January 14 2022

Washington State Department of Ecology
Northwest Regional Office
3190 160th Avenue Southeast
Bellevue, Washington 98008-5452

Attn: Li Ma

Transmitted via email to: *lima461@ecy.wa.gov*

Re: Status Report No. 77, October through December 2021 Activity Period
Boeing Auburn Facility
WAD 041337130, RCRA Corrective Action Agreed Order No. 01HWTRNR-3345
Auburn, Washington
Project No. 0025164.180.501

Dear Mr. Ma:

The Resource Conservation and Recovery Act (RCRA) Corrective Action Agreed Order (Auburn Agreed Order) became effective on August 14, 2002. As required under Section VI.13 of the Auburn Agreed Order, Landau Associates, Inc. (LAI) is providing Status Report No. 77 on behalf of The Boeing Company (Boeing), which covers the 3-month activity period of October through December 2021.

References

1. October 13, 2021. Email: Draft Proposed BoA Monitoring Plan – Boeing-Auburn Site Wide Corrective Action. From Sarah Fees, LAI, to Li Ma, Ecology.
2. October 13, 2021. Conference call. Boeing Auburn groundwater monitoring plan. Attendees: Li Ma and Christa Colouzis, Washington State Department of Ecology (Ecology); Debbie Taege, Boeing; and Sarah Fees, LAI.
3. October 15, 2021. Letter: Status Report No. 76, July through September 2021 Activity Period, Boeing Auburn Facility, WAD 041337130, RCRA Correction Action Agreed Order No. 01HWTRNR-3345, Auburn, Washington. From Sarah Fees, LAI, to Li Ma, Ecology.
4. October 15, 2021. Letter: Response to Ecology's September 14, 2021 Letter re: Conditional Point of Compliance Request, Boeing Auburn Facility, Agreed Order No. 01HWTRNR-3345. From Debbie Taege, Boeing, to Li Ma, Ecology.
5. October 18, 2021. Email: Re: File Transfer: Draft Proposed BoA Monitoring Plan – Boeing-Auburn Site Wide Corrective Action. From: Li Ma, Ecology, to Sarah Fees, LAI, and Debbie Taege, Boeing. (Attachments: Comments on the draft proposed BoA monitoring plan.)
6. October 20, 2021. Email: Boeing Auburn – Confirmation Soil Sampling for Historical Release at Building 17-07. From Sarah Fees, LAI, to Li Ma, Ecology.
7. October 22, 2021. Email: RE: Boeing Auburn – Confirmation Soil Sampling for Historical Release at Building 17-07. From Li Ma, Ecology, to Sarah Fees, LAI.

8. October 25, 2021. Email: Boeing Fabrication Auburn Site – Status Report 76, July through September 2021 Activity Period. From Li Ma, Ecology; to Representatives of City of Algona, City of Auburn, City of Pacific, Ecology, and Boeing.
9. November 10, 2021. Technical Memorandum: AOC A-14: Conceptual Long-term Groundwater Monitoring Plan, Boeing Auburn Facility, Auburn, Washington. From Sarah Fees, LAI, to Li Ma, Ecology.
10. November 11, 2021. Email: Revisions to Phase 10 GWMP. From Sarah Fees, LAI, to Li Ma, Ecology.
11. November 15, 2021. Email: RE: Revisions to Phase 10 GWMP. From Li Ma, Ecology, to Sarah Fees, LAI.
12. November 29, 2021. Letter: Groundwater Monitoring Plan, status of FS, and dCAP Schedule, Boeing Auburn Facility, Agreed Order No. 01WTRNR-3345. From Li Ma, Ecology, to Debbie Taege, Boeing.
13. December 10, 2021. Technical Memorandum: 2021 Building 17-07 Historical Release Discovery and Cleanup Report, Boeing Auburn Facility, Auburn, Washington. From Sarah Fees, LAI, to Li Ma, Ecology.
14. December 14, 2021. Email: Boeing Auburn Cyanide Sampling. From Li Ma, Ecology, to Debbie Taege, Boeing, and Sarah Fees, LAI.
15. December 14, 2021. Email: RE: Boeing Auburn Cyanide Sampling. From Sarah Fees, LAI, to Li Ma, Ecology, and Debbie Taege, Boeing. Attachment: September 24, 2020 Email: RE: June 2020 Cyanide results (AOC A-09).

Work Conducted

General Site-wide Corrective Action Activities

On October 15, 2021, LAI submitted Status Report No. 76 regarding third quarter 2021 activities to Washington State Department of Ecology (Ecology) and other stakeholders[1] for their records (Reference #3). Boeing and Ecology project managers continued to have monthly technical conference calls to discuss current project items. Status conference calls also occur quarterly to provide general updates on the project schedule, reporting and public outreach. These quarterly calls are attended by technical and communication personnel from Ecology, Boeing, LAI, City of Auburn, and the City of Algona's environmental consultant, ICF International (ICF).

Groundwater Sampling and Monitoring

On November 11, 2021, Boeing requested an update to the Phase 10 groundwater monitoring plan to adjust the frequency of Algona pilot test sampling from semiannual to annual (Reference #10). Ecology approved this update on November 15, 2021 (Reference #11). Phase 10 semiannual groundwater sampling took place from December 1 through 3, 2021. The semiannual groundwater

[1] A list of stakeholders that receive copies of the quarterly status reports is provided at the end of this document. Ecology also forwards quarterly status reports via email to representatives of the cities of Algona, Auburn, and Pacific (Reference #8).

sampling data are provided in Attachment 1. The current monitoring well network is shown on Figure 1-1. A sampling matrix for the December 2021 semiannual sampling event is presented in Table 1-1. A complete summary of groundwater analytical results is presented in Tables 1-2 and 1-3.

Monitoring for petroleum hydrocarbons occurred at wells in Building 17-06 (AGW128, AGW277, and AGW281) during the semiannual groundwater sampling.[2] Monitoring was completed on December 3, 2021. No free-phase product was detected in any of the monitored wells during the December 2021 monitoring event. Boeing maintains a sorbent sock in AGW128 to remove the product. The sorbent sock is replaced during monitoring.

On December 14, 2021, Ecology asked Boeing to confirm that the previously agreed upon groundwater sampling methods and analysis for cyanide were still being implemented at the Site (Reference #14). Boeing confirmed the procedure and provided a list of current sampling and analysis methods on December 14, 2021 (Reference #15).

Building 17-07 Historical Release Reporting

In August 2021, Boeing encountered localized petroleum contamination in soil during construction activities taking place inside Building 17-07. Construction activities included removal of former mill foundations, concrete slab, and soil in order to install new equipment between columns F2/F3 and J2/J3 in Building 17-07. Localized petroleum hydrocarbon-impacted soil was identified in the area as part of soil sampling conducted by Boeing for waste disposal purposes. In accordance with the project release reporting guidelines,[3] Boeing provided Ecology with written notice of a moderate release of petroleum hydrocarbons to soil associated with the former mill foundations.

On October 6, 2021, LAI conducted confirmation soil sampling following completion of soil excavation activities. Boeing provided a summary of soil sample results and a comparison of results to applicable cleanup levels to Ecology on October 20, 2021 (Reference #6). Ecology and Boeing had a series of email correspondence regarding the sample results and discussed the details during a regularly scheduled technical meeting on October 21, 2021. On October 22, 2021, Ecology provided concurrence that soil remaining in this area had concentrations below applicable cleanup levels and gave approval to begin backfilling activities (Reference #7). A technical memorandum including information about the nature and extent of contamination, soil removal, and confirmation sampling results was submitted to Ecology on December 10, 2021 (Reference #13).

[2] Boeing currently conducts semiannual monitoring (June and September) for petroleum hydrocarbons at Building 17-06. However, because the wells are currently sampled semiannually in June and December, monitoring for petroleum hydrocarbons also occurs in December.

[3] LAI. 2009. Memorandum: Boeing Auburn Facility Corrective Action Release Reporting Guidelines. To James Bet, Boeing, from Eric Weber and Jennifer Wynkoop, Landau Associates, Inc. March 5.

Feasibility Study Reporting

The draft feasibility study (FS) report was submitted to Ecology in the fourth quarter 2019. The draft supplemental feasibility study (SFS) was submitted to Ecology in the fourth quarter 2020. A summary document giving an overview of final decisions for the FS and SFS was prepared for the public comment period, which occurred in the second quarter 2021. In a letter dated November 29, 2021 (Reference #12), Ecology determined that the FS for Boeing Auburn is complete and provided a timeline for submittal of the draft cleanup action plan (dCAP).

Cleanup Action Plan Reporting

Prior to dCAP preparations, Boeing requested Ecology concurrence for an off-Property conditional point of compliance (CPOC) at the Site. In the third quarter 2021, Ecology provided a letter stating that the CPOC would be at the property boundary but indicated that Ecology would work with Boeing to develop a reasonable long-term groundwater monitoring plan for the Site. Boeing submitted a letter response on October 15, 2021 to document Boeing's position in regard to the CPOC decision (Reference #4). Boeing and Ecology had a meeting to discuss the details of the long-term groundwater monitoring plan on October 13, 2021 (Reference #2). Prior to the meeting, Boeing provided Ecology with figures and a proposed sampling matrix for discussion (Reference #1). Ecology provided comments on October 18, 2021 (Reference #5). Boeing submitted the conceptual long-term groundwater monitoring plan for AOC A-14 to Ecology on November 10, 2021 (Reference #9). Ecology concurred with the conceptual plan and requested preparation of the dCAP in a letter dated November 29, 2021 (Reference #12).

Boeing expects to submit the dCAP to Ecology in the first quarter 2022. Boeing will work with Ecology to finalize the cleanup action plan and prepare for next steps of the project.

Communications

Ecology and Boeing are working together to ensure that all stakeholders are aware of the progress of investigation and cleanup activities at the Boeing Auburn Site. The City of Algona continues to be notified of all fieldwork occurring in Algona. The City of Algona's consultant, ICF, continues to participate in project conference calls with Boeing and Ecology and continues to review Algona-related deliverables (e.g., work plans and reports). Boeing and Ecology also continue to periodically update the City of Auburn on activities.

Occurrence of Problems

None to report.

Projected Work for Next Reporting Period January through March 2022

Activities projected for the next reporting period pertain to dCAP preparation and ongoing stormwater feature monitoring. Tasks during first quarter 2022 are expected to include:

- Submittal of the draft cleanup action plan to Ecology
- Negotiations between Ecology and Boeing for the next legal order pertaining to cleanup at the site.
- Preparation of other documentation as required for finalization of the cleanup action plan
- Conducting wet season stormwater feature monitoring.

Other Significant Findings, Changes, and Contacts

None to report.

If you have any questions regarding this status report, or need any other information, please do not hesitate to contact Boeing or LAI.

LANDAU ASSOCIATES, INC.

Sarah Fees

Sarah Fees, LG
Associate Geologist

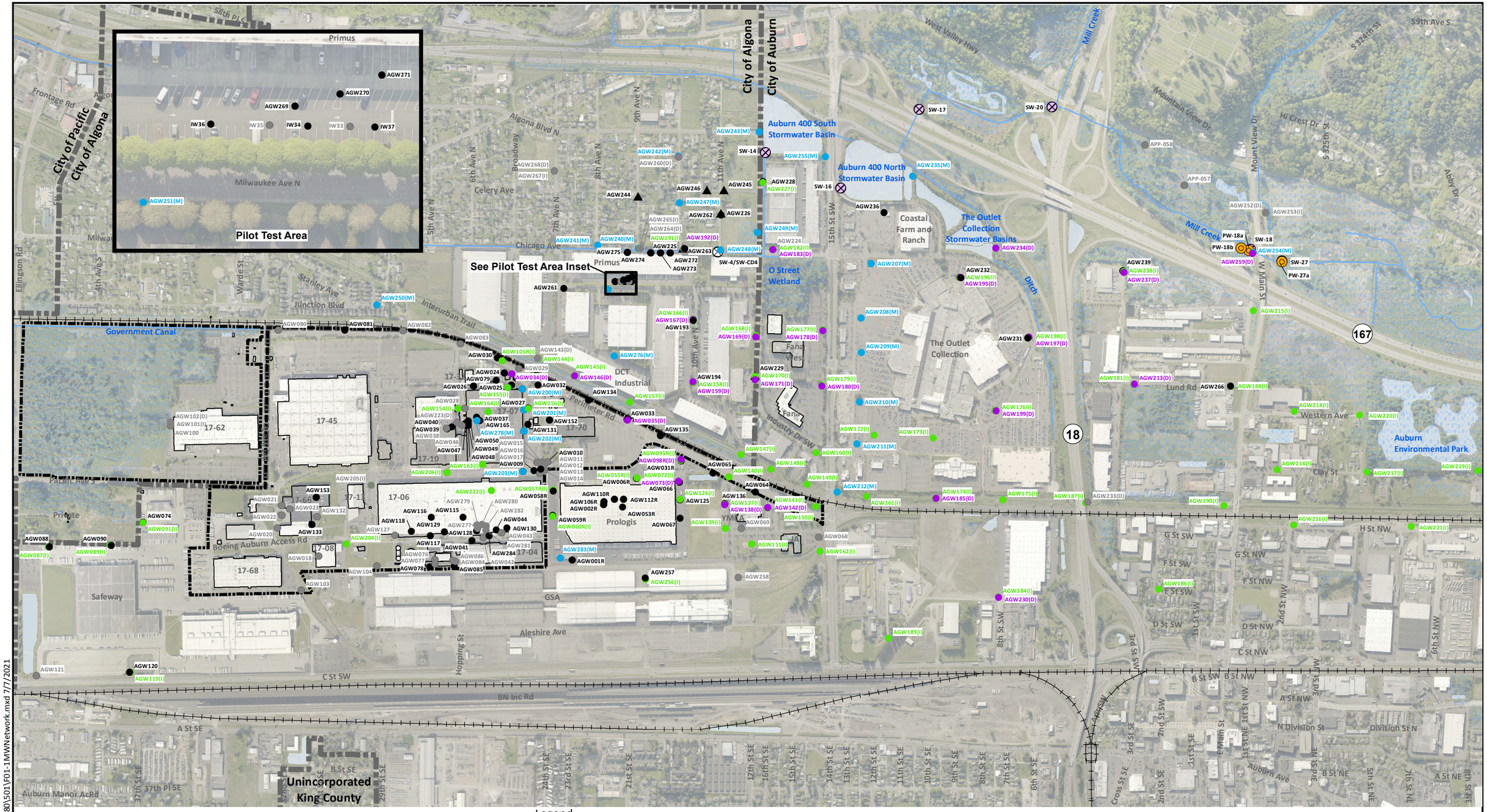
KMG/SEF/kjg
[Y:\025\164\R\QUARTERLY PROGRESS RPTS\2021\4Q21\LAI_BOA_4Q2021 STATUS RPT NO. 77 LETTER_DRAFT.DOCX

cc: Debbie Taege (email only)
Thomas MacMannis, Boeing (email only)
Kamara Sams, Boeing (email only)
James Swortz, Boeing (email only)
Kathryn Moxley, Boeing (email only)
Patrick McCabe, Boeing Realty (email only)
Brett Richer, Prologis (email only)
Steve Campbell, Prologis (email only)
Jason Berry, YMCA Auburn (email only)
Christa Colouzis, Ecology (email only)
Janelle Anderson, Ecology (email only)

Attachments: Attachment 1: Groundwater Sampling Results
Attachment 2: Laboratory Data Packages (only included in final hard copy on DVD)

ATTACHMENT 1

Groundwater Sampling Results



Notes

1. Groundwater wells are identified by the AGW prefix. The designations behind the identifications indicate the zone. If there is no designation, the well is screened in the shallow zone. (I) = intermediate zone, (D) = deep zone, (M) = multi-level well; screens in multiple groundwater zones.
2. Well designations beginning with APP are installed and owned by WSDOT.
3. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Offsite Water Table Well
- Shallow Monitoring Well (Water Table to 35 ft bgs)
- (I) Intermediate Monitoring Well (35 to 75 ft bgs)
- (D) Deep Monitoring Well (75 to 100 ft bgs)
- (M) Multi-Level Well
- Wells Not Currently Sampled
- Annual Stormwater/Surface Water Sample Location
- Semiannual Stormwater/Surface Water Sampling Location
- Annual Pore Water Sample Location
- Wetland Areas
- Water Bodies
- Waterways

0 1,000 2,000

Scale in Feet

N

Data Source: King County GIS.

LANDAU ASSOCIATES

Boeing Auburn
Auburn, Washington

Current Monitoring Network

Figure 1-1

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Table 1-1
4Q2021 Groundwater Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample Location	Field Sample ID:	Sample Date:	Sample Type:	Laboratory SDG:	Laboratory Sample ID:	Select VOCs by SW-846 8260C-SIM (a)	BTEX by SW-846 8260C	TPH-G by NWTPH-Gx	TPH-D by NWTPH-Dx	Dissolved Metals by SW-846 6020A	Free Cyanide by ASTM D7237 (b)
AGW006R	AGW006R-20211202	12/2/2021	PDN	21L0074	21L0074-09	X					
AGW010	AGW010-20211201	12/1/2021	N	21L0056	21L0056-01		X	X	X		
AGW010	AGW900-20211201	12/1/2021	FD	21L0056	21L0056-02		X	X	X		
AGW024	AGW024-20211202	12/2/2021	PDN	21L0074	21L0074-02	X					
AGW026	AGW026-20211202	12/2/2021	PDN	21L0074	21L0074-03	X					
AGW027	AGW027-20211202	12/2/2021	PDN	21L0074	21L0074-05	X					
AGW031R	AGW031R-20211202	12/2/2021	PDN	21L0074	21L0074-10	X					
AGW032	AGW032-20211201	12/1/2021	PDN	21L0048	21L0048-03	X					
AGW033	AGW033-20211203	12/3/2021	PDN	21L0079	21L0079-05	X					
AGW049	AGW049-20211201	12/1/2021	N	21L0048	21L0048-04					X	
AGW049	AGW049-NAOH-20211201	12/1/2021	N	A1L0089	A1L0089-01						X
AGW049	AGW901-20211201	12/1/2021	FD	21L0048	21L0048-05					X	
AGW049	AGW901-NAOH-2021201	12/1/2021	FD	A1L0089	A1L0089-03						X
AGW050	AGW050-20211201	12/1/2021	N	21L0048	21L0048-06					X	
AGW050	AGW050-NAOH-20211201	12/1/2021	N	A1L0089	A1L0089-05						X
AGW085	AGW085-20211202	12/2/2021	PDN	21L0074	21L0074-06	X					
AGW112R	AGW112R-20211202	12/2/2021	PDN	21L0074	21L0074-08	X					
AGW128	AGW128-20211203	12/3/2021	N	21L0080	21L0080-04				X		
AGW129	AGW129-20211202	12/2/2021	PDN	21L0074	21L0074-07	X					
AGW130	AGW130-20211202	12/2/2021	N	21L0074	21L0074-11				X		
AGW131	AGW131-20211201	12/1/2021	PDN	21L0048	21L0048-02	X					
AGW135	AGW135-20211203	12/3/2021	PDN	21L0079	21L0079-04	X					
AGW136	AGW136-20211203	12/3/2021	PDN	21L0080	21L0080-12	X					
AGW140	AGW140-20211202	12/2/2021	PDN	21L0072	21L0072-04	X					
AGW157	AGW157-20211202	12/2/2021	PDN	21L0072	21L0072-03	X					
AGW159	AGW159-20211203	12/3/2021	PDN	21L0080	21L0080-10	X					
AGW160	AGW160-20211203	12/3/2021	PDN	21L0080	21L0080-11	X					
AGW164	AGW164-20211202	12/2/2021	PDN	21L0074	21L0074-04	X					
AGW170	AGW170-20211203	12/3/2021	PDN	21L0080	21L0080-08	X					
AGW171	AGW171-20211203	12/3/2021	PDN	21L0080	21L0080-09	X					
AGW175	AGW175-20211201	12/1/2021	N	21L0053	21L0053-03	X					
AGW179	AGW179-20211203	12/3/2021	PDN	21L0080	21L0080-06	X					
AGW180	AGW180-20211203	12/3/2021	PDN	21L0080	21L0080-07	X					
AGW181	AGW181-20211202	12/2/2021	PDN	21L0072	21L0072-06	X					
AGW187	AGW187-20211201	12/1/2021	PDN	21L0053	21L0053-04	X					

Table 1-1
4Q2021 Groundwater Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample Location	Field Sample ID:	Sample Date:	Sample Type:	Laboratory SDG:	Laboratory Sample ID:	Select VOCs by SW-846 8260C-SIM (a)	BTEX by SW-846 8260C	TPH-G by NWTPH-Gx	TPH-D by NWTPH-Dx	Dissolved Metals by SW-846 6020A	Free Cyanide by ASTM D7237 (b)
AGW201-2	AGW201-2-30-20211201	12/1/2021	N	21L0059	21L0059-03		X				
AGW202-2	AGW202-2-30-20211201	12/1/2021	N	21L0059	21L0059-04		X				
AGW207-2	AGW207-2-30-20211203	12/3/2021	N	21L0080	21L0080-05	X					
AGW208-4	AGW208-4-49-20211203	12/3/2021	N	21L0079	21L0079-03	X					
AGW210-5	AGW210-5-60-20211203	12/3/2021	N	21L0080	21L0080-02	X					
AGW210-5	AGW902-20211203	12/3/2021	FD	21L0080	21L0080-03	X					
AGW210-6	AGW210-6-80-20211203	12/3/2021	N	21L0079	21L0079-02	X					
AGW212-5	AGW212-5-30-20211201	12/1/2021	N	21L0053	21L0053-02	X					
AGW231	AGW231-20211202	12/2/2021	PDN	21L0072	21L0072-05	X					
AGW235-4	AGW235-4-39-20211202	12/2/2021	N	21L0072	21L0072-02	X					
AGW239	AGW239-20211202	12/2/2021	N	21L0072	21L0072-07	X					
AGW239	AGW903-20211202	12/2/2021	FD	21L0072	21L0072-08	X					
AGW276-2	AGW276-2-25-20211201	12/1/2021	N	21L0059	21L0059-02		X				
AGW277	AGW277-20211202	12/2/2021	N	21L0073	21L0073-02				X		
AGW281	AGW281-20211202	12/2/2021	N	21L0073	21L0073-04				X		
AGW282	AGW282-20211202	12/2/2021	N	21L0073	21L0073-03				X		

Notes:

(a) Select VOCs consist of 1,1-dichloroethene, cis-1,2-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, trichloroethene, and vinyl chloride.

(b) Samples were analyzed for cyanide by Apex Laboratories; all other analytical methods were performed by Analytical Resources, Incorporated.

Abbreviations/Acronyms:

BTEX = benzene, toluene, ethylbenzene, and xylenes
EPA = US Environmental Protection Agency
FD = field duplicate
ID = identification
N = primary sample
NWTPH = Northwest Total Petroleum Hydrocarbon
PDN = passive diffusion primary sample
SDG = sample delivery group
SIM = selected ion monitoring
TPH-Dx = total petroleum hydrocarbons diesel range
TPH-Gx = total petroleum hydrocarbons gasoline range
VOC = volatile organic compound

Table 1-2
4Q2021 Semiannual Groundwater Sampling Analytical Results
Volatile Organic Compounds
Boeing Auburn Facility
Auburn, Washington

Sample Location	Zone	Laboratory SDG	Sample Date	Sample Type	Select VOCs by SW-846 8260D SIM (µg/L)					
					1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
AGW006R	Shallow	21L0074	12/2/2021	PDN	0.200 U	**0.821**	0.200 U	0.200 U	**0.352**	**0.108**
AGW024	Shallow	21L0074	12/2/2021	PDN	0.200 U	**1.02**	0.200 U	0.200 U	0.200 U	**2.04**
AGW026	Shallow	21L0074	12/2/2021	PDN	0.200 U	**0.790**	0.200 U	0.200 U	**0.687**	**0.0691**
AGW027	Shallow-WT	21L0074	12/2/2021	PDN	0.200 U	**1.42**	0.200 U	0.200 U	**0.238**	**1.06**
AGW031R	Shallow	21L0074	12/2/2021	PDN	0.200 U	**2.58**	0.200 U	0.200 U	**0.744**	**0.0311**
AGW032	Shallow-WT	21L0048	12/1/2021	PDN	0.200 U	0.200 U	0.200 U	0.200 U	0.200 U	**0.0473**
AGW033	Shallow-WT	21L0079	12/3/2021	PDN	0.200 U	**0.438**	0.200 U	0.200 U	**0.429**	**0.0626**
AGW085	Shallow-WT	21L0074	12/2/2021	PDN	0.200 U	0.200 U	0.200 U	0.200 U	0.200 U	0.0200 U
AGW112R	Shallow	21L0074	12/2/2021	PDN	0.200 U	**0.329**	0.200 U	0.200 U	**0.968**	**0.0623**
AGW129	Shallow-WT	21L0074	12/2/2021	PDN	0.200 U	0.200 U	**0.387**	0.200 U	**0.290**	0.0200 U
AGW131	Shallow	21L0048	12/1/2021	PDN	0.200 U	**1.37**	0.200 U	0.200 U	**0.215**	**5.84**
AGW135	Shallow	21L0079	12/3/2021	PDN	0.200 U	**0.390**	0.200 U	0.200 U	**0.978**	0.0200 U
AGW136	Shallow	21L0080	12/3/2021	PDN	0.200 U	**1.88**	0.200 U	0.200 U	**2.64**	**0.0232**
AGW140	Intermediate	21L0072	12/2/2021	PDN	0.200 U	**2.53**	0.200 U	**0.237**	**3.19**	**0.361**
AGW157	Intermediate	21L0072	12/2/2021	PDN	0.200 U	**2.68**	0.200 U	0.200 U	**0.397**	**0.387**
AGW159	Deep	21L0080	12/3/2021	PDN	0.200 U	**0.912**	0.200 U	0.200 U	**3.21**	**0.104**
AGW160	Intermediate	21L0080	12/3/2021	PDN	0.200 U	**0.380**	0.200 U	0.200 U	**2.40**	0.0200 U
AGW164	Intermediate	21L0074	12/2/2021	PDN	0.200 U	**0.396**	0.200 U	0.200 U	**1.20**	**0.0820**
AGW170	Intermediate	21L0080	12/3/2021	PDN	0.200 U	**0.373**	0.200 U	0.200 U	**1.83**	0.0200 U
AGW171	Deep	21L0080	12/3/2021	PDN	0.200 U	0.200 U	0.200 U	0.200 U	**1.34**	0.0200 U
AGW175	Intermediate	21L0053	12/1/2021	N	0.200 U	**0.331**	0.200 U	0.200 U	**1.31**	0.0200 U
AGW179	Intermediate	21L0080	12/3/2021	PDN	0.200 U	**5.83**	0.200 U	0.200 U	0.200 U	**0.711**
AGW180	Deep	21L0080	12/3/2021	PDN	0.200 U	**0.742**	0.200 U	0.200 U	**2.74**	**0.0209**

Table 1-2
4Q2021 Semiannual Groundwater Sampling Analytical Results
Volatile Organic Compounds
Boeing Auburn Facility
Auburn, Washington

Sample Location	Zone	Laboratory SDG	Sample Date	Sample Type	Select VOCs by SW-846 8260D SIM (µg/L)					
					1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
AGW181	Intermediate	21L0072	12/2/2021	PDN	0.200 U	**1.94**	0.200 U	0.200 U	**2.75**	**0.0423**
AGW187	Intermediate	21L0053	12/1/2021	PDN	0.200 U	**0.211**	0.200 U	0.200 U	**1.28**	0.0200 U
AGW207-2	Shallow	21L0080	12/3/2021	N	0.200 U	**4.78**	0.200 U	0.200 U	**3.19**	**0.154**
AGW208-4	Intermediate	21L0079	12/3/2021	N	0.200 U	**2.01**	0.200 U	0.200 U	**1.86**	**0.0456**
AGW210-5	Intermediate	21L0080	12/3/2021	N	0.200 U	**1.68**	0.200 U	0.200 U	**0.774**	**0.0922**
AGW210-5	Intermediate	21L0080	12/3/2021	FD	0.200 U	**1.69**	0.200 U	0.200 U	**0.794**	**0.0951**
AGW210-6	Deep	21L0079	12/3/2021	N	0.200 U	**0.257**	0.200 U	0.200 U	**3.01**	0.0200 U
AGW212-5	Intermediate	21L0053	12/1/2021	N	0.200 U	0.200 U	0.200 U	0.200 U	**1.14**	0.0200 U
AGW231	Shallow	21L0072	12/2/2021	PDN	0.200 U	**1.90**	0.200 U	0.200 U	0.200 U	**1.04**
AGW235-4	Intermediate	21L0072	12/2/2021	N	0.200 U	**12.1**	0.200 U	0.200 U	**1.14**	**0.142**
AGW239	Shallow	21L0072	12/2/2021	N	0.200 U	0.200 U	0.200 U	0.200 U	0.200 U	**0.145**
AGW239	Shallow	21L0072	12/2/2021	FD	0.200 U	0.200 U	0.200 U	0.200 U	0.200 U	**0.150**

Notes:

Bold text indicates detected analyte.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

U = The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

Abbreviations/Acronyms:

EPA = US Environmental Protection Agency
FD = field duplicate
µg/L = micrograms per liter
N = primary sample
PDN = passive diffusion primary sample
SDG = sample delivery group
SIM = selected ion monitoring
VOCs = volatile organic compounds
WT = water table

Table 1-3
4Q2021 Semiannual Groundwater Sampling Analytical Results
BTEX, Petroleum Hydrocarbons, Dissolved Metals, and Cyanide
Boeing Auburn Facility
Auburn, Washington

Sample Location	Zone	Laboratory SDG	Sample Date	Sample Type	BTEX by SW-846 8260D (µg/L)						Petroleum Hydrocarbons by NWTPH-Gx/Dx (mg/L)			Dissolved Metals by SW-846 6020B (mg/L)			Cyanide by ASTM D7237-10 (mg/L)
					Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Total Xylenes	Gasoline Range Organics (C7-C12)	Diesel Range Organics (C12-C24)	Oil Range Organics (C24-C40)	Cadmium	Copper	Nickel	Free Cyanide
AGW010	Shallow-WT	21L0056	12/1/2021	N	**0.76**	**2.23**	**323**	**98.4**	**13.5**	**112 J**	**16.9**	**0.281 J**	0.200 U	--	--	--	--
AGW010	Shallow-WT	21L0056	12/1/2021	FD	**0.75**	**2.19**	**305**	**94.8**	**13.1**	**108 J**	**14.9**	**0.286 J**	0.200 U	--	--	--	--
AGW049	Shallow	21L0048/A1L0089	12/1/2021	N	--	--	--	--	--	--	--	--	--	**0.0136**	**0.0977**	**0.0152**	0.00500 U
AGW049	Shallow	21L0048/A1L0089	12/1/2021	FD	--	--	--	--	--	--	--	--	--	**0.0137**	**0.108**	**0.0161**	0.00500 U
AGW050	Shallow	21L0048/A1L0089	12/1/2021	N	--	--	--	--	--	--	--	--	--	**0.00856**	--	**0.0108**	0.00500 U
AGW128	Shallow-WT	21L0080	12/3/2021	N	--	--	--	--	--	--	--	**0.675 J**	**3.75**	--	--	--	--
AGW130	Shallow-WT	21L0074	12/2/2021	N	--	--	--	--	--	--	--	0.100 UJ	0.200 U	--	--	--	--
AGW201-2	Shallow	21L0059	12/1/2021	N	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.60 U	--	--	--	--	--	--	--
AGW202-2	Shallow	21L0059	12/1/2021	N	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.60 U	--	--	--	--	--	--	--
AGW276-2	Off-Shallow	21L0059	12/1/2021	N	0.20 U	0.20 U	0.20 U	0.40 U	0.20 U	0.60 U	--	--	--	--	--	--	--
AGW277	Shallow-WT	21L0073	12/2/2021	N	--	--	--	--	--	--	--	0.100 UJ	0.200 U	--	--	--	--
AGW281	Shallow-WT	21L0073	12/2/2021	N	--	--	--	--	--	--	--	0.100 UJ	0.200 U	--	--	--	--
AGW282	Shallow-WT	21L0073	12/2/2021	N	--	--	--	--	--	--	--	0.100 UJ	0.200 U	--	--	--	--

Notes:

Bold text indicates detected analyte.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample

U = The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

UJ = The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Abbreviations/Acronyms:

BTEX = benzene, toluene, ethylbenzene, and xylenes

FD = field duplicate

µg/L = micrograms per liter

mg/L = milligrams per liter

-- = not analyzed

N = primary sample

NWTPH = Northwest Total Petroleum Hydrocarbon

SDG = sample delivery group

WT = water table

ATTACHMENT 2

Laboratory Data Packages
(only included in final hard copy on DVD)