ROY F. WESTON, INC.

152029

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MANAGERS DESIGNERS CONSULTANTS

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WESTON

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.
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101 Fieldcrest Avenue
Edison, New Jersey 08837

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

Property ID:	3	**Station Name:**	Lambert Avenue Well Field, Pump Station & Elevated Tank

District:	Babylon
Well No:	1
Structure Type:	Underground SubStructure & Prefab SuperStructure
Test Boring No:	
DEC 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 Test:	3/17/64
Final Test:	3/24/64
Accepted:	3/24/64
Construction Completed:	3/31/64

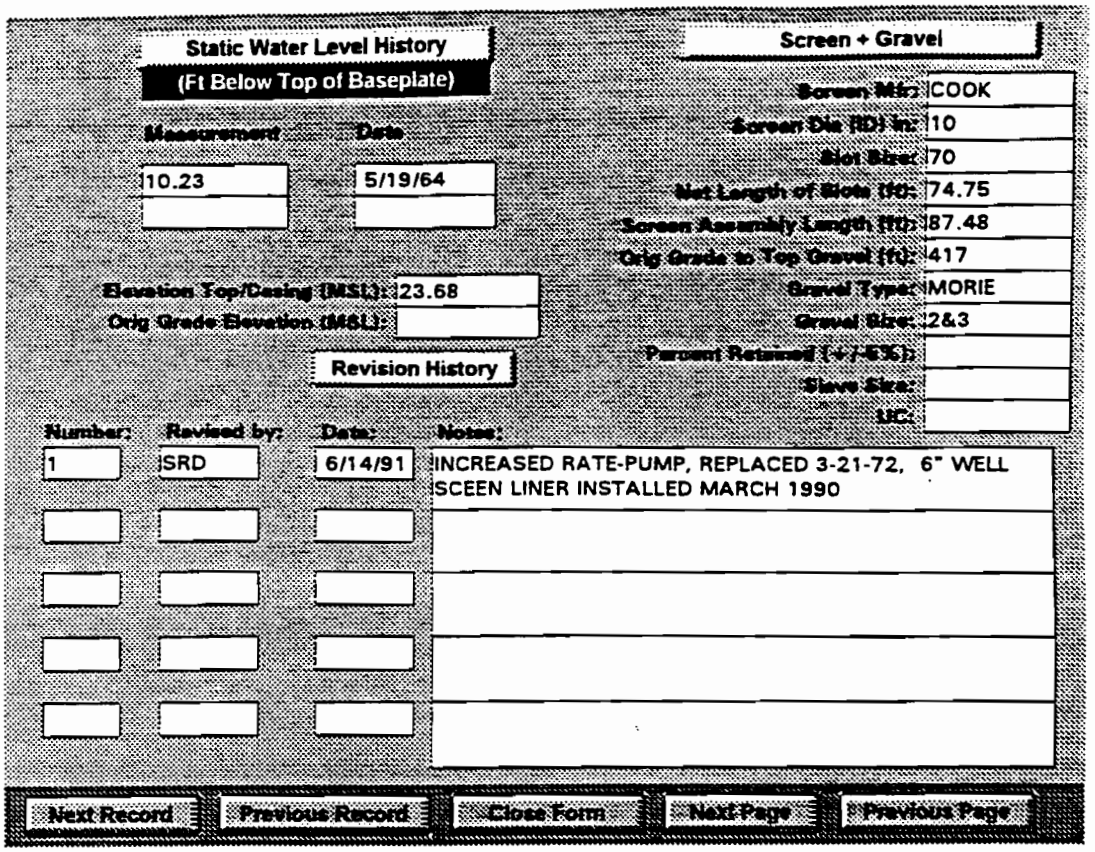
Miscellaneous Data

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 Riser (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):
Revision History
Screen + Gravel
Screen Mfr: COOK
Screen Dia (ID) in: 10
Slot Size: 70
Net Length of Slots (ft): 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%):
Sieve Size:
UC:
Number:
Revised by:
Date:
Notes:
1
SRD
6/14/91
INCREASED RATE-PUMP, REPLACED 3-21-72, 6" WELL SCEEN LINER INSTALLED MARCH 1990
Next Record
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Close Form
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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 No:	S-71882
WSA No:	7178
Decision Date:	9/11/81
Pressure Zone:	Zone: 20 Mor-Westhampton Low

Well Construction

Well Drilled:	
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 Casing to Bottom 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:	IS-54155T.
DEC No:	S-55733
WSA No:	6552
Decision Date:	6/16/75
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

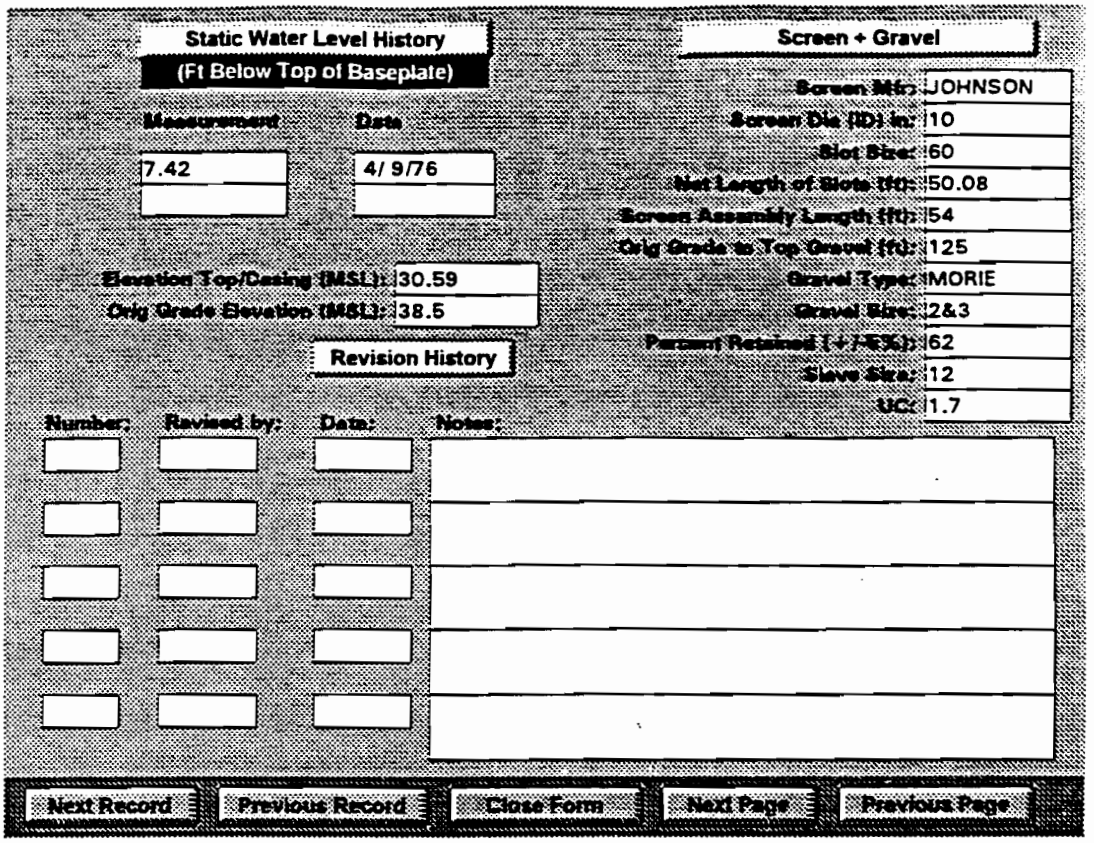
Well Driller:	DELTA
Well Type:	ROTARY
Well Started:	6/24/75
First Test:	9/15/75
Final Test:	9/25/75
Accepted:	9/26/75
Construction Completed:	10/ 7/75

Miscellaneous Data

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

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

Well Depth below Grade (ft):	241
Top of Casing to Packer (ft):	
Top of Casing to Riser (ft):	115.58
Top of Casing to Screen (ft):	170.75
Top/Casing to Bottom Tailpipe (ft):	224.75
Casing Diameter (in):	20
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
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): 50.08
Screen Assembly Length (ft): 54
Orig Grade to Top Gravel (ft): 125
Gravel Type: MORIE
Gravel Size: 2&3
Percent Retained (+/-5%): 62
Sieve Size: 12
UC: 1.7
Next Record
Previous Record
Close Form
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Property ID:	231	Station Name:	Sunrise Highway Well Field & Pump Station

District:	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

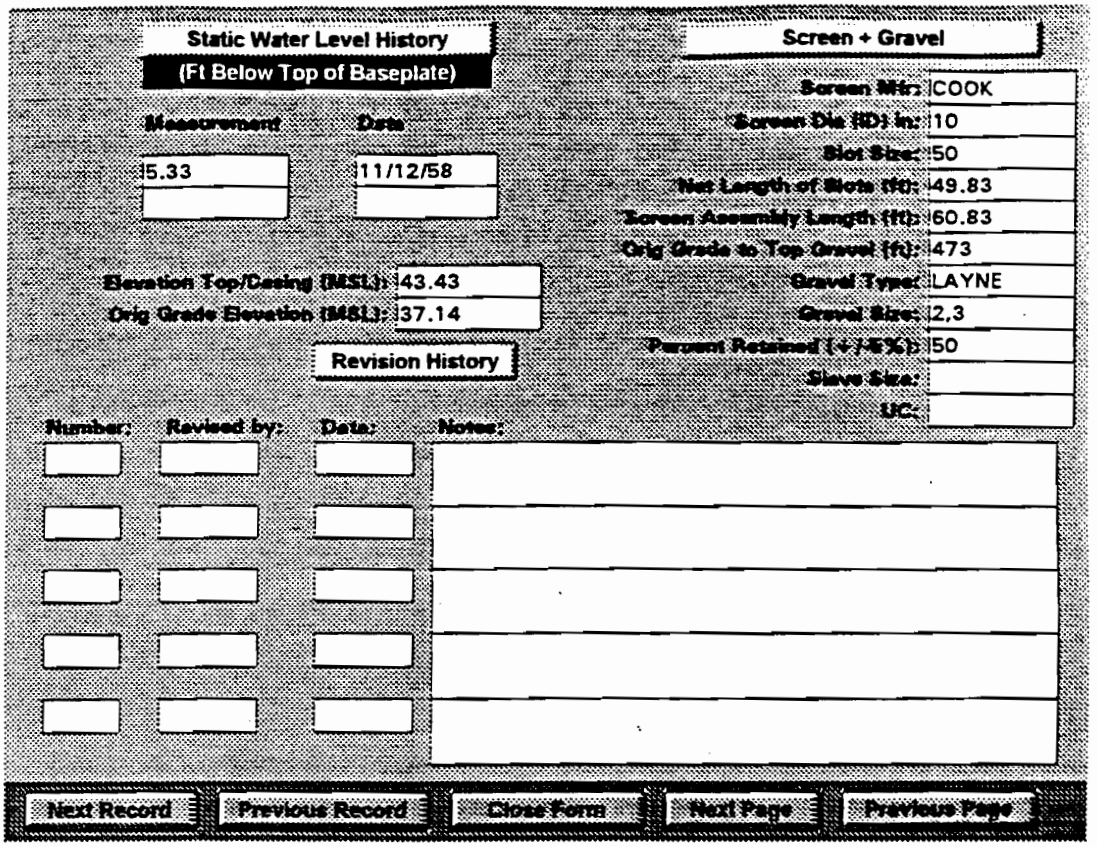
Well Driller:	DELTA
Well Type:	ROTARY
Well Started:	6/24/75
First Test:	8/ 7/75
Final Test:	8/28/75
Accepted:	8/29/75
Construction Completed:	10/ 7/75

Miscellaneous Data

Well Dwg No:	ABS-7198-7
Aquifer:	MAGOTHY
Date In Service:	7/16/76
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Normal Cap (gpm):	1,400
Authorized Cap (gpm):	1,400
Max Production (gpm):	1,725
Normal Prod Drawdown (ft):	23.08

Well Depth below Grade (ft):	346
Top of Casing to Packer (ft):	
Top of Casing to Riser (ft):	130.58
Top of Casing to Screen (ft):	211.25
Top/Casing to Bottom Tailpipe (ft):	308
Casing Diameter (in):	20
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:
Next Record
Previous Record
Close Form
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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
WSA No:	6915
Decision Date:	10/30/78
Pressure Zone:	Zone: 01 South Shore Low

Well Construction

Well Driller:	LAYNE
Well Type:	ROTARY
Well Started:	6/15/79
First Test:	9/ 5/79
Final Test:	9/26/79
Accepted:	9/28/79
Construction Completed:	10/30/79

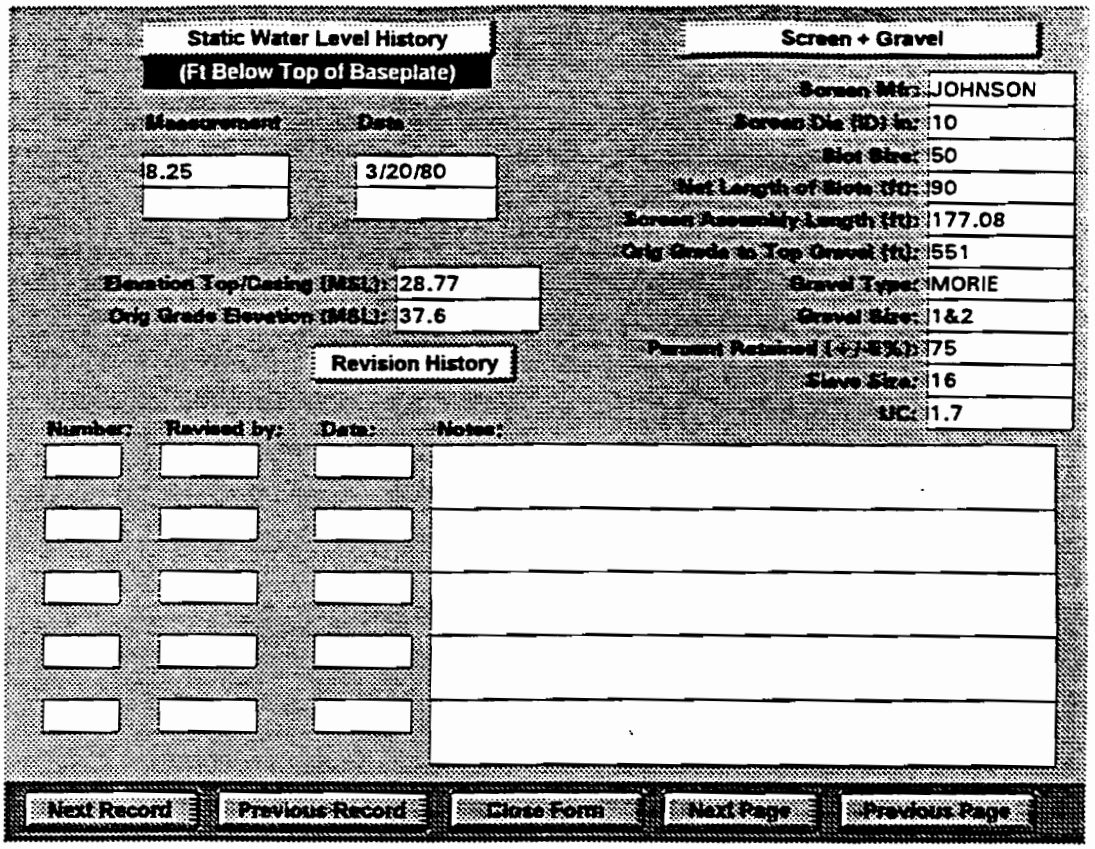
Miscellaneous Data

Well Dwg No:	ABS-8206-7
Aquifer:	MAGOTHY
Date In Service:	12/4/80
Active:	Yes
Status:	PERMANENT
Retirement Date:	

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 Bottom Tailpipe (ft):	709.33
Casing Diameter (in):	20

Normal Cap (gpm):	1,300
Authorized Cap (gpm):	1,300
Max Production (gpm):	3,316
Normal Prod Drawdown (ft):	18.75

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


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
Next Record
Previous Record
Close Form
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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:	IS-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

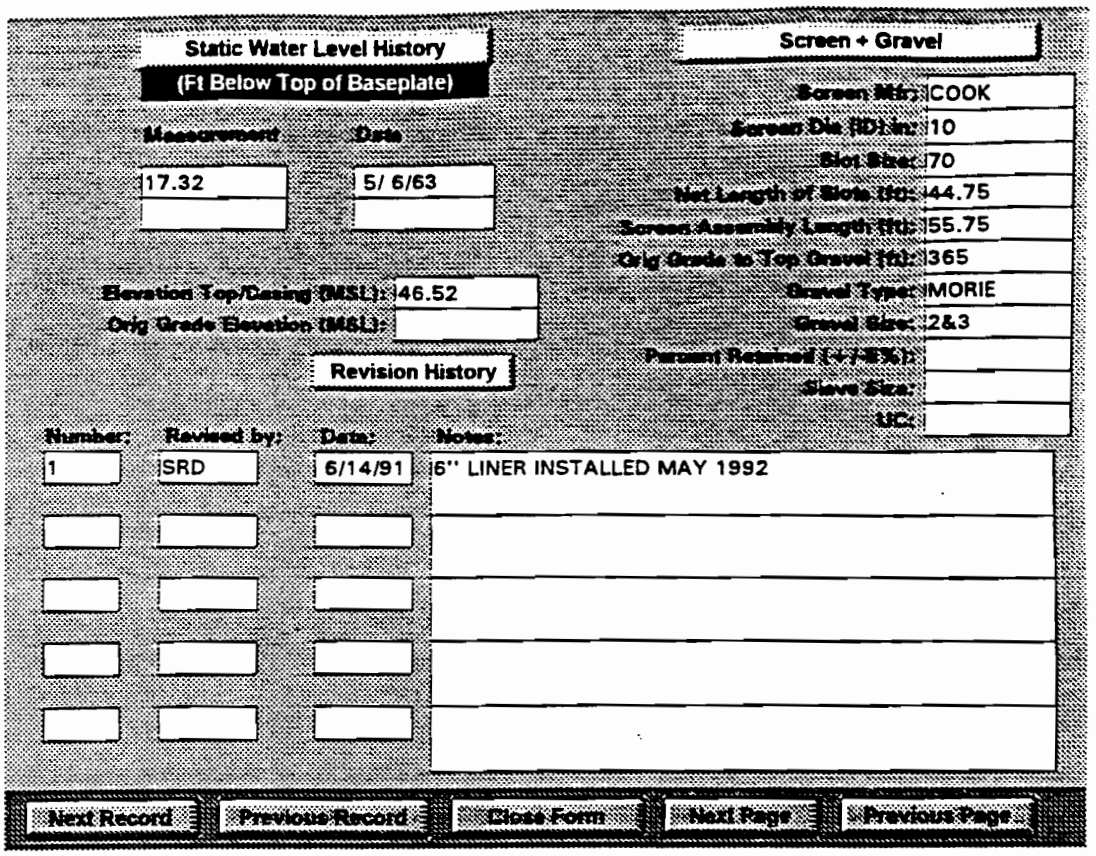
Miscellaneous Data

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 Packer (ft):	402.17
Top of Casing to Plug (ft):	
Top of Casing to Screen (ft):	416.5
Top Casing to Bottom Tailpipe (ft):	457.92
Casing Diameter (in):	16

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

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


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):
Revision History
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 (+/-5%):
Sieve Size:
UC:
Number:
Revised by:
Date:
Notes:
1
SRD
6/14/91
6" LINER INSTALLED MAY 1992
Next Record
Previous Record
Close Form
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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

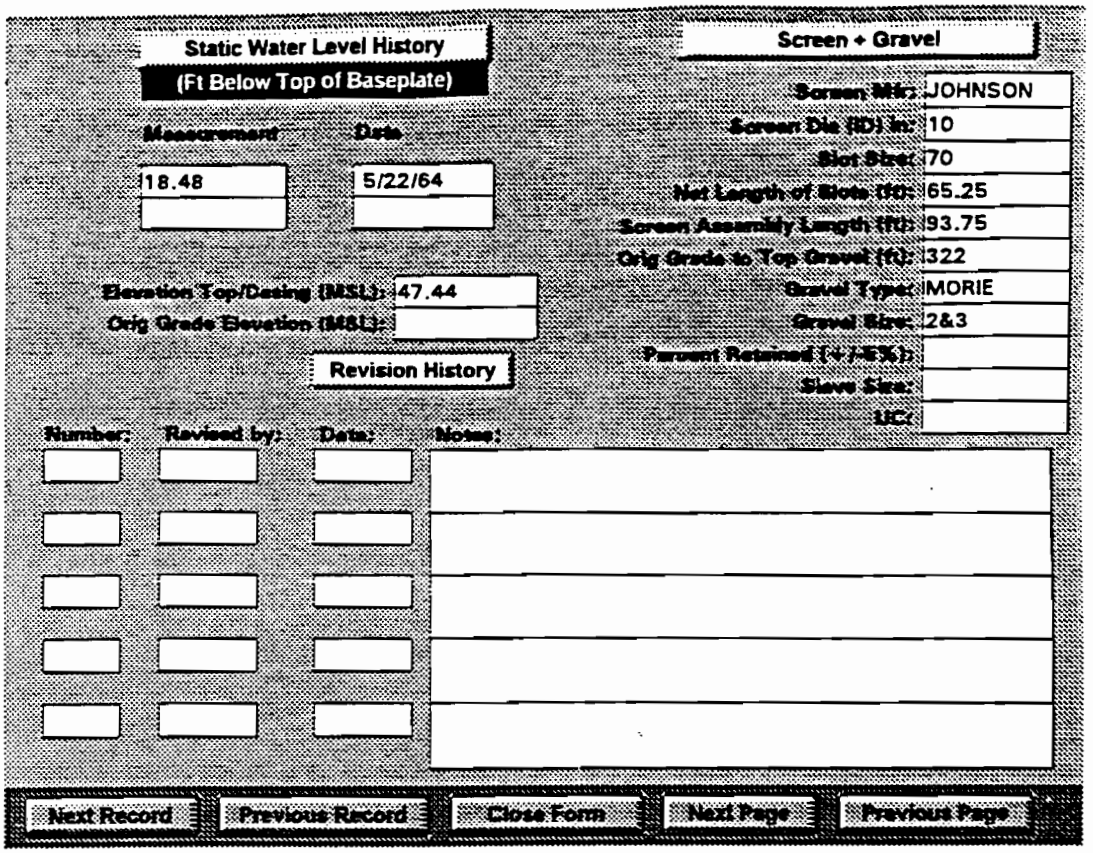
Miscellaneous Data

Well Dwg No:	ZA-1081-4
Aquifer:	MAGOTHY
Date in Service:	6/12/64
Active:	Yes
Status:	PERMANENT
Retirement Date:	

Well Depth below Grade (ft):	465.33
Top of Casing to Packer (ft):	373
Top of Casing to Riser (ft):	
Top of Casing to Screen (ft):	378.67
Top Casing to Bottom Tailpipe (ft):	466.83
Casing Diameter (in):	16

Normal Cap (gpm):	1,100
Authorized Cap (gpm):	1,200
Max Production (gpm):	1,500
Normal Prod Drawdown (ft):	22.04

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:
Next Record
Previous Record
Close Form
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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		
WBA No:	5901		
Decision Date:	12/15/70		
Pressure Zone:	Zone: 01 South Shore Low		

Well Construction

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

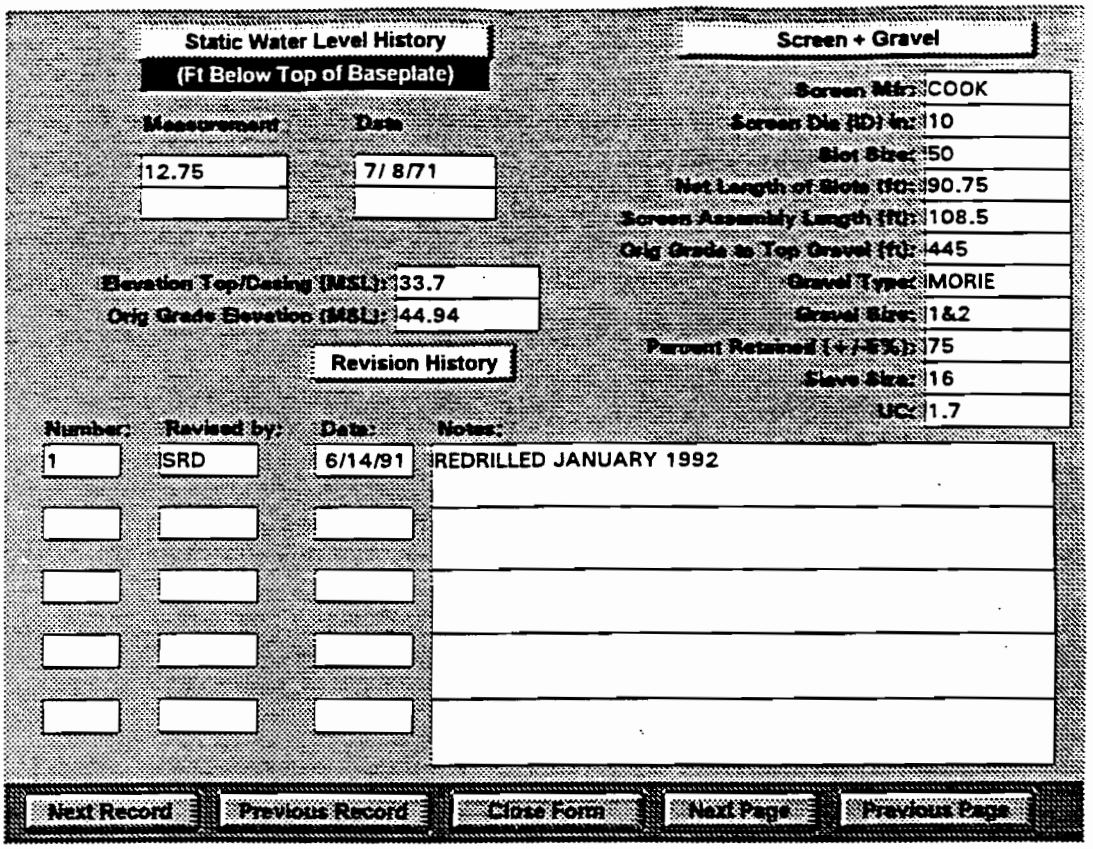
Miscellaneous Data

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/Casing to Bottom Tailpipe (ft):	611.25
Casing Diameter (in):	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
ISRD
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:			
DEC 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
First Test:	4/23/68
Final Test:	5/ 6/68
Accepted:	5/ 6/68
Construction Completed:	5/20/68

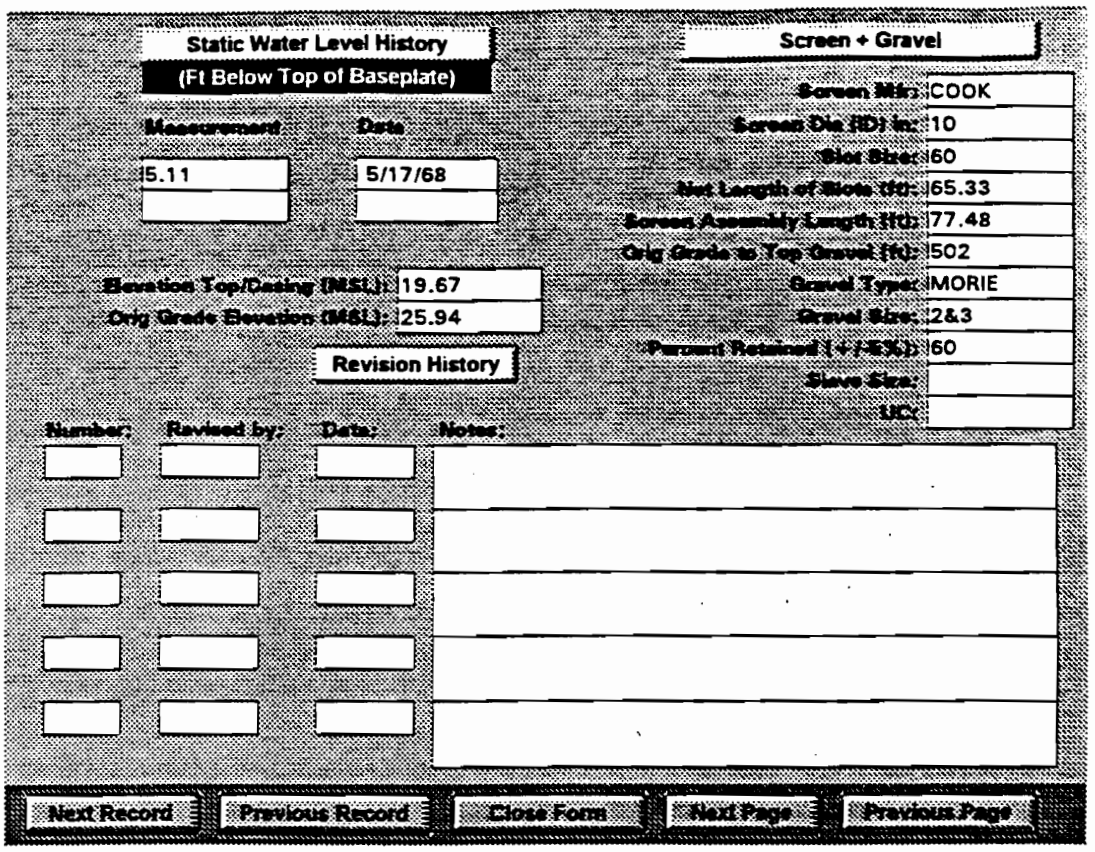
Miscellaneous Data

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 Riser (ft):	
Top of Casing to Screen (ft):	546.75
Top Casing to Bottom 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
Net Length of Slots (ft):
65.33
Screen Assembly Length (ft):
77.48
Orig Grade to Top Gravel (ft):
502
Gravel Type:
MORIE
Gravel Size:
2&3
Percent Retained (+/-5%):
60
Sieve Size:
UCx
Next Record
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Property ID:	1	Station Name:	Greene Avenue Well Field, Pump Station
Division:	Babylon		
Well No:	8		
Structure Type:	Underground Concrete		
Test Boring No:			
GEC No:	S-47887		
WSA No:	6251		
Decision Date:	3/29/73		
Pressure Zone:	Zone: 01 South Shore Low		

Well Construction

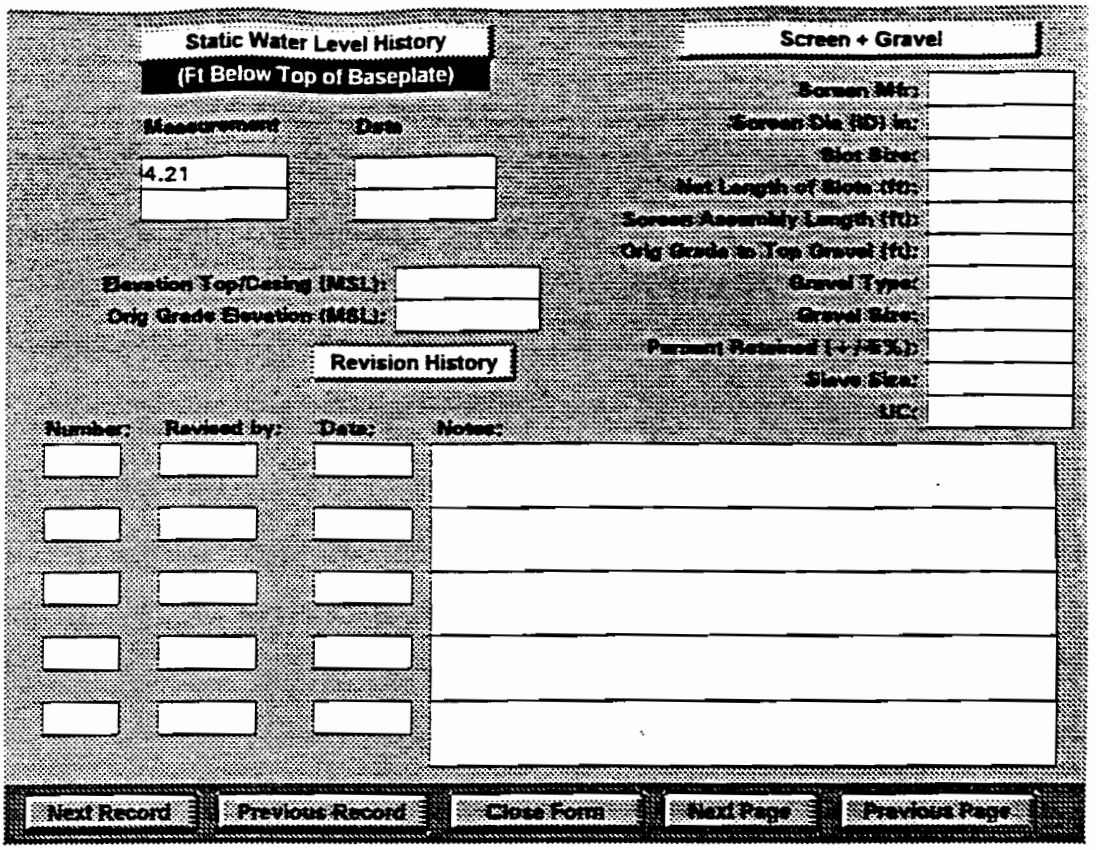
Well Driller:	
Well Type:	ROTARY
Well Started:	
First Test:	
Final Test:	
Accepted:	
Construction Completed:	

Miscellaneous Data

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

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

Well Depth below Grade (ft):	648
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):	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:
Next Record
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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		
WSA 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

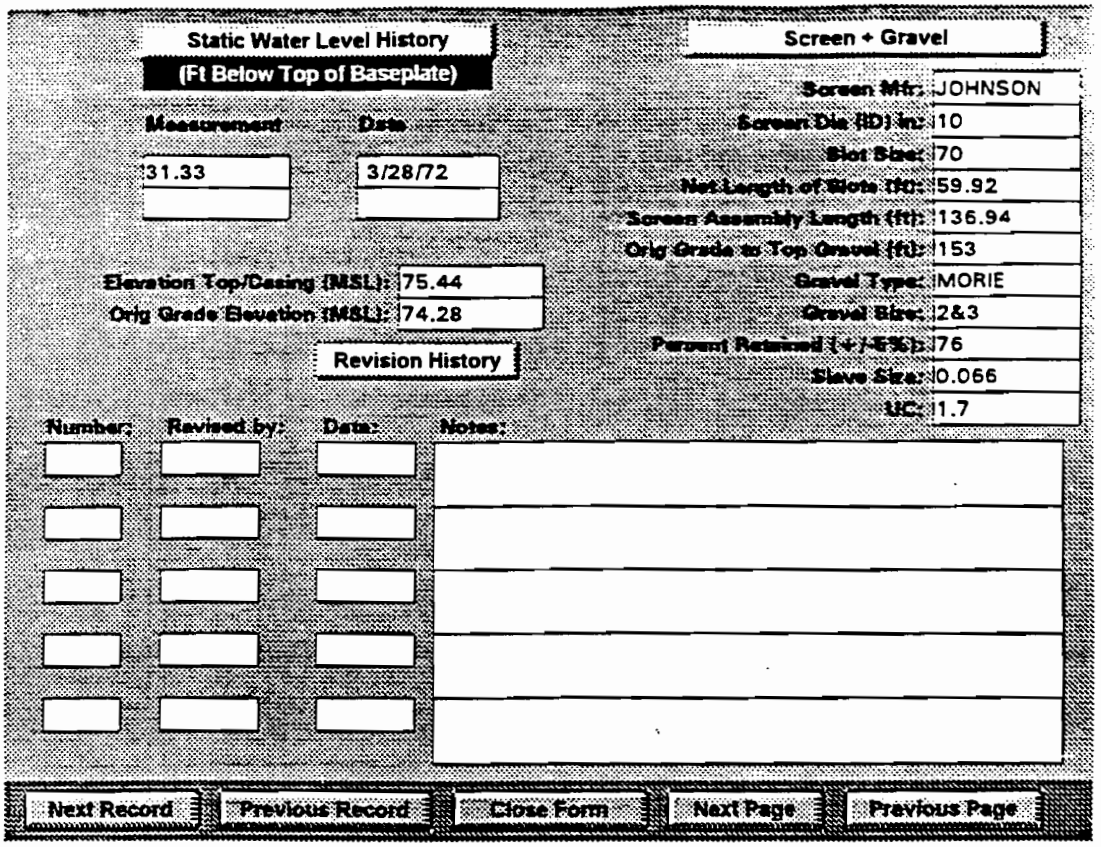
Miscellaneous Data

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
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): 59.92
Screen Assembly Length (ft): 136.94
Orig Grade to Top Gravel (ft): 153
Gravel Type: MORIE
Gravel Size: 2&3
Percent Retained (+/-5%): 76
Sieve Size: 0.066
UC: 1.7
Next Record
Previous Record
Close Form
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Previous Page

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 No:	S-46830		
WSA No:	6143		
Decision Date:	8/24/72		
Pressure Zone:	Zone: 01 South Shore Low		

Well Construction

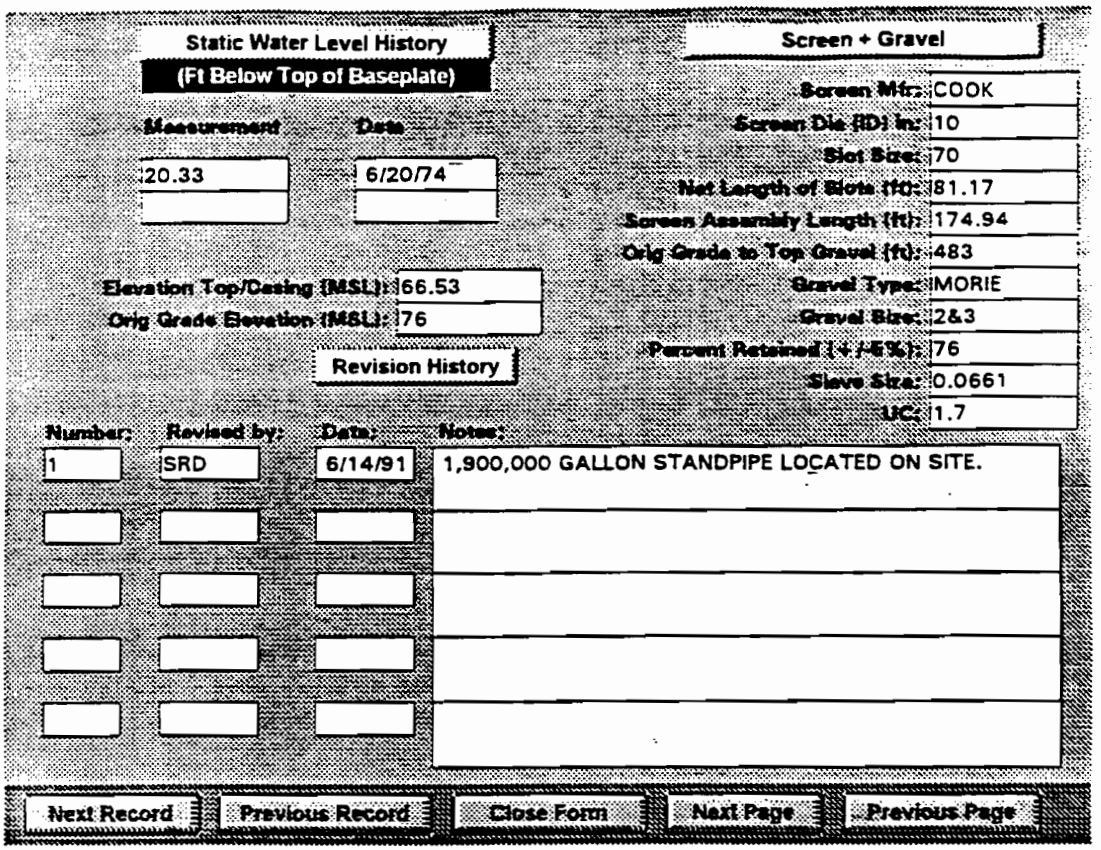
Well Driller:	STRATA
Well Type:	ROTARY
Well Started:	1/ 3/73
First Test:	3/21/73
Final Test:	10/16/73
Accepted:	10/18/73
Construction Completed:	11/ 2/73

Miscellaneous Data

Well Dwg 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

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 Bottom Tailpipe (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


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
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
Sieve Size: 0.0661
UC: 1.7
Number:
Revised by:
Date:
Notes:
1
SRD
6/14/91
1,900,000 GALLON STANDPIPE LOCATED ON SITE.
Next Record
Previous Record
Close Form
Next Page
Previous Page

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
WRA 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
Accepted:	5/ 6/70
Construction Completed:	5/27/70

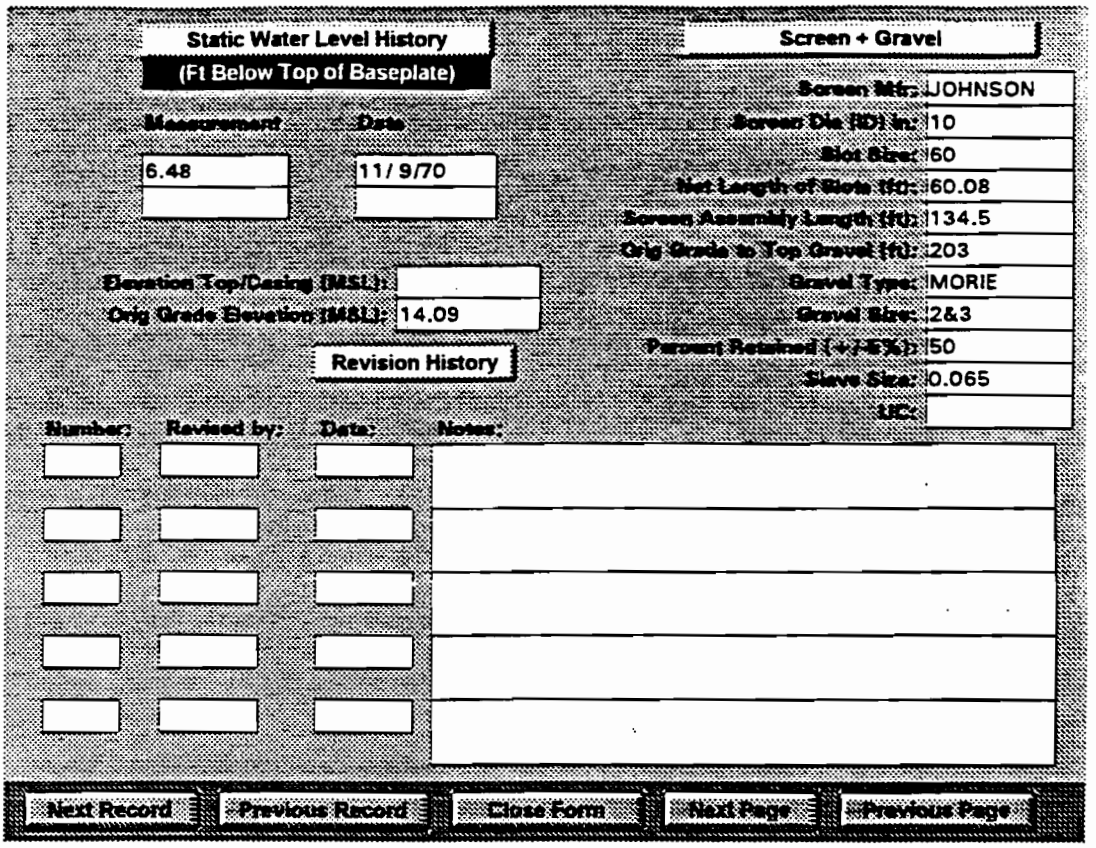
Miscellaneous Data

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 Riser (ft):	200.75
Top of Casing to Screen (ft):	271.33
Top Casing to Bottom 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:
Next Record
Previous Record
Close Form
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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
Accepted:	2/ 2/62
Construction Completed:	3/ 2/62

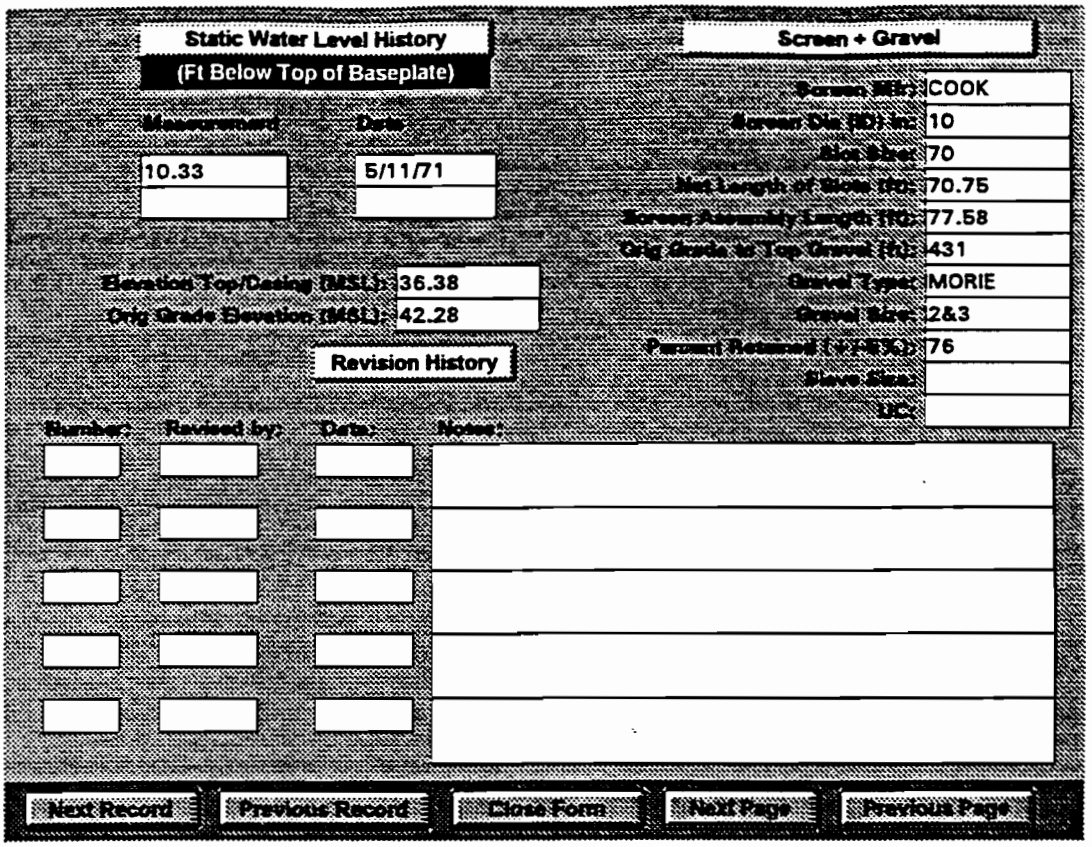
Miscellaneous Data

Well Dwg No:	IBL-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 Bottom Tailpipe (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 (+/-15%): 76
Sieve Size:
UC:
Next Record
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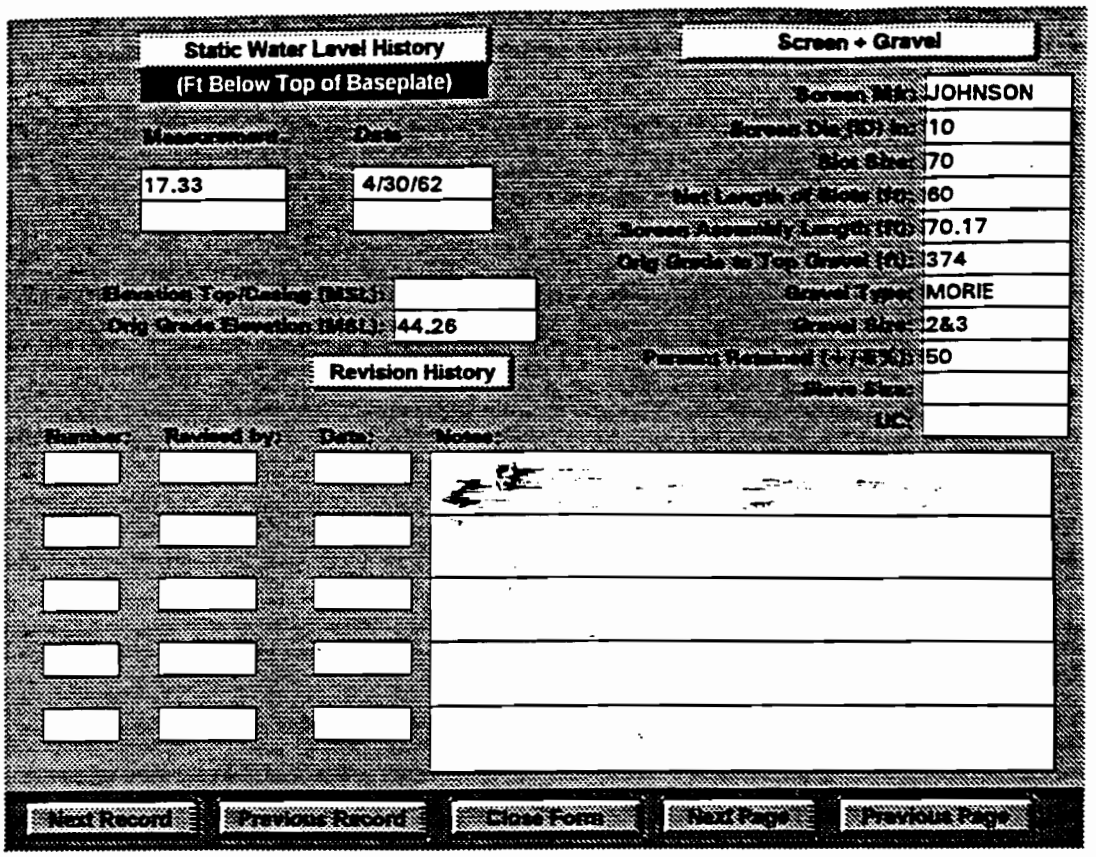
Static Water Level History
(Ft Below Top of Baseplate)
Measurement
Date
17.33
4/30/62
Elevation Top/Casing (MSL):
Orig Grade Elevation (MSL):
44.26
Revision History
Number:
Revised by:
Date:
Notes:
Screen + Gravel
Screen Mfr:
JOHNSON
Screen Dia (ID) in:
10
Slot Size:
70
Slot Length of Slots (ft):
60
Screen Assembly Length (ft):
70.17
Orig Grade to Top Gravel (ft):
374
Gravel Type:
MORIE
Gravel Size:
2&3
Percent Retained (+/-15%):
50
Sieve Size:
UCK
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Close Form
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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)
NYD985910560	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			
NYD982241569	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			
NYD980762488	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 NORTH RD - RTE 27 CUTCHOGUE 103 SUFFOLK	NY	11935	00	DS1			05/01/83	EPA (FUND)
					PA1			05/01/83	EPA (FUND)
					PA2			03/03/87	STATE(FUND)
					HR1			05/01/83	OTHER
					SI1		01/01/91	03/28/91	EPA (FUND)
NYD986910560	SPCE, INC. 214 CANDLEWOOD ROAD BRENTWOOD 103 SUFFOLK	NY	11717	00	DS1			07/06/95	STATE(FUND)
NYD002241669	SPECIAL METALS CORP MIDDLE SETTLEMENT RD NEW HARTFORD 065 ONEIDA	NY	13413	00	DS1			02/25/87	EPA (FUND)
					PA1		03/25/87	03/30/87	EPA (FUND)
NYD044466910	SPECTRUM FINISHING CORP 50 DALE ST WEST BABYLON 103 SUFFOLK	NY	11704	00	DS1			08/01/83	STATE(FUND)
					PA1			08/01/83	STATE(FUND)
					PA2			03/27/86	STATE(FUND)
					SI1		05/01/85	05/31/85	STATE(FUND)
NYD980762488	SPENCERPORT DUMP 500 WEST AVE OGDEN 055 MONROE	NY	14559	00	DS1			06/01/83	EPA (FUND)
					PA1			06/01/83	EPA (FUND)
					HR1			05/01/83	OTHER
					SI1		02/25/87	03/09/87	EPA (FUND)
					SP1			11/09/95	
NYD980532592	SPERRY UNIVAC 7 SPRUCE ST ILION 043 HERKIMER	NY	13357	00	DS1			06/09/81	EPA (FUND)
					PA1		08/26/87	09/02/87	EPA (FUND)
					SI1		07/01/90	09/25/90	EPA (FUND)
					SP1			09/29/95	
NYD000531960	SPRAYLAT CORPORATION 117 ANDERSON AVE. MOUNT VERNON 119 WESTCHESTER	NY	10550	00	DS1			06/06/89	EPA (FUND)
					PA1			07/20/89	EPA (FUND)

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 ~~pre~~ 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 RCB

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 MANAGERS DESIGNERS/CONSULTANTS

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 find 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 11/8-4-93

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

REV 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 315 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
  } heavy metals, wastewater cont. with cyanide
  - site visit in Spring 1997 with NYSDEC & WESTON REAC
  ~~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 ~~full~~ full. Lots of floor spillage. Only secondary containment ground tank. Large spill could flow outside.

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

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

Follow-Up-Action:

Originator's Initials

REV 110-1-93

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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For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

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-

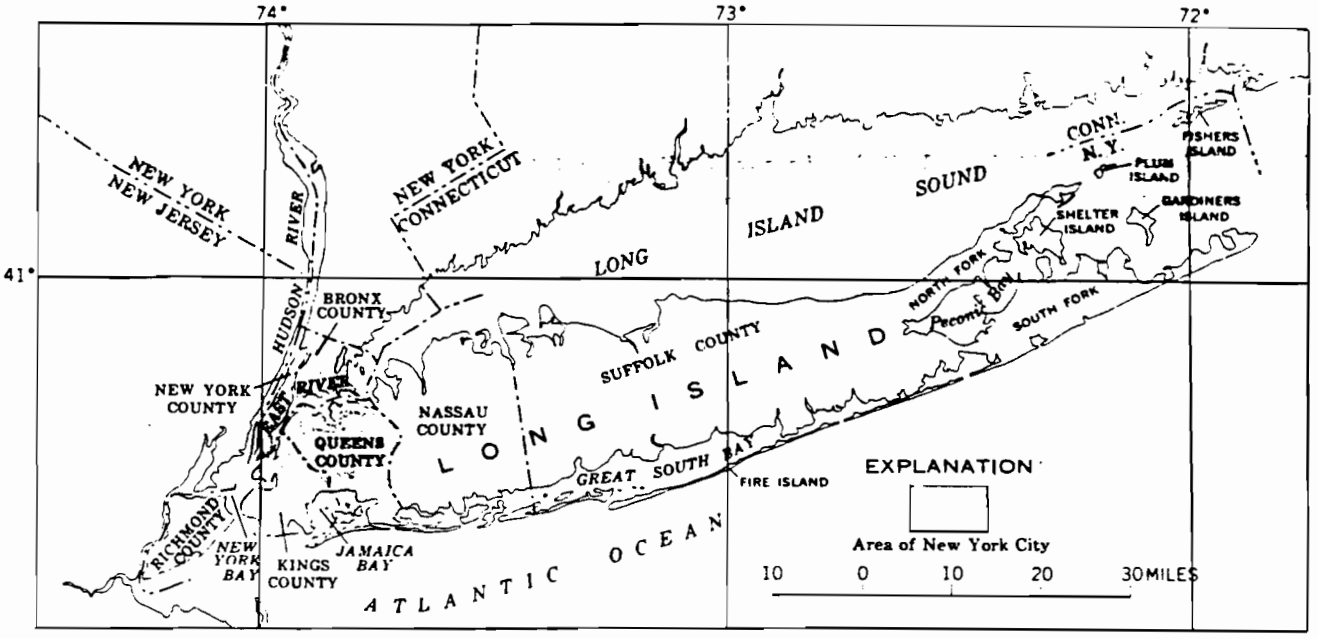


FIGURE 1.—Location and political boundaries of Long Island.

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

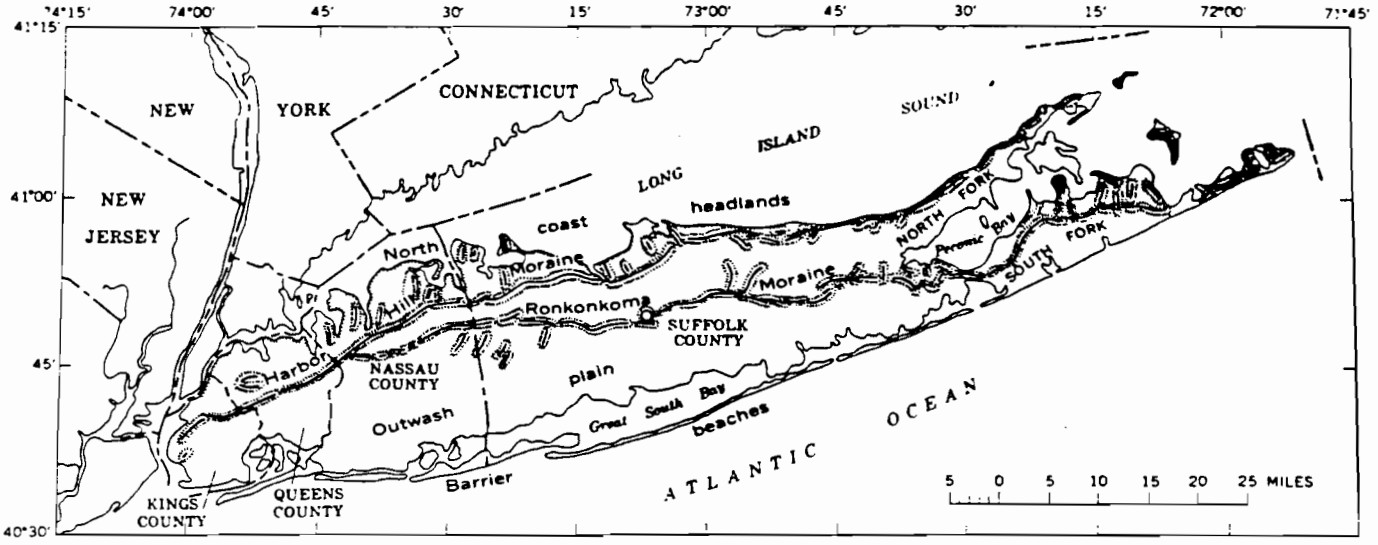


FIGURE 2.—Major physiographic features.

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

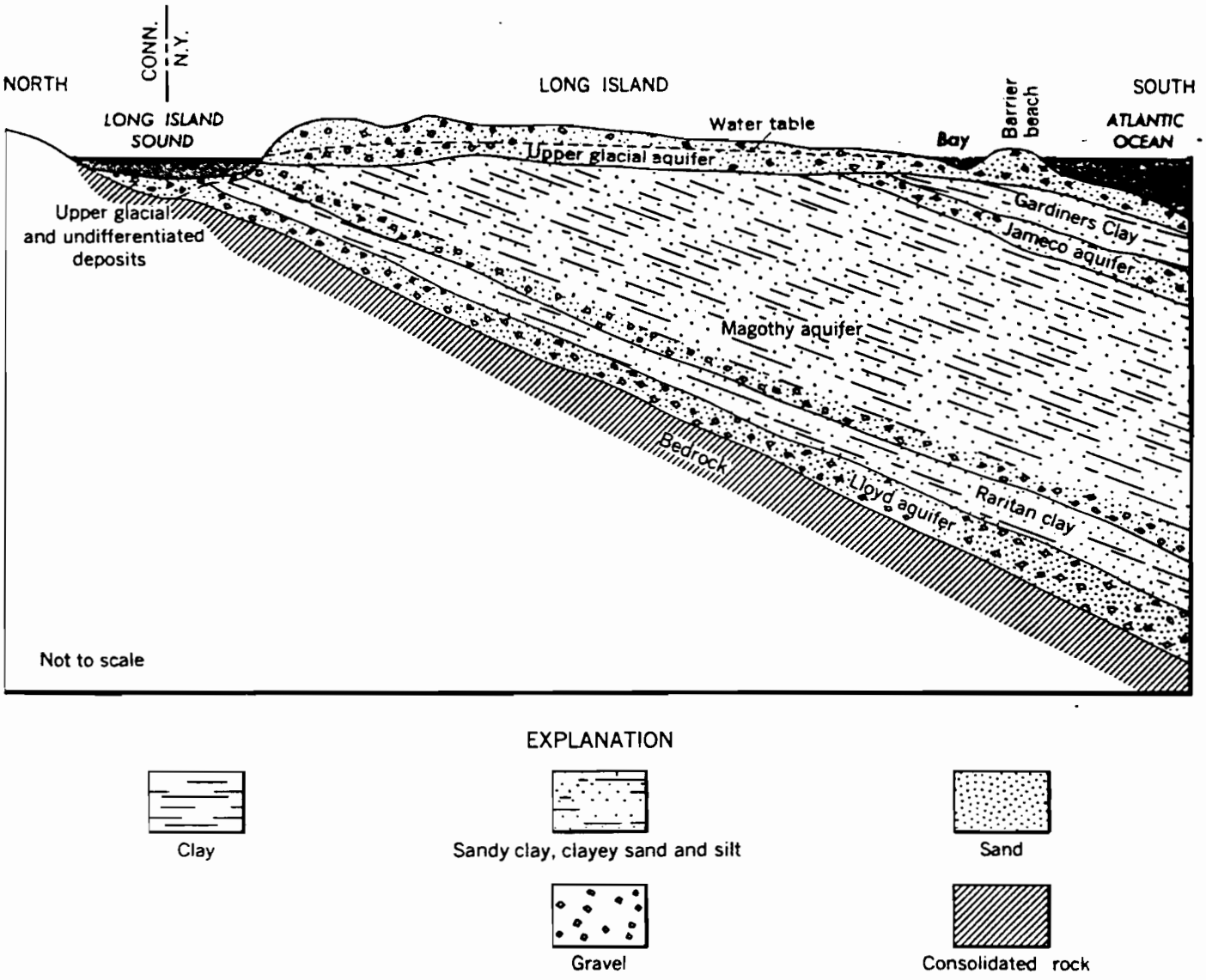


FIGURE 3.—Generalized geologic section showing relative positions of four principal aquifers.

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 groundwater reservoir are the Raritan clay, which overlies the Lloyd aquifer; the many discontinuous clay and silt

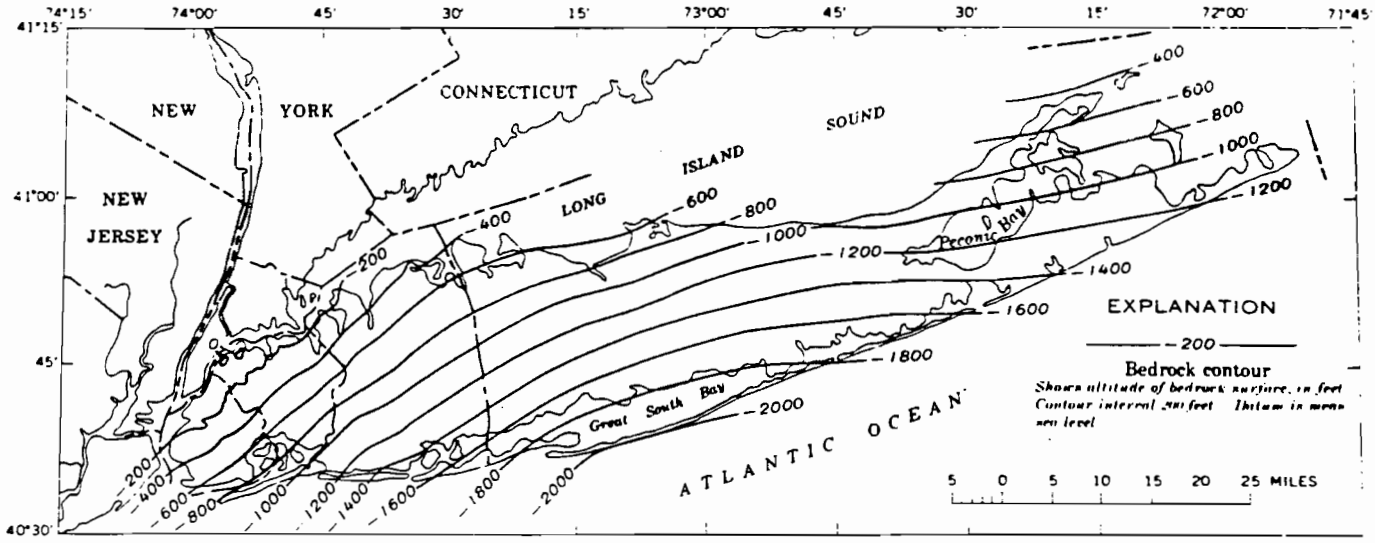


FIGURE 4.—Contour map of the bedrock surface. (Modified from Suter and others, 1949, pls. 8, 9, and 10.)

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 floodplain 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.)	200	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					
		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					
Cretaceous	Upper Cretaceous	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 No.	Lithologic class Description	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)
1	Gravel, sand and gravel, and coarse sand	87	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

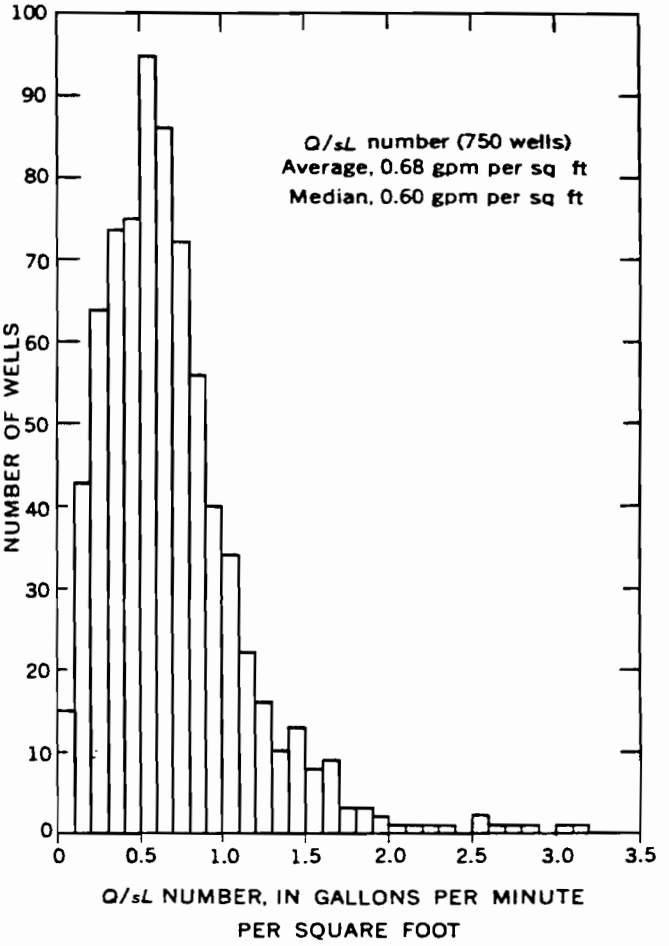


FIGURE 16.—Distribution of Q/sL numbers for wells screened in the Magothy aquifer. (Average hydraulic conductivity of screened intervals approximates 2,000 Q/sL; see text discussion.)

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

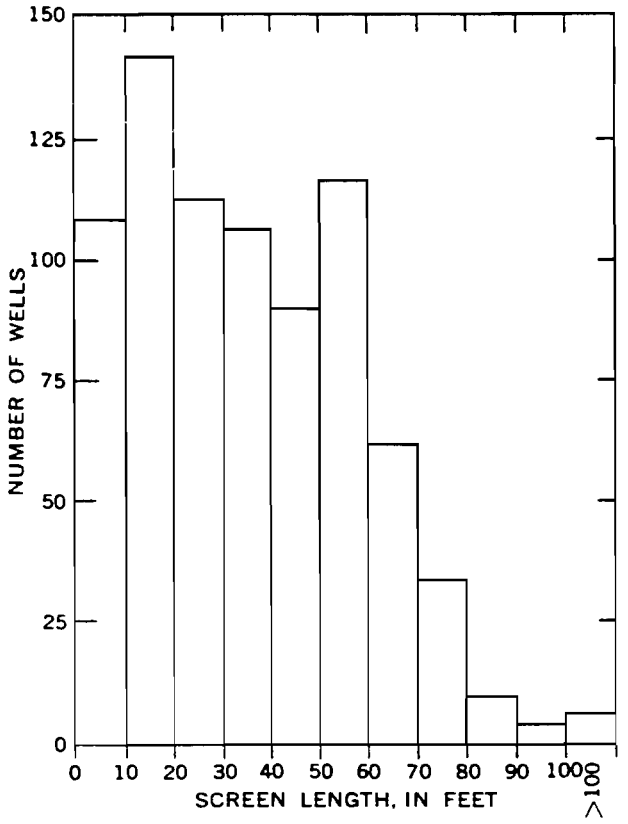


FIGURE 17.—Distribution of screen lengths of wells in the Magothy aquifer.

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.

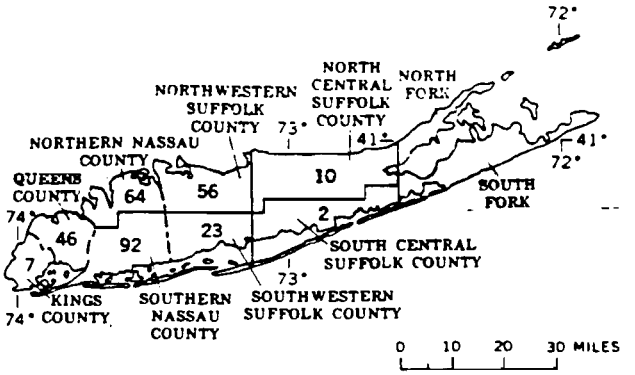


FIGURE 18.—Number of wells for which lithologic logs were available for the Magothy aquifer in the indicated subareas in 1967.

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

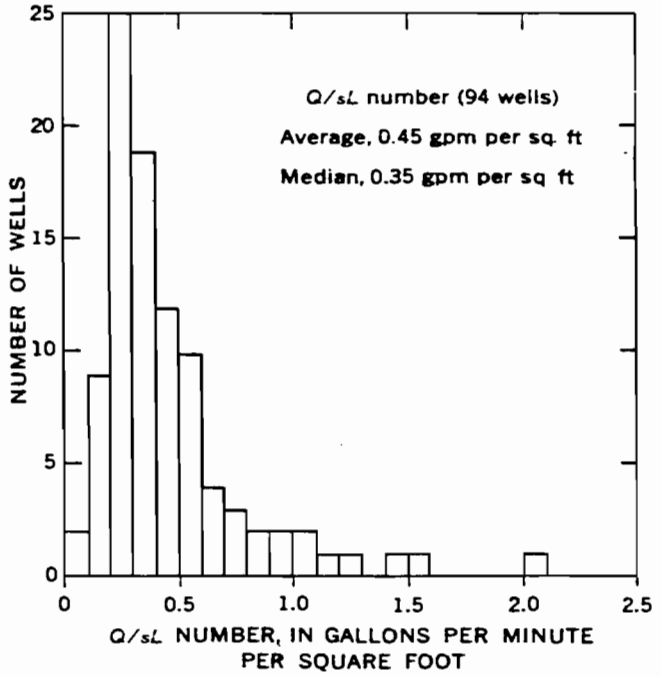


FIGURE 19.—Distribution of Q/sL numbers for wells screened in the Lloyd aquifer. (Average hydraulic conductivity of screened intervals approximates 2,000 Q/sL; see text discussion.)

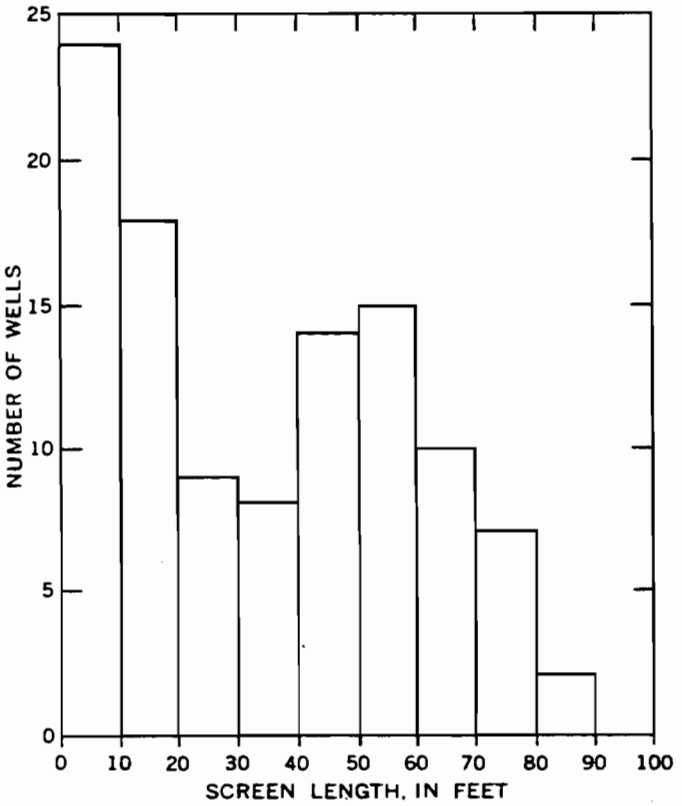


FIGURE 20.—Distribution of screen lengths of wells in the Lloyd aquifer.

REFERENCE NO. 32

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

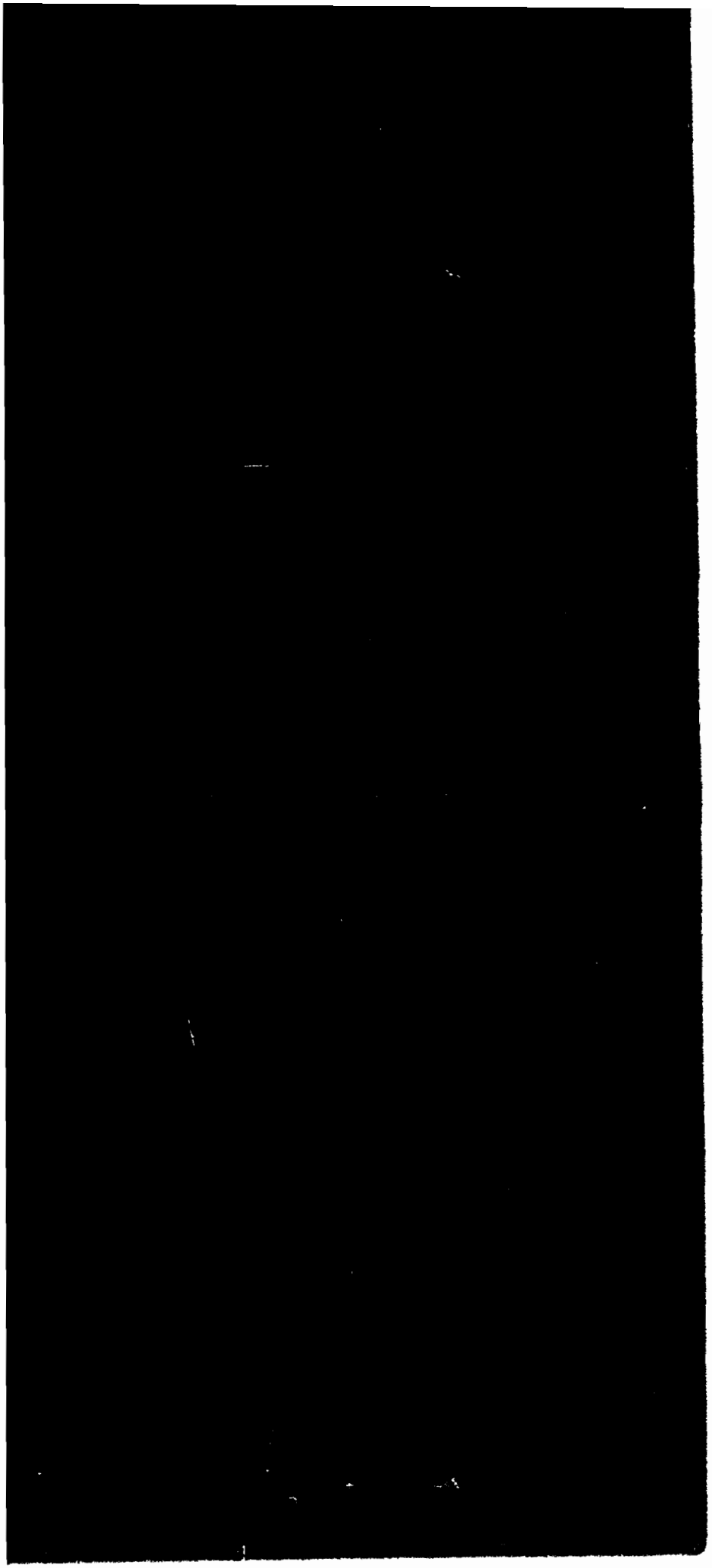
TOWN OF
BABYLON,
NEW YORK
SUFFOLK COUNTY

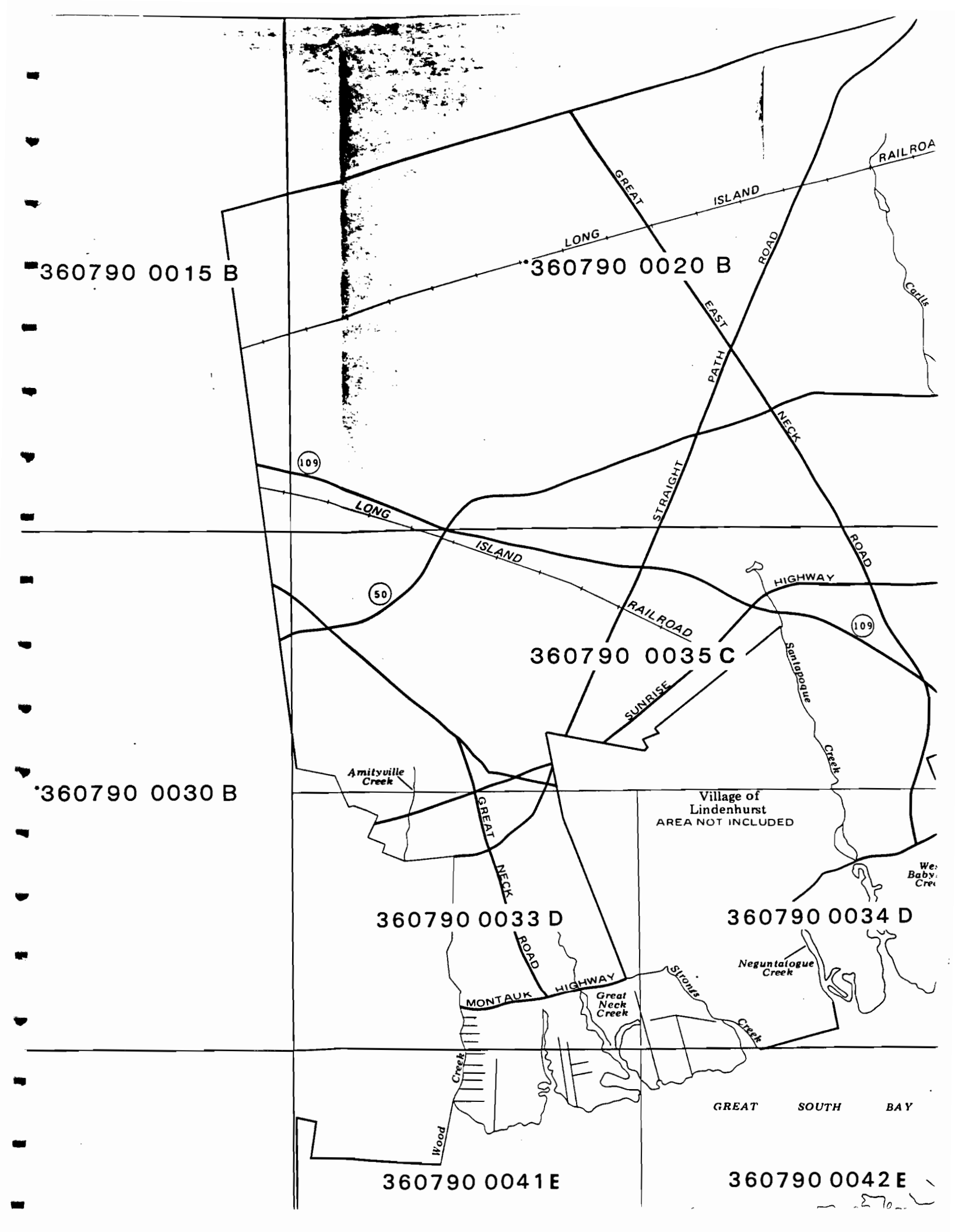
MAP INDEX

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

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LONG ISLAND RAILROA
GREAT NECK ROAD
EAST PATH
STRAIGHT PATH
NECK ROAD
LONG ISLAND RAILROAD
HIGHWAY
109
50
SUNRISE
Santapogue Creek
Amityville Creek
Village of Lindenhurst
AREA NOT INCLUDED
GREAT NECK ROAD
MONTAUK HIGHWAY
Great Neck Creek
Neguntalogue Creek
Strongs 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
- ~~Argalinis~~ Acuta (plant)

~~Six~~ State-listed threatened species
- ~~Sterna Hirundo (Bird)~~
- Helianthus Angusifolius (plant)
- Linum Medum var Texanum (plant)
- Platanthera Ciliaris (plant)
- Scleria Pauciflora var Caroliniana (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 STAFF 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 ~~sp~~spread lime on floor to ~~neutralize~~ 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.

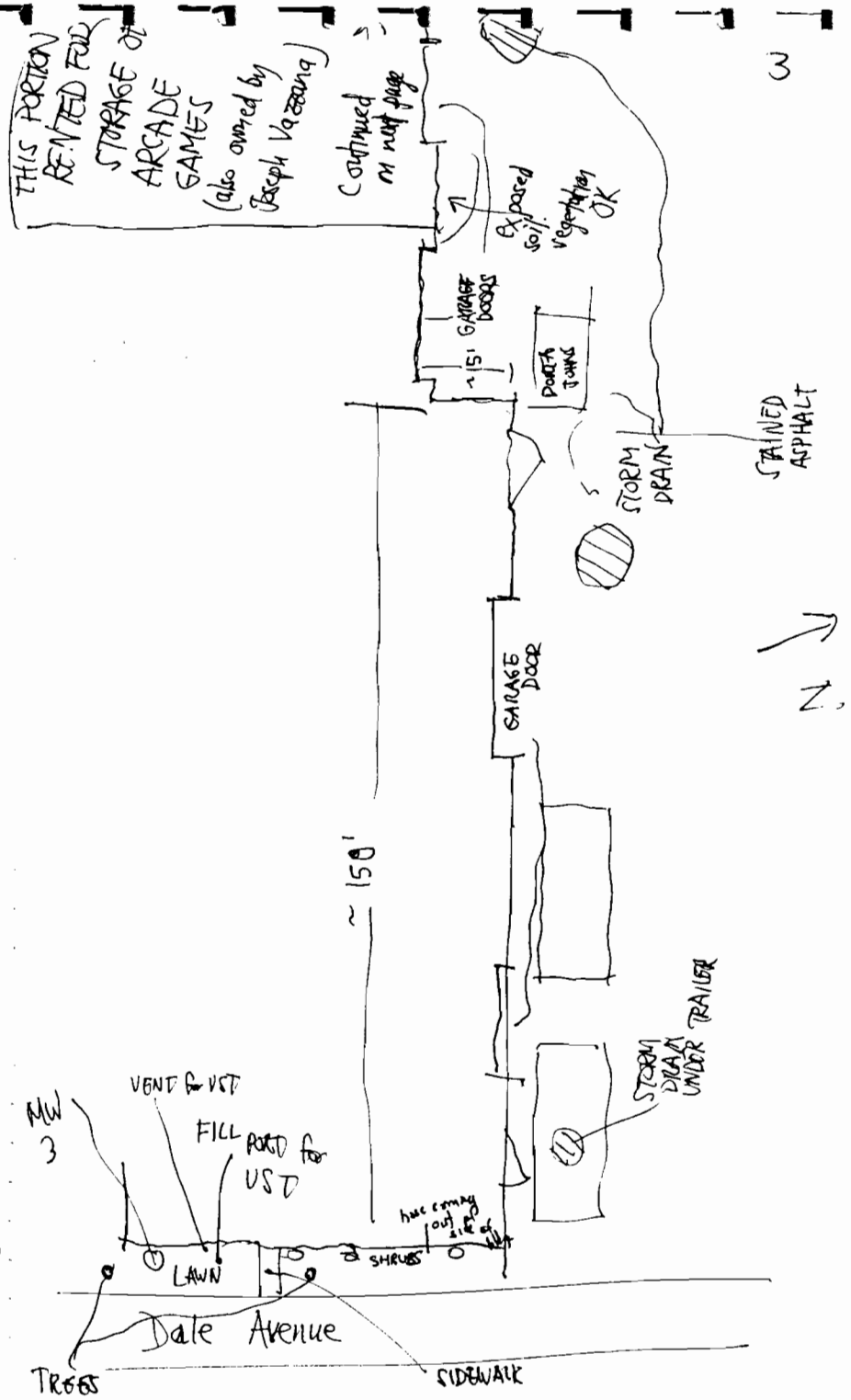
1410 Noted hose coming out of building on east side (along Dale Avenue). Hose goes into Y fitting leading to 2 other hoses going into ground.

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. ½ 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.



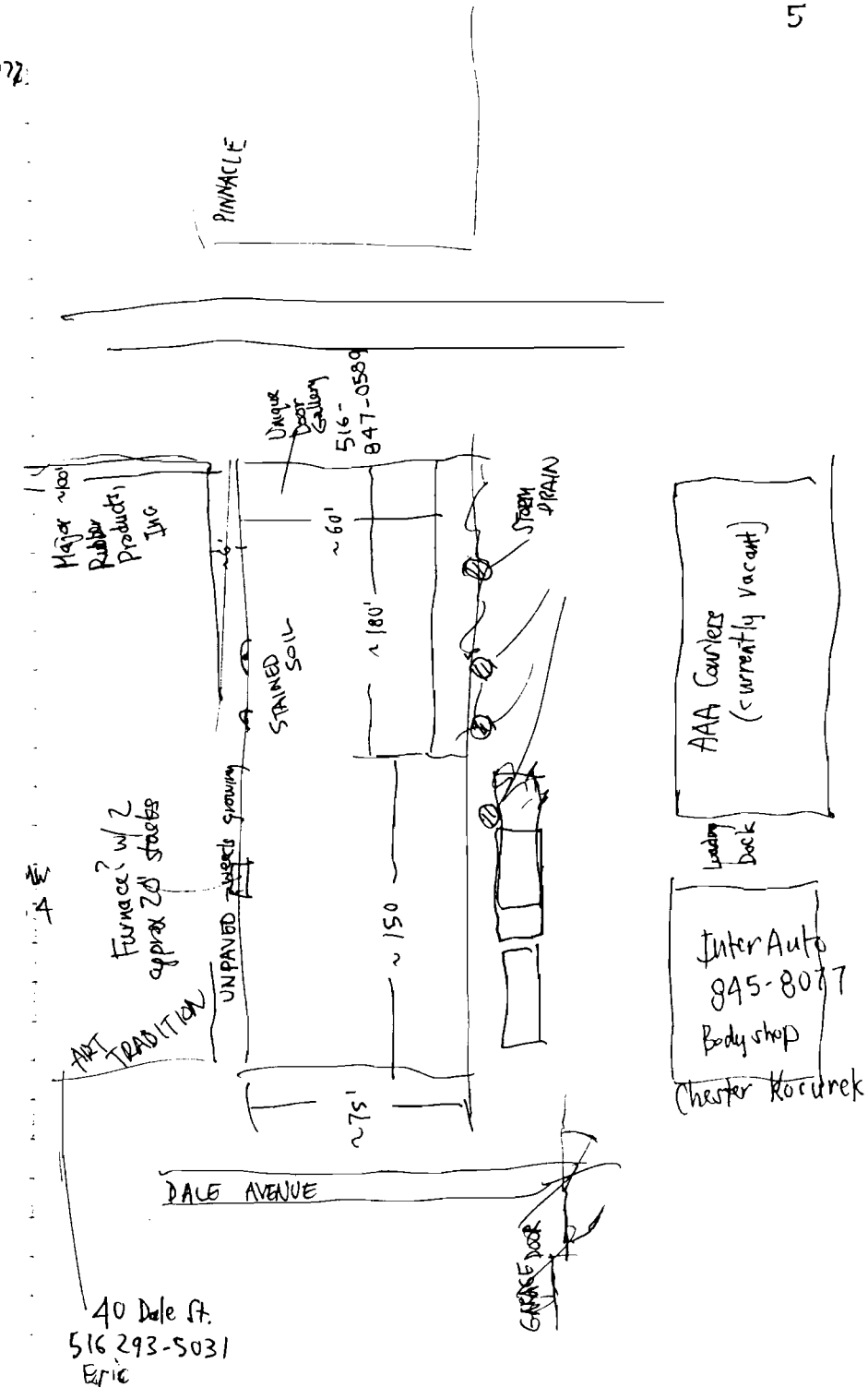
1445 Spoke to Chester Kocurek, owner of Inter Auto, body shop located in building to north of Spectrum building (516-845-8077).

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 (most recently JH occupied by AAA Couriers) to the north of Spectrum building.
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 4/7/98

0755 C. Guder, S Klepacki, M. Stanstad, J Hinge arrive on site

C Guder, J. Hinge inspect site, check well locations. Unload van and subcontractor 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 (YSI 58) SN 97B0597 AH

Calibrated water quality meter (YSI 63) [illegible] and [illegible]

- Conductivity 1000 uS/cm [illegible] read 0.963 @ 11.5°C 0.981 @ 12°C
- Checked pH in 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).

Note: Depths 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 for bail.

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	by	Date	Time
1	Location of SS01, facing east.	4/7/98	0940
2	Location of SS02, facing east	4/7/98	1015
3	Location of SS03, facing east.	4/7/98	1040
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	1240
new camera * 10	Location of SW05	4/7/98	1340
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

Photo	by	Date	Time
18	Location of SS07, facing south (toward Spectrum bldg).	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
0.34 mU/cm
pH: 6.64
DO: 69.4%

1205 Collect sample SW03.

1220 T. Varner, C. Guder collect sample SS09 (same location as SW04).

1225 [illegible] to dry well to collect SS05

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

1310 [illegible] SS06 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 locations.

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 Gauge 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 Gauge 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 padlocked 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 sandy 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 5' 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. 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,

and approx. 15' south of northern wall.

1510 Collect background soil sample SS20 from lawn west of AAA Couriers. Sample 1 dark brown silty sand with trace gravel. No readings above background on OVM. and trace root traces ly. 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 Gabrion 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 Cinque Dea 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 SS02 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 MMA

Convoys 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

43280 ml 528000 ml

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	033

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	15.552 3vol

Shallow Well (GW03)

TIME	Gal	TEMP	PH	COND	EL
1220	2.0	11.7	5.57	0.167	049
1225	4.0	12.1	5.79	0.187	-073
1285	6.0	11.8	5.79	0.188	-048

DEEP WELL (GW07)

TIME	GAL	TEMP	PH	COND	EL
1300	5.0	13.0	5.60	0.243	055
1315	10.0	13.4	5.57	0.263	-027
1330	15.0	13.4	5.64	0.262	-143

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 for wells located adjacent to Nuto body shop - no luck installed will use well located approximately 20 ft west of wells.

DTB 25.9
DTW 16.0
9.9
.16
594
990
1.584 lwl
3
4.752 3wol

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 GW-40 to locate well cap)

Shallow		Deep	
DTB	24.9	DTB	48.3
DTW	16.3	DTW	16.3
	8.6		32.0
	.16		.16
	516		192 0
	860		320 0
	1376		5.120
	.3		.3
	4.128 gal		15.360 gal

Shallow well (GW02)

Time	Gal	Temp	pH	cond	eH
1200	2.0	12.5	5.68	0.167	-122
1210	4.0	12.3	5.75	0.191	-0177
1215	6.0	12.2	5.75	0.188	-179

Deep well (GW06)

Time	Gal	Temp	pH	Cond	eH
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	-185

Sample GW02 & GW09 (DUP) at 1220 & 1320 resp.
Sampled GW06 at 1330.

REFERENCE NO. 35

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

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
MANAGERS DESIGNERS CONSULTANTS

John Hinga
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, 93
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 demobing within the next few weeks.

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

Follow-Up-Action:

Originator's Initials JH

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 _____

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 — Date: 4/15/98

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

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.	Sampling Co.	4. Date Shipped	Carrier
		2	Roy F Weston	4/7/98	Federal Express

Regional Information

Sampler (Name): Michelle Stensrud

Airbill Number: 803269342140

Non-Superfund Program

Sampler Signature: Michelle Stensrud

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

5. Ship To: PDP Analytical Services
1680 Lakefront Circle, Suite B
The Woodlands, TX 77380
ATTN: Sachin Kudchadkar

6. Preservative (Enter in Column D)
1. HCl
2. HNO_3
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)
BMM59	1	Low	Grab	—	X				483	22-0132-SW04	4/7/98 1100	MLS	MBKL35	MS/MSD
BMM61	2		Grab	—	X				497, 498, 499	22-0132-GW01	4/7/98 1130	MLS	MBKL37	MSD
BMM58	1		Grab	—	X				476	22-0132-SW03	4/7/98 1205	MLS	MBKL34	
BMM65	2		Grab	—	X				539	22-0132-GW05	4/7/98 1140	MLS	MBKL41	
BMM60	1		Grab	—	X				490	22-0132-SW05	4/7/98 1345	MLS	MBKL36	
BMM74	8		Grab	—	X				602	22-0132-TB01	4/7/98 800	MLS	—	Trip Blank
BMM63	2		Grab	-	X				525	22-0132-GW03	4/7/98 1400	MLS	MBKL39	
BMM67	2		Grab	-	X				553	22-0132-GW07	4/7/98 1410	MLS	MBKL43	
BMM56	1		Grab	-	X				462	22-0132-SW01	4/7/98 1445	MLS	MBKL32	
BMM57	1		Grab		X				469	22-0132-SW02	4/7/98 1605	MLS	MBKL33	

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

Page 1 of 2

Sample used for a spike and/or duplicate: BMM59, 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 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

DISTRIBUTION:
Blue - Region Copy Pink - SMO Copy White - Lab Copy for Return to Region Yellow - Lab Copy for Return to SMO

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS

O347271

Org-1

Organic Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

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

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: 803269342140

Non-Superfund Program

Sampler Signature: Michelle Stensrud

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

5. Ship To:
PDP Analytical Services
1680 Lakefront Circle, Suite B
The Woodlands, TX 77380
Attn: Sachin Kudchadkar

6. Preservative (Enter in Column D)
1. HCl
2. HNO_3
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	E BNA	E Pest/ PCB	E 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 FB03	4/7/98 1710	MLS	MBKL47	Field Blank
BMM64	2	Low	Grab	—	X				532	22-0132 GW04	4/7/98 1650	MLS	MBKL40	
BMM68	2	Low	Grab	—	X				560	22-0132 GW08	4/7/98 1700	MLS	MBKL44	

Shipment for Case complete? (Y/N)

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 Stensrud	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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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.: 24114

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
		2	Roy F Weston	4/7/95	Federal Express

Regional Information

Sampler (Name): Michelle Stensrud

Airbill Number: 803269342129

Non-Superfund Program

Sampler Signature: Michelle L. 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	Pre-Remedial	Remedial	Removal
SF			RIFS	CLEM
PRP		PA	RD	REMA
ST		SSI	RA	REM
FED		LSI	O&M	OIL
			NPLD	UST

(SSI: X)

6. Preservative (Enter in Column D)
1. HCl
2. HNO_3
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	E: BNA	E: Pest/ PCB	E: 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)
BMM68	2	low	Grab	—		X	X		561-564	22-0132-GWCK	4/7/95 1700	MLS	MBKL44	
BMM70	4	low	Grab	-	X	X	X		574,575-578	22-0132 FB:1	4/7/95 1730	MLS	MBKL46	Field Blank (1 Blank + Spike)

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	4/7/95 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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Org-1

0347251

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.	Sampling Co.	4. Date Shipped	Carrier
		2	ROY F. Weston	4/7/98	Federal Express

Regional Information

Sampler (Name): Michelle Stensrud

Airbill Number: 803269342140 29 (MCS)

Non-Superfund Program

Sampler Signature: Michelle 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)

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

City, State: West Babylon NY

Site Spill ID

ATTN: Nancy LeBlanc

6. Preservative (Enter in Column D): 1. HCl 2. HNO_3 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)
BMM42	5	Low	Grab	—	X	X	X		417, 418	22-0132-SW01	4/7/98 1405	MCS	MBKL18	
BMM54	5		Grab	—	X	X	X		456, 457	22-0132-SS22	4/7/98 1105	MCS	MBKL30	Dup
BMM63	2		Grab	—	(MCS)	X	X		528, 529, 526, 527	22-0132-SW03	4/7/98 1400	MCS	MBKL39	
BMM67	2		Grab	—		X	X		552, 555, 554, 557	22-0132-SW07	4/7/98 1410	MCS	MBKL43	
BMM56	2		Grab	—		X	X		466, 463, 464, 465	22-0132-SW01	4/7/98 1445	MCS	MBKL32	
BMM38	5		Grab	—	X	X	X		405, 406	22-0132-SS06	4/7/98 1540	MCS	MBKL14	
BMM57	1		Grab	—	-	X	X		470, 472, 473, 471	22-0132-SW02	4/7/98 1605	MCS	MBKL33	
BMM35	5		Grab	—	X	X	X		404, 408	22-0132-SS07	4/7/98 1645	MCS	MBKL15	
BMM71	4		Grab	—		X	X		582, 583, 585, 584	22-0132-FB02	4/7/98 1710	MCS	MBKL47	Field Blank
BMM64	2	↓	Grab	—		X	X		533 - 536	22-0132-SW04	4/7/98 1640	MCS	MBKL40	

Shipment for Case complete? (Y/N)	Page 2 of 3	Sample used for a spike and/or duplicate	Additional Sampler Signatures	Chain of Custody Seal Number
Y		BMM54		

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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SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS

Org-1

0347255

Organic Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

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

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: 803269342140

Non-Superfund Program

Sampler Signature: Michelle 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

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

City, State: West Babylon NY

Site Spill ID:

6. Preservative (Enter in Column D)
1. HCl
2. HNO_3
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	E: BNA	E: Pest/ PCB	E: 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		384, 340	22-0132 SS01	4/7/98 945	MLS	MBKL09	MS/MSD
BMM34	5		Grab	—	X	X	X		394, 393	22-0132 SS02	4/7/98 1005	MLS	MBKL10	
BMM35	5		Grab	—	X	X	X		396, 397	22-0132 SS03	4/7/98 1015	MLS	MBKL11	
BMM59	5		Grab	—		X	X		484, 485, 486, 487	22-0132 SW04	4/7/98 1100	MLS	MBKL35	
BMM60	2		Grab	—		X	X		500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511	22-0132-GW01	4/7/98 1130	MLS	MBKL37	MS/MSD
BMM58	1		Grab	—		X	X		477, 478, 479, 480	22-0132 SW03	4/7/98 1205	MLS	MBKL34	
BMM65	1		Grab	-		X	X		540, 541, 542, 543	22-0132 GW05	4/7/98 1140	MLS	MBKL41	
BMM40	5		Grab	—	X	X	X		411, 412	22-0132 SS08	4/7/98 1240	MLS	MBKL16	
BMM41	5		Grab	—	X	X	X		414, 415	22-0132 SS09	4/7/98 1220	MLS	MBKL17	
BMM66	1		Grab	—		X	X		491, 492, 493, 494	22-0132-SW05	4/7/98 1345	MLS	MBKL36	

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

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 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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SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS

0347253

Org-1

Organic Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

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

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	4/8/98	Federal Express

Regional Information

Sampler (Name): Michelle Stensrod

Airbill Number: 803269342130

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	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. HNO_3
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	E BNA	E Pest/ PCB	E 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				527	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 Blink - Dan

Shipment for Case complete? (Y/N)

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

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0012649

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.	Sampling Co.	4. Date Shipped	Carrier
		2	Roy F. Weston	4/8/98	Federal Express

Regional Information

Sampler (Name): Michelle Stransue

Airbill Number: 803269341902

Non-Superfund Program

Sampler Signature: Michelle Stransue

5. Ship To: American Analytical & Technical Services, Inc. 1980 Industriplex Blvd. Baton Rouge, LA 70809

Site Name: Spectrum Finishing Corp

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

City, State: West Babylon NY

Site Spill ID

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)
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 1035	MLS	MBKL19	
BMM37	5	Low	Grab	—	X	X	X		402, 403	22-0132-5505	4/8/98 1135	MLS	MBKL13	
BMM41	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-GW024	4/8/98 1320	MLS	MBKL38	
BMM64	2	Low	Grab	—		X	X		568-571	22-0132-GW041	4/8/98 1325	MLS	MBKL45	DUP
BMM66	2	Low	Grab	—		X	X		547-550	22-0132-GW048	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. Stransue	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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Org-1

0347256

EPA Organic Traffic Report & Chain of Custody Record

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

(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	4/8/98	Federal Express

Regional Information	Sampler (Name)	Airbill Number
	Michelle Stensrud	803269341902

Non-Superfund Program	Sampler Signature	5. Ship To
	Michelle Stensrud	American Analytical & Technical Services, Inc.

Site Name	3. Type of Activity	Remedial	Removal	5. Ship To (cont.)
Spectrum Finishing Corp	Lead / Pre-Remedial			11950 Industriplex Blvd
City, State: West Babylon NY	SF	RIFS	CLEM	Baton Rouge, LA 70809
Site Spill ID	PRP / PA	RD	REMA	Attn: Nancy LeBlanc
	ST / SSI [X]	RA	REM	
	FED / LSI	O&M	OIL	
		NPLD	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	E BNA	E Pest/ PCB	E 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	22-0132-5515	4/8/98 1435	MLS	~~MBKL~~ MCS	
BMM72	4	Low	Grab	—		X	X		589-592	22-0132-FB03	4/8/98 1455	MLS	MBKL48	Field Blank Bottle
BMM73	4	Low	Grab	[MS]	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	22-0132-5519	4/8/98 1450	MLS	MBKL27	MS/MSD
BMM52	5	Low	Grab	—	X	X	X		450-451	22-0132-5520	4/8/98 1510	MLS	MBKL28	

Shipment for Case complete? (Y/N)	Page X of 2	Sample used for a spike and/or duplicate	Additional Sampler Signatures	Chain of Custody Seal Number
	2	BMM51		

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	

EPA Form 9110-2 (Rev. 5-91) Replaces EPA Form (2075-7), previous edition which may be used

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Split Samples ☐ Accepted (Signature)
☐ Declined

Org.

0012646

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. 24114

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: Jason Rickman

Site Name: Spectron Finishing Corp

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

City, State: West Babylon NY

Site Spill ID

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
MBKL18	5	Low	Grab	—	X		X					419	22-0132-SS10	4/7/98 1405	MLS	BMM42	
MBKL30	5		Grab	—	X		X					458	22-0132-SS22	4/7/98 1405	MLS	BMM54	Dup
MBKL34	2		Grab	2,3	X		X					531,530	22-0132-GW03	4/7/98 1400	MLS	BMM63	
MBKL43	2		Grab	2,3	X		X					559,558	22-0132-GW07	4/7/98 1410	MLS	BMM67	
MBKL32	1		Grab	2,3	X		X					467,468	22-0132-SW01	4/7/98 1445	MLS	BMM52	
MBKL14	5		Grab	—	X		X					407	22-0132-SS06	4/7/98 1540	MLS	BMM38	
MBKL33	1		Grab	2,3	X		X					175	22-0132-SW02	4/7/98 1605	MLS	BMM57	
MBKL15	5		Grab	—	X		X					410	22-0132-SS07	4/7/98 1625	MLS	BMM39	
MBKL47	4		Grab	—	X		X					563	22-0132-FB02	4/7/98 1710	MLS	BMM71	Field Blk - beta
MBKL40	2	V	Grab	2,3	X		X					538,537	22-0132-GW04	4/7/98 1650	MLS	BMM64	

Shipment for Case complete? (Y/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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SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS

Inorg-1

1338340

EPA Inorganic Traffic Report & Chain of Custody Record

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

(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. Stansbury

Airbill Number: 803269341898

Non-Superfund Program

Sampler Signature: Michelle L. Stansbury

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	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	Metals 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)
MBKL 09	5		Grab	—	X		X					391, 392	22-0132-SSO1	4/7/98 0945	MCS	BMM33	MS/MSD
MBKL 10	5		Grab	—	X		X					395	22-0132-SSO2	4/7/98 1005	MCS	BMM34	
MBKL 11	5		Grab	—	X		X					398	22-0132-SSO3	4/7/98 1025	MCS	BMM35	
MBKL 35	1		Grab	2,3	X		X					488, 489	22-0132-SWO4	4/7/98 1100	MCS	BMM59	
MBKL 39	2		Grab	2,3	X		X					487, 488	22-0132-SWO3	4/7/98 1130	MCS	BMM58	MS/MSD
MBKL 37	2		Grab	2,3	X		X					512, 513, 514, 515, 516, 517	22-0132-SWO1	4/7/98 1130	MCS	BMM61	MS/MSD
MBKL 41	1		Grab	2,3	X		X					544, 545	22-0132-SWO5	4/7/98 1140	MCS	BMM65	
MBKL 16	5		Grab	—	X		X					413	22-0132-SSO8	4/7/98 1240	MCS	BMM40	
MBKL 17	5		Grab	—	X		X					416	22-0132-SSO4	4/7/98 1220	MCS	BMM41	
MBKL 36	1		Grab	2,3	X		X					496	22-0132-SWO2	4/7/98 1345	MCS	BMM60	

Shipment for Case complete? (Y/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. Stansbury	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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Inorg-1

1338341

EPA — Inorganic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

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PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

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: 803269341895

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: Tasan Rickman

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. HNO_3
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)
BMMK44	2	L	Grab	2,3	X		X					565, 566	22-0326WS8	4/7/98 1700	MLS	BMMK68	MS
MBBLK46	4	L	Grab	2,3	X		X					580, 579	22-0132FB01	4/7/98 1750	MLS	BMM70	FB01 - Rinsate

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 C. Stensrud	4/7/98 1515 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

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1338339

Inorg-1

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

(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	4/8/98	Federal Express

Regional Information:

Sampler (Name): Michelle Stensrud

Airbill Number: 803269341887

Non-Superfund Program:

Sampler Signature: Michelle Stensrud

5. Ship To: American Analytical & Technical Services, Inc
1700 West Albany, Suite C
Broken Arrow, OK 74012

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

ATTN: Jason Buckman

6. Preservative (Enter in Column D)
1. HCl
2. HNO_3
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	Metals 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
MBKL																	
MBKL35	5	Low	Grab	—	X		X					440	22-0132-SS17	4/8/98 1010	MLS	BMM49	
MBKL24	5	Low	Grab	—	X		X					437	22-0132-SS16	4/8/98 1030	MLS	BMM45	
MBKL19	5	Low	Grab	—	X		X					422	22-0132-SS11	4/8/98 1055	MLS	BMM43	
MBKL13	5	Low	Grab	—	X		X					404	22-0132-SS05	4/8/98 1135	MLS	BMM37	
MBKL42	5	Low	Grab	—	X		X					401	22-0132-SS04	4/8/98 1255	MLS	BMM36	
MBKL20	5	Low	Grab	—	X		X					425	22-0132-SS12	4/8/98 1200	MLS	BMM44	
MBKL26	5	Low	Grab	—	X		X					443	22-0132-SS18	4/8/98 1315	MLS	BMM52	
MBKL38	2	Low	Grab	2,3	X		X					523,524	22-0132-GW03	4/8/98 1320	MLS	BMM62	
MBKL45	2	Low	Grab	2,3	X		X					572,573	22-0132-GW04	4/8/98 1325	MLS	BMM69	Dup
MBKL42	2	Low	Grab	2,3	X		X					551,552	22-0132-GW02	4/8/98 1330	MLS	BMM64	

Shipment for Case complete? (Y/N)

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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Inorg-1

1338338

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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

(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
			Roy F. Weston	4/8/98	Federal Express

Regional Information

Sampler (Name): Michelle Stensrud

Airbill Number: 803269341887

Non-Superfund Program

Sampler Signature: Michelle Stensrud

5. Ship To: American Analytical & Technical Services, Inc. Suite C, 1200 West Albany, 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	RA	REM
FED		LSI	O&M	OIL
			NPLD	UST

6. Preservative (Enter in Column D)
1. HCl
2. HNO_3
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)
MBKL48	4	Low	Grab		X		X					593, 594	22-0132-FB03	4/8/98 1455	MLS	BMM72	Field Blnk - Inorg
MBKL49	4	Low	Grab		X		X					600, 601	22-0132 FB04	4/8/98 1515	MLS	BMM73	Field Blank - Bulk Trip
MBKL27	5	Low	Grab		X		X					448, 449	22-0132-SS19	4/8/98 1450	MLS	BMM38	MS/MSD
MBKL28	5	Low	Grab		X		X					452	22-0132-SS20	4/8/98 1510	MLS	BMM52	

Shipment for Case complete? (Y/N)

Page 2 of 2

Sample used for a spike and/or duplicate: MBKL27

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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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 Org 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

REGIONAL SAMPLE CONTROL CENTER

RECEIVED
JUL 31 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 SST

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 Babich	7-1-98
John Babich	7-6-98	George VanOrden	7/13/98
George VanOrden	7/28/98	J. Trutter DCR	7/28/98
J. Trutter DCR	7/29/98	D. Karras	7/29/98
D. 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 OLM03.2 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: Gary S. VanHorn Date: 7/24/1998

Verified By: D. Farras 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

Holding Time Report

SDG NO: BMM33 LABORATORY: AATSLA

CASE NO: 26114 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 Report

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

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 LABORATORY: AATSLA

CASE NO: 26114 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".

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

3E
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SMC/Surrogate Report

SDG NO: BMM56 LABORATORY: AATSLA

CASE NO: 26114 AGENCY INPUT FILE: BMM56.ASF

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.

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 LABORATORY: AATSLA

CASE NO: 26114 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

Laboratory Blanks Report

SDG NO: BMM33 LABORATORY: AATSLA
CASE NO: 26114 AGENCY INPUT FILE: BMM33.ASF

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.

Laboratory Blanks Report

SDG NO: BMM33 LABORATORY: AATSLA

CASE NO: 26114 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 "~~5X~~ 10X rule." Hits are qualified "U" if sample analyte result is < ~~5X~~ 10X field blank amount. 7/23/98

Di-n-butylphthalate

BMM56, BMM57 — qualified "U".

CLP DATA ASSESSMENT

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".

CLP DATA ASSESSMENT

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 LABORATORY: AATSLA
CASE NO: 26114 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

Calibration Report

SDG NO: BMM33 LABORATORY: AATSLA
CASE NO: 26114 AGENCY INPUT FILE: BMM33.ASF

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

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

DC-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

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

CLP DATA ASSESSMENT

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

Calibration Report

SDG NO: **BMM56** LABORATORY: **AATSLA**

CASE NO: **26114** 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

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

Calibration Report

SDG NO: **BMM56** LABORATORY: **AATSLA**

CASE NO: **26114** AGENCY INPUT FILE: **BMM56.ASF**

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

Internal Standards Report

SDG NO: BMM33 LABORATORY: AATSLA
CASE NO: 26114 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.

Quantitation Limit Report

SDG NO: BMM33 LABORATORY: AATSLA

CASE NO: 26114 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 LABORATORY: AATSLA

CASE NO: 26114 AGENCY INPUT FILE: BMM33.ASF

BMM42
Dieldrin, 4,4'-DDE, Endosulfan II, alpha-Chlordane
Aroclor-1254

BMM42DL
beta-BHC, Endosulfan II, Endrin aldehyde, alpha-Chlordane

BMM43
4,4'-DDE

BMM51
Dieldrin, 4,4'-DDE

BMM54
alpha-BHC, Dieldrin, Endosulfan II

BMM54DL
alpha-BHC, beta-BHC, Endosulfan II, 4,4'-DDD
alpha-Chlordane, Aroclor-1254

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
alpha-BHC, beta-BHC, Endrin

BMM33DL
alpha-BHC, beta-BHC, Aldrin, Endosulfan II
4,4'-DDD, Endrin ketone, alpha-Chlordane

BMM33MS
alpha-BHC, beta-BHC, gamma-BHC (Lindane), Aldrin
Endrin, Endrin aldehyde

BMM33MSD
alpha-BHC, beta-BHC, gamma-BHC (Lindane), Heptachlor
Aldrin, Dieldrin, Endrin, Endrin aldehyde

BMM34
Dieldrin, 4,4'-DDT, Methoxychlor, Endrin aldehyde
gamma-Chlordane

Quantitation Limit Report

SDG NO: BMM33 LABORATORY: AATSLA

CASE NO: 26114 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.

Quantitation Limit Report

SDG NO: BMM33
CASE NO: 26114

LABORATORY: AATSLA
AGENCY INPUT FILE: BMM33.ASF

Endrin aldehyde, alpha-Chlordane, gamma-Chlordane

BMM41DL
Dieldrin, 4,4'-DDE, 4,4'-DDT, Methoxychlor
gamma-Chlordane

BMM42
Endosulfan I, 4,4'-DDD, gamma-Chlordane

BMM42DL
Dieldrin, Endrin ketone, gamma-Chlordane

BMM49
Aroclor-1254

BMM51
Aldrin, Endosulfan I, Endosulfan II, Endosulfan sulfate
Methoxychlor, gamma-Chlordane

BMM52
4,4'-DDE, 4,4'-DDT

BMM54
Endosulfan I, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT
Methoxychlor, alpha-Chlordane, gamma-Chlordane, Aroclor-1254

BMM54DL
Heptachlor, Endosulfan I, Dieldrin, Methoxychlor
Endrin ketone, gamma-Chlordane

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

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CLP ORGANICS DATA REVIEW AND PRELIMINARY REVIEW (CLP/SOW OLMO 3.2)

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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

7/19/96

1.0 Chain of Custody and Sampling Trip Reports

1.1 Are the Traffic Repcrts/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.

4.0 Data Validation Checklist

4.1 Check the package for the following discrepancies:

	YES	NO	N/A
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:

	YES	NO
VOA Data?	✓	
BNA Data?	✓	
Pesticide/PCB data?	✓	

ACTION: Complete corresponding parts of checklist.

YES NO N/A

PART A: VOA ANALYSES

.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.

.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 CADRE 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? ✓ ✓ ___

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
5.3 Has a VOA method blank been analyzed at least once every twelve hours for each concentration level and GC/MS system used?	☑		
5.4 Was a VOA instrument blank analyzed after each sample/dilution which contained a target compound that exceeded the initial calibration range?		✓	
5.5 Was a VOA storage blank analyzed at the end of all samples for each SDG in a case?	✓		

ACTION: If any method/instrument blank data are missing, contact the WAM to obtain any missing deliverables from the laboratory. If method blank data are not available, reject "R" all associated positive data. However, using professional judgement, the data reviewer may substitute field blank or trip blank data for missing method blank data.

If any instrument blank analyzed after a sample with high concentration is missing, contact the WAM to obtain any missing deliverables from the laboratory. If the instrument blank was not analyzed or not available, inspect the chromatogram of the sample analyzed immediately after this analysis for possible carryover. Use professional judgement to determine if any contamination occurred and qualify analyte(s) accordingly.

If storage blank data is missing, contact the WAM to obtain any missing deliverables from the laboratory. If unavailable, note in the Contract Problems/Non-Compliance section of the Data Assessment.

5.6 The validator should verify that the correct identification scheme for the EPA Blank samples were used. See page B-33, section 3.3.7.3 of the SOW for further information.

	YES	NO	N/A
Was the correct identification scheme used for all VOA blanks?	✓		

ACTION: Contact the WAM to obtain missing deliverables from the lab, or make the required corrections on the forms. Document in the Data Assessment under Contract Problems/Non-compliance if corrections were made by the validator.

	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.			
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.

.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 Field Duplicates .

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 HI 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

NOTE: Contractual requirements state that if any surrogate fails acceptance criteria, the sample must be re-analyzed. If sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

NOTE: The laboratory must submit the following data:

1. If surrogate 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 surrogate recoveries and/or internal standard responses fail to meet the acceptance criteria upon re-analysis, then submit data from both analyses.

3.5 Are there any transcription/calculation errors between raw data and Form II? ___ [✓] ___

ACTION: If large errors exist, contact the WAM to request an explanation or resubmittal of corrected deliverables from the laboratory. Make necessary corrections and note errors in the Data Assessment.

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 3.2 above.

4.3 How many BNA spike recoveries are outside QC limits?

Water	Soils
BMM56: 1 out of 22	BMM33: 18 out of 22

	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)

		YES	NO	N/A
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.			
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.

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).

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.			

.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.

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.

5.0 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.

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.

3.3 Were outliers marked correctly with an asterisk?	[✓]		

ACTION: Circle all outliers with red pencil.

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.

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 (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 Chromatography: 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.

0 Contamination

NOTE: "Water blanks", "distilled water blanks" and "drilling water blanks" are validated like any other sample and are not used to qualify the data. Do not confuse them with the other QC blanks discussed below.

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.

Exception: 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.

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.

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.

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 last in-control standard, 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).

.0 Analytical Sequence Check (Form VIII-PEST)

	YES	NO	N/A
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.

	YES	NO	N/A
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.

	YES	NO	N/A
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.

	YES	NO	N/A
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)

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.

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 **reported** pesticide value 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
c. Blanks?	✓		
d. Instrument Blanks (per column & analysis)?	✓		
11.2 Are the Pest chromatograms and quant. reports included in the sample data package for each of the following:			
a. Samples and/or fractions as appropriate?	✓		
b. Matrix spikes and matrix spike duplicates?	✓		
c. Blanks?	✓		
d. Instrument Blanks (per column & analysis)?	✓		
ACTION: If any data are missing, take action specified in 3.2 above.			
11.3 Are the calibration factors shown in the quant. reports?		✓	
11.4 Is chromatographic performance acceptable with respect to:			
a. Baseline stability?	✓		
b. Resolution?	✓		
c. Peak shape?	✓		
d. Full-scale graph attenuation?	✓		
e. Other: _____?			
11.5 Were any electropositive displacement (negative peaks) or unusual peaks seen?		✓	
ACTION: Use professional judgement to determine the acceptability of the data. Address comments under System Performance section of the Data Assessment.			

12.0 Compound Quantitation and Reported Detection Limits

	YES	NO	N/A
12.1 Are there any transcription/calculation errors in Form I results? Check at least two positive results. Were any errors found?		✓	

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: [signature] **Number of Samples:** 19

Analytes Rejected Due to Exceeding Review Criteria For:

No. of Compounds/No. of Fractions (Samples)

	Surrogates	Holding Time	Calibration	Contamination	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	Calibration	Contamination	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: JR **Number of Samples:** 18

Analytes Rejected Due to Exceeding Review Criteria For:

No. of Compounds/No. of Fractions (Samples)

	Surrogates	Holding Time	Calibration	Contamination	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	Calibration	Contamination	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.

000001

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	

000002

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

000005

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 (µg/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:	BMM38DL
Sample weight (g):	30
Moisture:	17
Dil Factor:	10
Conv Factor:	402

	Result	Concentration (µg/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:	BMM38
Sample weight (g):	30
Moisture:	17
Dil Factor:	5
Conv Factor:	201

	Result	Concentration (µg/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:	BMM39
Sample weight (g):	30
Moisture:	20
Dil Factor:	5
Conv Factor:	208

	Result	Concentration (µg/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

000009

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 LeBlanc
Sample Custodian

April 22, 1998
Date

1A

VOLATILE 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: 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	UJ
67-64-1	Acetone	70	RUJ
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 J
78-93-3	2-Butanone	10	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 J
71-43-2	Benzene	10	U J
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U R
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	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

EPA SAMPLE NO. 126

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	16.93	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

1A
VOLATILE 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: 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 J
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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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: 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

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)

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	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

000071
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: 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~~ R

JCN 1 - 89

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	BJUJ
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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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: 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	R U J
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	U J
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	U J
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

1E

VOLATILE 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: 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	16.88	38	J
7.		Unknown	17.13	67	J
8.		Unknown	17.52	50	J
9.		Unknown	17.73	290	J
10.		Unknown	18.13	69	J
11.		Unknown	19.00	59	J
12.		Unknown	20.77	160	J

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1A

VOLATILE 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: 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)

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	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

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)

Number TICs found: 9 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	11.910	~~9~~	~~BJ~~ R
2.		Unknown	15.82	9	J
3.		Unknown	16.20	6	J
4.		Unknown	16.589	8	J
5.		Unknown	17.021	8	J
6.		Unknown	17.234	6	J
7.		Unknown	17.42	7	J
8.	55429-85-1	Benzeneethanamine, N-[(penta	17.72	~~17~~	~~BJN~~ R
9.		Unknown	18.121	8	J

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

000150 EPA SAMPLE NO.

BMM39RE

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: 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
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

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

1E

VOLATILE 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: 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

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	Chlorcethane	160	U
75-09-2	Methylene Chloride	160 ~~80~~	~~U~~
67-64-1	Acetone	530	BUJ
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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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)

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	13.634	1200	J
9.		Unknown branched alkane	14.17	1500	J
10.	124-18-5	Decane	14.684	9800	JN
11.	629-50-5	Tridecane	14.92	13000	JN
12.		Unknown acid	15.024	4000	J
13.		Unknown alkane	15.376	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-	15.889	2200	JN
17.	135-01-3	Benzene, 1,2-diethyl-	16.12	3700	JN
18.	1120-21-4	Undecane	16.370	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	17.021	2100	J

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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	14	U
67-64-1	Acetone	100	
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	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	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	14.67	1000	JN
6.	1120-21-4	Undecane	14.92	85	JN
7.		Unknown branched alkane	15.05	460	J
8.		Unknown alkane	15.37	200	J
9.		Unknown	15.47	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	17.23	1100	J
18.		Unknown	17.38	960	J
19.		Unknown	17.50	600	J
20.		Unknown	17.68	96	J

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
BMM43

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	U
67-64-1	Acetone	21	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	7	BJ
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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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)

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	13.789	10	J
2. 629-92-5	Nonadecane	17.174	45	JN

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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	BJU
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
EPA SAMPLE NO.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~Ethylbenzene~~ Alkylbenzene	15.234	9	J

nr

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000292 (51)

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	U
67-64-1	Acetone	75	BU
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
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

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	JU
67-64-1	Acetone	69	RUJ
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

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

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	16.77	17	J
5.		Unknown	16.98	24	J
6.		Unknown	17.15	31	J
7.		Unknown	17.38	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	U J
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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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

000351

161

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 R
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 R
67-64-1	Acetone	52	J
75-15-0	Carbon Disulfide	14	U R
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	U J

000352 162

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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)

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	17.78	96	J
10.		Unknown	17.92	170	J
11.		Unknown	18.05	530	J
12.		Unknown	18.18	520	J
13.		Unknown	18.33	320	J
14.		Unknown	18.98	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	21.18	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-	23.88	210	J

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

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

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	BJU
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	UJ
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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

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 J
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	BU
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.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

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~~	~~AJ~~ 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	17.90	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

MAY 25 1998

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

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~~ 4
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

000746

EPA SAMPLE NO. 171

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

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	~~590~~	~~AJ~~ R
2.		Unknown	16.47	420	J
3.		Unknown	17.43	590	J
4.		Unknown	17.76	400	J
5.		Unknown	17.85	960	J
6.		Unknown	17.97	930	J
7.		Unknown	18.01	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

TLA MAY 20 1998

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

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

000782 174

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

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~~	~~BJ~~ 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~~	~~E~~
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	10.37	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	14.68	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	17.43	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

MAY 26

MAY 2

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
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

000890 179

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
85-68-7	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

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

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	14.78	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	19.34	2500	J
27.		Unknown	19.87	1200	J
28.		Unknown	20.07	1900	J

MAY 26 1998

001006 181

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

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 J
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

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~~	~~BJ~~ 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	7900* ~~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

1F

EPA SAMPLE NO.

BMM39

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: 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	15.72	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	18.22	5300	J
20.		Unknown	18.48	2100	J
21.		Unknown	18.58	2000	J
22.		Unknown	18.97	2900	J
23.		Unknown	19.02	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	UJ
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~~	~~E~~
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 J
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

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	14.67	2300	J
8.		Unknown	14.75	3500	J
9.		Unknown	14.87	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	17.58	4500	J
18.		Unknown	17.67	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	18.48	2000	J
24.		Unknown	18.58	1900	J
25.		Unknown	18.87	1900	J
26.		Unknown	18.98	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

MAY 23

001250 187

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

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
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

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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	U J
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.~~30~~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	11.70	15000	J
17.	4612-63-9	9H-Fluorene, 2,3-dimethyl-	12.1~~8~~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-	12.72	17000	JN
23.	610-48-0	Anthracene, 1-methyl-	12.7~~8~~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

TH 5/20/98

1B

SEMIVOLATILE 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: 30.0 (g/mL) G Lab File ID: 122D21

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 29 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: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2300	U
111-44-4	bis(2-Chloroethyl)ether	2300	U
95-57-8	2-Chlorophenol	2300	U
541-73-1	1,3-Dichlorobenzene	2300	U
106-46-7	1,4-Dichlorobenzene	2300	U
95-50-1	1,2-Dichlorobenzene	2300	U
95-48-7	2-Methylphenol	2300	U
108-60-1	2,2'-oxybis(1-Chloropropane)	2300	U
106-44-5	4-Methylphenol	2300	U
621-64-7	N-Nitroso-di-n-propylamine	2300	U
67-72-1	Hexachloroethane	2300	U
98-95-3	Nitrobenzene	2300	U
78-59-1	Isophorone	480	J
88-75-5	2-Nitrophenol	2300	U
105-67-9	2,4-Dimethylphenol	2300	U
111-91-1	bis(2-Chloroethoxy)methane	2300	U
120-83-2	2,4-Dichlorophenol	2300	U
120-82-1	1,2,4-Trichlorobenzene	2300	U
91-20-3	Naphthalene	2300	U
106-47-8	4-Chloroaniline	2300	U J
87-68-3	Hexachlorobutadiene	2300	U
59-50-7	4-Chloro-3-methylphenol	2300	U
91-57-6	2-Methylnaphthalene	360	J
77-47-4	Hexachlorocyclopentadiene	2300	U
88-06-2	2,4,6-Trichlorophenol	2300	U
95-95-4	2,4,5-Trichlorophenol	5800	U
91-58-7	2-Chloronaphthalene	2300	U
88-74-4	2-Nitroaniline	5800	U
131-11-3	Dimethylphthalate	2300	U
208-96-8	Acenaphthylene	2300	U
606-20-2	2,6-Dinitrotoluene	2300	U
99-09-2	3-Nitroaniline	5800	U
83-32-9	Acenaphthene	2300	U

1C

SEMIVOLATILE 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: 30.0 (g/mL) G Lab File ID: 122D21

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 29 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: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	5800	U
100-02-7	4-Nitrophenol	5800	U
132-64-9	Dibenzofuran	2300	U
121-14-2	2,4-Dinitrotoluene	2300	U
84-66-2	Diethylphthalate	2300	U
7005-72-3	4-Chlorophenyl-phenylether	2300	U
86-73-7	Fluorene	2300	U
100-01-6	4-Nitroaniline	5800	U
534-52-1	4,6-Dinitro-2-methylphenol	5800	U
86-30-6	N-Nitrosodiphenylamine (1)	1100	J
101-55-3	4-Bromophenyl-phenylether	2300	U
118-74-1	Hexachlorobenzene	2300	U
87-86-5	Pentachlorophenol	5800	U
85-01-8	Phenanthrene	1400	J
120-12-7	Anthracene	2300	U
86-74-8	Carbazole	2300	U
84-74-2	Di-n-butylphthalate	2300	U
206-44-0	Fluoranthene	300	J
129-00-0	Pyrene	470	J
85-68-7	Butylbenzylphthalate	3200	
91-94-1	3,3'-Dichlorobenzidine	2300	U
56-55-3	Benzo(a)anthracene	2300	U
218-01-9	Chrysene	2300	U
117-81-7	bis(2-Ethylhexyl)phthalate	16000	
117-84-0	Di-n-octylphthalate	840	J
205-99-2	Benzo(b)fluoranthene	2300	U
207-08-9	Benzo(k)fluoranthene	2300	U
50-32-8	Benzo(a)pyrene	2300	U
193-39-5	Indeno(1,2,3-cd)pyrene	2300	U
53-70-3	Dibenz(a,h)anthracene	2300	U
191-24-2	Benzo(g,h,i)perylene	2300	U

(1) - Cannot be separated from Diphenylamine

001315 192
EPA SAMPLE NO.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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: 30.0 (g/mL) G Lab File ID: 122D21

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 29 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: 6.9

Number TICs found: 19 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	2613-76-5	1H-Indene, 2,3-dihydro-1,1,3	9.13	1700	JN
2.	575-37-1	Naphthalene, 1,7-dimethyl-	9.25	2600	JN
3.	581-40-8	Naphthalene, 2,3-dimethyl-	9.36	7500	JN
4.		Unknown	9.52	2000	J
5.	2131-42-2	Naphthalene, 1,4,6-trimethyl	9.97	3200	JN
6.	2245-38-7	Naphthalene, 1,6,7-trimethyl	10.12	3600	JN
7.	2131-42-2	Naphthalene, 1,4,6-trimethyl	10.17	3700	JN
8.	2131-42-2	Naphthalene, 1,4,6-trimethyl	10.32	2900	JN
9.		Unknown	11.47	3100	J
10.	779-02-2	Anthracene, 9-methyl-	12.78	2300	JN
11.	2531-84-2	Phenanthrene, 2-methyl-	12.96	2100	JN
12.	883-20-5	Phenanthrene, 9-methyl-	13.00	2200	JN
13.		Unknown	14.08	1600	J
14.		Unknown	15.17	1500	J
15.		Unknown	17.78	2000	J
16.		Unknown	17.97	2000	J
17.		Unknown	18.67	2100	J
18.		Unknown	18.97	2200	J
19.		Unknown	19.33	3000	J

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM43

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: 30.0 (g/mL) G Lab File ID: 123D07

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 3 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/03/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9

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	UJ
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	UJ
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	U
87-68-3	Hexachlorobutadiene	340	UJ
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	860	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	860	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	860	U
83-32-9	Acenaphthene	340	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM43

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: 30.0 (g/mL) G Lab File ID: 123D07

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 3 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/03/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	860	U
100-02-7	4-Nitrophenol	860	U
132-64-9	Dibenzofuran	340	U J
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U J
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	860	U
534-52-1	4,6-Dinitro-2-methylphenol	860	U J
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	860	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	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	340	U
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U J
207-08-9	Benzo(k)fluoranthene	340	U J
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

001378 195

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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: 30.0 (g/mL) G Lab File ID: 123D07

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 3 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/03/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Aldol condensation	5.72	~~81~~	~~AJ~~
2.		Aldol condensation	5.85	~~81~~	~~AJ~~
3.		Unknown	6.35	78	J
4.		Unknown	13.27	94	J
5.	78-51-3	Ethanol, 2-butoxy-, phosphat	15.57	370	JN

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

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: 30.0 (g/mL) G Lab File ID: 122D12

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: 7.3

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	U 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

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

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: 30.0 (g/mL) G Lab File ID: 122D12

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: 7.3

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	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350 ~~47~~	~~BJ~~ U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	87	J
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	900	
117-84-0	Di-n-octylphthalate	350	U
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

1F

001383 198
EPA SAMPLE NO.

BMM44

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: 2726005

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 122D12

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: 7.3

Number TICs found: 30 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Aldol condensation	5.70	~~420~~	~~AJ~~ R
2.		Aldol condensation	5.84	~~110~~	~~AJ~~ R
3.	541-02-6	Cyclopentasiloxane, decameth	7.27	77	JN
4.		Unknown	7.53	85	J
5.		Unknown	9.62	85	J
6.	70-55-3	Benzenesulfonamide, 4-methyl	11.20	92	JN
7.		Unknown	11.67	78	J
8.		Unknown	12.92	81	J
9.		Unknown	13.07	140	J
10.		Unknown	13.17	82	J
11.		Unknown	13.27	250	J
12.		Unknown	13.32	130	J
13.		Unknown	13.39	170	J
14.		Unknown	13.48	110	J
15.		Unknown	13.58	110	J
16.		Unknown	13.63	130	J
17.	32598-13-3	1,1'-Biphenyl, 3,3',4,4'-tet	13.78	86	JN
18.		Unknown	13.83	140	J
19.		Unknown	13.93	130	J
20.	38380-01-7	1,1'-Biphenyl, 2,2',4,4',5-p	14.12	78	JN
21.	25429-29-2	1,1'-Biphenyl, pentachloro-	14.58	89	JN
22.		Unknown	15.45	82	J
23.		Unknown	16.85	84	J
24.		Unknown	17.50	91	J
25.		Unknown	18.63	76	J
26.		Unknown	18.97	90	J
27.		Unknown	19.17	83	J
28.		Unknown	19.25	250	J
29.		Unknown	19.30	83	J
30.		Unknown	19.63	170	J

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM48

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: 30.0 (g/mL) G Lab File ID: 122D08

Level: (low/med) LOW Date Received: 04/09/98

% 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: 1.0

GPC Cleanup: (Y/N) Y pH: 3.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	UJ
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	900	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	360	U

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1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BMM48

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: 30.0 (g/mL) G Lab File ID: 122D08

Level: (low/med) LOW Date Received: 04/09/98

% 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: 1.0

GPC Cleanup: (Y/N) Y pH: 3.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	900	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360 ~~46~~	~~BJ~~ U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	140	J
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)phthalate	66	J
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenz(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

(1) - Cannot be separated from Diphenylamine

001430 201

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

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: 30.0 (g/mL) G Lab File ID: 122D08

Level: (low/med) LOW Date Received: 04/09/98

% 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: 1.0

GPC Cleanup: (Y/N) Y pH: 3.6

Number TICs found: 13 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	13.07	100	J
2.		Unknown	13.27	230	J
3.		Unknown	13.32	130	J
4.		Unknown	13.40	77	J
5.		Unknown	13.42	130	J
6.		Unknown	13.52	120	J
7.		Unknown	13.57	85	J
8.		Unknown	13.63	160	J
9.		Unknown	13.73	120	J
10.		Unknown	13.77	110	J
11.		Unknown	13.93	110	J
12.		Unknown	14.07	120	J
13.		Unknown	14.28	82	J

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 202

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: 30.0 (g/mL) G Lab File ID: 122D06

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 4 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: 8.0

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	U J
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	860	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	860	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	860	U
83-32-9	Acenaphthene	340	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

001449 EPA SAMPLE NO. 203

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: 30.0 (g/mL) G Lab File ID: 122D06

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 4 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: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	860	U
100-02-7	4-Nitrophenol	860	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	860	U
534-52-1	4,6-Dinitro-2-methylphenol	860	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	860	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	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	340	U
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

1F

SEMIVOLATILE 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: 30.0 (g/mL) G Lab File ID: 122D06

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 4 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: 8.0

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Aldol condensation	5.72	~~72~~	~~AJ~~
2.		Unknown	17.83~~4~~	89	J

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1B

SEMIVOLATILE 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: 30.0 (g/mL) G Lab File ID: 122D14

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 6 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: 7.4

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	880	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	880	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	880	U
83-32-9	Acenaphthene	350	U

206

1C

SEMIVOLATILE 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: 30.0 (g/mL) G Lab File ID: 122D14

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 6 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: 7.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	880	U
100-02-7	4-Nitrophenol	880	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	880	U
534-52-1	4,6-Dinitro-2-methylphenol	880	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	880	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350 ~~38~~	~~BJ~~ U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	70	J
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	350	U
117-84-0	Di-n-octylphthalate	350	U
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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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: 30.0 (g/mL) G Lab File ID: 122D14

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 6 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: 7.4

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Aldol condensation	5.71	~~140~~	~~AJ~~ R
2.		Aldol condensation	5.83	~~140~~	~~AJ~~ R
3.		Unknown	13.27	100	J
4.	473-13-2	Naphthalene, 1,2,3,4,4a,5,6,	19.87	120	JN
5.		Unknown	20.17	100	J

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1B

SEMIVOLATILE 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: 30.0 (g/mL) G Lab File ID: 123D09

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 7 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/03/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 7.0

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	UJ
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	UJ
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	UJ
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

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1C

SEMIVOLATILE 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: 30.0 (g/mL) G Lab File ID: 123D09

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 7 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/03/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 7.0

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 J
132-64-9	Dibenzofuran	1800	U
121-14-2	2,4-Dinitrotoluene	1800	U
84-66-2	Diethylphthalate	1800	U J
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 J
86-30-6	N-Nitrosodiphenylamine (1)	640	J
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	1800	U
206-44-0	Fluoranthene	1800	U
129-00-0	Pyrene	660	J
85-68-7	Butylbenzylphthalate	1800	U
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	370	J
117-84-0	Di-n-octylphthalate	1800	U
205-99-2	Benzo(b)fluoranthene	1800	U J
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

001468 210

1F

SEMIVOLATILE 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: 30.0 (g/mL) G Lab File ID: 123D09

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: 7 decanted: (Y/N) N Date Extracted: 04/10/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/03/98

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs found: 14 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	8.58	2700	J
2.	2613-76-5	1H-Indene, 2,3-dihydro-1,1,3	9.13	2200	JN
3.		Unknown	9.27	1800	J
4.		Unknown	9.38	8000	J
5.	54832-83-6	1H-Indene, octahydro-2,2,4,4	9.67	5700	JN
6.		Unknown	10.37	3100	J
7.		Unknown	10.53	2100	J
8.	829-26-5	Naphthalene, 2,3,6-trimethyl	10.57	2800	JN
9.		Unknown	10.65	3800	J
10.		Unknown	10.71	2000	J
11.		Unknown	12.43	2000	J
12.		Unknown	12.82	2500	J
13.		Unknown	13.07	1900	J
14.		Unknown	15.00	2300	J

MAY 26 1998

001523 211
EPA SAMPLE NO.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

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: 30.0 (g/mL) G Lab File ID: 122D16

Level: (low/med) LOW Date Received: 04/09/98

% 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: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370	U
111-44-4	bis(2-Chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
95-50-1	1,2-Dichlorobenzene	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
111-91-1	bis(2-Chloroethoxy)methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	370	U
106-47-8	4-Chloroaniline	370	U J
87-68-3	Hexachlorobutadiene	370	U
59-50-7	4-Chloro-3-methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	920	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	920	U
131-11-3	Dimethylphthalate	370	U
208-96-8	Acenaphthylene	370	U
606-20-2	2,6-Dinitrotoluene	370	U
99-09-2	3-Nitroaniline	920	U
83-32-9	Acenaphthene	370	U

001524 212

1C

SEMIVOLATILE 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: 30.0 (g/mL) G Lab File ID: 122D16

Level: (low/med) LOW Date Received: 04/09/98

% 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: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	920	U
100-02-7	4-Nitrophenol	920	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
86-73-7	Fluorene	370	U
100-01-6	4-Nitroaniline	920	U
534-52-1	4,6-Dinitro-2-methylphenol	920	U
86-30-6	N-Nitrosodiphenylamine (1)	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	920	U
85-01-8	Phenanthrene	370	U
120-12-7	Anthracene	370	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	370 ~~52~~	~~BJ~~ U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	bis(2-Ethylhexyl)phthalate	160	J
117-84-0	Di-n-octylphthalate	370	U
205-99-2	Benzo(b)fluoranthene	370	U
207-08-9	Benzo(k)fluoranthene	370	U
50-32-8	Benzo(a)pyrene	370	U
193-39-5	Indeno(1,2,3-cd)pyrene	370	U
53-70-3	Dibenz(a,h)anthracene	370	U
191-24-2	Benzo(g,h,i)perylene	370	U

(1) - Cannot be separated from Diphenylamine

001525 213
EPA SAMPLE NO.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BMM52

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: 30.0 (g/mL) G Lab File ID: 122D16

Level: (low/med) LOW Date Received: 04/09/98

% 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: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs found: 16 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Aldol condensation	5.72	~~460~~	~~AJ~~ R
2.		Aldol condensation	5.83	~~150~~	~~AJ~~ R
3.		Unknown	12.08	76	J
4.		Unknown	13.27	180	J
5.		Unknown	13.32	97	J
6.		Unknown	13.38	110	J
7.		Unknown	13.43	87	J
8.		Unknown	13.58	92	J
9.		Unknown	14.07	100	J
10.		Unknown	15.57	100	J
11.		Unknown	18.53	150	J
12.		Unknown	18.87	99	J
13.		Unknown	18.93	160	J
14.		Unknown	19.73	130	J
15.		Unknown	19.88	140	J
16.		Unknown	20.90	110	J

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM54

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: 30.0 (g/mL) G Lab File ID: 122D22

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 26 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	2200	U
111-44-4	bis(2-Chloroethyl)ether	2200	U
95-57-8	2-Chlorophenol	2200	U
541-73-1	1,3-Dichlorobenzene	2200	U
106-46-7	1,4-Dichlorobenzene	2200	U
95-50-1	1,2-Dichlorobenzene	2200	U
95-48-7	2-Methylphenol	2200	U
108-60-1	2,2'-oxybis(1-Chloropropane)	2200	U
106-44-5	4-Methylphenol	2200	U
621-64-7	N-Nitroso-di-n-propylamine	2200	U
67-72-1	Hexachloroethane	2200	U
98-95-3	Nitrobenzene	2200	U
78-59-1	Isophorone	2200	U
88-75-5	2-Nitrophenol	2200	U
105-67-9	2,4-Dimethylphenol	2200	U
111-91-1	bis(2-Chloroethoxy)methane	2200	U
120-83-2	2,4-Dichlorophenol	2200	U
120-82-1	1,2,4-Trichlorobenzene	2200	U
91-20-3	Naphthalene	2200	U
106-47-8	4-Chloroaniline	2200	UJ
87-68-3	Hexachlorobutadiene	2200	U
59-50-7	4-Chloro-3-methylphenol	2200	U
91-57-6	2-Methylnaphthalene	660	J
77-47-4	Hexachlorocyclopentadiene	2200	U
88-06-2	2,4,6-Trichlorophenol	2200	U
95-95-4	2,4,5-Trichlorophenol	5600	U
91-58-7	2-Chloronaphthalene	2200	U
88-74-4	2-Nitroaniline	5600	U
131-11-3	Dimethylphthalate	2200	U
208-96-8	Acenaphthylene	2200	U
606-20-2	2,6-Dinitrotoluene	2200	U
99-09-2	3-Nitroaniline	5600	U
83-32-9	Acenaphthene	330	J

1C 001535 EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BMM54

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: 30.0 (g/mL) G Lab File ID: 122D22

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 26 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	5600	U
100-02-7	4-Nitrophenol	5600	U
132-64-9	Dibenzofuran	2200	U
121-14-2	2,4-Dinitrotoluene	2200	U
84-66-2	Diethylphthalate	2200	U
7005-72-3	4-Chlorophenyl-phenylether	2200	U
86-73-7	Fluorene	2200	U
100-01-6	4-Nitroaniline	5600	U
534-52-1	4,6-Dinitro-2-methylphenol	5600	U
86-30-6	N-Nitrosodiphenylamine (1)	2200	U
101-55-3	4-Bromophenyl-phenylether	2200	U
118-74-1	Hexachlorobenzene	2200	U
87-86-5	Pentachlorophenol	5600	U
85-01-8	Phenanthrene	3000	
120-12-7	Anthracene	250	J
86-74-8	Carbazole	2200	U
84-74-2	Di-n-butylphthalate	~~2200~~ ~~950~~ *	~~BJ~~ U
206-44-0	Fluoranthene	630	J
129-00-0	Pyrene	1200	J
85-68-7	Butylbenzylphthalate	5000	
91-94-1	3,3'-Dichlorobenzidine	2200	U
56-55-3	Benzo(a)anthracene	2200	U
218-01-9	Chrysene	2200	U
117-81-7	bis(2-Ethylhexyl)phthalate	19000 * ~~21000~~	~~E~~
117-84-0	Di-n-octylphthalate	1600	J
205-99-2	Benzo(b)fluoranthene	240	J
207-08-9	Benzo(k)fluoranthene	160	J
50-32-8	Benzo(a)pyrene	2200	U
193-39-5	Indeno(1,2,3-cd)pyrene	2200	U
53-70-3	Dibenz(a,h)anthracene	2200	U
191-24-2	Benzo(g,h,i)perylene	2200	U

(1) - Cannot be separated from Diphenylamine

* Result from BMM54DL.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: BMM54

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: 30.0 (g/mL) G Lab File ID: 122D22

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: 26 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: 21 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	575-37-1	Naphthalene, 1,7-dimethyl-	9.27	3700	JN
2.	2131-42-2	Naphthalene, 1,4,6-trimethyl	9.98	3800	JN
3.	2131-42-2	Naphthalene, 1,4,6-trimethyl	10.33	4900	JN
4.	54774-89-9	Naphthalene, 2-methyl-1-prop	10.68	4300	JN
5.		Unknown	10.87	2400	J
6.		Unknown	10.97	2700	J
7.		Unknown	11.48	5700	J
8.		Unknown	11.60	2300	J
9.		Unknown	11.67	3000	J
10.	613-12-7	Anthracene, 2-methyl-	12.80	4100	JN
11.	832-71-3	Phenanthrene, 3-methyl-	12.85	2800	JN
12.		Unknown	13.40	2000	J
13.	1576-69-8	Phenanthrene, 2,7-dimethyl-	13.70	2800	JN
14.		Unknown	14.02	2600	J
15.		Unknown	15.17	2300	J
16.		Unknown	15.28	2200	J
17.		Unknown	15.83	4000	J
18.		Unknown	15.97	2500	J
19.		Unknown	18.22	4100	J
20.		Unknown	18.97	6000	J
21.		Unknown	19.35	3700	J

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001990 217
EPA SAMPLE NO.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

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: 27247.01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 5 decanted: (Y/N) N Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/12/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	~~8.8~~	~~P~~ R
319-85-7	beta-BHC	~~2.1~~	~~P~~ R
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	14	~~P~~ J
72-55-9	4,4'-DDE	31	~~P~~ J
72-20-8	Endrin	~~39~~	~~P~~ J
33213-65-9	Endosulfan II	3.5	U
72-54-8	4,4'-DDD	3.5	U
1031-07-8	Endosulfan sulfate	3.5	U
50-29-3	4,4'-DDT	3.5	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.5	U
7421-93-4	Endrin aldehyde	16	
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	70	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	35	U

002000 218

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

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: 27247.04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 8 decanted: (Y/N) N Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/01/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	28	P
72-55-9	4,4'-DDE	24	P
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	33	P
50-29-3	4,4'-DDT	~~16~~	P
72-43-5	Methoxychlor	25	P
53494-70-5	Endrin ketone	3.6	U
7421-93-4	Endrin aldehyde	20	P
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	~~9.8~~	P
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	73	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	1000	P
11096-82-5	Aroclor-1260	36	U

002018 219

1D

PESTICIDE 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: 27247.05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 10 decanted: (Y/N) N Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/12/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	J
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	2.5	P
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	5.4	P
72-55-9	4,4'-DDE	6.6	P
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	3.7	U
1031-07-8	Endosulfan sulfate	3.8	P
50-29-3	4,4'-DDT	3.7	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.7	U
7421-93-4	Endrin aldehyde	4.1	P
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	9.8	
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	74	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	320	
11096-82-5	Aroclor-1260	37	U

1D

PESTICIDE 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: 27260.06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 2 decanted: (Y/N) N Date Received: 04/09/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 05/25/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.4	U
72-55-9	4,4'-DDE	3.6	
72-20-8	Endrin	3.4	U
33213-65-9	Endosulfan II	3.4	U
72-54-8	4,4'-DDD	3.4	U
1031-07-8	Endosulfan sulfate	4.7	
50-29-3	4,4'-DDT	5.6	~~P~~ NJ
72-43-5	Methoxychlor	17	U J
53494-70-5	Endrin ketone	3.4	U
7421-93-4	Endrin aldehyde	3.4	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	68	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	83	
11096-82-5	Aroclor-1260	34	U

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1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

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: 27260.04D2

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 5 decanted: (Y/N) N Date Received: 04/09/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/12/98

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.1	P NJ
319-85-7	beta-BHC	3.6 ~~2.8~~	~~JP~~ NJ
319-86-8	delta-BHC	3.6	U
58-89-9	gamma-BHC (Lindane)	3.6	U
76-44-8	Heptachlor	3.6	U
309-00-2	Aldrin	3.6 ~~1.8~~	~~JP~~ UJ
1024-57-3	Heptachlor epoxide	~~45~~	R
959-98-8	Endosulfan I	~~24~~	R
60-57-1	Dieldrin	~~16~~	R
72-55-9	4,4'-DDE	6.9	U
72-20-8	Endrin	6.9	U
33213-65-9	Endosulfan II	~~30~~	R
72-54-8	4,4'-DDD	~~43~~	R
1031-07-8	Endosulfan sulfate	44	P NJ
50-29-3	4,4'-DDT	6.9	U
72-43-5	Methoxychlor	36 ~~18~~	~~JP~~ UJ
53494-70-5	Endrin ketone	41	P
7421-93-4	Endrin aldehyde	700NJ * ~~620~~	~~ER~~ NJ
5103-71-9	alpha-Chlordane	3.6	U
5103-74-2	gamma-Chlordane	140NJ * ~~90~~	ER NJ
8001-35-2	Toxaphene	360	U
12674-11-2	Aroclor-1016	69	U
11104-28-2	Aroclor-1221	140	U
11141-16-5	Aroclor-1232	69	U
53469-21-9	Aroclor-1242	69	U
12672-29-6	Aroclor-1248	69	U
11097-69-1	Aroclor-1254	69	U
11096-82-5	Aroclor-1260	69	U

* Result from EMC 37DL

1D

PESTICIDE 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: 27247.12

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 17 decanted: (Y/N) N Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/12/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
319-84-6	alpha-BHC	2.0	U	J
319-85-7	beta-BHC	2.0	U	
319-86-8	delta-BHC	2.0	U	
58-89-9	gamma-BHC (Lindane)	2.0	U	
76-44-8	Heptachlor	2.0	U	
309-00-2	Aldrin	2.0	U	
1024-57-3	Heptachlor epoxide	2.0	U	
959-98-8	Endosulfan I	2.0	U	
60-57-1	Dieldrin	19	~~P~~	NJ
72-55-9	4,4'-DDE	18	~~P~~	J
72-20-8	Endrin	4.0	U	
33213-65-9	Endosulfan II	4.0	U	
72-54-8	4,4'-DDD	4.0	U	
1031-07-8	Endosulfan sulfate	14	~~P~~	J
50-29-3	4,4'-DDT	~~16~~	~~P~~	R
72-43-5	Methoxychlor	20	U	J
53494-70-5	Endrin ketone	4.0	U	J
7421-93-4	Endrin aldehyde	14	~~P~~	NJ
5103-71-9	alpha-Chlordane	6.8	~~P~~	NJ
5103-74-2	gamma-Chlordane	~~10~~	~~P~~	R
8001-35-2	Toxaphene	200	U	J
12674-11-2	Aroclor-1016	40	U	
11104-28-2	Aroclor-1221	81	U	
11141-16-5	Aroclor-1232	40	U	
53469-21-9	Aroclor-1242	40	U	
12672-29-6	Aroclor-1248	40	U	
11097-69-1	Aroclor-1254	940		
11096-82-5	Aroclor-1260	40	U	

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1D

PESTICIDE 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: 27247.13D10

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 20 decanted: (Y/N) N Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/18/98

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 6.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	21	U R
319-85-7	beta-BHC	21	U
319-86-8	delta-BHC	21	U
58-89-9	gamma-BHC (Lindane)	21	U
76-44-8	Heptachlor	21	U
309-00-2	Aldrin	21	U
1024-57-3	Heptachlor epoxide	21	U
959-98-8	Endosulfan I	21	U
60-57-1	Dieldrin	270	P NJ
72-55-9	4,4'-DDE	250	P NJ
72-20-8	Endrin	41	U R
33213-65-9	Endosulfan II	41	U
72-54-8	4,4'-DDD	41	U
1031-07-8	Endosulfan sulfate	390	P NJ
50-29-3	4,4'-DDT	190	P R
72-43-5	Methoxychlor	260	
53494-70-5	Endrin ketone	41	U R
7421-93-4	Endrin aldehyde	300	P NJ
5103-71-9	alpha-Chlordane	21	U R
5103-74-2	gamma-Chlordane	84	P R
8001-35-2	Toxaphene	2100	U R
12674-11-2	Aroclor-1016	410	U
11104-28-2	Aroclor-1221	840	U
11141-16-5	Aroclor-1232	410	U
53469-21-9	Aroclor-1242	410	U
12672-29-6	Aroclor-1248	410	U
11097-69-1	Aroclor-1254	10000	P J
11096-82-5	Aroclor-1260	410	U R

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1D

PESTICIDE 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: 27247.06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 30 decanted: (Y/N) N Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/12/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.4	U
319-85-7	beta-BHC	2.4	U
319-86-8	delta-BHC	2.4	U
58-89-9	gamma-BHC (Lindane)	2.4	U
76-44-8	Heptachlor	2.4	U
309-00-2	Aldrin	2.4	U
1024-57-3	Heptachlor epoxide	2.4	U
959-98-8	Endosulfan I	2.4	U
60-57-1	Dieldrin	15	P
72-55-9	4,4'-DDE	~~25~~	~~P~~
72-20-8	Endrin	4.7	U
33213-65-9	Endosulfan II	4.7	U
72-54-8	4,4'-DDD	4.7	U
1031-07-8	Endosulfan sulfate	26	
50-29-3	4,4'-DDT	~~8.9~~	~~P~~
72-43-5	Methoxychlor	~~91~~	~~P~~
53494-70-5	Endrin ketone	4.7	U
7421-93-4	Endrin aldehyde	14	P
5103-71-9	alpha-Chlordane	6.0	P
5103-74-2	gamma-Chlordane	31	P
8001-35-2	Toxaphene	240	U
12674-11-2	Aroclor-1016	47	U
11104-28-2	Aroclor-1221	96	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	47	U
12672-29-6	Aroclor-1248	47	U
11097-69-1	Aroclor-1254	530	P
11096-82-5	Aroclor-1260	47	U

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PESTICIDE 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: 27247.07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 36 decanted: (Y/N) N Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/12/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.6	~~P~~ NJ
319-85-7	beta-BHC	3.3	~~P~~ NJ
319-86-8	delta-BHC	2.6	U
58-89-9	gamma-BHC (Lindane)	2.6	U
76-44-8	Heptachlor	2.6	U
309-00-2	Aldrin	2.6	U
1024-57-3	Heptachlor epoxide	2.6	U
959-98-8	Endosulfan I	~~4.0~~	~~P~~ R
60-57-1	Dieldrin	16	~~P~~ J
72-55-9	4,4'-DDE	24	
72-20-8	Endrin	5.2	U
33213-65-9	Endosulfan II	5.2	U
72-54-8	4,4'-DDD	5.2	U
1031-07-8	Endosulfan sulfate	17	~~P~~ J
50-29-3	4,4'-DDT	5.2	U
72-43-5	Methoxychlor	68	~~P~~ J
53494-70-5	Endrin ketone	7.9	
7421-93-4	Endrin aldehyde	18	~~P~~ NJ
5103-71-9	alpha-Chlordane	7.9	~~P~~ J
5103-74-2	gamma-Chlordane	9.4	~~P~~ J
8001-35-2	Toxaphene	260	U
12674-11-2	Aroclor-1016	52	U
11104-28-2	Aroclor-1221	100	U
11141-16-5	Aroclor-1232	52	U
53469-21-9	Aroclor-1242	52	U
12672-29-6	Aroclor-1248	52	U
11097-69-1	Aroclor-1254	540	
11096-82-5	Aroclor-1260	52	U

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PESTICIDE 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: 27247.08

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 29 decanted: (Y/N) N Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/12/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
319-84-6	alpha-BHC	2.4	U	J
319-85-7	beta-BHC	4.0		
319-86-8	delta-BHC	2.4	U	
58-89-9	gamma-BHC (Lindane)	2.4	U	
76-44-8	Heptachlor	2.4	U	
309-00-2	Aldrin	2.4	U	
1024-57-3	Heptachlor epoxide	2.4	U	
959-98-8	Endosulfan I	5.7	~~P~~	R
60-57-1	Dieldrin	15	~~P~~	J
72-55-9	4,4'-DDE	29	~~P~~	J
72-20-8	Endrin	4.6	U	J
33213-65-9	Endosulfan II	14	~~P~~	J
72-54-8	4,4'-DDD	15	~~P~~	NJ
1031-07-8	Endosulfan sulfate	16		J
50-29-3	4,4'-DDT	4.6	U	
72-43-5	Methoxychlor	24	U	
53494-70-5	Endrin ketone	4.6	U	
7421-93-4	Endrin aldehyde	18		
5103-71-9	alpha-Chlordane	6.8	~~P~~	J
5103-74-2	gamma-Chlordane	11	~~P~~	R
8001-35-2	Toxaphene	240	U	J
12674-11-2	Aroclor-1016	46	U	
11104-28-2	Aroclor-1221	94	U	
11141-16-5	Aroclor-1232	46	U	
53469-21-9	Aroclor-1242	46	U	
12672-29-6	Aroclor-1248	46	U	
11097-69-1	Aroclor-1254	440	~~P~~	J
11096-82-5	Aroclor-1260	46	U	J

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1D

PESTICIDE 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: 27260.03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 3 decanted: (Y/N) N Date Received: 04/09/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 05/25/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.4	U
72-55-9	4,4'-DDE	1.9	JP J
72-20-8	Endrin	3.4	U
33213-65-9	Endosulfan II	3.4	U
72-54-8	4,4'-DDD	3.4	U
1031-07-8	Endosulfan sulfate	3.4	U
50-29-3	4,4'-DDT	3.4	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.4	U
7421-93-4	Endrin aldehyde	3.4	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	69	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

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1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

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: 27260.05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 5 decanted: (Y/N) N Date Received: 04/09/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/12/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.5	U
72-55-9	4,4'-DDE	3.5	U
72-20-8	Endrin	3.5	U
33213-65-9	Endosulfan II	3.5	U
72-54-8	4,4'-DDD	3.5	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.5	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.5	U
7421-93-4	Endrin aldehyde	3.5	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	70	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	140	J
11096-82-5	Aroclor-1260	25	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

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: 27260.02

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 4 decanted: (Y/N) N Date Received: 04/09/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 05/25/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.4	U
72-55-9	4,4'-DDE	3.4	U
72-20-8	Endrin	3.4	U
33213-65-9	Endosulfan II	3.4	U
72-54-8	4,4'-DDD	3.4	U
1031-07-8	Endosulfan sulfate	3.4	U
50-29-3	4,4'-DDT	3.4	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.4	U
7421-93-4	Endrin aldehyde	3.4	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	70	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

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1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM49

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: 27260.01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 4 decanted: (Y/N) N Date Received: 04/09/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 05/29/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U R
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.4	U
72-55-9	4,4'-DDE	3.4	U
72-20-8	Endrin	3.4	U
33213-65-9	Endosulfan II	3.4	U
72-54-8	4,4'-DDD	3.4	U
1031-07-8	Endosulfan sulfate	3.4	U
50-29-3	4,4'-DDT	3.4	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.4	U
7421-93-4	Endrin aldehyde	3.4	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	70	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	37	P NJ
11096-82-5	Aroclor-1260	34	U R

002162 231

1D

PESTICIDE 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: 27260.07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 6 decanted: (Y/N) N Date Received: 04/09/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/12/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.5	U
72-55-9	4,4'-DDE	3.5	U
72-20-8	Endrin	3.5	U
33213-65-9	Endosulfan II	3.5	U
72-54-8	4,4'-DDD	3.5	U
1031-07-8	Endosulfan sulfate	3.5	U
50-29-3	4,4'-DDT	3.5	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.5	U
7421-93-4	Endrin aldehyde	3.5	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	71	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	86	
11096-82-5	Aroclor-1260	35	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

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: 27260.09

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 7 decanted: (Y/N) N Date Received: 04/09/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/12/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	2.4	P
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	7.8	P
60-57-1	Dieldrin	17	P
72-55-9	4,4'-DDE	18	P
72-20-8	Endrin	3.5	U
33213-65-9	Endosulfan II	4.2	P
72-54-8	4,4'-DDD	3.5	U
1031-07-8	Endosulfan sulfate	23	P
50-29-3	4,4'-DDT	50	
72-43-5	Methoxychlor	19	P
53494-70-5	Endrin ketone	3.5	U
7421-93-4	Endrin aldehyde	60	
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	2.4	P
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	72	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	35	U

1D

PESTICIDE 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: 27260.10

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 10 decanted: (Y/N) N Date Received: 04/09/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/25/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
319-84-6	alpha-BHC	1.9	U	J
319-85-7	beta-BHC	1.9	U	
319-86-8	delta-BHC	1.9	U	
58-89-9	gamma-BHC (Lindane)	1.9	U	
76-44-8	Heptachlor	1.9	U	
309-00-2	Aldrin	1.9	U	
1024-57-3	Heptachlor epoxide	1.9	U	
959-98-8	Endosulfan I	1.9	U	
60-57-1	Dieldrin	3.7	U	
72-55-9	4,4'-DDE	31	P	NJ
72-20-8	Endrin	3.7	U	J
33213-65-9	Endosulfan II	3.7	U	
72-54-8	4,4'-DDD	3.7	U	
1031-07-8	Endosulfan sulfate	3.7	U	
50-29-3	4,4'-DDT	38	P	NJ
72-43-5	Methoxychlor	19	U	J
53494-70-5	Endrin ketone	3.7	U	
7421-93-4	Endrin aldehyde	3.7	U	
5103-71-9	alpha-Chlordane	1.9	U	
5103-74-2	gamma-Chlordane	1.9	U	
8001-35-2	Toxaphene	190	U	
12674-11-2	Aroclor-1016	37	U	
11104-28-2	Aroclor-1221	74	U	
11141-16-5	Aroclor-1232	37	U	
53469-21-9	Aroclor-1242	37	U	
12672-29-6	Aroclor-1248	37	U	
11097-69-1	Aroclor-1254	37	U	
11096-82-5	Aroclor-1260	37	U	

1D

PESTICIDE 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: 27247.09

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

% Moisture: 26 decanted: (Y/N) N Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/10/98

Concentrated Extract Volume: 5000(uL) Date Analyzed: 06/12/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
319-84-6	alpha-BHC	2.8	~~P~~	J
319-85-7	beta-BHC	2.3	U	
319-86-8	delta-BHC	2.3	U	
58-89-9	gamma-BHC (Lindane)	2.3	U	
76-44-8	Heptachlor	2.3	U	
309-00-2	Aldrin	2.3	U	
1024-57-3	Heptachlor epoxide	2.3	U	
959-98-8	Endosulfan I	~~6.6~~	~~P~~	R
60-57-1	Dieldrin	17	P	J
72-55-9	4,4'-DDE	30		
72-20-8	Endrin	4.4	U	
33213-65-9	Endosulfan II	14	~~P~~	J
72-54-8	4,4'-DDD	15	~~P~~	NJ
1031-07-8	Endosulfan sulfate	18	~~P~~	NJ
50-29-3	4,4'-DDT	~~4.6~~	~~P~~	R
72-43-5	Methoxychlor	~~28~~	~~P~~	R
53494-70-5	Endrin ketone	4.4	U	J
7421-93-4	Endrin aldehyde	17		J
5103-71-9	alpha-Chlordane	8.2	~~P~~	NJ
5103-74-2	gamma-Chlordane	~~16~~	~~P~~	R
8001-35-2	Toxaphene	230	U	J
12674-11-2	Aroclor-1016	44	U	
11104-28-2	Aroclor-1221	90	U	
11141-16-5	Aroclor-1232	44	U	
53469-21-9	Aroclor-1242	44	U	
12672-29-6	Aroclor-1248	44	U	
11097-69-1	Aroclor-1254	500	~~P~~	NJ
11096-82-5	Aroclor-1260	44	U	J

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SDG NARRATIVE

Laboratory Name: AATSLA, Baton Rouge

Case No: **26114**
SDG No: BMM56
Contract: **68-D5-0023**

Eighteen (18) water samples were received 08 and 09 April 1998 for Full Target Compound List organic analysis utilizing USEPA's CLP SOW OLM03.2 protocol. The samples are listed below in Table 1:

TABLE 1

EPA Sample No:	**EPA Sample No.:**
BMM56	BMM66
BMM57	BMM67
BMM58	BMM68
BMM59	BMM69
BMM60	BMM70
BMM61	BMM71
BMM61MS	BMM72
BMM61MSD	BMM73
BMM62	
BMM63	
BMM64	
BMM65	

The pH of the volatile fraction of samples BMM70 and BMM73 (Field QC) was recorded as >2 just prior to analysis.

Volatile Organic Analysis:

No problems were noted.

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.

Semivolatile Organic Analysis:

No problems were noted.

Alkanes detected as a result of the library search routine are listed below:

BMM56

Unknown alkane	2 µg/L
Unknown alkane	4 µg/L
Unknown alkane	2 µg/L
Unknown alkane	2 µg/L

BMM57

Unknown alkane	2 µg/L

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.

Pesticide Organic Analysis:

No significant problems were noted.

Columns used for Pesticide/PCB analysis were:

a. RTX-35, 0.53 mm ID, 30 m length
Restek Crossbonded® 65% dimethyl - 35% diphenyl polysiloxane, 1.5 micron thickness

b. DB-1701P, 0.53 mm ID, 30 m length
Restek Crossbonded® 14% cyanopropylphenyl - 86% methyl polysiloxane, 1.5 micron thickness

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."

J.R. Troost, GC/MS Manager
19 May 1998
JT:jt

AATS

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 ___

SDG No./First Sample in SDG: BMM56 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: BMM73 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.	BMM56	11.	BMM66
2.	BMM57	12.	BMM67
3.	BMM58	13.	BMM68
4.	BMM59	14.	BMM69
5.	BMM60	15.	BMM70
6.	BMM61	16.	BMM71
7.	BMM62	17.	BMM72
8.	BMM63	18.	BMM73
9.	BMM64	19.	____
10.	BMM65	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 LeBlanc
Sample Custodian

April 22, 1998
Date

000016

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 238

BMM70 FB

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724614

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 106A11

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. Date Analyzed: 04/16/98

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/L	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	U
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	2	J
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 J
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	3	J
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	3	J
108-88-3	Toluene	10	U J
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.

BMM70

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724614

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 106A11

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: not dec. Date Analyzed: 04/16/98

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/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM73 F2

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726105

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 107A06

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 5.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50	U
74-83-9	Bromomethane	50	U
75-01-4	Vinyl Chloride	50	U
75-00-3	Chloroethane	50	U
75-09-2	Methylene Chloride	50	U
67-64-1	Acetone	680	B J
75-15-0	Carbon Disulfide	50	U
75-35-4	1,1-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
540-59-0	1,2-Dichloroethene (total)	50	U
67-66-3	Chloroform	50	U
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	50	U
71-55-6	1,1,1-Trichloroethane	50	U
56-23-5	Carbon Tetrachloride	50	U
75-27-4	Bromodichloromethane	50	U
78-87-5	1,2-Dichloropropane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
79-01-6	Trichloroethene	50	U
124-48-1	Dibromochloromethane	50	U
79-00-5	1,1,2-Trichloroethane	50	U
71-43-2	Benzene	50	U J
10061-02-6	trans-1,3-Dichloropropene	50	U
75-25-2	Bromoform	50	U
108-10-1	4-Methyl-2-Pentanone	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
108-88-3	Toluene	50	U J
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
100-42-5	Styrene	50	U
1330-20-7	Xylene (total)	50	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM73

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726105

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 107A06

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: not dec. Date Analyzed: 04/17/98

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 5.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

000083 242

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BMM56

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724601

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D09

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH: MAY 19 1998

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

000084 243

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM56

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724601

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D09

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	17	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	6	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM56

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724601

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D09

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH: MAY 19 1998 ml

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM57

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724602

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D10

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH: MAY 19 1998

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

000094 246

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM57

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724602

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D10

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: NA ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10 2	JU
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	3	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	UJ
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

000095247

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM57

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724602

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D10

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0 ml

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

MAY 19 1998

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

000101 248

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM58

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724603

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D11

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

MAY 19 1998

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM58

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724603

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D11

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylpnthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U J
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

000103 250

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BMM58

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724603

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D11

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

MAY 19 1998

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

000106 251
EPA SAMPLE NO.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BMM59

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724604

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D12

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0 nl

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM59

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724604

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D12

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	UJ
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

000108253

1F

EPA SAMPLE NO.

BMM59

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.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724604

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D12

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

nl

MAY 19 1998

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 556-67-2	Cyclotetrasiloxane, octameth	6.10	~~5~~ JN R	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM60

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724605

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D14

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0 JL

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

000114 255

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM60

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724605

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D14

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U J
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

000115 256

EPA SAMPLE NO.

BMM60

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.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724605

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D14

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

MAY 19 1998

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

000118 257

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM61

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724606

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D15

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

000119 258
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BMM61

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724606

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D15

Level: (low/med) LOW Date Received: 04/08/98

Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0 2.0 nu

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U J
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM61

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724606

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D15

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

MAY 19 1998

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

000123260

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM62

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726101

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D21

Level: (low/med) LOW Date Received: 04/09/98

Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/30/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM62

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726101

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D21

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/30/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U J
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U J
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U J
205-99-2	Benzo(b)fluoranthene	10	U J
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U J
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

000125 262
EPA SAMPLE NO.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BMM62

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726101

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D21

Level: (low/med) LOW Date Received: 04/09/98

Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/30/98

Injection Volume: 2.0(uL) Dilution Factor: nl ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

MAY 19 1998

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	15.084	15	J
2.	Unknown	22.08	6	J

000130263

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BMM63

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724609

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D18

Level: (low/med) LOW Date Received: 04/08/98

Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

000131 264
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BMM63

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724609

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D18

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	UJ
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

000132 265

1F

EPA SAMPLE NO.

BMM63

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.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724609

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D18

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

MAY 19 1998

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

000135 266

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM64

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724610

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D19

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BMM64

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724610

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D19

Level: (low/med) LOW Date Received: 04/08/98

Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U J
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

000137268

1F

EPA SAMPLE NO.

BMM64

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.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724610

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D19

Level: (low/med) LOW Date Received: 04/08/98

Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	15.02	23	J
2.		Unknown	20.710	5	J
3.		Unknown	20.82	3	J
4.		Unknown	22.209	24	J
5.		Unknown	22.17	2	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM65

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724611

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D20

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

000147 270

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM65

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724611

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D20

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	UJ
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

000148 271
EPA SAMPLE NO.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BMM65

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.. 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724611

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D20

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

MAY 19 1998

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 2008-58-4	Benzamide, 2,6-dichloro-	11.20	4	JN
2. 538-24-9	Dodecanoic acid, 1,2,3-propa	19.889	10	JN
3.	Unknown	20.05	5	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM66

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726103

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D23

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

000155 273
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BMM66

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726103

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D23

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: 1K ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U J
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U J
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U J
205-99-2	Benzo(b)fluoranthene	10	U J
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U J
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

000156 274

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM66

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726103

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D23

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: nd ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

Number TICs found: 11 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	2008-58-4	Benzamide, 2,6-dichloro-	11.22	4	JN
2.		Unknown	14.18	2	J
3.		Unknown	14.33	2	J
4.		Unknown	15.02	13	J
5.		Unknown	19.77	4	J
6.		Unknown	19.90	6	J
7.		Unknown	20.07	3	J
8.		Unknown	20.77	8	J
9.		Unknown	20.83	5	J
10.		Unknown	22.12	36	J
11.		Unknown	22.18	4	J

000170 275

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BMM67

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724612

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D21

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

000171 276
EPA SAMPLE NO.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BMM67

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724612

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D21

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U J
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

000172 277
EPA SAMPLE NO.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BMM67

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724612

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D21

Level: (low/med) LOW Date Received: 04/08/98

Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: 1 ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 11 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	124-07-2	Octanoic Acid	7.60	4	JN
2.	97-78-9	Glycine, N-methyl-N-(1-oxodo	10.27	7	JN
3.	57-10-3	Hexadecanoic acid	12.95	2	JN
4.	112-80-1	Oleic Acid	14.07	4	JN
5.		Unknown	15.10	56	J
6.		Unknown	17.45	3	J
7.		Unknown	19.77	2	J
8.		Unknown	20.77	7	J
9.		Unknown	20.82	4	J
10.		Unknown	22.08	33	J
11.		Unknown	22.17	3	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM68

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724613

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D22

Level: (low/med) LOW Date Received: 04/08/98

Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 1 [illegible] 98

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM68

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724613

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D22

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

000188 280
EPA SAMPLE NO.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BMM68

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724613

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D22

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 7 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	2008-58-4	Benzamide, 2,6-dichloro-	11.20	3	JN
2.	112-80-1	Oleic Acid	14.05	2	JN
3.		Unknown	14.97	3	J
4.	538-24-9	Dodecanoic acid, 1,2,3-propa	19.88	14	JN
5.		Unknown	20.03	6	J
6.		Unknown	20.65	15	J
7.		Unknown	22.07	9	J

000198 281
EPA SAMPLE NO.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BMM69

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726102

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D22

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM69

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726102

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D22

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U J
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U J
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U J
205-99-2	Benzo(b)fluoranthene	10	U J
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U J
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

000200 283

EPA SAMPLE NO.

BMM69

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.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726102

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D22

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 7 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

MAY 19 1998

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	105-60-2	Caprolactam	8.22	6	JN
2.		Unknown	15.034	21	J
3.		Unknown	15.089	20	J
4.		Unknown	19.889	2	J
5.		Unknown	20.77	3	J
6.		Unknown	20.82	2	J
7.		Unknown	22.1009	14	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM70 FB

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724614

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D23

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM70

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724614

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D23

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U J
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM70

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724614

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D23

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0 (uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

MAY 19 1998

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	17.45	4	J
2.		Unknown	19.87	4	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM71 FB

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724615

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D24

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM71

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724615

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D24

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	2	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U J
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BMM71

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2724615

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 121D24

Level: (low/med) LOW Date Received: 04/08/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

MAY 1 9 1998

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

000223 290

EPA SAMPLE NO.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BMM72 FB

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726104

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D24

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

000224 291

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM72

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726104

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D24

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: nr ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U J
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U J
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U J
205-99-2	Benzo(b)fluoranthene	10	U J
207-08-9	Benzo(k)fluoranthene	10	U J
50-32-8	Benzo(a)pyrene	10	U J
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

000225 292

EPA SAMPLE NO.

BMM72

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.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726104

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D24

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: NL ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

MAY 19 1998

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	19.90	8	J
2.		Unknown	20.08	4	J
3.		Unknown	20.70	13	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM73 FB

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726105

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D25

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM73

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726105

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D25

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	UJ
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	UJ
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	UJ
205-99-2	Benzo(b)fluoranthene	10	UJ
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	UJ
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BMM73

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 2726105

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 120D25

Level: (low/med) LOW Date Received: 04/09/98

% Moisture: decanted: (Y/N) Date Extracted: 04/10/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/01/98

Injection Volume: 2.0(uL) Dilution Factor: nl ~~2.0~~ 1.0

GPC Cleanup: (Y/N) N pH:

MAY 19 1998

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM56

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27246.01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM57

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27246.02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM58

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27246.03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM59

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27246.04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM60

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27246.05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM61

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27246.06

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM62

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27261.01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/09/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/27/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM63

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27246.09

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM64

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27246.10

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM65

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27246.11

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM66

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27261.03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/09/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/27/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM67

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27246.12

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM68

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27246.13

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM69

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27261.02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/09/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/27/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM70 FB

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27246.14

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM71 FB

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27246.15

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/08/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM72 FB

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27261.04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/09/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BMM73

Lab Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 26114 SAS No.: SDG No.: BMM56

Matrix: (soil/water) WATER Lab Sample ID: 27261.05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 04/09/98

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/11/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 04/28/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

RECORD OF COMMUNICATION

TO: YUNRU YANG

FROM: *JANET TROTTER*
Region II ESAT/RSCC

DATE: 6/17/98

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 Corp 26114 PDP Org Lawton Van 18W

REPLY BY: _____

SIGNATURE: _____ DATE: 6/23/98

DATE RECEIVED BY RSCC: / /

cc: EPA TASK MONITOR
ESAT, MANAGER
file

315

RECORD OF COMMUNICATION

REGIONAL SAMPLE CONTROL CENTER

RECEIVED
JUN 16 1998

DATE: MAY 2, 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 #SAMPLES MATRIX

PHASE SSI 18 WATER

LAB PDP FRACTION LOW CONC. VOA ONLY

TURN-AROUND-TIME ; 14 DAYS

REGION II RSCC DATA TRANSFER LOG

Relinquished By		Received By	
Signature	Date/Time	Signature	Date/Time
		John Bulich	4/23/98
John Bulich	5/2/98	Judy Snyder ESAT, Reg 3	5-26-98
Judy Snyder	6/1/98 0730	Kenneth W. Lacy ESAT Reg 3	6/2/98 0730
M. Rocker III	6/4/98	Maybeth Pinkard	6/16/98
Maybeth Pinkard	6/16/98	J. Lutter	6/16/98
J. Lutter DCR	6/16/98	G. Karras	6/16/98
G. Karras	6/16/98		

(over for instructions) revised 10/97

ATTACHMENT 1
SOP NO. HW-13

CLP DATA ASSESSMENT

Functional Guidelines for Evaluating Organic Analysis

CASE No.:26114 SDG No.: BMM56
LABORATORY: PDP
SITE: Spectrum Fishing Corporation
Low Concentration VOA only.

DATA ASSESSMENT

The current SOP HW-13 (Revision 2) October 1996, USEPA Region II Data Validation SOP for Statement of Work OLCO 2.1. 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, "U" (non-detect) or "JN" (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: K. W. Curry/ M. Mecanic Date: 6/8/98

Verified By: D Varras Date: 6/10/98

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.

No problems.

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.

No problems.

3. LABORATORY CONTROL SPIKE, LCS:

The LCS data is generated to determine the long term precision and accuracy of the analytical method in various matrices. The LCS may be used in conjunction with other QC criteria for additional qualification of data.

No problems.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have

CLP DATA ASSESSMENT

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 contaminants), the analytes are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" for these reasons:

A) **Method blank contamination:**

No contamination in associated method blanks.

B) **Field or rinse blank contamination:**
Acetone was detected at a concentration exceeding CRQL (9 µg/L) in the field blank collected 4/8/98 (BMM72). Methylene chloride was detected below CRQL (0.6J µg/L) in the field blank collected 4/7/98(BMM71). No data were qualified based on field blank contamination, because concentrations of contaminants were greater in the trip blanks as discussed below.

C) **Trip blank contamination:**
Acetone was detected at concentration of ten (10) µg/L in the trip blank collected 4/8/98 (BMM75). Acetone in samples BMM62 and BMM69 had concentrations > 10X the blank concentration and were qualified "U" based on this contamination. Methylene chloride was detected below CRQL (1J µg/L) in the trip blank collected 4/7/98(BMM74). This contamination did not impact the associated samples.

D) **Storage Blank**

No contamination in storage blank.

E) **Tics "R" rejected**

One (1) TIC at retention time 13.62 was rejected in samples BMM62 and BMM69 in the field blank collected same day as the samples.

CLP DATA ASSESSMENT

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 Decafluorotriphenyl-phosphine (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 $\geq$ 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".

Initial Calibration:
Compounds acetone, 2-butanone and 2-hexanone had initial

CLP DATA ASSESSMENT

calibration RRFs <0.05. All samples, blanks and quality control analyses were affected by this deficiency. Therefore, the following samples were "R" qualified for non-detects: VBLK92, VLCS92, BMM59, BMM60, BMM61, BMM63, BMM64, BMM65, BMM68, BMM71, BMM74, VBLK93, VLCS93, BMM56, BMM57, BMM58, BMM62, BMM67, BMM67DL, BMM69, BMM72, BMM75, VBLK95, VLCS95, BMM62DL2*, BMM63DL*, BMM67DL2*, BMM69DL2*, VIBLK02, VBLK96, VLCS96, BMM62DL*, VIBLK03, BMM66DL*, BMM69DL*, VIBLK04, BMM66, VHBLK01. The following samples had positive acetone values and were "J" qualified: BMM60, BMM62, BMM69, BMM72 and BMM75.*

***Samples were marked "DO NOT USE".*

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:

No Problems.

CLP DATA ASSESSMENT

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.

No problems.

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 provided false positive identifications.

No problems.

CLP DATA ASSESSMENT

10. CONTRACT PROBLEMS NON-COMPLIANCE:

11. FIELD DOCUMENTATION:

12. OTHER PROBLEMS

13. This package contains one (1) or two (2) dilutions for samples listed below because one (1) or more compounds exceeded the calibration range. Therefore, the values for these compounds were transferred from dilutions to the original analysis Form Is and the Form Is for diluted samples were marked "Do Not Use". The following samples were marked "DO NOT USE": *BMM62DL BMM62DL2, BMM63DL, BMM66DL, BMM67DL, BMM67DL2.*

		Results Reported From	
Sample	Compound	1st Dilution	2nd Dilution
BMM62	cis-1,2-dichloroethene	BMM62DL	---
	Trichloroethene	BMM62DL	---
	Tetrachloroethene	---	BMM62DL2
BMM63	cis-1,2-dichloroethene	BMM63DL	NA
	Tetrachloroethene	BMM63DL	NA
BMM66	cis-1,2-dichloroethene	BMM66DL	NA
BMM67	cis-1,2-dichloroethene	---	BMM67DL2
	Trichloroethene	BMM67DL	---
	Tetrachloroethene	BMM67DL	---
BMM69	cis-1,2-dichloroethene	BMM69DL	---
	Trichloroethene	BMM69DL	---
	Tetrachloroethene	---	BMM69DL2

TPO: [ ]ACTION [X]FYI REGION II

ORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO.: 26114 LABORATORY: PDP Analytical Corp.
SDG NO.: BMM56 DATA USER: EPA Region II
SOW: OLC02.1 REVIEW COMPLETION DATE: 6/8/98
NO. OF SAMPLES: 18 WATER

REVIEWER: [ ] ED [ ] ESAT [ ] OTHER, CONTRACTOR _____

QC ITEM	VOA	BNA	PEST		
HOLDING TIMES	O				
GC-MS PERFORMANCE	O				
INITIAL CALIBRATIONS	M				
CONTINUING CALIBRATIONS	M				
FIELD BLANKS(F = N/A)	X				
LABORATORY BLANKS	O				
SURROGATES	O				
LAB CONTROL SAMPLE (LCS)	O				
QC SAMPLES (LES)	O				
INTERNAL STANDARDS	O				
COMPOUND IDENTIFICATION	O				
COMPOUND QUANTITATION	O				
SYSTEM PERFORMANCE	O				
OVERALL ASSESSMENT	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.

TPO ACTION ITEMS: NONE

AREAS OF CONCERN: NONE

DATA REJECTION SUMMARY

Type of Review: Organic Date: 6/2/98 Case No.: 26114

Site Name: Spectrum Fishing Corp. Lab Name: PDP Analytical Corp.
Reviewer's Initials: KWC

Number of Samples: 18

Analytes Rejected Due to Exceeding Review Criteria For:

No. of Compounds/No. of Fractions (Samples)

	Surrogates	Holding Time	Calibration	Contamination	LCS	ID	Internal Standards	Other	Total # of Samples	Total # Rejected/Total # in All Samples			
VOA(41)	0	0	49	0	0	0	0	0	18	49	738	7	%

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	Calibration	Contamination	LCS	ID	Internal Standards	Other	Total # of Samples	Total # Estimated/Total # in All Samples			
VOA(41)	0	0	5	0	0	0	0	0	18	5	738	1	%

NOTE: ASTERISK (*) INDICATES ADDITIONAL EXCEEDANCES OF REVIEW CRITERIA.

STANDARD OPERATING PROCEDURE

USEPA Region II
Method: CLP/SOW, OLC02.1

Date: October, 1996
SOP HW-13, Revision 2

	YES	NO	N/A

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: 26114 **LAB:** PDP Analytical Corporation

SITE NAME: Spectrum Fishing Corp. **SDG No(s).:** BMM56

1.0 Chain of Custody and Sampling Trip Reports

1.1	Are the Traffic Reports/Chain-of-Custody Records present for all samples?	[X]	___	___
	ACTION: If no contact RSCC, or 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?	[X]	___	___
	ACTION: If no, contact either RSCC or ask the WAM to obtain the necessary 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?	X	___	
	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 data 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 the package?	[X]	___	___
2.3	Are there any discrepancies between the Traffic Reports/Chain-of-Custody Records, Sampling Trip Report and Sample Tags?	___	[X]	___
	ACTION: If yes, contact the WAM to obtain an explanation or resubmittal of any missing deliverables from the laboratory.			

		YES	NO	N/A
3.0 Cover Letter SDG Narrative				
3.1	Is the Narrative or Cover Letter Present?	[X]	___	___
3.2	Are the Case number and SDG number contained in the Narrative or Cover letter?	[X]	___	___
3.3	Does the Narrative contain the following information (see SOW, page B-11, section 2.6.1):			
	VOA: description or trap and column(s) used during sample analyses?	[X]	___	___
	BNA: descriptions of column(s) used during sample analyses?	[ ]	___	X
	PEST: description of columns used during sample analyses?	[ ]	___	X

NOTE: As stated in the SOW, page D-11/PEST, section 6.1.1.3.7, packed columns cannot be used.

3.4	Does the narrative, VOA and BNA sections, contain a list of all TICs identified as alkanes and their estimated concentrations?	[ ]	___	X
3.5	Does the narrative contain a record of all cooler temperatures? If the temperature of a cooler exceeded 10° C, the lab must list by fraction and sample number, all affected samples.	[X]	___	___
3.6	Does the narrative contain a list of the pH values determined for each water sample submitted for volatiles analysis (SOW, page B-11, section 2.6.1.2)?	[X]	___	___
3.7	Does the Case Narrative contain the "verbatim" statement as required on page B-11, section 2.6.1 of the SOW?	[X]	___	___

ACTION: If "No", to any question in this section, contact the WAM to obtain necessary resubmittals. If the information is unavailable, document under the Contract Problems/Non-Compliance section of the Data Assessment.

	YES	NO	N/A

4.0 Data Validation Checklist

4.1 Check the package for the following (see SOW reporting requirements, section 2.1, page B-7):

a. Is the package paginated in ascending order starting from the SDG narrative?	[X]	___	___
b. Are all forms and copies legible?	[X]	___	___
c. Is each fraction assembled in the order set forth in the SOW?	[X]	___	___
d. Is a Sample Data Summary Package submitted immediately preceding the Sample Data Package?	[X]	___	___

The following checklist is divided into three parts. Part A is filled out if the data package contains any Low Concentration Volatile analyses, Part B for any Low Concentration Semivolatile analyses and Part C for Low Concentration Pesticide/Aroclors.

Does this package contain:

Low Concentration Volatiles Data?	X	___
Low Concentration Semivolatiles Data?	___	X
Low Concentration Pesticides/Aroclors data?	___	X

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 Trip Report or Lab Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data? ___ [X] ___

ACTION: If samples were not iced or the ice was melted upon arrival at the laboratory and the temperature of the cooler was > 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".

2.0 Holding Times

2.1 Have any VOA technical holding times, determined from date of collection to date of analysis, been exceeded? ___ [X] ___

Technical Holding Times: Unpreserved samples maintained at 4°C, being evaluated for aromatic hydrocarbons, must be analyzed within 7 days of collection. If preserved with HCl (pH < 2) and stored at 4°C, then samples must be analyzed within 14 days of collection. If uncertain about preservation, notify the WAM to contact the sampler and determine whether or not samples were preserved.

ACTION: List sampling, VTSR, analysis dates and preservation for samples which missed holding time in the table below.

YES NO N/A

Table of Holding Time Violations
(See Chain-of-Custody Records)

Sample ID	Was Sample Preserved?	Date Sampled	Date Lab Received	Date Analyzed

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 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, flag all non-detects "R".

NOTE: Contractual Holding Times: Sample must be analyzed within 10 days from validated time of sample receipt (VTSR) at the laboratory.

3.0 System Monitoring Compound (SMC) Recovery (Form II LCV)

3.1 Are the Volatile SMC Recovery Summaries (Form II LCV) present? [X] ___ ___

ACTION: Call the WAM to obtain an explanation/resubmittal from the lab. If missing deliverables are unavailable, document the effect in the Data Assessment.

	YES	NO	N/A
3.2 Were outliers marked correctly with an asterisk?	[ ]	___	X

ACTION: Circle all outliers in red.

3.3 Was the surrogate, p-bromofluorobenzene, recovery outside contract limits of 80 - 120% for any sample or method blank?	___	[X]	___
If yes, were samples re-analyzed?	[ ]	___	X
Were method blanks re-analyzed?	[ ]	___	X

ACTION: If p-bromofluorobenzene recovery was > 10%, but failed to meet SOW specifications:

1. Qualify all positive results estimated (J).
2. Flag all non-detects as estimated detection limits (UJ) where recovery is < 80%.
3. Do not qualify non-detects if surrogate recovery is > 120%.

If p-bromofluorobenzene recovery was < 10%:

1. Flag all positive results estimated (J).
2. Flag all non-detects unusable (R).

Professional judgement should be used to qualify data that only have an associated method blank with the SMC recovery out of specification in both the original and reanalysis. Check internal standard areas.

3.4 Are there any transcription/calculation errors between raw data and Form II?	___	[X]	___

ACTION: If large errors exist, ask the WAM to obtain an explanation/resubmittal from the lab, make any necessary corrections and note errors in the data assessment.

4.0 Laboratory Control Sample (LCS) Recovery (Form III LCV)

4.1 Is the LCS Recovery Form (Form III LCV) present?	[X]	___	___
4.2 Was the LCS analyzed at the required frequency (once per SDG, or every 20 samples, whichever is			

	YES	NO	N/A
more frequent) for the Low Concentration VOA method?	[X]	___	___

ACTION: If any LCS data are missing, take action as specified in section 3.1 above.

4.3 How many VOA LCS recoveries are outside the specified QC limits of 60 - 140%?

__0__ out of 12

ACTION: Qualify associated samples for only the specific analytes included in the LCS solution in the following two situations:

1. If the LCS recovery is > 140%, flag positive results for the affected compound(s) estimated (J). Do not flag non-detects.

2. If the LCS recovery is < 60%, but mass spectral criteria were met, flag positive results for the affected compound(s) estimated (J) and non-detect(s) unusable (R).

Qualify all sample results in the following circumstances:

1. If 25% of the LCS recoveries were < 60%, qualify all positive results in the associated samples "J" and all non-detects "R".

2. If two or more LCS recoveries were < 10%, qualify all positive results in the associated samples "J" and all non-detects "R".

NOTE: It should be noted for TPO action (Organic Regional Data Assessment Summary Form) if a laboratory fails to analyze an LCS with each SDG, or if a laboratory consistently fails LCS recovery criteria.

5.0 Method Blanks (Form IV LCV)

		YES	NO	N/A
5.1	Is the Volatile Method Blank Summary (Form IV LCV) present?	[X]	___	___
5.2	Frequency of Analysis: For the analysis of Low Concentration VOA TCL compounds, has a method blank been analyzed for each SDG or every 20 samples, whichever is more frequent?	[X]	___	___

	YES	NO	N/A
5.3 Has a VOA method blank been analyzed at least once every twelve hours for each GC/MS system used?	[X]	___	___
5.4 Was a VOA instrument blank analyzed after each sample/dilution which contained a target compound at a concentration > 25 µg/ℓ (see SOW, page D-52/VOA, section 12.1.1.3)?	[X]	___	___

ACTION: If any method/instrument blank data are missing, notify the WAM to obtain resubmittals or an explanation from the lab. If method blank data are unavailable, reject (R) all associated positive results. However, the reviewer may use professional judgement and substitute field blank or trip blank data for missing method blank data.

If an instrument blank was not analyzed after a sample containing > 25 µg/ℓ, inspect the sample chromatogram acquired immediately after this sample for possible carryover. Use professional judgement to determine if carryover occurred and qualify analyte(s) accordingly.

5.5 Was a storage blank analyzed once per SDG after all the samples were analyzed?	[X]	___	___

ACTION: If storage blank data is missing, contact the WAM to obtain any missing deliverables from the laboratory. If unavailable, note in the Contract Problems/Non-Compliance section of the Data Assessment.

5.6 The validator should verify that the correct identification scheme for EPA blanks was used. (See SOW page B-31, section 3.3.7.3 for more information.)

Was the correct identification scheme used for all Low Concentration VOA blanks?	[X]	___	___

ACTION: Contact the WAM to obtain corrections from the lab, or make the necessary corrections. Document in the "Contract Problems/Non-Compliance section of the Data Assessment all corrections made by the validator.

5.7 Chromatography: review the blank raw data - chromatograms (RICs), quant. reports, data system printouts and spectra.

	YES	NO	N/A
Also compare the storage blank raw data with the method blank. Determine if contamination in the storage blank is also present in the method blank.			
Is the chromatographic performance (baseline stability) for each instrument acceptable for Low Concentration VOAs?	[X]	___	___

ACTION: Use professional judgement to determine the effect on the data.

5.8	Are all detected hits for target compounds in method, instrument and storage blanks less than the CRQL for that analyte?	[X]	___	___

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.

6.1	Does the storage blank contain positive results (TCL and/or TICs) for Low Concentration VOAs?	[ ]	X	___

ACTION: If the storage blank contains target compounds at a concentration greater than the CRQL, positive sample results for those compounds should be flagged "J". If gross contamination occurred positive sample results for that compound may be rejected (R).

6.2	Do any method/reagent/instrument blanks contain positive results (including TICs) for Low Concentration VOAs? When applied as described in the table below, the contaminant concentration in these blanks are multiplied by the sample dilution factor.	[ ]	X	___

YES NO N/A

NOTE: Contaminated instrument blanks are unacceptable under this SOW (see page D-52/VOA, section 12.1.2.3).

ACTION: Document in the Data Assessment under Contract Problems/Non-Compliance if a contaminated instrument blank was submitted.

ACTION: Sample analysis results after the high concentration sample must be evaluated for carryover. Instrument cross-contamination should be noted for TPO action (Organic Regional Data Assessment Summary Form) if an effect on the data is suspected.

6.3 Do any field/trip/rinse blanks have positive Low Concentration VOA results (including TICs)? X [ ] ___

ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.) See table 1.

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. 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 sample data should be qualified 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 < 10x blank value.	Sample conc. is < CRQL and < 10x blank value.	Sample conc. is > CRQL and > 10x blank value.
Other Conta-minants	Sample conc. is > CRQL, but < 5x blank value.	Sample conc. is < CRQL and < 5x blank value.	Sample conc. is > CRQL and > 5x blank value.

	YES	NO	N/A

NOTE: Analytes qualified "U" for blank contamination are 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).

6.4 Are there field/rinse/equipment blanks associated with every sample? [X] ___ ___

ACTION: Note in data assessment that there is no associated field/rinse/equipment blank.

Exception: samples taken from a drinking water tap do not have associated field blanks.

7.0 GC/MS Instrument Performance Check (Form V-LCV)

7.1 Are the GC/MS Instrument Performance Check Forms (Form V-LCV) present for Bromofluorobenzene (BFB)? [X] ___ ___

7.2 Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the BFB provided for each twelve hour shift? [X] ___ ___

7.3 Has an instrument performance compound been analyzed for every twelve hours of sample analysis per instrument? [X] ___ ___

ACTION: List date, time, instrument ID and sample analyses for which associated GC/MS tuning data are missing.

DATE	TIME	INSTRUMENT ID	SAMPLE NUMBERS
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

	YES	NO	N/A

ACTION: Notify the WAM to obtain missing data from the lab. If the lab cannot provide missing data, reject (R) all data generated outside an acceptable twelve hour calibration interval.

7.4 Have the ion abundances been normalized to m/z 95 (see SOW, page D-60/VOA)? [X] ___ ___

NOTE: All ion abundance ratios must be normalized to m/z 95, the nominal base peak, even though the 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? [X] ___ ___

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.) ___ [X] ___

7.7 Is the number of significant figures for the reported relative abundances consistent with the number given in the ion abundance criteria column on Form V LCV? [X] ___ ___

ACTION: If large errors exist, take action as specified in section 3.4 above.

7.8 Is the spectrum of the mass calibration compound acceptable? [X] ___ ___

ACTION: Use professional judgement to determine whether associated data should be accepted, qualified, or rejected.

	YES	NO	N/A

8.0 Target Compound List (TCL) Analytes (Form I LCV)

8.1	Are the Organic Analysis Data Sheets (Form I LCV) present with required header information on each page, for each of the following:			
	a. Samples and/or fractions as appropriate?	[X]	___	___
	b. Laboratory Control Samples?	[X]	___	___
	c. Blanks?	[X]	___	___
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 following:			
	a. Samples and/or fractions as appropriate?	[X]	___	___
	b. Laboratory Control Samples?	[X]	___	___
	c. Blanks?	[X]	___	___

ACTION: If any data are missing, take action specified in 3.1 above.

8.3	Are the response factors shown in the quant report?	[X]	___	___
8.4	Is chromatographic performance acceptable with respect to:			
	Baseline stability?	[X]	___	___
	Resolution?	[X]	___	___
	Peak shape?	[X]	___	___
	Full-scale graph (attenuation)?	[X]	___	___
	Other: _____?	[ ]	___	X

ACTION: Use professional judgement to determine the acceptability of the data.

8.5	Are lab-generated standard mass spectra of the identified VOA compounds present for each sample?	[X]	___	___

	YES	NO	N/A

ACTION: If any mass spectra are missing, take action as specified in 3.1 above. If lab does not generate their own standard spectra, make note under the "Contract Problems/Non-Compliance" section of the Data Assessment.

8.6	Is the RRT of each reported compound within ±0.06 RRT units of the standard RRT in the continuing calibration?	[X]	___	___
8.7	Are all ions present in the standard mass spectrum at a relative intensity greater than 25% also present in the sample mass spectrum?	[X]	___	___
8.8	Do sample and standard relative ion intensities agree to within ±20%?	[X]	___	___

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 the SOW page VOA D-32, section 21.

ACTION: When sample carry-over is suspected, use professional judgement to determine if instrument cross-contamination has affected positive compound identifications.

9.0 Tentatively Identified Compounds (TIC)

9.1	Are all Tentatively Identified Compound Forms (Form I LCV-TIC) present? Do listed TICs include scan number or retention time, estimated concentration and "JN" qualifier?	[X]	___	___
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?	[X]	___	___
	b. Blanks?	[X]	___	___
	b. Alkanes listed for each sample?	[X]	___	___

	YES	NO	N/A

ACTION: If any TIC data are missing, take action specified in 3.1 above.

ACTION: Add "JN" qualifier to all chemically named TICs if missing.

9.3 Are any target compounds (from any fraction) listed as TICs? (Example: 1,2-dimethylbenzene is xylene - a VOA target analyte - and should not be reported as a TIC.) ___ [X] ___

ACTION: Flag with "R" any target compound listed as a TIC.

9.4 Are all ions present in the reference mass spectrum with a relative intensity greater than 25% also present in the sample mass spectrum? [X] ___ ___

9.5 Do TIC and "best match" standard relative ion intensities agree within 20%? [ ] ___ X

ACTION: Use professional judgement to determine the acceptability of TIC identifications. If it is determined that an incorrect identification was made, change its 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 detected in a sample and is a suspected artifact of a common laboratory contaminant, the result should be qualified as unusable (R). (I.e., common lab contaminants such as 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.)

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 standards, quantitation ions, and RRFs were used to calculate Form I results.) ___ [X] ___

10.2 Are the CRQLs adjusted to reflect sample dilutions? [X] ___ ___

ACTION: If errors are large, take action as specified in section 3.4 above.

YES NO N/A

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 data from the diluted sample). Replace concentrations that exceed the calibration range in the original analysis by crossing out 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 I's 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? [X] ___ ___

ACTION: If any calibration standard data are missing, take action specified in section 3.1 above.

12.0 GC/MS Initial Calibration (Form VI)

12.1 Are the Initial Calibration Forms (Form VI LCV) present and complete for the volatile fraction at concentrations of 1, 2, 5, 10, and 25 $\mu g/\ell$? [X] ___ ___

ACTION: If any Initial Calibration forms are missing, take action as specified in section 3.1 above.

12.2 Are response factors stable for VOA's over the concentration range of the calibration (e.g., %RSD $\leq$ 30.0)? [X] ___ ___

ACTION: Circle all outliers in red.

NOTE: Although 13 Low Conc. VOA compounds have no maximum %RSD and require only minimal RRF performance (see Table D-3, page D-61/VOA), the technical acceptance criteria are the same for all analytes.

ACTION: If %RSD > 30.0%, qualify associated positive results for that analyte "J" (estimated) and non-detects using professional judgement. If %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 treated as "hits" when qualifying for initial calibration criteria.

12.3 Are any $\overline{RRFs}$ < 0.05? X [ ] ___

ACTION: Circle all outliers in red.

ACTION: If any $\overline{RRF}$ values are < 0.05, qualify associated non-detects unusable (R) and associated positive results estimated (J).

NOTE: Contract Requirements: The SOW allows up to two of the required analytes (see compounds marked with a "*" on Form VI and Table D-3, page D-61/VOA) to fail contractual %RSD and RRF criteria, provided the %RSD is ≤ 40.0 and RRF ≥ 0.010.

ACTION: If more than two of the required analytes failed %RSD or RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance and the Organic Regional Data Assessment Summary.

12.4 Are there any transcription/calculation errors in the reporting of $\overline{RRFs}$, RRFs or %RSD values? (Check at least 2 values, but if errors are found, check more.) ___ [X] ___

ACTION: Circle errors in red.

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 LCV)

13.1 Are the Continuing Calibration Forms (Form VII LCV) present and complete for the volatile fraction? [X] ___ ___

13.2 Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument? [X] ___ ___

ACTION: If any forms are missing or no continuing calibration standard has been analyzed within twelve hours of every sample analysis, ask the WAM to obtain

	YES	NO	N/A
13.5 Are there any transcription/calculation errors in the reporting of RRFs, or %D between initial RRFs and continuing RRFs? (Check at least two values but if errors are found, check more.)	___	[X]	___

ACTION: Circle errors in red.

ACTION: If errors are large, notify the WAM to obtain explanation/resubmittals from the lab. Document errors in the Contract Problems/Non-Compliance section of the Data Assessment.

14.0 Internal Standard (Form VIII LCV)

14.1 Are the internal standard areas (Form VIII LCV) of every sample and blank within the upper and lower limits (± 40%) for each continuing calibration?	[X]	___	___
If no, was the sample reanalyzed?	[ ]	___	X

ACTION: 1. Circle all outliers in red.

2. List all the outliers below.

Sample #	Int. Std.	Area	Lower Limit	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 quantitated with this internal standard.

2. Do not qualify non-detects when associated IS area counts are > +40%.

3. If the IS area is less than the lower limit (-40%), qualify all associated non-detects "UJ". If extremely low area counts are reported, (< 20%) or if performance exhibits a major, abrupt drop- off, flag all associated non-detects as unusable (R).

14.2 Are the retention times of the internal standards within ±20 seconds of the associated calibration standard? [X] ___ ___

ACTION: Professional judgement should be used to qualify data if the retention times differ by more than 20 seconds.

NOTE: Contract Requirements: The SOW (section 11.8.4, page D-51/VOA) states that any sample which fails the acceptance criteria for IS response must be reanalyzed.

ACTION: Document in the Data Assessment under Contract Problems/Non-Compliance any sample(s) which failed the above IS acceptance criteria.

15.0 Field Duplicates

15.1 Were any field duplicates submitted for Low Concentration VOA analysis? [X] ___ ___

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. If large differences exist, contact the WAM to confirm identification of field duplicates with the sampler.

TABLE 1

Samples Associated With Trip @ Field Blanks
Collected 4/8/98

Samples:	Type
BMM62, BMM66, BMM69	Field Samples
BMM72	Field Blank
BMM75	Trip Blank

Field/Trip Blanks

Blank	Type	Associated Samples
BMM71	Field	BMM56, BMM57, BMM58, BMM59, BMM60, BMM61, BMM63, BMM64, BMM65, BMM67, BMM68
BMM72	Field	BMM62, BMM66, BMM69
BMM74	Trip	BMM56, BMM57, BMM58, BMM59, BMM60, BMM61, BMM63, BMM64, BMM65, BMM67, BMM68
BMM75	Trip	BMM62, BMM66, BMM69

TPO: [ ]ACTION [X]FYI REGION II

ORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO.: 26114 LABORATORY: PDP Analytical Corp.
SDG NO.: BMM56 DATA USER: EPA Region II
SOW: OLC02.1 REVIEW COMPLETION DATE: 6/2/98
NO. OF SAMPLES: 18 WATER

REVIEWER: [ ] ED [ ] ESAT [ ] OTHER, CONTRACTOR _____

QC ITEM	VOA	BNA	PEST		
HOLDING TIMES	O				
GC-MS PERFORMANCE	O				
INITIAL CALIBRATIONS	M				
CONTINUING	M				
FIELD BLANKS(F = N/A)	X				
LABORATORY BLANKS	O				
SURROGATES	O				
LAB CONTROL SAMPLE	O				
QC SAMPLES (LES)	O				
INTERNAL STANDARDS	O				
COMPOUND	O				
COMPOUND QUANTITATION	O				
SYSTEM PERFORMANCE	O				
OVERALL ASSESSMENT	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.

TPO ACTION ITEMS: NONE

AREAS OF CONCERN: NONE

DATA REJECTION SUMMARY

Type of Review: Organic **Date:** 6/2/98 **Case No.:** 26114
Site Name: Spectrum Fishing Corp. **Lab Name:** PDP Analytical Corp.
Reviewer's Initials: KWC **Number of Samples:** 18

Analytes Rejected Due to Exceeding Review Criteria For:

No. of Compounds/No. of Fractions (Samples)

	Surrogates	Holding Time	Calibration	Contamination	LCS	ID	Internal Standards	Other	Total # of Samples	Total # Rejected/Total # in All Samples			
VOA(33)	0	0	49	0	0	0	0	0	18	49	738	7	%

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	Calibration	Contamination	LCS	ID	Internal Standards	Other	Total # of Samples	Total # Estimated/Total # in All Samples			
VOA(33)	0	0	5	0	0	0	0	0	18	5	738	1	%

NOTE: ASTERISK (*) INDICATES ADDITIONAL EXCEEDANCES OF REVIEW CRITERIA.

Definitions

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
DCB -decachlorobiphenyl
DDD - dichlorodiphenyldichloroethane
DDE - dichlorodiphenylethane
DDT - dichlorodiphenyltrichloroethane
GC - gas chromatography
GC/EC - gas chromatography/electron capture detector
GC/MS - gas chromatography/mass spectroscopy
GPC - gel permeation chromatography
kg - kilogram
µg - microgram
MAGIC - Mainframe Access Graphical Interface with CARD
ℓ - liter
LCS - Laboratory Control Sample
LES - Laboratory Evaluation Sample
mℓ - mililiter
PCB - polychlorinated biphenyl
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
TPO - technical project officer
VOA - volatile organic acid
VTSR - validated time of sample receipt
WAM - work assignment manager

DATA QUALIFIER DEFINITIONS

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the present of an analyte for which there is presumptive evidence to make a "tentative identification".

NJ - The analysis indicates the present 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 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 control criteria. The presence or absence of the analyte cannot be verified.

REFERENCES

SOW/CLP OLC02.1
National Functional Guidelines (Feb 94)
EPA QA/G-6, Nov 1995

ATTACHMENTS

Low Concentration Data Assessment

PDP ANALYTICAL SERVICES
1680 Lake Front Circle, Suite B • The Woodlands, TX 77380 • Phone (281)363-2233

RECEIVED
APR 23 1998
351

Contract No. 68-D7-0004	Case No. 26114	SDG No. BMM56

SDG NARRATIVE

SAMPLE RECEIPT :

4/8/98 - Received one cooler :

Cooler 1 temperature: 3°C (COC # 347271/012645) contained the following:

BMM59-	3 - VOA Vials
BMM61-	3 - VOA Vials
BMM58-	3- VOA Vials
BMM65-	3 - VOA Vials
BMM60-	3 - VOA Vials
BMM74-	3- VOA Vials
BMM63-	3 - VOA Vials
BMM67-	3 - VOA Vials
BMM56-	3- VOA Vials
BMM57-	3 - VOA Vials
BMM71-	3 - VOA Vials
BMM64-	3- VOA Vials
BMM68-	3- VOA Vials

No problems encountered.

The Federal Express airbill (# 803269342140) was inadvertantly misplaced and therfore could not be submitted with the package.

4/9/98 - Received one cooler :

Cooler 1 temperature: 3°C (COC # 012649) contained the following:

BSK75-	3 - VOA Vials
BSK62-	3 - VOA Vials
BSK69-	3- VOA Vials
BSK66-	3 - VOA Vials
BSK72-	3 - VOA Vials

No problems encountered.

VOLATILES:

All samples were analyzed on a HP 5971 GC/MS using a 60 meters long DB-624 column having a 0.53mm ID and 3um film thickness. The trap used was a OV-1/Tenax/Silica Gel (Tekmar #6. Cat 14-1755-003) . A 20 mL purge

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Contract No. 68-D7-0004	Case No. 26114	SDG No. BMM56

SDG NARRATIVE

volume was used for all samples, blanks and standards. The concentrations of the standards and spikes were maintained at the levels required by the Statement of Work (SOW).

The following field samples are analyzed for volatiles in this SDG. The pH of the samples is listed against them.

BMM56	2.0	BMM64	2.0	BMM74	2.0
BMM57	2.0	BMM65	2.0	BMM75	2.0
BMM58	2.0	BMM66	2.0		
BMM59	2.0	BMM67	2.0		
BMM60	2.0	BMM68	2.0		
BMM61	2.0	BMM69	2.0		
BMM62	2.0	BMM71	2.0		
BMM63	2.0	BMM72	2.0		

Manual integration's were performed for the following samples for the compounds listed against them.

VSTD00182 - Vinyl chloride, Chloroethane, Chloromethane, Bromomethane, Acetone.
VSTD00282 - Vinyl chloride, Chloroethane, Chloromethane, Bromomethane, 1,1-Dichloroethene, Carbon disulfide, Acetone .
VSTD00582 - Vinyl chloride, Chloroethane, Bromomethane, 1,1-Dichloroethene, trans 1,2-dichloroethene.
VSTD01082 - Vinyl chloride, Chloroethane, Chloromethane, Bromomethane, Carbon disulfide, Acetone, 1,1-dichloroethene, Methylene chloride
VSTD02582 - Vinyl chloride, Chloroethane, Chloromethane, Bromomethane, Carbon disulfide, Acetone, 1,1-dichloroethene.
VSTD00597- Vinyl chloride, Chloroethane, Chloromethane, Bromomethane, 1,1-Dichloroethene, Carbon disulfide.
VSTD00598- 1,4-Dichlorobenzene (when a manual integration is performed on an internal standard, the software automatically flags all compounds associated with that IS with a "m".)
VSTD00501- 1,4-Dichlorobenzene (when a manual integration is performed on an internal standard, the software automatically flags all compounds associated with that IS with a "m".), 1,4-Dichlorobenzene.
VSTD00502- 1,4-Dichlorobenzene (when a manual integration is performed on an internal standard, the software automatically flags all compounds associated with that IS with a "m".), 1,4-Dichlorobenzene.
VLCS92- Vinyl Chloride
VLCS93- Vinyl Chloride
VLCS96- Vinyl chloride

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Contract No. 68-D7-0004	Case No. 26114	SDG No. BMM56

SDG NARRATIVE

These manual integration's were necessary because the software failed to accurately integrate the entire peak. In all the above instances, the quantitation reports are flagged with "m". A hard copy printout of the manual integration's along with the scan ranges and initials of the operator is included in the data package .

Due to high concentration of target compounds, the following samples were analyzed at a dilution. Secondary dilutions had to be performed on some samples to get the concentration of all target compounds within the calibration range.

Sample BMM62 was analyzed at a 1X, 4X, and a 20X dilution.
Sample BMM63 was analyzed at a 1X,and a 2.5X dilution.
Sample BMM66 was analyzed at a 1X,and a 4X dilution.
Sample BMM67 was analyzed at a 1X, 20X and a 100X dilution.
Sample BMM69 was analyzed at a 1X, 4X, and a 20X dilution.

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 hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature:

Sud Chadha (Organic Supervisor) — Signature and Title

04/22/98 — Date of Signature

Z:\NETDATA\QA\FORMS\CLP\NARR1296.DOC

SAMPLE DELIVERY GROUP (SDG)
TRAFFIC REPORT (TR) COVER SHEET

Lab Name: **PDP Analytical Services** Contract No.: **68-D7-0004**

Lab Code: **PDP** Case No. **26114**
Full Sample Analysis Price in Contrac _____

SDG No./First Sample in SDG: **BMM56** 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: **BMM75** 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	**BMM56**	11	**BMM66**
2	**BMM57**	12	**BMM67**
3	**BMM58**	13	**BMM68**
4	**BMM59**	14	**BMM69**
5	**BMM60**	15	**BMM71**
6	**BMM61**	16	**BMM72**
7	**BMM62**	17	**BMM74**
8	**BMM63**	18	**BMM75**
9	**BMM64**	19	
10	**BMM65**	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).

Sushil Chadha
Signature

04/13/98
Date

1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 355

BMM56

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.010 Date Received: 04/08/98

Lab File ID: B6810 Date Analyzed: 04/09/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (UG/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	UR
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	UR
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	UR
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 356

BMM56

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.010 Date Received: 04/08/98

Lab File ID: B6810 Date Analyzed: 04/09/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
1.					
2.					
3.					
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1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 357

BMM57

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.011 Date Received: 04/08/98

Lab File ID: B6808 Date Analyzed: 04/09/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (UG/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	UR
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	UR
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	UR
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO. 358

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BMM57

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.011 Date Received: 04/08/98

Lab File ID: B6808 Date Analyzed: 04/09/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
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1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 359

BMM58

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.004 Date Received: 04/08/98

Lab File ID: B6800 Date Analyzed: 04/09/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (UG/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	UR
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	UR
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	UR
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO. 360

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BMM58

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.004 Date Received: 04/08/98

Lab File ID: B6800 Date Analyzed: 04/09/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
1.					
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1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 361

BMM59

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4544.002 Date Received: 04/08/98

Lab File ID: B6782 Date Analyzed: 04/08/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (UG/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	UR
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	UR
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	UR
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

EPA SAMPLE NO. 362

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BMM59

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4544.002 Date Received: 04/08/98

Lab File ID: B6782 Date Analyzed: 04/08/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
1.					
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1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 363

BMM60

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.006 Date Received: 04/08/98

Lab File ID: B6786 Date Analyzed: 04/08/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (UG/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	11	J
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	UR
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	UR
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 364

BMM60

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.006 Date Received: 04/08/98

Lab File ID: B6786 Date Analyzed: 04/08/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
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LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 365

BMM61

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.003 Date Received: 04/08/98

Lab File ID: B6783 Date Analyzed: 04/08/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (UG/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene chloride	2	U
67-64-1	Acetone	5	UR
75-15-0	Carbon disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	UR
74-97-5	Bromochloromethane	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-pentanone	5	U
591-78-6	2-Hexanone	5	UR
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U

1LCE

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 366

BMM61

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.003 Date Received: 04/08/98

Lab File ID: B6783 Date Analyzed: 04/08/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
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