PERIODIC REVIEW REPORT

Alcoa Vancouver
Facility Site ID#: 21

5701 NW Lower River Road
Vancouver, WA 98660

Industrial Section
Waste 2 Resources Program

June 2015

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1.0 Introduction

This document is a review by the Washington State Department of Ecology (Ecology) of post-cleanup conditions and monitoring data to ensure that human health and the environment are being protected at the Alcoa Vancouver site (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA) regulations, Chapter 173-340 Washington Administrative Code (WAC), and the Sediment Management Standards (SMS), Chapter 173-204 WAC.

Cleanup activities at this Site were completed under Consent Decree No. 09-2-00247-2 and the 2009 Cleanup Action Plan (CAP) between Alcoa and Ecology. The CAP identified four Areas of Concern (AOCs) that needed additional remedial action as part of the final cleanup action for the Site. Those four areas are the PCB-impacted Sediment Area, Dike Underground Storage Tanks, Soluble Oil Area and Crowley Parcel. Additional remedial actions were also performed by Evergreen under Enforcement Order 4931. During plant demolition, ACPC/Vanexco remediated areas of the Site under Consent Decree 95-2-03268-4. In addition, a number of other impacted plant areas were identified during facility demolition and subsequently remediated under Consent Decree No. 09-2-00247-2. A 2010 Supplemental Cleanup Action Plan and amended Consent Decree were prepared to address releases of trichloroethylene (TCE) and other contaminants at the East Landfill Area of Concern (AOC). The North and North 2 Landfills were investigated and remediated under Agreed Order No. DE 03 TCPIS-5737. The former Columbia Marine Lines Site was also investigated and cleaned up under Ecology Agreed Order No. DE 85-591.

Some of the cleanup actions resulted in soil and groundwater concentrations exceeding industrial cleanup levels remaining on the Site. A restrictive covenant was recorded to restrict the disturbance of upland caps, prohibit the modification of the caps without the prior written approval of Ecology, and limit the Site to industrial uses. The restrictive covenant also limits and controls extraction of groundwater from the Site within the former Crowley Parcel AOC and the fluoride-bearing groundwater surrounding the SPL Storage Area not covered by previously recorded restrictive covenants. In 2008 Evergreen also filed a restrictive covenant for the parcels that they previously owned.

WAC 173-340-420 (2) requires that Ecology conduct a periodic review of a site every five years under the following conditions:

- Whenever the department conducts a cleanup action.
- Whenever the department approves a cleanup action under an order, agreed order or consent decree.
- Or, as resources permit, whenever the department issues a no further action (NFA) opinion.
- And one of the following conditions exists:

    (a) Institutional controls or financial assurance are required as part of the cleanup.
    (b) Where the cleanup level is based on a practical quantitation limit.
    (c) Where, in the department's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the

uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(4)]:

(a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the Site.
(b) New scientific information for individual hazardous substances of mixtures present at the Site.
(c) New applicable state and federal laws for hazardous substances present at the Site.
(d) Current and projected Site use.
(e) The availability and practicability of higher preference technologies.
(f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

The department shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment. Photos of the site taken during a March 12, 2015 site visit are found in 14.0.

2.0 Summary of Site Conditions

2.1 Site History

The former Alcoa Vancouver (Alcoa) Site is located at 5701 NW Lower River Road in the industrial-zoned area along the northern shore of the Columbia River at river mile 103.3 in Clark County. The Site is approximately 3 miles northwest of downtown Vancouver, Washington and approximately 3 miles due west of Interstate 5. The facility covers approximately 208 acres (97 acres are owned by Alcoa and Evergreen owned 111 acres) and is bound on the north by NW Lower River Road, on the east by property owned by the Port of Vancouver, on the south by the Columbia River, and on the west by multiple industrial property owners. The current land uses in the general vicinity of the Site are mixed use industrial and agricultural. A Site vicinity map is shown in Figure 1.

The Site was developed in the late 1930s and construction of the aluminum smelter was completed in 1940. The aluminum smelting operations began in 1940. During World War II, Alcoa filled the eastern end of the smelter site with dredge sands from the Columbia River. From 1940 to 1970, Alcoa added a number of fabrication operations to the facility. By 1970, the facility contained an aluminum smelter and a series of fabrication plants to form the aluminum metal into finished goods such as wire, rod, and extruded channel. Alcoa operated the entire facility for approximately 45 years, until 1986. Figure 2 shows the historic uses of the site and areas of concern.

Alcoa then began remediating and selling individual land parcels and operations associated with the Site. In 1987 ACPC, Inc. purchased the cable mill operations and leased the associated land from Alcoa. In 1987, Alcoa sold the aluminum smelter to Vanalco, Inc.; however, Alcoa retained the title to the extrusion section of the property known as the Vancouver Extrusion Company (Vanexco) and the cable mill operation, subject to the ACPC lease. Vanexco was

operated by Alcoa until 1991 when it was closed. Additionally, in 1991, Alcoa sold a tract of land lying west of the aluminum smelter to Russell Towboat and Moorage Company; this tract of land is not part of the Site. In 1994, a parcel of property known as the North Parcel was sold to the Clark County PUD for construction of a cogeneration plant. A cleanup was conducted in the area known as the Northeast Parcel and the property was sold to Clark County for a jail site in 1997. Vanalco owned and operated the aluminum smelter from 1987 until late 2000 when it ceased all manufacturing operations and entered bankruptcy. Glencore Washington LLC (now known as Evergreen) purchased the smelter assets from the bankruptcy estate in 2002. No manufacturing operations have taken place at the Site since December 2000.

Columbia Marine Lines (succeeded by Crowley Marine Services, Inc.) leased property and operated a marine repair facility on the Alcoa property west of the aluminum smelter (the Crowley Parcel) from approximately 1963 until 1984. Today, the Port of Vancouver owns the former aluminum smelter site, storm water lagoons, and the small sanitary sewer plant (Figure 3). Alcoa retains ownership of the remainder of the Site, including the river dock and loading area, the land east of the smelter (including the East Landfill, the former North and North 2 Landfill areas, and the South Bank Area), and the property to the west of the smelter (the Crowley Parcel).

The aluminum smelter, which included potlines, an aluminum casting facility, green mill, carbon bakes, dock and raw materials handling system, laboratory, and miscellaneous support facilities, operated with only intermittent interruptions, from 1940 through 2000. The smelting operations required an extensive dry materials handling system for raw materials. Alumina ore was received by rail or ocean-going vessel (Photo 1). Other raw materials, including petroleum coke, coal tar pitch, anthracite coal, cryolite (sodium aluminum fluoride), and aluminum fluoride, were received by rail and truck (Photo 2).

2.2 Hydrogeology

The Site is located in the Portland Basin within the Columbia River floodplain. The Sandy River mudstone and the Troutdale Formation are the oldest sediment in the Portland Basin. The Troutdale Formation overlies the Sandy River Mudstone.

The Troutdale Formation is overlain by sediments deposited during Pleistocene catastrophic flooding of the Columbia River. These flood deposits have been termed the Unconsolidated Sedimentary Aquifer (USA). The USA is overlain by Quaternary Alluvium deposits consisting of very poorly consolidated silt and sand on the floodplains of the modern Columbia River. In developed areas along the river shoreline, the Quaternary Alluvium is overlain by artificial fill consisting primarily of dredged river sand.

The following geologic formations have been identified from shallow to deep:

- Dredge Fill
- Quaternary Alluvium
- Troutdale Formation

Four hydrogeologic units are found at the Site, including the Shallow Zone (7 to 25 feet thick), Intermediate Zone (15-35 feet bgs), Deep Zone (35 to 95 feet bgs), and the Aquifer Zone (95 to 125 feet bgs).

2.3 Historic Remediation Activities

Under Enforcement Order 931, former manufacturing, storage, and fabrication facilities were demolished and remedial actions were implemented. Evergreen excavated and disposed of over 51,000 tons of contaminated soil and solid waste at an off-site RCRA Subtitle D facility, and 7,200 tons of contaminated soil and hazardous waste at an off-site RCRA Subtitle C facility. Through a variety of consent decrees and orders, Alcoa has completed remediation of several portions of the Site. Two areas, the Vanexco/Rod Mill Building (Figure 4) and Concrete and SPL Storage Area, were remediated under Consent Decrees 95-2-03268 and 92-2-007783-9 respectively. Other areas of concern since remediated are the PCB-Impacted Sediment, Crowley Parcel, Dike Underground Storage Tanks, and Soluble Oil Area. Crowley undertook remedial actions pursuant to Order No. DE 85-591 and the East Landfill Area and North/North 2 Landfills were remediated under Agreed Order No. DE 03-5737.

2.4 Cleanup Levels

Given the industrial zoning of the area and the proposed industrial future use of the Site, it was decided that MTCA Method C industrial soil cleanup levels and the Sediment Management Standards were appropriate for the Site. Therefore Method C industrial soil cleanup levels were established under WAC 173-340-745. When Method C soil cleanup levels were not available for certain chemicals, MTCA Method A industrial soil cleanup levels were used. Future site uses continue to be industrial, there are no plans to extract water from the shallow water-bearing layers, and existing water supply regulations preclude this potential exposure pathway. Since there are few groundwater contaminants, the more stringent of either MTCA Method A or appropriate ARARs were used as groundwater cleanup levels.

Soil cleanup levels were developed for fluoride, PAHs, TPH, and PCBs by considering the following potential exposure pathways:

- Human health protection from direct soil contact pathway exposure
- Human health protection from soil-to-groundwater pathway exposure
- Human health protection from soil-to-air pathway exposure
- Terrestrial ecological protection.

Soil Cleanup Levels

Chemical of Potential Concern	Soil Cleanup Level (mg/kg)	Protection Basis
Fluoride	210,000	Direct Contact
PAHs	18	Direct Contact
PCBs	10	Direct Contact and Groundwater
TPH Diesel	2,000	Direct Contact and Groundwater
TPH Mineral Oil	4,000	Direct Contact and Groundwater
Crowley Parcel AOC TPH	5,070	Groundwater

Soil Remediation Level

Chemical of Potential Concern	Soil Remediation Level (mg/kg)	Protection Basis/Remedial Action
Fluoride	9,000	Groundwater-Excavate Soils above REL

As discussed in section 2.2, four water-bearing zones were identified beneath the Site. The shallow groundwater discharges into the Columbia River and does not appear to be a potential future source of potable groundwater due to low yield. Therefore, MTCA Method C cleanup levels based on the protection of surface water were established under WAC 173-340-730, which are risk-based cleanup levels developed based on the protection for human health and based on the consumption of fish and shellfish. In addition, Ecology's acute Surface Water Quality Standards, WAC 173-201A, were also considered applicable or relevant and appropriate requirements (ARARs) in establishing the groundwater cleanup levels based on the protection of surface water.

Since the deeper saturated zone (Unconsolidated Aquifer) is used as a source of potable water supply, MTCA Method B residential cleanup levels were established under WAC 173-340-720. When Method B groundwater cleanup levels were not available for certain chemicals, MTCA Method A residential groundwater cleanup levels were used.

Groundwater Cleanup Levels

Chemical of Potential Concern	Groundwater Cleanup Level	Protection Basis
Fluoride (dissolved)	4 ug/L	State Drinking Water MCL
TPH Diesel	500 ug/L	MTCA Method A Standard Value
TPH Mineral Oil	500 ug/L	MTCA Method A Standard Value

Groundwater Remediation Levels

Chemical of Potential Concern	Groundwater Remediation Level	Protection Basis/Remedial Action
Fluoride	2,500 ug/L	Surface Water-Evaluate need for treatment or alternate remedial action

The sediment remedial action at the Site involved mass removal to the maximum extent with modern, conventional dredging equipment. A mechanical dredge with a closed-bucket was used to the extent practicable to remove the sediment.

Site-Specific Sediment Cleanup Level and RAL

Parameter	Sediment PCB Concentration	Protection Basis/Remedial Action
Site-specific Cleanup Level	97 ug/kg	Human Health and Wildlife
Remedial Action Level	320 ug/kg	Dredge Sediment above RAL

Contaminants and cleanup levels developed for Evergreen Property are found in 13.1.

3.0 Remedial Investigations

ALCOA Property

For the 97 acres owned by Alcoa, the following investigations occurred:

3.1 PCB-Impacted Sediment

Shortly after the 1997 construction of a non-contact cooling water discharge pipeline and outfall to the Columbia River, Clark County PUD collected sediment from the outfall area in accordance with its National Pollutant Discharge Elimination System (NPDES) permit requirements. These sediment samples indicated the presence of elevated concentrations of PCBs in the immediate vicinity of the outfall. Subsequently, Alcoa began an investigation to determine the source of PCBs. This data revealed that disturbance of adjacent upland soils during construction of the outfall line was the source of PCBs detected in Columbia River sediments.

3.2 Dike Underground Storage Tanks

Alcoa maintained numerous underground storage tanks (USTs) at the Site on the dike adjacent to the Columbia River (Figure 4). These tanks stored a variety of fuels used in Site operations including gasoline, diesel, and fuel oils. In 1987, the four USTs on the dike, 1-34C, 2-34C, 3-34C, and 4-34C, were emptied, decontaminated, and abandoned in place. These were the only remaining USTs on the Site that were not abandoned in accordance with current WAC 173-360 (Underground Storage Tank Regulations) and subsequently approved by Ecology. Each tank was filled with gravel upon closure. In mid-2008, characterization of the soil near the USTs was conducted using geoprobe sampling equipment to determine the extent of the TPH contamination and to see if PCBs were present in this area. PCB-impacted soils were not identified and TPH concentrations were below Site cleanup levels.

3.3 Soluble Oil Area

During the fabrication of aluminum redraw rod, Alcoa used water soluble cooling oil. In the 1970s and 1980s, Alcoa discharged this cooling oil to several basin-like areas on the eastern portion of the Site. At an unknown point in time, the water soluble cooling oil was mixed with hydraulic oil that contained PCBs as a fire retardant. An unknown amount of PCB-impacted water soluble oil was deposited in an equalization pond bordered on the north and south by spurs of the Burlington Northern Santa Fe (BNSF) railway, on the east by a berm, and on the west by a fence. Any excess water in the vicinity had the potential to drain out the southern end of the pond into the surrounding area via a series of ditches and culverts near the railroad tracks. In the

1980s, investigations were conducted to determine possible PCB impacts to soil and groundwater in the vicinity of the former waste-oil disposal areas.

3.4 Crowley Parcel

From 1964 to approximately 1985, Columbia Marine Lines operated a marine repair facility on the property. Water and waste materials from barge maintenance and cleaning operations were deposited by Columbia Marine Lines (a predecessor in business to Crowley) into a series of three excavated pits (infiltration ponds) located on the southwestern portion of the Site. Over the course of operations, over 2 million gallons of waste materials were deposited in the barge waste disposal area. These waste materials consisted of barge slops, bilge slops, and water from gas freeing operations. The soil and groundwater at the Crowley Parcel were found to be impacted with PAHs, total petroleum hydrocarbons – gas range (TPH-G), TPH-oil, TPH-D (diesel range), and benzene, toluene, ethylbenzene, and xylene (BTEX). Under Agreed Order No. DE 85-591, Columbia Marine Lines was ordered to install and operate a hydrocarbon recovery system and submit a groundwater report on the extent of contamination. Sixty five (65) borings were installed by Geoprobe between 1999 and 2007.

3.5 East Landfill AOC

During the 1940s, the area beneath the 4.9 acre East Landfill was filled with dredge sands from the Columbia River. During early plant operations, the East Landfill was filled with miscellaneous industrial solid waste, construction debris, steel wire, cable, metal piping, alumina, scrap aluminum, and carbon bake oven furnace brick. These materials were located in the top 15 to 20 feet of the soil and had a total volume of approximately 150,000 cubic yards. Soil samples in this area found the presence of lead, cyanide, fluoride, PCBs, TCE, and PAHs. During the remedial investigation, groundwater and soil were found to contain TCE and PAHs above MTCA Method A industrial cleanup levels.

Fate and transport modeling of groundwater to surface water indicated that natural attenuation was occurring. To field check the modeling, a transition zone water (TZW) investigation was begun in December 2008 using small-volume passive peepers. In addition to quarterly groundwater monitoring, Alcoa performed surface sediment, TZW, and surface water monitoring in the Columbia River adjacent to the East Landfill AOC to examine TCE and vinyl chloride levels.

3.6 North/North 2 Landfills

North of the East Landfill is a 1.5 acre parcel known as the North Landfill and a 1-acre parcel known as the North 2 Landfill (Photo 11). The areas were used in the 1940s and 1950s to dispose of dredge materials from the Columbia River. Alcoa filled these two areas with materials containing polynuclear aromatic hydrocarbons (PAHs), construction materials, including concrete and refractory brick and fill materials generated during operation of the smelter, and extrusion and wire mills at the Site. The remedial investigation found PAHs, PCBs, and TCE above MTCA Method A industrial cleanup levels in the soil.

3.7 Northeast Parcel

The Northeast Parcel is 18 acres located on the eastern edge of the VANALO smelter complex and north of the TCE landfill. In 1996, a 200-foot grid was laid out and a backhoe dug 21 three foot deep sample holes. Soil samples were analyzed for PCBs, total cyanide, semi-volatile organic compounds, volatile organic compounds, total petroleum compounds, and metals. Two of the pits (TP-24 and TP-25) indicated contamination so a more detailed investigation with a geoprobe was used to determine the extent of contamination. Groundwater was investigated using two monitoring wells (MW-41 S,I,D and MW-91-4A), but no contamination was found.

Evergreen Property

For the 111 acres owned by Evergreen (Figure 5), seventeen investigations took place and the following are considered the primary investigations:

3.8 Former Carbon Storage Buildings

The principal contaminant of concern relating to carbon storage and handling in these buildings was carcinogenic PAHs; however total petroleum hydrocarbons (TPH), total metals, total fluoride, and polychlorinated biphenyls (PCBs) were also contaminants of concern in the remedial investigation. Test pits were excavated and soil samples obtained at the Greenmill Area, Disposal Ramp Area, and Carbon Storage Building 52. Building 52 contained elevated levels of PAHs generally in the upper one foot of soil. The Greenmill Area investigation detected PAHs and PCBs above soil cleanup levels. The Disposal Ramp investigation found PAHs above soil cleanup levels.

3.9 Carbon Bake Ovens

The Carbon Bake Ovens (Buildings No. 58, 60, and 64) were used to "bake" green carbon anodes into solid anode blocks. Forty eight (48) discrete soil and concrete samples and 42 furnace brick samples were collected. Twenty one (21) shallow test pits were also dug using a track-mounted excavator. Investigations in this area concluded that remediation was not warranted so site restoration was performed.

3.10 Wet-Scrubber Ponds

Effluent overflow waters from the Carbon Bake Ovens were discharged via a drain line contained in a covered concrete trench to two unlined settling ponds. The main contaminants of concern were PAHs, fluoride, PCBs, total and free cyanide, and total metals. Test pits and follow-up soil samples found fluoride, PAHs, and PCBs above cleanup levels in the soil.

3.11 Scrap Metal Recycling

The Scrap Metal Recycling area stored various metals such as cable, sheet metal, and worn out or off-specification parts. Contaminants of concern were diesel and oil-range hydrocarbons (TPH), fluoride, priority pollutant metals, and PCBs. Test pits were dug and soil samples were analyzed. Soil with TPH, PCBs, cadmium, and chromium were detected above soil cleanup levels.

3.12 Transformer Rectifier Area and Site Electrical Systems

Rectifier Stations 1 and 2 (Lines 1, 2 and 3) and the Site Electrical System remedial actions were completed under the Toxic Substances Control Act (TSCA) as a Self-Implementing On-Site Cleanup, with approval of the work by the US Environmental Protection Agency (USEPA). The contaminant of concern was PCBs.

4.0 Site Groundwater Investigations

A joint Evergreen/Alcoa framework for Site-wide groundwater investigation at the two properties was developed to assess both the groundwater quality and hydrogeology of the Site. A total of 76 groundwater monitoring wells were selected for sampling, including Alcoa property monitoring wells, Alcoa property water supply wells, Evergreen property monitoring wells, Crowley site monitoring wells, and Alcoa and Evergreen settling/sludge pond wells.

In accordance with the 2003 Ecology Agreed Order DE 03 TCPIS-5737, 2009 Ecology Enforcement Order 4931, and 2009 Ecology Consent Decree No. 09-2-00247-2, quarterly groundwater monitoring was conducted at the Site since 2003 at the North and North 2 Landfill Area, East Landfill Area, and Former SPL Storage Area (Figure 6). The groundwater monitoring program for these areas includes 45 monitoring wells that are screened in one of four hydrogeologic zones. The four hydrogeologic zones identified are:

- Shallow zone (8 wells)
- Intermediate Zone (13 wells)
- Deep Zone (13 wells)
- Aquifer Zone (11 wells).

Beginning in 2012 with the sale to the Port of Vancouver, changes were made to monitoring frequency, parameters, and well abandonment and relocation following Ecology approval.

Alcoa Property

4.1 PCB Impacted Sediments

Sediments in this part of the Site were not investigated for potential groundwater impacts.

4.2 Dike Underground Storage Tanks

Five monitoring wells were installed next to the USTs, and light non-aqueous phase liquid (LNAPL) was detected in the wells. The presence of diesel products in the soil and groundwater in the vicinity of the USTs indicated that additional remedial activities may be necessary.

4.3 Soluble Oil Area

In the 1980s, investigations were conducted to determine possible PCB impacts to groundwater in the vicinity of the former waste oil disposal areas. Groundwater impacts were not found.

4.4 The Crowley Parcel

In 1983, the first of three hydrogeological studies was conducted to obtain an evaluation of subsurface soil and groundwater conditions. In August 1984, Columbia Marine Lines informed Ecology of the closure and past uses of the former barge waste disposal area. Monitoring wells MW-1 through MW-21 were installed near the waste disposal site in 1985 by Crowley Marine Services Corp (Figure 7).

In 1985, the second hydrogeologic investigation was conducted to further define the extent and characteristics of the contamination in the vicinity of the former barge waste disposal area. Free hydrocarbons or LNAPL petroleum hydrocarbons were observed on the water surface of the wells near the disposal site.

4.5 East Landfill AOC

Seven monitoring wells were located within the limits of the East Landfill as shown on Figure 4, including MW-35I, MW-35D, MW-35A, MW-41S, MW-41I, MW-41D, MW-46I, MW-46D, MW-46A, MW-94-1I, MW-94-1D, MW-94-1A, MW-94-2I, MW-94-2D, and MW-94-2A. Groundwater monitoring continues to occur quarterly for VOCs (including TCE and vinyl chloride), PAHs, PCBs, total organic halides (TOX), and total organic carbon (TOC).

4.6 North/North 2 Landfills

Six groundwater monitoring wells were installed in the North and North 2 Landfills: MW-47I, MW-47D, MW-47A, MW-48I, MW-48D, and MW-48A. Groundwater monitoring continues on a quarterly basis for VOCs, PAHs, PCBs, total organic halides (TOX), cyanide, fluoride and total organic carbon (TOC). Monitoring well locations are shown on Figure 6.

5.0 Feasibility Study

Following the remedial investigation, six General Response Actions (GRAs) were identified to represent different conceptual approaches to remediation. Initially a number of technologies were considered for developing remedial alternatives as follows:

- Institutional controls
- Monitored natural attenuation/recovery
- Enhanced natural attenuation/recovery (ENR)
- In situ containment
- In situ treatment
- Removal and disposal

After the evaluation of remedial technologies, remedial alternatives were developed to address the COCs in soil and groundwater at the Site, as described below.

Alcoa Property

5.1 PCB Impacted Sediments

Sediment removal with ENR was selected as the preferred remedy to address the PCB-impacted sediment because it provides the greatest overall environmental benefit in terms of permanence, long-term risk reduction to human health and ecological receptors, maximum mass removal,

reasonable restoration timeframe, and appropriate management of short-term impacts. The remedy also met the intent of other MTCA goals in taking advantage of beneficial use opportunities.

5.2 Dike Underground Storage Tanks

The presumptive remedy for the Dike USTs included removal of the tanks, free product, and impacted soils exceeding the Site cleanup levels. Materials removed from the Site were disposed of at an appropriate off-site landfill. Removal of the source materials is protective of groundwater and meets the general Site Remedial Action Objectives (RAOs).

5.3 Soluble Oil Area

The presumptive remedy for the Soluble Oil Area consisted of removal and off-site disposal of the COC-impacted soil, waste, and raw materials. The contaminated material was removed until the remaining Site soil met cleanup levels.

Impacted materials with PCB concentrations greater than 10 mg/kg were removed from the Soluble Oil Area and disposed of at an off-site location. This presumptive remedy prevented direct contact with PCB-impacted material above Site cleanup levels. After removal, an appropriate cap was placed over the area in accordance with MTCA regulations. These actions are protective of groundwater.

5.4 The Crowley Parcel

On behalf of Crowley Marine Services, SECOR International Incorporated (SECOR) conducted site investigations to support development of a cleanup action plan. This work included aquifer testing and groundwater quality testing to evaluate potential groundwater cleanup alternatives. Four alternatives were evaluated – excavation and offsite disposal, excavation and on-site treatment, bioventing, and in-situ chemical oxidation. The Feasibility Study (FS) recommended excavation and on-site bioremediation. Although historical remediation actions were performed, residual contamination had persisted in both the soil and groundwater.

5.5 East Landfill AOC

Consolidation, excavation and offsite disposal, thermal treatment/incineration, and isolation beneath an engineered cap were considered for contaminated soil in the FS. Water treatment technologies using groundwater pump and treat systems and reactive barriers were examined and were found to not be practical for this Site. Natural attenuation and groundwater monitoring were the retained alternatives.

5.6 North/North 2 Landfills

Given the proximity of the North and North 2 Landfills, and their relatively small volume of materials compared to the volume of the East Landfill, Alcoa performed a feasibility study and selected a remedy which removed, consolidated and contained impacted soils from the North/North 2 Landfills in the East Landfill.

5.7 Northeast Parcel

Four remedial alternatives were evaluated and alternative 2 was selected. Alternative 2 included moving the contaminated material to the East landfill site for two year storage or final disposal. Dangerous waste soil would be transported to a dangerous waste landfill for final disposal. Excavated areas would be backfilled with clean fill material and the site would be graded to drain storm water.

Evergreen Property

The five areas identified in Enforcement Order 4931 (Former Carbon Storage Buildings, Carbon Bake Ovens, Wet-Scrubber Ponds, Scrap Metal Recycling, and Transformer Rectifier Area and Site Electrical Systems) were remediated under a presumptive remedy of soil and debris removal until Ecology-approved, site-specific soil cleanup levels (CULs) were met, followed by disposal of removed materials at permitted off-site facilities, and confirmational sampling, analysis, and evaluation. The soil contaminants of concern in the five areas and soil cleanup levels are shown in Tables 13.1 and 13.2.

6.0 Remedial Actions

Alcoa Property

Remedial actions were completed pursuant to Agreed Order No. 4931. Confirmational soil sampling results are found in the "December 2009 Project Completion Report, Alcoa/Evergreen Vancouver Site".

6.1 PCB Impacted Sediments

During remedial activities along the shoreline, impacted soil and waste was identified in the vicinity of two well clusters associated with the long-term groundwater monitoring network for the Site. Monitoring wells MW-50S, MW-19I, MW-50D, MW-50A, MW-51S, MW-51I, MW-51D, and MW-51A were abandoned in place. Impacted soils were removed and the former well locations were re-graded and restored to their pre-existing elevations. Using sonic drilling methods, the eight monitoring wells were reinstalled at the former locations.

On December 1, 2009, twenty seven creosote-treated piles were removed to allow for dredging activities. The piles were transported offsite to the Wasco County Landfill, located in The Dalles, Oregon.

Removal of soils and materials from the shoreline commenced on December 2, 2008 and continued until February 28, 2009. Approximately 8,456 tons of Spent Potliner (SPL) was removed from the shoreline. Approximately 1,306 tons of asbestos-containing materials were disposed of off-site. Approximately 3,396 tons of debris were disposed of off-site. An additional 322 tons of wood and treated pilings were removed from the shoreline during this project and disposed of off-site (Photos 3 and 4).

Using upland-based excavators and in-water mechanical dredging equipment, approximately 49,910 cubic yards of sediment were removed during the project. Approximately 1,760 cubic yards of additional sediment were removed across the clam removal area. All confirmation sediment samples met Site cleanup levels for PCBs and PAHs.

6.2 Dike Underground Storage Tanks

Removal of the four dike USTs commenced on November 10, 2008 and work was completed on January 14, 2009. Three of five monitoring wells installed around the UST area to support previous investigations were located and abandoned. The UST excavations were backfilled and compacted with a grade sloped similar to the dike. All of the confirmation soil samples met Site cleanup levels (Photo 5).

6.3 Soluble Oil Area

Removal of overburden, excavation, in situ characterization sampling, confirmational sampling, compaction and backfill activities in the Soluble Oil Area commenced on November 3, 2008 and were completed on November 26, 2008. Approximately 484 tons of soil was disposed at the CWM in Arlington, Oregon and approximately 2,602 tons of soil was disposed at the Wasco County Landfill in the Dalles, Oregon. All final soil confirmation samples were below the PCB cleanup level of 10 mg/kg (Photo 6).

6.4 The Crowley Parcel

Although historical remedial actions were performed, such as an interim action consisting of removal of the bulk of NAPL using a recovery trench, residual contamination persisted in both the soil and groundwater. A bioventing pilot test was performed in1999 and a dual phase extraction system was installed in 2000. In January 2009, Crowley began construction of the final remedial action for this area of the Site, consisting of source removal and ex situ treatment of impacted materials. Excavation work was completed on February 16, 2009, and construction of the bioremediation cell commenced on February 19, 2009. After the impacted soil was treated, confirmational soil sampling indicated compliance with cleanup levels. Following bioremediation, the biotreatment cell was decommissioned (Photo 7).

6.5 East Landfill AOC

Waste soil from the North and North 2 Landfills was excavated and placed on the East Landfill. Final grading of this material was completed on April 29, 2004. An engineered cap was placed on the East Landfill and a 3 to 6-inch layer of sand was placed over the cap. The landfill was then hydroseeded. The final cleanup action chosen for the East Landfill AOC consisted of a landfill cover to minimize the movement of contaminants from the landfill, institutional controls to control how the land and groundwater are used, and ongoing monitoring of the groundwater to ensure the landfill cover continues to function as designed. Groundwater natural attenuation, monitoring, source control (capping), armoring of the shoreline, and institutional controls are the chosen remedies for this Site. A variety of remedies were considered and the selected remedy provides treatment and source removal to the maximum extent practicable (Photos 8 and 9).

After the additional characterization of the East Landfill AOC in 2008/2009, Ecology required transition zone water (TZW) sampling in the biological active zone and surface water sampling at five locations over a total of five compliance monitoring events. As shown in the March 2015 Post Source Control Monitoring Report, the presence of TCE degradation products (e.g., vinyl chloride) demonstrates that natural attenuation is occurring. There were no exceedances of the TZW cleanup levels for TCE and vinyl chloride. There were four exceedances of vinyl chloride

at surface water station AVTZ-14, once in 2011 and three times in 2012. There were no TCE exceedances of Site surface water cleanup levels.

6.6 North/North 2 Landfills

Beginning April 2, 2004 approximately 38,000 cubic yards of waste soil were excavated from the North and North 2 Landfills and transported to the East Landfill for disposal. Confirmational sampling showed that soil concentrations of TCE, PAHs, and PCBs were below cleanup levels at the North and North 2 Landfills. The landfills were re-graded and hydro-seeded (Photo 10).

6.7 Northeast Parcel

Approximately 3,902 cubic yards of PCB-impacted soil with concentrations greater than 1 ppm was excavated. Approximately 472 tons of dangerous waste designated PCB-impacted soil was disposed of at the Northwest Arlington, Oregon facility. Approximately 5,330 tons of non-dangerous waste PCB-impacted soil was disposed at the Columbia Ridge Landfill and Recycling Facility in Arlington, Oregon. Approximately 17,105 cubic yards of PAH-impacted soil was excavated and transported to the temporary storage area at the East Landfill. After confirmational sampling showed that the remaining soil had PAH concentrations less than 1 ppm in compliance with MTCA Method A residential cleanup levels, the Northeast Parcel was backfilled, graded and hydroseeded (Photos 11 and 12).

Evergreen Property

All remediation efforts were initiated as Interim Actions under Enforcement Order No. 4931 until such time as final verification sampling confirmed that the remediated areas met Ecology-approved, site-specific cleanup levels. In some areas, multiple rounds of interim actions were completed followed by verification sampling and analysis. If the site-specific CULs were not met, Evergreen completed additional removal work until subsequent verification sampling and analysis confirmed that the CULs were achieved. Once an area was confirmed to meet the CULs, the remedial action was then considered a final remedial action under the Order. Verification soil sample results for all five areas are found in the "October 2008 Cleanup Verification Report, Evergreen Aluminum, Bridgewater Group, Inc.", and are summarized as follows:

Carbon Storage Area: Approximately 21,181 tons of soil were removed and managed as a Special Waste at Waste Management's Hillsboro Landfill and 851 tons of PAH-contaminated soil were shipped to Chemical Waste Management of the Northwest, Inc. (CWMNW). Forty six (46) composite confirmation soil samples were analyzed but no individual PAH exceeded the MTCA Method C soil cleanup level so cleanup was considered complete (Photo 13).

Scrap Metal Recycling: Approximately 159 tons of material were shipped to CWMNW as a Dangerous Waste and approximately 930 tons of contaminated soil were shipped to the Hillsboro Landfill. Confirmation soil samples indicated diesel and oil-range hydrocarbons were detected up to 344 mg/kg, fluoride ranged up to 4,250 mg/kg and total PCBs were found up to 0.11 mg/kg, all below MTCA cleanup levels. Metals were also not found above MTCA cleanup levels so cleanup was considered complete (Photo 14).

Carbon Bake Ovens: Following the investigation of this area, remediation was deemed to not be warranted and was approved for restoration. The characterization and sampling details are found in the technical memo by Hahn and Associates, Inc., 2007 (Photo 13).

Former Wet Scrubber Ponds: Approximately 1,015 tons of Persistent Dangerous Waste PAH-contaminated soil were shipped to the CWMNW facility in Arlington, Oregon between February 8 and February 25, 2008. Approximately 1,364 tons of low-level PAH-contaminated soil was shipped to the Hillsboro Landfill. Analysis of 24 confirmation soil samples had fluoride concentrations between 114 and 1,680 mg/kg, below the cleanup level. Analysis of 24 confirmation soil samples detected total PCBs up to 0.14 mg/kg, below the cleanup level of 1 mg/kg. Analysis of 24 confirmation soil samples did not detect individual PAHs above cleanup levels. Carcinogenic PAHs were found at a maximum of 17.2 mg/kg on a TEF adjusted basis, below the MTCA Method C soil cleanup level of 18 mg/kg.

Transformer/Rectifier System: Twenty-three pad transformer units were subject to a Self-Implementing On-Site PCB cleanup which de-energized, disconnected, removed, and salvaged them off-site. Verification laboratory sampling and analysis of soil at the transformer units did not detect mineral oil (diesel and oil-range TPH) or PCBs above MTCA Method A Industrial soil cleanup levels (Photo 14).

At the Rectifier Station area, a total of 734 tons of material greater than 50 ppm PCBs were shipped to CWMNW. Approximately 8,824 tons of waste containing less than 50 ppm was shipped to the Hillsboro Landfill as a Special Waste. Confirmational soil sampling results were all below the MTCA Method A Cleanup level of 1 ppm. Final confirmational soil sampling for mineral oil contamination detected a maximum concentration of 77.7 ppm, below the MTCA Method A cleanup level of 4,000 ppm. Approximately 970 tons of concrete containing less than 1 ppm PCB were crushed and mixed with other facility crushed concrete and used as general site fill material.

7.0 Other Remediation Activities

During the facility demolition activities, a number of areas were identified and remediated. These areas were impacted by historical plant operations. The emission control system used alumina ore as a medium to collect hydrogen fluoride gases from the primary reduction plan. This fluoride-enriched alumina ore was found along the rail area near the ore silos. This area was delineated and remediated. Coal tar pitch was found around the fresh ore silos in the road bedding materials. The areas with the coal tar pitch were delineated and remediated.

The carbon storage building stored calcined coke and coal tar pitch. Handling of these materials during the reduction plant's historical operations resulted in deposition on surrounding soils. These areas were delineated and remediated. All confirmation soil samples met Site goals for PAHs, with total PAHs of less than 18 mg/kg.

Fluoride impacted soils were delineated along the railroad track from Building 36 to near the raised conveyor transfer tower. Approximately 2,095 tons of soils were excavated and stockpiled for off-site disposal. Confirmation soil samples were collected prior to grading and confirmed the remedial action met Site cleanup levels.

Two aboveground storage tanks (ASTs) were historically filled with fuel oil from a dock in the Columbia River. While the ASTs were removed years ago, the foundations, made of carbon

plant brick and residues, were characterized and found to exceed cleanup levels for PAHs. The bricks were removed and used as fill material for the dike. All confirmation soil samples met site cleanup levels for PAHs. Fuel oil remaining in the AST pipeline was removed for recycling and the pipeline was then removed. Impacted soil was removed and stockpiled for off-site disposal. All confirmation soil samples met Site cleanup levels for TPH.

Building 67 was located on Alcoa property, to the south of the Evergreen coke and pitch storage building. Coke and pitch contamination was present in the soil on the north and west side of Building 67. The soil was excavated and confirmation soil samples met cleanup levels for PAHs.

Coal tar pitch was found near the alumina ore silos in several locations. The excavated soils were stockpiled with Subtitle C soils for off-site disposal. Confirmation soil samples were below cleanup levels for PAHs.

The reduction plant originally used Bunker C fuel in the carbon bake furnaces. The aboveground storage tanks were removed years ago, but the foundations and underground piping system were left in place. This system was removed and impacted soils were remediated.

Historically, ACPC used settling lagoons for soluble oils on the east side of the facility. This area was remediated during the property transfer to PUD. During demolition activities, the underground pipeline that led to the lagoons was identified. The piping was removed and impacted soils were remediated. The soil was excavated and confirmation soil samples met cleanup levels for TPH and PCBs.

Carbon plant materials, such as anodes and coke, were identified on the north side of the soluble oil area. These materials were delineated, excavated, and disposed of off-site.

7.1 Facility Demolition

The Site's ACPC/Vanexco facility contained 16 single story buildings that were constructed between 1949 and 1967. PCBs were used in the Extrusion Plant's and Rod Mill's operational fluid. The structure, siding, ceiling, concrete, and some soil in these buildings were contaminated. Remediation began in the 1990s to clean up some of the PCB contamination from the concrete and soil. The concrete floors were scarified and PCBs were successfully removed from the surfaces. The surfaces of pits and trenches were washed with solvent, bringing the surfaces' PCB concentrations below the cleanup level. The pits and trenches were then filled with flowable concrete or gravel and capped with asphalt. Four areas were excavated to remove PCB-impacted soil, but residual impacted soil was left in two of the excavations. These areas were capped and maintained in accordance with Consent Decree 95-2-03268-4.

The buildings associated with the Cable Mill were demolished and soils under the concrete slabs were characterized in place and remediated if site cleanup levels were not met.

The electrical plant substation (EPSS) associated with the ACPC/Vanexco facility was demolished and soil remediated in the area. An additional small electrical yard located west of ACPC was demolished and soils were remediated.

The area around and under building 430, the UST that was previously removed, and associated underground piping were demolished and the soil was remediated.

The storm and sanitary sewer system associated with the ACPC/Vanexco facility was removed or cleaned. In situ characterization of PCBs was conducted prior to beginning work on the sewer system. Sewers that were removed were properly disposed of off-site.

7.2 Confirmational Groundwater Monitoring

Chemicals of concern in groundwater at the Site are free cyanide, fluoride, total organic carbon, total organic halides, polycyclic aromatic hydrocarbons, polychlorinated biphenyls, and volatile organic compounds. Monitoring wells are screened in the shallow, intermediate, deep, and aquifer zones. Eight monitoring wells are screened in the shallow zone; 13 wells are constructed with screened intervals in the intermediate saturated zone; 13 wells are constructed with screened intervals in the deep saturated zone; and 11 wells are constructed with screened intervals intercepting the aquifer saturated zone. Changes to the frequency of monitoring as well as monitoring well abandonment and replacement have occurred. Post cleanup confirmational groundwater monitoring demonstrates that natural attenuation is occurring (Table 4).

8.0 Restrictive Covenant

8.1 Alcoa Restrictive Covenant

A restrictive covenant was recorded on March 26, 2009 by Alcoa describing the condition of the property, declaring that a cleanup was completed at the Site, restricting the disturbance of upland caps, prohibiting the modification of the caps without the prior written approval of Ecology, and limiting the Site to industrial uses. The restrictive covenant also controls and limits extraction of groundwater from the Site within the Crowley Parcel Area of Concern and the fluoride-bearing groundwater surrounding the SPL Storage Area not covered by previously recorded restrictive covenants. In addition, the restrictive covenant requires owners of the property to notify all lessees or property purchasers of the restrictions on the use of the properties. Finally, the restrictive covenant requires the owners of the property to make provisions for continued monitoring and operation and maintenance of the remedial action prior to conveying title, easement, lease or other interest in the Site.

8.2 City of Vancouver Conservation Covenant

On April 22, 1997, the City of Vancouver recorded a Conservation Covenant to ensure certain wetlands and streams, and their associated buffer zones, will be maintained in their natural state, as follows:

1. Owners are the sole and exclusive owners of the following described property in the City of Vancouver, Clark County, state of Washington: located in Sections 19 and 20, Township 2 North, Range 1 East, of the Willamette Meridian.
2. It is the purpose of this covenant to require that certain wetland and stream buffer areas be maintained in natural state in order to preserve and protect the wetland ecosystem.
3. A physical demarcation along the upland boundary of the buffer area shall be erected and thereafter maintained. Such demarcation may consist of fencing, hedging, or other prominent physical marking approved by the City of Vancouver Director of Community Development or his/her designee. Any change to the type of demarcation shall similarly be approved by the Director of Community Development.

4. Consistent with the purpose of this covenant, wetlands, streams, and their associated buffer shall be left in a natural state. A wetlands permit must be approved by the City of Vancouver Director of Community Development, for the following activities within such areas: the construction of any structure; the removal, excavation, grading or dredging of soil, sand, gravel, minerals, organic matter or material; the draining, flooding, or disturbing of the water level or water table; or the destruction or alteration of vegetation through cleaning, harvesting, intentional burning, or planting or vegetation: Provided, however, that the foregoing shall not be construed to prohibit the pruning or removal of dead, dying, or diseased trees and shrubs, the harvesting of wild crops in a manner that is not injurious to natural production of such crops, or the planting of native vegetation which is indigenous to the area.
5. Nothing in this covenant shall be construed to provide for public use of or entry into the wetland or buffer areas shown on the above-reference site map. However, representatives and agents of the City of Vancouver are hereby authorized to make reasonable entry upon such land for purposes related to administering this covenant: provided that owners or their heirs, successors of assigns are given at least 24-hours advanced notice of any such entry.
6. The provisions of this covenant are enforceable in law or equity by the City of Vancouver and the Department of Ecology and its successors.
7. This covenant and all of its provisions, and each of them, shall be binding upon the owners and any and all of their heirs, assigns, and successors in interest into whose ownership the above-described real property may pass, and any obligations made herein by owners, shall be enforceable against all of their heirs, assigns and successors in interest into whose ownership the above described property may pass.

8.3 Evergreen Restrictive Environmental Covenant

On December 31, 2008 Evergreen recorded a restrictive covenant for the parcels that they previously owned. The Evergreen Restrictive Environmental Covenant (EC) imposes the following restrictions on the property:

Section 1:

a. The Property shall be used only for traditional industrial uses, as described in RCW 70.105D.020(14) and defined in and allowed under Clark County's zoning regulations codified in the Clark County Washington Unified Development Code as of the date of this Covenant.

b. The Ingot Plant Capped Area contains soil contaminated with PCBs and is located under the Cap. The Grantor shall not alter, modify, or remove the existing Cap in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology. Any activity on the Ingot Plant Capped Area that may (1) result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action or (2) create a new exposure pathway is prohibited. Some examples of activities that are prohibited on the Ingot plant Capped Area include: drilling, digging, placement of any objects or use of any equipment which

deforms or stresses the surface beyond its load bearing capability, piercing the surface with a rod, spike or similar item, bulldozing or earthwork.

Section 2: Any activity on the Ingot Plant Capped Area that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

Section 3: Any activity on the Ingot Plant Capped Area that may (1) result in the release or exposure to the environment of a hazardous substance that remains on the Ingot Plant Capped Area as part of the Remedial Action or (2) create a new exposure pathway is prohibited without prior written approval from Ecology.

Section 4: The owner must give thirty (30) days advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 5: The Owner must restrict leases to uses and activities consistent with the Covenant and notify all lessees of the restrictions on the use of the Property.

Section 6: The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Covenant. Ecology may approve any inconsistent use only after public notice and comment.

Section 7: The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, to determine compliance with this Covenant, and to inspect records that are related to the Remedial Action.

Section 8: The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this EC shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

The Restrictive Covenants are available in Ecology's files and at the Clark County Assessor's Office.

9.0 Periodic Review

9.1 Effectiveness of completed cleanup actions

Source control activities were completed in 2004 including constructing an engineered cap on the East Landfill and shoreline stabilization, which prevents contact with the hazardous substances contained within the landfill. For the East Landfill AOC, the soil continues to comply with cleanup standards and is protective of human and ecological health since the engineered cap remains in place. Institutional controls continue to ensure the long-term integrity of the landfill cap.

The results of groundwater and TZW monitoring of TCE and other volatile organic compounds since the completion of source control measures demonstrates that the East Landfill waste is no

longer a significant source of contamination to groundwater and surface water and the concentrations and mass of TCE in groundwater is reduced.

Groundwater and TZW monitoring also indicate that site-wide residual TCE is degrading to vinyl chloride and then to non-toxic chemicals, and concentrations of fluoride continue to decrease. Concentrations of TCE in groundwater have been significantly reduced and continue to decline (Table 13.3). Natural attenuation of contaminants will continue to be monitored over the restoration timeframe necessary to meet groundwater cleanup standards at the Site.

9.2 New Scientific Information for Individual Hazardous Substances for Mixtures Present at the Site

There is no new relevant scientific information for hazardous substances remaining at the Site.

9.3 New Applicable State and Federal Laws for Hazardous Substances Present at the Site

MTCA Methods A and C industrial soil cleanup levels for COCs at the Site have not changed since the Remedial Actions were conducted at the Site.

9.4 Current and Projected Site Use

The area is zoned as industrial and portions of the property are currently occupied by a metal recycling facility with an office building. Portions of the property are covered with a low permeability composite asphalt cap. This use is not likely to have a negative impact on the risk posed by hazardous substances contained at the Site. There are no projected changes in the property use.

9.5 Availability and Practicability of Higher Preference Technologies

The remedy implemented included the excavation and disposal of a majority of contaminated soils and containment of remaining soils/hazardous substances with long term groundwater monitoring. The implemented remedy continues to be protective of human health and the environment. While higher preference cleanup technologies may be available, they are still not practicable at this Site.

9.6 Availability of Improved Analytical Techniques to Evaluate Compliance with Cleanup Levels

The analytical methods used at the time of the remedial actions were capable of detection below Site cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

10.0 Conclusions

- The cleanup actions completed at the Alcoa Vancouver Site appear to be protective of human health and the environment. Soil with contamination above cleanup levels was removed from almost all Evergreen and Alcoa sites during remedial action. Remaining contaminated soil is capped and groundwater monitoring will continue until cleanup standards are achieved.

- Soil cleanup levels have not been met everywhere at the Site; however, under WAC 173-340-740(6) (d), the cleanup action could comply with cleanup standards if the long-term integrity of the containment system is ensured and the requirements for containment technologies in WAC 173-340-360(8) have been met.
- The results of groundwater investigation and post cleanup confirmational groundwater monitoring and TZW monitoring continue to demonstrate that natural attenuation of contaminants is occurring. The post cleanup concentrations are decreasing and there is a restriction on the groundwater use at the Site (Table 13.3).
- Restrictive environmental covenants for the property are in place and will be effective in protecting the public health from exposure to any remaining hazardous substances and protecting the integrity of the cleanup action.

Based on this review, Ecology has determined that the remedial actions conducted at the Site continue to be protective of human health and the environment. The requirements of the Restrictive Covenants are being satisfactorily followed and no additional remedial actions are required at this time. It is the property owner's responsibility to continue to inspect the Site to assure that the integrity of the surface covers is maintained.

10.1 Next Review

The next review for the Site will be scheduled five years from the date of this periodic review. In the event that additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years from the completion of those activities.

11.0 References

Anchor Environmental, LLC. 2008. Remedial Investigation/Feasibility Study, Alcoa/Evergreen Vancouver Site, dated September 2008.

Anchor Environmental, LLC. 2008. Cleanup Action Plan and Schedule, Former Alcoa Vancouver Site, dated September 2008.

Anchor QEA, LLC. 2009. Project Completion Report, Alcoa/Evergreen Vancouver Site, Dated December 2009.

Washington State Department of Ecology (Ecology). Amended Consent Decree No. 09-2-00247-2, Former Alcoa Vancouver Site, dated February 28, 2009.

Washington State Department of Ecology (Ecology). 2007. Enforcement Order DE 4931 in the matter of remedial action by Evergreen Aluminum LLC.

Washington State Department of Ecology (Ecology). 2008. Enforcement Order DE 5660 in the matter of remedial action by Evergreen Aluminum LLC.

Washington State Department of Ecology (Ecology). 2003. Agreed Order No. DE 5737 in the matter of remedial action by Alcoa, Inc.

Bergman Associates. 2006. Final Report for Remediation of the North and North 2 Landfills and East Landfill cap Construction Projects., dated February 15, 2006 and revised February 12, 2007.

SLR International Corp. 2008. Draft Focused Remedial Investigation and Feasibility Study Former Columbia Marine Lines Site. February 19, 2008.

SLR International Corp. 2007. Proposed Cleanup Action Plan Former Columbia Marine Lines Site. November 2007.

Bridgewater Group, Inc. 2008. Cleanup Verification Report Evergreen Aluminum, LLC. October 2008.

Bridgewater Group, Inc. 2008. Self-Implementing Onsite Cleanup and PCB Removal Report Evergreen Aluminum, LLC. April 2008.

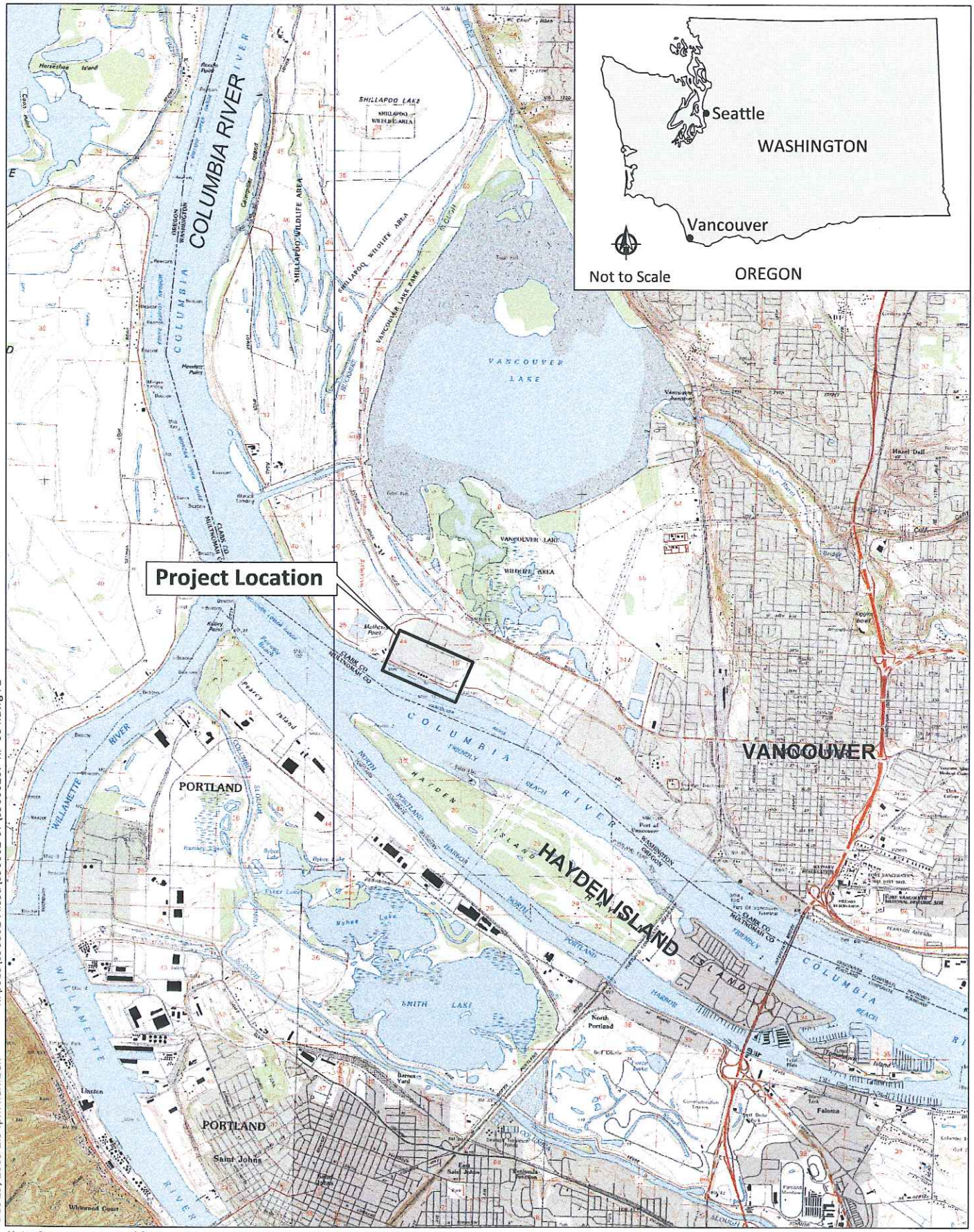
Hahn and Associates, Inc. 2007 Technical Memorandum: Carbon Bake Underdrain and Furnace Brick Characterization, Evergreen Aluminum Facility, September 2007.

Anchor QEA, LLC. 2015. Post Source Control Monitoring Report, March 2015.

Department of Ecology, Site Visit, March 12, 2015.

12.0 Appendices

12.1 Figures

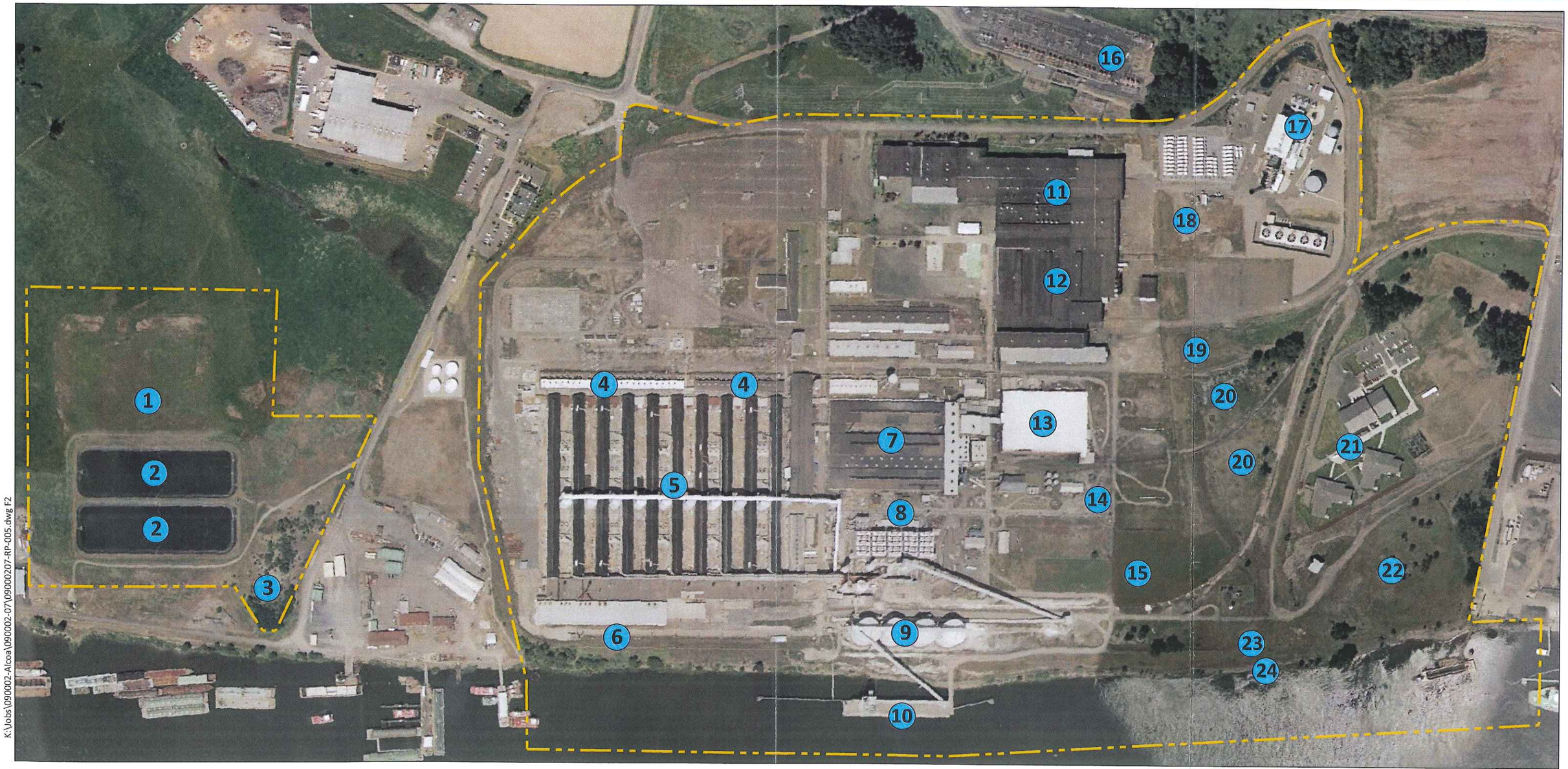


Note: Base map prepared from Terrain Navigator Pro USGS 7.5 minute quadrangle maps of Linnton, Sauvie Island, and Vancouver, Washington, and Portland, Oregon.

ANCHOR QEA

0 1
Scale in Miles

Figure 1
Vicinity Map
Project Completion Report
Alcoa/Evergreen Vancouver Site



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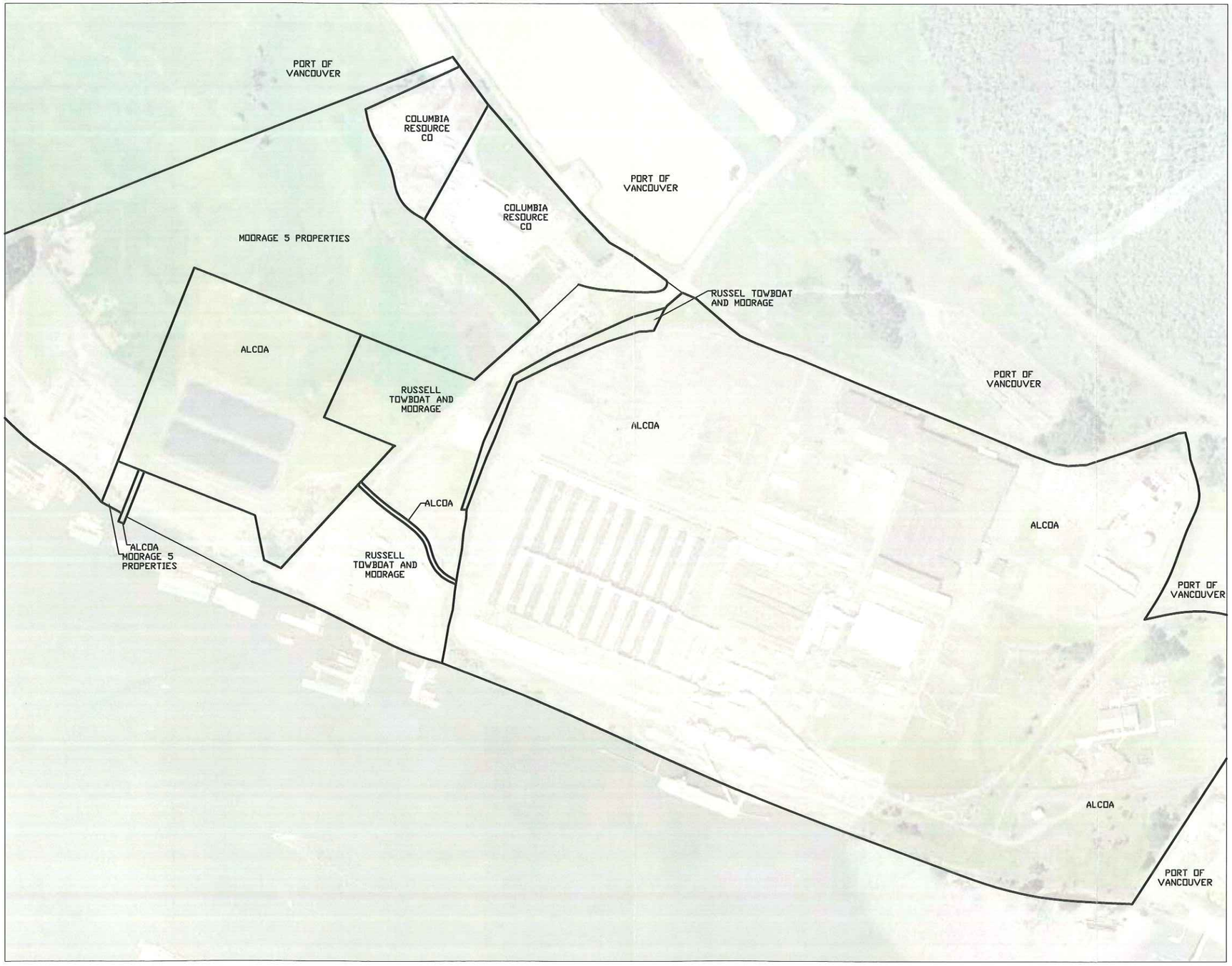
Dec 14, 2009 9:20am heriksen

1	Sludge Pond	7	Carbon Plant	13	Carbon Storage	19	Soluble Oil Area		Site Boundary
2	Stormwater Lagoons	8	Carbon Plant Emission Control System	14	Scrap Metal Recycling Area	20	North Landfills		
3	Crowley Site	9	Alumina and Raw Material Handling	15	SPL Storage Area	21	Northeast Parcel (Clark County Jail)		
4	Transformer/Rectifier Yards	10	Dock	16	Bonneville Power Station	22	East Landfill		
5	Potlines	11	Vanexco/Rod Mill Facilities	17	Clark County Public Utility	23	South Bank Area		
6	Dike UST	12	ACPC Facilities	18	Hydraulic Oil Lagoons	24	Clark County PUD Outfall		

0 400
Scale in Feet

ANCHOR QEA

Figure 2
Site Boundaries and Historical Layout
Project Completion Report
Alcoa/Evergreen Vancouver Site



N

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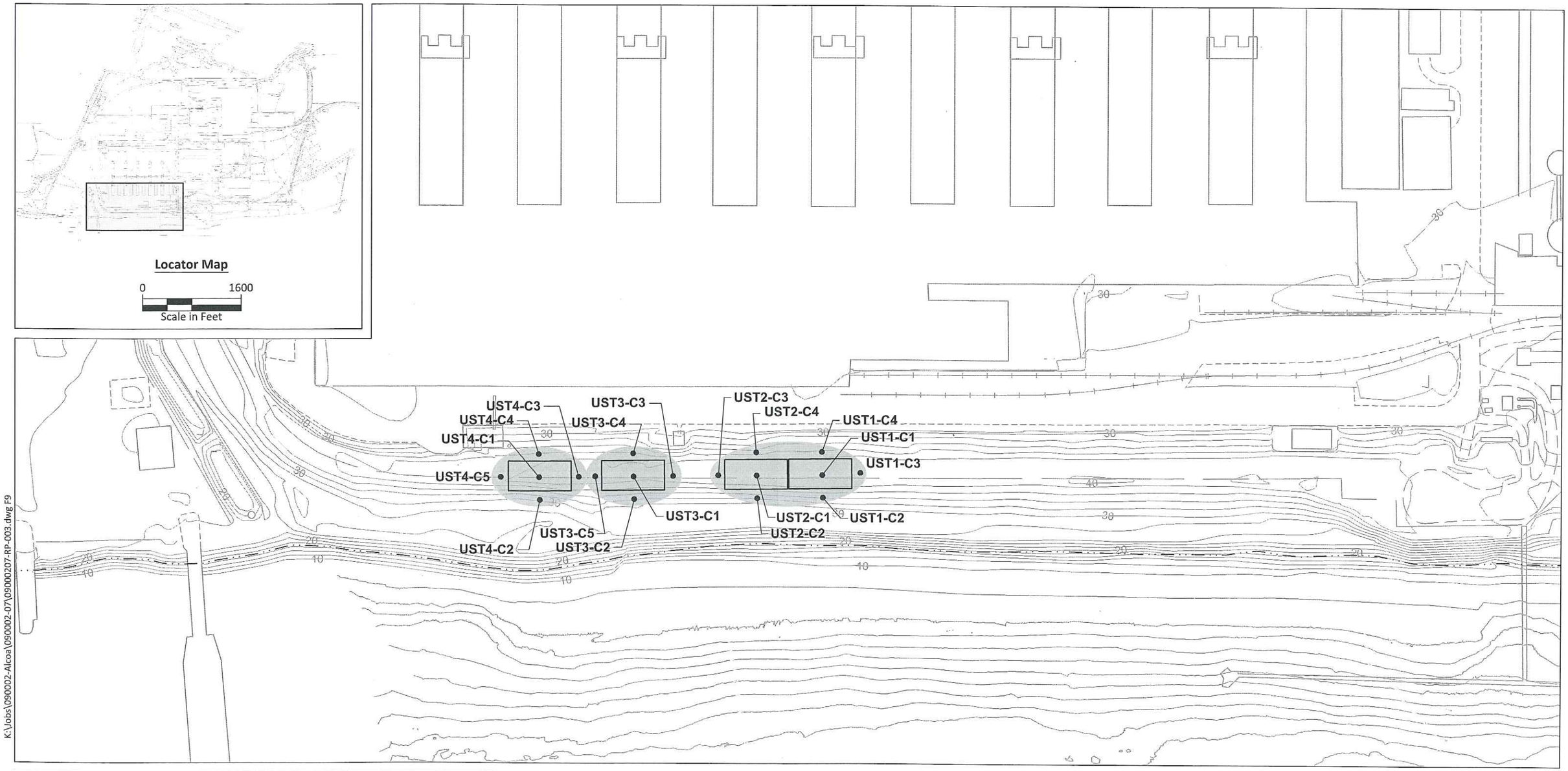
DATE 02/08
DWN. EMG
APPR. _____
REVIS. _____
PROJECT NO.
008.0205.00007

Figure 3
FORMER COLUMBIA MARINE LINES FACILITY
6305 LOWER RIVER ROAD
VANCOUVER, WASHINGTON
SITE VICINITY MAP



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Dec 15, 2009 3:50pm heriksen

HORIZONTAL DATUM: Washington State Plane - South Zone (NAD 83) U.S. Survey Feet.
VERTICAL DATUM: NGVD29.
TOPOGRAPHIC SURVEY: Orion GPS dated November 2007.
BATHYMETRIC SURVEY: ETRAC dated October 2008.

LEGEND:

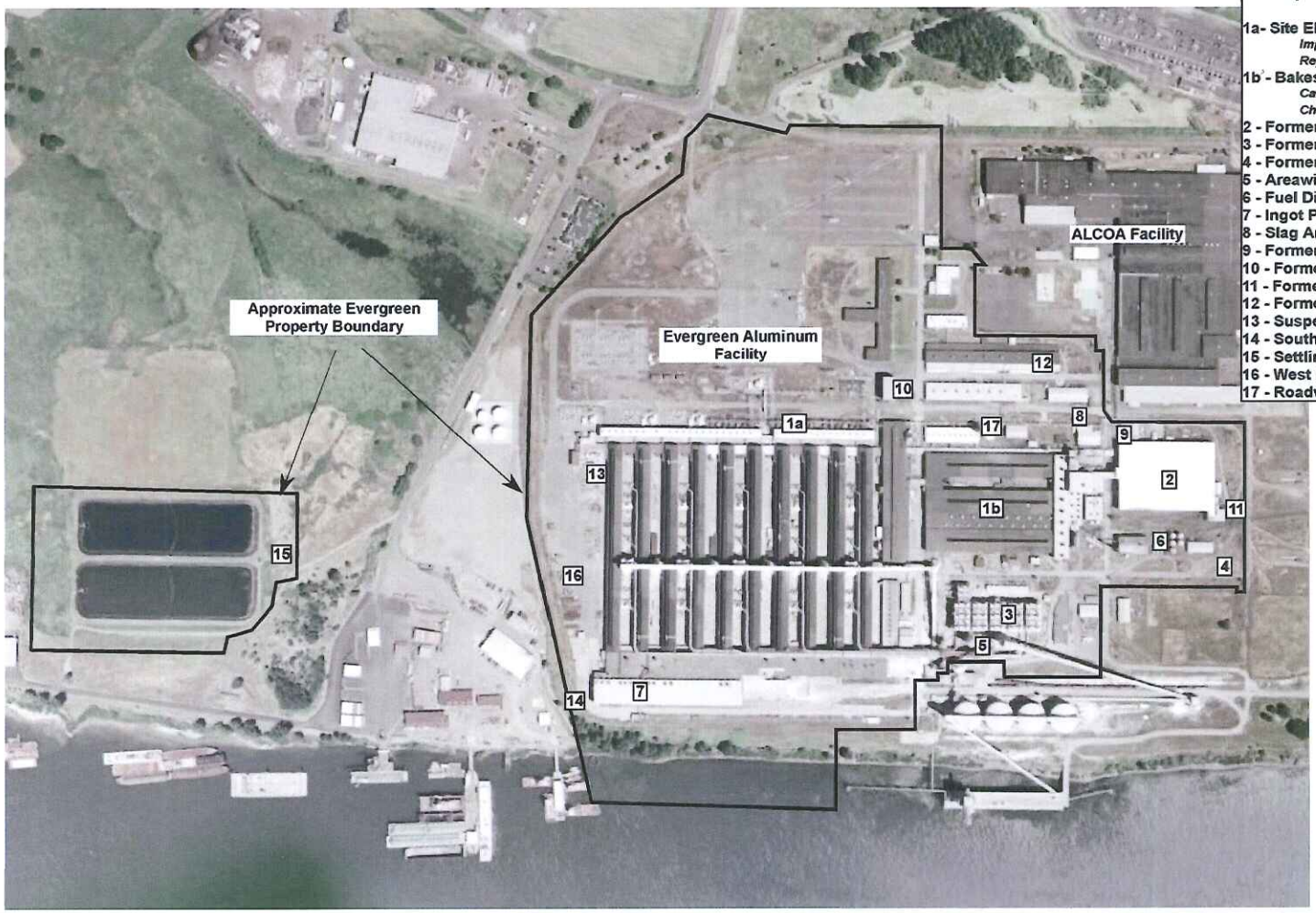
UST4-C5 ● Sample Location and Identification

Approximate Extent of Excavation

0 100
Scale in Feet

ANCHOR QEA

Figure 4
Dike UST Excavation and Sample Locations
Project Completion Report
Alcoa/Evergreen Vancouver Site



Cleanup Verification Report Section Reference:

1a- Site Electrical Systems (see April 2008 *Self-Implementing Onsite Cleanup and PCB Removal Report*)
1b' - Bakes (see September 2007 *Technical Memorandum: Carbon Bake Underdrain and Furnace Brick Characterization*)
2 - Former Carbon Storage
3 - Former Wet Scrubber Ponds and Clarifier
4 - Former Scrap Metal Recycling
5 - Areawide Fluoride
6 - Fuel Distribution Systems
7 - Ingot Plant
8 - Slag Area
9 - Former Paint Shop
10 - Former Transformer Service Building
11 - Former Rail Car Unloading Area
12 - Former Maintenance Shop
13 - Suspect RAI Storage Area
14 - Southwest Flood Control Dike
15 - Settling Pond Cleaning Staging Area
16 - West Dock
17 - Roadway Aprons

LEGEND

Approximate Property

0 200 400 800

Approximate Scale: 1"=400'

Base Maps:
Vanalco, Inc (April 2000) (DWG A-300001)
Google Earth (2008)

NORTH

Evergreen Aluminum LLC

Figure 5
Facility Areas of Concern

Evergreen Aluminum
5701 Lower River Road
Vancouver, Washington

Project No. 0007129.00 October 2008

Monitoring Well

Production Well

Gate

East Landfill

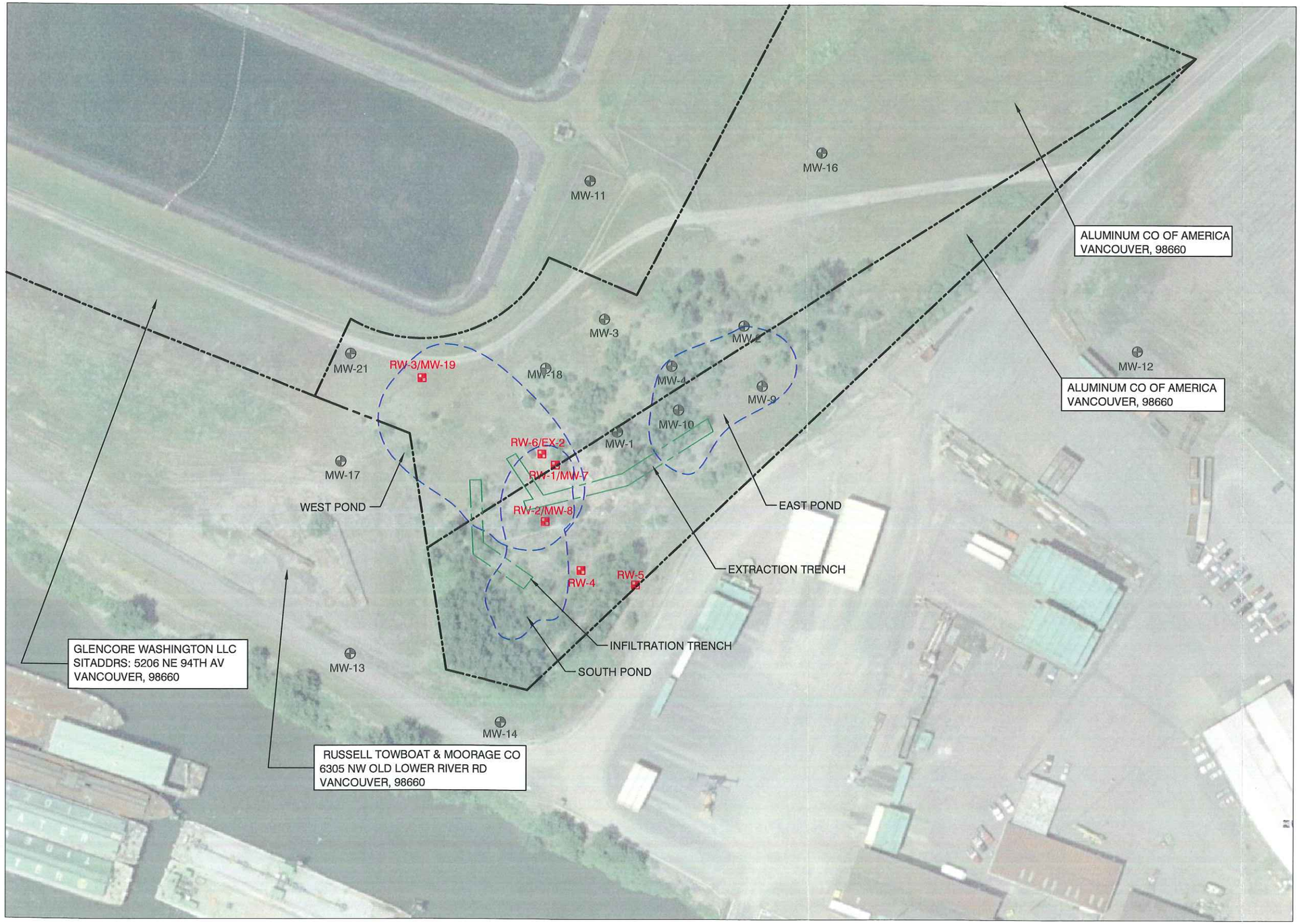
North Landfill

N

0 100 200

Approximate Scale in Feet

Figure 6
Monitoring Well Location Map
ALCOA Vancouver Site
Vancouver, WA



LEGEND

- GROUNDWATER MONITORING WELL
- EXTRACTION WELL
- APPROXIMATE PROPERTY LINES
- HISTORICAL EXTENTS OF PONDS

NOTES:

EXTENT OF EAST POND FROM 1971 AND 1980 AERIAL PHOTOGRAPHS

EXTENT OF WEST POND FROM HISTORICAL SITE TOPOGRAPHIC MAP AND 1968 AERIAL PHOTOGRAPH

EXTENT OF SOUTH POND FROM 1963 AND 1964 AERIAL PHOTOGRAPHS

N

0 100 200

SCALE IN FEET

NOTE:PROPERTY LINES ARE APPROXIMATE. PROPERTY LINES AND OWNERSHIP INFORMATION ARE BASED ON INFORMATION AVAILABLE ON THE CLARK COUNTY INTERNET WEB SITE.

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DATE 07/07
DWN. EMG
APPR. ____
REVIS. ____
PROJECT NO.
008.0205.00007

Figure 7
FORMER COLUMBIA MARINE LINES FACILITY
6305 LOWER RIVER ROAD
VANCOUVER, WASHINGTON
SITE PLAN

13.0 Tables

13.1 Evergreen COCs

Table 1-3
Summary of Verification Sampling and Analysis
Contaminants of Concern (COCs)

Area Identified In Order	Contaminant of Concern (COC)
Carbon Storage Area	PAHs
Scrap Metal Recycling	Diesel and oil-range TPH, PCBs, fluoride, total priority pollutant (13) metals
Carbon Bakes	No COIs exceeded screening levels
Former Wet Scrubber Clarifier and Ponds	PAHs, fluoride, PCBs
Transformer/Rectifier System	TPH (as mineral oil) and PCBs

13.2 Evergreen Cleanup Levels

All verification sampling activities were conducted in accordance with the above-referenced plans. Any deviations to these plans are discussed in the following sections.

Table 1-4
Summary of Soil Contaminants of Concern (COC), Reference Level Basis, and Cleanup Level

COC	Reference Level Basis	Cleanup Level (mg/kg)
Carcinogenic PAHs[1]	Method C (standard formula value)	18
Non-carcinogenic PAHs	Method C (standard formula value)	varies
Diesel and Oil-Range TPH	Method A Industrial (standard formula value)	2,000
Mineral oil TPH	Method A Industrial (standard formula value)	4,000
PCBs[2]	Method C downward adjusted to Method A for Leaching to Groundwater	10
Total (Bellack) Fluoride	Method C downward adjusted to Site Specific 3-Phase Model for Leaching to Groundwater	8,500[3]
Total Priority Pollutant (13) Metals	Higher of either Method C or Natural Background Concentration[4] for Direct contact; compared to Method A to pre-screen for Leaching to Groundwater.	Varies
Cyanide	Method C for Direct Contact; compared to Method B for a conservative down-ward adjusted Direct Contact value	70,000/1,600
Volatile Aromatics (BTEX)	Method C for Direct Contact; pre-screen to Method A for Leaching to Groundwater	varies

Note:
BTEX = benzene, toluene, ethylbenzene, xylene
TPH = total petroleum hydrocarbons

[1] Cleanup level developed for carcinogenic PAHs based on MTCA TEF procedure.
[2] Washington MTCA Method A Soil Cleanup Levels for Industrial Land Uses (WAC 173-340-900; Table 745-1), with engineering control. A cleanup level of 1 mg/kg was used in areas designated for unrestricted use (see WAC 173-340-900, Table 740-1).
[3] The site-specific Remediation Level (REL) is 8,500 mg/kg based on the 3-Phase Model completed prior to the final RI/FS. The final RI/FS REL for fluoride is 9,000 mg/kg.
[4] Ecology *Natural Background Soil Metals Concentrations in Washington State* (October 1994), Clark County.

13.3 Groundwater Monitoring Summary

Detected Volatile Organic Compounds in Groundwater

Sample Location	Date Sampled	Acetone ug/l[a]	Benzene ug/l	Carbon Disulfide ug/l	Carbon Tetrachloride ug/l	Chloroethane ug/l	Chloroform ug/l	Cymene (P-Isopropyltoluene) ug/l	1,1-DCA[e] ug/l	1,1-DCE[b] ug/l	cis-1,2-DCE[c] ug/l	trans-1,2-DCE[d] ug/l	1,2-DCA[e] ug/l	Isopropyl Benzene ug/l	Methyl Ethyl Ketone ug/l	Methyl Isobutyl Ketone ug/l	Naphthalene ug/l	Toluene ug/l	1,1,1-TCA[f] ug/l	1,1,2-TCA[g] ug/l	TCE[h] ug/l	Vinyl Chloride ug/l	m,p-Xylene ug/l	o-Xylene ug/l
North and North 2 Landfill Area																								
MW-47-I	6/1/2009	---	1.0 U[k]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-I	8/28/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-I	11/10/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	**1.6**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-I	2/25/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-I	6/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-I	9/22/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-I	11/11/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-I	2/28/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-I	6/20/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-I	8/29/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-I	12/12/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-I	2/2/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-I	4/17/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.21	2.0 U	1.0 U
MW-47-I	9/24/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-I	12/20/2012	12.5 U	0.1 U	0.5 U	0.2 U	0.2 U	0.5 U	0.1 U	0.1 U	0.2 U	0.085 U	0.2 U	0.4 U	0.1 U	2.0 U	2.0 U	0.1 U	0.1 U	0.2 U	0.2 U	0.083 U	0.16 U	0.1 U	0.1 U
MW-47-I	3/21/2013	10.0 U	0.1 U	0.5 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.085 U	0.2 U	0.4 U	0.1 U	2.5 U	2.5 U	0.1 U	0.1 U	0.2 U	0.2 U	0.083 U	0.16 U		
MW-47-I	6/20/2013	10.0 U	0.2 U	**0.4 J**	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U		
MW-47-I	9/19/2013	10.0 U	0.2 U	0.2 U	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U	0.5 U	0.2 U
MW-47-I	12/5/2013	10.0 U	0.2 U	**0.3 J**	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U	0.5 U	0.2 U
MW-47-D	6/1/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-D	8/26/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-D	11/10/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-D-Dup[i]	11/10/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.6**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-D	2/25/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-D	6/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-D	9/22/2010	**6.5**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-D	11/11/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.3**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-D	2/28/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-D	6/20/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-D	8/29/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-D	12/12/2011	**5.3**	1.0 U	**3.0**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-D	2/2/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-D	4/17/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.28	2.0 U	1.0 U
MW-47-D	9/24/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-D	12/20/2012	12.5 U	0.1 U	0.5 U	0.2 U	0.2 U	0.5 U	0.1 U	0.1 U	0.2 U	0.085 U	0.2 U	0.4 U	0.1 U	2.0 U	2.0 U	0.1 U	0.1 U	0.2 U	0.2 U	0.083 U	0.16 U	0.1 U	0.1 U
MW-47-D	3/21/2013	10.0 U	0.1 U	0.5 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.085 U	0.2 U	0.4 U	0.1 U	2.5 U	2.5 U	0.1 U	0.1 U	0.2 U	0.2 U	0.083 U	0.16 U		
MW-47-D	6/20/2013	10.0 U	0.2 U	0.2 U	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U		
MW-47-D	9/19/2013	10.0 U	0.2 U	0.2 U	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U	0.5 U	0.2 U
MW-47-D	12/5/2013	10.0 U	0.2 U	**0.4 J**	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	**0.008 J**	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U	0.5 U	0.2 U
MW-47-A	6/1/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**123**	**3.0**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.4**	**5.6**	2.0 U	1.0 U
MW-47-A	8/26/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**130**	**3.4**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.3**	**6.7**	2.0 U	1.0 U
MW-47-A	11/10/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**51.7**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.41**	2.0 U	1.0 U
MW-47-A	2/25/2010	5.0 U	1.0 U	**3.1**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**70.6**	**3.0**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.5**	**0.59**	2.0 U	1.0 U
MW-47-A	6/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**47.3**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.28**	2.0 U	1.0 U
MW-47-A	9/22/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**95.5**	**2.0**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.1**	**0.45**	2.0 U	1.0 U
MW-47-A	11/11/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**67.2**	**1.4**	1.0 U	1.0 U	5.0 U	5.0 U	0.020 U	1.0 U	1.0 U	1.0 U	**1.5**	**0.36**	2.0 U	1.0 U
MW-47-A	2/28/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**77.7**	**2.6**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.5**	**1.2**	2.0 U	1.0 U
MW-47-A	6/20/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**73.7**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.0**	**0.28**	2.0 U	1.0 U
MW-47-A	8/29/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**92.7**	**1.3**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.2**	**0.38**	2.0 U	1.0 U
MW-47-A	12/12/2011	5.0 U	1.0 U	**2.0**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**43.8**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.020 U	1.0 U	1.0 U	1.0 U	1.0 U	0.2 U	2.0 U	1.0 U
MW-47-A	2/2/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**31.6**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.45**	2.0 U	1.0 U
MW-47-A	4/17/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**35.3**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-A	9/24/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**8.2**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-47-A	12/20/2012	12.5 U	0.1 U	0.5 U	0.2 U	0.2 U	0.5 U	0.1 U	0.1 U	0.2 U	**3.4**	0.2 U	0.4 U	0.1 U	2.0 U	2.0 U	0.1 U	0.1 U	0.2 U	0.2 U	0.083 U	0.16 U	0.1 U	0.1 U
MW-47-A	3/21/2013	10.0 U	0.1 U	0.5 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	**22.4**	0.2 U	0.4 U	0.1 U	2.5 U	2.5 U	0.1 U	0.1 U	0.2 U	0.2 U	**0.094 J**	0.16 U		
MW-47-A	6/20/2013	10.0 U	0.2 U	0.2 U	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	**2.9**	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U		
MW-47-A-Dup	6/20/2013	10.0 U	0.2 U	0.2 U	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	**2.7**	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U		
MW-47-A	9/19/2013	10.0 U	0.2 U	0.2 U	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	**1.5**	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U	0.5 U	0.2 U
MW-47-A	12/5/2013	10.0 U	0.2 U	**0.3 J**	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	**0.98 J**	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	**0.008 J**	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U	0.5 U	0.2 U
MW-48-I	6/1/2009	---	**1.5**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	**1.8**	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-I	8/26/2009	---	**1.7**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-I	11/10/2009	---	**1.5**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	**2.2**	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-I	2/25/2010	5.0 U	**1.9**	1.0 U	1.0 U	1.0 U	1.0 U	**1.7**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	**2.2**	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	**3.2**	**1.8**
MW-48-I	6/23/2010	5.0 U	**1.9**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-I	9/22/2010	5.0 U	**1.5**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-I	11/11/2010	5.0 U	**1.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-I	3/3/2011	5.0 U	**1.5**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	**1.1**	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-I	6/21/2011	5.0 U	**1.0**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-I	9/27/2011	**5.1**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	**3.5**	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-I	12/12/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-I	2/3/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.83**	2.0 U	1.0 U
MW-48-I	4/18/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-I	9/25/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-I	12/20/2012	12.5 U	0.1 U	0.5 U	0.2 U	0.2 U	0.5 U	0.1 U	0.1 U	0.2 U	0.085 U	0.2 U	0.4 U	0.1 U	2.0 U	2.0 U	0.1 U	0.1 U	0.2 U	0.2 U	0.083 U	0.16 U	0.1 U	0.1 U
MW-48-I	3/20/2013	10.0 U	0.1 U	0.5 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.085 U	0.2 U	0.4 U	0.1 U	2.5 U	2.5 U	0.1 U	0.1 U	0.2 U	0.2 U	0.083 U	0.16 U		
MW-48-I	6/20/2013	10.0 U	0.2 U	0.2 U	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U		
MW-48-I	9/18/2013	10.0 U	0.2 U	0.2 U	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U	0.5 U	0.2 U
MW-48-I	12/5/2013	10.0 U	0.2 U	**0.3 J**	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	**0.008 J**	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U	0.5 U	0.2 U

Detected Volatile Organic Compounds in Groundwater

Sample Location	Date Sampled	Acetone ug/l[(i)]	Benzene ug/l	Carbon Disulfide ug/l	Carbon Tetrachloride ug/l	Chloroethane ug/l	Chloroform ug/l	Cymene (P-Isopropyltoluene) ug/l	1,1-DCA[(a)] ug/l	1,1-DCE[(b)] ug/l	cis-1,2-DCE[(c)] ug/l	trans-1,2-DCE[(d)] ug/l	1,2-DCA[(e)] ug/l	Isopropyl Benzene ug/l	Methyl Ethyl Ketone ug/l	Methyl Isobutyl Ketone ug/l	Naphthalene ug/l	Toluene ug/l	1,1,1-TCA[(f)] ug/l	1,1,2-TCA[(g)] ug/l	TCE[(h)] ug/l	Vinyl Chloride ug/l	m,p-Xylene ug/l	o-Xylene ug/l
MW-48-D	6/1/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-D	8/26/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-D	11/10/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-D	2/25/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-D	6/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-D	9/22/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-D	11/11/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.020 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-D	3/3/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-D	6/21/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-D	9/27/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.3**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-D-Dup	9/27/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.1**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.42**	2.0 U	1.0 U
MW-48-D	12/12/2011	**5.6**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.1**	1.0 U	1.0 U	5.0 U	5.0 U	10.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.21**	2.0 U	1.0 U
MW-48-D	2/1/2012	5.0 U	1.0 U	**1.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.6**	1.0 U	1.0 U	5.0 U	5.0 U	**1.5**	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-D	4/18/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-D	9/24/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-48-D	12/20/2012	13 U	0.062 U	**1.1**	0.16 U	0.22 U	0.5 U	0.086 U	0.11 U	0.19 U	**0.48 J**	0.15 U	0.37 U	0.076 U	2.0 U	2.0 U	0.068 U	0.2 J	0.19 U	0.15 U	0.083 U	0.16 U	**0.28 J**	0.1 U
MW-48-D	3/20/2013	10 U	0.062 U	0.5 U	0.16 U	0.22 U	0.14 U	0.086 U	0.11 U	0.19 U	**0.092 J**	0.15 U	0.37 U	0.076 U	2.5 U	2.5 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U		
MW-48-D	6/20/2013	10 U	**0.36 J**	**0.58 J**	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	**0.78 J**	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2.0 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 J		
MW-48-D	9/18/2013	**10 J**	**0.7 J**	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	**1.7**	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2.0 U	0.23 U	0.5 U	0.16 U	0.12 U	0.16 J	0.48 U	0.24 U
MW-48-D	12/5/2013	10 U	**0.26 J**	**0.49 J**	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	**0.42 J**	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	**0.025 J**	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-48-A	6/1/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**85.4**	**1.7**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.2**	**2.5**	2.0 U	1.0 U
MW-48-A	8/26/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**79.1**	**1.4**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**4.3**	2.0 U	1.0 U
MW-48-A	11/10/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**82.5**	**1.5**	1.0 U	1.0 U	5.0 U	5.0 U	0.027 U	1.0 U	1.0 U	1.0 U	**1.1**	**5.2**	2.0 U	1.0 U
MW-48-A	2/25/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**91.9**	**3.5**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.1**	**5.3**	2.0 U	1.0 U
MW-48-A	6/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**75.3**	**1.5**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.0**	**2.9**	2.0 U	1.0 U
MW-48-A	9/22/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**79.9**	**1.6**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.1**	**4.9**	2.0 U	1.0 U
MW-48-A	11/11/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.020 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-A	2/28/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-48-A	6/21/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**67.6**	**1.1**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.8**	2.0 U	1.0 U	
MW-48-A	9/27/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**9.2**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.61**	2.0 U	1.0 U	
MW-48-A	12/12/2011	**5.9**	1.0 U	**3.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**58.0**	**1.1**	1.0 U	1.0 U	5.0 U	5.0 U	10.0 U	1.0 U	1.0 U	1.0 U	**1.5**	**2.7**	2.0 U	1.0 U
MW-48-A	2/1/2012	5.0 U	1.0 U	**2.6**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**54.7**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.0**	**2.1**	2.0 U	1.0 U
MW-48-A	4/18/2012	5.0 U	1.0 U	**3.3**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**61.2**	**1.3**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.0**	**3.3**	2.0 U	1.0 U
MW-48-A	9/24/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**55.9**	**1.3**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.90**	2.0 U	1.0 U
MW-48-A	12/20/2012	12.5 U	0.1 U	0.5 U	0.2 U	0.2 U	0.5 U	0.1 U	0.1 U	0.2 U	**72.8**	**1.2**	0.4 U	0.1 U	2.0 U	2.0 U	0.1 U	0.1 U	0.2 U	0.2 U	**0.97 J**	**3.2**	0.1 U	0.1 U
MW-48-A	3/20/2013	10.0 U	0.1 U	0.5 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	**57.2**	**0.9 J**	0.4 U	0.1 U	2.5 U	2.5 U	0.1 U	0.1 U	0.2 U	0.2 U	**0.81 J**	**2.00**		
MW-48-A	6/20/2013	10.0 U	0.2 U	**0.3 J**	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	**61.2**	**0.9 J**	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	**0.71**	**2.70**		
MW-48-A	9/18/2013	21.3	0.2 U	0.2 U	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	**38.4**	**0.5 J**	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	**0.47**	**1.40**	0.5 U	0.2 U
MW-48-A	12/5/2013	10.0 U	0.2 U	**0.3 J**	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	**38.5**	**0.5 J**	0.2 U	0.5 U	2.5 U	2.5 U	**0.008 J**	0.2 U	0.5 U	0.2 U	**0.4**	**1.50**	0.5 U	0.2 U
East Landfill Area																								
MW-35-S	5/28/2009	NS [(m)]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35-S	8/25/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35-S	11/12/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35-S	2/23/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35-S	6/22/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35-S	9/20/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35-S	11/9/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35-S	3/1/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.4**	0.20 U	2.0 U	1.0 U
MW-35-S	6/21/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.2**	0.20 U	2.0 U	1.0 U
MW-35-S	12/15/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35-S	2/3/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35-S	4/17/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.4**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.4**	0.20 U	2.0 U	1.0 U
MW-35-S	9/26/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35-S	12/19/2012	12.5 U	0.062 U	0.5 U	0.16 U	0.22 U	0.5 U	0.086 U	0.11 U	0.19 U	0.085 U	0.15 U	0.37 U	0.076 U	2 U	2 U	0.068 U	0.077 U	0.19 U	0.15 U	**3.8**	0.16 U	0.11 U	0.1 U
MW-35-I	5/28/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**5.4**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**6.9**	0.20 U	2.0 U	1.0 U
MW-35-I	8/25/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**6.0**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**6.6**	0.20 U	2.0 U	1.0 U
MW-35-I	11/12/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-35-I	2/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**7.1**	**2.4**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**7.2**	0.20 U	2.0 U	1.0 U
MW-35-I	6/21/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**5.8**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**6.3**	0.20 U	2.0 U	1.0 U
MW-35-I	9/20/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**6.6**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**6.8**	0.20 U	2.0 U	1.0 U
MW-35-I	11/9/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**5.4**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**5.6**	0.20 U	2.0 U	1.0 U
MW-35-I	3/2/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**6.1**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**6.5**	0.20 U	2.0 U	1.0 U
MW-35-I	6/21/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**5.5**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**5.8**	0.20 U	2.0 U	1.0 U
MW-35-I	8/31/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.5**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**4.3**	0.20 U	2.0 U	1.0 U
MW-35-I	12/15/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**5.0**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	**4.8**	0.20 U	2.0 U	1.0 U
MW-35-I	2/3/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.6**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**4.0**	0.20 U	2.0 U	1.0 U
MW-35-I	4/17/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**5.1**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**5.5**	0.20 U	2.0 U	1.0 U
MW-35-I	9/26/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.5**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**4.4**	0.20 U	2.0 U	1.0 U
MW-35-I	12/19/2012	12.5 U	0.062 U	0.5 U	0.16 U	0.22 U	0.5 U	0.086 U	0.11 U	0.19 U	**3.5**	0.15 U	0.37 U	0.076 U	2 U	2 U	0.068 U	0.077 U	0.19 U	0.15 U	**3.6**	0.16 U	0.11 U	0.1 U
MW-35-I	3/21/2013	10 U	0.062 U	0.5 U	0.16 U	0.22 U	0.14 U	0.086 U	0.11 U	0.19 U	**3.6**	0.15 U	0.37 U	0.076 U	2.5 U	2.5 U	0.068 U	0.077 U	0.19 U	0.15 U	**3.8**	0.16 U		
MW-35-I	6/20/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.23 U	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	**0.58**	0.14 U		
MW-35-I	9/18/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	1.1	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	**1.5**	0.14 U	0.48 U	0.24 U
MW-35-I	12/5/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	**1.2**	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	**1.4**	0.14 U	0.48 U	0.24 U
MW-35-D	5/28/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**14.3**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-D	8/25/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**12.7**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-D	11/12/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**12.3**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-D	2/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.9**	**10.3**	**2.3**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-D	6/21/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**9.4**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-D	9/20/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**9.5**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U

Detected Volatile Organic Compounds in Groundwater

Sample Location	Date Sampled	Acetone ug/l[g]	Benzene ug/l	Carbon Disulfide ug/l	Carbon Tetrachloride ug/l	Chloroethane ug/l	Chloroform ug/l	Cymene (P-Isopropyltoluene) ug/l	1,1-DCA[a] ug/l	1,1-DCE[b] ug/l	cis-1,2-DCE[c] ug/l	trans-1,2-DCE[d] ug/l	1,2-DCA[e] ug/l	Isopropyl Benzene ug/l	Methyl Ethyl Ketone ug/l	Methyl Isobutyl Ketone ug/l	Naphthalene ug/l	Toluene ug/l	1,1,1-TCA[f] ug/l	1,1,2-TCA[g] ug/l	TCE[h] ug/l	Vinyl Chloride ug/l	m,p-Xylene ug/l	o-Xylene ug/l
MW-35-D	11/9/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	9.1	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-D	3/2/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	9.0	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-D	6/21/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	9.3	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-D	8/31/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.9	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-D	12/15/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.7	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-D	2/3/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.8	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-D	4/17/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.4	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-D	9/26/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.8	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-D	12/19/2012	12.5 U	0.062 U	0.5 U	0.16 U	0.22 U	0.5 U	0.086 U	0.11 U	0.19 U	6.3	0.15 U	0.37 U	0.076 U	2 U	2 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U	0.11 U	0.1 U
MW-35-D-Dup	12/19/2012	12.5 U	0.062 U	0.5 U	0.16 U	0.22 U	0.5 U	0.086 U	0.11 U	0.19 U	6.4	0.15 U	0.37 U	0.076 U	2 U	2 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U	0.11 U	0.1 U
MW-35-D	3/21/2013	10 U	0.062 U	0.5 U	0.16 U	0.22 U	0.14 U	0.086 U	0.11 U	0.19 U	0.65 J	0.15 U	0.37 U	0.076 U	2.5 U	2.5 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U		
MW-35-D	6/20/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	4.4	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U		
MW-35-D	9/18/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.9 J	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-35-D	12/5/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.23 U	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	0.0054 J	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-35-A	5/28/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-A	8/25/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-A	11/12/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.021 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-A	2/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-A	6/21/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-A	9/20/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-A	11/9/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-A	3/2/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-A	6/21/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-A	8/31/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-A	12/15/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-A	2/3/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.5	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-A	4/17/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-A	9/26/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-35-A	12/19/2012	12.5 U	0.062 U	0.5 U	0.16 U	0.22 U	0.5 U	0.086 U	0.11 U	0.19 U	0.085 U	0.15 U	0.37 U	0.076 U	2 U	2 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U	0.11 U	0.1 U
MW-35-A	3/21/2013	10 U	0.062 U	0.5 U	0.16 U	0.22 U	0.14 U	0.086 U	0.11 U	0.19 U	0.085 U	0.15 U	0.37 U	0.076 U	2.5 U	2.5 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U		
MW-35-A-Dup	3/21/2013	10 U	0.062 U	0.5 U	0.16 U	0.22 U	0.14 U	0.086 U	0.11 U	0.19 U	0.085 U	0.15 U	0.37 U	0.076 U	2.5 U	2.5 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U		
MW-35-A	6/20/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.23 U	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U		
MW-35-A	9/18/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.23 U	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-35-A-Dup	9/18/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.23 U	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-35-A	12/5/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.23 U	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	0.01 J	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-35-A-Dup	12/5/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.23 U	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2.0 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-41-S	5/28/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-S	8/25/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-S	11/12/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-S	2/23/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-S	6/22/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-S	9/20/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-S	11/9/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-S	3/1/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-S	6/21/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-S	12/15/2011	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-S	2/3/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-S	4/17/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-S	9/26/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-S	12/20/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-I	5/28/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-I	8/25/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-I	11/12/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-41-I	2/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-I	6/22/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-I	9/20/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-I	11/9/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-I	3/1/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-I	6/21/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-I	8/31/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-I	12/15/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-I	2/3/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-I	4/17/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	3.0	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-I	9/26/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-I	12/20/2012	12.5 U	0.1 U	0.5 U	0.2 U	0.2 U	0.5 U	0.1 U	0.1 U	0.2 U	0.085 U	0.2 U	0.4 U	0.1 U	2.0 U	2.0 U	0.1 U	0.1 U	0.2 U	0.2 U	0.083 U	0.16 U	0.1 U	0.1 U
MW-41-I	3/21/2013	10.0 U	0.1 U	0.5 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.085 U	0.2 U	0.4 U	0.1 U	2.5 U	2.5 U	0.1 U	0.1 U	0.2 U	0.2 U	0.083 U	0.16 U		
MW-41-I	6/20/2013	10.0 U	0.2 U	0.2 U	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U		
MW-41-I	9/18/2013	10.0 U	0.2 U	0.2 U	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U	0.5 U	0.2 U
MW-41-I	12/5/2013	10.0 U	0.2 U	0.2 U	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U	0.5 U	0.2 U
MW-41-D	5/28/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-D	8/25/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-D	11/10/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.028 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-D	2/24/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-D	6/22/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-D	9/20/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-D	11/9/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-D	3/1/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-D	6/21/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-D	8/31/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U

Detected Volatile Organic Compounds in Groundwater

Sample Location	Date Sampled	Acetone ug/l[(i)]	Benzene ug/l	Carbon Disulfide ug/l	Carbon Tetrachloride ug/l	Chloroethane ug/l	Chloroform ug/l	Cymene (P-Isopropyltoluene) ug/l	1,1-DCA[(a)] ug/l	1,1-DCE[(b)] ug/l	cis-1,2-DCE[(c)] ug/l	trans-1,2-DCE[(d)] ug/l	1,2-DCA[(e)] ug/l	Isopropyl Benzene ug/l	Methyl Ethyl Ketone ug/l	Methyl Isobutyl Ketone ug/l	Naphthalene ug/l	Toluene ug/l	1,1,1-TCA[(f)] ug/l	1,1,2-TCA[(g)] ug/l	TCE[(h)] ug/l	Vinyl Chloride ug/l	m,p-Xylene ug/l	o-Xylene ug/l
MW-41-D	12/15/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-D	2/3/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-D	4/17/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-D	9/26/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-41-D	12/20/2012	12.5 U	0.1 U	0.5 U	0.2 U	0.2 U	0.5 U	0.1 U	0.1 U	0.2 U	0.085 U	0.2 U	0.4 U	0.1 U	2.0 U	2.0 U	0.1 U	0.1 U	0.2 U	0.2 U	0.083 U	0.16 U	0.1 U	0.1 U
MW-41-D-Dup	12/20/2012	12.5 U	0.1 U	0.5 U	0.2 U	0.2 U	0.5 U	0.1 U	0.1 U	0.2 U	0.085 U	0.2 U	0.4 U	0.1 U	2.0 U	2.0 U	0.1 U	0.1 U	0.2 U	0.2 U	0.083 U	0.16 U	0.1 U	0.1 U
MW-41-D	3/21/2013	10.0 U	0.1 U	0.5 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.085 U	0.2 U	0.4 U	0.1 U	2.5 U	2.5 U	0.1 U	0.1 U	0.2 U	0.2 U	0.083 U	0.16 U		
MW-41-D	6/20/2013	10.0 U	0.2 U	0.2 U	0.3 U	0.5 U	0.3 U	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U		
MW-41-D	9/18/2013	10.0 U	0.2 U	0.2 U	0.3 U	0.5 U	0.8 J	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	2.0 U	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U	0.5 U	0.2 U
MW-41-D	12/5/2013	10.0 U	0.2 U	0.2 U	0.3 U	0.5 U	**0.4 J**	0.5 U	0.5 U	0.2 U	0.23 U	0.2 U	0.2 U	0.5 U	2.5 U	2.5 U	**0.008 J**	0.2 U	0.5 U	0.2 U	0.12 U	0.14 U	0.5 U	0.2 U
MW-46-I	5/29/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-I	8/25/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-I	11/11/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.020 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-I	2/24/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-I	6/22/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-I	9/21/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-I	11/10/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-I	3/3/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-I	6/20/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-I	8/31/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-I	12/15/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-I	2/1/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-I	4/20/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-I	9/25/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-I	12/18/2012	12.5 U	0.062 U	0.5 U	0.16 U	0.22 U	0.5 U	0.086 U	0.11 U	0.19 U	0.085 U	0.15 U	0.37 U	0.076 U	2 U	2 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U	0.11 U	0.1 U
MW-46-I	3/20/2013	10 U	0.062 U	0.5 U	0.16 U	0.22 U	0.14 U	0.086 U	0.11 U	0.19 U	0.085 U	0.15 U	0.37 U	0.076 U	2.5 U	2.5 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U		
MW-46-I	6/20/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.23 U	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U		
MW-46-I	9/19/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.23 U	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-46-I	12/3/2013	10 U	0.24 U	**0.62 J**	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.23 U	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-46-D	5/29/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.4**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D	8/25/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D	11/11/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.1**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.020 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D	2/24/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.7**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D	6/22/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.5**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D	9/21/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.6**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D	11/10/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.4**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D	3/3/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.1**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D	6/20/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.4**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D	8/31/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.0**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D	12/15/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.5**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D	2/1/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.4**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D	4/20/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.0**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D	9/25/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D-Dup	9/25/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-D	12/18/2012	12.5 U	0.062 U	0.5 U	0.16 U	0.22 U	0.5 U	0.086 U	0.11 U	0.19 U	0.085 U	0.15 U	0.37 U	0.076 U	2 U	2 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	**0.19 J**	0.11 U	0.1 U
MW-46-D	3/20/2013	10 U	0.062 U	0.5 U	0.16 U	0.22 U	0.14 U	0.086 U	0.11 U	0.19 U	0.085 U	0.15 U	0.37 U	0.076 U	2.5 U	2.5 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U		
MW-46-D-Dup	3/20/2013	10 U	0.062 U	0.5 U	0.16 U	0.22 U	0.14 U	0.086 U	0.11 U	0.19 U	0.085 U	0.15 U	0.37 U	0.076 U	2.5 U	2.5 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U		
MW-46-D	6/20/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.23 U	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U		
MW-46-D	9/19/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.23 U	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-46-D	12/3/2013	10 U	0.24 U	**0.35 J**	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.23 U	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-46-A	5/29/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-A	8/25/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-A	11/11/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.20**	2.0 U	1.0 U
MW-46-A	2/24/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-A	6/22/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-A	9/21/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-A	11/10/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-A	3/3/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-A	6/20/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-A	8/31/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-A	12/15/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-A	2/1/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-A	4/20/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-A	9/25/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-46-A	12/18/2012	12.5 U	0.062 U	0.5 U	0.16 U	0.22 U	0.5 U	0.086 U	0.11 U	0.19 U	1.6	0.15 U	0.37 U	0.076 U	2 U	2 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U	0.11 U	0.1 U
MW-46-A	3/20/2013	10 U	0.062 U	0.5 U	0.16 U	0.22 U	0.14 U	0.086 U	0.11 U	0.19 U	1.7	0.15 U	0.37 U	0.076 U	2.5 U	2.5 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U		
MW-46-A	6/20/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	1.3	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U		
MW-46-A	9/19/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	1.3	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-46-A	12/3/2013	10 U	0.24 U	**0.6 J**	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	**0.9 J**	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-94-1-I	5/29/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**238**	**8.4**	**3700**	**7.7**	**1.5**	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	**40.7**	**3.9**	**435**	**89.5**	2.0 U	1.0 U
MW-94-1-I	8/26/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**207**	1.0 U	**3390**	**5.9**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	**34.3**	**3.5**	**377**	**7.5**	2.0 U	1.0 U
MW-94-1-I	11/11/2009	---	1.0 U	1.0 U	1.0 U	**1.4**	1.0 U	1.0 U	**274**	**5.6**	**3920**	**7.0**	1.0 U	1.0 U	5.0 U	5.0 U	0.026 U	1.0 U	**40.9**	**3.1**	**486**	**63.0**	2.0 U	1.0 U
MW-94-1-I	2/24/2010	5.0 U	1.0 U	1.0 U	1.0 U	**2.0**	1.0 U	1.0 U	**250**	**5.9**	**3770**	**7.1**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	**35.2**	**2.4**	**474**	**21.0**	2.0 U	1.0 U
MW-94-1-I	6/23/2010	5.0 U	1.0 U	1.0 U	**5.3**	1.0 U	1.0 U	1.0 U	**211**	**4.9**	**3350**	**6.1**	**1.0**	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	**31.2**	**2.7**	**438**	**1.7**	2.0 U	1.0 U
MW-94-1-I	9/21/2010	5.0 U	1.0 U	1.0 U	**5.9**	**2.5**	1.0 U	1.0 U	**218**	**8.0**	**3550**	**6.7**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	**36.8**	**2.3**	**512**	**9.2**	2.0 U	1.0 U
MW-94-1-I	11/11/2010	5.0 U	1.0 U	1.0 U	1.0 U	**2.1**	1.0 U	1.0 U	**184**	**6.1**	**2520**	**5.7**	1.0 U	1.0 U	5.0 U	5.0 U	0.020 U	1.0 U	**28.8**	**2.0**	**336**	**6.1**	2.0 U	1.0 U
MW-94-1-I	3/3/2011	5.0 U	1.0 U	1.0 U	**3.9**	**1.4**	1.0 U	1.0 U	**166**	**5.0**	**2010**	**4.8**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	**24.2**	**1.8**	**289**	**2.2**	2.0 U	1.0 U
MW-94-1-I	6/20/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**200**	**6.1**	**2090**	**6.0**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	**23.6**	**2.4**	**372**	**1.2**	2.0 U	1.0 U
MW-94-1-I	8/29/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**185**	**6.2**	**1790**	**6.6**	1.0 U.	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	**24.4**	**2.2**	**318**	**3.4**	2.0 U	1.0 U
MW-94-1-I	12/13/2011	**315**	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	**104**	50.0 U	**1480**	50.0 U	50.0 U	50.0 U	250 U	250 U	0.020 U	50.0 U	50.0 U	50.0 U	**301**	10.0 U	100 U	50 U
MW-94-1-I	2/1/2012	5.0 U	1.0 U	1.0 U	**3.0**	1.0 U	1.0 U	1.0 U	**107**	**4.2**	**1910**	**3.7**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	**19.4**	**1.4**	**290**	**0.95**	2.0 U	1.0 U

Detected Volatile Organic Compounds in Groundwater

Sample Location	Date Sampled	Acetone ug/l[d]	Benzene ug/l	Carbon Disulfide ug/l	Carbon Tetrachloride ug/l	Chloroethane ug/l	Chloroform ug/l	Cymene (P-Isopropyltoluene) ug/l	1,1-DCA[a] ug/l	1,1-DCE[b] ug/l	cis-1,2-DCE[c] ug/l	trans-1,2-DCE[c] ug/l	1,2-DCA[a] ug/l	Isopropyl Benzene ug/l	Methyl Ethyl Ketone ug/l	Methyl Isobutyl Ketone ug/l	Naphthalene ug/l	Toluene ug/l	1,1,1-TCA[f] ug/l	1,1,2-TCA[g] ug/l	TCE[h] ug/l	Vinyl Chloride ug/l	m,p-Xylene ug/l	o-Xylene ug/l
MW-94-1-I	4/20/2012	5.0 U	1.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	114	4.5	1270	4.0	1.0 U	1.0 U	5.0 U	5.0 U	3.3	1.0 U	15.0	1.3	218	0.5	2.0 U	1.0 U
MW-94-1-I	9/25/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-94-1-I	12/19/2012	125 U	0.62 U	5 U	1.6 U	2.2 U	5 U	0.86 U	86.8	1.9 J	1260	2.1 J	3.7 U	0.76 U	20 U	20 U	0.68 U	0.77 U	8.2 J	1.5 U	227	1.6 U	1.1 U	1 U
MW-94-1-D	5/29/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.6	1.1	534	1.7	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0	0.20 U	2.0 U	1.0 U
MW-94-1-D	8/26/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	16.8	6.5	1180	3.3	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.2	61.8	2.0 U	1.0 U
MW-94-1-D	11/11/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	16.9	6.3	955	3.2	1.0 U	1.0 U	5.0 U	5.0 U	0.020 U	1.0 U	1.0 U	1.0 U	2.3	55.1	2.0 U	1.0 U
MW-94-1-D	2/24/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.2	3.9	765	4.1	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	9.2	2.0 U	1.0 U
MW-94-1-D	6/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	15.6	6.9	1530	3.5	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2	80.1	2.0 U	1.0 U
MW-94-1-D	9/21/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.1	3.2	753	3.3	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	13.7	2.0 U	1.0 U
MW-94-1-D	11/11/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	13.1	6.0	649	3.4	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	1.6	60.3	2.0 U	1.0 U
MW-94-1-D	3/3/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.6	491	2.8	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	13.6	2.0 U	1.0 U
MW-94-1-D	6/20/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.4	3.6	577	3.2	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	21.4	2.0 U	1.0 U
MW-94-1-D	8/29/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.7	1.0 U	323	1.2	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.5	0.46	2.0 U	1.0 U
MW-94-1-D	12/13/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.8	2.5	489	2.7	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	2.5	9.6	2.0 U	1.0 U
MW-94-1-D	2/1/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	13.4	6.7	1140	3.6	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	68.8	2.0 U	1.0 U
MW-94-1-D	4/20/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.7	3.9	382	2.7	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	19.5	2.0 U	1.0 U
MW-94-1-D	9/25/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-94-1-D	12/19/2012	62.5 U	0.31 U	2.5 U	0.81 U	1.1 U	2.5 U	0.43 U	4.3 J	2.2 J	574	1.7 J	1.9 U	0.38 U	10 U	10 U	0.34 U	0.38 U	0.94 U	0.76 U	0.53 J	15.2	0.55 U	0.52 U
MW-94-1-D-Dup	12/19/2012	12.5 U	0.062 U	0.5 U	0.16 U	0.22 U	0.5 U	0.086 U	5.8	3.2	619	2.3	0.37 U	0.076 U	2 U	2 U	0.068 U	0.077 U	0.19 U	0.15 U	0.59 J	21.2	0.11 U	0.1 U
MW-94-1-D	3/20/2013	10 U	0.062 U	0.5 U	0.16 U	0.22 U	0.14 U	0.086 U	0.55 J	1	223	1.7	0.37 U	0.076 U	2.5 U	2.5 U	0.068 U	0.077 U	0.19 U	0.15 U	0.35 J	2.6		
MW-94-I-D	6/20/2013	20 U	0.48 U	0.43 U	0.62 U	1 U	0.54 U	1 U	1 U	0.75 J	264	1.4 J	0.45 U	1 U	5 U	5 U	4 U	0.47 U	1 U	0.31 U	0.33 J	3.2		
MW-94-1-D-Dup	6/20/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.74 J	1.2	260	1.7	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.67	4.4		
MW-94-1-D	9/19/2013	20 U	0.48 U	0.43 U	0.62 U	1 U	0.54 U	1 U	1 U	0.48 U	222	0.56 J	0.45 U	1 U	5 U	5 U	4 U	0.47 U	1 U	0.31 U	2.1	0.28 U	0.97 U	0.47 U
MW-94-1-D	12/3/2013	20 U	0.48 U	0.7 J	0.62 U	1 U	0.54 U	1 U	16.5	5.6	1420	3.9	0.45 U	1 U	5 U	5 U	4 U	0.47 U	1 U	0.31 U	0.24 U	60.3	0.97 U	0.47 U
MW-94-1-D-Dup	12/3/2013	10 U	0.24 U	0.68 J	0.31 U	0.5 U	0.27 U	0.5 U	20.1	7.5	1220	5.8	0.27 J	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.19 J	78.8	0.48 U	0.24 U
MW-94-1-A	5/29/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.4	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-1-A	8/26/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-1-A	11/11/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.6	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-1-A	2/24/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.9	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-1-A	6/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-1-A	9/21/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-1-A	11/11/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-1-A	3/3/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-1-A	6/20/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-1-A	8/29/2011	5.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.5	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.00 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-1-A	12/13/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	10.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-1-A	2/1/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-1-A	4/20/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.4	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-1-A	9/25/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-1-A	12/19/2012	12.5 U	0.062 U	0.5 U	0.16 U	0.22 U	0.5 U	0.086 U	0.11 U	0.19 U	0.19 J	0.15 U	0.37 U	0.076 U	2 U	2 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U	0.11 U	0.1 U
MW-94-1-A	3/20/2013	10 U	0.062 U	0.5 U	0.16 U	0.22 U	0.14 U	0.086 U	0.11 U	0.19 U	0.57 J	0.15 U	0.37 U	0.076 U	2.5 U	2.5 U	0.068 U	0.077 U	0.19 U	0.15 U	0.17 J	0.16 U		
MW-94-1-A	6/20/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	1	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.15 J	0.14 U		
MW-94-1-A	9/19/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.23 U	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.16 J	0.14 U	0.48 U	0.24 U
MW-94-1-A	12/3/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	0.92 J	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.22 J	0.14 U	0.48 U	0.24 U
MW-94-2-I	5/28/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2	887	9.3	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.3	1.5	2.0 U	1.0 U
MW-94-2-I-Dup	5/28/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.3	906	8.4	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.1	1.6	2.0 U	1.0 U
MW-94-2-I	8/26/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1220	7.9	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.4	0.20 U	2.0 U	1.0 U
MW-94-2-I	11/11/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.9	997	8.0	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	8.3	2.4	2.0 U	1.0 U
MW-94-2-I	2/24/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1	4.4	1400	9.2	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.7	1.0 U	10.9	1.9	2.0 U	1.0 U
MW-94-2-I	6/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.3	1460	7.6	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.3	2.4	2.0 U	1.0 U
MW-94-2-I	9/21/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.3	1360	10.4	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.1	1.7	2.0 U	1.0 U
MW-94-2-I	11/11/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1	993	9.3	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	3.5	2.2	2.0 U	1.0 U
MW-94-2-I	3/3/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.7	957	8.8	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.6	2.4	2.0 U	1.0 U
MW-94-2-I	6/20/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	848	7.0	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.1	0.66	2.0 U	1.0 U
MW-94-2-I	8/29/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7	891	7.9	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.1	0.88	2.0 U	1.0 U
MW-94-2-I	12/13/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2	883	10.1	1.0 U	1.0 U	5.0 U	5.0 U	0.019 U	1.0 U	1.0 U	1.0 U	5.5	1.1	2.0 U	1.0 U
MW-94-2-I	2/1/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0	1250	5.8	1.0 U	1.0 U	5.0 U	5.0 U	1.6	1.0 U	1.0 U	1.0 U	2.9	0.88	2.0 U	1.0 U
MW-94-2-I	4/17/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1	796	7.7	1.0 U	1.0 U	116	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.9	0.39	2.0 U	1.0 U
MW-94-2-I	9/25/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-I	12/19/2012	62.5 U	0.31 U	2.5 U	0.81 U	1.1 U	2.5 U	0.43 U	0.55 U	1.6 J	991	6.1	1.9 U	0.38 U	10 U	10 U	0.34 U	0.38 U	0.94 U	0.76 U	3.9 J	1.1 J	0.55 U	0.52 U
MW-94-2-I	3/20/2013	50 U	0.31 U	2.5 U	0.81 U	1.1 U	0.72 U	0.43 U	0.55 U	0.94 U	830	5.1	1.9 U	0.38 U	12.5 U	12.5 U	0.34 U	0.38 U	0.94 U	0.76 U	3.3 J	0.79 U		
MW-94-2-I-Dup	3/20/2013	10 U	0.11 J	0.5 U	0.16 U	0.22 U	0.14 U	0.086 U	0.28 J	1.3	877	6.2	0.37 U	0.076 U	2.5 U	2.5 U	0.068 U	0.077 U	0.19 U	0.15 U	4.1	0.46		
MW-94-2-I	6/20/2013	50 U	1.2 U	1.1 U	1.5 U	2.5 U	1.4 U	2.5 U	2.5 U	1.2 U	940	5.5	1.1 U	2.5 U	12.5 U	12.5 U	10 U	1.2 U	2.5 U	0.78 U	2.7	0.69 U		
MW-94-2-I	9/19/2013	50 U	1.2 U	1.1 U	1.5 U	2.5 U	1.4 U	2.5 U	2.5 U	1.2 U	871	5.6	1.1 U	2.5 U	12.5 U	12.5 U	10 U	1.2 U	2.5 U	0.78 U	4.3	0.69 U	2.4 U	1.2 U
MW-94-2-I	12/3/2013	50 U	1.2 U	2.6 J	1.5 U	2.5 U	1.4 U	2.5 U	2.5 U	1.2 U	978	8.6	1.1 U	2.5 U	12.5 U	12.5 U	10 U	1.2 U	2.5 U	0.78 U	2.8	0.69 U	2.4 U	1.2 U
MW-94-2-D	5/28/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.1	20.2	2780	14.5	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	46.2	2.0 U	1.0 U
MW-94-2-D	8/26/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.8	18.8	3140	15.3	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	87.7	2.0 U	1.0 U
MW-94-2-D-Dup	8/26/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.5	17.2	3480	12.7	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	75.2	2.0 U	1.0 U
MW-94-2-D	11/11/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.7	16.6	3420	14.6	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	71.6	2.0 U	1.0 U
MW-94-2-D	2/24/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.5	19.0	3880	15.9	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	79.6	2.0 U	1.0 U
MW-94-2-D-Dup	2/24/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.4	10.9	3760	10.3	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.7	1.0 U	1.0 U	75.4	2.0 U	1.0 U
MW-94-2-D	6/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	15.5	3270	14.1	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	84.0	2.0 U	1.0 U
MW-94-2-D-Dup	6/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	15.8	3340	13.7	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	86.7	2.0 U	1.0 U
MW-94-2-D	9/21/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.1	18.0	3930	21.1	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	59.4	2.0 U	1.0 U
MW-94-2-D-Dup	9/21/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	18.1	3320	18.0	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	60.5	2.0 U	1.0 U
MW-94-2-D	11/11/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.2	19.5	3150	17.7	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	86.7	2.0 U	1.0 U
MW-94-2-D-Dup	11/11/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.4	20.3	3340	17.9	1.0 U	1.0 U	5.0 U	5.0 U	0.020 U	1.0 U	1.0 U	1.0 U	1.0 U	89.1	2.0 U	1.0 U
MW-94-2-D	3/3/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20.3	2900	17.1	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	74.9	2.0 U	1.0 U
MW-94-2-D-Dup	3/2/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.3	20.1	2830	17.3	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	72.7	2.0 U	1.0 U

Detected Volatile Organic Compounds in Groundwater

Sample Location	Date Sampled	Acetone ug/l[i]	Benzene ug/l	Carbon Disulfide ug/l	Carbon Tetrachloride ug/l	Chloroethane ug/l	Chloroform ug/l	Cymene (P-Isopropyltoluene) ug/l	1,1-DCA[a] ug/l	1,1-DCE[b] ug/l	cis-1,2-DCE[c] ug/l	trans-1,2-DCE[d] ug/l	1,2-DCA[e] ug/l	Isopropyl Benzene ug/l	Methyl Ethyl Ketone ug/l	Methyl Isobutyl Ketone ug/l	Naphthalene ug/l	Toluene ug/l	1,1,1-TCA[f] ug/l	1,1,2-TCA[g] ug/l	TCE[h] ug/l	Vinyl Chloride ug/l	m,p-Xylene ug/l	o-Xylene ug/l
MW-94-2-D	6/20/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.1**	**17.4**	**2630**	**16.1**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**51.3**	2.0 U	1.0 U
MW-94-2-D-Dup	6/20/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**3.0**	**16.9**	**2650**	**15.6**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**50.3**	2.0 U	1.0 U
MW-94-2-D	8/29/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.6**	**16.0**	**2620**	**19.5**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**63.9**	2.0 U	1.0 U
MW-94-2-D-Dup	8/29/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.5**	**16.3**	**2560**	**18.7**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**62.9**	2.0 U	1.0 U
MW-94-2-D	12/13/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.8**	**22.1**	**2360**	**27.3**	1.0 U	1.0 U	5.0 U	5.0 U	10.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**67.3**	2.0 U	1.0 U
MW-94-2-D-Dup	12/13/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.7**	**21.7**	**2920**	**36.3**	1.0 U	1.0 U	5.0 U	5.0 U	10.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**64.8**	2.0 U	1.0 U
MW-94-2-D	2/1/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.4**	**15.4**	**4400**	**12.6**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.2**	**47.7**	2.0 U	1.0 U
MW-94-2-D-Dup	2/1/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.3**	**15.3**	**3170**	**12.5**	1.0 U	1.0 U	5.0 U	5.0 U	**1.7**	1.0 U	1.0 U	1.0 U	1.0 U	**49.2**	2.0 U	1.0 U
MW-94-2-D	4/17/2012	**34.3**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**19.2**	**2620**	**16.0**	5.0 U	5.0 U	**589**	25.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**41.9**	10.0 U	5.0 U
MW-94-2-D-Dup	4/17/2012	**33.2**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**19.5**	**2670**	**14.9**	5.0 U	5.0 U	**586**	25.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**39.6**	10.0 U	5.0 U
MW-94-2-D	9/25/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.6**	**13.0**	**2380**	**13.1**	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**32.90**	2.0 U	1.0 U
MW-94-2-D	12/19/2012	250 U	1.2 U	10 U	3.2 U	4.3 U	10 U	1.7 U	2.2 U	**12.8 J**	**2970**	**11.4 J**	7.4 U	1.5 U	40 U	40 U	1.4 U	1.5 U	3.7 U	3 U	1.7 U	**33.7**	2.2 U	2.1 U
MW-94-2-D	3/20/2013	200 U	1.2 U	10 U	3.2 U	4.3 U	2.9 U	1.7 U	2.2 U	**9.3 J**	**2570**	**11.6 J**	7.4 U	1.5 U	50 U	50 U	1.4 U	1.5 U	3.7 U	3 U	1.7 U	**19.1**		
MW-94-2-D	6/20/2013	200 U	4.8 U	4.3 U	6.2 U	10 U	5.4 U	10 U	10 U	**10.7 J**	**2830**	**11.8 J**	4.5 U	10 U	50 U	50 U	40 U	4.7 U	10 U	3.1 U	2.4 U	**29.8**		
MW-94-2-D	9/19/2013	200 U	4.8 U	4.3 U	6.2 U	10 U	5.4 U	10 U	10 U	**10 J**	**2470**	**11.2 J**	4.5 U	10 U	50 U	50 U	40 U	4.7 U	10 U	3.1 U	2.4 U	**21.3**	9.7 U	4.7 U
MW-94-2-D	12/3/2013	200 U	4.8 U	**12.3 J**	6.2 U	10 U	5.4 U	10 U	10 U	**9.8 J**	**2410**	**12.2 J**	4.5 U	10 U	50 U	50 U	40 U	4.7 U	10 U	3.1 U	2.4 U	**25.7**	9.7 U	4.7 U
MW-94-2-A	5/28/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.1**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A	8/26/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A	11/11/2009	---	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.3**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.020 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A	2/24/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.6**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A	6/23/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.7**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A	9/21/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A	11/11/2010	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.020 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A	3/3/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A	6/20/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2.0**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A	8/29/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A	12/13/2011	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.4**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	0.020 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A	2/1/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.1**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	**1.6**	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A	4/17/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.0**	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A	9/25/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A-Dup	9/25/2012	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	2.0 U	1.0 U
MW-94-2-A	12/19/2012	12.5 U	0.062 U	0.5 U	0.16 U	0.22 U	0.5 U	0.086 U	0.11 U	0.19 U	**1.9**	0.15 U	0.37 U	0.076 U	2 U	2 U	0.068 U	0.077 U	0.19 U	0.15 U	**0.13 J**	0.16 U	0.11 U	0.1 U
MW-94-2-A	3/20/2013	10 U	0.062 U	0.5 U	0.16 U	0.22 U	0.14 U	0.086 U	0.11 U	0.19 U	**0.52 J**	0.15 U	0.37 U	0.076 U	2.5 U	2.5 U	0.068 U	0.077 U	0.19 U	0.15 U	0.083 U	0.16 U		
MW-94-2-A	6/20/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	**0.63 J**	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U		
MW-94-2-A	9/19/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	**0.65 J**	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-94-2-A-Dup	9/19/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	**0.66 J**	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
MW-94-2-A	12/3/2013	10 U	0.24 U	0.22 U	0.31 U	0.5 U	0.27 U	0.5 U	0.5 U	0.24 U	**0.87 J**	0.24 U	0.22 U	0.5 U	2.5 U	2.5 U	2 U	0.23 U	0.5 U	0.16 U	0.12 U	0.14 U	0.48 U	0.24 U
Primary Screening Level[n]		NE[o]	5.0	NE	NE	NE	NE	NE	NE	NE	NE	NE	5.0	NE	NE	NE	160	1,000	200	NE	5.0	0.2	NE	NE

Notes:

a 1,1-DCA = 1,1-Dichloroethane
b 1,1-DCE = 1,1-Dichloroethene
c cis-1,2-DCE = cis-1,2-Dichloroethene
d trans-1,2-DCE = trans-1,2-Dichloroethene
e 1,2-DCA = 1,2-Dichloroethane
f 1,1,1-TCA = 1,1,1-Trichloroethane
g 1,1,2-TCA = 1,1,2-Trichloroethane
h TCE = Trichloroethene
i ug/l = micrograms per liter
j --- = Not analyzed
k U = Constituent not detected at noted detection limit
l DUP = Duplicate sample
m NS = Not sampled because well was dry
n Screening Level is Washington Department of Ecology Model Toxics Control Act - Method A (MTCA Method A) Cleanup Level for Groundwater, unless otherwise noted.
o NE = Not established
p Washington State Maximum Contaminant Level for Drinking Water.

Values in bold were detected above the laboratory reporting limit.
Shaded values exceed the Screening Level.
MTCA values were obtained from the Department of Ecology Cleanup Level and Risk Calculations database in December 2011.
https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx

14.0 Photo Log

Photo 1: Alcoa Vancouver Display Board

Photo 2: Great Western Malting and Freight Access rail line wall

Photo 3: PCB Impacted Sediments

Photo 4: PCB Impacted Sediments

Photo 5: Former Dike Underground Storage Tanks

Photo 6: Soluble Oil Area

Photo 7: Former Crowley Parcel

Photo 8: Former East Landfill AOC

Photo 9: East Landfill MW-94-1-I (prior to re-location)

Photo 10: North/North 2 Landfill

Photo 11: Former NE Parcel

Photo 12: Former NE Parcel

Photo 13: Former Evergreen Property (Carbon Storage Area, Carbon Bake Ovens)

Photo 14: Former Evergreen property (Scrap Metal Recycling, Transformer Rectifier Areas)