

**SWMU and AOC Pre –Remedial Investigation  
Summary Report and 2009 SWMU and AOC Figures**

**Solid Waste Management Units and Areas of  
Concern Pre-Remedial Investigation Summary  
Boeing Auburn Facility  
Auburn, Washington**

February 9, 2017

Prepared for

The Boeing Company  
Seattle, Washington



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## SOLID WASTE MANAGEMENT UNIT S-06

Releases from the WWPTP were discovered prior to and during plant expansion activities in 1992 and 1993 (Geomatrix 2003). Several investigations were conducted to determine the extent of impact to the shallow subsurface soil in the WWPTP area around the time of plant expansion (Geomatrix 2003)<sup>1</sup>. During these investigations, it was discovered that shallow soil near the oil/water separator was contaminated with petroleum hydrocarbons and that groundwater contained concentrations of VC greater than MTCA Method A cleanup levels. Soil containing petroleum hydrocarbons was excavated from the vicinity of the oil/water separator in 1993. This area was subsequently capped with concrete to prevent future infiltration (Geomatrix 2003).

A general groundwater investigation of the WWPTP was performed in 1994 to evaluate VOCs in the area. Seven permanent (AGW024, AGW025, AGW027, AGW029, AGW030, AGW032, and AGW034)<sup>2</sup> and two temporary monitoring wells were installed to investigate the extent of VC detected in the groundwater. Investigation results indicated that TCE and VC groundwater concentrations exceeding MTCA Method A cleanup levels may extend off-Boeing property in the vicinity of the WWPTP area (Kennedy/Jenks 1994b). The highest VOC concentrations were detected at AGW024 (originally called RTP-1), located directly west of Building 17-15. Concentrations of VC at this well were initially 50 µg/L in 1991 and decreased to 10 µg/L by September 1993<sup>3</sup>. The source of VC was not determined in the report. TCE and cis-1,2-DCE were also detected, but at lower concentrations. The TCE maximum concentration was 4.4 µg/L and the cis-1,2-DCE maximum concentration was 18 µg/L. (Kennedy/Jenks 1994c).

In 1992, investigations also identified contaminated sludge in a process line west of the WWPTP area and adjacent to the Perimeter Road. Approximately 325 linear feet of line was removed and soil surrounding the line was excavated. Confirmation (post-excavation) soil testing did not detect petroleum hydrocarbons, cadmium, or chromium above MTCA Method A soil cleanup levels<sup>4</sup>.

In 1997, an investigation of the aerator tank was performed. Four soil borings and one shallow monitoring well (AGW079) were installed. Soil samples were analyzed for metals and VOCs. Metals were detected at low levels below screening levels [i.e., maximum chromium concentration was 18.1 milligrams per kilogram (mg/kg); cadmium was non-detect]. Toluene, methylene chloride, acetone, and 2-butanone were all detected once at low levels below screening levels. The groundwater sample from AGW079 contained cis-1,2-DCE (1.2 µg/L) and VC (3.8 µg/L). These data are consistent with

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<sup>1</sup> Based on the RI Work Plan (Geomatrix 2003), these investigations are documented in four reports by Kennedy/Jenks between 1991 and 1994. Only the 1994 report (Kennedy/Jenks 1994b) was reviewed. The other three reports could not be found. Consequently, only summary information from the RI Work Plan is presented here.

<sup>2</sup> These wells were originally labeled RTP-1 through RTP-7.

<sup>3</sup> Note that these data are not presented in tables or figures because it was collected prior to 1995.

<sup>4</sup> The exact location of this process line has not been identified, but it was presumably located in the general vicinity of AGW034(D) and AGW032 shown on Figure 6-1.

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general low-level impacts at the WWPTP and are not interpreted as a release from the aerator (AGI 1997). The location of the aerator and AGW079 are shown on Figure 6-1.

In 1998, a 1-inch-diameter pipe containing rinse water at the WWPTP ruptured. The release occurred west of the WWPTP, east of Perimeter Road. This release was investigated by collecting soil samples from four shallow borings. No constituents were detected above MTCA Method A soil cleanup levels (AGI 1998, Geomatrix 2003). The location of the 1998 rinse water rupture cleanup is shown on Figure 6-1.

In 1999, an area of contaminated soil was removed during the installation of a new oily waste pipe north of the WWPTP. Of the 11 confirmation samples, 4 showed diesel-range and oil-range petroleum hydrocarbons concentrations above Method A cleanup levels (200 mg/kg as specified in MTCA regulations at the time), indicating lingering contamination of the south, west, and north walls, and base of the excavated area. The north side and base of the excavation were expanded to remove contaminated soil, while structural concerns prevented expansion of the south and west sides of the excavation. Remaining concentrations were deemed protective of groundwater, and are capped by the existing concrete containment area; thus, the area was considered to require no further action. Six soil borings were drilled along the length of the new waste line alignment: ASB0084, ASB0085, ASB0086, ASB0087, ASB0088, and ASB0089 (AGI 1999b, c). Soil samples were collected at these borings between 1 and 12 ft depth for VOCs, metals (22 analytes), petroleum hydrocarbons, and PCBs. Antimony was detected in 5 of 12 samples between 6 and 9 mg/kg; the screening level is 5.42 mg/kg. No other constituents were detected above screening levels though there was an occasional low-level detection of petroleum hydrocarbons. During July 1999, a trench was excavated through the west side of the concrete containment area during construction of the new oily waste line. There were 30 tub skids of petroleum hydrocarbons-impacted soil were removed for disposal. While two of the three confirmation soil samples exceeded the petroleum hydrocarbons cleanup level at the time (i.e., 200 mg/kg), extractable petroleum hydrocarbon (EPH) analysis indicated that concentrations were protective of groundwater (AGI 1999a).

In 2001, a spill from the clarifier tank released material that potentially contaminated the soil underlying the asphalt. Contaminated soil was removed. Six confirmation soil samples were collected at the limits of the approximately 3 ft by 3 ft excavation on the southwest side of the clarifier. Samples were collected between 0.9 ft and 2.9 ft bgs and analyzed for cadmium and chromium; maximum concentrations were 0.7 mg/kg and 103 mg/kg, respectively. These values are below screening levels (CDM 2001c).

In 2003, a cleanup prompted by the discovery of petroleum hydrocarbons-contaminated soil took place around a leaking water line near Building 17-15. The location of the contaminated soil was directly north of well AGW024. There were 17 cubic yards (yd<sup>3</sup>) of soil excavated and four confirmation soil samples collected between 2 and 6 ft bgs. Samples were analyzed for VOCs, petroleum hydrocarbons, and eight metal analytes. All sample results were below screening levels.

Petroleum hydrocarbons were detected up to 1,241 mg/kg and PCE was detected in one sample at 3.4 µg/kg. Groundwater samples from monitoring well AGW024 showed no petroleum hydrocarbons contamination, but did indicate concentrations of VC, consistent with the known occurrence in the area of the WWPTP (CDM 2003).

Facility stormwater system drawings from as early as 1966 show an 18-inch stormwater pipe crossing under Perimeter Road. The 18-inch pipe collected stormwater from paved areas of the WWPTP and discharged it to the U.P. ditch on Union Pacific Railroad property. Effluent from the treatment plant was not discharged to the U.P. ditch; instead, it was discharged from the aerator on the east side of the treatment plant to a 12-inch stormwater main. From there, the treated process water was piped to the outfall at the southwest corner of the Boeing property and discharged to Government Canal (LAI 2006).

Several drawings show the 18-inch stormwater pipe across Perimeter Road as being decommissioned; however, the date of decommissioning is unknown. A report by Kennedy/Jenks indicates that the pipe was removed in 1993 and that an environmental cleanup was completed for the soil underlying the pipe (Kennedy/Jenks 1993a). Confirmation sampling from 17 transects under the pipe indicate that the soil in that area meets MTCA Method A soil cleanup levels for unrestricted land use (Kennedy/Jenks 1994c).

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## **SOLID WASTE MANAGEMENT UNIT S-13**

Immediately following removal of the old degreaser (SWMU S-13a), an investigation was undertaken to assess the quality of soil and groundwater beneath the degreaser and containment pit (Kennedy/Jenks 1996). Three borings (B-1, B-2, and B-3) were advanced to the water table at about 10 ft bgs. A fourth boring (MW-1, later renamed to AGW037) was drilled to 23 ft bgs. Seven grab samples were collected between 8 and 10 ft bgs at the four borings and analyzed for VOCs. No VOCs were detected in the soil samples.

Five groundwater grab samples were collected for VOCs in 1995. Eight VOCs were detected. VC was detected above the screening level at 7.2 µg/L at boring B-2. TCE was detected above the screening levels at a maximum of 1.7 µg/L; 1,1-DCA was detected below the screening level at the highest concentration at 18.6 µg/L. The investigative findings report concluded that a solvent release had not occurred through the degreaser containment pit bottom or nearby floor area (Kennedy/Jenks 1996).

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## **SOLID WASTE MANAGEMENT UNITS S-15a/S-16**

### **Summary of Building 17-06 Chip Handling System**

The aluminum chip conveyance system consists of two parts (the west-side aluminum chip conveyance system and the east-side aluminum chip conveyance system). The west-side aluminum chip conveyance system (Figure 6-6b) consists of vacuum piping that leads from the mills to clarifiers and bag houses that remove fine particles and dust. The chips are then conveyed from the west side to the briquetter on the east side of the building in a single-sealed vacuum pipe. Most of the vacuum piping is located below grade in covered utilidors. The vacuum piping system and utilidors were inspected in two locations during the 2008 inspection. The vacuum system is completely sealed and there was no evidence of fluid leaks or accumulation of chips outside the vacuum piping. If a leak were to develop in the vacuum pipe, the chips and fluids would still likely be contained by the vacuum system. The east side aluminum chip conveyance system consists of two major components: 1) chip collection at each mill, and 2) chip conveyance to the briquetter (shared conveyor). The components of the east-side chip conveyance system are shown of Figures 6-6a and 6-6b.

At each milling machine, chips are collected and transported from the cutter assembly to a shared conveyor for transport to the briquetter. Transported chips contain residual cutting fluid from the milling process. Each milling machine has an unlined concrete chase down both sides. A typical spar mill has a 'power chase' on one side that provides power and roller supports for the cutting system to move back and forth along the milling bed and a "chip collection chase" on the other side that contains a system [either zipper duct (vacuum) or push bar] for moving chips from the cutting bed to the shared conveyor (Figure 6-6a). The power chase and chip collection chase typically contain chips with cutting fluid, and hydraulic leaks at the mill can also flow to these chases.

The concrete power and chip collection chases were observed to be sloped to drain to the shared conveyor chase that contain the shared conveyor (described below). Liquids, in the shared conveyor chase, drain to concrete sumps (e.g., SAU06-12) that are located at intervals along the east side of the building. The locations of the concrete sumps coincide with low points in the shared conveyor chase.

Chips from the east side mills are transported north or south to the briquetter in a shared push bar conveyor (shared conveyor). This push bar conveyor consists of long hydraulic pistons with attached fins that ride in the bottom of a steel trough that is suspended within a concrete chase (shared conveyor chase). Segments of the shared conveyor chase slope north and south to sumps located along its length. The shared conveyor chase and associated sumps are designed to collect chip runoff (coolant) and other fluids such as hydraulic oil that enter the conveyance system. From the sumps, fluid is pumped to a central collection point (sumps SAU06-19 and SAU06-20) located in the briquetter room and from there to the wastewater treatment plant.

The west side aluminum chip conveyance system and the north and south portions of the east -side aluminum chip conveyance system come together at the "crossover" (room; Figure 6-6a). Sump

SAU06-12 is located adjacent to the crossover. From the crossover, chips exit the east side of the building into the shredder/briquetter system.

In the briquetter area located on the east side of Building 17-06, chips from Buildings 17-06 and 17-35, as well as several off-Facility locations, are shredded and pressed into briquettes for metal recycling. Chips collected in Building 17-35 are drained at that building and then transported in bins to a conveyor system on the east side of Building 17-06. A conveyor system adds the Building 17-35 chips and chips from off-Facility areas to the Building 17-06 chip handling system at a point just north of the briquetter.

Data from monitoring wells adjacent to the east-side aluminum chip conveyance system indicate that there may be a leak from the system. The most likely leak source is from areas where chip runoff fluids accumulate, such as the low spots in the shared conveyor chase and the sumps. In February 2008, Boeing cleaned and inspected sump SAU06-12. The sump was packed with excess chips and an accumulation of fluid was noted in the sump. The epoxy lining in the sump was visibly cracked in several places and a large unsealed hole (possibly from former piping) was observed in the side of the sump. Additionally, chip runoff fluid was observed running into the sump from the shared conveyor chase (as the system is designed to operate). The shared conveyor chase was observed to be unlined at this location.

## **Pre-Remedial Investigations**

SWMU S-16 (aluminum briquetter and chip conveyance system) was investigated in 1996 (SECOR 1996b) and is discussed below. No other specific investigations were completed that targeted the SWMU S-15a sump.

Hydrocarbon-impacted soil was observed during upgrades at the Building 17-06 briquetting machine. Consequently, an investigation was conducted to assess the quality of the soil and groundwater in the vicinity. A preliminary investigation was performed in 1996. The objective of this investigation was to evaluate soil and groundwater conditions associated with the briquetter. There were 15 borings advanced, 5 were converted to shallow monitoring wells (AGW041 through AGW045) and the remaining 10 (ASB0022 to ASB0031) were decommissioned (SECOR 1996b).

Two to three soil samples were collected for analysis at each boring with at least one sample collected at the 10 ft depth (directly above the water table). Samples were tested for PCBs at select borings and priority pollutant metals and oil-range hydrocarbons (analyses were quantitated as Blasocut, Unax, and Way oil) at all borings. The only oil-range hydrocarbons that were detected at concentrations above screening levels were at the 10 ft bgs sample at ASB0031 (23,900 mg/kg). This boring location is northwest of sump SAU06-12 (SWMU S-15a). Thallium and/or selenium were also detected at low concentrations above screening levels at AGW045 and ASB0031. PCBs were detected, but below screening levels.

Wells were screened across the water table, but no free product was observed. Groundwater samples detected oil-range petroleum hydrocarbons at AGW044 and AGW045 at 2.2 mg/L and 9.3 mg/L, respectively. TCE, PCE, and toluene were detected at low concentrations (less than 2.3 µg/L).

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## **SOLID WASTE MANAGEMENT UNIT S-30**

An investigation was conducted in March 1990 to define the depth and lateral extent of debris encountered during Building 17-10 expansion. The investigation consisted of aerial photograph review, drilling 15 soil borings, and analysis of soil samples. The debris consisted of abundant metal, glass, wood, and burnt wood mixed with soil. Soil analyses detected low levels of pesticides (DDD, DDT, and DDE) and PAHs. Zinc, copper, and lead concentrations were also elevated (LAI 1990). Approximately 2,500 yd<sup>3</sup> of soil and debris were excavated and disposed of at an off-Site permitted hazardous waste landfill. Approximately 400 yd<sup>3</sup> of fill were tested and returned to the excavation as backfill along with approximately 3,000 yd<sup>3</sup> of imported select fill.

After soil and debris excavation, 23 composite confirmation samples were collected from the base and sides of the excavation<sup>5</sup>. None of the samples exceeded MTCA cleanup level criteria at the time. The maximum petroleum hydrocarbons concentration was 170 mg/kg (LAI 1990).

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<sup>5</sup> Composite samples are not entered in the database and therefore, the data and locations are not presented on figures and tables.

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## AREA OF CONCERN A-01

A tank testing study conducted in 1985 identified petroleum hydrocarbons in the soil surrounding the AOC A-01 tanks (Norton 1985). Four monitoring wells (17-06-1 through 17-06-4) were installed by Dames and Moore in 1987. Relatively high concentrations of benzene (1,700 µg/L), toluene (3,000 µg/L), xylene (12,000 µg/L), and gasoline-range (9,100 µg/L) and diesel-range (3,700 µg/L) petroleum hydrocarbons were detected in groundwater (GeoEngineers 1991)<sup>6</sup>. The wells were subsequently destroyed during tank removal. Four monitoring wells (MW-1, MW-2, MW-3, and MW-4, later renamed to AGW009, AGW010, AGW011, and AGW012, respectively) were installed in 1990 (GeoEngineers 1991). Two soil samples were collected from each boring and analyzed for petroleum hydrocarbons and VOCs.

In 1992, five soil borings (B-1 through B-5) were advanced. Five additional borings were advanced and converted to monitoring wells (AGW013, AGW014, AGW015, AGW016, and AGW017). Two of the soil borings (B-1 and B-3) were advanced along the piping alignment that led to the service island at Building 17-05. There were 2 to 5 soil samples collected from each of the 10 borings (for a total of 19), depending on field screening results and analyzed for petroleum hydrocarbons (all 19 samples) and VOCs (6 of 19 samples). The depth of samples ranged from 0.5 ft to 20 ft bgs. Groundwater samples were also collected and analyzed for VOCs and oil-range- and gasoline-range petroleum hydrocarbons.

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<sup>6</sup> The Dames and Moore report was not located as part of the file search for the RI. The data but not the location of these wells is presented in GeoEngineers 1991.

## **AREA OF CONCERN A-05**

Boeing performed a cleanup action at a nearby fuel island (Boeing 1993). Approximately 200 yd<sup>3</sup> of contaminated soil was removed. There were 19 confirmation soil samples collected. The maximum detected petroleum hydrocarbons concentration in confirmation samples was 50 mg/kg, well below screening levels. In the investigation report, the location of the fuel island is shown as about 300 ft south and 128 ft east of Building 17-64. In the RI Work Plan, the AOC A-05 UST is shown only about 50 ft south of Building 17-64. Consequently, it is not clear how the fuel island spill relates to conditions at AOC A-05. Narrative in the RI Work Plan (Geomatrix 2003) and RFA (Tetra Tech 1998) imply that the fuel island remediation was conducted at or near the UST, but this is not consistent with information in the cleanup report (Boeing 1993).

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## AREA OF CONCERN A-06

Contaminated soil was first encountered south of Building 17-66 in June 1992 during trench excavation for a water pipeline (Kennedy/Jenks 1992). The scope of activities included:

- Excavating 500 yd<sup>3</sup> of soil
- Advancing 14 soil borings and collecting soil samples to delineate the appropriate extent of the excavation
- Collecting groundwater grab samples from six of the borings
- Collecting stock pile and screening level soil samples
- Collecting 16 confirmation soil samples within the trench excavation area.

VOC, SVOC, and petroleum hydrocarbons constituents were detected in soil. TCE was detected up to 6.4 mg/kg. PCE was detected up to 1.0 mg/kg. BTEX, dichlorobenzenes, and gasoline-range and diesel-range petroleum hydrocarbons were also detected. The final soil confirmation samples were below MTCA cleanup levels. Groundwater grab samples were collected from six borings in or adjacent to the excavation. TCE was detected in all six samples at concentrations from 7.8 µg/L to 93.6 µg/L. Diesel-range petroleum hydrocarbons were also detected in all six groundwater samples at concentrations between 0.3 mg/L and 3.1 mg/L. Other detected constituents included cis-1,2-DCE, BTEX, and dichlorobenzenes at relatively low concentrations.

During a telephone utility trench excavation in July 1992, green-colored waste material was encountered (Kennedy/Jenks 1993b). Approximately 30 yd<sup>3</sup> of material was removed. Samples of the material indicated chromium concentrations up to 96,000 mg/kg. Analytical results for metals in two confirmation soil samples had concentrations below MTCA Method A cleanup levels.

A groundwater investigation was conducted near the 1992 excavation areas. Eight temporary groundwater sampling locations were installed and sampled in November 1992. TCE, PCE, and cis-1,2-DCE were detected. The highest concentration was TCE at 9.7 µg/L. Dichlorobenzenes were also detected at low concentrations. Subsequently, four groundwater monitoring wells were installed (Kennedy/Jenks 1994c): RMSF-1 (AGW020), RMSF-2 (AGW021), RMSF-3 (AGW022), and RMSF-4 (AGW023). These wells were sampled in January and November 1993 for VOCs. TCE was detected above the screening level at 2.5 µg/L.

In 1993, Building 17-66 was expanded eastward onto vacant land that previously contained a fire suppression water tank and pump house. During construction, two areas of buried debris and soil were encountered (Kennedy/Jenks 1993a). Soil characterization samples were collected and analyzed for VOCs, petroleum hydrocarbons, SVOCs, pesticides, and PCBs. Diesel-range petroleum hydrocarbons were detected at concentrations up to 13,000 mg/kg. Relatively low concentrations of PCBs, PAHs, toluene, ethylbenzene, and xylenes were also detected. Soil and debris were removed from the two areas (Excavation 1 and Excavation 2). During soil excavation, several areas of discolored soil were encountered along with aluminum shavings, broken concrete, and dried sludge-like material.

Approximately 700 yd<sup>3</sup> was removed from the two excavations for treatment and disposal. There were 20 soil confirmation samples collected in Excavation 1 and 9 samples collected in Excavation 2; all were analyzed for petroleum hydrocarbons. The results indicated compliance with MTCA cleanup levels. Building 17-66 was subsequently expanded to cover these two excavation areas.

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## AREA OF CONCERN A-07

During tank removal in 1992, soil samples were collected from the excavation walls, floor, and groundwater samples were collected from two nearby monitoring wells (Geomatrix 2003). MEK was not detected in the excavated soil or in the groundwater samples. A subsequent trench excavation encountered MEK in soil adjacent to the former location of a floor-mounted MEK pump.

Approximately 10 yd<sup>3</sup> of soil were removed from this area, and confirmation soil samples from the wall of the excavation were collected. None of the samples contained MEK above the applicable MTCA cleanup levels (GeoEngineers 1992). The only detected constituents were acetone and methylene chloride at low levels below screening levels.

Two temporary wells (17-08-1 and 17-08-2) were installed directly adjacent to the UST and sampled in 1991. Phenols, phthalate, and VOCs including 2-butanone were detected in groundwater at concentrations below MTCA groundwater cleanup levels (GeoEngineers 1992).

In 1994, during excavation of a trench for new underground piping in Building 17-08, MEK-contaminated soil was encountered next to a floor-mounted MEK pump (Kennedy/Jenks 1994a). There were 10 yd<sup>3</sup> of MEK-contaminated soil removed and 4 confirmation soil samples collected. The maximum detected concentration of MEK was 1,300 mg/kg, which is below the screening level. A monitoring well (TMW-1, later renamed to AGW018) was installed in Building 17-08 16 ft north (downgradient) of the excavation. MEK was not detected in a groundwater sample collected from the well (Kennedy/Jenks 1994a).

## **AREA OF CONCERN A-09**

A historical review of acid scrubber drain line use was conducted in 1996. The line was apparently constructed in the 1960s. The line has handled various tank line components including copper and cyanide. COCs associated with the drain line were identified as cadmium, copper, and cyanide (AGI 1996b).

There were 20 soil compliance samples collected as part of the 1996 excavation of impacted soil (AGI 1996a). A follow up groundwater investigation was also conducted. Five shallow groundwater wells (AGW046, AGW047, AGW048, AGW049, and AGW050) were installed upgradient and downgradient of the leak. Three soil borings (between 3 and 6 ft bgs) were also advanced near the leak (AGR07HA1, AGR07HA2, and AGR07HA3) (AGI 1996b).

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## AREA OF CONCERN A-10

In 1996, a soil and groundwater investigation was conducted to assess impacts of cutting fluids and oil from the G&L Post Mill (SECOR 1996a). The scope of the investigation included:

- Advancing three borings
- Collecting soil samples for chemical analysis
- Installing wells in each boring (AGW038, AGW039, and AGW040)
- Collecting one round of groundwater samples for chemical analysis.

Three to four soil samples were collected at each boring between 2.5 ft bgs and 10 ft bgs. Samples were analyzed for VOCs, SVOCs, metals, and PCBs. Soil sampling results indicated the presence of petroleum hydrocarbons at concentrations above screening levels at AGW038 and AGW039, adjacent to the sump. Low levels of VOCs and PAHs were also detected. A low level of PCBs (41 µg/kg) was detected in one soil sample. Groundwater samples detected low levels of SVOCs, VOCs, and petroleum hydrocarbons. Arsenic was also detected above the MTCA Method A cleanup level of 5 µg/L.

In 2001, a follow-up soil and groundwater investigation was conducted at the G&L Post Mill (LAI 2001) in preparation for removal of the machine, sump, and foundation. The scope of the investigation included:

- Collecting groundwater samples from existing wells
- Advancing four additional borings to 15.5 ft (ASB0090, ASB0091, ASB0092, and ASB0093) in the direct vicinity of the sump
- Submitting select samples for laboratory analysis.

Soil samples were analyzed for petroleum hydrocarbons, VOCs, PCBs, and PAHs. Groundwater samples from existing wells were analyzed for petroleum hydrocarbons and BTEX. Sample results indicated the highest concentration of petroleum hydrocarbons-related compounds near the sump at ASB0090.

In 2001, a trench excavation for electrical conduit encountered contaminated soil along the southwest corner of the G&L Post Mill foundation. Contaminated soil from the trench was removed and six confirmation samples were collected for petroleum hydrocarbons, PAHs, and metals (CDM 2001b). Results of the confirmation soil samples exceeded MTCA Method A cleanup levels for petroleum hydrocarbons.

Also in 2001, a PCB cleanup was conducted in association with the decommissioning and removal of the G&L Post Mill (CDM 2001a). The post mill machine pit base was constructed of 5.5-ft thick concrete set 3.75 ft below the shop floor. The G&L Post Mill was anchored to the machine pit floor by approximately 140 anchor bolt attachments cast into the machine pit base. There were 125 bolt attachments that contained residual hydraulic oil, 25 of these attachments contained PCBs in excess

of 50 mg/kg (CDM 2001a). Boeing conducted a self-implemented cleanup under the authority of EPA. The cleanup consisted of removing the hydraulic oil and coring out the effected attachment assemblies (CDM 2001a). Subsequent verification sampling was conducted at six locations. PCB concentrations in the verification samples were less than 1 mg/kg (CDM 2001a).

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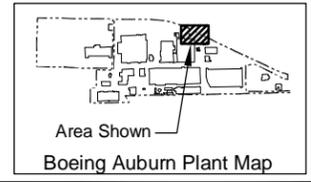
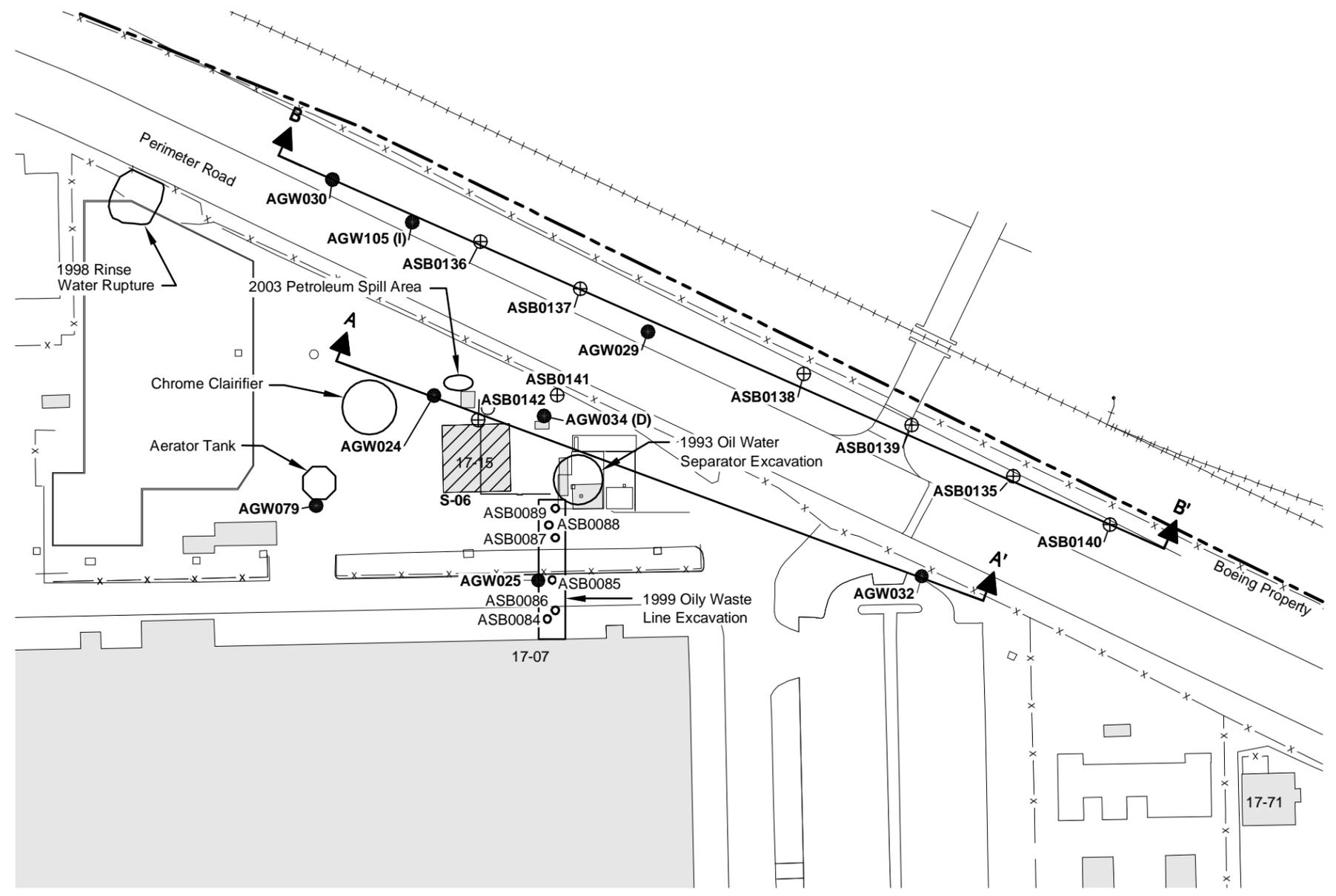
Tetra Tech. 1998. The Boeing Company Auburn Fabrication Division Auburn, Washington, Resource Conservation and Recovery Act Facility Assessment, Final Conclusions and Recommendation.

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## **2009 SWMU and AOC Figures**

Boeing Remedial Investigation Report [V:\025\164\050\055\DIR\Report 2009\FIG\_SWMU\S - SE PLAN.dwg (A) 16-1a- 3/30/2009

- Legend**
- AGW016 ● Monitoring Well Location and Designation
  - ASB0149 ⊕ Soil Boring Location and Designation
  - ASB0089 ○ Pre-RI Sample Boring Location and Designation (Locations are Approximate)
  -  S-12b Solid Waste Management Unit (SWMU)
  -  17-05 Current Building and Number
  - - - - - Property Boundary
  -  A A' Cross Section Location and Designation



Base map source: Geomatrix 2003



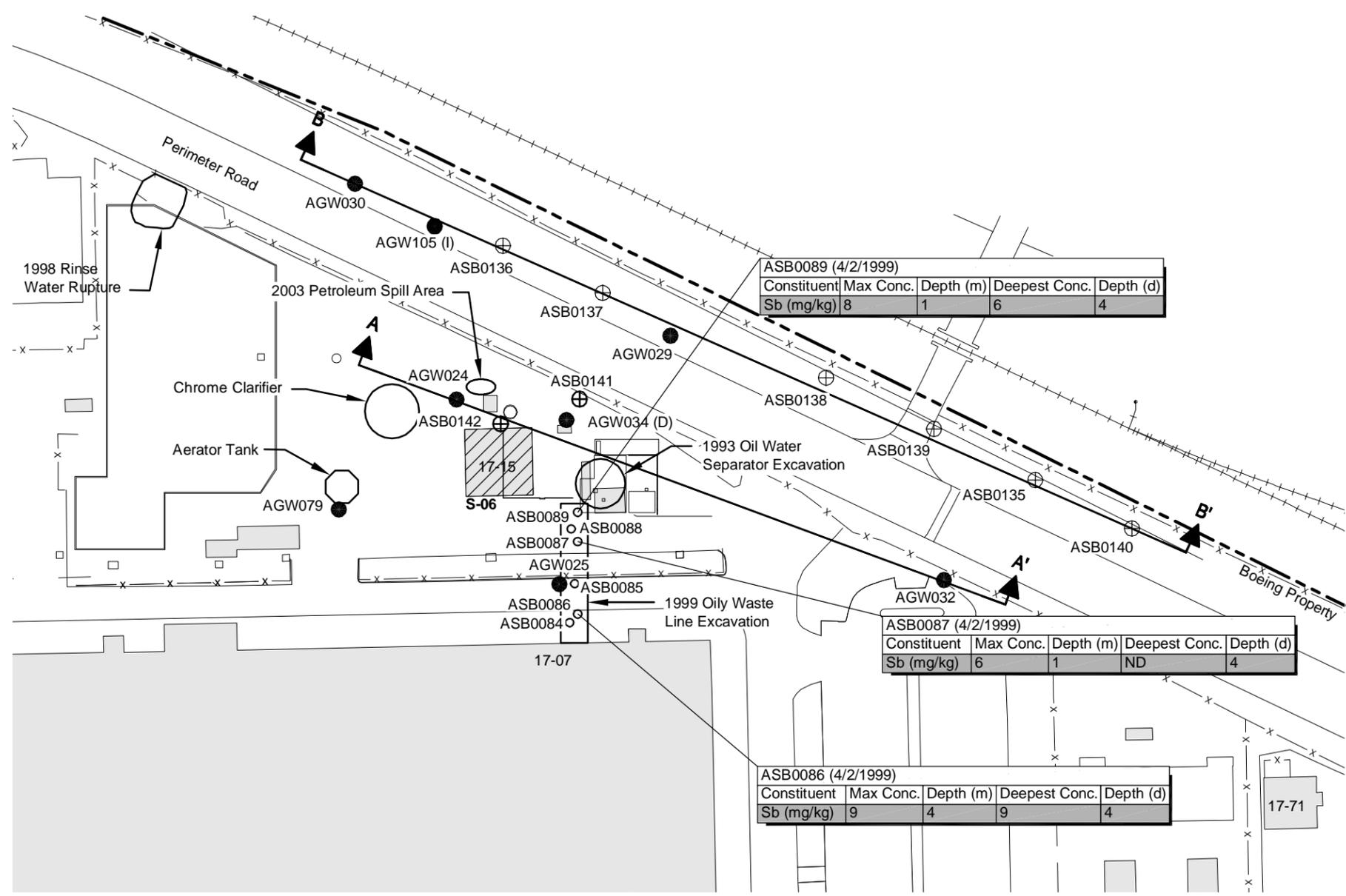
Boeing Auburn Remedial Investigation Auburn, Washington	<b>SWMU S-06 Site and Exploration Plan</b>	Figure <b>M-1a</b>
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Boeing Remedial Investigation Report | V:\025\164\050\055\DIR\Report 2009\FIG\_SWMUs - SO PLAN.dwg (A) 6-1b-4/9/2009

**Legend**

- AGW016 ● Monitoring Well Location and Designation
- ASB0149 ⊕ Soil Boring Location and Designation
- ASB0089 ○ Pre-RI Sample Boring Location and Designation (Locations are Approximate)
- S-12b** Solid Waste Management Unit (SWMU)
- 17-05 Current Building and Number
- Property Boundary
- A A' Cross Section Location and Designation

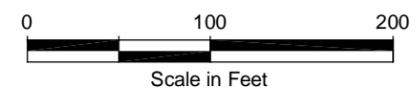
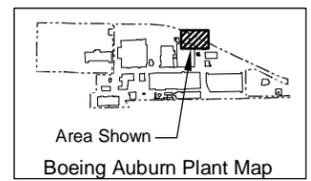


ASB0089 (4/2/1999)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Sb (mg/kg)	8	1	6	4

ASB0087 (4/2/1999)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Sb (mg/kg)	6	1	ND	4

ASB0086 (4/2/1999)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Sb (mg/kg)	9	4	9	4

- Notes**
1. ND = Compound Not Detected at Indicated Reporting Limit.
  2. Shaded results reflect exceedance of screening criteria.



Base map source: Geomatrix 2003



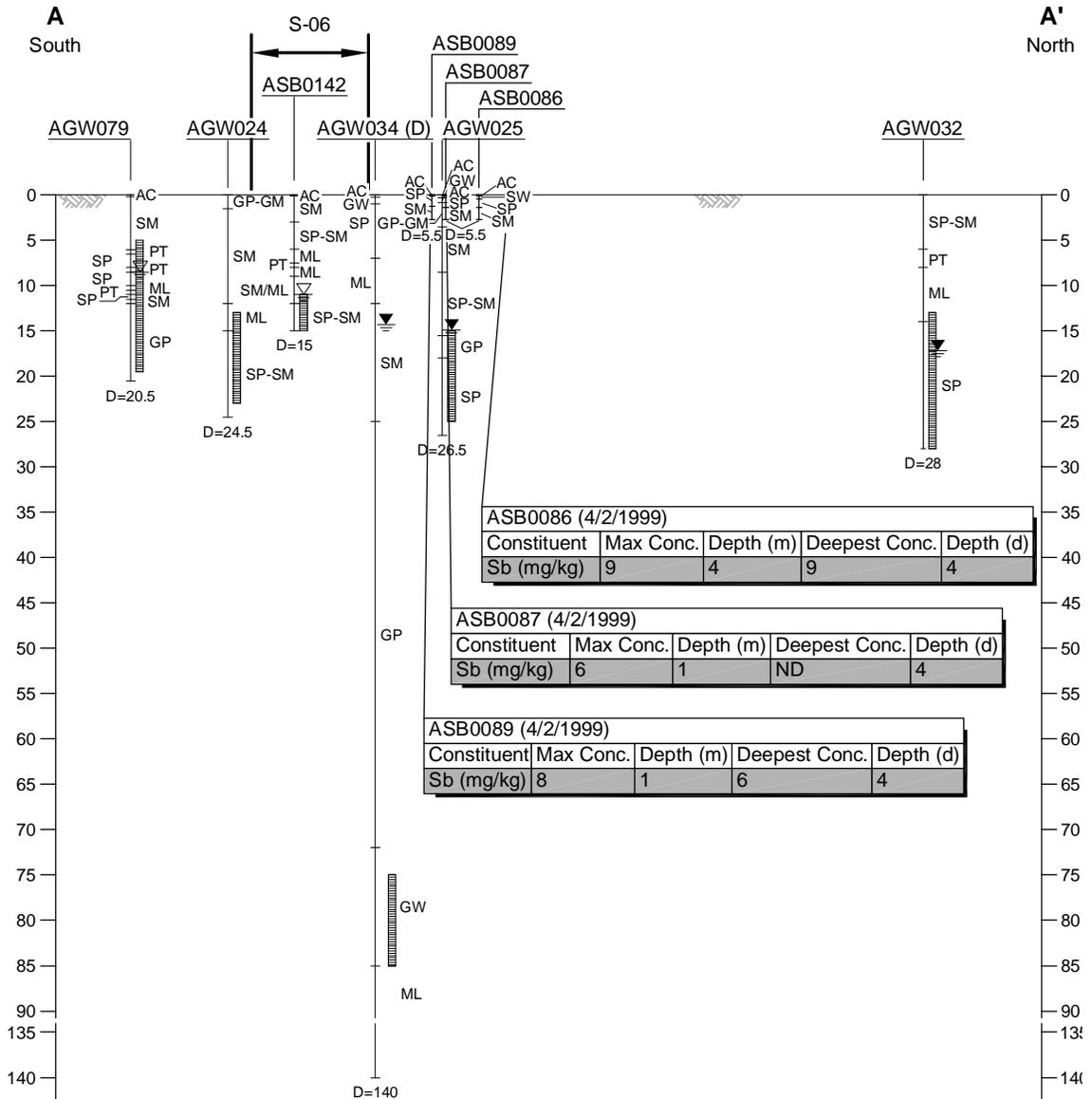
Boeing Auburn  
Remedial Investigation  
Auburn, Washington

**SWMU S-06  
Soil Plan View**

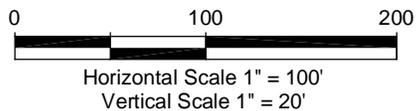
Figure  
**M-1b**

**Legend**

- AGW079 — Exploration Designation
  - Top of Exploration
  - Water Level (August 2004)
  - Water Level (ATD)
  - SM — Unified Soil Classification Symbol
  - Screen Interval / Sampling Interval
  - D=20.5 — Depth of Exploration
  - ND — Compound Not Detected at Indicated Reporting Limit
- Note: Shaded results reflect exceedance of screening criteria.



Note: Borings ASB0084, ASB0085, ASB0088 have no detections, therefore not shown on this figure for clarity.



Boeing Auburn Remedial Investigation Auburn, Washington	<b>SWMU S-06</b> <b>Soil Section A-A' View</b>	Figure <b>M-1c</b>
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Boeing Remedial Investigation Report | V:\025\164\050\055\DIR\Report 2009\FIG\_SWMUs - GWP\PLAN.dwg (A) '6-16'-49/2009

**Legend**

- AGW016 ● Monitoring Well Location and Designation
- ASB0149 ⊕ Soil Boring Location and Designation
- ASB0089 ○ Pre-RI Sample Boring Location and Designation (Locations are Approximate)
- S-126 Solid Waste Management Unit (SWMU)
- 17-05 Current Building and Number
- Property Boundary
- Cross Section Location and Designation

AGW030					
Constituent	Max	Max Date	Last	Last Date	
As (Diss) (mg/L)	0.002	8/30/1999	ND	12/1/2004	
bis(2-EHP) (µg/L)	15	5/21/2003	ND	12/1/2004	
Th (Diss) (mg/L)	0.001	11/25/2002	ND	12/1/2004	
V (Diss) (mg/L)	0.136	11/7/2000	0.043	12/1/2004	
VC (µg/L)	0.4	11/2/2001	ND	12/8/2008	

AGW105					
Constituent	Max	Max Date	Last	Last Date	
As (Diss) (mg/L)	0.006	12/1/2004	0.006	12/1/2004	
TCE (µg/L)	1.1	6/2/2008	0.8	12/8/2008	
V (Diss) (mg/L)	0.006	12/1/2004	0.006	12/1/2004	
VC (µg/L)	1.8	12/1/2004	0.95	12/8/2008	

AGW029					
Constituent	Max	Max Date	Last	Last Date	
As (Diss) (mg/L)	0.004	3/14/2000	ND	12/1/2004	
bis(2-EHP) (µg/L)	1.4	11/7/2000	ND	12/1/2004	
Th (Diss) (mg/L)	0.001	11/7/2000	ND	12/1/2004	
V (Diss) (mg/L)	0.039	9/3/1998	0.025	12/1/2004	
VC (µg/L)	0.5	9/10/1997, 12/5/2005	0.088	12/8/2008	

ASB0136					
Constituent	Max	Max Date	Last	Last Date	
VC (µg/L)	0.083	3/22/2004	0.083	3/22/2004	

AGW034					
Constituent	Max	Max Date	Last	Last Date	
As (Diss) (mg/L)	0.001	12/11/1995, 9/9/1997	0.001	12/7/2004	
bis(2-EHP) (µg/L)	48	9/2/1998	48	9/2/1998	
TCE (µg/L)	2.6	3/19/1998	2.4	12/5/2005	
VC (µg/L)	0.026	6/8/2004	ND	12/5/2005	

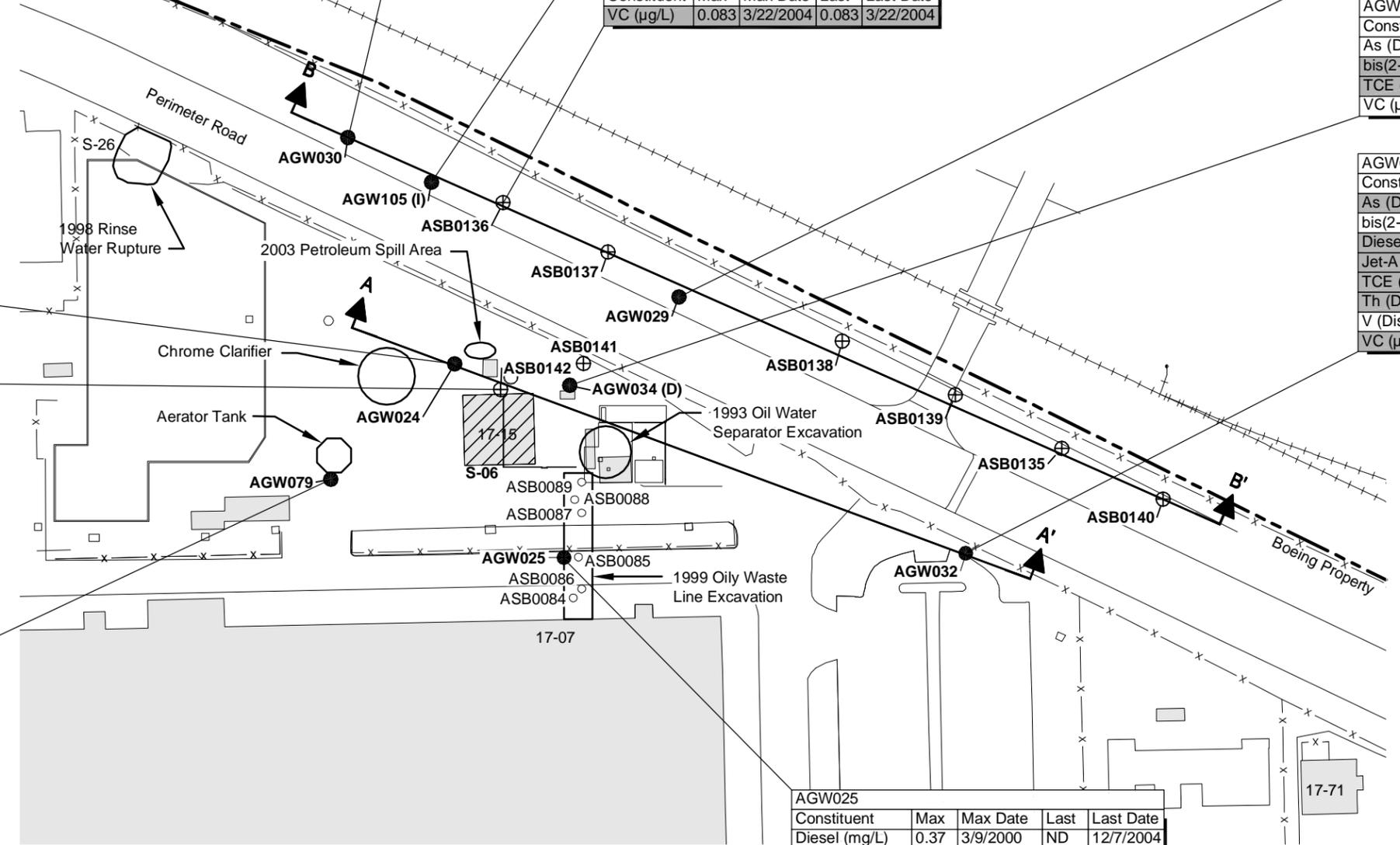
AGW024					
Constituent	Max	Max Date	Last	Last Date	
VC (µg/L)	9.5	9/2/1998	4.0	12/10/2008	

ASB0142					
Constituent	Max	Max Date	Last	Last Date	
VC (µg/L)	0.4	5/4/2004	0.4	5/4/2004	

AGW032					
Constituent	Max	Max Date	Last	Last Date	
As (Diss) (mg/L)	0.072	5/20/2002	0.014	12/7/2004	
bis(2-EHP) (µg/L)	3.9	9/2/1998	1.8	12/7/2004	
Diesel (mg/L)	1.4	3/13/2000	ND	12/7/2004	
Jet-A (mg/L)	0.91	3/13/2000	ND	11/7/2000	
TCE (µg/L)	0.7	9/9/1997	ND	12/4/2008	
Th (Diss) (mg/L)	0.001	2/16/1999	ND	12/7/2004	
V (Diss) (mg/L)	0.043	6/8/2004	0.019	12/7/2004	
VC (µg/L)	5.2	8/30/1999	0.88	12/4/2008	

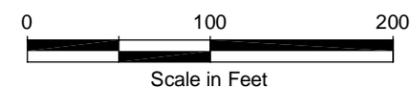
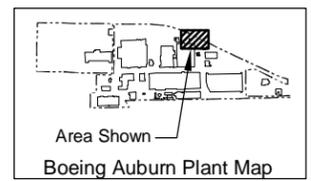
AGW079					
Constituent	Max	Max Date	Last	Last Date	
VC (µg/L)	3.8	1997	1.0	12/8/2008	

AGW025					
Constituent	Max	Max Date	Last	Last Date	
Diesel (mg/L)	0.37	3/9/2000	ND	12/7/2004	
V (Diss) (mg/L)	0.004	6/8/2004	0.004	12/7/2004	
TCE (µg/L)	0.2	6/3/2008	ND	12/4/2008	
VC (µg/L)	12.01	3/27/1995	2.4	12/4/2008	



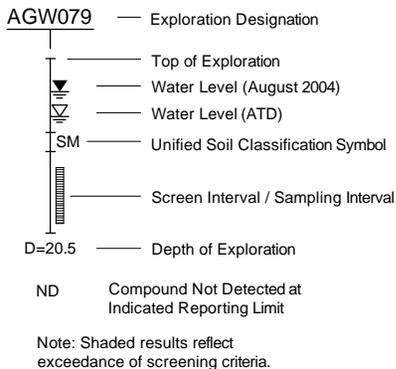
- Notes**
1. ND = Compound Not Detected at Indicated Reporting Limit
  2. Shaded results reflect exceedance of screening criteria.

Base map source: Geomatrix 2003



Boeing Auburn Remedial Investigation Auburn, Washington	<b>SWMU S-06 Groundwater Plan View</b>	Figure <b>M-1d</b>
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**Legend**



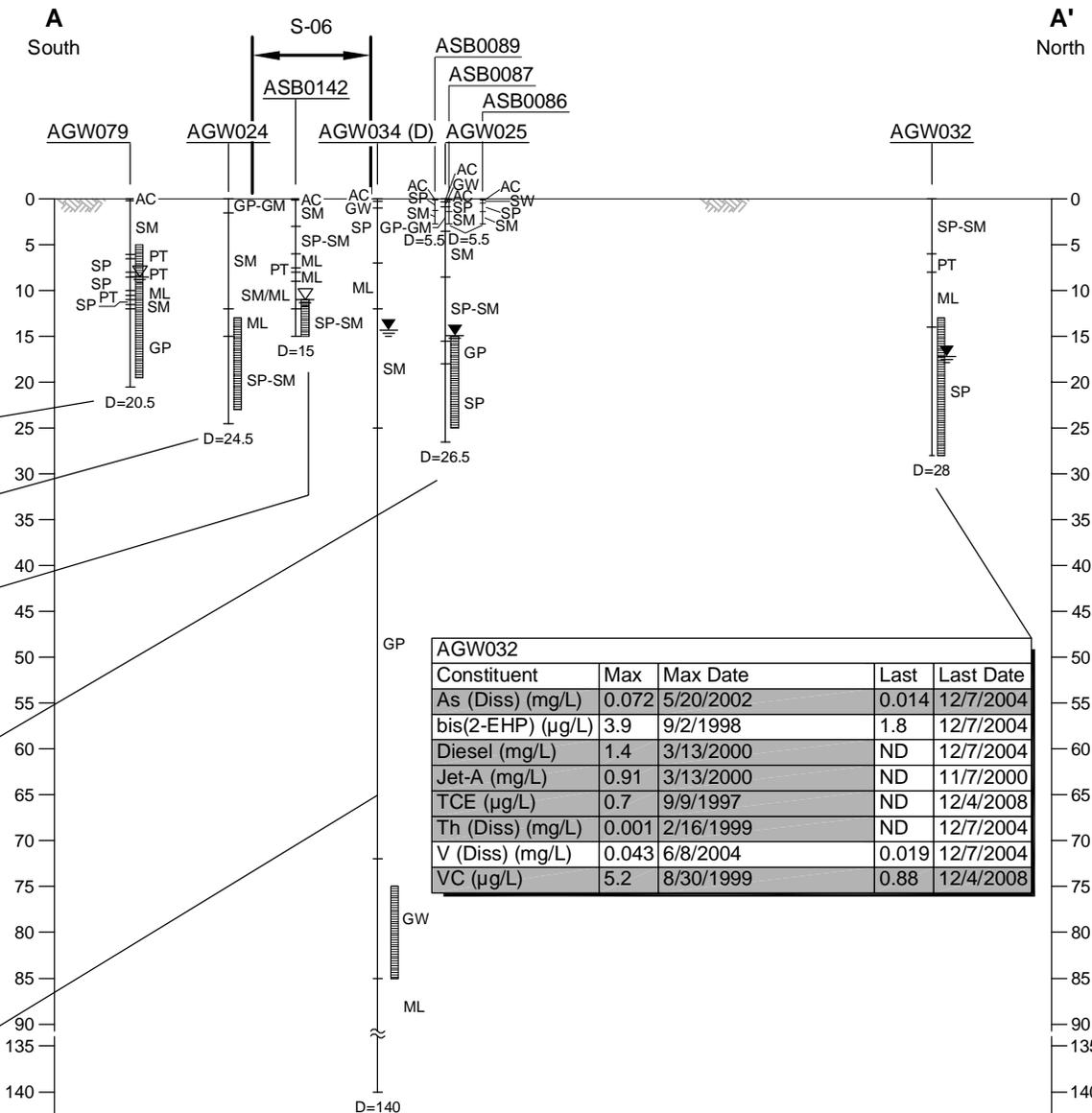
AGW079				
Constituent	Max	Max Date	Last	Last Date
VC (µg/L)	3.8	1997	1.0	12/8/2008

AGW024				
Constituent	Max	Max Date	Last	Last Date
VC (µg/L)	9.5	9/2/1998	4.0	12/10/2008

ASB0142				
Constituent	Max	Max Date	Last	Last Date
VC (µg/L)	0.4	5/4/2004	0.4	5/4/2004

AGW025				
Constituent	Max	Max Date	Last	Last Date
Diesel (mg/L)	0.37	3/9/2000	ND	12/7/2004
V (Diss) (mg/L)	0.004	6/8/2004	0.004	12/7/2004
TCE (µg/L)	0.2	6/3/2008	ND	12/4/2008
VC (µg/L)	12.01	3/27/1995	2.4	12/4/2008

AGW034				
Constituent	Max	Max Date	Last	Last Date
As (Diss) (mg/L)	0.001	12/11/1995, 9/9/1997	0.001	12/7/2004
bis(2-EHP) (µg/L)	48	9/2/1998	48	9/2/1998
TCE (µg/L)	2.6	3/19/1998	2.4	12/5/2005
VC (µg/L)	0.026	6/8/2004	ND	12/5/2005



AGW032				
Constituent	Max	Max Date	Last	Last Date
As (Diss) (mg/L)	0.072	5/20/2002	0.014	12/7/2004
bis(2-EHP) (µg/L)	3.9	9/2/1998	1.8	12/7/2004
Diesel (mg/L)	1.4	3/13/2000	ND	12/7/2004
Jet-A (mg/L)	0.91	3/13/2000	ND	11/7/2000
TCE (µg/L)	0.7	9/9/1997	ND	12/4/2008
Th (Diss) (mg/L)	0.001	2/16/1999	ND	12/7/2004
V (Diss) (mg/L)	0.043	6/8/2004	0.019	12/7/2004
VC (µg/L)	5.2	8/30/1999	0.88	12/4/2008

Note: Borings ASB0084, ASB0085, ASB0088 have no detections; therefore, not shown on this figure for clarity.



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Auburn, Washington

**SWMU S-06**  
**Groundwater Section A-A' View**

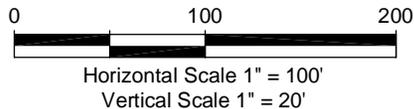
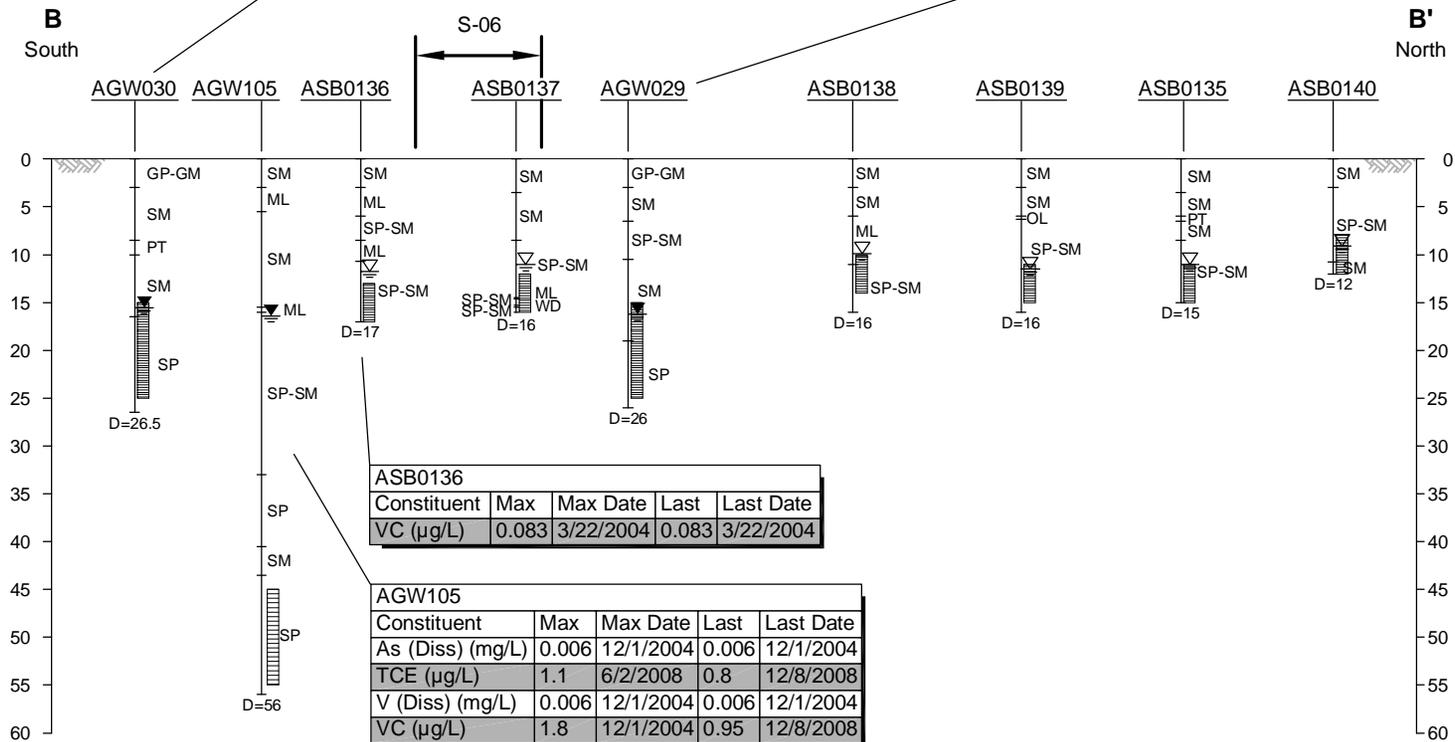
Figure  
**M-1e**

**Legend**

- AGW079 — Exploration Designation
  - Top of Exploration
  - Water Level (August 2004)
  - Water Level (ATD)
  - SM — Unified Soil Classification Symbol
  - Screen Interval / Sampling Interval
  - D=20.5 — Depth of Exploration
  - ND — Compound Not Detected at Indicated Reporting Limit
- Note: Shaded results reflect exceedance of screening criteria.

AGW030				
Constituent	Max	Max Date	Last	Last Date
As (Diss) (mg/L)	0.002	8/30/1999	ND	12/1/2004
bis(2-EHP) (µg/L)	15	5/21/2003	ND	12/1/2004
Th (Diss) (mg/L)	0.001	11/25/2002	ND	12/1/2004
V (Diss) (mg/L)	0.136	11/7/2000	0.043	12/1/2004
VC (µg/L)	0.4	11/2/2001	ND	12/8/2008

AGW029				
Constituent	Max	Max Date	Last	Last Date
As (Diss) (mg/L)	0.004	3/14/2000	ND	12/1/2004
bis(2-EHP) (µg/L)	1.4	11/7/2000	ND	12/1/2004
Th (Diss) (mg/L)	0.001	11/7/2000	ND	12/1/2004
V (Diss) (mg/L)	0.039	9/3/1998	0.025	12/1/2004
VC (µg/L)	0.5	9/10/1997, 12/5/2005	0.088	12/8/2008



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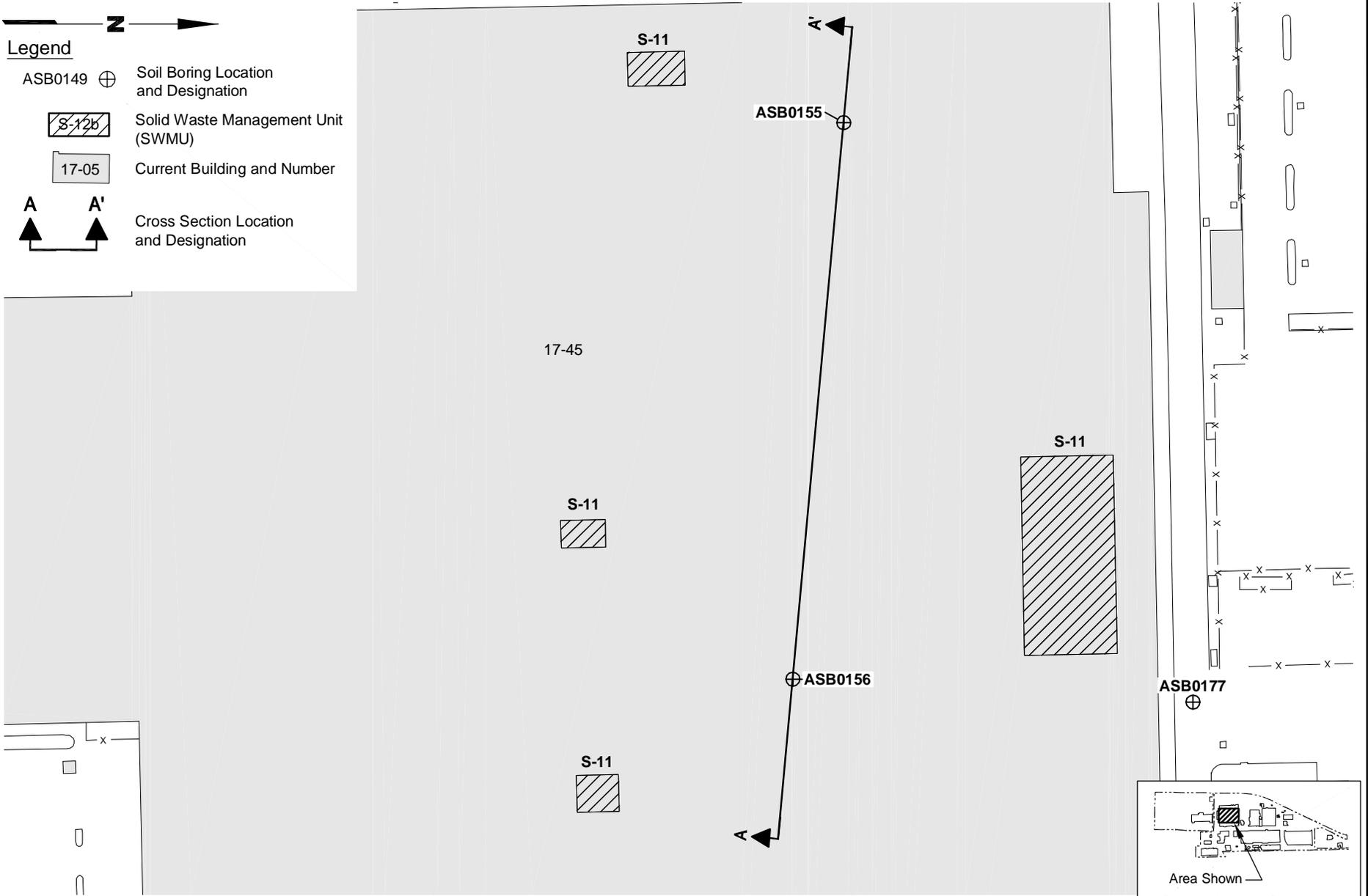
**SWMU S-06**  
**Groundwater Section B-B' View**

Figure  
**M-1f**

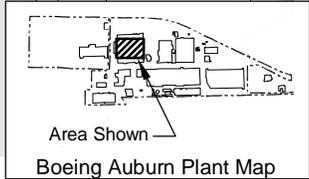


**Legend**

- ASB0149 ⊕ Soil Boring Location and Designation
-  S-12b Solid Waste Management Unit (SWMU)
-  17-05 Current Building and Number
-  Cross Section Location and Designation



Base map source: Geomatrix 2003



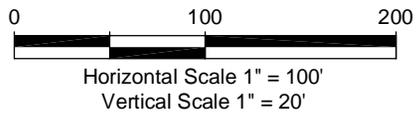
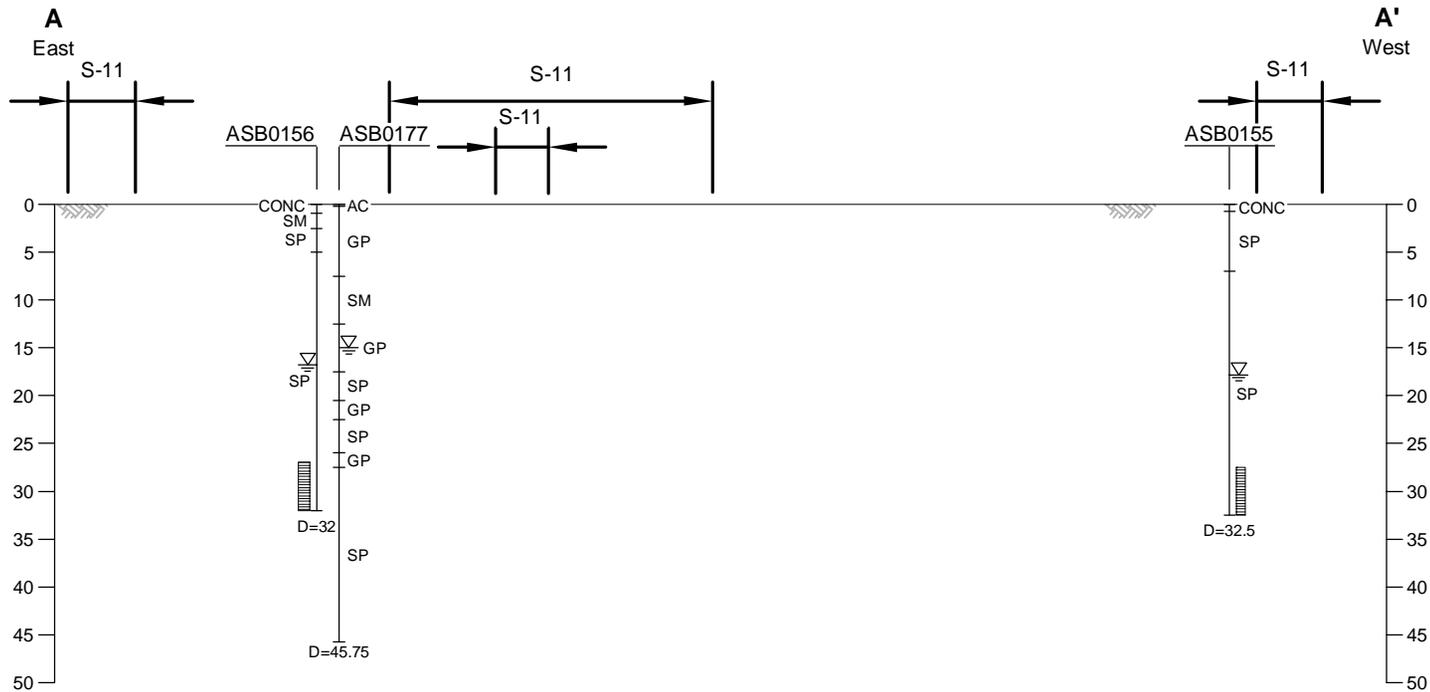
Boeing Auburn  
Remedial Investigation  
Auburn, Washington

**SWMU S-11**  
**Site and Exploration Plan**

Figure  
**M-2a**

**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration



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**SWMU S-11**  
**Section A-A' View**

Figure  
**M-2b**





**Legend**

- ASB0149 ⊕ Soil Boring Location and Designation
- S-12b Solid Waste Management Unit (SWMU)
- 17-05 Current Building and Number
- Cross Section Location and Designation

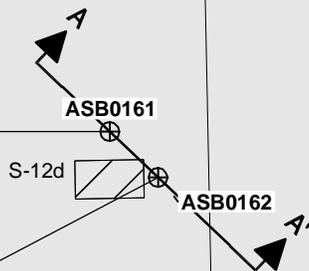
ASB0161				
Constituent	Max	Max Date	Last	Last Date
VC (µg/L)	0.13	8/31/2004	0.13	8/31/2004

ASB0162				
Constituent	Max	Max Date	Last	Last Date
VC (µg/L)	0.15	8/31/2004	0.15	8/31/2004

17-10

17-12

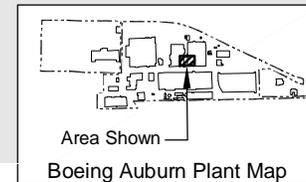
17-07



**Notes**

1. ND = Compound Not Detected at Indicated Reporting Limit
2. Shaded results reflect exceedance of screening criteria.

Base map source: Geomatrix 2003



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Remedial Investigation  
Auburn, Washington

**SWMU S-12d  
Groundwater Plan View**

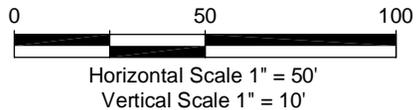
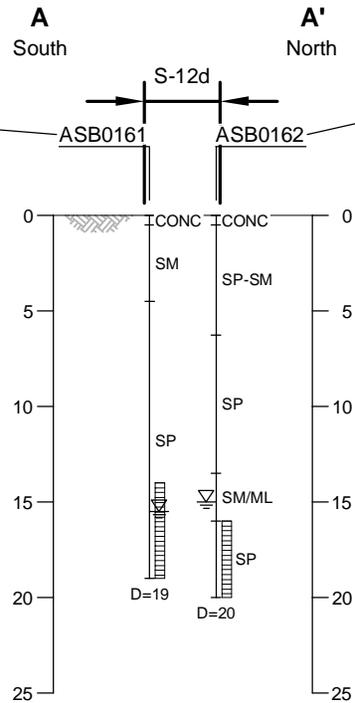
Figure  
**M-3a**

**Legend**

- AGW079 — Exploration Designation
  - Top of Exploration
  - Water Level (August 2004)
  - Water Level (ATD)
  - SM — Unified Soil Classification Symbol
  - Screen Interval / Sampling Interval
  - D=20.5 — Depth of Exploration
  - ND Compound Not Detected at Indicated Reporting Limit
- Note: Shaded results reflect exceedance of screening criteria.

ASB0161				
Constituent	Max	Max Date	Last	Last Date
VC (µg/L)	0.13	8/31/2004	0.13	8/31/2004

ASB0162				
Constituent	Max	Max Date	Last	Last Date
VC (µg/L)	0.15	8/31/2004	0.15	8/31/2004

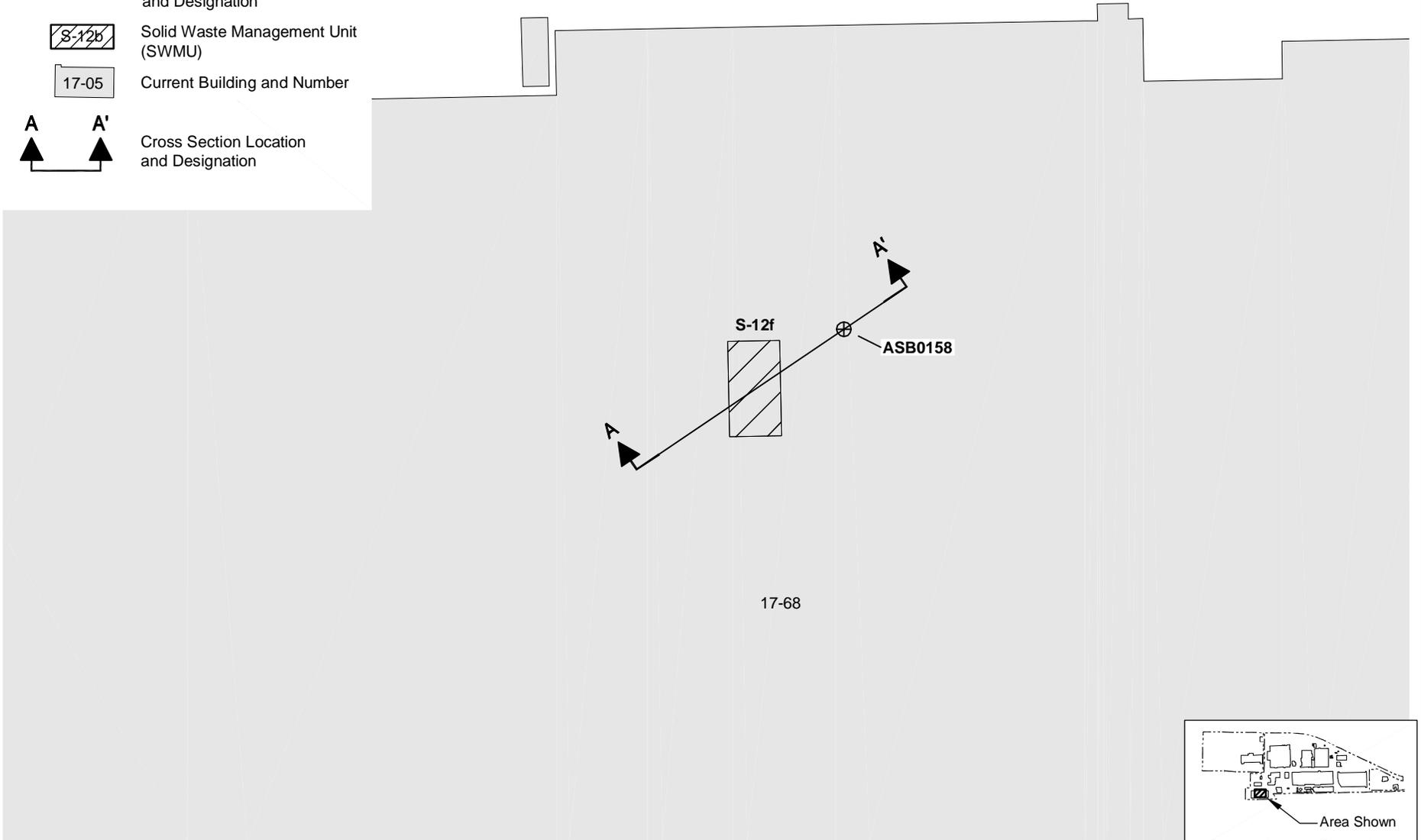


Boeing Auburn Remedial Investigation Auburn, Washington	<b>SWMU S-12d</b> <b>Groundwater Section A-A' View</b>	Figure <b>M-3b</b>
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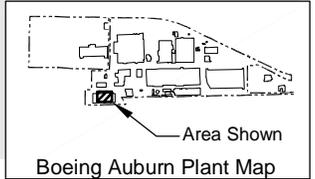


**Legend**

- ASB0149 ⊕ Soil Boring Location and Designation
-  S-12b Solid Waste Management Unit (SWMU)
-  17-05 Current Building and Number
-  Cross Section Location and Designation



Base map source: Geomatrix 2003



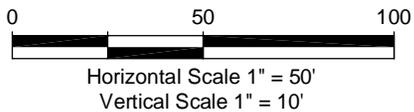
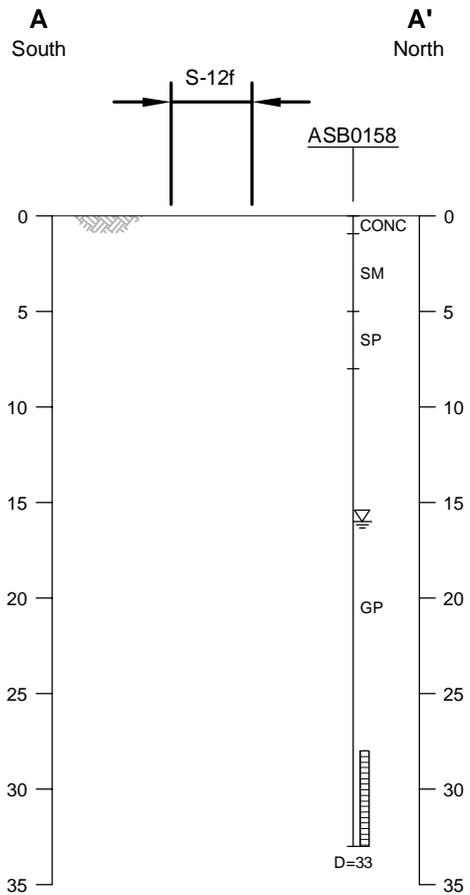
Boeing Auburn  
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Auburn, Washington

**SWMU S-12f**  
**Site and Exploration Plan**

Figure  
**M-4a**

**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- ▼ — Water Level (August 2004)
- ▽ — Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration

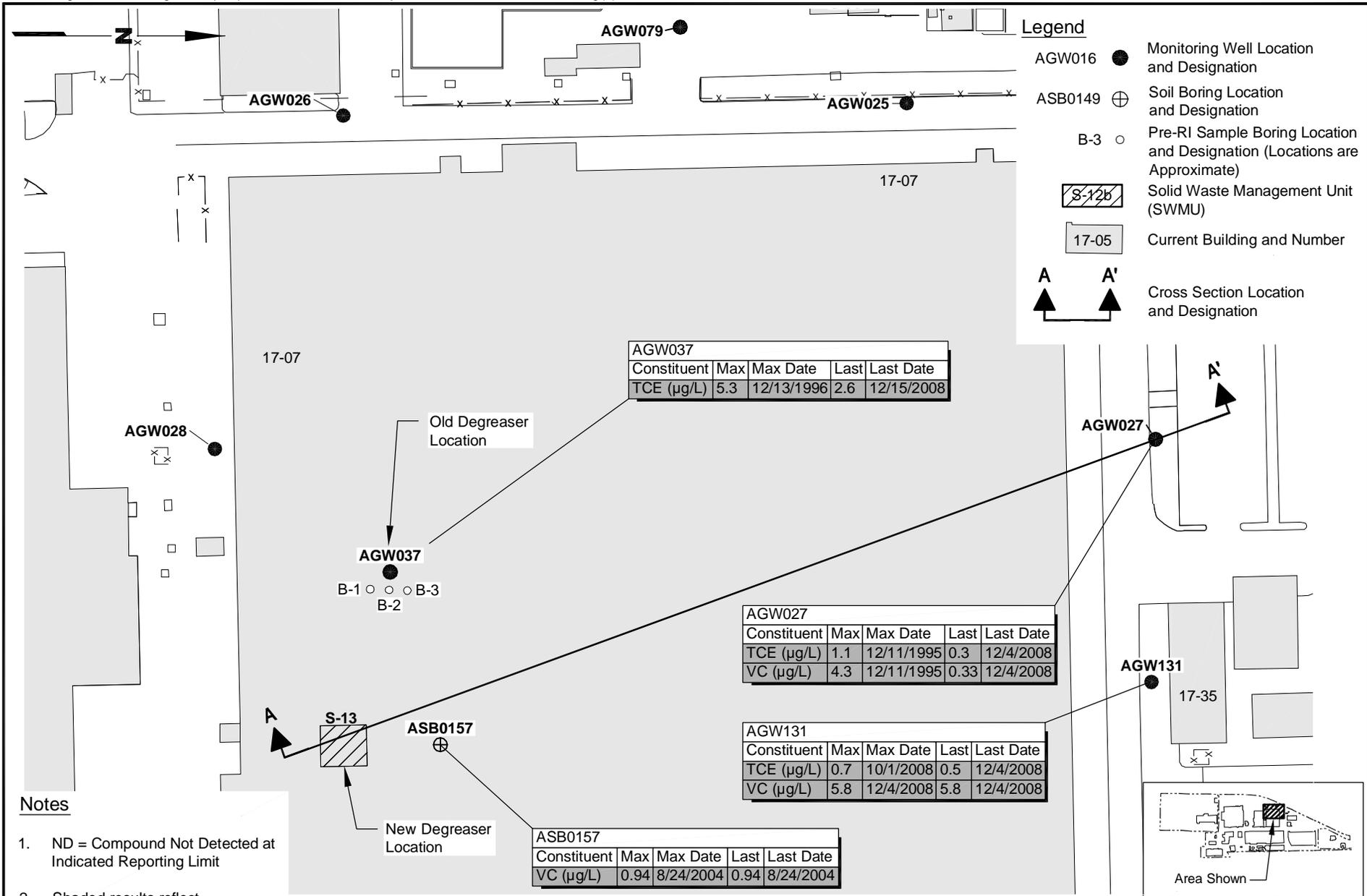


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**SWMU S-12f**  
**Section A-A' View**

Figure  
**M-4b**





**Notes**

1. ND = Compound Not Detected at Indicated Reporting Limit
2. Shaded results reflect exceedance of screening criteria.

Base map source: Geomatrix 2003



Boeing Auburn Remedial Investigation Auburn, Washington	<b>SWMU S-13 Groundwater Plan View</b>	Figure <b>M-5a</b>
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**Legend**

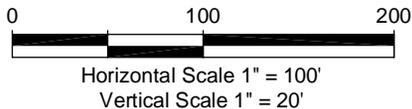
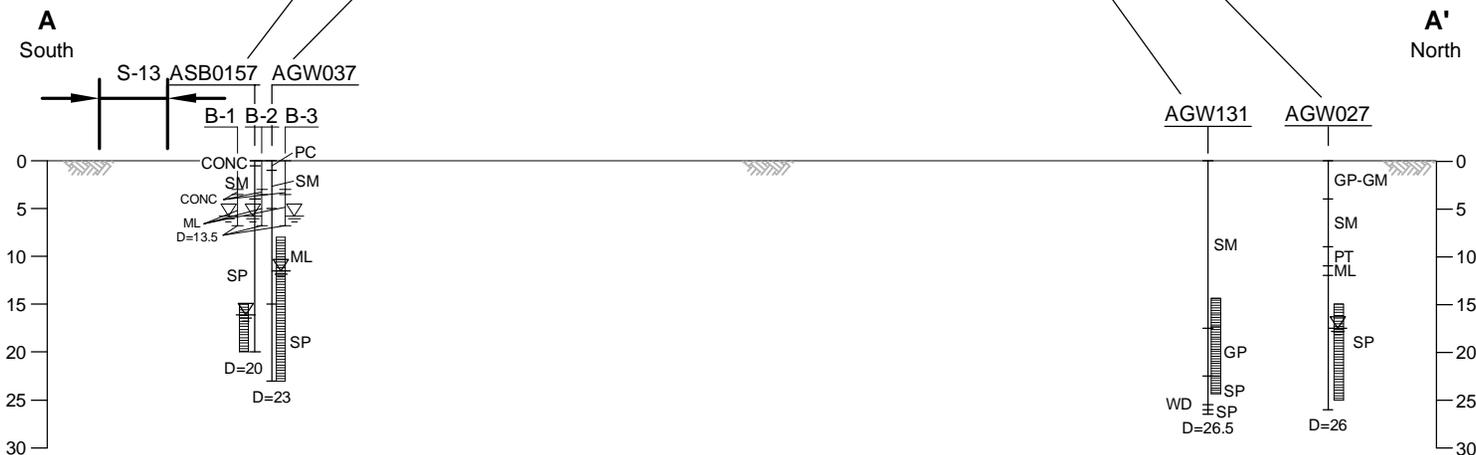
- AGW079 — Exploration Designation
  - Top of Exploration
  - Water Level (August 2004)
  - Water Level (ATD)
  - SM — Unified Soil Classification Symbol
  - Screen Interval / Sampling Interval
  - D=20.5 — Depth of Exploration
  - ND — Compound Not Detected at Indicated Reporting Limit
- Note: Shaded results reflect exceedance of screening criteria.

ASB0157				
Constituent	Max	Max Date	Last	Last Date
VC (µg/L)	0.94	8/24/2004	0.94	8/24/2004

AGW037				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	5.3	12/13/1996	2.6	12/15/2008

AGW131				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	0.7	10/1/2008	0.5	12/4/2008
VC (µg/L)	5.8	12/4/2008	5.8	12/4/2008

AGW027				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	1.1	12/11/1995	0.3	12/4/2008
VC (µg/L)	4.3	12/11/1995	0.33	12/4/2008

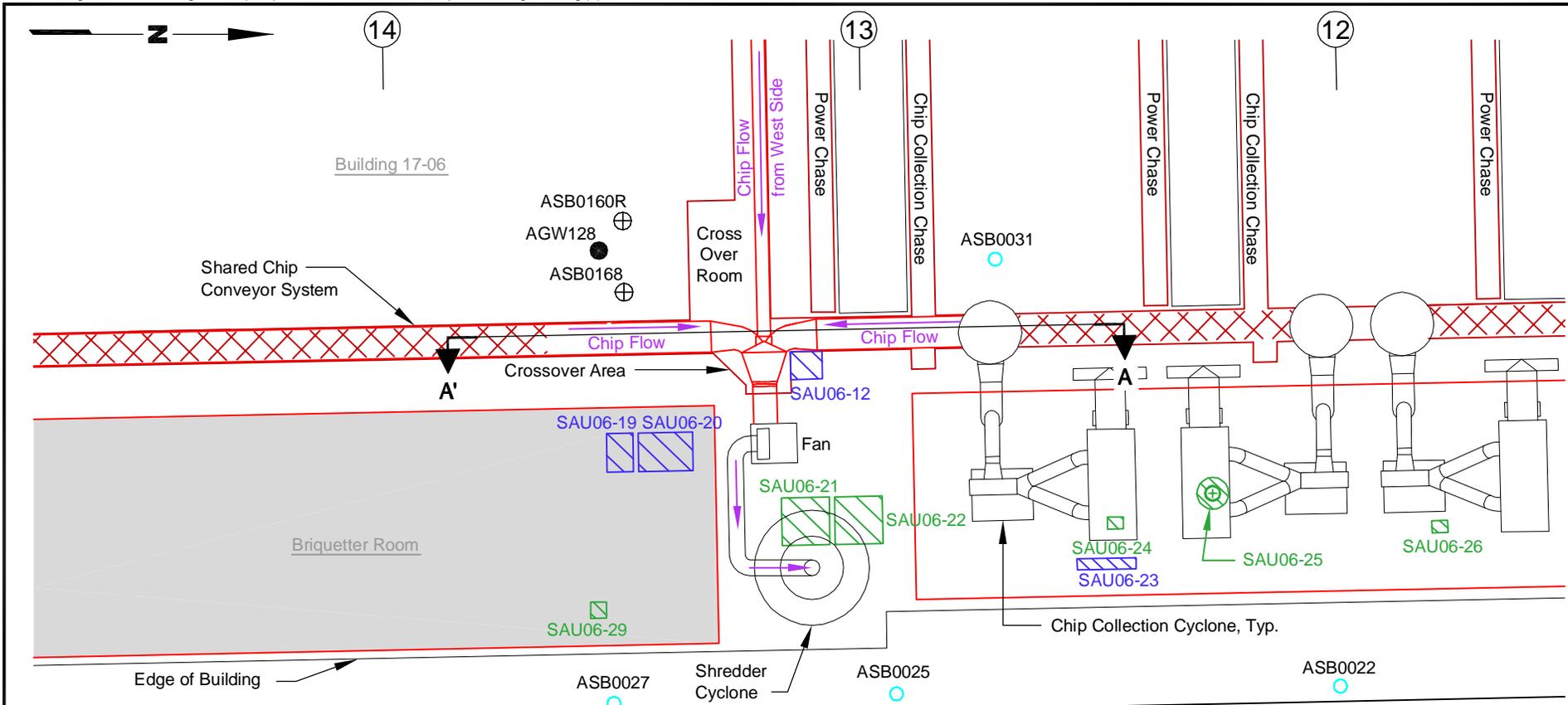


Boeing Auburn  
Remedial Investigation  
Auburn, Washington

**SWMU S-13**  
**Groundwater Section A-A' View**

Figure  
**M-5b**



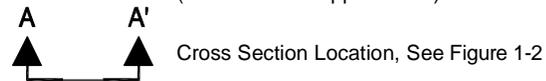


**Note**

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

**Legend**

- |   |                                      |  |
|---|--------------------------------------|--|
| AGW016 ● Monitoring Well Location and Designation                                   | — Vacuum or Jet Stream Type Conveyor | SAU06-34 □ Chip runoff Sump Location and Designation   |
| ASB0149 ⊕ Soil Boring Location and Designation                                      | ▤ Push Bar Type Conveyor             | SAU06-34 □ Water Sump Location and Designation (Cooling water, Storm/Rain water, Condensate) |
| ASB0089 ○ Pre-RI Sample Boring Location and Designation (Locations are Approximate) | 17-05 Boeing Building and Number     | → Direction of Chip Flow   |

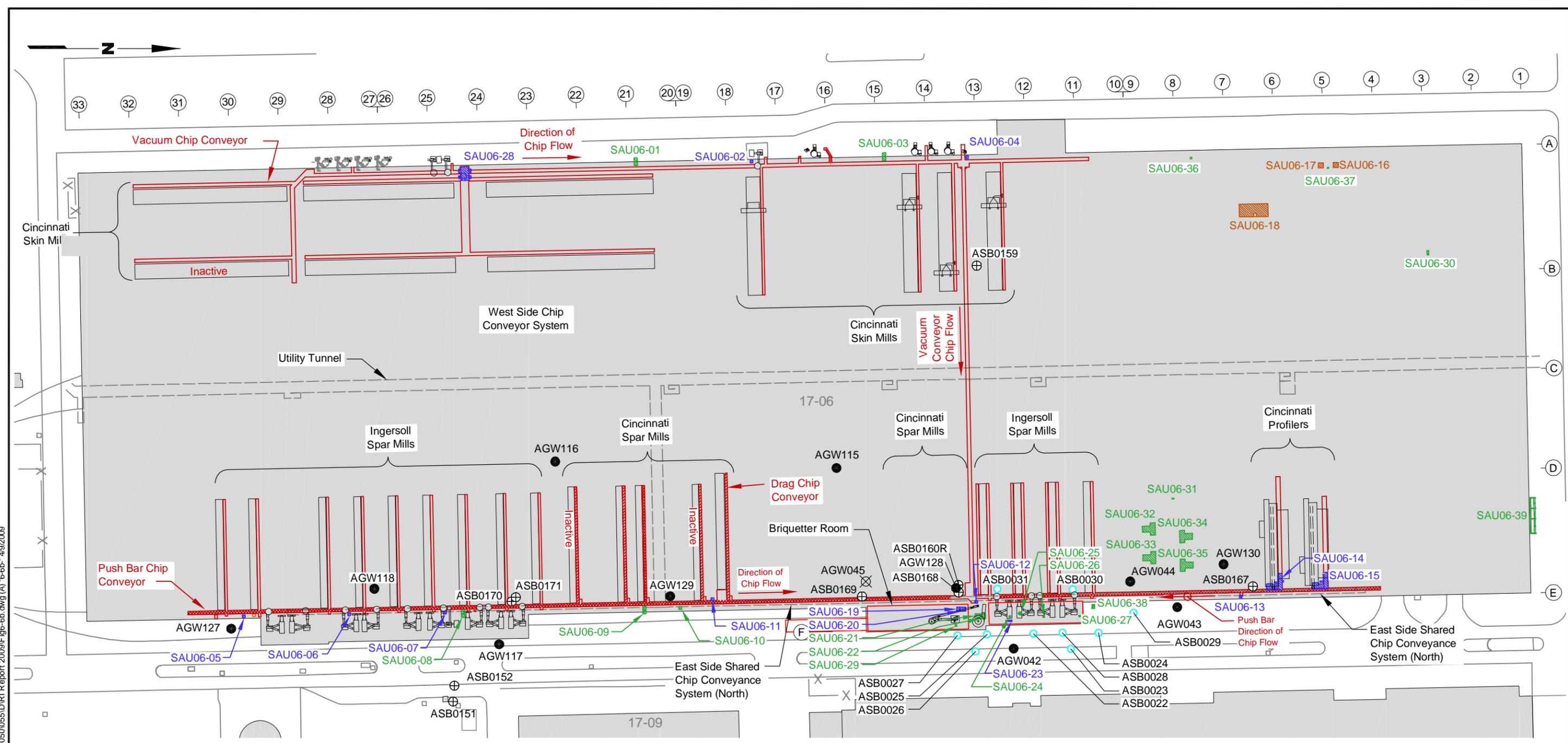


Base map source: Geomatrix 2003



Boeing Auburn Remedial Investigation Auburn, Washington	<b>Building 17-06 Briguetter Area, Sump ASU06-12, Crossover Area</b>	Figure <b>M-6a</b>
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Boeing Remedial Investigation Report | V:\025\164\050\055\DIR\Report 2009\Fig-6b.dwg (A) "6-6b" 4/9/2009

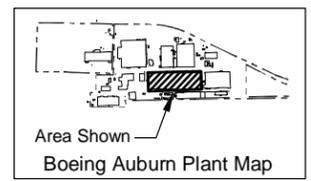


**Legend**

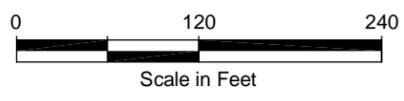
- |   |   |  |
|---|---|--|
| AGW016 ● Monitoring Well Location and Designation                                   | ==== Vacuum or Jet Stream Type Conveyor | SAU06-34 ■ Chip runoff Sump Location and Designation   |
| ASB0169 ⊕ Soil Boring Location and Designation                                      | ==== Push Bar Type Conveyor             | SAU06-34 ■ Water Sump Location and Designation (Cooling water, Storm/Rain water, Condensate) |
| ASB0149 ⊗ Abandoned Monitoring Well Location and Designation                        | ==== Drag Type Conveyor                 | SAU06-34 ■ Anodizing & Penetrant Sumps   |
| ASB0089 ○ Pre-RI Sample Boring Location and Designation (Locations are Approximate) | 17-05 Boeing Building and Number        |  |

**Note**

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.



Base map source: Geomatrix 2003



Boeing Auburn  
Remedial Investigation  
Auburn, Washington

**Building 17-06  
Aluminum Chip Conveyance System**

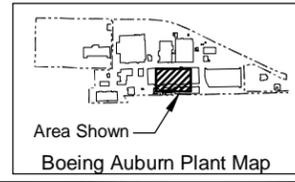
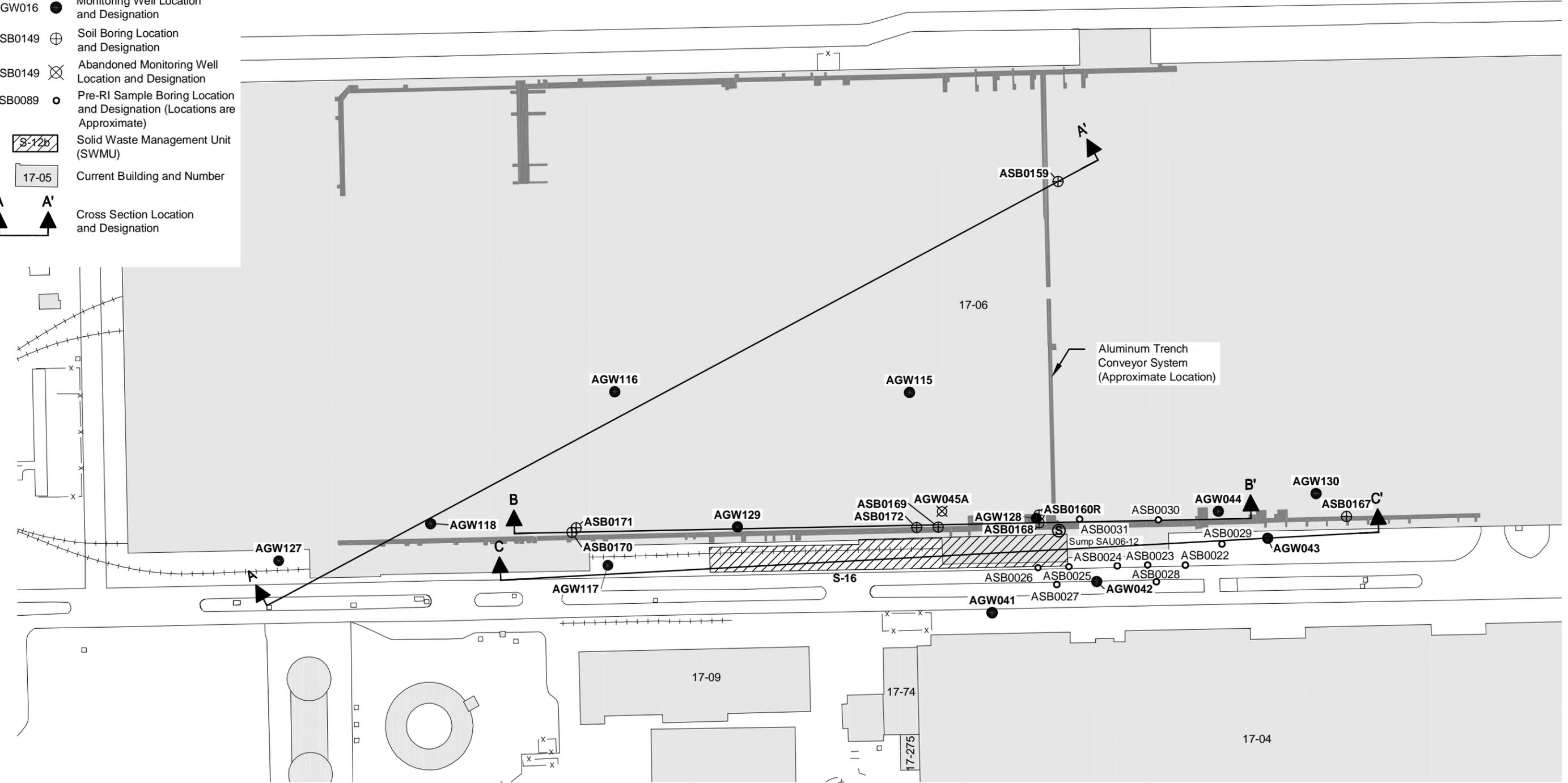
Figure  
**M-6b**

Boeing Remedial Investigation Report | V:\025\164\050\055\DIR\Report\_2009\FIG\_SWMUs - SE PLAN.dwg (A) "6-6c" 4/10/2009



**Legend**

- AGW016 ● Monitoring Well Location and Designation
- ASB0149 ⊕ Soil Boring Location and Designation
- ASB0149 ⊗ Abandoned Monitoring Well Location and Designation
- ASB0089 ○ Pre-RI Sample Boring Location and Designation (Locations are Approximate)
- S-12b Solid Waste Management Unit (SWMU)
- 17-05 Current Building and Number
- A Cross Section Location and Designation
- A' Cross Section Location and Designation



Base map source: Geomatrix 2003



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Auburn, Washington

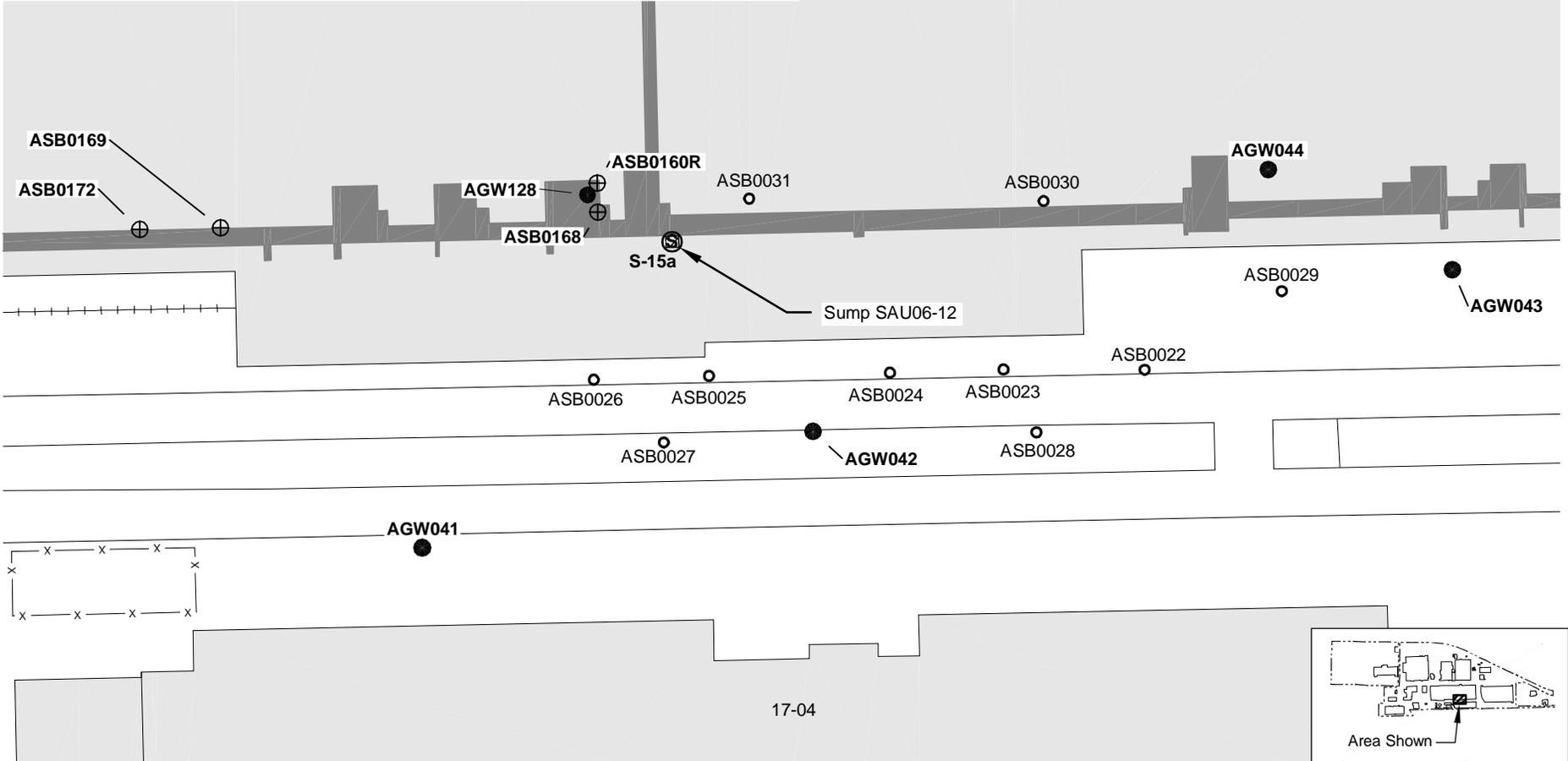
**SWMU S-16**  
**Site and Exploration Plan**

Figure  
**M-6C**

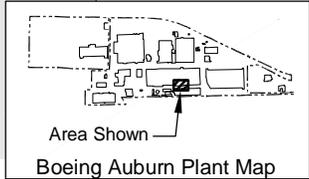


**Legend**

- AGW016 ● Monitoring Well Location and Designation
- ASB0149 ⊕ Soil Boring Location and Designation
- SAU06-12 ⊙ Sump (Location Approximate)
- ASB0089 ○ Pre-RI Sample Boring Location and Designation (Locations are Approximate)
- S-12b Solid Waste Management Unit (SWMU)
- 17-05 Current Building and Number



Base map source: Geomatrix 2003



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Auburn, Washington

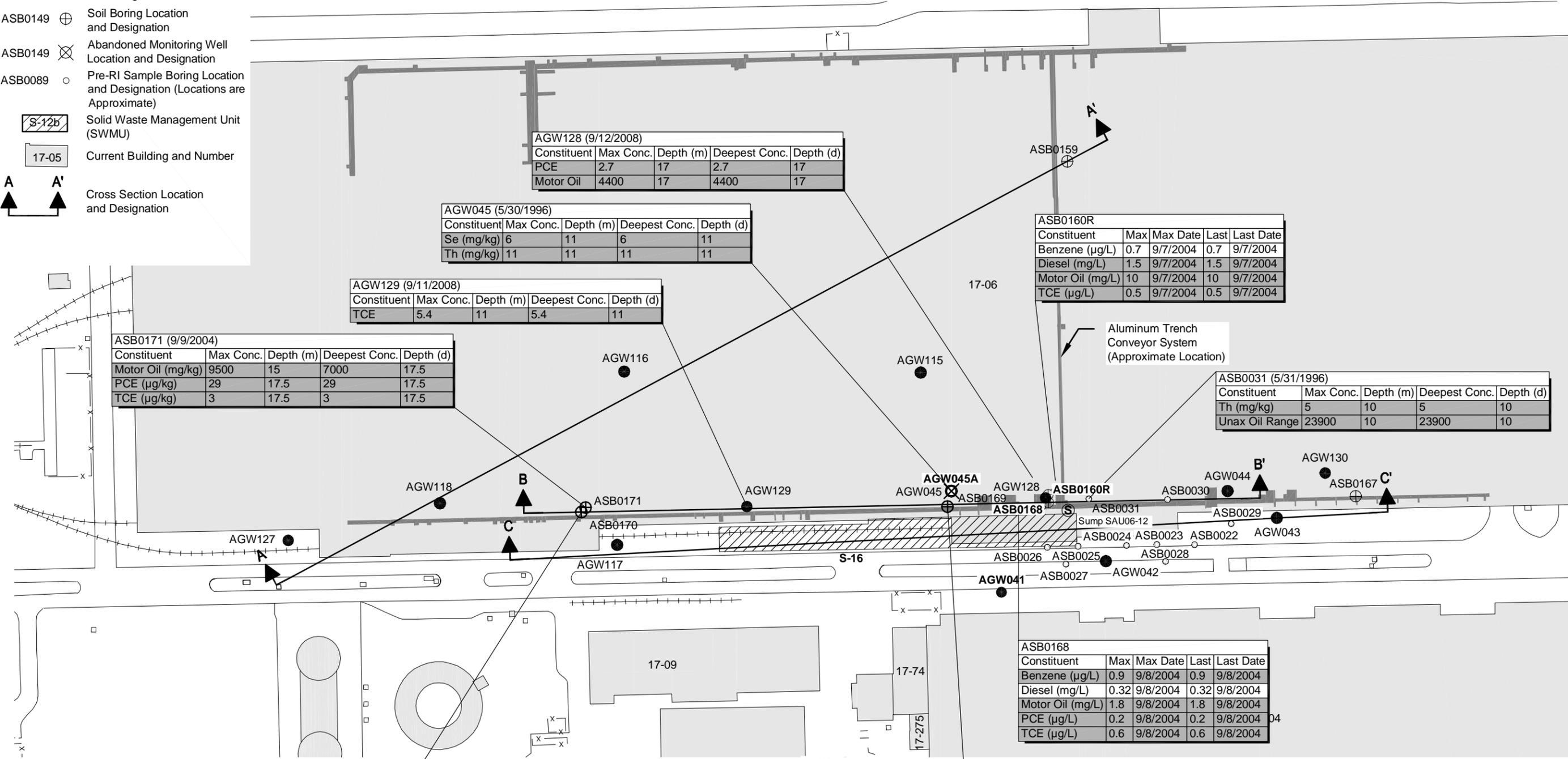
**SWMU S-15a**  
**Site and Exploration Plan**

Figure  
**M-6d**

Boeing Remedial Investigation Report | V:\025164\050\055\DIR\Report\2009\FIG\_SWMUs - SO PLAN.dwg (A) "6-6e" 4/9/2009

**Legend**

- AGW016 ● Monitoring Well Location and Designation
- ASB0149 ⊕ Soil Boring Location and Designation
- ASB0149 ⊗ Abandoned Monitoring Well Location and Designation
- ASB0089 ○ Pre-RI Sample Boring Location and Designation (Locations are Approximate)
- S-12b Solid Waste Management Unit (SWMU)
- 17-05 Current Building and Number
- A A' Cross Section Location and Designation



AGW128 (9/12/2008)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
PCE	2.7	17	2.7	17
Motor Oil	4400	17	4400	17

AGW045 (5/30/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Se (mg/kg)	6	11	6	11
Th (mg/kg)	11	11	11	11

AGW129 (9/11/2008)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
TCE	5.4	11	5.4	11

ASB0171 (9/9/2004)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Motor Oil (mg/kg)	9500	15	7000	17.5
PCE (µg/kg)	29	17.5	29	17.5
TCE (µg/kg)	3	17.5	3	17.5

ASB0160R

Constituent	Max	Max Date	Last	Last Date
Benzene (µg/L)	0.7	9/7/2004	0.7	9/7/2004
Diesel (mg/L)	1.5	9/7/2004	1.5	9/7/2004
Motor Oil (mg/L)	10	9/7/2004	10	9/7/2004
TCE (µg/L)	0.5	9/7/2004	0.5	9/7/2004

ASB0031 (5/31/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Th (mg/kg)	5	10	5	10
Unax Oil Range	23900	10	23900	10

ASB0168

Constituent	Max	Max Date	Last	Last Date
Benzene (µg/L)	0.9	9/8/2004	0.9	9/8/2004
Diesel (mg/L)	0.32	9/8/2004	0.32	9/8/2004
Motor Oil (mg/L)	1.8	9/8/2004	1.8	9/8/2004
PCE (µg/L)	0.2	9/8/2004	0.2	9/8/2004
TCE (µg/L)	0.6	9/8/2004	0.6	9/8/2004

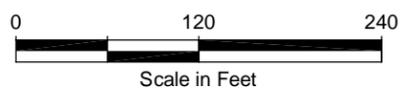
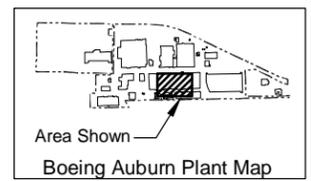
ASB0170 (9/9/2004)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Diesel (mg/kg)	3900	15	2200	17.5
Motor Oil (mg/kg)	20000	15	13000	17.5
PCE (µg/kg)	13	17.5	13	17.5
TCE (µg/kg)	1.6	17.5	1.6	17.5

ASB0169 (9/8/2004)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Motor Oil (mg/kg)	2900	17.5	2900	17.5
PCE (µg/kg)	2.8	15	ND	17.5

- Notes**
1. ND = Compound Not Detected at Indicated Reporting Limit.
  2. Shaded results reflect exceedance of screening criteria.



Base map source: Geomatrix 2003



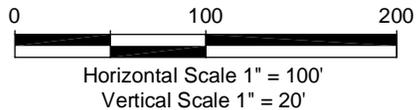
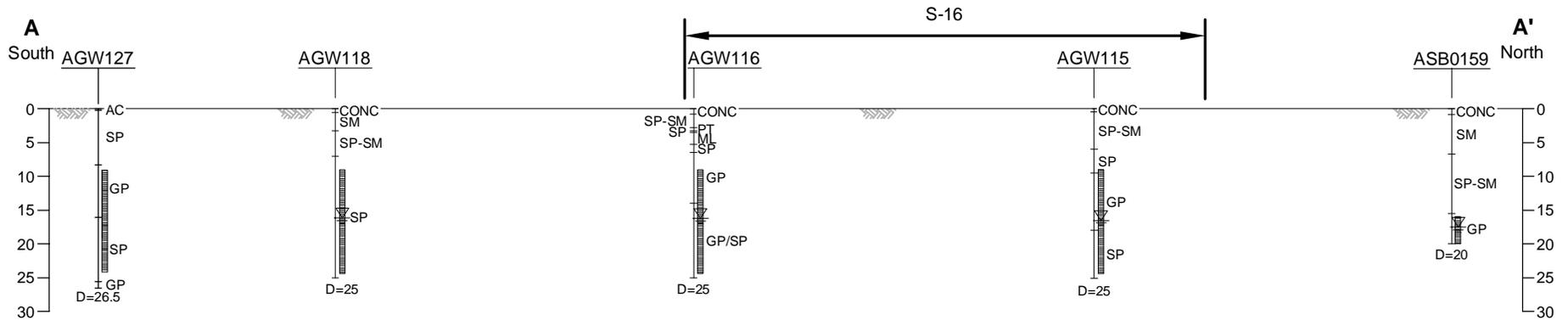
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Remedial Investigation  
Auburn, Washington

**SWMU S-16  
Soil Plan View**

Figure  
**M-6e**

**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- ▼ Water Level (August 2004)
- ▽ Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration

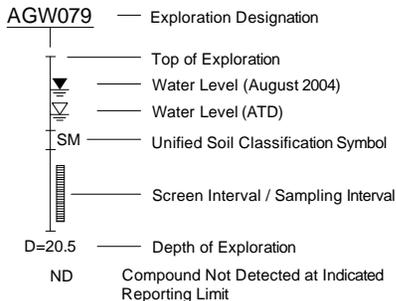


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Remedial Investigation  
Auburn, Washington

**SWMU S-16**  
**Soil Section A-A' View**

Figure  
**M-6f**

**Legend**



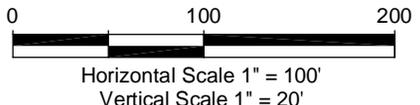
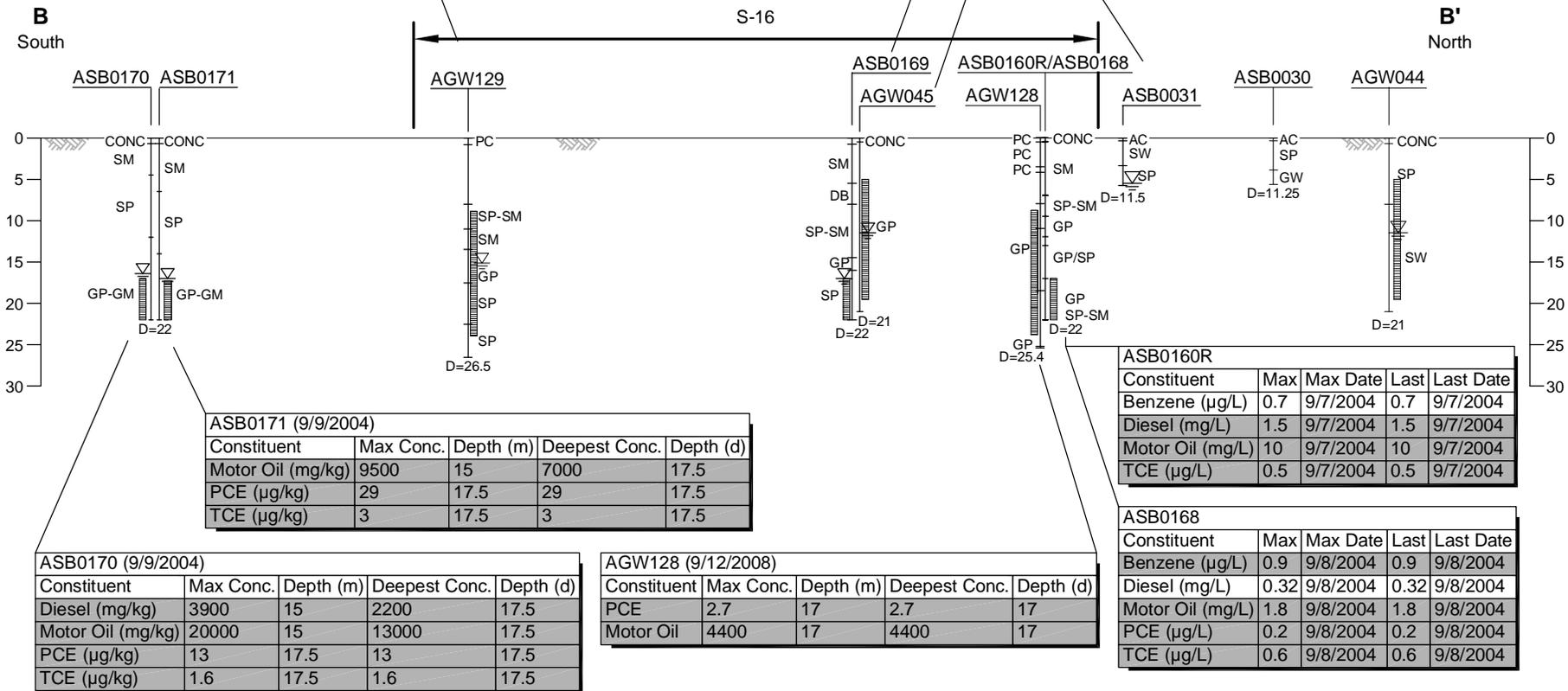
Note: Shaded results reflect exceedance of screening criteria.

AGW129 (9/11/2008)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
TCE	5.4	11	5.4	11

ASB0169 (9/8/2004)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Motor Oil (mg/kg)	2900	17.5	2900	17.5
PCE (µg/kg)	2.8	15	ND	17.5

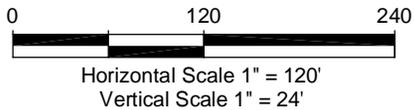
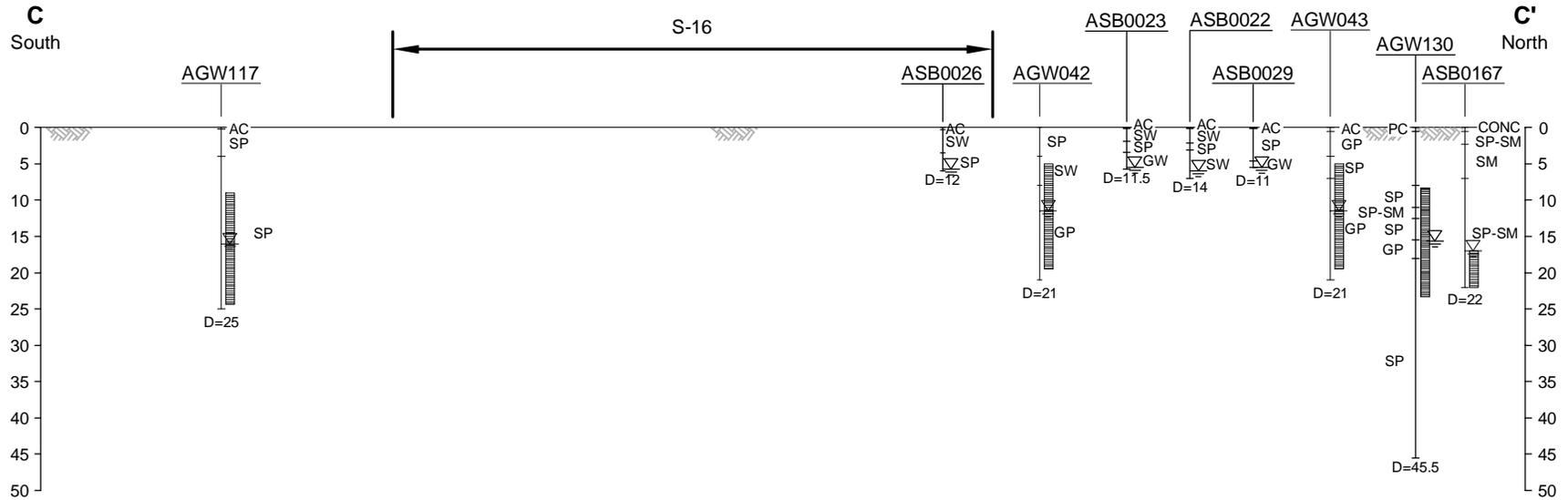
AGW045 (5/30/1996)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Se (mg/kg)	6	11	6	11
Th (mg/kg)	11	11	11	11

ASB0031 (5/31/1996)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Th (mg/kg)	5	10	5	10
Unax Oil Range	23900	10	23900	10



**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration



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**SWMU S-16**  
**Soil Section C-C' View**

Figure  
**M-6h**

Boeing Remedial Investigation Report V:\025164\05055\DIR\Report 2009\FIG\_SWMUs - G.W.PLAN.dwg (A) 6.61" 4/9/2009

**Legend**

- AGW016 ● Monitoring Well Location and Designation
- ASB0149 ⊕ Soil Boring Location and Designation
- ASB0149 ⊗ Abandoned Monitoring Well Location and Designation
- ASB0089 ○ Pre-RI Sample Boring Location and Designation (Locations are Approximate)
- S-12b Solid Waste Management Unit (SWMU)
- 17-05 Current Building and Number
- Cross Section Location and Designation

AGW129	Constituent	Max	Max Date	Last	Last Date
	PCE (µg/L)	0.7	10/1/2008	0.7	12/11/2008
	TCE (µg/L)	1.7	10/1/2008	1.7	12/11/2008

ASB0171	Constituent	Max	Max Date	Last	Last Date
	Diesel (mg/L)	0.61	9/9/2004	0.61	9/9/2004
	Motor Oil (mg/L)	3.4	9/9/2004	3.4	9/9/2004
	PCE (µg/L)	0.8	9/9/2004	0.8	9/9/2004
	TCE (µg/L)	0.8	9/9/2004	0.8	9/9/2004

AGW118	Constituent	Max	Max Date	Last	Last Date
	Diesel (mg/L)	1.6	6/6/2007	ND	1/15/2009
	Motor Oil (mg/L)	1.1	6/6/2007	ND	1/15/2009
	PCE (µg/L)	1.3	12/8/2006	1.0	12/11/2008
	TCE (µg/L)	0.8	12/7/2005	0.6	12/11/2008

AGW127	Constituent	Max	Max Date	Last	Last Date
	PCE (µg/L)	0.5	10/1/2008	0.5	12/10/2008
	TCE (µg/L)	0.3	10/1/2008	0.2	12/10/2008

ASB0170	Constituent	Max	Max Date	Last	Last Date
	Diesel (mg/L)	0.69	9/9/2004	0.69	9/9/2004
	Motor Oil (mg/L)	3.7	9/9/2004	3.7	9/9/2004
	PCE (µg/L)	0.8	9/9/2004	0.8	9/9/2004
	TCE (µg/L)	0.7	9/9/2004	0.7	9/9/2004

AGW128	Constituent	Max	Max Date	Last	Last Date
	Diesel (mg/L)	9.3	12/11/2008	1.3	1/15/2009
	Motor Oil (mg/L)	1.6	12/11/2008	1.2	1/15/2009
	PCE (µg/L)	0.5	10/1/2008	0.2	12/11/2008
	TCE (µg/L)	0.2	10/1/2008	ND	12/11/2008

AGW115	Constituent	Max	Max Date	Last	Last Date
	PCE (µg/L)	0.4	6/6/2007	ND	12/11/2008
	TCE (µg/L)	0.6	6/6/2007	ND	12/11/2008
	VC (µg/L)	0.31	12/11/2008	0.31	12/11/2008

AGW116	Constituent	Max	Max Date	Last	Last Date
	PCE (µg/L)	1	12/8/2006	0.8	12/11/2008
	TCE (µg/L)	0.5	5/27/2005, 12/7/2005, 12/8/2006, 6/5/2008	0.4	12/11/2008

AGW116	Constituent	Max	Max Date	Last	Last Date
	PCE (µg/L)	1.1	12/8/2006	0.8	12/10/2008
	TCE (µg/L)	0.8	12/7/2005	0.5	12/10/2008
	VC (µg/L)	0.041	6/6/2007	ND	12/10/2008

AGW045	Constituent	Max	Max Date	Last	Last Date
	TCE (µg/L)	1.1	6/11/1996	ND	3/12/1997

ASB0169	Constituent	Max	Max Date	Last	Last Date
	Diesel (mg/L)	0.46	9/8/2004	0.46	9/8/2004
	Motor Oil (mg/L)	2.7	9/8/2004	2.7	9/8/2004
	PCE (µg/L)	0.2	9/8/2004	0.2	9/8/2004
	TCE (µg/L)	0.6	9/8/2004	0.6	9/8/2004
	VC (µg/L)	0.025	9/8/2004	0.025	9/8/2004

ASB0169	Constituent	Max	Max Date	Last	Last Date
	Diesel (mg/L)	0.46	9/8/2004	0.46	9/8/2004
	Motor Oil (mg/L)	2.7	9/8/2004	2.7	9/8/2004
	PCE (µg/L)	0.2	9/8/2004	0.2	9/8/2004
	TCE (µg/L)	0.6	9/8/2004	0.6	9/8/2004
	VC (µg/L)	0.025	9/8/2004	0.025	9/8/2004

ASB0169	Constituent	Max	Max Date	Last	Last Date
	Diesel (mg/L)	0.46	9/8/2004	0.46	9/8/2004
	Motor Oil (mg/L)	2.7	9/8/2004	2.7	9/8/2004
	PCE (µg/L)	0.2	9/8/2004	0.2	9/8/2004
	TCE (µg/L)	0.6	9/8/2004	0.6	9/8/2004
	VC (µg/L)	0.025	9/8/2004	0.025	9/8/2004

ASB0159	Constituent	Max	Max Date	Last	Last Date
	1,1,2,2-PCA (µg/L)	0.5	8/30/2004	0.5	8/30/2004
	PCE (µg/L)	0.6	8/30/2004	0.6	8/30/2004
	TCE (µg/L)	1.8	8/30/2004	1.8	8/30/2004

ASB0160R	Constituent	Max	Max Date	Last	Last Date
	Benzene (µg/L)	0.7	9/7/2004	0.7	9/7/2004
	Diesel (mg/L)	1.5	9/7/2004	1.5	9/7/2004
	Motor Oil (mg/L)	10	9/7/2004	10	9/7/2004
	TCE (µg/L)	0.5	9/7/2004	0.5	9/7/2004

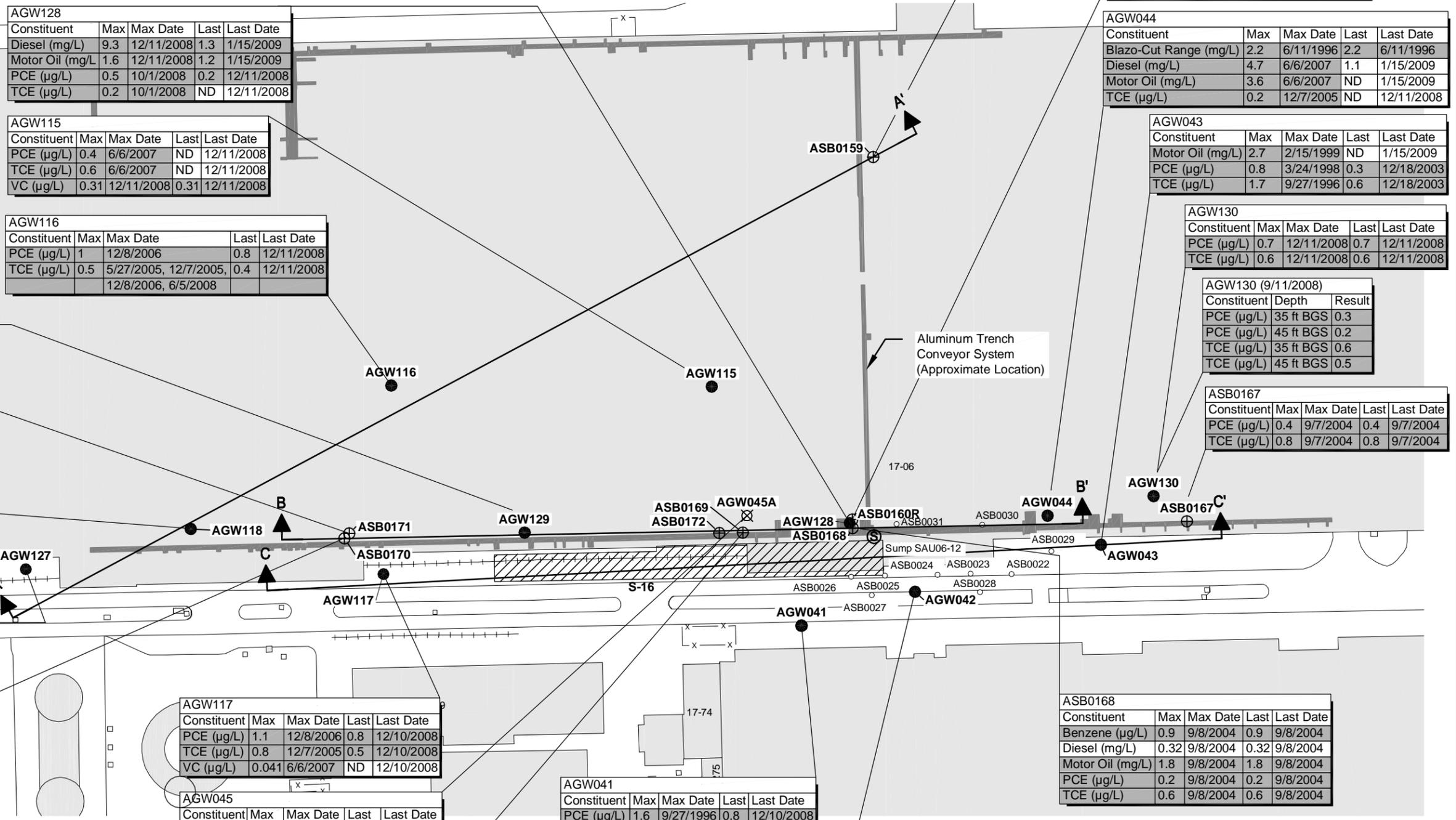
AGW044	Constituent	Max	Max Date	Last	Last Date
	Blazo-Cut Range (mg/L)	2.2	6/11/1996	2.2	6/11/1996
	Diesel (mg/L)	4.7	6/6/2007	1.1	1/15/2009
	Motor Oil (mg/L)	3.6	6/6/2007	ND	1/15/2009
	TCE (µg/L)	0.2	12/7/2005	ND	12/11/2008

AGW043	Constituent	Max	Max Date	Last	Last Date
	Motor Oil (mg/L)	2.7	2/15/1999	ND	1/15/2009
	PCE (µg/L)	0.8	3/24/1998	0.3	12/18/2003
	TCE (µg/L)	1.7	9/27/1996	0.6	12/18/2003

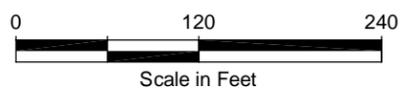
AGW130	Constituent	Max	Max Date	Last	Last Date
	PCE (µg/L)	0.7	12/11/2008	0.7	12/11/2008
	TCE (µg/L)	0.6	12/11/2008	0.6	12/11/2008

AGW130 (9/11/2008)	Constituent	Depth	Result
	PCE (µg/L)	35 ft BGS	0.3
	PCE (µg/L)	45 ft BGS	0.2
	TCE (µg/L)	35 ft BGS	0.6
	TCE (µg/L)	45 ft BGS	0.5

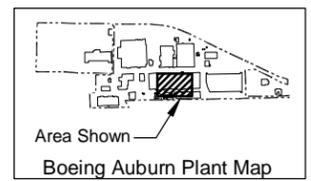
ASB0167	Constituent	Max	Max Date	Last	Last Date
	PCE (µg/L)	0.4	9/7/2004	0.4	9/7/2004
	TCE (µg/L)	0.8	9/7/2004	0.8	9/7/2004



- Notes**
1. ND = Compound Not Detected at Indicated Reporting Limit
  2. Shaded results reflect exceedance of screening criteria.



Base map source: Geomatrix 2003



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Remedial Investigation  
Auburn, Washington

**SWMU S-16/S-15a  
Groundwater Plan View**

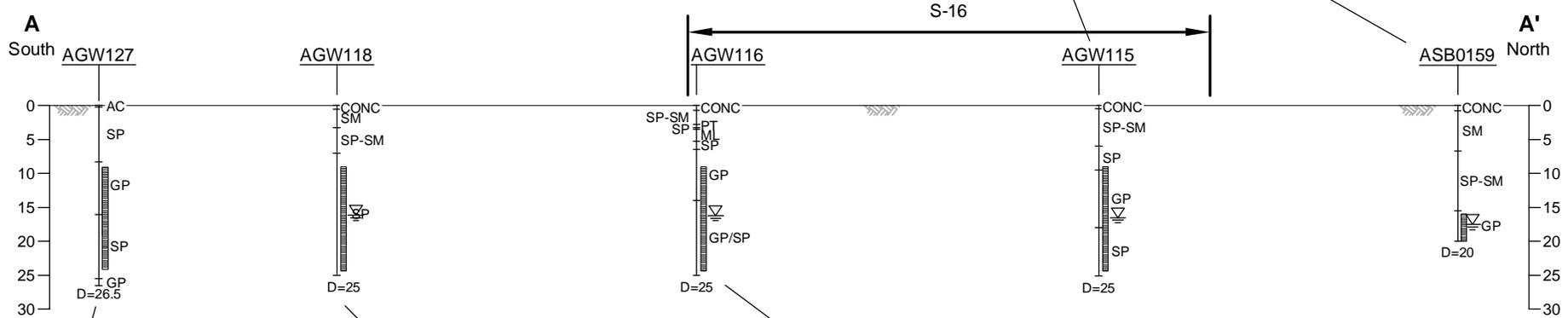
Figure  
**M-6i**

**Legend**

- AGW079 — Exploration Designation
  - Top of Exploration
  - Water Level (August 2004)
  - Water Level (ATD)
  - SM — Unified Soil Classification Symbol
  - Screen Interval / Sampling Interval
  - D=20.5 — Depth of Exploration
  - ND — Compound Not Detected at Indicated Reporting Limit
- Note: Shaded results reflect exceedance of screening criteria.

AGW115				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	0.4	6/6/2007	ND	12/11/2008
TCE (µg/L)	0.6	6/6/2007	ND	12/11/2008
VC (µg/L)	0.31	12/11/2008	0.31	12/11/2008

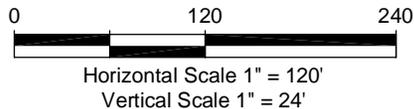
ASB0159				
Constituent	Max	Max Date	Last	Last Date
1,1,2,2-PCA (µg/L)	0.5	8/30/2004	0.5	8/30/2004
PCE (µg/L)	0.6	8/30/2004	0.6	8/30/2004
TCE (µg/L)	1.8	8/30/2004	1.8	8/30/2004



AGW127				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	0.5	10/1/2008	0.5	12/10/2008
TCE (µg/L)	0.3	10/1/2008	0.2	12/10/2008

AGW118				
Constituent	Max	Max Date	Last	Last Date
Diesel (mg/L)	1.6	6/6/2007	ND	1/15/2009
Motor Oil (mg/L)	1.1	6/6/2007	ND	1/15/2009
PCE (µg/L)	1.3	12/8/2006	1.0	12/11/2008
TCE (µg/L)	0.8	12/7/2005	0.6	12/11/2008

AGW116				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	1	12/8/2006	0.8	12/11/2008
TCE (µg/L)	0.5	5/27/2005, 12/7/2005, 12/8/2006, 6/5/2008	0.4	12/11/2008

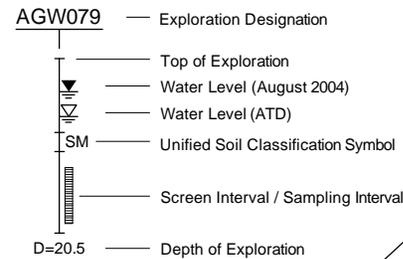


Boeing Auburn  
Remedial Investigation  
Auburn, Washington

**SWMU S-16**  
**Groundwater Section A-A' View**

Figure  
**M-6j**

**Legend**



ND Compound Not Detected at Indicated Reporting Limit

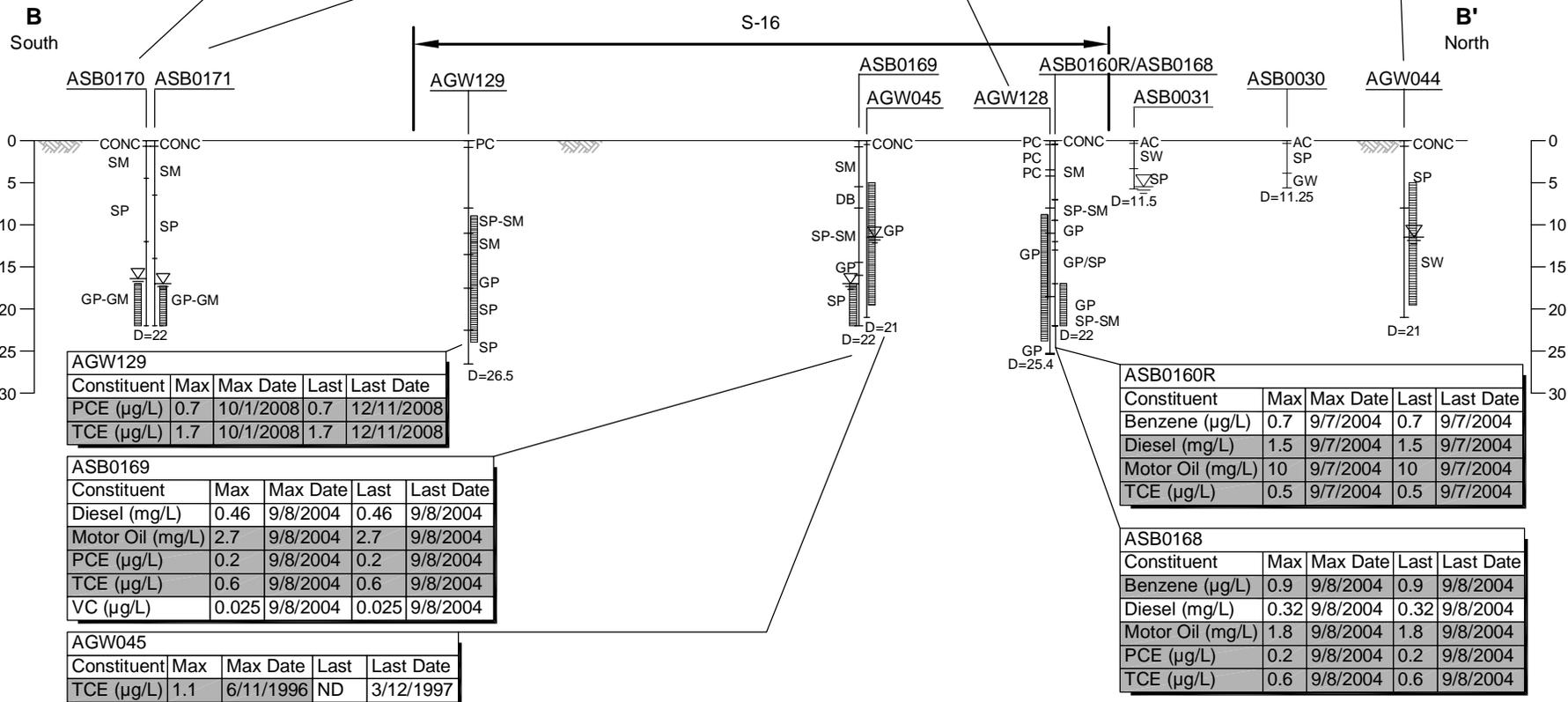
Note: Shaded results reflect exceedance of screening criteria.

ASB0170				
Constituent	Max	Max Date	Last	Last Date
Diesel (mg/L)	0.69	9/9/2004	0.69	9/9/2004
Motor Oil (mg/L)	3.7	9/9/2004	3.7	9/9/2004
PCE (µg/L)	0.8	9/9/2004	0.8	9/9/2004
TCE (µg/L)	0.7	9/9/2004	0.7	9/9/2004

ASB0171				
Constituent	Max	Max Date	Last	Last Date
Diesel (mg/L)	0.61	9/9/2004	0.61	9/9/2004
Motor Oil (mg/L)	3.4	9/9/2004	3.4	9/9/2004
PCE (µg/L)	0.8	9/9/2004	0.8	9/9/2004
TCE (µg/L)	0.8	9/9/2004	0.8	9/9/2004

AGW044				
Constituent	Max	Max Date	Last	Last Date
Blazo-Cut Range (mg/L)	2.2	6/11/1996	2.2	6/11/1996
Diesel (mg/L)	4.7	6/6/2007	1.1	1/15/2009
Motor Oil (mg/L)	3.6	6/6/2007	ND	1/15/2009
TCE (µg/L)	0.2	12/7/2005	ND	12/11/2008

AGW128				
Constituent	Max	Max Date	Last	Last Date
Diesel (mg/L)	9.3	12/11/2008	1.3	1/15/2009
Motor Oil (mg/L)	1.6	12/11/2008	1.2	1/15/2009
PCE (µg/L)	0.5	10/1/2008	0.2	12/11/2008
TCE (µg/L)	0.2	10/1/2008	ND	12/11/2008



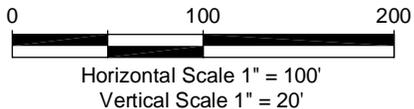
AGW129				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	0.7	10/1/2008	0.7	12/11/2008
TCE (µg/L)	1.7	10/1/2008	1.7	12/11/2008

ASB0169				
Constituent	Max	Max Date	Last	Last Date
Diesel (mg/L)	0.46	9/8/2004	0.46	9/8/2004
Motor Oil (mg/L)	2.7	9/8/2004	2.7	9/8/2004
PCE (µg/L)	0.2	9/8/2004	0.2	9/8/2004
TCE (µg/L)	0.6	9/8/2004	0.6	9/8/2004
VC (µg/L)	0.025	9/8/2004	0.025	9/8/2004

AGW045				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	1.1	6/11/1996	ND	3/12/1997

ASB0160R				
Constituent	Max	Max Date	Last	Last Date
Benzene (µg/L)	0.7	9/7/2004	0.7	9/7/2004
Diesel (mg/L)	1.5	9/7/2004	1.5	9/7/2004
Motor Oil (mg/L)	10	9/7/2004	10	9/7/2004
TCE (µg/L)	0.5	9/7/2004	0.5	9/7/2004

ASB0168				
Constituent	Max	Max Date	Last	Last Date
Benzene (µg/L)	0.9	9/8/2004	0.9	9/8/2004
Diesel (mg/L)	0.32	9/8/2004	0.32	9/8/2004
Motor Oil (mg/L)	1.8	9/8/2004	1.8	9/8/2004
PCE (µg/L)	0.2	9/8/2004	0.2	9/8/2004
TCE (µg/L)	0.6	9/8/2004	0.6	9/8/2004



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**SWMU S-16**  
**Groundwater Section B-B' View**

Figure  
**M-6k**

**Legend**

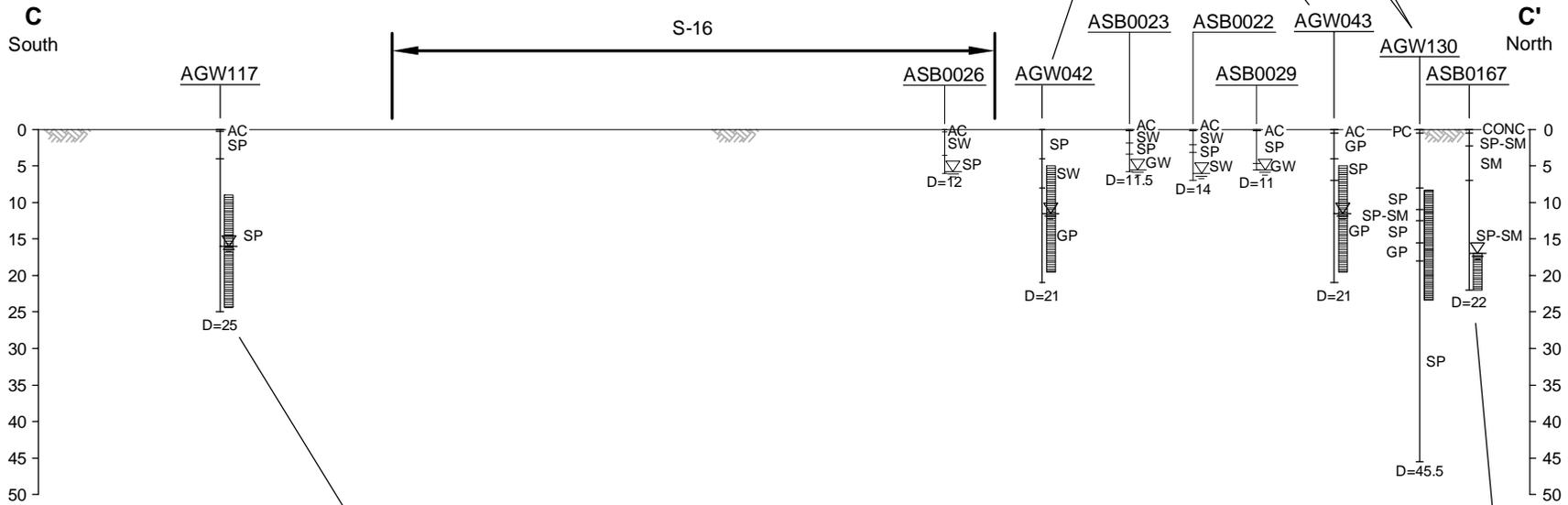
- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration
- ND Compound Not Detected at Indicated Reporting Limit
- Note: Shaded results reflect exceedance of screening criteria.

AGW043				
Constituent	Max	Max Date	Last	Last Date
Motor Oil (mg/L)	2.7	2/15/1999	ND	1/15/2009
PCE (µg/L)	0.8	3/24/1998	0.3	12/18/2003
TCE (µg/L)	1.7	9/27/1996	0.6	12/18/2003

AGW130				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	0.7	12/11/2008	0.7	12/11/2008
TCE (µg/L)	0.6	12/11/2008	0.6	12/11/2008

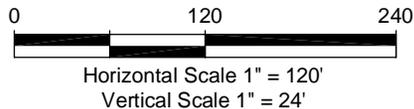
AGW042				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	1.1	9/27/1996	ND	3/12/1997

AGW130 (9/11/2008)		
Constituent	Depth	Result
PCE (µg/L)	35 ft BGS	0.3
PCE (µg/L)	45 ft BGS	0.2
TCE (µg/L)	35 ft BGS	0.6
TCE (µg/L)	45 ft BGS	0.5



AGW117				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	1.1	12/8/2006	0.8	12/10/2008
TCE (µg/L)	0.8	12/7/2005	0.5	12/10/2008
VC (µg/L)	0.041	6/6/2007	ND	12/10/2008

ASB0167				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	0.4	9/7/2004	0.4	9/7/2004
TCE (µg/L)	0.8	9/7/2004	0.8	9/7/2004



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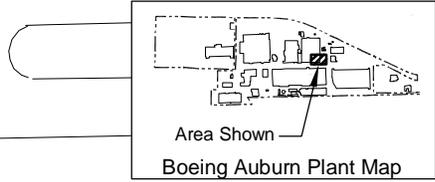
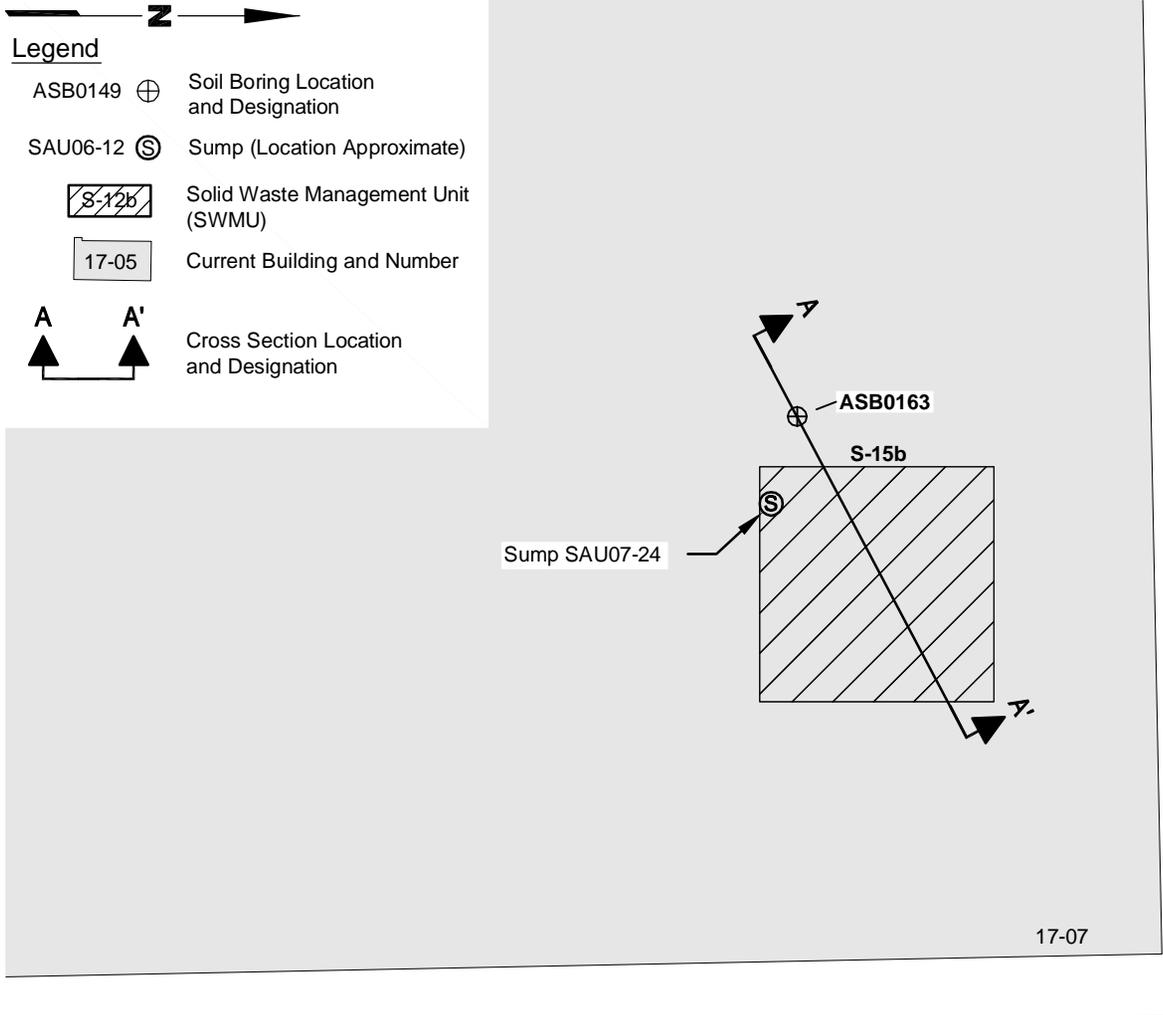
**SWMU S-16**  
**Groundwater Section C-C' View**

Figure  
**M-6I**



**Legend**

- ASB0149 ⊕ Soil Boring Location and Designation
- SAU06-12 ⊙ Sump (Location Approximate)
-  Solid Waste Management Unit (SWMU)
-  Current Building and Number
-  Cross Section Location and Designation



Base map source: Geomatrix 2003



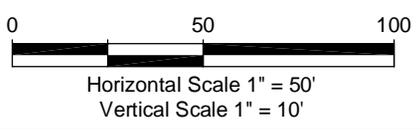
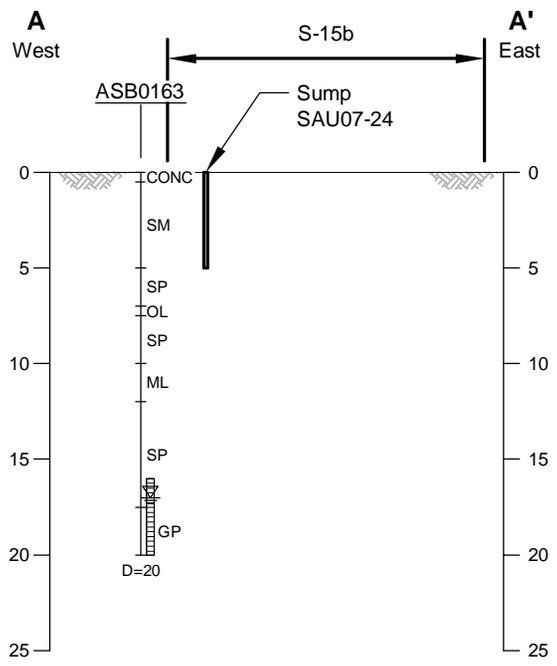
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**SWMU S-15b**  
**Site and Exploration Plan**

Figure  
**M-7a**

**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration



Boeing Auburn Remedial Investigation Auburn, Washington	<b>SWMU S-15b</b> <b>Section A-A' View</b>	Figure <b>M-7b</b>
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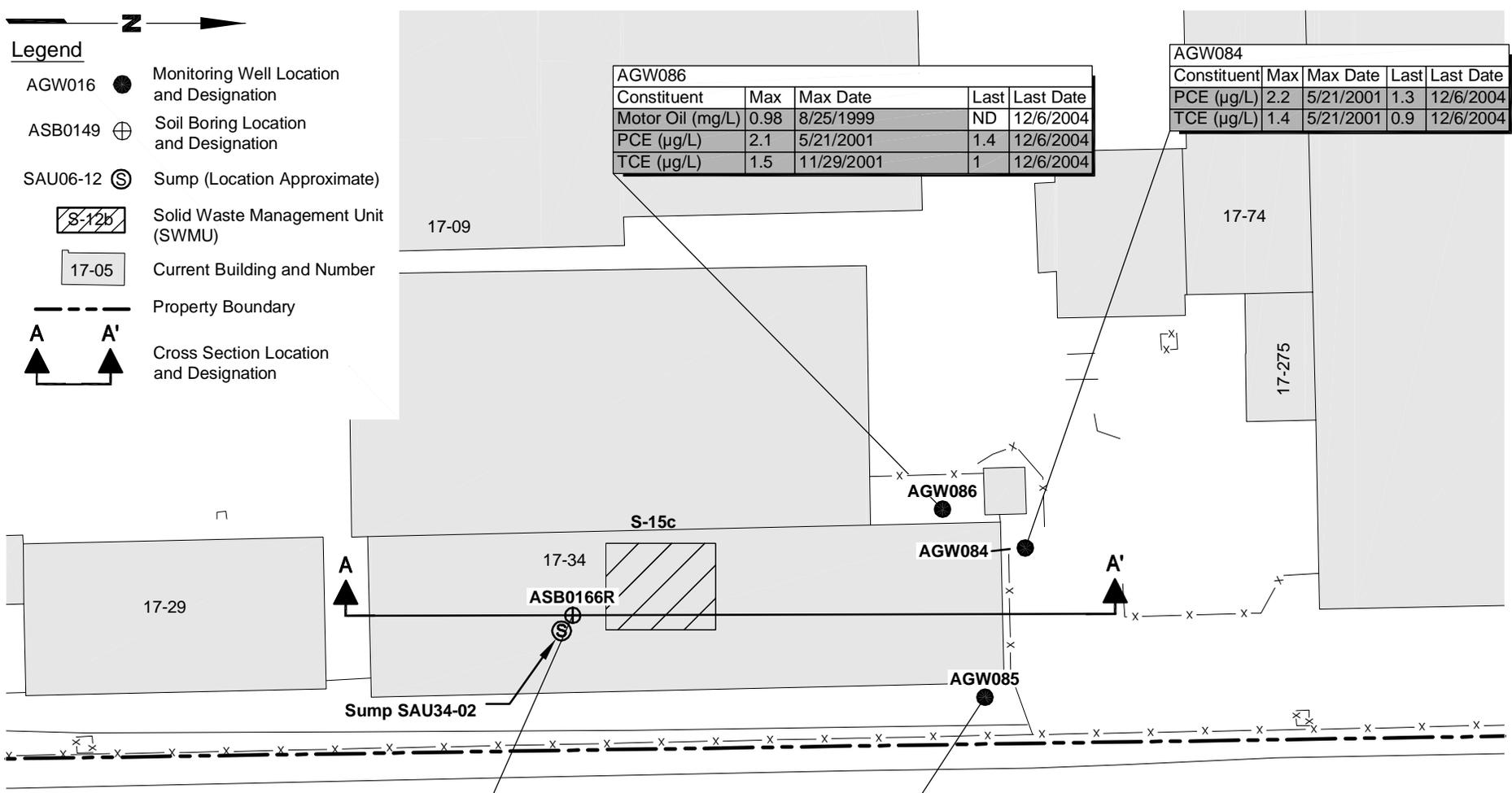


**Legend**

- AGW016 ● Monitoring Well Location and Designation
- ASB0149 ⊕ Soil Boring Location and Designation
- SAU06-12 ⊙ Sump (Location Approximate)
- S-12b Solid Waste Management Unit (SWMU)
- 17-05 Current Building and Number
- - - - - Property Boundary
- Cross Section Location and Designation

AGW086				
Constituent	Max	Max Date	Last	Last Date
Motor Oil (mg/L)	0.98	8/25/1999	ND	12/6/2004
PCE (µg/L)	2.1	5/21/2001	1.4	12/6/2004
TCE (µg/L)	1.5	11/29/2001	1	12/6/2004

AGW084				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	2.2	5/21/2001	1.3	12/6/2004
TCE (µg/L)	1.4	5/21/2001	0.9	12/6/2004



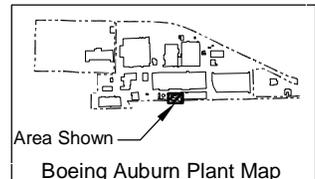
ASB0166R				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	0.3	9/2/2004	0.3	9/2/2004
TCE (µg/L)	2	9/2/2004	2	9/2/2004

AGW085				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	2	5/21/2001	1.0	12/9/2008
TCE (µg/L)	2.7	11/8/2000	1.2	12/9/2008

**Notes**

1. ND = Compound Not Detected at Indicated Reporting Limit
2. Shaded results reflect exceedance of screening criteria.

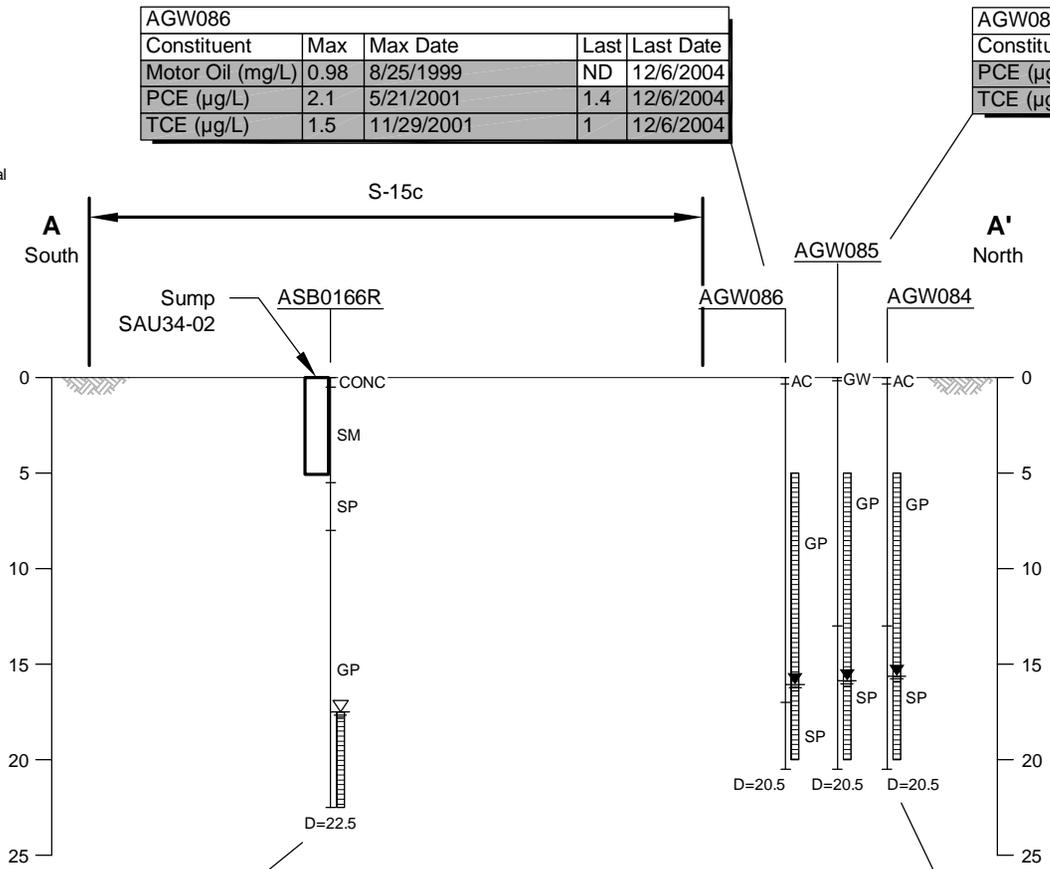
Base map source: Geomatrix 2003



Boeing Auburn Remedial Investigation Auburn, Washington	<b>SWMU S-15c Groundwater Plan View</b>	Figure <b>M-8a</b>
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**Legend**

- AGW079 — Exploration Designation
  - Top of Exploration
  - Water Level (August 2004)
  - Water Level (ATD)
  - SM — Unified Soil Classification Symbol
  - Screen Interval / Sampling Interval
  - D=20.5 — Depth of Exploration
  - ND — Compound Not Detected at Indicated Reporting Limit
- Note: Shaded results reflect exceedance of screening criteria.

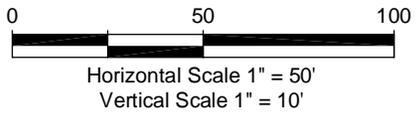


AGW086				
Constituent	Max	Max Date	Last	Last Date
Motor Oil (mg/L)	0.98	8/25/1999	ND	12/6/2004
PCE (µg/L)	2.1	5/21/2001	1.4	12/6/2004
TCE (µg/L)	1.5	11/29/2001	1	12/6/2004

AGW085				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	2	5/21/2001	1.0	12/9/2008
TCE (µg/L)	2.7	11/8/2000	1.2	12/9/2008

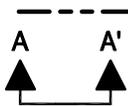
ASB0166R				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	0.3	9/2/2004	0.3	9/2/2004
TCE (µg/L)	2	9/2/2004	2	9/2/2004

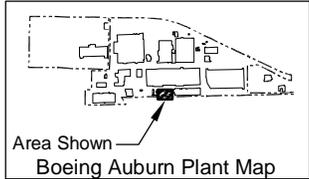
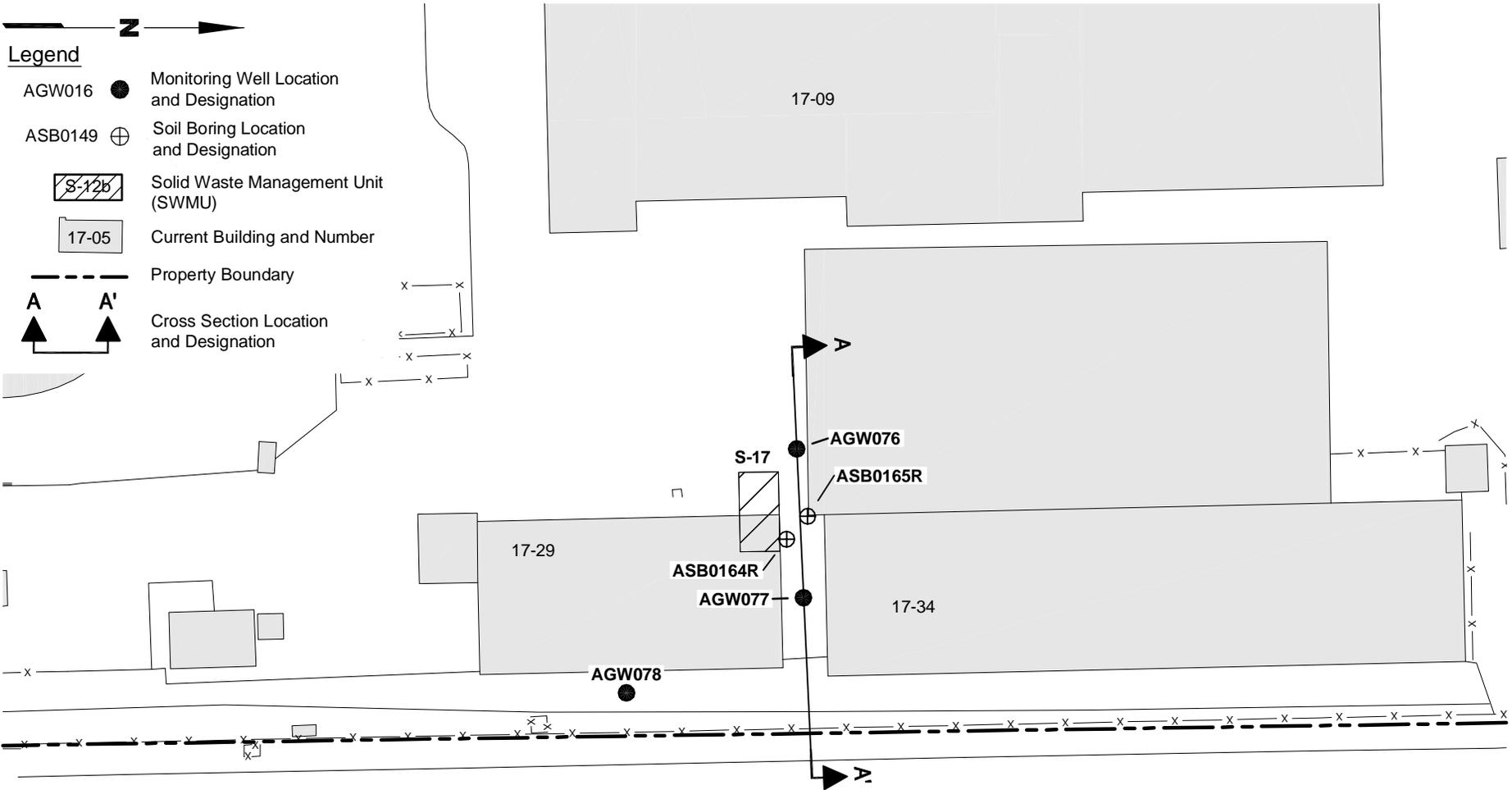
AGW084				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	2.2	5/21/2001	1.3	12/6/2004
TCE (µg/L)	1.4	5/21/2001	0.9	12/6/2004





**Legend**

- AGW016 ● Monitoring Well Location and Designation
- ASB0149 ⊕ Soil Boring Location and Designation
-  S-12b Solid Waste Management Unit (SWMU)
-  17-05 Current Building and Number
- - - - - Property Boundary
-  Cross Section Location and Designation



Base map source: Geomatrix 2003

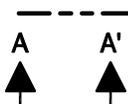


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**SWMU S-17**  
**Site and Exploration Plan**

Figure  
**M-9a**

**Legend**

- AGW016 ● Monitoring Well Location and Designation
- ASB0149 ⊕ Soil Boring Location and Designation
-  S-12b Solid Waste Management Unit (SWMU)
-  17-05 Current Building and Number
- - - Property Boundary
-  Cross Section Location and Designation

AGW076				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	1.5	2/15/1999	1.2	3/8/2000
TCE (µg/L)	1.1	8/31/1998	ND	3/8/2000

ASB0164R				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	0.5	9/2/2004	0.5	9/2/2004
TCE (µg/L)	1.2	9/2/2004	1.2	9/2/2004

AGW077				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	0.8	6/15/2004	ND	12/12/2004
TCE (µg/L)	0.6	6/15/2004	ND	12/12/2004

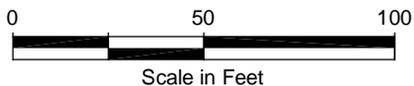
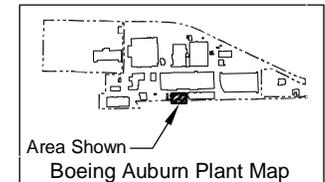
ASB0165R				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	0.9	9/2/2004	0.9	9/2/2004
TCE (µg/L)	0.5	9/2/2004	0.5	9/2/2004

AGW078				
Constituent	Max	Max Date	Last	Last Date
Diesel (mg/L)	0.28	5/15/2002	ND	12/6/2004
PCE (µg/L)	2.2	5/21/2001	1.7	12/6/2004
TCE (µg/L)	1.5	8/31/1998	0.9	12/6/2004

**Notes**

1. ND = Compound Not Detected at Indicated Reporting Limit
2. Shaded results reflect exceedance of screening criteria.

Base map source: Geomatrix 2003



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**SWMU S-17  
Groundwater Plan View**

Figure  
**M-9b**

**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration
- ND — Compound Not Detected at Indicated Reporting Limit

Note: Shaded results reflect exceedance of screening criteria.

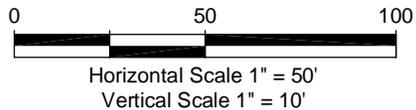
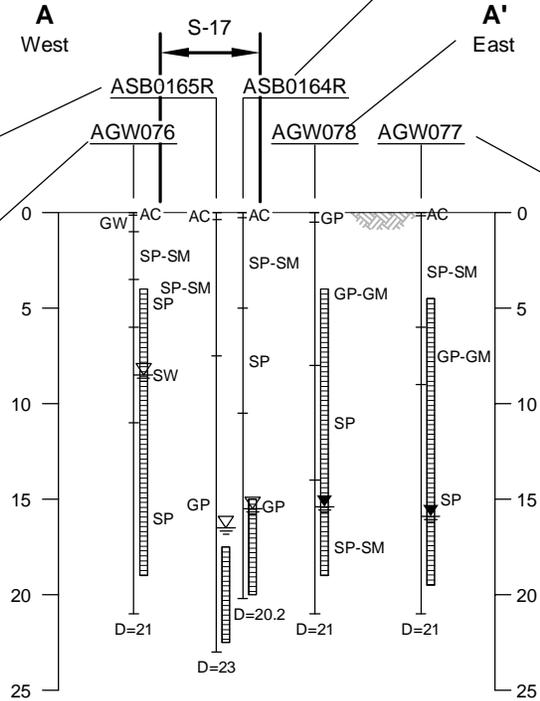
ASB0165R					
Constituent	Max	Max Date	Last	Last Date	
PCE (µg/L)	0.9	9/2/2004	0.9	9/2/2004	
TCE (µg/L)	0.5	9/2/2004	0.5	9/2/2004	

AGW076					
Constituent	Max	Max Date	Last	Last Date	
PCE (µg/L)	1.5	2/15/1999	1.2	3/8/2000	
TCE (µg/L)	1.1	8/31/1998	ND	3/8/2000	

ASB0164R					
Constituent	Max	Max Date	Last	Last Date	
PCE (µg/L)	0.5	9/2/2004	0.5	9/2/2004	
TCE (µg/L)	1.2	9/2/2004	1.2	9/2/2004	

AGW078					
Constituent	Max	Max Date	Last	Last Date	
Diesel (mg/L)	0.28	5/15/2002	ND	12/6/2004	
PCE (µg/L)	2.2	5/21/2001	1.7	12/6/2004	
TCE (µg/L)	1.5	8/31/1998	0.9	12/6/2004	

AGW077					
Constituent	Max	Max Date	Last	Last Date	
PCE (µg/L)	0.8	6/15/2004	ND	12/12/2004	
TCE (µg/L)	0.6	6/15/2004	ND	12/12/2004	



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**SWMU S-17**  
**Groundwater Section A-A' View**

Figure  
**M-9c**



**Legend**

- ASB0149 ⊕ Soil Boring Location and Designation
- S-12b Solid Waste Management Unit (SWMU)
- 17-05 Current Building and Number
- A A' Cross Section Location and Designation

AGW131				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	0.7	10/1/2008	0.5	12/4/2008
VC (µg/L)	5.8	12/4/2008	5.8	12/4/2008

ASB0145				
Constituent	Max	Max Date	Last	Last Date
VC (µg/L)	5.5	5/4/2004	5.5	5/4/2004

ASB0144				
Constituent	Max	Max Date	Last	Last Date
Benzene (µg/L)	0.4	5/4/2004	0.4	5/4/2004
VC (µg/L)	3.7	5/4/2004	3.7	5/4/2004

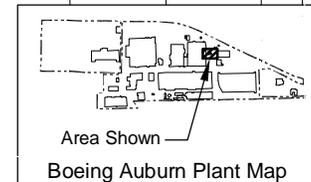
ASB0147				
Constituent	Max	Max Date	Last	Last Date
VC (µg/L)	0.18	5/5/2004	ND	8/23/2004

ASB0148				
Constituent	Max	Max Date	Last	Last Date
Benzene (µg/L)	5.4	5/5/2004	5.4	5/5/2004
VC (µg/L)	4.7	5/5/2004	4.7	5/5/2004

**Notes**

1. ND = Compound Not Detected at Indicated Reporting Limit
2. Shaded results reflect exceedance of screening criteria.

Base map source: Geomatrix 2003



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**SWMU S-18 View  
Groundwater Plan**

Figure  
**M-10a**

**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration
- ND — Compound Not Detected at Indicated Reporting Limit

Note: Shaded results reflect exceedance of screening criteria.

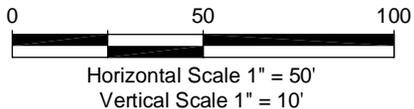
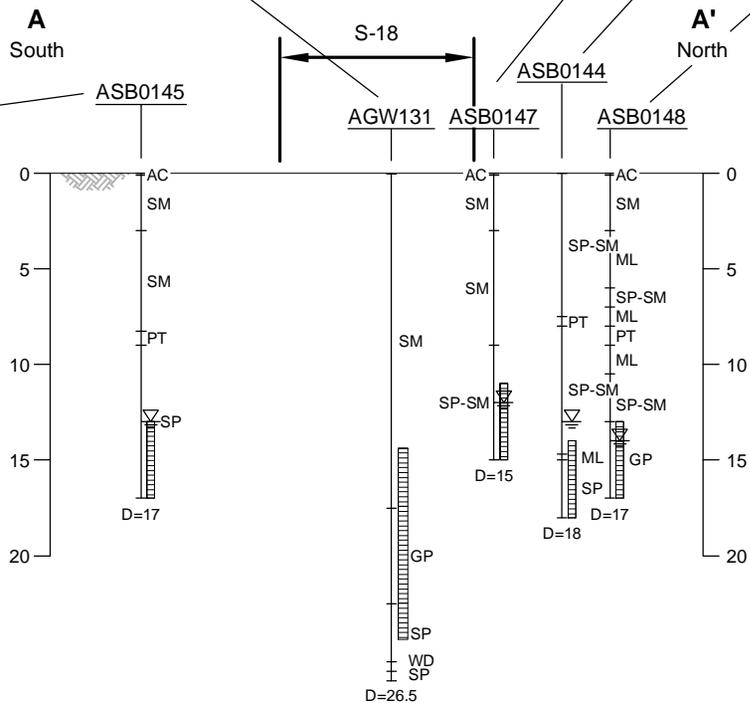
AGW131					
Constituent	Max	Max Date	Last	Last Date	
TCE (µg/L)	0.7	10/1/2008	0.5	12/4/2008	
VC (µg/L)	5.8	12/4/2008	5.8	12/4/2008	

ASB0147					
Constituent	Max	Max Date	Last	Last Date	
VC (µg/L)	0.18	5/5/2004	ND	8/23/2004	

ASB0144					
Constituent	Max	Max Date	Last	Last Date	
Benzene (µg/L)	0.4	5/4/2004	0.4	5/4/2004	
VC (µg/L)	3.7	5/4/2004	3.7	5/4/2004	

ASB0148					
Constituent	Max	Max Date	Last	Last Date	
Benzene (µg/L)	5.4	5/5/2004	5.4	5/5/2004	
VC (µg/L)	4.7	5/5/2004	4.7	5/5/2004	

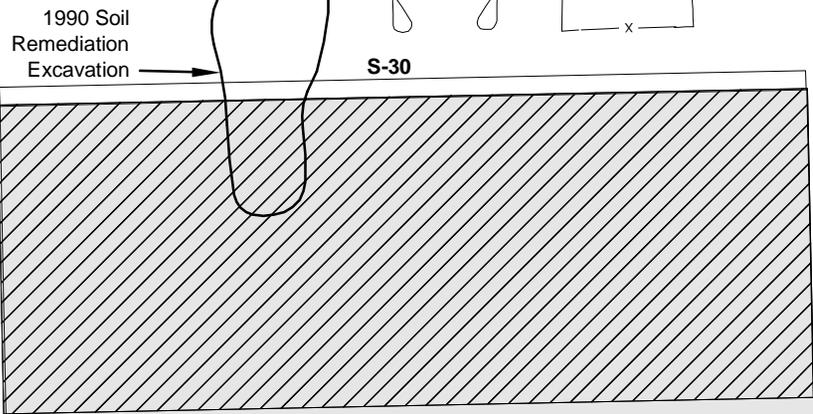
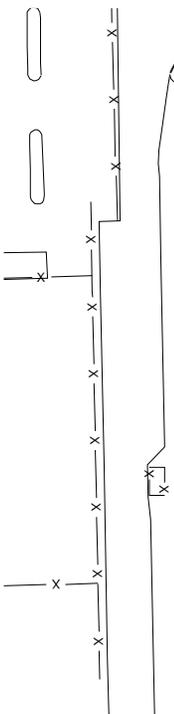
ASB0145					
Constituent	Max	Max Date	Last	Last Date	
VC (µg/L)	5.5	5/4/2004	5.5	5/4/2004	



**Legend**

- AGW016 ● Monitoring Well Location and Designation
- S-12b Solid Waste Management Unit (SWMU)
- 17-05 Current Building and Number
- A**   **A'**  
▲   ▲ Cross Section Location and Designation

AGW026	Constituent	Max	Max Date	Last	Last Date
	TCE (µg/L)	1.9	3/17/1997	1.0	12/8/2008

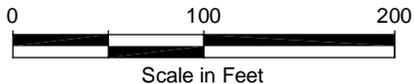
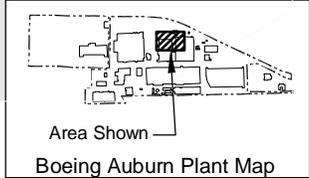


AGW028	Constituent	Max	Max Date	Last	Last Date
	TCE (µg/L)	3.1	6/20/1996	3	3/21/1997

**Notes**

1. ND = Compound Not Detected at Indicated Reporting Limit
2. Shaded results reflect exceedance of screening criteria.

Base map source: Geomatrix 2003



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**SWMU S-30  
Groundwater Plan View**

Figure  
**M-11a**

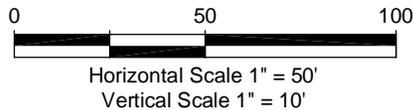
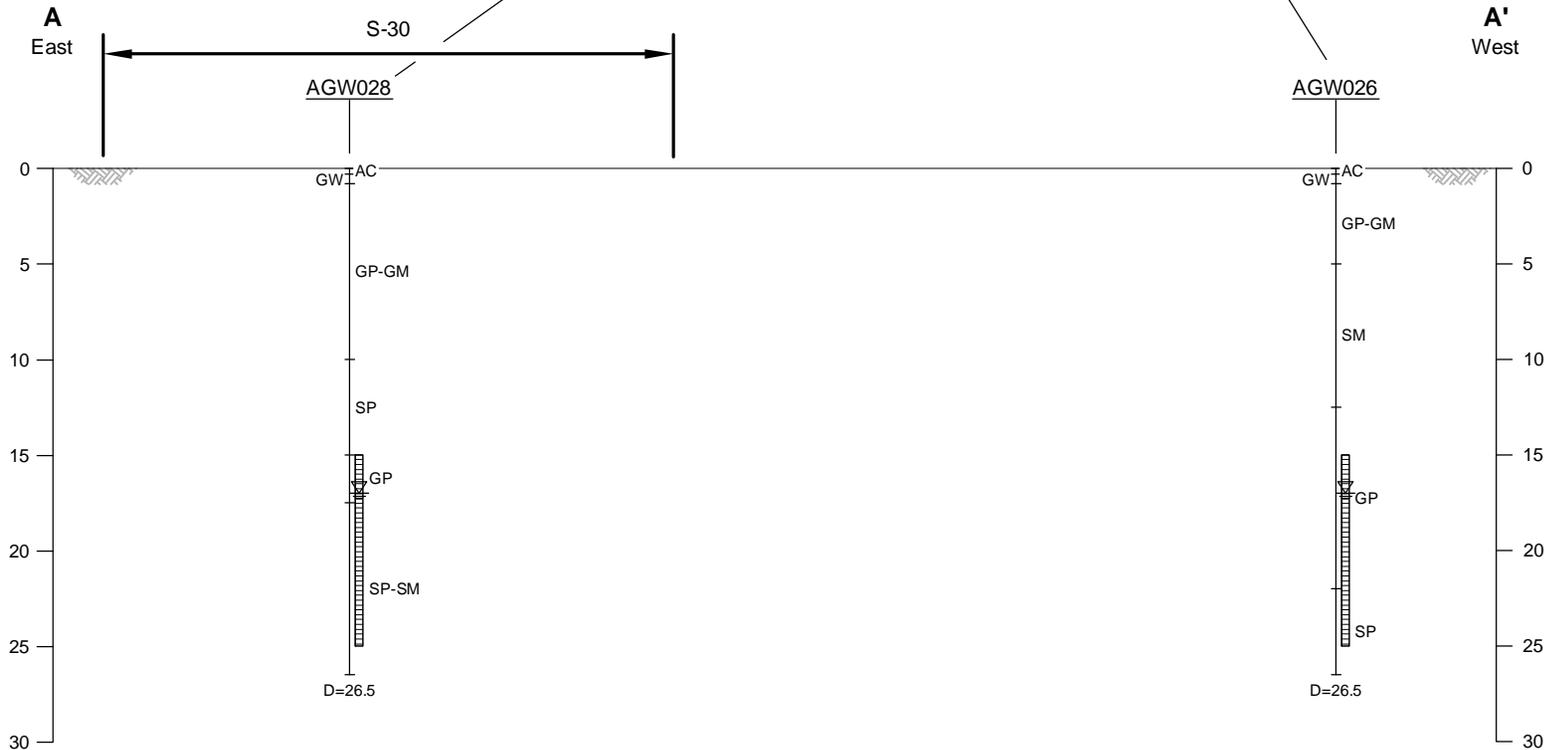
**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration

Note: Shaded results reflect exceedance of screening criteria.

AGW026				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	1.9	3/17/1997	1.0	12/8/2008

AGW028				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	3.1	6/20/1996	3	3/21/1997



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Auburn, Washington

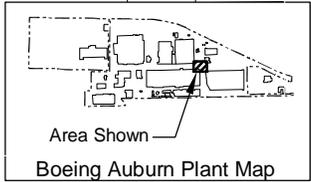
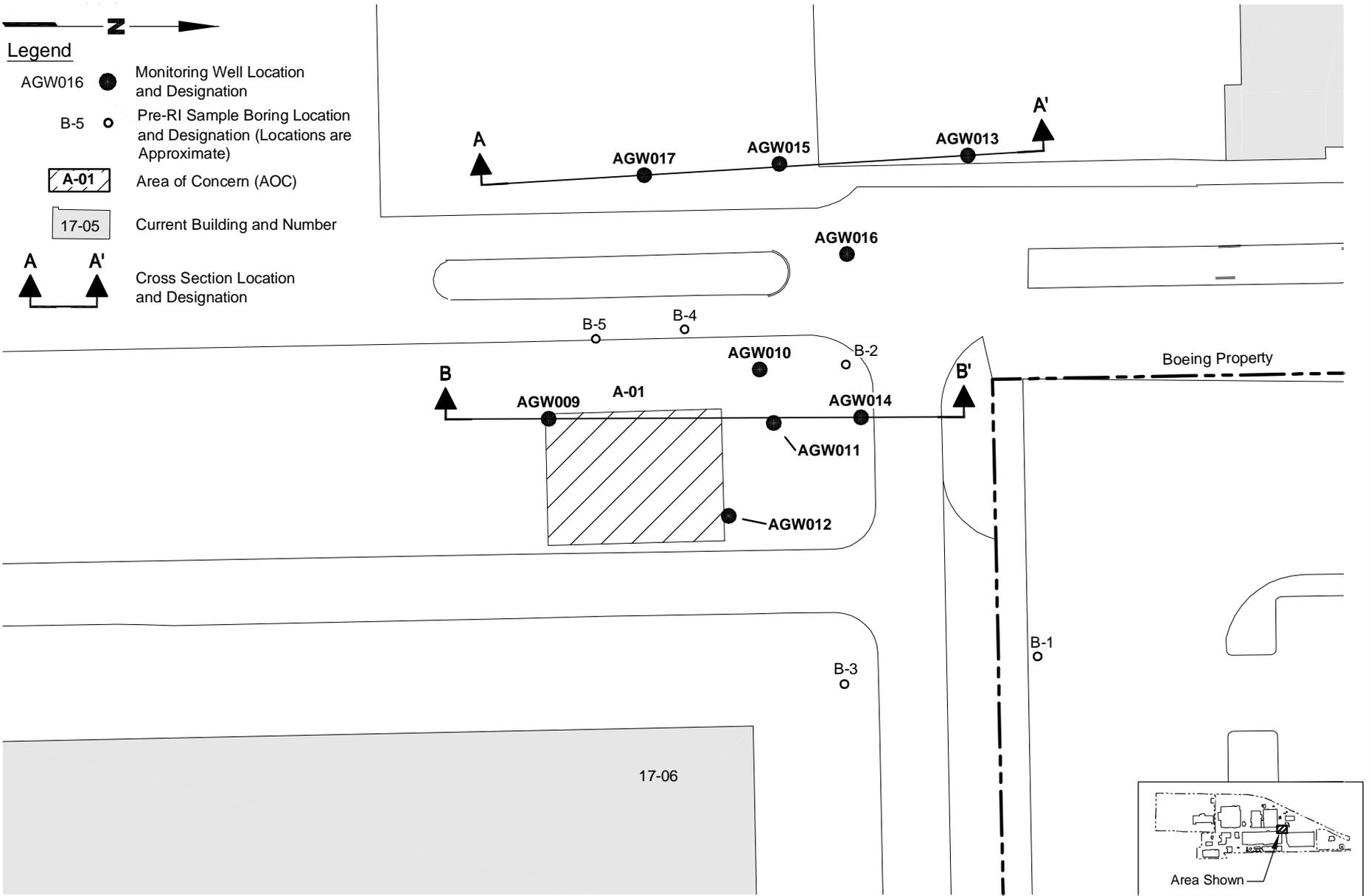
**SWMU S-30**  
**Groundwater Section A-A' View**

Figure  
**M-11b**

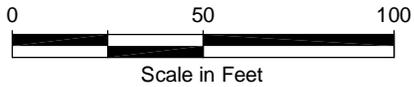


**Legend**

- AGW016 ● Monitoring Well Location and Designation
- B-5 ○ Pre-RI Sample Boring Location and Designation (Locations are Approximate)
- A-01 Area of Concern (AOC)
- 17-05 Current Building and Number
- A     A' Cross Section Location and Designation



Base map source: Geomatrix 2003



Boeing Auburn Remedial Investigation Auburn, Washington	<b>AOC A-01</b> <b>Site and Exploration Plan</b>	Figure <b>M-12a</b>
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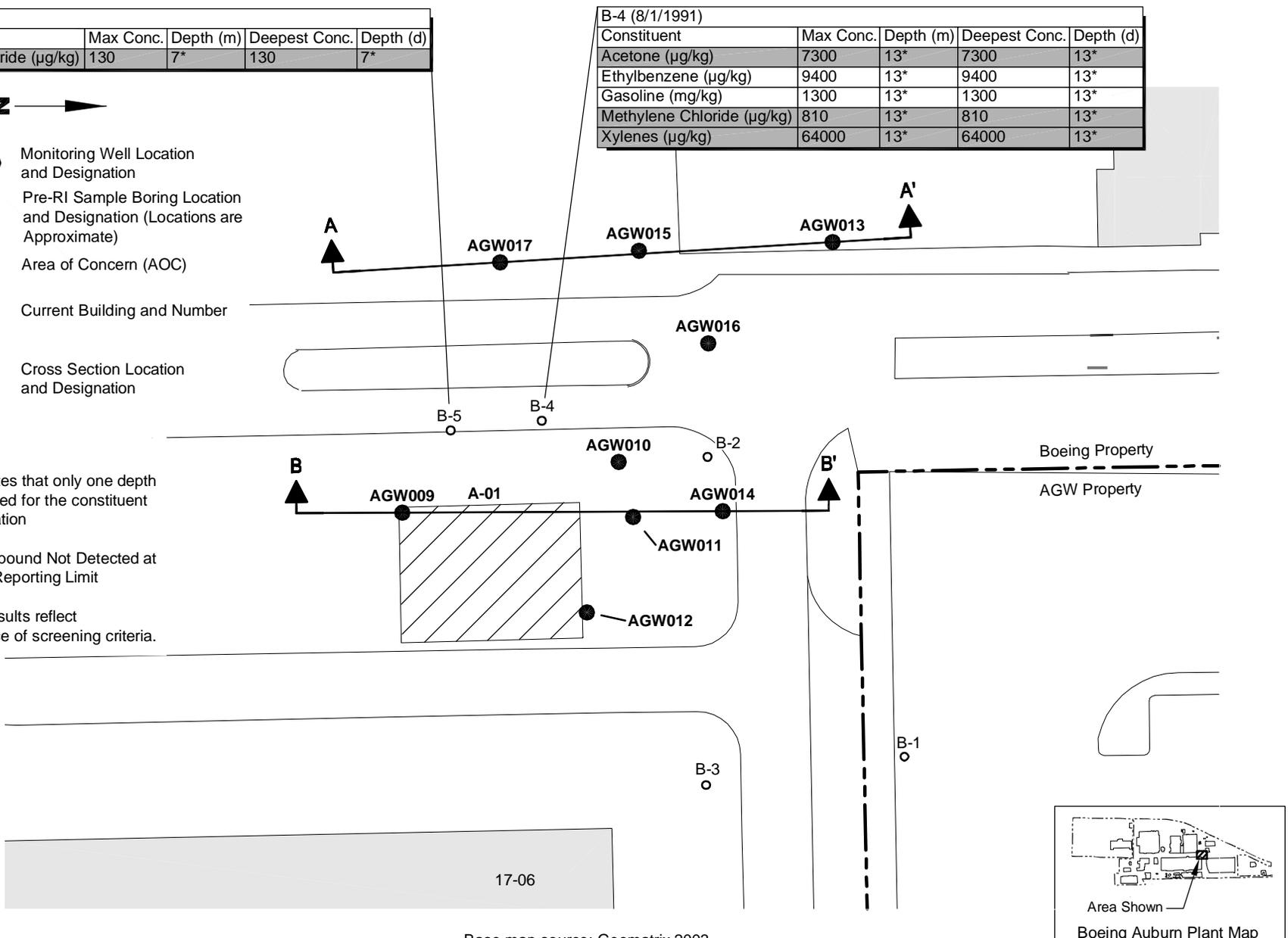
B-5 (8/6/1991)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Methylene Chloride (µg/kg)	130	7*	130	7*

B-4 (8/1/1991)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Acetone (µg/kg)	7300	13*	7300	13*
Ethylbenzene (µg/kg)	9400	13*	9400	13*
Gasoline (mg/kg)	1300	13*	1300	13*
Methylene Chloride (µg/kg)	810	13*	810	13*
Xylenes (µg/kg)	64000	13*	64000	13*

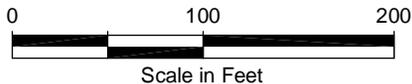
**Legend**

- AGW016 ● Monitoring Well Location and Designation
- B-5 ○ Pre-RI Sample Boring Location and Designation (Locations are Approximate)
-  A-01 Area of Concern (AOC)
-  17-05 Current Building and Number
-  Cross Section Location and Designation

- Notes**
- \* = Indicates that only one depth was sampled for the constituent at that location
  - ND = Compound Not Detected at Indicated Reporting Limit
  - Shaded results reflect exceedance of screening criteria.



Base map source: Geomatrix 2003



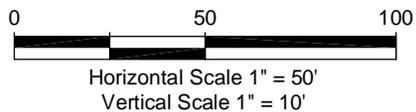
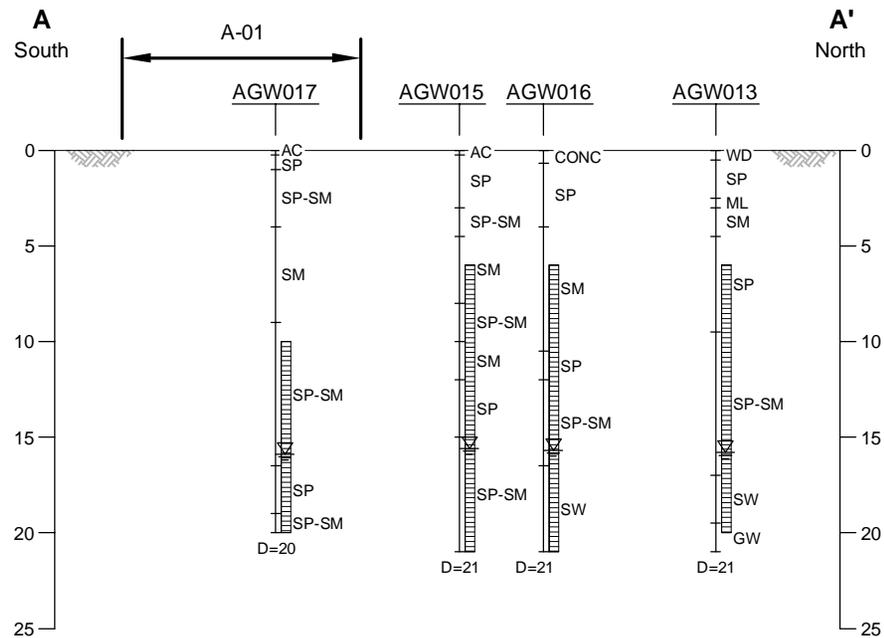
Boeing Auburn  
Remedial Investigation  
Auburn, Washington

**AOC A-01  
Soil Plan View**

Figure  
**M-12b**

**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration



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**AOC A-01**  
**Soil Section A-A' View**

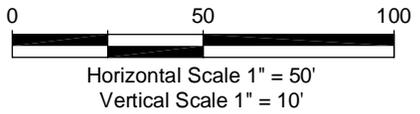
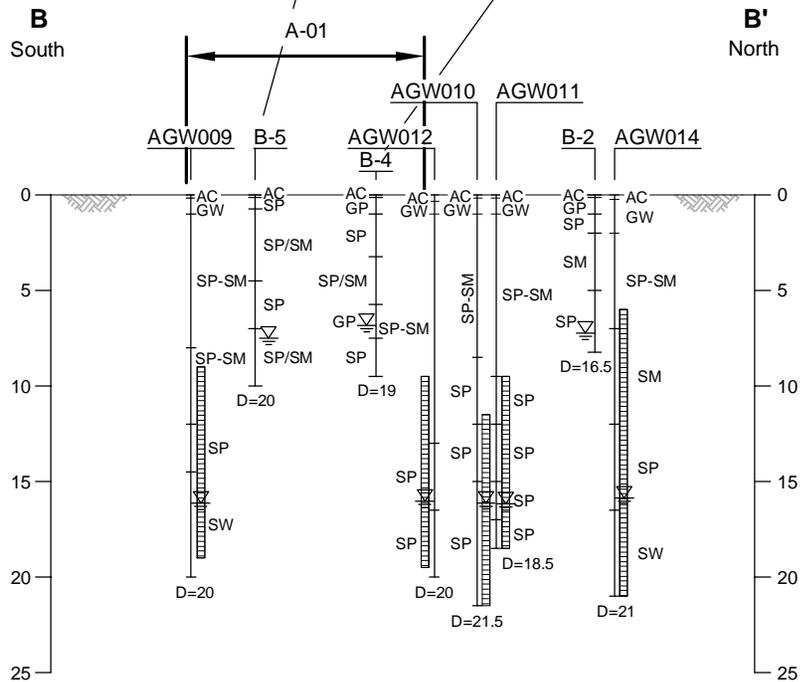
Figure  
**M-12c**

**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration
- \* Indicates that only one depth was sampled for the constituent at that location
- ND Compound Not Detected at Indicated Reporting Limit
- Note: Shaded results reflect exceedance of screening criteria.

B-5 (8/6/1991)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Methylene Chloride (µg/kg)	130	7*	130	7*

B-4 (8/1/1991)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Acetone (µg/kg)	7300	13*	7300	13*
Ethylbenzene (µg/kg)	9400	13*	9400	13*
Gasoline (mg/kg)	1300	13*	1300	13*
Methylene Chloride (µg/kg)	810	13*	810	13*
Xylenes (µg/kg)	64000	13*	64000	13*



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**AOC A-01**  
**Soil Section B-B' View**

Figure  
**M-12d**

Boeing Remedial Investigation Report | V:\025164\050055\DIR\Report 2009\FIG\_AOCs - GW PLAN.dwg (A) 7-1e- 4/9/2009



- Legend**
- AGW016 ● Monitoring Well Location and Designation
  - B-5 ○ Pre-RI Sample Boring Location and Designation (Locations are Approximate)
  - A-01 Area of Concern (AOC)
  - 17-05 Current Building and Number
  - A ▲ Cross Section Location and Designation
  - A' ▲ Cross Section Location and Designation

AGW017				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	6.15	3/24/1995	1.4	12/4/2008

AGW015				
Constituent	Max	Max Date	Last	Last Date
Diesel (mg/L)	0.59	12/5/2004	ND	12/4/2008
Benzene (µg/L)	1.6	10/1/1996	0.2	12/4/2008
Ethylbenzene (µg/L)	7.6	12/5/2006	ND	12/4/2008
m,p-Xylene (µg/L)	19	12/5/2006	ND	12/4/2008
o-Xylene (µg/L)	4.4	12/5/2006	ND	12/4/2008
Toluene (µg/L)	1.6	3/20/1997	ND	12/4/2008
TCE (µg/L)	1.5	3/24/1995	ND	12/4/2008
TCA (µg/L)	1.6	6/5/2008	ND	12/4/2008

- Notes**
1. ND = Compound Not Detected at Indicated Reporting Limit.
  2. Shaded results reflect exceedance of screening criteria.

AGW013				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	1.3	12/13/1995	ND	3/21/1997

AGW016				
Constituent	Max	Max Date	Last	Last Date
Benzene (µg/L)	14	12/19/1996	ND	3/13/2000
Ethylbenzene (µg/L)	13	12/19/1996	ND	12/5/2004
m,p-Xylene (µg/L)	2	12/19/1996	ND	12/5/2004
Toluene (µg/L)	0.3	9/4/1998	ND	12/5/2004

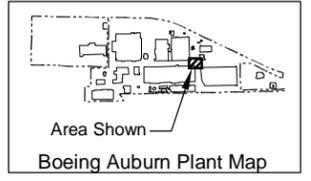
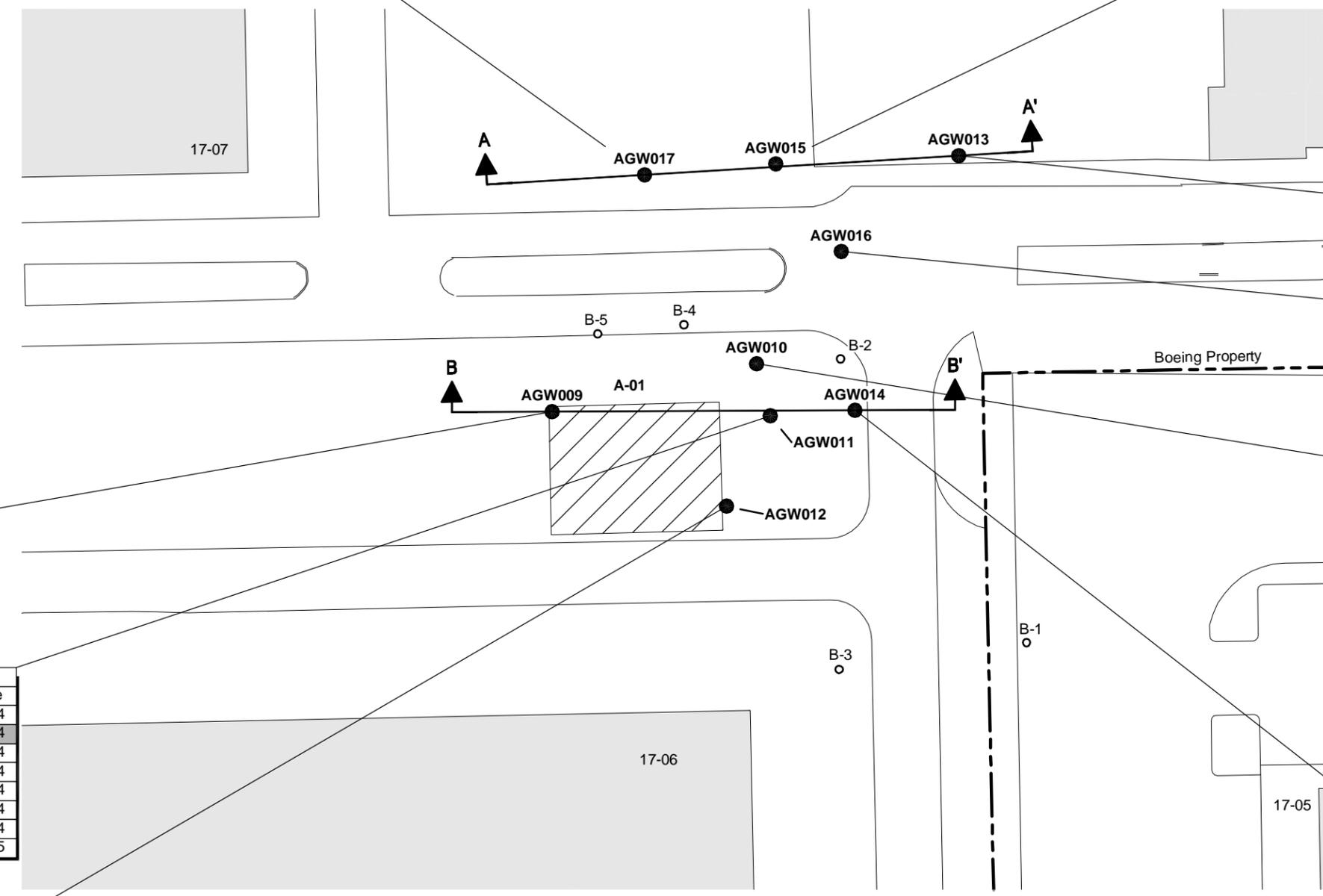
AGW009				
Constituent	Max	Max Date	Last	Last Date
1,1,2,2-PCA (µg/L)	1.5	10/1/1996	ND	12/4/2008
m,p-Xylene (µg/L)	2.1	12/5/2004	ND	12/4/2008
PCE (µg/L)	0.3	12/4/2008	0.3	12/4/2008
TCE (µg/L)	6.4	10/1/1996	1.5	12/4/2008

AGW010				
Constituent	Max	Max Date	Last	Last Date
1,1,2-TCA (µg/L)	1.1	3/23/1998	ND	12/4/2008
1,2-DCA (µg/L)	3.3	3/24/1995	ND	12/4/2008
Diesel (mg/L)	18.7	3/24/1995	ND	12/4/2008
Benzene (µg/L)	5250	3/24/1995	21	12/4/2008
Ethylbenzene (µg/L)	3600	5/24/2005	3100	12/4/2008
Gasoline (mg/L)	120	8/26/1999	58	12/4/2008
Jet-A (mg/L)	8.8	8/26/1999	5.1	6/7/2006
m,p-Xylene (µg/L)	11000	8/26/1999	8000	12/4/2008
o-Xylene (µg/L)	4300	8/26/1999	2000	12/4/2008
Styrene (µg/L)	12	3/20/1997	ND	12/4/2008
Toluene (µg/L)	15000	9/12/1997	66	12/4/2008
TCE (µg/L)	4	6/18/1996	ND	12/4/2008
Xylenes (µg/L)	13199	3/24/1995	13199	3/24/1995

AGW011				
Constituent	Max	Max Date	Last	Last Date
Diesel (mg/L)	0.64	3/24/1995	ND	12/5/2004
Benzene (µg/L)	2.6	12/10/2003	1.2	12/5/2004
Ethylbenzene (µg/L)	285	3/24/1995	ND	12/5/2004
Gasoline (mg/L)	2.45	3/24/1995	ND	12/5/2004
m,p-Xylene (µg/L)	40	12/19/1996	1.6	12/5/2004
o-Xylene (µg/L)	1.3	12/14/1995	ND	12/5/2004
Toluene (µg/L)	5.34	3/24/1995	ND	12/5/2004
Xylenes (µg/L)	15.98	3/24/1995	15.98	3/24/1995

AGW014				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	2.3	12/19/1996	ND	2/20/2004

AGW012				
Constituent	Max	Max Date	Last	Last Date
m,p-Xylene (µg/L)	1.4	3/26/1996	ND	12/5/2004
Toluene (µg/L)	1.3	3/26/1996	ND	12/5/2004
TCE (µg/L)	1	3/20/1997	1	3/20/1997



Base map source: Geomatrix 2003



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**AOC A-01  
Groundwater Plan View**

Figure  
**M-12e**

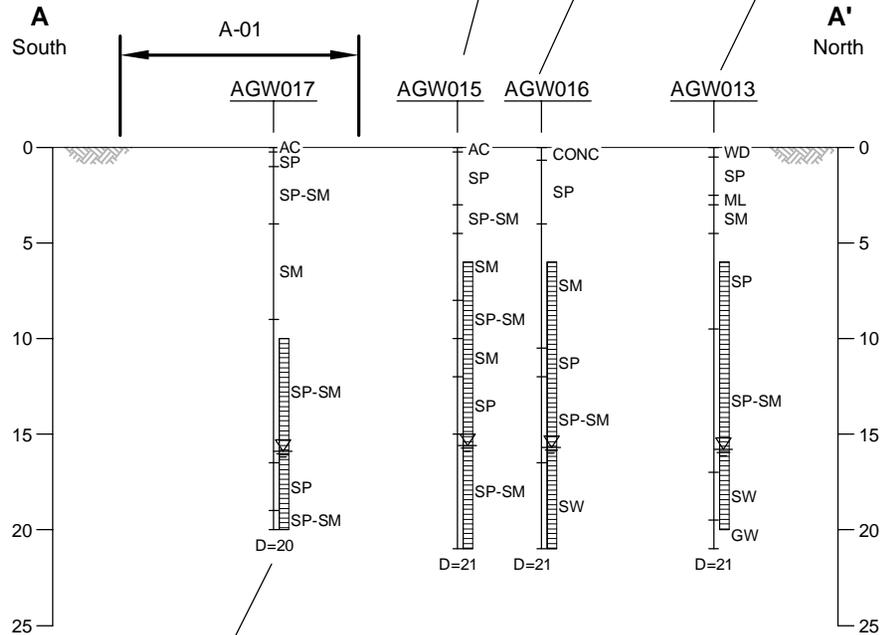
**Legend**

- AGW079 — Exploration Designation
  - Top of Exploration
  - Water Level (August 2004)
  - Water Level (ATD)
  - SM — Unified Soil Classification Symbol
  - Screen Interval / Sampling Interval
  - D=20.5 — Depth of Exploration
  - ND — Compound Not Detected at Indicated Reporting Limit
- Note: Shaded results reflect exceedance of screening criteria.

AGW015				
Constituent	Max	Max Date	Last	Last Date
Diesel (mg/L)	0.59	12/5/2004	ND	12/4/2008
Benzene (µg/L)	1.6	10/1/1996	0.2	12/4/2008
Ethylbenzene (µg/L)	7.6	12/5/2006	ND	12/4/2008
m,p-Xylene (µg/L)	19	12/5/2006	ND	12/4/2008
o-Xylene (µg/L)	4.4	12/5/2006	ND	12/4/2008
Toluene (µg/L)	1.6	3/20/1997	ND	12/4/2008
TCE (µg/L)	1.5	3/24/1995	ND	12/4/2008
TCA (µg/L)	1.6	6/5/2008	ND	12/4/2008

AGW016				
Constituent	Max	Max Date	Last	Last Date
Benzene (µg/L)	14	12/19/1996	ND	3/13/2000
Ethylbenzene (µg/L)	13	12/19/1996	ND	12/5/2004
m,p-Xylene (µg/L)	2	12/19/1996	ND	12/5/2004
Toluene (µg/L)	0.3	9/4/1998	ND	12/5/2004

AGW013				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	1.3	12/13/1995	ND	3/21/1997



AGW017				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	6.15	3/24/1995	1.4	12/4/2008

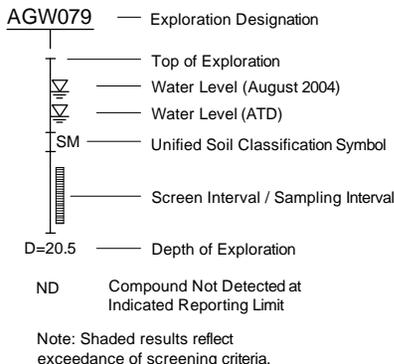


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**AOC A-01**  
**Groundwater Section A-A' View**

Figure  
M-12f

**Legend**

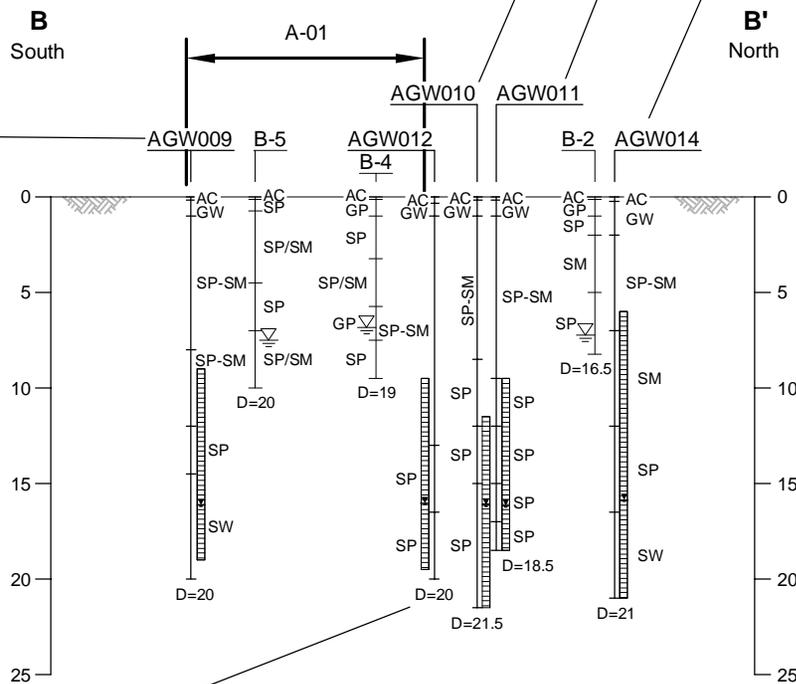


AGW010					
Constituent	Max	Max Date	Last	Last Date	
1,1,2-TCA (µg/L)	1.1	3/23/1998	ND	12/4/2008	
1,2-DCA (µg/L)	3.3	3/24/1995	ND	12/4/2008	
Diesel (mg/L)	18.7	3/24/1995	ND	12/4/2008	
Benzene (µg/L)	5250	3/24/1995	21	12/4/2008	
Ethylbenzene (µg/L)	3600	5/24/2005	3100	12/4/2008	
Gasoline (mg/L)	120	8/26/1999	58	12/4/2008	
Jet-A (mg/L)	8.8	8/26/1999	5.1	6/7/2006	
m,p-Xylene (µg/L)	11000	8/26/1999	8000	12/4/2008	
o-Xylene (µg/L)	4300	8/26/1999	2000	12/4/2008	
Styrene (µg/L)	12	3/20/1997	ND	12/4/2008	
Toluene (µg/L)	15000	9/12/1997	66	12/4/2008	
TCE (µg/L)	4	6/18/1996	ND	12/4/2008	
Xylenes (µg/L)	13199	3/24/1995	13199	3/24/1995	

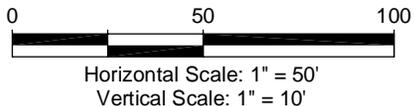
AGW011					
Constituent	Max	Max Date	Last	Last Date	
Diesel (mg/L)	0.64	3/24/1995	ND	12/5/2004	
Benzene (µg/L)	2.6	12/10/2003	1.2	12/5/2004	
Ethylbenzene (µg/L)	285	3/24/1995	ND	12/5/2004	
Gasoline (mg/L)	2.45	3/24/1995	ND	12/5/2004	
m,p-Xylene (µg/L)	40	12/19/1996	1.6	12/5/2004	
o-Xylene (µg/L)	1.3	12/14/1995	ND	12/5/2004	
Toluene (µg/L)	5.34	3/24/1995	ND	12/5/2004	
Xylenes (µg/L)	15.98	3/24/1995	15.98	3/24/1995	

AGW014					
Constituent	Max	Max Date	Last	Last Date	
TCE (µg/L)	2.3	12/19/1996	ND	2/20/2004	

AGW009					
Constituent	Max	Max Date	Last	Last Date	
1,1,2,2-PCA (µg/L)	1.5	10/1/1996	ND	12/4/2008	
m,p-Xylene (µg/L)	2.1	12/5/2004	ND	12/4/2008	
PCE (µg/L)	0.3	12/4/2008	0.3	12/4/2008	
TCE (µg/L)	6.4	10/1/1996	1.5	12/4/2008	



AGW012					
Constituent	Max	Max Date	Last	Last Date	
m,p-Xylene (µg/L)	1.4	3/26/1996	ND	12/5/2004	
Toluene (µg/L)	1.3	3/26/1996	ND	12/5/2004	
TCE (µg/L)	1	3/20/1997	1	3/20/1997	



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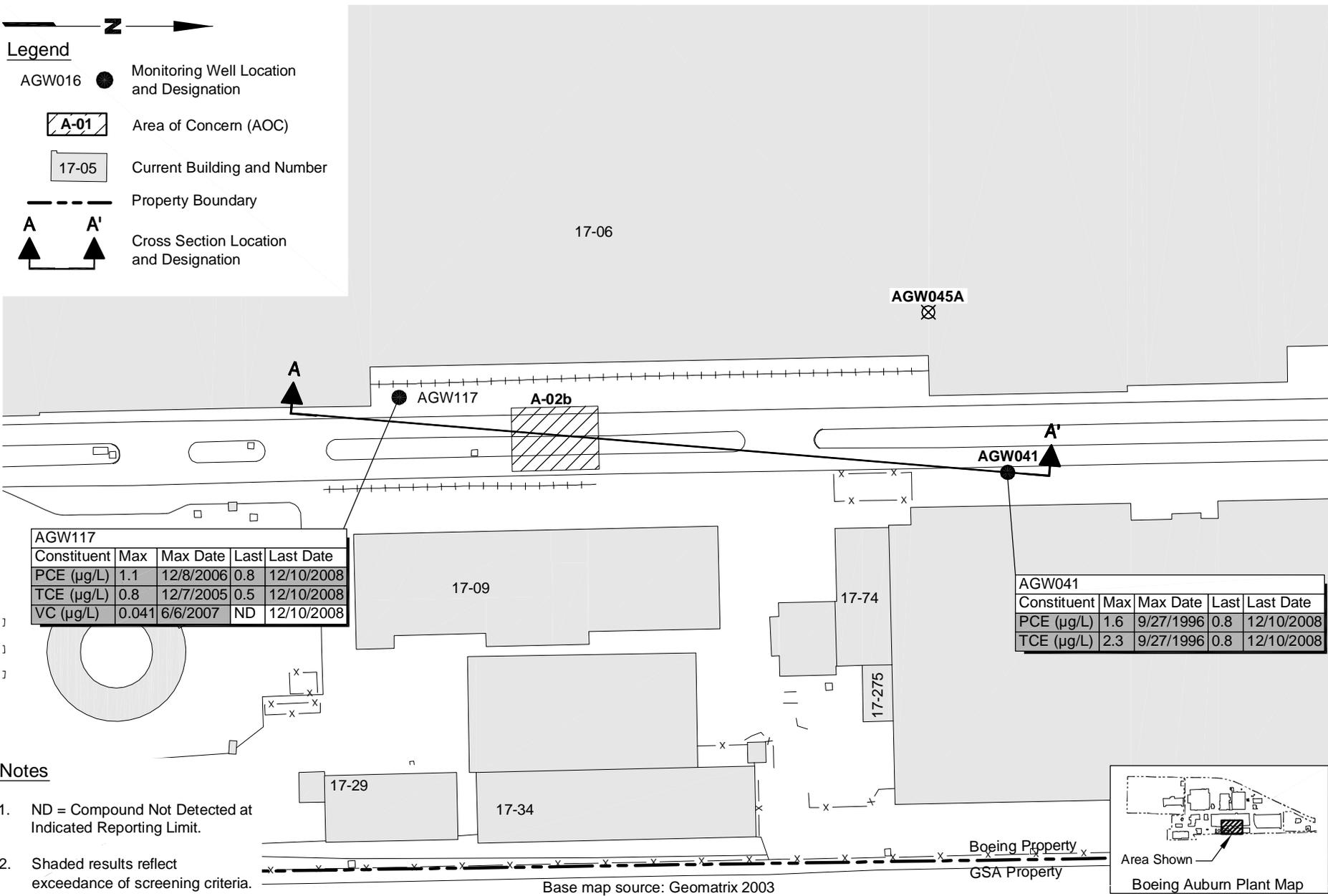
**AOC A-01**  
**Groundwater Section B-B' View**

Figure  
**M-12g**



**Legend**

- AGW016 ● Monitoring Well Location and Designation
- A-01 Area of Concern (AOC)
- 17-05 Current Building and Number
- Property Boundary
- A      A'
- ▲ Cross Section Location and Designation



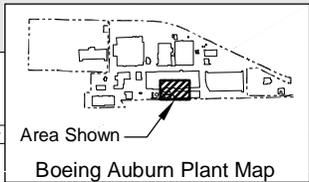
AGW117				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	1.1	12/8/2006	0.8	12/10/2008
TCE (µg/L)	0.8	12/7/2005	0.5	12/10/2008
VC (µg/L)	0.041	6/6/2007	ND	12/10/2008

AGW041				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	1.6	9/27/1996	0.8	12/10/2008
TCE (µg/L)	2.3	9/27/1996	0.8	12/10/2008

**Notes**

1. ND = Compound Not Detected at Indicated Reporting Limit.
2. Shaded results reflect exceedance of screening criteria.

Base map source: Geomatrix 2003



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**AOC A-02b  
Groundwater Plan View**

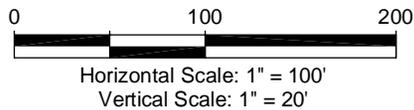
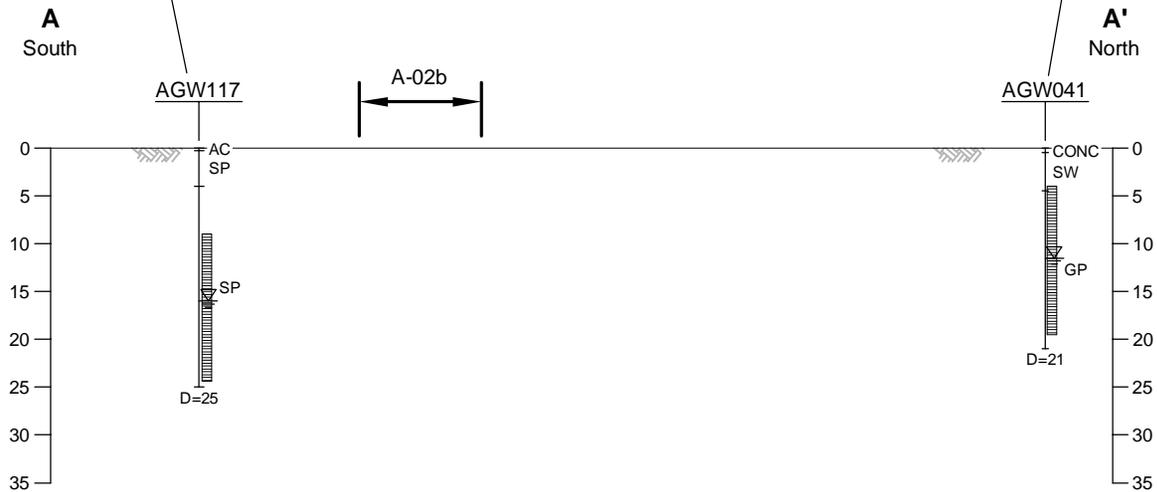
Figure  
**M-13a**

**Legend**

- AGW079 — Exploration Designation
  - Top of Exploration
  - Water Level (August 2004)
  - Water Level (ATD)
  - SM — Unified Soil Classification Symbol
  - Screen Interval / Sampling Interval
  - D=20.5 — Depth of Exploration
  - ND Compound Not Detected at Indicated Reporting Limit
- Note: Shaded results reflect exceedance of screening criteria.

AGW117				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	1.1	12/8/2006	0.8	12/10/2008
TCE (µg/L)	0.8	12/7/2005	0.5	12/10/2008
VC (µg/L)	0.041	6/6/2007	ND	12/10/2008

AGW041				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	1.6	9/27/1996	0.8	12/10/2008
TCE (µg/L)	2.3	9/27/1996	0.8	12/10/2008

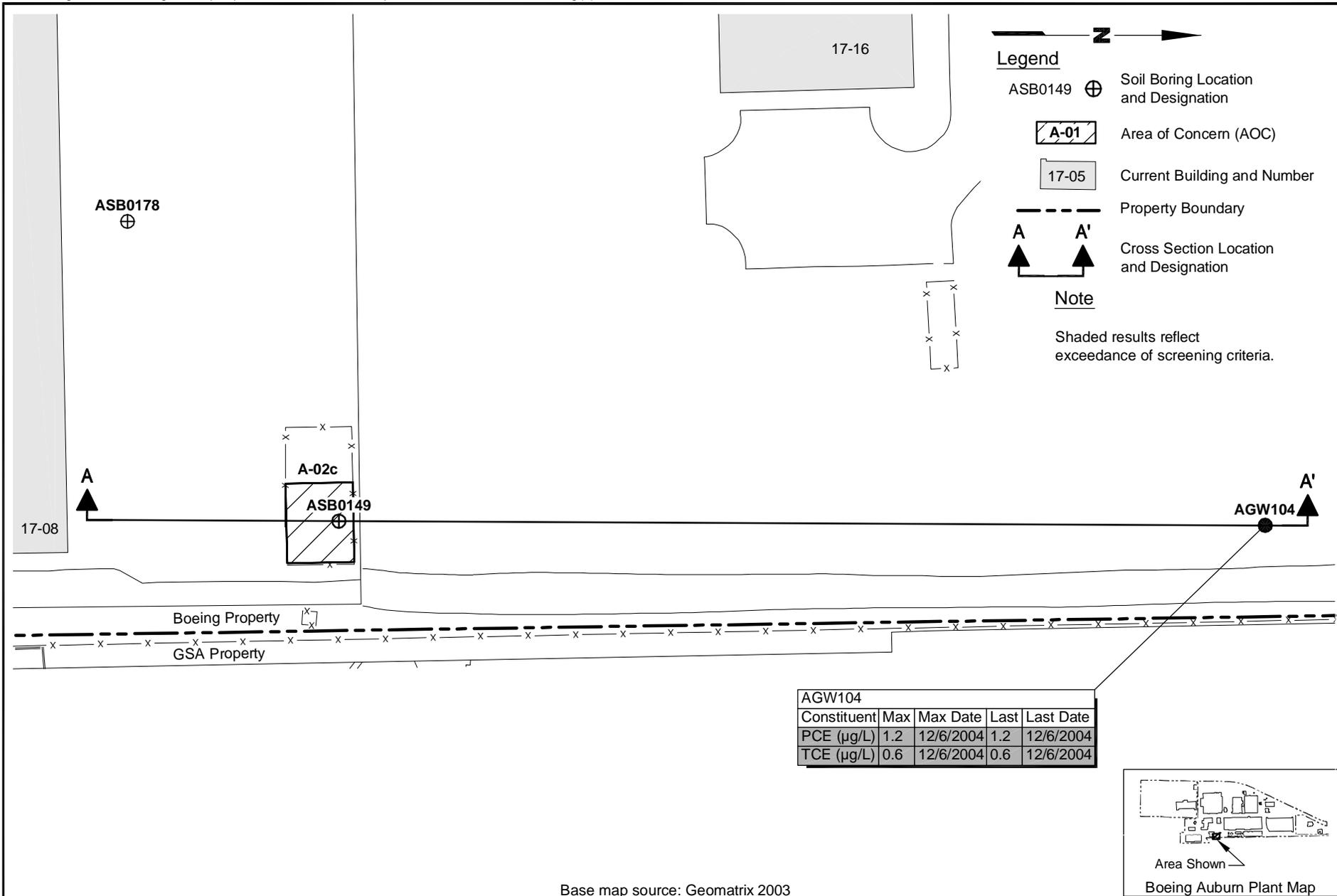


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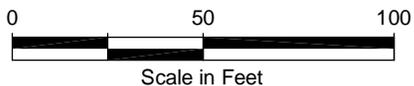
**AOC A-02b**  
**Groundwater Section A-A' View**

Figure  
**M-13b**





Base map source: Geomatrix 2003



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Remedial Investigation  
Auburn, Washington

**AOC A-02c  
Groundwater Plan View**

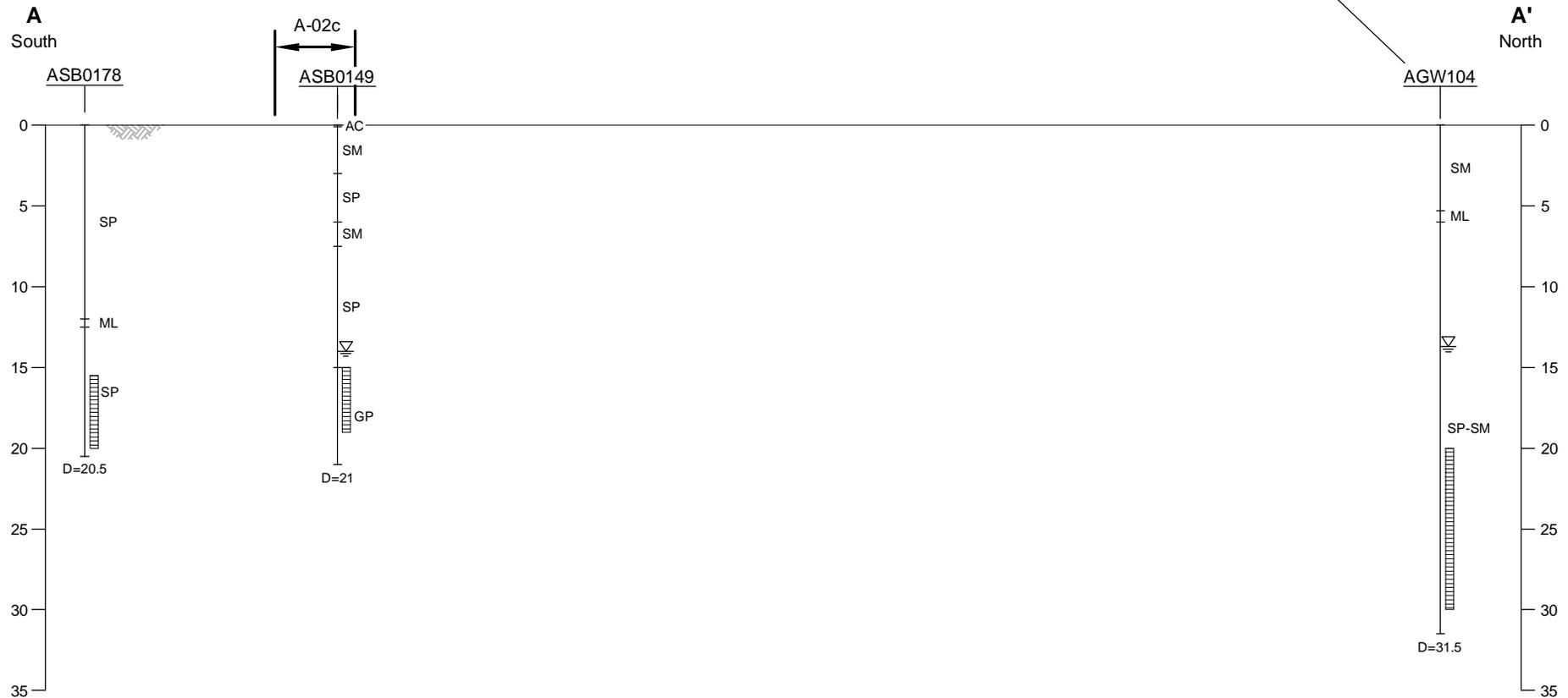
Figure  
**M-14a**

**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration

Note: Shaded results reflect exceedance of screening criteria.

AGW104				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	1.2	12/6/2004	1.2	12/6/2004
TCE (µg/L)	0.6	12/6/2004	0.6	12/6/2004



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**AOC A-02c**  
**Groundwater Section A-A' View**

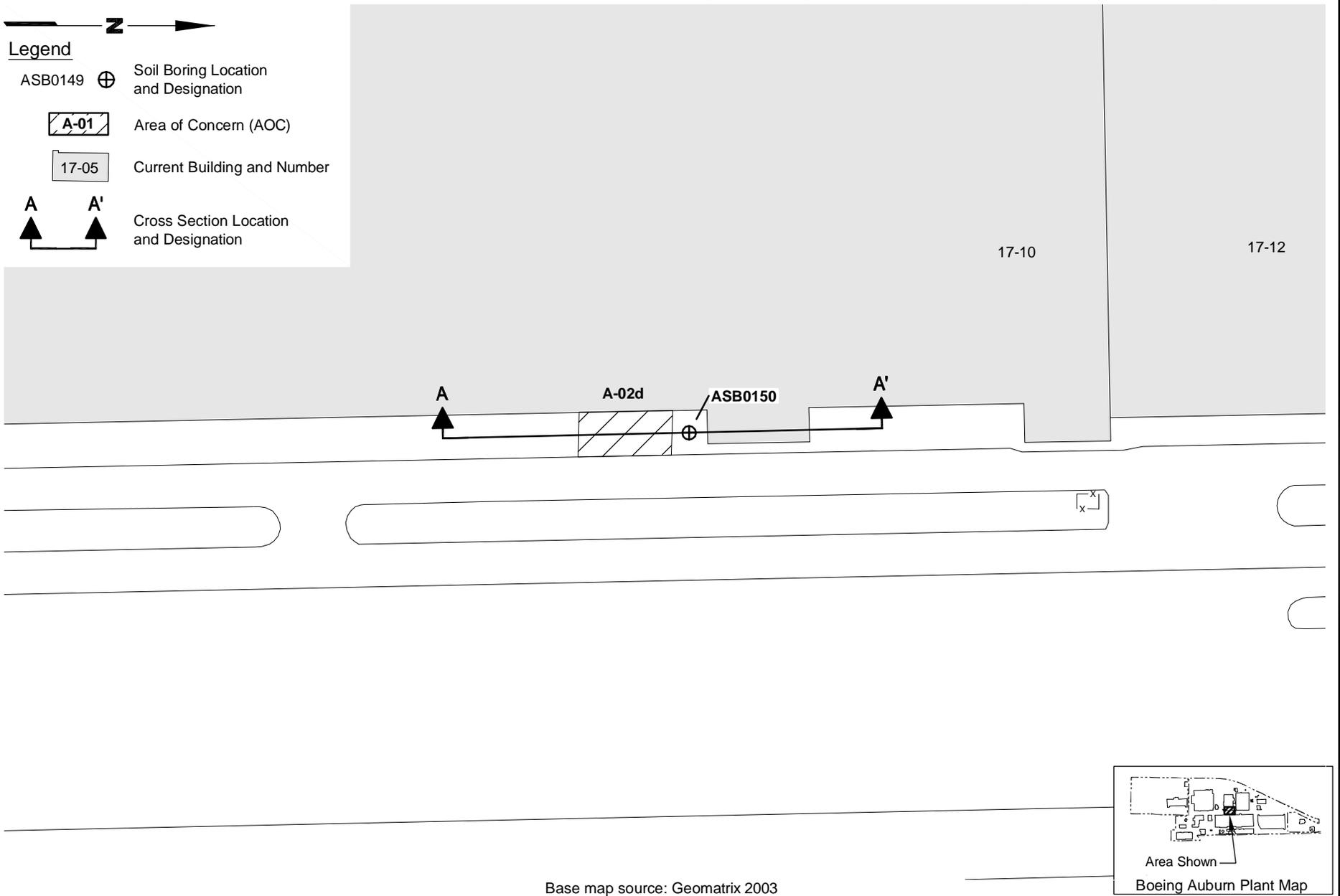
Figure  
**M-14b**



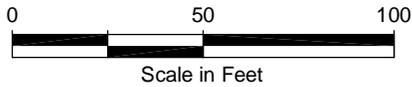


**Legend**

- ASB0149 ⊕ Soil Boring Location and Designation
- A-01 Area of Concern (AOC)
- 17-05 Current Building and Number
-  Cross Section Location and Designation



Base map source: Geomatrix 2003



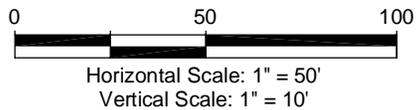
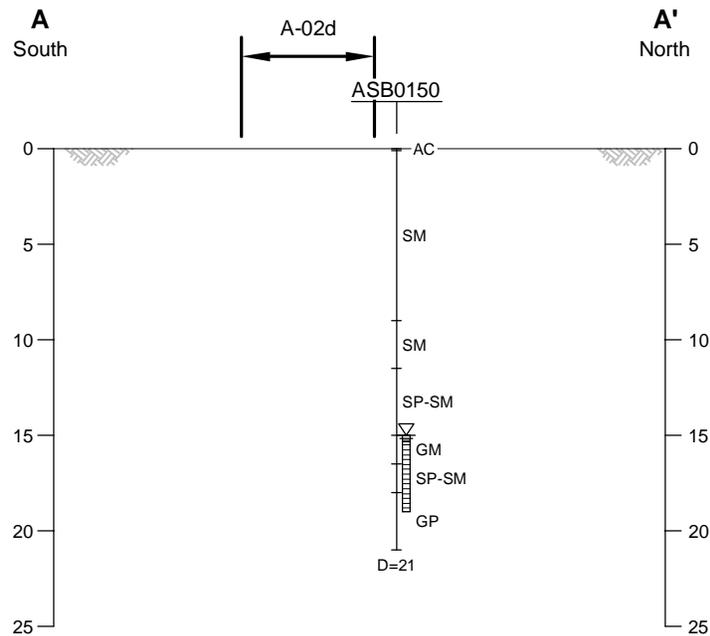
Boeing Auburn  
Remedial Investigation  
Auburn, Washington

**AOC A-02d**  
**Site and Exploration Plan**

Figure  
**M-15a**

**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- ▼ — Water Level (August 2004)
- ▽ — Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration



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**AOC A-02d**  
**Section A-A' View**

Figure  
**M-15b**



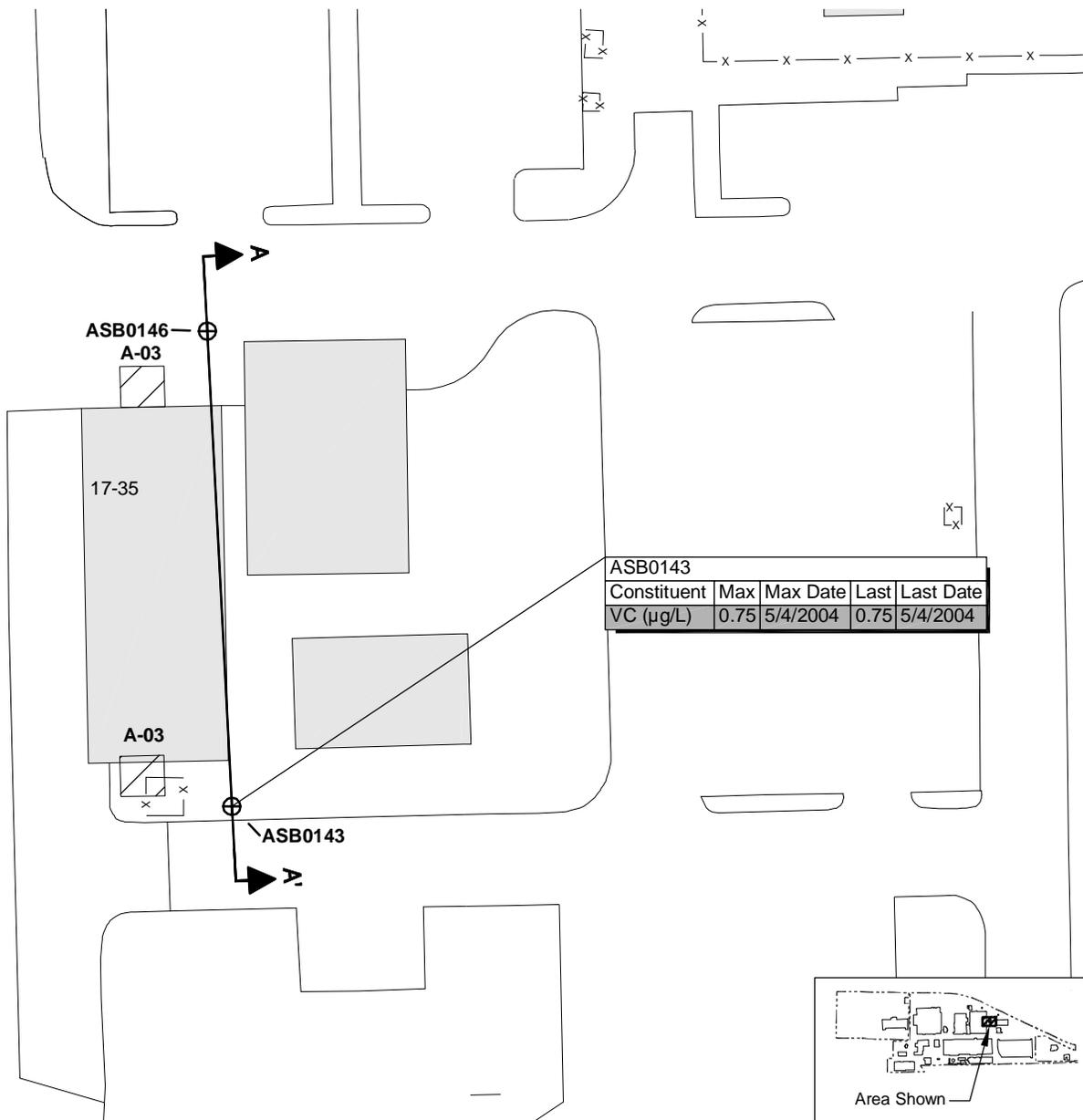
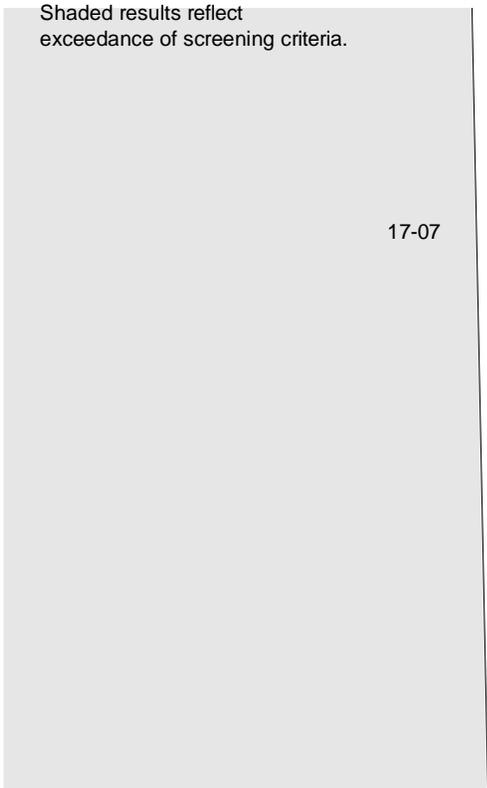


**Legend**

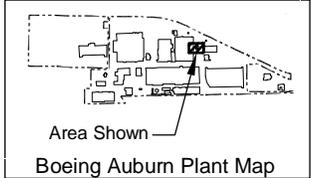
- ASB0149 ⊕ Soil Boring Location and Designation
- A-01 Area of Concern (AOC)
- 17-05 Current Building and Number
- A      A'  
▲      ▲ Cross Section Location and Designation

**Note**

Shaded results reflect exceedance of screening criteria.



ASB0143				
Constituent	Max	Max Date	Last	Last Date
VC (µg/L)	0.75	5/4/2004	0.75	5/4/2004



Base map source: Geomatrix 2003



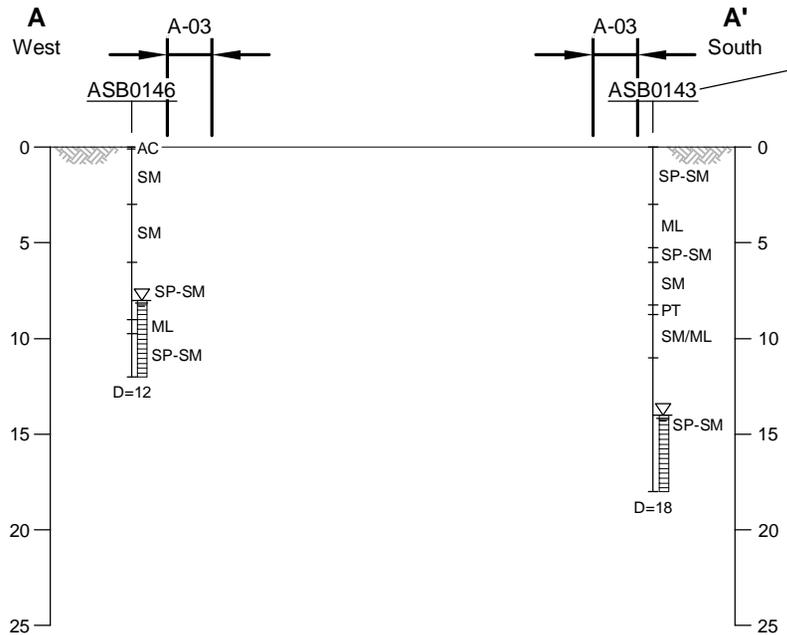
Boeing Auburn  
Remedial Investigation  
Auburn, Washington

**AOC A-03  
Groundwater Plan View**

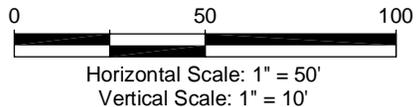
Figure  
**M-16a**

**Legend**

- AGW079 — Exploration Designation
  - Top of Exploration
  - Water Level (August 2004)
  - Water Level (ATD)
  - SM — Unified Soil Classification Symbol
  - Screen Interval / Sampling Interval
  - D=20.5 — Depth of Exploration
- Note: Shaded results reflect exceedance of screening criteria.



ASB0143				
Constituent	Max	Max Date	Last	Last Date
VC (µg/L)	0.75	5/4/2004	0.75	5/4/2004



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**AOC A-03**  
**Groundwater Section A-A' View**

Figure  
**M-16b**

**Legend**

AGW016 ● Monitoring Well Location and Designation

**A-01** Area of Concern (AOC)

17-05 Current Building and Number

--- Property Boundary

A A' Cross Section Location and Designation

AGW076				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	1.5	2/15/1999	1.2	3/8/2000
TCE (µg/L)	1.1	8/31/1998	ND	3/8/2000

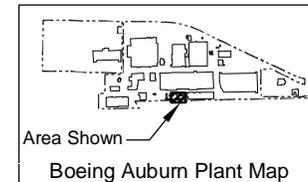
AGW078				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	2.2	5/21/2001	1.7	12/6/2004
TCE (µg/L)	1.5	8/31/1998	0.9	12/6/2004

**Notes**

1. ND = Compound Not Detected at Indicated Reporting Limit.
2. Shaded results reflect exceedance of screening criteria.

AGW077				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	0.8	6/15/2004	ND	12/12/2004
TCE (µg/L)	0.6	6/15/2004	ND	12/12/2004

Base map source: Geomatrix 2003



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**AOC A-04**  
**Groundwater Plan View**

Figure  
**M-17a**

**Legend**

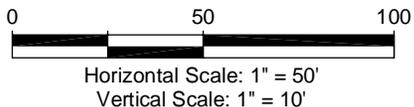
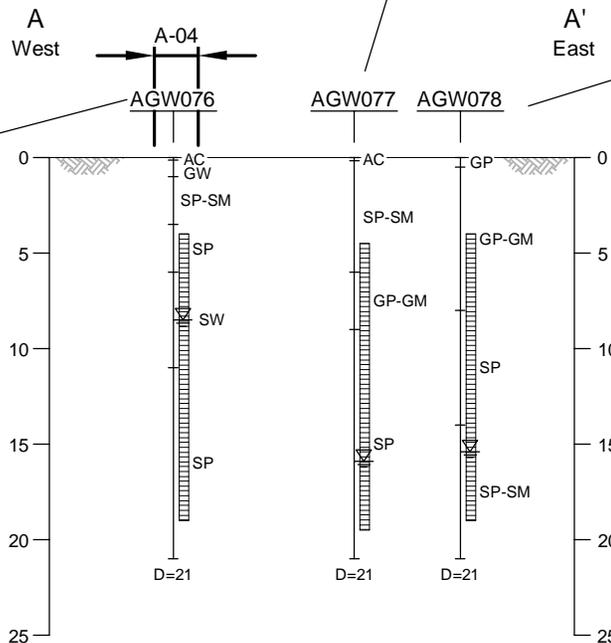
- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration
- ND — Compound Not Detected at Indicated Reporting Limit

Note: Shaded results reflect exceedance of screening criteria.

AGW076				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	1.5	2/15/1999	1.2	3/8/2000
TCE (µg/L)	1.1	8/31/1998	ND	3/8/2000

AGW077				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	0.8	6/15/2004	ND	12/12/2004
TCE (µg/L)	0.6	6/15/2004	ND	12/12/2004

AGW078				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	2.2	5/21/2001	1.7	12/6/2004
TCE (µg/L)	1.5	8/31/1998	0.9	12/6/2004



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**AOC A-04**  
**Groundwater Section A-A' View**

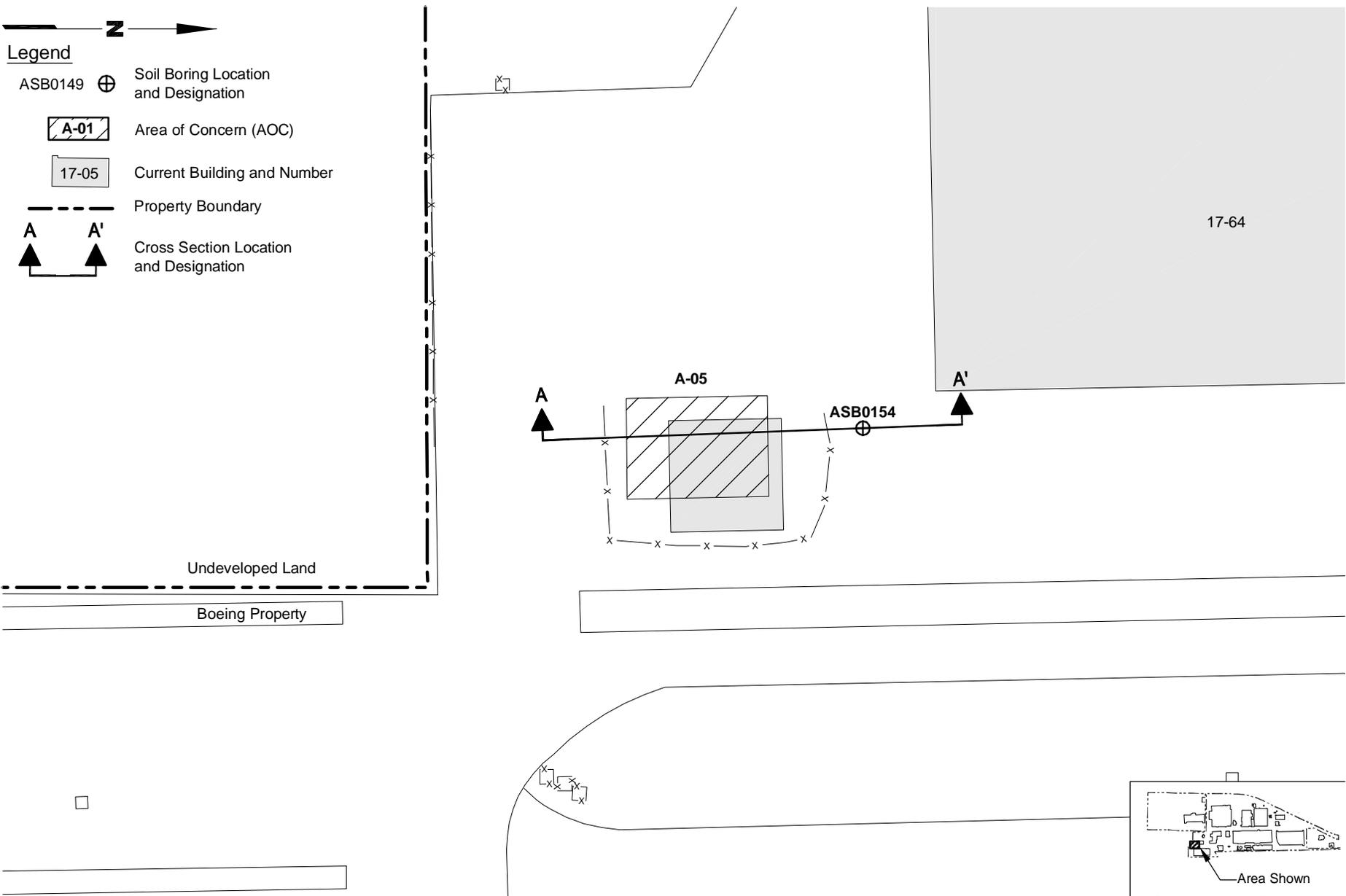
Figure  
**M-17b**





**Legend**

- ASB0149 ⊕ Soil Boring Location and Designation
- A-01 Area of Concern (AOC)
- 17-05 Current Building and Number
- - - - - Property Boundary
- A      A'  
▲      ▲ Cross Section Location and Designation



Base map source: Geomatrix 2003



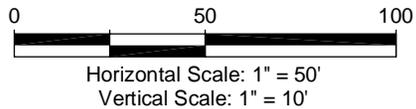
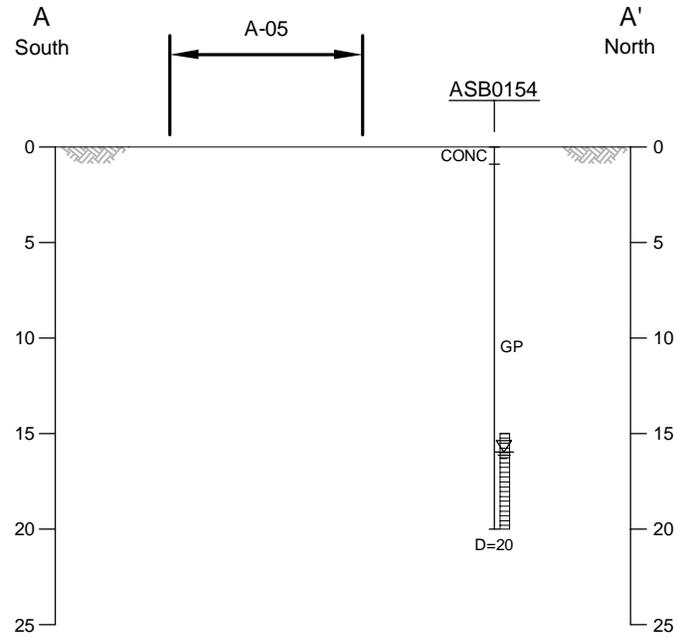
Boeing Auburn  
Remedial Investigation  
Auburn, Washington

**AOC A-05  
Groundwater Plan View**

Figure  
**M-18a**

**Legend**

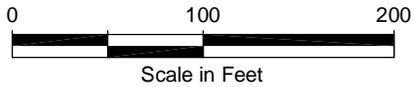
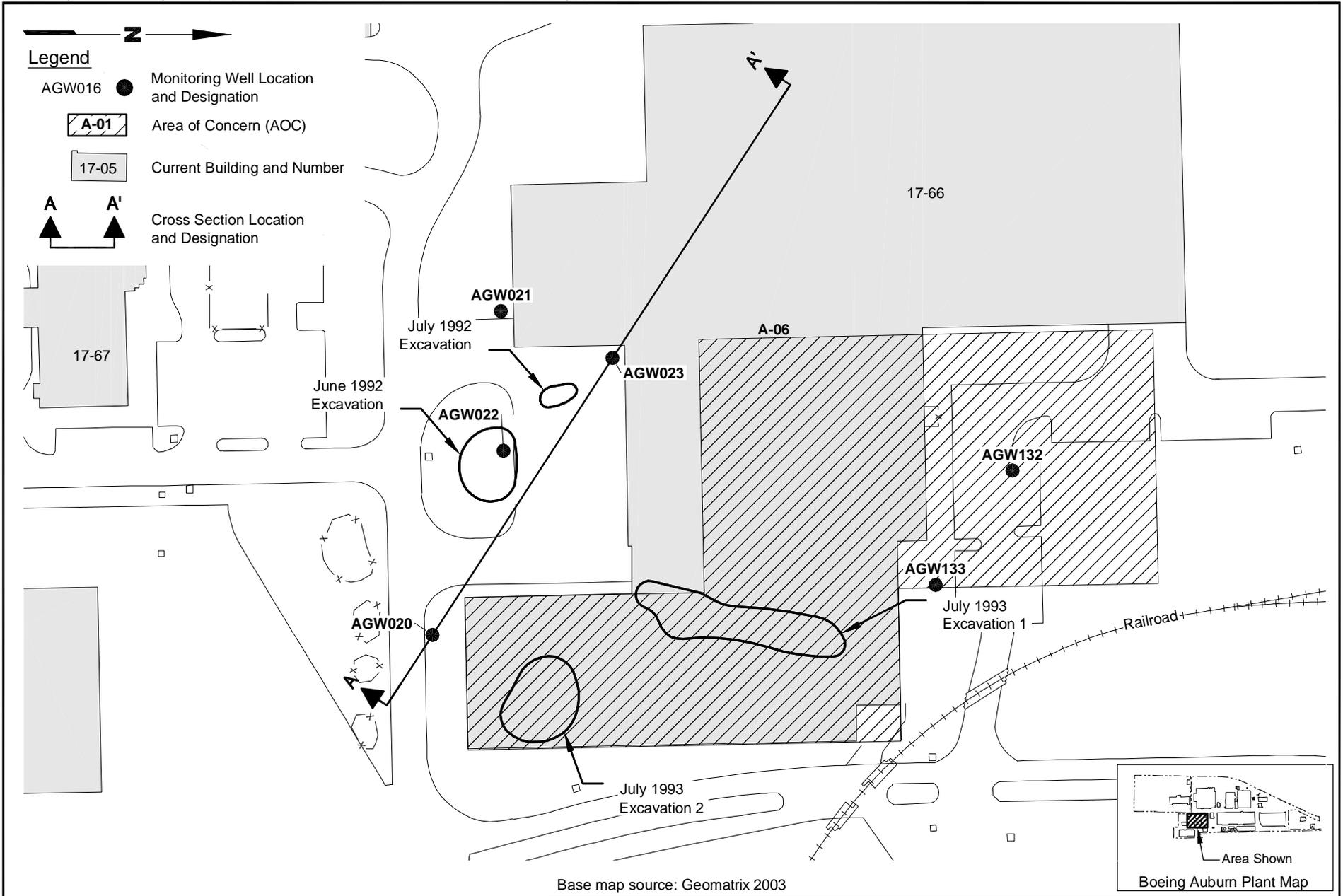
- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration



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**AOC A-05**  
**Groundwater Section A-A' View**

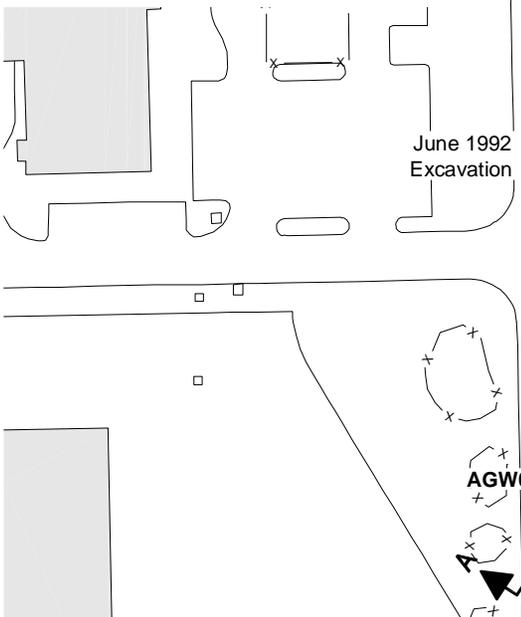
Figure  
**M-18b**



<p>Boeing Auburn Remedial Investigation Auburn, Washington</p>	<p><b>AOC A-06</b> <b>Site and Exploration Plan</b></p>	<p>Figure <b>M-19a</b></p>
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**Legend**

- AGW016 ● Monitoring Well Location and Designation
- A-01 Area of Concern (AOC)
- 17-05 Current Building and Number
-  Cross Section Location and Designation



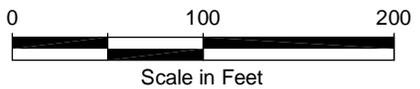
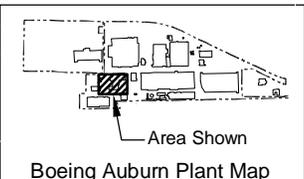
AGW023				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	0.2	8/31/1998	ND	3/8/2000

AGW133				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	0.4	12/10/2008	0.4	12/10/2008

**Notes**

1. ND = Compound Not Detected at Indicated Reporting Limit.
2. Shaded results reflect exceedance of screening criteria.

Base map source: Geomatrix 2003



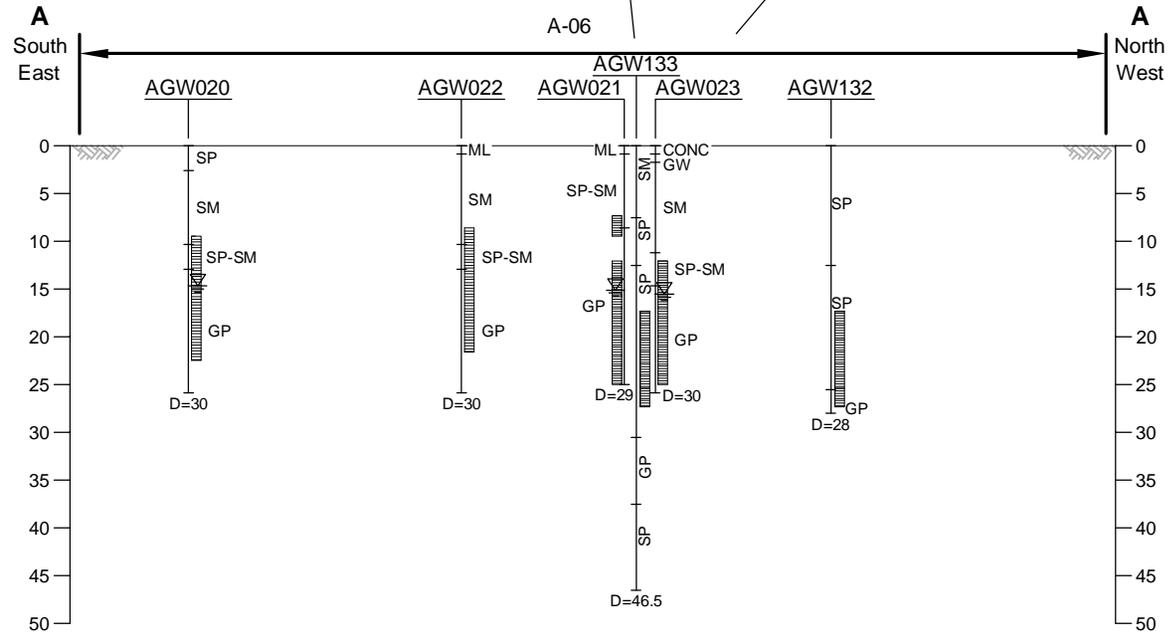
Boeing Auburn Remedial Investigation Auburn, Washington	<b>AOC A-06 Groundwater Plan View</b>	Figure <b>M-19b</b>
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**Legend**

- AGW079 — Exploration Designation
  - Top of Exploration
  - Water Level (August 2004)
  - Water Level (ATD)
  - SM — Unified Soil Classification Symbol
  - Screen Interval / Sampling Interval
  - D=20.5 — Depth of Exploration
  - ND — Compound Not Detected at Indicated Reporting Limit
- Note: Shaded results reflect exceedance of screening criteria.

AGW133				
Constituent	Max	Max Date	Last	Last Date
PCE (µg/L)	0.4	12/10/2008	0.4	12/10/2008

AGW023				
Constituent	Max	Max Date	Last	Last Date
TCE (µg/L)	0.2	8/31/1998	ND	3/8/2000

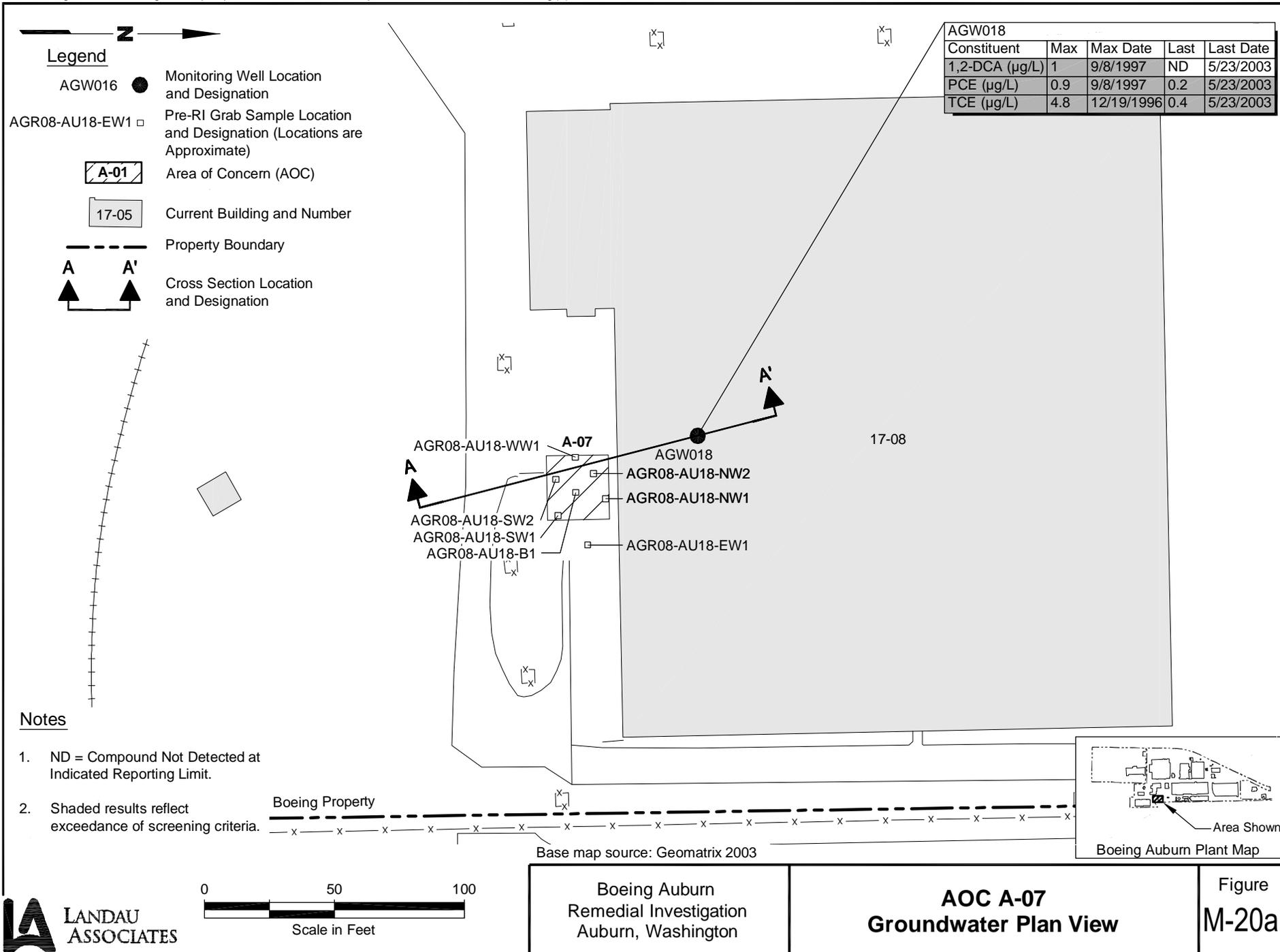


0 100 200  
 Horizontal Scale: 1" = 100'  
 Vertical Scale: 1" = 20'

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**AOC A-06**  
**Groundwater Section A-A' View**

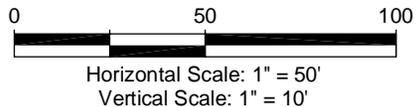
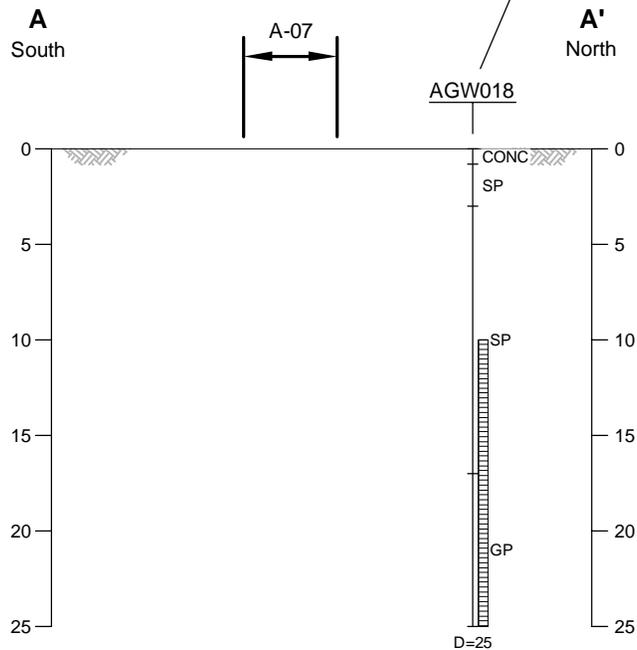
Figure  
**M-19c**



**Legend**

- AGW079 — Exploration Designation
  - Top of Exploration
  - Water Level (August 2004)
  - Water Level (ATD)
  - SM — Unified Soil Classification Symbol
  - Screen Interval / Sampling Interval
  - D=20.5 — Depth of Exploration
  - ND Compound Not Detected at Indicated Reporting Limit
- Note: Shaded results reflect exceedance of screening criteria.

AGW018				
Constituent	Max	Max Date	Last	Last Date
1,2-DCA (µg/L)	1	9/8/1997	ND	5/23/2003
PCE (µg/L)	0.9	9/8/1997	0.2	5/23/2003
TCE (µg/L)	4.8	12/19/1996	0.4	5/23/2003



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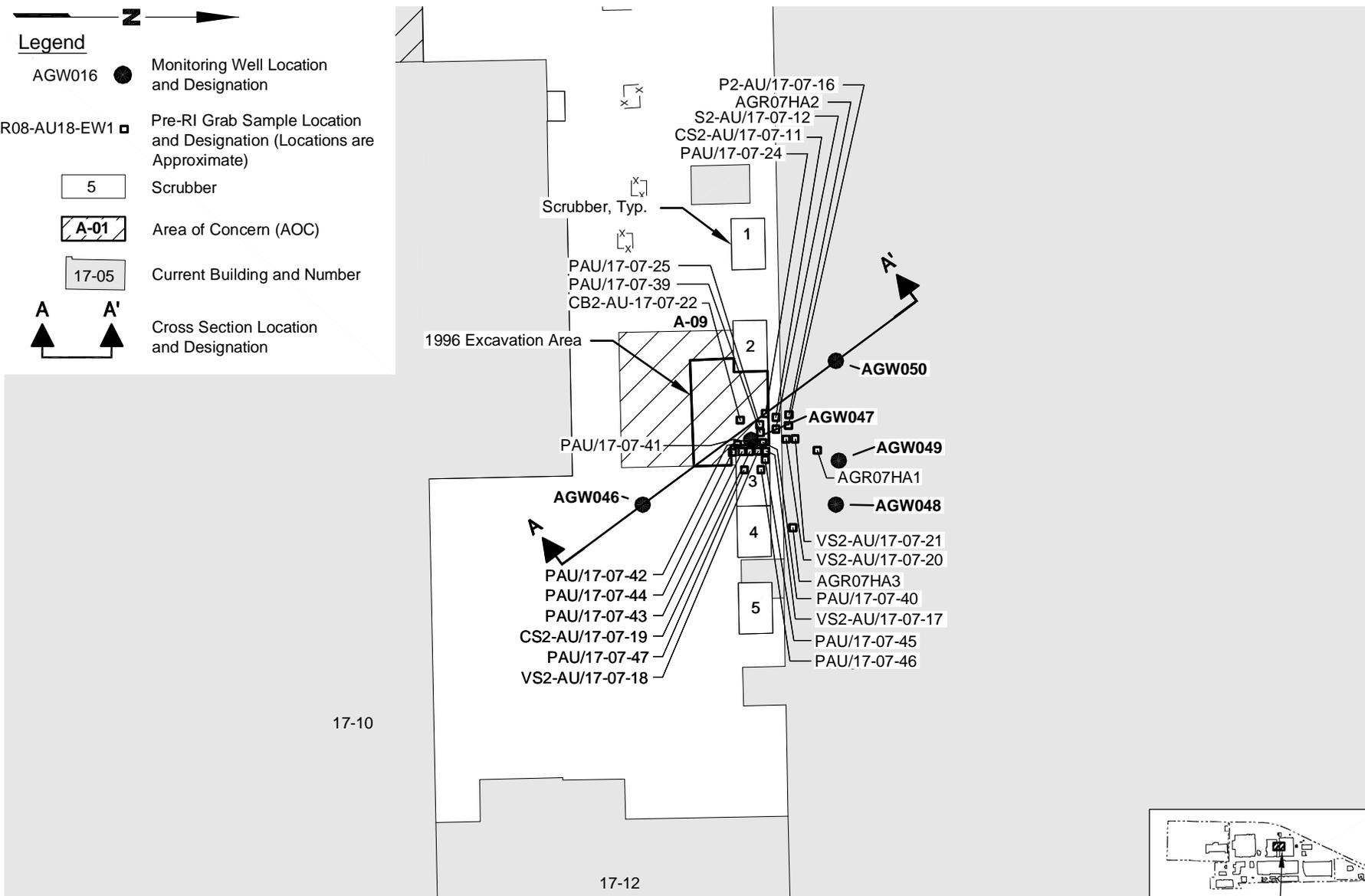
**AOC A-07**  
**Groundwater Section A-A' View**

Figure  
**M-20b**



**Legend**

- AGW016 ● Monitoring Well Location and Designation
- AGR08-AU18-EW1 □ Pre-RI Grab Sample Location and Designation (Locations are Approximate)
- 5 Scrubber
- A-01 Area of Concern (AOC)
- 17-05 Current Building and Number
- A A' Cross Section Location and Designation



Base map source: Geomatrix 2003



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Remedial Investigation  
Auburn, Washington

**AOC A-09**  
**Site and Exploration Plan**

Figure  
**M-21a**

Boeing Remedial Investigation Report | V:\025164\050\055\DIR\Report\2009\FIG\_AOCs - SO PLAN.dwg (A) 7-10b-492009



- Legend**
- AGW016 ● Monitoring Well Location and Designation
  - AGR08-AU18-EW1 □ Pre-RI Grab Sample Location and Designation (Locations are Approximate)
  - 5 Scrubber
  - A-01 Area of Concern (AOC)
  - 17-05 Current Building and Number
  - A A' Cross Section Location and Designation

PAU/17-07-41 (8/1/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	84	9*	84	9*
Total Cyanide (mg/kg)	41	9*	41	9*

PAU/17-07-42 (8/1/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	1.5	8*	1.5	8*

CS2-AU/17-07-19 (7/31/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	642	6*	642	6*
Total Cyanide (mg/kg)	200	6*	200	6*

VS2-AU/17-07-18 (7/31/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	169	7*	169	7*

PAU/17-07-45 (8/6/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	148	6.5*	148	6.5*

PAU/17-07-46 (8/6/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	15	7*	15	7*

PAU/17-07-25 (8/1/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	124	9.5*	124	9.5*
Total Cyanide (mg/kg)	110	9.5*	110	9.5*

PAU/17-07-39 (8/1/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	163	8*	163	8*
Total Cyanide (mg/kg)	77	8*	77	8*

AGR07-HA2 (9/13/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cu (mg/kg)	385	6	385	6
Total Cyanide (mg/kg)	200	6	200	6

P2-AU/17-07-16 (7/30/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	492	4*	492	4*
Total Cyanide (mg/kg)	73	4*	73	4*

S2-AU/17-07-12 (7/30/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	353	9*	353	9*
Total Cyanide (mg/kg)	75	9*	75	9*

VS2-AU/17-07-21 (7/31/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	224	6*	224	6*

VS2-AU/17-07-20 (7/31/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	77.9	6*	77.9	6*

AGW049 (9/13/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	37.8	7.5	ND	12.5
Cu (mg/kg)	619	10	123	12.5
Total Cyanide (mg/kg)	350	7.5	0.53	12.5

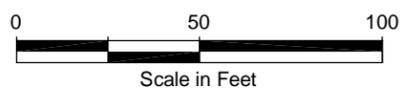
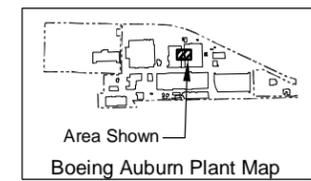
AGR07-HA1 (9/12/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	248	6.5	248	6.5
Cu (mg/kg)	378	6.5	378	6.5
Total Cyanide (mg/kg)	62	6.5	62	6.5

PAU/17-07-40 (8/1/1996)

Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	146	8*	146	8*

- Notes**
1. \* = Indicates that only one depth was sampled for the constituent at that location
  2. ND = Compound Not Detected at Indicated Reporting Limit
  3. Shaded results reflect exceedance of screening criteria.



Base map source: Geomatrix 2003



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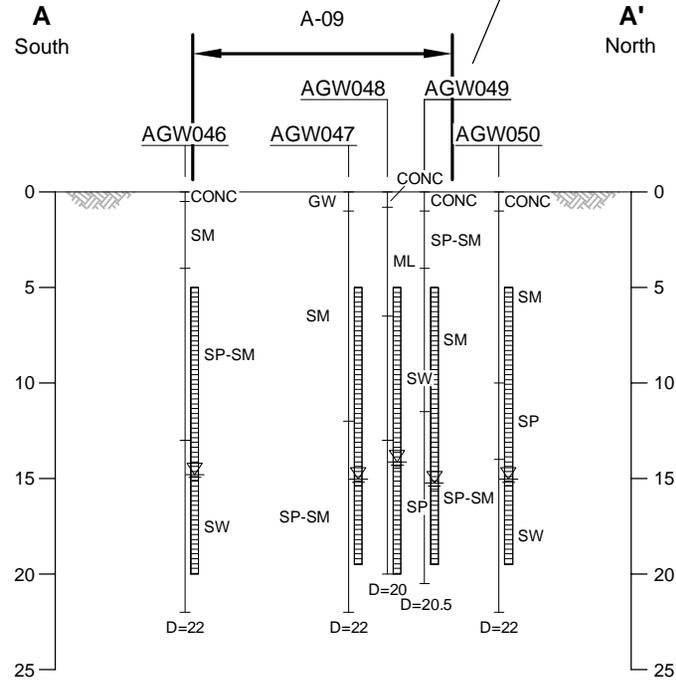
**AOC A-09  
Soil Plan View**

Figure  
**M-21b**

**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration
- ND Compound Not Detected at Indicated Reporting Limit
- Note: Shaded results reflect exceedance of screening criteria.

AGW049 (9/13/1996)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Cd (mg/kg)	37.8	7.5	ND	12.5
Cu (mg/kg)	619	10	123	12.5
Total Cyanide (mg/kg)	350	7.5	0.53	12.5



Boeing Remedial Investigation Report | V:\025164\050\055\DIR\Report\2009\FIG\_AOCs - G.W. PLAN.dwg (A) 7-10d- #9/2009



**Legend**

- AGW016 ● Monitoring Well Location and Designation
- AGR08-AU18-EW1 □ Pre-RI Grab Sample Location and Designation (Locations are Approximate)
- 5 Scrubber
- A-01 Area of Concern (AOC)
- 17-05 Current Building and Number
- A A' Cross Section Location and Designation

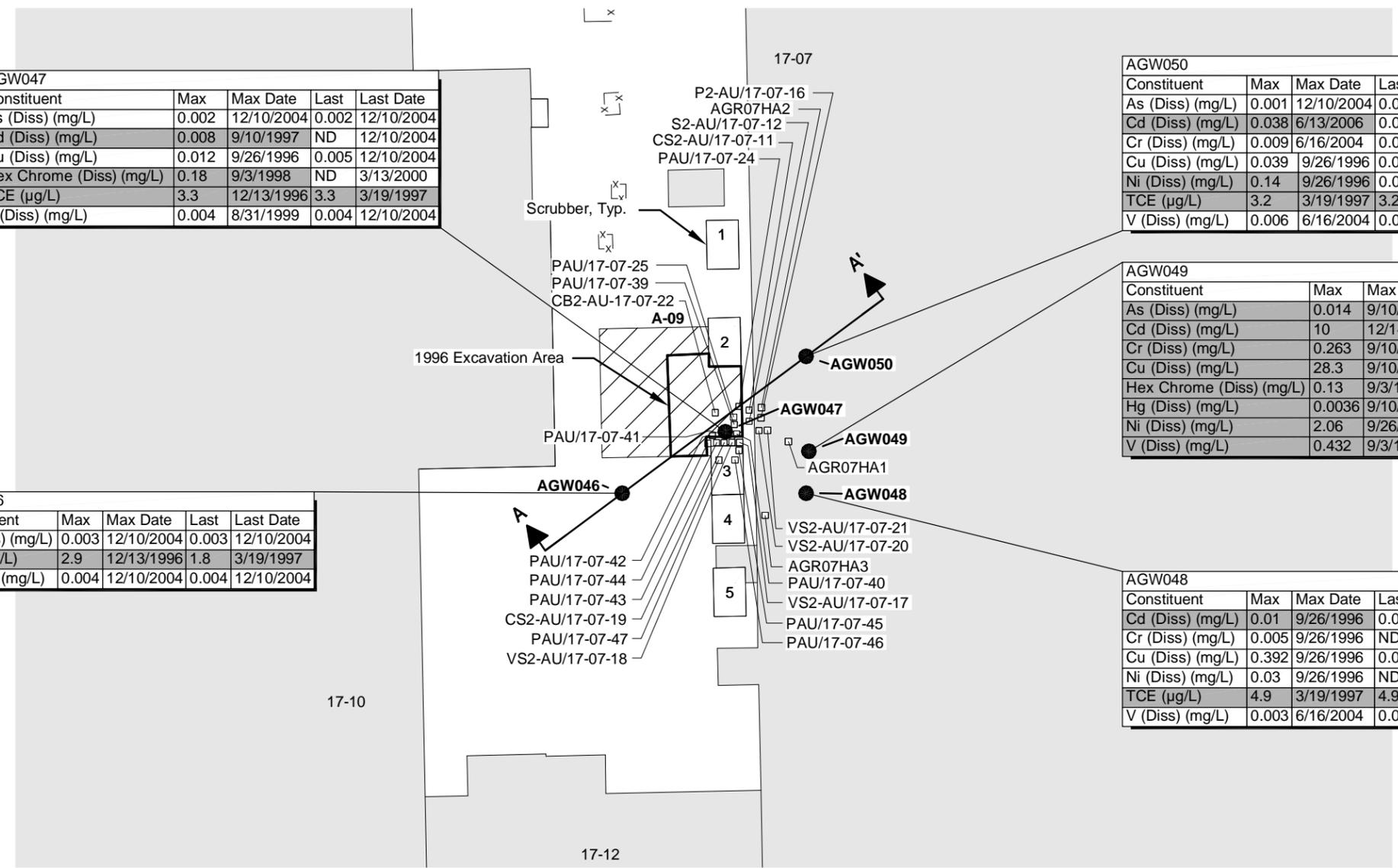
AGW047				
Constituent	Max	Max Date	Last	Last Date
As (Diss) (mg/L)	0.002	12/10/2004	0.002	12/10/2004
Cd (Diss) (mg/L)	0.008	9/10/1997	ND	12/10/2004
Cu (Diss) (mg/L)	0.012	9/26/1996	0.005	12/10/2004
Hex Chrome (Diss) (mg/L)	0.18	9/3/1998	ND	3/13/2000
TCE (µg/L)	3.3	12/13/1996	3.3	3/19/1997
V (Diss) (mg/L)	0.004	8/31/1999	0.004	12/10/2004

AGW050				
Constituent	Max	Max Date	Last	Last Date
As (Diss) (mg/L)	0.001	12/10/2004	0.001	12/10/2004
Cd (Diss) (mg/L)	0.038	6/13/2006	0.008	12/15/2008
Cr (Diss) (mg/L)	0.009	6/16/2004	0.008	12/10/2004
Cu (Diss) (mg/L)	0.039	9/26/1996	0.021	12/10/2004
Ni (Diss) (mg/L)	0.14	9/26/1996	0.01	12/15/2008
TCE (µg/L)	3.2	3/19/1997	3.2	3/19/1997
V (Diss) (mg/L)	0.006	6/16/2004	0.006	12/10/2004

AGW049				
Constituent	Max	Max Date	Last	Last Date
As (Diss) (mg/L)	0.014	9/10/1997	0.003	12/10/2004
Cd (Diss) (mg/L)	10	12/14/2007	0.005	12/15/2008
Cr (Diss) (mg/L)	0.263	9/10/1997	0.007	12/10/2004
Cu (Diss) (mg/L)	28.3	9/10/1997	1.47	12/10/2004
Hex Chrome (Diss) (mg/L)	0.13	9/3/1998	ND	3/13/2000
Hg (Diss) (mg/L)	0.0036	9/10/1997	0.0002	12/10/2004
Ni (Diss) (mg/L)	2.06	9/26/1996	0.08	12/15/2008
V (Diss) (mg/L)	0.432	9/3/1998	0.026	12/10/2004

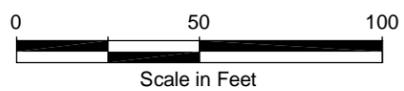
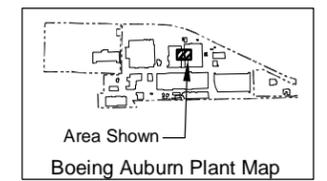
AGW046				
Constituent	Max	Max Date	Last	Last Date
As (Diss) (mg/L)	0.003	12/10/2004	0.003	12/10/2004
TCE (µg/L)	2.9	12/13/1996	1.8	3/19/1997
V (Diss) (mg/L)	0.004	12/10/2004	0.004	12/10/2004

AGW048				
Constituent	Max	Max Date	Last	Last Date
Cd (Diss) (mg/L)	0.01	9/26/1996	0.003	12/15/2008
Cr (Diss) (mg/L)	0.005	9/26/1996	ND	12/10/2004
Cu (Diss) (mg/L)	0.392	9/26/1996	0.01	12/10/2004
Ni (Diss) (mg/L)	0.03	9/26/1996	ND	12/15/2008
TCE (µg/L)	4.9	3/19/1997	4.9	3/19/1997
V (Diss) (mg/L)	0.003	6/16/2004	0.003	12/10/2004



**Notes**

1. ND = Compound Not Detected at Indicated Reporting Limit.
2. Shaded results reflect exceedance of screening criteria.



Base map source: Geomatrix 2003



Boeing Auburn Remedial Investigation Auburn, Washington	<b>AOC A-09 Groundwater Plan View</b>	Figure <b>M-21d</b>
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**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration

ND Compound Not Detected at Indicated Reporting Limit

Note: Shaded results reflect exceedance of screening criteria.

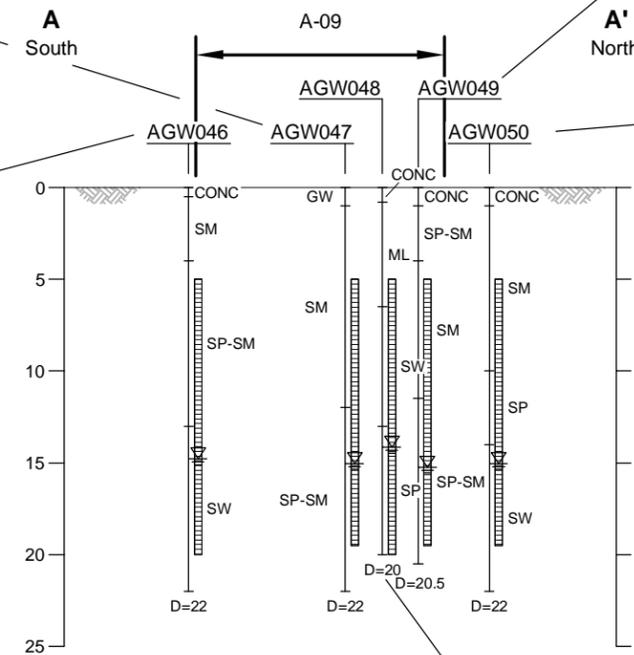
Constituent	Max	Max Date	Last	Last Date
As (Diss) (mg/L)	0.002	12/10/2004	0.002	12/10/2004
Cd (Diss) (mg/L)	0.008	9/10/1997	ND	12/10/2004
Cu (Diss) (mg/L)	0.012	9/26/1996	0.005	12/10/2004
Hex Chrome (Diss) (mg/L)	0.18	9/3/1998	ND	3/13/2000
TCE (µg/L)	3.3	12/13/1996	3.3	3/19/1997
V (Diss) (mg/L)	0.004	8/31/1999	0.004	12/10/2004

Constituent	Max	Max Date	Last	Last Date
As (Diss) (mg/L)	0.014	9/10/1997	0.003	12/10/2004
Cd (Diss) (mg/L)	10	12/14/2007	0.005	12/15/2008
Cr (Diss) (mg/L)	0.263	9/10/1997	0.007	12/10/2004
Cu (Diss) (mg/L)	28.3	9/10/1997	1.47	12/10/2004
Hex Chrome (Diss) (mg/L)	0.13	9/3/1998	ND	3/13/2000
Hg (Diss) (mg/L)	0.0036	9/10/1997	0.0002	12/10/2004
Ni (Diss) (mg/L)	2.06	9/26/1996	0.08	12/15/2008
V (Diss) (mg/L)	0.432	9/3/1998	0.026	12/10/2004

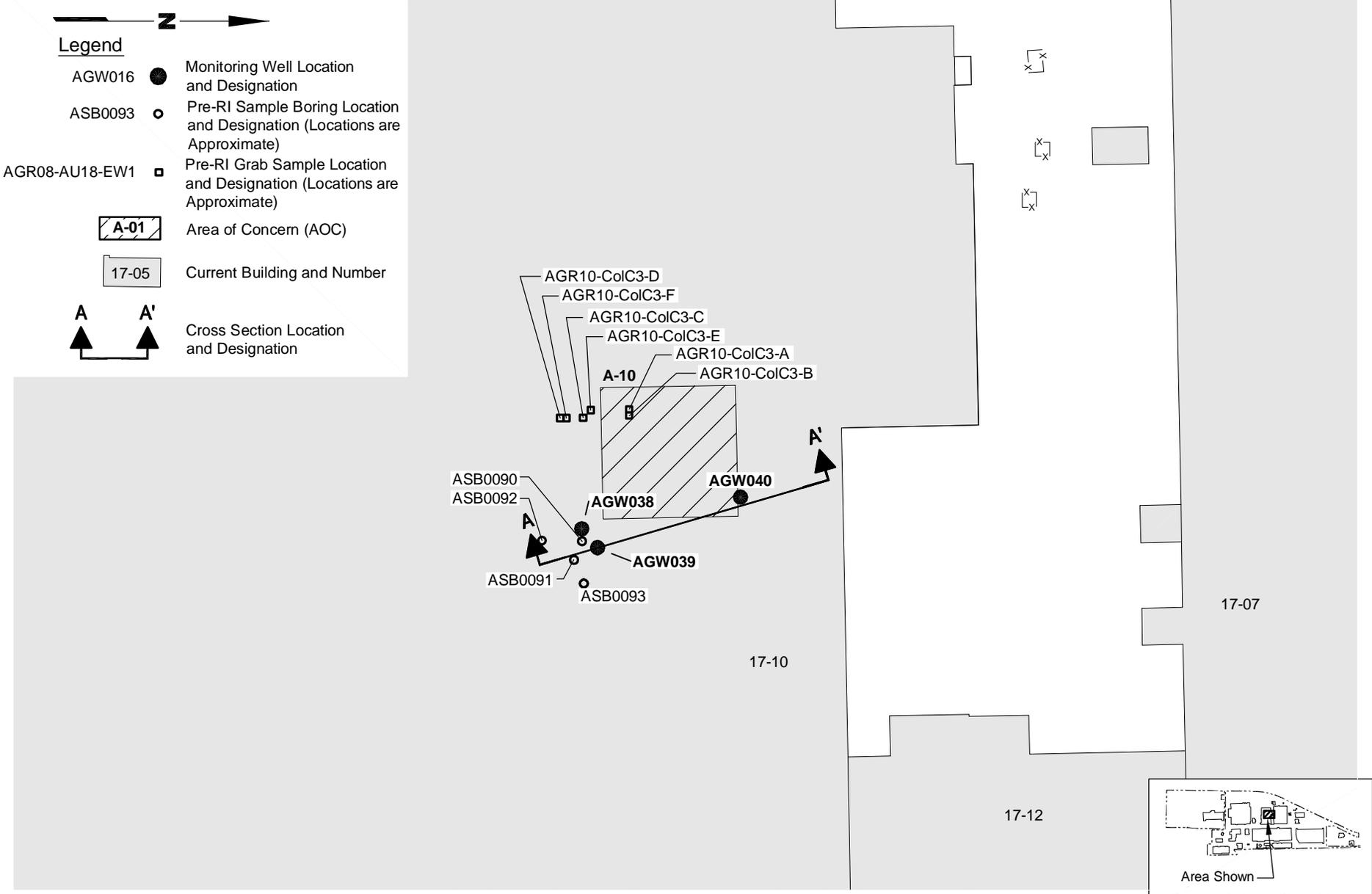
Constituent	Max	Max Date	Last	Last Date
As (Diss) (mg/L)	0.003	12/10/2004	0.003	12/10/2004
TCE (µg/L)	2.9	12/13/1996	1.8	3/19/1997
V (Diss) (mg/L)	0.004	12/10/2004	0.004	12/10/2004

Constituent	Max	Max Date	Last	Last Date
As (Diss) (mg/L)	0.001	12/10/2004	0.001	12/10/2004
Cd (Diss) (mg/L)	0.038	6/13/2006	0.008	12/15/2008
Cr (Diss) (mg/L)	0.009	6/16/2004	0.008	12/10/2004
Cu (Diss) (mg/L)	0.039	9/26/1996	0.021	12/10/2004
Ni (Diss) (mg/L)	0.14	9/26/1996	0.01	12/15/2008
TCE (µg/L)	3.2	3/19/1997	3.2	3/19/1997
V (Diss) (mg/L)	0.006	6/16/2004	0.006	12/10/2004

Constituent	Max	Max Date	Last	Last Date
Cd (Diss) (mg/L)	0.01	9/26/1996	0.003	12/15/2008
Cr (Diss) (mg/L)	0.005	9/26/1996	ND	12/10/2004
Cu (Diss) (mg/L)	0.392	9/26/1996	0.01	12/10/2004
Ni (Diss) (mg/L)	0.03	9/26/1996	ND	12/15/2008
TCE (µg/L)	4.9	3/19/1997	4.9	3/19/1997
V (Diss) (mg/L)	0.003	6/16/2004	0.003	12/10/2004



Boeing Remedial Investigation Report | V:\025164\050\055\DIR\Report\2009\FIG\_AOCs - GW\_SECTION.dwg (A) 7-10e- 4/9/2009



Base map source: Geomatrix 2003



Boeing Auburn  
Remedial Investigation  
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**AOC A-10**  
**Site and Exploration Plan**

Figure  
**M-22a**

**Notes**

- \* = Indicates that only one depth was sampled for the constituent at that location
- ND = Compound Not Detected at Indicated Reporting Limit
- Shaded results reflect exceedance of screening criteria.

**Legend**

- AGW016 ● Monitoring Well Location and Designation
- ASB0093 ○ Pre-RI Sample Boring Location and Designation (Locations are Approximate)
- AGR08-AU18-EW1 □ Pre-RI Grab Sample Location and Designation (Locations are Approximate)
- A-01 Area of Concern (AOC)
- 17-05 Current Building and Number
- A A' Cross Section Location and Designation

AGR10-C3D (9/14/2001)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Antimony (mg/kg)	6	1*	6	1*
Barium (mg/kg)	2100	1*	2100	1*
Diesel (mg/kg)	3400	1*	3400	1*
Motor Oil (mg/kg)	6100	1*	6100	1*

AGR10-C3E (9/14/2001)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Antimony (mg/kg)	6	1.6*	6	1.6*
Selenium (mg/kg)	7	1.6*	7	1.6*

AGR10-C3B (9/14/2001)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Antimony (mg/kg)	6	1.6*	6	1.6*

AGR10-C3F (9/14/2001)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Motor Oil (mg/kg)	2300	1.6*	2300	1.6*
Selenium (mg/kg)	6	1.6*	6	1.6*

AGR10-C3C (9/14/2001)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Antimony (mg/kg)	7	1*	7	1*
Selenium (mg/kg)	8	1*	8	1*

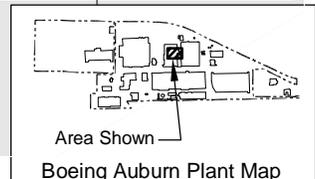
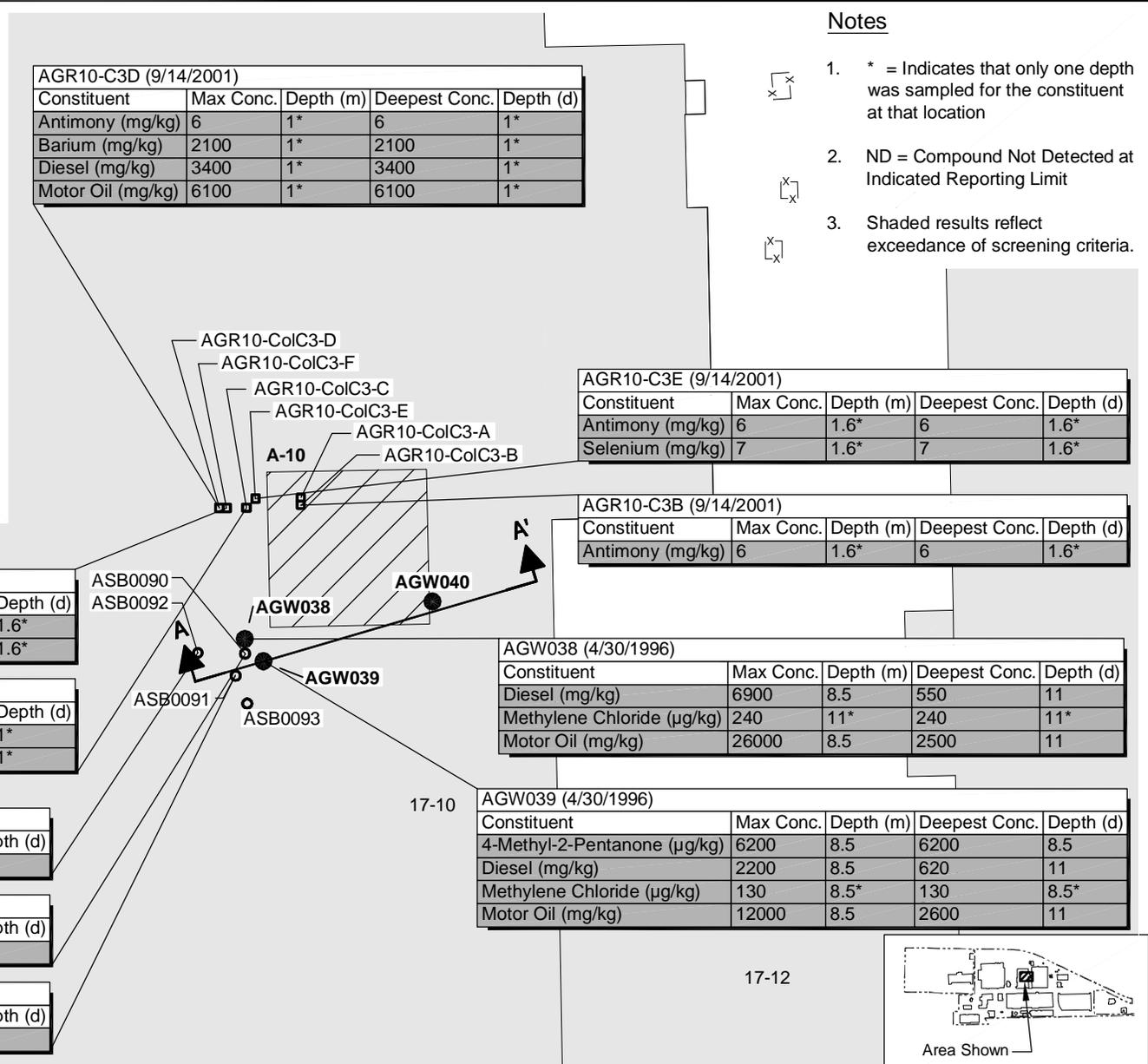
ASB0092 (3/1/2001)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
cPAHs (µg/kg)	460*	7.5	460*	7.5

ASB0090 (2/28/2001)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
cPAHs (µg/kg)	576	14	576	14

ASB0091 (2/28/2001)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
cPAHs (µg/kg)	271*	14	271*	14

AGW038 (4/30/1996)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Diesel (mg/kg)	6900	8.5	550	11
Methylene Chloride (µg/kg)	240	11*	240	11*
Motor Oil (mg/kg)	26000	8.5	2500	11

AGW039 (4/30/1996)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
4-Methyl-2-Pentanone (µg/kg)	6200	8.5	6200	8.5
Diesel (mg/kg)	2200	8.5	620	11
Methylene Chloride (µg/kg)	130	8.5*	130	8.5*
Motor Oil (mg/kg)	12000	8.5	2600	11



Base map source: Geomatrix 2003



**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration

\* Indicates that only one depth was sampled for the constituent at that location

ND Compound Not Detected at Indicated Reporting Limit

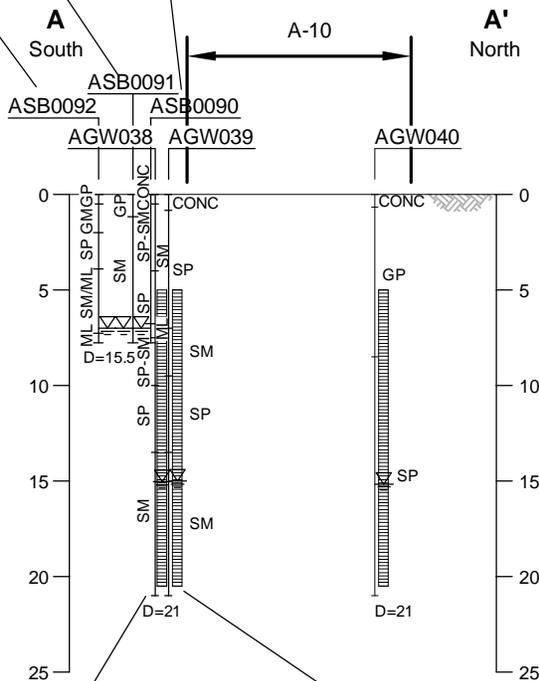
Note: Shaded results reflect exceedance of screening criteria.

Note: Shaded results reflect exceedance of screening criteria.

ASB0092 (3/1/2001)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
cPAHs (µg/kg)	460*	7.5	460*	7.5

ASB0091 (2/28/2001)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
cPAHs (µg/kg)	271*	14	271*	14

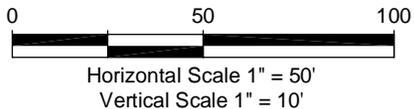
ASB0090 (2/28/2001)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
cPAHs (µg/kg)	576	14	576	14



AGW038 (4/30/1996)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
Diesel (mg/kg)	6900	8.5	550	11
Methylene Chloride (µg/kg)	240	11*	240	11*
Motor Oil (mg/kg)	26000	8.5	2500	11

AGW039 (4/30/1996)				
Constituent	Max Conc.	Depth (m)	Deepest Conc.	Depth (d)
4-Methyl-2-Pentanone (µg/kg)	6200	8.5	6200	8.5
Diesel (mg/kg)	2200	8.5	620	11
Methylene Chloride (µg/kg)	130	8.5*	130	8.5*
Motor Oil (mg/kg)	12000	8.5	2600	11

Note: Soil Boring ASB0093 has no detections, therefore not shown on this figure for clarity.



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**AOC A-10**  
**Soil Section A-A' View**

Figure  
**M-22c**



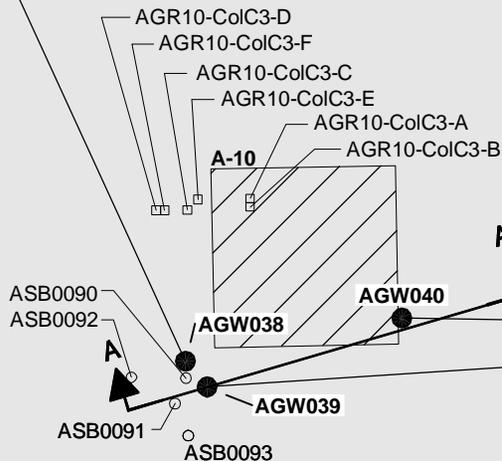
**Legend**

- AGW016 ● Monitoring Well Location and Designation
- ASB0093 ○ Pre-RI Sample Boring Location and Designation (Locations are Approximate)
- AGR08-AU18-EW1 □ Pre-RI Grab Sample Location and Designation (Locations are Approximate)
- A-01 Area of Concern (AOC)
- 17-05 Current Building and Number
- A A' Cross Section Location and Designation

AGW038				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE (µg/L)	0.048	12/12/2004	0.053	12/15/2008
As (Diss) (mg/L)	0.024	9/10/1997	0.003	3/13/2000
Diesel (mg/L)	9.6	5/3/1996	ND	12/12/2004
Motor Oil (mg/L)	35	5/3/1996	ND	12/12/2004
TCE (µg/L)	2.8	2/22/1999	1.0	12/15/2008
VC (µg/L)	0.034	6/15/2004	0.02	12/15/2008

AGW040				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE (µg/L)	0.049	6/15/2004	ND	12/15/2008
As (Diss) (mg/L)	0.003	5/3/1996	0.003	5/3/1996
TCE (µg/L)	4	12/13/1996	2.3	12/15/2008
VC (µg/L)	0.34	12/15/2008	0.34	12/15/2008

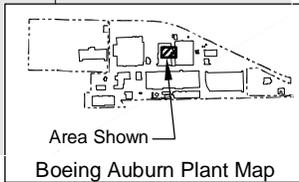
AGW039				
Constituent	Max	Max Date	Last	Last Date
1,1-DCE (µg/L)	0.11	12/15/2008	0.11	12/15/2008
As (Diss) (mg/L)	0.004	5/3/1996	0.004	5/3/1996
Diesel (mg/L)	0.56	5/3/1996	0.73	12/15/2004
Motor Oil (mg/L)	2	6/15/2004	2.3	12/15/2004
TCE (µg/L)	2	12/13/1996	1.3	12/15/2008
VC (µg/L)	0.047	12/15/2008	0.047	12/15/2008



**Notes**

1. ND = Compound Not Detected at Indicated Reporting Limit.
2. Shaded results reflect exceedance of screening criteria.

Base map source: Geomatrix 2003



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**AOC A-10  
Groundwater Plan View**

Figure  
**M-22d**

**Legend**

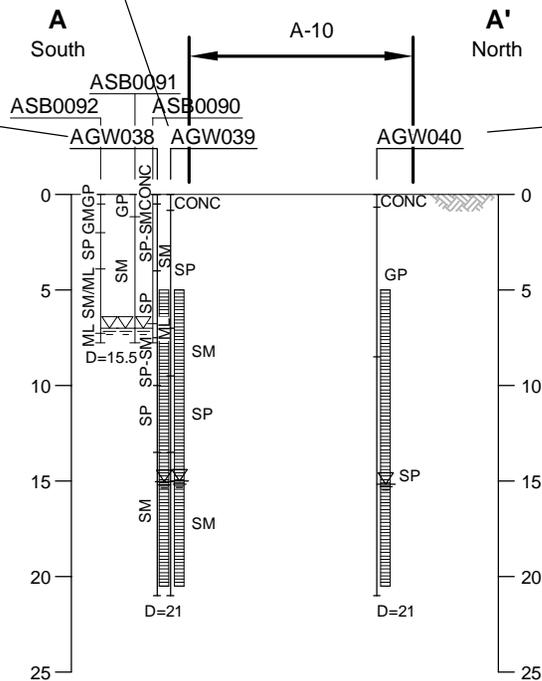
- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration
- ND — Compound Not Detected at Indicated Reporting Limit

Note: Shaded results reflect exceedance of screening criteria.

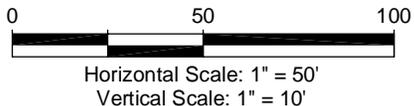
AGW038	Constituent	Max	Max Date	Last	Last Date
	1,1-DCE (µg/L)	0.048	12/12/2004	0.053	12/15/2008
	As (Diss) (mg/L)	0.024	9/10/1997	0.003	3/13/2000
	Diesel (mg/L)	9.6	5/3/1996	ND	12/12/2004
	Motor Oil (mg/L)	35	5/3/1996	ND	12/12/2004
	TCE (µg/L)	2.8	2/22/1999	1.0	12/15/2008
	VC (µg/L)	0.034	6/15/2004	0.02	12/15/2008

AGW039	Constituent	Max	Max Date	Last	Last Date
	1,1-DCE (µg/L)	0.11	12/15/2008	0.11	12/15/2008
	As (Diss) (mg/L)	0.004	5/3/1996	0.004	5/3/1996
	Diesel (mg/L)	0.56	5/3/1996	0.73	12/15/2004
	Motor Oil (mg/L)	2	6/15/2004	2.3	12/15/2004
	TCE (µg/L)	2	12/13/1996	1.3	12/15/2008
	VC (µg/L)	0.047	12/15/2008	0.047	12/15/2008

AGW040	Constituent	Max	Max Date	Last	Last Date
	1,1-DCE (µg/L)	0.049	6/15/2004	ND	12/15/2008
	As (Diss) (mg/L)	0.003	5/3/1996	0.003	5/3/1996
	TCE (µg/L)	4	12/13/1996	2.3	12/15/2008
	VC (µg/L)	0.34	12/15/2008	0.34	12/15/2008



Note: Soil Boring ASB0093 has no detections, therefore not shown on this figure for clarity.



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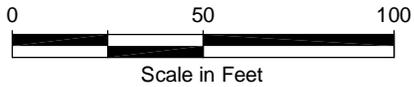
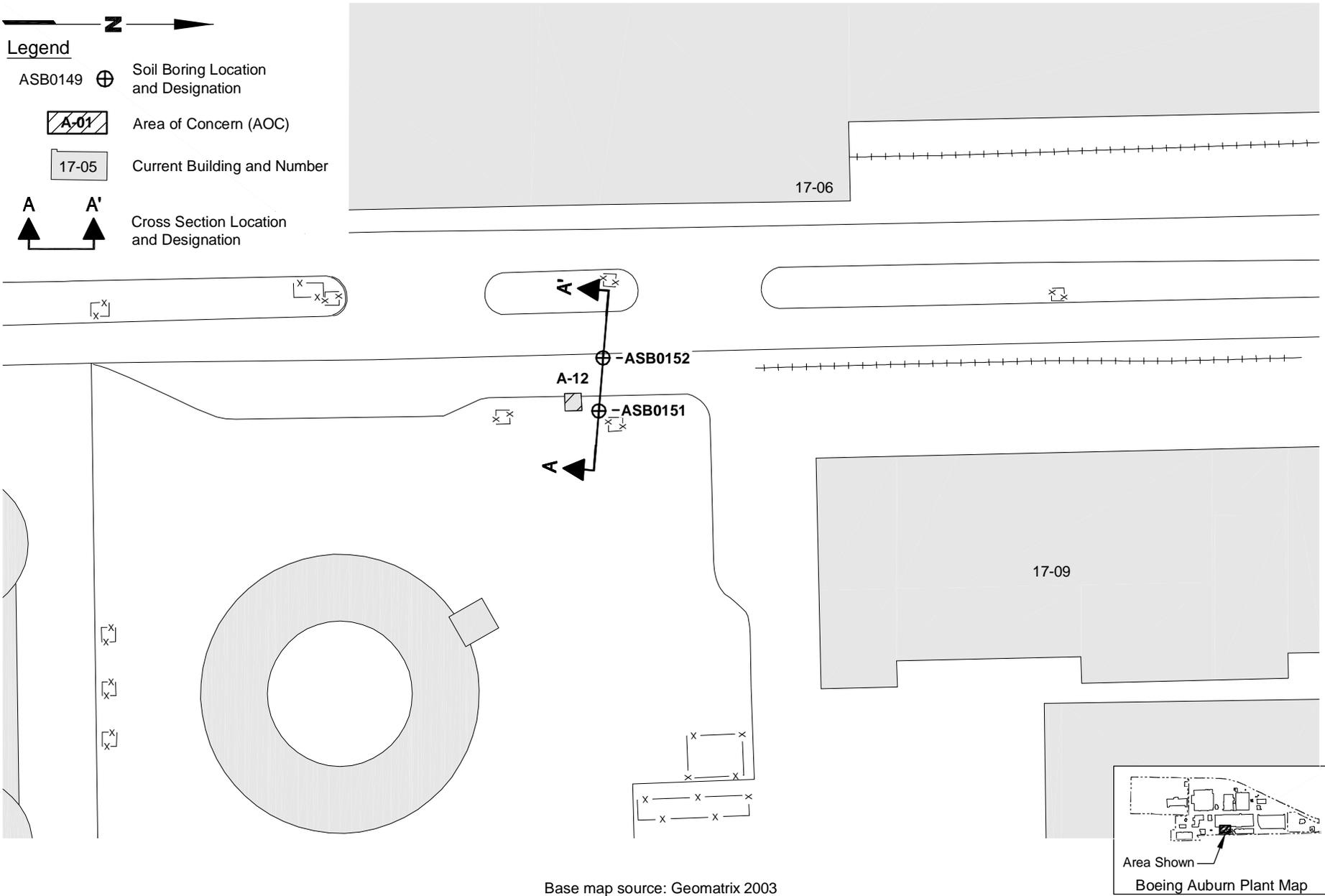
**AOC A-10**  
**Groundwater Section A-A' View**

Figure  
**M-22e**



**Legend**

- ASB0149 ⊕ Soil Boring Location and Designation
-  Area of Concern (AOC)
-  Current Building and Number
-  Cross Section Location and Designation



Base map source: Geomatrix 2003

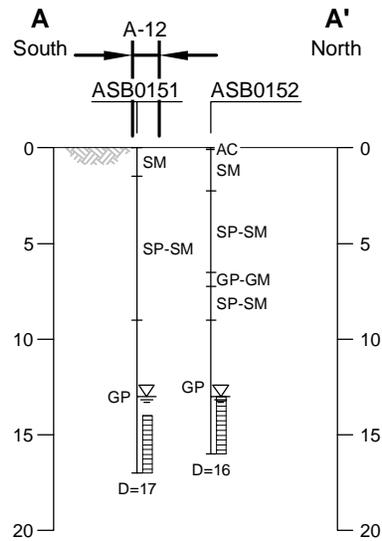
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Remedial Investigation  
Auburn, Washington

**AOC A-12**  
**Site and Exploration Plan**

Figure  
**M-23a**

**Legend**

- AGW079 — Exploration Designation
- Top of Exploration
- Water Level (August 2004)
- Water Level (ATD)
- SM — Unified Soil Classification Symbol
- Screen Interval / Sampling Interval
- D=20.5 — Depth of Exploration



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**AOC A-12  
Section A-A' View**

Figure  
**M-23b**