Summer 2010 Remedial Investigation Report
Boeing Auburn Fabrication Division Facility
Auburn, Washington

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Prepared for

The Boeing Company

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1.0 INTRODUCTION

The Boeing Company (Boeing) is currently undergoing corrective action at their Auburn Fabrication Division facility (facility). Corrective action requirements are documented in an Agreed Order (Order) (No. DE 01HWTRNR-3345) dated August 14, 2002 and the First Amended Agreed Order dated February 21, 2006 both with Washington State Department of Ecology (Ecology). The Order includes a requirement to conduct a remedial investigation (RI) at the facility. The facility is located at 700 15th Street Southwest in Auburn, Washington.

Since the summer 2009, Boeing has been implementing phased remedial investigation (RI) activities to characterize the source, nature, and extent of offsite volatile organic compound (VOC) plumes. The plumes consist of trichloroethene (TCE) and other VOCs in the groundwater. One plume occurs predominantly north of Area 1 (the Area 1 plume); a second plume occurs predominantly north and northwest of Building 17-07 and the Wastewater Pretreatment Plant (WWPTP) (the western plume). As part of this phased characterization program, Boeing recently completed an additional supplemental RI termed the summer 2010 RI.[1] The summer 2010 RI provided additional data to define the source, nature, and extent of the western plume and the nature and extent of the Area 1 plume. The approximate locations of the plumes are shown on Figure 1.

1.1 BACKGROUND

Boeing completed the *2nd Revised Ecology Review Draft Remedial Investigation Report* (2nd Revised RI Report) on April 10, 2009. This report was a comprehensive document that addressed all solid waste management units (SWMUs) and areas of concern (AOCs) at the facility. Ecology's June 19, 2009 comments on the 2nd Revised RI identified an offsite groundwater quality data gap. The comments included a request to complete offsite groundwater investigations north and northwest of the WWPTP and Area 1 along Perimeter Road. This investigation was termed the fall 2009 RI and included installation of seven intermediate and two deep wells (AGW143 through AGW152).[2] TCE and vinyl chloride were detected above screening levels (TCE, 0.49 µg/L; 0.029 µg/L, vinyl chloride) in both the intermediate and deep groundwater zones in these new wells. At well AGW145(I), located along Perimeter Road approximately 500 ft north of the WWPTP, TCE was detected at 15 µg/L. This result was the third highest TCE concentration ever detected in the intermediate zone.[3] The fall 2009 RI investigation was

[1] RI activities extended from the end of May 2010 to early November 2010.
[2] Well AGW153 was installed under the fall 2009 RI, but was south of the VOC plume areas.
[3] Based on the RI database for groundwater that consists of data from 1995 to present. The highest TCE concentration was 21 µg/L from well AGW126(I). The second highest was 17 µg/L at injection well IW-5(I).

documented in the *Technical Memorandum: First Addendum to the 2nd Revised Ecology Review Draft Remedial Investigation Report* (Landau Associates 2009).

Based on the results of the fall 2009 RI, a second investigation phase was implemented. This second phase was termed the winter 2010 RI and included three intermediate wells around the perimeter of Building 17-07 (AGW154, AGW155 and AGW156) to characterize the source of the western plume. The investigation also included two intermediate wells (AGW157 and AGW158) and one deep well (AGW159) to characterize the offsite western plume; and three intermediate wells (AGW160, AGW161 and AGW162) to characterize the offsite Area 1 plume. Data from the winter 2010 RI indicated that TCE concentrations exceeded screening levels in the intermediate and deep zones of the western plume in the furthest downgradient wells. Similarly, the furthest downgradient well (AGW161) associated with the Area 1 plume detected TCE at 3.1 µg/L. The results of the winter 2010 RI were summarized in the *1st Quarterly Status Report* (Landau Associates 2010a). The results were also presented at a meeting with Ecology on May 26, 2010 at Ecology's Northwest Regional Office.

Based on the results of the winter 2010 RI, a third investigation phase was implemented. This third phase is the summer 2010 RI.

1.2 REPORT OBJECTIVES

The objectives of this report are to present the results of the summer 2010 RI and update the current conceptual model related to the two offsite VOC plumes. A secondary objective is to present the results of the 3rd quarter 2010 Phase IV groundwater sampling event. The collection of all groundwater data associated with these two objectives was initiated in September 2010 and extended through November 8, 2010 to accommodate drilling new wells. Consistent with the report objectives, data and analysis presentations in this report are focused on the northern portion of the facility in three areas:

- The shallow groundwater zone in the vicinity of Building 17-07
- The shallow, intermediate, and deep groundwater zones associated with the western plume
- The intermediate groundwater zone associated with the Area 1 plume.

2.0 FIELD INVESTIGATIONS

The scope of the summer 2010 RI included installation of eighteen wells, water level monitoring, new well surveying, and groundwater sampling. The investigation scope was discussed with Ecology at the May 26, 2010 meeting and documented in a work plan (Landau Associates 2010b) submitted to Ecology on July 21, 2010. The final location of wells AGW168 and AGW169 were subsequently modified after work plan submittal per Ecology's comments. Final well locations were documented in a figure transmitted to Ecology by email on August 16, 2010. Additionally, the 3rd quarterly Phase IV groundwater sampling event occurred during RI activities. New wells were incorporated into the Phase IV groundwater monitoring program.

2.1 SITE ACCESS

The summer 2010 RI required drilling on City of Algona property, two separate commercial properties, and Puget Sound Energy (PSE) property as well as the facility. Property access agreements were obtained for all offsite drilling. Additionally, a right-of-way permit was required from the City of Algona. Property access obtainment efforts were initiated on May 31, 2010 prior to submittal of the work plan. Agreements were finalized with all four offsite parties over the four months that followed. The final property access was obtained from the City of Algona on October 11, 2010. Property access was the primary factor in dictating the drilling schedule.

2.2 BORINGS AND WELL INSTALLATION

The scope of drilling and installation activities included five offsite intermediate wells associated with the Area 1 plume; five offsite intermediate and deep well pairs associated with the western plume; and one shallow and two intermediate wells associated with the Building 17-07 source investigation. Drilling began on August 23, 2010. Drilling and well installation was completed on November 2, 2010. Boring and well installation logs for the eighteen summer 2010 RI wells are presented in Appendix A.

Prior to drilling, public and private utility locates were performed. All wells were drilled with a rotosonic drill rig by Boart-Longyear. All wells are 2-inch schedule 40 PVC with 10 ft long, 0.020 slot screen and Colorado 10/20 sand pack. Surface completions were flush mount for all wells. After well installation all wells were developed. A summary of summer 2010 RI well installations AGW163 through AGW180 is presented in Table 1. The locations of the summer 2010 RI well locations are shown on Figure 1.

The summer 2010 RI work plan identified twelve initial wells and six optional wells. Optional wells were the furthest downgradient (northern wells) identified in the work plan scope. Installation of

these wells was meant to be contingent on collecting initial groundwater samples from upgradient wells directly after well installation but before development. The samples were submitted for VOC analysis on a 24-hour turnaround; the results were compared to screening levels. If there was a screening level exceedance in the initial well sample, the corresponding optional well was installed. Optional well OPT-I3 was installed and renamed AGW176(I) based on initial sample results from well AGW173(I).[4] Optional well OPT-I4 was installed and renamed AGW175(I) based on initial sample results from well AGW174(I). The other four optional wells (OPT-I1, OPT-I2, OPT-D1 and OPT-D2) on the Fana property directly south of 15th Avenue SW were installed without following this work plan protocol. This was because sample results from AGW172(I) through AGW176(I) north of Area 1 indicated that it was more likely that the western plume had migrated as far as these other optional wells. Another factor was property access and schedule. Property access was gained on the Fana property prior to City of Algona property access. Therefore, modification of the drilling program was required to expedite the overall drilling program schedule.

In addition to well installation, well AGW140 was modified by raising the surface completion approximately 3 inches. This well was located in a depression on the east side of Perimeter Road where water would collect after rain events. Raising the surface completion helps keep the flush mount monument above the surface of water that ponds in this depression. The PVC well was not modified; therefore the well elevation was not resurveyed.

2.3 GROUNDWATER SAMPLING

Groundwater sampling during the summer 2010 RI can be segregated into five groups or events:

- Borehole samples were collected from select new wells during drilling
- Initial samples were collected from select new wells prior to well development
- Samples were collected from six existing shallow wells adjacent to or in Building 17-07
- Samples were collected from twelve summer 2010 RI wells installed during the 3rd quarter 2010 and existing wells as part of the Phase IV groundwater monitoring program 3rd quarter sampling event
- Samples were collected from the final six summer 2010 RI wells following their development during the 4th quarter 2010 (i.e., after September 30, 2010).

All wells installed as part of the summer 2010 RI were automatically incorporated into the Phase IV monitoring program.

[4] Note that the initial sample result from AGW173(I) was 0.7 µg/L for TCE. Slightly above the screening level of 0.49 µg/L. Therefore the decision was made to install AGW176(I). After AGW173(I) was developed, sample results were non-detect for TCE.

Shallow zone borehole samples were collected at all five western plume well pair locations (AGW166-30, AGW168-29, AGW170-28.5, AG177-29, AGW179-30)[5] and at the two Building 17-07 intermediate well locations (AGW163-28 and AGW164-29). Also, the shallow well at Building 17-07 was drilled into the intermediate zone to collect a borehole sample (AGW165-55). Sample results for borehole samples are presented in Table 2.

At two well locations, samples were collected from the well prior to development as part of the decision analysis for installation of optional wells (see Section 2-2 and the work plan). Samples AGW173-50 and AGW174-59 collected on September 1 and August 23, 2010 respectively are initial well samples collected in the final well screen prior to development. These samples are essentially collected using the same protocols as borehole samples and are therefore given the same sample number designation. These initial well sample data are presented in Table 2. Table 2 is a comprehensive table of all collected groundwater data associated with the eighteen summer 2010 RI wells (AGW163 through AGW180).

During an evaluation of potential TCE sources (Landau Associates 2010c) six shallow wells (AGW028 and AGW046 through AGW050) were identified near the southern wall of Building 17-07 where TCE had been detected at elevated concentrations (e.g., 3.3 µg/L). Since the last sampling date was in 1997, these wells were resampled as part of the evaluation of Building 17-07. The resample data for these wells is presented in Table 3.

Each of the eighteen summer 2010 RI wells were sampled after well development. Of the eighteen wells, only twelve wells were installed and sampled during the third quarter (AGW163 through AGW165 and AGW172 through AGW180).[6] The first sample collected from each of the twelve wells was considered part of the 3rd quarter Phase IV groundwater monitoring program.[7] Twelve other existing wells were also sampled as part of this regularly scheduled quarterly sampling program. A sampling matrix for all 3rd quarter Phase IV wells is presented in Table 4. All data for the 3rd quarter are presented in Table 5. Detections only for the 3rd quarter are presented in Table 6.

Groundwater sample results go through an initial review after they are received from the lab. Results from samples AGW173(I) and AGW176(I) initially appeared anomalous. Based on our working conceptual model of groundwater flow, we anticipated that AGW173(I) would have a higher concentration than AGW176(I) and this was not the case. Therefore, these wells were resampled on

[5] The sample designation for borehole samples are the well name followed by the sample depth. For example, AGW177-29 is a borehole sample collected at 29 ft while drilling well AGW177.

[6] The other six wells (AGW166 through AGW171) were not installed until November 2010 due to property access constraints on City of Algona right-of-way. Since these wells were first sampled in the 4th quarter 2010, they were not considered as part of the 3rd quarter sampling event.

[7] Due to site access delays, wells AGW166 through AGW171 were installed and first sampled by November 8, 2010. The first official Phase IV monitoring program sampling event that these wells will be included in will be the 4th quarter 2010 (semi-annual) sampling event.

October 6, 2010. The resampling confirmed the initial results. These data results are discussed in Section 4. The resample data is presented in Table 2.

2.4 GROUNDWATER LEVEL MONITORING

Groundwater level monitoring was completed on two occasions. On September 29 and October 1, 2010 all shallow wells in the vicinity of Building 17-07 were measured for groundwater levels as part of the Building 17-07 evaluation. Measurements were collected at all existing wells in and adjacent to the building as well as new well AGW165. During this event, all intermediate and deep wells in the northern portion of the facility were also measured to assist with the evaluation of the Area 1 and western plumes. The six intermediate and deep wells on City of Algona property were not installed during the September/October groundwater level measurement event. Therefore intermediate and deep wells were measured a second time on November 8 and 9, 2010 to incorporate the six City of Algona wells. Groundwater level data is presented in Section 3.

3.0 HYDROGEOLOGY

All summer 2010 RI borings were drilled using a rotosonic method. Prior to this investigation phase, deep wells were drilled with air rotary, percussion (cable tool) or rotosonic method while shallow and intermediate wells were drilled with hollow-stem auger. Rotosonic drilling returns a continuous core of soil. This core in turn allows for a more detailed description of site geology. Geologic data was summarized into a series of four south-to-north cross sections as part of an analysis to refine the site hydrogeologic conceptual model. The cross sections also show the relative screen interval of existing wells. This information is useful in evaluating spatial trends in water quality. Cross section locations are shown on Figure 2. Cross sections are presented on Figures 3 through 6.

3.1 GEOLOGY

Spatial analysis of geologic data in the northern portion of the facility indicates a high degree of variation in soil texture from the ground surface to the silt aquitard at about 80 to 100 ft depth below ground surface (BGS). Most of the soil consists of poorly graded sand (USCS classification SP) and well to poorly graded gravel (USCS classification GW to GP). In places the aquifer grades to a silty sand (USCS classification SM), and occasional silt layers (USCS classification ML) are present. The high degree of variation in soil texture is consistent with a relatively high energy alluvial environment of deposition. The degree of variation is demonstrated on cross sections on Figures 3 through 6.

Review of soil samples from the eighteen summer 2010 RI borings did indicate that soil texture appears to coarsen with depth. In general, the gravel content appeared to increase from the shallow to the deep zone. This is potentially significant because it may indicate that the deep groundwater zone has a higher hydraulic conductivity than the overlying groundwater zones. The relative increase in gravel content is not necessarily evident based on the USCS soil classification symbol[8] shown on the cross sections but was evident in visual examination of the soil.

In certain areas the underlying aquitard was encountered at shallower depths than expected. This occurred along Perimeter Road in the vicinity of the WWPTP at wells AGW034(D), AGW143(D) and AGW146(D) (see Figure 3) and directly north of this area at wells AGW159(D), AGW171(D) and AGW180(D) (see Figure 4). At these locations, the silt aquitard was encountered at about Elevation 0 to Elevation -10 ft, MSL; consequently, the overall saturated thickness of the deep aquifer zone is less,

[8] Well graded sand (USCS symbol SW) can have gravel content between 0 and 49 percent. Similarly, well graded gravel (GW) can have gravel content between 51 and 100 percent.

possibly resulting in an area or ridge of lower overall aquifer transmissivity[9] extending north from the WWPTP.

3.2 GROUNDWATER FLOW

Groundwater levels were contoured to evaluate shallow groundwater flow direction in the vicinity of Building 17-07 and intermediate and deep groundwater flow in the vicinity of the Area 1 and western plumes.

Groundwater flow in the vicinity of Building 17-07 was characterized in the 2nd Revised RI Report. Data presented in that report indicated that flow varied from north-northwestward in July 2008 to north-northeastward in August 2008 and October 2008. During the summer 2010 RI, groundwater level measurements from the late September and early October 2010 indicated that shallow groundwater flow in the vicinity of Building 17-07 was northward with a slight northeast component. This characterization is similar to the characterization from October 2008 presented in the 2nd Revised RI Report. Shallow groundwater level contours associated with Building 17-07 from late September/early October 2010 are presented on Figure 7.

Intermediate and deep zone groundwater flow direction was characterized in the 2nd Revised RI Report as being generally northward over the northern portion of the facility. However, contour plots were based on limited information because of the limited number of intermediate and deep wells that existed at the time the report was issued. At the completion of the winter 2010 RI, intermediate and deep zone contours were prepared for March 2010 and submitted in the 1st Quarterly Status Report. These data indicated that gradients were generally northward but with some variation particularly north of the facility. During the summer 2010 RI, after installation of a number of new intermediate and deep wells, groundwater level measurements were collected from late September/early October 2010 and early November 2010. These data confirm the northward flow of groundwater in both the intermediate and deep zones however gradients are not uniform throughout the area of the Area 1 and western plumes. For example, it appears that the gradient shifts from slightly northwest south of 15th Avenue Southwest to north or slightly northeast north of this road. Intermediate zone groundwater contours for September/October and November are shown on Figures 8a and 8b respectively. Deep zone groundwater contours for September/October and November are shown of Figures 9a and 9b respectively.

[9] Transmissivity is the product of aquifer thickness and hydraulic conductivity. By definition, a smaller thickness would equate to a lower transmissivity all else being equal.

4.0 GROUNDWATER QUALITY DATA

Groundwater quality data from the summer 2010 RI and the two previous offsite plume investigation phases were evaluated to update the conceptual model associated with offsite plume source and contaminant migration. The VOC constituents that were detected most consistently during these investigations were TCE, cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride; these constituents are all related in that cis-1,2-DCE and vinyl chloride are breakdown products of TCE. Other detected constituents include 1,1-dichloroethene (1,1-DCE) and 1,1-dichloroethane (1,1-DCA); these constituents are related in that they are breakdown products of 1,1,1-trichlorethane (TCA).[10] A summary of the summer 2010 RI results for these five constituents are presented on Figure 10 for reference. Tetrachloroethene (PCE) was also detected intermittently at low concentrations. These data are not included on figures since PCE was typically not considered a constituent of concern for Building 17-07 and Area 1 based on data presented in the 2nd Revised RI. PCE data however is included on tables and discussed in the text as appropriate.

4.1 BUILDING 17-07 SHALLOW ZONE INVESTIGATION

A review (Landau Associates 2010c) was conducted of Building 17-07 historical practices and infrastructure. This review indicated that Building 17-07 is a potential source of VOC contamination mainly because of a former TCE degreaser (SWMU S-13a) that operated from 1966 to 1995 in the south central portion of the building (Landau Associates 2010c). In addition to its use in the degreaser, TCE was presumably stored adjacent to the SWMU S-13a degreaser.

The Building 17-07 TCE source investigation portion of the summer 2010 RI included shallow borehole sampling at two intermediate well locations [AGW163(I) and AGW164(I)] and the sampling of a shallow well (AGW165). Additionally, sampling of six shallow wells that are not part of the Phase IV groundwater monitoring program was conducted since those locations had not been sampled in over a decade.

Current concentrations of TCE in the shallow zone are very low everywhere at and near Building 17-07. The area where TCE is detected most consistently is near and south of the former TCE degreaser. However, with the exception of TCE detected at 3.7 µg/L at well AGW037, all TCE concentrations are currently below 2 µg/L. Well AGW037 was installed next to the former degreaser. New well AGW165, was installed directly north (i.e., downgradient) of the chrome sump (SWMU S-34) located next to the

[10] TCA was only detected twice during sampling events conducted between September and November 2010. TCA was detected at 0.2 µg/L at AGW160(I) and at 0.3 µg/L at AGW180(D). These two wells are adjacent to each other located directly south of 15th Street SW.

former degreaser. TCE was detected at 1.9 µg/L at this well. Most recent TCE sampling data in and around the WWPTP, adjacent to Building 17-07, did not exceed 1 µg/L. Historically, the highest shallow zone TCE concentrations in the vicinity of Building 17-07 were detected near the northeast corner of the building at wells installed for AOC A-01.[11] The maximum concentration was 9.3 µg/L at well AGW009. Concentrations have declined at this cluster of seven wells to where only one location has a TCE detection based on most recent sample results (TCE is 1.3 µg/L at AGW017). A summary of shallow zone TCE concentration data is presented on Figure 11.

Current concentrations of cis-1,2-DCE are also very low in the shallow zone. However the pattern of detections is slightly different than TCE and more closely resembles the pattern for vinyl chloride. Vinyl chloride is the VOC that has the highest detected shallow zone concentrations. Current concentrations are elevated (i.e., greater than 5 µg/L) directly north of Building 17-07 at Building 17-35 (SWMU S-18) at two locations (boring ASB0145 and well AGW152). Vinyl chloride was also detected at 6.1 µg/L at the shallow borehole sample at new well AGW164(I). Slightly elevated vinyl chloride concentrations are also detected near the northwest corner of the building at well AGW025 (vinyl chloride is 2.6 µg/L). A summary of cis-1,2-DCE and vinyl chloride concentration data is presented in Figures 12 and 13 respectively.

Current concentrations of PCE, 1,1-DCE and 1,1-DCA are extremely low. These constituents were only occasionally detected in the vicinity of Building 17-07. For example, 1,1-DCE was only detected at three locations (AGW038, AGW040 and AGW131) based on most recent concentrations; the maximum concentration is 0.078 µg/L. 1,1-DCA was also only detected at three locations (AGW038, AGW039 and AGW079) based on most recent concentrations; the maximum concentration is 0.5 µg/L. The maximum PCE concentration detected during the most recent sampling round is 0.068 µg/L at AGW050. A summary of 1,1-DCE and 1,1-DCA concentration data is presented in Figures 14 and 15 respectively. The most recent PCE concentration data is presented in Table 2.

4.2 OFFSITE SHALLOW ZONE INVESTIGATION

As part of the western plume investigation conducted during the summer 2010 RI, borehole groundwater samples were collected in the shallow zone at each of the intermediate well clusters [AGW166(I), AGW168(I), AGW170(I), AGW177(I) and AGW179(I)]. All five of these well clusters are located northwest of the site, west of Perimeter Road but south of 15th Avenue Southwest. VOCs were detected at all locations. A summary of VOC detections at these well locations is included on Figure 10.

[11] AOC A-01 consists of former gasoline and diesel underground storage tanks. These tanks are not suspected of being a source of TCE.

TCE was detected in all of these borehole samples except AGW179(I) (30 ft-BHS). Detected concentrations ranged from 3.0 µg/l to 8.6 µg/L. At AGW179(I) (30 ft-BHS) cis-1,2-DCE was detected at 6.5 µg/L. Cis-1,2-DCE was also detected at the other four shallow zone borehole sample locations between 1.9 µg/L and 6.4 µg/L. Vinyl chloride, 1,1-DCE, and 1,1-DCA were also detected at some of the shallow borehole sample locations. PCE was detected at all five of the shallow borehole locations. The maximum concentration was 0.12 µg/L at AGW170(I) (28.5 ft-BHS).

At AGW177(I) (29 ft-BHS) all six VOC constituents of interest were detected. TCE, cis-1,2-DCE and 1,1-DCE were detected at concentrations that are higher than current concentrations in the Building 17-07 area. The TCE concentration was 8.6 µg/L, which is higher than any other historical shallow zone TCE detection at the facility[12] with the exception of Area 1 and select wells at AOC A-01. The occurrence of VOCs at this location in particular and shallow zone offsite groundwater in general does not appear to be consistent with spatial shallow zone VOC concentration trends detected at the facility.

4.3 INTERMEDIATE ZONE VOC PLUMES

The summer 2010 RI groundwater sample results helped define the nature and extent of intermediate zone VOC plumes. The primary constituent in both the western plume and the Area 1 plume is TCE though cis-1,2-DCE, vinyl chloride, PCE, 1,1-DCE and 1,1-DCA are also detected, particularly in the western plume.

The western TCE plume appears to extend from the northern portion of Building 17-07 approximately 5,000 ft downgradient to AGW176(I). The plume is relatively dilute [i.e., the current maximum concentration is 11 µg/L at AGW145(I)] and is long and relatively narrow. The plume appears to flow slightly to the northwest before bending back toward the northeast downgradient of 15th Avenue SW. The Area 1 TCE plume appears to show a similar pattern though offsite concentrations are slightly lower. Approximate extents of intermediate zone TCE plumes are shown on Figure 16.

Cis-1,2-DCE and vinyl chloride are also detected in the intermediate zone plumes. During the most recent sampling event, the maximum cis-1,2-DCE concentration is 7.5 µg/L at AGW145(I) located north of the WWPTP; the maximum vinyl chloride concentration is 6.8 µg/L at AGW155(I) located on the facility between the WWPTP and Building 17-07. The detections of these two constituents are shown on Figures 17 and 18 respectively.

PCE, 1,1-DCE and 1,1-DCA were also occasionally detected at intermediate zone well locations during the most recent sampling. The highest PCE concentration is 0.25 µg/L at AGW157(I) located on

[12] Based on the RI database for groundwater that consists of data from 1995 to present.

the facility north of Building 17-07 adjacent to Perimeter Road on the PSE Interurban Trail. The highest 1,1-DCE concentration is 0.4 µg/L at AGW147(I) located north of Area 1 adjacent to Perimeter Road on the PSE Interurban Trail. The highest 1,1-DCA concentrations were 0.9 and 1.1 µg/L at AGW055R(I) (located in Area 1) and AGW147(I) respectively.

4.4 DEEP ZONE VOC PLUMES

There appears to be a defined deep zone western TCE plume that follows a pattern similar to the intermediate zone TCE plume. The highest TCE concentration based on most recent sampling data is 5.2 µg/L at AGW159(D) located on Boundary Boulevard northwest of the facility. TCE is also detected in the deep zone within the footprint of the Area 1 intermediate zone plume, however concentrations are very low; the highest TCE concentration based on most recent sampling data is 0.9 µg/L at AGW138(D). The very low concentrations make it difficult to define a plume in the deep zone associated with Area 1. Deep zone TCE concentrations are shown on Figure 19.

Cis-1,2-DCE and vinyl chloride were also detected in the deep zone western plume during the most recent sampling event. Cis-1,2-DCE was detected at all deep western plume locations except AGW143(D). The maximum cis-1,2-DCE concentration is 2.0 µg/L at AGW146(D). The maximum vinyl chloride concentration is 0.36 at AGW146(D). The detections of these two constituents are shown on Figures 20 and 21 respectively. During the most recent sampling round, PCE was detected at four deep zone locations. The maximum concentration was 0.067 µg/L at AGW180(D). 1,1-DCE was not detected. 1,1DCA was only detected at AGW180(D) at 0.3 µg/L.

5.0 DISCUSSION

The summer 2010 RI provided additional information to define the hydrogeologic conceptual model offsite to the north of the facility. Groundwater flow in this area is northward, however there is some variation in horizontal gradients from northwestward to slightly northeastward. The variation in gradients may be due to changes in aquifer transmissivity or variations in groundwater recharge or discharge. Changes in aquifer transmissivity appear to occur due to changes in the elevation of the top of the underlying aquitard. Recharge and discharge may be affected by the relative amount of impervious surface or constructed wetland features that appear to be present north of the site (e.g., the property directly west of the Fana property is a maintained wetland).

Additional data collected during the recent investigation helped further define two intermediate zone VOC plumes that flow northward and beyond the facility boundary. The Area 1 and western plumes are similar in that TCE is the major constituent and the plumes are fairly narrow with relatively low TCE concentrations. However the western plume extends further vertically into the deep zone and contains higher concentrations of secondary VOC constituents such as cis-1,2-DCE and vinyl chloride. Current data indicate that the leading edge of both plumes extends beyond the northernmost wells. Additional field investigations will be necessary to identify the extent of both the western and Area 1 plumes.

Also, relatively low, but significant concentrations of VOCs were detected in shallow borehole samples at offsite western plume wells. During the 2nd Revised RI, shallow wells and borings were installed along Perimeter Road that confirmed that shallow zone VOC contamination was not migrating offsite northwest of Perimeter Road. The detections of VOCs in this area may be indicative of another source of VOC contamination that is not part of the Boeing facility. Additional investigations will be necessary to identify the source and nature and extent of offsite shallow zone VOC contamination.

The source of the Area 1 plume was previously identified as SWMU S-12b (former TCE degreaser) and AOC A-08 (former tank line). However the source of the western plume has not been identified. Historically, TCE concentrations at Building 17-07 have been relatively low (i.e., less than 4 µg/L) and do not appear to be indicative of a source consistent with the nature and extent of the western plume. The three additional wells installed in and around Building 17-07 during the summer 2010 RI were consistent with historical data in that concentrations were low. Additional field investigations will be required to identify the western plume source.

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6.0 REFERENCES

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Landau Associates, 2010c. *Technical Memorandum: Building 17-07 TCE Source Evaluation.* July 19.

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Legend

- New Shallow Well Location
- New Intermediate Well Location
- New Deep Well Location
- AGW001 — Existing Shallow Well Location and Designation
- AGW001(I) — Existing Intermediate Well Location and Designation
- AGW001(D) — Existing Deep Well Location and Designation
- 3.0 — Intermediate Zone TCE Concentration Contour (µg/L)
- King County Parcels (2010)
- City Limits

N

AGW176 (I) AGW175 (I) AGW173 (I) AGW174 (I) AGW172 (I) AGW161 (I) AGW177 (I) AGW179 (I) AGW178 (D) AGW180 (D) AGW160 (I) AGW150 (I) AGW162 (I) AGW149 (I) AGW068 AGW148 (I) AGW142 (D) AGW141 (I) AGW064 AGW151 (I) AGW147 (I) AGW069 AGW140 (I) AGW136 AGW139 (I) AGW065 AGW138 (D) AGW137 (I) AGW168 (I) AGW170 (I) AGW169 (D) AGW171 (D) AGW166 (I) AGW167 (D) AGW159 (D) AGW158 (I) AGW031R AGW095R (I) AGW066 AGW125 AGW098R (D) AGW067 AGW073 (D) AGW126 (I) AGW135 AGW072 (I) AGW055R (I) AGW033 AGW006R AGW157 (I) AGW035 (D) AGW112R AGW053R AGW110R AGW106R AGW002R AGW134 AGW146 (D) AGW145 (I) AGW001R AGW014 AGW057R (I) AGW152 AGW016 AGW060R (I) AGW144 (I) AGW013 AGW058R AGW059R AGW032 AGW015 AGW143 (D) AGW156 (I) AGW017 AGW012 AGW009 AGW010 AGW029 AGW027 AGW131 AGW011 AGW034 (D) AGW130 AGW024 AGW025 AGW043 AGW105 (I) AGW155 (I) AGW044 AGW030 AGW164 (I) AGW163 (I) AGW079 AGW165 AGW042 AGW037 AGW049 AGW128 AGW026 AGW050 AGW048 AGW115 AGW041 AGW083 AGW028 AGW047 AGW084 AGW154 (I) AGW046 AGW129 AGW085 AGW040 AGW086 AGW038 AGW039 AGW076 AGW117 AGW077 AGW116 AGW078 AGW118 AGW127 AGW104 AGW082

17-239 17-234 17240 17-70 17-07 17-04 17-06 17-74 17-12 17-10 17-29 17-44 17-16

Western Plume

Glimcher

Fana

Boundary Blvd

15th Street SW

Junior Achievement

Area 1 Plume

YMCA

Area 1
AMB Property

GSA Property

City of Auburn

City of Algona

10th Street SW

Milwaukee Avenue N

Perimeter Road

PSP&L R/W

UPRR R/W

WWPTP

3.0 5.0

Area Shown

Boeing Auburn Plant Map

Notes

1. "AGW" Designates Required Wells.
2. "OPT" Designates Optional Wells.
3. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Base map source: Geometrix 2003; Aerial Photo Source: Google Earth Professional 2009; Parcel Data Source: King County GIS 2010

0 500 1000
Scale in Feet

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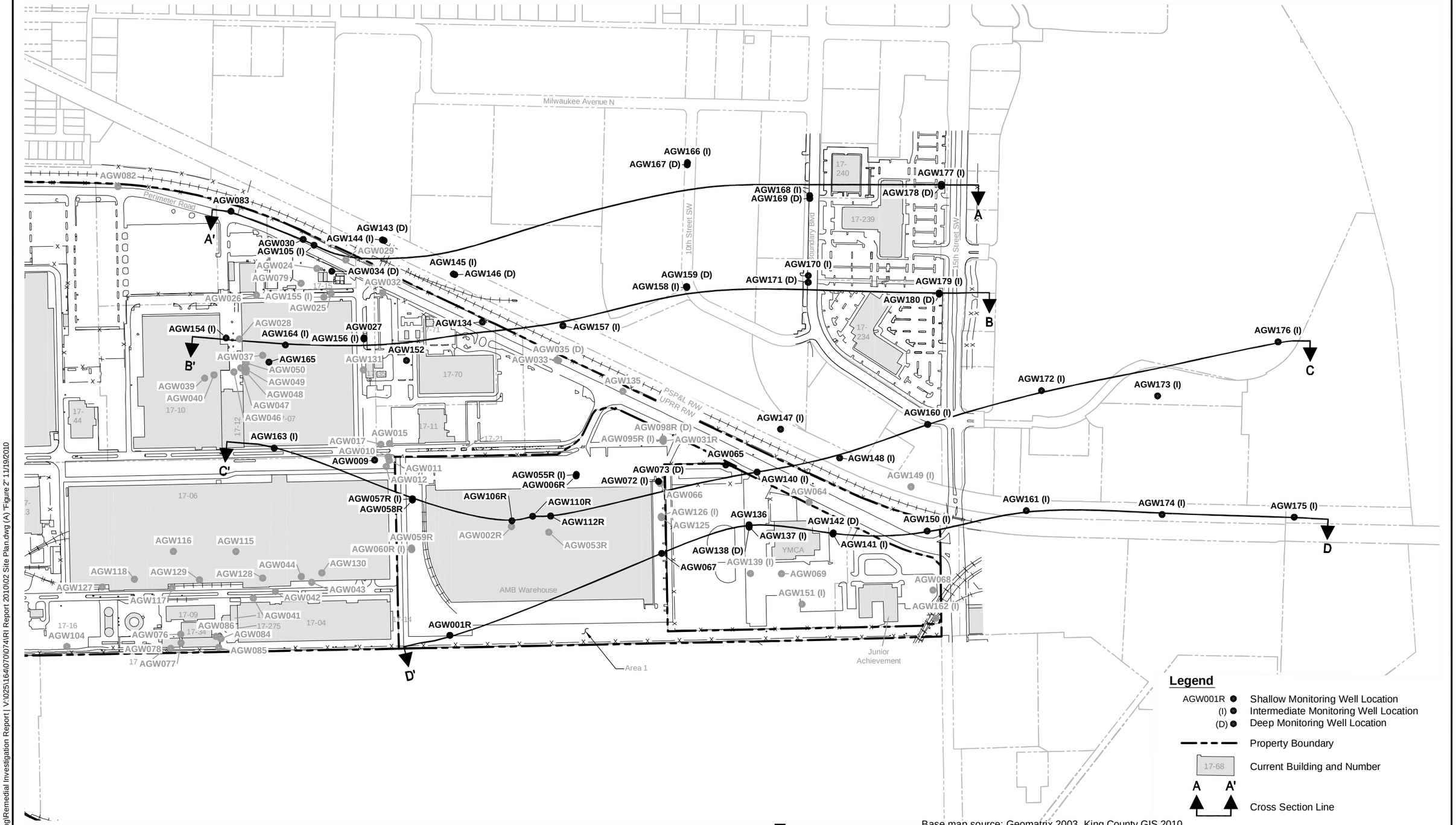
Remedial Investigation
Auburn, Washington

Well Locations

Figure
1



Base map source: Geomatrix 2003, King County GIS 2010

Boeing\Remedial investigation Report | V:\025\164\070\074\RI Report 2010\02 Site Plan.dwg (A) "Figure 2" 11/19/2010

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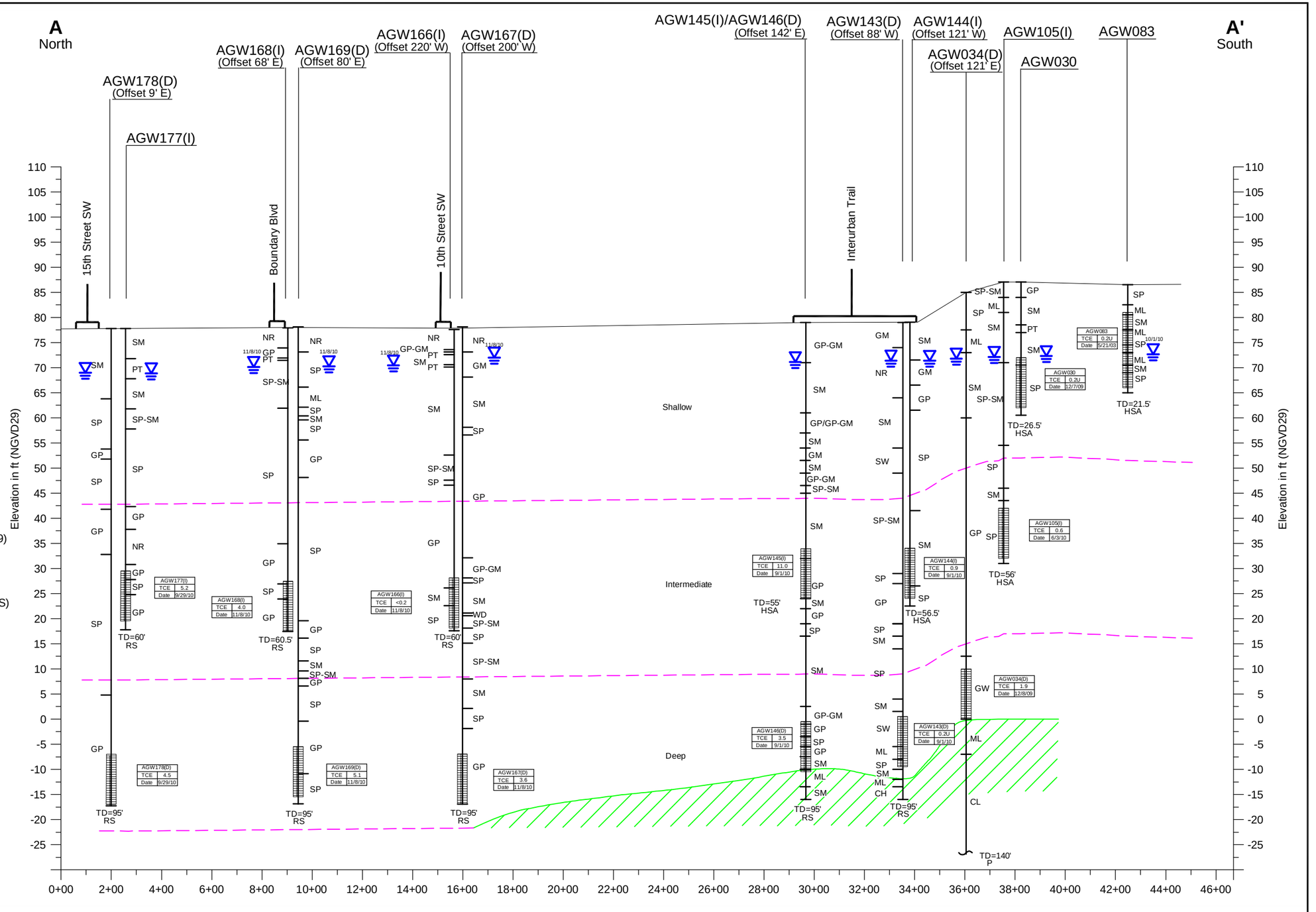
Boeing Auburn Remedial Investigation Auburn, Washington	**Site Plan**	Figure **2**



Legend

- AGW034(D) (Offset 81' E) — Exploration Designation; Offset Distance in Feet and Direction
- Top of Exploration
- Groundwater Level (NGVD29)
- Well Screen Interval
- Bottom of Exploration
- TD=140' — Total Depth of Boring (ft, BGS)
- P — Drilling Method
- Aquifer Zone Break
- Aquitard

Notes

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.
2. Groundwater elevations (NGVD29) were collected on September 28, 2010 unless otherwise noted.
3. Trichloroethene (TCE) concentrations are most recent and are in µg/L.
4. NR = No Recovery
   HSA = Hollow Stem Auger
   RS = Rotosonic
   P = Percussion

0 400 800

Horizontal Scale 1" = 400'
Vertical Scale 1" = 20'

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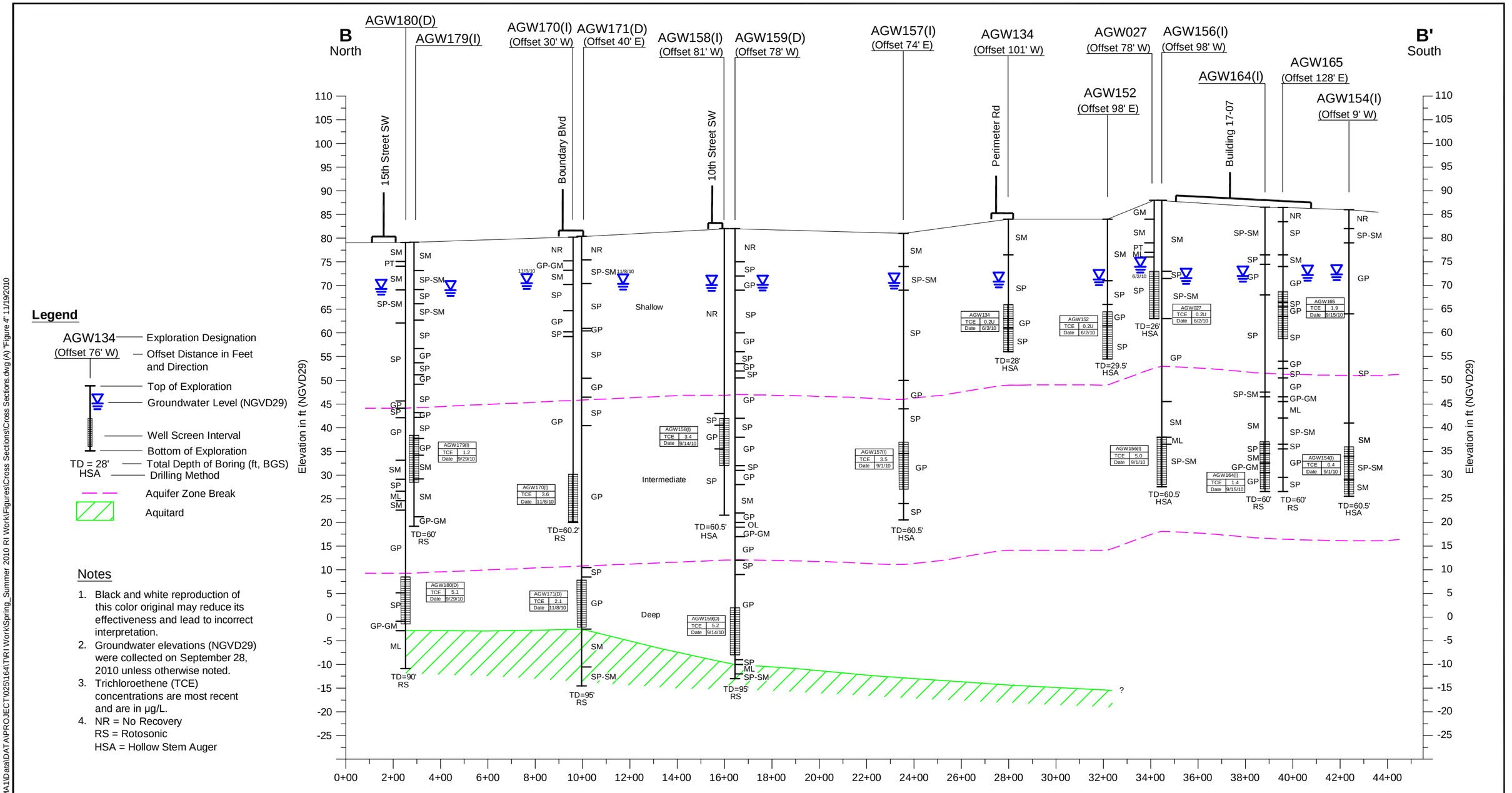
Remedial Investigation
Auburn, Washington

Geologic Cross Section A-A'

Figure 3



Legend

AGW134 (Offset 76' W) — Exploration Designation; Offset Distance in Feet and Direction

Top of Exploration

Groundwater Level (NGVD29)

Well Screen Interval

Bottom of Exploration

TD = 28' HSA — Total Depth of Boring (ft, BGS); Drilling Method

Aquifer Zone Break

Aquitard

Notes

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.
2. Groundwater elevations (NGVD29) were collected on September 28, 2010 unless otherwise noted.
3. Trichloroethene (TCE) concentrations are most recent and are in µg/L.
4. NR = No Recovery
   RS = Rotosonic
   HSA = Hollow Stem Auger

0 400 800

Horizontal Scale 1" = 400'
Vertical Scale 1" = 20'

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Boeing Auburn Remedial Investigation Auburn, Washington	**Geologic Cross Section B-B'**	Figure 4

C North

C' South

Elevation in ft (NGVD29)

AGW176(I)

AGW173(I) (Offset 163' E)

AGW172(I) (Offset 70' W)

15th Street SW

AGW160(I)

AGW148(I) (Offset 72' E)

Perimeter Rd

AGW147(I) (Offset 223' W)

AGW140(I)

AGW065 (Offset 110' W)

AGW072(I)/AGW073(D) (Offset 90' W)

AGW006R (Offset 202' W)

AGW055R(I) (Offset 204' W)

AGW112R

AGW110R

AGW106R

AMB Warehouse

AGW057R(I)

AGW058R

AGW009 (Offset 132' W)

Building 17-07

AGW163(I)

Shallow

Intermediate

Deep

AGW176(0) TCE 5.4 Date 10/6/10

AGW173(0) TCE 0.2U Date 10/6/10

AGW172(0) TCE 3.4 Date 9/16/10

AGW160(0) TCE 4.7 Date 9/14/10

AGW148(0) TCE 5.0 Date 9/14/10

AGW147(0) TCE 0.2U Date 9/14/10

AGW140(0) TCE 5.4 Date 9/14/10

AGW065 TCE 0.2U Date 6/9/10

AGW072(0) TCE 2.2 Date 6/7/10

AGW073(D) TCE 0.3 Date 6/7/10

AGW006R TCE 0.9 Date 6/7/10

AGW055R(I) TCE 0.8 Date 6/7/10

AGW112R TCE 2.0 Date 6/8/10

AGW110R TCE 0.2U Date 6/8/10

AGW106R TCE 0.2U Date 6/8/10

AGW057R(I) TCE 2.0 Date 6/7/10

AGW058R TCE 0.7 Date 6/7/10

AGW009 TCE 0.2U Date 6/10/10

AGW163(I) TCE 3.3 Date 9/15/10

TD=60' RS

TD=60' RS

TD=60' RS

TD=60.5' HSA

TD=55' HSA

TD=56.5' HSA

TD=46' RS

TD=27' HSA

TD=26.5' HSA

TD=46.5' HSA

TD=35.5' HSA

TD=35' HSA

TD=35' HSA

TD=50.5' HSA

TD=25.5' HSA

TD=20' HSA

TD=60' RS

TD=114' AR

GW

CL/ML

0+00 2+00 4+00 6+00 8+00 10+00 12+00 14+00 16+00 18+00 20+00 22+00 24+00 26+00 28+00 30+00 32+00 34+00 36+00 38+00 40+00 42+00 44+00 46+00 48+00 50+00 52+00 54+00 56+00 58+00

Legend

AGW173(I) — Exploration Designation

(Offset 168' E) — Offset Distance in Feet and Direction

Top of Exploration

Groundwater Level (NGVD29)

Well Screen Interval

Bottom of Exploration

TD = 60' — Total Depth of Boring (ft, BGS)

RS — Total Depth of Boring

Aquifer Zone Break

Aquitard

0 400 800

Horizontal Scale 1" = 400'
Vertical Scale 1" = 20'

Notes

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.
2. Groundwater elevations (NGVD29) were collected on September 28, 2010 unless otherwise noted.
3. Trichloroethene (TCE) concentrations are most recent and in in µg/L.
4. NR = No Recovery
   RS = Rotosonic
   HSA = Hollow Stem Auger
   AR = Air Rotary

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Boeing Auburn
Remedial Investigation
Auburn, Washington

Geologic Cross Section C-C'

Figure 5

D North

D' South

AGW175(I) AGW174(I) AGW161(I) 15th Street SW AGW150(I) Perimeter Rd AGW141(I) AGW142(D) AGW136/AGW137(I) AGW138(D) AGW067 AMB Warehouse AGW001R

Elevation in ft (NGVD29)

Shallow

Intermediate

Deep

AGW175(I): NR, GP, SM, NR, SM, SP, SP-SM, SP, ML, SM, GP-GM, SP, GP; TD=60' RS

AGW175(I) TCE 3.4 Date 9/15/10

AGW174(I): NR, SM, SP-SM, SP, SP-SM, SP, SP-SM, SM, SP, SM, GP; TD=60' RS

AGW174(I) TCE 3.6 Date 9/15/10

AGW161(I): NR, SM, SP-SM, SP, SM, GP-GM, SP; TD=60.4' HSA

AGW161(I) TCE 2.8 Date 9/15/10

AGW150(I): GP-GM, NR, SM, SP/SM, ML, SM, GP-GM, NR, GP/SP, SP, SP-SM, SP; TD=95' RS

AGW150(I) TCE 2.3 Date 9/14/10

AGW141(I): SM, ML, SM, ML, SM, GP-GM; TD=47' RS

AGW141(I) TCE 3.0 Date 6/9/10

AGW142(D): SM, ML, SM, GP, NR, SM, SP-SM, GP-GM, SP, GP, SP, GP, SM, GP; TD=92' RS

AGW142(D) TCE 0.7 Date 6/9/10

AGW136/AGW137(I): SP, TD=45.5' HSA; SP-SM, NR, SP; TD=65' HSA

AGW136 TCE 3.3 Date 6/9/10

AGW137(I) TCE 5.6 Date 6/9/10

AGW138(D): SM, GP, SM, GP, SP-SM, GP, GP-GM, SM, GM, GP, SM, GP, SP-SM, GP, SP; TD=93' RS

AGW138(D) TCE 0.9 Date 6/9/10

AGW067: SM, GP-GM; TD=29' HSA; 6/7/10

AGW067 TCE 5.9 Date 6/7/10

AGW001R: SM, SP-SM, GP; TD=25.5' HSA; 6/7/10

AGW001R TCE 3.4 Date 6/7/10

0+00 2+00 4+00 6+00 8+00 10+00 12+00 14+00 16+00 18+00 20+00 22+00 24+00 26+00 28+00 30+00 32+00 34+00 36+00 38+00 40+00 42+00 44+00 46+00 48+00 50+00 52+00

Legend

AGW175(I) — Exploration Designation

Top of Exploration

Groundwater Level (NGVD29)

Well Screen Interval

Bottom of Exploration

TD=60' — Total Depth of Boring (ft, BGS)

RS — Drilling Method

Aquifer Zone Break

0 400 800

Horizontal Scale 1" = 400'
Vertical Scale 1" = 20'

Notes

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.
2. Groundwater elevations (NGVD29) were collected on September 28, 2010 unless otherwise noted.
3. Trichloroethene (TCE) concentrations are most recent and in µg/L.
4. NR = No Recovery
   HSA = Hollow Stem Auger
   RS = Rotosonic

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Remedial Investigation
Auburn, Washington

Geologic Cross Section D-D'

Figure 6

Legend

- AGW001R 71.68 — Monitoring Well Location, Designation and Groundwater Elevation (ft, msl)
- 17-68 — Current Building and Number
- 69.0 — Groundwater Elevation Contour - Major
- 69.2 — Groundwater Contour Interval - Minor
- Property Boundary

AGW083 72.65
AGW030 72.29
AGW029 71.84
AGW024 72.19
AGW079 72.31
AGW026 72.42
AGW025 72.08
AGW032 71.80
AGW134 70.81
AGW028 72.44
AGW027 71.65
AGW037 72.33
AGW165 72.23
AGW046 72.34
AGW040 72.55
AGW050 72.36
AGW038 72.59
AGW039 72.53
AGW047 72.34
AGW049 72.28
AGW048 72.29
AGW152 71.30
AGW131 71.63
AGW015 71.43
AGW017 71.54
AGW013 71.34
AGW016 71.37
AGW009 71.59
AGW010 71.48
AGW011 71.50

72.6 72.4 72.2 72.0 71.8 71.6 71.4 71.2 71.0

PSP&L R/W
UPRR R/W
Perimeter Road

17-10 17-07 17-12 17-11 17-21 17-70 17-35 17-44 17-15 17-71

Notes

1. Water levels measured on September 28th and October 1st.
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

N

0 200 400

Scale in Feet

Base map source: Geomatrix 2003

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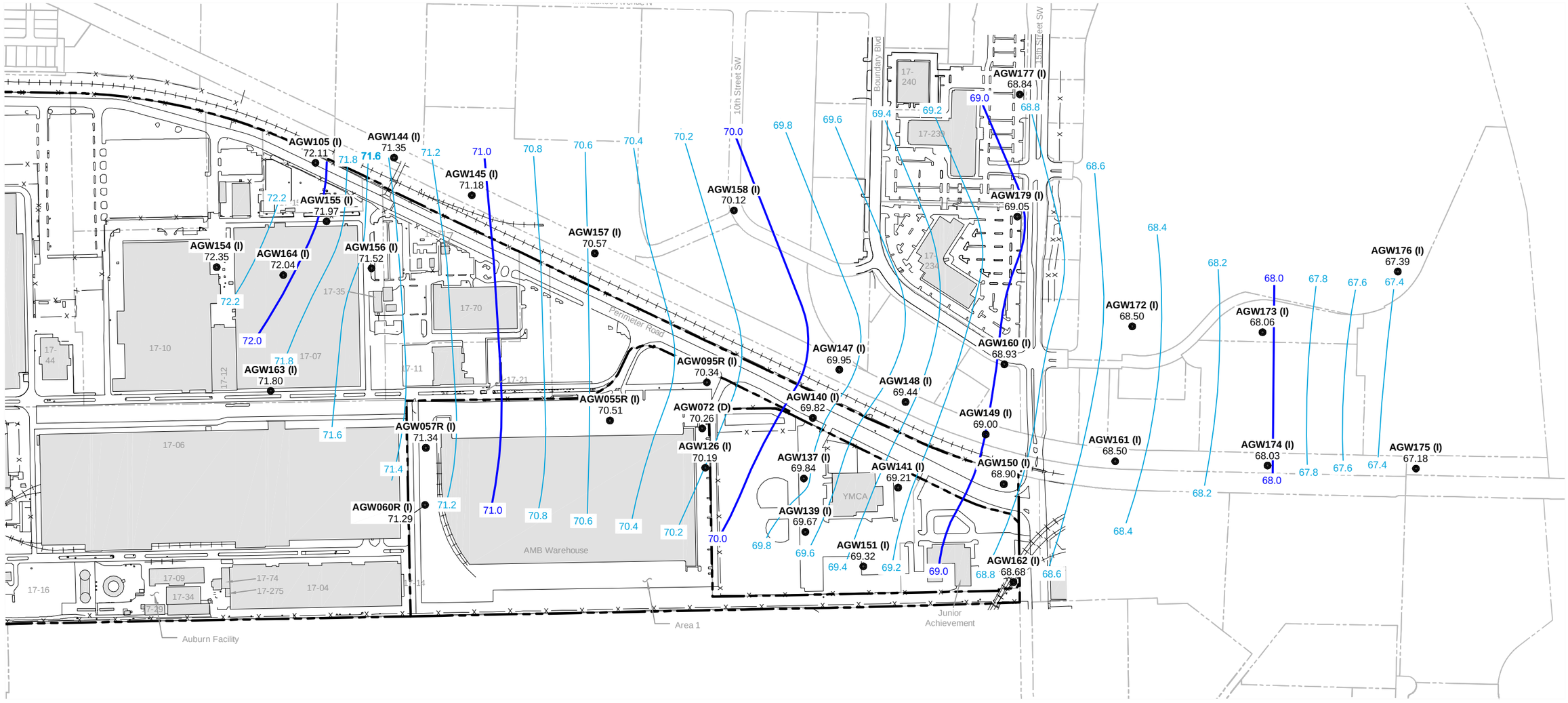
Remedial Investigation
Auburn, Washington

Building 17-07 Shallow Zone Water Level Contours October 2010

Figure 7

Boeing\Remedial Investigation Report | V:\025\164\070\074\RI Report 2010\07-08a-09a WL Oct.dwg (A) "Figure 7" 11/19/2010



Legend

- AGW001R 71.68 — Monitoring Well Location, Designation and Groundwater Elevation (ft, msl)
- 17-68 — Current Building and Number
- 69.0 — Groundwater Elevation Contour - Major
- 69.2 — Groundwater Contour Interval - Minor
- Property Boundary

Notes

1. Water levels measured on September 28th and October 1st.
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

N

0 500 1000

Scale in Feet

Base map source: Geomatrix 2003

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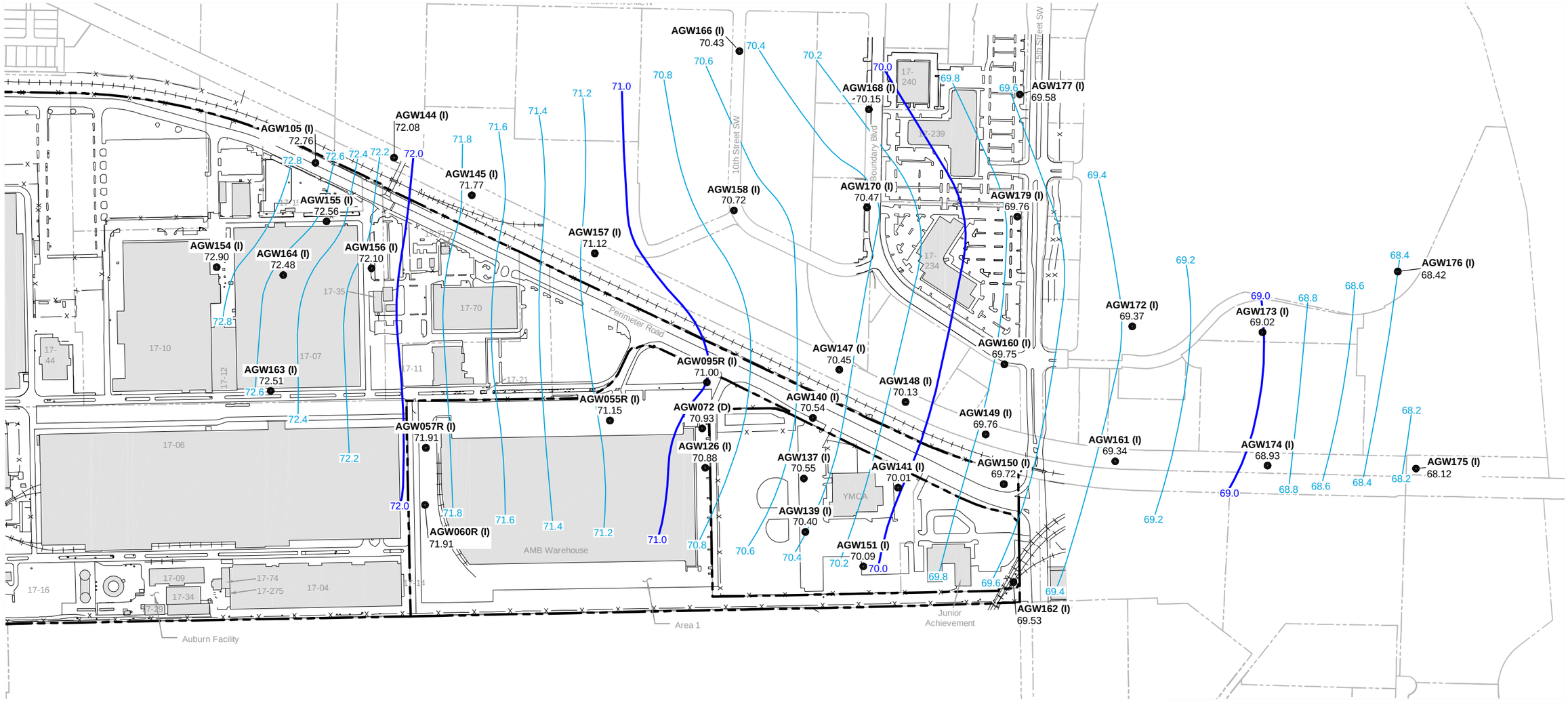
Boeing Auburn Remedial Investigation Auburn, Washington	**Intermediate Zone Water Level Contours October 2010**	Figure **8a**

Boeing\Remedial Investigation Report | V:\025\164\070\074\RI Report 2010\07-08a-09a WL Oct.dwg (A) "Figure 8a" 11/19/2010



Legend

- AGW001R 71.68 — Monitoring Well Location, Designation and Groundwater Elevation (ft, msl)
- 17-68 — Current Building and Number
- 69.0 — Groundwater Elevation Contour - Major
- 69.2 — Groundwater Contour Interval - Minor
- Property Boundary

Notes

1. Water levels measured on November 8th and 9th.
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

N

0 500 1000

Scale in Feet

Base map source: Geomatrix 2003

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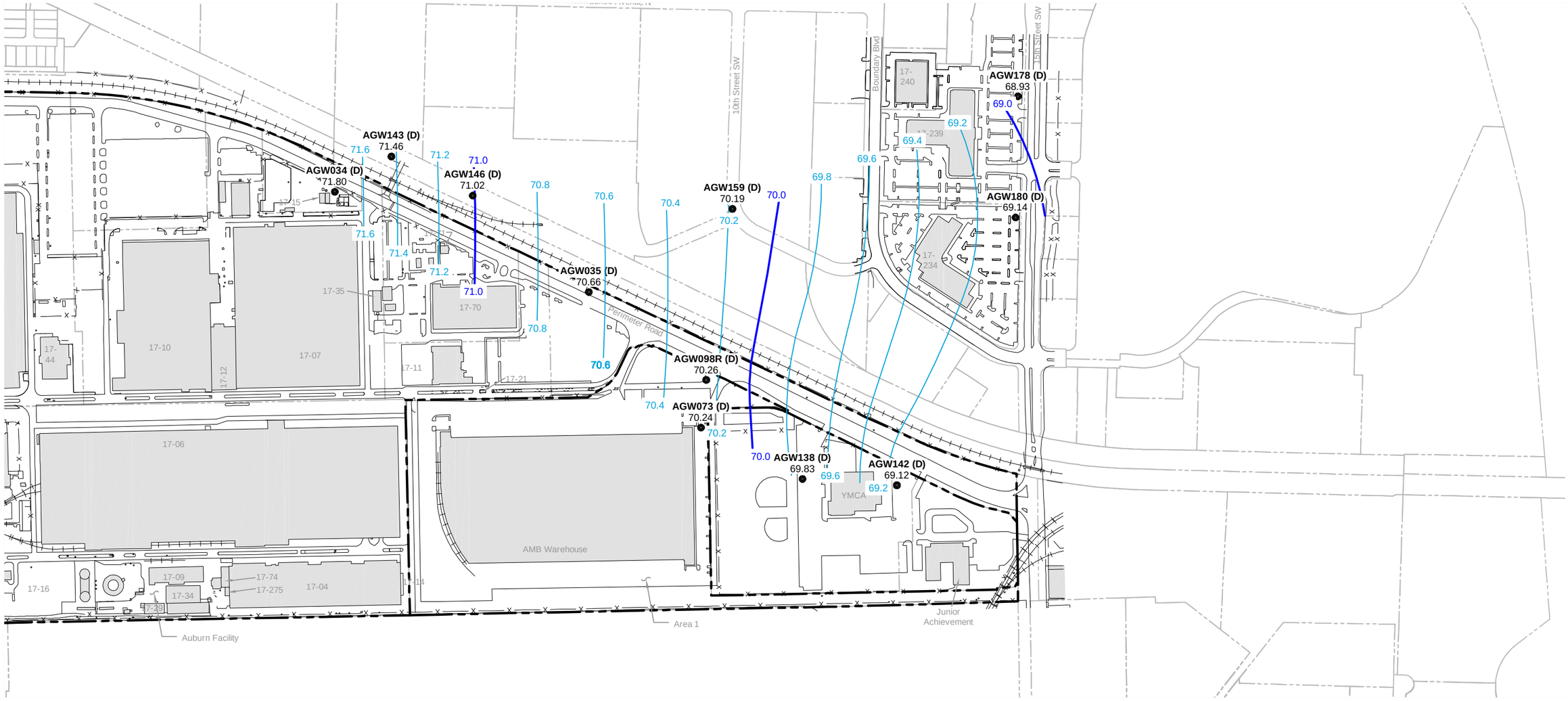
Remedial Investigation
Auburn, Washington

Intermediate Zone
Water Level Contours
November 2010

Figure
8b



Legend

- AGW001R 71.68 — Monitoring Well Location, Designation and Groundwater Elevation (ft, msl)
- 17-68 — Current Building and Number
- 69.0 — Groundwater Elevation Contour - Major
- 69.2 — Groundwater Contour Interval - Minor
- Property Boundary

Notes

1. Water levels measured on September 28th and October 1st.
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

N

0 500 1000

Scale in Feet

Base map source: Geomatrix 2003

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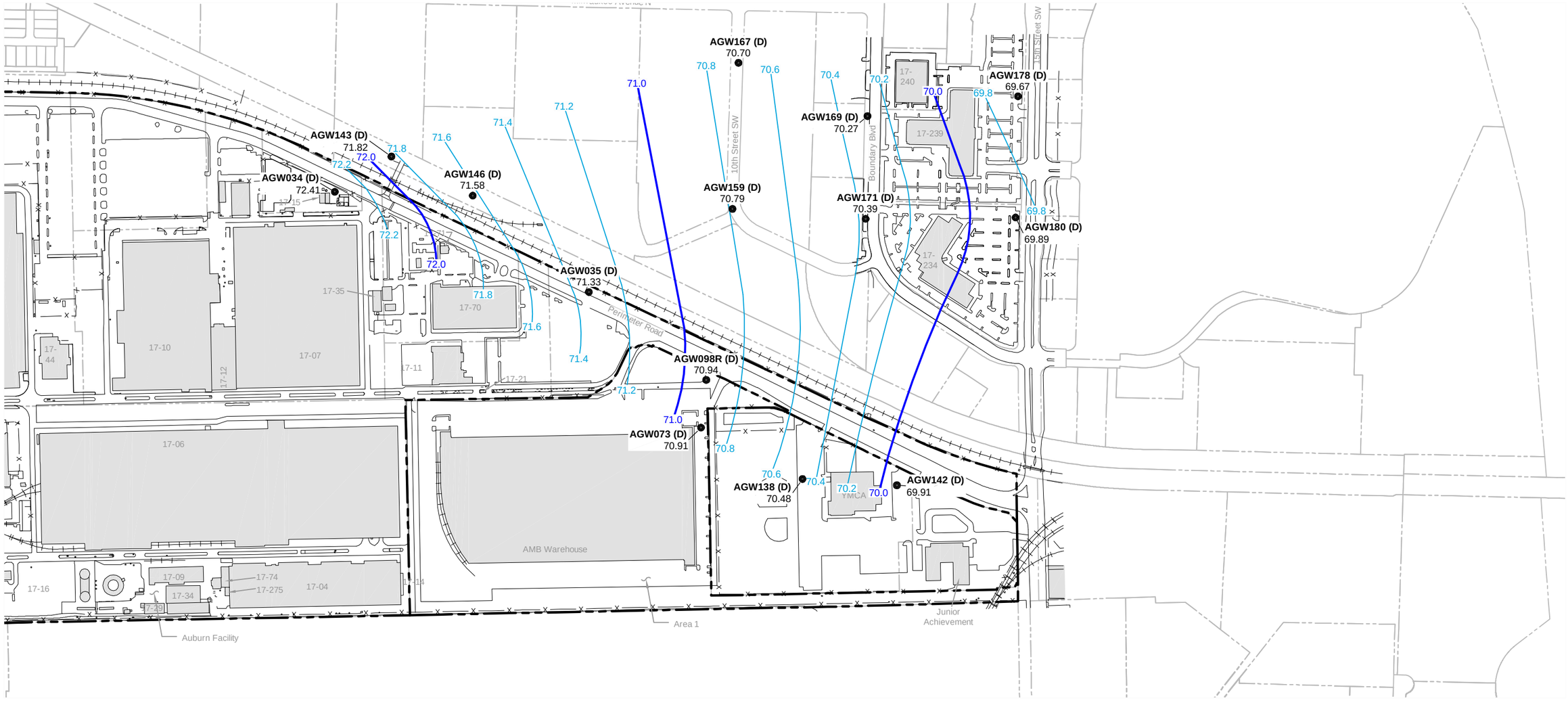
Boeing Auburn
Remedial Investigation
Auburn, Washington

Deep Zone
Water Level Contours
October 2010

Figure
9a



Legend

- AGW001R 71.68 — Monitoring Well Location, Designation and Groundwater Elevation (ft, msl)
- 17-68 — Current Building and Number
- 69.0 — Groundwater Elevation Contour - Major
- 69.2 — Groundwater Contour Interval - Minor
- Property Boundary

Notes

1. Water levels measured on November 8th and 9th.
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

N

0 500 1000

Scale in Feet

Base map source: Geomatrix 2003

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Boeing Auburn
Remedial Investigation
Auburn, Washington

Deep Zone
Water Level Contours
November 2010

Figure 9b

AGW164 (I)		
Constituent	Date	
1,1-DCE	9/15/2010	<0.2
1,1-DCA	9/15/2010	<0.2
Cis-1,2-DCE	9/15/2010	0.6
TCE	9/15/2010	1.4
VC	9/15/2010	0.54

AGW164 (I) (29ft-BHS)		
Constituent	Date	
1,1-DCE	8/24/2010	<0.2
1,1-DCA	8/24/2010	<0.2
Cis-1,2-DCE	8/24/2010	3.9
TCE	8/24/2010	0.9
VC	8/24/2010	6.1

AGW165 (I)		
Constituent	Date	
1,1-DCE	9/15/2010	<0.2
1,1-DCA	9/15/2010	<0.2
Cis-1,2-DCE	9/15/2010	0.9
TCE	9/15/2010	1.9
VC	9/15/2010	0.09

AGW165 (I) (55ft-BHS)		
Constituent	Date	
1,1-DCE	8/25/2010	<0.2
1,1-DCA	8/25/2010	<0.2
Cis-1,2-DCE	8/25/2010	0.2
TCE	8/25/2010	0.6
VC	8/25/2010	0.4

AGW163 (I)		
Constituent	Date	
1,1-DCE	9/15/2010	<0.2
1,1-DCA	9/15/2010	<0.2
Cis-1,2-DCE	9/15/2010	1
TCE	9/15/2010	3.3
VC	9/15/2010	0.039

AGW163 (I) (28ft-BHS)		
Constituent	Date	
1,1-DCE	8/26/2010	<0.2
1,1-DCA	8/26/2010	<0.2
Cis-1,2-DCE	8/26/2010	<0.2
TCE	8/26/2010	0.8
VC	8/26/2010	<0.02

AGW166 (I)		
Constituent	Date	
1,1-DCE	11/08/2010	<0.2
1,1-DCA	11/08/2010	<0.2
Cis-1,2-DCE	11/08/2010	<0.2
TCE	11/08/2010	<0.2
VC	11/08/2010	<0.2

AGW166 (I) (30ft-BHS)		
Constituent	Date	
1,1-DCE	10/26/2010	<0.2
1,1-DCA	10/26/2010	<0.2
Cis-1,2-DCE	10/26/2010	2.5
TCE	10/26/2010	3.4
VC	10/26/2010	0.6

AGW167 (D)		
Constituent	Date	
1,1-DCE	11/08/2010	<0.2
1,1-DCA	11/08/2010	<0.2
Cis-1,2-DCE	11/08/2010	2.4
TCE	11/08/2010	3.6
VC	11/08/2010	0.3

AGW168 (I)		
Constituent	Date	
1,1-DCE	11/08/2010	<0.2
1,1-DCA	11/08/2010	<0.2
Cis-1,2-DCE	11/08/2010	1.8
TCE	11/08/2010	4.0
VC	11/08/2010	0.2

AGW168 (I) (29ft-BHS)		
Constituent	Date	
1,1-DCE	10/28/2010	<0.2
1,1-DCA	10/28/2010	<0.2
Cis-1,2-DCE	10/28/2010	1.2
TCE	10/28/2010	3.0
VC	10/28/2010	0.076

AGW169 (D)		
Constituent	Date	
1,1-DCE	11/08/2010	<0.2
1,1-DCA	11/08/2010	<0.2
Cis-1,2-DCE	11/08/2010	2.0
TCE	11/08/2010	5.1
VC	11/08/2010	0.2

AGW177 (I)		
Constituent	Date	
1,1-DCE	9/29/2010	<0.2
1,1-DCA	9/29/2010	<0.2
Cis-1,2-DCE	9/29/2010	1.2
TCE	9/29/2010	5.2
VC	9/29/2010	0.053

AGW177 (I) (29ft-BHS)		
Constituent	Date	
1,1-DCE	9/21/2010	0.3
1,1-DCA	9/21/2010	0.5
Cis-1,2-DCE	9/21/2010	6.4
TCE	9/21/2010	8.6
VC	9/21/2010	2

AGW178 (D)		
Constituent	Date	
1,1-DCE	9/29/2010	<0.2
1,1-DCA	9/29/2010	<0.2
Cis-1,2-DCE	9/29/2010	0.9
TCE	9/29/2010	4.5
VC	9/29/2010	0.088

AGW170 (I)		
Constituent	Date	
1,1-DCE	11/08/2010	<0.2
1,1-DCA	11/08/2010	<0.2
Cis-1,2-DCE	11/08/2010	1.0
TCE	11/08/2010	3.6
VC	11/08/2010	<0.2

AGW170 (I) (28.5ft-BHS)		
Constituent	Date	
1,1-DCE	11/01/2010	0.2
1,1-DCA	11/01/2010	0.3
Cis-1,2-DCE	11/01/2010	1.9
TCE	11/01/2010	3.6
VC	11/01/2010	0.069

AGW171 (D)		
Constituent	Date	
1,1-DCE	11/08/2010	<0.2
1,1-DCA	11/08/2010	<0.2
Cis-1,2-DCE	11/08/2010	0.3
TCE	11/08/2010	2.1
VC	11/08/2010	<0.2

AGW179 (I)		
Constituent	Date	
1,1-DCE	9/29/2010	0.3
1,1-DCA	9/29/2010	0.6
Cis-1,2-DCE	9/29/2010	7.2
TCE	9/29/2010	1.2
VC	9/29/2010	0.1

AGW179 (I) (30ft-BHS)		
Constituent	Date	
1,1-DCE	9/22/2010	<0.2
1,1-DCA	9/22/2010	0.5
Cis-1,2-DCE	9/22/2010	6.5
TCE	9/22/2010	<0.2
VC	9/22/2010	0.093

AGW180 (D)		
Constituent	Date	
1,1-DCE	9/29/2010	<0.2
1,1-DCA	9/29/2010	0.3
Cis-1,2-DCE	9/29/2010	0.9
TCE	9/29/2010	5.1
VC	9/29/2010	<0.02

AGW176 (I)		
Constituent	Date	
1,1-DCE	10/6/2010	<0.2
1,1-DCA	10/6/2010	<0.2
Cis-1,2-DCE	10/6/2010	0.6
TCE	10/6/2010	5.4
VC	10/6/2010	<0.02

AGW172 (I)		
Constituent	Date	
1,1-DCE	9/16/2010	<0.2
1,1-DCA	9/16/2010	<0.2
Cis-1,2-DCE	9/16/2010	0.3
TCE	9/16/2010	3.4
VC	9/16/2010	<0.02

AGW173 (I)		
Constituent	Date	
1,1-DCE	10/6/2010	<0.2
1,1-DCA	10/6/2010	<0.2
Cis-1,2-DCE	10/6/2010	<0.2
TCE	10/6/2010	<0.2
VC	10/6/2010	<0.02

AGW173 (I) (50ft-BHS)		
Constituent	Date	
1,1-DCE	9/1/2010	<0.2
1,1-DCA	9/1/2010	<0.2
Cis-1,2-DCE	9/1/2010	<0.2
TCE	9/1/2010	0.7
VC	9/1/2010	<0.2

AGW174 (I)		
Constituent	Date	
1,1-DCE	9/15/2010	<0.2
1,1-DCA	9/15/2010	<0.2
Cis-1,2-DCE	9/15/2010	<0.2
TCE	9/15/2010	3.6
VC	9/15/2010	<0.02

AGW174 (I) (59ft-BHS)		
Constituent	Date	
1,1-DCE	8/23/2010	<0.2
1,1-DCA	8/23/2010	<0.2
Cis-1,2-DCE	8/23/2010	<0.2
TCE	8/23/2010	1.1
VC	8/23/2010	<0.2

AGW175 (I)		
Constituent	Date	
1,1-DCE	9/15/2010	<0.2
1,1-DCA	9/15/2010	<0.2
Cis-1,2-DCE	9/15/2010	0.6
TCE	9/15/2010	3.4
VC	9/15/2010	<0.02

Notes

1. All results shown in µg/L. Screening levels are as follows:

1,1-DCE	7.0
1,1-DCA	1600
Cis-1,2-DCE	70
TCE	0.49
VC	0.029

2. ND = Compound Not Detected at Indicated Reporting Limit.
3. BHS = Borehole Sample.
4. "Max" concentration: For wells with non-detect data, the lowest recorded detection limit is used as the maximum historical concentration.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation .

Legend

- AGW026 ● Monitoring Well Location
- TCE Detection = ≥ 5 µg/L
- TCE Detection = 3 < 5 µg/L
- TCE Detection = 1 < 3 µg/L
- TCE Detection = < 1 µg/L

(Color codes apply to most recent data only)

- Property Boundary
- 17-68 Current Building and Number

0 500 1000

Scale in Feet

Base map source: Geomatrix 2003

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Boeing Auburn
Remedial Investigation
Auburn, Washington

New Well VOC Concentrations Most Recent

Figure 10

Boeing\Remedial Investigation Report | V:\025\164070\074\RI Report 2010\10 2010 VOCs.dwg (A) "Figure 10" 11/19/2010

AGW083				
Constituent	Max	Max Date	Last	Last Date
TCE	<0.2	5/21/2003	<0.2	11/30/2004

AGW026				
Constituent	Max	Max Date	Last	Last Date
TCE	4.4	9/19/1992	0.7	6/2/2010

AGW028				
Constituent	Max	Max Date	Last	Last Date
TCE	3.1	6/20/1996	1.2	9/29/2010

AGW050				
Constituent	Max	Max Date	Last	Last Date
TCE	3.2	3/19/1997	1.1	9/29/2010

AGW047				
Constituent	Max	Max Date	Last	Last Date
TCE	3.3	3/19/1997	1	9/29/2010

AGW046				
Constituent	Max	Max Date	Last	Last Date
TCE	2.9	12/13/1996	1.2	9/29/2010

AGW030				
Constituent	Max	Max Date	Last	Last Date
TCE	<0.2	12/7/2009	<0.2	12/7/2009

AGW079				
Constituent	Max	Max Date	Last	Last Date
TCE	<0.2	6/3/2010	<0.2	6/3/2010

AGW024				
Constituent	Max	Max Date	Last	Last Date
TCE	<0.2	6/3/2010	<0.2	6/3/2010

AGW029				
Constituent	Max	Max Date	Last	Last Date
TCE	<0.2	6/3/2010	<0.2	6/3/2010

AGW025				
Constituent	Max	Max Date	Last	Last Date
TCE	0.2	6/3/2008	<0.2	6/2/2010

AGW037				
Constituent	Max	Max Date	Last	Last Date
TCE	5.3	12/13/1996	3.2	6/10/2010

AGW032				
Constituent	Max	Max Date	Last	Last Date
TCE	0.7	9/9/1997	<0.2	6/2/2010

AGW164 (I) (29ft-BHS)				
Constituent	Max	Max Date	Last	Last Date
TCE	0.9	8/24/2010	0.9	8/24/2010

AGW165				
Constituent	Max	Max Date	Last	Last Date
TCE	1.9	9/15/2010	1.9	9/15/2010

AGW027				
Constituent	Max	Max Date	Last	Last Date
TCE	3.7	11/24/1992	<0.2	6/2/2010

AGW134				
Constituent	Max	Max Date	Last	Last Date
TCE	<0.2	6/3/2010	<0.2	6/3/2010

AGW152				
Constituent	Max	Max Date	Last	Last Date
TCE	<0.2	6/2/2010	<0.2	6/2/2010

AGW131				
Constituent	Max	Max Date	Last	Last Date
TCE	0.7	10/1/2008	0.2	6/2/2010

AGW017				
Constituent	Max	Max Date	Last	Last Date
TCE	9.25	2/15/1994	1.3	6/9/2009

AGW015				
Constituent	Max	Max Date	Last	Last Date
TCE	1.5	3/24/1995	<0.2	6/9/2009

AGW013				
Constituent	Max	Max Date	Last	Last Date
TCE	1.33	2/16/1994	<1	3/21/1997

AGW016				
Constituent	Max	Max Date	Last	Last Date
TCE	<0.2	2/16/1999	<1	3/13/2000

AGW010				
Constituent	Max	Max Date	Last	Last Date
TCE	7.01	2/15/1994	<2.0	6/10/2010

AGW011				
Constituent	Max	Max Date	Last	Last Date
TCE	<1	3/20/1997	<1	3/20/1997

AGW009				
Constituent	Max	Max Date	Last	Last Date
TCE	9.3	8/31/1990	<2.0	6/10/2010

AGW038				
Constituent	Max	Max Date	Last	Last Date
TCE	3	2/22/1999	0.6	6/10/2009

AGW039				
Constituent	Max	Max Date	Last	Last Date
TCE	2	12/13/1996	1.4	12/11/2009

AGW040				
Constituent	Max	Max Date	Last	Last Date
TCE	4	12/13/1996	2.0	6/10/2009

AGW049				
Constituent	Max	Max Date	Last	Last Date
TCE	1.6	9/29/2010	1.6	9/29/2010

AGW048				
Constituent	Max	Max Date	Last	Last Date
TCE	4.9	3/19/1997	1.1	9/29/2010

AGW163 (I) (28ft-BHS)				
Constituent	Max	Max Date	Last	Last Date
TCE	0.8	8/26/2010	0.8	8/26/2010

ASB0136 <0.2 3/22/2004
ASB0137 <0.2 3/22/2004
ASB0138 <0.2 3/22/2004
ASB0139 <0.2 3/22/2004
ASB0140 <0.2 3/22/2004
ASB0141 <0.2 5/4/2004
ASB0142 <0.2 5/4/2004
ASB0135 <0.2 3/22/2004
ASB0146 <0.2 5/5/2004
ASB0147 <0.2 5/5/2004
ASB0148 <0.2 5/5/2004
ASB0145 <0.2 5/4/2004
ASB0144 <0.2 5/4/2004
ASB0143 <0.2 5/4/2004
ASB0157 <0.2 8/24/2004
ASB0161 <0.2 8/31/2004
ASB0162 <0.2 8/31/2004

S-13a
Former TCE Degreaser

17-07
17-10
17-12
17-44
17-06
17-11
17-21
17-70
17-71
17-35
17-68

Perimeter Road

Notes

1. All concentrations shown in µg/L, the screening level for TCE is 0.49 µg/L.
2. ND = Compound Not Detected at Indicated Reporting Limit.
3. BHS = Borehole Sample.
4. "Max" concentration: For wells with non-detect data, the lowest recorded detection limit is used as the maximum historical concentration.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- ASB0135 / <2 3/22/2004 — Soil Boring Location / Most Recent Sample Result & Date
- AGW026 — Monitoring Well Location
- TCE Detection = ≥ 5 µg/L
- TCE Detection = 3 < 5 µg/L
- TCE Detection = 1 < 3 µg/L
- TCE Detection = < 1 µg/L
- (Color codes apply to most recent data only)
- Property Boundary
- S-13a — Solid Waste Management Unit (SWMU)
- 17-68 — Current Building and Number

N

0 200 400

Scale in Feet

Base map source: Geomatrix 2003

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Remedial Investigation
Auburn, Washington

Building 17-07 Shallow Zone TCE Concentrations Maximum and Most Recent

Figure 11

AGW083				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	<0.2	5/21/2003	<0.2	11/30/2004

AGW026				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	3.4	9/19/1992	0.6	6/2/2010

AGW028				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1.1	6/20/1996	0.2	9/29/2010

AGW050				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1.3	3/19/1997	0.2	9/29/2010

AGW047				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1.4	12/13/1996	0.3	9/29/2010

AGW046				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1.5	3/19/1997	0.6	9/29/2010

AGW030				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	<0.2	12/7/2009	<0.2	12/7/2009

AGW079				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	3	12/8/2008	0.5	6/3/2010

AGW024				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	3.2	10/19/1992	0.4	6/3/2010

AGW029				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	<0.2	6/3/2010	<0.2	6/3/2010

AGW025				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	9.6	2/16/1999	4.6	6/2/2010

AGW037				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	2.6	3/29/1996	1.1	6/10/2010

AGW032				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	3.3	9/9/1997	<0.2	6/2/2010

AGW164 (I) (29ft-BHS)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	3.9	8/24/2010	3.9	8/24/2010

AGW165				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	0.9	9/15/2010	0.9	9/15/2010

AGW027				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	8.8	12/11/1995	0.7	6/2/2010

AGW134				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	<0.2	6/3/2010	<0.2	6/3/2010

AGW152				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1.4	10/29/2009	1	6/2/2010

AGW131				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	2.9	12/8/2009	1.9	6/2/2010

AGW017				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1.6	10/11/1991	0.4	6/9/2009

AGW015				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	3.31	2/15/1994	<0.2	6/9/2009

AGW013				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	<1	3/21/1997	<1	3/21/1997

AGW016				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	2.5	10/11/1991	<1	3/13/2000

AGW010				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	5.35	2/15/1994	<2.0	6/10/2010

AGW011				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	9.4	8/31/1990	<1	3/20/1997

AGW009				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1.3	8/8/1991	<0.2	6/10/2010

AGW038				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	2.5	3/19/1997	1.5	6/10/2009

AGW039				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	2.1	3/19/1997	1	12/11/2009

AGW040				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1.3	12/13/1996	0.6	6/10/2009

AGW049				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	0.7	9/29/2010	0.7	9/29/2010

AGW048				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1.6	3/19/1997	0.5	9/29/2010

AGW163 (I) (28ft-BHS)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	<0.2	5/21/2003	<0.2	8/26/2010

ASB0135 <2 3/22/2004
ASB0136 <0.2 3/22/2004
ASB0137 <0.2 3/22/2004
ASB0138 <0.2 3/22/2004
ASB0139 <0.2 3/22/2004
ASB0140 <0.2 3/22/2004
ASB0141 <0.2 5/4/2004
ASB0142 <0.2 5/4/2004
ASB0143 <0.2 5/4/2004
ASB0144 0.5 5/4/2004
ASB0145 0.8 5/4/2004
ASB0146 <0.2 5/5/2004
ASB0147 <0.2 5/5/2004
ASB0148 <0.2 5/5/2004
ASB0157 0.6 8/24/2004
ASB0161 4.0 8/31/2004
ASB0162 3.7 8/31/2004

S-13a
Former TCE Degreaser

17-07

Perimeter Road

Legend

- ASB0135 / <2 3/22/2004 — Soil Boring Location / Most Recent Sample Result & Date
- AGW026 — Monitoring Well Location
- TCE Detection = ≥ 5 µg/L
- TCE Detection = 3 < 5 µg/L
- TCE Detection = 1 < 3 µg/L
- TCE Detection = < 1 µg/L
- (Color codes apply to most recent data only)
- Property Boundary
- S-13a — Solid Waste Management Unit (SWMU)
- 17-68 — Current Building and Number

Notes

1. All concentrations shown in µg/L, the screening level for Cis-1,2-DCE is 70.0 µg/L.
2. ND = Compound Not Detected at Indicated Reporting Limit.
3. BHS = Borehole Sample.
4. "Max" concentration: For wells with non-detect data, the lowest recorded detection limit is used as the maximum historical concentration.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

N

0 200 400

Scale in Feet

Base map source: Geomatrix 2003

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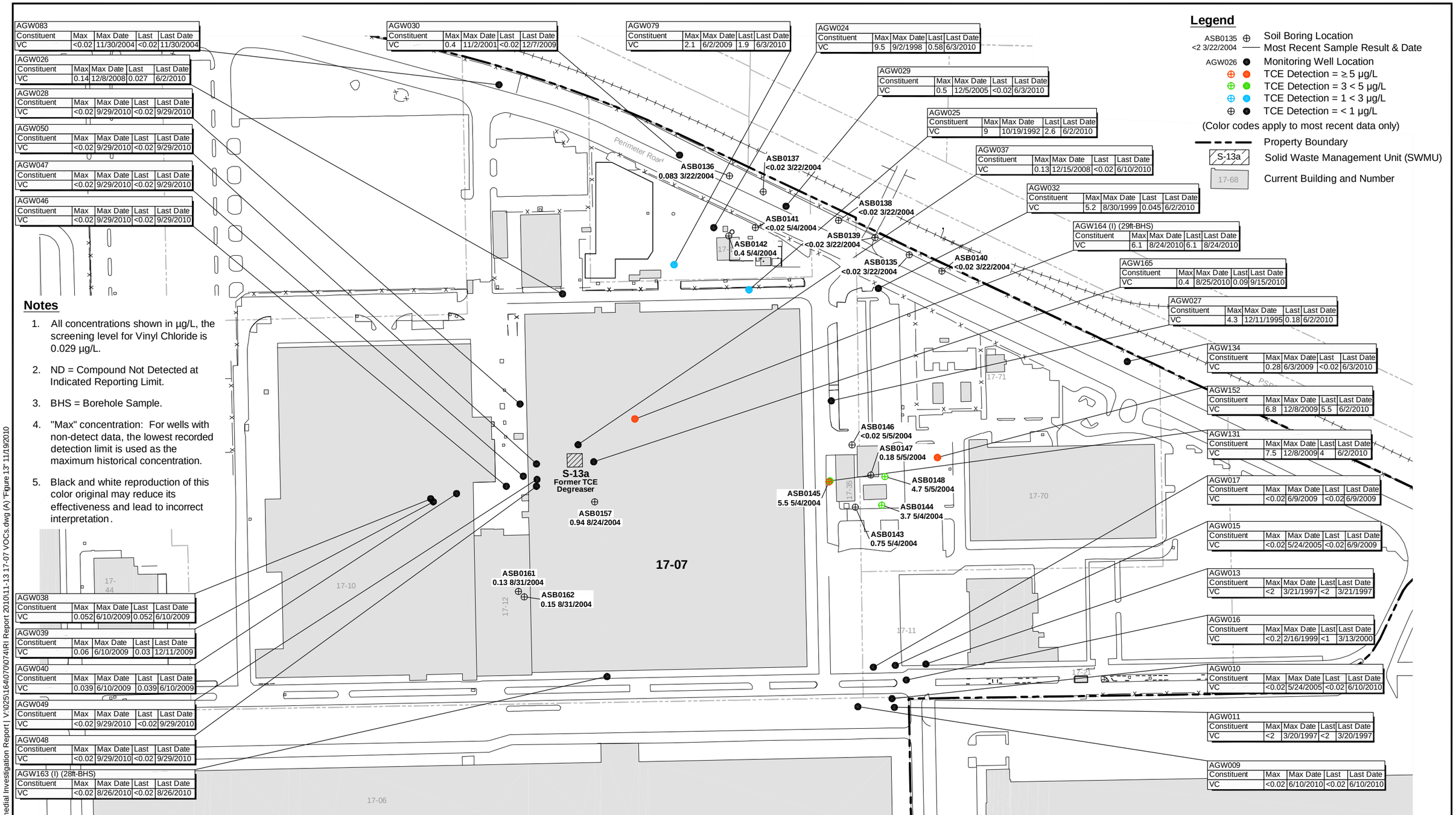
Remedial Investigation
Auburn, Washington

Building 17-07 Shallow Zone
Cis-1,2-DCE Concentrations
Maximum and Most Recent

Figure
12

BoeingIRemedial Investigation Report | V:\025\164\070\074\RI Report 2010\11-13 17-07 VOCs.dwg (A) "Figure 12" 11/19/2010


Legend
ASB0135 <2 3/22/2004 — Soil Boring Location / Most Recent Sample Result & Date
AGW026 — Monitoring Well Location
TCE Detection = ≥ 5 µg/L
TCE Detection = 3 < 5 µg/L
TCE Detection = 1 < 3 µg/L
TCE Detection = < 1 µg/L
(Color codes apply to most recent data only)
Property Boundary
S-13a — Solid Waste Management Unit (SWMU)
17-68 — Current Building and Number
Notes
1. All concentrations shown in µg/L, the screening level for Vinyl Chloride is 0.029 µg/L.
2. ND = Compound Not Detected at Indicated Reporting Limit.
3. BHS = Borehole Sample.
4. "Max" concentration: For wells with non-detect data, the lowest recorded detection limit is used as the maximum historical concentration.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.
AGW083 | Constituent | Max | Max Date | Last | Last Date | VC | <0.02 | 11/30/2004 | <0.02 | 11/30/2004
AGW026 | Constituent | Max | Max Date | Last | Last Date | VC | 0.14 | 12/8/2008 | 0.027 | 6/2/2010
AGW028 | Constituent | Max | Max Date | Last | Last Date | VC | <0.02 | 9/29/2010 | <0.02 | 9/29/2010
AGW050 | Constituent | Max | Max Date | Last | Last Date | VC | <0.02 | 9/29/2010 | <0.02 | 9/29/2010
AGW047 | Constituent | Max | Max Date | Last | Last Date | VC | <0.02 | 9/29/2010 | <0.02 | 9/29/2010
AGW046 | Constituent | Max | Max Date | Last | Last Date | VC | <0.02 | 9/29/2010 | <0.02 | 9/29/2010
AGW030 | Constituent | Max | Max Date | Last | Last Date | VC | 0.4 | 11/2/2001 | <0.02 | 12/7/2009
AGW079 | Constituent | Max | Max Date | Last | Last Date | VC | 2.1 | 6/2/2009 | 1.9 | 6/3/2010
AGW024 | Constituent | Max | Max Date | Last | Last Date | VC | 9.5 | 9/2/1998 | 0.58 | 6/3/2010
AGW029 | Constituent | Max | Max Date | Last | Last Date | VC | 0.5 | 12/5/2005 | <0.02 | 6/3/2010
AGW025 | Constituent | Max | Max Date | Last | Last Date | VC | 9 | 10/19/1992 | 2.6 | 6/2/2010
AGW037 | Constituent | Max | Max Date | Last | Last Date | VC | 0.13 | 12/15/2008 | <0.02 | 6/10/2010
AGW032 | Constituent | Max | Max Date | Last | Last Date | VC | 5.2 | 8/30/1999 | 0.045 | 6/2/2010
AGW164 (I) (29ft-BHS) | Constituent | Max | Max Date | Last | Last Date | VC | 6.1 | 8/24/2010 | 6.1 | 8/24/2010
AGW165 | Constituent | Max | Max Date | Last | Last Date | VC | 0.4 | 8/25/2010 | 0.09 | 9/15/2010
AGW027 | Constituent | Max | Max Date | Last | Last Date | VC | 4.3 | 12/11/1995 | 0.18 | 6/2/2010
AGW134 | Constituent | Max | Max Date | Last | Last Date | VC | 0.28 | 6/3/2009 | <0.02 | 6/3/2010
AGW152 | Constituent | Max | Max Date | Last | Last Date | VC | 6.8 | 12/8/2009 | 5.5 | 6/2/2010
AGW131 | Constituent | Max | Max Date | Last | Last Date | VC | 7.5 | 12/8/2009 | 4 | 6/2/2010
AGW017 | Constituent | Max | Max Date | Last | Last Date | VC | <0.02 | 6/9/2009 | <0.02 | 6/9/2009
AGW015 | Constituent | Max | Max Date | Last | Last Date | VC | <0.02 | 5/24/2005 | <0.02 | 6/9/2009
AGW013 | Constituent | Max | Max Date | Last | Last Date | VC | <2 | 3/21/1997 | <2 | 3/21/1997
AGW016 | Constituent | Max | Max Date | Last | Last Date | VC | <0.2 | 2/16/1999 | <1 | 3/13/2000
AGW010 | Constituent | Max | Max Date | Last | Last Date | VC | <0.02 | 5/24/2005 | <0.02 | 6/10/2010
AGW011 | Constituent | Max | Max Date | Last | Last Date | VC | <2 | 3/20/1997 | <2 | 3/20/1997
AGW009 | Constituent | Max | Max Date | Last | Last Date | VC | <0.02 | 6/10/2010 | <0.02 | 6/10/2010
AGW038 | Constituent | Max | Max Date | Last | Last Date | VC | 0.052 | 6/10/2009 | 0.052 | 6/10/2009
AGW039 | Constituent | Max | Max Date | Last | Last Date | VC | 0.06 | 6/10/2009 | 0.03 | 12/11/2009
AGW040 | Constituent | Max | Max Date | Last | Last Date | VC | 0.039 | 6/10/2009 | 0.039 | 6/10/2009
AGW049 | Constituent | Max | Max Date | Last | Last Date | VC | <0.02 | 9/29/2010 | <0.02 | 9/29/2010
AGW048 | Constituent | Max | Max Date | Last | Last Date | VC | <0.02 | 9/29/2010 | <0.02 | 9/29/2010
AGW163 (I) (28ft-BHS) | Constituent | Max | Max Date | Last | Last Date | VC | <0.02 | 8/26/2010 | <0.02 | 8/26/2010
ASB0136 0.083 3/22/2004
ASB0137 <0.02 3/22/2004
ASB0138 <0.02 3/22/2004
ASB0139 <0.02 3/22/2004
ASB0140 <0.02 3/22/2004
ASB0141 <0.02 5/4/2004
ASB0142 0.4 5/4/2004
ASB0135 <0.02 3/22/2004
ASB0146 <0.02 5/5/2004
ASB0147 0.18 5/5/2004
ASB0148 4.7 5/5/2004
ASB0145 5.5 5/4/2004
ASB0144 3.7 5/4/2004
ASB0143 0.75 5/4/2004
S-13a Former TCE Degreaser
ASB0157 0.94 8/24/2004
ASB0161 0.13 8/31/2004
ASB0162 0.15 8/31/2004
17-07
17-10
17-44
17-12
17-11
17-38
17-70
17-71
17-06
Perimeter Road
0 200 400
Scale in Feet
Base map source: Geomatrix 2003
Boeing Auburn Remedial Investigation Auburn, Washington
Building 17-07 Shallow Zone Vinyl Chloride Concentrations Maximum and Most Recent
Figure 13
Landau Associates
Boeing\Remedial Investigation Report | V:\025\164\070\074\RI Report 2010\11-13 17-07 VOCs.dwg (A) "Figure 13" 11/19/2010

AGW083				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	11/30/2004	<0.02	11/30/2004

AGW026				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	0.036	12/8/2008	<0.2	6/2/2010

AGW028				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	9/29/2010	<0.02	9/29/2010

AGW050				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	9/29/2010	<0.02	9/29/2010

AGW047				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	9/29/2010	<0.02	9/29/2010

AGW046				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	9/29/2010	<0.02	9/29/2010

AGW030				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	6/2/2009	<0.2	12/7/2009

AGW079				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	0.034	12/8/2008	<0.2	12/11/2009

AGW024				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	0.044	12/10/2008	<0.2	6/3/2010

AGW029				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	6/2/2009	<0.2	6/3/2010

AGW025				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	0.063	12/4/2008	<0.2	6/2/2010

AGW037				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	0.068	12/15/2008	<0.2	6/2/2010

AGW032				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	0.027	12/10/2007	<0.2	6/2/2010

AGW164 (I) (29ft-BHS)				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	8/24/2010	<0.02	8/24/2010

AGW165				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	9/15/2010	<0.02	9/15/2010

AGW027				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	0.027	12/5/2006	<0.2	6/2/2010

AGW134				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	6/3/2009	<0.02	6/3/2009

AGW152				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	0.025	10/29/2009	<0.2	6/2/2010

AGW131				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	0.13	12/4/2008	0.072	6/2/2009

AGW017				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	6/9/2009	<0.02	6/9/2009

AGW015				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	6/2/2009	<0.2	6/9/2009

AGW013				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<1	3/21/1997	<1	3/21/1997

AGW016				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.2	2/16/1999	<1	3/12/2000

AGW010				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	6/9/2009	<0.02	6/9/2009

AGW011				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<1	3/20/1997	<1	3/20/1997

AGW009				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	6/10/2010	<0.2	6/10/2010

AGW038				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	0.061	6/10/2009	0.061	6/10/2009

AGW039				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	0.11	12/15/2008	<0.2	12/11/2009

AGW040				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	0.094	12/15/2008	0.078	6/10/2009

AGW049				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	9/29/2010	<0.02	9/29/2010

AGW048				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	9/29/2010	<0.02	9/29/2010

AGW163 (I) (28ft-BHS)				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE	<0.02	8/26/2010	<0.02	8/26/2010

ASB0136 <0.02 3/22/2004
ASB0137 <0.02 3/22/2004
ASB0138 <0.02 3/22/2004
ASB0139 <0.02 3/22/2004
ASB0140 <0.02 3/22/2004
ASB0141 <0.02 5/4/2004
ASB0142 <0.02 5/4/2004
ASB0135 <0.02 3/22/2004
ASB0146 <0.02 5/5/2004
ASB0147 <0.02 5/5/2004
ASB0148 <0.02 5/5/2004
ASB0145 0.044 5/4/2004
ASB0144 <0.02 5/4/2004
ASB0143 <0.02 5/4/2004
ASB0157 <0.02 8/24/2004
ASB0161 0.059 8/31/2004
ASB0162 0.034 8/31/2004

S-13a Former TCE Degreaser

17-07

Notes

1. All concentrations shown in µg/L, the screening level for 1,1-DCE is 7.0 µg/L.
2. ND = Compound Not Detected at Indicated Reporting Limit.
3. BHS = Borehole Sample.
4. "Max" concentration: For wells with non-detect data, the lowest recorded detection limit is used as the maximum historical concentration.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- ASB0135 / <2 3/22/2004 — Soil Boring Location / Most Recent Sample Result & Date
- AGW026 — Monitoring Well Location
- TCE Detection = ≥ 5 µg/L
- TCE Detection = 3 < 5 µg/L
- TCE Detection = 1 < 3 µg/L
- TCE Detection = < 1 µg/L
- (Color codes apply to most recent data only)
- Property Boundary
- S-13a — Solid Waste Management Unit (SWMU)
- 17-68 — Current Building and Number

N

0 200 400
Scale in Feet

Base map source: Geomatrix 2003

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Boeing Auburn
Remedial Investigation
Auburn, Washington

Building 17-07 Shallow Zone 1,1-DCE Concentrations: Maximum and Most Recent

Figure 14

Boeing\Remedial Investigation Report | V:\025\16\407\0074\RI Report 2010\14-15 17-07.dwg (A) "Figure 14" 11/9/2010

AGW083				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	6/2/2004	<0.2	6/2/2004

AGW026				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	1	9/14/1993	<0.2	6/2/2010

AGW028				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	9/29/2010	<0.2	9/29/2010

AGW050				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	9/29/2010	<0.2	9/29/2010

AGW047				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	9/29/2010	<0.2	9/29/2010

AGW046				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	9/29/2010	<0.2	9/29/2010

AGW030				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	12/7/2009	<0.2	12/7/2009

AGW079				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	0.5	6/3/2010	0.5	6/3/2010

AGW024				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	4.5	2/9/1994	<0.2	6/3/2010

AGW029				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	6/3/2010	<0.2	6/3/2010

AGW025				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	5.29	2/9/1994	<0.2	6/2/2010

AGW037				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	2	6/21/1996	<0.2	6/10/2010

AGW032				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	2.1	10/2/1996	<0.2	6/2/2010

AGW164 (I) (29ft-BHS)				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	8/24/2010	<0.2	8/24/2010

AGW165				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	9/15/2010	<0.2	9/15/2010

AGW027				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	0.8	11/24/1992	<0.2	6/2/2010

AGW134				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	6/3/2010	<0.2	6/3/2010

AGW152				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	6/2/2010	<0.2	6/2/2010

AGW131				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	6/2/2010	<0.2	6/2/2010

AGW017				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	6/9/2009	<0.2	6/9/2009

AGW015				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	6/2/2009	<0.2	6/2/2009

AGW013				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<1	3/21/1997	<1	3/21/1997

AGW016				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	2/16/1999	<1	3/13/2000

AGW010				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	6/9/2009	<0.2	6/9/2009

AGW011				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<1	3/20/1997	<1	3/20/1997

AGW009				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	6/10/2010	<0.2	6/10/2010

AGW038				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	9.5	9/27/1996	0.5	6/10/2009

AGW039				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	7.4	9/27/1996	0.2	12/11/2009

AGW040				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.2	6/10/2009	<0.2	6/10/2009

AGW049				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.02	9/29/2010	<0.02	9/29/2010

AGW048				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.02	9/29/2010	<0.02	9/29/2010

AGW163 (I) (28ft-BHS)				
Constituent	Max	Max Date	Last	Last Date
1,1-DCA	<0.02	8/26/2010	<0.02	8/26/2010

ASB0136 <0.2 3/22/2004
ASB0137 <0.2 3/22/2004
ASB0138 <0.2 3/22/2004
ASB0139 <0.2 3/22/2004
ASB0140 <0.2 3/22/2004
ASB0141 <0.2 5/4/2004
ASB0142 0.6 5/4/2004
ASB0135 <0.2 3/22/2004
ASB0146 <0.2 5/5/2004
ASB0147 <0.2 5/5/2004
ASB0148 <0.2 5/5/2004
ASB0145 <0.2 5/4/2004
ASB0144 <0.2 5/4/2004
ASB0143 <0.2 5/4/2004
S-13a Former TCE Degreaser
ASB0157 <0.2 8/24/2004
ASB0161 1.6 8/31/2004
ASB0162 1.7 8/31/2004

17-07
17-10
17-11
17-12
17-21
17-35
17-70
17-06

Notes

1. All concentrations shown in µg/L, the screening level for 1,1-DCA is 1600 µg/L.
2. ND = Compound Not Detected at Indicated Reporting Limit.
3. BHS = Borehole Sample.
4. "Max" concentration: For wells with non-detect data, the lowest recorded detection limit is used as the maximum historical concentration.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- ASB0135 / <2 3/22/2004 — Soil Boring Location / Most Recent Sample Result & Date
- AGW026 — Monitoring Well Location
- TCE Detection = ≥ 5 µg/L
- TCE Detection = 3 < 5 µg/L
- TCE Detection = 1 < 3 µg/L
- TCE Detection = < 1 µg/L
- (Color codes apply to most recent data only)
- Property Boundary
- S-13a — Solid Waste Management Unit (SWMU)
- 17-68 — Current Building and Number

N

0 200 400

Scale in Feet

Base map source: Geomatrix 2003

Boeing Auburn
Remedial Investigation
Auburn, Washington

Building 17-07 Shallow Zone 1,1-DCA Concentrations: Maximum and Most Recent

Figure 15

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Boeing\Remedial Investigation Report | V:\025\16\407\0074\RI Report 2010\14-15 17-07.dwg (A) "Figure 15" 11/8/2010

AGW105 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	1.1	6/4/2007	0.6	6/3/2010

AGW155 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	0.6	6/2/2010	0.4	9/1/2010

AGW164 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	1.4	9/15/2010	1.4	9/15/2010

AGW165 (55ft-BHS)				
Constituent	Max	Max Date	Last	Last Date
TCE	0.6	8/25/2010	0.6	8/25/2010

AGW163 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	3.3	9/15/2010	3.3	9/15/2010

AGW154 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	0.6	6/3/2010	0.4	9/1/2010

AGW095R (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	3.3	6/11/2007	1.8	6/8/2010

AGW157 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	3.5	9/1/2010	3.5	9/1/2010

AGW145 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	15	12/7/2009	11	9/1/2010

AGW156 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	7.4	6/2/2010	5	9/1/2010

AGW144 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	0.9	9/1/2010	0.9	9/1/2010

AGW158(I)				
Constituent	Max	Max Date	Last	Last Date
TCE	4.2	6/9/2010	3.4	9/14/2010

AGW147 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	<0.2	9/14/2010	<0.2	9/14/2010

AGW166 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	<0.2	11/08/2010	<0.2	11/08/2010

AGW168(I)				
Constituent	Max	Max Date	Last	Last Date
TCE	4.0	11/08/2010	4.0	11/08/2010

AGW170(I)				
Constituent	Max	Max Date	Last	Last Date
TCE	3.6	11/08/2010	3.6	11/08/2010

AGW177 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	5.2	9/29/2010	5.2	9/29/2010

AGW179 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	1.2	9/29/2010	1.2	9/29/2010

AGW148 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	6.4	12/2/2009	5.0	9/14/2010

AGW172 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	3.4	9/16/2010	3.4	9/16/2010

AGW173 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	0.7	9/1/2010	<0.2	10/6/2010

AGW175 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	3.4	9/15/2010	3.4	9/15/2010

AGW176 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	5.4	10/6/2010	5.4	10/6/2010

AGW174 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	3.6	9/15/2010	3.6	9/15/2010

AGW161 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	3.1	3/9/2010	2.8	9/15/2010

AGW160 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	5.4	6/10/2010	4.7	9/14/2010

AGW149 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	5.2	6/10/2010	4.6	9/14/2010

AGW150 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	3.6	10/28/2009	2.3	9/14/2010

AGW162 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	1.2	6/9/2010	0.9	9/14/2010

AGW057R (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	3	6/11/2007	2	6/7/2010

AGW060R (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	2.1	9/11/2007	1.2	6/7/2010

AGW055R (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	2.5	6/11/2007	0.8	6/7/2010

AGW72 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	5	11/1/2001	2.2	6/7/2010

AGW126 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	21	6/11/2007	10	6/8/2010

AGW139 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	6.1	6/4/2009	5.2	6/9/2010

AGW137 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	7.3	10/30/2008	5.6	6/9/2010

AGW151 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	1.2	10/28/2009	0.7	9/15/2010

AGW140 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	8.3	12/3/2009	5.4	9/14/2010

AGW141 (I)				
Constituent	Max	Max Date	Last	Last Date
TCE	3.6	3/12/2009	3	6/9/2010

Notes

1. All concentrations shown in µg/L, the screening level for TCE is 0.49 µg/L.
2. ND = Compound Not Detected at Indicated Reporting Limit.
3. BHS = Borehole Sample.
4. "Max" concentration: For wells with non-detect data, the lowest recorded detection limit is used as the maximum historical concentration.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Monitoring Well Location
- TCE Detection = ≥ 5 µg/L
- TCE Detection = 3 < 5 µg/L
- TCE Detection = 1 < 3 µg/L
- TCE Detection = < 1 µg/L

(Color codes apply to most recent data only)

- VC Plume Contour (5.0 / 3.0)
- Property Boundary
- Current Building and Number (17-68)

N

0 500 1000

Scale in Feet

Base map source: Geomatrix 2003

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Boeing Auburn Remedial Investigation Auburn, Washington	**Intermediate Zone TCE Concentrations Maximum and Most Recent**	Figure 16

Boeing\Remedial Investigation Report | V:\025\164\070\074\RI Report 2010\16-18 SW Inter VOCs.dwg (A) "Figure 16" 11/19/2010

AGW105 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1.1	6/5/2006	0.7	6/3/2010

AGW155 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	8.6	3/15/2010	6.2	9/1/2010

AGW164 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	0.6	9/15/2010	0.6	9/15/2010

AGW165 (55ft-BHS)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	0.2	8/25/2010	0.2	8/25/2010

AGW163 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1	9/15/2010	1	9/15/2010

AGW154 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	0.7	6/3/2010	0.6	9/1/2010

AGW095R (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	0.9	6/3/2009	0.8	6/8/2010

AGW157 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	3	6/8/2008	2.7	9/1/2010

AGW145 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	8.7	12/7/2009	7.5	9/1/2010

AGW156 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	4.9	9/1/2010	4.9	9/1/2010

AGW144 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	2.1	6/8/2010	1.9	9/1/2010

AGW158(I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1.4	3/9/2010	0.9	9/14/2010

AGW147 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	6.6	3/9/2010	5.1	9/14/2010

AGW166 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	<0.2	11/08/2010	<0.2	11/08/2010

AGW168(I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1.8	11/08/2010	1.8	11/08/2010

AGW170(I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1.0	11/08/2010	1.0	11/08/2010

AGW177 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1.2	9/29/2010	1.2	9/29/2010

AGW179 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	7.2	9/29/2010	7.2	9/29/2010

AGW148 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	2.7	10/28/2009	2	9/14/2010

AGW172 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	0.3	9/16/2010	0.3	9/16/2010

AGW173 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	<0.2	10/6/2010	<0.2	10/6/2010

AGW175 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	0.6	9/15/2010	0.6	9/15/2010

AGW176 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	0.6	10/6/2010	0.6	10/6/2010

AGW174 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	<0.2	9/15/2010	<0.2	9/15/2010

AGW161 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	0.2	3/9/2010	<0.2	9/15/2010

AGW160 (I)				
Constituent	Max	Max Date	Last	Last Date
Vinyl Chloride	0.8	3/9/2010	0.4	9/14/2010

AGW149 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	1	6/10/2010	0.8	9/14/2010

AGW150 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	0.4	10/28/2009	<0.2	9/14/2010

AGW162 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	<0.2	9/14/2010	<0.2	9/14/2010

AGW057R (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	<0.2	6/7/2010	<0.2	6/7/2010

AGW060R (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	4	9/11/2007	2.9	6/7/2010

AGW055R (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	3	6/11/2007	1.6	6/7/2010

AGW72 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	0.8	12/3/2004	0.3	6/7/2010

AGW126 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	7.7	12/11/2007	4.9	6/8/2010

AGW139 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	0.6	2/19/2009	0.4	6/9/2010

AGW137 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	3.4	12/10/2008	2.4	6/9/2010

AGW151 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	<0.2	9/15/2010	<0.2	9/15/2010

AGW140 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	5.2	12/3/2009	3.4	9/14/2010

AGW141 (I)				
Constituent	Max	Max Date	Last	Last Date
Cis-1,2-DCE	0.6	12/2/2009	0.4	6/9/2010

Notes

1. All concentrations shown in µg/L, the screening level for Cis-1,2-DCE is 70.0 µg/L.
2. ND = Compound Not Detected at Indicated Reporting Limit.
3. BHS = Borehole Sample.
4. "Max" concentration: For wells with non-detect data, the lowest recorded detection limit is used as the maximum historical concentration.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Monitoring Well Location
- TCE Detection = ≥ 5 µg/L
- TCE Detection = 3 < 5 µg/L
- TCE Detection = 1 < 3 µg/L
- TCE Detection = < 1 µg/L

(Color codes apply to most recent data only)

- VC Plume Contour (5.0 / 3.0)
- Property Boundary
- 17-68 Current Building and Number

N

0 500 1000

Scale in Feet

Base map source: Geomatrix 2003

Boeing\Remedial Investigation Report | V:\025\164070\074\RI Report 2010\16-18 SW Inter VOCs.dwg (A) "Figure 17" 11/19/2010

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Remedial Investigation
Auburn, Washington

Intermediate Zone
Cis-1,2-DCE Concentrations
Maximum and Most Recent

Figure
17

AGW105 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	1.8	12/1/2004	0.66	6/3/2010

AGW155 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	6.8	9/1/2010	6.8	9/1/2010

AGW164 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.54	9/15/2010	0.54	9/15/2010

AGW165 (55ft-BHS)				
Constituent	Max	Max Date	Last	Last Date
VC	0.4	8/25/2010	0.4	8/25/2010

AGW163 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.039	9/15/2010	0.039	9/15/2010

AGW154 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.05	9/1/2010	0.05	9/1/2010

AGW095R (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.063	6/8/2010	0.063	6/8/2010

AGW157 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	2	6/8/2010	1.8	9/1/2010

AGW145 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	1.8	9/1/2010	1.8	9/1/2010

AGW156 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	1.8	9/1/2010	1.8	9/1/2010

AGW144 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.25	9/1/2010	0.25	9/1/2010

AGW158(I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.3	3/9/2010	0.099	9/14/2010

AGW147 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.18	3/9/2010	0.12	9/14/2010

AGW166 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	<0.2	11/08/2010	<0.2	11/08/2010

AGW168(I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.2	11/08/2010	0.2	11/08/2010

AGW170(I)				
Constituent	Max	Max Date	Last	Last Date
VC	<0.2	11/08/2010	<0.2	11/08/2010

AGW177 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.053	9/29/2010	0.053	9/29/2010

AGW179 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.1	9/29/2010	0.1	9/29/2010

AGW148 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.13	10/28/2009	0.096	9/14/2010

AGW172 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	<0.02	9/16/2010	<0.02	9/16/2010

AGW173 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	<0.02	10/6/2010	<0.02	10/6/2010

AGW175 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	<0.02	9/15/2010	<0.02	9/15/2010

AGW176 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	<0.02	10/6/2010	<0.02	10/6/2010

AGW057R (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.021	6/2/2009	<0.02	6/7/2010

AGW060R (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.14	6/2/2009	0.082	6/7/2010

AGW055R (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.34	3/10/2009	0.2	6/7/2010

AGW72 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	<0.02	6/7/2010	<0.02	6/7/2010

AGW126 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.14	6/3/2009	0.039	6/8/2010

AGW139 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	<0.02	6/9/2010	<0.02	6/9/2010

AGW137 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.042	12/10/2008	0.025	6/9/2010

AGW151 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	<0.02	9/15/2010	<0.02	9/15/2010

AGW140 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	1	12/3/2009	0.68	9/14/2010

AGW141 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	<0.02	6/9/2010	<0.02	6/9/2010

AGW174 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	<0.02	9/15/2010	<0.02	9/15/2010

AGW161 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	<0.02	9/15/2010	<0.02	9/15/2010

AGW160 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.03	3/9/2010	0.023	9/14/2010

AGW149 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	0.025	6/10/2010	<0.02	9/14/2010

AGW150 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	<0.02	9/14/2010	<0.02	9/14/2010

AGW162 (I)				
Constituent	Max	Max Date	Last	Last Date
VC	<0.02	9/14/2010	<0.02	9/14/2010

Notes

1. All concentrations shown in µg/L, the screening level for Vinyl Chloride is 0.029 µg/L.
2. ND = Compound Not Detected at Indicated Reporting Limit.
3. BHS = Borehole Sample.
4. "Max" concentration: For wells with non-detect data, the lowest recorded detection limit is used as the maximum historical concentration.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Monitoring Well Location
- TCE Detection = ≥ 5 µg/L
- TCE Detection = 3 < 5 µg/L
- TCE Detection = 1 < 3 µg/L
- TCE Detection = < 1 µg/L

(Color codes apply to most recent data only)

- VC Plume Contour (5.0, 3.0)
- Property Boundary
- Current Building and Number (17-68)

N

0 500 1000

Scale in Feet

Base map source: Geomatrix 2003

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Intermediate Zone
Vinyl Chloride Concentrations
Maximum and Most Recent

Figure
18

Boeing\Remedial Investigation Report | V:\025\164070\074\RI Report 2010\16-18 SW Inter VOCs.dwg (A) "Figure 18" 11/19/2010

AGW143 (D)				
Constituent	Max	Max Date	Last	Last Date
TCE	<0.2	9/1/2010	<0.2	9/1/2010

AGW034 (D)				
Constituent	Max	Max Date	Last	Last Date
TCE	2.6	3/19/1998	1.9	12/8/2009

AGW146 (D)				
Constituent	Max	Max Date	Last	Last Date
TCE	4.2	12/7/2009	3.5	9/1/2010

AGW167 (D)				
Constituent	Max	Max Date	Last	Last Date
TCE	3.6	11/08/2010	3.6	11/08/2010

AGW178 (D)				
Constituent	Max	Max Date	Last	Last Date
TCE	4.5	9/29/2010	4.5	9/29/2010

AGW169 (D)				
Constituent	Max	Max Date	Last	Last Date
TCE	5.1	11/08/2010	5.1	11/08/2010

AGW159 (D)				
Constituent	Max	Max Date	Last	Last Date
TCE	5.7	6/9/2010	5.2	9/14/2010

AGW171 (D)				
Constituent	Max	Max Date	Last	Last Date
TCE	2.1	11/08/2010	2.1	11/08/2010

AGW180 (D)				
Constituent	Max	Max Date	Last	Last Date
TCE	5.1	9/29/2010	5.1	9/29/2010

AGW098R (D)				
Constituent	Max	Max Date	Last	Last Date
TCE	1.6	9/11/2007	0.8	6/8/2010

AGW073 (D)				
Constituent	Max	Max Date	Last	Last Date
TCE	0.9	11/24/2002	0.3	6/7/2010

AGW035 (D)				
Constituent	Max	Max Date	Last	Last Date
TCE	5.7	3/19/1998	<0.2	12/7/2009

AGW150 (I) (90ft-BHS)				
Constituent	Max	Max Date	Last	Last Date
TCE	0.3	10/5/2009	0.3	10/5/2009

AGW142 (D)				
Constituent	Max	Max Date	Last	Last Date
TCE	1.2	12/2/2009	0.7	6/9/2010

AGW138 (D)				
Constituent	Max	Max Date	Last	Last Date
TCE	1.0	6/4/2009	0.9	6/9/2010

Notes

1. All concentrations shown in µg/L, the screening level for TCE is 0.49 µg/L.
2. ND = Compound Not Detected at Indicated Reporting Limit.
3. BHS = Borehole Sample.
4. "Max" concentration: For wells with non-detect data, the lowest recorded detection limit is used as the maximum historical concentration.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Monitoring Well Location
- TCE Detection = ≥ 5 µg/L
- TCE Detection = 3 < 5 µg/L
- TCE Detection = 1 < 3 µg/L
- TCE Detection = < 1 µg/L

(Color codes apply to most recent data only)

- 5.0 / 3.0 — VC Plume Contour
- Property Boundary
- 17-68 — Current Building and Number

N

0 500 1000

Scale in Feet

Base map source: Geomatrix 2003

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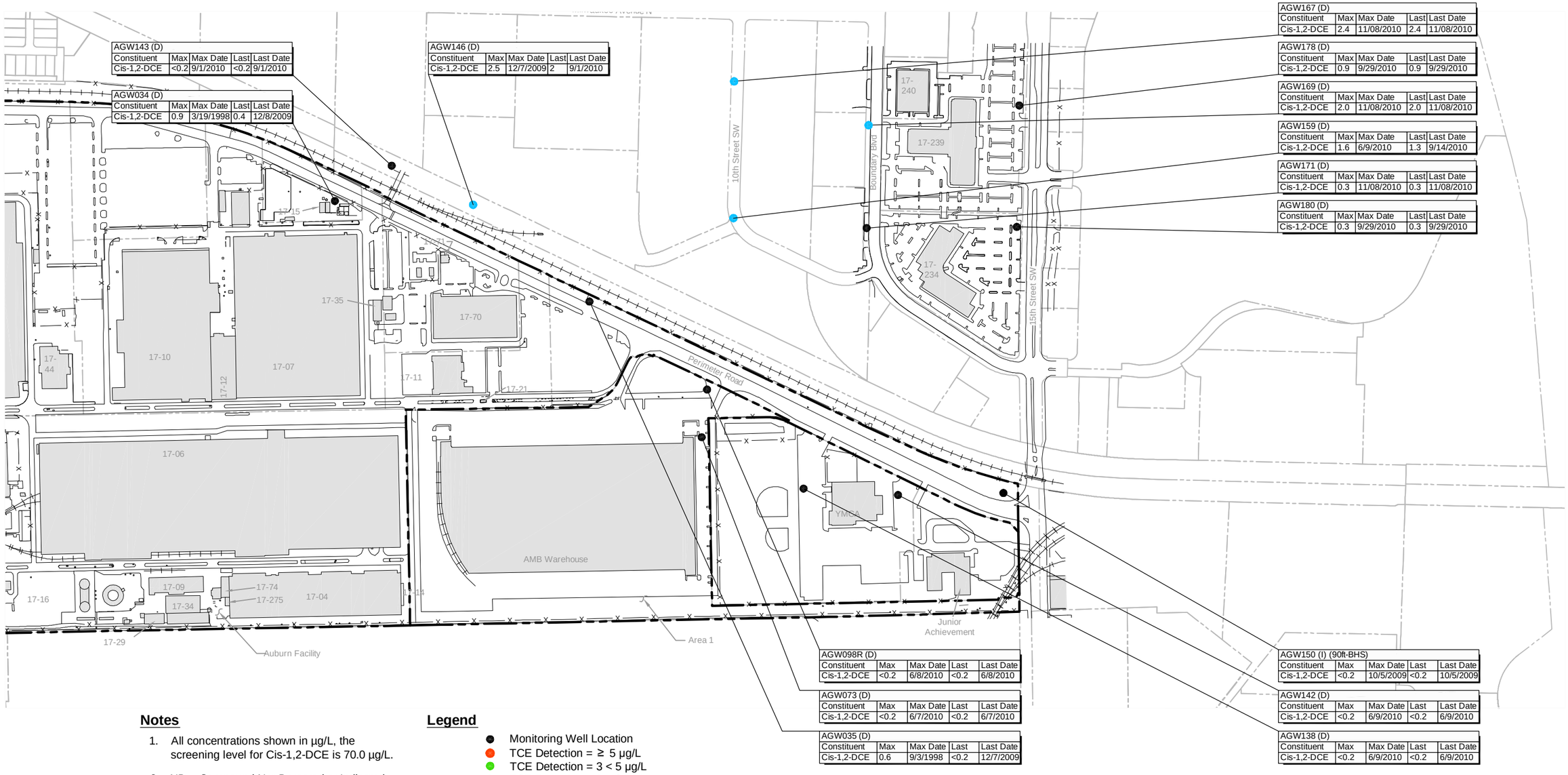
Remedial Investigation
Auburn, Washington

Deep Zone
TCE Concentrations
Maximum and Most Recent

Figure
19



Notes

1. All concentrations shown in µg/L, the screening level for Cis-1,2-DCE is 70.0 µg/L.
2. ND = Compound Not Detected at Indicated Reporting Limit.
3. BHS = Borehole Sample.
4. "Max" concentration: For wells with non-detect data, the lowest recorded detection limit is used as the maximum historical concentration.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation .

Legend

- Monitoring Well Location
- TCE Detection = ≥ 5 µg/L
- TCE Detection = 3 < 5 µg/L
- TCE Detection = 1 < 3 µg/L
- TCE Detection = < 1 µg/L

(Color codes apply to most recent data only)

- 5.0 / 3.0 — VC Plume Contour
- Property Boundary
- 17-68 — Current Building and Number

N

0 500 1000

Scale in Feet

Base map source: Geomatrix 2003

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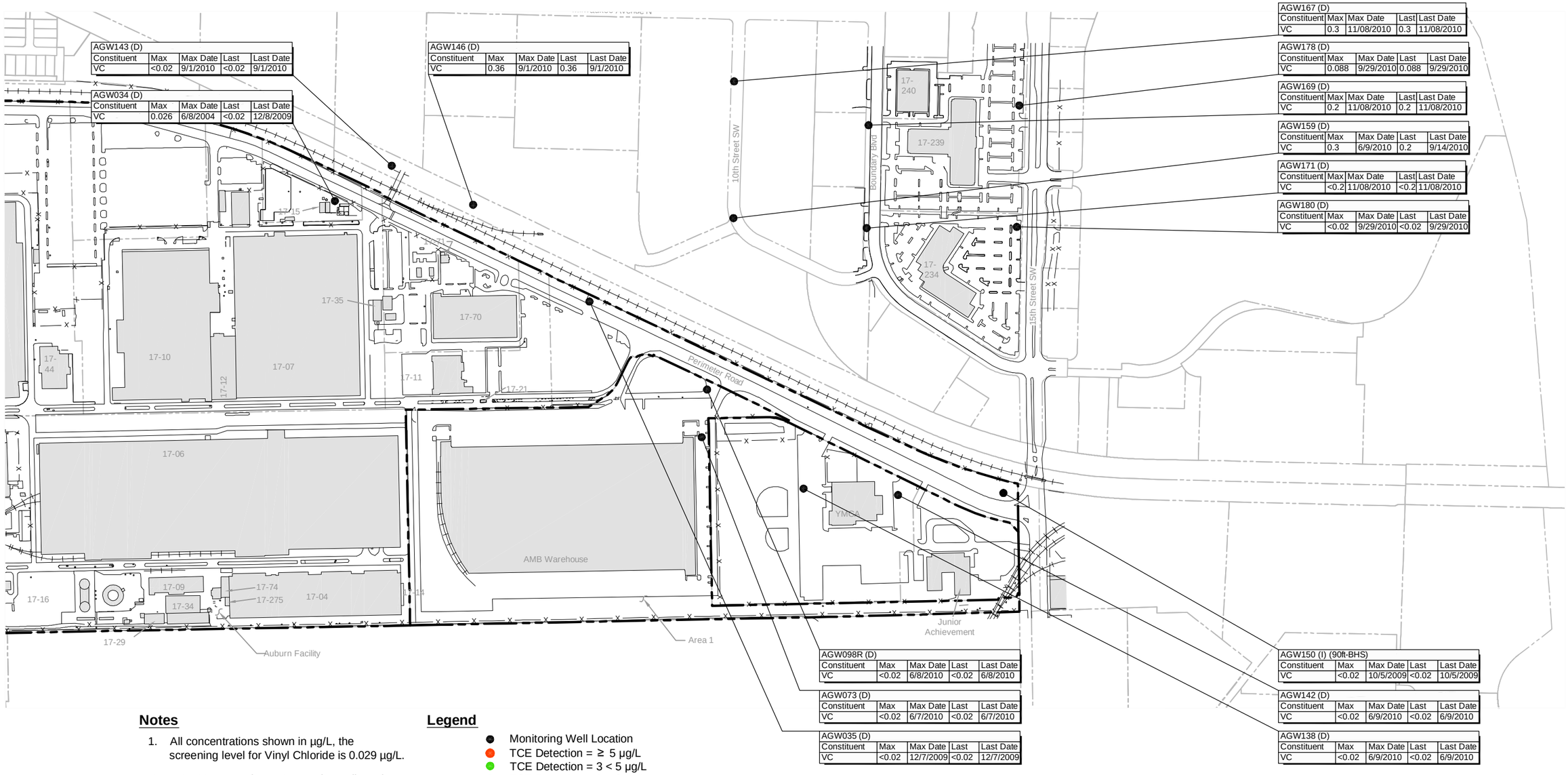
Remedial Investigation
Auburn, Washington

Deep Zone
Cis-1,2-DCE Concentrations
Maximum and Most Recent

Figure
20



Notes

1. All concentrations shown in µg/L, the screening level for Vinyl Chloride is 0.029 µg/L.
2. ND = Compound Not Detected at Indicated Reporting Limit.
3. BHS = Borehole Sample.
4. "Max" concentration: For wells with non-detect data, the lowest recorded detection limit is used as the maximum historical concentration.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Monitoring Well Location
- TCE Detection = ≥ 5 µg/L
- TCE Detection = 3 < 5 µg/L
- TCE Detection = 1 < 3 µg/L
- TCE Detection = < 1 µg/L

(Color codes apply to most recent data only)

- 5.0 / 3.0 — VC Plume Contour
- Property Boundary
- 17-68 — Current Building and Number

N

0 500 1000

Scale in Feet

Base map source: Geomatrix 2003

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Remedial Investigation
Auburn, Washington

Deep Zone
Vinyl Chloride Concentrations
Maximum and Most Recent

Figure
21

Boeing\Remedial Investigation Report | V:\025\164\070\074\RI Report 2010\19-21 SW Deep VOCs.dwg (A) "Figure 21" 11/19/2010

TABLE 1
DRILLING AND WELL INSTALLATION MATRIX
SUMMER/FALL 2010 RI
BOEING AUBURN

Well ID	Description	Coordinates		Date of Installation	Well Permanent Screen Depth BGS (bottom) (ft)	Number of Water Samples ATD	Borehole Sample depth ATD	Notes
		Northing	Easting					
AGW163	Intermediate (East of Building 17-07)	107361.2	1291162.6	8/26/2010	57.4	1	28	
AGW164	Intermediate (Inside Building 17-07)	107422.3	1290598.6	8/25/2010	59.6	1	29	
AGW165	Shallow (inside Building 17-07)	107332.1	1290692.4	8/25/2010	28	1	55	
AGW166	Intermediate	109620.7	1289600.4	10/26/2010	59.6	1	30	
AGW167	Deep	109619.9	1289612.4	10/27/2010	95	0	NA	
AGW168	Intermediate	110289.5	1289780.5	10/28/2010	60.5	1	29	
AGW169	Deep	110289.7	1289797.1	10/29/2010	93.8	0	NA	
AGW170	Intermediate	110281.9	1290219.0	11/1/2010	60.2	1	28.5	
AGW171	Deep	110281.4	1290255.9	11/2/2010	82.7	0	NA	Due to presence of fine grained material, permanent screen was set at 82.7 ft; see boring log
AGW172	Intermediate	111557.3	1290848.4	9/2/2010	59.5	0	NA	
AGW173	Intermediate	112192.1	1290877.2	9/1/2010	50.9	1	50	Due to presence of fine grained material, permanent screen was set at 50.9 ft; see boring log; Rush 24-hr sample to determine need for AGW176
AGW174	Intermediate	112216.7	1291525.9	8/23/2010	59.2	1	59	Rush 24-hr sample to determine need for AGW175
AGW175	Intermediate	112939.2	1291540.5	8/27/2010	58.2	0	NA	
AGW176	Intermediate	112850.9	1290581.4	9/3/2010	59	0	NA	
AGW177	Intermediate	111009.6	1289719.3	9/21/2010	58.5	1	29	
AGW178	Deep	111009.5	1289729.7	9/22/2010	95	0	NA	
AGW179	Intermediate	110997.7	1290314.2	9/23/2010	51	1	30	Due to presence of fine grained material, permanent screen was set at 51 ft; see boring log
AGW180	Deep	110997.4	1290320.6	9/23/2010	80.8	0	NA	Due to presence of fine grained material, permanent screen was set at 80.8 ft; see boring log

ATD = At time of drilling
BGS = Below ground surface
NA = Not applicable
Coordinate System and Zone: Washington State Plane, North Zone Coordinates
Horizontal Datum: NAD 83(91), North Zone, US FEET.
Vertical Datum: NGVD29, US FEET.

To convert elevations shown hereon to NAVD88 elevations please add 3.49 feet.

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
SUMMER 2010 RI
BOEING AUBURN

	AGW163-28 RK90C 8/26/2010	AGW163 RM88A 9/15/2010	AGW164-29 RK90A 8/24/2010	AGW164 RM88B 9/15/2010	AGW165-55 RK90B 8/25/2010	AGW165 RM88C 9/15/2010	AGW166-30 RT87A 10/26/2010
VOLATILES (µg/L)							
Method SW8260C							
Chloromethane	**0.6** J	0.5 U	0.5 U	0.5 U	**0.6** J	0.5 U	0.5 U
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	0.2 U	0.2 U	**4.5** J	**0.5**	**0.4** J	0.2 U	**0.6**
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	5.0 U	5.0 U	**5.9**	5.0 U	**7.2**	5.0 U	5.0 U
Carbon Disulfide	0.2 U	0.2 U	**0.8**	0.2 U	**2.3**	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	0.2 U	0.2 U	**0.2**	0.2 U	0.2 U	0.2 U	**0.2**
cis-1,2-Dichloroethene	0.2 U	**1.0**	**3.9**	**0.6**	**0.2**	**0.9**	**2.5**
Chloroform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Acetate	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 U
Bromodichloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	**0.8**	**3.3**	**0.9**	**1.4**	**0.6**	**1.9**	**3.4**
Dibromochloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Chloroethylvinylether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 UJ	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	**0.3**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	**0.3**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m, p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
o-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOLATILES (µg/L)							
Method SW8260CSIM							
Vinyl Chloride	0.020 U	**0.039**	**6.1** E	**0.54**	**0.29** J	**0.090**	**0.47**
Tetrachloroethene	**0.30**	**0.055**	0.020 U	0.020 U	0.020 U	**0.068**	**0.089**

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
SUMMER 2010 RI
BOEING AUBURN

	AGW166 RV47A (a) 11/08/2010	AGW167 RV47B (a) 11/08/2010	AGW168-29 RT87B 10/28/2010	AGW168 RV47C (a) 11/08/2010	AGW169 RV47D(a) 11/08/2010	AGW170-28.5 RU39A 11/01/2010	AGW170 RV47E (a) 11/08/2010
VOLATILES (µg/L)							
Method SW8260C							
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	0.2 U	**0.3**	0.2 U	**0.2**	**0.2**	0.2 U	0.2 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	5.0 U	5.0 U	**5.1**	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.3**	0.2 U
trans-1,2-Dichloroethene	0.2 U	**0.2**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.2 U	**2.4**	**1.2**	**1.8**	**2.0**	**1.9**	**1.0**
Chloroform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Acetate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	0.2 U	**3.6**	**3.0**	**4.0**	**5.1**	**3.6**	**3.6**
Dibromochloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Chloroethylvinylether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m, p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
o-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOLATILES (µg/L)							
Method SW8260CSIM							
Vinyl Chloride			**0.076**			**0.069**	
Tetrachloroethene			**0.085**			**0.12**	

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
SUMMER 2010 RI
BOEING AUBURN

	AGW171 RV47F (a) 11/08/2010	AGW172 RN24P 09/16/2010	AGW173-50 RL35A 9/1/2010	AGW173 RN24Q 09/16/2010	AGW173 RQ12A 10/06/2010	AGW174-59 RK10A 8/23/2010	AGW174 RN24M 09/15/2010
VOLATILES (µg/L)							
Method SW8260C							
Chloromethane	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	**0.6**	0.5 U
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	**5.1**	5.0 U	5.0 U	5.0 U	5.0 U	**17**	5.0 U
Carbon Disulfide	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	**0.3**	**0.3**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	**0.4**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Acetate	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	**2.1**	**3.4**	**0.7**	0.2 U	0.2 U	**1.1**	**3.6**
Dibromochloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Chloroethylvinylether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 UJ	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ
Toluene	0.2 U	0.2 U	**0.4**	**0.2**	0.2 U	0.2 U	0.2 U
Chlorobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
m, p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
o-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOLATILES (µg/L)							
Method SW8260CSIM							
Vinyl Chloride		0.020 U		0.020 U	0.020 U		0.020 U
Tetrachloroethene		0.020 U		0.020 U	0.020 U		**0.020**

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
SUMMER 2010 RI
BOEING AUBURN

	AGW175 RN24N 09/15/2010	AGW176 RN24A 09/14/2010	AGW176 RQ12B 10/06/2010	AGW177-29 RO29A 09/21/2010	AGW177 RP15D 09/29/2010	AGW178 RP15C 09/29/2010	AGW179-30 RO29B 09/22/2010
VOLATILES (µg/L)							
Method SW8260C							
Chloromethane	0.5 U	0.5 U	0.5 U	**0.5**	0.5 U	0.5 U	**0.5**
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	0.2 U	0.2 U	0.2 U	**2.0**	0.2 U	0.2 U	0.2 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	0.2 U	**0.2**	**1.0**	0.2 U	0.2 U	0.2 U	**0.2**
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	**0.3**	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	**0.5**	0.2 U	0.2 U	**0.5**
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	**0.2**	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	**0.6**	**0.5**	**0.6**	**6.4**	**1.2**	**0.9**	**6.5**
Chloroform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Acetate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	**3.4**	**4.7**	**5.4**	**8.6**	**5.2**	**4.5**	0.2 U
Dibromochloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Chloroethylvinylether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m, p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
o-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOLATILES (µg/L)							
Method SW8260CSIM							
Vinyl Chloride	0.020 U	0.020 U	0.020 U	**2.0**	**0.053**	**0.088**	**0.093**
Tetrachloroethene	0.020 U	0.020 U	0.020 U	**0.072**	**0.15**	**0.057**	0.020 U

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
SUMMER 2010 RI
BOEING AUBURN

	AGW179 RP15B 09/29/2010	AGW180 RP15A 09/29/2010
VOLATILES (µg/L)		
Method SW8260C		
Chloromethane	0.5 U	0.5 U
Bromomethane	1.0 U	1.0 U
Vinyl Chloride	0.2 U	0.2 U
Chloroethane	0.2 U	0.2 U
Methylene Chloride	0.5 U	0.5 U
Acetone	5.0 U	5.0 U
Carbon Disulfide	0.2 U	0.2 U
1,1-Dichloroethene	**0.3**	0.2 U
1,1-Dichloroethane	**0.6**	**0.3**
trans-1,2-Dichloroethene	0.2 U	0.2 U
cis-1,2-Dichloroethene	**7.2**	**0.9**
Chloroform	0.2 U	0.2 U
1,2-Dichloroethane	0.2 U	0.2 U
2-Butanone	5.0 U	5.0 U
1,1,1-Trichloroethane	0.2 U	**0.3**
Carbon Tetrachloride	0.2 U	0.2 U
Vinyl Acetate	1.0 U	1.0 U
Bromodichloromethane	0.2 U	0.2 U
1,2-Dichloropropane	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.2 U	0.2 U
Trichloroethene	**1.2**	**5.1**
Dibromochloromethane	0.2 U	0.2 U
1,1,2-Trichloroethane	0.2 U	0.2 U
Benzene	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.2 U	0.2 U
2-Chloroethylvinylether	1.0 U	1.0 U
Bromoform	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U
Tetrachloroethene	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U
Toluene	0.2 U	0.2 U
Chlorobenzene	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U
Styrene	0.2 U	0.2 U
Trichlorofluoromethane	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U
m, p-Xylene	0.4 U	0.4 U
o-Xylene	0.2 U	0.2 U
VOLATILES (µg/L)		
Method SW8260CSIM		
Vinyl Chloride	**0.10**	0.020 U
Tetrachloroethene	0.020 U	**0.067**

(a) Well was sampled in November 2010 outside of the 3rd quarter due to permit issuance delays.
U = Indicates the compound was undetected at the reported concentration.
J = Indicates the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was not detected in the sample; the reported sample reporting limit is an estimate.
E = The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate. See the SW8260C analysis result.
Bold = Detected compound.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
SHALLOW WELLS - 17-07 BUILDING AREA
BOEING AUBURN

	AGW028 RP15E 09/29/2010	AGW046 RP15F 09/29/2010	AGW047 RP15G 09/29/2010	AGW048 RP15H 09/29/2010	AGW049 RP15I 09/29/2010	AGW050 RP15J 09/29/2010
VOLATILES (µg/L)						
Method SW8260C						
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.7**
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	0.5 U	0.5 U	0.9 U	0.5 U	0.5 U	0.5 U
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**6.8**
Carbon Disulfide	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	**0.2**	**0.6**	**0.3**	**0.5**	**0.7**	**0.2**
Chloroform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Acetate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	**1.2**	**1.2**	**1.0**	**1.1**	**1.6**	**1.1**
Dibromochloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Chloroethylvinylether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m, p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
o-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOLATILES (µg/L)						
Method SW8260CSIM						
Vinyl Chloride	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Tetrachloroethene	**0.049**	**0.054**	**0.062**	**0.058**	**0.064**	**0.068**

U = Indicates the compound was undetected at the reported concentration.
UJ = The analyte was not detected in the sample; the reported sample reporting limit is an estimate.
E = The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.
This value is considered an estimate. See the SW8260C analysis result.
Bold = Detected compound.

TABLE 4
SAMPLE MATRIX
THIRD QUARTER 2010
BOEING AUBURN

Location	Lab ID	Sample Date	VOCs	VOC-SIM
AGW140	RN24H	9/14/2010	x	x
AGW143	RL49E	9/1/2010	x	x
AGW144	RL49D	9/1/2010	x	x
AGW145	RL49C	9/1/2010	x	x
AGW146	RL49B	9/1/2010	x	x
AGW147	RN24I	9/14/2010	x	x
AGW148	RN24J	9/14/2010	x	x
AGW149	RN24K	9/14/2010	x	x
AGW150	RN24G	9/14/2010	x	x
AGW151	RN24O	9/15/2010	x	x
AGW154	RL49H	9/1/2010	x	x
AGW155	RL49G	9/1/2010	x	x
AGW155-Dup	RL49I	9/1/2010	x	x
AGW156	RL49F	9/1/2010	x	x
AGW157	RL49A	9/1/2010	x	x
AGW158	RN24E	9/14/2010	x	x
AGW159	RN24D	9/14/2010	x	x
AGW160	RN24B	9/14/2010	x	x
AGW161	RN24L	9/15/2010	x	x
AGW162	RN24F	9/14/2010	x	x
AGW163	RM88A	9/15/2010	x	x
AGW164	RM88B	9/15/2010	x	x
AGW165	RM88C	9/15/2010	x	x
AGW172	RN24P	9/16/2010	x	x
AGW173	RN24Q	9/16/2010	x	x
AGW174	RN24M	9/15/2010	x	x
AGW175	RN24N	9/15/2010	x	x
AGW176	RN24A	9/14/2010	x	x
AGW177	RP15D	9/29/2010	x	x
AGW178	RP15C	9/29/2010	x	x
AGW179	RP15B	9/29/2010	x	x
AGW180	RP15A	9/29/2010	x	x
AGW999	RN24C	9/14/2010	x	x

TABLE 5
GROUNDWATER SAMPLING EVENT RESULTS
THIRD QUARTER 2010
BOEING AUBURN

	AGW140 RN24H 09/14/2010	AGW143 RL49E 9/1/2010	AGW144 RL49D 9/1/2010	AGW145 RL49C 9/1/2010	AGW146 RL49B 9/1/2010	AGW147 RN24I 09/14/2010	AGW148 RN24J 09/14/2010	AGW149 RN24K 09/14/2010	AGW150 RN24G 09/14/2010
VOLATILES (µg/L)									
Method SW8260C									
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	**0.7**	0.2 U	**0.2**	**1.4**	**0.3**	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**5.4**	5.0 U	5.0 U	5.0 U
Carbon Disulfide	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	**0.3**	0.2 U	0.2 U	0.2 U	0.2 U	**0.4**	**0.3**	0.2 U	0.2 U
1,1-Dichloroethane	**0.4**	0.2 U	0.2 U	0.2 U	0.2 U	**1.1**	**0.4**	0.2 U	0.2 U
trans-1,2-Dichloroethene	0.2 U	0.2 U	**0.5**	**1.2**	**0.2**	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	**3.4**	0.2 U	**1.9**	**7.5**	**2.0**	**5.1**	**2.0**	**0.8**	0.2 U
Chloroform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Acetate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	**5.4**	0.2 U	**0.9**	**11**	**3.5**	0.2 U	**5.0**	**4.6**	**2.3**
Dibromochloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Chloroethylvinylether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m,p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
o-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

TABLE 5
GROUNDWATER SAMPLING EVENT RESULTS
THIRD QUARTER 2010
BOEING AUBURN

	AGW140 RN24H 09/14/2010	AGW143 RL49E 9/1/2010	AGW144 RL49D 9/1/2010	AGW145 RL49C 9/1/2010	AGW146 RL49B 9/1/2010	AGW147 RN24I 09/14/2010	AGW148 RN24J 09/14/2010	AGW149 RN24K 09/14/2010	AGW150 RN24G 09/14/2010
VOLATILES (µg/L)									
Method 8260C SIM									
Vinyl Chloride	**0.68**	0.020 U	**0.25** J	**1.8** J	**0.36** J	**0.12**	**0.096**	0.020 U	0.020 U
Tetrachloroethene	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	**0.027**	**0.029**	**0.046**

TABLE 5
GROUNDWATER SAMPLING EVENT RESULTS
THIRD QUARTER 2010
BOEING AUBURN

	AGW151 RN24O 09/15/2010	AGW154 RL49H 9/1/2010	AGW155 RL49G 9/1/2010	AGW155-Dup RL49I 9/1/2010	AGW156 RL49F 9/1/2010	AGW157 RL49A 9/1/2010	AGW158 RN24E 09/14/2010	AGW159 RN24D 09/14/2010	AGW160 RN24B 09/14/2010
VOLATILES (µg/L)									
Method SW8260C									
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	0.2 U	0.2 U	**5.0**	**5.1**	**1.4**	**1.5**	0.2 U	**0.2**	0.2 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.2**
trans-1,2-Dichloroethene	0.2 U	0.2 U	**0.8**	**0.9**	**0.5**	**0.2**	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.2 U	**0.6**	**6.2**	**6.3**	**4.9**	**2.7**	**0.9**	**1.3**	**0.4**
Chloroform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.2**
Carbon Tetrachloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Acetate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	**0.7**	**0.4**	**0.4**	**0.4**	**5.0**	**3.5**	**3.4**	**5.2**	**4.7**
Dibromochloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Chloroethylvinylether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.2**	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m,p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
o-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

TABLE 5
GROUNDWATER SAMPLING EVENT RESULTS
THIRD QUARTER 2010
BOEING AUBURN

	AGW151 RN24O 09/15/2010	AGW154 RL49H 9/1/2010	AGW155 RL49G 9/1/2010	AGW155-Dup RL49I 9/1/2010	AGW156 RL49F 9/1/2010	AGW157 RL49A 9/1/2010	AGW158 RN24E 09/14/2010	AGW159 RN24D 09/14/2010	AGW160 RN24B 09/14/2010
VOLATILES (µg/L)									
Method 8260C SIM									
Vinyl Chloride	0.020 U	**0.050** J	**6.8** EJ	**6.5** EJ	**1.8** J	**1.8** J	**0.099**	**0.20**	**0.023**
Tetrachloroethene	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	**0.032** J	**0.25**	**0.058**	**0.020**

TABLE 5
GROUNDWATER SAMPLING EVENT RESULTS
THIRD QUARTER 2010
BOEING AUBURN

	AGW160-Dup RN24C 09/14/2010	AGW161 RN24L 09/15/2010	AGW162 RN24F 09/14/2010	AGW163 RM88A 9/15/2010	AGW164 RM88B 9/15/2010	AGW165 RM88C 9/15/2010	AGW172 RN24P 09/16/2010	AGW173 RN24Q 09/16/2010	AGW174 RN24M 09/15/2010	AGW175 RN24N 09/15/2010
VOLATILES (µg/L)										
Method SW8260C										
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	0.2 U	0.2 U	0.2 U	0.2 U	**0.5**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	**0.2**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	**0.5**	0.2 U	0.2 U	**1.0**	**0.6**	**0.9**	**0.3**	0.2 U	0.2 U	**0.6**
Chloroform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	**0.2**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Acetate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	**4.8**	**2.8**	**0.9**	**3.3**	**1.4**	**1.9**	**3.4**	0.2 U	**3.6**	**3.4**
Dibromochloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Chloroethylvinylether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.2**	0.2 U	0.2 U
Chlorobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m,p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
o-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

TABLE 5
GROUNDWATER SAMPLING EVENT RESULTS
THIRD QUARTER 2010
BOEING AUBURN

	AGW160-Dup RN24C 09/14/2010	AGW161 RN24L 09/15/2010	AGW162 RN24F 09/14/2010	AGW163 RM88A 9/15/2010	AGW164 RM88B 9/15/2010	AGW165 RM88C 9/15/2010	AGW172 RN24P 09/16/2010	AGW173 RN24Q 09/16/2010	AGW174 RN24M 09/15/2010	AGW175 RN24N 09/15/2010
VOLATILES (µg/L)										
Method 8260C SIM										
Vinyl Chloride	**0.023**	0.020 U	0.020 U	**0.039**	**0.54**	**0.090**	0.020 U	0.020 U	0.020 U	0.020 U
Tetrachloroethene	**0.021**	**0.048**	**0.021**	**0.055**	0.020 U	**0.068**	0.020 U	0.020 U	**0.020**	0.020 U

TABLE 5
GROUNDWATER SAMPLING EVENT RESULTS
THIRD QUARTER 2010
BOEING AUBURN

	AGW176 RN24A 09/14/2010	AGW177 RP15D 09/29/2010	AGW178 RP15C 09/29/2010	AGW179 RP15B 09/29/2010	AGW180 RP15A 09/29/2010
VOLATILES (µg/L)					
Method SW8260C					
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	**0.2**	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	**0.3**	0.2 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	**0.6**	**0.3**
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	**0.5**	**1.2**	**0.9**	**7.2**	**0.9**
Chloroform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	**0.3**
Carbon Tetrachloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Acetate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	**4.7**	**5.2**	**4.5**	**1.2**	**5.1**
Dibromochloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Chloroethylvinylether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m,p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
o-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

TABLE 5
GROUNDWATER SAMPLING EVENT RESULTS
THIRD QUARTER 2010
BOEING AUBURN

	AGW176 RN24A 09/14/2010	AGW177 RP15D 09/29/2010	AGW178 RP15C 09/29/2010	AGW179 RP15B 09/29/2010	AGW180 RP15A 09/29/2010
VOLATILES (µg/L)					
Method 8260C SIM					
Vinyl Chloride	0.020 U	**0.053**	**0.088**	**0.10**	0.020 U
Tetrachloroethene	0.020 U	**0.15**	**0.057**	0.020 U	**0.067**

U = Indicates the compound was undetected at the reported concentration.
J = Indicates the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was not detected in the sample; the reported sample reporting limit is an estimate.
E = The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate. See the SW8260C analysis result.
Bold = Detected compound.

TABLE 6
GROUNDWATER SAMPLING EVENT RESULTS
DETECTED ANALYTES ONLY
THIRD QUARTER 2010
BOEING AUBURN

	AGW140 RN24H 09/14/2010	AGW143 RL49E 9/1/2010	AGW144 RL49D 9/1/2010	AGW145 RL49C 9/1/2010	AGW146 RL49B 9/1/2010	AGW147 RN24I 09/14/2010	AGW148 RN24J 09/14/2010	AGW149 RN24K 09/14/2010	AGW150 RN24G 09/14/2010
VOLATILES (µg/L)									
Method SW8260C									
Vinyl Chloride	**0.7**	0.2 U	**0.2**	**1.4**	**0.3**	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Disulfide	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	**0.3**	0.2 U	0.2 U	0.2 U	0.2 U	**0.4**	**0.3**	0.2 U	0.2 U
1,1-Dichloroethane	**0.4**	0.2 U	0.2 U	0.2 U	0.2 U	**1.1**	**0.4**	0.2 U	0.2 U
trans-1,2-Dichloroethene	0.2 U	0.2 U	**0.5**	**1.2**	**0.2**	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	**3.4**	0.2 U	**1.9**	**7.5**	**2.0**	**5.1**	**2.0**	**0.8**	0.2 U
1,1,1-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	**5.4**	0.2 U	**0.9**	**11**	**3.5**	0.2 U	**5.0**	**4.6**	**2.3**
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOLATILES (µg/L)									
Method 8260C SIM									
Vinyl Chloride	**0.68**	0.020 U	**0.25** J	**1.8** J	**0.36** J	**0.12**	**0.096**	0.020 U	0.020 U
Tetrachloroethene	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	**0.027**	**0.029**	**0.046**

TABLE 6
GROUNDWATER SAMPLING EVENT RESULTS
DETECTED ANALYTES ONLY
THIRD QUARTER 2010
BOEING AUBURN

	AGW151 RN24O 09/15/2010	AGW154 RL49H 9/1/2010	AGW155 RL49G 9/1/2010	AGW155-Dup RL49I 9/1/2010	AGW156 RL49F 9/1/2010	AGW157 RL49A 9/1/2010	AGW158 RN24E 09/14/2010	AGW159 RN24D 09/14/2010	AGW160 RN24B 09/14/2010
VOLATILES (µg/L)									
Method SW8260C									
Vinyl Chloride	0.2 U	0.2 U	**5.0**	**5.1**	**1.4**	**1.5**	0.2 U	**0.2**	0.2 U
Carbon Disulfide	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.2**
trans-1,2-Dichloroethene	0.2 U	0.2 U	**0.8**	**0.9**	**0.5**	**0.2**	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.2 U	**0.6**	**6.2**	**6.3**	**4.9**	**2.7**	**0.9**	**1.3**	**0.4**
1,1,1-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.2**
Trichloroethene	**0.7**	**0.4**	**0.4**	**0.4**	**5.0**	**3.5**	**3.4**	**5.2**	**4.7**
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.2**	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOLATILES (µg/L)									
Method 8260C SIM									
Vinyl Chloride	0.020 U	**0.050** J	**6.8** EJ	**6.5** EJ	**1.8** J	**1.8** J	**0.099**	**0.20**	**0.023**
Tetrachloroethene	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	**0.032** J	**0.25**	**0.058**	**0.020**

TABLE 6
GROUNDWATER SAMPLING EVENT RESULTS
DETECTED ANALYTES ONLY
THIRD QUARTER 2010
BOEING AUBURN

	AGW160-Dup RN24C 09/14/2010	AGW161 RN24L 09/15/2010	AGW162 RN24F 09/14/2010	AGW163 RM88A 9/15/2010	AGW164 RM88B 9/15/2010	AGW165 RM88C 9/15/2010	AGW172 RN24P 09/16/2010	AGW173 RN24Q 09/16/2010	AGW174 RN24M 09/15/2010	AGW175 RN24N 09/15/2010
VOLATILES (µg/L)										
Method SW8260C										
Vinyl Chloride	0.2 U	0.2 U	0.2 U	0.2 U	**0.5**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Disulfide	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	**0.2**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	**0.5**	0.2 U	0.2 U	**1.0**	**0.6**	**0.9**	**0.3**	0.2 U	0.2 U	**0.6**
1,1,1-Trichloroethane	**0.2**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	**4.8**	**2.8**	**0.9**	**3.3**	**1.4**	**1.9**	**3.4**	0.2 U	**3.6**	**3.4**
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.2**	0.2 U	0.2 U
VOLATILES (µg/L)										
Method 8260C SIM										
Vinyl Chloride	**0.023**	0.020 U	0.020 U	**0.039**	**0.54**	**0.090**	0.020 U	0.020 U	0.020 U	0.020 U
Tetrachloroethene	**0.021**	**0.048**	**0.021**	**0.055**	0.020 U	**0.068**	0.020 U	0.020 U	**0.020**	0.020 U

TABLE 6
GROUNDWATER SAMPLING EVENT RESULTS
DETECTED ANALYTES ONLY
THIRD QUARTER 2010
BOEING AUBURN

	AGW176 RN24A 09/14/2010	AGW177 RP15D 09/29/2010	AGW178 RP15C 09/29/2010	AGW179 RP15B 09/29/2010	AGW180 RP15A 09/29/2010
VOLATILES (µg/L)					
Method SW8260C					
Vinyl Chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Disulfide	**0.2**	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	**0.3**	0.2 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	**0.6**	**0.3**
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	**0.5**	**1.2**	**0.9**	**7.2**	**0.9**
1,1,1-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	**0.3**
Trichloroethene	**4.7**	**5.2**	**4.5**	**1.2**	**5.1**
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
VOLATILES (µg/L)					
Method 8260C SIM					
Vinyl Chloride	0.020 U	**0.053**	**0.088**	**0.10**	0.020 U
Tetrachloroethene	0.020 U	**0.15**	**0.057**	0.020 U	**0.067**

U = Indicates the compound was undetected at the reported concentration.
J = Indicates the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was not detected in the sample; the reported sample reporting limit is an estimate.
E = The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate. See the SW8260C analysis result.
Bold = Detected compound.

APPENDIX A

Boring Logs

Soil Classification System

MAJOR DIVISIONS			GRAPHIC SYMBOL	USCS LETTER SYMBOL[1]	TYPICAL DESCRIPTIONS [2][3]
COARSE-GRAINED SOIL (More than 50% of material is larger than No. 200 sieve size)	GRAVEL AND GRAVELLY SOIL (More than 50% of coarse fraction retained on No. 4 sieve)	CLEAN GRAVEL (Little or no fines)		**GW**	Well-graded gravel; gravel/sand mixture(s); little or no fines
				GP	Poorly graded gravel; gravel/sand mixture(s); little or no fines
		GRAVEL WITH FINES (Appreciable amount of fines)		**GM**	Silty gravel; gravel/sand/silt mixture(s)
				GC	Clayey gravel; gravel/sand/clay mixture(s)
	SAND AND SANDY SOIL (More than 50% of coarse fraction passed through No. 4 sieve)	CLEAN SAND (Little or no fines)		**SW**	Well-graded sand; gravelly sand; little or no fines
				SP	Poorly graded sand; gravelly sand; little or no fines
		SAND WITH FINES (Appreciable amount of fines)		**SM**	Silty sand; sand/silt mixture(s)
				SC	Clayey sand; sand/clay mixture(s)
FINE-GRAINED SOIL (More than 50% of material is smaller than No. 200 sieve size)	SILT AND CLAY (Liquid limit less than 50)			**ML**	Inorganic silt and very fine sand; rock flour; silty or clayey fine sand or clayey silt with slight plasticity
				CL	Inorganic clay of low to medium plasticity; gravelly clay; sandy clay; silty clay; lean clay
				OL	Organic silt; organic, silty clay of low plasticity
	SILT AND CLAY (Liquid limit greater than 50)			**MH**	Inorganic silt; micaceous or diatomaceous fine sand
				CH	Inorganic clay of high plasticity; fat clay
				OH	Organic clay of medium to high plasticity; organic silt
	HIGHLY ORGANIC SOIL			**PT**	Peat; humus; swamp soil with high organic content

OTHER MATERIALS	GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
PAVEMENT		**AC** or **PC**	Asphalt concrete pavement or Portland cement pavement
ROCK		**RK**	Rock (See Rock Classification)
WOOD		**WD**	Wood, lumber, wood chips
DEBRIS		**DB**	Construction debris, garbage

NOTES:

1. USCS letter symbols correspond to symbols used by the Unified Soil Classification System and ASTM classification methods. Dual letter symbols (e.g., SP-SM for sand or gravel) indicate soil with an estimated 5-15% fines. Multiple letter symbols (e.g., ML/CL) indicate borderline or multiple soil classifications.
2. Soil descriptions are based on the general approach presented in the *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*, outlined in ASTM D 2488. Where laboratory index testing has been conducted, soil classifications are based on the *Standard Test Method for Classification of Soils for Engineering Purposes*, as outlined in ASTM D 2487.
3. Soil description terminology is based on visual estimates (in the absence of laboratory test data) of the percentages of each soil type and is defined as follows:

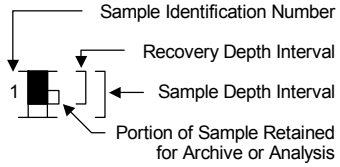
Primary Constituent:	> 50% - "GRAVEL," "SAND," "SILT," "CLAY," etc.
Secondary Constituents:	> 30% and ≤ 50% - "very gravelly," "very sandy," "very silty," etc.
	> 15% and ≤ 30% - "gravelly," "sandy," "silty," etc.
Additional Constituents:	> 5% and ≤ 15% - "with gravel," "with sand," "with silt," etc.
	≤ 5% - "trace gravel," "trace sand," "trace silt," etc., or not noted.

Drilling and Sampling Key

SAMPLER TYPE

Code	Description
a	3.25-inch O.D., 2.42-inch I.D. Split Spoon
b	2.00-inch O.D., 1.50-inch I.D. Split Spoon
c	Shelby Tube
d	Grab Sample
e	Single-Tube Core Barrel
f	Double-Tube Core Barrel
g	Other - See text if applicable
1	300-lb Hammer, 30-inch Drop
2	140-lb Hammer, 30-inch Drop
3	Pushed
4	Rotosonic
5	Air Rotary (Rock)
6	Wash Rotary (Rock)
7	Other - See text if applicable

SAMPLE NUMBER & INTERVAL



Field and Lab Test Data

Code	Description
PP = 1.0	Pocket Penetrometer, tsf
TV = 0.5	Torvane, tsf
PID = 100	Photoionization Detector VOC screening, ppm
W = 10	Moisture Content, %
D = 120	Dry Density, pcf
-200 = 60	Material smaller than No. 200 sieve, %
GS	Grain Size - See separate figure for data
AL	Atterberg Limits - See separate figure for data
VST	Vane Shear Test
GT	Other Geotechnical Testing
CA	Chemical Analysis

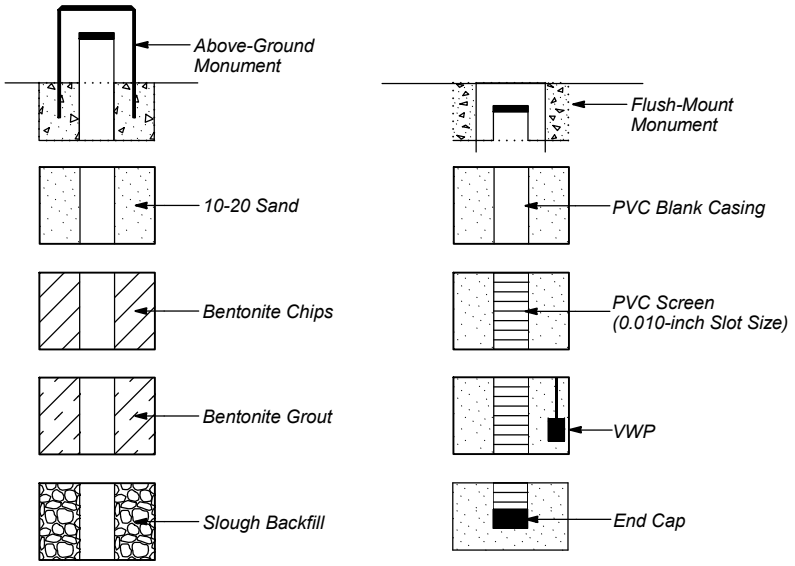
Groundwater

▽ Approximate water elevation at time of drilling (ATD).

▼ Approximate water elevation at other time(s). When multiple water levels are obtained other than ATD, only a representative range is shown. See text for additional information.

Note: Groundwater levels can fluctuate due to precipitation, seasonal conditions, and other factors.

Well Log Graphics



. 11/12/10 Y:\025\164\TA\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SCS WSDOT 2OF2

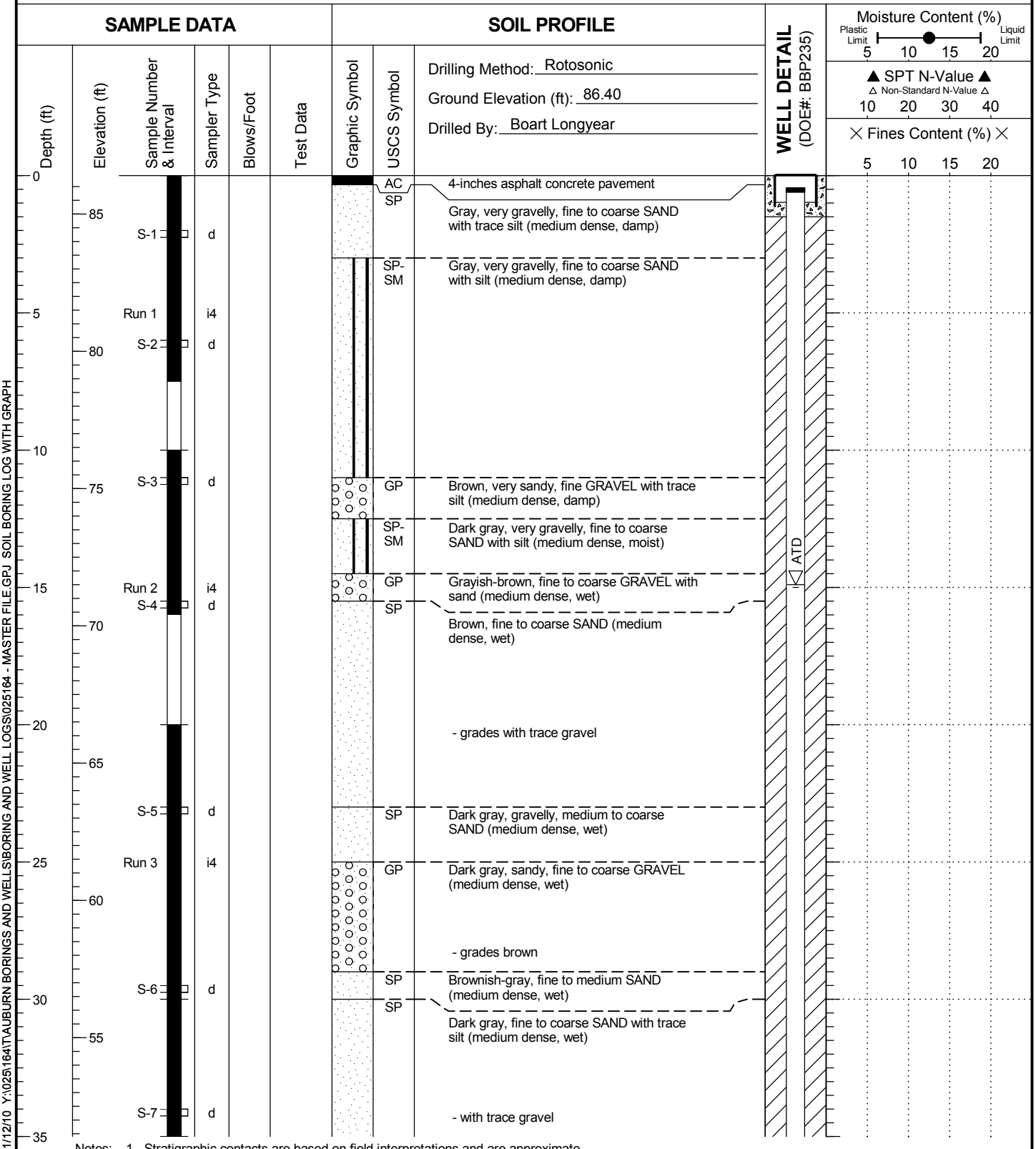
LANDAU ASSOCIATES

Boeing Auburn
Remedial Investigation
Auburn, Washington

Soil Classification System and Key

Figure A-1 (2 of 2)

AGW163



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP235**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

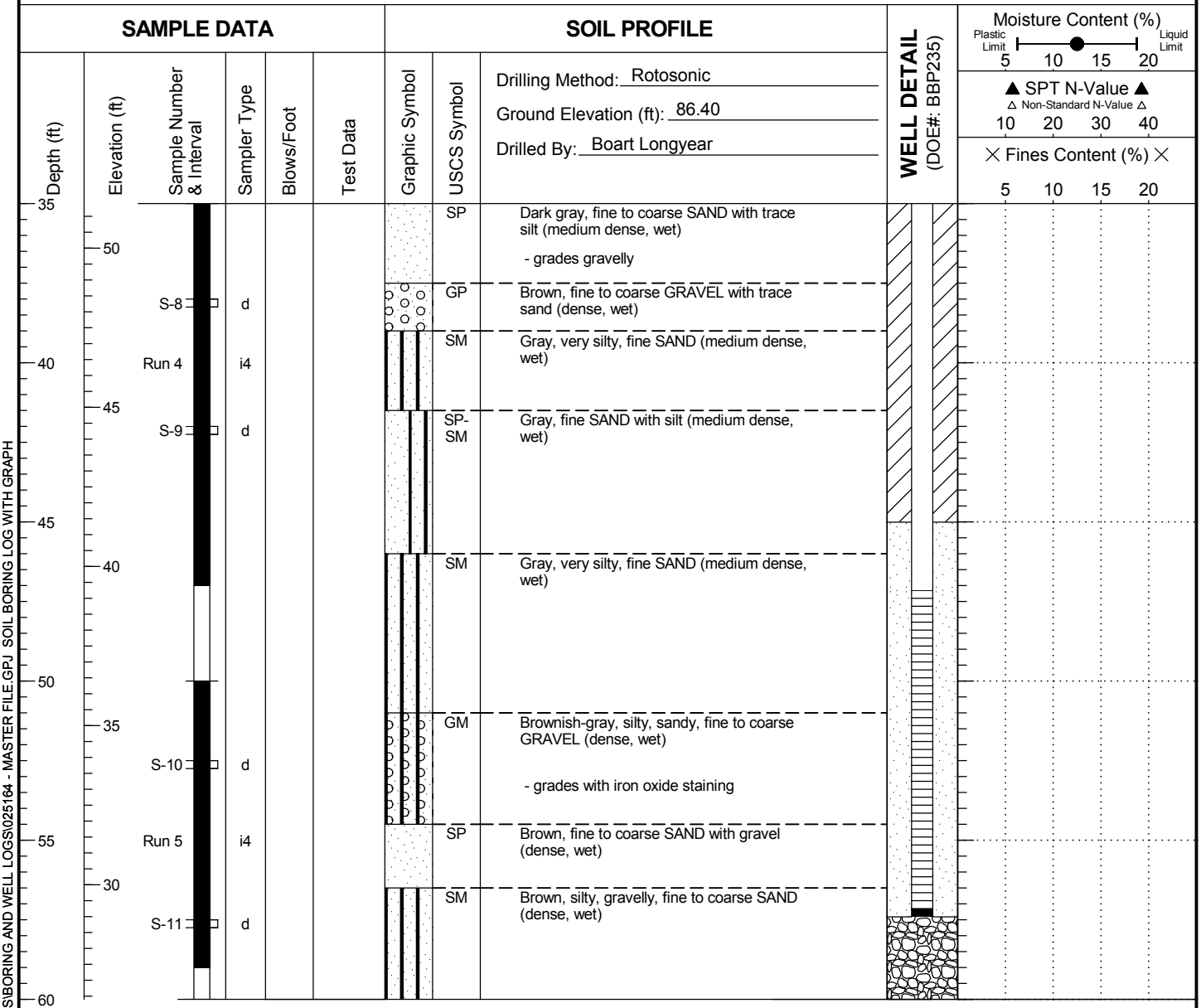
LANDAU ASSOCIATES

Boeing Auburn
Remedial Investigation
Auburn, Washington

Log of Boring AGW163

Figure
A-2
(1 of 2)

AGW163



Boring Completed 08/26/10. Total Depth of Boring = 60.0 ft.

Monitoring Well Completed 08/26/10
Total Depth of Monitoring Well = 57.4 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP235**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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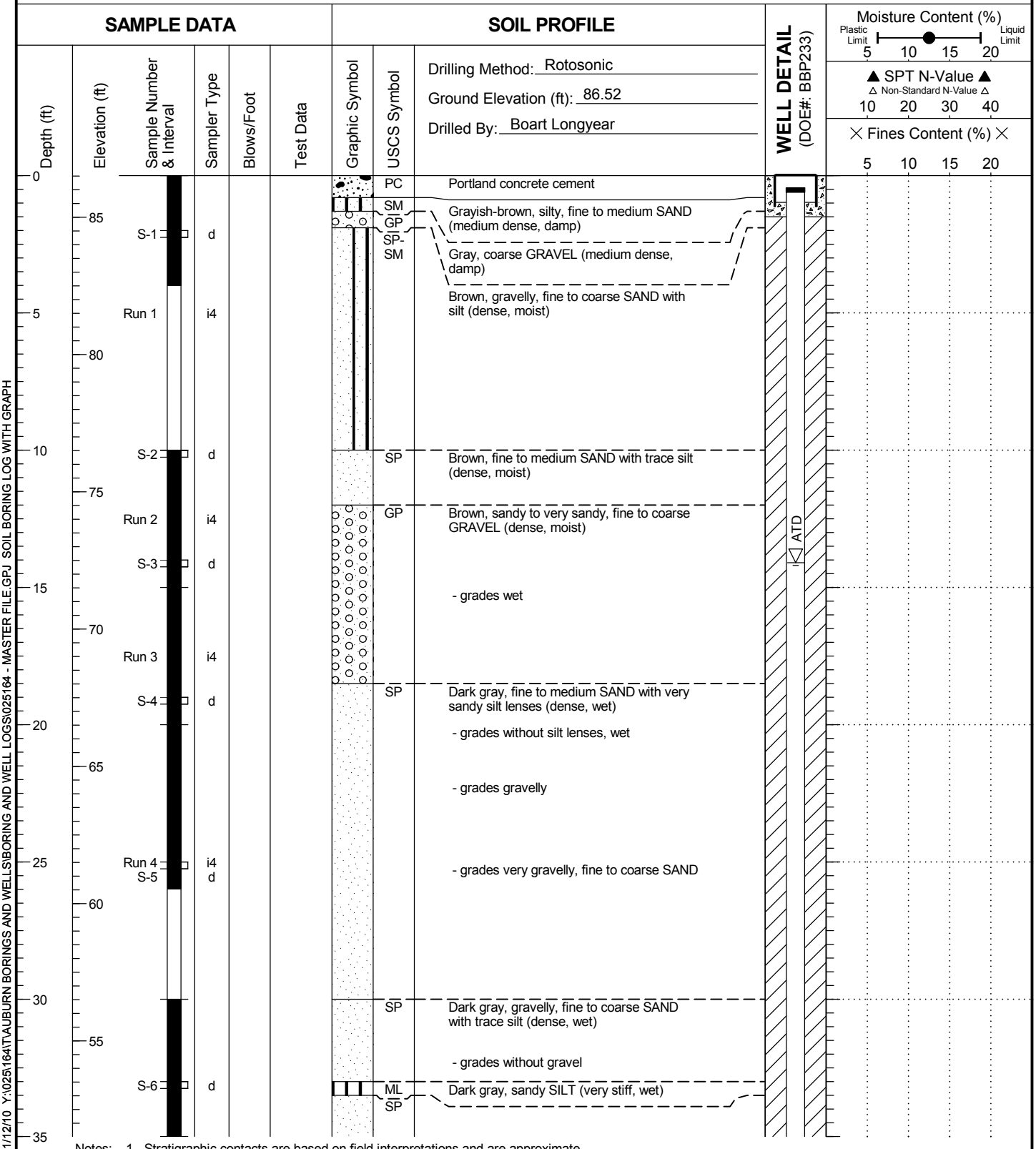
Remedial Investigation
Auburn, Washington

Log of Boring AGW163

Figure
A-2
(2 of 2)

AGW164



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP233**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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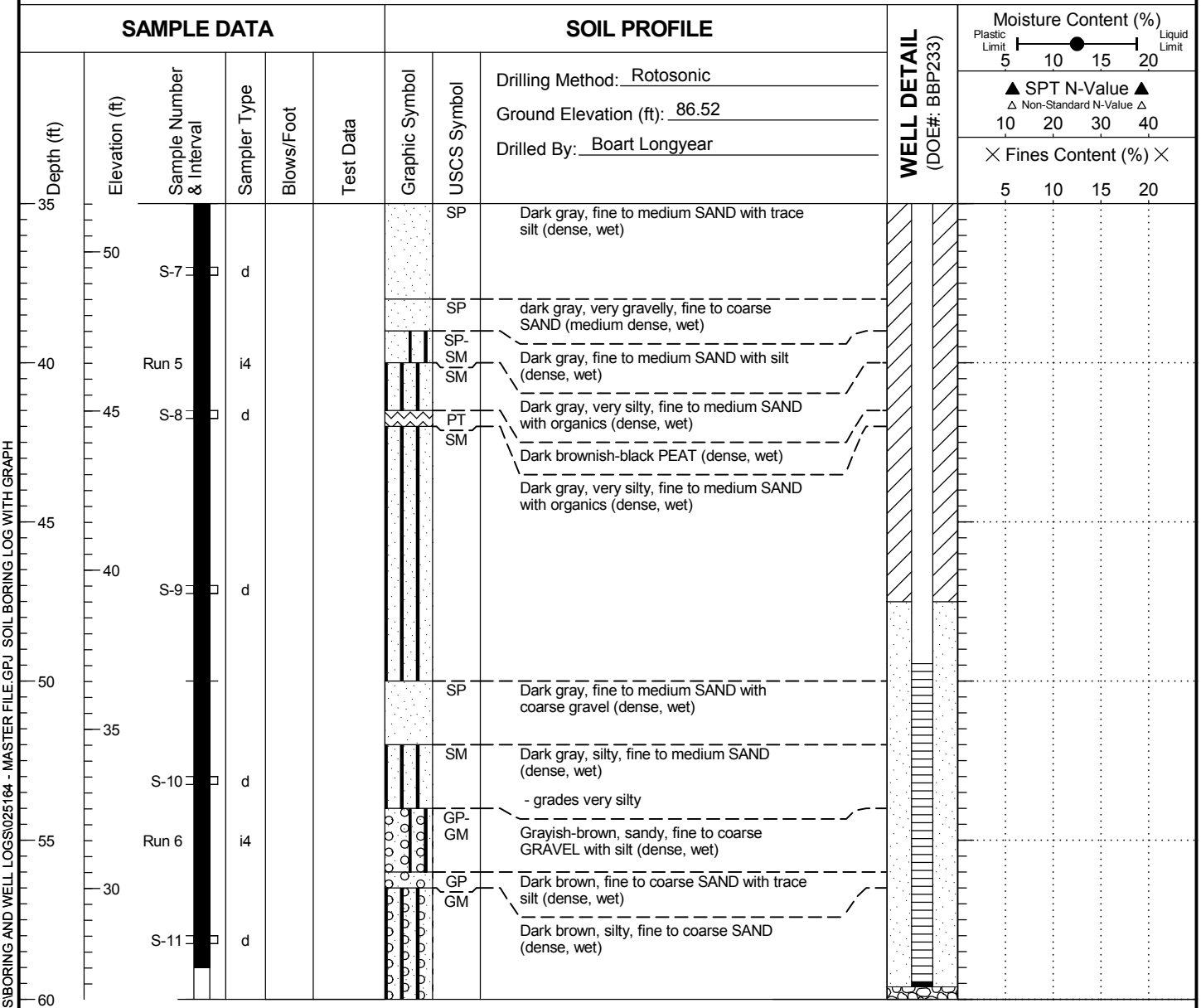
Auburn, Washington

Log of Boring AGW164

Figure
A-3
(1 of 2)

AGW164



Boring Completed 08/24/10. Total Depth of Boring = 60.0 ft.

Monitoring Well Completed 08/25/10
Total Depth of Monitoring Well = 59.6 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP233**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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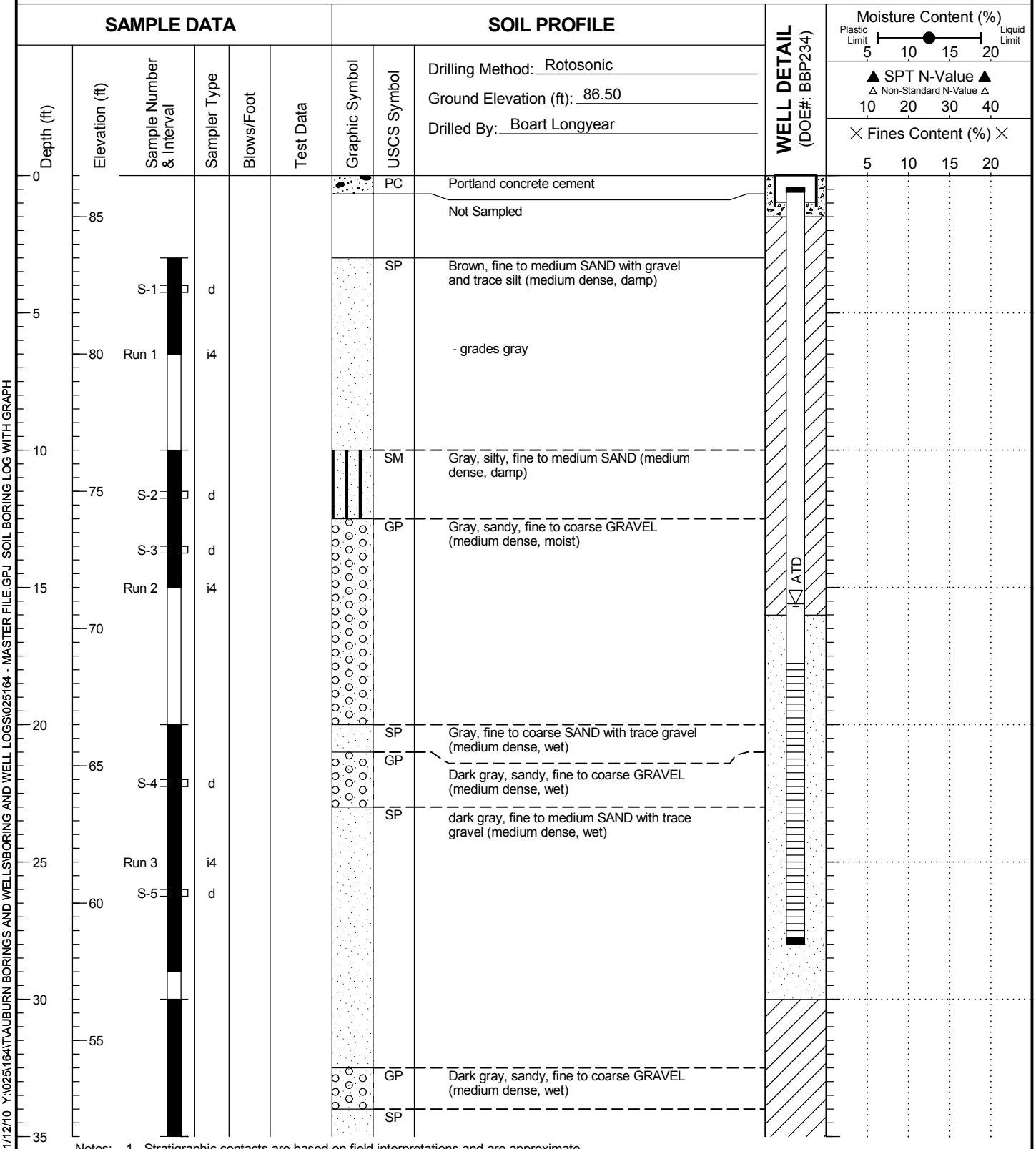
Auburn, Washington

Log of Boring AGW164

Figure
A-3
(2 of 2)

AGW165



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP234**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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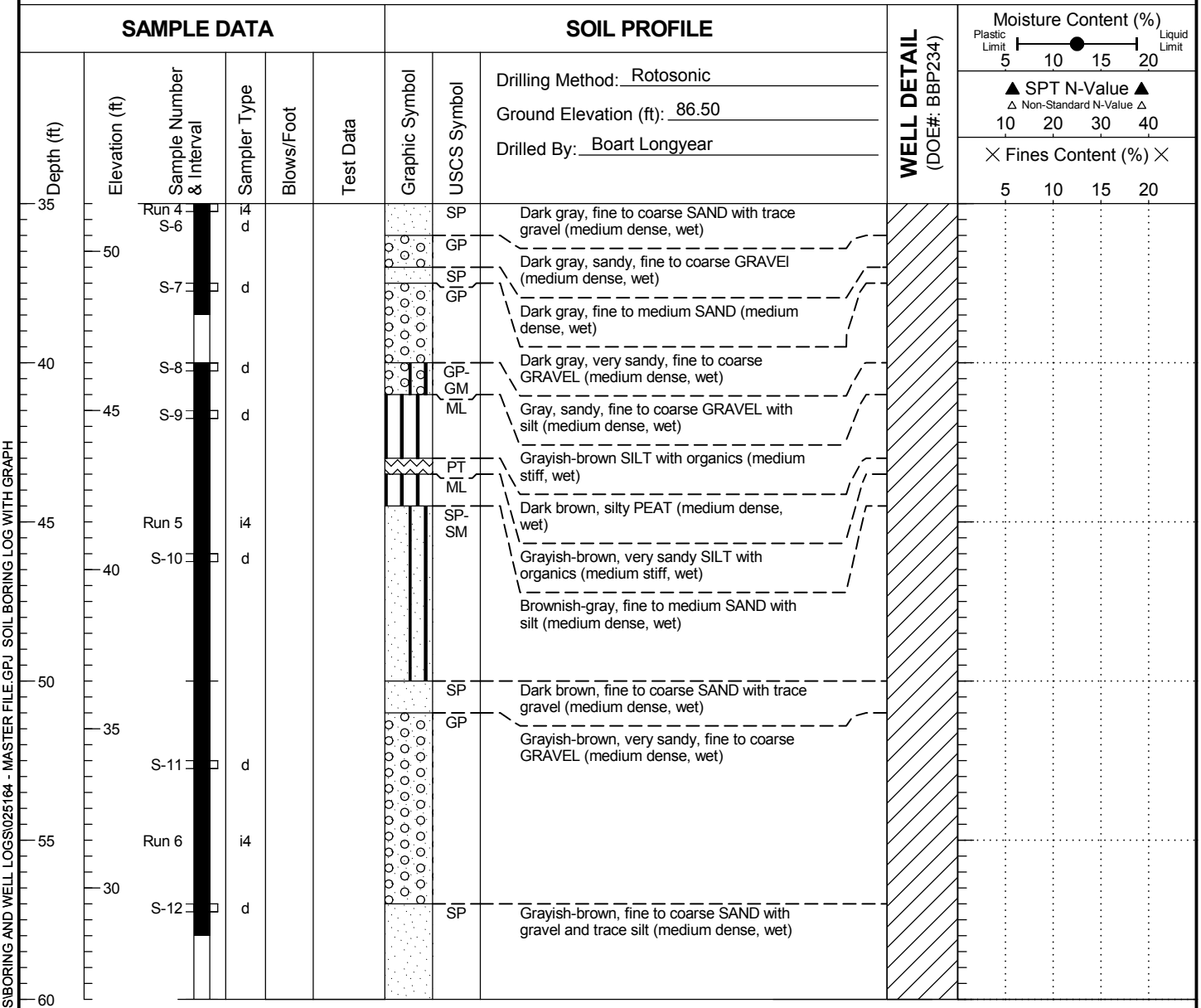
Auburn, Washington

Log of Boring AGW165

Figure
A-4
(1 of 2)

AGW165



Boring Completed 08/25/10. Total Depth of Boring = 60.0 ft.

Monitoring Well Completed 08/25/10
Total Depth of Monitoring Well = 28.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP234**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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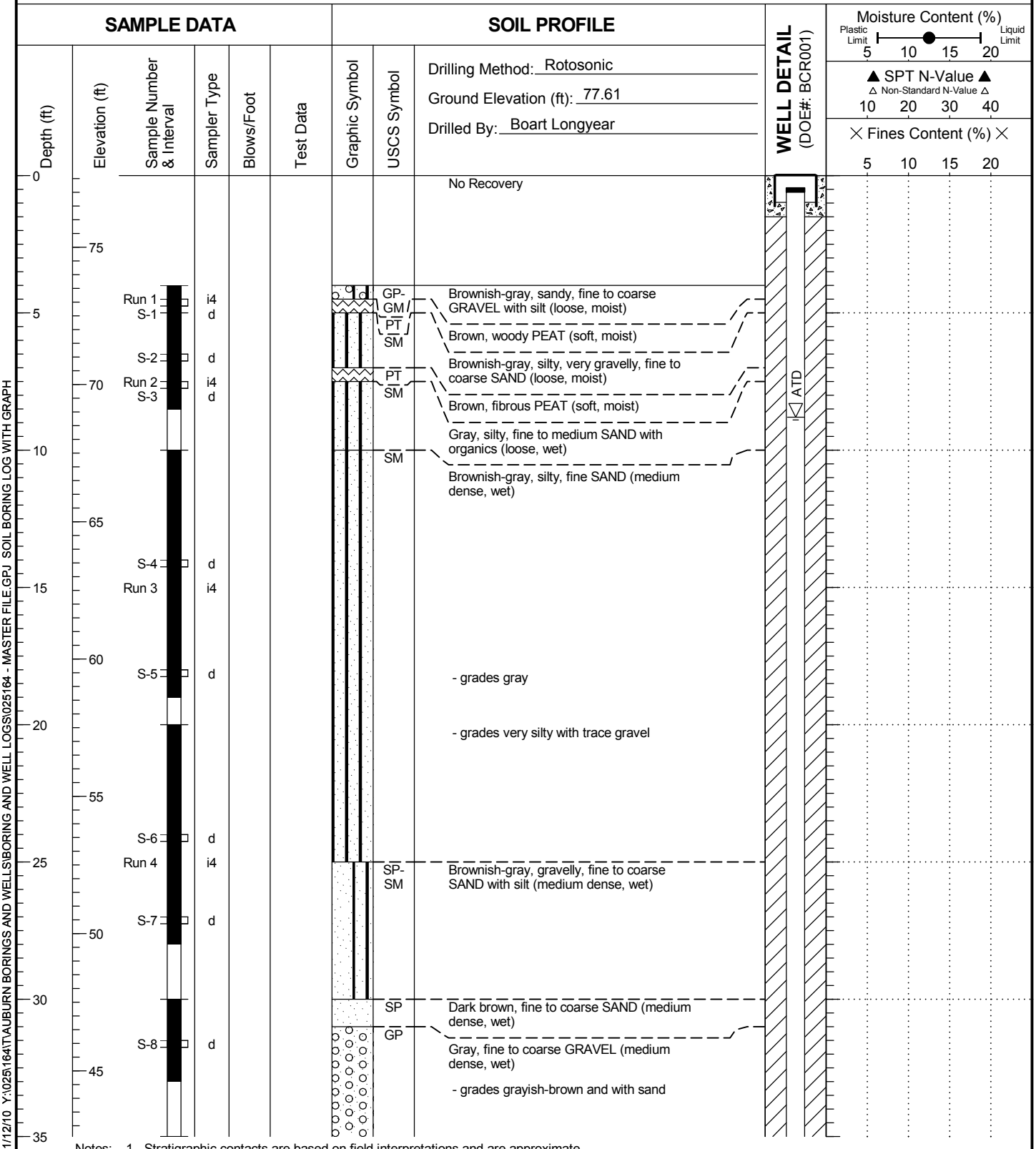
Log of Boring AGW165

Figure
A-4
(2 of 2)

AGW166



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR001**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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Auburn, Washington

Log of Boring AGW166

Figure
A-5
(1 of 2)

AGW166

SAMPLE DATA | **SOIL PROFILE** | **WELL DETAIL** (DOE#: BCR001)

Drilling Method: Rotosonic
Ground Elevation (ft): 77.61
Drilled By: Boart Longyear

Moisture Content (%) — Plastic Limit — Liquid Limit
5 10 15 20
▲ SPT N-Value ▲
△ Non-Standard N-Value △
10 20 30 40
× Fines Content (%) ×
5 10 15 20

Depth (ft)	Elevation (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Description
35	40	Run 5	i4				GP	Gray, fine to coarse GRAVEL (medium dense, wet)
40	35	S-9	d					
45	30	Run 6	i4					
50	25	S-10	d				SM	Brownish-gray, silty, fine SAND (medium dense, wet)
55	20	Run 7	i4				SP	Dark gray, fine to medium SAND (medium dense, wet)
		S-11	d					
60								
65								
70								

Boring Completed 10/26/10. Total Depth of Boring = 60.0 ft.

Monitoring Well Completed 10/26/10
Total Depth of Monitoring Well = 59.6 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR001**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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Auburn, Washington

Log of Boring AGW166

Figure
A-5
(2 of 2)

AGW167

SAMPLE DATA | **SOIL PROFILE** | **WELL DETAIL** (DOE#: BCR002)

Drilling Method: Rotosonic
Ground Elevation (ft): 78.11
Drilled By: Boart Longyear

Moisture Content (%) — Plastic Limit — Liquid Limit — 5 10 15 20
▲ SPT N-Value ▲ — △ Non-Standard N-Value △ — 10 20 30 40
× Fines Content (%) × — 5 10 15 20

Depth (ft)	Elevation (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Description
0	75							No Recovery
5		S-1	d				GM	Brown, silty, sandy, coarse GRAVEL (loose, moist)
		Run 1	i4					
10	70	S-2	d				SM	Brownish-gray, very silty, very gravelly, fine SAND (loose, wet)
								- grades silty and without gravel
15	65	S-3	d					
		Run 2	i4					
20	60	S-4	d				SP	Brown, fine to coarse SAND with gravel (medium dense, wet)
		S-5	d				GP	Brown, fine to coarse GRAVEL (medium dense, wet)
25	55	Run 3	i4					
30	50	S-6	d					
35	45	S-7	d				GP	Grayish-brown, sandy, fine to coarse GRAVEL with trace silt (medium dense, wet)

ATD

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR002**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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Auburn, Washington

Log of Boring AGW167

Figure
A-6
(1 of 3)

AGW167

SAMPLE DATA | **SOIL PROFILE** | **WELL DETAIL** (DOE#: BCR002)

Drilling Method: Rotosonic
Ground Elevation (ft): 78.11
Drilled By: Boart Longyear

Moisture Content (%) — Plastic Limit — Liquid Limit
5 10 15 20
▲ SPT N-Value ▲
△ Non-Standard N-Value △
10 20 30 40
× Fines Content (%) ×
5 10 15 20

Depth (ft)	Elevation (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Description
35	40	Run 4	i4				GP	Grayish-brown, sandy, fine to coarse GRAVEL with trace silt (medium dense, wet)
40	35	S-8	d					- grades very sandy
45	30	Run 8 S-9	i4 d					- grades sandy
50	25	S-10	d				GP-GM	Grayish-brown, fine to coarse GRAVEL with sand and silt (medium dense, wet)
55	20	S-11	d				SP	Dark gray, very gravelly, fine to coarse SAND (medium dense, wet)
60	15	Run 6	i4				SM	Gray, silty, fine SAND (medium dense, wet)
65	10	S-12	d				WD	Large fragments of wood
70		S-13	d				SP-SM	Dark gray, fine SAND with silt (medium dense, wet)
		Run 7	i4				SP	Dark gray, fine to coarse SAND with trace gravel (medium dense, wet)
		S-14	d				SP-SM	Dark gray, fine to coarse SAND with silt (medium dense, wet)

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR002**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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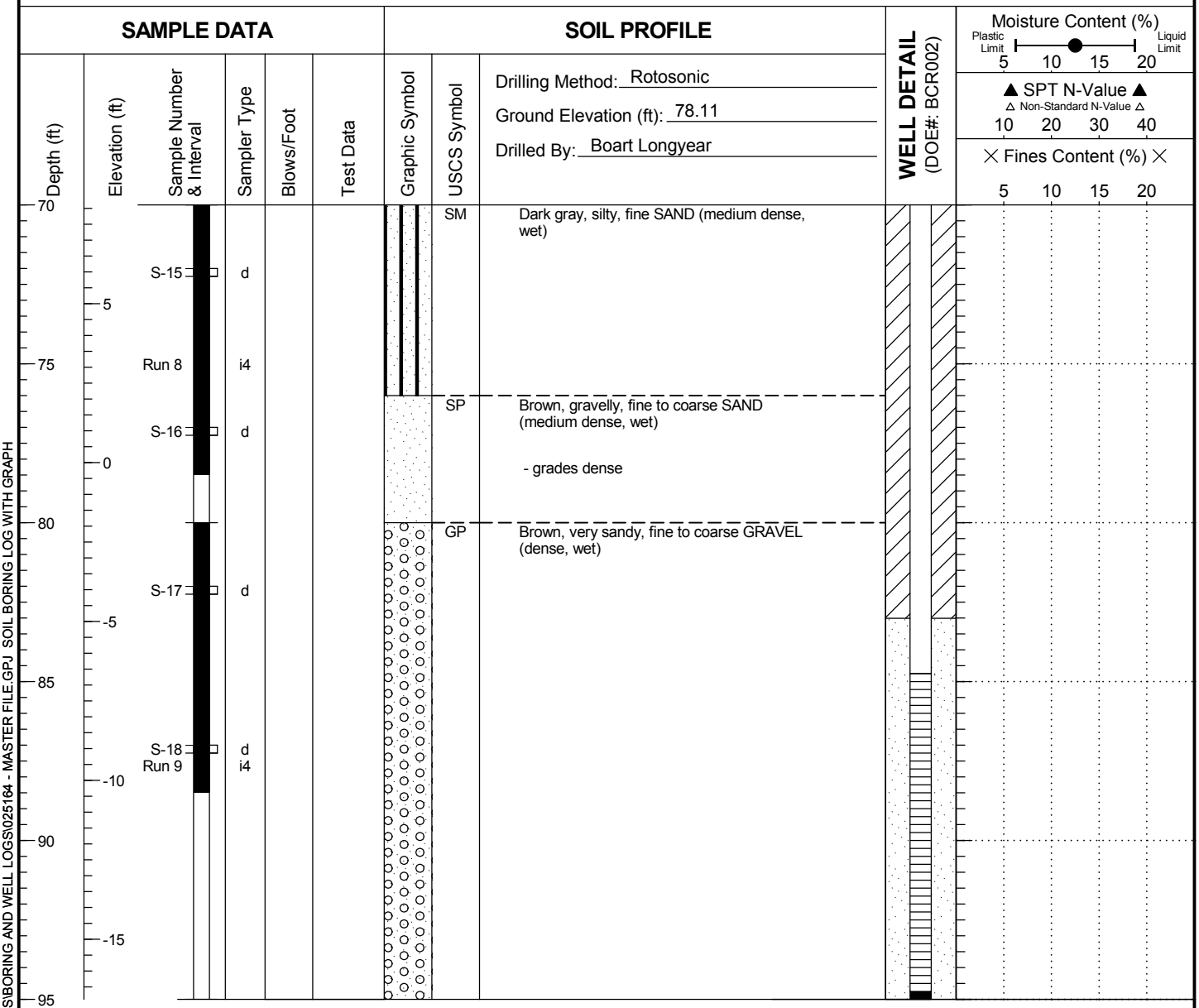
Auburn, Washington

Log of Boring AGW167

Figure
A-6
(2 of 3)

AGW167



Boring Completed 10/27/10. Total Depth of Boring = 95.0 ft.

Monitoring Well Completed 10/27/10
Total Depth of Monitoring Well = 95.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR002**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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Auburn, Washington

Log of Boring AGW167

Figure
A-6
(3 of 3)

AGW168

SAMPLE DATA | **SOIL PROFILE** | **WELL DETAIL** (DOE#: BCR003)

Drilling Method: Rotosonic
Ground Elevation (ft): 77.95
Drilled By: Boart Longyear

Moisture Content (%) — Plastic Limit / Liquid Limit — 5 10 15 20
▲ SPT N-Value ▲ / △ Non-Standard N-Value △ — 10 20 30 40
× Fines Content (%) × — 5 10 15 20

Depth (ft)	Elevation (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Description
0							AC	8-inches asphalt concrete pavement
								No Recovery
	75							
5		S-1	d				GP	Brown, sandy, fine to coarse GRAVEL (loose, moist)
		S-2	d				PT	Dark brown PEAT with gravel (soft, moist)
		Run 1	i4				SP-SM	Brown, fine to medium SAND with silt (loose, moist)
		S-3	d					
	70							
10								- grades dark gray and medium dense
		S-4	d					
	65							- grades wet
15		Run 2	i4					
							SP	Dark gray, fine to medium SAND with trace silt (medium dense, wet)
		S-5	d					
	60							- grades with wood
20								- grades gray
		S-6	d					
	55							
25		Run 3	i4					
	50							
30								- grades light grayish-brown
		S-7	d					
		S-8	d					- grades gravelly and fine to coarse sand
	45							
35								

ATD

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR003**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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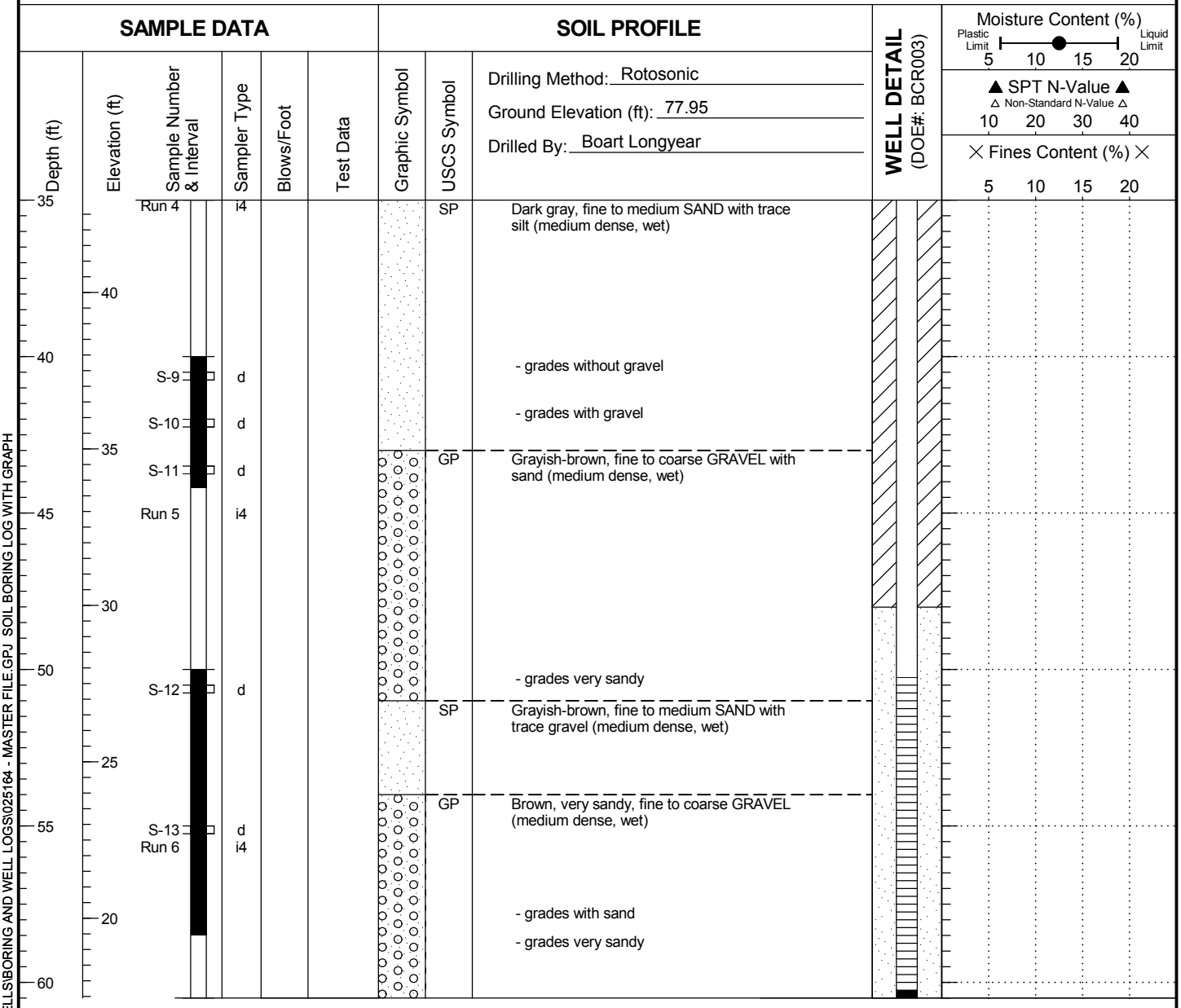
Remedial Investigation
Auburn, Washington

Log of Boring AGW168

Figure
A-7
(1 of 2)

AGW168



Boring Completed 10/28/10. Total Depth of Boring = 60.5 ft.

Monitoring Well Completed 10/28/10
Total Depth of Monitoring Well = 60.5 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR003**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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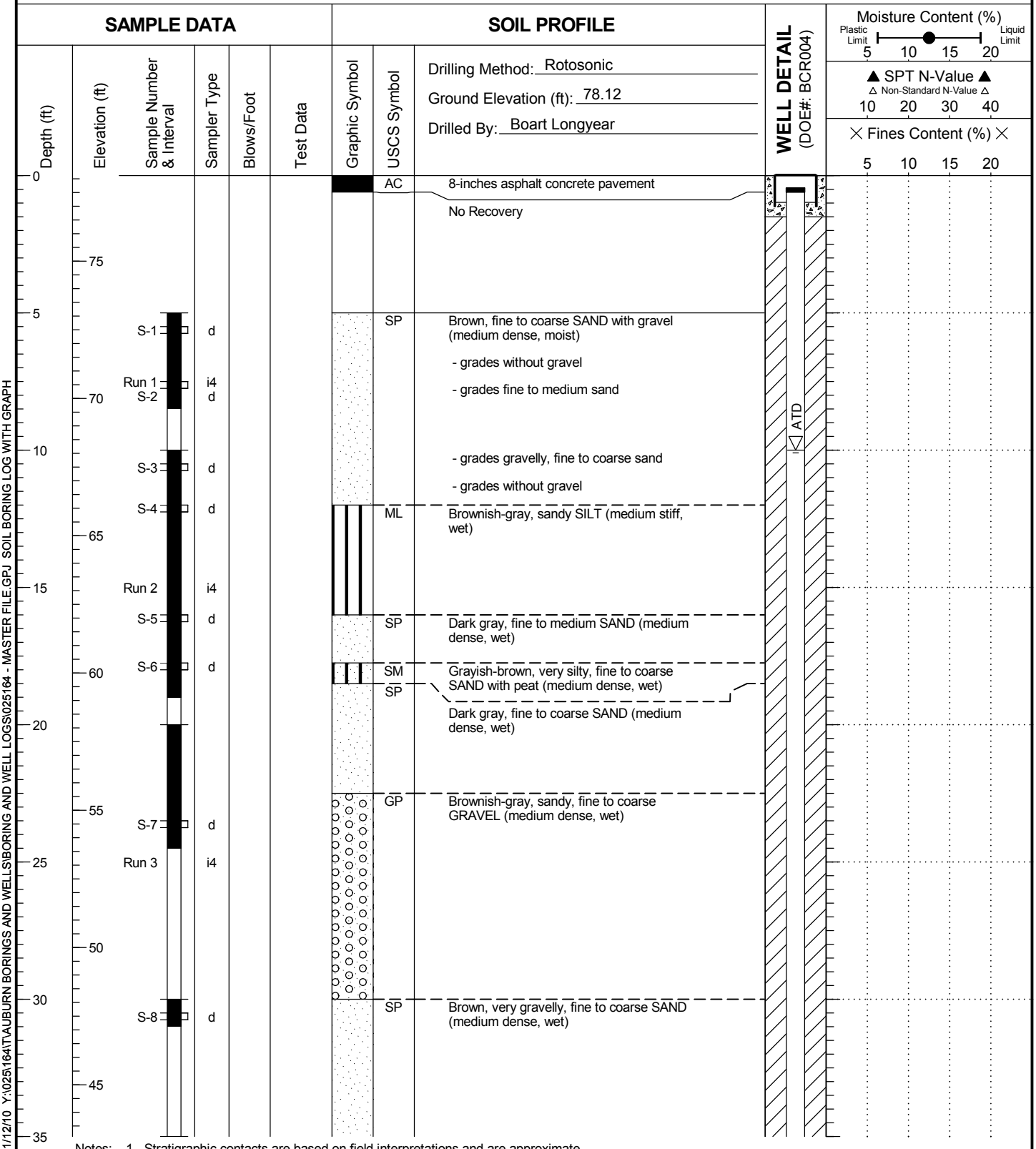
Auburn, Washington

Log of Boring AGW168

Figure
A-7
(2 of 2)

AGW169



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR004**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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Remedial Investigation
Auburn, Washington

Log of Boring AGW169

Figure
A-8
(1 of 3)

AGW169

SAMPLE DATA | **SOIL PROFILE** | **WELL DETAIL** (DOE#: BCR004)

Drilling Method: Rotosonic
Ground Elevation (ft): 78.12
Drilled By: Boart Longyear

Moisture Content (%) — Plastic Limit — Liquid Limit
▲ SPT N-Value ▲ / △ Non-Standard N-Value △
× Fines Content (%) ×

Depth (ft)	Elevation (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Description
35		Run 4	i4				SP	Brown, very gravelly, fine to coarse SAND (medium dense, wet)
	40							
40		S-9	d					- grades medium to coarse sand and without gravel
		S-10	d					- grades gravelly
	35							
45		Run 5	i4					
	30							
50							SP	Gray, fine to medium SAND (medium dense, wet)
	25	S-11	d					
55		Run 6	i4					- grades gravelly, fine to coarse sand
		S-12	d					
	20	S-13	d				GP	Brown, fine to coarse GRAVEL with sand (medium dense, wet)
60							SP	Brown, gravelly, fine to coarse SAND (medium dense, wet)
	15	S-14	d					
65		Run 7	i4					- grades with gravel
		S-15	d					
		S-16	d				SM	Gray, silty, fine SAND (medium dense, wet)
	10	S-17	d					
70							SP-SM	Gray, fine SAND with silt (medium dense, wet)

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR004**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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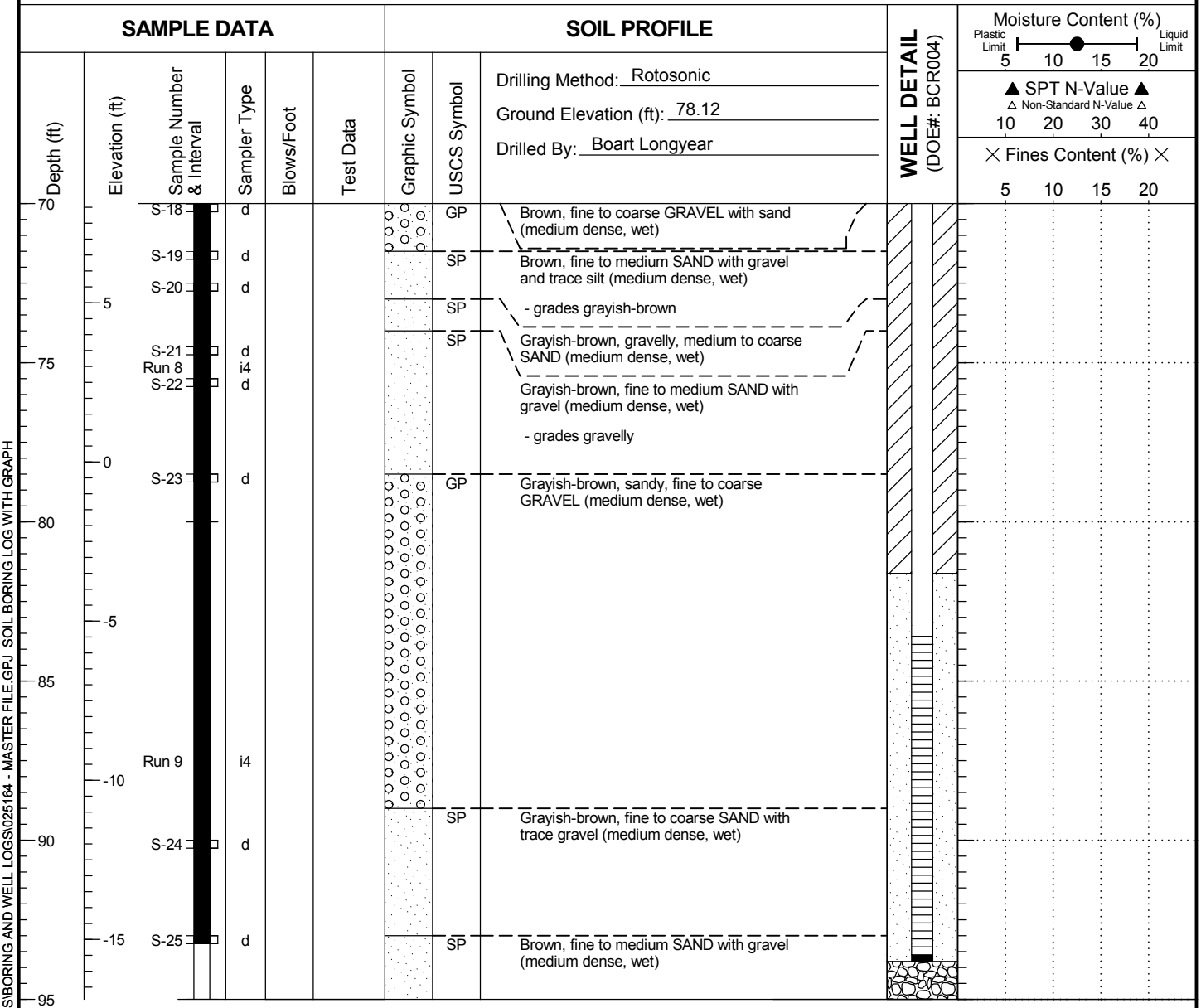
Remedial Investigation
Auburn, Washington

Log of Boring AGW169

Figure
A-8
(2 of 3)

AGW169



Boring Completed 10/29/10. Total Depth of Boring = 95.0 ft.

Monitoring Well Completed 10/29/10
Total Depth of Monitoring Well = 93.8 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR004**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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Auburn, Washington

Log of Boring AGW169

Figure
A-8
(3 of 3)

AGW170

SAMPLE DATA | **SOIL PROFILE** | **WELL DETAIL** (DOE#: BCR005)

Drilling Method: Rotosonic
Ground Elevation (ft): 80.21
Drilled By: Boart Longyear

Moisture Content (%) — Plastic Limit — Liquid Limit — 5 10 15 20
▲ SPT N-Value ▲ △ Non-Standard N-Value △ — 10 20 30 40
× Fines Content (%) × — 5 10 15 20

Depth (ft)	Elevation (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Description
0	80						AC	6-inches asphalt concrete pavement
								No Recovery
5	75	S-1	d				GP-GM	Brown, sandy, fine to coarse GRAVEL with silt (loose, moist)
		Run 1	i4				SM	Brown iron oxide mottled, silty, fine to
		S-2	d					medium SAND (loose, moist)
10	70	S-3	d				SP	Dark brown, fine to medium SAND (loose, wet)
								- grades with trace gravel
15	65	Run 2	i4					
		S-4	d				GP	Brown, sandy, fine to coarse GRAVEL (medium dense, wet)
20	60						SP	Brown, fine to coarse SAND with gravel (medium dense, wet)
							GP	Brown, sandy, fine to coarse GRAVEL
		S-5	d					(medium dense, wet)
25	55	Run 3	i4					
30	50							
		S-6	d					- grades very sandy
35								

ATD

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR005**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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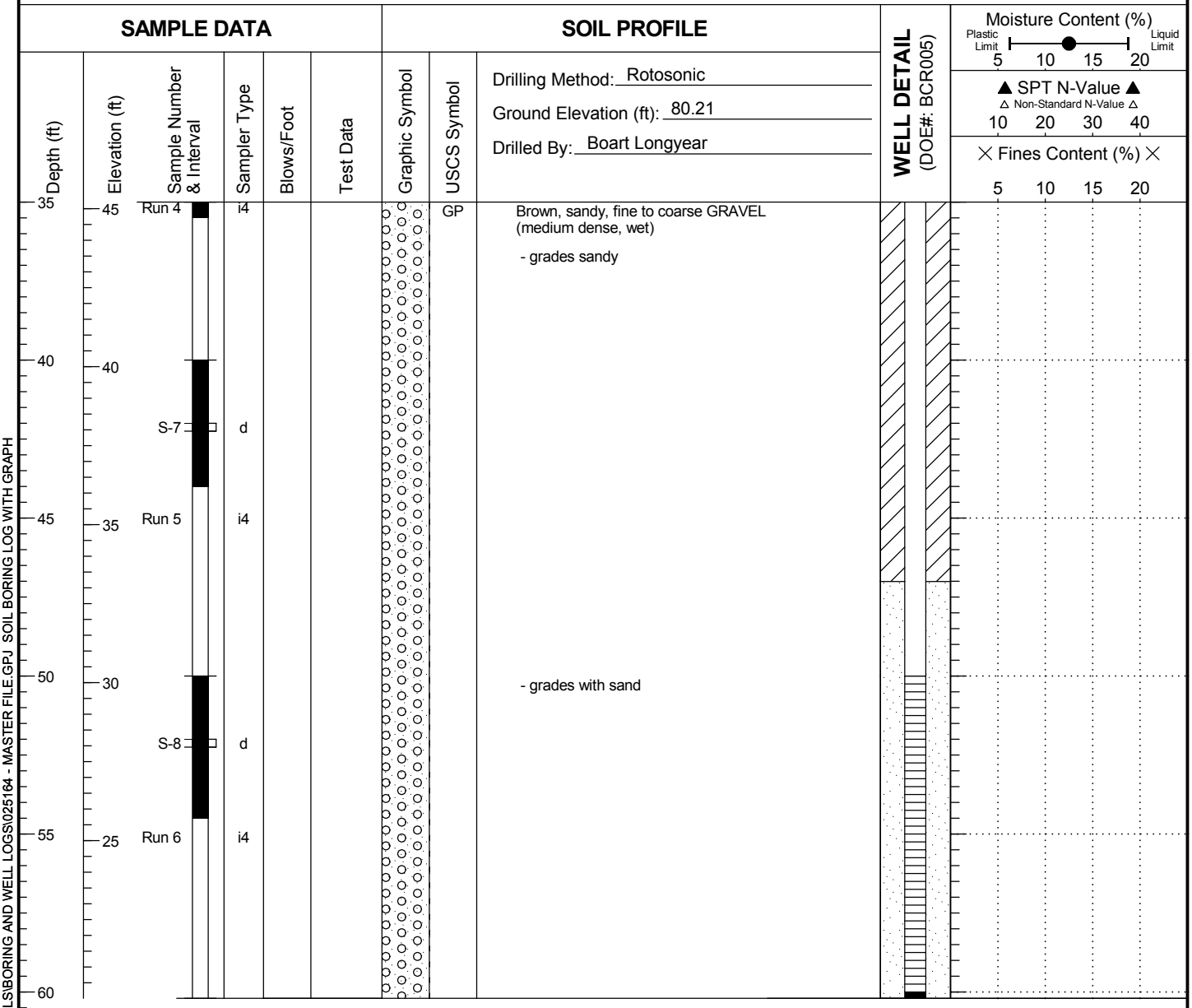
Auburn, Washington

Log of Boring AGW170

Figure
A-9
(1 of 2)

AGW170



Boring Completed 11/01/10. Total Depth of Boring = 60.2 ft.

Monitoring Well Completed 11/01/10
Total Depth of Monitoring Well = 60.2 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR005**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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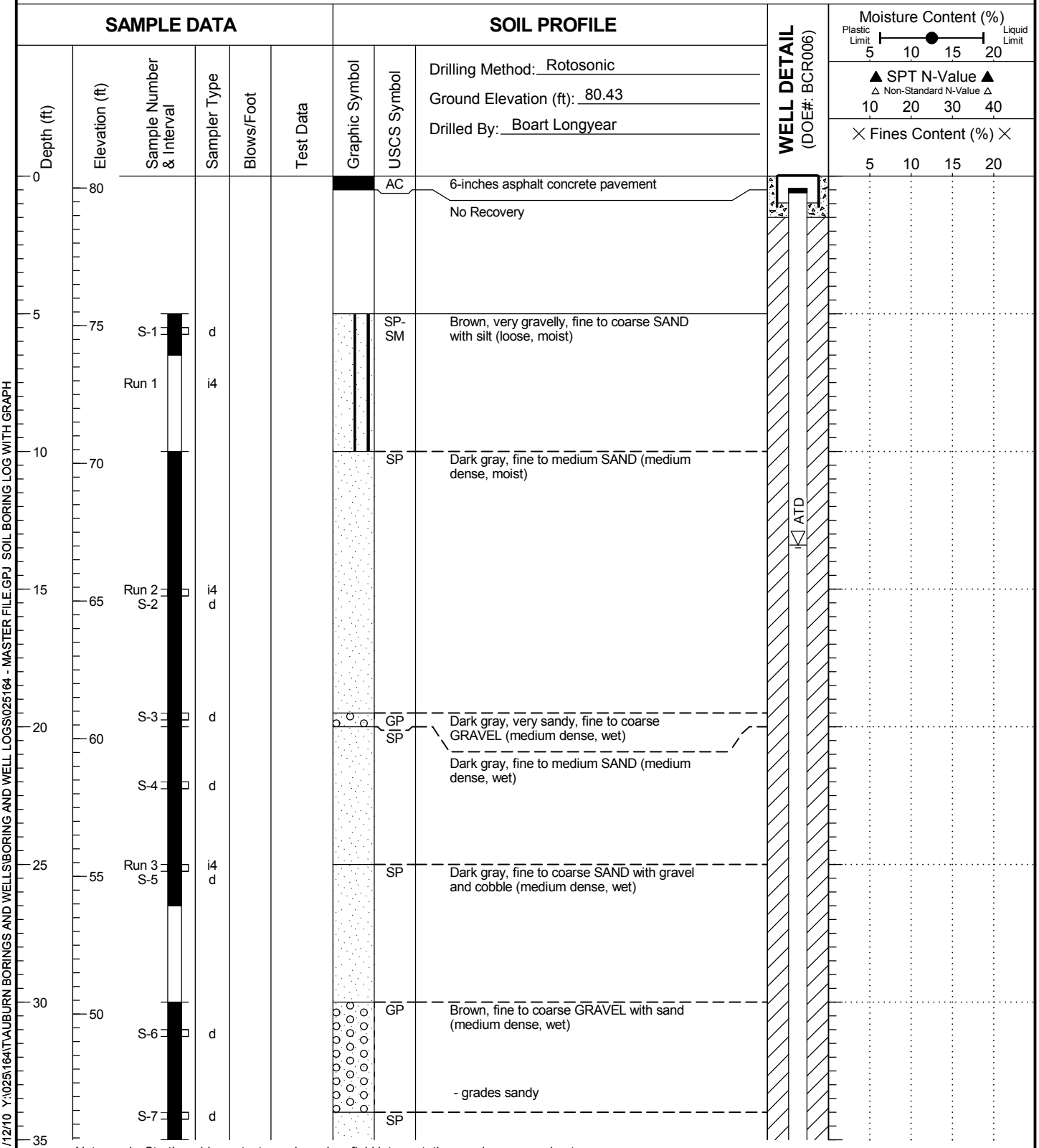
Auburn, Washington

Log of Boring AGW170

Figure
A-9
(2 of 2)

AGW171



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR006**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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Log of Boring AGW171

Figure
A-10
(1 of 3)

AGW171

SAMPLE DATA | **SOIL PROFILE** | **WELL DETAIL** (DOE#: BCR006)

Drilling Method: Rotosonic
Ground Elevation (ft): 80.43
Drilled By: Boart Longyear

Moisture Content (%) — Plastic Limit — Liquid Limit
5 10 15 20
▲ SPT N-Value ▲
△ Non-Standard N-Value △
10 20 30 40
× Fines Content (%) ×
5 10 15 20

Depth (ft)	Elevation (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Description
35	45	Run 4	i4				SP	Dark gray, very gravelly, fine to coarse SAND (medium dense, wet)
40	40	S-8	d				GP	Grayish-brown, very sandy, fine to coarse GRAVEL (medium dense, wet)
45	35	Run 5 S-9	i4 d					- grades brown and with sand
50	30	S-10	d					- grades dark brown
55	25	Run 6 S-11	i4 d					- grades very sandy
60	20	S-12	d					- grades sandy
65	15	Run 7 S-13	i4 d					- grades with trace sand
70								

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR006**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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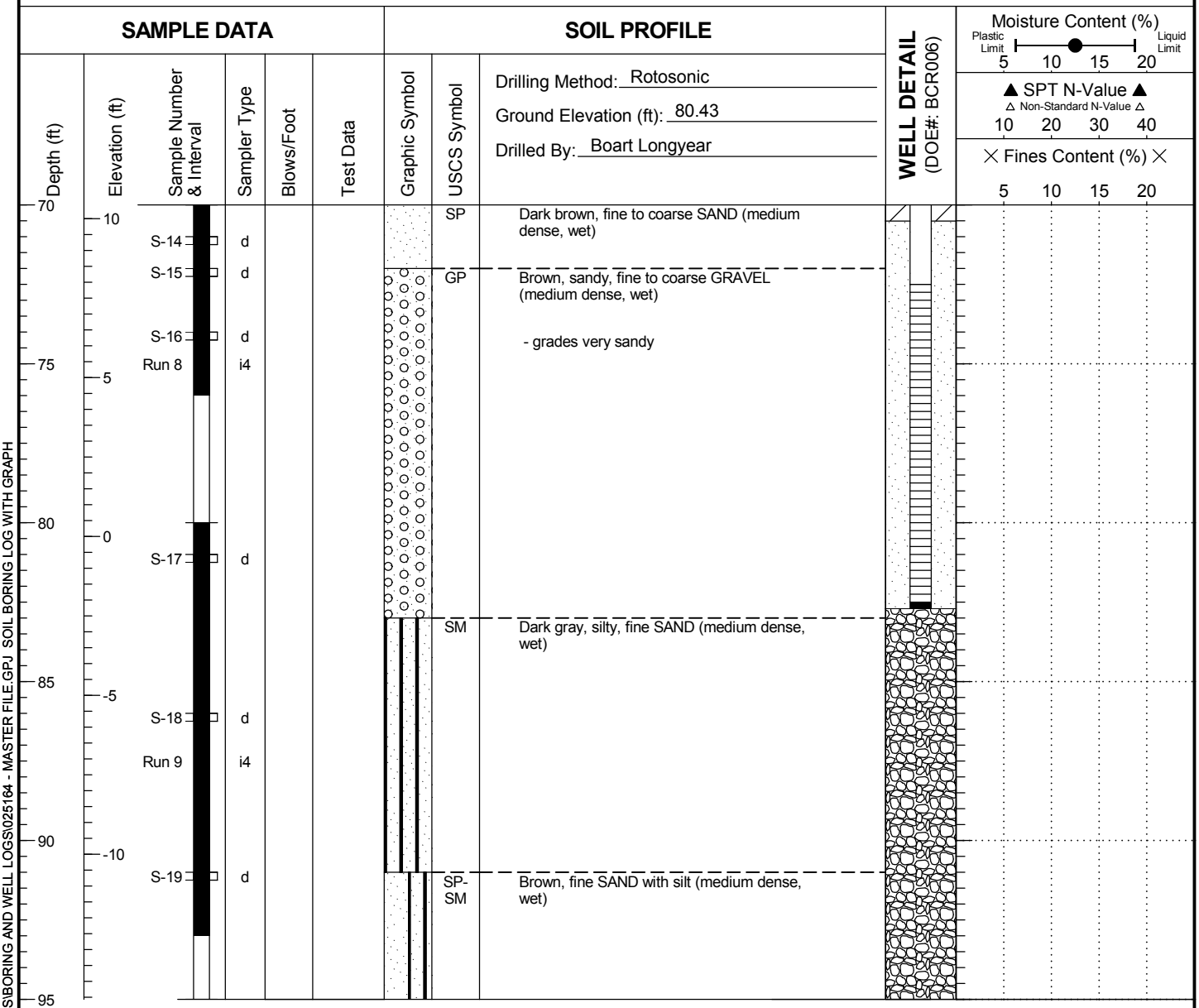
Boeing Auburn
Remedial Investigation
Auburn, Washington

Log of Boring AGW171

Figure
A-10
(2 of 3)

AGW171



Boring Completed 11/02/10. Total Depth of Boring = 95.0 ft.

Monitoring Well Completed 11/02/10
Total Depth of Monitoring Well = 82.7 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number:BCR006**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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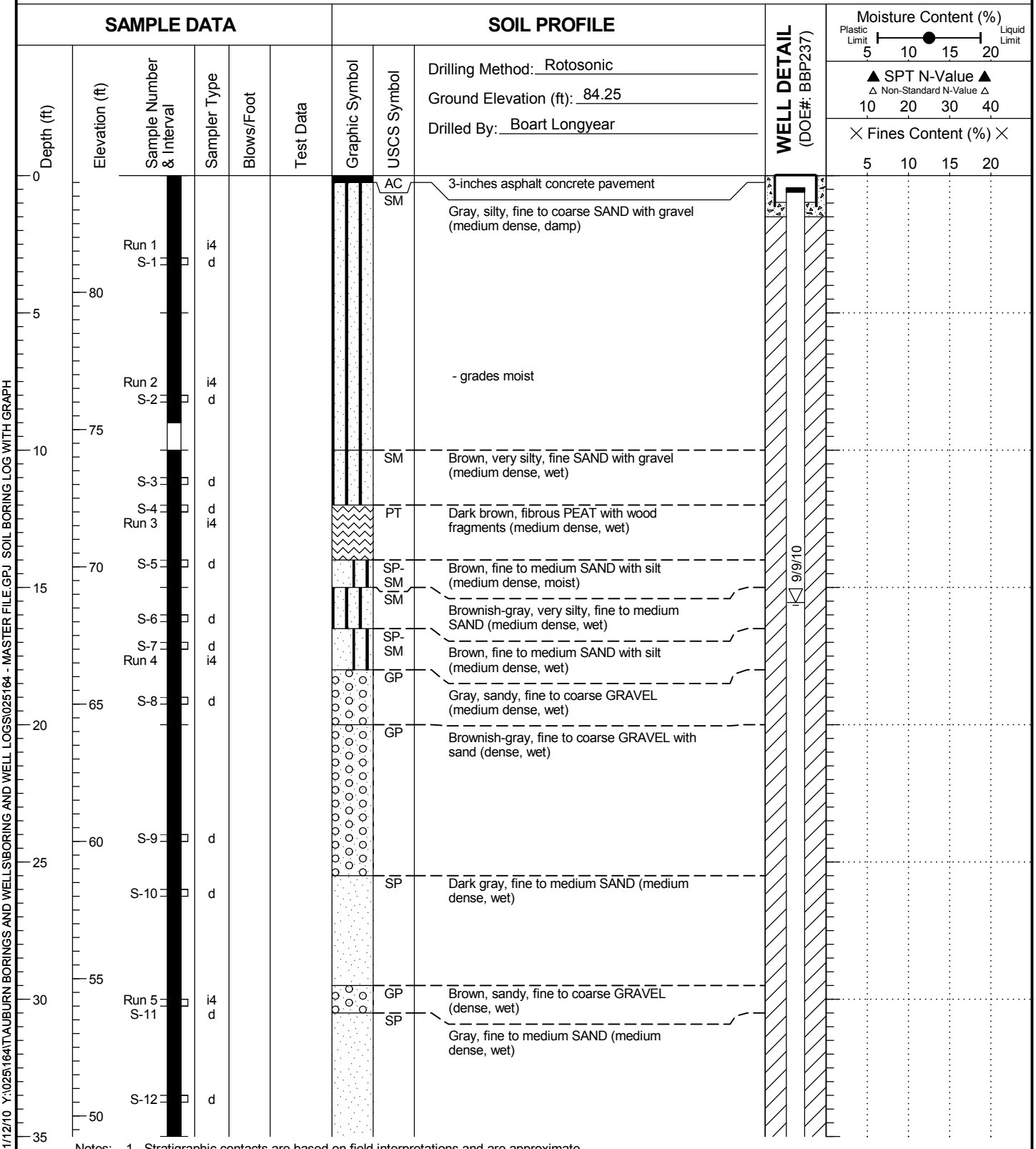
Auburn, Washington

Log of Boring AGW171

Figure
A-10
(3 of 3)

AGW172



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP237**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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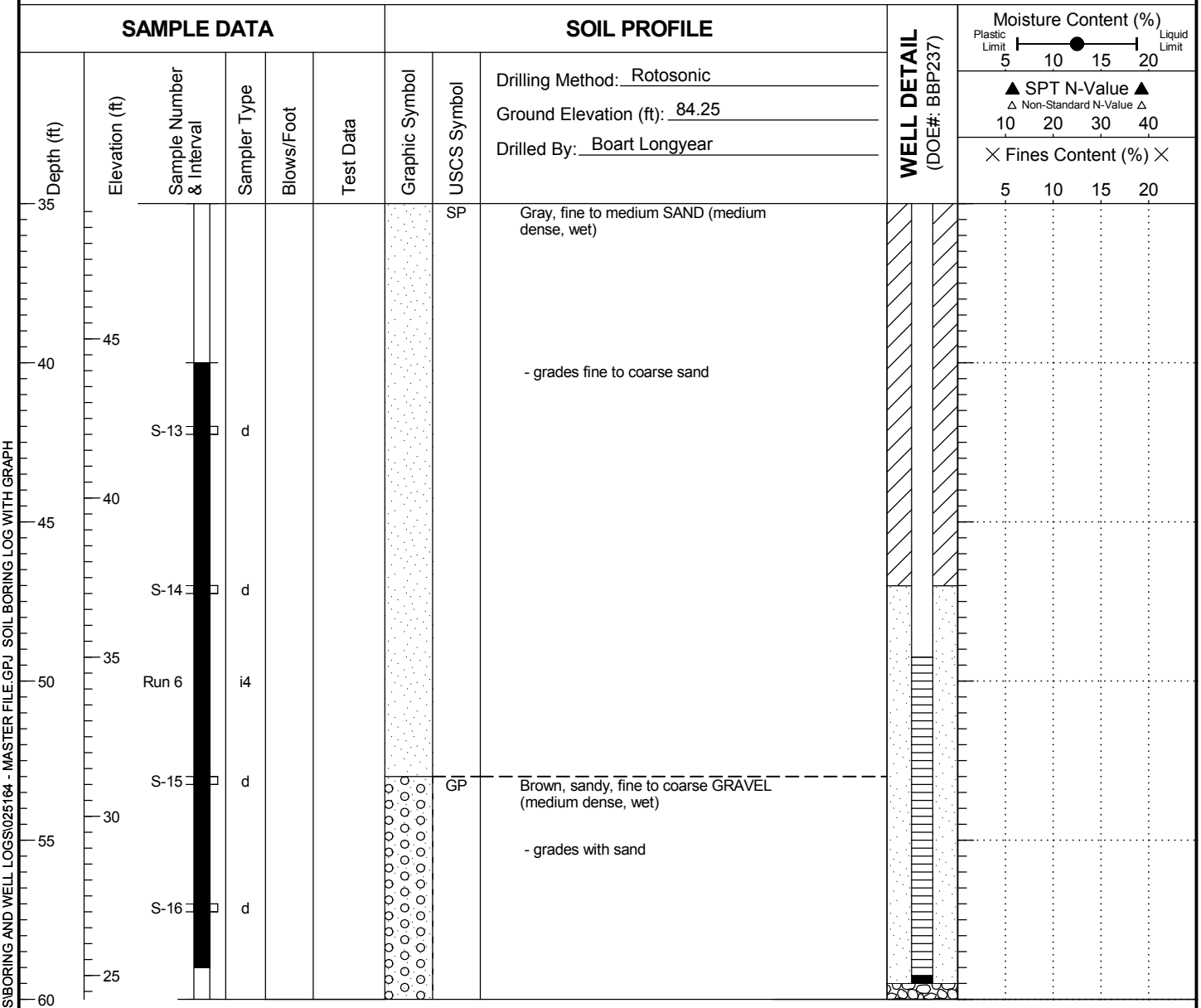
Auburn, Washington

Log of Boring AGW172

Figure
A-11
(1 of 2)

AGW172



Boring Completed 09/02/10. Total Depth of Boring = 60.0 ft.

Monitoring Well Completed 09/02/10
Total Depth of Monitoring Well = 59.5 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP237**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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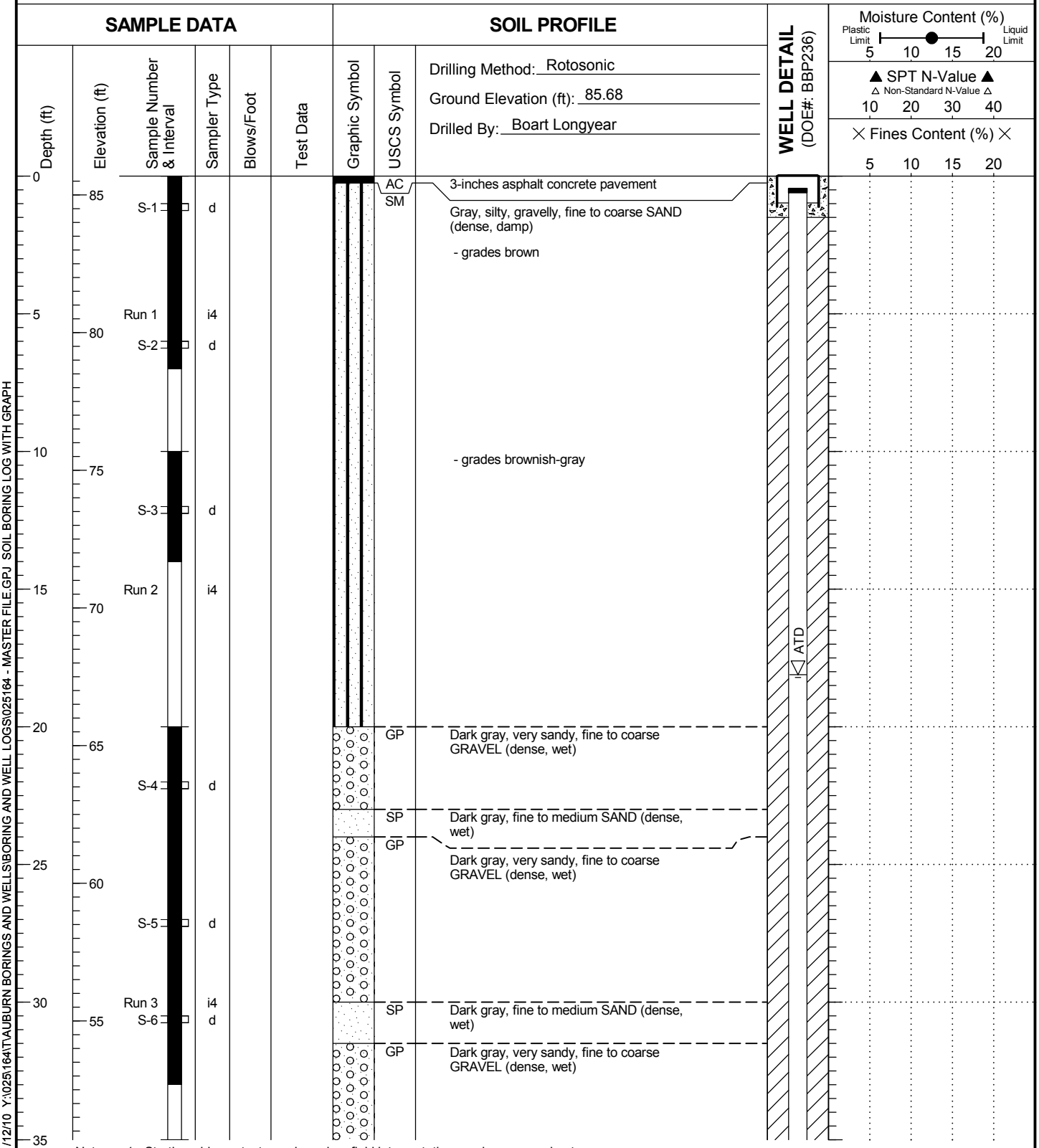
Auburn, Washington

Log of Boring AGW172

Figure
A-11
(2 of 2)

AGW173



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP236**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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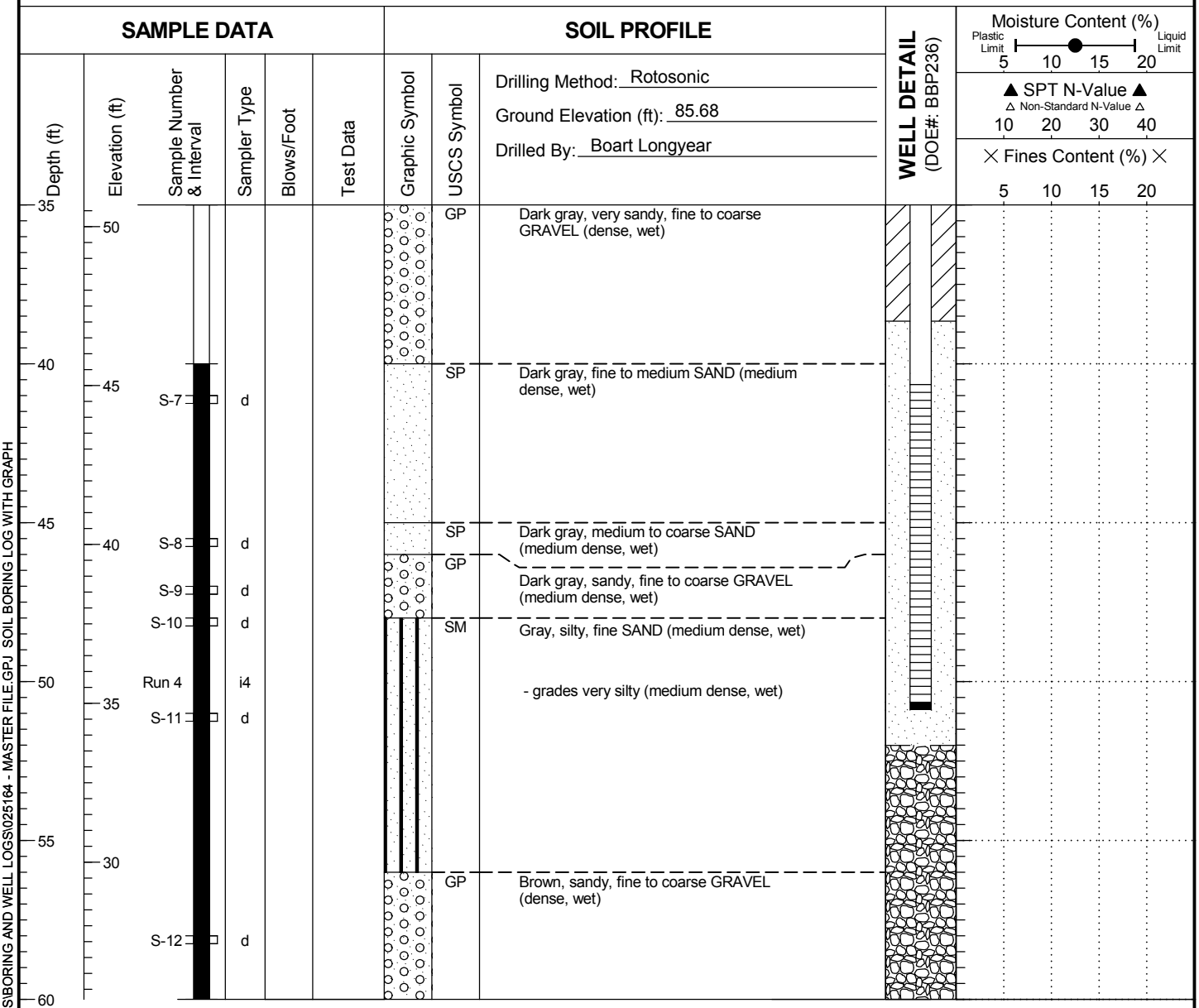
Auburn, Washington

Log of Boring AGW173

Figure
A-12
(1 of 2)

AGW173



Boring Completed 09/01/10. Total Depth of Boring = 60.0 ft.

Monitoring Well Completed 09/01/10
Total Depth of Monitoring Well = 50.9 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP236**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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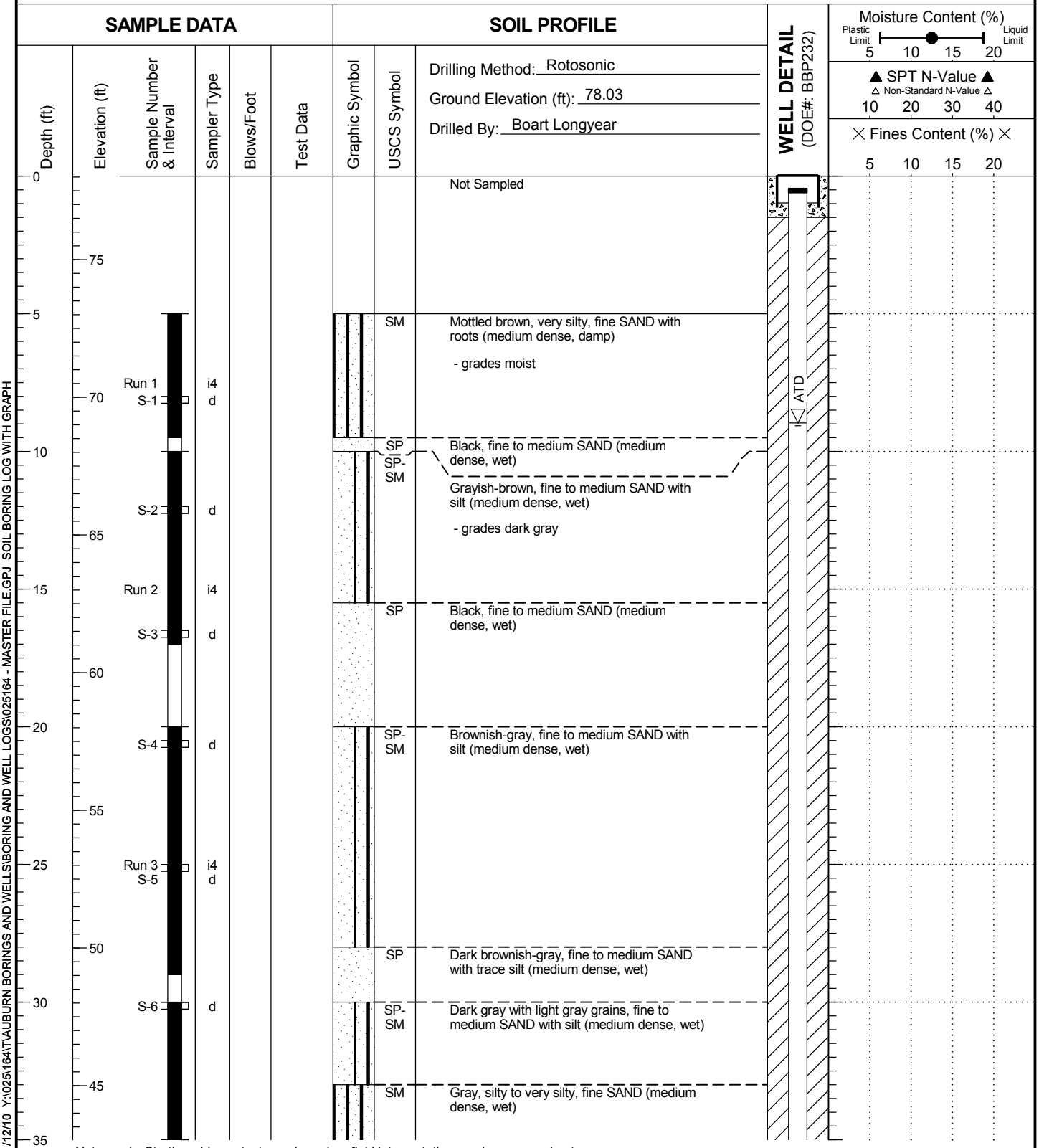
Remedial Investigation
Auburn, Washington

Log of Boring AGW173

Figure
A-12
(2 of 2)

AGW174



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP232**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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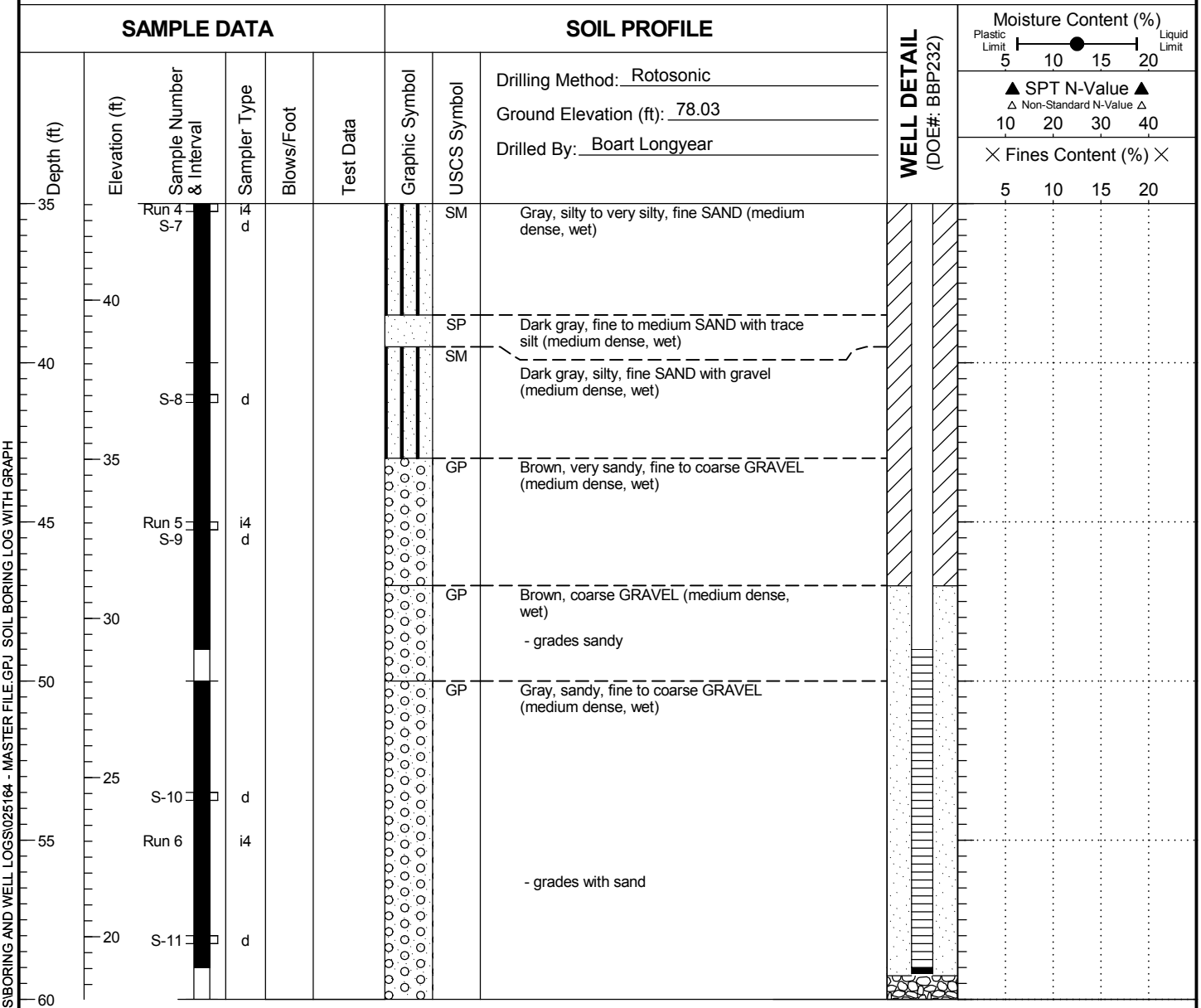
Auburn, Washington

Log of Boring AGW174

Figure
A-13
(1 of 2)

AGW174



Boring Completed 08/23/10. Total Depth of Boring = 60.0 ft.

Monitoring Well Completed 08/23/10
Total Depth of Monitoring Well = 59.2 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP232**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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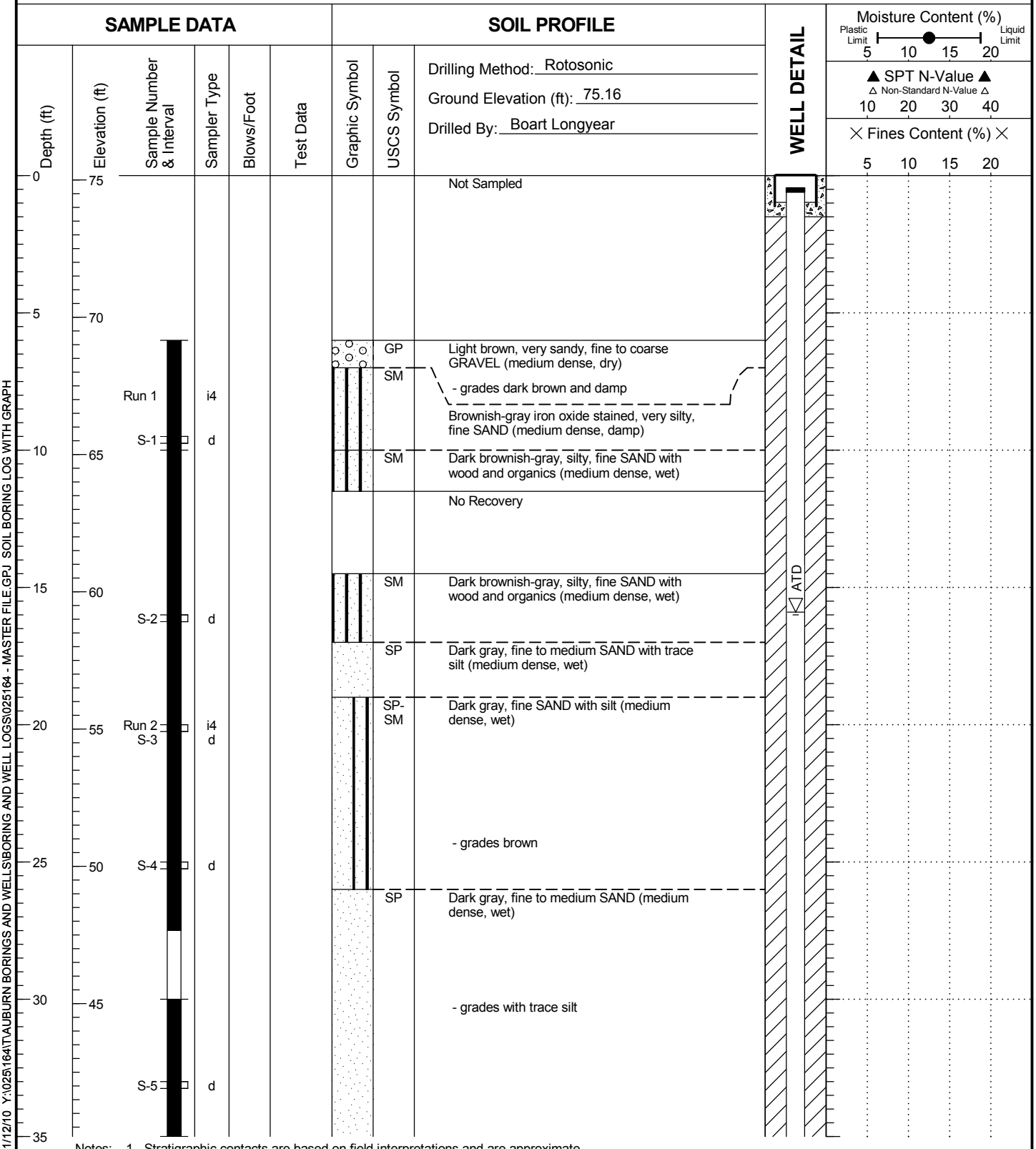
Remedial Investigation
Auburn, Washington

Log of Boring AGW174

Figure
A-13
(2 of 2)

AGW175



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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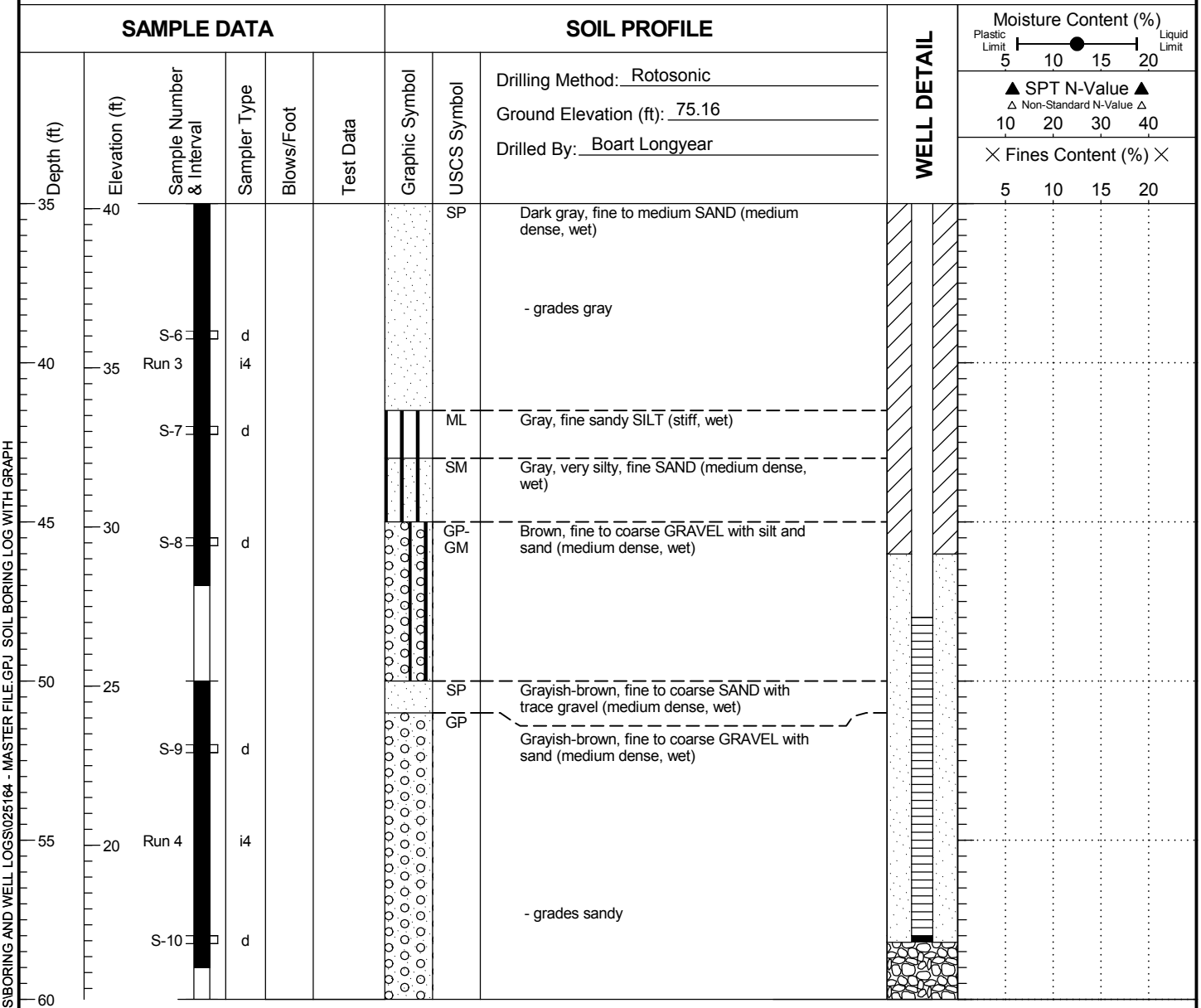
Remedial Investigation
Auburn, Washington

Log of Boring AGW175

Figure
A-14
(1 of 2)

AGW175



Boring Completed 08/27/10. Total Depth of Boring = 60.0 ft.

Monitoring Well Completed 08/27/10
Total Depth of Monitoring Well = 58.2 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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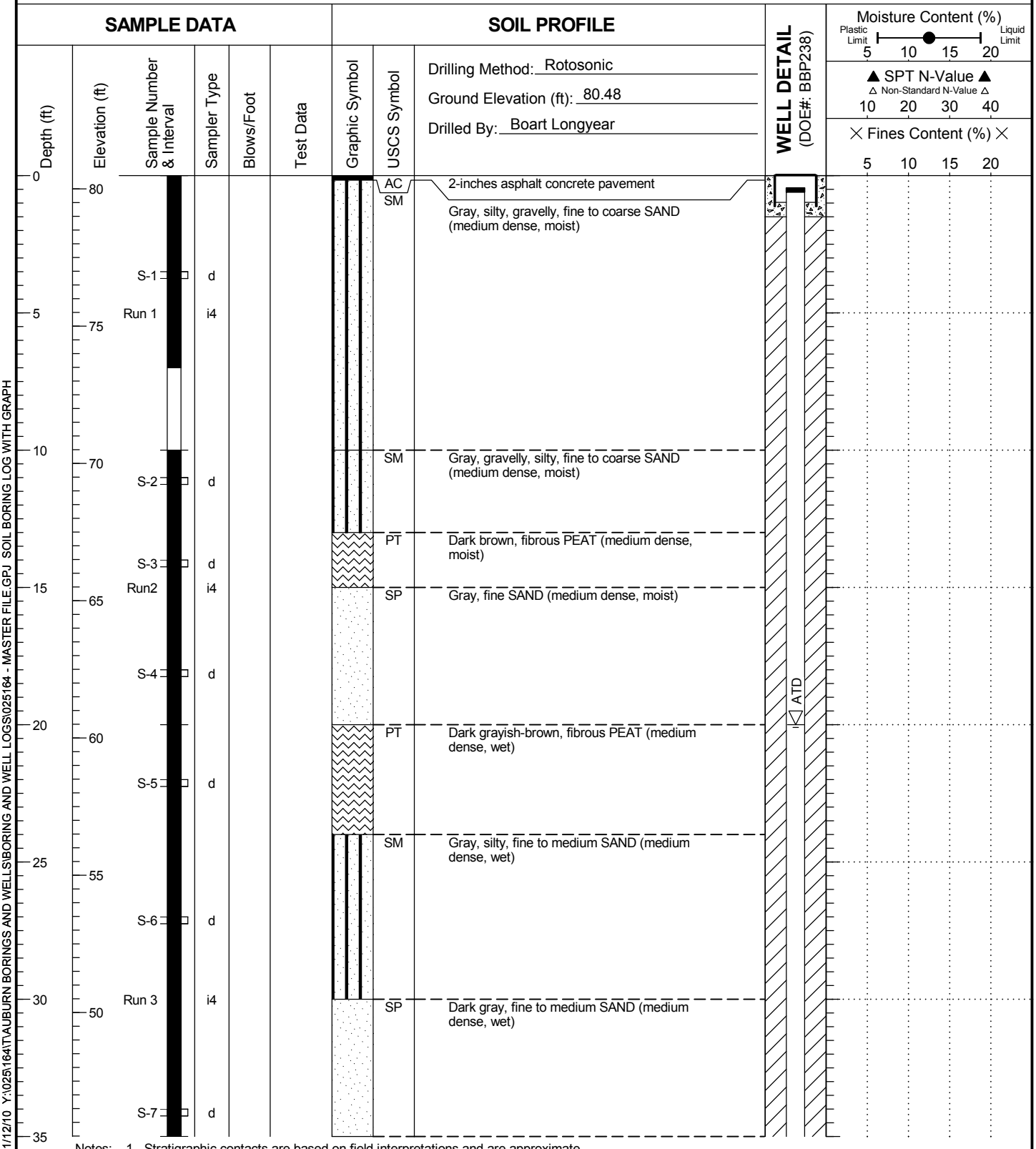
Auburn, Washington

Log of Boring AGW175

Figure
A-14
(2 of 2)

AGW176



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP238**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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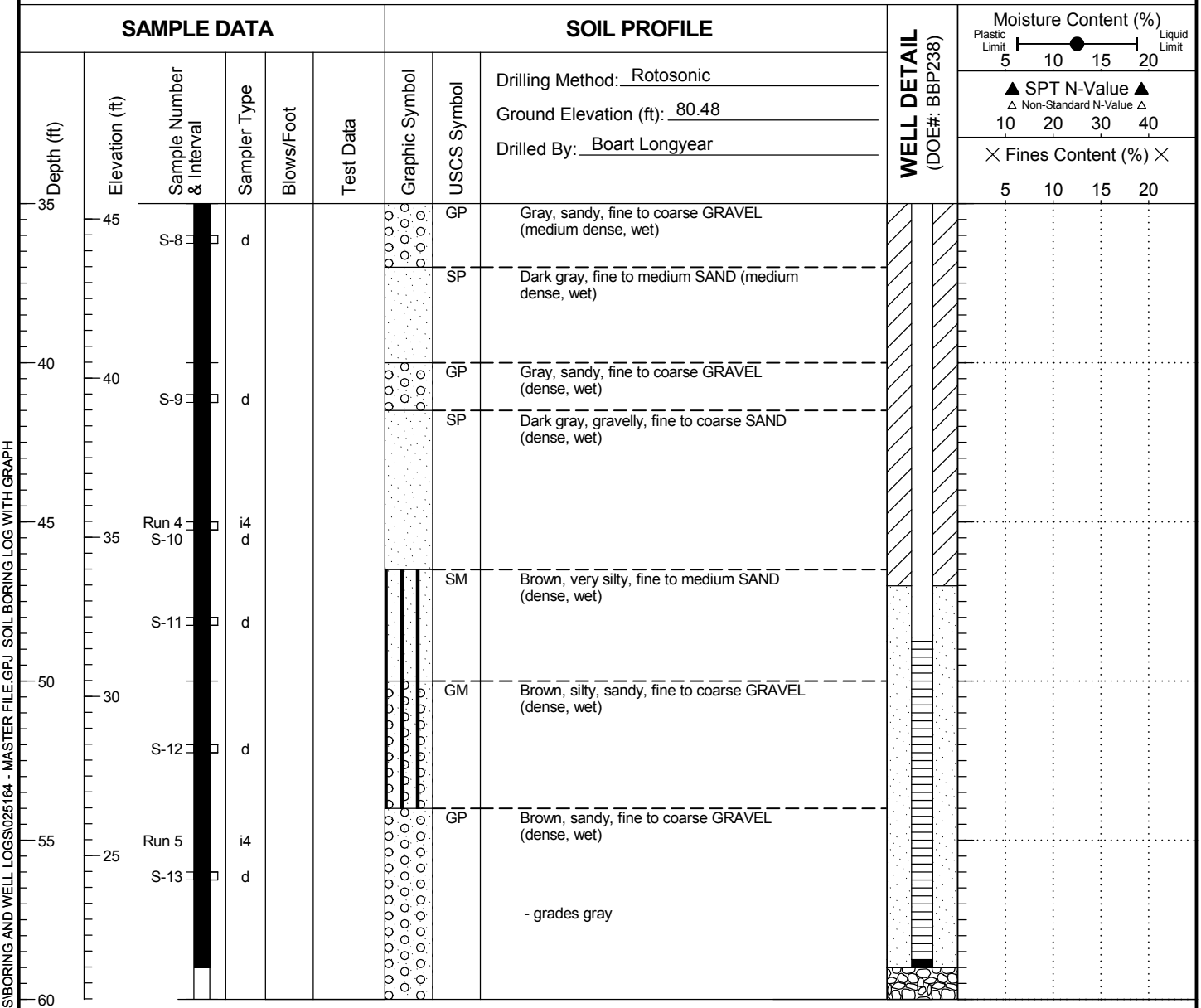
Auburn, Washington

Log of Boring AGW176

Figure
A-15
(1 of 2)

AGW176



Boring Completed 09/03/10. Total Depth of Boring = 60.0 ft.

Monitoring Well Completed 09/03/10
Total Depth of Monitoring Well = 59.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP238**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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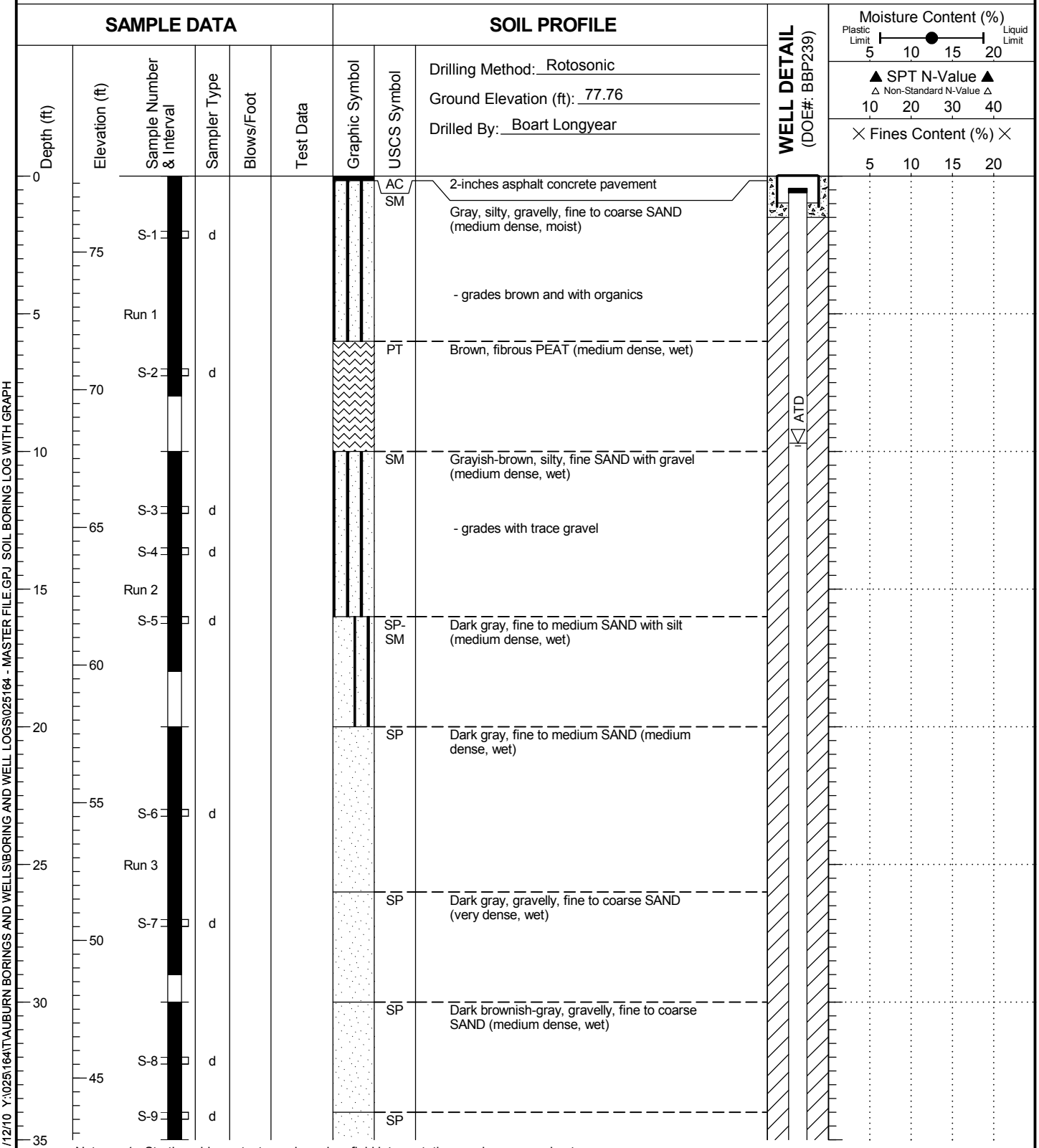
Auburn, Washington

Log of Boring AGW176

Figure
A-15
(2 of 2)

AGW177



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP239**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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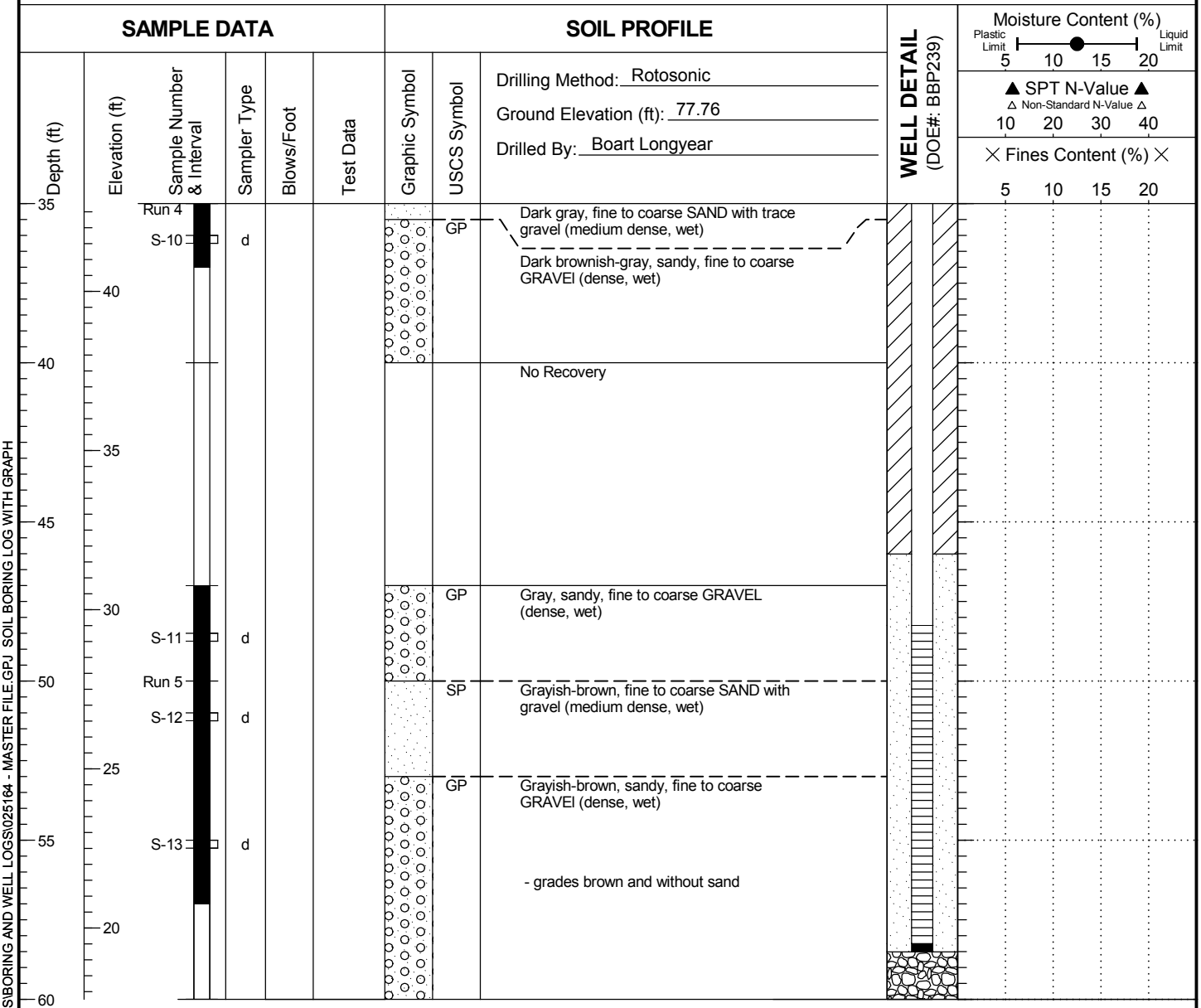
Remedial Investigation
Auburn, Washington

Log of Boring AGW177

Figure
A-16
(1 of 2)

AGW177



Boring Completed 09/21/10. Total Depth of Boring = 60.0 ft.

Monitoring Well Completed 09/21/10
Total Depth of Monitoring Well = 58.5 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP239**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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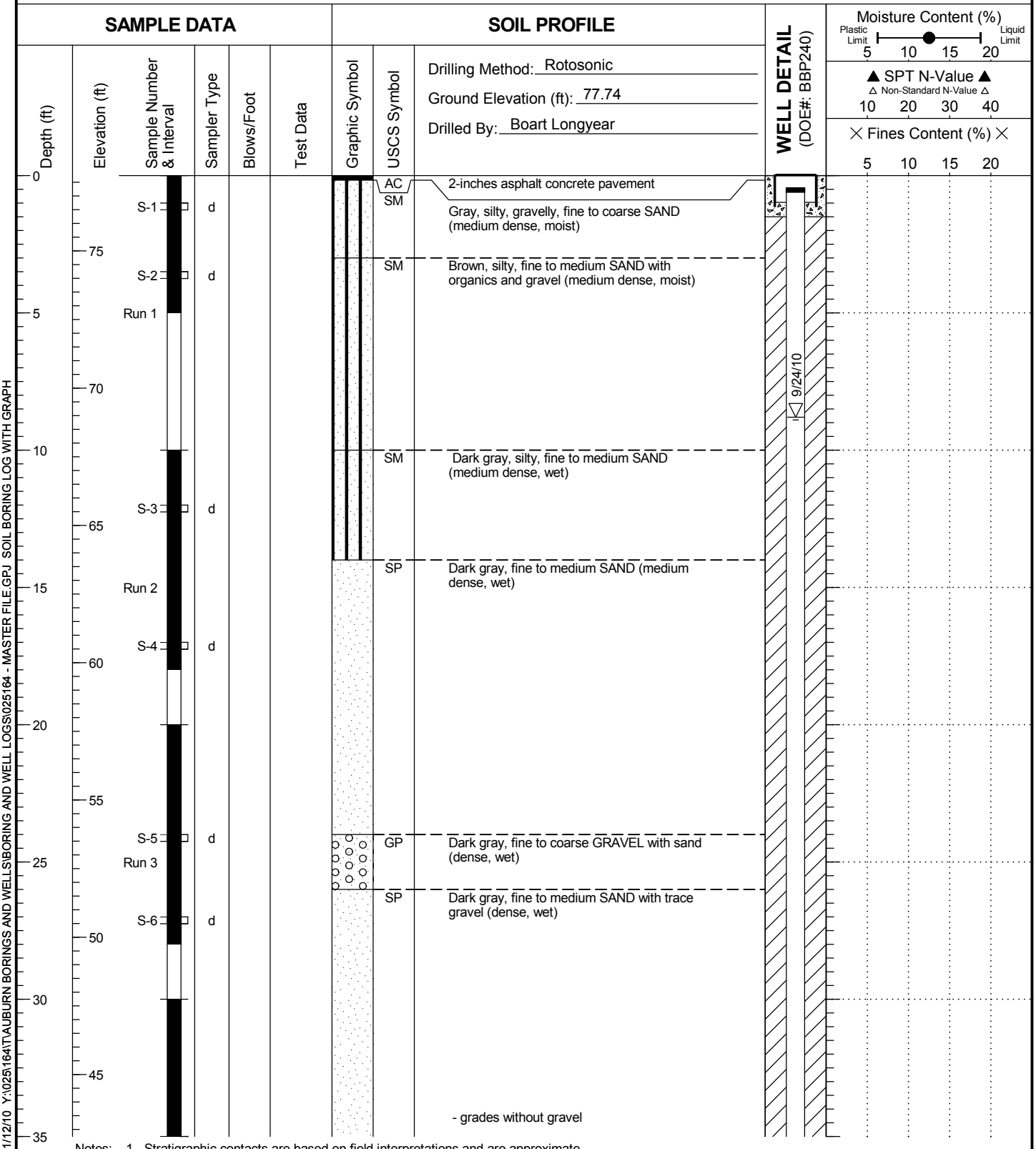
Remedial Investigation
Auburn, Washington

Log of Boring AGW177

Figure
A-16
(2 of 2)

AGW178



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP240**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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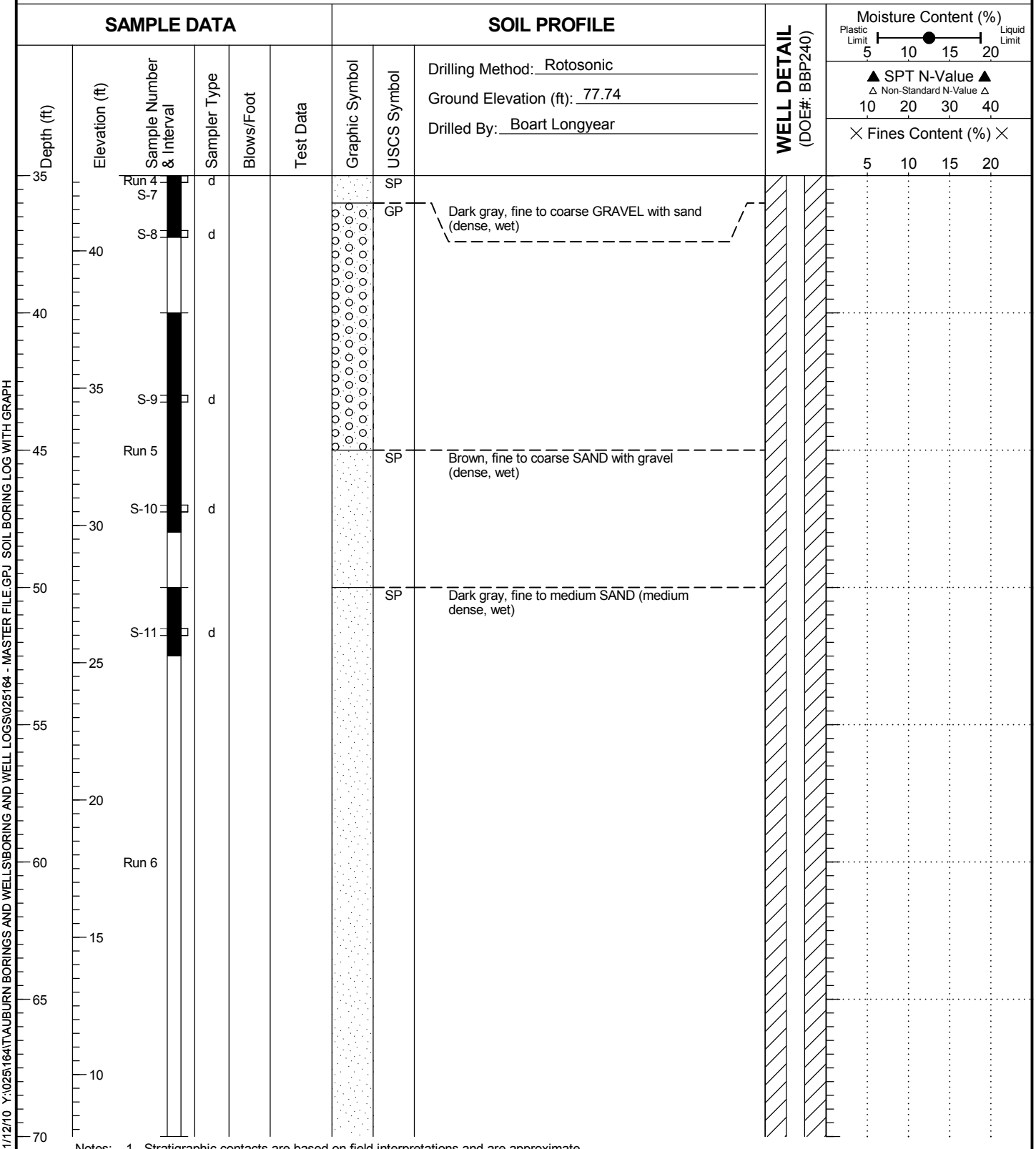
Remedial Investigation
Auburn, Washington

Log of Boring AGW178

Figure
A-17
(1 of 3)

AGW178



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP240**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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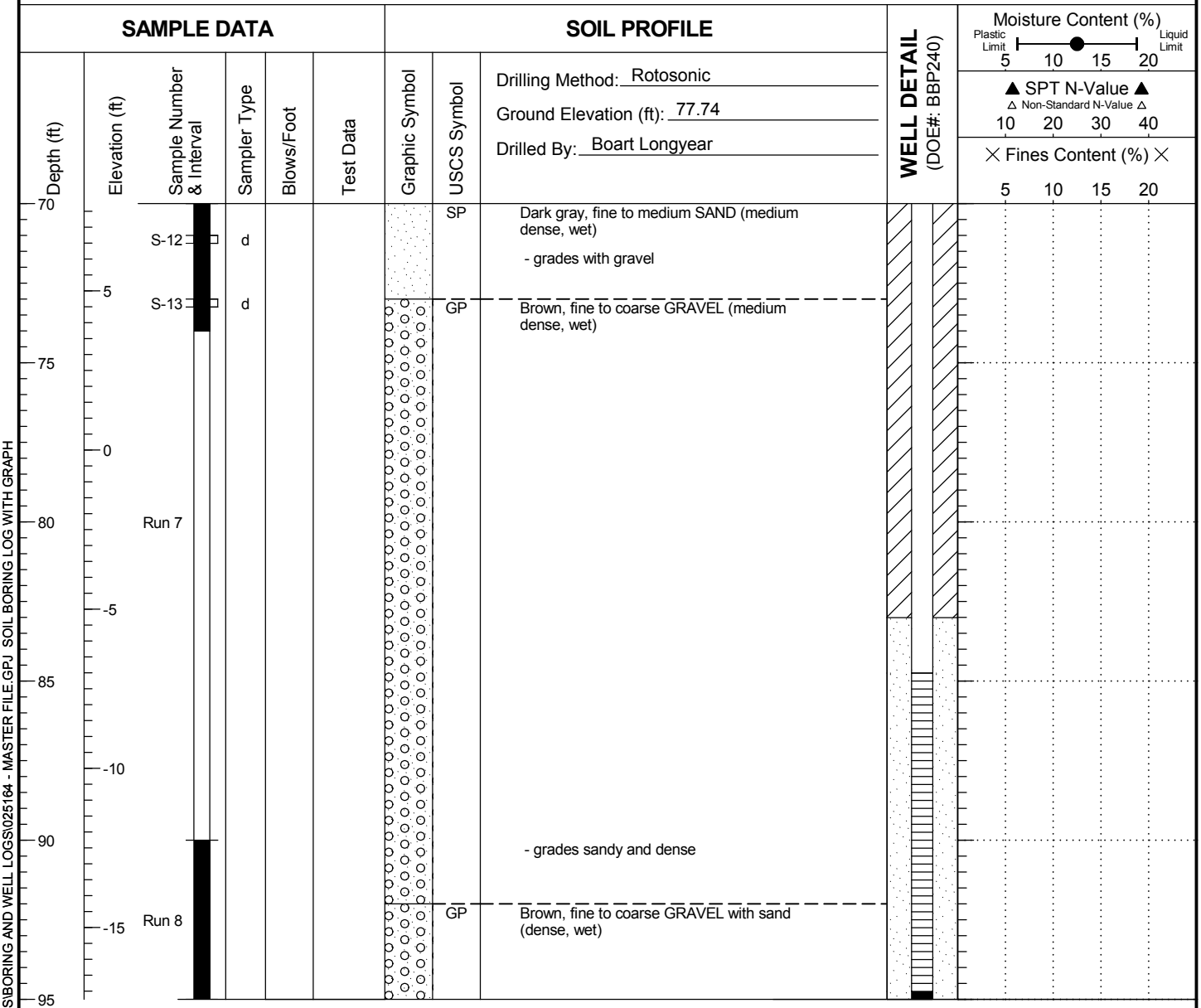
Remedial Investigation
Auburn, Washington

Log of Boring AGW178

Figure
A-17
(2 of 3)

AGW178



Boring Completed 09/22/10. Total Depth of Boring = 95.0 ft.

Monitoring Well Completed 09/22/10
Total Depth of Monitoring Well = 95.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP240**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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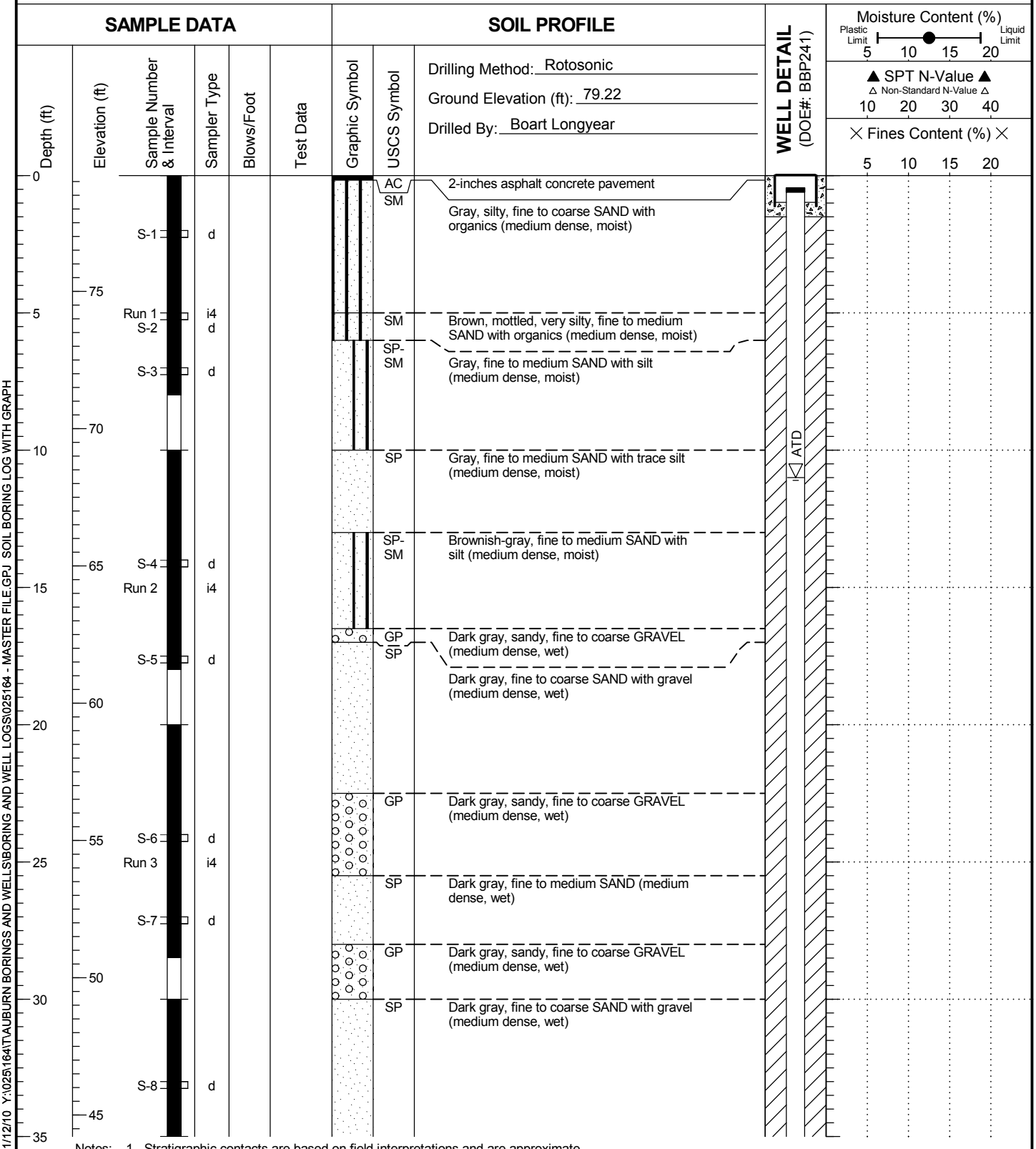
Boeing Auburn
Remedial Investigation
Auburn, Washington

Log of Boring AGW178

Figure
A-17
(3 of 3)

AGW179



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP241**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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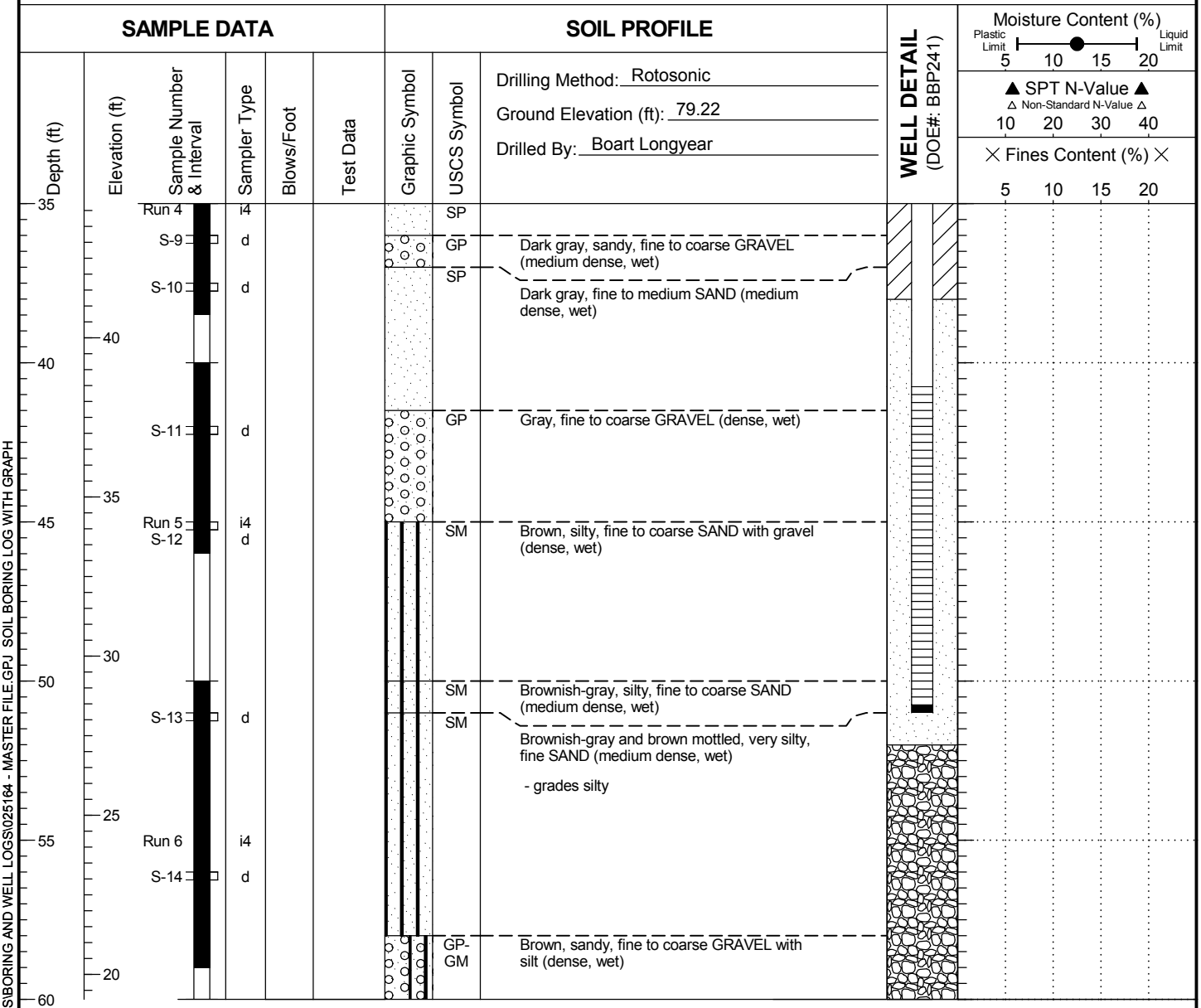
Remedial Investigation
Auburn, Washington

Log of Boring AGW179

Figure
A-18
(1 of 2)

AGW179



Boring Completed 09/23/10. Total Depth of Boring = 60.0 ft.

Monitoring Well Completed 09/23/10
Total Depth of Monitoring Well = 51.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP241**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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Remedial Investigation
Auburn, Washington

Log of Boring AGW179

Figure
A-18
(2 of 2)

AGW180

SAMPLE DATA | **SOIL PROFILE** | **WELL DETAIL** (DOE#: BBP242)

Drilling Method: Rotosonic
Ground Elevation (ft): 79.00
Drilled By: Boart Longyear

Moisture Content (%) — Plastic Limit — Liquid Limit — 5 10 15 20
▲ SPT N-Value ▲ △ Non-Standard N-Value △ — 10 20 30 40
× Fines Content (%) × — 5 10 15 20

Depth (ft)	Elevation (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Description
0							AC	2-inches asphalt concrete pavement
		S-1	d				SM	Grayish-brown, silty, fine to medium SAND (medium dense, moist)
	75						PT	Brown, fibrous PEAT (medium dense, moist)
5		Run 1	i4				SM	Gray, silty, fine SAND (medium dense, moist)
		S-2	d					
	70							
10							SP-SM	Gray, fine to medium SAND with silt and wood (medium dense, moist)
		S-3	d					
	65							
15		Run 2	i4					
		S-4	d				SP	Gray, gravelly, fine to coarse SAND (dense, wet)
	60							
20								- grades fine to medium sand and without gravel
		S-5	d					
	55							- grades gravelly
25		Run 3	i4					
		S-6	d					
	50							
30								- grades dark gray and gravelly
		S-7	d					
	45							
35		S-8	d				GP	Gray, fine to coarse GRAVEL with sand (dense, wet)

9/24/10

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP242**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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Remedial Investigation
Auburn, Washington

Log of Boring AGW180

Figure
A-19
(1 of 3)

AGW180

SAMPLE DATA | **SOIL PROFILE** | **WELL DETAIL** (DOE#: BBP242)

Drilling Method: Rotosonic
Ground Elevation (ft): 79.00
Drilled By: Boart Longyear

Moisture Content (%) — Plastic Limit — Liquid Limit
5 10 15 20
▲ SPT N-Value ▲
△ Non-Standard N-Value △
10 20 30 40
× Fines Content (%) ×
5 10 15 20

Depth (ft)	Elevation (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Description
35	45	Run 4	i4				SP	Dark gray, fine to coarse SAND (dense, wet)
		S-9	d					
		S-10	d				GP	Dark gray, sandy, fine to coarse GRAVEL (dense, wet)
40	40							- grades gray
		S-11	d					
45	35	Run 5	i4				SM	Brownish-gray, silty, fine to medium SAND (dense, wet)
		S-12	d					
50	30						SP	Dark gray, fine to medium SAND (medium dense, wet)
		S-13	d				ML	Brownish-gray, very sandy SILT with organics (medium stiff, wet)
55	25	S-14	d				SM	Gray, silty, fine SAND (medium dense, wet)
		S-15	d				GP	Gray, sandy, fine to coarse GRAVEL (medium dense, wet)
60	20	Run 6	i4					
65	15							
70	10							

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP242**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

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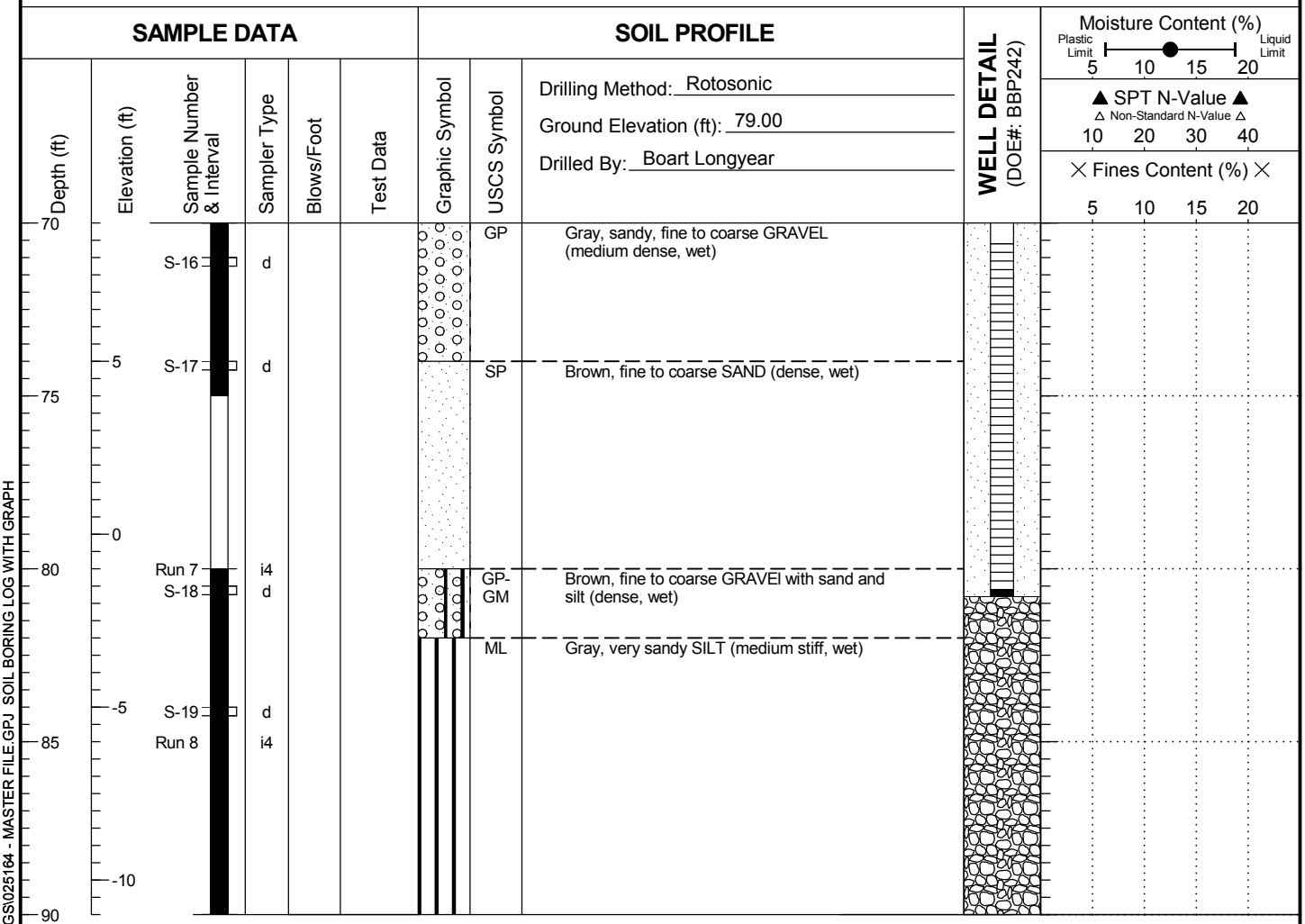
Remedial Investigation
Auburn, Washington

Log of Boring AGW180

Figure
A-19
(2 of 3)

AGW180



Boring Completed 09/23/10. Total Depth of Boring = 90.0 ft.

Monitoring Well Completed 09/23/10
Total Depth of Monitoring Well = 80.8 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. **DOE Unique Well Number: BBP242**

025164. 11/12/10 Y:\025\164\T\AUBURN BORINGS AND WELLS\BORING AND WELL LOGS\025164 - MASTER FILE.GPJ SOIL BORING LOG WITH GRAPH

LANDAU ASSOCIATES

Boeing Auburn
Remedial Investigation
Auburn, Washington

Log of Boring AGW180

Figure
A-19
(3 of 3)

APPENDIX B

Laboratory Analytical Results

(On CD)