

7070 SW Fir Loop, Suite 100 Tigard, Oregon 97223 www.atcassociates.com 503.684.0525 fax 503.624.0415

September 2, 2014

Mr. Ed Ralston Remediation Management Phillips 66 Company 76 Broadway Sacramento, California 95818

Subject: Remedial Actions Summary Report – Mercer Corridor Project Former Phillips 66 Facility No. 255353 (AOC # 1396) 600 Westlake Avenue North Seattle, Washington Washington State Department of Ecology VCP No. NW1714 Cardno ATC Project No. 076.75118.1396

Dear Mr. Ralston:

Enclosed is a copy of Cardno ATC's report summarizing remedial actions that occurred concurrently with the Mercer Corridor Project for the Former Phillips 66 Company (Phillips 66) facility located at 600 Westlake Avenue North in Seattle, Washington. The Mercer Corridor Project is being implemented by the City of Seattle in cooperation with King County, the State of Washington, and the United States to improve traffic congestion in and around the Mercer Street corridor between Interstate 5 and Elliot Avenue West.

If you have questions regarding the information presented in this report, or if you need additional information, please do not hesitate to contact us at (503) 684-0525.

Sincerely,

CARDNO ATC

Simon Payne, L.G. Project Geologist Kyle Sattler, L.G. Senior Project Manager

Enclosures



Shaping the Future

REMEDIAL ACTIONS SUMMARY REPORT – MERCER CORRIDOR PROJECT

Former Phillips 66 Facility No. 255353 (AOC #1396) 600 Westlake Avenue North Seattle, Washington

Cardno ATC Project No. 076.75118.1396

Prepared on behalf of: Mr. Ed Ralston Phillips 66 Company 76 Broadway Sacramento, California 95818

Prepared by:

Cardno ATC 7070 Southwest Fir Loop, Suite 100 Tigard, Oregon 97223 Phone: (503) 684-0525

September 2, 2014

TABLE OF CONTENTS

1.0	INTRODUCTION1	
2.0	MERCER CORRIDOR PROJECT AND RELATIONSHIP TO SITE CLEANUP 1	
3.0	P66 PROPERTY DESCRIPTION AND BACKGROUND	
3.1	SITE CLEANUP HISTORY	2
4.0	MCP REMEDIAL ACTIONS	
4. 4.2 4. 4. 4.3 4.3 4. 4.3 4. 4.4 4.4 4.4	.2 Utility Installations and Soil Removal Actions 6 .3 AS/SVE Installation Activities 6 WESTLAKE AVENUE NORTH 7 .1 Abandonment of Groundwater Monitor Wells 7 .2 Utility Installations and Soil Removal Actions 8 .2 Utility Installation and Soil Removal Actions 8 .3 SVE/AS Installation 8 .4 Abandonment of Groundwater Monitor Wells 8 .1 Abandonment of Groundwater Monitor Wells 8 .2 Utility Installation 8 .2 Utility Installation 8 .2 Utility Installation 8 .2 Utility Installations and Soil Removal Actions 8 .3 SVE/AS Installation 9 .3 SVE/AS Installation 9 .3 SVE/AS Installation 9 .3 SVE/AS Installation 9 .4 Abandonment of Groundwater Monitor Wells 10 .1 Abandonment of Groundwater Monitor Wells 10 .2 Soil Removal Actions 10	667778888999900
4. 5 .0)
5.0	CONCLUSIONS10	

TABLES:

Table 1	Summary of Soil Removal Volumes within Phillips 66 Area during Mercer Corridor
	Project (2011) – Mercer Street
Table 2	Summary of Soil Removal Volumes within Phillips 66 Area during Mercer Corridor
	Project (2011) – Westlake Avenue North
Table 3	Summary of Soil Removal Volumes within Phillips 66 Area during Mercer Corridor
	Project (2011) – Valley Street
Table 4	Summary of Soil Removal Volumes within Phillips 66 Area during Mercer Corridor
	Project (2011) – Terry Avenue North

FIGURES:

- Figure 1 Site Vicinity Map
- Figure 2 Site Layout Diagram
- Figure 3Mercer Street AS/SVE Wells
- Figure 4 Westlake Avenue North AS/SVE Wells
- Figure 5 Valley Street AS/SVE Wells
- Figure 6 Terry Avenue AS/SVE Wells

APPENDICIES:

- Ecology Resource Protection Well Reports Well Installations For Mercer Street Appendix A
- Appendix B Ecology Resource Protection Well Reports - Well Decommissioning For Westlake Avenue North
- Original Well Logs with Decommissioning Field Notes Valley Street Appendix C
- Appendix D
- Ecology Resource Protection Well Reports Well Installations for Valley Street Ecology Resource Protection Well Reports Well Decommissioning For Terry Avenue Appendix E North

1.0 INTRODUCTION

Cardno ATC has prepared this report on behalf of Phillips 66 Company (P66) to document remedial activities that were performed in conjunction with construction activities associated with the City of Seattle's (City) Department of Transportation (SDOT) Mercer Corridor Project (MCP). The MCP is a major construction project being implemented by the City of Seattle in cooperation with King County, the State of Washington, and the United States to improve traffic congestion in and around the Mercer Street corridor between Interstate 5 and Elliot Avenue West.

P66 is conducting investigation, cleanup, and monitoring of the former P66 facility (located on the south half of the city block that is bounded on the north by Valley Street, to the east by Terry Avenue North, to the south by Mercer Street, and to the west by Westlake Avenue North) and those properties on or around the block (including portions of Westlake Avenue North, Valley Street, Terry Avenue North, and Mercer Street). It is possible this city block is known as City Block #77 (and will be referred to as City Block #77 herein). The south half of City Block #77 will be herein referenced as the Site.

P66 is conducting the investigation, cleanup, and monitoring pursuant to a Settlement and Remedial Action Agreement (Settlement Agreement) among ConocoPhillips (now P66), Union Oil Company of California, City Investors XI, LLC (City Investors), and the City of Seattle (City) that was executed in April 2007.

The Site is currently enrolled in the Washington State Department of Ecology's (Ecology) and has been assigned VCP No. NW1714. The Site is shown relative to surrounding physical features in Figure 1. The current layout of the Site is shown on Figure 2.

2.0 MERCER CORRIDOR PROJECT AND RELATIONSHIP TO SITE CLEANUP

The MCP was implemented to improve access to and from Interstate-5 (I-5) at the Mercer Street/Valley Street couplet within the City of Seattle, Washington. The improvements have included; 1) the widening of Mercer Street (under condemnation) approximately 60 to 70 feet primarily to the north and altering Mercer Street to convey two-way traffic; 2) narrowing Valley Street to two lanes each direction; 3) widening Fairview Avenue; and 4) reconstructing sections of Boren Avenue, Terry Avenue, Westlake Avenue, and 9th Avenue, among other improvements. The project has also removed, replaced, and installed new subsurface infrastructure in this area. Gary Merlino Construction Company was contracted by the City to complete the MCP. The contract is being administered by SDOT. The MCP commenced in early 2010.

P66 and the City anticipated, based on previous environmental investigations, that gasoline impacts might be encountered in soil excavated during the course of the MCP construction, some of which P66 would be responsible for, and some of which could be attributable to other source(s). Therefore, prior to P66 and the City signing a formal Memorandum of Agreement, the parties proceeded on agreement in principle that costs related to excavation, handling, and disposal of soil excavated during the course of the MCP construction from depths at or below 7.5-feet below ground surface (bgs) within the ROW adjacent to P66's property (specifically in Mercer Street, and in Westlake Avenue North and Terry Avenue North, south of the northern P66 property boundary) and from



depths at or below 5.5-feet bgs within the ROW adjacent to the north half of Block #77 (specifically in Valley Street and Westlake Avenue North and Terry Avenue North, north of the northern P66 property boundary) would be the responsibility of P66. Soil excavated during the course of the MCP construction from depths above these levels, i.e., above the groundwater smear zone, or from any location outside this defined "P66 Area," would be the responsibility of the City.

Additionally, the parties cooperated in the incorporation of design specifications for P66's air sparge/soil vapor extraction (AS/SVE) wells and associated conveyance piping (prepared by Stantec Consulting Incorporated, dated October 15, 2009) into the plans and specifications for the MCP. P66's AS/SVE wells and associated conveyance piping would be installed in the Mercer Street ROW abutting the P66 property (including in the condemnation area) and in the Valley Street ROW abutting the north half of Block #77 by SDOT's contractor during the course of the MCP construction. These wells and associated conveyance piping would then be tied together with the remedial wells and conveyance piping that was previously installed within Westlake Avenue North and Terry Avenue North prior to the MCP. Furthermore, the City was deemed responsible for transporting soil cuttings generated during environmental drilling activities necessary for the installation of P66 remediation wells.

Lastly, the Memorandum of Agreement established that all P66 owned groundwater monitor wells located in City ROWs within the P66 Area would be abandoned by the City's contractor and the City would be responsible for the appropriate notification to the Washington State Department of Ecology.

3.0 P66 PROPERTY DESCRIPTION AND BACKGROUND

P66 is the current owner of the property that comprises the south half of City Block #77. City Investors XI, LLC (City Investors) currently owns the property that comprises the north half of the block. The eastern portion of the north half of City Block #77 was formerly occupied by the Brace Lumber Mill and subsequently by a Denny's restaurant. A former Union 76-branded gasoline service station (previously owned by Union Oil Company of California [Unocal]) previously occupied the southwest portion of City Block #77. The City currently holds easements for public rights-of-way on the streets and avenues surrounding the block.

All previous facilities on City Block #77 have been removed and/or demolished, and the north half of the block (owned by City Investors) is currently used as a parking lot. As part of the MCP, the City acquired a 70-foot wide strip of land from P66 located along on the north side of Mercer Street between Terry Avenue North and Westlake Avenue North in the MCP area. The approximate western two-thirds of the current P66 property is occupied by numerous above ground storage/treatment tanks utilized as part of a construction dewatering system associated with the development of the city block west of City Block #77, across Westlake Avenue North. The approximate eastern one-third of the current P66 property is occupied by the above ground AS/SVE system compound that is currently operating.

3.1 Site Cleanup History

In May 1980, Unocal discovered that approximately 80,000 gallons of supreme leaded gasoline was released from a product line south of the western pump islands at the Westlake 76 Station to the



2

subsurface over a four-month period. In response to the release the underground storage tanks (USTs) and product lines were replaced. Two recovery trenches and numerous recovery wells installed at the property removed a total of approximately 41,900 gallons of liquid phase hydrocarbons (LPH) between June 1980 and October 1992.

In 1988, an initial SVE system was installed utilizing the then existing recovery wells and trenches. Approximately 4,262 pounds of gasoline was recovered by the SVE system between June 1998 and August 1990, when the system was shut down due to decreasing extracted vapor concentrations. In February 1990, five USTs were removed from the former Unocal service station on the City Investors property located at the southeast corner of Westlake Avenue North and Valley Street. The USTs ranged from 550 gallons to 5,000 gallons in capacity and were previously used to store used motor oil and gasoline. Approximately 800 cubic yards of petroleum contaminated soil was excavated during removal of the USTs.

Between January 1991 and July 1993, approximately 465 gallons of LPH was recovered during periodic manual/passive LPH removal efforts. The initial SVE system continued to operate through May 1995.

In May 2001, a gasoline product line was ruptured during the removal of waste oil and heating oil USTs at the Westlake 76 Station. An estimated 600 gallons of supreme unleaded gasoline was released. Approximately 500 gallons of product was immediately removed from the excavation utilizing a vacuum truck. Throughout the year, vacuum trucks and hand bailing were used for fluid recovery from adjacent monitor wells. Approximately 4 gallons of LPH was manually recovered. Approximately 12,100 gallons of impacted groundwater was removed by vacuum truck.

In 2003, P66 installed a new AS/SVE system at the Westlake 76 Station that included an AS/SVE trench, SVE wells, and several deep AS wells. The system became operational in August 2003. Approximately 1,410 tons of petroleum impacted soil was removed and transported for treatment during the installation of the remediation system trenches and wells.

Further investigations conducted by P66 and other parties in 2004 and 2005 indicated petroleum contamination remained in soil and groundwater in various areas of the Site. In addition to residual impacts from the 1980 release on the Westlake 76 Station, these investigations indicated the presence of petroleum products released from past operations on the City Investors property, including the Union 76-branded gasoline service station and the former Brace Lumber Mill and Denny's restaurant. Additional investigation also indicated that petroleum products were released during past operations of service station and/or fuel storage facilities formerly located on neighboring properties, including the former Rosen property located at 961-965 Mercer Street, south of the P66 property. Releases of petroleum products on and from these properties and potentially other sources had impacted the City street and utility ROWs surrounding Block #77.

Between July 2006 and April 2007, pursuant to the April 2007 Settlement Agreement between P66 and the City, P66 implemented the first phase of the Westlake/Mercer Cleanup Project (herein referred to as Phase I). Phase I was performed as an independent remedial action and designed and completed on an expedited basis, as required to meet the City's timeline for construction of the South Lake Union Streetcar line and to avoid disruption of the Streetcar line due to remedial action at the Site. The Phase I remedial activities included; 1) installation of steel shoring, excavation and off-site



disposal of petroleum-impacted soil from the eastern lanes of Westlake Avenue North, and installation of AS/SVE wells and associated conveyance piping back to the P66 property boundary and connection to the then existing above ground AS/SVE system; 2) installation of SVE and enhanced fluid recovery (EFR) wells in Terry Avenue North and installation of associated conveyance piping back to the P66 property and connection to the then existing above ground AS/SVE system; 3) soil and groundwater sampling and analysis; and 4) backfilling and surface restoration. A total of approximately 16,172 tons of soil was excavated from the Westlake and Terry Avenue North ROWs, between Mercer and Valley Streets. Influent vapor samples indicated that the petroleum hydrocarbon impact was highest in those SVE wells completed in Terry Avenue North. Information regarding the Phase I W/MCP is provided in URS Corporation's Phase I Close Out Report, prepared in 2007.

Between November 2007 and August 2008, biweekly enhanced fluid recovery was performed utilizing the recovery wells in Terry Avenue North. A total of 28,142 gallons of impacted groundwater was removed from the wells during this time. Cumulative petroleum hydrocarbon removal from September 2003 through March 2008 was approximately 1,940 pounds. Total liquid phase hydrocarbons (LPH) recovered from June 1980 through the end of the third quarter 2008 was approximately 43,632 gallons. Information regarding the recovery of petroleum impacted fluids and vapor between November 2007 and August 2008 is provided in Delta's On-Site Environmental Assessment – Horizontal and Vertical Delineation report prepared in 2005.

In September 2008, the Westlake 76 Station was demolished, all above-ground structures were removed, and all of the existing conveyance piping for the remediation wells were cut and capped in their respective ROWs to facilitate Phase II W/MCP excavation activities.

Between November 2008 and June 2009, P66 implemented the second phase of the Westlake/Mercer Cleanup Project (herin referred to as Phase II), where City Block #77 (with the exception of the southeast corner) was excavated to depths up to 20 feet below ground surface (bgs). A soil/cement/bentonite (SCB) gravity wall was installed along the south, east, and north boundaries of City Block #77 (Figure 2). The SCB gravity wall, in conjunction with the previously installed sheet pile wall along the west property boundary, provided shoring for Phase II excavation activities and continues to serve as a hydraulic barrier. Backfill and surface restoration activities were completed in July 2009. A total of approximately 54,450 tons of soil was excavated from the Site during the Phase II excavation activities and transported off-site for disposal. Information regarding the Phase II is provided in URS Corporations Phase II Soil Sampling Report, prepared in 2009.

Confirmation soil sampling was conducted during the Phase II excavation activities to document conditions at the base of the excavation and to assess whether additional excavation was required to achieve cleanup levels or other project requirements. A total of 244 samples were collected from 65 sampling cells. On a cell by cell basis, P66 evaluated the data and assessed whether or not site conditions and/or project objectives required additional excavation. If requested by P66, the excavation continued downward until residual concentrations were below Ecology's Model Toxics Control Act (MTCA) Method A Cleanup Levels or as far as reasonably practicable depending on the accessibility of the petroleum impacts and other actual conditions in the field.

Soils encounterd during the Phase I and Phase II excavation activities generally consisted of sandy fill down to depths of at least 5 feet bgs. Fill between 5 feet to 35 feet bgs consisted of highly



variable compositions of silty sand, sandy silt, sand, silt to silty clay, clayey silt, sand with clay, sandy gravel, and occasionally thin layers of peat/clay. The fill material also includes variable proportions of wood or wood chips/wood debris, and sawdust, as thick as 5 to 11 feet.

The current monitor well network consists of 14 wells, including MWR-1 through MWR-6, MW-41, MW-45, MW-50, MW-54, MW-209 through MW-211, and SMW-3. All other wells have either been destroyed or decommissioned due to construction or remedial activities. Documentation for the former well network can be found in previous reports. Depth to groundwater typically fluctuates between 9 and 12 feet bgs over much of the area. Based on depth to groundwater measurements, it is apparent that groundwater flow is not consistent beneath the P66 property, but generally appears to flow towards the north. Groundwater flow direction is likely impacted by subsurface hydro-geologic barriers installed during remedial excavation activities completed in 2008 and/or the current dewatering activities taking place west of the Site.

Groundwater monitoring has been conducted at the Site since 1988. Groundwater monitoring has been conducted on a quarterly basis from the current monitor well network since at least 1995 through December 2012. A baseline monitoring event was conducted in November 2013 prior to starting the currently operating remediation system. Analytical results were similar to historic results since 2011.

During the MCP, numerous SVE and AS wells were installed in Terry Avenue North, Mercer Street, and Westlake Avenue North. Most recently, in July 2013, numerous remediation wells were installed in the Valley Street ROW under the oversight of SDOT. Between August and November 2013, all of the remediation wells/conveyance piping located in the Mercer and Valley Street ROWs and the Westlake and Terry Avenue ROWs were connected to new above ground AS/SVE treatment system currently located on the Phillips 66 property. The installation of the current above ground AS/SVE treatment system is described in this report.

4.0 MCP REMEDIAL ACTIONS

Remedial actions performed during the MCP construction included removal of petroleum hydrocarbon impacted soil within the P66 designated Area of Mercer and Valley Streets and Westlake and Terry Avenues North. Soil removal actions were completed during installation and/or upgrades of various subsurface utilities, including electrical and transmission duct banks and vaults, water, storm, and sanitary sewer systems. A summary of soil volumes removed from the P66 Area along Mercer and Valley Streets and Westlake and Terry Avenues North during the MCP construction are summarized in Tables 1 through 4. The information summarized in Tables 1 through 3 was provided to Cardno ATC via three sources including; 1) material ledgers (providing volumes of soil delivered to Waste Management) generated by SDOT; 2) truck logs provided by SDOT; and 3) an Excel® tracking spreadsheet produced and provided by PI Resources, LLC of Seattle, Washington (an environmental consultant for SDOT). The information summarized in Table 4 was provided by Clearcreek Contractors.

Tables 1 through 4 provide a description of the waste stream (as described by SDOT and/or PI Resources), the date the soil was transported, the contractor who hauled the soil, the truck number, and the approximate volume transported (in tons). Where truck numbers were not provided, the volumes provided on the tables were based on estimates made in the field (and not based on weigh



tickets). Most of the soil generated during the removal actions in Valley Street were placed on-site in a stockpile designated for P66 waste soil only and subsequently transported to Waste Management's Alaska Street facility, located at 70 South Alaska Street, Seattle, Washington, for disposal. Most of the soil generated during the removal actions in Mercer Street and Westlake and Terry Avenues North were direct hauled to Waste Management's Alaska Street facility for disposal.

Additionally, numerous AS/SVE remediation wells and associated conveyance piping (installed within excavated trenches) were completed in the P66 designated Area of Mercer and Valley Streets prior to the MCP construction. P66 also excavated soil along Terry Avenue during the MCP construction in order to install conveyance piping connected to the AS/SVE remediation wells installed in Valley Street. These trench excavation activities are summarizing in Cardno's Remediation System Installation and Startup Report dated June 20, 2014.

Numerous monitor wells were also abandoned during the MCP construction. The remedial actions and well abandonment activities conducted during the MCP construction along Mercer Street, Westlake Avenue North, Valley Street, and Terry Avenue North is summarized in the following sections.

4.1 Mercer Street

Remedial actions performed during the MCP, including the removal of petroleum impacted soil and the installation of numerous AS/SVE remediation wells and conveyance piping trenching, occurred within Mercer Street and the 70-foot easement between January 2011 and May 2012. Well abandonment, soil excavation, and AS/SVE well installation activities completed in Mercer Street are presented in the following sections.

4.1.1 Abandonment of Groundwater Monitor Wells

Between December 2010 and January 2011, the City reportedly oversaw the abandonment of groundwater monitor wells located in the P66 Area of Mercer Street prior to soil excavation activities. However, neither the City, SDOT, or their contractors could provide Cardno with documentation supporting the decommissioning activities. Additionally, Cardno could not locate any of the Resource Protection Well Reports documenting well decommissioning activities on Ecology's website. Monitor wells reportedly decommissioned along Mercer Street within the P66 Area include MW-18, MW-19, MW-24, MW-37, MW-40, MW-71, MW-72, MW-73, MW-200, MW-201, MW-202, MW-206 and MW-208. None of Ecology's Resource Protection Well Reports documenting well decommissioning activities in the P66 Area correlate with the dates the wells were reportedly decommissioned.

4.1.2 Utility Installations and Soil Removal Actions

Subsurface utilities, including electrical and transmission duct banks and vaults, water, storm, and sanitary sewer systems were installed and or upgraded within the P66 Area of Mercer Street between January 2011 and May 2012. As described in Section 2.0, P66 was responsible for costs related to excavation, handling, and disposal of soil generated along Mercer Street below 7.5 feet bgs. Approximately 1,183 tons of soil from within the P66 area and below 7.5 feet bgs was documented as removed and transported to Waste Management's Alaska Street Facility in Seattle, Washington for



disposal during the utility installation and upgrade activities along Mercer Street. A summary of soil volumes documented as removed during the MCP construction in Mercer Street is summarized in Table 1. An estimate of the soil volume removed during the MCP along Mercer Street that was not the responsibility of P66 is also provided in Table 1.

4.1.3 AS/SVE Installation Activities

In January 2011, Clearcreek Contractors (Clearcreek) of Marysville, Washington (Merlino Construction's remediation and earthwork contractor) installed a vault box on the north side of Mercer Street to route the future AS/SVE conveyance piping to be installed in Mercer Street. Between May and June, 2011 the City oversaw the installation of eight 1-inch diameter AS wells to approximately 20 feet bgs, designated MAS-20 through MAS-27, and eight 1-inch diameter SVE wells to approximately 8 feet bgs, designated MSVE-10 and MSVE-13 through MSVE-19 in Mercer Street, including the 70 foot easement. Clearcreek also excavated the conveyance piping trenching in Mercer Street in order to install the conveyance piping from the wells to the vault box.

In March and April, 2012 the City oversaw the installation of 19 1-inch diameter AS wells to approximately 20 feet bgs, designated MAS-1 through MAS-19, and 11 1-inch diameter SVE wells to approximately 8 feet bgs, designated MSVE-1 through MSVE-9, MSVE-11 and MSVE-12 within Mercer Street. Clearcreek and Interwest Construction of Seattle, Washington, also excavated the conveyance piping trenching in Mercer Street in order to install the conveyance piping from the wells to the vault box installed in January, 2011.

Approximately 916 tons of soil was removed during the well and conveyance pipe installation activities in Mercer Street and transported to Waste Management for disposal. A summary of soil volumes documented as removed during the installation of the AS/SVE wells and associated trenching is summarized in Table 1.

Locations of the AS/SVE wells installed in Mercer Street are shown in Figure 3. Copies of Ecology's available Resource Protection Well Reports documenting some of the AS/SVE well installation activities in Mercer Street are provided in Appendix A.

4.2 Westlake Avenue North

Remedial actions performed within Westlake Avenue North during the MCP, including removal of petroleum impacted soil and the installation of AS wells occurred between December 2010 and December 2011. In 2007, prior to the MCP, steel shoring was installed along the east side of Westlake Avenue North, east of the former street car tracks in order to facilitate excavation of petroleum impacted soil within Westlake Avenue North. The location of the shoring is shown on Figure 2. A total of 21 AS wells (identified as AS-1 through AS-21) were subsequently installed within the Westlake ROW at the locations shown on Figure 4. Well abandonment, soil excavation, and AS/SVE well installation activities are presented in the following sections.

4.2.1 Abandonment of Groundwater Monitor Wells

In June 2006, the City reportedly oversaw the abandonment of numerous groundwater monitor wells located in the P66 Area of Westlake Avenue North, including MW-8, MW-13 through MW-17, MW-



27, MW-42, MW-44, MW-70, MW-84, MW-98, MW-99, MW-105, and MW-205. Each well abandonment was performed by removing the vault box and filling the well with bentonite to ground surface. Copies of Ecology's Resource Protection Well Reports documenting the decommissioning of wells MW-13 through MW-16 and MW-44 are provided in Appendix B. Copies of the original well logs with decommissioning field notes for the remaining wells are also provided in Appendix B. Cardno could not locate any of the Resource Protection Well Reports documenting well decommissioning activities for these wells.

4.2.2 Utility Installations and Soil Removal Actions

As described in Section 3.1, the majority of the soil excavation activities within Westlake Avenue North occurred between July 2006 and April 2007 during Phase I of the W/MCP, prior to the MCP. However, some subsurface utilities were installed and/or upgraded within the "P66 Area" of Westlake Avenue North between January 2011 and December 2011. As described in Section 2.0, P66 was responsible for costs related to excavation, handling, and disposal of soil generated during utility excavation work along Westlake Avenue North below 7.5 feet south of the north P66 property boundary and below 5.5 feet bgs north of the north P66 property boundary. Approximately 438 tons of soil was documented as removed and transported to Waste Management for disposal during the utility installation and upgrade activities along Westlake Avenue North within the P66 Area. A summary of the soil volumes documented as removed during the MCP construction along Westlake Avenue North, is summarized in Table 2.

4.2.3 SVE/AS Installation

All AS/SVE remedial well installation activities in Westlake Avenue North occurred between July 2006 and April 2007, prior to the MCP work. A total of 21 AS wells and 9 SVE wells were installed. Between August and November 2013, all of the remediation wells/conveyance piping located in the Mercer and Valley Street ROWs and the Westlake and Terry Avenue ROWs were connected to new above ground AS/SVE treatment system currently located on the Phillips 66 property. The installation of the current above ground AS/SVE treatment system is described in Cardno ATC's Remediation System Installation and Startup Report, dated June 20, 2014.

4.3 Valley Street

Remedial actions performed during the MCP, including the removal of petroleum impacted soil and the installation of numerous AS/SVE remediation wells and associated conveyance piping trenching, occurred within Valley Street between January 2013 and July 2013. Well abandonment, soil excavation, and AS/SVE well installation activities completed in Valley Street are presented in the following sections.

4.3.1 Abandonment of Groundwater Monitor Wells

In June 2006, the City abandoned monitor well MW-204 located in Valley Street within the P66 Area. A copy of the original well log with decommissioning field notes for well MW-204 is provided in Appendix C. Between December 2010 and January 2011, the City reportedly oversaw the abandonment of additional groundwater monitor wells located in the P66 Area of Valley Street (including MW-86, MW-87, MW-88), prior to soil excavation activities. However, neither the City,



SDOT, or their contractors could provide Cardno with documentation supporting the decommissioning activities. Additionally, Cardno could not locate any of the Resource Protection Well Reports documenting well decommissioning activities on Ecology's website. None of Ecology's Resource Protection Well Reports documenting well decommissioning activities in the P66 Area correlate with the dates the wells were reportedly decommissioned.

4.3.2 Utility Installations and Soil Removal Actions

Subsurface utilities, including electrical and transmission duct banks and vaults, water, storm, and sanitary sewer systems were installed and or upgraded within the P66 Area of Valley Street between January 2013 and November 2013. As described in Section 2.0, P66 was responsible for costs related to excavation, handling, and disposal of soil excavated during the course of the MCP construction from depths at or below 5.5-feet bgs within the ROW adjacent to the north half of Block 77 (specifically in Valley Street and Westlake Avenue North and Terry Avenue North, north of the northern P66 property).

Approximately 3,746 tons of soil was documented as removed and transported to Waste Management for disposal during the utility installation and upgrade activities along Valley Street within the P66 Area. A summary of the soil volumes documented as removed during the MCP construction along Valley Street is summarized in Table 3.

4.3.3 SVE/AS Installation

In July 2013, the City oversaw the installation of 14 1-inch diameter air sparge wells to approximately 20 feet bgs, designated VAS-1 through VAS-14, and eight 1-inch diameter soil vapor extraction wells to approximately 8 feet bgs, designated VSVE-1 through VSVE-7, and VSEVE-9 within the Valley Street ROW. Clearcreek also excavated trenching within Valley Street in order to install conveyance piping from the wells. The conveyance piping trench was excavated toward the southwest corner of the intersection of Valley Street and Terry Avenue North, and was terminated on the west side of Terry Avenue North, approximately 20 feet south of the intersection. Soil generated during installation of the remediation wells was temporarily contained in 23 labeled 55-gallon drums. The contents of the drums were subsequently emptied into a truck and were transported to Waste Management for disposal on September 27, 2013.

Locations of the AS/SVE wells installed in Valley Street are shown in Figure 5. Copies of Ecology's available Resource Protection Well Reports documenting the AS well installation activities are provided in Appendix D. Resource Protection Well Reports documenting the SVE well installation activities could not be located.

4.4 Terry Avenue North

Limited improvements were conducted during the MCP in Terry Avenue. Remedial actions performed on Terry Avenue North during the MCP included well abandonment activities and removal of soil during the installation of conveyance piping associated with the AS/SVE wells located along Valley Street between December 2010 and October, 2013.



4.4.1 Abandonment of Groundwater Monitor Wells

In June 2006, the City abandoned well MW-36, MW-47 and MW-101, located in the P66 Area of Terry Avenue North. Copies of the original well logs with decommissioning field notes for these wells are provided in Appendix E. Between December 2010 and January 2011, the City reportedly oversaw the abandonment of additional groundwater monitor wells located in the P66 Area of Terry Avenue North (including MW-10, MW-69, MW-103, and MW-202) prior to soil excavation activities. However, neither the City, SDOT, or their contractors could provide Cardno with documentation supporting decommissioning activities for these wells. Additionally, Cardno could not locate any of the Resource Protection Well Reports documenting well decommissioning activities in the P66 Area correlate with the dates the wells were reportedly decommissioned.

4.4.2 Soil Removal Actions

As described in Section 2.0, P66 was responsible for costs related to excavation, handling, and disposal of soil generated during utility excavation work along Terry Avenue North below 7.5 feet south of the north P66 property boundary and below 5.5 feet bgs north of the north P66 property boundary. Trenching activities for the conveyance piping connected to the AS/SVE remediation wells installed in Valley Street began in the northwest corner of Terry Avenue on September 23, 2013. These trenching activities were conducted by Clearcreek under the supervision of Cardno ATC. The trench was excavated approximately 3-feet bgs. A total of 182.36 tons of soil was transported to Waste Management for disposal between September 27 and October 9, 2014. The soil volumes removed are summarized on Table 4. The trench excavation activities completed in Terry Avenue between September and October 2013 are summarized in Cardno ATC's System Installation and Startup Report, dated June 18, 2014.

4.4.3 SVE/AS Installation

All AS/SVE remedial well installation activities in Terry Avenue occurred between July 2006 and April 2007, prior to the MCP work. A total of 15 SVE wells were installed. No AS wells were installed in Terry Avenue North. The installation of the current above ground AS/SVE treatment system is described in Cardno ATC's System Installation and Startup Report, dated June 18, 2014. Locations of the AS/SVE wells installed in Terry Avenue North are shown in Figure 6.

5.0 CONCLUSIONS

Limited documentation is available to support the remediation well installation activities, monitor well decommissioning activities and soil excavation activities within the P66 Area during the MCP construction activities. The total documented soil volume removed from the ROWs in the P66 designated area during the MCP construction is approximately 6,466 tons. The documented excavated soil volumes or presented in Tables 1 through 4.

Between August and November 2013, all of the remediation wells/conveyance piping located in the Mercer and Valley Street ROWs and the Westlake and Terry Avenue ROWs were connected to new above ground AS/SVE treatment system currently located on the Phillips 66 property. The



installation of the current above ground AS/SVE treatment system is described in Cardno ATC's Remediation System Installation and Startup Report, dated June 20, 2014.



TABLES

Table 1Summary of Soil Removal Volumes within Phillips 66 Area during Mercer Corridor Project (2011) - Mercer StreetPhillips 66 Site No. 255353 (AOC 1396)600 Westlake Avenue NorthSeattle, Washington

Waste Stream	Date	Transport	Truck #	Approximate Tonnage
Mercer Street				
Installation of vault S625L1; Mercer St, west of Terry Ave	01/11/11	GMCC	170	18.09
Installation of vault S625L1; Mercer St, west of Terry Ave	01/11/11	GMCC	170	14.58
Installation of vault S625L1; Mercer St, west of Terry Ave	01/11/11	GMCC	166	15.15
Installation of vault S625L1; Mercer St, west of Terry Ave	01/11/11	GMCC	169	18.64
Installation of vault S625L1; Mercer St, west of Terry Ave	01/11/11	GMCC	170	18.43
Installation of vault S625L1; Mercer St, west of Terry Ave	01/11/11	GMCC	166	18.86
Installation of vault S625L1; Mercer St, west of Terry Ave	01/11/11	GMCC	169	17.04
Installation of vault S625L1; Mercer St, west of Terry Ave	01/11/11	GMCC	170	17.18
Installation of vault S625L1; Mercer St, west of Terry Ave	01/11/11	GMCC	166	16.94
Installation of vault S625L1; Mercer St, west of Terry Ave	01/11/11	GMCC	169	16.93
Installation of vault S625L1; Mercer St, west of Terry Ave	01/11/11	GMCC	170	16.41
Installation of vault S625L1; Mercer St, west of Terry Ave	01/11/11	GMCC	169	17.56
Installation of vault S625L1; Mercer St, west of Terry Ave	01/12/11	GMCC	166	14.21
Installation of vault S625L1; Mercer St, west of Terry Ave	01/12/11	GMCC	170	13.07
Installation of vault S625L1; Mercer St, west of Terry Ave	01/12/11	GMCC	168	14.6
Installation of vault S625L1; Mercer St, west of Terry Ave	01/12/11	GMCC	166	12.09
Installation of vault S625L1; Mercer St, west of Terry Ave	01/12/11	GMCC	170	9.63
Installation of vault S625L1; Mercer St, west of Terry Ave	01/12/11	GMCC	168	8.52
Installation of vault S625L1; Mercer St, west of Terry Ave	01/12/11	GMCC	166	9.29
Installation of vault S625L1; Mercer St, west of Terry Ave	01/12/11	GMCC	170	10.99
Installation of vault S625L1; Mercer St, west of Terry Ave	01/12/11	GMCC	168	8.91
Installation of vault S625L1; Mercer St, west of Terry Ave	01/12/11	GMCC	166	11.8
Installation of vault S625L1; Mercer St, west of Terry Ave	01/12/11	GMCC	170	7.6
Installation of vault S625L1; Mercer St, west of Terry Ave	01/13/11	GMCC	166	10.74
Installation of vault S625L1; Mercer St, west of Terry Ave	01/13/11	GMCC	168	10.37
Installation of vault S625L1; Mercer St, west of Terry Ave	01/13/11	GMCC	170	9.01
Installation of vault S625L1; Mercer St, west of Terry Ave	01/13/11	GMCC	166	16.8
Cleaning out the casing at Terry	06/24/11	GMCC	180	10.16
Cleaning out the casing at Terry	06/24/11	GMCC	180	14.42

MH T-1 and run toward T-2	08/08/11	GMCC	179	15.47
MH T-1 and run toward T-2	08/08/11	GMCC	179	17.07
MH T-1 and run toward T-2	08/08/11	GMCC	179	17.92
MH T-1 and run toward T-2	08/08/11	GMCC	179	16.46
MH T-1 and run toward T-2	08/08/11	GMCC	179	17.07
Communications Duct Bank; Mercer St	09/14/11	GMCC	171	16.53
Communications Duct Bank; Mercer St	09/14/11	GMCC	171	14.77
Communications Duct Bank; Mercer St	09/14/11	GMCC	171	15.33
Communications Duct Bank; Mercer St	09/14/11	GMCC	171	14.58
Communications Duct Bank; Mercer St	09/20/11	GMCC	168	15.18
Communications Duct Bank; Mercer St	09/20/11	GMCC	168	14.07
Utility work on Mercer St at Terry Ave	09/21/11	GMCC	168	12.27
Utility work on Mercer St at Terry Ave	09/21/11	GMCC	179	12.72
Utility work on Mercer St at Terry Ave	09/23/11	GMCC	129	17.6
Utility work on Mercer St at Terry Ave	09/23/11	GMCC	129	10.13
Utility work on Mercer St at Terry Ave	09/27/11	GMCC	162	15.6
Utility work on Mercer St at Terry Ave	09/27/11	GMCC	175	4.68
Utility work on Mercer St at Terry Ave	09/28/11	GMCC	168	8.41
Utility work on Mercer St at Terry Ave	09/28/11	GMCC	178	14.03
Utility work on Mercer St at Terry Ave	09/28/11	GMCC	168	8.51
Utility work on Mercer St at Terry Ave	09/28/11	GMCC	178	13.65
Utility work on Mercer St at Terry Ave	09/29/11	GMCC	168	11.05
Utility work on Mercer St at Terry Ave	09/29/11	GMCC	168	10.79
Utility work on Mercer St at Terry Ave	09/29/11	GMCC	168	10.71
Utility work on Mercer St at Terry Ave	09/29/11	GMCC	168	10.45
Utility work on Mercer St at Terry Ave	10/06/11	GMCC	186	15.55
Utility work on Mercer St at Terry Ave	10/06/11	GMCC	186	17.1
Utility work on Mercer St at Terry Ave	10/06/11	GMCC	186	17.62
Utility work on Mercer St at Terry Ave	10/28/11	GMCC	171	15.12
Utility work on Mercer St at Terry Ave	10/28/11	GMCC	171	15.16
Utility work on Mercer St at Terry Ave	10/28/11	GMCC	186	14.62
Utility work on Mercer St at Terry Ave	10/28/11	GMCC	171	14.6
Utility work on Mercer St at Terry Ave	10/28/11	GMCC	186	16.64
Utility work on Mercer St at Terry Ave	10/28/11	GMCC	171	13.38
Utility work on Mercer St at Terry Ave	10/28/11	GMCC	186	16.02
Utility work on Mercer St at Terry Ave	10/28/11	GMCC	171	14.82
Utility work on Mercer St at Terry Ave	10/28/11	GMCC	186	16.4
Utility work on Mercer St at Terry Ave	10/28/11	GMCC	171	16.71
Utility work on Mercer St at Terry Ave	10/31/11	GMCC	171	20.18

Utility work on Mercer St at Terry Ave	10/31/11	GMCC	171	22.45
Utility work on Mercer St at Terry Ave	10/31/11	GMCC	167	20.46
Utility work on Mercer St at Terry Ave	11/01/11	GMCC	186	15.16
Utility work on Mercer St at Terry Ave	11/01/11	GMCC	186	15.7
Utility work on Mercer St at Terry Ave	11/01/11	GMCC	186	13.74
Utility work on Mercer St at Terry Ave	11/01/11	GMCC	186	13.99
Utility work on Mercer St at Terry Ave	11/01/11	GMCC	186	14.21
Utility work on Mercer St at Terry Ave	11/01/11	GMCC	186	17.56
Utility work on Mercer St at Terry Ave	11/02/11	GMCC	186	16.55
Utility work on Mercer St at Terry Ave	11/02/11	GMCC	186	7.14
Utility work on Mercer St at Terry Ave	11/02/11	GMCC	186	14.99
Utility work on Mercer St at Terry Ave	11/03/11	GMCC	186	17.27
Utility work on Mercer St at Terry Ave	11/04/11	GMCC	170	17.87
Utility work on Mercer St at Terry Ave	11/04/11	GMCC	170	19.21
Subtotal Utility Installation Work on Mercer Street				1183.29
Sparging system on Mercer between Westlake and Terry	02/02/11	Clearcreek	44	16.72
Sparging system on Mercer between Westlake and Terry	02/02/11	Clearcreek	43	15.97
Sparging system on Mercer between Westlake and Terry	02/02/11	Clearcreek	44	15.49
Sparging system on Mercer between Westlake and Terry	02/02/11	Clearcreek	43	16.24
Sparging system on Mercer between Westlake and Terry	02/03/11	Clearcreek	44	15.3
Sparging system on Mercer between Westlake and Terry	02/03/11	Clearcreek	43	14.89
Sparging system on Mercer between Westlake and Terry	02/03/11	Interwest	564	14.3
Sparging system on Mercer between Westlake and Terry	02/03/11	Interwest	566	15.76
Sparging system on Mercer between Westlake and Terry	02/03/11	Interwest	572	16.6
Sparging system on Mercer between Westlake and Terry	02/03/11	Clearcreek	44	17.88
Sparging system on Mercer between Westlake and Terry	02/03/11	Clearcreek	43	18.16
Sparging system on Mercer between Westlake and Terry	02/04/11	Interwest	564	14.27
Sparging system on Mercer between Westlake and Terry	02/04/11	Interwest	566	15.44
Sparging system on Mercer between Westlake and Terry	02/04/11	Interwest	572	16.8
Sparging system on Mercer between Westlake and Terry	02/04/11	Clearcreek	44	17.05
Sparging system on Mercer between Westlake and Terry	02/04/11	Interwest	564	15.74
Sparging system on Mercer between Westlake and Terry	02/04/11	Interwest	566	16.31
Sparging system on Mercer between Westlake and Terry	02/04/11	Interwest	572	15.33
Sparging system on Mercer between Westlake and Terry	02/04/11	Clearcreek	44	16.21
Sparging system on Mercer between Westlake and Terry	02/04/11	Interwest	564	16
Sparging system on Mercer between Westlake and Terry	02/04/11	Interwest	566	14.78
Sparging system on Mercer between Westlake and Terry	02/04/11	Interwest	572	15.94
Sparging system on Mercer between Westlake and Terry	02/04/11	Clearcreek	44	18.99

otal Waste Soil - Mercer Street				2099.44
ubtotal sparging system installation on Mercer Street				916.15
OP site between Westlake & Terry and Mercer & Valley	06/03/11	Clearcreek	44	10.98
parging system on Mercer between Westlake and Terry	06/08/11	Clearcreek	44	19.41
parging system on Mercer between Westlake and Terry	06/08/11	Clearcreek	44	18.92
parging system on Mercer between Westlake and Terry	06/07/11	Clearcreek	44	17.35
parging system on Mercer between Westlake and Terry	06/07/11	Clearcreek	44	19.14
parging system on Mercer between Westlake and Terry	06/07/11	Clearcreek	44	17.37
parging system on Mercer between Westlake and Terry	06/06/11	Clearcreek	43	16.41
parging system on Mercer between Westlake and Terry	06/06/11	Clearcreek	44	17.55
parging system on Mercer between Westlake and Terry	06/06/11	Clearcreek	43	18.17
parging system on Mercer between Westlake and Terry	06/06/11	Clearcreek	44	20.1
parging system on Mercer between Westlake and Terry	06/06/11	Clearcreek	44	15.75
parging system on Mercer between Westlake and Terry	06/06/11	Clearcreek	43	14.74
parging system on Mercer between Westlake and Terry	06/06/11	Clearcreek	44	19.47
parging system on Mercer between Westlake and Terry	06/03/11	Clearcreek	43	15.39
parging system on Mercer between Westlake and Terry	06/03/11	Clearcreek	44	16.11
parging system on Mercer between Westlake and Terry	06/03/11	Interwest	82	13.75
parging system on Mercer between Westlake and Terry	06/03/11	Clearcreek	44	16.82
parging system on Mercer between Westlake and Terry	06/03/11	Clearcreek	44	17.29
parging system on Mercer between Westlake and Terry	06/03/11	Clearcreek	43	17.56
parging system on Mercer between Westlake and Terry	06/03/11	Interwest	82	15.23
parging system on Mercer between Westlake and Terry	06/03/11	Interwest	82	15.21
parging system on Mercer between Westlake and Terry	06/03/11	Clearcreek	44	15.95
parging system on Mercer between Westlake and Terry	06/02/11	Clearcreek	43	20.66
parging system on Mercer between Westlake and Terry	02/07/11	Clearcreek	44	6.97
parging system on Mercer between Westlake and Terry	02/07/11	Interwest	566	19.65
parging system on Mercer between Westlake and Terry	02/07/11	Clearcreek	44	19.75
parging system on Mercer between Westlake and Terry	02/07/11	Interwest	566	18.7
parging system on Mercer between Westlake and Terry	02/07/11	Clearcreek	44	18.03
parging system on Mercer between Westlake and Terry	02/07/11	Interwest	566	13.29
parging system on Mercer between Westlake and Terry	02/04/11	Interwest	564	13.13
parging system on Mercer between Westlake and Terry	02/04/11	Interwest	572	15.2
parging system on Mercer between Westlake and Terry	02/04/11	Interwest	566	16.63

Table 2Summary of Soil Removal Volumes within Phillips 66 Area during Mercer Corridor Project (2011) - Westlake Avenue NorthPhillips 66 Site No. 255353 (AOC 1396)600 Westlake Avenue NorthSeattle, Washington

Waste Stream	Date	Transport	Truck #	Approximate Tonnage
	· · · · · · · · · · · · · · · · · · ·			
Westlake Avenue				
Installation of Vault S623L1 at the NE corner of Westlake & Mercer	10/27/11	GMCC	186	10.963
Installation of Vault S623L1 at the NE corner of Westlake & Mercer	10/27/11	GMCC	173	14.34
Installation of Vault S623L1 at the NE corner of Westlake & Mercer	10/27/11	GMCC	173	16.74
Installation of Vault S623L1 at the NE corner of Westlake & Mercer	10/27/11	GMCC	186	13.67
Installation of Vault S623L1 at the NE corner of Westlake & Mercer	10/27/11	GMCC	173	16.55
Installation of Vault S623L1 at the NE corner of Westlake & Mercer	10/27/11	GMCC	186	11.63
Installation of Vault S623L1 at the NE corner of Westlake & Mercer	10/27/11	GMCC	173	14.68
Installation of Vault S623L1 at the NE corner of Westlake & Mercer	10/27/11	GMCC	186	14.26
Installation of Vault S623L1 at the NE corner of Westlake & Mercer	10/27/11	GMCC	173	15.58
Installation of Vault S623L1 at the NE corner of Westlake & Mercer	10/27/11	GMCC	186	13.07
Installation of Vault S623L1 at the NE corner of Westlake & Mercer	10/27/11	GMCC	173	15.57
Utility Work on Westlake at Mercer	11/09/11	GMCC	171	15.12
Utility Work on Westlake at Mercer	11/09/11	GMCC	172	14.82
Utility Work on Westlake at Mercer	11/09/11	GMCC	171	14.86
Utility Work on Westlake at Mercer	11/09/11	GMCC	172	16.02

otal Waste Soil - Westlake Ave				438.383
Itility Work on Westlake at Mercer	11/18/11	GMCC	186	14.16
Itility Work on Westlake at Mercer	11/18/11	GMCC	186	17.39
tility Work on Westlake at Mercer	11/18/11	GMCC	186	14.21
Itility Work on Westlake at Mercer	11/18/11	GMCC	186	12.54
Itility Work on Westlake at Mercer	11/17/11	GMCC	186	15.58
Itility Work on Westlake at Mercer	11/16/11	GMCC	186	16.89
tility Work on Westlake at Mercer	11/15/11	GMCC	186	12.64
tility Work on Westlake at Mercer	11/15/11	GMCC	186	16.94
Itility Work on Westlake at Mercer	11/15/11	GMCC	186	14.52
Itility Work on Westlake at Mercer	11/14/11	GMCC	186	17.84
Jtility Work on Westlake at Mercer	11/14/11	GMCC	186	17.11
Jtility Work on Westlake at Mercer	11/09/11	GMCC	171	17.72
Itility Work on Westlake at Mercer	11/09/11	GMCC	172	15.98
tility Work on Westlake at Mercer	11/09/11	GMCC	171	16.99

Table 3Summary of Soil Removal Volumes within Phillips 66 Area during Mercer Corridor Project (2013) - Valley StreetPhillips 66 Site No. 255353 (AOC 1396)600 Westlake Avenue NorthSeattle, Washington

Logged by GMCC - no disposal ticket

Waste Stream	Date	Transport	Truck #	Approximate Tonnage
Valley Street				
Bin Haul out P66 Comm bore pit - 3 solos on 1/24/13 to WM	01/24/13	Disposal from P66 Stockpile		15
Bin Haul out P66 Comm bore pit - 3 solos on 1/24/13 to WM	01/24/13	Disposal from P66 Stockpile		15
Bin Haul out P66 Comm bore pit - 3 solos on 1/24/13 to WM	01/24/13	Disposal from P66 Stockpile		15
Bin Haul out P66 water bore pit - 2 solos on 1/29/13 to WM	01/29/13	Disposal from P66 Stockpile		15
Bin Haul out P66 water bore pit - 2 solos on 1/29/13 to WM	01/29/13	Disposal from P66 Stockpile		15
Bin Haul out Terry & Valley Water Casing to Waste Management (no quantity identified)	01/30/13	Disposal from P66 Stockpile		15
Bin Haul out Terry & Valley Water Casing to Waste Management (no quantity identified)	01/31/13	Disposal from P66 Stockpile		15
Bin Haul out 2 solo Terry & Valley storm casing pit (P66)	02/13/13	Disposal from P66 Stockpile		15
Bin Haul out 2 solo Terry & Valley storm casing pit (P66)	02/13/13	Disposal from P66 Stockpile		15
Disposal - Profile 1072430R - P66 Area - Valley & Terry >5.5 feet	03/14/13	Disposal from P66 Stockpile	12152	11.72
Disposal - Profile 1072430R - P66 Area - Valley & Terry >5.5 feet	03/21/13	Disposal from P66 Stockpile	12152	13.14
Disposal - Profile 1072430R - P66 Area - Valley & Terry >5.5 feet	03/25/13	Disposal from P66 Stockpile	SS 109	11.71
Disposal - Profile 1072430R - P66 Area - Valley & Terry >5.5 feet	03/25/13	Disposal from P66 Stockpile	SS 109	11.02
Disposal - Profile 1072430R - P66 Area - Valley & Terry >5.5 feet	03/26/13	Disposal from P66 Stockpile	12 153	12.98
Disposal - Profile 1072430R - P66 Area - Valley & Terry >5.5 feet	03/26/13	Disposal from P66 Stockpile	12 153	13.27
Disposal - Profile 1072430R - P66 Area - Valley & Terry >5.5 feet	03/26/13	Disposal from P66 Stockpile	12 153	11.4
Disposal - Profile 1072430R - P66 Area - Valley & Terry >5.5 feet	03/26/13	Disposal from P66 Stockpile	12 153	16.12
Disposal - Profile 1072430R - P66 Area - Valley & Terry >5.5 feet	03/27/13	Disposal from P66 Stockpile	SS 117	27.71
Disposal - Profile 1072430R - P66 Area - Valley & Terry >5.5 feet	03/28/13	Disposal from P66 Stockpile	12 153	16.34
Disposal - Profile 1072430R - P66 Area - Valley & Terry >5.5 feet	03/28/13	Disposal from P66 Stockpile	12 153	14.67
Logged by GMCC - no disposal ticket	03/28/13	Disposal from P66 Stockpile	12 133	11.07
Disposal - Profile 1072430R - COP Area - Valley & Terry	03/29/13	Disposal from P66 Stockpile	SS 121	33.18
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/01/13	Disposal from P66 Stockpile	12 153	15.02
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/01/13	Disposal from P66 Stockpile	12 153	15.04
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/03/13	Disposal from P66 Stockpile	SS 1180	16.71
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/04/13	Disposal from P66 Stockpile	SS 95	27.59
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/04/13	Disposal from P66 Stockpile	SS 117	29.46

04/05/13

Disposal from P66 Stockpile

30

	04/05/13	Disposal from P66 Stockpile	SS 95	28.89
Disposal - Profile 1072430R - COP Area - Valley & Terry Disposal - Profile 1072430R - COP Area - Valley & Terry	04/08/13	Disposal from P66 Stockpile	12153	15.06
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/08/13	Disposal from P66 Stockpile	12153	13.76
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/09/13	Disposal from P66 Stockpile	12153	13.57
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/09/13	Disposal from P66 Stockpile	12153	14.05
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/10/13	Disposal from P66 Stockpile	12153	14.37
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/11/13	Disposal from P66 Stockpile	Tmax 53	29.99
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/11/13	Disposal from P66 Stockpile	Tmax 53	33.07
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/12/13	Disposal from P66 Stockpile	Tmax 49	29.4
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/12/13	Disposal from P66 Stockpile	Tmax 49	29.84
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/12/13	Disposal from P66 Stockpile	Tmax 49	26.18
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/24/13	Disposal from P66 Stockpile	SS95	31.99
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/24/13	Disposal from P66 Stockpile	SS1180	35.38
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/25/13	Disposal from P66 Stockpile	Tmax37	16.68
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/25/13	Disposal from P66 Stockpile	Tmax53	30.09
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/25/13	Disposal from P66 Stockpile	Tmax37	15.13
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/25/13	Disposal from P66 Stockpile	Tmax53	31.38
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/25/13	Disposal from P66 Stockpile	Tmax37	12.55
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/25/13	Disposal from P66 Stockpile	Tmax53	32.96
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/25/13	Disposal from P66 Stockpile	Tmax53	27.37
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/26/13	Disposal from P66 Stockpile	Tmax37	13.51
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/26/13	Disposal from P66 Stockpile	Tmax37	14.34
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/26/13	Disposal from P66 Stockpile	Tmax37	13.27
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/26/13	Disposal from P66 Stockpile	Tmax37	13.01
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/29/13	Disposal from P66 Stockpile	SS1180	25.5
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/29/13	Disposal from P66 Stockpile	SS1180	29.09
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/29/13	Disposal from P66 Stockpile	SS1180	30.6
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/30/13	Disposal from P66 Stockpile	SS1180	26.31
Disposal - Profile 1072430R - COP Area - Valley & Terry	04/30/13	Disposal from P66 Stockpile	SS1180	23.94
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/01/13	Disposal from P66 Stockpile	SS95	32.71
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/01/13	Disposal from P66 Stockpile	SS95	34.7
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/02/13	Disposal from P66 Stockpile	Tmax187	33.75
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/02/13	Disposal from P66 Stockpile	SS95	33.15
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/02/13	Disposal from P66 Stockpile	Tmax187	34.52
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/06/13	Disposal from P66 Stockpile	Tmax53	32.06
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/06/13	Disposal from P66 Stockpile	SS114	28.5
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/06/13	Disposal from P66 Stockpile	Tmax53	28.67
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/07/13	Disposal from P66 Stockpile	12153	14.86
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/07/13	Disposal from P66 Stockpile	12153	14.95
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/07/13	Disposal from P66 Stockpile	12153	15.03
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/07/13	Disposal from P66 Stockpile	SS100	26.52
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/08/13	Disposal from P66 Stockpile	Tmax 53	29.56
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/08/13	Disposal from P66 Stockpile	Tmax 53	31.1
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/09/13	Disposal from P66 Stockpile	Tmax187	30.42
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/09/13	Disposal from P66 Stockpile	Tmax43	33.33
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/09/13	Disposal from P66 Stockpile	SS97	30.33
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/09/13	Disposal from P66 Stockpile	SS97	31.28
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/10/13	Disposal from P66 Stockpile	SS95	31.03
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/10/13	Disposal from P66 Stockpile	Tmax187	31.33
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/13/13	Disposal from P66 Stockpile	SS95	32.52
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/13/13	Disposal from P66 Stockpile	SS95	17.24

Disposal - Profile 1072430R - COP Area - Valley & Terry	05/14/13	Disposal from P66 Stockpile	SS95	29.61
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/15/13	Disposal from P66 Stockpile	Tmax37	14.28
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/15/13	Disposal from P66 Stockpile	Tmax37	15.99
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/15/13	Disposal from P66 Stockpile	Tmax37	15.91
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/15/13	Disposal from P66 Stockpile	Tmax37	12.62
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/16/13	Disposal from P66 Stockpile	SS95	29.33
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/17/13	Disposal from P66 Stockpile	SS95	31.74
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/17/13	Disposal from P66 Stockpile	SS95	29.96
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/17/13	Disposal from P66 Stockpile	SS95	32.27
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/21/13	Disposal from P66 Stockpile	12 169	27.54
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/21/13	Disposal from P66 Stockpile	12 169	27
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/23/13	Disposal from P66 Stockpile	Tmax37	15.42
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/23/13	Disposal from P66 Stockpile	Tmax37	13.96
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/23/13	Disposal from P66 Stockpile	Tmax37	13.41
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/28/13	Disposal from P66 Stockpile	SS95	32.97
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/28/13	Disposal from P66 Stockpile	SS95	34.47
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/28/13	Disposal from P66 Stockpile	SS119	33.64
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/28/13	Disposal from P66 Stockpile	SS119	30.03
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/29/13	Disposal from P66 Stockpile	Tmax45	29.47
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/29/13	Disposal from P66 Stockpile	SS119	35.64
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/29/13	Disposal from P66 Stockpile	SS95	32.48
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/30/13	Disposal from P66 Stockpile	SS95	34.76
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/30/13	Disposal from P66 Stockpile	SS95	34.17
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/30/13	Disposal from P66 Stockpile	SS95	33.69
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/30/13	Disposal from P66 Stockpile	SS119	30.35
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/30/13	Disposal from P66 Stockpile	SS95	33.2
Disposal - Profile 1072430R - COP Area - Valley & Terry	05/31/13	Disposal from P66 Stockpile		30
Disposal - Profile 1072430R - COP Area - Valley & Terry	06/03/13	Disposal from P66 Stockpile		30
Disposal - Profile 1072430R - COP Area - Valley & Terry	06/03/13	Disposal from P66 Stockpile		30
Disposal - Profile 1072430R - COP Area - Valley & Terry	06/06/13	Disposal from P66 Stockpile	SS95	32.04
Disposal - Profile 1072430R - COP Area - Valley & Terry	06/10/13	Disposal from P66 Stockpile		30
Disposal - Profile 1072430R - COP Area - Valley & Terry	06/10/13	Disposal from P66 Stockpile		30
Disposal - Profile 1072430R - COP Area - Valley & Terry	06/11/13	Disposal from P66 Stockpile		30
Disposal - Profile 1072430R - COP Area - Valley & Terry	06/13/13	Disposal from P66 Stockpile		30
Disposal - Profile 1072430R - COP Area - Valley & Terry	06/14/13	Disposal from P66 Stockpile		30
Disposal - Profile 1072430R - COP Area - Valley & Terry	06/18/13	Disposal from P66 Stockpile		30
Disposal - Profile 1072430R - COP Area - Valley & Terry	06/25/13	Disposal from P66 Stockpile	SS95	28.6
Disposal - Profile 1072430R - COP Area - Valley & Terry	06/26/13	Disposal from P66 Stockpile	SS95	29.58
Disposal - Profile 1072430R - COP Area - Valley & Terry	07/08/13	Disposal from P66 Stockpile	SS119	27.57
Disposal - Profile 1072430R - COP Area - Valley & Terry	07/08/13	Disposal from P66 Stockpile	SS119	23.95
Total Soil Volume - Valley Street				3746.44

Table 4Summary of Soil Removal Volumes within Phillips 66 Area during Mercer Corridor Project (2013) - Terry Avenue NorthPhillips 66 Site No. 255353 (AOC 1396)600 Westlake Avenue NorthSeattle, Washington

Waste Stream	Date	Transport	Truck #	Tonnage
			•	
Terry Avenue North				
Trenching Material from Terry Avenue	09/27/13	Clearcreek Contractors	43	17.3
Trenching Material from Terry Avenue	09/27/13	Clearcreek Contractors	43	19.44
Trenching Material from Terry Avenue	09/27/13	Clearcreek Contractors	43	15.11
Trenching Material from Terry Avenue	10/07/13	Clearcreek Contractors	43	18.59
Trenching Material from Terry Avenue	10/07/13	Clearcreek Contractors	43	19.31
Trenching Material from Terry Avenue	10/07/13	Clearcreek Contractors	43	19.46
Trenching Material from Terry Avenue	10/07/13	Clearcreek Contractors	43	19.19
Trenching Material from Terry Avenue	10/08/13	Clearcreek Contractors	43	17.9
Trenching Material from Terry Avenue	10/08/13	Clearcreek Contractors	43	16.41
Trenching Material from Terry Avenue	10/09/13	Clearcreek Contractors	43	19.65
Total Soil Volume - Valley Street				182.36

FIGURES



NOTES:

1. LOCATIONS OF SITE FEATURES CONSTRUCTED FOR THE P-66 REMEDIATION SYSTEM (REMEDIATION COMPOUND, ON-SITE TRENCHES, TERRY AVE. TRENCH EXTENSION) HAVE NOT BEEN SURVEYED AND ARE APPROXIMATE.

2. LOCATIONS OF ALL OTHER SITE AND AREA FEATURES ARE BASED ON PLANS SUPPLIED BY SDOT, AND HAVE NOT BEEN VERIFIED BY THE PROJECT ENGINEER.



Cardno ERI **Shaping the Future**

EXPLANATION:						
~~~~	SHEET PILE LOC					
	GRAVITY WALL I					









#### APPENDIX A

#### ECOLOGY RESOURCE PROTECTION WELL REPORTS – WELL INSTALLATIONS FOR MERCER STREET

GO (SUBMIT ONE WELL REPORT PER WELL INSTALLED)         Construction/Decommission         MAS24       Y19262         Type of Well         Construction         Construction         Construction         Decommission ORIGINAL INSTALLATION Notice         of Intent Number         Site Address         Westlake Ave. N. & Mercer St.	25-4E-3Q	
Construction/Decommission $AA \le 24$ $(1/2)$ Construction $(1/2)$ Construction         Construction $(1/2)$ Construction $(1/2)$ Construction $(1/2)$ Construction $(1/2)$ Construction         Ster $(1/2)$ Construction	REPORT CURRENT Notice of Intent No. <u>RED 5927</u>	RESOURCE PROTECTION WELL F
State       Decommission ORGINAL INSTALLATION ACTION         of Intent Number		Construction/Decommission MAS24 4192
Consulting Firm       Clearcreek Contractor's       City       Seattle       4       County       17-King         Unique Beology Well ID Tag No.       BHR       441       Location       14       NE       14       Sec 30       Two 25N       R 4E       or With a construction canterior to be to easily and a serger reportability for constructions canterior to be to easily and an adding and the information and reportability for constructions canterior with a life adding and the information and reportability for constructions canterior with a life adding and the information and reportability for constructions canterior with a life adding and whell of the information and reportability with and the information and reportability for constructions canterior with a life adding and whell the information and reportability for construction and reportability with a life adding and whell the information and reportability with a life adding and whell the information and reportability for construction of this with and the information and reportability for construction of this with and the information and reportability for the information and reportability for	Property Owner Mercer Confdor	Decommission ORIGINAL INSTALLATION Notice
Opposite and the information reported above yet text on my best knowledge and abell?       Tax Parcel No.	Site Address Westlake Ave. N. & Mercer St.	
Opposite and the information reported above yet text on my best knowledge and abell?       Tax Parcel No.	Location         1/4         NE         1/4         SE         See         30         Twn         25N         R         4E         or	Unique Ecology Well ID Tag No. <u>BHB 441</u> WELL CONSTRUCTION CERTIFICATION: I constructed nuclor accept responsibility for
Non-the state (Print)       Scott Krueger       Cased or Uncased Diameter       8 '4'       StaticLevel /         Driller/Trainee Signature $1273$ Work/Decommission Start Date $-////////////////////////////////////$	Tay Parcel No.	Materials used and the information reported above we true to my best knowledge and bellet
If trainee, licensed driller's		Driller/Trainee Signature
Well Data W11-329       Formation Description         Pipe 4'       Pipe 4'       O       - 20'4'       FT         Depth       Depth       FT       Depth       FT       Depth       Depth       Stand         Naterial       S-5       Jobst Cement       Jobst Cement       O       - 20'4'       FT         Scal       Harris       S-5       Jobst Cement       O       - 20'4'       FT         Scal       Harris       Jobst Cement       O       - 0'4'       FT	11	If trainee, licensed driller's
Augustation of the series of t	Wi1-329 . Formation Description	Signature and License No
Seal 14 0 - FT	eal below grode <u>1 - 204</u> FT hep) <u>1 164</u> brown Silty <u>5.5</u> Sand	Concrete Surface Sea Depth Blank Casing (dia x de
Gravel Pack <u>2</u> FT Material <u>2/12</u>	<u>Neat concert</u> <u>4</u> FT	Type
	FT	Gravel Pack Material
Screen (dia x dep) Stot Size Material Stot Size Material Stot Size Stot Size	<u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u>	- Stot Size Material
Material S.S. Well Depth 20'4" FT JUL 19 2011 Backfill Material FT FT	20.4 FT FT BSOURCES.	Backfill
Total Hole Depth		

_				25-4E-3DJ
port	RESOURCE PROTECTION WELL (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	REPORT C	URRENT otice of Intent No.	RE05927
is Well Re	<b>RESOURCE PROTECTION WELL</b> (SUBMIT ONE WELL REPORT PER WELL INSTALLED) Construction/Decommission $M S V E 10 4$ Construction Decommission ORIGINAL INSTALLATION Notice		Type of Well Resource Pro	
this]	of Intent Number		ercer Corridor (e Ave. N. & Mercer St.	
lo I	Consulting Firm Clearcreek Contractor's		County	
atio	Unique Ecology Well ID Tag No. BHB 442	Location M <u>N</u>	E. 1/4 <u>SE</u> Sec <u>30</u>	Two 25N R 4E or WWM
Inforn	HAB INO.	Lat/Long (s;t,r I at Do still Required) Long I		Lat Min/Sec
	Materials used and the information reported above are true to my best into whidge and belief	Tax Parcel No.		<u></u>
and/or	X Driller Trainee Name (Print) Scott Krueger Driller/Trainee Signature	Cased or Uncased Diam	eter <u>65'10</u>	Static Level <u>NIA</u>
	Driller/Trainee License No. 2073	Work/Decommission Star	Dăte 5-	<u> </u>
Data	If trainee, licensed driller's	Work/Decommission End		· · · //
the	Construction/Design Well Data	W11-329	For	nation Description
Warranty	Concrete Surface S	Seal O dep) <u>4 104</u>	FT , 0	- <u>710"</u> FT 3:144
NOT W	Blank Casing (dia x Material	- PVC		
does	Backfill Type Seal Material	portland 6" Bent chips	0	FT
The Department of Ecology	Gravel Pack Material	al all	FT0	<u>-</u> ŕt
	Scrèen (dia x dep)	<u>4</u> <u>3</u> ' 020		RECEILE
The I	Material Well Depth Backfill	ρυς 7'10"	FT	JUL 19 2011 BESOURCES - NUME
	Material Total Hole Depth		FT	OURCES
	Scale ]" ==	Pageof		ECY 050-12 (Rec=v 2/01)

| | |

י י

ħ٢
25-4E-30J
-----------

Report.	RESOURCE PROTECTIO	ON WELL R INSTALLED)	REPORT CURI Notice	RENT of Intent No. <u>REO.5927</u>
	Construction/Decommission $M S V E$ Construction Decommission ORIGINAL INSTALLATIC of Intent Number	19 4192 N Notice	Property Owner <u>Mercer (</u>	
Ч	Consulting Firm Clearcreek Contractor's			County <u>17-King</u>
the inform	Unique Ecology Well ID Tag No	responsibility for metion stand acds Abdyco and belief	Lat/Long (s;t,r Lat Deg still Required) Long Deg Tax Parcel No.	1/4 SE Sec 30     Twn 25N R 4E     or       WWM++       Lat Min/Sec       Long Min/Sec
and/or	X Driller Traince Name (Print) Scoll Krueg	· · · · ·	Cased or Uncased Diameter	10 Static Level <u>NIA</u>
	Driller/Trainee License No2073		Work/Decommission Start Date	5 31 1/
Data	If trainee, licensed driller's		Work/Decommission End Date	
r the	Construction/Design	Well Data W	/11-329	Formation Description
NOT Warranty		Concrete Surface Seal Depth Hank Casing (dia x dep Aaterial		brown Silty Sand
does	H H H H H H H H H H H H H H H H H H H	Backfill 'ype Seal Material	6" FT Bent Chips	FT
nent of Eco		∃ravel Pack √laterial	<u><b>9</b>'3</u> " _{FT} <u>2/12</u>	FT
The Department of Ecology		Screen (dia x dep) Slot Size Materiał	<u>3</u> <u>4</u> <u>1020</u> <u>puc</u> <u>7</u> <u>6</u> " FT	RECEIVER
-		Well Depth Backfill Material Total Hole Depth	FT	AICED
	Scale 1" =		Pageof	ECY 050-12 (Re=v 2/01)

		,	25-4E-32
RESOURCE PROTECTION WELL I (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	REPORT	CURRENT Notice of Intent No.	RE05927
Construction/Decommission MSVE16 419 Construction Decommission ORIGINAL INSTALLATION Notice	ZG7 Property Owner	Type of Well Resource Pr Geotechnics Mercer Corridor	atection al Soil Boring
of Intent Number	Site Address We	estlake Ave. N. & Mercer St.	
Consulting Firm Clearcreek Contractor's	City Seattle		y 17-King
Unique Ecology Well ID RHR 444		NE 1/1 SE Sec 30	Two 25N R 4E or WWM
Tag No VI U VI		at Deg	Lat Min/Sec
Moteriple used and the information reported above are used on my best knowledge and bollef	Tax Parcel No.		(
X     Driller     Trainee Name (Print)     Scoll Krueger       Driller/Trainee Signature     Driller/Trainee License No.     2073			Static Level <u>MA</u> 31 - 11
If trainee, licensed driller's	Work/Decommission		//
Signature and License No	1		mation Description
Concrete Surface Sea Depth Blank Casing (dia x de	H' belower	· · · · · · · · · · · · · · · · · · ·	- 7'4" FT n S: 174 Sand
Material Backfill	<u>-pvc</u> 6"	<u> </u>	sand
Туре	neat come 6"	<u>n</u> t	FT
Seal Material	Bert Chip	26	
Material Gravel Pack Material Screen (dia x dep) Slct Size Material	<u>3'3"</u> <u>a(12</u>	FT 	
Screen (dia x dep)	Ц	3	
Slat Size	.1020	- /	RECEIL
Material Well Depth	- puc - 7.4"		PECEILIE JUL 19 2011 RESOURCES - THE
Backfill		-	Rep. Ship
Material Total Hole Depth		FT	-OURCES ->>
	Page		EC Y 050-12 (Rec=v 2.01)

•

٧L

•

25-4E-32J

Report.	<b>RESOURCE PROTECTION WELL</b> ] (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	typuce e	ENT of Intent No.	RE05927
<u>J</u> ell Re	Construction/Decommission $MSVE 15 41$	9269	Fype of Well ≤]Resource Prot	ection
	Decommission ORIGINAL INSTALLATION Notice	Ĺ	Geotechnical	Soil Boring
this	of Intent Number	Property Owner Mercer C		
			N. & Mercer St.	17-King
Ř	Consulting Firm Clearcreek Contractor's	City Seattle		EWM
Ê	Unique Ecology Well ID Tag No BHR 445	Location 14 <u>NE</u>		Twn 25N R 4E or WWM Lat Min/Sec
fõr	WELL CONSTRUCTION CERTIFICATION; I constructed and/or accept responsibility for	still Required) Long Deg		Long Min/Sec
	constitution of this well, and its compliance with all Washington well construction standards	ann reductory pong P		
the	Minerinis used and the information reported above are arread in y best has whethe and belief	Tax Parcel No.		
and/or	X     Driller     Traince Name (Print)     Scott Krueger       Driller/Traince Signature     2072			Static Level <u>N14</u>
• -	Driller/Traince License No. 2073	Work/Decommission Start Date	<u> </u>	51-10
Data	If trainee, licensed driller's	Work/Decommission End Date		/4
the	Woll Data	W11-329	- Form	ation Description
NOT Warranty t	Concrete Surface Se Depth		<u> </u>	7'10" FT Silty Sand
<b>VOT W</b>	Blank Casing (dia x do Material	$\frac{9}{6'} \frac{7}{6'} \frac{1}{6}$	<	sand
	Backfill Type	Deat Cement		FT
ology	Seal Material	Bart chips		
ofEc	Gravel Pack Material	<u>3'3''</u> FT <u>2/12</u>		
The Department of Ecology does	Screen (dia x dcp)	43		FT
Depai	Slot Size	1020 DUC		RECEIL
The	Material Well Depth	<u>7'10"</u> FT	WAT	UL 19 2011 DOURCES - THE
	Backfill	······································		
	Material			SOURCES .T
	Tral Hole Depth	T¶		
		Page of		EC Y 050-12 (Rec=v 2/01)

25-4E-30J

4

•

Report.	RESOURCE PROTECTION WE (SUBMIT ONE WELL REPORT PER WELL INSTALLE) MSVE 18	CLL REPORT CURR D) Notice C	LENT of Intent No. <u>REO 5927</u>
Well	Construction/Decommission 900 41	× .	Fype of Well Resource Protection Geotechnical Soil Boring
this	Decommission ORIGINAL INSTALLATION Notice of Intent Number	Property Owner Mercer C	orridor
		Site Address Westlake Ave.	N. & Mercer St.
0 E	Consulting Firm Clearcreek Contractor's	City Seattle	County <u>17-King</u>
Information on	Unique Ecology Well ID Tag No. <u>BHB 446</u>		1/4 <u>SE</u> see 30 Twn 25N R 4E or WWM Lat Min/See
õ	WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	Lat/Long (s,t,r Lat Deg	
	construction of this well, and its compliment with all Washington well construction stander da	still reduned much much by	
the	Materials used and the information reported above are true to my best knowledge and helfer	Tax Parcel No.	
and/or t	X Driller Trainee Name (Print) Scolt Krueger Driller/Trainee Signature	Cased or Uncased Diameter	10 Static Level <u>alla</u>
	Driller/Trainee License No. 2073	Work/Decommission Start Date	5-31-11
Data	If trainee, licensed driller's Signature and License No		/1
the	Construction/Design Web	Data W11-329	- Formation Description
Warranty t		rface Seal O FT	0 - 7'10"FT brown Silty Sand
an	Depth	(dia x dep) 4 4' 10''	brown Silty
3	Blank Casing	$(\text{dia x dep}) = \frac{7}{10}$	Sand
NOT	Material	<u> </u>	
does	Type	peat cement	0 FT
ģ	Seal	6 "	
ologv		Bent chips	
ЦÜ	Gravel Pack	<u>3'3''</u> FT	
Ğ	Material	2/12	
ň,			0 FT
The Denartment of Ecol	Screen (dia :		
Ŭ,	Slat Size	1020	OFCER
Ĉ	Material	pue	King
The	Well Depth	<u>7'10"</u> FT	THE OURCES - NUMBER
	Backfill		毘 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	Material		The second second second
	Tctal Hole	Depth FT	-outres.
	Scale ! "=	Pageof	ECY 050-12 (Rec=v 2.01)

۰.

			25-4E-30J
RESOURCE PROTECTION WELL (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	REPORT	CURRENT Notice of Intent No.	RE05927
Construction/Decommission MAS 23 41		Type of Well	
of Intent.Number	Property Owner Site Address We	Mercer Corridor stlake Ave, N. & Mercer St.	
Consulting Firm Clearcreek Contractor's			/ <u>17-King</u>
Unique Ecology Well ID Tag No. <u>BHB</u> 447	Location 1/4	<u>NE</u> 1/4 <u>SE</u> Sec <u>30</u>	Twn <u>25N R 4E</u> or WWM Lat Min/Sec
WELL CONSTRUCTION CERTIFICATION: ) constructed and/or accept responsibility for construction of this well, and its compliance with all Washin glan well construction standards		ng Deg	Long Min/Sec
Materitis used and the information reported above are used a my best knowledge and belief	Tax Parcel No.		
X Driller Traince Name (Print) Scoll Krueger	Cased or Uncased D	Diameter	Static Level 14
Driller/Trainee License No. 2073	Work/Decommission	Start Date	111
If trainee, licensed driller's	Work/Decommission	End Date	21
Construction/Design Well Data			nation Description
Concrete Surface So Depth Blank Casing (dia x d	6	FT browv	20 FT S:Hy Sand
Material Backfill Type Scal Material	10'1" Neat come 4' Bent chi		T
Scal Material Oravel Pack Material Screen (dia x dep) Slot Size Material	2/12	TTI	
Screen (dia x dep)	1 #	0	FT FT
- Slot Size Material	5.5	-   (	RECEIVE JUL 19 2011 PEROURCES - MAR
Well Depth Backfill	20'1'	FT (	THE JUL 19 2011 HEBOURCES - MAR
Material	k		OURCES .
Total Hole Depth	Page	FT	EC Y 050-12 (Rec=v 2/01)

25-46-30

eport.	RESOURCE PROTECTION WELL (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	L REPORT	CURF Notice (	ENT of Intent No.	<u>RE05921</u>	
ell R	Construction/Decommission $MaS 22$	419273		Type of Well		
· ·	Decommission ORIGINAL INSTALLATION Notice		]	Geotechnical	Soil Boring	
n this	of Intent Number	Property Owne Site Address		N. & Mercer St.	· · · · · · · · · · · · · · · · · · ·	
<u>P</u>	Consulting Firm Clearcreek Contractor's			County		
formation on	Unique Ecology Well ID Tag No. BHB 448				_Twn <u>25N _</u> R <u>4E</u>	EWM or WWM
no	WELL CONSTRUCTION CERTERICATION: I constructed and/or accept responsibility for	Lat/Long (s,t,1			Lat Min/Sec	
Ц	construction of this well, and its compliance with all Weship gron well construction standards	still Required)	Long Deg		Long Marsec	
the	At workeds used and the information reported above are true to my best knowledge and belief	Tax Parcel No.				
1	X Driller Traine: Name (Print) Scott Krueger Driller/Trainee Signature	Cased or Uncas	ed Diameter	8.4	Static Leve	st <u>18.</u>
ଅ	Driller/Trainee License No2073	Work/Decommis	sion Start Date		1-1-1-1-	
Data	If trainee, licensed driller's	Work/Decommis	sion End Date		· · · · · · · · · · · · · · · · · · ·	
the	Coistruction/Design Well Data	a W11-329 ·		- Form	ation Description	
	Concrete Surface	4' below Seal	r grode	0 ~	20'3". FT	
NOT Warranty	Depth Blank Casing (dia	x dep) / 1 G	FT ⊳´_3''	brown	<u>20.3</u> . M Si H y L	
5	Material	5.5		Sav	rd.	v
ž	Backfill	12'.	<u>3''</u> FT			
does	Туре	Neat C.	ement	0 -	FT	
γd	Seal	4			^^ ^ ^ ^ ^	
ology	Material	Bent C	hips			
The Department of Eco	Gravel Pack	2	FT			
t Ö	Material	2/12	. <u></u> 1			
nen		,	,		FT	
artr	Screen (dia x dep)			-	Annis	
ě	- Slot Size	1020	>	R K	ELENS	
D o	Material	<u> </u>			E)	
Ţħ	Well Depth	203	pt_	WATER PRO	ECENTE 19 2011 URCES - MAR	
	Backfill			1 1500	Jan	
	Material			30°	URCES-V	
	Tatal Hole Depth		FT			
	Scale 1" =	Page	of	<u> </u>	EC Y 050-12 (Re	,≂v 2/01)

<i>.</i>			25-4E	-301
RESOURCE PROTECTION WELL (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	REPORT CURR	ENT of Intent No.	RE05927	<u></u>
$\frac{419275}{MA521}$ Construction/Decommission $MA521$ Construction Construction Construction	Į L	Type of Well Resource Prote Geotechnical S orridor		
of Intent Number Consulting Firm <u>Clearcreek Contractor's</u>	Site Address Westlake Ave.	N. & Mercer St. County	17-King	
Unique Ecology Well ID Tag No	Location 1/4 NE 1 Lat/Long (s,t,r Lat Deg still Required) Long Deg		Twn <u>25N R 4E</u> Lat Min/Sec Long Min/Sec	
X Driller       Trainee Name (Print)       Scott Krueger         Driller/Trainee Signature       Scott Krueger         Driller/Trainee License No.       2073	Cased or Uncased Diameter		Static Leve	
If traince, licensed driller's	Work/Decommission End Date		/ · · ·	
Concrete Surface S	W11-329 4' below grode Seal	0 brown 5an	Silty	
Material Total Hole Depth	FT Page of	485	ECY 050-12 (Rec	
Scale I" =	Page of			•

25-4E-30J

eport	RESOURCE PROTECTION WELL (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	REPORT	CURRENT Notice of Intent No.	RE05927
<b>Jell Re</b>	(SUBMIT ONE WELL REPORT PER WELL INSTALLED) 419276 Construction/Decommission $MA520$ Construction		Type of Well Resource Pro	olection
S N	Decommission ORIGINAL INSTALLATION Notice	,	Geotechnica	
this	of Intent Number		Mercer Corridor Iake Ave, N, & Mercer St.	· · · · · · · · · · · · · · · · · · ·
Information on	Consulting Firm Clearcreek Contractor's	City Seallle	County	17-King
natio	Unique Ecology Well ID Tag No		NE1/4 <u>SE</u> Sec <u>30</u>	44 44 141
õ	WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for		Deg g Deg	Lat Min/Sec
	construction of this well, and its countience with all Washin gion well constructions standards	still Required) Long	<u> </u>	
the	M steriels used and the information reported above are true to my best knowledge and belief			
d/or	X Driller Traince Name (Print) Scott Krueger	Cased or Uncased Dia	imeter 84	Static Level <u>14</u>
and/	Driller/Trainee License No. 2073	Work/Decommission St	art Date	<del>14/</del>
Data	If trainec, licensed driller's	Work/Decommission En	nd Date	11
the		W11-329	For	nation Description
Warrantv f		4' below gr Seal O	FT brown	<u>- 20'7"</u> FT Silty
T W	Blank Casing (dia x Material	$\frac{dep}{X / 5^{\prime} 7^{\prime\prime}}$	- Sand	1
s NOT	Backfill	10'7"	→	
dop	Type	Neat comer	<u>.</u>	FT
any does	Seal Material	Bent chif	<u>-</u>	
The Densylmont of Eco	Gravel Pack	2	. 174_	
, 1 0	Material	2/12	- 0	FT
the	Screen (dia x dep)	1 1	_	
	Slat Size	1020		OFCEID
Ĺ c	Material	.5.5	-   /	Mar (1)
ي ۲	Well Depth	20'7"	$-^{\mathrm{FT}}$ (WA)	JUL 19 2011 RESOURCES - HINE
	Backfill		-   (8	
	Material		- T	SOURCES .
	Total Hole Depth			EC Y 050-12 (R cc=v 2/01)
	Scale 1" =	Pageof	·	

and the second second

25-4E-30J

Report.	RESOURCE PROTECTION WELL (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	L REPORT CURRENT Notice of Intent No. <u>RE05927</u>
Well Re	Construction/Decommission $\frac{21927}{MAS} 25$	Type of Well Resource Protection
	Decommission ORIGINAL INSTALLATION Notice	Property Owner Mercer Corridor
ቲ	of Intent Number	Site Address Westlake Ave. N. & Mercer St.
Information on this	Consulting Firm Clearcreek Contractor's	City Seattle County 17-King
mati	Unique Ecology Well ID Tag No BHB 45/	Location 1/4 <u>NE 1/4 SE</u> Sec 30 Twn 25N R 4E or WWM
Infor	WELL CONSTRUCTION CERTIFICATION: I constructed and/o a sceept responsibility for construction of this well, and its compliance with all Washin game well construction stand and t	Lat/Long (s,t,r Lat Deg Lat Min/Sec still Required) Long Deg Long Min/Sec
	Mucriels used and the lafamintan reported above are much a my best knowledge and belief	Tax Parcel No.
and/or	X Driller         Trainee Name (Print)         Scoll Krueger           Driller/Trainee Signature         36.501 %	Cased or Uncased Diameter 84 Static Level 14
	Driller/Trainee License No. 20/3	Work/Decommission Start Date
e Data	If traince, licensed driller's	Work/Decommission End Date
the	Construction/Design Well Dat	a W11-329 - Formation Description
		e Seal O FT 0 -20.5" FT
does NOT Warranty	Blank Casing (dia	
NOT	Material Backfill	<u>5.5</u> 10' 5'' FT
oes	Туре	New Coment 0 - FT
av d	s Seal	<u> </u>
Ecology	Material	<u>Bent chips</u>
оf П	Gravel Pack	2/12
The Department of		0 - FT
oartr	Screen (dia x dep	)
Del	Slot Size Material	T.S.
The	Well Depth	FTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFF FTFTFF FTFFFF FTFF FTFF FTFF FTFF FTFF FTFF FT
	Backfill	
	Material	VIOURCES-
	Total Hole Depth	FT
		Page of ECY (050-12 (Recry 2/01)

..

25-4E-32)

Report.	RESOURCE PROTECTION WELL R	EPORT CU	RRENT ice of Intent No.	RE05927
Vell Re	(SUBMIT ONE WELL REPORT PER WELL INSTALLED) 4 (92.70) Construction/Decommission MAS 26 Construction		Type of Well Resource Prote	•
	Decommission ORIGINAL INSTALLATION NOTED	Duranti Outpat More	er Corridor	ion porme
this	of Intent Number	Property Owner Merco Site Address Westlake	Ave. N. & Mercer SI.	
Ä		City Seattle	County	17-King
Ĕ	Consulting Firm Clearcreek Contractor's			
Information on	Unique Ecology Well ID Tag. No	Location 1/4 <u>NE</u> Lat/Long (s,t,r Lat Deg		Twn 25N R 4E or WWM
- UO	WELL CONSTRUCTION CERTERICATION: I constructed and/or accept responsibility for	still Required) Long De		Long Min/Sec
Ĩnf	construction a fulris well, and its compliance with all Washington well construction standards	sun required) tong	0	
the	Materizis used and the information reported above are true to any best knowledge as distilled	Tax Parcel No.		
and/or ti	X Driller     Traince Name (Print)     Scott Krueger       Driller/Traince Signature     32.000000000000000000000000000000000000	Cased or Uncased Diamet	er <u>84</u>	Static Level 14
and	Driller/Trainee License No. 2073	Work/Decommission Start I	Date	<u> </u>
ata	If trainee, licensed driller's Signature and License No.	Work/Decommission End D		•
e D		v11-329	Form	ation Description
the	ConstructionVDesign Well Data V			
μt		y' below grad	0 -	20'9" FT ~ S: 174 Sand
Marrantv	Concrete Surface Sea	" – Č _ E	с <u>с</u>	silty
L L	Depin	p) 1 15'9"	brown	
N.	Blank Casing (dia x de	5.5		Sand
NOT	Material			
N	Backfill	<u>10'9"</u> F		
ģ	Type	Neat Compu	t a	. FT
		4'		
2	Seal	D. r. chia	, [	
	1987	Bent chips		
	Gravel Pack	2 1	т	
ц Ч	Material	A. 112		
4			0	_ FT
5		· 1		
	5 Screen (dia x dep)			
1	Slot Size	+020+		OFCED
		5.5.		
•	Gravel Pack Material Screen (dia x dep) Slot Size Material Well Depth		स	
j	Well Depth	20 9	T A	
	Backfill		男	
	Material			SOURCES -
		······································	FT	JUL 19 2011
	Total Hole Depth			ECY 050-12 (Rec=v 2/01)
	Scale $1^{n} =$	Page of _		

25-4E-301

Report.	RESOURCE PROTECTION WELL F (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	REPORT CUR Notice	RENT of Intent No.	RE05927	
this Well	Construction/Decommission $4(9279)$ Construction Decommission ORIGINAL INSTALLATION Notice of Intent Number	······································	Type of Well Resource Prot Geotechnical Corridor re. N. & Mercer St.	Soil Boring	
0 U	Consulting Firm Clearcreek Contractor's	City Sealtle	County	17-King EW	М
The Denartment of Ecology does NOT Warranty the Data and/or the Information on	Unique Ecology Well ID Tag No	City <u>Seattle</u> Location 1/4 <u>NE</u> Lat/Long (s,t,r Lat Deg still Required) Long Deg Tax Parcel No. Cased or Uncased Diameter Work/Decommission Start Date Work/Decommission End Date (11-329 - U below Grade	$\frac{County}{1/4 \text{ SE}} \sec 30$	17-King       EW         Two 25N R 4E or       WV         Lat Min/Sec       WV         Long Min/Sec       Static Level A         // / / /       Static Level A         // / / /       Static Level A         // / / /       FT         Static Level A       FT         // / / /       FT         Static Level A       FT         Static Level A       FT         FT       Static Level FT         FT       FT         FT       FT	vm 
The	Well Depth Backfill Material Tal Hole Depth	7'10" FT	WATER	JUL 19 2011 SOURCES THE	
	Scale ! " =	Page of	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ECY 050-12 (Rec=v 2/0	11)



RESOURCE PROTECTION WELL	REPORT CURRENT	
(SUBMITIONE, WELL REPORT PER WELL INSTALLED)	Notice of Intent No. <u>REOS927</u>	
Construction/Decommission 419285VE 17	Type of Well	
X Construction	Resource Protection	
persent of the second	Geotechnical Soil Boring	
Decommission ORIGINAL INSTALLATION Notice of Intent Number	Normal Marrielland	
Of Them Wander	Site Address Westlake Ave. N. & Mercer St.	_
Consulting Firm. Clearcreek Contractor's Unique Ecology Well ID Tag No. , BHB 454 WELL CONSTRUCTION CERTIFICATION: 1 constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards	City Seattle County 17-King	
	EW.M	
Unique Ecology Well ID Tag No. RHR 455	Location 1/4 <u>NE</u> 1/4 <u>SE</u> Sec 30 Twn 25N R 4E or WWM	
	Lat/Long (s,t,r Lat Deg Lat Min/Sec	
WHILL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	still Required) Long Deg Long.Mln/Sec	
construction of this well, and its controlience with all Washin year well construction standards		
Manality usud and the information reported above are nue to my best knowledge and belief	Tax Parcel No.	
X Driller Traines Name (Print) Scott Krueger		
Driller/Trainee Signature	Cased or Uncased Diameter <u>54</u> Static Level <u>N</u>	24
Driller/Trainee License No. 2073	Work/Decommission Start Date	
If trainee, licensed driller's	Work/Decommission End Date //	
Construction/Design Well Data V	W11-329 - Formation Description	7
	below grade	
Concrete Surface Sea		
Depth		
Blank Casing (dia x dej	D) 4 5000 Sound Silty DVC Sand	
Material	ove Sand	
Backfill		
Туре	Neat cement 0 - FT	
	6"	
	Bert chips	
Material	peve chips	
Gravel Pack	3'3" FT	
Material	2112	
	<u> </u>	
Screen (dia x dep)	4 3	
	AELENA	
Slot Size	-620 Karrie	
Material		
Material Gravel Pack Material Screen (dia x dep) Slot Size Material	S' ST 19 2011	
Well Depth		ł
Backfill		
Material	<u>S'</u> <u>S'</u> <u>FT</u> <u>FT</u> <u>FT</u> <u>FT</u> <u>FT</u> <u>FT</u> <u>FT</u> <u>FT</u>	
	FT	
Total Hole Depth	Page of ECY 050-12 (Rec=v 2.01)	

75-	115-	305	
05	40	·	

	25-4E-30J	ł
RESOURCE PROTECTION WELL	Notice of Internation ILieu - 1	
$\tilde{\mathbf{x}}$ $\omega \leq \mu = 14$ 4	Type of Well	
Construction/Decommission /// SVC //		
<b>9</b> Decommission ORIGINAL INSTALLATION Notice	Geotechnical Soil Boring	
of Intent Number	Property Owner Mercer Corridor	<u></u>
E	Site Address <u>Westlake Ave, N. &amp; Mercer Sl.</u> City Seallle County <u>17-King</u>	
Consulting Firm Clearcreek Contractor's	EWM	
Consulting Firm Clearcreek Contractor's Unique Ecology Well ID Tag No. <u>BHB</u> 455 WELL CONSTRUCTION CERTIFICATION: 1 DOINSUNCIENT CORPUT RESPONSIBILITY FOR	Location 1/4 NE 1/4 SE Sec 30 Twn 25N R 4E or WWN	-
WELL CONSTRUCTION CERTIFICATION: 1 consucced and/or a coupt responsibility for	Lat/Long (s,t,r Lat Deg Lat Min/Sec	
construction of this well, and its compliance with all Washington well construction standards	still Required) Long Deg Long Min/Sec	
Materials used and the information reported above are trues a my best knowledge and belief	Tax Parcel No.	
Driller     Trainee Name (Print)     Scoll Krueger       Driller/Trainee Signature     Staff	Cased or Uncased Diameter Sy Static Level M	/// 
Driller/Trainee License No. 2073	Work/Decommission Start Date / 2 / / /	. <u></u>
If trainee, licensed driller's	Work/Decommission End Date //	
Signature and License No	W11-329 Formation Description	
Construction/Design		
Concrete Surface Se Depth Blank Casing (dia x d	al <u>O</u> FT brown SIMY	
E Depth	FT have SITTY	
Blank Casing (dia x d	lep) 4 3'6" Sand,	
	Sana,	
S Backfill		
Туре	heat cement 0 - FT	
	<u> </u>	
Material	Bent chips	
8		
Gravel Pack	<u>33</u> FT	
<b>O</b> Material	2/12	
	FT	
Screen (dia x dcp)	4_3	(
	1026 DECEILS	
Slot Size		
<b>D</b> Material		
The Depth The Depth The Depth The Depth The Depth The Depth The Depth	.6. 5" FT JUL 19 2011	
	<u>JUL 19 2011</u> <u>.6.6"</u> FT	
Backfill	Common the	
Material	FTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFTFT FTFTFT	
Tctal Hole Depth		
Scale 1" =	Page of 6CY 050-12 (Recm 2001)	)

۱,

#### **APPENDIX B**

### ECOLOGY RESOURCE PROTECTION WELL REPORTS – WELL DECOMMISSIOING FOR MERCER STREET

Please print, sign and return to the Department of Ecology **RESOURCE PROTECTION WELL REPORT** CURRENT Notice of Intent No. AE11933 (SUBMIT ONE WELL REPORT PER WELL INSTALLED) Construction/Decommission ("x" in box) Type of Well ("x in box) Construction Resource Protection Geotech Soil Boring Decommission ORIGINAL INSTALLATION Notice of Intent Number: Property Owner CITY OF SEATTLE UNKNOWN -----Site Address MERCER / FAIRVIEW / DEXTER / VALL ST Consulting Firm City SEATTLE_County KING Unique Ecology Well IDTag No. OUT. ATT ACHED Location SE 1/4-1/4 SE 1/4 Sec 30 Twn 24 R 4E WELL CONSTRUCTION CERTIFICATION: 1 constructed and/or EWM 🖾 or WWM 🔲 accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported Lat Deg _____ Min ____Sec Lat/Long (s, t, r above are true to my best knowledge and belief. still REQUIRED) Long Deg _____Min ___ Sec Driller D Engineer D Trainee Tax Parcel No. 1 14 ------Name (Print Last, First Name) RUNISH WILLS Cased or Uncased Diameter 21 Driller/Engineer /Traince Signature Static Level Driller or Traince License No. 1805 Work/Decommission Start Date 1/24/2011 If trainee, licensed driller's Signature and License Number: Work/Decommission Completed Date 1/28/2011 -----الا ال جراري الم المصيد الجريج ال Construction Design Well Data Formation Description Water-light cover CONCRETE CAP Surface flush vault REMOVED BU Locking Cap/Lock REF# mul 12 Casing <u>2_____ in</u> Diameter EXTRACTED WELL AND FILLED Material WITH BENTONITE Welded __ Threaded __ Glued ___ BOTTOM TO TOP OF GROUND Well Seal From 000 ft. To Material <u>BENT GROUT</u> 0 8 Amount Grout Weight 30% solids 69.75 11110 **Drilling Method** Hollow -Stem Auger Air Rotary Mud Rotary Push Probe Other Borehole Diameter _____in Screen Material Interval(s): From ____ .__ То _ From _____ To _____ in. Slot Size Filler Pack: From _____ To ___ Material: Size: Completed Depth: SCALE: 1"= PAGE 1 OF 1 ECY 050-12 (Rev 7/06) Ecology is an Equal Opportunity Employee

10-023 MERCER CORRIDOR, GARY MERLINO CONSTRUCTION (QUANTITY 40)

<b>RESOURCE PROTECTION</b>	rint, sign and return to WELL REPORT		Notice of Intent No. <u>AE1193</u>
(SUBMIT ONE WELL REPORT PER W Construction/Decommission ("x" in hox)	/ELL INSTALLED)		Type of Well ("x in box)
Construction			Resource Protection
Decommission			
ORIGINAL INSTALLATION Notice of Inten UNKNOWN			ITY OF SEATTLE
			CER / FAIRVIEW / DEXTER / VALL S
Unique Ecology Well IDTag No. NOT ATT		City <u>SEATTLE</u>	
			/4 SE 1/4 Sec 30 Twn 24 R 4E
WELL CONSTRUCTION CERTIFICATIO necept responsibility for construction of this well, and it	s compliance with all	EWM 🖾 or WWN	
Washington well construction standards. Materials used	d and the information reported	Lat/Long (s, t, r still REQUIRED)	Lat Deg MinSec
		·- · -	roug rock with sec
M Driller D Engineer D Trainee Name (Print Last, First Name) RUNISH John V	1 17 .0	Tax Parcel No.	······································
Name (Print Lest, First Name) R()NISH JOHN Driller/Engineer / Trainee Signature	her Kanish	Cased or Uncased	Diameter 211 Static Level
Driller or Traince License No. 1805	<b>S</b>	Work/Decommissi	on Start Date 1/24/2011
If trainec, licensed driller's Signature and	License Number:	Work/Decommissi	un Completed Date 1/28/2011
	i		
Construction Design	Walt D	ata	Remarking Description
,	-Water-tight cover	ata	Formation Description
CONCRETE CAP	-Surface flush vault	REMOVED	REF#_10_MW-14
	Locking Cap/Lock		REF#_10
	Casing		
	Diameter <u>2</u> in Material		EXTRACTED WELL AND FILLE
			WITH BENTONITE
	Welded Threaded	Glued	BOTTOM TO TOP OF GROUNE
	Well Seal		
	Fromft. To MaterialBENT GROUT	0_ft.	
	Amount	,,	
	Grout Weight 30% s	olids	
	Drilling Method		
CISTRE AND	Hollow – Ste Air Rotary	m Auger	
	Mud Rolary		
Eliter of the second se	Push Probe		
al and the second s	Other		-
	-Borehole Diameter		
Tatal Rate	•		
	-Screen		
	Material	**	
	Interval(s) From To		
	From To From To Slot Size	1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 19	
	-Filter Pack:	, in	
■ 10世紀での学校をはてきませんです。そのできょうとうとうとうないできたまたがあって	From To Material:	··	
	Maladah		
	Size'		
	Size: Completed Depth; 17		
SCALE: 1'= PAGE 1 OF 1	Size: Completed Depth: 1-7	··· ··· ··· ··· ··· ··· ··· ··· ··· ··	logy is an Equal Opportunity Employee

Please print, sign and return RESOURCE PROTECTION WELL REPORT (SUBMIT ONE WELL REPORT PER WELL INSTALLED)	to the Department of Ecology CURRENT Notice of Intent No. <u>AE11933</u>
Construction/Decommission ("x" in box)	Type of Well ("x in box)
	Resource Protection
Decommission	Ceotech Soil Boring
ORIGINAL INSTALLATION Notice of Intent Number: UNKNOWN	Property Owner CITY OF SEATTILE
Channel all and Drawn	Site Address MERCER / FAIRVIEW / DEXTER / VALL ST
Unique Ecology Well IDTag No. NOT ATTACHI D	City SEAT ILE County KING
	Location SE 1/4-1/4 SE 1/4 Sec 30 Two 24 R 4E
WELL CONSTRUCTION CERTIFICATION: 1 constructed and/or accept responsibility for construction of this well, and its compliance with all	EWM 🖾 or WWM 🗔
Wasitington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.	Lat/Long (s, t, r     Lat Deg Min Sec       still REQUIRED)     Long Deg Min Sec       Tax Parcel No.
Ø Driller □ Engineer □ Traince	Tax Parcel No.
Name (Print Last, First Name) ROSALL ROLL. Driller/Engineer /Trainee Signature	Tax Parcel NoCased or Uncased Diameter 2.11 Static Level
Driller or Traince License No. 1805	Cased of Orleased Diameter C. Static Level
	Work/Decommission Start Date 1/24/2011
If trainee, licensed driller's Signature and License Number:	Work/Decommission Completed Date 1/28/2011
Construction Design Well Dr	te Formation Description
CONCRETE CAP	REMOVED REF# 11 MW-15
Locking Cap/Lock	REF#_11
i i i i i i i i i i i i i i i i i i i	
Diameter 2in. Material	EXTRACTED WELL AND FILLED
Welded	WITH BENTONITE
CARLET INTERNATION CONTRACTOR OF A CONTRACTOR	
Well Seat From 14 ft. To Material <u>BENT GROUT</u>	Q ft.
Amount Grout Weight30% sc	olids.
Drilling Method	
Hollow – Sten Air Rotary	n Auger
Push Probe	
Olher	
Uorehole Diameter	
ID	
Screen	
Material	····
From To	
From To Slot Size	in
Filler Pack	
From To Material.	
Size:	
	· · · · · · · · · · · · · · · · · · ·
10-023 MERCER CORRIDOR, GARY MERLI	NO CONSTRUCTION (QUANTITY 40) $( \langle \langle \rangle \rangle)$

 $(\ddot{U})$ 

(Print Last, First Name) RUS/ISH LOTTY er/Engineer /Trainee Signature John RozLisch er or Trainee License No. 1805 nince, licensed dritter's Signature and License Number:	CURRENT Notice of Intent NoAE11933         Type of Well ("x in bax)         Sessure Protection         Geotech Soil Boring         Property Owner CITY OF SEATTLE         Site Address MERCER / FAIRVIEW / DEXTER / VALL. ST         City SEATTLE County KING         Location SE 1/4-1/4 SE 1/4 Sec 30 Twn 24 R 4E         EWM 🖾 or WWM []         Lat/Long (s, t, r         Lat/Long (s, t, r         Lat Deg Min Sec         still REQUIRED         Long Deg Min Sec         Tax Parcel No.         Cased or Uncased Diameter 2 **         Vork/Decommission Start Date 1/24/2011         Work/Decommission Completed Date 1/28/2011         REF# Formub-1bc         REF# ND1bc
Construction Decommission (GINAL INSTALLATION Notice of Intent Number: KNOWN sulting Firm que Ecology Well IDTag No. NOT ATTACHED LL CONSTRUCTION CERTIFICATION' I constructed and/or a responsibility for construction of this well, and its compliance with all ington well construction standards. Materials used and the information reported are function my best knowledge and helief. fillen Engineer [] Trainee (Print Last, First Name) Knydst HOTEX er/Engineer /Trainee Signature cr/Engineer /Trainee Signature and License Number: Construction Design Well Dat CONCRETE CAP Casing Diameter	Resource Protection         Geotech Soil Boring         Property Owner CITY OF SEATTLE         Site Address MERCER / FAIRVIEW / DEXTER / VALL, ST         City SEATTLE_County KING         Location SE 1/4-1/4 SE 1/4 Sec 30 Twn 24 R 4E         EWM 🖾 or WWM []         Lat/Long (s, t, r         Lat/Deg Min Sec         still REQUIRED         Long Deg Min Sec         Tax Parcel No.         Cased or Uncased Diameter Static Level         Work/Decommission Start Date 1/24/2011         Work/Decommission Completed Date 1/28/2011         REF# FormuD - 1/b
IGINAL INSTALLATION Notice of Intent Number:         KNOWN         sulting Firm         que Ecology Well IDTag No. NOT ATTACHED         LL CONSTRUCTION CERTIFICATION' Leonstructed and/or         responsibility for construction of this well, and its compliance with all         ington well construction of this well, and its compliance with all         ington well construction standards. Materials used and the information reported         a reture to my best knowledge and thelief.         (Print Last, First Name) RUMSHLINIX         (Print Last, First Name) RUMSHLINIX         cr/Engineer / Trainee Signature         (Print Last, First Name) RUMSHLINIX         cr/Engineer / Trainee Signature         (Print Last, First Name) RUMSHLINIX         Construction Design         Well Date         Construction Design         Water-tight cover         Surface flush vauit         Locking Cap/Lock         Casing         Diameter         Casing         Diameter	☐ Geotech Soil Boring         Property Owner CITY OF SEATTLE         Site Address MERCER / FAIRVIEW / DEXTER / VALL, ST         City SEATTLE_County KING         Location SE 1/4-1/4 SE 1/4 Sec 30 Twn 24 R 4E         EWM 🖾 or WWM []         Lat/Long (s, t, r         Lat/Long (s, t, r         Lat Deg Min Sec         still REQUIRED         Long Deg Min Sec         Tax Parcel No.         Cased or Uncased Diameter 2 '' Static Level         Work/Decommission Start Date 1/24/2011         Work/Decommission Completed Date 1/28/2011         REF# FormuD - 1/b
KNOWN         sulting Firm         (the Ecology Well IDTag No. NOT ATTACHED         LL CONSTRUCTION CERTIFICATION: Leonstructed and/or         a responsibility for construction of this well, and its compliance with all information reported : are function standards. Materials used and the information reported : are function will construction standards. Materials used and the information reported : are function will construction standards. Materials used and the information reported : are function will construction standards. Materials used and the information reported : are function will exist how well on the information reported : are function in the information reported : are function will exist how well information reported : are function in the information reported : and the information reported : are function in the information reported : are function in the information reported : are function in the information reported : are function in the information reported : are function in the information in the informating in the informating in the informating in t	Site Address MERCER / FAIRVIEW / DEXTER / VALL ST City SEATTLE_County KING Location SE 1/4-1/4 SE 1/4 Sec 30 Twn 24 R 4E EWM 🖾 or WWM [] Lat/Long (s, 1, r Lat DegMinSec still REQUIRED) Long DegMinSec Tax Parcel No. Cased or Uncased Diameter Static Level Work/Decommission Start Date 1/24/2011 Work/Decommission Completed Date 1/28/2011 Ata Formation Description REF# REF# Static Description
sulting Firm  que Ecology Well IDTag No. <u>NOT ATTACHED</u> LL CONSTRUCTION CERTIFICATION: Leonstructed and/or  a responsibility for construction of this well, and its compliance with all ington well construction standards. Materials used and the information reported care trus to my best knowledge and helief.  ritler = Engineer = Trainee Signature (Print Last, First Name) RUMSH HOTES  ritler = Construction Design Construction Design Water-tight cover Surface flush vauit Locking Cap/Lock Casing Diameter _2	City SEATTLE_County KING         Location SE 1/4-1/4 SE 1/4 Sec 30 Twn 24 R 4E         EWM 🖾 or WWM []         Lat/Long (s, t, r       Lat Deg Min Sec         still REQUIRED       Long Deg Min Sec         Tax Parcel No.       Cased or Uncased Diameter Static Level         Work/Decommission Start Date 1/24/2011       Work/Decommission Completed Date 1/28/2011         ata       Formation Description         REMOVED       REF# Sec
Satisfing Firm         que Ecology Well IDTag No. <u>NOT ATTACHED</u> LL CONSTRUCTION CERTIFICATION' I constructed and/or         thresponsibility for construction of this well, and its compliance with all         ington well construction standards. Materials used and the information reported         a re true to my bust knowledge and thelief.         rillor [] Engineer [] Traluce         (Print Last, First Name) RUMSH HOTK         (Print Last, First Name) RUMSH HOTK         cr/Engineer / Trainee Signature         (Print Last, First Name) RUMSH HOTK         cr/Engineer / Trainee Signature         (Print Last, First Name) RUMSH HOTK         cr or Trainee License No. 1805         binee, licensed drifter's Signature and License Number:         Construction Design       Water-tight cover         Surface flush vauit         Locking Cap/Lock         Casing       Diameter         Casing       Diameter	City SEATTLE_County KING         Location SE 1/4-1/4 SE 1/4 Sec 30 Twn 24 R 4E         EWM 🖾 or WWM []         Lat/Long (s, t, r       Lat Deg Min Sec         still REQUIRED       Long Deg Min Sec         Tax Parcel No.       Cased or Uncased Diameter Static Level         Work/Decommission Start Date 1/24/2011       Work/Decommission Completed Date 1/28/2011         ata       Formation Description         REMOVED       REF# Sec
LL CONSTRUCTION CERTIFICATION: I constructed and/or responsibility for construction of this well, and its compliance with all ington well construction standards. Materials used and the information reported are frue to my best knowledge and tellef. filler $\Box$ Engineer $\Box$ Trainee (Print Last, First Name) (KDMSH 1011X er/Engineer /Trainee Signature (Print Last, First Name) (KDMSH 1011X er/Engineer /Trainee Signature er or Trainee License No. 1805 alinee, licensed drifter's Signature and License Number: Construction Design CONCRETE CAP Construction Design Construction Design Con	Location <u>SE</u> 1/4-1/4 <u>SE</u> 1/4 Sec <u>30</u> Twn <u>24</u> R <u>4E</u> EWM 🖾 or WWM [] Lat/Long (s, t, r Lat Deg <u>Min</u> <u>Sec</u> still REQUIRED Long Deg <u>Min</u> <u>Sec</u> Tax Parcel No. Cased or Uncased Diameter <u>2</u> 'Static Level Work/Decommission Start Date 1/24/2011 Work/Decommission Completed Date 1/28/2011 REMOVED REF# <u>For work-16</u>
In responsibility for construction of this well, and its compliance with all ingten well construction standards. Materials used and the information reported : are frus to my bust knowledge and helief.         riller □ Engineer □ Trainee         (Print Last, First Name) RUNSH HollIN         er or Trainee License No. 1805         allnee, licensed drifter's Signature and License Number:         Construction Design         Well Date         Construction Design         Construction Design         Construction Design         Construction Design         Construction Design         Concrete CAP         Construction Design         Concrete CAP         Construction Design         Concrete CAP         Concrete CAP         Casing         Diameter         2         In.         Material	EWM I or WWM I         Lat/Long (s, t, r       Lat Deg MinSec         still REQUIRED)       Long Deg MinSec         Tax Parcel No.       Cased or Uncased Diameter?         Cased or Uncased Diameter?       Static Level         Work/Decommission Start Date 1/24/2011         Work/Decommission Completed Date 1/28/2011         REMOVED       REF# Formula - 1/2
Ingrad well construction standards. Materials used and the information reported         is are function to my bust knowledge and helief.         riller □ Engineer □ Traince         (Print Last, First Name) RUMSH HOTS         (Print Last, First Name) RUMSH HOTS         cr/Engineer / Traince Signature         (Print Last, First Name) RUMSH HOTS         cr or Traince License No. 1805         ninee, licensed driffer's Signature and License Number:         Construction Design         Water-light cover         Surface flush vauit         Locking Cap/Lock         Gasing         Diameter         2         In.	Lat/Long (s, 1, r       Lat Deg MinSec         still REQUIRED)       Long Deg MinSec         Tax Parcel No.       Cased or Uncased Diameter?         Cased or Uncased Diameter?       Static Level         Work/Decommission Start Date 1/24/2011         Work/Decommission Completed Date 1/28/2011         REMOVED         REF#         REF#         Static Level
(Print Last, First Name) RUS/ISH LOTTY cr/Engineer /Trainee Signature Signature and License Number: Construction Design Well Day CONCRETE CAP Water-Ught cover Surface flush vault Locking Cap/Lock Casing Diameter 2 in. Material	Cased or Uncased Diameter 2 Static Level Work/Decommission Starl Date 1/24/2011 Work/Decommission Completed Date 1/28/2011 ata Formation Description REF# 5 mw-16
(Print Last, First Name) RUSSELLIOTR er/Engineer /Trainee Signature er or Trainee License No. 1805 Since, licensed drifter's Signature and License Number: Construction Design CONCRETE CAP CONCRETE CAP Construction Design Construction Design Constructio	Cased or Uncased Diameter 2 Static Level Work/Decommission Starl Date 1/24/2011 Work/Decommission Completed Date 1/28/2011 ata Formation Description REF#REMOVED
Construction Design Water-tight cover Surface flush vault CONCRETE CAP	Work/Decommission Start Date 1/24/2011 Work/Decommission Completed Date 1/28/2011 Ata Formation Description REF#
Construction Design Water-tight cover Surface flush vault CONCRETE CAP	REMOVED REF#_15_mw-16
Construction Design Well Day CONCRETE CAP CONCRETE CAP Construction Co	REMOVED REF#_15_mw-16
Construction Design Well Date CONCRETE CAP Surface flush vault Locking Cap/Lock Casing Diameter 2. in. Material	REMOVED REF#_15_mw-16
Construction Design Well Date CONCRETE CAP Surface flush vault Locking Cap/Lock Casing Diameter 2. in. Material	REMOVED REF#_15_mw-16
CONCRETE CAP Water-tight cover 	REMOVED REF#_15_mw-16
CONCRETE CAP Surface flush vault Locking Cap/Lock	REMOVED REF#_15_mw-16
-Casing Diameter in.	REF#_15_mw-16_
Gasing Diameter 2. in. Material	
Diemeler 2. in. Material	
Welded Threaded G	EXTRACTED WELL AND FILLED
	WITH BENTONITE
Well Seal From 20 ft. To Material <u>BENT GROUT</u>	
From ft. To	<u>    0   </u> n.
Grout Weight 30% sol	licis
Drilling Method	
Hollow -Stem	n Auger
Air Rolary	· ·
Mud Rotary Push Probe	
Olher	
Borehole Diameter	
Screen	
Material	·
ANNO ANNO ANNO ANNO ANNO ANNO ANNO ANNO	
From To From To	
Stot Size	
NEXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
From To Material:	ter et al construction de la con
Size	in the many μ , in μ
SizeCompleted Depth:O	
SCALE: 1'= PAGE 1 OF 1 ECY 050-12 (F	Rev 7/08) Ecology (c on Course of the course
10-023 MERCER CORRIDOR, GARY MERLIN	the second secon

Please print, sign and return to the Department of Ecology **RESOURCE PROTECTION WELL REPORT** CURRENT Notice of Intent No. ____AE11933 (SUBMIT ONE WELL REPORT PER WELL INSTALLED) Construction/Decommission ("x" in box) Type of Well ("x in box) Construction Resource Protection Decommission Geotech Soil Boring **ORIGINAL INSTALLATION Notice of Intent Number:** Property Owner CITY OF SEATTLE UNKNOWN Site Address MERCER / FAIRVIEW / DEXTER / VALL ST Consulting Firm City SEATTLE County KING Unique Ecology Well IDTag No. ODT ATTACHED Location SE 1/4-1/4 SE 1/4 Sec 30 Two 24 R 4E WELL CONSTRUCTION CERTIFICATION: 1 constructed and/or EWM 🖾 or WWM 🗔 accept responsibility for construction of this well, and its compliance with all Lat/Long (s, t, r Lat Deg _____ Min ____ See Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief, still REQUIRED) Long Deg _____Min____See Driller [] Engineer [] Trainee
 Name (Print Last, First Name) (QNASTE 1011); Tax Parcel No. سن، د Cased or Uncased Diameter  $\mathcal{J}^{\mathrm{U}}_{\mathrm{L}}$ Static Level Driller/Engineer /Traince Signature Driller or Trainee License No. 1805 Work/Decommission Start Date 1/24/2011 Work/Decommission Completed Date 1/28/2011 If traince, licensed driller's Signature and License Number: and the second state of th Construction Design Well Data Formation Description Waler-tight cover CONCRETE CAP REMOVED Surface flush vault 36 march Locking Cap/Lock REF# Casing Diameter ____ in. EXTRACTED WELL AND FILLED Material WITH BENTONITE Welded _____ Threaded ____ Glued _____ BOTTOM TO TOP OF GROUND Well Seal From 20 ft. To Material BENT GROUT 0 6 Amount Grout Weight _____ 30% solids_____ 111 12400 Drilling Method ___ Hollow --Stem Auger Air Rotary ____ Mud Rotary Push Probe ----Other Borehole Diameter - in Screen Material Interval(s): From To From _____ To Slot Size ____ in Filler Pack: From Material Síze: Completed Depth: SCALE: I'= ___ PAGE 1 OF 1 ECY 050-12 (Rev. 7/06) Ecology is an Equal Opportunity Employee 10-023 MERCER CORRIDOR, GARY MERLINO CONSTRUCTION (QUANTITY 40)

#### APPENDIX C

# ORIGINAL WELL LOGS WITH DECOMMISSIONING FILED NOTES – VALLEY STREET

Ē			PROJEC	T NO:	WA255	-3615-1		LIENT:	Conoc	oPhillips		BORING/WELL NO: MW-204
			LOGGE	DBY:	K. Johr	nson	1	OCATION:	600 W	estlake Ave N, Seatt	le, WA	PAGE 1 OF 1
		1+~	DRILLEF		CDI		ſ	DATE DRILL	.ED:	10/21/2005	Location Map	
	Del	lid.	DRILLIN	g method:	HSA		ŀ	Iole Diam	ETER:	8.5"		
				ig method:	SS		ł	IOLE DEPT	Ή:	20'		
	Environm	nental	CASING	TYPE:	PVC		۷	VELL DIAM	ETER:	2"		See Figure 2
	Consultan		SLOT SI	ZE:	0.010"		۷	VELL DEPT	H:	20'		0
		,	GRAVEL		10-20		(	ASING STI	CKUP:	0		
				ELEVATIO	N		NORTH			EASTING		
			ļ	28.13	1		231872	.5		1269363.1		
We	ell Completion	Static	e =		lioi 🖱	l (j	Sam	ble g				
Ę	50	Water	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	_			LITH		/ DESCRIPTION
Rackfill	Casing	Level	∣ ∦ ပိ	L D D	blo blo	ept	S S	Interval Soil Ty			020017	Decordin Hold
Ц Пакала	8851		ļ	<u>a</u>	<u>a</u> ~		Å Å	<u> </u>				
	contr					-			Aspha	alt/Concrete (~12	<u>?")</u>	
						1						
6	×					-		_				
						2		_		Air-knifed/vac-c	leared to 5	5'
Ben								_				·····
Milder.	<u></u>					3-						
											• • • • • • • • • • • • • • • • • • • •	
	1					4	+ +					
										·		
					3	5	8			(No recovery)		
				-	5	-						
					5	6						
-					5						• • • • • • • • • • • • • • • • • • •	
			Damp	2,000	6			SP	Grave	lly SAND; gray, f	irm, damo	
					6	8						
					4	°—						
			Damp-	1,615	4	9		🖉 ML	Sandy	SILT; gray, som	ie gravel, f	irm, damp to moist
			Moist		4							
		<u> </u>			5							
		$\mathbf{\nabla}$		350	4		1992/200					
			Wet		3	11 —				(As above, wet)		
SAND	H			04 5	4							
S S	Hef			81.5	1	12				(No recovery)		
	H"(				2	_						
				34.8	3	13						
				0.70	3							
1.					1	14 ——						
	H - I			0	2					(Poor recovery, r	10 cample	
					3	15 —				(1 001 1000 013, 1	to sample	/
					4		Sold Store					
				0	3	16 ——						
			Wet		3	47		SM	Silty S/	AND; gray, soft,	wet	
					3	17						
1		1			3	18						
1					3	.0					,	
1					3	19						· · · · · · · · · · · · · · · · · · ·
1				0	5							
		Í			6	20		<u>.</u>				
1						-		-				
1						21	<u>                                      </u>	-	BOLLO	om of hole @	20'	
						<del></del>					•	
1	—— <b> </b>					22 —	┟┈╴┠╼╸	-{	·			
L	l							_1	1			

.....

. •

۰.

.

#### APPENDIX D

#### ECOLOGY RESOURCE PROTECTION WELL REPORTS – WELL INSTALLATIONS FOR VALLEY STREET

ESOURCE PROTECTION WELL ISUBMIT ONE WELL REPORT PER WELL INSTALLED	L REPORT	URRENT
Construction/Decommission		otice of Intent No. RE08597
X Construction		Type of Well
Decommission ORIGINAL INSTALLATION		X Resource Protection
of Intent Number	Durante	Geotechnical Soil Boring
Consulting Firm Clearcreek Contractor's	Property Owner Site Address	City of Seattle
Clearcreek Contractor's	City Seattle	Valley St between Terry and Westlake County King
Unique Ecology Well ID Tag No. BIC 562.	Location 14 SI	
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	<u> </u>	E NE NE Sec 30 TWN 25N R 4E or
construction of this well, and its compliance with all Washington well construction standards	Lat/Long (s,t,r Lat Deg	× Lat Min/Sec ×
Materials used and the information reported above are true to assure the knowledge and belief	still Required) Long Deg	x Long Min/Sec x
X Driller Traince Name (Print)	Tax Parcel No.	
Driller/Trainee Signature		
Driller/Trainee License No.	Cased or Uncased Diameter	
If trainee, licensed driller's	Work/Dicommision Start Date	
Signature and License No.		
Construction/Design	Work/Decommision End Date	<u>6/26/15</u>
W	Vell Data W3-362	Formation Design
		Formation Description
Concrete Surface Sea	al	
Depth	FT	GREYISH BLUE FINE TO
Blank Casing (dia x dep		Uneyist BLUE FINE TO
Malerial	- 85	MEDIUM SILTY SANDS
Backfill	6' FT	MEDIUM SILTY SANDS W/FEW GRAVELS NEAR SURFACE
Туре	NEW CEMENT	NEAR SERFACE
	IVER CONCINI	0
Seai	4	FT
Material	HYD BENT	
Gravel Pack	.1	
Material	The second secon	
	2/12 SAN 0	
		<u> </u>
Screen (dia x dep)	_ſ×i'	
Slot Size	.010	
Material		. 1
	<u> </u>	
Well Depth	<u>/76"</u> FT	
Backfill	_	
Material		WELL# 1
Total Hole Depth	17'6' FT	weiner 1
nle 1"=		
Pag	eof`	ECY 050-12 (Rec≈v 2/01)
		The There is a second provide the second provide th

<b>ESOURCE PI</b>	OTECTION			
SUBMIT ONE WELL REP	OTECTION WELL	REPORT	CURRENT	
Construction/Decommissio			Notice of Intent No.	DEODEAH
X Construction	נוג 		Type of Well	RE08597
Decommission ORIGINA of Intent Number	L INSTALLATION Notice		X Resource Prot	
of them trumper		Property Owner	Geotechnical	
Consulting Firm Clear	areat Caula a la	Site Address	Valley St hotward	of Seattle
	Treek Contractor's	City Sea	attle County	Terry and Westlake
Unique Ecology Well ID	•		county	King
1 ag INO.	BIC 563	Location 14	SE NE NE Sec 30	TWN 25N R 4E or
WELL CONSTRUCTION CERTIFICATION	I constructed and/or accept responsibility for	 Lat/Long (s,t,rLat E		WW
went wonten of this went, and its compliance	with all Washington well constituction standards	still Required) Long	D	Lat Min/Secx
oraterials used and the information reported a	tove are true to my best knowledge and belief	tong	Deg x	Long Min/Secx
X Driller Trainee Name (Print)	DAVE Gose	Tax Parcel No.		
Driller/Traince Signature	1 HI Gose	-		
Driller/Traince License No.		Cased of Uncased Diam	eter $\frac{8'}{2}$ s	tatic Level 15
	V 2744			10
f traince, licensed driller's		Work/Decommision Start	Date 6 26 13	_
ignature and License No.		Bilad Hitt	1. i	
struction/Design		Work/Decommision End E	Date62613	
	Wet	Data W3-362	Formation	Description
				Description
	Concrete Surface Seal			
	Depth		0 - /7	6 FT
		F1	6REYISH BU	E ELALE TO
	Blank Casing (dia x dep)	H'	menun	- 11102 70
	Malcrial	85	ITE DIUM	SILLY SANDS
	Backfill		W/ FEIN	GRAVELS
		6FT	Ne	GILTY SANOS GRAVELS PAR SEURFALE
	Туре	NEAT CEMENT		
	Seal	л ^ъ	0	FT
	Material	Jun Prist		,
	-	HYD BENT		
	Gravel Pack	FT		
	Material	212 SAND		
			0	FT
	Screen (dia x dep)	_1'×1'		
	Slot Size	.010		
	Material	5.5,	}	
mmsum	Well Depth	17'6" FT		
		<u>/76"</u> FT		
	Backfill			
	Material			
	Total Hole Depth	Jungle M	WELL#2	
		<u>176"</u> FT		
*.=	Page		I	
·	i age	of	EC	Y 050-12 (Rec=v 2:01)
				•
	1			•

.

a any fit of a start of the many field of the start of the

ESOURCE PROT	ECTION WELL ER WELL INSTALLED)	REPORT		RRENT ce of Intent No.	RE(	) 8597
Construction/Decommission X Construction Decommission ORIGINAL INST of Intent Number		Property Owne Site Address	r	(		/estie ka
Consulting Firm Clearcreek	Contractor's	City	Seattle	Cou		
	554	Location	1/4 <u>SE</u>	NE <u>NE</u> Sec	30_TWN 25N_R	4E or W
WELL CONSTRUCTION CERTIFICATION: I const construction of this well, and its compliance with all V	stingson well construction standards	Lat/Long (s,t,r still Required)		x	Lat Min/Sec Long Min/Sec	<u> </u>
Materials used and the information reported above are	true to my best knowledge and belief	Tax Parcel No.				
Driller/Traince Signature	24	Cased or Uncased	Diameter	<u>81/2</u>	Static Level	15'
f traince, licensed driller's	<u>N 2744</u>	Work/Decommisio	n Start Date	6-24	-15	
ignature and License No.		WorkDecommision	n End Date	6-24	13	
struction/Design	Wei	I Data W3-	362	Form	ation Description	
	Concrete Surface Seal Depth Blank Casing (dia x dep) Material Backfill Type Seal Material Gravel Pack		FT	o GREYISH MEOIA W/	<u>- 17'6"</u> BLUE FINE UM SILTY S FEW GRAVEL NEAR SEM	FT 70 ANDS S <b>GALE</b> FT
	Material Screen (dia x dep) Slot Size Material Well Depth	2/12 SAND 1"×1" .010 5.5.		0		т
e 1" =	Backfill Maurial Total Hole Depth	<u> </u>	_FT	Neu H	3	

.

ESOURCE PROT	ECTION WELL	REPORT	CURRENT	<i>,</i>
Construction/Decommission	EK WELL INSTALLED)		Notice of Intent No.	RE08597
X Construction			Type of Well	
Decommission ORIGINAL INS	THE ATION NEWS		X Resource Prot	
of Intent Number	TALLATION NONCE	Property Owner	Geotechnical :	
	· · ·	Site Address	Valley St hetwaar	of Seattle 1 Terry and Westlake
Consulting Firm Clearcreek	Contractor's		attle County	King
Unique Ecology Well ID Tag No.	558	Location 1/4	SE NE NE Sec 30	TWN 25N R 4E or
VELL CONSTRUCTION CERTIFICATION: 1 con		- Lat/Long (s,t,r Lat I	Dea r	WWM
onstruction of this well, and its compliance with all		still Required) Long		Lat Min/Sec x Long Min/Sec x
laterials used and the information reported above an	true to my pest knowledge and belief			
Driller Traineo Name (Print)	David Gose	Tax Parcel No.		
Driller/Traince Signature	21	Cased of Uncased Dian	neter <u>81/2</u>	Static Level 15
	<u>V 2744</u>	Work/D commision Star	t Date 6-24-13	2
f trainee, licensed driller's			<b>D</b> -2-1-1;	<u> </u>
ignature and License No.		Work/Decommision End	Date 6-24-1	3
struction/Design	Wel	l Data W3-362	Formation	n Description
	Concrete Surface Seal Depth Blank Casing (dia x dep) Material Backfill Type Seal Material Gravel Pack Material Screen (dia x dep) Slot Size	<u>H'</u>	0	FT FT FT FT FT FT FT FT FT FT
Jc ] ⁿ =	Material Well Depth Backfill Material Total Hole Depth Pa	<u>5.5.</u> <u>/7'6''</u> FT <u>-</u> <u>/7'6^</u> FT	WELL # 1	ECY 050-12 (Rec=v 2/01)
	н 1			

·

•

, **,** 

	: 		
<b>ESOURCE PR</b>	OTECTION WELL RT PER WELL INSTALLED		RRENT
Construction/Decommission		Noti	ce of Intent No. RE08597
X Construction			Type of Well
Decommission ORIGINAL	INSTALLATION' Motion		X Resource Protection
of Intent Number	Line Malle	Property Owner	Geotechnical Soil Boring City of Seattle
		Site Address	Valley St between Terry and Westlake
Consulting Firm Cleare	reek Contractor's	City Seattle	County King
Unique Ecology Well ID Tag No.	310 352	Location 1/4 SE	NE NE Sec 30 TWN 25N R 4E or
WELL CONSTRUCTION CERTIFICATION:	I constructed and/or accept responsibility for	- Lat/Long (s,t,r Lat Deg	WWM
construction of this well, and its compliance w	ih all Washington well construction standards	still Required) Long Deg	x Long Min/Sec x
Materials used and the information reported ab	ove are true to my best knowledge and belief		
XDriller Trainee Name (Print) Driller/Trainee Signature	DA Bose	Tax Parcel No.	oll
Driller/Traince License No.	2744	Cased or Uncased Diameter	<u>8/2</u> Static Level <u>15</u>
If traince, licensed driller's		WorkD commision Start Date	6-24-13
Signature and License No.		Work/Decommission End Date	6-24-13
Construction/Design	Wel	l Data W3-362	
		1Data W3-302	Formation Description
	Concrete Surface Seal		a 1941
	Depth	FT	OFTEYISH BLUE FINE TO
	Blank Casing (dia x dep)		ONEYISM BLUE FINE 10
	Material	<u> </u>	MEDIUM SILTY SANDS
	Backfill	- 44	MEDIUM SILTY SANDS W/ FEW GRAVELS NEAR SEURFALE
		FT FT	NEAR SEIRFACE
	Туре	NEAT CEMENT	0 - FT
	Scal	<u> </u>	<u> </u>
	Material	HYD BENT	
	Gravel Pack	<b>2</b> ¹ FT	
	Material	2 FT 2 72 SANO	
		~~~~ <u>}</u>	
			<u> </u>
	Screen (dia x dep)	<u>]'×]'</u>	
	Stot Size	.010	
	Material	5.5.	
	Well Depth	Í7'6''ÉT	
	Backfill		
	Material	-	Well # 5
	Total Hole Depth	17'6" FT	
Scale 1" =	Da		
	Pa	ge of	ECY 050-12 (Rec=v 2/01)

,

.ESOURCE PRO	TECTION WELL R	EPORT	CUR	RENT		
SUBMIT ONE WELL REPORT				e of Intent No.	RE	08597
Construction/Decommission				Type of Well		
X Construction				X Resource	Protection	
Decommission ORIGINAL II	NSTALLATION Notice			Geotechni	ical Soil Boring	
of Intent Number	······	Property Owner Site Address	• 		City of Seattle	R Z (1 1
Consulting Firm Clearcre	eek Contractor's	Site Address City	Seattle	Valley St Det Cou	ween Terry and V nty King	
		····,	,			EWM
Unique E cology Well ID Tag No. B	DC 651	Location	1/4 <u>SE</u>	NE <u>NE</u> Sec	30 TWN 25N R	or
WELL CONSTRUCTION CERTIFICATION: 1		Lat/Long (s,t,r	•	<u>x</u>	Lat Min/Sec	<u> </u>
construction of this well, and its compliance with		still Required)	Long Deg	<u>x</u>	Long Min/Sec	<u> </u>
Materials used and the information reported above	we are true to my best knowledge and belief	Tax Parcel No.				
X Driller Trainee Name (Print)	DevidGose	_		al	<u></u>	
Driller/Traince Signature		Cased or Uncased	Diameter	8/2	Static Level	/5
Driller/Traince License No.	<u> </u>	Work/D commisio	n Start Date	6-24	1-13	
If trainee, licensed driller's		Work/Decommisio	n End Data	6-24		
Signature and License No.				<u> </u>	149	
Construction/Design	Well	Data W3-	-362	For	nation Description	1
	Concrete Surface Seal Depth Blank Casing (dia x dep) Material Backfill Type Seal Material Gravel Pack Material Screen (dia x dep) Słot Size		 FT	0 GREYISA MEON W	<u>- 17'6</u> " BLUE FINI IUM SIGTY FEW GRAVI NEAR SA	FT FT FT
Scale 1" =	Material Well Depth Backfill Material Total Hole Depth Pa	<u>5.5.</u> <u>17'6''</u> - <u>-</u> <u>17'6''</u> Ige		WEU —	#6 ECY 050-12	(Rec≠v 2/01)

FSOUDCE DD				
SUBMIT ONE WELL REPOR	DTECTION WELL		URRENT	B Daaron
Construction/Decommission		n e	otice of Intent No.	RE08597
X Construction			Type of Well	
Decommission ORIGINAL	INSTALLATION Notice		X Resource Pro	
of Intent Number	·	Property Owner		of Seattle
Consulting Firm Clearer	ante Composito al a	Site Address	Valley St betwee	en Terry and Westlake
		City Seattl	e County	
Unique Ecology Well ID Tag No	10 556	Location 1/4 S	E NE NE Sec 30	TWN 25N R 4E or WWM
WELL CONSTRUCTION CERTIFICATION: 1	constructed ana/or secept responsibility for	Lat/Long (s,t,r Lat Deg	x	Lat Min/Sec x
construction of this well, and its compliance with		still Required) Long De		Long Min/Sec x
Materials used and the information reported abo	ware true to my best knowledge and belief	Tax Parcel No.		
Driller/Traince Signature		Cased or Uncased Diameter	81/2	Static Level 15
Driller/Trainee License No.	<u> </u>	Work/D commision Start Da	10 <u>6/25/13</u>	
Signature and License No.		Work/Decommision End Dat	, landa	
L		Commission End Dat	· <u>6725/13</u>	
onstruction/Design	Wel	Data W3-362	Formati	on Description
	Concrete Surface Seal Depth Blank Casing (dia x dep) Material Backfill Type Seal	FT	GREYISH BA MEDIUN W/FE	176 ⁴ FT WE FINE TO A SILTY SANDS W GRAVELS NEAR SERFACE FT
	Material Gravel Pack Material Screen (dia x dep) Slot Size	<u>HYO BENT</u> <u>Z'</u> FT <u>2 12 SAN O</u> <u>J'X J'</u> .010	0 -	FT
	Material Well Depth Backfill Material Total Hole Depth	<u>5.5,</u> <u>17'6''</u> ft <u>-</u> <u>17'6'</u> ft	wen #	7
Scale 1" =	Pa	ge of		ECY 050-12 (Rec=+ 2/01)
· · · · · · · · · · · · · · · · · · ·				
· · ·	: • •			
	1			
	and the second second			
建制的合同。他们就是这些公司, 我们就是我们的问题。	法通知时时上述法院的政治的法律的法 化固定试验计			

, ·

ESOURCE PROTE	UTION WELL WELL INSTALLED)	REPORT		RENT e of Intent No.	Diboogo
Construction/Decommission			ivotic	Type of Well	RE0859
XConstruction	÷			X Resource Pro	lection
Decommission ORIGINAL INSTAL	LATION Notice			Geotechnical	
	······································	Property Owner Site Address	<u> </u>	City	of Seattle
Consulting Firm Clearcreek Con	tractor's		Seattle	Valley St betwee County	n Terry and Westla King
Unique Ecology Well ID			·····		
	55	Location N	4 <u>SE</u>	NE NE Sec 30	TWN 25N R 4E
WELL CONSTRUCTION CERTIFICATION I constructed	and/or accept responsibility for	Lat/Long (s,t,r L	at Deg	x	Lat Min/Sec x
construction of this well, and its compliance with all Washin Materials used and the information reported at	stan well construction standards	still Required) L	ong Deg	x	Long Min/Sec x
Materials used and the information reported above are true to	. 🖠	Tax Parcel No.			
X Driller Trainee Name (Print) Driller/Trainee Signature	Gose				
Driller/Trainee License No.	2744	Cased or Uncased Di	iameter _	8/2	Static Level 15
	1/44	Work/Decommision S	last Date	1. 14 14	
If traince, licensed driller's			ant Dute	6-24-13	·····
Signature and License No.		Work/Decommision E	ind Date	6-24-13	
nstruction/Design	We	ll Data W3-36	2	Es mussi	
			=T		n Description
	Concrete Surface Seal			•	
	Depth		FT	<u> </u>	<u>76"</u> FT UE FINE TO
			(0	SHEYISH BL	UE FINE TO
	Blank Casing (dia x dep)		-	MEDIUM	SILTY SAND
	Material	<u> </u>	_	IN FER	(GROUFLS
	Backfill	<u> </u>	FT		SILTY SAND S GRAVELS DEAR SURFAC
	Туре	NEAT CEMENT			
	Seal	/1 ^t	-		FT
	Material	HIND REAL	-		
		HYD BENT			
	Gravel Pack	2'	~		
	Material	2/12 SANO	FT		
		- HIP SAND			
					FT
	Screen (dia x dep)	/×/'			
	Slot Size	.010			
	- Material	<u></u>			
	-				
	Well Depth -	<u> </u>	FT	WE42 # 8	
	Jackfill			いちゃん おり	
1	otal Hole Depth	17'6" F	т		
le !" =	Pan	ge of			
	1 45	ge of	<u> </u>		ECY 050-12 (Rec=v 2/01)

ESOURCE PROTECTION WE SUBMIT ONE WELL REPORT PER WELL INSTALLED		CURRENT	RE08597
Construction/Decommission X Construction Decommission ORIGINAL INSTALLATION Notice of Intent Number		Type of Well X Resource Protectior Geotechnical Soil B	1
Consulting Firm Clearencek Contractor's	Property Owner Site Address City Seatt	City of Ser Valley St between Terr	attle ry and Westlake
Unique Ecology Well ID Tag No BIC 557	· · · · · · · · · · · · · · · · · · ·	Ie County SE NE NE 30 TWN	King 25N R 4E
WELL CONSTRUCTION CERTIFICATION constructed and/or accept responsibility construction of this well, and its compliance with all Washington well cunstruction stands	Lat/Long (s,t,r Lat Deg still Required) Long D	_xLat M	lin/Sec x
Materials used and the information reported above are true to my best knowledge and behavior and	Tax Parcel No.		Min/Sec <u>x</u>
Driller/Traince Signature Driller/Traince License No. 2744	Cased or Uncased Diamete		Level <u>15</u>
If traince, licensed driller's	Work/Decommision Start D		<u></u>
Construction/Design	Well Data W3-362	Formation Desc	
Concrete Surface Depth Blank Casing (dia Material Backfill Type Scal Material	FT	<u>0</u> _ 17'6' GREYISH BLUE MEDIUM SII W/ FEW GI NEAI	FT FINE TO LTY SANDS RAVELS R SEVAFACE FT
Gravel Pack Material Screen (dia x dep) Slot Size Material	2' FT 2/12 SAN 0 	0	FT
Well Depth Back fili Material Total Hole Depth	<u> </u>	wen #9	

arzan zutartan zarazati kulan hili izalizi na kalan ali tari kulan ku

· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		
	-		
. •			
ESOURCE PR	DTECTION WELL	REPORT CT	IRRENT
(SUBMIT ONE WELL REPO	RT PER WELL INSTALLED)		
Construction/Decommission		NOL	
X Construction			Type of Well
Decominission ORIGINAL	INSTALLATION Notice		X Resource Protection
of Intent Number		Property Owner	Geotechnical Soil Boring
		Site Address	City of Seattle Valley St between Terry and Westlake
Consulting Firm Cleare	reek Contractor's	City Seattle	County King
Unique Ecology Well ID			EWM
Tag No.	558	Location 1/4 SE	NE NE See 30 TWN 25N R 4E or
WELL CONSTRUCTION CERTIFICATION:	constructed and/or accent memory billing for	_	WWM
construction of this well, and its compliance wi	th all Washington well construction standards	Lat/Long (s,t,r Lat Deg still Required) Long Deg	_x Lat Min/Sec _x
Materials used and the information reported abo		som reduiten) rolls nes	x Long Min/Sec x
		Tax Parcel No.	
X Driller Trainee Name (Print) Driller/Trainee Signature	DividiGase		
	MA	Cased or Uncased Diameter	
Driller/Trainee License No.	• 2744		
If traince, licensed driller's		Work/Decommision Start Date	6 25 13
Signature and License No.	·	Work/Decommision End Date	ilait a
		Wolk/Decominision End Date	67513
Construction/Design	Wel	I Data W3-362	Formation Description
		······································	
	Concrete Surface Seal		110
	Depth	- FT	$\frac{0}{-76}$ FT
			<u>- 176</u> FT GREYISH BLUE FINE TO
	Blank Casing (dia x dcp)	M'	MEDIUM SILTY SANOS W/ FEW GRAVELS NEAR SEURFACE
	Material	<u> </u>	III EEU GRAVELS
	Backfill	6 FT	Han shares
	Туре	NEAT CEMENT	NEAR SURPACE
		IVENI VENIENI	0 - 1000
	Seat	4`	FT
	Material	HYD BENT	1
▲	Gravel Pack	2' FT	
	Material	212 SAN 0	
			_0 FT
	Screen (dia x dep)	ľ×ľ	
	•		
	Slot Size	.010	
	Material	5.5.	
	Well Depth -	<u>/7'6''</u> FT	line the s
	Backfill	-	wize # 10
	- Material		
	(
	Total Hole Depth	<u>17'6"</u> FT	
Scale I" =	n.		
	Paį	ge of	ECY 050-12 (Rec=v 2/01)
;	· · · · ·		

.

areas a subject to de a constant de la constant de

ESOURCE PROTECTIC	N WELL F	REPORT	CU	RRENT		
WELL KEPUKI PER WELL I	STALLED)			ce of Intent No.	D E	08597
Construction/Decommission				Type of Well		.00397
XConstruction				X Resource Pro		
Decommission ORIGINAL INSTALLATION	Notice					
of Intent Number	<u></u>	Property Owne	r	Geotechnica	of Seattle	
Consulting Firm Clearcreek Contractor		Site Address		Valley St betwe	en Terry and V	Westlake
		City	Seattle	County	King	3
Unique Ecology Well ID Tag No. BIC 559		Location	1/4 SE	NE NE Sec 30	TWN 75N .	EV
WELL CONSTRUCTION CERTIFICATION I constructed and/or acce	·	T			_10// <u>2014</u> R	<u>4E</u> or W1
construction of this well, and its compliance with all Washington well co	HINGION Standards	Lat/Long (s,t,r still Required)	Lat Deg	_ <u>x</u>	Lat Min/Sec	<u>x</u>
Materials used and the information reported above are true to my past kno	wiedge and belief	sun required)	Long Deg	<u> </u>	Long Min/Sec	<u> </u>
X Driller Trainee Name (Print)		Tax Parcel No.				
Driller/Traince Signature		C		al	······	
Driller/Traince License No 2744	<u> </u>	Cased of Uncased	Diameter	8/2	Static Level	15
If trainee, licensed driller's		Work/D commision	Start Date	6/25/1	3	
Signature and License No.		\sim				
	(Work/Decommision	End Date	6/25/13		
istruction/Design	Well [Data W3-1	362	Formatio	on Description	
					in Description	
Conc	ete Surface Seal			٥	-41	
Dept			FT	GREYISH BO	(10	FT
Blank	Casing (dia x dep)			онеулян Ва	WE FINE	70
Materi		<u>19</u>		MEDIUN	t silty s	CANOS
		<u> </u>		W/ FE	W GRAVEL	15
Backfi		6	FT		I GILTY S W GRAVEL NEAR SEN	FAIE
Туре	1	Vent Cement	E			
Seal		4				FT
Materia	· _	HYD BENT	-			
			-			
Gravel	ack	2'	FT			
Materia	<u></u>	212 SAND	-''			
			-			
				_0	I	Ŧ
Screen (lia x dep)	<u>1'×1'</u>	_			
Stot Size		.010				
Material	· ·	5.5.	-			
			-			
Well Der	uh	17'6"	FT			
Backfill				WELL # 11		
Material		-	•			
Total Hol	: Depth	ار را وم				
		17'6"	FT			
e]" ≔	Page	of				

ESOURCE PROTECTION WEL (SUBMIT ONE WELL REPORT PER WELL INSTALLED) Construction/Decommission X Construction Decommission ORIGINAL INSTALLATION Notice of Intent Number Consulting Firm Clearcreek Contractor's		JRRENT lice of Intent No. Type of Well	RE08597
X Construction Decommission ORIGINAL INSTALLATION Notice of Intent Number		Type of Well	R1200397
Decommission ORIGINAL INSTALLATION Notice			
		X Resource Protec	tion
		Geotechnical So	
Consulting Firm Clearcreek Contractor's	Property Owner Site Address	City of	Seattle
	City Seattle	Valley St between 7 County	
Unique Ecology Well ID		County	King
	Location 1/4 SE	NE NE Sec 30 TV	VN 25N R 4E
ZEL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	Lat/Long (s,t,r Lat Deg	х т.	
instruction of this well, and its compliance with all Washington well construction standards	still Required) Long Deg		nt Min/Sec mg Min/Sec
alerials used and the information reported above are true to my best knowledge and belief	-	C.	<u></u>
Driller Traince Name (Print) David Gose	Tax Parcel No.		· · · · · · · · · · · · · · · · · · ·
riller/Traince Signature	Cased or Uncased Diameter	81/2 Sta	tic Level 15
riller/Traince License No. 2744			
traince, licensed driller's	Work/D commision Start Date	6/25/13	·
gnature and License No.	Work/Decommision End Date	1 lando	
ruction/Design		<u> </u>	
V	Vell Data W3-362	Formation D	Description
Concrete Surface Se Depth		OREVISH BUDE	6″ FT
	FT	GREVISH BUIE	ELALE TO
Blank Casing (dia x de	ър) /Н¹	MENUM	CITY CANOS
Material	<u>×</u>	Infebruiry Cont	GARIELS
Backfill	6 FT	W PEN	SILTY SANOS GRAVELS AR SEURFACE
Туре	NEW CEMENT	NC	AN SIDAPATE
Seai	1	0 -	FT
Material	4	- <u></u>	
internal internal	HYD BENT		
Gravel Pack			
Material	2' FT		
	2/12 SANO		
		0	FT
Screen (dia x dep)	ſ×ſ		
Stot Size			
	0		
Material	5.5.		
Well Depth	<u>17'6''</u> FT		
Backfill			
Material		. 1	
		WELL #12	
Total Hole Depth	FT		

.

ESOURCE P	ROTECTION WELL	DED of	
Construction/Decommissi XConstruction	OTEC HON WELL PORT PER IVELL INSTALLED) on IL INSTALLATION Notice		CURRENT Notice of Intent No. RE08597 Type of Well X Resource Protection
Consulting Firm Clean	rcreek Contractor's	Property Owner Site Address City Seatt	Geotechnical Soil Boring City of Scattle Valley St between Terry and Waster
WELL CONSTRUCTION CERTIFICATION	010 961	Location 1/4 Lat/Long (s,t,r Lat Deg	SE NE NE Sec 30 TWN 25N R 4E OT
the man, and its cooppliance	with all Washington well construction standards	still Required) Long D	cg x Lat Min/Sec x Long Min/Sec x
Driller/Traince Signature Driller/Traince License No	2744	Cased or Uncased Diameter	8/2 Static Level 15'
If trainee, licensed driller's		Work/Decommision Start Da	
Construction/Design		I Data W3-362	Formation Description
	Concrete Surface Seal Depth Blank Casing (dia x dep) Material Backfill Type	FT FT NEAT CEMENT	<u>- 176</u> FT GREYISH BLUE FINE TO MEDIUM SILTY SANDS W/ FEW GRAVELS NEAR SEURFALE
	Gravel Pack	4' HYD BENT 2' FT 2/12 SAN O	FT
	Screen (dia x dep) Slot Size Material Well Depth Backfill	<u>1'x1'</u> .010 5.5. <u>17'6"</u> FT	FT
Scale 1" =	Material Total Hole Depth	- FT	WELL #13
	Page	of	ECY 050-12 (Rec=v 2:01)

,

都 和於1946年(4月初年))			
\$			
ESOURCE DE	OTTOTT		
(SUBMIT ONE IFFI I DED	OTECTION WELL	REPORT	CURRENT
Construction/Decommissio			
X Construction	<u>л</u>		Type of Well
Decomplission Opical	· · · · · ·		
Decommission ORIGINAL of Intent Number	. INSTALLATION Notice		X Resource Protection
		Property Owner	Geotechnical Soil Boring City of Seattle
Consulting Firm Cleare	reek Contractor's	Site Address	Valley St between Terry and Westicke
		City Seattl	e County King
Unique Ecology Well ID Tag No,	BIC 564	Location 1/4 S	EWM
WELL CONSTRUCTION CERTIFICATION	Constitutional and the	_	E NE NE Sec 30 TWN 25N R 4E or
construction of this well, and its compliance u	ith all Washington well construction standards	Lat/Long (s,t,r Lat Deg	Lat Min/Sec
Afaterials used and the information reported ab	ovo are true to mo pett knowledge and but a	still Required) Long Dep	z Long Min/Sec x
X Driller Trainee Name (Print)		Tax Parcel No.	
Driller/Traince Signature	Devid Gose		
Driller/Trainee License No.		Cased or Uncased Diameter	81/2 Static Level 15'
	V 2744		
If traince, licensed driller's		Work/Decommision Start Date	6/26/13
Signature and License No.		Work/Decommision End Date	
Construction/Design			6/24/13
	Well	Data W3-362	Formation Description
	Concrete Surface Seal		
	Depth	FT	GAEYISH BLUE FINE TO
	Blank Casing (dia x dep)	111 ¹	OHEVISM BLUE FINE TO
	Material	<u> </u>	MEDIUM SILTY SANDS
	Backfill		W FEW GRAVELS
	· · ·	6FT	W/ FEW GRAVELS NEAR SEVREALE
	Type -	NEW CEMENT	
	Seal	Ц	0 - FT
	- Material	HYD BENT	
	· · · -		
	Gravel Pack	1 ¹	
	Material	2 FT 2/12 SAN O)
		EPE SANU	
			0
	Screen (dia x dep)	_1'×1'	FT
	Slot Size		
		010	
	Material	5.5.	
1111 Marina	Well Depth	17'6" FT	
		<u> </u>	
	Backfil)		
	Material	-	WELL # 14
	Total Hole Depth	17'6" FT	•
Scale 1" =			
	Page	of	
•			ECY 050-12 (Ree=v 2/01)
ļ ,			

APPENDIX E

ECOLOGY RESOURCE PROTECTION WELL REPORTS – WELL DECOMMISSIONING FOR TERRY AVENUE NORTH





Boring Log B2/Monitoring Well MW101

?

