PROPERTY CLOSURE REPORT

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RGI PROJECT NO. 2016-023D
VCP PROJECT NO. NW3172

PROPERTY CLOSURE REPORT
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1 INTRODUCTION

The Riley Group, Inc. (RGI) is pleased to prevent this Property Closure Report (Closure Report), which provides information requested by Ecology for the Sea Mar Community Health Center property located at 9635 Des Moines Memorial Drive South in Seattle, Washington (hereafter referred to as the Property). The location of the Property is displayed on Figure 1.

The Property is currently owned by Sea Mar Community Health Center (hereafter referred to as the Client) and is enrolled in the Washington Department of Ecology (Ecology) Voluntary Cleanup Program (VCP). The Property is identified by Ecology as the Sea Mar Community Health Center Dominics Plaza project with VCP No. NW3172. Remedial Actions were conducted on the Property in 2016 and 2017, which successfully remediated petroleum related soil and groundwater contamination on the Property.

The purpose of this Closure Report is to provide supplemental information requested by Ecology in order to bring the Property to regulatory closure in the form of an unrestricted No Further Action (NFA) determination. RGI has had several correspondences with Ms. Kim Wooten (Ecology Project Manager) and Ecology indicated that they would require the following information prior to issuing a NFA for the Property:

- Summary of environmental work completed at the Property:
- Revised Terrestrial Ecological Evaluation (TEE).
- Evaluation of soil impacts in Area A and Area B to determine if soil conditions in these locations fit the criteria for a Model Remedy. This included an evaluation of the chromatogram associated with Area A and presenting an empirical demonstration in Area B demonstrating that MTCA Method B soil cleanup levels are appropriate for evaluating soil in this location.
- Provide documentation for all groundwater monitoring wells that were destroyed during construction and properly decommissioned.
- Summary of the status of the west-adjoining FMH Material Handling Solutions Site.

The Client requested RGI prepare this Closure Report to provide Ecology the information requested in an effort to bring the Property to regulatory closure in the form of a NFA determination from Ecology.

2 PROJECT BACKGROUND

This section summarizes the history of the Property and previous environmental investigations and cleanup work completed at the Property.

2.1 PROPERTY HISTORY

The Property was historically used as agricultural land and was first developed in 1900 when a single-family residence was constructed on the central portion of the Property along with two sheds. Between 1936 and 1953, these buildings were removed and the Property was redeveloped with a greenhouse, a produce stand, and a first generation former gasoline station (located on the northern portion of the Property). A single-family residence was constructed on the southern portion of the Property at that time and a 300-gallon heating oil underground storage tank (UST) was utilized for heating this residence.

In the early 1960s, the first generation gasoline service station was replaced with a second-generation gasoline service station and the existing grocery building. The second generation gasoline station was removed sometime between 1978 and 1981. The southern portion of the existing commercial building

was constructed in 1986. Known tenants include Rascal's Casino, Maytag Laundromat, restaurants, a hair salon, a video store, offices, and a youth boxing club.

In 2016, the commercial building on the western portion of the Property was renovated, which included an addition extending the building further north. The Property currently is occupied by a museum, offices, and an adolescent medical center. Since 2007, environmental investigations and remedial actions have been conducted on the Property and are summarized in the following section.

2.1 PREVIOUS INVESTIGATIONS

Numerous environmental investigations and remedial actions have been completed by RGI at the Property. This environmental work is documented in the following reports:

- *Well Installation and Environmental Consulting Services Report* (Well Installation Report) prepared for Sea Mar Community Health Center and dated January 14, 2021 by RGI.
- *Draft Environmental Status Report* (2018 ESR Report), prepared for Sea Mar Community Health Center and dated September 12, 2018 by RGI.
- *2017 Underground Storage Tank Closure and Remedial Action Report (2017 UST/RA Report),* prepared for Sea Mar Community Health Center (Sea Mar) and dated September 12, 2017 by RGI.
- *1st Quarter 2017 Groundwater Monitoring Report* prepared for Sea Mar and dated May 15, 2017 by RGI.
- *Remedial Investigation/Feasibility Study and Remedial Action Report* (2017 RI/FS/RA Report), prepared for Sea Mar and dated March 13, 2017 by RGI.
- *4th Quarter 2016 Groundwater Monitoring Report* prepared for Sea Mar and dated January 11, 2017 by RGI.
- *3rd Quarter 2016 Groundwater Monitoring Report* prepared for Sea Mar and dated October 27, 2016 by RGI.
- *2nd Quarter 2016 Groundwater Monitoring Report* prepared for Sea Mar and dated August 17, 2016 by RGI.
- *Phase II Subsurface Investigation* (Phase II), prepared for HomeStreet Bank and dated March 28, 2016 by RGI.
- *Phase I Environmental Site Assessment* (2016 Phase I ESA), prepared for HomeStreet Bank and dated March 14, 2016 by RGI.
- *Supplemental Phase II and Geophysical Survey* (Supplemental Phase II), prepared for Sea Mar and dated January 30, 2008 by RGI.
- *Geophysical Survey and Limited Phase II Subsurface Investigation* (Limited Phase II), prepared for Frontier Bank and dated November 12, 2007 by RGI.
- *Phase I Environmental Site Assessment* (2007 Phase I ESA), prepared for Frontier Bank and dated October 10, 2007 by RGI.

In addition, RGI has prepared the following reports for the Property in connection with the halogenated volatile organic compound (HVOC) release associated with the east-adjoining FMH Site:

- *Vapor Intrusion Assessment Report,* prepared for Sea Mar and dated November 20, 2020 by RGI.
- *Well Installation & Data Summary Report,* prepared for Sea Mar and dated May 9, 2018 by RGI.

- *Third Quarter 2020 Groundwater Monitoring Report* prepared for Sea Mar and dated September 29, 2020 by RGI.

A summary of pertinent information pertaining to the above mentioned documents is included in the following sections. Figures 2 through 4 display current Property conditions, pertinent information pertaining to previously completed work, and information requested by Ecology. All of the reports listed above have been submitted to Ecology under the VCP. For specific details pertaining to these investigations/remedial actions, the reader is directed to refer to the original reports in their entirety.

It should be noted that groundwater on the western portion of the Property has been impacted with HVOCs including trichloroethene (TCE), vinyl chloride, and cis-1,2-Dichloroethene (cis-1,2-DCE) as a result of release(s) originating from the west-adjoining property that migrated onto the Property. This west-adjoining property is enrolled in the VCP and identified by Ecology as the FMH Material Handling Solutions Site (FMH Site) with VCP Project No. NW3119. This property is owned by Starship Properties LLC (Starship) and operated by Beckwith & Kuffel (B&K). The FMH Site is being managed under the VCP by the west-adjoining property owner, their consultant, and the Ecology VCP Site Manager. The work performed in connection with the FMH Site (i.e., vapor intrusion assessment and groundwater sampling pertaining to the FMH Site) does not pertain to regulatory closure of the Property and is therefore not summarized below.

2.1.1 RGI PHASE I ESA (2007)

RGI conducted a Phase I ESA of the Property in 2007 on behalf of Frontier Bank. At that time, the Property was occupied by Dominic's Red Apple Market, a single-family residence, a casino, offices for Sea Mar, and a Maytag Laundromat. The Phase I ESA identified the following recognized environmental conditions (RECs) for the Property:

- Historical gasoline service stations occupied the northern portion of the Property from approximately the 1940s to the 1970s. No information was found regarding the status of the former USTs (removed, closed in place, abandoned), or any other underground improvements (hoist, product piping, etc.).
- A heating oil UST was identified near the northwest corner of the residence situated on the southern portion of the Property.
- Groundwater impacted with diesel- and oil-range total petroleum hydrocarbons (TPH) was identified on the west-adjoining property, located up-gradient of the Property, which represented a potential threat to groundwater quality beneath the Property.

RGI recommended conducting a Phase II Subsurface Investigation at the Property to determine if the above-mentioned RECs had adversely impacted soil and/or groundwater on the Property.

2.1.2 RGI LIMITED PHASE II ESA (2007)

RGI conducted subsurface investigations on the Property in 2007 and 2008. These investigations included geophysical surveys on the Property, advancing 19 test probes across the Property, and collecting and analyzing soil and groundwater samples. Seven of the test probes were completed as groundwater monitoring wells (MW1 through MW7).

Data obtained during these investigations indicated the following:

- Soil and groundwater on the northern portion of the Property (in the location of the former gasoline service stations) was impacted with petroleum-related contaminants of concern (COCs) at concentrations exceeding applicable MTCA soil and groundwater cleanup levels.

- Soil and groundwater on the southern -portion of the Property (in the immediate vicinity of the heating oil UST) was impacted with diesel-range TPH at concentrations that exceeded applicable MTCA soil and groundwater cleanup levels. The release from this UST was limited to the immediate vicinity of the UST.
- Groundwater on the western portion of the Property was impacted with diesel- and oil-range TPH, vinyl chloride, cis 1,2-DCE and TCE at concentrations that exceeded applicable MTCA groundwater cleanup levels. The source of these groundwater impacts beneath the western portion of the Property was suspected to be the up-gradient and west-adjoining property FMH Site, which was subsequently confirmed in later investigations.
- Groundwater was encountered at depths between approximately 1' and 7' bgs and the groundwater flow direction was determined to be to the north-northeast across the Property.

Based on the findings of these investigations, RGI recommended decommissioning the heating oil UST with subsequent remedial excavation of contaminated soil and groundwater cleanup. RGI also recommended additional subsurface investigation in order to characterize the nature and extent of soil and groundwater impacts located elsewhere on the Property.

2.1.3 RGI PHASE II ESA (2016)

RGI conducted a Phase II Subsurface Investigation on the Property in 2016 on behalf of HomeStreet Bank and the Client. The investigation consisted of conducting a geophysical survey on the Property, advancing four test probes (P1 to P4), installing three groundwater monitoring wells (MW8, MW9, and MW10), and installing one soil vapor well (SV1). RGI also collected and analyzed associated soil, groundwater, and soil vapor samples.

Data obtained during the Phase II indicated the following:

- The geophysical survey indicated that the heating oil UST on the southern portion of the Property was 3' in diameter and 5' in length and oriented north to south.
- Soil and groundwater on the northern portion of the Property (in the location of the former gasoline service stations) was impacted with petroleum-related COCs at concentrations exceeding applicable MTCA soil and groundwater cleanup levels. In addition, lead and cadmium were identified in shallow soils (<4.5' bgs) at concentrations above applicable MTCA cleanup levels. The extent of soil and groundwater contamination associated with the gasoline service stations was determined to be confined to within the Property boundaries.
- Soil and groundwater on the southern portion of the Property (in the immediate vicinity of the heating oil UST) was impacted with diesel-range TPH at concentrations that exceeded applicable MTCA soil and groundwater cleanup levels. The extent of soil and groundwater contamination was determined to be confined to within the Property boundaries in the immediate vicinity of the heating oil UST.
- Groundwater on the eastern portion of the Property (in the location of MW7) was impacted with petroleum-related COCs at concentrations that exceeded the applicable MTCA groundwater cleanup levels.
- Groundwater on the western portion of the Property was impacted with diesel- and oil-range TPH, vinyl chloride, TCE, and cis 1,2-DCE at concentrations that exceeded applicable MTCA groundwater cleanup levels. The source of these groundwater impacts was the FMH Site. A soil vapor sample was collected and analyzed in the location of HVOC-impacted groundwater on the

Property. Soil vapor data indicated that TCE soil vapor concentrations may pose a vapor intrusion threat for the Property building.

RGI recommended preparation of a Conceptual Cleanup Action Scope of Work in order to develop a plan for remediating contaminated soil and groundwater on the Property. RGI also recommended further evaluation of the vapor intrusion risk associated with the TCE groundwater impacts from the west-adjoining property.

2.1.4 RI/FS/RA (2017)

In 2016, RGI conducted a Remedial Investigation, Feasibility Study, and Remedial Action on the Property. The following work was performed:

- Cleanup action alternatives were evaluated in accordance with MTCA regulations and remedial excavation with dewatering was selected as the appropriate cleanup action for remediating soil and groundwater impacts on the Property.
- Based on discussions with the various stakeholders, it was determined that groundwater impacts associated with the FMH Site would be addressed by the west-adjoining property owner and their environmental consultant.
- Three additional groundwater monitoring wells were installed on the Property. MW11 and MW12 were installed near the eastern Property boundary at the northern portion of the Property and MW13 was installed on the northern portion of the Property. RGI also installed wells MW14 through MW20 near the western Property boundary and these wells were used to assess impacts from the west-adjoining FMH Site. Groundwater samples were collected and analyzed from monitoring wells throughout the Property.
- The heating oil UST on the southern portion of the Property was decommissioned and removed in accordance with applicable regulations.
- Soil impacted with petroleum-related COCs and/or metals was remediated in five separate areas (Areas 1 through 4 and Area TP) to the maximum extent possible via remedial excavation with off-Property disposal of contaminated soil. Remedial excavations reached a maximum depth of 16' bgs. Performance and confirmation soil samples were collected and analyzed from each Area to demonstrate compliance with MTCA regulations.
- Decommissioning of wells MW1, MW5, MW6, MW7, MW9, and MW10.

Based on the findings of the RI/FS/RA, RGI concluded the following regarding the former Property uses (gasoline service stations and heating oil UST):

- All soil contamination on the Property was fully remediated to the maximum extent possible and in accordance with MTCA regulations. A total of approximately 1,460 cubic yards (or 2,042 tons) of contaminated soil were removed and disposed of off-Property during the RA. A limited amount of gasoline-range TPH remains on the Property at a depth of approximately 6' bgs beneath the location of Area 3 (northwestern portion of Property) and at a depth of approximately 5' bgs at MW11 (near the eastern Property boundary on the northern portion of the Property). Further remedial excavation in these locations was not feasible due to the presence of water and sewer lines, respectively. The remaining soil contamination in these locations was considered isolated and limited in extent. *Note: The gasoline-range TPH that remained in Area 3 was later determined to be diesel-range TPH at a concentration below the MTCA soil cleanup level. This is discussed further in Section 5.*

- Post-remediation groundwater monitoring data indicated that groundwater concentrations of petroleum-related COC were in compliance with MTCA regulations in the areas of the gasoline service station and heating oil UST.

Based on the conclusions of the RI/FS/RA, RGI recommended that a vapor intrusion assessment be conducted in order to determine if groundwater contamination associated with the west-adjoining FMH Site was adversely impacting indoor air in the Property building.

2.1.5 GROUNDWATER SAMPLING (2016-2017)

From the first quarter of 2016 through the first quarter of 2017, RGI performed quarterly groundwater monitoring of groundwater monitoring wells throughout the Property.

Post-remediation groundwater analytical data indicated that groundwater on the Property was no longer impacted with petroleum related COCs at concentrations above applicable MTCA groundwater cleanup levels for at least 4 consecutive quarters in the locations of the former gas stations and heating oil UST. Groundwater sampling was discontinued after the first quarter of 2017.

2.1.6 UST/RA REPORT (2017)

In 2017, RGI decommissioned one 675-gallon UST that was encountered during construction of a storm water detention vault on the Property. RGI also conducted additional remedial actions and investigation work on the Property, which included the following:

- Directed the excavation of test pits and collected characterization soil samples to determine if soil was impacted with COCs in the location of a planned storm water detention vault.
- Performed oversight of the decommissioning and removal of a suspected waste oil UST with a 675-gallon capacity in accordance with applicable regulations. RGI also conducted a UST Site Assessment at that time and the area was identified as Area 6
- Performed remedial excavations of soil impacted with petroleum-related COCs in two separate areas (Areas 5 and 6) and disposed of contaminated soil off-Property in accordance with applicable regulations. Remedial excavations reached a maximum depth of 8’ bgs. Performance and confirmation soil samples were collected and analyzed from each Area to demonstrate compliance with MTCA regulations.
- Assisted the general contractor with the characterization and disposal of contaminated soil and excavation water, which included soil and/or groundwater containing concentrations of COCs below MTCA groundwater cleanup levels that required special handling. RGI also obtained *General Letter of Authorization No. 40111-01* from King County Wastewater Treatment Division (KCWTD), which allowed for excavation water to be discharged to the sanitary sewer system

Based on the findings of the UST/RA, RGI concluded the following:

- All contaminated soil in Areas 5 and 6 was fully remediated. The maximum depth of soil contamination in both Areas 5 and 6 was situated above the groundwater level. Therefore, groundwater was not impacted by this soil contamination. A total of approximately 340 cubic yards (480 tons) of impacted soil was removed from these areas for MTCA compliance purposes and disposed of in accordance with applicable regulations. RGI also assisted with the disposal of soil containing concentrations of petroleum related COCs below MTCA soil cleanup levels that required special handling.
- A total of approximately 1,700-gallons of excavation water containing concentrations of COCs below MTCA groundwater cleanup levels was removed from the Property and disposed of in

accordance with applicable regulations. This water was not representative of groundwater and consisted of storm water runoff that had entered the open excavation and perched water situated around utilities.

Based on the conclusions of the 2017 UST/RA and the 2016 RI/FS/RA, RGI recommended requesting that Ecology grant a NFA determination for the Property.

2.1.7 ECOLOGY CORRESPONDENCES, WELL INSTALLATION & ENVIRONMENTAL CONSULTING SERVICES (2018-2021)

RGI had numerous correspondences with Ms. Kim Wooten of Ecology to discuss the plan for regulatory closure and information required to be submitted to Ecology. Based on these correspondences, the tasks discussed in this section were performed and this Closure Report was prepared.

2.1.7.1 WELL INSTALLATION & ENVIRONMENTAL CONSULTING SERVICES (2018-2021)

On October 2, 2018, RGI installed groundwater monitoring well MW22 at the request of Ecology. MW22 was situated down-gradient of an area where soil containing gasoline-range TPH was thought to be present at a concentration above the MTCA soil cleanup level. However, as discussed in Section 5, this soil was later determined to be diesel-range TPH at a concentrations below the applicable MTCA soil cleanup level.

The groundwater sample obtained from well MW22 did not contain concentrations of COCs above applicable MTCA groundwater cleanup levels, which further demonstrating that soil and groundwater impacts where not present at this portion of the Property.

RGI provided information to Ecology regarding wells that were destroyed and decommissioned at the Property. Wells that were decommissioned or destroyed on the Property are described in Section 6.

RGI completed well modifications and RGI retained a licensed surveyor to survey the top of casing and surface elevations at wells MW8, MW11, MW17A, MW18, MW19, MW20, MW21, and MW22 on June 12, 2019.

The *Well Installation and Environmental Consulting Services Report* dated January 14, 2021 by RGI documents all work discussed above in further detail.

3 REGULATORY FRAMEWORK IN WASHINGTON STATE

In Washington State, the Model Toxics Control Act (MTCA, RCW 70.105D), mandates that site cleanups protect human health and the environment. The MTCA Cleanup Regulation (173-340 WAC) defines the approach for establishing cleanup requirements for individual sites, including the establishment of cleanup standards and selection of cleanup actions.

The MTCA regulation provides three options for establishing standard and site-specific cleanup levels for soil and groundwater. Method A cleanup levels are intended to provide conservative cleanup levels for sites undergoing routine site characterization or cleanup actions or those sites with relatively few hazardous substances. Method B and C cleanup levels are set using a site risk assessment, which focus on the use of "reasonable maximum exposure" assumptions based on site-specific characteristics and toxicity of contaminants.

As previously indicated MTCA Method A soil and groundwater cleanup levels were used to evaluate soil and groundwater on the Property during previous investigations.

3.1 SOIL CLEANUP LEVELS

The soil cleanup levels historically selected for evaluating soil concentrations of COCs at the Property during previous investigations and cleanup activities were the MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses. These soil cleanup levels were considered sufficient for evaluating whether or not concentrations of COCs in soil were in compliance with MTCA regulations.

Ecology established Model Remedies to streamline and accelerate the process of regulatory closure. The *Model Remedy for Sites with Petroleum Impacts to Groundwater* (Model Remedy Guidance) revised December 2017 by Ecology describes 12 different Model Remedy scenarios for sites with petroleum contaminated groundwater. The Model Remedy Guidance describes the criteria and requirements associated with each of the Model Remedies.

Based on discussions with Ecology and evaluation of all post remediation soil and groundwater analytical data, RGI determined that the use of Model Remedy No. 5 (MR No. 5) was appropriate for bringing the Property to regulatory closure. MR No. 5 stipulates that groundwater must be in compliance with MTCA Method A groundwater cleanup levels. Once this is established, a generic total TPH cleanup level of 1,500 mg/kg is appropriate for evaluating soil TPH concentrations. MR No. 5 also states that MTCA Method B direct contact soil cleanup levels can be used provided that an empirical demonstration is presented, which demonstrates that soil does not represent a threat to groundwater quality. The rationale for using MR No. 5 at the Property and the empirical demonstration are discussed further in Section 5.

The selected soil cleanup levels for evaluating TPH impacted soil in Area A and Area B under MR No. 5 were the Model Remedy specific TPH soil cleanup level cleanup level of 1,500 mg/kg and the MTCA Method B soil cleanup levels protective of the direct contact pathway. These values were obtained from the Cleanup Level and Risk Calculation (CLARC) database in October of 2021.

3.2 GROUNDWATER CLEANUP LEVELS

The selected groundwater cleanup levels used for evaluating groundwater concentrations of COCs during previous investigations and cleanup activities at the Property were the MTCA Method A Cleanup Levels for Groundwater. These groundwater cleanup levels were considered sufficient for evaluating whether or not concentrations of COCs in groundwater were in compliance with MTCA regulations.

Under the MTCA regulation, groundwater cleanup levels must be set at concentrations at least as stringent as applicable state and federal laws (Applicable or Relevant and Appropriate Requirements [ARARs], WAC 173-340-700[5] [a]). Therefore, when no Method A groundwater cleanup level was available for a given compound, the ARAR was referenced.

Groundwater cleanup levels were obtained from the Ecology CLARC database at the time and are referenced in previous reports.

4 TERRESTRIAL ECOLOGICAL EVALUATION

A Terrestrial Ecological Evaluation (TEE) is required by WAC 174-340-7490 at any site where there has been a release of a hazardous substance to soil. MTCA regulations require that one of the following actions be taken:

- Documenting a TEE exclusion using criteria in WAC 173-340-7491;
- Conducting a simplified TEE as set forth in WAC 173-340-7492; or
- Conducting a site-specific TEE as set forth in WAC 173-340-7493.

RGI conducted the TEE in accordance with WAC 174-340-7490 and determined that the Property qualifies

for a TEE exclusion since there are less than 1.5 acres of undeveloped land on or within 500 feet of the Property.

A copy of the TEE Exclusion Form and map displaying the area within a 500 foot radius of the Property is included in Appendix A.

5 APPLICATION OF MODEL REMEDY

Based on discussions with Ecology, RGI evaluated using a Model Remedy to bring the Property to regulatory closure using the Model Remedy Guidance and determined that MR No. 5 described in the Model Remedy Guidance is appropriate for bringing the Property to regulatory closure. The Model Remedy Guidance states the following regarding Model Remedy No. 5:

- "*This model remedy is for situations where, following remediation, sufficient monitoring data are collected to confirm that the Method A groundwater cleanup levels are met throughout the site. Once groundwater quality has been adequately addressed, an empirical demonstration can be pursued using the provisions in WAC 173-340-747 to establish Method B soil cleanup levels that are protective of groundwater. This requires that the characteristics of the site are representative of future site conditions. Method B soil cleanup levels that are protective of the direct contact pathway (with the exception of the generic TPH level of 1,500 mg/kg) must be determined using the provisions contained in WAC 173-340-740(3). Ecology's Cleanup Level and Risk Calculations (CLARC) website houses the CLARC spreadsheet that provides compound-specific Method B direct contact levels for unrestricted use*"

In order to utilize MR No. 5, RGI further evaluated the two areas (Area A and Area B) where soil containing concentrations of COCs initially reported above MTCA soil cleanup levels were reported to be left in place on the Property. These two areas are described below.

5.1 AREA A

The location of Area A is displayed on Figures 2 through 4. Area A is situated near the northwest portion of the existing commercial building and is an area where a minor amount of soil containing (what was initially thought to be) gasoline-range TPH left in place at a concentration above the MTCA soil cleanup level at approximately 6' bgs. This soil was situated on the west side of the location identified as Area 3 in the 2017 RI/FS/RA Report. This report documents the collection and analysis of soil sample 3WSW6-6, which was obtained from the western limit of the Area 3 remedial excavation and adjacent to a high pressure water line that ran north/south in that location and limited further remedial excavation in this location. The water line was subsequently decommissioned. At that time, soil sample 3WSWS-6 was reported to contain both gasoline- and diesel-range TPH concentrations of 530 mg/kg and 1,100 mg/kg, respectively. The sample also contained ethylbenzene and xylenes a concentrations 0.018 mg/kg and 0.30 mg/kg, respectively. Gasoline-range TPH was the only contaminant that was reported to exceed the applicable MTCA soil cleanup level of 30 mg/kg.

Soil sample 3WSW6-6 was situated in a location where primarily diesel and oil were present prior to the 2016 Remedial Action. In addition, this soil sample contained ethybenzene and xylenes, which are commonly found in diesel-range TPH mixtures. Since the NWTPH-Gx method is used to quantify concentrations against a known product and the potential exists for diesel-range TPH fractions to be detected during analysis using the NWTPH-Gx method, RGI requested that Friedman & Bruya, Inc. (FBI) evaluate the chromatogram associated with sample 3WSW6-6 to determine if the reported gasoline-range TPH concentration was a result of diesel-range TPH being detected during analysis using the NWTPH-Gx method.

FBI evaluated the chromatogram for sample 3WSW-6 and concluded that the patterns and the boiling range displayed by the peaks on the chromatogram were indicative of a middle distillate such as diesel fuel No. 2 or heating oil. FBI further indicated that the primary intent of the NWTPH methods is to identify and quantitate samples against the correct fuel product. When multiple tests are used, overlap can occur where a single product, like diesel-range TPH, is detected and measured by more than one test. When this happens, some of the contamination present will be double counted, biasing results high, which can cause the application of incorrect cleanup standards. Based on the evaluation, FBI concluded that only diesel-range TPH was present in the sample. A copy of FBI's evaluation letter is included in Appendix B.

Based on FBI's evaluation, RGI determined that the previously reported gasoline-range TPH concentration for sample 3WSWS-6 of 530 mg/kg was a result of double counting since this concentration was included in the reported concentration of 1,100 mg/kg for diesel-range TPH. Therefore, the diesel-range TPH concentration of 1,100 mg/kg was evaluated for compliance under MR No. 5 and determined to be below both the Model Remedy specific TPH soil cleanup level of 1,500 mg/kg. Therefore, soil situated in the location of soil sample 3WSW6-6 does not represent an environmental concern for the Property.

Further evidence of this soil not representing a concern for the Property was obtained in 2018 when RGI installed and sampled groundwater monitoring well MW22. Well MW22 is situated in close proximity to, and down-gradient of, the location of Area A. Groundwater data obtained from MW22 indicated that no COCs were present in groundwater at concentrations above the applicable MTCA Method A groundwater cleanup levels.

5.2 AREA B EMPIRICAL DEMONSTRATION

Area B is situated in the location of groundwater monitoring well MW11, which is located approximately 1.5' southwest of the northeast Property boundary. This location represented the northeast portion of the 2016 Area 4 remedial excavation described in the 2017 RI/FS/RA Report.

During the installation of well MW11 on May 4, 2016, soil sample MW11-5 was collected at approximately 5' bgs and submitted for analyses of COCs. Soil analytical data obtained from this sample indicated that gasoline-range TPH and benzene were present in soil at concentrations of 85 mg/kg and 0.31 mg/kg, respectively. These concentrations exceeded the MTCA Method A soil cleanup levels of 30 mg/kg and 0.03 mg/kg, respectively. Soil samples collected at MW11 at depths of 3' bgs (2' above sample MW11-5) and 7.5' bgs (2.5' below MW11-5) did not contain any COCs at concentrations above compound-specific laboratory detection limits. Therefore, this soil contamination was determined to be isolated and estimated to be present in an approximately 1.5' thick lens of sand.

Saturated soil conditions were not encountered during drilling of MW11 until reaching approximately 9' bgs, which was approximately 4' below the location were contaminated soil was observed. In the 2017 RI/FS/RA Report, RGI concluded that impacted soil in the location of well MW11 was isolated and did not pose a threat to groundwater quality on the Property.

Groundwater samples were obtained from well MW11 and submitted for analyses on five occasions between May 6, 2016 and March 31, 2017. No COCs were detected in groundwater at concentrations above the applicable MTCA groundwater cleanup levels during any of these sampling events. In addition, gasoline-range TPH and benzene were not detected at a concentration above the laboratory detection limit in the final four quarterly groundwater monitoring events.

Based on this empirical demonstration, RGI concludes that the isolated amount of gasoline-range TPH and benzene impacted soil situated in the location of MW11 between approximately 4' and 6' bgs does not represent a threat to groundwater quality on the Property.

5.3 MODEL REMEDY EVALUATION RESULTS

Based on the evaluation of Area A, RGI concludes that soil in Area A does not represent a threat to human health or the environment since the detected concentration of diesel-range TPH present in soil in this location did not exceed the Model Remedy Specific TPH soil cleanup level of 1,500 mg/kg. Therefore, Area A has been eliminated as an environmental concern for the Property and no further evaluation of this soil is warranted.

Based on the Area B evaluation presented in Section 5.2, RGI determined that the isolated amount of impacted soil that remains (or has likely degraded since then) in the location of MW11 does not represent a threat to groundwater quality on the Property and soil concentrations of gasoline-range TPH and benzene were below the Model Remedy specific TPH soil cleanup level of 1,500 mg/kg and the MTCA Method B soil cleanup level of 18 mg/kg for benzene. Therefore, soil in Area B does not represent a threat to human health or the environment and no further evaluation of this soil is warranted. In addition, there are no plans to change current use of the Property in the foreseeable future.

The results of this evaluation demonstrate that soil and groundwater concentrations of COCs at the Property are in compliance with MTCA regulations and the requirements stipulated under MR No. 5. Therefore, the Property qualifies for a NFA determination from Ecology.

6 DECOMMISSIONED & DESTROYED GROUNDWATER MONITORING WELLS

During construction activities, which took place on the Property between 2016 and 2019, several groundwater monitoring wells and one soil vapor well were inadvertently destroyed during construction by others. RGI was not on-Property when the damaged wells occurred. These wells are discussed below in Section 6.1.

RGI notified Noel Philip, Well Construction Coordinator at Ecology's Northwest Regional Office, about the destruction of wells MW1, MW4, MW12, MW13, MW16, MW17, and soil vapor well SV1 on September 20, 2018.

In addition, RGI decommissioned several wells prior to and after remediation work. These decommissioned wells included wells MW5, MW6, MW7, MW9, MW10, and MW14 and are described below in Section 6.2.

The locations of all wells (decommissioned, destroyed, and existing wells) are displayed on Figure 4 and borelogs pertaining to these wells are included in Appendix C. Resource Protection Well Decommissioning Reports (RPWRs) for wells that were destroyed during construction under unknown circumstances while RGI was not on-Property are also included in Appendix C.

6.1 GROUNDWATER MONITORING WELLS DESTROYED DURING CONSTRUCTION

Several wells were inadvertently destroyed during construction while RGI was no on-Property due to unknown circumstances. RGI attempted to obtain information regarding what led to the destruction of these wells, but the GC was unable to provide any additional information. After the first phase of remedial action was completed in 2016, RGI was no longer required to maintain a full time on-Property presence. In early 2017, RGI returned to the Property and was unable to locate groundwater monitoring wells MW1, MW4, MW13, MW15, MW16, and soil vapor well SV1. These wells were presumed to be destroyed during construction. During a repair to the sewer line in early 2018, the well casing pertaining to MW4 was encountered and completely removed from the subsurface.

After completing the second phase of the remedial action in 2017, RGI returned to the Property in April of 2018 to implement a plan for protecting groundwater monitoring wells from being damaged during the

planned paving of the Property. RGI was unable to locate wells MW12 and MW17 at that time. RGI had previously observed these wells to be in good condition during the 2017 remedial action, which was performed between April and June of 2017. Therefore, wells MW12 and MW17 were presumed to be destroyed sometime in the second half of 2017 during construction activities and no information regarding the circumstances that led to the destruction of these wells was available.

The repaving of the Property occurred in 2018 and early 2019 and RGI implemented a plan to protect all wells in locations that were to be paved. The plan consisted of the GC notifying RGI regarding when paving, or other construction activities, would occur in locations that could potentially damage wells in order for RGI to be on-Property during the work to ensure the wells were protected. RGI was on-Property for the majority of paving work completed in the vicinity of wells. However, in May of 2019, after the paving of the Property was completed, RGI was on-Property to modify well monuments to match the existing grade of the new asphalt and make repairs to existing wells. RGI was unable to locate wells MW2 and MW3 at that time. These wells were situated in a portion of the Property had been recently paved. RGI was not notified regarding paving work in this location and therefore was not on-Property during that work. These wells were presumed to be paved over and/or damaged in early 2019.

On June 19, 2019 RGI retained the services of Applied Professional Services, Inc. (APS) in an attempt to locate wells MW2 and MW3 under the new pavement using standard utility locating methodologies. No evidence of these wells were observed. However, utility locating instruments did detect the presence of anomalies a few feet away from the mapped locations. Therefore, RGI investigated these areas further by utilizing a circular saw to remove asphalt in the two locations where anomalies were detected. Each location was then excavated to a depth of approximately 2' bgs using handheld tools. No evidence of wells MW2 or MW3 were observed in the locations investigated and the locations were backfilled with gravel. RGI concluded that these wells were destroyed during the asphalt paving between April and May of 2019 and no additional information was available pertaining to these wells.

RPWRs pertaining to wells that were destroyed during construction (MW1, MW2, MW3, MW4, MW12, MW13, MW15, MW16, MW17, and soil vapor well SV1) are included in Appendix C.

6.1 GROUNDWATER MONITORING WELL DECOMMISSIONING

Prior to and after remedial action work completed in 2016 and 2017, RGI decommissioned several wells on the Property in accordance with Ecology regulations. All wells were decommissioned by abandoning the wells with hydrated bentonite and patching the surface to match the existing grade.

During the remedial action in 2016, it was necessary to decommission several wells situated in remedial excavation areas and locations where construction activities were taking place. Therefore, in June of 2016, RGI decommissioned wells MW5, MW6, MW7, MW9, and MW10.

Well MW14 was situated inside the building in a location where a floor remodel was about to take place. Therefore, on July 25, 2018, RGI decommissioned MW14 by filling the wells with hydrated bentonite and filling the existing well monument with concrete

7 SUMMARY OF WEST-ADJOINING FMH SITE

Groundwater on the western portion of the Property has been impacted with HVOCs including TCE, vinyl chloride, and cis-1,2-DCE as a result of release(s) on the west-adjoining property, which is identified by Ecology as the FMH Site. This property is currently owned by Starship and operated by B&K. The estimated extent of groundwater impacts extending onto the western portion of the Property is depicted on Figures 2 through 4.

Landau Associates (LA) has completed the following work on behalf of Starship:

- Performed pre-remedial injection baseline groundwater sampling on the western portion of the Property and the FMH Site in November of 2017.
- Injected approximately 8,500 gallons of LactOil™ on southeast corner of the Starship property, which corresponds to the location where HVOC impacted soil was removed from that property. LactOil™ is a product designed to enhance the degradation of TCE and breakdown compounds in groundwater.
- Conducted post-remedial injection groundwater sampling on the western portion of the Property and the FMH Site.

The remedial injection of LactOil™ does not appear to have had any effect on degrading TCE in groundwater on the western portion of the Property. Concentrations of HVOCs have remained similar prior to and after the LactOil™ injection. This may be due to the LactOil™ not reaching the target area on the Property.

Based on correspondences/meetings between Sea Mar, RGI, B&K and LA, RGI has performed the following tasks associated with HVOC-impacted groundwater from the FMH Site:

- Installed and sampled two groundwater monitoring wells (MW17A and MW21) on the western portion of the Property in order to monitor HVOC-impacted groundwater on the Property from the FMH Site and the effectiveness of the remedial injection.
- Conducted a Vapor Intrusion Assessment (VIA) on the Property in order to determine if HVOC impacted groundwater impacts from the FMH Site has adversely impacted indoor air in the commercial building on the western portion of the Property. The results of the VIA are documented in the *Vapor Intrusion Assessment Report* dated November 20, 2020 by RGI. The VIA consisted of installing six soil vapor wells on the Property and collecting and analyzing soil vapor and indoor air samples. Soil vapor and indoor air analytical data obtained during the VIA demonstrated that HVOC impacted groundwater associated with the FMH Site has not adversely impacted indoor air in the Property building.

It is RGI's understanding that the west-adjoining property owner is responsible for remediating the portion of the Property impacted by the FMH Site. Litigation is currently underway and settlement negotiations are ongoing. The outcome of this litigation will determine the ultimate plan and timeframe for remediating the western portion of the Property impacted by the FMH Site.

8 CONCLUSIONS

Based on the findings of the Property Closure Report, RGI draws the following conclusions:

- Historical petroleum releases to soil and groundwater on the Property associated with the former heating oil UST, gasoline service stations, and other miscellaneous TPH releases have been fully remediated. Soil and groundwater on the Property is currently in compliance with MTCA regulations.
- The Property qualifies for a No Further Action determination under Model Remedy No. 5. An evaluation conducted by the analytical laboratory demonstrated that previously reported gasoline-range TPH impacted soil in Area A (near northwest portion of the building) was determined to be diesel range TPH at a concentration below the Model Remedy specific soil cleanup level for TPH of 1,500 mg/kg. Therefore, this soil does not represent an environmental concern for the Property. The empirical demonstration conducted for Area B (location of MW11) indicates that the isolated amount of gasoline-range TPH and benzene impacted soil in the location of MW11 is not adversely impacting groundwater quality and that soil in this location is in compliance with the TPH soil cleanup level of 1,500 mg/kg and the MTCA Method B soil cleanup level for benzene (protective of the direct contact pathway) of 18 mg/kg.
- Wells MW1, MW2, MW3, MW4, MW12, MW13, MW5, MW16, and MW17 were inadvertently damaged during the course of construction while RGI was not on-Property. RGI also decommissioned wells MW5, MW6, MW7, MW9, and MW14 in accordance with applicable regulations throughout the course of the project.
- Groundwater on the western portion of the Property is impacted with HVOCs as a result of releases associated with the west-adjoining FMH Site. The remediation of HVOC soil and/or groundwater on the west-adjoining property, as well as the extent of HVOCs contamination that has migrated onto the westernmost portion of the Property is the responsibility of the west adjoining Potential Liable Parties (PLPs) and is being managed under the VCP separately. Litigation and settlement negotiations are currently underway, which will determine the final plan and timeframe for the remediation of these impacts. Soil vapor and indoor air analytical data obtained during a Vapor Intrusion Assessment conducted by RGI in October of 2018 and March of 2020 demonstrated that the releases associated with the west-adjoining property have not adversely impacted indoor air in the Property building.

RGI and SeaMar Community Health Center respectfully request that Ecology grant an unrestricted No Further Action determination for the SeaMar Community Health Center Dominics Plaza site.

If we may provide you with any additional information or clarification of this work, please contact the undersigned at (425) 415-0551.

Sincerely,

THE RILEY GROUP, INC.

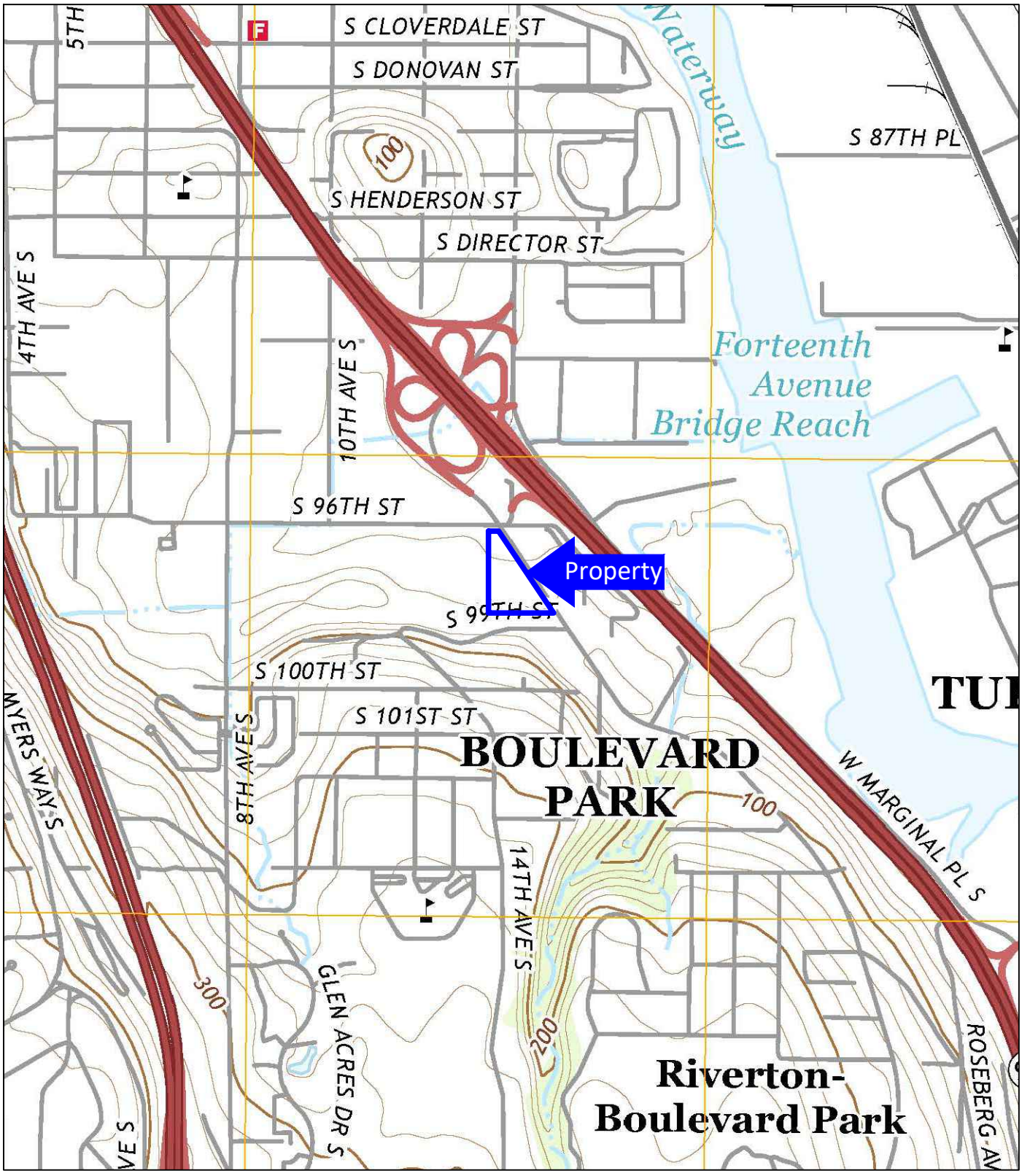
Jerry Sawetz
Senior Environmental Scientist

Paul D. Riley, LG, LHG
Principal

Distribution: *Mr. Mike Leong, SeaMar Community Health Center (Electronic PDF)*
Ms. Kim Wooten, Ecology Northwest Regional Office (Electronic PDF)

Corporate Office
17522 Bothell Way Northeast
Bothell, Washington 98011
Phone 425.415.0551 ♦ Fax 425.415.0311

www.riley-group.com



USGS, 2017, Seattle South, Washington
7.5-Minute Quadrangle

Approximate Scale: 1"=1000'

0 500 1000 2000

N

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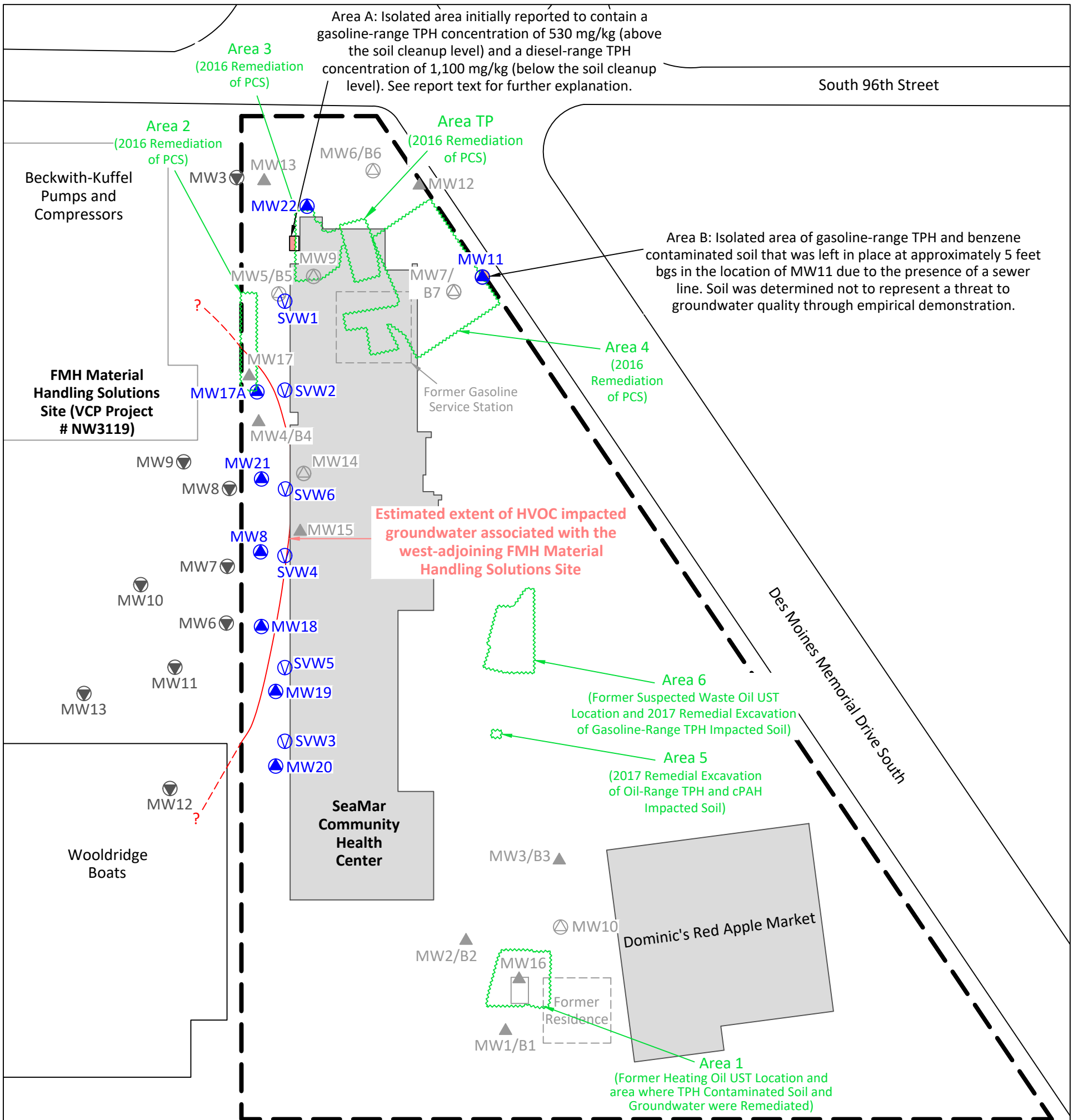
Sea Mar Community Health Center		Figure 1
RGI Project Number 2016-023D	Property Vicinity Map	Date Drawn: 11/2021
Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108		



Note: Not all previous sampling locations on Property or west-adjoining property are shown here.

= 2016/2017 Remedial excavation boundary
HVOC = Halogenated volatile organic compounds
cPAHs = Carcinogenic polycyclic aromatic hydrocarbons
UST = Underground storage tank
PCS = Petroleum contaminated soil
TPH = Total petroleum hydrocarbons
= Existing soil vapor well installed by RGI to assess impacts from FMH Material Handling Solutions Site. See Vapor Intrusion Assessment Report by RGI, dated November 20, 2020.
= Monitoring well on west-adjoining property installed by others
= Monitoring well properly decommissioned by RGI
= Monitoring well destroyed during construction by others (while RGI was not on-Property)
= (in blue) Existing groundwater monitoring well previously installed by RGI
= Property boundary

Approximate Scale: 1"=60'
0 30 60 120
N

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Sea Mar Community Health Center		Figure 2
RGI Project Number 2016-023D	Property Representation	Date Drawn: 11/2021
Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108		

Area A: Isolated area initially reported to contain a gasoline-range TPH concentration of 530 mg/kg (above the soil cleanup level) and a diesel-range TPH concentration of 1,100 mg/kg (below the soil cleanup level). See report text for further explanation.

Area B: Isolated area of gasoline-range TPH and benzene contaminated soil that was left in place at approximately 5 feet bgs in the location of MW11 due to the presence of a sewer line. Soil was determined not to represent a threat to groundwater quality through empirical demonstration.

Area 3 (2016 Remediation of PCS)

Area 2 (2016 Remediation of PCS)

Area TP (2016 Remediation of PCS)

Area 4 (2016 Remediation of PCS)

Area 6 (Former Suspected Waste Oil UST Location and 2017 Remedial Excavation of Gasoline-Range TPH Impacted Soil)

Area 5 (2017 Remedial Excavation of Oil-Range TPH and cPAH Impacted Soil)

Area 1 (Former Heating Oil UST Location and area where TPH Contaminated Soil and Groundwater were Remediated)

Beckwith-Kuffel Pumps and Compressors

FMH Material Handling Solutions Site (VCP Project # NW3119)

SeaMar Community Health Center

Wooldridge Boats

Former Gasoline Service Station

Former Residence

Dominic's Red Apple Market

Des Moines Memorial Drive South

Estimated extent of HVOC-impacted groundwater associated with the west-adjoining FMH Material Handling Solutions Site

MW13, MW6/B6, MW12, MW22, MW9, MW11, MW5/B5, MW7/B7, MW17, MW17A, MW4/B4, MW21, MW14, MW8, MW15, MW18, MW19, MW20, MW3/B3, MW10, MW2/B2, MW16, MW1/B1

MW22				
Date	Gas	BTEX	DSL	Oil
10/10/18	ND	ND	**330x**	ND

MW6				
Date	Gas	BTEX	DSL	Oil
03/07/16	----	----	**200x**	ND
01/16/08	----	----	ND*	ND*
01/11/08	ND	ND	----	----

MW12				
Date	Gas	BTEX	DSL	Oil
03/31/17	ND	ND	ND	ND
12/15/16	ND	ND	ND	ND
09/12/16	ND	ND	**80x**	ND
06/30/16	ND	ND	**220x**	ND

MW9		
Date	DSL	Oil
03/07/16	**730x**	ND

MW11				
Date	Gas	BTEX	DSL	Oil
03/31/17	ND	ND	**76x**	ND
12/15/16	ND	ND	**140x**	ND
09/12/16	ND	ND	**69x**	ND
06/30/16	ND	ND	**190x**	ND

MW5				
Date	Gas	BTEX	DSL	Oil
01/11/08	ND	ND	ND*	ND*

MW17				
Date	Gas	BTEX	DSL	Oil
12/15/16	----	----	ND	ND
09/12/16	----	----	**76x**	**310**
07/14/16	ND	ND	**230x**	ND

MW7							
Date	Gas	B	T	E	X	DSL	Oil
03/07/16	**2,500**	**11**	ND	**3.6**	**3.8**	**1,500x**	ND
01/25/08	**4,000**	**43**	**20**	**34**	**27**	----	----
01/16/08	**5,500**	**61**	**29**	**46**	**45**	----	----
01/11/08	----	----	----	----	----	**890x***	ND

MW4		
Date	DSL	Oil
06/30/16	ND	ND
03/07/16	**52x**	ND

MW8		
Date	DSL	Oil
06/30/16	**100x**	ND
03/07/16	**80x**	ND

MW3		
Date	DSL	Oil
03/31/17	ND	ND
09/12/16	ND	ND
01/11/08	ND*	ND*

MW10		
Date	DSL	Oil
03/07/16	**56x**	ND

MW18				
Date	Gas	BTEX	DSL	Oil
03/31/17	----	----	ND	ND
12/15/16	----	----	ND	ND
09/12/16	----	----	ND	ND
07/14/16	ND	ND	**63x**	ND

MW19		
Date	DSL	Oil
03/31/17	ND	ND
12/15/16	ND	ND
09/12/16	**81x**	ND

MW20		
Date	DSL	Oil
03/31/17	ND	ND
12/15/16	ND	ND
09/12/16	ND	ND

MW2		
Date	DSL	Oil
03/31/17	**140x**	ND
12/15/16	**210x**	ND
09/12/16	**200x**	ND
06/30/16	**290x**	ND

MW16		
Date	DSL	Oil
09/12/16	**110x**	ND
07/14/16	**150x**	ND

MW1		
Date	DSL	Oil
03/07/16	ND	ND
01/11/08	ND*	ND*

Note: Analytical data pertaining to HVOC-impacted groundwater associated with the FMH Material Handling Solutions Site not displayed here.

= Groundwater Analytical Results in micrograms/liter (ug/L);
- Gas = Gasoline total petroleum hydrocarbons
- BTEX = Benzene, toluene, ethylbenzene, xylenes
- DSL/Oil = Diesel/oil total petroleum hydrocarbons
- ND = Not detected above laboratory detection limits
- Bold and yellow highlighted results (if any) indicate groundwater concentration exceeds the applicable groundwater cleanup level

= Groundwater flow direction based on historical groundwater monitoring events
= 2016/2017 Remedial excavation boundary
* = Indicates analyzed using silica gel cleanup
HVOC = Halogenated volatile organic compounds
cPAHs = Carcinogenic polycyclic aromatic hydrocarbons
UST = Underground storage tank
PCS = Petroleum contaminated soil
TPH = Total petroleum hydrocarbons
= Monitoring well properly decommissioned by RGI
= Monitoring well destroyed during construction by others (while RGI was not on-Property)
= (in blue) Existing groundwater monitoring well
= Property boundary

Approximate Scale: 1"=60'
0 30 60 120
N

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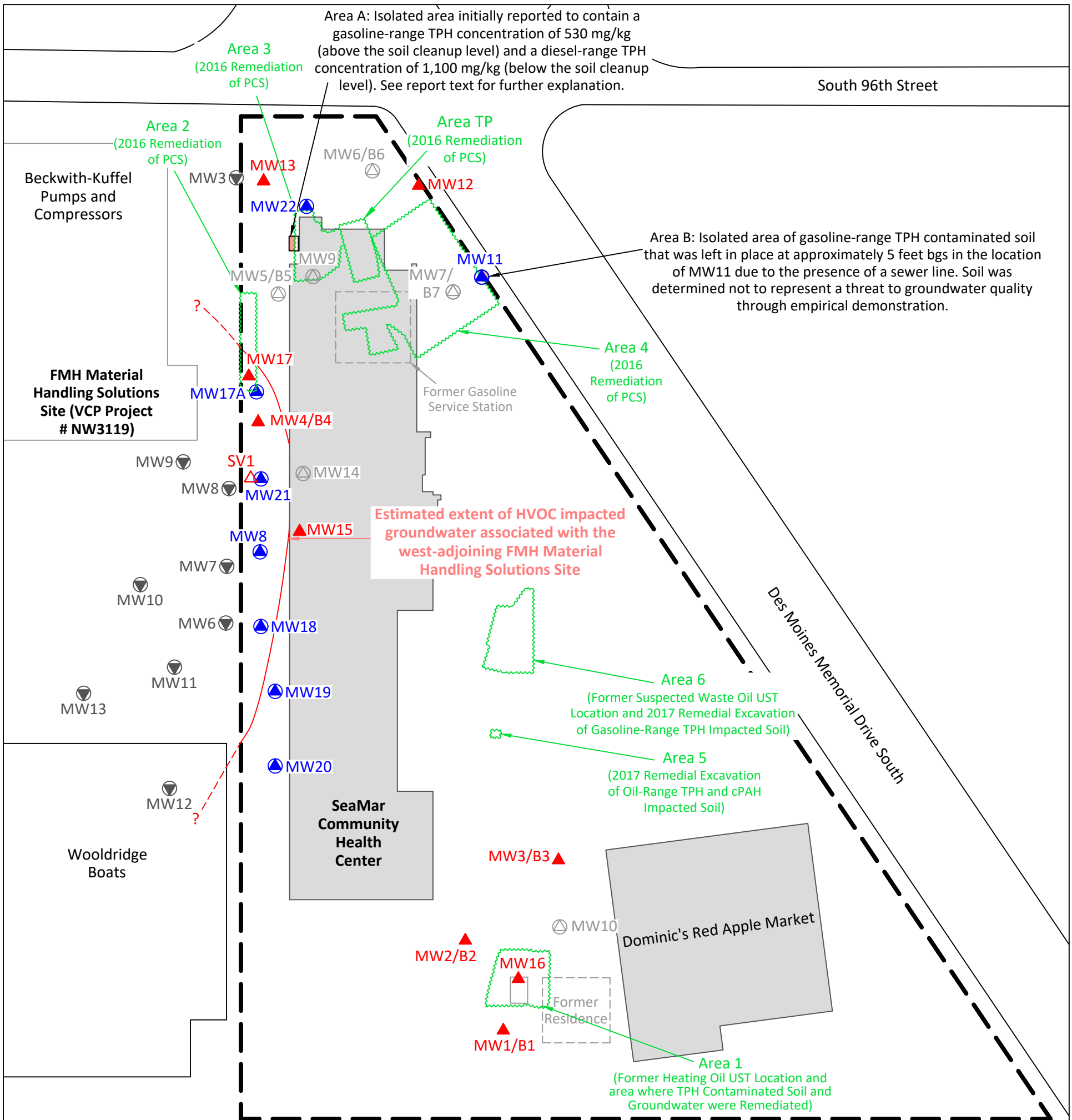
Sea Mar Community Health Center		Figure 3
RGI Project Number 2016-023D	Summary of Petroleum Related Groundwater Analytical Data	Date Drawn: 11/2021
Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108		



Note: Not all previous sampling locations on Property or west-adjoining property are shown here.

= 2016/2017 Remedial excavation boundary
HVOC = Halogenated volatile organic compounds
cPAHs = Carcinogenic polycyclic aromatic hydrocarbons
UST = Underground storage tank
PCS = Petroleum contaminated soil
TPH = Total petroleum hydrocarbons
= Monitoring well on west-adjoining property installed by others
= Monitoring well properly decommissioned by RGI
= Monitoring well destroyed during construction by others (while RGI was not on-Property)
= Former soil vapor well destroyed during construction by others (while RGI was not on-Property)
= (in blue) Existing groundwater monitoring well previously installed by RGI
= Property boundary

Approximate Scale: 1"=60'
0 30 60 120
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Sea Mar Community Health Center		Figure 4
RGI Project Number 2016-023D	Locations of Decommissioned and Destroyed Groundwater Monitoring Wells	Date Drawn: 11/2021
Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108		

APPENDIX A

Voluntary Cleanup Program

Washington State Department of Ecology
Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation.

Step 1: IDENTIFY HAZARDOUS WASTE SITE	
Please identify below the hazardous waste site for which you are documenting an evaluation.	
Facility/Site Name: Sea Mar Community Health Center Dominics Plaza	
Facility/Site Address: 9635 Des Moines Memorial Drive South, Seattle, WA 98108	
Facility/Site No: 22844	VCP Project No.: NW3172

Step 2: IDENTIFY EVALUATOR			
Please identify below the person who conducted the evaluation and their contact information.			
Name: Jerry Sawetz			Title: Senior Project Manager
Organization: The Riley Group, Inc.			
Mailing address: 17522 Bothell Way NE			
City: Bothell		State: WA	Zip code: 98011
Phone: 425-415-0551	Fax:		E-mail: jsawetz@riley-group.com

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

☒ Yes *If you answered **"YES,"** then answer **Question 2**.*

☐ No or Unknown *If you answered **"NO" or "UNKNOWN,"** then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? *Check all that apply. Then skip to **Step 4** of this form.*

Point of Compliance: WAC 173-340-7491(1)(a)

☐ All soil contamination is, or will be,* at least 15 feet below the surface.

☐ All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

☐ All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

☐ There is less than 0.25 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.

☒ For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

☐ Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

[±] "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

[#] "Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

☐ Yes *If you answered **"YES,"** then answer **Question 2** below.*

☐ No or Unknown *If you answered **"NO"** or **"UNKNOWN,"** then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

☐ Yes *If you answered **"YES,"** then answer **Question 3** below.*

☐ No *If you answered **"NO,"** then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

☐ Yes *If you answered **"YES,"** then answer **Question 4** below.*

☐ No *If you answered **"NO,"** then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

☐ Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*

☐ Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? *Check all that apply. Then skip to **Step 4** of this form.*

Exposure Analysis: WAC 173-340-7492(2)(a)

☐ Area of soil contamination at the Site is not more than 350 square feet.

☐ Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

☐ No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. *See* WAC 173-340-7493(1)(c).

1. Was there a problem? *See* WAC 173-340-7493(2).

☐ Yes *If you answered **"YES,"** then answer **Question 2** below.*

☐ No *If you answered **"NO,"** then identify the reason here and then skip to **Question 5** below:*

- ☐ No issues were identified during the problem formulation step.
- ☐ While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? *See* WAC 173-340-7493(3).

- ☐ Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*
- ☐ Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?
Check all that apply. See WAC 173-340-7493(3).

- ☐ Literature surveys.
- ☐ Soil bioassays.
- ☐ Wildlife exposure model.
- ☐ Biomarkers.
- ☐ Site-specific field studies.
- ☐ Weight of evidence.
- ☐ Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

- ☐ Confirmed there was no problem.
- ☐ Confirmed there was a problem and established site-specific cleanup levels.

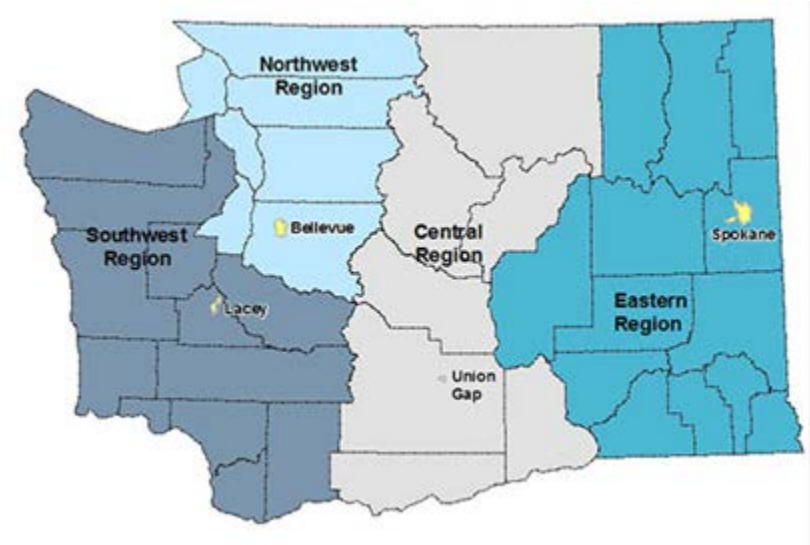
5. Have you already obtained Ecology's approval of both your problem formulation and problem resolution steps?

☐ Yes If so, please identify the Ecology staff who approved those steps:

☐ No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.



Northwest Region: Attn: VCP Coordinator 3190 160th Ave. SE Bellevue, WA 98008-5452	**Central Region:** Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009
Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775	**Eastern Region:** Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295

If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call 877-833-6341.

= 500 foot radius from Property
= Property boundary

Approximate Scale: 1"=300'

0 150 300 600

N

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Phone: 425.415.0551
Fax: 425.415.0311

Sea Mar Community Health Center		Figure 1
RGI Project Number 2016-023D	TEE Exclusion Map	Date Drawn: 10/2021
Address: 9635 Des Moines Memorial Drive South, Seattle, Washington 98108		

APPENDIX B

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

January 23, 2019

Jerry Sawetz, Senior Environmental Scientist
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Mr. Sawetz:

As requested, the data from the NWTPH-Dx and NWTPH-Gx testing of the soil sample 3WSW6-6 submitted on June 14, 2016 from the Riley Group Sea Mar 2016-023A, F&BI 606248 project were reviewed. The purpose of this review was to provide further information regarding the nature of the material present at this site. The findings are provided below.

The soil sample arrived in good condition. Upon arrival, the sample was placed in a refrigerator maintained at 4°C until removal for sample processing. The sample was extracted and analyzed using a gas chromatograph with a flame ionization detector (GC/FID) by method NWTPH-Gx and NWTPH-Dx. The data generated yielded information on the boiling range and general chemical composition of the material present. The GC/FID traces are enclosed.

The NWTPH-Dx GC trace using the flame ionization detector (FID) showed the presence of medium boiling compounds. The medium boiling compounds appear as a regular pattern of peaks on top of a broad hump or unresolved complex mixture (UCM). This material elutes from *n*-C_8 to *n*-C_{25} showing a maximum near *n*-C_{18}. This correlates with a temperature range of approximately 126°C to 401°C with a maximum near 316°C. The patterns and boiling range displayed by these peaks are indicative of a middle distillate such as diesel fuel No. 2 or heating oil.

The large peak seen near 4.5 minutes on the GC/FID trace is pentacosane, added as a quality assurance check for this GC analysis.

The primary intent of the NWTPH methods are to identify and quantitate the samples against the correct fuel product. When multiple tests are used, overlap can occur where a single product like diesel is detected and measured by more than one test. When this happens, some of the contamination present will be double counted, biasing results high, and can cause the application of incorrect clean-up standards. Based on the chromatography for sample 3WSW6-6, only diesel fuel is present. The NWTPH-Gx clean-up standard should not be applied to the results. Instead, the NWTPH-Dx clean up standard would be applicable to sample 3WSW6-6.

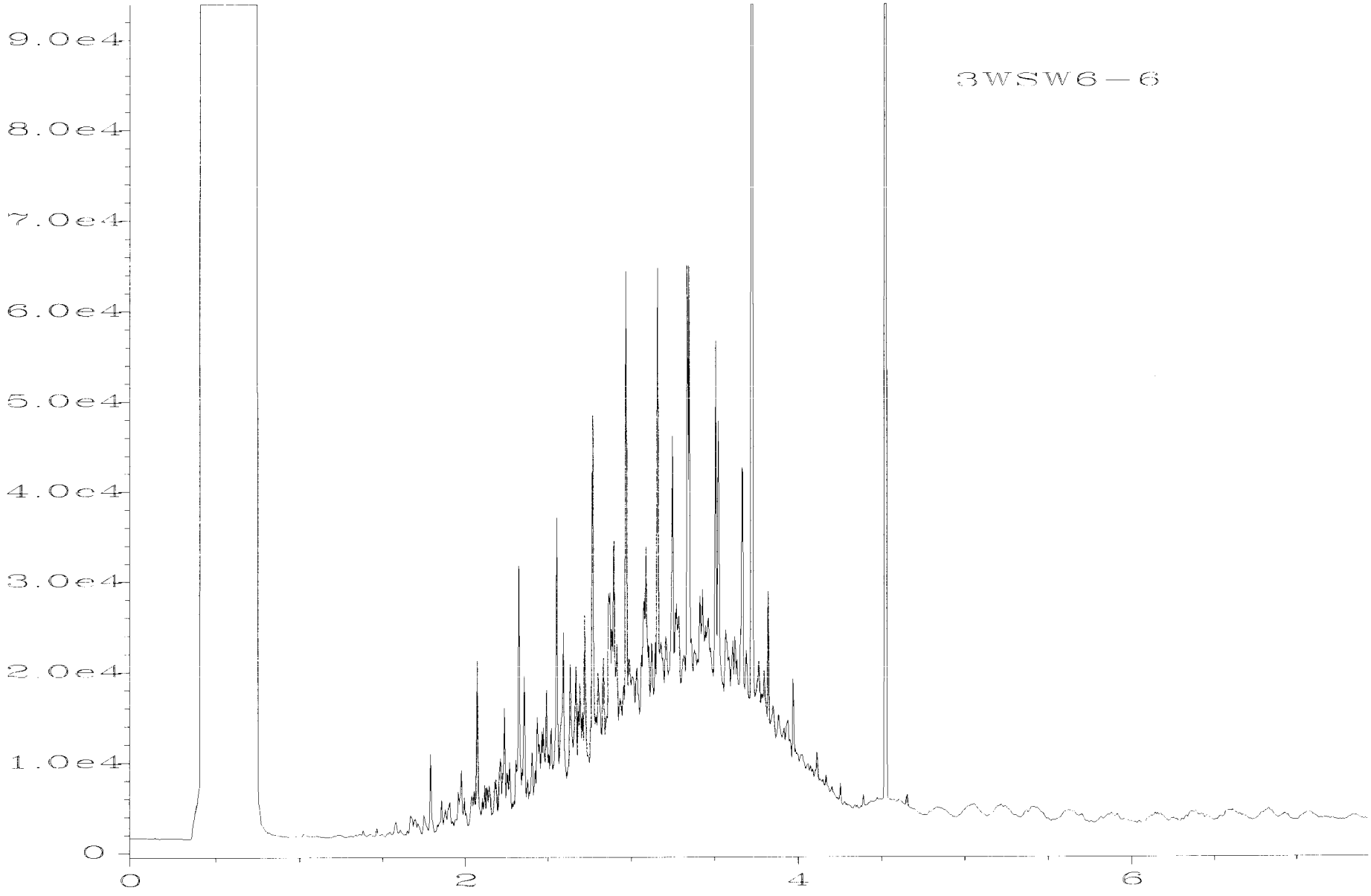
Please contact us if additional consultation is needed by our firm in the interpretation of the analytical results provided. We appreciate this opportunity to be of service to you and hope you will call if you should have any questions. We will hold your samples for 30 days before disposal unless directed otherwise.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Chemist

Enclosures
TRG0115R.DOC



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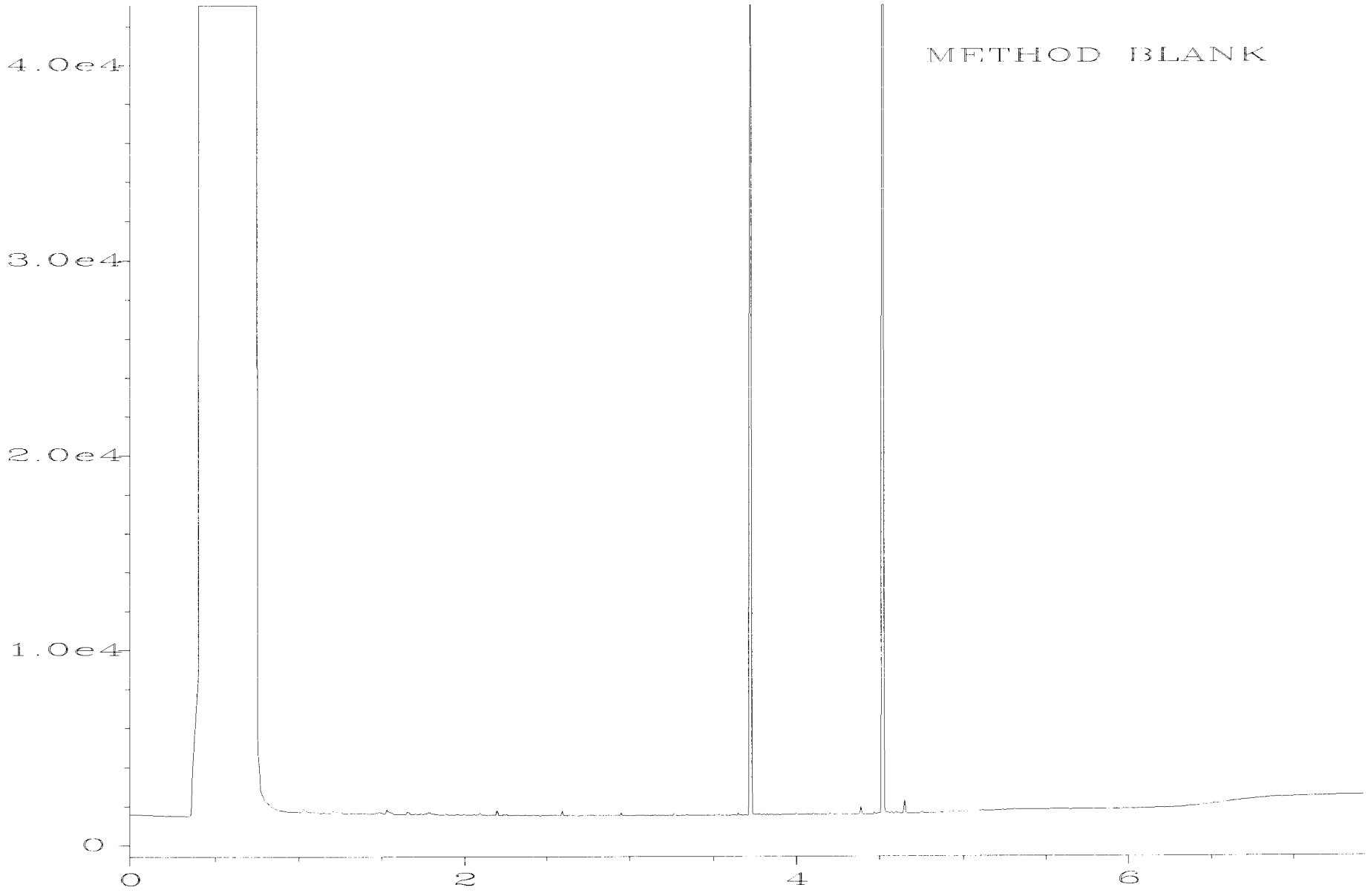

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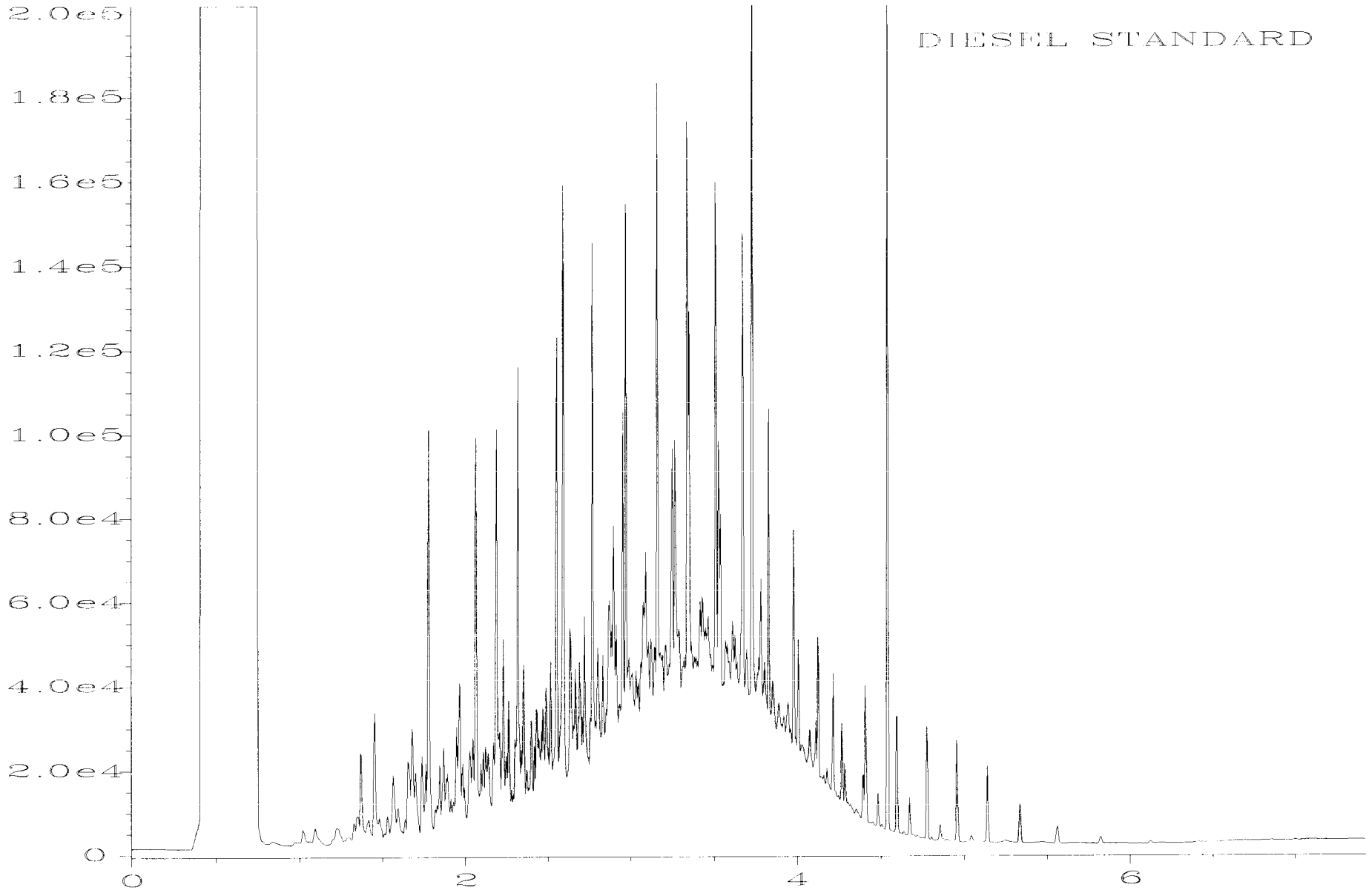

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APPENDIX C

285934

Please print, sign and return to the Department of Ecology 23-1E-5A

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. R65533

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☒ Construction
☐ Decommission

MW-2

ORIGINAL INSTALLATION Notice of Intent Number:

Type of Well *("x in box)*

☒ Resource Protection
☐ Geotech Soil Boring

Consulting Firm Riley Group

Unique Ecology Well IDTag No. AGT-172

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name) Haun, Martin

Driller/Engineer /Trainee Signature

Driller or Trainee License No. 2827

If trainee, licensed driller's Signature and License Number:

Property Owner Northshore Plaza Enterprises

Site Address 9635 Des Moines-Memorial Drive S

City Seattle County King

Location NE1/4-1/4 NE1/4 Sec 05 Twn 23N R 04

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED) Lat Deg ____ Min ____ Sec ____

Long Deg ____ Min ____ Sec ____

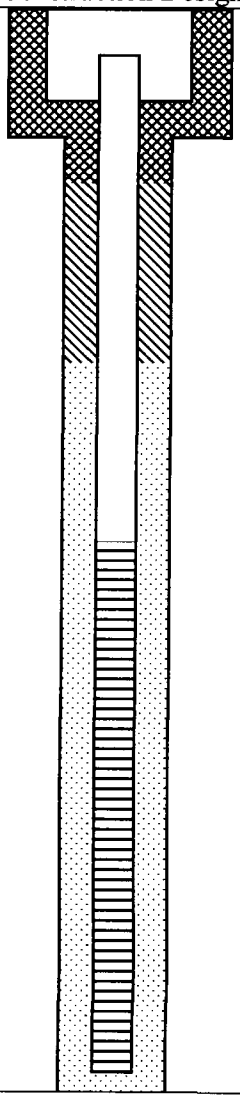
Tax Parcel No. 5624200371

Cased or Uncased Diameter 2" Static Level N/A

Work/Decommission Start Date 2JAN08

Work/Decommission Completed Date 2JAN08

Construction Design



Well Data

MONUMENT TYPE: 5" FLUSH MOUNT

CONCRETE SURFACE SEAL: Ø-1'

ANNULAR SPACE: 3'

BACKFILL: 1'-4'

TYPE: BENTONITE

PVC BLANK: Ø-5'

SCREEN: 5'-10'

SLOT SIZE: 10/10

TYPE: 3/4" PRE PACK PVC SCH 40

SAND PACK: 4'-10'

MATERIAL: 16/20 SILICA SAND

DRILLING METHOD: DIRECT PUSH

WELL DEPTH: 10'

BORING DIAMETER: 2"

Formation Description

Ø-8'
GRAYISH SAND SILT

8'-10'
SOILS NOT OBSERVED

RECEIVED
JAN 14 2008
DEPT. OF ECOLOGY

SCALE: 1"= ____ PAGE 2 OF 7

285936

Please print, sign and return to the Department of Ecology

23-4E-5A

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. R65533

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☒ Construction

☐ Decommission

MW-3

ORIGINAL INSTALLATION Notice of Intent Number:

Type of Well *("x in box)*

☒ Resource Protection

☐ Geotech Soil Boring

Property Owner Northshore Plaza Enterprises

Site Address 9635 Des Moines-Memorial Drive S

Consulting Firm Riley Group

City Seattle County King

Unique Ecology Well IDTag No. AFN 272

Location NE1/4-1/4 NE1/4 Sec 05 Twn 23N R 04

EWM ☒ or WWM ☐

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Lat/Long (s, t, r still REQUIRED) Lat Deg _____ Min _____ Sec _____

Long Deg _____ Min _____ Sec _____

☒ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name) Haun, Martin

Driller/Engineer /Trainee Signature

Driller or Trainee License No. 2827

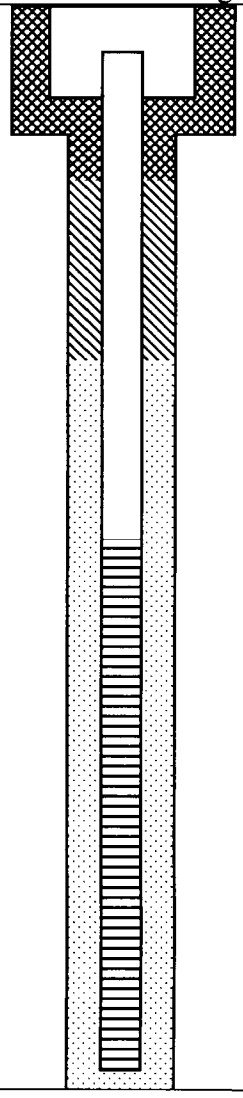
Tax Parcel No. 5624200371

Cased or Uncased Diameter 2" Static Level N/A

Work/Decommission Start Date 25JAN08

Work/Decommission Completed Date 25JAN08

If trainee, licensed driller's Signature and License Number:

Construction Design	Well Data	Formation Description
	MONUMENT TYPE: 5" FLUSH MOUNT CONCRETE SURFACE SEAL: Ø-1' ANNULAR SPACE: 3' BACKFILL: 1'-4' TYPE: BENTONITE PVC BLANK: Ø-5' SCREEN: 5'-10' SLOT SIZE: .010 TYPE: 3/4" PRE-PACK PVC SCH 40 SAND PACK: 4'-12' MATERIAL: 10/20 SILICA SAND DRILLING METHOD: DIRECT PUSH WELL DEPTH: 12' BORING DIAMETER: 2"	Ø-12' BRN SAND SILT W/TRACE GRAVEL

RECEIVED

JAN 14 2008

DEPT. OF ECOLOGY

SCALE: 1"= ____ PAGE 4 OF 7

285937

Please print, sign and return to the Department of Ecology 23-4E-5A

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. R65533

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☒ Construction
☐ Decommission

MW-4

Type of Well *("x in box)*

☒ Resource Protection
☐ Geotech Soil Boring

ORIGINAL INSTALLATION Notice of Intent Number:

Consulting Firm Riley Group

Unique Ecology Well IDTag No. ALP-437

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee
Name (Print Last, First Name) Haun, Martin
Driller/Engineer /Trainee Signature
Driller or Trainee License No. 2827

If trainee, licensed driller's Signature and License Number:

Property Owner Northshore Plaza Enterprises

Site Address 9635 Des Moines-Memorial Drive S

City Seattle County King

Location NE1/4-1/4 NE1/4 Sec 05 Twn 23N R 04

EWM ☒ or WWM ☐

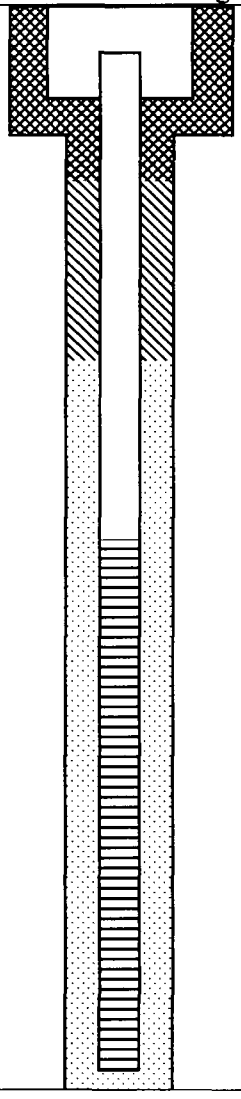
Lat/Long (s, t, r still REQUIRED) Lat Deg ____ Min ____ Sec ____
Long Deg ____ Min ____ Sec ____

Tax Parcel No. 5624200371

Cased or Uncased Diameter 2" Static Level N/A

Work/Decommission Start Date 2JAN08

Work/Decommission Completed Date 2JAN08

Construction Design	Well Data	Formation Description
	MONUMENT TYPE: 5" FLUSH MOUNT CONCRETE SURFACE SEAL: 0-1' ANNULAR SPACE: 3' BACKFILL: 1'-4' TYPE: BENTONITE PVC BLANK: 0-5' SCREEN: 5'-10' SLOT SIZE: .010 TYPE: 3/4" PRE-PACK PVC SCH 40 SAND PACK: 4'-10' MATERIAL: 10/20 SILICA SAND DRILLING METHOD: DIRECT PUSH WELL DEPTH: 10' BORING DIAMETER: 2"	NO SOILS OBSERVED

RECEIVED
JAN 14 2008
DEPT. OF ECOLOGY

SCALE: 1"= ____ PAGE 5 OF 7

Boring/Monitoring Well Log

Project Name: Dominic's Plaza Phase III				Sheet
Job No.: 2007-234C	Logged By: S. Howell	Start Date: 1/2/2008	Completion Date: 1/2/2008	Boring No.: B1/MW-1
Drilling Contractor: ESN		Drilling Method: Direct Push Probe		Sampling Method:
Ground Surface Elevation:		Hole Completion: Well		Surface Conditions: Gravel

PID Reading (ppm)	Sample ID	Depth	Soil Description
		1	Brown, silty, gravelly sand
		2	
		3	
0.0	B1-4	4	Gray-brown sandy, gravelly silt
		5	
		6	
		7	
0.0	B1-8	8	Grey, silty fine sand
		9	
0.0	B1-10	10	Boring terminated @ 10' bgs
		11	
		12	
		13	
		14	
		15	
		16	
		17	
		18	
		19	
		20	Boring terminated @ 20' bgs

WELL

GW Depth

Boring Completion

Notes: (bgs - below ground surface)

▼ - Groundwater encountered during drilling.

The Riley Group, Inc.
17522 Bothell Way NE, Suite A
Bothell, Washington 98011
Phone: 425.415.0551 Fax: 425.415.0311

Boring/Monitoring Well Log

Project Name: Dominic's Plaza Phase III				Sheet
Job No.: 2007-234C	Logged By: S. Howell	Start Date: 1/2/2008	Completion Date: 1/2/2008	Boring No.: B2/MW-2
Drilling Contractor: ESN		Drilling Method: Direct Push Probe		Sampling Method:
Ground Surface Elevation:		Hole Completion: Well		Surface Conditions: Asphalt

PID Reading (ppm)	Sample ID	Sample Interval	Drive Interval	WELL	GW Depth	Depth	Soil Description	Boring Completion
						1		
						2		
						3		
0.0	B2-4					4	Gray, sandy silt	
						5		
						6		
						7		
0.0	B2-8					8		
						9	Boring terminated @ 8' bgs	
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		
							Boring terminated @ 20' bgs	

Notes: (bgs - below ground surface)

▼ - Groundwater encountered during drilling.

The Riley Group, Inc.
17522 Bothell Way NE, Suite A
Bothell, Washington 98011
Phone: 425.415.0551 Fax: 425.415.0311

Boring/Monitoring Well Log

Project Name: Dominic's Plaza Phase III				Sheet
Job No.: 2007-234C	Logged By: S. Howell	Start Date: 1/2/2008	Completion Date: 1/2/2008	Boring No.: B3/MW-3
Drilling Contractor: ESN		Drilling Method: Direct Push Probe		Sampling Method:
Ground Surface Elevation:		Hole Completion: Well		Surface Conditions: Asphalt

PID Reading (ppm)	Sample ID	Sample Interval	Drive Interval	WELL	GW Depth	Depth	Soil Description	Boring Completion
						1	Light brown silty, gravelly sand	
						2		
						3	Grey-brown silty fine sand	
0.0	B3-4					4		
						5		
					▼	6		
						7		
0.0	B3-8					8	Brown silty gravelly sand	
						9		
						10		
						11		
0.0	B3-12					12	Boring terminated @ 12' bgs	
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20	Boring terminated @ 20' bgs	

Notes: (bgs - below ground surface)

▼ - Groundwater encountered during drilling.

The Riley Group, Inc.
17522 Bothell Way NE, Suite A
Bothell, Washington 98011
Phone: 425.415.0551 Fax: 425.415.0311

Boring/Monitoring Well Log

Project Name: Dominic's Plaza Phase III				Sheet
Job No.: 2007-234C	Logged By: S. Howell	Start Date: 1/2/2008	Completion Date: 1/2/2008	Boring No.: B4/MW-4
Drilling Contractor: ESN		Drilling Method: Direct Push Probe		Sampling Method:
Ground Surface Elevation:		Hole Completion: Well		Surface Conditions: Asphalt

PID Reading (ppm)	Sample ID	Depth	Soil Description	Boring Completion
		1		
		2	Moist, gray-brown silty sand	
		3		
0.0	B4-4	4		
		5		
		6	No Recovery	
		7		
0.0	B4-8	8		
		9		
		10	No Recovery	
		11		
0.0	B4-12	12		
			Boring terminated @ 12' bgs	
		13		
		14		
		15		
		16		
		17		
		18		
		19		
		20		
			Boring terminated @ 20' bgs	

WELL — GW Depth

Notes: (bgs - below ground surface)

▼ - Groundwater encountered during drilling.

The Riley Group, Inc.
17522 Bothell Way NE, Suite A
Bothell, Washington 98011
Phone: 425.415.0551 Fax: 425.415.0311

Boring/Monitoring Well Log

Project Name: Dominic's Plaza Phase III				Sheet
Job No.: 2007-234C	Logged By: S. Howell	Start Date: 1/2/2008	Completion Date: 1/2/2008	Boring No.: MW-5
Drilling Contractor: ESN		Drilling Method: Direct Push Probe		Sampling Method: N/A
Ground Surface Elevation:		Hole Completion: Well		Surface Conditions: Asphalt

PID Reading (ppm)	Sample ID	Sample Interval	Drive Interval	WELL	GW Depth	Depth	Soil Description	Boring Completion
						1		
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10	**No samples collected. Well point driven by probe only.**	
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20	Boring terminated @ 20' bgs	

Notes: (bgs - below ground surface)

▼ - Groundwater encountered during drilling.

The Riley Group, Inc.
17522 Bothell Way NE, Suite A
Bothell, Washington 98011
Phone: 425.415.0551 Fax: 425.415.0311

Boring/Monitoring Well Log

Project Name: Dominic's Plaza Phase III				Sheet
Job No.: 2007-234C	Logged By: S. Howell	Start Date: 1/2/2008	Completion Date: 1/2/2008	Boring No.: MW-6
Drilling Contractor: ESN		Drilling Method: Direct Push Probe		Sampling Method: N/A
Ground Surface Elevation:		Hole Completion: Well		Surface Conditions: Asphalt

PID Reading (ppm)	Sample ID	Sample Interval	Drive Interval	WELL	GW Depth	Depth	Soil Description	Boring Completion
					▼	1		
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10	**No samples collected. Well point driven by probe only.**	
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20	Boring terminated @ 20' bgs	

Notes: (bgs - below ground surface)

▼ - Groundwater encountered during drilling.

The Riley Group, Inc.
17522 Bothell Way NE, Suite A
Bothell, Washington 98011
Phone: 425.415.0551 Fax: 425.415.0311

Boring/Monitoring Well Log

Project Name: Dominic's Plaza Phase III				Sheet
Job No.: 2007-234C	Logged By: S. Howell	Start Date: 1/2/2008	Completion Date: 1/2/2008	Boring No.: MW-7
Drilling Contractor: ESN		Drilling Method: Direct Push Probe		Sampling Method: N/A
Ground Surface Elevation:		Hole Completion: Well		Surface Conditions: Asphalt

PID Reading (ppm)	Sample ID	Sample Interval	Drive Interval	WELL	GW Depth	Depth	Soil Description	Boring Completion
						1		
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10	**No samples collected. Well point driven by probe only.**	
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		
							Boring terminated @ 20' bgs	

Notes: (bgs - below ground surface)

▼ - Groundwater encountered during drilling.

The Riley Group, Inc.
17522 Bothell Way NE, Suite A
Bothell, Washington 98011
Phone: 425.415.0551 Fax: 425.415.0311

Project Name: **Sea Mar Community Health Center** Project Number: **2016-023** Client: **Sea Mar Community Health Center**	Test Probe/Well No.: **MW8** **Sheet 1 of 1**

Date(s) Drilled: **03/04/16**	Logged By: **AJ**	Surface Conditions: **Asphalt**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2.25" Diameter**	Total Depth of Borehole: **13 feet bgs**
Drill Rig Type: **Track-Mounted**	Drilling Contractor: **The Riley Group, Inc.**	Approximate Surface Elevation (feet amsl): **n/a**
Groundwater Elevation: **10' bgs**	Sampling Method(s): **Continuous**	Hammer Data: **n/a**
Borehole Backfill: **Monitoring Well**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	

Elevation (feet)	Depth (feet)	Sample Type	Sample ID	Sampling Resistance, blows/ft	PID Reading, ppm	Recovery (%)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Temporary Well Log	REMARKS AND OTHER TESTS
	0						Asphalt		Asphalt		Concrete 0 - 1
									No recovery		Blank 3/4" PVC
							SM		Dark brown, silty, fine SAND with trace gravel		Bentonite 1 - 6.5
	5		MW8-5.5		0.3		ML		Gray SILT with very fine to fine sand, stiff, moist to wet, no odor, no sheen		
							SP-SM		Gray with iron-oxide staining, very fine to medium SAND with silt and trace gravel, dense, moist, no odor, no sheen		Prepack Slotted PVC 7.5 - 12.5
			MW8-9		0.3		ML		Gray, silty, very fine SAND, dense, moist, no odor, no sheen		Silica Sand 6.5 - 13
	10								No sample		
									Test probe terminated at 13 feet bgs. Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal.		
	15										
	20										
	25										

The Riley Group, Inc.
17522 Bothell Way NE, Bothell, WA 98011

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023**

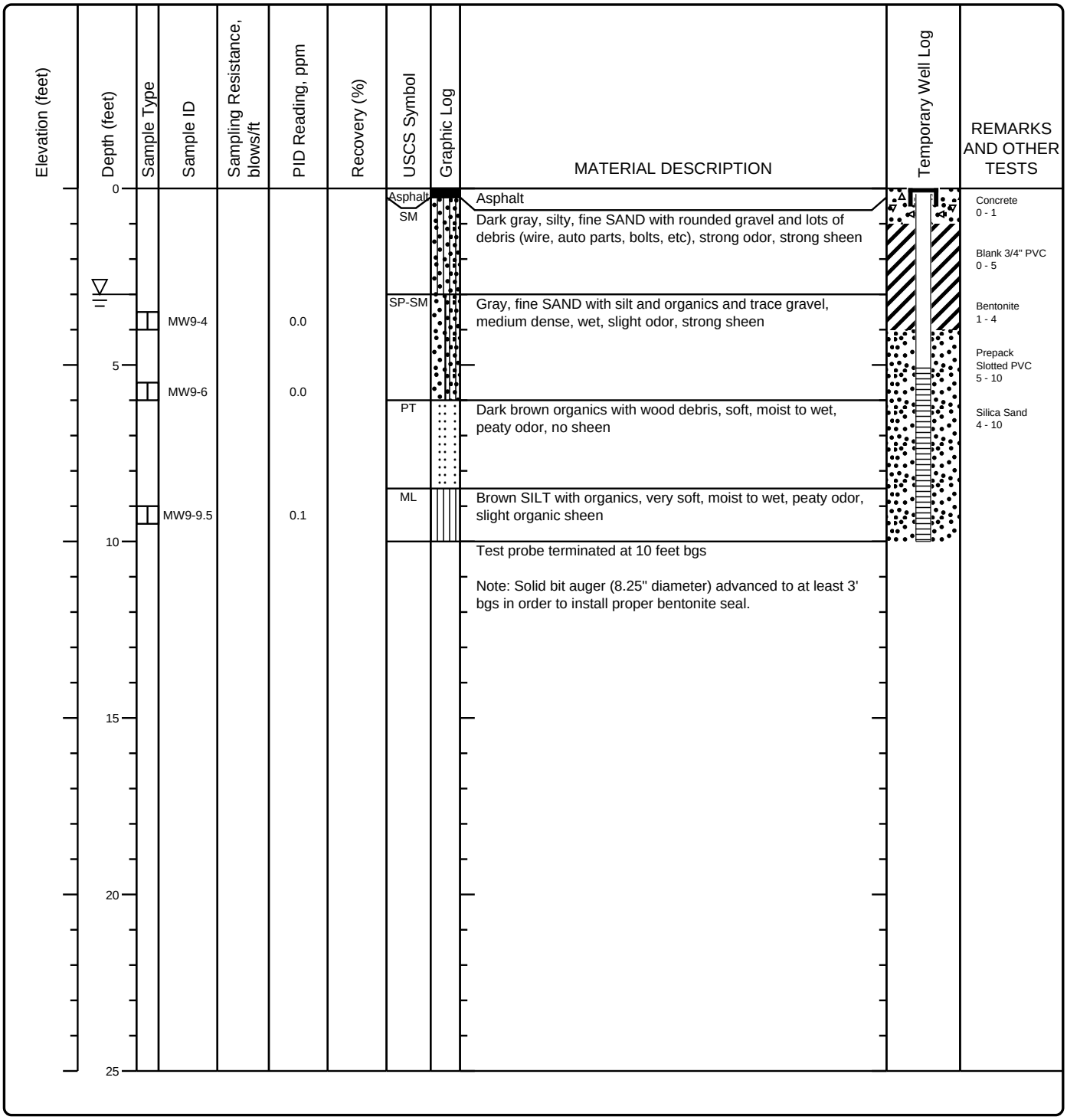
Client: **Sea Mar Community Health Center**

RILEYGROUP

Test Probe/Well No.: **MW9**

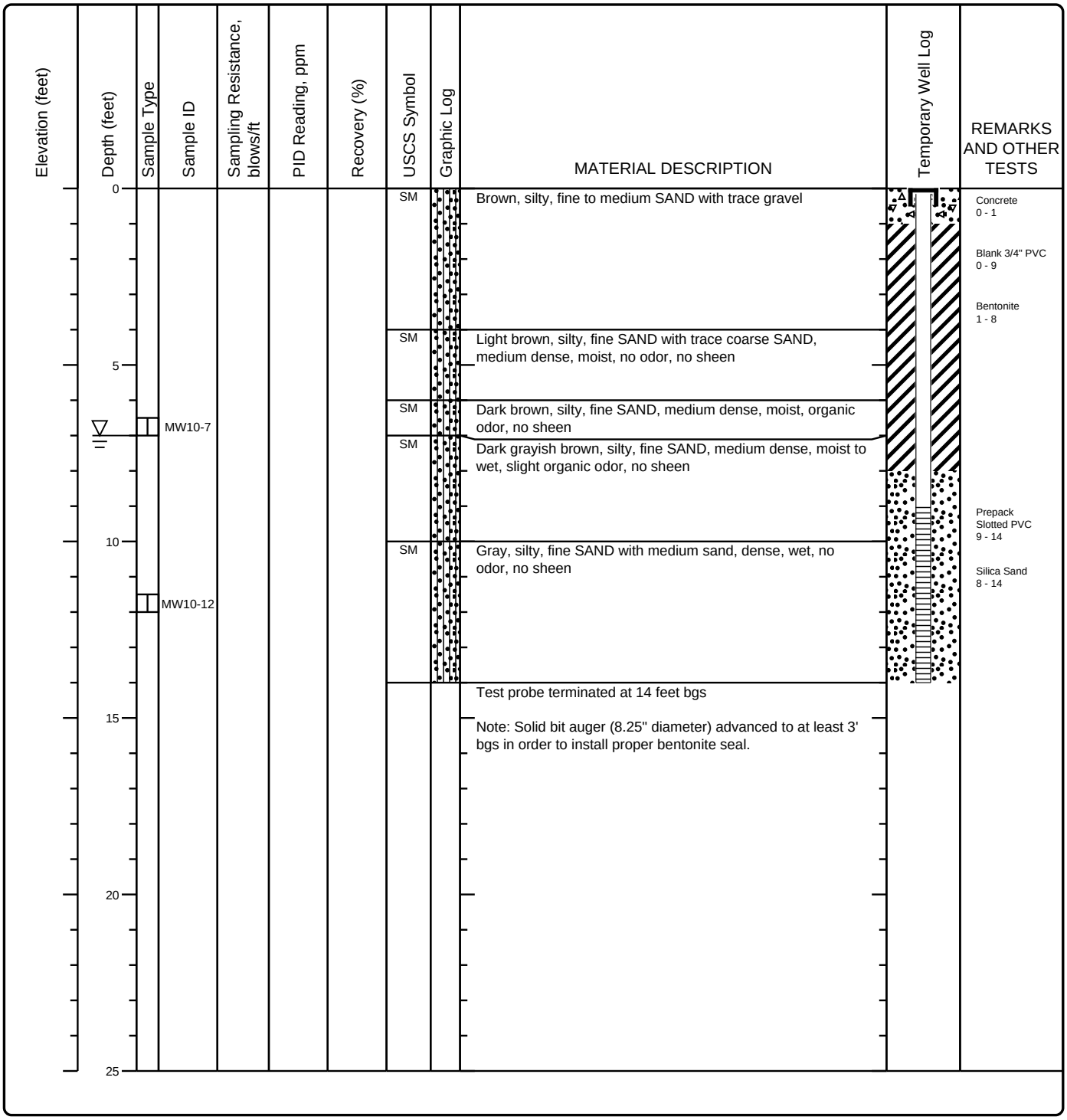
Sheet 1 of 1

Date(s) Drilled: **03/04/16**	Logged By: **AJ**	Surface Conditions: **Asphalt**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2.25" Diameter**	Total Depth of Borehole: **10 feet bgs**
Drill Rig Type: **Track-Mounted**	Drilling Contractor: **The Riley Group, Inc.**	Approximate Surface Elevation (feet amsl): **n/a**
Groundwater Elevation: **3' bgs**	Sampling Method(s): **Continuous**	Hammer Data: **n/a**
Borehole Backfill: **Monitoring Well**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	



Project Name: **Sea Mar Community Health Center** Project Number: **2016-023** Client: **Sea Mar Community Health Center**	RILEYGROUP Test Probe/Well No.: **MW10** **Sheet 1 of 1**

Date(s) Drilled: **03/04/16**	Logged By: **AJ**	Surface Conditions: **Grass**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2.25" Diameter**	Total Depth of Borehole: **14 feet bgs**
Drill Rig Type: **Track-Mounted**	Drilling Contractor: **The Riley Group, Inc.**	Approximate Surface Elevation (feet amsl): **n/a**
Groundwater Elevation: **7' bgs**	Sampling Method(s): **Continuous**	Hammer Data: **n/a**
Borehole Backfill: **Monitoring Well**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	



Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023A**

Client: **SeaMar Community Health Centers**

RILEYGROUP

Test Probe/Well No.: **MW11**

Sheet 1 of 1

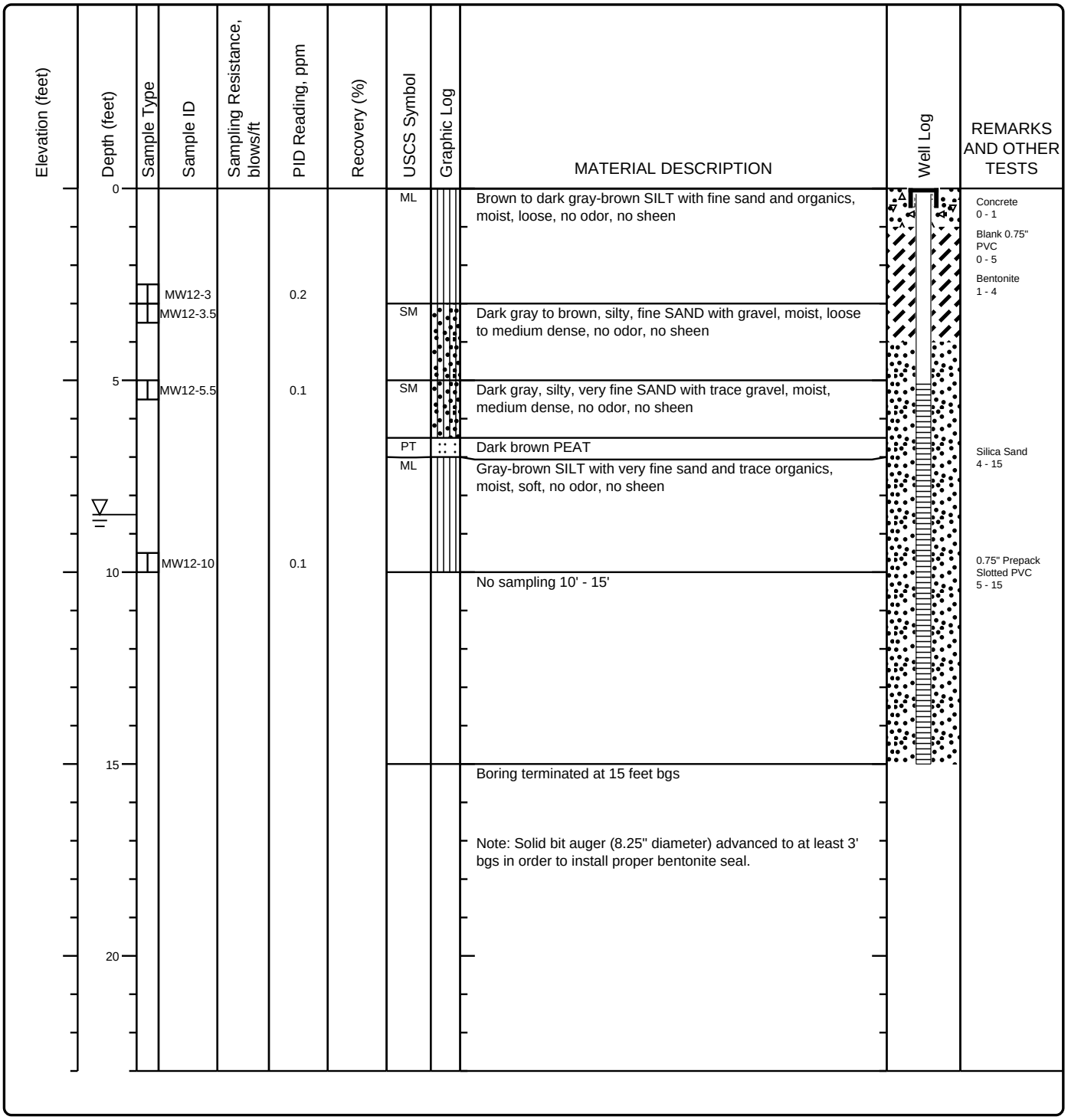
Date(s) Drilled: **05/04/16**	Logged By: **AJ**	Surface Conditions: **Grass**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2" Diameter**	Total Depth of Borehole: **15 feet bgs**
Drill Rig Type: **Track-Mounted**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **n/a**
Groundwater Elevation: **4.3'**	Sampling Method(s): **Continuous**	Hammer Data: **n/a**
Borehole Backfill: **Monitoring Well**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	

Elevation (feet)	Depth (feet)	Sample Type	Sample ID	Sampling Resistance, blows/ft	PID Reading, ppm	Recovery (%)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Well Log	REMARKS AND OTHER TESTS
	0						SM		Brown, silty, fine SAND with gravel, moist, loose, no odor, slight sheen		Concrete 0 - 1
			MW11-3		22.8						Blank 0.75" PVC 0 - 5
							SP-SM		Dark gray, fine SAND with silt and trace organics, moist, loose to medium dense, slight odor, slight sheen		Bentonite 1 - 4
	5		MW11-5		5.6				No odor		
							SM		Dark gray, silty, fine SAND with trace organics and gravel, moist, loose to medium dense, no odor, very slight sheen		Silica Sand 4 - 15
			MW11-7.5		0.0						
							ML		Brown, very fine sandy SILT with organics, moist to wet, soft, no odor		
	10		MW11-10		0.0				No sampling from 10' - 15'		0.75" Prepack Slotted PVC 5 - 15
	15								Boring terminated at 15 feet bgs		
									Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal.		
	20										

The Riley Group, Inc.
17522 Bothell Way NE, Bothell, WA 98011

Project Name: **Sea Mar Community Health Center** Project Number: **2016-023A** Client: **SeaMar Community Health Centers**	RILEYGROUP Test Probe/Well No.: **MW12** **Sheet 1 of 1**

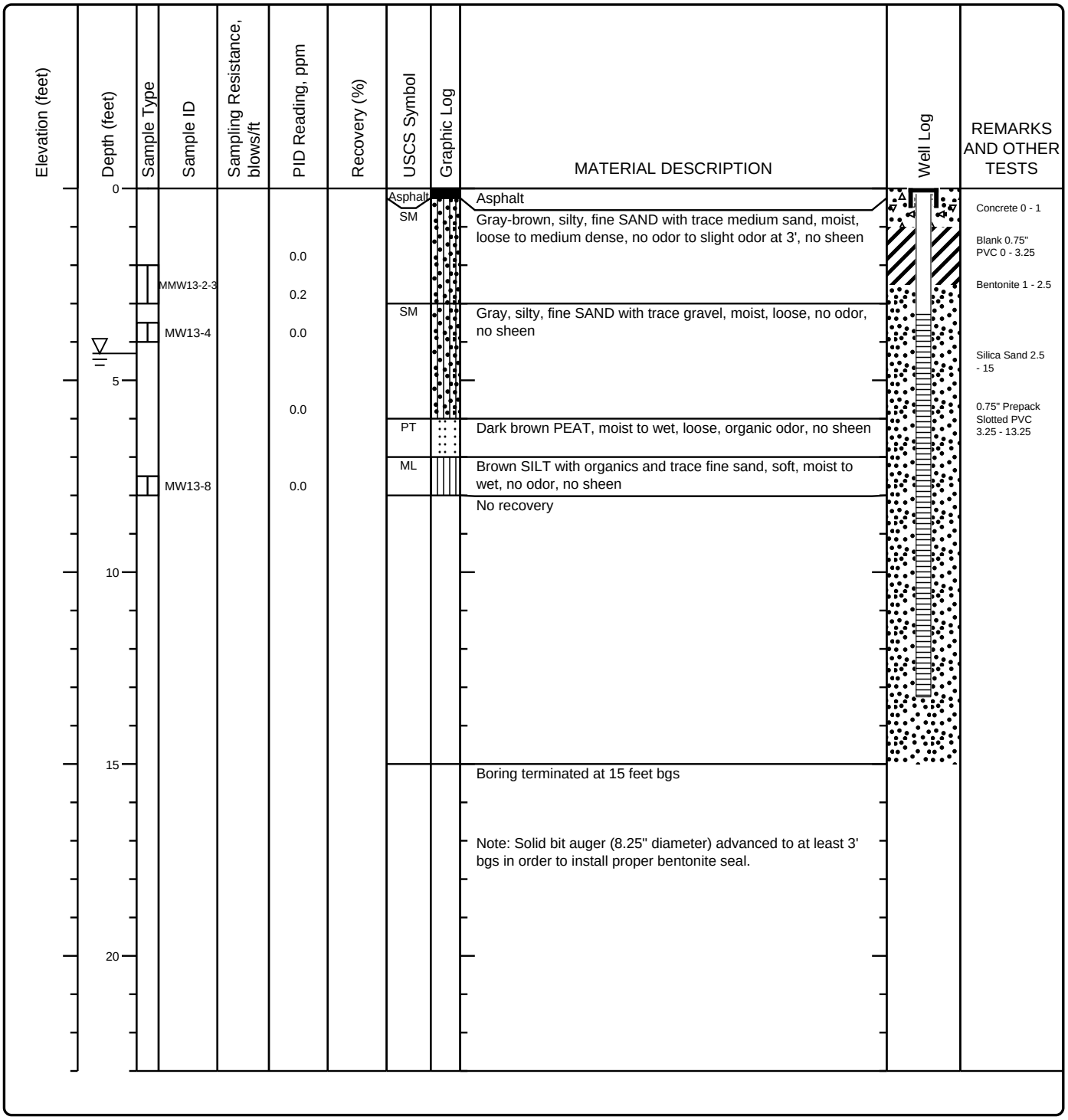
Date(s) Drilled: **05/04/16**	Logged By: **AJ**	Surface Conditions: **Grass**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2" Diameter**	Total Depth of Borehole: **15 feet bgs**
Drill Rig Type: **Track-Mounted**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **n/a**
Groundwater Elevation: **8'6"**	Sampling Method(s): **Continuous**	Hammer Data: **n/a**
Borehole Backfill: **Bentonite**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	



The Riley Group, Inc.
17522 Bothell Way NE, Bothell, WA 98011

Project Name: **Sea Mar Community Health Center** Project Number: **2016-023A** Client: **SeaMar Community Health Centers**	RILEYGROUP Test Probe/Well No.: **MW13** **Sheet 1 of 1**

Date(s) Drilled: **05/04/16**	Logged By: **AJ**	Surface Conditions: **Asphalt**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2" Diameter**	Total Depth of Borehole: **15 feet bgs**
Drill Rig Type: **Track-Mounted**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **n/a**
Groundwater Elevation: **4'4"**	Sampling Method(s): **Continuous**	Hammer Data: **n/a**
Borehole Backfill: **Monitoring Well**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	



The Riley Group, Inc.
17522 Bothell Way NE, Bothell, WA 98011

Project Name: **Sea Mar Community Health Center** Project Number: **2016-023A** Client: **SeaMar Community Health Centers**	RILEYGROUP Test Probe/Well No.: **MW14** **Sheet 1 of 1**

Date(s) Drilled: **05/04/16**	Logged By: **AJ**	Surface Conditions: **Concrete**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **3" Diameter**	Total Depth of Borehole: **15.5 feet bgs**
Drill Rig Type: **Track-Mounted**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **n/a**
Groundwater Elevation: **6'**	Sampling Method(s): **Continuous**	Hammer Data: **n/a**
Borehole Backfill: **Monitoring Well**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	

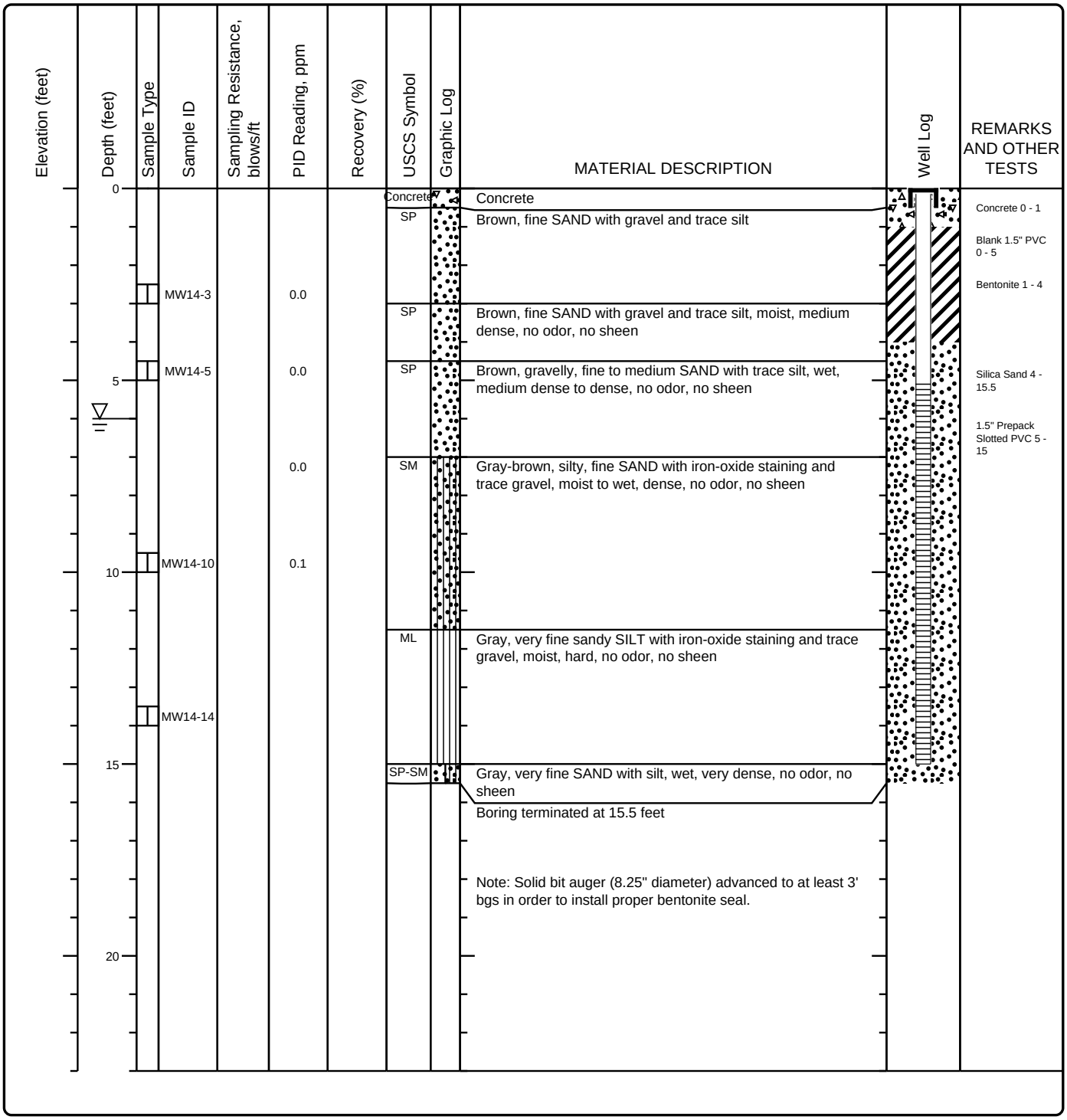


Figure MW14

The Riley Group, Inc.
17522 Bothell Way NE, Bothell, WA 98011

Project Name: **Sea Mar Community Health Center** Project Number: **2016-023A** Client: **SeaMar Community Health Centers**	RILEYGROUP Test Probe/Well No.: **MW15** **Sheet 1 of 1**

Date(s) Drilled: **05/04/16**	Logged By: **AJ**	Surface Conditions: **Concrete**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **3" Diameter**	Total Depth of Borehole: **17 feet bgs**
Drill Rig Type: **Track-Mounted**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **n/a**
Groundwater Elevation: **8'**	Sampling Method(s): **Continuous**	Hammer Data: **n/a**
Borehole Backfill: **Monitoring Well**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	

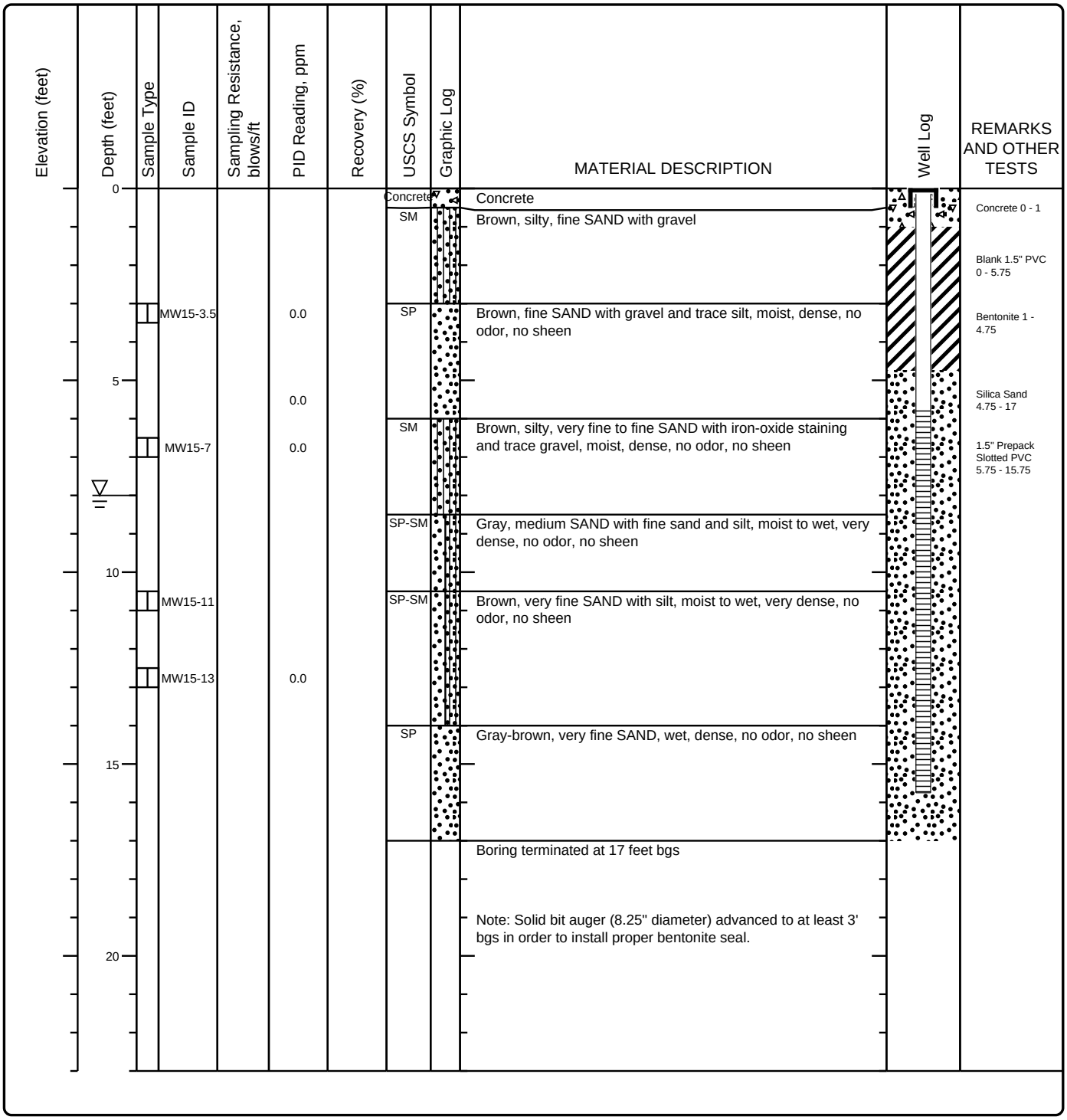
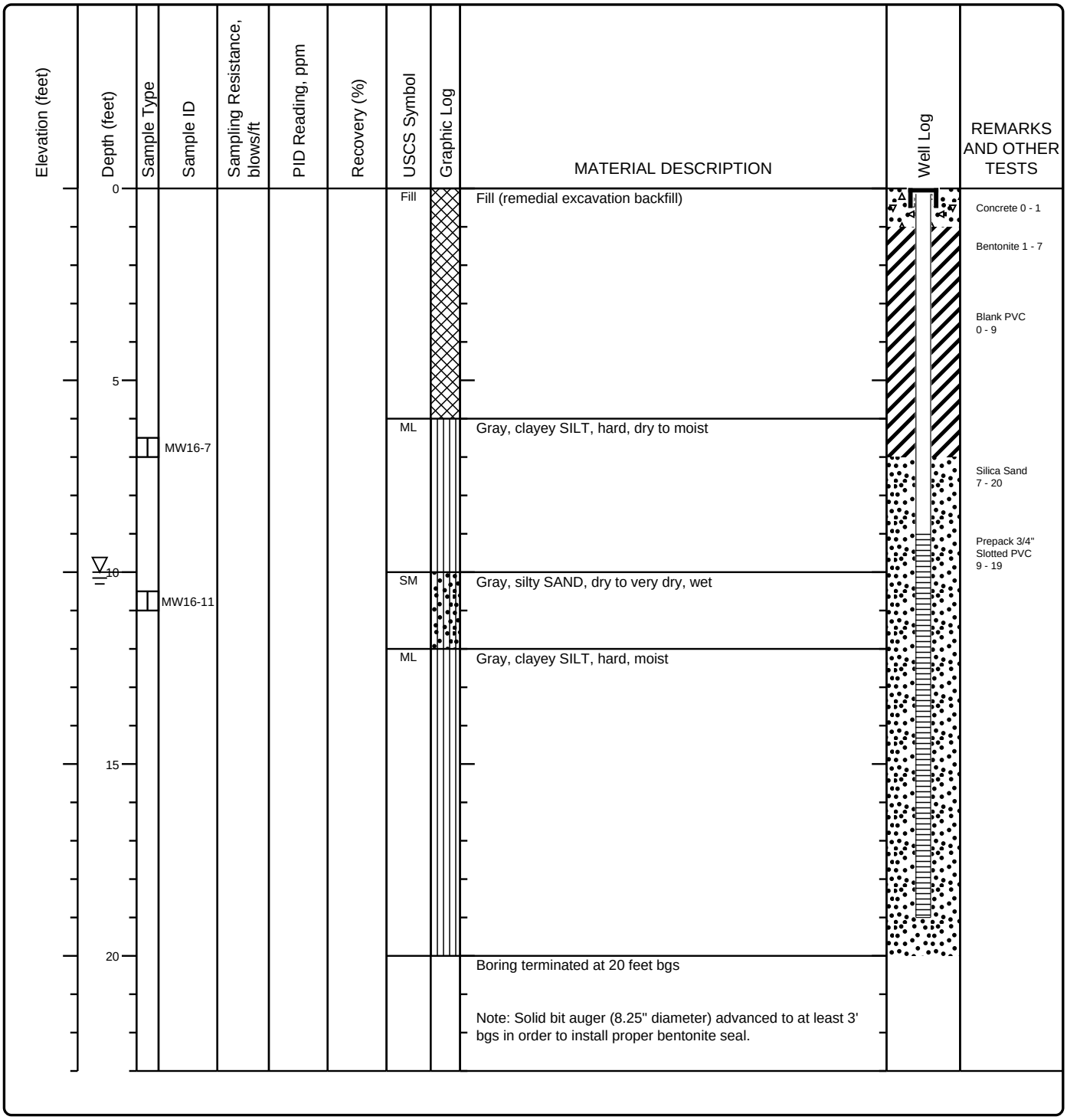


Figure MW15

The Riley Group, Inc.
17522 Bothell Way NE, Bothell, WA 98011

Project Name: **Sea Mar Community Health Center** Project Number: **2016-023A** Client: **SeaMar Community Health Centers**	RILEYGROUP Test Probe/Well No.: **MW16** **Sheet 1 of 1**

Date(s) Drilled: **07/14/16**	Logged By: **CF**	Surface Conditions: **Soil**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2" Diameter**	Total Depth of Borehole: **20 feet bgs**
Drill Rig Type: **Track-Mounted**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **n/a**
Groundwater Elevation: **10'**	Sampling Method(s): **Continuous**	Hammer Data: **n/a**
Borehole Backfill: **Monitoring Well**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	



Project Name: **Sea Mar Community Health Center** Project Number: **2016-023A** Client: **SeaMar Community Health Centers**	Test Probe/Well No.: **MW17** **Sheet 1 of 1**

Date(s) Drilled: **07/14/16**	Logged By: **CF**	Surface Conditions: **Gravel**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2" Diameter**	Total Depth of Borehole: **15 feet bgs**
Drill Rig Type: **Track-Mounted**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **n/a**
Groundwater Elevation: **Not Encountered**	Sampling Method(s): **None**	Hammer Data: **n/a**
Borehole Backfill: **Monitoring Well**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	

Elevation (feet)	Depth (feet)	Sample Type	Sample ID	Sampling Resistance, blows/ft	PID Reading, ppm	Recovery (%)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Well Log	REMARKS AND OTHER TESTS
	0								Gravel		Concrete 0 - 1
									No samples 0 - 15		Blank PVC 0 - 5
											Bentonite 1 - 3
											Silica Sand 3 - 15
	5										Prepack 3/4" Slotted PVC 5 - 15
	10										
	15								Boring terminated at 15 feet bgs Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal.		
	20										

The Riley Group, Inc.
17522 Bothell Way NE, Bothell, WA 98011

Project Name: **Dominic's Plaza (Sea Mar Community Health Center)**

Project Number: **2016-023A**

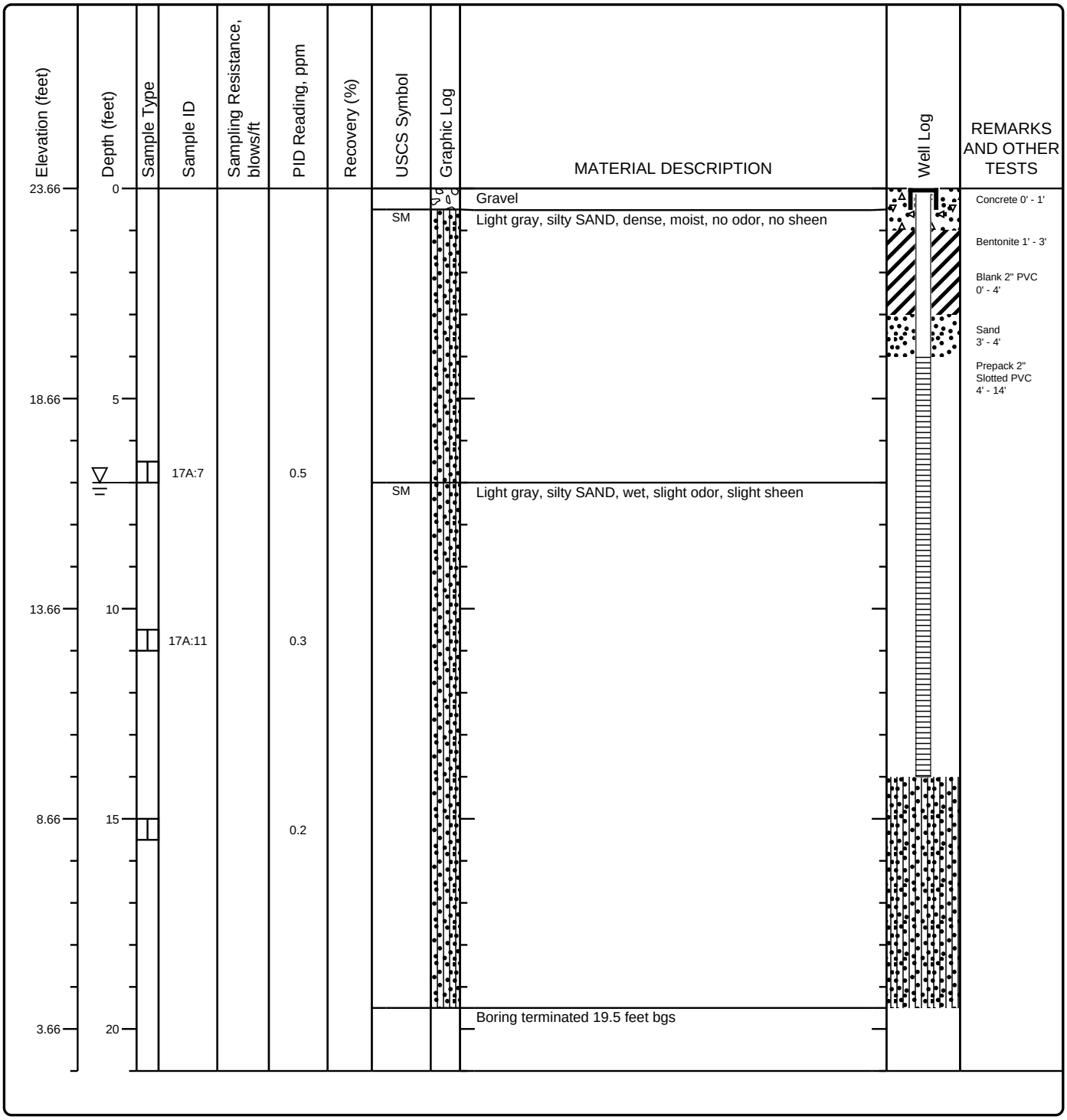
Client: **SeaMar Community Health Centers**

RILEYGROUP

Test Probe/Well No.: **MW17A**

Sheet 1 of 1

Date(s) Drilled: **11/21/17**	Logged By: **SL**	Surface Conditions: **Gravel**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2.25"**	Total Depth of Borehole: **19.5 feet bgs**
Drill Rig Type: **Geoprobe**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **23.66'**
Groundwater Level: **7'**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	



The Riley Group, Inc.
17522 Bothell Way NE, Bothell, WA 98011

Project Name: **Sea Mar Community Health Center** Project Number: **2016-023A** Client: **SeaMar Community Health Centers**	Test Probe/Well No.: **MW18** **Sheet 1 of 1**

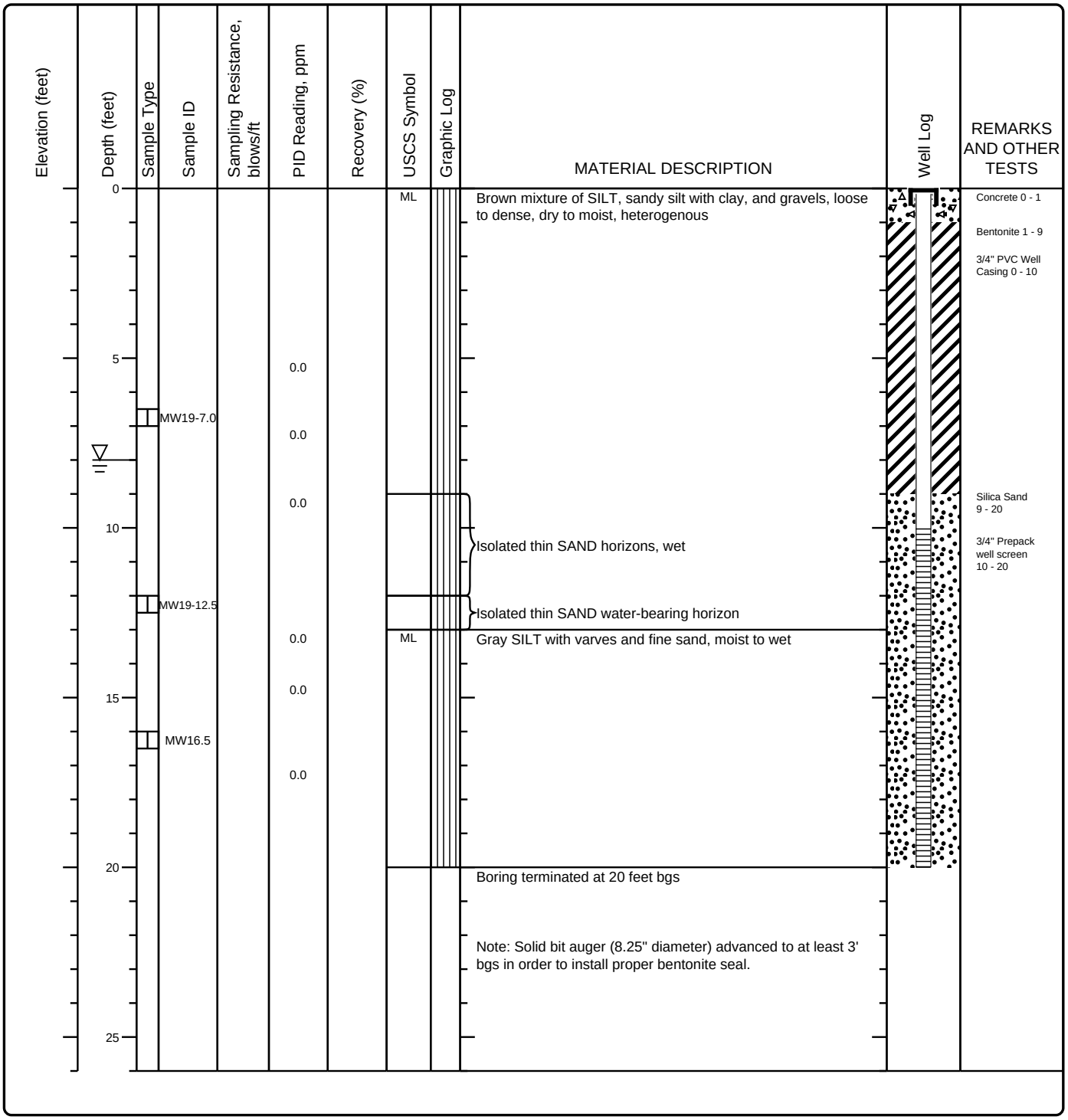
Date(s) Drilled: **07/14/16**	Logged By: **CF**	Surface Conditions: **Asphalt**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2" Diameter**	Total Depth of Borehole: **20 feet bgs**
Drill Rig Type: **Track-Mounted**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **n/a**
Groundwater Elevation: **10'**	Sampling Method(s): **None**	Hammer Data: **n/a**
Borehole Backfill: **Monitoring Well**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	

Elevation (feet)	Depth (feet)	Sample Type	Sample ID	Sampling Resistance, blows/ft	PID Reading, ppm	Recovery (%)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Well Log	REMARKS AND OTHER TESTS
	0						Asphalt		Asphalt		Concrete 0 - 1
									No samples 0 - 20		Blank PVC 0 - 10
											Bentonite 1 - 8
	5										
											Silica Sand 8 - 20
	10 ▽										Prepack 3/4" Slotted PVC 10 - 20
	15										
	20								Boring terminated at 20 feet bgs		
									Note: Solid bit auger (8.25" diameter) advanced to at least 3' bgs in order to install proper bentonite seal.		

The Riley Group, Inc.
17522 Bothell Way NE, Bothell, WA 98011

Project Name: **Sea Mar Community Health Center** Project Number: **2016-023A** Client: **SeaMar Community Health Centers**	Test Probe/Well No.: **MW19** **Sheet 1 of 1**

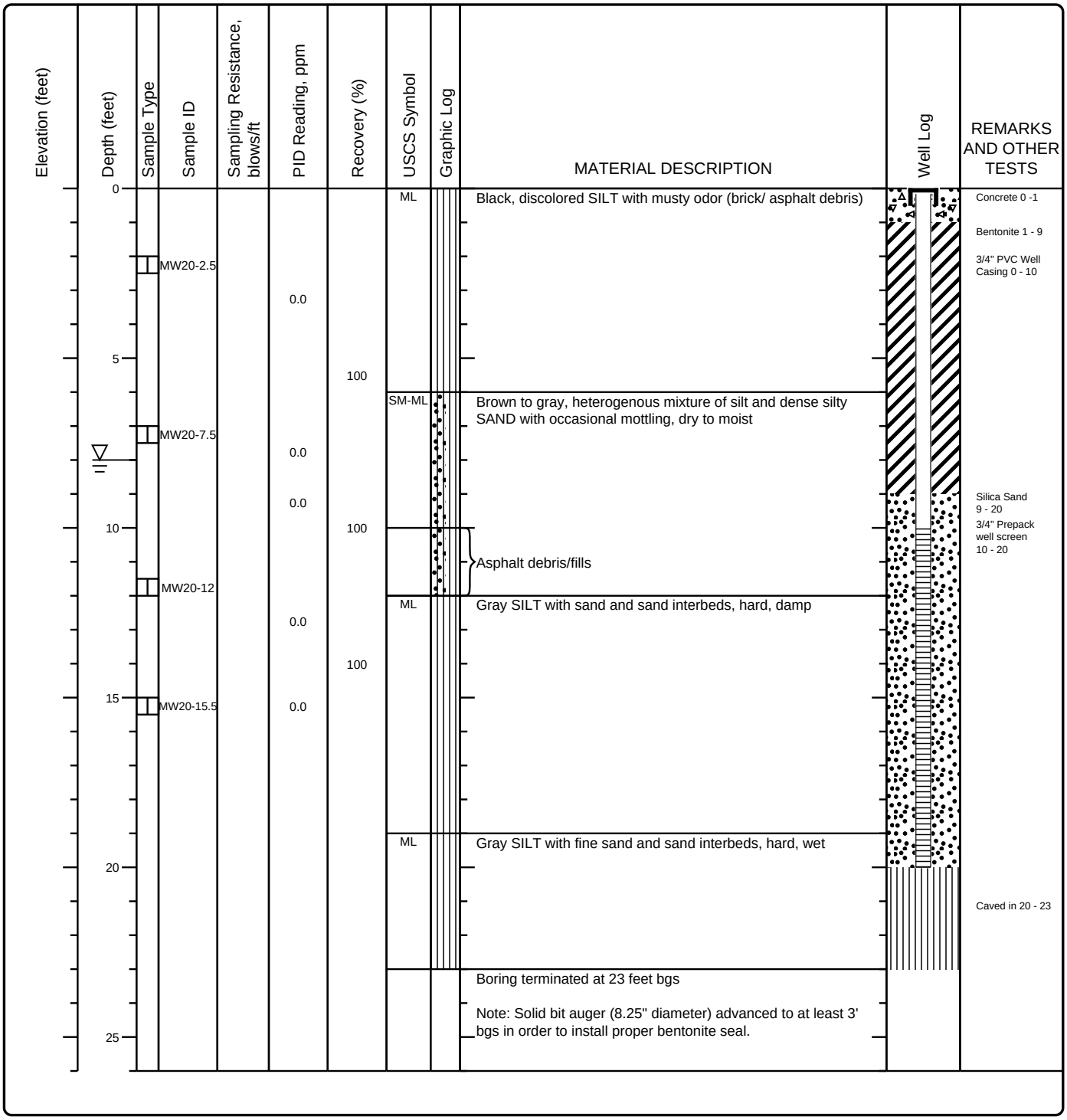
Date(s) Drilled: **09/08/2016**	Logged By: **CF**	Surface Conditions: **Asphalt**
Drilling Method(s): **Direct Push/ Hollow Stem Auger**	Drill Bit Size/Type: **3.25" O.D.**	Total Depth of Borehole: **20 feet bgs**
Drill Rig Type: **Track-Mounted**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **n/a**
Groundwater Elevation: **8 feet bgs**	Sampling Method(s): **Continuous**	Hammer Data: **n/a**
Borehole Backfill: **Monitoring Well**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	



The Riley Group, Inc.
17522 Bothell Way NE, Bothell, WA 98011

Project Name: **Sea Mar Community Health Center** Project Number: **2016-023A** Client: **SeaMar Community Health Centers**	Test Probe/Well No.: **MW20** **Sheet 1 of 1**

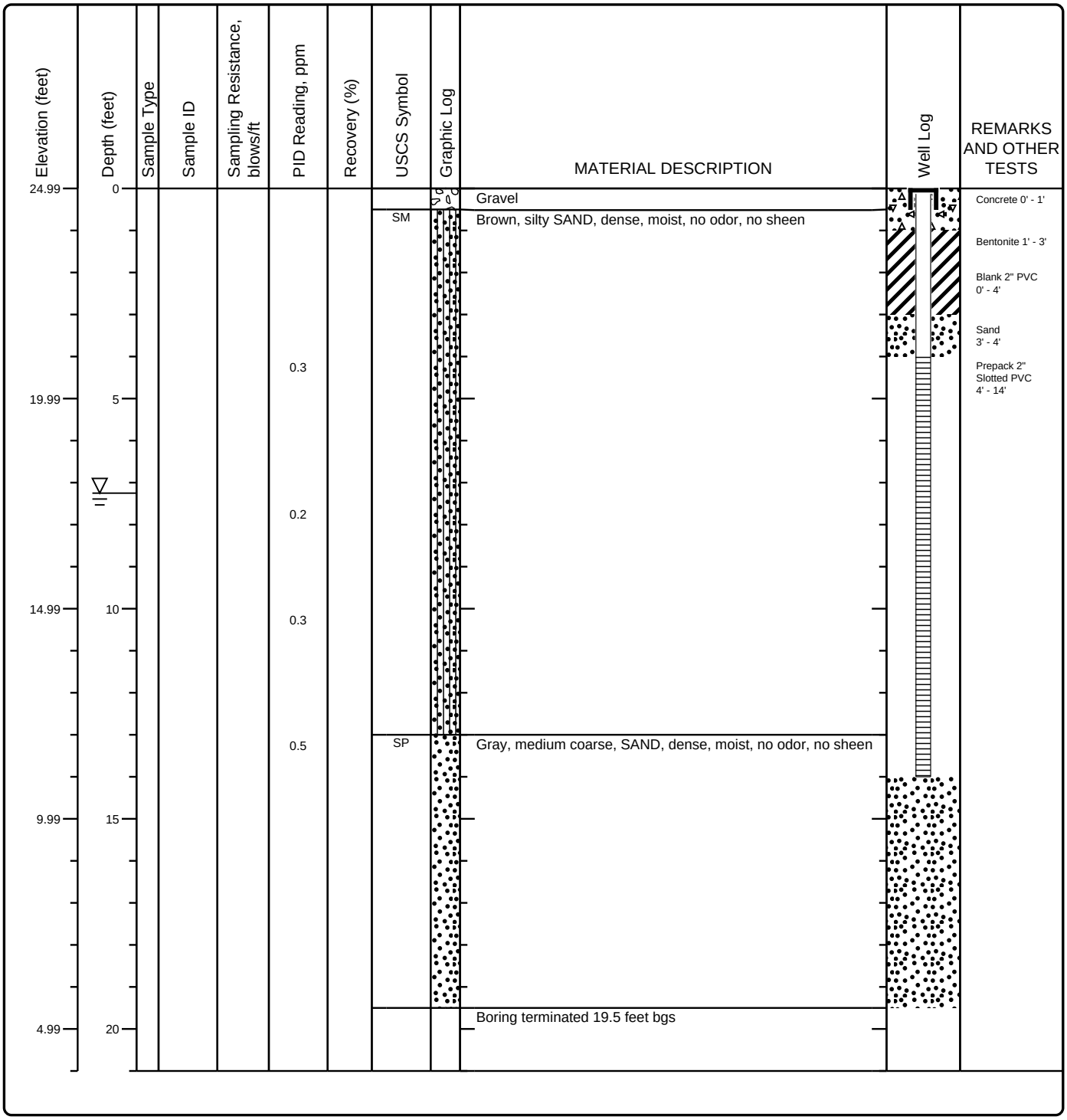
Date(s) Drilled: **09/08/2016**	Logged By: **PDR**	Surface Conditions: **Asphalt**
Drilling Method(s): **Direct Push/ Hollow Stem Auger**	Drill Bit Size/Type: **3.25" O.D.**	Total Depth of Borehole: **23 feet bgs**
Drill Rig Type: **Track-Mounted**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **n/a**
Groundwater Elevation: **8 feet bgs**	Sampling Method(s): **Continuous**	Hammer Data: **n/a**
Borehole Backfill: **Monitoring Well**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	



Project Name: **Dominic's Plaza (Sea Mar Community Health Center)**	Test Probe/Well No.: **MW21**
Project Number: **2016-023A**	**Sheet 1 of 1**
Client: **SeaMar Community Health Centers**	

RILEYGROUP

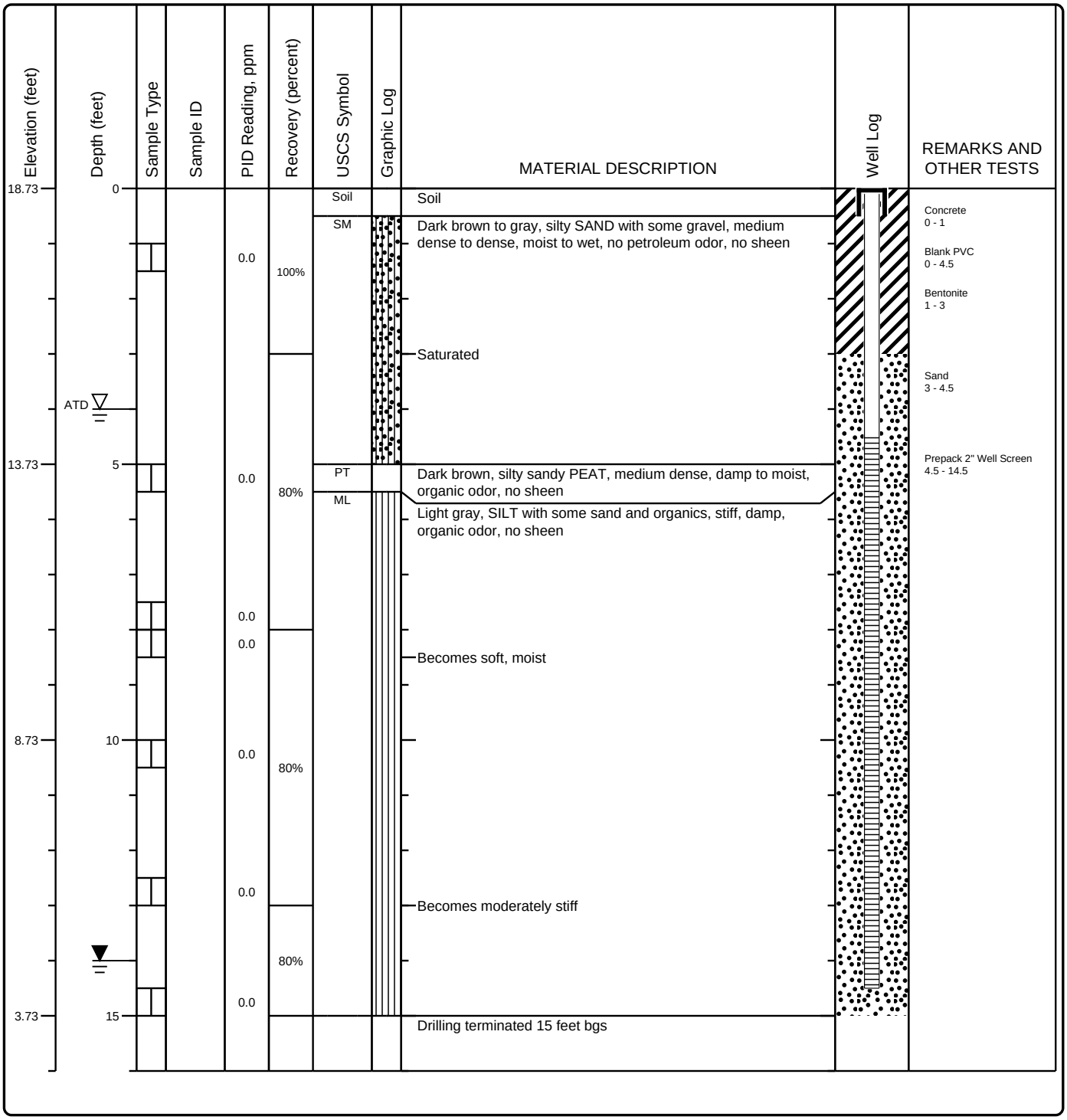
Date(s) Drilled: **11/21/17**	Logged By: **SL**	Surface Conditions: **Gravel**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type: **2.25"**	Total Depth of Borehole: **19.5 feet bgs**
Drill Rig Type: **Geoprobe**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **24.99'**
Groundwater Level: **7.25'**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **Bentonite**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	



The Riley Group, Inc.
17522 Bothell Way NE, Bothell, WA 98011

Project Name: **Dominic's Plaza (Sea Mar Community Health Center)**	Well No.: **MW22 (BKZ204)**
Project Number: **2016-023A**	**Sheet 1 of 1**
Client: **SeaMar Community Health Centers**	

Date(s) Drilled: **10/02/18**	Logged By: **LC**	Surface Conditions: **Top Soil**
Drilling Method(s): **Direct Push**	Drill Bit Size/Type:	Total Depth of Borehole: **15'**
Drill Rig Type: **Geoprobe 7730 DT**	Drilling Contractor: **RGI**	Approximate Surface Elevation (feet amsl): **18.73'**
Groundwater Level: **16.24' on 10/10/18**	Sampling Method(s): **Continuous**	Hammer Data : **n/a**
Borehole Backfill: **n/a**	Location: **9635 Des Moines Memorial Drive South, Seattle, Washington 98108**	



The Riley Group, Inc.
17522 Bothell Way NE, Bothell, WA 98011

Project Name: **Sea Mar Community Health Center**

Project Number: **2016-023**

Client: **Sea Mar Community Health Center**

RILEYGROUP

Boring Log Key

Sheet 1 of 1

Elevation (feet)	Depth (feet)	Sample Type	Sample ID	Sampling Resistance, blows/ft	PID Reading, ppm	Recovery (%)	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Temporary Well Log	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8	9	10	11	12

COLUMN DESCRIPTIONS

1. Elevation (feet): Elevation (MSL, feet).
2. Depth (feet): Depth in feet below the ground surface.
3. Sample Type: Type of soil sample collected at the depth interval shown.
4. Sample ID: Sample identification number.
5. Sampling Resistance, blows/ft: Number of blows to advance driven sampler one foot (or distance shown) beyond seating interval using the hammer identified on the boring log.
6. PID Reading, ppm: The reading from a photo-ionization detector, in parts per million.
7. Recovery (%): Core Recovery Percentage is determined based on a ratio of the length of core sample recovered compared to the cored interval length.
8. USCS Symbol: USCS symbol of the subsurface material.
9. Graphic Log: Graphic depiction of the subsurface material encountered.
10. MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
11. Temporary Well Log: Graphical representation of well installed upon completion of drilling and sampling.
12. REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

- Asphaltic Concrete (AC)
- Bentonite
- Portland Cement Concrete
- SILT, SILT w/SAND, SANDY SILT (ML)
- Peat
- Silty SAND (SM)
- Poorly graded SAND (SP)
- Poorly graded SAND with Silt (SP-SM)

TYPICAL SAMPLER GRAPHIC SYMBOLS

- Auger sampler
- Bulk Sample
- 3-inch-OD California w/ brass rings
- CME Sampler
- Continuous
- Grab Sample
- 2.5-inch-OD Modified California w/ brass liners
- Pitcher Sample
- 2-inch-OD unlined split spoon (SPT)
- Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

- Water level (at time of drilling, ATD)
- Water level (after waiting)
- Minor change in material properties within a stratum
- Inferred/gradational contact between strata
- Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

285933

Please print, sign and return to the Department of Ecology

23-4E-5A

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. R65533

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

RECEIVED

JAN 14 2008

DEPARTMENT OF ECOLOGY
WELL DRILLING UNIT

Construction/Decommission *("x" in box)*

☒ Construction
☐ Decommission

MW1

ORIGINAL INSTALLATION Notice of Intent Number:

Type of Well *("x in box)*

☒ Resource Protection
☐ Geotech Soil Boring

Property Owner Northshore Plaza Enterprises

Site Address 9635 Des Moines-Memorial Drive S

Consulting Firm Riley Group

City Seattle County King

Unique Ecology Well IDTag No. AGT-171

Location NE1/4-1/4 NE1/4 Sec 05 Twn 23N R 04

EWM ☒ or WWM ☐

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Lat/Long (s, t, r still REQUIRED) Lat Deg ____ Min ____ Sec ____

Long Deg ____ Min ____ Sec ____

☒ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name) Haun, Martin

Driller/Engineer /Trainee Signature

Driller or Trainee License No. 2827

Tax Parcel No. 5624200371

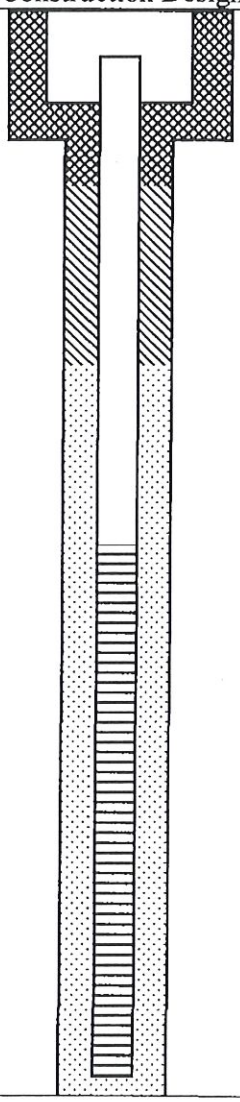
Cased or Uncased Diameter 2" Static Level N/A

Work/Decommission Start Date 25JAN08

Work/Decommission Completed Date 25JAN08

If trainee, licensed driller's Signature and License Number:

Construction Design



Well Data

MONUMENT TYPE: 5" FLUSH MOUNT

CONCRETE SURFACE SEAL: ϕ -1'

ANNULAR SPACE: 3'

BACKFILL: 1'-4'

TYPE: BENTONITE

PVC BLANK: ϕ-5'

SCREEN: 5'-10'

SLOT SIZE: 10ϕ

TYPE: 3/4" PRE PACK PVC SCH 40

SAND PACK: 4'-10'

MATERIAL: 10/20 SILICA SAND

DRILLING METHOD: DIRECT PUSH

WELL DEPTH: 10'

BORING DIAMETER: 2"

Formation Description

ϕ-8'
BRN SAND SILT W/TRACE GRAVEL

8'-10'
GREYISH MED SAND

8

STATE OF ECOLOGY
FISCAL & BUDGET

JAN 10 A8:45

SCALE: 1"= ____ PAGE 1 OF 7

ECY 050-12 (Rev. 7/06)

Ecology is an Equal Opportunity Employer

285936

Please print, sign and return to the Department of Ecology

23-4E-SA

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. R65533

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☒ Construction

☐ Decommission

MW4

ORIGINAL INSTALLATION Notice of Intent Number:

Type of Well *("x in box)*

☒ Resource Protection

☐ Geotech Soil Boring

Property Owner Northshore Plaza Enterprises

Site Address 9635 Des Moines-Memorial Drive S

Consulting Firm Riley Group

City Seattle County King

Unique Ecology Well IDTag No. AFN 272

Location NE1/4-1/4 NE1/4 Sec 05 Twn 23N R 04

EWM ☒ or WWM ☐

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Lat/Long (s, t, r still REQUIRED) Lat Deg _____ Min _____ Sec _____

Long Deg _____ Min _____ Sec _____

☒ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name) Haun, Martin

Driller/Engineer /Trainee Signature

Driller or Trainee License No. 2827

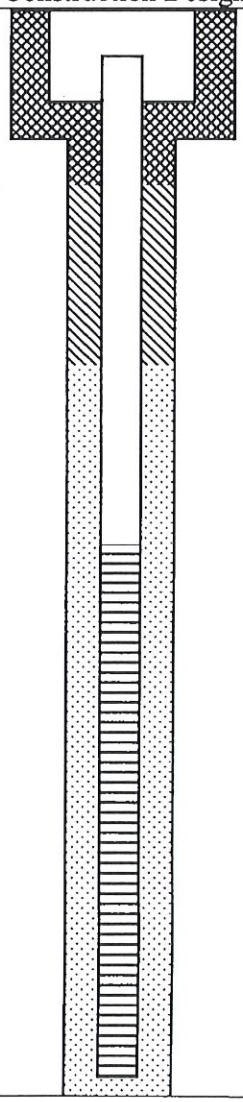
Tax Parcel No. 5624200371

Cased or Uncased Diameter 2" Static Level N/A

Work/Decommission Start Date 2JAN08

Work/Decommission Completed Date 25JAN08

If trainee, licensed driller's Signature and License Number:

Construction Design	Well Data	Formation Description
	MONUMENT TYPE: 5" FLUSH MOUNT CONCRETE SURFACE SEAL: Ø-1' ANNULAR SPACE: 3' BACKFILL: 1'-4' TYPE: BENTONITE PVC BLANK: Ø-5' SCREEN: 5'-10' SLOT SIZE: .010 TYPE: 3/4" PRE-PACK PVC SCH 40 SAND PACK: 4'-12' MATERIAL: 10/20 SILICA SAND DRILLING METHOD: DIRECT PUSH WELL DEPTH: 12' BORING DIAMETER: 2"	Ø-12' BRN SAND SILT W/ TRACE GRAVEL

RECEIVED

JAN 14 2008

DEPT. OF ECOLOGY

SCALE: 1"= ____ PAGE 4 OF 7

ECY 050-12 (Rev. 7/06)

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RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. RE12765

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission ("x" in box)

☒ Construction MW-12

☐ Decommission

ORIGINAL INSTALLATION Notice of Intent Number:

Type of Well ("x in box)

☒ Resource Protection

☐ Geotech Soil Boring

Consulting Firm THE RILEY GROUP, INC

Unique Ecology Well IDTag No. BJH 407

Property Owner SEAMAR COMMUNITY HEALTH CENTER

Site Address 9635 DES MOINES MEMORIAL DR S

City SEATTLE County KING

Location NE 1/4-1/4 NE 1/4 Sec 5 Twn 23N R 4E

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED) Lat Deg ____ Min ____ Sec ____

Long Deg ____ Min ____ Sec ____

Tax Parcel No. 5624200371

Cased or Uncased Diameter 3/4" Static Level 8.5'

Work/Decommission Start Date 5/4/16

Work/Decommission Completed Date 5/4/16

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee

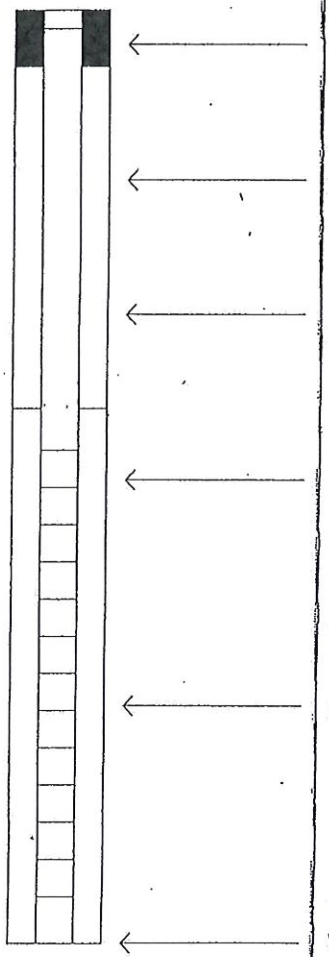
Name (Print Last, First Name) RILEY, PAUL

Driller/Engineer/Trainee Signature

Driller or Trainee License No. 2247

If trainee, licensed driller's Signature and License Number:

Construction Design



Well Data

Monument Type: 5x12" STEEL

Surface Seal: 0-1 ft CONCRETE

PVC Blank: 3/4" SCH 40 PVC

Length: 0-5 ft

AUGERED 0-3 FT W/6.25" FOR SEAL.

Well Seal: 3/8" BENTONITE CHIP

Seal Length: 1-4 ft

PVC Screen: PRE-PACK SCREEN

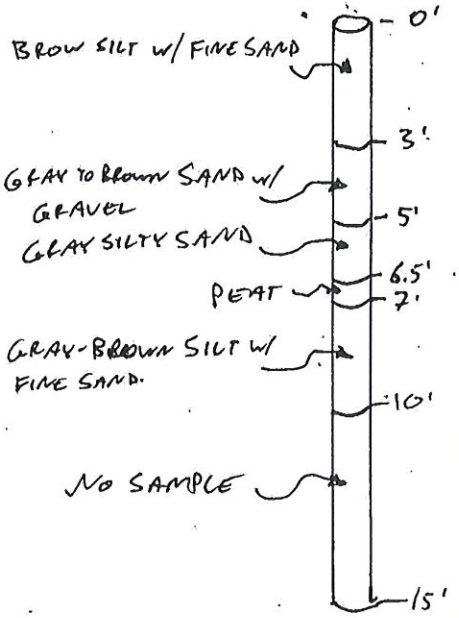
Screen Length: 5-15 ft

Slot Size: 0.010"

Sand Size: 10/20 COLORADO SAND 4-15 ft

Well Depth: 15 ft

Formation Description



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SCALE: 1"= ____ PAGE ____ OF ____

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. RE12765

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission ("x" in box)

☒ Construction

☐ Decommission

MW-13

ORIGINAL INSTALLATION Notice of Intent Number:

Consulting Firm THE RILEY GROUP, INC

Unique Ecology Well IDTag No. BJH 406

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name) RILEY, PAUL

Driller/Engineer/Trainee Signature

Driller or Trainee License No. 2247

If trainee, licensed driller's Signature and License Number:

Type of Well ("x in box)

☒ Resource Protection

☐ Geotech Soil Boring

Property Owner SEAMAR COMMUNITY HEALTH CENTER

Site Address 9635 DES MOINES MEMORIAL DR S

City SEATTLE County KING

Location NE 1/4-1/4 NE 1/4 Sec 5 Twn 23N R 4E

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED) Lat Deg ____ Min ____ Sec ____

Long Deg ____ Min ____ Sec ____

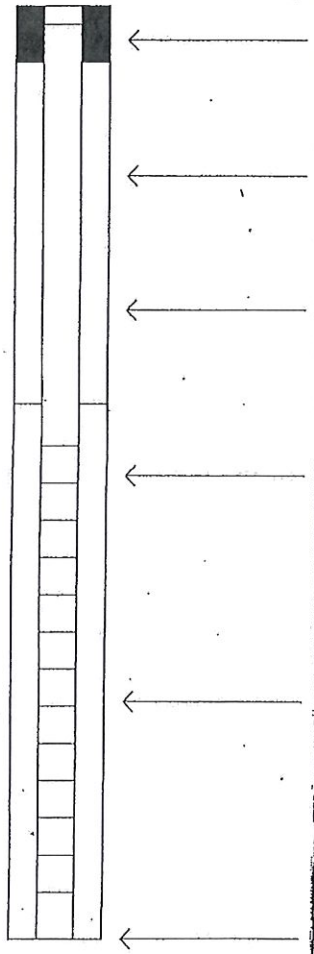
Tax Parcel No. 5624200371

Cased or Uncased Diameter 3/4" Static Level 4.3'

Work/Decommission Start Date 5/4/16

Work/Decommission Completed Date 5/4/16

Construction Design



Well Data

Monument Type: 5x12" STEEL

Surface Seal: 0 - 1ft CONCRETE

PVC Blank: 3/4" SCH 40 PVC

Length: 0 - 3.25 ft

AUGERED TO 3ft W/6.25" FOR SEAL

Well Seal: 3/8" BENTONITE CHIP

Seal Length: 1 - 2.5 ft

PVC Screen: PRE-PACK SCREEN

Screen Length: 3.25 ft - 13.25 ft

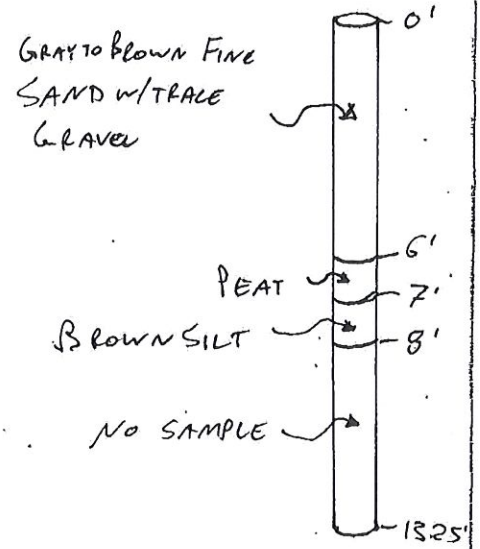
Slot Size: 0.010"

Sand Size: 10/20 COLORADO SAND

2.5 TO 13.25 ft

Well Depth: 13.25 ft

Formation Description



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ECY 050-12 (Rev 02-2011) To request ADA accommodation including materials in a format for the visually impaired, call Ecology Water Resources Program at 360-407-6872. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. RE12765

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission ("x" in box)

☒ Construction MW-15

☐ Decommission

ORIGINAL INSTALLATION Notice of Intent Number:

Consulting Firm THE RILEY GROUP, INC

Unique Ecology Well IDTag No. BJH 409

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name) RILEY, PAUL

Driller/Engineer /Trainee Signature

Driller or Trainee License No. 2247

If trainee, licensed driller's Signature and License Number:

Type of Well ("x in box)

☒ Resource Protection

☐ Geotech Soil Boring

Property Owner SEAMAR COMMUNITY HEALTH CENTER

Site Address 9635 DES MOINES MEMORIAL DR S

City SEATTLE County KING

Location NE 1/4-1/4 NE 1/4 Sec 5 Twn 23N R 4E

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED) Lat Deg ____ Min ____ Sec ____

Long Deg ____ Min ____ Sec ____

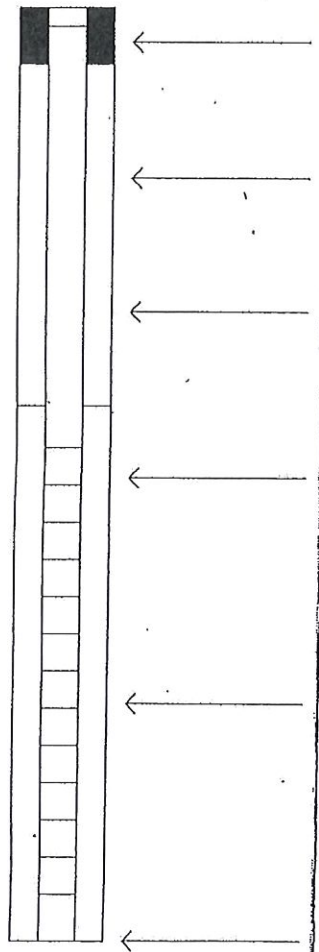
Tax Parcel No. 5624200371

Cased or Uncased Diameter 1.5" Static Level 8'

Work/Decommission Start Date 5/4/16

Work/Decommission Completed Date 5/4/16

Construction Design



Well Data

Monument Type: 8x12" STEEL

Surface Seal: 0 - 1 ft CONCRETE

PVC Blank: 1.5" SCH 40 PVC

Length: 0 - 5.75 ft

AUGERED 0 - 3ft w/ 6.25" FOR SEAL

Well Seal: 3/8" BENTONITE CHIP

Seal Length: 1 - 4.75 ft

PVC Screen: PRE-PACK SCREEN

Screen Length: 5.75 - 15.75 ft

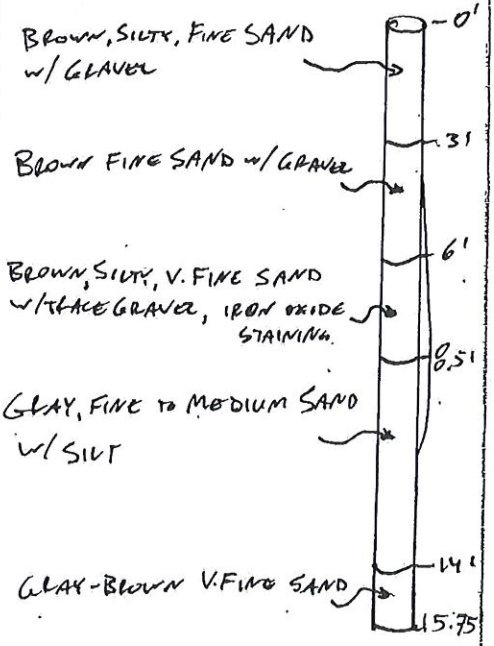
Slot Size: 0.010"

Sand Size: 10/20 COLORADO SAND

4.75 - 15.75 ft

Well Depth: 15.75 ft

Formation Description



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SCALE: 1"=____ PAGE____ OF____

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. RE13105

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

MW-16

☒ Construction
☐ Decommission

ORIGINAL INSTALLATION Notice of Intent Number: RE13105

Consulting Firm The Riley Group, Inc.

Unique Ecology Well IDTag No. BJH 420

Type of Well *("x in box)*
☒ Resource Protection
☐ Geotech Soil Boring

Property Owner Sea Mar Community Health Center

Site Address 9635 Des Moines Memorial Drive South

City Seattle County King

Location NE 1/4-1/4 NE 1/4 Sec 5 Twn 23N R 4E

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED) Lat Deg ____ Min ____ Sec ____

Long Deg ____ Min ____ Sec ____

Tax Parcel No. 5624200371

Cased or Uncased Diameter 3/4" Static Level 10'

Work/Decommission Start Date 07/19/16

Work/Decommission Completed Date 07/19/16

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee

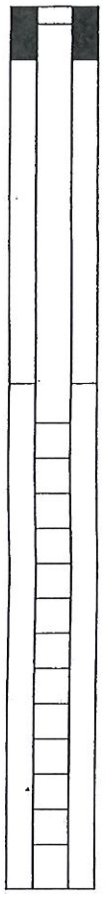
Name (Print Last, First Name) Riley, Paul

Driller/Engineer /Trainee Signature

Driller or Trainee License No. 2247

If trainee, licensed driller's Signature and License Number:

Construction Design



Well Data

Monument Type: 5x12 steel

Surface Seal: Concrete 0-1' auger 0-8' for seal

PVC Blank: SCH 40

Length: 0-9'

Well Seal: 3/8" bentonite chip

Seal Length: 1-7'

PVC Screen: pre-pack screen

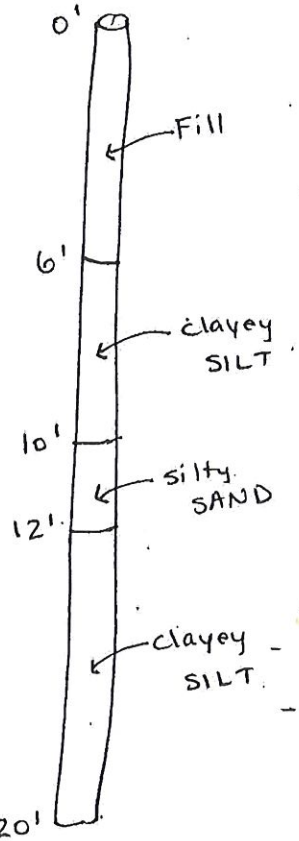
Screen Length: 9-19'

Slot Size: 0.20

Sand Size: 8-12 mesh 50# 7-20'

Well Depth: 20'

Formation Description



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JAN 13 2017
DEPT OF ECOLOGY
NWRO - WR

SCALE: 1"= ____ PAGE 1 OF 1

ECY 050-12 (Rev 02-2011) To request ADA accommodation including materials in a format for the visually impaired, call Ecology Water Resources Program at 360-407-6872. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. RE 13105

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☒ Construction MW-17

☐ Decommission

ORIGINAL INSTALLATION Notice of Intent Number: RE13105

Type of Well *("x in box)*

☒ Resource Protection

☐ Geotech Soil Boring

Consulting Firm The Riley Group, Inc.

Unique Ecology Well IDTag No. BJH 421

Property Owner Sea Mar Community Health Center

Site Address 9635 Des Moines Memorial Drive South

City Seattle County King

Location NE 1/4-1/4 NE 1/4 Sec 5 Twn 23N R 4E

EWM ☒ or WWM ☐

Lat/Long (s, t, r still REQUIRED) Lat Deg ____ Min ____ Sec ____

Long Deg ____ Min ____ Sec ____

Tax Parcel No. 5624200371

Cased or Uncased Diameter 3/4" Static Level —

Work/Decommission Start Date 07/19/16

Work/Decommission Completed Date 07/19/16

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

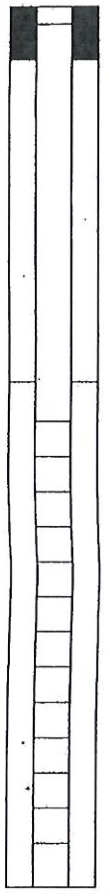
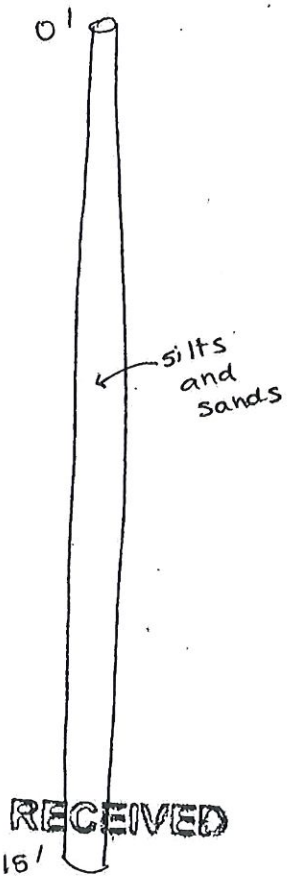
☒ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name) Riley, Paul

Driller/Engineer /Trainee Signature

Driller or Trainee License No. 2247

If trainee, licensed driller's Signature and License Number:

Construction Design	Well Data	Formation Description
	Monument Type: 5x12 steel Surface Seal: 0-1' concrete augered 0-3' for seal PVC Blank: SCH 40 Length: 0-5' Well Seal: 3/8" bentonite Seal Length: 1-3' PVC Screen: pre-pack Screen Length: 5-15' Slot Size: 0.20" slot Sand Size: 8-12 mesh 80# 3-15' Well Depth: 15'	

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RECEIVED JAN 13 2017 DEPT OF ECOLOGY NWRO - WR

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ECY 050-12 (Rev 02-2011) To request ADA accommodation including materials in a format for the visually impaired, call Ecology Water Resources Program at 360-407-6872. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

Please print, sign and return to the Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. RE12654

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *("x" in box)*

☒ Construction
☐ Decommission

SV-1

ORIGINAL INSTALLATION Notice of Intent Number:

Type of Well *("x in box)*

☒ Resource Protection
☐ Geotech Soil Boring

Property Owner SeaMar Community Health Center

Site Address 9635 Des Moines Memorial Drive South

Consulting Firm The Riley Group, Inc.

City Seattle County King

Unique Ecology Well IDTag No. BIS 792

Location NE 1/4-1/4 NE 1/4 Sec 5 Twn 23N R 4E

EWM ☒ or WWM ☐

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Lat/Long (s, t, r still REQUIRED) Lat Deg _____ Min _____ Sec _____

Long Deg _____ Min _____ Sec _____

Tax Parcel No. 562420-0371

☑ Driller ☐ Engineer ☐ Trainee

Name (Print Last, First Name) Riley, Paul

Driller/Engineer /Trainee Signature

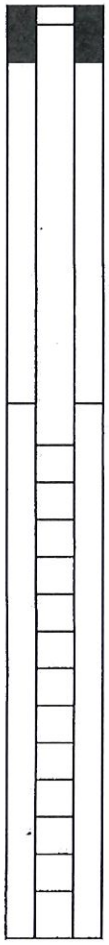
Driller or Trainee License No. 2247

Cased or Uncased Diameter 3/4" Static Level N/A

Work/Decommission Start Date 3/04/2016

Work/Decommission Completed Date 3/04/2016

If trainee, licensed driller's Signature and License Number:

Construction Design	Well Data	Formation Description
	Monument Type: 5x12 steel monument Surface Seal: 0 - 1 ft. concrete PVC Blank: 3/4" ID Sch 40 PVC Length: 0 to 3 ft. 8.5" diameter Augered for well seal 0 to 3 ft. Well Seal: 3/8" Med chip Bentonite Seal Length: 1 to 2.5 ft. PVC Screen: 3/4" ID slotted PVC Screen Length: 3 to 3.5 ft. Slot Size: 20 slot Sand Size: 10-20 mesh #50 Colorado Sand 2.5 to 3.5 ft. Well Depth: 3.5 ft.	0 ft. Fill 3.5 ft.

SCALE: 1"= ____ PAGE ____ OF ____

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ECY 050-12 (Rev 02-2011) To request ADA accommodation including materials in a format for the visually impaired, call Ecology Water Resources Program at 360-407-6872. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.