest/PCB	High ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Inorg. Samp. No.	K Designated Field QC
BMM47	5	low	Grab	—	X				432	22-0132-SS15	4/8/98 1435	MLS	MBKL —	
BMM72	4	low	Grab	—		X	X		589-592	22-0132-FB03	4/8/98 1455	MLS	MBKL48	Field Blank Bottle
BMM73	4	low	Grab	1	X	X	X		595-599	22-0132-FB04	4/8/98 1515	MLS	MBKL49	Field Blank Bottle/Travel
BMM51	5	low	Grab	—	X	X	X		444-447	22-0132-SS19	4/8/98 1450	MLS	MBKL27	MS/MSD
BMM52	5	low	Grab	—	X	X	X		450-451	22-0132-SS20	4/8/98 1510	MLS	MBKL28	

Shipment for Case complete? (Y/N): Y

Page 2 of 2

Sample used for a spike and/or duplicate: BMM51

Additional Sampler Signatures:

Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Michelle L. Stensrud	4/8/98 1700				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	

Split Samples: ☐ Accepted (Signature) ☐ Declined

EPA Form 9110-2 (Rev. 5-91) Replaces EPA Form (2075-7), previous edition which may be used

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Contract Laboratory Program Sample Management Office
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703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 26114

1. Project Code:
Account Code:
2. Region No.: 2
Sampling Co.: Roy F. Weston
4. Date Shipped: 4/7/98
Carrier: Federal Express

Regional Information:
Sampler (Name): Michelle Stensrud
Airbill Number: 8032693418 98

Non-Superfund Program:
Sampler Signature: Michelle Stensrud
5. Ship To: American Analytical & Technical Services, Inc. 1700 West Albany, Suite C Broken Arrow, OK 74012
ATTN: Jason Ruckman

Site Name: Spectron Finishing Corp
City, State: West Babylon NY
Site/Spill ID:

3. Type of Activity:
Lead: SF, PRP, ST, FED
Pre-Remedial: PA, SSI (X), LSI
Remedial: RIFS, RD, RA, O&M, NPLD
Removal: CLEM, REMA, REM, OIL, UST

6. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (Specify) N. Not preserved

7. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./ Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc. only: Nitrate/ Nitrite	Fluoride	High only: pH	Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/ Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Enter Appropriate Qualifier for Designated Field QC (B = Blank S = Spike D = Duplicate PE = Perform. Eval. — = Not a QC Sample)
MBKL 18	5	Low	Grab	—	X		X					419	22-0132-SS10	4/7/98 1405	MLS	BMM42	
MBKL 30	5		Grab	—	X		X					458	22-0132-SS22	4/7/98 1405	MLS	BMM54	DUP
MBKL 39	2		Grab	2,3	X		X					531, 530	22-0132-GW03	4/7/98 1400	MLS	BMM63	
MBKL 43	2		Grab	2,3	X		X					559, 558	22-0132-GW07	4/7/98 1410	MLS	BMM67	
MBKL 32	1		Grab	2,3	X		X					467, 468	22-0132-SW01	4/7/98 1445	MLS	BMM56	
MBKL 14	5		Grab	—	X		X					407	22-0132-SS06	4/7/98 1540	MLS	BMM38	
MBKL 33	1		Grab	2,3	X		X					475	22-0132-SW02	4/7/98 1605	MLS	BMM57	
MBKL 15	5		Grab	—	X		X					410	22-0132-SS07	4/7/98 1625	MLS	BMM39	
MBKL 47	4		Grab	—	X		X					556, 557	22-0132-FB02	4/7/98 1710	MLS	BMM71	Field Blank - bailer
MBKL 40	2		Grab	2,3	X		X					538, 537	22-0132-GW04	4/7/98 1650	MLS	BMM64	

Shipment for Case complete? (Y/N): N
Page 1 of 3
Sample used for a spike and/or duplicate: MBKL30
Additional Sampler Signatures:
Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Michelle C. Stensrud	4/7/98 1545				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

Split Samples: ☐ Accepted (Signature) ☐ Declined

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EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 26114

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
		2	Roy F. Weston	4/7/98	Federal Express

Regional Information:

Sampler (Name): Michelle L. Stensrud

Airbill Number: 803269341898

Non-Superfund Program:

Sampler Signature: Michelle L. Stensrud

5. Ship To: American Analytical & Technical Services, Inc
1700 West Albany, Suite C
Broken Arrow, OK 74012
ATTN: Jason Buckman

Site Name: Spectrum Finishing Corp

City, State: West Babylon NY

Site Spill ID:

3. Type of Activity: Lead: SF, PRP, ST, FED; Pre-Remedial: PA, SSI [X], LSI; Remedial: RIFS, RD, RA, O&M, NPLD; Removal: CLEM, REMA, REM, OIL, UST

6. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (Specify) N. Not preserved

7. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc. only: Nitrate/Nitrite	Low Conc. only: Fluoride	High only: pH	High only: Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Enter Appropriate Qualifier for Designated Field QC (B = Blank S = Spike D = Duplicate PE = Perform. Eval. — = Not a QC Sample)
MBKL09	5		Grab	—	X		X					391, 392	22-0132-SS01	4/7/98 0945	MCS	BMM33	MS/MSD
MBKL10	5		Grab	—	X		X					395	22-0132-SS02	4/7/98 1005	MCS	BMM34	
MBKL11	5		Grab	—	X		X					398	22-0132-SS03	4/7/98 1015	MCS	BMM35	
MBKL35	1		Grab	2,3	X		X					488, 489	22-0132-SW04	4/7/98 1100	MCS	BMM59	
MBKL39	1		Grab	2,3	X		X					482, 481	22-0132-SW03	4/7/98 1205	MCS	BMM58	~~MS/MSD~~
MBKL37	2		Grab	2,3	X		X					512, 513, 514, 515, 516, 517	22-0132-GW1	4/7/98 1130	MCS	BMM61	MS/MSD
MBKL41	1		Grab	2,3	X		X					544, 545	22-0132-GW05	4/7/98 1140	MCS	BMM65	
MBKL16	5		Grab	—	X		X					413	22-0132-SS08	4/7/98 1240	MCS	BMM40	
MBKL17	5		Grab	—	X		X					416	22-0132-SS09	4/7/98 1220	MCS	BMM41	
MBKL36	1		Grab	2,3	X		X					496	22-0132-SW05	4/7/98 1345	MCS	BMM60	

Shipment for Case complete? (Y/N): N

Page 2 of 3

Sample used for a spike and/or duplicate:

Additional Sampler Signatures:

Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Michelle L. Stensrud	4/7/98 1845				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

EPA Form 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

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Split Samples ☐ Accepted (Signature)
☐ Declined

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS

1338341

Inorg-1

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 26114

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
		2	Roy F. Weston	4/7/98	Federal Express

Regional Information:

Sampler (Name): Michelle Stensrud

Airbill Number: 803269341898

Non-Superfund Program:

Sampler Signature: Michelle Stensrud

5. Ship To: American Analytical & Technical Services, Inc. 1700 West Albany, Suite C Broken Arrow, OK 74012

ATTN: Tason Rockman

Site Name: Spectrum Finishing Corp

City, State: West Babylon NY

Site Spill ID:

3. Type of Activity: Lead: SF, PRP, ST, FED; Pre-Remedial: PA, SSI [X], LSI; Remedial: RIFS, RD, RA, O&M, NPLD; Removal: CLEM, REMA, REM, OIL, UST

6. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (Specify) N. Not preserved

7. Sample Description (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc. only: Nitrate/Nitrite	Low Conc. only: Fluoride	High only: pH	High only: Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Enter Appropriate Qualifier for Designated Field QC (B = Blank S = Spike D = Duplicate PE = Perform. Eval. — = Not a QC Sample)
(1) ~~BMM MBKL~~ BMM 44	2	L	Grab	2,3	X		X					565, 566	22-0B2GW08	4/7/98 1700	MLS	BMM44 ~~MBKL18~~	MLS
MBKL 46	4	L	Grab	2,3	X		X					580, 579	22-0132FB01	4/7/98 1750	MLS	BMM70	FB01 - bow/trend

Shipment for Case complete? (Y/N)	Page 1 of 3	Sample used for a spike and/or duplicate	Additional Sampler Signatures	Chain of Custody Seal Number

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Michelle L. Stensrud	4/7/98 1845 1830 MLS				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

Split Samples: ☐ Accepted (Signature) ☐ Declined

EPA Form 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

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1338339

Inorg-1

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 26114

1. Project Code:
Account Code:
2. Region No.: 2
Sampling Co.: Roy F. Weston
4. Date Shipped: 4/8/98
Carrier: Federal Express

Regional Information:
Sampler (Name): Michelle Stensrud
Airbill Number: 8032693418 87

Non-Superfund Program:
Sampler Signature: Michelle Stensrud
5. Ship To: American Analytical & Technical Services, Inc
1700 West Albany, Suite C
Broken Arrow, OK 74012
ATTN: Jason Buckman

Site Name: Spectrum Finishing Corp
City, State: West Babylon NY
Site Spill ID:

3. Type of Activity

Lead		Pre-Remedial		Remedial		Removal	
SF				RIFS		CLEM	
PRP		PA		RD		REMA	
ST		SSI	X	RA		REM	
FED		LSI		O&M		OIL	
				NPLD		UST	

6. Preservative (Enter in Column D)
1. HCl
2. HNO3
3. NaOH
4. H_2SO_4
5. $K_2CR_2O_7$
6. Ice only
7. Other (Specify)
N. Not preserved

7. Sample Description (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./ Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc. only: Nitrate/Nitrite	Fluoride	High only: pH	Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Enter Appropriate Qualifier for Designated Field QC (B = Blank S = Spike D = Duplicate PE = Perform. Eval. — = Not a QC Sample)
MBKL																	
MBKL25	5	Low	Grab	—	X		X					440	22-0132-5517	4/8/98 1010	MLS	BMM49	
MBKL24	5	Low	Grab	—	X		X					437	22-0132-5516	4/8/98 1030	MLS	BMM45	
MBKL19	5	Low	Grab	—	X		X					422	22-0132-5511	4/8/98 1055	MLS	BMM43	
MBKL13	5	Low	Grab	—	X		X					404	22-0132-5505	4/8/98 1135	MLS	BMM37	
MBKL12	5	Low	Grab	—	X		X					401	22-0132-5504	4/8/98 1255	MLS	BMM36	
MBKL20	5	Low	Grab	—	X		X					425	22-0132-5512	4/8/98 1200	MLS	BMM44	
MBKL26	5	Low	Grab	—	X		X					443	22-0132-5518	4/8/98 1315	MLS	BMM52	
MBKL38	2	Low	Grab	2,3	X		X					523,524	22-0132-6002	4/8/98 1320	MLS	BMM62	
MBKL45	2	Low	Grab	2,3	X		X					572,573	22-0132-6009	4/8/98 1325	MLS	BMM69	Dup
MBKL42	2	Low	Grab	2,3	X		X					551,552	22-0132-6006	4/8/98 1321	MLS	BMM66	

Shipment for Case complete? (Y/N): Y
Page 1 of 2
Sample used for a spike and/or duplicate: MBKL45
Additional Sampler Signatures:
Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Michelle L. Stensrud	4/8/98 1700				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

Split Samples: ☐ Accepted (Signature) ☐ Declined

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1338338

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 26114

1. Project Code:
Account Code:
2. Region No.:
Sampling Co.: Roy F. Weston
4. Date Shipped: 4/8/98
Carrier: Federal Express

Regional Information:
Sampler (Name): Michelle Stensrud
Airbill Number: 8032693 4/1887

Non-Superfund Program:
Sampler Signature: Michelle Stensrud
5. Ship To: American Analytical & Technical Services, Inc. 1700 West Albany Suite C Broken Arrow, OK 74012
ATTN: Jason Ruckman

Site Name: Spectrum Finishing Corp
City, State: West Babylon NY
Site Spill ID:

3. Type of Activity

Lead		Pre-Remedial		Remedial		Removal	
SF				RIFS		CLEM	
PRP		PA		RD		REMA	
ST		SSI	X	RA		REM	
FED		LSI		O&M		OIL	
				NPLD		UST	

6. Preservative (Enter in Column D)
1. HCl
2. HNO3
3. NaOH
4. H_2SO_4
5. $K_2CR_2O_7$
6. Ice only
7. Other (Specify)
N. Not preserved

7. Sample Description (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (Specify)

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./ Grab	D Preservative from Box 6	E - RAS Analysis: Metals Total	Metals Dissolved	Cyanide	Low Conc. only: Nitrate/ Nitrite	Fluoride	High only: pH	Conductivity	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/ Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.	K Enter Appropriate Qualifier for Designated Field QC (B = Blank S = Spike D = Duplicate PE = Perform. Eval. — = Not a QC Sample)
MBKL 48	4	Low	Grab		X		X					593,594	22-0132-FB03	4/8/98 1455	MLS	BMM72	Field Blank - bulk
MBKL 49	4	Low	Grab		X		X					600,601	22-0132 FB04	4/8/98 1515	MLS	BMM[illegible]	Field Blank - Bulk Travel
MBKL 27	5	Low	Grab		X		X					448,449	22-0132-S519	4/8/98 1450	MLS	BMM[illegible]	MS/MSD
MBKL 28	5	Low	Grab		X		X					452	22-0132-S520	4/8/98 1570	MLS	BMM52	

Shipment for Case complete? (Y/N): Y

Page 2 of 2

Sample used for a spike and/or duplicate: MBKL 27

Additional Sampler Signatures:

Chain of Custody Seal Number:

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Michelle L. Stensrud	4/8/98 1700				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

Split Samples: ☐ Accepted (Signature) ☐ Declined

EPA Form 9110-1 (Rev. 5-91) Replaces EPA Form (2075-6), previous edition which may be used

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SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS

Inorg-1

1338342

REFERENCE NO. 41

RECORD OF COMMUNICATION

TO: Yunru Yang

FROM: *JANET TROTTER*
Region II ESAT/RSCC

DATE: August 5, 1998

SUBJECT: QUALITY ASSURED DATA

MESSAGE

PLEASE SIGN BELOW IN ACKNOWLEDGEMENT OF RECEIPT OF THE FOLLOWING AND RETURN ONE COPY OF THIS RECORD OF COMMUNICATION TO THE RSCC-REGION II.

① Spectrum Finishing 26114 AATSLA Aug 195/18W

REPLY BY:

received at WESTON 8/6/98

SIGNATURE: [signature] DATE: 8/17/98

DATE RECEIVED BY RSCC: / /

cc: EPA TASK MONITOR
ESAT, MANAGER
file

RECORD OF COMMUNICATION

2

REGIONAL SAMPLE CONTROL CENTER

RECEIVED
JUL 3 1 1998

DATE: JULY 6, 1998
SUBJECT: CLP Data Package for Quality Assurance Review
FROM: RSCC / ESAT
TO: George Karras, Hazardous Waste Support Section

Attached is the following ORGANIC Data Package to be reviewed for Quality Assurance

SITE SPECTRUM FINISHING CORP.

CASE# 26114

CONTRACTOR AWES

PHASE SSI

LAB AATSLA

TURN-AROUND-TIME 35 DAYS

#SAMPLES	MATRIX
19	SOIL
18	WATER

FRACTION 20 FULL TCL, 16 BNA & PEST ONLY, AND 1 VOA ONLY

REGION II RSCC DATA TRANSFER LOG

Relinquished By		Received By	
Signature	Date/Time	Signature	Date/Time
		John Balicky	7-1-98
John Balicky	7-6-98	George Vandalen	7/13/98
George Vandalen	7/28/98	J. Trotter DCR	7/28/98
J. Trotter DCR	7/29/98	G. Karras	7/29/98
G. Karras	7/31/98		

(over for instructions) revised 10/97

CLP DATA ASSESSMENT

Functional Guidelines for Evaluating Organic Analysis

CASE No.: 26114 SDG No.: BMM33, BMM56 LABORATORY: AATSLA

SITE: Spectrum Finishing Corp.

DATA ASSESSMENT

The current SOP HW-6 (Revision 11) June 1996, USEPA Region II Data Validation SOP for Statement of Work OLMO3.2 for evaluating organic data have been applied.

All data are valid and acceptable except those analytes rejected "R" (unusable). Due to the detection of QC problems some analytes may have the "J" (estimated), "N" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer's Signature: George S. Vanderbilt Date: 7/24/1998

Verified By: G. Karras Date: 7/30/1998

CLP DATA ASSESSMENT

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time.

SDG BMM33

VOA, BNA, PEST:

Technical Holding Times: See attached CADRE Holding Time Report for a list of samples qualified due to technical holding time.

VOA:

Contract Holding Times: Samples BMM38, BMM52 and BMM54 were analyzed past the ten-day VTSR holding time.

PEST:

Contract Holding Times: Samples BMM33, BMM33DL, BMM33MS, BMM33MSD, BMM34, BMM34DL, BMM35, BMM36, BMM37, BMM37DL, BMM38, BMM38DL, BMM39, BMM39DL, BMM40, BMM40DL, BMM41, BMM41DL, BMM42, BMM42DL, BMM43, BMM44, BMM48, BMM49, BMM50, BMM51, BMM52, BMM54 and BMM54DL were analyzed past the 40-day contract holding time (SOW Sec. 8.4, page D-20/PEST).

SDG BMM56

VOA:

BMM70, BMM73 - The SDG Narrative indicates these samples had pH greater than 2. Aromatic analytes for these samples, therefore, were analyzed outside the seven-day holding time criteria. Hits and non-detects for benzene, toluene, chlorobenzene, ethylbenzene, styrene and xylene are

2A
5

Holding Time Report

SDG NO: BMM33
CASE NO: 26114

LABORATORY: AATSLA
AGENCY INPUT FILE: BMM33.ASF

HOLDING TIME CRITERIA

Volatile

Preserved	Primary	Expanded
Water	14	28
Soil	14	28

	---- Aromatic ----		-- Non-aromatic --	
Unpreserved	Primary	Expanded	Primary	Expanded
Water	7	28	14	28
Soil	10	28	10	28

Semivolatile

	--- Extraction ---		---- Analysis ----	
	Primary	Expanded	Primary	Expanded
Water	7	28	40	60
Soil	7	28	40	60

Pesticide

	--- Extraction ---		---- Analysis ----	
	Primary	Expanded	Primary	Expanded
Water	7	28	40	60
Soil	7	28	40	60

DC-3: The following volatile soil samples have aromatic analytes outside expanded holding time criteria.
Hits are qualified "J" and non-detects are qualified "R".

BMM35 ✓
Benzene, Toluene, Chlorobenzene, Ethylbenzene
Styrene, Xylene (total)

BMM38 ✓
Benzene, Toluene, Chlorobenzene, Ethylbenzene
Styrene, Xylene (total)

Holding Time Raport

SDG NO: BMM33 LABORATORY: AATSLA
CASE NO: 26114 AGENCY INPUT FILE: BMM33.ASF

BMM54
Benzene, Toluene, Chlorobenzene, Ethylbenzene
Styrene, Xylene (total)

DC-5: The following volatile soil samples have aromatic analytes
outside primary holding time criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

BMM52
Benzene, Toluene, Chlorobenzene, Ethylbenzene
Styrene, Xylene (total)

DC-7: The following volatile soil samples have non-aromatic analytes
outside expanded holding time criteria.
Hits are qualified "J" and non-detects are qualified "R".

BMM35
Chloromethane, Bromomethane, Vinyl Chloride, Chloroethane
Methylene Chloride, Acetone, Carbon Disulfide, 1,1-Dichloroethene
1,1-Dichloroethane, 1,2-Dichloroethene (total), Chloroform, 1,2-Dichloroethane
2-Butanone, 1,1,1-Trichloroethane, Carbon Tetrachloride, Bromodichloromethane
1,2-Dichloropropane, cis-1,3-Dichloropropene, Trichloroethene, Dibromochloromethane
1,1,2-Trichloroethane, trans-1,3-Dichloropropene, Bromoform, 4-Methyl-2-Pentanone
2-Hexanone, Tetrachloroethene, 1,1,2,2-Tetrachloroethane

BMM38
Chloromethane, Bromomethane, Vinyl Chloride, Chloroethane
Methylene Chloride, Acetone, Carbon Disulfide, 1,1-Dichloroethene
1,1-Dichloroethane, 1,2-Dichloroethene (total), Chloroform, 1,2-Dichloroethane
2-Butanone, 1,1,1-Trichloroethane, Carbon Tetrachloride, Bromodichloromethane
1,2-Dichloropropane, cis-1,3-Dichloropropene, Trichloroethene, Dibromochloromethane
1,1,2-Trichloroethane, trans-1,3-Dichloropropene, Bromoform, 4-Methyl-2-Pentanone
2-Hexanone, Tetrachloroethene, 1,1,2,2-Tetrachloroethane

BMM54
Chloromethane, Bromomethane, Vinyl Chloride, Chloroethane
Methylene Chloride, Acetone, Carbon Disulfide, 1,1-Dichloroethene
1,1-Dichloroethane, 1,2-Dichloroethene (total), Chloroform, 1,2-Dichloroethane
2-Butanone, 1,1,1-Trichloroethane, Carbon Tetrachloride, Bromodichloromethane
1,2-Dichloropropane, cis-1,3-Dichloropropene, Trichloroethene, Dibromochloromethane
1,1,2-Trichloroethane, trans-1,3-Dichloropropene, Bromoform, 4-Methyl-2-Pentanone
2-Hexanone, Tetrachloroethene, 1,1,2,2-Tetrachloroethane

DC-9: The following volatile soil samples have non-aromatic analytes

outside primary holding time criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

BMM52
Chloromethane, Bromomethane, Vinyl Chloride, Chloroethane
Methylene Chloride, Acetone, Carbon Disulfide, 1,1-Dichloroethene
1,1-Dichloroethane, 1,2-Dichloroethene (total), Chloroform, 1,2-Dichloroethane
2-Butanone, 1,1,1-Trichloroethane, Carbon Tetrachloride, Bromodichloromethane
1,2-Dichloropropane, cis-1,3-Dichloropropene, Trichloroethene, Dibromochloromethane
1,1,2-Trichloroethane, trans-1,3-Dichloropropene, Bromoform, 4-Methyl-2-Pentanone
2-Hexanone, Tetrachloroethene, 1,1,2,2-Tetrachloroethane

DC-106: The following semivolatile soil samples are outside primary extraction holding time criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

BMM41, BMM41MS, BMM41MSD

DC-165: The following pesticide water and/or soil samples are outside primary analysis holding time criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

BMM33, BMM33DL, BMM33MS, BMM33MSD, BMM34, BMM34DL
BMM35, BMM36, BMM37, BMM37DL, BMM38, BMM38DL
BMM40, BMM40DL, BMM41, BMM41DL, BMM42, BMM42DL
BMM43, BMM44, BMM48, BMM49, BMM50, BMM51
BMM52, BMM54, BMM54DL

DC-166: The following pesticide water and/or soil samples are outside expanded analysis holding time criteria.
Hits are qualified "J" and non-detects are qualified "R".

BMM39, BMM39DL, PBLK1

qualified "J".*

*Note: CADRE reports failed to address this problem.

2. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.

SDG BMM33

VOA, BNA, PEST:

See attached CADRE SMC/Surrogate Report for a list of qualifications.

SDG BMM56

PEST:

See attached CADRE SMC/Surrogates Report for a list of qualifications.

3. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

No qualification necessary.;

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than 5 times the blank contaminant level (10 times for common

3A
9

SMC/Surrogate Report

SDG NO: BMM33 LABORATORY: AATSLA

CASE NO: 26114 AGENCY INPUT FILE: BMM33.ASF

SMC/SURROGATE CRITERIA

Volatile

Percent Recovery Limits

	--- Water ---		---- Soil ---	
	Lower	Upper	Lower	Upper
Toluene-d8	88.0	110.0	84.0	138.0
Bromofluorobenzene	86.0	115.0	59.0	113.0
1,2-Dichloroethane-d4	76.0	114.0	70.0	121.0

Semivolatile

Percent Recovery Limits

	--- Water ---		---- Soil ---	
	Lower	Upper	Lower	Upper
Nitrobenzene-d5	35.0	114.0	23.0	120.0
2-Fluorobiphenyl	43.0	116.0	30.0	115.0
Terphenyl-d14	33.0	141.0	18.0	137.0
Phenol-d5	10.0	110.0	24.0	113.0
2-Fluorophenol	21.0	110.0	25.0	121.0
2,4,6-Tribromophenol	10.0	123.0	19.0	122.0
2-Chlorophenol-d4	33.0	110.0	20.0	130.0
1,2-Dichlorobenzene-d4	16.0	110.0	20.0	130.0

Pesticide

Percent Recovery Limits

	--- Water ---		---- Soil ---	
	Lower	Upper	Lower	Upper
Tetrachloro-m-xylene	30.0	150.0	30.0	150.0
Decachlorobiphenyl	30.0	150.0	30.0	150.0

DC-35: The following volatile samples have system monitoring compound

recoveries above the upper limit of the criteria window.
Hits are qualified "J" and non-detects are not flagged.

BMM39, BMM39RE

DC-83: The following semivolatile samples have two or more base/neutral surrogate recoveries above the upper limit of the criteria window. Hits are qualified "J" and non-detects are not flagged.

BMM37

DC-85: The following semivolatile samples have two or more base/neutral surrogate recoveries below the lower limit of the criteria window and greater than 10%. Hits are qualified "J" and non-detects are qualified "UJ".

BMM33MS

DC-86: The following semivolatile samples have two or more acid surrogate recoveries below the lower limit of the criteria window and greater than 10%. Hits are qualified "J" and non-detects are qualified "UJ".

BMM33MS

DC-157: The following semivolatile samples were not qualified due to missing surrogate compound information.
Visual inspection of the data is required to verify all surrogate compounds are present.

BMM33, BMM33MSD, BMM38, BMM38DL, BMM39, BMM40
BMM40DL, BMM42, BMM54DL

DC-174: The following pesticide samples have surrogate percent recoveries which exceed the upper limit of the criteria window.
If %R for both surrogates on both columns are > contract limit, hits are flagged "J".

BMM33DL, BMM34DL, BMM37, BMM37DL, BMM38DL, BMM39
BMM39DL, BMM40, BMM40DL, BMM41DL, BMM42, BMM42DL
BMM48, BMM52, BMM54, BMM54DL

DC-175: The following undiluted pesticide samples have surrogate percent recoveries of less than 10%.
Hits are qualified "J" and non-detects are qualified "R".

BMM33MSD, BMM44, BMM49, BMM50

SMC/Surrogate Report

SDG NO: BMM33
CASE NO: 26114

LABORATORY: AATSLA
AGENCY INPUT FILE: BMM33.ASF

DC-177: The following pesticide samples have surrogate percent recoveries outside the lower limit of the criteria window, but > 10%. Hits & non-detects are qualified "J" only for same surr. on both columns with no interference. Use professional judgement when interference is detected. Remove "J" when 1 surr. on 1 column is out.

BMM33, BMM41, BMM44 – No qualification necessary.

DC-178: The following pesticide samples are not fully qualified for surrogate RT because of missing RT information. Visual inspection of the data is required. Samples with surrogates falling outside the RT window should be qualified based on professional judgement.

BMM33MSD – Hits are qualified "J", non-detects are qualified "R".

JV
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SMC/Surrogate Report

SDG NO: BMM56 LABORATORY: AATSLA

CASE NO: 26114 AGENCY INPUT FILE: BMM56.ASF

SMC/SURROGATE CRITERIA

Volatile

Percent Recovery Limits

	--- Water ---		---- Soil ---	
	Lower	Upper	Lower	Upper
Toluene-d8	88.0	110.0	84.0	138.0
Bromofluorobenzene	86.0	115.0	59.0	113.0
1,2-Dichloroethane-d4	76.0	114.0	70.0	121.0

Semivolatile

Percent Recovery Limits

	--- Water ---		---- Soil ---	
	Lower	Upper	Lower	Upper
Nitrobenzene-d5	35.0	114.0	23.0	120.0
2-Fluorobiphenyl	43.0	116.0	30.0	115.0
Terphenyl-d14	33.0	141.0	18.0	137.0
Phenol-d5	10.0	110.0	24.0	113.0
2-Fluorophenol	21.0	110.0	25.0	121.0
2,4,6-Tribromophenol	10.0	123.0	19.0	122.0
2-Chlorophenol-d4	33.0	110.0	20.0	130.0
1,2-Dichlorobenzene-d4	16.0	110.0	20.0	130.0

Pesticide

Percent Recovery Limits

	--- Water ---		---- Soil ---	
	Lower	Upper	Lower	Upper
Tetrachloro-m-xylene	30.0	150.0	30.0	150.0
Decachlorobiphenyl	30.0	150.0	30.0	150.0

DC-177: The following pesticide samples have surrogate percent recoveries

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outside the lower limit of the criteria window, but > 10%. Hits & non-detects are qualified "J" only for same surr. on both columns with no interference. Use professional judgement when interference is detected. Remove "J" when 1 surr. on 1 column is out.

BMM57, ~~BMM58~~*, BMM59, ~~BMM63, BMM66, BMM69~~*

* Only one surrogate was out for these samples.

contaminants), the analytes are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" (or "R" where indicated) for these reasons:

A) **Method blank contamination:**

SDG BMM33

VOA, BNA:

See attached CADRE Laboratory Blanks Report for a list of qualifications.

VOA TICs:

BMM35, BMM38 - TICs flagged "B" were qualified "R".

PEST:

No problems.

B) **Field or rinse blank contamination:**

SDG BMM33

VOA:

BMM38 - 1,1,2,2-tetrachloroethane.

SDG BMM56

BNA:

See attached CADRE Field QC Report for a list of qualifications.

C) **Trip blank contamination:**

Trip blanks apparently were collected, as noted on the traffic reports, but not analyzed.

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Laboratory Blanks Report

SDG NO: BMM33 LABORATORY: AATSLA
CASE NO: 26114 AGENCY INPUT FILE: BMM33.ASF

LABORATORY BLANKS CRITERIA

Volatile

Method Blank Contamination Threshold Multipliers

	First	Expanded
Common contaminant compounds	10.00	10.00
Other compounds	5.00	5.00

Semivolatile

Method Blank Contamination Threshold Multipliers

	First	Expanded
Common contaminant compounds	10.00	10.00
Other compounds	5.00	5.00

Pesticide

Method Blank Contamination Threshold Multipliers

	First	Expanded
All compounds	5.00	5.00

DC-31: The following volatile samples have analyte concentrations reported above the CRQL and less than or equal to ten times (10X) the associated method blank concentration.
Hits are qualified "U" and non-detects are not flagged.

BMM33, BMM33MS
Acetone

BMM33MSD
Acetone

BMM35

Laboratory Blanks Report

SDG NO: BMM33
CASE NO: 26114

LABORATORY: AATSLA
AGENCY INPUT FILE: BMM33.ASF

Methylene Chloride

BMM37
Acetone

BMM38
Methylene Chloride

BMM39
Acetone

BMM39RE
Acetone

BMM40
Acetone

BMM41
Acetone

BMM42
Acetone

BMM42RE
Acetone

BMM43
Acetone

BMM44
Acetone

BMM47
Acetone

BMM48
Acetone

BMM49
Acetone

BMM50
Acetone

BMM51
Acetone

DC-72: The blank associated with the following SV sample was qualified "R" during a previous qualification.
Hits are not flagged and non-detects are not flagged.

Hexachlorocyclopentadiene
BMM41, BMM41MS, BMM41MSD

DC-199: The following volatile samples have analyte concentrations reported below the CRQL and less than or equal to five times (5X) the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL.
Hits are qualified "U" and non-detects are not flagged.

BMM33MS
4-Methyl-2-Pentanone

BMM47
4-Methyl-2-Pentanone

DC-200: The following volatile samples have analyte concentrations reported below the CRQL and less than or equal to ten times (10X) the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL.
Hits are qualified "U" and non-detects are not flagged.

BMM36
Acetone

DC-202: The following semivolatile samples have analyte concentrations reported above the CRQL and less than or equal to ten times (10X) the associated method blank concentration.
Hits are qualified "U" and non-detects are not flagged.

BMM34
Di-n-butylphthalate

DC-206: The following semivolatile samples have analyte concentrations reported below the CRQL and less than or equal to ten times (10X) the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL.
Hits are qualified "U" and non-detects are not flagged.

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Laboratory Blanks Report

SDG NO: BMM33
CASE NO: 26114

LABORATORY: AATSLA
AGENCY INPUT FILE: BMM33.ASF

BMM33
Di-n-butylphthalate

BMM33MS
Di-n-butylphthalate

BMM33MSD
Di-n-butylphthalate

BMM35
Di-n-butylphthalate

BMM36
Di-n-butylphthalate

BMM37
Di-n-butylphthalate

BMM37DL
Di-n-butylphthalate

BMM39
Di-n-butylphthalate

BMM40
Di-n-butylphthalate

BMM40DL
Di-n-butylphthalate

BMM44
Di-n-butylphthalate

BMM48
Di-n-butylphthalate

BMM50
Di-n-butylphthalate

BMM52
Di-n-butylphthalate

BMM54
Di-n-butylphthalate

BMM54DL
Di-n-butylphthalate

Field QC Report

SDG NO: BMM56 LABORATORY: AATSLA

CASE NO: 26114 AGENCY INPUT FILE: BMM56.ASF

DC-146: The following semivolatile samples are affected by contamination in their corresponding field blank for the indicated analytes. Visual inspection of the data is required to verify the "~~5%~~ 10X rule." Hits are qualified "U" if sample analyte result is < ~~5%~~ 10X field blank amount. 7/23/98

Di-n-butylphthalate

BMM56, BMM57 — qualified "U".

D) Storage blank contamination:

SDG BMM33

VOA:

BMM33, 33MS, 33MSD, BMM34, BMM39, BMM39RE, BMM40, BMM41, BMM42, BMM42RE, BMM43, BMM47, BMM48, BMM49, BMM51, BMM54 - methylene chloride.

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatiles Decafluorotriphenylphosphine (DFTPP).

If the mass calibration is in error, all associated data will be classified as unusable "R".

No problems.

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be ≥ 0.05 in both initial and continuing calibrations. A value < 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected "R".

SDG BMM33

BNA:

See attached CADRE Calibration Report for a list of qualifications.

7. CALIBRATION:

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance Percent RSD must be < 30% and %D must be < 25%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified "R".

For the PEST/PCB fraction, if %RSD exceeds 20% for all analytes except for the two surrogates (which must not exceed 30% RSD), qualify all associated positive results "J" and non-detects "UJ".

The following analytes in the sample shown were qualified for %RSD and %D:

SDG BMM33

VOA, BNA:

See attached CADRE Calibration Report for a list of qualifications.

PEST:

Aldrin and endrin ketone were outside %RSD criteria. However, since all samples were previously qualified for holding time criteria, no further action is necessary.

Calibration Report

SDG NO: BMM33
CASE NO: 26114

LABORATORY: AATSLA
AGENCY INPUT FILE: BMM33.ASF

CALIBRATION CRITERIA

Volatile

	Primary	Expanded
Minimum RRF	0.05	0.05
Maximum %RSD (initial calibration)	30	90
Maximum %D (continuing calibration)	25	90
Calibration time period	12	

Semivolatile

	Primary	Expanded
Minimum RRF	0.05	0.05
Maximum %RSD (initial calibration)	30	90
Maximum %D (continuing calibration)	25	90
Calibration time period	12	

Pesticide

Maximum %RSD (initial calibration) - TCL analytes	20
- surrogates	30
Maximum RPD (continuing calibration)	25
INDA/INDB percent resolution	90
Continuing calibration sequence time	12

DC-21: The following volatile samples are associated with an initial calibration percent relative standard deviation (%RSD) outside primary criteria.
Hits are qualified "J" and non-detects are not flagged .

BMM39
Acetone

BMM41
Acetone

BMM42
Acetone

BMM44

Acetone

BMM48
Acetone

BMM49
Acetone

VBLKAR
Acetone

DC-22: The following volatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside primary criteria. Hits are qualified "J" and non-detects are not flagged.

BMM33
Acetone

BMM33MS
Acetone

BMM33MSD
Acetone

BMM34
Acetone

BMM36
Acetone

BMM37
Acetone

BMM39RE
Acetone

BMM40
Acetone

BMM42RE
Acetone

BMM43
Acetone

6C
24

BMM47
Acetone

BMM50
Acetone

BMM51
Acetone

VBLKAT
Acetone

VBLKAU
Acetone

DC-23: The following volatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

BMM33
Acetone, 1,2-Dichloroethane, 2-Butanone, Benzene

BMM33MS
Acetone, 1,2-Dichloroethane, 2-Butanone, Benzene

BMM33MSD
Acetone, 1,2-Dichloroethane, 2-Butanone, Benzene

BMM34
Acetone, 1,2-Dichloroethane, 2-Butanone, Benzene

BMM35
Chloromethane, Acetone, 2-Butanone, 1,1,1-Trichloroethane

BMM36
1,2-Dichloroethane, Benzene

BMM37
1,2-Dichloroethane, Benzene

BMM38
Chloromethane, Acetone, 2-Butanone, 1,1,1-Trichloroethane

BMM39RE
Acetone, 1,2-Dichloroethane, 2-Butanone, Benzene

Calibration Report

SDG NO: BMM33 LABORATORY: AATSLA
CASE NO: 26114 AGENCY INPUT FILE: BMM33.ASF

BMM40
Acetone, 1,2-Dichloroethane, 2-Butanone, Benzene

BMM42RE
Acetone, 1,2-Dichloroethane, 2-Butanone, Benzene

BMM43
Acetone, 1,2-Dichloroethane, 2-Butanone, Benzene

BMM47
Acetone, 1,2-Dichloroethane, 2-Butanone, Benzene

BMM50
1,2-Dichloroethane, Benzene

BMM51
Acetone, 1,2-Dichloroethane, 2-Butanone, Benzene

BMM54
Chloromethane, 1,1,1-Trichloroethane, 4-Methyl-2-Pentanone, 2-Hexanone

VBLKAT
Acetone, 1,2-Dichloroethane, 2-Butanone, Benzene

VBLKAU
1,2-Dichloroethane, Benzene

VBLKBU
Chloromethane, Acetone, 2-Butanone, 1,1,1-Trichloroethane

VBLKBV
Chloromethane, 1,1,1-Trichloroethane, 4-Methyl-2-Pentanone, 2-Hexanone

VH3LKBV
Chloromethane, 1,1,1-Trichloroethane, 4-Methyl-2-Pentanone, 2-Hexanone

DC-94: The following semivolatile samples are associated with an initial calibration with relative response factors (RRFs) outside primary criteria.
Hits are flagged "J" and non-detects are qualified "R".

BMM41
Hexachlorocyclopentadiene

BMM41MS
Hexachlorocyclopentadiene

BMM41MSD
Hexachlorocyclopentadiene

SBLKDP
Hexachlorocyclopentadiene

DC-98: The following semivolatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside primary criteria.
Hits are qualified "J" and non-detects are not flagged.

BMM33
Hexachlorocyclopentadiene, Diethylphthalate

BMM33MS
Hexachlorocyclopentadiene, Diethylphthalate

BMM33MSD
Hexachlorocyclopentadiene, Diethylphthalate

BMM34
Hexachlorocyclopentadiene, Diethylphthalate

BMM35
Hexachlorocyclopentadiene, Diethylphthalate

BMM36
Hexachlorocyclopentadiene, Diethylphthalate

BMM37
Hexachlorocyclopentadiene, Diethylphthalate

BMM37DL
Hexachlorocyclopentadiene, Diethylphthalate

BMM38
Hexachlorocyclopentadiene, Diethylphthalate

BMM38DL
Hexachlorocyclopentadiene, Diethylphthalate

BMM39
Hexachlorocyclopentadiene, Diethylphthalate

BMM39DL
Hexachlorocyclopentadiene, Diethylphthalate

BMM40
Hexachlorocyclopentadiene, Diethylphthalate

BMM40DL
Hexachlorocyclopentadiene, Diethylphthalate

BMM42
Hexachlorocyclopentadiene, Diethylphthalate

BMM43
Hexachlorocyclopentadiene, Diethylphthalate

BMM44
Hexachlorocyclopentadiene, Diethylphthalate

BMM48
Hexachlorocyclopentadiene, Diethylphthalate

BMM49
Hexachlorocyclopentadiene, Diethylphthalate

BMM50
Hexachlorocyclopentadiene, Diethylphthalate

BMM51
Hexachlorocyclopentadiene, Diethylphthalate

BMM52
Hexachlorocyclopentadiene, Diethylphthalate

BMM54
Hexachlorocyclopentadiene, Diethylphthalate

BMM54DL
Hexachlorocyclopentadiene, Diethylphthalate

SBLKDI
Hexachlorocyclopentadiene, Diethylphthalate

DC-100: The following semivolatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

Calibration Report

SDG NO: BMM33 LABORATORY: AATSLA
CASE NO: 26114 AGENCY INPUT FILE: BMM33.ASF

BMM33
4-Chloroaniline

BMM33MS
Hexachloroethane, Diethylphthalate, 4-Nitroaniline, Benzo(b)fluoranthene

BMM33MSD
Hexachloroethane, Diethylphthalate, 4-Nitroaniline, Benzo(b)fluoranthene

BMM34
4-Chloroaniline

BMM35
4-Chloroaniline

BMM36
4-Chloroaniline

BMM37
4-Chloroaniline

BMM37DL
Nitrobenzene, bis(2-Chloroethoxy)methane, Hexachlorobutadiene, 4-Nitrophenol
Diethylphthalate, 4,6-Dinitro-2-methylphenol, Benzo(b)fluoranthene

BMM38
4-Chloroaniline

BMM38DL
Nitrobenzene, bis(2-Chloroethoxy)methane, Hexachlorobutadiene, 4-Nitrophenol
Diethylphthalate, 4,6-Dinitro-2-methylphenol, Benzo(b)fluoranthene

BMM39
4-Chloroaniline

BMM39DL
Nitrobenzene, bis(2-Chloroethoxy)methane, Hexachlorobutadiene, 4-Nitrophenol
Diethylphthalate, 4,6-Dinitro-2-methylphenol, Benzo(b)fluoranthene

BMM40
4-Chloroaniline

BMM40DL
Nitrobenzene, bis(2-Chloroethoxy)methane, Hexachlorobutadiene, 4-Nitrophenol
Diethylphthalate, 4,6-Dinitro-2-methylphenol, Benzo(b)fluoranthene

BMM42
4-Chloroaniline

BMM43
Nitrobenzene, bis(2-Chloroethoxy)methane, Hexachlorobutadiene, 4-Nitrophenol
Diethylphthalate, 4,6-Dinitro-2-methylphenol, Benzo(b)fluoranthene

BMM44
4-Chloroaniline

BMM48
4-Chloroaniline

BMM49
4-Chloroaniline

BMM50
4-Chloroaniline

BMM51
Nitrobenzene, bis(2-Chloroethoxy)methane, Hexachlorobutadiene, 4-Nitrophenol
Diethylphthalate, 4,6-Dinitro-2-methylphenol, Benzo(b)fluoranthene

BMM52
4-Chloroaniline

BMM54
4-Chloroaniline

BMM54DL
Nitrobenzene, bis(2-Chloroethoxy)methane, Hexachlorobutadiene, 4-Nitrophenol
Diethylphthalate, 4,6-Dinitro-2-methylphenol, Benzo(b)fluoranthene

SBLKDI
Nitrobenzene, bis(2-Chloroethoxy)methane, Hexachlorobutadiene, 4-Nitrophenol
Diethylphthalate, 4,6-Dinitro-2-methylphenol, Benzo(b)fluoranthene

QC-197: The following pesticide samples are not qualified because of missing calibration verification information. Visual inspection of the data is required.

BMM33, BMM33DL, BMM33MS, BMM33MSD, BMM34, BMM34DL
BMM35, BMM36, BMM37, BMM37DL, BMM38, BMM38DL
BMM39, BMM39DL, BMM40, BMM40DL, BMM41, BMM41DL
BMM42, BMM42DL, BMM43, BMM44, BMM48, BMM49
BMM50, BMM51, BMM52, BMM54, BMM54DL, PBLK1

6I
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Calibration Report

SDG NO: BMM33 LABORATORY: AATSLA
CASE NO: 26114 AGENCY INPUT FILE: BMM33.ASF

DC-342: The following semivolatile samples are associated with a continuing calibration percent difference (%D) outside expanded criteria.
Hits are qualified "J" and non-detects are flagged "R".

4-Nitrophenol
BMM33MS, BMM33MSD

SDG BMM56

VOA, BNA:

See attached CADRE Calibration Report for a list of qualifications.

8. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than ±30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, the reviewer will use professional judgement to determine either partial or total rejection of the data for that sample fraction.

SDG BMM33

VOA, BNA:

See attached CADRE Internal Standards Report for a list of qualifications.

9. COMPOUND IDENTIFICATION:

A) Volatile and Semi-Volatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have

7A
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Calibration Report

SDG NO: BMM56
CASE NO: 26114

LABORATORY: AATSLA
AGENCY INPUT FILE: BMM56.ASF

CALIBRATION CRITERIA

Volatile

	Primary	Expanded
Minimum RRF	0.05	0.05
Maximum %RSD (initial calibration)	30	90
Maximum %D (continuing calibration)	25	90
Calibration time period	12	

Semivolatile

	Primary	Expanded
Minimum RRF	0.05	0.05
Maximum %RSD (initial calibration)	30	90
Maximum %D (continuing calibration)	25	90
Calibration time period	12	

Pesticide

Maximum %RSD (initial calibration)	- TCL analytes	20
	- surrogates	30
Maximum RPD (continuing calibration)		25
INDA/INDB percent resolution		90
Continuing calibration sequence time		12

DC-21: The following volatile samples are associated with an initial calibration percent relative standard deviation (%RSD) outside primary criteria.
Hits are qualified "J" and non-detects are not flagged .

BMM70
Acetone, 2-Butanone, 2-Hexanone

VBLKAS
Acetone, 2-Butanone, 2-Hexanone

DC-22: The following volatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside primary criteria.

Hits are qualified "J" and non-detects are not flagged.

BMM73
Acetone, 2-Butanone, 2-Hexanone

VBLKAT
Acetone, 2-Butanone, 2-Hexanone

VHBLKAT
Acetone, 2-Butanone, 2-Hexanone

DC-98: The following semivolatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside primary criteria.
Hits are qualified "J" and non-detects are not flagged.

BMM56
Hexachlorocyclopentadiene, Diethylphthalate

BMM57
Hexachlorocyclopentadiene, Diethylphthalate

BMM58
Hexachlorocyclopentadiene, Diethylphthalate

BMM59
Hexachlorocyclopentadiene, Diethylphthalate

BMM60
Hexachlorocyclopentadiene, Diethylphthalate

BMM61
Hexachlorocyclopentadiene, Diethylphthalate

BMM61MS
Hexachlorocyclopentadiene, Diethylphthalate

BMM61MSD
Hexachlorocyclopentadiene, Diethylphthalate

BMM62
Hexachlorocyclopentadiene, Diethylphthalate

BMM63
Hexachlorocyclopentadiene, Diethylphthalate

7C
34

BMM64
Hexachlorocyclopentadiene, Diethylphthalate

BMM65
Hexachlorocyclopentadiene, Diethylphthalate

BMM66
Hexachlorocyclopentadiene, Diethylphthalate

BMM67
Hexachlorocyclopentadiene, Diethylphthalate

BMM68
Hexachlorocyclopentadiene, Diethylphthalate

BMM69
Hexachlorocyclopentadiene, Diethylphthalate

BMM70
Hexachlorocyclopentadiene, Diethylphthalate

BMM71
Hexachlorocyclopentadiene, Diethylphthalate

BMM72
Hexachlorocyclopentadiene, Diethylphthalate

BMM73
Hexachlorocyclopentadiene, Diethylphthalate

SBLKDI
Hexachlorocyclopentadiene, Diethylphthalate

DC-100: The following semivolatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

BMM56
Benzo(b)fluoranthene

BMM57
Benzo(b)fluoranthene

BMM58

7D
35

Benzo(b)fluoranthene

BMM59
Benzo(b)fluoranthene

BMM60
Benzo(b)fluoranthene

BMM61
Benzo(b)fluoranthene

BMM61MS
2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Di-n-octylphthalate, Benzo(b)fluoranthene
Benzo(a)pyrene

BMM61MSD
Benzo(b)fluoranthene

BMM62
2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Di-n-octylphthalate, Benzo(b)fluoranthene
Benzo(a)pyrene

BMM63
Benzo(b)fluoranthene

BMM64
Benzo(b)fluoranthene

BMM65
Benzo(b)fluoranthene

BMM66
2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Di-n-octylphthalate, Benzo(b)fluoranthene
Benzo(a)pyrene

BMM67
Benzo(b)fluoranthene

BMM68
Benzo(b)fluoranthene

BMM69
2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Di-n-octylphthalate, Benzo(b)fluoranthene
Benzo(a)pyrene

BMM70
Benzo(b)fluoranthene

Calibration Report

SDG NO: BMM56 LABORATORY: AATSLA
CASE NO: 26114 AGENCY INPUT FILE: BMM56.ASF

BMM71
Benzo(b)fluoranthene

BMM72
2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Di-n-octylphthalate, Benzo(b)fluoranthene
Benzo(a)pyrene

BMM73
2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Di-n-octylphthalate, Benzo(b)fluoranthene
Benzo(a)pyrene

SBLKDT
Benzo(b)fluoranthene

DC-197: The following pesticide samples are not qualified because of missing calibration verification information. Visual inspection of the data is required.

BMM56, BMM57, BMM58, BMM59, BMM60, BMM61
BMM61MS, BMM61MSD, BMM62, BMM63, BMM64, BMM65
BMM66, BMM67, BMM68, BMM69, BMM70, BMM71
BMM72, BMM73, PBLK1

7F
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Internal Standards Report

SDG NO: BMM33
CASE NO: 26114

LABORATORY: AATSLA
AGENCY INPUT FILE: BMM33.ASF

INTERNAL STANDARD CRITERIA

Volatile

Retention Time & Area Count Limits

	-- Primary --		- Expanded --	
	Lower	Upper	Lower	Upper
Retention time	- 0.5	+ 0.5	- 0.5	+ 0.5
Area count	/ 2	* 2	/ 4	* 4

Semivolatile

Retention Time & Area Count Limits

	-- Primary --		- Expanded --	
	Lower	Upper	Lower	Upper
Retention time	- 0.5	+ 0.5	- 0.5	+ 0.5
Area count	/ 2	* 2	/ 4	* 4

DC-43: The following volatile samples have internal standard area counts that are outside the lower limit of primary criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

BMM33

1,1,1-Trichloroethane, Carbon Tetrachloride, Bromodichloromethane, 1,2-Dichloropropane, cis-1,3-Dichloropropene, Trichloroethene, Dibromochloromethane, 1,1,2-Trichloroethane, Benzene, trans-1,3-Dichloropropene, Bromoform

BMM33MS

1,1,1-Trichloroethane, Carbon Tetrachloride, Bromodichloromethane, 1,2-Dichloropropane cis-1,3-Dichloropropene, Trichloroethene, Dibromochloromethane, 1,1,2-Trichloroethane Benzene, trans-1,3-Dichloropropene, Bromoform, 4-Methyl-2-Pentanone 2-Hexanone, Tetrachloroethene, 1,1,2,2-Tetrachloroethane, Toluene Chlorobenzene, Ethylbenzene, Styrene, Xylene (total)

BMM33MSD

1,1,1-Trichloroethane, Carbon Tetrachloride, Bromodichloromethane, 1,2-Dichloropropane cis-1,3-Dichloropropene, Trichloroethene, Dibromochloromethane, 1,1,2-Trichloroethane Benzene, trans-1,3-Dichloropropene, Bromoform

Internal Standards Report

SDG NO: BMM33 LABORATORY: AATSLA
CASE NO: 26114 AGENCY INPUT FILE: BMM33.ASF

BMM39

Chloromethane, Bromomethane, Vinyl Chloride, Chloroethane
Methylene Chloride, Acetone, Carbon Disulfide, 1,1-Dichloroethene
1,1-Dichloroethane, 1,2-Dichloroethene (total), Chloroform, 1,2-Dichloroethane
2-Butanone, 1,1,1-Trichloroethane, Carbon Tetrachloride, Bromodichloromethane
1,2-Dichloropropane, cis-1,3-Dichloropropene, Trichloroethene, Dibromochloromethane
1,1,2-Trichloroethane, Benzene, trans-1,3-Dichloropropene, Bromoform
4-Methyl-2-Pentanone, 2-Hexanone, Tetrachloroethene, 1,1,2,2-Tetrachloroethane
Toluene, Chlorobenzene, Ethylbenzene, Styrene
Xylene (total)

BMM42

4-Methyl-2-Pentanone, 2-Hexanone, Tetrachloroethene, 1,1,2,2-Tetrachloroethane
Toluene, Chlorobenzene, Ethylbenzene, Styrene
Xylene (total)

BMM42RE

4-Methyl-2-Pentanone, 2-Hexanone, Tetrachloroethene, 1,1,2,2-Tetrachloroethane
Toluene, Chlorobenzene, Ethylbenzene, Styrene
Xylene (total)

DC-44: The following volatile samples have internal standard area counts outside expanded criteria.
Hits are qualified "J" and non-detects are qualified "R".

BMM33

4-Methyl-2-Pentanone, 2-Hexanone, Tetrachloroethene, 1,1,2,2-Tetrachloroethane
Toluene, Chlorobenzene, Ethylbenzene, Styrene
Xylene (total)

BMM33MSD

4-Methyl-2-Pentanone, 2-Hexanone, Tetrachloroethene, 1,1,2,2-Tetrachloroethane
Toluene, Chlorobenzene, Ethylbenzene, Styrene
Xylene (total)

DC-77: The following semivolatile samples have internal standard area counts that are outside the lower limit of primary criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

BMM33

Di-n-octylphthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

BMM33MS

Internal Standards Report

SDG NO: BMM33 LABORATORY: AATSLA
CASE NO: 26114 AGENCY INPUT FILE: BMM33.ASF

Di-n-octylphthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

BMM33MSD
Di-n-octylphthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

BMM38DL
Di-n-octylphthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

BMM39
Di-n-octylphthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

BMM39DL
Di-n-octylphthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

BMM40
Di-n-octylphthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

BMM40DL
Di-n-octylphthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

BMM54DL
Di-n-octylphthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

provided false positive identifications.

SDG BMM33

BNA:

BMM34, BMM35, BMM36, BMM37, BMM37DL, BMM43, BMM44, BMM49, BMM50, BMM52 - laboratory artifacts (flagged "A") were qualified "R".

SDG BMM56

BNA:

BMM59 - Siloxane, a laboratory artifact, was qualified "R".

B) **Pesticide Fraction:**

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract.

SDG BMM33

See CADRE Quantitation Limit Report for a list of qualifications.

10. **CONTRACT PROBLEMS NON-COMPLIANCE:**

SDG BMM33

VOA:

BMM38, BMM52, BMM54 - these samples were analyzed past the contract holding time (SOW Sec. 8.3, page D-18/VOA).

VOA, BNA:

Alkanes were not listed separately in the SDG Narrative as required by SOW Section 2.6.1, page B-13.

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Quantitation Limit Report

SDG NO: BMM33
CASE NO: 26114

LABORATORY: AATSLA
AGENCY INPUT FILE: BMM33.ASF

DC-422: The following pesticide samples have analytes for which the percent difference between column results exceeds primary criteria. Hits > CRQL are flagged "J." Or: if %D is > 50% and value is < CRQL, sample result is elevated to the CRQL and qualified "U."

BMM33 J J
Dieldrin, 4,4'-DDE

BMM33DL J J U
Dieldrin, 4,4'-DDE, Endrin aldehyde

BMM33MS J J
Heptachlor, 4,4'-DDT

BMM33MSD J J
4,4'-DDE, 4,4'-DDT

BMM34 J J J
4,4'-DDE, Endosulfan sulfate, Aroclor-1254

~~BMM34DL - endrin aldehyde - J~~ 7/5/98

BMM35
Endrin aldehyde J

BMM38 J J
4,4'-DDE, Endosulfan sulfate

BMM38DL U J J
Endrin aldehyde, alpha-Chlordane, Aroclor-1254

BMM39
Aroclor-1254 J

BMM39DL
Aroclor-1254 J

BMM40
Aroclor-1254 J

BMM40DL J J
gamma-Chlordane, Aroclor-1254

BMM41 J J
Dieldrin, Endosulfan sulfate

BMM41DL U J J
Endosulfan sulfate, Endrin ketone, alpha-Chlordane

Quantitation Limit Report

SDG NO: BMM33
CASE NO: 26114

LABORATORY: AATSLA
AGENCY INPUT FILE: BMM33.ASF

BMM42 J J J J
Dieldrin, 4,4'-DDE, Endosulfan II, alpha-Chlordane
Aroclor-1254 J

BMM42DL J J U J
beta-BHC, Endosulfan II, Endrin aldehyde, alpha-Chlordane

BMM43
4,4'-DDE J

BMM51 J J
Dieldrin, 4,4'-DDE

BMM54 J J J
alpha-BHC, Dieldrin, Endosulfan II

BMM54DL J U J J
alpha-BHC, beta-BHC, Endosulfan II, 4,4'-DDD
alpha-Chlordane, Aroclor-1254
U J

DC-423: The following pesticide samples have analytes for which the percent difference between column results exceeds expanded criteria. Hits > CRQL are flagged "NJ;" or "R" when %D > 100; or "NJ" when %D is between 100 - 200 (interference detected). Hits < CRQL are elevated to the CRQL and qualified "U."

BMM33 R R R
alpha-BHC, beta-BHC, Endrin

BMM33DL U U U U
alpha-BHC, beta-BHC, Aldrin, Endosulfan II
4,4'-DDD, Endrin ketone, alpha-Chlordane
U U U

BMM33MS NJ R NJ R
alpha-BHC, beta-BHC, gamma-BHC (Lindane), Aldrin
Endrin, Endrin aldehyde
R NJ

BMM33MSD R R R NJ
alpha-BHC, beta-BHC, gamma-BHC (Lindane), Heptachlor
Aldrin, Dieldrin, Endrin, Endrin aldehyde
NJ NJ R NJ

BMM34 JN R JN JN
Dieldrin, 4,4'-DDT, Methoxychlor, Endrin aldehyde
gamma-Chlordane R

8C
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Quantitation Limit Report

SDG NO: BMM33
CASE NO: 26114

LABORATORY: AATSLA
AGENCY INPUT FILE: BMM33.ASF

BMM34DL
Dieldrin, 4,4'-DDE, Endosulfan sulfate, 4,4'-DDT
Methoxychlor, gamma-Chlordane, Aroclor-1254

BMM35
Heptachlor epoxide, Dieldrin, 4,4'-DDE, Endosulfan sulfate

BMM36
4,4'-DDT

BMM37
alpha-BHC, beta-BHC, Aldrin, Heptachlor epoxide
Endosulfan I, Dieldrin, Endosulfan II, 4,4'-DDD
Endosulfan sulfate, Methoxychlor, Endrin ketone, Endrin aldehyde
gamma-Chlordane

BMM37DL
alpha-BHC, Heptachlor epoxide, Endosulfan I, Dieldrin
Endosulfan II, 4,4'-DDD, Endosulfan sulfate, Endrin aldehyde
gamma-Chlordane

BMM38
Dieldrin, 4,4'-DDT, Endrin aldehyde, alpha-Chlordane
gamma-Chlordane

BMM38DL
beta-BHC, Dieldrin, 4,4'-DDE, Endosulfan sulfate
4,4'-DDT, Endrin ketone, gamma-Chlordane

BMM39
Dieldrin, 4,4'-DDE, Endosulfan sulfate, 4,4'-DDT
Endrin aldehyde, gamma-Chlordane

BMM39DL
Dieldrin, 4,4'-DDE, Endosulfan sulfate, 4,4'-DDT
Methoxychlor, Endrin aldehyde, gamma-Chlordane

BMM40
Dieldrin, 4,4'-DDE, 4,4'-DDT, Methoxychlor
Endrin aldehyde, alpha-Chlordane, gamma-Chlordane

BMM40DL
delta-BHC, Dieldrin, 4,4'-DDE, 4,4'-DDT
Methoxychlor, Endrin aldehyde, alpha-Chlordane

BMM41
alpha-BHC, beta-BHC, Endosulfan I, Methoxychlor

*Qualification based on professional judgement.

8D
44

Quantitation Limit Report

SDG NO: BMM33
CASE NO: 26114

LABORATORY: AATSLA
AGENCY INPUT FILE: BMM33.ASF

NJ NJ NJ
Endrin aldehyde, alpha-Chlordane, gamma-Chlordane

BMM41DL U U U U
Dieldrin, 4,4'-DDE, 4,4'-DDT, Methoxychlor
gamma-Chlordane U

BMM42 R NJ R
Endosulfan I, 4,4'-DDD, gamma-Chlordane

BMM42DL U U U
Dieldrin, Endrin ketone, gamma-Chlordane

BMM49
Aroclor-1254 JN

BMM51 NJ NJ R NJ
Aldrin, Endosulfan I, Endosulfan II, Endosulfan sulfate
Methoxychlor, gamma-Chlordane
R R

BMM52 NJ NJ
4,4'-DDE, 4,4'-DDT

BMM54 R NJ NJ R
Endosulfan I, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT
Methoxychlor, alpha-Chlordane, gamma-Chlordane, Aroclor-1254
R NJ R NJ

BMM54DL U U U U
Heptachlor, Endosulfan I, Dieldrin, Methoxychlor
Endrin ketone, gamma-Chlordane
U U

PEST:

BMM33, BMM33DL, BMM33MS, BMM33MSD, BMM34, BMM34DL, BMM35, BMM36, BMM37, BMM37DL, BMM38, BMM38DL, BMM39, BMM39DL, BMM40, BMM40DL, BMM41, BMM41DL, BMM42, BMM42DL, BMM43, BMM44, BMM48, BMM49, BMM50, BMM51, BMM52, BMM54, BMM54DL - these samples were analyzed past the 40-day contract holding time (SOW Sec. 8.4, page D-20/PEST).

BMM36 - The lab failed to analyze an Aroclor standard within 72 hours of this sample which contains an Aroclor hit (SOW Sec.11.1.1.4, page D-62/PEST).

BMM33DL, BMM34DL, BMM38DL, BMM39DL, BMM40DL, BMM41DL, BMM42DL, BMM54DL - these samples were not required since the initial analyses did not contain any target hits exceeding the initial calibration range (SOW Sec. 10.2.3.3, page D-60/PEST).

11. FIELD DOCUMENTATION:

12. OTHER PROBLEMS:

SDG BMM33

PEST:

Form 10A was submitted for sample BMM52DL (see page 2326); however, no corresponding raw data or Form 1D was submitted. The sample also appears on the analytical sequence, Form 8D, page 2288. Since the original analysis, BMM52, did not require dilution for any TCL compounds, no action was taken.

CLP DATA ASSESSMENT

13. This package contains reextractions, reanalyses or dilutions. Upon reviewing the QA results, the following Form 1(s) are identified not to be used.

SDG BMM33

VOA:

BMM39 - Sample BMM39RE, with fewer qualifications, was used instead.

BMM42RE - Sample BMM42, with fewer qualifications, was used instead.

BNA:

BMM37DL, BMM38DL, BMM39DL, BMM40DL, BMM54DL - The corresponding undiluted analyses, with pertinent data transferred from these samples, were used instead.

PEST:

BMM33DL, BMM34DL, BMM38DL, BMM39DL, BMM40DL, BMM41DL, BMM42DL, BMM54DL - these samples were not required. The undiluted analyses were used instead.

BMM37DL - the original undiluted analysis, with pertinent data transferred from this sample was used instead.

SOP NO. HW-6

Revision #11

May 1996

CLP ORGANICS DATA REVIEW AND PRELIMINARY REVIEW (CLP/SOW OLMO 3.2)

By: George Karras Date: 6/12/96
George Karras, Work Assignment Manager/Chemist
Toxic and Hazardous Waste Section

By: Karen Taylor Date: 6/17/96
Karen Taylor, Chemist
Toxic and Hazardous Waste Section

CONCURRED BY: Kevin W. Kubik Date: 6/18/96
Kevin Kubik, Chief
Toxic and Hazardous Waste Section

APPROVED BY: Robert M. Runyon Date: 6/18/96
Robert Runyon, Chief
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CLP Data Assessment . . . . . Attachment 1

Organic Regional Data Assessment Summary Form . . . Attachment 2

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INTRODUCTION

Scope and Applicability

This SOP offers detailed guidance in evaluating laboratory data generated according to the methods in the "USEPA Contract Laboratory Program Statement of Work for Organics Analysis OLM03.2," August 1994. The validation methods and actions discussed in this document are based on the requirements set forth in the "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," February 1994. This document attempts to cover technical as well as contractual problems specific to each fraction and sample matrix; however, situations may arise where data limitations must be assessed based on the reviewer's professional judgement.

In addition to technical requirements, contractual requirements are also covered in this document. While it is important that instances of contract non-compliance be addressed in the Data Assessment, the technical criteria are always used to qualify the analytical data.

Summary of Method

To ensure a thorough evaluation of each result in a data case, the reviewer must complete the checklist within this SOP, answering specific questions while performing the prescribed "ACTIONS" in each section. Qualifiers (or flags) are applied to questionable or unusable results as instructed. The data qualifiers discussed in this document are defined on page 4 of the National Functional Guidelines mentioned above.

The reviewer must prepare a detailed data assessment to be submitted along with the completed SOP checklist. The Data Assessment must list all data qualifications, reasons for qualifications, instances of missing data and contract non-compliance. This information is further summarized on the Organic Regional Data Assessment Summary and Data Rejection Summary forms (see attached).

CADRE reports, when available, are to be incorporated into the Data Assessment. To generate CADRE reports for a particular SDG, follow the SOP for Validating RAS/CLP Data Cases with MAGIC, CARD and CADRE (see attached).

Reviewer Qualifications

This SOP is intended for use by organic data validators who have successfully completed the USEPA Region II data validation training program. Data reviewers must possess a working knowledge of the USEPA Statement of Work and National Functional Guidelines mentioned above.

DEFINITIONS

Acronyms

BFB - bromofluorobenzene
BHC - benzene hexachloride
BNA - base neutral acid
CADRE - Computer Aided Data Review and Evaluation
CARD - CLP Analytical Results Database
CCS - contract compliance screening
CLASS - Contract Laboratory Analytical Services Support
CLP - Contract Laboratory Program
CRQL - Contract Required Quantitation Limit
%D - percent difference
DCB -decachlorobiphenyl
DDD - dichlorodiphenyldichloroethane
DDE - dichlorodiphenylethane
DDT - dichlorodiphenyltrichloroethane
GC - gas chromatography
GC/EC - gas chromatograph/electron capture detector
GC/MS - gas chromatograph/mass spectrometer
GPC - gel permeation chromatography
IS - internal standard
kg - kilogram
µg - microgram
MAGIC - Mainframe Access Graphical Interface with CARD
MS - matrix spike
MSD - matrix spike duplicate
ℓ - liter
mℓ - mililiter
PCB - polychlorinated biphenyl
PE - performance evaluation
PEM - Performance Evaluation Mixture
QC - quality control
RAS - Routine Analytical Services
RIC - reconstructed ion chromatogram
RPD - relative percent difference
RRF - relative response factor
$\overline{RRF}$ - average relative response factor (from initial calibration)
RRT - relative retention time
RSD - relative standard deviation
RT - retention time
RSCC - Regional Sample Control Center
SDG - sample delivery group
SMC - system monitoring compound
SOP - standard operating procedure
SOW - Statement of Work
SVOA - semivolatile organic acid
TCL - Target Compound List
TCLP - Toxicity Characteristics Leachate Procedure
TCX -tetrachloro-m-xylene
TIC - tentatively identified compound

Acronyms (cont'd.)

TPO - technical project officer
VOA - volatile organic acid
VTSR - validated time of sample receipt
WAM - EPA Work Assignment Manager

Data Qualifiers

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively dienrified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality contrrol criteria. The presence or absence of the analyte cannot be verified.

YES NO N/A

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: 26114 LABORATORY: AATSLA

SITE NAME: Spectrum Finishing Corp. SDG Number(s): ~~BKT68~~, BMM33, BMM51

1.0 Chain of Custody and Sampling Trip Reports

1.1 Are the Traffic Reports/Chain-of-Custody Records present for all samples? [ ] ___ ___

ACTION: If no, contact RSCC, or contact the WAM to obtain replacement of missing or illegible copies from the lab.

1.2 Is the Sampling Trip Report present for all samples and all fractions? [ ] ___ ___

ACTION: If no, contact either RSCC or ask the WAM to obtain this information from the prime contractor.

2.0 Data Completeness and Deliverables

2.1 Have any missing deliverables been received and added to the data package? ___ ___

NOTE: The lab is required to submit data for only two analyses, for each fraction. (i.e., the original sample and one dilution, or the most concentrated dilution analyzed and one further dilution.)

ACTION: Contact the WAM to obtain an explanation or resubmittal of any missing deliverables from the lab. If lab cannot provide them, note the effect on the review of the package in the Contract Problems/Non-compliance section of the Data Assessment and the Organic Regional Data Assessment Summary form.

2.2 Was CLASS CCS checklist included with package? [ ] ___ ___

2.3 Are there any discrepancies between the Traffic Reports/Chain-of-Custody Records, Sampling Report and Sample Tags? ___ [ ] ___

	YES	NO	N/A
ACTION: If yes, contact the WAM to obtain an explanation or resubmittal of any missing deliverables from the laboratory.			
3.0 Cover Letter SDG Narrative			
3.1 Is the Narrative or Cover Letter Present?	✓		
3.2 Are case number, SDG number and contract number contained in the SDG Narrative or cover letter (see SOW, Exhibit B, section 2.6.1)?	✓		
3.3 Does the narrative contain the following information:			
VOA: description of trap and columns used during sample analyses?	✓		
BNA: description of columns used during sample analyses?	✓		
Pest: description of columns used during sample analyses?	✓		
NOTE: As per section 6.23.3.1 SOW/p. D-11/Pest, Packed columns are not permitted.			
3.4 Does the narrative, VOA and BNA sections, contain a list of all TICs identified as alkanes and their estimated concentrations?	✓		
3.5 Does the narrative contain a record of all cooler temperatures? If the temperature of a cooler was exceeded, > 10° C, the lab must list by fraction and sample number, all affected samples.		✓	
3.6 Does the narrative contain a list of the pH values determined for each water sample submitted for volatile analysis (SOW Exhibit B, section 2.6.1.2)?			
3.7 Does the Case Narrative contain the statement, "verbatim", as required in Section B of the SOW?	✓		

ACTION: If "No", to any question in this section, contact the WAM to obtain all necessary resubmittals. If information is not available, document in the Data Assessment under Contract Problems/Non-Compliance section.

	YES	NO	N/A
4.0 Data Validation Checklist			
4.1 Check the package for the following discrepancies:			
a. Is the package paginated in ascending order starting from the SDG narrative?	[✓]		
b. Are all forms and copies legible?	[ ]	✓	
c. Is each fraction assembled in the order set forth in the SOW?	[✓]		
d. Is a Sample Data Summary Package submitted immediately preceding the Sample Data Package?	[ ]	✓	

The following checklist is divided into three parts. Part A is for any VOA analyses, Part B is for BNAs and Part C is Pesticide/PCBs.

Does this package contain:

VOA Data?	✓	
BNA Data?	✓	
Pesticide/PCB data?	✓	

ACTION: Complete corresponding parts of checklist.

YES NO N/A

PART A: VOA ANALYSES

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody Records, Sampling Report or Lab Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data? ___ [✓] ___

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50% - 90% water, all data should be flagged as estimated (J). If a soil sample other than TCLP contains more than 90% water, all data should be qualified as unusable (R).

ACTION: If samples were not iced or the ice was melted upon arrival at the laboratory and the cooler temperature was elevated (> 10° C), then flag all positive results with a "J" and all non-detects "UJ".

ACTION: If both VOA vials for a sample have air bubbles or the VOA vial analyzed had air bubbles, flag all positive results "J" and all non-detects "R".

ACTION: The smallest soil size permitted is 0.5g. If any soil sample is smaller than 0.5g, document in the Data Assessment under Contract Problems/Non-Compliance.

2.0 Holding Times

2.1 Have any VOA technical holding times, determined from date of collection to date of analysis, been exceeded? ✓ [ ] ___

Technical Holding Times: If unpreserved, aqueous samples, maintained at 4° C for aromatic hydrocarbons analysis must be analyzed within 7 days of collection. If preserved with HCl (pH < 2) and stored at 4° C, then aqueous samples must be analyzed within 14 days of collection. If uncertain about preservation, contact sampler to determine whether or not samples were preserved. The holding time for soils is 10 days from date of collection.

YES NO N/A

Table of Holding Time Violations
(See Chain-of-Custody Records)

Sample ID	Sample Matrix	Was Sample Preserved?	Date Sampled	Date Lab Received	Date Analyzed
See ADRE HT Report.					

ACTION: If technical holding times are exceeded, flag all positive results as estimated "J" and sample quantitation limits as estimated "UJ", and document in the Data Assessment that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. At a minimum, all results must be qualified "J", but the reviewer may determine that non-detect data are unusable "R". If holding times are exceeded by more than 28 days, all non detect data are unusable "R".

NOTE: Contractual Holding Times: Analysis of water and soil/sediment samples must be completed within 10 days of Validated Time of Sample Receipt (VTSR). This requirement does not apply to Performance Evaluation (PE) samples.

ACTION: If contractual holding times are exceeded, document in the Data Assessment and on the Organic Regional Data Assessment Summary form.

NOTE: The data reviewer must note in the Data Assessment whether or not technical and contractual holding times were met.

	YES	NO	N/A
3.0 System Monitoring Compound (SMC) Recovery (Form II)			
3.1 Are the VOA SMC Recovery Summaries (Form II) present for each of the following matrices:			
a. Low Water?	✓		
b. Low Soil?	✓		
c. Med Soil?			✓
3.2 Are all the VOA samples listed on the appropriate System Monitoring Compound Recovery Summary for each of the following matrices:			
a. Low Water?	✓		
b. Low Soil?	✓		
c. Med Soil?			✓

ACTION: Contact the WAM to obtain an explanation or resubmittal of any missing deliverables from the laboratory. If missing deliverables are unavailable, document the effect in the Data Assessment.

3.3 Were outliers marked correctly with an asterisk?	✓		

ACTION: Circle all outliers with red pencil.

3.4 Was one or more VOA system monitoring compound recovery outside of contract specifications for any sample or method blank?	✓	N/A	
If yes, were samples re-analyzed?	✓		
Were method blanks re-analyzed?	✓		

ACTION: If recoveries are ≥ 10%, but 1 or more compounds fail to meet SOW specifications:

1. All positive results are qualified as estimated "J".

2. Flag all non-detects as estimated detection limits "UJ" where recovery is less than the lower acceptance limit.

YES NO N/A

3. If SMC recoveries are above allowable levels, do not qualify non-detects.

If any system monitoring compound recovery is < 10%:

1. Flag all positive results as estimated "J".

2. Flag all non-detects as unusable "R".

Professional judgement should be used to qualify data that only have method blank SMC recoveries out of specification in both original and re-analyses. Check the internal standard areas.

NOTE: Contractual requirements state that if any SMC fails the acceptance criteria, the sample must be re-analyzed. If the affected sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance and in the Organic Regional Data Assessment Summary.

NOTE: The laboratory must submit the following data:

1. If SMC recoveries and internal standard responses meet the acceptance criteria in the re-analyzed sample, then the laboratory must submit only the re-analysis.

2. If an SMC recovery and/or internal standard response fails to meet the acceptance criteria upon re-analysis, then submit data from both analyses.

(Refer to section 11.4.3.2, page D-46/VOA of the SOW for more information.)

3.5 Are there any transcription/calculation errors between raw data and Form II? ___ [✓] ___

ACTION: If large errors exist, contact the WAM to obtain an explanation or resubmittal of corrected deliverables from the laboratory. Make any necessary corrections and note the effect in the Data Assessment.

	YES	NO	N/A

4.0 Matrix Spikes (Form III)

4.1 Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present? [ ] ___ ___

4.2 Were matrix spikes analyzed at the required frequency for each of the following matrices:

a. Low Water? [✓] ___ ___

b. Low Soil? [✓] ___ ___

c. Med Soil? [ ] ___ ✓

ACTION: If any matrix spike data are missing, take the action specified in section 3.2 above.

4.3 How many VOA spike recoveries are outside QC limits?

	Water		Soils	
BMM56	NA	out of 10	BMM33: 2	out of 10

4.4 How many RPDs for matrix spike and matrix spike duplicate recoveries are outside QC limits?

	Water		Soils	
BMM56	___	out of 5	BMM33: 1	out of 5

ACTION: No action is taken based upon MS/MSD data alone. However, using informed professional judgement, the MS/MSD results may be used in conjunction with other QC criteria to determine the need for qualification of the data.

ACTION: Circle all outliers with red pencil.

5.0 Blanks (Form IV)

5.1 Is the Method Blank Summary (Form IV) present? [✓] ___ ___

5.2 Frequency of Analysis: for the analysis of VOA TCL compounds, has a reagent/method blank* been analyzed for each SDG or every 20 samples of similar matrix (low water, low soil or medium soil), whichever is more frequent? [✓] ___ ___

	YES	NO	N/A
5.7 Chromatography: review the blank raw data-chromatograms (RICs), quant. reports or data system printouts and spectra. Is the chromatographic performance (baseline stability) for each instrument acceptable for VOAs?	✓		

ACTION: Use professional judgement to determine the effect on the data.

	YES	NO	N/A
5.8 Are all detected hits for target compounds in method, instrument and storage blanks less than the CRQL for that analyte?	✓		

Exception: Acetone and 2-butanone must be less than 5 times the CRQL, and methylene chloride must be less than 2.5 times its CRQL.

ACTION: If no, an explanation and laboratory's corrective actions must be addressed in the case narrative. If the narrative contains no explanation, then make a note in the Contract Problems/Non-Compliance section of the Data Assessment.

6.0 Contamination

NOTE: "Water blanks", "drill blanks", and "distilled water blanks" are validated like any other sample, and are not used to qualify data. Do not confuse them with the other QC blanks discussed below.

	YES	NO	N/A
6.1 Do any method/instrument/reagent/storage blanks have positive results (TCL and/or TIC) for VOAs?	✓	✓	

NOTE: When applied as directed in the table below, the contaminant concentration in these blanks are multiplied by the sample dilution factor and corrected for %moisture when necessary.

NOTE: A contaminated instrument blank is not allowable under this SOW. See page D-48/VOA, section 12.1.2.4 for additional information. Document in the Data Assessment under Contract Problems/Non-Compliance if contaminated instrument blank was submitted.

	YES	NO	N/A
6.2 Do any field/trip/rinse blanks have positive VOA results (TCL and/or TIC)?	✓		

YES NO N/A

ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)

NOTE: All field blank results associated with a particular group of samples (may exceed one per case) must be used to qualify data. Trip blanks are used to qualify only those samples with which they were shipped and are not required for non-aqueous matrices. Blanks may not be qualified because of contamination in another blank. Field Blanks & Trip Blanks must be qualified for system monitoring compound, instrument performance criteria, spectral or calibration QC problems.

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks. If any blanks are grossly contaminated, all associated data should be qualified as unusable "R".

For:	Flag sample result with a "U" when:	Report CRQL & qualify "U" when:	No qualification is needed when:
Methylene Chloride Acetone Toluene 2-Butanone	Sample conc. is > CRQL, but ≤ 10× blank value.	Sample conc. is < CRQL and ≤ 10× blank value.	Sample conc. is > CRQL and > 10× blank value.
Other Conta-minants	Sample conc. is > CRQL, but ≤ 5× blank value.	Sample conc. is < CRQL and ≤ 5× blank value.	Sample conc. is > CRQL and > 5× blank value.

NOTE: Analytes qualified "U" for blank contamination are still considered as "hits" when qualifying for calibration criteria.

ACTION: For TIC compounds, if the concentration in the sample is less than five times the concentration in the most contaminated associated blank, flag the sample data "R".

	YES	NO	N/A
6.3 Are there field/rinse/equipment blanks associated with every sample?	✓		

ACTION: For low level samples, note in the Data Assessment that there is no associated field/rinse/equipment blank. For samples with high concentrations of suspected blank contaminants, use professional judgement to qualify these values and make a note in the Data Assessment.

Exception: samples taken from a drinking water tap do not have associated field blanks.

7.0 GC/MS Instrument Performance Check (Form V)

	YES	NO	N/A
7.1 Are the GC/MS Instrument Performance Check Forms (Form V) present for Bromofluorobenzene (BFB)?	✓		
7.2 Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the BFB provided for each twelve hour shift?	✓		
7.3 Has an instrument performance check been analyzed for every analytical sequence on each instrument?	✓		

ACTION: List date, time, instrument ID, and sample numbers for which associated GC/MS tuning data are unavailable.

DATE	TIME	INSTRUMENT	SAMPLE NUMBERS

ACTION: Notify the WAM to obtain missing data, if possible. If the lab cannot provide the missing data, reject, "R", all data generated outside an acceptable twelve hour calibration interval.

	YES	NO	N/A
7.4 Have the ion abundances been normalized to m/z 95 as specified in Exhibit D, page D-56/VOA?	✓		

NOTE: All ion abundance ratios must be normalized to m/z 96, the nominal base peak, even though the

	YES	NO	N/A
ion abundance of m/z 174 may be up to 120% that of m/z 95.			
ACTION: If mass assignment is in error, qualify all associated data as unusable "R".			
7.5 Have the ion abundance criteria been met for each instrument used?	✓		
ACTION: List all data which do not meet ion abundance criteria (attach a separate sheet).			
ACTION: If ion abundance criteria are not met, the Region II TPO must be notified.			
7.6 Are there any transcription/calculation errors between mass lists and Form Vs? (Check at least two values, but if errors are found check more.)		✓	
7.7 Is the number of significant figures for the reported relative abundances consistent with the number given for each ion in the ion abundance criteria column?	✓		
ACTION: If large errors exist, take action as specified in section 3.5 above.			
7.8 Are the spectra of the mass calibration compound acceptable?	✓		
ACTION: Use professional judgement to determine whether associated data should be accepted, qualified, or rejected.			
8.0 Target Compound List (TCL) Analytes (FORM I VOA)			
8.1 Are the Organic Analysis Data Sheets (Form I VOA) present with required header information on each page, for each of the following:			
a. Samples and/or fractions as appropriate?	✓		
b. Matrix spikes and matrix spike duplicates?	✓		
c. Blanks?	✓		
8.2 Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (quant. reports) included in the sample package for each of the			

	YES	NO	N/A
following:			
a. Samples and/or fractions as appropriate?	[✓]		
b. Matrix spikes and matrix spike duplicates (mass spectra not required)?	[✓]		
c. Blanks?	[✓]		
ACTION: If any data are missing, take action specified in 3.2 above.			
8.3 Are the response factors shown in the quant. report?	[✓]	✓	
8.4 Is chromatographic performance acceptable with respect to:			
a. Baseline stability?	[✓]		
b. Resolution?	[✓]		
c. Peak shape?	[✓]		
d. Full-scale graph (attenuation)?	[✓]		
e. Other: _____?	[ ]		
ACTION: Use professional judgement to determine the acceptability of the data.			
8.5 Are the lab-generated standard mass spectra of the identified VOA compounds present for each sample?	[✓]		
ACTION: If any mass spectra are missing, take action as specified in 3.2 above. If the lab does not generate its own standard spectra, document in the Contract Problems/Non-compliance section of the Data Assessment and the Organic Regional Data Assessment Summary.			
8.6 Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	[✓]		
8.7 Are all ions present in the standard mass spectrum at a relative intensity greater than 10% also present in the sample mass spectrum?	[✓]		

	YES	NO	N/A
8.8 Do sample and standard relative ion intensities agree within ±20%?	[✓]		

ACTION: Use professional judgement to determine acceptability of data. If it is determined that incorrect identifications were made, all such data should be rejected "R", flagged "N" (presumptive evidence of the presence of the compound) or changed to not detected "U" at the calculated detection limit. In order to be positively identified, the data must comply with the criteria listed in 8.6, 8.7, and 8.8.

ACTION: When sample carry-over is suspected, use professional judgement determine if instrument cross-contamination has affected positive compound identifications.

9.0 Tentatively Identified Compounds (TIC)

	YES	NO	N/A
9.1 Are all Tentatively Identified Compound Forms (Form I Part B) present; and do listed TICs include scan number or retention time, estimated concentration and "JN" qualifier?	[✓]		
9.2 Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following:			
a. Samples and/or fractions as appropriate?	[✓]		
b. Blanks?	[✓]		
c. Alkanes listed for each sample?	[ ]	✓	

ACTION: If any TIC data are missing, take action specified in 3.2 above.

ACTION: Add "JN" qualifier to all chemically named TICs, if missing.

	YES	NO	N/A
9.3 Are any TCL compounds (from any fraction) listed as TIC compounds? (Example: 1,2- dimethylbenzene is xylene, a VOA TCL analyte, and should not be reported as a TIC.)		[✓]	

ACTION: Flag with "R" any TCL compound listed as a TIC.

9.4 Are all ions present in the reference mass

	YES	NO	N/A
spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?	[✓]		
9.5 Do TIC and "best match" standard relative ion intensities agree within ±20%?	[✓]		

ACTION: Use professional judgement to determine the acceptability of TIC identifications. If it is determined an incorrect identification was made, change the identification to "unknown," or to some less specific identification as appropriate. (Example: "C3 substituted benzene.")

Also, when a compound is not found in any blank, but is detected in a sample and is a suspected artifact of a common laboratory contaminant, the result should be qualified as unusable "R". (E.g., Common Lab Contaminants: CO_2 (M/E 44), siloxanes (M/E 73) hexane, aldol condensation products, solvent preservatives, and related by-products - see the National Functional Guidelines for further guidance.)

	YES	NO	N/A
9.6 Are TICs with responses < 10% of the internal standard (as determined by inspection of the peak areas or height) reported?		[✓]	

ACTION: If yes, cross out questionable TIC(s).

10.0 Compound Quantitation and Reported Detection Limits

	YES	NO	N/A
10.1 Are there any transcription/calculation errors in Form I results? (Check at least two positive values. Verify that the correct internal standards, quantitation ions, and RRF were used to calculate Form I results.)		[✓]	
10.2 Are the CRQLs adjusted to reflect sample dilutions and, for soils, sample moisture?	[✓]		

ACTION: If errors are large, take action as specified in section 3.5 above.

ACTION: When a sample is analyzed at more than one dilution, the lowest CRQLs are used (unless a QC exceedance dictates the use of the higher CRQL data from the diluted sample). Replace concentrations that exceeded the calibration range in the original analysis by crossing out

YES NO N/A

the "E" and its corresponding value on the original Form I and substituting the data from the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form Is not to be used, including any in the data summary package.

11.0 Standards Data (GC/MS)

11.1 Are the Reconstructed Ion Chromatograms, and data system printouts (quant. reports) present for each initial and continuing calibration? [✓] ___ ___

ACTION: If any calibration standard data are missing, take action specified in 3.2 above.

12.0 GC/MS Initial Calibration (Form VI)

12.1 Are the Initial Calibration Forms (Form VI) present and complete at concentrations of 10, 20, 50, 100, 200ng for separate calibrations of low water/med soils (unheated purge) and low soils (heated purge)? [✓] ___ ___

ACTION: If any calibration standard forms are missing, take action specified in 3.2 above.

12.2 Were all low level soil standards, blanks and samples analyzed by heated purge? [✓] ___ ___

ACTION: If low level soil samples were not heated during purge, qualify positive hits "J" (estimated) and non-detects "R".

12.3 Are the % relative standard deviation (%RSD) values for VOAs ≤ 30% over the concentration range of the calibration? [✓] [✓] ___

NOTE: Although 11 VOA compounds have a contractual minimum RRF and no maximum %RSD, the technical acceptance criteria are the same for all analytes.

ACTION: Circle all outliers with red pencil.

ACTION: If %RSD is > 30.0%, qualify associated positive results for that analyte "J" (estimated) and non-detects using professional judgement. When %RSD is > 90%, flag all non-detects for that analyte "R" (unusable) and positive hits "J".

YES NO N/A

NOTE: Analytes previously qualified "U" for blank contamination are still considered as "hits" when qualifying for initial calibration criteria.

12.4 Are any average RRFs < 0.05? ___ ✓ ___

ACTION: Circle all outliers with red pencil.

ACTION: If the average RRF is < 0.05, then qualify associated non-detects with an "R" and flag associated positive data as estimated "J".

NOTE: Contract Requirement: The SOW allows up to two of the required analytes to fail contractual %RSD or RRF criteria, provided the %RSD is ≤ 40% and RRF is ≥ 0.010. (See Table 5, page D-59/VOA and analytes marked with a "*" on Form VI for required analytes and contractual criteria.) Technical criteria, however, are the same for all analytes.

ACTION: If more than two analytes failed %RSD or RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance and the Organic Regional Data Assessment Summary.

12.5 Are there any transcription/calculation errors in the reporting of average relative response factors (RRF) or %RSD? (Check at least 2 values, but if errors are found, check more.) ___ ✓ ___

ACTION: Circle errors with red pencil.

ACTION: If errors are large, contact the WAM to obtain an explanation/resubmittal from the lab, document in the Data Assessment under Contract Problems/Non-Compliance and in the Organic Regional Data Assessment Summary.

13.0 GC/MS Continuing Calibration (Form VII)

13.1 Are the Continuing Calibration Forms (Form VII) present and complete for separate calibration of low water/med soil and low soil samples? ✓ ___ ___

13.2 Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument? ✓ ___ ___

YES NO N/A

ACTION: If any forms are missing or no continuing calibration standard has been analyzed within twelve hours of every sample analysis, contact the WAM to request an explanation/resubmittal from the lab. If continuing calibration data are not available, flag all associated sample data as unusable "R".

ACTION: List below all sample(s) that were not analyzed within twelve hours of the previous continuing calibration.

_____

_____

_____

13.3 Do any volatile compounds have a percent difference (%D) between the initial and continuing RRF which exceeds the ±25% criteria? ✓ ___ ___

NOTE: Although 11 VOA compounds have a contractual minimum RRF and no maximum %D, the technical acceptance criteria are the same for all analytes.

ACTION: Circle all outliers with red pencil.

ACTION: Qualify both positive results and non-detects for the outlier compound(s) as estimated. When %D is > 90%, qualify all non-detects for that analyte unusable (R) and positive results estimated (J).

13.4 Are any continuing calibration RRFs < 0.05? ___ ✓ ___

ACTION: Circle all outliers with red pencil.

ACTION: If the RRF is < 0.05, qualify the associated non-detects as unusable "R" and the associated positive values "J".

NOTE: Contract Requirement: The SOW allows up to two of the required analytes to fail contractual %D and RRF criteria, provided that the %D is ≤ 40% and the RRF is ≥ 0.010. (See Table 5 pg. D-59/VOA or analytes marked with a "*" on Form VI for required analytes.) Technical criteria, however, are the same for all analytes.

	YES	NO	N/A

ACTION: If more than two analytes failed %D and RRF, criteria document in the Data Assessment under contract Problems/Non-Compliance and on the Organic Regional Data Assessment Summary form.

13.5 Are there any transcription/calculation errors in the reporting of RRF or %D between initial and continuing RRFs? (Check at least two values, but if errors are found, check more.) ___ [✓] ___

ACTION: Circle errors with red pencil.

ACTION: If errors are large, contact the WAM to obtain an explanation/resubmittal from the lab, document in the Data Assessment under Contract Problems/Non-Compliance.

14.0 Internal Standard (Form VIII)

14.1 Are the internal standard areas (Form VIII) of every sample and blank within the upper and lower limits (-50% to +100%) for each continuing calibration? [ ] ✓ ___ ___

If no, was the sample re-analyzed? [ ] ✓ ___ ___

ACTION: 1. Circle all outliers with red pencil.

2. List all the outliers below.

Sample #	Internal Std.	Area	Lower/Upper Limit
			/
			/
			/
			/

(Attach additional sheets if necessary, or attach copies of Form VIIIs.)

ACTION: If any sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

ACTION: 1. If the internal standard area count is outside the upper or lower limit, flag with "J" all positive results quantitated with this

YES NO N/A

internal standard.

2. Do not qualify non-detects when associated IS area counts are > 100%.

3. If the IS area in the sample is below the "lower limit," < 50%, qualify all analytes associated with that IS estimated, "J". If the area counts are extremely low, < 25% of the area in the 12 hour standard, or if performance exhibits a major abrupt drop- off, flag all associated non-detects as unusable, "R", and positive hits estimated, "J".

14.2 Are the retention times of the internal standards within 30 seconds of the associated calibration standard? [✓] ___ ___

ACTION: Professional judgement should be used to qualify data if the retention times differ by more than 30 seconds.

NOTE: Contractual requirements state that if any internal standard fails the acceptance criteria, the sample must be re-analyzed. If the affected sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

NOTE: See Notes in section 3.4, page 7 for a description of sample data the laboratory must submit.

15.0 <u>Field Duplicates</u>

15.1 Were any field duplicates submitted for VOA analysis? [✓] ___ ___

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between duplicate results must be addressed in the reviewer narrative. However, if large differences exist, identification of field duplicates should be confirmed by contacting the sampler.

YES NO N/A

PART B: BNA ANALYSES

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody records or laboratory SDG Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special notations affecting the quality of the data? ___ [✓] ___

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50% - 90% water, all data should be flagged as estimated "J". If a soil sample, other than TCLP, contains more than 90% water, all data should be qualified as unusable "R".

ACTION: If samples were not iced or if the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10° C), flag all positive results "J" and all non-detects "UJ".

2.0 Holding Times

2.1 Have any BNA technical holding times, determined from date of collection to date of extraction, been exceeded? ✓ [ ] ___

Technical Holding Time: Continuous extraction of water samples for BNA analysis must be started within seven days of the date of collection. Soil/sediment samples must be extracted within 7 days of collection. Extracts must be analyzed within 40 days of the date of extraction.

Table of Holding Time Violations
(See Chain-of-Custody Records)

Sample Analyzed	Sample Matrix	Date Sampled	Date Lab Received	Date Extracted	Date Analyzed
	See CADRE HT Report.				

YES NO N/A

ACTION: If technical holding times were exceeded, flag all positive results as estimated (J) and sample quantitation limits as estimated (UJ), and document in the narrative that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon reanalysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on sample results. At a minimum, all results should be qualified "J", but the reviewer may determine that non-detect data are unusable "R". If holding times were exceeded by more than 28 days, all non-detect data must be qualified "R", unusable.

NOTE: Contractual Holding Times: Extraction of water samples must be started within 5 days VTSR. Soil/sediment samples must be extracted within 10 days of VTSR. This requirement does not apply to Performance Evaluation (PE) samples. Water and soil/sediment extracts must be analyzed within 40 days following extraction.

ACTION: If contractual holding times are exceeded, document in the Data Assessment and on the Organic Regional Data Assessment Summary form.

NOTE: The data reviewer must note in the Data Assessment whether or not technical and contractual holding times were met.

3.0 Surrogate Recovery (Form II)

3.1 Are BNA Surrogate Recovery Summaries (Form II) present for each of the following matrices:

a. Low Water? [✓] ___ ___

b. Low Soil? [✓] ___ ___

c. Med Soil? [✓] ___ ___

3.2 Are all the BNA samples listed on the appropriate Surrogate Recovery Summaries for each of the following matrices:

a. Low Water? [✓] ___ ___

b. Low Soil? [✓] ___ ___

	YES	NO	N/A
c. Med Soil?	[✓]		

ACTION: Contact the WAM to request an explanation or resubmittal of any missing deliverables from the laboratory. If missing deliverables are unavailable, document the effect in the Data Assessment.

3.3 Were outliers marked correctly with an asterisk?	[✓]		

ACTION: Circle all outliers with red pencil.

3.4 Were two or more base-neutral OR acid surrogate recoveries out of specification for any sample or method blank?	✓	[✓]	
If yes, were samples reanalyzed?	[✓]		
Were method blanks reanalyzed?	[✓]		

ACTION: If all BNA surrogate recoveries are ≥ 10%, but two within the base-neutral or acid fraction do not meet SOW specifications, for the affected fraction only (i.e. acid or base-neutral compounds):

1. Flag all positive results as estimated (J).

2. Flag all non-detects as estimated detection limits ("UJ") when recoveries are less than the lower acceptance limit.

3. Do not qualify non-detects if recoveries are greater than the upper acceptance limit.

If any base-neutral or acid surrogate has a recovery of < 10%:

1. Qualify positive results for that fraction as estimated (J).

2. Qualify non-detects for that fraction as unusable (R).

Professional judgement should be used to qualify data that have method blank surrogate recoveries out of specification in both original and reanalyses. Check the internal standard areas.

YES NO N/A

4.4 How many RPDs for matrix spike and matrix spike duplicate recoveries are outside QC limits?

Water Soils

BMM56: 0 out of 11 BMM33: 2 out of 11

ACTION: No action is taken based upon MS/MSD data alone. However, using informed professional judgement, the data reviewer may use the matrix spike and matrix spike duplicate results in conjunction with other QC criteria and determine the need for some qualification of the data.

ACTION: Circle all outliers with red pencil.

5.0 Blanks (Form IV)

5.1 Is the Method Blank Summary (Form IV) present? [✓] ___ ___

5.2 Frequency of Analysis: Has a reagent/method blank analysis been reported per 20 samples of similar matrix, or concentration level, and for each extraction batch? [✓] ___ ___

5.3 Has a BNA method blank been analyzed for each GC/MS system used? (See SOW pg. D-54/SVOA, Section 12.1.2.) [✓] ___ ___

ACTION: If any method blank data are missing, contact the WAM to obtain an explanation/resubmittal from the lab. If resubmittals are unavailable, use professional judgement to determine if the associated sample data should be qualified.

5.4 The validator should verify that the correct identification scheme for the EPA Blank samples were used. See page B-33, sec. 3.3.7.3 of the SOW for further information.

Was the correct identification scheme used for all BNA blanks? [✓] ___ ___

ACTION: Contact the WAM to obtain resubmittals from the lab or make the required corrections on the forms. Document all corrections made by the validator in the Data Assessment under Contract Problems/Non-Compliance.

	YES	NO	N/A
5.5 Chromatography: review the blank raw data - chromatograms (RICs), quant. reports or data system printouts and spectra. Is the chromatographic performance (baseline stability) acceptable for each instrument?	[✓]	___	___

ACTION: Use professional judgement to determine the effect on the data.

	YES	NO	N/A
5.6 Are all detected hits for target compounds less than the CRQL for that analyte in all method blanks?	[✓]	___	___

Exception: Phthalate esters must be less than five times (5×) the CRQL.

6.0 Contamination

NOTE: "Water blanks", "drill blanks" and "distilled water blanks" are validated like any other sample and are not used to qualify data. Do not confuse them with the other QC blanks discussed below.

	YES	NO	N/A
6.1 Do any method/reagent blanks have positive results (TCL and/or TIC)?	✓	[ ]	___

NOTE: Water: When applied as directed in the table below (page 29), the contaminant concentration in method/instrument/reagent blanks is multiplied by the sample dilution factor, where necessary.

Soil: If the lab has not already done so, the contaminant concentration in soil blanks is multiplied by 33 times the sample dilution factor and corrected for %moisture (fraction of solid) where necessary. 30 grams of sodium sulfate (1 gram for medium level soils) are used to prepare the soil reagent/method blank as instructed on page D-54/SVOA, section 12.1.3. Contact the WAM to obtain resubmittals if the soil blanks are not reported in soil units (µg/kg).

	YES	NO	N/A
6.2 Do any field/rinse blanks have positive BNA results (TCL and/or TIC)?	✓	[ ]	___

ACTION: Prepare a list of samples associated with each contaminated blank. (Attach a separate sheet.)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case) must be

YES NO N/A

used to qualify sample data. Do not convert field blank results to account for the difference in soil CRQLs. Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, spectral, instrument performance or calibration QC problems.

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks. If gross contamination exists, all data in the associated samples should be qualified as unusable "R".

For:	Flag sample result with a "U" when:	Report CRQL & qualify "U" when:	No qualification is needed when:
Common Phthalate-Esters	Sample conc. is > CRQL, but ≤ 10× blank value.	Sample conc. is < CRQL and ≤ 10× blank value.	Sample conc. is > CRQL and > 10× blank value.
Other Conta-minants	Sample conc. is > CRQL, but ≤ 5× blank value.	Sample conc. is < CRQL and ≤ 5× blank value.	Sample conc. is > CRQL and > 5× blank value.

NOTE: Analytes qualified "U" for blank contamination are still treated as "hits" when qualifying for calibration criteria.

ACTION: For TIC compounds, if the concentration in the sample is less than five times the concentration in the most contaminated associated blank, flag the sample data "R" (unusable).

6.3 Are there field/rinse/equipment blanks associated with every sample? [✓] ___ ___

ACTION: For low level samples, note in the Data Assessment that there is no associated field/rinse/equipment blank. For analytes with high concentration, use professional judgement on qualification of these values and make a note in the Data Assessment.

Exception: samples taken from a drinking water tap do not have associated field blanks.

	YES	NO	N/A

7.0 GC/MS Instrument Performance Check

7.1	Are the GC/MS Instrument Performance Check Forms (Form V) present for Decafluorotriphenylphosphine (DFTPP)?	✓		
7.2	Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the DFTPP provided for each twelve hour shift?	✓		
7.3	Has an instrument performance check solution been analyzed for every twelve hours of sample analysis per instrument?	✓		

ACTION: List date, time, instrument ID, and sample number for which no associated GC/MS tuning data are valid.

SAMPLE NUMBERS	DATE	TIME	INSTRUMENT ID

ACTION: If the WAM cannot obtain missing data from the lab, reject "R" all data generated outside an acceptable twelve hour calibration interval.

7.4	Have the ion abundances been normalized to m/z 198 (see SOW, page D-61/SVOA)?	✓		

NOTE: All ion abundance ratios must be normalized to m/z 198, the nominal base peak, even though the ion abundance of m/z 442 may up to 110% that of m/z 198.

ACTION: If mass assignment is in error, flag all associated sample data as unusable "R".

7.5	Have the ion abundance criteria been met for each instrument used?	✓		

ACTION: List all data which do not meet ion abundance criteria (attach a separate sheet).

	YES	NO	N/A
ACTION: If ion abundance criteria are not met, the Region II TPO must be notified.			
7.6 Are there any transcription/calculation errors between mass lists and Form Vs? (Check at least two values, but if errors are found check more.)		✓	
7.7 Is the number of significant figures for the reported relative abundances consistent with the number given for each ion in the ion abundance criteria column?	✓		
ACTION: If large errors exist, take action as specified in section 3.5 above.			
7.8 Are the spectra of the mass calibration compound acceptable?	✓		
ACTION: Use professional judgement to determine whether associated data should be accepted, qualified, or rejected.			
8.0 Target Compound List (TCL) Analytes (FORM I SV)			
8.1 Are the Organic Analysis Data Sheets (Form I SV) present with required header information on each page, for each of the following:			
a. Samples and/or fractions as appropriate?	✓		
b. Matrix spikes and matrix spike duplicates?	✓		
c. Blanks?	✓		
8.2 Has GPC cleanup been performed on all soil/sediment sample extracts?	✓		
ACTION: If data suggests that GPC was not performed, use professional judgement. Make note in Contract Problems/Non-Compliance section of the Data Assessment and the Organic Regional Data Assessment Summary.			
8.3 Are the BNA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (quant. reports) included in the sample package for each of the following:			
a. Samples and/or fractions as appropriate?	✓		

	YES	NO	N/A
b. Matrix spikes and matrix spike duplicates (mass spectra not required)?	[✓]		
c. Blanks?	[✓]		
ACTION: If any data are missing, take action specified in 3.2 above.			
8.4 Are the response factors shown in the quant. report?	[✓]		
8.5 Is chromatographic performance acceptable with respect to:			
Baseline stability?	[✓]		
Resolution?	[✓]		
Peak shape?	[✓]		
Full-scale graph (attenuation)?	[✓]		
Other:_____?	[ ]		
ACTION: Use professional judgement to determine the acceptability of the data.			
8.6 Are lab-generated standard mass spectra of identified BNA compounds present for each sample?	[✓]		
ACTION: If any mass spectra are missing, take action specified in 3.2 above. Note under Contract Non-compliance if lab does not generate their own standard spectra. If spectra are missing, reject all positive data.			
8.7 Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	[✓]		
8.8 Are all ions present in the standard mass spectrum at a relative intensity greater than 10% also present in the sample mass spectrum?	[✓]		
8.9 Do sample and standard relative ion intensities agree within ±20%?	[✓]		
ACTION: Use professional judgement to determine acceptability of data. If it is determined that incorrect identifications were made, all			

	YES	NO	N/A

such data should be rejected "R", flagged "N" (presumptive evidence of the presence of the compound) or changed to not detected "U" at the calculated detection limit. In order to be positively identified, the data must comply with the criteria listed in 8.7, 8.8, and 8.9.

ACTION: When sample carry-over is a possibility, professional judgement should be used to determine if instrument cross-contamination has affected any positive compound identification.

9.0 Tentatively Identified Compounds (TIC)

		YES	NO	N/A
9.1	Are all Tentatively Identified Compound Forms (Form I, Part B) present; and do listed TICs include scan number or retention time, estimated concentration and "JN" qualifier?	✓		
9.2	Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following:			
	a. Samples and/or fractions as appropriate?	✓		
	b. Blanks?	✓		
	c. Alkanes listed for each sample?		✓	

ACTION: If any TIC data are missing, take action specified in 3.2 above.

ACTION: Add "N" qualifier to all chemically named TICs, if missing.

		YES	NO	N/A
9.3	Are any TCL compounds (from any fraction) listed as TIC compounds? (Example: 1,2-dimethylbenzene is xylene - a VOA TCL - and should not be reported as a TIC.)		✓	

ACTION: Flag with "R" any TCL compound listed as a TIC.

		YES	NO	N/A
9.4	Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?	✓		
9.5	Do TIC and "best match" standard relative ion intensities agree within ±20%?	✓		

	YES	NO	N/A
ACTION: Use professional judgement to determine the acceptability of TIC identifications. If it is determined that an incorrect identification was made, change the identification to "unknown," or to some less specific identification (example: "C3 substituted benzene") as appropriate. Also, when a compound is not found in any blank, but is a suspected artifact of a common laboratory contaminant, the result should be qualified as unusable, "R".			
9.6 Are any TICs with responses < 10% of the internal standard (as determined by inspection of the peak areas or height) reported?	___	[✓]	___
ACTION: If yes, cross out questionable TIC(s).			
10.0 Compound Quantitation and Reported Detection Limits			
10.1 Are there any transcription/calculation errors in Form I results? (Check at least two positive values. Verify that the correct internal standard, quantitation ion, and RRF were used to calculate Form I result.)	___	[✓]	___
10.2 Are the CRQLs adjusted to reflect sample dilutions and, for soils, sample moisture?	[✓]	___	___
ACTION: If errors are large, take action as specified in section 3.5 above.			
ACTION: When a sample is analyzed at more than one dilution, the lowest CRQLs are used (unless a QC exceedance dictates the use of the higher CRQL data from the diluted sample analysis). Replace concentrations that exceed the calibration range in the original analysis by crossing out the "E" and its associated value on the original Form I and substituting the data from the analysis of the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form Is that should not be used, including any in the summary package.			
11.0 Standards Data (GC/MS)			
11.1 Are the Reconstructed Ion Chromatograms, and data system printouts (quant. reports) present for initial and continuing calibration?	[✓]	___	___

YES NO N/A

ACTION: If any calibration standard data are missing, take action specified in 3.2 above.

12.0 GC/MS Initial Calibration (Form VI)

12.1 Are the Initial Calibration Forms (Form VI) present and complete for the BNA fraction? [✓] ___ ___

ACTION: If any calibration standard forms are missing, take action specified in 3.2 above.

12.2 Are the % relative standard deviation (%RSD) values for BNAs ≤ 30% over the concentration range of the calibration? [✓] ✓ ___

ACTION: Circle all outliers with red pencil.

NOTE: Although 21 BNA compounds have a contractual minimum RRF and no maximum %RSD, the technical criteria are the same for all analytes.

NOTE: Eight BNA compounds do not require a 20ng standard. Refer to SOW section 7.2.4.5.1, page D-15/SVOA for a list of required compounds and contractual criteria.

ACTION: If the %RSD is > 30.0%, qualify positive results for that analyte "J" and non-detects using professional judgement. When %RSD is > 90%, flag all non-detect results for that analyte "R" (unusable) and all positive results "J" (estimated).

NOTE: Analytes previously qualified "U" due to blank contamination are still considered as "hits" when qualifying for calibration criteria.

12.3 Are any average RRFs < 0.05? ✓ [ ] ___

ACTION: Circle all outliers with red pencil.

ACTION: If the average RRF is < 0.05 then:

1. "R" all non-detects.

2. "J" all positive results.

12.4 Are there any transcription/calculation errors in the reporting of RRFs and/or %RSDs? (Check at least two values; if errors are found check more.) ___ [✓] ___

YES NO N/A

ACTION: Circle errors with red pencil.

ACTION: If errors are large, take action as specified in section 3.5 above.

NOTE: Contract Requirement: The SOW allows up to four of the required analytes to fail contractual %RSD or RRF criteria provided the %RSD is ≤ 40% or RRF is ≥ 0.010. (See Table 5, page D-66/SVOA and analytes marked with a "*" on Form VI for a list of required analytes and contractual criteria.) Technical criteria, however, are the same for all analytes.

ACTION: If more than four analytes fail %RSD or RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance and on the Organic Regional Data Assessment Summary form.

13.0 GC/MS Continuing Calibration (Form VII)

13.1 Are the Continuing Calibration Forms (Form VII) present and complete for the BNA fraction? [✓] ___ ___

13.2 Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument? [✓] ___ ___

ACTION: List below all sample analyses that were not analyzed within twelve hours of a continuing calibration standard for each instrument used.

_____

_____

_____

ACTION: If any forms are missing, or no continuing calibration standard has been analyzed within twelve hours of every sample analysis, contact the WAM to obtain an explanation/resubmittal from the lab. If continuing calibration data are unavailable, flag all associated sample data as unusable "R".

13.3 Does any BNA compound have a percent difference (%D) between the initial and continuing calibration RRFs which exceeds the ±25.0% criteria? ✓ [ ] ___

	YES	NO	N/A

ACTION: Circle all outliers with red pencil.

ACTION: Qualify both positive results and non-detects for the outlier compound(s) as estimated "J". When %D is > 90%, reject all non-detects for that analyte, "R", and qualify positive results "J" (estimated).

13.4 Are any continuing RRFs < 0.05? ___ [✓] ___

ACTION: Circle all outliers with red pencil.

ACTION: If the RRF is < 0.05, qualify as unusable (R) associated non-detects and "J" associated positive values.

NOTE: Contract Requirement: The SOW allows up to four of the required analytes to fail contractual %D and RRF criteria, provided that the %D is ≤ 40% and the RRF is ≥ 0.010. (See Table 5 page D-66/SVOA or analytes marked with a "*" on Form VI for a list of the required analytes.) Technical criteria, however, are the same for all analytes.

ACTION: If more than four analytes failed %D and RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance and on the Organic Regional Data Summary Form.

13.5 Are there any transcription/calculation errors in the reporting of average relative response factors (RRF) or %difference (%D) between initial and continuing RRFs? (Check at least two values, but if errors are found, check more.) ___ [✓] ___

ACTION: Circle errors with red pencil.

ACTION: If errors are large, take action as specified in section 3.5 above.

14.0 Internal Standards (Form VIII)

14.1 Are the internal standard areas (Form VIII) of every sample and blank within the upper and lower limits (-50% to +100%) for each continuing calibration? [ ] [✓] ___

If no, was sample re-analyzed? [✓] ___ ___

YES NO N/A

ACTION: 1. Circle all outliers with red pencil.

2. List all the outliers below.

ACTION: If sample was not reanalyzed, document in Data Assessment in Contract Problems/Non-Compliance.

Sample #	Internal Std.	Area	Lower/Upper Limit
			/
			/
			/
			/

(Attach additional sheets if necessary.)
(or attach copies of Form VIIIs)

ACTION: 1. If the internal standard area count is outside the "upper" or "lower" limit, flag with "J" all positive results and non-detects quantitated with this internal standard.

2. Do not qualify non-detects associated with IS area > 100%.

3. If the IS area in the sample is < 50%, qualify all analytes associated with that IS estimated (J). If area counts are extremely low (< 25% of the area in the 12 hour standard), or if performance exhibits a major abrupt drop-off, flag all associated non-detects as unusable (R) and positive hits estimated (J).

14.2 Are the retention times of the internal standards within 30 seconds of the associated calibration standard? ✓ ___ ___

ACTION: Professional judgement should be used to qualify data if the retention times differ by more than 30 seconds.

NOTE: Contractual requirements state that if any internal standard fails the acceptance criteria, the sample must be re-analyzed. If the affected sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

YES NO N/A

NOTE: See Notes in section 3.4, page 24 for a description of sample data the laboratory must submit.

15.0 **Field Duplicates**

15.1 Were any field duplicates submitted for BNA analysis? ✓ ___ ___

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, identification of field duplicates should be confirmed by contacting the sampler.

YES NO N/A

PART C: PESTICIDE/PCB ANALYSIS

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody Records or SDG Narrative indicate any problems with sample receipt, condition of the samples, analytical problems or special circumstances affecting the quality of the data? ___ [✓] ___

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50% - 90% water, all data should be qualified as estimated "J". If a soil sample, other than TCLP, contains more than 90% water, all data should be qualified as unusable "R".

ACTION: If samples were not iced, or if the ice was melted upon arrival at the laboratory, and the temperature of the cooler was elevated > 10^0 C, flag all positive results "J" and all non-detects "UJ".

ACTION: Check aqueous extraction log for sample pH, if adjustment was needed, it should have been noted in the SDG Narrative. If more information is needed, notify the WAM to contact the lab.

2.0 Holding Times

2.1 Have any PEST/PCB technical holding times, determined from date of collection to date of extraction, been exceeded? ✓ [ ] ___

NOTE: Technical Holding Times: Water and soil samples for PEST/PCB analysis must be extracted within 7 days of the date of collection. Extracts must be analyzed within 40 days of the date extraction.

ACTION: If technical holding times are exceeded, flag all positive results as estimated "J" and sample quantitation limits "UJ" and document in the narrative that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of

YES NO N/A

additional storage on the sample results. At a minimum, all the data should at least be qualified "J", but the reviewer may determine that non-detects are unusable "R".

Table of Holding Time Violations
(See Chain-of-Custody Records)

Sample Analyzed	Sample Matrix	Date Sampled	Date Lab Received	Date Extracted	Date Analyzed
See	CASE	HT	Report		

NOTE: Contractual Holding Times: Extraction of water samples must be completed within 5 days VTSR. Soil/sediment samples must be extracted within 10 days of VTSR. This requirement does not apply to Performance Evaluation (PE) samples. Extracts of water and soil/sediment samples must be analyzed within 40 days following start of extraction.

ACTION: If contractual holding times are exceeded, document in the Data Assessment and Organic Regional Data Assessment Summary form.

NOTE: The data reviewer must note in the Data Assessment whether or not **technical and contractual** holding times were met.

3.0 Surrogate Recovery (Form II)

3.1 Are the PEST/PCB Surrogate Recovery Summaries (Form II) present for each of the following matrices:

a. Low Water? [✓] ___ ___

b. Soil? [✓] ___ ___

3.2 Are all the PEST/PCB samples listed on the appropriate Surrogate Recovery Summary for each of the following matrices:

	YES	NO	N/A
a. Low Water?	[✓]		
b. Soil?	[✓]		

ACTION: Contact the WAM to obtain an explanation or resubmittal of any missing deliverables from the laboratory. If missing deliverables are unavailable, document the effect in the Data Assessment.

	YES	NO	N/A
3.3 Were outliers marked correctly with an asterisk?	[✓]		

ACTION: Circle all outliers with red pencil.

	YES	NO	N/A
3.4 Were surrogate recoveries of TCX or DCB outside of the contract specification for any sample, method blank or sulfur clean-up blank (30-150%)?	✓	[ ]	

ACTION: In the absence of matrix interference, qualification of the data is not required in the following three situations:

1. When surrogates on both columns are diluted out.

2. When one surrogate on one column was outside (either above or below) the contract limits but above 10%.

3. When the same surrogate on both columns is above the contract limit.

If the same surrogate on both columns is below the contract limit but above 10%, check chromatograms for interference. The reviewer may use professional judgement, and qualify only those analytes which elute in the region of the GC chromatogram where interference was observed.

If the same surrogate on both columns is below the contract limit but above 10% (with no interference), qualify non-detects and positive hits "J" (estimated).

If recoveries for both surrogates on both columns are below the contract limit but above 10%, flag positive results and non-detects for that sample "J".

	YES	NO	N/A

If recoveries are above the contract limit for both surrogates on both columns, then qualify positive values "J".

If both surrogates on one column are below the contract limit but above 10%, then use the data from the other column, providing both surrogates on that column are within contract limits. The validator must check from which column the concentration is reported for each analyte. If the value is reported from the failed column, then cross it out and use the value from the other column. Document this change in the Data Assessment.

If recovery is below 10% for either surrogate on any column, qualify positive results "J" and flag non-detects "R".

3.5 Were surrogate retention times (RT) within the windows established during the initial 3-point analysis of Individual Standard Mixture A (see Form VI Pest-1)? [ ] ___ ___

ACTION: If the RT limits are not met, positive results and non-detects for that sample may be qualified unusable, "R", based on professional judgement.

3.6 Are there any transcription/calculation errors between raw data and Form II? ___ [✓] ___

ACTION: If large errors exist, contact the WAM to obtain an explanation or resubmittal of corrected deliverables from the laboratory. Make any necessary corrections and document the effect in the Data Assessment.

.0 Matrix Spikes (Form III)

4.1 Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present? [✓] ___ ___

4.2 Were matrix spikes analyzed at the required frequency for each of the following matrices (one MS/MSD must be performed for every 20 samples of similar matrix or concentration level):

a. Low Water? [✓] ___ ___

	YES	NO	N/A
b. Soil?	[✓]		

ACTION: If any matrix spike data are missing, take the action specified in 3.2 above.

ACTION: Circle all outliers with red pencil.

4.3 How many PEST/PCB spike recoveries are outside QC limits?

Water	Soil
BMM56: 0 out of 12	BMM33: 0 out of 12

4.4 How many RPDs for matrix spike and matrix spike duplicate recoveries are outside QC limits?

Water	Soil
BMM56: 0 out of 6	BMM33: 1 out of 6

ACTION: No action is taken on MS/MSD data alone. However, using informed professional judgement, the data reviewer may use the matrix spike and matrix spike duplicate results in conjunction with other QC criteria and determine the need for some qualification of the data.

5.0 Blanks (Form IV)

	YES	NO	N/A
5.1 Is the Method Blank Summary (Form IV) present?	[✓]		
5.2 Frequency of Analysis: Has a reagent/method blank been analyzed for each SDG, every 20 samples of similar matrix and concentration level or each extraction batch, whichever is more frequent?	[✓]		

ACTION: If any blank data are missing, take action as specified above in section 3.2. If blank data is not available, reject "R" all associated positive data. However, using professional judgement, the data reviewer may substitute field blank data for missing method blank data.

5.3 A separate Form IV should be present if part of an extraction batch required sulfur removal. In such cases some samples will be listed on two blank summary forms - once under the method

	YES	NO	N/A
blank, and once under the sulfur clean-up blank (PCBLK). Was this additional blank raw data and Form IV submitted when required?	[ ]	✓	
ACTION: If sulfur clean-up blank data and Form IV are missing, take action as specified in 3.2 above.			
5.4 Has a PEST/PCB instrument blank been analyzed at the beginning of every 12 hr. period following the initial calibration sequence (minimum contract requirement)?	[✓]		
ACTION: If any blank data are missing, take action as specified in section 3.2 above.			
5.5 Was the correct identification scheme used for all Pest/PCB blanks? (See page B-33, sec. 3.3.7.3 of the SOW for further information.)	[✓]		
ACTION: Contact the WAM to obtain resubmittals or make the required corrections on the forms. Document in the Data Assessment under Contract Problems/Non-Compliance all corrections made by the validator.			
5.6 <u>Chromatography</u>: review the blank raw data - chromatograms, quant. reports and data system printouts. Is the chromatographic performance (baseline stability) for each instrument acceptable?	[✓]		
ACTION: Use professional judgement to determine the effect on the data.			

6.0 Contamination

NOTE: "Water blanks", "distilled water blanks" and "drilling water blanks" are validated like any other sample and are <u>not</u> used to qualify the data. Do not confuse them with the other QC blanks discussed below.

	YES	NO	N/A
6.1 Do any method/reagent, instrument, or cleanup blanks show positive hits for pest/PCBs?		[✓]	
6.2 If any method blanks and/or sulfur clean-up blanks contain "hits" for target compounds, are these hits greater than the CRQL for that			

	YES	NO	N/A
analyte?	___	[ ]	✓
6.3 In any instrument blanks, is the concentration of any target hit > 0.5 times CRQL for that analyte (see SOW, section 12.1.4.4.2, page D-77/PEST)?	___	[ ]	✓

NOTE: Most labs will report 0.5 times CRQLs on the instrument blank Form I instead of the actual method CRQLs. If the lab reported the actual CRQLs, then check if any detected hits are above 0.5 times the CRQLs reported on the Form I.

ACTION: If yes to any of the above questions: note in the Data Assessment under Contract Problems/Non-Compliance if any method or clean-up blanks contain hits > the CRQL, or of instrument blank contained hits > 0.5 times CRQL for that analyte.

6.4 Do any field/rinse blanks have positive pest/PCB results?	___	[✓]	___

ACTION: Prepare a list of the samples associated with each contaminated blank. (Attach a separate sheet)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case or one per day) may be used to qualify data. Do not convert <u>field blank</u> results to account for the difference in soil CRQLs. Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, and/or calibration QC problems.

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks.

NOTE: When applied as directed in the table below, the contaminant concentration in method/instrument/reagent/cleanup blanks is multiplied by the sample dilution factor, where necessary.

If the laboratory has not already done so, the contaminant concentration in <u>soil</u> blanks is multiplied by 33 times the sample dilution factor and corrected for %moisture (fraction of solid) where necessary. 30 grams of sodium sulfate are used to prepare each soil reagent/method blank as instructed on page D-72/PEST, section 12.1.2.3.1. Ask the WAM

YES NO N/A

to contact the laboratory if the soil blanks are not reported in soil units (µg/kg).

Flag sample result with a "U":	Report CRQL & qualify "U":	No qualification is needed:
Sample conc. > CRQL, but ≤ 5× blank.	Sample conc. < CRQL & is ≤ 5× blank value.	Sample conc. > CRQL & > 5× blank value.

NOTE: If gross blank contamination exists, all data in the associated samples should be qualified as "R", unusable.

6.5 Are there field/rinse/equipment blanks associated with every sample? [✓] ___ ___

ACTION: For low level samples, note in the Data Assessment that there is no associated field/rinse/equipment blank. For analytes with high concentrations, use professional judgement to qualify these values and document in the Data Assessment.

<u>Exception</u>: samples taken from a drinking water tap do not have associated field blanks.

7.0 Calibration and GC Performance

7.1 Are the following Gas Chromatograms and Data Systems Printouts for both columns present for all samples, blanks and MS/MSD:

a. Peak resolution check? [✓] ___ ___

b. Performance evaluation mixtures? [✓] ___ ___

c. Aroclor 1016/1260? [✓] ___ ___

d. Aroclors 1221, 1232, 1242, 1248, 1254? [✓] ___ ___

e. Toxaphene? [✓] ___ ___

f. Low points individual mixtures A & B? [✓] ___ ___

g. Med points individual mixtures A & B? [✓] ___ ___

h. High points individual mixtures A & B? [✓] ___ ___

	YES	NO	N/A
i. Instrument blanks?	✓		
j. Were the appropriate GC columns used as specified on pg. D-11/PEST, sections 6.23.3.1 to 6.23.3.7, in the SOW?	✓		
7.2 Do the chromatograms for all Individual Standard Mixtures and PEM analyses display single component analytes at > 10% but < 100% of full scale (see sections 9.3.5.8.1 thru 9.3.5.8.4, pages D-32 & 33/PEST)?	✓		
Have chromatograms for Individual Standard Mixtures and PEM analyses been replotted, showing scaling factor(s), to meet the above requirements when necessary?	✓		

NOTE: All standard chromatograms must clearly display all peaks at > 10% but < 100% of full scale, and replotted if necessary to accommodate peaks not properly scaled in the initial chromatogram(s). Both the initial and replotted chromatograms must be submitted with the data package.

ACTION: If all single component peaks are not clearly displayed on chromatograms for all Individual Standard Mixtures and PEM analyses, notify the WAM to obtain resubmittal of the necessary data.

	YES	NO	N/A
7.3 Are Forms VI PEST 1-7 present and complete for each column-and each analytical sequence?	✓		

ACTION: If no, take action as specified in 3.2 above.

	YES	NO	N/A
7.4 Are there any transcription/ calculation errors between raw data and Forms VI?		✓	

ACTION: If large errors exist, take action as specified in section 3.6 above.

	YES	NO	N/A
7.5 Do all standard retention times, including each pesticide in each level of Individual Mixtures A & B, fall within the windows established during the Initial Calibration (see Form VI PEST-1)?	✓		

ACTION: If no, all samples in the entire analytical sequence are potentially affected. Check to see if the chromatograms contain peaks within an expanded window surrounding the expected

YES NO N/A

retention times. If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present and cannot be identified through pattern recognition or using a revised RT window, qualify all positive results "JN" and non-detects as unusable (R). For aroclors, the RT may be outside the window, but the aroclor may still be identified from its distinctive pattern.

7.6 Are the linearity criteria for the initial analyses of Individual Standards A & B within limits for both columns? (%RSD must be ≤ 25.0 for alpha and delta BHC, ≤ 30.0 for the two surrogates and ≤ 20% for all other analytes.) [✓] ___ ___

NOTE: Contractual requirements allow up to two single component TCL compounds, but not surrogates, on each column to exceed the criteria provided the %RSD is ≤ 30%. (See page D-28/Pest, sec. 9.2.5.7 in the SOW.) Technical criteria, however, are the same for all analytes.

ACTION: If technical criteria were not met, qualify all associated positive results generated during the entire analytical sequence "J" and all non-detects "UJ". When %RSD > 90%, flag all non-detect results for that analyte "R" (unusable).

ACTION: If more than two analytes failed %RSD, document in the Data Assessment Contract Problems/Non-Compliance section and Organic Regional Data Assessment Summary form.

7.7 Is the resolution between each pair of adjacent peaks in the Resolution Check Mixture ≥ 60.0% for both columns? (See Form VI PEST-4.) [✓] ___ ___

ACTION: If no, qualify positive results for compounds that were not adequately resolved "J". Use professional judgement to determine if non-detects which elute in areas affected by co-eluting peaks should be qualified "N" as presumptive evidence of presence or unusable (R).

7.8 Is Form VI PEST-5 present and complete for each Performance Evaluation Mixture (PEM) standard used for <u>both initial and continuing</u> calibrations (see SOW section 3.12.4.4, page B-52)? [✓] ___ ___

	YES	NO	N/A
ACTION: If no, take action as specified in section 3.2 above.			
7.9 For each PEM standard, was the resolution between each pair of adjacent peaks ≥ 90.0% on both columns?	✓		
ACTION: Qualify positive results for compounds not adequately resolved estimated (J). Qualify non-detects based on professional judgement.			
7.10 Have Forms VI PEST-6 & PEST-7 been completed for all midpoint Individual Standards A and B used for initial calibration?	✓		
For each standard, was the resolution between each pair of adjacent peaks ≥ 90.0% on both columns?	✓		
ACTION: If no, qualify positive results for compounds that were not adequately resolved estimated (J). Use professional judgement to determine if non-detects which elute in areas affected by co-eluting peaks should be qualified "N" as presumptive evidence of presence or unusable "R".			
7.11 Is Form VII Pest-1 present and complete for each PEM standard analyzed during the analytical sequence for both columns?	✓		
Was the %Breakdown of DDT and Endrin calculated using the equations given on page D-26/PEST, sec. 9.2.4.8 in the SOW?	✓		
Were all pesticides and surrogates in each PEM standard within the RT windows established during the Initial Calibration?	✓		
ACTION: If no, take action as specified in 3.2 above.			
7.12 Has the individual percent breakdown for DDT/Endrin exceeded 20.0% in any PEM on either column? (See Form VII PEST-1.)			
- for 4,4'-DDT?		✓	
- for Endrin?		✓	
Has the combined percent breakdown for DDT/Endrin			

YES NO N/A

exceeded 30.0% in any PEM on either column (required for all PEM analyses)? ___ ✓ ___

ACTION: 1. If any percent breakdown has failed the QC criteria in either PEM in steps 2 and 17 in the initial calibration sequence (page D-28/Pest, sec. 9.2.5.6 in the SOW), qualify all samples in the entire analytical sequence as described in sections 2.a, b and c below.

2. If any percent breakdown failed the QC criteria in a PEM calibration verification analysis, review data beginning with the samples which followed the last in-control standard until the next acceptable PEM and qualify the data as described below.

a. 4,4'-DDT Breakdown: If DDT breakdown was > 20.0%:

i. Qualify all positive results for DDT with "J". If DDT was not detected, but DDD and DDE are positive, then qualify the quantitation limit for DDT unusable, "R".

ii. Qualify positive results for DDD and/or DDE as presumptively present at an approximated quantity "JN".

b. Endrin Breakdown: If endrin breakdown was > 20.0%:

i. Qualify all positive results for endrin with "J". If endrin was not detected, but endrin aldehyde and endrin ketone are positive, then qualify the quantitation limit for Endrin as unusable "R".

ii. Qualify positive results for endrin ketone and endrin aldehyde as presumptively present at an approximated quantity "JN".

c. Combined Breakdown: If the combined 4,4'-DDT and endrin breakdown is greater than 30.0%:

i. Qualify all positive results for DDT and Endrin with "J". If endrin was not detected, but endrin aldehyde and endrin ketone are positive, then qualify the quantitation limit for endrin as unusable

YES NO N/A

"R". If DDT was not detected, but DDD and DDE are positive, then qualify the quantitation limit for DDT as unusable "R".

ii. Qualify positive results for endrin ketone and endrin aldehyde as presumptively present at an approximated quantity "JN". Qualify positive results for DDD and/or DDE as presumptively present at an approximated quantity "JN".

7.13 Are all percent difference (%D) values for PEM analytes and surrogates on both columns ≥ -25% and ≤ +25.0%? (See Form VII PEST-1.) [✓] ___ ___

ACTION: If no, qualify all associated positive results generated during the analytical sequence "J" and sample quantitation limits "UJ".

NOTE: If the failing PEM is part of the initial calibration, all samples are potentially affected. If the offending standard is a calibration verification, the associated samples are those which followed the last in-control standard until the next passing standard.

7.14 Is Form VII Pest-2 present and complete for each INDA and INDB calibration verification analyzed? [✓] ___ ___

ACTION: If no, take action specified in 3.2 above.

7.15 Are there any transcription/calculation errors between raw data and Form VII Pest-2? ___ [✓] ___

ACTION: If large errors exists, take action as specified in section 3.6 above.

7.16 Do all standard retention times for each INDA and INDB calibration verification fall within the RT windows established during the initial calibration sequence? (See Form VII PEST-2.) [✓] ___ ___

ACTION: If no, beginning with the samples which followed the <u>last in-control standard</u>, check to see if the chromatograms contain peaks within an expanded window surrounding the expected retention times. If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present and cannot be identified through pattern recognition or using a revised

YES NO N/A

RT window, qualify all positive results and non-detects as unusable (R).

7.17 Are all %D values for INDA and INDB calibration verification compounds ≥ -25.0% and ≤ +25.0%? [✓] ___ ___

ACTION: If the %D is outside the ±25.0% range for any compound(s), qualify associated positive results for that compound "J" and non-detects "UJ". The "associated samples" are those which followed the last in-control standard up to the next passing standard containing the analyte(s) in question. If the %D is > 90%, flag all non-detects for that analyte "R" (unusable).

8.0 Analytical Sequence Check (Form VIII-PEST)

8.1 Is Form VIII present and complete for each column and each period of analyses? [✓] ___ ___

ACTION: If no, take action specified in 3.2 above.

8.2 Was the proper analytical sequence followed for each initial calibration and subsequent analyses, and all standards analyzed at the required frequency for each GC/EC instrument used.? (See SOW pages D-23 & D-58/PEST.) [✓] ___ ___

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify accordingly. Generally, the effect is negligible unless the sequence was grossly altered and/or the calibration was out of QC limits.

8.3 Were all samples analyzed within a 12 hour time period beginning with the injection of an instrument blank and bracketed by acceptable analyses of the proper standards? [✓] ___ ___

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify accordingly. Document in the Data Assessment under Contract Problems/Non-Compliance and Organic Regional Data Assessment Summary.

8.4 If a multi-component analyte was detected in a sample, was a matching multi-component standard analyzed within 72 hours of the injection of the

	YES	NO	N/A
sample and within a valid 12 hour sequence?	[✓]	___	___

NOTE: This additional standard is for identification purposes only. Positive results for Aroclors and Toxaphene are quantitated from the initial calibration.

ACTION: If no, document in the Data Assessment under Contract Problems/Non-Compliance and on the Organic Regional Data Assessment Summary form.

9.0 Cleanup Efficiency Verification (Form IX)

	YES	NO	N/A
9.1 Is Form IX PEST-1 present and complete for each lot of Florisil Cartridges used? (Florisil Cleanup is required for all Pest/PCB extracts.)	[✓]	___	___
Are all samples listed on the Pesticide Florisil Cartridge Check Form?	[✓]	___	___

ACTION: If no, take action specified in 3.2 above. If data suggests florisil clean-up was not performed, document in the Data Assessment under the Contract Non-compliance section.

	YES	NO	N/A
9.2 Are percent recoveries (%REC) of the pesticide and surrogate compounds used to check the efficiency of the florisil clean-up procedure within QC limits of 80 - 120%?	[ ]	___	___

ACTION: Qualify only the analyte(s) which failed the recovery criteria as follows:

If %REC is < 80%, qualify positive results "J" and non-detects "UJ".

If any pesticide %REC was zero, flag non-detects "R" for that compound.

Use professional judgement to qualify positive results if any recoveries are > 120%.

NOTE: Sample data should be evaluated for potential interferences if recovery of 2,4,5-trichlorophenol was > 5% in the Florisil Cartridge Performance Check analysis. Document any problems found in the Data Assessment under the Contract Problems/Non-Compliance section.

	YES	NO	N/A
9.3 If GPC Cleanup was performed (mandatory for all soil sample extracts), is Form IX Pest-2 present?	[ ]	___	___
Are all soil samples listed on Form IX Pest-2?	[ ]	___	___

ACTION: If no, take action specified in 3.2 above. If data suggests GPC clean-up was not performed when required, document in the Data Assessment under the Contract Problems/Non-Compliance section and Organic Regional Data Assessment Summary.

Are the %REC values for all pesticides in the GPC calibration solution between 80 - 110%?	[✓]	___	___

ACTION: Qualify only those analytes which failed the recovery criteria as follows:

If %REC are < 80%, qualify positive results "J" and non-detects "UJ".

If any pesticide %REC was zero, flag non-detects "R" for that compound.

Use professional judgement to qualify positive results if any recoveries are > 110%.

NOTE: An Aroclor mixture containing Aroclors 1016 and 1260 is also analyzed during GPC calibration; however, Aroclor data is not listed on Form IX PEST-2. The raw GPC data for Aroclors 1016/1260 must be evaluated for pattern similarity with previously analyzed Aroclor standards.

9.4 The validator should verify that the correct identification scheme for the EPA Blank samples were used. See page B-35, sec. 3.3.7.8 and 3.3.7.9 of the SOW for further information.			
Was the correct identification scheme used for GPC and Florisil blanks?	[✓]	___	___

10.0 Pesticide/PCB Identification

10.1 Is Form X complete for every sample in which a pesticide or PCB was detected?	[✓]	___	___

ACTION: If no, take action specified in 3.2 above.

	YES	NO	N/A
10.2 Are all sample chromatograms properly scaled, attenuated, etc. as required for proper identification of single and multi-component analytes? (Refer to SOW sections 11.3.7.1 thru 11.3.7.8, page D-70/Pest for specific details.)	✓		

NOTE: Proper verification of Pest/PCB results depends on clear, legible presentation of the raw data. Single component pesticides and all peaks chosen for quantitation of multi-component analytes must appear at less than full scale. Toxaphene and PCB patterns must be clearly visible to enable comparison with standard chromatograms.

ACTION: If retention times or apex of peaks cannot be verified, or if multi-component peak patterns cannot be discerned, contact the WAM to obtain rescaled chromatograms from the lab.

	YES	NO	N/A
10.3 Are there any transcription/calculation errors between raw data and Forms 10A and 10B?		✓	

ACTION: If large errors exist, take action as specified in section 3.6 above.

	YES	NO	N/A
10.4 Are RTs of sample compounds within the established RT windows for analyses on both columns?	✓		
Was GC/MS confirmation provided when required (when compound concentration is > 10 ug/mℓ in the final extract)?	✓		

ACTION: Use professional judgement to qualify positive results which were not confirmed by GC/MS analysis. Qualify as unusable (R) all positive results which were not confirmed on a second GC column. Also qualify as unusable (R) all positive results which do not meet RT window criteria, unless associated standard compounds are similarly biased. Use professional judgement to assign an appropriate quantitation limit.

	YES	NO	N/A
10.5 Is the percent difference (%D) calculated for the positive sample results on both columns > 25.0%?	✓		

ACTION: If the reviewer finds neither column shows interference for the positive hits, the data should be flagged as follows:

YES NO N/A

% Difference	Qualifier
0 - 25%	None
25 - 70%	"J"
70 - 100%	"JN"
> 100% (No interference)	"R"
> 100 ~~- 200%~~ (Interference detected)*	"JN"
> 50% (Pesticide value is < CRQL)**	"U"
> 200%	"R"

* When the reported %D is 100 - 200%, but interference is detected on either column, qualify the data with "J".

** When the <u>reported pesticide value</u> is lower than the CRQL, and the %D is > 50%, raise the value to the CRQL and qualify "U", undetected.

NOTE: For Aroclors, if the %D is > 50%, but the pattern of GC peaks on both columns indicates a specific Aroclor is present, qualify that Aroclor "J".

NOTE: The lower of the two values is reported on Form I. If using professional judgement, the reviewer determines that the higher result was more acceptable, the reviewer should replace the value and indicate the reason for the change in the Data Assessment.

10.6 Check chromatograms for false negatives, especially the multiple-peak compounds (Toxaphene and the PCBs). Were there any false negatives? ___ [✓] ___

ACTION: Use professional judgement to decide if the compound should be reported. If the appropriate PCB standards were not analyzed within 72 hrs. of the sample(s) in question, qualify the data unusable "R".

Also note in Data Assessment under Contract Problems/Non-Compliance if the lab failed to analyze Aroclor standards when required.

11.0 Target Compound List (TCL) Analytes

11.1 Are the Organic Analysis Data Sheets (Form I Pest) present with required header information on each page, for each of the following:

a. Samples and/or fractions as appropriate? [✓] ___ ___

b. Matrix spikes and matrix spike duplicates? [✓] ___ ___

YES NO N/A

NOTE: Single-peak pesticide results can be checked for rough agreement between quantitative results obtained on the two GC columns. Use professional judgement to decide whether a large discrepancy indicates the presence of an interfering compound. If an interfering compound is visible on the chromatogram, the lower of the two values should be reported and qualified as presumptively present at an approximated quantity "JN". This necessitates a determination of an estimated concentration on the confirmation column. The narrative should indicate that the presence of interferences has interfered with the evaluation of the second column confirmation.

12.2 Are the CRQLs adjusted to reflect sample dilutions? [✓] ___ ___

ACTION: If large errors exist, take action as specified in section 3.6 above.

ACTION: When a sample is analyzed at more than one dilution, the lowest CRQLs are used (unless a QC exceedance dictates the use of the higher CRQLs from the diluted sample). Replace concentrations which exceed the calibration range in the original analysis by crossing out the "E" value on the original Form I and substituting it with the result from the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form I's that should not be used, including those in the data summary package.

ACTION: Quantitation limits affected by large, off-scale peaks should be qualified as unusable (R). If the interference is on-scale, the reviewer may offer an approximated quantitation limit (UJ) for each affected compound.

NOTE: If a sample required greater than a 10 times dilution, then a 10 times more concentrated analysis must also be performed and submitted (see SOW, page D-60/PEST, section 10.2.3.5).

ACTION: If a more concentrated analysis is unavailable, document in the Contract Problems/Non-Compliance section of the Data Assessment. Use professional judgement to qualify non-detects and positive hits below the CRQL.

	YES	NO	N/A
13.0 Field Duplicates			
13.1 Were any field duplicates submitted?	✓		

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, identification of field duplicates should be confirmed by contacting the sampler.

DPO: [X]ACTION [X]FYI REGION II

ORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO.: 26114 LABORATORY: AATSLA

SDG NO.: BMM33 DATA USER: EPA Region II

SOW: OLM03.2 REVIEW COMPLETION DATE: 7/24/98

NO. OF SAMPLES: ___ WATER 19 SOIL ___ OTHER

REVIEWER: [ ] ESD [X] ESAT [ ] OTHER, CONTRACTOR: _____

QC ITEM	VOA	BNA	PEST	
HOLDING TIMES	Z	X	M	
GC-MS PERFORMANCE	O	O	NA	
INITIAL CALIBRATIONS	X	O	O	
CONTINUING CALIBRATIONS	M	X	O	
FIELD BLANKS(F = N/A)	X	O	O	
LABORATORY BLANKS	O	O	O	
SURROGATES	O	O	O	
MATRIX SPIKE/DUPLICATES	O	O	O	
QC SAMPLES(LCS, PVS)	NA	NA	NA	
INTERNAL STANDARDS	M	X	NA	
COMPOUND IDENTIFICATION	O	O	M	
COMPOUND QUANTITATION	O	O	O	
SYSTEM PERFORMANCE	O	O	O	
OVERALL ASSESSMENT	Z	X	M	

O = No problems or minor problems that do not affect data usability.
X = No more than about 5% of the data points are qualified as either estimated or unusable.
M = More than about 5% of the data points are qualified as either estimated or unusable.
Z = More than about 5% of the data points are qualified as unusable.

DPO ACTION ITEMS:

PEST: samples BMM33DL, BMM34DL, BMM38DL, BMM39DL, BMM40DL, BMM41DL, BMM42DL, BMM54DL were not required since the initial analyses did not contain any target hits exceeding the initial calibration range

AREAS OF CONCERN:

VOA, BNA: Laboratory reports alkanes on Forms 1, instead of separately in the SDG Narrative.

DATA REJECTION SUMMARY

Type of Review: Organic Date: 7/24/98 Case/SDG No.: 26114/BMM33

Site Name: Spectrum Finishing Corp. Lab Name: AATSLA

Reviewer's Initials: [illegible] Nurber of Samples: 19

Analytes Rejected Due to Exceeding Review Criteria For:

No. of Compounds/No. of Fractions (Samples)

	Surrogates	Holding Time	Calibra-tion	Contamina-tion	ID	Internal Standards	Other	Total # of Samples	Total # Rejected/Total # in All Samples
VOA(33)		97				8		19	105 / 627 = 17 %
ACID(14)								18	0 / 252 = 0 %
B/N(50)			1					18	1 / 900 = .1 %
PEST(21)	62	15			27			18	104 / 378 = 28 %
PCB(7)	19	7						18	26 / 126 = 21 %

NOTE: ASTERISK (*) INDICATES ADDITIONAL EXCEEDANCES OF REVIEW CRITERIA.

Analytes Estimated Due to Exceeding Review Criteria For:

No. of Compounds/No. of Fractions (Samples)

	Surrogates	Holding Time	Calibra-tion	Contamina-tion	ID	Internal Standards	Other	Total # of Samples	Total # Estimated/Total # in All Samples
VOA(33)	2	47	44	18		54		19	165 / 627 = 26 %
ACID(14)		14						18	14 / 252 = 6 %
B/N(50)		50	15	12		21		18	98 / 900 = 11 %
PEST(21)		250						18	250 / 378 = 66 %
PCB(7)		119						18	119 / 126 = 94 %

NOTE: ASTERISK (*) INDICATES ADDITIONAL EXCEEDANCES OF REVIEW CRITERIA.

DPO: [ ]ACTION [ ]FYI REGION II

ORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO.: 26114 LABORATORY: AATSLA

SDG NO.: BMM56 DATA USER: EPA Region II

SOW: OLM03.2 REVIEW COMPLETION DATE: 7/24/98

NO. OF SAMPLES: 18 WATER ___ SOIL ___ OTHER

REVIEWER: [ ] ESD [X] ESAT [ ] OTHER, CONTRACTOR: _____

QC ITEM	VOA	BNA	PEST	
HOLDING TIMES	O	O	O	
GC-MS PERFORMANCE	O	O	NA	
INITIAL CALIBRATIONS	O	O	O	
CONTINUING CALIBRATIONS	O	X	O	
FIELD BLANKS(F = N/A)	O	X	O	
LABORATORY BLANKS	O	O	O	
SURROGATES	O	O	O	
MATRIX SPIKE/DUPLICATES	O	O	O	
QC SAMPLES(LCS, PVS)	NA	NA	NA	
INTERNAL STANDARDS	O	O	NA	
COMPOUND IDENTIFICATION	O	O	O	
COMPOUND QUANTITATION	O	O	O	
SYSTEM PERFORMANCE	O	O	O	
OVERALL ASSESSMENT	O	X	O	

O = No problems or minor problems that do not affect data usability.
X = No more than about 5% of the data points are qualified as either estimated or unusable.
M = More than about 5% of the data points are qualified as either estimated or unusable.
Z = More than about 5% of the data points are qualified as unusable.

DPO ACTION ITEMS:

AREAS OF CONCERN:

DATA REJECTION SUMMARY

Type of Review: Organic Date: 7/24/98 Case/SDG No.: 26114/BMM56

Site Name: Spectrum Finishing Corp. Lab Name: AATSLA

Reviewer's Initials: [illegible] Number of Samples: 18

Analytes Rejected Due to Exceeding Review Criteria For:

No. of Compounds/No. of Fractions (Samples)

	Surrogates	Holding Time	Calibra-tion	Contamina-tion	ID	Internal Standards	Other	Total # of Samples	Total # Rejected/Total # in All Samples
VOA(33)								2	0 / 66 = 0 %
ACID(14)								18	0 / 252 = 0 %
B/N(50)								18	0 / 900 = 0 %
PEST(21)								18	0 / 378 = 0 %
PCB(7)								18	0 / 126 = 0 %

NOTE: ASTERISK (*) INDICATES ADDITIONAL EXCEEDANCES OF REVIEW CRITERIA.

Analytes Estimated Due to Exceeding Review Criteria For:

No. of Compounds/No. of Fractions (Samples)

	Surrogates	Holding Time	Calibra-tion	Contamina-tion	ID	Internal Standards	Other	Total # of Samples	Total # Estimated/Total # in All Samples
VOA(33)								2	0 / 66 = 0 %
ACID(14)			10					18	10 / 252 = 4 %
B/N(50)			28	2				18	30 / 900 = 3 %
PEST(21)	42							18	42 / 378 = 11 %
PCB(7)	14							18	14 / 126 = 11 %

NOTE: ASTERISK (*) INDICATES ADDITIONAL EXCEEDANCES OF REVIEW CRITERIA.

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SDG NARRATIVE

Laboratory Name: AATSLA, Baton Rouge

Case No:	26114
SDG No:	BMM33
Contract:	68-D5-0023

Nineteen (19) soil samples were received on April 8th and 9th, 1998 for full Target Compound List organic analyses utilizing USEPA's CLP SOW OLM03.2 protocol. The samples are listed below in Table 1:

TABLE 1

BMM33	BMM42
BMM33 MS	BMM43
BMM33 MSD	BMM44
BMM34	BMM47
BMM35	BMM48
BMM36	BMM49
BMM37	BMM50
BMM38	BMM51
BMM39	BMM52
BMM40	BMM54
BMM41	

Volatile Organic Analysis:
In addition to the above Table 1 analyses, the following were also performed: BMM39RE and BMM42RE.

Samples BMM39 and BMM42 had internal standard area recoveries and/or surrogate spike recoveries outside QC criteria for two analyses each. Matrix effect is suspected. All runs are submitted and therefore billable.

Sample BMM33 and its MS/MSD all had internal standard area recoveries outside QC criteria. Matrix effect is suspected. The MS/MSD analyses also had spike compound recoveries and a % RPD outside advisory QC criteria. No further action was necessary.

Please note samples BMM52, BMM38, BMM35 and BMM54 were all analyzed outside contract holding time. The laboratory apologizes for any inconveniences this might cause.

VHBLKBV (storage blank) was analyzed alongside sample BMM54 as a low level soil. That is to say 5.0 grams of VHBLKBV was weighed out and analyzed using a heated purge. This is done in an effort to treat the storage blank exactly like an SDG sample.

No other significant problems were encountered.

A 75 m x 0.53 mm ID with a 3 µm film DB-624 J&W capillary column was utilized. Also a 30.5 cm Supelco Purge Trap F consisting of 1 cm 3% SP-2100, 15 cm Tenax TA, and 7.7 cm Silica gel 15 was used.

All manual integrations are represented by an "m" flag on the quantitative report. Included in the data package are graphic reports of any manual integrations which have been initialed and dated.

Semi-volatile Organic Analysis:
In addition to the Table 1 analyses above the following were also performed:

BMM37DL	BMM54DL
BMM38DL	BMM41MS
BMM39DL	BMM41MSD
BMM40DL	

SDG NARRATIVE

Laboratory Name: AATSLA, Baton Rouge
Case No: 26114
SDG No: BMM33
Contract: 68-D5-0023

Samples BMM37, BMM38, BMM39, BMM40 and BMM54 were analyzed at an additional or additionally at a dilution due to target compound exceeding the linear range of the initial calibration. All runs are submitted and, therefore, billable.

All samples were extracted using the low level protocol except BMM41 which was extracted utilizing the medium level procedure. Additionally, BMM41 required an MS/MSD analyses which are submitted and, therefore, billable.

Sample BMM33's MS/MSD had spike compound recoveries and % RPDs outside advisory QC criteria. No further action was required.

Sample BMM37 had one base neutral and/or acid extractable surrogate outside recovery criteria for its initial undiluted run but was within control criteria for its diluted analysis. Matrix effect is suspected..

See following pages for Alkanes.

A 30m x 0.25 mm ID with a 0.25 µm film XTI-5 Restek capillary column was utilized.

Manual integrations are represented by an "m" flag on the quantitative report. Included in the data package are graphic reports of any manual integrations which have been initialed and dated.

No significant problems were encountered during the analyses of these samples.

Pesticide Organic Analysis:

Columns used for Pesticide/PCB analysis were:

a. CLPESTICII - Restek Proprietary 0.53 mm ID, 30 m length
b. CLPESTIC - Restek Proprietary 0.53 mm ID, 30 m length

The laboratory regrets that all pesticide extracts were analyzed beyond the 40-day extract holding time on both GC columns.

The following samples required analyses at dilution of 10; accordingly the undiluted analysis is also presented:

BMM33	BMM41
BMM34	BMM42
BMM38	BMM54
BMM40	

Sample BMM37 was analyzed at dilutions of 20 and 2; sample BMM39 was analyzed at dilutions of 100 and 10.

In sample BMM48, recoveries of surrogates TCX and DCB on Column 2 exceeded advisory QC limit. In sample BMM52, both surrogates exceeded limits on Column 1. TCX in sample BMM49 failed low on Column 2. In sample BMM44, TCX failed low on both GC Columns as well as DCB on Column 1. In sample BMM50, TCX failed low on both GC columns. In BMM42 and BMM54, DCB exceeded limits on Column 2. In BMM41, DCB failed low on Column 1 wherein BMM40 TCX failed high on Column 2.

Furthermore, in most of the dilutions, surrogate recoveries failed advisory QC ranges.

000003

SDG NARRATIVE

Laboratory Name:	AATSLA, Baton Rouge
Case No:	26114
SDG No:	BMM33
Contract:	68-D5-0023

In BMM33MSD, surrogate DCB on Column 1 was masked by coeluting interference resulting in no apparent recovery. The RPD for spike compound Aldrin exceeded QC limits.

During package review, two technicalities were noted: (1) Sample BMM36 was found to contain AR1254, but no AR1254 standard was analyzed on either column within 72 hours of the sample analysis and (2) on Column 2 the time between injections of PIBLK 23 and PIBLK24 exceeded 12 hours plus the length of chromatographic run (27 minutes) by 10 minutes.

Where manual integrations were performed, the modifications were dated and initialed.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his designee, as verified by the following signature."

John Troost
GC/MS Supervisor
June 30, 1998
JT:jam

ALKANES

EPA ID:	BMM33
Sample weight (g):	30
%Moisture:	5
Dil Factor:	3
Conv Factor:	105

	Result	Concentration (µg/Kg)
Unknown alkane	15.12	1,592
Branched Alkane	9.2	968
Unknown alkane	10.4	1,095
Branched Alkane	20.75	2,184
Branched Alkane	23.15	2,437
Branched Alkane	29.13	3,066
Unknown alkane	34.39	3,620
Unknown alkane	16.42	1,728
Unknown alkane	24.5	2,579
Unknown alkane	19.24	2,025
Unknown alkane	16.4	1,726
Unknown alkane	25.97	2,734
Unknown alkane	14.18	1,493

EPA ID:	BMM34
Sample weight (g):	30
%Moisture:	8
Dil Factor:	5
Conv Factor:	181

	Result	Concentration (µg/Kg)
Unknown alkane	3.07	556
Unknown alkane	7.85	1,422
Unknown alkane	2.81	509
Unknown alkane	6.1	1,105

EPA ID:	BMM35
Sample weight (g):	30
%Moisture:	10
Dil Factor:	5
Conv Factor:	185

	Result	Concentration (µg/Kg)
Unknown alkane	2.13	394
Unknown alkane	4.68	867
Unknown alkane	9.99	1,850

EPA ID:	BMM37
Sample weight (g):	30
%Moisture:	5
Dil Factor:	1
Conv Factor:	35

	Result	Concentration (µg/Kg)
Branched Alkane	15.24	535
Branched Alkane	11.79	414
Branched Alkane	17.53	615
Branched Alkane	8.59	301
Unknown alkane	8.43	296
Unknown alkane	13.27	466
Branched Alkane	8.04	282
Unknown alkane	25.27	887
Unknown alkane	19.74	693
Unknown alkane	10.88	382
Unknown alkane	15.7	551
Unknown alkane	8.63	303
Unknown alkane	9.53	334
Unknown alkane	13.2	463
Branched Alkane	8.35	293

ALKANES

EPA ID:	BMM37DL
Sample weight (g):	30
Moisture:	5
Dil Factor:	3
Conv Factor:	105

	Result	Concentration (ug/Kg)
Branched Alkane	4.69	494
Branched Alkane	5.91	622
Branched Alkane	3.76	396
Unknown alkane	3.68	387
Unknown alkane	10.97	1,155
Branched Alkane	5.9	621
Branched Alkane	8.34	878
Unknown alkane	4.64	488
Unknown alkane	18.01	1,896
Branched Alkane	5.54	583
Unknown alkane	4.85	511
Unknown alkane	4.99	525
Unknown alkane	7.44	783

EPA ID:	BMM38
Sample weight (g):	30
Moisture:	17
Dil Factor:	5
Conv Factor:	201

	Result	Concentration (ug/Kg)
Branched Alkane	5.4	1,084
Branched Alkane	7.44	1,494
Branched Alkane	6.89	1,384
Branched Alkane	7.44	1,494
Branched Alkane	9.33	1,873
Branched Alkane	10.87	2,183
Unknown alkane	10.76	2,161
Unknown alkane	11.06	2,221
Unknown alkane	8.21	1,649
Branched Alkane	14.54	2,920
Branched Alkane	9.02	1,811
Branched Alkane	13.51	2,713
Branched Alkane	8.89	1,785
Unknown alkane	21	4,217
Unknown alkane	13.55	2,721
Unknown alkane	12.19	2,448
Unknown alkane	16.51	3,315
Branched Alkane	4.95	994
Unknown alkane	8.17	1,641
Unknown alkane	5.76	1,157
Unknown alkane	5.33	1,070
Unknown alkane	4.67	938

EPA ID:	BMM38DL
Sample weight (g):	30
Moisture:	17
Dil Factor:	10
Conv Factor:	402

	Result	Concentration (ug/Kg)
Branched Alkane	2.47	992
Branched Alkane	3.34	1,341
Branched Alkane	3.61	1,450
Branched Alkane	4.28	1,719
Branched Alkane	5.01	2,012
Branched Alkane	6.17	2,478
Unknown alkane	5.51	2,213
Branched Alkane	2.21	888
Unknown alkane	3	1,205
Unknown alkane	3.81	1,530
Unknown alkane	9.23	3,707
Unknown alkane	2.14	859
Unknown alkane	4.57	1,835
Unknown alkane	9.29	3,731
Unknown alkane	4.24	1,703
Unknown alkane	2.55	1,024
Unknown alkane	2.66	1,068

EPA ID:	BMM39
Sample weight (g):	30
Moisture:	20
Dil Factor:	5
Conv Factor:	208

	Result	Concentration (ug/Kg)
Unknown alkane	6.71	1,398
Unknown alkane	10.22	2,129
Unknown alkane	7.24	1,508
Unknown alkane	8.96	1,867
Unknown alkane	5.98	1,246
Unknown alkane	7.2	1,500
Unknown alkane	5.83	1,215
Unknown alkane	6.14	1,279
Unknown alkane	10.57	2,202
Unknown alkane	26.41	5,502
Unknown alkane	16.25	3,385
Unknown alkane	13.11	2,731
Unknown alkane	10.06	2,096
Unknown alkane	10.08	2,100
Unknown alkane	21.65	4,510
Unknown alkane	9.96	2,075
Unknown alkane	10.41	2,169
Unknown alkane	12.57	2,619
Unknown alkane	7.18	1,496
Unknown alkane	9.62	2,004
Unknown alkane	10.75	2,240
Unknown alkane	12.07	2,515
Unknown alkane	17.87	3,723
Unknown alkane	7.02	1,463
Unknown alkane	8.84	1,842

ALKANES

EPA ID:	BMM39DL
Sample weight (g):	30
%Moisture:	20
Dil Factor:	10
Conv Factor:	417

	Result	Concentration (µg/Kg)
Branched Alkane	2.42	1,008
Branched Alkane	3.48	1,450
Branched Alkane	3.52	1,467
Branched Alkane	4.24	1,767
Branched Alkane	4.81	2,004
Branched Alkane	6.43	2,679
Branched Alkane	5.59	2,329
Branched Alkane	2.42	1,008
Unknown alkane	4.91	2,046
Unknown alkane	11.69	4,871
Unknown alkane	3.69	1,538
Unknown alkane	7.44	3,100
Unknown alkane	4.17	1,738
Unknown alkane	8.09	3,371
Branched Alkane	3.33	1,388
Unknown alkane	2.63	1,096
Unknown alkane	2.96	1,233
Unknown alkane	5.09	2,121

EPA ID:	BMM40
Sample weight (g):	30
%Moisture:	30
Dil Factor:	5
Conv Factor:	238

	Result	Concentration (µg/Kg)
Unknown alkane	12.64	3,010
Unknown alkane	7.77	1,850
Unknown alkane	14.07	3,350
Unknown alkane	10.15	2,417
Unknown alkane	23.86	5,681
Unknown alkane	9.63	2,293
Unknown alkane	16.78	3,995
Unknown alkane	20.47	4,874
Unknown alkane	11.11	2,645
Unknown alkane	20.75	4,940
Unknown alkane	21.93	5,221
Unknown alkane	18.3	4,357
Unknown alkane	13.76	3,276
Unknown alkane	18.99	4,521
Unknown alkane	23.08	5,495
Unknown alkane	12.98	3,090

EPA ID:	BMM40DL
Sample weight (g):	30
%Moisture:	30
Dil Factor:	10
Conv Factor:	476

	Result	Concentration (µg/Kg)
Unknown alkane	6.29	2,995
Unknown alkane	5	2,381
Unknown alkane	5.34	2,543
Unknown alkane	10.28	4,895
Unknown alkane	4.76	2,267
Unknown alkane	22.96	10,933
Unknown alkane	6.56	3,124
Unknown alkane	8.78	4,181
Unknown alkane	6.81	3,243
Unknown alkane	7.83	3,729
Unknown alkane	6.17	2,938
Unknown alkane	16.75	7,976
Unknown alkane	8.48	4,038
Unknown alkane	9.13	4,348
Unknown alkane	17.3	8,238
Unknown alkane	9.46	4,505
Unknown alkane	7.85	3,738
Unknown alkane	8.97	4,271
Unknown alkane	6.89	3,281
Unknown alkane	7.19	3,424

EPA ID:	BMM41
Sample weight (g):	1
%Moisture:	36
Dil Factor:	1
Conv Factor:	1563

	Result	Concentration (µg/Kg)
Unknown alkane	5.87	9,172
Unknown alkane	14.74	23,031
Unknown alkane	6.87	10,734
Unknown alkane	15.52	24,250
Unknown alkane	8.72	13,625
Unknown alkane	16.81	26,266
Unknown alkane	21.03	32,859
Unknown alkane	17.74	27,719
Unknown alkane	35.29	55,141
Unknown alkane	25.07	39,172
Unknown alkane	9.54	14,906
Unknown alkane	7.82	12,219
Unknown alkane	11.12	17,375
Unknown alkane	14.12	22,063
Unknown alkane	31.91	49,859
Unknown alkane	21.65	33,828
Unknown alkane	11.14	17,406
Unknown alkane	16.84	26,313
Unknown alkane	23.09	36,078
Unknown alkane	7.24	11,313
Unknown alkane	14.93	23,328
Unknown alkane	7.87	12,297
Unknown alkane	7.96	12,438

ALKANES

EPA ID:	BMM42
Sample weight (g):	30
%Moisture:	29
Dil Factor:	5
Conv Factor:	235

	Result	Concentration (µg/Kg)
Unknown alkane	9.46	2,221
Branched Alkane	22.65	5,317
Branched Alkane	7.05	1,655
Unknown alkane	20.77	4,876
Branched Alkane	6.63	1,556
Branched Alkane	10.69	2,509
Unknown alkane	43.55	10,223
Unknown alkane	19.9	4,671
Unknown alkane	43.88	10,300
Unknown alkane	7.34	1,723
Unknown alkane	46.32	10,873
Unknown alkane	52.53	12,331
Unknown alkane	22.08	5,183
Unknown alkane	7.43	1,744
Unknown alkane	40.94	9,610
Unknown alkane	21.96	5,155
Unknown alkane	35.82	8,408
Unknown alkane	31.09	7,298
Unknown alkane	22.19	5,209
Unknown alkane	15.34	3,601
Unknown alkane	9.34	2,192
Unknown alkane	7.68	1,803
Unknown alkane	9.88	2,319
Unknown alkane	10.69	2,509
Unknown alkane	11.07	2,599
Unknown alkane	9.99	2,345
Unknown alkane	11.98	2,812
Unknown alkane	11.1	2,606
Unknown alkane	8.5	1,995
Unknown alkane	8.25	1,937
Unknown alkane	8.72	2,047

EPA ID:	BMM44
Sample weight (g):	30
%Moisture:	5
Dil Factor:	1
Conv Factor:	35

	Result	Concentration (µg/Kg)
Unknown alkane	2.15	75
Unknown alkane	2.91	102
Unknown alkane	3.43	120
Unknown alkane	3.39	119
Unknown alkane	2.91	102

EPA ID:	BMM51
Sample weight (g):	30
%Moisture:	7
Dil Factor:	5
Conv Factor:	179

	Result	Concentration (µg/Kg)
Branched Alkane	17.58	3,151
Unknown alkane	18.24	3,269
Branched Alkane	14.51	2,600
Branched Alkane	25.99	4,658
Unknown alkane	49.57	8,884
Unknown alkane	59.68	10,695
Branched Alkane	13.28	2,380
Branched Alkane	13.97	2,504
Unknown alkane	98.47	17,647
Unknown alkane	18.47	3,310
Unknown alkane	23.41	4,195
Unknown alkane	25.93	4,647
Branched Alkane	16.14	2,892
Unknown alkane	103.28	18,509
Branched Alkane	10.91	1,955
Unknown alkane	46.38	8,312
Branched Alkane	44.44	7,964
Unknown alkane	20.18	3,616
Unknown alkane	11.07	1,984
Unknown alkane	13.88	2,487
Unknown alkane	47.8	8,566
Unknown alkane	33.7	6,039
Unknown alkane	13.2	2,366
Unknown alkane	11.93	2,138
Branched Alkane	11.33	2,030
Unknown alkane	16.01	2,869
Unknown alkane	38.66	6,928
Unknown alkane	17.89	3,206
Unknown alkane	12.12	2,172
Unknown alkane	11.34	2,032
Unknown alkane	36.03	6,457
Unknown alkane	12.25	2,195
Unknown alkane	23.65	4,238
Unknown alkane	34.83	6,242
Unknown alkane	21.33	3,823
Unknown alkane	13.89	2,489

ALKANES

EPA ID:	BMM52
Sample weight (g):	30
%Moisture:	10
Dil Factor:	1
Conv Factor:	37

	Result	Concentration (µg/Kg)
Unknown alkane		#VALUE!
		#VALUE!
Unknown alkane	2.22	82
Unknown alkane	2.92	108
Unknown alkane	2.01	74
Unknown alkane	2.86	106
Unknown alkane	2.23	83
Unknown alkane	15.42	571
Unknown alkane	7.95	294
Unknown alkane	13.14	487
Unknown alkane	4.7	174

EPA ID:	BMM54DL
Sample weight (g):	30
%Moisture:	26
Dil Factor:	10
Conv Factor:	450

	Result	Concentration (µg/Kg)
Unknown alkane	13.14	5,919
Branched Alkane	30.84	13,892
Branched Alkane	7.97	3,590
Branched Alkane	7.01	3,158
Unknown alkane	18.07	8,140
Unknown alkane	7.9	3,559
Branched Alkane	9.41	4,239
Unknown alkane	33.24	14,973
Unknown alkane	18.27	8,230
Unknown alkane	34.61	15,590
Unknown alkane	5.65	2,545
Unknown alkane	37.35	16,824
Unknown alkane	43.16	19,441
Unknown alkane	19.58	8,820
Unknown alkane	32.99	14,860
Unknown alkane	18.06	8,135
Unknown alkane	28.01	12,617
Unknown alkane	24.9	11,216
Unknown alkane	16.49	7,428
Unknown alkane	12.82	5,775
Unknown alkane	7.78	3,505
Unknown alkane	7.11	3,203
Unknown alkane	6.82	3,072
Unknown alkane	10.12	4,559
Unknown alkane	6.89	3,104
Unknown alkane	6.34	2,856

EPA ID:	BMM54
Sample weight (g):	30
%Moisture:	26
Dil Factor:	5
Conv Factor:	225

	Result	Concentration (µg/Kg)
Unknown alkane	25.03	5,637
Unknown alkane	58.47	13,169
Unknown alkane	8.88	2,000
Unknown alkane	24.44	5,505
Unknown alkane	22.26	5,014
Unknown alkane	73.2	16,486
Unknown alkane	22.75	5,124
Unknown alkane	53.26	11,995
Unknown alkane	12.85	2,894
Unknown alkane	73.84	16,631
Unknown alkane	75.78	17,068
Unknown alkane	34.2	7,703
Unknown alkane	60.28	13,577
Unknown alkane	32.44	7,306
Unknown alkane	9.84	2,216
Unknown alkane	53.12	11,964
Unknown alkane	45.99	10,358
Unknown alkane	10.25	2,309
Unknown alkane	31.22	7,032
Unknown alkane	26.71	6,016
Unknown alkane	15.1	3,401
Unknown alkane	12.11	2,727
Unknown alkane	15.23	3,430
Unknown alkane	12.6	2,838
Unknown alkane	15.99	3,601
Unknown alkane	13.46	3,032
Unknown alkane	9.79	2,205
Unknown alkane	8.79	1,980
Unknown alkane	17.88	4,027

SAMPLE DELIVERY GROUP (SDG)
TRAFFIC REPORT (TR) COVER SHEET

Lab Name: American Analytical & Technical Services, Inc. Contract No.: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: -

Full Sample Analysis Price in Contract:

SDG No./First Sample in SDG: BMM33 Sample Receipt Date: 04/08/98
(Lowest EPA Sample Number in first shipment of samples received under SDG) (MM/DD/YY)

Last Sample in SDG: BMM52 Sample Receipt Date: 04/09/98
(Highest EPA Sample Number in last shipment of samples received under SDG) (MM/DD/YY)

EPA Sample Numbers in the SDG (listed in alphanumeric order):

1.	BMM33	11.	BMM43
2.	BMM34	12.	BMM44
3.	BMM35	13.	BMM47
4.	BMM36	14.	BMM48
5.	BMM37	15.	BMM49
6.	BMM38	16.	BMM50
7.	BMM39	17.	BMM51
8.	BMM40	18.	BMM52
9.	BMM41	19.	BMM54
10.	BMM42	20.	

NOTE: There are a maximum of 20 field samples in an SDG.

Attach Traffic Reports to this form in alphanumeric order
(i.e., the order listed on this form).

Nancy LeBeau
Sample Custodian

April 22, 1998
Date

000036 125

EPA SAMPLE NO.

BMM33

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724701

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 107A14

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 4 Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	11	U
67-64-1	Acetone	70	~~B~~ UJ
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	~~10~~	~~U~~ R
591-78-6	2-Hexanone	~~10~~	~~U~~
127-18-4	Tetrachloroethene	~~10~~	~~U~~
79-34-5	1,1,2,2-Tetrachloroethane	~~10~~	~~U~~
108-88-3	Toluene	21	J
108-90-7	Chlorobenzene	~~10~~	~~U~~ R
100-41-4	Ethylbenzene	~~10~~	~~U~~
100-42-5	Styrene	~~10~~	~~U~~
1330-20-7	Xylene (total)	~~10~~	~~U~~

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EPA SAMPLE NO.

BMM33

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724701

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 107A14

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 4 Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 2234-75-5	Cyclohexane, 1,2,4-trimethyl	12.75	18	JN
2. 3728-55-0	1-Ethyl-3-methylcyclohexane	12.93	150	JN
3.	Unknown	13.32	350	J
4. 15869-94-0	Octane, 3,6-dimethyl-	13.60	270	JN
5.	Unknown alkane	13.77	910	J
6.	Unknown alkane	14.02	280	J
7.	Unknown cyclic alkane	14.30	840	J
8.	Unknown cyclic alkane	14.68	1300	J
9.	Unknown alkane	14.77	990	J
10.	Unknown cyclic alkane	15.00	980	J
11. 2847-72-5	Decane, 4-methyl-	15.17	1600	JN
12.	Unknown cyclic alkane	15.48	1500	J
13.	Unknown alkane	15.77	300	J
14.	Unknown	15.87	330	J
15. 91-17-8	Naphthalene, decahydro-	16.22	270	JN
16.	Unknown	16.45	310	J
17.	Unknown cyclic alkane	16.67	55	J
18.	Unknown	16.73	130	J
19.	Unknown	16.92	56	J
20.	Unknown	17.12	76	J
21.	Unknown	17.28	23	J
22. 488-23-3	Benzene, 1,2,3,4-tetramethyl	17.32	43	JN

JUN 18

000064 127
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

BMM34

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724704

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 107A17

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 8 Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	11	~~U~~
67-64-1	Acetone	11	U J
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U J
78-93-3	2-Butanone	11	U J
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U J
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	87	
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

EPA SAMPLE NO.

BMM34

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724704

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 107A17

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 8 Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	4.98	83	J

000070 129
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

BMM35

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724705

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 148B07

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 6 Date Analyzed: 05/28/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	39	B
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM35

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724705

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 148B07

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 6 Date Analyzed: 05/28/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	17.189	8	J
2. 55429-85-1	Benzeneethanamine, N-[(penta	17.721	~~8~~	~~BJN~~

000077
EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

BMM36

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 108A07

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 2 Date Analyzed: 04/18/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	~~BJ~~
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	UJ
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	UJ
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

000078 132

EPA SAMPLE NO.

BMM36

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 108A07

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 2 Date Analyzed: 04/18/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM37

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726004

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 108A06

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 5 Date Analyzed: 04/18/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	26	U
74-83-9	Bromomethane	26	U
75-01-4	Vinyl Chloride	26	U
75-00-3	Chloroethane	26	U
75-09-2	Methylene Chloride	26	U
67-64-1	Acetone	53	BUJ
75-15-0	Carbon Disulfide	26	U
75-35-4	1,1-Dichloroethene	26	U
75-34-3	1,1-Dichloroethane	26	U
540-59-0	1,2-Dichloroethene (total)	26	U
67-66-3	Chloroform	26	U
107-06-2	1,2-Dichloroethane	26	UJ
78-93-3	2-Butanone	26	U
71-55-6	1,1,1-Trichloroethane	6	J
56-23-5	Carbon Tetrachloride	26	U
75-27-4	Bromodichloromethane	26	U
78-87-5	1,2-Dichloropropane	26	U
10061-01-5	cis-1,3-Dichloropropene	26	U
79-01-6	Trichloroethene	26	U
124-48-1	Dibromochloromethane	26	U
79-00-5	1,1,2-Trichloroethane	26	U
71-43-2	Benzene	26	UJ
10061-02-6	trans-1,3-Dichloropropene	26	U
75-25-2	Bromoform	26	U
108-10-1	4-Methyl-2-Pentanone	26	U
591-78-6	2-Hexanone	26	U
127-18-4	Tetrachloroethene	180	
79-34-5	1,1,2,2-Tetrachloroethane	26	U
108-88-3	Toluene	14	J
108-90-7	Chlorobenzene	26	U
100-41-4	Ethylbenzene	26	U
100-42-5	Styrene	26	U
1330-20-7	Xylene (total)	6	J

000083 134

EPA SAMPLE NO.

BMM37

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726004

Sample wt/vol: 2.0 (g/mL) G Lab File ID: 108A06

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 5 Date Analyzed: 04/18/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 12

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	14.87	17	J
2.	Unknown	15.40	270	J
3.	Unknown	16.22	80	J
4.	Unknown	16.57	14	J
5.	Unknown	16.78	40	J
6.	Unknown	16.89	38	J
7.	Unknown	17.13	67	J
8.	Unknown	17.52	50	J
9.	Unknown	17.74	290	J
10.	Unknown	18.13	69	J
11.	Unknown	19.00	59	J
12.	Unknown	20.77	160	J

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000101

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM38

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724712

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 148B06

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 6 Date Analyzed: 05/28/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	15	B
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

000102

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM38

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724712

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 148B06

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 6 Date Analyzed: 05/28/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 9 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	11.97	~~9~~	~~BJ~~ R
2.	Unknown	15.82	9	J
3.	Unknown	16.20	6	J
4.	Unknown	16.58	8	J
5.	Unknown	17.02	8	J
6.	Unknown	17.23	6	J
7.	Unknown	17.42	7	J
8. 55429-85-1	Benzeneethanamine, N-[(penta	17.72	~~17~~	~~BJN~~ R
9.	Unknown	18.12	8	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000150
EPA SAMPLE NO.

BMM39RE

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724713

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 107A20

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 20 Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	12 ~~10~~	~~BU~~
67-64-1	Acetone	59	~~BUJ~~
75-15-0	Carbon Disulfide	3	J
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	UJ
78-93-3	2-Butanone	14	J
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	UJ
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	12	U

000151

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM39RE

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724713

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 107A20

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 20 Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 25

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 592-27-8	Heptane, 2-methyl-	10.38	800	JN
2. 589-81-1	Heptane, 3-methyl-	10.55	500	JN
3. 111-65-9	Octane	11.07	1600	JN
4. 583-57-3	Cyclohexane, 1,2-dimethyl- (	11.18	340	JN
5. 2207-04-7	Cyclohexane, 1,4-dimethyl- t	11.32	130	JN
6.	Unknown branched alkane	11.52	99	J
7.	Unknown branched alkane	11.63	230	J
8.	Unknown branched alkane	11.78	200	J
9. 1678-91-7	Cyclohexane, ethyl-	11.90	590	JN
10.	Unknown branched alkane	12.28	420	J
11.	Unknown branched alkane	12.47	100	J
12. 111-84-2	Nonane	12.97	420	JN
13. 15869-94-0	Octane, 3,6-dimethyl-	13.62	110	JN
14.	Unknown cyclic alkane	13.77	150	J
15.	Unknown branched alkane	14.28	120	J
16. 124-18-5	Decane	14.77	660	JN
17.	Unknown branched alkane	15.18	390	J
18.	Unknown acid	15.48	120	J
19.	Unknown cyclic alkane	15.58	140	J
20.	Unknown branched alkane	15.87	340	J
21.	Unknown branched alkane	16.02	130	J
22. 1120-21-4	Undecane	16.48	850	JN
23.	Unknown branched alkane	16.75	90	J
24.	Unknown	17.15	120	J
25.	Unknown branched alkane	17.37	180	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM40

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724706

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 107A18

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 30 Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	14	JU
67-64-1	Acetone	67	BUJ
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	UJ
78-93-3	2-Butanone	14	UJ
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	UJ
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	6	J
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (total)	14	U

000182

EPA SAMPLE NO.

BMM40

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724706

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 107A18

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 30 Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	2-Propanol, 2-methyl-	6.70	31	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM41

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724707

Sample wt/vol: 0.5 (g/mL) G Lab File ID: 105A23

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 36 Date Analyzed: 04/15/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	160	U
74-83-9	Bromomethane	160	U
75-01-4	Vinyl Chloride	160	U
75-00-3	Chloroethane	160	U
75-09-2	Methylene Chloride	160 ~~B0~~	~~U~~
67-64-1	Acetone	530	~~B~~ UJ
75-15-0	Carbon Disulfide	160	U
75-35-4	1,1-Dichloroethene	160	U
75-34-3	1,1-Dichloroethane	160	U
540-59-0	1,2-Dichloroethene (total)	160	U
67-66-3	Chloroform	160	U
107-06-2	1,2-Dichloroethane	160	U
78-93-3	2-Butanone	160	U
71-55-6	1,1,1-Trichloroethane	160	U
56-23-5	Carbon Tetrachloride	160	U
75-27-4	Bromodichloromethane	160	U
78-87-5	1,2-Dichloropropane	160	U
10061-01-5	cis-1,3-Dichloropropene	160	U
79-01-6	Trichloroethene	160	U
124-48-1	Dibromochloromethane	160	U
79-00-5	1,1,2-Trichloroethane	160	U
71-43-2	Benzene	160	U
10061-02-6	trans-1,3-Dichloropropene	160	U
75-25-2	Bromoform	160	U
108-10-1	4-Methyl-2-Pentanone	160	U
591-78-6	2-Hexanone	160	U
127-18-4	Tetrachloroethene	160	U
79-34-5	1,1,2,2-Tetrachloroethane	160	U
108-88-3	Toluene	160	U
108-90-7	Chlorobenzene	160	U
100-41-4	Ethylbenzene	160	U
100-42-5	Styrene	160	U
1330-20-7	Xylene (total)	160	U

000189 142

EPA SAMPLE NO.

BMM41

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724707

Sample wt/vol: 0.5 (g/mL) G Lab File ID: 105A23

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 36 Date Analyzed: 04/15/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown alkane	10.92	910	J
2.	Unknown alkane	11.22	1400	J
3.	Unknown branched alkane	12.15	800	J
4.	Unknown branched alkane	12.33	350	J
5. 111-84-2	Nonane	12.83	1200	JN
6.	Unknown branched alkane	13.20	4200	J
7.	Unknown	13.47	420	J
8.	Unknown cyclic alkane	13.63	1200	J
9.	Unknown branched alkane	14.17	1500	J
10. 124-18-5	Decane	14.63	9800	JN
11. 629-50-5	Tridecane	14.92	13000	JN
12.	Unknown acid	15.03	4000	J
13.	Unknown alkane	15.37	1600	J
14. 1678-93-9	Cyclohexane, butyl-	15.45	1400	JN
15. 6975-98-0	Decane, 2-methyl-	15.75	6000	JN
16. 13151-34-3	Decane, 3-methyl-	15.89	2200	JN
17. 135-01-3	Benzene, 1,2-diethyl-	16.12	3700	JN
18. 1120-21-4	Undecane	16.37	27000	JN
19.	Unknown aromatic	16.57	1800	J
20.	Unknown alkane	16.65	3400	J
21.	Unknown aromatic	16.85	3600	J
22.	Unknown	17.02	2100	J

JUN 18

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM42

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724708

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 105A21

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 29 Date Analyzed: 04/15/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	[illegible]	[illegible]
67-64-1	Acetone	100	[illegible]
75-15-0	Carbon Disulfide	8	J
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	30	
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	UJ
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	7	J
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	7	J
100-42-5	Styrene	14	U
1330-20-7	Xylene (total)	21	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM42

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724708

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 105A21

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 29 Date Analyzed: 04/15/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	111-65-9	Octane	10.93	80	JN
2.	111-84-2	Nonane	12.83	70	JN
3.		Unknown branched alkane	13.18	84	J
4.		Unknown	13.62	52	J
5.	124-18-5	Decane	14.6~~3~~4	1000	JN
6.	1120-21-4	Undecane	14.92	85	JN
7.		Unknown branched alkane	15.05	460	J
8.		Unknown alkane	15.3~~7~~9	200	J
9.		Unknown	15.4~~3~~4	150	J
10.		Unknown branched alkane	15.73	900	J
11.		Unknown	15.87	340	J
12.		Unknown	16.12	110	J
13.		Unknown alkane	16.35	3800	J
14.		Unknown alkane	16.63	700	J
15.		Unknown alkane	16.82	290	J
16.		Unknown	17.02	270	J
17.		Unknown	17.2~~3~~4	1100	J
18.		Unknown	17.38	960	J
19.		Unknown	17.50	600	J
20.		Unknown	17.68	96	J

JN 18

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM43

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 107A22

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 3 Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	~~B~~U
67-64-1	Acetone	21	BUJ
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	UJ
78-93-3	2-Butanone	7	~~U~~J
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	UJ
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM44

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726005

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 105A28

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 5 Date Analyzed: 04/15/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	7	J
67-64-1	Acetone	100	BUJ
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	72	
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	8	J
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM44

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726005

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 105A28

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 5 Date Analyzed: 04/15/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	11.68	6	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM47

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726008

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 107A27

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 7 Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	11	U
67-64-1	Acetone	88	~~BUJ~~
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	UJ
78-93-3	2-Butanone	14	J
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	UJ
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11 5	~~BJ~~ U
591-78-6	2-Hexanone	7	J
127-18-4	Tetrachloroethene	3	J
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	2	J
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	15	

000283 150

EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BMM47

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726008

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 107A27

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 7 Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~Ethylbenzene~~	15.2~~3~~4	9	J

Alkylbenzene

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000292 (5)

EPA SAMPLE NO.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

BMM48

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 105A25

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 4 Date Analyzed: 04/15/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	~~10~~ 5	~~U~~ BMB
67-64-1	Acetone	75	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

000293 152
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BMM48

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 105A25

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 4 Date Analyzed: 04/15/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 13 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	9.68	7	J
2.	Unknown alkane	11.07	72	J
3.	Unknown alkane	11.22	110	J
4.	Unknown alkane	13.15	50	J
5.	Unknown	14.22	6	J
6.	Unknown alkane	14.85	140	J
7.	Unknown	15.22	8	J
8.	Unknown	15.43	71	J
9.	Unknown	16.22	21	J
10.	Unknown PAH	16.68	68	J
11.	Naphthalene, -dimethyl-	17.38	330	J
12.	Unknown	17.68	0	J
13.	Naphthalene, -dimethyl-	18.03	0	J

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM49

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 105A24

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 4 Date Analyzed: 04/15/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	69	BUJ
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM49

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 105A24

Level: (low/med) LOW Date Received: 04/09/98

Moisture: not dec. 4 Date Analyzed: 04/15/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 13

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	9.83	52	J
2.	Unknown	11.20	190	J
3.	Unknown	12.02	24	J
4.	Unknown alkane	13.22	150	J
5.	Unknown	14.27	29	J
6.	Tridecane	14.93	430	J
7.	Unknown	15.22	89	J
8.	Unknown	15.52	41	J
9.	Unknown alkane	15.73	38	J
10.	Unknown	16.22	10	J
11.	Unknown alkane	16.32	6	J
12.	Unknown	16.58	49	J
13.	Unknown	17.32	300	J

JUN 18 '98

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM50

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726007

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 108A08

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 6 Date Analyzed: 04/18/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	11	U
67-64-1	Acetone	15	BUJ
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	UJ
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	UJ
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM50

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726007

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 108A08

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 6 Date Analyzed: 04/18/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	17.22	12	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM51

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.. 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726009

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 107A28

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 7 Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	14	U
67-64-1	Acetone	29	BUJ
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	UJ
78-93-3	2-Butanone	11	UJ
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	UJ
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM51

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726009

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 107A28

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 7 Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 7 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	15.23	6	J
2.	Unknown	16.37	33	J
3.	Unknown branched alkane	16.57	21	J
4.	Unknown	16.72	17	J
5.	Unknown	16.98	24	J
6.	Unknown	17.15	31	J
7.	Unknown	17.34	30	J

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM52

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726010

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 118A10

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. 10 Date Analyzed: 04/28/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	UJ
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	10	J
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM54

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724709

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 163B05

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 26 Date Analyzed: 06/12/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	14	U
67-64-1	Acetone	52	J
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
100-42-5	Styrene	14	U
1330-20-7	Xylene (total)	7	J

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EPA SAMPLE NO.

BMM54

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724709

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 163B05

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. 26 Date Analyzed: 06/12/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 27

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown alkane	15.42	530	J
2.	Unknown	15.83	400	J
3.	Unknown	16.52	240	J
4.	Unknown	16.67	180	J
5.	Unknown	17.00	120	J
6.	Unknown alkane	17.15	1400	J
7.	Unknown	17.42	310	J
8.	Unknown alkane	17.63	140	J
9.	Unknown	17.79	96	J
10.	Unknown	17.92	170	J
11.	Unknown	18.05	530	J
12.	Unknown	18.19	520	J
13.	Unknown	18.33	320	J
14.	Unknown	18.99	1100	J
15.	Unknown	19.68	920	J
16.	Unknown	19.87	820	J
17.	Unknown	20.52	140	J
18.	Unknown	20.67	220	J
19.	Unknown	20.88	94	J
20.	Unknown	21.00	270	J
21.	Unknown	21.19	220	J
22.	Unknown	21.47	400	J
23.	Unknown	21.92	100	J
24.	Unknown	22.12	150	J
25.	Unknown	22.77	250	J
26.	Unknown	23.47	120	J
27.	Naphthalene, -dimethyl-	23.89	210	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM33

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724701

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D17

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 5 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 3.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1000	U
111-44-4	bis(2-Chloroethyl)ether	1000	U
95-57-8	2-Chlorophenol	1000	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U
95-48-7	2-Methylphenol	1000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1000	U
106-44-5	4-Methylphenol	1000	U
621-64-7	N-Nitroso-di-n-propylamine	1000	U
67-72-1	Hexachloroethane	1000	U
98-95-3	Nitrobenzene	1000	U
78-59-1	Isophorone	1000	U
88-75-5	2-Nitrophenol	1000	U
105-67-9	2,4-Dimethylphenol	1000	U
111-91-1	bis(2-Chloroethoxy)methane	1000	U
120-83-2	2,4-Dichlorophenol	1000	U
120-82-1	1,2,4-Trichlorobenzene	1000	U
91-20-3	Naphthalene	1000	U
106-47-8	4-Chloroaniline	1000	UJ
87-68-3	Hexachlorobutadiene	1000	U
59-50-7	4-Chloro-3-methylphenol	1000	U
91-57-6	2-Methylnaphthalene	1000	U
77-47-4	Hexachlorocyclopentadiene	1000	U
88-06-2	2,4,6-Trichlorophenol	1000	U
95-95-4	2,4,5-Trichlorophenol	2600	U
91-58-7	2-Chloronaphthalene	1000	U
88-74-4	2-Nitroaniline	2600	U
131-11-3	Dimethylphthalate	1000	U
208-96-8	Acenaphthylene	1000	U
606-20-2	2,6-Dinitrotoluene	1000	U
99-09-2	3-Nitroaniline	2600	U
83-32-9	Acenaphthene	1000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM33

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724701

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D17

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 5 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 3.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	2600	U
100-02-7	4-Nitrophenol	2600	U
132-64-9	Dibenzofuran	1000	U
121-14-2	2,4-Dinitrotoluene	1000	U
84-66-2	Diethylphthalate	1000	U
7005-72-3	4-Chlorophenyl-phenylether	1000	U
86-73-7	Fluorene	1000	U
100-01-6	4-Nitroaniline	2600	U
534-52-1	4,6-Dinitro-2-methylphenol	2600	U
86-30-6	N-Nitrosodiphenylamine (1)	1000	U
101-55-3	4-Bromophenyl-phenylether	1000	U
118-74-1	Hexachlorobenzene	1000	U
87-86-5	Pentachlorophenol	2600	U
85-01-8	Phenanthrene	170	J
120-12-7	Anthracene	1000	U
86-74-8	Carbazole	1000	U
84-74-2	Di-n-butylphthalate	1000	~~B~~ U
206-44-0	Fluoranthene	900	J
129-00-0	Pyrene	1600	
85-68-7	Butylbenzylphthalate	1000	U
91-94-1	3,3'-Dichlorobenzidine	1000	U
56-55-3	Benzo(a)anthracene	360	J
218-01-9	Chrysene	380	J
117-81-7	bis(2-Ethylhexyl)phthalate	1000	J
117-84-0	Di-n-octylphthalate	1000	U J
205-99-2	Benzo(b)fluoranthene	1000	U
207-08-9	Benzo(k)fluoranthene	1000	U
50-32-8	Benzo(a)pyrene	1000	U
193-39-5	Indeno(1,2,3-cd)pyrene	1000	U
53-70-3	Dibenz(a,h)anthracene	1000	U
191-24-2	Benzo(g,h,i)perylene	1000	U

(1) - Cannot be separated from Diphenylamine

000656 165

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM33

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724701

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D17

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 5 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 3.0

GPC Cleanup: (Y/N) Y pH: 6.0

Number TICs found: 30

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	8.08	1900	J
2.		Unknown	9.62	1200	J
3.	613-12-7	Anthracene, 2-methyl-	12.78	2400	JN
4.	2531-84-2	Phenanthrene, 2-methyl-	12.97	1900	JN
5.	612-94-2	Naphthalene, 2-phenyl-	13.27	2500	JN
6.		Unknown	13.47	2300	J
7.	1576-69-8	Phenanthrene, 2,7-dimethyl-	13.58	1300	JN
8.		Unknown	14.07	1800	J
9.		Unknown	14.70	1300	J
10.		Unknown	14.82	3700	J
11.		Unknown	14.92	1800	J
12.		Unknown	14.98	1200	J
13.		Unknown	16.65	1400	J
14.		Unknown	17.12	1300	J
15.		Unknown	17.88	2100	J
16.		Unknown	17.97	1800	J
17.		Unknown	18.08	2900	J
18.		Unknown	18.32	5100	J
19.		Unknown	18.50	2400	J
20.		Unknown	18.68	2500	J
21.		Unknown	18.77	4600	J
22.		Unknown	18.83	1300	J
23.		Unknown	18.93	3000	J
24.		Unknown	19.07	14000	J
25.		Unknown	19.43	7600	J
26.		Unknown	19.62	1300	J
27.		Unknown	19.67	1600	J
28.		Unknown	19.88	2400	J
29.		Unknown	19.95	1600	J
30.		Unknown	20.27	1700	J

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM34

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724704

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D18

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 8 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1800	U
111-44-4	bis(2-Chloroethyl)ether	1800	U
95-57-8	2-Chlorophenol	1800	U
541-73-1	1,3-Dichlorobenzene	1800	U
106-46-7	1,4-Dichlorobenzene	1800	U
95-50-1	1,2-Dichlorobenzene	1800	U
95-48-7	2-Methylphenol	1800	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1800	U
106-44-5	4-Methylphenol	1800	U
621-64-7	N-Nitroso-di-n-propylamine	1800	U
67-72-1	Hexachloroethane	1800	U
98-95-3	Nitrobenzene	1800	U
78-59-1	Isophorone	1800	U
88-75-5	2-Nitrophenol	1800	U
105-67-9	2,4-Dimethylphenol	1800	U
111-91-1	bis(2-Chloroethoxy)methane	1800	U
120-83-2	2,4-Dichlorophenol	1800	U
120-82-1	1,2,4-Trichlorobenzene	1800	U
91-20-3	Naphthalene	1800	U
106-47-8	4-Chloroaniline	1800	U
87-68-3	Hexachlorobutadiene	1800	U
59-50-7	4-Chloro-3-methylphenol	1800	U
91-57-6	2-Methylnaphthalene	1800	U
77-47-4	Hexachlorocyclopentadiene	1800	U
88-06-2	2,4,6-Trichlorophenol	1800	U
95-95-4	2,4,5-Trichlorophenol	4500	U
91-58-7	2-Chloronaphthalene	1800	U
88-74-4	2-Nitroaniline	4500	U
131-11-3	Dimethylphthalate	1800	U
208-96-8	Acenaphthylene	1800	U
606-20-2	2,6-Dinitrotoluene	1800	U
99-09-2	3-Nitroaniline	4500	U
83-32-9	Acenaphthene	1800	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM34

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724704

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D18

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 8 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4500	U
100-02-7	4-Nitrophenol	4500	U
132-64-9	Dibenzofuran	1800	U
121-14-2	2,4-Dinitrotoluene	1800	U
84-66-2	Diethylphthalate	1800	U
7005-72-3	4-Chlorophenyl-phenylether	1800	U
86-73-7	Fluorene	1800	U
100-01-6	4-Nitroaniline	4500	U
534-52-1	4,6-Dinitro-2-methylphenol	4500	U
86-30-6	N-Nitrosodiphenylamine (1)	1800	U
101-55-3	4-Bromophenyl-phenylether	1800	U
118-74-1	Hexachlorobenzene	1800	U
87-86-5	Pentachlorophenol	4500	U
85-01-8	Phenanthrene	1800	U
120-12-7	Anthracene	1800	U
86-74-8	Carbazole	1800	U
84-74-2	Di-n-butylphthalate	2400	BLA
206-44-0	Fluoranthene	240	J
129-00-0	Pyrene	220	J
85-68-7	Butylbenzylphthalate	1300	J
91-94-1	3,3'-Dichlorobenzidine	1800	U
56-55-3	Benzo(a)anthracene	1800	U
218-01-9	Chrysene	1800	U
117-81-7	bis(2-Ethylhexyl)phthalate	4500	
117-84-0	Di-n-octylphthalate	1800	U
205-99-2	Benzo(b)fluoranthene	1800	U
207-08-9	Benzo(k)fluoranthene	1800	U
50-32-8	Benzo(a)pyrene	1800	U
193-39-5	Indeno(1,2,3-cd)pyrene	1800	U
53-70-3	Dibenz(a,h)anthracene	1800	U
191-24-2	Benzo(g,h,i)perylene	1800	U

(1) - Cannot be separated from Diphenylamine

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EPA SAMPLE NO.

BMM34

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724704

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D18

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 8 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.5

Number TICs found: 19

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Aldol condensation	5.71	~~540~~	~~AU~~ R
2.	Unknown	12.94	390	J
3.	Unknown	17.38	410	J
4.	Unknown	17.65	540	J
5.	Unknown	17.74	730	J
6.	Unknown	17.82	660	J
7.	Unknown	17.91	4000	J
8.	Unknown	~~18.00~~ 17.99	390	J
9.	Unknown	18.17	620	J
10.	Unknown	18.23	410	J
11.	Unknown	18.54	540	J
12.	Unknown	18.63	630	J
13.	Unknown	18.85	480	J
14.	Unknown	18.93	1400	J
15.	Unknown	19.30	630	J
16.	Unknown	20.13	480	J
17.	Unknown	20.27	450	J
18.	Unknown	20.40	480	J
19.	Unknown	20.93	820	J

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM35

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724705

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D19

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 10 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1800	U
111-44-4	bis(2-Chloroethyl)ether	1800	U
95-57-8	2-Chlorophenol	1800	U
541-73-1	1,3-Dichlorobenzene	1800	U
106-46-7	1,4-Dichlorobenzene	1800	U
95-50-1	1,2-Dichlorobenzene	1800	U
95-48-7	2-Methylphenol	1800	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1800	U
106-44-5	4-Methylphenol	1800	U
621-64-7	N-Nitroso-di-n-propylamine	1800	U
67-72-1	Hexachloroethane	1800	U
98-95-3	Nitrobenzene	1800	U
78-59-1	Isophorone	1800	U
88-75-5	2-Nitrophenol	1800	U
105-67-9	2,4-Dimethylphenol	1800	U
111-91-1	bis(2-Chloroethoxy)methane	1800	U
120-83-2	2,4-Dichlorophenol	1800	U
120-82-1	1,2,4-Trichlorobenzene	1800	U
91-20-3	Naphthalene	1800	U
106-47-8	4-Chloroaniline	1800	UJ
87-68-3	Hexachlorobutadiene	1800	U
59-50-7	4-Chloro-3-methylphenol	1800	U
91-57-6	2-Methylnaphthalene	1800	U
77-47-4	Hexachlorocyclopentadiene	1800	U
88-06-2	2,4,6-Trichlorophenol	1800	U
95-95-4	2,4,5-Trichlorophenol	4600	U
91-58-7	2-Chloronaphthalene	1800	U
88-74-4	2-Nitroaniline	4600	U
131-11-3	Dimethylphthalate	1800	U
208-96-8	Acenaphthylene	1800	U
606-20-2	2,6-Dinitrotoluene	1800	U
99-09-2	3-Nitroaniline	4600	U
83-32-9	Acenaphthene	1800	U

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM35

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724705

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D19

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 10 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4600	U
100-02-7	4-Nitrophenol	4600	U
132-64-9	Dibenzofuran	1800	U
121-14-2	2,4-Dinitrotoluene	1800	U
84-66-2	Diethylphthalate	1800	U
7005-72-3	4-Chlorophenyl-phenylether	1800	U
86-73-7	Fluorene	1800	U
100-01-6	4-Nitroaniline	4600	U
534-52-1	4,6-Dinitro-2-methylphenol	4600	U
86-30-6	N-Nitrosodiphenylamine (1)	1800	U
101-55-3	4-Bromophenyl-phenylether	1800	U
118-74-1	Hexachlorobenzene	1800	U
87-86-5	Pentachlorophenol	4600	U
85-01-8	Phenanthrene	1800	U
120-12-7	Anthracene	1800	U
86-74-8	Carbazole	1800	U
84-74-2	Di-n-butylphthalate	1800 420	~~BJ~~ U
206-44-0	Fluoranthene	200	J
129-00-0	Pyrene	1800	U
85-68-7	Butylbenzylphthalate	830	J
91-94-1	3,3'-Dichlorobenzidine	1800	U
56-55-3	Benzo(a)anthracene	1800	U
218-01-9	Chrysene	1800	U
117-81-7	bis(2-Ethylhexyl)phthalate	2800	
117-84-0	Di-n-octylphthalate	1800	U
205-99-2	Benzo(b)fluoranthene	1800	U
207-08-9	Benzo(k)fluoranthene	1800	U
50-32-8	Benzo(a)pyrene	1800	U
193-39-5	Indeno(1,2,3-cd)pyrene	1800	U
53-70-3	Dibenz(a,h)anthracene	1800	U
191-24-2	Benzo(g,h,i)perylene	1800	U

(1) - Cannot be separated from Diphenylamine

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EPA SAMPLE NO.

BMM35

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724705

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D19

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 10 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.5

Number TICs found: 26

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Aldol condensation	5.72	~~500~~	~~NJ~~ R
2.	Unknown	16.47	420	J
3.	Unknown	17.43	590	J
4.	Unknown	17.72	400	J
5.	Unknown	17.85	960	J
6.	Unknown	17.97	930	J
7.	Unknown	18.00	780	J
8.	Unknown	18.05	850	J
9.	Unknown	18.10	750	J
10.	Unknown	18.15	1100	J
11.	Unknown	18.19	1500	J
12.	Unknown	18.25	2000	J
13.	Unknown	18.39	2000	J
14.	Unknown	18.47	2300	J
15.	Unknown	18.58	2600	J
16.	Unknown	18.65	2800	J
17.	Unknown	18.72	1500	J
18.	Unknown	18.87	3300	J
19.	Unknown	18.97	2400	J
20.	Unknown	~~19.00~~ 18.99	1900	J
21.	Unknown	19.07	2200	J
22.	Unknown	19.17	980	J
23.	Unknown	19.22	1200	J
24.	Unknown	19.27	660	J
25.	Unknown	19.33	1900	J
26.	Unknown	19.54	370	J

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM36

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726006

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D13

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 2 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	UJ
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	850	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	850	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	850	U
83-32-9	Acenaphthene	340	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM36

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726006

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D13

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 2 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	850	U
100-02-7	4-Nitrophenol	850	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	850	U
534-52-1	4,6-Dinitro-2-methylphenol	850	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	850	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340 36	~~BJ~~ U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	67	J
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenz(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

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EPA SAMPLE NO.

BMM36

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726006

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D13

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 2 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.9

Number TICs found: 1

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Aldol condensation	5.70	~~170~~ AJR	

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM37

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726004

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D11

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 5 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	bis(2-Chloroethyl)ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	2,2'-oxybis(1-Chloropropane)	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
111-91-1	bis(2-Chloroethoxy)methane	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	UJ
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	870	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	870	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	870	U
83-32-9	Acenaphthene	350	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM37

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726004

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D11

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 5 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	870	U
100-02-7	4-Nitrophenol	870	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	870	U
534-52-1	4,6-Dinitro-2-methylphenol	870	U
86-30-6	N-Nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	870	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	61	J
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350 ~~96~~	~~B~~ U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3'-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	bis(2-Ethylhexyl)phthalate	6700* ~~5100~~	~~B~~
117-84-0	Di-n-octylphthalate	200	J
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenz(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

(1) - Cannot be separated from Diphenylamine

*Result from BMM37DL

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM37

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2726004

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D11

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 5 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5

Number TICs found: 30

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Aldol condensation	5.82	~~320~~	~~AJ~~ R
2.	Unknown	8.35	370	J
3.	Unknown	9.37	480	J
4.	Unknown	9.63	400	J
5.	Unknown	10.34	600	J
6.	Unknown	11.78	580	J
7.	Unknown	12.18	350	J
8.	Unknown	12.82	440	J
9.	Unknown	14.22	380	J
10.	Unknown halogenated	14.33	450	J
11.	Unknown halogenated	14.69	550	J
12.	Unknown halogenated	14.72	450	J
13.	Unknown halogenated	14.83	850	J
14.	Unknown halogenated	15.67	450	J
15.	Unknown halogenated	15.72	550	J
16.	Unknown halogenated	15.78	740	J
17.	Unknown halogenated	16.02	520	J
18.	Unknown halogenated	16.12	470	J
19.	Unknown	16.57	480	J
20.	Unknown	16.67	590	J
21.	Unknown	17.42	330	J
22.	Unknown	17.52	360	J
23.	Unknown	17.63	400	J
24.	Unknown	17.78	540	J
25.	Unknown	17.98	370	J
26.	Unknown	18.03	410	J
27.	Unknown	18.22	670	J
28.	Unknown	18.67	500	J
29.	Unknown	18.98	1700	J
30.	Unknown	19.35	900	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM38

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724712

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D23

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 17 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2000	U
111-44-4	bis(2-Chloroethyl)ether	2000	U
95-57-8	2-Chlorophenol	2000	U
541-73-1	1,3-Dichlorobenzene	2000	U
106-46-7	1,4-Dichlorobenzene	2000	U
95-50-1	1,2-Dichlorobenzene	2000	U
95-48-7	2-Methylphenol	2000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	2000	U
106-44-5	4-Methylphenol	2000	U
621-64-7	N-Nitroso-di-n-propylamine	2000	U
67-72-1	Hexachloroethane	2000	U
98-95-3	Nitrobenzene	2000	U
78-59-1	Isophorone	2000	U
88-75-5	2-Nitrophenol	2000	U
105-67-9	2,4-Dimethylphenol	2000	U
111-91-1	bis(2-Chloroethoxy)methane	2000	U
120-83-2	2,4-Dichlorophenol	2000	U
120-82-1	1,2,4-Trichlorobenzene	2000	U
91-20-3	Naphthalene	2000	U
106-47-8	4-Chloroaniline	2000	U 5
87-68-3	Hexachlorobutadiene	2000	U
59-50-7	4-Chloro-3-methylphenol	2000	U
91-57-6	2-Methylnaphthalene	2000	U
77-47-4	Hexachlorocyclopentadiene	2000	U
88-06-2	2,4,6-Trichlorophenol	2000	U
95-95-4	2,4,5-Trichlorophenol	5000	U
91-58-7	2-Chloronaphthalene	2000	U
88-74-4	2-Nitroaniline	5000	U
131-11-3	Dimethylphthalate	2000	U
208-96-8	Acenaphthylene	2000	U
606-20-2	2,6-Dinitrotoluene	2000	U
99-09-2	3-Nitroaniline	5000	U
83-32-9	Acenaphthene	2000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM38

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724712

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D23

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 17 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	5000	U
100-02-7	4-Nitrophenol	5000	U
132-64-9	Dibenzofuran	2000	U
121-14-2	2,4-Dinitrotoluene	2000	U
84-66-2	Diethylphthalate	2000	U
7005-72-3	4-Chlorophenyl-phenylether	2000	U
86-73-7	Fluorene	2000	U
100-01-6	4-Nitroaniline	5000	U
534-52-1	4,6-Dinitro-2-methylphenol	5000	U
86-30-6	N-Nitrosodiphenylamine (1)	2000	U
101-55-3	4-Bromophenyl-phenylether	2000	U
118-74-1	Hexachlorobenzene	2000	U
87-86-5	Pentachlorophenol	5000	U
85-01-8	Phenanthrene	2000	U
120-12-7	Anthracene	2000	U
86-74-8	Carbazole	2000	U
84-74-2	Di-n-butylphthalate	18000* ~~21000~~	~~BE~~
206-44-0	Fluoranthene	2000	U
129-00-0	Pyrene	310	J
85-63-7	Butylbenzylphthalate	1100	J
91-94-1	3,3'-Dichlorobenzidine	2000	U
56-55-3	Benzo(a)anthracene	2000	U
218-01-9	Chrysene	2000	U
117-81-7	bis(2-Ethylhexyl)phthalate	8000	
117-84-0	Di-n-octylphthalate	360	J
205-99-2	Benzo(b)fluoranthene	2000	U
207-08-9	Benzo(k)fluoranthene	2000	U
50-32-8	Benzo(a)pyrene	2000	U
193-39-5	Indeno(1,2,3-cd)pyrene	2000	U
53-70-3	Dibenz(a,h)anthracene	2000	U
191-24-2	Benzo(g,h,i)perylene	2000	U

(1) - Cannot be separated from Diphenylamine

* Result from BMM38DL

000891 180

EPA SAMPLE NO.

BMM38

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724712

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D23

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 17 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.5

Number TICs found: 28

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	14.01	3000	J
2.	Unknown	14.74	940	J
3.	Unknown	15.18	3200	J
4.	Unknown	15.30	2300	J
5.	Unknown	15.52	2200	J
6.	Unknown	15.93	1000	J
7.	Unknown	16.09	2300	J
8.	Unknown	16.42	1400	J
9.	Unknown	16.61	1600	J
10.	Unknown	~~17.00~~ 16.99	1900	J
11.	Unknown	17.38	1200	J
12.	Unknown	17.42	1100	J
13.	Unknown	17.67	1100	J
14.	Unknown	17.74	1100	J
15.	Unknown	17.79	2800	J
16.	Unknown	17.87	940	J
17.	Unknown	17.98	2700	J
18.	Unknown	18.17	890	J
19.	Unknown	18.22	4100	J
20.	Unknown	18.57	1600	J
21.	Unknown	18.67	3200	J
22.	Unknown	18.87	1100	J
23.	Unknown	18.97	2000	J
24.	Unknown	19.00	2000	J
25.	Unknown	19.18	1400	J
26.	Unknown	19.37	2500	J
27.	Unknown	19.87	1200	J
28.	Unknown	20.07	1900	J

MAY 26 1998

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM39

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724713

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D24

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 20 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2100	U
111-44-4	bis(2-Chloroethyl)ether	2100	U
95-57-8	2-Chlorophenol	2100	U
541-73-1	1,3-Dichlorobenzene	2100	U
106-46-7	1,4-Dichlorobenzene	2100	U
95-50-1	1,2-Dichlorobenzene	2100	U
95-48-7	2-Methylphenol	2100	U
108-60-1	2,2'-oxybis(1-Chloropropane)	2100	U
106-44-5	4-Methylphenol	2100	U
621-64-7	N-Nitroso-di-n-propylamine	2100	U
67-72-1	Hexachloroethane	2100	U
98-95-3	Nitrobenzene	2100	U
78-59-1	Isophorone	2100	U
88-75-5	2-Nitrophenol	2100	U
105-67-9	2,4-Dimethylphenol	2100	U
111-91-1	bis(2-Chloroethoxy)methane	2100	U
120-83-2	2,4-Dichlorophenol	2100	U
120-82-1	1,2,4-Trichlorobenzene	2100	U
91-20-3	Naphthalene	2100	U
106-47-8	4-Chloroaniline	2100	U
87-68-3	Hexachlorobutadiene	2100	U
59-50-7	4-Chloro-3-methylphenol	2100	U
91-57-6	2-Methylnaphthalene	2100	U
77-47-4	Hexachlorocyclopentadiene	2100	U
88-06-2	2,4,6-Trichlorophenol	2100	U
95-95-4	2,4,5-Trichlorophenol	5200	U
91-58-7	2-Chloronaphthalene	2100	U
88-74-4	2-Nitroaniline	5200	U
131-11-3	Dimethylphthalate	2100	U
208-96-8	Acenaphthylene	2100	U
606-20-2	2,6-Dinitrotoluene	2100	U
99-09-2	3-Nitroaniline	5200	U
83-32-9	Acenaphthene	2100	U

001007 182

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM39

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724713

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D24

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 20 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	5200	U
100-02-7	4-Nitrophenol	5200	U
132-64-9	Dibenzofuran	2100	U
121-14-2	2,4-Dinitrotoluene	2100	U
84-66-2	Diethylphthalate	2100	U
7005-72-3	4-Chlorophenyl-phenylether	2100	U
86-73-7	Fluorene	2100	U
100-01-6	4-Nitroaniline	5200	U
534-52-1	4,6-Dinitro-2-methylphenol	5200	U
86-30-6	N-Nitrosodiphenylamine (1)	2100	U
101-55-3	4-Bromophenyl-phenylether	2100	U
118-74-1	Hexachlorobenzene	2100	U
87-86-5	Pentachlorophenol	5200	U
85-01-8	Phenanthrene	280	J
120-12-7	Anthracene	2100	U
86-74-8	Carbazole	2100	U
84-74-2	Di-n-butylphthalate	2100 ~~820~~	~~B~~ U
206-44-0	Fluoranthene	240	J
129-00-0	Pyrene	370	J
85-68-7	Butylbenzylphthalate	2000	J
91-94-1	3,3'-Dichlorobenzidine	2100	U
56-55-3	Benzo(a)anthracene	2100	U
218-01-9	Chrysene	2100	U
117-81-7	bis(2-Ethylhexyl)phthalate	79000* ~~22000~~	E
117-84-0	Di-n-octylphthalate	630	J
205-99-2	Benzo(b)fluoranthene	2100	U J
207-08-9	Benzo(k)fluoranthene	2100	U
50-32-8	Benzo(a)pyrene	2100	U
193-39-5	Indeno(1,2,3-cd)pyrene	2100	U
53-70-3	Dibenz(a,h)anthracene	2100	U
191-24-2	Benzo(g,h,i)perylene	2100	U

(1) - Cannot be separated from Diphenylamine

*Result from BMM39DL.

001008 183

EPA SAMPLE NO.

BMM39

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724713

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D24

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 20 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.3

Number TICs found: 25

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 832-64-4	Phenanthrene, 4-methyl-	12.98	1400	JN
2.	Unknown	13.50	2000	J
3.	Unknown	14.02	6600	J
4. 56558-17-9	1,1'-Biphenyl, 2,3',4,4',6-P	14.18	1300	JN
5.	Unknown halogenated	14.43	1400	J
6.	Unknown	14.48	1600	J
7. 32598-14-4	1,1'-Biphenyl, 2,3,3',4,4'-p	14.62	1600	JN
8.	Unknown	14.78	2200	J
9.	Unknown	14.82	1500	J
10. 32598-14-4	1,1'-Biphenyl, 2,3,3',4,4'-p	14.98	2900	JN
11.	Unknown	15.20	2200	J
12. 74472-35-8	1,1'-Biphenyl, 2,3,3',4,6-Pe	15.28	3500	JN
13. 38380-08-4	1,1'-Biphenyl, 2,3,3',4,4',5	15.55	2500	JN
14.	Unknown	15.78	1600	J
15.	Unknown	15.80	2700	J
16.	Unknown	15.88	1500	J
17.	Unknown	17.80	2800	J
18. 85-70-1	Phthalic acid, butyl ester,	18.17	1200	JN
19.	Unknown	18.21	5300	J
20.	Unknown	18.48	2100	J
21.	Unknown	18.58	2000	J
22.	Unknown	18.97	2900	J
23.	Unknown	19.01	3700	J
24.	Unknown	19.18	2400	J
25.	Unknown	19.35	2600	J

MAY 26 1998

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM40

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724706

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D20

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 30 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2400	U
111-44-4	bis(2-Chloroethyl)ether	2400	U
95-57-8	2-Chlorophenol	2400	U
541-73-1	1,3-Dichlorobenzene	2400	U
106-46-7	1,4-Dichlorobenzene	2400	U
95-50-1	1,2-Dichlorobenzene	2400	U
95-48-7	2-Methylphenol	2400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	2400	U
106-44-5	4-Methylphenol	2400	U
621-64-7	N-Nitroso-di-n-propylamine	2400	U
67-72-1	Hexachloroethane	2400	U
98-95-3	Nitrobenzene	2400	U
78-59-1	Isophorone	2400	U
88-75-5	2-Nitrophenol	2400	U
105-67-9	2,4-Dimethylphenol	2400	U
111-91-1	bis(2-Chloroethoxy)methane	2400	U
120-83-2	2,4-Dichlorophenol	2400	U
120-82-1	1,2,4-Trichlorobenzene	2400	U
91-20-3	Naphthalene	2400	U
106-47-8	4-Chloroaniline	2400	U
87-68-3	Hexachlorobutadiene	2400	U
59-50-7	4-Chloro-3-methylphenol	2400	U
91-57-6	2-Methylnaphthalene	2400	U
77-47-4	Hexachlorocyclopentadiene	2400	U
88-06-2	2,4,6-Trichlorophenol	2400	U
95-95-4	2,4,5-Trichlorophenol	5900	U
91-58-7	2-Chloronaphthalene	2400	U
88-74-4	2-Nitroaniline	5900	U
131-11-3	Dimethylphthalate	440	J
208-96-8	Acenaphthylene	2400	U
606-20-2	2,6-Dinitrotoluene	2400	U
99-09-2	3-Nitroaniline	5900	U
83-32-9	Acenaphthene	2400	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM40

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724706

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D20

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 30 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	5900	U
100-02-7	4-Nitrophenol	5900	U
132-64-9	Dibenzofuran	2400	U
121-14-2	2,4-Dinitrotoluene	2400	U
84-66-2	Diethylphthalate	2400	U
7005-72-3	4-Chlorophenyl-phenylether	2400	U
86-73-7	Fluorene	2400	U
100-01-6	4-Nitroaniline	5900	U
534-52-1	4,6-Dinitro-2-methylphenol	5900	U
86-30-6	N-Nitrosodiphenylamine (1)	2400	U
101-55-3	4-Bromophenyl-phenylether	2400	U
118-74-1	Hexachlorobenzene	2400	U
87-86-5	Pentachlorophenol	5900	U
85-01-8	Phenanthrene	420	J
120-12-7	Anthracene	2400	U
86-74-8	Carbazole	2400	U
84-74-2	Di-n-butylphthalate	2400 ~~730~~	~~BJ~~ U
206-44-0	Fluoranthene	900	J
129-00-0	Pyrene	1100	J
85-68-7	Butylbenzylphthalate	17000	
91-94-1	3,3'-Dichlorobenzidine	2400	U
56-55-3	Benzo(a)anthracene	2400	U
218-01-9	Chrysene	280	J
117-81-7	bis(2-Ethylhexyl)phthalate	35000 * ~~27000~~	~~B~~
117-84-0	Di-n-octylphthalate	1500	J
205-99-2	Benzo(b)fluoranthene	380	J
207-08-9	Benzo(k)fluoranthene	270	J
50-32-8	Benzo(a)pyrene	2400	U
193-39-5	Indeno(1,2,3-cd)pyrene	2400	U
53-70-3	Dibenz(a,h)anthracene	2400	U
191-24-2	Benzo(g,h,i)perylene	2400	U

(1) - Cannot be separated from Diphenylamine

* Result From BMM40DL

001131 186

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM40

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724706

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D20

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 30 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/02/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.8

Number TICs found: 30

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 115-96-8	Tri(2-chloroethyl) phosphate	11.75	2300	JN
2. 832-71-3	Phenanthrene, 3-methyl-	12.78	2200	JN
3.	Unknown	14.02	2600	J
4. 6765-39-5	1-Heptadecene	14.13	2100	JN
5.	Unknown	14.45	2100	J
6.	Unknown	14.50	2200	J
7.	Unknown	14.64	2300	J
8.	Unknown	14.75	3500	J
9.	Unknown	14.84	2500	J
10.	Unknown	14.90	2100	J
11.	Unknown	15.20	6400	J
12.	Unknown	15.47	3400	J
13.	Unknown	15.55	2500	J
14.	Unknown	15.73	2100	J
15.	Unknown	15.82	2000	J
16.	Unknown	17.40	2200	J
17.	Unknown	17.54	4500	J
18.	Unknown	17.64	2000	J
19.	Unknown	17.68	7300	J
20.	Unknown	17.75	2800	J
21.	Unknown	18.00	7700	J
22.	Unknown	18.23	6600	J
23.	Unknown	18.49	2000	J
24.	Unknown	18.58	1900	J
25.	Unknown	18.87	1900	J
26.	Unknown	18.99	9100	J
27.	Unknown	19.13	4700	J
28.	Unknown	19.22	13000	J
29.	Unknown	19.37	4100	J
30.	Unknown	19.45	3200	J

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001250 187

EPA SAMPLE NO.

BMM41

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724707

Sample wt/vol: 1.0 (g/mL) G Lab File ID: 134D16

Level: (low/med) MED Date Received: 04/08/98

% Moisture: 36 decanted: (Y/N) N Date Extracted: 04/17/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/14/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	470000	U J
111-44-4	bis(2-Chloroethyl)ether	470000	U
95-57-8	2-Chlorophenol	470000	U
541-73-1	1,3-Dichlorobenzene	470000	U
106-46-7	1,4-Dichlorobenzene	470000	U
95-50-1	1,2-Dichlorobenzene	470000	U
95-48-7	2-Methylphenol	470000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	470000	U
106-44-5	4-Methylphenol	470000	U
621-64-7	N-Nitroso-di-n-propylamine	470000	U
67-72-1	Hexachloroethane	470000	U
98-95-3	Nitrobenzene	470000	U
78-59-1	Isophorone	470000	U
88-75-5	2-Nitrophenol	470000	U
105-67-9	2,4-Dimethylphenol	470000	U
111-91-1	bis(2-Chloroethoxy)methane	470000	U
120-83-2	2,4-Dichlorophenol	470000	U
120-82-1	1,2,4-Trichlorobenzene	470000	U
91-20-3	Naphthalene	470000	U
106-47-8	4-Chloroaniline	470000	U
87-68-3	Hexachlorobutadiene	470000	U
59-50-7	4-Chloro-3-methylphenol	470000	U
91-57-6	2-Methylnaphthalene	7500	J
77-47-4	Hexachlorocyclopentadiene	~~470000~~	~~U~~ R
88-06-2	2,4,6-Trichlorophenol	470000	U
95-95-4	2,4,5-Trichlorophenol	1200000	U
91-58-7	2-Chloronaphthalene	470000	U
88-74-4	2-Nitroaniline	1200000	U
131-11-3	Dimethylphthalate	470000	U
208-96-8	Acenaphthylene	470000	U
606-20-2	2,6-Dinitrotoluene	470000	U
99-09-2	3-Nitroaniline	1200000	U
83-32-9	Acenaphthene	1900	J

001251 188
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BMM41

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724707

Sample wt/vol: 1.0 (g/mL) G Lab File ID: 134D16

Level: (low/med) MED Date Received: 04/08/98

% Moisture: 36 decanted: (Y/N) N Date Extracted: 04/17/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/14/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1200000	UJ
100-02-7	4-Nitrophenol	1200000	U
132-64-9	Dibenzofuran	470000	U
121-14-2	2,4-Dinitrotoluene	470000	U
84-66-2	Diethylphthalate	470000	U
7005-72-3	4-Chlorophenyl-phenylether	470000	U
86-73-7	Fluorene	3600	J
100-01-6	4-Nitroaniline	1200000	U
534-52-1	4,6-Dinitro-2-methylphenol	1200000	U
86-30-6	N-Nitrosodiphenylamine (1)	470000	U
101-55-3	4-Bromophenyl-phenylether	470000	U
118-74-1	Hexachlorobenzene	470000	U
87-86-5	Pentachlorophenol	1200000	U
85-01-8	Phenanthrene	11000	J
120-12-7	Anthracene	470000	U
86-74-8	Carbazole	470000	U
84-74-2	Di-n-butylphthalate	470000	U
206-44-0	Fluoranthene	470000	U
129-00-0	Pyrene	470000	U
85-68-7	Butylbenzylphthalate	62000	J
91-94-1	3,3'-Dichlorobenzidine	470000	U
56-55-3	Benzo(a)anthracene	470000	U
218-01-9	Chrysene	470000	U
117-81-7	bis(2-Ethylhexyl)phthalate	62000	J
117-84-0	Di-n-octylphthalate	470000	U
205-99-2	Benzo(b)fluoranthene	470000	U
207-08-9	Benzo(k)fluoranthene	470000	U
50-32-8	Benzo(a)pyrene	470000	U
193-39-5	Indeno(1,2,3-cd)pyrene	470000	U
53-70-3	Dibenz(a,h)anthracene	470000	U
191-24-2	Benzo(g,h,i)perylene	470000	U

(1) - Cannot be separated from Diphenylamine

001252 189

EPA SAMPLE NO.

BMM41

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM33

Matrix: (soil/water) SOIL Lab Sample ID: 2724707

Sample wt/vol: 1.0 (g/mL) G Lab File ID: 134D16

Level: (low/med) MED Date Received: 04/08/98

% Moisture: 36 decanted: (Y/N) N Date Extracted: 04/17/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/14/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

Number TICs found: 30

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	90-12-0	Naphthalene, 1-methyl-	8.53	13000	JN
2.		Unknown	8.62	12000	J
3.	581-42-0	Naphthalene, 2,6-dimethyl-	9.18	15000	JN
4.	575-43-9	Naphthalene, 1,6-dimethyl-	9.45	15000	JN
5.	2131-42-2	Naphthalene, 1,4,6-trimethyl	9.~~90~~89	13000	JN
6.	2131-42-2	Naphthalene, 1,4,6-trimethyl	10.10	20000	JN
7.	829-26-5	Naphthalene, 2,3,6-trimethyl	10.3~~8~~4	17000	JN
8.		Unknown	10.88	17000	J
9.		Unknown	11.03	9500	J
10.		Unknown	11.1~~7~~6	13000	J
11.		Unknown	11.22	11000	J
12.		Unknown	11.2~~8~~6	10000	J
13.	2523-37-7	9H-Fluorene, 9-methyl-	11.33	16000	JN
14.	612-75-9	3,3'-Dimethylbiphenyl	11.~~4~~039	26000	JN
15.		Unknown	11.6~~8~~4	9400	J
16.		Unknown	11.7~~0~~1	15000	J
17.	4612-63-9	9H-Fluorene, 2,3-dimethyl-	12.1~~3~~4	16000	JN
18.		Unknown	12.1~~8~~9	17000	J
19.		Unknown	12.25	16000	J
20.		Unknown	12.52	12000	J
21.		Unknown	12.57	9400	J
22.	613-12-7	Anthracene, 2-methyl-	12.7~~2~~1	17000	JN
23.	610-48-0	Anthracene, 1-methyl-	12.7~~7~~6	11000	JN
24.	613-12-7	Anthracene, 2-methyl-	12.8~~8~~9	15000	JN
25.	1961-96-2	1H-Indene, 1-phenyl-	12.92	16000	JN
26.	3674-66-6	Phenanthrene, 2,5-dimethyl-	13.60	8700	JN
27.		Unknown	15.38	14000	J
28.		Unknown	17.48	9800	J
29.		Unknown	19.23	3700	J
30.		Unknown	19.6~~8~~9	2500	J