

**FORMER RED DEVIL PAINT
30 NORTH WEST STREET
MOUNT VERNON, WESTCHESTER COUNTY, NEW YORK**

Final Engineering Report

BCP INDEX #W3-1079-05-09

SITE # C360031

Prepared for:

SUSA Mt. Vernon, LLC

Prepared by:

**LBG ENGINEERING SERVICES, P.C.
Professional Environmental & Civil Engineers
4 Westchester Park Drive, Suite 175
White Plains, NY 10604
(914) 694-5711
www.lbgweb.com**

JANUARY 31, 2017

TABLE OF CONTENTS

	<u>Page</u>
TABLE OF CONTENTS.....	i
LIST OF TABLES.....	vi
LIST OF FIGURES	xiii
CERTIFICATIONS	xv
LIST OF ACRONYMS	xvi
1.0 BACKGROUND AND SITE DESCRIPTION	1
2.0 SUMMARY OF SITE REMEDY	5
2.1 Remedial Action Objectives	5
2.1.1 Groundwater RAOs	5
2.1.2 Soil RAOs	5
2.1.3 Surface Water RAOs.....	6
2.2 Description Of Selected Remedy.....	6
3.0 OPERABLE UNITS AND INTERIM REMEDIAL MEASURES.....	8
3.1 Operable Units	8
3.2 Interim Remedial Measures	9
3.2.1 ERM Interim Remedial Measures	9
3.2.2 LBG Interim Remedial Measures.....	9
3.2.2.1 Interim Remedial Measure 1	10
3.2.2.2 Interim Remedial Measure 2	13
4.0 DESCRIPTION OF REMEDIAL ACTIONS.....	15
4.1 Governing Documents	15
4.1.1 Site Specific Health & Safety Plan (HASP)	15
4.1.2 Quality Assurance Project Plan (QAPP)	16
4.1.3 Soil/Materials Management Plan (S/MMP)	16
4.1.3.1 Soil Screening Methods	16
4.1.3.2 Stockpile Methods	18

TABLE OF CONTENTS

(continued)

	<u>Page</u>
4.1.3.3 Materials Excavation and Load Out	18
4.1.3.4 Materials Transport Off-Site	19
4.1.3.5 Materials Disposal Off-Site.....	20
4.1.3.6 Materials Reuse On-Site	20
4.1.3.7 Fluids Management	20
4.1.3.8 Demarcation.....	20
4.1.3.9 Backfill from Off-Site Sources.....	21
4.1.3.10 Contingency Plan	24
4.1.3.11 Odor, Dust and Nuisance Control Plan.....	25
4.1.4 Storm-Water Pollution Prevention Plan (SWPPP).....	26
4.1.5 Community Air Monitoring Plan (CAMP)	27
4.1.6 Community Participation Plan	27
4.1.6.1 Project Contact List.....	28
4.1.6.2 Public Contact List.....	28
4.1.6.3 Document Repositories.....	28
4.1.6.4 Public Notices	29
4.1.6.5 Public Comment Periods.....	29
4.2 Remedial Program Elements	30
4.2.1 Contractors and Consultants.....	30
4.2.2 Site Preparation	31
4.2.2.1 Boiler Room Dismantling.....	32
4.2.2.2 Storage Unit Removal	32
4.2.2.3 Subsurface Pipe Tracing and Ground Penetrating Radar Survey	33
4.2.2.4 Removal of Abandoned Overhead Piping.....	34
4.2.3 General Site Controls	35

TABLE OF CONTENTS

(continued)

	<u>Page</u>
4.2.4 Nuisance Controls	35
4.2.5 CAMP Results	36
4.2.6 Reporting	37
4.3 Contaminated Materials Removal	37
4.3.1 UST/AST Closure and Contamination Excavation Activities	37
4.3.2 Area A.....	38
4.3.3 Area B.....	42
4.3.4 First Floor USTs	42
4.3.5 Basement ASTs	45
4.3.6 Area C.....	47
4.3.7 Area D	54
4.3.7.1 Alleyway.....	54
4.3.8 Commercial Space and Adjacent Room	60
4.3.8.1 Hot Spot Excavation.....	60
4.3.8.2 Commercial Space Excavation.....	62
4.4 Remedial Performance/Documentation Sampling	65
4.4.1 Soil.....	65
4.4.1.1 Area A (Including Parking Lot)	66
4.4.1.1.1 Volatile Organic Compounds (VOCs).....	66
4.4.1.1.2 Semivolatile Organic Compounds (SVOC).....	68
4.4.1.1.3 Metals	69
4.4.1.1.4 Pesticides and PCBs	70
4.4.1.2 Area B.....	70
4.4.1.2.1 VOCs.....	70
4.4.1.2.2 SVOCs	71

TABLE OF CONTENTS

(continued)

	<u>Page</u>
4.4.1.2.3 Metals	72
4.4.1.3 Area C	73
4.4.1.3.1 VOCs.....	74
4.4.1.3.2 SVOCs	76
4.4.1.3.3 Metals	77
4.4.1.4 Area D (Including Alley)	77
4.4.1.4.1 VOCs.....	78
4.4.1.4.2 SVOCs	82
4.4.1.4.3 Metals	84
4.4.2 On-Site and Off-Site Groundwater	85
4.4.2.1 Area A (Including Parking Lot)	86
4.4.2.2 Area B.....	87
4.4.2.3 Area C	88
4.4.2.4 Area D (Including Alleyway)	89
4.4.3 On-Site and Off-Site Soil Vapor	91
4.4.3.1 Soil Vapor Quality	91
4.5 Imported Backfill.....	96
4.5.1 Area A.....	96
4.5.2 Area B.....	97
4.5.3 Area C.....	97
4.5.4 Area D	98
4.5.4.1 Alleyway.....	98
4.5.4.2 Hot Spot Excavation.....	98
4.5.4.3 Commercial Space Excavation.....	99

TABLE OF CONTENTS

(continued)

	<u>Page</u>
4.6 Contamination Remaining At The Site	99
4.6.1 Groundwater	101
4.6.2 Soil Vapor	102
4.6.3 LNAPL.....	103
4.7 Composite Cover System	104
4.8 Other Engineering Controls	105
4.8.1 Sub-Slab Depressurization System (SSDS)	105
4.8.2 Dual-Phase Extraction Treatment System.....	106
4.8.2.1 Treatment Trailer Enclosure	106
4.8.2.2 Treatment System Components.....	108
4.8.2.3 DPE Fluids Recovery and Treatment System Components.....	108
4.8.2.4 SVE/SSDS Soil Vapor Recovery System Components.....	116
4.8.4 Chemical Oxidation Application.....	122
4.8.4.1 Area D Excavation.....	122
4.8.4.2 Area A ORC Applications.....	125
4.9 Institutional Controls	126

APPENDICES

LIST OF TABLES

(at end of report)

Table

1	Summary of Soil Quality – Area A (Parking Lot) Excavation Endpoints, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE
2	Summary of Soil Quality – Area A (Parking Lot) UST-P Excavation Endpoints, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE
3	Summary of Soil Quality – Area A UST Geoprobe Closure Confirmation Samples, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE
4	Summary of Soil Quality – Well Installation Soil Samples (LBG), Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE
5	Summary of Soil Quality – Area A Surface Soil, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE
6	Summary of Soil Quality – Area A (Parking Lot) Excavation Endpoints, Semivolatile Organic Compounds – EPA Method 8270
7	Summary of Soil Quality – Area A (Parking Lot) UST-P Excavation Endpoints, Semivolatile Organic Compounds – EPA Method 8270
8	Summary of Soil Quality – Area A UST Geoprobe Closure Confirmation Samples, Semivolatile Organic Compounds – EPA Method 8270
9	Summary of Soil Quality – Well Installation Soil Samples (LBG), Semivolatile Organic Compounds – EPA Method 8270
10	Summary of Soil Quality – Area A Surface Soil, Semivolatile Organic Compounds – EPA Method 8270
11	Summary of Soil Quality – Area A (Parking Lot) Excavation Endpoints, Total RCRA Metals – EPA Method 6010 and 7471
12	Summary of Soil Quality – Area A (Parking Lot) UST-P Excavation Endpoints, Total RCRA Metals – EPA Method 6010 and 7471
13	Summary of Soil Quality – Area A UST Geoprobe Closure Confirmation Samples, Total Metals Analysis
14	Summary of Soil Quality – Well Installation Soil Samples (LBG), Total Metals Analysis

LIST OF TABLES

(at end of report)

(continued)

Table

15	Summary of Soil Quality – Area A Surface Soil, Total RCRA Metals – EPA Method 6010 and 7471
16	Summary of Soil Quality – Area A Surface Soil, PCBs and Pesticides
17	Summary of Soil Quality – Area B UST Geoprobe Closure Confirmation Samples, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE
18	Summary of Soil Quality – Area B AST Geoprobe Closure Confirmation Samples, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE
19	Summary of Soil Quality – Area B (Boiler Room) Geoprobe, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE
20	Summary of Soil Quality – Boiler Room Pipe Trench Bottom Sample, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE
21	Summary of Soil Quality – Area B Excavation Endpoints, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE
22	Summary of Soil Quality – Area B UST Geoprobe Closure Confirmation Samples, Semivolatile Organic Compounds – EPA Method 8270
23	Summary of Soil Quality – Area B (Boiler Room) Geoprobe, Semivolatile Organic Compounds – EPA Method 8270
24	Summary of Soil Quality – Area B AST Geoprobe Closure Confirmation Samples, Semivolatile Organic Compounds – EPA Method 8270
25	Summary of Soil Quality – Area B Excavation Endpoints, Semivolatile Organic Compounds – EPA Method 8270
26	Summary of Soil Quality – Boiler Room Pipe Trench Bottom Sample, Semivolatile Organic Compounds – EPA Method 8270
27	Summary of Soil Quality – Area B Excavation Endpoints, Total RCRA Metals – EPA Method 6010 and 7471
28	Summary of Soil Quality – Boiler Room Pipe Trench Bottom Sample, Total Metals Analysis
29	Summary of Soil Quality – Area C UST-D Geoprobe Closure Confirmation Samples, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE

LIST OF TABLES

(at end of report)

(continued)

Table

- | | |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 30 | Summary of Soil Quality – Area C UST Closure Excavation Endpoint Confirmation Samples, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE |
| 31 | Summary of Soil Quality – Hydraulic Barrier Geoprobe Boring, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE |
| 32 | Summary of Soil Quality – Area C UST-D Geoprobe Closure Confirmation Samples, Semivolatile Organic Compounds – EPA Method 8270 |
| 33 | Summary of Soil Quality – Area C UST Closure Excavation Endpoint Confirmation Samples, Semivolatile Organic Compounds – EPA Method 8270 |
| 34 | Summary of Soil Quality – Hydraulic Barrier Geoprobe Boring, Semivolatile Organic Compounds – EPA Method 8270 |
| 35 | Summary of Soil Quality – Area C UST-D Geoprobe Closure Confirmation Samples, Total Metals Analysis |
| 36 | Summary of Soil Quality – Area C UST Closure Excavation Endpoint Confirmation Samples, Total Metals Analysis |
| 37 | Summary of Soil Quality – Hydraulic Barrier Geoprobe Boring, Total Metals Analysis |
| 38 | Summary of Soil Quality – Area D UST Excavation Endpoint Confirmation Samples, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE |
| 39 | Summary of Soil Quality – Area D UST-10, UST-A and UST-B Geoprobe Closure Confirmation Samples, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE |
| 40 | Summary of Soil Quality – Area D (Commercial Space) UST Closure Confirmation Samples, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE |
| 41 | Summary of Soil Quality – Area D (Commercial Space) Excavation, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE |
| 42 | Summary of Soil Quality – Area D Excavation Endpoint Confirmation Samples, Semivolatile Organic Compounds – EPA Method 8270 |

LIST OF TABLES

(at end of report)

(continued)

Table

- | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 43 | Summary of Soil Quality – Area D UST-10, UST-A and UST-B Geoprobe Closure Confirmation Samples, Semivolatile Organic Compounds – EPA Method 8270 |
| 44 | Summary of Soil Quality – Area D (Commercial Space) UST Confirmation Samples, Semivolatile Organic Compounds – EPA Method 8270 |
| 45 | Summary of Soil Quality – Area D (Commercial Space) Excavation, Semivolatile Organic Compounds – EPA Method 8270 |
| 46 | Summary of Soil Quality – Area D Excavation Endpoint Confirmation Samples, Total Metals Analysis |
| 47 | Summary of Soil Quality – Area D UST-10, UST-A and UST-B Geoprobe Closure Confirmation Samples, Total Metals Analysis |
| 48 | Summary of Soil Quality – Area D (Commercial Space) Tank Closure Confirmation Samples, Total Metals Analysis |
| 49 | Summary of Soil Quality – Area D (Commercial Space) Excavation, Total RCRA Metals – EPA Method 6010 and 7471 |
| 50 | Summary of Groundwater Quality – Area A Geoprobe Closure Confirmation Samples, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE |
| 51 | Summary of Groundwater Quality – Area A Geoprobe Closure Confirmation Samples, Semivolatile Organic Compounds – EPA Method 8270 |
| 52 | Summary of Groundwater Quality – Area A Geoprobe Closure Confirmation Samples, Total Metals Analysis |
| 53 | Summary of Groundwater Quality – Area B UST Geoprobe Closure Confirmation Samples, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE |
| 54 | Summary of Groundwater Quality – Area B AST Geoprobe Closure Confirmation Samples, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE |
| 55 | Summary of Groundwater Quality – Area B UST Geoprobe Closure Confirmation Samples, Semivolatile Organic Compounds – EPA Method 8270 |

LIST OF TABLES

(at end of report)

(continued)

Table

56	Summary of Groundwater Quality – Area B AST Geoprobe Closure Confirmation Samples, Semivolatile Organic Compounds – EPA Method 8270
57	Summary of Groundwater Quality – Area C Geoprobe Closure Confirmation Samples, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE
58	Summary of Groundwater Quality – Hydraulic Barrier Geoprobe Borings, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE
59	Summary of Groundwater Quality – Area C Geoprobe Closure Confirmation Samples, Semivolatile Organic Compounds – EPA Method 8270
60	Summary of Groundwater Quality – Hydraulic Barrier Geoprobe Borings, Semivolatile Organic Compounds – EPA Method 8270
61	Summary of Groundwater Quality – Area C Geoprobe Closure Confirmation Samples, Total Metals Analysis
62	Summary of Groundwater Quality – Hydraulic Barrier Geoprobe Boring, Total Metals Analysis
63	Summary of Groundwater Quality – Area D (Alleyway) UST Geoprobe Closure Confirmation Samples, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE
64	Summary of Groundwater Quality – Area D (Commercial Space) UST Geoprobe Closure Confirmation Samples, Volatile Organic Compounds – EPA Method 8260, Modified to Include MTBE
65	Summary of Groundwater Quality – Area D (Alleyway) UST Geoprobe Closure Confirmation Samples, Semivolatile Organic Compounds – EPA Method 8270
66	Summary of Groundwater Quality – Area D (Commercial Space) UST Geoprobe Closure Confirmation Samples, Semivolatile Organic Compounds – EPA Method 8270
67	Summary of Groundwater Quality – Area D (Alleyway) UST Geoprobe Closure Confirmation Samples, Total Metals Analysis
68	Summary of Groundwater Quality – Area D (Commercial Space) UST Geoprobe Closure Confirmation Samples, Total Metals Analysis

LIST OF TABLES

(at end of report)

(continued)

Table

69	Summary of Soil Vapor Intrusion Sampling (Area A) – EPA Method TO-15, Samples Collected October 3, 4, 5, 6, 2006
70	Summary of Soil Vapor Intrusion Sampling (Area B) – EPA Method TO-15, Samples Collected October 4, 2006
71	Summary of Soil Vapor Intrusion Sampling (Area C) – EPA Method TO-15, Samples Collected October 5, 2006
72	Summary of Soil Vapor Intrusion Sampling (Area D) – EPA Method TO-15, Samples Collected October 4, 2006
73	Summary of Soil Vapor Point and Ambient Outdoor Air Sampling – EPA Method TO-15, Samples Collected October 6, 2006
74	Summary of Soil Vapor Intrusion Sampling – Propane Tracer Gas, Samples Collected October 3, 4, 5, 6, 2006
75	Summary of Soil Vapor Intrusion Sampling (Area A) – EPA Method TO-15, Samples Collected March 8, 2007
76	Summary of Soil Vapor Intrusion Sampling (Area B) – EPA Method TO-15, Samples Collected March 7, 2007
77	Summary of Soil Vapor Intrusion Sampling (Area C) – EPA Method TO-15, Samples Collected March 5, 2007
78	Summary of Soil Vapor Intrusion Sampling (Area D) – EPA Method TO-15, Samples Collected March 5, 2007
79	Summary of Soil Vapor Point and Ambient Outdoor Air Sampling – EPA Method TO-15, Samples Collected March 7, 2007
80	Summary of Soil Vapor Intrusion Sampling – Propane Tracer Gas, Samples Collected March 8, 2007
81	Summary of Soil Vapor Intrusion Sampling (Area A) – EPA Method TO-15, Samples Collected March 11, 2011
82	Summary of Soil Vapor Intrusion Sampling (Area B) – EPA Method TO-15, Samples Collected March 11, 2011
83	Summary of Soil Vapor Intrusion Sampling (Area C) – EPA Method TO-15, Samples Collected March 11, 2011

LIST OF TABLES

(at end of report)

(continued)

Table

- | | |
|----|--------------------------------------------------------------------------------------------------------|
| 84 | Summary of Soil Vapor Intrusion Sampling (Area D) – EPA Method TO-15, Samples Collected March 11, 2011 |
| 85 | Summary of Ambient Outdoor Air Sampling – EPA Method TO-15, Samples Collected March 11, 2011 |
| 86 | Summary of Soil Vapor Intrusion Sampling – Helium Trace Gas, Samples Collected March 11, 2011 |

LIST OF FIGURES

(at end of report)

Figure

- 1 Site Location Map
- 2 Site Plan
- 3 Subsurface Conductive Tracing Map
- 4 Area C – UST and AST Location Map
- 5 Ground Penetrating Radar Map Bisects and Potential Anomalies
- 6 Area A – UST Location Map
- 7 UST Closure Confirmation Geoprobe Boring Location Map – Area A, 2007
- 8 Excavation Extent and Endpoint Sample Location Map – Area A, 2008
- 9 Extent of Exploratory Excavations – Area A, 2008
- 10 Area B – UST and AST Location Map
- 11 UST and AST Closure Confirmation Geoprobe Boring Location Map – Area B, 2006
- 12 Excavation Extent and Endpoint Sample Location Map – Area B, 2007
- 13 Extent of Exploratory Excavations – Area B, 2007
- 14 Sub-Slab Depressurization Piping Locations
- 15 Sub-Slab Passive Vent System Construction Details
- 16 Excavation Extent and Endpoint Sample Location Map – Area C, 2007
- 17 UST and AST Closure Confirmation Geoprobe Boring Location Map – Area C, 2006/2007
- 18 Extent of Exploratory Excavations – Area C – 2007
- 19 Area D – UST Location Map
- 20 Excavation Extent and Endpoint Sample Location Map – Area D, 2006/2007/2008
- 21 UST Closure Confirmation Geoprobe Boring Location Map – Area D, 2006/2007
- 22 Area D Fire Escape Structural Support Construction Plans

LIST OF FIGURES

(at end of report)

(continued)

Figure

- | | |
|----|-----------------------------------------------------------------------------------|
| 23 | Well Location Map – 2005 |
| 24 | Extent of Exploratory Excavations – Area D, 2006/2007/2008 |
| 25 | Surface Soil Sample Locations – April 16, 2015 |
| 26 | Total VOC Concentrations in Soil – Horizontal Delineation Map – Area A |
| 27 | Total VOC Concentrations in Soil – Horizontal Delineation Map – Area B |
| 28 | Geoprobe and Grout Injection Pilot Test Borings for Hydraulic Barrier Feasibility |
| 29 | Total VOC Concentrations in Soil – Horizontal Delineation Map – Area C |
| 30 | Total VOC Concentrations in Soil – Horizontal Delineation Map – Area D |
| 31 | Soil Vapor Intrusion Sampling Map, October 2006, March 2007 and October 2009 |
| 32 | Soil Vapor Intrusion Sampling Map – March 11, 2011 |
| 33 | Cover Location and Type |
| 34 | Treatment System Trailer Location |
| 35 | Treatment System Trailer Layout |
| 36 | Chemical Oxidation Applications – Area D, 2008 |

CERTIFICATIONS

I, William Karl Beckman, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the approved remedial activities were implemented and that all construction activities were completed in substantial conformance with the Department-approved remedial activities.

I certify that the data submitted to the Department with this Final Engineering Report demonstrate that the remediation requirements set forth in the approved remedial activities and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established for the remedy.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitor wells, and that such plan has been approved by Department.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, William Karl Beckman, of LBG Engineering Services, P.C., 4 Westchester Park Drive, Suite 175 White Plains, New York 10604, am certifying as Owner's Designated Site Representative for the Site.

063219-1
NYS Professional Engineer #

01/19/17
Date



Signature

LIST OF ACRONYMS

ACRONYM	DEFINITION
ACFM	Actual Cubic Feet Per Minute
ACMs	Asbestos Containing Materials
ADT	Aquifer Drilling and Testing, Inc.
AST	Aboveground Storage Tank
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CAMP	Community Air Monitoring Plan
CCR	Construction Completion Report
CFM	Cubic Feet Per Minute
COC	Certificate of Completion
CPP	Community Participation Plan
DAR	Division of Air Resources
DPE	Dual-Phase Extraction
DTI	Directional Technologies, Inc.
EC	Engineering Control
ECs/ICs	Engineering Controls/Institutional Controls
Enviroprobe	Enviroprobe Services, Inc.
FER	Final Engineering Report
ft bg	Feet Below Grade
Gpm	Gallons Per Minute
GPR	Ground Penetrating Radar

LIST OF ACRONYMS
(continued)

ACRONYM	DEFINITION
GWQS	Groundwater Quality Standards and Guidance Values
HASP	Health and Safety Plan
HSO	Health and Safety Officer
in bg	Inches Below Grade
Innovative	Innovative Recycling Technologies, Inc.
IRM	Interim Remedial Measures
IRM No. 2	Interim Remedial Measure No. 2
LBG	Leggette, Brashears & Graham, Inc.
LBGES	LBG Engineering Services, P.C.
LRP	Liquid Ring Pump
MALCO	MALCO Paving and Masonry
mg/kg	Milligrams Per Kilogram
mg/l	Milligrams Per Liter
NAPL	Non-Aqueous Phase Liquid
NEC	National Electric Code
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
OM&M	Operation, Maintenance and Monitoring
ORC	Oxygen Release Compound
OSHA	Occupational Safety and Health Administration
PAHs	Polycyclic Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls

LIST OF ACRONYMS
(continued)

ACRONYM	DEFINITION
PCE	Perchloroethylene
PID	Photoionization Detector
ppm	Parts Per Million
ProAct	ProAct Services Corporation
psi	Pounds Per Square Inch
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objectives
RCA	Recycled Concrete Aggregate
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RIWP	Remedial Investigation Work Plan
ROD	Record of Decision
RUSCO	Restricted Use Soil Clean-up Objectives
S/MMP	Soil/Materials Management Plan
SCOs	Soil Cleanup Objectives
SMP	Site Management Plan
SMR	Site Management Report
sq ft	Square Feet
SSDS	Sub-Slab Depressurization System
SUSA	SUSA Mt. Vernon, LLC
SVE	Soil Vapor Extraction
SWPPP	Storm-Water Pollution Prevention Plan

LIST OF ACRONYMS
(continued)

ACRONYM	DEFINITION
TAL	Target Analyte List
TCE	Trichloroethylene
TCL	Target Compound List
TOGS	Technical and Operational Guidance Series
Tradewinds	Tradewinds Environmental Restoration, Inc.
ug/kg	Micrograms Per Kilogram
ug/m ³	Micrograms Per Cubic Meter
UPS	Uninterrupted Power Supply
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds
WCDEF	Westchester County Department of Environmental Facilities
WCDOH	Westchester County Department of Health

FINAL ENGINEERING REPORT
FORMER RED DEVIL PAINT
30 NORTH WEST STREET
MOUNT VERNON, WESTCHESTER COUNTY, NEW YORK
BCP INDEX #W3-1079-05-09
SITE # C360031

1.0 BACKGROUND AND SITE DESCRIPTION

The Site is located in the City of Mount Vernon, Westchester County, New York and is identified as Section 164.68, Block 1056, Lots 11 and 12 on the Mount Vernon Tax Map. The location of the Site, as shown on figure 1, is at 40°54'54" north latitude and 73°51'35" west longitude. The Site, presently an Extra Space Storage self-storage facility, is approximately 50,000 sq. ft. (square feet) in area, 73 percent (37,035 sq. ft.) of which is developed. The Site is bounded by Oak Street to the north, Mount Vernon Avenue to the south, North West Street to the east, and the Metro North Railroad to the west (see figure 2). Currently, the surrounding area within a one mile radius of the Site is urban with mixed residential and industrial/commercial development. The Bronx River is located approximately 115 feet northwest of the Site.

The boundary of the Site is more fully described in the Metes and Bounds included in Appendix I.

The developed portion of the Site is improved with several buildings constructed at various times and homologated into one composite unit (the "Building"). The components of the Building are referenced as Area A, Area B, Area C and Area D. These areas are shown on the Site Plan included as figure 2.

The Site has a long history of industrial manufacturing activities related to the manufacture and distribution of paints and lacquers.¹ There have been releases to the environment at the Site as a result of several factors including but not limited to: the nature of the materials used in conjunction with these activities; the means of onsite storage for chemicals used in the

¹ From 1959 to 1971, Red Devil Paints & Chemicals, Inc. operated a paint facility, which blended and manufactured paints and varnishes. From 1971 to 1989, Red Devil was operated as a division of Insilco Corporation. In 1990 the paint facility ended its operations at the Site.

manufacturing processes; improper historical waste disposal and housekeeping practices; and failure of the onsite chemical storage systems. The result of these combined factors was contamination of the subsurface beneath and emanating from the Site.

The Site is located in an industrial area with history of industrial activity that dates back at least 75 years. A chronology of Site owners and/or operators is as follows:

- SUSA Mt. Vernon, LLC 1991-present
- Insilco 1989-1991
- Red Devil Paint Division of Insilco 1971-1989
- Red Devil Paints & Chemicals, Inc. 1959-1971
- Technical Color and Chemical Works, Inc. 1955-1963
- Continental Bakery Corporation 1926-1940
- Bakery Services Corporation 1927-1930
- Shults Bread Company 1911-1915
- Egler and Sons Baking Company 1908

The available records indicate that most of the construction on the Site was completed by Red Devil Paints and Chemicals, Inc. (Red Devil). The core of the facility which consisted of the production area, the packing and the garage areas (Areas C and D) was probably built in 1915. A paint removal building was built in 1956 (historically in the parking lot adjacent to Area A); however, it has since been razed. The storage/machine shop (Area B) was constructed in 1963. In 1966 the packing and mixing room was completed as an addition to Area C (currently the western portion of Area C). The final office structure (the building on the southern portion of Area A) was completed in 1987.

From 1959 to 1971, Red Devil operated a paint facility, which blended and manufactured paints and varnishes. From 1971 to 1989, Red Devil was operated as a division of Insilco Corporation. In 1990, the paint facility ended its operations at the Site. A decommissioning program that encompassed the identification of environmental management requirements for facility deactivation was implemented by ERM. The objective of the facility deactivation process was to identify items requiring decontamination, removal, and/or special handling in order to prepare equipment and facilities for plant closure as well as to assess areas

of the Site which had negatively impacted the environment through historical onsite facility activities. During the period of facility operations (1959 to 1990) materials were released from leaking underground storage tanks (USTs) and aboveground storage tanks (ASTs) and associated piping systems.

In 1991, the property and the Building were sold by Insilco to SUSA Mt. Vernon, LLC (SUSA). Since that time, the Site has continued to be utilized as a commercial self-storage facility.

On June 29, 1992, the New York State Department of Environmental Conservation (NYSDEC) placed Red Devil on the New York State Inactive Hazardous Waste Registry as a Class 2 Site.

The NYSDEC and the Insilco Corporation entered into a Consent Order on June 29, 1993. The Order obligated the responsible parties to implement a Remedial Investigation/Feasibility Study (RI/FS) program to define the nature and extent of contamination resulting from past activities at the Site. In 1994, an onsite product recovery system (Area C) and the Bronx River boom system were put into operation as interim remedial measures.

A Record of Decision (ROD) for Red Devil in Mount Vernon, Site Number 360031, was issued by NYSDEC in March 1996. According to the ROD, the selected remedy for the Site was based on the RI/FS completed by ERM. Two operable units, OU-1 and OU-2, were designated for the Site. OU-1 addressed the presence of non-aqueous phase liquid (NAPL) material both onsite and offsite and measures to prevent its seepage into the Bronx River. OU-2 was scheduled to follow the completion of OU-1 and was designed to address the residual groundwater and soil contamination after the NAPL was removed. As part of the OU-1 remediation, a product recovery system was installed and put into operation in 1999.

On April 2, 2003, ERM submitted a letter to the NYSDEC outlining the operational status of the remedial systems for the Site. This letter presented the conditions at the Site at the time that Insilco Technologies (Insilco Corporation), whom acknowledged its status as the responsible party for remedial measures at the Site, had filed for bankruptcy. The letter further stated that nearly all of the proceeds from the sales of assets in those bankruptcy proceedings were being delivered to the Debtors' senior lending group. Consequently, ERM

stated that in the near future, funding would not be available for operation of the remedial systems at the Site.

A NYSDEC letter dated April 22, 2003 characterized the April 2, 2003 letter as “a closure memo which is certainly premature”. As per the NYSDEC letter, the Red Devil Site continues to be listed in the New York State Registry of Inactive Hazardous Waste Disposal Sites as a Classification “2” site which indicates that the Site is a significant threat to the public health or environment. The actions taken by Insilco had not been successful in remediating the contamination emanating from the Site. Insilco was deemed to be in violation of the Order (Index #W3-0704-94-08, March 31, 1997) requiring them to complete the implementation of the ROD for OU-1. Specifically, Insilco failed to:

1. continue to operate the onsite NAPL recovery system (ERM removed the recovery pump without NYSDEC authorization);
2. continue to provide for the maintenance of the recovery boom(s) in the Bronx River beyond the end of April 2003;
3. continue to operate the off-site embankment area NAPL recovery system (ERM has removed the recovery pump without NYSDEC authorization). Insilco has also breached its access agreement with Metro-North Railroad in that Insilco has not maintained the requisite insurance coverage and is not maintaining the equipment located on the railroad right of way; and
4. propose an alternative recovery methodology for recovery of the NAPL in Area D, as requested by the Department.

SUSA entered into a Brownfield Cleanup Agreement (BCA) with the NYSDEC (Site #C360031 and Index #W3-1079-05-09, which was issued on November 3, 2005) in order to continue its current use as a self-storage facility and to construct improvements to the facility as part of its redevelopment program for the Site. This BCA required SUSA to investigate and remediate contaminated media at the Site. All environmental activities at the Site subsequent to its acceptance into the program were and continue to be completed as required under the BCA between the owner and the NYSDEC.

2.0 SUMMARY OF SITE REMEDY

2.1 Remedial Action Objectives

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for this Site.

2.1.1 Groundwater RAOs

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatile organic compounds emanating from contaminated groundwater.

RAOs for Environmental Protection

- Restore groundwater aquifer, to the extent practicable, to pre-disposal/pre-release conditions.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

2.1.2 Soil RAOs

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota due to ingestion/direct contact with contaminated soil that would cause toxicity or bioaccumulation through the terrestrial food chain.

2.1.3 Surface Water RAOs

RAOs for Public Health Protection

- Prevent ingestion of contaminated water.
- Prevent contact or inhalation of contaminants from impacted water bodies.
- Prevent surface water contamination that may result in fish advisories.

RAOs for Environmental Protection

- Restore surface water to ambient water quality standards for each contaminant of concern.
- Prevent impacts to biota due to ingestion/direct contact with contaminated surface water that would cause toxicity or bioaccumulation through the marine or aquatic food chain.

2.2 Description Of Selected Remedy

The Site remediation has been completed as outlined in the approved Remedial Investigation Work Plan (RIWP) submitted in July 2006. Additional work plans approved for work completed during the remedial investigation include a Closure of Tanks Permanently Out Of Service Work Plan (submitted to the NYSDEC on September 28, 2006), a Procedural Plan, Excavation, Removal and Disposal of Contaminated Waste (submitted to the NYSDEC on November 13, 2006), an Addendum to IRM (tank closure) letter outlining the sub-slab venting system and the product recovery well in the southern portion of Area D (submitted to the NYSDEC on November 6, 2007), and a Tank Grave Excavation Chemical Oxidation Application Work Plan (submitted to the NYSDEC on July 24, 2008). In addition, Site remediation was completed as outlined in the approved Interim Remedial Measures (IRM) Work Plan dated August 2010.

The factors considered during the selection of the remedy are those listed in 6 NYCRR 375-1.8. The following are the components of the selected remedy:

1. excavation of soil/fill exceeding Track 4 Soil Cleanup Objectives (SCOs);
2. closure of abandoned onsite ASTs and USTs;

3. construction and maintenance of a soil cover system consisting of asphalt and concrete to prevent human exposure to contaminated soil/fill remaining at the Site;
4. installation and maintenance of a Sub-Slab Depressurization System (SSDS) as a means of remediating contaminated soil vapor and preventing human exposure to contaminated soil vapor by preventing soil-vapor intrusion into the indoor air;
5. installation and maintenance of a Dual-Phase Extraction (DPE) treatment system that achieves total fluids recovery (groundwater and NAPL) from horizontal groundwater extraction wells and vapor-phase recovery from the soil vapor extraction (SVE)/SSDS recovery network;
6. use of high-vacuum extraction NAPL recovery from onsite monitor wells;
7. use of chemical oxidation applications in Area A and Area D to enhance contaminant degradation and aid in groundwater remediation;
8. execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site;
9. development of a Soil/Materials Management Plan (S/MMP) should any future soil disturbance take place onsite;
10. development and implementation of a Site Management Plan (SMP) for long-term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance, and (4) reporting; and
11. periodic certification of the institutional and engineering controls listed above.

3.0 OPERABLE UNITS AND INTERIM REMEDIAL MEASURES

3.1 Operable Units

As a result of the ROD issued by the NYSDEC in March 1996, two operable units, OU-1 and OU-2, were designated for the Site. According to the ROD, the selected remedy for the Site was based on the RI/FS completed by ERM. OU-1 addressed the presence of NAPL material both onsite and offsite and its seepage into the Bronx River. OU-2 was scheduled to follow the completion of OU-1 and was designed to address the residual groundwater and soil contamination, after the NAPL had been removed. As part of the OU-1 remediation, a product recovery system was installed and put into operation in 1999.

As was stated previously, Insilco Corporation filed for bankruptcy and, consequently, funding was no longer available for operation of the remedial systems at the Site. This situation led to Insilco being deemed to be in violation of the Order (Index #W3-0704-94-08, March 31, 1997); requiring them to complete the implementation of the ROD for OU-1. Specifically, Insilco failed to:

1. continue to operate the onsite NAPL recovery system (ERM removed the recovery pump without NYSDEC authorization);
2. continue to provide for the maintenance of the recovery boom(s) in the Bronx River beyond the end of April 2003;
3. continue to operate the offsite embankment area NAPL recovery system (ERM removed the recovery pump without NYSDEC authorization). Insilco also breached its access agreement with Metro-North Railroad in that Insilco has not maintained the requisite insurance coverage and is not maintaining the equipment located on the railroad right of way; and
4. propose an alternative recovery methodology for recovery of the NAPL in Area D, as requested by the Department.

3.2 Interim Remedial Measures

3.2.1 ERM Interim Remedial Measures

Initial IRMs were conducted at the Site based on findings as the RI progressed. An IRM is implemented when a source of contamination or exposure pathway can be effectively addressed before completion of the RI/FS.

Two IRMs began in 1993 during the RI/FS. The first IRM included NAPL recovery from Areas C and D. Wells were used to pump the NAPL through a series of lines that emptied into two large storage tanks located onsite. When the tanks were full, the product was pumped out by a vac truck and transported to a disposal facility (Cycle Chem, Inc. of Elizabeth, New Jersey) for recycling as a fuel. By June 1995, approximately 5,330 gallons from Area C and 160 gallons from Area D had been recovered. Area D's lower recovery was due to the change in NAPL viscosity, which caused pumping problems.

The second IRM addressed the material seeping into the Bronx River. A two-system boom was employed in order to contain the paint material for collection and prevent it from impacting downstream locations. The inner absorbent boom intercepted the material for biweekly collection and disposal, while the outer skirted nonabsorbent boom prevented the material from leaving the seep location. The boom system extended from an upstream location to 300 feet downstream at its collection point. The solidified (due to contact with the air) seep material (non-hazardous) was transported to Cycle Chem by Freehold Cartage and landfilled. An estimated average of 0.50 cubic yards of solidified seep material was removed biweekly.

These remedial measures were not continued after Insilco declared bankruptcy in 2003 and ERM was instructed to stop the work at the Site.

3.2.2 LBG Interim Remedial Measures

In July 2005, LBG completed a preliminary evaluation of the environmental conditions at the Site. Following this preliminary evaluation, several IRMs were approved and conducted at the Site and are described below. Based on the results of the implementation of the IRMs, the scope of the various IRMs as implemented were sufficient to constitute the final remedy, following which the Site no longer posed a threat to human health or the environment. Therefore, No Further Action is the selected remedy for the Site. The Site remedy will

include continued monitoring of the conditions at the Site and, as necessary, the operation of the remedial system installed as an IRM and the implementation of ECs and ICs that have been identified as part of the proposed remedy for the Site. Summaries of the IRMs are presented below, and details of the elements of the remedy are presented in Section 4.0.

3.2.2.1 Interim Remedial Measure 1

The IRM activities were completed between 2006 and 2008 in conjunction with the RI activities conducted at the Site (which consisted of a subsurface environmental investigation to delineate the extent and concentration of soil, groundwater and soil vapor/indoor air contamination present at the Site). The IRM activities implemented at the Site were completed in conjunction with several pilot studies for evaluating future remedial technologies.

As a result of the subsurface investigation activities as well as the IRM activities completed at the Site, the Site has been comprehensively characterized. The Site characterization has defined the extent of soil vapor/indoor air, soil and groundwater contamination in the subsurface.

Mitigation activities were completed in Areas A, B, C and D. In Area A, this activity consisted of removal of an asphalt cap, UST closure activities and excavation/removal of contaminated soil within the parking lot. In Areas B, C and D, the mitigation activities consisted of: removal of the slab on grade; UST closure activities; excavation/removal of contaminated soil and free-phase product; backfill with a highly permeable gravel (the first floor of Area B and the majority of the basement of Area C and all of Area D); the installation of a SSDS within the gravel layer; the installation of a vapor barrier; and the installation of new reinforced concrete slab. The SSDS pipe located on the first floor of Area B is currently passively venting to the atmosphere via a roof-mounted wind turbine, while the SSDS pipes located in Area C and Area D were designed for future use with an onsite treatment system, if and as needed. The installation of the SSDS piping provides a means to address soil vapor beneath the Site and would provide remediation of contamination within unsaturated soils.

The IRM activities consisted of: removal of sixteen (16) bulk storage tanks and their residual contents from the Site; removal of approximately 2,550 tons of non-hazardous soil from the Site and disposal at offsite approved/licensed facilities; removal of approximately

11 tons of hazardous wood from the Site and disposal at an offsite approved/licensed facility; and removal of approximately 224 tons of hazardous contaminated soil and disposal at offsite approved/licensed facilities.

The pilot tests and pumping tests completed in conjunction with the IRMs implemented at the Site were effective in removing a significant volume of contaminated material from the subsurface as well as providing information for evaluating the potential remedial alternatives at the Site based on the site-specific geology. The results of the groundwater pumping test revealed that, due to the limited available saturated thickness and the low transmissivity of the subsurface soils, vertical groundwater wells were not a feasible remedial alternative for removal of contaminated groundwater and/or free-phase product (NAPL) at the Site. The results of the SVE pilot test with a vertical well revealed that, due to the nature of the subsurface soils, neither high nor low vacuum from a vertical SVE well would induce a significant radius of influence to effectively remediate residual soil contamination. Finally, based on the grout injection pilot test, a hydraulic barrier (using multiple injection points along the downgradient perimeter of the Site) was ruled out as a method for preventing the offsite migration of free-phase product (NAPL).

Although several potential remedial alternatives were determined not to be feasible for use at the Site, several alternatives were determined to be viable for the Site. The results of the horizontal well HEW-1 and HEW-2 pumping tests demonstrated that groundwater pumping from a horizontal well had the potential to remove groundwater with dissolved-phase volatile organic compounds (VOCs) and free-phase product from the subsurface, and to act as a hydraulic barrier for offsite migration of free-phase product. The drawdown versus time data showed that the drawdown around the horizontal well screens increased in a linear fashion during both pumping tests. The tests indicated that continuous pumping would remove both free-phase product and impacted groundwater from the subsurface and induce a cone of depression sufficient to control further migration of both free-phase product (NAPL) and groundwater with dissolved VOCs. The pumping test results concluded that groundwater extraction from an aquifer with low permeability can be effectively achieved through the use of horizontal extraction well(s). Accordingly, it is feasible for groundwater remediation and free-phase product removal at the Site to be accomplished by the pump and treat technology

utilizing horizontal groundwater/product extraction wells in conjunction with periodic product removal from vertical monitoring/delineation/extraction wells.

The pilot test of horizontal SVE Well HSVE-1 demonstrated that a substantial vacuum influence throughout the subsurface was the result of the increase in screened area provided by the horizontal well. As a result of this pilot test, it was determined that a horizontal SVE well(s) is effective in removing vapor-phase contamination from the subsurface of the Site. Additionally, operation of a horizontal SVE well will act as an additional preventative measure reducing any potential for indoor intrusion of soil vapor.

In addition to the RI activities and onsite IRM activities, the Volunteer, SUSA, conducted voluntary routine maintenance of the boom system located along the bank of the Bronx River. The Bronx River boom system, consisting of an inner sorbent boom and an outer hard boom, prevents leachate seeping from the riverbank from entering the main flow of the Bronx River. Once trapped, the leachate then solidifies on the water's surface and is periodically removed for disposal. Since the beginning of the RI, five (5) separate boom maintenance rounds have been completed. The first boom maintenance round was completed on September 22, 2006. This round removed boom material which had been present since the NYSDEC last completed a maintenance round. The second boom maintenance round was completed on April 3, 2007. The third boom maintenance round was completed on June 20, 2007. The fourth boom maintenance round was completed on April 18, 2008. The fifth (and last) boom maintenance round was completed on November 3, 2008. All of the waste sorbent boom material and solidified seep material generated during the change-out activities was placed in plastic garbage bags, drummed and disposed of as non-hazardous waste.

Following the June 20, 2007 boom maintenance round (completed in response to flooding of the Bronx River), an upriver spill (soybean oil from a salad dressing manufacturer) occurred on June 22, 2007. Upon request of the spill response personnel, consisting of the Mount Vernon Fire Department and the Westchester County Department of Health (WCDOH), the boom system was used to contain the spill in the river. The waste sorbent boom material from this maintenance round was placed in plastic garbage bags, drummed and the manufacturer responsible for the spill also was responsible for disposal. Additionally, the

manufacturer incurred the cost for the boom change-out activities as well as for replacement of the sorbent boom material.

On November 3, 2008, the last maintenance round of the Bronx River boom system was completed. The boom maintenance activities have since been taken over by the NYSDEC and its subcontractor in conjunction with the Superfund cleanup of the contamination downgradient from the Site located adjacent to the Bronx River.

A copy of the Completed Interim Remedial Measures Report is included in Appendix II.

3.2.2.2 Interim Remedial Measure 2

Interim Remedial Measure No. 2 (IRM No. 2), conducted onsite from December 2010 to May 2016, consisted of the installation and operation of an active remediation system. IRM No. 2 consisted of contaminant extraction, treatment, discharge and monitoring. This remedial system was designed to actively remediate the dissolved-phase groundwater contamination via extraction and treatment and to reduce residual source material NAPL via extraction. Additionally, the utilization of a perimeter horizontal extraction well was utilized to control the offsite migration of dissolved-phase contamination as well as NAPL. This IRM was determined to be protective of human health and the environment, as it served to reduce residual contamination, was implementable, and was a cost-effective acceptable remedial technology.

The IRM No. 2 extraction processes were conducted via the horizontal groundwater extraction Well HEW-2, which is located along the downgradient property boundary. It was constructed with a 4-inch diameter stainless-steel well screen and stainless-steel riser pipe. Groundwater pumping tests conducted on HEW-2 (2008) indicated that groundwater and free-phase product remediation at the Site could be accomplished by the pump and treat technology utilizing horizontal groundwater/product extraction wells. In addition to the total fluids recovery system used for HEW-2, the horizontal SVE Well HSVE-1 and the twelve SSDS pipe legs were connected via a manifold to the treatment shed. Each SVE/SSDS pipe leg was independently controlled and able to be actively operated as necessary.

Contaminated groundwater extracted from the subsurface was treated to meet applicable discharge requirements established by Westchester County Department of Environmental Facilities (WCDEF) prior to discharge to the sanitary sewer system. Extracted soil vapor was discharged to the atmosphere in compliance with NYSDEC Division of Air Resources (DAR) air discharge requirements. The potential existed that the extracted soil vapor could require treatment with vapor-phase carbon prior to discharge to the atmosphere if necessary to comply with DAR air discharge requirements; however, the discharge concentrations did not require treatment and decreased with time. An air discharge permit was to have been obtained if necessary to meet requirements set forth in the NYSDEC Air Guide 1 Guidelines for the Control of Toxic Ambient Air Contaminants; however, it was not necessary based on the discharge concentrations.

As per Section 7 of the Decision Document dated March 2016, the multi-phase extraction treatment system (IRM No. 2) will continue to operate intermittently on an as-needed basis to address any remaining contamination; including the extraction, treatment and disposal of LNAPL, groundwater and soil vapor.

A copy of the Construction Completion Report (CCR) IRM No. 2 is included in Appendix II.

4.0 DESCRIPTION OF REMEDIAL ACTIONS

Work plans utilized for remedial activities completed at the Site include: the RIWP submitted in July 2006; a Closure of Tanks Permanently Out Of Service Work Plan (submitted to the NYSDEC on September 28, 2006); a Procedural Plan, Excavation, Removal and Disposal of Contaminated Waste (submitted to the NYSDEC on November 13, 2006); an Addendum to IRM (tank closure) letter outlining the sub-slab depressurization system (and/or sub-slab venting system) and the product recovery well in the southern portion of Area D (submitted to the NYSDEC on November 6, 2007); and a Tank Grave Excavation Chemical Oxidation Application Work Plan (submitted to the NYSDEC on July 24, 2008). In addition, Site remediation was completed as outlined in the IRM Work Plan dated August 2010. Continued management of the Site will be conducted in compliance with the Site Management Plan (SMP), which is included in Appendix III.

4.1 Governing Documents

Several work plans were utilized as governing documents by LBG during the implementation of the remedial field activities. All activities were implemented in compliance with the NYSDEC approved Site Specific Health and Safety Plan (HASP) which includes the Community Air Monitoring Plan (CAMP). In addition, a Quality Assurance Project Plan (QAPP), a S/MMP and a Community Participation Plan (CPP) were also prepared for the remedial field activities. These governing documents are described below.

4.1.1 Site Specific Health & Safety Plan (HASP)

The primary objective of the HASP is to establish work-safety guidelines, requirements and procedures both before and during the field activities, while providing a framework for the safe conduct of remedial field activities. The HASP is intended as a guide for all LBG and subcontractor employees who will be involved in the site activities for the project.

The HASP was followed for all remedial and invasive work completed at the Site and all remedial work was completed in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal Occupational Safety and Health

Administration (OSHA). A copy of the HASP is attached as an appendix to the SMP, which is included in its entirety in Appendix III.

4.1.2 Quality Assurance Project Plan (QAPP)

The QAPP is included as is attached as an appendix to the SMP, which is included in its entirety in Appendix III. The QAPP describes the specific policies, objectives, organization, functional activities and quality assurance/quality control (QA/QC) activities designed to achieve the project data quality objectives.

4.1.3 Soil/Materials Management Plan (S/MMP)

The Site has been fully remediated to the extent feasible and is protective of public health for the use currently employed (self-storage facility). Invasive work that disturbs the residual contamination is not anticipated. However, any future intrusive work that will disturb the residual contamination and modifications or repairs to the existing cover system will only be implemented with the approval of NYSDEC and New York State Department of Health (NYSDOH), and following notification of NYSDEC, NYSDOH and the property owner. Any ground invasive work must be conducted in accordance with the procedures defined in an NYSDEC/NYSDOH-approved HASP and CAMP prepared for the Site. Additionally, all ground invasive construction work will be conducted in accordance with the procedures and methodologies outlined below. Any intrusive construction work must be certified as compliant with the following components of the S/MMP and documentation will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (see Section 7). All work conducted under the S/MMP will be completed under the supervision of the Remedial Engineer. Presented below are the elements of the S/MMP for future ground invasive construction work.

4.1.3.1 Soil Screening Methods

Visual, olfactory and photoionization detector (PID) soil screening and assessment will be conducted by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (Residual Contamination Zone).

Soil screening will be conducted regardless of when the invasive work is done and will include all excavation and invasive work completed during development, such as excavations for foundations and utility work. Screening will be conducted by qualified environmental professionals. Resumes will be provided in the annual Site Management Report (SMR) for all personnel conducting invasive work field screening (i.e., those representing the Remedial Engineer) for unknown contaminant sources during remediation and development work.

During all excavation activities, the soil/fill will be inspected for staining and will be field screened for the presence of VOCs with a PID. Visual, olfactory and PID soil screening and assessment will be completed by or under the supervision of the Field Project Supervisor and/or Health and Safety Officer (HSO) and will be reported in the annual SMR. For future invasive work, the personnel fulfilling the project role of Field Project Supervisor and/or HSO may be modified. In this circumstance, the roles will be filled by personnel qualified to conduct the required responsibilities.

Based on any soil that may be observed to be discolored, tinted, dyed, unnaturally mottled, or has a sheen, or excavated soil/fill that is visibly stained or produces elevated PID readings (i.e., above background), such soil will be considered potentially contaminated and stockpiled on the Site for further assessment. The potentially contaminated soil/fill will be stockpiled or will be stored in labeled drums and/or a lined and covered roll-off container. All waste soil will be sampled for waste characterization. The waste will then be transported offsite to a permitted waste management facility for disposal that is appropriate for the quality of the characterized soil.

If buried drums or USTs are encountered during excavation activities, they will be properly removed (in the case of drums) or closed per 6 NYCRR Part 595 and/or Part 613 (in the case of tanks), and any associated waste will be characterized and disposed offsite. The soil/fill surrounding the buried drums or USTs will be considered as potentially contaminated and will be stockpiled and characterized. Post-excavation samples will be collected and analyzed from the sidewalls/bottom of any drum or tank excavation as per DER-10 Section 5.4.

Soil/fill screened in the field as having PID concentrations below background and exhibiting no visual or olfactory evidence of contamination may be left onsite below the demarcation fabric and certified cover fill. Soil/fill that is excavated as part of development which

cannot be left in place below the cover system will be characterized prior to transportation offsite for disposal at a permitted facility.

4.1.3.2 Stockpile Methods

Excavated soil from suspected areas of contamination (if encountered) will be stockpiled separately and will be segregated from clean soil and construction materials. Stockpiles will be used only when necessary and will be removed as soon as practicable.

While stockpiles are in place, they will be inspected daily, and before and after every storm event. Results of inspections will be recorded on the daily field sheets and will be available for inspection by NYSDEC. Excavated soils will be stockpiled on, at minimum, double layers of 8-mil minimum sheeting, will be kept covered at all times with appropriately anchored plastic tarps, and will be routinely inspected. Broken or ripped tarps will be promptly replaced. All stockpile activities will be compliant with applicable laws and regulations. Soil stockpile areas will be appropriately graded to control run-off in accordance with applicable laws and regulations. Hay bales or equivalent will surround soil stockpiles except for areas where access by equipment is required. Silt fencing and hay bales will be used as needed near catch basins, surface waters and other discharge points.

4.1.3.3 Materials Excavation and Load Out

The Volunteer, or subsequent owners, and their contractors are solely responsible for safe execution of all invasive and other work conducted under the S/MMP. The Remediation Engineer or a qualified environmental professional under his/her supervision will:

- oversee remedial work and the excavation and load-out of any contaminated material;
- ensure that there is a party responsible for the safe execution of invasive and other work, relative to potentially contaminated subsurface material, that is planned for the Site;
- ensure that Site development activities and development-related grading cuts will not interfere with, or otherwise impair or compromise the remedial cover system;

- ensure that the presence of utilities and easements on the Site has been investigated and that any identified risks from any proposed work are properly addressed by appropriate parties;
- ensure that all loaded outbound trucks are inspected and cleaned if necessary before leaving the Site;
- ensure that all loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate federal, state, local, and New York State Department of Transportation (NYSDOT) requirements (and all other applicable transportation requirements); and
- ensure that all egress points for truck and equipment transport from the Site will be kept clean of Site-derived materials during work on the Site that may encounter potentially contaminated subsurface materials.

Locations where vehicles exit the Site shall be inspected daily for evidence of soil tracking off premises. Cleaning of the adjacent streets will be implemented as needed to maintain a clean condition with respect to Site-derived materials. Open and uncontrolled mechanical processing of historical fill and contaminated soil on-Site will not be conducted without prior NYSDEC approval.

The Remedial Engineer will ensure that Site development activities will not interfere with, or otherwise impair or compromise the remedial cover system.

4.1.3.4 Materials Transport Off-Site

In the event contaminated subsurface materials are to be transported off-site, a material transport plan will be prepared and will show that all transport of materials will be completed by licensed haulers in accordance with appropriate local, state, and federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately placarded.

4.1.3.5 Materials Disposal Off-Site

In the event that soil and other material are found to be contaminated and are to be removed from the Site, such materials will be stored, transported, and disposed of in full compliance with applicable local, state, and federal regulations. Waste characterization will be completed for off-Site disposal in a manner suitable to the receiving facility and in conformance with applicable permits. Sampling and analytical methods, sampling frequency, analytical results and QA/QC will be reported in the Annual Site Monitoring Report. All data available for soil/material to be disposed at a given facility must be submitted to the disposal facility with suitable explanation prior to shipment and receipt. The annual SMR will include an accounting of the destination of all contaminated subsurface material removed from the Site under this S/MMP.

4.1.3.6 Materials Reuse On-Site

Soil and fill that is derived from the property that meets the 6 NYCRR Part 375 SCOs for Unrestricted Use may be reused on-Site. Material that is excavated during subsequent work on Site or development and does not leave the property, and is relocated on the property and on comparable soil/fill material, will be subject to future management under the SMP. The Remedial Engineer will ensure that reused materials are segregated from other materials to be exported from the Site and that procedures defined for material reuse are followed.

4.1.3.7 Fluids Management

All liquids to be removed from the Site, including dewatering fluids, will be handled, transported and disposed in accordance with applicable local, state, and federal regulations. Alternatively, to reduce offsite waste streams, liquids generated at the Site may be treated utilizing the onsite remedial system.

4.1.3.8 Demarcation

The lower limits of the remedial excavation activities are visually identifiable due to the nature of the material used for backfill, which consisted of crushed stone. In the event that ground invasive activities result in disturbance or excavation beyond the current limits of the

gravel backfill, a physical demarcation layer, consisting of orange snow fencing material or equivalent material, will be placed to provide a visual reference to define the top surface of residual contaminated soils on the property. Subsequently a land survey will be completed by a New York State licensed surveyor after the completion of the soil disturbance/excavation and prior to backfilling. The survey will define the top elevation of the new top surface of any remaining contaminated soils. This new demarcation layer will constitute the adjusted top of the Residuals Management Zone (if present), the zone that requires adherence to special conditions for disturbance of contaminated residual soils defined in the SMP. The survey will measure the grade covered by the demarcation layer before the placement of cover soils, pavement and sub-soils, structures, or other materials. This survey and the demarcation layer placed on this grade surface will constitute a revision to the physical and written record of the upper surface of the Residuals Management Zone in the SMP, and will become the new upper surface of record.

4.1.3.9 Backfill from Off-Site Sources

In the event that offsite material is brought onto the Site, the backfill will be comprised of soil or other unregulated material as set forth in 6 NYCRR Part 360. Additionally, due to the selected cleanup track of restricted-commercial use, the imported backfill comprising the 1-foot thick cover soil may not exceed the lower of the protection of groundwater or the protection of public health SCO for unrestricted use, as set forth in 6 NYCRR Part 375-6.8(b). For each source of backfill that is imported to the Site, one of the following will be completed prior to importing the backfill.

- a. documentation will be provided to NYSDEC as to the source of the material and the consistency of the material in accordance with the exemption for no chemical testing listed in DER-10 Section 5.4(e)(5); or
- b. chemical testing will be completed in accordance with Table 5.4(e)10 of DER-10.

In the event that laboratory analytical testing is conducted, the results for each new source of fill must meet the values provided in Appendix 5 of DER-10 for the identified use (of potential future use) of the Site and must receive approval by the NYSDEC.

Backfill (other than virgin stone or other exempt material) brought to the Site will require sampling and laboratory analysis in accordance with this subdivision and Table 5.4(e)10. Once it is determined that the fill material meets imported backfill or cover soil chemical requirements and is non-hazardous, and lacks petroleum contamination, the material will be loaded onto trucks for delivery to the Site.

Samples of the fill will be collected based on the soil quantity and type of constituents identified in the table and will be a combination of discrete and composite samples, handled as follows:

1. for VOCs only, grab samples are allowed. These grab samples are one or more discrete samples collected from the fill, with the number as specified in the volatile column of Table 5.4(e)10 for the soil quantity in question, and analyzed for the VOCs identified in Appendix 5 of DER-10; or
2. for SVOCs, inorganics and polychlorinated biphenyls (PCBs)/pesticides:
 - a. one or more composite samples are collected from the volume of soil identified in Table 5.4(e)10 for analysis, with each composite from a different location in the fill volume;
 - b. each composite is prepared by collecting discrete samples from 3 to 5 random locations from the volume of soil to be tested; and
 - c. the discrete samples are mixed, and after mixing, a sample of the mixture is analyzed for the SVOCs, inorganic and PCBs/pesticide constituents identified in Appendix 5 of DER-10.

As per DER-10 Table 5.4(e)10, the following recommended number of soil samples (frequency for various quantities of soil) for soil imported to or exported from a site have been established:

Contaminant	VOCs	SVOCs, Inorganic and PCBs/Pesticide
Soil Quantity (Cubic Yards)	Discrete Samples	Composite Samples
0-50	1	1
50-100	2	1
100-200	3	1
200-300	4	1
300-400	4	2
400-500	5	2
500-800	6	2
800-1,000	7	2
Greater than 1,000	An additional 2 VOC and 1 Composite for each additional 1,000 cubic yards	

For projects where large amounts of cover material/backfill are required, DER-10 allows for a reduction in the sampling frequency from that specified in Table 5.4(e)10 once a trend of compliance is established.

A process will be established to evaluate sources of backfill and cover soil to be imported to the Site, and will include an examination of source location, current and historical use(s), and any applicable documentation. Inspection of imported fill material will include visual, olfactory and PID screening for evidence of contamination. Materials imported to the Site will be subject to inspection, as follows:

- trucks with imported fill material will be in compliance with applicable laws and regulations and will enter the Site at designated locations;
- the Remedial Engineer, NYSDEC-approved environmental professional or acceptable designee is responsible to ensure that every truck load of imported material is inspected for evidence of contamination; and
- fill material will be free of solid waste including pavement materials, debris, stumps, roots, and other organic matter, as well as ashes, oil, perishables or foreign matter.

Material from industrial sites, spill sites, environmental remediation sites or other potentially contaminated sites will not be imported to the Site.

The following potential sources may be used pending attainment of backfill and cover soil quality objectives:

- clean soil from construction projects at non-industrial sites in compliance with applicable laws and regulations;
- clean soil from roadway or other transportation-related projects in compliance with applicable laws and regulations; and,
- clean recycled concrete aggregate (RCA) from facilities permitted or registered by the regulations of NYSDEC.

RCA may be imported from facilities permitted or registered by NYSDEC. The Remedial Engineer, NYSDEC-approved environmental professional or acceptable designee is responsible to ensure that the facility is compliant with 6 NYCRR Part 360 registration and permitting requirements for the period of acquisition of RCA. RCA imported from compliant facilities will not require additional testing, unless required by NYSDEC under its terms for operation of the facility. RCA imported to the Site must be derived from recognizable and uncontaminated concrete. RCA material is not acceptable for, and will not be used as, cover material.

All materials received for import to the Site will be approved by the Remedial Engineer or NYSDEC-approved environmental professional and will be in compliance with the provisions in this S/MMP.

4.1.3.10 Contingency Plan

The contingency plan is developed to address the discovery of unknown structures or contaminated media during ground-invasive excavation activities. Identification of unknown contamination source areas during invasive Site work will be promptly communicated to a NYSDEC Project Manager.

If underground tanks or other previously unidentified contaminant sources are found during on-Site excavation or development related construction, sampling will be conducted on the product in the tank and on the soils surrounding the tank. Chemical analytical work will be for full scan parameters (target analyte list [TAL] metals; target compound list [TCL] volatiles

and semivolatiles; TCL pesticides and PCBs). The chemical analyses will not be otherwise limited without NYSDEC approval.

4.1.3.11 Odor, Dust and Nuisance Control Plan

During the implementation of any Site activities that disturb any remaining contaminated soil beneath a demarcation layer, appropriate measures will be implemented to ensure odor, dust and other nuisances created by the activities do not negatively impact the surrounding community.

Details of the odor, dust and other nuisance control measures that are to be used are presented in the CAMP, are attached as an appendix to the SMP, which is included in its entirety in Appendix III. A summary of the respective control measures are presented below.

Odor Control Plan

The odor control plan is capable of controlling emissions of nuisance odors from moving off-Site. All necessary means will be employed to prevent on- and off-Site odor nuisances. At a minimum, procedures will include: (a) limiting the area of open excavations; (b) shrouding open excavations with tarps and other covers; and (c) use of foams to cover exposed odorous soils.

If odors develop and cannot otherwise be controlled, additional means to eliminate odor nuisances will include: (a) direct load-out of soils to trucks for off-Site disposal; and (b) use of chemical odorants in spray or misting systems.

This odor control plan is capable of controlling emissions of nuisance odors. If nuisance odors are identified, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC (and NYSDOH if required) will be notified of all odor complaint events. Implementation of all odor controls, including halt of work, will be the responsibility of the Remedial Engineer certifying the Final Engineering Report (FER) or a NYSDEC-approved environmental professional.

Dust Control Plan

A dust suppression plan that addresses dust management during ground invasive on-Site work that disturbs remaining contaminated soil below the demarcation layer will include, at a minimum, the items listed below:

- use of a dedicated water spray methodology for roads, excavation areas and stockpiles;
- use of properly anchored tarps to cover stockpiles;
- exercise extra care during dry and high-wind periods; and
- use of gravel or RCA on egress and other roadways to provide a clean and dust-free road surface.

This dust control plan is capable of controlling emissions of dust. If nuisance dust emissions are identified, work will be halted and the source of dusts will be identified and corrected. Work will not resume until all nuisance dust emissions have been abated. NYSDEC (and NYSDOH if required) will be notified of all dust complaint events. Implementation of all dust controls, including halt of work, will be the responsibility of the Remedial Engineer certifying the FER or a NYSDEC-approved environmental professional.

Other Nuisances

A plan for rodent control will be developed and utilized by the contractor prior to and during Site clearing and Site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work and will conform to industry standard noise control standards.

4.1.4 Storm-Water Pollution Prevention Plan (SWPPP)

A Site Specific Storm-Water Pollution Prevention Plan (SWPPP) was not developed for the remedial activities conducted onsite as the majority of the excavation and soil disturbance activities took place within the interior of the building or were fully contained within the Site boundaries. When applicable, the erosion and sediment controls for all exterior remedial

construction were conducted in conformance with requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control. This document will define the procedures to be followed for any future ground invasive construction work conducted at the Site.

4.1.5 Community Air Monitoring Plan (CAMP)

Environmental air monitoring and visual observation will be conducted during implementation of any on-site ground-invasive activities that disturb remaining contaminated soil beneath the demarcation layer. The proposed program consists of two primary forms of environmental monitoring: particulates (dust) and VOCs. The purpose of the CAMP is to ensure that the Engineering Controls (ECs) designed to protect the community from fugitive releases are functioning properly and, should any such releases occur, ensure immediate notice thereof so that appropriate abatement actions may be implemented.

A CAMP has been prepared for this Site and is attached as an appendix to the SMP, which is included in its entirety in Appendix III. The CAMP outlines the following information:

- details of the perimeter air monitoring program;
- action levels to be used;
- methods for air monitoring; and
- analytes to be measured and instrumentation to be used.

Air monitoring locations will be determined daily and will be established based on the location of the work and the prevailing wind direction. During the implementation of CAMP activities, action level exceedances observed in the CAMP will be reported to NYSDEC and NYSDOH.

4.1.6 Community Participation Plan

There are several parts that make up the CPP; the pertinent elements are described below. A copy of the CPP, including both the project contact list and the public contact list is included in Appendix IV.

4.1.6.1 Project Contact List

A project contact list was prepared for the Site. This list contains people that can be contacted at the Town and at regulatory agencies, by the public, for general and technical information on the project. The list also includes a designated Citizen Participation Specialist who can be contacted regarding citizen participation activities. The Project Contact List will be reviewed and if necessary revised on an annual basis.

4.1.6.2 Public Contact List

A public contact list was also prepared for the Site. This list identifies affected and interested parties including: owners of properties adjacent to the site; local news media and local government officials. This list will be used by the Town and regulatory agencies to disseminate information to the public regarding the status of the project and the availability of site related documents. The Public Contact List will be reviewed and if necessary revised on an annual basis.

4.1.6.3 Document Repositories

Two local document repositories have been established at the locations below, where site related documents will be made available to the public.

Mount Vernon Public Library
28 South First Avenue
Mount Vernon, NY 10550
Telephone: (914) 668-1840
Hours: Monday thru Thursday - 9 a.m. to 9 p.m.
Friday and Saturday - 9 a.m. to 5 p.m.
Sunday - Closed

Town of Pelham Public Library
530 Colonial Avenue
Pelham, NY 10803-2118
Telephone: (914) 738-1234
Hours: Monday and Thursday - 1 p.m. to 9 p.m.
Tuesday, Wednesday and Friday - 10 a.m. to 5 p.m.
Saturday - 10 a.m. to 4 p.m.
Sunday - 12 p.m. to 4 p.m.

These document repositories will be periodically inspected to ensure that all material related to the Site investigation and remediation activities are available for review.

4.1.6.4 Public Notices

Public notices were made at several key points during the Site investigation and remediation activities. A public notice was mailed to the Public Contact List on July 19, 2005 announcing the application for the Site to the Brownfield Cleanup Program (BCP). This notice was also published in The Journal News on July 20, 2005. Additional notices were made through mailings to the Public Contact List to announce the following:

- availability of the Fact Sheet, and initiation of a 30-day public comment period;
- to announce the opening of the 30-day public comment period for the draft RIWP in April 2006;
- May 2006 to announce the extension of the public comment period for the draft RIWP until June 20, 2006;
- November 2011 announcement of a public meeting to discuss the IRM CCR #1 which was held on December 7, 2011;
- October 2015 announcement of the Public Comment Period on the Alternatives Analysis and Remedial Work Plan.

In addition, a public notice will be sent at the issuance of Certificate of Completion (COC) (i.e., Site Closure).

4.1.6.5 Public Comment Periods

After release of the draft RIWP, a 30-day public comment period was established, which was then extended until June 20, 2006, for the submission of written comments by the public. The written comments were to be submitted to the NYSDEC and NYSDOH project managers. Their contact information is listed in the included Project Contact List and also included on the Fact Sheet(s).

Following the completion of the RI and based on its findings, IRM CCR #1 was generated. IRM CCR #1 was available for review at the document repositories and a public meeting

was held on December 7, 2011 to address any comments and/or concerns regarding IRM CCR #1 and to discuss future work to be done on the Site.

After release of the draft AA/RWP, a 45-day public comment period was established in October 2015 for the submission of written comments by the public. The written comments were to be submitted to the NYSDEC and NYSDOH project managers. On March 18, 2016 the NYSDEC issued the approval notice for the AA/RWP submitted in September 2015 in addition to the issued final approved Decision Document for the Site.

4.2 Remedial Program Elements

4.2.1 Contractors and Consultants

The following is a list of contractors who conducted work at the Site, along with the associated scope of work:

- Balance Electrical Contracting Corp. of Long Island City, New York – decommissioned the defunct electrical wiring within the building, and installed wiring associated with the remedial treatment system and miscellaneous onsite electrical components;
- Tradewinds Environmental Restoration, Inc. (Tradewinds) of Bay Shore, New York – conducted Site preparation activities, AST/UST closure activities, contaminated soil excavation and loadout, drywell installation, and completed Site reconstruction activities;
- Innovative Recycling Technologies, Inc. of Lindenhurst New York – completed waste profiling activities and coordinated with waste disposal facilities for offsite disposal of waste streams generated as part of the IRM activities completed at the Site;
- EcolSciences, Inc. of Rockaway, New Jersey – completed the fish and wildlife impact analysis for sediments along the Bronx River as part of the remedial investigation;
- Aquifer Drilling and Testing, Inc. (ADT) of Mineola, New York – constructed the vertical monitor and delineation wells onsite;

- Directional Technologies, Inc. (DTI) of Wallingford, Connecticut – drilled and constructed the horizontal extraction and SVE wells onsite;
- Bunney Associates/Insite Engineering of Brewster New York and Carmel, New York, respectively – completed the New York certified land survey activities for documenting remedial activities for BCP reports and for the Environmental Easement;
- Wintek Corporation of Flanders New Jersey – conducted maintenance service on liquid ring pump during the modification of the remedial system;
- Enviroprobe Services, Inc. (Enviroprobe) of Westmont, New Jersey – conducted an onsite ground penetrating radar (GPR) survey searching for utilities as well as abandoned USTs;
- ProAct Services Corporation (ProAct) of Southbury, Connecticut – designed and installed the DPE treatment system onsite;
- Mr. Rooter Plumbing of Mount Vernon, New York – obtained the permits and installed the interconnected piping in the new drywells in the Area A parking lot;
- Structural Contracting Services, Inc. of Mount Vernon, New York – designed and installed the fire escape structural support in the Area D alleyway to facilitate the closure activities associated with UST-T and UST-U;
- MALCO Paving and Masonry (MALCO) of Mount Vernon, New York – repaved the exterior parking lot in Area A and the Area D alleyway, as well as restored the interior concrete slab in Areas B, C and D; and
- Emergency Sewer and Drain, Inc. of Hawthorne, New York – conducted the high pressure jetting activities for the redevelopment of the horizontal extraction wells

4.2.2 Site Preparation

In order to facilitate the access for conducting the subsurface investigations, several areas were prepared by removing old electrical equipment, heating equipment and onsite storage units.

4.2.2.1 Boiler Room Dismantling

An abandoned boiler room was located in the basement of Area B. The location of this room is shown on figure 2. As part of the Site preparation activities, all equipment from the boiler room in the Area B basement was dismantled. This equipment consisted of three cast iron boiler units and all associated piping. During the equipment dismantling activities, asbestos containing materials (ACMs) (gasket material and flange material) were identified within the cast iron boilers. Asbestos removal activities were completed by Tradewinds personnel that were licensed with the New York State Department of Labor for conducting asbestos abatement activities. The ACM was placed in seventeen (17) plastic bags, sealed and subsequently disposed of at Southern Alleghenies of Davidsville, Pennsylvania. Disposal manifests for the ACM removed from the boiler room are included in Appendix V. Following the completion of the asbestos abatement activities, the remaining piping and boiler components were removed and disposed offsite.

4.2.2.2 Storage Unit Removal

In order to access the locations for the existing monitor and product delineation wells and to complete soil excavation in several areas, numerous storage units were removed. Initially, selected units were disassembled to provide access to select areas throughout the Site. The occupants of the units were notified of the impending need for access and were given a set period of time to empty out their units. In an effort to expedite access for the environmental investigation activities, SUSA/Extra Space Storage relocated numerous tenants from the Site to a higher quality Extra Space Storage facility located a block away. Due to the move-out activity, some subsurface investigations were postponed until removal of the storage units was completed (Area D commercial space and the first floor of Area B where UST-E, UST-F, UST-G and UST-H were located).

Following consultation with the NYSDEC and to facilitate work throughout the Site, Extra Space Storage relocated all tenants from the basement of the building (Area B, Area C and Area D) and in the first floor portion of Area B. After all of the tenants were relocated,

all of the remaining storage units in Area C and Area D were disassembled and the refuse generated during these activities was removed from the Site.

4.2.2.3 Subsurface Pipe Tracing and Ground Penetrating Radar Survey

The presence of underground structures creates significant risks during demolition, reconstruction, new construction, retrofits, and remediation projects. These risks include property damage, environmental releases, project delays, and personal injury. Due to the uncertain and unseen risk that subsurface structures (e.g., utilities, old foundations, storage tanks) were present, and the benefit that the additional information generated from the investigations would provide with regard to steering the investigation, subsurface mapping activities were completed. Primarily, this was done to evaluate areas where USTs were suspected to be present (based on indicators), to evaluate where subsurface drainage piping runs were located, as well as to evaluate the subsurface where no UST indicators were observed. Two techniques were used for the mapping of subsurface structures and utilities.

The technologies utilized for subsurface mapping consisted of conductive tracing and GPR. Each of these methods has advantages and disadvantages, which are presented below.

Conductive tracing is used for tracing an individual pipe or cable (conductor), and is used when other conductors or metal objects are nearby. The conductive method requires a direct connection to the pipe to be traced. This method may also be used to trace nonmetallic pipe by placing a wire, plumber's snake, or electrical fish tape within the nonmetallic pipe. The active line locator utilizes a frequency transmitter signal, which travels on the conductor (pipe). A receiver is then used to identify the location of the conductor. This method is used for determining a particular object or several points along a buried pipeline or cable. It is the preferred method for identifying unknown or lost conductors. This method was used for tracing the path of the floor drains throughout the basement as well as to trace suspect UST pipes.

On July 3, 2007 conductive pipe tracing was conducted at the Site. This activity was done to locate and trace identified pipes and floor drains throughout the Site. The traced utilities were recorded on a Site map and are presented on figure 3. The results of the conductive pipe tracing showed that there was a suspect UST identified in the eastern portion of Area C. As is presented in the USTs removal section, UST-W was located in this area which

was adjacent to 3 additional and previously undiscovered USTs; UST-X, UST-Y and UST-Z. The locations of these USTs are shown on figure 4.

GPR is a mapping system which can detect and map subsurface structures made of most materials. The GPR survey is conducted by using a small transmitter/receiver antenna over the ground surface while the reflected radar pulses are presented and recorded on an attached console. Readings with characteristic parabolic reflections may indicate the location of cylindrical features such as pipes or USTs. Utility trenches will show up as patterns of soil disturbance and as indicative of non-native backfill materials. The two biggest limits of the GPR technology are: limited depth penetration in conductive soils such as clays; and inaccurate interpretation of pipe depth and diameter. In order to obtain accurate data, the pipe or other feature must be at least one inch in diameter for every foot in depth to be detected by the GPR equipment. Based on this rule, a pipe must be at least 4 inches in diameter to be mapped at 4 feet in depth. As such, this method was used to determine if previously unidentified USTs were present in the subsurface.

On September 13, 2007, a GPR survey was conducted at the Site by Enviroprobe. The focus area of the survey was: the basement of the Site in Area B, Area C and Area D; the Area A/B parking lot; and the portion of North West Street (east of the parking lot where historical Sanborn Maps showed an UST). Numerous bisects were completed and evaluated in real-time for detected anomalies. The GPR bisects completed at the Site, as well as any anomalies that were detected, are shown on figure 5. The results of the GPR survey were the following: no additional USTs or subsurface anomalies were detected in the basement of the building; a slight anomaly was observed in Area A/B parking lot (in the area of the former paint removal building); and no data were obtained regarding the historical UST upgradient across North West Street.

4.2.2.4 Removal of Abandoned Overhead Piping

As part of the Site preparation, unused and abandoned pipes were removed from the basement of the building. The abandoned and unused piping was a part of the historical manufacturing activities at the Site and consisted of an extensive piping network located in the

ceiling of the basement. These unnecessary pipes were dismantled, cut into pieces and taken offsite for recycling. The piping was inspected as it was being dismantled and cut; none of the piping contained residual product. This pipe removal activity continued throughout the duration of the project as additional sections of piping were encountered as the remedial investigation activities progressed throughout the Site.

4.2.3 General Site Controls

During the implementation of the onsite remedial activities, there were two main factors taken into consideration regarding site security. The first factor was that the Site is located in a busy urban environment. As such, when work was to be conducted in the vicinity of traffic and/or pedestrians, all proper health and safety measures were observed including: placement of barricades/cones/fencing between the work zone and the pedestrians/traffic; use of a flag person to direct traffic and pedestrians; as well as the use of additional personnel to act as spotters for any hazardous conditions or unsafe activity.

The second factor was that during the remedial activities, the Site continued operation as an active self-storage facility. As was stated above, all tenants were relocated from the basement of the building (Area B, Area C and Area D) and in the first floor portion of Area B, to an offsite storage facility. This action would minimize the tenant contact and disturbance of the remedial activities. In addition, during the workday, there was a minimum of one Extra Space employee onsite at all times and security cameras located throughout the building. During non-working hours, the building was equipped with an alarm system that would alert the local police precinct in the event of a disturbance.

4.2.4 Nuisance Controls

During the remedial activities, contaminated soil was excavated from several portions of the Site, including the basement of Area C and Area D, the alleyway adjacent to Area D, the first floor of Area B and the parking lot of Area A. Due to the fact that the majority of the excavation activities took place inside of the building, dust and odor control mitigation were minimal. However, a hose was readily available to keep dust generation to a minimum. During excavation activities in the Area A parking lot and Area D alleyway, continuous air moni-

toring was conducted in the upwind, worksite and downwind locations to ensure that dust and odors were not leaving the work zone. In addition, water was sprayed on the soil to keep the dust to a minimum when excavation activity was ongoing. It should be noted that no odor or dust complaints were received from the public during the soil excavation activities onsite.

The majority of the contaminated soil was stockpiled in the interior of the building in the Area D commercial space prior to loading for offsite disposal. For loadout of the contaminated soil, the trucks were backed into the commercial space where they were then loaded. In the Area A parking lot, soil loading was not conducted during times of inclement weather in order to reduce the amount of soil tracked offsite. Prior to leaving the Site, each truck was checked to ensure that their exterior was relatively free of soil. The adjacent apron and roadway was broom swept at the end of each workday to remove residual soil. During soil loadout activities, continuous air monitoring was conducted in the upwind, worksite and downwind locations to ensure that dust and odors were not leaving the work zone. In addition, water was sprayed on the soil to keep the dust to a minimum. It should be noted that no odor or dust complaints were received from the public during the soil loadout activities onsite.

4.2.5 CAMP Results

During the course of the remedial activities onsite, continuous air monitoring was conducted in the upwind, worksite and downwind locations to ensure worker safety and to ensure that dust and odors were not leaving the Site. In addition, a water hose was kept nearby in order to provide a means of dust suppression. Dust suppression methods were employed during periods of high winds, whenever the particulate levels began to increase or when visible dust was observed. As such, the concentrations of VOCs and particulates measured during air monitoring did not exceed action levels in the downwind sampling location. However, elevated concentrations of VOCs and particulates were detected when work occurred within the building when exhaust producing equipment (excavators, saws, etc.) were being used. In order to mitigate the amount of VOCs and particulates, ventilation equipment was setup within the work zone in addition to the use of water as a means of dust suppression. In addition, frequent work breaks were taken and the machines shut down in order to let the VOC and particulate concentrations dissipate before work resumed. It should be noted that no odor or dust

complaints were received from the public during the remedial activities onsite. Copies of all air monitoring field sheets relating to the CAMP are provided in electronic format in Appendix VI.

4.2.6 Reporting

On a daily basis, field notes and air monitoring logs were prepared, as well as photographs documenting work progress and conditions at the Site. The NYSDEC representative was updated regularly during Site visits and during periodic (weekly, monthly) phone calls and/or emails regarding work progression at the Site.

The digital photo log documenting the remedial activities at the Site is included in Appendix VII.

4.3 Contaminated Materials Removal

The IRMs completed at the Site were effective in removing a significant and substantial volume of contaminated material from the subsurface. The locations and extents of the IRM excavations completed at the Site are presented on figures extracted from the CCR IRM #1, copies of which are included in Appendix II. In addition, the information concerning site-specific geology and lithology was valuable in helping to rule out the feasibility of some potential future remedial actions. As a result of the onsite UST/AST closure activities and soil excavation activities: sixteen (16) bulk storage tanks and their residual contents were removed from the Site; more than 2,550 tons of non-hazardous soil were removed from the Site (disposed offsite at approved/licensed facilities); more than 11 tons of hazardous wood were removed from the Site (disposed offsite at an approved/licensed facility); and more than 224 tons of hazardous contaminated soil were removed from the Site (disposed offsite at approved/licensed facilities).

4.3.1 UST/AST Closure and Contamination Excavation Activities

As a result of the onsite UST/AST closure activities and soil excavation activities, sixteen (16) bulk storage tanks and their residual contents were removed from the Site. In order to confirm and verify the tank closure activities completed at the Site prior to LBG work

and to conduct removal of several of the tanks abandoned onsite, tank closure activities were conducted. The tank closure activities consisted of:

- collection of soil and groundwater samples from the area of previously removed USTs;
- determining if additional USTs were present beneath the site;
- removal of the 10,000-gallon aboveground fuel oil storage tank from the basement of Area B;
- removal of several USTs listed as historically closed in-place from Areas B, C and D; and
- removal of several USTs which were not identified during the previous IRM and/or investigations.

The tank closure activities are summarized by each Area below:

4.3.2 Area A

Available site records indicated that the following tanks were present in Area A: six 1,500-gallon USTs along the northeast portion of the parking lot (listed as having been removed by ERM and designated as UST-1A, UST-2A, UST-3A, UST-4A, UST-5A and UST-6A); three USTs of unknown size located beneath the Area A corridor connecting Area A and Area B (removed prior to ERM's involvement in the original project and heretofore designated as UST-7A, UST-8A and UST-9A); and two USTs of unknown size in the southern portion of the parking lot (recorded as having been removed prior to ERM's involvement in the original project and heretofore designated as UST-10A and UST-11A). The former locations of tanks in Area A are presented on figure 6.

In 2007, LBG completed soil excavation activities to verify that tanks UST-1A, UST-2A, UST-3A, UST-4A, UST-5A, and UST-6A had been removed as conflicting records by ERM stated that these six tanks had been abandoned in-place. The excavation activities revealed that the six 1,500-gallon USTs had been removed and a filter fabric liner had been installed marking the extent of the old excavation. The exploratory trenching excavation was then backfilled.

Confirmation soil sampling was completed at the former locations of the eleven USTs in Area A. The confirmation soil sampling consisted of drilling: GeoProbe soil borings at the approximate center of the former location of the UST-1A to UST-6A (GP-1A to GP-6A); one GeoProbe boring between the former locations of UST-7A, UST-8A and UST-9A in the loading dock area (GP-USTPR-3); and two GeoProbe borings between the former locations of UST-10A and UST-11A (GP-USTPR-1 and GP-USTPR-2). These sample locations are presented on figure 7. Of note, the locations for GeoProbe sampling in the loading dock were limited due to the presence of electrical panels in the area.

In addition to the UST closure GeoProbe soil borings, one GeoProbe boring was advanced in between UST-1A and UST-2A (GP-LBG-HP6), which was a previous sample location HP-6 from the ERM investigation. In addition to the tank closure sampling, one GeoProbe boring was advanced in the onsite drywell (GP-Drywell) located in the southwest corner of the parking lot. This boring was advanced to determine if the drywell is or has historically been a preferential pathway for surface contaminant spills to the subsurface. All of the confirmation GeoProbe soil boring locations in Area A are shown on figure 7.

For each GeoProbe boring, continuous soil samples were collected from grade to the boring terminus. All of the soil samples were described on a geologic log and screened with a PID for the presence of VOCs. For each GeoProbe boring location, soil samples were collected (for submission to the laboratory analysis) from the following depths within the boring: one from approximately 0 to 2 feet below the estimated elevation of the bottom of the tank and one from the depth where the highest PID reading was obtained. Additionally, two groundwater samples were collected from each boring for laboratory analysis. The soil and groundwater samples were collected in laboratory supplied containers and submitted to the laboratory for analysis of VOCs, SVOCs and total metals.

In addition to the UST GeoProbe investigation, the drywell formerly present in the southwest corner of the parking lot was cleaned out with a “guzzler” vacuum truck to remove refuse/leaves/detritus and increase its efficiency for storm-water drainage. While cleaning it out, it was observed that the drywell was not properly constructed. The “drywell” was constructed of bricks extending approximately 1.5 feet into the subsurface. Additionally, during the cleaning activity, a pipe was uncovered which bisected the side of the drywell. The dry-

well was excavated; exposing a 3,000-gallon UST. This UST, referred to as UST-P, was observed to have been cut open and filled with concrete slurry. Although an odor was observed in the soil surrounding the tank, the concrete within the tank did not exhibit any off-gas VOCs when screened with a PID. The concrete was broken apart using an excavator mounted jackhammer and taken offsite for recycling. The tank was observed to be in good condition with no observed pitting or corrosion holes. On the western side of the UST (in the location of the drywell), stained soil was observed and some soil surrounding the tank exhibited hydrocarbon odors. The contaminated soil was primarily detected adjacent to the pipe fittings on the tank. The soil surrounding and beneath UST-P was excavated and stockpiled onsite for offsite disposal. In order to facilitate the excavation and due to limited space in the parking lot, some of the soil was transferred to the Area D commercial space for offsite disposal. The extent of the excavation was limited based on the presence of building foundations in the area. After the excavation was completed, two bottom samples (B-1 and B-2), two south sidewall samples (S-1 and S-2) and one east sidewall sample (E-1) were collected from the tank excavation. Additionally, one bottom sample was collected from the excavation in the area of the former drywell (DWB-1). These endpoint sample locations are presented on figure 8. All endpoint samples were submitted to laboratory for analysis of VOCs, SVOCs and total metals.

According to historical documents, the parking lot was improved with a paint removal building. This building was constructed in 1956 (in connection with Technical Color & Chemical Works, Inc.) and was later demolished to its foundation (date not known). The continued presence of the foundation is illustrated in figures prepared and submitted by ERM as part of their environmental investigations of the Site. Additionally, review of blueprints obtained from Fuller & D'Angelo, P.C. (the architects for Area A building) showed the location of the former 1-story paint removal building. Based on the October 2006 and March 2007 soil-vapor sampling rounds completed at the Site, the highest concentration of perchloroethylene (PCE) was detected in soil vapor sample SVP-2 in Area A (15,000 ug/m³ [micrograms per cubic meter] in October 2006). Based on the documented historical presence of USTs in this former building, the parking lot area was excavated and the building foundation was demolished/removed. The foundation consisted of a concrete slab (which was not continuous) and rock walls running from the street to the Area A/Area B corridor.

Following the removal of the building slab and foundation, exploratory excavations were dug in the parking lot of Area A in an attempt to locate unknown USTs. During the excavations, it was observed that most of the backfill from grade to approximately 10 ft bg. consisted of waste demolition debris, which was assumed to be associated with the former building or brought in from offsite. Upon further excavation, a layer of coal ash was discovered from approximately 10 to 12 ft bg. Native soil was encountered at approximately 12 ft bg, at which point the excavation was terminated. As a result of this excavation work, it was confirmed that no additional USTs were present in the subsurface beneath the former paint removal building foundation.

The extent of the Area A parking lot excavation is shown on figure 9. The soil excavated from the parking lot was stockpiled onsite and disposed offsite as non-hazardous petroleum contaminated soil (based on waste characterization). On April 21, 2008, a total of 516.49 tons (generated in association with the UST-P closure and parking lot exploratory excavation activities) was taken offsite by Innovative and disposed of at Soil Safe, Inc. – Bridgeport located in Logan Township, New Jersey. Copies of the disposal manifests for the parking lot excavated soil are included in Appendix V. It should be noted that during the excavation activities, product delineation well DW-3A was destroyed. This well was subsequently replaced with a stainless-steel replacement product delineation Well R-3A.

After the excavation was completed to a final depth of approximately 11 to 12 ft bg, it was backfilled with RCA fill to eliminate the presence of an open excavation pending installation of the drywells and construction of the final parking lot.

Considering the removal of the former “drywell” from the parking lot, the City of Mount Vernon required that a new drywell system be constructed in the parking lot. This new drywell was required because the maximum projected storm-water load exceeded the capacity of the storm-water drain line which discharges to the main storm-water sewer line located on Oak Street. On November 14, 2008, an additional area was excavated in the center of the parking lot for the construction of four drywells. The excavation encompassed the area previously excavated in association with the foundation removal activities. The soil and fill excavated for installation of the drywells was segregated; separating the fill material from soil not previously excavated. All material was stockpiled onsite and disposed of offsite as non-

hazardous petroleum contaminated soil (based on waste characterization). On November 26, 2008, a total of 205.68 tons (generated in association with drywell installation activities) was taken offsite by Innovative and disposed of at Soil Safe, Inc. – Bridgeport located in Logan Township, New Jersey. Copies of the disposal manifests for the parking lot excavated soil are included in Appendix V. After the completing the excavation required for the installation of the drywells, two bottom samples were collected from the area (Parking Lot B-1 and Parking Lot B-2). These endpoint sample locations are shown on figure 8. All endpoint samples were collected in laboratory-supplied containers and submitted to the laboratory for analysis of VOCs, SVOCs and total metals.

The drywells were installed and the excavation was backfilled with a minimum of 1 foot of 1 1/2-inch gravel surrounding each drywell to approximately 2 ft bg (feet below grade). The remainder of the parking lot was re-graded with the segregated RCA backfill material and final grade (in preparation for the asphalt) was graded with Item 4 stone. The parking lot was then paved with a 4-inch thick asphalt cap.

4.3.3 Area B

Based on available records, four (4) USTs were historically present beneath the first floor of Area B and nine (9) vaulted ASTs were historically present in the basement of Area B. The four USTs were recorded as being located beneath the concrete slab of the first floor (eastern portion) of Area B while the ASTs were recorded as being located in the basement (western portion) of Area B. The former locations of tanks historically within Area B are shown on figure 10. Past ERM reports state that the four USTs (UST-E, UST-F, UST-G and UST-H) were cleaned out, inspected and abandoned in place after the tanks were filled with inert foam. Eight of the nine ASTs were previously removed (AST-1 through AST-8) from the Site and one AST (AST-9) was left in place because it was used to store fuel oil for the operation of the boilers.

4.3.4 First Floor USTs

On August 23-24, 2006, fourteen GeoProbe borings (GP-1 to GP-14) were advanced in the first floor of Area B. The locations of these GeoProbe borings were selected based on

previous environmental reports for the Site and were located in an area assumed to be downgradient of the abandoned USTs. For each GeoProbe boring, continuous soil samples were collected from grade to the boring terminus. All of the soil samples were described on a geologic log and screened with a PID for the presence of VOCs. The soil sample from each boring that exhibited the highest PID headspace-vapor concentration was collected for laboratory analysis. In the absence of headspace-vapor readings, the sample collected closest to the groundwater level was submitted to the laboratory for analysis for VOCs and SVOCs. It should be noted that none of the soil samples screened in the field during the GeoProbe sampling activities exhibited a PID concentration over 20 ppm (parts per million). In addition to the soil sampling, groundwater samples were collected from GP-2, GP-6, GP-9 and GP-12 using temporary piezometers installed in the boring. Groundwater samples were then collected from the piezometers using a peristaltic pump and polyethylene tubing. The groundwater samples were collected in laboratory-supplied containers and submitted to the laboratory for analysis for VOCs and SVOCs. The locations of the GeoProbe borings are shown on figure 11.

Between August 2007 and October 2007, the first floor of Area B was excavated to expose the USTs (UST-E, UST-F, UST-G and UST-H) which were reported as abandoned in-place in ERM reports. The historically documented locations of these USTs in Area B are shown on figure 10. Upon completing the removal of the storage units and concrete slab, the entire area was excavated to expose the abandoned tanks. Based on the excavation activities, it was determined that only three abandoned tanks were present in this area. All three USTs were verified to be 3,000-gallon tanks; contrary to ERM reports stating that UST-E, UST-F and UST-G were 3,500-gallons, 4,000-gallons and 3,000-gallons, respectively. During the tank closure activities, an occupant from an adjacent property stated that he remembered “some time ago” that there was a large tank removed from the area and taken away from the Site. This input provides an explanation for why UST-H was not found during the tank closure activities. The USTs that were confirmed to have been abandoned in place (UST-E, UST-F and UST-G) were observed to have been cut open, cleaned and filled with inert foam (as listed in the ERM reports). These tanks were subsequently: cut open to expose the entire inside; emptied of the inert foam (which was stored in an onsite roll-off dumpster pending offsite

disposal); removed from their excavations; and cut into pieces. Prior to cutting the tanks, they were inspected and observed to be in good condition with no corrosion holes and/or pitting (with the exception of the access holes cut into them by ERM for the abandonment activities). The cut tank pieces were then taken to Pascap Co., Inc., in Bronx, New York for recycling.

After the tanks were cleaned and removed from the excavations, endpoint confirmation samples were collected. The endpoint confirmation samples consisted of: two bottom samples from beneath each tank excavation (EB-1 and EB-2, FB-1 and FB-2 and GB-1 and GB-2); two west sidewall samples from the UST-E excavation (EW-1 and EW-2); one north sidewall sample from each tank excavation (EN-1, FN-1 and GN-1); one south sidewall sample from each tank excavation (ES-1, FS-1 and GS-1); and two east sidewall samples from the UST-G excavation (GE-1 and GE-2). The excavation limits as well as the sidewall sample locations for Area B are shown on figure 12. All endpoint samples were submitted to the laboratory for analysis of VOCs, SVOCs and total metals.

After UST-E, UST-F and UST-G were removed, the remainder of the first floor area slab was removed and exploratory excavations were completed to verify that UST-H was not present in a location other than what was listed in historical documents. The entire first floor area was excavated to a depth of approximately 10 ft bg. The results of the exploratory excavations revealed that UST-H was no longer present below the first floor of Area B. The limits of the exploratory excavations completed in Area B are shown on figure 13.

The resulting excavations in the first floor of Area B were backfilled with excavated soil (screened in the field) and the entire area was re-graded to approximately one (1) foot below final grade elevation. A total of approximately 100 tons of soil was removed as a result of the re-grading activities. This soil was incorporated along with the topsoil removed from other areas. Based on waste classification, this soil was disposed of offsite as non-hazardous petroleum impacted soil. From September to December 2007, the excavated Area B/C/D topsoil was taken offsite by Innovative and disposed of at Clean Earth of Carteret, Inc. located in Carteret, New Jersey. Copies of the disposal manifests for the excavated Area B/C/D topsoil are included in Appendix V. An 8-inch layer of gravel was then added above the backfilled area. A 2-inch diameter sub-slab passive ventilation pipe was installed in the gravel layer down the center of the room. The location of the SSDS pipe is shown on figure 14. After the

gravel layer was leveled, a covering of polyethylene sheeting was placed on top of the gravel. The seams were folded and double taped. Lastly, a 4-inch thick concrete slab (reinforced with welded wire mesh) was installed. Expansion joints were saw-cut into the concrete slab.

Following a 28 day cure time, the concrete slab was finished with an epoxy/paint covering. The passive ventilation pipe was extended to the roof of the building along a brick supporting column and vented to the roof. The end of the pipe on the roof was completed with a wind-powered turbine to provide a minimal vacuum on the sub-slab passive ventilation pipe. A diagram of the sub-slab passive vent system is shown on figure 15.

4.3.5 Basement ASTs

In order to confirm that the subsurface was not negatively impacted by the historical presence of the ASTs in the basement of Area B, several GeoProbe borings were advanced in the historical locations of the tanks. As part of these subsurface sampling activities, both soil and groundwater samples were collected.

On September 6 and 7, 2006, ten GeoProbe borings (GP-AST-1, GP-AST-2, GP-AST-3, GP-AST-4A, GP-AST-4B, GP-AST-5A, GP-AST-5B, GP-AST-6, GP-AST-7, and GP-AST-8) were advanced at locations of the previously removed ASTs. These boring locations are shown on figure 11. Prior to drilling, the area was visually inspected to identify any potential spill areas. Based on the visual observation, no staining was observed on the concrete in the areas where the ASTs were historically located. For each GeoProbe boring, continuous soil samples were collected from grade to the boring terminus. All of the soil samples were described on a geologic log and screened with a PID for the presence of VOCs. The soil sample from each boring that exhibited the highest headspace-vapor concentration was collected for laboratory analysis. In the absence of PID headspace-vapor readings, the sample collected closest to the groundwater level was submitted to the laboratory for analysis for VOCs and SVOCs. Additionally, groundwater samples were collected from GP-AST-1, GP-AST-2, GP-AST-3, GP-AST-6 and GP-AST-7 using temporary piezometers installed in the completed boring. Groundwater samples were then collected from the piezometers using a peristaltic pump and polyethylene tubing. The groundwater samples were collected in laboratory-supplied containers and submitted to the laboratory for analysis for VOCs and SVOCs.

Between November 18 and 30, 2006, closure activities were completed on the remaining AST in Area B (AST-9). AST-9 was observed to be a 10,000-gallon single wall steel tank which was most recently used to store fuel oil for the boiler. Prior to closure activities, the area surrounding the tank was sealed off with a polyethylene sheeting barrier and a carbon filtration air ventilation system was set-up for handling vapors. After an access hole was cut into the tank, AST-9 was purged of vapors, cut open and the residual contents of AST-9 were removed and the interior of the tank was cleaned. After the tank was cleaned it was cut into pieces and removed from the excavation. For several days during the closure of this tank, NYSDEC representatives were onsite observing the activities. Prior to cutting the tank, it was inspected and observed to be in good condition with no corrosion holes and/or pitting. Additionally, there were no signs of leaking or spills observed beneath and/or surrounding the AST. The contents of the tank were removed and stored in 55-gallon drums for offsite disposal. On February 7, 2007, nine drums of non-hazardous waste (generated from the cleaning of AST-9 as well as oil soaked sorbents and debris from the cleaning of tanks UST-D, UST-A, UST-B and UST-10) were taken to Clean Earth of North Jersey in South Kearney, New Jersey for disposal. The United States Environmental Protection Agency (USEPA) ID Number for the Clean Earth of North Jersey disposal facility is NJD991291105. A copy of the disposal manifest for the above-listed waste is included in Appendix V. The cleaned and cut tank pieces were taken to Pascap Co., Inc., in Bronx, New York for recycling.

In addition to the tanks that were recorded as historically being present at the Site, pipes were identified beneath the slab in the boiler room. A stick-up was located in an adjacent room to the boiler room and upon inspection it was determined to have residual oil in it. On June 8, 2007, LBG supervised the removal of the residual fuel oil from this pipe by means of a high vacuum operation. The residual oil was vacuumed out of the pipe and the concrete was removed from this area (boiler room and trench). After the concrete slab was removed and the pipe was traced, it was determined that the pipe stick-up which contained the residual oil was the termination point. This pipe appears to have been connected to the boiler and to one of the ASTs in the basement of Area B.

After the concrete slab was removed from the boiler room, the four pipes which penetrated the northern wall of the boiler room into Area C were uncovered. It was determined

that these pipes were historically connected to the USTs beneath the first floor slab in Area B (UST-E, UST-F, UST-G and UST-H). The pipes were removed and on November 16, 2007 a grab soil sample was collected from the pipe trench beneath the piping run (Boiler Room Pipe Trench Bottom) and submitted to the laboratory for analysis of VOCs, SVOCs and total metals. The location of this grab soil sample is presented on figure 16.

On September 10, 2007, a GeoProbe boring (GP-BR-1) was advanced in the boiler room to characterize the soil in this area. The location of this boring is shown on figure 11. For this GeoProbe boring, continuous soil samples were collected from grade to the boring terminus. All of the soil samples were described on a geologic log and screened with a PID for the presence of VOCs. The soil sample that exhibited the highest PID headspace-vapor concentration was collected in laboratory-supplied containers and submitted to the laboratory for analysis for VOCs and SVOCs.

Following completion of the sampling activities in the boiler room, the excavation was backfilled with clean fill and the entire area was re-graded to approximately one (1) foot below final grade elevation. A 2-inch layer of gravel was then added above the backfilled area. After the gravel layer was leveled, a covering of polyethylene sheeting was placed on top of the gravel. The seams were folded and double taped. Lastly, a 4-inch thick concrete slab (reinforced with welded wire mesh) was poured.

4.3.6 Area C

Four vaulted ASTs (AST-13, AST-15, AST-16 and AST-19) and one UST (UST-D) were previously identified by ERM as being located in Area C. ERM reports state that the four ASTs (historically located in the vault area under the sidewalk) were cleaned and removed from the Site. Also according to ERM reports, UST-D was abandoned in place because it was in the vicinity of a foundation wall. Additionally, some of the ERM figures showed an additional UST (referred to in this report as UST-W) in the basement of Area C adjacent to the former location of the vaulted ASTs.

LBG subsequently conducted tank closure activities in Area C. These activities consisted of: removal of UST-D and collection of endpoint samples from the excavation; tracing of suspect stick-up pipes; subsequent identification of four (4) additional USTs (UST-W,

UST-X, UST-Y and UST-Z); removal of UST-W, UST-X, UST-Y and UST-Z; collection of endpoint confirmation samples from the excavations; and attempting to collect closure samples from beneath the slab where the vaulted ASTs were historically located. The former locations of all tanks historically in Area C are presented on figure 4.

In November 2006, UST-D was uncovered and found to be a 4,000-gallon single wall steel UST. This capacity is contrary to past ERM reports stating that UST-D was a 7,500-gallon UST. The tank was observed to have previously been cut open and abandoned with inert foam; however, the headspace within the UST had elevated VOC readings when screened with a PID. Following waste characterization of the foam and the residual water/sludge from the UST, on December 4, 2006 the waste material was removed from the tank by TradeWinds using a guzzler vacuum truck for disposal offsite. On December 6, 2006, a total of 1,754 gallons of non-hazardous waste was taken to Clean Water of New York in Staten Island, New York for disposal. The USEPA ID Number for the Clean Water of New York disposal facility is NYD000968545. A copy of the disposal manifest is included in Appendix V. After the tank was cleaned it was inspected and observed to be in good condition with no corrosion holes or major pitting. It was then cut into pieces and removed from the excavation. The cleaned and cut tank pieces were taken to Pascap Co., Inc., in Bronx, New York for recycling. After the UST was removed from the excavation, four sidewall endpoint confirmation samples (N-1, S-1, E-1, and W-1) and two bottom endpoint confirmation samples (B-1 and B-2) were collected. The soil samples were screened in the field with a PID. The bottom sample PID concentrations were all below 20 ppm while the sidewall soil sample PID concentrations were all below 225 ppm. The locations and sample depths for the endpoint confirmation soil samples, as well as the limits of the UST excavation, are shown on figure 17. The endpoint soil samples were collected in laboratory-supplied containers and submitted to the laboratory for analysis for VOCs, SVOCs and total metals.

Based on the results of the utility tracing activities completed on July 3, 2007, a suspect UST was identified in the eastern portion of Area C. As a result of this anomaly, the concrete floor slab and wood floor were removed in this area to expose the subsurface soils. Based on the waste characterization analytical results for the wood, it was disposed of as hazardous waste due to elevated concentrations of xylenes and lead (F003 [spent non-halogenated sol-

vents] and D008 [lead]). A total of 70 cubic yards of contaminated wood debris/waste was taken offsite as hazardous waste for disposal at Stablax Canada, Inc. located in Blainville, Quebec. The USEPA ID Number for the Stablax Canada, Inc. disposal facility is NYD980756415. Copies of the disposal manifests for the contaminated wood are included in Appendix V. The concrete was taken offsite for recycling. Of note, headspace analyses completed on multiple crushed concrete samples showed no detectable PID readings.

After removing parts of the concrete slab and wood floor, and after exposing the subsurface in Area C, it was verified that an UST was present in the area where the anomaly was detected by the utility tracing activities. This tank was subsequently labeled as UST-W. In July 2007, after the tank was exposed, it was revealed that this tank (a 3,000-gallon single wall steel UST) had been previously closed in place and was filled with clean sand. In preparation for the excavation activities, a polyethylene barrier was erected around the presumed extent of the UST. The sand was then removed from UST-W. After the tank was cleaned, it was inspected and observed to have 4 corrosion holes approximately 1/4 inch in diameter. It was then cut into pieces and removed from the excavation. The cleaned and cut tank pieces were taken to Pascap Co., Inc., in Bronx, New York for recycling. PID measurements confirmed that there were no VOCs in the sand, which was stockpiled onsite for later reuse as backfill. While UST-W was being excavated, visually impacted soil was identified along the northeastern sidewall of the tank area (in the location of the piping connection to the tank). This soil was adjacent to a structural supporting column which limited the extent of the excavation. During and after the removal of the UST-W, several soil samples were collected from the excavation and screened for the presence of VOCs. All soil screened showed PID readings below 75 ppm and all endpoint sample PID readings were below 55 ppm. After UST-W was removed and accessible soil was excavated (to the extent possible with the equipment which could fit in the space), endpoint soil samples were collected. Five sidewall and two bottom endpoint confirmation samples were collected. One endpoint sample (WS-2) was collected from adjacent to the structural supporting column where the contamination was observed. All endpoint soil samples were collected in laboratory-supplied containers and submitted to the laboratory for analysis for VOCs, SVOCs and total metals.

Following the closure of UST-W, the second anomaly identified in Area C (adjacent to UST-W) was confirmed to be an additional UST (UST-X). This tank was previously unidentified in any historical reports and/or Site documents, and was found to be a 3,000-gallon single wall steel UST. While UST-W had been previously abandoned in place, UST-X had only the fill and vent pipes cut and no closure activities had been completed prior to covering the tank with the concrete slab. UST-X was purged of vapors and cut open. After an access hole was cut into the tank, the residual contents of UST-X were removed from the tank and the interior of the tank was cleaned. After the tank was cleaned, it was inspected and observed to be in good condition with no corrosion holes or major pitting. It was then cut into pieces and removed from the excavation. The cleaned and cut tank pieces were taken to Pascap Co., Inc., in Bronx, New York for recycling. During and after the removal of the UST-X, several soil samples were collected from the excavation and screened for the presence of VOCs. The PID readings ranged from 0.0 ppm to 20 ppm with the exception of the western sidewall area (where the piping had been connected to the tank) where the final endpoint PID concentration was 1,350 ppm. Once the UST was cleared from the excavation, six sidewall endpoint confirmation samples (XN-1, XN-2, XS-1, XS-2, XW-1, and XE-1) and two bottom endpoint confirmation samples (XB-1 and XB-2) were collected. The locations and sample depths for the endpoint confirmation soil samples, as well as the limits of the UST excavation, are shown on figure 16. The endpoint soil samples were collected in laboratory-supplied containers and submitted to the laboratory for analysis for VOCs, SVOCs and total metals.

Following the closure of UST-W, the excavation was extended to the south upon observing disrupted soil adjacent to the excavation sidewall. Once the excavation was extended, piping associated with another UST was discovered, and further excavation revealed an additional UST (UST-Y) to be present. This tank was previously unidentified on any historical reports and/or Site documents and was found to be a 3,000-gallon single wall steel UST. Similar to UST-X, UST-Y had only had the fill and vent pipes cut and no closure activities had been completed prior to covering the tank with the concrete slab. UST-Y had a small amount of residual sludge in it. UST-Y was purged of vapors and cut open. After an access hole was cut into the tank, the residual contents of UST-Y were removed from the tank and the interior of the tank was cleaned. After the tank was cleaned, it was inspected and observed to be in good

condition with no corrosion holes or major pitting. UST-Y was then cut into pieces and removed from the excavation. The cleaned and cut tank pieces were taken to Pascap Co., Inc., in Bronx, New York for recycling. During and after the removal of UST-Y, several soil samples were collected from the excavation and screened for the presence of VOCs. The PID readings for the soil surrounding the tank were all below 40 ppm with the exception of one bottom sample (YB-3) which had a PID concentration of 300 ppm. Once the UST was cleared from the excavation, five sidewall endpoint confirmation samples (YN-1, YN-2, YS-1, YS-2, and YE-1) and three bottom endpoint confirmation samples (YB-1, YB-2 and YB-3) were collected. All endpoint sample locations were approved by the onsite NYSDEC representative (Ms. Kathy Eastman). The locations and sample depths for the endpoint confirmation soil samples, as well as the limits of the UST excavation, are shown on figure 16. The endpoint soil samples were collected in laboratory-supplied containers and submitted to the laboratory for analysis for VOCs, SVOCs and total metals.

Following the closure of UST-Y, the excavation was extended to the south upon observing disrupted soil adjacent to the excavation sidewall. Once the excavation was extended, piping associated with another UST was discovered, and further excavation revealed an additional UST (UST-Z) to be present. This tank was previously unidentified on any historical reports and/or Site documents and was found to be a 3,000-gallon single wall steel UST. Similar to UST-X and UST-Y, UST-Z had only the fill and vent pipes cut and no closure activities had been completed prior to covering the tank with a concrete slab. The soil adjacent to the tank (where the pipes were observed) was visibly contaminated and when screened exhibited PID concentrations ranging from 800 to 1,100 ppm. Additionally, UST-Z had approximately one to two inches of sludge in the bottom. UST-Z was purged of vapors, cut open and the residual contents of UST-Z were removed from the tank. After the tank was removed from the excavation, it was inspected and observed to be in good condition with no corrosion holes and only minimal pitting. It was then cut into pieces and removed from the excavation. The cleaned and cut tank pieces were taken to Pascap Co., Inc., in Bronx, New York for recycling. During and after the removal of the UST-Z, several soil samples were collected from the excavation and screened for the presence of VOCs. The PID readings ranged from 0.0 ppm to 1,500 ppm. Once the UST was cleared from the excavation, five sidewall endpoint

confirmation samples (ZN-1, ZN-2, ZS-1, ZS-2 and ZW-1) and two bottom endpoint confirmation samples (ZB-1 and ZB-2) were collected. All endpoint sample locations were approved by the onsite NYSDEC representative (Ms. Kathy Eastman). The locations and sample depths for the endpoint confirmation soil samples, as well as the limits of the UST excavation, are shown on figure 16. The endpoint soil samples were collected in laboratory-supplied containers and submitted to the laboratory for analysis for VOCs, SVOCs and total metals.

All accessible contaminated soil (approximately 5 cubic yards) was excavated from around UST-W, UST-X, UST-Y and UST-Z, and was stockpiled in the Area D commercial space. This soil was characterized and subsequently disposed of as hazardous waste along with the soil excavated from the Area D hot spot excavation.

In September 2007, during the closure activities for UST-W, UST-X, UST-Y and UST-Z, the vaulted area beneath the sidewalk and North West Street was accessed. The vault was filled with refuse and was subsequently cleared out and additional areas were accessed (cinder block walls were removed). After the vault area was cleaned out, the floor and walls were visually inspected. Based on this inspection, no areas of significant staining were observed in or around the areas where the vaulted ASTs were historically located. On September 10, 2007, soil borings were attempted where the vaulted ASTs (AST-13, AST-15, AST-16 and AST-19) were historically located. The borings were attempted with a limited-access track-mounted GeoProbe rig; however, in each of the four locations (GP-AST13, GP-AST15, GP-AST16 and GP-AST19), refusal was encountered within the first 1 to 3 feet of the boring. Figure 17 shows the location of GeoProbe borings in Area C. Throughout the vaulted area, the concrete slab thickness and hardness prevented the GeoProbe rig from penetrating the slab and reaching the subsurface soils. No soil and/or groundwater samples could be collected for analysis; the concrete slab in this area was observed to be in good condition with no evidence of significant spills and/or gross contamination. Following the removal of the remainder of the concrete floor and wood floor in the main section of Area C, an attempt was also made to remove the concrete from the vault area using excavating equipment. The concrete was removed from the vault area where possible (in some cases the concrete was approximately 2 to 3 feet thick); however, the majority of the slab could not be removed. All underlying soil which was exposed was screened with a PID and no elevated

concentrations were identified in the headspace from crushed concrete from this area and/or the underlying soil (where it was accessible) in the areas where the former ASTs were located. All apparent subsurface impacts in the area near the historical locations of the vaulted ASTs could be attributed to the adjacent USTs (UST-W, UST-X, UST-Y and UST-Z). Based on the field observations and the thickness of the concrete in this area, the ASTs historically located in the vault area have not impacted the subsurface soil and/or groundwater.

Following the tank closure activities, the tank excavations were backfilled with 3/4-inch gravel. After backfilling the excavations, the remainder of the concrete in Area C (east of the dividing wall which runs along the western side of the elevator) was broken apart using excavators and track-mounted breakers and removed from the Site. The concrete was taken offsite for recycling. Headspace analyses conducted on multiple crushed concrete samples with a PID showed no detectable VOC readings. After the concrete was removed, a layer of soil (approximately 2 feet thick) was excavated from the entire area. Additionally, multiple exploratory excavations were completed throughout Area C to determine if additional USTs were present. The extent of the excavation activities in Area C area is shown on figure 18. All excavated soil was temporarily stockpiled in the Area D commercial space pending waste classification and offsite disposal. A total of 702.04 tons of soil was removed as a result of the regrading activities (which included approximately 100 tons of soil generated from the Area B UST excavation). Based on waste classification, this soil was disposed of offsite as non-hazardous petroleum impacted soil. From September to December 2007, the excavated Area B/C/D topsoil was taken offsite by Innovative and disposed of at Clean Earth of Carteret, Inc. located in Carteret, New Jersey. Copies of the disposal manifests for the excavated Area B/C/D topsoil are included in Appendix V.

After all of the topsoil in Area C was excavated and the area re-graded to approximately 16 inches below final grade elevation, a 12-inch layer of washed 3/4-inch gravel was then added above the backfilled area. Six (6) 2-inch diameter passive sub-slab ventilation pipes were installed in the gravel layer down the center of the room. The locations of these passive sub-slab ventilation pipes are shown on figure 14. After the gravel layer was leveled, a covering of polyethylene sheeting serving as a vapor barrier was placed on top of the gravel. The polyethylene seams were folded and double taped. A 4-inch thick concrete slab

(reinforced with welded wire mesh) was then poured in the area. Expansion joints were installed/saw-cut in the concrete slab.

4.3.7 Area D

4.3.7.1 Alleyway

Historical ERM investigations identified three USTs (UST-A, UST-B and UST-10) located in the alley of Area D. ERM reports state that UST-A and UST-B were left in place at the Site as they were used for storm-water control during heavy rain events. UST-10 was identified as being historically used for storage of waste solvents. ERM reports state that this tank was cleaned, filled with inert foam and abandoned in place. The former locations of all tanks historically within Area D are shown on figure 19.

During the winter 2006-2007, LBG completed subsequent tank closure activities in the alleyway consisting of removal of UST-A, UST-B and UST-10. The concrete throughout the alleyway (the majority of which was 1-foot thick and reinforced with rebar) was broken apart and taken offsite for recycling. Of note, headspace analyses conducted on multiple crushed concrete samples showed no detectable PID readings.

After the concrete was removed, UST-A and UST-B were uncovered and were both observed to be 3,500-gallon single wall steel USTs. The tops of both UST-A and UST-B were exposed and both tanks were observed to be intact (not previously abandoned). Both tanks contained water. The associated fill and vent pipes were cut off adjacent to each tank. Additionally, neither AST-A or AST-B were connected to the storm-water drains at the ends of the alleyway.

Both tanks contained residual water. Both UST-A and UST-B were purged of vapors and cut open. Once they were cut open, it was revealed that both tanks contained residual sludge/still bottoms (presumably from past manufacturing activities) much of which appeared to be hardened paint and varnish. After an access hole was cut into each tank, the residual contents were removed from both tanks and the interior of both tanks was cleaned. All of the residual sludge was stored in 55-gallon steel drums for offsite disposal. After the tanks were cleaned, they were inspected and observed to be in good condition with no corrosion holes or major pitting. Each UST was then cut into pieces and removed from the excavation. The

cleaned and cut tank pieces were taken to Pascap Co., Inc., in Bronx, New York for recycling. At the request of the NYSDEC, the waste generated from each tank was characterized separately. The UST-A waste contaminants consisted of VOCs including benzene, toluene, ethylbenzene, xylenes (BTEX) in addition to n-propylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, sec-butylbenzene, tert-butylbenzene and 4-isopropyltoluene. UST-B contained the same contaminants (at higher concentrations) and also contained methylene chloride and several SVOCs (naphthalene, 2-methylnaphthalene, di-n-butyl phthalate and bis(2-ethylhexyl)phthalate). Copies of the analytical reports are included in Appendix VIII.

During and after the removal of UST-A, several soil samples were collected from the excavation and screened for the presence of VOCs. Following the removal of UST-A, excavation was limited by the building to the south and east. Three sidewall endpoint confirmation samples (N-1, S-1 and W-1) and two bottom endpoint confirmation samples (B-1 and B-2) were collected. The locations of these endpoint confirmation samples are shown on figure 20. The endpoint soil samples were collected in laboratory-supplied containers and submitted to the laboratory for analysis for VOCs, SVOCs and total metals. After the endpoint confirmation samples were collected, the excavation was backfilled with 3/4-inch gravel (compacted at 1-foot lifts) to stabilize the area and to ensure that the building foundation was not impacted or undermined.

Ms. Kathy Eastman, Project Manager for the NYSDEC, was onsite during the cleaning and removal of UST-B. During and after the removal of UST-B, several soil samples were collected from the excavation and screened for the presence of VOCs components. The PID readings screened from the UST-B excavation were all 0.0 ppm. Once UST-B was removed from the excavation, four sidewall endpoint confirmation samples (north sidewall, south sidewall, east sidewall and west sidewall) and three bottom endpoint confirmation samples (Bottom 1, Bottom 2 and Bottom 3) were collected. The locations of these endpoint confirmation samples are shown on figure 20. The endpoint soil samples were collected in laboratory-supplied containers and submitted to the laboratory for analysis for VOCs, SVOCs and total metals. After the endpoint confirmation samples were collected, the excavation was backfilled with 3/4-inch gravel (compacted at 1-foot lifts) to stabilize the area and to ensure that the building foundation was not impacted or undermined.

UST-10, a 10,000-gallon single wall tank, was abandoned onsite and filled with an inert foam. After UST-10 was uncovered and cut open, a sample of the foam was collected in a laboratory-supplied container and submitted to the laboratory for waste characterization analysis. The foam (contaminated with VOCs) was subsequently removed from UST-10 and disposed of offsite prior to removing the tank. Approximately 20 cubic yards of waste foam were transported to Republic Environmental in Hatfield, Pennsylvania for disposal. After the foam was removed from the tank, 437 gallons of contaminated water were also evacuated from the tank. This water (non-hazardous waste based on laboratory analysis) was transported offsite and disposed of at Clean Water located at 3249 Richmond Terrace in Staten Island, New York. Copies of the disposal manifests for the UST-10 foam and waste water are included in Appendix V.

After the foam was removed from the tank, the interior was cleaned. Once cleaned, the tank was inspected and observed to be in good condition with no corrosion holes or major pitting. It was then cut into pieces and removed from the excavation. The cleaned and cut tank pieces were taken to Pascap Co., Inc., in Bronx, New York for recycling.

During and after the removal of UST-10, several soil samples were collected from the excavation and screened for the presence of VOCs. The PID readings ranged from 0.0 ppm to 10 ppm. All endpoint confirmation soil samples screened in the field had PID concentrations of 0.0 ppm with the exceptions of B-1 and B-2 which had PID concentrations of 0.5 ppm and 0.6 ppm, respectively. The excavation for UST-10 was limited by the building to the east and the retaining wall to the west. After the excavation was completed, seven sidewall endpoint confirmation samples (NS-1, NS-2, NS-3, SS-1, SS-2, SS-3 and ES-1) and five bottom endpoint confirmation samples (B-1, B-2, B-3, B-4 and B-5) were collected. The locations of these endpoint confirmation samples are shown on figure 20. No sidewall soil sample was collected on the side adjacent to UST-B because the soil between the two tanks was removed to facilitate the excavation activities. The endpoint soil samples were collected in laboratory-supplied containers and submitted to the laboratory for analysis for VOCs, SVOCs and total metals. After the endpoint confirmation samples were collected, the excavation was backfilled with 3/4-inch gravel (compacted at 1-foot lifts) to stabilize the area and to ensure that the building foundation was not impacted or undermined.

Due to the presence of NAPL immediately upgradient in the adjacent commercial space, the NYSDEC requested groundwater and soil confirmation samples to be collected from the water table and confining layer below the USTs. This confirmation sampling consisted of drilling GeoProbe soil borings at the approximate center of the former location of the USTs. The locations of these GeoProbe borings are shown on figure 21. For each GeoProbe boring location, soil samples were collected (for submission to the laboratory for analysis) from the following depths within the boring: one from approximately 12 to 16 ft bg which was the estimated elevation below the bottom of the tank; and one from the termination point of the boring (refusal). Additionally, two groundwater samples were collected from each boring; one from the water table and one from the termination of the boring. These soil and groundwater samples were submitted to laboratory for analysis for VOCs, SVOCs and total metals.

The sludge cleaned from UST-A, UST-B and UST-10 was stored in steel 55-gallon drums pending offsite disposal. A total of nine (9) 55-gallon drums of sludge were generated during the closure of these USTs. Samples of the waste generated from the tank closure activities were submitted to AMRO Environmental Laboratories Corporation for waste classification. Based on the analytical results of the waste, it was disposed of as hazardous waste due to elevated concentrations of xylenes, 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene (F003, F005 [spent solvent waste]). Following receipt of the laboratory analysis, the waste was removed from the Site by Innovative Recycling Technologies, Inc. (Innovative) of Lindenhurst, New York. On June 22, 2007, the waste was transported and disposed of under the Site's USEPA ID Number NYD056301971. The waste was disposed of at Chemtron under their disposal facility USEPA ID Number of OHD066060609. Copies of the disposal manifests for the waste are included in Appendix V.

In 2008, during the excavation activities conducted in Area D (former commercial space), suspected fill pipes and vent pipes were discovered running along the western wall of the commercial space (see Commercial Space and Adjacent Room section below). The concrete floor for the former remediation room in the alleyway was jack-hammered to allow access to the subsurface. Once the concrete was removed, the soil was dug out by hand and the top of an additional tank was discovered (heretofore referred to as UST-U). This tank was determined to be a 3,000-gallon single wall steel UST. The former location of UST-U is

shown on figure 19. Because this tank was located beneath the former remediation room, the room had to be demolished to remove the tank. This situation presented a logistical problem as the south wall of the room served as a structural support for the fire escape serving the 2nd and 3rd floors of the building. A temporary brace was constructed to support the fire escape while UST-U was removed. Following the removal of the former remediation room and the remaining concrete slab, UST-U was uncovered. While uncovering UST-U, another UST was discovered adjacent to the north of UST-U. This tank (referred to as UST-T) was located beneath the bathroom connected to the southwest corner of the commercial space. The former location of UST-T is shown on figure 19. On May 22, 2008, a vacuum truck operated by TradeWinds was used to remove 789 gallons of contaminated water and waste oil from UST-T and UST-U. Based on the analytical results of the waste liquid, it was disposed of as hazardous waste due to chemical components detected in the waste liquid (D001 [mineral spirits]). The waste was disposed at Norlite Corporation of Cohoes, New York under their disposal facility USEPA ID Number of NYD080469935. A copy of the disposal manifest for the waste is included in Appendix V.

However, because the tanks were not able to be removed from the subsurface (due to the continued presence of the fire escape), the exposed access ports collected rainwater as a result of a subsequent storm event. On June 16, 2008, a vacuum truck operated by TradeWinds was used to remove 522 gallons of contaminated rainwater from UST-T and UST-U.

On June 17, 2008, UST-U was removed from the excavation and verified to be a 3,000-gallon single wall steel UST. UST-U was then cut open, revealing that the tank contained residual material (presumably from past manufacturing activities); much of which appeared to be hardened paint and varnish. After an access hole was cut into the tank, the residual contents were removed from the tank and the interior was cleaned. A total of three drums of tank sludge and one drum of tank bottoms were cleaned out of UST-U. Based on the nature of the hardened varnish, it was not able to be removed from the tank interior by hand. As such, the tank was cut open and the material was scraped off of the interior of the tank using the excavator. Six drums of dried product were scraped from the interior of UST-U. All of the residual waste from UST-U was stored in ten 55-gallon steel drums for offsite disposal.

On November 6, 2008, the ten drums of waste generated from the cleaning of UST-U were disposed of as hazardous based on the laboratory analysis (D018 [benzene] and F002, F003 and F005 [spent solvent waste]). The waste was disposed of at Chemtron under their disposal facility USEPA ID Number of OHD066060609. A copy of the disposal manifest for the waste is included in Appendix V.

After the tanks were cleaned they were inspected and observed to be in good condition with no corrosion holes or major pitting. UST-U was removed from the excavation. The excavator was able to be positioned so that UST-T could be pulled from beneath the bathroom wall. On June 20, 2008, UST-T was removed from beneath the bathroom and observed to be an approximately 500-gallon single wall riveted steel UST. UST-T was then cut open, revealing that the tank contained residual sludge/tank bottoms. After an access hole was cut into the tank, the residual contents were removed from the tank and the interior was cleaned. A total of two 55-gallon steel drums of sludge/tank bottoms were cleaned out of UST-T. On November 6, 2008, the two drums of waste generated from the cleaning of UST-T were disposed of as hazardous due to elevated concentrations of toluene and xylenes as shown in the laboratory analysis (D018 [benzene] and F002, F003 and F005 [spent solvent waste]). The waste was disposed of at Chemtron under their disposal facility USEPA ID Number of OHD066060609. A copy of the disposal manifest for the waste is included in Appendix V.

After both UST-U and UST-T were removed, the excavation was advanced as far as possible without undermining the building foundations. Five sidewall endpoint confirmation samples (AT-1, AT-2, AT-3, AT-4 and AT-5) were collected, all of which had PID concentrations of 0.0 ppm. The bottom of the excavation was visibly impacted with red and purple stained soil. As such, the excavation was benched down to facilitate reaching the maximum depth of the excavation. Soil was screened with a PID continuously, with PID concentrations ranging from approximately 1,000 ppm to 5,000 ppm. All excavated soil was stockpiled in the commercial space (on poly sheeting) pending offsite disposal. After reaching a total depth of 13 ft bg (approximate elevation of the groundwater table), bottom endpoint confirmation samples (AT-6, AT-7, AT-8 and AT-9) were collected. The locations of these endpoint confirmation samples are shown on figure 20. The endpoint soil samples were collected in laboratory-supplied containers and submitted to the laboratory for analysis for VOCs, SVOCs

and total metals. After the endpoint confirmation samples were collected, the excavation was backfilled with 3/4-inch gravel (compacted at 1-foot lifts) to stabilize the area and to ensure that the building foundation was not impacted or undermined.

On July 25, 2008, 95.22 tons of soil removed from the UST-U and UST-T excavation were disposed of offsite as hazardous waste due to elevated concentrations of toluene and xylenes (D001 [mineral spirits]). The waste soil was disposed of at Chemtron under their disposal facility USEPA ID Number of OHD066060609. Copies of the disposal manifests for the waste are included in Appendix V. After both tanks were cleaned they were inspected and observed to be in good condition with no corrosion holes or major pitting. The cleaned and cut tank pieces were taken to Pascap Co., Inc., in Bronx, New York for recycling.

Following the tank closure activities, the temporary brace was replaced with a permanent fire escape structural support. A plan showing the extent of the temporary brace as well as the permanent fire escape structural support is shown on figure 22.

Upon completion of all of the excavation activities in the Area D alleyway, the area was re-graded to an elevation of 4 inches below the final grade elevation. The surface was then restored with a 4-inch thick asphalt cap.

4.3.8 Commercial Space and Adjacent Room

4.3.8.1 Hot Spot Excavation

After the concrete slab/wood floor was broken and removed from Area C, the same activity was completed in Area D to provide access to the subsurface. The primary reason for this activity was to facilitate the exploratory trenching to determine if previously unidentified USTs were present and, if so, if they were active sources.

On October 22, 2007, following the removal of the overlying concrete slab, soil was excavated in the room adjacent to the commercial space (the southern portion of Area D). No additional USTs were located in this room. Following the exploratory trenching, preparations were made to excavate the grossly contaminated soil in this area. The excavation in this area was guided by the evaluation of historical fluid-level measurements. These measurements revealed that the free-phase product was localized in this area (southern portion of Area D). As such, it was suspected that an unidentified tank may be present in the subsurface in this

area. Additionally, this is the area where past product removal efforts conducted by ERM were unsuccessful due to the high viscosity of the product. Considering all of these factors, this excavation (referred to as the “hot spot” excavation) was completed in the area where the greatest thicknesses of free-phase product (NAPL) had been historically observed (in the area of the former product delineation Well DW-13D, see figure 23).

After excavating several feet of soil (which did not reveal impact based on field screening), the excavation of hot spot soil was initiated. At approximately 10 ft bg, visually impacted soil was encountered within the excavation. All soil from 10 ft bg to the termination depth of the excavation at approximately 18 ft bg was segregated onsite from other soil and stockpiled in the commercial space (on poly sheeting). A total of 129.015 metric tons of hazardous contaminated soil was removed and disposed of offsite in association with the “hot spot” excavation. Of note, much of the soil removed from this excavation was saturated with free-phase product (NAPL). The excavation was expanded laterally to the limitations of the excavating equipment and/or the presence of building structural components. A replacement groundwater/product extraction well (EW-1D) was constructed in the center of the completed excavation, consisting of one ten-foot section of 6-inch slotted stainless-steel well screen set from 8 to 18 ft bg. and one eight-foot section of 6-inch stainless steel riser pipe set from grade to 8 ft bg. Following the well installation, the remaining excavation was backfilled with washed gravel to approximately 2 to 3 feet above the top of screen around the riser pipe of the extraction well.

The completed hot spot excavation area was then backfilled with 3/4-inch highly permeable gravel to approximately 5 feet below the final grade elevation. The gravel was covered with a taped polyethylene liner and the area was then further backfilled from approximately 5 ft bg to 1 ft bg using the non-impacted soil originally excavated and segregated from the same area. The surface was then covered with 3/4-inch highly permeable gravel to approximately 4 inches below the final grade elevation. The sub-slab depressurization piping (from Area C as well as the one leg installed in this room) was installed in a trench in the gravel, and extended to the Area D commercial space. The 3/4-inch gravel was leveled to cover the sub-slab depressurization piping and the gravel was then covered with a taped polyethylene liner serving as a vapor barrier. The concrete slab was then

restored with a 4-inch thick concrete slab (reinforced with welded wire mesh). Saw cuts (1/4-inch wide and 1/2-inch deep) and expansion joints were cut throughout the concrete slab to ensure temperature differentials did not result in cracking of the slab.

4.3.8.2 Commercial Space Excavation

Historical ERM investigations identified UST-34, UST-35, UST-36 and UST-C within the commercial space of Area D. These USTs (4,000-gallon, 4,000-gallon, 4,000-gallon and 1,500-gallon respectively) were found by ERM to contain fluids and sludge. After the fluids and sludge were removed, the tanks were cut open and disposed offsite. Approximately 30 cubic yards of contaminated soils were removed from this area as part of the ERM tank closure activities. The locations of these tanks are shown on figure 19. No additional work was reported to have been done to address residual soil contamination in this area by ERM.

Considering the absence of closure documentation for UST-34, UST-35, UST-36 and UST-C, LBG conducted a subsurface investigation and collected soil and groundwater samples at the location of these tanks. The confirmation sampling consisted of advancing GeoProbe soil borings at the approximate center of the former location of each of the USTs. For each GeoProbe boring, continuous soil samples were collected from grade to the boring terminus. For each GeoProbe boring location, soil samples were collected (for submission to the laboratory) from the following depths within the boring: one from approximately 0 to 2 feet below the estimated elevation of the bottom of the tank and one from the location where the highest PID reading was obtained. Additionally, two groundwater samples were collected from each boring; one from the water table and one from the termination of the boring. These samples were submitted to laboratory for analysis for VOCs, SVOCs and total metals. Laboratory analytical results of the LBG GeoProbe tank closure samples for UST-34, UST-35, UST-36 and UST-C indicated that soil and groundwater in the area contained concentrations of VOCs and total metals exceeding the applicable NYSDEC standards. As such, the concrete slab was removed from the commercial space of Area D to provide access to the subsurface for excavation of contaminated soil.

Following the removal of the concrete slab, exploratory trenches were excavated to determine if any tanks (listed as previously removed or unidentified) were present in the area.

During these excavation activities, a previously undiscovered UST (referred to as UST-V) was discovered along the southern wall of the commercial space. UST-V was observed to be an “old” (based on riveted construction) 275-gallon steel tank. On January 9, 2008, UST-V was removed from the Area D commercial space and verified to be a 275-gallon single wall riveted steel UST. The tank was in good condition with no visual corrosion holes or pitting. UST-V was then cut open, revealing that the tank contained residual sludge/tank bottoms. After an access hole was cut into the tank, the residual contents were removed from the tank and the interior was cleaned. A total of one 55-gallon steel drum of sludge/tank bottom was removed from UST-V. After UST-V was removed from the excavation, the soil surrounding the tank was excavated to the maximum extent possible (limited based on the building foundation). The UST excavation was then backfilled with clean fill to prevent undermining of the foundation wall. On November 6, 2008, one drum of waste generated from the cleaning of UST-V was disposed of as hazardous based on the laboratory analysis (D018 [benzene] and F002, F003 and F005 [spent solvent waste]). The waste was disposed of at Chemtron under their disposal facility USEPA ID Number of OHD066060609. A copy of the disposal manifest for the waste is included in Appendix V.

Following the removal of UST-V, the soil excavation was expanded to remove all accessible contaminated soil from the subsurface beneath the historical locations of UST-34, UST-35, UST-36 and UST-C. A figure illustrating the extent of the excavation as well as the location of the endpoint confirmation soil sample is presented as figure 20. The extent of the excavation was limited by the presence of the building foundations (south and west) and by the confined space which limited the size of the excavator. As shown on figure 20, the excavation was completed to a depth of approximately 13 ft bg.

A total of 1,128.20 tons of contaminated soil was excavated from the subsurface in the area beneath/surrounding the former locations of UST-34, UST-35, UST-36 and UST-C and disposed of as non-hazardous petroleum contaminated soil (based on laboratory analysis). As a result of the excavation activities, several of the product delineation wells previously constructed in the commercial space by ERM (DW-4D, DW-5D, DW-6D, DW-7D, DW-8D, DW-9D and DW-10D) and monitor well MW-4D were destroyed. Two replacement

delineation wells (R-4D and R-5D) were constructed in the commercial space to provide future groundwater characterization information.

All soil excavated from the Area D commercial space was taken offsite under manifest by Innovative and disposed of at Soil Safe, Inc.– Bridgeport located in Logan Township, New Jersey. Copies of the disposal manifests for the excavated soil are included in Appendix V. Upon reaching the limits of the excavation (or <50.0 ppm PID concentrations during the field screening), the excavation was terminated. Excavation endpoint confirmation samples were collected from the termination points of the excavation and submitted to the laboratory for analysis for VOCs, SVOCs and total metals. The extent of the excavation activities in Area D is presented on figure 24.

Following the completion of the excavation activities, the resulting excavation was backfilled with washed 3/4-inch highly permeable gravel. This material was selected to facilitate future sub-slab depressurization activities as well as the application of a chemical oxidation compound (for a pilot test and for potential future application events). The purpose of the chemical oxidation application is to enhance in-situ remediation of the residual contamination. The groundwater monitor wells, product delineation wells and SVE well present in the area will also facilitate future applications of the chemical oxidization compound if deemed to be effective. The commercial space excavation was backfilled with the 3/4-inch highly permeable gravel to approximately 12 inches below final grade elevation. Five (5) 2-inch diameter passive sub-slab ventilation pipes were installed in the gravel layer. The locations of these passive sub-slab ventilation pipes are shown on figure 14. After the sub-slab ventilation pipes were installed, they were covered with 3/4-inch highly permeable gravel and the surface was leveled to 4 inches below final grade elevation (8 inches in the area of the Oak Street entrance). A covering of polyethylene sheeting was placed on top of the gravel serving as a vapor barrier and the polyethylene seams were folded and double taped. Lastly, a 4-inch thick concrete slab (reinforced with welded wire mesh) was poured throughout the commercial space. A thicker 8-inch thick welded wire mesh reinforced concrete slab was poured in the area of the Oak Street entrance. Expansion joints (1/4-inch wide and 1/2-inch deep) were cut throughout the concrete slab to ensure temperature differentials did not result in cracking of the slab.

4.4 Remedial Performance/Documentation Sampling

4.4.1 Soil

The results of the onsite soil sampling activities (consisting of hollow-stem auger split-spoon sampling, GeoProbe macro-core sampling and excavation endpoint sampling indicate that residual soil contamination exists in the subsurface throughout the Site. The primary contaminants of concern at the Site consist of VOCs and, to a lesser degree, SVOCs and metals.

The subsurface contamination was related to the historical USTs and ASTs onsite that were associated with the former manufacturing activities. Based on the subsurface investigation, the areas at the Site where the highest concentration and distribution of VOC-impacted soil is present include: the location of the former drywell in the parking lot of Area A; the western perimeter of Area C; the northeastern corner of the former UST-W excavation in Area C; and the south/southwestern portion of Area D where the highest concentration of VOC contamination was detected. These are the areas of the Site where most of the soil excavation activities were focused. The elevated metals concentrations in the subsurface soils (where detected) are most likely attributed to a combination of factors including the historic use of coal ash and urban fill as backfill material, as well as regional site background concentrations. However, considering the depth of several soil samples containing metals at concentrations exceeding Restricted Use Soil Clean-up Objectives (RUSCO), the exceedance of metals criteria throughout the Site can also be attributable to regional background concentrations as influenced by the historical land use.

Although residual soil contamination remains beneath the Site, based on the fact that the entire Site is capped with asphalt/concrete, the potential for exposure due to dermal contact or ingestion is insignificant. Additionally, ECs are being utilized at the Site to remediate the residual soil contamination. These additional ECs include activation of the horizontal SVE well (HSVE-1) along with active passive venting from the sub-slab piping throughout Area C and Area D.

A detailed description of the soil quality at the Site (relative to Area A, Area B, Area C and Area D) is outlined in the following sections.

4.4.1.1 Area A (Including Parking Lot)

Based on remedial investigation activities conducted in 2007 and 2008, subsurface soil quality was characterized in Area A. The soil samples collected from GeoProbe drilling in conjunction with the LBG UST closure activities for the previously removed USTs were used to evaluate soil quality in Area A. Closure sampling for UST-P, sampling of the former dry-well located in the southwest corner of the parking lot, construction of additional delineation Well DW-4A, surface soil sampling in the southwest corner of the property, sampling following the exploratory excavation activities in the existing parking area, and collection of bottom samples following the excavation for the construction of the required replacement drywells were also used to define soil quality.

The locations of soil sample(s) submitted for laboratory analysis based on the highest observed PID reading and/or the most visibly contaminated sample at a sampling location in Area A are presented in figures 7, 8 and 25. Tables 1 to 16 summarize the soil quality from all Area A sampling locations and identify the samples which exceed Track 4 Restricted Use Commercial SCOs at the Site following IRM activities.

4.4.1.1.1 Volatile Organic Compounds (VOCs)

Initially, the highest concentrations of VOCs in Area A were detected at the GP-Dry Well sampling location. This soil sample, collected from 22 to 26 ft bg, exhibited concentrations of toluene (17,000 ug/kg [micrograms per kilogram]), xylenes (7,400 ug/kg), 1,2,4-trimethylbenzene (21,000 ug/kg) and 1,3,5-trimethylbenzene (7,000 ug/kg).

The initial sampling prompted additional investigation activities for the former dry well. The resulting investigation identified UST-P; which was removed. After the removal of UST-P, the highest concentrations of VOCs detected in Area A were in the two bottom endpoint confirmation samples (B-1 and B-2); with elevated concentrations of VOCs also being detected in the south sidewall endpoint confirmation sample (S-1). UST-P endpoint samples B-1, B-2 and S-1 all had toluene concentrations exceeding Part 375 Protection of Groundwater RUSCOs, with the highest concentration (65,000 ug/kg) being detected in B-2 at 10 ft bg. The B-2 endpoint sample location is adjacent to where the GP-Dry Well boring was previously advanced. The only other VOC detected above Part 375 Protection of Groundwater RUSCOs

was benzene, which was detected in the UST-P endpoint sidewall sample S-1 at a concentration of 220 ug/kg.

The two soil samples Parking Lot B-1 and Parking Lot B-2, which were collected from the bottom of the excavation in the center of the parking lot, had concentrations of VOCs exceeding Part 375 Protection of Groundwater RUSCOs. Parking Lot B-1 contained acetone (2,100 ug/kg), benzene (350 ug/kg), toluene (11,000 ug/kg) and methylene chloride (7,600 ug/kg) in concentrations exceeding Part 375 Protection of Groundwater RUSCOs. Parking Lot B-2 contained benzene (71 ug/kg), toluene (2,700 ug/kg) and methylene chloride (480 ug/kg) in concentrations exceeding Part 375 Protection of Groundwater RUSCOs.

Methylene chloride was detected at concentrations exceeding Part 375 Protection of Groundwater RUSCOs in soil samples GP-1A to GP-6A, GP-UST-PR-1 and GP-UST-PR-3. Additional VOCs detected above Part 375 Protection of Groundwater RUSCOs included GeoProbe soil sample GP-UST-PR-3 (10 to 15 ft bg), which had elevated concentrations of benzene and toluene; GP-UST-PR-3 (35 to 39.5 ft bg) which had acetone and GP-4A (4 to 8 ft bg), which had a concentration of methylene chloride of 120 ug/kg. The only other VOC detected above Part 375 Protection of Groundwater RUSCOs was PCE, which was detected in the GP-4A sample (4 to 8 ft bg). The remainder of the samples that were collected had no VOC concentrations exceeding Part 375 Protection of Groundwater RUSCOs.

The Area A surface soil samples both contained VOC concentrations below Part 375 Protection of Groundwater RUSCOs. Toluene was detected in Area A-SS-1 (0 to 2 in. bg) (inches below grade) and in Area A-SS-2 (6 to 12 in. bg). All other compounds were non-detectable in the two sampling locations.

The soil sample collected from delineation Well DW-4A contained no detectable VOCs. This soil sample, which was collected during the construction of this well, was used to laterally delineate the onsite contamination on the southern perimeter of the Site.

Another area where no VOCs were detected included the samples OTB-1 and OTB-2, which were collected from beneath approximately 12 ft bg in the former location of tanks UST-1A to UST-6A. A summary of the VOCs detected in soil for Area A is presented on tables 1 to 5.

Figure 26 shows the distribution of total VOCs detected in soil samples collected from Area A. As a result of this distribution of soil contamination in Area A, the excavation and resulting soil disposal activities were focused on the center of the parking lot as well as the southwest corner (the removal of UST-P and the former drywell). A total of 722.17 tons of non-hazardous soil was excavated from Area A and disposed offsite at an approved and licensed disposal facility. Excavation was limited due to the presence of the building foundations. It should be noted that all VOC concentrations in Area A were below Part 375 Protection of Public Health (Commercial) RUSCOs.

4.4.1.1.2 Semivolatile Organic Compounds (SVOC)

The only SVOCs detected in Area A soils consisted of benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene and benzo(a)pyrene. The soil samples where these concentrations exceeded Part 375 RUSCOs were all from the shallow depths of 4 to 8 ft bg. This contamination may be attributed to the fill material previously placed beneath the asphalt which consisted of primarily ash and waste demolition debris. Subsequently, the area where there was the highest concentration of SVOCs exceeding Part 375 RUSCOs (the former location of tanks UST-1A to UST-6A) was later excavated to a depth of approximately 12 ft bg during the exploratory excavation activities in the Area A parking lot (former paint removal building) and the installation of the replacement drywells. The resulting endpoint confirmation sample OTB-1 contained no detectable concentrations of SVOCs while OTB-2 showed significantly reduced SVOC concentrations.

The above-listed SVOCs were also detected in the endpoint confirmation samples collected from the UST-P excavation, the former dry well excavation bottom (DWB-1), as well as the confirmation closure samples collected for previously removed tanks UST-10 and UST-11 (samples GP-UST PR-1 and GP-UST PR-2).

All other soil samples collected from Area A had SVOCs at concentrations below the Part 375 RUSCOs, including DW-4A (35 ft bg), Area A-SS-1 and Area A-SS-2 (both surface sampling locations) along the southern property boundary.

The elevated SVOC concentrations in the subsurface may be attributed to the historical operations at the Site. Polycyclic aromatic hydrocarbons (PAHs), specifically those detected in

Area A, are associated with coal combustion. Assuming that the ash and debris used as back-fill on the Site was from the historical operations at the Site (a former bakery) or imported to the Site, then this would explain the elevated SVOC concentrations in the soil. Additionally, the removal of the fill material overlying the native soil is an effective remedy preventing SVOCs from leaching into the subsurface native soils and/or potentially impacting groundwater. The SVOCs detected in soil samples collected from Area A are summarized on tables 6 to 10.

4.4.1.1.3 Metals

Total metals analysis completed on the GeoProbe confirmation soil samples collected from Area A show elevated concentrations (exceeding Part 375 RUSCOs) of lead and mercury in only two samples. These compounds exceeded Part 375 RUSCOs for soil samples GP-4A (4 to 8 ft bg) [lead at 870 mg/kg] and GP-6A (12 to 16 ft bg) [mercury at 1.17 mg/kg].

Total metals analysis completed on Area A excavation endpoint samples showed elevated concentrations (exceeding Part 375 RUSCOs) of arsenic and lead in only three confirmation soil samples. These compounds exceeded Part 375 RUSCOs for soil samples B-1 (10 ft bg) [arsenic at 20.8 mg/kg], B-2 (10 ft bg) [arsenic at 17.9 mg/kg], and Parking Lot B-2 (11 ft bg) [lead at 824 mg/kg]. These elevated metals concentrations are likely attributed to the fill material previously present in the subsurface. This fill material was excavated (down to native soil) from the parking lot area. However, the elevated metals concentrations in the subsurface may also be attributed to regional background soil concentrations.

Total metals analysis completed on Area A surface soil samples showed an elevated concentration (exceeding Part 375 RUSCOs) of mercury in Area A-SS-2 (0-2 in. bg). All other metals concentrations were below Part 375 RUSCOs. As stated above, these elevated metals concentrations are likely attributed to the fill material present along the southern property boundary.

Soil quality data for metal concentrations for Area A are summarized on tables 11 to 15.

4.4.1.1.4 Pesticides and PCBs

A pesticides and PCBs analysis was completed on the Area A surface soil sample locations along the southern property boundary. Both soil samples showed concentrations below the Part 375 RUSCOs. The pesticides and PCBs detected in soil samples collected from Area A are summarized on table 16. Additionally, copies of the Category B Deliverables laboratory analytical reports are included in Appendix IX.

4.4.1.2 Area B

Soil quality data for Area B were evaluated from GeoProbe samples collected in 2006 and 2007; in conjunction with the closure sampling of the previously removed ASTs, a perimeter sampling from in-place USTs, and post-excavation endpoint sampling completed following the removal of USTs from the first floor area. In addition, split-spoon soil samples collected from a GeoProbe soil boring in the boiler room and surface soil sample (collected from the pipe trench) were also used for soil quality characterization in this area. The soil sample(s) with the highest observed PID concentration and/or the most visible contamination were submitted for laboratory analysis. Soil sampling locations for Area B are shown on figures 11 and 12.

4.4.1.2.1 VOCs

The first floor portion of Area B and basement of Area B was initially characterized using GeoProbe soil sampling (GP-1 to GP-14 and GP-AST-1 to GP-AST-8, respectively). These sample locations are shown on figure 11. The highest level of VOC contamination detected in the Area B GeoProbe soil samples consisted of methylene chloride (just exceeding Part 375 RUSCOs in thirteen sample locations. Of note, all UST and AST GeoProbe soil samples had VOC concentrations below Part 375 RUSCOs for Protection of Public Health (Commercial). The VOCs detected in the first floor GeoProbe soil samples and the basement GeoProbe soil samples are summarized on tables 17 and 18, respectively.

In September 2007, an additional GeoProbe boring was advanced at the entrance to the boiler room in Area B. BR-1 (16 to 20 ft bg) had VOC concentrations all below Part 375

RUSCOs. The VOCs detected in the boiler room GeoProbe soil sample are summarized on table 19.

The pipe trench bottom sample was collected from the eastern wall (where the pipes ran from the Area B/C partition wall to the first floor of Area B) of the boiler room. This sample (collected after the pipes were removed) had no VOC concentrations that were above the laboratory detection limits and is summarized on table 20. The soil sample collected from delineation Well DW-21B (constructed immediately upgradient from the former locations of UST-E, UST-F and UST-G) contained no detectable VOCs. This soil sample was used to laterally delineate the onsite contamination on the eastern perimeter of the Site in Area B and the results are summarized on table 4.

After the first floor USTs were removed, the excavation endpoint confirmation samples were collected. These sample locations are shown on figure 12. Laboratory analyses from sidewall and bottom samples reported that only methylene chloride was detected over the Part 375 RUSCOs. Methylene chloride was detected over the Part 375 RUSCOs for Protection of Groundwater in all but the south sidewall samples (ES-1, FS-1 and GS-1) and the east sidewall for UST-G (GE-1). However, methylene chloride was detected in the associated laboratory method blank which was analyzed with the UST-E and UST-F excavation endpoint samples. Therefore, the detection of methylene chloride in the UST-E and UST-F endpoint samples is considered to be related to a laboratory artifact. It should be noted that methylene chloride was not detected in the method blank associated with the UST-G excavation endpoint samples. The VOCs detected in the soil for the UST-E/UST-F/UST-G excavation endpoints are summarized on table 21.

Figure 27 shows the distribution of total VOCs detected in all soil samples collected from Area B during the remedial investigation. Based on an evaluation of the total VOC distribution and concentrations, no significant VOC soil contamination remains in Area B.

4.4.1.2.2 SVOCs

Similar to Area A, the only SVOCs detected in Area B soils above the Part 375 RUSCOs consist of benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, and benzo(a)pyrene; with the addition of indeno(1,2,3-cd)pyrene.

All SVOCs from the first floor GeoProbe soil sampling locations (GP-1 to GP-14) were detected at concentrations below the Part 375 RUSCOs. The SVOCs detected at the first floor GeoProbe soil sampling locations are summarized on table 22.

All SVOC concentrations in the soil collected from DW-21B (33 to 35 ft bg) were below the laboratory detection limits and are summarized on table 9.

The soil sample from the additional GeoProbe boring advanced in the entrance to the boiler room in Area B (BR-1, 16 to 20 ft bg) had no detectable concentrations of SVOCs. The SVOCs not detected in the boiler room GeoProbe soil sample are summarized on table 23.

The highest SVOC concentrations in Area B were detected in the soil samples collected from the shallow depths (0 to 4 ft bg) of the basement AST GeoProbe soil samples. All of the deep samples collected in this area had no detectable concentrations of SVOCs. As such, these elevated SVOC concentrations are likely reflecting contamination related to the fill material beneath the concrete slab. This area of the basement was one of the areas where the concrete slab was not removed due to the limited access in the area. It should be noted that the concrete slab in the basement of Area B (where the ASTs were historically located) was observed to be in good condition with minimal sign of wear, degradation, cracking or other conditions which would create/have created a preferential pathway for spills to the subsurface. A summary of the SVOCs from the basement GeoProbe soil sampling locations is shown on table 24.

No SVOCs were detected at concentrations exceeding Part 375 RUSCOs for the UST-E/UST-F/UST-G excavation endpoint soil samples. The SVOCs detected in the soil for the UST-E/UST-F/UST-G excavation endpoints are summarized on table 25.

The only SVOCs detected above the Part 375 RUSCOs for the boiler room pipe trench bottom soil sample were benzo(a)anthracene, chrysene and benzo(a)pyrene. All other SVOCs detected in the boiler room pipe trench bottom soil sample were below Part 375 RUSCOs. The SVOCs detected in the boiler room pipe trench bottom soil sample are summarized on table 26.

4.4.1.2.3 Metals

Total metals analysis completed on Area B UST-E/UST-F/UST-G excavation endpoint samples detected elevated concentrations (exceeding Part 375 RUSCOs) for arsenic and barium

(table 27). Soil was excavated to the bottom of the tanks (to facilitate tank removal), however, the majority of it was left in place. The extent of excavation was regulated in the field based on readings obtained by screening the material with a PID.

The boiler room pipe trench bottom soil sample contained no metals with concentrations exceeding the Part 375 RUSCOs. The metals detected in the boiler room pipe trench bottom soil sample are summarized on table 28.

The elevated metals concentrations in the subsurface are most likely attributed to a combination of factors, including the historic use of coal ash and urban fill as backfill material as well as regional soil background concentrations. Similar to the fill observed in Area A, the fill material beneath the slab consisted of primarily ash and waste demolition debris. The elevated metals concentrations reflective of the UST-E/UST-F/UST-G excavation endpoint soil samples and the pipe trench bottom soil sample are believed to be associated with this historical fill. However, considering the depth of the soil sample collected from DW-21B (33 to 35 ft bg), the fact that it contained a slightly elevated concentration of chromium (17.4 mg/kg) suggests that the exceedance is attributable to regional soil background concentrations (table 14).

Additionally, copies of the Category B Deliverables laboratory analytical reports are included in Appendix IX.

4.4.1.3 Area C

Based on the remedial investigation activities that were completed, sub-surface soil quality was characterized in Area C. The soil samples consisted of GeoProbe samples (collected after the removal of UST-D from the water table and from the top of bedrock) as well as post-excavation endpoint samples collected following the removal of UST-D, UST-W, UST-X, UST-Y and UST-Z. Additionally, soil quality analysis was completed on samples collected during the construction of the groundwater monitor/product delineation wells and during the drilling of the hydraulic barrier investigation GeoProbe borings. Following the removal of the tanks from Area C, the excavations were extended to the maximum possible depth. The lateral limits of the excavation were primarily restricted by structural components of the building (support pillars and perimeter walls) and the excavation depths were limited by the size of the

excavating equipment that was able to fit inside the building; resulting in a maximum excavation depth of approximately 8 ft bg. For all sample locations, the soil sample(s) collected for laboratory analysis represent the soil with the highest observed PID concentration and/or the most visibly contaminated endpoint location available. Soil sampling locations for Area C are shown on figures 16, 17 and 28.

4.4.1.3.1 VOCs

The analytical results from post-excavation endpoint samples collected from the UST-D excavation indicated that no VOCs exceeded the Part 375 RUSCOs. However, analysis of the GeoProbe soil sample collected from the former area of UST-D (GP-Tank D [15 to 20 ft bg]) showed that toluene (at a concentration of 5,000 ug/kg) was the only VOC detected above the Part 375 RUSCO for Protection of Groundwater. This concentration exceeds the established Part 375 RUSCO for Protection of Groundwater for toluene of 700 ug/kg. Of note, this sample was collected near the groundwater table, at a depth which was beyond the limit of the excavation equipment. The VOCs detected in the GP-Tank D GeoProbe soil samples and the UST-D post-excavation endpoint samples are summarized on tables 29 and 30, respectively.

The soil samples collected from both DW-18C (constructed on the northern edge of Area C) and DW-20B (constructed on the southwestern edge of Area C but previously identified to be located in Area B) contained concentrations of VOCs exceeding the Part 375 RUSCOs for ethylbenzene, xylenes, n-propylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, sec-butylbenzene and naphthalene. DW-18C is located adjacent to Area D, where historical investigations showed that the majority of the free-phase NAPL had existed onsite. The data suggest that soil in this area may have been impacted from contamination migrating from Area D. All VOC concentrations in the soil sample collected from DW-19C (constructed on the southern edge of Area C) were below the Part 375 RUSCOs with the exception of methylene chloride. The VOCs, detected in the soil samples collected during the construction of DW-20B, DW-18C and DW-19C, are summarized on table 4.

VOC concentrations in all endpoint soil samples collected from excavations UST-D, UST-W, UST-X, UST-Y and UST-Z were below Part 375 RUSCOs for Protection of Public Health (Commercial). Post-excavation samples for UST-D and UST-Y contained no concen-

trations of VOCs that exceeded the Part 375 RUSCOs for Protection of Groundwater. Post-excavation samples for UST-W contained several VOCs (xylene, acetone, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene and sec-butylbenzene) at concentrations that exceed their respective Part 375 RUSCOs for Protection of Groundwater. Post-excavation samples for UST-X contained two VOCs (acetone and methylene chloride) detected at concentrations that exceed Part 375 RUSCOs for Protection of Groundwater. Post-excavation bottom sample ZB-1 for UST-Z contained 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene at concentrations exceeding their respective Part 375 RUSCOs for Protection of Groundwater. The high concentrations of xylene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, sec-butylbenzene and 4-isopropyl-toluene detected in the soils at the UST-W excavation were located on the south sidewall and adjacent to a foundation footer which prevented additional soil from being excavated. The acetone and methylene chloride concentrations detected in the excavation endpoint samples were only slightly above Part 375 RUSCOs for Protection of Groundwater of 50 ug/kg. However, both acetone and methylene chloride were detected in the associated laboratory method blank which was analyzed with the excavation endpoint samples. Therefore, the detection of these compounds is considered to be related to laboratory artifacts. As was the case for all four tanks (UST-W, UST-X, UST-Y and UST-Z), the excavations were expanded to their limits as defined by the presence of interior building structural footings. The VOCs detected in the UST-W, UST-X, UST-Y and UST-Z excavation endpoint confirmation soil samples are summarized on table 30.

The soil samples were collected in Area C for subsurface evaluation of the feasibility of construction of a hydraulic barrier (GP-HB-2, GP-HB-4, GP-HB-5, GP-HB-6 and GP-HB-7). Several of these sampling locations (GP-HB-2 10 to 15 ft bg, GP-HB-4 10 to 15 ft bg, and GP-HB-6 25 to 27 ft bg) have concentrations of VOCs that exceeded the Part 375 RUSCOs. The sample from boring GP-HB-2, which is located approximately 15 feet north of the UST-D excavation, has concentrations of toluene (2,600 ug/kg), xylenes (7,000 ug/kg), 1,2,4-trimethylbenzene (28,000 ug/kg) and 1,3,5-trimethylbenzene (12,000 ug/kg) which exceed the Part 375 RUSCOs. The samples from borings GP-HB-4 and GP-HB-6 have concentrations of ethylbenzene, xylenes, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, n-propylbenzene and n-butylbenzene which exceed the Part 375 RUSCOs. Overall, the highest VOC concentrations

appear to be present in the shallow sample interval for the GeoProbe borings (which encompasses the soil/groundwater interface). The VOCs detected in the hydraulic barrier sampling location soil samples are summarized on table 31.

Figure 29 shows the distribution of total VOCs detected in all soil samples collected from Area C. The distribution of VOC soil contamination in Area C indicates the highest levels of total VOCs are along the western perimeter of Area C; with localized soil contamination in the area of former USTs UST-W and UST-Z as well as MW-18C (on the northern perimeter of Area C). An important factor to mention, the highest concentrations of total VOC soil contamination along the western perimeter of Area C were detected in soil samples collected from the soil/groundwater interface. As such, the high concentrations of total VOCs can be attributed to free-phase product (NAPL) and/or dissolved phase VOCs. Additionally, the limits of excavation were restricted in the area of the former USTs due to the presence of the building foundations and/or support pillars.

4.4.1.3.2 SVOCs

The analytical results from both the post-excavation endpoint samples collected from the UST-D excavation and the GeoProbe soil samples collected from the UST-D excavation indicate that no SVOCs were detected at concentrations that exceeded the Part 375 RUSCOs. The SVOC concentrations for the GP-Tank D GeoProbe soil samples and the UST-D post-excavation endpoint samples are summarized on tables 32 and 33, respectively.

The analytical results from the post-excavation endpoint samples collected from the UST-W, UST-X, UST-Y and UST-Z excavations indicate that no SVOCs exceeded the Part 375 RUSCOs. The SVOC concentrations for the UST-W, UST-X, UST-Y and UST-Z excavation endpoint confirmation soil samples are summarized on table 33.

The hydraulic barrier GeoProbe soil samples GP-HB-2, GP-HB-4, GP-HB-5, GP-HB-6 and GP-HB-7 contained no SVOCs that exceeded the Part 375 RUSCOs. The SVOC concentrations for the hydraulic barrier GeoProbe soil samples GP-HB-2, GP-HB-4, GP-HB-5, GP-HB-6 and GP-HB-7 are summarized on table 34.

4.4.1.3.3 Metals

Analysis of total metals for the endpoint samples collected from the Tank D excavation indicated that only one compound (mercury) was detected in one location (bottom sample B-2) at a concentration exceeding the Part 375 RUSCO for Protection of Groundwater (0.73 mg/kg). This sample location is shown on figure 16. Additionally, the GeoProbe soil samples collected from the Tank D excavation area (15 to 20 ft bg and 25 to 29.5 ft bg) contained metals concentrations that were all below Part 375 RUSCOs. The metals concentrations for the GP-Tank D GeoProbe soil samples and the UST-D post-excavation endpoint samples are summarized on tables 35 and 36, respectively.

The post-excavation endpoint samples collected from the UST-W, UST-X, UST-Y and UST-Z excavations contained total metals concentrations that were below Part 375 RUSCOs for all endpoint samples from the excavations except one; YE-1. YE-1 had an arsenic concentration (17.0 mg/kg) which exceeded the Part 375 RUSCO of 16 mg/kg. The metals concentrations for the UST-W, UST-X, UST-Y and UST-Z excavation endpoint confirmation soil samples are summarized on table 36.

The hydraulic barrier GeoProbe soil samples GP-HB-2, GP-HB-4, GP-HB-5, GP-HB-6 and GP-HB-7 contained total metals concentrations that were below Part 375 RUSCOs. The metals concentrations for the hydraulic barrier GeoProbe soil samples GP-HB-2, GP-HB-4, GP-HB-5, GP-HB-6 and GP-HB-7 are summarized on table 37.

Additionally, copies of the Category B Deliverables laboratory analytical reports are included in Appendix IX.

4.4.1.4 Area D (Including Alley)

Based on the remedial investigation activities, the sub-surface soil quality was characterized throughout Area D. The soil samples collected by GeoProbe drilling in conjunction with the closure sampling of the previously removed USTs and post-excavation endpoint sampling conducted following the removal of UST-A, UST-B, UST-C, UST-10, UST-34, UST-35, UST-36, UST-T, UST-U and UST-V were used to evaluate soil quality in Area D and alley area. Additionally, analysis of soil samples collected during construction of the groundwater monitor/product delineation wells and endpoint soil samples from excavations were also used

to evaluate soil quality in this area. The soil sample(s) collected for laboratory analysis represent the soil with the highest observed PID concentration and/or the most visibly contaminated samples from available endpoint locations. Soil sampling locations for Area D are shown on figures 20, 21 and 28.

4.4.1.4.1 VOCs

Following the removal of UST-A and UST-B located in the alley area, analysis of the endpoint confirmation soil samples showed that all VOCs were below the Part 375 RUSCOs with the exception of UST-A endpoint N-1 (methylene chloride) and UST-B Endpoint East Sidewall (toluene). Analysis of the endpoint confirmation soil samples following the removal of UST-10 (in the alley) and UST-V (in the commercial space) showed that all VOCs were below the Part 375 RUSCOs with the exception of methylene chloride. The VOCs detected in the UST-A, UST-B, UST-10 and UST-V endpoint confirmation soil samples are summarized on table 38.

The excavation endpoint soil samples collected following the removal of UST-T and UST-U contained the highest concentrations of VOCs detected in the soil at the Site. The soil sample locations (AT-1 to AT-9) are shown on figure 20. These soil samples were collected following the removal of approximately 80 cubic yards of soil down to the water table. The locations in the excavation where the highest VOCs concentrations were detected are the bottom samples for UST-T (AT-6 and AT-7) and the bottom samples for UST-U (AT-8 and AT-9). AT-6 and AT-7 (collected from beneath the former waste oil tank UST-T) contained the highest concentrations of benzene (AT-6 at 5,400 ug/kg), toluene (AT-6 at 5,700,000 ug/kg), ethylbenzene (AT-7 at 140,000 ug/kg), xylene (AT-7 at 459,000 ug/kg), tetrachloroethene (AT-7 at 8,000 ug/kg), 1,1,1-trichloroethane (AT-6 at 22,000 ug/kg), isopropyltoluene (AT-6 at 4,300 ug/kg), n-propylbenzene (AT-6 at 9,200 ug/kg), 1,2,4-trimethylbenzene (AT-6 at 25,000 ug/kg) and 1,3,5-trimethylbenzene (AT-6 at 61,000 ug/kg). The bottom sample AT-8 from UST-U also contained toluene, ethylbenzene and xylenes at some of the highest concentrations present at the Site. Of note, the bottom samples collected from the UST-T/UST-U excavation are the only endpoint soil samples to have VOC concentrations (toluene, ethylbenzene and xylene) exceeding Part 375 RUSCOs for Protection of Public Health

(Commercial). The VOCs detected in the UST-T and UST-U endpoint confirmation soil samples are summarized on table 38.

Following the removal of UST-A, UST-B and UST-10, GeoProbe soil samples were also collected from the former areas of the tanks. These samples were collected from depths which were beyond the reach of the excavating equipment (the groundwater table and bedrock/the confining layer). The GeoProbe soil samples (GP-Tank 10 WT [12 to 16 ft bg], GP-Tank 10 CL [20 to 24 ft bg], GP-Tank A WT [10 to 15 ft bg], GP-Tank B WT [12 to 16 ft bg] and GP-Tank B CL [24 to 27 ft bg]) all contained concentrations of VOCs that exceeded the Part 375 RUSCOs. These VOCs include toluene, ethylbenzene, xylene, n-propylbenzene, 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene. Only soil sample GP-Tank A CL (25 to 27 ft bg) had concentrations below the Part 375 RUSCOs for all VOCs. The VOCs detected in the UST-A, UST-B and UST-10 GeoProbe soil samples are summarized on table 39.

In order to verify the closure activities of UST-34, UST-35, UST-36 and UST-C (completed by ERM), GeoProbe soil samples were collected from the former areas of these tanks. The analytical results of the sampling indicated VOC concentrations in the subsurface beneath the former locations of UST-36 and UST-C were all below the Part 375 RUSCOs with the exception of GP-Tank-C (4 to 8 ft bg) which had methylene chloride at a concentration of 77 ug/kg. However, the results from analysis of soil samples collected from beneath the former locations of UST-34 and UST-35 indicated that significant contamination remains in the subsurface. The VOCs detected above Part 375 RUSCOs in these samples include ethylbenzene, xylene, methylene chloride, isopropylbenzene, n-propylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, sec-butylbenzene, 4-isopropyltoluene and naphthalene. The VOCs detected in the UST-34, UST-35, UST-36 and UST-C GeoProbe soil samples are summarized on table 40.

The initial GeoProbe soil sampling for UST-34, UST-35, UST-36 and UST-C prompted additional investigation activities in the commercial space. The resulting investigation identified that significant contaminated soil remained in place at the Site (presumably related to these tanks). After the hot spot excavation activities were completed in the Area D adjacent room, the excavation was continued into the commercial space. Following the com-

pletion of the commercial space excavation to a depth of 13 ft bg (which is below the water table), endpoint confirmation soil samples were collected from several locations. The locations of these endpoint soil samples (B-1, B-2, B-3, B-4, B-6, B-7, S-1, S-2, S-3, S-4, S-7 and S-8) are shown on figure 20. The highest concentrations of VOC contamination in this excavation were detected in the soil samples collected from the bottom of the excavation and from the southwestern corner of the commercial space. This area is immediately downgradient from the former locations of UST-34 and UST-35. Similarly, the VOCs exceeding Part 375 RUSCOs, include ethylbenzene, xylene, isopropylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene and sec-butylbenzene from sample locations B-1, B-2, B-3, B-4, B-6, B-7, S-3 and S-4. The locations in the excavation where these VOCs were detected at the highest concentrations are: ethylbenzene detected in B-2 (2,600 ug/kg); xylene detected in B-2 (23,400 ug/kg); isopropylbenzene detected in B-4 (18,000 ug/kg); 1,2,4-trimethylbenzene detected in B-4 (85,000 ug/kg); 1,3,5-trimethylbenzene detected in B-4 (490,000 ug/kg); and sec-butylbenzene detected in B-2 (6,900 ug/kg). The excavation in this area was advanced as far as possible while maintaining the structural integrity of the building foundation. All remaining VOCs detected in the excavation endpoint samples were below the Part 375 RUSCOs. The VOCs detected in the commercial space excavation endpoint confirmation soil samples are summarized on table 41.

Four soil samples were collected in Area D for subsurface evaluation of the feasibility to construct a hydraulic barrier (GP-HB-1, GP-HB-3, GP-HB-8 and GP-HB-9). Several of the samples from these locations (GP-HB-1 [15 to 20 ft bg], GP-HB-3 [20 to 25 ft bg], GP-HB-8 [15 to 20 ft bg], GP-HB-9 [15 to 20 ft bg], and GP-HB-9 [20 to 25 ft bg]) have concentrations of VOCs that exceed the Part 375 RUSCOs for Protection of Groundwater. The sample from GP-HB-1, which is located approximately 20 feet west of the UST-A and UST-B excavations, contains toluene (21,000 ug/kg), ethylbenzene (1,100 ug/kg), xylenes (6,800 ug/kg) and 1,2,4-trimethylbenzene (20,000 ug/kg) at concentrations that exceed the Part 375 RUSCOs. GP-HB-3 (20 to 25 ft bg) (from the boring advanced and sampled prior to the construction of DW-16D) contains ethylbenzene (1,400 ug/kg), xylenes (6,500 ug/kg) and 1,2,4-trimethylbenzene (24,000 ug/kg) and 1,3,5-trimethylbenzene (10,000 ug/kg) at concentrations that exceed the Part 375 RUSCOs. GP-HB-8 and GP-HB-9 were advanced along the northern perimeter of the

Site. GP-HB-8 (15 to 20 ft bg), from the boring advanced and sampled prior to the construction of DW-17D, contains only xylenes (1,700 ug/kg), 1,3,5 trimethylbenzene (10,000 ug/kg), and 1,2,4-trimethylbenzene (5,800 ug/kg) at concentrations that exceed the Part 375 RUSCOs. GP-HB-9 (15 to 20) ft bg contains xylenes (2,500 ug/kg) and 1,2,4-trimethylbenzene (18,000 ug/kg) at concentrations that exceed the Part 375 RUSCOs. GP-HB-9 (20 to 25 ft bg) contains ethylbenzene (1,100 ug/kg), xylenes (11,000 ug/kg), n-propylbenzene (7,400 ug/kg), 1,2,4-trimethylbenzene (54,000 ug/kg) and 1,3,5-trimethylbenzene (23,000 ug/kg) at concentrations that exceed the Part 375 RUSCOs. Overall, the highest VOC concentrations detected in the Area D hydraulic barrier soil samples appear to be present in the shallow sample interval for the GeoProbe borings (which is closest to the soil/groundwater interface) with the exception of GP-HB-9. The VOCs detected in the hydraulic barrier sampling location soil samples are summarized on table 31.

Nine wells were constructed in Area D during the remedial investigation: EW-1 (later replaced with EW-1D); SVE-1 (later excavated out and constructed in pea gravel backfill); DW-16D; DW-17D; DW-21D; DW-22D; DW-23D; R-4D; and R-5D. These wells are shown on figure 2. The soil samples collected from DW-23D (constructed adjacent to UST-A in the alley) contained benzene (610 ug/kg) and toluene (180,000 ug/kg) at concentrations which exceed the Part 375 RUSCOs. EW-1 and DW-21D were both constructed in the room adjacent to the south of the commercial space. This room is where the majority of the historical free-phase NAPL (thickness and lateral extent) has been found in the subsurface. Both EW-1 and DW-21D contain several VOCs (ethylbenzene, xylene, methylene chloride, n-propylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and naphthalene) which exceed the Part 375 RUSCOs. This area was subsequently excavated (adjacent to DW-21D but encompassing EW-1) to approximately 18 ft bg as the hot spot excavation. The four remaining Area D wells (SVE-1, DW-22D, R-4D, and R-5D) were all constructed in the commercial space. Soil samples collected from these four sampling locations contained ethylbenzene, xylene, n-propylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene sec-butylbenzene and naphthalene at concentrations exceeding the Part 375 RUSCOs. For all samples, the compound with the highest concentration is 1,2,4-trimethylbenzene; with the exception of DW-23D in which toluene was present at the highest concentration. The VOCs detected in the

soil samples collected during the construction of EW-1, SVE-1, DW-21D, DW-22D, DW-23D, R-4D and R-5D are summarized on table 4.

Figure 30 shows the distribution of total VOCs detected in all soil samples collected from Area D. The distribution of total VOC soil contamination in Area D indicates that the highest concentrations of total VOCs are in the west/southwestern portion of Area D. The highest concentrations of total VOC soil contamination were detected in the endpoint samples collected from beneath the former USTs UST-T and UST-U. A total of 95.22 tons of hazardous soil was excavated from the UST-T/UST-U area of the Site and disposed offsite at an approved and licensed disposal facility. High concentrations of total VOC soil contamination were detected in soil samples collected from the southern portion of Area D (the “hot spot” area) and the commercial space. A total of 129.015 tons of hazardous soil was excavated from the “hot spot” area and a total of 1,128.2 tons of non-hazardous soil was excavated from commercial space at the Site and disposed offsite at an approved and licensed disposal facility. All limits of excavation were restricted due to the presence of the building foundations. Similar to the observations in Area C, the highest concentrations of total VOC soil contamination were detected in soil samples collected from the soil/groundwater interface. As such, the high concentrations of total VOCs can be attributed to free-phase product (NAPL) and/or dissolved-phase VOCs.

4.4.1.4.2 SVOCs

Laboratory analysis for excavation sidewall and bottom endpoint confirmation soil samples collected from the UST-10, UST-T, UST-U and UST-V excavations showed that all SVOCs were below the Part 375 RUSCOs. Additionally, all bottom endpoint confirmation soil samples collected from the UST-A and UST-B excavations showed that all SVOCs were below the Part 375 RUSCOs. However, five SVOCs (benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene) were detected at concentrations exceeding Part 375 RUSCOs for sidewall samples collected from the UST-A and UST-B excavations. The locations where one or more of the listed compounds were detected in exceedance of Part 375 RUSCOs are: UST-A sidewalls N-1, S-1 and W-1; and UST-B sidewalls North Sidewall and East Sidewall. These endpoint confirmation soil sample locations are

shown on figure 20. The SVOCs detected in the UST-10, UST-T, UST-U, UST-V, UST-A and UST-B endpoint confirmation soil samples are summarized on table 42.

The UST-A, UST-B and UST-10 closure confirmation GeoProbe soil samples were collected in the former locations of the tanks. These soil samples were collected from depths which were beyond the reach of the excavating equipment (the groundwater table and bedrock/the confining layer). All GeoProbe soil samples (GP-Tank 10 WT [12 to 16 ft bg], GP-Tank 10 CL [20 to 24 ft bg], GP-Tank A WT [10 to 15 ft bg], GP-Tank B WT [12 to 16 ft bg] and GP-Tank B CL [24 to 27 ft bg]) contained concentrations of SVOCs in concentrations below the Part 375 RUSCOs. The SVOCs detected in the UST-A, UST-B and UST-10 GeoProbe soil samples are summarized on table 43.

In order to verify the closure activities of UST-34, UST-35, UST-36 and UST-C (closed by ERM), GeoProbe soil samples were collected from the former locations of these tanks (as determined from historical documents). The results of the sampling indicated SVOC concentrations in the subsurface beneath the former locations of UST-34, UST-35, UST-36 and UST-C were all below the Part 375 RUSCOs in the deep soil samples. Several SVOCs exceeded the Part 375 RUSCOs in the shallow (4 to 8 ft bg) soil samples collected from GP-Tank 36, however, this soil was subsequently excavated and disposed offsite as part of the commercial space excavation. The SVOCs detected in the UST-34, UST-35, UST-36 and UST-C GeoProbe soil samples are summarized on table 44.

Of the nine wells constructed in Area D throughout the course of the remedial investigation, samples only from R-4D and R-5D were analyzed for SVOCs. The soil at DW-16D and DW-17D was characterized by using soil samples collected from GP-HB-3 and GP-HB-8 borings. R-4D and R-5D were both constructed in the commercial space. All SVOC concentrations detected in both R-4D and R-5D were below Part 375 RUSCOs. The SVOCs detected in the soil samples collected during construction of R-4D and R-5D are summarized on table 9.

Four soil samples were collected in Area D for subsurface evaluation of the feasibility of constructing a hydraulic barrier (GP-HB-1, GP-HB-3, GP-HB-8 and GP-HB-9). All soil samples collected from these soil borings for laboratory analysis (both shallow and deep) con-

tain SVOCs at concentrations below the Part 375 RUSCOs. The SVOCs detected in the Area D hydraulic barrier sampling location soil samples are summarized on table 34.

Once the commercial space excavation was completed to a depth of 13 ft bg (below the water table), endpoint confirmation soil samples were collected from several locations. The locations of these endpoint soil samples (B-1, B-2, B-3, B-4, B-6, B-7, S-1, S-2, S-3, S-4, S-7 and S-8) are shown on figure 20. Soil samples from all of the endpoints contained SVOCs at concentrations below the Part 375 RUSCOs with the exception of S-2. Excavation endpoint soil sample S-2 contained benzo(a)anthracene, chrysene and benzo(a)pyrene at concentrations slightly exceeding Part 375 RUSCOs. The SVOCs detected in the commercial space excavation endpoint confirmation soil samples are summarized on table 45.

4.4.1.4.3 Metals

The laboratory results of the soil samples collected from Area D indicate that metals contamination (arsenic, barium, mercury and selenium) remains in the soil in concentrations which exceed the Part 375 RUSCOs.

Multiple endpoint soil samples were collected from the completed Area D UST excavations for UST-A, UST-B, UST-T and UST-U. Total metals concentrations exceeding the applicable Part 375 RUSCOs include: arsenic (UST-B, UST-T and UST-U); barium (UST-U); and mercury (UST-A and UST-V). The total metals detected in the Area D UST excavation endpoint confirmation soil samples are summarized on table 46.

The UST-A, UST-B and UST-10 closure confirmation GeoProbe soil samples (collected from the groundwater table and bedrock/the confining layer) were analyzed for total metals. The results of the laboratory analyses indicate that no metals were detected at concentrations exceeding Part 375 RUSCOs. The metals detected in the UST-A, UST-B and UST-10 GeoProbe soil samples are summarized on table 47.

Laboratory analysis for the GeoProbe soil samples collected for UST-34, UST-35 and UST-C (closed by ERM), indicated that all metals concentrations are below Part 375 RUSCOs. Additionally, the deep GeoProbe soil sample UST-36 (GP-Tank 36 [28 to 29.5]) had concentrations of metals below Part 375 RUSCOs. Only the shallow GeoProbe soil sample collected for UST-36 (GP-Tank 36 [4 to 8]) contained metals (arsenic, barium and lead) at

concentrations exceeding Part 375 RUSCOs. Of note, this soil was removed as part of the commercial space excavation. The remaining metals concentrations were all below the Part 375 RUSCOs. The total metals detected in the UST-34, UST-35, UST-36 and UST-C GeoProbe soil samples are summarized on table 48.

Once the commercial space excavation was completed to a depth of 13 ft bg, endpoint confirmation soil samples were collected from several locations and submitted to the laboratory for analysis of total metals. The locations of these endpoint soil samples (B-1, B-2, B-3, B-4, B-6, B-7, S-1, S-2, S-3, S-4, S-7 and S-8) are shown on figure 20. The laboratory analytical results indicated that all metals concentrations in the endpoint soil samples were below Part 375 RUSCOs with the exception of selenium in B-2. The total metals detected in the commercial space excavation endpoint confirmation soil samples are summarized on table 49.

Of the nine wells constructed in Area D throughout the course of the remedial investigation, only samples from R-4D and R-5D were analyzed for total metals. The soil at DW-16D and DW-17D was characterized by using soil samples collected from GP-HB-3 and GP-HB-8 borings. R-4D and R-5D were both constructed in the commercial space. All metals concentrations detected in the samples from R-4D and R-5D were below Part 375 RUSCOs. The total metals detected in the soil samples collected during the construction of R-4D and R-5D are summarized on table 14.

Four soil samples were collected in Area D for subsurface evaluation of the feasibility of constructing a hydraulic barrier (GP-HB-1, GP-HB-3, GP-HB-8 and GP-HB-9). All metals concentrations in the soil samples collected from these soil borings were below Part 375 RUSCOs. The total metals detected in the Area D hydraulic barrier sampling location soil samples are summarized on table 37.

Additionally, copies of the Category B Deliverables laboratory analytical reports are provided in Appendix IX.

4.4.2 On-Site and Off-Site Groundwater

The results of onsite groundwater sampling activities (GeoProbe sampling and groundwater monitor well and product delineation well sampling), indicate that residual groundwater contamination exists in the subsurface throughout the Site. Based on the subsurface investiga-

tion, the areas at the Site where continued high concentrations of VOC-impacted groundwater are present include: the location of the former drywell in the parking lot of Area A (R-3A, which is a replacement well for historical delineation Well DW-3A); the western perimeter of Area C; and in the southwestern portion of Area D (DW-23D), where the highest concentration of VOC contamination was detected. These areas are the places on the Site where the majority of the soil excavation/disposal activities were focused, thereby eliminating a significant volume of source material as well as NAPL. Historical groundwater quality summary tables and trend analysis graphs illustrating the dissolved-phase VOC concentrations in groundwater for Areas A, B, C and D are provided in Appendix X. The results of the laboratory analysis indicated that nearly all SVOC concentrations in groundwater samples collected from the Site are below the NYSDEC Technical and Operational Guidance Series (TOGS) guidance values (with the exception of naphthalene at several locations). The results of the laboratory analysis indicated that the majority of the metals concentrations in groundwater samples collected from the Site are below the NYSDEC TOGS guidance values. Exceptions include arsenic, barium, chromium, mercury and selenium in Area A, and chromium in two locations in Area C and three locations in Area D.

Although residual groundwater contamination remains beneath the Site, groundwater in the vicinity of the Site is not utilized as a source of drinking water. Potable water at the Site and surrounding properties is provided by the City of Mt. Vernon Board of Water Supply. The Board of Water Supply receives all of its water from the New York City's Catskill/Delaware reservoir system. Because the entire Site is capped with asphalt/concrete and the groundwater is a minimum of approximately 12 feet below ground surface, the potential for exposure via dermal contact or ingestion of contaminated groundwater is insignificant.

A detailed description of the pre-remedy groundwater quality at the Site (relative to Area A, Area B, Area C and Area D) is outlined in the following sections.

4.4.2.1 Area A (Including Parking Lot)

GeoProbe groundwater samples from Area A (associated with UST closure confirmation activities) were collected from two discrete depths: one from the water table; and a

deeper one from the confining layer (the soil-bedrock interface). All samples were submitted to a laboratory for analysis of VOCs, SVOCs and total metals.

The groundwater samples from the GeoProbe boring locations (figure 7) were used to evaluate the groundwater quality beneath the former locations of UST-1A to UST-6A, UST-7 to UST-10 and the former parking lot drywell.

The results of the laboratory analysis indicated that all VOC concentrations are below the NYSDEC TOGS guidance values at most of the sampling locations. The locations where VOC concentrations in groundwater exceed TOGS include: GP-4A and GP-5A at the water table (PCE at 6.5 ug/l and 18 ug/l, respectively); GP-UST-PR-3 at the water table and the confining layer (benzene at 1.1 ug/l and 2.1 ug/l, respectively); and GP-Dry Well at the water table and the confining layer (toluene [21,000 ug/l and 5,900 ug/l], ethylbenzene [20 ug/l and 19 ug/l], xylene [60.3 ug/l and 62 ug/l], 1,2,4-trimethylebenzene [8.4 ug/l and 8.7 ug/l] and 1,2-dichlorobenzene [9.8 ug/l and 9.1 ug/l], respectively).

The results of the laboratory analysis indicated that all SVOC concentrations are below the NYSDEC TOGS guidance values for the Area A GeoProbe groundwater samples.

The results of the laboratory analysis indicated that all of the Area A GeoProbe groundwater samples contain concentrations of metals exceeding the NYSDEC TOGS guidance values with the exception of GP-Dry Well, GP-UST-PR1 and GP-UST-PR2. The metals that were detected at concentrations exceeding the NYSDEC TOGS guidance values include arsenic, barium, chromium, mercury and selenium. Of note, the metals concentrations are significantly higher in the groundwater samples collected from the water table than those collected from the confining layer.

The groundwater quality results for the Area A GeoProbe groundwater samples are summarized on table 50 for VOCs, table 51 for SVOCs, and table 52 for total metals.

Additionally, copies of the Category B Deliverables laboratory analytical reports are provided in Appendix IX.

4.4.2.2 Area B

GeoProbe groundwater samples were collected from both the first floor and the basement Area B (associated with UST and AST closure confirmation activities). Four

groundwater samples were collected in the first floor, and were collected from borings GP-2, GP-6, GP-9, and GP-12. Five samples were collected from the basement, and were collected from borings GP-AST-1, GP-AST-2, GP-AST-3, GP-AST-6, and GP-AST-7. The Area B GeoProbe groundwater sampling locations are shown on figure 11. All samples were submitted to a laboratory for analysis of VOCs and SVOCs.

The results of the laboratory analysis indicated that all VOC and SVOC concentrations for both the first floor GeoProbe groundwater samples and the basement GeoProbe groundwater samples are below the NYSDEC TOGS guidance values (in addition to the laboratory detection limit).

The groundwater quality results for the Area B GeoProbe groundwater samples are summarized on tables 53 and 54 for VOCs and on tables 55 and 56 for SVOCs.

Additionally, copies of the Category B Deliverables laboratory analytical reports are provided in Appendix IX.

4.4.2.3 Area C

Only two UST closure GeoProbe groundwater samples were collected from Area C; those being from the boring advanced following the removal of UST-D. Additionally, groundwater samples were collected from the hydraulic barrier GeoProbe borings GP-HB-2, GP-HB-4, GP-HB-5, GP-HB-6 and GP-HB-7. For each boring, groundwater samples were collected from two discrete depths: one from the water table (WT); and a deeper one from the confining layer/soil-bedrock interface (CL). The Area C GeoProbe groundwater sampling locations are shown on figure 17 and figure 28. All of these groundwater samples collected were submitted to a laboratory for analysis of VOCs, SVOCs and total metals.

The results of the laboratory analysis indicated that all VOCs in both of the GP-Tank D GeoProbe groundwater samples are below the NYSDEC TOGS Groundwater Quality Standards and Guidance Values (GWQS) with the exception of the following compounds: toluene, ethylbenzene, isopropylbenzene, n-propylbenzene, 1,2,4-trimethylbenzene, sec-butylbenzene, n-butylbenzene and naphthalene. All VOC concentrations exceeding the TOGS GWQS from the GP-Tank D GeoProbe groundwater samples are only slightly above NYSDEC TOGS guidance values. All five hydraulic barrier GeoProbe sampling locations from Area C

contain VOCs in concentrations exceeding the TOGS GWQS. The highest concentration detected in these borings were in the groundwater samples collected from GP-HB-2 WT (located approximately 30 feet north of UST-D) in which toluene was detected at a concentration of 3,200 ug/l. On average, the remaining VOCs were detected at concentrations approximately two orders of magnitude greater than TOGS GWQS.

The results of the laboratory analysis indicated that all SVOC concentrations are below the NYSDEC TOGS guidance values for the Area C GeoProbe groundwater samples (GP-Tank D and hydraulic barrier GeoProbe sampling locations) with the exception of naphthalene.

The results of the laboratory analysis indicated that all metals concentrations were below the NYSDEC TOGS guidance values for all the Area C GeoProbe groundwater samples collected from GP-Tank D. Additionally, all metals concentrations were below the NYSDEC TOGS guidance values for all groundwater samples collected from the Area C hydraulic barrier GeoProbe borings with the exception of borings GP-HB-4 and GP-HB-7 which had concentrations of chromium exceeding TOGS GWQS. Of note, the samples with the chromium concentration exceeding TOGS GWQS were collected from the confining layer for both borings (the deep sample). All metals concentrations detected in the groundwater samples collected from the water table sample are below the respective NYSDEC TOGS GWQS.

The groundwater quality results for the Area C GeoProbe groundwater samples are summarized on tables 57 and 58 for VOCs, tables 59 and 60 for SVOCs, and tables 61 to 62 for total metals.

Additionally, copies of the Category B Deliverables laboratory analytical reports are provided in Appendix IX.

4.4.2.4 Area D (Including Alleyway)

GeoProbe groundwater samples were collected from Area D in association with UST closure confirmation activities. Additionally, groundwater samples were collected from the four Area D hydraulic barrier GeoProbe borings GP-HB-1, GP-HB-3, GP-HB-8 and GP-HB-9. For each boring, groundwater samples were collected from two discrete depths: one from the water table; and a deeper one from the confining layer/soil-bedrock interface. All groundwater

samples from these borings were submitted to a laboratory for analysis of VOCs, SVOCs and total metals.

The groundwater samples from the GeoProbe boring locations (figures 21 and 28) were used to evaluate the groundwater quality beneath the former locations of UST-A, UST-B, UST-10, UST-34, UST-35, UST-36 and UST-C.

The results of the laboratory analysis indicated that all of the groundwater samples contained VOCs at concentrations exceeding the NYSDEC TOGS guidance values. The VOCs detected at the highest concentrations beneath the alleyway tanks UST-A and UST-B include toluene and xylene. Toluene in the groundwater beneath the former UST-A is nearly five orders of magnitude above the NYSDEC TOGS guidance value. The VOCs detected at the highest concentrations beneath the commercial space tanks UST-34, UST-35, UST-36 and UST-C include xylenes, 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene. Although the VOC concentrations for these compounds exceed guidance values, the maximum concentration for any individual compound beneath the former commercial space tanks was 3,500 ug/l. This concentration was detected at GP-Tank 34 in the sample collected from the water table. Samples from all four hydraulic barrier GeoProbe sampling locations in Area D contain VOCs in concentrations exceeding the TOGS GWQS. The highest concentrations detected in these borings were in the groundwater samples collected from GP-HB-1 CL (located adjacent to UST-A) in which toluene was detected at a concentration of 120,000 ug/l and benzene was detected at a concentration of 940 ug/l. On average, the remaining VOCs were detected at concentrations approximately two orders of magnitude greater than the TOGS GWQS.

The results of the laboratory analysis indicated that all SVOC concentrations (with the exception of naphthalene) were below the NYSDEC TOGS guidance values for all of the Area D GeoProbe groundwater samples (GP-Tank D and hydraulic barrier GeoProbe sampling locations).

The results of the laboratory analysis indicated that all metals concentrations were below the NYSDEC TOGS guidance values for all the Area D GeoProbe groundwater samples in the commercial space. Only one sample collected from the alleyway contained metals in concentrations which exceed the TOGS GWQS; that sample being GP-Tank 10 WT (chromium at 126 ug/l). Additionally, all metals concentrations were below the NYSDEC TOGS guidance

values for all groundwater samples collected from the Area D hydraulic barrier GeoProbe borings with the exception of borings GP-HB-3 and GP-HB-8 which had concentrations of chromium exceeding TOGS GWQS. Of note, the samples with the chromium concentration exceeding TOGS GWQS were collected from the confining layer for both borings (the deep sample). All metals concentrations detected in the groundwater samples collected from the water table sample were below the respective NYSDEC TOGS GWQS.

The groundwater quality results for the Area D GeoProbe groundwater samples are summarized on tables 58, 63 and 64 for VOCs, tables 60, 65 and 66 for SVOCs, and tables 62, 67 and 68 for total metals. Additionally, copies of the Category B Deliverables laboratory analytical reports are provided in Appendix IX.

4.4.3 On-Site and Off-Site Soil Vapor

The results of the onsite soil-vapor intrusion sampling rounds (conducted prior to onsite IRM activities) indicated that soil-vapor VOC concentrations beneath the Site are minimal. Additionally, none of the indoor air samples contained concentrations of PCE, trichloroethylene (TCE) and/or methylene chloride (the only compounds with established indoor air guidance values) above the established NYSDOH air guidance values. Based on the NYSDOH Soil Vapor/Indoor Air Matrices (which correlate soil-vapor concentrations and indoor air), the most conservative recommended courses of action for the Site (for the two sampling rounds) were: monitor/mitigate in Area A; monitor/mitigate in Area B; monitor in Area C; and take reasonable and practical actions to identify the source(s) and reduce exposures in Area D. Following the soil-vapor intrusion sampling rounds, mitigation activities were conducted in Areas A, B, C and D. These activities are discussed further in Section 4.8, below.

A detailed description of the pre-remedy soil vapor and indoor air quality at the Site (relative to Area A, Area B, Area C and Area D) is outlined in the following sections.

4.4.3.1 Soil Vapor Quality

On October 3, 4, 5 and 6, 2006, LBG conducted an initial soil-vapor intrusion sampling at the Site. The soil-vapor intrusion sampling was implemented in order to determine if the

subsurface contamination includes elevated concentrations of VOCs in the soil vapor. The data were used to evaluate the impact of soil-vapor intrusion on the indoor air quality at the Site. The vapor samples were collected from the newly constructed sub-slab soil-vapor sampling points. The October 2006 soil-vapor sampling locations are shown on figure 31.

The laboratory analysis of the soil-vapor samples concluded that several VOCs were detected in the soil vapor beneath the Site. The compounds which were detected at the highest concentrations included: tetrachloroethene, dichlorodifluoromethane, pentane, acetone, carbon disulfide, methylene chloride, hexane, 2-butanone, heptane, and toluene. Many other VOCs were detected in the soil vapor, however, at lower concentrations. The highest concentrations of VOCs in the soil vapor were detected in the following areas: the western portion of the parking lot near SVP-2 (PCE); dichlorodifluoromethane and PCE in Area A; acetone, toluene, xylene and PCE in Area B; the southwestern portion of Area C near SS-C2 and SS-C5 (acetone, hexane, methylene chloride, heptane, 2-butanone, carbon disulfide and xylene); and in the southern part of Area D near SS-C8 (PCE, acetone). It should be noted that none of the indoor air samples contained concentrations of PCE, TCE and/or methylene chloride above the established NYSDOH air guidance values. However, based on the NYSDOH Soil Vapor/Indoor Air Matrices (which correlates soil-vapor concentrations and indoor air), the recommended courses of action for the Site are: monitor/mitigate based on the PCE detected in the soil vapor (maximum of 630 ug/m³ in SS-A1) and indoor air (estimated 3.4 ug/m³) in Area A; monitor/mitigate based on the PCE detected in the soil vapor (maximum of 340 ug/m³ in SS-B1) and indoor air (estimated 4.3 ug/m³) in Area B; and take reasonable and practical actions to identify the source(s) and reduce exposures based on the PCE detected in the soil vapor (maximum of 22 ug/m³ in SS-D2) and indoor air (estimated 3.8 ug/m³) in Area D.

The VOC concentrations detected in the soil vapor, indoor air and outdoor ambient air samples from the October 2006 sampling round are summarized on tables 69 through 74. A copy of the laboratory report is included in Appendix XI.

On March 4, 5, 7 and 8, 2007, LBG conducted a second soil-vapor intrusion sampling at the Site. This supplemental sampling was conducted in order to collect soil-vapor intrusion data during the “heating season”. Like the initial round, the objective of the second sampling round was to determine if the subsurface contamination includes elevated concentrations of

VOCs in the soil vapor and, if present, to evaluate the impact to the indoor air quality at the Site. Samples were collected from the sub-slab soil-vapor sampling points. The March 2007 soil-vapor sampling locations are shown on figure 31.

The laboratory analysis of the soil-vapor samples indicated that several VOCs were detected in the soil vapor beneath the Site. The compounds which were detected at the highest concentrations were similar to the previous sampling round. These compounds included tetrachloroethene, dichlorodifluoromethane, pentane, acetone, carbon disulfide, methylene chloride, hexane, 2-butanone, heptane, and toluene. However, these compounds were detected at concentrations that were significantly lower than those detected in the October 2006 sampling round. The main exception to this trend was 1,1,2,2-tetrachloroethane, which was not detected in the October 2006 sampling round but was present at 3,500 ug/m³ (SS-C2) and 2,000 ug/m³ (SS-C5) in the southwest corner of Area C. Many other VOCs were detected in the soil vapor, however, at lower concentrations. The highest concentrations of VOCs in the soil vapor were detected in the following areas: the western portion of the parking lot near SVP-2 (PCE); dichlorodifluoromethane and PCE in Area A; acetone, toluene and PCE in Area B; the southwestern portion of Area C near SS-C2 and SS-C5 (1,1,2,2-tetrachloroethane, acetone, hexane, methylene chloride, heptane, 2-butanone, carbon disulfide and xylene); and on the southern part of Area D near SS-C8 (PCE, acetone, pentane, carbon disulfide, methylene chloride, hexane, isooctane, toluene, xylene and 1,1,1-trichloroethane);, and SS-D2 (acetone). It should be noted that none of the indoor air samples contained concentrations of PCE, TCE and/or methylene chloride above the established NYSDOH air guidance values. However; based on the NYSDOH Soil Vapor/Indoor Air Matrices (which correlates soil vapor concentrations and indoor air), the recommended course of action for the Site are: monitor based on the PCE detected in the soil vapor (maximum of 110 ug/m³ in SS-A5) and indoor air (1.22 ug/m³) in Area A; no further action based on the PCE detected in the soil vapor (maximum of 32 ug/m³ in SS-B1) and indoor air (estimated 0.6 ug/m³), as well as the TCE detected in the soil vapor (maximum of 2.2 ug/m³ in SS-B3) and indoor air (estimated 0.215 ug/m³) in Area B; and monitor based on the PCE detected in the soil vapor (maximum of 860 ug/m³ in SS-C8) and indoor air (estimated 1.56 ug/m³), as well as the TCE

detected in the soil vapor (maximum of 19 ug/m³ in SS-C4) and indoor air (estimated 0.322 ug/m³) in Area C.

The VOC concentrations detected in the soil vapor, indoor air and outdoor ambient air samples from the March 2007 sampling round are summarized on tables 75 through 80. A copy of the laboratory report is included in Appendix XI.

On October 22, 2009, LBG conducted a third soil-vapor sampling event at the Site. This supplemental sampling was conducted in order to collect a soil-vapor sample from the southern perimeter of the Site to assess the potential for offsite impact to the adjacent property to the south. Like the initial round, the objective of the third sampling round was to determine if the subsurface contamination included elevated concentrations of VOCs in the soil vapor. A sample was collected from a temporary soil-vapor sampling point that was constructed in the alley to the south of Area A. The October 2009 soil-vapor sampling location is shown on figure 31. The only difference from the previous soil-vapor sampling rounds was that the QA/QC procedure consisted of using a helium tracer gas rather than a propane tracer gas.

The laboratory analysis of the soil-vapor sample collected from SVP-3 on October 22, 2009 concluded that several VOCs were detected at low concentrations in the soil vapor beneath this portion of the Site. The compounds which were detected at the highest concentrations were similar to the previous sampling round. These compounds included: dichlorodifluoromethane, trichlorofluoromethane, acetone, and 1,1,1-trichloroethane. Many other VOCs were detected in the soil vapor, however, at lower concentrations. It should be noted that none of the VOC concentrations for PCE, TCE and/or methylene chloride were present at concentrations exceeding the established NYSDOH air guidance values for each respective compound (although the NYSDOH values are not directly applicable to soil vapor). The VOC concentrations detected in the soil-vapor sample from the October 2009 sampling round are included with the March 2007 soil vapor and ambient air sampling data which are summarized on table 79.

On March 11, 2011, LBG conducted a fourth soil-vapor sampling event at the Site. Like the initial round, the objective of this sampling round was to determine if the subsurface contamination includes elevated concentrations of VOCs in the soil vapor and, if present, to evaluate the impact to the indoor air quality at the Site. Samples were collected from select

sub-slab soil-vapor sampling points and soil-vapor sampling points in Areas A and B. In Areas C and D, only the indoor air was sampled. The March 2011 soil-vapor sampling locations are shown on figure 32. The laboratory analytical results of the soil-vapor samples indicated that several VOCs were detected in the soil vapor beneath the Site. The compounds which were detected at the highest concentrations were similar to the previous sampling round. These compounds included: toluene, xylenes, PCE, 1,1,1-trichloroethane and dichlorodifluoromethane. The concentrations of these contaminants were similar those detected by the March 2007 sample round. The highest concentrations of VOCs in the soil vapor were detected in the following areas: dichlorodifluoromethane, 1,1,1-trichloroethane and PCE in Area A, and acetone, 1,1,1-trichloroethane and PCE in Area B. It should be noted that none of the indoor air samples contained concentrations of PCE, TCE and/or methylene chloride above the established NYSDOH air guidance values. Based on the NYSDOH Soil Vapor/Indoor Air Matrices (which correlates soil-vapor concentrations and indoor air), the recommended courses of action for the Site are: In Area A, monitor based on the TCE detected in the soil vapor (6.6 ug/m^3 in SS-A3) and indoor air (0.601 ug/m^3), take reasonable and practical actions to identify the source(s) and reduce exposures based on the TCE detected in the soil vapor (2.0 ug/m^3 in SS-A1) and indoor air (0.601 ug/m^3). No further action is necessary based on the detected PCE and 1,1,1-trichloroethane concentrations. In Area B: monitor based on the PCE detected in the soil vapor (120 ug/m^3 in SS-B1) and indoor air (1.10 ug/m^3). No further action is necessary based on the detected TCE and 1,1,1-trichloroethane concentrations. In Area C: take reasonable and practical actions to identify the source(s) and reduce exposures based on the TCE detected in the indoor air concentration. No further action is necessary based on the detected PCE and 1,1,1-trichloroethane concentrations. In Area D: take reasonable and practical actions to identify the source(s) and reduce exposures based on the TCE detected in the indoor air concentration. No further action is necessary based on the detected PCE and 1,1,1-trichloroethane concentrations. The VOC concentrations detected in the soil vapor, indoor air and outdoor ambient air samples from the March 2011 sampling round are summarized on tables 81 through 86. A copy of the laboratory report is included in Appendix XI.

4.5 Imported Backfill

Two types of backfill were imported to the Site following the remedial activities: virgin stone and RCA. The virgin stone consisted of gravel sourced from Palumbo Sand and Gravel Company, Inc. of Dover Plains, New York. LBG documented the source of the stone as a rock quarry and thus did not need laboratory analytical data before the gravel was imported to the Site; in accordance with the exemption for no chemical testing listed in DER-10 Section 5.4(e)(5).

In addition to the virgin gravel backfill, recycled concrete aggregate (RCA) was imported to the Site and used for sub-base material beneath the restored asphalt pavement in the Area A parking lot and the Area D exterior alleyway. The RCA was imported from RCA Asphalt of Mount Vernon, New York, a NYSDEC registered construction and demolition (C&D) processing facility. The 6 NYCRR Part 360 Permit Number for RCA Asphalt is 60W17 and was issued on April 9, 2004. Due to its status as a registered facility, no certification testing was required for the RCA backfill imported from RCA Asphalt. The locations at the Site in which imported backfill was used for regrading following completion of the contaminated soil excavation activities are discussed in the following sections.

4.5.1 Area A

Following the UST-P closure and the demolition and removal of the foundation of the former paint removal building, exploratory excavations were conducted to verify that there were no remaining USTs present in the parking lot. After the excavation was completed to a final depth of approximately 11 to 12 ft bg, it was backfilled with RCA fill to eliminate the presence of an open excavation pending installation of the drywells and construction of the final parking lot.

Following the drywell installation, the excavation was backfilled with a minimum of 1 foot of 1 1/2-inch gravel surrounding each drywell to approximately 2 ft bg. The remainder of the parking lot was re-graded with RCA backfill material to prepare the subgrade before the cap restoration. Item 4 stone was used for the final layer in preparation for paving activities. The parking lot was then paved with a 4-inch thick asphalt cap. The excavation limits for Area A are shown on figure 9.

4.5.2 Area B

Following the UST-E, UST-F and UST-G tank closure activities, the remainder of the first floor area slab was removed and exploratory excavations were advanced to verify that UST-H was not present in a location other than what was listed in historical documents. The entire first floor area was excavated to a depth of approximately 10 ft bg. The results of the exploratory excavations revealed that UST-H was no longer present in the subsurface of the first floor of Area B. The limits of the exploratory excavations completed in Area B are shown on figure 13.

The excavation in the first floor of Area B was backfilled with excavated soil (screened in the field) and the entire area was re-graded to approximately one (1) foot below final grade elevation. An 8-inch layer of gravel was then added above the backfilled area. After the gravel layer was leveled, a covering of polyethylene sheeting was placed on top of the gravel. The seams were folded and double taped. Lastly, a 4-inch thick concrete slab (reinforced with welded wire mesh) was poured. Expansion joints were saw-cut into the concrete slab.

4.5.3 Area C

Following the UST-D, UST-W, UST-X, UST-Y and UST-Z tank closure activities, the tank excavations were backfilled with 3/4-inch gravel. After backfilling the excavations, the remainder of the concrete in Area C (east of the dividing wall which runs along the western side of the elevator) was broken apart using excavators and track-mounted breakers and removed from the Site. After the concrete was removed, a layer of soil (approximately 2 feet thick) was excavated from the entire area. Additionally, multiple exploratory excavations were completed throughout Area C to determine if additional USTs were present. The extent of the excavation activities completed in Area C is presented on figure 18. After all of the soil in Area C was excavated and the area re-graded to approximately 16 inches below final grade elevation, a 12-inch layer of 3/4-inch gravel was then placed above the backfilled area. After the gravel layer was leveled, a covering of polyethylene sheeting was placed on top of the gravel. The polyethylene seams were folded and double taped. A 4-inch thick concrete slab

(reinforced with welded wire mesh) was poured in the area. Expansion joints were saw-cut into the concrete slab.

4.5.4 Area D

4.5.4.1 Alleyway

Following the concrete removal throughout the Area D alleyway (most of which was 1-foot thick and reinforced with rebar) and subsequent UST-A, UST-B, UST-U, UST-T and UST-10 tank closure activities, the excavations were backfilled with 3/4-inch gravel (compacted at 1-foot lifts) to stabilize the area and to ensure that the building foundation was not impacted or undermined. The limits of the excavations in Area D are shown on figure 24. The excavations were backfilled with the gravel to an elevation of 4 inches below the final grade elevation. The surface was then restored with a 4-inch thick asphalt cap.

4.5.4.2 Hot Spot Excavation

After the concrete slab/wood floor was broken and removed, several feet of soil (which were not impacted based on field screening) were excavated from the area. The hot spot soil excavation then was completed to the termination of the excavation at approximately 18 ft bg. The limits of the excavations in Area D are shown on figure 24. A replacement groundwater/product extraction well (EW-1D) was constructed in the center of the completed excavation and the resulting excavation was backfilled with washed gravel to approximately 2 to 3 feet above the top of the well screen. The completed hot spot excavation area was then backfilled with 3/4-inch highly permeable gravel from the washed gravel surface to approximately 5 feet below the final grade elevation. The gravel was covered with a taped polyethylene liner and the excavation was then further backfilled from approximately 5 ft bg to 1 ft bg using the non-impacted soil originally excavated and segregated from the same area. The soil surface was then covered with 3/4-inch highly permeable gravel to approximately 4 inches below the final grade elevation and covered with a taped polyethylene liner. A 4-inch thick concrete slab (reinforced with welded wire mesh) was then poured. Expansion joints (1/4 inch wide and 1/2-inch deep) were then saw-cut throughout the concrete slab to ensure temperature differentials do not result in cracking of the slab.

4.5.4.3 Commercial Space Excavation

Following the removal of the concrete slab, exploratory trenching was conducted to determine if any tanks (listed as previously removed or unidentified) were present in the area. During these excavation activities, UST-V was discovered along the southern wall of the commercial space. After the closure of UST-V, the excavation was backfilled with gravel to prevent the adjacent wall from being undermined.

Following the removal of UST-V, the soil excavation was expanded to remove all accessible contaminated soil from the subsurface beneath the historical locations of UST-34, UST-35, UST-36 and UST-C. The limits of the excavations in Area D are shown on figure 24. The limits of the excavations were restricted by the presence of the building foundations (south and west) and by the confined space which limited the size of the excavator. As shown on figure 24, the excavation was completed to a depth of approximately 13 ft bg. The commercial space excavation was then backfilled with 3/4-inch highly permeable gravel and the surface leveled at approximately 4 inches below final grade elevation (8 inches in the area of the Oak Street entrance). A covering of polyethylene sheeting was placed on top of the gravel and the polyethylene seams were folded and double taped. Lastly, a 4-inch thick concrete slab (reinforced with welded wire mesh) was poured throughout the commercial space. An 8-inch thick welded wire mesh reinforced concrete slab was poured in the area of the Oak Street entrance. Expansion joints (1/4-inch wide and 1/2-inch deep) were saw-cut the concrete slab to ensure temperature differentials do not result in cracking of the slab.

4.6 Contamination Remaining At The Site

The IRM excavation activities were effective at removing NAPL and a significant amount of the contaminant source material from the Site. As a result, the residual soil contamination with contaminant concentrations exceeding Part 375 Commercial RUSCOs are limited to:

- Volatile Organic Compounds (VOCs):
 - Toluene was detected in 3 soil samples in Area D (UST-T AT-6 [13 ft bg], UST-T AT-7 [13 ft bg], and UST-U AT-8 [13 ft bg]).

- Semivolatile Organic Compounds (SVOCs):
 - benzo(a)pyrene was detected in:
 - 5 soil samples in Area A (GP-1A [4-8 ft bg], GP-2A [4-8 ft bg], GP-3A [4-8 ft bg], GP-4A [4-8 ft bg], and GP-UST PR-2 [4-8 ft bg]);
 - 5 soil samples in Area B (GP-AST-2 [0-4 ft bg], GP-AST-4B [0-4 ft bg], GP-AST-5A [3-4 ft bg], GP-AST-8 [0-4 ft bg], and Boiler Room Pipe Trench Bottom [3 ft bg]); and
 - 5 soil samples in Area D (UST-A N-1 [7 ft bg]; UST-A S-1 [7 ft bg], UST-A W-1 [7 ft bg]; GP-Tank 36 [4-8 ft bg], and UST-B North Sidewall [5 ft bg]).
 - indeno(1,2,3-cd)pyrene was detected in 4 soil samples in Area B (GP-AST-2 [0-4 ft bg], GP-AST-4B [0-4 ft bg], GP-AST-5A [3-4 ft bg], and GP-AST-8 [0-4 ft bg]).
- Metals:
 - Arsenic:
 - 2 soil samples in Area A (B-1 [10 ft bg] and B-2 [10 ft bg]);
 - 2 soil samples in Area B (GS-1 [4 ft bg] and GE-1 [4 ft bg]);
 - 1 soil sample in Area C (YE-1 [4 ft bg]); and
 - 5 soil samples in Area D (GP-Tank 36 [4-8 ft bg], UST-B South Sidewall [5 ft bg], UST-T AT-2 [5 ft bg], UST-U, AT-1 [5 ft bg], and UST-U, AT-3 [5 ft bg]).
 - Barium
 - 2 soil samples in Area B (EN-1 [5 ft bg] and GB-2 [9 ft bg]);
 - 1 soil sample in Area C (UST-U, AT-3 [5 ft bg]); and
 - 1 soil sample in Area D (GP-Tank 36 [4-8 ft bg]).
 - Mercury
 - 1 soil sample in Area A (GP-6A [12-16 ft bg]); and
 - 1 soil sample in Area C (UST-D, B-2 [7.5 ft bg]).

Following the IRM soil excavation activities, residual soil contamination with contaminant concentrations exceeding Part 375 RUSCOs for Protection of Groundwater remain at the Site. The areas where the highest concentration and distribution of VOC-impacted soil is present include: the location of the former drywell in the parking lot of Area A; the western perimeter of Area C; and the northeastern corner of the former UST-W excavation in Area C. The highest concentration of VOC contamination was detected in the south/southwestern portion of Area D. This location is the area of the Site where most of the soil excavation/disposal activities were focused. The elevated metals concentrations in the subsurface soils (where detected) are most likely attributed to a combination of factors including the historic use of coal ash and urban fill as backfill material. However; considering the depth of several soil samples containing metals at concentrations exceeding Part 375 RUSCOs, the presence of metals at these higher concentrations throughout the Site may also be attributable to regional background soil quality. The locations of all soil samples are shown on figures 7, 8, 11, 12, 16, 17, 20, 21, 25 and 28, and endpoint soil quality results are summarized on tables 1 through 49.

Although residual soil contamination remains beneath the Site, the potential for exposure due to dermal contact or ingestion is insignificant because the entire Site is capped with asphalt/concrete. In Area C and Area D where the when and where the active SSDS operates, the EC will also provide an ancillary benefit of active remediation of the residual VOC soil contamination. To a lesser extent, the passive SSDS venting system may provide some remedial benefit toward remediation of residual VOC soil contamination.

4.6.1 Groundwater

The results of onsite groundwater sampling activities (GeoProbe sampling and groundwater monitor well and product delineation well sampling), indicate that residual groundwater contamination exists in the subsurface throughout the Site. Based on the subsurface investigation, the areas at the Site where continued high concentrations of VOC-impacted groundwater are present include: the location of the former drywell in the parking lot of Area A (R-3A, which is a replacement well for historical delineation Well DW-3A); the western perimeter of Area C; and in the southwestern portion of Area D (DW-23D), where the highest

concentration of VOC contamination was detected. These locations are the areas of the Site where most of the soil excavation/disposal activities were focused, thereby eliminating a significant volume of source material as well as NAPL. Historical groundwater quality summary tables and trend analysis graphs illustrating the dissolved-phase VOC concentrations in groundwater for Areas A, B, C and D are provided in Appendix X. The results of the laboratory analysis indicated that nearly all SVOC concentrations in groundwater samples collected from the Site are below the NYSDEC TOGS guidance values (with the exception of naphthalene in several locations). The results of the laboratory analysis indicated that most of the metals concentrations in groundwater samples collected from the Site are below the NYSDEC TOGS guidance values. Exceptions include arsenic, barium, chromium, mercury and selenium in Area A, and chromium in two locations in Area C and three locations in Area D.

Although residual groundwater contamination remains beneath the Site, groundwater in the vicinity of the Site is not utilized as a source of drinking water. Potable water at the Site and surrounding properties is provided by the City of Mt. Vernon Board of Water Supply. The Board of Water Supply receives all of its water from New York City's Catskill/Delaware reservoir system. Because the entire Site is capped with asphalt/concrete and the groundwater is a minimum of approximately 12 feet below ground surface, the potential for exposure via dermal contact or ingestion of contaminated groundwater is insignificant. Additionally, ECs (concrete and asphalt cap, SSDS, DPE treatment system, high vacuum NAPL recovery and chemical oxidation applications) are currently being utilized at the Site to remediate the residual groundwater contamination as well as any remaining NAPL, thereby reducing the potential offsite impact to the Bronx River.

4.6.2 Soil Vapor

Based on the NYSDOH Soil Vapor/Indoor Air Matrices (which correlate soil-vapor concentrations and indoor air), the most conservative recommended courses of action for the Site (for the March 2011 sampling round) were: monitor in Area A, monitor in Area B, take reasonable and practical actions to identify the source(s) and reduce exposures in Area C, and take reasonable and practical actions to identify the source(s) and reduce exposures in Area D.

Following the initial soil-vapor intrusion sampling rounds, mitigation activities were completed in Areas A, B, C and D. In Area A, the remedial activity consisted of removal of an asphalt cap, UST closure activities and excavation/removal of contaminated soil within the parking lot and installation of a new asphalt cap. In Areas B, C and D, the remedial mitigation activities consisted of: removal of the slab on grade, UST closure activities, excavation/removal of contaminated soil and free-phase product, backfill with a highly permeable gravel (the first floor of Area B and most of the basement of Area C and all of Area D), the installation of several sub-slab depressurization pipes within the gravel layer, and pouring of new reinforced concrete slabs. The sub-slab depressurization pipe in Area B is currently used for passive venting to the atmosphere via a roof-mounted wind turbine (producing minimal vacuum), while the SSDS in Area C and Area D is currently connected to the manifold on the exterior of the treatment system trailer. This setup enables the use of the dual-phase treatment system as a means of controlling soil vapor beneath the Site.

In conclusion, remedial actions completed at the Site have been effective in removing a significant amount of the source material from the subsurface. However, subsurface residual contamination remains beneath the Site, primarily in dissolved-phase (VOCs in groundwater). The Site will be protected from soil-vapor intrusion by way of the following ECs: an impermeable Site cap; passive SSDS piping within Area B; and active extraction from SSDS wells in Area C and Area D. To address the remaining soil and dissolved-phase contamination at the Site, an impermeable Site cap will be maintained as an EC, and ICs including Site access and use restrictions will be maintained to prevent exposure to subsurface contamination and to make the Site protective of human health. Additionally, intermittent operation of the remedial system can be conducted for recovery and/or treatment of any accumulated LNAPL and dissolved-phase VOCs. System operation would also control and/or minimize offsite contaminant migration. These actions will make the Site protective of human health and the environment.

4.6.3 LNAPL

As of December 2015, the IRM system has been effective in reducing the NAPL to the point of de minimis concentrations being recovered from the product delineation wells as well

as the horizontal extraction wells. From the initial start-up of the treatment system until December 16, 2015, a total of approximately 849,415 gallons of groundwater have been treated by the system and discharged to the sanitary sewer. Residual subsurface contamination remains beneath the Site primarily as dissolved-phase VOCs. As a result of the contaminated soil, groundwater and soil vapor remaining beneath the Site after completion of the Remedial Action, EC/ICs are required to protect human health and the environment. These ECs/ICs are described in the following sections. Long-term management of these EC/ICs and residual contamination will be completed under the SMP approved by the NYSDEC.

4.7 Composite Cover System

A composite cover system was constructed to prevent human exposure to residual contaminated soils remaining under the Site.

The exterior Site cover systems in the areas where contaminated soils were excavated consist of backfilled excavations completed with 4-inch thick asphalt caps. The building interior Site cover systems in the areas where contaminated soils were excavated consist of backfilled excavations completed with 4-inch or 8-inch thick welded-wire mesh reinforced concrete slabs.

The building interior Site cover systems in the areas where contaminated soils were excavated consist of (from bottom to top): 1) clean backfill from the bottom of the completed excavation to approximately 4 to 8 inches below final grade elevation (the uppermost portion of the backfill consists of a minimum of 12 inches of washed 3/4-inch gravel; 2) 2-inch diameter sub-slab ventilation pipes installed within the gravel layer; 3) a covering of polyethylene sheeting (seams were folded and double taped) placed on top of the gravel; 4) a 4-inch to 8-inch thick concrete slab (reinforced with welded-wire mesh) with expansion joints saw-cut in the concrete slab; and 5) an epoxy surface coating. The locations of each cover type built at the Site are shown on figure 33. A S/MMP is described in Section 4.1.3 above, and outlines procedures and the methodologies that will be utilized for excavation, handling, and management of materials for any ground invasive construction work conducted at the Site which disturbs materials located beneath the cover system and/or underlying residual contamination. The S/MMP will govern onsite ground invasive construction work in the event

that any is undertaken. All such work must be conducted in accordance with the listed procedures and methodologies in addition to the HASP and CAMP prepared for the Site.

4.8 Other Engineering Controls

Because contaminated soil, groundwater and soil vapor remained beneath the Site after the completion of the IRM activities, ECs were required to protect human health and the environment. The Site has several primary ECs, as described in the following subsections.

4.8.1 Sub-Slab Depressurization System (SSDS)

The SSDS was constructed beneath the composite cover system in Area B (first floor) and in Areas C and D. The Area B SSDS consists of one horizontal pipe leg set in a layer of pea gravel. This pipe leg consists of seven 10-foot lengths of 2-inch I.D. 20-slot Schedule 40 PVC pipe. At the base of the wall, a 2-inch PVC elbow and 10-foot lengths of 2-inch I.D., Schedule 40 solid PVC pipe was used to run the SSDS pipe leg along a support column in the wall and through the roof. Currently, this SSDS pipe leg is being used as passive venting to the atmosphere via a roof-mounted wind turbine (which induces vacuum). The SSDS system in Areas C and D consists of 12 legs (6 in Area C and 6 in Area D) set in a layer of pea gravel. Each pipe leg consists of two 10-foot lengths of 2-inch I.D. 20-slot Schedule 40 PVC pipe, with the exception of the pipe leg located in the former UST-T excavation in Area D. This leg has one 10-foot length of slotted pipe. Solid pipe was then used for the remainder of each pipe leg. This solid pipe consisted of 10-foot lengths of 2-inch I.D., Schedule 40 PVC pipe. Each individual pipe leg in Area C and D was terminated in the southern corner of the commercial space and is connected to the treatment system manifold to be used in active remediation of soil vapor using vacuum recovery generated via the LRP. The locations of the horizontal SSDS pipe legs are shown on figure 14.

Procedures for operating and maintaining the SSDS are provided in the Operation and Maintenance Plan (Section 5 of the SMP). Procedures for monitoring the system are included in the Monitoring Plan (Section 4 of the SMP). The Monitoring Plan also addresses inspection procedures that must occur after any severe weather condition has taken place that may affect onsite ECs. A copy of the SMP is provided in Appendix III.

4.8.2 Dual-Phase Extraction Treatment System

The treatment system currently consists of a total fluids recovery system. The treatment system components are installed in a treatment trailer staged in the commercial space on the northern portion of the Site. The treatment trailer is staged in the southeastern corner of Area D, adjacent to where HEW-1, HEW-2, HSVE-1 and the SSDS pipe wellheads are located. As per Section 7 of the Decision Document dated March 2016, the treatment system will continue to operate intermittently on an as-needed basis to address any remaining contamination; including the extraction, treatment and disposal of LNAPL, groundwater and soil vapor. Figures 34 and 35 show the location of the treatment system trailer and the layout of the remedial system in the treatment trailer, respectively.

4.8.2.1 Treatment Trailer Enclosure

The trailer which houses the remedial equipment was constructed and delivered to the Site by ProAct of Southbury, Connecticut. The trailer is 30-feet long, 8-feet wide and 8-feet tall and consists of two rooms. One room is the control room and the second room is the process room that contains the extraction and treatment equipment. The control room is considered a non-classified room based on National Electric Code (NEC). As defined by the NEC, the process room is classified as a “Haz. 1/Div. 2” explosion-proof room. The double doors on the back of the trailer allow access to the DPE room (Haz. 1/Div. 2 room). A passenger side door allows access to the control room.

A 200 amp, 208 volt, three-phase power supply provides power to the system. A main fused disconnect is installed on the outside of the trailer. The main disconnect is located above the trailer hitch assembly on the front of the trailer. A telephone line box is located near the front of the trailer to allow a telephone line connection.

The trailer contains an aluminum diamond plate floor throughout the trailer for longer life. The trailer is completely insulated for winter time operations and soundproofing. All electrical components in the process room (lights, a heater with a thermostat and a fan with a thermostat) are explosion-proof. The process room also contains a sump and float that when activated it will shut down the system.

The control room also contains lights, a heater with a thermostat and a fan with a thermostat; however, they are not classified as explosion-proof. Both rooms contain louvers over the fan and additional louvers allow fresh air in when fan is operational. All fresh air louvers contain mosquito screening to prevent debris and other unwanted pests into the trailer.

The trailer is constructed with multiple inlet hose connections on the outside. These inlet hose connections include:

- two (2) male camlock connections on the side of the trailer for water pumps;
- one (1) 4-inch male camlock connection on the side of the trailer for the SVE system; and
- twelve (12) 2-inch male camlock connections on the side of the trailer for the SSDS pipes.

The treatment trailer contains a total fluids recovery phase (groundwater/NAPL) manifold that has two legs (HEW-1 and HEW-2). Each leg contains a pressure gauge, site glass, flow control valve, check valve, and pressure transmitter. The manifold is constructed of carbon steel and has unions in key locations to allow easy disassembly and cleaning. Each leg of the manifold extends outside the trailer and has male camlock fittings for connections to piping from extraction wells.

The treatment trailer also contains a 13-leg intake manifold constructed of stainless-steel for the one (1) SVE well (HSVE-1) and for the twelve (12) SSDS pipes. One leg consists of a 4-inch line that exits the trailer and contains a 4-inch male camlock. This leg connects to the 4-inch HSVE-1 well. Each of the other twelve legs includes the following: a flow meter, a flow control gate valve and a vacuum gauge. The outside of the trailer contains twelve 2-inch male camlock connections for connecting up to twelve (12) SSDS wells. Each leg on the manifold is set up to allow air to bypass the flow meter. This bypass will lengthen the life of the flow meter and minimize maintenance. The legs and entire manifold is constructed with unions in key locations to allow easy disassembly of the components for routine cleaning and servicing. The locations of the extraction wells and the SSDS legs are shown on figures 2 and 14, respectively.

4.8.2.2 Treatment System Components

The remedial technology currently in operation to address the residual contamination at the Site is a DPE system that achieves total fluids recovery from horizontal groundwater extraction wells and vapor-phase recovery from the SVE/SSDS recovery network. The DPE technology (also referred to as the total fluids recovery) was designed to extract groundwater and free-phase (NAPL) via the horizontal extraction Wells HEW-1 and HEW-2.

The system was initially constructed and activated as outlined in the IRM Work Plan, and employed recycling eductor-jet pumps for fluids recovery and a regenerative blower for vapor-phase recovery. Subsequent to field data indicating operational deficiencies in the extraction system, the system components were modified to incorporate the use of a high-vacuum liquid-ring pump (LRP). The IRM treatment system components are described below.

4.8.2.3 DPE Fluids Recovery and Treatment System Components

Initial Operation

The initial extraction system employed recycling eductor-jet pumps (utilizing a water reservoir holding tank for continuous operation). Extracted fluids were collected for treatment and/or disposal. The jet pump system had two (2) eductor-jet pumps for pumping water from the two 4-inch horizontal water wells. The system consisted of two J-T Eductor model 1 1/4-inch – SL eductors, and two Goulds transfer pumps (Model 1BF-1 centrifugal pumps with 1 1/2-hp explosion-proof motors). The eductors had: a 3/4-inch motive connection and a 1 1/4-inch outlet connection; and a 1 1/4-inch suction connection and a 1 1/4-inch outlet connection. Each eductor operated at a recirculation flow rate of 10.07 gpm (gallons per minute) @ 50 psi (pounds per square inch) while being capable of lifting and entraining 4.88 gpm of suction flow. The limiting factor for the extraction volume was the well yield. The jet pumps were mounted in the process room. Water/oil was pumped to the oil/water separator from the two eductor jet pumps. Additionally, any condensate from the knock-out tank was pumped to the oil/water separator via a transfer pump (TP1).

The contaminated water/NAPL from the jet pumps was continuously recycled via a reservoir sump within the oil/water separator (capable of treatment rates up to

30 gpm). All contributing pre-treatment water flow sources (two horizontal groundwater extraction wells and the SVE knock-out tank) can/could be individually managed to ensure that there is/was no exceedance of the oil/water separator capacity. The stainless-steel oil/water separator was specifically designed for groundwater remediation. The selected parallel-corrugated plate oil/water separator removes essentially 100% of all free and dispersed non-emulsified oil droplets larger than 20 microns in diameter and with a specific gravity of 0.90 or less and Reynolds Number of less than 500. The separator is constructed of 12 gauge 304 stainless-steel. Basic specifications for the groundwater treatment system components are:

Separator Volume:	238 gallons
Effluent Tank Volume:	90 gallons
Sludge Storage Volume:	25 gallons
Coalescing area:	8 cubic feet
Operational weight:	2,316 pounds

The unit comes standard with a gasketed stainless-steel lid to allow for easy removal of the coalescing pack, when required. One-inch drain valves are located in key locations to allow complete draining of the oil/water separator. The oil/water separator is also equipped with an emergency high level shut-off float switch.

A product line is plumbed from the oil/water separator to the outside of the trailer where a product recovery tank (drum with emergency high level shut-off float switch) is connected. The product recovery tank is supplied with the system. An explosion-proof high level switch will alarm the system on a high fluid level in the tank. The product tank is a 55-gallon drum with a modified lid to contain an air stack and high level float assembly.

A centrifugal transfer pump (TP2) is used to pump the water from the oil/water separator through bag filters and then through liquid-phase carbon prior to being discharged to the sanitary sewer. The centrifugal pump is plumbed the same as the knock-out tank transfer pump (TP1) discussed above.

The treatment system utilizes two Rosedale Model LCO8 bag filters mounted before liquid-phase carbon units. This model is 30 inches in height and 6 inches in diameter. This unit features quick opening covers, large surface area filter cartridges and a basket for greater particulate holding capacity. They are constructed of carbon steel with a Buna N standard cover gasket. The two filters are plumbed in parallel to allow changing of the bag filters without shutting down the system. The filter units have unions on connecting pipes before and after each unit to facilitate easy service and removal. The bottom of the bag filter housing contains a 1-inch valve and drain. The system is set up with a simple procedure to allow extracting water from the bag filter housing back into the knock-out tank by utilizing a 1-inch suction line. This arrangement allows easy removal of free standing water from the filter housing when servicing the bag filters is required.

Water leaving the bag filter units is treated by the carbon adsorbers, and then passes through a flow meter, check valve and then exits the trailer. The treatment system contains two stainless-steel high-pressure (100 psi rated) liquid granular activated carbon adsorption units. Each carbon adsorber contains 800 pounds of granular activated carbon for a total of 1,600 pounds. The carbon adsorbers are placed in series and are designed with quick disconnect fittings to allow easy changing of the adsorbers. Each adsorber contains sample ports and a pressure gauge to monitor operational conditions across the carbon bed. The following summary is the pre-calculated liquid-phase carbon adsorption usage based on the stated influent parameters:

Carbon Usage Based on Assumed Influent Quality and Flow

benzene	0.000
toluene (mg/l)	0.235
ethylbenzene (mg/l)	0.038
xylenes (mg/l)	0.078
water flow (gpm)	5.0

pounds of carbon used/minute	0.001
pounds of carbon used/hour	0.05
pounds of carbon used/day	1.20
pounds of carbon used/month	36.07

The process flow diagram for the remediation system and the manufacturer's equipment specifications for the components of the multi-phase extraction and treatment system are included in Appendix XII.

As a result of the hydrogeologic characterization activities completed during the RI, the projected combined groundwater extraction rate (and subsequent treated groundwater discharge rate) from horizontal extraction Wells HEW-1 and HEW-2 was anticipated to be approximately 3 to 4 gpm. Additionally, it was anticipated that long-term continuous pumping would have the potential to further develop the horizontal wells and increase the extraction rate. Based on the operation, maintenance and monitoring (OM&M) activities completed via field monitoring over the period of IRM treatment system operation from February 2011 until approximately August 2012, insufficient groundwater extraction rates were achieved and continued to decline. A summary of the measured groundwater extraction rates for the groundwater extraction-treatment system were as follows:

- February 2012 – 0.71 gpm
- March 2012 – 0.02 gpm
- April 2012 – 0.78 gpm
- July 2012 – 0.02 gpm

As per the historical OM&M activities, the eductor pumps did not generate sufficient influence to actively extract and treat contaminated groundwater and NAPL, nor was the extraction rate sufficient to ensure hydraulic containment along the downgradient perimeter of the Site.

In order to ensure measurable recovery and establish hydraulic containment, multiple high pressure water jetting activities to clear the well screens were conducted.

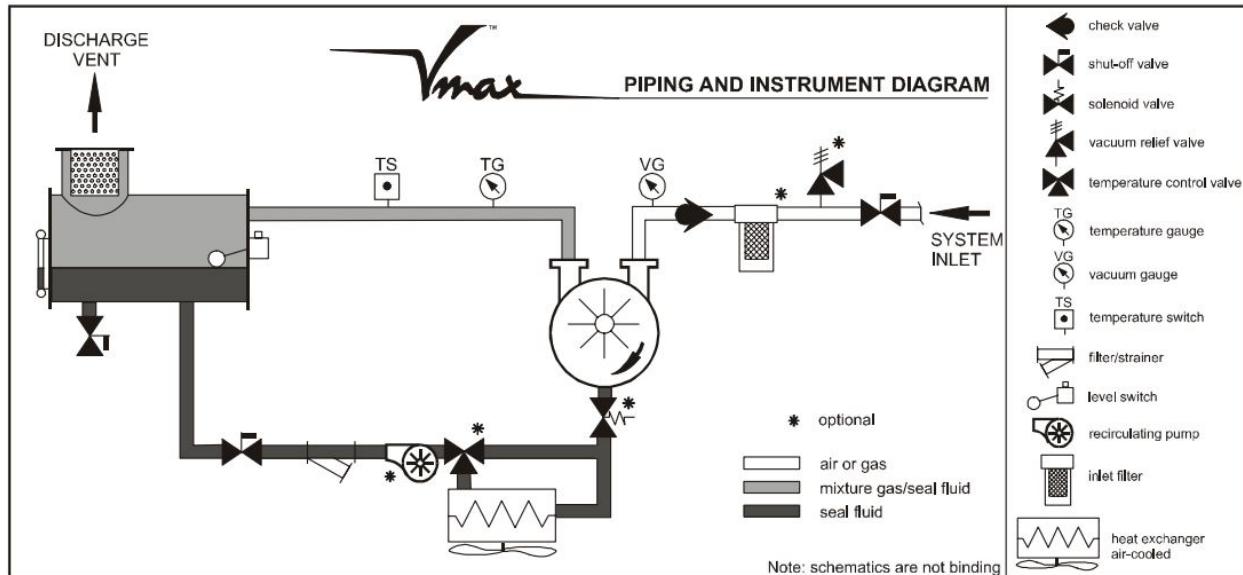
However, even after the jetting activities, the groundwater recovery rates were minimal.

Modified DPE System (2013)

Based on the field observations during the initial operating period of the IRM system, it was determined that the eductor-jet pumps were the source of persistent operational deficiencies. Due to the inability of the eductor pumps to effectively extract groundwater from the horizontal groundwater extraction wells (HEW-1 and HEW-2), the IRM system was modified as follows:

- The eductor pumps previously utilized for the multi-phase extraction system were replaced with a Dekker Vacuum Technologies, Inc. 7.5 horsepower VMax oil-sealed LRP capable of operating with a maximum vacuum of 28 inches of Hg (mercury) and a maximum air flow rate of 100 ACFM (actual cubic feet per minute). Technical specification sheets for the Dekker LRP are included in Appendix XII.
- The regenerative blower previously used for SVE and the SSDS was disconnected from the IRM system. The SVE and SSDS extraction pipes were connected to the LRP manifold for both SSDS and vapor extraction.
- In the event removal of free product becomes necessary in select onsite product delineation wells (primarily DW-14D and R-4D), it can be achieved by utilizing a portable high vacuum extraction drum. The specialized drum top was constructed to allow connection to the LRP during system monitoring events. This configuration facilitates the implementation of on-demand high vacuum extraction events (approximately 10 to 12 inches of Hg) from select product delineation wells.

A piping and instrument diagram (typical) of the Vmax oil-sealed liquid ring vacuum pump system is presented below.



The LRP is capable of operating with an approximate extraction air flow volume of 100 CFM and a maximum vacuum of 28 inches of Hg. The high vacuum combined with the increased air flow extraction rate generates a vacuum within the horizontal wells. The imparted vacuum will increase the groundwater yield within the horizontal groundwater extraction wells which formerly relied on gravity drainage for recharge with the eductor pumps.

Incorporation of the LRP for the DPE (total fluids recovery) from HEW-1 and HEW-2 was completed in order to hydraulically control the offsite migration of contaminated groundwater along the downgradient perimeter of the Site, to control offsite migration of residual NAPL along the downgradient perimeter of the Site, and to actively remediate residual NAPL, groundwater and soil-vapor contamination from the subsurface beneath the Site.

LRP Installation

The LRP was installed in the treatment trailer in the former location of the replaced eductor pumps. This location provides sufficient airflow and accessibility. To prevent excessive ambient temperature rise, adequate ventilation was provided. Cooling is an important aspect of reliable equipment operation and it is, therefore,

important to install the unit in a reasonably cool area where the temperature does not exceed 110°F (43°C).

The pump was installed inside the treatment trailer on a level surface in a horizontal position. The treatment trailer is designed to be able to support the total unit weight, without any settlement or crushing, be rigid and is substantial enough to absorb any equipment vibration, maintain true alignment with any drive mechanism, and capable of permanently supporting the system baseplate at all points. The vacuum system was leveled and secured.

All LRP wiring of the factory control panel was completed by authorized manufacturer service technicians as well as by a licensed electrician. Additionally, all wiring connecting the LRP to the main treatment system control panel was completed by a licensed electrician in compliance with OSHA, NEC and any other applicable local electrical code concerning switches, fused disconnects, etc. As recommended by DEKKER, a disconnect switch was fitted between the LRP and the incoming power source.

Before installation of the process flow piping, all protective inserts on the pump suction and discharge were removed. Piping connected to the system was installed without imposing any strain on the system components. Flexible connectors were used where necessary. All piping was cleaned of debris before installation.

The inlet piping is connected to the effluent end of the knock-out tank which has a filter screen. The SVE/SSDS manifold is connected to the air/water separator knock-out tank; however, based on the history of the operation of the IRM treatment system, the vapor-phase knock-out tank is not required for operation of the SVE/SSDS extraction. Therefore, the knock-out tank was utilized as a phase separator for the LRP to facilitate the groundwater/NAPL extraction. Two of the SSDS legs were disconnected from the extraction manifold. The inlets were then used to connect the horizontal extraction wells to the DPE manifold. This knock-out tank prior to the inlet of the LRP protects the unit against carry-over of pipe debris or extracted solids. If at any point the inlet gas pumped contains dust or foreign particles not removed by the knock-out tank filter, a suitable 10 micron (or finer) inlet filter can be installed at the inlet port.

In the event a blockage occurs in the inlet piping to the LRP, the system also contains a vacuum relief valve (anti-cavitation valve) so that air can enter the pump inlet. It must be noted that the LRP should never run with a closed suction, which causes cavitation and will damage the pump.

Inlet piping is constructed of 2-inch diameter PVC. The LRP was installed as close as possible to the knock-out tank, to minimize losses due to the length of the suction line.

Vmax systems are supplied with an inlet check valve as standard. This valve provides a minimum of resistance close to the pump suction flange to prevent back flow of process gas and seal fluid when the pump is stopped.

The discharge piping is constructed of 2-inch diameter PVC, which is the same size as the piping from the knock-out tank. A drip leg consisting of a tee on the discharge line was installed to prevent condensation from draining back into the separator reservoir. The exhaust gases from the pump system are not discharged into the area where the system is installed, but instead are discharged at the roofline on the south end of the building. The exhaust line is constructed of 4 inch diameter PVC pipe.

LRP Protection Measures

The LRP system contains a high temperature switch as a protective device to protect the unit from being damaged from overheating and to help with maintenance. This switch will signal when the temperature of the oil is exceeding the shut-down level. The switch will shut the unit down. The unit will not restart until the alarm condition is acknowledged and is reset. The switch is a “snap disc” type of switch that is normally closed. When the temperature reaches the maximum set point, the switch will open. Once the switch has opened, there is a 10 to 20°F differential that the temperature will need to drop in order for the switch to close.

Additionally, the LRP will be connected to the main control panel. This connection will allow for the development of additional alarm conditions that will result in shut-down of the LRP to protect from component damage. One such alarm condition is the low pressure alarm on the influent of the LRP. This condition will prevent

damage to the LRP due to operating conditions outside of optimal (or acceptable) parameter ranges.

4.8.2.4 SVE/SSDS Soil Vapor Recovery System Components

The SVE/SSDS system was designed to:

1. induce negative pressure beneath the slab on grade via extraction from the network of SSDS extraction pipes; and
2. conduct active extraction of soil vapors in the areas of residual subsurface contamination.

Initial Operation

The initial IRM system design utilized a Roots URAI 59 Positive Displacement Blower with a 20 Hp XP motor for the operation of the onsite SVE/SSDS system. The SVE/SSDS blower was installed in the system trailer. The following specifications apply to this blower:

system model:	URAI 59
rotational speed:	1450 RPM
nominal capacity:	600 Inlet CFM @ 5" Hg
max vacuum capacity:	12" HG
motor size:	20 HP
noise level @ 3 feet:	89 dBA
foundation:	14,000 pound double axle trailer
onsite power requirements:	3 phase, 208 volt, 200 amp service (54 amp requirement for blower)
knock-out tank:	120-gallon capacity
fluid removal pump:	1 Hp controlled by switches and floats
control panel:	separate room NEMA 4
gauges and controls:	in-line flow meter, vacuum, pressure and temperature gauges, transmitters and valves

The contaminated air/water from the LRP enters the 120-gallon air/fluids separator tank. This tank separates the fluids and the air. The air then passes through a strainer and then enters the SVE blower system. Liquids (if/when generated in the form of condensate) are pumped via a Moyno (progressive cavity) transfer pump (TP1) out of the system at a flow rate of up to 10 gpm. The knock-out tank contains a 6-inch man-way for cleaning purposes. The side of the knock-out tank contains a site tube with three level float switches. These float switches control the pump. The high/high float switch shuts down the SVE system. If the high/high float is activated, the SVE system will not run in “Hand” or in “Auto” mode until the water is drained below the high level float switch. The float switch assembly is installed in a way that allows easy removal and cleaning without needing to drain the entire tank. The pump is positioned to allow for easy servicing and removal, if necessary. The pump is plumbed to allow for a recirculation line and has valves which allow accurate control of the water flow rate from the knock-out tank. A pressure transmitter is installed in line to monitor the pump’s pressure. If the pressure becomes either too high or too low, this condition will cause the pump to shut down. A pressure gauge is situated to allow monitoring of pump pressures during operation. Water pumped from the knock-out tank is pumped to the oil/water separator (discussed above).

Air leaving the knock-out tank goes through a particulate filter on the top of the knock-out tank. This feature allows any moisture or particulates to fall back into the knock-out tank. The air then passes through a totalizing air flow meter and then into the Roots URAI SVE Blower. A dilution air inlet just before the blower allows additional control of the air stream from the wells. Air leaving the positive displacement blower passes through a silencer and then out of the trailer (for treatment with vapor-phase carbon if required) prior to discharge to the atmosphere.

The manufacturer’s equipment specifications for the above-referenced components of the SVE/SSDS are included in Appendix XII.

Modified SVE/SSDS System (2013)

The modified IRM system design utilizes the LRP (also used for the DPE system) for the operation of the onsite SVE/SSDS system.

Based on the IRM system operation observations (as recorded during the IRM system operation with the jet eductor pumps being used for groundwater extraction), the soil vapor extracted from the horizontal soil-vapor extraction well, as well as the SSDS legs, did not have any significant VOC content.

Following the system modifications to the IRM system, all extraction activities are completed via the high-vacuum extraction induced by the LRP. As a result, all soil vapor from the SSDS legs and HSVE-1 is extracted in combination with the total fluids recovery from the horizontal groundwater extraction wells (HEW-1 and HEW-2). This system modification sufficiently addresses the sub-slab depressurization aspect of the remedial system due to the fact that the system is effective in inducing a negative pressure in the sub-slab.

All extraction legs enter the 120-gallon air/fluids knock-out tank that is installed between the extraction manifold and the LRP. The knock-out tank separates the extracted fluids (recovered NAPL and groundwater) and the air. The knock-out tank contains a 6-inch man-way for cleaning purposes. The side of the knock-out tank contains a site tube with three fluid level float switches. These float switches control the pump. The high/high level float switch shuts down the SVE system. If the high/high float is activated, the SVE system will not run in “Hand” or in “Auto” mode until the water is drained below the high level float switch. The float switch assembly is installed in a way that allows easy removal and cleaning without needing to drain the entire tank. The pump is positioned to allow for easy servicing and removal, if necessary. The pump is plumbed to allow for a recirculation line and has valves to accurately control the water flow rate from the knock-out tank. A pressure transmitter is installed in line to monitor the pump’s pressure. If the pressure becomes either too high or too low, this condition will cause the pump to shut down. A pressure gauge is situated to allow monitoring of pump pressures during operation.

Following moisture separation in the knock-out tank, the air stream then passes through an air filter strainer on the top of the knock-out tank prior to entering the LRP. This feature allows any moisture or particulates to fall back into the knock-out tank. The air then passes into the LRP, and subsequently is discharged to the atmosphere. On the effluent piping, sampling ports are used to measure air discharge rates as well as to screen the air stream for VOC concentrations (using a PID) and to collect effluent air samples. A dilution air inlet just before the blower allows additional control of the LRP operating vacuum pressure. The effluent air stream is discharged from the LRP under positive pressure. The effluent pipe runs out of the treatment system trailer and discharges the air stream to the atmosphere.

Extracted fluids (recovered NAPL and groundwater) accumulate in the knock-out tank, where it is pumped cyclically to the oil/water separator via a Moyno (progressive cavity) transfer pump (TP1). TP1 is capable of operating at a discharge flow rate of up to 10 gpm. The float system controls the operation of the transfer pump. Water pumped from the knock-out tank is pumped to the oil/water separator (discussed above).

The manufacturer's equipment specifications for the above-referenced components of the SVE/SSDS are included in Appendix XII.

Equipment Controls - Initial Operation

The control panel is located inside a separate control room in the treatment trailer. Controls include the following:

- Hand/Off/Auto – SVE Blower;
- Hand/Off/Auto – LRP;
- Hand/Off/Auto – Knock-out tank Transfer Pump (Transfer Pump 1 [TP1]);
- Hand/Off/Auto – Oil/water separator Transfer Pump (Transfer Pump 2 [TP2]);
- Hand/Off/Auto - Process room fan;
- Hand/Off/Auto - Control room fan;

- Alarm Clear light;
- Control panel power light;
- Alarm reset button; and
- Emergency Stop button (as the treatment components are in the process room), an additional emergency stop button is in the process room. Upon activation, the entire system is de-energized.

The following are the fault conditions that are programmed for the system, all of which will initiate a remote notification.

Fault Condition	Action	System Shut Down
Blower motor overload tripped	Deactivates the LRP	Yes
Sustained low vacuum in the DPE, >20 seconds after blower starts	Deactivates the LRP	Yes
Any transfer pump motor overload tripped	Deactivates LRP and Transfer pump	Yes
High pressure on LRP	Deactivates Centrifugal pump	No
Low pressure on Transfer pumps (TP1 and TP2)	Deactivates LRP and Transfer pump	Yes
High/high level in DPE knock-out tank	Deactivates LRP	Yes
High LRP Temperature	Deactivates LRP	Yes
High LRP pressure	Deactivates LRP	Yes
High/high level in oil/water separator	Deactivates LRP and TP 1	Yes
High bag filter pressure	Deactivates LRP, TP1 and TP2	Yes
High level in product tank	Deactivates LRP and TP 1	Yes
Trailer floor sump leak detection	Deactivates LRP, TP1 and TP2	Yes
Fault from auxiliary inputs	Deactivates the DPE system	Yes

The system utilizes the Proview PLC software which is Windows®-based and allows local site access via a laptop computer and optional remote control via a telephone line or cellular phone connection. This system can display all system components, motors and switches. The operator can access real time and historical data for tracking fault conditions, vacuum and pressure histories, run-time meters for each motor, as well as liquid and vapor flow rates and total flow analysis. With a remote

connection, the system is also able to provide routine faxes and status reports and provide notification when the system shuts down. Additionally, the system has the capability of providing immediate remote control of all system components.

Each element of the treatment system has a green light on the control panel when it is activated. The system contains an emergency stop located in the control room and a second one located at the main door entrance to the process room. When activated, it registers on the control panel but does not activate the auto dialer. The control panel includes status lights for all operations. The panel also has Hand/Off/Auto control settings for all components. On an alarm condition, a red alarm light illuminates.

In addition to system monitoring, the following data logging occurs:

- LRP/Knock-out tank vacuum level;
- LRP effluent pressure;
- LRP effluent discharge temperature;
- transfer pump pressures (both pumps);
- bag filter pressure (pre filter, post filter);
- carbon unit pressure (mid-carbon);
- effluent water discharge pressure;
- discharge water flow rates and totalizer;
- air discharge flow rate and totalizer;
- the fault conditions mentioned above; and
- operational hours.

The control panel contains power surge protection and also an uninterrupted power supply (UPS) to allow for notification of personnel in the event of power outages that cause system failures. The UPS provides power for an additional 15 to 30 minutes after a power outage.

The manufacturer's equipment specifications for the equipment controls for the treatment system are included in Appendix XII. Procedures for monitoring the DPE Treatment System are provided in the Monitoring Plan in Section 4 of the SMP, while

procedures for operating and maintaining the DPE Treatment System are provided in the Operation and Maintenance Plan in Section 5 of the SMP. The Monitoring Plan also addresses inspection procedures that must occur after any severe weather condition has taken place that may affect onsite ECs. A copy of the SMP is provided in Appendix III.

4.8.3 Mobile High Vacuum Extraction NAPL Recovery

In order to conduct more effective product recovery activities from the select onsite product delineation wells where residual NAPL is observed, a high vacuum extraction mobile drum recovery system was utilized for recovery of NAPL from delineation wells located within Area D. This system consists of a modified lid which is fitted to a NYSDOT approved steel 55-gallon drum that can be moved to remote locations via a wheeled dolly base. The modified lid contains three connection ports: a 2-inch diameter negative pressure (vacuum) extraction connection that is connected to the LRP, a 1-inch diameter vacuum release valve inlet, and, a 1-inch diameter vacuum suction connection that is used for the targeted extraction activities.

The mobile drum recovery system is used to conduct extraction events on the product delineation wells that have the greatest amount of residual NAPL still remaining after the onsite excavation activities and operation of the IRM treatment system. These delineation wells include R-4D, DW-14D and DW-21D. The manual high vacuum extraction rounds were conducted on these wells during the regularly scheduled system OM&M site visits to remove NAPL which had accumulated subsequent to the previous OM&M site visit. It should be noted that as of December 2015, DW-2C was the only well with a measurable thickness of LNAPL, which was only measured as a film. Future product accumulations will be targeted with the high vacuum extraction mobile drum recovery system or manually bailed when necessary.

4.8.4 Chemical Oxidation Application

4.8.4.1 Area D Excavation

Following the tank closure activities in the Area D commercial space, LBG conducted a field pilot study to determine the Site feasibility for the use of chemical oxidization technology

to remediate soil and groundwater contamination. The Chemical Oxidation Application activities in the Area D excavation were conducted according to the work plan submitted to the NYSDEC in July 2008.

The objectives of the Chemical Oxidation Application activities were:

- to determine the effect of the chemical oxidization compound applied to the subsurface, as facilitated by a former excavation backfilled with more permeable material; and
- to monitor the chemical oxidization efficiency for reducing concentrations of dissolved-phase VOCs in the groundwater, as determined by quarterly groundwater monitoring.

The selected chemical oxidant used was RegenOx™. RegenOx™ (manufactured by Regenesis [<http://www.regenesis.com/products/chemOx/regenOx/>]) is an advanced chemical oxidation technology that destroys contaminants through powerful, yet controlled chemical reactions and not through biological means. This product maximizes in-situ performance while using a solid alkaline oxidant that employs a sodium percarbonate complex with a multi-part catalytic formula. RegenOx™ directly oxidizes contaminants while its unique catalytic component generates a range of highly oxidizing free radicals that rapidly and effectively destroy a range of target contaminants.

The RegenOx™ application is designed to remove significant amounts of contamination from the subsurface. The application process enables the two part (Part A and Part B) product to be combined just prior to use. Part A is the oxidizer powder and Part B is the liquid activator. Part A consists of a mixture of sodium percarbonate ($2\text{Na}_2\text{CO}_3 \cdot 3\text{H}_2\text{O}_2$), sodium carbonate (Na_2CO_3), sodium silicate and silica gel. Part B consists of a mixture of sodium silicate solution, silica gel and ferrous sulfate. Both parts of the product were packaged and shipped to the Site in 30 pound 5-gallon PVC buckets (approximately 3 gallons of material per bucket).

There are two typical application methods for RegenOx™ : direct application to an exposed surface of a soil excavation; and direct-injection techniques (into existing wells or boreholes). The first application method, direct application to the completed excavation, was

employed at the Site in the Area D commercial space. RegenOx™ was applied to the completed excavation area to target the impacted groundwater beneath the source area. As previously stated, the excavation was backfilled with clean 1/2-inch highly permeable pea stone. This material was selected to allow the RegenOx™ solution to percolate directly to the water table during the application activities. Volume and density application rates for RegenOx™ were based on the manufacturer's recommendations. A RegenOx™ Summary Page outlining the summary of the RegenOx™ totals (recommended dosage rates) provided by the manufacturer is included in Appendix XIII.

The application was completed from November 14 to 18, 2008. The application activities consisted of mixing a total of 4,020 pounds of the two part RegenOx™ with water at a mix ratio of 30 pounds of Part A and 30 pounds of Part B to 60 gallons of water to create a 5% solution as per the manufacturer's recommendation. The solution was mixed between 30 to 60 minutes to dissolve all of the Parts A and B. The RegenOx™ applications were applied to three trenches in the southwest corner of the Area D commercial space. The locations of the application trenches are shown on figure 36.

A second application was completed in November 2015 utilizing EW-1D to take advantage of the high permeability and large volume of void space available as a result of the hot spot excavation activities conducted in this area. The properties of the backfilled hot spot would maximize the RegenOx™ contact time at the limits of the completed excavation, as well as mobilize residual contamination that was beyond the limits reached by the excavation. To ensure that the solution was discharged through the well screen without the need for pressurized injection, RegenOx™ was applied in the following four steps:

1. 2.5 gallons of the Part A oxidizer powder was combined with 25 gallons of water in a 55-gallon drum. The Part A oxidizer powder and water were mixed for approximately 20 minutes to ensure the oxidizer was completely dissolved, following which it was injected into EW-1D.
2. The mixing drum was flushed with another 25 gallons of water, which was then injected into EW-1D to ensure that the Part A and water mixture was fully mobilized into the surrounding subsurface.

3. 2.5 gallons of the Part B liquid activator was combined with 25 gallons of water in a 55-gallon drum. The Part B liquid activator and water were mixed for approximately 20 minutes to ensure the activator was completely mixed with the water, following which it was injected into EW-1D.
4. The mixing drum was flushed with another 25 gallons of water to clean off the residual Part B liquid activator and water. The rinsing water was then injected into EW-1D to ensure that the Part B and water mixture was fully mobilized into the surrounding subsurface.

Supplemental applications (if conducted) would be implemented per the procedure followed during the 2015 application, utilizing direct applications via onsite wells. RegenOx™ applications may be completed following the completion of scheduled groundwater monitoring activities. Additional RegenOx™ applications will be contingent on verification that it continues to be effective at reducing dissolved-phase contaminant concentrations at the Site.

4.8.4.2 Area A ORC Applications

Following the tank closure activities in Area A, LBG conducted a field pilot study to determine the Site feasibility for accelerated bioremediation to enhance the remediation of remaining VOC contamination in groundwater. The bioremediation activities completed in the Area A excavation were conducted according to the work plan submitted to the NYSDEC in July 2008.

The objectives of the accelerated bioremediation activities were:

- to determine the effect of the accelerated bioremediation compound applied to the subsurface, as facilitated by a replacement groundwater monitor well which was constructed in the former drywell (R-3A); and,
- to monitor the accelerated bioremediation efficiency for reducing concentrations of dissolved-phase VOCs in the groundwater, as determined by quarterly groundwater monitoring.

Oxygen Release Compound (ORC) is a proprietary formulation of phosphate-intercalated magnesium peroxides that, when hydrated, produce a controlled release of oxygen for periods of up to 12 months for a single application. ORC applications augment the natural attenuation of dissolved-phase VOCs and accelerate the rate of naturally occurring aerobic contaminant biodegradation in groundwater and saturated soils.

In Area A, R-3A is a well that has historically exhibited elevated concentrations of dissolved-phase VOCs in the groundwater. As such, an ORC sock was installed in the monitor well on December 16, 2013 and is changed quarterly or on an as needed basis during the groundwater sampling rounds. The impact of the ORC application(s) was evaluated via groundwater monitoring events at the Site. ORC continues to provide remedial benefits in R-3A, therefore additional applications will be completed after the completion of scheduled groundwater monitoring activities. ORC applications will be stopped if analytical data indicate that it is no longer effectively reducing dissolved-phase VOC contaminant concentrations at or downgradient of R-3A.

Procedures for monitoring the ORC applications are provided in the Monitoring Plan in Section 4 of the SMP. The Monitoring Plan also addresses inspection procedures that must occur after any severe weather condition has occurred that may affect on-site ECs. A copy of the SMP is provided in Appendix II.

4.9 Institutional Controls

The Site remedy requires that an environmental easement be placed on the property to document the engineering controls and ensure proper monitoring and maintenance of the controls in order to:

1. prevent future exposure to remaining contamination by controlling disturbances of the site cover system;
2. continue intermittent operation (as necessary) of the multi-phase extraction system to address residual contaminated media;
3. operation and maintenance of the sub-slab depressurization system via active or passive means based on Site conditions;

4. require the remedial party or Site owner to complete and submit to the NYSDEC a periodic certification of institutional and engineering controls in accordance with Part 375-1.8(h)(3);
5. allow the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g) which are consistent with the remedial elements. This land usage is consistent with current local zoning laws;
6. restrict the use of groundwater as a source of potable or process water, without first implementing any and all necessary water quality treatment as may be determined by the NYSDEC, NYSDOH or Westchester County DOH; and
7. require compliance with the NYSDEC-approved Site Management Plan.

The Environmental Easement for the Site was executed by the Department on June 30, 2015, and filed with the Westchester County Clerk on September 22, 2015. The County Recording identifier number for this filing is 551983351. A copy of the Environmental Easement and proof of filing is provided in Appendix XIV.

dmd

January 31, 2017

f:\reports\furman\red devil paints\2015\final engineering report\final fer\report.v360031-2017-1-31.reddevil.fer.docx

TABLES

TABLE 1
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area A (Parking Lot) Excavation Endpoints
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}																		
			Acetone	Benzene	Toluene	Ethylbenzene	Total Xylenes	1,1,1-Trichloroethane	Methylene Chloride	Tetrachloroethene	Trichloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
OTB-1	12	4/11/2008	ND ^{4/}	ND	ND	ND	ND	ND	ND	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
OTB-2	12	4/11/2008	ND	ND	ND	ND	ND	ND	ND	410	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parking Lot B-1 (Dry Wells)	11	11/14/2008	2,100	350	11,000	ND	ND	ND	7600	880	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parking Lot B-2 (Dry Wells)	11	11/14/2008	ND	71	2,700	ND	ND	ND	480	520	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	44,000	500,000	39,000	500,000	500,000	500,000	150,000	200,000	NS ^{5/}	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000	500,000
	Protection of Groundwater		50	60	700	1,000	1,600	680	50	1,300	470	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000	930

^{1/} Methyl tert butyl ether
^{2/} Micrograms per kilogram
^{3/} Feet below grade

^{4/} Not detected
^{5/} Not Specified

TABLE 2

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031**

**Summary of Soil Quality - Area A (Parking Lot) UST-P Excavation Endpoints
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}**

Sample Location	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}																
			Benzene	Toluene	Ethylbenzene	Total Xylenes	1,1,1-Trichloroethane	Methylene Chloride	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
B-1	10	4/8/2008	ND ^{4/}	19,000	ND	ND	ND	ND	92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-2	10	4/8/2008	ND	65,000	42	50	ND	ND	42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-1	5	4/8/2008	220	2,300	ND	55	ND	ND	140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-2	5	4/8/2008	ND	130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
E-1	5	4/8/2008	33	160	ND	ND	ND	ND	35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DWB-1	10	4/8/2008	ND	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	500,000	500,000	150,000	NS ^{5/}	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000	500,000
	Protection of Groundwater		60	700	1,000	1,600	680	50	1,300	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000	930

^{1/} Methyl tert butyl ether

^{2/} Micrograms per kilogram

^{3/} Feet below grade

^{4/} Not detected

^{5/} Not Specified

TABLE 3
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area A UST Geoprobe Closure Confirmation Samples
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}																					
			Benzene	Toluene	Ethylbenzene	Total Xylenes	Acetone	Methylene Chloride	1,1- Dichloroethane	1,1,1-Trichloroethane	1,2- Dichloroethane	cis-1,2-Dichloroethene	Trichloroethene	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
GP-1A	4-8	1/10/2007	ND ^{4/}	ND	ND	ND	ND	90	ND	ND	ND	38	ND	43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-1A	32-34	1/10/2007	ND	ND	ND	ND	ND	63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-2A	4-8	1/10/2007	ND	ND	ND	ND	ND	83	ND	ND	ND	ND	50	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-2A	28-32	1/10/2007	ND	ND	ND	ND	ND	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-3A	4-8	1/11/2007	ND	ND	ND	ND	ND	93	ND	ND	ND	ND	35	490	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-3A	32-35	1/11/2007	ND	ND	ND	ND	ND	79	ND	ND	ND	ND	ND	140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-4A	4-8	1/11/2007	ND	45	ND	ND	ND	120	ND	ND	ND	ND	ND	1,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-4A	32-33	1/11/2007	ND	ND	ND	ND	ND	99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5A	4-8	1/11/2007	ND	ND	ND	ND	ND	100	ND	ND	ND	ND	ND	170	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5A	32-33.5	1/11/2007	ND	ND	ND	ND	ND	98	ND	ND	ND	ND	ND	31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6A	12-16	1/12/2007	ND	ND	ND	ND	ND	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6A	32-35	1/12/2007	ND	ND	ND	ND	ND	76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
LBG RESAMPLE HP-6	12-16	1/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP- DRY WELL	22-26	1/16/2007	ND	17,000	1,300	7,400	ND	ND	ND	ND	ND	ND	ND	ND	1,100	2,700	7,000	ND	21,000	1,100	1,100	ND	1,300	ND
GP- DRY WELL	30-34	1/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-1	4-8	1/17/2007	45	290	ND	53	ND	71	ND	ND	ND	ND	ND	32	ND	ND	ND	ND	54	ND	ND	ND	ND	ND
GP-UST PR-1	32-35.5	1/17/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-2	4-8	1/17/2007	ND	320	ND	60	ND	ND	ND	ND	ND	ND	ND	39	ND	ND	34	ND	85	ND	ND	ND	620	ND
GP-UST PR-2	28-31	1/17/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	78	ND
GP-UST PR-3	10-15	1/31/2007	320	2,100	ND	ND	ND	570	110	150	220	ND	120	1,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-3	35-39.5	1/31/2007	ND	120	ND	ND	520	ND	ND	ND	ND	ND	ND	27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	500,000	500,000	NS ^{5/}	500,000	NS	NS	200,000	150,000	NS	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000	500,000
	Protection of Groundwater		60	700	1,000	1,600	50	50	NS	680	NS	NS	470	1,300	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000	930

^{1/} Methyl tert butyl ether

^{2/} Micrograms per kilogram

^{3/} Feet below grade

^{4/} Not detected

^{5/} Not Specified

TABLE 4

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Well Installation Soil Samples (LBG)
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}															
			Benzene	Toluene	Ethylbenzene	Total Xylenes	Methylene Chloride	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
EW-1	14-16	3/12/2007	< 2,500	< 2,500	9,200	72,000	10,000	< 2,500	6,500	14,000	45,000	< 2,500	110,000	8,500	9,700	< 2,500	13,000	< 2,500
DW-18C	12-14	3/20/2007	< 2,800	< 2,800	9,300	67,000	< 5,500	< 2,800	7,900	16,000	47,000	< 2,800	110,000	10,000	11,000	< 2,800	13,000	< 2,800
DW-19C	16-18	3/19/2007	< 27	< 27	< 27	< 27	81	< 27	120	310	< 27	42	3,200	300	330	490	280	< 27
DW-20B	14-16	3/15/2007	< 2,400	< 2,400	12,000	27,000	< 4,900	< 2,400	10,000	25,000	67,000	< 2,400	190,000	17,000	18,000	< 2,400	17,000	< 2,400
DW-21D	15-17	3/13/2007	< 2,900	< 2,900	12,000	97,000	11,000	< 2,900	7,800	15,000	49,000	< 2,900	110,000	9,100	10,000	< 2,900	15,000	< 2,900
DW-22D	12-14	3/21/2007	< 2,800	< 2,800	< 2,800	3,300	< 5,500	< 2,800	7,900	15,000	6,900	< 2,800	140,000	8,900	5,000	10,000	21,000	< 2,800
DW-23D	15-17	3/8/2007	610	180,000	1,800	7,500	< 600	< 300	450	950	3,200	< 300	7,500	640	1,700	< 300	810	< 300
SVE-1	19-21	3/7/2007	< 290	1,100	14,000	96,000	< 570	< 290	9,000	19,000	68,000	2,500	120,000	13,000	16,000	< 290	17,000	< 290
DW-4A	35	7/25/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DW-21B	33 -35	7/25/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
R-4D	24 -26	7/24/2008	ND	60	1,600	11,500	ND	ND	1,500	3,400	8,500	300	20,000	2,200	2,300	ND	1,500	ND
R-5D	14 -16	7/24/2008	ND ^{4/}	ND	3,000	24,660	ND	ND	4,600	9,100	36,000	1,200	65,000	7,600	8,400	ND	6,800	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	500,000	150,000	NS ^{5/}	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000	500,000
	Protection of Groundwater		60	700	1,000	1,600	50	1,300	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000	930

^{1/} Methyl tert butyl ether
^{2/} Micrograms per kilogram
^{3/} Feet below grade

^{4/} Not detected
^{5/} Not Specified
Note: DW-23D was listed as DW-15D on the initial laboratory report

TABLE 5
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Soil Quality - Area A Surface Soil
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Sample Depth (" bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}																
			Benzene	Toluene	Ethylbenzene	Total Xylenes	1,1,1-Trichloroethane	Methylene Chloride	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
Area A-SS-1	(0"-2")	4/16/2015	ND ^{4/}	74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Area A-SS-2	(0"-2")	4/16/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Area A-SS-1	(6"-12")	4/16/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Area A-SS-2	(6"-12")	4/16/2015	ND	130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Field Duplicate		4/16/2015	ND	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	500,000	500,000	150,000	NS ^{5/}	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000	500,000
	Protection of Groundwater		60	700	1,000	1,600	680	50	1,300	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000	930

1/ Methyl tert butyl ether
2/ Micrograms per kilogram
3/ Inches below grade

4/ Not detected
5/ Not Specified

TABLE 6
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area A (Parking Lot) Excavation Endpoints
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Sample Depth (ft bg) ^{1/}	Date	Concentration (ug/kg) ^{2/}																						
			Naphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Di-n-butyl phthalate	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene	
OTB-1	12	4/11/2008	ND ^{3/}	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
OTB-2	12	4/11/2008	ND	ND	ND	ND	ND	ND	ND	1,300	300	ND	ND	1,500	1,300	690	710	510	480	620	330	ND	330	ND	
Parking Lot B-1 (Dry Wells)	11	11/14/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Parking Lot B-2 (Dry Wells)	11	11/14/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	NS ^{4/}	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000	
	Protection of Groundwater		12,000	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000	

1) - Feet below grade

2) - Micrograms per kilogram

3) - Not Detected

4) - Not Specified

Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 7

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031**

**Summary of Soil Quality - Area A (Parking Lot) UST-P Excavation Endpoints
Semi-Volatile Organic Compounds - EPA Method 8270**

Sample Location	Sample Depth (ft bg) ^{1/}	Date	Concentration (ug/kg) ^{2/}																					
			Naphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Di-n-butyl phthalate	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene
B-1	10	4/8/2008	ND ^{3/}	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-2	10	4/8/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	670	620	530	540	620	500	580	430	ND	560	ND
S-1	5	4/8/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-2	5	4/8/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
E-1	5	4/8/2008	ND	ND	ND	ND	ND	ND	ND	670	ND	ND	ND	1,300	1,000	650	690	650	490	670	400	ND	420	ND
DWB-1	10	4/8/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	550	470	340	340	330	320	280	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	NS ^{4/}	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000
	Protection of Groundwater		12,000	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000

1) - Feet below grade

2) - Micrograms per kilogram

3) Not detected

4) Not Specified

Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 8

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area A UST Geoprobe Closure Confirmation Samples
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Sample Depth (ft bg) ^{1/}	Date	Concentration (ug/kg) ^{2/}																					
			Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene
GP-1A	4-8	1/10/2007	ND	ND	ND	ND	ND	ND	ND	ND	1,200	440	ND	2,900	2,700	1,600	1,600	1,500	1,300	1,600	1,100	ND	990	290
GP-1A	32-34	1/10/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-2A	4-8	1/10/2007	ND	ND	ND	350	ND	ND	ND	ND	4,800	820	360	5,600	4,700	2,200	2,500	2,100	1,600	2,100	1,500	ND	1,300	270
GP-2A	28-32	1/10/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-3A	4-8	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	1,100	370	ND	1,800	1,700	910	1,000	810	920	1,100	740	ND	640	ND
GP-3A	32-35	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-4A	4-8	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	1,700	430	ND	2,700	2,500	1,300	1,500	1,400	1,000	1,500	970	ND	930	330
GP-4A	32-33	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5A	4-8	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5A	32-33.5	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6A	12-16	1/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6A	32-35	1/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP- DRY WELL	22-26	1/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP- DRY WELL	30-34	1/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-1	4-8	1/17/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	480	450	330	370	300	380	390	400	ND	370	ND
GP-UST PR-1	32-35.5	1/17/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-2	4-8	1/17/2007	ND	ND	390	360	ND	ND	1,400	ND	8,000	1,800	ND	5,900	6,000	2,900	3,200	1,600	1,800	2,100	1,700	ND	1,700	670
GP-UST PR-2	28-31	1/17/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-3	10-15	1/31/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	330	ND	840	ND	950	ND
GP-UST PR-3	35-39.5	1/31/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	NS ^{4/}	NS	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000
	Protection of Groundwater		12,000	NS	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000

1) - Feet below grade
2) - Micrograms per kilogram

3) Not detected
4) Not Specified
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 9
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Well Installation Soil Samples (LBG)
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Sample Depth (ft bg) ^{1/}	Date	Concentration (ug/kg) ²⁾																				
			Naphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene
R-5D	14 -16	7/24/2008	1,200	ND ³⁾	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
R-4D	24 -26	7/24/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DW-21B	33 -35	7/25/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DW-4A	35	7/25/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	NS ⁴⁾	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000
	Protection of Groundwater		12,000	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000

1) - Feet below grade

2) - Micrograms per kilogram

3) - Not Detected

4) - Not Specified

Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 10
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Soil Quality - Area A Surface Soil
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Sample Depth (" bg) ^{1/}	Date	Concentration (ug/kg) ^{2/}																					
			Naphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Din-butyl phthalate	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene
Area A-SS-1	(0"-2")	4/16/2015	ND ^{3/}	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Area A-SS-2	(0"-2")	4/16/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Area A-SS-1	(6"-12")	4/16/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Area A-SS-2	(6"-12")	4/16/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Field Duplicate		4/16/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	NS ^{4/}	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000
	Protection of Groundwater		12,000	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000

1) - Inches below grade
2) - Micrograms per kilogram

3) Not detected
4) Not Specified
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 11

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031**

**Summary of Soil Quality - Area A (Parking Lot) Excavation Endpoints
Total RCRA Metals - EPA Method 6010 & 7471**

Sample Location	Sample Depth (ft bg) ^{1/}	Date	Concentration (mg/kg) ^{2/}							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
OTB-1	12	4/11/2008	10.8	88.7	ND ³⁾	28.7	96	ND	21.2	ND
OTB-2	12	4/11/2008	11.9	187	ND	25	371	0.579	26.2	ND
Parking Lot B-1 (Dry Wells)	11	11/14/2008	ND	131	ND	34.2	242	0.143	ND	ND
Parking Lot B-2 (Dry Wells)	11	11/14/2008	6.51	170	ND	28.3	824	0.627	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		16	400	9.3	1,500	1,000	2.8	1,500	1,500
	Protection of Groundwater		16	820	7.5	NS ⁴⁾	450	0.73	1,500	8.3

1) - Milligrams per kilogram

3) - Not detected

2) - Feet below grade

4) - Not Specified

TABLE 12

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031**

**Summary of Soil Quality - Area A (Parking Lot) UST-P Excavation Endpoints
Total RCRA Metals - EPA Method 6010 & 7471**

Sample Location	Sample Depth (ft bg) ^{1/}	Date	Concentration (mg/kg) ^{2/}							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
B-1	10	4/8/2008	20.8	188	ND ^{3/}	29.7	216	0.59	ND	ND
B-2	10	4/8/2008	17.9	91.2	ND	18.3	108	0.09	ND	ND
S-1	5	4/8/2008	13.3	108	ND	16.6	213	0.14	ND	ND
S-2	5	4/8/2008	ND	ND	0.71	4.19	27.2	ND	ND	ND
E-1	5	4/8/2008	11.3	199	ND	37	311	0.3	ND	ND
DWB-1	10	4/8/2008	6.54	ND	ND	3.43	11.8	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		16	400	9.3	1,500	1,000	2.8	1,500	1,500
	Protection of Groundwater		16	820	7.5	NS ^{4/}	450	0.73	1,500	8.3

TABLE 13

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031**

**Summary of Soil Quality - Area A UST Geoprobe Closure Confirmation Samples
Total Metals Analysis**

Sample Location	Sample Depth (ft bg) ²⁾	Date	Concentration (mg/kg) ¹⁾							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium
GP-1A	4-8	1/10/2007	12.6	193	ND ³⁾	29.9	263	0.145	ND	ND
GP-1A	32-34	1/10/2007	11.7	128	ND	19.6	4.29	ND	ND	ND
GP-2A	4-8	1/10/2007	11.10	171	ND	23.3	228	0.157	ND	ND
GP-2A	28-32	1/10/2007	ND	34.5	ND	9.61	ND	ND	ND	ND
GP-3A	4-8	1/11/2007	11.7	114	ND	27.6	56.3	0.104	ND	ND
GP-3A	32-35	1/11/2007	10.5	39.5	ND	10.7	12.3	ND	ND	ND
GP-4A	4-8	1/11/2007	13.8	365	0.764	30.8	870	0.181	ND	ND
GP-4A	32-33	1/11/2007	11.2	31.8	ND	11	3.9	ND	ND	ND
GP-5A	4-8	1/11/2007	12.2	87	ND	24.1	65	0.341	ND	ND
GP-5A	32-33.5	1/11/2007	9.54	34.4	ND	10.8	8.09	ND	ND	ND
GP-6A	12-16	1/12/2007	11.8	102	ND	31.4	20.3	1.17	ND	ND
GP-6A	32-35	1/12/2007	11.4	28.4	ND	7.92	ND	ND	ND	ND
GP-DRYWELL	22-26	1/16/2007	12.8	97.2	ND	25.5	4.19	ND	ND	ND
GP-DRYWELL	30-34	1/16/2007	11.6	74	ND	21	ND	ND	ND	ND
GP-UST PR-1	4-8	1/17/2007	14.4	147	ND	24.0	239	0.103	ND	ND
GP-UST PR-1	32-35.5	1/17/2007	7.59	83.6	ND	22.7	4.92	ND	ND	ND
GP-UST PR-2	4-8	1/17/2007	ND	123	ND	30.1	36.7	0.228	ND	ND
GP-UST PR-2	28-31	1/17/2007	ND	70.2	ND	27.2	ND	ND	ND	ND
GP-UST PR-3	10-15	1/31/2007	12.1	180	0.826	30.3	447	0.535	ND	ND
GP-UST PR-3	35-39.5	1/31/2007	8.74	92.7	ND	27.0	98.1	0.0654	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		16	400	9.3	1,500	1,000	2.8	1,500	1,500
	Protection of Groundwater		16	820	7.5	NS ⁴⁾	450	0.73	8.3	4

1) - Milligrams per kilogram

2) - Feet below grade

3) - Not detected

4) - Not Specified

TABLE 14

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031**

**Summary of Soil Quality - Well Installation Soil Samples (LBG)
Total Metals Analysis**

Sample Location	Sample Depth (ft bg) ²⁾	Date	Concentration (mg/kg) ¹⁾							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium
R-5D	14 -16	7/24/2008	ND ³⁾	28.7	ND	10	3.68	ND	ND	ND
R-4D	24 -26	7/24/2008	ND	78.7	ND	24.1	ND	ND	ND	ND
DW-21B	33 -35	7/25/2008	ND	54.5	ND	17.4	4.47	ND	ND	ND
DW-4A	35	7/25/2008	ND	153	ND	44.1	51.7	0.275	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		16	400	9.3	1,500	1,000	2.8	1,500	1,500
	Protection of Groundwater		16	820	7.5	NS ⁴⁾	450	0.73	1,500	8.3

1) - Milligrams per kilogram

2) - Feet below grade

3) - Not detected

4) - Not Specified

TABLE 15

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

**Summary of Soil Quality - Area A Surface Soil
Total RCRA Metals - EPA Method 6010 & 7471**

Sample Location	Sample Depth (" bg) ^{1/}	Date	Concentration (mg/kg) ^{2/}											
			Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Zinc
Area A-SS-1	(0"-2")	4/16/2015	ND ^{3/}	ND	ND	10.6	16.7	212	182	ND	7.82	ND	ND	87.7
Area A-SS-2	(0"-2")	4/16/2015	ND	49.4	0.819	18	33.4	73.7	147	0.802	13.6	ND	ND	218
Area A-SS-1	(6"-12")	4/16/2015	ND	37.5	ND	8.48	16.6	51.6	133	0.0385	5.95	ND	ND	69.5
Area A-SS-2	(6"-12")	4/16/2015	ND	38.7	ND	25.2	22.4	115	134	0.1	11.2	ND	ND	137
Field Duplicate		4/16/2015	ND	71.6	ND	16.2	25.6	74.1	142	0.086	11.1	ND	ND	196
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		16	400	9.3	1,500	270	1,000	10,000	2.8	310.0	1,500	1,500	10,000
	Protection of Groundwater		16	820	7.5	NS ^{4/}	1,720	450	2,000	0.73	130.00	8.3	4.0	2,480

1/ Inches below grade

2/ Milligrams per kilogram

3/ Not Detected

4/ Not Specified

Table 16

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Quality - Area A Surface Soil

PCBs and Pesticides

Contaminant	CAS Number	Area A-SS-1		Area A-SS-2		Field Duplicate	UNRESTRICTED	Protection of Public Health				Protection of Ecological Resources	Protection of Groundwater
		(0"-2" bg) ^{1/}	(6"-12" bg)	(0"-2" bg)	(6"-12" bg)			Residential	Restricted-Residential	Commercial	Industrial		
		Concentration (mg/kg) ^{2/}											
4,4'-DDE	72-55-9	< 0.0016	< 0.0017	< 0.002	< 0.0018	< 0.0019	0.0033	1.8	8.9	62	120	0.0033	17
4,4'-DDT	50-29-3	< 0.0016	< 0.0017	< 0.002	< 0.0018	< 0.0019	0.0033	1.7	7.9	47	94	0.0033	136
4,4'-DDD	72-54-8	< 0.0016	< 0.0017	< 0.002	< 0.0018	< 0.0019	0.0033	2.6	13	92	180	0.0033	14
Aldrin	309-00-2	< 0.00082	< 0.00083	< 0.001	< 0.0009	< 0.00094	0.005	0.019	0.097	0.68	1.4	0.14	0.19
alpha-BHC	319-84-6	< 0.00082	< 0.00083	< 0.001	< 0.0009	< 0.00094	0.02	0.097	0.48	3.4	6.8	0.04	0.02
beta-BHC	319-85-7	< 0.00082	< 0.00083	< 0.001	< 0.0009	< 0.00094	0.036	0.072	0.36	3	14	0.6	0.09
delta-BHC	319-86-8	< 0.00082	< 0.00083	< 0.001	< 0.0009	< 0.00094	0.04	100	100	500	1,000	0.04	0.25
Dibenzofuran	132-64-9	< 0.26	< 0.26	< 0.32	< 0.28	< 0.3	7	14	59	350	1,000	NS	210
Dieldrin	60-57-1	< 0.0016	< 0.0017	< 0.002	< 0.0018	< 0.0019	0.005	0.039	0.2	1.4	2.8	0.006	0.1
Endosulfan I	959-98-8	< 0.00082	< 0.00083	< 0.001	< 0.0009	< 0.00094	2.4	4.8	24	200	920	NS ^{3/}	102
Endosulfan II	33213-65-9	< 0.0016	< 0.0017	< 0.002	< 0.0018	< 0.0019	2.4	4.8	24	200	920	NS	102
Endosulfan sulfate	1031-07-8	< 0.0016	< 0.0017	< 0.002	< 0.0018	< 0.0019	2.4	4.8	24	200	920	NS	1,000
Endrin	72-20-8	< 0.0016	< 0.0017	< 0.002	< 0.0018	< 0.0019	0.014	2.2	11	89	410	0.014	0.06
Heptachlor	76-44-8	0.0017	0.0019	< 0.001	< 0.0009	< 0.00094	0.042	0.42	2.1	15	29	0.14	0.38
Lindane	58-89-9	< 0.00082	< 0.00083	< 0.001	< 0.0009	< 0.00094	0.1	0.28	1.3	9.2	23	6	0.1
Polychlorinated biphenyls	1336-36-3	<0.182	<0.182	<0.224	<0.196	<0.203	0.1	1	1	1	25	1	3.2

1/ Inches below grade

2/ Milligrams per kilogram

3/ No Standard

TABLE 17
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area B UST Geoprobe Closure Confirmation Samples
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}															
			Benzene	Toluene	Ethylbenzene	Total Xylenes	Methylene Chloride	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
GP-1	0-5	8/23/2006	ND ^{4/}	ND	ND	ND	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-2	15-20	8/23/2006	ND	ND	ND	ND	89	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-3	15-20	8/23/2006	ND	ND	ND	ND	74	1200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-4	15-20	8/23/2006	ND	ND	ND	ND	77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5	5-10	8/23/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6	10-15	8/23/2006	ND	ND	ND	ND	70	54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-7	10-15	8/23/2006	ND	ND	ND	ND	76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-8	15-20	8/23/2006	ND	ND	ND	ND	74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-9	0-5	8/24/2006	ND	ND	ND	ND	54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-10	0-5	8/24/2006	ND	ND	ND	ND	64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-11	Not Sampled	8/24/2006	No Sample Collected - Refusal from UST at ~3 ft bg															
GP-12	0-5	8/24/2006	ND	ND	ND	ND	110	80	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-13	Not Sampled	8/24/2006	No Sample Collected - Refusal from UST at ~3 ft bg															
GP-14	0-5	8/24/2006	ND	ND	ND	ND	65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	500,000	150,000	NS ^{5/}	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000	500,000
	Protection of Groundwater		60	700	1,000	1,600	50	1,300	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000	930

^{1/} Methyl tert butyl ether
^{2/} Micrograms per kilogram
^{3/} Feet below grade

4/ Not detected
5/ Not Specified

TABLE 18

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area B AST Geoprobe Closure Confirmation Samples
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}																	
			Benzene	Toluene	Ethylbenzene	Total Xylenes	Methylene Chloride	Chloroform	Tetrachloroethene	1,1,1-Trichloroethane	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
GP-AST-1	12-16	9/7/2006	ND ^{4/}	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-2	0-4	9/7/2006	ND	ND	ND	ND	250	470	390	34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-3	0-4	9/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-4A	0-4	9/6/2006	32	73	ND	95	ND	ND	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	73	ND
GP-AST-4B	0-4	9/7/2006	ND	ND	ND	ND	ND	ND	72	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-5A	0-4	9/6/2006	ND	41	ND	30	63	ND	69	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-5B	0-4	9/6/2006	ND	39	ND	33	470	ND	92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-6	11.5-14	9/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-7	8-11	9/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-8	0-4	9/6/2006	ND	47	ND	35	ND	ND	90	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	500,000	NS ⁵⁾	150,000	500,000	NS	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000	500,000
	Protection of Groundwater		60	700	1,000	1,600	50	NS	1,300	680	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000	930

^{1/} Methyl tert butyl ether

^{2/} Micrograms per kilogram

^{3/} Feet below grade

4/ Not detected

5/ Not Specified

TABLE 19

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031**

**Summary of Soil Quality - Area B (Boiler Room) Geoprobe
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}**

Sample Location	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}																
			Benzene	Toluene	Ethylbenzene	Total Xylenes	1,1,1-Trichloroethane	Methylene Chloride	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
BR-1	16-20	9/10/2007	ND ^{4/}	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	250	240	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	500,000	500,000	150,000	NS ^{5/}	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000	500,000
	Protection of Groundwater		60	700	1,000	1,600	680	50	1,300	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000	930

^{1/} Methyl tert butyl ether

^{2/} Micrograms per kilogram

^{3/} Feet below grade

^{4/} Not detected

^{5/} Not Specified

TABLE 20
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Boiler Room Pipe Trench Bottom Sample
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}																					
			Benzene	Toluene	Ethylbenzene	Total Xylenes	Acetone	Methylene Chloride	1,1- Dichloroethane	1,1,1-Trichloroethane	1,2- Dichloroethane	cis-1,2-Dichloroethene	Trichloroethene	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
Boiler Room Pipe Trench Bottom	3	11/16/2007	ND ^{4/}	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	44,000	500,000	39,000	500,000	500,000	NS ^{5/}	150,000	NS	NS	500,000	190,000	500,000	190,000	500,000	NS	190,000	500,000	NS	500,000	500,000	500,000
	Protection of Groundwater		50	60	700	1,000	1,600	680	NS	1,300	NS	NS	3,900	8,400	5,900	3,600	11,000	NS	3,600	11,000	NS	12,000	12,000	930

^{1/} Methyl tert butyl ether
^{2/} Micrograms per kilogram
^{3/} Feet below grade

^{4/} Not Detected
^{5/} Not Specified

TABLE 21
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area B Excavation Endpoints
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Tank ID	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}															
				Benzene	Toluene	Ethylbenzene	Total Xylenes	Methylene Chloride	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
EN-1	UST-E	5	10/12/2007	ND ^{4/}	ND	ND	ND	79	170	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EW-1		5	10/12/2007	ND	ND	ND	ND	94	190	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EW-2		5	10/12/2007	ND	ND	ND	ND	87	260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ES-1		5	10/12/2007	ND	ND	ND	ND	ND	160	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-1		7	10/12/2007	ND	44	ND	ND	270	570	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB-2		7	10/12/2007	ND	ND	ND	ND	140	530	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FN-1	UST-F	5	10/12/2007	ND	ND	ND	ND	330	450	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FB-1		7	10/12/2007	ND	ND	ND	ND	440	890	ND	ND	ND	ND	ND	ND	ND	ND	ND	
FB-2		7	10/12/2007	ND	ND	ND	ND	250	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	
FS-1		5	10/12/2007	ND	ND	ND	ND	ND	71	ND	ND	ND	ND	ND	ND	ND	ND	ND	
GB-1	UST-G	9	10/16/2007	ND	ND	ND	ND	650	520	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GB-2		9	10/16/2007	ND	ND	ND	ND	810	640	ND	ND	ND	ND	ND	ND	ND	ND	ND	
GN-1		4	10/16/2007	ND	ND	ND	ND	250	270	ND	ND	ND	ND	ND	ND	ND	ND	ND	
GS-1		4	10/16/2007	ND	ND	ND	ND	ND	80	ND	ND	ND	ND	ND	ND	ND	ND	ND	
GE-1		4	10/16/2007	ND	ND	ND	ND	ND	48	ND	ND	ND	ND	ND	ND	ND	ND	ND	
GE-2		4	10/16/2007	ND	ND	ND	ND	69	34	ND	ND	ND	ND	ND	ND	ND	ND	ND	
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives		Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	500,000	150,000	NS	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000	500,000
		Protection of Groundwater		60	700	1,000	1,600	50	1,300	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000	930

^{1/} Methyl tert butyl ether

^{2/} Micrograms per kilogram

^{3/} Feet below grade

^{4/} Not Detected

^{5/} Not Specified

TABLE 22
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area B UST Geoprobe Closure Confirmation Samples
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Sample Depth (ft bg) ^{1/}	Date	Concentration (ug/kg) ^{2/}																					
			Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene
GP-1	0-5	8/23/2006	ND ^{3/}	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-2	15-20	8/23/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-3	15-20	8/23/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-4	15-20	8/23/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5	5-10	8/23/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6	10-15	8/23/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-7	10-15	8/23/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-8	15-20	8/23/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-9	0-5	8/24/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-10	0-5	8/24/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-11	NA	8/24/2006	No Sample Collected - Refusal from UST at ~3 ft bg																					
GP-12	0-5	8/24/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	290	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-13	NA	8/24/2006	No Sample Collected - Refusal from UST at ~3 ft bg																					
GP-14	0-5	8/24/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	NS ^{4/}	NS	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000
	Protection of Groundwater		12,000	NS	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000

1/ Micrograms per kilogram
2/ Feet below grade

3/ Not Detected
4/ Not Specified
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 23

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area B (Boiler Room) Geoprobe
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Sample Depth (ft bg) ^{1/}	Date	Concentration (ug/kg) ^{2/}																					
			Naphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Di-n-butyl phthalate	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene
BR-1	16-20	9/10/2007	ND ^{3/}	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	NS ^{4/}	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000
	Protection of Groundwater		12,000	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000

^{1/} Micrograms per kilogram

^{2/} Feet below grade

^{3/} Not Detected

^{4/} Not Specified

Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 24
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area B AST Geoprobe Closure Confirmation Samples
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Sample Depth (ft bg) ^{1/}	Date	Concentration (ug/kg) ^{2/}																					
			Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene	Benzo (g,h,i) perylene	Acenaphthylene
GP-AST-1	12-16	9/7/2006	ND ^{3/}	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-2	0-4	9/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	2500	690	ND	5900	4800	2800	3100	2500	2000	2600	760	1700	1800	ND
GP-AST-3	0-4	9/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-4A	0-4	9/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	320	ND	ND	510	500	270	310	260	ND	320	ND	ND	270	ND
GP-AST-4B	0-4	9/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	2800	540	320	3700	3200	1500	1700	1200	1300	1500	370	850	1000	ND
GP-AST-5A	0-4	9/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	2200	500	ND	3400	3000	1500	1600	1400	920	1400	400	830	890	ND
GP-AST-5B	0-4	9/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	980	ND	ND	1400	1200	640	660	540	620	600	ND	340	400	ND
GP-AST-6	11.5-14	9/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-7	8-11	9/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-8	0-4	9/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	2400	860	ND	6700	5500	3000	2800	2200	2200	2700	ND	1600	1700	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	NS ^{4/}	NS	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000
	Protection of Groundwater		12,000	NS	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000

^{1/} Micrograms per kilogram
^{2/} Feet below grade

^{3/} Not Detected
^{4/} Not Specified
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 25

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031**

Summary of Soil Quality - Area B Excavation Endpoints
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Tank ID	Sample Depth (ft bg) ^{1/}	Date	Concentration (ug/kg) ^{2/}																					
				Naphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	BiS (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene	
EN-1	UST-E	5	10/12/2007	ND ^{3/}	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
EW-1		5	10/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
EW-2		5	10/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ES-1		5	10/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
EB-1		7	10/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	630	ND	ND	870	1,000	530	620	410	470	530	310	ND	360	ND
EB-2		7	10/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	490	ND	ND	1,400	1,300	790	840	820	710	830	530	ND	560	ND
FN-1	UST-F	5	10/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	460	530	280	300	ND	ND	ND	ND	ND	ND	ND	
FB-1		7	10/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
FB-2		7	10/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	550	ND	ND	1,100	1,100	620	700	580	410	560	400	ND	440	ND
FS-1		5	10/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GB-1	UST-G	9	10/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
GB-2		9	10/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	510	ND	ND	880	1,100	530	580	430	380	500	290	ND	330	ND
GN-1		4	10/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-1		4	10/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GE-1		4	10/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	290	280	ND	ND	ND	ND	ND	ND	ND	ND	ND
GE-2		4	10/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives		Protection of Public Health (Commercial)	500,000	NS ^{4/}	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000		
		Protection of Groundwater	12,000	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000		

1/ Micrograms per kilogram

2/ Feet below grade

3/ Not Detected

4/ Not Specified

Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 26

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031**

**Summary of Soil Quality - Boiler Room Pipe Trench Bottom Sample
Semi-Volatile Organic Compounds - EPA Method 8270**

Sample Location	Sample Depth (ft bg) ^{1/}	Date	Concentration (ug/kg) ^{3/}																				
			Naphtthalene	2-Methylnaphtthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene
Boiler Room Pipe Trench Bottom	3	11/16/2007	ND ^{3/}	ND	ND	ND	ND	ND	ND	2,400	ND	ND	2,300	4,300	1,600	1,900	870	930	1,200	600	ND	980	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	NS	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000
	Protection of Groundwater		12,000	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000

^{1/} Micrograms per kilogram

^{2/} Feet below grade

^{3/} Not Detected

^{4/} Not Specified

Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 27

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031**

**Summary of Soil Quality - Area B Excavation Endpoints
Total RCRA Metals - EPA Method 6010 & 7471**

Sample Location	Tank ID	Sample Depth (ft bg) ^{1/}	Date	Concentration (mg/kg) ^{2/}							
				Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
EN-1	UST-E	5	10/12/2007	8.8	438	ND ^{3/}	30.4	134	0.23	ND	ND
EW-1		5	10/12/2007	10.1	191	ND	30.3	112	0.23	ND	ND
EW-2		5	10/12/2007	8.47	164	ND	30.9	98.9	0.25	ND	ND
ES-1		5	10/12/2007	9.76	169	ND	33.6	60.7	0.18	ND	ND
EB-1		7	10/12/2007	8.76	269	ND	24.8	143	0.25	ND	ND
EB-2		7	10/12/2007	8.67	191	ND	27.1	343	0.72	ND	ND
FN-1	UST-F	5	10/12/2007	7.34	337	ND	22.8	229	0.11	ND	ND
FB-1		7	10/12/2007	ND	260	ND	14.5	174	0.17	ND	ND
FB-2		7	10/12/2007	11.8	394	ND	22.2	413	0.2	ND	ND
FS-1		5	10/12/2007	9.75	161	ND	32.6	126	0.09	ND	ND
GB-1	UST-G	9	10/16/2007	9.42	239	ND	13.7	90	0.06	ND	ND
GB-2		9	10/16/2007	13.6	685	0.68	20.2	356	0.2	ND	ND
GN-1		4	10/16/2007	12	338	ND	24.3	145	0.22	ND	ND
GS-1		4	10/16/2007	17.3	133	ND	32.5	67.2	0.15	ND	ND
GE-1		4	10/16/2007	17.1	180	ND	34.7	100	0.29	ND	ND
GE-2		4	10/16/2007	11.9	113	ND	22.6	69.4	0.22	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives		Protection of Public Health (Commercial)		16	400	9.3	1,500	1,000	2.8	1,500	1,500
		Protection of Groundwater		16	820	7.5	NS ^{4/}	450	0.73	4	8.3

1) - Milligrams per kilogram

3) - Not detected

2) - Feet below grade

4) - Not Specified

TABLE 28

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031**

**Summary of Soil Quality - Boiler Room Pipe Trench Bottom Sample
Total Metals Analysis**

Sample Location	Sample Depth (ft bg) ²⁾	Date	Concentration (mg/kg) ¹⁾								
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium	Zinc
Boiler Room Pipe Trench Bottom	3	11/16/2007	ND ³⁾	66.8	ND	14.3	54.8	0.339	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		16	400	9.3	1,500	1,000	2.8	1,500	1,500	10,000,000
	Protection of Groundwater		16	820	7.5	NS ⁴⁾	450	0.73	4	8.3	2,480,000

1) - Milligrams per kilogram

2) - Feet below grade

3) - Not detected

4) - Not Specified

TABLE 29

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031**

**Summary of Soil Quality - Area C UST-D Geoprobe Closure Confirmation Samples
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}**

Sample Location	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}															
			Benzene	Toluene	Ethylbenzene	Total Xylenes	Methylene Chloride	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
GP-TANK D WT ^{4/}	15-20	1/19/2007	ND ^{5/}	5,000	ND	340	ND	ND	ND	ND	320	ND	750	ND	ND	ND	ND	ND
GP-TANK D CL ^{6/}	25-29.5	1/19/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	56	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	500,000	150,000	NS ^{5/}	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000	500,000
	Protection of Groundwater		60	700	1,000	1,600	50	1,300	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000	930

1/ Methyl tert butyl ether

2/ Micrograms per kilogram

3/ Feet below grade

4/ Not detected

5/ Not Specified

TABLE 30
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area C UST Closure Excavation Endpoint Confirmation Samples
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE^{1/}

Sample Location	Tank ID	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}																
				Benzene	Toluene	Ethylbenzene	Total Xylenes	Acetone	Methylene Chloride	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
N-1	UST-D	5.5	12/6/2006	ND ^{4/}	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	100	ND	ND	ND	ND	ND
S-1		5.5	12/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
E-1		5.5	12/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
W-1		5.5	12/6/2006	ND	160	ND	ND	ND	ND	ND	45	60	ND	86	570	310	79	ND	ND	ND
B-1		7.5	12/6/2006	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	34	ND	ND	ND	ND	ND
B-2		7.5	12/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	93	ND	ND	ND	ND	ND
WB-1	UST-W	7	8/2/2007	ND	ND	ND	ND	330	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WB-2		7	8/2/2007	ND	ND	ND	ND	ND	57	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WS-1		5	8/2/2007	ND	ND	ND	ND	ND	59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WS-2		5	8/7/2007	ND	ND	230	2,900	ND	ND	ND	1,400	5,300	24,000	1,100	59,000	14,000	14,000	ND	12,000	ND
WN-1		5	8/2/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WE-1		5	8/2/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WW-1		5	8/2/2007	ND	ND	ND	ND	320	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XN-1	UST-X	4	8/7/2007	ND	ND	ND	ND	250	61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XN-2		4	8/7/2007	ND	ND	ND	ND	340	94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XS-1		4	8/7/2007	ND	ND	ND	ND	320	79	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XS-2		4	8/7/2007	ND	ND	ND	ND	330	81	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XB-1		6	8/7/2007	ND	ND	ND	ND	290	84	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XB-2		6	8/7/2007	ND	ND	ND	ND	250	87	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XE-1		4	8/7/2007	ND	ND	ND	ND	310	59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XW-1		4	8/7/2007	ND	ND	ND	ND	ND	53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YE-1	UST-Y	4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YS-1		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YS-2		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YN-1		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YN-2		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YB-1		7	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YB-2		7	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YB-3		7	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZS-1	UST-Z	4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	660	ND	100	ND	ND	ND	160	ND
ZS-2		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZN-1		4	8/16/2007	ND	ND	ND	148	ND	ND	ND	ND	ND	6,700	220	10,000	ND	1,100	ND	1,100	ND
ZN-2		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZW-1		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZB-1		7	8/16/2007	ND	ND	ND	330	ND	ND	ND	ND	ND	14,000	460	25,000	460	2,700	ND	2,800	ND
ZB-2		7	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives		Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	500,000	500,000	150,000	NS ^{5/}	500,000	190,000	190,000	500,000	500,000	NS	500,000	500,000	500,000
		Protection of Groundwater		60	700	1,000	1,600	50	50	1,300	NS	3,900	8,400	3,600	11,000	11,000	NS	12,000	12,000	930

1/ Methyl tert butyl ether
2/ Micrograms per kilogram
3/ Feet below grade

4/ Not detected
5/ Not Specified

TABLE 31
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Hydraulic Barrier Geoprobe Boring
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}															
			Benzene	Toluene	Ethylbenzene	Total Xylenes	Methylene Chloride	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
GP-HB-1	15-20	1/22/2007	ND	21,000	1,100	6,800	ND	ND	1,100	2,500	8,300	ND	20,000	1,800	1,900	ND	1,500	ND
GP-HB-1	25-27	1/22/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-2	10-15	1/22/2007	ND	2,600	1,200	7,000	ND	ND	1,400	3,400	12,000	290	28,000	2,000	2,400	ND	2,200	ND
GP-HB-2	25-29.5	1/22/2007	ND	560	130	700	ND	ND	130	280	890	ND	2,100	150	170	ND	160	ND
GP-HB-3	20-25	1/23/2007	ND	ND	1,400	6,500	ND	ND	1,300	3,000	10,000	350	24,000	1,900	ND	ND	2,600	ND
GP-HB-3	30-34	1/23/2007	ND	ND	150	730	ND	ND	150	350	1,100	41	2,200	230	150	ND	260	ND
GP-HB-4	10-15	1/23/2007	ND	ND	3,800	1,200	ND	ND	11,000	28,000	22,000	1,200	180,000	8,700	7,800	13,000	8,200	ND
GP-HB-4	25-28	1/23/2007	ND	ND	ND	ND	ND	ND	ND	43	84	ND	270	29	27	ND	50	ND
GP-HB-5	15-20	1/24/2007	ND	36	ND	ND	ND	ND	80	230	510	32	1,800	260	230	ND	100	ND
GP-HB-5	20-25	1/24/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	250	33	30	ND	45	ND
GP-HB-6	15-20	1/25/2007	ND	ND	ND	ND	ND	ND	ND	ND	78	ND	260	26	40	ND	86	ND
GP-HB-6	25-27	1/25/2007	ND	ND	2,500	7,900	ND	ND	4,200	9,600	29,000	910	71,000	7,000	7,400	ND	6,000	ND
GP-HB-7	20-25	1/30/2007	ND	ND	90	160	ND	ND	160	450	1,100	42	4,000	410	440	ND	500	ND
GP-HB-7	25-27	1/30/2007	ND	ND	ND	ND	ND	ND	ND	28	95	ND	350	46	60	ND	180	ND
GP-HB-8	15-20	1/26/2007	ND	ND	530	1,700	ND	ND	520	1,300	4,200	ND	5,800	1,000	210	ND	950	ND
GP-HB-8	25-27	1/26/2007	ND	ND	ND	48	ND	ND	ND	39	110	ND	180	38	ND	ND	ND	ND
GP-HB-9	15-20	1/26/2007	ND	ND	ND	2,500	ND	ND	1,000	2,400	6,000	280	18,000	1,500	1,400	ND	1,600	ND
GP-HB-9	20-25	1/26/2007	ND	ND	1,100	11,000	ND	ND	3,400	7,400	23,000	890	54,000	4,900	4,400	ND	6,300	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	500,000	150,000	NS ^{5/}	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000	500,000
	Protection of Groundwater		60	700	1,000	1,600	50	1,300	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000	930

^{1/} Methyl tert butyl ether
^{2/} Micrograms per kilogram
^{3/} Feet below grade

^{4/} Not detected
^{5/} Not Specified

TABLE 32

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area C UST-D Geoprobe Closure Confirmation Samples
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Sample Depth (ft bg) ¹⁾	Date	Concentration (ug/kg) ²⁾																					
			Naphthalene	1-Methyl/naphthalene	2-Methyl/naphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene
GP-TANK D WT ³⁾	15-20	1/19/2007	690	ND ⁴⁾	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK D CL ⁵⁾	25-29.5	1/19/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	NS ⁶⁾	NS	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000
	Protection of Groundwater		12,000	NS	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000

1) - Feet below grade

2) - Micrograms per kilogram

3) - Water Table

4) - Not detected

5) - Confining Layer

6) - Not Specified

Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 33
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area C UST Closure Excavation Endpoint Confirmation Samples
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Tank ID	Sample Depth (ft bg) ^{1/}	Date	Concentration (ug/kg) ^{2/}																					
				Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene
N-1	UST-D	5.5	12/6/2006	ND ^{3/}	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-1		5.5	12/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
E-1		5.5	12/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
W-1		5.5	12/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-1		7.5	12/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-2		7.5	12/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WB-1	UST-W	7	8/2/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WB-2		7	8/2/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WS-1		5	8/2/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WS-2		5	8/7/2007	5,600	ND	1,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WN-1		5	8/2/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WE-1		5	8/2/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WW-1	UST-X	5	8/2/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XN-1		4	8/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XN-2		4	8/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XS-1		4	8/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XS-2		4	8/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XB-1		6	8/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XB-2	UST-Y	6	8/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XE-1		4	8/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
XW-1		4	8/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YE-1		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YS-1	UST-Z	4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YS-2		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YN-1		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YN-2		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	450	ND	ND	460	610	ND	400	ND	ND	ND	ND	ND	ND	ND
YB-1		7	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YB-2		7	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
YB-3	UST-Z	7	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZS-1		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZS-2		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZN-1		4	8/16/2007	590	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZN-2		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZW-1		4	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZB-1	UST-Z	7	8/16/2007	1,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZB-2		7	8/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives		Protection of Public Health (Commercial)		500,000	NS ^{5/}	NS	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000
		Protection of Groundwater		12,000	NS	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000

1) - Feet below grade
2) - Micrograms per kilogram

3/ Not Detected
4/ Not Specified
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 34
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Hydraulic Barrier Geoprobe Boring
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Sample Depth (ft bg) ^{1/}	Date	Concentration (ug/kg) ^{2/}																					
			Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene
GP-HB-1	15-20	1/22/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-1	25-27	1/22/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-2	10-15	1/22/2007	1,800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-2	25-29.5	1/22/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-3	20-25	1/23/2007	1,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-3	30-34	1/23/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-4	10-15	1/23/2007	5,100	ND	580	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-4	25-28	1/23/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-5	15-20	1/24/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-5	20-25	1/24/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-6	15-20	1/25/2007	8,500	ND	1,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-6	25-27	1/25/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-7	20-25	1/30/2007	310	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-7	25-27	1/30/2007	ND	ND	ND	ND	ND	ND	ND	440	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-8	15-20	1/26/2007	450	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-8	25-27	1/26/2007	680	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-9	15-20	1/26/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-9	20-25	1/26/2007	2,600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	NS ^{6/}	NS	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000
	Protection of Groundwater		12,000	NS	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000

1) - Feet below grade
2) - Micrograms per kilogram
3) - Water Table
4) - Not detected

5) - Confining Layer
6) - Not Specified
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 35

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031**

**Summary of Soil Quality - Area C UST-D Geoprobe Closure Confirmation Samples
Total Metals Analysis**

Sample Location	Sample Depth (ft bg) ²⁾	Date	Concentration (mg/kg) ¹⁾							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium
GP-TANK D WT ³⁾	15-20	1/19/2007	7.91	53.6	ND ⁴⁾	10.7	3.33	ND	ND	ND
GP-TANK D CL ⁵⁾	25-29.5	1/19/2007	13.9	40.2	ND	12.8	3.73	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		16	400	9.3	1,500	1,000	2.8	1,500	1,500
	Protection of Groundwater		16	820	7.5	NS ⁶⁾	450	0.73	8.3	4

1) - Milligrams per kilogram

2) - Feet below grade

3) -Water Table

4) - Not detected

5) - Confining Layer

6) - Not Specified

TABLE 36
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area C UST Closure Excavation Endpoint Confirmation Samples
Total Metals Analysis

Sample Location	Tank ID	Sample Depth (ft bg) ²⁾	Date	Concentration (mg/kg) ¹⁾							
				Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium
N-1	UST-D	5.5	12/6/2006	ND ³⁾	6.41	ND	12.3	14.1	0.143	ND	ND
S-1		5.5	12/6/2006	12.8	45.6	ND	19	4.73	0.0506	ND	ND
E-1		5.5	12/6/2006	6.46	53	ND	16.5	8.31	0.0495	ND	ND
W-1		5.5	12/6/2006	ND	113	ND	32.4	32.6	0.262	ND	ND
B-1		7.5	12/6/2006	ND	90.4	ND	31.3	9.87	0.33	ND	ND
B-2		7.5	12/6/2006	ND	113	ND	23.5	40.3	3.31	ND	ND
WB-1	UST-W	7	8/2/2007	6.66	214	ND	26.6	ND	ND	ND	ND
WB-2		7	8/2/2007	ND	71.7	ND	13.8	ND	ND	ND	ND
WS-1		5	8/2/2007	ND	168	ND	43.1	ND	ND	ND	ND
WS-2		5	8/7/2007	ND	108	ND	25.3	4.14	ND	ND	ND
WN-1		5	8/2/2007	ND	146	ND	30.2	ND	ND	ND	ND
WE-1		5	8/2/2007	ND	130	ND	31.2	3.66	ND	ND	ND
WW-1		5	8/2/2007	6.58	70.8	ND	24.5	6.15	ND	ND	ND
XN-1	UST-X	4	8/7/2007	ND	73.9	ND	21.1	9.60	0.479	ND	ND
XN-2		4	8/7/2007	ND	60	ND	16.7	ND	ND	ND	ND
XS-1		4	8/7/2007	ND	61.9	ND	17.9	ND	ND	ND	ND
XS-2		4	8/7/2007	ND	40.5	ND	8.97	ND	ND	ND	ND
XB-1		6	8/7/2007	8.12	77.4	ND	22.7	5.03	ND	ND	ND
XB-2		6	8/7/2007	ND	53.7	ND	26.8	4.22	ND	ND	ND
XE-1		4	8/7/2007	ND	76.3	ND	16.8	ND	0.114	ND	ND
XW-1		4	8/7/2007	ND	61.8	ND	29.6	ND	0.44	ND	ND
YE-1	UST-Y	4	8/16/2007	17.0	106	ND	27.1	3.55	ND	ND	ND
YS-1		4	8/16/2007	12.4	146	ND	38.9	11.8	ND	ND	ND
YS-2		4	8/16/2007	10.5	58.3	ND	17.4	4.54	ND	ND	ND
YN-1		4	8/16/2007	8.21	64.9	ND	19.4	ND	ND	ND	ND
YN-2		4	8/16/2007	10.1	79.8	ND	24.7	3.06	ND	ND	ND
YB-1		7	8/16/2007	12.5	181	ND	44.3	ND	ND	ND	ND
YB-2		7	8/16/2007	12.5	97.6	ND	37.0	ND	ND	ND	ND
YB-3		7	8/16/2007	10.1	35.2	ND	15.3	ND	ND	ND	ND
ZS-1	UST-Z	4	8/16/2007	11.8	96.2	ND	33.5	5.22	ND	ND	ND
ZS-2		4	8/16/2007	8.56	69.0	ND	18.7	14.0	0.199	ND	ND
ZN-1		4	8/16/2007	12.3	113	ND	33.0	3.52	ND	ND	ND
ZN-2		4	8/16/2007	7.78	48.1	ND	14.2	ND	ND	ND	ND
ZW-1		4	8/16/2007	10.3	60.8	ND	17.5	ND	ND	ND	ND
ZB-1		7	8/16/2007	ND	27.0	ND	8.17	ND	ND	ND	ND
ZB-2		7	8/16/2007	10.4	64.6	ND	17.7	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives		Protection of Public Health (Commercial)		16	400	9.3	1,500	1,000	2.8	1,500	1,500
		Protection of Groundwater		16	820	7.5	NS ⁴⁾	450	0.73	8.3	4

1) - Milligrams per kilogram
2) - Feet below grade

3) - Not detected
4) - Not Specified

TABLE 37

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031**

**Summary of Soil Quality - Hydraulic Barrier Geoprobe Boring
Total Metals Analysis**

Sample Location	Sample Depth (ft bg) ²⁾	Date	Concentration (mg/kg) ¹⁾							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium
GP-HB-1	15-20	1/22/2007	7.26	88.0	ND ³⁾	23.0	ND	ND	ND	ND
GP-HB-1	25-27	1/22/2007	9.58	37.2	ND	8.84	ND	ND	ND	ND
GP-HB-2	10-15	1/22/2007	8.10	58.2	ND	15.1	ND	ND	ND	ND
GP-HB-2	25-29.5	1/22/2007	ND	35.9	ND	10.4	ND	ND	ND	ND
GP-HB-3	20-25	1/23/2007	ND	50	ND	16.8	ND	ND	ND	ND
GP-HB-3	30-34	1/23/2007	ND	54	ND	17.1	ND	ND	ND	ND
GP-HB-4	10-15	1/23/2007	6.88	53.5	ND	24.1	4.25	ND	ND	ND
GP-HB-4	25-28	1/23/2007	9.35	132	ND	94.5	4.72	ND	ND	ND
GP-HB-5	15-20	1/24/2007	8.43	79.9	ND	24.2	3.75	ND	ND	ND
GP-HB-5	20-25	1/24/2007	10.4	58.7	ND	12.2	3.27	ND	ND	ND
GP-HB-6	15-20	1/25/2007	ND	33.7	ND	12.4	5.46	ND	ND	ND
GP-HB-6	25-27	1/25/2007	8.04	39.5	ND	9.93	3.42	ND	ND	ND
GP-HB-7	20-25	1/30/2007	7.62	87.5	ND	21.6	3.94	ND	ND	ND
GP-HB-7	25-27	1/30/2007	11.5	36.7	ND	13.9	3.54	ND	ND	ND
GP-HB-8	15-20	1/26/2007	ND	31.2	ND	10.3	ND	ND	ND	ND
GP-HB-8	25-27	1/26/2007	8.11	90.7	ND	23.2	4.4	ND	ND	ND
GP-HB-9	15-20	1/26/2007	ND	32	ND	8.17	ND	ND	ND	ND
GP-HB-9	20-25	1/26/2007	7.89	82.7	ND	11.1	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		16	400	9.3	1,500	1,000	2.8	1,500	1,500
	Protection of Groundwater		16	820	7.5	NS ⁴⁾	450	0.73	8.3	4

1) - Milligrams per kilogram

2) - Feet below grade

3) - Not detected

3) - Not detected

4) - Not Specified

TABLE 38
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area D UST Excavation Endpoint Confirmation Samples
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Tank ID	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}																				
				Benzene	Toluene	Ethylbenzene	Total Xylenes	1,1-Dichloroethane	Methylene Chloride	1,1,1-Dichloroethane	Trichloroethene	Tetrachloroethene	1,1,1 - Trichloroethane	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE	
N-1	UST-A	7	12/15/2006	ND ^{4/}	56.0	ND	ND	ND	60.0	ND	ND	87.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
S-1		7	12/15/2006	ND	140	ND	ND	ND	ND	57.0	ND	250	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
E-1		7	12/15/2006	ND	ND	ND	ND	ND	ND	ND	ND	66	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
W-1		7	12/15/2006	ND	58	ND	ND	44	ND	310	46	570	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-1		10	12/15/2006	ND	210	ND	ND	ND	ND	ND	ND	38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-2		10	12/15/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
West Sidewall	UST-B	5	12/18/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
South Sidewall		5	12/18/2006	ND	27.0	ND	ND	ND	ND	ND	ND	45.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
North Sidewall		5	12/18/2006	ND	310	ND	44.0	ND	ND	160	ND	130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
East Sidewall		6	12/18/2006	ND	710	ND	108	30	ND	ND	ND	190	ND	ND	ND	53	ND	80	ND	ND	ND	120	ND	
Bottom #1		8	12/18/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Bottom #2		8	12/18/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bottom #3	8	12/18/2006	ND	72	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
AT-2	UST-T	5	6/19/2008	ND	69	ND	ND	ND	ND	ND	ND	220	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
AT-5		5	6/19/2008	ND	2,400	39	417	ND	95	ND	ND	110	31	ND	ND	36	ND	100	ND	ND	ND	130	ND	
AT-6		13	6/20/2008	5,400	5,700,000	60,000	187,000	ND	ND	ND	ND	ND	22,000	4,300	9,200	25,000	ND	61,000	4,900	5,500	ND	9,500	ND	
AT-7		13	6/23/2008	ND	5,500,000	140,000	459,000	ND	ND	ND	ND	8,000	4,500	ND	ND	8,100	ND	21,000	ND	ND	ND	6,600	ND	
AT-1	UST-U	5	6/19/2008	ND	110	ND	ND	ND	ND	ND	ND	210	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
AT-3		5	6/19/2008	ND	160	ND	ND	ND	500	ND	ND	110	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
AT-4		5	6/19/2008	ND	490	ND	69	ND	50	ND	ND	160	25	ND	ND	ND	ND	44	ND	ND	ND	53	ND	
AT-8		13	6/23/2008	ND	3,600,000	64,000	213,000	ND	ND	ND	ND	5,400	4,500	ND	ND	ND	ND	5,500	ND	ND	ND	ND	ND	
AT-9		13	6/23/2008	ND	7,900	1,100	3,420	ND	ND	ND	ND	ND	ND	34	85	140	ND	370	70	85	ND	140	ND	
Tank V- Bottom	UST-V	10	1/9/2008	ND	ND	ND	ND	ND	110	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Tank V- East		5	1/9/2008	ND	ND	ND	ND	ND	ND	ND	ND	67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Tank V- West		5	1/9/2008	ND	ND	ND	ND	ND	270	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Tank V- North		5	1/9/2008	ND	ND	ND	ND	ND	ND	ND	ND	33	33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
NS-1	UST-10	6	1/3/2007	ND	ND	ND	ND	ND	54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
NS-2		6	1/3/2007	ND	ND	ND	ND	ND	170	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
NS-3		6	1/3/2007	ND	ND	ND	ND	ND	130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ES-1		6	1/3/2007	ND	ND	ND	ND	ND	140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
SS-1		6	1/3/2007	ND	ND	ND	ND	ND	170	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
SS-2		6	1/3/2007	ND	ND	ND	ND	ND	53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
SS-3		6	1/3/2007	ND	ND	ND	ND	ND	160	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-1		11	1/3/2007	ND	ND	ND	ND	ND	57	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-2		11	1/3/2007	ND	ND	ND	ND	ND	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	48	ND	
B-3		11	1/3/2007	ND	36	ND	ND	ND	140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-4		11	1/3/2007	ND	ND	ND	ND	ND	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-5		11	1/3/2007	ND	ND	ND	ND	ND	130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives		Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	NS ^{5/}	500,000	500,000	200,000	150,000	500,000	NS	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000	500,000	
		Protection of Groundwater		60	700	1,000	1,600	NS	50	680	470	1,300	680	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000	930	

1/ Methyl tert butyl ether
2/ Micrograms per kilogram
3/ Feet below grade

4/ Not detected
5/ Not Specified

TABLE 39
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area D UST-10, UST-A and UST-B Geoprobe Closure Confirmation Samples
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}															
			Benzene	Toluene	Ethylbenzene	Total Xylenes	Methylene Chloride	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
GP-TANK 10 WT ^{4/}	12-16	1/18/2007	ND ^{5/}	ND	ND	17,400	ND	ND	ND	4,000	14,000	ND	35,000	ND	2,900	ND	ND	ND
GP-TANK 10 CL ^{6/}	20-24	1/18/2007	ND	ND	ND	14,000	ND	ND	3,600	7,900	26,000	ND	72,000	5,300	4,600	ND	9,000	ND
GP-TANK A WT	10-15	1/19/2007	ND	65,000	5,500	16,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK A CL	25-27	1/19/2007	ND	ND	ND	ND	ND	ND	730	2,100	ND	ND	1,000	780	ND	970	630	ND
GP-TANK B WT	12-16	1/18/2007	ND	4,500	ND	6,500	ND	ND	ND	4,700	10,000	ND	35,000	4,300	4,700	7,600	ND	ND
GP-TANK B CL	24-27	1/18/2007	ND	18,000	ND	ND	ND	ND	ND	ND	3,000	ND	8,600	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	500,000	150,000	NS ^{7/}	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000	500,000
	Protection of Groundwater		60	700	1,000	1,600	50	1,300	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000	930

^{1/} Methyl tert butyl ether

^{2/} Micrograms per kilogram

^{3/} Feet below grade

^{4/} Water Table

^{5/} Not detected

^{6/} Confining Layer

^{7/} Not Specified

TABLE 40

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality - Area D (Commercial Space) UST Closure Confirmation Samples
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Sample Depth (ft bg) ^{3/}	Date	Concentration (ug/kg) ^{2/}																	
			Benzene	Toluene	Ethylbenzene	Total Xylenes	Methylene Chloride	1,1-Dichloroethane	1,1,1-Trichloroethane	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
GP-TANK 34	4-8	1/15/07	ND ^{4/}	ND	260	300	560	ND	ND	ND	17,000	40,000	15,000	2,400	150,000	20,000	14,000	29,000	16,000	ND
GP-TANK 34	24-27	1/15/07	ND	280	5,200	40,000	ND	ND	ND	ND	3,800	8,500	26,000	810	60,000	5,500	6,400	11,000	4,500	ND
GP-TANK 35	4-8	1/15/07	ND	ND	430	370	ND	ND	ND	ND	7,200	15,000	11,000	2,700	93,000	14,000	6,500	23,000	9,400	ND
GP-TANK 35	24-26	1/15/07	ND	ND	2,000	15,100	ND	ND	ND	ND	1,700	3,700	13,000	380	30,000	2,500	2,800	5,100	2,900	ND
GP-TANK 36	4-8	1/15/07	ND	ND	51	110	100	160	290	ND	38	90	52	ND	230	89	ND	72	55	ND
GP-TANK 36	28-29.5	1/15/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50	ND	120	ND	ND	ND	ND	ND
GP-TANK C	4-8	1/16/2007	ND	ND	ND	44	77	29	68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK C	20-24	1/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	53	70	ND	580	67	51	130	64	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	500,000	NS ^{5/}	500,000	500,000	150,000	NS	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000
	Protection of Groundwater		60	700	1,000	1,600	50	NS	680	50	1,300	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000

^{1/} Methyl tert butyl ether
^{2/} Micrograms per kilogram
^{3/} Feet below grade

4/ Not detected
^{5/} Not Specified

TABLE 41
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

Summary of Soil Quality- Area D (Commercial Space) Excavation
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ¹⁾

Sample Location	Sample Depth (ft bg) ³⁾	Date	Concentration (ug/kg) ²⁾																
			Benzene	Toluene	Ethylbenzene	Total Xylenes	1,1,1-Trichloroethane	Methylene Chloride	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
B-1	13	4/25/2008	ND ⁴⁾	ND	1,600	16,000	ND	ND	ND	1,800	3,700	15,000	690	41,000	3,700	3,700	ND	4,000	ND
B-2	13	4/25/2008	ND	ND	2,600	23,400	ND	ND	ND	3,100	7,000	27,000	1,300	75,000	6,900	7,900	ND	11,000	ND
B-3	13	5/12/2008	ND	ND	500	390	ND	ND	ND	4,100	12,000	ND	ND	110,000	860	840	1,200	720	ND
B-4	13	5/12/2008	ND	ND	1,500	1,300	ND	ND	ND	18,000	51,000	85,000	ND	490,000	2,900	2,200	ND	4,300	ND
B-6	13	5/20/2008	ND	ND	ND	6,200	ND	ND	ND	820	1,000	15,000	730	21,000	3,200	4,400	ND	1,000	ND
B-7	13	5/20/2008	ND	ND	ND	16,800	ND	ND	ND	2,100	1,500	28,000	1,200	64,000	6,800	8,300	ND	11,000	ND
S-1	6	4/25/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND	ND	ND	ND	ND	ND	ND
S-2	7	5/12/2008	ND	29	ND	ND	39	ND	46	ND	ND	31	ND	95	ND	ND	ND	ND	ND
S-3	7	5/12/2008	ND	ND	69	1030	ND	ND	ND	580	1,500	10,000	170	57,000	660	1,200	1,600	1,400	ND
S-4	7	5/12/2008	ND	ND	ND	ND	ND	ND	ND	4,400	9,800	340	1,200	18,000	6,300	3,300	9,700	7,900	ND
S-7	7	5/20/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-8	7	5/20/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		44,000	500,000	39,000	500,000	500,000	500,000	500,000	150,000	NS ^{5/}	500,000	190,000	500,000	190,000	500,000	NS	500,000	500,000
	Protection of Groundwater		60	700	1,000	1,600	680	50	50	1,300	NS	3,900	8,400	5,900	3,600	11,000	NS	12,000	12,000

1/ Methyl tert butyl ether
2/ Micrograms per kilogram
3/ Feet below grade

4/ Not detected
5/ Not Specified

TABLE 42
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Soil Quality - Area D Excavation Endpoint Confirmation Samples
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Tank ID	Sample Depth (ft bg) ^{1/}	Date	Concentration (ug/kg) ^{2/}																						
				Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene	
N-1	UST-A	7	12/15/2006	ND ^{3/}	ND	ND	640	ND	310	720	ND	7,400	1,600	510	7,400	6,800	3,500	3,800	2,500	2,400	3,100	1,700	ND	1,900	ND	
S-1		7	12/15/2006	ND	ND	ND	320	ND	ND	400	ND	5,300	1,200	350	8,000	7,200	4,300	4,800	4,000	3,100	4,400	2,700	ND	2,900	ND	
E-1		7	12/15/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
W-1		7	12/15/2006	ND	ND	ND	ND	ND	ND	ND	ND	1,700	460	ND	2,300	2,200	1,200	1,400	1,000	1,100	1,300	840	ND	920	ND	
B-1		10	12/15/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-2		10	12/15/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
West Sidewall	UST-B	5	12/18/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
South Sidewall		5	12/18/2006	ND	ND	ND	ND	ND	ND	ND	340	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	360	ND	480	ND	
North Sidewall		5	12/18/2006	ND	ND	ND	ND	ND	ND	ND	ND	2,300	610	ND	3,700	3,700	2,200	2,600	1,900	1,500	2,100	1,300	ND	1,500	ND	
East Sidewall		5	12/18/2006	4,700	ND	480	ND	ND	ND	ND	ND	400	ND	ND	560	640	350	530	500	440	350	450	ND	530	ND	
Bottom #1		8	12/18/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Bottom #2		8	12/18/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Bottom #3		8	12/18/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
AT-2	UST-T	5	6/19/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	800	ND	1,200	ND	
AT-5		5	6/19/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	380	ND	
AT-6		13	6/20/2008	3,200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
AT-7		13	6/23/2008	1,200	ND	ND	ND	ND	ND	ND	ND	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
AT-1	UST-U	5	6/19/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
AT-3		5	6/19/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
AT-4		5	6/19/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
AT-8		13	6/23/2008	520	ND	ND	ND	ND	ND	ND	ND	320	510	ND	ND	590	540	ND	320	ND	ND	ND	ND	320	ND	
AT-9		13	6/23/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Tank V- Bottom	UST-V	10	1/9/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Tank V- East		5	1/9/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Tank V- West		5	1/9/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Tank V- North		5	1/9/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
NS-1	UST-10	6	1/3/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
NS-2		6	1/3/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
NS-3		6	1/3/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
ES-1		6	1/3/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
SS-1		6	1/3/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
SS-2		6	1/3/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
SS-3		6	1/3/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-1		11	1/3/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
B-2		11	1/3/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-3		11	1/3/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-4		11	1/3/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-5		11	1/3/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives		Protection of Public Health (Commercial)		500,000	NS ^{4/}	NS	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000	
		Protection of Groundwater		12,000	NS	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000	

1) - Feet below grade
2) - Micrograms per kilogram
3) - Not Detected

3) - Not Detected
4) - Not Specified
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 43
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Soil Quality - Area D UST-10, UST-A and UST-B Geoprobe Closure Confirmation Samples
Semivolatile Organic Compounds - EPA Method 8270

Sample Location	Sample Depth (ft bg) ¹⁾	Date	Concentration (ug/kg) ²⁾																					
			Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene
GP-TANK 10 WT ³⁾	12-16	1/18/2007	3,000	ND ⁴⁾	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK 10 CL ⁵⁾	20-24	1/18/2007	2,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK A WT	10-15	1/19/2007	310	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK A CL	25-27	1/19/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK B WT	12-16	1/18/2007	3,400	ND	380	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK B CL	24-27	1/18/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK D WT	15-20	1/19/2007	690	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK D CL	25-29.5	1/19/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	NS ⁶⁾	NS	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000
	Protection of Groundwater		12,000	NS	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000

1) - Feet below grade
2) - Micrograms per kilogram
3) -Water Table

4) - Not detected
5) - Confining Layer
6) - Not Specified
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 44

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Soil Quality - Area D (Commercial Space) UST Confirmation Samples
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Sample Depth (ft bg) ^{1/}	Date	Concentration (ug/kg) ^{2/}																					
			Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Acenaphthylene
GP-TANK 34	4-8	1/15/07	12,000	ND ^{3/}	1,500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK 34	24-27	1/15/07	2,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK 35	4-8	1/15/07	7,900	ND	690	ND	ND	ND	ND	ND	490	ND	ND	400	490	ND	430	ND	ND	ND	ND	ND	ND	ND
GP-TANK 35	24-26	1/15/07	1,900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK 36	4-8	1/15/07	850	ND	1,200	1,900	ND	1,500	4,100	ND	30,000	7,300	1,300	25,000	20,000	11,000	12,000	7,200	5,700	8,000	4,400	430	3,900	1,400
GP-TANK 36	28-29.5	1/15/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK C	4-8	1/16/2007	610	ND	ND	ND	ND	ND	ND	ND	310	ND	ND	640	600	360	380	390	350	420	330	ND	310	ND
GP-TANK C	20-24	1/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	NS ^{4/}	NS	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000
	Protection of Groundwater		12,000	NS	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000

1) - Feet below grade
2) - Micrograms per kilogram

3) - Not Detected
4) - Not Specified
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

<div>TABLE 45</div> <div>FORMER RED DEVIL PAINT FACILITY</div> <div>30 NORTH WEST STREET</div> <div>MOUNT VERNON, NEW YORK</div> <div>SITE NO. 3-60-031</div>																								
Summary of Soil Quality- Area D (Commercial Space) Excavation																								
Semi-Volatile Organic Compounds - EPA Method 8270																								
Sample Location	Sample Depth (ft bg) ¹⁾	Date	Concentration (ug/kg) ²⁾																					
			Naphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Di-n-butyl phthalate	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,l) perylene	Acenaphthylene
B-1	13	4/25/2008	4,000	920	ND ³⁾	ND	ND	ND	ND	ND	ND	ND	1,200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-2	13	4/25/2008	2,800	410	ND	ND	ND	ND	ND	340	ND	ND	ND	630	650	350	440	300	350	410	ND	ND	ND	ND
B-3	13	5/12/2008	650	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-4	13	5/12/2008	930	530	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-6	13	5/20/2008	590	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-7	13	5/20/2008	4,100	290	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-1	6	4/25/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-2	7	5/12/2008	ND	ND	ND	ND	ND	ND	ND	1,300	410	ND	ND	2,000	2,100	1,100	1,200	920	940	1,100	710	ND	800	270
S-3	7	5/12/2008	2,400	490	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-4	7	5/12/2008	3,700	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-7	7	5/20/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
S-8	7	5/20/2008	ND	ND	ND	ND	ND	ND	1,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		500,000	NS ⁴⁾	500,000	NS	350,000	500,000	NS	500,000	500,000	NS	NS	500,000	500,000	5,600	56,000	5,600	56,000	1,000	5,600	560	500,000	500,000
	Protection of Groundwater		12,000	NS	98,000	NS	210,000	386,000	NS	1,000,000	1,000,000	NS	NS	1,000,000	1,000,000	1,000	1,000	1,700	1,700	22,000	8,200	1,000,000	1,000,000	107,000

1) - Feet below grade

2) - Micrograms per kilogram

3) - Not Detected

4) - Not Specified

Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 46

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Soil Quality - Area D Excavation Endpoint Confirmation Samples
Total Metals Analysis

Sample Location	Tank ID	Sample Depth (ft bg) ²⁾	Date	Concentration (mg/kg) ¹⁾								
				Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium	
N-1	UST-A	7	12/15/2006	12.6	246	ND	25.9	394	1.06	ND	ND	
S-1		7	12/15/2006	11.4	146	ND	23.1	169	0.263	ND	ND	
E-1		7	12/15/2006	14.0	365	ND	42.0	173	0.126	ND	ND	
W-1		7	12/15/2006	12.5	136	ND	26.4	168	0.241	ND	ND	
B-1		10	12/15/2006	9.97	63.9	ND	24.0	12.3	ND	ND	ND	
B-2		10	12/15/2006	9.53	59.8	ND	19.6	12.6	ND	ND	ND	
West Sidewall	UST-B	5	12/18/2006	11.9	90.9	<0.728	21.5	39.7	0.119	<2.04	<1.5	
South Sidewall		5	12/18/2006	17.8	230	<0.745	45.2	184	0.300	<2.09	<6	
North Sidewall		5	12/18/2006	12.5	164	<0.710	22.4	225	0.365	<1.99	<1.4	
East Sidewall		5	12/18/2006	12.3	130	<0.663	21.4	193	0.217	<1.86	<1.3	
Bottom #1		8	12/18/2006	11.2	110	<0.706	26.7	22.6	0.128	<1.98	<1.4	
Bottom #2		8	12/18/2006	12.3	107	<0.752	28.2	17.4	0.0714	<2.11	<1.5	
Bottom #3		8	12/18/2006	10.6	67.7	<0.631	20.6	18.6	0.0685	<1.77	<1.3	
AT-2	UST-T	5	6/19/2008	16.2	129	ND ³⁾	39.1	144	0.182	ND	ND	
AT-5		5	6/19/2008	11.7	108	ND	13.9	143	0.456	ND	ND	
AT-6		13	6/20/2008	ND	114	ND	41.1	7.10	0.0764	ND	ND	
AT-7		13	6/23/2008	ND	115	ND	35.6	27.2	0.125	ND	ND	
AT-1	UST-U	5	6/19/2008	20.1	145	ND ³⁾	39.6	198	0.255	ND	ND	
AT-3		5	6/19/2008	18.1	779	ND	42.2	422	0.158	ND	ND	
AT-4		5	6/19/2008	14.8	157	ND	25.4	262	0.348	ND	ND	
AT-8		13	6/23/2008	ND	113	ND	34.8	34	0.178	ND	ND	
AT-9		13	6/23/2008	ND	103	ND	42.4	4.82	ND	ND	ND	
Tank V- Bottom	UST-V	10	1/9/2008	ND ³⁾	99.1	ND	20.1	44.3	0.23	ND	ND	
Tank V- East		5	1/9/2008	ND	69.6	ND	22	23.5	0.15	ND	ND	
Tank V- West		5	1/9/2008	ND	93	ND	22	27.4	0.12	ND	ND	
Tank V- North		5	1/9/2008	ND	271	0.84	19.1	495	0.89	ND	ND	
NS-1	UST-10	6	1/3/2007	ND	ND	ND	6.33	6.06	ND	ND	ND	
NS-2		6	1/3/07	ND	ND	ND	5.19	4.72	ND	ND	ND	
NS-3		6	1/3/07	ND	ND	ND	2.86	4.33	ND	ND	ND	
ES-1		6	1/3/07	ND	ND	ND	3.35	14.6	ND	ND	ND	
SS-1		6	1/3/07	ND	ND	ND	2.93	7.3	ND	ND	ND	
SS-2		6	1/3/07	ND	ND	ND	4.01	7.91	ND	ND	ND	
SS-3		6	1/3/07	10.1	ND	ND	47.3	6.70	ND	ND	ND	
B-1		11	1/3/07	ND	ND	ND	2.58	10.3	ND	ND	ND	
B-2		11	1/3/07	ND	ND	ND	2.90	13.4	ND	ND	ND	
B-3		11	1/3/07	ND	ND	ND	2.13	5.94	ND	ND	ND	
B-4		11	1/3/07	ND	ND	ND	3.74	5.46	ND	ND	ND	
B-5		11	1/3/07	ND	ND	ND	3.37	4.69	ND	ND	ND	
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives		Protection of Public Health (Commercial)		16	400	9.3	1,500	1,000	2.8	1,500	1,500	
		Protection of Groundwater		16	820	7.5	NS ⁴⁾	450	0.73	8.3	4	

1) - Milligrams per kilogram
2) - Feet below grade

3) - Not detected
4) - Not Specified

TABLE 47

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

**Summary of Soil Quality - Area D UST-10, UST-A and UST-B Geoprobe Closure Confirmation Samples
Total Metals Analysis**

Sample Location	Sample Depth (ft bg) ²⁾	Date	Concentration (mg/kg) ¹⁾							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium
GP-TANK 10	12-16	1/18/2007	ND ³⁾	90.6	ND	33.1	4.97	ND	ND	ND
GP-TANK 10	20-24	1/18/2007	8.41	68.3	ND	12.4	ND	ND	ND	ND
GP-TANK A	10-15	1/19/2007	ND	115	ND	26.6	16.0	ND	ND	ND
GP-TANK A	25-27	1/19/2007	8.24	66.4	ND	16.7	3.79	ND	ND	ND
GP-TANK B	12-16	1/18/2007	ND	106	ND	24.8	5.12	0.124	ND	ND
GP-TANK B	24-27	1/18/2007	ND	47.1	ND	11.5	4.12	ND	ND	ND
GP-TANK D	15-20	1/19/2007	7.91	53.6	ND	10.7	3.33	ND	ND	ND
GP-TANK D	25-29.5	1/19/2007	13.9	40.2	ND	12.8	3.73	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		16	400	9.3	1,500	1,000	2.8	1,500	1,500
	Protection of Groundwater		16	820	7.5	NS ⁴⁾	450	0.73	8.3	4

1) - Milligrams per kilogram

2) - Feet below grade

3) - Not detected

4) - Not Specified

TABLE 48

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

**Summary of Soil Quality - Area D (Commercial Space) Tank Closure Confirmation Samples
Total Metals Analysis**

Sample Location	Sample Depth (ft bg) ²⁾	Date	Concentration (mg/kg) ¹⁾							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium
GP-TANK 34	4-8	1/15/07	7.8	46.2	ND ³⁾	13.2	97.8	0.0627	ND	ND
GP-TANK 34	24-27	1/15/07	6.45	48.1	ND	12.2	ND	ND	ND	ND
GP-TANK 35	4-8	1/15/07	9.95	50.8	ND	17.5	94.8	ND	ND	ND
GP-TANK 35	24-26	1/15/07	7.79	47.2	ND	16.9	ND	ND	ND	ND
GP-TANK 36	4-8	1/15/07	17.6	452	ND	21.5	484	0.479	ND	ND
GP-TANK 36	28-29.5	1/15/07	11.3	65.2	ND	23.9	ND	ND	ND	ND
GP-TANK C	4-8	1/16/2007	13.3	149	ND	25.8	112	0.350	ND	ND
GP-TANK C	20-24	1/16/2007	7.88	36.8	ND	12	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		16	400	9.3	1,500	1,000	2.8	1,500	1,500
	Protection of Groundwater		16	820	7.5	NS ⁴⁾	450	0.73	8.3	4

1) - Milligrams per kilogram

2) - Feet below grade

3) - Not detected

4) - Not Specified

TABLE 49

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

**Summary of Soil Quality- Area D (Commercial Space) Excavation
Total RCRA Metals - EPA Method 6010 & 7471**

Sample Location	Sample Depth (ft bg) ²⁾	Date	Concentration (mg/kg) ¹⁾							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
B-1	13	4/25/2008	7.41	60.9	ND ³⁾	16.1	51.3	0.11	ND	ND
B-2	13	4/25/2008	8.55	70	ND	29	12.8	ND	19.5	ND
B-3	13	5/12/2008	ND	37.9	ND	15.5	ND	ND	ND	ND
B-4	13	5/12/2008	ND	60.7	ND	25	7.92	ND	ND	ND
B-5	13	5/16/2008								
B-6	13	5/20/2008	ND	54.3	ND	16.4	21.8	0.083	ND	ND
B-7	13	5/20/2008	ND	48.7	ND	18.6	ND	ND	ND	ND
S-1	6	4/25/2008	8.27	63.7	ND	31.7	6.17	ND	ND	ND
S-2	7	5/12/2008	ND	115	ND	19	159	0.2	ND	ND
S-3	7	5/12/2008	ND	91.6	ND	32.1	19.6	0.09	ND	ND
S-4	7	5/12/2008	ND	43	ND	15.5	16.8	ND	ND	ND
S-5	6	5/16/2008								
S-6	7	5/16/2008								
S-7	7	5/20/2008	ND	52.5	ND	19.7	6.21	0.10	ND	ND
S-8	7	5/20/2008	ND	28	ND	12.7	ND	ND	ND	ND
6NYCRR 375-68(b) Restricted Use Soil Cleanup Objectives	Protection of Public Health (Commercial)		16	400	9.3	1,500	1,000	2.8	1,500	1,500
	Protection of Groundwater		16	820	7.5	NS ⁴⁾	450	0.73	4	8.3

1) - Milligrams per kilogram

2) - Feet below grade

3) - Not detected

4) - Not Specified

TABLE 50

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Groundwater Quality - Area A Geoprobe Closure Confirmation Samples
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Date	Chloroethane	Concentration (ug/l) ^{2/}																									
			Acetone	1,1-Dichloroethane	1,1,1-Trichloroethane	Benzene	Trichloroethene	Toluene	Chlorobenzene	cis-1,2-Dichloroethene	Ethylbenzene	o-Xylene	m,p-Xylene	Total Xylenes	Methylene Chloride	Chloroform	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	1,2-Dichlorobenzene	Naphthalene	MTBE
GP-1A WT ^{6/}	1/10/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-1A CL ^{7/}	1/10/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-2A WT	1/10/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-2A CL	1/10/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-3A WT	1/11/2007	ND	11.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0	ND	ND	3.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-3A CL	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-4A WT	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0	ND	ND	3.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-4A CL	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0	ND	ND	6.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5A WT	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5A CL	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0	ND	ND	18.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6A WT	1/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6A CL	1/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0	ND	ND	4.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-DRY WELL WT	1/16/2007	ND	ND	ND	ND	1.2	ND	21,000	4.8	ND	20	4.3	28	32.3	ND	ND	ND	ND	ND	2.4	ND	8.4	ND	ND	ND	9.8	ND	ND
GP-DRY WELL CL	1/16/2007	ND	ND	ND	ND	ND	ND	5,900	2.6	ND	19	4.0	29	33.0	ND	ND	ND	ND	ND	2.3	ND	8.7	ND	ND	ND	9.1	ND	ND
GP-UST PR-1 WT	1/17/2007	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	0.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-1 CL	1/17/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-2 WT	1/17/2007	ND	ND	ND	2.9	ND	2.2	ND	ND	ND	ND	ND	ND	0.0	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-2 CL	1/17/2007	ND	ND	ND	4.4	ND	2.8	ND	ND	ND	ND	ND	ND	0.0	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-3 WT	1/31/2007	ND	ND	ND	ND	1.1	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	ND	ND	ND
GP-UST PR-3 CL	1/31/2007	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND	3.2	ND	ND
NYSDEC ^{4/} TOGS GWQS ^{5/}		5	50	5	5	1	5	5	5	5	5	5	5	5	5	7	5	5	5	5	5	5	5	5	5	5	10	10

1/ Methyl tert butyl ether
2/ Micrograms per liter
3/ Not detected
4/ - New York State Department of Environmental Conservation

5/ Technical & Operational Guidance Series Ground Water Quality Standards
6/ Water Table
7/ Confining Layer

TABLE 51

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Groundwater Quality - Area A Geoprobe Closure Confirmation Samples
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Date	Concentration (ug/l) ¹⁾																											
		1-Methylnaphthalene	2-Methylphenol	4-Methylphenol	Nitrobenzene	Naphthalene	4-Chloro-3-methylphenol	2-Methylnaphthalene	Acenaphthylene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	3,3'-Dichlorobenzidine	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Benzoic Acid
GP-1A WT ⁵⁾	1/10/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-1A CL ⁶⁾	1/10/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-2A WT	1/10/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-2A CL	1/10/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-3A WT	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-3A CL	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-4A WT	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-4A CL	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5A WT	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5A CL	1/11/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6A WT	1/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6A CL	1/12/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-DRY WELL WT	1/16/2007	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-DRY WELL CL	1/16/2007	ND	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-1 WT	1/17/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-1 CL	1/17/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-2 WT	1/17/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-2 CL	1/17/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-3 WT	1/31/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-3 CL	1/31/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC TOGS ³⁾ Groundwater Quality Standards		N/A ⁴⁾	N/A	N/A	0.4*	10 *	N/A	N/A	N/A	20 *	N/A	N/A	50 *	5	50 *	50 *	N/A	50 *	50 *	5 *	0.002 *	0.002 *	0.002 *	0.002 *	ND	0.002 *	N/A	N/A	N/A

1) - Micrograms per liter
2) - Not detected
3) - Technical & Operational Guidance Series
4) - Not available

5) - Water Table
6) - Confining Layer
* - Technical & Operational Guidance Series Ground Water Guidance Value
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B delivera

TABLE 52

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

**Summary of Groundwater Quality - Area A Geoprobe Closure Confirmation Samples
Total Metals Analysis**

Sample Location	Date	Concentration (ug/l) ¹⁾							
		Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium
GP-1A WT ²⁾	1/10/2007	17.0	792	ND ⁴⁾	290	640	1.66	ND	ND
GP-1A CL ³⁾	1/10/2007	12.7	528	ND	169	315	0.805	ND	ND
GP-2A WT	1/10/2007	10.2	497	ND	254	439	0.567	ND	ND
GP-2A CL	1/10/2007	ND	228	ND	43.7	69.5	ND	ND	ND
GP-3A WT	1/11/2007	ND	245	ND	39.9	89.0	ND	ND	ND
GP-3A CL	1/11/2007	48.5	3,690	ND	981	1,770	1.88	ND	ND
GP-4A WT	1/11/2007	NA ⁵⁾	NA	NA	NA	NA	NA	NA	NA
GP-4A CL	1/11/2007	11.3	758	ND	177	503	3.68	ND	ND
GP-5A WT	1/11/2007	ND	ND	ND	13.5	50.1	ND	ND	ND
GP-5A CL	1/11/2007	44.9	4,830	ND	918	3,290	9.69	ND	ND
GP-6A WT	1/12/2007	40.7	2,570	ND	984	270	14.8	ND	6.0
GP-6A CL	1/12/2007	ND	743	ND	239	76.0	9.05	ND	ND
GP-DRY WELL WT	1/16/2007	ND	ND	ND	ND	ND	ND	ND	ND
GP-DRY WELL CL	1/16/2007	ND	ND	ND	ND	11.0	ND	ND	ND
GP-UST PR-1 WT	1/17/2007	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-1 CL	1/17/2007	ND	ND	ND	ND	ND	ND	ND	ND
GP-UST PR-2 WT	1/17/2007	ND	201	ND	ND	ND	ND	ND	ND
GP-UST PR-2 CL	1/17/2007	ND	200	ND	ND	ND	ND	ND	ND
GP-UST PR-3 WT	1/31/2007	ND	1,370	ND	510	ND	0.292	ND	ND
GP-UST PR-3 CL	1/31/2007	9.65	1,230	ND	322	ND	ND	ND	ND
NYSDEC ⁶⁾ TOGS ⁷⁾ Groundwater Quality Standards		25	1,000	5.0	50	25	0.7	50	10

1) - Micrograms per liter

2) - Water Table

3) - Confining Layer

4) - Not detected

5) - Not Analyzed

6) - New York State Department of Environmental Conservation

7) - Technical & Operational Guidance Series

TABLE 53

FORMER RED DEVIL PAINT FACILITY

30 NORTH WEST STREET

MOUNT VERNON, NEW YORK

SITE NO. 3-60-031

Summary of Groundwater Quality - Area B UST Geoprobe Closure Confirmation Samples

Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Date	Concentration (ug/l) ^{2/}																					
		Acetone	Benzene	Toluene	Chlorobenzene	cis-1,2-Dichloroethene	Ethylbenzene	o-Xylene	m,p-Xylene	Total Xylenes	Methylene Chloride	Chloroform	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
GP-2	8/23/2006	ND ^{3/}	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6	8/23/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-9	8/24/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-12	8/24/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	19	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC ^{4/} TOGS GWQS ^{5/}		50	1	5	5	5	5	5	5	5	5	7	5	5	5	5	5	5	5	5	5	10	10

^{1/} Methyl tert butyl ether

^{2/} Micrograms per liter

^{3/} Not detected

^{4/} - New York State Department of Environmental Conservation

^{5/} Technical & Operational Guidance Series Ground Water Quality Standards

TABLE 54

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Groundwater Quality - Area B AST Geoprobe Closure Confirmation Samples
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Date	Concentration (ug/l) ^{2/}																					
		Acetone	Benzene	Toluene	Chlorobenzene	cis-1,2-Dichloroethene	Ethylbenzene	o-Xylene	m,p-Xylene	Total Xylenes	Methylene Chloride	Chloroform	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
GP-AST-1	9/7/2006	ND ^{3/}	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-2	9/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-3	9/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-6	9/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-7	9/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC ^{4/} TOGS GWQS ^{5/}		50	1	5	5	5	5	5	5	5	5	7	5	5	5	5	5	5	5	5	5	10	10

^{1/} Methyl tert butyl ether
^{2/} Micrograms per liter
^{3/} Not detected
^{4/} - New York State Department of Environmental Conservation
^{5/} Technical & Operational Guidance Series Ground Water Quality Standards

TABLE 55

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Groundwater Quality - Area B UST Geoprobe Closure Confirmation Samples
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Date	Concentration (ug/l) ¹⁾																									
		1-Methylnaphthalene	Nitrobenzene	Naphthalene	4-Chloro-3-methylphenol	2-Methylnaphthalene	Acenaphthylene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	3,3'-Dichlorobenzidine	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,I) perylene	Benzoic Acid
GP-2	8/23/2006	ND ²⁾	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6	8/23/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-9	8/24/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-12	8/24/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC TOGS ³⁾ Groundwater Quality Standards		N/A ⁴⁾	0.4*	10 *	N/A	N/A	N/A	20 *	N/A	N/A	50 *	5	50 *	50 *	N/A	50 *	50 *	5 *	0.002 *	0.002 *	0.002 *	0.002 *	ND	0.002 *	N/A	N/A	N/A

1) - Micrograms per liter
2) - Not detected
3) - Technical & Operational Guidance Series

4) - Not available
* - Technical & Operational Guidance Series Ground Water Guidance V
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliver

TABLE 56

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Groundwater Quality - Area B AST Geoprobe Closure Confirmation Samples
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Date	Concentration (ug/l) ¹⁾																									
		1-Methylnaphthalene	Nitrobenzene	Naphthalene	4-Chloro-3-methylphenol	2-Methylnaphthalene	Acenaphthylene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	3,3'-Dichlorobenzidine	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Benzoic Acid
GP-AST-1	9/7/2006	ND ²⁾	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-2	9/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-3	9/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-6	9/6/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-AST-7	9/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC TOGS ³⁾ Groundwater Quality Standards		N/A ⁴⁾	0.4*	10 *	N/A	N/A	N/A	20 *	N/A	N/A	50 *	5	50 *	50 *	N/A	50 *	50 *	5 *	0.002 *	0.002 *	0.002 *	0.002 *	ND	0.002 *	N/A	N/A	N/A

1) - Micrograms per liter
2) - Not detected
3) - Technical & Operational Guidance Series

4) - Not available
* - Technical & Operational Guidance Series Ground Water Guidance V
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliver

TABLE 57
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Groundwater Quality - Area C Geoprobe Closure Confirmation Samples
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Date	Concentration (ug/l) ^{2/}																								
		Chloroethane	Acetone	1,1-Dichloroethane	1,1,1- Trichloroethane	Benzene	Toluene	Chlorobenzene	cis-1,2-Dichloroethene	Ethylbenzene	o-Xylene	m,p-Xylene	Total Xylenes	Methylene Chloride	Chloroform	Tetrachloroethene	Isopropyl benzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
GP-TANK D WT ^{3/}	1/19/2007	ND ^{4/}	ND	ND	ND	ND	430	ND	ND	72	ND	ND	0	ND	ND	ND	110	190	ND	ND	680	20	ND	20	96	ND
GP-TANK D CL ^{5/}	1/19/2007	ND	ND	ND	ND	ND	610	ND	ND	90	ND	ND	0	ND	ND	ND	130	220	ND	ND	790	22	ND	21	120	ND
NYSDEC TOGS ^{6/} Groundwater Quality Standards		5	50	5	5	1	5	5	5	5	5	5	5	5	7	5	5	5	5	5	5	5	5	5	10	10

1/ Methyl tert butyl ether
2/ Micrograms per liter
3/ Water Table
4/ Not detected

5/ Confining Layer
6/ Technical & Operational Guidance Series

TABLE 58

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Groundwater Quality - Hydraulic Barrier Geoprobe Borings
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE^{1/}

Sample Location	Date		Concentration (ug/l) ^{2/}																						
		Chloroethane	Acetone	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	cis-1,2-Dichloroethene	Ethylbenzene	o-Xylene	m,p-Xylene	Total Xylenes	Methylene Chloride	Chloroform	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
GP-HB-1 WT ^{5/}	1/22/2007	ND ^{3/}	ND	ND	24	2,800	ND	ND	ND	21	59	80	ND	ND	ND	ND	ND	30	ND	82	ND	ND	ND	ND	ND
GP-HB-1 CL ^{6/}	1/22/2007	500	ND	370	940	120,000	ND	ND	ND	240	600	840	ND	ND	ND	ND	ND	210	ND	550	ND	ND	ND	ND	ND
GP-HB-2 WT	1/22/2007	ND	ND	ND	17	3,200	ND	ND	54	69	180	249	ND	ND	ND	ND	ND	63	26	190	ND	ND	ND	ND	ND
GP-HB-2 CL	1/22/2007	ND	ND	ND	13	2,600	ND	ND	43	54	160	214	ND	ND	ND	ND	ND	66	25	180	ND	ND	ND	ND	ND
GP-HB-3 WT	1/23/2007	ND	ND	ND	ND	ND	ND	ND	280	200	1,200	1,400	ND	ND	ND	51	70	250	ND	760	ND	ND	ND	120	ND
GP-HB-3 CL	1/23/2007	ND	ND	ND	ND	26	ND	ND	300	210	1,200	1,410	ND	ND	ND	56	80	270	ND	830	20	ND	ND	130	ND
GP-HB-4 WT	1/23/2007	ND	ND	ND	ND	ND	ND	ND	26	ND	33	33	ND	ND	ND	34	51	81	ND	450	ND	ND	ND	ND	ND
GP-HB-4 CL	1/23/2007	ND	ND	ND	ND	ND	ND	ND	56	ND	68	68	ND	ND	ND	63	110	170	ND	1,000	ND	ND	ND	57	ND
GP-HB-5 WT	1/24/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	ND	ND	ND	34	54	76	ND	560	ND	ND	ND	ND	ND
GP-HB-5 CL	1/24/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	ND	ND	ND	37	56	86	ND	620	ND	ND	ND	ND	ND
GP-HB-6 WT	1/25/2007	ND	ND	ND	17	ND	ND	ND	300	ND	970	970	ND	ND	ND	91	150	440	ND	1,400	29	34	ND	170	ND
GP-HB-6 CL	1/25/2007	ND	ND	ND	ND	ND	ND	ND	180	ND	560	560	ND	ND	ND	71	110	310	ND	1,000	26	26	ND	110	ND
GP-HB-7 WT	1/30/2007	ND	ND	ND	ND	ND	ND	ND	180	ND	320	320	ND	ND	ND	66	98	220	ND	960	23	21	ND	130	ND
GP-HB-7 CL	1/30/2007	ND	ND	ND	ND	ND	ND	ND	200	ND	350	350	ND	ND	ND	73	110	270	ND	1,100	28	27	ND	130	ND
GP-HB-8 WT	1/26/2007	ND	ND	ND	ND	ND	ND	ND	130	ND	410	410	ND	ND	ND	42	64	170	ND	400	ND	ND	ND	ND	ND
GP-HB-8 CL	1/26/2007	ND	ND	ND	ND	ND	ND	ND	160	ND	590	590	ND	ND	ND	53	84	240	ND	590	22	ND	ND	77	ND
GP-HB-9 WT	1/26/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	140	140	ND	ND	ND	39	57	85	ND	520	ND	ND	ND	57	ND
GP-HB-9 CL	1/26/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	120	120	ND	ND	ND	35	53	77	ND	470	ND	ND	ND	ND	ND
NYSDEC TOGS ^{4/} Groundwater Quality Standards		5	50	5	1	5	5	5	5	5	5	5	5	7	5	5	5	5	5	5	5	5	5	10	10

1/ Methyl tert butyl ether

2/ Micrograms per liter

3/ Not detected

4/ - Technical & Operational Guidance Series

5/ Water Table

6/ Confining Layer

TABLE 59

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Groundwater Quality - Area C Geoprobe Closure Confirmation Samples
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Date	Concentration (ug/l) ¹⁾																											
		1-Methylnaphthalene	2-Methylphenol	4-Methylphenol	Nitrobenzene	Naphthalene	4-Chloro-3-methylphenol	2-Methylnaphthalene	Acenaphthylene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	3,3'-Dichlorobenzidine	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Benzoic Acid
GP-TANK D WT ²⁾	1/19/2007	ND	ND	ND	ND	61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK D CL ³⁾	1/19/2007	ND	ND	ND	ND	170	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC TOGS ⁶⁾ Groundwater Quality Stanards		N/A	N/A	N/A	0.4*	10 *	N/A	N/A	N/A	20 *	N/A	N/A	50 *	5	50 *	50 *	N/A	50 *	50 *	5 *	0.002 *	0.002 *	0.002 *	0.002 *	ND	0.002 *	N/A	N/A	N/A

1) - Micrograms per liter

2) - Water Table

3) - Not detected

4) Confining Layer

5) - Not Available

6) - Technical & Operational Guidance Series

* - Technical & Operational Guidance Series Ground Water Guidance Value

Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverable

TABLE 60

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Groundwater Quality - Hydraulic Barrier Geoprobe Borings
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Date	Concentration (ug/l) ¹⁾																											
		1-Methylnaphthalene	2-Methylphenol	4-Methylphenol	Nitrobenzene	Naphthalene	4-Chloro-3-methylphenol	2-Methylnaphthalene	Acenaphthylene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	3,3'-Dichlorobenzidine	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,i) perylene	Benzoic Acid
GP-HB-1 WT ⁵⁾	1/22/2007	ND ²⁾	17	26	ND	24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-1 CL ⁶⁾	1/22/2007	ND	32	48	ND	79	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-2 WT	1/22/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-HB-2 CL	1/22/2007	ND	ND	ND	ND	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-3 WT	1/23/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-HB-3 CL	1/23/2007	ND	ND	ND	ND	180	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-4 WT	1/23/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-HB-4 CL	1/23/2007	ND	ND	ND	ND	69	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-5 WT	1/24/2007	ND	ND	ND	ND	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-5 CL	1/24/2007	ND	ND	ND	ND	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-6 WT	1/25/2007	ND	ND	ND	ND	31,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-6 CL	1/25/2007	ND	ND	ND	ND	120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-7 WT	1/30/2007	ND	ND	ND	ND	99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-7 CL	1/30/2007	ND	ND	ND	ND	96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-8 WT	1/26/2007	ND	ND	ND	ND	36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-8 CL	1/26/2007	ND	ND	ND	ND	52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-9 WT	1/26/2007	ND	ND	ND	ND	41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-9 CL	1/26/2007	ND	ND	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC TOGS ³⁾ Groundwater Quality Standards		N/A ⁴⁾	N/A	N/A	0.4*	10 *	N/A	N/A	N/A	20 *	N/A	N/A	50 *	5	50 *	50 *	N/A	50 *	50 *	5 *	0.002 *	0.002 *	0.002 *	0.002 *	ND	0.002 *	N/A	N/A	N/A

1) - Micrograms per liter
2) - Not detected
3) - Technical & Operational Guidance Series Ground Water Quality Standards
4) - Not available

5) - Water Table
6) - Confining Layer
* - Technical & Operational Guidance Series Ground Water Guidance Value
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 61

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

**Summary of Groundwater Quality - Area C Geoprobe Closure Confirmation Samples
Total Metals Analysis**

Sample Location	Date	Concentration (ug/l) ¹⁾							
		Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium
GP-TANK D WT ²⁾	1/19/2007	ND ³⁾	ND	ND	ND	ND	ND	ND	ND
GP-TANK D CL ⁴⁾	1/19/2007	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC ⁵⁾ TOGS ⁶⁾ Groundwater Quality Standards		25	1,000	5.0	50	25	0.7	50	10

1) - Micrograms per liter

2) - Water Table

3) - Not detected

4) - Confining Layer

5) - New York State Department of Environmental Conservation

6) - Technical & Operational Guidance Series

TABLE 62

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

**Summary of Groundwater Quality - Hydraulic Barrier Geoprobe Boring
Total Metals Analysis**

Sample Location	Date	Concentration (ug/l) ¹⁾							
		Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium
GP-HB-1 WT ²⁾	1/22/2007	ND ⁴⁾	345	ND	11.9	ND	0.259	ND	ND
GP-HB-1 CL ³⁾	1/22/2007	ND	334	ND	24.2	ND	ND	ND	ND
GP-HB-2 WT	1/22/2007	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-2 CL	1/22/2007	ND	231	ND	25.8	ND	ND	ND	ND
GP-HB-3 WT	1/23/2007	ND	211	ND	ND	ND	ND	ND	ND
GP-HB-3 CL	1/23/2007	ND	424	ND	81.3	67	ND	ND	ND
GP-HB-4 WT	1/23/2007	ND	ND	ND	12.5	ND	ND	ND	ND
GP-HB-4 CL	1/23/2007	5.68	462	ND	135	64	0.239	ND	ND
GP-HB-5 WT	1/24/2007	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-5 CL	1/24/2007	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-6 WT	1/25/2007	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-6 CL	1/25/2007	ND	ND	ND	17.4	ND	ND	ND	ND
GP-HB-7 WT	1/30/2007	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-7 CL	1/30/2007	ND	340	ND	56.8	ND	0.46	ND	ND
GP-HB-8 WT	1/26/2007	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-8 CL	1/26/2007	ND	446	ND	100	ND	ND	ND	ND
GP-HB-9 WT	1/26/2007	ND	ND	ND	ND	ND	ND	ND	ND
GP-HB-9 CL	1/26/2007	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC ⁵⁾ TOGS ⁶⁾ Groundwater Quality Standards		25	1,000	5.0	50	25	0.7	50	10

1) - Micrograms per liter

2) - Water Table

3) - Confining Layer

4) - Not detected

5) - New York State Department of Environmental Conservation

6) - Technical & Operational Guidance Series

TABLE 63

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Groundwater Quality - Area D (Alleyway) UST Geoprobe Closure Confirmation Samples
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Date		Concentration (ug/l) ^{2/}																							
		Chloroethane	Acetone	1,1-Dichloroethane	1,1,1- Trichloroethane	Benzene	Toluene	Chlorobenzene	cis-1,2-Dichloroethene	Ethylbenzene	o-Xylene	m,p-Xylene	Total Xylenes	Methylene Chloride	Chloroform	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
GP-TANK 10 WT ^{3/}	1/18/2007	ND ^{4/}	ND	ND	ND	ND	200	ND	ND	510	1,100	2,500	ND	ND	ND	ND	ND	220	760	ND	2,200	ND	ND	ND	ND	ND
GP-TANK 10 CL ^{5/}	1/18/2007	ND	ND	ND	ND	10	85	ND	23	330	630	1,500	ND	130	ND	ND	76	110	380	ND	1,100	25	39	ND	150	ND
GP-TANK A WT	1/19/2007	ND	ND	440	360	1,500	240,000	ND	ND	470	470	1,400	ND	ND	ND	ND	ND	ND	220	ND	670	ND	ND	ND	ND	ND
GP-TANK A CL	1/19/2007	ND	ND	350	380	1,200	230,000	ND	ND	540	490	1,600	ND	ND	ND	ND	ND	ND	240	ND	620	ND	ND	ND	ND	ND
GP-TANK B WT	1/18/2007	ND	ND	ND	ND	ND	24,000	ND	ND	240	ND	590	ND	ND	ND	ND	ND	ND	ND	ND	570	ND	ND	ND	ND	ND
GP-TANK B CL	1/18/2007	ND	ND	ND	ND	ND	28,000	ND	ND	290	ND	770	ND	ND	ND	ND	ND	ND	250	ND	850	ND	ND	ND	ND	ND
NYSDEC TOGS ^{6/} Groundwater Quality Standards		5	50	5	5	1	5	5	5	5	5	5	5	5	7	5	5	5	5	5	5	5	5	5	10	10

^{1/} Methyl tert butyl ether
^{2/} Micrograms per liter
^{3/} Water Table
^{4/} Not detected

^{5/} Confining Layer
^{6/} Technical & Operational Guidance Series

TABLE 64

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Groundwater Quality - Area D (Commercial Space) UST Geoprobe Closure Confirmation Samples
Volatile Organic Compounds - EPA Method 8260, Modified to Include MTBE ^{1/}

Sample Location	Date		Concentration (ug/l) ^{2/}																						
		Chloroethane	Acetone	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	cis-1,2-Dichloroethene	Ethylbenzene	o-Xylene	m,p-Xylene	Total Xylenes	Methylene Chloride	Chloroform	Tetrachloroethene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	MTBE
GP-TANK 34 WT ^{3/}	1/15/2007	ND ^{4/}	ND	ND	16	58	ND	ND	510	1,200	2,300	3,500	ND	ND	ND	160	280	840	ND	1,700	62	62	ND	290	ND
GP-TANK 34 CL ^{5/}	1/15/2007	ND	ND	ND	14	47	ND	ND	400	940	1,900	2,840	ND	ND	ND	130	230	630	380	2,500	46	42	ND	230	ND
GP-TANK 35 WT	1/18/2007	ND	ND	ND	ND	49	ND	ND	240	460	1,100	1,560	ND	ND	ND	59	86	320	ND	930	21	22	ND	120	ND
GP-TANK 35 CL	1/18/2007	ND	ND	ND	14	95	ND	ND	330	660	1,600	2,260	ND	ND	ND	67	100	380	ND	1,100	23	27	ND	160	ND
GP-TANK 36 WT	1/16/2007	ND	ND	ND	ND	36	ND	ND	360	280	1,600	1,880	ND	ND	ND	76	100	360	ND	1,000	25	27	ND	180	ND
GP-TANK36 CL	1/16/2007	ND	ND	ND	ND	40	ND	ND	430	330	1,900	2,230	ND	ND	ND	120	180	600	ND	1,600	50	82	ND	240	ND
GP-TANK C WT	1/16/2007	ND	ND	ND	ND	ND	ND	ND	99	ND	240	240	ND	ND	2.6	39	58	78	5.4	620	22	14	ND	75	ND
GP-TANK C CL	1/16/2007	ND	ND	ND	ND	ND	ND	ND	74	ND	180	180	ND	ND	3.3	33	52	74	5.4	460	22	15	ND	63	ND
NYSDEC TOGS ^{6/} Groundwater Quality Standards		5	50	5	1	5	5	5	5	5	5	5	5	7	5	5	5	5	5	5	5	5	5	10	10

^{1/} Methyl tert butyl ether
^{2/} Micrograms per liter
^{3/} Water Table
^{4/} Not detected

^{5/} Confining Layer
^{6/} Technical & Operational Guidance Series

TABLE 65

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Groundwater Quality - Area D (Alleyway) UST Geoprobe Closure Confirmation Samples
Semi-Volatile Organic Compounds - EPA Method 8270

Sample Location	Date	Concentration (ug/l) ¹⁾																											
		1-Methylnaphthalene	2-Methylphenol	4-Methylphenol	Nitrobenzene	Naphthalene	4-Chloro-3-methylphenol	2-Methylnaphthalene	Acenaphthylene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	3,3'-Dichlorobenzidine	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,I) perylene	Benzoic Acid
GP-TANK 10 WT ²⁾	1/18/2007	ND ³⁾	ND	ND	ND	670	ND	48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK 10 CL ⁴⁾	1/18/2007	ND	ND	ND	ND	180	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK A WT	1/19/2007	ND	27	40	ND	140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK A CL	1/19/2007	NA ⁵⁾	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-TANK B WT	1/18/2007	ND	41	59	ND	51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK B CL	1/18/2007	ND	38	56	ND	48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC TOGS ⁶⁾ Groundwater Quality Standards		N/A	N/A	N/A	0.4*	10 *	N/A	N/A	N/A	20 *	N/A	N/A	50 *	5	50 *	50 *	N/A	50 *	50 *	5 *	0.002 *	0.002 *	0.002 *	0.002 *	ND	0.002 *	N/A	N/A	N/A

1) - Micrograms per liter
2) - Water Table
3) - Not detected
4) - Confining Layer

5) - Not Available
6) - Technical & Operational Guidance Series
* - Technical & Operational Guidance Series Ground Water Guidance Value
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

TABLE 66																													
FORMER RED DEVIL PAINT FACILITY 30 NORTH WEST STREET MOUNT VERNON, NEW YORK SITE NO. 3-60-031																													
Summary of Groundwater Quality - Area D (Commercial Space) UST Geoprobe Closure Confirmation Samples Semi-Volatile Organic Compounds - EPA Method 8270																													
Sample Location	Date	Concentration (ug/l) ¹⁾																											
		1-Methylnaphthalene	2-Methylphenol	4-Methylphenol	Nitrobenzene	Naphthalene	4-Chloro-3-methylphenol	2-Methylnaphthalene	Acenaphthylene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) phthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	3,3' -Dichlorobenzidine	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,l) perylene	Benzoic Acid
GP-TANK 34 WT ⁵⁾	1/15/2007	ND	ND	ND	ND	250	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK 34 CL ⁶⁾	1/15/2007	ND	ND	ND	ND	420	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK 35 WT	1/18/2007	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GP-TANK 35 CL	1/18/2007	ND	ND	ND	ND	620	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK 36 WT	1/16/2007	ND	ND	ND	ND	130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK 36 CL	1/16/2007	ND	ND	ND	ND	130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK C WT	1/16/2007	ND	ND	ND	ND	52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK C CL	1/16/2007	ND	ND	ND	ND	48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC'TOGS ³⁾ Groundwater Quality Standards		N/A ⁴⁾	N/A	N/A	0.4*	10 *	N/A	N/A	N/A	20 *	N/A	N/A	50 *	5	50 *	50 *	N/A	50 *	50 *	5 *	0.002 *	0.002 *	0.002 *	0.002 *	ND	0.002 *	N/A	N/A	N/A

1) - Micrograms per liter

2) - Not detected

3) - Technical & Operational Guidance Series

4) - Not available

5) - Water Table

6) - Confining Layer

* - Technical & Operational Guidance Series Ground Water Guidance Value

Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category

TABLE 67

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

**Summary of Groundwater Quality - Area D (Alleyway) UST Geoprobe Closure Confirmation Samples
Total Metals Analysis**

Sample Location	Date	Concentration (ug/l) ¹⁾							
		Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium
GP-TANK 10 WT ²⁾	1/18/2007	7.44	519	ND	126	ND	ND	ND	ND
GP-TANK 10 CL ³⁾	1/18/2007	ND ⁴⁾	ND	ND	ND	ND	ND	ND	ND
GP-TANK A WT	1/19/2007	ND	218	ND	ND	ND	ND	ND	ND
GP-TANK A CL	1/19/2007	NA ⁵⁾	NA	NA	NA	NA	NA	NA	NA
GP-TANK B WT	1/18/2007	ND	256	ND	ND	ND	ND	ND	ND
GP-TANK B CL	1/18/2007	ND	334	ND	ND	ND	ND	ND	ND
NYSDEC ⁶⁾ TOGS ⁷⁾ Groundwater Quality Standards		25	1,000	5.0	50	25	0.7	50	10

1) - Micrograms per liter

2) - Water Table

3) - Confining Layer

4) - Not detected

5) - Not Analyzed

6) - New York State Department of Environmental Conservation

7) - Technical & Operational Guidance Series

TABLE 68

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

**Summary of Groundwater Quality - Area D (Commercial Space) UST Geoprobe Closure Confirmation Samples
Total Metals Analysis**

Sample Location	Date	Concentration (ug/l) ¹⁾							
		Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Silver	Selenium
GP-TANK 34 WT ²⁾	1/15/2007	ND ⁴⁾	ND	ND	ND	ND	ND	ND	ND
GP-TANK 34 CL ³⁾	1/15/2007	ND	205	ND	ND	ND	ND	ND	ND
GP-TANK 35 WT	1/18/2007	N/A ⁵⁾	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GP-TANK 35 CL	1/18/2007	ND	240	ND	ND	ND	ND	ND	ND
GP-TANK 36 WT	1/16/2007	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK 36 CL	1/16/2007	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK C WT	1/16/2007	ND	ND	ND	ND	ND	ND	ND	ND
GP-TANK C CL	1/16/2007	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC ⁶⁾ TOGS ⁷⁾ Groundwater Quality Standards		25	1,000	5.0	50	25	0.7	50	10

1) - Micrograms per liter

2) - Water Table

3) - Confining Layer

4) - Not detected

5) - Not Analyzed

6) - New York State Department of Environmental Conservation

7) - Technical & Operational Guidance Series

Table 69

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

**Summary of Soil Vapor Intrusion Sampling (Area A) - EPA Method TO-15
Samples Collected October 3, 2006**

Compound	Concentration (ug/m ³)							NYSDOH Air Guidance Value (ug/m ³)
	SS-A1	SS-A2	SS-A3	SS-A4	SS-A5	Indoor Air Area A	Indoor Air Area A (SIM mode)	
Dichlorodifluoromethane	8,100	1,400	1,600	3,300	750	9.6	NA	NE
Chlorodifluoromethane	ND	ND	ND	ND	ND	4.3	NA	NE
Freon 114	ND	ND	ND	ND	ND	ND	NA	NE
Chloromethane	ND	ND	ND	ND	ND	1.2 J	NA	NE
Vinyl Chloride	ND	ND	ND	ND	ND	ND	<0.023	NE
1,3-Butadiene	ND	ND	ND	ND	ND	ND	NA	NE
Bromomethane	ND	ND	ND	ND	ND	ND	NA	NE
Chloroethane	ND	ND	ND	ND	ND	ND	NA	NE
Dichlorofluoromethane	ND	ND	ND	ND	ND	ND	NA	NE
Trichlorofluoromethane	7.5	5.3 J	ND	ND	5.9	7.2	NA	NE
Pentane	ND	4.8	5.9 J	22 J	12	7.3	NA	NE
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	NA	NE
Freon 113	4.5 J	ND	ND	ND	ND	ND	NA	NE
Acetone	11	67 J	61	350	57	40 J	NA	NE
Carbon Disulfide	ND	ND	ND	170	ND	1.2 J	NA	NE
3-Chloropropene	ND	ND	ND	ND	ND	ND	NA	NE
Methylene Chloride	1.8 J	5	16 J	150	4.3	9.4	NA	60
trans-1,2-Dichloroethene	1.2 J	ND	ND	ND	ND	ND	NA	NE
Methyl t-Butyl Ether	ND	ND	ND	ND	ND	ND	NA	NE
Hexane	ND	4.5	ND	48	1.6 J	4.7	NA	NE
1,1-Dichloroethane	1.3 J	2.1 J	12 J	ND	150	ND	NA	NE
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	NA	NE
2-Butanone	1.6 J	5.0 J	ND	260	4.0 J	5.8 J	NA	NE
Chloroform	19	6.3	46 J	ND	29	ND	NA	NE
1,1,1-Trichloroethane	390	82	180	56	120	ND	NA	NE
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	NA	NE
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	NA	NE
Benzene	ND	2.2 J	ND	7.7 J	0.99 J	3.4	NA	NE
Isooctane	ND	2.5 J	ND	ND	1.1 J	3.7 J	NA	NE
Heptane	ND	2.6 J	ND	ND	1.6 J	4.1 J	NA	NE
Trichloroethene	5.3 J	ND	20 J	ND	3.4 J	ND	0.54	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	NA	NE
Dibromomethane	ND	ND	ND	ND	ND	ND	NA	NE
Bromodichloromethane	2.1 J	ND	ND	ND	ND	ND	NA	NE
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	NA	NE
4-Methyl-2-Pentanone	2.6 J	ND	ND	ND	ND	64 J	NA	NE
Toluene	14	41	55	140	34	16	NA	NE
Octane	ND	1.3 J	ND	ND	ND	ND	NA	NE
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	NA	NE
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	NA	NE
Tetrachloroethene	630	65	460	110	420	3.4 J	3.80	100
2-Hexanone	ND	ND	ND	ND	ND	ND	NA	NE

NYSDOH - New York State Department of Health
ug/m³ - micrograms per cubic meter
J - Estimated Value

NE - Not Established
NA - Not Analyzed
SIM - Selected Ion Monitoring

concentration exceeds 500 ug/m³

Note - Propane detected in SS-A5 at 25 ppmv (0.0025%)


**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling (Area A) - EPA Method TO-15
Samples Collected October 3, 4, 5, 6, 2006

Compound	Concentration (ug/m ³)							NYSDOH Air Guidance Value (ug/m ³)
	SS-A1	SS-A2	SS-A3	SS-A4	SS-A5	Indoor Air Area A	Indoor Air Area A (SIM mode)	
Dibromochloromethane	ND	ND	ND	ND	ND	ND	NA	NE
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	NA	NE
Chlorobenzene	ND	ND	ND	17 J	ND	ND	NA	NE
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	NA	NE
Ethylbenzene	1.7 J	4.2 J	ND	20 J	3.0 J	1.8 J	NA	NE
m/p-Xylene	7.0	14	13 J	64	12	5.1	NA	NE
o-Xylene	1.9 J	3.7 J	ND	42 J	3.0 J	2.0 J	NA	NE
Styrene	ND	ND	ND	44.	ND	0.89 J	NA	NE
Bromoform	ND	ND	ND	ND	ND	ND	NA	NE
Cumene	ND	1.1 J	ND	ND	ND	ND	NA	NE
1,1,2,2-Tetrachloroethane	ND	ND	ND	85	ND	ND	NA	NE
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	NA	NE
Bromobenzene	ND	ND	ND	ND	ND	ND	NA	NE
4-Ethyltoluene	2.0 J	7.0	ND	ND	1.4 J	2.9 J	NA	NE
1,3,5-Trimethylbenzene	ND	2.2 J	ND	150	1.4 J	ND	NA	NE
1,2,4-Trimethylbenzene	2.8 J	6.9	ND	180	5.9	2.6 J	NA	NE
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	NA	NE
1,4-Dichlorobenzene	ND	ND	ND	97	ND	3.5 J	NA	NE
1,2-Dichlorobenzene	ND	ND	ND	120	ND	ND	NA	NE
Hexachloroethane	ND	ND	ND	ND	ND	ND	NA	NE

NYSDOH - New York State Department of Health
ug/m3 - micrograms per cubic meter
J - Estimated Value

NE - Not Established
NA - Not Analyzed
SIM - Selected Ion Monitoring

 concentration exceeds 500 ug/m³

Note - Propane detected in SS-A5 at 25 ppmv (0.0025%)

TABLE 70

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling (Area B) - EPA Method TO-15
Samples Collected October 4, 2006

Compound	Concentration (ug/m ³)					NYSDOH Air Guidance Value (ug/m ³)
	SS-B1	SS-B2	SS-B3	Indoor Air Area B	Indoor Air Area B (SIM mode)	
Dichlorodifluoromethane	24	ND	7.8 J	3.0 J	NA	NE
Chlorodifluoromethane	ND	ND	ND	5.3	NA	NE
Freon 114	ND	ND	ND	ND	NA	NE
Chloromethane	ND	ND	ND	0.93 J	NA	NE
Vinyl Chloride	ND	ND	ND	ND	< 0.023	NE
1,3-Butadiene	ND	ND	ND	ND	NA	NE
Bromomethane	ND	ND	ND	ND	NA	NE
Chloroethane	ND	ND	ND	ND	NA	NE
Dichlorofluoromethane	ND	ND	ND	ND	NA	NE
Trichlorofluoromethane	2.5 J	ND	ND	1.9 J	NA	NE
Pentane	2.1 J	240	1.4 J	6.9	NA	NE
1,1-Dichloroethene	ND	ND	ND	ND	NA	NE
Freon 113	ND	ND	ND	ND	NA	NE
Acetone	40	ND	100	28	NA	NE
Carbon Disulfide	ND	ND	ND	1.5 J	NA	NE
3-Chloropropene	ND	ND	ND	ND	NA	NE
Methylene Chloride	11	ND	3.8 J	8.9	NA	60
trans-1,2-Dichloroethene	ND	ND	ND	ND	NA	NE
Methyl t-Butyl Ether	ND	ND	ND	ND	NA	NE
Hexane	1.7 J	37	1.4 J	4.6	NA	NE
1,1-Dichloroethane	ND	ND	2.3 J	ND	NA	NE
cis-1,2-Dichloroethene	0.91 J	ND	ND	ND	NA	NE
2-Butanone	5.9	ND	13	5.7 J	NA	NE
Chloroform	ND	14	3.1 J	ND	NA	NE
1,1,1-Trichloroethane	62	58	18	ND	NA	NE
Carbon Tetrachloride	ND	ND	ND	ND	NA	NE
1,2-Dichloroethane	ND	ND	ND	ND	NA	NE
Benzene	1.5 J	5.2	1.3 J	3.7	NA	NE
Isooctane	0.93 J	35	ND	3.3 J	NA	NE
Heptane	ND	9.2	ND	2.3 J	NA	NE
Trichloroethene	1.5 J	ND	ND	ND	0.54	5
1,2-Dichloropropane	ND	ND	ND	ND	NA	NE
Dibromomethane	ND	ND	ND	ND	NA	NE
Bromodichloromethane	ND	ND	ND	ND	NA	NE
cis-1,3-Dichloropropene	ND	ND	ND	ND	NA	NE
4-Methyl-2-Pentanone	3.5 J	ND	ND	ND	NA	NE
Toluene	43	37	100	15	NA	NE
Octane	ND	1.7 J	ND	ND	NA	NE
trans-1,3-Dichloropropene	ND	ND	ND	ND	NA	NE
1,1,2-Trichloroethane	ND	ND	ND	ND	NA	NE
Tetrachloroethene	340	150	34	4.3 J	6.2	100
2-Hexanone	ND	ND	ND	ND	NA	NE

NYSDOH - New York State Department of Health

ug/m3 - micrograms per cubic meter

J - Estimated Value

NE - Not Established

NA - Not Analyzed

SIM - Selected Ion Monitoring

concentration exceeds 500 ug/m³

Note - Propane detected in SS-B2 at 1200 ppmv (0.12%)


**RED DEVIL PAINT
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling (Area B) - EPA Method TO-15
Samples Collected October 4, 2006

Compound	Concentration (ug/m ³)					NYSDOH Air Guidance Value (ug/m ³)
	SS-B1	SS-B2	SS-B3	Indoor Air Area B	Indoor Air Area B (SIM mode)	
Dibromochloromethane	ND	ND	ND	ND	NA	NE
1,2-Dibromoethane	ND	ND	ND	ND	NA	NE
Chlorobenzene	ND	ND	ND	ND	NA	NE
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	NA	NE
Ethylbenzene	4.0 J	3.4 J	7.6 J	2.5 J	NA	NE
m/p-Xylene	16	13	30	7.1	NA	NE
o-Xylene	4.8	3.6 J	6.9 J	2.3 J	NA	NE
Styrene	ND	ND	ND	ND	NA	NE
Bromoform	ND	ND	ND	ND	NA	NE
Cumene	ND	ND	ND	ND	NA	NE
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	NA	NE
1,2,3-Trichloropropane	ND	ND	ND	ND	NA	NE
Bromobenzene	ND	ND	ND	ND	NA	NE
4-Ethyltoluene	5.6	4.3 J	5.4 J	3.2 J	NA	NE
1,3,5-Trimethylbenzene	2.0 J	1.8 J	2.0 J	1.5 J	NA	NE
1,2,4-Trimethylbenzene	7.4	6.1	6.2 J	4.4 J	NA	NE
1,3-Dichlorobenzene	ND	ND	ND	ND	NA	NE
1,4-Dichlorobenzene	3.4 J	1.7 J	ND	4.7 J	NA	NE
1,2-Dichlorobenzene	ND	ND	ND	ND	NA	NE
Hexachloroethane	ND	1.9 J	ND	ND	NA	NE

NYSDOH - New York State Department of Health
ug/m3 - micrograms per cubic meter
J - Estimated Value

NE - Not Established
NA - Not Analyzed
SIM - Selected Ion Monitoring

 concentration exceeds 500 ug/m³

Note - Propane detected in SS-B2 at 1200 ppmv (0.12%)

Table 71

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Soil Vapor Intrusion Sampling (Area C) - EPA Method TO-15

Samples Collected October 5, 2006

Compound	Concentration (ug/m ³)										NYSDOH Air Guidance Value (ug/m ³)
	SS-C1	SS-C2	SS-C3	SS-C4	SS-C5	SS-C6	SS-C7	SS-C8	Indoor Air Area C	Indoor Air Area C (SIM mode)	
Dichlorodifluoromethane	5.5	ND	4.0 J	4.4 J	ND	6.7	2.0 J	490 J	2.3 J	NA	NE
Chlorodifluoromethane	ND	ND	0.85 J	1.2 J	120 J	ND	2.3 J	110 J	ND	NA	NE
Freon 114	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Chloromethane	3.7	ND	0.72 J	ND	ND	0.54 J	ND	ND	0.62 J	NA	NE
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.023	NE
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Chloroethane	ND	ND	ND	ND	ND	ND	ND	200 J	ND	NA	NE
Dichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Trichlorofluoromethane	5.4 J	ND	2.5 J	7.5	ND	4.4 J	ND	200 J	1.2 J	NA	NE
Pentane	1.9 J	250 J	ND	ND	450	0.74 J	8.9	670	ND	NA	NE
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Freon 113	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Acetone	21	1,700	11	16	1,600	30	55	2,400	8.2	NA	NE
Carbon Disulfide	ND	500	ND	ND	1,100	ND	ND	1,100	ND	NA	NE
β-Chloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Methylene Chloride	3.3 J	810	ND	ND	790	6.6	29	830	0.73 J	NA	60
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Methyl t-Butyl Ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Hexane	ND	1,400	ND	0.92 J	1,200	ND	1.8 J	710	ND	NA	NE
1,1-Dichloroethane	4.1	ND	ND	0.97 J	ND	ND	ND	410	ND	NA	NE
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
2-Butanone	ND	550 J	ND	ND	ND	6.7	13	1,500	1.7 J	NA	NE
Chloroform	37	ND	ND	1.7 J	ND	ND	ND	ND	ND	NA	NE
1,1,1-Trichloroethane	67	ND	5.9	17	ND	17	4.4 J	1,300	ND	NA	NE
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Benzene	ND	83 J	ND	ND	ND	ND	ND	ND	ND	NA	NE
Isooctane	ND	ND	ND	1.7 J	ND	ND	ND	ND	ND	NA	NE
Heptane	ND	680	ND	2.7 J	ND	1.4 J	3.5 J	310 J	ND	NA	NE
Trichloroethene	3.9 J	ND	2.0 J	67	ND	1.2 J	13	ND	ND	<0.11	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
4-Methyl-2-Pentanone	ND	ND	ND	3.5 J	ND	ND	6.5 J	ND	ND	NA	NE
Toluene	24	320 J	6.4	11	260 J	22	21	800	3.2 J	NA	NE
Octane	ND	ND	ND	1.3 J	ND	ND	ND	280 J	ND	NA	NE
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Tetrachloroethene	970	ND	77	170	ND	120	7.1 J	2,800	ND	0.61 J	100
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE

NYSDOH - New York State Department of Health

ug/m3 - micrograms per cubic meter

J - Estimated Value

NE - Not Established

NA - Not Analyzed

SIM - Selected Ion Monitoring

concentration exceeds 500 ug/m³

Note - Propane detected in SS-C1 at 4 ppmv (0.000004%)

**RED DEVIL PAINT
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling (Area C) - EPA Method TO-15
Samples Collected October 5, 2006

Compound	Concentration (ug/m ³)										NYSDOH Air Guidance Value (ug/m ³)
	SS-C1	SS-C2	SS-C3	SS-C4	SS-C5	SS-C6	SS-C7	SS-C8	Indoor Air Area C	Indoor Air Area C (SIM mode)	
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Ethylbenzene	3.7 J	270 J	1.3 J	0.96 J	420 J	2.9 J	2.1 J	230 J	ND	NA	NE
m/p-Xylene	13	ND	2.8 J	1.4 J	1,100	10	6.9 J	560	ND	NA	NE
o-Xylene	4.6	170 J	ND	ND	270 J	4.2 J	2.3 J	150 J	ND	NA	NE
Styrene	ND	ND	ND	ND	140 J	ND	ND	100 J	ND	NA	NE
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Cumene	ND	190 J	ND	ND	ND	ND	ND	130 J	ND	NA	NE
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
4-Ethyltoluene	4.7 J	ND	ND	0.98 J	ND	11	3.1 J	ND	ND	NA	NE
1,3,5-Trimethylbenzene	1.7 J	ND	ND	ND	ND	12	ND	ND	ND	NA	NE
1,2,4-Trimethylbenzene	6.2	190 J	ND	ND	320 J	8.3	3.4 J	150 J	ND	NA	NE
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE

NYSDOH - New York State Department of Health

ug/m3 - micrograms per cubic meter

J - Estimated Value

NE - Not Established

NA - Not Analyzed

SIM - Selected Ion Monitoring

concentration exceeds 500 ug/m³

Note - Propane detected in SS-C1 at 4 ppmv (0.000004%)

TABLE 72

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling (Area D) - EPA Method TO-15
Samples Collected October 4, 2006

Compound	Concentration (ug/m ³)				NYSDOH Air Guidance Value (ug/m ³)
	SS-D1	SS-D2	Indoor Air Area D	Indoor Air Area D (SIM mode)	
Dichlorodifluoromethane	ND	27 J	8.5	NA	NE
Chlorodifluoromethane	ND	30 J	3.9	NA	NE
Freon 114	ND	ND	ND	NA	NE
Chloromethane	ND	ND	1.4 J	NA	NE
Vinyl Chloride	ND	ND	ND	<0.023	NE
1,3-Butadiene	ND	ND	ND	NA	NE
Bromomethane	ND	ND	ND	NA	NE
Chloroethane	10 J	29	ND	NA	NE
Dichlorofluoromethane	14 J	ND	ND	NA	NE
Trichlorofluoromethane	ND	ND	3.8 J	NA	NE
Pentane	420	270	10	NA	NE
1,1-Dichloroethene	ND	ND	ND	NA	NE
Freon 113	ND	ND	ND	NA	NE
Acetone	76	220	33	NA	NE
Carbon Disulfide	ND	41	ND	NA	NE
3-Chloropropene	ND	ND	ND	NA	NE
Methylene Chloride	ND	62	10	NA	60
trans-1,2-Dichloroethene	ND	ND	ND	NA	NE
Methyl t-Butyl Ether	ND	ND	ND	NA	NE
Hexane	87	130	6.3	NA	NE
1,1-Dichloroethane	46	33 J	ND	NA	NE
cis-1,2-Dichloroethene	ND	ND	ND	NA	NE
2-Butanone	ND	88	4.4 J	NA	NE
Chloroform	ND	ND	ND	NA	NE
1,1,1-Trichloroethane	ND	ND	ND	NA	NE
Carbon Tetrachloride	ND	ND	ND	NA	NE
1,2-Dichloroethane	ND	ND	ND	NA	NE
Benzene	12 J	11 J	4.7	NA	NE
Isooctane	220	70	4.8	NA	NE
Heptane	ND	29 J	4.3	NA	NE
Trichloroethene	ND	ND	ND	1.2	5
1,2-Dichloropropane	ND	ND	ND	NA	NE
Dibromomethane	ND	ND	ND	NA	NE
Bromodichloromethane	ND	ND	ND	NA	NE
cis-1,3-Dichloropropene	ND	ND	ND	NA	NE
4-Methyl-2-Pentanone	ND	ND	ND	NA	NE
Toluene	41	44	16	NA	NE
Octane	ND	ND	1.5 J	NA	NE
trans-1,3-Dichloropropene	ND	ND	ND	NA	NE
1,1,2-Trichloroethane	ND	ND	ND	NA	NE
Tetrachloroethene	ND	22 J	3.8 J	3.7	100
2-Hexanone	ND	ND	ND	NA	NE

NYSDOH - New York State Department of Health
ug/m³ - micrograms per cubic meter

NE - Not Established
NA - Not Analyzed

J - Estimated Value

SIM - Selected Ion Monitoring

Note - Propane detected in SS-D1 at 450 ppmv (0.045%)

**RED DEVIL PAINT
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling (Area D) - EPA Method TO-15
Samples Collected October 4, 2006

Compound	Concentration (ug/m ³)				NYSDOH Air Guidance Value (ug/m ³)
	SS-D1	SS-D2	Indoor Air Area D	Indoor Air Area D (SIM mode)	
Dibromochloromethane	ND	ND	ND	NA	NE
1,2-Dibromoethane	ND	ND	ND	NA	NE
Chlorobenzene	ND	ND	ND	NA	NE
1,1,1,2-Tetrachloroethane	ND	ND	ND	NA	NE
Ethylbenzene	15 J	22 J	3.3 J	NA	NE
m/p-Xylene	43	69	8.6	NA	NE
o-Xylene	9.1 J	12 J	2.1 J	NA	NE
Styrene	ND	ND	ND	NA	NE
Bromoform	ND	ND	ND	NA	NE
Cumene	ND	ND	1.4 J	NA	NE
1,1,2,2-Tetrachloroethane	ND	ND	ND	NA	NE
1,2,3-Trichloropropane	ND	ND	ND	NA	NE
Bromobenzene	ND	ND	ND	NA	NE
4-Ethyltoluene	ND	ND	3.8 J	NA	NE
1,3,5-Trimethylbenzene	ND	ND	2.4 J	NA	NE
1,2,4-Trimethylbenzene	24 J	22 J	6.6	NA	NE
1,3-Dichlorobenzene	ND	ND	ND	NA	NE
1,4-Dichlorobenzene	ND	ND	1.5 J	NA	NE
1,2-Dichlorobenzene	ND	ND	ND	NA	NE
Hexachloroethane	ND	ND	ND	NA	NE

NYSDOH - New York State Department of Health

ug/m3 - micrograms per cubic meter

J - Estimated Value

Note - Propane detected in SS-D1 at 450 ppmv (0.045%)

NE - Not Established

NA - Not Analyzed

SIM - Selected Ion Monitoring

TABLE 73

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Point and and Ambient Outdoor Air Sampling - EPA Method TO-15

Samples Collected October 6, 2006

Compound	Concentration (ug/m ³)						NYSDOH Air Guidance Value (ug/m ³)
	SVP-1	SVP-2	Outdoor Air Upwind	Indoor Air Upwind (SIM mode)	Outdoor Air Downwind	Outdoor Air Downwind (SIM mode)	
Dichlorodifluoromethane	210	230	2.5 J	NA	2.6 J	NA	NE
Chlorodifluoromethane	1.1 J	15 J	ND	NA	0.99 J	NA	NE
Freon 114	ND	ND	ND	NA	ND	NA	NE
Chloromethane	ND	ND	ND	NA	0.81 J	NA	NE
Vinyl Chloride	ND	ND	ND	<0.023	ND	<0.023	NE
1,3-Butadiene	ND	ND	ND	NA	ND	NA	NE
Bromomethane	ND	ND	ND	NA	ND	NA	NE
Chloroethane	ND	ND	ND	NA	ND	NA	NE
Dichlorofluoromethane	ND	ND	ND	NA	ND	NA	NE
Trichlorofluoromethane	2.7 J	ND	1.3 J	NA	1.4 J	NA	NE
Pentane	0.68 J	23 J	1.3 J	NA	0.86 J	NA	NE
1,1-Dichloroethene	ND	ND	ND	NA	ND	NA	NE
Freon 113	5.2 J	ND	ND	NA	ND	NA	NE
Acetone	50	480	270	NA	16	NA	NE
Carbon Disulfide	ND	260	1.0 J	NA	1.2 J	NA	NE
3-Chloropropene	ND	ND	ND	NA	ND	NA	NE
Methylene Chloride	6.5	110	2.2 J	NA	2.1 J	NA	60
trans-1,2-Dichloroethene	1.1 J	ND	ND	NA	ND	NA	NE
Methyl t-Butyl Ether	ND	ND	ND	NA	ND	NA	NE
Hexane	ND	50	2.1 J	NA	ND	NA	NE
1,1-Dichloroethane	330	ND	ND	NA	ND	NA	NE
cis-1,2-Dichloroethene	ND	ND	ND	NA	ND	NA	NE
2-Butanone	1.7 J	27 J	15	NA	ND	NA	NE
Chloroform	32	45 J	ND	NA	ND	NA	NE
1,1,1-Trichloroethane	180	470	ND	NA	ND	NA	NE
Carbon Tetrachloride	ND	ND	ND	NA	ND	NA	NE
1,2-Dichloroethane	5.3	ND	ND	NA	ND	NA	NE
Benzene	ND	ND	0.70 J	NA	0.70 J	NA	NE
Isooctane	1.4 J	ND	1.2 J	NA	ND	NA	NE
Heptane	ND	ND	4.3	NA	ND	NA	NE
Trichloroethene	31	67	ND	<0.11	ND	<0.11	5
1,2-Dichloropropane	ND	ND	ND	NA	ND	NA	NE
Dibromomethane	ND	ND	ND	NA	ND	NA	NE
Bromodichloromethane	ND	ND	ND	NA	ND	NA	NE
cis-1,3-Dichloropropene	ND	ND	ND	NA	ND	NA	NE
4-Methyl-2-Pentanone	ND	ND	ND	NA	ND	NA	NE
Toluene	13	86	25	NA	8	NA	NE
Octane	ND	11 J	2.5 J	NA	ND	NA	NE
trans-1,3-Dichloropropene	ND	ND	ND	NA	ND	NA	NE
1,1,2-Trichloroethane	ND	ND	ND	NA	ND	NA	NE
Tetrachloroethene	570	15,000	ND	0.41 J	ND	0.47 J	100
2-Hexanone	ND	ND	3.9 J	NA	ND	NA	NE

NYSDOH - New York State Department of Health
ug/m3 - micrograms per cubic meter
J - Estimated Value

NE - Not Established
NA - Not Analyzed
SIM - Selected Ion Monitoring

concentration exceeds 500 ug/m³
Note - Propane detected in SVP-1 at 2 ppmv (0.000002%)

**RED DEVIL PAINT
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Point and and Ambient OutdoorAir Sampling - EPA Method TO-15
Samples Collected October 6, 2006

Compound	Concentration (ug/m ³)						NYSDOH Air Guidance Value (ug/m ³)
	SVP-1	SVP-2	Outdoor Air Upwind	Indoor Air Upwind (SIM mode)	Outdoor Air Downwind	Outdoor Air Downwind (SIM mode)	
Dibromochloromethane	ND	ND	ND	NA	ND	NA	NE
1,2-Dibromoethane	ND	ND	ND	NA	ND	NA	NE
Chlorobenzene	ND	ND	ND	NA	ND	NA	NE
1,1,1,2-Tetrachloroethane	ND	ND	ND	NA	ND	NA	NE
Ethylbenzene	1.2 J	12 J	3.0 J	NA	ND	NA	NE
m/p-Xylene	4.9	42 J	12	NA	2.5 J	NA	NE
o-Xylene	1.4 J	17 J	3.0 J	NA	ND	NA	NE
Styrene	ND	13 J	ND	NA	ND	NA	NE
Bromoform	ND	ND	ND	NA	ND	NA	NE
Cumene	ND	ND	ND	NA	ND	NA	NE
1,1,2,2-Tetrachloroethane	ND	ND	ND	NA	ND	NA	NE
1,2,3-Trichloropropane	ND	ND	ND	NA	ND	NA	NE
Bromobenzene	ND	ND	ND	NA	ND	NA	NE
4-Ethyltoluene	1.7 J	ND	3.2 J	NA	ND	NA	NE
1,3,5-Trimethylbenzene	ND	ND	1.2 J	NA	ND	NA	NE
1,2,4-Trimethylbenzene	2.4 J	12 J	4.2 J	NA	ND	NA	NE
1,3-Dichlorobenzene	ND	ND	ND	NA	ND	NA	NE
1,4-Dichlorobenzene	ND	ND	ND	NA	ND	NA	NE
1,2-Dichlorobenzene	ND	ND	ND	NA	ND	NA	NE
Hexachloroethane	ND	ND	ND	NA	ND	NA	NE

NYSDOH - New York State Department of Health

ug/m3 - micrograms per cubic meter

J - Estimated Value

Note - Propane detected in SVP-1 at 2 ppmv (0.000002%)

NE - Not Established

NA - Not Analyzed

SIM - Selected Ion Monitoring

TABLE 74

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling - Propane Tracer Gas
Samples Collected October 3, 4, 5, 6, 2006

Sampling Location	Concentration (ppmv)	Concentration (%)
SS-A5	25	0.0025
SS-B2	1200	0.12
SS-C1	4	0.000004
SS-D1	450	0.045
SVP-1	2	0.000002

ppmv - parts per million vapor

J - Estimated Value

TABLE 75

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling (Area A) - EPA Method TO-15
Samples Collected March 8, 2007

Compound	Concentration (ug/m ³)							NYSDOH Air Guidance Value (ug/m ³)
	SS-A1	SS-A2	SS-A3	SS-A4	SS-A5	Indoor Air Area A	Indoor Air Area A (SIM mode)	
Dichlorodifluoromethane	850	49	4.0 J	5.5	ND	3.5 J	NA	NE
Chlorodifluoromethane	ND	3.8	1.3 J	ND	ND	ND	NA	NE
Freon 114	ND	ND	ND	ND	ND	ND	NA	NE
Chloromethane	ND	ND	0.85 J	0.89 J	ND	ND	NA	NE
Vinyl Chloride	ND	ND	ND	ND	ND	ND	<0.023	NE
1,3-Butadiene	ND	ND	ND	ND	ND	ND	NA	NE
Bromomethane	ND	ND	ND	ND	ND	ND	NA	NE
Chloroethane	ND	ND	ND	ND	ND	ND	NA	NE
Dichlorofluoromethane	ND	ND	ND	ND	ND	ND	NA	NE
Trichlorofluoromethane	2.3 J	2.5 J	3.1 J	1.8 J	1.3 J	2.0 J	NA	NE
Pentane	ND	4.4	1.7 J	1.5 J	0.71 J	1.6 J	NA	NE
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	NA	NE
Freon 113	ND	ND	ND	ND	ND	ND	NA	NE
Acetone	15	43	35	16	35	21	NA	NE
Carbon Disulfide	ND	ND	ND	ND	ND	ND	NA	NE
3-Chloropropene	ND	ND	ND	ND	ND	ND	NA	NE
Methylene Chloride	ND	37	13	15	2.6 J	9.1	NA	60
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	NA	NE
Methyl t-Butyl Ether	ND	ND	ND	ND	ND	ND	NA	NE
Hexane	ND	12	2.5 J	2.1 J	ND	2.0 J	NA	NE
1,1-Dichloroethane	ND	ND	ND	ND	56	ND	NA	NE
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	NA	NE
2-Butanone	4.3 J	1.8 J	ND	2.0 J	7.0	4.8 J	NA	NE
Chloroform	8.6	3.6 J	ND	ND	11	ND	NA	NE
1,1,1-Trichloroethane	100	17	ND	ND	49	ND	NA	NE
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	NA	NE
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	NA	NE
Benzene	ND	0.64 J	1.2 J	1.3 J	ND	1.3 J	NA	NE
Isooctane	ND	ND	2.8 J	ND	ND	3.1 J	NA	NE
Heptane	ND	ND	1.1 J	ND	ND	ND	NA	NE
Trichloroethene	ND	ND	ND	ND	3.0 J	ND	0.161 J	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	NA	NE
Dibromomethane	ND	ND	ND	ND	ND	ND	NA	NE
Bromodichloromethane	ND	ND	ND	ND	ND	ND	NA	NE
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	NA	NE
4-Methyl-2-Pentanone	ND	ND	ND	ND	ND	ND	NA	NE
Toluene	1.7 J	20	7.9	7.3	2.6 J	5.4	NA	NE
Octane	ND	ND	ND	ND	ND	ND	NA	NE
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	NA	NE
1,1,2-Trichloroethane	ND	ND	8.1	ND	ND	ND	NA	NE
Tetrachloroethene	79	14	15	ND	110	ND	1.22	100
2-Hexanone	ND	ND	ND	ND	ND	ND	NA	NE

NYSDOH - New York State Department of Health
ug/m³ - micrograms per cubic meter
J - Estimated Value

NE - Not Established
NA - Not Analyzed
SIM - Selected Ion Monitoring

concentration exceeds 500 ug/m³
Note - Propane detected in SS-A5 at 3.7 ppmv (0.0000037%)

**RED DEVIL PAINT
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling (Area A) - EPA Method TO-15
Samples Collected March 8, 2007

Compound	Concentration (ug/m ³)							NYSDOH Air Guidance Value (ug/m ³)
	SS-A1	SS-A2	SS-A3	SS-A4	SS-A5	Indoor Air Area A	Indoor Air Area A (SIM mode)	
Dibromochloromethane	ND	ND	ND	ND	ND	ND	NA	NE
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	NA	NE
Chlorobenzene	ND	ND	ND	ND	ND	ND	NA	NE
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	NA	NE
Ethylbenzene	0.87 J	ND	0.96 J	0.87 J	0.87 J	ND	NA	NE
m/p-Xylene	3.2 J	1.8 J	3.5 J	4.0 J	2.4 J	ND	NA	NE
o-Xylene	ND	ND	1.2 J	1.3 J	ND	ND	NA	NE
Styrene	ND	ND	ND	ND	ND	ND	NA	NE
Bromoform	ND	ND	ND	ND	ND	ND	NA	NE
Cumene	ND	ND	ND	ND	ND	ND	NA	NE
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	NA	NE
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	NA	NE
Bromobenzene	ND	ND	ND	ND	ND	ND	NA	NE
4-Ethyltoluene	ND	ND	ND	ND	ND	ND	NA	NE
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	NA	NE
1,2,4-Trimethylbenzene	1.8 J	ND	1.4 J	ND	ND	ND	NA	NE
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	NA	NE
1,4-Dichlorobenzene	ND	5.7 J	18	38	3.7 J	ND	NA	NE
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	NA	NE
Hexachloroethane	ND	ND	ND	ND	ND	ND	NA	NE

NYSDOH - New York State Department of Health

ug/m3 - micrograms per cubic meter

J - Estimated Value

NE - Not Established

NA - Not Analyzed

SIM - Selected Ion Monitoring


 concentration exceeds 500 ug/m³

TABLE 76

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling (Area B) - EPA Method TO-15
Samples Collected March 7, 2007

Compound	Concentration (ug/m ³)						NYSDOH Air Guidance Value (ug/m ³)
	SS-B1	SS-B2	SS-B3	Indoor Air	Area B	Indoor Air Area B (SIM mode)	
Dichlorodifluoromethane	4.9 J	2.4 J	2.1 J	2.3 J	NA	NA	NE
Chlorodifluoromethane	1.2 J	ND	ND	ND	NA	NA	NE
Freon 114	ND	ND	ND	ND	NA	NA	NE
Chloromethane	4.0	0.50 J	ND	0.85 J	NA	NA	NE
Vinyl Chloride	ND	ND	ND	ND	< 0.023	NA	NE
1,3-Butadiene	ND	ND	ND	ND	NA	NA	NE
Bromomethane	ND	ND	ND	ND	NA	NA	NE
Chloroethane	ND	ND	ND	ND	NA	NA	NE
Dichlorofluoromethane	ND	ND	ND	ND	NA	NA	NE
Trichlorofluoromethane	ND	ND	1.1 J	1.1 J	NA	NA	NE
Pentane	0.68 J	ND	ND	0.71 J	NA	NA	NE
1,1-Dichloroethene	ND	ND	ND	ND	NA	NA	NE
Freon 113	ND	ND	ND	ND	NA	NA	NE
Acetone	25	11	6.8	26	NA	NA	NE
Carbon Disulfide	ND	ND	ND	ND	NA	NA	NE
3-Chloropropene	ND	ND	ND	ND	NA	NA	NE
Methylene Chloride	1.3 J	ND	ND	ND	NA	NA	60
trans-1,2-Dichloroethene	ND	ND	ND	ND	NA	NA	NE
Methyl t-Butyl Ether	ND	ND	ND	ND	NA	NA	NE
Hexane	ND	ND	ND	ND	NA	NA	NE
1,1-Dichloroethane	ND	ND	ND	ND	NA	NA	NE
cis-1,2-Dichloroethene	ND	ND	ND	ND	NA	NA	NE
2-Butanone	ND	ND	ND	ND	NA	NA	NE
Chloroform	ND	ND	ND	ND	NA	NA	NE
1,1,1-Trichloroethane	9.1	4.9 J	2.0 J	ND	NA	NA	NE
Carbon Tetrachloride	ND	ND	ND	ND	NA	NA	NE
1,2-Dichloroethane	ND	ND	ND	ND	NA	NA	NE
Benzene	0.73 J	0.70 J	ND	0.80 J	NA	NA	NE
Isooctane	ND	ND	1.7 J	ND	NA	NA	NE
Heptane	ND	ND	ND	ND	NA	NA	NE
Trichloroethene	ND	ND	2.2 J	ND	0.215 J	NA	5
1,2-Dichloropropane	ND	ND	ND	ND	NA	NA	NE
Dibromomethane	ND	ND	ND	ND	NA	NA	NE
Bromodichloromethane	ND	ND	ND	ND	NA	NA	NE
cis-1,3-Dichloropropene	ND	ND	ND	ND	NA	NA	NE
4-Methyl-2-Pentanone	ND	ND	ND	7.3 J	NA	NA	NE
Toluene	3.3 J	53	5.1	6.1	NA	NA	NE
Octane	ND	ND	ND	ND	NA	NA	NE
trans-1,3-Dichloropropene	ND	ND	ND	ND	NA	NA	NE
1,1,2-Trichloroethane	ND	ND	ND	ND	NA	NA	NE
Tetrachloroethene	32	6.0 J	9.9	ND	0.6	NA	100
2-Hexanone	ND	ND	ND	ND	NA	NA	NE

NYSDOH - New York State Department of Health

ug/m³ - micrograms per cubic meter

J - Estimated Value

NE - Not Established

NA - Not Analyzed

SIM - Selected Ion Monitoring

concentration exceeds 500 ug/m³

**RED DEVIL PAINT
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling (Area B) - EPA Method TO-15
Samples Collected March 7, 2007

Compound	Concentration (ug/m ³)					NYSDOH Air Guidance Value (ug/m ³)
	SS-B1	SS-B2	SS-B3	Indoor Air Area B	Indoor Air Area B (SIM mode)	
Dibromochloromethane	ND	ND	ND	ND	NA	NE
1,2-Dibromoethane	ND	ND	ND	ND	NA	NE
Chlorobenzene	ND	ND	ND	ND	NA	NE
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	NA	NE
Ethylbenzene	ND	ND	ND	ND	NA	NE
m/p-Xylene	3.1 J	1.9 J	2.6 J	3.7 J	NA	NE
o-Xylene	0.91 J	ND	ND	1.5 J	NA	NE
Styrene	ND	ND	ND	ND	NA	NE
Bromoform	ND	ND	ND	ND	NA	NE
Cumene	ND	ND	ND	ND	NA	NE
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	NA	NE
1,2,3-Trichloropropane	ND	ND	ND	ND	NA	NE
Bromobenzene	ND	ND	ND	ND	NA	NE
4-Ethyltoluene	2.1 J	ND	ND	ND	NA	NE
1,3,5-Trimethylbenzene	1.4 J	ND	ND	ND	NA	NE
1,2,4-Trimethylbenzene	2.2 J	ND	1.2 J	1.3 J	NA	NE
1,3-Dichlorobenzene	ND	ND	ND	ND	NA	NE
1,4-Dichlorobenzene	4.7 J	ND	ND	ND	NA	NE
1,2-Dichlorobenzene	ND	ND	ND	ND	NA	NE
Hexachloroethane	ND	ND	ND	ND	NA	NE

NYSDOH - New York State Department of Health
ug/m3 - micrograms per cubic meter
J - Estimated Value

NE - Not Established
NA - Not Analyzed
SIM - Selected Ion Monitoring


 concentration exceeds 500 ug/m³

TABLE 77

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Soil Vapor Intrusion Sampling (Area C) - EPA Method TO-15
Samples Collected March 5, 2007

Compound	Concentration (ug/m ³)										NYSDOH Air Guidance Value (ug/m ³)
	SS-C1	SS-C2	SS-C3	SS-C4	SS-C5	SS-C6	SS-C7	SS-C8	Indoor Air Area C	Indoor Air Area C (SIM mode)	
Dichlorodifluoromethane	2.5 J	ND	2.2 J	5.4	3.1 J	15	ND	86	1.1 J	NA	NE
Chlorodifluoromethane	ND	ND	ND	ND	0.92 J	ND	ND	18 J	24	NA	NE
Freon 114	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Chloromethane	ND	ND	ND	ND	0.70 J	ND	ND	ND	0.43 J	NA	NE
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.023	NE
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Bromomethane	ND	ND	ND	ND	ND	ND	0.93 J	ND	ND	NA	NE
Chloroethane	ND	ND	ND	ND	ND	ND	ND	73	ND	NA	NE
Dichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Trichlorofluoromethane	ND	ND	ND	1.6 J	2.2 J	8.3	1.2 J	31 J	1.2 J	NA	NE
Pentane	ND	99	ND	ND	7.3	1.4 J	ND	240	1.8 J	NA	NE
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	16 J	ND	NA	NE
Freon 113	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Acetone	28	140	18	30	54	39	8.9	450	38	NA	NE
Carbon Disulfide	ND	55 J	ND	ND	ND	ND	22	260	ND	NA	NE
3-Chloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Methylene Chloride	ND	210	ND	ND	29	7.3	ND	210	15	NA	60
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Methyl t-Butyl Ether	ND	ND	ND	ND	0.72 J	ND	ND	ND	ND	NA	NE
Hexane	ND	230	ND	ND	12	0.85 J	ND	120	1.5 J	NA	NE
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	110	ND	NA	NE
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
2-Butanone	12	ND	8.6 J	21	21	17	ND	24 J	13	NA	NE
Chloroform	7.4	ND	ND	ND	ND	ND	ND	20 J	1.2 J	NA	NE
1,1,1-Trichloroethane	13	ND	2.9 J	3.4 J	ND	30	ND	260	ND	NA	NE
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Benzene	ND	15 J	ND	ND	0.83 J	0.67 J	ND	19 J	1.0 J	NA	NE
Isooctane	ND	ND	ND	ND	30	ND	ND	65	ND	NA	NE
Heptane	ND	190	ND	ND	ND	ND	ND	78	2.3 J	NA	NE
Trichloroethene	ND	ND	ND	19	ND	ND	2.8 J	19 J	ND	0.322	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
4-Methyl-2-Pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Toluene	1.9 J	17 J	ND	4.8	5.6	6.0	14	64	6.7	NA	NE
Octane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Tetrachloroethene	100	ND	52	38	2.8 J	230	2.1 J	860	ND	1.56	100
2-Hexanone	3.5 J	ND	ND	4.9 J	ND	3.0 J	ND	ND	ND	NA	NE

NYSDOH - New York State Department of Health

ug/m3 - micrograms per cubic meter

J - Estimated Value

NE - Not Established

NA - Not Analyzed

SIM - Selected Ion Monitoring

concentration exceeds 500 ug/m³

Note - Propane detected in SS-C7 at 1.4 ppmv (0.0000014%)

**RED DEVIL PAINT
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling (Area C) - EPA Method TO-15
Samples Collected March 5, 2007

Compound	Concentration (ug/m ³)										NYSDOH Air Guidance Value (ug/m ³)
	SS-C1	SS-C2	SS-C3	SS-C4	SS-C5	SS-C6	SS-C7	SS-C8	Indoor Air Area C	Indoor Air Area C (SIM mode)	
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Ethylbenzene	ND	ND	ND	ND	15	1.4 J	ND	ND	1.1 J	NA	NE
m/p-Xylene	1.4 J	78 J	3.4 J	3.0 J	27	5.8	4.2 J	160	ND	NA	NE
o-Xylene	ND	ND	ND	ND	ND	2.4 J	0.96 J	82	ND	NA	NE
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Cumene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
1,1,2,2-Tetrachloroethane	ND	3,500	110	ND	2,000	ND	ND	ND	ND	NA	NE
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
4-Ethyltoluene	ND	ND	ND	ND	ND	27	ND	ND	ND	NA	NE
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	47	ND	ND	ND	NA	NE
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	39	ND	ND	ND	NA	NE
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NE

NYSDOH - New York State Department of Health

ug/m³ - micrograms per cubic meter

J - Estimated Value

NE - Not Established

NA - Not Analyzed

SIM - Selected Ion Monitoring

concentration exceeds 500 ug/m³

TABLE 78

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

**Summary of Soil Vapor Intrusion Sampling (Area D) - EPA Method TO-15
Samples Collected March 5, 2007**

Compound	Concentration (ug/m ³)				NYSDOH Air Guidance Value (ug/m ³)
	SS-D1	SS-D2	Indoor Air Area D	Indoor Air Area D (SIM mode)	
Dichlorodifluoromethane	NA	ND	2.8 J	NA	NE
Chlorodifluoromethane	NA	ND	ND	NA	NE
Freon 114	NA	ND	ND	NA	NE
Chloromethane	NA	ND	0.99 J	NA	NE
Vinyl Chloride	NA	ND	ND	NA	NE
1,3-Butadiene	NA	ND	ND	NA	NE
Bromomethane	NA	ND	ND	NA	NE
Chloroethane	NA	ND	ND	NA	NE
Dichlorofluoromethane	NA	ND	ND	NA	NE
Trichlorofluoromethane	NA	ND	1.1 J	NA	NE
Pentane	NA	ND	2.9 J	NA	NE
1,1-Dichloroethene	NA	ND	ND	NA	NE
Freon 113	NA	ND	ND	NA	NE
Acetone	NA	240	130	NA	NE
Carbon Disulfide	NA	ND	ND	NA	NE
3-Chloropropene	NA	ND	ND	NA	NE
Methylene Chloride	NA	ND	ND	NA	60
trans-1,2-Dichloroethene	NA	ND	ND	NA	NE
Methyl t-Butyl Ether	NA	ND	ND	NA	NE
Hexane	NA	ND	1.6 J	NA	NE
1,1-Dichloroethane	NA	ND	ND	NA	NE
cis-1,2-Dichloroethene	NA	ND	ND	NA	NE
2-Butanone	NA	ND	18	NA	NE
Chloroform	NA	ND	1.1 J	NA	NE
1,1,1-Trichloroethane	NA	ND	ND	NA	NE
Carbon Tetrachloride	NA	ND	ND	NA	NE
1,2-Dichloroethane	NA	ND	ND	NA	NE
Benzene	NA	12 J	2.4 J	NA	NE
Isooctane	NA	46 J	ND	NA	NE
Heptane	NA	ND	ND	NA	NE
Trichloroethene	NA	ND	ND	NA	5
1,2-Dichloropropane	NA	ND	ND	NA	NE
Dibromomethane	NA	ND	ND	NA	NE
Bromodichloromethane	NA	ND	ND	NA	NE
cis-1,3-Dichloropropene	NA	ND	ND	NA	NE
4-Methyl-2-Pentanone	NA	ND	2.6 J	NA	NE
Toluene	NA	16 J	6.1	NA	NE
Octane	NA	ND	2.6 J	NA	NE
trans-1,3-Dichloropropene	NA	ND	ND	NA	NE
1,1,2-Trichloroethane	NA	ND	4.4 J	NA	NE
Tetrachloroethene	NA	ND	ND	NA	100
2-Hexanone	NA	ND	7.2 J	NA	NE

NYSDOH - New York State Department of Health

ug/m³ - micrograms per cubic meter

J - Estimated Value

Note 2 - Sampling at SS-D1 failed (no recovery in summa canister)

NE - Not Established

NA - Not Analyzed

Note - Propane detected in SS-D2 at 9400 ppmv (0.009400%)

SIM - Selected Ion Monitoring

**RED DEVIL PAINT
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling (Area D) - EPA Method TO-15
Samples Collected March 5, 2007

Compound	Concentration (ug/m ³)				NYSDOH Air Guidance Value (ug/m ³)
	SS-D1	SS-D2	Indoor Air Area D	Indoor Air Area D (SIM mode)	
Dibromochloromethane	NA	ND	ND	NA	NE
1,2-Dibromoethane	NA	ND	ND	NA	NE
Chlorobenzene	NA	ND	ND	NA	NE
1,1,1,2-Tetrachloroethane	NA	ND	ND	NA	NE
Ethylbenzene	NA	ND	1.1 J	NA	NE
m/p-Xylene	NA	ND	3.2 J	NA	NE
o-Xylene	NA	ND	1.3 J	NA	NE
Styrene	NA	ND	ND	NA	NE
Bromoform	NA	ND	ND	NA	NE
Cumene	NA	ND	ND	NA	NE
1,1,2,2-Tetrachloroethane	NA	ND	ND	NA	NE
1,2,3-Trichloropropane	NA	ND	ND	NA	NE
Bromobenzene	NA	ND	ND	NA	NE
4-Ethyltoluene	NA	ND	ND	NA	NE
1,3,5-Trimethylbenzene	NA	ND	ND	NA	NE
1,2,4-Trimethylbenzene	NA	ND	ND	NA	NE
1,3-Dichlorobenzene	NA	ND	ND	NA	NE
1,4-Dichlorobenzene	NA	ND	ND	NA	NE
1,2-Dichlorobenzene	NA	ND	ND	NA	NE
Hexachloroethane	NA	ND	ND	NA	NE

NYSDOH - New York State Department of Health

ug/m3 - micrograms per cubic meter

J - Estimated Value

NE - Not Established

NA - Not Analyzed

SIM - Selected Ion Monitoring

RED DEVIL PAINT
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Soil Vapor Point and and Ambient OutdoorAir Sampling - EPA Method TO-15
Samples Collected March 7, 2007

Compound	Concentration (ug/m ³)							NYSDOH Air Guidance Value (ug/m ³)
	SVP-1	SVP-2	Outdoor Air Upwind	Indoor Air Upwind (SIM mode)	Outdoor Air Downwind	Outdoor Air Downwind (SIM mode)	SVP-3 *	
Dichlorodifluoromethane	2.2 J	ND	2.2 J	NA	2.3 J	NA	12	NE
Chlorodifluoromethane	ND	ND	0.71 J	NA	0.78 J	NA	1.5 J	NE
Freon 114	ND	ND	ND	NA	ND	NA	ND	NE
Chloromethane	0.83 J	ND	0.60 J	NA	1.1 J	NA	0.59 J	NE
Vinyl Chloride	ND	ND	ND	<0.023	ND	<0.023	ND	NE
1,3-Butadiene	ND	ND	ND	NA	ND	NA	ND	NE
Bromomethane	ND	ND	ND	NA	ND	NA	ND	NE
Chloroethane	ND	ND	ND	NA	ND	NA	ND	NE
Dichlorofluoromethane	ND	ND	ND	NA	ND	NA	ND	NE
Trichlorofluoromethane	ND	ND	1.2 J	NA	ND	NA	15	NE
Pentane	1.8 J	ND	0.83 J	NA	1.4 J	NA	1.5 J	NE
1,1-Dichloroethene	ND	ND	ND	NA	ND	NA	ND	NE
Freon 113	ND	ND	ND	NA	ND	NA	ND	NE
Acetone	29	ND	9.2	NA	30	NA	7.7	NE
Carbon Disulfide	ND	ND	ND	NA	ND	NA	1.7 J	NE
3-Chloropropene	ND	ND	ND	NA	ND	NA	ND	NE
Methylene Chloride	12	ND	ND	NA	ND	NA	1.5 J	60
trans-1,2-Dichloroethene	ND	ND	ND	NA	ND	NA	ND	NE
Methyl t-Butyl Ether	1.1 J	ND	ND	NA	ND	NA	ND	NE
Hexane	2.9 J	ND	ND	NA	ND	NA	1.7 J	NE
1,1-Dichloroethane	ND	ND	ND	NA	ND	NA	ND	NE
cis-1,2-Dichloroethene	ND	ND	ND	NA	ND	NA	ND	NE
2-Butanone	5.2 J	ND	2.8 J	NA	6.7	NA	1.7 J	NE
Chloroform	ND	ND	ND	NA	ND	NA	ND	NE
1,1,1-Trichloroethane	ND	ND	ND	NA	ND	NA	14	NE
Carbon Tetrachloride	ND	ND	ND	NA	ND	NA	ND	NE
1,2-Dichloroethane	ND	ND	ND	NA	ND	NA	ND	NE
Benzene	1.2 J	ND	0.99 J	NA	1.4 J	NA	0.85 J	NE
Isooctane	ND	ND	ND	NA	ND	NA	ND	NE
Heptane	ND	ND	ND	NA	ND	NA	0.95 J	NE
Trichloroethene	ND	ND	ND	0.269	ND	0.215 J	ND	5
1,2-Dichloropropane	ND	ND	ND	NA	ND	NA	ND	NE
Dibromomethane	ND	ND	ND	NA	ND	NA	ND	NE
Bromodichloromethane	ND	ND	ND	NA	ND	NA	ND	NE
cis-1,3-Dichloropropene	ND	ND	ND	NA	ND	NA	ND	NE
4-Methyl-2-Pentanone	ND	2.3 J	ND	NA	ND	NA	ND	NE
Toluene	4.0	13	2.6 J	NA	3.8	NA	1.8 J	NE
Octane	ND	ND	ND	NA	ND	NA	ND	NE
trans-1,3-Dichloropropene	ND	ND	ND	NA	ND	NA	ND	NE
1,1,2-Trichloroethane	ND	ND	ND	NA	ND	NA	ND	NE
Tetrachloroethene	ND	410	ND	0.543	ND	0.543	5.0 J	100
2-Hexanone	ND	ND	ND	NA	ND	NA	ND	NE

NYSDOH - New York State Department of Health
ug/m3 - micrograms per cubic meter
J - Estimated Value

NE - Not Established
NA - Not Analyzed
SIM - Selected Ion Monitoring

concentration exceeds 500 ug/m³
Note - Propane detected in SS-A5 at 750 ppmv (0.000750%)
* - SVP-3 sampled on October 22, 2009

TABLE 79

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Point and and Ambient Outdoor Air Sampling - EPA Method TO-15
Samples Collected March 7, 2007

Compound	Concentration (ug/m ³)							NYSDOH Air Guidance Value (ug/m ³)
	SVP-1	SVP-2	Outdoor Air Upwind	Indoor Air Upwind (SIM mode)	Outdoor Air Downwind	Outdoor Air Downwind (SIM mode)	SVP-3 *	
Dibromochloromethane	ND	ND	ND	NA	ND	NA	ND	NE
1,2-Dibromoethane	ND	ND	ND	NA	ND	NA	ND	NE
Chlorobenzene	ND	ND	ND	NA	ND	NA	ND	NE
1,1,1,2-Tetrachloroethane	ND	ND	ND	NA	ND	NA	ND	NE
Ethylbenzene	2.2 J	1.0 J	ND	NA	ND	NA	ND	NE
m/p-Xylene	5.8	3.1 J	1.5 J	NA	2.6 J	NA	ND	NE
o-Xylene	2.7 J	1.0 J	ND	NA	0.96 J	NA	ND	NE
Styrene	ND	ND	ND	NA	ND	NA	ND	NE
Bromoform	ND	ND	ND	NA	ND	NA	ND	NE
Cumene	ND	ND	ND	NA	ND	NA	ND	NE
1,1,2,2-Tetrachloroethane	ND	ND	ND	NA	ND	NA	ND	NE
1,2,3-Trichloropropane	ND	ND	ND	NA	ND	NA	ND	NE
Bromobenzene	ND	ND	ND	NA	ND	NA	ND	NE
4-Ethyltoluene	ND	ND	ND	NA	ND	NA	ND	NE
1,3,5-Trimethylbenzene	ND	ND	ND	NA	ND	NA	ND	NE
1,2,4-Trimethylbenzene	ND	ND	ND	NA	1.0 J	NA	ND	NE
1,3-Dichlorobenzene	ND	ND	ND	NA	ND	NA	ND	NE
1,4-Dichlorobenzene	ND	ND	ND	NA	ND	NA	ND	NE
1,2-Dichlorobenzene	ND	ND	ND	NA	ND	NA	ND	NE
Hexachloroethane	ND	ND	ND	NA	ND	NA	ND	NE

NYSDOH - New York State Department of Health

ug/m³ - micrograms per cubic meter

J - Estimated Value

NE - Not Established

NA - Not Analyzed

SIM - Selected Ion Monitoring

* - SVP-3 sampled on October 22, 2009

TABLE 80

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling - Propane Tracer Gas
Samples Collected March 8, 2007

Sampling Location	Concentration (ppmv)	Concentration (%)
SS-A5	3.7	0.0000037
SS-B2	< 50	< 0.005
SS-C7	1.4	0.0000014
SS-D2	9400	0.0094
SVP-1	< 50	< 0.005

ppmv - parts per million vapor

J - Estimated Value

Table 81

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

**Summary of Soil Vapor Intrusion Sampling (Area A) - EPA Method TO-15
Samples Collected March 11, 2011**

Compound	Concentration (ug/m ³)							NYSDOH Air Guidance Value (ug/m ³)
	SS-A1	SS-A2	SS-A3	SS-A4	SS-A5	Indoor Air Area A	Indoor Air Area A (SIM mode)	
Vinyl Chloride	ND	NS	ND	NS	NS	ND	<=0.0322	NE
Vinyl bromide	ND	NS	ND	NS	NS	ND	NA	NE
Vinyl acetate	ND	NS	ND	NS	NS	2.7	NA	NE
Trichloroethylene	2.0 J	NS	6.6	NS	NS	ND	0.601	5
trans-1,3-Dichloropropylene	ND	NS	ND	NS	NS	ND	NA	NE
trans-1,2-Dichloroethylene	ND	NS	ND	NS	NS	ND	NA	NE
Toluene	7.6	NS	8.9	NS	NS	170	NA	NE
Tetrahydrofuran	9.2	NS	7.6	NS	NS	ND	NA	NE
Tetrachloroethylene	68	NS	62	NS	NS	1.5 J	1.86	100
Styrene	ND	NS	ND	NS	NS	ND	NA	NE
Propylene	ND	NS	ND	NS	NS	ND	NA	NE
p-Ethyltoluene	3	NS	2.9	NS	NS	37	NA	NE
p- & m- Xylenes	7.5	NS	8.1	NS	NS	110	NA	NE
o-Xylene	2.4	NS	2.7	NS	NS	38	NA	NE
n-Hexane	2.1	NS	7.6	NS	NS	ND	NA	NE
n-Heptane	ND	NS	2.2	NS	NS	50	NA	NE
Methylene chloride	2.6 B	NS	6.3 B	NS	NS	3.1 B	NA	60
Methyl tert-butyl ether (MTBE)	ND	NS	ND	NS	NS	ND	NA	NE
4-Methyl-2-pentanone	15	NS	7.8	NS	NS	ND	NA	NE
Isopropanol	51 J	NS	ND	NS	NS	ND	NA	NE
Hexachlorobutadiene	ND	NS	ND	NS	NS	ND	NA	NE
Ethyl Benzene	2.0 J	NS	2.2	NS	NS	37	NA	NE
Ethyl acetate	ND	NS	0.88 J	NS	NS	ND	NA	NE
Cyclohexane	ND	NS	ND	NS	NS	39	NA	NE
cis-1,3-Dichloropropylene	ND	NS	ND	NS	NS	ND	NA	NE
cis-1,2-Dichloroethylene	ND	NS	36	NS	NS	ND	< =0.0827	NE
Chloromethane	ND	NS	ND	NS	NS	1.1	NA	NE
Chloroform	4.1	NS	7.7	NS	NS	2.3	NA	NE
Chloroethane	ND	NS	ND	NS	NS	ND	NA	NE
Carbon tetrachloride	ND	NS	ND	NS	NS	ND	0.512	NE
Carbon disulfide	ND	NS	ND	NS	NS	ND	NA	NE
Bromomethane	ND	NS	ND	NS	NS	ND	NA	NE
Bromoform	ND	NS	ND	NS	NS	ND	NA	NE
Bromodichloromethane	ND	NS	ND	NS	NS	3.2	NA	NE
Benzyl chloride	ND	NS	ND	NS	NS	ND	NA	NE
Benzene	ND	NS	1.4 J	NS	NS	29	NA	NE
Acetone	12	NS	25	NS	NS	38	NA	NE
3-Chloropropene	ND	NS	ND	NS	NS	ND	NA	NE
2-Hexanone	ND	NS	5.5	NS	NS	8.6	NA	NE
2-Butanone	ND	NS	ND	NS	NS	9.4	NA	NE
2,2,4-Trimethylpentane	ND	NS	2.4	NS	NS	ND	NA	NE
1,4-Dioxane	ND	NS	ND	NS	NS	ND	NA	NE
1,4-Dichlorobenzene	ND	NS	ND	NS	NS	11	NA	NE
1,3-Dichlorobenzene	ND	NS	ND	NS	NS	ND	NA	NE
1,3-Butadiene	ND	NS	ND	NS	NS	ND	NA	NE
1,3,5-Trimethylbenzene	1.4 J	NS	ND	NS	NS	2.3	NA	NE
1,2-Dichlorotetrafluoroethane	ND	NS	ND	NS	NS	ND	NA	NE
1,2-Dichloropropane	ND	NS	ND	NS	NS	ND	NA	NE
1,2-Dichloroethane	ND	NS	ND	NS	NS	ND	0.247	NE
1,2-Dichlorobenzene	ND	NS	ND	NS	NS	ND	NA	NE
1,2,4-Trimethylbenzene	52	NS	2.4 J	NS	NS	31	NA	NE
1,2,4-Trichlorobenzene	ND	NS	ND	NS	NS	ND	NA	NE
1,1-Dichloroethylene	ND	NS	ND	NS	NS	ND	< =0.0508	NE
1,1-Dichloroethane	ND	NS	2.6	NS	NS	ND	NA	NE
Trichlorofluoromethane (Freon 11)	2.6 J	NS	2.1 J	NS	NS	4	NA	NE
1,1,2-Trichloroethane	5.5	NS	ND	NS	NS	ND	NA	NE
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	NS	ND	NS	NS	ND	NA	NE
1,1,2,2-Tetrachloroethane	ND	NS	ND	NS	NS	ND	NA	NE
1,1,1-Trichloroethane	81	NS	35	NS	NS	ND	0.444	NE
Dichlorodifluoromethane	570	NS	720	NS	NS	4.3	NA	NE
Chlorobenzene	ND	NS	ND	NS	NS	ND	NA	NE

NYSDOH - New York State Department of Health

ug/m³ - micrograms per cubic meter

J - Estimated Value

ND - Not Detected above Method Detection Limit

NE - Not Established

NA - Not Analyzed

concentration exceeds 500 ug/m³

Table 82

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Soil Vapor Intrusion Sampling (Area B) - EPA Method TO-15
Samples Collected March 11, 2011

Compound	Concentration (ug/m ³)							NYSDOH Air Guidance Value (ug/m ³)
	SS-B1	SS-B2	SS-B3	1st Floor Indoor Air Area B	1st Floor Indoor Air Area B (SIM mode)	Basement Indoor Air Area B	Basement Indoor Air Area B (SIM mode)	
Vinyl Chloride	ND	ND	ND	ND	< =0.0322	ND	< =0.0322	NE
Vinyl bromide	ND	ND	ND	ND	NA	ND	NA	NE
Vinyl acetate	ND	ND	ND	ND	NA	ND	NA	NE
Trichloroethylene	ND	ND	ND	ND	<=0.124	ND	0.273	5
trans-1,3-Dichloropropylene	ND	ND	ND	ND	NA	ND	NA	NE
trans-1,2-Dichloroethylene	ND	ND	ND	ND	NA	ND	NA	NE
Toluene	8.4	4.8	8.7 J	11	NA	46	NA	NE
Tetrahydrofuran	23	3.2	9.5 J	3.4	NA	16	NA	NE
Tetrachloroethylene	120	51	ND	ND	0.897	ND	1.10	100
Styrene	ND	ND	ND	ND	NA	ND	NA	NE
Propylene	ND	ND	ND	1.5 J	NA	1.6 J	NA	NE
p-Ethyltoluene	3.6	3.0	ND	2.7	NA	12	NA	NE
p- & m- Xylenes	5.8	6.8	ND	6.8	NA	30	NA	NE
o-Xylene	2.0 J	2.2	ND	2.4	NA	11	NA	NE
n-Hexane	ND	3.2	ND	5.9	NA	34	NA	NE
n-Heptane	ND	ND	ND	2.9	NA	17	NA	NE
Methylene chloride	2.0 B	6.1 B	6.1 J, B	2.0 B	NA	2.4 B	NA	60
Methyl tert-butyl ether (MTBE)	ND	ND	ND	ND	NA	ND	NA	NE
4-Methyl-2-pentanone	ND	8.2	21	2.7 J	NA	14	NA	NE
Isopropanol	ND	ND	12 J	29	NA	32	NA	NE
Hexachlorobutadiene	ND	ND	ND	ND	NA	ND	NA	NE
Ethyl Benzene	1.4 J	1.7 J	ND	2.2	NA	9.1	NA	NE
Ethyl acetate	ND	ND	ND	1.8	NA	ND	NA	NE
Cyclohexane	ND	ND	ND	2.0	NA	7.6	NA	NE
cis-1,3-Dichloropropylene	ND	ND	ND	<1.2	NA	ND	NA	NE
cis-1,2-Dichloroethylene	ND	ND	ND	ND	<=0.0827	ND	<=0.0827	NE
Chloromethane	ND	ND	ND	1.1	NA	1.1	NA	NE
Chloroform	1.9 J	4.3	ND	ND	NA	ND	NA	NE
Chloroethane	ND	ND	ND	ND	NA	ND	NA	NE
Carbon tetrachloride	ND	ND	ND	ND	0.512	ND	0.512	NE
Carbon disulfide	ND	ND	ND	ND	NA	ND	NA	NE
Bromomethane	ND	ND	ND	ND	NA	ND	NA	NE
Bromoform	ND	ND	ND	ND	NA	ND	NA	NE
Bromodichloromethane	ND	ND	ND	ND	NA	ND	NA	NE
Benzyl chloride	ND	ND	ND	ND	NA	ND	NA	NE
Benzene	ND	ND	ND	2.6	NA	9.7	NA	NE
Acetone	2.6	16	ND	4.8	NA	19	NA	NE
3-Chloropropene	ND	ND	ND	ND	NA	ND	NA	NE
2-Hexanone	ND	ND	ND	ND	NA	7.4	NA	NE
2-Butanone	13	ND	8.9	2.8	NA	4.4	NA	NE
2,2,4-Trimethylpentane	ND	ND	ND	3.9	0.6	ND	NA	NE
1,4-Dioxane	ND	ND	ND	ND	NA	ND	NA	NE
1,4-Dichlorobenzene	ND	ND	ND	ND	NA	ND	NA	NE
1,3-Dichlorobenzene	ND	ND	ND	ND	NA	ND	NA	NE
1,3-Butadiene	ND	ND	ND	ND	NA	ND	NA	NE
1,3,5-Trimethylbenzene	ND	1.2 J	ND	ND	NA	ND	NA	NE
1,2-Dichlorotetrafluoroethane	ND	ND	ND	ND	NA	ND	NA	NE
1,2-Dichloropropane	ND	ND	ND	ND	NA	ND	NA	NE
1,2-Dichloroethane	ND	ND	ND	ND	0.165	ND	0.206	NE
1,2-Dichlorobenzene	ND	ND	ND	ND	NA	ND	NA	NE
1,2,4-Trimethylbenzene	2.6	2.8	ND	2.4 J	NA	14	NA	NE
1,2,4-Trichlorobenzene	ND	ND	ND	ND	NA	ND	NA	NE
1,1-Dichloroethylene	ND	ND	ND	ND	<=0.0508	ND	<=0.0508	NE
1,1-Dichloroethane	ND	ND	ND	ND	NA	ND	NA	NE
Trichlorofluoromethane (Freon 11)	2.3 J	1.9 J	ND	1.4 J	NA	1.4 J	NA	NE
1,1,2-Trichloroethane	ND	ND	ND	ND	NA	2.1 J	NA	NE
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	ND	ND	ND	NA	ND	NA	NE
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	NA	ND	NA	NE
1,1,1-Trichloroethane	45	29	ND	ND	< =0.0294	ND	< =0.0294	NE
Dichlorodifluoromethane	2.5	1.9 J	ND	2.3 J	NA	2.5	NA	NE
Chlorobenzene	ND	ND	ND	ND	NA	ND	NA	NE

NYSDOH - New York State Department of Health

ug/m3 - micrograms per cubic meter

J - Estimated Value

B - Compound Detected in Method Blank

ND - Not Detected above Method Detection Limit

NE - Not Established

NA - Not Analyzed

SIM - Selected Ion Monitoring

Table 83

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Soil Vapor Intrusion Sampling (Area C) - EPA Method TO-15
Samples Collected March 11, 2011

Compound	Concentration (ug/m ³)										NYSDOH Air Guidance Value (ug/m ³)
	SS-C1	SS-C2	SS-C3	SS-C4	SS-C5	SS-C6	SS-C7	SS-C8	Indoor Air Area C	Indoor Air Area C (SIM mode)	
Vinyl Chloride	NS	NS	NS	NS	NS	NS	NS	NS	ND	<=0.0322	NE
Vinyl bromide	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
Vinyl acetate	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
Trichloroethylene	NS	NS	NS	NS	NS	NS	NS	NS	ND	0.328	5
trans-1,3-Dichloropropylene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
trans-1,2-Dichloroethylene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
Toluene	NS	NS	NS	NS	NS	NS	NS	NS	39	NA	NE
Tetrahydrofuran	NS	NS	NS	NS	NS	NS	NS	NS	15	NA	NE
Tetrachloroethylene	NS	NS	NS	NS	NS	NS	NS	NS	ND	1.38	100
Styrene	NS	NS	NS	NS	NS	NS	NS	NS	5.2	NA	NE
Propylene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
p-Ethyltoluene	NS	NS	NS	NS	NS	NS	NS	NS	10	NA	NE
p- & m- Xylenes	NS	NS	NS	NS	NS	NS	NS	NS	46	NA	NE
o-Xylene	NS	NS	NS	NS	NS	NS	NS	NS	15	NA	NE
n-Hexane	NS	NS	NS	NS	NS	NS	NS	NS	31	NA	NE
n-Heptane	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
Methylene chloride	NS	NS	NS	NS	NS	NS	NS	NS	4.8 B	NA	60
Methyl tert-butyl ether (MTBE)	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
4-Methyl-2-pentanone	NS	NS	NS	NS	NS	NS	NS	NS	12	NA	NE
Isopropanol	NS	NS	NS	NS	NS	NS	NS	NS	22	NA	NE
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
Ethyl Benzene	NS	NS	NS	NS	NS	NS	NS	NS	11	NA	NE
Ethyl acetate	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
Cyclohexane	NS	NS	NS	NS	NS	NS	NS	NS	6.5	NA	NE
cis-1,3-Dichloropropylene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
cis-1,2-Dichloroethylene	NS	NS	NS	NS	NS	NS	NS	NS	ND	<=0.0827	NE
Chloromethane	NS	NS	NS	NS	NS	NS	NS	NS	1.0 J	NA	NE
Chloroform	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
Chloroethane	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
Carbon tetrachloride	NS	NS	NS	NS	NS	NS	NS	NS	ND	0.512	NE
Carbon disulfide	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
Bromomethane	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
Bromoform	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
Bromodichloromethane	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
Benzyl chloride	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
Benzene	NS	NS	NS	NS	NS	NS	NS	NS	8.6	NA	NE
Acetone	NS	NS	NS	NS	NS	NS	NS	NS	3.5	NA	NE
3-Chloropropene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
2-Hexanone	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
2-Butanone	NS	NS	NS	NS	NS	NS	NS	NS	6.6	NA	NE
2,2,4-Trimethylpentane	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
1,4-Dioxane	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
1,4-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	3.5	NA	NE
1,3-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
1,3-Butadiene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
1,3,5-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
1,2-Dichlorotetrafluoroethane	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
1,2-Dichloropropane	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
1,2-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	ND	0.247	NE
1,2-Dichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
1,2,4-Trimethylbenzene	NS	NS	NS	NS	NS	NS	NS	NS	11	NA	NE
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
1,1-Dichloroethylene	NS	NS	NS	NS	NS	NS	NS	NS	ND	<=0.0508	NE
1,1-Dichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
Trichlorofluoromethane (Freon 11)	NS	NS	NS	NS	NS	NS	NS	NS	1.4 J	NA	NE
1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
1,1,2,2-Tetrachloroethane	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE
1,1,1-Trichloroethane	NS	NS	NS	NS	NS	NS	NS	NS	ND	0.388	NE
Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	NS	NS	2.3 J	NA	NE
Chlorobenzene	NS	NS	NS	NS	NS	NS	NS	NS	ND	NA	NE

NYSDOH - New York State Department of Health
ug/m3 - micrograms per cubic meter
J - Estimated Value

ND - Not Detected above Method Detection Limit
NE - Not Established
NA - Not Analyzed

Table 84

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

Summary of Soil Vapor Intrusion Sampling (Area D) - EPA Method TO-15
Samples Collected March 11, 2011

Compound	Concentration (ug/m ³)					NYSDOH Air Guidance Value (ug/m ³)
	SS-D1	SS-D2	SS-D3	Indoor Air Area D	Indoor Air Area D (SIM mode)	
Vinyl Chloride	NS	NS	NS	ND	<=0.0322	NE
Vinyl bromide	NS	NS	NS	ND	NA	NE
Vinyl acetate	NS	NS	NS	ND	NA	NE
Trichloroethylene	NS	NS	NS	ND	0.601	5
trans-1,3-Dichloropropylene	NS	NS	NS	ND	NA	NE
trans-1,2-Dichloroethylene	NS	NS	NS	ND	NA	NE
Toluene	NS	NS	NS	23	NA	NE
Tetrahydrofuran	NS	NS	NS	10	NA	NE
Tetrachloroethylene	NS	NS	NS	ND	1.72	100
Styrene	NS	NS	NS	3.5	NA	NE
Propylene	NS	NS	NS	2.9	NA	NE
p-Ethyltoluene	NS	NS	NS	8.3	NA	NE
p- & m- Xylenes	NS	NS	NS	36	NA	NE
o-Xylene	NS	NS	NS	11	NA	NE
n-Hexane	NS	NS	NS	16	NA	NE
n-Heptane	NS	NS	NS	7.5	NA	NE
Methylene chloride	NS	NS	NS	3.3 B	NA	60
Methyl tert-butyl ether (MTBE)	NS	NS	NS	ND	NA	NE
4-Methyl-2-pentanone	NS	NS	NS	ND	NA	NE
Isopropanol	NS	NS	NS	12	NA	NE
Hexachlorobutadiene	NS	NS	NS	ND	NA	NE
Ethyl Benzene	NS	NS	NS	8.6	NA	NE
Ethyl acetate	NS	NS	NS	ND	NA	NE
Cyclohexane	NS	NS	NS	5.6	NA	NE
cis-1,3-Dichloropropylene	NS	NS	NS	ND	NA	NE
cis-1,2-Dichloroethylene	NS	NS	NS	ND	< =0.0827	NE
Chloromethane	NS	NS	NS	1.1	NA	NE
Chloroform	NS	NS	NS	ND	NA	NE
Chloroethane	NS	NS	NS	ND	NA	NE
Carbon tetrachloride	NS	NS	NS	ND	0.512	NE
Carbon disulfide	NS	NS	NS	ND	NA	NE
Bromomethane	NS	NS	NS	ND	NA	NE
Bromoform	NS	NS	NS	ND	NA	NE
Bromodichloromethane	NS	NS	NS	ND	NA	NE
Benzyl chloride	NS	NS	NS	ND	NA	NE
Benzene	NS	NS	NS	6.5	NA	NE
Acetone	NS	NS	NS	2.2	NA	NE
3-Chloropropene	NS	NS	NS	ND	NA	NE
2-Hexanone	NS	NS	NS	ND	NA	NE
2-Butanone	NS	NS	NS	ND	NA	NE
2,2,4-Trimethylpentane	NS	NS	NS	ND	NA	NE
1,4-Dioxane	NS	NS	NS	ND	NA	NE
1,4-Dichlorobenzene	NS	NS	NS	2.3 J	NA	NE
1,3-Dichlorobenzene	NS	NS	NS	ND	NA	NE
1,3-Butadiene	NS	NS	NS	ND	NA	NE
1,3,5-Trimethylbenzene	NS	NS	NS	ND	NA	NE
1,2-Dichlorotetrafluoroethane	NS	NS	NS	ND	NA	NE
1,2-Dichloropropane	NS	NS	NS	ND	NA	NE
1,2-Dichloroethane	NS	NS	NS	ND	0.165 J	NE
1,2-Dichlorobenzene	NS	NS	NS	ND	NA	NE
1,2,4-Trimethylbenzene	NS	NS	NS	9.8	NA	NE
1,2,4-Trichlorobenzene	NS	NS	NS	ND	NA	NE
1,1-Dichloroethylene	NS	NS	NS	ND	<=0.0508	NE
1,1-Dichloroethane	NS	NS	NS	ND	NA	NE
Trichlorofluoromethane (Freon 11)	NS	NS	NS	1.4 J	NA	NE
1,1,2-Trichloroethane	NS	NS	NS	ND	NA	NE
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NS	NS	NS	ND	NA	NE
1,1,2,2-Tetrachloroethane	NS	NS	NS	ND	NA	NE
1,1,1-Trichloroethane	NS	NS	NS	ND	0.227	NE
Dichlorodifluoroethane	NS	NS	NS	2.4 J	NA	NE
Chlorobenzene	NS	NS	NS	ND	NA	NE

NYSDOH - New York State Department of Health

ug/m3 - micrograms per cubic meter

J - Estimated Value

B - Compound Detected in Method Blank

ND - Not Detected above Method Detection Limit

NE - Not Established

NA - Not Analyzed

SIM - Selected Ion Monitoring

Table 85

**FORMER RED DEVIL PAINT
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Ambient Outdoor Air Sampling - EPA Method TO-15
Samples Collected March 11, 2011

Compound	Concentration (ug/m ³)				NYSDOH Air Guidance Value (ug/m ³)
	Outdoor Air Upwind	Indoor Air Upwind (SIM mode)	Outdoor Air Downwind	Outdoor Air Downwind (SIM mode)	
Vinyl Chloride	ND	<=0.0322	ND	<=0.0322	NE
Vinyl bromide	ND	NA	ND	NA	NE
Vinyl acetate	ND	NA	ND	NA	NE
Trichloroethylene	ND	<=0.124	ND	<=0.124	5
trans-1,3-Dichloropropylene	ND	NA	ND	NA	NE
trans-1,2-Dichloroethylene	ND	NA	ND	NA	NE
Toluene	2.7	NA	2.6	NA	NE
Tetrahydrofuran	1.2 J	NA	ND	NA	NE
Tetrachloroethylene	ND	0.621	ND	1.59	100
Styrene	ND	NA	ND	NA	NE
Propylene	ND	NA	ND	NA	NE
p-Ethyltoluene	ND	NA	ND	NA	NE
p- & m- Xylenes	ND	NA	ND	NA	NE
o-Xylene	ND	NA	ND	NA	NE
n-Hexane	1.8	NA	2.5	NA	NE
n-Heptane	ND	NA	ND	NA	NE
Methylene chloride	4.9 B	NA	2.3 B	NA	60
Methyl tert-butyl ether (MTBE)	ND	NA	ND	NA	NE
4-Methyl-2-pentanone	ND	NA	ND	NA	NE
Isopropanol	11	NA	9.8	NA	NE
Hexachlorobutadiene	ND	NA	ND	NA	NE
Ethyl Benzene	ND	NA	ND	NA	NE
Ethyl acetate	1.8	NA	ND	NA	NE
Cyclohexane	ND	NA	ND	NA	NE
cis-1,3-Dichloropropylene	ND	NA	ND	NA	NE
cis-1,2-Dichloroethylene	ND	<=0.0827	ND	<=0.0827	NE
Chloromethane	1.1	NA	1.1	NA	NE
Chloroform	ND	NA	ND	NA	NE
Chloroethane	ND	NA	ND	NA	NE
Carbon tetrachloride	ND	0.576	ND	0.576	NE
Carbon disulfide	ND	NA	ND	NA	NE
Bromomethane	ND	NA	ND	NA	NE
Bromoform	ND	NA	ND	NA	NE
Bromodichloromethane	ND	NA	ND	NA	NE
Benzyl chloride	ND	NA	ND	NA	NE
Benzene	1.2	NA	1.2 J	NA	NE
Acetone	12	NA	ND	NA	NE
3-Chloropropene	ND	NA	ND	NA	NE
2-Hexanone	ND	NA	ND	NA	NE
2-Butanone	2.5	NA	1.7	NA	NE
2,2,4-Trimethylpentane	ND	NA	ND	NA	NE
1,4-Dioxane	ND	NA	ND	NA	NE
1,4-Dichlorobenzene	ND	NA	ND	NA	NE
1,3-Dichlorobenzene	ND	NA	ND	NA	NE
1,3-Butadiene	ND	NA	ND	NA	NE
1,3,5-Trimethylbenzene	ND	NA	ND	NA	NE
1,2-Dichlorotetrafluoroethane	ND	NA	ND	NA	NE
1,2-Dichloropropane	ND	NA	ND	NA	NE
1,2-Dichloroethane	ND	0.165 J	ND	<=0.0959	NE
1,2-Dichlorobenzene	ND	NA	ND	NA	NE
1,2,4-Trimethylbenzene	ND	NA	ND	NA	NE
1,2,4-Trichlorobenzene	ND	NA	ND	NA	NE
1,1-Dichloroethylene	ND	<=0.0508	ND	<=0.0508	NE
1,1-Dichloroethane	ND	NA	ND	NA	NE
Trichlorofluoromethane (Freon 11)	1.4	NA	ND	NA	NE
1,1,2-Trichloroethane	ND	NA	ND	NA	NE
1,1,2-Trichloro-1,2,2-trifluoroethane (F)	ND	NA	ND	NA	NE
1,1,2,2-Tetrachloroethane	ND	NA	ND	NA	NE
1,1,1-Trichloroethane	ND	<=0.0294	ND	<=0.0294	NE
Dichlorodifluoroethane	2.3 J	NA	2.3 J	NA	NE
Chlorobenzene	ND	NA	ND	NA	NE

NYSDOH - New York State Department of Health
ug/m3 - micrograms per cubic meter
J - Estimated Value
B - Compound Detected in Method Blank
NS - Not Sampled

ND - Not Detected above Method Detection Limit
NE - Not Established
NA - Not Analyzed
SIM - Selected Ion Monitoring

TABLE 86

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

Summary of Soil Vapor Intrusion Sampling - Helium Tracer Gas
Samples Collected March 11, 2011

Sampling Location	Concentration (ppmv)	Concentration (%)
SS-A5	3.7	0.0000037
SS-B2	< 50	< 0.005
SS-B2	< 50	< 0.005

ppmv - parts per million vapor

J - Estimated Value

FIGURES



0 1,000 2,000 4,000 Feet



BASE SOURCE: U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLE;
MOUNT VERNON, NEW YORK; 1966. PHOTOREVISED 1979.

**FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031**

SITE LOCATION MAP

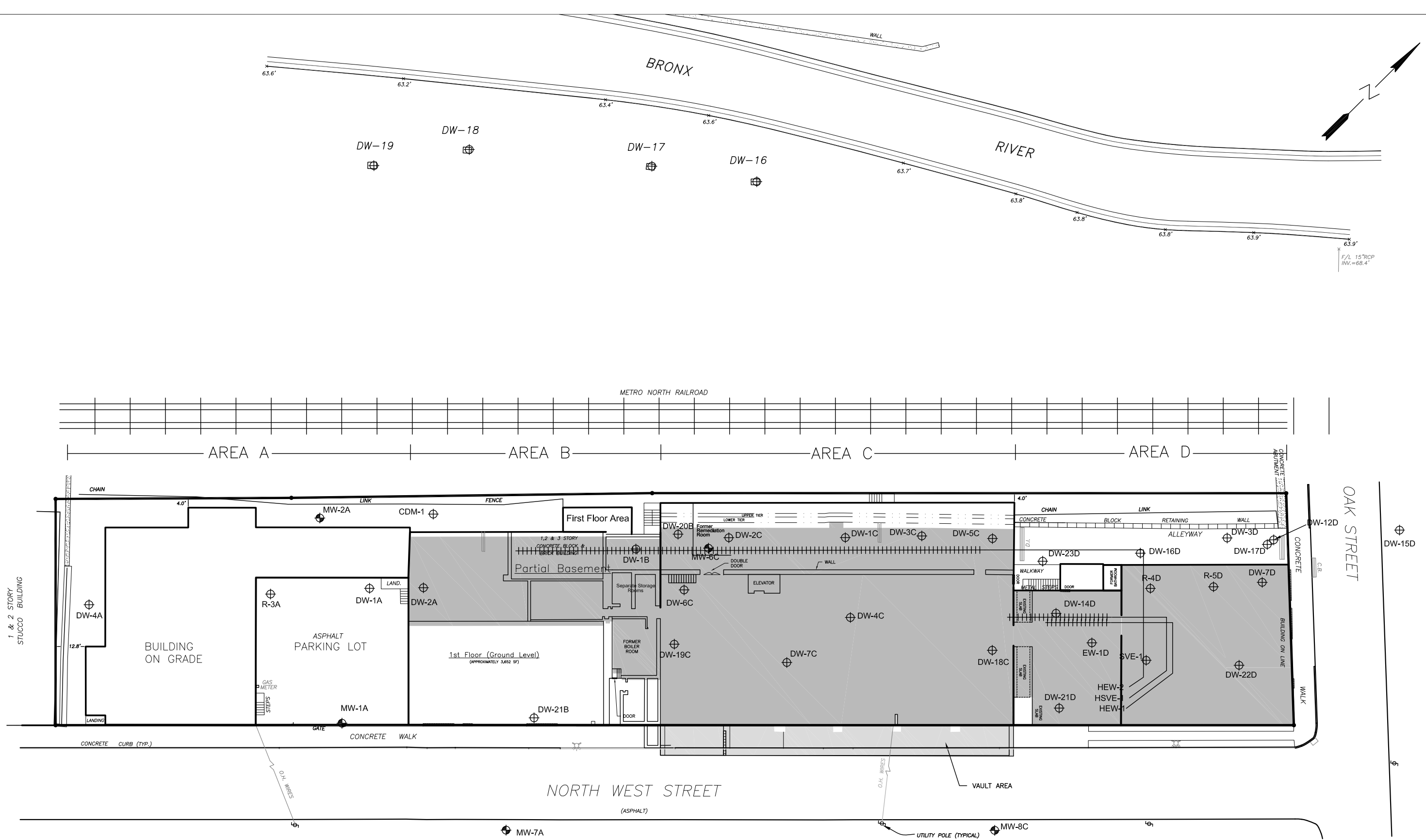


Prepared by:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Services
4 Westchester Park Drive, Suite 175
White Plains, NY 10604
(914) 694-5711 www.lbgweb.com

DATE: 10/6/15

FILE: B:LBG_NY_red_devil

DRAWN BY: BK CHECKED BY: JAM FIGURE: 1



- LEGEND**
- PROPERTY BOUNDARY
 - GROUNDWATER MONITOR WELL LOCATION
 - PRODUCT DELINEATION WELL LOCATION
 - HORIZONTAL WELL

R-3A, R-4D AND R-5D ARE REPLACEMENT WELLS

NOTE: IT IS A VIOLATION OF ARTICLE 130 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE EXPRESS WRITTEN VERIFICATION OR ADOPTION BY A NEW YORK STATE LICENSED LAND SURVEYOR OR ENGINEER IN ACCORDANCE WITH SECTION 7209 (2), ARTICLE 130, NEW YORK STATE EDUCATION LAW.



FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 360031

SITE PLAN

DATE	REVISED

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Engineering Services
110 Corporate Park Drive
Suite 112
White Plains, NY 10604
(914) 694-5711

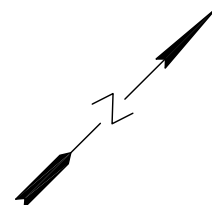
DRAWN: JM

CHECKED: BH

DATE: 9/28/15

FIGURE: 2

7.1-10-10
INV. = 68.4'



METRO NORTH RAILROAD

AREA B

AREA C

AREA D

OAK STREET

NORTH WEST STREET
(ASPHALT)

LEGEND

- PROPERTY BOUNDARY
- FLOOR DRAIN—CONCRETE LINED
- SUMP—SOIL BOTTOM
- FLOOR DRAIN PIPING
- PIPE TERMINATION POINT
- SUMP CONCRETE LINED
- SUBSURFACE ANOMALY (SUSPECTED TANK)



NOTE: IT IS A VIOLATION OF ARTICLE 130 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE EXPRESS WRITTEN VERIFICATION OR ADOPTION BY A NEW YORK STATE LICENSED LAND SURVEYOR OR ENGINEER IN ACCORDANCE WITH SECTION 7209 (2), ARTICLE 130, NEW YORK STATE EDUCATION LAW.

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

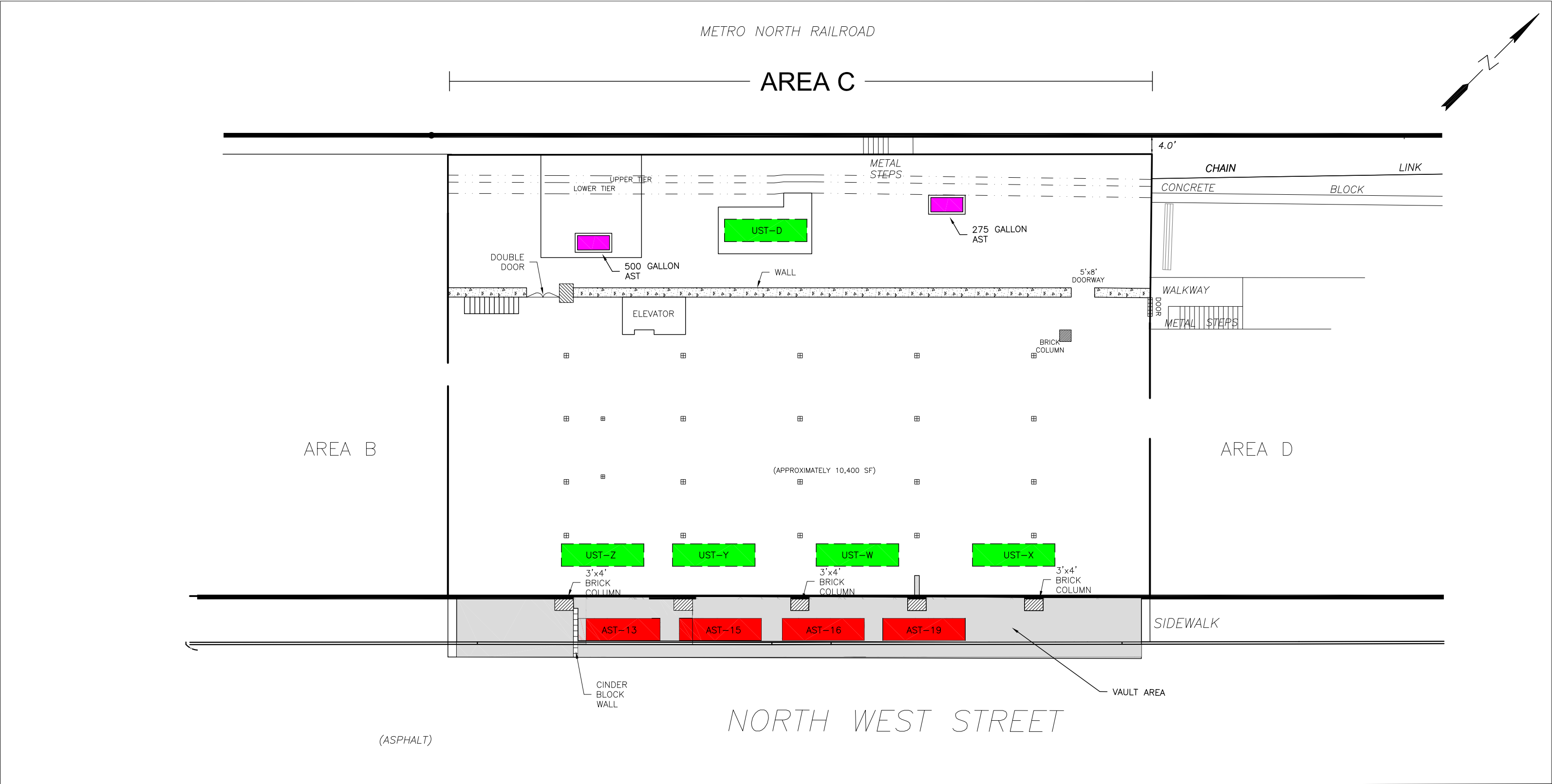
SUBSURFACE CONDUCTIVE TRACING MAP

DATE	REVISED

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Engineering Services
110 Corporate Park Drive
Suite 112
White Plains, NY 10604
(914) 694-5711



DRAWN: JM CHECKED: SG DATE: 1/16/09 FIGURE: 3



LEGEND

- PROPERTY BOUNDARY
- BASEMENT PILLAR SUPPORT
- UST REMOVED BY LBG
- AST REMOVED BY ERM

EXISTING AST WITH SECONDARY CONTAINMENT (REMEDIAL DERIVED WASTE STORAGE)

NOTE: IT IS A VIOLATION OF ARTICLE 130 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE EXPRESS WRITTEN VERIFICATION OR ADOPTION BY A NEW YORK STATE LICENSED LAND SURVEYOR OR ENGINEER IN ACCORDANCE WITH SECTION 7209 (2), ARTICLE 130, NEW YORK STATE EDUCATION LAW.



FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

AREA C – UST & AST LOCATION MAP


DATE	REVISED	PREPARED BY:
		LEGGETTE, BRASHEARS & GRAHAM, INC.
		Professional Ground-Water and Environmental Engineering Services
		110 Corporate Park Drive
		Suite 112
		White Plains, NY 10604
		(914) 694-5711

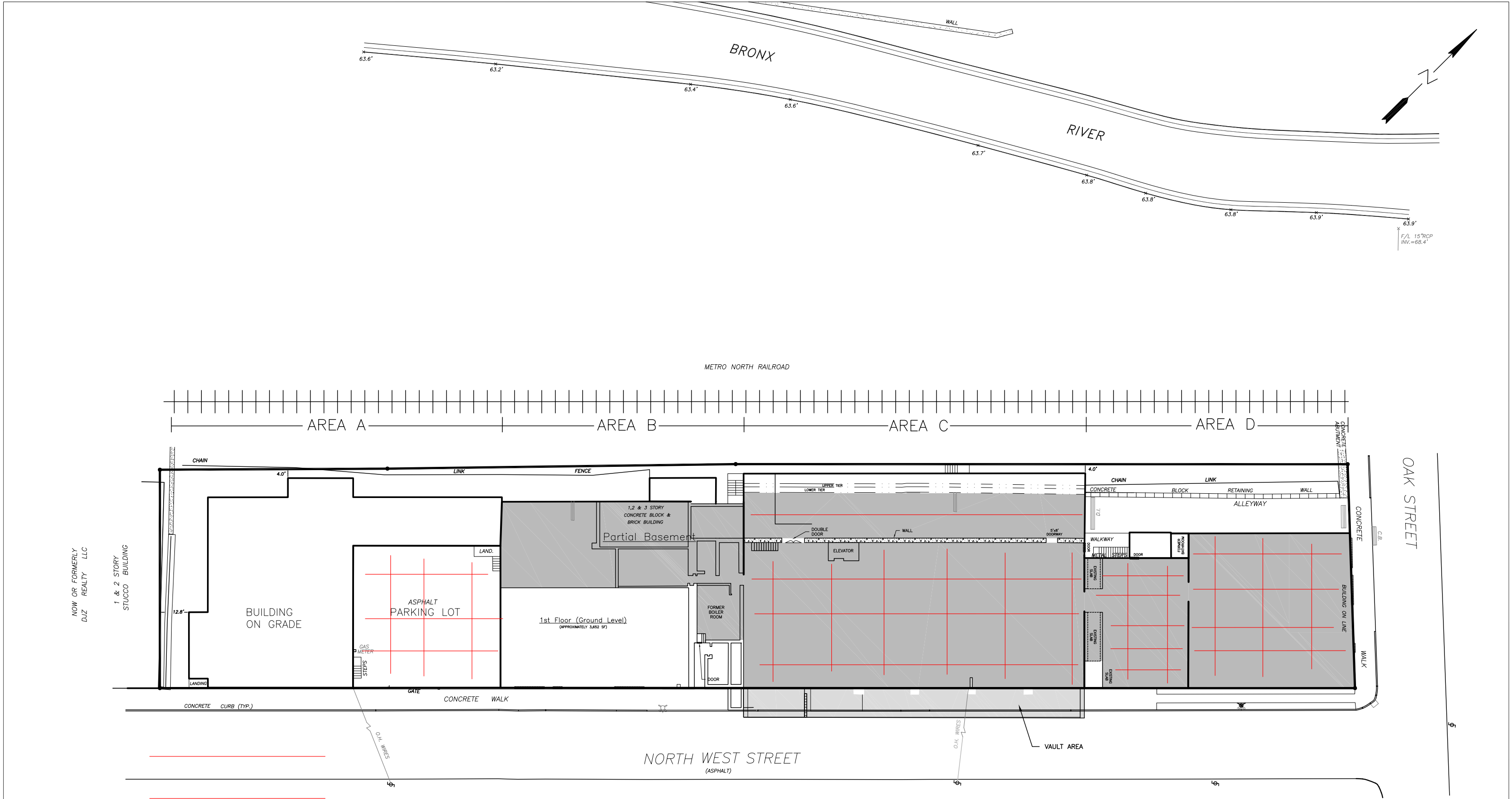
DRAWN: JM

CHECKED: SG

DATE: 12/31/08

FIGURE: 4





LEGEND

— PROPERTY BOUNDARY

— GROUND PENETRATING RADAR BISECT

NOTE: NO SUBSURFACE ANOMALIES DETECTED WITH GPR.
SIGNIFICANT INTERFERENCE OBSERVED DUE TO STEEL REBAR, CONCRETE AND ROCKS.

NOTE: IT IS A VIOLATION OF ARTICLE 130 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE EXPRESS WRITTEN VERIFICATION OR ADOPTION BY A NEW YORK STATE LICENSED LAND SURVEYOR OR ENGINEER IN ACCORDANCE WITH SECTION 7209 (2), ARTICLE 130, NEW YORK STATE EDUCATION LAW.



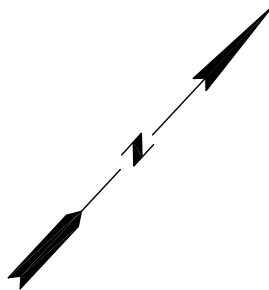
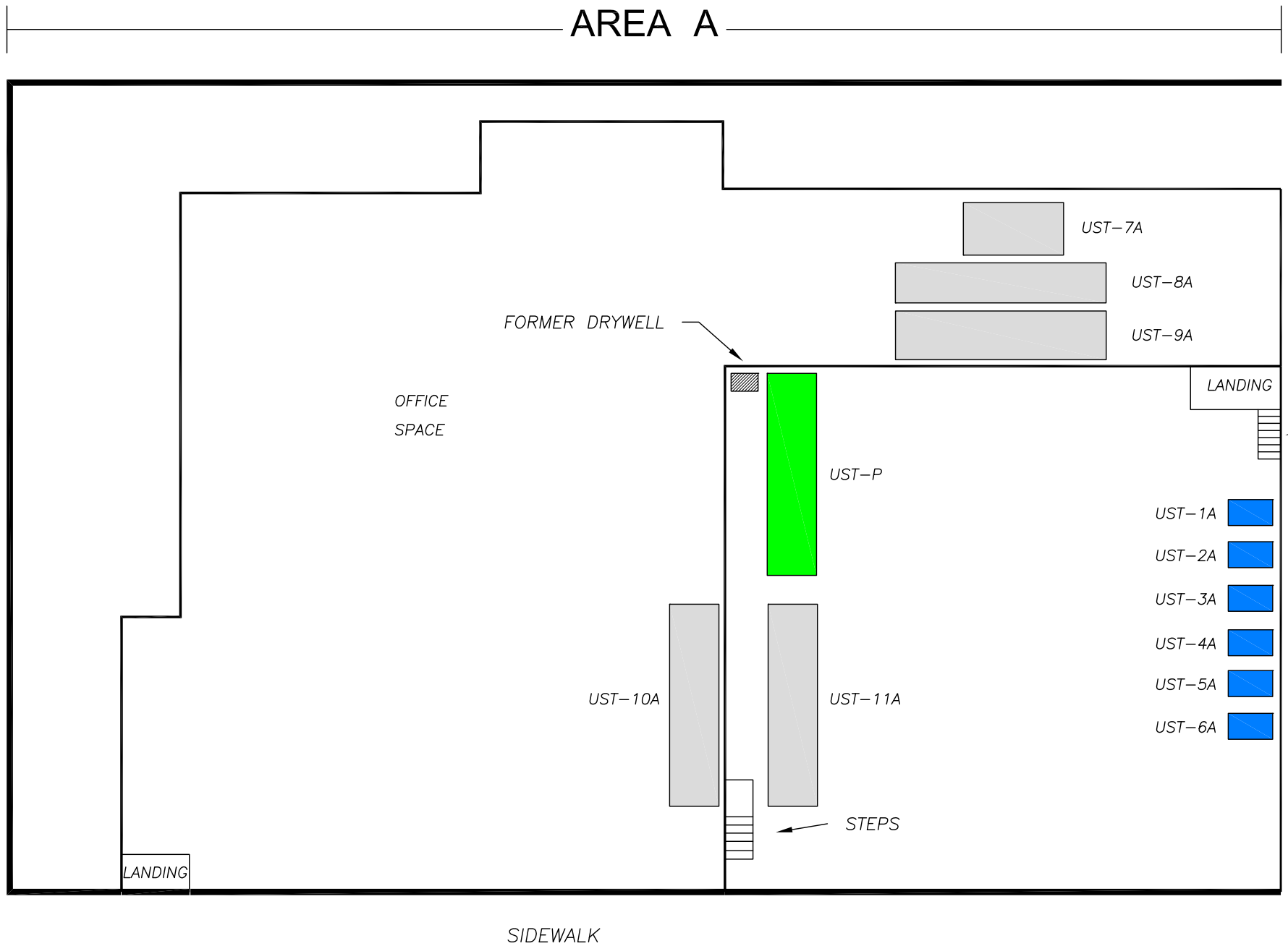
FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

GROUND PENETRATING RADAR MAP
BISECTS AND POTENTIAL ANOMALIES

DATE	REVISED

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Engineering Services
110 Corporate Park Drive
Suite 112
White Plains, NY 10604
(914) 694-5711

DRAWN: JM	CHECKED: SG	DATE: 12/30/08	FIGURE: 5
-----------	-------------	----------------	-----------



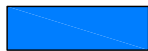
LEGEND



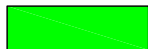
PROPERTY BOUNDARY



UST REMOVED BEFORE ERM AND LBG



UST REMOVED BY ERM

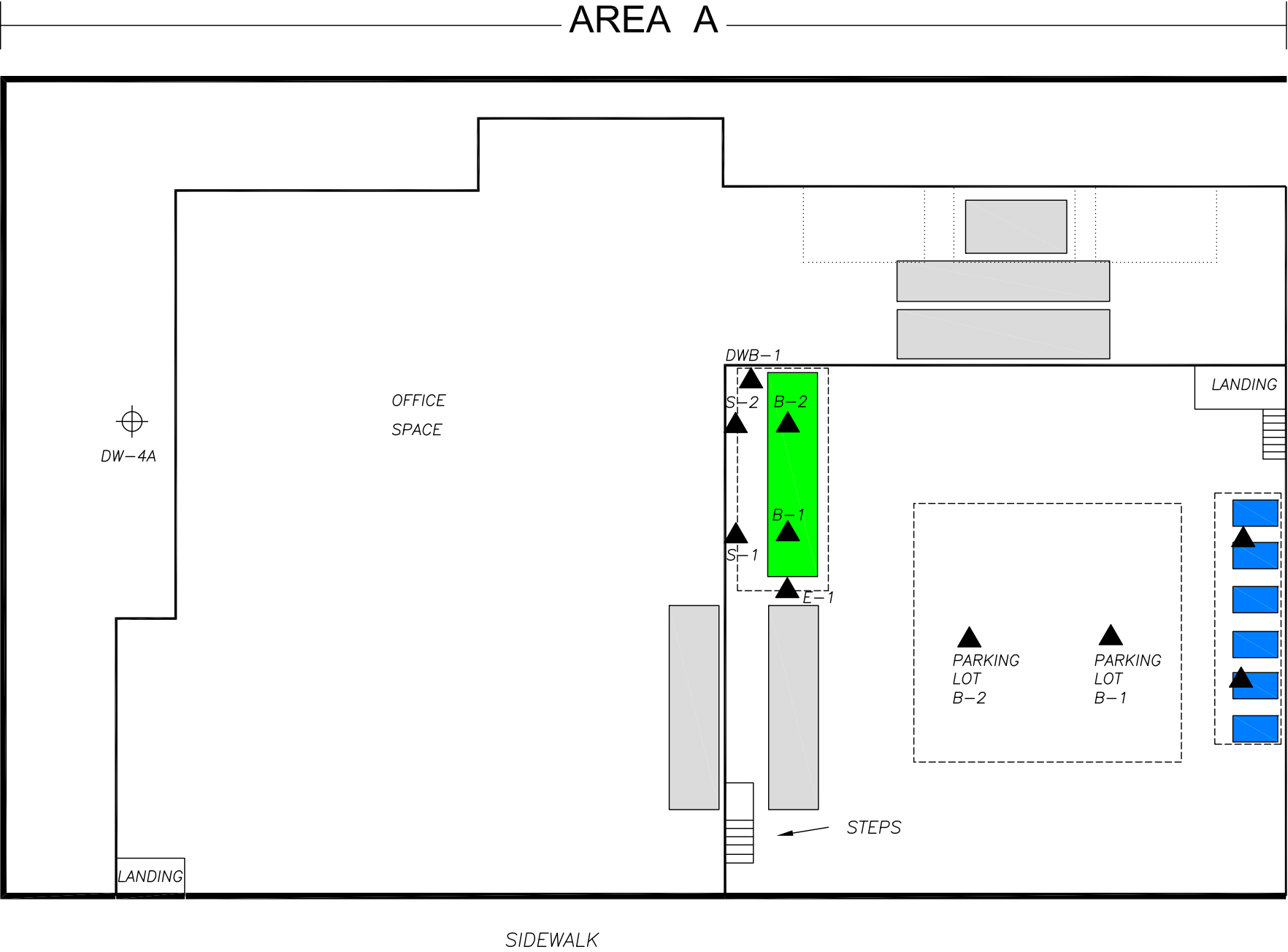


UST REMOVED BY LBG



FORMER RED DEVIL PAINT FACILITY 30 NORTH WEST STREET MT. VERNON, NY SITE NUMBER 3-60-03			
AREA A - UST LOCATION MAP			
	PREPARED BY: LEGGETTE, BRASHEARS & GRAHAM, INC. Professional Ground-Water and Environmental Services 110 Corporate Park Drive; Suite 112 White Plains, New York (914) 694-5711		
	FILE: Area A-UST locations	DRAWN BY: JAM	CHECKED BY: SG
DATE: 11/14/08			FIGURE: 6

UST	SIZE	SAMPLE I.D.
P	5,000 GALLON STEEL	B-1 B-2 S-1 S-2 E-1 DWB-1
N/A	N/A	OTB-1 OTB-2 PARKING LOT B-1 PARKING LOT B-2



LEGEND



PROPERTY BOUNDARY



UST REMOVED BEFORE ERM AND LBG



UST REMOVED PRIOR TO LBG BY ERM



UST REMOVED BY LBG



APPROXIMATE EXTENT OF EXCAVATION



DW-4A

DELINEATION WELL LOCATION



ENDPOINT SAMPLE LOCATION



STORAGE (UTILITY AND ELECTRIC)



SCALE IN FEET

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MT. VERNON, NY
SITE NUMBER 3-60-03

EXCAVATION EXTENT AND ENDPOINT SAMPLE
LOCATION MAP - AREA A, 2008

PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Services
4 Westchester Park Drive; Suite 175
White Plains, New York
(914) 694-5711

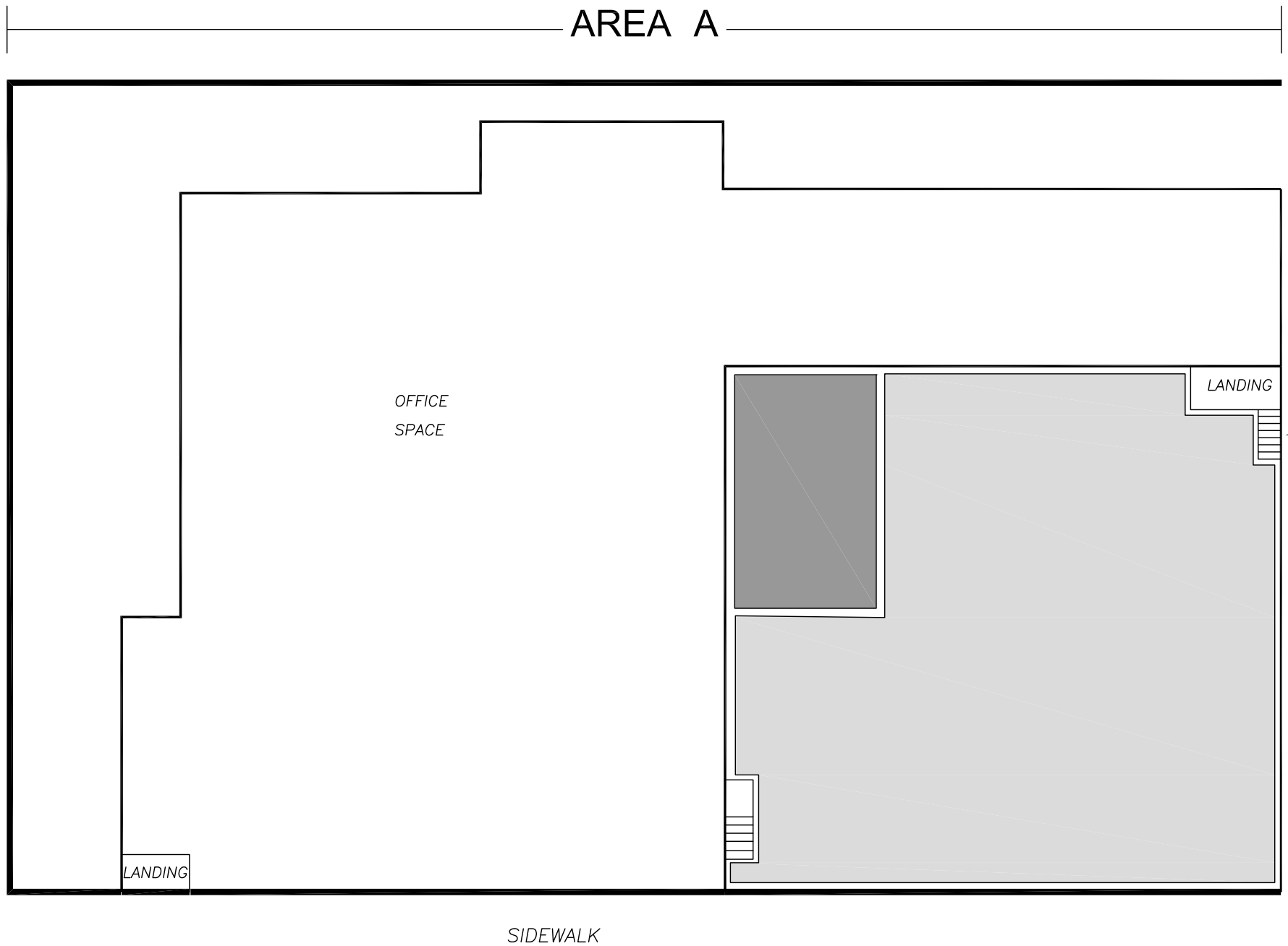
FILE: fig5

DRAWN BY: JM

CHECKED BY: SG

DATE: 11/17/15

FIGURE: 8



LEGEND



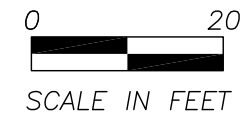
PROPERTY BOUNDARY



EXCAVATION APPROXIMATELY 10' DEPTH



EXCAVATION APPROXIMATELY 11'-12' DEPTH



FORMER RED DEVIL PAINT FACILITY 30 NORTH WEST STREET MT. VERNON, NY SITE NUMBER 3-60-03			
EXTENT OF EXPLORATORY EXCAVATIONS AREA A - 2008			
	PREPARED BY: LEGGETTE, BRASHEARS & GRAHAM, INC. Professional Ground-Water and Environmental Services 110 Corporate Park Drive; Suite 112 White Plains, New York (914) 694-5711		
	FILE: fig35-Area A	DRAWN BY: JM	CHECKED BY: SG
DATE: 1/16/09			FIGURE: 9



LEGEND

- PROPERTY BOUNDARY
- AST REMOVED BY ERM
- AST REMOVED BY LBG
- UST REMOVED BY LBG
- UST REMOVED BY ERM

0 20
SCALE IN FEET

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NY
SITE NUMBER 3-60-031

AREA B –
UST AND AST LOCATION MAP



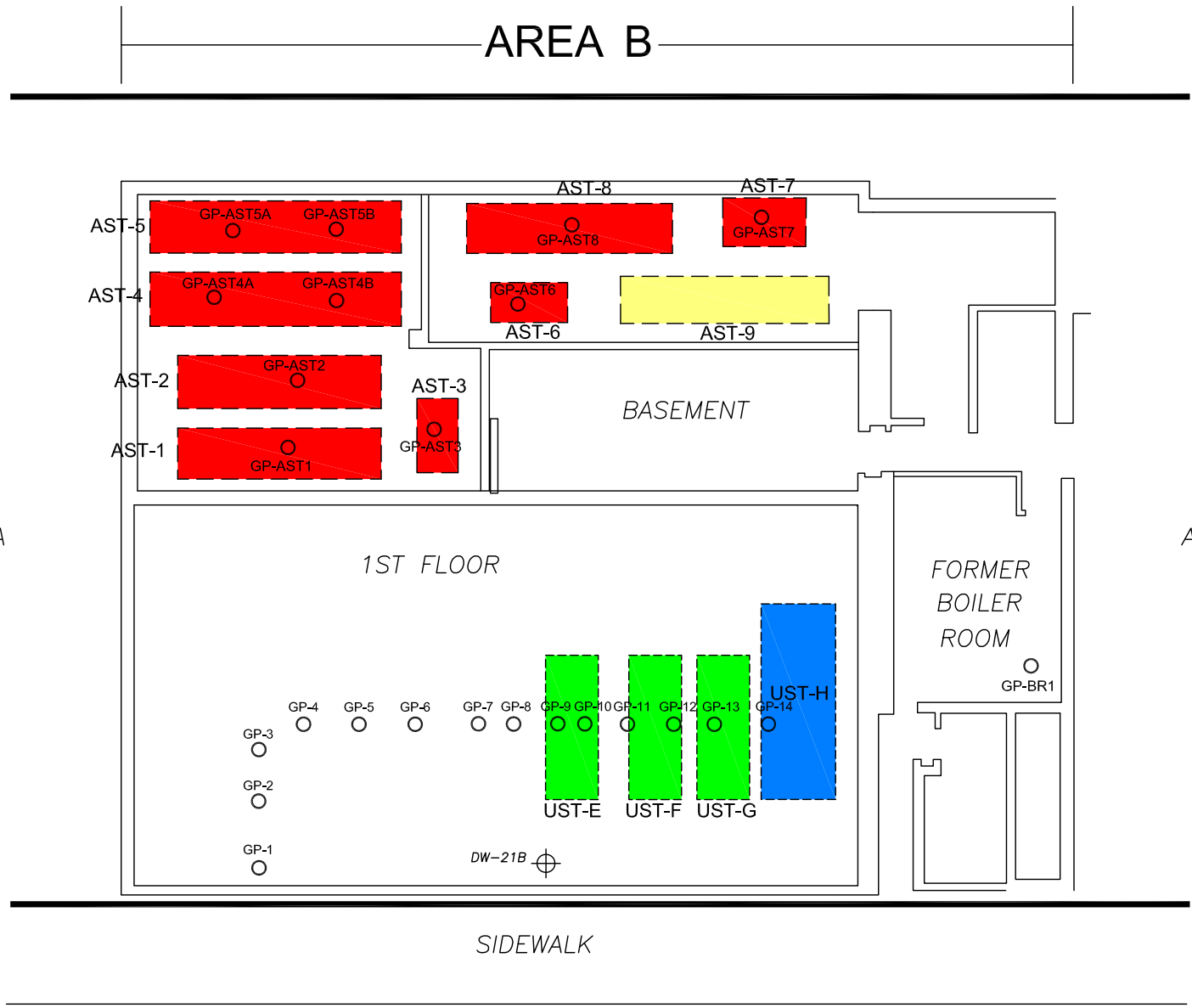
PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Services
110 Corporate Park Drive; Suite 112
White Plains, New York
(914) 694-5711

newArea b-UST&AST

DRAWN BY: JAM

CHECKED BY: SG

DATE: 11/24/08
FIGURE: 10



LEGEND



DELINEATION WELL LOCATION



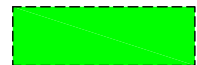
PROPERTY BOUNDARY



AST REMOVED BY ERM



AST REMOVED BY LBG



UST REMOVED BY LBG



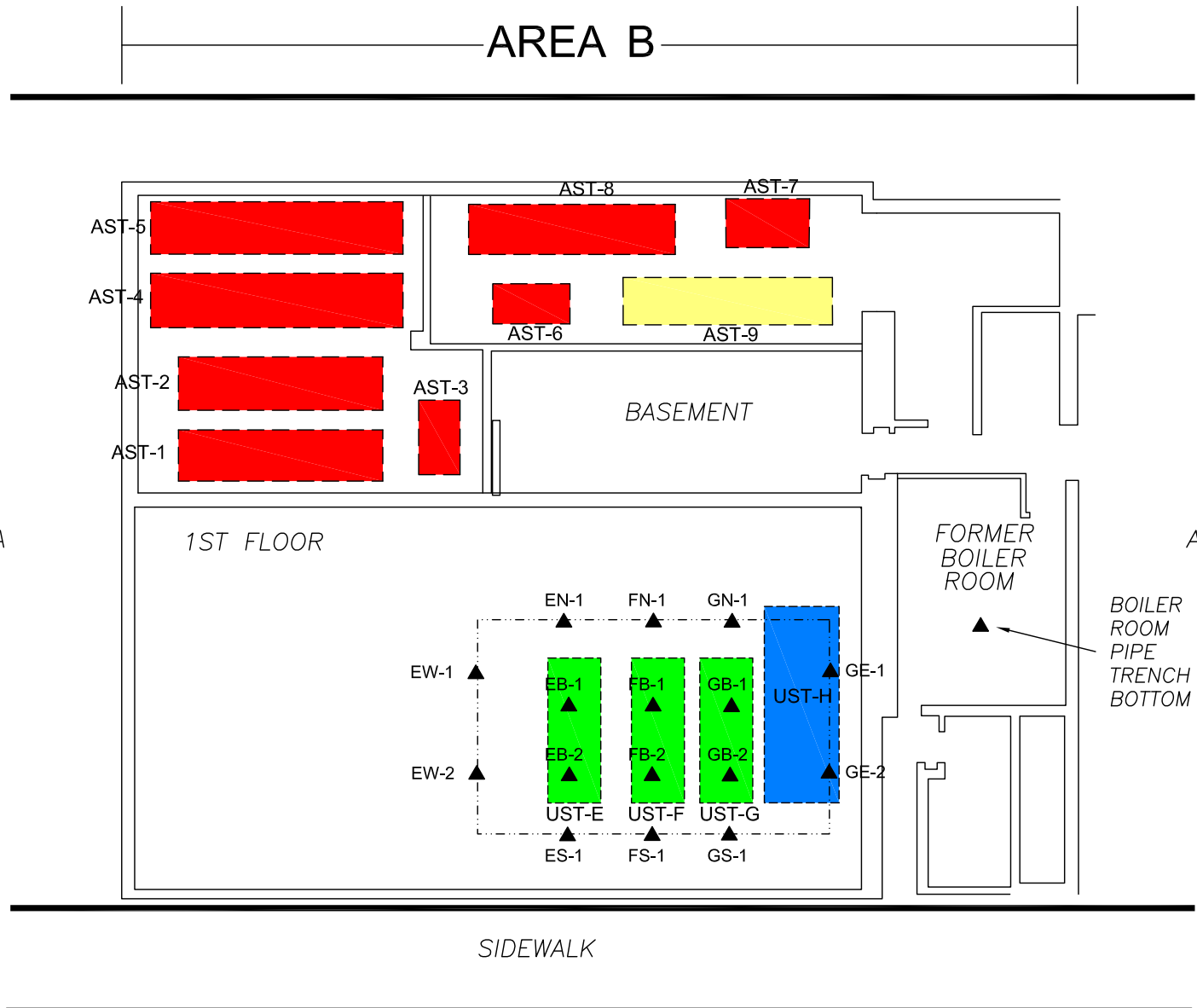
UST REMOVED BY ERM



GEOPROBE BORING LOCATION
WITH DESIGNATION



FORMER RED DEVIL PAINT FACILITY 30 NORTH WEST STREET MOUNT VERNON, NY SITE NUMBER 3-60-031			
UST AND AST CLOSURE CONFIRMATION GEOPROBE BORING LOCATION MAP - AREA B, 2006			
	PREPARED BY: LEGGETTE, BRASHEARS & GRAHAM, INC. Professional Ground-Water and Environmental Services 110 Corporate Park Drive; Suite 112 White Plains, New York (914) 694-5711		
	FIG 36-AREA B	DRAWN BY: JAM	CHECKED BY: SG
DATE: 1/21/09			FIGURE: 11



UST	SIZE	SAMPLE I.D.	DEPTH (FT BG)
E	3,000 GALLON STEEL	EW-1	5
		EW-2	5
		EN-1	5
		ES-1	5
		EB-1	7
		EB-2	7
F	3,000 GALLON STEEL	FN-1	5
		FS-1	5
		FB-1	7
		FB-2	7
G	3,000 GALLON STEEL	GN-1	4
		GS-1	4
		GE-1	4
		GE-2	4
		GB-1	9
		GB-2	9
N/A	N/A	BOILER ROOM PIPE TRENCH BOTTOM	3

LEGEND

- PROPERTY BOUNDARY
- AST REMOVED BY ERM
- AST REMOVED BY LBG
- UST REMOVED BY LBG
- UST REMOVED BY ERM
- ENDPOINT SAMPLE LOCATION WITH DESIGNATION
- N/A NOT APPLICABLE



FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NY
SITE NUMBER 3-60-031

EXCAVATION EXTENT AND ENDPOINT SAMPLE LOCATION MAP
AREA B, 2007

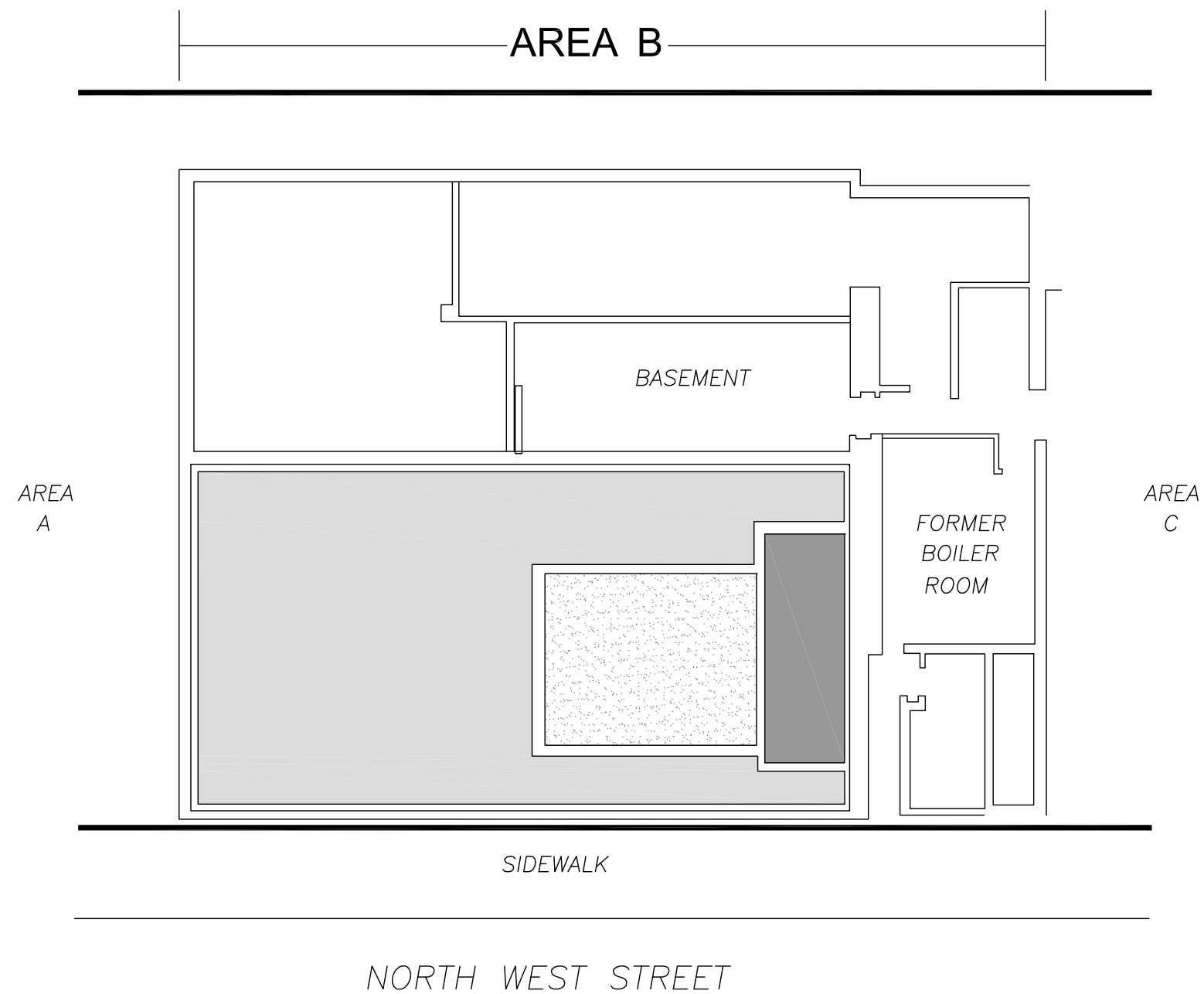
PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Services
110 Corporate Park Drive; Suite 112
White Plains, New York
(914) 694-5711

FIG 37-AREA B

DRAWN BY: JAM

CHECKED BY: SG

DATE: 1/21/09
FIGURE: 12



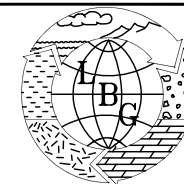
LEGEND

- PROPERTY BOUNDARY**
- EXCAVATION APPROXIMATELY 7-9' DEPTH
- EXCAVATION APPROXIMATELY 10' DEPTH
- EXPLORATORY EXCAVATION APPROXIMATELY 12' DEPTH
(Only Top 16-inches Was Disposed)

0 20
SCALE IN FEET

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NY
SITE NUMBER 3-60-031

EXTENT OF EXPLORATORY EXCAVATIONS
AREA B, 2007



PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Services
110 Corporate Park Drive; Suite 112
White Plains, New York
(914) 694-5711

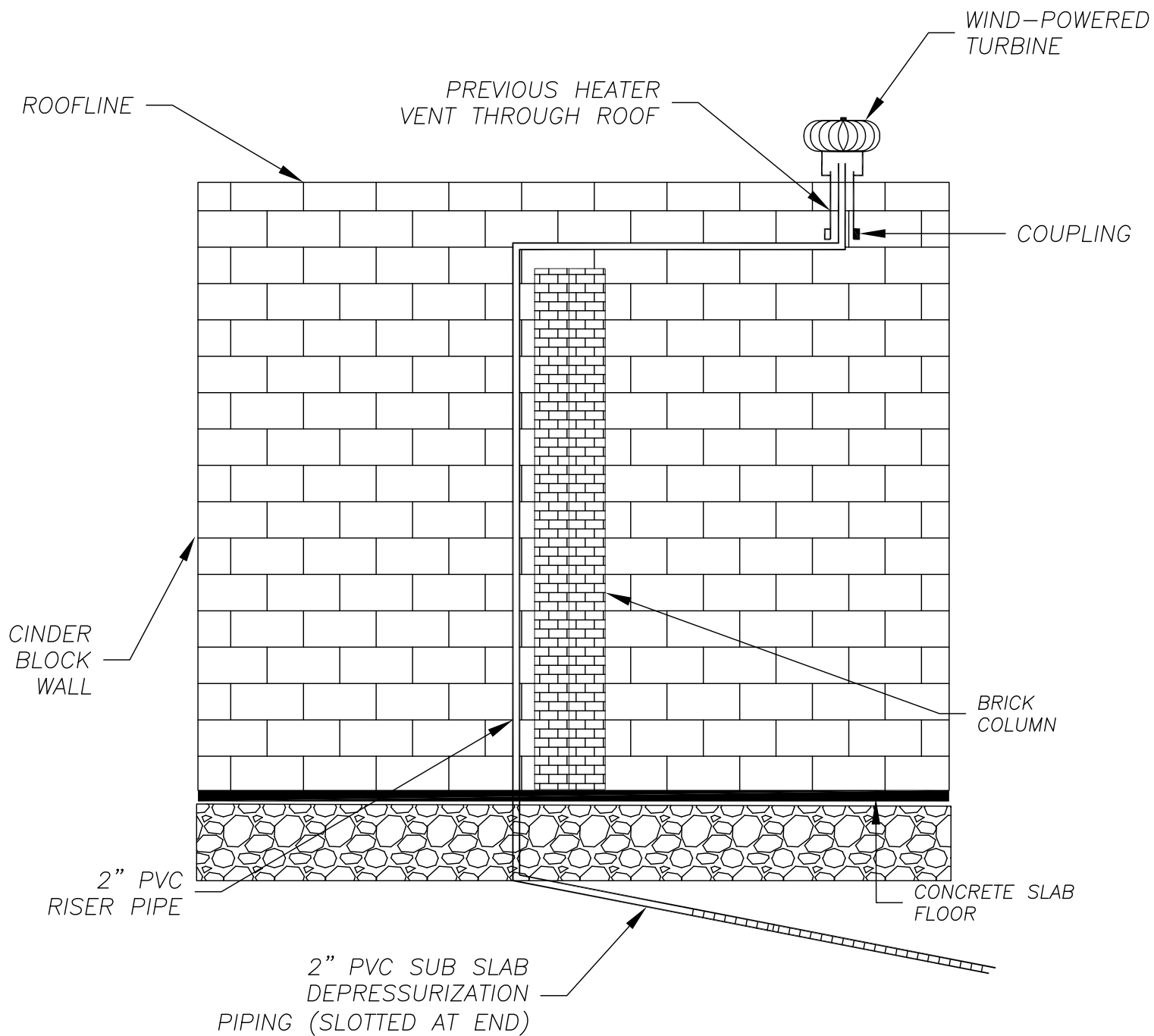
DATE: 1/21/09

FIG 38-AREA B

DRAWN BY: JAM

CHECKED BY: SG

FIGURE: 13



NOT TO SCALE

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NY
SITE NUMBER 3-60-031

SUB-SLAB PASSIVE VENT
SYSTEM CONSTRUCTION DETAILS



PREPARED BY:

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Services
110 Corporate Park Drive, Suite 112
White Plains, NY 10604
(914) 694-5711

DATE: 12/8/08

FILE: Area B Passive Vent

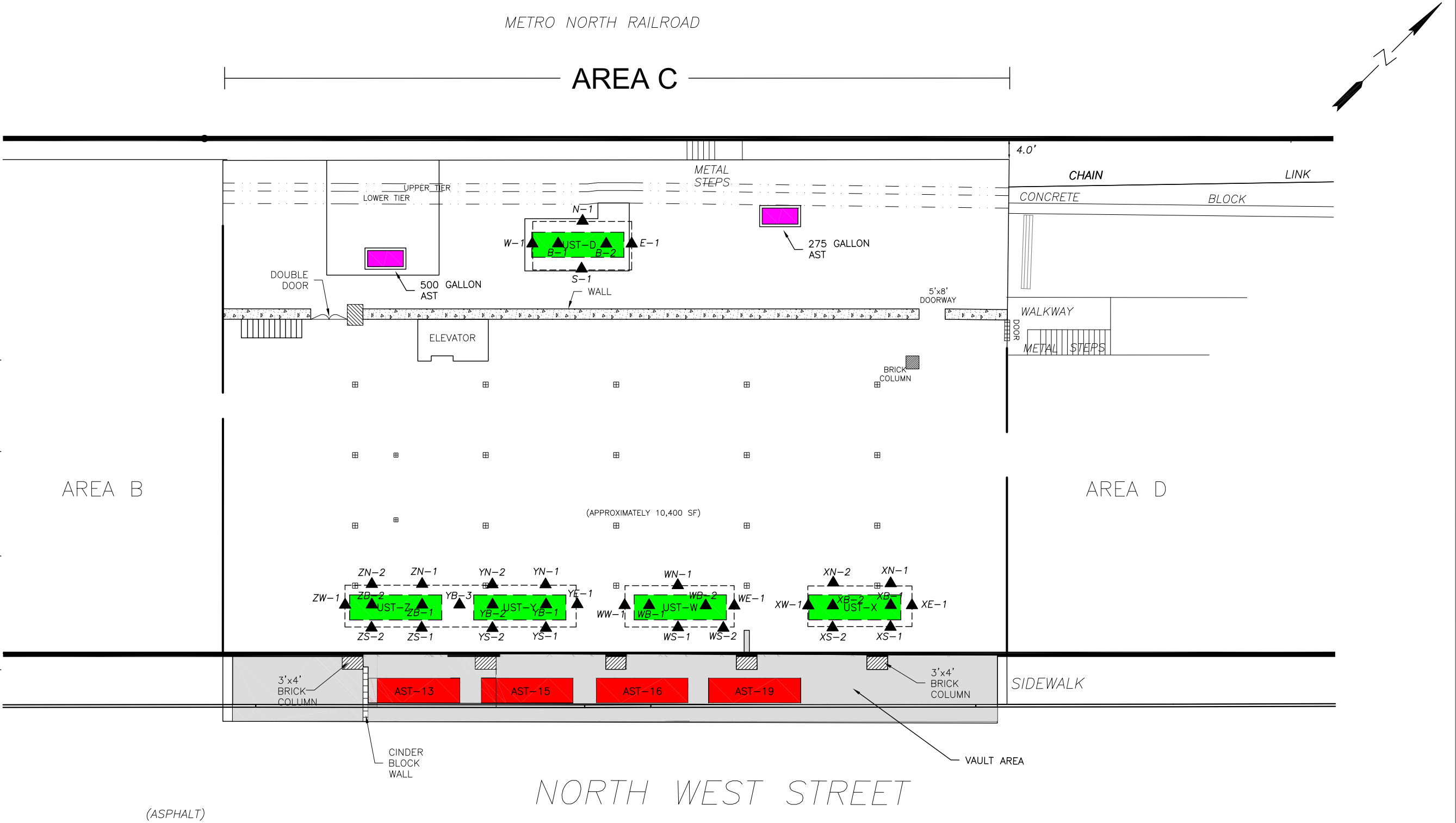
DRAWN BY: JM

CHECKED BY: SG

FIGURE: 15

UST	SIZE	SAMPLE I.D.	DEPTH (FT BG)
W	4,000 GALLON STEEL	WN-1	5
		WW-1	5
		WS-1	5
		WS-2	5
		WE-1	5
		WB-1	7
		WB-2	7
X	4,000 GALLON STEEL	XN-1	4
		XN-2	4
		XW-1	4
		XS-1	4
		XS-2	4
		XE-1	4
		XB-1	6
		XB-2	6

UST	SIZE	SAMPLE I.D.	DEPTH (FT BG)
D	4,000 GALLON STEEL	N-1	5.5
		E-1	5.5
		S-1	5.5
		W-1	5.5
		B-1	7.5
		B-2	7.5
Z	4,000 GALLON STEEL	ZN-1	4
		ZN-2	4
		ZW-1	4
		ZS-1	4
		ZS-2	4
		ZB-1	7
Y	4,000 GALLON STEEL	YN-1	4
		YN-2	4
		YS-1	4
		YS-2	4
		YE-1	4
		YB-1	7
		YB-2	7
		YB-3	7



LEGEND

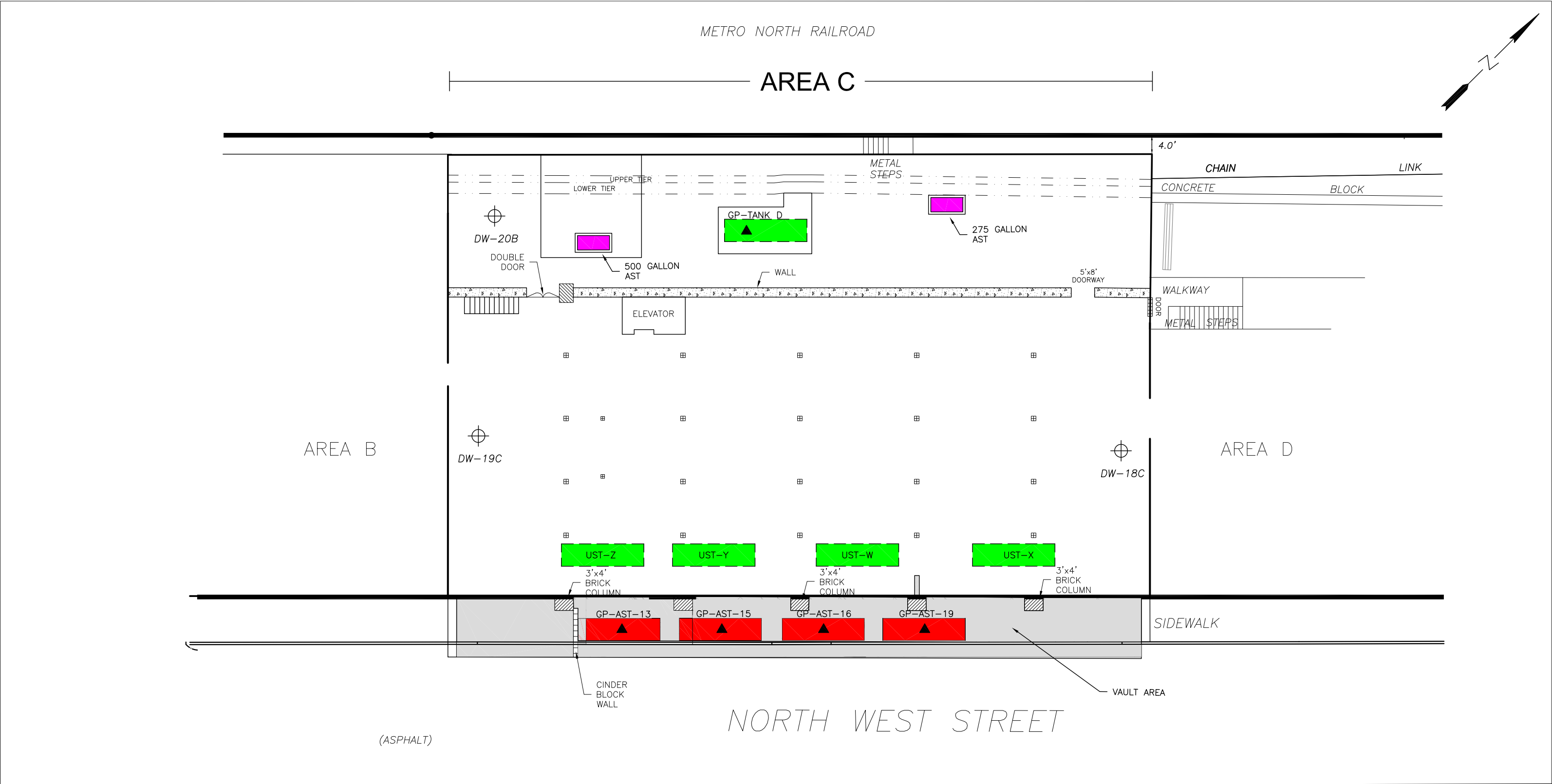
- PROPERTY BOUNDARY
- BASEMENT PILLAR SUPPORT
- UST REMOVED BY LBG
- AST REMOVED BY ERM

- EXISTING AST WITH SECONDARY CONTAINMENT (REMEDIATED WASTE STORAGE)
- ENDPOINT SOIL SAMPLE LOCATION

NOTE: IT IS A VIOLATION OF ARTICLE 130 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE EXPRESS WRITTEN VERIFICATION OR ADOPTION BY A NEW YORK STATE LICENSED LAND SURVEYOR OR ENGINEER IN ACCORDANCE WITH SECTION 7209 (2), ARTICLE 130, NEW YORK STATE EDUCATION LAW.

0 20
SCALE IN FEET

FORMER RED DEVIL PAINT FACILITY 30 NORTH WEST STREET MOUNT VERNON, NEW YORK SITE NO. 3-60-031			
EXCAVATION EXTENT AND ENDPOINT SAMPLE LOCATION MAP - AREA C, 2007			
DATE	REVISED	PREPARED BY:	
		LEGGETTE, BRASHEARS & GRAHAM, INC.	
		Professional Ground-Water and Environmental Engineering Services	
		110 Corporate Park Drive	
		Suite 112	
		White Plains, NY 10604	
		(914) 694-5711	
DRAWN:	JM	CHECKED:	SG
DATE:	1/21/09	FIGURE:	16



LEGEND

- PROPERTY BOUNDARY
- BASEMENT PILLAR SUPPORT
- UST REMOVED BY LBG
- AST REMOVED BY ERM



EXISTING AST WITH SECONDARY CONTAINMENT (REMEDIAL DERIVED WASTE STORAGE)



DW-20B

DELINEATION WELL LOCATION

NOTE: IT IS A VIOLATION OF ARTICLE 130 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE EXPRESS WRITTEN VERIFICATION OR ADOPTION BY A NEW YORK STATE LICENSED LAND SURVEYOR OR ENGINEER IN ACCORDANCE WITH SECTION 7209 (2), ARTICLE 130, NEW YORK STATE EDUCATION LAW.

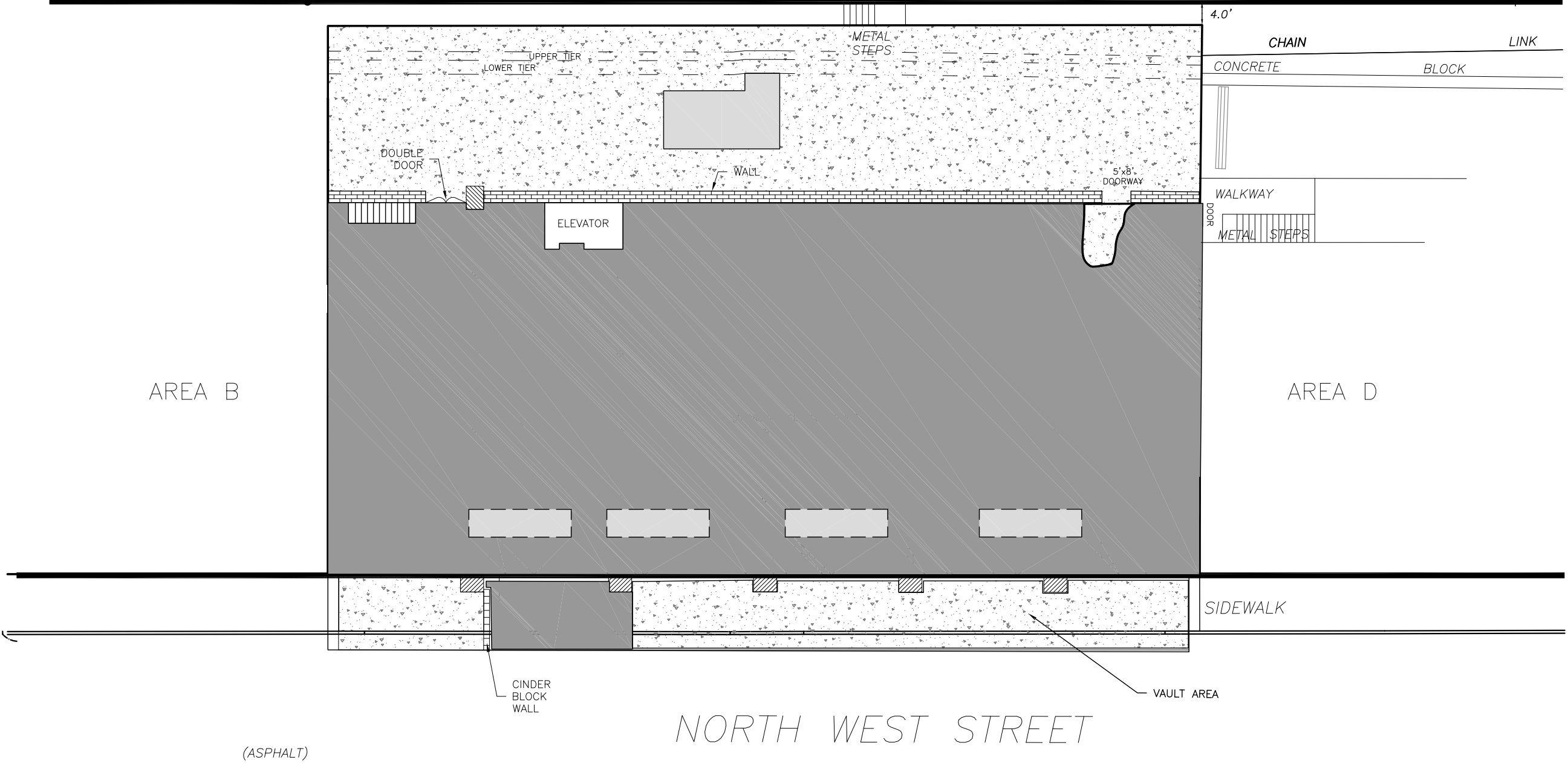
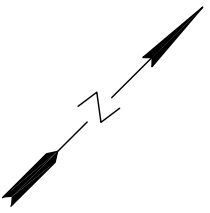


SCALE IN FEET

FORMER RED DEVIL PAINT FACILITY 30 NORTH WEST STREET MOUNT VERNON, NEW YORK SITE NO. 3-60-031			
UST & AST CLOSURE CONFIRMATION GEOPROBE BORING LOCATION MAP - AREA C 2006/2007			
DATE	REVISED	PREPARED BY:	
		LEGGETTE, BRASHEARS & GRAHAM, INC.	
		Professional Ground-Water and Environmental Engineering Services	
		4 Westchester Drive	
		Suite 175	
		White Plains, NY 10604	
		(914) 694-5711	
DRAWN:	JM	CHECKED:	SG
DATE:	11/17/15	FIGURE:	17

METRO NORTH RAILROAD

AREA C



LEGEND

- PROPERTY BOUNDARY
- CONCRETE LEFT IN PLACE
- EXCAVATION APPROXIMATELY 6-8' DEPTH
- EXCAVATION APPROXIMATELY 16' DEPTH

UTILITY POLE (TYPICAL)

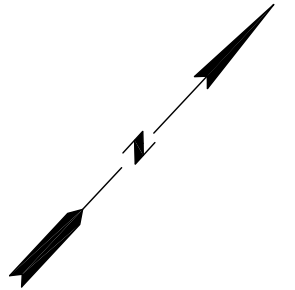
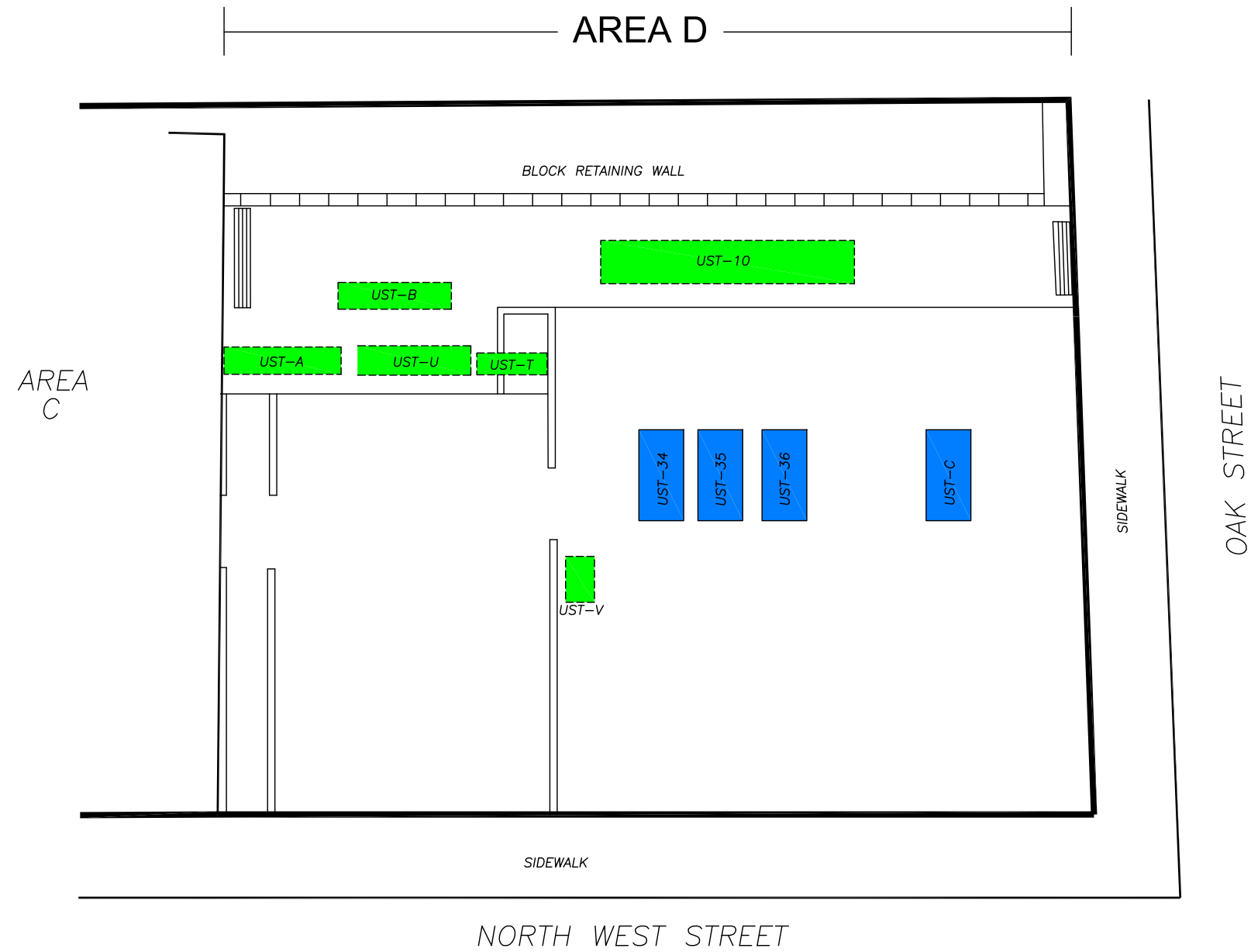


NOTE: IT IS A VIOLATION OF ARTICLE 130 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE EXPRESS WRITTEN VERIFICATION OR ADOPTION BY A NEW YORK STATE LICENSED LAND SURVEYOR OR ENGINEER IN ACCORDANCE WITH SECTION 7209 (2), ARTICLE 130, NEW YORK STATE EDUCATION LAW.



FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

EXTENT OF EXPLORATORY EXCAVATIONS
AREA C - 2007

DATE	REVISED	PREPARED BY:
		LEGGETTE, BRASHEARS & GRAHAM, INC.
		Professional Ground-Water and Environmental Engineering Services
		110 Corporate Park Drive
		Suite 112
		White Plains, NY 10604
		(914) 694-5711
DRAWN:	JM	CHECKED: SG
DATE:	1/21/09	FIGURE: 18



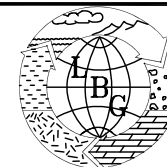
LEGEND

-  PROPERTY BOUNDARY
-  UST REMOVED BY LBG
-  UST REMOVED BY ERM
-  CATCH BASIN



FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MT. VERNON, NY
SITE NUMBER 3-60-03

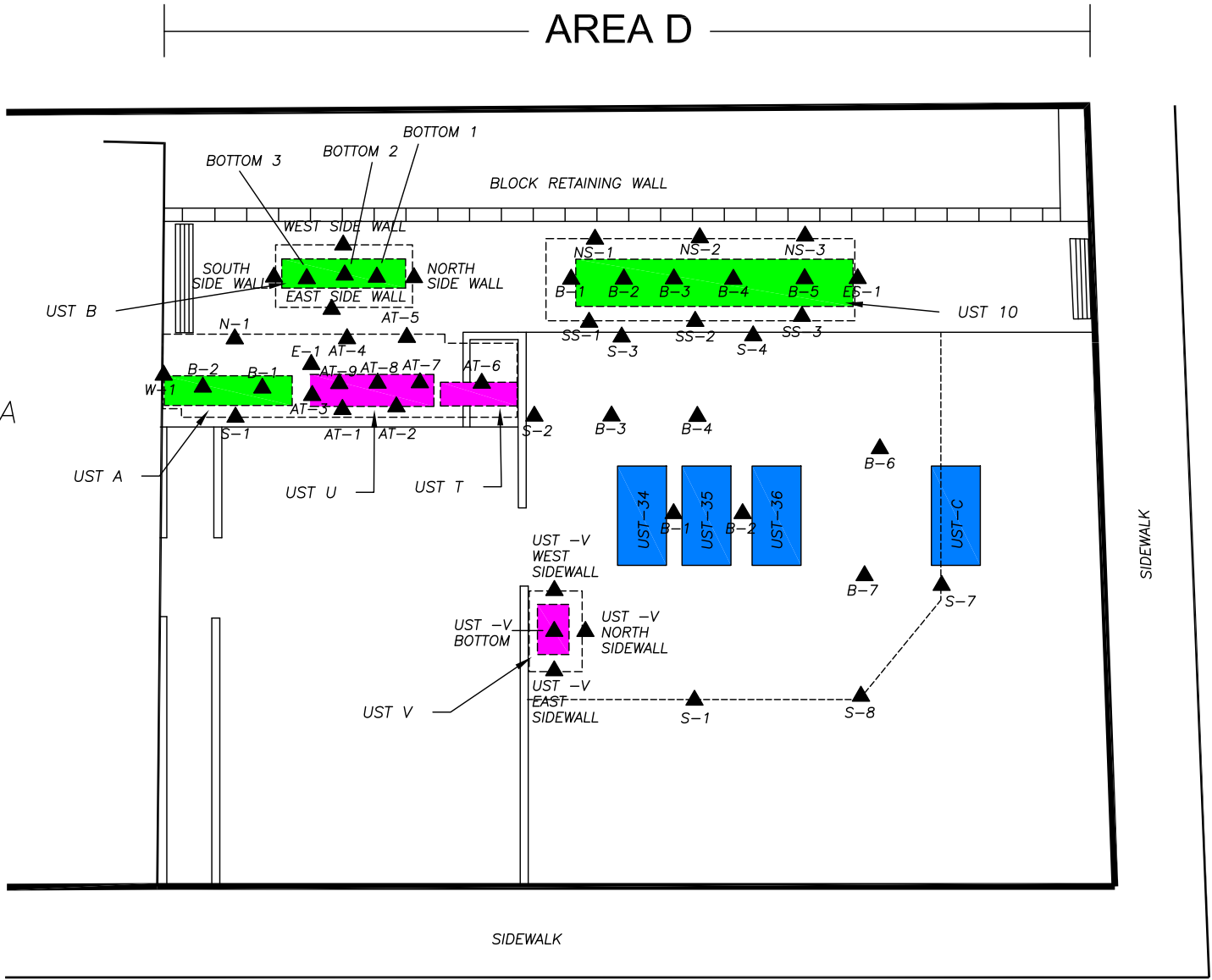
AREA D - UST LOCATION MAP



PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Services
110 Corporate Park Drive; Suite 112
White Plains, New York
(914) 694-5711

UST	SIZE	SAMPLE I.D.	DEPTH (FT BG)
V	275 GALLON STEEL	NORTH SIDEWALL	5
		EAST SIDEWALL	5
		WEST SIDEWALL	5
		BOTTOM	10
U	3,000 GALLON STEEL	AT-1	5
		AT-3	5
		AT-4	5
		AT-8	13
		AT-9	13
T	500 GALLON STEEL	AT-2	5
		AT-5	5
		AT-6	13
		AT-7	13
34	4000 GAL STEEL	B-1	13
35	4000 GAL STEEL	B-2	13
36	4000 GAL STEEL	B-3	13
C	1500 GAL STEEL	B-4	13
		B-6	13
		B-7	13
		S-1	6
		S-2	7
		S-3	7
		S-4	7
		S-5	7
		S-6	7
		S-7	7
		S-8	7

AREA C



NORTH WEST STREET

LEGEND

- PROPERTY BOUNDARY
- UST REMOVED BY LBG (PREVIOUSLY ABANDONED BY ERM)
- UST REMOVED BY ERM
- UST REMOVED BY LBG (PREVIOUSLY UNIDENTIFIED)
- CATCH BASIN
- ENDPOINT SOIL SAMPLE LOCATION




UST	SIZE	SAMPLE I.D.	DEPTH (FT BG)
10	10,000 GALLON STEEL	NS-1	5
		NS-2	5
		NS-3	6
		ES-1	6
		SS-1	5
		SS-2	5
		SS-3	6
		B-1	11
		B-2	11
		B-3	11
		B-4	11
		B-5	11
A	3,500 GALLON STEEL	N-1	7
		E-1	7
		S-1	7
		W-1	7
		B-1	10
		B-2	10
B	3,500 GALLON STEEL	NORTH SIDEWALL	5
		EAST SIDEWALL	5
		SOUTH SIDEWALL	5
		WEST SIDEWALL	5
		BOTTOM 1	8
		BOTTOM 2	8
		BOTTOM 3	8

OAK STREET

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MT. VERNON, NY
SITE NUMBER 3-60-03

EXCAVATION EXTENT AND ENDPOINT SAMPLE LOCATION MAP
AREA D, 2006/2007/2008



PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Services
110 Corporate Park Drive; Suite 112
White Plains, New York
(914) 694-5711

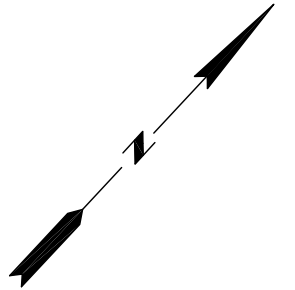
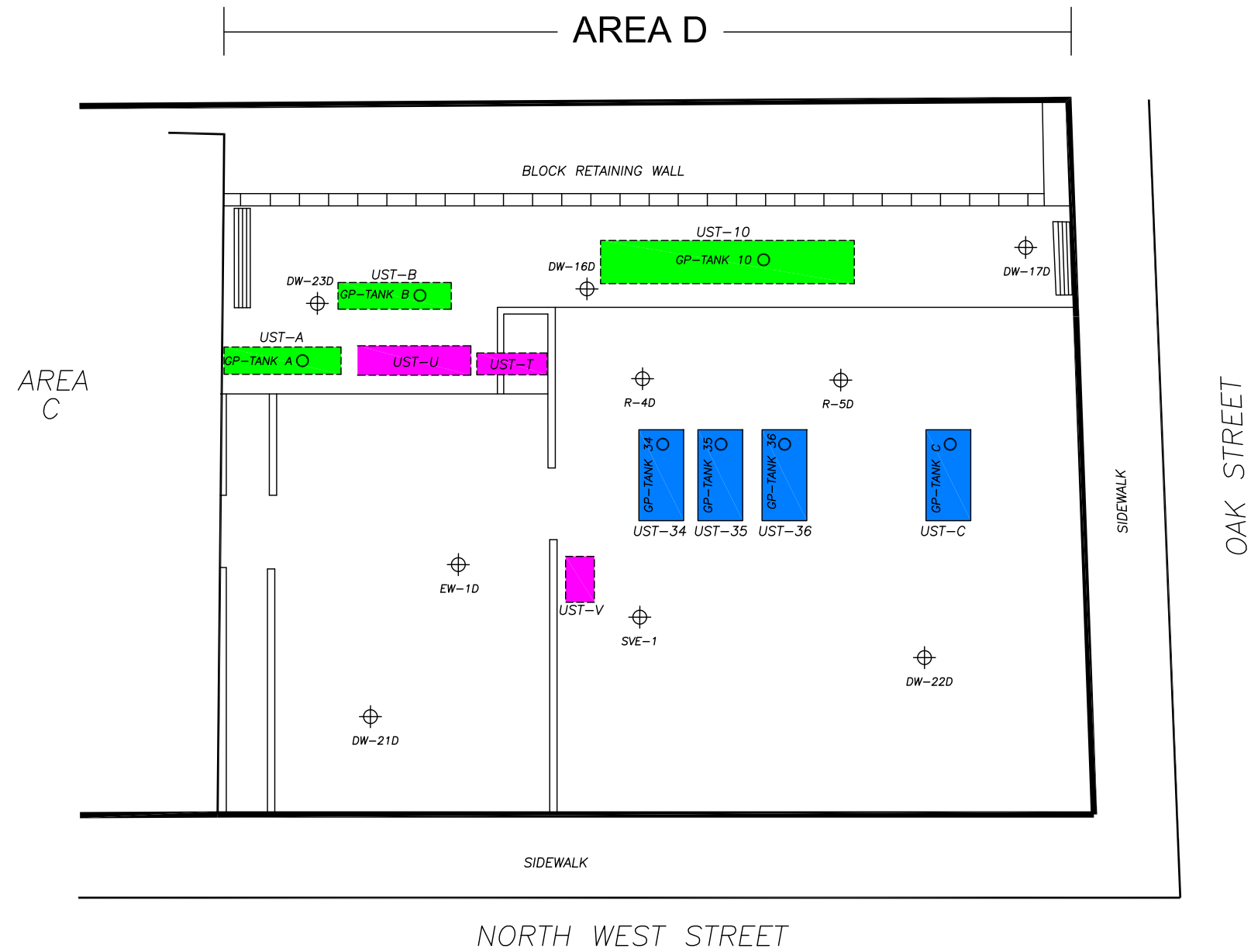
DATE: 1/21/09

FILE: fig43 - area D

DRAWN BY: JAM

CHECKED BY: SG

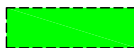
FIGURE: 20



LEGEND



PROPERTY BOUNDARY



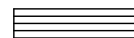
UST REMOVED BY LBG (PREVIOUSLY ABANDONED BY ERM)



UST REMOVED BY ERM



UST REMOVED BY LBG (PREVIOUSLY UNIDENTIFIED)



CATCH BASIN



GEOPROBE BORING LOCATION
WITH DESIGNATION



DW-21D

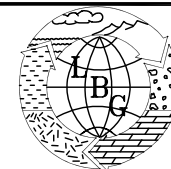
DELINEATION WELL LOCATION



SCALE IN FEET

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MT. VERNON, NY
SITE NUMBER 3-60-03

UST CLOSURE CONFIRMATION GEOPROBE BORING
LOCATION MAP AREA D, 2006/2007



PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Services
4 Westchester Park Drive; Suite 175
White Plains, New York
(914) 694-5711

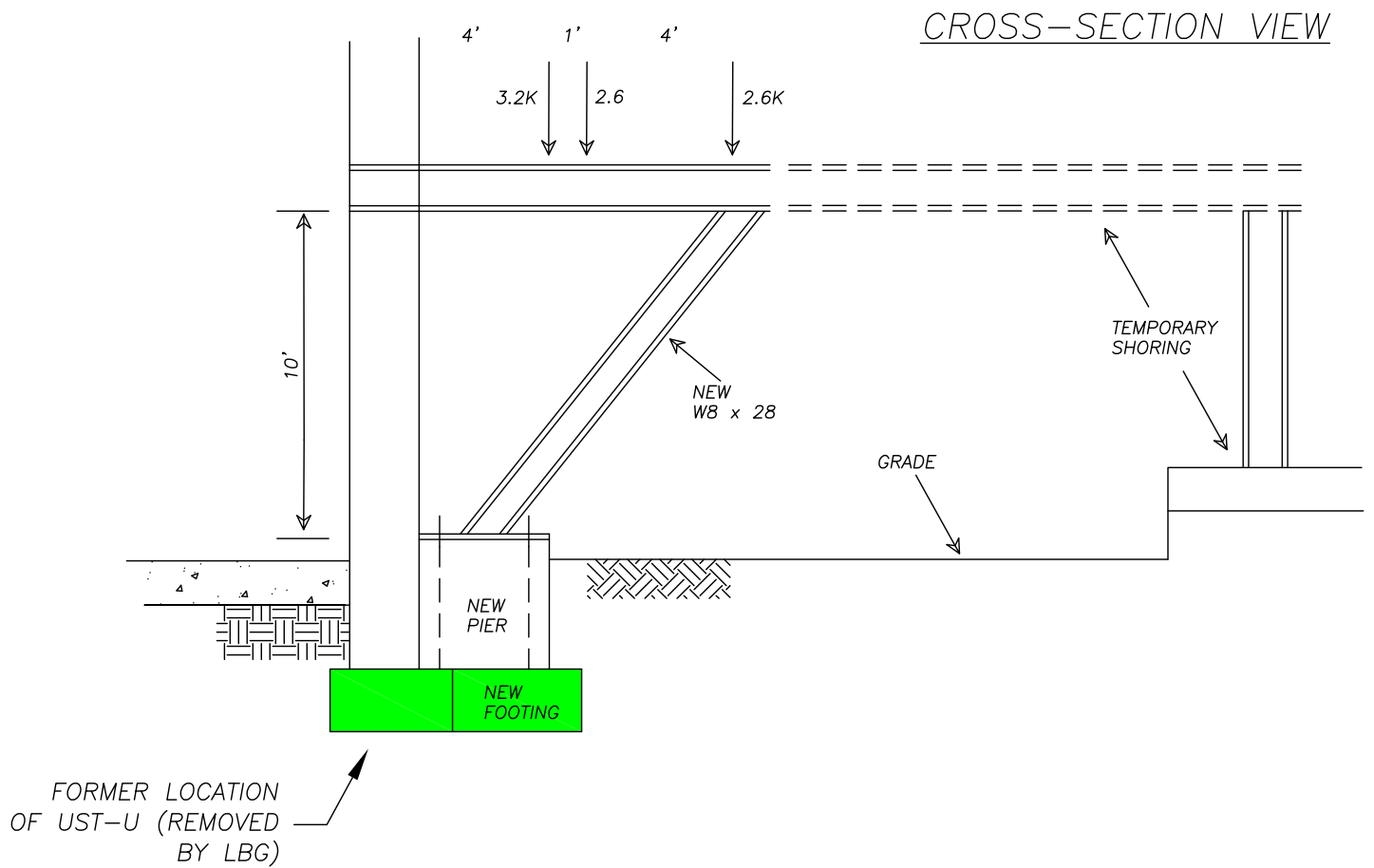
FILE: figure 13

DRAWN BY: JAM

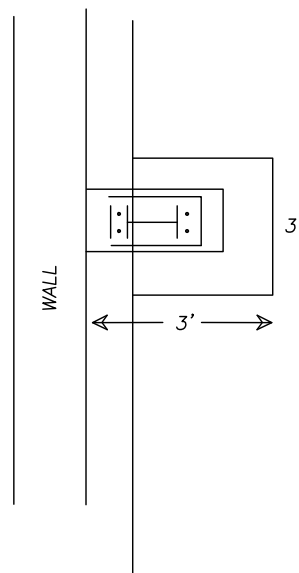
CHECKED BY: SG

DATE: 11/17/15

FIGURE: 21



PLAN VIEW



NOTE: MODIFICATIONS TO FIRE SUPPORT
WERE REQUIRED FOR REMOVAL AND
CLOSURE OF UST-T & UST-U

NOT TO SCALE

RED DEVIL PAINT
30 NORTH WEST STREET
MOUNT VERNON, NY
SITE NUMBER 3-60-031

AREA D FIRE ESCAPE STRUCTURAL SUPPORT
CONSTRUCTION PLANS



PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Services
110 Corporate Park Drive, Suite 112
White Plains, NY 10604
(914) 694-5711

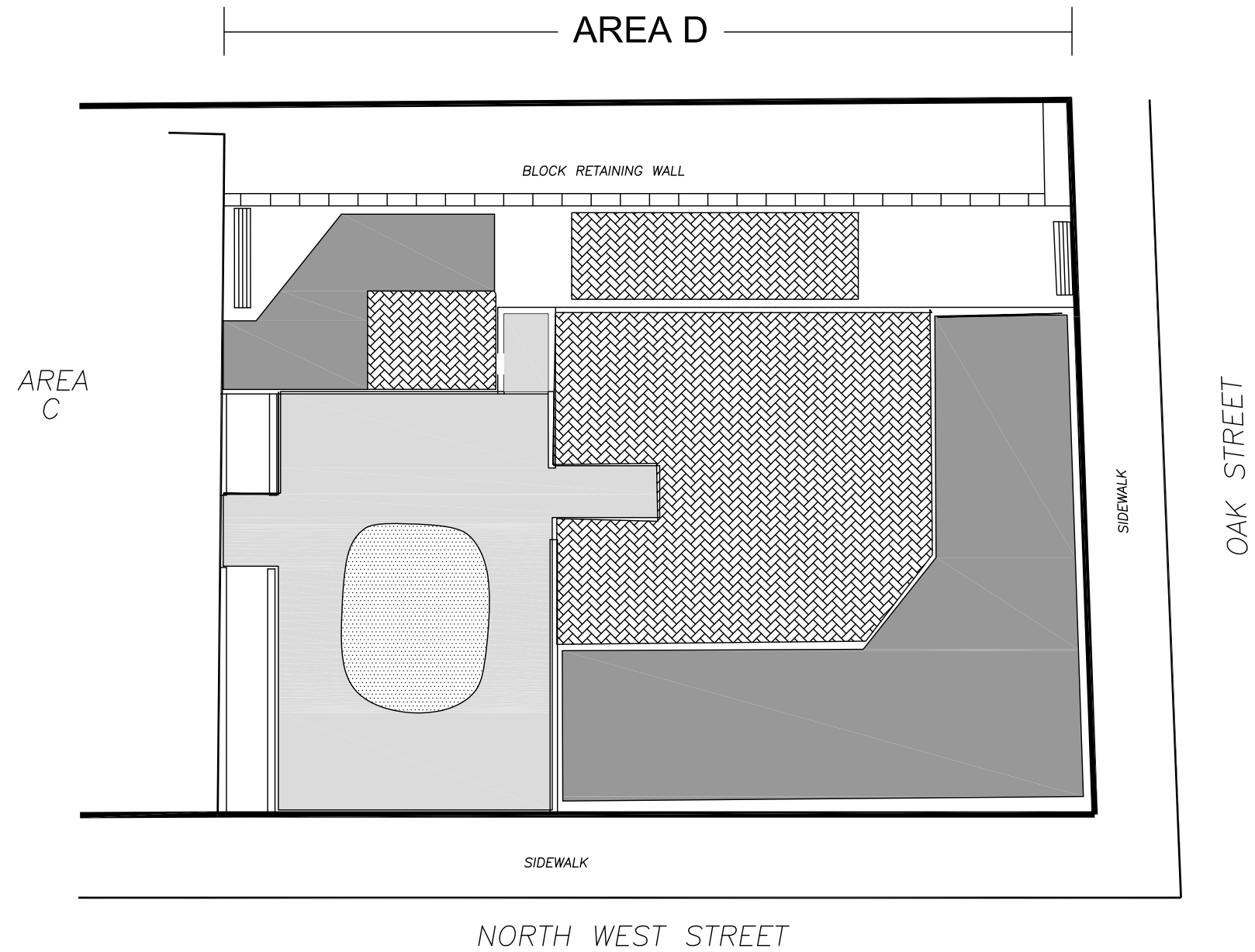
FILE: fig F - oak street fire

DRAWN BY: JM

CHECKED BY: SG

DATE: 12/8/08

FIGURE: 22



LEGEND



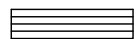
PROPERTY BOUNDARY



EXCAVATION APPROXIMATELY 8' DEPTH



EXCAVATION APPROXIMATELY 8-10' DEPTH



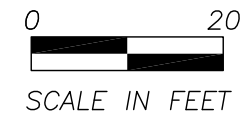
CATCH BASIN



EXCAVATION APPROXIMATELY 12-13' DEPTH

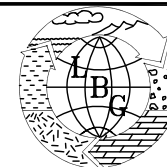


EXCAVATION APPROXIMATELY 18' DEPTH



FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MT. VERNON, NY
SITE NUMBER 3-60-03

EXTENT OF EXPLORATORY EXCAVATIONS,
AREA D, 2006/2007/2008



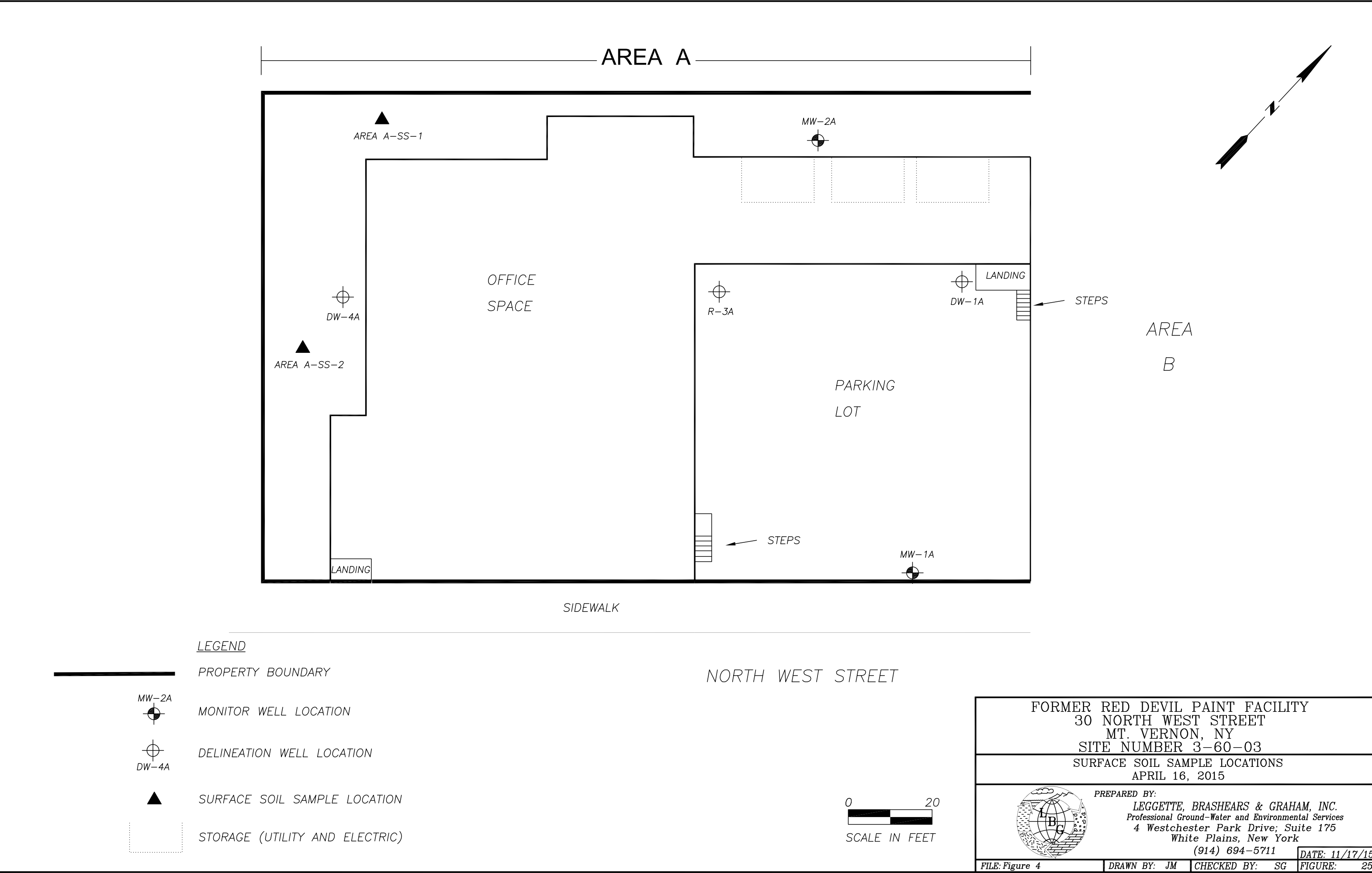
PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Services
110 Corporate Park Drive; Suite 112
White Plains, New York
(914) 694-5711

FILE: fig44 - AREA D

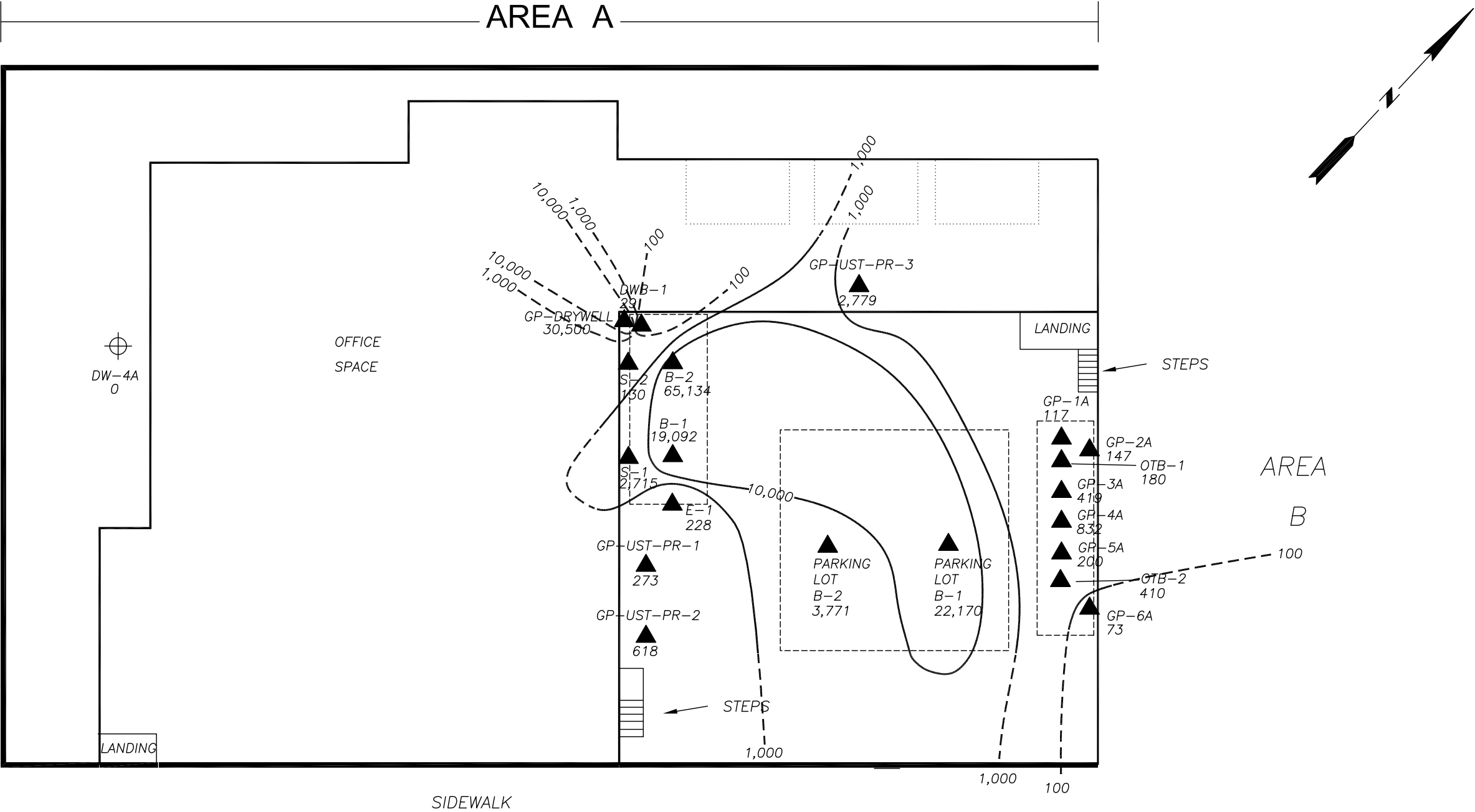
DRAWN BY: JAM

CHECKED BY: SG

DATE: 1/21/09
FIGURE: 24



UST	SIZE	SAMPLE I.D.	DEPTH (FT BG)	TOTAL VOC's (ug/kg)
P	3,000 GALLON STEEL	B-1	10	19,092
		B-2	10	65,134
		S-1	5	2,715
		S-2	5	130
		E-1	5	228
		DWB-1	10	29
N/A	N/A	OTB-1	12	180
		OTB-2	12	410
		PARKING LOT B-1	11	22,170
		PARKING LOT B-2	11	3,771
N/A	N/A	GP-1A	4-8	117*
		GP-2A	32-34	147*
		GP-3A	4-8	419*
		GP-4A	32-35	832*
		GP-5A	4-8	200*
		GP-6A	32-33.5	73*
		LBG HP-6 RESAMPLE	12-16	0
		GP-DRY WELL	22-26	30,500*
		GP-UST-PR-1	30-34	273*
		GP-UST-PR-2	4-8	618*
		GP-UST-PR-3	32-35.5	2,779*
			28-31	
			10-15	
			35-39.5	
N/A	N/A	DW-4A	35	0



LEGEND

- PROPERTY BOUNDARY
- APPROXIMATE EXTENT OF EXCAVATION
- ENDPOINT SAMPLE LOCATION
- STORAGE (UTILITY AND ELECTRIC)
- VOC
- VOLATILE ORGANIC COMPOUND

- DELINEATION WELL LOCATION
- MICROGRAMS PER KILOGRAM
- VOC ISOCONCENTRATION LINE (DASHED WHERE INFERRED)
- INDICATES AN AVERAGE



FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MT. VERNON, NY
SITE NUMBER 3-60-03

TOTAL VOC CONCENTRATIONS IN SOIL
HORIZONTAL DELINEATION MAP - AREA A

PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Services
4 Westchester Park Drive; Suite 175
White Plains, New York
(914) 694-5711

FILE: figure 6

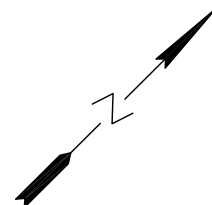
DRAWN BY: JM

CHECKED BY: SG

DATE: 11/17/15

FIGURE: 26

7.4' TO 10' HGT
INV. = 68.4'

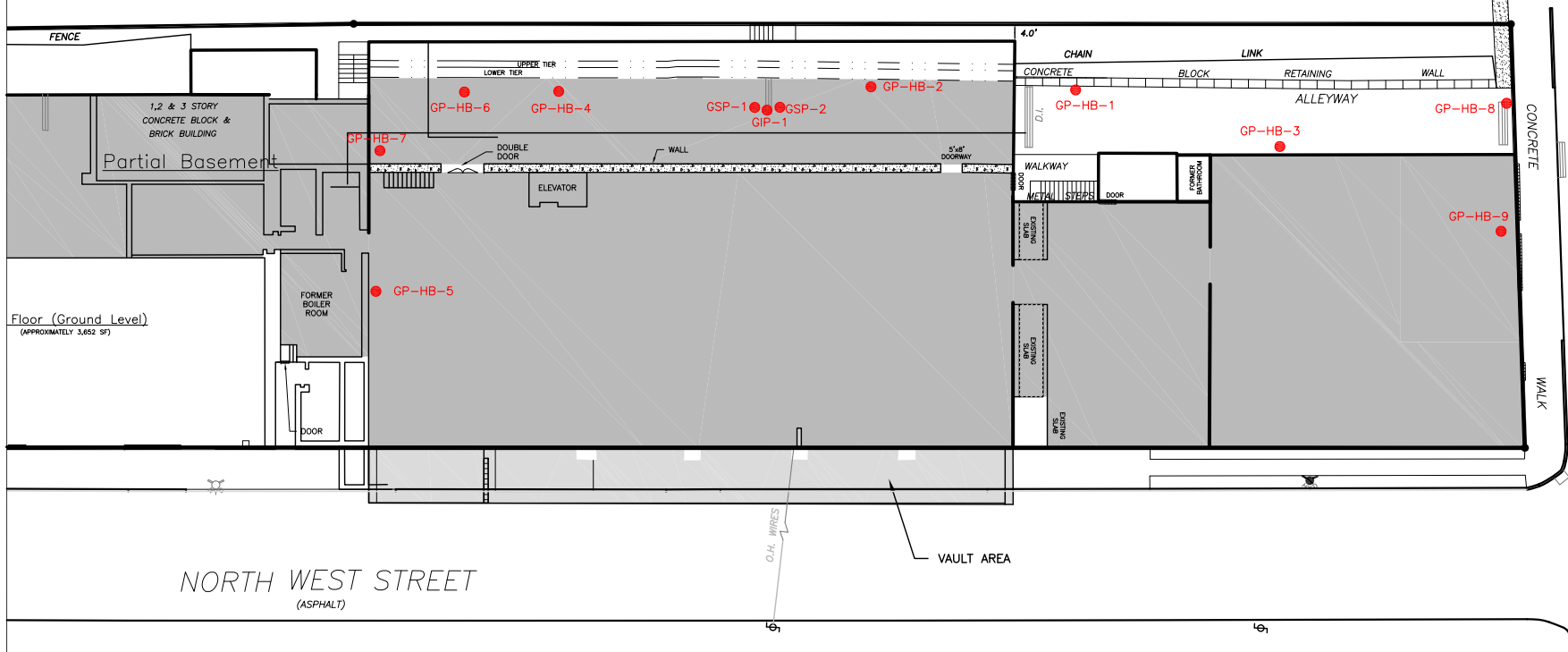


METRO NORTH RAILROAD

AREA B

AREA C

AREA D



LEGEND


- PROPERTY BOUNDARY
- HYDRAULIC BARRIER GEOPROBE LOCATIONS



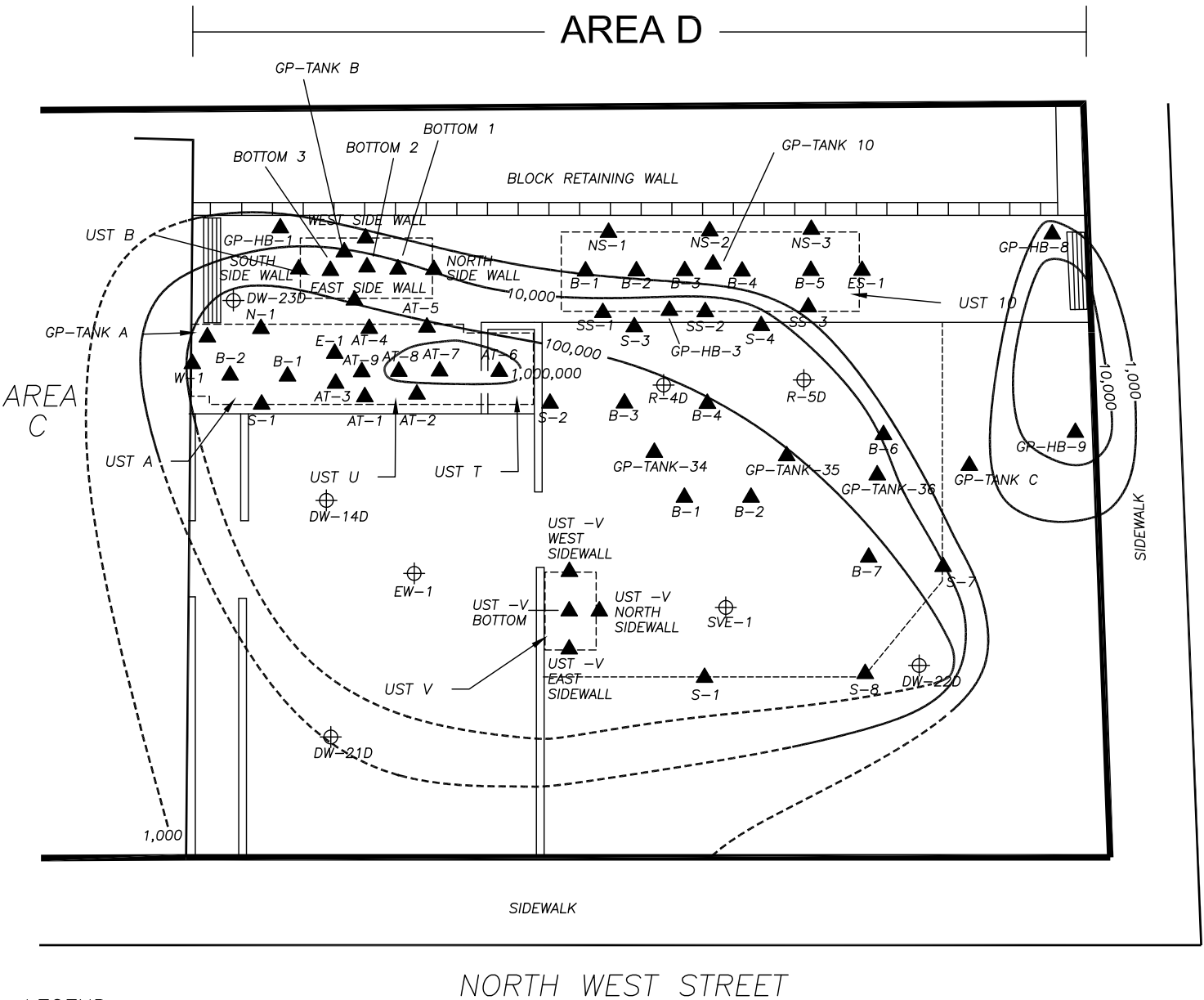
NOTE: IT IS A VIOLATION OF ARTICLE 130 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE EXPRESS WRITTEN VERIFICATION OR ADOPTION BY A NEW YORK STATE LICENSED LAND SURVEYOR OR ENGINEER IN ACCORDANCE WITH SECTION 7209 (2), ARTICLE 130, NEW YORK STATE EDUCATION LAW.

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

GEOPROBE AND GROUT INJECTION PILOT TEST BORINGS FOR HYDRAULIC BARRIER FEASIBILITY

DATE	REVISED	 LEGGETTE, BRASHEARS & GRAHAM, INC. Professional Ground-Water and Environmental Engineering Services 110 Corporate Park Drive Suite 112 White Plains, NY 10604 (914) 694-5711
DRAWN: JM	CHECKED: SG	DATE: 1/16/09
		FIGURE: 28

UST	SIZE	SAMPLE I.D.	DEPTH (FT BG)	TOTAL VOCs ug/kg
V	275 GALLON STEEL	NORTH SIDEWALL	5	66
		EAST SIDEWALL	5	67
		WEST SIDEWALL	5	270
		BOTTOM	10	110
U	3,000 GALLON STEEL	AT-1	5	320
		AT-3	5	770
		AT-4	5	891
		AT-8	13	3,892,400
		AT-9	13	13,344
T	500 GALLON STEEL	AT-2	5	289
		AT-5	5	3,358
		AT-6	13	6,093,800
		AT-7	13	6,147,200
34	4000 GAL STEEL	B-1	13	91,190
35	4000 GAL STEEL	B-2	13	165,200
36	4000 GAL STEEL	B-3	13	130,610
C	4000 GAL STEEL	B-4	13	656,200
		B-6	13	53,350
		B-7	13	139,700
		S-1	6	33
		S-2	7	240
		S-3	7	75,209
		S-4	7	60,940
		S-7	7	0
NA	NA	S-8	7	0
		EW-1	14-16	297,900
		DW-21D	15-17	335,900
		DW-22D	12-14	218,000
		DW-23D	15-17	205,160
		SVE-1	19-21	375,600
		R-4D	24-26	52,860
		R-5D	14-16	166,360
		GP-TANK 10	12-24	107,850
		GP-TANK A	10-27	74,300
		GP-TANK B	12-27	53,450
		GP-HB-1	15-27	33,000
		GP-HB-3	20-34	28,205
		GP-HB-8	15-27	8,312
		GP-HB-9	15-25	75,535



LEGEND

	PROPERTY BOUNDARY
	CATCH BASIN
	ENDPOINT SOIL SAMPLE LOCATION
VOC	VOLATILE ORGANIC COMPOUND
ug/kg	MICROGRAMS PER KILOGRAMS
NA	NOT AVAILABLE
	VOC ISOCONCENTRATION LINE (DASHED WHERE INFERRED)



UST	SIZE	SAMPLE I.D.	DEPTH (FT BG)	TOTAL VOCs ug/kg
10	10,000 GALLON STEEL	NS-1	5	54
		NS-2	5	170
		NS-3	6	130
		ES-1	6	140
		SS-1	5	170
		SS-2	5	53
		SS-3	6	160
		B-1	11	57
		B-2	11	198
		B-3	11	176
A	3,500 GALLON STEEL	B-4	11	150
		B-5	11	130
		N-1	7	203
		E-1	7	66
		S-1	7	447
		W-1	7	1,028
B	3,500 GALLON STEEL	B-1	10	248
		B-2	10	0
		NORTH SIDEWALL	5	644
		EAST SIDEWALL	5	1,291
		SOUTH SIDEWALL	5	72
		WEST SIDEWALL	5	0
		BOTTOM 1	8	0
		BOTTOM 2	8	0
		BOTTOM 3	8	72

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MT. VERNON, NY
SITE NUMBER 3-60-03

TOTAL VOC CONCENTRATIONS IN SOIL
HORIZONTAL DELINEATION MAP - AREA D

PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Services
110 Corporate Park Drive; Suite 112
White Plains, New York
(914) 694-5711

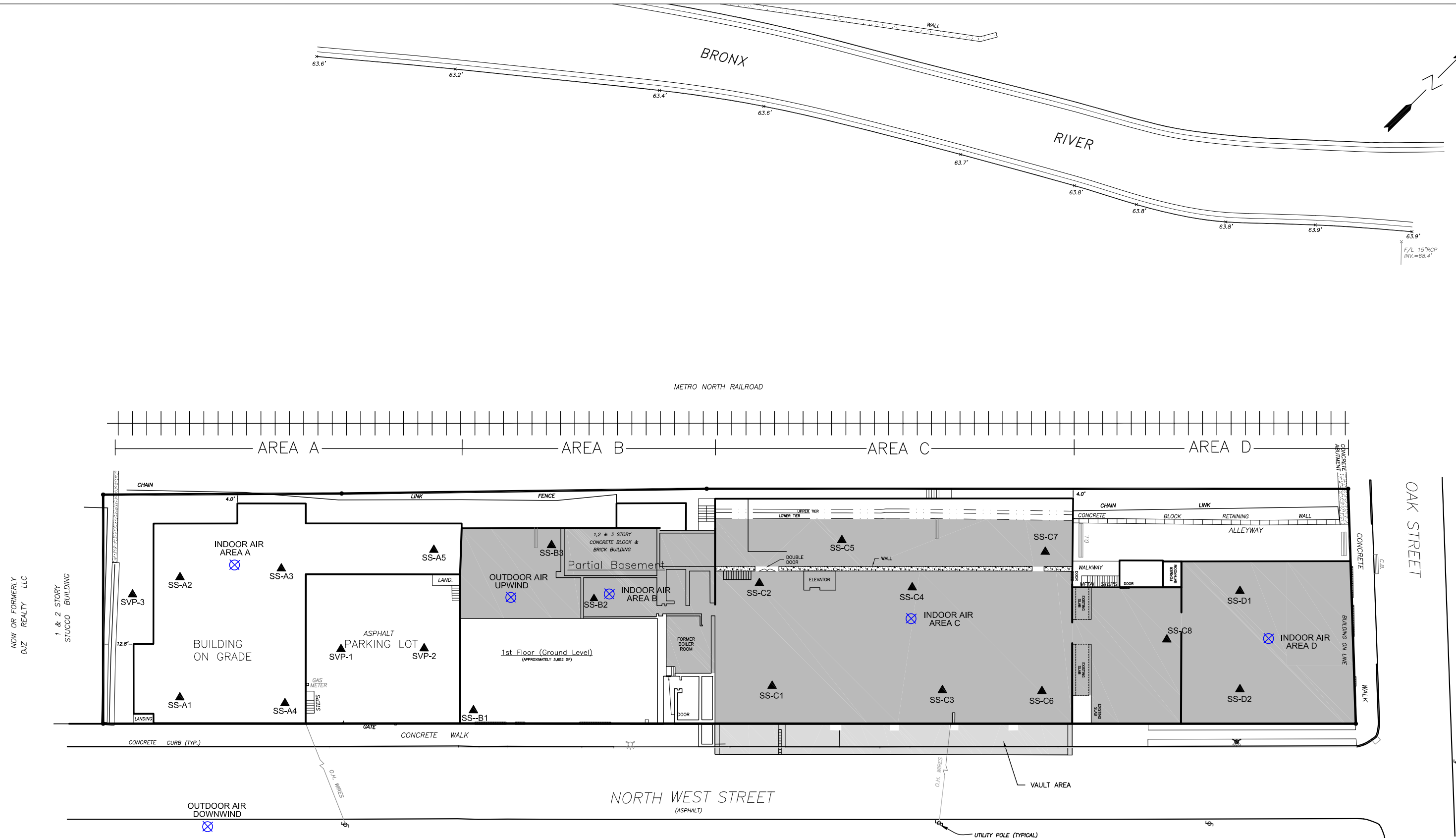
FILE: VOC conc - area d

DRAWN BY: JM

CHECKED BY: BH

DATE: 2/27/09

FIGURE: 30



LEGEND


- PROPERTY BOUNDARY
- SUB-SLAB/SOIL VAPOR SAMPLING POINT
- INDOOR/OUTDOOR AMBIENT AIR SAMPLING LOCATION

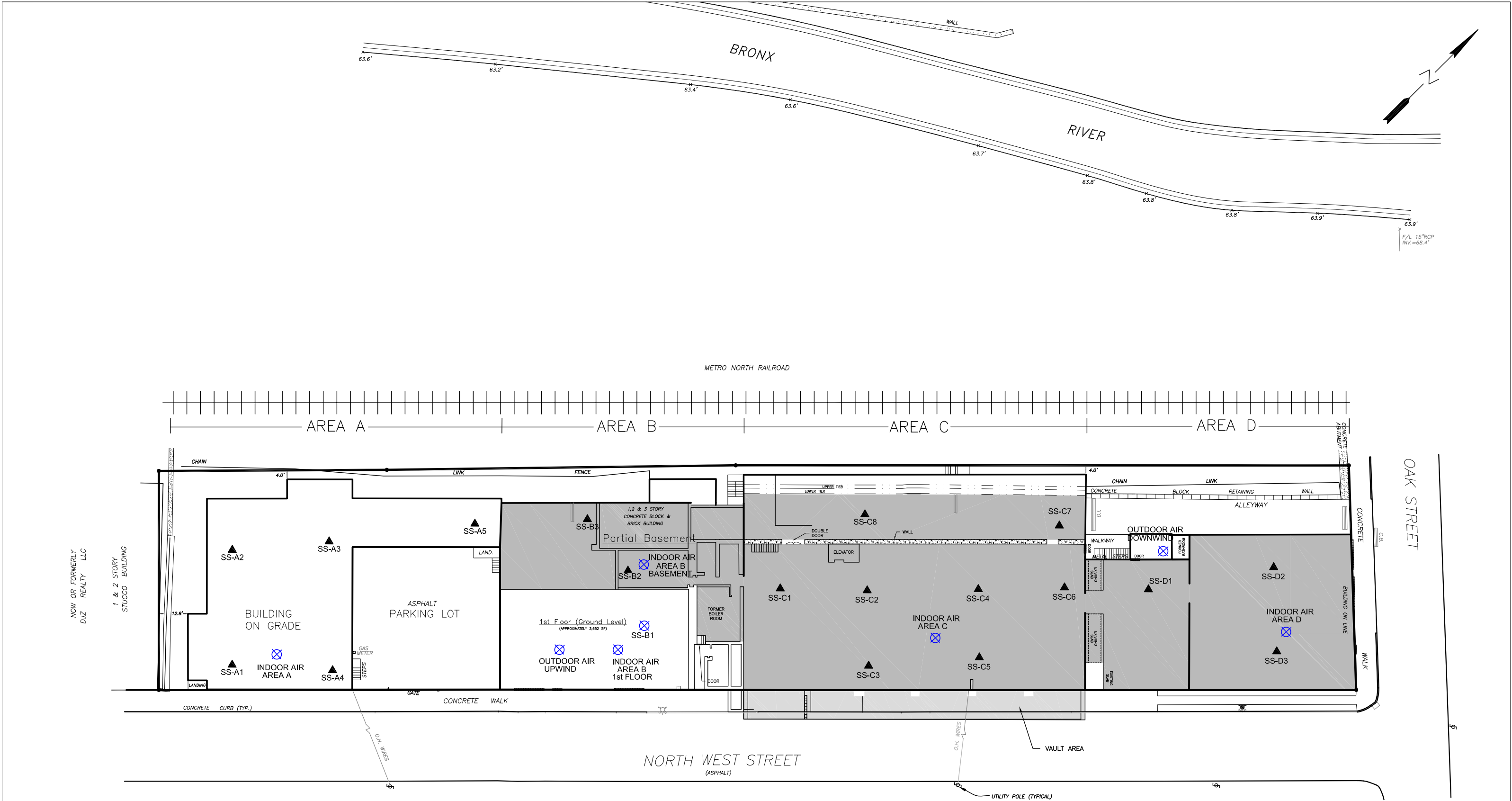
NOTE: IT IS A VIOLATION OF ARTICLE 130 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE EXPRESS WRITTEN VERIFICATION OR ADOPTION BY A NEW YORK STATE LICENSED LAND SURVEYOR OR ENGINEER IN ACCORDANCE WITH SECTION 7209 (2), ARTICLE 130, NEW YORK STATE EDUCATION LAW.

0 40
SCALE IN FEET

FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

SOIL VAPOR INTRUSION SAMPLING MAP
OCTOBER 2006, MARCH 2007 AND OCTOBER 2009

DATE	REVISED			LEGGETTE, BRASHEARS & GRAHAM, INC. Professional Ground-Water and Environmental Engineering Services 110 Corporate Park Drive Suite 112 White Plains, NY 10604 (914) 694-5711			
DRAWN:	JM	CHECKED:	SG	DATE:	1/16/09	FIGURE:	



LEGEND

- PROPERTY BOUNDARY
- SUB-SLAB/SOIL VAPOR SAMPLING POINT
- INDOOR/OUTDOOR AMBIENT AIR SAMPLING LOCATION

NOTE: IT IS A VIOLATION OF ARTICLE 130 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DOCUMENT IN ANY WAY WITHOUT THE EXPRESS WRITTEN VERIFICATION OR ADOPTION BY A NEW YORK STATE LICENSED LAND SURVEYOR OR ENGINEER IN ACCORDANCE WITH SECTION 2209 (2), ARTICLE 130, NEW YORK STATE EDUCATION LAW.




FORMER RED DEVIL PAINT FACILITY
30 NORTH WEST STREET
MOUNT VERNON, NEW YORK
SITE NO. 3-60-031

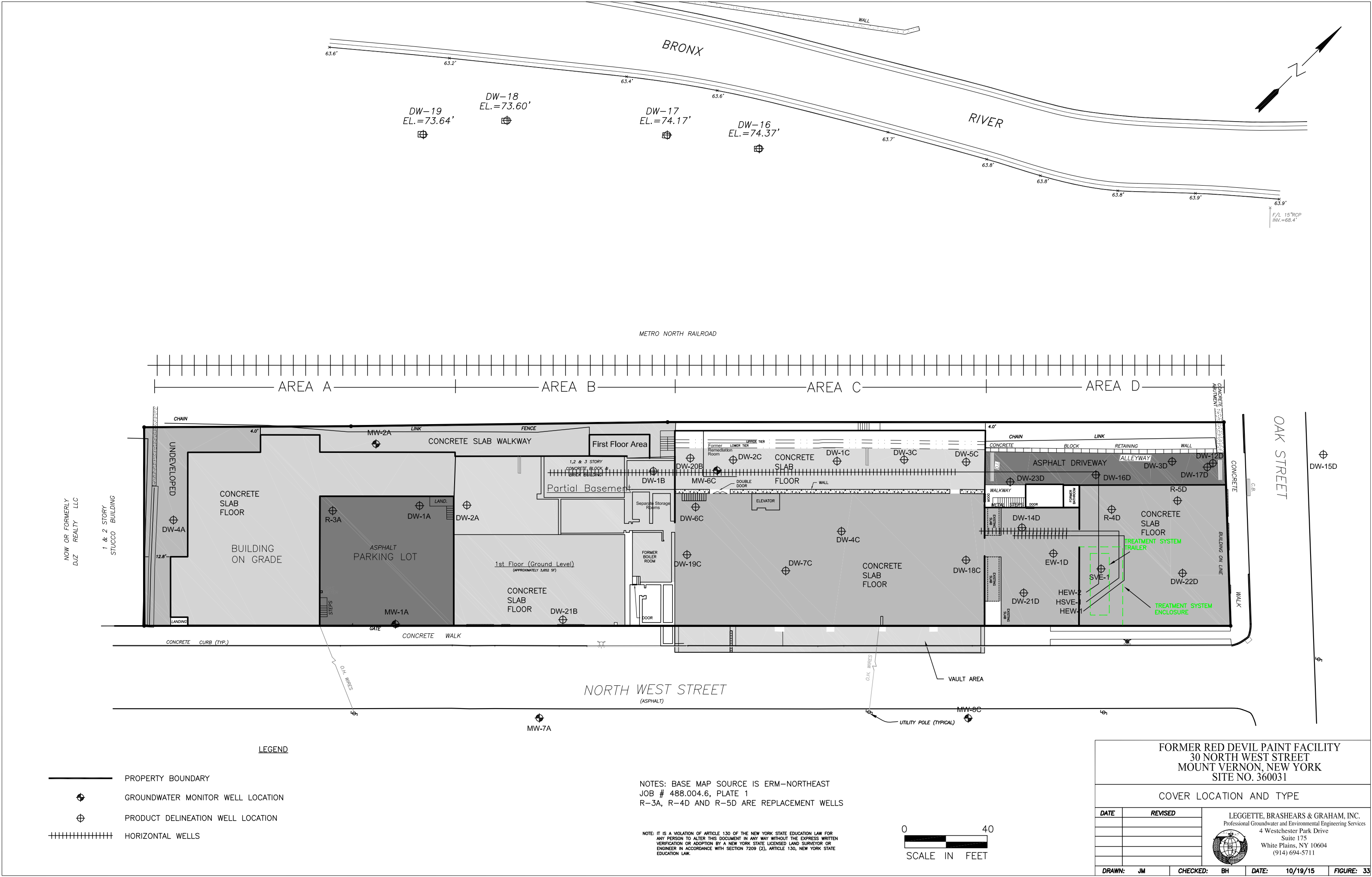
SOIL VAPOR INTRUSION SAMPLING MAP
MARCH 11, 2011

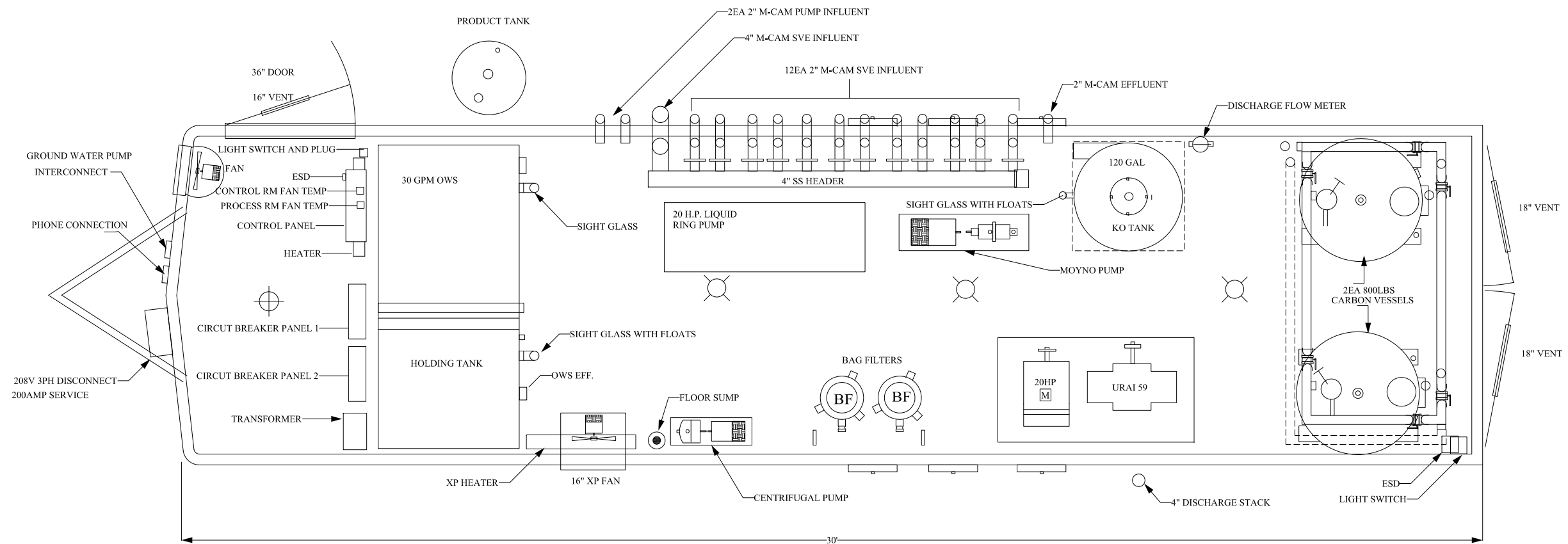
DATE	REVISED

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Engineering Services
110 Corporate Park Drive
Suite 112
White Plains, NY 10604
(914) 694-5711



DRAWN: JM	CHECKED: SG	DATE: 3/14/11	FIGURE: 32
-----------	-------------	---------------	------------





NOT TO SCALE

FORMER RED DEVIL PAINT FACILITY 30 NORTH WEST STREET MOUNT VERNON, NEW YORK SITE NO. 360031			
TREATMENT SYSTEM TRAILER LAYOUT			
DATE	REVISED		
DRAWN: JM		CHECKED: BH	DATE: 10/19/15
			FIGURE: 35

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Engineering Services
4 Westchester Park Drive
Suite 175
White Plains, NY 10604
(914) 694-5711



