Department of Environmental Conservation

Division of Hazardous Waste Remediation

1997 O&M Report

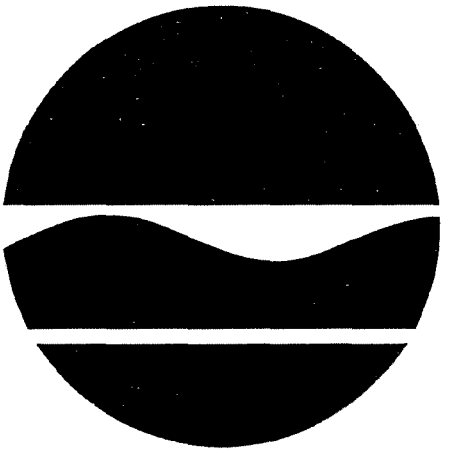
Patton's Busy Bee Disposal Site
Town of Alfred, Allegany County
Site Number 9-02-014

January 1998

New York State Department of Environmental Conservation

1997 Operation and Maintenance Report

Patton's Busy Bee Disposal Site
Site #902014



Prepared by:

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Michael J. Hinton P.E.
Environmental Engineer II
(716) 851-7220

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Section I Executive Sun ary

The New York State Department of Environmental Conservation (DEC), Region 9 Division of Environmental Remediation (DER) staff have performed the required Operation and Maintenance inspections and sampling of the landfill cap, monitoring wells and selected residential drinking water wells associated with the Busy Bee Landfill Disposal site.

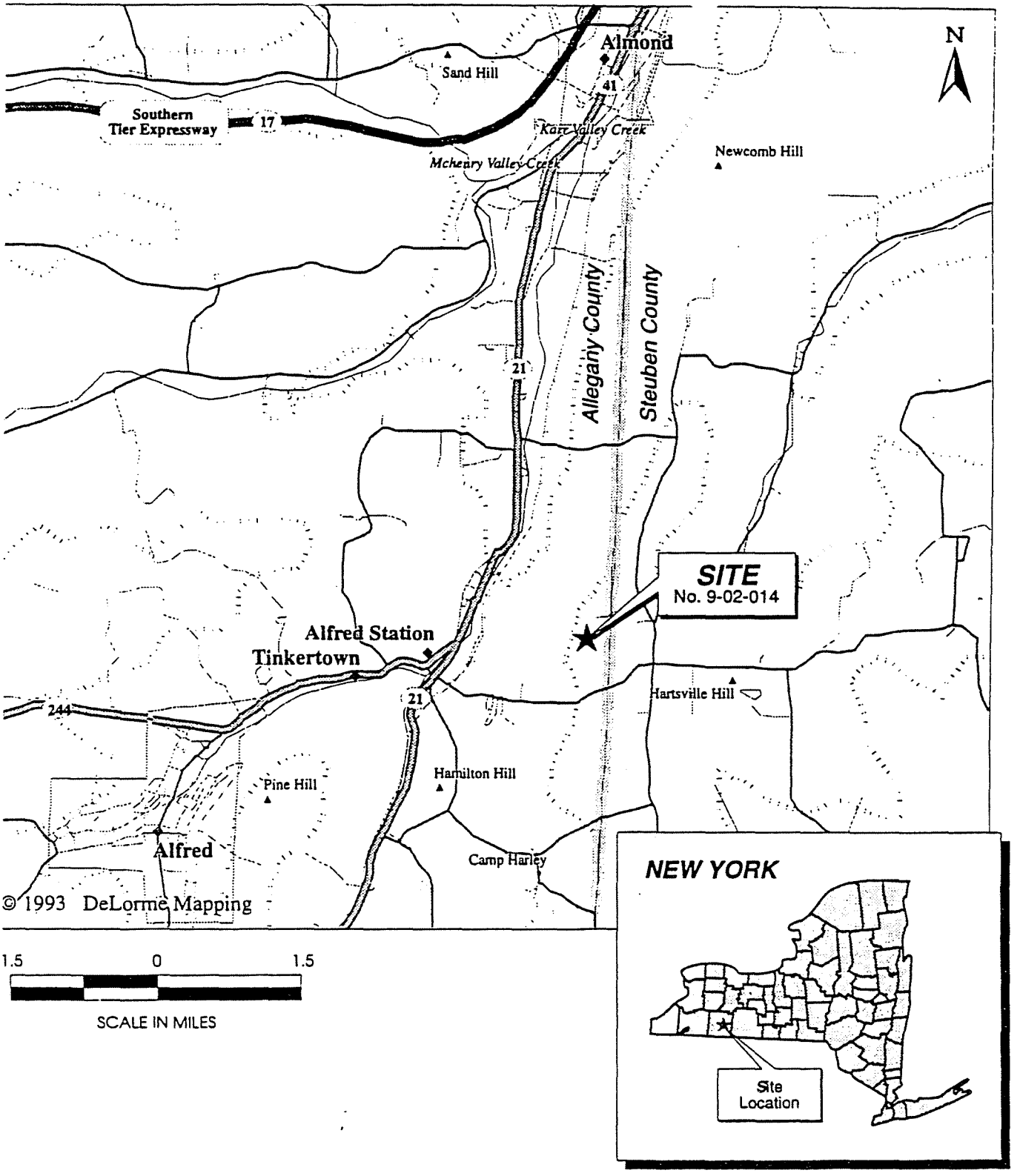
A general site inspection was performed on 10/27/97 that examined the landfill cap, monitoring well integrity, and overall site conditions. The only significant discrepancy discovered is that the lack of adequate site security is allowing unrestricted site access as evidenced by abandoned derelict vehicles and indiscriminate dumping of debris and used tires.

The site's 4 leachate collection tanks are being checked on a monthly basis by Region 9 Solid and Hazardous Waste staff and a log of leachate levels is being maintained. Leachate removal is being performed by the Leo Dickson Company under contract with the DEC. The first loads of leachate were removed under this contract on 10/27/97 and disposed of at the Hornell sewage treatment plant. The frequency of leachate removal is a decision of the DEC and is to be performed when any of the tanks reach 75% capacity.

Seven of the eight selected residential wells were sampled by DEC staff on 11/12/97. The last residential well was unavailable because the residents were not available to provide access to the home an additional attempt was made on 11/26/97 to collect a sample from the last home but proved unsuccessful.

Seven of the nine site monitoring wells were purged and sampled on 11/12/97 by DEC staff. The remaining wells, MW-107S and MW-113 were purged dry and failed to recharge sufficiently to allow sample collection. The monitoring wells were re-purged and sampled on 11/26/97. However due to low sample volume only volatile organic analysis were performed on MW-107S and MW-113.

It is recommended that site security be improved to prevent unauthorized vehicles from entering the site. Mowing of the vegetative cover will be required in the fall of 1998 and leachate removal activities must continue.



Site Location Map

Section II Site Inspectio.

On 10/27/97 an inspection of the Busy Bee landfill was conducted to satisfy the requirements of the Operation and Maintenance Manual dated September 1997.

In general, no significant problems were discovered that would impact on the integrity of the landfill cover system or leachate management. There were no observed areas of erosion of the cover system nor observed breakouts of leachate on the side slopes of the landfill or the down gradient hill sides. The areas of previously observed leachate seeps were inspected and found to be clear of leachate. The attached Site inspection form was completed during this site inspection. Also attached are site photographs taken during this inspection.

Minor concerns with the landfill are associated with the lack of security to prevent unauthorized use of the site. Abandoned vehicles, debris and several used tires have been disposed on the perimeter of the site particular on the eastern edge. It also appears that vehicles are using the perimeter road for off road activities.

SITE INSPECTION FORM

Name of Inspector: Michael J. Hinton P.E.
Title: Environmental Engineer II

Date of Inspection: 10/27/97

1. Leachate tanks being monitored regularly: ■ yes □ no
   Date of last tank inspection 10/21/97

2. Access road condition: ■ Good □ Fair □ Poor

   If poor, describe: _____

3. Vegetative cover: □ Good ■ Fair □ Poor

   If poor, describe: Some bare areas observed on top of landfill cap. No erosion noted.

4. Woody plants present on cap: □ Yes ■ No

5. Mowing required: ■ Yes □ No

6. Condition of gas vents: ■ Unobstructed □ Obstructed □ Damaged □ Missing

   If damaged, describe: _____

7. Erosion of cap: ■ None □ Minor □ Needs Repair

   Describe repair needed: _____

8. Evidence of ponded water on cap: ■ None □ Suspected □ Observed
   Indicate location on map and describe: _____

9. Evidence of animal borrows on cap: □ No ■ Yes
   If yes, backfill as required. Date backfilled: _____

10. Leachate seeps observed on cap: ■ No □ Yes
If yes, indicate location(s) on site map. Describe appearance: _____

11. Other leachate seeps observed (not on cap): □ No ■ Yes
If yes, indicate location(s) on site map. Describe appearance: Leachate observed north east of the Henry landfill in previously detected locations. The leachate is attributed to the Henry Landfill and not from the Busy Bee inactive hazardous waste site.

12. Litter present on or around landfill: □ No ■ Yes
If yes, describe and indicate location(s) on site map: Debris including used tires and two abandoned vehicles on site
Remove at time of inspection if possible. Not possible

13. Condition of monitoring wells. *Inspect each well and check boxes below as completed. All wells should be secured and locked. If damaged, identify well number and describe damage*:
Did not inspect MW-105S &105I. All wells locked (except W-7) with at least 3 different lock types.

■ W-3	■ W-8	■ MW-101I	■ MW-104I	■ MW-107I
■ W-4S	■ W-9	■ MW-101D	■ MW-104D	■ MW-108I
■ W-4D	■ W-10S	■ MW-102I	□ MW-105S	■ MW-108D
■ W-5	■ W-10D	■ MW-102D	□ MW-105I	■ MW-109
■ W-6	■ W-11	■ MW-103I	■ MW-106I	■ MW-110
■ W-7	■ MW-101S	■ MW-103D	■ MW-107S	■ MW-113

Additional Comments:

Site security is inadequate. Cable across access road is seldom used, if at all. Appears that site perimeter road is being used for field cars. 2 abandoned late model vehicles on site. Debris and used tires disposed of on site. Monitoring wells used for long term O&M have had locks replaced with keyed alike Master Locks key #2538

Send copies of completed form to:

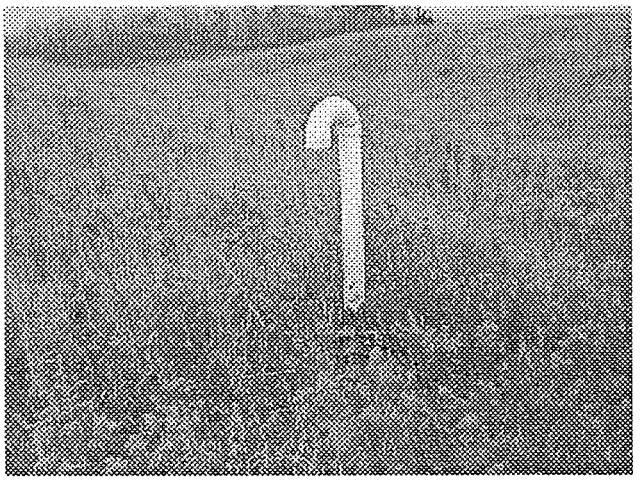
Mr. Gerald Rider
NYSDEC Div. Env. Rem.
O&M Section
50 Wolf Road
Albany, NY 12233-7010

Mr. Michael Hinton
NYSDEC Div.of Env. Rem.
Region 9 Office
270 Michigan Avenue
Buffalo, NY 14203-2999

Ms. Mary Jane Peachey
NYSDEC Div.of Env. Rem.
Region 8 Office
6274 East Avon-Lima Road
Avon, NY 14414

10/27/97 Leachate removal

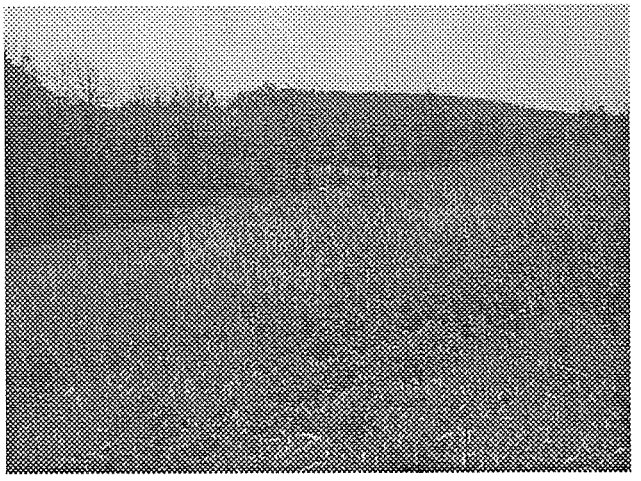
10/27/97 Leachate Removal Tank BB-T1



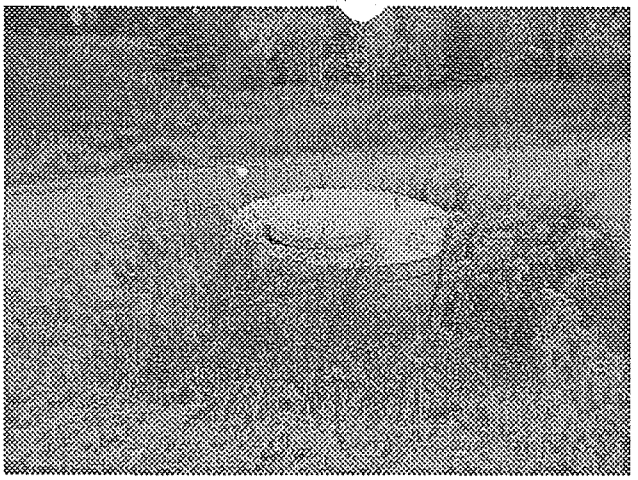
10/27/97 Landfill Gas Vent

10/27/97 North Slope Landfill

10/27/97 Swale under Power Lines

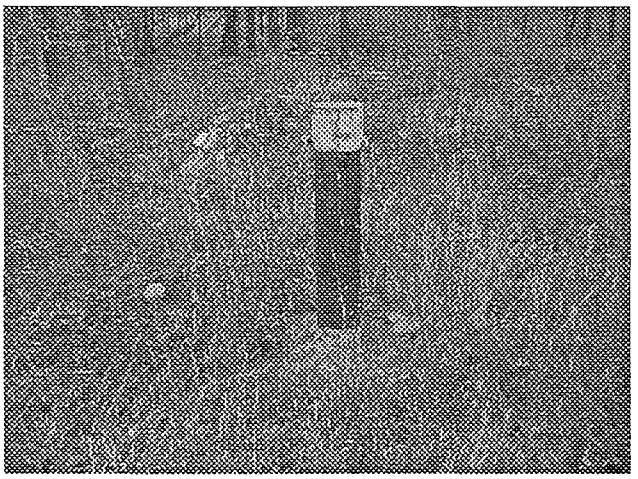


10/27/97 East Slope Landfill



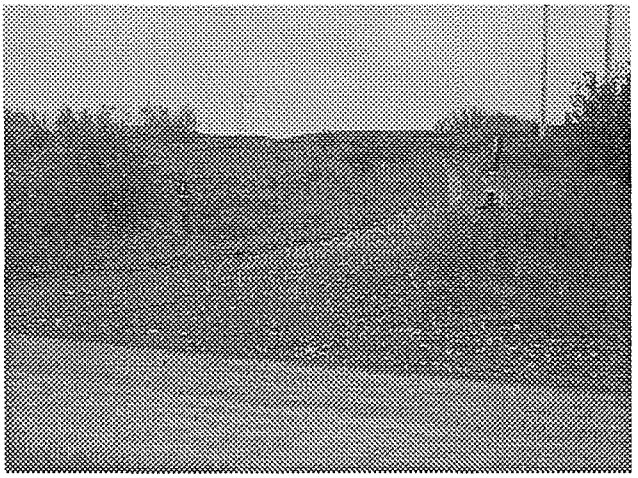
10/27/97 Leachate Collection Manhole

10/27/97 Abandoned Vehicle and Debris

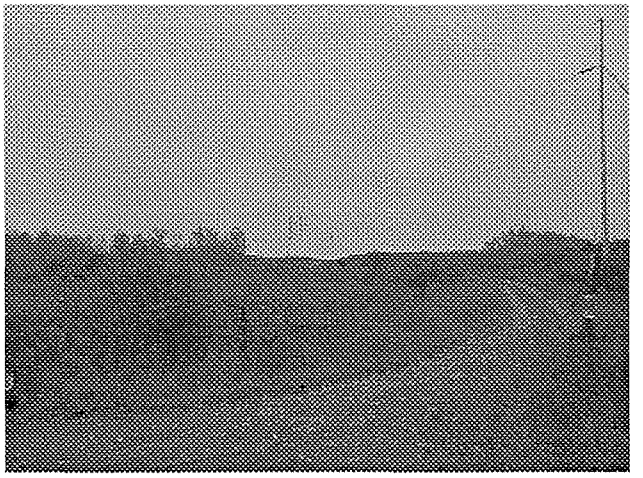


10/27/97 Monitoring Well W-9

10/27/97 Abandoned Vehicle



10/27/97 Site Entrance Note No Cable



10/27/97 Access Road

Section III Residential W. . Samples

On November 12, 1997 the selected nearby residential drinking water wells were sampled by the NYSDEC Region 9 Division of Environmental Remediation staff. Seven of the eight homes were sampled. The last home identified as sample #D7 was not sampled because no one was home at the time of our visit. Attempts were being made to contact the home owner to arrange water sampling at a later date. A second attempt to sample the drinking water of the last home was arranged for 11/26/97. An appointment was made for the convenience of the tenant living at this location. Unfortunately, the tenant failed to keep the appointment. This well will not be sampled during this sampling round. The next residential well sampling will occur in the fall of 1998.

The following Table III-1& III-2 are a summary of the data obtained from the residential well samples. Each individual homeowner and tenant has received a copy of their particular test results. The actual well sample results are kept in the Region 9 office and available upon request.

Residential Well Sample Locations

Sample #D1
5633 Clark Rd.
Alfred Station, NY 14803
(607) 587-8379

Sample #D2
5629 Clark Rd

Sample #D3
5771 Clark Rd.
Alfred Station, NY 14803
(607) 587-9104

Sample #D4
5583 Crosby Creek Rd.
Alfred Station, NY 14803
(607) 587-9056

Sample #D5
55 45 Crosby Creek Rd.
Hornell, NY 14843
(607) 587-8790

Sample #D6
5503 Hartsville Hill Rd.
Alfred Station, NY 14803
(607) 587-9298

Sample #D7 (Not Collected)
242 Hartsville Hill Rd.
Alfred Station, NY 14803

Sample #D8
266 Hartsville Hill Rd.
Alfred Station, NY 14803
(607) 587-9425

RESIDENTIAL WELL SAMPLING

Form to be completed at time of sampling

DATE OF SAMPLING: **11/12/97** TIME OF SAMPLING: **1635**

NAME OF SAMPLER: **M. Hinton/B.Sadowski** SAMPLE ID NUMBER: **A883-D1**

OWNER OF WELL:

Name: Telephone No.: **(607) 587-8379**
Address: **5633 Clark Rd. Alfred Station NY 14803**

OCCUPANT OF HOUSE SERVED BY WELL (If other than owner):

Name: **Same** Telephone No.:
Address:

WATER USE:

Domestic: **Yes** Number of persons using water: **2**
Livestock: **No** Number and type of livestock:
Irrigation: **No** Acres Frequency
Other (specify)

WATER TREATMENT:

Chlorinator present? **No** Water Softener? **Yes**
Water Filter? **No** Type
Other (specify)

DESCRIBE WHERE WATER SAMPLE WAS OBTAINED: (e.g. outdoor faucet, kitchen tap) (Water should be sampled as close to well head as possible)
Sample collected from storage in basement before water softener
MS/MSD samples collected at this location

FUTURE USE: Are there any planned changes to current supply?

ADDITIONAL COMMENTS:

House up for sale, advised owner to notify us when property is sold

RESIDENTIAL WELL SAMPLING

Form to be completed at time of sampling

DATE OF SAMPLING: **11/12/97** TIME OF SAMPLING: **1645**

NAME OF SAMPLER: **M. Hinton/B. Sadowski** SAMPLE ID NUMBER: **A883-D2**

OWNER OF WELL:

Name: Telephone No.: **(607) 587-8375**
Address: **5633 Clark Rd Alfred Station NY 14803**

OCCUPANT OF HOUSE SERVED BY WELL (If other than owner):

Name: **Tenant** Telephone No.:
Address: **5629 Clark Rd. Alfred Station NY 14803**

WATER USE:

Domestic: **Yes** Number of persons using water: **2**
Livestock: **No** Number and type of livestock
Irrigation: **No** Acres Frequency
Other (specify)

WATER TREATMENT:

Chlorinator present? **No** Water Softener? **No**
Water Filter? **No** Type
Other (specify)

DESCRIBE WHERE WATER SAMPLE WAS OBTAINED: (e.g. outdoor faucet, kitchen tap) (Water should be sampled as close to well head as possible)
Sample collected from kitchen sink

FUTURE USE: Are there any planned changes to current supply?
Tenant planning to move out of trailer by 12/31/97

ADDITIONAL COMMENTS:
This trailer is supplied water by the "spring"

RESIDENTIAL WELL SAMPLING

Form to be completed at time of sampling

DATE OF SAMPLING: **11/12/97** TIME OF SAMPLING: **1530**

NAME OF SAMPLER: **M.Hinton/B.Sadowski** SAMPLE ID NUMBER: **A883-D3**

OWNER OF WELL:

Name: Telephone No.: **(607) 587-9104**
Address: **5771 Clark Rd. Alfred Station NY 14803**

OCCUPANT OF HOUSE SERVED BY WELL (If other than owner):

Name: Telephone No.:
Address:

WATER USE:

Domestic: **Yes** Number of persons using water: **2**
Livestock: **Yes** Number and type of livestock: **chickens**
Irrigation: **No** Acres Frequency
Other (specify)

WATER TREATMENT:

Chlorinator present? **No** Water Softener? **No**
Water Filter? **No** Type
Other (specify)

DESCRIBE WHERE WATER SAMPLE WAS OBTAINED: (e.g. outdoor faucet, kitchen tap) (Water should be sampled as close to well head as possible)
Sample was collected from the kitchen sink

FUTURE USE: Are there any planned changes to current supply?

ADDITIONAL COMMENTS:

RESIDENTIAL WELL SAMI .NG

Form to be completed at time of sampling

DATE OF SAMPLING: **11/12/97** TIME OF SAMPLING: **1430**

NAME OF SAMPLER: **M.Hinton/B.Sadowski** SAMPLE ID NUMBER: **A883-D4**

OWNER OF WELL:

Name: Telephone No.: **(607) 359-2314**
Address: **PO Box F, Addison NY 14801**

OCCUPANT OF HOUSE SERVED BY WELL (If other than owner):

Name: Tenant Telephone No.: **(607) 587-9056**
Address: **5583 Crosby Creek Rd. Alfred Station, NY 14803**

WATER USE:

Domestic: **Yes** Number of persons using water: **6**
Livestock: **No** Number and type of livestock
Irrigation: **No** Acres Frequency
Other (specify)

WATER TREATMENT:

Chlorinator present? **No** Water Softener? **No**
Water Filter? **No** Type
Other (specify)

DESCRIBE WHERE WATER SAMPLE WAS OBTAINED: (e.g. outdoor faucet, kitchen tap) (Water should be sampled as close to well head as possible)
Sample collected from Kitchen sink

FUTURE USE: Are there any planned changes to current supply?

ADDITIONAL COMMENTS:
Tenant not aware of any treatment on the well water

RESIDENTIAL WELL SAMPLING

Form to be completed at time of sampling

DATE OF SAMPLING: **11/12/97** TIME OF SAMPLING: **1645**

NAME OF SAMPLER: **M.Hinton/B.Sadowski** SAMPLE ID NUMBER: **A883-D5**

OWNER OF WELL:

Name: Telephone No.: **(607) 587-8790**
Address: **5545 Crosby Creek Rd. Hornell NY 14843**

OCCUPANT OF HOUSE SERVED BY WELL (If other than owner):

Name: Telephone No.:
Address:

WATER USE:

Domestic: Yes No Number of persons using water
Livestock: Yes No Number and type of livestock
Irrigation: Yes No Acres Frequency
Other (specify)

WATER TREATMENT:

Chlorinator present? Yes No Water Softener? Yes No
Water Filter? Yes No Type
Other (specify)

DESCRIBE WHERE WATER SAMPLE WAS OBTAINED: (e.g. outdoor faucet, kitchen tap) (Water should be sampled as close to well head as possible)
Sample was collected from back yard spigot. Hose was disconnected and sample obtained directly from tap.

FUTURE USE: Are there any planned changes to current supply?

ADDITIONAL COMMENTS:
No one was home at time of sample collection. Phone message from owner directed us to take sample from back yard spigot.

RESIDENTIAL WELL SAMPLING

Form to be completed at time of sampling

DATE OF SAMPLING: **11/12/97** TIME OF SAMPLING: **1715**

NAME OF SAMPLER: **M.Hinton/B.Sadowski** SAMPLE ID NUMBER: **A883-D6**

OWNER OF WELL:

Name: Telephone No.: **(607) 587-9298**
Address: **5503 Hartsville Hill Rd. Alfred Station NY 14803**

OCCUPANT OF HOUSE SERVED BY WELL (If other than owner):

Name: Telephone No.:
Address:

WATER USE:

Domestic: **Yes** Number of persons using water: **5**
Livestock: **No** Number and type of livestock
Irrigation: **No** Acres Frequency
Other (specify)

WATER TREATMENT:

Chlorinator present? **No** Water Softener? **No**
Water Filter? **No** Type
Other (specify)

DESCRIBE WHERE WATER SAMPLE WAS OBTAINED: (e.g. outdoor faucet, kitchen tap) (Water should be sampled as close to well head as possible)
Sample was collected from kitchen sink

FUTURE USE: Are there any planned changes to current supply?

ADDITIONAL COMMENTS:
Owner recently purchased home (ABOUT 1 YEAR) would like copies of past water sample results

RESIDENTIAL WELL SAMPLING

Form to be completed at time of sampling

DATE OF SAMPLING: **Attempted 11/12/97 & 11/25/97** TIME OF SAMPLING: **N/A**

NAME OF SAMPLER: **N/A** SAMPLE ID NUMBER: **A883-D7**

OWNER OF WELL:

Name: **Scott and Tammy Cooper** Telephone No.: **(607) 478-8668**
Address: **9 First St. Andover NY 14806**

OCCUPANT OF HOUSE SERVED BY WELL (If other than owner):

Name: **Tenant** Telephone No.: **(607) 587-9729**
Address: **242 Hartsville Hill Rd. Alfred Station NY 14803**

WATER USE: (please circle)

Domestic: Yes No Number of persons using water
Livestock: Yes No Number and type of livestock
Irrigation: Yes No Acres Frequency
Other (specify)

WATER TREATMENT:

Chlorinator present? Yes No Water Softener? Yes No
Water Filter? Yes No Type
Other (specify)

DESCRIBE WHERE WATER SAMPLE WAS OBTAINED: (e.g. outdoor faucet, kitchen tap) (Water should be sampled as close to well head as possible)
No sample collected, no one was home. Neighbors advised on current owner.
Appointment arranged for 11/25/97 at 2:00 PM was not kept by tenant.

FUTURE USE: Are there any planned changes to current supply?

ADDITIONAL COMMENTS:
Tenant is buying property on a land contract.
Tenant can be contacted at mother's phone (607) 324-7969

RESIDENTIAL WELL SAMPLING

Form to be completed at time of sampling

DATE OF SAMPLING: **11/12/97** TIME OF SAMPLING: **1505**

NAME OF SAMPLER: **M.Hinton/B.Sadowski** SAMPLE ID NUMBER: **A883-D8 & D9**

OWNER OF WELL:

Name: Telephone No.: **(607) 587-9425**
Address: **266 Hartsville Hill Rd. Alfred Station NY 14803**

OCCUPANT OF HOUSE SERVED BY WELL (If other than owner):

Name: Telephone No.:
Address:

WATER USE:

Domestic: **Yes** Number of persons using water: **4**
Livestock: **No** Number and type of livestock
Irrigation: **No** Acres Frequency
Other (specify)

WATER TREATMENT:

Chlorinator present? **No** Water Softener? **No**
Water Filter? **No** Type
Other (specify)

DESCRIBE WHERE WATER SAMPLE WAS OBTAINED: (e.g. outdoor faucet, kitchen tap) (Water should be sampled as close to well head as possible)
Sample collected from kitchen sink. Duplicate sample #D9 also collected at this location.

FUTURE USE: Are there any planned changes to current supply?

ADDITIONAL COMMENTS:

TABLE III-1 DRINKING WATER W[illegible]S
VOLATILE ORGANIC COMPOUNDS
(ug/l)

Parameter	D1 11/12/97	D2 11/12/97	D3 11/12/97	D4 11/12/97	D5 11/12/97
Dichlorodifluoromethane	2.0U	2.0U	2.0U	2.0U	2.0U
Chloromethane	2.0U	2.0U	2.0U	2.0U	2.0U
Vinyl Chloride	2.0U	2.0U	2.0U	2.0U	2.0U
Bromomethane	2.0U	2.0U	2.0U	2.0U	2.0U
Chloroethane	2.0U	2.0U	2.0U	2.0U	2.0U
Trichlorofluoromethane	2.0U	2.0U	2.0U	2.0U	2.0U
1,1-Dichloroethene	1.0U	1.0U	1.0U	1.0U	1.0U
Methylene Chloride	4.0U	4.0U	4.0U	4.0U	4.0U
trans-1,2-Dichloroethene	1.0U	1.0U	1.0U	1.0U	1.0U
1,1-Dichloroethane	1.0U	1.0U	1.0U	1.0U	1.0U
cis-1,2-Dichloroethene	1.0U	1.0U	1.0U	1.0U	1.0U
Chloroform	1.0U	1.0U	1.0U	1.0U	1.0U
1,1,1-Trichloroethane	1.0U	1.0U	1.0U	1.0U	1.0U
Carbon Tetrachloride	1.0U	1.0U	1.0U	1.0U	1.0U
1,2-Dichloroethane	1.0U	1.0U	1.0U	1.0U	1.0U
Trichloroethene	1.0U	1.0U	1.0U	1.0U	1.0U
1,2-Dichloropropane	1.0U	1.0U	1.0U	1.0U	1.0U
Bromodichloromethane	1.0U	1.0U	1.0U	1.0U	1.0U
cis-1,3-Dichloropropene	1.0U	1.0U	1.0U	1.0U	1.0U
trans-1,3-Dichloropropene	1.0U	1.0U	1.0U	1.0U	1.0U
1,1,2-Trichloroethane	1.0U	1.0U	1.0U	1.0U	1.0U
Tetrachloroethene	1.0U	1.0U	1.0U	1.0U	1.0U
Dibromochloromethane	1.0U	1.0U	1.0U	1.0U	1.0U
Chlorobenzene	1.0U	1.0U	1.0U	1.0U	1.0U
Bromoform	1.0U	1.0U	1.0U	1.0U	1.0U
1,1,2,2-Tetrachloroethane	1.0U	1.0U	1.0U	1.0U	1.0U
1,3-Dichlorobenzene	1.0U	1.0U	1.0U	1.0U	1.0U
1,4-Dichlorobenzene	1.0U	1.0U	1.0U	1.0U	1.0U
1,2-Dichlorobenzene	1.0U	1.0U	1.0U	1.0U	1.0U
Benzene	1.0U	1.0U	1.0U	1.0U	1.0U
Toluene	1.0U	1.0U	1.0U	1.0U	1.0U
Ethylbenzene	1.0U	1.0U	1.0U	1.0U	1.0U
Xylenes (total)	1.0U	1.0U	1.0U	1.0U	1.0U

U- compound not detected

ABLE III-1 (cont) DRINKING WATL NELLS
VOLATILE ORGANIC COMPOUNDS
(ug/l)

Parameter	D6 11/12/97	D7 11/12/97	D8 11/12/97	D8 (DUP) 11/12/97
Dichlorodifluoromethane	2.0U	NS	2.0U	2.0U
Chloromethane	2.0U	NS	2.0U	2.0U
Vinyl Chloride	2.0U	NS	2.0U	2.0U
Bromomethane	2.0U	NS	2.0U	2.0U
Chloroethane	2.0U	NS	2.0U	2.0U
Trichlorofluoromethane	2.0U	NS	2.0U	2.0U
1,1-Dichloroethene	1.0U	NS	1.0U	1.0U
Methylene Chloride	4.0U	NS	4.0U	4.0U
trans-1,2-Dichloroethene	1.0U	NS	1.0U	1.0U
1,1-Dichloroethane	1.0U	NS	1.0U	1.0U
cis-1,2-Dichloroethene	1.0U	NS	1.0U	1.0U
Chloroform	1.0U	NS	1.0U	1.0U
1,1,1-Trichloroethane	1.0U	NS	1.0U	1.0U
Carbon Tetrachloride	1.0U	NS	1.0U	1.0U
1,2-Dichloroethane	1.0U	NS	1.0U	1.0U
Trichloroethene	1.0U	NS	1.0U	1.0U
1,2-Dichloropropane	1.0U	NS	1.0U	1.0U
Bromodichloromethane	1.0U	NS	1.0U	1.0U
cis-1,3-Dichloropropene	1.0U	NS	1.0U	1.0U
trans-1,3-Dichloropropene	1.0U	NS	1.0U	1.0U
1,1,2-Trichloroethane	1.0U	NS	1.0U	1.0U
Tetrachloroethene	1.0U	NS	1.0U	1.0U
Dibromochloromethane	1.0U	NS	1.0U	1.0U
Chlorobenzene	1.0U	NS	1.0U	1.0U
Bromoform	1.0U	NS	1.0U	1.0U
1,1,2,2-Tetrachloroethane	1.0U	NS	1.0U	1.0U
1,3-Dichlorobenzene	1.0U	NS	1.0U	1.0U
1,4-Dichlorobenzene	1.0U	NS	1.0U	1.0U
1,2-Dichlorobenzene	1.0U	NS	1.0U	1.0U
Benzene	1.0U	NS	1.0U	1.0U
Toluene	1.0U	NS	1.0U	1.0U
Ethylbenzene	1.0U	NS	1.0U	1.0U
Xylenes (total)	1.0U	NS	1.0U	1.0U

U- compound not detected
NS- No Sample Collected

Table III-2 DRINKING WATER WE
INORGANIC COMPOUNDS
(ug/l)

Parameter	D1 11/12/97	D2 11/12/97	D3 11/12/97	D4 11/12/97	D5 11/12/97
Aluminum	85.7*	38.2 U*	38.7*	38.2 U*	38.2 U*
Antimony	30.0 U	30.0 U	30.0 U	30.0 U	30.0 U
Arsenic	30.6 U	30.6 U	30.6 U	30.6 U	30.6 U
Barium	87.8	14.2	252	106	120
Beryllium	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Cadmium	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Calcium	54800	44300	46600	46800	54200
Chromium	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Cobalt	4.1	4.1 U	4.1 U	4.1 U	4.1 U
Copper	10.0*	37.5*	18.5*	19.3*	10.5*
Iron	72.1*	1320*	16.5*	13.4*	7.8*
Lead	22.7 U	22.7 U	22.7 U	22.7 U	22.7 U
Magnesium	23700	10800	18900	19500	21200
Manganese	21.3	15.7	1.3 U	21.1	5.7
Mercury	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nickel	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U
Potassium	2850	1550	2790	2490	2520
Selenium	42.6 U	42.6 U	42.6 U	42.6 U	42.6 U
Silver	5.0 U	5.0 U	49.3	5.0 U	5.0 U
Sodium	10600	19900	5620	6780	8320
Thallium	34.4 U	34.4 U	34.4 U	34.4 U	34.4 U
Vanadium	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U
Zinc	8.7*	33.2*	21.2*	5.9*	9.9*

U- not detected at or above detection limit
N- Spiked sample recovery not within control limits
*- Duplicate analysis not within control limits
NS- No sample collected

ıble III-2 (cont) DRINKING WATE /ELLS
INORGANIC COMPOUNDS
(ug/l)

Parameter	D6 11/12/97	D7 11/12/97	D8 11/12/97	D8(DUP) 11/12/97
Aluminum	52.5*	NS	38.2 U*	83.3*
Antimony	30.0 U	NS	30.0 U	30.0 U
Arsenic	30.6 U	NS	30.6 U	30.6 U
Barium	82.5	NS	21.0	22.0
Berylium	0.30 U	NS	0.30 U	0.30 U
Cadmium	3.8 U	NS	3.8 U	3.8 U
Calcium	55000	NS	57200	60600
Chromium	3.1 U	NS	3.1 U	3.1 U
Cobalt	4.1 U	NS	4.1 U	4.1 U
Copper	6.7*	NS	18.0*	27.8*
Iron	46.5*	NS	30.4*	41.9*
Lead	22.7 U	NS	22.7 U	22.7 U
Magnesium	23800	NS	21500	22600
Manganese	31.6	NS	119	124
Mercury	0.10 U	NS	0.10 U	0.10 U
Nickel	10.5 U	NS	10.5 U	10.5 U
Potassium	2270	NS	2920	2880
Selenium	42.6 U	NS	42.6 U	42.6 U
Silver	5.0 U	NS	5.0 U	5.0 U
Sodium	8170	NS	33900	36000
Thallium	34.4 U	NS	34.4 U	34.4 U
Vanadium	4.6 U	NS	4.6 U	4.6 U
Zinc	4.4*	NS	6.0*	10.5*

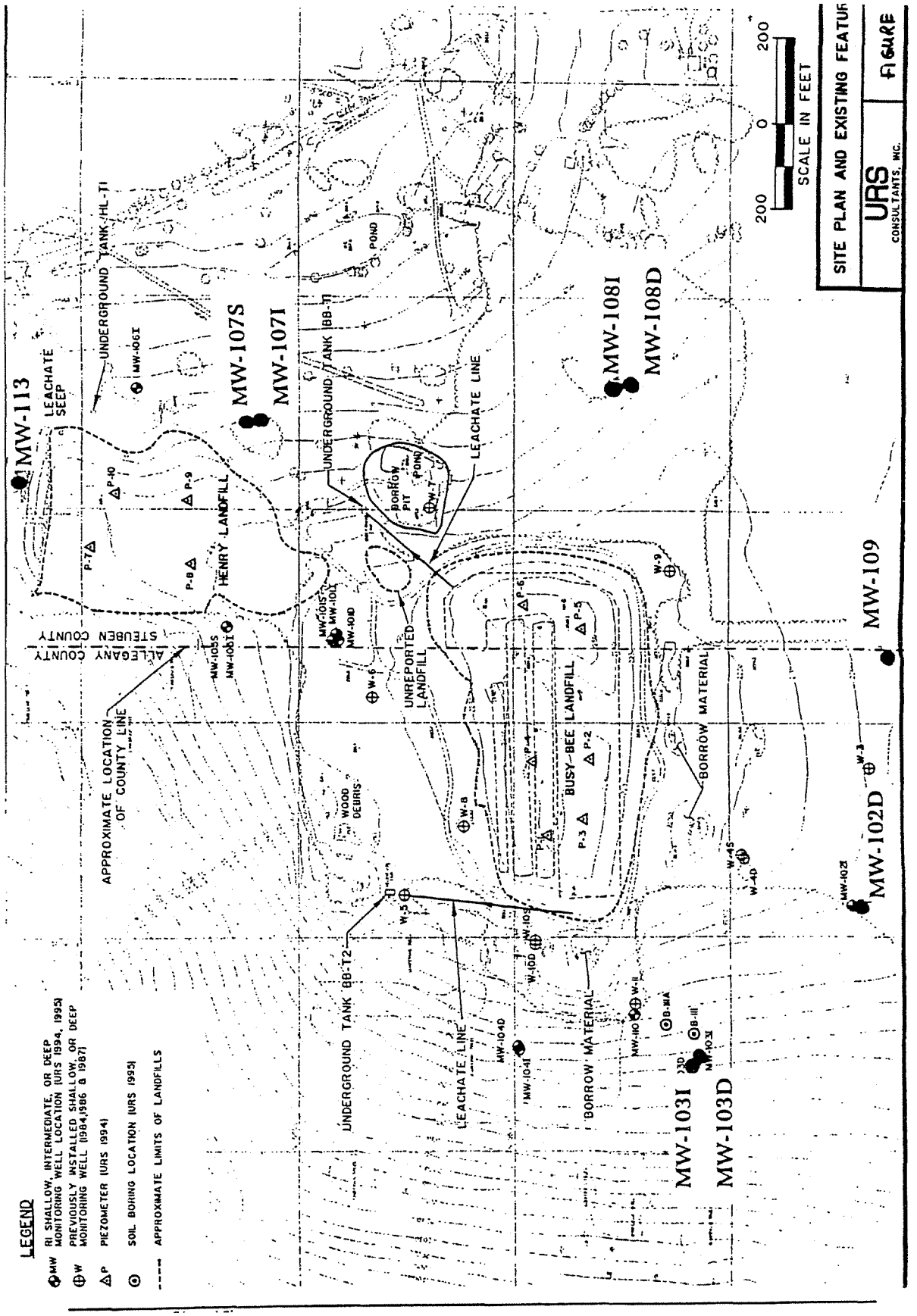
U- not detected at or above detection limit
N- Spiked sample recovery not within control limits
*- Duplicate analysis not within control limits

Section IV Site Monit ng Wells

On November 12, 1997 the on-site monitoring wells were sampled by the NYSDEC Region 9 Division of Environmental Remediation staff. Each well was purged by either a dedicated bailer, grunfus pump or a watera hand pump to remove stagnant water from the well casing and allow fresh formation water to enter the well. Typical groundwater parameters such as temperature, conductivity, pH and turbidity are normally recorded during well purging to ensure that fresh formation water is entering the well. However, due to adverse weather conditions with the low temperatures (about 30° F) and snow, the meters quickly malfunctioned and were not providing accurate information. The decision was immediately made to forgo use of the meters and simply remove the required well volumes. The well purging and sampling logs found on the following pages indicate the volume of groundwater removed prior to sampling.

Monitoring Wells MW-107S and MW-113 could not be sampled as the purging process bailed the wells dry and the recharge into the well was to slow to allow sample collection. The wells were scheduled to be sampled on 11/14/97 but a major winter storm prevented the sampling team from traveling to the site. On 11/26/97 the wells were re-purged and sampled. However due to small sample volume only volatile organic analysis were performed on MW-107S and MW-113. The small volume and high turbidity of the sample collected from MW-113 also resulted in higher detection limits than is normally reported by the analytical protocol. Also, there is concern that the sample collected from MW-113 is not representative of actual groundwater conditions due to the very slow recovery of water in this well..

The attached Tables IV-1& IV-2 provide a summary of the compounds detected in each well. The actual laboratory data sheets are maintained in the NYSDEC Region 9 Buffalo office and are available for review if requested.



Location of Long term Monitoring Wells

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee		**Site Number:** 902014
Sampler: M. Hinton/B. Sadowski		
Purge Date: 11/12/97	**Start Purge:** 1300	**End Purge:** 1350
Sample Date: 11/12/97		**Sample Time:** 1600

Well Number: **MW-102D**

1. Total Casing and Screen Length (Ft):	68.4'
2. Casing Internal Diameter (in):	2"
3. Water Level Below Top of Casing (Ft.):	55.4'
4. Volume of Water in Casing (Gal.): #1 - #3 X #2 (gal/ft)	2.12
Volume of 3 Casings:	6.3 gallons

Well ID	Vol.(gal/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469
8"	2.611

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
pH										
CONDUCTIVITY										
TURBIDITY										
TEMPERATURE										
Eh										
TIME										

COMMENTS:
No metering between well volumes due to malfunctioning meters
3 well volumes removed with dedicated plastic bailer
First bailer volume was clear, after 3 well volumes purge water was very turbid w/ light tan color
Slow recovery, last few bailers only half full

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee		**Site Number:** 902014
Sampler: D. King		
Purge Date: 11/12/97	**Start Purge:** 1030	**End Purge:** 1130
Sample Date: 11/12/97		**Sample Time:** 1150

Well Number: **MW-103D**

1. Total Casing and Screen Length (Ft):	71.8'
2. Casing Internal Diameter (in):	2"
3. Water Level Below Top of Casing (Ft.):	49.8'
4. Volume of Water in Casing (Gal.): #1 - #3 X #2 (gal/ft)	3.59
Volume of 3 Casings:	10.76 gallons

Well ID	Vol.(gal/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469
8"	2.611

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
	3.6	7.2	10.8							
pH										
CONDUCTIVITY										
TURBIDITY	104.9									
TEMPERATURE	7.4									
Eh										
TIME										

COMMENTS:
No metering between well volumes due to malfunctioning meters
3 well volumes removed with dedicated plastic bailer

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee		**Site Number:** 902014
Sampler: J. Tuk		
Purge Date: 11/12/97	**Start Purge:** 1130	**End Purge:** 1115
Sample Date: 11/12/97		**Sample Time:** 1200

Well Number: **MW-103I**

1. Total Casing and Screen Length (Ft):	28.7'
2. Casing Internal Diameter (in):	2"
3. Water Level Below Top of Casing (Ft.):	15.65'
4. Volume of Water in Casing (Gal.): #1 - #3 X #2 (gal/ft)	2.13
Volume of 3 Casings:	6.4 gallons

Well ID	Vol.(gal/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469
8"	2.611

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
pH										
CONDUCTIVITY										
TURBIDITY										
TEMPERATURE										
Eh										
TIME										

COMMENTS:
No metering between well volumes due to malfunctioning meters
3 well volumes removed with dedicated plastic bailer

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee		**Site Number:** 902014
Sampler: D. King		
Purge Date: 11/12/97	**Start Purge:** 1500	**End Purge:** 1530
Sample Date: 11/12/97		**Sample Time:** 1542

Well Number: **MW-107I**

1. Total Casing and Screen Length (Ft):	71.0'
2. Casing Internal Diameter (in):	1"
3. Water Level Below Top of Casing (Ft.):	60.53'
4. Volume of Water in Casing (Gal.): #1 - #3 X #2 (gal/ft)	0.43
Volume of 3 Casings:	1.29 gallons

Well ID	Vol.(gal/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469
8"	2.611

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
pH										
CONDUCTIVITY										
TURBIDITY										
TEMPERATURE										
Eh										
TIME										

COMMENTS:
No metering between well volumes due to malfunctioning meters
3 well volumes removed with dedicated plastic bailer
Slow recovery

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee		**Site Number:** 902014
Sampler: M. Hinton		
Purge Date: 11/12/97&11/25/97	**Start Purge:** 1020 on 11/25	**End Purge:** 1130 on 11/25
Sample Date: 11/25/97		**Sample Time:** 1300 hours

Well Number: **MW-107S**

1. Total Casing and Screen Length (Ft):	31.35'
2. Casing Internal Diameter (in):	1"
3. Water Level Below Top of Casing (Ft.):	19.87/21.44'
4. Volume of Water in Casing (Gal.): #1 - #3 X #2 (gal/ft)	0.47/0.40
Volume of 3 Casings:	1.41/1.2 gallons

Well ID	Vol.(gal/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469
8"	2.611

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
pH										
CONDUCTIVITY										
TURBIDITY										
TEMPERATURE										
Eh										
TIME										

COMMENTS:
No metering between well volumes due to malfunctioning meters
2 well volumes removed with hand watera pump
well dry at 1 gallon removed
Little or no recharge, Could not sample well
Purged 0.75 gallons on 11/25/97 and collected sample (1 volume estimated at 0.41 gallons on 11/25)

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee		**Site Number:** 902014
Sampler: J. Tuk/D. Szymanski		
Purge Date: 11/12/97	**Start Purge:** 1400	**End Purge:** 1420
Sample Date: 11/12/97		**Sample Time:** 1510

Well Number: **MW-108D**

1. Total Casing and Screen Length (Ft):	77.60 '
2. Casing Internal Diameter (in):	2"
3. Water Level Below Top of Casing (Ft.):	44.50 '
4. Volume of Water in Casing (Gal.): #1 - #3 X #2 (gal/ft)	5.39
Volume of 3 Casings:	16.2 gallons

Well ID	Vol.(gal/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469
8"	2.611

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
pH										
CONDUCTIVITY										
TURBIDITY										
TEMPERATURE										
Eh										
TIME										

COMMENTS:
No metering between well volumes due to malfunctioning meters
3 well volumes removed with grunfus pump
Dedicated plastic bailer used to collect sample

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee	**Site Number:** 902014	
Sampler: J. Tuk/D. Szymanski		
Purge Date: 11/12/97	**Start Purge:** 1330	**End Purge:** 1345
Sample Date: 11/12/97		**Sample Time:** 1500

Well Number: **MW-108I**

1. Total Casing and Screen Length (Ft):	56.7 '
2. Casing Internal Diameter (in):	2"
3. Water Level Below Top of Casing (Ft.):	47.60 '
4. Volume of Water in Casing (Gal.): #1 - #3 X #2 (gal/ft)	1.48
Volume of 3 Casings:	4.45 gallons

Well ID	Vol.(gal/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469
8"	2.611

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
pH										
CONDUCTIVITY										
TURBIDITY										
TEMPERATURE										
Eh										
TIME										

COMMENTS:
No metering between well volumes due to malfunctioning meters
3 well volumes removed with grunfus pump
Sample collected with dedicated plastic bailer

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee		**Site Number:** 902014
Sampler: J. Tuk/D. Szymanski		
Purge Date: 11/12/97	**Start Purge:** 1030	**End Purge:** 1600
Sample Date: 11/12/97		**Sample Time:** 1630

Well Number: **MW-109**

1. Total Casing and Screen Length (Ft):	104.15 '
2. Casing Internal Diameter (in):	2"
3. Water Level Below Top of Casing (Ft.):	57.95 '
4. Volume of Water in Casing (Gal.): #1 - #3 X #2 (gal/ft)	7.5
Volume of 3 Casings:	22.6 gallons

Well ID	Vol.(gal/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469
8"	2.611

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
pH										
CONDUCTIVITY										
TURBIDITY										
TEMPERATURE										
Eh										
TIME										

COMMENTS:
No metering between well volumes due to malfunctioning meters
1 well volume removed with grunfus pump, pump could not reach deep enough into water column. 2 well volumes removed with dedicated plastic bailer
Sample collected with dedicated plastic bailer
Recharge very slow

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee		**Site Number:** 902014
Sampler: B. Sadowski		
Purge Date: 11/12/97&11/25/97	**Start Purge:** 1040 on 11/25/97	**End Purge:** 1057 on 11/25/97
Sample Date: 11/25/97		**Sample Time:** 1415 hours

Well Number: **MW-113**

1. Total Casing and Screen Length (Ft):	51.46 '
2. Casing Internal Diameter (in):	2"
3. Water Level Below Top of Casing (Ft.):	42.48/47.81 '
4. Volume of Water in Casing (Gal.): #1 - #3 X #2 (gal/ft)	1.46/0.6
Volume of 3 Casings:	4.39/1.8 gallons

Well ID	Vol.(gal/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469
8"	2.611

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
	1.46	2.92	4.35							
pH	7.1	7.2	7.3							
CONDUCTIVITY	450	500	500							
TURBIDITY	NM	NM	NM							
TEMPERATURE	NM	NM	NM							
Eh										
TIME	1120	1130	1140							

COMMENTS:
No NAPL observed in well on 11/12/97 & 11/25/97
Well purging performed and sample collected with dedicated plastic bailer
NM - No Measurement
Very slow recovery. In-sufficient water volume available to sample at 1200 hrs, 1500hrs and 1630 hrs. Sample to be collected at later date.
Purged 2.0 gallons on 11/25/95 very slow recovery could only collect 1 VOA insufficient volume for 2nd VOA and metals. Purge water very cloudy (grey)

TABLE IV-1 MONITORING WEL.
VOLATILE ORGANIC COMPOUNDS
(ug/l)

Parameter	MW-102D 11/12/97	MW-103I 11/12/97	MW-103D 11/12/97	MW-107I 11/12/97	MW-107S 11/21/97
Dichlorodifluoromethane	2.0 U	2.0 U	2.0 U	2.0 U	1.1X
Chloromethane	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Vinyl Chloride	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Bromomethane	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Chloroethane	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
Trichlorofluoromethane	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
Methylene Chloride	4.0 U	4.0 U	4.0 U	4.0 U	0.20 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
cis-1,2-Dichloroethene	1.0 U	18	12	1.0 U	0.20 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
Carbon Tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
Trichloroethene	1.0 U	9.1	4.2	1.0 U	0.20 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	0.40 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	0.40 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	0.40 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	0.40 U
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	NR
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	NR
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	NR
Xylenes (total)	1.0 U	1.0 U	1.0 U	1.0 U	NR

U- compound not detected
NR- Not Reported
X- Questionable, not confirmed by second column analysis

TABLE IV-1 (cont) MONITORING WELLS
VOLATILE ORGANIC COMPOUNDS
(ug/l)

Parameter	MW-108D 11/12/97	MW-108I 11/12/97	MW-109 11/12/97	MW-113 11/21/97	
Dichlorodifluoromethane	2.0 U	2.0 U	2.0 U	NR	
Chloromethane	2.0 U	2.0 U	2.0 U	10 U	
Vinyl Chloride	2.0 U	2.0 U	2.0 U	10 U	
Bromomethane	2.0 U	2.0 U	2.0 U	10 U	
Chloroethane	2.0 U	2.0 U	2.0 U	10 U	
Trichlorofluoromethane	2.0 U	2.0 U	2.0 U	NR	
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	10 U	
Methylene Chloride	4.0 U	4.0 U	4.0 U	10 U	
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	NR	
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	10 U	
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	NR	
Chloroform	1.0 U	1.0 U	1.0 U	10 U	
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	NR	
Carbon Tetrachloride	1.0 U	1.0 U	1.0 U	10 U	
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	10 U	
Trichloroethene	1.0 U	1.0 U	1.0 U	10 U	
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	10 U	
Bromodichloromethane	1.0 U	1.0 U	1.0 U	10 U	
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	10 U	
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	NR	
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	10 U	
Tetrachloroethene	1.0 U	1.0 U	1.0 U	10 U	
Dibromochloromethane	1.0 U	1.0 U	1.0 U	10 U	
Chlorobenzene	1.0 U	1.0 U	1.0 U	10 U	
Bromoform	1.0 U	1.0 U	1.0 U	NR	
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	10 U	
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	NR	
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	NR	
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	NR	
Benzene	1.0 U	1.0 U	1.0 U	10 U	
Toluene	1.0 U	1.0 U	1.0 U	10 U	
Ethylbenzene	1.0 U	1.0 U	1.0 U	10 U	
Xylenes (total)	1.0 U	1.0 U	1.0 U	10 U	

U- compound not detected
NR- Not Reported

Table IV-2 MONITORING WE 3
INORGANIC COMPOUNDS
(ug/l)

Parameter	MW-102D 11/12/97	MW-103D 11/12/97	MW-103I 11/12/97	MW-107I 11/12/97	MW-107S 11/25/97
Aluminum	1600*	10500*	2860*	6740*	NS
Antimony	30.0U	30.0U	30.0U	30.0U	NS
Arsenic	30.6U	30.6U	30.6U	30.6U	NS
Barium	110	109	63	139	NS
Berylium	0.30U	0.30U	0.30U	0.30U	NS
Cadmium	3.8U*	3.8U*	3.8U*	3.8U*	NS
Calcium	44700	20800	13800	51400	NS
Chromium	3.1U	11.6	3.1U	29.0	NS
Cobalt	4.1U	8.2	4.1U	8.2	NS
Copper	9.2	22.1	8.7	15.1	NS
Iron	1900N	13200N	3240N	10700N	NS
Lead	22.7U	22.7U	22.7U	22.7U	NS
Magnesium	14700	10100	4280	12400	NS
Manganese	37.2	509	111	2930	NS
Mercury	0.10U	0.10U	0.10U	0.10U	NS
Nickel	10.5U	22.9	10.5U	30.2	NS
Potassium	2620	5180	2380	4270	NS
Selenium	42.6U	46.4	42.6U	46.9	NS
Silver	5.0U	5.0U	5.0U	5.0U	NS
Sodium	3940	4370	4360	6080	NS
Thallium	34.4U	34.4U	34.4U	34.4U	NS
Vanadium	4.6U*	19.2*	6.4*	11.3*	NS
Zinc	11.0*	38.7*	14.0*	33.0*	NS

NS- No Sample (Preservation Error)
U- not detected at or above detection limit
N- Spiked sample recovery not within control limits
*- Duplicate analysis not within control limits

Table IV-2 (cont) MONITORING LLS
INORGANIC COMPOUNDS
(ug/l)

Parameter	MW-108D 11/12/97	MW-108I 11/12/97	MW-109 11/12/97	MW-113 11/25/97
Aluminum	2230*	10300*	314*	NS
Antimony	30.0U	30.0U	30.0U	NS
Arsenic	30.6U	30.6U	30.6U	NS
Barium	175	134	116	NS
Berylium	0.30U	0.55	0.30U	NS
Cadmium	3.8U*	3.8U*	3.8U*	NS
Calcium	28600	48500	32900	NS
Chromium	7.2	41.0	3.1U	NS
Cobalt	4.1U	5.7	4.1U	NS
Copper	11.0	17.2	8.5	NS
Iron	5560N	15400N	8640N	NS
Lead	22.7U	22.7U	22.7U	NS
Magnesium	10500	21200	8720	NS
Manganese	345	374	290	NS
Mercury	0.10U	0.10U	0.10U	NS
Nickel	10.5U	37.7	10.5U	NS
Potassium	3150	7180	2150	NS
Selenium	42.6U	42.6U	42.6U	NS
Silver	5.0U	5.0U	5.0U	NS
Sodium	4890	3930	4390	NS
Thallium	34.4U	34.4U	34.4U	NS
Vanadium	4.7*	17.4*	4.6U*	NS
Zinc	38.7*	74.6*	12.4*	NS

NS- No Sample (insufficient volume)
U- not detected at or above detection limit
N- Spiked sample recovery not within control limits
*- Duplicate analysis not within control limits

Section V Leachate Management

The leachate generated from the Patton's Busy Bee landfill is collected in 4 on site underground collection tanks. Staff from the Region 9 Division's of Solid and Hazardous Waste and Environmental Remediation monitor the leachate levels in the tanks approximately once a month. During periods of high leachate generation (spring & early summer) the tanks are checked more frequently. Conversely, during the winter months accessibility to the tanks is restricted due to weather conditions and therefore less frequent monitoring can be performed.

Based on the results of the tank monitoring, leachate is removed by a contracted leachate hauler when the leachate levels reach at least 75% capacity in any one of the tanks. The current leachate hauler is Leo Dickson and Sons. Their first removal effort occurred on 10/27/97 when 15200 gallons were removed and transported to the Hornell Waste Water Treatment plant for disposal. Due to permit modification delays, the Hornell plant could not immediately treat the leachate and it was placed in a storage tank until the permit modifications were completed. This caused a delay in the removal of the remaining leachate until 11/21/97 when the contractor made arrangements with the Canandaigua Treatment plant and the Ithaca Treatment plant. The leachate removed on 11/21/97 was transported to the Canandaigua plant for disposal.

Previous leachate management was performed by the Remedial Investigation consultant, URS Inc., and the disposal site during that period was the Canandaigua plant.

On 12/1/97 the Hornell Treatment Plant received permission from the Division of Water to accept the leachate from Patton's Busy Bee landfill. The leachate that was hauled to the Hornell plant on 10/27/97 was treated and leachate hauling resumed on 12/3/97.

The following tables provide information on the leachate monitoring and removal activities. A sample from the leachate tank was collected on 11/12/97 and is summarized in Table V-1 & V-2. The actual data is located in the Region 9 office and will be provided upon request.

Patton's Busy Bee Disposal Site
Site No. 9-02-014

Leachate Tank Monitoring

Tank #BB-T1-North

North Tank:Estimated Capacity: 15,000 gallons
Distance from Top of Standpipe to Bottom of Tank: 12.4'
Tank Diameter: 10' (est)
Tank Length: 25' (est)

BB-T1-North

Leachate Tank Measurement							
Date	Depth	Date	Depth	Date	Depth	Date	Depth
9/11/97	8.05'						
9/17/97	8.05'						
10/21/97	0.6'						
11/12/97	0.63'						
11/25/97	6.20'						
12/10/97	9.83'						

Note: Depth measured from top of riser to leachate level

Arrange for removal when leachate is within 4.9' of top of riser

Patton's Busy Bee Disposal Site
Site No. 9-02-014

Leachate Tank Monitoring

Tank #BB-T1-South

South Tank:Estimated Capacity: 18,000 gallons
Distance from Top of Standpipe to Bottom of Tank: 12.8'
Tank Diameter: 10.7' (est)
Tank Length: 28' (est)

BB-T1-South

Leachate Tank Measurement							
Date	Depth	Date	Depth	Date	Depth	Date	Depth
9/11/97	6.25'						
9/17/97	6.10'						
10/21/97	1.83'						
11/12/97	1.84'						
11/25/97	4.53'						
12/10/97	8.58'						

Note: Depth measured from top of riser to leachate level

Arrange for removal when leachate is within 4.8' of top of riser

. atton's Busy Bee Dispos.. Site
Site No. 9-02-014

Leachate Tank Monitoring

Tank #BB-T2-North

North Tank:Estimated Capacity: 2000 gallons
Distance from Top of Standpipe to Bottom of Tank: 7.5' (est)
Tank Diameter: 5' (est)
Tank Length: unknown

BB-T2-North

Leachate Tank Measurement							
Date	Depth	Date	Depth	Date	Depth	Date	Depth
9/11/97	7.1						
9/17/97	7.05'						
10/21/97	5.0'						
11/12/97	3.91'						
11/25/97	3.90'						
12/10/97	7.37'						

Note: Depth measured from top of riser to leachate level

Arrange for removal when leachate is within 3.5' of top of riser

Patton's Busy Bee Disposal Site
Site No. 9-02-014

Leachate Tank Monitoring

Tank #BB-T2-South

South Tank:Estimated Capacity: 4000 gallons
Distance from Top of Standpipe to Bottom of Tank: 6.3'
Tank Diameter: 5.1' (est)
Tank Length: 24' (est)

BB-T2-South

Leachate Tank Measurement							
Date	Depth	Date	Depth	Date	Depth	Date	Depth
9/11/97	3.05'						
9/17/97	3.0'						
10/21/97	1.6'						
11/12/97	1.73'						
11/25/97	1.65'						
12/10/97	3.83'						

Note: Depth measured from top of riser to leachate level

Arrange for removal when leachate is within 2.3' of top of riser

Leachate Removal Log

Date	Estimated Storage Volume	Estimated Volume Removed	Date	Estimated Storage Volume	Estimated Volume Removed
10/27/97	38,000	15,200			
10/29/97	22,800	canceled			
11/21/97	38,000	10,000			
12/3/97	No Estimate	20,000			
12/4/97	No Estimate	5,500			
12/5/97	No Estimate	6,800			

TABLE V-1 Leachate Collection Tank
Volatile Organic Compounds
(ug/l)

Parameter	BB-T1S 11/12/97
Dichlorodifluoromethane	2.0U
Chloromethane	2.0U
Vinyl Chloride	2.0U
Bromomethane	2.0U
Chloroethane	2.0U
Trichlorofluoromethane	2.0U
1,1-Dichloroethene	1.0U
Methylene Chloride	4.0U
trans-1,2-Dichloroethene	1.0U
1,1-Dichloroethane	1.0U
cis-1,2-Dichloroethene	1.0U
Chloroform	1.0U
1,1,1-Trichloroethane	1.0U
Carbon Tetrachloride	1.0U
1,2-Dichloroethane	1.0U
Trichloroethene	1.0U
1,2-Dichloropropane	1.0U
Bromodichloromethane	1.0U
cis-1,3-Dichloropropene	1.0U
trans-1,3-Dichloropropene	1.0U
1,1,2-Trichloroethane	1.0U
Tetrachloroethene	1.0U
Dibromochloromethane	1.0U
Chlorobenzene	1.0U
Bromoform	1.0U
1,1,2,2-Tetrachloroethane	1.0U
1,3-Dichlorobenzene	1.0U
1,4-Dichlorobenzene	1.0U
1,2-Dichlorobenzene	1.0U
Benzene	1.0U
Toluene	1.0U
Ethylbenzene	1.0U
Xylenes (total)	1.0U

U- compound not detected

TABLE V-2 Leachate Collection [illegible]
Volatile Organic Compounds
(ug/l)

Parameter	BB-T1S 11/12/97
Aluminum	144*
Antimony	30.0U
Arsenic	30.6U
Barium	166
Berylium	0.30U
Cadmium	3.8U*
Calcium	43900
Chromium	5.2
Cobalt	4.1U
Copper	11.0
Iron	3900N
Lead	22.7U
Magnesium	17300
Manganese	2700
Mercury	0.10U
Nickel	31.9
Potassium	12600
Selenium	42.6U
Silver	5.0U
Sodium	175000
Thallium	34.4U
Vanadium	4.7*
Zinc	16.0*

U- not detected at or above detection limit
N- Spiked sample recovery not within control limits
***- Duplicate analysis not within control limits**

Section VI Recommendations

The following recommendations are provided for the 1998 Operation and Maintenance Year:

- The removal of leachate on an as needed basis must continue to ensure the landfill is maintained in as dry as state as possible. The buildup of leachate during the period prior to the RI investigation is suspected as the cause of the groundwater contamination associated with the Busy Bee Landfill.

- Sampling of the selected residential drinking water wells must continue as recommended in the Record of Decision. This information will re-assure the homeowners that the drinking wells are not affected by the Busy Bee contaminants.

- Sampling of the on-site monitoring wells must continue to evaluate the effectiveness of the landfill cap and leachate collection system.

- A gate restricting access to the site should be considered. Due to the location and nature of this site, indiscriminate dumping has and will continue to occur. A gate constructed across the access road in an appropriate location should be sufficient. Complete fencing of the site is unwarranted and will not provide a deterrent to trespassers and recreational vehicles such as ATV and snowmobiles.

- The landfill cap will require mowing and minor repair of animal burrows. The mowing should be accomplished in the fall of 1998.

- Warning signs should be placed around the site advising trespassers, hunters etc of the existence of the landfill.

- The Henry Landfill directly north of the Busy Bee and not part of this O&M activity should be maintained by the Solid Waste program. Leachate continues to seep from the landfill along the northern perimeter and flows off site into the drainage ditches along Clark Road.

Section VII Conclusions

The inspection, leachate removal activities, monitoring well and private well sampling have been performed in accordance with the O&M Plan developed for this site. The analysis of data collected indicate that there is no evidence of migration of site related compounds from the Busy Bee landfill area into the surrounding properties. The NYS DOH has concluded that the private wells sampled as part of this project have not been impacted by site related compounds.

Appendix A

To: Mike Hinton, Reg. 9
From: Christine McGrath, QAU, ISS, BCS
Re: Patton's Busy Bee Data

I have reviewed the following data packages from Recra:

1. Sample Data Package: RFW Batch 9711L310
10 water samples for GC VOA (EPA 8021) and metals analyses
NYSDEC ID: SH997-1112-A883102D
" 103I
" 103D
" 107I
" 108I
" 108D
" 109
" DMW
" TIS
" TB

The laboratory case narrative for the EPA 8021 analyses states that "All surrogate recoveries were outside laboratory control limits." A review of the data packages shows that the volatile surrogate recoveries for these samples are acceptable.

The data in this package is valid and usable.

2. Sample Data Package: RFW Batch 9711L31
9 water samples for GC VOA (EPA 8021) and metals analysis
NYSDEC ID: SH997-1112-A883D1 through D9 and TB

The data in this package is valid and usable.

3. Sample Data Package Case#: SH 997, SDG#: 1125
2 water samples: A883107S GC VOA (EPA 8021) and metals analysis
A883113 GC/MS VOA (ASP 95-1)

The analysis of sample A883107S (MW-107S) reported 1.1 ppb of dichlorodifluoromethane. This detection was not confirmed on a second column. I called the lab to inquire about the confirmation analysis and it is Recra's policy to do dual column confirmation on positive detections only by request. I will ask Jack Ryan, our Contract Manager, if we can have dual column confirmation, on positive detections, as a standard request for EPA Method 8021.

Karen Maiurano confirmed that the dichlorodifluoromethane was not detected during the RI sampling, which included TCL volatiles + tentatively identified compounds (TICs). Therefore, this detection should be viewed as tentative, pending confirmation in another sampling round. The confirmational analysis should be done by EPA method 8021 with dual column confirmation. I told Mark Nemec, Recra Program Manager, that it would be acceptable for the Division of Environmental Remediation (DER) purposes if the confirmational analysis was done by GC/MS, instead of on a second GC column, if this was more convenient for Recra.

The data in this package is valid an usable, with the exception of the detection of

Dichlorodifluoromethane MW107S, which should be qualified a . The X qualifier should be defined as a questionable detection, which was not confirmed by dual column analysis.

I have returned the reports to the DOW for microfilming. Please don't hesitate to call me at (518) 457-9280, if you have an questions.

cc: J. Rankin
K. Maiurano

Appendix B

STATE OF NEW YORK
DEPARTMENT OF HEALTH
II University Place Albany, New York 12203

Barbara A. DeBuono, M.D., M.P.H.
Commissioner of Health

Dennis P. Whalen
Executive Deputy Commissioner

January 6, 1998

[redacted]

Re: Water Sample Test Results
Patton's Busy Bee Disposal Landfill
Site #902014
Alfred Station, Allegany County

Dear [redacted]:

On November 14, 1997, Mr. Michael Hinton of the New York State Department of Environmental Conservation collected a water sample from your drinking water well as part of the post closure plan for the Patton's Busy Bee Landfill. The sample was analyzed for volatile organic and inorganic (metals) compounds by a private laboratory which is approved by the New York State Department of Health. I have enclosed a copy of your test results and an "Analytical Report Explanation Sheet" to help you interpret your sample results. **Based on the laboratory results for this sample, your water is suitable for all purposes.**

No volatile organic compounds were detected in your water sample. In general, the inorganic compounds found are at concentrations that naturally occur in groundwater in New York State.

If you have any questions, please call me toll-free at 1-800-458-1158, Ext. 6309.

Sincerely,

Richard E. Tuers

Richard Tuers
Assistant Sanitary Engineer
Bureau of Environmental Exposure
Investigation

Enclosure