CITY OF HOUSTON

PUBLIC WORKS AND ENGINEERING
PLANNING & DEVELOPMENT DIVISION

EXECUTIVE SUMMARY

Project Overview

InControl Technologies, Inc was retained by Irvington Holdings LLC (the current property owner), to provide environmental consulting services at the vacant tract of land located at 6809 Irvington Blvd., Houston, Harris County, Texas. The subject property consists of approximately 3.09-acres of land located north of downtown Houston, Harris County, Texas (**Figure B1**). The subject property is undeveloped with surrounding properties developed with a mixture of industrial properties and residential properties (**Figure C1**).

The Site is located within the White Oak Bayou Watershed (**Figure B2**). According to the Flood Insurance Rate Map (**Figure B3**) the Site is located outside the 0.2% annual chance (500 year) floodplain.

The Site currently has several groundwater PCLE zones. The PCLE zones are depicted on **Figure B4-1 through Figure B4-3**.

Historical Environmental Condition

Historically, the land use at the subject property has been industrial, specifically for wood treating operations. Prior to 1966, wood treating operations were conducted on the subject property by an unknown company. Between 1966 and 1984, Hatheway Patterson Corporation (HPC) continued wood treating operations on the subject property. The historic layout of the HPC facility is depicted on **Figure C2**. Prior to 1974, a surface impoundment was used to dispose of wastewater generated from the wood treatment operations. During 1974, HPC began treating wastewaters in a tank and discharging the effluent to the City of Houston sanitary sewer system. During a compliance inspection by the Texas Department of Water Resources in 1983, spills of pentachlorophenol (PCP) onto the soils as a result of leaking pipes and poor housekeeping practices were noted. During this inspection, it was also noted that a pipe was discharging contaminated water from the treating area into a drainage ditch north of the HPC facility. HPC ceased operations at the facility in October 1984. In 1985, the facility was dismantled and removed from the property.

Between 1985 and 1988, Toxcon Engineering Company (Toxcon) conducted soil assessments at the subject property. Toxcon identified elevated concentrations of PCP and penanthrene in surface soil (0- to 15-ft below ground surface (bgs)). At a later date, SKA Consulting, L.P. (SKA) did not observe these

concentrations in soil leading to the conclusion these compounds underwent bioattenuation in the more than 20 years between assessments. In 1990, Toxcon, in accordance with the Texas Water Commission (TWC) Agreed Order dated October 7, 1987, covered most of the site with a 2-foot clay cap and deed-recorded the site as a Class 1 Non-hazardous landfill (Waste Control Unit (WCU)).

Between 1987 and 1994, several consulting firms conducted site assessments at the property. These assessments included the installation of ten groundwater monitoring wells. SKA installed several more monitoring wells in the first and second groundwater bearing units between 1994 and present. Groundwater samples collected from these wells indicated that groundwater has been impacted by dissolved phase PCP. The plume has been fully delineated in all directions in both the first and second groundwater bearing units (**Figure B4-1** through **Figure B4-3**).

HPC considered several options for groundwater remediation at the site. A plan for a remediation system was submitted to the Texas Commission on Environmental Quality (TCEQ) (then Texas Natural Resource Conservation Commission (TNRCC)). However, the only progress that was made on the system was the installation and hydraulic testing of two recovery wells. In 2005, Cirrus Associates, LLC convinced the property owners the proposed remediation system would not be effective. It appears that no groundwater remediation/ treatment system was installed and operated on the subject property.

Much of the early assessment and remediation work at the subject property was done in compliance with the 1987 Agreed Order issued by the TWC. On May 25, 2000, the TNRCC (now TCEQ) issued a “Notice of Compliance” letter to HPC indicating that HPC had fulfilled the requirements and technical recommendations of the Agreed Order and concluded “No Further Action” was necessary with respect to the site.

All available analytical results from soil and groundwater sampling were compared to the most conservative Tier 1 Protective Concentration Levels (PCLs) (**Table F1** through **Table F12**). **Figure B5** depicts the locations of the soil and groundwater sampling points on the subject property. Based on the information available to date, the extent of groundwater impact has been horizontally and vertically delineated in all directions (**Figure B4-1** through **Figure B4-3**). A comparison of the sampling results available for the investigation areas indicates the area of impact has remained stable over time. Compound specific PCLE zones are depicted in **Figure B4-1** through **Figure B4-3**. The direction of groundwater flow in the first groundwater bearing unit is erratic but trends toward the northeast (**Figure B6-1**). The direction of groundwater flow in the second groundwater bearing unit is toward the south (**Figure B6-2**).

Five (5) water wells were identified within a ½-mile radius of the proposed MSD boundary. None of the identified water wells within a ½-mile radius are listed as a domestic or public supply wells. All identified wells within the ½-mile radius are listed as industrial or unused. None of the identified wells are within the proposed MSD boundary. The nearest domestic well (State ID 65-14-437) is located approximately 0.51-miles north of the proposed MSD boundary and is completed at a depth of 190-ft below ground surface (bgs). The completion depths of the identified wells range from 50-ft bgs to greater than 2,000-ft bgs. The nearest well completed at a depth of near 50-ft bgs is located approximately 1-mile south of the

subject property on the opposite side of Loop 610. Typically the completion zones are much deeper than the limit of impacted groundwater associated with the proposed MSD area.

Little White Oak Bayou is located approximately 1-mile west of the proposed MSD boundary. Due to the distance and direction of this water body from the proposed MSD area, surface water is not threatened by the affected groundwater identified on the site (**Figure B2**).

Appendix B – Site Maps

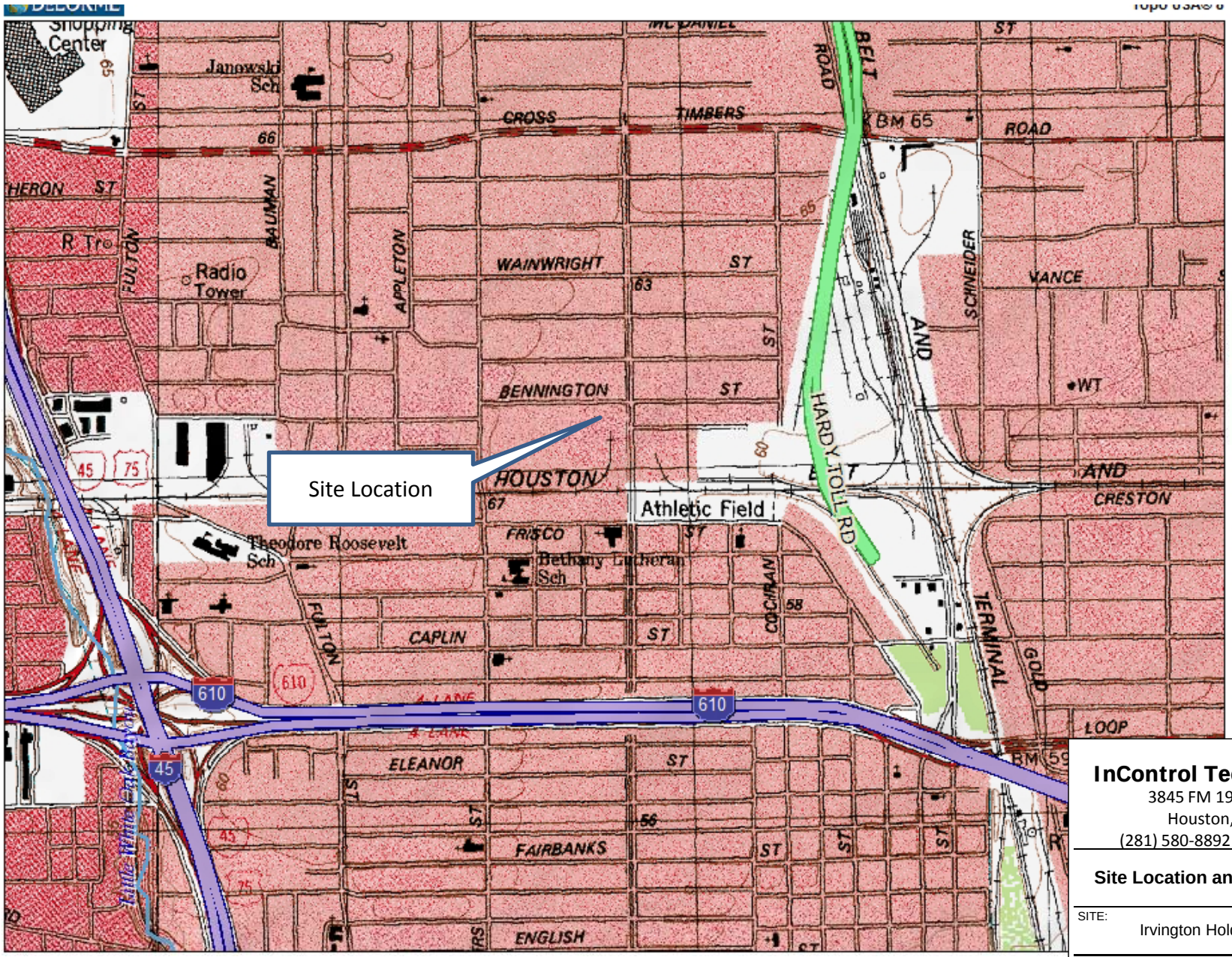
The figures set out in this section provide information required under Item 2. The maps depict the property location and topography, the area of groundwater contamination, the location of all soil sampling points and groundwater monitoring wells, the groundwater gradient, and the soil and groundwater PCL exceedance zones.

The following is a listing of figures included in **Appendix B**.

Figure B1 – Site location and topographic Map
Figure B2 – Watershed Map
Figure B3 – Floodplain Map
Figure B4-1 – Groundwater PCLE zones in 1st GWBU (September 2008)
Figure B4-2 – Groundwater PCLE zones in 1st GWBU – (November 2010)
Figure B4-3 – Groundwater PCLE zones in 2nd GWBU – (November 2010)
Figure B5 – Sample Location Map (Soil and Groundwater)
Figure B6-1 – Groundwater Gradient Map – 1st GWBU (November 2010)
Figure B6-2 – Groundwater Gradient Map – 2nd GWBU (November 2010)

The subject property is located within the White Oak Bayou watershed (**Figure B2**). The property is not located within the 100-year floodplain (**Figure B3**).

Figure B4-1 through **Figure B4-3** depict all of the groundwater PCLE zones within the proposed MSD boundary. These zones were developed based on several environmental samples collected from both soil and groundwater. **Figure B5** shows the locations of the soil and groundwater samples. Soil samples were collected from each soil boring during monitoring well installation. Groundwater flow in the first groundwater bearing unit is highly variable and is likely a result of this unit being a perched groundwater zone and possibly discontinuous across the site (**Figure B6-1)**. Groundwater flow in the second groundwater bearing unit flows toward the south which is consistent with this area (**Figure B6-2**). The primary chemicals of concern (COCs) are pentachlorophenol (1st and 2nd GWBU), benzene (1st GWBU), naphthalene (1st GWBU) and 2-methylnapthalene (1st GWBU).



N

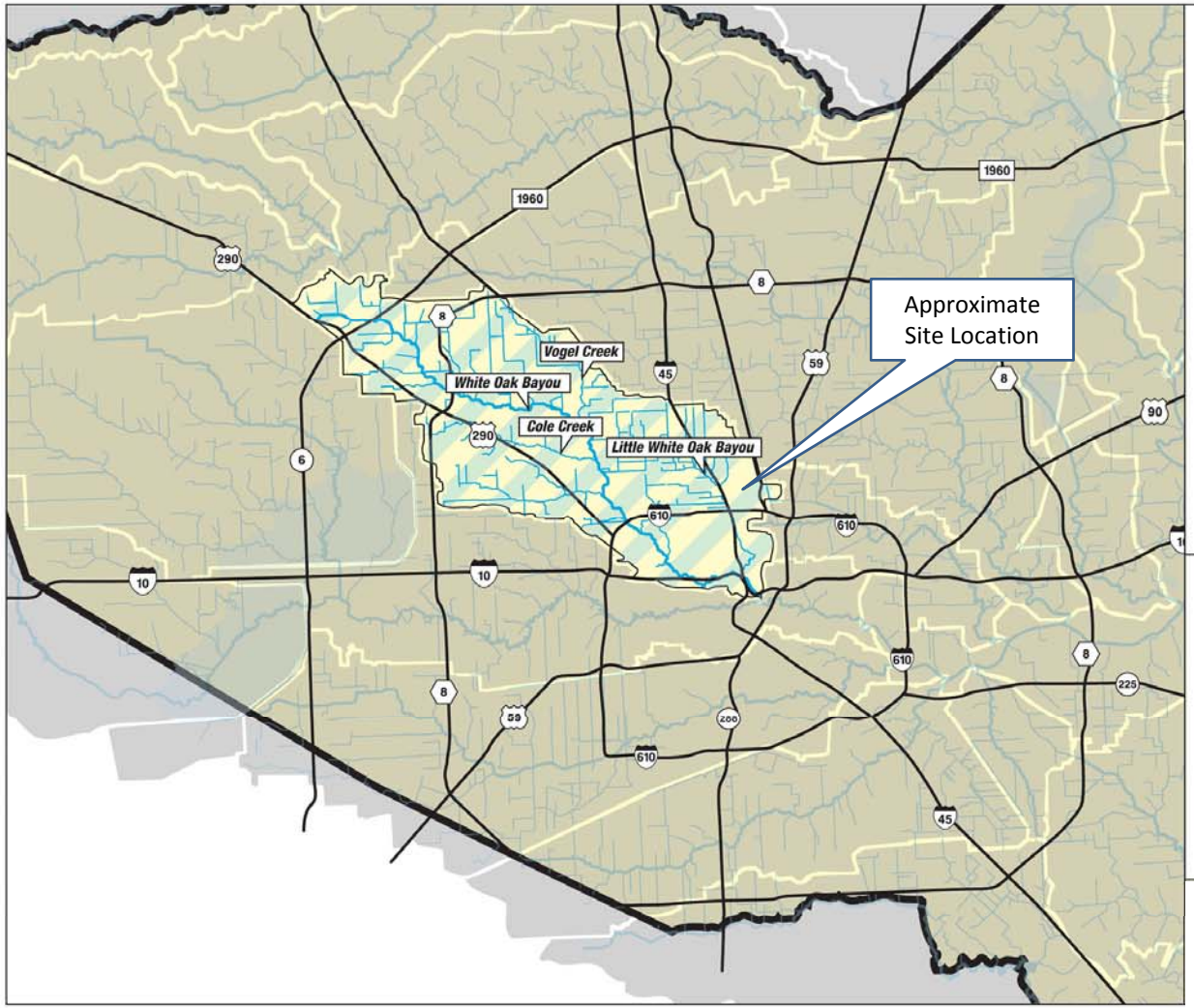
Source: 1982 Settegast Quad

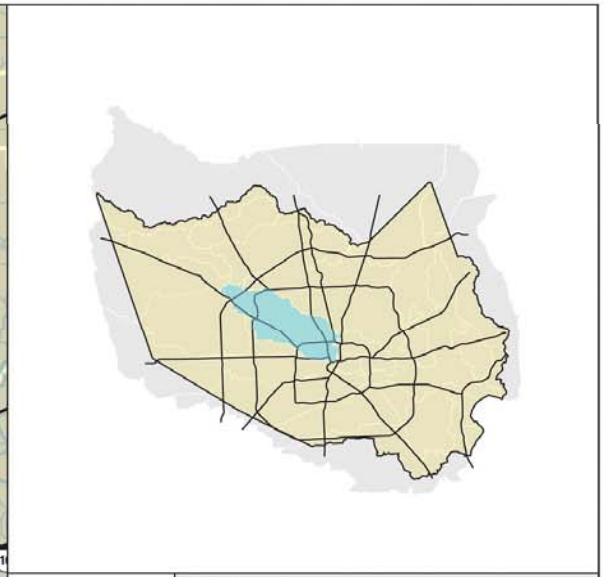
0 1000 2000 ft

InControl Technologies, Inc.
3845 FM 1960 W, Suite 195
Houston, Texas 77068
(281) 580-8892 FAX (281) 580-8853

Site Location and Topographic Map

SITE: Irvington Holdings LLC			PM: MFM
LOCATION: 6809 Irvington Blvd. Houston, TX 77022			CHECKED:
DETAILED: CP	DESIGNED: 11/22/10	PROJECT NO: 571-101	FIGURE: **B1**





Drainage Area:
111 Sq. Miles

Watershed Population:
416,067

Open Stream Miles:
151 Miles

Primary Streams:
White Oak Bayou
Little White Oak Bayou
Cole Creek
Vogel Creek

InControl Technologies, Inc.
3845 FM 1960 W, Suite 195
Houston, Texas 77068
(281) 580-8892 FAX (281) 580-8853

Watershed Map

SITE: Irvington Holdings LLC			PM: MFM
LOCATION: 6809 Irvington Blvd. Houston, TX 77022			CHECKED:
DETAILED: CP	DESIGNED: 11/22/10	PROJECT NO: 571-101	FIGURE: **B2**

Source: Harris County Flood Control District

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevation** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevation (BFEs) shown on this map apply only landward of 0.0' North American Vertical Datum (NAVD). Users of this FIRM should be aware that coastal flood elevations may also be provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this community. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map is Universal Tranverse Mercator (UTM) zone 15. The **horizontal datum** is NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum.** For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242,** or visit their website at www.ngs.noaa.gov.

Base map information shown on this FIRM was provided in digital format by the Harris Galveston Area Council and was revised and enhanced by Harris County.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

An accompanying Flood Insurance Study report, Letters of Map Revision or Letters of Map Amendment revising portions of this panel, and digital versions of this PANEL may be available. Contact the **FEMA Map Service Center** at the following phone numbers and Internet address for information on all related products available from FEMA;

Phone: 800-358-9616
FAX: 800-358-9620
www.fema.gov/msc

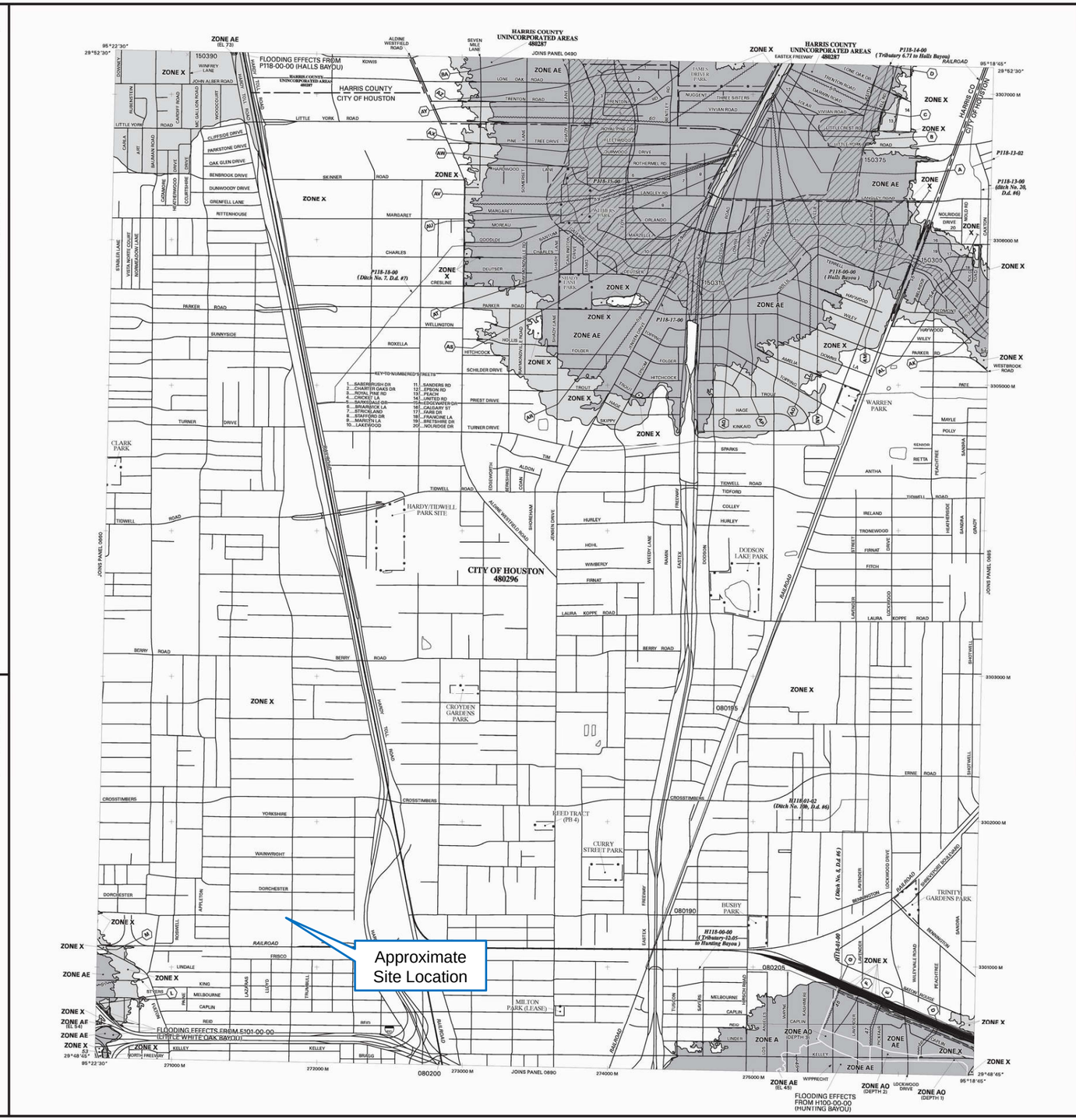
If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at www.fema.gov.

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transfered from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report may reflect stream channel distances that differ from what is shown on this map.

Vertical Datum Adjustment due to subsidence is the 2001 adjustment.

Benchmarks shown on this map were provided by either Harris County or the National Geodetic Survey. To obtain elevation, description, and location information for benchmarks provided by Harris County, please contact the Permits Office of the Public Infrastructure Departement at (713) 956-3000 or visit their website at http://www.eng.hctx.net/permits. For information regarding the benchmarks provided by the National Geodetic Survey, please see note above.

Some bridges and other structures shown on the detailed studied streams are not labeled. See corresponding flood profile for appropriate name.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

ZONE A	No base flood elevations determined.
ZONE AE	Base flood elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Areas of special flood hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood event.
ZONE A99	Area to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no base flood elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	Floodplain boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

(A)———(A)	Cross Section Line
(23)- - - - - -(23)	Transect Line
97°07'30", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
4276000M	1000-meter Universal Transverse Mercator grid values, zone 15
500000 FT	5000-foot grid ticks
DX5510	Bench mark (see explanation in Notes to Users section of this FIRM panel).
• M1.5	River Mile

MAP REPOSITORY
Refer to Repository Listing on Index Map

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
SEPTEMBER 28, 1990

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
SEPTEMBER 30, 1992
NOVEMBER 6, 1996
APRIL 20, 2000
to change base flood elevations, to add special flood hazard areas, to change special flood hazard areas, to change zone designations, to reflect updated topographic information, and to change floodway.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.

MAP SCALE 1" = 1000'
500 0 1000 2000 FEET
300 0 300 600 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0680L

FIRM
FLOOD INSURANCE RATE MAP
HARRIS COUNTY,
TEXAS
AND INCORPORATED AREAS

PANEL 680 OF 1150
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
HARRIS COUNTY, UNINCORPORATED AREAS	480287	0680	L
HOUSTON, CITY OF	480296	0680	L

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
48201C0680L

MAP REVISED:
REVISED PRELIMINARY
JUN 9 2006

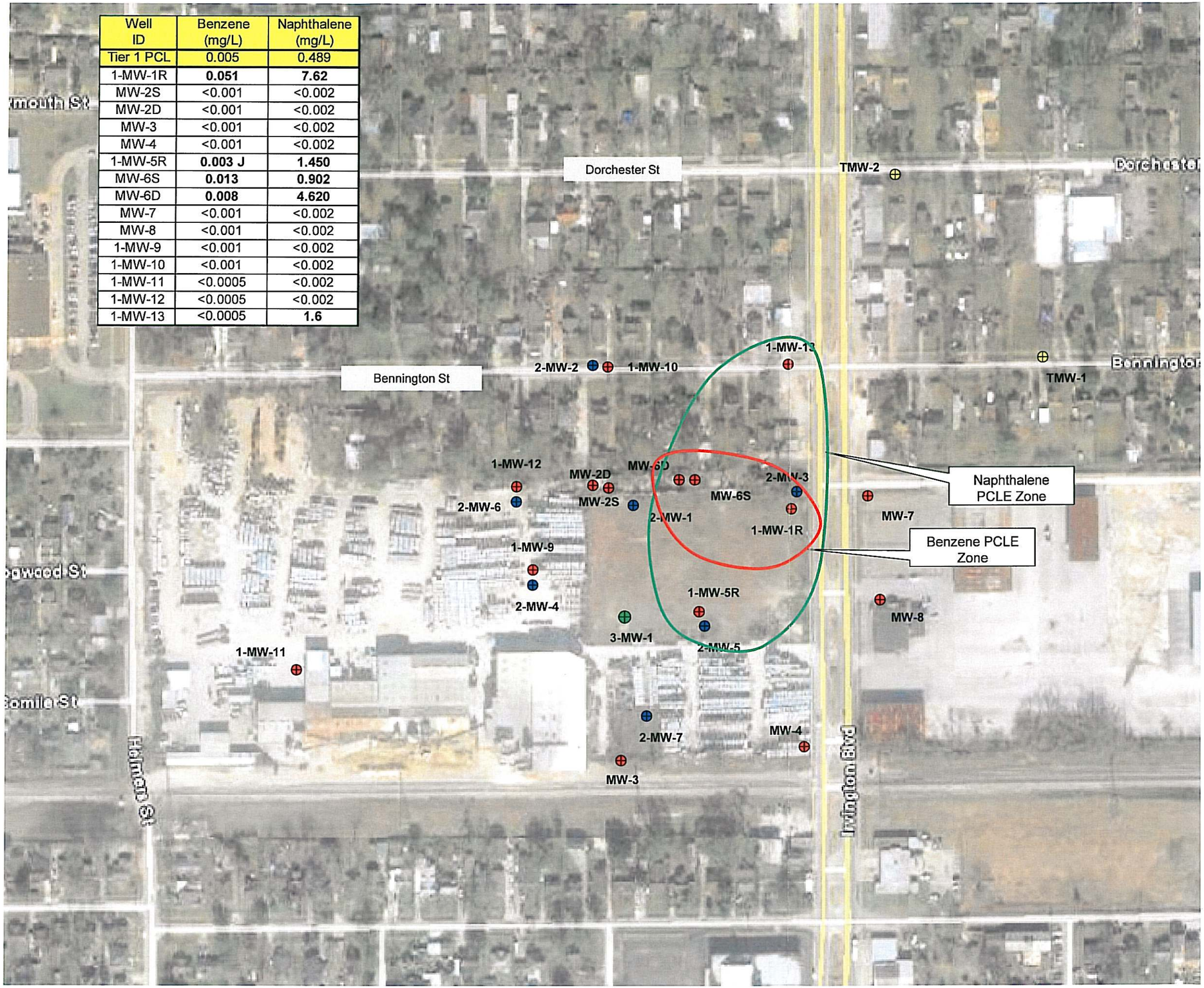
Federal Emergency Management Agency

InControl Technologies, Inc.
3845 FM 1960 W, Suite 195
Houston, Texas 77068
(281) 580-8892 FAX (281) 580-8853

Flood Plain Map

CLIENT: Irvington Holdings			PM: MFM
LOCATION: 6809 Irvington Blvd. Houston, Texas 77022			CHECKED:
DETAILED: CP	DESIGNED: 11/22/10	PROJECT NO: 571-101	FIGURE: **B3**

Well ID	Benzene (mg/L)	Naphthalene (mg/L)
Tier 1 PCL	0.005	0.489
1-MW-1R	**0.051**	**7.62**
MW-2S	<0.001	<0.002
MW-2D	<0.001	<0.002
MW-3	<0.001	<0.002
MW-4	<0.001	<0.002
1-MW-5R	**0.003 J**	**1.450**
MW-6S	**0.013**	**0.902**
MW-6D	**0.008**	**4.620**
MW-7	<0.001	<0.002
MW-8	<0.001	<0.002
1-MW-9	<0.001	<0.002
1-MW-10	<0.001	<0.002
1-MW-11	<0.0005	<0.002
1-MW-12	<0.0005	<0.002
1-MW-13	<0.0005	**1.6**



LEGEND:

MW-7 — 1st GWBU Monitoring Wells

MW-7 — 2nd GWBU Monitoring Well

MW-7 — 3rd GWBU Monitoring Well

TMW-1 — Temporary Well

STATE OF TEXAS
MICHAEL F. MARCON
12/21/10
GEOLOGIST
2704
LICENSED
PROFESSIONAL GEOSCIENTIST

N

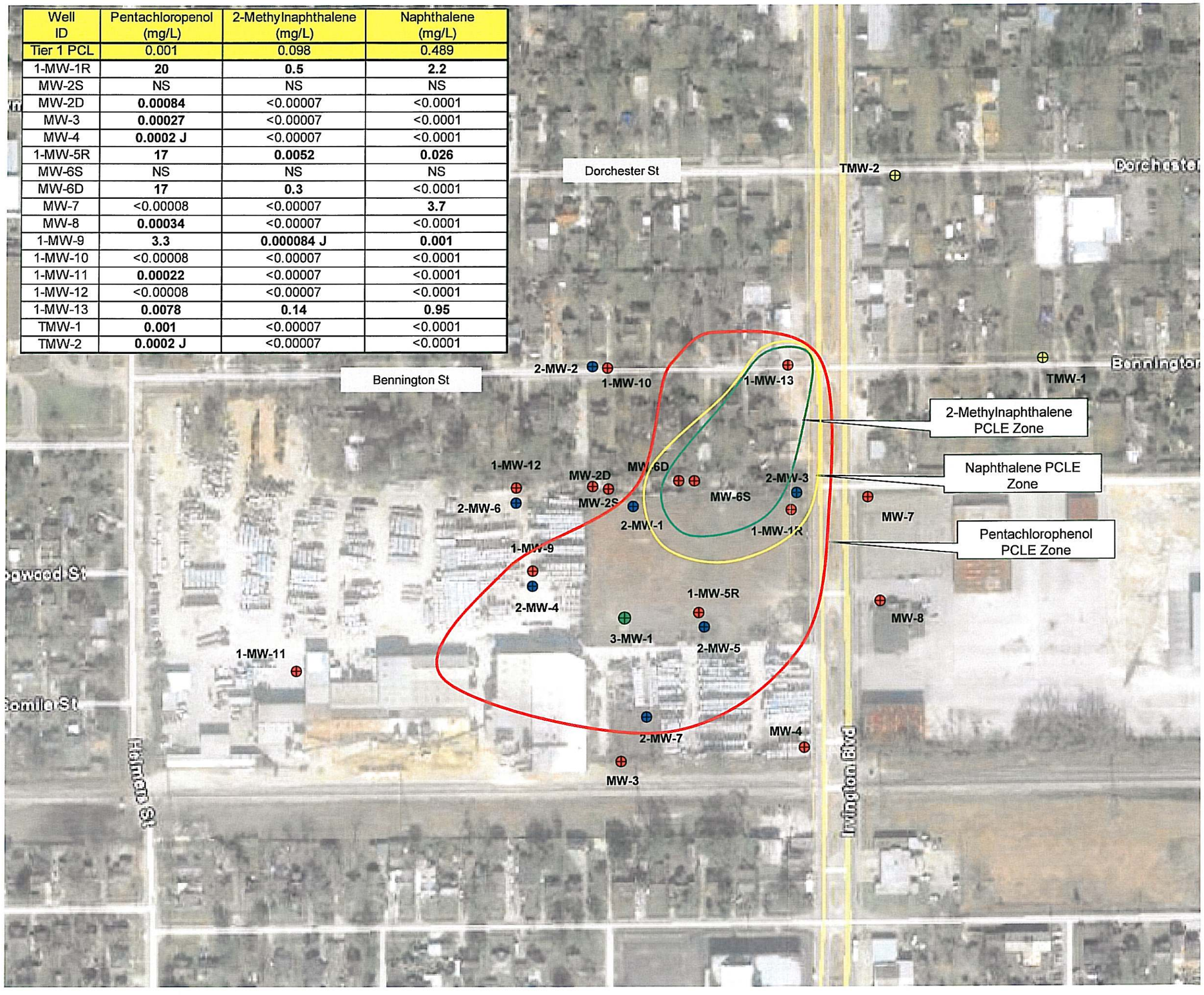
0 200 400
Approximate Scale (Feet)

InControl Technologies, Inc.
3845 FM 1960 W, Suite 195
Houston, Texas 77068
(281) 580-8892 FAX (281) 580-8853

Groundwater COC Map – 1st GWBU (September 2008)

CLIENT: Vacant Land			PM: MFM
LOCATION: 6809 Irvington Blvd. Houston, TX 77022			CHECKED:
DETAILED: 11/24/10	DESIGNED: CP	PROJECT NO: 571-101	FIGURE: B4-1

Well ID	Pentachloropenol (mg/L)	2-Methylnaphthalene (mg/L)	Naphthalene (mg/L)
Tier 1 PCL	0.001	0.098	0.489
1-MW-1R	**20**	**0.5**	**2.2**
MW-2S	NS	NS	NS
MW-2D	**0.00084**	<0.00007	<0.0001
MW-3	**0.00027**	<0.00007	<0.0001
MW-4	**0.0002 J**	<0.00007	<0.0001
1-MW-5R	**17**	**0.0052**	**0.026**
MW-6S	NS	NS	NS
MW-6D	**17**	**0.3**	<0.0001
MW-7	<0.00008	<0.00007	**3.7**
MW-8	**0.00034**	<0.00007	<0.0001
1-MW-9	**3.3**	**0.000084 J**	**0.001**
1-MW-10	<0.00008	<0.00007	<0.0001
1-MW-11	**0.00022**	<0.00007	<0.0001
1-MW-12	<0.00008	<0.00007	<0.0001
1-MW-13	**0.0078**	**0.14**	**0.95**
TMW-1	**0.001**	<0.00007	<0.0001
TMW-2	**0.0002 J**	<0.00007	<0.0001



LEGEND:

MW-7 — 1st GWBU Monitoring Wells

MW-7 — 2nd GWBU Monitoring Well

MW-7 — 3rd GWBU Monitoring Well

TMW-1 — Temporary Well

STATE OF TEXAS
12/21/10
MICHAEL F. MARCOM
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2704
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PROFESSIONAL GEOSCIENTIST

N

0 200 400

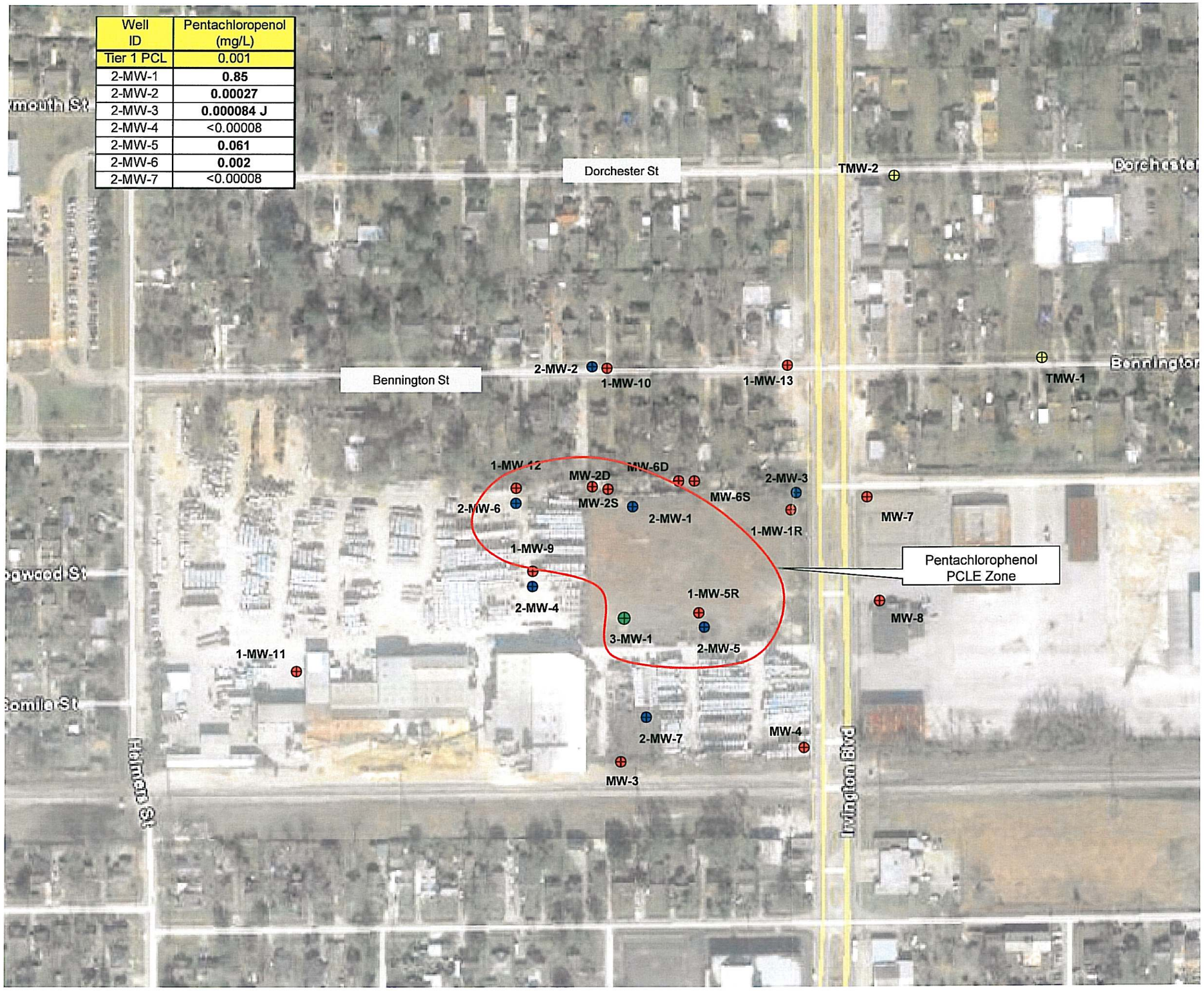
Approximate Scale (Feet)

InControl Technologies, Inc.
3845 FM 1960 W, Suite 195
Houston, Texas 77068
(281) 580-8892 FAX (281) 580-8853

Groundwater COC Map – 1st GWBU (November 2010)

CLIENT: Vacant Land			PM: MFM
LOCATION: 6809 Irvington Blvd. Houston, TX 77022			CHECKED:
DETAILED: 11/24/10	DESIGNED: CP	PROJECT NO: 571-101	FIGURE: B4-2

Well ID	Pentachloropenol (mg/L)
Tier 1 PCL	0.001
2-MW-1	**0.85**
2-MW-2	**0.00027**
2-MW-3	**0.000084 J**
2-MW-4	<0.00008
2-MW-5	**0.061**
2-MW-6	**0.002**
2-MW-7	<0.00008



LEGEND:

MW-7 — 1st GWBU Monitoring Wells

MW-7 — 2nd GWBU Monitoring Well

MW-7 — 3rd GWBU Monitoring Well

TMW-1 — Temporary Well

STATE OF TEXAS
MICHAEL F. MARCON
GEOLOGIST
2704
LICENSED
PROFESSIONAL GEOSCIENTIST

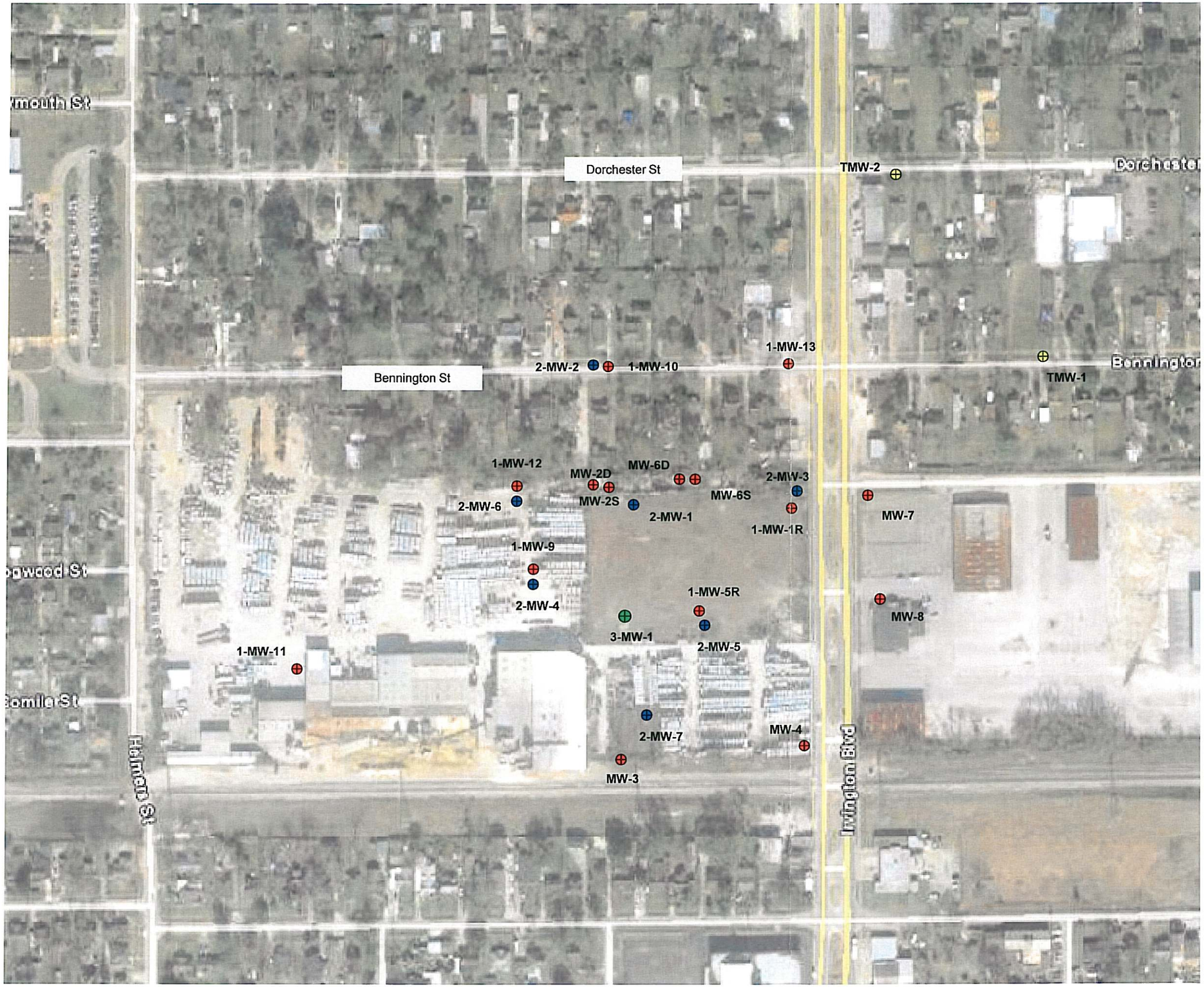
N

0 200 400
Approximate Scale (Feet)

InControl Technologies, Inc.
3845 FM 1960 W, Suite 195
Houston, Texas 77068
(281) 580-8892 FAX (281) 580-8853

Groundwater COC Map – 2nd GWBU Pentachlorophenol (November 2010)

CLIENT: Vacant Land			PM: MFM
LOCATION: 6809 Irvington Blvd. Houston, TX 77022			CHECKED:
DETAILED: 11/24/10	DESIGNED: CP	PROJECT NO: 571-101	FIGURE: B4-3



LEGEND:

MW-7	1st GWBU Monitoring Wells
MW-7	2nd GWBU Monitoring Well
MW-7	3rd GWBU Monitoring Well
TMW-1	Temporary Well

STATE OF TEXAS
12/21/10
MICHAEL F. MARCON
GEOLOGIST
2704
LICENSED
PROFESSIONAL GEOSCIENTIST

N

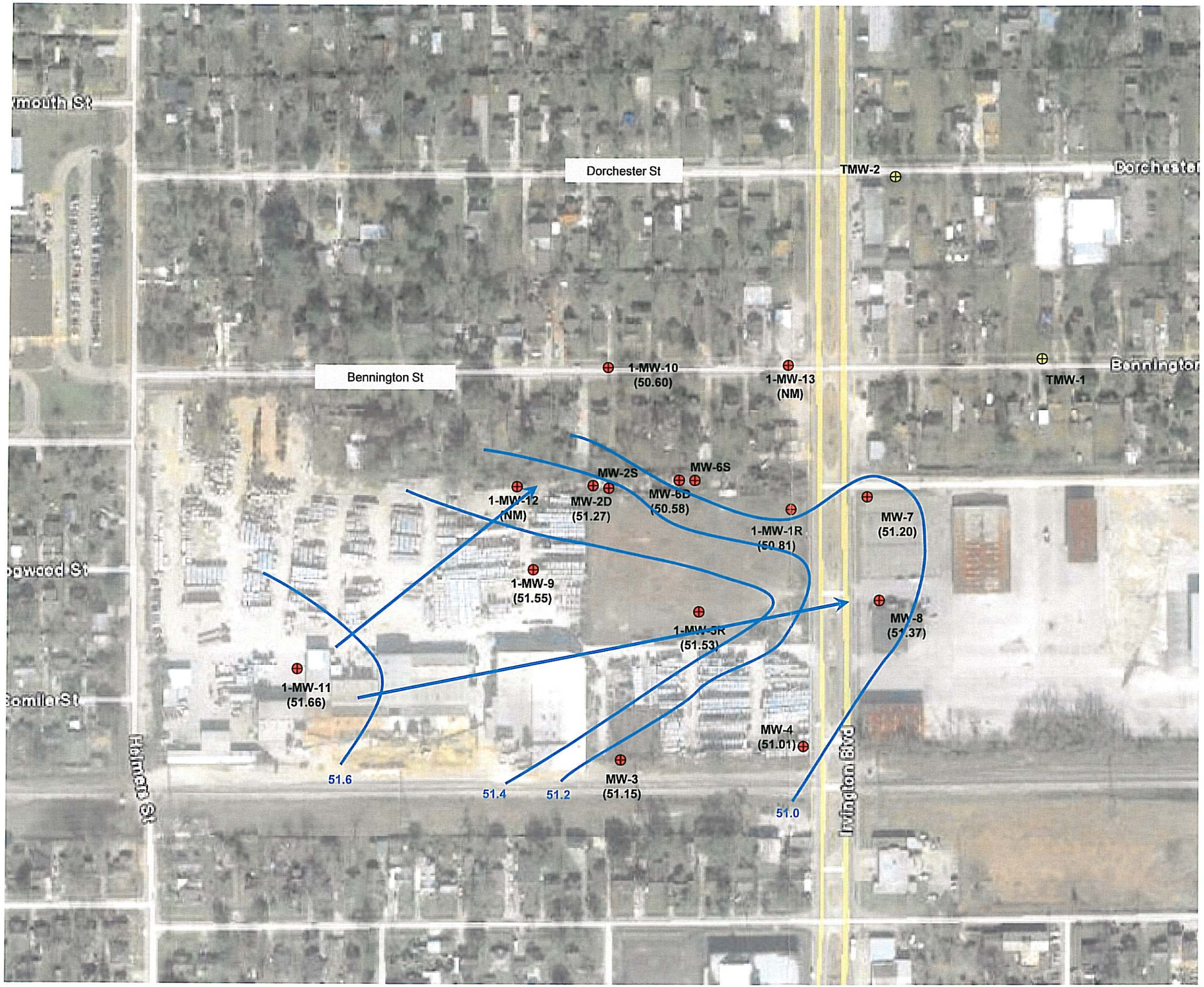
0 200 400

Approximate Scale (Feet)

InControl Technologies, Inc.
3845 FM 1960 W, Suite 195
Houston, Texas 77068
(281) 580-8892 FAX (281) 580-8853

Sample Location Map

CLIENT: Vacant Land			PM: MFM
LOCATION: 6809 Irvington Blvd. Houston, TX 77022			CHECKED:
DETAILED: 11/24/10	DESIGNED: CP	PROJECT NO: 571-101	FIGURE: B5



LEGEND:

MW-7	1st GWBU Monitoring Wells
MW-7	2nd GWBU Monitoring Well
MW-7	3rd GWBU Monitoring Well
(51.55)	Groundwater Elevation (ft bgs)
→	Direction of Groundwater Flow

STATE OF TEXAS
12/21/10
MICHAEL F. MARCON
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N

0 200 400
Approximate Scale (Feet)

InControl Technologies, Inc.
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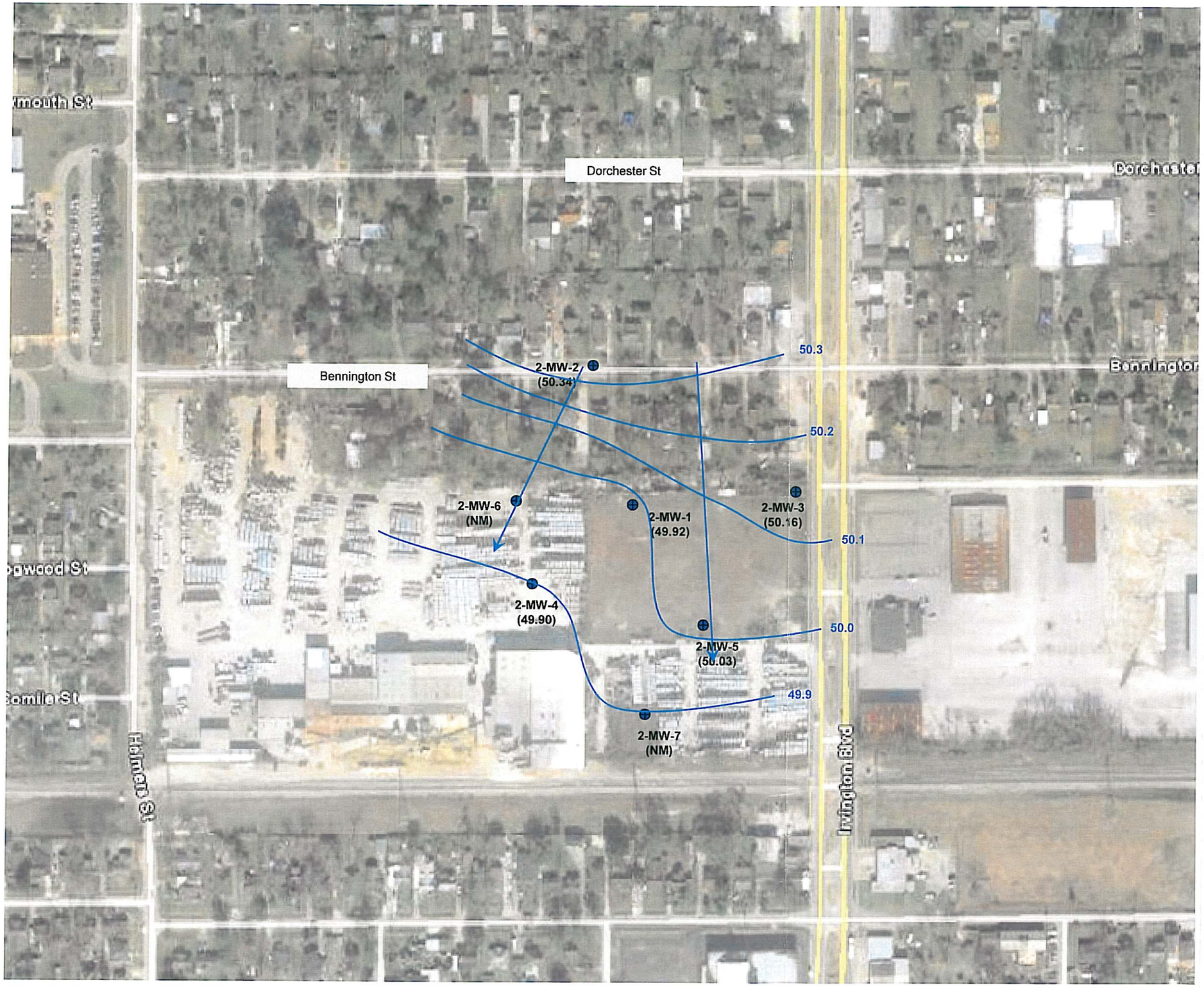
Groundwater Gradient Map – 1st GWBU November 2010

CLIENT: Vacant Land			PM: MFM
LOCATION: 6809 Irvington Blvd. Houston, TX 77022			CHECKED:
DETAILED: 11/24/10	DESIGNED: CP	PROJECT NO: 571-101	FIGURE: B6-1



LEGEND:

MW-7	1st GWBU Monitoring Wells
MW-7	2nd GWBU Monitoring Well
MW-7	3rd GWBU Monitoring Well
(51.55)	Groundwater Elevation (ft bgs)
→	Direction of Groundwater Flow

STATE OF TEXAS
12/21/10
MICHAEL F. MARCOM
GEOLOGIST
2704
LICENSED
PROFESSIONAL GEOSCIENTIST

N

0 200 400

Approximate Scale (Feet)

InControl Technologies, Inc.
3845 FM 1960 W, Suite 195
Houston, Texas 77068
(281) 580-8892 FAX (281) 580-8853

Groundwater Gradient Map – 2nd GWBU November 2010

CLIENT: Vacant Land			PM: MFM
LOCATION: 6809 Irvington Blvd. Houston, TX 77022			CHECKED:
DETAILED: 11/24/10	DESIGNED: CP	PROJECT NO: 571-101	FIGURE: B6-2

Appendix C – Property Use

The proposed MSD area is approximately 3.09-acres of land located north of downtown Houston, Harris County, Texas. The affected property is located in a mixture of residential and industrial development (**Figure C1**). **Figure C1** (included in **Appendix C**) provides a description of the surrounding land use within 500-feet of the site.

Historically the property was used as a wood treating facility. The Hatheway Patterson Corporation (HPC) operated a wood treating facility at the property from 1966 to late 1984. Prior to 1966 the property was used as a wood treating facility but the owner is not known. HPC stopped operations at the property in October 1984. The facility was dismantled and removed from the property in 1985. HPC operations occupied a larger tract of land that what is currently the subject property (**Figure C2**). The anticipated use of the property will be future expansion from the adjacent Hansen Pipe & Products, Inc. facility.

Approximately 100% of the subject property is covered with grasses and natural vegetation (**Figure C1**). Future use of the subject property is to be redeveloped for commercial/ industrial use.

- North – Bennington Street followed by residential development;
- East – Irvington Blvd. followed by Hope Lumber;
- South – a laydown yard for Hansen Pipe & Products, Inc. followed by railroad tracks;
- West – Hansen Pipe & Products, Inc. followed by Helmers St.

LEGEND:

MSD Boundary

500-ft Radius

N

0 250 500

Approximate Scale (Feet)

InControl Technologies, Inc.
3845 FM 1960 W, Suite 195
Houston, Texas 77068
(281) 580-8892 FAX (281) 580-8853

Surrounding Property Map

SITE: Irvington Holdings LLC			PM: MFM
LOCATION: 6809 Irvington Blvd. Houston, TX 77022			CHECKED:
DETAILED: CP	DESIGNED: 11/22/10	PROJECT NO: 571-101	FIGURE: **C1**

LEGEND:

- MSD Boundary
- Historic Property Boundary
- Waste Management Unit (WMU) (estimated)

N

0 175 350

Approximate Scale (Feet)

InControl Technologies, Inc.
3845 FM 1960 W, Suite 195
Houston, Texas 77068
(281) 580-8892 FAX (281) 580-8853

Historic Property Map
1978

SITE: Irvington Holdings LLC			PM: MFM
LOCATION: 6809 Irvington Blvd. Houston, TX 77022			CHECKED:
DETAILED: CP	DESIGNED: 11/22/10	PROJECT NO: 571-101	FIGURE: **C2**

Appendix D – PCLE Zone Discussion

A) A review of recent groundwater sampling data indicates that the COCs that currently exceed the Tier 1 ${}^{GW}GW_{Ing}$ PCLs are pentachlorophenol (PCP), 2-methylnaphthalene, naphthalene and benzene. PCLE zones for each COC are discussed in more detail below. The areas of affected groundwater are delineated in all directions (**Figure B4-1** through **Figure B4-3**).

Volatile Organic Compounds (VOCs)

A review of recent groundwater sampling data indicates that the VOCs that currently exceed the Tier 1 ${}^{GW}GW_{Ing}$ PCLs are benzene and naphthalene (**Table F5**, and **Table F6**). The area of impacted groundwater has been delineated in all directions (**Figure B4-1**). Groundwater samples collected from the second groundwater bearing unit reported concentrations of benzene and naphthalene less than the Tier 1 ${}^{GW}GW_{Ing}$ PCLs. This PCLE zone is confined to the first groundwater bearing unit which is encountered at a depth of 30- to 39-feet bgs.

Semi-volatile Organic Compounds (SVOCs)

A review of recent groundwater sampling data indicates that pentachlorophenol (PCP), 2-methylnaphthalene and naphthalene currently exceed the Tier 1 ${}^{GW}GW_{Ing}$ PCL on the subject property (**Table F7, Table F8** and **Table F9**). The pentachlorophenol (PCP) plume is encountered in the first (**Figure B4-2**), second, and third (**Figure B4-3**) groundwater bearing units. Reported concentrations of 2-methylnaphthalene and naphthalene are exceed the Tier 1 ${}^{GW}GW_{Ing}$ PCLs in the first groundwater bearing unit only (**Figure B4-2**) and therefore appear to be limited to depths of 30- to 39-feet bgs. All three plumes in the first groundwater bearing unit and the PCP plume in the second groundwater bearing unit have been delineated in all directions. A comparison of the naphthalene plume identified in the 2008 groundwater data (**Figure B4-1**) to the present naphthalene plume (**Figure B4-2**), there is a noticeable decrease in the overall size of the area of impacted groundwater indicating natural attenuation processes are actively degrading the naphthalene in groundwater.

A comparison of the groundwater sampling results with applicable non-ingestion protective concentration levels (${}^{Air}GW_{Inh-V}$) indicates that none of the groundwater samples reported a COC concentration above the ${}^{Air}GW_{Inh-V}$ PCL. Therefore, based on the recent groundwater monitoring results, there is no non-ingestion protective concentration level exceedance zone within the proposed MSD boundary.

Based on a review of boring logs, the shallow groundwater is encountered at a depth of approximately 30-feet below ground surface (ft bgs). The bottom of the shallow groundwater bearing unit is estimated at approximately 39 to 40-ft bgs. The first groundwater bearing unit grades from a sand to a sandy silt or silty clay across the property. A second, deeper groundwater bearing unit is encountered at approximately 50- to 55-ft bgs and is comprised of a silty sand to a silty clay. This second, deeper groundwater bearing unit is underlain by a clay unit. The first and second groundwater bearing units are separated by approximately 10-feet of clay. A boring log for third groundwater bearing unit monitoring well 3-MW-1 was not available for review. The lithology of the third groundwater bearing unit is unclear at this

time. Based on the casing depth of 3-MW-1, it appears that the base of the third groundwater bearing unit is approximately 70-ft bgs.

B) The following table represents the groundwater ingestion PCL exceedances that were reported from the most recent monitoring event:

Table D1 – Groundwater ingestion PCL Exceedances in First Groundwater Bearing Unit

		Naphthalene (mg/L)	2-Methylnaphthalene (mg/L)	Pentachlorophenol (mg/L)
Tier 1 $^{GW}GW_{Ing}$ PCLs		0.489	0.98	0.001
Tier 1 $^{Air}GW_{Inh-V}$ PCLs		316	NA	13,263
Monitoring Well ID	Sample Date	Concentration (mg/L)		
MW-1R	11/1/2010	**2.2**	**0.097**	**20**
1-MW-5R	11/1/2010	**0.26**	**0.0052**	**17**
MW-6D	11/3/2010	**3.7**	**0.3**	**17**
1-MW-9	11/3/2010	0.001	0.000084 J	**3.3**
1-MW-13	11/3/2010	**0.95**	**0.14**	**0.008**

Notes – Values in **Bold** exceed the $^{GW}GW_{Ing}$ PCL (ingestion PCLE)
Values in ***Bold Italics*** exceed the $^{Air}GW_{Inh-V}$ PCL (non-ingestion PCLE)

Table D2 – Groundwater ingestion PCL Exceedances in Second Groundwater Bearing Unit

		Pentachlorophenol (mg/L)
Tier 1 $^{GW}GW_{Ing}$ PCLs		0.001
Tier 1 $^{Air}GW_{Inh-V}$ PCLs		13,263
Monitoring Well ID	Sample Date	Concentration (mg/L)
2-MW-1	11/3/2010	**0.85**
2-MW-5	11/1/2010	**0.061**
2-MW-6	11/3/2010	**0.002**

Notes – Values in **Bold** exceed the $^{GW}GW_{Ing}$ PCL (ingestion PCLE)
Values in ***Bold Italics*** exceed the $^{Air}GW_{Inh-V}$ PCL (non-ingestion PCLE)

Table D3 – Groundwater ingestion PCL Exceedances in Third Groundwater Bearing Unit

		Pentachlorophenol (mg/L)
Tier 1 ${}^{GW}GW_{Ing}$ PCLs		0.001
Tier 1 ${}^{Air}GW_{Inh\text{-}V}$ PCLs		13,263
Monitoring Well ID	Sample Date	Concentration (mg/L)
3-MW-1	11/2/2010	**0.006**

Notes – Values in **Bold** exceed the ${}^{GW}GW_{Ing}$ PCL (ingestion PCLE)
Values in ***Bold Italics*** exceed the ${}^{Air}GW_{Inh\text{-}V}$ PCL (non-ingestion PCLE)

Groundwater COC concentrations tabulated above are less than the ${}^{Air}GW_{Inh\text{-}V}$ non-ingestion PCL. Therefore, based on the monitoring data there is no non-ingestion PCLE zone on the subject property.

C) The chemicals of concern (COCs) detected in groundwater samples (pentachlorophenol, 2-methylnaphthalene, naphthalene, and benzene) are associated with the historic operations at the subject property included in the proposed MSD boundary.

Pentachlorophenol

Pentachlorophenol (PCP) is a manufactured chemical that does not occur naturally. PCP is found either in pure form or as the sodium salt of PCP which is easily dissolved in water. Pure pentachlorophenol exists as colorless crystals. Impure pentachlorophenol (the form usually found at hazardous waste sites) is dark gray to brown and exists as dust, beads, or flakes. Humans are usually exposed to impure pentachlorophenol (also called technical grade pentachlorophenol).

Pentachlorophenol was widely used as a pesticide and wood preservative. Since 1984, the purchase and use of pentachlorophenol has been restricted to certified applicators. It is no longer available to the general public. It is still used industrially as a wood preservative for utility poles, railroad ties, and wharf pilings.

Pentachlorophenol can be found in the air, water, and soil. It enters the environment through evaporation from treated wood surfaces, industrial spills, and disposal at uncontrolled hazardous waste sites. Pentachlorophenol is broken down by sunlight, other chemicals, and microorganisms to other chemicals within a couple of days to months.

2-Methylnaphthalene and Naphthalene

2-Methylnaphthalene is a natural component of crude oil and coal, and is found in pyrolysis and combustion products such as cigarette and wood smoke, emissions from combustion engines, asphalt,

coal tar residues, and used oils. Pure 2-methylnaphthalene is a component used in the manufacture of vitamin K and the insecticide carbaryl.

Naphthalene is a crystalline, aromatic, white, solid hydrocarbon. It is volatile, forming a flammable vapor, and readily sublimes at room temperature, producing a characteristic odor that is detectable at low concentrations. Naphthalene is a major constituent of creosote which is used in the wood treating process. Although not a lot is known about the behavior of 2-methylnaphthalene in the environment it is assumed that it behaves similarly to naphthalene.

Naphthalene enters the environment from industrial uses, from its use as a moth repellent, from the burning of wood or tobacco, and from accidental spills. Naphthalene at hazardous waste sites and landfills can dissolve in water. Naphthalene can become weakly attached to soil or pass through the soil into groundwater.

Some naphthalene will dissolve in water in rivers, lakes, or wells. Naphthalene in water is destroyed by bacteria or evaporates into the air. Most of the naphthalene will be gone from rivers or lakes within 2 weeks. Naphthalene breaks down faster in water containing other pollutants, such as petroleum products.

Naphthalene binds weakly to soils and sediment. It easily passes through sandy soils to reach groundwater. In soil, some microorganisms break down naphthalene. When near the surface of the soil, it will evaporate into air. Healthy soil will allow the growth of microorganisms which break down most of the naphthalene in 1 to 3 months. If the soil has few microorganisms, it will take about twice as long. Microorganisms may change the chemical structure of naphthalene. Some common bacteria grow on naphthalene, breaking it down to carbon monoxide.

<u>Benzene</u>

Benzene is a volatile organic compound (VOC) commonly associated with refined petroleum products. It is soluble in water and is less dense than water. In sufficient quantities, benzene will “float” on top of the water table as a non-aqueous phase liquid (NAPL). Today benzene is mainly used as an intermediate to make other chemicals. Its most widely-produced derivatives include styrene, which is used to make polymers and plastics, phenol for resins and adhesives (via cumene), and cyclohexane, which is used in the manufacture of Nylon. Smaller amounts of benzene are used to make some types of rubbers, lubricants, dyes, detergents, drugs, explosives, napalm and pesticides.

Based on the field observations and laboratory results, it appears that the groundwater COCs on the subject property are primarily dissolved in the shallow groundwater. A review of the off-site groundwater sampling results indicates that the dissolved phase COCs extend off-site to the adjacent north (**Figure B4-1** through **Figure B4-3**).

Appendix E – COCs in Designated Groundwater Discussion

A) Refer to **Appendix D** for a discussion of the chemicals of concern (COC) in the ingestion protective concentration level (PCL) exceedance zone. Current groundwater sampling results indicate that there are several identified COCs (pentachlorophenol, 2-methylnaphthalene, naphthalene, and benzene) that exceed the ingestion protective concentration levels on the subject property in the shallow groundwater bearing unit. **Figure B4-1** through **Figure B4-3** depicts the PCLE zones.

B) Refer to **Table D1**, **Table D2**, and **Table D3** for a tabulated comparison of COC concentrations with the respective TRRP Protective Concentration Levels (PCLs)

C) Refer to **Appendix D** for a discussion of the basic geochemical properties of the contaminants of concern (COCs) in the ingestion PCL exceedance zone.

Appendix F – Summary of Soil and Groundwater Concentration Data

Appendix F contains tables summarizing the concentration levels for the primary chemicals of concern in soil and groundwater. The tables include the concentration level, the ingestion protective concentration limits ($^{GW}Soil_{Ing}$ for soil and $^{GW}GW_{Ing}$ for groundwater), the non-ingestion protective concentration limits for soil ($^{Tot}Soil_{Comb}$ and $^{Air}Soil_{Inh\text{-}V}$) and groundwater ($^{Air}GW_{Inh\text{-}V}$), the critical protective concentration limits assuming no MSD is in place ($^{GW}Soil_{Ing}$ for soil and and $^{GW}Soil_{Ing}$ for groundwater), and the critical PCLs assuming that an MSD is in place ($^{Tot}Soil_{Comb\ for}$ soil and $^{Air}GW_{Inh\text{-}V}$ for groundwater).

Table F1
Summary of VOCs inSoil
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Depth (ft)	Sample Date	Benzene	m,p-Xylenes	n-Propylbenzene	p-Cymene (p-Isopropyltoluene)	1,2,4-Trimethylbenzene	Ethylbenzene	Methylene Chloride	Naphthalene	Toluene	1,3,5-trimethylbenzene	isopropylbenzene	n-Butylbenzene	o-Xylene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier 1 $^{GW}Soil_{Ing}$ Critical PCL without MSD			**0.026**	--	**44.82**	**231.521**	**9.706**	**7.63**	**0.013**	**31.246**	**8.21**	**53.2**	**347.411**	**121.345**	**70.71**
Tier 1 $^{Tot}Soil_{Comb}$ Critical PCL with MSD			65.794	--	2157.787	3733.786	131.464	5340.626	392.587	220.759	5934.217	112.52	4343.168	1896.511	48153.55
Tier 1 $^{Air}Soil_{Inh-V}$ Critical PCL with MSD			162.813	--	6321.753	6862.44	156.605	15350.96	762.105	267.656	62938.95	115.702	9246.959	6591.542	68211.97
1-MW-1R	11.5-14	8/9/2007	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	24-26.5	8/9/2007	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	41.5-44	8/9/2007	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	**0.004 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
1-MW-5R	16.5-19	8/21/2007	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	24-26.5	8/21/2007	<0.001 U	**0.008 J**	**0.003 J**	**0.005 J**	**0.052**	**0.003 J**	<0.005 U	**3.51 D**	**0.001 J**	**0.015**	**0.004 J**	<0.001 U	**0.005 J**
	29-30	8/21/2007	<0.001 U	<0.003 U	<0.001 U	**0.002 J**	**0.012**	<0.001 U	<0.005 U	**0.487 D**	<0.001 U	**0.004 J**	<0.001 U	<0.001 U	<0.001 U
	45-46.5	8/21/2007	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
1-MW-9	29-31.5	8/7/2007	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	36-38	8/7/2007	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.002 U	**0.001 JB**	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	42-44	8/7/2007	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
1-MW-10	21-23.5	8/8/2007	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	26-28	8/8/2007	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	35-36.5	8/8/2007	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
1-MW-11	10-12.5	9/2/2008	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	22.5-25	9/2/2008	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	40-42.5	9/2/2008	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	7.5-10	9/2/2008	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
1-MW-12	27.5-30	10/8/2009	<0.00061	<0.0012	<0.00061	<0.00061	<0.00061	<0.00061	<0.0012	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061
	42-44	10/8/2009	<0.00063	<0.0013	<0.00063	<0.00063	<0.00063	<0.00063	<0.0013	**0.012**	<0.00063	<0.00063	<0.00063	<0.00063	<0.00063
1-MW-13	27.5-30	11/9/2009	<0.00062	<0.0012	<0.00062	<0.00062	<0.00062	<0.00062	<0.0012	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062
	33-35	11/9/2009	<0.00063	<0.0013	<0.00063	<0.00063	<0.00063	<0.00063	<0.0013	**0.027**	<0.00063	<0.00063	<0.00063	<0.00063	<0.00063

Table F1
Summary of VOCs inSoil
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Depth (ft)	Sample Date	Benzene	m,p-Xylenes	n-Propylbenzene	p-Cymene (p-Isopropyltoluene)	1,2,4-Trimethylbenzene	Ethylbenzene	Methylene Chloride	Naphthalene	Toluene	1,3,5-trimethylbenzene	isopropylbenzene	n-Butylbenzene	o-Xylene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier 1 $^{GW}Soil_{Ing}$ Critical PCL without MSD			**0.026**	--	**44.82**	**231.521**	**9.706**	**7.63**	**0.013**	**31.246**	**8.21**	**53.2**	**347.411**	**121.345**	**70.71**
Tier 1 $^{Tot}Soil_{Comb}$ Critical PCL with MSD			65.794	--	2157.787	3733.786	131.464	5340.626	392.587	220.759	5934.217	112.52	4343.168	1896.511	48153.55
Tier 1 $^{Air}Soil_{Inh-V}$ Critical PCL with MSD			162.813	--	6321.753	6862.44	156.605	15350.96	762.105	267.656	62938.95	115.702	9246.959	6591.542	68211.97
2-MW-1	2.5-5	8/6/2007	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	25-27.5	8/6/2007	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	**0.148**	**0.001 JB**	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	35-37	8/6/2007	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	**0.552 D**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	44.5-46	8/6/2007	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	**0.673 D**	**0.001 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	48-50	8/10/2007	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	**0.031**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	57-58.5	8/10/2007	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	**0.003 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
2-MW-2	12.5-15	9/3/2008	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	15-17.5	9/3/2008	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	22.5-25	9/3/2008	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.006 JB**	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	35-37	9/3/2008	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.005 JB**	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	40-42	9/9/2008	<0.001 U	<0.002 U	<0.001 U	<0.001 U	**0.001 J**	<0.001 U	<0.005 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	50-52	9/9/2008	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
2-MW-3	25-27.5	8/27/2008	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.005 JB**	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	37.5-40	8/27/2008	**0.003 J**	**0.004 J**	<0.001 U	<0.001 U	**0.002 J**	**0.002 J**	<0.005 U	**0.375 D**	**0.005 J**	<0.001 U	<0.001 U	<0.001 U	**0.003 J**
	7.5-10	8/27/2008	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.009 JB**	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	50-52.5	9/8/2008	<0.001 U	<0.003 U	<0.001 U	<0.001 U	**0.002 J**	<0.001 U	**0.011 J**	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
2-MW-4	2.5-5	9/2/2008	<0.001 U	<0.002 U	<0.001 U	**0.002 J**	**0.005 J**	<0.001 U	**0.007 JB**	<0.002 U	<0.001 U	**0.003 J**	<0.001 U	**0.001 J**	<0.001 U
	25-27.5	9/2/2008	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	40-42.5	9/2/2008	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.005 JB**	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	5-7.5	9/2/2008	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	50-52.5	9/8/2008	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	57.5-60	9/8/2008	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.005 J**	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U

Table F1
Summary of VOCs inSoil
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Depth (ft)	Sample Date	Benzene	m,p-Xylenes	n-Propylbenzene	p-Cymene (p-Isopropyltoluene)	1,2,4-Trimethylbenzene	Ethylbenzene	Methylene Chloride	Naphthalene	Toluene	1,3,5-trimethylbenzene	isopropylbenzene	n-Butylbenzene	o-Xylene
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier 1 $^{GW}Soil_{Ing}$ Critical PCL without MSD			**0.026**	--	**44.82**	**231.521**	**9.706**	**7.63**	**0.013**	**31.246**	**8.21**	**53.2**	**347.411**	**121.345**	**70.71**
Tier 1 $^{Tot}Soil_{Comb}$ Critical PCL with MSD			65.794	--	2157.787	3733.786	131.464	5340.626	392.587	220.759	5934.217	112.52	4343.168	1896.511	48153.55
Tier 1 $^{Air}Soil_{Inh-V}$ Critical PCL with MSD			162.813	--	6321.753	6862.44	156.605	15350.96	762.105	267.656	62938.95	115.702	9246.959	6591.542	68211.97
2-MW-5	12.5-15	8/28/2008	<0.001 U	**0.006 J**	**0.003 J**	**0.004 J**	**0.035**	**0.002 J**	<0.005 U	**0.456 D**	<0.001 U	**0.01**	**0.004 J**	<0.001 U	**0.005 J**
	25-27.5	8/28/2008	<0.001 U	<0.002 U	<0.001 U	<0.001 U	**0.008**	<0.001 U	<0.005 U	**0.215 D**	<0.001 U	**0.002 J**	<0.001 U	<0.001 U	**0.001 J**
	40-42.5	8/28/2008	<0.001 U	<0.002 U	<0.001 U	<0.001 U	**0.005 J**	<0.001 U	<0.005 U	**0.169**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.001 J**
	46.5-49	9/9/2008	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.006 J**	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
	56-58	9/9/2008	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.005 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U
2-MW-6	2.5-4	10/6/2009	<0.00058	<0.0012	<0.00058	<0.00058	<0.00058	<0.00058	<0.0012	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058
	42.5-45	10/6/2009	<0.00063	<0.0013	<0.00063	<0.00063	<0.00063	<0.00063	<0.0013	**0.021**	**0.0007 J**	<0.00063	<0.00063	<0.00063	<0.00063
	47.5-50	10/8/2009	<0.00064	<0.0013	<0.00064	<0.00064	<0.00064	<0.00064	<0.0013	<0.00064	<0.00064	<0.00064	<0.00064	<0.00064	<0.00064
	52-54	10/8/2009	<0.00064	<0.0013	<0.00064	<0.00064	<0.00064	<0.00064	<0.0013	<0.00064	<0.00064	<0.00064	<0.00064	<0.00064	<0.00064
2-MW-7	35-37.5	10/1/2009	<0.00061	<0.0012	<0.00061	<0.00061	<0.00061	<0.00061	<0.0012	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061
	41.5-43	10/1/2009	<0.00063	<0.0013	<0.00063	<0.00063	<0.00063	<0.00063	<0.0013	<0.00063	<0.00063	<0.00063	<0.00063	<0.00063	<0.00063
	50-51	10/12/2009	<0.0006	<0.0012	<0.0006	<0.0006	<0.0006	<0.0006	<0.0012	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
	56-57.5	10/12/2009	<0.00063	<0.0013	<0.00063	<0.00063	<0.00063	<0.00063	<0.0013	<0.00063	<0.00063	<0.00063	<0.00063	<0.00063	<0.00063
3-MW-1	27.5-30	9/30/2009	<0.00062	<0.0012	<0.00062	<0.00062	<0.00062	<0.00062	<0.0012	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062
	45-47.5	9/30/2009	<0.00063	<0.0013	<0.00063	<0.00063	<0.00063	<0.00063	<0.0013	<0.00063	<0.00063	<0.00063	<0.00063	<0.00063	<0.00063
	50-52.5	10/15/2009	<0.00065	<0.0013	<0.00065	<0.00065	<0.00065	<0.00065	<0.0013	<0.00065	<0.00065	<0.00065	<0.00065	<0.00065	<0.00065
	57-59	10/15/2009	<0.00061	<0.0012	<0.00061	<0.00061	<0.00061	<0.00061	<0.0012	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061
	62-63	10/19/2009	<0.00063	<0.0013	<0.00063	<0.00063	<0.00063	<0.00063	<0.0013	<0.00063	<0.00063	<0.00063	<0.00063	<0.00063	<0.00063
	66-68	10/19/2009	<0.00066	<0.0013	<0.00066	<0.00066	<0.00066	<0.00066	<0.0013	<0.00066	<0.00066	<0.00066	<0.00066	<0.00066	<0.00066

Notes:

Bold	Concentration reported above laboratory detection limits
<	Analyzed for but not detected at concentrations greater than the laboratory detection limit.
J	Estimated
	Exceeds critical PCL

Table F2
Summary of SVOCs inSoil
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Depth (ft)	Sample Date	Diethyl Phthalate	Indeno(1,2,3-c,d)Pyrene	Phenanthrene	2-Methylnaphthalene	Acenaphthylene	Benzo(a)pyrene	Benzo(k)fluoranthene	bis(2-ethylhexyl) phthalate	di-n-Octyl Phthalate	Fluoranthene	Naphthalene	Phenol	4-Nitrophenol	Anthracene	Benzo(b)fluoranthene	Benzoic Acid	Chrysene	Dibenzofuran	Fluorene	Pentachlorophenol	Pyrene	Acenaphthene	Benzo(a)anthracene	Benzo(g,h,i)perylene	Benzyl Butyl Phthalate	di-n-Butyl Phthalate
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier 1 $^{GW}Soil_{Ing}$ Critical PCL without MSD			**155.851**	173.371	**415.717**	**17.067**	**408.66**	7.64	615.159	163.522	1000000	**1917.26**	**31.246**	**19.148**	**0.1**	**6889.841**	60.116	**189.298**	1545.386	**33.379**	**298.538**	**0.018**	**1116.515**	**236.366**	17.743	46486.87	**264.988**	**3317.492**
Tier 1 $^{Tot}Soil_{Comb}$ Critical PCL with MSD			2701.175	**5.722**	1705.203	252.101	3781.513	**0.564**	**57.232**	**43.158**	**1285.742**	2316.432	220.759	2868.764	73.002	17744.11	**5.713**	687.713	**560.63**	266.261	2262.904	2.417	1697.615	2965.473	**5.653**	**1780.341**	1608.591	5115.378
Tier 1 $^{Air}Soil_{Inh-V}$ Critical PCL with MSD			2847.185	25087.97	--	--	--	847.022	152213.8	--	537438.3	--	267.656	3350.626	161.66	--	6146.75	689.592	591251.7	--	--	452.326	--	--	3746.94	--	24973.87	29768.81
1-MW-1R	11.5-14	8/9/2007	<0.042 U	<0.061 U	<0.042 U	<0.044 U	<0.042 U	<0.042 U	<0.042 U	<0.042 U	<0.042 U	<0.046 U	<0.045 U	<0.042 U	<0.072 U	<0.056 U	<0.042 U	<0.373 U	<0.042 U	<0.046 U	<0.042 U	<0.059 U	<0.048 U	<0.042 U	<0.042 U	<0.042 U	<0.048 U	<0.042 U
	24-26.5	8/9/2007	<0.043 U	<0.063 U	<0.043 U	<0.046 U	<0.043 U	<0.043 U	<0.044 U	<0.043 U	<0.043 U	<0.048 U	<0.047 U	<0.043 U	<0.075 U	<0.058 U	<0.043 U	<0.389 U	<0.043 U	<0.048 U	<0.043 U	<0.062 U	<0.05 U	<0.043 U	<0.043 U	<0.043 U	<0.05 U	<0.043 U
	41.5-44	8/9/2007	<0.042 U	<0.061 U	<0.042 U	<0.044 U	<0.042 U	<0.042 U	<0.042 U	<0.042 U	<0.042 U	<0.046 U	<0.045 U	<0.042 U	<0.072 U	<0.056 U	<0.042 U	<0.373 U	<0.042 U	<0.046 U	<0.042 U	**0.083 J**	<0.048 U	<0.042 U	<0.042 U	<0.042 U	<0.048 U	<0.042 U
1-MW-5R	16.5-19	8/21/2007	<0.041 U	<0.06 U	<0.041 U	<0.043 U	<0.041 U	<0.041 U	<0.042 U	<0.041 U	<0.041 U	<0.045 U	<0.044 U	<0.041 U	<0.071 U	<0.055 U	<0.041 U	<0.367 U	<0.041 U	<0.045 U	<0.041 U	<0.058 U	<0.047 U	<0.041 U	<0.041 U	<0.041 U	<0.047 U	<0.041 U
	24-26.5	8/21/2007	<0.04 U	<0.058 U	**9.03 D**	**7.84 D**	**0.214**	**0.099 J**	**0.085 J**	<0.04 U	<0.04 U	**3.43 D**	**3.66 D**	<0.04 U	**0.505**	<0.053 U	**0.204**	<0.354 U	**0.438**	**2.49 J**	**3.23 D**	**20.3 D**	**2.31**	**2.83 D**	**0.498**	<0.04 U	<0.045 U	<0.04 U
	29-30	8/21/2007	<0.043 U	<0.062 U	**0.793**	**0.508**	<0.043 U	<0.043 U	<0.043 U	<0.043 U	<0.043 U	**0.317**	**0.204 J**	<0.043 U	<0.074 U	**0.819**	<0.043 U	<0.381 U	<0.043 U	**0.188 J**	**0.275**	**7.59 D**	**0.197 J**	**0.201 J**	**0.044 J**	<0.043 U	<0.049 U	<0.043 U
	45-46.5	8/21/2007	<0.041 U	<0.06 U	<0.041 U	<0.043 U	<0.041 U	<0.041 U	<0.042 U	<0.041 U	<0.041 U	<0.045 U	<0.044 U	<0.041 U	<0.072 U	<0.055 U	<0.041 U	<0.369 U	<0.041 U	<0.046 U	<0.041 U	<0.059 U	<0.047 U	<0.041 U	<0.041 U	<0.041 U	<0.047 U	<0.041 U
1-MW-9	29-31.5	8/7/2007	<0.04 U	<0.059 U	<0.04 U	<0.042 U	<0.04 U	<0.04 U	<0.041 U	<0.04 U	<0.04 U	<0.044 U	<0.043 U	<0.04 U	<0.07 U	<0.054 U	<0.04 U	<0.359 U	<0.04 U	<0.044 U	<0.04 U	**0.111 J**	<0.046 U	<0.04 U	<0.04 U	<0.04 U	<0.046 U	<0.04 U
	36-38	8/7/2007	<0.04 U	<0.058 U	<0.04 U	<0.042 U	<0.04 U	<0.04 U	<0.041 U	<0.04 U	<0.04 U	<0.044 U	<0.043 U	<0.04 U	<0.069 U	<0.053 U	<0.04 U	<0.355 U	<0.04 U	<0.044 U	<0.04 U	**0.404**	<0.045 U	<0.04 U	<0.04 U	<0.04 U	<0.046 U	<0.04 U
	42-44	8/7/2007	<0.043 U	<0.062 U	<0.043 U	<0.045 U	<0.043 U	<0.043 U	<0.043 U	<0.043 U	<0.043 U	<0.047 U	<0.046 U	<0.043 U	<0.074 U	<0.057 U	<0.043 U	<0.38 U	<0.043 U	<0.047 U	<0.043 U	<0.061 U	<0.048 U	<0.043 U	<0.043 U	<0.043 U	<0.049 U	<0.043 U
1-MW-10	21-23.5	8/8/2007	<0.041 U	<0.06 U	<0.041 U	<0.043 U	<0.041 U	<0.041 U	<0.042 U	<0.041 U	<0.041 U	<0.045 U	<0.044 U	<0.041 U	<0.071 U	<0.055 U	<0.041 U	<0.368 U	<0.041 U	<0.046 U	<0.041 U	<0.059 U	<0.047 U	<0.041 U	<0.041 U	<0.041 U	<0.047 U	<0.041 U
	26-28	8/8/2007	<0.038 U	<0.055 U	<0.038 U	<0.04 U	<0.038 U	<0.038 U	<0.039 U	<0.038 U	<0.038 U	<0.042 U	<0.041 U	<0.038 U	<0.066 U	<0.051 U	<0.038 U	<0.339 U	<0.038 U	<0.042 U	<0.038 U	<0.054 U	<0.043 U	<0.038 U	<0.038 U	<0.038 U	<0.043 U	<0.038 U
	35-36.5	8/8/2007	<0.042 U	<0.061 U	<0.042 U	<0.044 U	<0.042 U	<0.042 U	<0.043 U	<0.042 U	<0.042 U	<0.046 U	<0.045 U	<0.042 U	<0.073 U	<0.056 U	<0.042 U	<0.375 U	<0.042 U	<0.046 U	<0.042 U	<0.06 U	<0.048 U	<0.042 U	<0.042 U	<0.042 U	<0.048 U	<0.042 U
1-MW-11	10-12.5	9/2/2008	<0.04 U	<0.059 U	<0.04 U	<0.042 U	<0.04 U	<0.04 U	<0.041 U	<0.04 U	<0.04 U	<0.044 U	<0.043 U	<0.04 U	<0.07 U	<0.054 U	<0.04 U	<0.36 U	<0.04 U	<0.045 U	<0.04 U	<0.057 U	<0.046 U	<0.04 U	<0.04 U	<0.04 U	<0.046 U	<0.04 U
	22.5-25	9/2/2008	<0.045 U	<0.066 U	<0.045 U	<0.048 U	<0.045 U	<0.045 U	<0.046 U	<0.045 U	<0.045 U	<0.05 U	<0.048 U	<0.045 U	<0.079 U	<0.061 U	<0.045 U	<0.405 U	<0.045 U	<0.05 U	<0.045 U	<0.064 U	<0.052 U	<0.045 U	<0.045 U	<0.045 U	<0.052 U	<0.045 U
	40-42.5	9/2/2008	<0.042 U	<0.061 U	<0.042 U	<0.044 U	<0.042 U	<0.042 U	<0.043 U	<0.042 U	<0.042 U	<0.046 U	<0.045 U	<0.042 U	<0.073 U	<0.056 U	<0.042 U	<0.375 U	<0.042 U	<0.047 U	<0.042 U	<0.06 U	<0.048 U	<0.042 U	<0.042 U	<0.042 U	<0.048 U	<0.042 U
	7.5-10	9/2/2008	<0.04 U	<0.058 U	<0.04 U	<0.042 U	<0.04 U	<0.04 U	<0.04 U	<0.04 U	<0.04 U	<0.044 U	<0.043 U	<0.04 U	<0.069 U	<0.053 U	<0.04 U	<0.355 U	<0.04 U	<0.044 U	<0.04 U	<0.057 U	<0.045 U	<0.04 U	<0.04 U	<0.04 U	<0.046 U	<0.04 U
1-MW-12	27.5-30	10/8/2009	**0.0059 J**	<0.0043	<0.0036	**0.0038 J**	<0.0027	<0.0028	<0.004	**0.011**	<0.0035	<0.0027	<0.004	**0.0043 J**	<0.0046	<0.0027	<0.004	**0.019**	<0.0035	<0.0027	<0.0027	<0.0034	<0.0027	<0.0027	<0.0034	<0.0035	**0.0031 J**	**0.028**
	42-44	10/8/2009	<0.0041	<0.0044	<0.0038	<0.0034	<0.0028	<0.0029	<0.0041	<0.0083	<0.0036	<0.0028	<0.0041	<0.0041	<0.0048	<0.0028	<0.0041	**0.0094**	<0.0036	<0.0028	<0.0028	**0.011**	<0.0028	<0.0028	<0.0035	<0.0036	<0.0031	**0.0044 J**
1-MW-13	27.5-30	11/9/2009	<0.0041	<0.0043	<0.0037	<0.0033	<0.0027	<0.0029	<0.0041	**0.016**	<0.0036	**0.0052 J**	<0.0041	<0.0041	<0.0047	<0.0027	<0.0041	<0.0082	<0.0036	<0.0027	<0.0027	**0.0064 J**	**0.0066 J**	<0.0027	<0.0035	<0.0036	<0.0031	**0.0055 J**
	33-35	11/9/2009	<0.0041	<0.0044	**0.0068 J**	<0.0034	<0.0028	<0.0029	<0.0041	**0.0097**	<0.0036	**0.015**	<0.0041	<0.0041	<0.0048	<0.0028	<0.0041	<0.0083	<0.0036	<0.0028	<0.0028	**0.0077 J**	**0.0068 J**	<0.0028	<0.0035	<0.0036	<0.0031	**0.0032 J**
2-MW-1	2.5-5	8/6/2007	<0.04 U	**0.196 J**	**0.328**	<0.042 U	**0.097 J**	**0.169 J**	**0.212**	<0.04 U	<0.04 U	**1.57**	<0.043 U	<0.04 U	<0.07 U	**0.618**	**0.703**	<0.359 U	**0.406**	<0.045 U	<0.04 U	**2.95 D**	**1.64**	<0.04 U	**0.449**	**0.152 J**	<0.046 U	<0.04 U
	25-27.5	8/6/2007	<0.039 U	<0.058 U	**6.25 D**	**1.32**	<0.039 U	**0.043 J**	**0.057 J**	<0.039 U	<0.039 U	**2.81**	**0.251**	<0.039 U	<0.068 U	**0.56**	**0.131 J**	<0.352 U	**0.343**	**1.47**	**2.33**	**12.8 D**	**1.13**	**1.73**	**0.295**	<0.039 U	<0.045 U	<0.039 U
	35-37	8/6/2007	**0.163 J**	<0.059 U	**0.271**	<0.042 U	<0.04 U	<0.04 U	<0.041 U	<0.04 U	<0.04 U	**0.117 J**	<0.043 U	<0.04 U	<0.07 U	<0.054 U	<0.04 U	<0.358 U	<0.04 U	<0.044 U	**0.052 J**	**3.85 D**	**0.05 J**	<0.04 U	<0.04 U	<0.04 U	<0.046 U	<0.04 U
	44.5-46	8/6/2007	<0.04 U	<0.059 U	<0.04 U	<0.042 U	<0.04 U	<0.04 U	<0.041 U	<0.04 U	<0.04 U	<0.044 U	<0.043 U	<0.04 U	<0.07 U	<0.054 U	<0.04 U	<0.358 U	<0.04 U	<0.044 U	<0.04 U	<0.057 U	<0.046 U	<0.04 U	<0.04 U	<0.04 U	<0.046 U	<0.04 U
	48-50	8/10/2007	<0.042 U	<0.062 U	<0.042 U	<0.044 U	<0.042 U	<0.042 U	<0.043 U	<0.042 U	<0.042 U	<0.047 U	<0.045 U	<0.042 U	<0.073 U	<0.057 U	<0.042 U	<0.378 U	<0.042 U	<0.047 U	<0.042 U	<0.06 U	<0.048 U	<0.042 U	<0.042 U	<0.042 U	<0.049 U	<0.042 U
	57-58.5	8/10/2007	<0.042 U	<0.061 U	<0.042 U	<0.044 U	<0.042 U	<0.042 U	<0.043 U	<0.042 U	<0.042 U	<0.046 U	<0.045 U	<0.042 U	<0.073 U	<0.056 U	<0.042 U	<0.375 U	<0.042 U	<0.046 U	<0.042 U	<0.06 U	<0.048 U	<0.042 U	<0.042 U	<0.042 U	<0.048 U	<0.042 U
2-MW-2	12.5-15	9/3/2008	<0.04 U	<0.058 U	<0.04 U	<0.042 U	<0.04 U	<0.04 U	<0.04 U	<0.04 U	<0.04 U	<0.044 U	<0.042 U	<0.04 U	<0.069 U	<0.053 U	<0.04 U	<0.355 U	<0.04 U	<0.044 U	<0.04 U	<0.056 U	<0.045 U	<0.04 U	<0.04 U	<0.04 U	<0.046 U	<0.04 U
	15-17.5	9/3/2008	<0.041 U	<0.06 U	<0.041 U	<0.043 U	<0.041 U	<0.041 U	<0.042 U	<0.041 U	<0.041 U	<0.045 U	<0.044 U	<0.041 U	<0.071 U	<0.055 U	<0.041 U	<0.368 U	<0.041 U	<0.046 U	<0.041 U	<0.059 U	<0.047 U	<0.041 U	<0.041 U	<0.041 U	<0.047 U	<0.041 U
	22.5-25	9/3/2008	<0.045 U	<0.065 U	<0.045 U	<0.047 U	<0.045 U	<0.045 U	<0.046 U	<0.045 U	<0.045 U	<0.049 U	<0.048 U	<0.045 U	<0.078 U	<0.06 U	<0.045 U	<0.4 U	<0.045 U	<0.05 U	<0.045 U	<0.064 U	<0.051 U	<0.045 U	<0.045 U	<0.045 U	<0.051 U	<0.045 U
	35-37	9/3/2008	<0.042 U	<0.061 U	<0.042 U	<0.044 U	<0.042 U	<0.042 U	<0.043 U	<0.042 U	<0.042 U	<0.046 U	<0.045 U	<0.042 U	<0.073 U	<0.056 U	<0.042 U	<0.374 U	<0.042 U	<0.046 U	<0.042 U	<0.059 U	<0.048 U	<0.042 U	<0.042 U	<0.042 U	<0.048 U	<0.042 U
	40-42	9/9/2008	<0.039 U	<0.057 U	<0.039 U	<0.041 U	<0.039 U	<0.039 U	<0.04 U	<0.039 U	<0.039 U	<0.043 U	<0.042 U	<0.039 U	<0.068 U	<0.052 U	<0.039 U	<0.349 U	<0.039 U	<0.043 U	<0.039 U	<0.056 U	<0.045 U	<0.039 U	<0.039 U	<0.039 U	<0.045 U	<0.039 U
	50-52	9/9/2008	<0.043 U	<0.062 U	<0.043 U	<0.045 U	<0.043 U	<0.043 U	<0.043 U	<0.043 U	<0.043 U	<0.047 U	<0.046 U	<0.043 U	<0.074 U	<0.057 U	<0.043 U	<0.381 U	<0.043 U	<0.047 U	<0.043 U	<0.061 U	<0.049 U	<0.043 U	<0.043 U	<0.043 U	<0.049 U	<0.043 U
2-MW-3	25-27.5	8/27/2008	<0.039 U	<0.057 U	<0.039 U	<0.041 U	<0.039 U	<0.039 U	<0.04 U	<0.039 U	<0.039 U	<0.043 U	<0.042 U	<0.039 U	<0.068 U	<0.053 U	<0.039 U	<0.352 U	<0.039 U	<0.044 U	<0.039 U	**0.153 J**	<0.045 U	<0.039 U	<0.039 U	<0.039 U	<0.045 U	<0.039 U
	37.5-40	8/27/2008	<0.042 U	<0.061 U	<0.042 U	<0.044 U	<0.042 U	<0.042 U	<0.043 U	<0.042 U	<0.042 U	<0.046 U	**0.424**	<0.042 U	<0.072 U	<0.056 U	<0.042 U	<0.373 U	<0.042 U	<0.046 U	<0.042 U	**4.9 D**	<0.048 U	<0.042 U	<0.042 U	<0.042 U	<0.048 U	<0.042 U
	7.5-10	8/27/2008	<0.778 U	<1.14 U	**3.22 J**	<0.817 U	<0.778 U	<0.778 U	<0.793 U	<0.778 U	<0.778 U	**1.03 J**	<0.833 U	<0.778 U	<1.35 U	<1.04 U	**1.49 J**	<6.97 U	<0.778 U	<0.862 U	**1.06 J**	<1.11 U	<0.887 U	**0.794 J**	<0.778 U	<0.778 U	<0.893 U	<0.778 U
	50-52.5	9/8/2008	<0.045 U	<0.066 U	<0.045 U	<0.048 U	<0.045 U	<0.045 U	<0.046 U	<0.045 U	<0.045 U	<0.05 U	<0.049 U	<0.045 U	<0.079 U	<0.061 U	<0.045 U	<0.405 U	<0.045 U	<0.05 U	<0.045 U	<0.064 U	<0.052 U	<0.045 U	<0.045 U	<0.045 U	<0.052 U	<0.045 U
2-MW-4	2.5-5	9/2/2008	<0.037 U	<0.055 U	**0.067 J**	<0.039 U	<0.037 U	<0.037 U	<0.038 U	<0.037 U	<0.037 U	**0.073 J**	<0.04 U	<0.037 U	<0.065 U	<0.05 U	<0.037 U	<0.334 U	**0.045 J**	<0.041 U	<0.037 U	<0.053 U	**0.081 J**	<0.037 U	<0.037 U	<0.037 U	<0.043 U	<0.037 U
	25-27.5	9/2/2008	<0.038 U	<0.056 U	<0.038 U	<0.04 U	<0.038 U	<0.038 U	<0.039 U	<0.038 U	<0.038 U	<0.042 U	<0.041 U	<0.038 U	<0.066 U	<0.051 U	<0.038 U	<0.341 U	<0.038 U	<0.042 U	<0.038 U	<0.054 U	<0.044 U	<0.038 U	<0.038 U	<0.038 U	<0.044 U	<0.038 U
	40-42.5	9/2/2008	<0.042 U	<0.061 U	<0.042 U	<0.044 U	<0.042 U	<0.042 U	<0.043 U	<0.042 U	<0.042 U	<0.046 U	<0.045 U	<0.042 U	<0.073 U	<0.056 U	<0.042 U	<0.375 U	<0.042 U	<0.047 U	<0.042 U	**0.388 J**	<0.048 U	<0.042 U	<0.042 U	<0.042 U	<0.048 U	<0.042 U
	5-7.5	9/2/2008	<0.038 U	<0.056 U	<0.038 U	<0.04 U	<0.038 U	<0.038 U	<0.039 U	<0.038 U	<0.038 U	<0.042 U	<0.041 U	<0.038 U	<0.067 U	<0.051 U	<0.038 U	<0.343 U	<0.038 U	<0.042 U	<0.038 U	<0.055 U	<0.044 U	<0.038 U	<0.038 U	<0.038 U	<0.044 U	<0.038 U
	50-52.5	9/8/2008	<0.043 U	<0.063 U	<0.043 U	<0.045 U	<0.043 U	<0.043 U	<0.044 U	<0.043 U	<0.043 U	<0.047 U	<0.046 U	<0.043 U	<0.075 U	<0.057 U	<0.043 U	<0.384 U	<0.043 U	<0.048 U	<0.043 U	<0.061 U	<0.049 U	<0.043 U	<0.043 U	<0.043 U	<0.049 U	<0.043 U
	57.5-60	9/8/2008	<0.04 U	<0.059 U	<0.04 U	<0.042 U	<0.04 U	<0.04 U	<0.041 U	<0.04 U	<0.04 U	<0.044 U	<0.043 U	<0.04 U	<0.07 U	<0.054 U	<0.04 U	<0.36 U	<0.04 U	<0.045 U	<0.04 U	<0.057 U	<0.046 U	<0.04 U	<0.04 U	<0.04 U	<0.046 U	<0.04 U

Table F2
Summary of SVOCs inSoil
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Depth (ft)	Sample Date	Diethyl Phthalate	Indeno(1,2,3-c,d)Pyrene	Phenanthrene	2-Methylnaphthalene	Acenaphthylene	Benzo(a)pyrene	Benzo(k)fluoranthene	bis(2-ethylhexyl) phthalate	di-n-Octyl Phthalate	Fluoranthene	Naphthalene	Phenol	4-Nitrophenol	Anthracene	Benzo(b)fluoranthene	Benzoic Acid	Chrysene	Dibenzofuran	Fluorene	Pentachlorophenol	Pyrene	Acenaphthene	Benzo(a)anthracene	Benzo(g,h,i)perylene	Benzyl Butyl Phthalate	di-n-Butyl Phthalate
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tier 1 $^{GW}Soil_{Ing}$ Critical PCL without MSD			**155.851**	173.371	**415.717**	**17.067**	**408.66**	7.64	615.159	163.522	1000000	**1917.26**	**31.246**	**19.148**	**0.1**	**6889.841**	60.116	**189.298**	1545.386	**33.379**	**298.538**	**0.018**	**1116.515**	**236.366**	17.743	46486.87	**264.988**	**3317.492**
Tier 1 $^{Tot}Soil_{Comb}$ Critical PCL with MSD			2701.175	**5.722**	1705.203	252.101	3781.513	**0.564**	**57.232**	**43.158**	**1285.742**	2316.432	220.759	2868.764	73.002	17744.11	**5.713**	687.713	**560.63**	266.261	2262.904	2.417	1697.615	2965.473	**5.653**	**1780.341**	1608.591	5115.378
Tier 1 $^{Air}Soil_{Inh-V}$ Critical PCL with MSD			2847.185	25087.97	--	--	--	847.022	152213.8	--	537438.3	--	267.656	3350.626	161.66	--	6146.75	689.592	591251.7	--	--	452.326	--	--	3746.94	--	24973.87	29768.81
2-MW-5	12.5-15	8/28/2008	<0.827 U	<1.21 U	<0.827 U	<0.868 U	<0.827 U	<0.827 U	<0.842 U	<0.827 U	<0.827 U	<0.911 U	<0.885 U	<0.827 U	<1.44 U	<1.11 U	<0.827 U	<7.4 U	<0.827 U	<0.916 U	<0.827 U	<1.18 U	<0.942 U	<0.827 U	<0.827 U	<0.827 U	<0.948 U	<0.827 U
	25-27.5	8/28/2008	<0.039 U	<0.058 U	**0.105 J**	<0.041 U	<0.039 U	<0.039 U	<0.04 U	<0.039 U	<0.039 U	<0.043 U	**0.044 J**	<0.039 U	<0.068 U	<0.053 U	<0.039 U	<0.352 U	<0.039 U	<0.044 U	<0.039 U	**2.37 J**	<0.045 U	<0.039 U	<0.039 U	<0.039 U	<0.045 U	<0.039 U
	40-42.5	8/28/2008	<0.388 U	<0.566 U	<0.388 U	<0.407 U	<0.388 U	<0.388 U	<0.395 U	<0.388 U	<0.388 U	<0.427 U	<0.415 U	<0.388 U	<0.673 U	<0.519 U	<0.388 U	<3.47 U	<0.388 U	<0.43 U	<0.388 U	**7.23**	<0.442 U	<0.388 U	<0.388 U	<0.388 U	<0.445 U	<0.388 U
	46.5-49	9/9/2008	<0.039 U	<0.057 U	<0.039 U	<0.041 U	<0.039 U	<0.039 U	<0.04 U	<0.039 U	<0.039 U	<0.043 U	<0.042 U	<0.039 U	<0.068 U	<0.052 U	<0.039 U	<0.348 U	<0.039 U	<0.043 U	<0.039 U	<0.055 U	<0.044 U	<0.039 U	<0.039 U	<0.039 U	<0.045 U	<0.039 U
	56-58	9/9/2008	<0.041 U	<0.06 U	<0.041 U	<0.043 U	<0.041 U	<0.041 U	<0.042 U	<0.041 U	<0.041 U	<0.045 U	<0.044 U	<0.041 U	<0.071 U	<0.055 U	<0.041 U	<0.366 U	<0.041 U	<0.045 U	<0.041 U	<0.058 U	<0.047 U	<0.041 U	<0.041 U	<0.041 U	<0.047 U	<0.041 U
2-MW-6	2.5-4	10/6/2009	<0.0038	<0.0041	<0.0035	<0.0031	<0.0026	<0.0027	<0.0038	**0.014**	<0.0034	<0.0026	<0.0038	<0.0038	<0.0044	<0.0026	<0.0038	<0.0077	<0.0034	<0.0026	<0.0026	<0.0033	<0.0026	<0.0026	<0.0033	<0.0034	<0.0029	<0.0029
	42.5-45	10/6/2009	<0.0042	<0.0044	<0.0038	<0.0034	<0.0028	<0.0029	<0.0042	**0.023**	<0.0037	<0.0028	<0.0042	<0.0042	<0.0048	<0.0028	<0.0042	<0.0084	<0.0037	<0.0028	<0.0028	<0.0035	<0.0028	<0.0028	<0.0035	<0.0037	<0.0032	<0.0032
	47.5-50	10/8/2009	**0.0055 J**	<0.0045	**0.005 J**	<0.0034	<0.0028	<0.0029	<0.0042	**0.047**	<0.0037	<0.0028	<0.0042	<0.0042	<0.0048	<0.0028	<0.0042	**0.02**	<0.0037	<0.0028	**0.0035 J**	<0.0036	<0.0028	<0.0028	<0.0036	<0.0037	**0.0034 J**	**0.036**
	52-54	10/8/2009	<0.0042	<0.0045	<0.0038	<0.0034	<0.0028	<0.0029	<0.0042	**0.0093**	<0.0037	<0.0028	<0.0042	<0.0042	<0.0048	<0.0028	<0.0042	<0.0084	<0.0037	<0.0028	<0.0028	<0.0036	<0.0028	<0.0028	<0.0036	<0.0037	<0.0032	**0.0053 J**
2-MW-7	35-37.5	10/1/2009	<0.004	<0.0043	<0.0037	<0.0033	<0.0027	<0.0028	<0.004	<0.0081	<0.0035	<0.0027	<0.004	<0.004	<0.0046	<0.0027	<0.004	<0.0081	<0.0035	<0.0027	<0.0027	**0.0084**	<0.0027	<0.0027	<0.0034	<0.0035	<0.003	<0.003
	41.5-43	10/1/2009	<0.0041	<0.0044	<0.0038	<0.0034	<0.0028	<0.0029	<0.0041	<0.0083	<0.0036	<0.0028	<0.0041	<0.0041	<0.0048	<0.0028	<0.0041	<0.0083	<0.0036	<0.0028	<0.0028	<0.0035	<0.0028	<0.0028	<0.0035	<0.0036	<0.0031	<0.0031
	50-51	10/12/2009	<0.004	<0.0042	<0.0036	<0.0033	<0.0027	<0.0028	<0.004	**0.017**	<0.0035	<0.0027	<0.004	<0.004	<0.0046	<0.0027	<0.004	**0.015**	<0.0035	<0.0027	<0.0027	<0.0034	<0.0027	<0.0027	<0.0034	<0.0035	<0.003	**0.0039 J**
	56-57.5	10/12/2009	<0.0042	<0.0044	<0.0038	<0.0034	<0.0028	<0.0029	<0.0042	<0.0083	<0.0037	<0.0028	<0.0042	<0.0042	<0.0048	<0.0028	<0.0042	<0.0083	<0.0037	<0.0028	<0.0028	<0.0035	<0.0028	<0.0028	<0.0035	<0.0037	<0.0032	<0.0032
3-MW-1	27.5-30	9/30/2009	<0.0041	<0.0043	<0.0037	<0.0033	<0.0027	<0.0028	<0.0041	<0.0081	<0.0036	<0.0027	<0.0041	<0.0041	<0.0047	<0.0027	<0.0041	**0.016**	<0.0036	<0.0027	<0.0027	<0.0035	<0.0027	<0.0027	<0.0035	<0.0036	<0.0031	<0.0031
	45-47.5	9/30/2009	<0.0041	<0.0044	<0.0038	<0.0034	<0.0028	<0.0029	<0.0041	<0.0083	<0.0036	<0.0028	<0.0041	<0.0041	<0.0048	<0.0028	<0.0041	<0.0083	<0.0036	<0.0028	<0.0028	**0.023**	<0.0028	<0.0028	<0.0035	<0.0036	<0.0031	<0.0031
	50-52.5	10/15/2009	<0.0043	<0.0045	<0.0039	<0.0035	<0.0029	<0.003	<0.0043	<0.0086	<0.0038	<0.0029	<0.0043	<0.0043	<0.0049	<0.0029	<0.0043	<0.0086	<0.0038	<0.0029	<0.0029	<0.0036	<0.0029	<0.0029	<0.0036	<0.0038	<0.0032	<0.0032
	57-59	10/15/2009	<0.004	<0.0043	<0.0037	<0.0033	<0.0027	<0.0028	<0.004	<0.008	<0.0035	<0.0027	<0.004	<0.004	<0.0046	<0.0027	<0.004	**0.018**	<0.0035	<0.0027	<0.0027	**0.0097**	<0.0027	<0.0027	<0.0034	<0.0035	<0.003	**0.004 J**
	62-63	10/19/2009	<0.0041	<0.0044	<0.0038	<0.0034	<0.0028	<0.0029	<0.0041	**0.035**	**0.0038 J**	<0.0028	<0.0041	<0.0041	<0.0048	<0.0028	<0.0041	<0.0083	<0.0036	<0.0028	<0.0028	**0.016**	<0.0028	<0.0028	<0.0035	<0.0036	<0.0031	<0.0031
	66-68	10/19/2009	<0.0043	<0.0046	<0.004	<0.0036	<0.0029	<0.003	<0.0043	<0.0087	<0.0038	<0.0029	<0.0043	<0.0043	<0.005	<0.0029	<0.0043	<0.0087	<0.0038	<0.0029	<0.0029	<0.0037	<0.0029	<0.0029	<0.0037	<0.0038	<0.0033	<0.0033
SB-1	4-5	10/5/2009	-	-	-	-	-	-	-	-	-	-	-	-	<0.0045	-	-	-	-	-	-	<0.0033	-	-	-	-	-	-
	43-44	10/5/2009	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	<0.0037	-	-	-	-	-	-
	59-60	10/5/2009	-	-	-	-	-	-	-	-	-	-	-	-	<0.0049	-	-	-	-	-	-	<0.0036	-	-	-	-	-	-
SB-2	4-5	10/5/2009	-	-	-	-	-	-	-	-	-	-	-	-	<0.0045	-	-	-	-	-	-	**0.75**	-	-	-	-	-	-
	45-46	10/5/2009	-	-	-	-	-	-	-	-	-	-	-	-	<0.0045	-	-	-	-	-	-	**0.061**	-	-	-	-	-	-
SB-2A	57-58	10/19/2009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.041**	-	-	-	-	-	-
SB-3	48-50	10/7/2009	-	-	-	-	-	-	-	-	-	-	-	-	<0.0045	-	-	-	-	-	-	**0.12**	-	-	-	-	-	-
	57-58	10/7/2009	-	-	-	-	-	-	-	-	-	-	-	-	<0.0049	-	-	-	-	-	-	**0.027**	-	-	-	-	-	-
SB-7	12.5-15	10/16/2009	-	-	-	-	-	-	-	-	-	-	-	-	<0.0047	-	-	-	-	-	-	<0.0035	-	-	-	-	-	-
	45-46	10/16/2009	-	-	-	-	-	-	-	-	-	-	-	-	<0.0047	-	-	-	-	-	-	**0.24**	-	-	-	-	-	-
	57-58	10/16/2009	-	-	-	-	-	-	-	-	-	-	-	-	<0.0047	-	-	-	-	-	-	**0.011**	-	-	-	-	-	-
SB-8	14-15	10/16/2009	-	-	-	-	-	-	-	-	-	-	-	-	<0.0052	-	-	-	-	-	-	<0.0039	-	-	-	-	-	-
	24-26.5	10/16/2009	-	-	-	-	-	-	-	-	-	-	-	-	<0.0046	-	-	-	-	-	-	**1**	-	-	-	-	-	-
	52-53	10/16/2009	-	-	-	-	-	-	-	-	-	-	-	-	<0.0047	-	-	-	-	-	-	<0.0035	-	-	-	-	-	-

Notes:

Bold	Concentration reported above laboratory detection limits
<	Analyzed for but not detected at concentrations greater than the laboratory detection limit.
J	Estimated
	Exceeds critical PCL

Table F3
Summary of RCRA Metals inSoil
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Depth (ft)	Sample Date	Arsenic mg/kg	Barium mg/kg	Cadmium mg/kg	Chromium mg/kg	Lead mg/kg	Mercury mg/kg	Selenium mg/kg
Tier 1 $^{GW}Soil_{Ing}$ Critical PCL without MSD			**5.019**	**443.832**	**1.51**	**2400.191**	**3.029**	**0.008**	**2.296**
Tier 1 $^{Tot}Soil_{Comb}$ Critical PCL with MSD			24.168	7962.323	52.421	32607.149	500	3.649	308.168
Tier 1 $^{Air}Soil_{Inh-V}$ Critical PCL with MSD			--	--	--	--	--	4.605	--
Texas-Specific Background Conc.			5.9	300	--	30	15	0.04	0.3
1-MW-1R	11.5-14	8/9/2007	**4.14**	**76.6**	<0.123 U	**13.3**	**7.42**	<0.0123 U	<0.123 U
	24-26.5	8/9/2007	**4.94**	**109**	<0.13 U	**23.4**	**13.2**	<0.013 U	<0.13 U
	41.5-44	8/9/2007	**5.05**	**165**	<0.121 U	**26.6**	**14.8**	<0.0121 U	<0.121 U
1-MW-5R	16.5-19	8/21/2007	**6.31**	**264**	**0.17**	**20.7**	**15.9**	<0.0113 U	<0.113 U
	24-26.5	8/21/2007	**1.8**	**58.5**	<0.11 U	**9.33**	**8.91**	**0.011 J**	<0.11 U
	29-30	8/21/2007	**6.52**	**198**	<0.123 U	**17.5**	**7.31**	<0.0123 U	<0.123 U
	45-46.5	8/21/2007	**3.78**	**135**	**0.117**	**27.5**	**14.2**	**0.0117 J**	<0.117 U
1-MW-9	29-31.5	8/7/2007	**6.39**	**108**	<0.117 U	**17.5**	**11.7**	**0.0187 J**	**0.316 J**
	36-38	8/7/2007	**2.96**	**85.1**	**0.117**	**18.7**	**10.2**	**0.0187 J**	**0.468**
	42-44	8/7/2007	**4.81**	**3610**	<0.125 U	**34.5**	**22.9**	**0.025 J**	**0.426**
1-MW-10	21-23.5	8/8/2007	**4.95**	**107**	<0.123 U	**23**	**8.31**	<0.0123 U	<0.123 U
	26-28	8/8/2007	**8.89**	**96**	**0.165**	**9.72**	**11.4**	<0.0103 U	<0.103 U
	35-36.5	8/8/2007	**3.11**	**622**	<0.117 U	**21.3**	**11.7**	<0.0117 U	<0.117 U
1-MW-11	10-12.5	9/2/2008	<0.101 U	**21**	<0.101 U	**1.92**	**4.58**	<0.0101 U	<0.101 U
	22.5-25	9/2/2008	**3.81**	**145**	**0.198**	**14.9**	**10.7**	**0.0132 J**	<0.132 U
	40-42.5	9/2/2008	**6.01**	**105**	**0.2**	**23.5**	**10.7**	<0.001163 U	<0.125 U
	7.5-10	9/2/2008	<0.109 U	**35**	<0.109 U	**2.36**	**3.92**	<0.001005 U	<0.109 U
2-MW-1	2.5-5	8/6/2007	**0.696**	**124**	<0.111 U	**4.12**	**12.5**	**0.0884**	<0.111 U
	25-27.5	8/6/2007	**0.579**	**37.4**	<0.118 U	**8.82**	**6.59**	**0.0118 J**	**0.13 J**
	35-37	8/6/2007	**7.35**	**112**	<0.118 U	**19.7**	**15.8**	**0.0118 J**	**0.177 J**
	44.5-46	8/6/2007	**3.82**	**147**	**0.156**	**27.5**	**11.3**	**0.012 J**	**0.24 J**
	48-50	8/10/2007	**2.57**	**87.1**	<0.119 U	**22.9**	**11.8**	<0.0119 U	<0.119 U
	57-58.5	8/10/2007	**2.34**	**90.7**	<0.12 U	**28.2**	**14.9**	<0.012 U	<0.12 U
2-MW-2	12.5-15	9/3/2008	**0.898**	**101**	**0.135**	**11.3**	**8.1**	<0.001114 U	<0.112 U
	15-17.5	9/3/2008	**3.85**	**48.2**	<0.115 U	**7.45**	**8.44**	<0.0115 U	<0.115 U
	22.5-25	9/3/2008	**0.335**	**102**	<0.12 U	**23.5**	**3.65**	<0.012 U	<0.12 U
	35-37	9/3/2008	**3.29**	**198**	**0.142**	**20.9**	**14**	<0.001045 U	<0.118 U
	40-42	9/9/2008	**1.2**	**60**	<0.098 U	**11.6**	**7.69**	<0.0098 U	<0.098 U
	50-52	9/9/2008	**3.8**	**66.9**	<0.115 U	**16.3**	**12.1**	<0.0115 U	<0.115 U
2-MW-3	25-27.5	8/27/2008	**11.6**	**586**	**0.186**	**9.84**	**21.3**	<0.001 U	**0.487**
	37.5-40	8/27/2008	**3.29**	**217**	<0.122 U	**19.4**	**14.1**	<0.0012 U	**0.219 J**
	7.5-10	8/27/2008	**0.968**	**79.2**	<0.105 U	**4.87**	**6.1**	**0.0048**	**0.137 J**
	50-52.5	9/8/2008	**4.08**	**2560**	**0.101**	**14.9**	**10.9**	**0.001799 J**	<0.101 U

Table F3
Summary of RCRA Metals inSoil
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Depth (ft)	Sample Date	Arsenic mg/kg	Barium mg/kg	Cadmium mg/kg	Chromium mg/kg	Lead mg/kg	Mercury mg/kg	Selenium mg/kg
Tier 1 $^{GW}Soil_{Ing}$ Critical PCL without MSD			**5.019**	**443.832**	**1.51**	**2400.191**	**3.029**	**0.008**	**2.296**
Tier 1 $^{Tot}Soil_{Comb}$ Critical PCL with MSD			24.168	7962.323	52.421	32607.149	500	3.649	308.168
Tier 1 $^{Air}Soil_{Inh-V}$ Critical PCL with MSD			--	--	--	--	--	4.605	--
Texas-Specific Background Conc.			5.9	300	--	30	15	0.04	0.3
	11.5-14	8/9/2007	**4.14**	**76.6**	<0.123 U	**13.3**	**7.42**	<0.0123 U	<0.123 U
2-MW-4	2.5-5	9/2/2008	**1.41**	**99.8**	**0.202**	**8.71**	**23.5**	**0.0112 J**	<0.112 U
	25-27.5	9/2/2008	**0.848**	**67.6**	<0.11 U	**7.15**	**9.88**	**0.002548 J**	<0.11 U
	40-42.5	9/2/2008	**3.23**	**105**	**0.171**	**21.5**	**14.2**	<0.0123 U	<0.122 U
	5-7.5	9/2/2008	<0.106 U	**26.4**	<0.106 U	**2.53**	**4.81**	**0.0106 J**	<0.106 U
	50-52.5	9/8/2008	**2.35**	**70.3**	<0.125 U	**16.2**	**11.2**	<0.001069 U	<0.125 U
	57.5-60	9/8/2008	**5.42**	**67.1**	**0.131**	**14**	**10.6**	<0.0109 U	<0.109 U
2-MW-5	12.5-15	8/28/2008	**8.63**	**5450**	**0.211**	**9.61**	**31.1**	<0.001 U	<0.117 U
	25-27.5	8/28/2008	**2.11**	**48**	**0.127**	**8.35**	**5.5**	<0.001 U	**0.39**
	40-42.5	8/28/2008	**2.57**	**92.4**	**0.127**	**13.8**	**8.54**	<0.0011 U	<0.106 U
	46.5-49	9/9/2008	**0.931**	**45.7**	<0.099 U	**10.2**	**6.93**	<0.0099 U	**0.099 J**
	56-58	9/9/2008	**2.89**	**54**	**0.098**	**11**	**8.25**	<0.0089 U	<0.09 U
SB-4	12.5-15	10/8/2009	**1.13**	**123**	-	-	-	-	-
SB-5	12.5-15	10/12/2009	**2.89**	**714**	-	-	-	-	-
SB-6	12.5-15	10/15/2009	**0.413 J**	**99.5**	-	-	-	-	-

Notes:

Bold Concentration reported above laboratory detection limits

< Analyzed for but not detected at concentrations greater than the laboratory detection limit.

J Estimated

Exceeds critical PCL

Table F4
Summary of VOCs in First Groundwater Bearing Unit
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Date	1,3,5-Trimethylbenzene mg/L	Methylene Chloride mg/L	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	o-Xylene mg/L	m,p-Xylenes mg/L	isopropylbenzene mg/L	n-Propylbenzene mg/L	p-Cymene (p-Isopropyltoluene) mg/L	Tetrachloroethylene mg/L	Trichloroethene mg/L	cis-1,2-Dichloroethene mg/L	1,2,4-Trimethylbenzene mg/L	Naphthalene mg/L
Tier 1 $^{GW}GW_{Ing}$ Critical PCL without MSD		**1.222**	**0.005**	**0.005**	**1**	**0.7**	**10**	--	**2.444**	**0.978**	**2.444**	**0.005**	**0.005**	**0.07**	**0.244**	**0.489**
Tier 1 $^{Air}GW_{Inh-V}$ Critical PCL without MSD		125.71	1271.866	179.885	63590.093	15648.647	758029.1	--	4396.768	6046.439	4564.859	498.445	118.293	16241.37	189.897	316.311
1-MW-1R	8/14/2007	**0.016**	<0.001 U	**0.052**	**0.082**	**0.043**	**0.046**	**0.085**	**0.012**	**0.002 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.047**	**7.84 D**
	9/26/2008	**0.016**	<0.001 U	**0.051**	**0.07**	**0.042**	**0.049**	**0.086**	**0.01**	**0.002 J**	**0.001 J**	<0.001 U	<0.001 U	<0.001 U	**0.054**	**7.62 D**
MW-2S	8/15/2007	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
	9/22/2008	<0.001 U	**0.002 JB**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
MW-2D	8/15/2007	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
	9/22/2008	<0.001 U	**0.003 JB**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
MW-3	8/13/2007	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
	9/23/2008	<0.001 U	**0.007**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
MW-4	8/14/2007	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
	9/23/2008	<0.001 U	**0.007**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
1-MW-5R	8/22/2007	**0.009**	**0.002 J**	**0.006**	**0.014**	**0.009**	**0.015**	**0.021**	**0.004 J**	**0.002 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.034**	**2.36 D**
	9/26/2008	**0.004 J**	**0.002 J**	**0.003 J**	**0.007**	**0.006**	**0.008**	**0.009 J**	**0.002 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.017**	**1.45 D**
MW-6S	8/15/2007	**0.003 J**	<0.001 U	**0.006**	**0.011**	**0.003 J**	**0.007**	**0.01**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.011**	**0.867 D**
	9/25/2008	**0.004 J**	<0.001 U	**0.013**	**0.017**	**0.005 J**	**0.008**	**0.013**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.012**	**0.902 D**
MW-6D	8/15/2007	**0.008**	<0.001 U	**0.007**	**0.025**	**0.025**	**0.025**	**0.037**	**0.009**	**0.002 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.037**	**5.9 D**
	9/25/2008	**0.009**	<0.001 U	**0.008**	**0.022**	**0.022**	**0.021**	**0.031**	**0.007**	**0.002 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.042**	**4.62 D**
MW-7	8/14/2007	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
	9/22/2008	<0.001 U	**0.002 JB**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
MW-8	8/14/2007	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	**0.006**	**0.006**	**0.006**	<0.001 U	<0.002 U
	9/22/2008	<0.001 U	**0.003 JB**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	**0.002 J**	**0.002 J**	**0.002 J**	<0.001 U	<0.002 U
1-MW-9	8/14/2007	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.006**	<0.002 U	**0.004 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
	9/24/2008	<0.001 U	**0.002 JB**	<0.001 U	<0.001 U	<0.001 U	**0.006**	<0.002 U	**0.003 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
1-MW-10	8/14/2007	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
	6/4/2008	<0.001 U	**0.001 JB**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
1-MW-11	9/24/2008	<0.001 U	**0.007**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U
1-MW-12	11/3/2009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	<0.0005	<0.0006	<0.0005	<0.0005	<0.0005	<0.0005
1-MW-13	11/16/2009	**0.0087**	<0.0005	<0.0005	**0.002 J**	**0.0088**	**0.0072**	**0.014**	**0.0044 J**	**0.00096 J**	<0.0005	<0.0006	<0.0005	<0.0005	**0.027**	**1.6**

Notes:

Bold	Concentration reported above laboratory detection limits
<	Analyzed for but not detected at concentrations greater than the laboratory detection limit.
J	Estimated
	Exceeds critical PCL

Table F5
Summary of VOCs in Second Goundwater Bearing Unit
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Date	Methylene Chloride mg/L	Naphthalene mg/L
Tier 1 $^{GW}GW_{Ing}$ Critical PCL without MSD		**0.005**	**0.489**
Tier 1 $^{Air}GW_{Inh-V}$ Critical PCL without MSD		1271.866	316.311
2-MW-1	8/22/2007	**0.002 J**	**0.024**
	9/25/2008	<0.001 U	**0.056**
2-MW-2	9/23/2008	**0.007**	<0.002 U
2-MW-3	9/25/2008	**0.002 JB**	<0.002 U
2-MW-4	9/24/2008	**0.002 JB**	<0.002 U
2-MW-5	9/26/2008	<0.001 U	<0.002 U
2-MW-6	11/2/2009	<0.0005	<0.0005
2-MW-7	11/3/2009	<0.0005	<0.0005

Notes:

Bold	Concentration reported above laboratory detection limits
<	Analyzed for but not detected at concentrations greater than the laboratory detection limit.
J	Estimated
	Exceeds critical PCL

Table F6
Summary of SVOCs in First Groundwater Bearin g Unit
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Date	Pentachlorophenol	Pyrene	2,4,5-Trichlorophenol	2-Chloronaphthalene	Acenaphthylene	Benzo(a)pyrene	bis(2-ethylhexyl) phthalate	Dibenzofuran	Fluorene	Phenanthrene	Pyridine	2,4,6-Trichlorophenol	2-Methylnaphthalene	4-Nitrophenol	Anthracene	Benzo(b)fluoranthene	Chrysene	Diethyl Phthalate	Naphthalene	Phenol	2,4-Dimethylphenol	2-methylphenol	Acenaphthene	Benzo(a)anthracene	Benzyl Butyl Phthalate	di-n-Butyl Phthalate	Fluoranthene
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Tier 1 [GW] GW_{Ing} Critical PCL without MSD		**0.001**	**0.733**	**2.444**	**1.955**	**1.467**	**0**	**0.006**	**0.098**	**0.978**	**0.733**	**0.024**	**0.024**	**0.098**	**0.049**	**7.333**	**0.001**	**0.125**	**19.554**	**0.489**	**7.333**	**0.489**	**1.222**	**1.467**	**0.001**	**0.48**	**2.444**	**0.978**
Tier 1 [Air] GW_{Inh-V} Critical PCL without MSD		13263.33	--	454829.3	--	--	387.737	--	--	--	--	223.259	49419.92	--	23630.93	--	1633.117	583761.5	135746.1	316.311	275467.3	163342.8	100098.3	--	2046.858	124111.7	71589.54	--
	8/14/2007	**28.1 D**	**0.004 J**	**0.003 J**	<0.001 U	**0.03**	<0.001 U	<0.001 U	**0.106 JD**	**0.025**	**0.08**	**0.013**	**0.002 J**	**0.313 JD**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**4.0 D**	**0.002 J**	**0.007 J**	**0.029**	**0.05**	<0.001 U	<0.001 U	**0.017**	**0.008**
	9/26/2008	**29.3 D**	<0.02 U	<0.02 U	<0.02 U	**0.045 J**	<0.02 U	<0.02 U	**0.162 J**	**0.025 J**	**0.254**	<0.07 U	<0.02 U	**0.5**	<0.02 U	**0.021 J**	<0.02 U	<0.02 U	<0.02 U	**6.91 D**	<0.02 U	<0.021 U	**0.028 J**	**0.058 J**	<0.02 U	<0.02 U	<0.053 U	<0.02 U
1-MW-1R	11/1/2010	**20**	<0.0007	**0.0016 J**	<0.001	**0.0049**	<0.0008	<0.002	**0.054**	**0.012**	**0.03**	-	**0.0012 J**	**0.097**	<0.0007	**0.0017 J**	<0.0009	<0.0007	<0.0007	**2.2**	<0.0007	<0.0008	**0.0086**	**0.025**	<0.0007	<0.001	<0.0007	**0.002**
	8/15/2007	**0.003 J**	**0.002 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.004 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.002 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.003 U	**0.002 J**
	9/22/2008	**0.005 J**	**0.002 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.004 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.003 U	**0.001 J**
MW-2D	11/3/2010	**0.00084**	**0.0013**	<0.00009	<0.0001	<0.00007	<0.00008	**0.0012**	<0.00008	<0.00007	<0.00007	-	<0.00007	<0.00007	<0.00007	<0.00007	<0.00009	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	<0.00009	<0.00007	<0.0001	<0.00007	**0.00028**
	8/15/2007	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.004 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.002 U	<0.001 U	<0.001 U	<0.001 U	<0.003 U	<0.001 U
MW-2S	9/22/2008	**0.003 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.004 J**	<0.001 U	<0.004 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.002 J**	<0.001 U	<0.001 U	<0.003 U	<0.001 U
	8/13/2007	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.004 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.003 U	<0.001 U
	9/23/2008	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.004 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.003 U	<0.001 U
MW-3	11/4/2010	**0.00027**	<0.00007	<0.00009	<0.0001	<0.00007	<0.00008	<0.0002	<0.00008	<0.00007	<0.00007	-	<0.00007	<0.00007	<0.00007	<0.00007	<0.00009	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	<0.00009	<0.00007	<0.0001	<0.00007	<0.00007
	8/14/2007	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.004 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.003 U	<0.001 U
	9/23/2008	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.007 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.003 U	<0.002 U	<0.002 U	<0.002 U	<0.005 U	<0.002 U
MW-4	11/3/2010	**0.0002 J**	<0.00007	<0.00009	<0.0001	<0.00007	<0.00008	**0.00029**	<0.00008	<0.00007	<0.00007	-	<0.00007	<0.00007	<0.00007	<0.00007	<0.00009	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	<0.00009	<0.00007	**0.00012 J**	<0.00007	<0.00007
	8/22/2007	**25.8 D**	**0.004 J**	**0.004 J**	**0.002 J**	**0.014**	<0.001 U	<0.001 U	**0.08 J**	**0.056 D**	**0.069 D**	<0.004 U	**0.001 J**	**0.337 D**	<0.001 U	**0.077**	<0.001 U	<0.001 U	<0.001 U	**1.51 D**	<0.001 U	<0.001 U	<0.001 U	**0.076 D**	<0.001 U	<0.001 U	<0.003 U	**0.007**
	9/26/2008	**23.0 D**	<0.02 U	<0.02 U	<0.02 U	<0.02 U	<0.02 U	<0.02 U	**0.098 J**	**0.06 J**	**0.096 J**	<0.07 U	<0.02 U	**0.13**	<0.02 U	<0.02 U	<0.02 U	<0.02 U	<0.02 U	**1.34**	<0.02 U	<0.021 U	<0.027 U	**0.091 J**	<0.02 U	<0.02 U	<0.053 U	<0.02 U
1-MW-5R	11/1/2010	**17**	<0.0007	**0.0059**	<0.001	<0.0007	<0.0008	<0.002	**0.028**	**0.021**	**0.022**	-	**0.005**	**0.0052**	<0.0007	**0.0028**	<0.0009	<0.0007	<0.0007	**0.26**	<0.0007	<0.0008	<0.0008	**0.029**	<0.0007	<0.001	<0.0007	**0.0033**
	8/15/2007	**18.5 D**	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	**0.231 J**	**0.109 J**	**0.176 J**	<0.363 U	<0.103 U	**0.584**	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	**5.23**	<0.103 U	<0.11 U	<0.137 U	**0.19 J**	<0.103 U	<0.103 U	<0.272 U	<0.103 U
	9/25/2008	**9.48 J**	<0.01 U	<0.01 U	<0.01 U	<0.01 U	<0.01 U	<0.01 U	**0.229**	**0.109**	**0.179**	<0.035 U	<0.01 U	**0.589**	<0.01 U	**0.018 J**	<0.01 U	<0.01 U	<0.01 U	**4.43 D**	<0.01 U	<0.011 U	<0.013 U	**0.211**	<0.01 U	<0.01 U	<0.026 U	**0.011 J**
MW-6D	11/3/2010	**17**	<0.00007	<0.00009	<0.0001	**0.0035**	<0.00008	**0.0011**	**0.11**	**0.049**	**0.066**	-	<0.00007	**0.3**	<0.00007	**0.0055**	<0.00009	<0.00007	<0.00007	**3.7**	<0.00007	**0.012**	<0.00008	**0.09**	<0.00007	<0.0001	<0.00007	**0.0031**
	8/15/2007	**17.9 D**	<0.101 U	<0.101 U	<0.101 U	<0.101 U	<0.101 U	<0.101 U	<0.101 U	<0.101 U	<0.125 U	<0.355 U	<0.101 U	**0.114 J**	<0.101 U	<0.101 U	<0.101 U	<0.101 U	<0.101 U	**0.571**	<0.101 U	<0.108 U	<0.134 U	<0.101 U	<0.101 U	<0.101 U	<0.267 U	<0.101 U
	8/14/2007	<0.001 U	**0.001 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.011**	**0.006**	<0.001 U	<0.004 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.014**	<0.001 U	<0.001 U	<0.003 U	**0.002 J**
	9/22/2008	<0.001 U	**0.002 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.009 J**	**0.005 J**	<0.001 U	<0.004 U	<0.001 U	<0.001 U	**0.002 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.011**	<0.001 U	<0.001 U	<0.003 U	**0.003 J**
MW-6S	11/4/2010	<0.00008	**0.00041**	<0.00009	<0.0001	<0.00007	<0.00008	**0.0011**	**0.0014**	**0.00071**	<0.00007	-	<0.00007	<0.00007	<0.00007	<0.00007	<0.00009	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	**0.001**	<0.00007	<0.0001	**0.00009 J**	**0.00069**
	8/14/2007	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.004 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.003 U	<0.001 U
	9/22/2008	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.004 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.003 U	<0.001 U
MW-8	11/4/2010	**0.00034**	<0.00007	<0.00009	<0.0001	<0.00007	<0.00008	**0.0017**	<0.00008	<0.00007	<0.00007	-	<0.00007	<0.00007	<0.00007	<0.00007	<0.00009	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	<0.00009	<0.00007	<0.0001	**0.00009 J**	<0.00007
	8/14/2007	**5.94 D**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	**0.048**	**0.009**	<0.001 U	<0.004 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.003 U	<0.001 U
	9/24/2008	**5.37 D**	<0.01 U	<0.01 U	<0.01 U	<0.01 U	<0.01 U	<0.01 U	**0.046 J**	<0.01 U	<0.012 U	<0.035 U	<0.01 U	<0.011 U	<0.01 U	<0.01 U	<0.01 U	<0.01 U	<0.01 U	<0.01 U	<0.01 U	<0.011 U	<0.013 U	<0.01 U	<0.01 U	<0.01 U	<0.026 U	<0.01 U
1-MW-9	11/3/2010	**3.3**	<0.00007	<0.00009	<0.0001	<0.00007	<0.00008	**0.00091**	**0.013**	**0.0013**	<0.00007	-	<0.00007	**0.000084 J**	<0.00007	<0.00007	<0.00009	<0.00007	<0.00007	**0.001**	<0.00007	<0.00008	<0.00008	<0.00009	<0.00007	<0.0001	<0.00007	<0.00007
	8/14/2007	**0.002 J**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.004 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.003 U	<0.001 U
	6/4/2008	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.004 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.003 U	<0.001 U
1-MW-10	11/3/2010	<0.00008	<0.00007	<0.00009	<0.0001	<0.00007	<0.00008	**0.00092**	<0.00008	<0.00007	<0.00007	-	<0.00007	<0.00007	<0.00007	<0.00007	<0.00009	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	<0.00009	<0.00007	<0.0001	<0.00007	<0.00007
	9/24/2008	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.007 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.003 U	<0.002 U	<0.002 U	<0.002 U	<0.005 U	<0.002 U
1-MW-11	11/4/2010	**0.00022**	<0.00007	<0.00009	<0.0001	<0.00007	<0.00008	**0.0022**	<0.00008	<0.00007	<0.00007	-	<0.00007	<0.00007	<0.00007	<0.00007	<0.00009	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	<0.00009	<0.00007	<0.0001	<0.00007	<0.00007
	11/3/2009	**0.00024**	**0.000097 J**	<0.00009	<0.0001	<0.00007	<0.00008	**0.00057**	<0.00008	<0.00007	**0.0001 J**	<0.00008	<0.00007	<0.00007	<0.00007	<0.00007	<0.00009	<0.00007	**0.000072 J**	**0.00017 J**	<0.00007	<0.00008	<0.00008	<0.00009	<0.00007	<0.0001	**0.00035**	**0.00016 J**
1-MW-12	11/3/2010	<0.00008	<0.00007	<0.00009	<0.0001	<0.00007	<0.00008	**0.00026**	<0.00008	<0.00007	<0.00007	-	<0.00007	<0.00007	<0.00007	<0.00007	<0.00009	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	<0.00009	<0.00007	<0.0001	<0.00007	<0.00007
	11/16/2009	**0.016**	**0.0083**	**0.00019 J**	<0.0001	**0.0014**	**0.00017 J**	**0.0037**	**0.13**	**0.079**	**0.18**	<0.00008	<0.00007	**0.19**	<0.00007	**0.019**	**0.00028**	**0.0008**	<0.00007	**1.3**	<0.00007	<0.00008	<0.00008	**0.16**	**0.0009**	<0.0001	**0.000089 J**	**0.025**
1-MW-13	11/3/2010	**0.0078**	**0.0055**	<0.00009	<0.0001	<0.00007	<0.00008	**0.0021**	**0.089**	**0.048**	**0.094**	-	<0.00007	**0.14**	<0.00007	**0.028**	<0.00009	**0.00016 J**	<0.00007	**0.95**	<0.00007	<0.00008	<0.00008	**0.19**	**0.00018 J**	<0.0001	<0.00007	**0.013**
TMW-1	11/1/2010	**0.00097**	<0.00007	<0.00009	<0.0001	<0.00007	<0.00008	**0.00041**	<0.00008	<0.00007	<0.00007	-	<0.00007	<0.00007	<0.00007	<0.00007	<0.00009	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	<0.00009	<0.00007	<0.0001	**0.000072 J**	<0.00007
TMW-2	11/1/2010	**0.0002 J**	<0.00007	<0.00009	<0.0001	<0.00007	<0.00008	**0.00037**	<0.00008	<0.00007	<0.00007	-	<0.00007	<0.00007	<0.00007	<0.00007	<0.00009	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	<0.00009	<0.00007	<0.0001	**0.00033**	<0.00007

Notes:

Bold	Concentration reported above laboratory detection limits
<	Analyzed for but not detected at concentrations greater than the laboratory detection limit.
J	Estimated
	Exceeds critical PCL

Table F7
Summary of SVOCs in Second Groundwater Bearing Unit
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Date	2,4,5-Trichlorophenol	2-Chlorophenol	Acenaphthene	bis(2-ethylhexyl) phthalate	Dibenzofuran	Fluorene	Phenanthrene	2,4,6-Trichlorophenol	2-Methylnaphthalene	Anthracene	Chrysene	Diethyl Phthalate	Naphthalene	Phenol	2,4-Dichlorophenol	2-methylphenol	Benzo(a)anthracene	di-n-Butyl Phthalate	Fluoranthene	Pentachlorophenol	Pyrene	Acetophenone
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Tier 1 $^{GW}GW_{Ing}$ Critical PCL without MSD		**2.444**	**0.122**	**1.467**	**0.006**	**0.098**	**0.978**	**0.733**	**0.024**	**0.098**	**7.333**	**0.125**	**19.554**	**0.489**	**7.333**	**0.073**	**1.222**	**0.001**	**2.444**	**0.978**	**0.001**	**0.733**	**2.444**
Tier 1 $^{Air}GW_{Inh-V}$ Critical PCL without MSD		454829.348	61503.225	--	--	--	--	--	49419.916	--	--	583761.504	135746.132	316.311	275467.28	542621.039	100098.274	2046.858	71589.54	--	13263.334	--	135542.633
	8/22/2007	**0.003 J**	<0.001 U	**0.002 J**	<0.001 U	**0.002 J**	**0.002 J**	**0.006**	<0.001 U	**0.004 J**	<0.001 U	<0.001 U	<0.001 U	**0.016**	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.003 U	**0.001 J**	**0.723 D**	<0.001 U	-
	9/25/2008	**0.013**	<0.001 U	**0.004 J**	<0.001 U	**0.003 J**	<0.001 U	**0.006**	**0.016**	**0.01**	<0.001 U	<0.001 U	<0.001 U	**0.129 D**	**0.002 J**	**0.003 J**	<0.001 U	<0.001 U	<0.003 U	**0.002 J**	**0.484 D**	**0.001 J**	-
2-MW-1	11/2/2010	**0.0095**	**0.0007**	**0.00082**	**0.001**	<0.00008	<0.00007	**0.00056**	**0.0069**	**0.0027**	<0.00007	<0.00007	<0.00007	**0.047**	**0.003**	<0.00008	**0.00053**	<0.00007	<0.00007	**0.0006**	**0.85**	**0.00041**	**0.002**
	9/23/2008	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.003 U	<0.002 U	<0.005 U	<0.002 U	<0.002 U	<0.002 U	-
2-MW-2	11/4/2010	<0.00009	<0.00008	<0.00009	**0.0011**	<0.00008	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	<0.00007	**0.000084 J**	<0.00007	**0.00027**	<0.00007	<0.0001
	9/25/2008	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.003 U	<0.002 U	<0.005 U	<0.002 U	<0.002 U	<0.002 U	-
2-MW-3	11/1/2010	<0.00009	<0.00008	<0.00009	<0.0002	<0.00008	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	<0.00007	<0.00007	<0.00007	**0.000084 J**	<0.00007	<0.0001
	9/24/2008	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.002 U	<0.003 U	<0.002 U	<0.005 U	<0.002 U	<0.002 U	<0.002 U	-
2-MW-4	11/3/2010	<0.00009	<0.00008	<0.00009	**0.00089**	<0.00008	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	<0.00007	<0.00007	<0.00007	<0.00008	<0.00007	<0.0001
	9/26/2008	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.001 U	<0.003 U	<0.001 U	<0.001 U	<0.001 U	-
2-MW-5	11/1/2010	<0.00009	<0.00008	**0.0019**	**0.00035**	**0.0002 J**	<0.00007	**0.0015**	<0.00007	<0.00007	**0.00021**	<0.00007	**0.000089 J**	**0.00061**	<0.00007	<0.00008	<0.00008	<0.00007	<0.00007	**0.00021**	**0.061**	<0.00007	<0.0001
	11/2/2009	<0.00009	<0.00008	**0.00026**	**0.0059**	**0.00032**	**0.00028**	**0.0019**	<0.00007	**0.00041**	**0.00028**	**0.000075 J**	<0.00007	**0.0031**	<0.00007	<0.00008	<0.00008	**0.000082 J**	**0.000085 J**	**0.0013**	**0.00075**	**0.00079**	-
2-MW-6	11/3/2010	<0.00009	<0.00008	<0.00009	**0.0016**	<0.00008	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	<0.00007	<0.00007	**0.00023**	**0.002**	**0.00023**	<0.0001
2-MW-7	11/3/2009	<0.00009	<0.00008	<0.00009	**0.0016**	<0.00008	<0.00007	**0.00017 J**	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	<0.0001	<0.00007	<0.00008	<0.00008	<0.00007	**0.00014 J**	**0.00023**	<0.00008	**0.00014 J**	-

Notes:

Bold	Concentration reported above laboratory detection limits
<	Analyzed for but not detected at concentrations greater than the laboratory detection limit.
J	Estimated
	Exceeds critical PCL

Table F8
Summary of SVOCs in Third Groundwater Bearing Unit
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Date	Bis(2-ethylhexyl)phthalate mg/L	Phenanthrene mg/L	Di-n-butyl phthalate mg/L	Benzoic acid mg/L	Pentachlorophenol mg/L
Tier 1 $^{GW}GW_{Ing}$ Critical PCL without MSD		**0.006**	**0.733**	**2.444**	**97.768**	**0.001**
Tier 1 $^{Air}GW_{Inh-V}$ Critical PCL without MSD		--	--	71589.54	104258	13263.33
3-MW-1	11/4/2009	**0.001**	**0.00007 J**	**0.00029**	**0.00053**	**0.0074**
	11/2/2010	**0.00025**	<0.00007	<0.00007	**-**	**0.006**

Notes:

Bold	Concentration reported above laboratory detection limits
<	Analyzed for but not detected at concentrations greater than the laboratory detection limit.
J	Estimated
	Exceeds critical PCL

Table F9
Summary of RCRA Metals in First Groundwater Bearing Unit
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Date	Arsenic mg/L	Barium mg/L	Cadmium mg/L	Chromium mg/L	Lead mg/L	Mercury mg/L	Selenium mg/L	Silver mg/L
Tier 1 $^{GW}GW_{Ing}$ Critical PCL without MSD		**0.01**	**2**	**0.005**	**0.1**	**0.015**	**0.002**	**0.05**	**0.122**
Tier 1 $^{Air}GW_{Inh-V}$ Critical PCL without MSD		--	--	--	--	--	7.272	--	--
	8/14/2007	**0.005**	**0.216**	<0.001 U	**0.003 B**	**0.001 J**	<0.0001 U	**0.002 J**	<0.001 U
1-MW-1R	11/1/2010	**0.00748**	**0.412**	<0.0006	<0.0006	<0.0004	-	<0.0025	<0.0007
MW-2S	8/15/2007	**0.007**	**0.458**	<0.001 U	<0.001 U	<0.001 U	<0.0001 U	**0.003 J**	<0.001 U
	8/15/2007	**0.003**	**0.197**	<0.001 U	<0.001 U	<0.001 U	<0.0001 U	**0.002 J**	<0.001 U
MW-2D	11/3/2010	**0.00105 J**	**0.208**	**0.00105 J**	<0.0006	<0.0004	-	<0.0025	<0.0007
	8/13/2007	**0.005**	**0.629**	<0.001 U	**0.002 JB**	**0.001 J**	**0.0005**	**0.004**	<0.001 U
MW-3	11/4/2010	**0.00165 J**	**0.428**	<0.0006	<0.0006	**0.000426 J**	**-**	<0.0025	<0.0007
	8/14/2007	**0.004**	**0.589**	<0.001 U	**0.003 JB**	**0.001 J**	<0.0001 U	**0.002 J**	<0.001 U
MW-4	11/3/2010	<0.0009	**0.568**	<0.0006	**0.00212 J**	**0.00119 J**	-	<0.0025	<0.0007
	8/22/2007	**0.004**	**0.907**	<0.001 U	**0.005 B**	**0.001 JB**	<0.0001 U	**0.003 J**	<0.001 U
1-MW-5R	11/1/2010	**0.00285 J**	**1.1**	<0.0006	**0.000807 J**	**0.00108 J**	-	<0.0025	<0.0007
MW-6S	8/15/2007	**0.005**	**0.126**	<0.001 U	**0.003 B**	<0.001 U	<0.0001 U	**0.002 J**	<0.001 U
	8/15/2007	**0.003**	**0.407**	<0.001 U	**0.003 J**	**0.002 JB**	<0.0001 U	<0.001 U	<0.001 U
MW-6D	11/3/2010	**0.00378 J**	**0.52**	<0.0006	<0.0006	<0.0004	-	<0.0025	<0.0007
	8/14/2007	**0.007**	**0.304**	<0.001 U	**0.003 B**	**0.001 J**	<0.0001 U	**0.002 J**	<0.001 U
MW-7	11/4/2010	**0.00204 J**	**0.276**	<0.0006	<0.0006	**0.000459 J**	-	<0.0025	<0.0007
	8/14/2007	**0.005**	**0.43**	<0.001 U	**0.018**	**0.001 J**	<0.0001 U	**0.002 J**	<0.001 U
1-MW-9	11/3/2010	**0.00137 J**	**0.298**	<0.0006	**0.00762**	<0.0004	-	<0.0025	<0.0007
	8/14/2007	**0.005**	**0.476**	<0.001 U	**0.003 JB**	**0.001 J**	<0.0001 U	**0.002 J**	<0.001 U
1-MW-10	11/3/2010	**0.000951 J**	**0.328**	<0.0006	**0.00129 J**	<0.0004	-	<0.0025	<0.0007
	9/24/2008	**0.004**	**1**	<0.001 U	<0.001 U	<0.001 U	<0.000033 U	<0.001 U	<0.001 U
1-MW-11	11/4/2010	**0.000972 J**	**0.95**	<0.0006	<0.0006	**0.00042 J**	-	<0.0025	<0.0007
1-MW-12	11/3/2010	**0.000974 J**	**0.528**	<0.0006	**0.000625 J**	<0.0004	-	<0.0025	<0.0007
1-MW-13	11/3/2010	**0.019**	**0.281**	<0.0006	<0.0006	<0.0004	-	<0.0025	<0.0007

Notes:

Bold	Concentration reported above laboratory detection limits
<	Analyzed for but not detected at concentrations greater than the laboratory detection limit.
J	Estimated
	Exceeds critical PCL

Table F10
Summary of RCRA Metals in Second Groundwater Bearing Unit
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Date	Arsenic mg/L	Barium mg/L	Cadmium mg/L	Chromium mg/L	Lead mg/L	Mercury mg/L	Selenium mg/L	Silver mg/L
Tier 1 $^{GW}GW_{Ing}$ Critical PCL without MSD		**0.01**	**2**	**0.005**	**0.1**	**0.015**	**0.002**	**0.05**	**0.122**
Tier 1 $^{Air}GW_{Inh-V}$ Critical PCL without MSD		--	--	--	--	--	7.272	--	--
2-MW-1	8/22/2007	**0.005**	**0.274**	<0.001 U	**0.024**	**0.001 JB**	<0.0001 U	**0.003 J**	<0.001 U
	11/2/2010	**0.00348 J**	**0.471**	<0.0006	**0.00278 J**	<0.0004	<0.000042	<0.0025	<0.0007
2-MW-2	9/23/2008	**0.004**	**0.296**	<0.001 U	<0.001 U	<0.001 U	<0.000033 U	<0.001 U	<0.001 U
	11/4/2010	**0.00149 J**	**0.306**	<0.0006	**0.000621 J**	<0.0004	<0.000042	<0.0025	<0.0007
2-MW-3	9/25/2008	**0.004**	**0.119**	<0.001 U	<0.001 U	<0.001 U	<0.000033 U	<0.001 U	<0.001 U
	11/1/2010	**0.0047 J**	**0.169**	<0.0006	**0.00104 J**	**0.000553 J**	<0.000042	<0.0025	<0.0007
2-MW-4	9/24/2008	**0.006**	**0.233**	<0.001 U	**0.004**	<0.001 U	<0.000033 U	<0.001 U	<0.001 U
	11/3/2010	**0.00648**	**0.283**	<0.0006	**0.00128 J**	**0.000677 J**	<0.000042	<0.0025	<0.0007
2-MW-5	9/26/2008	**0.002 J**	**0.403**	<0.001 U	**0.006**	**0.001 J**	<0.000033 U	**0.001 JB**	<0.001 U
	11/1/2010	**0.00504**	**0.146**	<0.0006	**0.00266 J**	**0.00117 J**	<0.000042	<0.0025	<0.0007
2-MW-6	11/3/2010	**0.00287 J**	**0.229**	<0.0006	**0.000912 J**	<0.0004	<0.000042	<0.0025	<0.0007

Notes:

Bold	Concentration reported above laboratory detection limits
<	Analyzed for but not detected at concentrations greater than the laboratory detection limit.
J	Estimated
	Exceeds critical PCL

Table F11
Summary of RCRA Metals inThird Groundwater Bearing Unit
Irvington Holdings
6809 Irvington Blvd., Houston, Texas

Sample ID	Sample Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Tier 1 $^{GW}GW_{Ing}$ Critical PCL without MSD		**0.01**	**2**	**0.005**	**0.1**	**0.015**	**0.002**	**0.05**	**0.122**
Tier 1 $^{Air}GW_{Inh-V}$ Critical PCL without MSD		--	--	--	--	--	7.272	--	--
Sample	Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
3-MW-1	11/2/2010	**0.00148 J**	**0.204**	<0.0006	**0.00143 J**	<0.0004	<0.000042	<0.0025	<0.0007

Notes:

Bold	Concentration reported above laboratory detection limits
<	Analyzed for but not detected at concentrations greater than the laboratory detection limit.
J	Estimated
	Exceeds critical PCL

Appendix G – Plume Stability

The subject property has been affected by dissolved phase contaminants (one or more of benzene, naphthalene, 2-methylnaphthalene, or pentachlorophenol) in the soil and groundwater. These contaminants are believed to be associated with the historic operations conducted on the subject property.

The lateral extent of groundwater impact in the first groundwater bearing unit has been delineated in all directions. Analytical results show the first groundwater bearing unit has been impacted by benzene, naphthalene, 2-methylnaphthalene and pentachlorophenol. Historic analytical results show concentrations of benzene in groundwater have remained stable to decreasing over time (**Table F5**). Concentrations of naphthalene in shallow groundwater have demonstrated a decreasing trend over time (**Table F5**, **Table F7**). Comparing the aerial extent of naphthalene impacts to groundwater between September 2008 and November 2010, there is a noticeable decrease in the overall size of the plume (**Figure B4-1** and **Figure B4-2**). Decreasing concentrations over time are noted in first groundwater monitoring wells with respect to 2-methylnaphthalene and pentachlorophenol (**Table F7**).

The lateral extent of groundwater impact in the second groundwater bearing unit has been delineated in all directions. Analytical results show the second groundwater bearing unit has been impacted by pentachlorophenol (**Table F8**, **Figure B4-3**). Historic analytical results show concentrations of pentachlorophenol in groundwater have remained stable over time (**Table F8**).

The lateral extent of groundwater impact in the third groundwater bearing unit has not been delineated in all directions. Analytical results show the third groundwater bearing unit has been impacted by pentachlorophenol (**Table F9**). Although there are limited historic analytical results for the third groundwater bearing unit, it appears that concentrations of pentachlorophenol are stable to decreasing (**Table F9**).

Figure B4-1 through **Figure B4-3** depict the delineated COC plumes in shallow groundwater.

A review of the groundwater data collected to date, it appears that the area of affected groundwater is not expanding and is the result of historic releases associated with past operations on the subject property.