Phase I Environmental Site Assessment and Limited Phase II Environmental Investigation Appendices

Frederick Brick Works, Inc.
184 East South Street
Frederick, Maryland 21701

Prepared for
Frederick Brick Works, Inc.
Frederick, Maryland 21701
and
Farmers and Mechanics National Bank
Frederick, Maryland 21705

August 30, 2000

BAY ENVIRONMENTAL CORPORATION
132 East Main Street, Suite 400, Salisbury, Maryland 21801
Phone 410-219-5600 • Fax 410-219-5700
Toll Free 800-516-9302

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APPENDICES

A. Sanborn Fire Insurance Maps

B. ASTM Transaction Screen Questionnaire

C. Freedom of Information and Public Information Act Request Letters and Responses

D. Selected Records from Maryland Department of the Environment, Water Management Administration

E. Maryland Department of Assessments and Taxation Real Property Tax Records

F. Historic Maps of Frederick Brick Works Vicinity

G. EcoSearch *Priority Risk Report*

H. Boring Logs and Monitoring Well Completion Forms

I. Soil and Ground Water Analysis Reports and Chain of Custody Documentation

APPENDIX A. Sanborn Fire Insurance Maps

vistainfo
vistainfo.com

PERTAINING TO:
Frederick Brick Works, Inc.
184 East South Street
Frederick MD 21701

REPORT NUMBER:
349006/546334

PREPARED ON:
8/17/00

ON BEHALF OF:
EcoSearch Environmental Services
9365 Counselors Row, Suite 104
Indianapolis IN 46240

If you have any questions or comments regarding this report, please contact VISTA customer service at 1-800-767-0403, locally at 858-450-6100, or fax us at 858-450-6195.
Thank you for your order.

SANBORN MAP LEGEND

CODING OF FIRE–RESISTIVE STRUCTURAL UNITS FOR FIREPROOF AND NON–COMBUSTIBLE BUILDINGS

FRAMING

CODE	STRUCTURAL UNIT
A.	Reinforced Concrete Frame.
B.	Reinforced Concrete Joists, Columns, Beams, Trusses, Arches, Masonry Piers.
C.	Protected Steel Frame.
D.	Individually Protected Steel Joists, Columns, Beams, Trusses, Arches.
E.	Indirectly Protected Steel Frame.
F.	Indirectly Protected Steel Joists, Columns, Beams, Trusses, Arches.
G.	Unprotected Steel Frame.
H.	Unprotected Steel Joists, Columns, Beams, Trusses, Arches.
O.	Masonry Bearing Walls only.

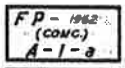
FLOORS

CODE	STRUCTURAL UNIT
1.	Reinforced Concrete. Reinforced Concrete with Masonry Units. Pre–cast Concrete or Gypsum Slabs or Planks.
2.	Concrete or Metal Lath. Incombustible Form Boards. Paper–backed Wire Fabric. Steel Deck, and Cellular, Ribbed or Corrugated Steel Units.
3.	Open Steel Deck or Grating.

ROOF

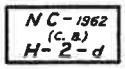
CODE	STRUCTURAL UNIT
a.	Reinforced Concrete. Reinforced Concrete with Masonry Units. Reinforced Gypsum Concrete Pre–cast Concrete or Gypsum Slabs or Planks.
b.	Concrete or Gypsum on Metal Lath. Incombustible Form Boards. Paper–backed Wire Fabric. Steel Deck. and Cellular. Ribbed or Corrugated Steel Units.
c. or	Incombustible Composition Boards with without Insulation. Masonry or Metal Tiles.
d.	Steel Deck. Corrugated Metal or Asbestos Protected Metal with or without Insulation.

The coding to the left, for framing, floor and roof structural units is used in describing the construction of fie–retistive buildings. In addition, reports for fire–resistive buildings will show the date built, wall construction other than brick, and ceilings.



A fireproof building built in 1962 with concrete walls and reinforced concrete frame, floors and roof.

A fireproof building built in 1962 with metal panel walls, reinforced concrete columns and beams, concrete walls on metal lath and gypsum slab roof; noncombustible ceilings.



A non combustible building built in 1962 with concrete block walls; unprotected steel columns, beams and joists; concrete floors on metal lath and steel deck roof.

MASONRY CONSTRUCTION

Important interior and all exterior masonry walls of all non–residential buildings and residential buildings of five or more dwelling units are shown with weighted (——) lines.

Masonry walls of residential buildings of four dwelling units or less are shown in a standard line and the construction is noted on all buildings diagramed after July, 1963.

WALLS

- 8" Brick
- 12" Concrete
- 18" & 20" Stone
- 12" & 8" Hollow Tile Wall Thicknesses Placed Relative to Respective Floors
- Cinder, Concrete or Cement Brick
- Hollow Cinder or Concrete Blocks, Pilastered
- Mixed Construction of Concrete Blocks, Brick Faced
- Mixed Construction of Concrete Blocks and Brick
- Masonry Walls, Metal Faced
- Adobe
- Hollow Cinder or Concrete Block Interior Wall Basement to Roof
- Tile Interior Wall Basement to Roof
- Cement Brick End Wall

PARTITIONS

- Frame
- Tile from Foundation to Top Ceiling only
- Concrete First Floor only
- Hollow Cinder or Concrete Block 1st Floor only
- Brick 2nd Floor only
- Tile 1st & 3rd Floor only

OPENINGS

(Interior)

- Wall with No Openings
- Wall with Double Standard Fire Doors 1st Floor
- Wall with Standard Fire Door Basement
- Wall with Substandard Fire Doors 1st & 3rd Floors
- Wall with Metal & Wired Glass Fire Doors all Floors
- Wall with Substandard Fire Doors 1st, 2nd & 3rd Floors & Unprotected Opening 4th Floor
- Wall with Small Unprotected Openings only
- Wall with Unprotected Openings all Floors

(Exterior)

- 1st Floor
- 1st & 2nd Floors
- 3rd Floor
- 1st & 4th Fl. with Metal Shutter 1st.
- 10th& 22nd only
- 10th & 22nd Fl.
- Glass Block
- Wired Glass in Metal Sash 2nd & 3rd Fl.

NON–MASONRY CONSTRUCTION

Non–masonry walls are shown with fine(——) lines.
(Walls construction other than wood and stucco on wood frame is noted)

- Wood & Stucco & Cement Plaster, Etc. on Wood Frame
- Brick Veneered on Wood Frame (Other Types of Veneered on Wood Frume Specifically Noted)
- Mixed Masonry & Non–Masonryt Type of Masonry Specifically Noted)
- Wood, Brick Lined, Br., Filled & Brick Nogged
- Wood & Sash Glass
- Metal & Sash Glass
- Metal Clad on Wood Frame
- Iron Building
- Iron Building with Wood Roof. (Location of Extensive Wood Areas Specifically noted)
- Asbestos Clad on Wood Frame, Noted in Non–Residential Structures only.
- Mixed Wall–(9' of CB with Metal Sash Above
- Metal Panels
- Apron Walls with wood Sash and Glass
- Stucco, Cement Plaster, Etc. on Steel Frame
- Gunite on Steel Frame
- Asphalt and/or Asbestos Protected Metal on Steel Frame
- Asphalt and/or Asbestos Protected Metal on Wood Frame
- Glass Panels

FIRE PROTECTION

- Fire Department Connection
- Automatic Sprinklers throughout contiguous sections of single risk
- Automatic Sprinklers all floors of building
- Automatic Sprinklers in part of building only (Note under Symbol indicates protected portion of building)
- Not Sprinklered
- Automatic Chemical Sprinklers
- Chemical Sprinklers in part of building only (Note under Symbol indicated protected portion of building)
- Vertical Pipe or Stand Pipe
- Automatic Fire Alarm
- Water Tank
- Outside Vertical Pipe on fire Escape
- Fire Alarm Box Noted "HPFS" on High Pressure Fire Service
- Single Hydrant
- Double Hydrant
- Triple Hydrant
- Quadruple Hydrant of the High Pressure Service
- Water Pipes of the High Pressure Service
- Water Pipes of the High Pressure Service as shown on Key Map
- Public Water Service
- Private Water Service

VERTICAL OPENINGS

- Skylight lighting top story only
- Skylight lighting 3 stories
- Skylight with Wired Glass in Metal Sash
- Open Elevator
- Frame Enclosed Elevator
- Frame Enclosed Elevator with Traps
- Frame Enclosed Elevator with Self Closing Traps
- Concrete Block Enclosed Elevator with Traps
- Tile Enclosed Elevator with self closing Traps
- Brick Enclosed Elevator with wired Glass Door
- Open Hoist
- Hoist with Traps
- Open Hoist Basement to 1st
- Stairs

MISCELLANEOUS

- Number of stories, Height in Feet Composition Roof Covering
- Parapet 6" above Roof Frame Cornice Parapet 12" above Roof
- Parapet 24" above Roof Occupied by Warehouse Metal, Slate, Tile or Asbestos Shingle Roof Covering Parapet 48" above Roof
- 2 Stories & Basement 1st Floor Occupied by Store 2 Residential Units above 1st Auto in Basement Drive or Passageway Wood Shingle Roof.
- Iron Chimney
- Iron Chimney (with spark arrestor)
- Vertical Steam Boiler
- Horizontal Steam Boiler
- Width of Street between Block Lines, not Curb Lines
- Ground Elevation
- House numbers nearest to Buildings are Official or Actually up on Buildings. Old house numbers are farthest from Buildings
- Reference Adjoining Page
- Fire Department as shown on Key Map
- Brick Chimney
- Gasoline Tank
- Fire Pump
- Block Number
- Vac. or V. – Vacant
- Vac. & Op. or V. –O. – Vacant & Open

GLOSSARY

A–B Lines An arbitrary boundary between adjoining sheets.
A Private garage
ABV Above
A.F. A. Equipped with fire detecting devices which automatically signal a central fire department.
AIR COND Air cooling system employing ducts through floors
APRON WALL A masonry wall extending 5' or less above foundation
ASSOC RISK Risk not underwritten by stock Fire Ins. Companies.
BASEMENT A story having its floor below ground and it's ceiling at least 4' above ground. Cook County Ill.: A floor of a building next below the first floor. Shown by the symbol B following story height. Sub–basements or sub–cellars. (stories below the first basement), are shown by the symbol SB following basement symbol.
CHIMNEYS (Applicable to maps in Rocky Mountain & Pacific Coast States.)
BC. Brick, stone, concrete brick & concrete chimneys.
C. BL. C. Concrete block chimney
C.C. Non standard concrete chimney
T.C. Tile Chimney
P.C. Patent chimney
IR. CH. Iron chimneys
S.P. Stove pipe
S.P.V. Stove pipe with patent ventilator.

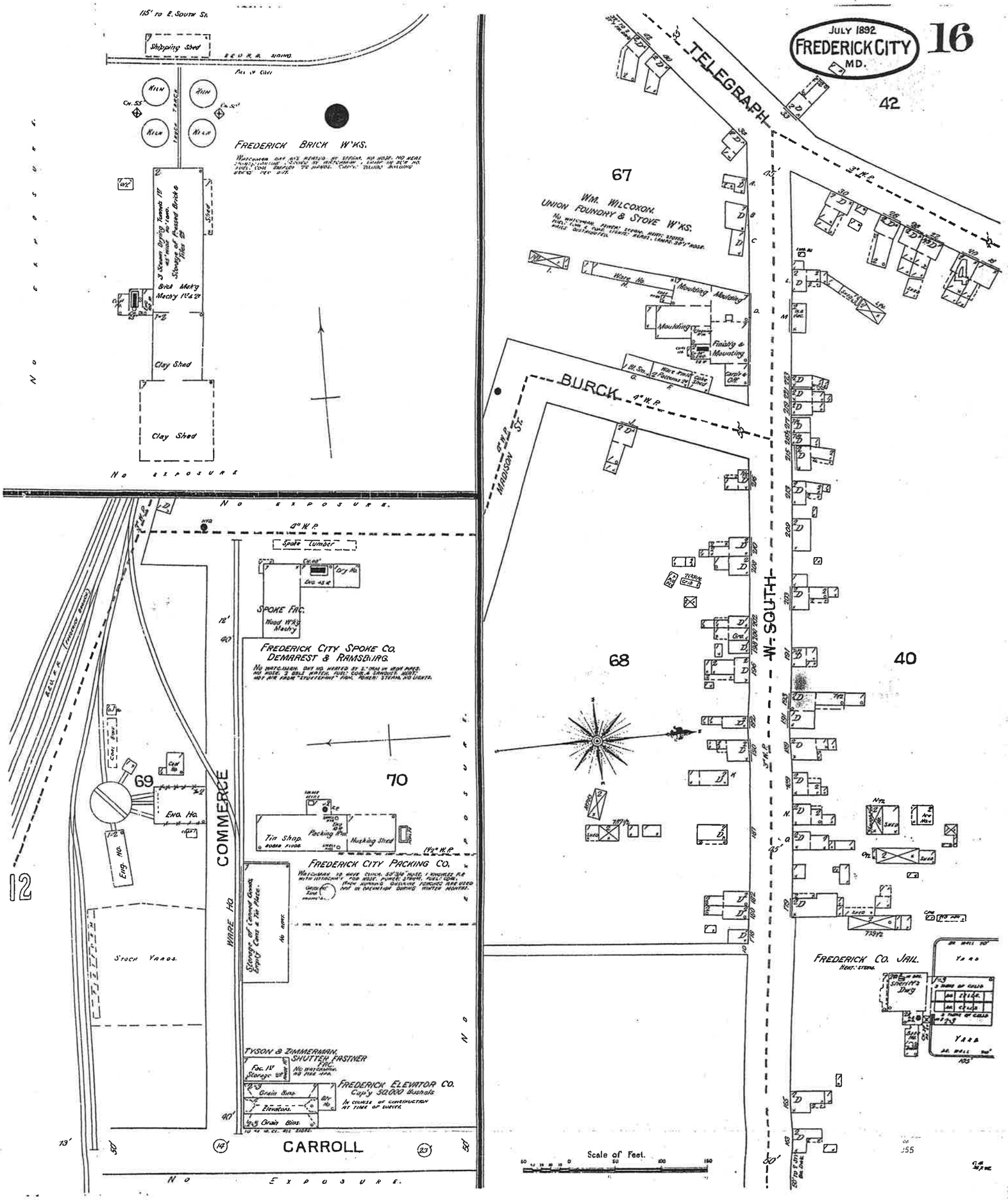
RESIDENTIAL OCCUPANCY SYMBOLS
D Single family unit or as qualified by a numeral.
E APTS A multi–family residential building corresponding with local Rating Bureau definition in family units per floor, story height, & separation of entrance.
ROOM G A residential Building normally occupied by a single family but with 10 or more rooms rented for lodging purposes.
EXCEPTIONS: 6 rooms in Arizona, California, Nevada, Utah & Montana; 5 rooms in Oregon & Washington; 4 rooms in Idaho & Hawaii.

FIRE RESISTIVE CONSTRUCTION SYMBOLS
F.P. Approved masonry walls, floors & roof, interior supports of approved masonry, concrete and/or protected steel.
F.P.X. F.P. qualifications except inferior or sub–standard walls.
N.C. Fire resistive with unprotected structural steel units
HOLLOW WALL A bonded masonry wall having a continuous air space within.
I.E.P. Independent Electric Plant.
IMPASSABLE Not traversable due to condition of terrain
LEDGED WALL A masonry bearing wall with extended edges to support floors.
LOFT Tenanted by industrial occupancies.
M.L. & P. Concrete or plaster applied to metal lath on wood studdings.
M.S. & G. Metal sash & glass.
NOT OPEN Streets appearing on records but not open on ground.
O.L. Windows overlooking the roof above the corresponding floor of an adjoining building
O.U. Open between ground and first floor.
PILAST'D. Masonry reinforcing columns in walls.
SKYTS. Skylights.
SL. CL. Slate attached to wood siding.
SM. HO. Smoke House.
STABLE Shown by crossing or diagonal lines on diagram.
SUSP'D Suspended Ceilings below floor and/or roof beams.
SYST. System.
TRANSF. Transformer.
WD. Wood.

LAND USE APPLICABLE TO CHANGES DIAGRAMMED AFTER 5/49

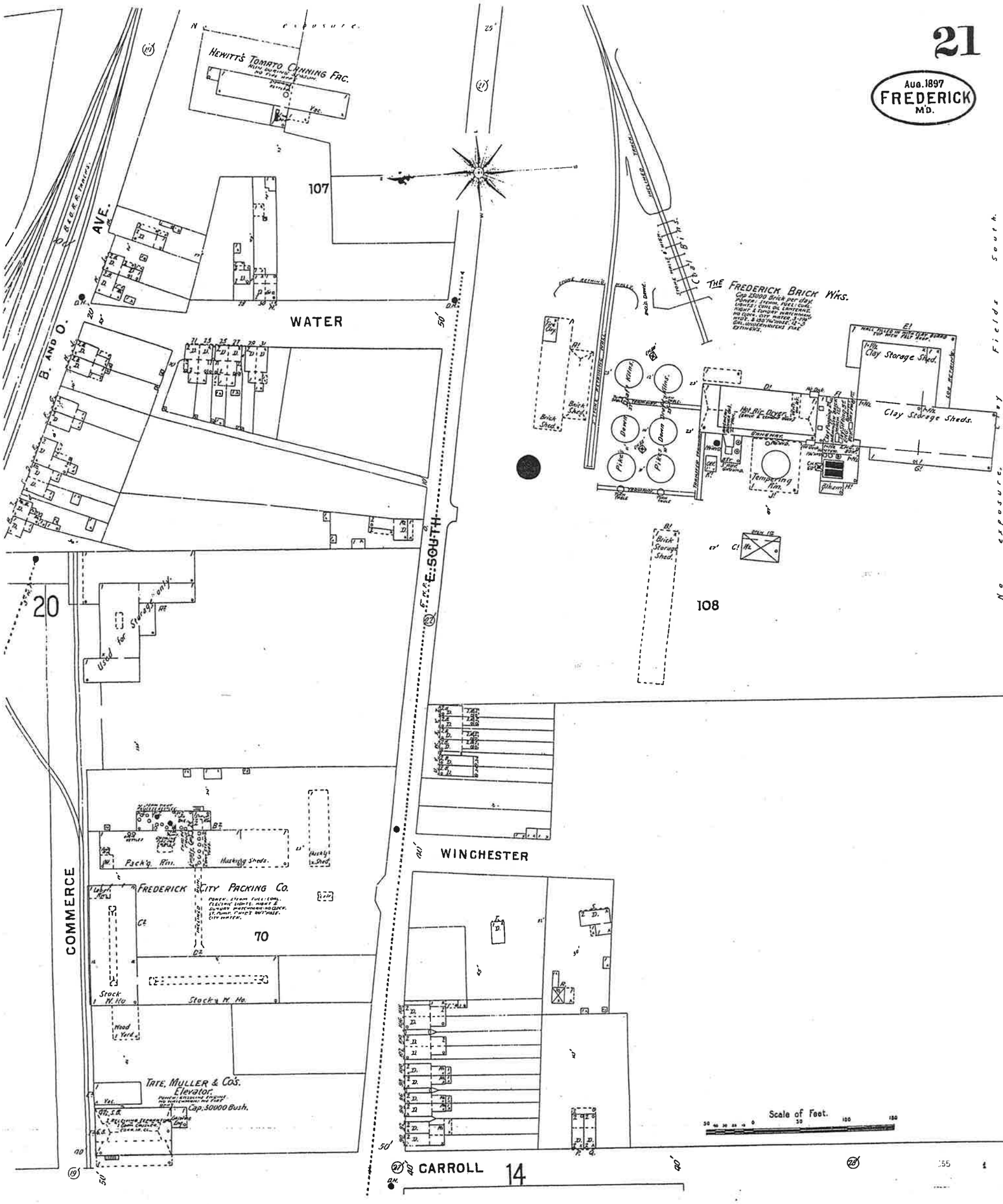
R	RESIDENTIAL	M	MANUFACTURING
RT	RESIDENTIAL-TRANSIENT	P	PUBLIC OR INSTITUTIONAL
C	COMMERCIAL	U	UTILITY
W	WAREHOUSE	T	TRANSPORTATION

NUMERICAL PREFIX INDICATES THE NUMBER OF ESTABLISHMENTS IN EACH CATEGORY



1892

SANBORN



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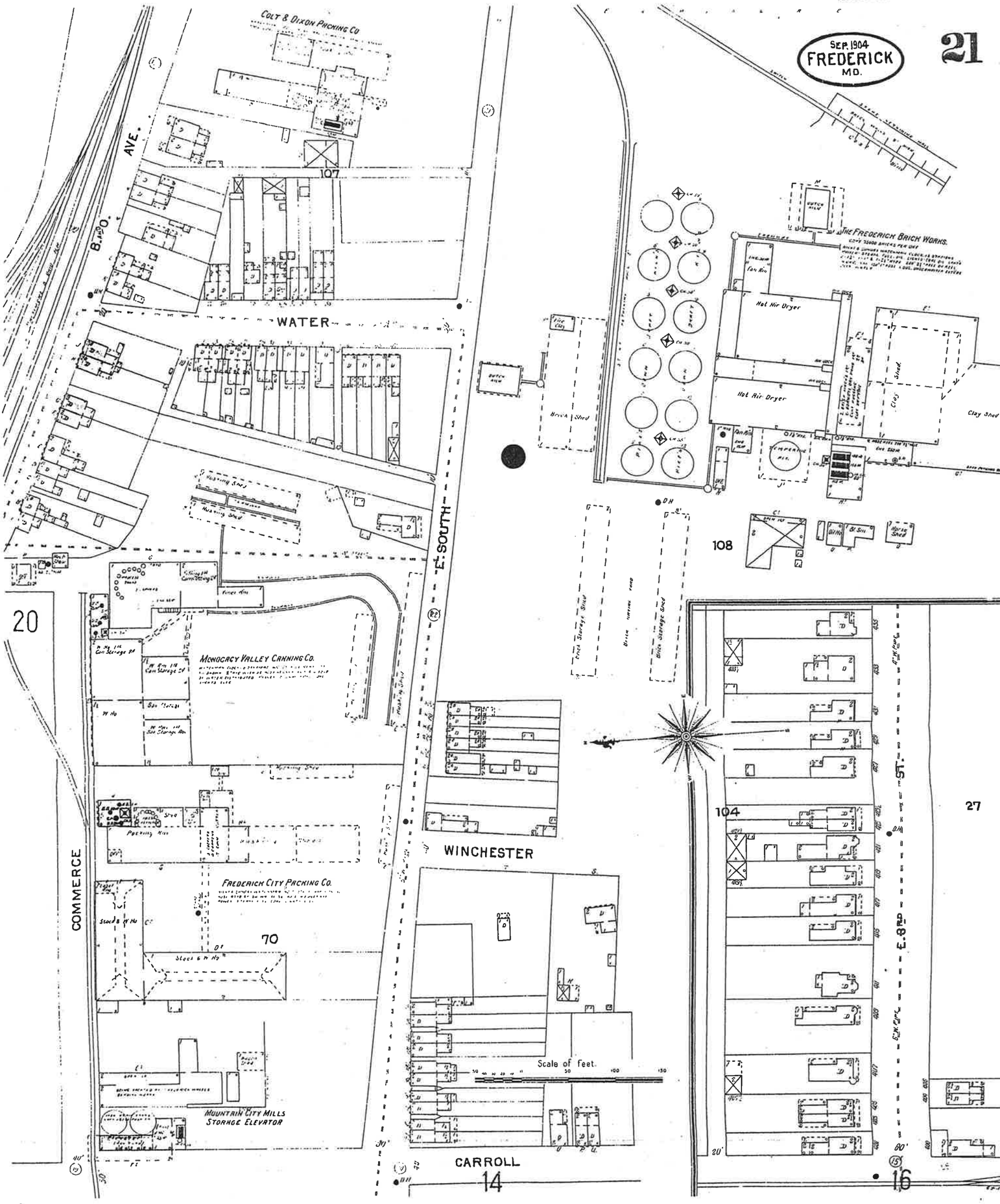

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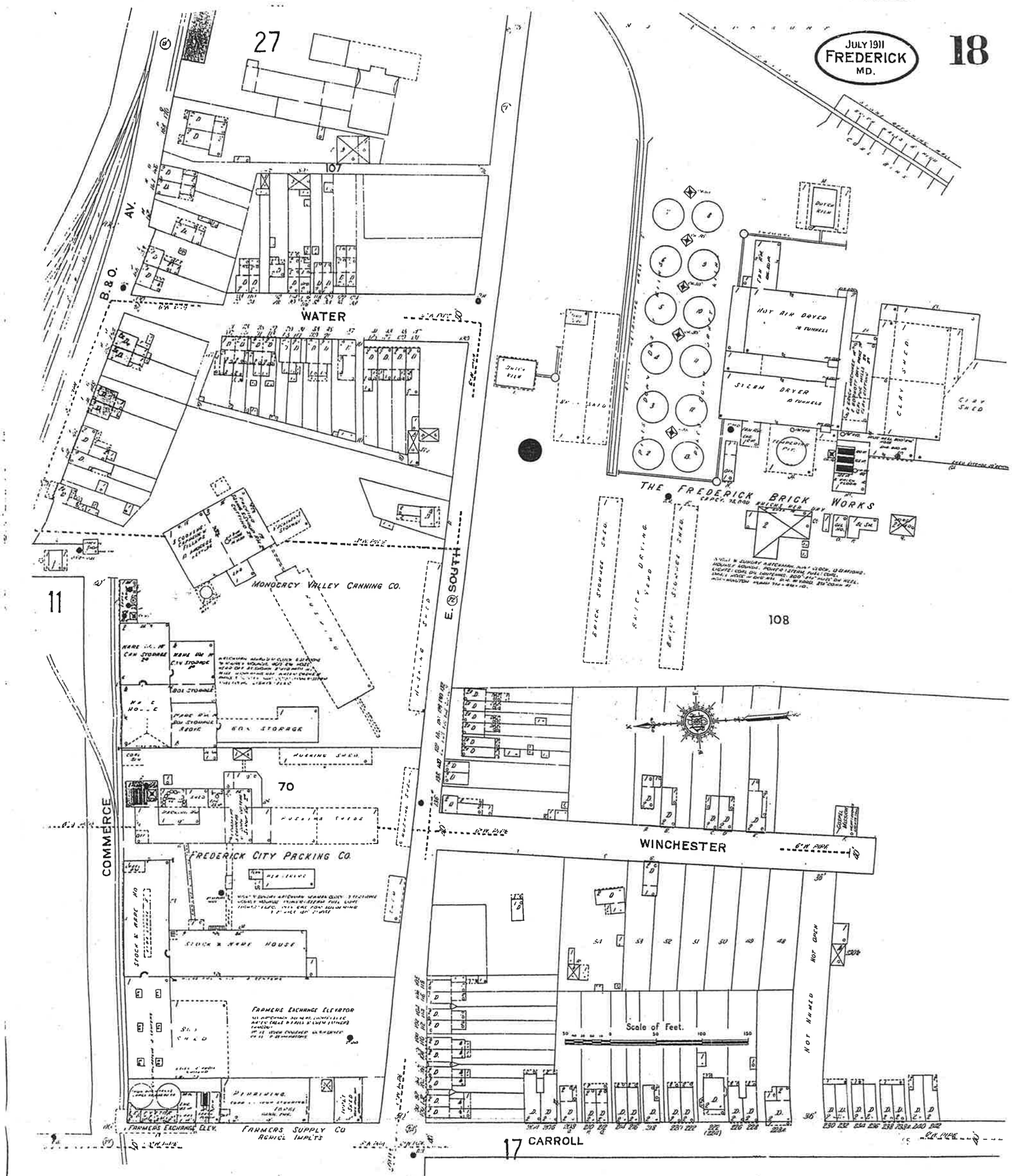

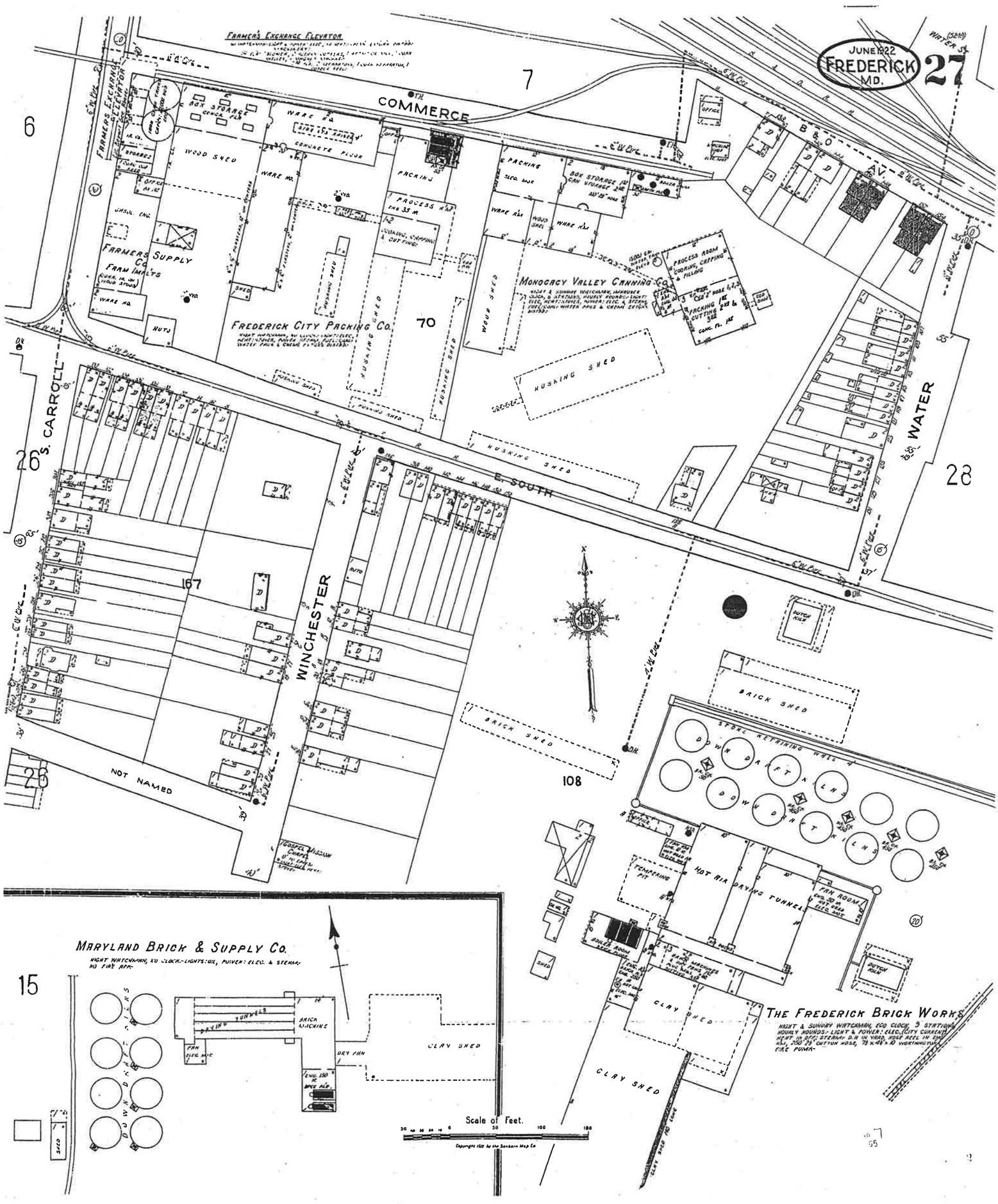

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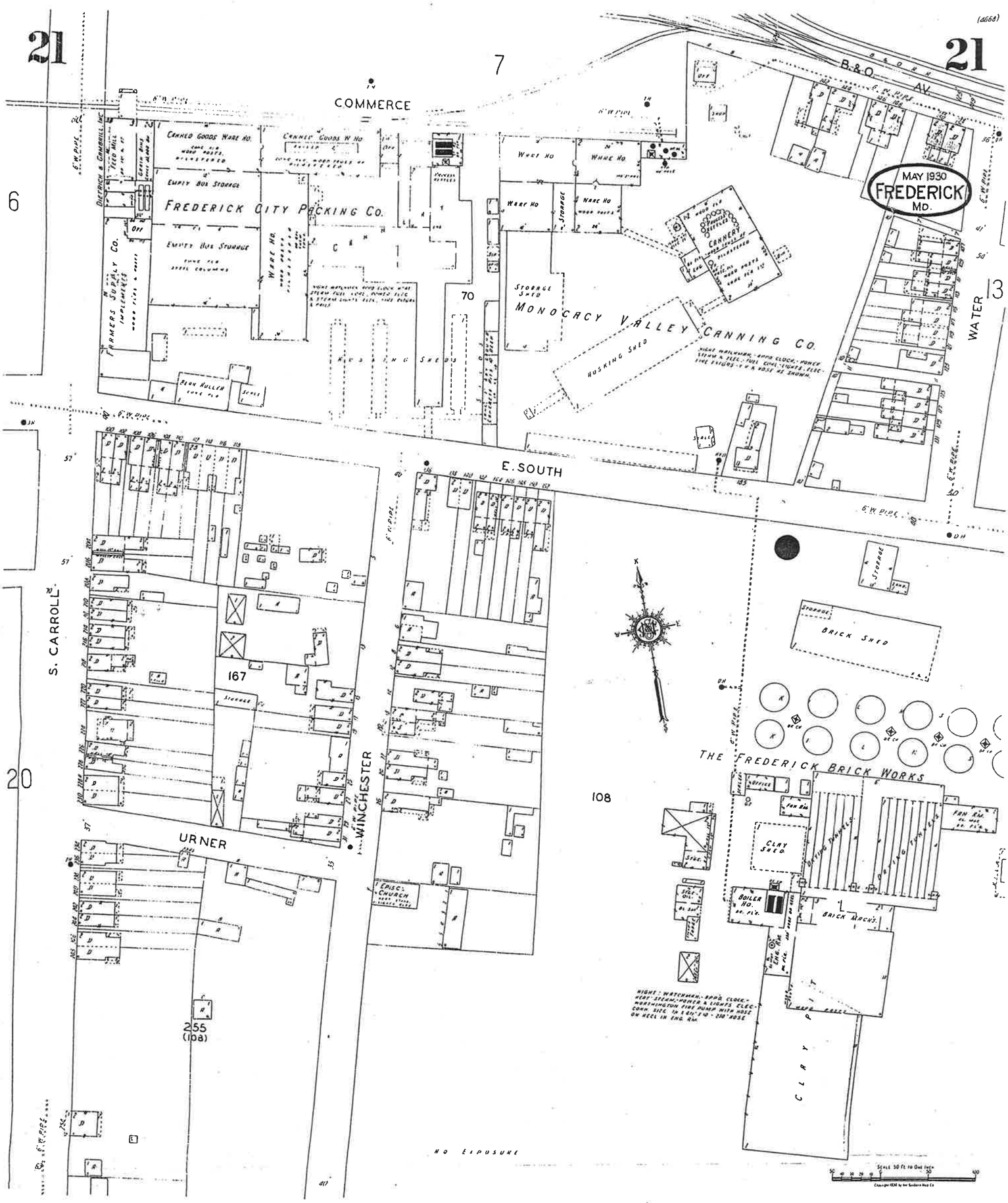
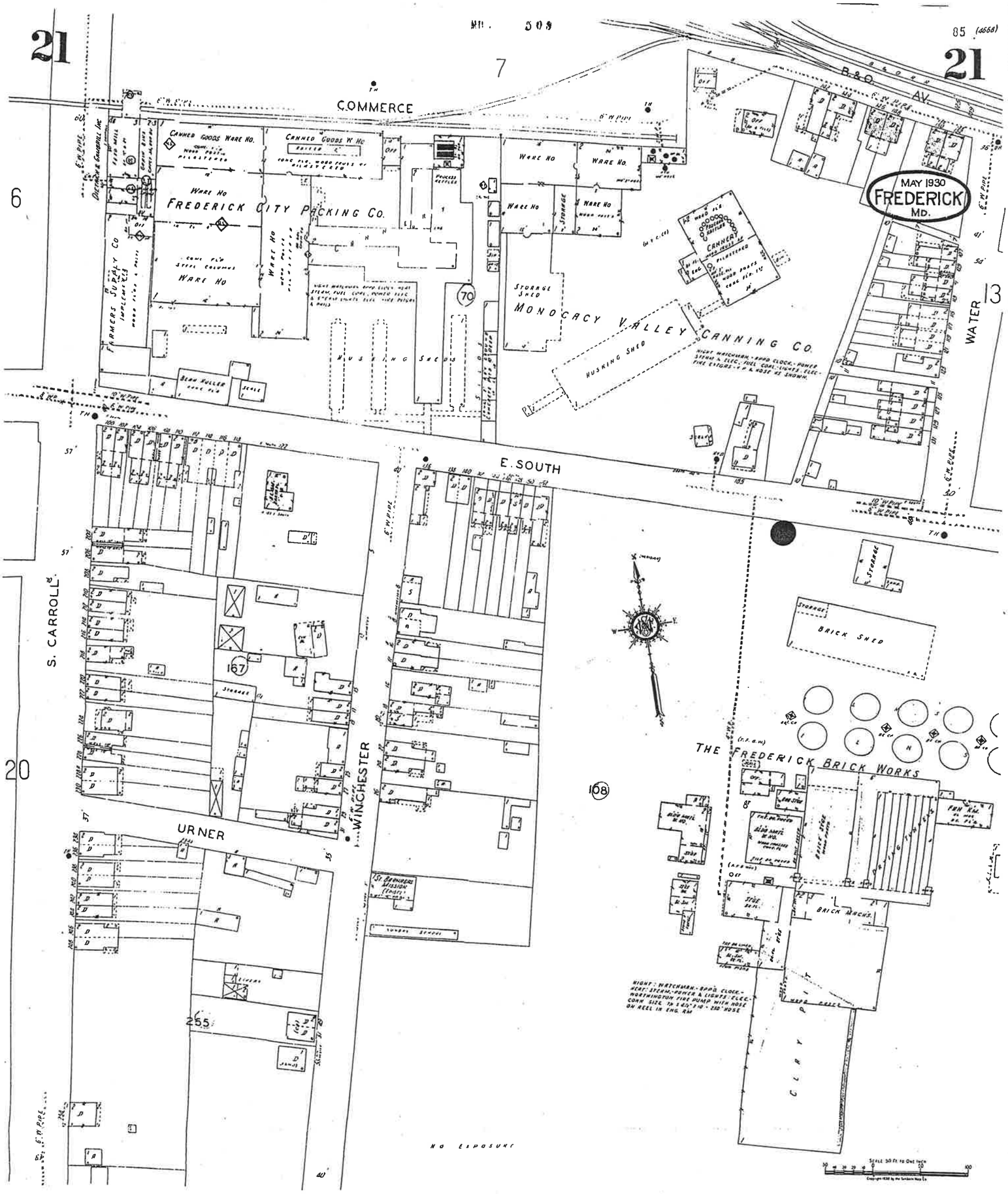
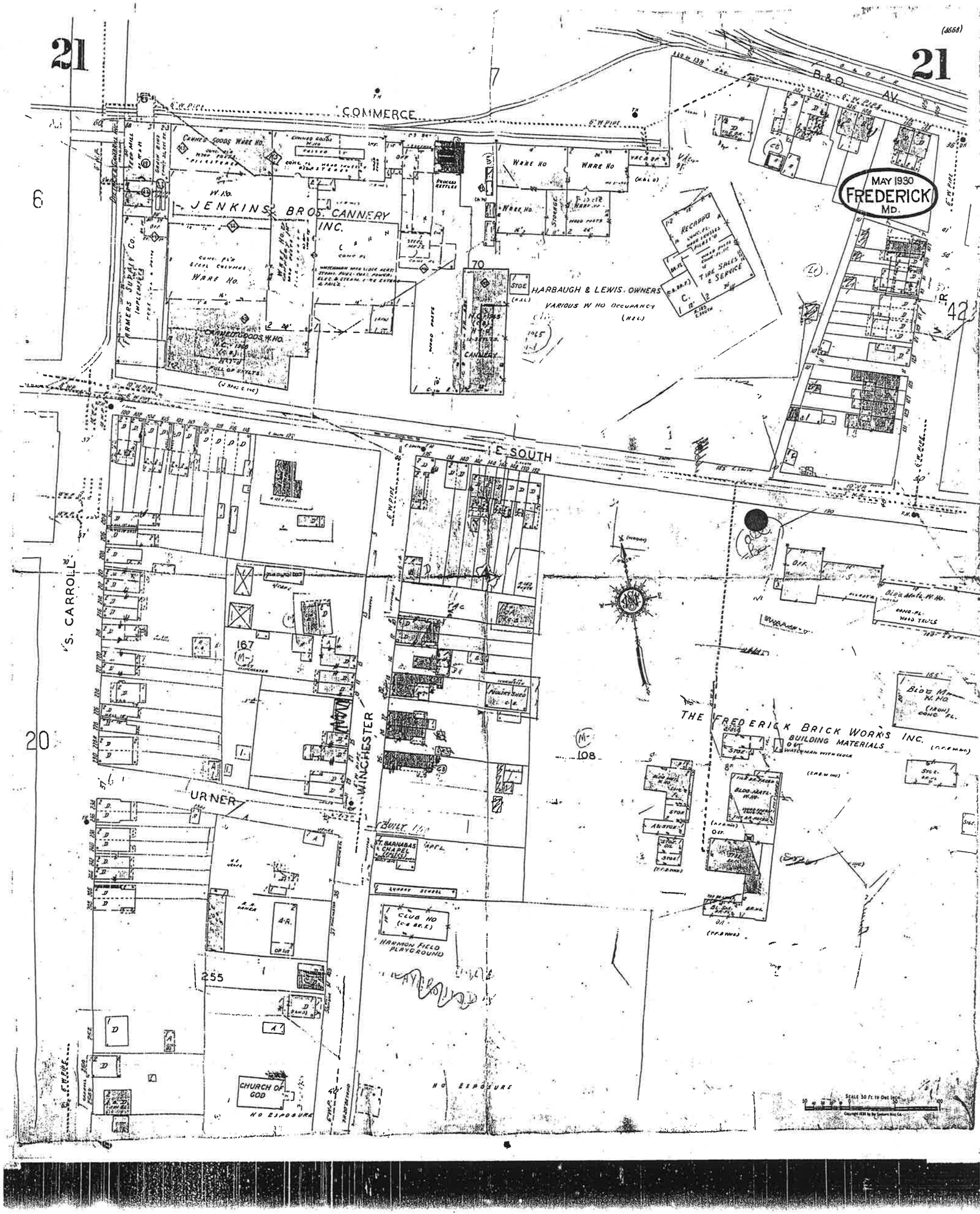


1930



1947



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APPENDIX B. ASTM Transaction Screen Questionnaire

ASTM Transaction Screen Questionnaire

Description of Site and Address: **Frederick Brick Works**
184 East South Street, Frederick, Maryland

Question	Owner Reg			Occupants (if applicable)			Observed	
1a. Is the *property* used for an industrial use?	Yes	(No)	Unk	Yes	No	Unk	Yes	(No)
1b. Is any *adjoining property* used for an industrial use?	(Yes)	No	Unk	Yes	No	Unk	(Yes)	No
2a. Did you observe evidence or do you have any prior knowledge that the *property* has been used for an industrial use in the past?	Yes	No	Unk	Yes	No	Unk	Yes	(No)
2b. Did you observe evidence or do you have any prior knowledge that any *adjoining property* has been used for an industrial use in the past?	Yes	(No)	Unk	Yes	No	Unk	(Yes) Fert. Mfg.	No
3a. Is the *property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	Yes	(No)	Unk	Yes	No	Unk	Yes	(No)
3b. Is any *adjoining property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)? Farmers Co-op, Griffith's Bulk Fuel - operating	(Yes)	No	Unk	Yes	No	Unk	(Yes)	No
4a. Did you observe evidence or do you have any prior knowledge that the *property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	(Yes)	No	Unk	Yes	No	Unk	(Yes)	No
4b. Did you observe evidence or do you have any prior knowledge that any *adjoining property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?	(Yes)	No	Unk	Yes	No	Unk	(Yes)	No
5a. Are there currently any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gal (19 L) in volume or 50 gal (190 L) in aggregate, stored on or used at the *property* or at the facility?	(Yes)	No	Unk	Yes	No	Unk	(Yes)	No
5b. Did you observe evidence or do you have any prior knowledge that there have been previously any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gal (19 L) in volume or 50 gal (190 L) in aggregate, stored on or used at the *property* or at the facility?	(Yes)	No	Unk	Yes	No	Unk	(Yes) stored chem. for sale	No
6a. Are there currently any industrial *drums* (typically 55 gal (208 L)) or sacks of chemicals located on the property or at the facility? stored for resale	(Yes)	No	Unk	Yes	No	Unk	(Yes)	No
6b. Did you observe evidence or do you have any prior knowledge that there have been previously any industrial *drums* (typically 55 gal (208 L)) or sacks of chemicals located on the property or at the facility? resale	(Yes)	No	Unk	Yes	No	Unk	(Yes)	No
7a. Did you observe evidence or do you have any prior knowledge that *fill dirt* has been brought onto the property that originated from a contaminated site?	Yes	(No)	Unk	Yes	No	Unk	Yes	(No)
7b. Did you observe evidence or do you have any prior knowledge that *fill dirt* has been brought onto the property that is of an unknown origin? KLINE	Yes	(No)	Unk	Yes	No	Unk	Yes	(No)
8a. Are there currently any *pits, ponds*, or *lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	(No)	Unk	Yes	No	Unk	Yes	(No)
8b. Did you observe evidence or do you have any prior knowledge that there have been previously any *pits, ponds*, or *lagoons* located on the *property* in connection with waste treatment or waste disposal? garbage	(Yes)	No	Unk	Yes	No	Unk	(Yes)	No
9a. Is there currently any stained soil on the *property*? stained soil in oil maintenance building - east floor	(Yes)	No	Unk	Yes	No	Unk	(Yes)	No

Question	Owner			Occupants			Observed	
9b. Did you observe evidence or do you have any prior knowledge that there have been previously any stained soil on the *property*?	Yes	(No)	Unk	Yes	No	Unk	Yes	(No)
10a. Are there currently any registered or unregistered storage tanks (above or underground) located on the *property*? 2 above ground, 1 removed UST	(Yes)	No	Unk	Yes	No	Unk	(Yes)	No
10b. Did you observe evidence or do you have any prior knowledge that there have been previously, any unregistered storage tanks (above or underground) located on the *property*?	(Yes)	No	Unk	Yes	No	Unk	(Yes)	No
11a. Are there currently any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property* or adjacent to any structure located on the *property*? Kilns fired by coal / Bldgs heat coal then gas	Yes	(No)	Unk	Yes	No	Unk	Yes	(No)
11b. Did you observe evidence or do you have any prior knowledge that there have been previously any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property* or adjacent to any structure located on the *property*?	Yes	(No)	Unk	Yes	No	Unk	(Yes)	No
12a. Are there currently any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors?	Yes	(No)	Unk	Yes	No	Unk	Yes	(No)
12b. Did you observe evidence or do you have any prior knowledge that there have been previously any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors?	Yes	(No)	Unk	Yes	No	Unk	Yes	(No)
13a. If the property is served by a private well or nonpublic water system, is there evidence or do you have prior knowledge that contaminants have been identified in the well or system that exceed the guidelines applicable to the water system?	Yes	(No)	Unk	Yes	No	Unk	Yes	(No)
13b. If the property is served by a private well or nonpublic water system, is there evidence or do you have prior knowledge that the well has been designated as contaminated by any government environmental/health agency?	Yes	(No)	Unk	Yes	No	Unk	Yes	(No)
14. Does the *owner* or *occupant* of the *property* have any knowledge of *environmental liens* or governmental notification relating to past or recurrent violations of environmental laws with respect to the *property* or any facility located on the *property*?	Yes	(No)	Unk	Yes	No	Unk		
15a. Has the *owner* or *occupant* of the *property* been informed of the past existence of *hazardous substances* or *petroleum products* with respect to the *property* or any facility located on the *property*?	Yes	(No)	Unk	Yes	No	Unk		
15b. Has the *owner* or *occupant* of the *property* been informed of the current existence of *hazardous substances* or *petroleum products* with respect to the *property* or any facility located on the *property*?	Yes	(No)	Unk	Yes	No	Unk		
15c. Has the *owner* or *occupant* of the *property* been informed of the past existence of environmental violations with respect to the *property* or any facility located on the *property*?	Yes	(No)	Unk	Yes	No	Unk		
15d. Has the *owner* or *occupant* of the *property* been informed of the current existence of environmental violations with respect to the *property* or any facility located on the *property*?	Yes	(No)	Unk	Yes	No	Unk		
16. Does the *owner* or *occupant* of the *property* have any knowledge of any *environmental site assessment* of the property or facility that indicated the presence of *hazardous substances* or *petroleum products* on, or contamination of, the *property* or recommended further assessment of the *property*?	Yes	(No)	Unk	Yes	No	Unk		
17. Does the *owner* or *occupant* of the *property* know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum product* by any owner or occupant of the *property*?	Yes	(No)	Unk	Yes	No	Unk		
18a. Does the *property* discharge waste water, on or adjacent to the *property*, other than storm water, into a storm water sewer system?	Yes	(No)	Unk	Yes	No	Unk	Yes	No
18b. Does the *property* discharge waste water, on or adjacent to the *property*, other than storm water, into a sanitary sewer system?	Yes	(No)	Unk	Yes	No	Unk	Yes	No

Sanborns indicate USTs.

Question	Owner			Occupants			Observed	
19. Did you observe evidence or do you have any prior knowledge that any *hazardous substances* or *petroleum products*, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade, buried and/or burned on the *property*? including garbage	(Yes)	No	Unk	Yes	No	Unk	(Yes)	No
20. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCBs?	Yes	(No)	Unk	Yes	No	Unk	Yes	(No)
Government Records/Historical Sources Inquiry								
21. Do any of the following federal government record systems list the property or any property within the circumference of the area noted below: National Priorities List -- within 1.0 mile (1.6 Km)? CERCLIS List -- within 0.5 mile (0.8 Km)? ARCHIVE RCRA CORRACTS Facilities -- within 1.0 mile (1.6 Km)? RCRA non-CORRACTS TSD Facilities -- within 0.5 mile (0.8 Km)?							Yes (Yes) Yes Yes	(No) No (No) (No)
22. Do any of the following state record systems list the property or any property within the circumference of the area noted below: List maintained by state environmental agency of hazardous waste sites identified for investigation or remediation that is the state agency equivalent to NPL -- within approximately 1.0 mile (1.6 Km)? List maintained by state environmental agency of sites identified for investigation or remediation that is the state equivalent to CERCLIS -- within 0.5 mile (0.8 Km)? Leaking Underground Storage Tank (LUST) List -- within 0.5 mile (0.8 Km)? Ok 8-28-00 Solid Waste/Landfill Facilities -- within 0.5 mile (0.8 Km)?							(Yes) (Yes) (Yes) (Yes)	No No No No
23. Based upon a review of *fire insurance maps* or consultation with the local fire department serving the *property*, all as specified in the guide, are any buildings or other improvements on the property or on an *adjoining property* identified as having been used for an industrial use or uses likely to lead to contamination of the *property*? adjoining properties - Griffith Oil.							(Yes)	(No)

The *preparer* of the *transaction screen questionnaire* must complete and sign the following statement.

This questionnaire was completed by:

Name Meg Battin , Principal

Firm/address Bay Environmental Corporation, 29998 Polks Road, Princess Anne, Maryland 21853

Phone number (410) 651-0100 Date 8/27/00

If the preparer is different than the user, complete the following:

Name of user _____

User's address _____

User's phone number _____

Preparer's relationship to site Consultant

Preparer's relationship to user (for example, principal, employee, agent, consultant) Consultant

Copies of the completed questionnaire have been filed at; or mailed or delivered to (specify which):

Frederick Brick Works, Frederick, Maryland

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's actual knowledge no material facts have been suppressed or misstated.

Signature Preparer — Date 8/27/00

CLAYTON MINNICK

Signature Owner/Representative — Date 1/22/99

Signature Occupant — Date

Ray Craggs

APPENDIX C. Freedom of Information and Public Information Act Request Letters and Responses

BAY ENVIRONMENTAL CORPORATION
132 East Main Street, Suite 400, Salisbury, Maryland 21801 • Phone 410-219-5600 • Fax 410-219-5700

October 16, 1998

Mr. Don Mauldin
Freedom of Information Act Coordinator
Maryland Department of the Environment
Waste Management Administration
2500 Broening Highway
Baltimore, Maryland 21224

Re: Public Information Act Request Project 98008

Dear Mr. Mauldin:

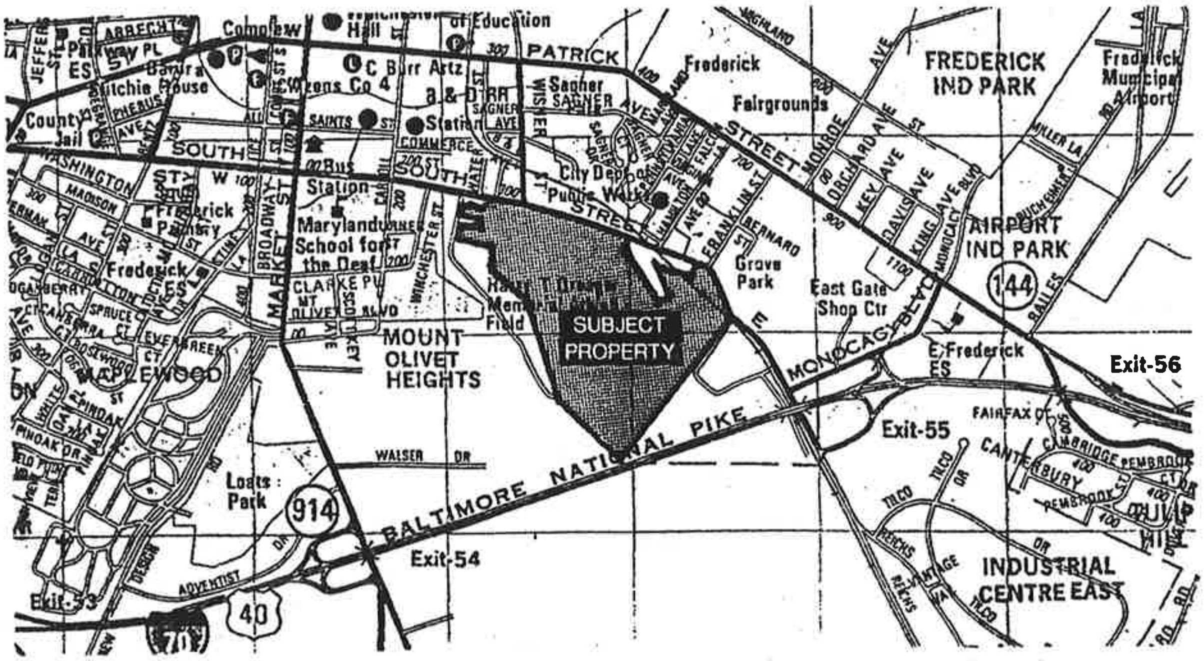
Bay Environmental Corporation is performing an Environmental Site Assessment for property located in Frederick, Maryland. Under the Public Information Act, we are requesting the well completion report for Well Tag number FR-94-0590. The well is located within the corporate limits of the City of Frederick, south of East Patrick Street and north of Interstate 70 (State Route 40). We would also appreciate any other information pertaining to this well, along with similar information for additional wells that may have been drilled in this locality in connection with FR-94-0590.

If the tabulated information is insufficient for an accurate search, please contact our office at 1-800-516-9302. Thank you for your assistance.

Sincerely
Bay Environmental Corporation

Claudia Stone

Claudia Stone, R.G.
Principal



SUBJECT PROPERTY
PATRICK
Frederick
Fairgrounds
FREDERICK IND PARK
AIRPORT IND PARK
144
SOUTH
STREET
Station
Maryland School for the Deaf
MOUNT OLIVET HEIGHTS
MAPLEWOOD
Grove Park
East Gate Shop Ctr
MONOCACY BLVD
E Frederick ES
Exit-56
Exit-55
Exit-54
Exit-53
BALTIMORE NATIONAL PIKE
WALSER DR
Loats Park
914
40
70
INDUSTRIAL CENTRE EAST
CANTERBURY
FAIRFAX CT
ADVENTIST

MARYLAND DEPARTMENT OF THE ENVIRONMENT
2500 Broening Highway • Baltimore Maryland 21224
(410) 631-4120

Parris N. Glendening
Governor

Jane T. Nishida
Secretary

November 25, 1998

Ms. Claudia Stone
Bay Environmental Corporation
29998 Polks Road
Princess Anne MD 21853

Ref: PIA Request No. 0-98-0643

Dear Ms. Stone:

This is in response to your Public Information Act request received October 20, 1998 regarding 184 East South Street. Files have been located in the following MDE administrations:

Administration	Contact	Phone Number
Water Management	Lauren Gibson	(410) 631-4823
Air & Radiation Management	Laramie Daniel	(410) 631-3220

You may contact the personnel listed above to arrange an appointment for file review or to request photocopies of all releasable materials be mailed to you. Also, if you request copies, you will be invoiced for copying and postage fees. Should you have any questions, you may contact me at (410) 631-4120. When requesting information regarding this request, please cite the PIA reference number listed above.

Sincerely,

Joane D. Mueller
PIA Coordinator
Technical & Regulatory Services Administration

cc: Lauren Gibson, Water Management
Laramie Daniel, Air & Radiation

BAY ENVIRONMENTAL CORPORATION
132 EAST MAIN STREET, SUITE 400, SALISBURY, MARYLAND 21801 • PHONE 410-219-5600 • FAX 410-219-5700

October 16, 1998

Mr. Don Mauldin
Freedom of Information Act Coordinator
Maryland Department of the Environment
Waste Management Administration
2500 Broening Highway
Baltimore, Maryland 21224

Re: Public Information Act Request Project 98008

Dear Mr. Mauldin:

Bay Environmental Corporation is performing an Environmental Site Assessment for property located in Maryland. The table below lists the legal information describing the property. We have also attached a property-location map.

Owner	Frederick Brick Works, Inc.
Site Name	Frederick Brick Works
Street Address	184 East South Street
City, State, Zip	Frederick, MD 21701
County	Frederick
Parcel Number	962
Tax Map Number	City of Frederick Map 115V
Deed Reference	--
Former Name	None

As part of the site-assessment process, we request that your agency review appropriate records pertaining to the referenced property, under the Public Information Act. We request the records be searched for past or current environmental complaints, citations, violations; special use permits; well permits; underground storage tank/bulk storage information; site investigations; solid waste and Superfund files; hazardous waste generation and disposal; and any other items that may be of environmental concern relating to the subject property or adjacent properties.

If the tabulated information is insufficient for an accurate search, please contact our office at 1-800-516-9302. Please contact our office with the results of the records search. Thank you for your assistance.

Sincerely
Bay Environmental Corporation

Claudia Stone

Claudia Stone, R.G.
Principal

Att.-1

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Water Management Administration
Office of Operational Services & Administration
2500 Broening Highway • Baltimore Maryland 21224
PHONE: (410) 631-4823 FAX: (410) 631-4894 EMAIL: opdbs@ea.net

November 5, 1998

Ms. Claudia Stone
Bay Enviornmental Corporation
29998 Polks Road
Princess Anne MD 21853

SUBJECT: Public Information Act Request 98-135W, Well completion report for tag FR-94-0590.

Dear Ms. Stone:

I am writing in response to your letter dated October 16, 1998 in which you requested a copy of the well completion report for tag FR-94-0590. Attached is a copy of the requested document. If I can be of any further assistance, please do not hesitate to call me.

Sincerely,
Lauren Gibson

Lauren Gibson
Public Information Act Liaison
Water Management Administration

Attachment

1 | 1 | 3090 — SEQUENCE NO. (MDE USE ONLY)

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL

please print or type

STATE PERMIT NUMBER: FR-94-0590

fill in this form completely

OWNER INFORMATION

Date Received (APA): 09 17 97 (MM DD YY)

RN 7207

Last Name / Owner / First Name: State Highway Adm

Street or RFD: C/o 81 Mosher Street

Town / State / Zip: Baltimore, Md. 21217

DRILLER INFORMATION

Driller's Name: George F. Easterday — License No.: MWD 040

Firm Name: L. Franklin Easterdav, Inc.

Address: 9265 Brown Church Rd., MT. Airy, Md. 21771

Signature: George F. Easterday — Date: 9/12/97

LOCATION OF WELL

B 3 — CC#

COUNTY: Frederick

SUBDIVISION:

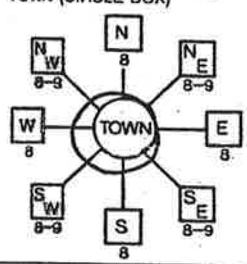
SECTION: ____ LOT: W-4

NEAREST TOWN: Frederick

MILES FROM TOWN (enter 0 if in town): 0 — M I

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



NEAR WHAT ROAD: I 70

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX): NORTH (N circled) / WEST / EAST / SOUTH

DISTANCE FROM ROAD: 100 Ft. — ENTER FT OR MI

TAX MAP: 418 BLK: ____ PARCEL ____

WELL INFORMATION

B 2

APPROX. PUMPING RATE (GAL. PER MIN.): 5

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY): 500

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- [H] HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY) (crossed out)
- [F] FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION
- 22 [I] INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT)
- [P] PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE APPROVAL
- [T] TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT) (circled)

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL

COUNTY NAME: FREDERICK — COUNTY NO.: 97

STATE SIGNATURE: ____ INSERT S →

DATE ISSUED: 09 17 97 — CO SIGNATURE: [signature] — EXP. DATE: 9-31-98

NORTH GRID: 572 000 — EAST GRID: 0689 000

APPROXIMATE DEPTH OF WELL: 300 FEET

APPROXIMATE DIAMETER OF WELL: 6 NEAREST INCH

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X →

(301) 829-1640
fax (301) 829-2667

X

000
000

SOURCES OF DRILLING WATER
1. wells
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 680

N 570

METHOD OF DRILLING (circle one)

BORED (or Augered)	JETTED	Jetted & DRIVEN
AIR-ROTary (circled)	AIR-PERcussion	ROTARY (Hydraulic Rotary)
CABLE	REVerse-ROTary	DRive-POINT

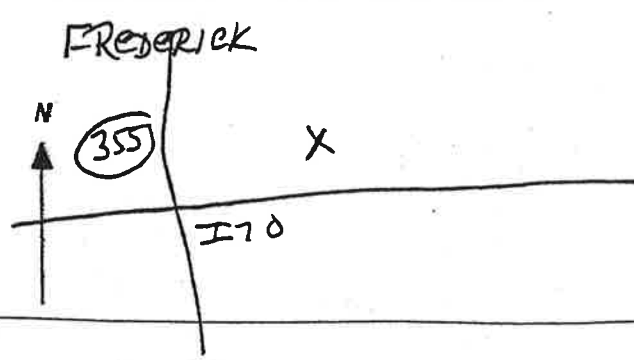
other ____

REPLACEMENT OR DEEPENED WELLS
(CIRCLE APPROPRIATE BOX)

- [N] THIS WELL WILL NOT REPLACE AN EXISTING WELL (circled)
- [Y] THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
- 39 [S] THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
- [D] THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE) ____

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROP. PERMIT NUMBER: GAP

FORCE: DM (WRITE INITIALS IN BOX) — PERMIT No. FR-94-0590

SPECIAL CONDITIONS

NOTE = APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED =

ORIGINAL

1045 (MDE USE ONLY)

THIS NUMBER IS TO BE PUNCHED (COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 97-378

T/CO USE ONLY
TE Received AN 07 1998

DATE WELL COMPLETED 10/15/97

Depth of Well 202 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" FR-94-0590

OWNER STATE HIGHWAY ADM

STREET OR RFD 170 TOWN Frederick

SUBDIVISION SECTION LOT W-4

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Topsoil	0	1	
Sandy Clay	1	6	
Boulders	6	12	
Sandy Clay	12	20	
Sandy Limestone	20	21	
Opening	21	24	
Sandy Clay	24	30	
Sandy Limestone	30	33	
Opening	33	35	
Sandy Limestone	35	59	
Sandy Clay	59	63	
Sandy Limestone	63	81	
Mud Seam	81	85	✓
Sandy Limestone	85	202	
Note: Broken 10" bit at 94'-95'			
Bentonite	93	94	

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes [Y] no [N]

CIRCLE APPROPRIATE LETTER
- A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E ELECTRIC LOG OBTAINED
- P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: MWD 040

George F. Easterday
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: MWD 386

Wesley Blanz
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes [Y] no [N]

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT [CM] BENTONITE CLAY [BC]

NO. OF BAGS NA NO. OF POUNDS

GALLONS OF WATER

DEPTH OF GROUT SEAL (to nearest foot)
from ft. to ft. (enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
- [ST] STEEL
- [CO] CONCRETE
- [PL] PLASTIC
- [OT] OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL	4	66

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	to
ST	12	3	19

SCREEN RECORD
screen type or open hole insert appropriate code below
- [ST] STEEL
- [BR] BRASS BRONZE
- [PL] PLASTIC
- [HO] OPEN HOLE
- [OT] OTHER

EACH SCREEN		DEPTH (nearest ft.)	
1	PL	63	93
2			
3			

SLOT SIZE 1 .010 2 3

DIAMETER OF SCREEN 4 (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

from	to
93	63

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T	(E.R.O.S.)	W Q
T		

TELESCOPE CASING | LOG INDICATOR | OTHER DATA

C 3

PUMPING TEST
HOURS PUMPED (nearest hour)

PUMPING RATE (gal. per min.)

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING NA ft.

WHEN PUMPING ft.

TYPE OF PUMP USED (for test)
- [A] air
- [P] piston
- [T] turbine
- [C] centrifugal
- [R] rotary
- [O] other (describe below)
- [J] jet
- [S] submersible

PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO) YES [NO]

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29.

CAPACITY: GALLONS PER MINUTE (to nearest gallon)

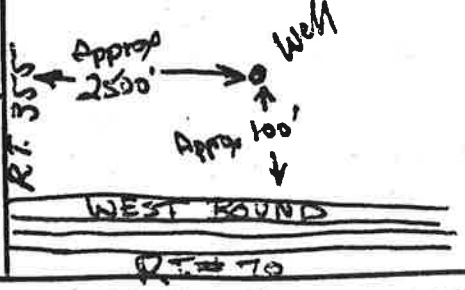
PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)
- [+] above LAND SURFACE
- [−] below

3 (nearest foot)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



BAY ENVIRONMENTAL CORPORATION
29998 POLKS ROAD, PRINCESS ANNE, MARYLAND 21853 • PHONE (410) 651-0100 • FAX (410) 651-0400

January 8, 1999

Larry A. Bohn, R.S.
Director Environmental Health Services
Frederick County Environmental Health Department
350 Montevue Lane
Frederick, Maryland 21702

Re: Freedom of Information Act Request Project 98008

Dear Mr. Bohn:

Bay Environmental Corporation is performing an Environmental Site Assessment for property located in Maryland. The table below lists the legal information describing the property. We have also attached a property-location map.

Owner	Frederick Brick Works, Inc.
Site Name	Frederick Brick Works
Street Address	184 East South Street
City, State, Zip	Frederick, MD 21701
County	Frederick
Parcel Number	962
Tax Map Number	City of Frederick Map 115V
Former Name	None

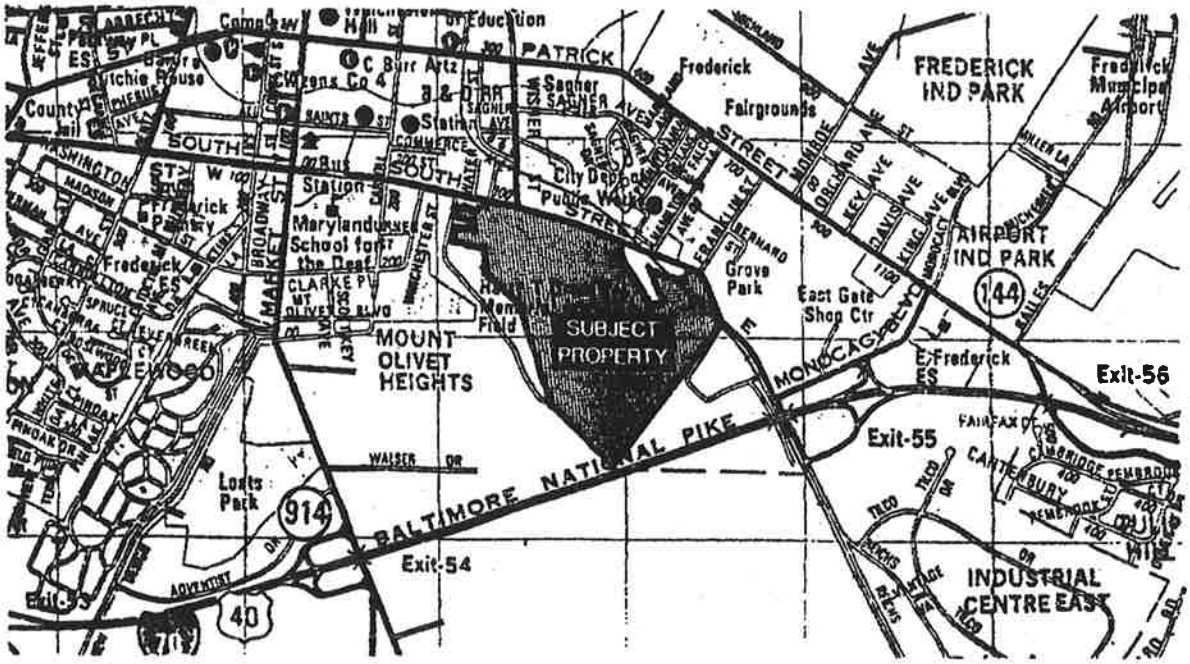
As part of the site-assessment process, we request that your agency review appropriate records pertaining to the referenced property, under the Freedom of Information Act. We request the records be searched for past or current environmental permits, complaints, citations, violations; special use permits; well permits; waste disposal records; underground storage tank/bulk storage information; site investigations; solid waste and hazardous waste generation and disposal; and any other items that may be of environmental concern relating to the subject property or adjacent properties.

If the tabulated information is insufficient for an accurate search, please contact our office at 1-800-516-9302. Please contact our office with the results of the records search. Thank you for your assistance.

Sincerely
Bay Environmental Corporation

Meg Battin
Principal

Att.-1


SUBJECT PROPERTY
MOUNT OLIVET HEIGHTS
FREDERICK IND PARK
AIRPORT IND PARK
INDUSTRIAL CENTRE EAST
BALTIMORE NATIONAL PIKE
Exit-54
Exit-55
Exit-56
PATRICK STREET
SOUTH MARKET ST
Frederick Fairgrounds
Grove Park
East Gate Shop Ctr
E.Frederick ES
Loats Park
914
40
144

State of Maryland

Frederick County Health Department

JAMES E. BOWES, M.D., M.P.H.
Health Officer, Frederick County

ENVIRONMENTAL HEALTH SERVICES
350 Montevue Lane
Frederick, Maryland 21702
Telephone: 301-694-1719

January 22, 1999

Ms. Meg Battin, Principal
Bay Environmental Corporation
29998 Polks Road
Princess Anne, MD 21853

Re: Environmental Assessment
Frederick Brick Works, Inc.
184 East South Street
Frederick, Maryland

Dear Ms. Battin:

The Health Department has received your request for information regarding the above-captioned property. Health Department records show no complaints, citations or environmental infractions concerning the property. The area is served by community water and sewer systems. No well permits were found for the property.

There are no known underground storage tanks on the property. This information comes from the Department's Underground Storage Tank List. The information on this list is voluntary so there may be tanks on the site or in the area that the Department is not aware of. You may wish to contact the Maryland Department of the Environment (MDE) for a more complete listing.

Specific information on this property regarding leaking tanks, releases or illegal dumping of hazardous material may be recorded and maintained at the Waste Management Administration of MDE. It is recommended that you contact MDE, the Federal Environmental Protection Agency, the office of the State Fire Marshall and the Frederick County Department of Public Works for additional information regarding the site.

Sincerely,

Larry A. Bohn, R.S., Director
Environmental Health Services Division

FREDERICK COUNTY MARYLAND 1748

PLEASE PROVIDE ANY INFORMATION ON THE ATTACHED LISTED PROPERTY. RESEARCH YOUR FILES AND WRITE ANY COMMENTS BELOW YOUR NAME. AFTER REVIEWING THIS FORM, PLEASE FORWARD TO THE NEXT OFFICE. YOUR HELP IS GREATLY APPRECIATED!

Please return to my desk by 1/26/99

INDIVIDUAL WELL & SEPTIC BRANCH - Tom Mohler and/or David Gatrell

No Knowledge of Environmental Hazard at or around site. TBM -1-19-99

NO COMPLAINTS ON FILE IN THIS OFFICE DM 1-19-99

COMMUNITY SERVICES BRANCH - Charles Gillis

No known or recorded environmental incidences for the property.
No known or recorded UST or LUST for Property or surrounding area. 1-19-99

CJG

WATER QUALITY BRANCH - Paul Offutt and/or Julie Rhodes

No known environmental incidents for this property. Public water + sewer. JRhodes 1120199

FOOD CONTROL BRANCH - Luther Horine and/or Lin Jimerfield

1/20/99

IF YOU HAVE NO AVAILABLE INFORMATION, PLEASE SIGN AND DATE BESIDE YOUR NAME.

Thank you,

Larry

State of Maryland

Frederick County Health Department

JAMES E. BOWES, M.D., M.P.H.
Health Officer, Frederick County

ENVIRONMENTAL HEALTH SERVICES
350 Montevue Lane
Frederick, Maryland 21702
Telephone: 301-694-1719

January 27, 1999

Ms. Meg Battin, Principal
Bay Environmental Corporation
29998 Polks Road
Princess Anne, MD 21853

RE: Environmental Assessment
Frederick Brick Works, Inc.
184 East South Street
Frederick, Maryland

Dear Ms. Battin:

After reviewing your request and responding to you, our department found well permits for the above referenced property. Enclosed you will find two well completion reports, one abandonment report, and a well permit application for a new well.

We are sorry if this caused a delay in your response to your client.

Sincerely,

Peggy Fraley

Peggy Fraley
Services Supervisor I

/pf

Enclosure (4)

FREDERICK COUNTY, MARYLAND 1748

County Well Permit No. 98-40

FREDERICK COUNTY HEALTH DEPARTMENT WELL PERMIT

Applicant or Owner Frederick Brickworks Driller Eichelbergers 717-691-6062

Street or R.F.D. 184 E. South Street, Frederick

Location of Property

Tax Map ~~#58~~ 418 Parcel 962

If Subdivision: (Name) Block or Section Lot

Area of Lot Square Feet or Acres Well To Furnish water to: Home Farm

Public or Private Water Co. Industrial Commercial Mon. Well 6 Mon. wells Heat Pump

This application is made with the understanding that the well will be drilled ***only*** at the place designated by the Health Department and as shown in the sketch below. A completion certificate of this well must be filed by the driller, at the Health Department, within forty-five (45) days after completion of drilling. All well drilling operations will be carried out in accordance with regulations of the State Department of Health. Drilling at any other location, other than shown on sketch, ***VOIDS*** this approval certificate.

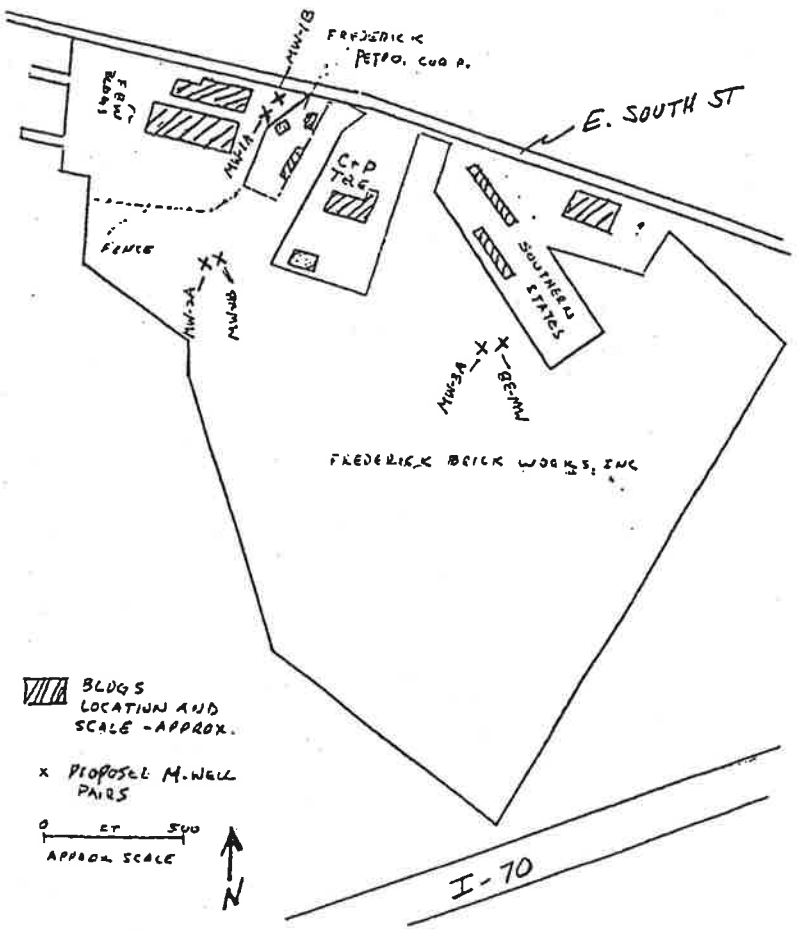
Dwayne Koch

Signature of Applicant Date

Owner ____ Contractor ____ Well Driller ____ Agent ____

TO BE COMPLETED BY HEALTH DEPARTMENT North Grid 574 East Grid 0686

MONITORING WELLS ONLY



VOID
AFTER THIS DATE
5-20-99

The property described above has been inspected and the well site approved as shown.

Date of Approval 11-16-98 Sanitarian David Hetrick

30
SEQUENCE NO. (MDE USE ONLY)

ER IS TO BE PUNCHED 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER

USE ONLY
E Received

DATE WELL COMPLETED: 11/24/98

Depth of Well: 70 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": FR-94-1165

OWNER FREDERICK BRICK WORKS
STREET OR RFD 184 EAST SOUTH STREET TOWN FREDERICK
SUBDIVISION SECTION LOT

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
OVB & Clay	0	6	
Blue LS	6	64	
FRAC LS	64	65	
Blue LS	65	70	

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED: yes (Y) no (N)

CIRCLE APPROPRIATE LETTER
- A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E ELECTRIC LOG OBTAINED
- P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

TYPE: MWD/MSD/MGD
DRILLERS LIC. NO. MWD 332

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. JWD-315

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): yes (Y) no (N)
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT (CM) BENTONITE CLAY (BC)
NO. OF BAGS 6 NO. OF POUNDS 600
GALLONS OF WATER 39
DEPTH OF GROUT SEAL (to nearest foot)
from 02 ft. to 56 ft.
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
- ST STEEL
- CO CONCRETE
- PL PLASTIC
- OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL	02	60

OTHER CASING (if used)
EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole insert appropriate code below
- ST STEEL
- BR BRASS BRONZE
- HO OPEN HOLE
- PL PLASTIC
- OT OTHER

C 2

EACH SCREEN

		DEPTH (nearest ft.)	
1	PL	60	70
2			
3			

SLOT SIZE 1 0 2 2 3 0
DIAMETER OF SCREEN 02 (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68: from 58 to 70

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T (TELESCOPE CASING) (E.R.O.S.) (LOG INDICATOR) W Q (OTHER DATA)

C 3

PUMPING TEST
HOURS PUMPED (nearest hour)
PUMPING RATE (gal. per min.)
METHOD USED TO MEASURE PUMPING RATE
WATER LEVEL (distance from land surface)
BEFORE PUMPING ft.
WHEN PUMPING ft.

TYPE OF PUMP USED (for test)
- A air
- P piston
- T turbine
- C centrifugal
- R rotary
- O other (describ below)
- J jet
- S submersible

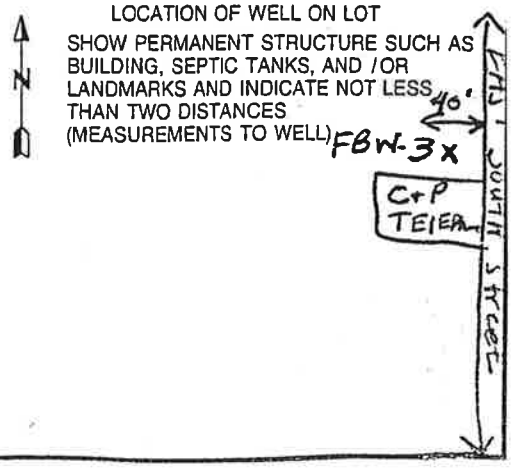
PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO): YES (NO)

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29.
CAPACITY: GALLONS PER MINUTE (to nearest gallon)
PUMP HORSE POWER
PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)
(+) above (–) below LAND SURFACE
02 (nearest) foot

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND / OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



COUNTY

...UENCE NO.
...DE USE ONLY)
...CHED
...S)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER

DATE WELL COMPLETED: 11/23/98 (13–20)

Depth of Well: 47 (TO NEAREST FOOT) (22–26)

PERMIT NO. FROM "PERMIT TO DRILL WELL": FR-94-117 (28–36)

FREDERICK BRICK WORKS

STREET OR RFD: 184 EAST SOUTH Street (last name / first name) TOWN: FREDERICK

SUBDIVISION: SECTION: LOT:

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Fill Ash + Clay	0	29	
LS	29	47	

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED: yes [Y] no (N)

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

TYPE: MWD/MSD/MGD

DRILLERS LIC. NO. MWD 332

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. TWD-315

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): yes [Y] (44) no (N) (44)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT (CM) (45–46) BENTONITE CLAY (BC) (45–46)

NO. OF BAGS 2 NO. OF POUNDS 200

GALLONS OF WATER 13

DEPTH OF GROUT SEAL (to nearest foot)

from 02 (48–52) ft. to 11 (54–58) ft.
TOP BOTTOM
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

ST STEEL · CO CONCRETE · PL PLASTIC · OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL (60–61)	02 (63–64)	15 (66–70)

OTHER CASING (if used)
EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below

ST STEEL · BR BRASS BRONZE · HO OPEN HOLE · PL PLASTIC · OT OTHER

C 2 (1–2)

EACH SCREEN

	DEPTH (nearest ft.)			
1	PL (8–9)	15 (11–15)	25 (17–21)	
2	PL (23–24)	25 (26–30)	35 (32–36)	
3	PL (38–39)	35 (41–45)	45 (47–51)	

SLOT SIZE 1 0 2 2 3 0

DIAMETER OF SCREEN 02 (56–60) (NEAREST INCH)

GRAVEL PACK from 13 to 47

IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 (68)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (70) (E.R.O.S.) (72) W Q (74 75 76)

TELESCOPE CASING · LOG INDICATOR · OTHER DATA

C 3 (1–2)

PUMPING TEST
HOURS PUMPED (nearest hour) (8–9)

PUMPING RATE (gal. per min.) (11–15)

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING ft. (17–20)

WHEN PUMPING ft. (22–25)

TYPE OF PUMP USED (for test)

A air (27) · P piston (27) · T turbine (27)
C centrifugal (27) · R rotary (27) · O other (27) (describe below)
J jet (27) · S submersible (27)

PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO): YES (NO)

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31–35)

PUMP HORSE POWER (37–41)

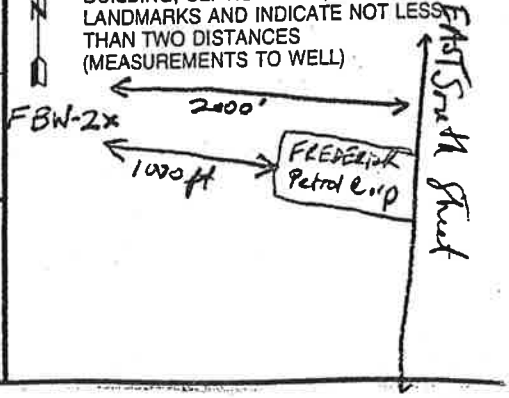
PUMP COLUMN LENGTH (nearest ft.) (43–47)

CASING HEIGHT (circle appropriate box and enter casing height)

(+) above (49) · (–) below (49) LAND SURFACE

02 (50–51) (nearest) foot

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



COUNTY

MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION
2500 BROENING HIGHWAY, BALTIMORE, MARYLAND 21224, (410) 631-3784

****

WATER WELL ABANDONMENT-SEALING REPORT FORM

****

SUBMIT COPIES OF COMPLETED FORM TO:

- COUNTY ENVIRONMENT AGENCY (contact MDE, WMA if address needed)
- WELL OWNER
- MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: 11-24-98 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any): FR-94-1170

* PERMIT NUMBER OF REPLACEMENT WELL:

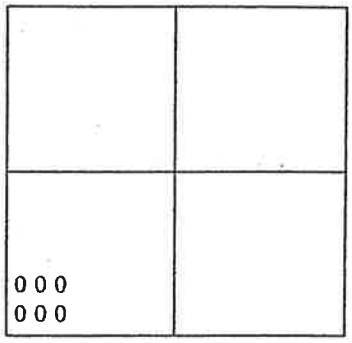
* PERSON ABANDONING WELL: Charles Eichelberger WELL DRILLERS LICENSE NUMBER: 332
CIRCLE (MWD) MSD / MGD

* OWNER'S NAME: FREDERICK BRICK WORK

* WELL LOCATION:

COUNTY: FREDERICK
NEAREST TOWN: FREDERICK
TAX MAP 418 BLOCK _____ PARCEL 962
SUBDIVISION: _____
SECTION: _____ LOT: _____

MARYLAND GRID COORDINATES
BOX NUMBER E 686 N 573 <---



SHOW WELL LOCATION BY X WITHIN BOX

* TYPE OF WELL BEING ABANDONED:

- X DRILLED
- _____ JETTED
- _____ BORED/AUGUERED
- _____ HAND DUG
- _____ OTHER (specify) _____

* USE CODE:

- _____ DOMESTIC
- _____ MUNICIPAL/PUBLIC
- _____ IRRIGATION
- _____ INDUSTRIAL
- X TEST/OBSERVATION

* TYPE OF CASING:

- X STEEL
- _____ PLASTIC
- _____ CONCRETE
- _____ OTHER (specify) _____

* SIZE OF CASING: 6 INCHES IN DIAMETER

* DEPTH OF WELL: 120 FEET DEEP

* WAS ANY CASING REMOVED? X YES _____ NO
if yes, length removed, in feet: 6 ft

* WAS CASING RIPPED OR PERFORATED? ___ YES X NO

LOG OF SEALING MATERIAL

MATERIAL	FEET FROM	FEET TO
Cement grout	0	120

Charles Eichelberger 332 (MWD) MSD / MGD
SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN LICENSE # CIRCLE ONE DATE

DENV 828 JULY 1993

2) COUNTY ENVIRONMENTAL AGENCY

BAY ENVIRONMENTAL CORPORATION
29998 POLKS ROAD, PRINCESS ANNE, MARYLAND 21853 • PHONE (410) 651-0100 • FAX (410) 651-0400

February 8, 1999

Public Information Officer
State Highway Administration
707 North Calvert Street
Baltimore, MD 21202

Re: Freedom of Information Act Request

Project 98008

Dear Madam/Sir:

Bay Environmental Corporation is performing an Environmental Site Assessment for property located in Maryland. The table below lists the legal information describing the property. We have also attached a property-location map.

Owner	Frederick Brick Works, Inc.
Site Name	Frederick Brick Works
Street Address	184 East South Street
City, State, Zip	Frederick, MD 21701
County	Frederick
Parcel Number	962
Tax Map Number	City of Frederick Map 115V
Former Name	None

As part of the site-assessment process, we request that your agency review appropriate records pertaining to the referenced property, under the Freedom of Information Act. The property is currently under consideration as part of the East Street Extension Project in Frederick, Maryland. We request the records be searched for consultant reports, aerial photographs, special permits, well permits and any other items of information relating to the subject property and adjacent properties, including that part of Highway I-70 south of the Frederick Brick Works.

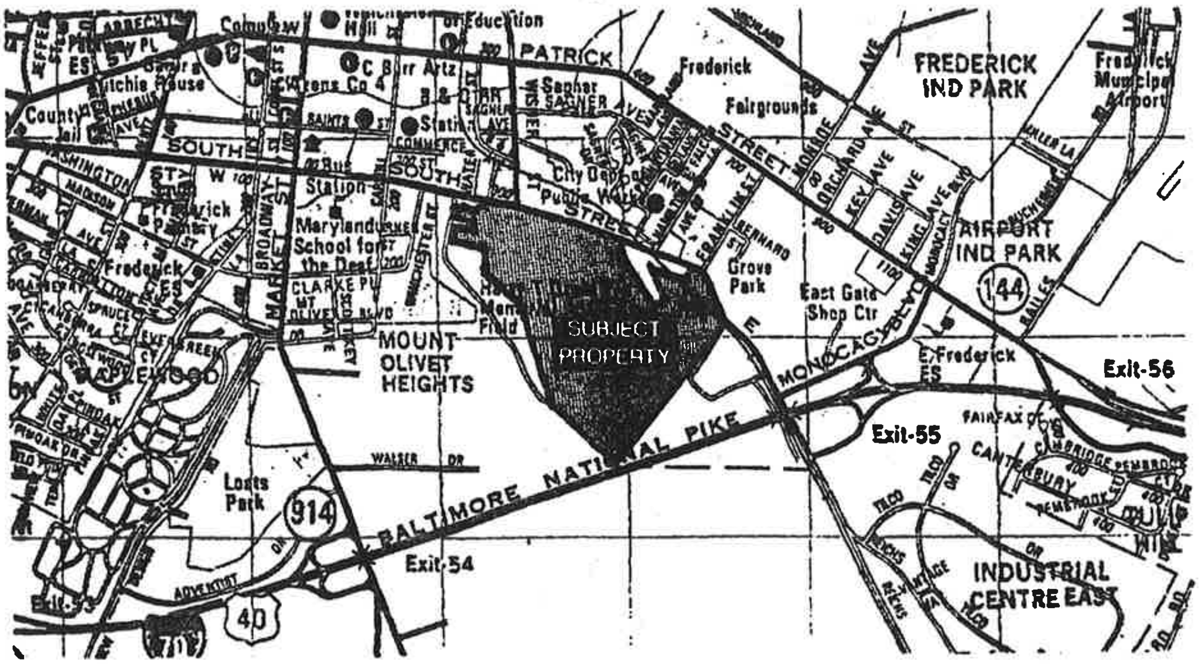
If the information provided above is not sufficient for an accurate search, please contact our office at 1-800-516-9302. Please contact our office with the results of the records search. Thank you for your assistance.

Sincerely
Bay Environmental Corporation

Meg Battin
Principal

Att.-1

D:\Bay\Projects.98\98008.Frederick\98008PIA5.doc


SUBJECT PROPERTY
PATRICK
SOUTH
STREET
FREDERICK IND PARK
Frederick Fairgrounds
AIRPORT IND PARK
MOUNT OLIVET HEIGHTS
BALTIMORE NATIONAL PIKE
MONOCACY BLVD
Exit-54
Exit-55
Exit-56
INDUSTRIAL CENTRE EAST
Grove Park
East Gate Shop Ctr
Loats Park
BROADWAY
MARKET ST
County Jail
Bus Station
Maryland School for the Deaf
144
914
40

BAY ENVIRONMENTAL CORPORATION
132 East Main Street, Suite 400, Salisbury, Maryland 21801 • Phone 410-219-5600 • Fax 410-219-5700

January 26, 1999

Maryland State Highway Administration
2323 Joppa Road
Brooklandville, Maryland

Re: Freedom of Information Act Request Project 98008

Dear Sir/Madam:

Bay Environmental Corporation requests that the Maryland State Highway Administration release for our review, under the Freedom of Information Act, any and all documents, reports, maps, charts, information, studies, data, and the like pertaining to the East Street Extension project in Frederick, Maryland. While we are particularly interested in information generated and gathered in the region of the Frederick Brick Works, Inc., 184 East South Street, Frederick, MD 21701, Tax Map Number City of Frederick Map 115V, Parcel Number 962, we would like to review all files associated with the above highway project.

If you have any questions, please call our office at (410) 651-0100.

Sincerely,
Bay Environmental Corporation

Claudia Stone

Claudia Stone, R.G.
Principal

BAY ENVIRONMENTAL CORPORATION

APPENDIX D. Select Records from Maryland Department of the Environment Water Management Administration

Permit / Approval Numbers 90-FR-033
Date: 07/14/98

INSPECTION FINDINGS

SITE INSPECTION THIS DATE FOUND THE SITE TO BE ACTIVE WITH STOCKPILING AND GRADING OCCURRING IN THE BACK SECTION OF THE SITE.

THE SEDIMENT CONTROL PLAN "APPROVAL" FOR THIS SITE EXPIRED ON 06/28/97. IN ORDER FOR EARTH DISTURBANCE TO CONTINUE ON THIS SITE, THE APPROVAL MUST BE RENEWED. FOR ASSISTANCE ON RENEWING YOUR APPROVAL, CONTACT THE FREDERICK SOIL CONSERVATION DISTRICT [SCD] AT 301-695-2803.

THERE WERE NO SEDIMENT CONTROL PROBLEMS OBSERVED AT THIS TIME.

THE SEDIMENT CONTROL PLAN SHOULD BE SUBMITTED TO THE FREDERICK SCD FOR RENEWAL WITHIN 30 DAYS. IF THE PLAN IS NOT RENEWED, NO FURTHER EARTH DISTURBANCE SHOULD OCCUR ON SITE AND ALL DISTURBED AREAS WILL NEED TO BE STABILIZED.

REPORT MAULED TO: R.F. KLINE CONSTRUCTION, ATTN: JIM SNYDER

Department Of The Environment
Water Management Administration
Compliance Program
160 South Water Street
Frostburg, Maryland 21532
Telephone (301) 689-8391/8494

Date: 07/14/98
Time: 1300
RAMS:

Field Investigation Report by: DAVE RYDER

Permit / Approval Numbers 90-FR-033

Sitename . . . . . .FREDERICK BRICKYARD

Cnty. . . FR Region. . . 1 Grids . . .29 G 08

Permit Type . . . . . .Sediment

Person(s) Contacted . . . . . .

Site Status . . . . . .Currently Active

Inspection Reason . . . . . .Routine Scheduled

Site Condition. . . . . .Corrections Needed

Warning Notice Issued . . . . . .No

Site Complaint Issued . . . . . .No

Recommended Action. . . . . .Continue Routine Investigation

Evidence Collected. . . . . .VISUAL OBSERVATION

Documentation Attached. . . . . .No

SEE ATTACHED FOR DESCRIPTION OF FINDINGS

1/8/93

STATE OF MARYLAND
SEDIMENT & STORMWATER ADMINISTRATION
BALTIMORE, MD 21224

TO: NOTE TO File
90FR033
FREDERICK BRICK WORKS

SUBJECT: FIR DATED 12/30/92

FROM:
D. RYDER

JIM SNYDER OF R.F. KLINE CONST. ADVISED (BY PHONE) THAT THE SINK HOLE HAS BEEN "BLOCKED OFF" AS PER REPORT DATED 12/30/92. THE SINK HOLE WAS FIRST CHOKED OFF WITH LARGE ROCK AND THEN COVERED OVER WITH SMALLER "SHOT" ROCK. THE DRAINAGE SWALE TO THIS SINK HOLE WAS ALSO FILLED WITH ROCK ~~from~~ For APPROX 20' AWAY FROM HOLE. - MR. SNYDER WAS ON VACATION FOR PAST SEVERAL WEEKS AND THAT IS WHY WORK WAS DELAYED.
STOCKPILE WILL AGAIN BE ACTIVE WITHIN NEXT WEEK OR SO.

FIELD INVESTIGATION REPORT

MARYLAND DEPARTMENT OF ENVIRONMENT *
Water Management Administration *
2500 Broening Highway *
Baltimore, MD 21224 *
(410) 631-3510

DATE: 12/30/92 TIME: 1410 SITE VISIT NO. -

SITE NAME: FREDERICK BRICK WORKS COUNTY: FR

MAP LOCATION: 29-G-8 WEATHER: PARTLY CLDY

SITE CONTACT(S): NO ONE ON SITE TITLE:

TITLE:

INSPECTION TYPE:

- ☐ SF TYPE ( )
- ☒ SCD APPROVAL
- ☐ COMPLAINT (P/A)
- ☐ OTHER

PROJECT STATUS:

- ☐ STARTED-ACTIVE
- ☒ STARTED-INACTIVE
- ☐ NOT STARTED
- ☐ COMPLETE

SSA APRPROVAL NO. 90FR033
VIOLATION NO.
COMPLAINT (P/A) NO.

SITE CONDITIONS:

VIOLATION

- ☐ SEQ. OF CONST.
- ☐ SCE
- ☐ SILT FENCE
- ☐ EARTHEN DIKE
- ☐ SEDIMENT TRAP
- ☐ SEDIMENT BASIN
- ☒ SEED, MULCH, TACK DISTURBED SOILS NOT BEING STABILIZED WITHIN 14 DAY REQUIREMENT
- ☐ OTHER
- ☒ OTHER BLOCK OFF SINK HOLE IN SOUTH SECTION OF SITE (NOTED ON LAST REPORT)

ACTION TAKEN:

- ☐ SITE COMPLAINT ISSUED
- ☐ STOP WORK ISSUED
- ☐ SEE ATTACHMENTS

EVIDENCE COLLECTED:

- ☐ SAMPLE
- ☐ GRAPHIC
- ☐ PHOTO
- ☐ VIDEO
- ☐ OTHER

PENALTY ADVISORY: STATE LAW PROVIDES FOR CIVIL AND CRIMINAL PENALTIES RANGING FROM $1,000 TO $50,000 PER DAY FOR VIOLATIONS OF TITLE 4 OF THE MARYLAND ENVIRONMENT ARTICLE.

☒ **WARNING! VIOLATIONS --** ☒ **Sediment Control,** ☒ **Sediment Pollution**
Penalty action possible next inspection

☐ **NOTICE!! VIOLATIONS --** ☐ **Sediment Control,** ☐ **Sediment Pollution**
RECOMMENDING PENALTY ACTION

****

☐ REPORT RECEIVED BY:

☐ FIELD REPORT MAILED TO:
WAYNE WILLIAR - R.F. KLINE Const.

I HEREBY ACKNOWLEDGE RECEIPT OF THIS REPORT BY MY SIGNATURE WHICH DOES NOT IMPLY AGREEMENT OR DISAGREEMENT WITH ITS CONTENT.

****

Inspector: David L Ryder

NOTE: See all pages for a complete report. This is page 1 of 2.

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Richard F. Kline, Inc.
c/o Wayne Willis
P.O. Box 665
7490 New Technology Way
Frederick MD 21701

4a. Article Number P 254 013 864

4b. Service Type
☐ Registered ☐ Insured
☐ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery JAN 13 1993

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

FREDERICK, MD USPS

PS Form 3811, December 1991 ☆ U.S.G.P.O.: 1992-307-530 **DOMESTIC RETURN RECEIPT**

Is your RETURN ADDRESS on the reverse side?

Thank you for using Return Receipt Service.

P 254 713 864

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for international Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

Sent to Kline	
Street and No.	
P.O., State and ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 1/6/93	

PS Form 3800, June 1991

MDE

SSA APPROVAL NO. 90FR033

VIOLATION NO. _____

COMPLAINT NO. _____

DATE: 12/30/92

COMMENTS:

THE FOLLOWING CORRECTIVE ACTIONS MUST BE COMPLETED TO BRING THE SITE INTO COMPLIANCE

#1 BLOCK OFF THE SINK HOLE AS TO PREVENT DRAINAGE FROM THE DISTURBED AREAS FROM ENTERING IT.

SINK HOLE IS LOCATED IN THE BACK (SOUTH) SECTION OF THE SITE, SOUTH WEST CORNER, BELOW THE "ACTIVE" FILL AREA.

#2 STABILIZE ALL INACTIVE DISTURBED AREAS (SOILS) AS PER 14 DAY REQUIREMENTS.

NOTE: Please review all sheets for complete report.

This is Sheet 2 of 2 Inspector: David L Ryles Received By: _____

Eff. April 8, 1992

FIELD INVESTIGATION REPORT

MARYLAND DEPARTMENT OF ENVIRONMENT *
Water Management Administration *
2500 Broening Highway *
Baltimore, MD 21224 *
(410) 631-3510

DATE: 12/16/92 TIME: 1130 SITE VISIT NO. 1

SITE NAME: FREDERICK BRICK WORKS COUNTY: FR

MAP LOCATION: 29-G-8 WEATHER: LIGHT RAIN

SITE CONTACT(S): NO ONE ON SITE TITLE:

TITLE:

INSPECTION TYPE:

- ☐ SF TYPE ( )
- ☒ SCD APPROVAL
- ☐ COMPLAINT (P/A)
- ☐ OTHER

PROJECT STATUS:

- ☐ STARTED-ACTIVE
- ☒ STARTED-INACTIVE
- ☐ NOT STARTED
- ☐ COMPLETE

SSA APRPROVAL NO. 90FR033
VIOLATION NO.
COMPLAINT (P/A) NO.

SITE CONDITIONS:

VIOLATION

- ☐ SEQ. OF CONST.
- ☐ SCE
- ☐ SILT FENCE
- ☐ EARTHEN DIKE
- ☐ SEDIMENT TRAP
- ☐ SEDIMENT BASIN
- ☐ SEED, MULCH, TACK
- ☐ OTHER A SINK HOLE HAS DEVELOPED IN THE BACK (SOUTH) SECTION OF THE ~~OTHER~~ SITE, SOUTHWEST CORNER, BELOW THE ACTIVE FILL AREA

ACTION TAKEN:

- ☐ SITE COMPLAINT ISSUED
- ☐ STOP WORK ISSUED
- ☒ SEE ATTACHMENTS

EVIDENCE COLLECTED:

- ☐ SAMPLE
- ☐ GRAPHIC
- ☐ PHOTO
- ☐ VIDEO
- ☐ OTHER

PENALTY ADVISORY: STATE LAW PROVIDES FOR CIVIL AND CRIMINAL PENALTIES RANGING FROM $1,000 TO $50,000 PER DAY FOR VIOLATIONS OF TITLE 4 OF THE MARYLAND ENVIRONMENT ARTICLE.

☐ **WARNING! VIOLATIONS --** ☐ **Sediment Control,** ☐ **Sediment Pollution**
Penalty action possible next inspection

☐ **NOTICE!! VIOLATIONS --** ☐ **Sediment Control,** ☐ **Sediment Pollution**
RECOMMENDING PENALTY ACTION

****

☐ REPORT RECEIVED BY:

☐ FIELD REPORT MAILED TO: JIM SNYDER WAYNE WILLIAMS - R.F. KLINE CONST.

I HEREBY ACKNOWLEDGE RECEIPT OF THIS REPORT BY MY SIGNATURE WHICH DOES NOT IMPLY AGREEMENT OR DISAGREEMENT WITH ITS CONTENT.

****

Inspector: David L. Ryder

NOTE: See all pages for a complete report. This is page 1 of 2.

MDE

SSA APPROVAL NO. 90FR033

VIOLATION NO. _____

COMPLAINT NO. _____

DATE: 12/16/92

COMMENTS:

TO MAINTAIN COMPLIANCE THE FOLLOWING IS NEEDED.

#1 BLOCK OFF SINK HOLE TO PREVENT SITE DRAINAGE FROM ENTERING IT.

IF ASSISTANCE IS NEEDED ON HOW TO BLOCK/FILL IN SINK HOLE, CONTACT THE FREDERICK CO SOIL CONSERVATION DISTRICT 301-695-2803

NOTE: Please review all sheets for complete report.

This is Sheet 2 of 2 Inspector: David L Ryland Received By: _____

APPENDIX E. Maryland Department of Assessments and Taxation Real Property Records

Real Property Information

Maryland Department of Assessments and Taxation
Real Property System

[Go Back] FREDERICK COUNTY [Start Over]

DISTRICT: 02 ACCT NO: 044129

Owner Information

Owner Name: FREDERICK BRICK WORKS, THE **Use:** COMMERCIAL

Mailing Address: PO BOX 505
FREDERICK MD 21705-0505 **Principal Residence:** NO

Transferred From: **Date:** **Price:**

Deed Reference: 1) **Special Tax Recapture:**
2)

* NONE *

Tax Exempt: NO

Location Information [View Map]

Premises Address:	Zoning:	Legal Description:
E SOUTH ST FREDERICK 21701	M2	40.02 AC E. SOUTH ST. FREDERICK

Map	Grid	Parcel	Subdiv	Sect	Block	Lot	Group	Plat No:
418		889A				2	81	Plat Ref:

Special Tax Areas **Town:** FREDERICK CITY
Ad Valorem: FRED CITY DIST 1 FIRE TAX
Tax Class:

Primary Structure Data

Year Built:	Enclosed Area:	Property Land Area:	County Use:
0000		40.02 AC	

Value Information

	Base Value	Current Value As Of 01/01/1999	Phase-In Value As Of 07/01/2000	Phase-in Assessments As Of 07/01/1999	Phase-in Assessments As Of 07/01/2000
Land:	970,720	970,700			
Impts:	0	0			
Total:	970,720	970,700	970,700	388,280	388,280
Pref Land:	0	0	0	0	0

Partial Exempt Assessments

	Code	07/01/1999	07/01/2000
County	000	0	0
State	000	0	0
Municipal	000	0	0

[Go Back] [Start Over]

Real Property Information

Maryland Department of Assessments and Taxation
Real Property System

[Go Back] [Start Over]

FREDERICK COUNTY
DISTRICT: 02 ACCT NO: 044110

Owner Information

Owner Name: FREDERICK BRICK WORKS, THE
Use: COMMERCIAL

Mailing Address: PO BOX 505
FREDERICK MD 21705-0505
Principal Residence: NO

Transferred From:
Date: **Price:**
Deed Reference: 1)
2)
Special Tax Recapture:
* NONE *

Tax Exempt: NO

Location Information [View Map]

Premises Address:
184 E SOUTH ST
FREDERICK 21701

Zoning: M2

Legal Description:
31.44 AC
E. SOUTH ST.
FREDERICK

Map	Grid	Parcel	Subdiv	Sect	Block	Lot	Group	Plat No:
418	5	962A					81	Plat Ref:

Special Tax Areas
Town: FREDERICK CITY
Ad Valorem: FRED CITY DIST 1 FIRE TAX
Tax Class:

Primary Structure Data

Year Built:	Enclosed Area:	Property Land Area:	County Use:
1949	29,073 SF	31.43 AC	

Value Information

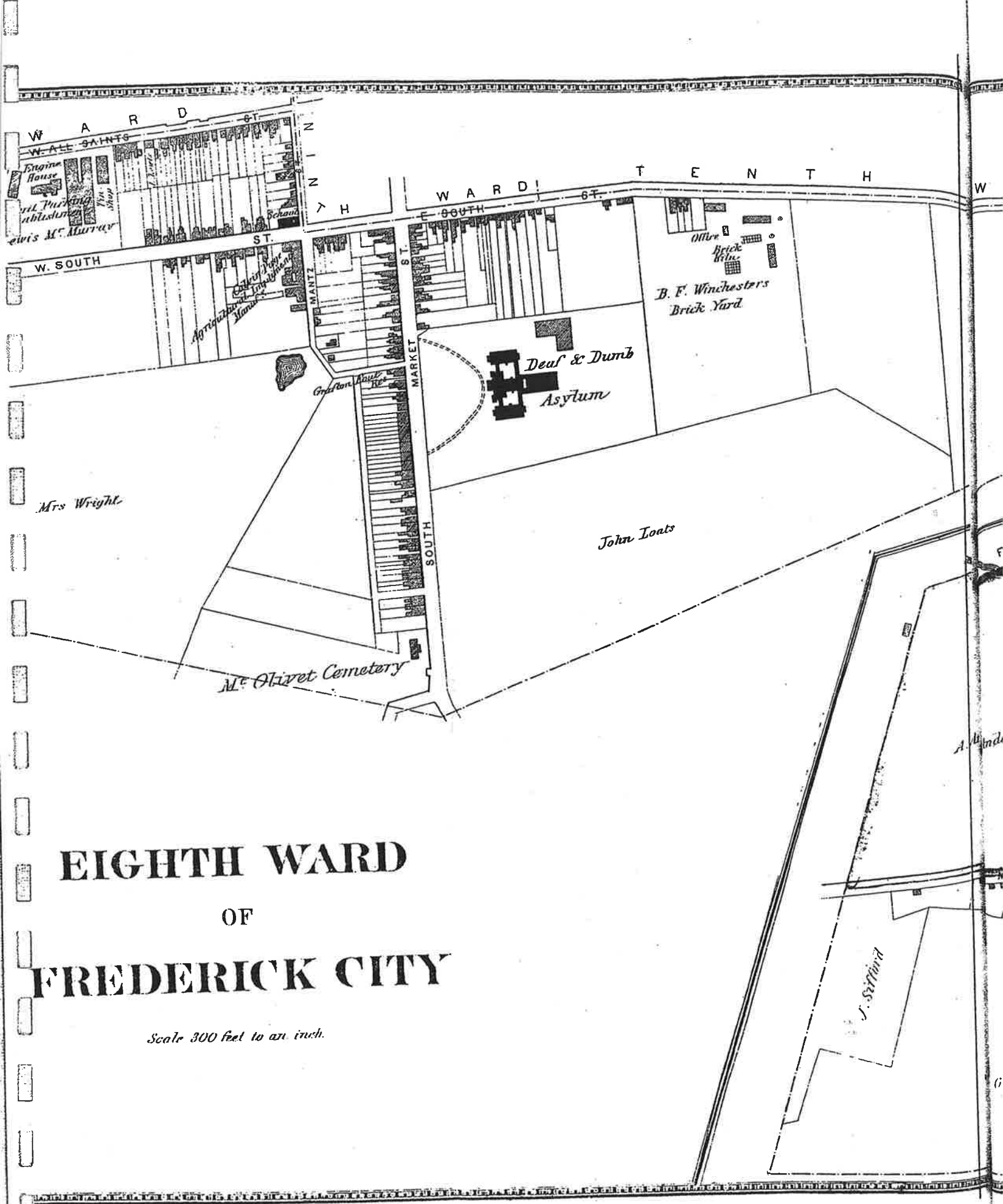
	Base Value	Current Valuc As Of 01/01/1999	Phase-In Value As Of 07/01/2000	Phase-in Assessments As Of 07/01/1999	Phase-in Assessments As Of 07/01/2000
Land:	1,454,700	1,454,700			
Impts:	298,200	303,400			
Total:	1,752,900	1,758,100	1,756,366	701,850	702,540
Pref Land:	0	0	0	0	0

Partial Exempt Assessments

	Code	07/01/1999	07/01/2000
County	000	0	0
State	000	0	0
Municipal	000	0	0

[Go Back] [Start Over]

APPENDIX F. Historic Maps of Frederick Brick Works Vicinity



EIGHTH WARD
OF
FREDERICK CITY

Scale 300 feet to an inch.

Atlas of Frederick County Maryland 1873 C. O. Titus & Co. 1873

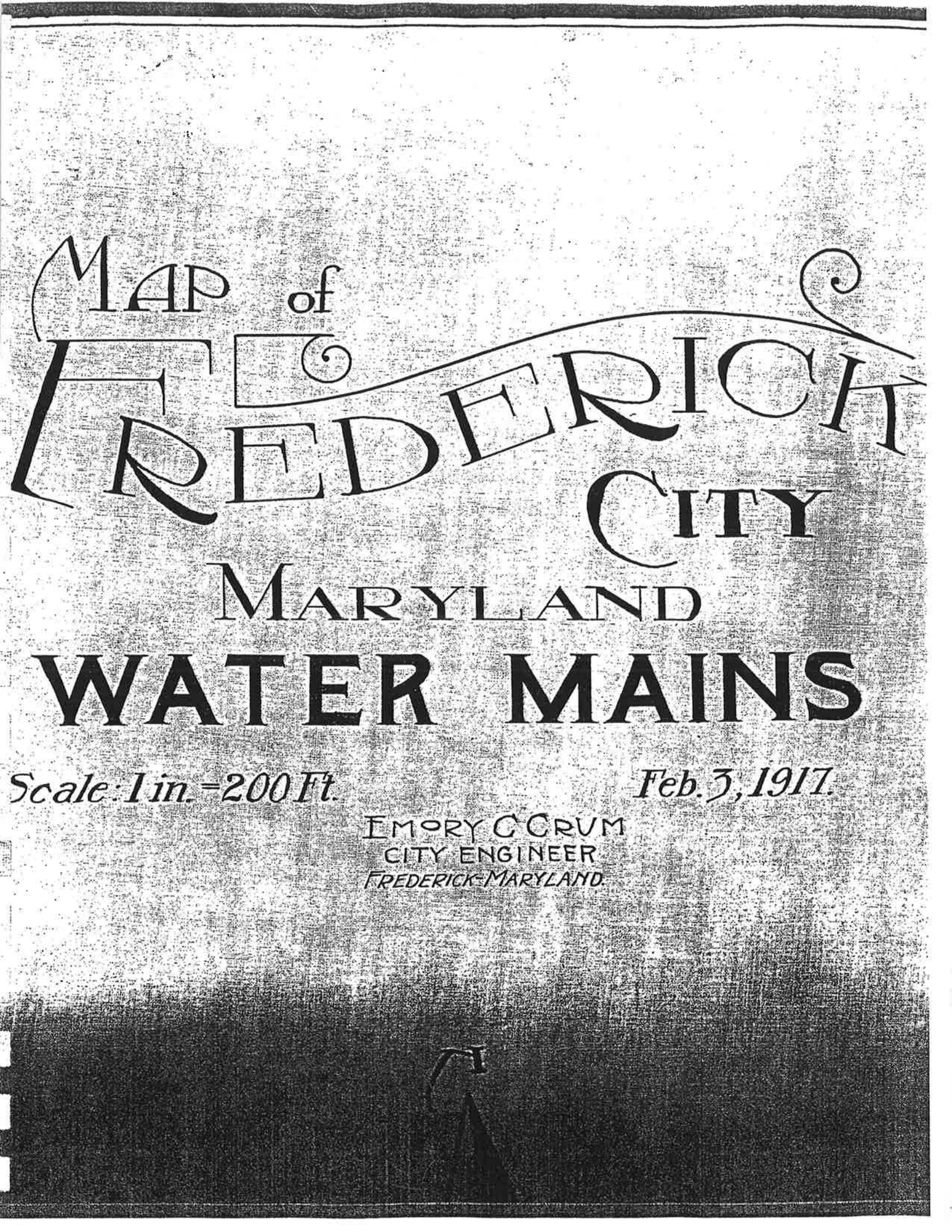
Map of Frederick City Maryland

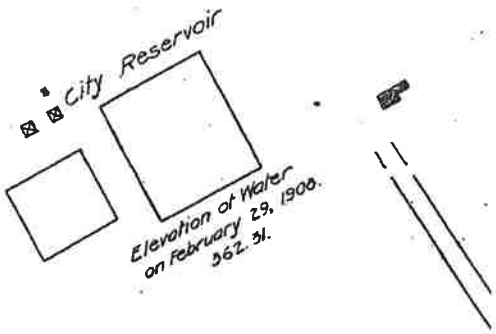
WATER MAINS

Scale: 1 in. = 200 Ft.

Feb. 3, 1917.

EMORY C. CRUM
CITY ENGINEER
FREDERICK-MARYLAND.



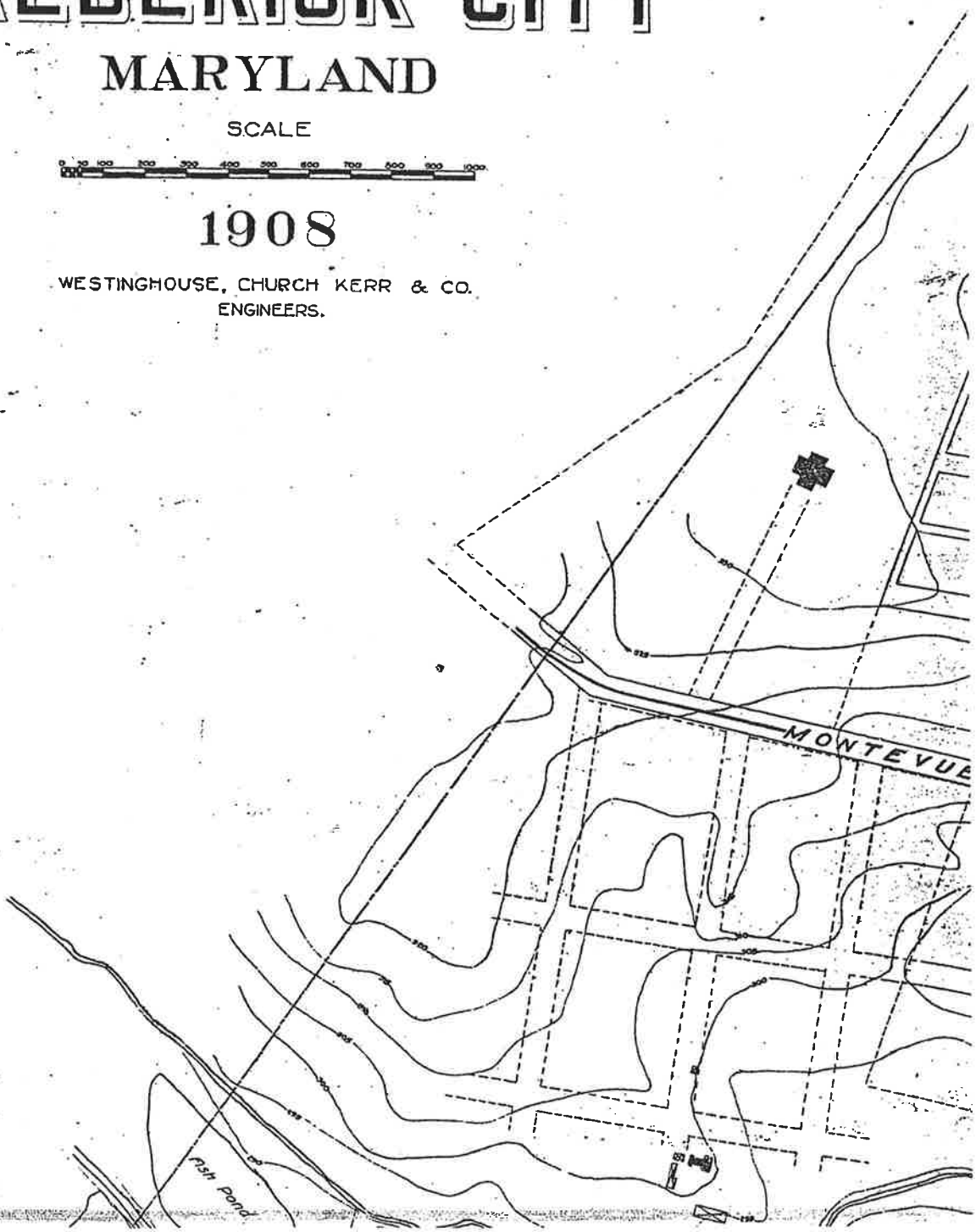


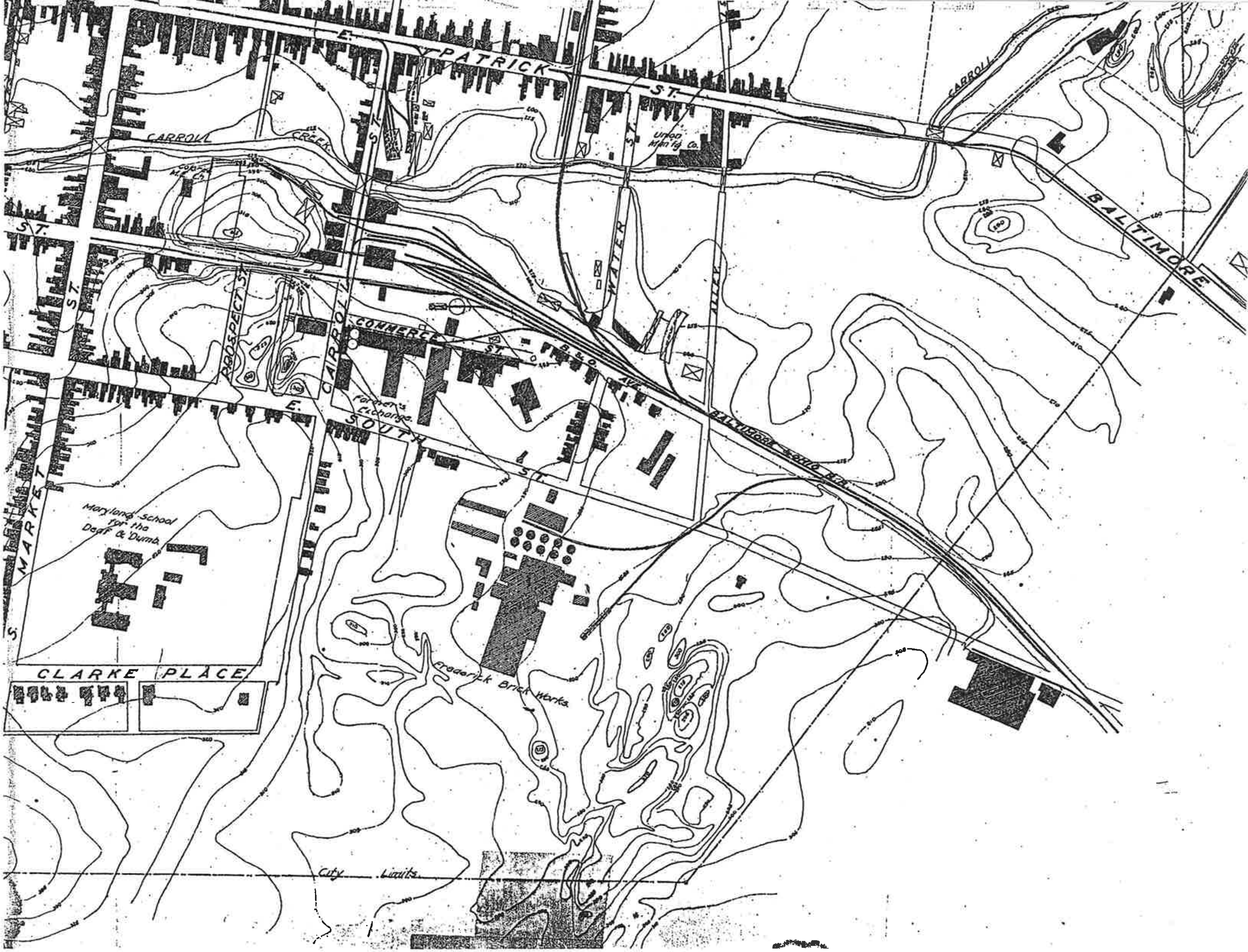
TOPOGRAPHICAL MAP
OF
FREDERICK CITY
MARYLAND

SCALE

1908

WESTINGHOUSE, CHURCH KERR & CO.
ENGINEERS.




E. PATRICK ST.
CARROLL CREEK
CARROLL
Union Mfg Co.
WATER ST.
ALLEY
BALTIMORE
PROSPECT ST.
CARROLL ST.
COMMERCE ST.
B. & O. AVE.
BALTIMORE & OHIO R.R.
Farmer's Exchange
E. SOUTH ST.
MARKET ST.
Maryland School for the Deaf & Dumb
CLARKE PLACE
Frederick Brick Works
City Limits


SOUTH
STREET
PLACE
6"
4"
10"
290
295
300
305
310
315
320
280
285
250


SOUTH
WINCHESTER STREET
SOUTH
PLACE
BOULEVARD
SCALE
500
FEET
1000


CSX RAILROAD
WISNER ST
CONC
SAGNER AVE
PENNSYLVANIA
SOUTH
CSX RAILROAD
273.0
288.4
293.6
293.0
294.7
298.6
304.0
300
305
307.6
305.4
301.6
300.2
299.9
301.6
301.6

APPENDIX G. Ecosearch *Priority Risk Report*

(This appendix is printed on two sides.)

Introduction

We want to thank you for your order requesting the enclosed site assessment.

EcoSearch makes every effort possible to combine the most accurate environmental data available into an understandable and easy-to-use format.

While every attempt has been made to ensure accuracy of the information presented, we cannot guarantee the accuracy of the data from the original sources, nor can we guarantee that no transcription or plotting errors have occurred.

If any concerns arise from your review of the databases in this report, please call the appropriate agency involved. As a service, we have included phone numbers in the database description section of this report to help you in your evaluation.

The enclosed maps present a working approximation of the location of surrounding environmental sites based primarily on available accurate site addresses. These maps should not be used for purposes more correctly handled by surveys.

EcoSearch is driven by its mission to present the most responsive, technically sound, and cost-effective environmental data services available to our customer.

EcoSearch Environmental Resources, Inc.

9365 Counselors Row Suite 104
Indianapolis, Indiana 46240
ph: (317) 574-8830 fax: (317) 574-8840

EcoSearch

Government Records Search

Type of Report:	Priority Risk Report
Site Location:	**Frederick Brick Works, Inc.** **184 East South Street** **Frederick, MD 21701**
Date:	August 22, 2000
Report ID Number:	2205-7502
Especially Prepared For:	Ms. Claudia Stone Bay Environmental
Project #:	00114

Thank you for choosing EcoSearch.

Read Me First

The following suggestions are offered in an attempt to help you in using and understanding this site assessment from

1. Skim over the entire report to familiarize yourself with its contents and layout.

2. You will notice that the information is presented following this general concept: we begin by giving sections that summarize data and then give detailed information about these summaries as you proceed further into the report.

3. Then refer to the section titled "Statistical Overview". You will need to take a moment to read the column headings and the data below them. Also, as you go down the first column (left side) you will probably need to look back at the preceeding section titled "Database Descriptions". Please pay particular attention to the radius searched as they vary according to the database. These are ASTM standards that we meet and exceed. Your site's datum is the third, shaded column. Also, the next column showing database hits within the first radius is important as it will include data about adjoining properties. The unmappable sites have their own section with a cover page explaining them.

4. The next section titled "Maps" is important as it gives a very clear visual presentation of the site, and which database(s) are at the site itself or within the study radii.

5. The site summary page(s) tells you by map ID# which database is at that location as well as the site's name and distance/direction from your study site. You will notice that the numbering corresponds to the distance from the subject site– eg. #1 is your site itself or the site closest to it, #2 is further away. This continues until all database hits have been summarized within the largest study radius. Your report may extend further than one mile if you asked us to extend the radii.

6. As you will recall our format goes from summary-type pages to detailed information. Therefore, the next section is "Detailed Data". Here extensive data is given about each database hit. The map ID#, distance, and direction are in the top left corner. Further data follows.

7. The "Unmappable" section was referred to earlier. In this summary you will find those sites. Please read the cover page as it describes unmappable sites and our efforts to minimize and/or eliminate them from all of our site assessments.

8. The last section -- "Glossary/Acronyms" is self-explanatory and often helpful to our customers.

If you would like further help in understanding our reports please refer to the frequently asked questions list on our web site or call as our intention is to have this report helpful to you.

Database Descriptions -- Federal Databases

NPL

National Priorities List

US Environmental Protection Agency
Office of Solid Waste and Emergency Response
(703) 603-8881

Data Date:	December 20, 1999
Release Date:	December 20, 1999
Active Date:	March 10, 2000
Last Contact Date:	July 28, 2000

The NPL is a subset of the CERCLIS and lists over 1,150 of the nation's most dangerous sites of uncontrolled or hazardous waste which require cleanup. Also known as the Superfund List, the sites are scored according to the hazardous ranking system.

CERCLA (Active)

Comprehensive Environmental Response, Compensation, and Liability Information System (Active)

US Environmental Protection Agency
Office of Solid Waste and Emergency Response
Internet

Data Date:	December 20, 1999
Release Date:	December 20, 1999
Active Date:	March 10, 2000
Last Contact Date:	July 28, 2000

CERCLIS maintains information on over 15,000 sites nationally identified as hazardous or potentially hazardous which may require action. These sites are currently being investigated or an investigation has been completed regarding the release of hazardous substances. The most serious of this list as ranked by the hazardous ranking system are transferred to the NPL.

CERCLA (NFRAP Archive)

Comprehensive Environmental Response, Compensation, and Liability Information System (NFRAP Archive)

US Environmental Protection Agency
Office of Solid Waste and Emergency Response

Data Date:	December 20, 1999
Release Date:	December 20, 1999
Active Date:	March 10, 2000
Last Contact Date:	July 28, 2000

For more complete information purposes we include sites which have been reclassified as No Further Remedial Action Planned (NFRAP) by the EPA. This action was taken by the EPA beginning February 1995 as a part of the Brownfields Redevelopment Program. These former CERCLIS sites, also known as the CERCLIS Archive, have been delisted because a lack of significant contamination was found.

RCRA TSD

Resource Conservation and Recovery Information System -- Treatment, Storage, and Disposal Facilities

US Environmental Protection Agency
Office of Solid Waste and Emergency Response
(202) 260-4610

Data Date:	April 15, 2000
Release Date:	April 15, 2000
Active Date:	August 7, 2000
Last Contact Date:	July 28, 2000

RCRIS contains information on hazardous waste handlers regulated by the US Environmental Protection Agency under the Resource Conservation and Recovery Act (RCRA). It is a national system used to track events and activities which fall under RCRA. The TSD database is a subset of the complete RCRIS file which includes facilities which treat, store, dispose, or incinerate hazardous waste. Additionally, compliance and corrective action (CORRACTS) information is included.

RCRA Generator

Resource Conservation and Recovery Information System -- Large and Small Quantity Generators

US Environmental Protection Agency
Office of Solid Waste and Emergency Response
(202) 260-4610

Data Date:	April 15, 2000
Release Date:	April 15, 2000
Active Date:	August 7, 2000
Last Contact Date:	July 28, 2000

RCRIS contains information on hazardous waste handlers regulated by the US Environmental Protection Agency under the Resource Conservation and Recovery Act (RCRA). It is a national system used to track events and activities which fall under RCRA. The generators database is a subset of the complete RCRIS file which includes hazardous waste generators which create more than 100kg of hazardous waste per month or meet other requirements of RCRA. We also include RCRA Notifiers, Transporters, and formerly regulated RCRA Sites for more complete hazardous waste information. Additionally, compliance and corrective action information is included.

RAATS

RCRA Administrative Action Tracking System

US Environmental Protection Agency
Office of Enforcement and Compliance Assurance
(202) 564-4104

Data Date:	April 14, 1995
Release Date:	Not Available
Active Date:	April 17, 1995
Last Contact Date:	June 15, 2000

The RCRA Administrative Action Tracking System contains additional information on RCRA enforcement actions. Data includes the type of action, proposed penalty, and final penalty amount. This is a historical database and will not be updated by the source agency. EcoSearch will call once a year to verify historical status.

CORRACTS

Resource Conservation and Recovery Information System -- Corrective Action Sites

US Environmental Protection Agency
Office of Solid Waste and Emergency Response
(202) 260-4610

Data Date:	April 15, 2000
Release Date:	April 15, 2000
Active Date:	August 7, 2000
Last Contact Date:	July 28, 2000

The CORRACTS database includes RCRIS (Resource Conservation and Recovery Information System) sites with reported corrective action. This information is also reported in the standard RCRIS detailed data.

ERNS

Emergency Response Notification System

US Environmental Protection Agency
Office of Solid Waste and Emergency Response
(202) 260-2342

Data Date:	January 1, 2000
Release Date:	January 1, 2000
Active Date:	March 17, 2000
Last Contact Date:	July 28, 2000

ERNS is a national database which contains information on specific notification of releases of oil and hazardous substances into the environment. The system stores data regarding the site of the spill, the material released, and the medium into which it occured. As a joint effort, the Department of Transportation and the Environmental Protection Agency have collaborated to compile more than 365,000 records.

PADS

PCB Activity Database System

US Environmental Protection Agency
Office of Pollution Prevention and Toxics
(202) 260-3992

Data Date:	November 20, 1999
Release Date:	November 20, 1999
Active Date:	February 18, 2000
Last Contact Date:	July 28, 2000

This database stores information about facilities which handle PCBs and file EPA form 7710-53. It is divided into storage facilities, disposers, generators, and transporters.

TRI

Toxic Release Inventory

US Environmental Protection Agency
Office of Pollution Prevention and Toxics
(202) 260-1531

Data Date:	October 1996
Release Date:	November 1999
Active Date:	March 17, 2000
Last Contact Date:	July 28, 2000

TRI contains information from facilities which manufacture, process, or import any of the over 300 listed toxic chemicals which are released directly into air, water, or land or are transported off-site. The database includes facts on amounts of chemicals stored and emitted from the facility. This database is released on an infrequent basis by the US EPA. EcoSearch includes information from 1987 through the 1996 reporting year.

SSTS

Section Seven Tracking System

US Environmental Protection Agency
Office of Prevention, Pesticides, and Toxic Substances
(202) 564-5008

Data Date:	July 31, 1998
Release Date:	Not Available
Active Date:	August 27, 1998
Last Contact Date:	July 28, 2000

Formerly FATES, this system tracks the registration of pesticide-producing establishments and tracks the types and amounts of pesticides, active ingredients, and devices which are sold, produced, or distributed annually.

DOCKET

Civil Enforcement Docket

US Environmental Protection Agency
Office of Enforcement
(202) 564-4114

Data Date:	September 3, 1998
Release Date:	Not Available
Active Date:	February 3, 1999
Last Contact Date:	July 28, 2000

The Civil Enforcement Docket is information on civil and administrative actions filed by the Department of Justice for the US Environmental Protection Agency. This record has been continually updated since 1972 and includes data regarding facility name, dates, laws violated, and penalties assessed.

TSCA

Toxic Substances Control Act Inventory

US Environmental Protection Agency

(202) 554-1404

Data Date: May 14, 1986
Release Date: Not Available

Last Contact Date: July 28, 2000

The Toxic Substances Control Act Inventory includes the locations and chemical production information of more than 7000 processors and manufacturers of chemicals. This database is no longer released to the public by the US EPA.

Database Descriptions -- State Databases

SML (HWS)

Maryland State Master List Sites

Maryland Department of the Environment
Waste Management Administration
410-631-3322

Data Date: January 2, 2000
Release Date: January 2, 2000
Active Date: January 18, 2000
Last Contact Date: August 10, 2000

The Maryland State Master List is a listing of sites which are considered to be a threat to the public health and welfare by the Maryland Department of the Environment.

SWF

Maryland Solid Waste Facilities

Maryland Department of the Environment
Waste Management Administration
410-631-3318

Data Date: March 31,2000
Release Date: Marach 31, 2000
Active Date: May 1, 2000
Last Contact Date: August 10, 2000

The Maryland Permitted Solid Waste Facilities Report is a listing of all permitted solid waste landfills and processing facilities operating within the State of Maryland.

LUST

Maryland Leaking Underground Storage Tanks

Maryland Department of the Environment
Underground Storage Tank Program
(410)631-3433

Data Date: August 25, 1998
Release Date: August 25, 1998
Active Date: November 14, 1998
Last Contact Date: August 10, 2000

This report contains summary information pertaining to active cases of cleanup activities at facilties which have had either a hazardous materials spill or a leaking underground storage tank.

UST

Maryland Underground Storage Tank List

Maryland Department of the Environment
Underground Storage Tank Program
(410) 631-3443

Data Date: December 5, 1996
Release Date: December 5, 1996
Active Date: June 23, 1998
Last Contact Date: August 10, 2000

The Maryland UST Report is a listing of all registered underground storage tanks located within the State of Maryland. The state of Maryland changed their database and in the process attempted to reregister everyone. The MDUST containes facilities that responded to the registration. Facilities that did not respond to the registration are located in the database MDUSTC.

EcoSearch Statistical Overview

Property Information

184 East South Street
Frederick, MD 21701
Latitude: 39.409261 N Longitude: 77.405863 W

Search Parameters

Report: Priority Risk Report
Radii: ASTM*
Zip Code(s): 21701 21704
City: Frederick

FEDERAL DATABASES	Radius (miles)	Mappable Sites					Unmappable Sites		
		Total	Site	within 1/4mi	0.25 - 0.50mi	0.50 - 1.00mi	Zip Code	City	County
NPL	1.000	0	0	0	0	0	0	0	0
CERCLA (Active)	1.000	0	0	0	0	0	0	0	0
CERCLA (NFRAP Archive)	1.000	2	0	0	1	1	0	0	0
RCRA TSD	1.000	0	0	0	0	0	0	0	0
RCRA Generator	0.250	8	0	8	-	-	0	0	0
CORRACTS	1.000	0	0	0	0	0	0	0	0
ERNS	0.250	1	0	1	-	-	-	-	-
PADS	1.000	0	0	0	0	0	0	-	-
TRI	0.500	1	0	0	1	-	0	0	0
SSTS	1.000	1	0	0	0	1	0	0	0
DOCKET	1.000	1	0	0	0	1	0	0	0
TSCA	1.000	1	0	0	0	1	0	-	-

STATE DATABASES	Radius (miles)	Mappable Sites					Unmappable Sites		
		Total	Site	within 1/4mi	0.25 - 0.50mi	0.50 - 1.00mi	Zip Code	City	County
SML (HWS)	1.000	1	0	0	1	0	0	0	0
SWF	1.000	1	0	0	1	0	0	0	0
LUST	0.500	2	0	2	0	-	0	1	0
UST	0.250	10	0	10	-	-	1	0	0

MANUAL GEOCODING:^ For this city/township, **310** sites were manually plotted by EcoSearch.

* This database search and study radii meets or exceeds the ASTM (American Society of Testing and Materials)standards for a government records review. N/A denotes an ASTM-required database which is not available from the state.
^ Manual Geocoding: Plotting environmental site data using paper maps and phone calls to properly place the information on the map.

Accurate street addresses are required for records to be found at the study property.
Mappable Sites are environmental sites which were located and appear on the enclosed EcoSearch Map, Site Summary, and Detailed Data sections of the report. These sites are summarized based on proximity to the study site.
Unmappable Sites are governmental records with incomplete or inaccurate address information. These sites could not be located on the street map, but have been searched by the Zip Codes, Cities, and County specified in the search parameters. Further investigation of these sites and their relationship to your study site is necessary.

Site Summary

Map ID#	Database / Agency ID#	Site Name, Address, and County	Distance/Direction
1	UST Maryland Underground Storage Tank 6006076	FREDERICK PETROLEUM CORP 200 E SOUTH ST FREDERICK, MD 21701-5656 FREDERICK	0.04697 mi ENE **Manually Geocoded***
2	RCRA Generator RCRA Small Quantity Generator MDD982571507	AGRISEARCH LABORATORIES 26 WATER ST FREDERICK, MD 21701-5620 FREDERICK	0.04854 mi NE
3	UST Maryland Underground Storage Tank 3006425	E/W & GRIFFITH 5 COMMERCE ST FREDERICK, MD 21701-5612 FREDERICK	0.08400 mi N
4	LUST Maryland Leaking Underground Storage Tank 94-3055FR	FARMER CO-OP WISNER ST & SOUTH ST , MD FREDERICK	0.09562 mi E **Manually Geocoded***
5	UST Maryland Underground Storage Tank 3006416	FREDERICK SOC (38447) 450 E SOUTH ST FREDERICK, MD 21701-5703 FREDERICK	0.12208 mi E
6A	ERNS Emergency Response Notification System 365143	CORNER OF B & O AVE. AND WISNER AVE. FREDERICK, MD FREDERICK	0.14357 mi NE **Manually Geocoded***
6B	UST Maryland Underground Storage Tank 3006619	PHOENIX INC 167 B&O AVE & WISHER ST FREDERICK, MD 21701 FREDERICK	0.14357 mi NE **Manually Geocoded***
7	UST Maryland Underground Storage Tank 3006540	WILLARD CHEMICAL CO INC 50 S WISHER ST FREDERICK, MD 21701 FREDERICK	0.14555 mi NE
8	RCRA Generator RCRA Small Quantity Generator MDD981104300	GRIMMS AUTOMOTION INC 126 S CARROLL ST FREDERICK, MD 21701-5609 FREDERICK	0.15167 mi W
9	UST Maryland Underground Storage Tank 3006648	SOUTHERN STATES FRED. CORP INC E SOUTH ST FREDERICK, MD 21701 FREDERICK	0.15403 mi E **Manually Geocoded***
10	UST Maryland Underground Storage Tank 3013307	MCCUTCHEON APPLE PRODUCTS INC 13 S WISNER ST FREDERICK, MD 21701-5625 FREDERICK	0.15782 mi NE
11	RCRA Generator RCRA Small Quantity Generator MDD095426607	GRIFFITH-CONSUMERS COMPANY 11 S WISNER ST FREDERICK, MD 21701-5625 FREDERICK	0.15856 mi NE
12	RCRA Generator RCRA Small Quantity Generator MDD985411214	SFA FREDERICK MANUFACTURING 20 S WISNER ST FREDERICK, MD 21701-5652 FREDERICK	0.15931 mi NE **Manually Geocoded***
13	UST Maryland Underground Storage Tank 3006709	GENE ROMSBURG ENT. INC PO BOX 10, 27 WATER ST FREDERICK, MD 21701 FREDERICK	0.17512 mi NNE **Manually Geocoded***

EcoSearch Environmental Resources, Inc.

Priority Risk Report Map

Report ID: 2205-7502

Site: 184 East South Street
Frederick, MD 21701

☆ Study Site

Study Site Matches Database

FEDERAL DATABASES	Radius (mi)
NPL Sites	1.00
CERCLA (Active) Sites	1.00
CERCLA (NFRAP Archive) Sites	1.00
RCRA TSD Sites	1.00
RCRA Generator Sites	0.25
CORRACTS Sites	1.00
ERNS Sites	0.25
PADS Sites	1.00
TRI Sites	0.50
SSTS Sites	1.00
DOCKET Sites	1.00
TSCA Sites	1.00

STATE DATABASES	
SML (HWS) Sites	1.00
SWF Sites	1.00
LUST Sites	0.50
UST Sites	0.25

MULTIPLE MATCHES / AREAS

Two Database Matches

Three or More Matches

Database Area Site

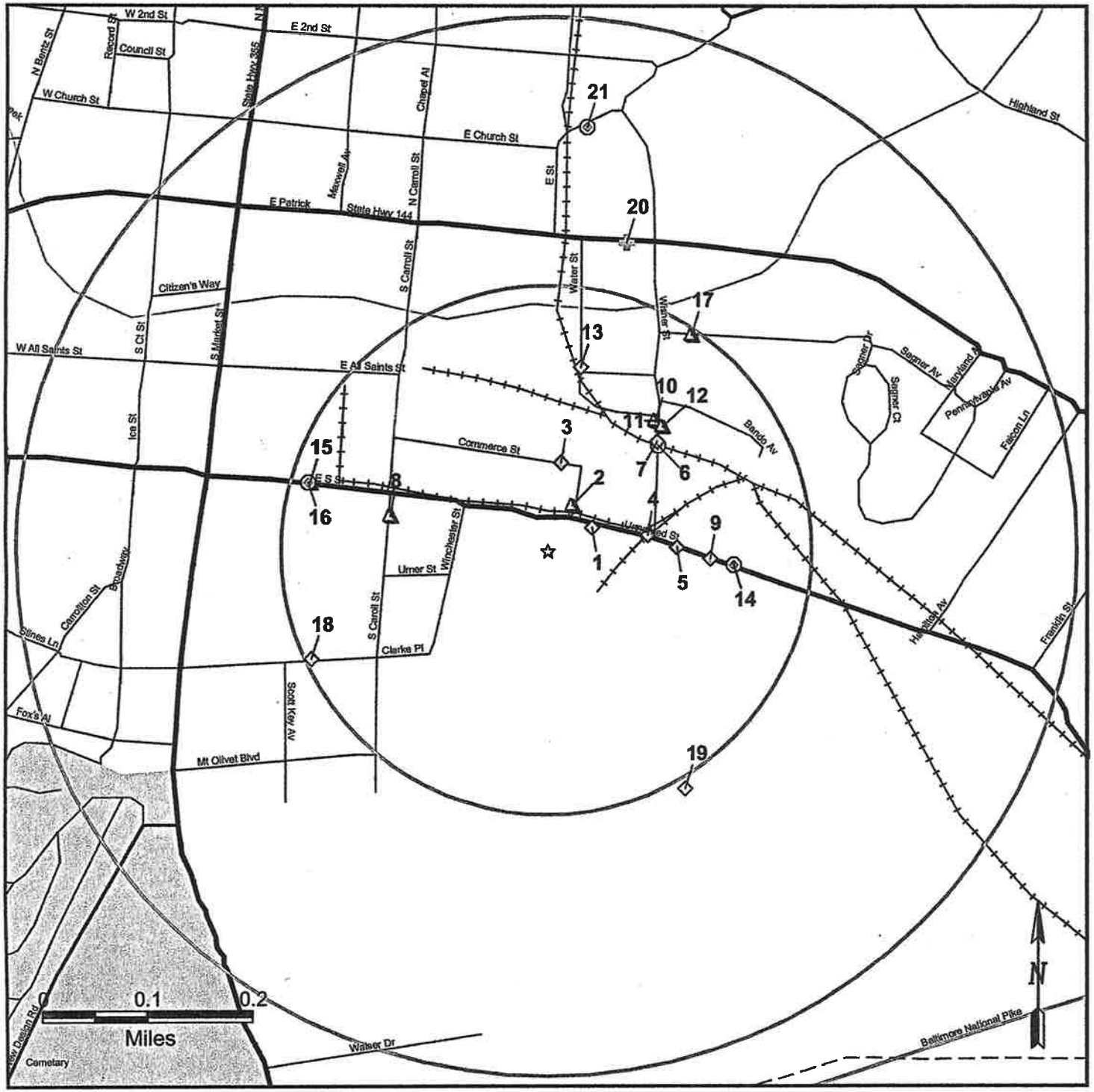
MAP LEGEND

Parks
Incorp. Areas
Water
Cemeteries

Streets
Secondary Roads
Primary Roads
Freeways
Railroads
Boundaries

Radii: 1/4 mile, 1/2 mile, 1 mile

Note: The information contained on this map is subject to the general disclaimer on the first page.



EcoSearch Environmental Resources, Inc.

Priority Risk Report Map

Report ID: 2205-7502

Site: 184 East South Street
Frederick, MD 21701

☆ Study Site

Study Site Matches Database

FEDERAL DATABASES	Radius (mi)
NPL Sites	1.00
CERCLA (Active) Sites	1.00
CERCLA (NFRAP Archive) Sites	1.00
RCRA TSD Sites	1.00
RCRA Generator Sites	0.25
CORRACTS Sites	1.00
ERNS Sites	0.25
PADS Sites	1.00
TRI Sites	0.50
SSTS Sites	1.00
DOCKET Sites	1.00
TSCA Sites	1.00

STATE DATABASES	
SML (HWS) Sites	1.00
SWF Sites	1.00
LUST Sites	0.50
UST Sites	0.25

MULTIPLE MATCHES / AREAS

Two Database Matches

Three or More Matches

Database Area Site

MAP LEGEND

Parks

Incorp. Areas

Water

Cemeteries

Streets

Secondary Roads

Primary Roads

Freeways

Railroads

Boundaries

Radii: 1/4 mile, 1/2 mile, 1 mile

Note: The information contained on this map is subject to the general disclaimer on the first page.

Site Summary

Map ID#	Database / Agency ID#	Site Name, Address, and County	Distance/Direction
14A	LUST Maryland Leaking Underground Storage Tank 95-0122FR	J.H.G. CONTRACTORS 519 EAST SOUTH STREET , MD FREDERICK	0.17634 mi E **Manually Geocoded***
14B	UST Maryland Underground Storage Tank 3006708	FAMILY BRAND GAS STATION 519 E SOUTH ST FREDERICK, MD 21701-5748 FREDERICK	0.17634 mi E
15	RCRA Generator RCRA Small Quantity Generator MDD982573560	NEW ERA CUSTOM DESIGN 103 E SOUTH ST FREDERICK, MD 21701-5637 FREDERICK	0.23201 mi WNW
16A	RCRA Generator RCRA Small Quantity Generator MDD981939309	WOODSTOCK DESIGN INC 101-B E SOUTH ST FREDERICK, MD 21701-5637 FREDERICK	0.23356 mi WNW **Manually Geocoded***
16B	RCRA Generator RCRA Small Quantity Generator MDD985389584	ALPHA DESIGN SIGNS 101 E SOUTH ST FREDERICK, MD 21701-5637 FREDERICK	0.23356 mi WNW
17	RCRA Generator RCRA Small Quantity Generator MDD121342117	IEC-INNOVATIVE ELECTRONICS CORP 406 SAGNER AVE FREDERICK, MD 21701-5758 FREDERICK	0.24406 mi NE
18	UST Maryland Underground Storage Tank 3006578	MARYLAND SCHOOL FOR THE DEAF 101 CLARKE PL FREDERICK, MD 21701-6529 FREDERICK	0.24447 mi WSW
19	SWF Maryland Permitted Solid Waste Landfill 1994WOF00900	MEDERI MED , MD FREDERICK	0.26012 mi SE **Agency Provided Lat/Long****
20	TRI Toxic Release Inventory Site 21701HGHSD424EP	MORNINGSTAR FOODS INC. 428 E PATRICK ST FREDERICK, MD 21701-5730 FREDERICK	0.29937 mi NNE
21A	CERCLA CERCLA Site (Delisted NFRAP Site) MDD980693972	FREDERICK TOWN GAS 350 CHURCH ST FREDERICK, MD 21701 FREDERICK	0.39871 mi N **Manually Geocoded***
21B	SML (HWS) Maryland State Master List Site MD #164	FREDERICK TOWN GAS 350 CHURCH ST FREDERICK, MD 21701 FREDERICK	0.39871 mi N **Manually Geocoded***
22	DOCKET Civil Enforcement Docket 03-92-0418A	FREDERICKS HOUSING AUTHORITY O 209 MADISON ST FREDERICK, MD 21701-6536 FREDERICK	0.57034 mi W
23	CERCLA CERCLA Site (Delisted NFRAP Site) MDD003076627	FREDERICK TOOL AND DIE CO. INC. 579 E CHURCH ST FREDERICK, MD 21701-5768 FREDERICK	0.63323 mi NE
24A	SSTS Section Seven Tracking System 005813MD 001	CLOROX COMPANY 605 E CHURCH ST FREDERICK, MD 21701-5705	0.65737 mi NE

Site Summary

Map ID#	Database / Agency ID#	Site Name, Address, and County	Distance/Direction
24B	TSCA Toxic Substances Control Act Inventory Site 007052G	THE CLOROX COMPANY PO BOX 522 FREDERICK, MD 21705-0522 FREDERICK	0.65737 mi NE **Manually Geocoded***

* -- Manually Geocoded: Site plotted or corrected using paper maps, phone calls, and other resources to properly place the site on the map.

** -- Agency Provided Lat/Long: Site plotted using the latitude and longitude given by the federal or state government agency.

*** -- Area Manually Plotted: Area manually drawn using digital and paper maps.

Detailed Data

The following pages contain the detailed data concerning the sites plotted on the map and included in the site summary.

Please Note: Pages are not included for databases not found within the search radii.

These pages are arranged as follows:

Delisted CERCLA Data

RCRA TSD and Generators Data

ERNS Data

TRI Data

SSTS Data

DOCKET Data

TSCA Data

Maryland SML Data

Maryland SWF Data

Maryland LUST Data

Maryland UST Data

CERCLA Archive Data

Delisted Comprehensive Environmental Response, Compensation, and Liability Act Sites (Archive Sites)

Map ID#: **21A** Distance (mi): **0.398710**
Direction: **N**

EPA ID#: **MDD980693972**
CERCLIS Site ID#: **0300303**
Status: This site has been delisted from CERCLIS
No Further Remedial Action Planned

Facility Name: **FREDERICK TOWN GAS**
Address: **350 CHURCH ST**
City, State, Zip: **FREDERICK, MD 21701**
County: **FREDERICK**

Hydro Unit: **02070009**

Federal Facility Indicator: **Not a Federal Facility**
Ownership Indicator: **Other**

Site Incident Category: **Not Reported**

Comments: **Not Reported**
NPL Status: **Not on the NPL**
RCRIS Facility Indicator: **Not Reported**

Event	Date Started	Date Completed
DISCOVERY	Not Reported	1982-10-01
PRELIMINARY ASSESSMENT	Not Reported	1985-10-16

Map ID#: **23** Distance (mi): **0.633231**
Direction: **NE**

EPA ID#: **MDD003076627**
CERCLIS Site ID#: **0304127**
Status: This site has been delisted from CERCLIS
No Further Remedial Action Planned

Facility Name: **FREDERICK TOOL AND DIE CO. INC.**
Address: **579 E. CHURCH STREET**
City, State, Zip: **FREDERICK, MD 21701**
County: **FREDERICK**

Hydro Unit: **02070009**

Federal Facility Indicator: **Status Undetermined**
Ownership Indicator: **Private**

Site Incident Category: **Not Reported**

Comments: **THE FILE INDICATES THAT THE COMPANY DISPOSED OF OIL AND SOLVENTS BY POURING THEM ON THE GROUND ON THE PROPERTY. THE COM PANY MANUFACTURES METAL PARTS AND ASSEMBLES ELECTRONIC RELAYS.**
NPL Status: **Not on the NPL**
RCRIS Facility Indicator: **Not Reported**

Event	Date Started	Date Completed
DISCOVERY	Not Reported	1990-02-13
PRELIMINARY ASSESSMENT	1990-06-14	1990-12-13
SITE INSPECTION	1993-09-07	1994-07-20

RCRA TSD and Generators Data

Facility and Compliance Information

Map ID#: **2** Distance (mi): **0.048540** Direction: **NE**
Name: **AGRISEARCH LABORATORIES**
Address: **26 WATER ST**
EPA ID#: **MDD982571507**
City, State, Zip: **FREDERICK** **MD** **21701**
Status: **Small Quantity Generator**

SIC Code:
Land Type: **Unknown**
Contact Name: **WILLIAM SPARE**
Contact Phone: **301-662-2203**

RCRA Evaluation / Violation / Enforcement Data

No Compliance Information Reported

RAATS (RCRA Administrative Action Tracking System) Data

No RAATS Information Reported for this Site

RCRA Corrective Action Data (CORRACTS) Instrument and Event Data

No Corrective Action Instrument Information for this Site

Map ID#: **8** Distance (mi): **0.151665** Direction: **W**
Name: **GRIMMS AUTOMOTION INC**
Address: **126 S CARROLL ST**
EPA ID#: **MDD981104300**
City, State, Zip: **FREDERICK** **MD** **21701**
Status: **Small Quantity Generator**

SIC Code:
Land Type: **Unknown**
Contact Name: **DALE GRIMM**
Contact Phone: **301-694-6613**

RCRA Evaluation / Violation / Enforcement Data

No Compliance Information Reported

RAATS (RCRA Administrative Action Tracking System) Data

No RAATS Information Reported for this Site

RCRA Corrective Action Data (CORRACTS) Instrument and Event Data

No Corrective Action Instrument Information for this Site

Map ID#: **11** Distance (mi): **0.158560** Direction: **NE**
Name: **GRIFFITH-CONSUMERS COMPANY**
Address: **11 S WISNER STREET**
EPA ID#: **MDD095426607**
City, State, Zip: **FREDERICK** **MD** **21701**
Status: **Small Quantity Generator**

SIC Code:
Land Type: **Unknown**
Contact Name: **W.C. MEIGAN**
Contact Phone: **301-322-5100**

RCRA Evaluation / Violation / Enforcement Data

No Compliance Information Reported

RAATS (RCRA Administrative Action Tracking System) Data

RCRA Wastes and Waste Code Information previously reported by EcoSearch have been removed from the RCRIS database by the USEPA.

RCRA TSD and Generators Data

Facility and Compliance Information

No RAATS Information Reported for this Site

RCRA Corrective Action Data (CORRACTS) Instrument and Event Data

No Corrective Action Instrument Information for this Site

Map ID#: **12** Distance (mi): **0.159313** Direction: **NE**

Name: **SFA FREDERICK MANUFACTURING**
Address: **20 SOUTH WISNER ST**
City, State, Zip: **FREDERICK** **MD** **21701**

EPA ID#: **MDD985411214**
Status: **Small Quantity Generator**

Land Type: **Unknown**

SIC Code:
Contact Name: **TIMOTHY ENGLAR**
Contact Phone: **301-662-6811**

RCRA Evaluation / Violation / Enforcement Data

No Compliance Information Reported

RAATS (RCRA Administrative Action Tracking System) Data

No RAATS Information Reported for this Site

RCRA Corrective Action Data (CORRACTS) Instrument and Event Data

No Corrective Action Instrument Information for this Site

Map ID#: **15** Distance (mi): **0.232011** Direction: **WNW**

Name: **NEW ERA CUSTOM DESIGN**
Address: **103 E SOUTH ST**
City, State, Zip: **FREDERICK** **MD** **21701**

EPA ID#: **MDD982573560**
Status: **Small Quantity Generator**

Land Type: **Unknown**

SIC Code:
Contact Name: **JOHN GAGE**
Contact Phone: **301-695-4310**

RCRA Evaluation / Violation / Enforcement Data

No Compliance Information Reported

RAATS (RCRA Administrative Action Tracking System) Data

No RAATS Information Reported for this Site

RCRA Corrective Action Data (CORRACTS) Instrument and Event Data

No Corrective Action Instrument Information for this Site

RCRA Wastes and Waste Code Information previously reported by EcoSearch have been removed from the RCRIS database by the USEPA.

RCRA TSD and Generators Data

Facility and Compliance Information

Map ID#: **16A** Distance (mi): **0.233555** Direction: **WNW**

Name: **WOODSTOCK DESIGN INC**
Address: **101-B EAST SOUTH ST**
City, State, Zip: **FREDERICK** **MD** **21701**

EPA ID#: **MDD981939309**
Status: **Small Quantity Generator**

SIC Code:
Land Type: **Unknown**
Contact Name: **THOMAS WOODSTOCK**
Contact Phone: **301-694-0087**

RCRA Evaluation / Violation / Enforcement Data

EVALUATIONS

Eval. #:	19910318001	Agency:	State	Evaluation Date:	03/18/1991
Eval. #:	19910419002	Agency:	State	Evaluation Date:	04/19/1991
Eval. #:	19910828	Agency:	State	Evaluation Date:	08/28/1991

VIOLATIONS

Viol. #:	MDD981939309S0001	Violation Type:	Generator - Any Requirements	Actual Resolution Date:	08/28/1991
Viol. #:	MDD981939309S0002	Violation Type:	Generator - Any Requirements	Actual Resolution Date:	05/03/1991
Viol. #:	MDD981939309S0003	Violation Type:	Generator - Any Requirements	Actual Resolution Date:	08/28/1991
Viol. #:	MDD981939309S0004	Violation Type:	Generator - Any Requirements	Actual Resolution Date:	08/28/1991
Viol. #:	MDD981939309S0005	Violation Type:	Generator - Any Requirements	Actual Resolution Date:	08/28/1991
Viol. #:	MDD981939309S0006	Violation Type:	Generator - Any Requirements	Actual Resolution Date:	08/28/1991
Viol. #:	MDD981939309S0007	Violation Type:	Generator - Any Requirements	Actual Resolution Date:	08/28/1991
Viol. #:	MDD981939309S0008	Violation Type:	Generator - Any Requirements	Actual Resolution Date:	08/28/1991
Viol. #:	MDD981939309S0009	Violation Type:	Generator - Any Requirements	Actual Resolution Date:	08/28/1991

ENFORCEMENTS

Enf. #: **19910318001** Agency: **State** Type: **Written Informal** Date: **03/18/1991**

RAATS (RCRA Administrative Action Tracking System) Data

No RAATS Information Reported for this Site

RCRA Corrective Action Data (CORRACTS) Instrument and Event Data

No Corrective Action Instrument Information for this Site

Map ID#: **16B** Distance (mi): **0.233555** Direction: **WNW**

Name: **ALPHA DESIGN SIGNS**
Address: **101 E SOUTH ST**
City, State, Zip: **FREDERICK** **MD** **21701**

EPA ID#: **MDD985389584**
Status: **Small Quantity Generator**

SIC Code:
Land Type: **Unknown**
Contact Name: **LARRY STRUBE**
Contact Phone: **301-662-3363**

RCRA Evaluation / Violation / Enforcement Data

No Compliance Information Reported

RAATS (RCRA Administrative Action Tracking System) Data

No RAATS Information Reported for this Site

RCRA Corrective Action Data (CORRACTS) Instrument and Event Data

No Corrective Action Instrument Information for this Site

RCRA Wastes and Waste Code Information previously reported by EcoSearch have been removed from the RCRIS database by the USEPA.

RCRA TSD and Generators Data

Facility and Compliance Information

Map ID#: **17**
Distance (mi): **0.244064**
Direction: **NE**
EPA ID#: **MDD121342117**
Status: **Small Quantity Generator**

Name: **IEC-INNOVATIVE ELECTRONICS CORP**
Address: **406 SAGNER AVE**
City, State, Zip: **FREDERICK** **MD** **21701**

Land Type: **Private Land**

SIC Code:
Contact Name: **DIANE DAVIS**
Contact Phone: **301-694-9355**

RCRA Evaluation / Violation / Enforcement Data

No Compliance Information Reported

RAATS (RCRA Administrative Action Tracking System) Data

No RAATS Information Reported for this Site

RCRA Corrective Action Data (CORRACTS) Instrument and Event Data

No Corrective Action Instrument Information for this Site

RCRA Wastes and Waste Code Information previously reported by EcoSearch have been removed from the RCRIS database by the USEPA.

ERNS Data

Emergency Response Notification System Data

Map ID#: **6A** Distance (mi): **0.143569**
Direction: **NE**

ID #: **365143** Location: **CORNER OF B & O AVE. AND WISNER AVE.**
City, State, Zip: **FREDERICK, MD**

Time Released: **02/05/1994** **10:00** Deaths: **0** Injuries: **0** Evacuations: **0** Property Damage: **0.00**

Medium Affected: **Land**
Name of Affected Medium: **DRAINAGE DITCH**

Discharger Information (if reported):

Cause of Release: **Other Cause** **KUHN TRANSPORTATION**
Additional Cause: **Not Reported** **UNSPECIFIED**
UNSPECIFIED

Source: **Tractor Trailer**
Transportation Mode: **Highway Related**

Release Description: **SADDLE TANK ON TRACTOR TRAILER SADDLE TANK/TRACTOR TRAILER WAS PARKED ON A STEEP SLOPE WHICH CAUSED THE RELEASE**

Action Description: **FIRE DEPT. PLACED SORBENTS ALONG ROADSIDE. STATE IS RESPONDING AND NO ASSISTANCE REQUIRED.**

Misc. Information:

Material(s) Spilled:	Quantity	Units	Quan in Water	Units in Water	Pounds
OIL, FUEL: NO. 2-D	**30.00**	**GAL**	**10.00**	**GAL**	**222.00**

TRI Data

Toxic Release Inventory Data

Map ID#: 20 Distance: 0.299367
Direction: NNE

Agency ID: 21701HGHSD424EP
EPA ID#: NA
SIC Code: 2026

Name: HIGH'S DAIRIES INC.
Address: 424 E. PATRICK ST.
City, State, Zip: FREDERICK, MD 21701

Submission Year: 1987 Substance: PHOSPHORIC ACID
Maximum Amount On Site (lbs): 10,000 TO 99,999
Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
0.00	0.00	0.00	0.00	17,203.00	0.00	17,203.00

Submission Year: 1987 Substance: AMMONIA
Maximum Amount On Site (lbs): 10,000 TO 99,999
Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
1,600.00	0.00	0.00	0.00	0.00	0.00	1,600.00

Submission Year: 1987 Substance: SODIUM HYDROXIDE (SOLUTION)
Maximum Amount On Site (lbs): 10,000 TO 99,999
Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
0.00	0.00	0.00	0.00	48,670.00	0.00	48,670.00

Submission Year: 1988 Substance: AMMONIA
Maximum Amount On Site (lbs): 1,000 TO 9,999
Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
9,293.00	0.00	0.00	0.00	0.00	0.00	9,293.00

Submission Year: 1988 Substance: PHOSPHORIC ACID
Maximum Amount On Site (lbs): 100 TO 999
Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
33,393.00	0.00	0.00	0.00	0.00	0.00	33,393.00

Submission Year: 1988 Substance: SODIUM HYDROXIDE (SOLUTION)
Maximum Amount On Site (lbs): 1,000 TO 9,999
Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
66,836.00	0.00	0.00	0.00	0.00	0.00	66,836.00

Submission Year: 1989 Substance: AMMONIA
Maximum Amount On Site (lbs): 10,000 TO 99,999
Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
9,404.00	0.00	0.00	0.00	8,232.00	0.00	17,636.00

Submission Year: 1989 Substance: PHOSPHORIC ACID
Maximum Amount On Site (lbs):
Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
22,782.00	0.00	0.00	0.00	0.00	0.00	22,782.00

Submission Year: 1990 Substance: PHOSPHORIC ACID
Maximum Amount On Site (lbs): 1,000 TO 9,999
Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
0.00	0.00	0.00	0.00	0.00	0.00	0.00

TRI Data

Toxic Release Inventory Data

Submission Year: **1990** Substance: **AMMONIA**

Maximum Amount On Site (lbs): **10,000 TO 99,999**

Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
14,378.00	0.00	0.00	0.00	0.00	0.00	14,378.00

Submission Year: **1990** Substance: **CHLORINE**

Maximum Amount On Site (lbs): **1,000 TO 9,999**

Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
0.00	0.00	0.00	0.00	13,977.00	0.00	13,977.00

Submission Year: **1991** Substance: **PHOSPHORIC ACID**

Maximum Amount On Site (lbs): **1,000 TO 9,999**

Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
0.00	0.00	0.00	0.00	0.00	0.00	0.00

Submission Year: **1991** Substance: **AMMONIA**

Maximum Amount On Site (lbs): **10,000 TO 99,999**

Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
12,300.00	0.00	0.00	0.00	0.00	0.00	12,300.00

Submission Year: **1992** Substance: **CHLORINE**

Maximum Amount On Site (lbs): **100 TO 999**

Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
0.00	0.00	0.00	0.00	0.00	0.00	0.00

Submission Year: **1992** Substance: **PHOSPHORIC ACID**

Maximum Amount On Site (lbs): **1,000 TO 9,999**

Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
0.00	0.00	0.00	0.00	0.00	0.00	0.00

Submission Year: **1992** Substance: **AMMONIA**

Maximum Amount On Site (lbs): **10,000 TO 99,999**

Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
13,636.00	0.00	0.00	0.00	0.00	0.00	13,636.00

Submission Year: **1993** Substance: **PHOSPHORIC ACID**

Maximum Amount On Site (lbs): **1,000 TO 9,999**

Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
0.00	0.00	0.00	0.00	0.00	0.00	0.00

Submission Year: **1993** Substance: **AMMONIA**

Maximum Amount On Site (lbs): **10,000 TO 99,999**

Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
13,636.00	0.00	0.00	0.00	0.00	0.00	13,636.00

Submission Year: **1994** Substance: **PHOSPHORIC ACID**

Maximum Amount On Site (lbs): **1,000 TO 9,999**

Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
0.00	0.00	0.00	0.00	0.00	0.00	0.00

TRI Data

Toxic Release Inventory Data

Submission Year: **1994** Substance: **AMMONIA**

Maximum Amount On Site (lbs): **10,000 TO 99,999**

Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
15,303.00	0.00	0.00	0.00	0.00	0.00	15,303.00

Submission Year: **1995** Substance: **PHOSPHORIC ACID**

Maximum Amount On Site (lbs): **1,000 TO 9,999**

Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
0.00	0.00	0.00	0.00	0.00	0.00	0.00

Submission Year: **1996** Substance: **PHOSPHORIC ACID**

Maximum Amount On Site (lbs): **1,000 TO 9,999**

Amount Released or Transported (lbs):

Air	Water	Underground	Land	Pub. Owned Treatment	Offsite Transfer	Total
0.00	0.00	0.00	0.00	0.00	0.00	0.00

SSTS Data

Section Seven Tracking System Data (Pesticide Producers)

Map ID#: **24A** Distance (mi): **0.657367** Direction: **NE**

Name: **CLOROX COMPANY**
Address: **605 E CHURCH ST**
City, State, Zip: **FREDERICK, MD 21701**

Agency ID Code: **005813MD 001**

Year Reported	Pesticide Product Name
1989	FRESH SCENT CLOROX
1989	CLOROX BLEACH
1990	CLOROX LIQUID BLEACH
1990	CLOROX FRESH SCENT & CLOROX LEMON FRESH
1991	CLOROX LIQUID BLEACH
1991	CLOROX FRESH SCENT
1992	CLOROX FRESH SCENT
1992	CLOROX LIQUID BLEACH

DOCKET Data

Civil Enforcement Docket

Map ID#: 22 Distance (mi): 0.570342
Direction: W

Docket Number: 03-92-0418A Case Name: FREDERICK, HOUSING AUTHORITY O Date Filed: 09/30/92
Federal Penalty Assessed: $24,000 Date Concluded: 06/30/93
Cost Recovery Charged: Case Result:

Law Reported Violated	Section	Violation Type	Pollutant Type
Clean Air Act	113D		

Subject Facilities / EPA ID# / Address / City, State, and Zip

MDD985417385 / FREDERICKS HOUSING AUTHORITY O / 209 MADISON ST / FREDERICKS, MD 21701

Subject Defendant(s)

ENVIRONMENTAL CONTROL & ABATEMENT, INC.
FREDERICK, HOUSING AUTHORITY OF

TSCA Data

Toxic Substances Control Act Sites Data

Map ID#:	24B	Distance (mi):	0.657367	Name:	THE CLOROX COMPANY
		Direction:	NE	Address:	P.O. BOX 522
Agency ID:	007052G			City, State, Zip:	FREDERICK, MD 21701

Additional Remarks: **Not Reported**

CAS Number	Production Volume per Year	Reported Chemical Name
7681-52-9	Not Reported	Hypochlorous acid, sodium salt

Maryland SML Data

Maryland State Master List Data

Map ID#:	21B	Distance (mi):	0.39871		
		Direction:	N	Name:	FREDERICK TOWN GAS
				Address:	350 CHURCH ST
Agency ID:	MD #164			City, State, Zip:	FREDERICK, MD 21701
				County:	FREDERICK
				Alias:	NONE
Type of Site:	No Further Remedial Action Planned				

Maryland SWF Data

Maryland Solid Waste Facilities Data

Map ID#: **19** Distance (mi): **0.26012**

Direction: **SE** Name: **MEDERI MED**

County: **FREDERICK**

Permit Number: **1994WOF00900**

Type of Site: **Special Medical Waste Processing Facility**

Owner: **Private (Commercial)**

Permit Expiration Date: **11/03/99**

Comments: **SPECIAL MEDICAL WASTE**

Maryland LUST Data

Maryland Leaking Underground Storage Tank Data

Map ID#:	4	Distance (mi):	0.09562	Name:	FARMER CO-OP
		Direction:	E	Address:	WISNER ST & SOUTH ST
Agency ID:	94-3055FR			City, State, Zip:	City Not Reported, MD
				County:	FREDERICK
Recovery:	AUTOMATIC				
Closure Status:	OPEN				

Map ID#:	14A	Distance (mi):	0.17634	Name:	J.H.G. CONTRACTORS
		Direction:	E	Address:	519 EAST SOUTH STREET
Agency ID:	95-0122FR			City, State, Zip:	City Not Reported, MD
				County:	FREDERICK
Recovery:	MONITORING				
Closure Status:	OPEN				

Maryland UST Data

Maryland Registered Underground Storage Tank Data

Map ID#: 1 Distance (mi): 0.04697
Direction: ENE
Agency ID: 6006076
Name: FREDERICK PETROLEUM CORP
Address: 200 E SOUTH ST
City, State, Zip: FREDERICK, MD 21701

TankID#	Tank Status	Substance	Capacity (gal)	Age
1	Removed	GASOLINE/G	1,000.00	16.00
2	Removed		1,000.00	16.00
3	Removed	HEATING OIL	1,000.00	16.00
4	Removed	GASOLINE/G	1,000.00	16.00

Map ID#: 3 Distance (mi): 0.08400
Direction: N
Agency ID: 3006425
Name: E/W & GRIFFITH
Address: 5 COMMERCE
City, State, Zip: FREDERICK, MD 21701

TankID#	Tank Status	Substance	Capacity (gal)	Age
1	Removed	GASOLINE/G	550.00	11.00
2	Removed	DIESEL	550.00	11.00

Map ID#: 5 Distance (mi): 0.12208
Direction: E
Agency ID: 3006416
Name: FREDERICK SOC (38447)
Address: 450 E SOUTH ST
City, State, Zip: FREDERICK, MD 21701

TankID#	Tank Status	Substance	Capacity (gal)	Age
1	Removed	GASOLINE/G	10,000.00	20.00
2	Removed	USED OIL	1,000.00	20.00
3	Current	USED OIL	1,000.00	3.00

Map ID#: 6B Distance (mi): 0.14357
Direction: NE
Agency ID: 3006619
Name: PHOENIX INC
Address: 167 B&O AVE & WISHER ST
City, State, Zip: FREDERICK, MD 21701

TankID#	Tank Status	Substance	Capacity (gal)	Age
1	Removed	HEATING OIL	30,000.00	25.00
2	Removed	GASOLINE/G	18,000.00	25.00
3	Removed	GASOLINE/G	18,000.00	25.00
4	Removed	GASOLINE/G	18,000.00	25.00
5	Removed	DIESEL	18,000.00	25.00
6	Removed	OTHER	4,000.00	12.00
7	Removed	OTHER	4,000.00	12.00
8	Removed	OTHER	4,000.00	12.00
9	Removed	HEATING OIL	550.00	0.00
10	Removed	OTHER	550.00	0.00
11	Removed	OTHER	550.00	0.00
12	Removed	OTHER	550.00	0.00

Maryland UST Data

Maryland Registered Underground Storage Tank Data

Map ID#: 7 Distance (mi): 0.14555
Direction: NE
Agency ID: 3006540
Name: WILLARD CHEMICAL CO INC
Address: 50 S WISHER ST
City, State, Zip: FREDERICK, MD 21701

TankID#	Tank Status	Substance	Capacity (gal)	Age
1	Current	OTHER	30,000.00	20.00

Map ID#: 9 Distance (mi): 0.15403
Direction: E
Agency ID: 3006648
Name: SOUTHERN STATES FRED. CORP INC
Address: E SOUTH ST
City, State, Zip: FREDERICK, MD 21701

TankID#	Tank Status	Substance	Capacity (gal)	Age
1	Removed	GASOLINE/G	550.00	27.00
2	Removed	GASOLINE/G	1,000.00	27.00

Map ID#: 10 Distance (mi): 0.15782
Direction: NE
Agency ID: 3013307
Name: MCCUTCHEON APPLE PRODUCTS INC
Address: 13 S WISNER
City, State, Zip: FREDERICK, MD 21701

TankID#	Tank Status	Substance	Capacity (gal)	Age
1	Removed	HEATING OIL	0.00	0.00
2	Removed	HEATING OIL	0.00	0.00
3	Removed	HEATING OIL	0.00	0.00
4	Removed	DIESEL	0.00	0.00
5	Removed	GASOLINE/G	0.00	0.00
6	Permanently Out of Service	GASOLINE/G	500.00	0.00
7	Permanently Out of Service	GASOLINE/G	500.00	0.00

Map ID#: 13 Distance (mi): 0.17512
Direction: NNE
Agency ID: 3006709
Name: GENE ROMSBURG ENT. INC
Address: PO BOX 10, 27 WATER ST
City, State, Zip: FREDERICK, MD 21701

TankID#	Tank Status	Substance	Capacity (gal)	Age
1	Removed	DIESEL	10,000.00	22.00
2	Removed	DIESEL	4,000.00	22.00
3	Removed	DIESEL	4,000.00	22.00

Map ID#: 14B Distance (mi): 0.17634
Direction: E
Agency ID: 3006708
Name: FAMILY BRAND GAS STATION
Address: 519 E SOUTH ST
City, State, Zip: FREDERICK, MD 21701

TankID#	Tank Status	Substance	Capacity (gal)	Age
1	Removed	DIESEL	2,000.00	24.00
2	Removed	GASOLINE/G	4,000.00	24.00
3	Removed	GASOLINE/G	4,000.00	24.00
4	Removed	GASOLINE/G	4,000.00	24.00
5	Removed	KEROSENE	1,000.00	0.00

Maryland UST Data

Maryland Registered Underground Storage Tank Data

6	Removed	HEATING OIL	20,000.00	0.00
7	Removed	HEATING OIL	20,000.00	0.00
8	Removed	HEATING OIL	20,000.00	0.00
9	Removed	HEATING OIL	20,000.00	0.00
10	Removed	HEATING OIL	20,000.00	0.00

Map ID#: **18**
Distance (mi): **0.24447**
Direction: **WSW**
Agency ID: **3006578**
Name: **MARYLAND SCHOOL FOR THE DEAF**
Address: **101 CLARKE PLACE**
City, State, Zip: **FREDERICK, MD 21701**

TankID#	Tank Status	Substance	Capacity (gal)	Age
1	Current	USED OIL	10,000.00	35.00
2	Current		10,000.00	35.00
3	Current	GASOLINE/G	500.00	24.00
4	Current	GASOLINE/G	1,000.00	31.00
5	Current		11,000.00	23.00
6	Current		11,000.00	23.00
7	Current	USED OIL	550.00	20.00

Unmappable Sites

A limitation of many records of governmental databases is incomplete or incorrect address information. Without proper addresses, it is more difficult to locate and map these sites.

Instead of leaving these potentially important sites out of the manually geocoded EcoSearch report, we implement a painstaking manual geocoding strategy aimed at plotting these unmappable sites by looking at zip codes, city names, and county names identified with the radius around your study site. The zip codes, cities, and counties searched are identified on the EcoSearch Statistical Overview page.

Our sophisticated mapping software, enhanced TIGER street maps, and address correction database processing methods find and plot most environmental sites. We then perform manual geocoding, plotting those sites the computer fails to find using a variety of resources. These include using our in-house collection of paper maps, directories, cross-referencing database information, and calling post offices, local government, or the sites themselves to accurately locate environmental records. We also correct obvious TIGER street map errors and omissions.

This effort at manual geocoding results in a short or non-existant orphan/unmappable list and increases accuracy and reliability of the data in our reports. The EcoSearch Instant Online and Preview reports take advantage of all previous geocoding work that has been done providing the highest quality report virtually instantaneously. The potential remains that an order can be placed in an area which has not been worked, thus resulting in more unmappables than typically associated with an EcoSearch report.

The limited number of sites which could not be reasonably found through our geocoding strategy are presented in this section for further review to assess their impact on your study site.

After the summary unmappable site information, the detailed data follows.

Unmappable Sites

Database	Agency ID#	Site Name and Address	County
LUST Maryland Leaking Underground Storage Tank	9-0303FR	CHICKEN MAN EAST PATRICK ST. FREDERICK, MD	FREDERICK
UST Maryland Underground Storage Tank	3006681	TEMPERATURE SERVICE FREDERICK TOWN FREDERICK, MD 21701	FREDERICK

Maryland LUST Data

Maryland Leaking Underground Storage Tank Data

Map ID#:	1UN	Distance (mi):	0.00000	Name:	CHICKEN MAN
		Direction:		Address:	EAST PATRICK ST.
Agency ID:	9-0303FR			City, State, Zip:	FREDERICK, MD
				County:	FREDERICK
Recovery:	AUTOMATIC				
Closure Status:	OPEN				

Maryland UST Data

Maryland Registered Underground Storage Tank Data

Map ID#: **2UN** Distance (mi): **0.00000**
Direction:

Agency ID: **3006681**
Name: **TEMPERATURE SERVICE**
Address: **FREDERICK TOWN**
City, State, Zip: **FREDERICK, MD 21701**

TankID#	Tank Status	Substance	Capacity (gal)	Age
1	Current	HEATING OIL	0.00	0.00

Environmental Glossary

Acid

A large class of substances having a pH less than seven. An acid waste is considered hazardous when the pH is 2.0 or less.

Acute Effect

An adverse effect on a human or animal body, with severe symptoms developing rapidly and coming quickly to a crisis.

Acute Exposure

A dose that is delivered to the body in a single event or in a short period of time.

Aerobic

Occurring in the presence of free oxygen.

Alkaline

A substance with a pH between 7 and 14. An alkaline waste is considered hazardous when its pH is 12.5 or greater.

Ambient

Existing conditins of air, water, and other media at a particular time.

Anaerobic

Occurring in the absence of oxygen.

Assessment

An analysis or examination.

Background Environmental Sample

Samples that are considered to contain no contaminants or known concentrations of contaminants.

Base

A substance which forms a salt when reacted with an acid. Bases have a pH of greater than seven.

Buffer Zone

An area of land which surrounds a hazardous waste facility and on which certain land uses and activities are restricted to protect the public health and safety and the environment from existing or potential hazards caused by the migration of hazardous waste (CH&SC Sec. 25110.3).

Carcinogen

A substance or agent capable of causing or producing cancer in mammals.

Caustics

A large class of substances which form solutions having a high pH.

Chronic Effect

An adverse effect on a human or animal body, with symptoms which develop slowly over a long period of time or which reoccur frequently.

Chronic Exposure

Low doses repeatedly received by the body over a long period of time.

Combustible

A term used by the NFPA, DOT, and others to classify certain liquids that will burn, on the basis of flash points. Both the NFPA and DOT generally define "combustible liquids" as having a flash point of 100° F or higher.

Concentration

The relative amount of a substance when combined or mixed with other substances.

Contingency Plan

A document setting out an organized, planned, and coordinated course of action to be followed in case of a fire or explosion or release of a hazardous waste from a TSD or a generator's facility that could threaten human health or the environment (RCRA).

Corrosive

As defined by DOT, a corrosive material is a liquid or solid that causes visible destruction or irreversible alterations in human skin tissue at the site of contact or in the case of leakage from its packaging a liquid that has a severe corrosion rate on steel. A solid or liquid which exhibits these characteristics can be regulated as hazardous waste.

Decomposition

Breakdown of material or substance (by heat, chemical reaction, electrolysis, decay, or other processes) into elements or simpler compounds.

Decontamination

The process of removing contaminants from individuals and equipment.

Deep Well Injection

Disposal of wastes by injecting them into a geological formation deep in the ground, sometimes after pretreatment to avoid solidification.

EPA ID Number

This unique number assigned by EPA to each generator, transporter, or TSD.

Effluent

Waste material, either treated or untreated, discharged into the environment.

Environmental Assessment

The measurement or prediction of the transport, dispersion, and final location of a hazardous substance when released into the environment.

Environmental Emergencies

Incidents involving the release (or potential release) of hazardous materials into the environment which require immediate remedial action.

Environmental Hazard

A condition capable of posing risk of exposure to air, water, soil, plants, or wildlife.

Exception Report

A report that generators who transport waste off-site must submit if they do not receive a properly completed copy of their manifest within 45 days of the date on which the initial transporter accepted the waste.

Generator

The person or facility who, by nature or ownership, management or control, is responsible for causing or allowing to be caused, the creation of hazardous waste.

Glovebag

A device used to remove a section of pipe insulation without isolating the entire space or room.

Groundwater Hydrology

The study of the movement of water below the earth's surface.

Hazard

A circumstance or condition that can cause harm. Hazards are often categorized into four groups: biological, chemical, physical, and radiation.

Hazard Classes

A series of nine descriptive terms that have been established by the UN Committee of Experts to categorize the hazardous nature of chemical, physical, and biological materials. These categories are: flammable liquids, explosives, gases, oxidizers, radioactive materials, corrosives, flammable solids, poisonous and infectious substances, and dangerous substances.

Hazardous Waste

Any material that is subject to the hazardous waste manifest requirements of the EPA specified in the CFR, Title 40, Part 262 or would be subject to these requirements in the absence of an interim authorization to a State under CFR, Title 40, Part 123, Subpart F.

Heavy Metals

Certain metallic elements having a high density and generally toxic, e.g., lead, silver, mercury, and arsenic.

Immediate Removal

Actions undertaken to prevent or mitigate immediate and significant risk of harm to human life or health or the environment. As set forth in the National Contingency Plan, these actions shall be terminated after $1 million has been obligated or six months have elapsed from the date of initial response.

Incident

The release or potential release of a hazardous substance into the environment.

Inert

Exhibiting no chemical activity; totally unreactive.

Innocent Land Owner's Defense

The defense of a purchaser of real property that he or she exercised due diligence in having hazards assessed prior to purchase.

Interim Status

Allows owners and operators of TSDs that were in existence, or for which construction had commenced, prior to November 19, 1980 to continue to operate without a permit after this date pending final issuance from RCRA.

Joint and Several Liability

Under federal law each party that contributed to damages may be held liable for all damages, but each has the right to compel the others to contribute and indemnify.

Liability

Being subject to legal action for one's behavior.

MSDS Material Safety Data Sheet

Required by OSHA of owners to alert employees to hazards, their effect, and protective action.

Manifest

Form which indicates generator, quantity, and type of waste for each shipment of hazardous wastes disposed in off-site facilities.

National Contingency Plan

Policies and procedures that the Federal Government follows in implementing responses to incidents involving hazardous substances.

P Wastes

A federal waste list comprised of substances categorized as acutely hazardous.

Part A

The first part of a two part application that must be submitted by a TSD to receive a permit. It contains general facility information.

Part B

The second part of a two part application that must be submitted by a TSD to receive a permit. It contains highly technical and detailed information.

Planned Removal

The removal of released hazardous substances from the environment within a non-immediate, long term time period. Under CERCLA: Actions intended to minimize increases in exposure such that time and cost commitments are limited to six months and/or $1 million.

Poison, Class A

A DOT term for extremely dangerous poisons, that is, poisonous gases or liquids of such nature that a very small amount of the gas, or vapor of the liquid, mixed with air is dangerous to life. Some examples: phosgene, cyanogen, and hydrocyanic acid.

Poison, Class B

A DOT term for liquid, solid, paste, or semisolid substances, other than Class A poisons, which are known to be toxic to man as to afford a hazard to health during transportation.

Pollutant

A substance or mixture which after release into the environment and upon exposure to any organisms will or may reasonably be anticipated to cause adverse effects in such organisms and their offspring.

Priority Pollutants

A list of chemicals selected from the list of toxic pollutants by the EPA as priority toxic pollutants for regulation under the Clean Water Act.

Remedial Actions

Responses to releases of hazardous substances on the NPL that are consistent with a permanent remedy which would prevent or mitigate the migration of materials into the environment.

Risk

The probability that an unwanted event will occur.

Second Responders

Those personnel required to assist or relieve first responders at a hazardous material incident due to their specialized knowledge, equipment, or experience. These include State environmental protection or health officials, commercial response, cleanup companies, and appropriate industry representatives.

Strict Liability

Holds a party responsible for damages irrespective of the amount of care taken in handling a hazardous substance.

Subtitle C

The part of RCRA which pertains to the management of hazardous waste.

Subtitle I

The part of RCRA which pertains to the storage of petroleum products and hazardous substances, other than wastes, in USTs.

Superfund

See CERCLA.

Synergistic

The action of two materials together which is greater in effect than the sum of the individuals actions.

TIGER Files

The US Census Bureau's TIGER files provide a nationwide computerized map with address range information.

Tort

A legal wrong, sometimes referred to as negligence.

Toxicity

The ability of a substance to produce injury by non-mechanical means once it reaches a susceptible site in or on the body.

U Wastes

A federal list of hazardous wastes which consists of substances deemed to be hazardous for hazards other than acute hazards.

-- Adapted from Lincoln Graduate Center, 1993. Real Estate Environmental Screening. San Antonio, Texa

Acronyms and Abbreviations

-AIRS	Aerometric Information Retrieval System
-AST	Aboveground Storage Tank
-ASTM	American Society for Testing and Materials
-BLM	Bureau of Land Management
-BNA	Bureau of National Affairs
-CAA	Clean Air Act
-CDC	Centers for Disease Control
-CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
-CERCLIS	CERCLA Information System
-CICIS	Chemicals in Commerce Information System
-COE	U.S. Army Corps of Engineers
-CWA	Clean Water Act
-DDT	Dicholoro-diphenyl-dichloroethane
-DOC	Department of Commerce
-DOCKET	Enforcement Docket System--Office of Enforcement and Compliance Monitoring
-DOE	Department of Energy
-DOT	Department of Transportation
-EPA	Environmental Protection Agency
-ERCS	Emergency Response Cleanup Services
-ERNS	Emergency Response Notification System
-ESA	Environmental Site Assessment
-FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
-FINDS	Facility Index System
-FOIA	Freedom of Information Act
-FWPCA	Federal Water Pollution Control Act
-HHS	Department of Health and Human Services
-HSWA	Hazardous and Solid Waste Amendments of 1984
-HUD	Department of Housing and Urban Development
-LUST	Leaking Underground Storage Tank
-MSDS	Material Safety Data Sheet
-NEPA	National Environment Policy Act
-NESHAP	National Emission Standards for Hazardous Air Pollutants
-NFRAP	No Further Remedial Action Planned (Delisted CERCLA Site)
-NOI	Notice of Intent
-NOV	Notice of Violation
-NPDES	National Pollution Discharge Elimination System
-NPL	National Priorities List
-NRC	Nuclear Regulatory Commission
-NRIS	Nuclear Regulatory Information System
-OSHA	Occupational Safety and Health Administration
-PADS	PCB Activity Database System

Acronyms and Abbreviations

-PCB	Polychlorinated Biphenyls
-POTW	Publicly-Owned Treatment Works
-PPM	Parts Per Million
-PRP	Potentially Responsible Parties
-RAATS	RCRA Administrative Action Tracking System
-RCRA	Resource Conservation and Recovery Act of 1976
-RCRIS	Resource Conservation and Recovery Information System
-RFA	RCRA Facility Assessment
-RFI	RCRA Facility Investigation
-RI	Remedial Investigation (CERCLA)
-SARA	Superfund Amendments and Reauthorization Act of 1986
-SCS	Soil Conservation Service
-SDWA	Safe Drinking Water Act
-SETS	Superfund Enforcement Tracking System
-SSTS	Section Seven Tracking System
-SWF/LF	Solid Waste Facilities / Landfills
-TIGER	Topologically Integrated Geographic Encoding and Referencing System
-TRI	Toxic Release Inventory
-TSCA	Toxic Substances Control Act
-TSD	Treatment, Storage, or Disposal Facility
-USDA	U.S. Department of Agriculture
-USGS	U.S. Geological Survey
-UST	Underground Storage Tank
-WWTP	Wastewater Treatment Plant

APPENDIX H. Boring Logs and Monitoring Well Completion Forms

BAY ENVIRONMENTAL CORPORATION
132 East Main Street, Suite 400, Salisbury, MD 21801
Phone (410) 219-5600 : Fax (410) 219-5700

LOG OF BORING: FBW-1

Date drilled: 11-23-98
Driller: Eichelbergers, Inc., Mechanicsburg, PA
Drilling Equipment: Ingersall-Rand T2W Air Rotary Rig
Weather: sunny, 55-65 deg.
On-site geologist: C.Stone
Well tag: N/A

Fill
Limestone
Cement Grout w/Hole Plug
Cement Grout

Depth (feet bgs)	Rock/Soil Description	PID Tests
0-5	Fill: red-brown fill and dirt with rock fragments and roots; dry	(a)
5-10	Fill: brown fill and dirt with brick, quartz and limestone fragments; dry	(a)
10-15	Fill: light tan silty fill and dirt with iron-stained limestone fragments; dry	(a)
15-20	Fill: reddish-brown and tan silty fill and dirt with limestone fragment dry	(a)
20-26	Fill: as above; dry	(a)
26-30	Limestone: dark gray to black; massive; consolidated; dry	(a)
30-35	Limestone: as above; dry	(a)
35-40	Limestone: as above; dry	(a)
40-45	Limestone: as above; dry	(a)
45-50	Limestone: as above; dry	(a)
50-55	Limestone: as above; dry	(a)
55-60	Limestone: as above; dry	(a)
60-100	Limestone: as above; dry	(a)
100-105	Limestone: as above; dry	(a)
105-110	Limestone: as above; dry	(a)
110-115	Limestone: as above; dry	(a)
115-120	Limestone: as above; dry	(a)
	Total Depth = 120 feet	

Lithologic and Well Completion Log

(a) PID readings did not exceed background.
(b) Hole produced no water, was abandoned by grouting from bottom to top with 17 bags of cement/bentonite slurry. Seven bags of Hole Plug were added to slurry in the top 50 feet.

BAY ENVIRONMENTAL CORPORATION

132 East Main Street, Suite 400, Salisbury, MD 21801
Phone (410) 219-5600 : Fax (410) 219-5700

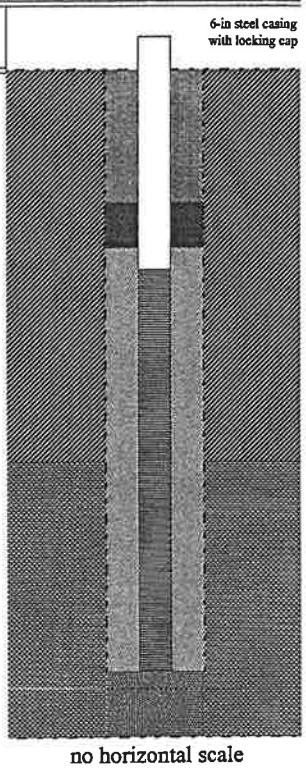
LOG OF BORING: FBW-2

Date drilled: 11-23-98
Driller: Eichelbergers, Inc., Mechanicsburg, PA
Drilling Equipment: Ingersall-Rand T2W Air Rotary Rig
Weather: sunny, 55-65 deg.
On-site geologist: C.Stone
Well tag: FR-94-1171

Fill
Limestone
Cement Grout
Bentonite Plug
Clean Sand
2" dia PVC Casing
0.2" Slot PVC Screen

Depth (feet bgs)	Rock/Soil Description	PID Tests
0-5	Fill: large black limestone fragments with calcite-filled fractures, roots, and dirt; dry	(a)
5-10	Fill: dark brown fill and dirt with limestone fragments, small roots, and bits of decomposed brick; dry	(a)
10-15	Fill: as above, with large pebble-sized limestone fragments; dry	(a)
15-20	Fill: as above; dry	(a)
20-25	Fill: dark brown clayey fill and dirt with orange clay balls (probably decomposed brick); moist	
25-29	Fill: dark brown clayey fill and dirt with orange clay balls (probably decomposed brick); moist	(a)
29-35	Limestone: dark gray to black with trace of calcite; consolidated; dry	(a)
35-40	Limestone: as above; dry	(a)
40-45	Limestone: dark gray to black, weathered to more clayey texture, with iron stains; moist	(a)
45-50	Limestone, dark gray to black with probably thin reddish tan interbeds of sandy shale; wet	(a)
	Total Depth = 50 feet	

Lithologic and Well Completion Log



no horizontal scale

(a) PID readings did not exceed background.

BAY ENVIRONMENTAL CORPORATION

132 East Main Street, Suite 400, Salisbury, MD 21801
Phone (410) 219-5600 : Fax (410) 219-5700

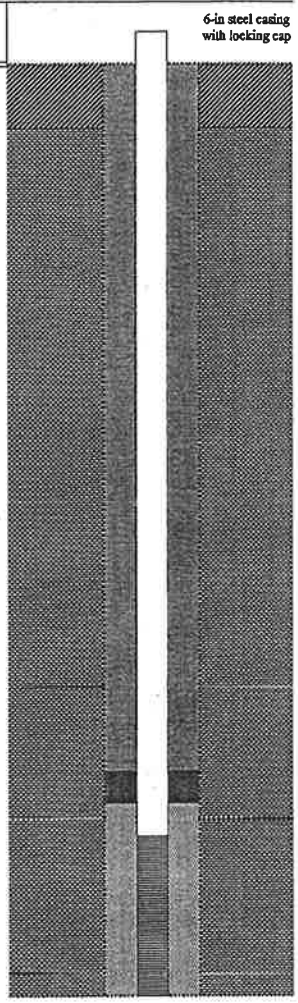
LOG OF BORING: FBW-3

Date drilled: 11-24-98
Driller: Eichelbergers, Inc., Mechanicsburg, PA
Drilling Equipment: Ingersall-Rand T2W Air Rotary Rig
Weather: sunny, 55-65 deg.
On-site geologist: C.Stone
Well tag: FR-94-1169

Fill
Limestone
Cement Grout
Bentonite Plug
Clean Sand
2" dia PVC Casing
0.2" Slot PVC Screen

Depth (feet bgs)	Rock/Soil Description	PID Tests
0-5	Fill: decomposed and clayey brick fragments and bits of stone; damp	(a)
5-10	Limestone: dark gray to black, weathered with trace iron stains; structure appears massive; dry	(a)
10-15	Limestone: as above; dry	(a)
15-20	Limestone: dark gray to black, with calcite-filled fractures; structure somewhat platy; dry	(a)
20-25	Limestone: as above; dry	(a)
25-30	Limestone: as above; dry	(a)
30-35	Limestone: as above; dry	(a)
35-40	Limestone: as above, except calcite more abundant; dry	(a)
40-45	Limestone: as above, except calcite more abundant; dry	(a)
45-50	Limestone: as above, except calcite more abundant; dry	(a)
50-55	Limestone: dary gray to black, less calcite, trace iron stains on fracture surfaces; massive concoidal structure; dry	(a)
55-60	Limestone: as above; dry	(a)
60-65	Limestone: as above; dry	(a)
65-70	Limestone: as above except larger calcite facture fillings; saturated	(a)
70-71	Limestone: as above except larger calcite facture fillings; saturated	
	Total Depth = 71 feet	

Lithologic and Well Completion Log



no horizontal scale

(a) PID readings did not exceed background.

C 1 | - 8056 | SEQUENCE NO. (MDE USE ONLY)

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT

FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER

ST/CO USE ONLY
DATE Received

DATE WELL COMPLETED: 11 23 98

Depth of Well: 120 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": FR-94-1170

OWNER FREDERICK BRICK WORKS (last name / first name)

STREET OR RFD 184 EAST SOUTH STREET TOWN FREDERICK

SUBDIVISION SECTION LOT

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Fill + OVB	0	14	
Weathered LS	14	26	
Blue LS	26	120	
Dry Hole			
Abandoned			

NUMBER OF UNSUCCESSFUL WELLS: 1

WELL HYDROFRACTURED: yes [Y] no [N]

CIRCLE APPROPRIATE LETTER
- A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E ELECTRIC LOG OBTAINED
- P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

TYPE: MWD/MSD/MGD

DRILLERS LIC. NO. MWD 332

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. JWD-315

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): yes [Y] no [N]

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT [CM] BENTONITE CLAY [BC]

NO. OF BAGS 17 NO. OF POUNDS 700

GALLONS OF WATER 111

DEPTH OF GROUT SEAL (to nearest foot)

from 0 ft. to 120 ft.
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

[ST] STEEL [CO] CONCRETE [PL] PLASTIC [OT] OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole insert appropriate code below

[ST] STEEL [BR] BRASS BRONZE [HO] OPEN HOLE [PL] PLASTIC [OT] OTHER

C 2

EACH SCREEN	DEPTH (nearest ft.)
1	
2	
3	

SLOT SIZE 1 ____ 2 ____ 3 ____

DIAMETER OF SCREEN ____ (NEAREST INCH)

GRAVEL PACK from ____ to ____

IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T ____ (E.R.O.S.) ____ W Q ____

TELESCOPE CASING | LOG INDICATOR | OTHER DATA

C 3

PUMPING TEST
HOURS PUMPED (nearest hour)

PUMPING RATE (gal. per min.)

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING ____ ft.

WHEN PUMPING ____ ft.

TYPE OF PUMP USED (for test)

[A] air [P] piston [T] turbine [C] centrifugal [R] rotary [O] other (describe below) [J] jet [S] submersible

PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29.

CAPACITY: GALLONS PER MINUTE (to nearest gallon)

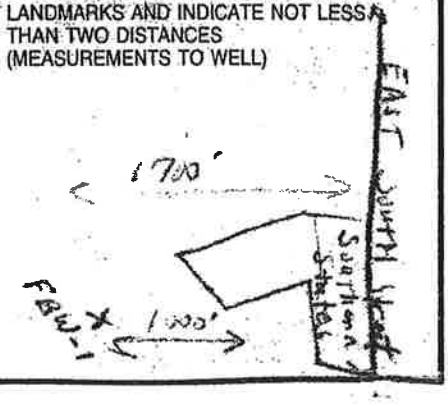
PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)

[+] above [−] below LAND SURFACE (nearest foot)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION
2500 BROENING HIGHWAY, BALTIMORE, MARYLAND 21224, (410) 631-3784

****

WATER WELL ABANDONMENT-SEALING REPORT FORM

****

SUBMIT COPIES OF COMPLETED FORM TO:

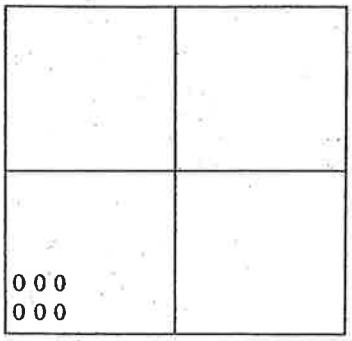
* COUNTY ENVIRONMENT AGENCY (contact MDE, WMA if address needed)
* WELL OWNER
* MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: 11-24-98 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any): FR-94-1170
* PERMIT NUMBER OF REPLACEMENT WELL:
* PERSON ABANDONING WELL: Charles Eichelberger WELL DRILLERS LICENSE NUMBER: 332
  CIRCLE (MWD)/MSD/MGD
* OWNER'S NAME: FREDERICK BRICK WORK
* WELL LOCATION:

COUNTY: FREDERICK
NEAREST TOWN: FREDERICK
TAX MAP 418 BLOCK _____ PARCEL 962
SUBDIVISION: _____
SECTION: _____ LOT: _____

MARYLAND GRID COORDINATES
BOX NUMBER E 686 N 573 <———



SHOW WELL LOCATION BY X WITHIN BOX

* TYPE OF WELL BEING ABANDONED:

X DRILLED _____ JETTED
_____ BORED/AUGUERED _____ HAND DUG
_____ OTHER (specify) _____

* USE CODE:

_____ DOMESTIC _____ MUNICIPAL/PUBLIC
_____ IRRIGATION _____ INDUSTRIAL
X TEST/OBSERVATION

* TYPE OF CASING:

X STEEL _____ PLASTIC
_____ CONCRETE _____ OTHER (specify)
_____

* SIZE OF CASING: 6 INCHES IN DIAMETER
* DEPTH OF WELL: 120 FEET DEEP
* WAS ANY CASING REMOVED? X YES _____ NO
  if yes, length removed, in feet: 6 ft
* WAS CASING RIPPED OR PERFORATED? ___ YES X NO

LOG OF SEALING MATERIAL

MATERIAL	FEET FROM	FEET TO
Cement grout	0	120

[signature] 332 (MWD)/MSD/MGD
SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN — LICENSE # — CIRCLE ONE — DATE

DENV 828 JULY 1993

3) WELL OWNER

C 1 | 8057 | SEQUENCE NO. (MDE USE ONLY)

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER

ST/CO USE ONLY
DATE Received

DATE WELL COMPLETED: 11/23/98

Depth of Well: 47 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": FR-94-1171

OWNER: FREDERICK BRICK WORKS

STREET OR RFD: 189 EAST SOUTH Street TOWN: FREDERICK

SUBDIVISION: SECTION: LOT:

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Fill Ash, Clay	0	29	
LS	29	47	

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED: yes [Y] no (N)

CIRCLE APPROPRIATE LETTER
- A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E ELECTRIC LOG OBTAINED
- P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

TYPE: MWD/MSD/MGD

DRILLERS LIC. NO. MWD 332

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. JWD-315

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): yes (Y) no (N)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT (CM) BENTONITE CLAY [BC]

NO. OF BAGS 2 NO. OF POUNDS 200

GALLONS OF WATER 13

DEPTH OF GROUT SEAL (to nearest foot)

from [02] ft. to [11] ft. (enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

[ST] STEEL [CO] CONCRETE [PL] PLASTIC [OT] OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL	02	15

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole insert appropriate code below

[ST] STEEL [BR] BRASS BRONZE [HO] OPEN HOLE [PL] PLASTIC [OT] OTHER

C 2

EACH SCREEN		DEPTH (nearest ft.)	
1	PL	15	25
2	PL	25	35
3	PL	35	45

SLOT SIZE 1 0 2 2 3 0

DIAMETER OF SCREEN: 02 (NEAREST INCH)

GRAVEL PACK: from 13 to 47

IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T [ ] (E.R.O.S.) [ ] W Q [ ]

TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3

PUMPING TEST
HOURS PUMPED (nearest hour)

PUMPING RATE (gal. per min.)

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING ft.

WHEN PUMPING ft.

TYPE OF PUMP USED (for test)

[A] air [P] piston [T] turbine

[C] centrifugal [R] rotary [O] other (describe below)

[J] jet [S] submersible

PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO): YES (NO)

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29.

CAPACITY: GALLONS PER MINUTE (to nearest gallon)

PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

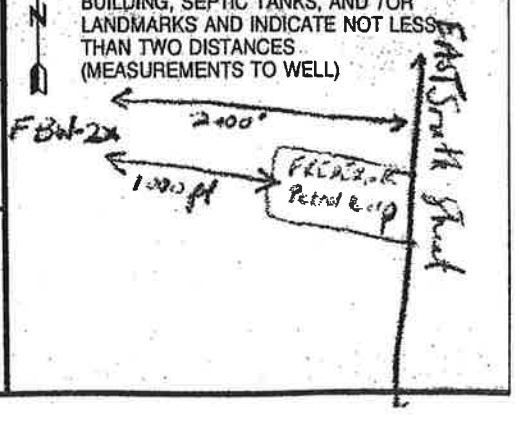
CASING HEIGHT (circle appropriate box and enter casing height)

(+) above LAND SURFACE

(−) below

02 (nearest) foot

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



C 1 8058 — SEQUENCE NO. (MDE USE ONLY)
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER

ST/CO USE ONLY
DATE Received

DATE WELL COMPLETED: 11/24/98

Depth of Well: 70 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": FR-94-1167

OWNER: FREDERICK BRICK WORKS (last name / first name)
STREET OR RFD: 124 EAST SOUTH STREET TOWN: FREDERICK
SUBDIVISION: SECTION: LOT:

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
OVB + Clay	0	6	
Blue BS	6	64	
FRAC BS	64	65	
Blue BS	65	70	

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED: yes (Y) / no (N)

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

TYPE: MWD/MSD/MGD
DRILLERS LIC. NO. MWD 332
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)
LIC. NO. JWD-315
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): yes (Y) / no (N)
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT (CM) BENTONITE CLAY (BC)
NO. OF BAGS 6 NO. OF POUNDS 600
GALLONS OF WATER 39
DEPTH OF GROUT SEAL (to nearest foot) from 02 ft. (TOP) to 56 ft. (BOTTOM) (enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below: (ST) STEEL, (CO) CONCRETE, (PL) PLASTIC, (OT) OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL	02	60

OTHER CASING (if used)
EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole insert appropriate code below: (ST) STEEL, (BR) BRASS BRONZE, (HO) OPEN HOLE, (PL) PLASTIC, (OT) OTHER

C 2

EACH SCREEN		DEPTH (nearest ft.)	
1	PL	60	70
2			
3			

SLOT SIZE 1 02 2 2 3 0
DIAMETER OF SCREEN 02 (NEAREST INCH)

GRAVEL PACK: from 58 to 70
IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T (70) (E.R.O.S.) (72) W Q (74 75 76)
TELESCOPE CASING — LOG INDICATOR — OTHER DATA

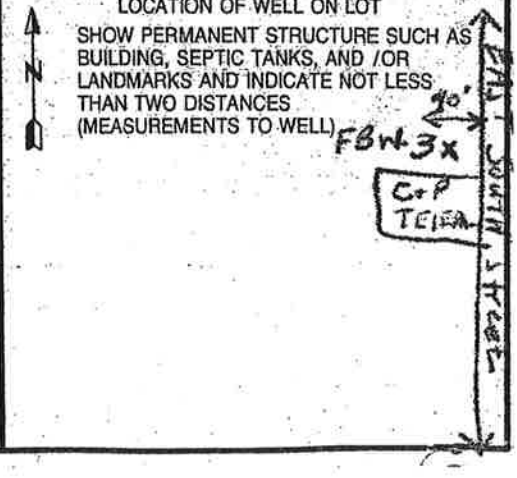
C 3

PUMPING TEST
HOURS PUMPED (nearest hour)
PUMPING RATE (gal. per min.)
METHOD USED TO MEASURE PUMPING RATE
WATER LEVEL (distance from land surface)
BEFORE PUMPING ft.
WHEN PUMPING ft.

TYPE OF PUMP USED (for test)
A air — P piston — T turbine — C centrifugal — R rotary — O other (describe below) — J jet — S submersible

PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO): YES / NO
IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.
TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29.
CAPACITY: GALLONS PER MINUTE (to nearest gallon)
PUMP HORSE POWER
PUMP COLUMN LENGTH (nearest ft.)
CASING HEIGHT (circle appropriate box and enter casing height): (+) above / (−) below LAND SURFACE
02 (nearest foot)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



OWNER

APPENDIX I. Soil and Ground Water Analysis Reports and Chain of Custody Documentation

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

LABORATORY RESULTS

DATE RECEIVED: January 28, 1999

PROJECT: Frederick Brick Works

PROJECT #: 98008

PREPARED FOR:

Bay Environmental Corporation
29998 Polks Road
Princess Anne, MD 21853

February 4, 1999

6630 Baltimore National Pike Baltimore, Maryland 21228 (410) 747-8770 (800) 932-9047 fax (410) 788-8723

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PHASE SEPARATION SCIENCE, INC.

ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 99012814 Page 1 of 10
Bay Environmental Corporation
February 4, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Water

Date Sampled: 1/27/99
Date Received: 1/28/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW3GW						
Polychlorinated Biphenyls						
Aroclor 1016	< 5	ug/L	EPA 8082	5	2/2/99	2/3/99
Aroclor 1221	< 5	ug/L	EPA 8082	5	2/2/99	2/3/99
Aroclor 1232	< 5	ug/L	EPA 8082	5	2/2/99	2/3/99
Aroclor 1242	< 5	ug/L	EPA 8082	5	2/2/99	2/3/99
Aroclor 1248	< 5	ug/L	EPA 8082	5	2/2/99	2/3/99
Aroclor 1254	< 5	ug/L	EPA 8082	5	2/2/99	2/3/99
Aroclor 1260	< 5	ug/L	EPA 8082	5	2/2/99	2/3/99
Organochlorine Pesticides						
Aldrin	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
a-BHC	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
b-BHC	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
g-BHC (Lindane)	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
d-BHC	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Chlordane, total	< 10	ug/L	EPA 8081	10	2/2/99	2/3/99
4,4'-DDD	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
4,4'-DDE	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
4,4'-DDT	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Dieldrin	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Endosulfan I	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Endosulfan II	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Endosulfan Sulfate	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Endrin	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Endrin Aldehyde	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Heptachlor	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Heptachlor Epoxide	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Methoxychlor	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Toxaphene	< 10	ug/L	EPA 8081	10	2/2/99	2/3/99
RCRA Metals						
Arsenic	< 5	ug/L	EPA 200.8	5	1/29/99	1/29/99
Barium	130	ug/L	EPA 200.8	5	1/29/99	1/29/99
Cadmium	< 5	ug/L	EPA 200.8	5	1/29/99	1/29/99
Chromium	12	ug/L	EPA 200.8	5	1/29/99	1/29/99
Lead	< 5	ug/L	EPA 200.8	5	1/29/99	1/29/99
Mercury	< 1	ug/L	EPA 200.8	1	1/29/99	1/31/99
Selenium	< 5	ug/L	EPA 200.8	5	1/29/99	1/29/99
Silver	< 5	ug/L	EPA 200.8	5	1/29/99	1/29/99

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PHASE SEPARATION SCIENCE, INC.

ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 99012814 Page 2 of 10
Bay Environmental Corporation
February 4, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Water

Date Sampled: 1/27/99
Date Received: 1/28/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW3GW						
Semi-Volatile Organic Compounds						
Acenaphthene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Acenaphthylene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Anthracene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Benzo (a) anthracene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Benzo (b) fluoranthene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Benzo (k) fluoranthene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Benzoic acid	< 50	ug/L	EPA 8270A	50	2/2/99	2/2/99
Benzo (g,h,i) perylene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Benzo (a) pyrene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Benzyl alcohol	< 20	ug/L	EPA 8270A	20	2/2/99	2/2/99
Bis (2-chloroethoxy) methane	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Bis (2-chloroethyl) ether	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Bis (2-chloroisopropyl) ether	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Bis (2-ethylhexyl) phthalate	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
4-bromophenyl phenyl ether	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Butyl benzyl phthalate	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
4-Chloroaniline	< 20	ug/L	EPA 8270A	20	2/2/99	2/2/99
4-Chloro-3-methylphenol	< 20	ug/L	EPA 8270A	20	2/2/99	2/2/99
2-Chloronaphthalene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2-Chlorophenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
4-Chlorophenyl phenyl ether	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Chrysene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Dibenzo (a,h) anthracene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Di-n-butyl phthalate	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Dibenzofuran	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
1,2-Dichlorobenzene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
1,3-Dichlorobenzene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
1,4-Dichlorobenzene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
3,3-Dichlorobenzidine	< 20	ug/L	EPA 8270A	20	2/2/99	2/2/99
2,4-Dichlorophenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Diethyl phthalate	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2,4-Dimethylphenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Dimethyl phthalate	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
4,6-Dinitro-2-methylphenol	< 50	ug/L	EPA 8270A	50	2/2/99	2/2/99
2,4-Dinitrophenol	< 50	ug/L	EPA 8270A	50	2/2/99	2/2/99
2,4-Dinitrotoluene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 99012814 Page 3 of 10
Bay Environmental Corporation
February 4, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Water

Date Sampled: 1/27/99
Date Received: 1/28/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW3GW						
2,6-Dinitrotoluene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Di-n-octyl phthalate	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Fluoranthene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Fluorene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Hexachlorobenzene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Hexachlorobutadiene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Hexachlorocyclopentadiene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Hexachloroethane	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Indeno (1,2,3-cd) pyrene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Isophorone	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2-Methylnaphthalene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2-Methylphenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
4-Methylphenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Naphthalene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2-Nitroaniline	< 50	ug/L	EPA 8270A	50	2/2/99	2/2/99
3-Nitroaniline	< 50	ug/L	EPA 8270A	50	2/2/99	2/2/99
Nitrobenzene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2-Nitrophenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
4-Nitrophenol	< 50	ug/L	EPA 8270A	50	2/2/99	2/2/99
N-Nitrosodiphenylamine	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
N-Nitroso-di-n-propylamine	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Pentachlorophenol	< 50	ug/L	EPA 8270A	50	2/2/99	2/2/99
Phenanthrene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Phenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Pyrene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
1,2,4-Trichlorobenzene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2,4,5-Trichlorophenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2,4,6-Trichlorophenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Volatile Organic Compounds						
Benzene	< 25	ug/L	EPA 8260	5		2/3/99
Bromobenzene	< 25	ug/L	EPA 8260	5		2/3/99
Bromochloromethane	< 25	ug/L	EPA 8260	5		2/3/99
Bromodichloromethane	< 25	ug/L	EPA 8260	5		2/3/99
Bromoform	< 25	ug/L	EPA 8260	5		2/3/99
Bromomethane	< 25	ug/L	EPA 8260	5		2/3/99
n-Butylbenzene	< 25	ug/L	EPA 8260	5		2/3/99
sec-Butylbenzene	< 25	ug/L	EPA 8260	5		2/3/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 99012814 Page 4 of 10
Bay Environmental Corporation
February 4, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Water

Date Sampled: 1/27/99
Date Received: 1/28/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW3GW						
tert-Butylbenzene	< 25	ug/L	EPA 8260	5		2/3/99
Carbon tetrachloride	< 25	ug/L	EPA 8260	5		2/3/99
Chlorobenzene	< 25	ug/L	EPA 8260	5		2/3/99
Chloroethane	< 25	ug/L	EPA 8260	5		2/3/99
Chloroform	< 25	ug/L	EPA 8260	5		2/3/99
Chloromethane	< 25	ug/L	EPA 8260	5		2/3/99
2-Chlorotoluene	< 25	ug/L	EPA 8260	5		2/3/99
4-Chlorotoluene	< 25	ug/L	EPA 8260	5		2/3/99
Dibromochloromethane	< 25	ug/L	EPA 8260	5		2/3/99
1,2-Dibromo-3-chloropropane	< 25	ug/L	EPA 8260	5		2/3/99
1,2-Dibromoethane	< 25	ug/L	EPA 8260	5		2/3/99
Dibromomethane	< 25	ug/L	EPA 8260	5		2/3/99
1,2-Dichlorobenzene	< 25	ug/L	EPA 8260	5		2/3/99
1,3-Dichlorobenzene	< 25	ug/L	EPA 8260	5		2/3/99
1,4-Dichlorobenzene	< 25	ug/L	EPA 8260	5		2/3/99
Dichlorodifluoromethane	< 25	ug/L	EPA 8260	5		2/3/99
1,1-Dichloroethane	< 25	ug/L	EPA 8260	5		2/3/99
1,2-Dichloroethane	< 25	ug/L	EPA 8260	5		2/3/99
1,1-Dichloroethene	< 25	ug/L	EPA 8260	5		2/3/99
cis-1,2-Dichloroethene	< 25	ug/L	EPA 8260	5		2/3/99
trans-1,2-Dichloroethene	< 25	ug/L	EPA 8260	5		2/3/99
1,2-Dichloropropane	< 25	ug/L	EPA 8260	5		2/3/99
1,3-Dichloropropane	< 25	ug/L	EPA 8260	5		2/3/99
2,2-Dichloropropane	< 25	ug/L	EPA 8260	5		2/3/99
1,1-Dichloropropene	< 25	ug/L	EPA 8260	5		2/3/99
Ethylbenzene	< 25	ug/L	EPA 8260	5		2/3/99
Hexachlorobutadiene	< 25	ug/L	EPA 8260	5		2/3/99
Isopropylbenzene	< 25	ug/L	EPA 8260	5		2/3/99
p-Isopropyltoluene	< 25	ug/L	EPA 8260	5		2/3/99
Methylene chloride	eb 12	ug/L	EPA 8260	5		2/3/99
Methyl-t-butyl ether	90	ug/L	EPA 8260	5		2/3/99
Naphthalene	< 25	ug/L	EPA 8260	5		2/3/99
n-Propylbenzene	< 25	ug/L	EPA 8260	5		2/3/99
Styrene	< 25	ug/L	EPA 8260	5		2/3/99
1,1,1,2-Tetrachloroethane	< 25	ug/L	EPA 8260	5		2/3/99
1,1,2,2-Tetrachloroethane	< 25	ug/L	EPA 8260	5		2/3/99
Tetrachloroethene	< 25	ug/L	EPA 8260	5		2/3/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 99012814 Page 5 of 10
Bay Environmental Corporation
February 4, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Water

Date Sampled: 1/27/99
Date Received: 1/28/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW3GW						
Toluene	< 25	ug/L	EPA 8260	5		2/3/99
1,2,3-Trichlorobenzene	< 25	ug/L	EPA 8260	5		2/3/99
1,2,4-Trichlorobenzene	< 25	ug/L	EPA 8260	5		2/3/99
1,1,1-Trichloroethane	< 25	ug/L	EPA 8260	5		2/3/99
1,1,2-Trichloroethane	< 25	ug/L	EPA 8260	5		2/3/99
Trichloroethene	< 25	ug/L	EPA 8260	5		2/3/99
1,2,3-Trichloropropane	< 25	ug/L	EPA 8260	5		2/3/99
1,2,4-Trimethylbenzene	< 25	ug/L	EPA 8260	5		2/3/99
1,3,5-Trimethylbenzene	< 25	ug/L	EPA 8260	5		2/3/99
Vinyl chloride	< 25	ug/L	EPA 8260	5		2/3/99
Xylenes, total	< 75	ug/L	EPA 8260	15		2/3/99

Reviewed By: Matt Ogle
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
b - found in blank / suspected lab artifact
e - estimated value, less than reporting limit

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Bay Environmental Corporation
February 4, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Water

Date Sampled: 1/27/99
Date Received: 1/28/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW2GW						
Polychlorinated Biphenyls						
Aroclor 1016	< 5	ug/L	EPA 8082	5	2/2/99	2/3/99
Aroclor 1221	< 5	ug/L	EPA 8082	5	2/2/99	2/3/99
Aroclor 1232	< 5	ug/L	EPA 8082	5	2/2/99	2/3/99
Aroclor 1242	< 5	ug/L	EPA 8082	5	2/2/99	2/3/99
Aroclor 1248	< 5	ug/L	EPA 8082	5	2/2/99	2/3/99
Aroclor 1254	< 5	ug/L	EPA 8082	5	2/2/99	2/3/99
Aroclor 1260	< 5	ug/L	EPA 8082	5	2/2/99	2/3/99
Organochlorine Pesticides						
Aldrin	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
a-BHC	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
b-BHC	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
g-BHC (Lindane)	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
d-BHC	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Chlordane, total	< 10	ug/L	EPA 8081	10	2/2/99	2/3/99
4,4'-DDD	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
4,4'-DDE	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
4,4'-DDT	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Dieldrin	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Endosulfan I	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Endosulfan II	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Endosulfan Sulfate	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Endrin	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Endrin Aldehyde	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Heptachlor	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Heptachlor Epoxide	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Methoxychlor	< 0.2	ug/L	EPA 8081	0.2	2/2/99	2/3/99
Toxaphene	< 10	ug/L	EPA 8081	10	2/2/99	2/3/99
RCRA Metals						
Arsenic	< 5	ug/L	EPA 200.8	5	1/29/99	1/29/99
Barium	41	ug/L	EPA 200.8	5	1/29/99	1/29/99
Cadmium	< 5	ug/L	EPA 200.8	5	1/29/99	1/29/99
Chromium	< 5	ug/L	EPA 200.8	5	1/29/99	1/29/99
Lead	< 5	ug/L	EPA 200.8	5	1/29/99	1/29/99
Mercury	< 1	ug/L	EPA 200.8	1	1/29/99	1/31/99
Selenium	< 5	ug/L	EPA 200.8	5	1/29/99	1/29/99
Silver	< 5	ug/L	EPA 200.8	5	1/29/99	1/29/99

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Bay Environmental Corporation
February 4, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Water

Date Sampled: 1/27/99
Date Received: 1/28/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW2GW						
Semi-Volatile Organic Compounds						
Acenaphthene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Acenaphthylene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Anthracene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Benzo (a) anthracene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Benzo (b) fluoranthene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Benzo (k) fluoranthene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Benzoic acid	< 50	ug/L	EPA 8270A	50	2/2/99	2/2/99
Benzo (g,h,i) perylene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Benzo (a) pyrene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Benzyl alcohol	< 20	ug/L	EPA 8270A	20	2/2/99	2/2/99
Bis (2-chloroethoxy) methane	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Bis (2-chloroethyl) ether	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Bis (2-chloroisopropyl) ether	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Bis (2-ethylhexyl) phthalate	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
4-bromophenyl phenyl ether	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Butyl benzyl phthalate	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
4-Chloroaniline	< 20	ug/L	EPA 8270A	20	2/2/99	2/2/99
4-Chloro-3-methylphenol	< 20	ug/L	EPA 8270A	20	2/2/99	2/2/99
2-Chloronaphthalene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2-Chlorophenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
4-Chlorophenyl phenyl ether	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Chrysene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Dibenzo (a,h) anthracene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Di-n-butyl phthalate	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Dibenzofuran	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
1,2-Dichlorobenzene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
1,3-Dichlorobenzene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
1,4-Dichlorobenzene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
3,3-Dichlorobenzidine	< 20	ug/L	EPA 8270A	20	2/2/99	2/2/99
2,4-Dichlorophenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Diethyl phthalate	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2,4-Dimethylphenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Dimethyl phthalate	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
4,6-Dinitro-2-methylphenol	< 50	ug/L	EPA 8270A	50	2/2/99	2/2/99
2,4-Dinitrophenol	< 50	ug/L	EPA 8270A	50	2/2/99	2/2/99
2,4-Dinitrotoluene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
February 4, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Water

Date Sampled: 1/27/99
Date Received: 1/28/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW2GW						
2,6-Dinitrotoluene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Di-n-octyl phthalate	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Fluoranthene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Fluorene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Hexachlorobenzene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Hexachlorobutadiene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Hexachlorocyclopentadiene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Hexachloroethane	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Indeno (1,2,3-cd) pyrene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Isophorone	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2-Methylnaphthalene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2-Methylphenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
4-Methylphenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Naphthalene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2-Nitroaniline	< 50	ug/L	EPA 8270A	50	2/2/99	2/2/99
3-Nitroaniline	< 50	ug/L	EPA 8270A	50	2/2/99	2/2/99
Nitrobenzene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2-Nitrophenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
4-Nitrophenol	< 50	ug/L	EPA 8270A	50	2/2/99	2/2/99
N-Nitrosodiphenylamine	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
N-Nitroso-di-n-propylamine	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Pentachlorophenol	< 50	ug/L	EPA 8270A	50	2/2/99	2/2/99
Phenanthrene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Phenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Pyrene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
1,2,4-Trichlorobenzene	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2,4,5-Trichlorophenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
2,4,6-Trichlorophenol	< 10	ug/L	EPA 8270A	10	2/2/99	2/2/99
Volatile Organic Compounds						
Benzene	< 5	ug/L	EPA 8260	5		2/3/99
Bromobenzene	< 5	ug/L	EPA 8260	5		2/3/99
Bromochloromethane	< 5	ug/L	EPA 8260	5		2/3/99
Bromodichloromethane	< 5	ug/L	EPA 8260	5		2/3/99
Bromoform	< 5	ug/L	EPA 8260	5		2/3/99
Bromomethane	< 5	ug/L	EPA 8260	5		2/3/99
n-Butylbenzene	< 5	ug/L	EPA 8260	5		2/3/99
sec-Butylbenzene	< 5	ug/L	EPA 8260	5		2/3/99

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Bay Environmental Corporation
February 4, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Water

Date Sampled: 1/27/99
Date Received: 1/28/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW2GW						
tert-Butylbenzene	< 5	ug/L	EPA 8260	5		2/3/99
Carbon tetrachloride	< 5	ug/L	EPA 8260	5		2/3/99
Chlorobenzene	< 5	ug/L	EPA 8260	5		2/3/99
Chloroethane	< 5	ug/L	EPA 8260	5		2/3/99
Chloroform	< 5	ug/L	EPA 8260	5		2/3/99
Chloromethane	< 5	ug/L	EPA 8260	5		2/3/99
2-Chlorotoluene	< 5	ug/L	EPA 8260	5		2/3/99
4-Chlorotoluene	< 5	ug/L	EPA 8260	5		2/3/99
Dibromochloromethane	< 5	ug/L	EPA 8260	5		2/3/99
1,2-Dibromo-3-chloropropane	< 5	ug/L	EPA 8260	5		2/3/99
1,2-Dibromoethane	< 5	ug/L	EPA 8260	5		2/3/99
Dibromomethane	< 5	ug/L	EPA 8260	5		2/3/99
1,2-Dichlorobenzene	< 5	ug/L	EPA 8260	5		2/3/99
1,3-Dichlorobenzene	< 5	ug/L	EPA 8260	5		2/3/99
1,4-Dichlorobenzene	< 5	ug/L	EPA 8260	5		2/3/99
Dichlorodifluoromethane	< 5	ug/L	EPA 8260	5		2/3/99
1,1-Dichloroethane	< 5	ug/L	EPA 8260	5		2/3/99
1,2-Dichloroethane	< 5	ug/L	EPA 8260	5		2/3/99
1,1-Dichloroethene	< 5	ug/L	EPA 8260	5		2/3/99
cis-1,2-Dichloroethene	< 5	ug/L	EPA 8260	5		2/3/99
trans-1,2-Dichloroethene	< 5	ug/L	EPA 8260	5		2/3/99
1,2-Dichloropropane	< 5	ug/L	EPA 8260	5		2/3/99
1,3-Dichloropropane	< 5	ug/L	EPA 8260	5		2/3/99
2,2-Dichloropropane	< 5	ug/L	EPA 8260	5		2/3/99
1,1-Dichloropropene	< 5	ug/L	EPA 8260	5		2/3/99
Ethylbenzene	< 5	ug/L	EPA 8260	5		2/3/99
Hexachlorobutadiene	< 5	ug/L	EPA 8260	5		2/3/99
Isopropylbenzene	< 5	ug/L	EPA 8260	5		2/3/99
p-Isopropyltoluene	< 5	ug/L	EPA 8260	5		2/3/99
Methylene chloride	< 5	ug/L	EPA 8260	5		2/3/99
Methyl-t-butyl ether	< 5	ug/L	EPA 8260	5		2/3/99
Naphthalene	< 5	ug/L	EPA 8260	5		2/3/99
n-Propylbenzene	< 5	ug/L	EPA 8260	5		2/3/99
Styrene	< 5	ug/L	EPA 8260	5		2/3/99
1,1,1,2-Tetrachloroethane	< 5	ug/L	EPA 8260	5		2/3/99
1,1,2,2-Tetrachloroethane	< 5	ug/L	EPA 8260	5		2/3/99
Tetrachloroethene	< 5	ug/L	EPA 8260	5		2/3/99

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Bay Environmental Corporation
February 4, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Water

Date Sampled: 1/27/99
Date Received: 1/28/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW2GW						
Toluene	< 5	ug/L	EPA 8260	5		2/3/99
1,2,3-Trichlorobenzene	< 5	ug/L	EPA 8260	5		2/3/99
1,2,4-Trichlorobenzene	< 5	ug/L	EPA 8260	5		2/3/99
1,1,1-Trichloroethane	< 5	ug/L	EPA 8260	5		2/3/99
1,1,2-Trichloroethane	< 5	ug/L	EPA 8260	5		2/3/99
Trichloroethene	< 5	ug/L	EPA 8260	5		2/3/99
1,2,3-Trichloropropane	< 5	ug/L	EPA 8260	5		2/3/99
1,2,4-Trimethylbenzene	< 5	ug/L	EPA 8260	5		2/3/99
1,3,5-Trimethylbenzene	< 5	ug/L	EPA 8260	5		2/3/99
Vinyl chloride	< 5	ug/L	EPA 8260	5		2/3/99
Xylenes, total	< 15	ug/L	EPA 8260	15		2/3/99

Notes/Comments:
PQL - Practical Quantitation Limit

Reviewed By: Matt Cohee
Quality Assurance Chemist

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

(1)

CLIENT: BAY ENVIRONMENTAL CORPORATION PHONE NO: (410) 651-0100

PROJECT MGR: M. BATTIN FAX NO: (410) 651-0400

PROJECT NAME: FREDERICK BRICK WORKS

SITE LOCATION: FREDERICK MD

PROJECT NUMBER: 98008

P.O. NUMBER:

PSS Project: 990128-14

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE C= COMP G= GRAB	Preservatives Used	Analysis Required (3) VOCs 8260	SEMI VOC 8270	PESTICIDES/PCB	Metals RCRA8						REMARKS
	FBW3GW	1.27.99		water	1	G				X							1L Amber
	FBW3GW	1.27.99		water	1	G					X						1L Amber
	FBW3GW	1.27.99		water	2	G		X	X								2 VOC
	FBW2GW	1.27.99		water	1	G				X							1L Amber
	FBW2GW	1.27.99		water	1	G					X						1L Amber
	FBW2GW	1.27.99		water	2	G		X	X								2 VOC

(5)

Collected / Relinquished By: (1)	Date	Time	Received By:
Matt Battin	1/27/99	4:30 pm	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4) FedEx	Date 1/28/99	Time 1030	Received For Laboratory By:

(4)

Shipping Carrier:

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO

Temperature °C: ONICE

Data Deliverables Required

Level I Level II Level III

Chain of Custody Seal: (Circle)

INTACT BROKEN ABSENT

Requested Turnaround Time and Special Instructions:

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • FAX (410) 788-8723

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

(1)

CLIENT: BAY ENVIRONMENTAL CORPORATION PHONE NO: (410) 651-0100

PROJECT MGR: M. BATTIN FAX NO: (410) 651 0400

PROJECT NAME: FREDERICK BRICK WORKS

SITE LOCATION: FREDERICK, MD

PROJECT NUMBER: 98008

P.O. NUMBER:

PSS Project:

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE C= COMP G= GRAB	Preservatives Used / Analysis Required (3) Methanol	REMARKS
	FBW2 GW	1/29/99	1:45	GW	1	G	X	
	FBW2 GW	1/29/99	1:55	GW	1	G	X	

(5)

Collected / Relinquished By: (1)	Date	Time	Received By:
	1/29/99	3:20	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date 1-29-99	Time 3:20PM	Received For Laboratory By:

(4)

Shipping Carrier:

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO

Temperature °C:

Data Deliverables Required

Level I Level II Level III

Chain of Custody Seal: (Circle)

INTACT BROKEN ABSENT

Requested Turnaround Time and Special Instructions:

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PHASE SEPARATION SCIENCE, INC.

ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 99012814-01
Bay Environmental Corporation
February 18, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008

Matrix: Water

Date Sampled: 1/27/99
Date Received: 1/28/99

Date Analyzed: 2/18/99

Sample ID: FBW3GW

Volatile Organic Compounds

	Result	Unit		Result	Unit
Benzene	e 1	ug/L	Bromobenzene	< 5	ug/L
Bromochloromethane	< 5	ug/L	Bromodichloromethane	< 5	ug/L
Bromoform	< 5	ug/L	Bromomethane	< 5	ug/L
n-Butylbenzene	< 5	ug/L	sec-Butylbenzene	e 2	ug/L
tert-Butylbenzene	< 5	ug/L	Carbon tetrachloride	< 5	ug/L
Chlorobenzene	< 5	ug/L	Chloroethane	< 5	ug/L
Chloroform	< 5	ug/L	Chloromethane	< 5	ug/L
2-Chlorotoluene	< 5	ug/L	4-Chlorotoluene	< 5	ug/L
Dibromochloromethane	< 5	ug/L	1,2-Dibromo-3-chloropropane	< 5	ug/L
1,2-Dibromoethane	< 5	ug/L	Dibromomethane	< 5	ug/L
1,2-Dichlorobenzene	< 5	ug/L	1,3-Dichlorobenzene	< 5	ug/L
1,4-Dichlorobenzene	< 5	ug/L	Dichlorodifluoromethane	< 5	ug/L
1,1-Dichloroethane	< 5	ug/L	1,2-Dichloroethane	< 5	ug/L
1,1-Dichloroethene	< 5	ug/L	cis-1,2-Dichloroethene	< 5	ug/L
trans-1,2-Dichloroethene	< 5	ug/L	1,2-Dichloropropane	< 5	ug/L
1,3-Dichloropropane	< 5	ug/L	2,2-Dichloropropane	< 5	ug/L
1,1-Dichloropropene	< 5	ug/L	Ethylbenzene	< 5	ug/L
Hexachlorobutadiene	< 5	ug/L	Isopropylbenzene	e 2	ug/L
p-Isopropyltoluene	e 1	ug/L	Methylene chloride	< 5	ug/L
Methyl-t-butyl ether	97	ug/L	Naphthalene	< 5	ug/L
n-Propylbenzene	< 5	ug/L	Styrene	< 5	ug/L
1,1,1,2-Tetrachloroethane	< 5	ug/L	1,1,2,2-Tetrachloroethane	< 5	ug/L
Tetrachloroethene	e 3	ug/L	Toluene	< 5	ug/L
1,2,3-Trichlorobenzene	< 5	ug/L	1,2,4-Trichlorobenzene	< 5	ug/L
1,1,1-Trichloroethane	< 5	ug/L	1,1,2-Trichloroethane	< 5	ug/L
Trichloroethene	< 5	ug/L	1,2,3-Trichloropropane	< 5	ug/L
1,2,4-Trimethylbenzene	< 5	ug/L	1,3,5-Trimethylbenzene	< 5	ug/L
Vinyl chloride	< 5	ug/L	Xylenes, total	< 15	ug/L

Method(s): EPA 8260

Reviewed By: Matt Cohee
Quality Assurance Chemist

Qualifiers:
e - estimated value, less than reporting limit

PHASE SEPARATION SCIENCE, INC.

Analytical Chemistry Environmental Science

LABORATORY RESULTS

DATE RECEIVED: March 4, 1999

PROJECT: Frederick Brick Works

PROJECT #: 98008

PREPARED FOR:

Bay Environmental Corporation
29998 Polks Road
Princess Anne, MD 21853

March 11, 1999

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE •

CERTIFICATE OF ANALYSIS
No. 99030402 Page 1 of 55
Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Ground Water

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-3						
Polychlorinated Biphenyls						
Aroclor 1016	< 5	ug/L	EPA 8082	5	3/4/99	3/4/99
Aroclor 1221	< 5	ug/L	EPA 8082	5	3/4/99	3/4/99
Aroclor 1232	< 5	ug/L	EPA 8082	5	3/4/99	3/4/99
Aroclor 1242	< 5	ug/L	EPA 8082	5	3/4/99	3/4/99
Aroclor 1248	< 5	ug/L	EPA 8082	5	3/4/99	3/4/99
Aroclor 1254	< 5	ug/L	EPA 8082	5	3/4/99	3/4/99
Aroclor 1260	< 5	ug/L	EPA 8082	5	3/4/99	3/4/99
Organochlorine Pesticides						
Aldrin	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
a-BHC	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
b-BHC	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
g-BHC (Lindane)	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
d-BHC	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
Chlordane, total	< 10	ug/L	EPA 8081	10	3/4/99	3/4/99
4,4'-DDD	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
4,4'-DDE	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
4,4'-DDT	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
Dieldrin	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
Endosulfan I	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
Endosulfan II	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
Endosulfan Sulfate	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
Endrin	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
Endrin Aldehyde	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
Heptachlor	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
Heptachlor Epoxide	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
Methoxychlor	< 0.2	ug/L	EPA 8081	0.2	3/4/99	3/4/99
Toxaphene	< 10	ug/L	EPA 8081	10	3/4/99	3/4/99
RCRA Metals						
Arsenic	< 5	ug/L	EPA 200.8	5	3/4/99	3/5/99
Barium	130	ug/L	EPA 200.8	5	3/4/99	3/5/99
Cadmium	< 5	ug/L	EPA 200.8	5	3/4/99	3/5/99
Chromium	< 5	ug/L	EPA 200.8	5	3/4/99	3/5/99
Lead	< 5	ug/L	EPA 200.8	5	3/4/99	3/5/99
Mercury	< 1	ug/L	EPA 200.8	1	3/4/99	3/8/99
Selenium	< 5	ug/L	EPA 200.8	5	3/4/99	3/5/99
Silver	< 5	ug/L	EPA 200.8	5	3/4/99	3/5/99

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PHASE SEPARATION SCIENCE, INC.

ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 99030402 Page 2 of 55
Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Ground Water

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-3						
Semi-Volatile Organic Compounds						
Acenaphthene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Acenaphthylene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Anthracene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Benzo (a) anthracene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Benzo (b) fluoranthene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Benzo (k) fluoranthene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Benzoic acid	< 50	ug/L	EPA 8270A	50	3/4/99	3/8/99
Benzo (g,h,i) perylene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Benzo (a) pyrene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Benzyl alcohol	< 20	ug/L	EPA 8270A	20	3/4/99	3/8/99
Bis (2-chloroethoxy) methane	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Bis (2-chloroethyl) ether	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Bis (2-chloroisopropyl) ether	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Bis (2-ethylhexyl) phthalate	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
4-bromophenyl phenyl ether	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Butyl benzyl phthalate	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
4-Chloroaniline	< 20	ug/L	EPA 8270A	20	3/4/99	3/8/99
4-Chloro-3-methylphenol	< 20	ug/L	EPA 8270A	20	3/4/99	3/8/99
2-Chloronaphthalene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
2-Chlorophenol	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
4-Chlorophenyl phenyl ether	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Chrysene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Dibenzo (a,h) anthracene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Di-n-butyl phthalate	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Dibenzofuran	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
1,2-Dichlorobenzene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
1,3-Dichlorobenzene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
1,4-Dichlorobenzene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
3,3-Dichlorobenzidine	< 20	ug/L	EPA 8270A	20	3/4/99	3/8/99
2,4-Dichlorophenol	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Diethyl phthalate	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
2,4-Dimethylphenol	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Dimethyl phthalate	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
4,6-Dinitro-2-methylphenol	< 50	ug/L	EPA 8270A	50	3/4/99	3/8/99
2,4-Dinitrophenol	< 50	ug/L	EPA 8270A	50	3/4/99	3/8/99
2,4-Dinitrotoluene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99

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PHASE SEPARATION SCIENCE, INC.

ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 99030402 Page 3 of 55
Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Ground Water

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-3						
2,6-Dinitrotoluene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Di-n-octyl phthalate	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Fluoranthene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Fluorene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Hexachlorobenzene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Hexachlorobutadiene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Hexachlorocyclopentadiene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Hexachloroethane	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Indeno (1,2,3-cd) pyrene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Isophorone	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
2-Methylnaphthalene	e 3	ug/L	EPA 8270A	10	3/4/99	3/8/99
2-Methylphenol	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
4-Methylphenol	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Naphthalene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
2-Nitroaniline	< 50	ug/L	EPA 8270A	50	3/4/99	3/8/99
3-Nitroaniline	< 50	ug/L	EPA 8270A	50	3/4/99	3/8/99
Nitrobenzene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
2 Nitrophonol	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
4-Nitrophenol	< 50	ug/L	EPA 8270A	50	3/4/99	3/8/99
N-Nitrosodiphenylamine	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
N-Nitroso-di-n-propylamine	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Pentachlorophenol	< 50	ug/L	EPA 8270A	50	3/4/99	3/8/99
Phenanthrene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Phenol	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Pyrene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
1,2,4-Trichlorobenzene	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
2,4,5-Trichlorophenol	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
2,4,6-Trichlorophenol	< 10	ug/L	EPA 8270A	10	3/4/99	3/8/99
Volatile Organic Compounds						
Benzene	e 1	ug/L	EPA 8260	5		3/8/99
Bromobenzene	< 5	ug/L	EPA 8260	5		3/8/99
Bromochloromethane	< 5	ug/L	EPA 8260	5		3/8/99
Bromodichloromethane	< 5	ug/L	EPA 8260	5		3/8/99
Bromoform	< 5	ug/L	EPA 8260	5		3/8/99
Bromomethane	< 5	ug/L	EPA 8260	5		3/8/99
n-Butylbenzene	< 5	ug/L	EPA 8260	5		3/8/99
sec-Butylbenzene	9	ug/L	EPA 8260	5		3/8/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 99030402 Page 4 of 55
Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Ground Water

Date Sampled: 3/2/99
Date Received: 3/4/99

Sample ID: FBW-3

	Result	Unit	Method	PQL	Prepared	Analyzed
tert-Butylbenzene	< 5	ug/L	EPA 8260	5		3/8/99
Carbon tetrachloride	< 5	ug/L	EPA 8260	5		3/8/99
Chlorobenzene	< 5	ug/L	EPA 8260	5		3/8/99
Chloroethane	< 5	ug/L	EPA 8260	5		3/8/99
Chloroform	< 5	ug/L	EPA 8260	5		3/8/99
Chloromethane	< 5	ug/L	EPA 8260	5		3/8/99
2-Chlorotoluene	< 5	ug/L	EPA 8260	5		3/8/99
4-Chlorotoluene	< 5	ug/L	EPA 8260	5		3/8/99
Dibromochloromethane	< 5	ug/L	EPA 8260	5		3/8/99
1,2-Dibromo-3-chloropropane	< 5	ug/L	EPA 8260	5		3/8/99
1,2-Dibromoethane	< 5	ug/L	EPA 8260	5		3/8/99
Dibromomethane	< 5	ug/L	EPA 8260	5		3/8/99
1,2-Dichlorobenzene	< 5	ug/L	EPA 8260	5		3/8/99
1,3-Dichlorobenzene	< 5	ug/L	EPA 8260	5		3/8/99
1,4-Dichlorobenzene	< 5	ug/L	EPA 8260	5		3/8/99
Dichlorodifluoromethane	< 5	ug/L	EPA 8260	5		3/8/99
1,1-Dichloroethane	< 5	ug/L	EPA 8260	5		3/8/99
1,2-Dichloroethane	< 5	ug/L	EPA 8260	5		3/8/99
1,1-Dichloroethene	< 5	ug/L	EPA 8260	5		3/8/99
cis-1,2-Dichloroethene	< 5	ug/L	EPA 8260	5		3/8/99
trans-1,2-Dichloroethene	< 5	ug/L	EPA 8260	5		3/8/99
1,2-Dichloropropane	< 5	ug/L	EPA 8260	5		3/8/99
1,3-Dichloropropane	< 5	ug/L	EPA 8260	5		3/8/99
2,2-Dichloropropane	< 5	ug/L	EPA 8260	5		3/8/99
1,1-Dichloropropene	< 5	ug/L	EPA 8260	5		3/8/99
Ethylbenzene	< 5	ug/L	EPA 8260	5		3/8/99
Hexachlorobutadiene	< 5	ug/L	EPA 8260	5		3/8/99
Isopropylbenzene	6	ug/L	EPA 8260	5		3/8/99
p-Isopropyltoluene	e 2	ug/L	EPA 8260	5		3/8/99
Methylene chloride	< 5	ug/L	EPA 8260	5		3/8/99
Methyl-t-butyl ether	67	ug/L	EPA 8260	5		3/8/99
Naphthalene	< 5	ug/L	EPA 8260	5		3/8/99
n-Propylbenzene	6	ug/L	EPA 8260	5		3/8/99
Styrene	< 5	ug/L	EPA 8260	5		3/8/99
1,1,1,2-Tetrachloroethane	< 5	ug/L	EPA 8260	5		3/8/99
1,1,2,2-Tetrachloroethane	< 5	ug/L	EPA 8260	5		3/8/99
Tetrachloroethene	< 5	ug/L	EPA 8260	5		3/8/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Ground Water

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-3						
Toluene	< 5	ug/L	EPA 8260	5		3/8/99
1,2,3-Trichlorobenzene	< 5	ug/L	EPA 8260	5		3/8/99
1,2,4-Trichlorobenzene	< 5	ug/L	EPA 8260	5		3/8/99
1,1,1-Trichloroethane	< 5	ug/L	EPA 8260	5		3/8/99
1,1,2-Trichloroethane	< 5	ug/L	EPA 8260	5		3/8/99
Trichloroethene	< 5	ug/L	EPA 8260	5		3/8/99
1,2,3-Trichloropropane	< 5	ug/L	EPA 8260	5		3/8/99
1,2,4-Trimethylbenzene	< 5	ug/L	EPA 8260	5		3/8/99
1,3,5-Trimethylbenzene	< 5	ug/L	EPA 8260	5		3/8/99
Vinyl chloride	< 5	ug/L	EPA 8260	5		3/8/99
Xylenes, total	< 15	ug/L	EPA 8260	15		3/8/99

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
e - estimated value, less than reporting limit

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CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-AH1						
Polychlorinated Biphenyls						
Aroclor 1016	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1221	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1232	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1242	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1248	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1254	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1260	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Organochlorine Pesticides						
Aldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
a-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
b-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
g-BHC (Lindane)	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
d-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Chlordane, total	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
4,4'-DDD	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDE	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDT	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Dieldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan I	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan II	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan Sulfate	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin Aldehyde	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor Epoxide	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Methoxychlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Toxaphene	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
RCRA Metals						
Arsenic	< 5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Barium	55	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Cadmium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Chromium	17	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Lead	6.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Mercury	< 0.1	mg/kg	EPA 200.8	0.1	3/4/99	3/8/99
Selenium	< 5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Silver	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-AH1						
Semi-Volatile Organic Compounds						
Acenaphthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Acenaphthylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (a) anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (b) fluoranthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (k) fluoranthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzoic acid	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Benzo (g,h,i) perylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (a) pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzyl alcohol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
Bis (2-chloroethoxy) methane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-chloroethyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-chloroisopropyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-ethylhexyl) phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-bromophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Butyl benzyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Chloroaniline	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
4-Chloro-3-methylphenol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
2-Chloronaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Chlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Chlorophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Chrysene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dibenzo (a,h) anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Di-n-butyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dibenzofuran	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,2-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,3-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,4-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
3,3-Dichlorobenzidine	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
2,4-Dichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Diethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4-Dimethylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dimethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4,6-Dinitro-2-methylphenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
2,4-Dinitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
2,4-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 99030402 Page 8 of 55
Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-AH1						
2,6-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Di-n-octyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Fluoranthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Fluorene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorobutadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorocyclopentadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachloroethane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Indeno (1,2,3-cd) pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Isophorone	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Methylnaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Naphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
3-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Nitrobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Nitrophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Nitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
N-Nitrosodiphenylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
N-Nitroso-di-n-propylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Pentachlorophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Phenanthrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Phenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,2,4-Trichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4,5-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4,6-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Volatile Organic Compounds						
Benzene	e 1	ug/kg	EPA 8260	5		3/10/99
Bromobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Bromochloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
Bromodichloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
Bromoform	< 5	ug/kg	EPA 8260	5		3/10/99
Bromomethane	< 5	ug/kg	EPA 8260	5		3/10/99
n-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
sec-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-AH1						
tert-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Carbon tetrachloride	< 5	ug/kg	EPA 8260	5		3/10/99
Chlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Chloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Chloroform	< 5	ug/kg	EPA 8260	5		3/10/99
Chloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
2-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/10/99
4-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/10/99
Dibromochloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dibromo-3-chloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dibromoethane	< 5	ug/kg	EPA 8260	5		3/10/99
Dibromomethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,3-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,4-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Dichlorodifluoromethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
cis-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
trans-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,3-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
2,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloropropene	< 5	ug/kg	EPA 8260	5		3/10/99
Ethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Hexachlorobutadiene	< 5	ug/kg	EPA 8260	5		3/10/99
Isopropylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
p-Isopropyltoluene	< 5	ug/kg	EPA 8260	5		3/10/99
Methylene chloride	eb 4	ug/kg	EPA 8260	5		3/10/99
Methyl-t-butyl ether	< 5	ug/kg	EPA 8260	5		3/10/99
Naphthalene	< 5	ug/kg	EPA 8260	5		3/10/99
n-Propylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Styrene	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,1,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,2,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Tetrachloroethene	< 5	ug/kg	EPA 8260	5		3/10/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-AH1						
Toluene	5	ug/kg	EPA 8260	5		3/10/99
1,2,3-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,4-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,1-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,2-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Trichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,3-Trichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,4-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,3,5-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Vinyl chloride	< 5	ug/kg	EPA 8260	5		3/10/99
Xylenes, total	< 15	ug/kg	EPA 8260	15		3/10/99

Notes/Comments:
PQL - Practical Quantitation Limit
b - found in blank / suspected lab artifact
e - estimated value, less than reporting limit

Reviewed By: Matt Cohee
Quality Assurance Chemist

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CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-20-1						
Polychlorinated Biphenyls						
Aroclor 1016	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1221	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1232	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1242	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1248	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1254	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1260	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Organochlorine Pesticides						
Aldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
a-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
b-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
g-BHC (Lindane)	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
d-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Chlordane, total	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
4,4'-DDD	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDE	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDT	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Dieldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan I	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan II	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan Sulfate	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin Aldehyde	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor Epoxide	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Methoxychlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Toxaphene	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
RCRA Metals						
Arsenic	0.7	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Barium	70	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Cadmium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Chromium	7.2	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Lead	59	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Mercury	< 0.1	mg/kg	EPA 200.8	0.1	3/4/99	3/8/99
Selenium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Silver	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-20-1						
Semi-Volatile Organic Compounds						
Acenaphthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Acenaphthylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (a) anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (b) fluoranthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (k) fluoranthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzoic acid	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Benzo (g,h,i) perylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (a) pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzyl alcohol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
Bis (2-chloroethoxy) methane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-chloroethyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-chloroisopropyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-ethylhexyl) phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-bromophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Butyl benzyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Chloroaniline	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
4-Chloro-3-methylphenol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
2-Chloronaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Chlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Chlorophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Chrysene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dibenzo (a,h) anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Di-n-butyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dibenzofuran	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,2-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,3-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,4-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
3,3-Dichlorobenzidine	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
2,4-Dichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Diethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4-Dimethylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dimethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4,6-Dinitro-2-methylphenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
2,4-Dinitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
2,4-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-20-1						
2,6-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Di-n-octyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Fluoranthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Fluorene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorobutadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorocyclopentadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachloroethane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Indeno (1,2,3-cd) pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Isophorone	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Methylnaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Naphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
3-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Nitrobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Nitrophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Nitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
N-Nitrosodiphenylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
N-Nitroso-di-n-propylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Pentachlorophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Phenanthrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Phenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,2,4-Trichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4,5-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4,6-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Volatile Organic Compounds						
Benzene	< 5	ug/kg	EPA 8260	5		3/10/99
Bromobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Bromochloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
Bromodichloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
Bromoform	< 5	ug/kg	EPA 8260	5		3/10/99
Bromomethane	< 5	ug/kg	EPA 8260	5		3/10/99
n-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
sec-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-20-1						
tert-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Carbon tetrachloride	< 5	ug/kg	EPA 8260	5		3/10/99
Chlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Chloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Chloroform	< 5	ug/kg	EPA 8260	5		3/10/99
Chloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
2-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/10/99
4-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/10/99
Dibromochloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dibromo-3-chloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dibromoethane	< 5	ug/kg	EPA 8260	5		3/10/99
Dibromomethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,3-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,4-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Dichlorodifluoromethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
cis-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
trans-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,3-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
2,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloropropene	< 5	ug/kg	EPA 8260	5		3/10/99
Ethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Hexachlorobutadiene	< 5	ug/kg	EPA 8260	5		3/10/99
Isopropylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
p-Isopropyltoluene	< 5	ug/kg	EPA 8260	5		3/10/99
Methylene chloride	eb 2	ug/kg	EPA 8260	5		3/10/99
Methyl-t-butyl ether	< 5	ug/kg	EPA 8260	5		3/10/99
Naphthalene	< 5	ug/kg	EPA 8260	5		3/10/99
n-Propylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Styrene	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,1,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,2,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Tetrachloroethene	< 5	ug/kg	EPA 8260	5		3/10/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-20-1						
Toluene	e 3	ug/kg	EPA 8260	5		3/10/99
1,2,3-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,4-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,1-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,2-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Trichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,3-Trichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,4-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,3,5-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Vinyl chloride	< 5	ug/kg	EPA 8260	5		3/10/99
Xylenes, total	< 15	ug/kg	EPA 8260	15		3/10/99

Reviewed By: Matt Cohee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
b - found in blank / suspected lab artifact
e - estimated value, less than reporting limit

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-23-1						
Polychlorinated Biphenyls						
Aroclor 1016	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1221	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1232	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1242	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1248	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1254	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1260	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Organochlorine Pesticides						
Aldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
a-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
b-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
g-BHC (Lindane)	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
d-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Chlordane, total	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
4,4'-DDD	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDE	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDT	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Dieldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan I	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan II	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan Sulfate	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin Aldehyde	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor Epoxide	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Methoxychlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Toxaphene	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
RCRA Metals						
Arsenic	1.1	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Barium	170	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Cadmium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Chromium	6.7	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Lead	120	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Mercury	< 0.1	mg/kg	EPA 200.8	0.1	3/4/99	3/8/99
Selenium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Silver	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-23-1						
Semi-Volatile Organic Compounds						
Acenaphthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Acenaphthylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (a) anthracene	e 150	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (b) fluoranthene	e 110	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (k) fluoranthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzoic acid	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Benzo (g,h,i) perylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (a) pyrene	e 150	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzyl alcohol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
Bis (2-chloroethoxy) methane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-chloroethyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-chloroisopropyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-ethylhexyl) phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-bromophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Butyl benzyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Chloroaniline	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
4-Chloro-3-methylphenol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
2-Chloronaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Chlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Chlorophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Chrysene	e 160	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dibenzo (a,h) anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Di-n-butyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dibenzofuran	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,2-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,3-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,4-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
3,3-Dichlorobenzidine	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
2,4-Dichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Diethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4-Dimethylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dimethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4,6-Dinitro-2-methylphenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
2,4-Dinitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
2,4-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE •

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-23-1						
2,6-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Di-n-octyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Fluoranthene	e 210	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Fluorene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorobutadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorocyclopentadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachloroethane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Indeno (1,2,3-cd) pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Isophorone	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Methylnaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Naphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
3-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Nitrobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Nitrophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Nitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
N-Nitrosodiphenylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
N-Nitroso-di-n-propylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Pentachlorophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Phenanthrene	e 120	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Phenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Pyrene	e 350	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,2,4-Trichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4,5-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4,6-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Volatile Organic Compounds						
Benzene	e 2	ug/kg	EPA 8260	5		3/11/99
Bromobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Bromochloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
Bromodichloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
Bromoform	< 5	ug/kg	EPA 8260	5		3/11/99
Bromomethane	< 5	ug/kg	EPA 8260	5		3/11/99
n-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
sec-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-23-1						
tert-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Carbon tetrachloride	< 5	ug/kg	EPA 8260	5		3/11/99
Chlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Chloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
Chloroform	< 5	ug/kg	EPA 8260	5		3/11/99
Chloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
2-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/11/99
4-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/11/99
Dibromochloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dibromo-3-chloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dibromoethane	< 5	ug/kg	EPA 8260	5		3/11/99
Dibromomethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,3-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,4-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Dichlorodifluoromethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
cis-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
trans-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,3-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
2,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1-Dichloropropene	< 5	ug/kg	EPA 8260	5		3/11/99
Ethylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Hexachlorobutadiene	< 5	ug/kg	EPA 8260	5		3/11/99
Isopropylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
p-Isopropyltoluene	< 5	ug/kg	EPA 8260	5		3/11/99
Methylene chloride	b 5	ug/kg	EPA 8260	5		3/11/99
Methyl-t-butyl ether	< 5	ug/kg	EPA 8260	5		3/11/99
Naphthalene	< 5	ug/kg	EPA 8260	5		3/11/99
n-Propylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Styrene	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,1,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,2,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
Tetrachloroethene	e 1	ug/kg	EPA 8260	5		3/11/99

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CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-23-1						
Toluene	7	ug/kg	EPA 8260	5		3/11/99
1,2,3-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,2,4-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,1-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,2-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
Trichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
1,2,3-Trichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2,4-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,3,5-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Vinyl chloride	< 5	ug/kg	EPA 8260	5		3/11/99
Xylenes, total	e 2	ug/kg	EPA 8260	15		3/11/99

Reviewed By: Matt Cohee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
b - found in blank / suspected lab artifact
e - estimated value, less than reporting limit

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CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-2-1						
Polychlorinated Biphenyls						
Aroclor 1016	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1221	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1232	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1242	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1248	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1254	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1260	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Organochlorine Pesticides						
Aldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
a-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
b-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
g-BHC (Lindane)	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
d-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Chlordane, total	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
4,4'-DDD	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDE	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDT	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Dieldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan I	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan II	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan Sulfate	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin Aldehyde	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor Epoxide	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Methoxychlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Toxaphene	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
RCRA Metals						
Arsenic	5.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Barium	350	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Cadmium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Chromium	9.6	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Lead	490	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Mercury	0.7	mg/kg	EPA 200.8	0.1	3/4/99	3/8/99
Selenium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Silver	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-2-1						
Semi-Volatile Organic Compounds						
Acenaphthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Acenaphthylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (a) anthracene	e 91	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (b) fluoranthene	e 130	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (k) fluoranthene	e 170	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzoic acid	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Benzo (g,h,i) perylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (a) pyrene	e 140	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzyl alcohol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
Bis (2-chloroethoxy) methane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-chloroethyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-chloroisopropyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-ethylhexyl) phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-bromophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Butyl benzyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Chloroaniline	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
4-Chloro-3-methylphenol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
2-Chloronaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Chlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Chlorophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Chrysene	e 130	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dibenzo (a,h) anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Di-n-butyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dibenzofuran	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,2-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,3-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,4-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
3,3-Dichlorobenzidine	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
2,4-Dichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Diethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4-Dimethylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dimethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4,6-Dinitro-2-methylphenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
2,4-Dinitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
2,4-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-2-1						
2,6-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Di-n-octyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Fluoranthene	e 220	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Fluorene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorobutadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorocyclopentadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachloroethane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Indeno (1,2,3-cd) pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Isophorone	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Methylnaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Naphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
3-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Nitrobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Nitrophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Nitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
N-Nitrosodiphenylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
N-Nitroso-di-n-propylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Pentachlorophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Phenanthrene	e 190	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Phenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Pyrene	e 190	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,2,4-Trichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4,5-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4,6-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Volatile Organic Compounds						
Benzene	5	ug/kg	EPA 8260	5		3/10/99
Bromobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Bromochloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
Bromodichloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
Bromoform	< 5	ug/kg	EPA 8260	5		3/10/99
Bromomethane	< 5	ug/kg	EPA 8260	5		3/10/99
n-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
sec-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 99030402 Page 24 of 55
Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-2-1						
tert-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Carbon tetrachloride	< 5	ug/kg	EPA 8260	5		3/10/99
Chlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Chloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Chloroform	< 5	ug/kg	EPA 8260	5		3/10/99
Chloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
2-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/10/99
4-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/10/99
Dibromochloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dibromo-3-chloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dibromoethane	< 5	ug/kg	EPA 8260	5		3/10/99
Dibromomethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,3-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,4-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Dichlorodifluoromethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
cis-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
trans-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,3-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
2,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloropropene	< 5	ug/kg	EPA 8260	5		3/10/99
Ethylbenzene	e 3	ug/kg	EPA 8260	5		3/10/99
Hexachlorobutadiene	< 5	ug/kg	EPA 8260	5		3/10/99
Isopropylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
p-Isopropyltoluene	< 5	ug/kg	EPA 8260	5		3/10/99
Methylene chloride	b 11	ug/kg	EPA 8260	5		3/10/99
Methyl-t-butyl ether	e 2	ug/kg	EPA 8260	5		3/10/99
Naphthalene	< 5	ug/kg	EPA 8260	5		3/10/99
n-Propylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Styrene	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,1,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,2,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Tetrachloroethene	e 2	ug/kg	EPA 8260	5		3/10/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-2-1						
Toluene	22	ug/kg	EPA 8260	5		3/10/99
1,2,3-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,4-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,1-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,2-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Trichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,3-Trichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,4-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,3,5-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Vinyl chloride	< 5	ug/kg	EPA 8260	5		3/10/99
Xylenes, total	e 6	ug/kg	EPA 8260	15		3/10/99

Reviewed By: Matt Cohee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
b - found in blank / suspected lab artifact
e - estimated value, less than reporting limit

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-2-2						
Polychlorinated Biphenyls						
Aroclor 1016	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1221	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1232	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1242	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1248	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1254	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1260	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Organochlorine Pesticides						
Aldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
a-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
b-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
g-BHC (Lindane)	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
d-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Chlordane, total	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
4,4'-DDD	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDE	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDT	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Dieldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan I	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan II	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan Sulfate	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin Aldehyde	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor Epoxide	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Methoxychlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Toxaphene	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
RCRA Metals						
Arsenic	< 5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Barium	53	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Cadmium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Chromium	10	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Lead	10	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Mercury	< 0.5	mg/kg	EPA 200.8	0.1	3/4/99	3/8/99
Selenium	< 5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Silver	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99

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CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-2-2						
Semi-Volatile Organic Compounds						
Acenaphthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Acenaphthylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (a) anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (b) fluoranthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (k) fluoranthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzoic acid	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Benzo (g,h,i) perylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (a) pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzyl alcohol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
Bis (2-chloroethoxy) methane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-chloroethyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-chloroisopropyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-ethylhexyl) phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-bromophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Butyl benzyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Chloroaniline	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
4-Chloro-3-methylphenol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
2-Chloronaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Chlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Chlorophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Chrysene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dibenzo (a,h) anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Di-n-butyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dibenzofuran	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,2-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,3-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,4-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
3,3-Dichlorobenzidine	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
2,4-Dichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Diethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4-Dimethylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dimethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4,6-Dinitro-2-methylphenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
2,4-Dinitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
2,4-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-2-2						
2,6-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Di-n-octyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Fluoranthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Fluorene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorobutadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorocyclopentadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachloroethane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Indeno (1,2,3-cd) pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Isophorone	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Methylnaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Naphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
3-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Nitrobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Nitrophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Nitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
N-Nitrosodiphenylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
N-Nitroso-di-n-propylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Pentachlorophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Phenanthrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Phenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,2,4-Trichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4,5-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4,6-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Volatile Organic Compounds						
Benzene	< 5	ug/kg	EPA 8260	5		3/10/99
Bromobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Bromochloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
Bromodichloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
Bromoform	< 5	ug/kg	EPA 8260	5		3/10/99
Bromomethane	< 5	ug/kg	EPA 8260	5		3/10/99
n-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
sec-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-2-2						
tert-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Carbon tetrachloride	< 5	ug/kg	EPA 8260	5		3/10/99
Chlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Chloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Chloroform	< 5	ug/kg	EPA 8260	5		3/10/99
Chloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
2-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/10/99
4-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/10/99
Dibromochloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dibromo-3-chloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dibromoethane	< 5	ug/kg	EPA 8260	5		3/10/99
Dibromomethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,3-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,4-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Dichlorodifluoromethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
cis-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
trans-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,3-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
2,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloropropene	< 5	ug/kg	EPA 8260	5		3/10/99
Ethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Hexachlorobutadiene	< 5	ug/kg	EPA 8260	5		3/10/99
Isopropylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
p-Isopropyltoluene	< 5	ug/kg	EPA 8260	5		3/10/99
Methylene chloride	< 5	ug/kg	EPA 8260	5		3/10/99
Methyl-t-butyl ether	< 5	ug/kg	EPA 8260	5		3/10/99
Naphthalene	< 5	ug/kg	EPA 8260	5		3/10/99
n-Propylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Styrene	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,1,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,2,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Tetrachloroethene	< 5	ug/kg	EPA 8260	5		3/10/99

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CERTIFICATE OF ANALYSIS
No. 99030402 Page 30 of 55
Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-2-2						
Toluene	e 1	ug/kg	EPA 8260	5		3/10/99
1,2,3-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,4-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,1-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,2-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Trichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,3-Trichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,4-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,3,5-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Vinyl chloride	< 5	ug/kg	EPA 8260	5		3/10/99
Xylenes, total	< 15	ug/kg	EPA 8260	15		3/10/99

Reviewed By: Matt Colee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
e - estimated value, less than reporting limit

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 99030402 Page 31 of 55
Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-22-1						
Polychlorinated Biphenyls						
Aroclor 1016	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1221	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1232	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1242	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1248	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1254	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1260	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Organochlorine Pesticides						
Aldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
a-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
b-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
g-BHC (Lindane)	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
d-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Chlordane, total	< 500	ug/kg	EPA 8081	50	3/5/99	3/9/99
4,4'-DDD	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
4,4'-DDE	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
4,4'-DDT	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Dieldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Endosulfan I	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Endosulfan II	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Endosulfan Sulfate	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Endrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Endrin Aldehyde	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Heptachlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Heptachlor Epoxide	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Methoxychlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Toxaphene	< 500	ug/kg	EPA 8081	50	3/5/99	3/9/99
RCRA Metals						
Arsenic	9.0	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Barium	430	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Cadmium	< 5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Chromium	14	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Lead	810	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Mercury	0.5	mg/kg	EPA 200.8	0.1	3/4/99	3/8/99
Selenium	0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Silver	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE •

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

Sample ID: FBW-TP-22-1

	Result	Unit	Method	PQL	Prepared	Analyzed
Semi-Volatile Organic Compounds						
Acenaphthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Acenaphthylene	e 63	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (a) anthracene	1400	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (b) fluoranthene	2300	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (k) fluoranthene	1800	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzoic acid	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Benzo (g,h,i) perylene	620	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (a) pyrene	2000	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzyl alcohol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
Bis (2-chloroethoxy) methane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-chloroethyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-chloroisopropyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-ethylhexyl) phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-bromophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Butyl benzyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Chloroaniline	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
4-Chloro-3-methylphenol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
2-Chloronaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Chlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Chlorophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Chrysene	1600	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dibenzo (a,h) anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Di-n-butyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dibenzofuran	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,2-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,3-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,4-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
3,3-Dichlorobenzidine	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
2,4-Dichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Diethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4-Dimethylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dimethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4,6-Dinitro-2-methylphenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
2,4-Dinitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
2,4-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99

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CERTIFICATE OF ANALYSIS
No. 99030402 Page 33 of 55
Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-22-1						
2,6-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Di-n-octyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Fluoranthene	1800	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Fluorene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorobutadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorocyclopentadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachloroethane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Indeno (1,2,3-cd) pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Isophorone	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Methylnaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Naphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
3-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Nitrobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Nitrophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Nitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
N-Nitrosodiphenylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
N-Nitroso-di-n-propylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Pentachlorophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Phenanthrene	e 260	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Phenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Pyrene	1900	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,2,4-Trichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4,5-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4,6-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Volatile Organic Compounds						
Benzene	8	ug/kg	EPA 8260	5		3/11/99
Bromobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Bromochloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
Bromodichloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
Bromoform	< 5	ug/kg	EPA 8260	5		3/11/99
Bromomethane	< 5	ug/kg	EPA 8260	5		3/11/99
n-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
sec-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 99030402 Page 34 of 55
Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-22-1						
tert-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Carbon tetrachloride	< 5	ug/kg	EPA 8260	5		3/11/99
Chlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Chloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
Chloroform	< 5	ug/kg	EPA 8260	5		3/11/99
Chloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
2-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/11/99
4-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/11/99
Dibromochloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dibromo-3-chloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dibromoethane	< 5	ug/kg	EPA 8260	5		3/11/99
Dibromomethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,3-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,4-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Dichlorodifluoromethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
cis-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
trans-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,3-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
2,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1-Dichloropropene	< 5	ug/kg	EPA 8260	5		3/11/99
Ethylbenzene	5	ug/kg	EPA 8260	5		3/11/99
Hexachlorobutadiene	< 5	ug/kg	EPA 8260	5		3/11/99
Isopropylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
p-Isopropyltoluene	< 5	ug/kg	EPA 8260	5		3/11/99
Methylene chloride	b 7	ug/kg	EPA 8260	5		3/11/99
Methyl-t-butyl ether	e 2	ug/kg	EPA 8260	5		3/11/99
Naphthalene	< 5	ug/kg	EPA 8260	5		3/11/99
n-Propylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Styrene	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,1,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,2,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
Tetrachloroethene	e 4	ug/kg	EPA 8260	5		3/11/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-22-1						
Toluene	39	ug/kg	EPA 8260	5		3/11/99
1,2,3-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,2,4-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,1-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,2-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
Trichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
1,2,3-Trichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2,4-Trimethylbenzene	e 2	ug/kg	EPA 8260	5		3/11/99
1,3,5-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Vinyl chloride	< 5	ug/kg	EPA 8260	5		3/11/99
Xylenes, total	e 12	ug/kg	EPA 8260	15		3/11/99

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
b - found in blank / suspected lab artifact
e - estimated value, less than reporting limit

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-25-1						
Polychlorinated Biphenyls						
Aroclor 1016	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1221	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1232	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1242	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1248	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1254	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1260	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Organochlorine Pesticides						
Aldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
a-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
b-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
g-BHC (Lindane)	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
d-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Chlordane, total	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
4,4'-DDD	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDE	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDT	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Dieldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan I	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan II	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan Sulfate	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin Aldehyde	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor Epoxide	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Methoxychlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Toxaphene	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
RCRA Metals						
Arsenic	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Barium	20	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Cadmium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Chromium	2.7	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Lead	7.0	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Mercury	< 0.1	mg/kg	EPA 200.8	0.1	3/4/99	3/8/99
Selenium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Silver	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-25-1						
Semi-Volatile Organic Compounds						
Acenaphthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Acenaphthylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (a) anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (b) fluoranthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (k) fluoranthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzoic acid	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Benzo (g,h,i) perylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (a) pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzyl alcohol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
Bis (2-chloroethoxy) methane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-chloroethyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-chloroisopropyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-ethylhexyl) phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-bromophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Butyl benzyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Chloroaniline	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
4-Chloro-3-methylphenol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
2-Chloronaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Chlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Chlorophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Chrysene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dibenzo (a,h) anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Di-n-butyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dibenzofuran	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,2-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,3-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,4-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
3,3-Dichlorobenzidine	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
2,4-Dichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Diethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4-Dimethylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dimethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4,6-Dinitro-2-methylphenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
2,4-Dinitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
2,4-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-25-1						
2,6-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Di-n-octyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Fluoranthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Fluorene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorobutadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorocyclopentadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachloroethane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Indeno (1,2,3-cd) pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Isophorone	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Methylnaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Naphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
3-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Nitrobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Nitrophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Nitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
N-Nitrosodiphenylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
N-Nitroso-di-n-propylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Pentachlorophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Phenanthrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Phenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,2,4-Trichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4,5-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4,6-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Volatile Organic Compounds						
Benzene	e 2	ug/kg	EPA 8260	5		3/11/99
Bromobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Bromochloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
Bromodichloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
Bromoform	< 5	ug/kg	EPA 8260	5		3/11/99
Bromomethane	< 5	ug/kg	EPA 8260	5		3/11/99
n-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
sec-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-25-1						
tert-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Carbon tetrachloride	< 5	ug/kg	EPA 8260	5		3/11/99
Chlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Chloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
Chloroform	< 5	ug/kg	EPA 8260	5		3/11/99
Chloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
2-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/11/99
4-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/11/99
Dibromochloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dibromo-3-chloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dibromoethane	< 5	ug/kg	EPA 8260	5		3/11/99
Dibromomethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,3-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,4-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Dichlorodifluoromethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
cis-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
trans-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,3-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
2,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1-Dichloropropene	< 5	ug/kg	EPA 8260	5		3/11/99
Ethylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Hexachlorobutadiene	< 5	ug/kg	EPA 8260	5		3/11/99
Isopropylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
p-Isopropyltoluene	< 5	ug/kg	EPA 8260	5		3/11/99
Methylene chloride	eb 4	ug/kg	EPA 8260	5		3/11/99
Methyl-t-butyl ether	< 5	ug/kg	EPA 8260	5		3/11/99
Naphthalene	< 5	ug/kg	EPA 8260	5		3/11/99
n-Propylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Styrene	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,1,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,2,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
Tetrachloroethene	< 5	ug/kg	EPA 8260	5		3/11/99

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-25-1						
Toluene	6	ug/kg	EPA 8260	5		3/11/99
1,2,3-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,2,4-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,1-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,2-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
Trichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
1,2,3-Trichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2,4-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,3,5-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Vinyl chloride	< 5	ug/kg	EPA 8260	5		3/11/99
Xylenes, total	< 15	ug/kg	EPA 8260	15		3/11/99

Reviewed By: Matt Cohee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
b - found in blank / suspected lab artifact
e - estimated value, less than reporting limit

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-28-1						
Polychlorinated Biphenyls						
Aroclor 1016	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1221	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1232	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1242	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1248	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1254	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1260	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Organochlorine Pesticides						
Aldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
a-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
b-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
g-BHC (Lindane)	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
d-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Chlordane, total	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
4,4'-DDD	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDE	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDT	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Dieldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan I	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan II	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan Sulfate	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin Aldehyde	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor Epoxide	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Methoxychlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Toxaphene	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
RCRA Metals						
Arsenic	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Barium	31	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Cadmium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Chromium	2.3	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Lead	12	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Mercury	< 0.1	mg/kg	EPA 200.8	0.1	3/4/99	3/8/99
Selenium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Silver	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-28-1						
Semi-Volatile Organic Compounds						
Acenaphthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Acenaphthylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Anthracene	e 120	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (a) anthracene	e 310	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (b) fluoranthene	e 310	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (k) fluoranthene	e 380	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzoic acid	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Benzo (g,h,i) perylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzo (a) pyrene	e 310	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Benzyl alcohol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
Bis (2-chloroethoxy) methane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-chloroethyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-chloroisopropyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Bis (2-ethylhexyl) phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-bromophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Butyl benzyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Chloroaniline	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
4-Chloro-3-methylphenol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
2-Chloronaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Chlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Chlorophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Chrysene	e 290	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dibenzo (a,h) anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Di-n-butyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dibenzofuran	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,2-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,3-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,4-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
3,3-Dichlorobenzidine	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/10/99
2,4-Dichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Diethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4-Dimethylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Dimethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4,6-Dinitro-2-methylphenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
2,4-Dinitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
2,4-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-28-1						
2,6-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Di-n-octyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Fluoranthene	e 530	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Fluorene	e 41	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorobutadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachlorocyclopentadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Hexachloroethane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Indeno (1,2,3-cd) pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Isophorone	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Methylnaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Naphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
3-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Nitrobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2-Nitrophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
4-Nitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
N-Nitrosodiphenylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
N-Nitroso-di-n-propylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Pentachlorophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/10/99
Phenanthrene	e 330	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Phenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Pyrene	e 480	ug/kg	EPA 8270A	660	3/9/99	3/10/99
1,2,4-Trichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4,5-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
2,4,6-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/10/99
Volatile Organic Compounds						
Benzene	e 2	ug/kg	EPA 8260	5		3/11/99
Bromobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Bromochloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
Bromodichloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
Bromoform	< 5	ug/kg	EPA 8260	5		3/11/99
Bromomethane	< 5	ug/kg	EPA 8260	5		3/11/99
n-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
sec-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-28-1						
tert-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Carbon tetrachloride	< 5	ug/kg	EPA 8260	5		3/11/99
Chlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Chloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
Chloroform	< 5	ug/kg	EPA 8260	5		3/11/99
Chloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
2-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/11/99
4-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/11/99
Dibromochloromethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dibromo-3-chloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dibromoethane	< 5	ug/kg	EPA 8260	5		3/11/99
Dibromomethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,3-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,4-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Dichlorodifluoromethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
cis-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
trans-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
1,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,3-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
2,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1-Dichloropropene	< 5	ug/kg	EPA 8260	5		3/11/99
Ethylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Hexachlorobutadiene	< 5	ug/kg	EPA 8260	5		3/11/99
Isopropylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
p-Isopropyltoluene	< 5	ug/kg	EPA 8260	5		3/11/99
Methylene chloride	b 7	ug/kg	EPA 8260	5		3/11/99
Methyl-t-butyl ether	< 5	ug/kg	EPA 8260	5		3/11/99
Naphthalene	< 5	ug/kg	EPA 8260	5		3/11/99
n-Propylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Styrene	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,1,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,2,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
Tetrachloroethene	< 5	ug/kg	EPA 8260	5		3/11/99

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/3/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-28-1						
Toluene	6	ug/kg	EPA 8260	5		3/11/99
1,2,3-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,2,4-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,1-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
1,1,2-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/11/99
Trichloroethene	< 5	ug/kg	EPA 8260	5		3/11/99
1,2,3-Trichloropropane	< 5	ug/kg	EPA 8260	5		3/11/99
1,2,4-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
1,3,5-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/11/99
Vinyl chloride	< 5	ug/kg	EPA 8260	5		3/11/99
Xylenes, total	< 15	ug/kg	EPA 8260	15		3/11/99

Reviewed By: Matt Cohee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
b - found in blank / suspected lab artifact
e - estimated value, less than reporting limit

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-13-1						
Polychlorinated Biphenyls						
Aroclor 1016	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1221	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1232	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1242	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1248	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1254	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1260	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Organochlorine Pesticides						
Aldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
a-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
b-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
g-BHC (Lindane)	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
d-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Chlordane, total	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
4,4'-DDD	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDE	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
4,4'-DDT	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Dieldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan I	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan II	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endosulfan Sulfate	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Endrin Aldehyde	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Heptachlor Epoxide	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Methoxychlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/8/99
Toxaphene	< 500	ug/kg	EPA 8081	50	3/5/99	3/8/99
RCRA Metals						
Arsenic	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Barium	39	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Cadmium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Chromium	4.4	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Lead	10	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Mercury	< 0.1	mg/kg	EPA 200.8	0.1	3/4/99	3/8/99
Selenium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Silver	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-13-1						
Semi-Volatile Organic Compounds						
Acenaphthene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Acenaphthylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Anthracene	e 46	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (a) anthracene	e 98	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (b) fluoranthene	e 160	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (k) fluoranthene	e 150	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzoic acid	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Benzo (g,h,i) perylene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (a) pyrene	e 140	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzyl alcohol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
Bis (2-chloroethoxy) methane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-chloroethyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-chloroisopropyl) ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-ethylhexyl) phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-bromophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Butyl benzyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Chloroaniline	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
4-Chloro-3-methylphenol	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
2-Chloronaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Chlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Chlorophenyl phenyl ether	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Chrysene	e 130	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dibenzo (a,h) anthracene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Di-n-butyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dibenzofuran	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,2-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,3-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,4-Dichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
3,3-Dichlorobenzidine	< 1300	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
2,4-Dichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Diethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4-Dimethylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dimethyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4,6-Dinitro-2-methylphenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
2,4-Dinitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
2,4-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-13-1						
2,6-Dinitrotoluene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Di-n-octyl phthalate	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Fluoranthene	e 260	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Fluorene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorobutadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorocyclopentadiene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachloroethane	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Indeno (1,2,3-cd) pyrene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Isophorone	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Methylnaphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Methylphenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Naphthalene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
3-Nitroaniline	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Nitrobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Nitrophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Nitrophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
N-Nitrosodiphenylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
N-Nitroso-di-n-propylamine	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Pentachlorophenol	< 3300	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Phenanthrene	e 210	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Phenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Pyrene	e 260	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,2,4-Trichlorobenzene	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4,5-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4,6-Trichlorophenol	< 660	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Volatile Organic Compounds						
Benzene	e 2	ug/kg	EPA 8260	5		3/10/99
Bromobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Bromochloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
Bromodichloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
Bromoform	< 5	ug/kg	EPA 8260	5		3/10/99
Bromomethane	< 5	ug/kg	EPA 8260	5		3/10/99
n-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
sec-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-13-1						
tert-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Carbon tetrachloride	< 5	ug/kg	EPA 8260	5		3/10/99
Chlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Chloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Chloroform	< 5	ug/kg	EPA 8260	5		3/10/99
Chloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
2-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/10/99
4-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/10/99
Dibromochloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dibromo-3-chloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dibromoethane	< 5	ug/kg	EPA 8260	5		3/10/99
Dibromomethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,3-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,4-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Dichlorodifluoromethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
cis-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
trans-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,3-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
2,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloropropene	< 5	ug/kg	EPA 8260	5		3/10/99
Ethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Hexachlorobutadiene	< 5	ug/kg	EPA 8260	5		3/10/99
Isopropylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
p-Isopropyltoluene	< 5	ug/kg	EPA 8260	5		3/10/99
Methylene chloride	eb 4	ug/kg	EPA 8260	5		3/10/99
Methyl-t-butyl ether	< 5	ug/kg	EPA 8260	5		3/10/99
Naphthalene	< 5	ug/kg	EPA 8260	5		3/10/99
n-Propylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Styrene	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,1,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,2,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Tetrachloroethene	< 5	ug/kg	EPA 8260	5		3/10/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-13-1						
Toluene	6	ug/kg	EPA 8260	5		3/10/99
1,2,3-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,4-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,1-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,2-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Trichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,3-Trichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,4-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,3,5-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Vinyl chloride	< 5	ug/kg	EPA 8260	5		3/10/99
Xylenes, total	< 15	ug/kg	EPA 8260	15		3/10/99

Reviewed By: Matt Cohee
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
b - found in blank / suspected lab artifact
e - estimated value, less than reporting limit

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-18-1						
Polychlorinated Biphenyls						
Aroclor 1016	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1221	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1232	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1242	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1248	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1254	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Aroclor 1260	< 0.5	mg/kg	EPA 8082	0.5	3/5/99	3/8/99
Organochlorine Pesticides						
Aldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
a-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
b-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
g-BHC (Lindane)	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
d-BHC	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Chlordane, total	< 500	ug/kg	EPA 8081	50	3/5/99	3/9/99
4,4'-DDD	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
4,4'-DDE	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
4,4'-DDT	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Dieldrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Endosulfan I	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Endosulfan II	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Endosulfan Sulfate	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Endrin	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Endrin Aldehyde	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Heptachlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Heptachlor Epoxide	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Methoxychlor	< 10	ug/kg	EPA 8081	1	3/5/99	3/9/99
Toxaphene	< 500	ug/kg	EPA 8081	50	3/5/99	3/9/99
RCRA Metals						
Arsenic	2.4	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Barium	110	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Cadmium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Chromium	5.6	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Lead	150	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Mercury	0.1	mg/kg	EPA 200.8	0.1	3/4/99	3/8/99
Selenium	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99
Silver	< 0.5	mg/kg	EPA 200.8	0.5	3/4/99	3/5/99

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-18-1						
Semi-Volatile Organic Compounds						
Acenaphthene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Acenaphthylene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Anthracene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (a) anthracene	e 450	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (b) fluoranthene	e 400	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (k) fluoranthene	e 470	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzoic acid	< 33000	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Benzo (g,h,i) perylene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzo (a) pyrene	e 520	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Benzyl alcohol	< 13000	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
Bis (2-chloroethoxy) methane	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-chloroethyl) ether	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-chloroisopropyl) ether	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Bis (2-ethylhexyl) phthalate	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-bromophenyl phenyl ether	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Butyl benzyl phthalate	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Chloroaniline	< 13000	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
4-Chloro-3-methylphenol	< 13000	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
2-Chloronaphthalene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Chlorophenol	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Chlorophenyl phenyl ether	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Chrysene	e 450	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dibenzo (a,h) anthracene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Di-n-butyl phthalate	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dibenzofuran	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,2-Dichlorobenzene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,3-Dichlorobenzene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,4-Dichlorobenzene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
3,3-Dichlorobenzidine	< 13000	ug/kg	EPA 8270A	1300	3/9/99	3/9/99
2,4-Dichlorophenol	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Diethyl phthalate	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4-Dimethylphenol	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Dimethyl phthalate	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4,6-Dinitro-2-methylphenol	< 33000	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
2,4-Dinitrophenol	< 33000	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
2,4-Dinitrotoluene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99

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ANALYTICAL CHEMISTRY • ENVIRONMENTAL SCIENCE

CERTIFICATE OF ANALYSIS
No. 99030402 Page 53 of 55
Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-18-1						
2,6-Dinitrotoluene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Di-n-octyl phthalate	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Fluoranthene	e 810	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Fluorene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorobenzene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorobutadiene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachlorocyclopentadiene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Hexachloroethane	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Indeno (1,2,3-cd) pyrene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Isophorone	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Methylnaphthalene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Methylphenol	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Methylphenol	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Naphthalene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Nitroaniline	< 33000	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
3-Nitroaniline	< 33000	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Nitrobenzene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2-Nitrophenol	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
4-Nitrophenol	< 33000	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
N-Nitrosodiphenylamine	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
N-Nitroso-di-n-propylamine	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Pentachlorophenol	< 33000	ug/kg	EPA 8270A	3300	3/9/99	3/9/99
Phenanthrene	e 750	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Phenol	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Pyrene	e 890	ug/kg	EPA 8270A	660	3/9/99	3/9/99
1,2,4-Trichlorobenzene	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4,5-Trichlorophenol	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
2,4,6-Trichlorophenol	< 6600	ug/kg	EPA 8270A	660	3/9/99	3/9/99
Volatile Organic Compounds						
Benzene	e 4	ug/kg	EPA 8260	5		3/10/99
Bromobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Bromochloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
Bromodichloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
Bromoform	< 5	ug/kg	EPA 8260	5		3/10/99
Bromomethane	< 5	ug/kg	EPA 8260	5		3/10/99
n-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
sec-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99

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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-18-1						
tert-Butylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Carbon tetrachloride	< 5	ug/kg	EPA 8260	5		3/10/99
Chlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Chloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Chloroform	< 5	ug/kg	EPA 8260	5		3/10/99
Chloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
2-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/10/99
4-Chlorotoluene	< 5	ug/kg	EPA 8260	5		3/10/99
Dibromochloromethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dibromo-3-chloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dibromoethane	< 5	ug/kg	EPA 8260	5		3/10/99
Dibromomethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,3-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,4-Dichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Dichlorodifluoromethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
cis-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
trans-1,2-Dichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,3-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
2,2-Dichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1-Dichloropropene	< 5	ug/kg	EPA 8260	5		3/10/99
Ethylbenzene	e 1	ug/kg	EPA 8260	5		3/10/99
Hexachlorobutadiene	< 5	ug/kg	EPA 8260	5		3/10/99
Isopropylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
p-Isopropyltoluene	< 5	ug/kg	EPA 8260	5		3/10/99
Methylene chloride	b 6	ug/kg	EPA 8260	5		3/10/99
Methyl-t-butyl ether	< 5	ug/kg	EPA 8260	5		3/10/99
Naphthalene	< 5	ug/kg	EPA 8260	5		3/10/99
n-Propylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Styrene	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,1,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,2,2-Tetrachloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Tetrachloroethene	e 1	ug/kg	EPA 8260	5		3/10/99

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CERTIFICATE OF ANALYSIS
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Bay Environmental Corporation
March 11, 1999

Project: Frederick Brick Works
Site Location: Frederick, MD
Project Number: 98008
Matrix: Soil

Date Sampled: 3/2/99
Date Received: 3/4/99

	Result	Unit	Method	PQL	Prepared	Analyzed
Sample ID: FBW-TP-18-1						
Toluene	12	ug/kg	EPA 8260	5		3/10/99
1,2,3-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,4-Trichlorobenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,1-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
1,1,2-Trichloroethane	< 5	ug/kg	EPA 8260	5		3/10/99
Trichloroethene	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,3-Trichloropropane	< 5	ug/kg	EPA 8260	5		3/10/99
1,2,4-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
1,3,5-Trimethylbenzene	< 5	ug/kg	EPA 8260	5		3/10/99
Vinyl chloride	< 5	ug/kg	EPA 8260	5		3/10/99
Xylenes, total	e 1	ug/kg	EPA 8260	15		3/10/99

Reviewed By: Matt Cohen
Quality Assurance Chemist

Notes/Comments:
PQL - Practical Quantitation Limit
b - found in blank / suspected lab artifact
e - estimated value, less than reporting limit

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

(1)

CLIENT: BAY ENVIRONM PHONE NO: (410) 651-0100
PROJECT MGR: MEG BATTIN FAX NO: (410) 651-0400
PROJECT NAME: FREDERICK BRICK WORKS
SITE LOCATION: FREDERICK, MD
PROJECT NUMBER: 98008
P.O. NUMBER:

PSS Project: 9903040 2

PAGE 1 OF 2

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE C=COMP G=GRAB	Preservatives Used	Analysis Required (3) VOCs	RCRA 8 METALS	PCB/PEST	SEMI-VOCS							REMARKS
	FBW-3	3/2/99	5 PM	GW	2	G		X										
	FBW-3	"	"	"	1	G			X									
	FBW-3	"	"	"	1	"				X								
	FBW-3	"	"	"	1	"					X							
	FBW-AH1 ✓	3/2/99		SOIL	2	G		X	X	X	X							~~FAIL~~
	FBW-TP-20-1 ✓	"	4:25	SOIL	2	G		X	X	X	X							
	FBW-TP-23-1 ✓	3/3/99	8:45	SOIL	2	G		X	X	X	X							
	FBW-TP-2-1 ✓	3/2/99	9:45	~~FAIL~~	"	"		X	X	X	X							SOIL
	FBW-TP-2-2 ✓	3/9/99	10 AM	SOIL	"	"		X	X	X	X							
	FBW-TP-22-1 ✓	3/3/99	8:20 A	"	"	"		X	X	X	X							

(5)

Collected / Relinquished By: (1)	Date	Time	Received By:
Mike Battin	3/3/99	4 pm	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date 3/4	Time 10:00	Received For Laboratory By:

(4)

Shipping Carrier:
Shipping Ticket No:
Samples Received Cold? (Circle) YES NO
Temperature °C:
Data Deliverables Required
Level I Level II Level III
Chain of Custody Seal: (Circle)
INTACT BROKEN ABSENT

Requested Turnaround Time and Special Instructions:
Called Client / Meg re. Sample 2-2. Sampled on 9th?, Meg said it was sampled on 2nd.
mc 3/8/99
2:10 pm

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • FAX (410) 788-8723

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

(1)

CLIENT: Bay Enviro PHONE NO: (410) 651-0100

PROJECT MGR: Meg Battin FAX NO: ( )

PROJECT NAME: Frederick Brick Works

SITE LOCATION:

PROJECT NUMBER: 98008

P.O. NUMBER:

PSS Project: 990304-02

PAGE 2 OF 2

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No. CONTAINERS	SAMPLE TYPE C=COMP G=GRAB	Preservatives Used	Analysis Required (3) VOCs	Semi VOCs	RCRA 8 Metals	PCB/Pest	REMARKS
	FBW-TP-25-1 ✓	3/3/99	9:15 A	SOIL	2	G		X	X	X	X	
	FBW-TP-28-1 ✓	3/3/99	11:00	SOIL	2	G		X	X	X	X	
	FBW-TP-13-1 ✓	3/2/99	11:45	"	"	"		X	X	X	X	
	FBW-TP-18-1 ✓	3/2/99	3:00	"	"	"		X	X	X	X	
	~~FBW-TP-~~											

(5)

Collected / Relinquished By: (1)	Date	Time	Received By:
[signature]	3/3/99	4:00	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date 3/4	Time 10:00	Received For Laboratory By: [signature]

(4)

Shipping Carrier:

Shipping Ticket No:

Samples Received Cold? (Circle) (YES) NO

Temperature °C:

Data Deliverables Required

Level I Level II Level III

Chain of Custody Seal: (Circle)

INTACT BROKEN (ABSENT)

Requested Turnaround Time and Special Instructions:

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