APPENDIX A

Conceptual Long-Term AOC A-14 Monitoring Plan

Technical Memorandum

TO:	Li Ma, Washington State Department of Ecology
CC:	Deborah Taege, The Boeing Company James Swortz, The Boeing Company
FROM:	Sarah Fees, LG
DATE:	November 10, 2021
RE:	**AOC A-14: Conceptual Long-term Groundwater Monitoring Plan** **Boeing Auburn Facility** **Auburn, Washington** **Project No. 0025164.180.301**

Introduction

Landau Associates, Inc. (LAI) has prepared this technical memorandum, which presents the plan for the Site-wide groundwater monitoring program for monitored natural attenuation (MNA) cleanup of volatile organic compounds (VOCs) associated with previous releases from The Boeing Company's (Boeing's) Auburn Facility.[1] This monitoring plan will specifically address monitoring of the MNA remedy for Area of Concern (AOC) A-14 and does not address monitoring of other cleanup actions at the Boeing Auburn Site[2] (Site). The Boeing Auburn Plant is located at 700 15th Street Southwest, Auburn, Washington (State Dangerous Waste Identification [ID] Number WAD041337130). The Site is undergoing Resource Conservation and Recovery Act (RCRA) corrective action as required by Agreed Order Number 01HWTRNR-3345 (Agreed Order).[3]

The conceptual cleanup action for Site-wide trichloroethene (TCE) and vinyl chloride (VC) in groundwater (AOC A-14) was agreed upon by the Washington State Department of Ecology (Ecology) and Boeing as part of its Feasibility Study and Supplemental Feasibility Study. The cleanup action will consist of MNA throughout the Site and enhanced *in situ* bioremediation (EISB) in the northern residential area of Algona (Algona Focus Area). The conceptual cleanup action for AOC A-14 is shown on Figure 1. The cleanup action will be described in the Cleanup Action Plan (CAP) and will include groundwater sampling to monitor the effectiveness of the cleanup remedies.

Boeing is presenting this conceptual Long-term Groundwater Monitoring Plan to build consensus with Ecology on the groundwater monitoring plan requirements for AOC A-14 in an effort to expedite remedy implementation upon completion of the CAP. A final compliance monitoring plan will be submitted to Ecology following the completion of the CAP.

[1] The Facility includes the current boundaries of the Boeing Auburn Plant and the adjacent Prologis property, as defined in the Agreed Order.

[2] The Site includes the Facility and all contiguous property affected by releases of hazardous substances that are confirmed or suspected to have originated at the Facility.

[3] The agreed order was originally dated May 15, 2002 (Ecology 2002), and first amended on April 7, 2006 (Ecology 2006) and second amended on November 1, 2018 (Ecology 2018).

Cleanup Standards

Ecology required cleanup levels developed for TCE and VC at the Site to use surface water quality standards (SWQS) as groundwater cleanup levels. In its September 14, 2021 letter (Ecology 2021), Ecology determined that cleanup levels identified as SWQS for VOCs in groundwater shall be met at a conditional point of compliance (CPOC) for the Site, specifically the Facility boundary. An environmental covenant will be placed on the affected Facility parcels upgradient of the CPOC to restrict groundwater use for drinking water. The proposed location for the CPOC is shown on Figure 1.

Groundwater Monitoring Plan Outline

An outline of the general plan for selection of groundwater monitoring locations and the rationale for changes over time as monitoring progresses are described below. Monitoring frequency will be adjusted in the future based on data and with Ecology's concurrence. SWQS have been identified as the overall groundwater CULs for the area downgradient of the CPOC; however, drinking water quality standards (DWQS) or other project milestones will be used to adjust monitoring frequency as remediation progresses.

- Facility monitoring:
    - Select locations on the Facility will be monitored for VOCs every 5 years.
    - Select locations along the Facility CPOC boundary will be monitored for VOCs every 2 years.
- The following general rules apply for groundwater monitoring downgradient of the CPOC:
    - Annual groundwater monitoring will occur in the Algona focus area. This monitoring will be used to supplement the monitoring conducted as part of the EISB injection activities, which will be described in the engineering design report (EDR).
    - Select locations with concentrations greater than DWQS and selected boundary locations would be monitored annually.
    - Select locations with exceedances of SWQS would be monitored every 5 years.
    - MNA parameters would be monitored at select wells every 5 years (except where monitored more frequently in the Algona area as part of the Algona focus area EISB).
    - Once a monitoring location reaches CULs (SWQS) it would be removed from the monitoring program (unless identified as a boundary well).
- Once concentrations decrease below DWQS at all wells monitored downgradient of the CPOC, monitoring and reporting would be reduced to every 5 years.

Groundwater Monitoring Plan

The proposed groundwater monitoring plan is described below. Table 1 provides the proposed sampling matrix for VOCs and MNA parameters. Monitoring locations were selected based on discussions with Ecology, concentrations of TCE and VC, and to provide spatial representation throughout at the Site. The

planned monitoring locations are shown on Figure 2. The planned locations are also included on plume concentration contours on Figures 3 through 8.

City of Pacific Sentry Wells

Two monitoring wells are selected for continued monitoring as sentry wells for the City of Pacific well field. AGW074 and AGW091, located between the well field and the Facility, will be monitored annually to verify that VOC concentrations remain below laboratory reporting limits. There have been no detections of VOCs (tetrachloroethene, TCE, cis-1,2-dichloroethene, and VC) at any of the City of Pacific sentry wells during the last 16 years of monitoring.

Facility Monitoring Wells

Eight wells at the Facility related to the former release areas will be monitored every 5 years. Facility monitoring wells include AGW037, AGW155, AGW201-2, AGW201-5, and AGW201-6 near Building 17-07 (former Western Plume release area) and AGW125, AGW126, and AGW283-1 near the Prologis building (former Area 1 plume release area). Seven of the wells will also be monitored for MNA parameters every 5 years.

CPOC Boundary Monitoring Wells

Per Ecology's request, six monitoring wells along the CPOC boundary will be monitored every 2 years. As indicated during discussions between Boeing and Ecology, if the concentrations in these wells continue to decrease over time, monitoring frequency will be decreased to every 5 years consistent with the other Facility monitoring wells. CPOC boundary monitoring wells include AGW032, AGW035, AGW064, AGW105R, AGW135, and AGW150.

Downgradient Monitoring Wells

Select locations downgradient of the Facility where concentrations are greater than DWQS will be monitored annually until concentrations reach DWQS. Once DWQS are reached, monitoring frequency will be adjusted to every 5 years. Select locations that exceed SWQS will be monitored every 5 years until concentrations meet SWQS. Once SWQS are met, the well will be removed from the monitoring network.

- Twelve monitoring wells that are currently greater than DWQS will be monitored annually. Nine of these wells will also be monitored for MNA parameters every 5 years.
- Seventeen monitoring wells that currently exceed SWQS will be monitored every 5 years. Five of these wells will also be monitored for MNA parameters every 5 years.

Algona Monitoring Wells

Select wells will be monitored more frequently as part of the EISB remedy, to be determined as part of the EDR. However, monitoring wells in the Algona Focus area will initially be monitored on an annual basis to provide additional data to supplement the EISB treatment. Twenty wells will be monitored annually during the EISB injection activities with monitoring to include both VOCs and MNA parameters. The sampling at

these Algona monitoring wells may be adjusted depending on the EISB injection and monitoring design. Annual monitoring will be discontinued after completion of EISB injection activities.

Boundary Locations

Monitoring wells and surface water, stormwater, and pore water boundary locations have been identified for monitoring the downgradient extents of the plumes. These boundary locations may change over time as the VOC-impacted area shrinks. Boundary monitoring locations include:

- Thirteen monitoring wells;
- Five stormwater/surface water locations; and
- Two pore water locations.

Six of the 13 monitoring wells will also be monitored for MNA parameters every five years.

Conclusions and Next Steps

The proposed monitoring plan will maintain sufficient data quality to allow for continued monitoring of the VOC-impacted groundwater over time. This plan outlines general monitoring activities and steps for modifications as appropriate. A final compliance monitoring plan will be submitted after finalization of the CAP. Any future modifications to the plan will be discussed with and approved by Ecology.

Use of This Technical Memorandum

This Technical Memorandum has been prepared for the exclusive use of The Boeing Company and Washington State Department of Ecology for specific application to the Boeing Auburn Facility. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of Landau Associates. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Landau Associates, shall be at the user's sole risk. Landau Associates warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. LAI makes no other warranty, either express or implied.

LANDAU ASSOCIATES, INC.

Sarah Fees

Sarah Fees, LG
Associate Geologist

SEF/KMG/kjg
[Y:\025\164\R\DCAP\MONITORING PLAN\SITE-WIDE GROUNDWATER MONITORING PLAN_NOV2021.DOCX]

References

Ecology. 2002. Agreed Order No. 01HWTRNR-3345. Washington State Department of Ecology. August 14.

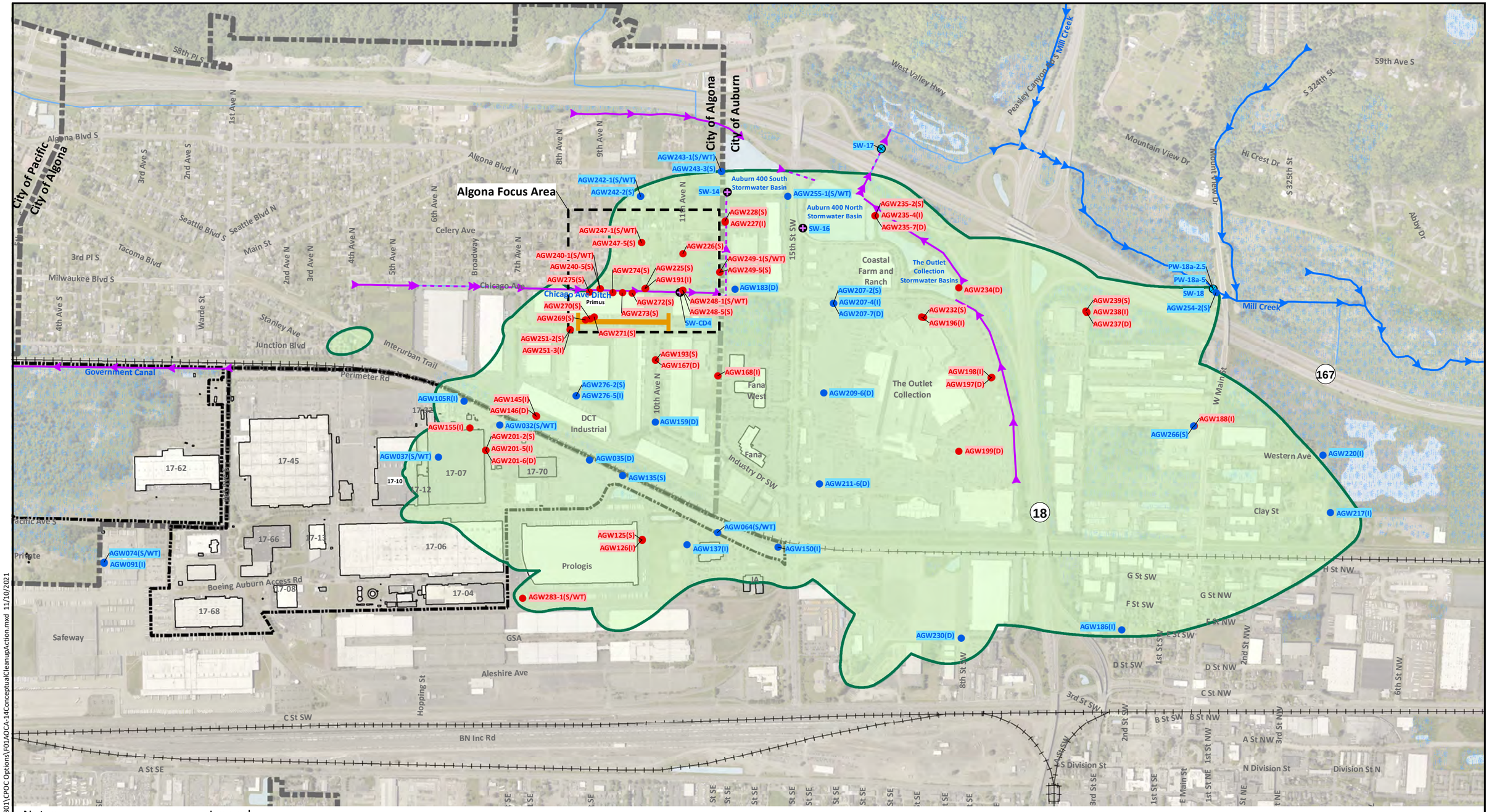
Ecology. 2006. First Amended Agreed Order No. 01HWTRNR-3345; In the Matter of Remedial Action by: The Boeing Company and AMB Property Corporation, to The Potentially Liable Parties. State of Washington Department of Ecology. April 7.

Ecology. 2018. Second Amended Agreed Order No. 01HWTRNR-3345. In the Matter of Remedial Action by The Boeing Company and Prologis to The Potentially Liable Person(s). Washington State Department of Ecology. November 1.

Ecology. 2021. Letter: Conditional Point of Compliance Request; Boeing Auburn Facility; Agreed Order No. 01HWTRNR-3345. From Li Ma, to The Boeing Company. September 14.

Attachments

Figure 1: AOC A-14: Conceptual Cleanup Action (MNA and Algona Focus Area EISB)
Figure 2: AOC A-14: Proposed Monitoring Plan – VOC Sampling Frequency
Figure 3: AOC A-14: Shallow Zone Trichloroethene Concentrations June 2021
Figure 4: AOC A-14: Shallow Zone Vinyl Chloride Concentrations June 2021
Figure 5: AOC A-14: Intermediate Zone Trichloroethene Concentrations June 2021
Figure 6: AOC A-14: Intermediate Zone Vinyl Chloride Concentrations June 2021
Figure 7: AOC A-14: Deep Zone TCE Concentrations June 2021
Figure 8: AOC A-14: Deep Zone Vinyl Chloride Concentrations June 2021
Table 1: AOC A-14 Sampling Matrix



Notes

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

Legend

- Monitoring Well Proposed for Long-Term VOC Monitoring
- Monitoring Well Proposed for Long-Term VOC and MNA Paramater Monitoring
- Stormwater Sample Location Proposed for Long-Term VOC Monitoring
- Surface Water Sample Location Proposed for Long-Term VOC Monitoring
- TCE/VC Plume Extent - June 2021
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- Open Surface Water Waterway
- Open Stormwater Waterway
- Piped Surface Water Waterway
- Piped Stormwater Waterway
- Algona Focus Area Conceptual Enhanced In Situ Bioremediation (EISB) Injection Row

0 1,000 2,000

Scale in Feet

N

Data Source: King County GIS.

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Boeing Auburn Cleanup Action Plan Auburn, Washington	**AOC A-14: Conceptual Cleanup Action (Monitored Natural Attenuation and Algona Focus Area EISB)**	Figure 1

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Notes

1. For monitoring well locations, June 2021 data are used. For pore water, stormwater feature, and surface water feature locations, September 2021 data are used.
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Exceedance of SWQS (TCE>0.38 µg/L and/or (VC>0.20 µg/L)
- Greater than DWQS (TCE>4 µg/L and/or VC>0.29 µg/L)
- No Exceedance
- Ongoing Stormwater Sample Location
- Ongoing Surface Water Sample Location

- Facility Boundary
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- Facility Boundary Conditional Point of Compliance
- AGWXXX City of Pacific Sentry/Plume Boundary Location (Annual Monitoring)
- AGWXXX Annual Monitoring (Currently Greater than DWQS)
- AGWXXX Every 5 Year Monitoring (Currently Exceeds SWQS)
- AGWXXX Algona EISB Wells (Initially Annual Monitoring)
- AGWXXX CPOC Boundary Well (Every 2 Year Monitoring)
- AGWXXX Facility Well (Every 5 Year Monitoring)

0 1,000 2,000

Scale in Feet

Data Source: King County GIS.

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Boeing Auburn Cleanup Action Plan Auburn, Washington	**AOC A-14 Proposed Monitoring Plan - VOC Sampling Frequency**	Figure 2

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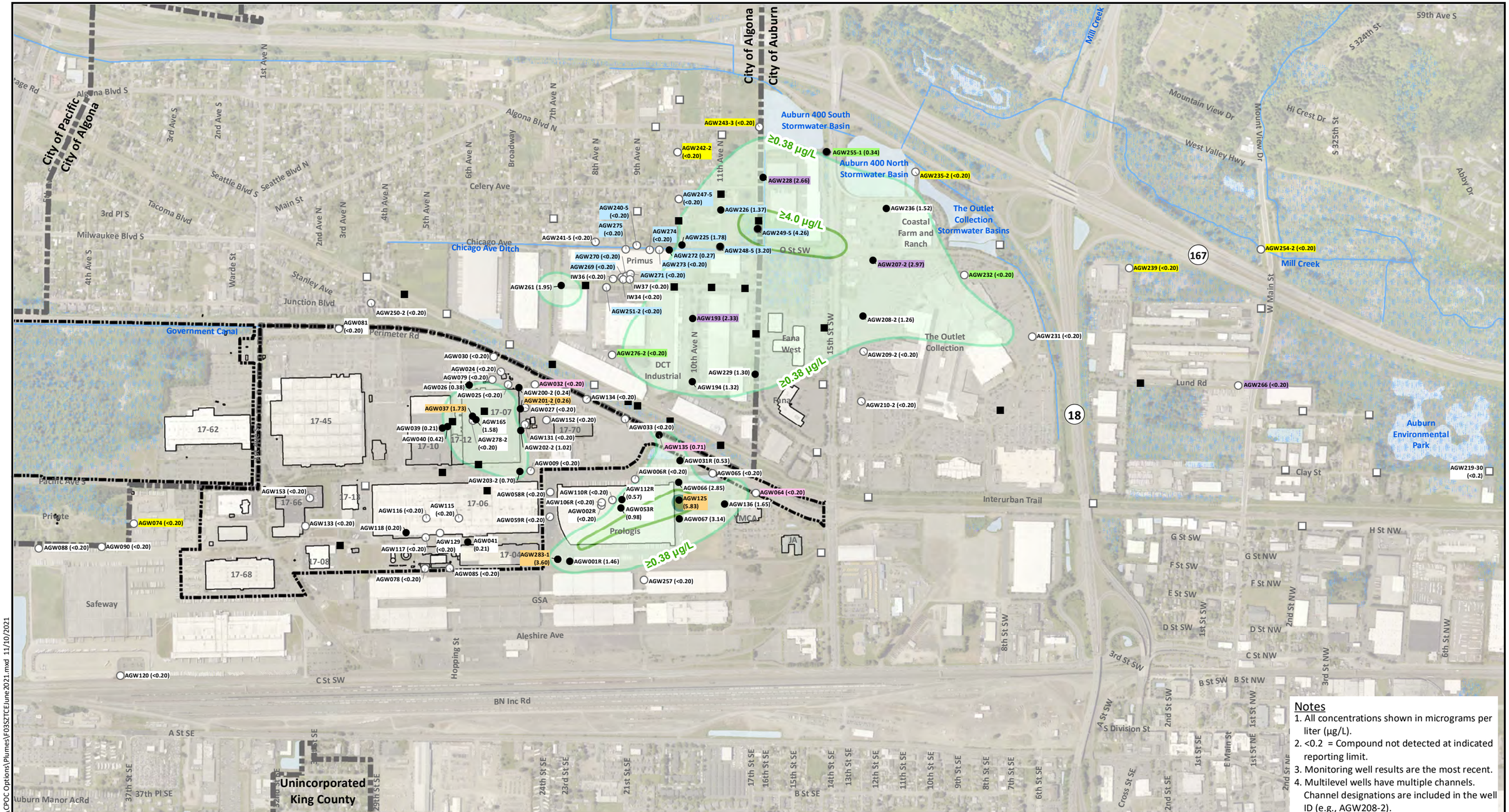

Notes

1. All concentrations shown in micrograms per liter (µg/L).
2. <0.2 = Compound not detected at indicated reporting limit.
3. Monitoring well results are the most recent.
4. Multilevel wells have multiple channels. Channel designations are included in the well ID (e.g., AGW208-2).
5. Wells with no results shown are no longer sampled.
6. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Monitoring Well Location
- Historical Borehole Grab Sample Location
- Non-Detect
- TCE Contour (≥5.0 µg/L)
- TCE Contour (≥4.0 µg/L)
- TCE Contour (≥0.38 µg/L)
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- AGWXXX City of Pacific Sentry/Plume Boundary Location (Annual Monitoring)
- AGWXXX Annual Monitoring (Currently Greater than DWQS)
- AGWXXX Every 5 Year Monitoring (Currently Exceeds SWQS)
- AGWXXX Algona EISB Wells (Initially Annual Monitoring)
- AGWXXX CPOC Boundary Well (Every 2 Year Monitoring)
- AGWXXX Facility Well (Every 5 Year Monitoring)

0 1,000 2,000
Scale in Feet

N

Data Source: King County.

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Auburn, Washington

AOC A-14: Shallow Zone Trichloroethene Concentrations June 2021

Figure 3

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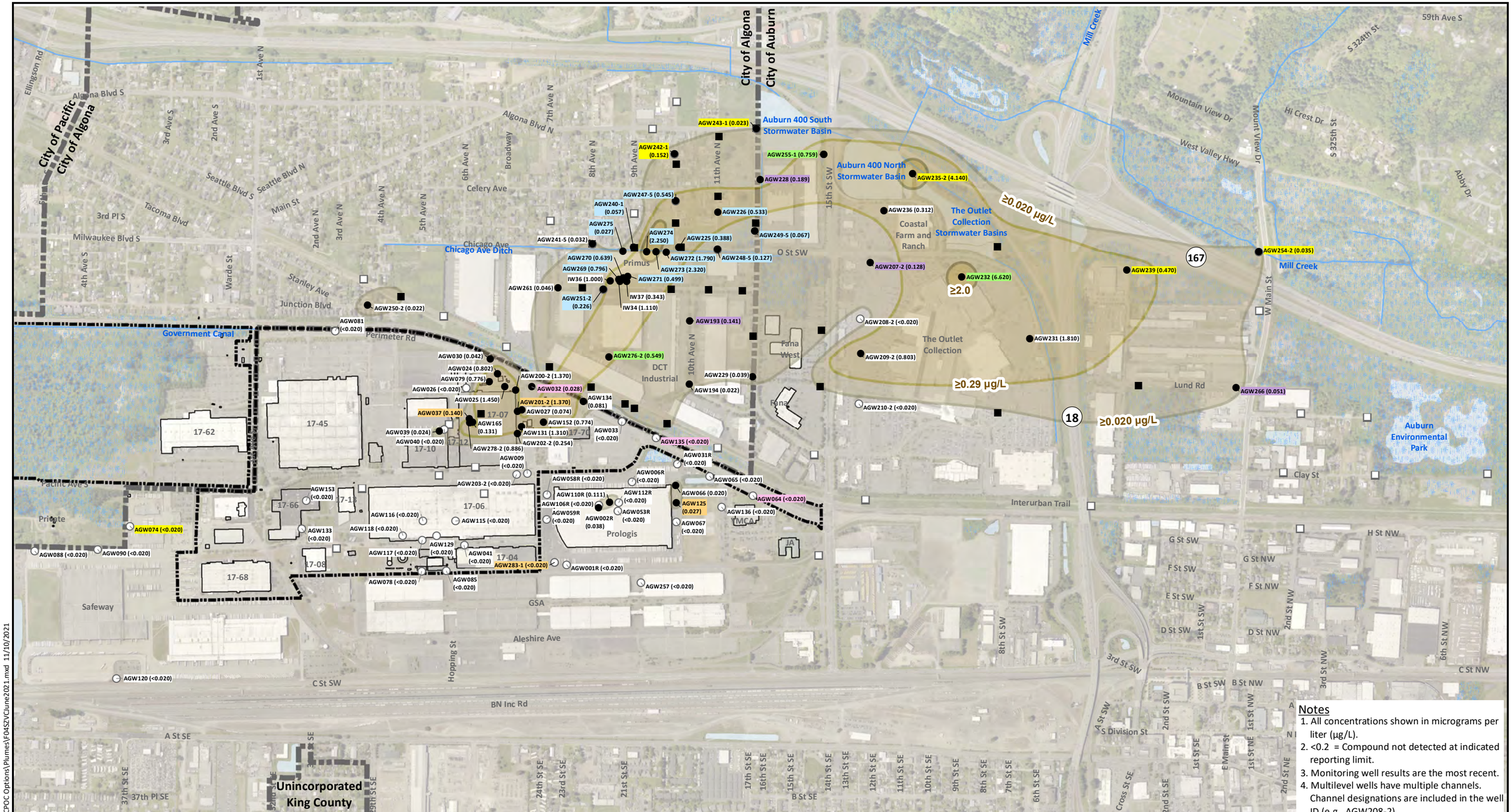

Legend

- Monitoring Well Location
- Historical Borehole Grab Sample Location
- Non-Detect
- Vinyl Chloride Contour (≥2.0 µg/L)
- Vinyl Chloride Contour (≥0.29 µg/L)
- Vinyl Chloride Contour (≥0.020 µg/L)
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- AGWXXX City of Pacific Sentry/Plume Boundary Location (Annual Monitoring)
- AGWXXX Annual Monitoring (Currently Greater than DWQS)
- AGWXXX Every 5 Year Monitoring (Currently Exceeds SWQS)
- AGWXXX Algona EISB Wells (Initially Annual Monitoring)
- AGWXXX CPOC Boundary Well (Every 2 Year Monitoring)
- AGWXXX Facility Well (Every 5 Year Monitoring)

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0 1,000 2,000

Scale in Feet

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AOC A-14: Shallow Zone
Vinyl Chloride Concentrations
June 2021

Figure
4

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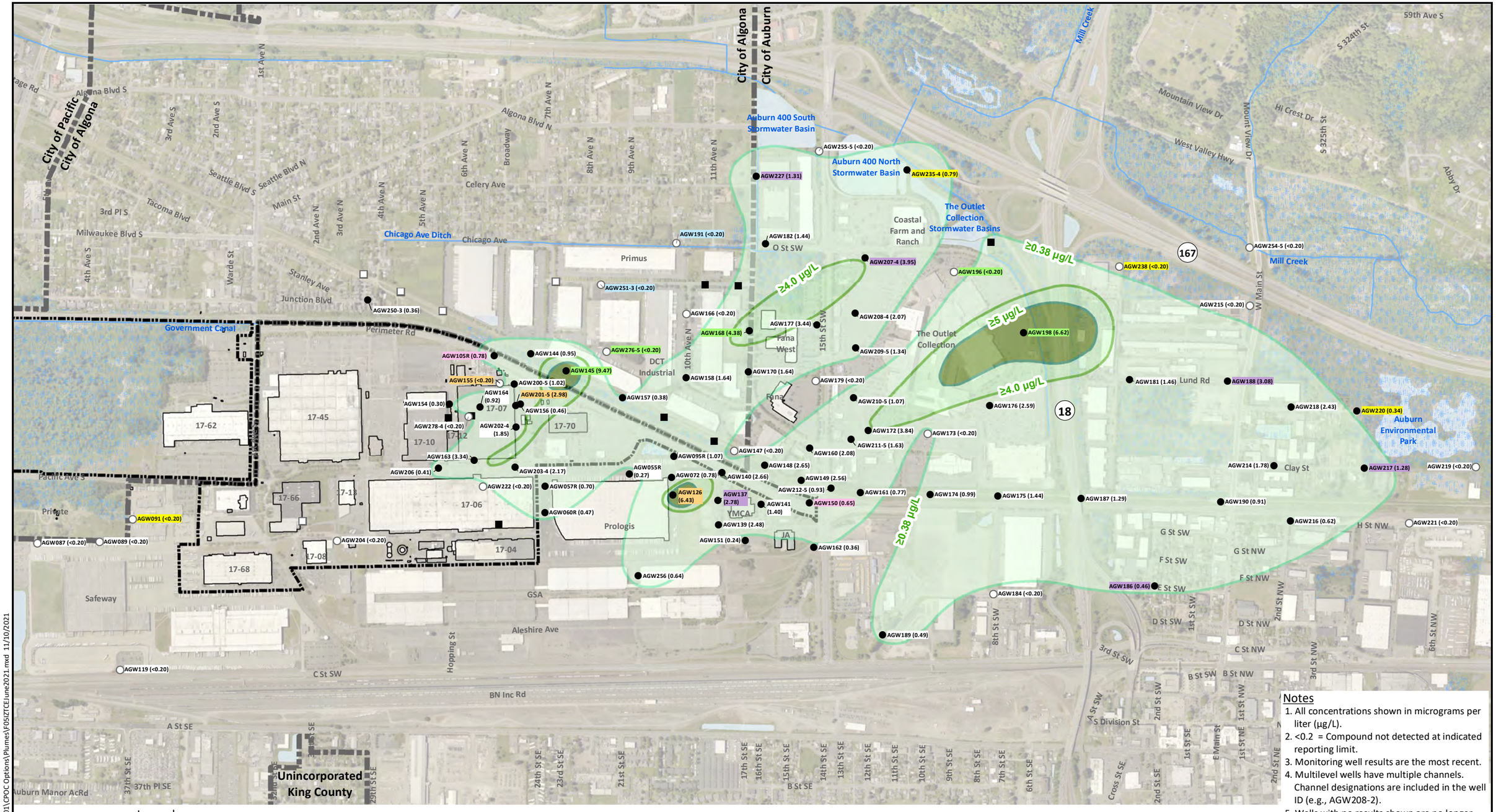

Legend

- Monitoring Well Location
- Historical Borehole Grab Sample Location
- Non-Detect
- TCE Contour (≥5.0 µg/L)
- TCE Contour (≥4.0 µg/L)
- TCE Contour (≥0.38 µg/L)
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- AGWXXX City of Pacific Sentry/Plume Boundary Location (Annual Monitoring)
- AGWXXX Annual Monitoring (Currently Greater than DWQS)
- AGWXXX Every 5 Year Monitoring (Currently Exceeds SWQS)
- AGWXXX Algona EISB Wells (Initially Annual Monitoring)
- AGWXXX CPOC Boundary Well (Every 2 Year Monitoring)
- AGWXXX Facility Well (Every 5 Year Monitoring)

N

0 1,000 2,000
Scale in Feet

Data Source: King County GIS.

Notes

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4. Multilevel wells have multiple channels. Channel designations are included in the well ID (e.g., AGW208-2).
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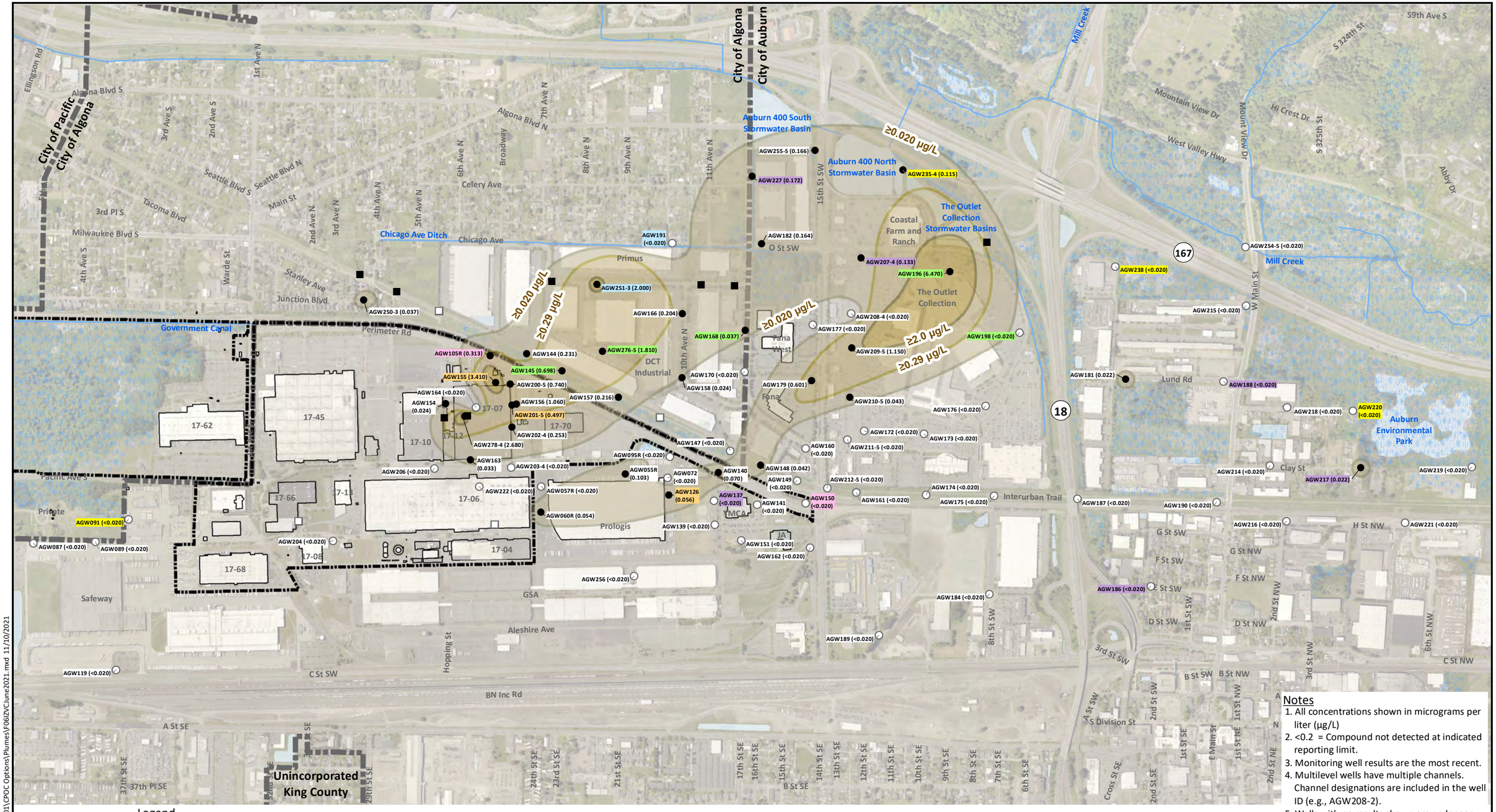
AOC A-14: Intermediate Zone Trichloroethene Concentrations June 2021

Figure 5



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5. Wells with no results shown are no longer sampled.
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Legend

- Monitoring Well Location
- Historical Borehole Grab Sample Location
- Non-Detect
- Vinyl Chloride Contour (≥2.0 µg/L)
- Vinyl Chloride Contour (≥0.29 µg/L)
- Vinyl Chloride Contour (≥0.020 µg/L)
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- AGWXXX City of Pacific Sentry/Plume Boundary Location (Annual Monitoring)
- AGWXXX Annual Monitoring (Currently Greater than DWQS)
- AGWXXX Every 5 Year Monitoring (Currently Exceeds SWQS)
- AGWXXX Algona EISB Wells (Initially Annual Monitoring)
- AGWXXX CPOC Boundary Well (Every 2 Year Monitoring)
- AGWXXX Facility Well (Every 5 Year Monitoring)

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Scale in Feet

Data Source: King County GIS.

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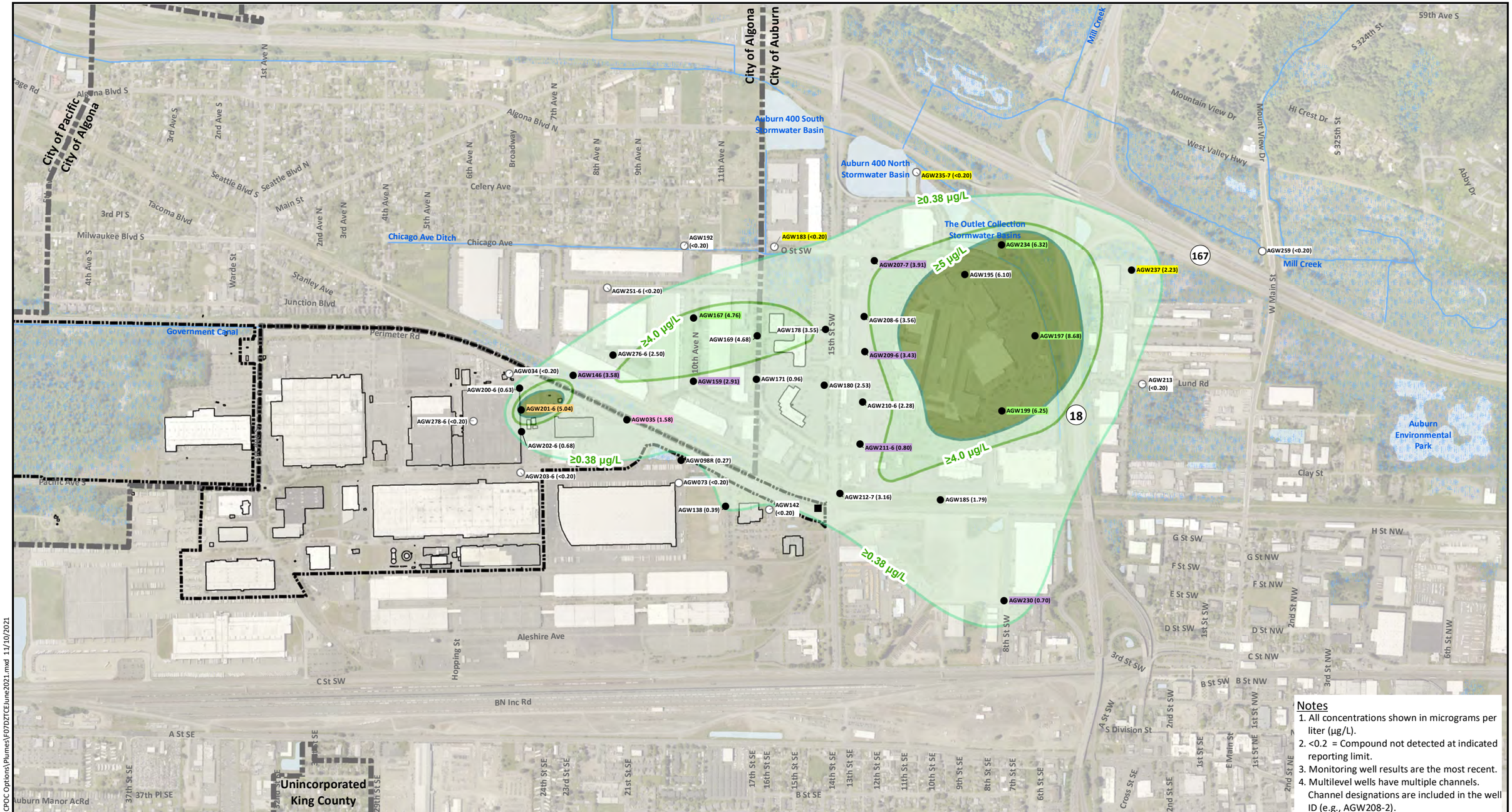
Boeing Auburn Cleanup Action Plan Auburn, Washington	**AOC A-14: Intermediate Zone Vinyl Chloride Concentrations June 2021**	Figure 6



Legend

- Monitoring Well Location
- Historical Borehole Grab Sample Location
- Non-Detect
- TCE Contour (≥5.0 µg/L)
- TCE Contour (≥4.0 µg/L)
- TCE Contour (≥0.38 µg/L)
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- AGWXXX City of Pacific Sentry/Plume Boundary Location (Annual Monitoring)
- AGWXXX Annual Monitoring (Currently Greater than DWQS)
- AGWXXX Every 5 Year Monitoring (Currently Exceeds SWQS)
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- AGWXXX CPOC Boundary Well (Every 2 Year Monitoring)
- AGWXXX Facility Well (Every 5 Year Monitoring)

N

0 1,000 2,000

Scale in Feet

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Cleanup Action Plan
Auburn, Washington

AOC A-14: Deep Zone
Trichloroethene Concentrations
June 2021

Figure
7

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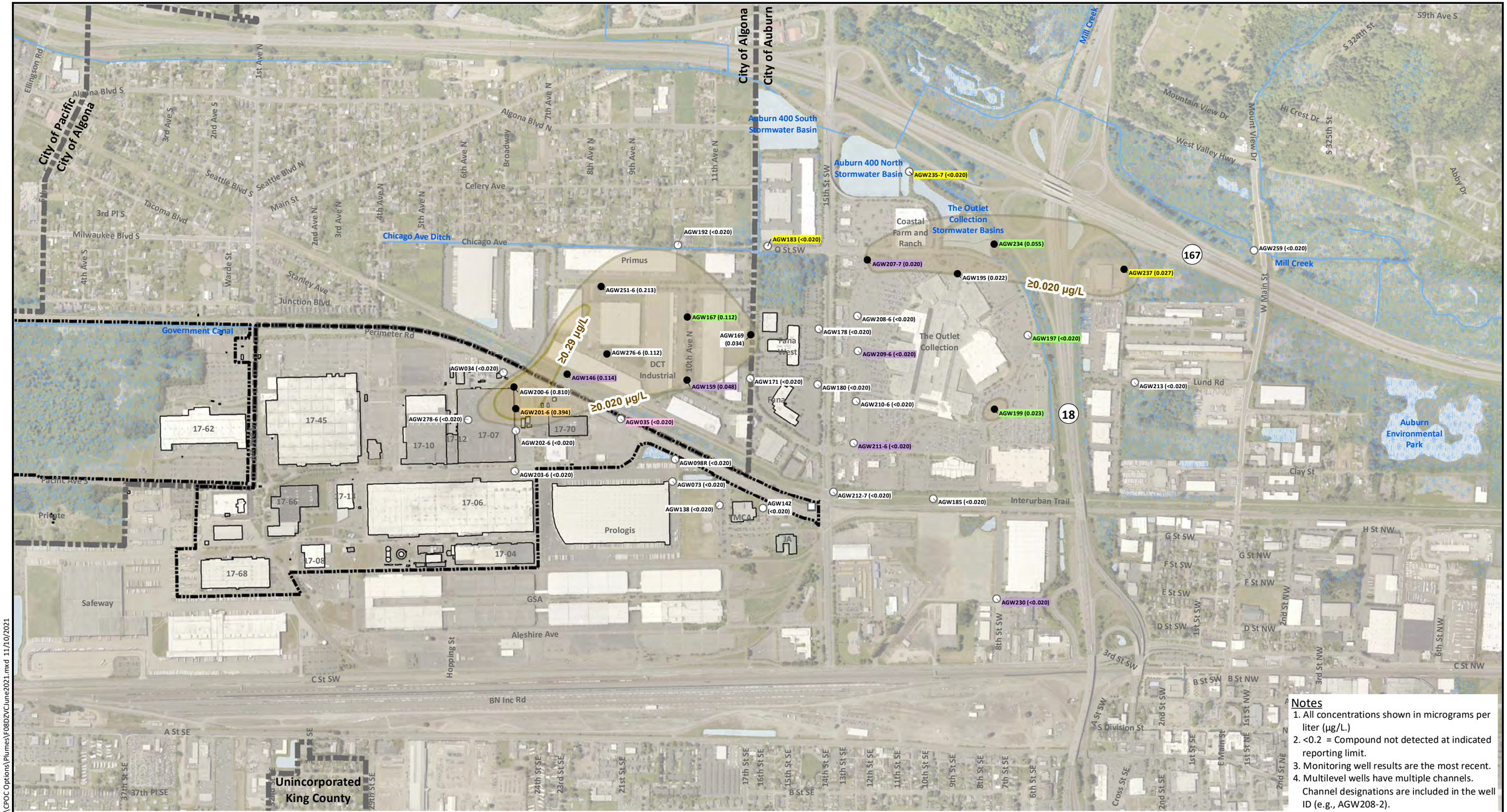

Legend

- Monitoring Well Location
- Historical Borehole Grab Sample Location
- Non-Detect
- Vinyl Chloride Contour (≥2.0 µg/L)
- Vinyl Chloride Contour (≥0.29 µg/L)
- Vinyl Chloride Contour (≥0.020 µg/L)
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- AGWXXX City of Pacific Sentry/Plume Boundary Location (Annual Monitoring)
- AGWXXX Annual Monitoring (Currently Greater than DWQS)
- AGWXXX Every 5 Year Monitoring (Currently Exceeds SWQS)
- AGWXXX Algona EISB Wells (Initially Annual Monitoring)
- AGWXXX CPOC Boundary Well (Every 2 Year Monitoring)
- AGWXXX Facility Well (Every 5 Year Monitoring)

N

0 1,000 2,000

Scale in Feet

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3. Monitoring well results are the most recent.
4. Multilevel wells have multiple channels. Channel designations are included in the well ID (e.g., AGW208-2).
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Boeing Auburn
Cleanup Action Plan
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AOC A-14: Deep Zone
Vinyl Chloride Concentrations
June 2021

Figure
8

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample ID	Groundwater Zone	Sampling Method (c)	Description	Location	Proposed Sampling Frequency - VOCs (a)	Proposed Sampling Frequency - MNA (b)	Recommendation for Sampling Frequency
AGW001R	S	PDB	On Facility (Prologis; Former Building 17-03)	Southeast of Prologis Building; South End of Area 1	--	--	Remove; SWQS exceedance; Adjacent to AGW283
AGW002R	S	Low Flow	On Facility (Prologis; Former Building 17-05)	In Prologis Building; Area 1	--	--	Remove; SWQS exceedance; 17-05 IRA Location
AGW006R	S	PDB	On Facility (Prologis; Former Building 17-05)	West of Prologis Building; Area 1	--	--	Remove; ND
AGW009	S	PDB	On Facility (Boeing Auburn)	Northwest of Building 17-06	--	--	Remove; ND
AGW024	S	PDB	On Facility (Boeing Auburn)	WWPTP	--	--	Remove; Greater than DWQS
AGW025	S	PDB	On Facility (Boeing Auburn)	East of WWPTP	--	--	Remove; Greater than DWQS
AGW026	S	PDB	On Facility (Boeing Auburn)	West of Building 17-07	--	--	Remove; ND
AGW027	S	PDB	On Facility (Boeing Auburn)	North of Building 17-07	--	--	Remove; SWQS exceedance
AGW030	S	PDB	On Facility (Boeing Auburn)	West of WWPTP; Property Boundary	--	--	Remove; SWQS exceedance
AGW031R	S	PDB	On Facility (Boeing Auburn)	Northwest of Prologis Building; Property Boundary	--	--	Remove; SWQS exceedance
AGW032	S	PDB	On Facility (Boeing Auburn)	North of WWPTP; Property Boundary	BE	--	CPOC Monitoring; SWQS exceedance
AGW033	S	PDB	On Facility (Boeing Auburn)	North of Building 17-70; Property Boundary	--	--	Remove; ND
AGW034	D	PDB	On Facility (Boeing Auburn)	WWPTP; Property Boundary	--	--	Remove; ND
AGW035	D	PDB	On Facility (Boeing Auburn)	North of Building 17-70; Property Boundary	BE	--	CPOC Monitoring; SWQS exceedance
AGW037	S	PDB	On Facility (Boeing Auburn)	South Part of Building 17-07	QE	--	Every 5 years; SWQS exceedance
AGW039	S	PDB	On Facility (Boeing Auburn)	North Part of Building 17-10	--	--	Remove; SWQS exceedance
AGW040	S	PDB	On Facility (Boeing Auburn)	North Part of Building 17-10	--	--	Remove; SWQS exceedance
AGW041	S	PDB	On Facility (Boeing Auburn)	East of Building 17-06	--	--	Remove; ND

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample ID	Groundwater Zone	Sampling Method (c)	Description	Location	Proposed Sampling Frequency - VOCs (a)	Proposed Sampling Frequency - MNA (b)	Recommendation for Sampling Frequency
AGW053R	S	PDB	On Facility (Prologis)	In Prologis Building; Area 1	--	--	Remove; SWQS exceedance
AGW055R	I	PDB	On Facility (Prologis)	West of Prologis Building; Area 1	--	--	Remove; SWQS exceedance
AGW057R	I	PDB	On Facility (Prologis)	South of Prologis Building; South End of Area 1	--	--	Remove; SWQS exceedance
AGW058R	S	PDB	On Facility (Prologis)	South of Prologis Building; South End of Area 1	--	--	Remove; ND
AGW059R	S	PDB	On Facility (Prologis)	South of Prologis Building; South End of Area 1	--	--	Remove; ND
AGW060R	I	PDB	On Facility (Prologis)	South of Prologis Building; South End of Area 1	--	--	Remove; SWQS exceedance
AGW064	S	PDB	Downgradient (YMCA)	West of YMCA Building; Area 1	BE	--	CPOC Monitoring; ND
AGW065	S	PDB	Downgradient (YMCA)	South of YMCA Building; Area 1	--	--	Remove; ND
AGW066	S	PDB	On Facility (Prologis)	North of Prologis Building; Area 1	--	--	Remove; SWQS exceedance
AGW067	S	PDB	On Facility (Prologis)	N of Prologis Bldg; Area 1	--	--	Remove; SWQS exceedance
AGW072	I	PDB	On Facility (Prologis)	Northwest of Prologis Building; Area 1	--	--	Remove; SWQS exceedance
AGW073	D	PDB	On Facility (Prologis)	Northwest of Prologis Building; Area 1	--	--	Remove; ND
AGW074	S	PDB	City of Pacific Sentry Well	North of City of Pacific Wells	A	--	Annual; City of Pacific Sentry Well
AGW078	S	PDB	On Facility (Boeing Auburn)	Building 17-34 South; Property Boundary	--	--	Remove; ND
AGW079	S	PDB	On Facility (Boeing Auburn)	South of Building 17-15	--	--	Remove; Greater than DWQS
AGW081	S	PDB	On Facility (Boeing Auburn)	Perimeter Road West of Building 17-45; Property Boundary	--	--	Remove; ND
AGW085	S	PDB	On Facility (Boeing Auburn)	East of Building 17-34; Property Boundary	--	--	Remove; ND
AGW087	I	PDB	City of Pacific Sentry Well	East of City of Pacific Wells	--	--	Remove; ND

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample ID	Groundwater Zone	Sampling Method (c)	Description	Location	Proposed Sampling Frequency - VOCs (a)	Proposed Sampling Frequency - MNA (b)	Recommendation for Sampling Frequency
AGW088	S	PDB	City of Pacific Sentry Well	East of City of Pacific Wells	--	--	Remove; ND
AGW089	I	PDB	City of Pacific Sentry Well	Northeast of City of Pacific Wells	--	--	Remove; ND
AGW090	S	PDB	City of Pacific Sentry Well	Northeast of City of Pacific Wells	--	--	Remove; ND
AGW091	I	PDB	City of Pacific Sentry Well	North of City of Pacific Wells	A	--	Annual; City of Pacific Sentry Well
AGW095R	I	PDB	On Facility (Prologis)	Northwest of Prologis Building; Area 1	--	--	Remove; SWQS exceedance
AGW098R	D	PDB	On Facility (Prologis)	Northwest of Prologis Building; Area 1	--	--	Remove; SWQS exceedance
AGW105R	I	PDB	On Facility (Boeing Auburn)	Perimeter Road West of WWPTP; Property Boundary	BE	--	CPOC Monitoring; Greater than DWQS
AGW106R	S	Low Flow	On Facility (Prologis)	In Prologis Building; Area 1	--	--	Remove; ND
AGW110R	S	Low Flow	On Facility (Prologis)	In Prologis Building; Area 1	--	--	Remove; SWQS exceedance; 17-05 IRA Location
AGW112R	S	PDB	On Facility (Prologis)	In Prologis Building; Area 1	--	--	Remove; SWQS exceedance; 17-05 IRA Location
AGW115	S	PDB	On Facility (Boeing Auburn)	In Building 17-06	--	--	Remove; ND
AGW116	S	PDB	On Facility (Boeing Auburn)	In Building 17-06	--	--	Remove; ND
AGW117	S	PDB	On Facility (Boeing Auburn)	In Building 17-06	--	--	Remove; ND
AGW118	S	PDB	On Facility (Boeing Auburn)	In Building 17-06	--	--	Remove; ND
AGW119	I	PDB	City of Pacific Sentry Well	East Side of Safeway Property	--	--	Remove; ND
AGW120	S	PDB	City of Pacific Sentry Well	East Side of Safeway Property	--	--	Remove; ND
AGW125	S	PDB	On Facility (Prologis)	North of Prologis Building; Area 1	QE	QE	Facility Monitoring; Greater than DWQS
AGW126	I	Low Flow	On Facility (Prologis)	North of Prologis Building; Area 1	QE	QE	Facility Monitoring; Greater than DWQS

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample ID	Groundwater Zone	Sampling Method (c)	Description	Location	Proposed Sampling Frequency - VOCs (a)	Proposed Sampling Frequency - MNA (b)	Recommendation for Sampling Frequency
AGW129	S	PDB	On Facility (Boeing Auburn)	In Building 17-06	--	--	Remove; ND
AGW131	S	PDB	On Facility (Boeing Auburn)	North of Building 17-07	--	--	Remove; Greater than DWQS
AGW133	S	PDB	On Facility (Boeing Auburn)	East of Building 17-66	--	--	Remove; ND
AGW134	S	PDB	On Facility (Boeing Auburn)	Perimeter Road West of Building 17-70; Property Boundary	--	--	Remove; SWQS exceedance
AGW135	S	PDB	On Facility (Boeing Auburn)	Perimeter Road North of Building 17-70; Property Boundary	BE	--	CPOC Monitoring; SWQS exceedance
AGW136	S	PDB	Downgradient (YMCA)	South of YMCA Building; Area 1	--	--	Remove; SWQS Exceedance
AGW137	I	PDB	Downgradient (YMCA)	South of YMCA Building; Area 1	QE	--	Every 5 years; SWQS Exceedance
AGW138	D	PDB	Downgradient (YMCA)	South of YMCA Building; Area 1	--	--	Remove; SWQS exceedance
AGW139	I	PDB	Downgradient (YMCA)	Southeast of YMCA Building; Area 1	--	--	Remove; SWQS exceedance
AGW140	I	PDB	Downgradient (YMCA)	Southwest of YMCA Building; Area 1	--	--	Remove; SWQS exceedance
AGW141	I	PDB	Downgradient (YMCA)	North of YMCA Building; Area 1	--	--	Remove; SWQS exceedance
AGW142	D	PDB	Downgradient (YMCA)	North of YMCA Building; Area 1	--	--	Remove; ND
AGW144	I	PDB	Downgradient (Facility Boundary)	Interurban Trail, Northwest of WWPTP	--	--	Remove; SWQS exceedance
AGW145	I	PDB	Downgradient (Facility Boundary)	Interurban Trail, Northwest of WWPTP	A	QE	Annual; Greater than DWQS
AGW146	D	PDB	Downgradient (Facility Boundary)	Interurban Trail, Northwest of WWPTP	QE	QE	Every 5 years; SWQS Exceedance
AGW147	I	PDB	Downgradient (Facility Boundary)	Interurban Trail, West of YMCA/JA	--	--	Remove; ND
AGW148	I	PDB	Downgradient (Facility Boundary)	Interurban Trail, West of YMCA/JA	--	--	Remove; SWQS exceedance
AGW149	I	PDB	Downgradient (Facility Boundary)	Interurban Trail, West of YMCA/JA	--	--	Remove; SWQS exceedance

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample ID	Groundwater Zone	Sampling Method (c)	Description	Location	Proposed Sampling Frequency - VOCs (a)	Proposed Sampling Frequency - MNA (b)	Recommendation for Sampling Frequency
AGW150	I	PDB	On Facility (Boeing Auburn)	West of YMCA/JA	BE	--	CPOC Monitoring; SWQS exceedance
AGW151	I	PDB	Downgradient (YMCA)	East of YMCA Building; Area 1	--	--	Remove; Below SWQS
AGW152	S	PDB	On Facility (Boeing Auburn)	North of Building 17-07	--	--	Remove; Greater than DWQS
AGW153	S	PDB	On Facility (Boeing Auburn)	In Building 17-66	--	--	Remove; ND
AGW154	I	PDB	On Facility (Boeing Auburn)	South of Building 17-07; South of Former Vapor Degreaser in Building 17-07	--	--	Remove; SWQS exceedance
AGW155	I	PDB	On Facility (Boeing Auburn)	West of Building 17-07	QE	QE	Facility Monitoring; Greater than DWQS
AGW156	I	PDB	On Facility (Boeing Auburn)	North of Building 17-07	--	--	Remove; Greater than DWQS
AGW157	I	PDB	Downgradient (Facility Boundary)	Northwest of Building 17-21; Property Boundary	--	--	Remove; SWQS exceedance
AGW158	I	PDB	Downgradient (Commercial Algona)	10th Street Southwest	--	--	Remove; SWQS exceedance
AGW159	D	PDB	Downgradient (Commercial Algona)	10th Street Southwest	QE	--	Every 5 years; SWQS Exceedance
AGW160	I	PDB	Downgradient (Commercial Auburn)	West of YMCA/JA - Industry Drive	--	--	Remove; SWQS exceedance
AGW161	I	PDB	Downgradient (Commercial Auburn)	Interurban Trail, North of 15th Street Southwest	--	--	Remove; SWQS exceedance
AGW162	I	PDB	Downgradient (YMCA/JA)	Northeast corner of YMCA/JA	--	--	Remove; Below SWQS
AGW163	I	PDB	On Facility (Boeing Auburn)	East of Building 17-07, near large door	--	--	Remove; SWQS exceedance
AGW164	I	PDB	On Facility (Boeing Auburn)	Building 17-07, near column A7	--	--	Remove; SWQS exceedance
AGW165	S	PDB	On Facility (Boeing Auburn)	Building 17-07, near column B9	--	--	Remove; SWQS exceedance
AGW166	I	PDB	Downgradient (Commercial Algona)	10th Street Southwest	--	--	Remove; SWQS exceedance
AGW167	D	PDB	Downgradient (Commercial Algona)	10th Street Southwest	A	QE	Annual; Greater than DWQS

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample ID	Groundwater Zone	Sampling Method (c)	Description	Location	Proposed Sampling Frequency - VOCs (a)	Proposed Sampling Frequency - MNA (b)	Recommendation for Sampling Frequency
AGW168	I	PDB	Downgradient (Commercial Algona)	Boundary Boulevard	A	QE	Annual; Greater than DWQS
AGW169	D	PDB	Downgradient (Commercial Algona)	Boundary Boulevard	--	--	Remove; Greater than DWQS
AGW170	I	PDB	Downgradient (Commercial Algona)	Boundary Boulevard	--	--	Remove; SWQS exceedance
AGW171	D	PDB	Downgradient (Commercial Algona)	Boundary Boulevard	--	--	Remove; SWQS exceedance
AGW172	I	PDB	Downgradient (Outlet Collection)	Southeast corner of Outlet Collection Lot	--	--	Remove; SWQS exceedance
AGW173	I	PDB	Downgradient (Outlet Collection)	East side of Outlet Collection Lot	--	--	Remove; ND
AGW174	I	PDB	Downgradient (Commercial Auburn)	Interurban Trail, North of 15th Street Southwest	--	--	Remove; SWQS exceedance
AGW175	I	Low Flow	Downgradient (Commercial Auburn)	Interurban Trail, North of 15th Street Southwest	--	--	Remove; SWQS exceedance
AGW176	I	PDB	Downgradient (Outlet Collection)	Northeast corner of Outlet Collection Lot	--	--	Remove; SWQS exceedance
AGW177	I	PDB	Downgradient (Commercial Auburn)	Western Fana Property	--	--	Remove; SWQS exceedance
AGW178	D	PDB	Downgradient (Commercial Auburn)	Western Fana Property	--	--	Remove; SWQS exceedance
AGW179	I	PDB	Downgradient (Commercial Auburn)	Eastern Fana Property	--	--	Remove; Greater than DWQS
AGW180	D	PDB	Downgradient (Commercial Auburn)	Eastern Fana Property	--	--	Remove; SWQS exceedance
AGW181	I	PDB	Downgradient (Commercial Auburn)	South end of Lund Road	--	--	Remove; SWQS Exceedance
AGW182	I	PDB	Downgradient (Commercial Auburn)	O Street at Boundary Boulevard	--	--	Remove; SWQS exceedance
AGW183	D	PDB	Downgradient (Commercial Auburn)	O Street at Boundary Boulevard	A	--	Annual; Boundary Location
AGW184	I	PDB	Downgradient (Commercial Auburn)	8th Street at cul-de-sac	--	--	Remove; ND
AGW185	D	PDB	Downgradient (Commercial Auburn)	Interurban Trail, East of Outlet Collection	--	--	Remove; SWQS exceedance

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample ID	Groundwater Zone	Sampling Method (c)	Description	Location	Proposed Sampling Frequency - VOCs (a)	Proposed Sampling Frequency - MNA (b)	Recommendation for Sampling Frequency
AGW186	I	PDB	Downgradient (Commercial Auburn)	E Street and 3rd	QE	--	Every 5 years; SWQS exceedance
AGW187	I	PDB	Downgradient (Commercial Auburn)	Interurban Trail, North side of SR 18	--	--	Remove; SWQS exceedance
AGW188	I	Low Flow	Downgradient (Commercial Auburn)	Lund Road at Main Street	QE	QE	Every 5 years; SWQS Exceedance
AGW189	I	PDB	Downgradient (Commercial Auburn)	City of Auburn Maintenance Facility	--	--	Remove; SWQS exceedance
AGW190	I	PDB	Downgradient (Commercial Auburn)	Interurban Trail at Main Street	--	--	Remove; SWQS exceedance
AGW191	I	PDB	Downgradient (Residential Algona)	Chicago Avenue and 10th Avenue, Algona	A	A	Annual; Algona EISB
AGW192	D	PDB	Downgraident (Residential Algona)	Chicago Avenue and 10th Avenue, Algona	--	--	Remove; ND
AGW193	S	PDB	Downgradient (Commercial Algona)	10th Street Southwest, Algona	QE	QE	Every 5 years; SWQS Exceedance
AGW194	S	PDB	Downgradient (Commercial Algona)	10th Street Southwest, Algona	--	--	Remove; SWQS exceedance
AGW195	D	PDB	Downgradient (Outlet Collection)	Outlet Collection-delivery area, West side	--	--	Remove; Greater than DWQS
AGW196	I	PDB	Downgradient (Outlet Collection)	Outlet Collection-delivery area, West side	A	QE	Annual; Greater than DWQS
AGW197	D	PDB	Downgradient (Outlet Collection)	Outlet Collection-West of Sam's Club	A	QE	Annual; Greater than DWQS
AGW198	I	PDB	Downgradient (Outlet Collection)	Outlet Collection-West of Sam's Club	A	QE	Annual; Greater than DWQS
AGW199	D	PDB	Downgradient (Outlet Collection)	Outlet Collection-North of Marshalls	A	QE	Annual; Greater than DWQS
AGW200-2	S	Low Flow	On Facility (Boeing Auburn)	Outside Building 17-07 Northwest Corner	--	--	Remove; Greater than DWQS
AGW200-5	I	Low Flow	On Facility (Boeing Auburn)	Outside Building 17-07 Northwest Corner	--	--	Remove; Greater than DWQS
AGW200-6	D	Low Flow	On Facility (Boeing Auburn)	Outside Building 17-07 Northwest Corner	--	--	Remove; Greater than DWQS
AGW201-2	S	Low Flow	On Facility (Boeing Auburn)	Outside Building 17-07 North Central	QE	QE	Facility Monitoring; Greater than DWQS

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample ID	Groundwater Zone	Sampling Method (c)	Description	Location	Proposed Sampling Frequency - VOCs (a)	Proposed Sampling Frequency - MNA (b)	Recommendation for Sampling Frequency
AGW201-5	I	Low Flow	On Facility (Boeing Auburn)	Outside Building 17-07 North Central	QE	QE	Facility Monitoring; Greater than DWQS
AGW201-6	D	Low Flow	On Facility (Boeing Auburn)	Outside Building 17-07 North Central	QE	QE	Facility Monitoring; Greater than DWQS
AGW202-2	S	Low Flow	On Facility (Boeing Auburn)	Outside Building 17-07 East Central	--	--	Remove; SWQS exceedance
AGW202-4	I	Low Flow	On Facility (Boeing Auburn)	Outside Building 17-07 East Central	--	--	Remove; SWQS exceedance
AGW202-6	D	Low Flow	On Facility (Boeing Auburn)	Outside Building 17-07 East Central	--	--	Remove; SWQS exceedance
AGW203-2	S	Low Flow	On Facility (Boeing Auburn)	Staging area btween Buildings 17-07 and 17-06	--	--	Remove; SWQS exceedance
AGW203-4	I	Low Flow	On Facility (Boeing Auburn)	Staging area btween Buildings 17-07 and 17-06	--	--	Remove; SWQS exceedance
AGW203-6	D	Low Flow	On Facility (Boeing Auburn)	Staging area btween Buildings 17-07 and 17-06	--	--	Remove; ND
AGW204	I	PDB	On Facility (Boeing Auburn)	In grass Northwest of Bldg 17-08	--	--	Remove; ND
AGW206	I	PDB	On Facility (Boeing Auburn)	In parking area, East of Building 17-10	--	--	Remove; SWQS exceedance
AGW207-2	S	Low Flow	Downgradient (Outlet Collection)	Outlet Collection parking lot, Southwest corner	QE	--	Every 5 years; SWQS Exceedance
AGW207-4	I	Low Flow	Downgradient (Outlet Collection)	Outlet Collection parking lot, Southwest corner	QE	--	Every 5 years; SWQS Exceedance
AGW207-7	D	Low Flow	Downgradient (Outlet Collection)	Outlet Collection parking lot, Southwest corner	QE	--	Every 5 years; SWQS Exceedance
AGW208-2	S	Low Flow	Downgradient (Outlet Collection)	Outlet Collection parking lot across from Taco Del Mar	--	--	Remove; SWQS exceedance
AGW208-4	I	Low Flow	Downgradient (Outlet Collection)	Outlet Collection parking lot across from Taco Del Mar	--	--	Remove; SWQS exceedance
AGW208-6	D	Low Flow	Downgradient (Outlet Collection)	Outlet Collection parking lot across from Taco Del Mar	--	--	Remove; SWQS exceedance
AGW209-2	S	Low Flow	Downgradient (Outlet Collection)	Outlet Collection parking lot across from Starbucks	--	--	Remove; Greater than DWQS
AGW209-5	I	Low Flow	Downgradient (Outlet Collection)	Outlet Collection parking lot across from Starbucks	--	--	Remove; Greater than DWQS

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample ID	Groundwater Zone	Sampling Method (c)	Description	Location	Proposed Sampling Frequency - VOCs (a)	Proposed Sampling Frequency - MNA (b)	Recommendation for Sampling Frequency
AGW209-6	D	Low Flow	Downgradient (Outlet Collection)	Outlet Collection parking lot across from Starbucks	QE	--	Every 5 years; SWQS Exceedance
AGW210-2	S	Low Flow	Downgradient (Outlet Collection)	Outlet Collection parking lot across from IHOP	--	--	Remove; ND
AGW210-5	I	Low Flow	Downgradient (Outlet Collection)	Outlet Collection parking lot across from IHOP	--	--	Remove; SWQS exceedance
AGW210-6	D	Low Flow	Downgradient (Outlet Collection)	Outlet Collection parking lot across from IHOP	--	--	Remove; SWQS exceedance
AGW211-5	I	Low Flow	Downgradient (Outlet Collection)	Outlet Collection parking lot across from Red Robin	--	--	Remove; SWQS exceedance
AGW211-6	D	Low Flow	Downgradient (Outlet Collection)	Outlet Collection parking lot across from Red Robin	QE	--	Every 5 years; SWQS Exceedance
AGW212-5	I	Low Flow	Downgradient (Commerical Auburn)	Interurban Trail at 15th Street Southwest	--	--	Remove; SWQS exceedance
AGW212-7	D	Low Flow	Downgradient (Commerical Auburn)	Interurban Trail at 15th Street Southwest	--	--	Remove; SWQS exceedance
AGW213	D	PDB	Downgradient (Commerical Auburn)	South End of Lund Road	--	--	Remove; ND
AGW214	I	Low Flow	Downgradient (Commerical Auburn)	Sputh end of Clay Street, West side of street in parking lane next to driveway	--	--	Remove; SWQS exceedance
AGW215	I	Low Flow	Downgradient (Commerical Auburn)	West Main Street access Road, North side of road	--	--	Remove; ND
AGW216	I	Low Flow	Downgradient (Commerical Auburn)	H Street, intersection with 2nd Street, West side	--	--	Remove; SWQS exceedance
AGW217	I	Low Flow	Downgradient (Commerical Auburn)	Clay Street, halfway up West side	QE	--	Every 5 years; SWQS Exceedance
AGW218	I	Low Flow	Downgradient (Commerical Auburn)	Western Avenue, West side, in grass next to sidewalk North of driveway	--	--	Remove; SWQS Exceedance
AGW219	I	PDB	Downgradient (Commerical Auburn)	Clay Street, West side of cul-de-sac at North end	--	--	Remove; ND
AGW220	I	Low Flow	Downgradient (Commerical Auburn)	Western Avenue, North end	A	--	Annual; Boundary Location
AGW221	I	Low Flow	Downgradient (Commerical Auburn)	H Street instersection with 6th, West side in gravel	--	--	Remove; ND
AGW222	I	PDB	On Facility (Boeing Auburn)	In Building 17-06	--	--	Remove; ND

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample ID	Groundwater Zone	Sampling Method (c)	Description	Location	Proposed Sampling Frequency - VOCs (a)	Proposed Sampling Frequency - MNA (b)	Recommendation for Sampling Frequency
AGW225	S (WT)	Low Flow	Downgradient (Residential Algona)	Chicago Avenue and 10th Avenue, Algona	A	A	Annual; Algona EISB
AGW226	S (WT)	Low Flow	Downgradient (Residential Algona)	11th Avenue, Algona	A	A	Annual; Algona EISB
AGW227	I	PDB	Downgradient (Commerical Algona/Auburn)	West end of Boundary Boulevard	QE	QE	Every 5 years; SWQS Exceedance
AGW228	S	Low Flow	Downgradient (Commerical Algona/Auburn)	West end of Boundary Boulevard	QE	QE	Every 5 years; SWQS Exceedance
AGW229	S (WT)	PDB	Downgraident (Commercial Algona)	Boundary Boulevard	--	--	Remove; SWQS exceedance
AGW230	D	PDB	Downgradient (Commerical Auburn)	8th Street at cul-de-sac	QE	--	Every 5 years; SWQS Exceedance
AGW231	S	PDB	Downgradient (Outlet Collection)	Outlet Collection-North of Marshalls	--	--	Remove; Greater than DWQS
AGW232	S	PDB	Downgradient (Outlet Collection)	Outlet Collection-delivery area, West side	A	QE	Annual; Greater than DWQS
AGW234	D	PDB	Downgradient (Outlet Collection Stormwater Ponds)	Access road to Outlet Collection stormwater ponds	A	QE	Annual; Greater than DWQS
AGW235-2	S	Low Flow	Downgradient (Outlet Collection Stormwater Ponds)	Access road to Outlet Collection stormwater ponds	A	QE	Annual; Boundary Location
AGW235-4	I	Low Flow	Downgradient (Outlet Collection Stormwater Ponds)	Access road to Outlet Collection stormwater ponds	A	QE	Annual; Boundary Location
AGW235-7	D	Low Flow	Downgradient (Outlet Collection Stormwater Ponds)	Access road to Outlet Collection stormwater ponds	A	QE	Annual; Boundary Location
AGW236	S	Low Flow	Downgradient (Coastal Farm&Ranch)	Coastal Farm & Ranch Parking Lot	--	--	Remove; Greater than DWQS
AGW237	D	PDB	Downgradient (Commerical Auburn)	Auburn School District, Northwest corner of property	A	QE	Annual; Boundary Location
AGW238	I	PDB	Downgradient (Commerical Auburn)	Auburn School District, Northwest corner of property	A	QE	Annual; Boundary Location
AGW239	S	Low Flow	Downgradient (Commerical Auburn)	Auburn School District, Northwest corner of property	A	QE	Annual; Boundary Location
AGW240-1	S (WT)	Low Flow	Downgradient (Residential Algona)	Chicago Avenue and 9th Avenue, Algona	A	A	Annual; Algona EISB
AGW240-5	S	Low Flow	Downgradient (Residential Algona)	Chicago Avenue and 9th Avenue, Algona	A	A	Annual; Algona EISB

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample ID	Groundwater Zone	Sampling Method (c)	Description	Location	Proposed Sampling Frequency - VOCs (a)	Proposed Sampling Frequency - MNA (b)	Recommendation for Sampling Frequency
AGW241-1	S (WT)	Low Flow	Downgradient (Residential Algona)	Chicago Avenue and 8th Avenue, Algona	--	--	Remove; ND
AGW241-5	S	Low Flow	Downgradient (Residential Algona)	Chicago Avenue and 8th Avenue, Algona	--	--	Remove; SWQS exceedance
AGW242-1	S (WT)	Low Flow	Downgradient (Residential Algona)	10th Avenue North and Algona Boulevard, Algona	A	--	Annual; Boundary Location
AGW242-2	S	Low Flow	Downgradient (Residential Algona)	10th Avenue North and Algona Boulevard, Algona	A	--	Annual; Boundary Location
AGW243-1	S (WT)	Low Flow	Downgradient (Residential Algona)	Boundary Boulevard and Algona Boulevard, Algona	A	--	Annual; Boundary Location
AGW243-3	S	Low Flow	Downgradient (Residential Algona)	Boundary Boulevard and Algona Boulevard, Algona	A	--	Annual; Boundary Location
AGW244	S (WT)	Low Flow	Downgradient (Residential Algona)	Celery Avenue and 9th Avenue, Algona	--	--	Remove; ND
AGW245	S (WT)	PDB	Downgradient (Residential Algona)	11th Avenue between Algona Boulevard and Celery Avenue, Algona	--	--	Remove; ND
AGW246	S (WT)	PDB	Downgradient (Residential Algona)	Celery Avenue between 11th Avenue and 10th Avenue, Algona	--	--	Remove; ND
AGW247-1	S (WT)	Low Flow	Downgradient (Residential Algona)	10th Avenue East of Algona Boulevard, Algona	A	A	Annual; Algona EISB
AGW247-5	S	Low Flow	Downgradient (Residential Algona)	10th Avenue East of Algona Boulevard, Algona	A	A	Annual; Algona EISB
AGW248-1	S (WT)	Low Flow	Downgradient (Residential Algona)	Chicago Avenue and 11th Avenue, Algona	A	A	Annual; Algona EISB
AGW248-5	S	Low Flow	Downgradient (Residential Algona)	Chicago Avenue and 11th Avenue, Algona	A	A	Annual; Algona EISB
AGW249-1	S (WT)	Low Flow	Downgradient (Residential Algona)	Boundary Boulevard, Algona	A	A	Annual; Algona EISB; Greater than DWQS
AGW249-5	S	Low Flow	Downgradient (Residential Algona)	Boundary Boulevard, Algona	A	A	Annual; Algona EISB; Greater than DWQS
AGW250-2	S	Low Flow	Downgradient (Residential Algona - Junction Blvd)	Junction Boulevard, Algona	--	--	Remove; SWQS exceedance
AGW250-3	I	Low Flow	Downgradient (Residential Algona - Junction Blvd)	Junction Boulevard, Algona	--	--	Remove; SWQS exceedance
AGW251-1	S (WT)	Low Flow	Downgradient (Commercial Algona)	Milwaukee Boulevard, Algona	--	--	Remove; ND

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample ID	Groundwater Zone	Sampling Method (c)	Description	Location	Proposed Sampling Frequency - VOCs (a)	Proposed Sampling Frequency - MNA (b)	Recommendation for Sampling Frequency
AGW251-2	S	Low Flow	Downgradient (Commercial Algona)	Milwaukee Boulevard, Algona	A	A	Annual; Algona EISB
AGW251-3	I	Low Flow	Downgradient (Commercial Algona)	Milwaukee Boulevard, Algona	A	A	Annual; Algona EISB
AGW251-6	D	Low Flow	Downgradient (Commercial Algona)	Milwaukee Boulevard, Algona	--	--	Remove; SWQS exceedance
AGW254-1	S (WT)	Low Flow	Downgradient (Auburn - Mill Creek)	South Access Road, West Main Street	--	--	Remove; ND
AGW254-2	S	Low Flow	Downgradient (Auburn - Mill Creek)	South Access Road, West Main Street	A	--	Annual; Boundary Location
AGW254-5	I	Low Flow	Downgradient (Auburn - Mill Creek)	South Access Road, West Main Street	--	--	Remove; ND
AGW255-1	S (WT)	Low Flow	Downgradient (Auburn - Stormwater Basins)	15th Street Southwest, North of O Street	A	--	Annual; Greater than DWQS
AGW255-3	S	Low Flow	Downgradient (Auburn - Stormwater Basins)	15th Street Southwest, North of O Street	--	--	Remove; SWQS exceedance
AGW255-5	I	Low Flow	Downgradient (Auburn - Stormwater Basins)	15th Street Southwest, North of O Street	--	--	Remove; SWQS exceedance
AGW256	I	PDB	Upgradient (GSA)	GSA, South of Northwest Building	--	--	Remove; SWQS exceedance
AGW257	S	PDB	Upgradient (GSA)	GSA, South of Northwest Building	--	--	Remove; ND
AGW259	D	PDB	Downgradient (Auburn - Mill Creek)	S Access Road, West Main Street	--	--	Remove; ND
AGW261	S	PDB	Downgradient (Commercial Algona)	South end of Milwaukee Boulevard, Algona	--	--	Remove; SWQS exceedance
AGW262	S (WT)	PDB	Downgradient (Residential Algona)	11th Avenue, Algona	--	--	Remove; SWQS exceedance
AGW263	S (WT)	PDB	Downgradient (Residential Algona)	Chicago Avenue and 10th Avenue, Algona	--	--	Remove; Greater than DWQS
AGW266	S	PDB	Downgradient (Commercial Auburn)	Lund Road at Main Street	QE	--	Every 5 years; SWQS exceedance
AGW269	S	Low Flow	Downgradient (Commercial Algona)	Primus, East of Warehouse	A	A	Annual; Algona EISB
AGW270	S	Low Flow	Downgradient (Commercial Algona)	Primus, East of Warehouse	A	A	Annual; Algona EISB

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample ID	Groundwater Zone	Sampling Method (c)	Description	Location	Proposed Sampling Frequency - VOCs (a)	Proposed Sampling Frequency - MNA (b)	Recommendation for Sampling Frequency
AGW271	S	Low Flow	Downgradient (Commercial Algona)	Primus, East of Warehouse	A	A	Annual; Algona EISB
AGW272	S	Low Flow	Downgradient (Commercial Algona)	Primus, West of Warehouse	A	A	Annual; Algona EISB
AGW273	S	Low Flow	Downgradient (Commercial Algona)	Primus, West of Warehouse	A	A	Annual; Algona EISB
AGW274	S	Low Flow	Downgradient (Commercial Algona)	Primus, West of Warehouse	A	A	Annual; Algona EISB
AGW275	S	Low Flow	Downgradient (Commercial Algona)	Primus, West of Warehouse	A	A	Annual; Algona EISB
AGW276-2	S	Low Flow	Downgradient (Commercial Algona)	DCT Industrial	A	--	Annual; Greater than DWQS
AGW276-5	I	Low Flow	Downgradient (Commercial Algona)	DCT Industrial	A	--	Annual; Greater than DWQS
AGW276-6	D	Low Flow	Downgradient (Commercial Algona)	DCT Industrial	--	--	Remove; SWQS exceedance
AGW278-1	S (WT)	Low Flow	On Facility (Boeing Auburn)	South Part of Building 17-07	--	--	Remove; Greater than DWQS
AGW278-2	S	Low Flow	On Facility (Boeing Auburn)	South Part of Building 17-07	--	--	Remove; Greater than DWQS
AGW278-4	I	Low Flow	On Facility (Boeing Auburn)	South Part of Building 17-07	--	--	Remove; Greater than DWQS
AGW278-6	D	Low Flow	On Facility (Boeing Auburn)	South Part of Building 17-07	--	--	Remove; Greater than DWQS
AGW283-1	S (WT)	Low Flow	On Facility (Prologis)	Southeast of Prologis Building	QE	QE	Facility Monitoring; SWQS exceedance
AGW283-2	S	Low Flow	On Facility (Prologis)	Southeast of Prologis Buidling; South End of Area 1	--	--	Remove; ND

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample ID	Groundwater Zone	Sampling Method (c)	Description	Location	Proposed Sampling Frequency - VOCs (a)	Proposed Sampling Frequency - MNA (b)	Recommendation for Sampling Frequency
IW34	S	Low Flow	Downgradient (Commercial Algona)	Primus, East of Warehouse	--	--	Remove; Greater than DWQS
IW36	S	Low Flow	Downgradient (Commercial Algona)	Primus, East of Warehouse	--	--	Remove; Greater than DWQS
IW37	S	Low Flow	Downgradient (Commercial Algona)	Primus, East of Warehouse	--	--	Remove; Greater than DWQS
SW-CD4	Stormwater	Low Flow	Chicago Avenue Ditch	11th Avenue and Chicago Avenue	A	--	Annual; Boundary Location
SW-14	Stormwater	Low Flow	Auburn 400 South Basin	Stormwater inlet structure discharge pipe located at southeast corner of basin.	A	--	Annual; Boundary Location
SW-16	Stormwater	Low Flow	Auburn 400 North Basin	Southeastern edge of basin where access allows.	A	--	Annual; Boundary Location
SW-17	Stormwater	Low Flow	Wetland north of Auburn 400 North Basin Outflow	Stormwater outflow culvert to the wetland on the west side of SR 167.	A	--	Annual; Boundary Location
SW-18	Surface Water	Low Flow	Mill Creek	Beneath the south side of West Main Street via a box culvert.	A	--	Annual; Boundary Location
SW-20	Surface Water	Low Flow	Wetlands west of SR 167 to Mill Creek	South of the intersection of Peasley Canyon Road South with the West Valley Highway near SR 18.	--	--	Remove; ND
SW-27	Surface Water	Low Flow	Mill Creek	North side of West Main Street adjacent to PW-27.	--	--	Remove; ND
PW-18a-2.5	Pore Water	Low Flow	Mill Creek	Beneath the south side of West Main Street via a box culvert.	A	--	Annual; Boundary Location
PW-18a-5	Pore Water	Low Flow	Mill Creek	Beneath the south side of West Main Street via a box culvert.	A	--	Annual; Boundary Location
PW-18b-2.5	Pore Water	Low Flow	Mill Creek	Approximately 50 meters south of West Main Street, on east side of Mill Creek.	--	--	Remove; ND
PW-18b-5	Pore Water	Low Flow	Mill Creek	Approximately 50 meters south of West Main Street, on east side of Mill Creek.	--	--	Remove; ND
PW-27-2.5	Pore Water	Low Flow	Mill Creek	North side of West Main Street.	--	--	Remove; ND
PW-27-5	Pore Water	Low Flow	Mill Creek	North side of West Main Street.	--	--	Remove; ND

Table 1
AOC A-14 Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Notes:

(a) VOCs by Method 8260D; collect three 40-mL VOAs (HCl); Method 8260 LL or SIM may alternatively be used to meet screening levels, if needed. VOC analyte list will include: 1,1-DCE, cis-1,2-DCE, PCE, trans-1,2-DCE, TCE, and VC.

(b) MNA Parameters include Ethene/Ethane/Methane by RSKSOP-175 modified, Sulfate By EPA Method 300.0, TOC by SM 5310 C-2000, and DO/ORP/Iron II field measurements.

(c) The bottom of each PDB is placed 2 feet from the bottom of the well screen except for PDBs at AGW227 and AGW237, which are placed 6 feet from the bottom of the well screen, and all water table wells that are 2 feet from the top of the lowest recorded DTW.

MS/MSDs will be collected at least 1 per 20 samples per analysis. A field duplicate will be collected at least 1 per 20 samples per analysis. One trip blank per cooler will be run for VOCs and TPH-G.

Abbreviations and Acronyms:

CPOC = Conditional Point of Compliance
DCE = dichloroethene
DO = dissolved oxygen
DTW = Depth to Water
DWQS = Drinking water quality standards
EISB = enhanced *in situ* bioremediation
EPA = US Environmental Protection Agency
GSA = General Services Administration
HCl = hydrocloric acid
ID = Identification
IHOP = International House of Pancakes
IRA = Interim Remedial Action
JA = Junior Achievement
mL = milliliter
MNA = monitored natural attenuation
MS = matrix spike
MSD - matrix spike duplicate
NA = natural attentuation
ND = not detected
ORP = oxygen reduction potential
PCE = tetrachloroethene
PDB = passive diffusion bag
SIM = select ion monitoring
SR = State Route
SWQS = Surface water quality standards
TCE = trichloroethene
TOC = total organic carbon
VC = vinyl chloride
VOA = volatile organic analysis
VOC = volatile organic compound
WWPTP = Wastewater Pre-Treatment Plant
YMCA = Young Men's Christian Association

Groundwater Zone
S(WT) = Water Table
S = Shallow
I = Intermediate
D = Deep

Frequency
A = Annually (June)
BE = Biennial; Every 2 years (June)
QE = Quinquennial; Every 5 Years (June)