600850

MONITORING WELL SAMPLES

DIHM/OEP/SSD
TRACE ORGANICS ANALYSIS

Co. STAFFORD

SITE Bush Valley SAMPLE STATION OW-1

Date of Collection	3/17/83	5/22/83	9/28/83	3/21/85	7/21/86	7/16/87
Lab Number	1486	2272	863	2775	0517	850210
CHLOROMETHANE		<2	~1	<1	<1	<1
BROMOMETHANE		<1				
DICHLORODIFLUOROMETHANE						
VINYL CHLORIDE						
CHLOROETHANE		✓				
METHYLENE CHLORIDE		1				
TRICHLOROFLUOROMETHANE		<1				
1,1-DICHLOROETHENE						
1,1-DICHLOROETHANE						
TRANS-1,2,-DICHLOROETHENE						
CHLOROFORM						
1,2-DICHLOROETANE						
1,1,1-TRICHLOROETHANE						
CARBON TETRACHLORIDE						
BROMODICHLOROMETHANE						
1,2-DICHLOROPROPANE						
TRANS-1,3-DICHLOROPROPROPENE						
TRICHLOROETHENE						
DIBROMOCHLOROMETHANE						
1,1,2-TRICHLOROETHANE						
CIS-1,3-DICHLOROPROPENE						
2-CHLOROETHYLVINYLETHER						
BROMOFORM						
1,1,2,2-TETRACHLOROETHANE						
TETRACHLOROETHENE						
CHLOROBENZENE						
TOTAL TRIHALOMETHANES						
BENZENE						
TOLUENE						
ETHYLBENZENE			✓	✓	✓	✓
TOTAL XYLENES		<2	<2	<2	<2	<2
TOTAL PURGEABLE HC.						
TETRAHYDROFURAN						
METHYLETHYLKETONE (2-BUTANONE)(MEK)				3	3	11
METHYLISOBUTYLKETONE(MIBK)						
ACETONE						31
2-PROPANOL						144

AR300219

DHMH/OEP/SSD
TRACE ORGANICS ANALYSIS

Co: Hampton

ITE Bush Valley SAMPLE STATION SW #2

e of Collection	3/17/83	4/22/83	7/28/83	3/21/84	7/3/86	7/16/87			
Number	1457	3273	964	2976	0518	880211			
HLOROMETHANE		<2	<1	<1	<1	<1			
ROMOMETHANE					<1				
ICHLORODIFLUOROMETHANE					3				
INYL CHLORIDE					<1	✓			
HLOROETHANE		✓	✓		<1	3			
ETHYLENE CHLORIDE		4	2		7	<1			
RICHLOROFLUOROMETHANE		<1	<1		<1				
,1-DICHLOROETHENE					<1				
,1-DICHLOROETHANE					2				
RANS-1,2,-DICHLOROETHENE					2				
LOROFORM					<1	✓			
2-DICHLOROETANE					8	2	<1	2	
,1,1-TRICHLOROETHANE					<1	<1			
ARBON TETRACHLORIDE									
ROMODICHLOROMETHANE									
,2-DICHLOROPROPANE									
RANS-1,3-DICHLOROPROPROPENE					✓	✓			
RICHLOROETHENE					3	5	6	<1	
IBROMOCHLOROMETHANE					<1	<1			
,1,2-TRICHLOROETHANE									
IS-1,3-DICHLOROPROPENE									
-CHLOROETHYLVINYLETHER									
ROMOFORM									
,1,2,2-TETRACHLOROETHANE					✓				
ACHLOROETHENE					7				
HLOROBENZENE					<1				
OTAL TRIHALOMETHANES									
ENZENE					3				
OLUENE					<1	✓			
THYLBENZENE		✓	✓	✓	<1	14			
OTAL XYLENES		<2	<2	<2	<7	67			
TAL PURGEABLE HC.									
ETRAHYDROFURAN						63			
ETHYLETHYLKETONE									
2-BUTANONE)(MEK)									
ETHYLISOBUTYLKETONE(MIBK)									
ethyl ether					ORS.				

AR300220

DIMH/OEP/SSD
TRACE ORGANICS ANALYSIS

C/O - HANFORD

[redacted] BUSH VALLEY

SAMPLE STATION 04N21

Date of Collection	3/07/83	6/22/83	7/25/83	3/21/85	7/31/86	9/14/89	7-7-88	2-22-90
Sample Number	1455	2270	365	2997	6519	930212		
BROMOMETHANE		<1		<1	4	3	11	<5
CHLOROMETHANE	?	<1		<1	<1	<1	<1	<1
DICHLORODIFLUOROMETHANE		083	045	55	16	23	6	<1
VINYL CHLORIDE	?	15	13	22	10	7	2	<1
CHLOROETHANE		013	16	23	12	12	12	<1
METHYLENE CHLORIDE	120	700	260	96	7	9	<1	<1
TRICHLOROFLUOROMETHANE	5	13	7	5	2	<1	<1	<1
1,1-DICHLOROETHENE				<1	<1	<1	<1	<1
1,1-DICHLOROETHANE	5	41	63	109	53	46	23	<1
TRANS-1,2,-DICHLOROETHENE	1	4	5	62	27	32	4	<1
CHLOROFORM				<1	<1	<1	<1	<1
1,2-DICHLOROETANE		3	2	80	<1	49	<1	1
1,1,1-TRICHLOROETHANE	2	5		<1	54	<1	<1	11
CARBON TETRACHLORIDE					<1		<1	<1
BROMODICHLOROMETHANE					<1		<1	<1
1,2-DICHLOROPROPANE					7	6	4	<1
TRANS-1,3-DICHLOROPROPRO...					<1	<1	<1	<1
TRICHLOROETHENE	2	4	5	18	13	9	3	<1
DIBROMOCHLOROMETHANE				<1	<1	<1	<1	4
1,1,2-TRICHLOROETHANE							<1	<1
CIS-1,3-DICHLOROPROPENE							<1	<10
2-CHLOROETHYLVINYLETHER							<1	<1
BROMOFORM							<1	<1
1,1,2,2-TETRACHLOROETHANE							<1	<1
TETRACHLOROETHENE	15	25	70	40	7	12	<1	<1
CHLOROBENZENE				5	8	8	<1	<1
TOTAL TRIHALOMETHANES							[redacted]	[redacted]
BENZENE	7	12	19	41	18	14	7	<1
TOLUENE				<1	<1	<1	<1	5
ETHYLBENZENE			5	<1	<1	<1	<1	<1
TOTAL XYLENES	2	4	15	2	<2	<2	<2	<2
TOTAL PURGEABLE HC.								
TETRAHYDROFURAN						8		
METHYLETHYLKETONE								
(2-BUTANONE)(MEK)								
METHYLISOBUTYLKETONE(MIBK)								
ETHYL ETHER	11	30	32		85	101	49	
1-2 DIBROMOETHANE				1				
FREON 12	62							
TENTATIVELY IDENTIFIED	✓	✓	✓	✓	✓	✓		
[redacted] N-BUTANOL					240			

AR300221

Bush Valley Landfil

Site Sampling Background Information

July 11, 1984

David Healy DH

Bush Valley Landfill

Outlined below is a synopsis of activities completed at the Bush Valley Landfill on July 11, 1984. NUS Corporation was assigned to complete a site investigation of this facility under EPA's Dump Site Program. Samples were sent to EPA's contract labs for analysis. After receiving the laboratory analysis, NUS will finalize a draft site investigation report, which will be sent to EPA and WMA in approximately 6-9 months. The following individuals were on-site:

Ric Callahan - NUS Corporation
Marsha Irwin - NUS Corporation
Jim Strickland - NUS Corporation
Randy Dickinson - NUS Corporation
Barry Schlesinger - NUS Corporation
Lloyd Harris - Owner
Frank Henderson - WMA, Support Services Division
David Healy - WMA, Support Services Division
Butch Henderson - WMA, Summer Student
David Berardelli - WMA, Summer Student

Three of the four monitoring wells were sampled. Monitoring well 3 contained one foot of water and did not have enough volume for sampling. The other three wells were bailed prior to sampling. Monitoring well information is as follows:

Monitoring Well	Depth	Depth to Water	Column of Water
1	45	12	33
2	43	9	34
3	19	18	1
4	20	9	11

The Braxton-Harris House was abandoned approximately one year ago, and has a field stone lined, 30 deep, dug well with a hand pump.

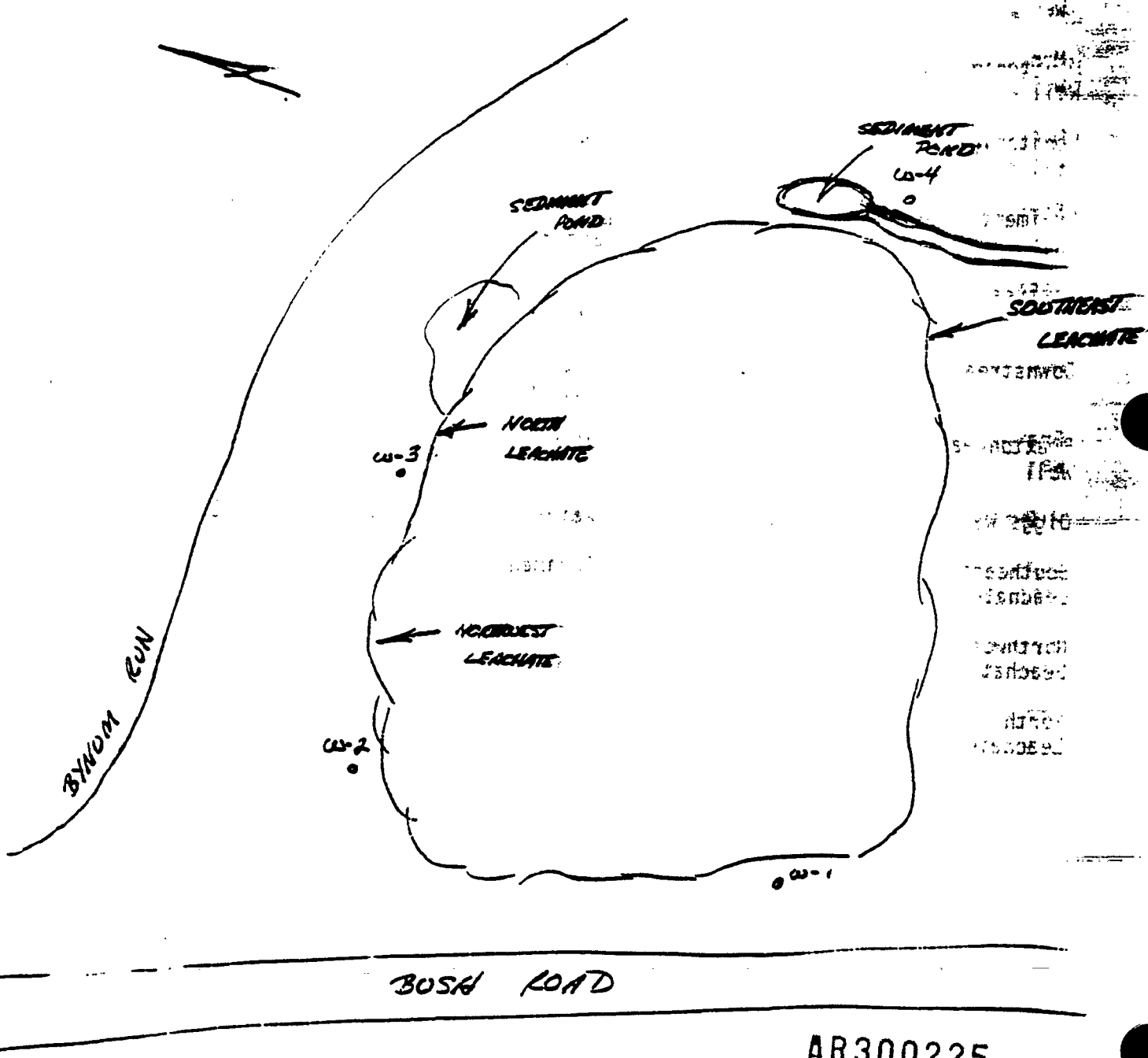
There was evidence of leachate seeps around the fill and three seeps were sampled. The sediment pond near monitoring well 3 had tadpoles and at least one frog.

Mr. Harris estimated he has 47 acres on this property, of which, approximately 29 acres has been landfilled.

Bush Valley Landfill

Sampling Information

Sampling Location	Time	Type of Sample	pH	Specific Conductance
Monitoring Well #1	9:20	Water	5.9	94
Monitoring Well #2	10:25	Water	6.34	56
Monitoring Well #4	11:50	Water	5.64	500
Sediment Pond (near MW-3)	9:50 9:55	Water Sediment	6.41	200
Upstream	10:55 11:05	Water Sediment	6.43	160
Downstream	12:06 12:10	Water Sediment	6.41	180
Braxton-Harris Well	10:35	Water	6.38	60
Diggs Well	12:20	Water	6.69	180
Southeast Leacnate	11:45	Sediment		
Northwest Leachate	12:45 12:55	Water Sediment	7.28	7000
North Leachate	13:10 13:15	Water Sediment	7.33	5200



AR300225

BRAXTON-HALLS HOUSE

NOT TO

3136

December 15, 1975

Mr. John C. Lawther
Water Resources Administration
Tawes State Office Building
Annapolis, MD 21401

Re: Groundwater Quality Monitoring Wells
Bush Valley Landfill
Harford County

Dear Sir:

The permit numbers for the four wells installed at the subject landfill are as follows:

Permit Numbers - 73 - 2517
73 - 2526
73 - 2527
73 - 2528

The driller name is Hamilton.

As I said during our recent conversation, three of the wells were recently checked and found to contain turbid water that had a decidedly oily feel. We are concerned that the present condition of the water may cause readings that will not be representative of the groundwater beneath this site.

We would appreciate an investigation of this matter by your Department.

Sincerely yours,

AR300226

Douglas H. John
Regional Consultant
Division of Solid Waste Control

DHJ:mj

cc: Dr. Canfield

State of Maryland

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
ENVIRONMENTAL HEALTH ADMINISTRATION
201 WEST PRESTON STREET
BALTIMORE 21201
PHONE • 301-383-3136

NEIL SOLOMON, M.D., PH.D.
SECRETARY

DONALD M. NOREN
DIRECTOR

Address Replies to P.O. Box 13387
Baltimore, Maryland 21203

February 19, 1976

Mr. F. J. Handshoe
Resources Protection Division
119 Hays Street
P.O. Box 191
Bel Air, Maryland 21014

Dear Jim:

You will find attached our proposed program for monitoring the quality of ground and surface water on and near the Mullins, Tollgate, Scarboro, Madonna, and Bush Valley Landfills. We have also attached the information concerning sampling station locations and data collected previously which you might not have.

At Tollgate, the outfall from the sediment basin nearest U.S. Route 1 has been added as a sampling station. Sampling the discharge from this basin will allow us to monitor the quality of the water which is draining off the most recently filled areas.

We recommend that the following analyses of the samples be requested: Chemical Oxygen Demand, pH, Chlorides, Iron, Total Dissolved Solids, Total Hardness and Sodium. These analyses represent "rountine" monitoring of ground and surface waters. Normally, this Division assumes the responsibility for obtaining comprehensive background samples at new landfills.

Of course, the numbers and location of stations will changes as existing sites are upgraded or phased out or new sites are established.

Samples may have to be collected at intervals more frequent than those shown if the analyses show a significant change in the ground or surface waters near any of the landfills.

If, after reviewing this proposed program, you have any questions or comments, please let us know.

Sincerely yours,

Douglas H. John
Regional Consultant
Division of Solid Waste Control

DHJ:mj

Attachments

cc: John C. Lawther
G. Ward Barstow

SAMPLING INFORMATION

Site Name	Station Type	Number	Sample By	Frequency Times/Yr.	Months
TOLLGATE	Mon. Wells	9	SHD	4	3-6-9-12
	Stream	1	CHD	2	4-11
	Sed. Basin Outfall	1	CHD	2	4-11
MULLINS	Potable Wells	5	CHD	4	3-6-9-12
	Stream	2	CHD*	2	3-9
SCAREGRO	Mon. Wells	4	SHD	4	3-6-9-12
	Potable Wells	1	CHD	4	3-6-9-12
MADONNA	Spring	1	CHD	4	3-6-9-12
	Potable Wells	3**	CHD	4	3-6-9-12
BUSH VALLEY	Mon. Wells	4	SHD	4	3-6-9-12
	Stream	2*	CHD	2	4-11

* These stations may be dropped if they are included in the monitoring program of the Water Resources Administration.

** The Division of Solid Waste Control will survey the properties near this site to determine which potable wells could serve as monitoring stations. CHD will sample routinely.

2/76

DHJ:mj

SAMPLING INFORMATION

Site Name	Station Type	Number	Sample By	Frequency Times/Yr.	Months
TOLLGATE	Mon. Wells	9	SHD	4	3-6-9-12
	Stream	1	CHD	2	4-11
	Sed. Basin Outfall	1	CHD	2	4-11
MULLINS	Potable Wells	5	CHD	4	3-6-9-12
	Stream	2	CHD*	2	3-9
SCARBORO	Mon. Wells	4	SHD	4	3-6-9-12
	Potable Wells	1	CHD	4	3-6-9-12
MADONNA	Spring	1	CHD	4	3-6-9-12
	Potable Wells	3**	CHD	4	3-6-9-12
BUSH VALLEY	Mon. Wells	4	SHD	4	3-6-9-12
	Stream	2*	CHD	2	4-11

* These stations may be dropped if they are included in the monitoring program of the Water Resources Administration.

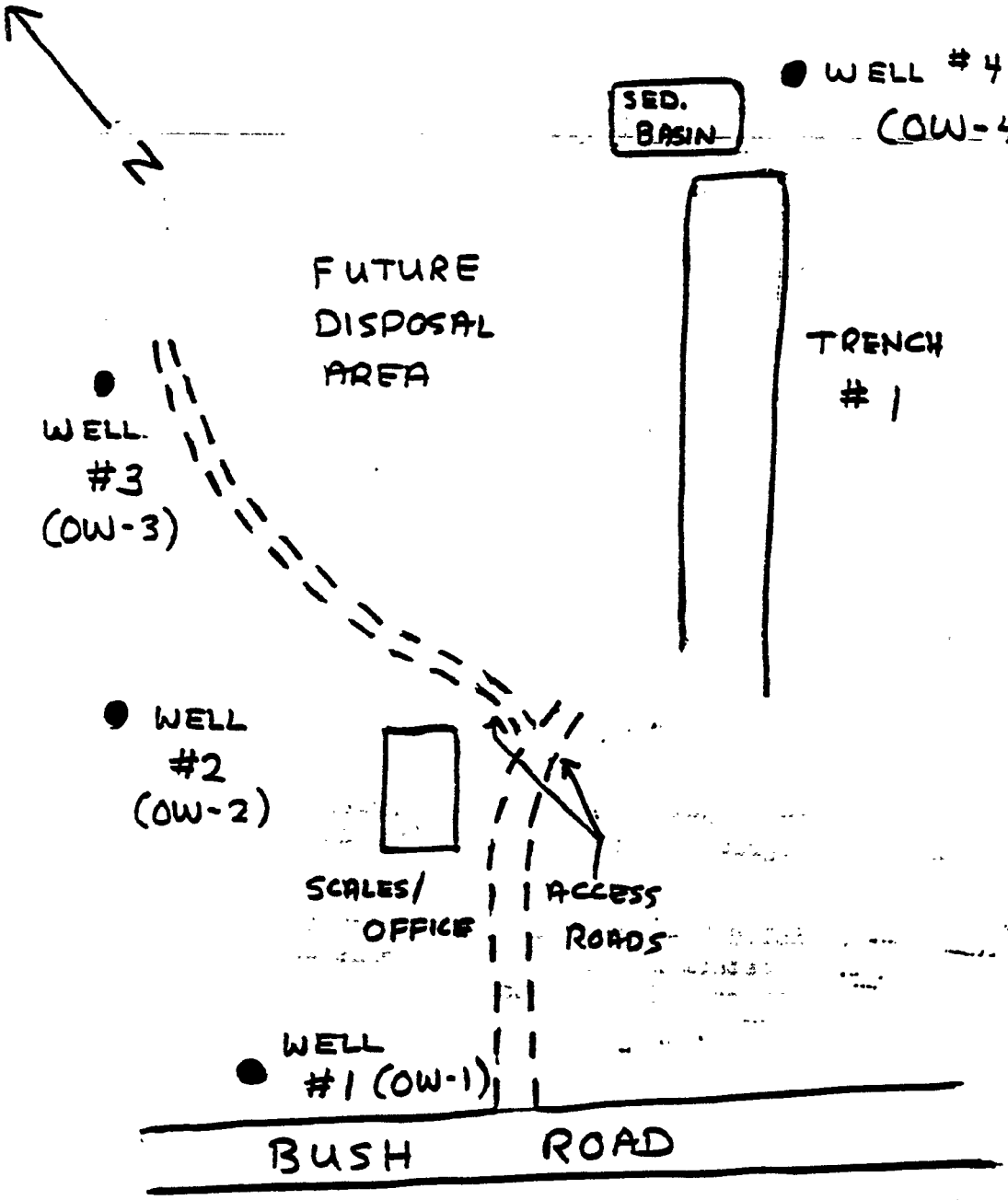
** The Division of Solid Waste Control will survey the properties near this site to determine which potable wells could serve as monitoring stations. CHD will sample routinely.

2/76

DHJ:mj

BUSH VALLEY LANDFILL

LOCATION OF MONITORING WELLS



WELL NO.	PERMIT NO.
1	73-2517 - AR30023K
2	-2526
3	-2527
4	-2528

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

NUMBER BUW-1

HARFORD
NAME OF COUNTY

SOURCE OF SAMPLE BUSH VALLEY WELL COLLECTOR RICH ADAMS

SAMPLE TYPE: DISTRIBUTION _____ SOURCE WELL OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: U.S. with Fe

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			OW-1	071778	

FIELD pH * 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.9		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	22		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	23		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	34		SILVER	333	
✓	IRON	122	4.2		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	35	
	ALBUMINOID	153		✓	SODIUM	371	8
	NITRATE	162		✓	TOTAL SOLIDS	381	156
	NITRITE	173		✓	COD		7
	MBAS	182		✓			
	ALUMINUM	192					AR300232
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS. ALL OTHERS IN MILLIGRAMS PER LITER (ppm)

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

OTTLE NUMBER BOW-2

HARFORD
NAME OF COUNTY

SOURCE OF SAMPLE BUSH VALLEY SLF COLLECTOR

SAMPLE TYPE: DISTRIBUTION ____ SOURCE W ____ OTHER ____ (Specify)

COMMUNITY ____ OTHER PUBLIC ____ PRIVATE SUPPLY ____

REMARKS: ____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			OW-2	071778	

20 21 22
FIELD * pH ____ FIELD RESID. CHLORINE: FREE 23 24 ____ TOTAL 25 26 ____

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	8.4		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	115		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	20		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	26		SILVER	333	
✓	IRON	122	65		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	21
	NITRATE	162		✓	TOTAL SOLIDS	381	270
	NITRITE	173		✓	COD		33
	MBAS	182					
	ALUMINUM	192					AR300233
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS, ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

DATE RECEIVED 1111 4 7 1978 DATE REPORTED

0255

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

OTTLE UMBER BW-3

HAROLD
NAME OF COUNTY

SOURCE OF SAMPLE BUSH VALLEY COLLECTOR RICH - ADAMS

SAMPLE TYPE: DISTRIBUTION _____ SOURCE _____ OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			OW-3	071778	

FIELD * pH 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
	pH *	011	6.6		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	44		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	8		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	38		SILVER	333	
✓	IRON	122	1900		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	12
	NITRATE	162		✓	TOTAL SOLIDS	381	17600
	NITRITE	173		✓	COD		INTERFERENCE
	MBAS	182					AR300234
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER BCW-4

HAROLD
NAME OF COUNTY

SOURCE OF SAMPLE BUSH VALLEY COLLECTOR KICH. AGNES

SAMPLE TYPE: DISTRIBUTION _____ SOURCE // OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: NO. 4.

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS. CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			OW-4	07 17 77	

FIELD pH * 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.8		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	49		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	9		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	35		SILVER	333	
✓	IRON	122	130		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	11
	NITRATE	162		✓	TOTAL SOLIDS	381	454
	NITRITE	173		✓	(COD)		5
	MBAS	182					
	ALUMINUM	192					AR300235
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS, ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

DATE RECEIVED _____ DATE REPORTED OCT 5 1977 CHEMIST _____ LAB NO. 25

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

SAMPLE NUMBER BOW-1

Harford Co.
NAME OF COUNTY

SOURCE OF SAMPLE Rush Valley Dev. S & F COLLECTOR Adams

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Well OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: Division Solid Waste

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			BOW1	10/19/78	

FIELD pH * 20 21 22 _____ FIELD RESID. CHLORINE: FREE 23 24 _____ TOTAL 25 26 _____

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.0		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	20		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	160		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	36		SILVER	333	
✓	IRON	122	120		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	9
	NITRATE	162		✓	TOTAL SOLIDS	381	302
	NITRITE	173		✓	C.O.D.		INTERFERING
	MBAS	182					
	ALUMINUM	192					AR300236
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS. ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER BOW-2

Harford Co.
NAME OF COUNTY

SOURCE OF SAMPLE Bush Valley SLF COLLECTOR Adams

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Well OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: Division Solid Waste

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			BOW2	10 18 78	

FIELD pH* _____ FIELD RESID. CHLORINE: FREE _____ TOTAL _____

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.5		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	122		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	17		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	134		SILVER	333	
✓	IRON	122	47		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	22
	NITRATE	162		✓	TOTAL SOLIDS	381	274
	NITRITE	173		✓	Cond.		42
	MBAS	182					
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

AR300237

* RESULTS REPORTED IN UNITS, ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

DATE RECEIVED OCT 10 19__ DATE REPORTED _____ CHEMIST _____ LAB NO. _____

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
REPORT OF DRINKING WATER ANALYSIS

TLE NUMBER BOW-3

Harford Co
NAME OF COUNTY

SOURCE OF SAMPLE Bush Valley SLF COLLECTOR Adams

SAMPLE TYPE: DISTRIBUTION ____ SOURCE Well OTHER ____ (Specify)

COMMUNITY ____ OTHER PUBLIC ____ PRIVATE SUPPLY ____

REMARKS: Division Solid Waste

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			B0W3	101978	

FIELD pH * 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.8		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	1970		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	13.		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	164		SILVER	333	
✓	IRON	122	4500		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	14.
	NITRATE	162		✓	TOTAL SOLIDS	381	50400
	NITRITE	173		✓	CO2		INTERFERENCE
	MBAS	182					
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

AR300238

* RESULTS REPORTED IN UNITS, ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER BOW-4

NAME OF COUNTY Harford Co.

SOURCE OF SAMPLE Bush Valley S.L.F. COLLECTOR Adams

SAMPLE TYPE: DISTRIBUTION _____ SOURCE WELL OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: Division Solid Waste

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARRIER NO.
			BOW4	101978	1

FIELD pH* _____ FIELD RESID. CHLORINE: FREE _____ TOTAL _____

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.6		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	32		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	19		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	36		SILVER	333	
✓	IRON	122	.97		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	
	NITRATE	162		✓	TOTAL SOLIDS	381	214
	NITRITE	173		✓	COD.		74
	MBAS	182					
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS. ALL OTHERS IN MILLIGRAMS PER LITER

AR300239

DATE RECEIVED OCT 19 DATE REPORTED OCT 2 CHEMIST

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
REPORT OF DRINKING WATER ANALYSIS

NUMBER B-W-3

HARFORD
NAME OF COUNTY

SOURCE OF SAMPLE BUSH VALLEY S.L.F COLLECTOR BELLUSCI ADAMS

SAMPLE TYPE: DISTRIBUTION _____ SOURCE WELL OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: DIV. SOLID WASTE

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W 3	3 2 2 2 7 9	

FIELD pH * 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.6		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	93		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	9.		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	64.		SILVER	333	
✓	IRON	122	.09		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143		✓	~~POTASSIUM~~	361	
	ALBUMINOID	153		✓	SODIUM	371	17.
	NITRATE	162		✓	~~TOTAL SOLIDS~~ TDS	381	138.
	NITRITE	173		✓	COD		<2.
	MBAS	182					
	ALUMINUM	192					AR300240
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS, ALL OTHERS, IN MILLIGRAMS PER LITER (PPM)

APR 10 1979

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER B-W-4

HARFORD
NAME OF COUNTY

SOURCE OF SAMPLE BUSH VALLEY S.L.T. COLLECTOR BELLUSCI-ADAMS

SAMPLE TYPE: DISTRIBUTION _____ SOURCE _____ OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: DIV. SOLID WASTE

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W4	3 22 79	

RECEIVED
MAR 18 1979
DIVISION OF SOLID WASTE

FIELD pH * _____ FIELD RESID. CHLORINE: FREE _____ TOTAL _____

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.4		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	57		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	11		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	39		SILVER	333	
✓	IRON	122	TR		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	13
	NITRATE	162		✓	~~TOTAL SOLIDS~~ TDS	381	106
	NITRITE	173		✓	C.O.D.		TR
	MBAS	182					
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS, ALL OTHERS IN MILLIGRAMS PER L

DATE RECEIVED MAR 22 1979 DATE REPORTED APR 18 1979 CHEMIST _____ HR 300241

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

TITLE NUMBER B-W-3

Hartford
NAME OF COUNTY

SOURCE OF SAMPLE Buck Valley (SLF) COLLECTOR Adams

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Well OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: Dir. Solid Waste #2015

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			B W - 3	4 2 5 7 9	

FIELD * pH [20 21 22] FIELD RESID. CHLORINE: FREE [23 24] TOTAL [25 26]

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.5		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	119		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	8		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	49		SILVER	333	
	IRON	122			ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	111
	NITRATE	162			TOTAL SOLIDS	381	
	NITRITE	173		✓	COD		INTERFERE
	MBAS	182		✓	SC *		AR300242 1461
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS ALL OTHERS IN MILLIGRAMS PER LITER (PP

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER B-W1

Harford
NAME OF COUNTY

SOURCE OF SAMPLE Bush Valley S.L.P. COLLECTOR Beehm

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Well OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: New Blid Well

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
			W1	7 5 7 9	
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.

FIELD pH* 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.7		CALCIUM *	231	
✓	COLOR *	020	10		MAGNESIUM	241	
✓	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	17		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	23		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
	HARDNESS	110			SILVER	333	
	IRON	122			ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	8
	NITRATE	162			TOTAL SOLIDS	381	
	NITRITE	173		✓	S.C *		110
	MBAS	182		✓	C.O.D.		LABIACMIDE
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS. ALL OTHERS IN MILLIGRAMS

AR300243

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

SOURCE NUMBER B-W-2

Harford
NAME OF COUNTY

SOURCE OF SAMPLE Brush Valley COLLECTOR Bealmear Mills

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Well OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: Dev. Solid Waste

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARRIER NO.
			W2	7 5 7 9	

FIELD * pH 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
	pH *	011	85		CALCIUM *	231	
	COLOR *	020	88		MAGNESIUM	241	
	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	110		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	16		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
	HARDNESS	110			SILVER	333	
	IRON	122			ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	19
	NITRATE	162			TOTAL SOLIDS	381	
	NITRITE	173		✓	S.C @ 25°		260
	MBAS	182		✓	COD		LABACCIDENT
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

AR300244

* RESULTS REPORTED IN UNITS. ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER B-W3

Harford
NAME OF COUNTY

SOURCE OF SAMPLE Bush Valley COLLECTOR Bellman Tiller

SAMPLE TYPE: DISTRIBUTION ____ SOURCE well OTHER ____ (Specify)

COMMUNITY ____ OTHER PUBLIC ____ PRIVATE SUPPLY ____

REMARKS: Dev. Solid Waste

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W3	7 5 79	

FIELD pH * 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.6		CALCIUM *	231	
✓	COLOR *	020	1A		MAGNESIUM	241	
	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	71		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	16		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
	HARDNESS	110			SILVER	333	
	IRON	122			ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	1A
	NITRATE	162			TOTAL SOLIDS	381	
	NITRITE	173		✓	S.C *		146
	MBAS	182		✓	C.O.D.		LAB ACCIDENT
	ALUMINUM	192			A		
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS. ALL OTHERS IN mg/l

AUG 13 1979

AR300245

LAB NO.

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

SAMPLE NUMBER B-W 4

Harford
NAME OF COUNTY

SOURCE OF SAMPLE Bush Valley COLLECTOR Beehm-Mills

SAMPLE TYPE: DISTRIBUTION ____ SOURCE Well OTHER ____ (Specify)

COMMUNITY ____ OTHER PUBLIC ____ PRIVATE SUPPLY ____

REMARKS: Dev. Solid Waste

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W4	7 5 7 9	

FIELD * pH ____ (20 21 22) FIELD RESID. CHLORINE: FREE ____ (23 24) TOTAL ____ (25 26)

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	63		CALCIUM *	231	
✓	COLOR *	020	20		MAGNESIUM	241	
	TURBIDITY *	031			ARSENIC	253	
✓	ALKALINITY	040	AB		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091			MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
	HARDNESS	110			SILVER	333	
	IRON	122			ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	12
	NITRATE	162			TOTAL SOLIDS	381	
	NITRITE	173		✓	S.C *		130
	MBAS	182		✓	C.O.D.		LAB ACCIDENT
	ALUMINUM	192					AR300246
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS, ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

AUG 13 1979

LAB NO. -01

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER B-W-1

Harford
NAME OF COUNTY

SOURCE OF SAMPLE Bush Valley COLLECTOR Bell

SAMPLE TYPE: DISTRIBUTION _____ SOURCE well OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: D-S.W.

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W1	051580	S.C 120

FIELD pH* 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.7	✓	CALCIUM	231	58
✓	COLOR **	020	60		MAGNESIUM	241	
✓	TURBIDITY *	031	18		ARSENIC	253	
✓	ALKALINITY	040	16		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	24		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	32		SILVER	333	
✓	IRON	122	20		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
✓	AMMONIA N. FREE	143	053		POTASSIUM	361	
✓	ALBUMINOID AN	153	097	✓	SODIUM	371	8
	NITRATE	162		✓	TOTAL SOLIDS 155	381	90
	NITRITE	173		✓	C.O.D.		FR
	MBAS	182		✓	S.O.P.		116
	ALUMINUM	192		✓	Org Tot AR3002417		
	CYANIDE	202					
	SILICA	210					
✓	SULFATE	220	41				

* RESULTS REPORTED IN ____ ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

N 2 1980

LAB NO.

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER B.W-2

Hampton
NAME OF COUNTY

SOURCE OF SAMPLE Bush Valley COLLECTOR Bell

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Well OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: D.S.W

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W2	05 15 80	

S.C
210

FIELD pH * 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	8.3	✓	CALCIUM	231	7.4
✓	COLOR *	020	6		MAGNESIUM	241	
✓	TURBIDITY *	031	1		ARSENIC	253	
✓	ALKALINITY	040	90		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	14		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	20		SILVER	333	
✓	IRON	122	.37		ZINC	342	
✓	MANGANESE	133			OIL (GREASE)	351	
✓	~~AMMONIA N FREE~~	143	.20		POTASSIUM	361	
✓	~~ALBUMINOID~~ TKN	153	.22	✓	SODIUM	371	19
	NITRATE	162		✓	TOTAL SOLIDS DISS	381	192
	NITRITE	173		✓	COD		11.4
	MBAS	182		✓	S.C.*		190
	ALUMINUM	192		✓	Org Nitr.		.46
	CYANIDE	202					
	SILICA	210					
✓	SULFATE	220	4				

AR300248

* RESULTS REPORTED IN UNITS. ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

/1000

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER B-W-3

NAME OF COUNTY Hampshire

SOURCE OF SAMPLE Kimble Valley COLLECTOR Beeler

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Well OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: D.S.W

1	2 3	4 5 6. 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W3	05 15 80	S.C. 340

FIELD pH * 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	68	✓	CALCIUM	231	27
✓	COLOR *	020	25		MAGNESIUM	241	
✓	TURBIDITY *	031	200		ARSENIC	253	
✓	ALKALINITY	040	155		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	15		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	105		SILVER	333	
✓	IRON	122	240		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
✓	AMMONIA N. FREE	143	046		POTASSIUM	361	
✓	ALBUMINOID INV	153	29	✓	SODIUM	371	29
	NITRATE	162		✓	TOTAL SOLIDS DISS	381	172
	NITRITE	173		✓	S C*		495
	MBAS	182		✓	Col D		3
	ALUMINUM	192			Org. N		2
	CYANIDE	202					
	SILICA	210					
✓	SULFATE	220	3				

* RESULTS REPORTED IN UNITS, ALL OTHERS IN MILLIGRAMS

JAN 15 1980 DATE REPORTED JUN 2 1980 CHEMIST

AR300249

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

TLE NUMBER BW-4

Harford
NAME OR COUNTY

SOURCE OF SAMPLE Bush Valley COLLECTOR Bell

SAMPLE TYPE: DISTRIBUTION ____ SOURCE well OTHER ____ (Specify)

COMMUNITY ____ OTHER PUBLIC ____ PRIVATE SUPPLY ____

REMARKS: DSW

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			34	051580	S-C

20

FIELD pH * ____ FIELD RESID. CHLORINE: FREE ____ TOTAL ____

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.4	✓	CALCIUM	231	82
✓	COLOR *	020	60		MAGNESIUM	241	
✓	TURBIDITY **	031	19.0		ARSENIC	253	
✓	ALKALINITY	040	51		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	19		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	40		SILVER	333	
✓	IRON	122	6.1		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
✓	AMMONIA N. FREE	143	<0.10		POTASSIUM	361	
✓	~~ALBUMINOID~~ TKN	153	0.24	✓	SODIUM	371	14
	NITRATE	162		✓	TOTAL SOLIDS Diss	381	96
	NITRITE	173		✓	SC X		142
	MBAS	182		✓	COD		10
	ALUMINUM	192		✓	org N.t.		0.2
	CYANIDE	202					
✓	SILICA	210					
✓	SULFATE	220	6				

AR300250

* RESULTS REPORTED IN UNITS; ALL OTHERS IN MILLIGRAMS

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER BVW-1

NAME OF COUNTY Hartford

SOURCE OF SAMPLE Beach Valley COLLECTOR Beeler

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Well OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: D.S.W

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W-1	09 15 80	S.C 10-5

FIELD * pH 7.2 (20 21 22) FIELD RESID. CHLORINE: FREE _____ (23 24) TOTAL _____ (25 26) T.16

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.3		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
✓	TURBIDITY **	031	6.4		ARSENIC	253	
✓	ALKALINITY	040	15.	~~✓~~	~~BARIUM~~	262	
	BICARBONATE ALK.	050		✓	CADIUM	273	.0005
	CARBONATE ALK.	060		✓	CHROMIUM TOTAL	282	.01
	CARBONATE STAB. pH *	071		✓	COPPER	293	.03
	ALKALINITY	080		✓	LEAD	302	.02
✓	CHLORIDE	091	24.	✓	MERCURY	314	.0002
	FLUORIDE	101		✓	~~SELENIUM~~ NICKEL	323	.02
✓	HARDNESS	110	25.		SILVER	333	
✓	IRON	122	.40	✓	ZINC	342	.06
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143		✓	POTASSIUM	361	0.7
	ALBUMINOID	153		✓	SODIUM	371	8.
	NITRATE	162		✓	TOTAL SOLIDS DISS	381	86.
	NITRITE	173		✓	S.C.*		107.
	MBAS	182		✓	C.O.D		3.0
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

AR300251

* RESULTS REPORTED IN UNITS, ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

DATE RECEIVED SEP 15 1980 DATE REPORTED OCT 23 1980 CHEMIST [illegible] LAB NO. _____

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER BLW-2

Harford
NAME OF COUNTY

SOURCE OF SAMPLE Bush Walley COLLECTOR Beeson

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Well OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: D.S.W

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W2	09 15 80	—

SP
270

FIELD * pH 7.8 (20 21 22) FIELD RESID. CHLORINE: FREE (23 24) TOTAL (25 26) T.18

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	7.2		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
✓	TURBIDITY *	031	6.2		ARSENIC	253	
✓	ALKALINITY	040	116.		BARIUM	262	
	BICARBONATE ALK.	050		✓	CADIUM	273	K0.005
	CARBONATE ALK.	060		✓	CHROMIUM TOTAL	282	K0.01
	CARBONATE STAB. pH *	071		✓	COPPER	293	0.06
	ALKALINITY	080		✓	LEAD	302	0.02
✓	CHLORIDE	091	15.	✓	MERCURY	314	0.0003
	FLUORIDE	101		✓	~~SELENIUM~~ NICKEL	323	0.03
✓	HARDNESS	110	22		SILVER	333	
✓	IRON	122	2.1	✓	ZINC	342	0.06
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143		✓	POTASSIUM	361	5.1
	ALBUMINOID	153		✓	SODIUM	371	11.
	NITRATE	162		✓	TOTAL SOLIDS DISS	381	148.
	NITRITE	173		✓	S.C.M		258.
	MBAS	182		✓	C.O.D		25.
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

AR300252

* RESULTS REPORTED IN UNITS; ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER BHW-3

Hanford NAME OF COUNTY

SOURCE OF SAMPLE Bush Valley COLLECTOR Beeline

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Well OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: D.S.W

MGRAMS

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W3	091580	

SC 400

FIELD pH* 20 21 22: 6.3 FIELD RESID. CHLORINE: FREE 23 24: _____ TOTAL 25 26: T.1?

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.7		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
✓	TURBIDITY *	031	5 ADD		ARSENIC	253	
✓	ALKALINITY	040	202		BARIUM	262	
	BICARBONATE ALK.	050		✓	CADIUM	273	<0.005
	CARBONATE ALK.	060		✓	CHROMIUM TOTAL	282	0.015 ✓
	CARBONATE STAB. pH *	071		✓	COPPER	293	0.013
	ALKALINITY	080		✓	LEAD	302	0.012
✓	CHLORIDE	091	12	✓	MERCURY	314	0.0002
	FLUORIDE	101		✓	SELENIUM NICKEL	323	0.21
✓	HARDNESS	110	71		SILVER	333	
✓	IRON	122	39	✓	ZINC	342	0.16
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143		✓	POTASSIUM	361	5.0
	ALBUMINOID	153		✓	SODIUM	371	24
	NITRATE	162		✓	TOTAL SOLIDS DISS	381	214
	NITRITE	173		✓	S.C.U.		334.
	MBAS	182		✓	C.O.D		12.5
	ALUMINUM	192					AR300253
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS. ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

DATE RECEIVED SEP 15 19?? DATE REPORTED OCT 23 1980 CHEMIST _____ LAB NO. _____

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
REPORT OF DRINKING WATER ANALYSIS

TITLE NUMBER Bww. 4

NAME OF COUNTY Harford

SOURCE OF SAMPLE Bush Valley COLLECTOR Beeman

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Well OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: R.S.W

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W4	091580	S.C

140

FIELD * pH 7. FIELD RESID. CHLORINE: FREE _____ TOTAL _____ T. 1.7

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.4		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
✓	TURBIDITY *	031	1.75		ARSENIC	253	
✓	ALKALINITY	040	47.		BARIUM	262	
	BICARBONATE ALK.	050		✓	CADIUM	273	<.005
	CARBONATE ALK.	060		✓	CHROMIUM TOTAL	282	<.01
	CARBONATE STAB. pH *	071		✓	COPPER	293	.04
	ALKALINITY	080		✓	LEAD	302	.02
✓	CHLORIDE	091	10.	✓	MERCURY	314	<.0002
	FLUORIDE	101		✓	~~SELENIUM~~ NICKEL	323	.07
✓	HARDNESS	110	41.		SILVER	333	
✓	IRON	122	.38	✓	ZINC	342	.06
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143		✓	POTASSIUM	361	.9
	ALBUMINOID	153		✓	SODIUM	371	12
	NITRATE	162		✓	TOTAL SOLIDS DISS	381	304
	NITRITE	173		✓	S.C *		424
	MBAS	182		✓	C.O.D		10.
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

AR300254

* RESULTS REPORTED IN UNITS ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER B.V.S-1

NAME OF COUNTY Harford

SOURCE OF SAMPLE Bush COLLECTOR Bellum

SAMPLE TYPE: DISTRIBUTION ____ SOURCE Shea OTHER ____ (Specify)

COMMUNITY ____ OTHER PUBLIC ____ PRIVATE SUPPLY ____

REMARKS: D.S.W

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			S1	091580	

FIELD pH * 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	6.9		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
✓	TURBIDITY *	031	2.0		ARSENIC	253	
✓	ALKALINITY	040	42.		BARIUM	262	
	BICARBONATE ALK.	050		✓	CADIUM	273	<0.005
	CARBONATE ALK.	060		✓	CHROMIUM TOTAL	282	<0.01
	CARBONATE STAB. pH *	071		✓	COPPER	293	0.03
	ALKALINITY	080		✓	LEAD	302	<0.01
✓	CHLORIDE	091	12.	✓	MERCURY	314	<0.002
	FLUORIDE	101		✓	SELENIUM NICKEL	323	<0.01
✓	HARDNESS	110	65.		SILVER	333	
✓	IRON	122	0.32	✓	ZINC	342	0.04
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143		✓	POTASSIUM	361	1.7
	ALBUMINOID	153		✓	SODIUM	371	8.
	NITRATE	162		✓	TOTAL SOLIDS DISS	381	126.
	NITRITE	173		✓	S.C *		162
	MBAS	182		✓	C.O.D		3.0
	ALUMINUM	192			AR300255		
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS. ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

DATE RECEIVED SEP 15 '58 DATE REPORTED OCT 22 1958 CHEMIST ____ LAB ____

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
REPORT OF DRINKING WATER ANALYSIS

FILE NUMBER BWS 2

Harford
NAME OF COUNTY

SOURCE OF SAMPLE Bush Valley COLLECTOR Bellum

SAMPLE TYPE: DISTRIBUTION ____ SOURCE Shian OTHER ____ (Specify)

COMMUNITY ____ OTHER PUBLIC ____ PRIVATE SUPPLY ____

REMARKS: 10-SW

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			S 2	0 9 1 5 8 0	

FIELD pH* ____ FIELD RESID. CHLORINE: FREE ____ TOTAL ____

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	7.1		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
✓	TURBIDITY *	031	1.9		ARSENIC	253	
✓	ALKALINITY	040	41.		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	<.005
	CARBONATE ALK.	060		✓	CHROMIUM TOTAL	282	<.01
	CARBONATE STAB. pH *	071		✓	COPPER	293	<.01
	ALKALINITY	080		✓	LEAD	302	.02
✓	CHLORIDE	091	12	✓	MERCURY	314	<.0002
✓	FLUORIDE	101		✓	~~SELENIUM~~ NICKEL	323	<.01
✓	HARDNESS	110	60.		SILVER	333	
✓	IRON	122	.19	✓	ZINC	342	.02
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143		✓	POTASSIUM	361	1.7
	ALBUMINOID	153		✓	SODIUM	371	8
	NITRATE	162			TOTAL SOLIDS DISS	381	126
	NITRITE	173		✓	S.C.*		162
	MBAS	182		✓	C.O.D		30
	ALUMINUM	192			AR300256		
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS. ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF WATER ANALYSIS

Bottle Number: _____ Name: _____ County: _____

Source of Sample: _____ Street _____ Town or City Collector: _____

Sample Type (Circle): Community Source | Non-Community Distribution | Private MCL | Emergency Recheck | Routine

Remarks: _____

County	Plant No.	Sampling Station	Date Collected	Time	Acid
				M	

Field Data: pH* _____ Chlorine Residual: Free _____ Total _____ Specific Cond. _____

ANALYSIS	CODE	RESULTS	ANALYSIS	CODE	RESULTS
pH*	403		Arsenic	253	
Alkalinity (Total)	440		Barium	262	
Alkalinity (HCO3)	450		Cadmium	273	
Alkalinity (CO3)	460		Chromium	283	
pH*, Ca CO3 SAT	371		Lead	302	
Alkalinity, Ca CO3 SAT	380		Mercury	314	
Hardness	900		Selenium	323	
Ammonia-N	608		Silver	333	
Nitrate-Nitrite N	162		Aluminum	192	
Nitrite N	173		Calcium	231	
MBAS	182		Copper	241	
Chloride	091		Iron	122	
Fluoride	101		Magnesium	241	
Color*	020		Manganese	133	
Turbidity*	031		Nickel	391	
Conductance*, SPEC.	201		Potassium	361	
Silica	210		Sodium	371	
Sulfate	220		Zinc	342	
Total Residue	381		TOC		

END

AR300257

* Results reported in units, as numbers in milligrams per liter (ppm)

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF WATER ANALYSIS

Bottle Number: _____ Name _____ County _____

Source of Sample: _____ Collector: _____
Street Town or City

Sample Type (Circle): Community Source | Non-Community Distribution | Private MCL | Emergency Recheck | Routine

Remarks: _____

County	Plant No.	Sampling	Date Collected	Time	Acid

Field Data: _____ pH* _____ Chlorine Residual: Free _____ Total _____ Specific Conductance _____

ANALYSIS	CODE	RESULTS	ANALYSIS	CODE	RESULTS
pH*	403		Arsenic	253	
Alkalinity, Total	440		Barium	262	
Alkalinity, HCO_3	450		Cadmium	273	
Alkalinity, CO_3	460		Chromium	383	
pH* @ 60 DEG SAT	97*		Lead	302	
Alkalinity @ 60 DEG SAT	980		Mercury	314	
Hardness	900		Selenium	323	
Ammonia-N	608		Silver	333	
Nitrate-Nitrite N	620		Aluminum	192	
Nitrite N	173		Calcium	231	
MBAS	192		Copper	241	
Chloride	991		Iron	255	
Fluoride	101		Magnesium	241	
Color*	020		Manganese	133	
Turbidity*	031		Nickel	791	
Conductance*, SPEC.	201		Potassium	361	
Silica	210		Sodium	371	
Sulfate	220		Zinc	342	
Total Residue	381				

AR300258

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF WATER ANALYSIS

Bottle Number: _____ Name _____ County _____

Source of Sample: _____ Collector: _____
Street Town or City

Sample Type (Circle):	Community Source	Non-Community Distribution	Private MCL	Emergency Recheck	Routine

Remarks: _____

County	Plant No.	Sampling Station	Date Collected	Time	Acid

Field Data: pH* _____ Chlorine Residual: Free _____ Total _____ Specific Cond. _____

ANALYSIS	CODE	RESULTS	ANALYSIS	CODE	RESULTS
pH*	011		Arsenic	253	
Alkalinity (Total)	040		Barium	262	
Alkalinity, HCO_3	050		Cadmium	273	
Alkalinity, CO_3	060		Chromium	283	
pH* $CaCO_3$ SAT	071		Lead	302	
Alkalinity $CaCO_3$ SAT	080		Mercury	314	
Hardness	100		Selenium	323	
Ammonia-N	143		Silver	333	
Nitrate-Nitrite N	162		Aluminum	192	
Nitrite N	173		Calcium	231	
MBAS	182		Copper	241	
Chloride	091		Iron	122	
Fluoride	101		Magnesium	241	
Color*	020		Manganese	133	
Turbidity*	031		Nickel	391	
Conductance*, SPEC.	201		Potassium	361	
Silica	210		Sodium	371	
Sulfate	220		Zinc	342	
Total Residue	381				

AR300259

* Results reported in units, all others in milligrams per liter (ppm).

Date Received _____ Date Reported _____ Chemist _____ Lab No. _____

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

Volatile Organics in Water

BOTTLE NUMBER BV-W-1

NAME OF COUNTY Anne Arundel

SOURCE OF SAMPLE Bens Valley COLLECTOR Boehm

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	KEYCARD NO.
			W 1	0 3 1 7 8 3	

FIELD pH 20 21 22 _____ FIELD RESID. CHLORINE:FREE 23 24 _____ TOTAL 25 26 _____

Trihalomethanes (ppb)		Aromatics (ppb)	
Chloroform	_____	Benzene	_____
Bromodichloromethane	_____	Toluene	_____
Chlorodibromomethane	_____	Ethylbenzene	_____
Bromoform	_____	Total Xylenes	_____
Total Trihalomethanes	_____		

Other Volatile Hydrocarbons (ppb)

Vinyl Chloride	_____	Trichloroethene	_____
Carbontetrachloride	_____		
Chlorobenzene	_____		
Methylene Chloride	_____		
Tetrachloroethene	_____		

No volatile priority pollutants detected (GC/MS) 11/30/82

Results reported in micrograms per liter (parts per billion)

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

Volatile Organics in Water

BOTTLE NUMBER BV-10-2

NAME OF COUNTY Garrett

SOURCE OF SAMPLE Bear Valley COLLECTOR Beeman

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			04 2	03 17 83	

FIELD pH (20 21 22) _____ FIELD RESID. CHLORINE: FREE (23 24) _____ TOTAL (25 26) _____

Trihalomethanes (ppb)

Chloroform	_____
Bromodichloromethane	_____
Chlorodibromomethane	_____
Bromoform	_____
Total Trihalomethanes	_____

Aromatics (ppb)

Benzene	_____
Toluene	_____
Ethylbenzene	_____
Total Xylenes	_____

Other Volatile Hydrocarbons (ppb)

Vinyl Chloride	_____
Carbontetrachloride	_____
Chlorobenzene	_____
Methylene Chloride	_____
Tetrachloroethene	_____
Trichloroethene	_____

No volatile priority pollutants observed (GC/MS) verification

AR300261

Results reported in micrograms per liter (parts per billion)

MAR 14 1983 DATE RECEIVED 03/21/83 AH-48

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

Volatile Organics in water

BOTTLE NUMBER BV-104

NAME OF COUNTY Harford

SOURCE OF SAMPLE Bush Valley COLLECTOR Bellew

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity ✓ private _____

Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			04	03 17 83	

FIELD pH 20 21 22 _____ FIELD RESID. CHLORINE: FREE 23 24 _____ TOTAL 25 26 _____

Trihalomethanes (ppb)

Chloroform _____

Bromodichloromethane _____

Chlorodibromomethane _____

Bromoform _____

Total Trihalomethanes _____

Aromatics (ppb)

Benzene 7ppb

Toluene —

Ethylbenzene —

Total Xylenes 2ppb

1,1,1-Trichloroethane 2ppb

1,2-Dichloroethane 1ppb

1,1 Dichloroethane 8ppb

Ethyl Ether 11ppb

Other Volatile Hydrocarbons (ppb)

Vinyl Chloride 7ppb

Carbontetrachloride _____

Chlorobenzene _____

Methylene Chloride 120ppb

Tetrachloroethene 15ppb

Trichloroethene 2ppb

Trichloro Fluoromethane CCl_3F 8ppb

Dichloro Di Fluoromethane CCl_2F_2 (Freon) 12) 2ppb

Chloroethane 9ppb

No other volatile [illegible] pollutants (GC/MS) verification. Also check $CHClF_2$, $CHCl_2F$ (methanes, substituted alkanes, & ethanes)

AR300362

CHEMICAL ANALYSIS OF STREAMS AND WASTE WATERS

Town ..... County ..... County Code .....

Source of Sample ..... STP Code .....

Sewage ☐ Stream ☐ Industrial Waste ☐ Other .....

☑ Grab ☑ Composite ☑ Raw ☑ Final ☐ Chlorinated ☐ Unchlorinated

☐ Intermediate

Bottle No. BV-1 REMARKS:

Bottle No. ..... Field Chlorine Residual: Free ..... Total ..... Rain ☐ Yes ☐ No

Collected: Date 1/13/83 Hour 1000 Collector .....

Check Test Required	Test	Result (ppm)
✓	pH JAN 17	6.2 4
	Dissolved oxygen	1.0 3
✓	Biochemical oxygen demand (5 days at 20° C) OUT	3.8 0
	Chemical oxygen demand	
	Solids, suspended	48
	Solids, total	
	Solids, volatile	
	Nitrogen, as free ammonia — N	
	Nitrogen, as organic ammonia — N	
	Nitrogen, total Kjeldahl — N	
	Nitrogen, as nitrate — N + nitrite — N	
	Phosphorous, ortho	
	Phosphorous, total	
	Chloride (as Cl)	
	Other:	
	OFFICE USE ONLY 90	A C D

Received ..... Reported ..... Chemist .....

Lab. No. .....

DHMH [illegible]

AR300263

FILE COPY

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BU-W-1

Name of County

SOURCE OF SAMPLE Beach Valley COLLECTOR Bellanca

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well 1 stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

FILE

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W1	062283	

20 21 22	23 24	25 26
FIELD pH	FIELD RESID. CHLORINE: FREE	TOTAL

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<1 ppb	trans-1,3-Dichloropropene	<1 ppb	Benzene	<1. pp
Bromomethane		Trichloroethene		Toluene	<1.
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	<1.
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2.
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	1 ppb	2-Chloroethylvinylether		Tetrahydrofuran	<1.
Trichlorofluoromethane	<1 ppb	Bromoform		Methylethylketone	<1.
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	<1.
1,1 Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	<1.
trans-1,2 Dichloroethene		Chlorobenzene			
Chloroform		Total Trihalomethanes			
1,2 Dichloroethane		Other Purgeable Organics:			
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2 Dichloropropane					

AR300264

Results reported in micrograms per liter (parts per billion)

STATE OF [illegible]

DEPARTMENT OF HEALTH AND [illegible]

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

FILE COPY ONLY

BOTTLE NUMBER 611-W-2

Name of County

SOURCE OF SAMPLE Kent's Valley COLLECTOR [illegible]

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline and oil) Contamination _____

Other (specify) _____

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	STA. NO	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W2	06 7 2 5 3	

20 21 22		23 24		25 26
FIELD pH	FIELD RESID. CHLORINE: FREE		TOTAL	

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<1 ppb	trans-1,3-Dichloropropene	<1 ppb	Benzene	<1 ppb
Bromomethane		Trichloroethene		Toluene	<1
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	<1
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	4 ppb	2-Chloroethylvinylether		Tetrahydrofuran	<1
Trichlorofluoromethane	<1 ppb	Bromoform		Methylethylketone	<1
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	<1
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	<1
trans-1,2-Dichloroethene		Chlorobenzene			
Chloroform		Total Trihalomethanes			
1,2 Dichloroethane		Other Purgeable Organics:			
1,1,1-Trichloroethane				AR300265	
Carbon Tetrachloride					
Bromodichloromethane					
1,2 Dichloropropane					

(Results reported in micrograms per liter (parts per billion))

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

FILE COPY ONLY

BOTTLE NUMBER BV-W-11

Name of County

SOURCE OF SAMPLE Beach Valley COLLECTOR [illegible]

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ non-community _____ private _____

Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline etc.) Contamination _____

Other (specify) _____

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	CLIENT NO	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W11	062253	11

20 21 22	23 24	25 26
FIELD pH	FIELD RESID. CHLORINE: FREE	TOTAL

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	_____	trans-1,3-Dichloropropene	_____	Benzene	12 ppb
Bromomethane	_____	Trichloroethene	9 ppb	Toluene	_____
Dichlorodifluoromethane	observed	Dibromochloromethane	_____	Ethylbenzene	_____
Vinyl chloride	15 ppb	1,1,2-Trichloroethane	_____	Total Xylenes	4 ppb
Chloroethane	observed	cis-1,3-Dichloropropene	_____	Total Purgeable Hydrocarbons	_____
Methylene chloride	20 ppb	2-Chloroethylvinylether	_____	Tetrahydrofuran	_____
Trichlorofluoromethane	13 ppb	Bromoform	_____	Methylethylketone	_____
1,1-Dichloroethene	_____	1,1,2,2-Tetrachloroethane	_____	(2-Butanone) (MEK)	_____
1,1-Dichloroethane	49 ppb	Tetrachloroethene	28 ppb	Methylisobutylketone (MIBK)	_____
trans-1,2-Dichloroethene	4 ppb	Chlorobenzene	_____	Ethyl Ether	30 ppb
Chloroform	_____	Total Trihalomethanes	_____	Also observed CH_2ClF, $CHCl_2F$	
1,2-Dichloroethane	3 ppb	Other Purgeable Organics:		pentanes, ~~AR300206~~ substituted	
1,1,1-Trichloroethane	8 ppb	cycloalkanes			
Carbon Tetrachloride	_____				
Bromodichloromethane	_____	(GC/MS verification			
1,2-Dichloropropane	_____				

Results reported in micrograms per liter (parts per billion)

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LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BV. W-1

Name of County Hanford

SOURCE OF SAMPLE Bird Valley COLLECTOR Beeler

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER _____

Community _____ Noncommunity _____ private _____

Lake or reservoir _____ River _____ Tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ Presumed Potable _____

Reason for submitting sample: _____ Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	SD KEY	PLANT	SYSTEMIC STATION	DATE COLLECTED	FINAL TREAT
			W1	092883	T

20 21 22		23 24		25 26
FIELD RESID	FIELD RESID CHLORINE MGL		TOTAL	

Purgeable Halocarbons (EPA 601)

Chloromethane	<1.	trans-1,3-Dichloropropene	<1.	Benzene	<1.
Bromomethane		Trichloroethene		Toluene	<1.
Dichlorofluoromethane		Dibromochloromethane		Ethylbenzene	<1.
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis 1,3 Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	
Trichlorofluoromethane		Bromoform		Methyl ethyl Ketone	
1,1 Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone)	
1,1 Dichloroethane		Tetrachloroethene		Methyl Isobutyl Ketone (MIBK)	
trans-1,2 Dichloroethene		Chlorobenzene			
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics			
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

AR300267

STATE OF [illegible]

DEPARTMENT OF HEALTH AND [illegible]

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LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BV W-2

Harford
Name of County

SOURCE OF SAMPLE Bush Valley L.F. COLLECTOR Bellew

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ non-community _____ private _____

Landfill [illegible] _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ [illegible] _____

Reason for submitting sample [illegible] _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	[illegible]	W2 SAMPLING STATION	0 9 2 8 8 3 DATE COLLECTED	DATE RECD

20 21 22		23 24		25 26
[illegible]	FIELD RESID. CHLORINE, PPM		TOTAL	

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<1.	trans-1,3-Dichloropropene	<1.	Benzene	<1.
Bromomethane		Trichloroethene		Toluene	<1.
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	<1.
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2.
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	2.	2-Chloroethylvinylether		Tetrahydrofuran	
Trichlorofluoromethane	<1.	Bromoform		Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone, MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene			
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics		AR300268	
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

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TRACE ORGANICS ANALYSIS
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BU-W-4

Travis County

SOURCE OF SAMPLE: Bush Valley COLLECTOR Barbara

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER _____

Community _____ Municipality _____ private _____

Industrial effluent _____ STP sampling location _____ STP effluent _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gas, oil, etc.) Contamination _____

Other (specify) _____

REMARKS: _____

						W	4		0	9	2	8	8	3					
									STATION LOCATION						DATE COLLECTED				

CHLORINATED? _____ TIME _____

		trans-1,3-Dichloropropene		Benzene	17	ppb
		Trichloroethene	5	ppb Toluene		
	oxsd	Dibromochloromethane		Ethylbenzene	5	ppb
	23 ppb	1,1,2-Trichloroethane		Total Xylenes	15	ppb
	16 ppb	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons		
	260 ppb	Bis(chloromethyl) Ether		Tetrahydrofuran		
	7 ppb	Bromoform		Methylethylketone		
		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)		
	63 ppb	Tetrachloroethene	26	ppb Methylisobutylketone (MIBK)		
	5 ppb	Chlorobenzene		Ethyl Ether	32	pp
		Total Trihalomethanes				
	5 ppb	Total Purgeable Halocarbons				

Also observed CHCl2F, CHCl2CCl3, CHCl2F, A/K/A AR30226 MEK

other volatile priority pollutants (12 ppb)

(F(MS) verification EPA ref

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
REPORT OF WATER ANALYSIS

Bottle Number: BKW-1 Name: Bush Valley L.F. County: Harford

Source of Sample: Well (Street / Town or City) Collector: Beeler

Sample Type (Circle): Community Source / Non-Community Distribution / Private MCL / Emergency Recheck / Routine

Remarks: ARD

County	Plant No.	Sampling Station	Date Collected	Time	Acidz.	Iced
		W1	03/21/85	M		

Field Data: pH* | Chlorine Residual: Free | Total | Specific Conductance

✓	ANALYSIS	CODE	RESULTS	✓	ANALYSIS	CODE	RESULTS
✓	pH*	011	6.9	✓	Arsenic	253	<0.01
✓	Alkalinity (Total)	040	17.	✓	Barium	262	<0.1
	Alkalinity (HCO_3)	050		✓	Cadmium	273	0.002
	Alkalinity (CO_3)	060		✓	Chromium - T	283	<0.01
	pH*, Ca CO_3 SAT.	071		✓	Lead	302	<0.01
	Alkalinity, Ca CO_3 SAT	080		✓	Mercury	314	<0.0005
✓	Hardness	110	15.	✓	Selenium	323	<0.01
✓	Ammonia-N	143	0.8		Silver	333	
✓	Nitrate-Nitrite N	162	<0.2		Aluminum	192	
✓	Nitrite N	173	0.008	✓	Calcium	231	2.
	MBAS	182		✓	Copper	241	<0.01
✓	Chloride	091	16.	✓	Iron	122	20.10
	Fluoride	101		✓	Magnesium	241	2.
✓	Color*	020		✓	Manganese	133	0.21
✓	Turbidity*	031	9.6		Nickel	391	
✓	Conductance*, SPEC.	201	90.	✓	Potassium	361	<1.
✓	Silica	210		✓	Sodium	371	10.3
✓	Sulfate	220	1.1	✓	Zinc	342	0.02
✓	Total Residue VISS	381	44.	✓	C.O.D		9.0
				✓	TK AR300270		0.8

* Results reported in units, all others in milligrams per liter (ppm)

Bruce L. Solnick, Ph.D.
Lab Dir.

Information Only

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER B-W-1

Name of County

SOURCE OF SAMPLE Bush Valley COLLECTOR Bell

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W 1	0 3 2 1 8 5	

20 21 22	23 24	25 26
FIELD pH	FIELD RESID. CHLORINE: FREE	TOTAL
6.24		

624

Purgeable Halocarbons (EPA 601)			Purgeable Aromatics (EPA 602)	
Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane		Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	
Trichlorofluoromethane		Bromoform		Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	3
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene			
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics:			
1,1,1-Trichloroethane					
Carbon Tetrachloride					AR300271
Bromodichloromethane					
1,2-Dichloropropane					

Results reported in micrograms per liter (parts per billion)

DATE RECEIVED MAR 21 1985 DATE REPORTED MAR 27 1985 CHEMIST Will LAB. N

DHMH-749 (7/84) 2M

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF WATER ANALYSIS

Bottle Number: ~~[illegible]~~ BH. W2 Name: Bush Valley Tower County: Harford

Source of Sample: Street Town or City Collector: Beals

Sample Type (Circle): Community Source / Non-Community Distribution / Private MCL / Emergency Recheck / Routine

Remarks: ~~[illegible]~~ H20

County	Plant No.	Sampling Station	Date Collected	Time	Acidified	Iced
		W2	03/21/85	M		

Field Data: pH* ____ Chlorine Residual: Free ____ Total ____ Specific Conductance ____

✓	ANALYSIS	CODE	RESULTS	✓	ANALYSIS	CODE	RESULTS
✓	pH*	011	6.7	✓	Arsenic	253	<0.01
✓	Alkalinity (Total)	040	13	✓	Barium	262	<1
	Alkalinity (HCO_3)	050		✓	Cadmium	273	0.004
	Alkalinity (CO_3)	060		✓	Chromium — T	283	<0.01
	pH*, Ca CO_3 SAT.	071		✓	Lead	302	<0.01
	Alkalinity, Ca CO_3 SAT	080		✓	Mercury	374	<0.0005
✓	Hardness	110	13	✓	Selenium	323	<0.01
✓	Ammonia-N	143	1.1		Silver	333	
✓	Nitrate-Nitrite N	162	<0.2		Aluminum	192	
✓	Nitrite N	173	0.028	✓	Calcium	231	<2
	MBAS	182		✓	Copper	241	0.02
✓	Chloride	091	11	✓	Iron	122	28.06
	Fluoride	101		✓	Magnesium	241	1.0
	Color*	020		✓	Manganese	133	0.3
✓	Turbidity*	031	31.0		Nickel	391	
✓	Conductance*, SPEC.	201	74	✓	Potassium	361	4.1
	Silica	210		✓	Sodium	371	6.2
✓	Sulfate	220	27	✓	Zinc	342	0.04
✓	Total Residue Diss	381	90	✓	C.O.D		AR300272 <10
				✓	TKN		0.7

AR-300272

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER B-W-2

Name of Laboratory

SOURCE OF SAMPLE Bush Valley COLLECTOR Beeline

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting samples: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

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REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W2	032185	

20 21 22		23 24		25 26
FIELD pH	FIELD RESID. CHLORINE: FREE		TOTAL	

624

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane		Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	
Trichlorofluoromethane		Bromoform		Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene			
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics:			
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

AR300273

Results reported in micrograms per liter (parts per billion)

DATE RECEIVED MAR 21 1985 DATE REPORTED MAR 27 1985 CHEMIST _____ LAB. _____

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STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF WATER ANALYSIS

Bottle Number: B.U.W-4 Name: Bush Valley 2:12 County: Harford

Source of Sample: Well Collector: Beeline

Street Town or City

Sample Type (Circle): Community Source / Non-Community Distribution / Private / MCL / Emergency / Routine / Recheck

Remarks: Add

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County	Plant No.	Sampling Station	Date Collected	Time	Acid	Iced
		W2	032185			

Field Data: pH* ____ Chlorine Residual: Free ____ Total ____ Specific Conductance ____

	ANALYSIS	CODE	RESULTS		ANALYSIS	CODE	RESULTS
✓	pH*	011	6.8	✓	Arsenic	253	<0.01
✓	Alkalinity (Total)	040	249	✓	Barium	282	<1.0
	Alkalinity (HCO_3)	050		✓	Cadmium	273	0.002
	Alkalinity (CO_3)	060		✓	Chromium	283	<0.01
	pH*, Ca CO_3 SAT.	071		✓	Lead	302	0.02
	Alkalinity, Ca CO_3 SAT	080		✓	Mercury	314	<0.0005
✓	Hardness	110	131	✓	Selenium	323	<0.01
✓	Ammonia-N	143	1.2		Silver	333	
✓	Nitrate-Nitrite N	162	<0.2		Aluminum	192	
✓	Nitrite N	173	0.022	✓	Calcium	231	24
	MBAS	182		✓	Copper	241	0.02
✓	Chloride	091	44	✓	Iron	122	1736
	Fluoride	101		✓	Magnesium	241	16
	Color*	020		✓	Manganese	133	0.79
✓	Turbidity*	031	75.5		Nickel	391	
✓	Conductance*, SPEC.	201	608	✓	Potassium	361	1.6
	Silica	210		✓	Sodium	371	32.7
✓	Sulfate	220	116	✓	Zinc	372	0.05
✓	Total Residue TDS	381	454	✓	C.O.D		28
				✓	TKN		<0.2

AR300274

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER 4 B-W-3

Name of Courthouse

SOURCE OF SAMPLE Bush Valley COLLECTOR Beall

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

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REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION 43	DATE COLLECTED 032178	CARD NO.

20 21 22	23 24	25 26
FIELD pH	FIELD RESID. CHLORINE: FREE	TOTAL

624 6-24

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	41
Bromomethane	<1	Trichloroethene	18	Toluene	<1
Dichlorodifluoromethane	55	Dibromochloromethane	<1	Ethylbenzene	<1
Vinyl chloride	22	1,1,2-Trichloroethane		Total Xylenes	2
Chloroethane	23	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	96	2-Chloroethylvinylether		Tetrahydrofuran	
Trichlorofluoromethane	5	Bromoform		Methylethylketone	
1,1-Dichloroethene	<1	1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane	109	Tetrachloroethene	40	Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene	62	Chlorobenzene	5		
Chloroform	<1	Total Trihalomethanes			
1,2-Dichloroethane	80	Other Purgeable Organics:			
1,1,1-Trichloroethane	<1	1,2-Dibromoethane = 1			
Carbon Tetrachloride		observed: dichlorofluoromethane			
Bromodichloromethane		methyl cyclopentane			
1,2-Dichloropropane					

AR300275

Results reported in micograms per liter (parts per billion)

DATE RECEIVED MAR 21 1985 DATE REPORTED MAR 27 1985 CHEMIST Wall LAI

ZM

DHMH 749 (7/84)

NUS CORPORATION
A Halliburton Company

Dec. 10, 1985
(wells sampled 7-84)

PROJECT FOR PERFORMANCE OF REMEDIAL RESPONSE ACTIVITIES AT UNCONTROLLED HAZARDOUS SUBSTANCE FACILITIES—ZONE 1

NUS CORPORATION
SUPERFUND DIVISION

DD Number F3-5405-44
PA Number 2996 4C-1112

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

■ Organic ☐ Inorganic

Site Name Bear Valley
Date of Sample 7/11/84

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Phenol	Benzoic Acid	4-Methyl Phenol	1,4-Dichlorobenzene	n-Nitroso diphenyl Amine	bis-(2-ethyl hexyl) Phthalate	di-n-butyl Phthalate	di-n-octyl Phthalate	Di ethyl Phthalate	trans-1,2-Dichloro ethene	1,2-Dichloro propane	Ethyl Benzene	Xylene	Remarks
9101	Blk	AQ	ug/l							10K◇		10K◇					
9103	UPSTREAM DYNUM RUN	AQ	ug/l	10K◇						10K◇							
9105	DOWNSTREAM DYNUM RUN	AQ	ug/l	10K◇						10K◇							
9107	MW #1	AQ	ug/l					10K	10K	10K◇		10K◇					
9108	MW #2	AQ	ug/l						10K	10K◇					5K◇		
7015	MW #4	AQ	ug/l	10K◇						10K◇		10K◇	15	10K◇		95	
7016	SEDIMENT BASIN NE	AQ	ug/l							10K◇		10K◇					
7018	BRAXTON & HARRIS HOME WELL (ABANDONED)	AQ	ug/l	10K◇					10K	10K◇		10K◇					
7020	DILLS HOME WELL	AQ	ug/l					10K		10K◇		10K◇					
7022	LEACHATE NW	AQ	ug/l	64	2500◇	1000			20			68◇			6.2		
8183	LEACHATE N	AQ	ug/l	10K◇			10K		10K	10K◇					6.2	5K◇	

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

Number F3-8405-44
Number 2996 110-002

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

■ Organic ☐ Inorganic

Site Name Bush Valley
Date of Sample 7/11/84

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Phenanthrene	Benzene	Chlorobenzene	1,2-Dichloroethane	1,1,1-Trichloroethane	1,1-Dichloroethane	Chloroethane	Methylene chloride	Tetrachloroethene	Toluene	Trichloroethene	Vinyl chloride	Acetone	Remarks
101	Blk	AQ	µg/l								5K◇						
103	UPSTREAM BYNUM RUN	AQ	µg/l								5K◇						
105	DOWNSTREAM BYNUM RUN	AQ	µg/l								5K◇						
107	MW #1	AQ	µg/l	10K							5K◇						
108	MW #2	AQ	µg/l								5K◇						
015	MW #4	AQ	µg/l		22	5K	22	5K	65	14	85	19		7.7	12		
016	SEDIMENT BASIN NE	AQ	µg/l								5K◇						
018	BRAXTON & HARRIS HOME WELL (ABANDONED)	AQ	µg/l								5K◇						
020	DIGGS HOME WELL	AQ	µg/l								5K◇		5K				
022	LEACHATE NW	AQ	µg/l		6.2	5K					5K◇		63			748◇	
983	LEACHATE N	AQ	µg/l		5K					17	5K◇		56			60◇	

AR300278

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

DD Number F3-8405-44
PA Number 2996 410-002

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

■ Organic ☐ Inorganic

Site Name Buck Valley
Date of Sample 7/11/84

Sample Number	Sample Description and Location	Phase	Units	2-Butanone	Carbondisulfide	2-Heptanone	4-Methyl-2-Pentanone	Total Xylenes	Acrolein								Remarks
9101	Blk.	AQ	µg/l														
9103	UPSTREAM BYNUM RUN	AQ	µg/l														
9105	DOWNSTREAM BYNUM RUN	AQ	µg/l														
9107	MW #1	AQ	µg/l		1.4												
9108	MW #2	AQ	µg/l														
7015	MW #4	AQ	µg/l		1K			5K									
7016	SEDIMENT BASIN NE	AQ	µg/l														
7018	BRAXTON'S HOME WELL (ABANDONED)	AQ	µg/l														
7020	DIGGS HOME WELL	AQ	µg/l														
7022	LEACHATE NW	AQ	µg/l	1400		5K	110	7.2	100R								
8483	LEACHATE NE	AQ	µg/l				60	190									

For identified compounds, please see the Analytical Quality Assurance section of this report.

TDD Number F3-8405-44
EPA Number 2996 410-012

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

■ Organic ☐ Inorganic

Site Name Bush Valley
Date of Sample 7/11/84

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	bis(2-ethylhexyl) phthalate		Methylene Chloride	Toluene	Acetone	Heptachlor	β-BHC							Remarks
C7017	SEDIMENT BASIN NE	SOL	µg/kg	10K	U	620	50	50	U								
C7019	LEACHATE SOUTH	SOL	µg/kg	10K	U	>11,000	U	20	U								
C7021	LEACHATE NW	SOL	µg/kg	1200	U	>11,000	U	25	U	0.005K	U						
C8482	LEACHATE N	SOL	µg/kg	10K	U	>800	U	14	U		0.005K	U					
C8102	BLANK	SOL	µg/kg	280K	U	32	U										
C9104	UPSTREAM HYNUM RUN	SOL	µg/kg			700	U	60	U								
C9106	DOWNSTREAM HYNUM RUN	SOL	µg/kg			600	U	35	U								

AR300280

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

TDD Number F3-5405-44
EPA Number LUC-002

Site Name Basin Valley Landfill
Date of Sample 2-12-14

Sample Number	Sample Description and Location	Phase	Units	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Remarks
MC3461	BLANK	AQ	µg/L					8.0									
MC3462	BLANK	SOL	mg/kg														
MC3463	UPSTREAM BYNUM RUN	AQ	µg/L									314		18			
MC3464	UPSTREAM BYNUM RUN	SOL	mg/kg	5970	5.8	30	0.27	0.40	11	5.5	8.5	5870	2.8	120		7.5	
MC3465	DOWNSTREAM BYNUM RUN	AQ	µg/L	236								412		40			
MC3466	DOWN STREAM BYNUM RUN	SOL	mg/kg	5130	4.8	27	0.28	0.60	11	6.4	9.4	9550	5.1	236		8.0	
MC3467	MW #1	AQ	µg/L	35,200	44		11	◇2.4	807	104	553	86,000	126	1130	0.63	269	
MC3468	MW #2	AQ	µg/L	25,200	34		6.0	◇1.2	328	96	337	32,000	164	1020		195	
MC3470	MW #4	AQ	µg/L	13,100	75			◇3.0	332	96	819	32,000	53	1690	0.46	526	
MC3471	SEDIMENT BASIN SE	AQ	µg/L	4,210								3540		219			
MC3472	SEDIMENT BASIN NE	SOL	mg/kg	8720	9.9	33	0.36		18	5.1	8.7	10,200	4.6	160		6.2	
MC3473	BEHIND HOUSE WELL (ABANDONED)	AQ	µg/L	1,570					16		232	1660	1.3	51			
MC3474	LEACHATE SOUTH	SOL	mg/kg	7,100	8.7	38	0.33	0.82	14	5.8	6.7	12,500	7.5	191		6.5	
MC3475	PIGGS HOME WELL	AQ	µg/L									357					

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

[ ] Organic [X] Inorganic

ID Number F3-S405-44
EPA Number LHD-002

Site Name Rural Valley Landfill
Date of Sample 2-12-84

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Selenium	Silver	Tin	Vanadium	Zinc	Antimony								Remarks
IC 3476	LEACHATE NW	SOL	mg/kg			8.5	95	25	1.5								
IC 3477	LEACHATE NW	AQ	µg/L	7.8		21	367	1210									
IC 3552	LEACHATE N	SOL	mg/kg			21	33	47	1.4								
IC 3553	LEACHATE N	AQ	µg/L	3.1		23		276									

AR300282

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

[illegible] are based upon quality assurance review of data.

DD Number E3-S405-44
PA Number LCRR002

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Bush Valley Landfill
Date of Sample 7-12-94

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	SELENIUM	SILVER	TIN	VANADIUM	ZINC	ANTIMONY								Remarks
MC3461	BLANK	AQ	UG/L														
MC3462	BLANK	SOL	MG/KG														
MC3463	UPSTREAM BYNUM RUN	AQ	UG/L														
MC3464	UPSTREAM BYNUM RUN	SOL	MG/KG			46	18	28									
MC3465	DOWNSTREAM BYNUM RUN	AQ	UG/L		10	36											
MC3466	DOWNSTREAM BYNUM RUN	SOL	MG/KG			4.2	18	24									
MC3467	MW #1	AQ	UG/L			63	749	668									
MC3468	MW #2	AQ	UG/L			82	405	358									
MC3470	MW #4	AQ	UG/L			98		307									
MC3471	SEDIMENT BASIN NE	AQ	UG/L					13									
MC3472	SEDIMENT BASIN NE	SOL	MG/KG			5.3	24	24									
MC3473	BRAXTON HARRIS HOME WELL (ABANDONED)	AQ	UG/L					119									
MC3474	LEACHATE SOUTH	SOL	MG/KG			5.8	19	27									
MC3475	DIGGS HOME WELL	AQ	UG/L			21											

NOTE: For a rev[illegible] this data and non-target, tentatively identified compounds, please see t[illegible]ytical Quality Assurance section of this report.

[illegible] review of data.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

ID Number F3-3405-44
EPA Number 140-202

Site Name Basin Valley Chevron
Date of Sample 7-11-84

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	ALUMINUM	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON	LEAD	MANGANESE	MERCURY	NICKEL	Remarks
103476	LEACHATE NW	SOL	mg/kg	17,400	17	42	0.34	0.070	111	13	12	45,200	5.1	243		33	
103477	LEACHATE NW	HQ	µg/L	113,000	138	210		D 1.3	339	45	146	231,000	174	4870	1.3	154	
103552	LEACHATE N	SOL	mg/kg	13,100	10	49	0.52	0.22	17	8.3	16	15,500	14	19.3		9.9	
103553	LEACHATE N	AQ	µg/L	7,870	16	226			28			40,300	9.1	582		73	

AR300284

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

FILE: 0815 HOST.

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston Street
J. Mahoon Joseph, Ph.D., Director

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BU W-2

HARFORD
Name of County

SOURCE OF SAMPLE BUSH COLLECTOR HOFER

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well X stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

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REMARKS: _____

CHAIN of CUSTODY NAME/ TIME/DATE TO: _____ TO: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			B V W 2	0 7 3 1 8 6	1

20 21 22	23 24	25 26
FIELD pH	FIELD RESID. CHLORINE: FREE 6.24	TOTAL

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics	
Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	3
Bromomethane	<1	Trichloroethene	3	Toluene	<1
Dichlorodifluoromethane	3	Dibromochloromethane	<1	Ethylbenzene	<1
Vinyl chloride	<1	1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane	<1	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	7	2-Chloroethylvinylether		Tetrahydrofuran	7
Trichlorofluoromethane	<1	Bromoform		(2-Butanone) (MEK)	ND.
1,1-Dichloroethene	<1	1,1,2,2-Tetrachloroethane		Methylisobutylketone (MIBK)	
1,1-Dichloroethane	2	Tetrachloroethene	2	Acrolein	
trans-1,2-Dichloroethene	2	Chlorobenzene	<1	Acrylonitrile	
Chloroform	<1	Total Trihalomethanes			
1,2-Dichloroethane	8	**Other Purgeable Organics:**		AR300285	
1,1,1-Trichloroethane	<1	ethyl ether = 3			
Carbon Tetrachloride		observed: chlorodifluoromethane			
Bromodichloromethane		dichlorofluoromethane			
1,2-Dichloropropane					

Results reported in micrograms per liter (parts per billion)

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston Street
J. Mahesh Joseph, Ph.D., Director

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BU W4

HARFORD
Name of County

SOURCE OF SAMPLE BUSH COLLECTOR HOFER

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well X stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: _____

CHAIN of CUSTODY
NAME/ TIME/DATE TO: _____
TO: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			BUW4	073196	

FIELD pH (20 21 22) _____ FIELD RESID. CHLORINE: FREE (23 24) _____ TOTAL (25 26) _____

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics	
Chloromethane	4	trans-1,3-Dichloropropene	<1	Benzene	18
Bromomethane	<1	Trichloroethene	13	Toluene	<1
Dichlorodifluoromethane	16	Dibromochloromethane	<1	Ethylbenzene	<1
Vinyl chloride	10	1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane	12	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	7	2-Chloroethylvinylether		Tetrahydrofuran	8
Trichlorofluoromethane	2	Bromoform		(2-Butanone) (MEK)	N.D.
1,1-Dichloroethene	<1	1,1,2,2-Tetrachloroethane		Methylisobutylketone (MIBK)	
1,1-Dichloroethane	53	Tetrachloroethene	7	Acrolein	
trans-1,2-Dichloroethene	27	Chlorobenzene	8	Acrylonitrile	
Chloroform	<1	Total Trihalomethanes			
1,2-Dichloroethane	<1	**Other Purgeable Organics:**			
1,1,1-Trichloroethane	54	ethyl ether = 95			
Carbon Tetrachloride	<1	Observed: chlorodifluoromethane			
Bromodichloromethane	<1	dichlorofluoromethane			
1,2-Dichloropropane	7	n-butanol = 240			

AR300286

Results reported in micrograms per liter (parts per billion)

SEP 3 1996

VDavis

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF WATER ANALYSIS

Bottle Number: Bvwl Name: BUSH County: HARFORD

Source of Sample: Well (Street / Town or City) Collector: HOFFER

Sample Type (Circle): Community Source — Non-Community Distribution — Private MCL — Emergency Recheck — Routine

Remarks: SSD

County	Plant No.	Sampling Station	Date Collected	Time	Acid — Lead
		Bvwl	6/7/31/86	M	

Field Data: pH* ____ Chlorine Residual: Free ____ Total ____ Specific Conductance ____

ANALYSIS	CODE	RESULTS	ANALYSIS	CODE	RESULTS
pH*	011	6.61	Arsenic	253	<.001
Alkalinity (Total)	040	78.	Barium	262	<.1
Alkalinity (HCO_3)	050		Cadmium	273	<.000
Alkalinity (CO_3)	060		Chromium	283	<.01
pH*, Ca CO_3 SAT.	071		Lead	302	<.001
Alkalinity, Ca CO_3 SAT	080		Mercury	314	<.0005
Hardness	110	217	Selenium	323	<.001
Ammonia-N	143	1.15	Silver	333	
Nitrate-Nitrite N	162	<.02	Aluminum	192	
Nitrite N	173	0.205	Calcium	231	59.
MBAS	182		Copper	241	<.10
Chloride	091	5.	Iron	122	.538
Fluoride	101		Magnesium	241	13.6
Color*	020		Manganese	133	0.146
Turbidity*	031	23.0	Nickel	391	
Conductance*, SPEC.	201	183.	Potassium	361	2.3
Silica	210		Sodium	371	11.4
Sulfate	220	<1.0	Zinc	342	<.10
Total Residue DISS	381	156.	COD		<1.0

AR300287

* Results reported in units, all others in milligrams per liter (ppm)

Date Received ____ Date Reported ____ Chemist ____ Lab No. ____

DHMH 80-A (10/85)

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston Street
J. Mahesa Joseph, Ph.D., Director

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BUW1

HARFORD
Name of County

SOURCE OF SAMPLE BUSH COLLECTOR HOFER

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well X stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

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SEP 4 1986

ENFORCEMENT FILE
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REMARKS: _____

CHAIN of CUSTODY
NAME/ TIME/DATE TO: _____ TO: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			BUW1	073186	

20 21 22	23 24	25 26
FIELD pH	FIELD RESID. CHLORINE: FREE	TOTAL

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics	
Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane		Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	N.D.
Trichlorofluoromethane		Bromoform		(2-Butanone) (MEK)	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		Methylisobutylketone (MIBK)	
1,1-Dichloroethane		Tetrachloroethene		Acrolein	
trans-1,2-Dichloroethene		Chlorobenzene		Acrylonitrile	
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics: N.D.			
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

AR300288

Results reported in micrograms per liter (parts per billion)

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF WATER ANALYSIS

Bottle Number: BVW2 Name: BUSH County: HARFORD

Source of Sample: WELL (Street / Town or City) Collector: HOFFER

Sample Type (Circle): Community Source — Non-Community Distribution — Private — MCL — Emergency Recheck — Routine

Remarks: SSD

County	Plant No.	Sampling Station	Date Collected	Time	Lead
		BVIW2	6/7/31/86	M	

Field Data: pH* ____ Chlorine Residual: Free ____ Total ____ Specific Conductance ____

	ANALYSIS	CODE	RESULTS		ANALYSIS	CODE	RESULTS
✓	pH*	011	6.2	✓	Arsenic	253	<0.01
✓	Alkalinity (Total)	040	72.	✓	Barium	262	<0.1
	Alkalinity (HCO_3)	050		✓	Cadmium	273	<0.005
	Alkalinity (CO_3)	060		✓	Chromium	283	<0.0
	pH*, Ca CO_3 SAT.	071		✓	Lead	302	<0.01
	Alkalinity, Ca CO_3 SAT	080		✓	Mercury	314	<0.0005
✓	Hardness	110	23.	✓	Selenium	323	<0.01
✓	Ammonia-N	143	1.1		Silver	333	
✓	Nitrate-Nitrite N	162	<0.2		Aluminum	192	
✓	Nitrite N	173	0.02	✓	Calcium	231	13.6
	MBAS	182		✓	Copper	241	<0.10
✓	Chloride	091	10.	✓	Iron	122	38.19
	Fluoride	101		✓	Magnesium	241	2.4
	Color*	020		✓	Manganese	133	0.56
✓	Turbidity*	031	1.3		Nickel	391	
✓	Conductance*, SPEC.	201	148.	✓	Potassium	361	<1.0
	Silica	210		✓	Sodium	371	9.2
✓	Sulfate	220	10.0	✓	Zinc	342	<0.10
✓	Total Residue DISS	381	112.	✓	COD		<10

AR300289

*Results reported in units, all others in milligrams per liter (ppm)

Date Received ____ Date Reported JUN 30 1986 Chemist ____ Lab No. ____

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF WATER ANALYSIS

Bottle Number: [illegible]4 Name: BUSH County: HARFORD

Source of Sample: WELL (Street / Town or City) Collector: HOFER

Sample Type (Circle): Community Source / Non-Community Distribution / Private MCL / Emergency Recheck / Routine

Remarks: SSD

County	Plant No.	Sampling Station	Date Collected	Time	Acid	Iced
		0 1 W 1 4	0 7 3 1 8 6	M		

Field Data: pH* | Chlorine Residual: Free / Total | Specific Conductance

ANALYSIS	CODE	RESULTS	ANALYSIS	CODE	RESULTS
pH*	011	6.4	Arsenic	253	<0.01
Alkalinity (Total)	040	236.	Barium	262	.04
Alkalinity (HCO_3)	050		Cadmium	273	<0.005
Alkalinity (CO_3)	060		Chromium	283	<0.01
pH*, Ca CO_3 SAT.	071		Lead	302	.01
Alkalinity, Ca CO_3 SAT	080		Mercury	314	<0.0005
Hardness	110	172.	Selenium	323	<0.01
Ammonia-N	143	.12	Silver	333	
Nitrate-Nitrite N	162	4.02	Aluminum	192	
Nitrite N	173	0.018	Calcium	231	31.2
MBAS	182		Copper	241	<0.10
Chloride	091	92.	Iron	122	34.46
Fluoride	101		Magnesium	241	20.1
Color*	020		Manganese	133	3.59
Turbidity*	031	41.0	Nickel	391	
Conductance*, SPEC.	201	591.	Potassium	361	1.9
Silica	210		Sodium	371	57.8
Sulfate	220	11.2	Zinc	342	<0.10
Total Residue D.S.S	381	400.	COD		AR300290 1.62

* Results reported in units, all others in milligrams per liter (ppm)

AUG – 2 [illegible]

Lab No.

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
REPORT OF WATER ANALYSIS

Title Number: BVW-1 Name: Bush Valley County: HARFORD

Source of Sample: Well (Street / Town or City) Collector: HOFER

Sample Type (Circle): Community Source — Non-Community Distribution — Private MCL — Emergency Recheck — Routine

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Remarks: SSD

County	Plant No.	Sampling Station	Date Collected	Time	Acid	Lead
		1	07/16/87	M		

Field Data: pH* | Chlorine Residual: Free | Total | Specific Conductance

✓	ANALYSIS	CODE	RESULTS	✓	ANALYSIS	CODE	RESULTS
✓	pH*	011	6.4	✓	Arsenic	253	<0.01
✓	Alkalinity (Total)	040	25	✓	Barium	262	<1
	Alkalinity (HCO_3)	050		✓	Cadmium	273	<0.01
	Alkalinity (CO_3)	060		✓	Chromium	283	<0.01
	pH*, Ca CO_3 SAT.	071		✓	Lead	302	<0.05
	Alkalinity, Ca CO_3 SAT	080		✓	Mercury	314	<0.0002
✓	Hardness	110	136	✓	Selenium	323	<0.01
✓	Ammonia-N	143	<.1		Silver	333	
✓	Nitrate-Nitrite N	162	<0.02		Aluminum	192	
✓	Nitrite N	173	0.02	✓	Calcium	231	25.9
	MBAS	182		✓	Copper	241	<0.05
✓	Chloride	091	89	✓	Iron	122	0.52
	Fluoride	101		✓	Magnesium	241	16.5
	Color*	020		✓	Manganese	133	0.13
✓	Turbidity*	031	1.3		Nickel	391	
✓	Conductance*, SPEC.	201	501	✓	Potassium	361	2.4
	Silica	210		✓	Sodium	371	16
✓	Sulfate	220	12	✓	Zinc	342	0.34
✓	Total Residue DISS	381	344	✓	COD		24
				✓	TKN		<0.2

AR300029

* Results reported in units, all others in milligrams per liter (ppm)

Date Received _____ Date Reported JUL 20 1987 Chemist _____ Lab No. _____

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston Street
J. Mahoney Joseph, Ph.D., Director

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BU W-1

HARFORD
Name of County

SOURCE OF SAMPLE Bush Valley COLLECTOR Hoff

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well X stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	CARD NO.
			1 1	0 7 1 6 8 7	

FIELD pH (20 21 22) FIELD RESID. CHLORINE: FREE (23 24) TOTAL (25 26) 07168210

Purgeable Halocarbons (EPA 624)				Purgeable Aromatics (EPA 624)	
Chloromethane	<1.	trans-1,3-Dichloropropene	<1.	Benzene	<1.
Bromomethane		Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	N.D.
Trichlorofluoromethane		Bromoform		(2-Butanone) (MEK)	11.
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		Methylisobutylketone (MIBK)	N.D.
1,1-Dichloroethane		Tetrachloroethene		Acrolein	
trans-1,2-Dichloroethene		Chlorobenzene		Acrylonitrile	
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics: N.D.			
1,1,1-Trichloroethane		ACETONE	31.	AR300292	
Carbon Tetrachloride		2-PROPANOL	14.		
Bromodichloromethane		OBSERVED: DIMETHYLDISULFIDE			
1,2-Dichloropropene					

Results reported in micrograms per liter (parts per billion)

DATE RECEIVED JUL 16 1987 DATE REPORTED JUL 30 1987 CHEMIST

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
REPORT OF WATER ANALYSIS

Title Number: BVW-2 Name: BUSH Valley County: HARFORD

Source of Sample: Well (Street) (Town or City) Collector: HOFER

Sample Type (Circle): Community Source | Non-Community Distribution | Private MCL | Emergency | Routine | Recheck

Remarks: SSD.

RECEIVED
JUL 30 1987

County	Plant No.	Sampling Station	Date Collected	Time	Acid	Iced
		2	07/28/87	M		

Field Data: pH* | Chlorine Residual: Free | Total | Specific Conductance

ANALYSIS	CODE	RESULTS	ANALYSIS	CODE	RESULTS
pH*	011	6.5	Arsenic	253	<0.01
Alkalinity (Total)	040	274	Barium	262	<0.1
Alkalinity (HCO_3)	050		Cadmium	273	<0.005
Alkalinity (CO_3)	060		Chromium	283	<0.01
pH*, Ca CO_3 SAT.	071		Lead	302	0.14
Alkalinity, Ca CO_3 SAT	080		Mercury	314	<0.0005
Hardness	110	115	Selenium	323	<0.01
Ammonia-N	143	<0.1	Silver	333	
Nitrate-Nitrite N	162	<0.05	Aluminum	192	
Nitrite N	173	<0.05	Calcium	231	52
MBAS	182		Copper	241	<0.05
Chloride	091	13	Iron	122	1.2
Fluoride	101		Magnesium	241	12
Color*	020		Manganese	133	0.04
Turbidity*	031	2.3	Nickel	391	
Conductance*, SPEC.	201	449	Potassium	361	2.6
Silica	210		Sodium	371	4.5
Sulfate	220	<1	Zinc	342	0.16
Total Residue D.55	381	58	COD		<10
			TKN		0.9

AR300293

* Results reported in units, all others in milligrams per liter (ppm)

Date Received _____ Date Reported 7.30.87 Chemist _____ Lab N

DHMH 90-A (10/85) SUM

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Laboratories Administration

201 W. Preston Street

J. Mahlon Johnson, Ph.D., Director

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BV W-2

HARFORD
Name of County

SOURCE OF SAMPLE Bush Valley COLLECTOR Hofer

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well X stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	TM CARD NO
			2	0 7 1 6 8 7	

20 21 22		23 24		25 26	
FIELD pH		FIELD RESID. CHLORINE: FREE		TOTAL	

07168211

Purgeable Halocarbons (EPA 601/624)				Purgeable Aromatics EPA 602	
Chloromethane	<1.	trans-1,3-Dichloropropene	<1.	Benzene	<1.
Bromomethane		Trichloroethene	5.	Toluene	<1.
Dichlorodifluoromethane		Dibromochloromethane	<1.	Ethylbenzene	14.
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	67.
Chloroethane	3.	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	<1.	2-Chloroethylvinylether		Tetrahydrofuran	63.
Trichlorofluoromethane		Bromoform		(2-Butanone) (MEK)	N.D.
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		Methylisobutylketone (MIBK)	
1,1-Dichloroethane		Tetrachloroethene		Acrolein	
trans-1,2-Dichloroethene		Chlorobenzene		Acrylonitrile	
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane	2	Other Purgeable Organics: N.D.		AR300294	
1,1,1-Trichloroethane	<1				
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

Results reported in micrograms per liter (parts per billion) VA.00

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF WATER ANALYSIS

Bottle Number: BU W-4 Name: BUSH VALLEY Well County: HARFORD

Source of Sample: _____ Street _____ Town or City Collector: HOFFA

Sample Type (Circle): Community Source | Non-Community Distribution | Private MCL | Emergency Recheck | Routine

RECEIVED JUL 30 1987

Remarks: SSD

County | Plant No. | Sampling Station: 4 | Date Collected: 07/16/87 | Time: ___ M | Acidity | Lead

Field Data: pH* | Chlorine Residual: Free | Total | Specific Conductance

✓	ANALYSIS	CODE	RESULTS	✓	ANALYSIS	CODE	RESULTS
✓	pH*	011	6.6	✓	Arsenic	253	<0.001
✓	Alkalinity (Total)	040	61	✓	Barium	262	0.11
	Alkalinity (HCO_3)	050		✓	Cadmium	273	0.006
	Alkalinity (CO_3)	060		✓	Chromium	283	<0.01
	pH*, Ca CO_3 SAT.	071		✓	Lead	302	<0.05
	Alkalinity, Ca CO_3 SAT	080		✓	Mercury	314	<0.0002
✓	Hardness	110	57	✓	Selenium	323	<0.001
✓	Ammonia-N	143	0.01		Silver	333	
✓	Nitrate-Nitrite N	162	0.02		Aluminum	192	
✓	Nitrite N	173	<0.01	✓	Calcium	231	16
	MBAS	182		✓	Copper	241	<0.05
✓	Chloride	091	15	✓	Iron	122	0.46
	Fluoride	101		✓	Magnesium	241	4.9
	Color*	020		✓	Manganese	133	0.02
✓	Turbidity*	031	1.4		Nickel	391	
✓	Conductance*, SPEC.	201	210	✓	Potassium	361	3.6
	Silica	210		✓	Sodium	371	10.2
✓	Sulfate	220	13	✓	Zinc	342	
✓	Total Residue DISS	381	110	✓	COD		5
				✓	TKN		AR3002951

* Results reported in units, all others in milligrams per liter (ppm)

Date Received _____ Date Reported JUL 31 '87 Chemist _____ Lab No. _____

DHMH 90-A (10/85) DM

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston Street
J. Mahoney Joseph, Ph.D., Director

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BV W4

HARFORD
Name of County

SOURCE OF SAMPLE BUSH VALLEY COLLECTOR HOFER

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well X stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	CARD NO.
			1 4	0 7 1 6 8 7	

FIELD pH (20 21 22) _____ FIELD RESID. CHLORINE: FREE (23 24) _____ TOTAL (25 26) _____

0716R0212

Purgeable Halocarbons (EPA 601 624)				Purgeable Aromatics (EPA 602 624)	
Chloromethane	3.	trans-1,3-Dichloropropene	<1.	Benzene	14.
Bromomethane	<1.	Trichloroethene	9.	Toluene	<1.
Dichlorodifluoromethane	28.	Dibromochloromethane	<1.	Ethylbenzene	<1.
Vinyl chloride	7.	1,1,2-Trichloroethane		Total Xylenes	22
Chloroethane	12	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	9.	2-Chloroethylvinylether		Tetrahydrofuran	8.
Trichlorofluoromethane	<1.	Bromoform		(2-Butanone) (MEK)	N.D.
1,1-Dichloroethene	<1.	1,1,2,2-Tetrachloroethane		Methylisobutylketone (MIBK)	
1,1-Dichloroethane	46.	Tetrachloroethene	12.	Acrolein	
trans-1,2-Dichloroethene	32.	Chlorobenzene	8.	Acrylonitrile	
Chloroform	<1.	Total Trihalomethanes			
1,2-Dichloroethane	49.	**Other Purgeable Organics:**		AR300296	
1,1,1-Trichloroethane	<1.	ETHYL ETHER	101.		
Carbon Tetrachloride		OBSERVED: DICHLOROFLUOROMETHANE, CHLORODIFLUOROMETH			
Bromodichloromethane	<1.				
1,2-Dichloropropane	6.				

Results reported in micrograms per liter (parts per billion)

JUL 30 1987

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston Street
J. Mahesh Joseph, Ph.D., Director

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BW-1 COLLECTOR Hofel Harford County

SOURCE OF SAMPLE Bush Valley Landfill

(Include Address)

SAMPLE TYPE: Community ____ Noncommunity ____ Domestic ____ STP Station ____

Observation Well X Stream ____ Tidal Waters ____ Industrial Effluent ____

Other (Specify) ____

Preservative Used ____

IMPORTANT: First time sampled ____ Last known sampling date 7/16/87

Reason for submitting sample: Survey ____ Suspected Petroleum Contamination ____

Suspected Industrial Chemical Contamination ____ Other (Specify) ____

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JUL 20 1988

CHAIN OF CUSTODY: From: ____ To: ____

From: ____ To: ____

REMARKS: ENFORCEMENT FILE.
FILE COPY ONLY.

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			1	07 07 87	

20 21 22 FIELD pH ____ FIELD RESID. CHLORINE: FREE 23 24 ____ TOTAL 25 26 ____

07QL0083

Purgeable Halocarbons (EPA 8240)

Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane		Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	N.D.
Trichlorofluoromethane		Bromoform		(2-Butanone MEK)	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethene		Methylisobutylketone (MIBK)	
1,1-Dichloroethane		Tetrachloroethene		Acrolein	
trans-1,2-Dichloroethene		Chlorobenzene		Acrylonitrile	
Chloroform		Total Trihalomethanes		Carbon Disulfide	
1,2-Dichloroethane		Other Purgeable Organics:	N.D.	Vinyl Acetate	
1,1,1-Trichloroethane				Acetone	
Carbon Tetrachloride				2-Hexanone	
Bromodichloromethane				Styrene	
1,2-Dichloropropane					

AR300297

Results reported in micrograms per L (parts per million/billion)

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston St.
P.O. Box 2355, Baltimore, Maryland 21203
J. Mehsen Joseph, Ph.D., Director

C0008[illegible]800

Lab No. _____

WATER ANALYSIS

Bottle Number: BW-2 Name: Bush Valley Landfill County: Harford

Source of Sample: well Collector: [illegible]
Street Town or City

Sample Type (Circle): Community Source / Non-Community Distribution / Private MCL / Emergency Recheck / Routine

Remarks: (Surface) (W-3 Cone)

County	Plant No.	Sampling Station	Date Collected	Time	Acid	Iced
		2	07078			

Field Data: pH* _____ Chlorine Residual: Free _____ Total _____ Specific Conductance _____

✓	ANALYSIS	CODE	RESULTS	✓	ANALYSIS	CODE	RESULTS
✓	pH*	00403	7.1	✓	Arsenic	01002	<0.01
✓	Alkalinity (Total)	00410	27	✓	Barium	01007	<0.1
	pH*, Ca CO, SAT.	70311		✓	Cadmium	01027	<0.01
	Alkalinity, Ca CO, SAT.	74033		✓	Chromium	01034	<0.01
✓	Hardness	00900		✓	Lead	01051	<0.05
✓	Ammonia-N	00608	27	✓	Mercury	71900	<0.0005
✓	Nitrate-Nitrate N	00630	<0.2	✓	Selenium	01147	<0.1
✓	Nitrite N	00615	<0.1		Silver	01077	
	MBAS	38260					
✓	Chloride	00940	11		Aluminum	01105	
	Fluoride	00951		✓	Calcium	00916	57
	Color*	00081		✓	Copper	01042	0.018
✓	Turbidity*	00076	1.5	✓	Iron	01045	0.51
✓	Conductance*, SPEC	00095	110	✓	Magnesium	00927	25
✓	Sulfate	00945	<11	✓	Manganese	01055	0.17
	Total Solids	00500			Nickel	01067	
✓	Dissolved Solids	70300	58	✓	Potassium	00937	1.1
				✓	Sodium	00929	7.9
				✓	Zinc	01092	0.03
				✓	COD		AR300298 13

RECEIVED
SEP 30 1988
ENFORCEMENT FILE COPY ONLY

*Results reported in units, all others in milligrams per liter (ppm)

8 1988 Date Received 7/26/88 Chemist [illegible]

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston Street
J. Mehsen Joseph, Ph.D., Director

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BW-2 COLLECTOR Hafer Hafer County

SOURCE OF SAMPLE Bush Valley LANDFILL

(Include Address)

SAMPLE TYPE: Community ____ Noncommunity ____ Domestic ____ STP Station ____

Observation Well X Stream ____ Tidal Waters ____ Industrial Effluent ____

Other (Specify) ____

Preservative Used —

IMPORTANT: First time sampled ____ Last known sampling date 7/16/87

Reason for submitting sample: Survey ____ Suspected Petroleum Contamination ____

Suspected Industrial Chemical Contamination ____ Other (Specify) ____

CHAIN OF CUSTODY: From: ____ To: ____

From: ____ To: ____

REMARKS: ENFORCEMENT FILE COPY ONLY

RECEIVED
JUL 26 1988

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			2	0 7 0 7 8 8	

FIELD pH 20 21 22 ____ FIELD RESID. CHLORINE: FREE 23 24 ____ TOTAL 25 26 ____

07100068A

Purgeable Halocarbons (EPA 8240)

Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane		Trichloroethene	6	Toluene	
Dichlorodifluoromethane		Dibromochloromethane	<1	Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	36
Trichlorofluoromethane		Bromoform		(2-Butanone MEK)	ND
1,1-Dichloroethene		1,1,2,2-Tetrachloroethene		Methylisobutylketone (MIBK)	
1,1-Dichloroethane	2	Tetrachloroethene		Acrolein	
trans-1,2-Dichloroethane	<1	Chlorobenzene		Acrylonitrile	
Chloroform		Total Trihalomethanes		Carbon Disulfide	101
1,2-Dichloroethane		**Other Purgeable Organics:**		Vinyl Acetate	ND
1,1,1-Trichloroethane				Acetone	
Carbon Tetrachloride				2-Hexanone	
Bromodichloromethane				Styrene	2
1,2-Dichloropropane				Ethyl ether	1

AR300299

Results reported in micrograms per L (parts per million/billion)

DATE RECEIVED JUL 2 [illegible] DATE REPORTED JUL 18 1988 CHEMIST [signature]

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston Street
J. Mahesh Joseph, Ph.D., Director

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BW-3 4 COLLECTOR Hafer Halfold
SOURCE OF SAMPLE Bush Valley Landfill County
(Include Address)
SAMPLE TYPE: Community ____ Noncommunity ____ Domestic ____ STP Station ____
Observation Well X Stream ____ Tidal Waters ____ Industrial Effluent ____
Other (Specify) ____
Preservative Used ____

RECEIVED
JUL 26 1988

IMPORTANT: First time sampled ____ Last known sampling date 7/16/87
Reason for submitting sample: Survey ____ Suspected Petroleum Contamination ____
Suspected Industrial Chemical Contamination ____ Other (Specify) ____
CHAIN OF CUSTODY: From: ~~ENFORCEMENT FILE~~ To: ____
From: FILE COPY ONLY To: ____
REMARKS: ____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			4	070788	07 10

0085

FIELD pH ____ FIELD RESID. CHLORINE: FREE ____ TOTAL ____

Purgeable Halocarbons (EPA 824)				Other Purgeables	
Chloromethane	11	trans-1,3-Dichloropropene	<1	Benzene	7
Bromomethane	<1	Trichloroethene	3	Toluene	<1
Dichlorodifluoromethane	6	Dibromochloromethane	<1	Ethylbenzene	<1
Vinyl chloride	2	1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane	12	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	<1	2-Chloroethylvinylether		Tetrahydrofuran	N.D.
Trichlorofluoromethane		Bromoform		(2-Butanone MEK)	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethene		Methylisobutylketone (MIBK)	
1,1-Dichloroethane	23	Tetrachloroethene		Acrolein	
trans-1,2-Dichloroethene	4	Chlorobenzene	5	Acrylonitrile	
Chloroform	<1	Total Trihalomethanes		Carbon Disulfide	10
1,2-Dichloroethane		Other Purgeable Organics: ND		Vinyl Acetate	ND
1,1,1-Trichloroethane				Acetone	
Carbon Tetrachloride				2-Hexanone	
Bromodichloromethane				Styrene	
1,2-Dichloropropane					
				ethyl ether	99

AR300300

Results reported in micrograms per L (parts per million/billion)

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston St.
P.O. Box 2355, Baltimore, Maryland 21203
J. Mehsen Joseph, Ph.D., Director

WATER ANALYSIS

Lab No. Date Received:

Do not write above this line.

Data Category Code:

Bottle Number: B-W-1 Name: Bush Valley Landfill County: Harford

Source of Sample: Well Collector: Bowden
Street Town or City (Include telephone Number)

Sample Types (Circle): Drinking Water, Landfill, Stream, Other
Community (Public Treated), Non-Community (Pub. Untreated), Private, Other
Source (Raw Water), Distribution (Treated), MCL
Emergency, Routine, Recheck

RECEIVED
OCT 5 1989
GROUNDWATER AND SPECIAL INVESTIGATION DIVISION

Remarks: HSWMA MDE MISSED S-1 + S-2 well #3 out

County	Plant No.	Sampling Station	Date Collected	Time	Iced	Type of Acid:
		W1	[redacted]			Acid:

Date & Time are Required for Valid Samples

Field Data: pH* | Chlorine Residual: Free, Total | Specific Conductance

✓	ANALYSIS	CODE	RESULTS	✓	ANALYSIS	CODE	RESULTS
✓	pH*	00403	7.6	✓	Arsenic	01002	<0.01
✓	Alkalinity (Total)	00410	110	✓	Barium	01007	<10
	pH*, Ca CO, SAT.	70311		✓	Cadmium	01027	<0.01
	Alkalinity, Ca CO, SAT.	74023		✓	Chromium	01034	<0.01
✓	Hardness	00900	57	✓	Lead	01051	<0.05
✓	Ammonia-N	00608	<0.10	✓	Mercury	71900	<0.0005
✓	Nitrate-Nitrate N	00630	<0.2	✓	Selenium	01147	<0.01
✓	Nitrite N	00615	0.002		Silver	01077	
	MBAS	38260					
✓	Chloride	00940	20		Aluminum	01105	
	Fluoride	00951			Calcium	00916	42
	Color*	00081		✓	Copper	01042	<0.05
✓	Turbidity*	00076	13	✓	Iron	01045	4522
✓	Conductance*, SPEC	00095	292	✓	Magnesium	00927	12
✓	Sulfate	00945	20	✓	Manganese	01055	0.92
✓	Total Solids	00500	108		Nickel	01067	
	Dissolved Solids	70300		✓	Potassium	00937	4.8
				✓	Sodium	00929	15.2
				✓	Zinc	01092	0.10
				✓	C.O.D.		<40

AR300301

Reported in units, all others in milligrams per liter (ppm).

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston St.
P.O. Box 2355, Baltimore, Maryland 21203
J. Mehsen Joseph, Ph.D., Director

WATER ANALYSIS

Lab No.: Date Received:

Do not write above this line.

Data Category Code:

Bottle Number: 2 W-2 Name: Bush Valley Landfill County: Harford

Source of Sample: Well Collector: Bourdeau

Street Town or City (Include telephone Number)

Sample Types (Circle): Drinking Water, Landfill, Stream, Other

Community (Public Treated), Non-Community (Pub. Untreated), Private, Other

Source (Raw Water), Distribution (Treated), MCL

Emergency, Routine, Recheck

RECEIVED
OCT 5 1989

Remarks: HSWMA MDE

GROUNDWATER AND SPECIAL INVESTIGATION DIVISION

County	Plant No.	Sampling Station	Date Collected	Time	Iced	Type of Acid: Acid
		W2	[redacted]89			

Date & Time are Required for Valid Samples

Field Data: pH* | Chlorine Residual: Free, Total | Specific Conductance

✓	ANALYSIS	CODE	RESULTS	✓	ANALYSIS	CODE	RESULTS
✓	pH*	00403	7.2	✓	Arsenic	01002	<0.01
✓	Alkalinity (Total)	00410	51	✓	Barium	01007	<0.1
	pH*, Ca CO, SAT.	70311		✓	Cadmium	01027	<0.01
	Alkalinity, Ca CO, SAT.	74023		✓	Chromium	01034	<0.01
✓	Hardness	00900	63	✓	Lead	01051	<0.05
✓	Ammonia-N	00608	3.7	✓	Mercury	71900	<0.0005
✓	Nitrate-Nitrate N	00630	<0.2	✓	Selenium	01147	<0.01
✓	Nitrite N	00615	0.006		Silver	01077	
	MBAS	38260					
✓	Chloride	00940	34		Aluminum	01105	
	Fluoride	00951		✓	Calcium	00916	11.8
	Color*	00081		✓	Copper	01042	<0.05
✓	Turbidity*	00076	3.10	✓	Iron	01045	4.273
✓	Conductance*, SPEC	00095	217	✓	Magnesium	00927	1.84
✓	Sulfate	00945	28	✓	Manganese	01055	0.152
✓	Total Solids	00500	146		Nickel	01067	
	Dissolved Solids	70300		✓	Potassium	00937	1.8
				✓	Sodium	00929	15.3
				✓	Zinc	01092	0.007
				✓	C.O.D		<10

AR 300302

* Reported in units all others in milligrams per liter (mg/l)

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston St.
P.O. Box 2355, Baltimore, Maryland 21203
J. Mehsen Joseph, Ph.D., Director

WATER ANALYSIS

Lab No. Date Received:

C0021[illegible]

Do not write above this line.

Data Category Code:

Bottle Number: B-W-4 Name: Bush Valley Landfill County: Harford

Source of Sample: Well Collector: Bowden
Street Town or City (Include telephone Number)

Sample Types (Circle):	Drinking Water	Community (Public Treated)	Non-Community (Pub. Untreated)	Private	Other	Source (Raw Water)	Distribution (Treated)	Emergency	Routine	Recheck
	Landfill									
	Stream									
	Other									

RECEIVED
OCT 5 1989
WATER AND SPECIAL INVESTIGATION DIVISION

Remarks: HSWMA MDE

County	Plant No.	Sampling Station	Date Collected	Date & Time are Required for Valid Samples	Iced	Type of Acid: Acid
		MW	0 8 2 9 8 9			

Field Data: pH* | Chlorine Residual: Free | Total | Specific Conductance

✓	ANALYSIS	CODE	RESULTS	✓	ANALYSIS	CODE	RESULTS
✓	pH*	00403	7.6	✓	Arsenic	01002	<0.0
✓	Alkalinity (Total)	00410	104	✓	Barium	01007	<0.1
	pH*, Ca CO, SAT.	70311		✓	Cadmium	01027	<0.01
	Alkalinity, Ca CO, SAT.	74023		✓	Chromium	01034	<0.01
✓	Hardness	00900	53	✓	Lead	01051	<0.05
✓	Ammonia-N	00608	1.60	✓	Mercury	71900	<0.0005
✓	Nitrate-Nitrate N	00630	<0.2	✓	Selenium	01147	<0.01
✓	Nitrite N	00615	0.025		Silver	01077	
	MBAS	38260					
✓	Chloride	00940	20.		Aluminum	01105	
	Fluoride	00951		✓	Calcium	00916	13.7
	Color*	00081		✓	Copper	01042	<0.05
✓	Turbidity*	00076	52	✓	Iron	01045	1.52
✓	Conductance*, SPEC	00095	287	✓	Magnesium	00927	5.1
✓	Sulfate	00945	24	✓	Manganese	01055	0.68
✓	Total Solids	00500	94		Nickel	01067	
	Dissolved Solids	70300		✓	Potassium	00937	4.4
				✓	Sodium	00929	
				✓	Zinc	01092	<0.05
				✓	C.O.D		41C

AR300303

RCRA

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston Street
J. Mahoney Joseckis Ph.D., Director

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

NUMBER Biv-W-1 COLLECTOR Bowden Hanford Co County

SOURCE OF SAMPLE Brush Valley Landfill

(Include Address)

SAMPLE TYPE: Community ____ Noncommunity ____ Domestic ____ STP Station ____

Observation Well ✓ Stream ____ Tidal Waters ____ Industrial Effluent ____

Other (Specify) ____

Preservative Used 1+1 HCl

RECEIVED

IMPORTANT: First time sampled ____ Last known sampling date ____

Reason for submitting sample: Survey ____ Suspected Petroleum Contamination ____

Suspected Industrial Chemical Contamination ____ Other (Specify) ____

MAR 5 1990

CHAIN OF CUSTODY: From: ____ To: GROUNDWATER AND SPECIAL

From: ____ To: INVESTIGATION DIVISION

REMARKS: Split w/ MDE

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W 1	0 2 2 2 9 0	

20 21 22	23 24	25 26	Time
FIELD pH	FIELD RESID. CHLORINE: FREE	TOTAL	

Purgeable Halocarbons (EPA 601)

Chloromethane	<5
Bromomethane	<1
Dichlorodifluoromethane	
Vinyl chloride	
Chloroethane	
Methylene chloride	
Trichlorofluoromethane	
1,1-Dichloroethene	
1,1-Dichloroethane	
trans-1,2-Dichloroethene	
Chloroform	
1,2-Dichloroethane	
1,1,1-Trichloroethane	
Carbon Tetrachloride	
Bromodichloromethane	
1,2-Dichloropropane	
trans-1,3-Dichloropropene	<1
Trichloroethene	
Dibromochloromethane	
1,1,2-Trichloroethane	
cis-1,3-Dichloropropene	
2-Chloroethylvinylether	<10
Bromoform	<1
1,1,2,2-Tetrachloroethane	
Tetrachloroethene	
Chlorobenzene	
Total Trihalomethanes	

Other Purgeable Organics:

Other Purgeables

Benzene	<1
Toluene	
Ethylbenzene	
Total Xylenes	<2
Total Purgeable Hydrocarbons	
Tetrahydrofuran	
(2-Butanone MEK)	
Methylisobutylketone (MIBK)	
Acrolein	
Acrylonitrile	
Carbon Disulfide	
Vinyl Acetate	
Acetone	
2-Hexanone	
Styrene	
methyl-tert-butyl-ether	26

AR300304

Results reported in micrograms per (parts per million/billion)

DEC 10 1990

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston Street
J. Mahesh Joseph Ph.D., Director

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BV-W-2 COLLECTOR Bowden Hanford Co. County

SOURCE OF SAMPLE Bush Valley Landfill

(Include Address)

SAMPLE TYPE: Community ____ Noncommunity ____ Domestic ____ STP Station ____
Observation Well ✓ Stream ____ Tidal Waters ____ Industrial Effluent ____
Other (Specify) ____
Preservative Used 1↓1 HCl

IMPORTANT: First time sampled ____ Last known sampling date ____
Reason for submitting sample: Survey ____ Suspected Petroleum Contamination ____
Suspected Industrial Chemical Contamination ____ Other (Specify) ____

CHAIN OF CUSTODY: From: ____ To: ____
From: ____ To: ____

REMARKS: HSWMA MDE

RECEIVED
MAR 5 1990
GROUNDWATER AND SPECIAL INVESTIGATION DIVISION

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W2	02 22 90	

20 21 22	23 24	25 26	
FIELD pH	FIELD RESID. CHLORINE: FREE	TOTAL	Time

Purgeable Halocarbons (EPA 601)

Chloromethane	<5	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane	<1	Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chonde		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether	<10	Tetrahydrofuran	N.D.
Trichlorofluoromethane		Bromoform	<1	(2-Butanone MEK)	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		Methylisobutylketone (MIBK)	
1,1-Dichloroethane		Tetrachloroethene		Acrolein	
trans-1,2-Dichloroethene		Chlorobenzene		Acrylonitrile	
Chloroform	<1	Total Trihalomethanes		Carbon Disulfide	
1,2-Dichloroethane	2	**Other Purgeable Organics:**		Vinyl Acetate	
1,1,1-Trichloroethane	<1			Acetone	
Carbon Tetrachlonde				2-Hexanone	
Bromodichloromethane				Styrene	
1,2-Dichloropropane					

AR300305

FEB 22 1990

Results reported in micrograms per liter (parts per billion)

CHECKLIST H. Cornick LAB NO.

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston Street
J. Mehesen Joseph, Ph.D., Director

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BV-W-4 COLLECTOR Bowden Hanford Co County

SOURCE OF SAMPLE Buck Valley Landfill

(Include Address)

SAMPLE TYPE: Community ____ Noncommunity ____ Domestic ____ STP Station ____
Observation Well ✓ Stream ____ Tidal Waters ____ Industrial Effluent ____
Other (Specify) ____
Preservative Used 1+1 HCl

RECEIVED
MAR 5 1990
GROUNDWATER AND SPECIAL INVESTIGATION DIVISION

IMPORTANT: First time sampled ____ Last known sampling date ____
Reason for submitting sample: Survey ____ Suspected Petroleum Contamination ____
Suspected Industrial Chemical Contamination ____ Other (Specify) ____

CHAIN OF CUSTODY: From: ____ To: ____
From: ____ To: ____

REMARKS: HSWMA MDE

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			W4	0 2 2 2 9 0	

FIELD pH (20 21 22) ____ FIELD RESID. CHLORINE: FREE (23 24) ____ TOTAL (25 26) ____ Time ____

Purgeable Halocarbons (EPA 624)				Other Purgeables	
Chloromethane	<5	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane	<1	Trichloroethene	<1	Toluene	5
Dichlorodifluoromethane		Dibromochloromethane	4	Ethylbenzene	<1
Vinyl chloride		1,1,2-Trichloroethane	<1	Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene	<1	Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether	<10	Tetrahydrofuran	
Trichlorofluoromethane		Bromoform	<1	(2-Butanone MEK)	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		Methylisobutylketone (MIBK)	
1,1-Dichloroethane		Tetrachloroethene		Acrolein	
trans-1,2-Dichloroethene		Chlorobenzene	↓	Acrylonitrile	
Chloroform	↓	Total Trihalomethanes		Carbon Disulfide	
1,2-Dichloroethane		Other Purgeable Organics:		Vinyl Acetate	
1,1,1-Trichloroethane				Acetone	
Carbon Tetrachloride	<1			2-Hexanone	
Bromodichloromethane				Styrene	
1,2-Dichloropropane	↓				
				methyl-tert-butyl ether	5

AR300306

Results reported in micrograms per liter (parts per million/billion)

RESIDENTIAL WELL SAMPLES

PAULA FLEET

BUSH RD 1

P 104

VOA's	8-14-87 existing	6-11-87	7-1-87	7-14-87	7-29-87 raw	8-10-87 raw	8-18-87 treated	9-14-87 raw	12-17-87 raw	9-21-88 raw		
DICHLOROFLUORO METHANE estim.			3	4	3							
DICHLORODIFLUOROMETHANE	4	3	7	4	12	14	1	16	3			
METHYLENE CHLORIDE		1	1	1	L.T.1			18				
1,1 DICHLOROETHANE		1	L.T.1	L.T.1	L.T.1							
CHLOROFORM		1	L.T.1	L.T.1	L.T.1							
1,1,2,2-TETRA CHLOROETHANE						1						
TETRAHYDROFURAN (THF)		60	34		17		30	17				
12-BUTANONE (MEK)		6					7					
TRICHLOROFLUOROMETHANE		L.T.1	1	L.T.1	L.T.1							
VINYL CHLORIDE					1							
TETRACHLOROETHENE		2	2	2	2	2				1		
Toluene							2					

(L.T. equals less than)

Blank indicates non-detected

AR300308

Harry Sodker 37041 Sewell Rd.
Abingdon, MD 21009

VOA's	5-2-89
DICHLOROFLUORO METHANE	
DICHLORO DIFLUOROMETHANE	
METHYLENE CHLORIDE	
1,1 DICHLOROETHANE	
CHLOROFORM	
1,1,2,2-TETRA CHLOROETHANE	
TETRAHYDROFURAN (THF)	
12-BUTANONE (MEK)	
TRICHLOROFLUORO METHANE	
VINYL CHLORIDE	

Blank indicates non-detected

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HA-WW-97

HARFORD (Name of County)

SOURCE OF SAMPLE 1312 Bush Rd COLLECTOR Whitlock

SAMPLE TYPE: Grab DISTRIBUTION _____ SOURCE well OTHER _____ (specify)

Community _____ noncommunity _____ private ✓

Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with ~~thiosulfate~~ 1+1 HCl

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) Bush Valley L.F. offsite

REMARKS: Paula Fleet 6 of Vessels #2 Outside Fence
Aberdeen 21009 Well P# HA-81-3074

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY 12	PLANT NO	SAMPLING STATION	DATE COLLECTED 092188	CARD NO

FIELD pH _____ FIELD RESID CHLORINE FREE _____ TOTAL _____

8240

Purgeable Halocarbons (EPA 8240)				Purgeable Aromatics (EPA 8240)	
Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane		Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	N.D
Trichlorofluoromethane		Bromoform		Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene	<1		
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics:	N.D.		
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

AR300310

SEP 22 1988

Results reported in micrograms per liter (parts per billion)

DEPART[illegible]ENT OF HEALTH AND MENTAL [illegible]IENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

[illegible] NUMBER HA-WW-96

HARFORD
Name of County

SOURCE OF SAMPLE 1310 Bush Rd COLLECTOR Whitted

SAMPLE TYPE: Grab DISTRIBUTION _____ SOURCE Well OTHER _____ (specify)

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate 1+1 HCl

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) Bush Valley L.F. offsite outside fence

REMARKS: Linda Milton (Well Pro. #
Abingdon 21009 L. of Versailles #1 HA-81-2405)

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY 12	PLANT NO	SAMPLING STATION	DATE COLLECTED 092188	CARD NO

20 21 22	23 24	25 26
FIELD pH	FIELD RESID CHLORINE FREE	TOTAL

8240

Purgeable Halocarbons (EPA 8240)

Chloromethane	<1	trans 1,3-Dichloropropene	<1
Bromomethane		Trichloroethene	
Dichlorodifluoromethane		Dibromochloromethane	
Vinyl chloride		1,1,2-Trichloroethane	
Chloroethane		cis-1,3-Dichloropropene	
Methylene chloride		2-Chloroethylvinylether	
Trichlorofluoromethane		Bromoform	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane	
1,1-Dichloroethane		Tetrachloroethene	
trans-1,2-Dichloroethene		Chlorobenzene	
Chloroform		Total Trihalomethanes	
1,2-Dichloroethane		Other Purgeable Organics: N.D.	
1,1,1-Trichloroethane			
Carbon Tetrachloride			
Bromodichloromethane			
1,2-Dichloropropane			

8240

Purgeable Aromatics (EPA 8240)

Benzene	<1
Toluene	
Ethylbenzene	
Total Xylenes	<2
Total Purgeable Hydrocarbons	
Tetrahydrofuran	N.D.
Methylethylketone	
(2-Butanone) (MEK)	
Methylisobutylketone (MIBK)	

AR300311

Results reported in micrograms per liter (parts per billion)

DATE RECEIVED SEP 22 1988 DATE REPORTED OCT 10 1988 CHEMIST D. Cormier LAB. NO. _____

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HA-WW-98

HARFORD
Name of County

SOURCE OF SAMPLE 1230 Bush Rd COLLECTOR Whitlock

SAMPLE TYPE: Grab DISTRIBUTION _____ SOURCE well OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with ~~thiosulfate~~ 1+1 HCl

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) Bush Valley L.F. offsite

REMARKS: Sam Washington
Abingdon 21009

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY 12	PLANT NO	SAMPLING STATION	DATE COLLECTED 092/18	CARD NO

20 21 22	23 24	25 26
FIELD pH	FIELD RESID CHLORINE FREE	TOTAL

Purgeable Halocarbons (EPA 601)

Chloromethane	<5	trans 1,3-Dichloropropene	<1
Bromomethane	<1	Trichloroethene	↓
Dichlorodifluoromethane	↓	Dibromochloromethane	↓
Vinyl chloride	↓	1,1,2-Trichloroethane	↓
Chloroethane	↓	cis 1,3-Dichloropropene	↓
Methylene chloride	↓	2-Chloroethylvinylether	<10
Trichlorofluoromethane	↓	Bromoform	<1
1,1-Dichloroethene	↓	1,1,2,2 Tetrachloroethane	↓
1,1-Dichloroethane	↓	Tetrachloroethene	↓
trans 1,2 Dichloroethene	↓	Chlorobenzene	↓
Chloroform	↓	Total Trihalomethanes	↓
1,2-Dichloroethane	↓		
1,1,1 Trichloroethane	↓		
Carbon Tetrachloride	↓		
Bromodichloromethane	↓		
1,2-Dichloropropane	V		

Purgeable Aromatics (EPA 602)

Benzene	<1
Toluene	↓
Ethylbenzene	↓
Total Xylenes	<2
Total Purgeable Hydrocarbons	↓
Tetrahydrofuran	N.D.
Methylethylketone	↓
(2-Butanone) (MEK)	↓
Methylisobutylketone (MIBK)	↓

Other Purgeable Organics: N.D.

AR300312

Results reported in micrograms per liter (parts per billion)

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HE-FK-039

ENFIELD
Name of County

SOURCE OF SAMPLE 1830 Bush Rd COLLECTOR Whitrock

SAMPLE TYPE: Grab DISTRIBUTION ✓ SOURCE well OTHER (specify)

Community ____ noncommunity ____ private ✓

Landfill observation well ✓ stream ____ tidal waters ____

Industrial effluent ____ STP sampling station ____ STP effluent ____

Chlorinated ____ preserved with thiosulfate 1+1 HCl

RECEIVED
JAN 4 1988
ENFORCEMENT FILE
FILE COPY ONLY

Reason for submitting sample: Trihalomethane Survey ____

Suspected Industrial Chemical Contamination ____

Suspected Petroleum (gasoline, etc.) Contamination ____

Other (specify) Off-site Landfill monitoring - Bush Valley L.F.

REMARKS: Sam Washington
Edgewood 21009

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY 12	PLANT NO	SAMPLING STATION	DATE COLLECTED 12 17 87	CARD NO.

FIELD pH (20 21 22) FIELD RESID. CHLORINE: FREE (23 24) TOTAL (25 26)

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<5	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane	<1	Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether	<10	Tetrahydrofuran	N.D.
Trichlorofluoromethane		Bromoform	<1	Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene			
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics: N.D.			
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane	V				

AR300313

Results reported in micrograms per liter (parts per billion)

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HC-PA-034

Name of County

SOURCE OF SAMPLE 1310 Bush Rd COLLECTOR [illegible]

SAMPLE TYPE: Grab DISTRIBUTION ✓ SOURCE well OTHER (specify)

Community ____ noncommunity ____ private ✓

Landfill observation well ✓ stream ____ tidal waters ____

Industrial effluent ____ STP sampling station ____ STP effluent ____

Chlorinated ____ preserved with thiosulfate 1+1 HCl

Outside faucet

Reason for submitting sample: Trihalomethane Survey ____

Suspected Industrial Chemical Contamination ____

Suspected Petroleum (gasoline, etc.) Contamination ____

Other (specify) Off-site landfill monitoring - Bush Valley

REMARKS: Linda Milton 2 of Vessels #1

Abingdon 21009 12/28/87

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	CARD NO
	12			12/17/87	

20 21 22	23 24	25 26
FIELD pH	FIELD RESID. CHLORINE: FREE	TOTAL

624

Purgeable Halocarbons (EPA 624)				Purgeable Aromatics (EPA 624)	
Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane	<1	Trichloroethene		Toluene	
Dichlorodifluoromethane	2	Dibromochloromethane		Ethylbenzene	
Vinyl chloride	<1	1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	N.D.
Trichlorofluoromethane		Bromoform		Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene			
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics: N.D.			
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

AR300314

Results reported in micrograms per liter (parts per billion)

DATE RECEIVED DEC 1 9 1987 DATE REPORTED JAN 19 1988 CHEMIST [illegible] LAB. NO. [illegible]

2M

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER 112-TH-03

Hartford
Name of County

SOURCE OF SAMPLE 131 Blue Rd COLLECTOR [illegible]

SAMPLE TYPE: Grab DISTRIBUTION [illegible] SOURCE well OTHER (specify) [illegible]

Community [illegible] noncommunity [illegible] private ✓

Site Landfill observation well ✓ stream [illegible] tidal waters [illegible]

Industrial effluent [illegible] STP sampling station [illegible] STP effluent [illegible]

Chlorinated [illegible] preserved with thiosulfate 1+1 HCl

Reason for submitting sample: Trihalomethane Survey [illegible]

Outside Faucet "Raw"

Suspected Industrial Chemical Contamination [illegible]

Suspected Petroleum (gasoline, etc.) Contamination [illegible]

Other (specify) Off-site Landfill monitoring - Blue Hill Rd L.F.

REMARKS: Paula Fleet 1 of Vessels = 2

Elevation 210' 12/27/86

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	CARD NO
	12			121787	

20 21 22		23 24		25 26
FIELD pH	FIELD RESID. CHLORINE: FREE 6.24		TOTAL	

Purgeable Halocarbons (EPA 601)

Chloromethane	< 1	trans-1,3-Dichloropropene	< 1	Benzene	< 1
Bromomethane	< 1	Trichloroethene		Toluene	
Dichlorodifluoromethane	3	Dibromochloromethane		Ethylbenzene	✓
Vinyl chloride	< 1	1,1,2-Trichloroethane		Total Xylenes	< 2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	N.D
Trichlorofluoromethane		Bromoform		Methylethylketone	
1,1-Dichloroethene		1,1,2,2 Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene	✓		
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics: N.D			
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane	✓				

AR300315

Results reported in micrograms per liter (parts per billion)

HARFORD COUNTY HEALTH DEPARTMENT

119 South Hays Street P.O. Box 191 Bel Air, Maryland 21014-0191

Telephone 879-8322/838-1500 ext. 246

Thomas M. Thomas
Health Officer
Beverly Stump, M.D., MPH
Deputy Health Officer

January 5, 1988

Mr. Sam Washington
1230 Bush Road
Abingdon, Maryland 21009

re: Sample collected 12/17/87

Dear Mr. Washington:

Analysis indicates that all compounds are less than our laboratory's levels of detection. If you have any questions, please don't hesitate to contact me.

Sincerely,

Willis W. Whitlock, Jr., M.P.H., R.S.
Supervising Sanitarian
Air Pollution/Solid Waste

WWW/br

AR300316

HARFORD COUNTY HEALTH DEPARTMENT

119 South Hays Street P.O. Box 191 Bel Air, Maryland 21014-0191

Telephone 879-8322/838-1500 ext. 252

Thomas M. Thomas
Health Officer
Beverly Stump, M.D., MPH
County Health Officer

June 26, 1987

Ms. Paula Fleet
1312 Busn Road
Abingdon, Maryland 21009

re: Volatile Hydrocarbon
Water Samples
Land of Vessels, lot #2
Use and Occupancy Permit
B.P. #2064-87

Dear Ms. Fleet,

According to Mr. Wade Whitlock, Supervisor of the Solid Waste Division, the referenced water sample results indicate probable contamination by Bush Valley Landfill leachates. Although the levels are low as of June 11, 1987 this department feels that these levels only indicate the beginning of what can become a more serious problem with the groundwater. I have listed the contaminants, the levels found, and the recommended limits, if any are available: (note ppb - parts per billion)

Dichlorodifluoromethane - 3 ppb - cancer risk 10^{-5} at 1.9 ppb

Dichlorofluoromethane - observed - no limit set

Methylene chloride - 1 ppb - cancer risk 10^{-5} at 1.9 ppb

1,1 dichlorethane - 1 ppb - no limit set

Chloroform - 1 ppb - EPA level set at .10 ppb
Cancer risk 10^{-5} at 1.9 ppb

Tetrachloroethane - 2 ppb - limits unavailable

Additionally, tetrahydrofuran and methylethylketone (MEK or 2-butanone) were found in your water sample. These levels are as follows:

Tetrahydrofuran - 60 ppb - EPA suggested limit 3,100 ppb

(2-butatone) (MEK) - 6 ppb - limits unavailable

Ms. Paula Fleet
1312 Bush Road
Abingdon, Maryland 21009

re: Volatile Hydrocarbon
Water Samples
B.P. 2064-87

Most likely these chemicals are evident because of the cement used in sealing your plastic well casing. Mr. Whitlock recommends that you flush the plumbing and run the well off thoroughly. Eventually the levels will drop as the cement cures.

In summary, Mr. Whitlock has recommended that your Use and Occupancy Permit not be released from this department because of the potential health hazard involving the groundwater and your water supply. Also it is recommended that you pursue the possibilities either treatment equipment, or of connecting to public water as soon as possible. You can contact the Department of Public Works (Ken Etchison) at 838-6000 for that information.

Should you wish to discuss this matter further please contact Mr. Whitlock or me at 838-1500.

Sincerely,

Woody Williams

Woody Williams, R.S.
Supervising Sanitarian
Community Health Protection

WW/br

cc: T. Thomas
G. Miller
J. Lamb
W. Whitlock
J. Handshoe
J. Palmer
D.I.L.P.
Solid Waste Mgmt.

879-8322/836-1500 ext. 246

December 7, 1987

Mrs. Paula Fleet
1312 Bush Road
Abingdon, Maryland 21009

Dear Mrs. Fleet,

I would like to obtain a sample of your well water in the morning of Thursday, December 17th if it is possible. If this is not convenient, please contact me as soon as possible to arrange an alternate date.

If you cannot be home, I can take the sample from an outside faucet. Please let me know if one is to be used, and where it is located.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Willis W. Whitlock, Jr., M.P.H., R.S.
Supervising Sanitarian
Air Pollution/Solid Waste

WWW/br

1987

879-8322/838-1500 Ext. 246

July 22, 1987

Mrs. Paula Fleet
2007 McKean Avenue
Baltimore, Maryland 21217

Re: Land of Vessells, Lot #2
Water Monitoring

Dear Mrs. Fleet:

I am writing to provide you with the results of the analyses that have been done on the three samples this Department has taken from the referenced water supply. Since our previous letter provided the standards, I will limit this letter to the results, to date:

	June 11, 1987	July 1, 1987	July 14, 1987
Trichlorofluoromethane	Less Than 1.	1.	L.T. 1
Dichlorofluoromethane	Observed	3 (estimated)	4 est.
Dichlorodifluoromethane	3.	7	4
Methylene Chloride	1	1.	1
1,1-Dichloroethane	1	L.T. 1	L.T. 1
Chloroform	1	L.T. 1	L.T. 1
Tetrachloroethene	2	2	2
Tetrahydrofuran	60	34	Not Detected
Methylethylketone	6	N.D.	N.D.

All results are in micrograms per liter or parts per billion.

As you can see, each compound can vary or remain constant independently of others. I am scheduling re-sampling approximately the third of August.

If you have any questions, or if I can be of any assistance in solving this problem, do not hesitate to contact me.

Sincerely,

WILLIS W. WHITLOCK, JR., M.P.H., R.S.
Supervising Sanitarian
Air Pollution/Solid Waste

AR300320

WWW/mc

cc. Alan Cawn, Esq. Law Dept

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER [illegible]

[illegible] Name of County

SOURCE OF SAMPLE 1310 Bush Rd. COLLECTOR [illegible]

SAMPLE TYPE: [illegible] DISTRIBUTION ✓ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate ✓

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

BUSH VALLEY LANDFILL OFF-SITE

REMARKS: [illegible]

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	CARD NO
	[illegible]			09 24 87	

20 21 22	23 24	25 26
FIELD pH	FIELD RESID. CHLORINE: FREE	TOTAL

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	< 5	trans 1,3-Dichloropropene	< 1	Benzene	< 1
Bromomethane	< 1	Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	✓
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	< 2
Chloroethane		cis-1,3-Dichloropropene	✓	Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether	< 10	Tetrahydrofuran	1148
Trichlorofluoromethane		Bromoform	< 1	Methylethylketone (2-Butanone) (MEK)	154
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		Methylisobutylketone (MIBK)	N.D.
1,1-Dichloroethane		Tetrachloroethene			
trans-1,2-Dichloroethene	✓	Chlorobenzene	✓		
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane	< 1	Other Purgeable Organics N.D			
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2 Dichloropropane	✓				

AR300321

Results reported in micrograms per liter (parts per billion) Well

879-8322/838-1500 ext. 246

October 28, 1987

Mrs. Paula Fleet
2007 McKean Avenue
Baltimore, Maryland 21217

re: 1312 Bush Road

Dear Mrs. Fleet,

Analysis of the September 24, 1987 sample, (we just received the report), indicated the following.

Dichlorodifluoromethane	-	16. parts per billion
Methylene Chloride	-	18. " " "
Tetrahydrofuran	-	17. " " "

Earlier letters have provided the standards and nothing new has shown up. This sample was taken from the outside rear faucet.

I would like to re-sample in mid December, and check your interior treatment system as well. Please contact me to set up a mutually convenient date and time.

If you have any questions at all, please do not hesitate to contact me.

Sincerely,

Willis W. Whitlock, Jr., M.P.H.,R.S.
Supervising Sanitarian
Air Pollution/Solid Waste

WWW/br

encl.

bind copie: Alan Cason, Esq. Co. Law

AR300322

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER [illegible]

[illegible] Name of County

SOURCE OF SAMPLE 13/2 [illegible] COLLECTOR [illegible]

SAMPLE TYPE: [illegible] DISTRIBUTION ✓ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with ~~thiosulfate~~ HCl ✓

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, inc.) Contamination _____

Other (specify) _____

BUSH VALLEY LANDFILL OFF-SITE

REMARKS: [illegible]

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	CARD NO
	[illegible]			3 9 2 H 8 7	[illegible]

FIELD pH [20 21 22] FIELD RESID CHLORINE, FREE [23 24] TOTAL [25 26]

1009 GW 58

Purgeable Halocarbons (EPA 601/624)				Purgeable Aromatics (EPA 602/624)	
Chloromethane	<1.	trans 1,3-Dichloropropene	<1.	Benzene	<1.
Bromomethane	<1	Trichloroethene		Toluene	
Dichlorodifluoromethane	16.	Dibromochloromethane		Ethylbenzene	
Vinyl chloride	<1.	1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane	<1.	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	18.	2-Chloroethylvinylether		Tetrahydrofuran	17.
Trichlorofluoromethane	<1	Bromoform		Methylethylketone	N.D
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1 Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene			
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics:	N.D		
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

AR300323

Results reported in micrograms per liter (parts per billion) (ppb)

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER _____ Name of County _____

SOURCE OF SAMPLE 1230 Bush Rd COLLECTOR _____

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate ✓

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

BUSH VALLEY LANDFILL OFF-SITE

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 – 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	CARD NO.
	1 5			0 9 2 4 8 7	

20 21 22		23 24		25 26
FIELD pH	FIELD RESID CHLORINE: FREE		TOTAL	

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	< 5	trans-1,3-Dichloropropene	< 1	Benzene	< 1
Bromomethane	< 1	Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	↓
Vinyl chloride		1,1,2 Trichloroethane		Total Xylenes	< 2
Chloroethane		cis-1,3-Dichloropropene	↓	Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether	< 10	Tetrahydrofuran	N.D
Trichlorofluoromethane		Bromoform	< 1	Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene	↓		
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics: N D			
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane	↓				

AR300324

Results reported in micrograms per liter (parts per billion)

DATE RECEIVED _____ DATE REPORTED Oct 16 19__ CHEMIST _____ LAB NO _____

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HP Nov-32

HARFORD
Name of County

SOURCE OF SAMPLE 1312 Bush Rd. COLLECTOR G. Whitlock

SAMPLE TYPE: _____ DISTRIBUTION ✓ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Offsite Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: Paula Fleet 671-5620 C. of Vessels #2
2007 McKean Rd. Balto 21207

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	CARD NO
	12			08 18 87	

20 21 22	23 24	25 26
FIELD pH	FIELD RESID CHLORINE: FREE	TOTAL

0820K0752

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<5	trans 1,3-Dichloropropene	<1	Benzene	<1.
Bromomethane	<1.	Trichloroethene		Toluene	
Dichlorodifluoromethane	14.	Dibromochloromethane		Ethylbenzene	
Vinyl chloride	<1	1,1,2-Trichloroethane		Total Xylenes	<2.
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether	<10.	Tetrahydrofuran	N.D
Trichlorofluoromethane		Bromoform	<1.	Methylethylketone	
1,1-Dichloroethene		1,1,2,2 Tetrachloroethane	1.	(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene	2.	Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene	<1.		
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics: N.D.			
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

AR300325

Results reported in micrograms per liter (parts per billion) ug/l

Triplett Kitchen
Water

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HA-WW-29

HARFORD
Name of County

SOURCE OF SAMPLE 1312 Bush Rd. COLLECTOR Whitlock

SAMPLE TYPE: ✓ DISTRIBUTION _____ SOURCE _____ OTHER _____ (specify)

Community _____ noncommunity _____ private ✓

Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

Bush Valley - off site monitoring

REMARKS Paula Fleet 679 9620 L. of Vassells #2
2007 McKean Ave Balto 21217

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY 12	PLANT NO	SAMPLING STATION	DATE COLLECTED 01 18 87	CARD NO.

FIELD pH 20 21 22 FIELD RESID CHLORINE FREE 23 24 TOTAL 25 26

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<1	trans 1,3 Dichloropropene	<1	Benzene	<1
Bromomethane		Trichloroethene		Toluene	2
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	<1
Vinyl chloride		1,1,2 Trichloroethane		Total Xylenes	<2
Chloroethane		cis 1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2 Chloroethylvinylether		Tetrahydrofuran	30
Trichlorofluoromethane		Bromoform		Methylethylketone (2 Butanone) (MEK)	7
1,1 Dichloroethene		1,1,2,2 Tetrachloroethane		Methylisobutylketone (MIBK)	ND
1,1 Dichloroethane		Tetrachloroethene			
trans 1,2 Dichloroethene		Chlorobenzene	✓		
Chloroform		Total Trihalomethanes			
1,2 Dichloroethane		Other Purgeable Organics: ND			
1,1,1 Trichloroethane				AR300326	
Carbon Tetrachloride					
Bromodichloromethane					
1,2 Dichloropropane	✓				

Results reported in micrograms per liter (parts per billion)

1 0 1987 DATE REPORTED 2 6 19 CHEMIST

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HA-LL-123

Harford
Name of County

SOURCE OF SAMPLE 1310 Rt 1 Ld. COLLECTOR L. Wilson

SAMPLE TYPE: Grab DISTRIBUTION ✓ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with ~~thiosulfate~~ HCl ✓

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: Land of Vessels ≈ 1 mi (Rt 1) Mile

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY: 12	PLANT NO	SAMPLING STATION	DATE COLLECTED: 072987	CARD NO

0803 K0441

20 21 22	23 24	25 26
FIELD pH	FIELD RESID. CHLORINE: FREE	TOTAL

Purgeable Halocarbons (EPA 601) 624

Chloromethane	<1.	trans-1,3-Dichloropropene	<1.	Benzene	<1.
Bromomethane	<1.	Trichloroethene		Toluene	
Dichlorodifluoromethane	3.	Dibromochloromethane		Ethylbenzene	
Vinyl chloride	<1.	1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	36
Trichlorofluoromethane		Bromoform		Methylethylketone	N.D
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene			
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics: N.D.		AR300327	
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

Results reported in micrograms per liter (parts per billion) 1/

Letter sent 8/11/87 SV

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER Hf-LW1-821

Harford
Name of County

SOURCE OF SAMPLE 1220 Fuel Co COLLECTOR Webber

SAMPLE TYPE: Grab DISTRIBUTION ✓ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with ~~thiosulfate~~ 1+1 HCl ✓

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: BUSH VALLEY LANDFILL RESIDENTIAL SAMPLE - Washington

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY: 12	PLANT NO	SAMPLING STATION	DATE COLLECTED: 07 24 87	CARD NO.

20 21 22	23 24	25 26
FIELD pH	FIELD RESID. CHLORINE: FREE	TOTAL

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<5.	trans-1,3-Dichloropropene	<1.	Benzene	<1.
Bromomethane	<1.	Trichloroethene		Toluene	✓
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	✓
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene	✓	Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether	<10.	Tetrahydrofuran	N.D.
Trichlorofluoromethane		Bromoform	<1.	Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	✓
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene	✓		
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics: N.D.			
1,1,1-Trichloroethane				AR300328	
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane	✓				

Results reported in micrograms per liter (parts per billion)

DATE RECEIVED: AUG 3 1987 DATE REPORTED: AUG 5 1987 CHEMIST: [signature] LAB NO.

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HA-LL-82-2

Harford
Name of County

SOURCE OF SAMPLE 1312 Bush Rd COLLECTOR Wilson

SAMPLE TYPE: Grab DISTRIBUTION ✓ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate (1+1 HCl) ✓

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: BUSH VALLEY LANDFILL RESIDENTIAL SAMPLE - Fleet Corp of Harford #2 (Rear)

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	CARD NO
	12			070979	

FIELD pH (20 21 22) _____ FIELD RESID. CHLORINE: FREE (23 24) _____ TOTAL (25 26) _____ 0803 10AM

Purgeable Halocarbons (EPA 601/624)

Chloromethane	<1.	trans-1,3-Dichloropropene	<1.	Benzene	<1
Bromomethane	<1	Trichloroethene		Toluene	
Dichlorodifluoromethane	12.	Dibromochloromethane		Ethylbenzene	
Vinyl chloride	1.	1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane	<1.	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	17.
Trichlorofluoromethane		Bromoform		Methylethylketone	ND.
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene	2.	Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene	<1.		
Chloroform		Total Trihalomethanes			
,2-Dichloroethane		**Other Purgeable Organics:**			
1,1,1-Trichloroethane		DICHLORODIFLUOROMETHANE 3. (ESTIMATED)			
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

AR300329

... micrograms per liter (parts per billion) ug/l

879-8322/838-1500 ext. 246

August 11, 1987

Mrs. Linda Milton
1310 Bush Road
Abingdon, Maryland 21009

re: Sample taken 7/29/87

Dear Mrs. Milton:

Please find enclosed a copy of the lab report for the referenced sample. I have summarized the results below. Please note that all results are in parts per billion.

Dichlorodifluoromethane	- 3.
Tetrahydrofuran	- 36.

If you have any questions at all, please do not hesitate to contact me.

Sincerely,

Willis W. Whitlock, Jr., M.P.H., R.S.
Supervising Sanitarian
Air Pollution/Solid Waste

WWW/br

encl.

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HAV-71 / HAV-72

Hot Coral
Name of County

SOURCE OF SAMPLE 1312 Bush Rd COLLECTOR Leary

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE well OTHER _____ (specify)

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) Next to Land Fill / history of contamination

REMARKS: Paula Fleet / 1312 Bush Rd / Abing
Ld of Vessell #2 / 81-3024 / 2064-87

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	CARD NO
	12			071487	

20 21 22		23 24		25 26
FIELD pH	FIELD RESID. CHLORINE: FREE		TOTAL	

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<5	trans-1,3-Dichloropropene	<1.	Benzene	<1.
Bromomethane	<1.	Trichloroethene		Toluene	
Dichlorodifluoromethane	4.	Dibromochloromethane		Ethylbenzene	
Vinyl chloride	<1.	1,1,2-Trichloroethane		Total Xylenes	<2.
Chloroethane	<1.	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	1.	2-Chloroethylvinylether	<10.	Tetrahydrofuran	N.D.
Trichlorofluoromethane	<1.	Bromoform	<1.	Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane	<1.	(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene	2	Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene	<1.		
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		**Other Purgeable Organics:**			
1,1,1-Trichloroethane		OBSERVED: DICHLOROFLUOROMETHANE 4. (ESTIMATED)			
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

AR300331

879-8322/838-1500 ext. 246

August 11, 1987

Mrs. Paula Fleet
2007 McKean Avenue
Baltimore, Maryland 21217

re: sample taken 7/29/87 at
1312 Bush Road

Dear Mrs. Fleet:

Please find a copy of the lab report for the referenced sample enclosed. Comparison with the previous sample reports will show that there is variation occurring in the Dichlorodifluoromethane and Tetrahydrofuran. The only "new" compound is Vinylchloride.

The 1985 E.P.A. Recommended Maximum Contaminant Level is 1 microgram per liter or parts per billion. This compound is listed as a human positive carcinogen. If you have any questions at all, please do not hesitate to contact me.

Sincerely,

W. W. Whitlock, Jr., M.P.H., R.S.
Supervising Sanitarian
Air Pollution/Solid Waste

WWW/br

encl.

AR300332

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HA-111-C01

Harford
Name of County

SOURCE OF SAMPLE 1310 Bush Rd. COLLECTOR Weldon

SAMPLE TYPE: Grab DISTRIBUTION ✓ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with ~~thiosulfate~~ 1+1 HCl ✓

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

RECEIVED
JUL 13 1987
ENFORCEMENT FILE
FILE COPY ONLY

REMARKS: BUSH VALLEY LANDFILL RESIDENT SAMPLE
Linda [illegible] Ln. [illegible] Abingdon, Md.

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY: 12	PLANT NO	SAMPLING STATION	DATE COLLECTED: 070287	CARD NO

FIELD pH (20 21 22) _____ FIELD RESID. CHLORINE: FREE (23 24) _____ TOTAL (25 26) _____

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<5	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane	<1	Trichloroethene		Toluene	
Dichlorodifluoromethane	2	Dibromochloromethane		Ethylbenzene	
Vinyl chloride	<1	1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether	<10	Tetrahydrofuran	17
Trichlorofluoromethane		Bromoform	<1	Methylethylketone	N.D.
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene			
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics: N.D.			
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

AR300333

Bob Dean

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HA-LW-002

Harford
Name of County

SOURCE OF SAMPLE 1312 Bush Rd. COLLECTOR L. Schlee

SAMPLE TYPE: Grel DISTRIBUTION ✓ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with ~~thiosulfate~~ ✓

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

RECEIVED
JUL 10 1987

REMARKS: BUSH VALLEY LANDFILL RESIDENT SAMPLE
Level of Vernon Lot #2 on Ms. Paula Fleet

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY: 1 2	PLANT NO	SAMPLING STATION	DATE COLLECTED: 0 7 0 1 8 7	CARD NO.

FIELD pH (20 21 22) _____ FIELD RESID. CHLORINE: FREE (23 24) _____ TOTAL (25 26) _____

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<5	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane	<1	Trichloroethene		Toluene	
Dichlorodifluoromethane	7	Dibromochloromethane		Ethylbenzene	
Vinyl chloride	<1	1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane	<10	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	10	2-Chloroethylvinylether	<10	Tetrahydrofuran	34
Trichlorofluoromethane	10	Bromoform	<1	Methylethylketone	N.D.
1,1-Dichloroethene	<1	1,1,2,2-Tetrachloroethane	<1	(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene	2	Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene	<1		
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		**Other Purgeable Organics:**			
1,1,1-Trichloroethane		Dichlorofluoromethane = 3 (est)			
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

Results reported in micrograms per liter (parts per billion)

DATE RECEIVED JUL 2 1987 DATE REPORTED JUL 8 1987 CHEMIST [illegible] LAB. NO. [illegible]

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HA-WW-27

Harford
Name of County

SOURCE OF SAMPLE 1230 Bush Rd. COLLECTOR Whitlock

SAMPLE TYPE: Grab DISTRIBUTION ✓ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with 1+1 HCl ✓

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: BUSH VALLEY LANDFILL RESIDENTIAL SAMPLE
Sam Washington Abingdon 21009

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY: 12	PLANT NO.	SAMPLING STATION	DATE COLLECTED: 051987	CARD NO.

FIELD pH (20 21 22) FIELD RESID. CHLORINE: FREE (23 24) TOTAL (25 26)

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<5.	trans-1,3-Dichloropropene	<1.	Benzene	<1.
Bromomethane	<1.	Trichloroethene		Toluene	↓
Dichlorodifluoromethane	↓	Dibromochloromethane	↓	Ethylbenzene	↓
Vinyl chloride	↓	1,1,2-Trichloroethane	↓	Total Xylenes	<2.
Chloroethane	↓	cis-1,3-Dichloropropene	↓	Total Purgeable Hydrocarbons	↓
Methylene chloride	↓	2-Chloroethylvinylether	<10.	Tetrahydrofuran	N.D.
Trichlorofluoromethane	↓	Bromoform	<1.	Methylethylketone	↓
1,1-Dichloroethene	↓	1,1,2,2-Tetrachloroethane	↓	(2-Butanone) (MEK)	↓
1,1-Dichloroethane	↓	Tetrachloroethene	↓	Methylisobutylketone (MIBK)	↓
trans-1,2-Dichloroethene	↓	Chlorobenzene	↓		
Chloroform	↓	Total Trihalomethanes	↓	AR300335	
1,2-Dichloroethane	↓	Other Purgeable Organics: N.D.			
1,1,1-Trichloroethane	↓				
Carbon Tetrachloride	↓				
Bromodichloromethane	↓				
1,2-Dichloropropane	↓				

H01 BC VH

GINNY

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

OK 81-3074

BOTTLE NUMBER HAV-91 / HAV-93

Harford
Name of County

SOURCE OF SAMPLE 1312 Bush Rd. COLLECTOR Leary

SAMPLE TYPE: _____ DISTRIBUTION Out SOURCE Well OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) Near landfill

probably plastic from well to house - Well-casing plastic - internal plumbing - ?

RECEIVED
FIRE FILE ONLY

REMARKS: Ld of Elsworth B Vessell #2 / 2064-87
James Palmer / 3824 Grove Church Rd / Millers, Md 21107

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	CARD NO
	1 2			0 6 1 1 8 7	

FIELD pH (20 21 22) _____ FIELD RESID. CHLORINE: FREE (23 24) _____ TOTAL (25 26) _____

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<5	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane	<1	Trichloroethene		Toluene	
Dichlorodifluoromethane	3	Dibromochloromethane		Ethylbenzene	
Vinyl chloride	<1.	1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane	<1	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	1	2-Chloroethylvinylether	<10	Tetrahydrofuran	60
Trichlorofluoromethane	<1	Bromoform	<1	Methylethylketone	(2-Butanone) (MEK)
1,1-Dichloroethene	<1	1,1,2,2-Tetrachloroethane	<1		6
1,1-Dichloroethane	1	Tetrachloroethene	2	Methylisobutylketone (MIBK)	N.D.
trans-1,2-Dichloroethene	<1	Chlorobenzene	<1		
Chloroform	1	Total Trihalomethanes			
1,2-Dichloroethane	<1	Other Purgeable Organics:			
1,1,1-Trichloroethane		observed: dichlorofluoromethane			
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

AR300336

Results reported in micrograms per liter (parts per billion)

DATE RECEIVED JUN 12 1987 DATE REPORTED JUN 22 1987 CHEMIST [illegible] LAB. NO. _____

DHMH 749 3/85

21

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HA-WW-22

HARFORD
Name of County

SOURCE OF SAMPLE 1230 Busch Rd COLLECTOR WHITLOCK

SAMPLE TYPE: GRAB DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Offsite Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with ~~thiosulfate~~ 1+HCl ✓

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) Priority Pollutant Survey

REMARKS: Sam Washington Private well used as offsite monitori
Abingdon 21009 well - [redacted] - Coliforms found recently

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY: 12	PLANT NO.	SAMPLING STATION	DATE COLLECTED: 11 14 86	CARD NO.

FIELD pH (20 21 22) FIELD RESID. CHLORINE: FREE (23 24) TOTAL (25 26)

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane		Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	N.D.
Trichlorofluoromethane		Bromoform		Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene			
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics: N.D.		AR300337	
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HA-WW-28

Harford 1
Name of County

SOURCE OF SAMPLE 1310 Bush Rd. COLLECTOR Whitlock

SAMPLE TYPE: Grab DISTRIBUTION ✓ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with ~~thiosulfate~~ HCl ✓

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: BUSH VALLEY LANDFILL RESIDENTIAL SAMPLE
Linda Milton Aberdeen 21009 L. of Vessells #1

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
	12			05/19/87	

FIELD pH (20 21 22) _____ FIELD RESID. CHLORINE: FREE (23 24) _____ TOTAL (25 26) _____

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA ~~602~~)	
Chloromethane	<5.	trans-1,3-Dichloropropene	<1.	Benzene	<1.
Bromomethane	<1.	Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether	<10.	Tetrahydrofuran	N.D.
Trichlorofluoromethane		Bromoform	<1.	Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene			
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics: N.D.			
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

AR300338

Results reported in micrograms per liter (parts per billion)

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HF.WW.17

HARFORD
Name of County

SOURCE OF SAMPLE 1230 Bush Rd. COLLECTOR Whitlock

SAMPLE TYPE: Grab DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Offsite Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with ~~thiosulfate~~ 1+1 HCl

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) Offsite Landfill Monitoring Bush Valley L.F.

REMARKS: Sam Worcington
5993 Abingdon 21009

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY: 1 2	PLANT NO	SAMPLING STATION	DATE COLLECTED: 0 8 1 4 8 6	CARD NO

20 21 22 FIELD pH | FIELD RESID. CHLORINE: FREE 23 24 | TOTAL 25 26

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane		Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	N.D.
Trichlorofluoromethane		Bromoform		Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene	V	Chlorobenzene			
Chloroform	2	Total Trihalomethanes			
1,2-Dichloroethane	<1	Other Purgeable Organics: N.D.			AR300339
1,1,1-Trichloroethane		None Detected in			
Carbon Tetrachloride		~~private mon. wells~~		~~7-31-86~~	
Bromodichloromethane		(9-5-86)			
1,2-Dichloropropane					

micrograms per liter (parts per billion)

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HA-WW-18

HARFORD
Name of County

SOURCE OF SAMPLE 1310 Bush Rd. COLLECTOR Whitlock

SAMPLE TYPE: Grab DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

ff-site Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with ~~thiosulfate~~ 1+1 HCl

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) OFF-site Monitoring well Bush Valley L.F.

REMARKS: Linda Milton — previous: Tetrahydrofuran 10ppb
Abingdon Chloroform 1ppb

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
	12			081486	

FIELD pH (20 21 22) _____ FIELD RESID. CHLORINE: FREE (23 24) _____ TOTAL (25 26) _____

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane		Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	N.D.
Trichlorofluoromethane		Bromoform		Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene			
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		**Other Purgeable Organics:**			
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane	✓				

AR300340

Results reported in micrograms per liter (parts per billion)

DATE RECEIVED AUG 15 1986 DATE REPORTED 3 CHEMIST L.Lisell LAB

DHMH 749 3/85

G. C. Lab. Dept. No. 611

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

HA 6

BOTTLE NUMBER HA 7

HARFORD
Name of County

SOURCE OF SAMPLE 1310 BUSH RD. COLLECTOR PINARANGO

SAMPLE TYPE: GRAB DISTRIBUTION _____ SOURCE ✓ OTHER _____ (specify)

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with ~~thiosulfate~~ HCL ✓

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) Off site Monitoring of Bush Valley Landfill.

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	CARD NO
	12			060686	

FIELD pH 20 21 22 _____ FIELD RESID. CHLORINE: FREE 23 24 _____ TOTAL 25 26 _____

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA ~~602~~)	
Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane		Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	10
Trichlorofluoromethane		Bromoform		Methylethylketone	N.D.
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene			
Chloroform	1	Total Trihalomethanes			
1,2-Dichloroethane	<1	Other Purgeable Organics: ND		AR300341	
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENT.
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

Name of County

SOURCE OF SAMPLE 21 Lowell Rd, Rockville COLLECTOR

SAMPLE TYPE: DISTRIBUTION SOURCE Well OTHER (specify)

Community noncommunity private

Test well observation well stream tidal waters

Industrial effluent STP sampling station STP effluent

Dechlorinated , reserved with thiosulfate

Reason for special sample: Trihalomethane Survey

Suspected chemical Contamination

Other (gasoline, etc.) Contamination

Well Monitoring - Rush Valley

3	4 5 6 7	8 9 10 11	12 13 14 15
2			01 05 01
FACILITY	PLANT NO	SAMPLING STATION	DATE COLLECTED

FIELD RESID. CHLORINE: FREE (23 24) TOTAL (25 26)

EPA 601		Purgeable	
<5	trans-1,3-Dichloropropene	<1	Benzene
<1	Trichloroethene		Toluene
	Dibromochloromethane		Ethylben:
	1,1,2-Trichloroethane		Total X
	cis-1,3-Dichloropropene		Total Purg
	2-Chloroethylvinylether	<10	Tetrahydr
	Bromoform	<1	Methyleth
	1,1,2,2-Tetrachloroethane		(2-Butanon
	Tetrachloroethene		Methylisob
	Chlorobenzene		
	Total Trihalomethanes		
	Other Purgeable Organics: N.D.		

AR300342

Results reported in micrograms per liter (parts per billion)

6-8-90

Bush Valley File Book

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HAV-21 / HAV-22

Harford
Name of County

SOURCE OF SAMPLE 1230 Bush Rd COLLECTOR Leary

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE well OTHER (specify) _____

Community _____ noncommunity _____ private ✓

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved wit sulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline etc.) Contamination _____

Other (specify) Land Fill next door / There have been medical problems.

REMARKS: Sam Washington / 1230 Bush Rd / Abingdon
Water wells

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY: 12	PLANT NO	SAMPLING STATION	DATE COLLECTED: 03 01 86	DEMO NO

FIELD pH _____ FIELD RESID. CHLORINE: FREE _____ TOTAL _____

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane		Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	N.D.
Trichlorofluoromethane		Bromoform		Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		2-Butanone (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene	✓		
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		Other Purgeable Organics: N.D.			
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Bromodichloromethane					

AR300343

WMA Priority

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER HA-PW-01 / HA-PW-02

HARFORD
Name of County

SOURCE OF SAMPLE 1310 BUSH RD. COLLECTOR P. NARANGO

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE ✓ OTHER (specify) _____

Community _____ noncommunity _____ private ✓

offsite Landfill observation well ✓ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with ~~thiosulfate~~ HCl ✓

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) Testing of well adjacent to Bush Valley

REMARKS: Landfill sampling per request Paul Thompson WMA-Eu
Land of Vassells Lot 1 HA-31-2405

RECEIVED
MAY 27 1986
ENFORCEMENT FILE
FILE COPY ONLY

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY: 12	PLANT NO	SAMPLING STATION	DATE COLLECTED: 05/15/86	CARD NO

FIELD pH (20 21 22) FIELD RESID. CHLORINE: FREE (23 24) TOTAL (25 26)

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics (EPA 602)	
Chloromethane	SEE NOTE	trans-1,3-Dichloropropene	<1.	Benzene	<1.
Bromomethane	<1.	Trichloroethene		Toluene	
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	<2
Chloroethane		cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride		2-Chloroethylvinylether		Tetrahydrofuran	36.
Trichlorofluoromethane		Bromoform		Methylethylketone	<1.
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	
trans-1,2-Dichloroethene		Chlorobenzene			
Chloroform	3.	Total Trihalomethanes			
1,2-Dichloroethane	<1.	**Other Purgeable Organics:**			
1,1,1-Trichloroethane		NOTE: SUSPECT CHLOROMETHANE, BROMOMETHANE			
Carbon Tetrachloride		AND/OR CHLORODIFLUOROMETHANE PRESENT; RE-			
Bromodichloromethane		SAMPLE AND REFERENCE SAMPLE COLLECTED			
1,2-Dichloropropane		5-15-86, LAB. NO. 4125			

Results reported in micrograms per liter (parts per billion)

DATE RECEIVED MAY 1 6 1986 DATE REPORTED MAY 27 1986 CHEMIST Vaill LAB NO.

AR300344

Beechwood Mobile Home - 3 wells, Q = 0.012 MGD
population = 65, = 1500 feet from landfill.

Belcamp Industrial Park - 1 well, Q = 0.012 MGD
population = 50 1.5 mi from landfill.

Lou Mar Estates - 1 well, Q = 0.005 MGD population = 50
2.5 mi from landfill.

Perryman Water Treatment Plant - Total of 8 wells, 3 wells are within 3 mi. of landfill, Total Q for wells 1,2, & 3 = MGD.

HARFORD COUNTY
1773

HARFORD COUNTY HEALTH DEPARTMENT

119 South Hays Street P.O. Box 191 Bel Air, Maryland 21014-0191

Telephone 879-2404/838-3047 ext 33

Thomas M. Thomas
Health Officer
Beverly Stump, M.D., MPH
Deputy Health Officer

MEMO

TO: Tom DeReamer, HSWMA-CERCLA Response

FROM: Larry Webber, R.S.

RE: Bush Valley Sampling

DATE: September 7, 1989

Enclosed are the copies you requested for Bush Valley, samples taken since December 1987. Our last samples were taken August 14, 1989 and when those results are received, copies will be forwarded. Milton and Fleet are the houses next door, Washington is across the road.

LW/ab

State of Maryland

OFFICE OF ENVIRONMENTAL PROGRAMS
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

201 WEST PRESTON STREET • BALTIMORE, MARYLAND 21201 • AREA CODE 301 • 225-6367

TTY FOR DEAF: Balto. Area 383-7555
D.C. Metro 565-0451

Adele Wilzack, R.N., M.S., Secretary

William M. Eichbaum, Assistant Secretary

October 28, 1985

Ms. Marsha Erwin
NUS Corporation
992 Old Eagle School Road
Suite 916
Wayne, Pennsylvania 19087

Re: Groundwater Supplies in the vicinity of Bush Valley Landfill

Dear Ms. Erwin:

Please find enclosed a map showing locations, and a list providing flows of community wells within a 3 mile radius of the Bush Valley Landfill.

If you have any questions in this regard, please feel free to call me at (301) 225-6367.

Sincerely yours,

Barry K. O'Brien

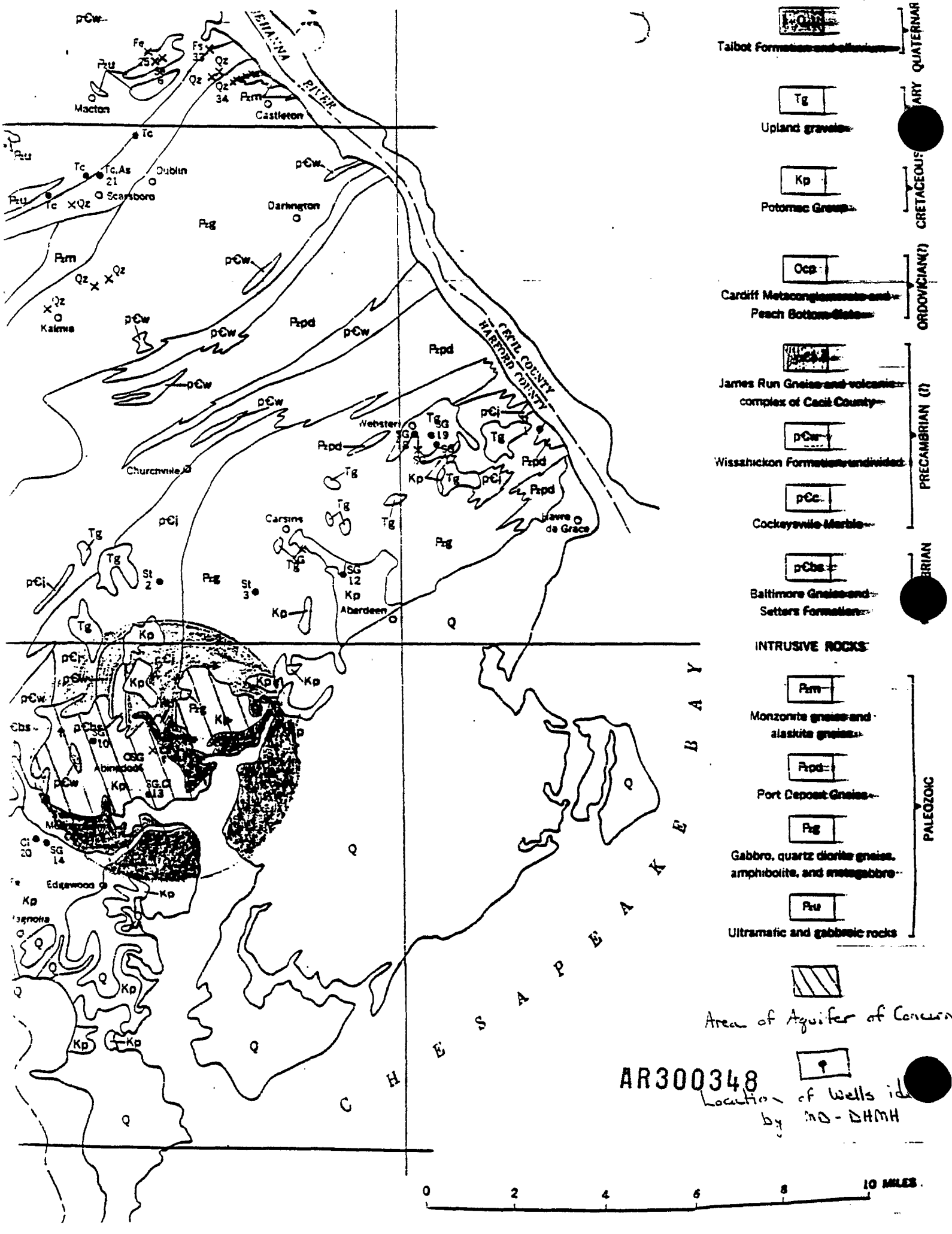
Barry K. O'Brien, P.E.
Public Health Engineer
Division of Water Supply

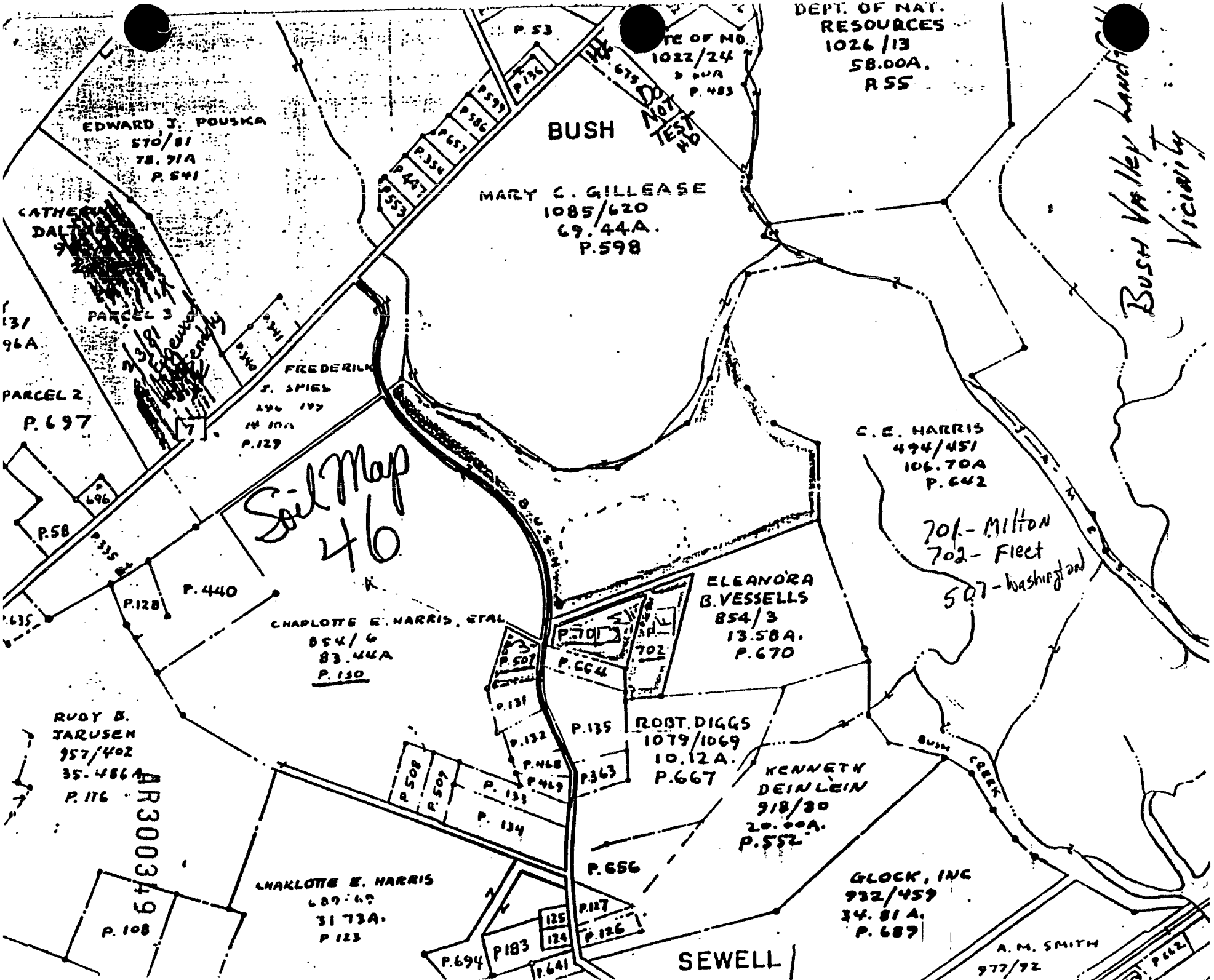
BKO:das

Enclosures (2)

cc: Mr. William F. Parrish, Jr.
Mr. Paul Thompson

AR300347


Talbot Formation and alluvium
QUATERNARY
Tg
Upland gravels
Kp
Potomac Group
CRETACEOUS
Ocp
Cardiff Metaconglomerate and Peach Bottom Slate
ORDOVICIAN(?)
James Run Gneiss and volcanic complex of Cecil County
pCw
Wissahickon Formation, undivided
pCc
Cockeysville Marble
pCbs
Baltimore Gneiss and Setters Formation
PRECAMBRIAN (?)
INTRUSIVE ROCKS
Pzm
Monzonite gneiss and alaskite gneiss
Pzpd
Port Deposit Gneiss
Pzg
Gabbro, quartz diorite gneiss, amphibolite, and metagabbro
Pzu
Ultramafic and gabbroic rocks
PALEOZOIC
Area of Aquifer of Concern
Location of Wells id
by MD-DHMH
AR300348
CECIL COUNTY
HARFORD COUNTY
SUSQUEHANNA RIVER
CHESAPEAKE BAY
Macton
Castleton
Dublin
Scarsboro
Darlington
Kalmia
Churchville
Carsins
Webster
Havre de Grace
Aberdeen
Abingdon
Edgewood
0
2
4
6
8
10 MILES


Soil Map 46
BUSH
MARY C. GILLEASE
1085/620
69.44A.
P.598
EDWARD J. POUSKA
570/81
78.91A
P.541
PARCEL 3
PARCEL 2
P.697
FREDERICK J. SPIES
P.129
DEPT. OF NAT. RESOURCES
1026/13
58.00A.
RSS
STATE OF MD.
1022/24
& 1024
P.483
DOT NOT TESTED
C.E. HARRIS
494/451
106.70A
P.642
701 - Milton
702 - Fleet
507 - Washington
ELEANORA B. VESSELLS
854/3
13.58A.
P.670
CHARLOTTE E. HARRIS, ETAL
854/6
83.44A
P.130
P.440
P.128
P.58
P.696
P.635
P.335
P.507
P.664
P.131
P.132
P.135
P.468
P.469
P.363
ROBT. DIGGS
1079/1069
10.12A.
P.667
RUDY B. JARUSEN
957/402
35.486A.
P.116
AR30034
P.508
P.509
P.133
P.134
KENNETH DEINLEIN
918/80
20.00A.
P.552
BUSH CREEK
CHARLOTTE E. HARRIS
689/69
31.73A.
P.123
P.108
P.656
GLOCK, INC
932/459
34.81A.
P.687
P.127
125
124
P.126
P.694
P.183
P.641
SEWELL
A.M. SMITH
977/72
P.662
Bush Valley Land Vicinity

Bellaire

FILE COPY ONLY

PRIORITIES ANALYSIS
TOXICS INTEGRATION BRANCH
VOLATILE ORGANICS ANALYSIS

ENTITY BU. W-4 Hartford

SOURCE OF SAMPLE Bush Valley COLLECTOR Baldwin

SAMPLE TYPE: DISCHARGE SOURCE OTHER

Community

Industrial Chemical

Petroleum

Other

RECEIVED

ENFORCEMENT FILE
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W4 | 09 12 18 83

	trans-1,2-Dichloroethene		Benzene	17 ppb
	Trichloroethene	5 ppb	Toluene	
oksil	Dibromochloromethane		Ethylbenzene	5 ppb
23 ppb	1,1,2-Trichloroethane		Total Xylenes	15 ppb
16 ppb	bis(2-Chloroethyl)ether		Total Polynuclear Aromatic Hydrocarbons	
260 ppb	2-Chloroethylvinyl ether		Tetrahydrofuran	
7 ppb	Bromoform		Methylethylketone	
	1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	
63 ppb	Tetrachloroethene	20 ppb	Methyl chloride (CH3Cl)	
5 ppb	Chlorobenzene		Ethyl Ether	32 ppb
	Total Phthalate Esters			
5 ppb	Other Priority Pollutants:			

AR300350

Also discovered CHCl2F, Alkanes, MEK
other volatile priority pollutants (12 ppb)
(GC/MS) verification EPA 624

AR300350

STREAM SAMPLES

GERAGHTY & MILLER, INC.
Environmental Services

SUBJECT: MD Dept Health
PROJECT: Merit Engineering Data for
CLIENT/PROJECT NO: Bush Valley

BY: DATE:
CHKD: DATE:
REV: DATE:

PAGE
SHEET 1/2

Bush Valley: Summary of on-site Stream Sampling Analytical Results

-1 *	7/17/78	10/18/78	3/22/79	7/5/79	5/15/80	10/20/81
pH (units)	9.0 NI 1	7.8 NI	7.6 NI	7.6	7.4	7.4
Color (units)				25	6	NI
Turbidity (units)	1.0	3	8	5.4	2.0	NI
Alkalinity mg/L	39	36	27	36	32	44
Chloride (mg/L)	14		15	12	11	13
Hardness mg/L	47	50	44	NI	54	59
Iron (mg/L)	0.14	0.3	0.22	NI	0.25	NI
Manganese (mg/L)	9	3	9	8	8	NI
Total Solids (mg/L)	110	NI	124	NI	118 (DISS)	NI
COD	6	6	2	Lab Accident	<2	0
SC (not defined) units	NI	NI	NI	144	151	179
Ammonia N (mg/L)	NI	NI	NI	NI	<0.10	NI
TKN (mg/L)	NI	NI	NI	NI	0.3	NI
Nitrate (mg/L)	NI	NI	NI	NI	14	NI

* NO Indication of location from which Surface sample was collected

NI: No Information

AR300352

GERAGHTY & MILLER, INC.
Environmental Services

SUBJECT: MD Dept. Environ. —
PROJECT: Pilot Study —
CLIENT/PROJECT NO: Patapsco Valley —

BY: DATE:
CHKD: DATE:
REV: DATE:

PAGE
SHEET 2

Gunpowder Valley - Summary of on-site Stream Sample Analytical Data

S-2 *	7/17/73	10/18/78	3/22/79	7/3/79	5/15/80	6/20/81
pH (units)	7.6	7.4		7.7	7.8	7.5
Color (units)	NI	NI		23	6	NI
Turbidity (units)	1.5	1.6		4.8	1.7	NI
Conductivity (µmho)	39	35		36	32	41
Chloride (mg/L)	15	12		12	11	14
Hardness (mg/L)	56	52		NI	52	59
Iron (mg/L)	0.13	0.24		NI	0.19	NI
Sodium (mg/L)	7	8		8	8	NI
Total Solids (mg/L)	126	118		NI	108 (DS)	NI
COD	5	7		Lab Accident	<2	CANCELLED
Coliform	NI	NI		43	49	20 (# not given)
Ammonia-N (mg/L)	NI	NI		NI	<0.10	NI
TKN (mg/L)	NI	NI		NI	0.4	NI
Fecal (mg/L)	NI	NI	NI	NI	14	NI
Calcium	NI	NI	NI	NI	13	NI

NO DATA

* S-2 SAMPLING LOCATION Unknown

NI NO INFORMATION

AR300353

Additional Data From MD Dept. of Environment 7/11/84

upstream	pH =	6.43	Spec. cond. = 160
downstream	pH =	6.41	Spec. cond. = 180

GERAGHTY & MILLER, INC.
Environmental Services

SUBJECT: NUS DATA FOR
PROJECT: RUS - ALLEY
CLIENT/PROJECT NO: Landfill

BY: DATE:
CHKD: DATE:
REV: DATE:

PAGE:
SHEET: 3/3

STREAM SAMPLING RESULTS

ORGANICS	7/11/84 upstream * Bynum Run C-9103 (aqueous)	7/11/84 downstream * Bynum Run C-9105 (aqueous)	7/11/84 upstream * Bynum Run C-9104 (solid)	7/11/84 downstream * Bynum Run C-9106 (solid)
Phenol (ug/L)	10K ◇	10K ◇		
di-n-butyl phthalate (ug/L)	10K ◇	10K ◇		
methylene chloride (ug/L)	5K ◇	5K ◇	700 ◇	600 ◇
Acetone (ug/L)	NI	NI	60 ◇	35 ◇

◇ Denotes result is questionable quantitative confirmation based upon quality assurance review of data.

7/12/84

Inorganics	upstream * Bynum Run	downstream * Bynum Run
Aluminum (ug/L)	NI	236
Iron (ug/L)	314	412
Manganese (ug/L)	18	40
Silver (ug/L)	NI	10
Tin (ug/L)	NI	36

* Indicates whether samples were collected from same location.

AR300354

GERAGHTY & MILLER, INC.
Environmental Services

SUBJECT: NUS DATA
PROJECT: Bush Valley Landfill
CLIENT/PROJECT NO:

BY: DATE:
CHKD: DATE:
REV: DATE:

Stream / Sediment Sample Results

7/12/84

		Upstream Bypass Run (Solid)	Downstream Bypass Run (Solid)
Al	mg/kg	5970	5130
As		5.3	4.8
Ba		20	27
Be		0.22	0.28
Cd		0.10	0.060
Cr		11	11
Co		5.5	6.4
Cu		8.5	9.4
Fe		8870	9050
Pb		7.3	5.1
Mn		120	236
Hg		NI	NI
Ni		7.5	8.0
Sn		4.6	4.2
Vanadium		13	18
Zn		28	24

AR300355

NI = No Information

Bush Valley Landfil

Site Sampling Background Information

July 11, 1984

David Healy DH

Bush Valley Landfill

Outlined below is a synopsis of activities completed at the Bush Valley Landfill on July 11, 1984. NUS Corporation was assigned to complete a site investigation of this facility under EPA's Dump Site Program. Samples were sent to EPA's contract labs for analysis. After receiving the laboratory analysis, NUS will finalize a draft site investigation report, which will be sent to EPA and WMA in approximately 6-9 months. The following individuals were on-site:

Ric Callahan - NUS Corporation
Marsha Irwin - NUS Corporation
Jim Strickland - NUS Corporation
Randy Dickinson - NUS Corporation
Barry Schlesinger - NUS Corporation
Lloyd Harris - Owner
Frank Henderson - WMA, Support Services Division
David Healy - WMA, Support Services Division
Butch Henderson - WMA, Summer Student
David Berardelli - WMA, Summer Student

Three of the four monitoring wells were sampled. Monitoring well 3 contained one foot of water and did not have enough volume for sampling. The other three wells were bailed prior to sampling. Monitoring well information is as follows:

Monitoring Well	Depth	Depth to Water	Column of Water
1	45	12	33
2	43	9	34
3	19	18	1
4	20	9	11

The Braxton-Harris House was abandoned approximately one year ago, and has a field stone lined, 30 deep, dug well with a hand pump.

There was evidence of leachate seeps around the fill and three seeps were sampled. The sediment pond near monitoring well 3 had tadpoles and at least one frog.

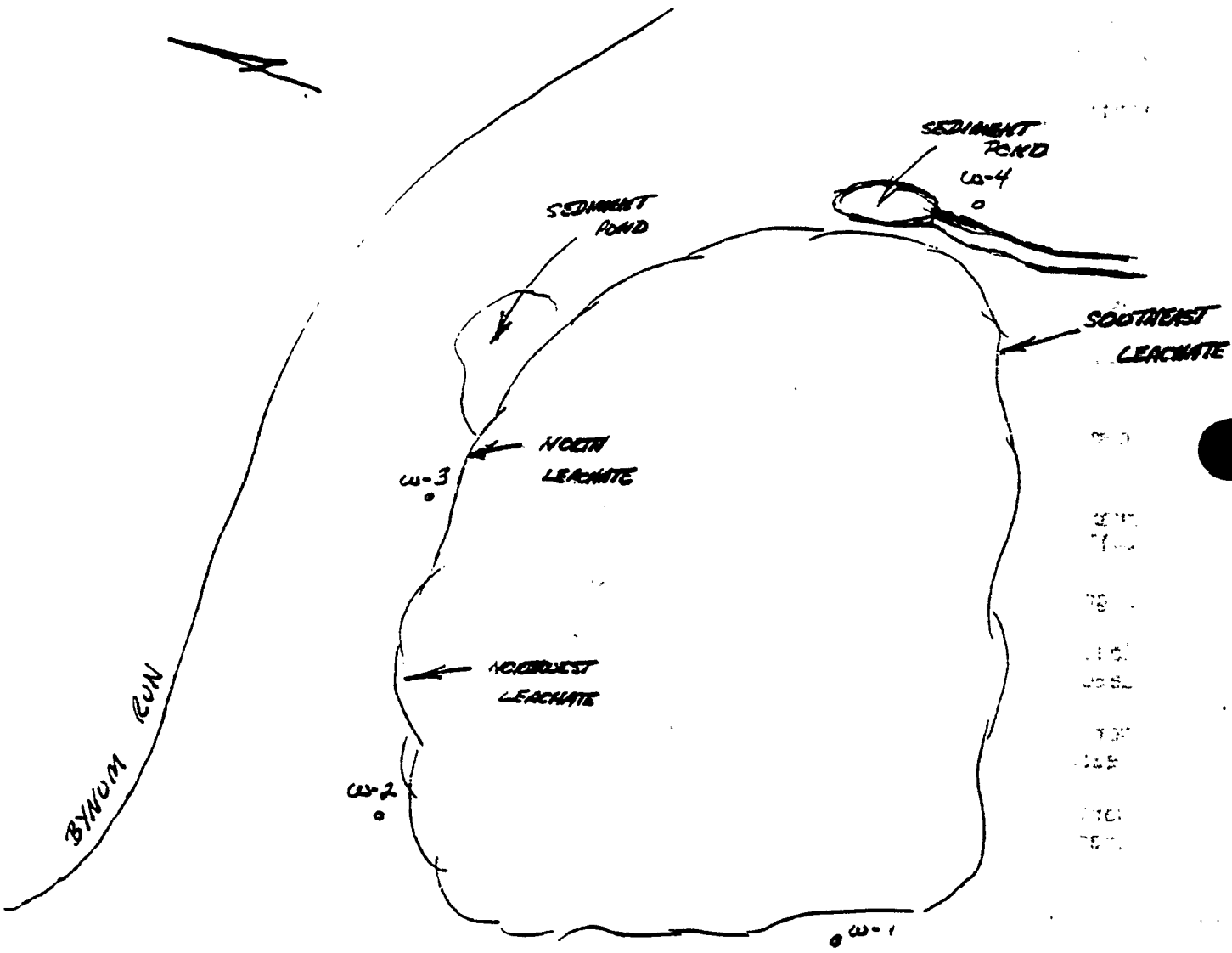
Mr. Harris estimated he has 47 acres on this property, of which, approximately 29 acres has been landfilled.

Bush Valley Landfill

Sampling Information

Sampling Location	Time	Type of Sample	pH	Specific Conductance
Monitoring Well #1	9:20	Water	5.9	94
Monitoring Well #2	10:25	Water	6.34	66
Monitoring Well #4	11:50	Water	5.64	500
Sediment Pond (near MW-3)	9:50 9:55	Water Sediment	6.41	200
Upstream	10:55 11:05	Water Sediment	6.43	160
Downstream	12:06 12:10	Water Sediment	6.41	180
Braxton-Harris Well	10:35	Water	6.38	60
Diggs Well	12:20	Water	6.69	180
Southeast Leacnate	11:45	Sediment		
Northwest Leachate	12:45 12:55	Water Sediment	7.28	7000
North Leachate	13:10 13:15	Water Sediment	7.33	5200

BUSH VALLEY LANDFILL



BRAXTON-HARRIS HOUSE

NOT TO

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER 5-1

HARFORD
NAME OF COUNTY

SOURCE OF SAMPLE BUSH VALLEY SLF COLLECTOR DICH-ADAMS

SAMPLE TYPE: DISTRIBUTION _____ SOURCE SURFACE OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: _____

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			5-1	07 17 78	

FIELD* pH [20 21 22] FIELD RESID. CHLORINE: FREE [23 24] TOTAL [25 26]

TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
pH *	011	7.0		CALCIUM	231	
COLOR *	020			MAGNESIUM	241	
TURBIDITY *	031	1.0		ARSENIC	253	
ALKALINITY	040	39.		BARIUM	262	
BICARBONATE ALK.	050			CADIUM	273	
CARBONATE ALK.	060			CHROMIUM +6	282	
CARBONATE STAB. pH *	071			COPPER	293	
ALKALINITY	080			LEAD	302	
CHLORIDE	091	14.		MERCURY	314	
FLUORIDE	101			SELENIUM	323	
HARDNESS	110	47.		SILVER	333	
IRON	122	0.14		ZINC	342	
MANGANESE	133			OIL (GREASE)	351	
AMMONIA N. FREE	143			POTASSIUM	361	
ALBUMINOID	153			SODIUM	371	9.
NITRATE	162			TOTAL SOLIDS	381	110.
NITRITE	173			COLI		AR300360 6.
MBAS	182					
ALUMINUM	192					
CYANIDE	202					
SILICA	210					
SULFATE	220					

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER 5-2

HARFORD
NAME OF COUNTY

SOURCE OF SAMPLE BUSH VALLEY SLF COLLECTOR RICH-ADAMS

SAMPLE TYPE: DISTRIBUTION _____ SOURCE STREAM OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: DUISION SOLID WASTE

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			5-2	071878	

FIELD * pH 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	7.6		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
✓	TURBIDITY *	031	15		ARSENIC	253	
✓	ALKALINITY	040	39		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	13		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	54		SILVER	333	
✓	IRON	122	013		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	7
	NITRATE	162		✓	TOTAL SOLIDS	381	126
	NITRITE	173		✓	COD		5
	MBAS	182					
	ALUMINUM	192					AR300361
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS, ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

DATE RECEIVED JUL 19 1978 DATE REPORTED _____ CHEMIST _____ LAB

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER 5-1

Harford Co.
NAME OF COUNTY

SOURCE OF SAMPLE Buck Valley SLF COLLECTOR Adams

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Stream OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: Division Solid Waste

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			5-1	10 18 78	

FIELD * pH _____ (20 21 22) FIELD RESID. CHLORINE: FREE _____ (23 24) TOTAL _____ (25 26)

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	7.8		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
✓	TURBIDITY *	031	1.8		ARSENIC	253	
✓	ALKALINITY	040	36		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	11.		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	50.		SILVER	333	
✓	IRON	122	0.18		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	9.
	NITRATE	162		✓	TOTAL SOLIDS	381	112.
	NITRITE	173		✓	COD		AR300362 16
	MBAS	182					
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210					

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER 5 - 2

Harford Co
NAME OF COUNTY

SOURCE OF SAMPLE Bush Valley S & F COLLECTOR A Sims

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Stream OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: Division Solid Waste

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			5-2	10/9/78	

FIELD * pH 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	7.4		CALCIUM	231	
	COLOR *	020			MAGNESIUM	241	
✓	TURBIDITY *	031	16		ARSENIC	253	
✓	ALKALINITY	040	37		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	12		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	62		SILVER	333	
✓	IRON	122	.024		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	8
	NITRATE	162		✓	TOTAL SOLIDS	381	118
	NITRITE	173		✓	COD		7
	MBAS	182					
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

AR300363

* RESULTS REPORTED IN UNITS, ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

DATE RECEIVED OCT 10 DATE REPORTED OCT 23 1978 CHEMIST _____ LAB

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER B S1

HANFORD
NAME OF COUNTY

SOURCE OF SAMPLE Bush Valley S.L.F. COLLECTOR Bellasc-Adams

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Stream OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: Div. Solid Waste

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			S1	32 22 79	

FIELD pH * 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	76		CALCIUM	231	
	COLOR **	020			MAGNESIUM	241	
✓	TURBIDITY *	031	18		ARSENIC	253	
✓	ALKALINITY	040	27		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH- *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	31		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	44		SILVER	333	
✓	IRON	122	022		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	9
	NITRATE	162		✓	~~TOTAL SOLIDS~~ TDS	381	124
	NITRITE	173		✓	C.O.D		2
	MBAS	182					
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

AR300364

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER B-51

Harford
NAME OF COUNTY

SOURCE OF SAMPLE Bush Valley COLLECTOR Bellum Mills

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Stream OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: Dev. Solid Waste

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			5 1	7 5 7 9	

FIELD * pH _____ (20 21 22) FIELD RESID. CHLORINE: FREE _____ (23 24) TOTAL _____ (25 26)

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	7.6		CALCIUM *	231	
✓	COLOR *	020	25		MAGNESIUM	241	
✓	TURBIDITY *	031	5.4		ARSENIC	253	
	ALKALINITY	040	36		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY *	080			LEAD	302	
✓	CHLORIDE	091	12		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
	HARDNESS	110			SILVER	333	
	IRON	122			ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	8
	NITRATE	162			TOTAL SOLIDS	381	
	NITRITE	173		✓	S.C. *		144
	MBAS	182		✓	C.O.D.		✓ LAB ACCIDENT
	ALUMINUM	192					AR 300355
	CYANIDE	202					
	SILICA	210					
	SULFATE	220					

* RESULTS REPORTED IN UNITS. ALL OTHERS IN MILLIGRAMS PER LITER (PPM).

AUG 13 1979

LAB

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER B-52

Harford
NAME OF COUNTY

SOURCE OF SAMPLE Bush Valley COLLECTOR Bolton / Steele

SAMPLE TYPE: DISTRIBUTION ____ SOURCE Sloan OTHER ____ (Specify)

COMMUNITY ____ OTHER PUBLIC ____ PRIVATE SUPPLY ____

REMARKS: Dev. Solid Waste

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
			8 2	7 5 7 9	
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.

FIELD pH * 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	7.7		CALCIUM	231	
✓	COLOR *	020	23		MAGNESIUM	241	
✓	TURBIDITY *	031	48		ARSENIC	253	
	ALKALINITY	040	36		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	12		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
	HARDNESS	110			SILVER	333	
	IRON	122			ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
	AMMONIA N. FREE	143			POTASSIUM	361	
	ALBUMINOID	153		✓	SODIUM	371	8
	NITRATE	162			TOTAL SOLIDS	381	
	NITRITE	173		✓	S.C. *		43
	MBAS	182		✓	C.O.D		
	ALUMINUM	192					
	CYANIDE	202					
	SILICA	210			AR300366		
	SULFATE	220					

AR300366 CONFIDENT

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF WATER ANALYSIS

Bottle Number: B.J. Name: [illegible] County: [illegible]

Source of Sample: [illegible] Collector: [illegible]

Street Town or City

Sample Type Circle):	Community Source	Non-Community Distribution	Private MCL	Emergency Recheck	Routine

Remarks: [illegible]

County	Plant No.	Sampling Station	Date Collected	Time	Acid
		[illegible]	[illegible]		

Field Data: pH* | Chlorine Residual: Free | Total | Specific Co[illegible]

ANALYSIS	CODE	RESULTS	ANALYSIS	CODE	RESULTS
pH*	[illegible]	[illegible]	Arsenic	253	
Alkalinity (Total)	040	[illegible]	Barium	262	
Alkalinity HCO3	050		Cadmium	273	
Alkalinity CO3	060		Chromium	283	
pH*, Ca CO3 SAT	27[illegible]		Lead	302	
Alkalinity, Ca CO3 SAT	280		Mercury	314	
Hardness	[illegible]		Selenium	323	
Ammonia-N	143		Silver	333	
Nitrate-Nitrite N	162		Aluminum	192	
Nitrite N	173		Calcium	231	
MBAS	132		Copper	241	
Chloride	091	[illegible]	Iron	122	
Fluoride	101		Magnesium	241	
Color*	020		Manganese	133	
Turbidity*	031		Nickel	391	
Conductance*, SPEC.	201	[illegible]	Potassium	361	
Silica	210		Sodium	371	
Sulfate	220		Zinc	342	
Total Residue	381	[illegible]			

AR300367

* Results reported in units, [illegible] milligrams per liter (ppm)

Date Received Date Reported Chemist Lab No.

DHMH 6A (9/81)

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF WATER ANALYSIS

Bottle Number: _____ Name: _____ County: _____

Source of Sample: _____ Street _____ Town or City _____ Collector: _____

Sample Type (Circle): Community Source | Non-Community Distribution | Private MCL | Emergency Recheck | Routine

Remarks: _____

County	Plant No.	Sampling Station	Date Collected	Time	Acid

Field Data: pH* _____ CHLORINE Residual: Free _____ Total _____ Specific Conductance* _____

ANALYSIS	CODE	RESULTS	ANALYSIS	CODE	RESULTS
pH*	011		Arsenic	253	
Alkalinity (Total)	040		Barium	262	
Alkalinity (HCO)	050		Cadmium	273	
Alkalinity (CO)	060		Chromium	283	
pH* Ca CO SAT	071		Lead	302	
Alkalinity Ca CO SAT	080		Mercury	314	
Hardness	100		Selenium	323	
Ammonia-N	143		Silver	333	
Nitrate-Nitrite N	162		Aluminum	192	
Nitrite N	173		Calcium	231	
MBAS	192		Copper	241	
Chloride	091		Iron	255	
Fluoride	101		Magnesium	241	
Color*	020		Manganese	133	
Turbidity*	031		Nickel	391	
Conductance*, SPEC.	201		Potassium	361	
Silica	210		Sodium	371	
Sulfate	220		Zinc	342	
Total Residue	381				

AR300368

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER B-51

NAME OF COUNTY Harford

SOURCE OF SAMPLE Bush Valley COLLECTOR Bellew

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Stream OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: D.S.-W

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			51	051580	

FIELD * pH (20 21 22) FIELD RESID. CHLORINE: FREE (23 24) TOTAL (25 26)

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	7.4	✓	CALCIUM	231	12.
✓	COLOR *	020	6.		MAGNESIUM	241	
✓	TURBIDITY *	031	20		ARSENIC	253	
✓	ALKALINITY	040	32		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	11.		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	54.		SILVER	333	
✓	IRON	122	025		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
✓	AMMONIA N. FREE	143	<.010		POTASSIUM	361	
✓	~~ALBUMINOID~~ TKN	153	.03	✓	SODIUM	371	8.
	NITRATE	162		✓	TOTAL SOLIDS Diss	381	118.
	NITRITE	173		✓	Sp. Cond.		151.
	MBAS	182		✓	COD		52
	ALUMINUM	192		✓	Org. Nitr.		
	CYANIDE	202					
	SILICA	210					
✓	SULFATE	220	14.				

AP300369

* RESULTS REPORTED IN UNITS. ALL OTHERS IN MILLIGRAMS PER LITER (PPM)

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF DRINKING WATER ANALYSIS

BOTTLE NUMBER B-S-2

Harford
NAME OF COUNTY

SOURCE OF SAMPLE Bush Valley COLLECTOR Beck

SAMPLE TYPE: DISTRIBUTION _____ SOURCE Stream OTHER _____ (Specify)

COMMUNITY _____ OTHER PUBLIC _____ PRIVATE SUPPLY _____

REMARKS: D.S.W

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS CODE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
			S 2	05 15 80	

FIELD * pH 20 21 22 FIELD RESID. CHLORINE: FREE 23 24 TOTAL 25 26

✓	TEST FOR	CODE	RESULTS	✓	TEST FOR	CODE	RESULTS
✓	pH *	011	7.8	✓	CALCIUM	231	13
✓	COLOR *	020	6		MAGNESIUM	241	
✓	TURBIDITY *	031	1.7		ARSENIC	253	
✓	ALKALINITY	040	32		BARIUM	262	
	BICARBONATE ALK.	050			CADIUM	273	
	CARBONATE ALK.	060			CHROMIUM +6	282	
	CARBONATE STAB. pH *	071			COPPER	293	
	ALKALINITY	080			LEAD	302	
✓	CHLORIDE	091	11		MERCURY	314	
	FLUORIDE	101			SELENIUM	323	
✓	HARDNESS	110	52		SILVER	333	
✓	IRON	122	.919		ZINC	342	
	MANGANESE	133			OIL (GREASE)	351	
✓	AMMONIA N. FREE	143	<.010		POTASSIUM	361	
✓	~~ALBUMINOID~~ TKN	153	.64	✓	SODIUM	371	8
	NITRATE	162		✓	TOTAL SOLIDS Diss	381	106
	NITRITE	173		✓	TOC		1.42
	MBAS	182		✓	COD		AR300370 .42
	ALUMINUM	192		✓	Org-Tot		.04
	CYANIDE	202					
✓	SILICA	210					
✓	SULFATE	220	14				

NUS CORPORATION
A Halliburton Company

Dec. 10, 1985
(Sampled 7-84)

PROJECT FOR PERFORMANCE OF REMEDIAL RESPONSE ACTIVITIES AT UNCONTROLLED HAZARDOUS SUBSTANCE FACILITIES—ZONE 1

NUS CORPORATION
SUPERFUND DIVISION

F3-5405-44
2996 4C-22

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Bulk Loading
Date of Sample 7/11/84

Compounds Detected

Sample Description and Location	Phase	Units	Phenol	Benzoic Acid	4-Methyl Phenol	1,4-Dichlorobenzene	N-Nitroso diphenyl Amine	bis-(2-ethyl hexyl) Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Diethyl Phthalate	1,2,4-Trichloro benzene	1,2-Dichloro propane	Ethyl Benzene	Aniline	Remarks
Blk	AQ	µg/l							10K U		10K U					
UPSTREAM MINUM RUN	AQ	µg/l	10K U						10K U							
DOWNSTREAM MINUM RUN	AQ	µg/l	10K U						10K U							
MW #1	AQ	µg/l					10K	10K	10K U		10K U					
MW #2	AQ	µg/l						10K	10K U						5K U	
MW #4	AQ	µg/l	10K U			"			10K U		10K U	15	10K U		95	
SEDIMENT BASIN NE	AQ	µg/l							10K U		10K U					
BAXTON + HARRIS HOME WELL (ABANDONED)	AQ	µg/l	10K U					10K	10K U		10K U					
WELLS HOME WELL	AQ	µg/l					10K		10K U		10K U					
LEACHATE NW	AQ	µg/l	64	2500	1000			20 J			6.8 U			6.2		
LEACHATE N	AQ	µg/l	10K U			10K		10K	10K U					6.2	5K U	

EPA 330/9-82-002

Analytical Quality Assurance section of this report.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

Number E3-8405-44
Number 2996 111-002

☒ Organic ☐ Inorganic

Site Name B.R. Lucky
Date of Sample 2/11/85

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Phenanthrene	Benzene	Chlorobenzene	1,2-Dichloroethane	1,1,1-Trichloroethane	1,1-Dichloroethane	Chloroethane	Methylene Chloride	Trichloroethene	Toluene	Trichloroethene	Vinyl Chloride	Acetone	Remarks
101	Blk	AQ	µg/l								5K U						
103	UPSTREAM BYNUM RUN	AQ	µg/l								5K U						
105	DOWNSTREAM BYNUM RUN	AQ	µg/l								5K U						
107	MW #1	AQ	µg/l	10K							5K U						
108	MW #2	AQ	µg/l								5K U						
1015	MW #4	AQ	µg/l		22	5K	22	5K	65	14	85	19		7.7	12		
1016	SEDIMENT BASIN NE	AQ	µg/l								5K U						
1018	BRAXTON & HARRIS HOME WELL (ABANDONED)	AQ	µg/l								5K U						
1020	DIGGS HOME WELL	AQ	µg/l								5K U		5K				
1022	LEACHATE NW	AQ	µg/l		6.2	5K					5K U		63			74 U	
1023	LEACHATE N	AQ	µg/l		5K					17	5K U		56			60 U	

APR 2000373

... tified compounds, please see the Analytical Quality Assurance section of this rep...

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

■ Organic ☐ Inorganic

Site Name Buck Valley

Date of Sample 7/11/84

ber F3-8405-44

ber 2996 4P-002

Compounds Detected

Sample Description and Location	Phase	Units	2-Butanone	Carbondisulfide	2-Hexanone	4-Methyl-2-Pentanone	Total Xylenes	Acrolein								Remarks
Blk.	AQ	µg/l														
UPSTREAM BYNUM RUN	AQ	µg/l														
DOWNSTREAM BYNUM RUN	AQ	µg/l														
MW #1	AQ	µg/l		1.4												
MW #2	AQ	µg/l														
MW #4	AQ	µg/l		1K			5K									
SEDIMENT BASIN NE	AQ	µg/l														
BRAXTON & HARRIS HOME WELL (ABANDONED)	AQ	µg/l														
DIGGS HOME WELL	AQ	µg/l														
LEACHATE NW	AQ	µg/l	1400		5K	110	7.2	100R								
LEACHATE N	AQ	µg/l				60	190									
	AQ															
	AQ															

0003714

...the Analytical Quality Assurance section of this report.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

■ Organic ☐ Inorganic

DD Number F3-8405-44
PA Number 2996 MD-012

Site Name Bush Valley
Date of Sample 2/11/84

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: bis(2-ethylhexyl) phthalate		Methylene Chloride	Toluene	Acetone	Heptachlor	g-BHC						Remarks
7017	SEDIMENT BASIN NE	SOL	µg/Kg	10K		620	50	50								
7019	LEACHATE SOUTH	SOL	µg/Kg	10K		>11,000		20								
7021	LEACHATE NW	SOL	µg/Kg	1200		>11,000		25	0.005K							
8482	LEACHATE N	SOL	µg/Kg	10K		>8000		14		0.005K						
8102	BLANK	SOL	µg/Kg	280K		32										
9104	UPSTREAM HYDUM RUN	SOL	µg/Kg			700		60								
9106	DOWNSTREAM HYDUM RUN	SOL	µg/Kg			600		35								

AR300875

For tentatively identified compounds, please see the Analytical Quality ... section of this report.

F3-5405-44
LLC-002

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

Site Name Bash Quarry Caldwell

Date of Sample 2-12-87

[ ] Organic [X] Inorganic

Sample Description and Location	Phase	Units	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Remarks
BLANK	AQ	MG/L					8.0									
BLANK	SOL	MG/KG														
UPSTREAM BYNUM RUN	AQ	MG/L									3.4		18			
UPSTREAM BYNUM RUN	SOL	MG/KG	5970	5.8	30	0.27	0.16	11	5.5	8.5	5570	2.8	120		2.5	
DOWNSTREAM BYNUM RUN	AQ	MG/L	3.2								4.2		40			
DOWNSTREAM BYNUM RUN	SOL	MG/KG	5130	4.8	37	0.28	0.60	11	6.4	9.4	4950	5.1	236		8.0	
MW #1	AQ	MG/L	35,200	44		11	◇ 24	307	104	553	70,000	126	1130	0.63	269	
MW #2	AQ	MG/L	25,200	34		6.0	◇ 12	328	96	337	32,000	164	1020		195	
MW #4	AQ	MG/L	13,100	25			◇ 30	322	96	819	23,000	53	1690	0.46	536	
SEDIMENT BASIN NE	SED	MG/L	4,210								3540		219			
SEDIMENT BASIN NE	SED	MG/KG	8720	9.9	33	0.16		18	5.1	8.7	10,200	4.6	160		6.2	
BRAXTON'S MAN HOME WELL (ABANDONED)	GW	MG/L	1,570					16		2.3	1,660	1.3	57			
LEACHATE SOUTH	SOL	MG/KG	7,100	8.7	35	0.33	0.80	13	5.8	6.7	12,500	2.8	141		6.5	
BIGGS HOME WELL	AQ	MG/L									357					

For review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

) Number F3-5405-44

Number 140-002

[ ] Organic [X] Inorganic

Site Name Love Canal

Date of Sample 2-12-84

ample Number	Sample Description and Location	Phase	Units	Compounds Detected: SELENIUM	SILVER	TIN	VANADIUM	ZINC	ANTIMONY						Remarks
3471	LEACHATE NW	SOL	mg/kg			8.5	9.	25	6.5						
3477	LEACHATE NW	AQ	µg/L	7.8		21	367	1210							
3552	LEACHATE N	SOL	mg/kg			21	33	47	6.4						
3553	LEACHATE N	AQ	µg/L	3.2		23		276							

AR300377

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

E3-8405-44

LMB-002

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Basin Valley Complex

Date of Sample 7-16-84

Sample Description and Location	Phase	Units	Components Detected: Selenium	Silver	Tin	Vanadium	Zinc	Antimony							Remarks
BLANK	AQ	UG/L													
BLANK	SOL	UG/KG													
UPSTREAM BYNUM RUN	AQ	UG/L													
UPSTREAM BYNUM RUN	SOL	UG/KG			4.6	18	28								
DOWNSTREAM BYNUM RUN	AQ	UG/L		10	86										
DOWNSTREAM BYNUM RUN	SOL	UG/KG			4.2	18	24								
MW #1	AQ	UG/L			63	74	665								
MW #2	AQ	UG/L			82	405	358								
MW #4	AQ	UG/L			98		307								
SEDIMENT BASIN NE	AQ	UG/L					13								
SEDIMENT BASIN NE	SOL	UG/KG			5.3	24	24								
BRAXTON-HARRIS HOME WELL (ABANDONED)	AQ	UG/L					119								
LEACHATE SOUTH	SOL	UG/KG			5.8	19	27								
DIGGS HOME WELL	AQ	UG/L			21										

For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

For a quality assurance review of data.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name: Basin Valley Chevron

Date of Sample: 7 11 94

) Number F3-3405-44

) Number L40-002

Compounds Detected

mple mber	Sample Description and Location	Phase	Units	ALUMINUM	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON	LEAD	MANGANESE	MERCURY	NICKEL	Remarks
3476	LEACHATE NW	SOL	mg/kg	17,400	17	47	0.34	0.070	111	13	17	[illegible]	5.1	248		33	
3477	LEACHATE NW	AQ	µg/L	113,000	138	210		B 1.3	339	45	146	[illegible]	174	4870	1.3	154	
3552	LEACHATE N	SOL	mg/kg	13,100	10	49	0.56	0.22	19	8.3	16	15,300	14	19.3		9.9	
3553	LEACHATE N	AQ	µg/L	7,870	16	226			28			40,300	9.1	577		7.3	

AR300379

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

LEACHATE SAMPLES

GERAGHTY & MILLER, INC.
Environmental Services

SUBJECT: Ash Fill Landfill
PROJECT: NDHMI DATA
CLIENT/PROJECT NO: Leachate

BY: DATE:
CHKD: DATE:
REV: DATE:

PAGE:
SHEET: 113

Inorganics	Leachate from North Slope 1/13/83	Leachate 10/16/85
Cadmium (mg/L)	<0.05	NI
Chromium (mg/L)	0.16	
Lead (mg/L)	<1.5	
Mercury (mg/L)	.003	
Silver (mg/L)	.07	
Manganese (mg/L)	8.04	
Nickel (mg/L)	0.15	
Potassium (mg/L)	410	
Zinc (mg/L)	3.35	
pH		7.12
Dissolved O_2		0.33
BOD		563

NI = No Information

GERAGHTY & MILLER, INC.
Environmental Services

SUBJECT: MDHMH Bosh Valley
PROJECT: Leachate Samples
CLIENT/PROJECT NO:

BY: DATE:
CHKD: DATE:
REV: DATE:

Volatile Organics — Location	All	10/16/85 NI	2/5/86 NW(?)	2/5/86 N(?)	2/5/86 SE(?)	11/6/86 NI(?)	12/10/86 FRONT	[illegible]	3/7/88 NE
Chloromethane	ug/L	<1	<10	<10	<1	<1	<50	[illegible]	[illegible]
Bromomethane		<1	<10	<10	<1	<1	<50	[illegible]	<1
Dichlorodifluoromethane		<1	<10	<10	<1	<1	<50	<50	<1
Vinyl Chloride		2	<10	<10	<1	<1	<50	[illegible]	[illegible]
Chloroethane		36	17	<10	<1	<1	<50	<50	<1
Methylene chloride		5	35	36	2	<1	6000	150	4
Trichlorofluoromethane		<1	<10	<10	<1	<1	<50	<50	<1
1,1-Dichloroethene		<1	<10	<10	<1	<1	<50	<50	<1
1,1-Dichloroethane		<1	<10	<10	<1	<1	<50	<50	2
trans-1,2-Dichloroethene		<1	<10	<10	<1	<1	<50	<50	2
Chloroform		<1	<10	<10	<1	<1	<50	<50	<1
1,2-Dichloroethane		<1	<10	<10	<1	1	<50	<50	<1
1,1,1-Trichloroethane		<1	<10	<10	<1	<1	<50	<50	<1
Carbon Tetrachloride		<1	<10	<10	<1	<1	<50	<50	<1
Bromodichloromethane		<1	<10	<10	<1	<1	<50	<50	<1
1,2-Dichloropropane		<1	<10	<10	<1	<1	200	<50	<1
trans-1,3-Dichloropropene		<1	<10	<10	<1	<1	<50	<50	<1
Trichloroethene		<1	<10	<10	<1	<1	<50	<50	<1
Dibromochloromethane		<1	<10	<10	<1	<1	<50	<50	<1
1,1,2-Trichloroethane		<1	<10	<10	<1	<1	<50	<50	<1
cis-1,3-Dichloropropene		<1	<10	<10	<1	<1	<50	<50	<1
2-Chloroethylvinylether		<1	<10	<10	<1	<1	<50	<50	<1
Bromoform		<1	<10	<10	<1	<1	<50	<50	<1
1,1,2,2-Tetrachloroethane		<1	<10	<10	<1	<1	<50	<50	<1
Tetrachloroethene		<1	<10	<10	<1	<1	<50	<50	<1
Chlorobenzene		8	<10	<10	<1	<1	<50	<50	<1
Benzene		18	<10	<10	<1	6	<50	<50	5
Toluene		390	2060	<10	11	87	200	500	44

GERAGHTY & MILLER, INC.
Environmental Services

SUBJECT: Bush Valley Landfill
PROJECT: MDHMH DATA
CLIENT/PROJECT NO:

BY: DATE:
CHKD: DATE:
REV: DATE:

PAGE: 5
SHEET: 3/3

Volatile Organics LOCATION	10/16/85	2/5/86	2/5/86	2/5/86	11/6/86	12/10/86	12/10/86	7/7/87
	NI	N Site	N Side	SE Side	NI	Front	Rear	NE
Ethyl Benzene ug/L	14	110	<10	<1	45	<50	<50	15
Total Xylenes	37	310	<20	1	101	<50	<50	47
Total Purgeable Hydrocarbons	NI	NI	NI	NI	NI	NI	NI	NI
Tetrahydrofuran	2180	ND	NI	NI	43	1900	250	250
2-Butanone (MEK)	5050	29	565	390	183	5400	6400	133
4-Hydroxy-4-Methyl-2-Pentanone (MIBK)	280	100	NI	20	9	300	50	9
Acrolein	NI	ND	NI	NI	ND	ND	ND	ND
Acrylonitrile	NI	ND	NI	NI	ND	ND	ND	ND
Acetone	NI	4660	1060	770	133	26000	3800	469
Isopropyl alcohol	NI	1290	NI	635	131	72000	5900	380
Ethyl Ether	NI	170	NI	NI	67	650	100	64
Also observed	—	—	* C-5 to C-7 hydrocarbons	C5-C7 Hydrocarbons	—	C_4-C_6 alkanes	C_4-C_6 alkanes	
N-Butanol	NI	NI	NI	NI	NI	42000	3900	NI
2-Hexanone	NI	NI	NI	NI	NI	NI	NI	94
Methyl tert-butyl-ether	NI	NI	NI	NI	NI	NI	NI	3

NI = No information

Summary of BNA Compounds Detected

		N	2/5/86	2/5/86
Phenol	(ug/L)		<1	40
Isophorone	(ug/L)		2	<5
Diethyl Phthalate	(ug/L)		2	<5
Di-N-butyl Phthalate	(ug/L)		2	<5

All other BNA compounds are less than detection limits

AR300383

GERAGHTY & MILLER, INC.
Environmental Services

SUBJECT: NUS Data
PROJECT: Bush Valley Landfill
CLIENT/PROJECT NO: 7-84

BY: DATE:
CHKD: DATE:
REV: DATE:

	Aqueous Leachate NW	Aqueous leachate N	Solid leachate S	solid leachate NW	Solid leachate N
Phenol	64	10K ◆	NI	NI	NI
Benzoic Acid	2500 ◆	NI			
4-Methyl Phenol	1000	NI			
1,4 Dichlorobenzene	NI	10K			
bis-(2-ethyl-hexyl) phthalate	20	10K	10K ◆	1200 ◆	10K ◆
di-n-butyl phthalate	NI	10K ◆	NI	NI	NI
diethyl phthalate	68 ◆	NI			
Ethyl benzene	6.2	6.2			
Aniline	NI	5K ◆			
Benzene	6.2	5K			
Chlorobenzene	5K	NI			
Chloroethane	NI	17			
methylene chloride	5K ◆	5K ◆	>11,000 ◆	>11,000 ◆	>2000 ◆
Toluene	63	56	NI	NI	NI
Acetone	740 ◆	60 ◆	20 ◆	25 ◆	14 ◆
2 Butanone	1400	NI	NI	NI	NI
2-Hexanone	5K	NI			
4-methyl 2pentanone	110	60			
Total xylenes	7.2	190			
Acrolein	100K ◆	NI			
Hexachloro	NI	NI	0.001	0.0005K ◆	NI ◆
B-BTC	NI	NI	NI	NI	0.0057K ◆
Al	113000	7840	7100	17900	12100
As	138	16	8.7	17	10
Ba	2100	226	38	49	49
Be	NI	NI	0.38	0.34	0.58
Cd	1.3 ◆	NI	0.085	0.090	0.22
Cr	339	28	13	11	19
Co	145	NI	5.8	13	8.3

AR300384

GERAGHTY & MILLER, INC.
Environmental Services

SUBJECT: Gratiot Valley Landfill
PROJECT: NUS DATA
CLIENT/PROJECT NO: 7-11-84

BY: DATE:
CHKD: DATE:
REV: DATE:

PAGES:
SHEET 2

	Aqueous Leachate NW	Aqueous Leachate N	Solid Leachate South	Solid Leachate NW	Solid Leachate N
Cu	146	NI	6.7	19	16
Fe	208000	40,000	17500	26200	15500
Pb	174	9.1	7.8	5.1	14
Mn	4870	599	191	243	193
Hg	1.3	NI	NI	NI	NI
Ni	184	33	6.5	33	9.9
Se	7.8	3.1	NI	NI	NI
Sn	71	23	5.8	7.1	8.8
Vanadium	269	NI	19	45	31
Zn	1210	276	27	28	47
Antimony	NI	NI	NI	1.5	1.4

AR300385

NUS CORPORATION
A Halliburton Company

Dec. 10, 1985
(Sampled 7-84)

PROJECT FOR PERFORMANCE OF REMEDIAL RESPONSE ACTIVITIES AT UNCONTROLLED HAZARDOUS SUBSTANCE FACILITIES—ZONE 1

NUS CORPORATION
SUPERFUND DIVISION

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

■ Organic □ Inorganic

Site Name Book Knolls

Date of Sample 7/11/84

umber F3-8405-44

umber 2996

Compounds Detected

e or	Sample Description and Location	Phase	Units	Phenol	Benzoic Acid	4-Methyl Phenol	1,4-Dichlorobenzene	N-Nitroso diphenyl amine	bis-(2-ethyl hexyl) Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Di ethyl Phthalate	1,2,4-Trichloro benzene	1,2-Dichloro ethane	1,2-Dichloro propane	Ethyl Benzene	Fluorene	Remarks
1	Blk	AQ	ug/l							10K◇		10K◇						
3	UPSTREAM BYNUM RUN	AQ	ug/l	10K◇						10K◇								
5	DOWNSTREAM BYNUM RUN	AQ	ug/l	10K◇						10K◇								
7	MW #1	AQ	ug/l					10K	10K	10K◇		10K◇						
8	MW #2	AQ	ug/l						10K	10K◇							5K◇	
5	MW #4	AQ	ug/l	10K◇						10K◇		10K◇	15	10K◇			95	
6	SEDIMENT BASIN NE	AQ	ug/l							10K◇		10K◇						
8	BRAXTON & HARRIS HOME WELL (ABANDONED)	AQ	ug/l	10K◇					10K	10K◇		10K◇						
10	DIGGS HOME WELL	AQ	ug/l					10K		10K◇		10K◇						
12	LEACHATE NW	AQ	ug/l	64	2500	1000			20			68◇			6.2			
13	LEACHATE N	AQ	ug/l	10K◇			10K		10K	10K◇					6.2	5K◇		

Number F3-8405-44
Number 2996 110-002

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

■ Organic ☐ Inorganic

Site Name Bush Valley
Date of Sample 2/11/84

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Phenanthrene	Benzene	Chlorobenzene	1,2-Dichloroethane	1,1,1-Trichloroethane	1,1-Dichloroethane	Chloroethane	Methylene Chloride	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride	Acetone	Remarks
101	Blk	AQ	µg/l								5K◊						
103	UPSTREAM BYNUM RUN	AQ	µg/l								5K◊						
105	DOWNSTREAM BYNUM RUN	AQ	µg/l								5K◊						
107	MW #1	AQ	µg/l	10K							5K◊						
108	MW #2	AQ	µg/l								5K◊						
0015	MW #4	AQ	µg/l		22	5K	22	5K	65	14	85	19		7.7	12		
0016	SEDIMENT BASIN NE	AQ	µg/l								5K◊						
0018	BRAXTON & HARRIS HOME WELL (ABANDONED)	AQ	µg/l								5K◊						
0020	PIGGS HOME WELL	AQ	µg/l								5K◊		5K				
0022	LEACHATE NW	AQ	µg/l		6.2	5K					5K◊		63			74◊	
0023	LEACHATE N	AQ	µg/l		5K					17	5K◊		56			60◊	

APR 30 1984

For tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

Number F3-8405-44
Number 2996 40-002

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

■ Organic ☐ Inorganic

Site Name Burch Valley
Date of Sample 7/11/84

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: 2-Butanone	Carbon disulfide	2-Hexanone	4-Methyl-2-pentanone	Total Xylenes	Acrolein	Remarks
01	Blk.	AQ	µg/l							
03	UPSTREAM BYNUM RUN	AQ	µg/l							
05	DOWNSTREAM BYNUM RUN	AQ	µg/l							
07	MW #1	AQ	µg/l		1.4					
08	MW #2	AQ	µg/l							
015	MW #4	AQ	µg/l		1K			5K		
016	SEDIMENT BASIN NE	AQ	µg/l							
018	BRAXTON + HARRIS HOME WELL (ABANDONED)	AQ	µg/l							
020	DIGGS HOME WELL	AQ	µg/l							
022	LEACHATE NW	AQ	µg/l	1400		5K	110	7.2	100D	
483	LEACHATE N	AQ	µg/l				60	190		

ARCW0389

...section of this report.

DD Number F3-8405-44
PA Number 2956 110-002

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

■ Organic ☐ Inorganic

Site Name Bush Valley
Date of Sample 7/11/84

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: bis(2-ethylhexyl) phthalate		Methylene Chloride	Toluene	Acetone	Heptachlor	β-BHC							Remarks
7017	SEDIMENT BASIN NE	SOL	µg/kg	10K◊		620◊	50	50◊									
7019	LEACHATE SOUTH	SOL	µg/kg	10K◊		>11,000◊		20◊									
7021	LEACHATE NW	SOL	µg/kg	1200◊		>11,000◊		25◊	0.005K◊								
8/02	LEACHATE N	SOL	µg/kg	10K◊		>8000◊		14◊		0.005K◊							
8102	BLANK	SOL	µg/kg	280K◊		32◊											
9104	UPSTREAM BYNUM RUN	SOL	µg/kg			700◊		60◊									
9106	DOWNSTREAM BYNUM RUN	SOL	µg/kg			600◊		35◊									

AR300390

◊ - tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

Site Name Bush Valley Landfill

Number F3-5405-44

Number LUC-002

☐ Organic ☒ Inorganic

Date of Sample 2-12-92

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: Aluminum	Arsenic	Barium	Beryllium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Remarks
161	BLANK	AQ	µg/L					2.0								
163	BLANK	SOL	mg/kg													
163	UPSTREAM BYNUM RUN	AQ	µg/L								314		18			
164	UPSTREAM BYNUM RUN	SOL	mg/kg	5970	5.8	30	0.27	0.40	11	5.5	8.5	5970	2.8	120		2.5
165	DOWNSTREAM BYNUM RUN	AQ	µg/L	32								413		40		
166	DOWN STREAM BYNUM RUN	SOL	mg/kg	5130	4.8	27	0.28	0.60	11	6.4	9.4	6950	5.1	236		8.0
167	MW #1	AQ	µg/L	35,200	44		11	◇ 2.4	307	104	55.3	46,000	126	1130	0.63	267
168	MW #2	AQ	µg/L	25,200	34		6.0	◇ 1.2	328	96	337	32,000	164	1020		195
170	MW #4	AQ	µg/L	13,100	7.5			◇ 3.0	322	96	81.9	22,000	53	1620	0.46	536
171	SEDIMENT BASIN NE	AQ	µg/L	4,210								3540		219		
172	SEDIMENT BASIN NE	SOL	mg/kg	8720	9.9	33	0.36		18	5.1	8.7	10,200	4.6	160		6.2
173	BRADSHAW HOME WELL LANDFILL	AQ	µg/L	8,540					16		23.2	8,460	13	57		
174	LEACHATE SOUTH	SOL	mg/kg	7,100	8.7	38	0.33	0.080	14	5.8	6.7	12,500	7.8	164		6.5
175	DIGGS HOME WELL	AQ	µg/L									357				

AR300388

Lead compounds (Pb) see the Analytical Quality Assurance section of this report.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

Site Name Pine Valley Complex

Number F3-9405-44

Number WD-002

☐ Organic ☒ Inorganic

Date of Sample 2-12-94

mple mber	Sample Description and Location	Phase	Units	Compounds Detected: SELENIUM	SILVER	TIN	VANADIUM	ZINC	ANTIMONY						Remarks
3476	LEACHATE NW	SOL	mg/kg			8.5	45	25	6.5						
3477	LEACHATE NW	AQ	µg/L	7.8		21	367	1210							
3552	LEACHATE N	SOL	mg/kg			21	33	47	6.4						
3553	LEACHATE N	AQ	µg/L	3.1		23		276							

AR300392

NOTE: For a review of the data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

Number E3-8405-44

Number LMP-002

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Bush Valley Landfill

Date of Sample 7-12-84

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Selenium	Silver	Tin	Vanadium	Zinc	Fluoride								Remarks
461	BLANK	AQ	µg/L														
462	BLANK	SOL	mg/kg														
463	UPSTREAM BYNUM RUN	AQ	µg/L														
464	UPSTREAM BYNUM RUN	SOL	mg/kg			4.6	18	28									
465	DOWNSTREAM BYNUM RUN	AQ	µg/L		10	36											
466	DOWNSTREAM BYNUM RUN	SOL	mg/kg			4.2	18	24									
467	MW #1	AQ	µg/L			63	74	605									
468	MW #2	AQ	µg/L			82	405	358									
470	MW #4	AQ	µg/L			98		307									
471	SEDIMENT BASIN NE	AQ	µg/L					12									
472	SEDIMENT BASIN NE	SOL	mg/kg			5.3	24	24									
473	BRAXTON HOME WELL (ABANDONED)	AQ	µg/L					119									
4479	LEACHATE SOUTH	SOL	mg/kg			5.8	19	27									
4475	DIGGS HOME WELL	AQ	µg/L			21											

For [illegible] and non-target tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

) Number F3-3405-44
A Number L40-002

Site Name Basin Valley Mobile
Date of Sample 7-11-94

Compounds Detected

mple umber	Sample Description and Location	Phase	Units	ALUMINUM	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	IRON	LEAD	MANGANESE	MERCURY	NICKEL	Remarks
3476	LEACHATE NW	SOL	mg/kg	17,900	17	42	0.34	0.070	111	13	12	25,200	5.1	243		33	
3477	LEACHATE NW	AQ	µg/L	113,000	138	2100		D 1.3	359	45	146	253,000	174	4870	1.3	154	
3552	LEACHATE N	SOL	mg/kg	13,100	10	49	0.52	0.22	19	8.3	16	15,300	14	19.3		9.9	
3553	LEACHATE N	AQ	µg/L	7,870	16	226			28			40,300	9.1	572		7.3	

AR300394

NOTE: For a review of data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

Bush Valley Landfil

Site Sampling Background Information

July 11, 1984

David Healy DH

AR300395

Bush Valley Landfill

Outlined below is a synopsis of activities completed at the Bush Valley Landfill on July 11, 1984. NUS Corporation was assigned to complete a site investigation of this facility under EPA's Dump Site Program. Samples were sent to EPA's contract labs for analysis. After receiving the laboratory analysis, NUS will finalize a draft site investigation report, which will be sent to EPA and WMA in approximately 6-9 months. The following individuals were on-site:

Ric Callahan - NUS Corporation
Marsha Irwin - NUS Corporation
Jim Strickland - NUS Corporation
Randy Dickinson - NUS Corporation
Barry Schlesinger - NUS Corporation
Lloyd Harris - Owner
Frank Henderson - WMA, Support Services Division
David Healy - WMA, Support Services Division
Butch Henderson - WMA, Summer Student
David Berardelli - WMA, Summer Student

Three of the four monitoring wells were sampled. Monitoring well 3 contained one foot of water and did not have enough volume for sampling. The other three wells were bailed prior to sampling. Monitoring well information is as follows:

Monitoring Well	Depth	Depth to Water	Column of Water
1	45	12	33
2	43	9	34
3	19	18	1
4	20	9	11

The Braxton-Harris House was abandoned approximately one year ago, and has a field stone lined, 30 deep, dug well with a hand pump.

There was evidence of leachate seeps around the fill and three seeps were sampled. The sediment pond near monitoring well 3 had tadpoles and at least one frog

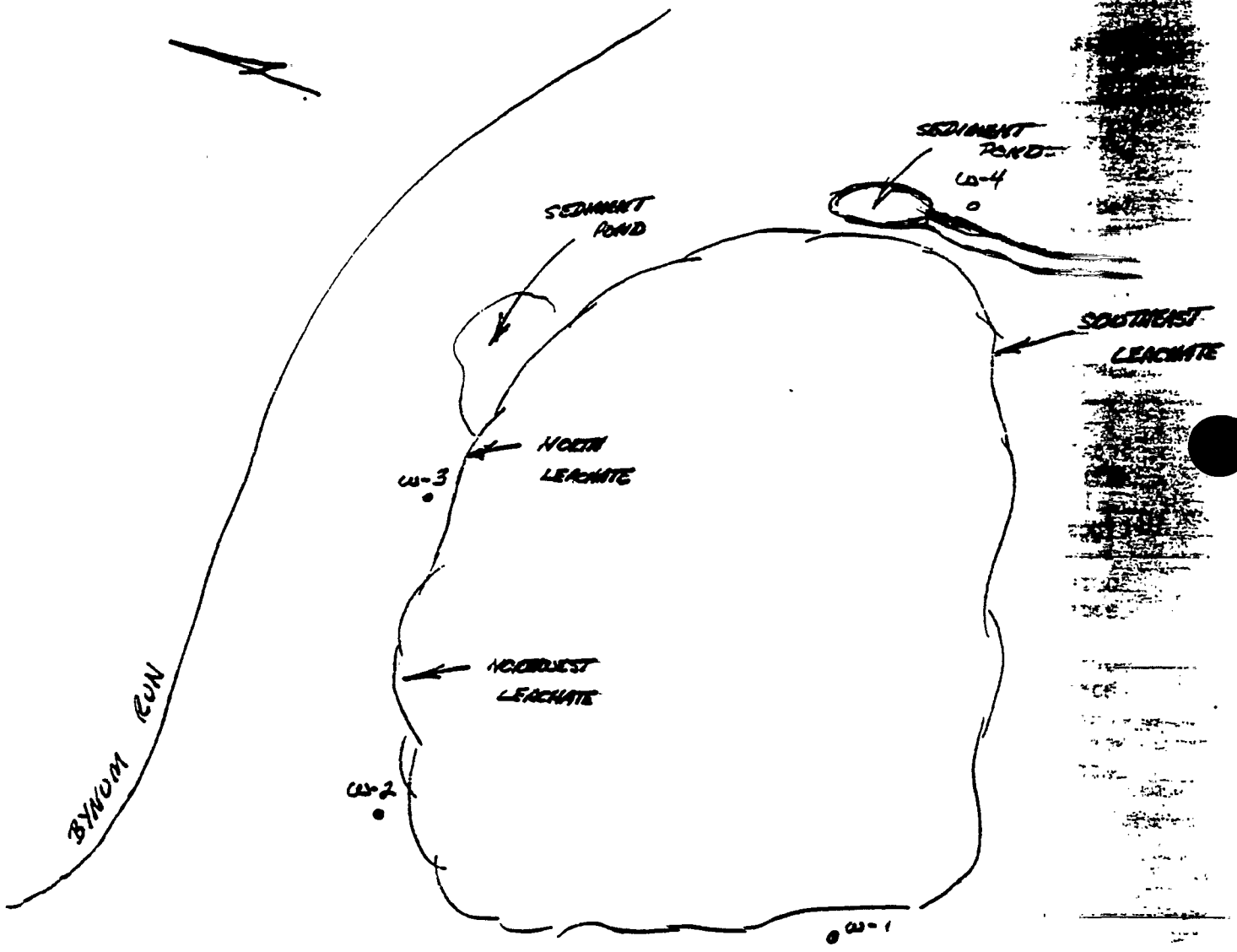
Mr. Harris estimated he has 47 acres on this property, of which, approximately 29 acres has been landfilled.

Bush Valley Landfill

Sampling Information

Sampling Location	Time	Type of Sample	pH	Specific Conductance
Monitoring Well #1	9:20	Water	5.9	94
Monitoring Well #2	10:25	Water	6.34	66
Monitoring Well #4	11:50	Water	5.64	500
Sediment Pond (near MW-3)	9:50 9:55	Water Sediment	6.41	200
Upstream	10:55 11:05	Water Sediment	6.43	160
Downstream	12:06 12:10	Water Sediment	6.41	180
Braxton-Harris Well	10:35	Water	6.38	60
Diggs Well	12:20	Water	6.69	180
Southeast Leachate	11:45	Sediment		
Northwest Leachate	12:45 12:55	Water Sediment	7.28	7000
North Leachate	13:10 13:15	Water Sediment	7.33	5200

DUSH VALLEY LANDFILL



BUSH ROAD

AR300398

BRAXTON-HARRIS HOUSE

NOT TO

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION

REPORT OF WATER ANALYSIS

JAN 15 '83

Bottle Number: BV-2 Name: Rock Hill Landfill County: Harford

Source of Sample: Rock Rd. Street Abingdon Town or City Collector: J. Curtis

Sample Type (Circle): Community Source | Non-Community Distribution | Private MCL | Emergency Recheck | Routine

Remarks: leachate from north slope — total metals —

County	Plant No.	Sampling Station	Date Collected	Time	Acid	Iced
			01/13/83	10A M		

Field Data: pH* | Chlorine Residual: Free | Total | Specific Conductance

✓	ANALYSIS	CODE	RESULTS	✓	ANALYSIS	CODE	RESULTS
	pH*	011			Arsenic	253	
	Alkalinity (Total)	040			Barium	262	
	Alkalinity (HCO_3)	050		✓	Cadmium	273	<.05
	Alkalinity (CO_3)	060		✓	Chromium	283	.161
	pH*, Ca CO_3 SAT.	071		✓	Lead	302	<.5
	Alkalinity, Ca CO_3 SAT	080		✓	Mercury	314	.0003
	Hardness	110			Selenium	323	
	Ammonia-N	143			Silver	333	
	Nitrate-Nitrite N	162			Aluminum	192	
	Nitrite N	173			Calcium	20	
	MBAS	182		✓	Copper	241	.017
	Chloride	091			Iron	122	
	Fluoride	101			Magnesium	241	
	Color*	020		✓	Manganese	133	.067
✓	Turbidity*	031		✓	Nickel	391	<.15
	Conductance*, SPEC.	201		✓	Potassium	361	1.01
	Silica	210			Sodium	371	
	Sulfate	220		✓	Zinc	342	.515
	Total Residue	381			Chl-		

AR300399

* Results reported in units, all others in milligrams per liter (ppm)

STATE OF MARYLAND

Department of Health & Mental Hygiene

Office of Environmental Programs

Control Sample No. [illegible]

Laboratory's Sample No. [illegible]

SPECIMEN

Chain of Custody Record

Instructions: Execute two (2) copies, both copies to accompany collected sample(s) until delivery to the Custodial Clerk at the Central Laboratory or other appropriate authorized agency. The Custodial Clerk or other authorized person accepting delivery will sign both copies, one copy to stay with the collected sample(s) and one copy to be returned to the sample(s) collector.

Location of Sampling	Description of waste sampled (color, odor, liquid, solid, et
Bush Valley Landfill	dark liquid, odor

Field Information (sampling method, container, preservation, etc.)

grab, cubitainer

No. of Pkgs.	Identifying marks placed on collected samples.	Name, title, telephone no., address of collector.
1	BV-2	James D. Curtis x665

Date of Sampling & Time	If the collector did not deliver the collected sample(s) list intermediate shipper, name, title, signature, inclusi dates & time of possession.
1/13/83 1000 hrs.	

Laboratory to which sample(s) was delivered	Remarks:
DHMH 201 W. Preston	Leachate

By whom delivered (Name & Title)	Date & Time Delivered	Delivered to (Name & Title)	Receipt Acknowledge by (signature)
James Curtis Inspector	1/13/83	LINDA AMES CHEMIST I	Linda Ames
			AR300400

STATE OF MARYLAND — Waste Management
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
Howard and Biddle Streets
P.O. Box 2355, Baltimore Maryland 21203

CHEMICAL ANALYSIS OF STREAMS AND WASTE WATERS

Hampden ..... County Harford ..... County Code .....

of Sample Bush Valley Landfill ..... STP Code .....

Sewage ☐ Stream ☐ Industrial Waste ☐ Other leachate

Grab ☐ Composite ☒ Raw ☐ Final ☐ Chlor ☐ Unchl

☐ Intermediate ☐ UV ☐ Dechlorinated

No. BVL-02 REMARK .....

Field Chlorine ☐ Yes

le No. ..... Residual: Free ..... Total ..... Rain ☐ No

ected: Date 10/16/85 Hour 1420 Collector J. Curtis

Check Test Required	Test	Result (ppm)
✓	pH (OCT 1 8 1985)	7.12
	Dissolved oxygen	0.33
✓	Biochemical oxygen demand (5 days at 20° C)	368
	Chemical oxygen demand	
	Solids, suspended	
	Solids, total	
	Solids, volatile	
	Nitrogen, as free ammonia — N	
	Nitrogen, as organic ammonia — N	
	Nitrogen, total Kjeldahl — N	
	Nitrogen, as nitrate — N + nitrite — N	
	Phosphorous, ortho	
	Phosphorous, total	
	Chloride (as Cl)	
	Other:	
	OFFICE USE ONLY 90	A C D

..... Reported ..... Chemist .....

No. .....

MHH - 93 (4/81) 30M

AR300401

STATE OF MARYLAND

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

LABORATORIES ADMINISTRATION
TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER BVL-04

Harford
Name of County

SOURCE OF SAMPLE Bush Valley Landfill COLLECTOR James Curtis

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with sulfate _____

NOV 19 1985

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline etc.) Contamination _____

Other (specify) _____

REMARKS: Leachate

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO	SAMPLING STATION	DATE COLLECTED	

10/16/85

20 21 22	23 24	25 26
FIELD pH	FIELD RESID. CHLORINE: FREE	TOTAL

624

624

Purgeable Halocarbons (EPA 624)				Purgeable Aromatics (EPA 624)	
Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	13
Bromomethane	1	Trichloroethene		Toluene	3-1.7
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	16
Vinyl chloride	2	1,1,2-Trichloroethane		Total Xylenes	3.7
Chloroethane	3.6	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	5	2-Chloroethylvinylether		Tetrahydrofuran	2,130
Trichlorofluoromethane	<1	Bromoform		Methylethylketone	
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		(2-Butanone) (MEK)	5,150
1,1-Dichloroethane		Tetrachloroethene		Methylisobutylketone (MIBK)	2,810
trans-1,2-Dichloroethene		Chlorobenzene	3		
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		**Other Purgeable Organics:**			
1,1,1-Trichloroethane		1,1-Dichloroethene 120			
Carbon Tetrachloride					
Bromodichloromethane					
1,2-Dichloropropane					

AR300402

Results reported in micrograms per liter (parts per billion)

DATE RECEIVED OCT 17 1985 DATE REPORTED NOV 1 1985 CHEMIST [illegible]

DHMH 749 3/85

ZM

Office of Environmental Programs

RECEIVED

NOV 19 1985

INDUSTRIAL WASTE

M. Knight
1310
1311

Chain of Custody Record

Instructions: Execute two (2) copies, both copies to accompany collected sample(s) until delivery to the Custodial Clerk of the Central Laboratory or other appropriate authorized agency. The Custodial Clerk or other authorized person accepting delivery will sign both copies, one copy to stay with the collected sample(s) and one copy to be returned to the sample(s) collector.

Location of Sampling	Description of waste sampled (color, odor, liquid, solid,
Bush Valley Landfill	dark liquid

Field Information (sampling method, containers, preservation, etc.)

2 VOAs
grab sample

No. of Pkgs.	Identifying marks placed on collected samples.	Name, title, telephone no., address of collector.
2	BVL-03 BVL-04	James Curtis x5732

Date of Sampling & Time	If the collector did not deliver the collected sample(s) list intermediate shipper, name, title, signature, inclu dates & time of possession.
10/16/85 1420 hrs	

Laboratory to which sample(s) was delivered	Remarks:
DAHH	

By whom delivered (Name & Title)	Date & Time Delivered	Delivered to (Name & Title)	Receipt Acknowledge by (signature)
J. Curtis	10/17/85 1426 HRS	K K Gill, Jr LS IV	K K Gill, Jr

RECEIVED

NOV 19 1985

ENFORCEMENT FILE
FILE COPY ONLY

NOV 19 1985

AR300403

Harford Co

State of Maryland
Department of Health and Mental Hygiene
Office of Environmental Programs
201 West Preston Street, Baltimore, Maryland 21201

Report of Observations

Type of Inspection/Observations: Landfill / Sampling Date 7-15-86

Facility Name: Bush Valley

Remarks:

On the above date, Jeff Smith & Ed Glass (DHMH) inspected the Bush Valley Landfill for the purpose of sampling and photo documentation. The following was noted:

- Leachate outbreaks were observed throughout the landfill, some of which were brown, while others were flowing. Note: The weather at the time of inspection was cloudy / raining as was the day before. This contributed to the increased runoff / flow of leachate. The following samples were taken:

1120 HRS JSBV2586A (3 VOA's) leachate / soil from front of the fill (10 o'clock)

1140 HRS JSBV2586B (3 VOA's) leachate from left of fill (North?)

1210 HRS JSBV2586C (3 VOA's) leachate (mostly surface runoff) from rear of fill (Southeast?)

1220 HRS JSBV2586R (amber) water sample from stormpipe at rear of fill

1230 HRS JSBV2586S (amber) water sample from storm pond at left side of fill (near MW-3)

- There was evidence of hospital wastes (plastic pan bottles) observed as well as waste from Cello Corp (guard containers which were empty of bowl cleaner & "brevity blue")
- Also observed was a burned Toyota on the top of the fill.
- (We spoke to Bill Harris on-site and he stated no dumping is taking place on the property, but he did express an interest in "going up another 20' with rubble."
- Photographs attached.
- Mr Harris' niece is currently building a new house next to the landfill.

AR300404

Observer: Jeff Smith Person Interviewed: Wm Harris

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston Street
J. Mehsen Joseph, Ph.D., Director

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER YSBV2556 L

Harford
(Name of County)

SOURCE OF SAMPLE Bad well COLLECTOR [redacted] MDE

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

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ENFORCEMENT FILE
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REMARKS: Leachate sample from [redacted]

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED 120186 / 112016S	CARD NO.

FIELD pH [20 21 22] FIELD RESID. CHLORINE: FREE [23 24] TOTAL [25 26]

Purgeable Halocarbons (EPA 624)				Purgeable Aromatics (EPA 624)	
Chloromethane	<10	trans-1,3-Dichloropropene	<10	Benzene	<10
Bromomethane		Trichloroethene		Toluene	2,060
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	110
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	310
Chloroethane	17	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	35	2-Chloroethylvinylether		Tetrahydrofuran	N.D
Trichlorofluoromethane	<10	Bromoform		(2-Butanone) (MEK)	29
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		Methylisobutylketone (MIBK)	10
1,1-Dichloroethane		Tetrachloroethene		Acrolein	N.D
trans-1,2-Dichloroethene		Chlorobenzene		Acrylonitrile	N.D
Chloroform		Total Trihalomethanes			
1,2-Dichloroethane		**Other Purgeable Organics:**			
1,1,1-Trichloroethane		acetone = 4,660			
Carbon Tetrachloride		isopropyl alcohol = 1,290			
Bromodichloromethane		ethyl ether = 170			

AR300405

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston Street
J. Mehaan Jessen, Ph.D., Director

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER JSBV7596 F

Harford
Name of County

SOURCE OF SAMPLE Brush Valley COLLECTOR Jeff Smith / OEP

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline, etc.) Contamination _____

Other (specify) _____

REMARKS: Leachate from [redacted]

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED 02 05 86	CARD NO.

1140 HRS

FIELD pH (20 21 22) FIELD RESID. CHLORINE: FREE (23 24) TOTAL (25 26)

Purgeable Halocarbons (EPA 624)				Purgeable Aromatics (EPA 624)	
Chloromethane	<10	trans-1,3-Dichloropropene	<10	Benzene	<10
Bromomethane	"	Trichloroethene	"	Toluene	"
Dichlorodifluoromethane	"	Dibromochloromethane	"	Ethylbenzene	"
Vinyl chloride	"	1,1,2-Trichloroethane	"	Total Xylenes	<20
Chloroethane	"	cis-1,3-Dichloropropene	"	Total Purgeable Hydrocarbons	
Methylene chloride	36	2-Chloroethylvinylether	"	Tetrahydrofuran	
Trichlorofluoromethane	<10	Bromoform	"	(2-Butanone) (MEK)	565
1,1-Dichloroethene	"	1,1,2,2-Tetrachloroethane	"	Methylisobutylketone (MIBK)	
1,1-Dichloroethane	"	Tetrachloroethene	"	Acrolein	
trans-1,2-Dichloroethene	"	Chlorobenzene	"	Acrylonitrile	
Chloroform	"	Total Trihalomethanes	"		
1,2-Dichloroethane	"	Other Purgeable Organics:			
1,1,1-Trichloroethane	"	acetone = 1,060			
Carbon Tetrachloride	"	observed: C5-C7 hydrocarbons			
Bromodichloromethane	"	NF=1) = TNTC			

AR300406

STATE OF MARYLAND
DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
201 W. Preston Street
J. Mahoon Jobson, Ph.D., Director

(625)
0306H-2608C

TRACE ORGANICS LABORATORY
VOLATILE ORGANICS ANALYSIS

BOTTLE NUMBER SBV2586C

Harford
(Name of County)

SOURCE OF SAMPLE Bush Valley COLLECTOR Jeff Smith/OEP

SAMPLE TYPE: _____ DISTRIBUTION _____ SOURCE _____ OTHER (specify) _____

Community _____ noncommunity _____ private _____

Landfill observation well _____ stream _____ tidal waters _____

Industrial effluent _____ STP sampling station _____ STP effluent _____

Chlorinated _____ preserved with thiosulfate _____

Reason for submitting sample: Trihalomethane Survey _____

Suspected Industrial Chemical Contamination _____

Suspected Petroleum (gasoline etc.) Contamination _____

Other (specify) _____

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REMARKS: Leachate sample from [redacted]

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.
				0 2 0 5 8 6	

1210 HRS

FIELD pH (20 21 22) FIELD RESID. CHLORINE: FREE (23 24) TOTAL (25 26)

Purgeable Halocarbons (EPA 601)				Purgeable Aromatics	
Chloromethane	<1	trans-1,3-Dichloropropene	<1	Benzene	<1
Bromomethane		Trichloroethene		Toluene	11
Dichlorodifluoromethane		Dibromochloromethane		Ethylbenzene	<1
Vinyl chloride		1,1,2-Trichloroethane		Total Xylenes	1
Chloroethane	↓	cis-1,3-Dichloropropene		Total Purgeable Hydrocarbons	
Methylene chloride	2	2-Chloroethylvinylether		Tetrahydrofuran	
Trichlorofluoromethane	<1	Bromoform		(2-Butanone) (MEK)	390
1,1-Dichloroethene		1,1,2,2-Tetrachloroethane		Methylisobutylketone (MIBK)	20
1,1-Dichloroethane		Tetrachloroethene		Acrolein	
trans-1,2-Dichloroethene		Chlorobenzene	↓	Acrylonitrile	
Chloroform		Total Trihalomethanes		AR300407	
1,2-Dichloroethane		**Other Purgeable Organics:**			
1,1,1-Trichloroethane		acetone = 770			
Carbon Tetrachloride		isopropyl alcohol = 635			
Bromodichloromethane		observed: C5-C7 hydrocarbons			

MARYLAND STATE DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Laboratories Administration
P.O. Box 2355
Baltimore, Maryland 21203

1 OF 3

Priority _____ TRACE ORGANICS ~~HAZARDOUS WASTE~~ LABORATORY Lab No. ~~002600~~

Organic Analysis Report Form

Collector J. Smith / 1210 / 2-5-86 Sample Source Bush Valley
Name/Time/Date

Sample ID No. SSBV2586R Preservative Used —

Sample Alert [redacted]

Specify Program:

RCRA: ____ NPDES: ✓ OTHER: Landfill

Chain of Custody Sample Possesion:

From: J. Smith / 1455 / 2-5-86 To: [redacted]
Name/Time/Date Name/Time/Date

From: _____ To: _____
Name/Time/Date Name/Time/Date

From: _____ To: _____
Name/Time/Date Name/Time/Date

Circle and Specify Parameters Requested:

1. EP Toxicity
2. PCB/Pesticides
3. Priority Pollutant Scan
4. Identify/Compare

GC/MS Analysis indicates the presence of the following compounds:

GC Analysis indicates the presence of the following PCB/Pesticides:

AUG - 1986

AR300408

Section Chief: [redacted] Verified By: [redacted] Authorized By: _____

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
ENVIRONMENTAL CHEMISTRY DIVISION
TRACE ORGANICS LABORATORY

EXTRACTABLE ORGANICS ANALYSIS (EPA 625)

CONTAINER NO. JSBN 2586R COLLECTOR J. SMITH COUNTY HARFORD

SAMPLE SOURCE BUSH VALLEY LF STORMWATER POND IN REAR OF FILL

SAMPLE TYPE (SPECIFY) LANDFILL LEACHATE

REMARKS:

0220E 2607C

1 | 2 3 TRANS TYPE | COUNTY | 4 5 6 7 PLANT NO. | 8 9 10 11 SAMPLING STATION | 12 13 14 15 16 17 DATE COLLECTED | 18 19 CARD NO.

20 21 22 FIELD pH | FIELD RESID. CHLORINE: FREE 23 24 | TOTAL 25 26 | TIME

METHOD: FUSED SILICA CAPILLARY GC/MS (EPA 625)

ACIDS		**AMINES**	
Phenol	<1.	N-Nitrosodimethylamine	<1.
2-Chlorophenol		N-Nitrosodipropylamine	
2-Nitrophenol		N-Nitrosodiphenylamine	
2,4-Dimethylphenol		1,2-Diphenylhydrazine	
2,4-Dichlorophenol		Benzidine	<50.
4-Chloro-3-methylphenol		3,3'-Dichlorobenzidine	<20
2,4,6-Trichlorophenol	<2.	**POLYNUCLEAR AROMATICS**	
2,4-Dinitrophenol	<10.		
4-Nitrophenol	<10.	Naphthalene	<1.
2-Methyl-4,6-dinitrophenol	<5.	Acenaphthylene	
Pentachlorophenol	<5.	Acenaphthene	
		Fluorene	
BASE-NEUTRALS		Phenanthrene	
CHLORINATED HYDROCARBONS		Anthracene	
1,3-Dichlorobenzene	<1.	Fluoranthene	
1,4-Dichlorobenzene		Pyrene	
1,2-Dichlorobenzene		Benzo(a)anthracene	
Hexachloroethane		Chrysene	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	<2.
Hexachlorobutadiene	<5.	Benzo(k)fluoranthene	
Hexachlorocyclopentadiene	<5.	Benzo(a)pyrene	
2-Chloronaphthalene	<1.	Indeno(1,2,3-cd)pyrene	
Hexachlorobenzene	<1.	Dibenzo(a,h)anthracene	
		Benzo(g,h,i)perylene	
HALOETHERS		**PHTHALATE ESTERS**	
Bis(2-chloroethyl)ether	<1.	Dimethyl phthalate	<1.
Bis(2-chloroisopropyl)ether		Diethyl phthalate	2.
Bis(2-chloroethoxy)methane		Di-N-butyl phthalate	2.
4-Chlorophenylphenylether		Butylbenzyl phthalate	
4-Bromophenylphenylether		Bis(2-ethylhexyl) phthalate	4.
		Di-N-octyl phthalate	<1
NITROAROMATICS AND ISOPHORONE			
Nitrobenzene	<1		
Isophorone	2.		
2,6-Dinitrotoluene	<1.		
2,4-Dinitrotoluene	<1.		

Results reported in micrograms/Liter gram (ppb)

MARYLAND STATE DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Laboratories Administration
P.O. Box 2355
Baltimore, Maryland 21203

Priority _____ TRACE ORGANICS HAZARDOUS WASTE LABORATORY Lab No. 002610

Organic Analysis Report Form

Collector J. Smith / 1255 / 2-5-86 Sample Source Bush Valley
Name/Time/Date

Sample ID No. 6BV2585 Preservative Used —

Sample Alert [redacted]

Specify Program:

RCRA: ____ NPDES: ✓ OTHER: Landfill

Chain of Custody Sample Possession:

From: J. Smith / 1455 / 2-5-86 To: E.V. Hill Jr. / 1455 / 2-5-86
Name/Time/Date Name/Time/Date

From: _____ To: _____
Name/Time/Date Name/Time/Date

From: _____ To: _____
Name/Time/Date Name/Time/Date

Circle and Specify Parameters Requested:

1. EP Toxicity
2. PCB/Pesticides
3. Priority Pollutant Scan
4. Identify/Compare

GC/MS Analysis indicates the presence of the following compounds:

GC Analysis indicates the presence of the following PCB/Pesticides:

AR300410

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
LABORATORIES ADMINISTRATION
ENVIRONMENTAL CHEMISTRY DIVISION
TRACE ORGANICS LABORATORY

EXTRACTABLE ORGANICS ANALYSIS (EPA 625)

CONTAINER NO. JSBV2586&S COLLECTOR J. SMITH COUNTY

SAMPLE SOURCE BUSH VALLEY — STORMWATER POND ON SIDE OF FILL

SAMPLE TYPE (SPECIFY) LANDFILL LEACHATE

REMARKS: 0220F2610C

AUG [illegible]

1	2 3	4 5 6 7	8 9 10 11	12 13 14 15 16 17	18 19
TRANS TYPE	COUNTY	PLANT NO.	SAMPLING STATION	DATE COLLECTED	CARD NO.

20 21 22	23 24	25 26
FIELD pH	FIELD RESID. CHLORINE: FREE	TOTAL TIME

METHOD: FUSED SILICA CAPILLARY GC/MS (EPA/625)

ACIDS		AMINES	
Phenol	40.	N-Nitrosodimethylamine	<5.
2-Chlorophenol	<5.	N-Nitrosodipropylamine	
2-Nitrophenol		N-Nitrosodiphenylamine	
2,4-Dimethylphenol		1,2-Diphenylhydrazine	
2,4-Dichlorophenol		Benzidine	<100
4-Chloro-3-methylphenol		3,3'-Dichlorobenzidine	<5.
2,4,6-Trichlorophenol	<10.	**POLYNUCLEAR AROMATICS**	
2,4-Dinitrophenol	<25.	Naphthalene	<5.
4-Nitrophenol	<25.	Acenaphthylene	
2-Methyl-4,6-dinitrophenol	<10.	Acenaphthene	
Pentachlorophenol	<10.	Fluorene	
BASE-NEUTRALS		Phenanthrene	
CHLORINATED HYDROCARBONS		Anthracene	
1,3-Dichlorobenzene	<5.	Fluoranthene	
1,4-Dichlorobenzene		Pyrene	
1,2-Dichlorobenzene		Benzo(a)anthracene	
Hexachloroethane		Chrysene	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	<10
Hexachlorobutadiene	<25.	Benzo(k)fluoranthene	
Hexachlorocyclopentadiene	<25.	Benzo(a)pyrene	
2-Chloronaphthalene	<5.	Indeno(1,2,3-cd)pyrene	
Hexachlorobenzene	<5.	Dibenzo(a,h)anthracene	
		Benzo(g,h,i)perylene	
HALOETHERS		**PHTHALATE ESTERS**	
Bis(2-chloroethyl)ether	<5.	Dimethyl phthalate	<5.
Bis(2-chloroisopropyl)ether		Diethyl phthalate	
Bis(2-chloroethoxy)methane		Di-N-butyl phthalate	
4-Chlorophenylphenylether		Butylbenzyl phthalate	
4-Bromophenylphenylether		Bis(2-ethylhexyl) phthalate	
		Di-N-octyl phthalate	
NITROAROMATICS AND ISOPHORONE			
Nitrobenzene	<5.		
Isophorone			

All concentrations reported in micrograms/Liter

STATE OF MARYLAND — DEPARTMENT OF HEALTH AND MENTAL HYGIENE

MEMORANDUM

Copies: Frank Henderson

TO John Koontz From Alex Cox AC Date 3/18/86

Subject Harford County Landfills Organic Contamination

As per our conversation of 3/17/86, please find attached a list of organic contaminants found in groundwater samples from landfills located in Harford County, Maryland.

If I can be of assistance, please call.

AC:amj

Attachment

AR300412

The data from the Landfill Monitoring Section indicates that the following facilities within Harford County exhibit signs of organic contamination of the groundwater. The values given are ranges of organic contamination in parts per billion (ppb).

Michalesville:

OW#2 -
Methylene Chloride - 10 ppb
1,1-dichloroethane - 2-26 ppb
Tetrahydrofuran (THF) - 16 ppb
OW#3 -
Tetrahydrofuran (THF) - 13-43 ppb (decreasing)
Ethyl Ether - 33-42 ppb
OW#4 -
Chloroethane - 3-13 ppb
Benzene - 7-13 ppb
Tetrahydrofuran - 15-75 ppb (decreasing)
Ethyl Ether - 116-340 ppb (decreasing)

[redacted]

OW#4 -
Vinyl Chloride - 7-23 ppb
Methylene Chloride - 96-260 ppb
Trichlorofluoromethane - 5-13 ppb
1,1-dichloroethane - 8-109 ppb
1,1,1-trichloroethane - 2-8 ppb
1,2-dichloroethane - 3-80 ppb
Trichloroethene - 2-18 ppb
Tetrachloroethene - 15-40 ppb
Benzene - 7-41 ppb
T. Xylenes - 2-15 ppb
Ethyl Ether - 11-32 ppb

Abington:

OW#1 -

Methylene Chloride - 2-7 ppb

Trans-1,2-dichloroethene - 1-8 ppb

OW#2 -

Trans-1,2-dichloroethene - 5-7 ppb (decreasing)

Tetrahydrofuran (THF) - 20-23 ppb (decreasing)

OW#3 -

Trans-1,2-dichloroethene - 8-17 ppb

1,2-dichloroethane - 7-26 ppb

Trichloroethene - 2-4 ppb

Benzene - 2-5 ppb

MEK - 5-19 ppb (successive to the MIBK)

MIBK - 22 ppb (one event)

Madonna:

OW#1A -

Trichlorofluoromethane - 5 ppb

1,1,1-trichloroethane - 6 ppb

Scarboro:

OW#1 -

Dichlorofluoromethane - 3-5 ppb (decreasing)

Trichlorofluoromethane - 31-90 ppb (decreasing)

Tetrahydrofuran (THF) - 2-14 ppb (decreasing)

OW#2 -

Chloroform - 2 ppb

Toluene - 1 ppb

OW#3 -

Dichlorodifluoromethane - 12 ppb

Trichlorofluoromethane - 20-30 ppb

Tetrachloroethene - 21-22 ppb

Tetrahydrofuran (THF) - 4-79 ppb

OW#4 -

Dichlorodifluoromethane - 36-66 ppb (decreasing)

Methylenechloride - 40-63 ppb

Trichlorofluoromethane - 23-53 ppb

1,1-dichloroethane - 5-11 ppb

1,1,1-trichloroethane - 9-16 ppb

Tetrahydrofuran (THF) - 58 ppb

Methylethylketone - 14 ppb

Tetrachloroethene - 2-4 ppb

OW#5 - one sample showed traces of organic contaminants in 7/85 - more recent samples indicate no contamination)

Methylene Chloride - 43 ppb

Toluene - 7 ppb

Ethylbenzene - 4 ppb

T. Xylenes - 18 ppb

Tetrahydrofuran (THF) - 72 ppb

MEK - 173 ppb

MIBK - 82 ppb

Acetone - 88 ppb

Tollgate:

Parks Bld. Well -
1,1-dichloroethane - 5-11 ppb (decreasing)
Trans-1,2-dichloroethene - 10-27 ppb (decreasing)
Trichloroethene - 7-16 ppb
Tetrachloroethene - 4-10 ppb
PW#1 -
Trichloroethene - 2-7 ppb
Tetrachloroethene - 7-41 ppb
Well #A -
Methylene Chloride - 8-80 ppb
Trichlorofluoromethane - 2-22 ppb
1,1-dichloroethane - 1-30 ppb
Trans-1,2-dichloroethene - 1-120 ppb
1,1,1-trichloroethane - 13-36 ppb
Trichloroethene - 1-20 ppb
Tetrachloroethene - 90-480 ppb
Benzene - 1-14 ppb
Well #D -
Dichlorodifluoromethane - 26-100 ppb
Vinyl Chloride - 9-35 ppb
Methylene Chloride - 2-6 ppb
1,1-dichloroethene - 4-46 ppb
1,1-dichloroethane - 1-54 ppb
Trichloroethene - 2-6 ppb
Tetrahydrofuran (THF) - 20-32 ppb

Tollgate (continued)

Well #H -
1,1-dichloroethene - 4-20 ppb
1,1-dichloroethane - 2-10 ppb
trans-1,2-dichloroethene - 10-110 ppb
Trichloroethene - 81-700 ppb
1,1,1-trichloroethane - 12-45 ppb
Tetrachloroethene - 9-52 ppb
Well #L -
Tetrahydrofuran (THF) - 4-34 ppb
Well #M -
Dichlorofluoromethane - 89-220 ppb
Trichlorofluoromethane - < 1-53 ppb
1,1-dichloroethene - 10-55 ppb
1,1-dichloroethane - 17-54 ppb
Trans-1,2-dichloroethene - 6-17 ppb
1,1,1-trichloroethane - 100-360 ppb
Trichloroethene - 540-1300 ppb
Tetrachloroethene - 11-87 ppb
Well #N -
Tetrahydrofuran (THF) - 2-100 ppb (decreasing rapidly)