



Spokane International Airport

9000 West Airport Drive, Suite 204 | Spokane, Washington 99224 | spokaneairports.net

March 26, 2026

Jeremy Schmidt, PE, Site Manager, Toxics Cleanup Program
Department of Ecology
4601 N. Monroe Street
Spokane, WA 99205

RE: Submittal of Ecology-Approved Initial PFAS Investigation Report
Enforcement Order DE 22584 (“EO”)

Dear Jeremy:

Attached is Spokane International Airport’s (SIA) Initial PFAS Investigation (IPI) Report, which was approved in its entirety by the Department of Ecology (Ecology) on March 19, 2026.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lisa Corcoran', with a stylized flourish at the end.

Lisa Corcoran
Chief Development Officer

cc via email: Spokane International Airport
Kyle Twohig, Senior Director of Public Works, Spokane County
Marlene Feist, Public Works Director, City of Spokane
Ivy Anderson, Assistant Attorney General, Department of Ecology



INITIAL PFAS INVESTIGATION REPORT

SPOKANE INTERNATIONAL AIRPORT

Spokane, WA

Facility Site ID: 6332493; Cleanup Site ID: 16774

Prepared for:



Spokane
International Airport

SPOKANE INTERNATIONAL AIRPORT

9000 W. Airport Drive, Suite 204

Spokane, Washington 99224

Prepared by:

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Job No.: 6892

Issued: 13 March 2026

INITIAL PFAS INVESTIGATION REPORT

SPOKANE INTERNATIONAL AIRPORT

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Facility Site ID: 6332493; Cleanup Site ID: 16774

This Initial PFAS Investigation Report was prepared by the staff of GSI Environmental Inc., under the supervision of the Engineer(s) and/or Geologist(s) whose signatures appear hereon.

The findings, recommendations, specifications, or professional opinions were prepared in accordance with generally accepted professional engineering and/or geologic practice. No warranty is expressed or implied.

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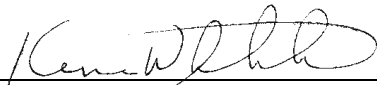
Approved as Final: 19 March 2026



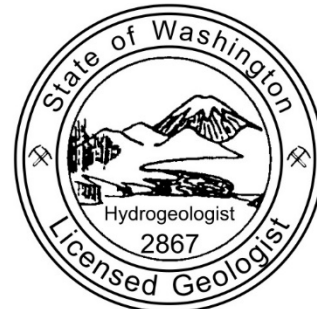
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COMMON ACRONYMS

ADF	aircraft deicing fluid
AFFF	aqueous film-forming foam
AOA	Air Operations Area
ARFF	Airport Rescue and Fire Fighting
bgs	below ground surface
CFR	Code of Federal Regulations
Ecology	Washington State Department of Ecology
EO	Enforcement order
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
GSI Environmental	GSI Environmental Inc
HASP	Health and Safety Plan
HFPO-DA	hexafluoropropylene oxide-dimer acid
IDW	investigation derived waste
MCL	maximum contaminant level
µg/kg	micrograms per kilogram
mg/kg	milligrams per kilogram
MTCA	Model Toxics Control Act
ng/L	nanograms per Liter
PFAS	per- and polyfluoroalkyl substances
PFBA	perfluorobutanoic acid
PFBS	perfluorobutanesulfonic acid
PFDA	perfluorodecanoic acid
PFHxA	perfluorohexanoic acid
PFHxS	perfluorohexanesulfonic acid
PFNA	perfluorononanoic acid
PFOA	perfluorooctanoic acid
PFODA	perfluorooctadecanoic acid
PFOS	perfluorooctane sulfonic acid
QAPP	Quality Assurance Project Plan
RI/FS	Remedial Investigation and Feasibility Study
SAP	Sampling and Analysis Plan
SAR	Site Assessment Report
SIA	Spokane International Airport
WA ANG	Washington Military Department Air National Guard
WRIA	Water Resource Inventory Area

INITIAL PFAS INVESTIGATION REPORT

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Spokane, WA

1.0 INTRODUCTION

GSI Environmental Inc. (GSI) prepared this Initial PFAS Investigation (IPI) Report on behalf of Spokane International Airport (SIA), also known by its International Air Transport Association code, GEG. The purpose of this study was to establish a preliminary dataset by collecting and analyzing groundwater and soil samples. This preliminary dataset will support the development of additional investigations needed to evaluate the nature and extent of PFAS in the identified potential and known areas of concern at SIA (Figure 1-1).

The IPI Report addresses requirements detailed in Task 1B (Initial PFAS Investigation) of Enforcement Order No. DE22584 (the Order) as issued by the Washington State Department of Ecology (Ecology) on 29 March 2024. This investigation was carried out in accordance with the EO SOW and the IPI Work Plan approved by Ecology.

EXECUTIVE SUMMARY

The Initial PFAS Investigation (IPI) Report collected a preliminary dataset for PFAS in groundwater and soil to support the development of a Remedial Investigation Work Plan, focusing on areas with potential or known PFAS releases. The data collected met the intended data quality objectives as detailed in the IPI Work Plan. Preliminary findings show elevated concentrations of PFAS in areas where federally mandated fire training exercises were carried out. The next step is to conduct a Remedial Investigation and Feasibility Study to better understand PFAS distributions and potential transport pathways, which will allow for the evaluation and implementation of remedial solutions.

1.1 Investigation Purpose and Objective

The purpose of the IPI was to generate a dataset to facilitate the development of the Remedial Investigation and Feasibility Study (RI/FS) Work Plan. Prior to the IPI, there was limited data for per- and polyfluoroalkyl substances (PFAS) in groundwater and no PFAS soil data on the Site.¹ The IPI focused on the areas within the Site identified in the Task 1A Site Assessment Report (SAR) as areas of potential or known concern where aqueous film-forming foam (AFFF) may have been discharged (GSI Environmental Inc. 2024a). The review of available information resulted in the identification of ten potential or known PFAS areas of concern. These areas either (a) have PFAS detections in the local groundwater (based on historical groundwater data for PFAS) or (b) have the potential for PFAS to be present in the local environment due to the storage, handling, and required use of AFFF as part of the federal mandate on SIA from the and Federal Aviation Administration (FAA) to maintain their Part 139 Certification.

As an initial investigation, the IPI sampling efforts were conducted in areas where a potential or known release may have occurred, or where previous groundwater data indicated PFAS are present. Additional areas were included based on results from a groundwater sampling event which took place in March 2024, as well as inclusion of the Triangle Ramp Training Area where water-only firefighting training occurred.

The areas sampled and rationale for their inclusion in the IPI are listed below:

¹ The term "Site" as used in this report refers to the main operational area within the SIA property boundary as shown in Exhibit A of the Order and presented in figures as the "Primary Airport Area." This term is not meant to define the facility boundary as defined by WAC 173-340-200, as that spatial designation is the subject of this ongoing investigation.

- Current Fire House Area: AFFF concentrate storage and limited historical usage of discharged foam at the Fire House to comply with mandates by FAA necessary for SIA to follow and to remain operational as a passenger airport.
- FAA Inspection Testing Area: Location used for FAA inspections and testing as mandated to maintain Part 139 certification with the FAA.
- Field Maintenance Building Area: Historical AFFF concentrate storage and equipment maintenance.
- Former Geiger Field Area: Though there were no known AFFF activities in the immediate area, PFAS was detected in groundwater at a monitoring well.
- Geiger Correctional Facility Area: Located near a minimum-security prison operated by Spokane County, the Geiger Correctional Facility (Ecology Facility/ Site No. 663, Cleanup Site ID 1137). GHD Group Pty Ltd (GHD) currently conducts semiannual groundwater monitoring at this facility on behalf of Phillips 66 company to address petroleum hydrocarbons present in groundwater. This location has no known AFFF activities. Paired groundwater wells from this area were sampled to provide increased spatial coverage.
- Geiger Delivery Facility Area: Located at the intersection of S Geiger Blvd. and W Electric Ave, the Geiger Delivery Facility (Ecology Facility/ Site No. 666, Cleanup Site ID 1185) is approximately one mile east of the Joint Training Area. GHD currently conducts annual groundwater monitoring at this facility on behalf of Phillips 66 company to address petroleum hydrocarbons present in soil and groundwater. This location has no known AFFF activities. Paired groundwater wells from this area were sampled to provide increased spatial coverage and capture potential off-Site sources of PFAS.
- Historical Fire House Area: Historical AFFF concentrate storage and discharge of foam for training as mandated to maintain Part 139 certification with the FAA.
- Joint Fire Training Area: The Air Force, SIA, and the Washington Military Department Air National Guard (WA ANG) conducted joint training activities with AFFF as mandated by federal authorities and regulations. These activities contributed to the use of PFAS-containing AFFF in this area. The Former Geiger Field Landfill, operated by the DoD from approximately 1961-1967 (ECOVA 1991), also falls within this area. The area immediately east of the Air Operations Area (AOA) fence line, the former Remtech Area, was also investigated due to its proximity and potential for PFAS concerns associated with historical operations.
- Land Treatment Area: This area is used to treat stormwater containing aircraft deicing fluid (ADF) by land application. ADF is not a source of PFAS (ITRC 2023). While there is no known source of PFAS to this area from airport operations, PFAS was detected in the groundwater during the March 2024 sampling event. No other airport-related activities occurring within this area have the potential to introduce PFAS to the soil or groundwater.
- Stormwater Recovery Area: This area is where collected stormwater is discharged to allow filtration into the ground. Triangle Ramp Training Area: Firefighting training was conducted in this area using only water, no foam was deployed. Shallow soils were tested to ensure there was no carry-over of PFAS via the firefighting equipment.
- West Park Drive / Waste to Energy Facility Area: Though there are no known AFFF activities in the immediate area, PFAS was detected in groundwater at a monitoring well.

Groundwater and soil samples were collected for this study. The groundwater sampling objectives were to conduct a synoptic sampling of groundwater from a select number of existing wells across the Site and measure depth to groundwater. The soil sampling objectives were to provide preliminary information on the spatial (horizontal and vertical) distributions of any PFAS present within Site soils.

1.2 Report Organization

The IPI Report is organized to document pre-field and field activities, present the field and analytical results for groundwater and soil, and summarize preliminary observations. The appendices provide additional information as follows:

- Appendix A: Compiled field forms and chain of custody forms for all samples collected.
- Appendix B: I Compilation of investigation derived waste records.
- Appendix C: Analysis of the relative percent difference for field duplicates, analytical results for all quality assurance and quality control (QA/QC) samples, and data validation reports.
- Appendix D: Compilation of analytical laboratory reports for all constituents measured.
- Appendix E: A copy of the Monitoring Well Survey Report.
- Appendix F: Lithologic logs from soil borings collected.

2.0 SITE SETTING AND BACKGROUND

The Site, also known as the Primary Airport Area, is located at the southwestern limit of the City of Spokane generally in Sections 5 and 6 of Township 24 North Range 42 East, and Sections 28, 29, 30, 31, 32, and 33 of Township 25 North Range 42 East. SIA is located within Spokane County and is jointly owned by Spokane County (the County) and the City of Spokane (the City, Figure 1-1).

2.1 Site Description

Prior to becoming SIA, the Site was under the ownership and management of a branch of the DoD that included the Air Force, Army, and WA ANG (GSI Environmental Inc. 2024a). The Army National Guard leased a portion of SIA, currently referred to as Aerospace Park, until 2006. Due to the types of operations and historical use of the SIA land by the DoD, some areas of the Site have been classified as a Formerly Used Defense Sites (FUDS) under the Defense Environmental Restoration Program (DERP).

Airport operations are divided into airside and landside areas. Airside operations are within the secure fenced Air Operations Area (AOA; Figure 1-1) and include the runway side of the passenger terminal, field maintenance, fuel station, and glycol storage area. Third-party operators holding leases are also within the fenced area. The Aerospace Park is a third-party leased area where local businesses such as International Aerospace Coatings (IAC) operate. Landside airport infrastructure, outside of the secure fenced AOA, includes the stormwater recovery area and land treatment area. Additional aviation-related support industries and nonaviation businesses are present outside the fence line. Several leaseholders have operations concentrated in the Business Park area.

DoD, WA ANG, and SIA fire training exercises, at times involving the use of AFFF, were conducted as required by both FAA and DoD policies (GSI Environmental Inc. 2024a). The airport currently operates as a regional commercial service for the surrounding community and is the second largest airport in the State of Washington. As an airport serving passenger aircraft, SIA is required by the FAA to be certified under 14 Code of Federal Regulations (CFR) Part 139, Certification of Airports (Part 139). Under this certification, SIA must maintain compliance with safety and emergency response requirements, including the federal requirements for aircraft rescue, firefighting, testing, and usage of AFFF.²

2.1.1 Historical Site Assessments

Three previous PFAS studies at the Site are summarized in the Site Assessment Report (GSI Environmental Inc. 2024a). In March 2024, SIA conducted a preliminary groundwater sampling event, collecting samples from 28 existing monitoring wells. Results of the March 2024 sampling event are available in the IPI Work Plan (GSI Environmental Inc. 2024b) with the associated potentiometric maps presented in Figures 6-1 and 6-3. The sampling procedures, quality assurance practices, and collection details for the March 2024 sampling event followed those detailed in Appendix B of the IPI Work Plan SAP/QAPP (GSI Environmental Inc. 2024b).

2.2 Geology and Hydrogeology

The Site lies within the Columbia Basin Province, a region known for extensive plateaus, steep river canyons, and sinuous ridges (Department of Natural Resources 2025). The Site is within a

² https://www.faa.gov/airports/airport_safety/part139_cert

gentle sloping elevated plateau with elevations approximately ranging from 2,390 to 2,280 feet above mean sea level. The Site lies in the West Plains physiographic region in the northeast corner of the Columbia Basin. The West Plains is bounded in the north by the Spokane River, the south by upland buttes, the east by Marshall Creek and Latah Creek, and the west by the upland buttes and Spring Creek of eastern Lincoln County (M. B. McCollum and Pritchard 2012). Ecology’s Water Resource Inventory Area (WRIA) identifies three areas in the West Plains. WRIA 56 which includes a majority of the Site, WRIA 34 east of the Site, and WRIA 54 capturing the northernmost portion of the Site.

2.2.1 Geology

General geology for the region is described by Deobald and Buchanan (1995). The geologic strata underlying the area from surface to depth includes unconsolidated quaternary deposits, Columbia River basalts, and basement crystalline rock (Exhibit 2-1).

Exhibit 2-1. Stratigraphy of the Site

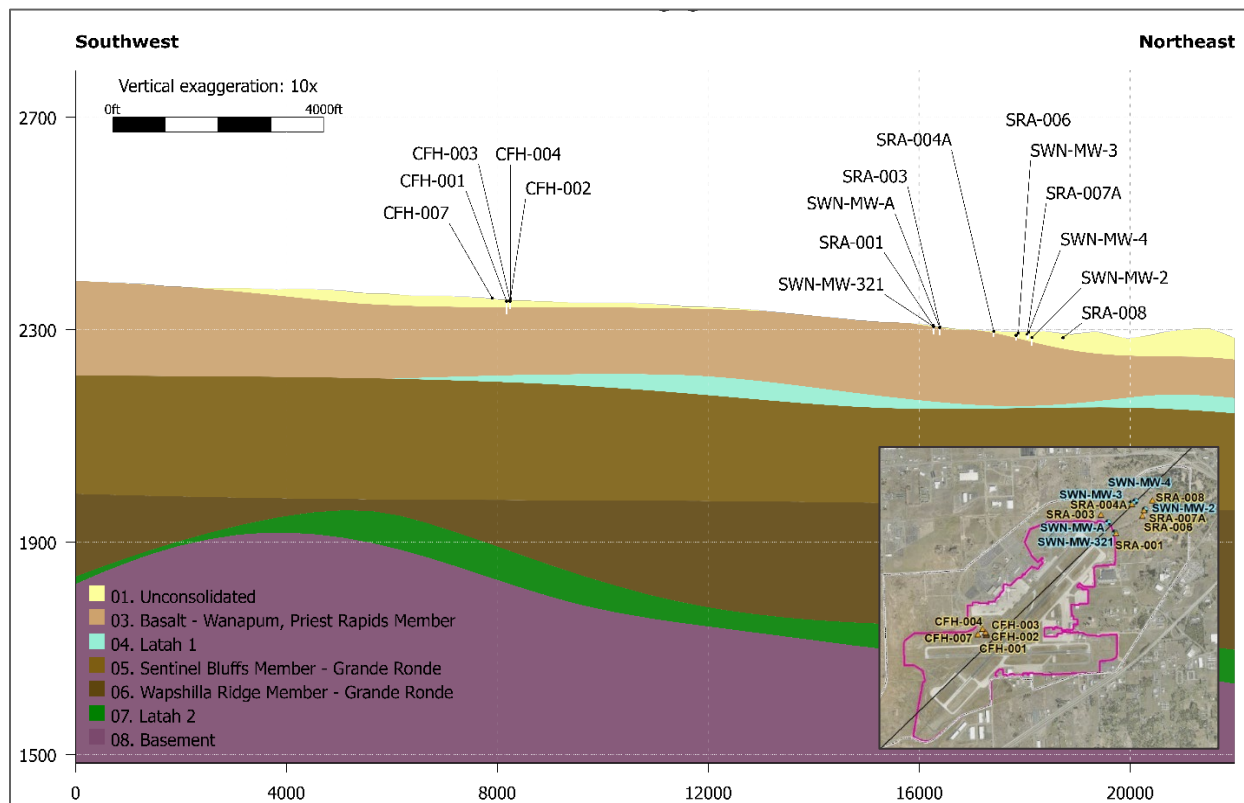
Era	Period	Epoch	Geologic Units				Geologic Model Units
Cenozoic	Quaternary	Holocene	All Quaternary Sedimentary Units				Overburden
		Pleistocene					
	Tertiary	Pliocene	All Pliocene Sedimentary Units				
		Miocene	Columbia River Flood Basalt Group		Missoula Flood Sediments		Columbia River Basalt Group and Sedimentary Interbeds
			<i>Member</i>	<i>Unit</i>	<i>Formation</i>		
			Wanapum	Priest Rapids	Ellensburg	Latah	
			Grande Ronde	Sentinel Bluffs			
Wapshilla Ridge							
Pre-Cenozoic		Crystalline Igneous and Metamorphic Rocks				Basement	

Notes: Modified from (Burns et al. 2011) and (Reidel and Tolan 2013), reproduced from GSI Environmental Inc., 2024)Appendix A

At the Site, relatively thin unconsolidated overburden (0 to 60 ft [0 to 18 m]) is typically present at ground surface (Exhibit 2-2). Unconsolidated deposits include both Pleistocene era channel deposits and late Pleistocene to Paleocene surficial deposits. Miocene age Columbia River Basalt Group (CRBG) is located immediately beneath the unconsolidated deposits throughout the Site (Kasbohm et al. 2023; Derkey et al. 2004; Hamilton et al. 2004). In the West Plains the CRBG thickness is less than 1,000 ft (Derkey et al. 2004; Hamilton et al. 2004; Burns et al. 2011). Of the seven formal formations comprising the CRBG in the Columbia Basin (Reidel et al. 2013) only two are found in the West Plains: the Grande Ronde Basalt and the overlying Wanapum Basalt. Two members of the Grande Ronde Basalt Formation are present at the Site (Wapshilla Ridge and Sentinel Bluffs Members) as well as one member of the Wanapum Basalt formation, the Priest Rapids Member (Derkey et al. 2004; McCollum and Hamilton 2012). The Wanapum Basalt

lies at or near ground surface with a thickness of 120 to 160 ft (37 to 49 m), overlying Grande Ronde Basalt and in some cases interbedded Latah Formation.³ The CRBG is underlain by crystalline basement rock described by Hamilton et al. (2004) as Tertiary to Cretaceous age granite.

Exhibit 2-2. Geologic Cross Section (Southwest to Northwest through the Site)



Notes: Geologic cross-section developed from site specific and area well logs coupled with area studies.

2.2.2 Hydrogeology

Several of the geologic units described in Section 2.2.1 are considered unique hydrogeologic units with unique hydraulic characteristics. Hydraulic test data is available for several of the hydrostratigraphic units within the Site. Exhibit 2-3 summarizes this information into ranges.

Unconsolidated deposits host the shallowest groundwater system. The unconsolidated/alluvial aquifers mantling basalt are typically thin (0 to 60 feet thick at the Site), and little to no lateral continuity occurs. Therefore, the shallowest continuous aquifer is a combination of unconsolidated strata and shallow Wanapum.

From literature, CRBG hydraulic conductivity spans over multiple orders of magnitude, in large part due to their three-part layered structure: flow bottom, flow interior, and flow top. The typically repeated stratigraphic patterns of the CRBG are described as: a sparsely vesicular flow bottom; a dense, jointed, and typically non-vesicular flow interior; and a vesicular, brecciated flow top (Reidel et al. 2013). The flow top of one basalt flow and flow bottom of the overlying basalt flow

³The Latah Formation includes soil, sedimentary deposits of fluvial, lacustrine, volcanoclastic debris flow, and ash-fall that accumulated between flood basalts during eruptive hiatuses. These primarily sedimentary beds interfinger with the CRBG and are typically fine to medium grained and less than 100 feet thick (Reidel et al. 2013; Swanson et al. 1979).

are collectively referred to as the interflow zone and typically have higher horizontal hydraulic conductivity (Kahle et al. 2011). On a regional scale, sedimentary interbeds (Latah) are considered confining or semi-confining units to flow top and flow bottom aquifers (Burns et al. 2011). However, thin or missing Latah interbeds may result in greater communication between basalt aquifers at a local scale (Lite 2013; Taylor and Gazis 2014).

Although not present within the SIA property boundary, several northeast- to southwest-trending, sediment-filled paleochannels are present in the West Plains and are a significant part of the unconsolidated aquifer system. One paleochannel is known to exist north of SIA. Portions of many of these paleochannels cut deeply through the underlying Wanapum Basalt and Grande Ronde Basalt, integrating otherwise somewhat segregated groundwater flow systems.

Exhibit 2-3. Hydraulic Conductivity

Hydrostratigraphic Unit		Horizontal Hydraulic Conductivity Range (feet/day)	Source for Estimate
Alluvium	West Plains	0.02 – 1,288	(Budinger & Associates, Inc. 2019) (Century West 1993) (EA Engineering 2025)
Columbia River Basalt Group (CRBG)	Wanapum	Regional	(Whiteman 1994) (Northwest Land & Water, Inc. 2011) (Northwest Land & Water, Inc. 2012) (Bay West and URS 2022) (AFCEC and Johnson 2024)
		West Plains	(Northwest Land & Water, Inc. 2011) (Northwest Land & Water, Inc. 2012) (Bay West and URS 2022) (AFCEC and Johnson 2024) (EA Engineering 2025)
		Interflow	Reidel et al 2002 as cited in (Kahle et al. 2011) Spane and Thorne 1985 as cited in (Kahle et al. 2011)
		Flow Interior	
	Grande Ronde	Regional	(Whiteman 1994), Brown & Spane 1983 as cited in (Spane 2013) Bruce 1981 as cited in (Spane 2013) Gephart, Deju, & Eddy 1979 as cited in (Spane 2013) Jackson 1982 as cited in (Spane 2013) La Sala & Doty 1971 as cited in (Spane 2013) Raymond & Tilson 1968 as cited in (Spane 2013) Reidel, Spane, & Johnson 2005 as cited in (Spane 2013) Spane, Thorne, & Riggsbee 1983 as cited in (Spane 2013) Strait & Spane as cited in (Spane 2013) Stone 1985 as cited in (Spane 2013) (McGrail et al. 2009)
		West Plains	(EA Engineering 2025)
		Interflow	Reidel et al. 2002 as cited in (Kahle et al. 2011) Strait and Mercer 1987 as cited in (Kahle et al. 2011)
		Flow Interior	
	CRBG	Flow Tops	USDOE 1988 as cited in (GSI Water Solutions Inc. et al. 2015)
		Flow Interior	
Interflow		(Hansen 1994)	
Glacial Fluvial or Latah		0.99 - 20	(Northwest Land & Water, Inc. 2011) (Northwest Land & Water, Inc. 2012)

3.0 FIELD ACTIVITIES

Soil and groundwater sampling was performed between 02 and 27 January 2025. Pre-field activities, sample collection, and post-field activities are described in the following subsections.

3.1 Pre-Field Activities

GSI or a subcontractor performed the following pre-field coordination activities:

- Updated the existing Site-Specific Health and Safety Plan (HASP) to include drilling and soil sampling activities and maintained the HASP on-Site during field activities.
- Assessed access to the Site and proposed drilling locations.
- Contracted a private subcontractor to assess the presence of buried utilities and other subsurface structures and obstructions at proposed boring locations.
- Utility clearance was obtained from multiple providers, including FAA Locate.
- Adjusted boring locations based on the location of utilities as well as access and Site operational constraints and collected updated GPS coordinates.
- Marked boring locations with white paint within the area cleared by ground penetrating radar (GPR) to ensure clearance from underground utilities.
- Coordinated and scheduled field activities with drilling, utility, and laboratory subcontractors.
- Submitted FAA Form 7460 and received FAA approval for field activities at the proposed soil boring locations.
- Coordinated with SIA operations and security to ensure compliance and safety while conducting field work within the AOA.
- Notified the FAA 14 days before fieldwork began within the AOA.
- Confirmed that all personnel on the field team and subcontractors reviewed the Inadvertent Discovery Plan (Appendix D of the IPI Work Plan).
- Provided Ecology notice five calendar days prior to commencing field activities.

3.2 Groundwater Sampling and Analysis

Groundwater sampling was conducted in accordance with the procedures in Appendix B of the IPI Work Plan. Figure 3-1 shows the locations of the groundwater monitoring wells sampled. The following monitoring wells included in the IPI Work Plan were not sampled:

- EA-MW-6B was found to be in poor condition with no monument, and the measured depth to the bottom (30.5 ft) of the well casing was not near the well construction depth of 40 ft as detailed on the construction log. During upcoming field investigations this well will be repaired in accordance with Washington Administrative Code (WAC 173-160 2008).
- W-MW-16 was dry.

Prior to sampling, static water levels were collected using a Geotech water level meter. The approximate depth to the bottom of each well casing was also determined using a water level meter to assess if redevelopment of a well should be conducted before sampling. The following monitoring wells were redeveloped by purging 10 casing volumes of groundwater and then allowed to equilibrate for at least 48 hours prior to sampling:

- EA-MW-7A was found to have approximately 6 ft of sediment, intruding upon the bottom foot of the screened interval.
- EA-MW-7B was found to have approximately 10 ft of sediment intruding upon the bottom 2.5 ft of the screened interval.
- GCF-MW-8 was found to have approximately 4 ft of sediment intruding upon the bottom 4 ft of the screened interval.

One monitoring well, GCF-MW-10, was redeveloped due to the presence of surface water above the locking plug.

Groundwater samples were collected using low-flow groundwater sampling procedures for the collection of environmental samples (IPI Work Plan, Appendix B, Attachment A: Operating Procedures 3012 and 3032). Several field parameters were measured using a YSI multi-parameter water quality meter: temperature, pH, specific conductivity (SC), turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP). Measured field parameters are shown in Table 4-1.

Decontamination procedures followed those described in the IPI Work Plan. Prior to commencement of sampling activities and between each use, sampling equipment was cleaned in a “3-bucket” wash and rinse system with laboratory grade detergent (e.g., Liquinox). After decontamination, the final rinse consisted of laboratory-supplied PFAS-free water.

Groundwater samples were collected in laboratory-provided PFAS-free HDPE containers, placed in resealable plastic bags, and stored in a cooler with ice. The groundwater samples were transported to the Eurofins Northwest (Spokane, WA) under chain-of-custody protocols and analyzed on a standard turn-around-time basis.

Groundwater samples were collected from 50 groundwater monitoring wells. The following samples were transported to analytical laboratories for analysis:

- A total of 80 samples were analyzed for PFAS by Eurofins Northern California in Sacramento, California:
 - › 50 primary samples
 - › 9 field duplicate samples
 - › 12 equipment rinsate blanks
 - › 9 field blanks
- All primary and field duplicate groundwater samples were analyzed for cations, anions, and alkalinity by Eurofins Northwest in Spokane, Washington.
- All primary and field duplicate groundwater samples were analyzed for stable isotopes by Isotech.

Field forms and chain of custody forms are provided in Appendix A.

3.2.1 Well Survey

A well survey was conducted by Sandis (Spokane, WA) from 10 to 11 September 2024. The surveyor report is presented in Appendix E with the resulting coordinates and elevations shown in Table 3-1.

3.3 Soil Sampling and Analysis

Soil sampling and analysis proceeded in accordance with the IPI Work Plan. Prior to drilling at each location, a handheld Global Positioning System (GPS) was used to record the coordinates of the marked boring location. The sample locations are shown in Table 3-2. The presence of utilities and other obstacles necessitated the repositioning of the following target sampling locations:

- HFH-004 was moved to the exterior wall of the historical fire house as the drill rig mast was unable to be raised inside the building.
- HFH-006 had the soil sample collection method changed to a hand auger due to the high density of utilities (electrical, sewer, telecoms) in the area.
- JTA-009 was moved towards the north downslope of its original location due to natural gas line interference.
- SRA-001 was moved to the north side of the drainage channel due to drill rig access issues associated with the slope of the original location.
- SRA-002 had the soil sample collection method changed to a hand auger due to the height restrictions for the drill rig mast in the obstruction free zone of the 3-21 runway approach area.
- SRA-004A and SRA-004B were moved approximately 450 feet northwest along the drainage channel due to the height restrictions for the drill rig mast in the obstruction free zone of the 3-21 runway approach area.
- SRA-007A and SRA-007B were moved upslope in the drainage channel area due to surface water submergence.
- TRA-001 was moved inside of the AOA fence line due to access restrictions within the USPS operational area.

Figures 3-2a and 3-2b show the locations sampled within each PFAS area of potential and known concern.

Yellow Jacket Drilling Services was subcontracted to conduct soil sampling. Soil borings were advanced from ground surface until groundwater or basalt was encountered using sonic drilling methods with a TSi 150cc track-mounted sonic rig. Prior to first use and in between borings, downhole drilling and sampling equipment was decontaminated using a high-pressure steam cleaner with potable water. The borings were advanced in 5-foot increments for the first 20 feet and 10-foot increments thereafter. The drilling was performed with a track mounted sonic rig coring system, which utilizes two casing sizes: one larger outer drill casing and one inner core barrel. The outer drill casing consisted of a large diameter casing (i.e., 8- or 9-inch outside diameter [OD]) that was advanced behind the smaller diameter core barrel, creating a cased-off borehole as the boring was advanced. At each location, the recovered continuous core was evaluated, and the boring was extended to the first encounter of groundwater.

The soil cores recovered from the continuous coring activities were observed for general characteristics including odor. Lithologic boring logs were prepared using the Unified Soil Classification System (USCS) for guidance, as described in the American Society for Testing Materials (ASTM) International Standard D 2488-17e. The soil boring logs are included as Appendix F.

Soil samples were collected in laboratory-provided PFAS-free containers, placed in resealable plastic bags, and stored in a cooler with ice. Samples were collected and handled following procedures described in the IPI Work Plan (GSI 2024b, Appendix B, Attachment A). Soil samples were transported to Eurofins Northwest under chain-of-custody protocols and analyzed on a standard turn-around-time basis.

Soil samples were collected from a total of 57 locations. Samples were collected during the advancement of soil borings at 47 locations, while hand augers were utilized for 10 sample locations. The following soil samples were collected:

- A total of 337 samples were received by Eurofins Northern California in Sacramento, California, for percent moisture and PFAS analysis:
 - 284 primary samples
 - 34 field duplicate samples
 - 19 blanks (equipment, field, and handwash)
- A total of 318 samples were received by Eurofins Northwest in Spokane, Washington, for pH and total organic carbon (TOC) analysis:
 - 284 primary samples
 - 34 field duplicate samples

Field forms and chain of custody forms are provided in Appendix A.

3.4 Deviations from Work Plan

Deviations from the IPI Work Plan entailed:

- One monitoring well was found to be damaged (EA-MW-6B) and one monitoring well was dry (W-MW-16). As detailed in Section 3.2, these two wells were not sampled.
- Ten soil boring locations were adjusted due to the presence of utilities or access issues as detailed in Section 3.3.

3.5 Investigation-Derived Waste

Investigation-derived waste (IDW), consisting of soil cuttings, groundwater well purge water, and decontamination wash water, was generated during the field investigation. Soil and water were containerized separately in 55-gallon drums and temporarily stored on-Site within the secure perimeter fence. Clean Harbors conducted confirmation testing for PFAS levels in the drums and managed the removal and disposal via incineration of the IDW in accordance with state and federal regulations. Appendix B presents IDW analytical results and manifests. Final documentation for the destruction from Clean Harbors for the IDW has not yet been received.

4.0 ANALYTICAL METHODS

Analytical methods for groundwater and soil samples are presented in Exhibit 4.1. Details regarding these analytical methods, such as laboratory reporting limits, laboratory method detection limits, holding times, and sampling containers, are presented in the IPI Work Plan (GSI Environmental Inc. 2024b).

Exhibit 4-1. Laboratory Analytical Methods

Lab	Analyte	Media	Method
Eurofins Northern California (Sacramento, CA)	PFAS	Groundwater & Soil	EPA 1633A
	Moisture Content	Soil	EPA 1633A
Eurofins Northwest (Spokane, WA)	Cations (calcium, magnesium, potassium, sodium)	Groundwater	EPA 200.7
	Anions (chloride, bromide, nitrate, sulfate)	Groundwater	EPA 300.0
	Alkalinity	Groundwater	SM 2320 B
	Total organic carbon (TOC)	Soil	EPA SW846 9060A
	pH	Soil	EPA SW846 9045D
Isotech (Stratum Reservoir; Champagne, IL)	Stable Isotopes ($\delta^2\text{H-H}_2\text{O}$, $\delta^{18}\text{O-H}_2\text{O}$)	Groundwater	Vienna Standard Mean Ocean Water (VSMOW)

As part of the groundwater sampling, several field parameters were collected: temperature, pH, specific conductivity, turbidity, DO, and ORP.

Tables 4-1 through 4-4 presents all analytical laboratory data and field parameters in tabular form.

5.0 DATA USABILITY

Data usability was assessed following the process established in the IPI Work Plan (GSI Environmental Inc. 2024b). It was determined that the data collected from the IPI are generally usable and satisfies the data quality objectives. All associated evaluations for data usability are provided in Appendix C, including an evaluation of the relative percent difference between field duplicates; results from quality control blanks for PFAS; and data validation reports.

6.0 GROUNDWATER RESULTS

This section presents groundwater elevation and water quality data. Tables 4-1 and 4-2 presents all field parameters and analytical results for groundwater in tabular format. Appendix D presents a compilation of analytical laboratory reports for all measured constituents.

6.1 Groundwater Elevation

The combination of monitoring well survey data and depth to water measurements collected in March 2024 and again in January 2025 allows for calculation of groundwater elevations.⁴ Table 6-1 presents measured depth to groundwater and calculated groundwater elevations. Groundwater elevation data allows for an understanding of flow directions and flow gradients.

Figures 6-1 and 6-2 present interpreted Site potentiometric surfaces for groundwater hosted in unconsolidated material from March 2024 and January 2025, respectively.⁵ Because Site wells completed in Wanapum are typically in the upper 50 percent of the Wanapum Basalt Member, Figures 6-3 and 6-4 represent the upper Wanapum potentiometric surface from March 2024 and January 2025, respectively. The flow fields⁶ for both the unconsolidated groundwater system and the upper Wanapum groundwater system are dominated by a northerly flow direction on the south side of the Site that shifts to the northeast on the north side of the Site. Therefore, upgradient wells include monitoring locations that wrap from the south side (e.g., EA-MW-5B and GDF-MW-10A) to monitoring locations along the west side (e.g., W-MW-17, W-MW-15, and LA-MW-8). The changing flow direction focuses the groundwater flow toward the northeast, predominantly in the Stormwater Recovery Area (SWN series wells). Wells in the Land Treatment Area are cross-gradient from the Primary Airport Area. Similarly, wells in the Gieger Correctional Facility, Former Geiger Field areas, and Waste to Energy Plant area are largely cross-gradient of Site but also downgradient of a small portion of the Site.

6.1.1 Groundwater Gradients

Horizontal hydraulic gradients in the unconsolidated material range from 0.002 to 0.015, with the steepest gradients occurring on the southeast side of the Site and the flattest on the western portion of the Site (Figures 6-1 and 6-2). Horizontal hydraulic gradients in the upper Wanapum range from 0.004 to 0.015, with the steepest gradients on the southern portion of the Site and the flattest through the center of the Site.

Groundwater elevation data in shallow and deep paired wells are available for nine paired sites, allowing for analysis of vertical gradients. Exhibit 6-1 presents the available data and calculated vertical gradients from the March 2024 and January 2025 monitoring events. Most of the site exhibits downward or negligible gradients. Downward gradients suggest a downward component of flow, upward gradients suggest an upward component of flow, and negligible gradient suggests flow is dominantly horizontal. The magnitude of a vertical gradient between different aquifers does not imply that there is a strong hydraulic connection and/or flux.

⁴ Groundwater elevation is calculated by subtracting the depth to water from the survey elevation of the measuring point (top of casing).

⁵ Groundwater elevations posted in Figures 6-1 and 6-2 are derived from (a) wells screened across unconsolidated material and (b) wells screened across both unconsolidated material and upper Wanapum (Table 3-1).

⁶ Potentiometric surfaces acknowledge depth to water in soil borings and ground surface elevation.

Exhibit 6-1. Site Vertical Gradients

Shallow Well	Deeper Well	Shallow Well Screen Midpoint Elevation (feet)	Deep Well Screen Midpoint Elevation (feet)	Shallow Well Formation	Deeper Well Formation	Month-Year	Shallow Well GW Elevation (feet)	Deeper Well GW Elevation (feet)	Vertical Gradient (unitless)	Direction
EA-MW-13B	EA-MW-13A	2368.75	2346.53	Unconsolidated	Unconsolidated/Fill / Basalt	MAR-2024	2370.19	2367.48	0.122	Downward
EA-MW-14B	EA-MW-14A	2371.31	2355.10	Unconsolidated	Unconsolidated / Fill / Basalt	MAR-2024	2370.11	2367.83	0.141	Downward
						JAN-2025	2370.26	2367.44	0.174	Downward
EA-MW-5B	EA-MW-5A	2361.32	2308.25	Unconsolidated/Basalt	Basalt	MAR-2024	2371.98	2368.07	0.074	Downward
						JAN-2025	2372.74	2367.57	0.097	Downward
EA-MW-7B	EA-MW-7A	2361.55	2315.90	Unconsolidated/Basalt	Basalt	JAN-2025	2367.52	2367.46	0.001	Negligible
EA-MW-8B	EA-MW-8A	2358.94	2311.08	Unconsolidated/Basalt	Basalt	JAN-2025	2367.41	2367.48	-0.002	Negligible
						MAR-2024	2367.69	2367.84	-0.003	Negligible
GCF-MW-12B	GCF-MW-12A	2320.57	2282.05	Basalt	Basalt	JAN-2025	2323.26	2323.25	0.0003	Negligible
GCF-MW-5	GCF-MW-5D	2346.61	2320.00	Unconsolidated/Basalt	Basalt / Interbed	JAN-2025	2352.60	2322.38	1.136	Downward
GDF-GR-7S	GDF-GR-7D	2347.59	2321.99	Basalt	Basalt	JAN-2025	2366.46	2367.75	-0.050	Upward
GDF-MW-10R	GDF-MW-10A	2361.14	2294.10	Unconsolidated/Basalt	Basalt	JAN-2025	2364.09	2354.70	0.140	Downward

Note: Vertical gradient values are considered negligible if they are less than the horizontal gradient in the area. The horizontal gradient near EA-MW-7 and EA-MW-8 is approximately 0.0035. The horizontal gradient near GCF-MW-12 is approximately 0.01.

Additional information regarding the degree of vertical groundwater flow for the Site is currently lacking. This will be further evaluated during the RI/FS with support from the quarterly groundwater monitoring results.

6.2 Major Ion Chemistry

Major ion chemistry for the Site is available from March 2024 and January 2025. During the March sampling event, 29 groundwater primary samples (plus 3 field duplicates) were collected from 29 wells. The January sampling event collected 50 primary samples (plus 9 field duplicates) from 50 wells.

6.2.1 Analytical Results

Major ion chemistry was evaluated at the analytical laboratory with ion chromatography (EPA Method 300.0) or inductively coupled plasma atomic emission spectrometry (EPA Method 200.7). Table 4-1 presents analytical results for groundwater in tabular format.

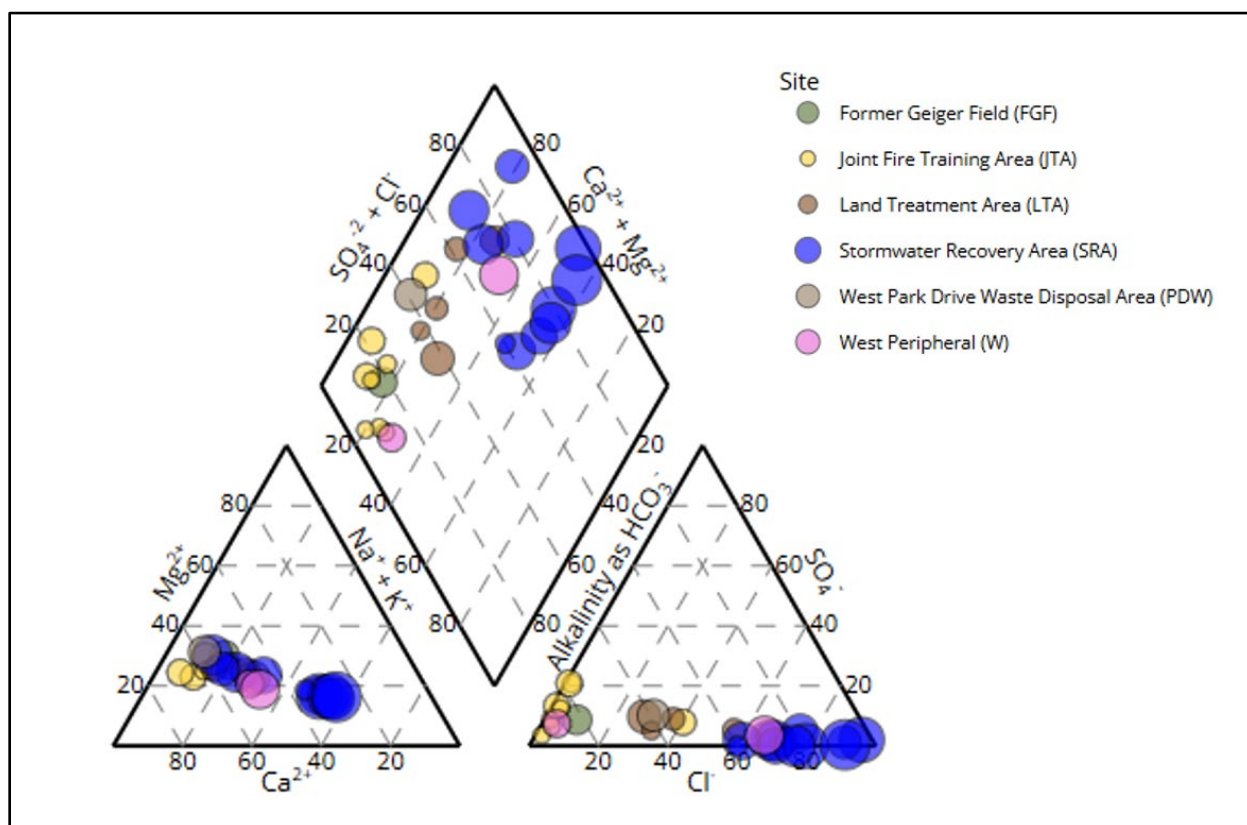
6.2.2 Water Characteristics

Exhibits 6-2 and 6-3 use Piper diagrams to present major ion chemistry for samples from March 2024 and January 2025, respectively. Piper diagrams (Piper, A.M. 1944) graphically present the major ion water quality data and can indicate six dominant water quality types: calcium-

bicarbonate, calcium-sulfate, magnesium-sulfate, sodium-sulfate, sodium-hydroxide, and calcium-hydroxide. Piper diagrams plot the proportion of major cations and major anions in separate ternary (triangular) plots. The vertices of the cation plot are concentrations of calcium, magnesium, and the sum of sodium and potassium. The vertices of the anion plot are concentrations of sulfate, chloride, and the sum of carbonate and bicarbonate. The two ternary plots are then projected onto a diamond-shaped combination plot by drawing lines parallel to the outer axis of each ternary diagram upward until they intersect with one another. The diamond-shaped plot is a matrix transformation of the anion/cation ternary plots. Symbol size on the Piper plot is scaled according to specific conductivity, where a higher specific conductivity (higher major ion concentrations) results in a larger circle.

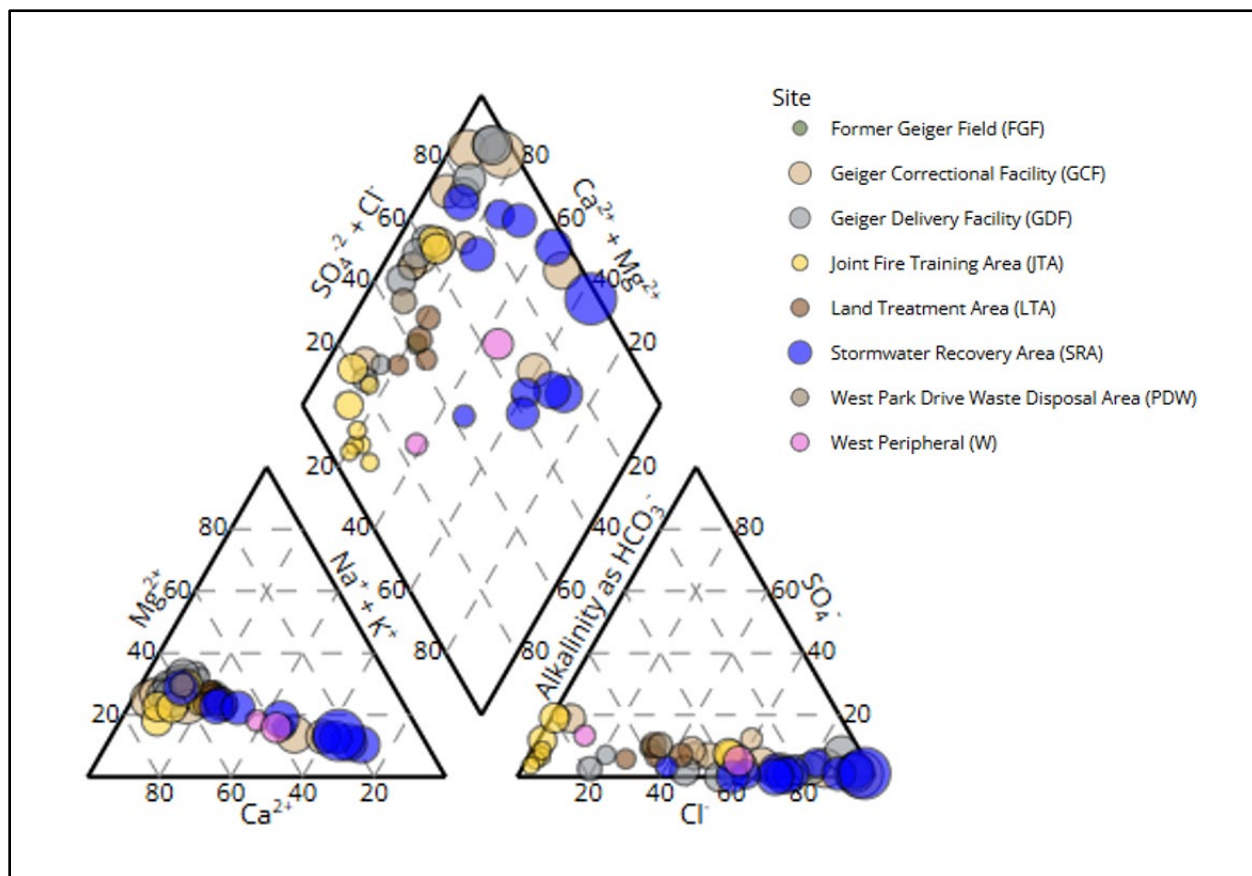
Major ion chemistry suggests background water is predominantly calcium carbonate, but many areas are dominated by calcium chloride or sodium chloride water type. Most of the locations with stronger chloride or sodium and chloride signals appear to be in communication with roadway storm water runoff. These locations include the Stormwater Recovery Area, areas along major roadways such as W-MW-17, and areas along the ditch systems that historically conveyed storm runoff, such as the Land Treatment Area (well LA-MW-9). In general, the major ion profiles by area are consistent between the March 2024 and January 2025 sampling events.

Exhibit 6-2. Piper Plot March 2024 Sampling Event



Note: Circle size is scaled by specific conductivity.

Exhibit 6-3. Piper Plot January 2025 Sampling Event



Note: Circle size is scaled by specific conductivity.

6.3 Analytical Results – Isotopes

Water isotopes can be used as natural tracers for understanding the origin, movement, and age of groundwater. Predictable relationships between the isotopic compositions of $\delta^{18}\text{O}$ and $\delta^2\text{H}$ in water and latitude, altitude, continentality, and climate conditions provide frameworks for interpreting sample measurements.⁷ Variations in the isotopic composition of groundwater can be used to determine likely recharge areas and elevations, and to delineate flow paths.

Previous regional investigations in WRIA 54 and WRIA 56 (Northwest Land & Water, Inc. 2012, 2011) observed that shallow groundwater is isotopically enriched relative to deeper groundwater.

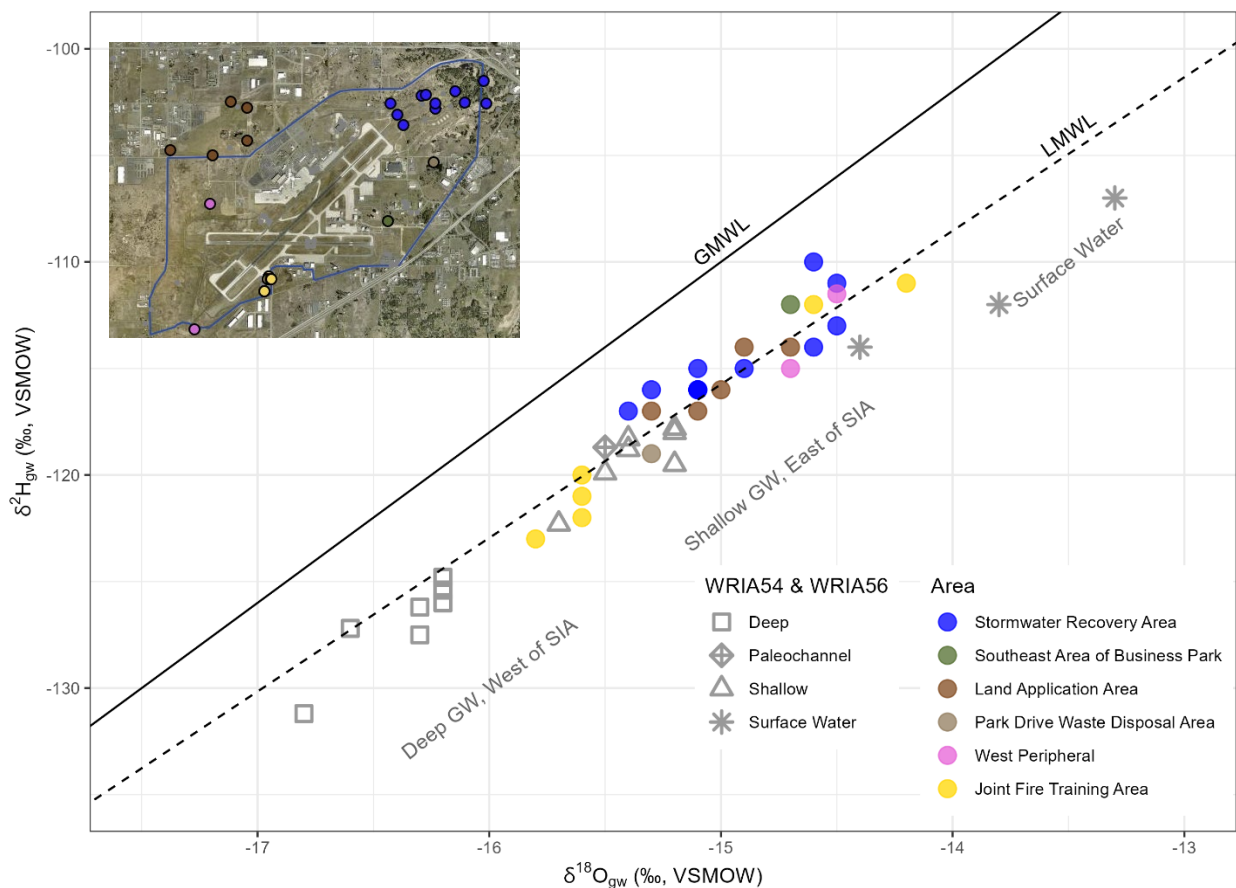
⁷ Isotope compositions are expressed as δ -values, representing deviations in per mil (‰) from Vienna Standard Mean Ocean Water (VSMOW). Water isotope results are typically compared to the Global Meteoric Water Line (GMWL), described by $\delta^2\text{H} = 8 \delta^{18}\text{O} + 10$, which represents the observed global relationship between $\delta^{18}\text{O}$ and $\delta^2\text{H}$ in amount-weighted annual precipitation. Local Meteoric Water Lines (LMWL) are developed for many areas to describe the isotopic composition of precipitation at a local or regional scale. A LMWL was calculated from modelled precipitation values at the Spokane International Airport (Bowen G. J. and Revenaugh J. 2003). Generally, more depleted isotopic signatures (lower on the LMWL) indicates precipitation at higher elevations and snowmelt. As an air mass moves higher and becomes colder, the remaining vapor will become progressively depleted in the heavier isotopes. In contrast, enriched isotopic signatures (higher on the LMWL) correspond with low elevation precipitation and warmer air masses. Deviation from the GMWL or LMWL can result from evaporation in surface water.

This finding is indicative of recharge from local low-elevation surface water and precipitation. In comparison, deeper groundwater is more isotopically depleted, indicative of basement recharge from high elevation snowmelt. A west to east gradient of isotopic enrichment was also noted, which follows the general direction of groundwater flow. In this study, sampled areas to the west and southwest had more depleted isotopic signatures, suggesting areas to the west are more influenced by deeper aquifers than areas to the east.

Isotope data for the Site is available from March 2024 and January 2025. During the March sampling event, 29 primary groundwater samples (plus 3 duplicate samples) were collected from 29 wells. The January sampling event included the collection of 50 primary samples (plus 9 duplicate samples) from 50 wells.

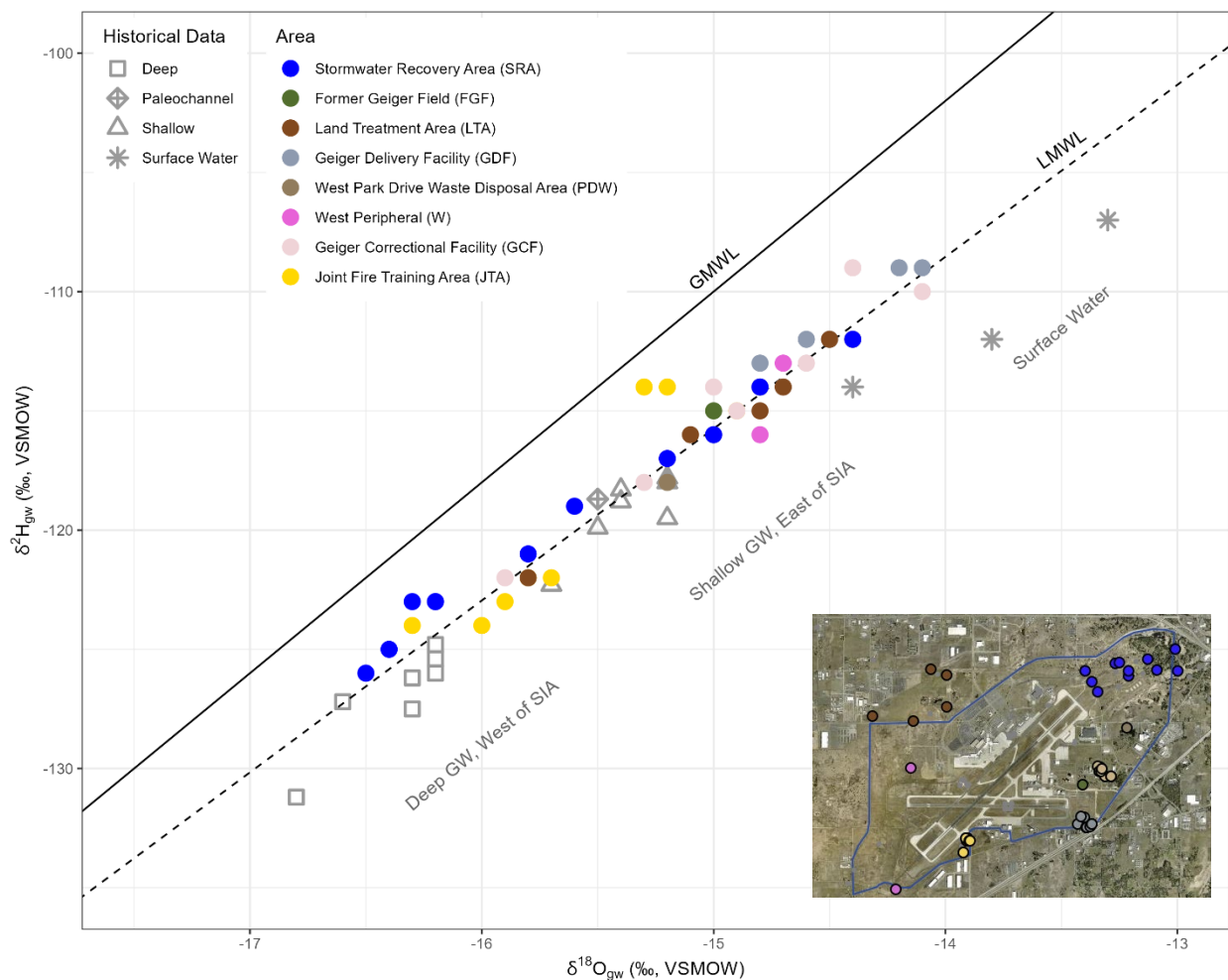
Isotope results from March 2024 plot along the LMWL, indicating that they are fed by meteoric water with minimal evaporation or isotopic exchange (Exhibit 6-4). The SIA samples overlap with the range identified in previous studies to be fed by a mixing of the isotopically depleted deeper groundwater with shallow groundwater fed by local low-elevation precipitation and surface water. Many SIA samples are more isotopically enriched and extend further along the LMWL than the groundwater samples from previous studies, overlapping with the range of previously sampled surface water (Exhibit 6-4). The weighted mean isotopic signature of annual precipitation for the area is $-13.9 \delta^{18}\text{O}$, $-107.5 \delta^2\text{H}$. Isotopes from Site groundwater approach this value, suggesting many of the sampled Site wells have minimal mixing with the deeper aquifers and are primarily recharged by local precipitation and surface waters.

Exhibit 6-4. Isotope Results Plotted with GMWL and LMWL (March 2024)



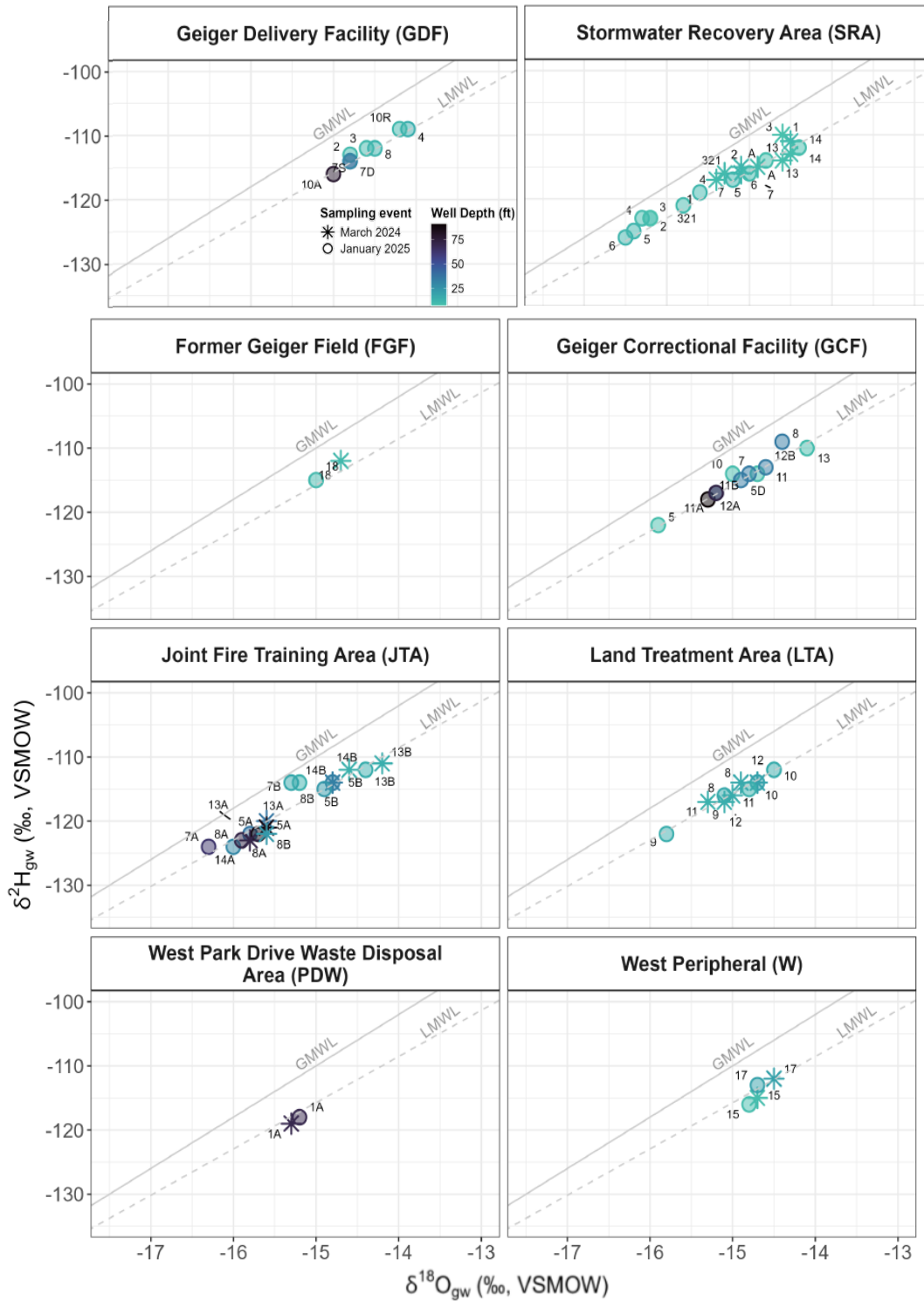
Isotope results from the January 2025 sampling event also fall along the LMWL. Unlike in 2024, the 2025 water isotope samples extend down the LMWL into the range previously identified as deeper groundwater, west of the SIA. These more isotopically depleted samples are from the Stormwater Recovery Area and the Joint Fire Training Area (Exhibit 6-5). Several wells sampled in the Geiger Correctional Facility and Geiger Delivery Facility have a more enriched isotopic signature, extending the overall range further up the LMWL into the range previously identified as representative of surface water (Exhibit 6-5).

Exhibit 6-5. Isotope Results Plotted with GMWL and LMWL (January 2025)



The southwest to northeast isotopic gradient observed in the previous studies does not appear to be well supported by the 2024 and 2025 SIA isotope results. However, a southwest to northeast isotopic gradient is observed when the Stormwater Recovery Area results are excluded. Similarly, there appears to be a correlation with depth when excluding results from the Stormwater Recovery Area (Exhibit 6-6). Generally, samples from shallow wells are more isotopically enriched than deeper wells. Isotopic enrichment is especially apparent at wells sampled from the Geiger Delivery Facility and the Geiger Correctional Facility (excluding Well GCF-MW-5; Exhibit 6-6). Most sites have consistent isotopic composition between sampling events. However, the Stormwater Recovery Area shows notable differences between sampling events at wells MW-6, MW-5, MW-4, MW-3, MW-2, and MW-321 (Exhibit 6-6). Within the Stormwater Recovery Area, the January 2025 samples are (a) more isotopically depleted than their corresponding March 2024

Exhibit 6-6. Isotope by Depth and Location and Sampling Event



samples and (b) more depleted than samples from the other areas measured in both 2024 and 2025. Seasonal isotopic variability could be due to snowmelt event(s) contributing a significant portion of water into the shallow groundwater system in the Stormwater Recovery Area.

6.4 Analytical Results – PFAS

PFAS concentrations in Site groundwater were evaluated using data collected in March 2024 and January 2025. Results from the March 2024 sampling event are presented in the PFAS Investigation Work Plan. The January 2025 sampling event included 50 primary samples and 9 field duplicate samples collected from 50 wells, each analyzed via EPA Method 1633 for 40 individual PFAS analytes.

To characterize the significance of PFAS analytes within Site groundwater, GSI prepared summary data and figures containing concentrations of the ten PFAS analytes listed in Ecology's CLARC tables. These ten analytes are from four PFAS subgroups:

- Perfluoroalkyl carboxylic acids (PFCAs): PFBA, PFHxA, PFOA, PFNA, PFDA
- Perfluoro sulfonic acids (PFSAs): PFBS, PFHxS, and PFOS
- Fluorotelomer sulfonic acids (FTSs): 6:2 FTS
- Perfluoro ether carboxylic acids (PFECAs): HFPO-DA

Figures 6-5 through 6-11 and Table 6-2 present the select PFAS analytes and their respective concentrations. For each well where a field duplicate sample was collected, the corresponding values posted in Figures 6-5 through 6-11 represent an average value for the sample and associated field duplicate. See Appendix C for details on data handling. Table 4-2 tabulates all analytical PFAS results.

6.5 PFAS Distributions in Groundwater

The following subsections describe PFAS results from the January 2025 sampling event. The discussion is grouped into seven sub areas known as Geiger Correctional Facility, Geiger Delivery Facility, Joint Fire Training Area, Land Treatment Area, Stormwater Recovery Area, West Park Drive / Waste to Energy Facility, and West Peripheral Area.

6.5.1 Geiger Correctional Facility Area

Figure 6-5 presents measured concentrations from 11 wells sampled in the Geiger Correctional Facility Area in January 2025. HFPO-DA, and 6:2 FTS were detected in all samples and PFDA was below detection in all but two wells. PFBA concentrations ranged from 0.97 to 17 nanograms per liter (ng/L). PFHxA ranged from below detection to 12 ng/L. PFOA concentrations ranged from 1.6 to 30 ng/L. PFNA concentrations ranged from below method detection limit⁸ (<0.42) to 6.3 ng/L. PFDA concentrations ranged from <0.4 to 24 ng/L). PFBS concentrations range from 1.1 to 4.5 ng/L. PFHxS concentrations ranged from 1.7 to 42 ng/L. PFOS concentrations ranged from 0.71 to 32 ng/L. Screen depths for the 11 monitoring wells sampled ranged from 3 to 97 ft below ground surface (bgs; Table 6-2). Samples from seven wells had higher PFOA and PFOS, these include GCF-MW-5D, GCF-MW-7, GCF-MW-11A, GCF-MW-11B, GCF-MW-12A, GCF-MW-12B, and GCF-MW-13. No data suggests that a concentration trend with depth occurs in this area.

⁸ Results falling below the method detection limit (non-detect) for sample is denoted with the symbol < followed by the method detection limit value.

Southwest of the Geiger Correctional Facility, one monitoring well (FGF-MW-18) was sampled in January 2025 in the Former Geiger Field Area (Figure 3-1). PFNA, HFPO-DA, and 6:2 FTS were below the method detection limit in all samples (Table 6-2). The PFBA, PFHxA, PFBS, PFHxS, and PFOS concentrations were, 3.1, 6.2, 3.2, 0.73, 7.8, and 17 ng/L, respectively. The screen depth for this well ranges from 8 to 13 ft bgs (Table 6-2).

6.5.2 Geiger Delivery Facility Area

Figure 6-6 presents measured concentrations from nine wells sampled in the Geiger Delivery Facility Area in January 2025. Concentrations of PFNA, PFDA, HFPO-DA, and 6:2 FTS were below detection in all samples. PFBA concentrations ranged from 1.7 to 19 ng/L. PFHxA concentrations range from below detection to 8.4 ng/L. PFOA concentrations ranged from 0.48 to 3.9 ng/L. PFBS concentrations ranged from 0.94 to 3.6 ng/L. PFHxS concentrations ranged from 0.65 to 2.8 ng/L. PFOS concentrations ranged from 0.71 to 8.2 ng/L. Screen depths for the nine sampled wells ranged from 5 to 83 ft bgs (Table 6-2); no data suggests that a concentration trend with depth occurs in this area.

6.5.3 Joint Fire Training Area

Figure 6-7 presents measured concentrations from nine wells sampled in the Joint Fire Training Area in January 2025. HFPO-DA was below detection in all samples. Concentrations of PFBA and PFHxA ranged from <0.83 to 200 ng/L, and <0.42 to 1,100 ng/L, respectively. PFOA concentrations ranged from <0.42 to 200 ng/L. PFNA and PFDA concentrations ranged from <0.42 to 8.6 ng/L and <0.42 to <5 ng/L, respectively. PFBS, PFHxS, and PFOS had concentrations ranging from <0.42 to 720, 1.42 to 12,000 ng/L, and <0.42 to 7,200 ng/L, respectively. 6:2 FTS concentrations ranged from <0.83 to 22 ng/L. Screen depths for the ten monitoring wells sampled ranged from 7.5 to 91 ft bgs (Table 6-2). PFAS data from the Joint Fire Training Area suggest a decreasing concentration trend with depth. Wells with concentrations of PFOA, PFHxS, and PFOS above the federal maximum contaminant levels (MCLs) all had screened intervals shallower than 42 ft bgs.⁹ The sample collected from well EA-MW-13B had the highest concentration for each of the ten selected PFAS analytes.

6.5.4 Land Treatment Area

Figure 6-8 presents measured concentrations from five wells sampled in the Land Treatment Area in January 2025. HFPO-DA concentrations were below detection in all samples. PFBA and PFHxA had concentrations ranging from <0.79 to 42 ng/L and <0.39 to 180 ng/L, respectively. Three wells in this area had detectible PFOA, with concentrations ranging from <0.42 to 24 ng/L. PFNA was detectible in samples from two wells and PFDA was detectible in samples from one well, with concentrations respectively ranging from <0.39 to 4.9 ng/L and <0.39 to 9 ng/L. PFBS, PFHxS and PFOS concentrations ranged from <0.39 to 4.1 ng/L, <0.61 to 16 ng/L, and <0.42 to 14 ng/L, respectively. Two wells had samples with detectible 6:2 FTS, concentrations ranged from <0.85 to 2.5 ng/L. The groundwater wells sampled in this area are all relatively shallow with screen depths ranging from 6 to 26 ft bgs (Table 6-2). Two wells (LA-MW-8 and LA-MW-9) had relatively

⁹ The MCLs are the National Primary Drinking Water values issued by EPA in April 2024 and are used here for context understanding that further work will be conducted during the development of the Remedial Investigation Work Plan and the Remedial Investigation to conduct a quantitative risk assessment and provide direct support for the development of protective Site- and chemical specific clean up levels. MCL values are provided in the IPI Work Plan (GSI Environmental Inc. 2024b).

higher PFOA and PFOS compared to other wells in the Land Treatment Area. One of these wells (LA-MW-8) is located upgradient of the Site (Figure 6-2).

6.5.5 Stormwater Recovery Area

Figure 6-9 presents measured concentrations from 11 wells sampled in the Stormwater Recovery Area in January 2025. HFPO-DA concentrations were below detection in all samples. PFBA and PFHxA concentrations ranged from 9 to 71 ng/L and 18 to 150 ng/L, respectively. PFOA concentrations ranged from 22 to 370. PFNA and PFDA concentrations ranged from 3.5 to 53 ng/L and 1.5 to 170 ng/L. Concentrations of PFBS, PFHxS, and PFOS ranged from 1.5 to 22 ng/L, 18 to 1100 ng/L, and 19 to 86 ng/L, respectively. The wells in the Stormwater Recovery Area are all relatively shallow with screen depths ranging from 6.5 to 20 ft bgs (Table 6-2). This area shows significant variability in PFAS signature; the maximum concentration of each analyte with an exceedance was typically from a unique well. The maximum PFOA (370 ng/L) and PFNA (53 ng/L) concentrations occurred in a sample collected from SWN-MW-3, whereas the maximum PFDA (98 ng/L) detection was from SWN-MW-4. The maximum detection of PFHxS (1,100 ng/L) was from SWN-MW-321, while the maximum PFOS concentration (93 ng/L) was detected in a sample from well SWN-MW-2. The Stormwater Recovery Area receives water via permitted stormwater outfalls collected from three drainage areas (Valley 2023).

6.5.6 West Park Drive / Waste to Energy Facility Area

One well (PD-MW-1A) with a screen depth of 65 to 75 ft bgs was sampled in West Park Drive / Waste to Energy Facility Area (Figure 6-10 and Table 6-2). Located adjacent to the Waste to Energy facility, PD-MW-1A is near a potential PFAS source unrelated to SIA operations. The concentrations of PFNA, PFDA, HFPO-DA, and 6:2 FTS were below detection. The concentrations of PFBA, PFHxA, PFOA PFBS, PFHxS, and PFOS were 3.6, 2.7, 5.4, 4, 26, and 29 ng/L, respectively.

6.5.7 West Peripheral Area

Figure 6-11 and Table 6-2 present PFAS concentrations from two wells screened between 7 and 25 ft bgs in the West Peripheral Area (near the western extent of the Primary Airport Area). The January 2025 sample concentrations of PFNA, PFDA, HFPO-DA, PFHxS, and 6:2 FTS were below detection in samples from both wells. PFBA, PFHxA, and PFOA concentrations ranged from <0.89 to 4.6 ng/L, <0.45 to 1.5 ng/L, and <0.45 to 1.9 ng/L, respectively. PFBS and PFOS concentrations ranged from 3 to 7.2 and <0.45 to 2.3 ng/L, respectively.

6.6 Comparison to March 2024 Groundwater Results

PFAS concentrations in Site groundwater were evaluated using data collected in March 2024 and January 2025. Comparing results from the March 2024 sampling event (GSI 2024) to those from the IPI investigation shows less variability in deep wells compared to shallow wells. For example, EA-MW-14A, EA-MW-13A, and EA-MW-8A, with screen midpoints respectively at 30, 45, and 71.5 ft bgs showed less than a 30 ng/L difference in PFHxS concentrations between sampling events. Whereas EA-MW-13B and 14B (screen midpoint at 16 and 16.5 ft bgs, respectively) had 900 ng/L and a 4,500 ng/L difference in PFHxS concentrations, respectively, between sampling in March 2024 and January 2025.

Both the January and March sampling events occurred during periods of relatively high groundwater levels. The temporal nature of PFAS concentrations will be further evaluated with support from the quarterly groundwater monitoring program.

7.0 SOIL RESULTS

Prior to this investigation, no PFAS data in soil was available for the Site. The soil results provide the needed data to serve as a basis for the RI/FS Work Plan. This section summarizes the observed lithology in soil borings and hand auger samples and the associated analytical laboratory results. The locations sampled are shown in Figures 3-2A and 3-2B. Tables 4-3 and 4-4 presents all analytical results (TOC, pH, and PFAS) for soil in a tabular format and Appendix D presents a compilation of all analytical laboratory reports for all measured constituents.

7.1 Lithology

Soil samples were collected from 47 boring locations using sonic drilling methods. An additional ten samples from shallow subsurface soils were collected via hand auger. The locations sampled are presented in Figures 3-2A and 3-2B and Table 3-2. Soil samples were analyzed for PFAS, moisture content, TOC, and pH via methods detailed in Section 4.

Lithology observed across the site is basalt overlain by unconsolidated overburden composed of interbeds of silt, silty sand, poorly graded sand with silt, and/or poorly graded sand with gravel. The thickness of the overburden ranged from 0.5 to 44 ft bgs for 32 boring locations where basalt was encountered. Groundwater was encountered at depths ranging from 6 to 34 ft bgs.

7.1.1 Current Fire House Area

In the Current Fire House Area, six soil borings were advanced northeast and southeast of the fire house building (Figure 3-2A). An additional soil boring (CFH-007) was advanced adjacent to the oil-water separator that receives wastewater from trench drains within the fire house building. The three westernmost borings (CFH-005, CFH-006, CFH-007) were terminated upon encounter with basalt at depths ranging from 5 to 7 ft bgs. Basalt was not encountered at the four remaining borings advanced to depths ranging from 15 to 25 feet: three east of the current fire house (CFH-001, CFH-002, CFH-003) and one to the north (CFH-004). Sample collection from these borings ceased upon encountering groundwater at depths ranging from 9.5 to 15 ft bgs.

7.1.2 FAA Inspection Testing Area

In the FAA Inspection Testing Area, four surface soil samples were collected (0 to 6 inches bgs). Four soil borings were advanced in each quadrant of grassy areas formed by the intersection of runway 8/26 and Taxiway D (Figure 3-2A). Borings south of the runway were advanced 20 ft and sample collection ceased upon encountering groundwater at 6 ft bgs to the west of Taxiway D (FIT-001) and 15 ft bgs (FIT-002) to the east of the Taxiway D. Borings north of the 3-1 runway were advanced 15 to 20 ft (FIT-003 and FIT-004) and sample collection was ceased upon encountering basalt at 12 to 16 ft bgs.

7.1.3 Field Maintenance Building Area

In the Field Maintenance Building Area, four soil borings were advanced through the pavement (Figure 3-2A) of the previously unpaved area on either side of the Field Maintenance Building. The three western bores (FMB-001, FMB-002, FMB-004) were advanced 15 ft and basalt was encountered at 10 to 15 ft bgs. Sample collection ceased upon encountering groundwater at 5 ft bgs (FMB-001) and 10 ft bgs (FMB-004). Groundwater was not encountered at FMB-002. The

remaining bore, FMB-003, was advanced 20 feet and did not encounter basalt. Sample collection at FMB-003 ceased upon encountering groundwater 15 ft bgs.

7.1.4 Historical Fire House Area

In the Historic Fire House Area, one hand auger soil sample for surface soil (0-6 inches bgs) was collected near a dry well west of the historical fire house building (location HFH-006; Figure 3-2A). Five soil borings were advanced 15 ft: three soil borings to the southwest (HFH-001, HFH-002, HFH-003) and one to the northeast in line with bay door openings of the historical fire house (HFH-005). Additionally, one boring (HFH-004) was advanced outside of the building adjacent to the location where the AFFF concentrate was stored (Figure 3-2A). Sample collection ceased upon encountering basalt at depths ranging from 12 to 13 ft bgs, except for HFH-001, where groundwater was encountered at 7 ft bgs.

7.1.5 Joint Fire Training and Remtech Areas

Twelve soil borings were advanced in the Joint Fire Training and Remtech Areas (Figure 3-2A). In the Remtech area, just east of the AOA fenceline, three borings were advanced. The two southernmost borings (RT-001 and RT-002) were advanced 15 to 20 feet, encountering basalt at 15 ft bgs at each location. Sample collection ceased upon encountering groundwater at 12 to 15 ft bgs. The northernmost boring (RT-003) was advanced 35 ft and sample collection ceased upon encountering basalt at 31 ft bgs as groundwater was not encountered.

In the Joint Fire Training Area, nine borings were advanced. The southernmost boring (JTA-001), southeast of monitoring well pair EA-MW-5A and EA-MW-5B, was advanced 25 ft and sample collection ceased after encountering groundwater at 24 ft bgs. In the former Geiger Field Landfill Area, five borings (JTA-002, JTA-003, JTA-004, JTA-005, and JTA-006) were advanced between monitoring well pair EA-MW-5A and EA-MW-5B and monitoring well pair EA-MW-14A and EA-MW-14B. These borings were advanced 30 to 50 ft, and each encountered a lean clay interval at 16 to 20 ft bgs that was approximately 8 to 15 ft thick. Though groundwater was not encountered in these borings, perched water was observed above the lean clay intervals in three borings (JTA-003, JTA-005, and JTA-006). Sample collection for these borings ceased upon encountering basalt at depths ranging from 25 to 44 ft bgs. The three northernmost borings (JTA-007, JTA-008, and JTA-009) were advanced 20 to 35 feet. The boring near monitoring well pair EA-MW-13A and EA-MW-13B (JTA-007) encountered basalt at 30 ft bgs, and sample collection ceased upon encountering groundwater at 14 ft bgs. The boring near monitoring well pair EA-MW-7A and EA-MW-7B (JTA-008) was advanced to 20 ft and sample collection was ceased upon encountering groundwater at 17.5 ft bgs. The northernmost boring (JTA-009) was advanced 35 ft and sample collection ceased at 30 ft bgs upon encountering basalt. Groundwater was not encountered at JTA-009.

7.1.6 Land Treatment Area

Three soil borings were advanced in the Land Treatment Area (Figure 3-2B). South of LA-MW-8, one boring (LTA-001) was advanced 15 ft and sample collection ceased after groundwater was encountered at 12 ft bgs. Between LA-MW-10 and LA-MW-11, one boring (LTA-002) was advanced 15 ft and sample collection ceased upon encountering groundwater and basalt at 11 ft bgs. Between LA-MW-12 and LA-MW-9, one boring (LTA-003) was advanced 20 ft and sample collection ceased upon encountering groundwater at 18 ft bgs.

7.1.7 Stormwater Recovery Area

Samples were collected from thirteen locations in the Stormwater Recovery Area (Figure 3-2B). Only one shallow sample (SRA-002) was collected adjacent to the 3-21 stormwater outfall due to height restrictions requiring a sample collection method change as detailed in Section 3.3. Two soil borings were advanced adjacent to the Alpha (SRA-001) and Perimeter Ditch (SRA-003) permitted stormwater outfalls. The boring adjacent to the Alpha outfall was advanced 10 ft and sample collection ceased upon encountering basalt at 6.5 ft bgs. The boring adjacent to the Perimeter Ditch outfall was advanced 15 ft and sample collection ceased upon encountering groundwater at 13 ft bgs. One boring (SRA-004A) was advanced on the bank of the channel emanating from the Alpha outfall near monitoring well SWN-MW-3 and one shallow sample (SRA-004B) was collected at the apparent high-water line of the channel. The boring near SWN-MW-3 was advanced 10 ft and sample collection ceased upon encountering basalt at 7 ft bgs.

In an upslope area between the 3-21 outfall and monitoring well SWN-MW-1, one boring (SRA-005) was advanced 25 ft and encountered basalt at 23 ft bgs. Sample collection ceased upon encountering groundwater at 17 ft bgs. One boring west of SWN-MW-1 (SRA-006) was advanced 10 ft and sample collection ceased upon encountering basalt at 8 ft bgs. However, sample recovery failed between 1 and 5 ft bgs. One boring (SRA-007A) was advanced on the bank of the channel emanating from the 3-21 outfall near monitoring well SWN-MW-2 and one shallow sample (SRA-007B) was collected at the apparent high-water line of the channel. The boring near SWN-MW-2 was advanced 10 ft and sample collection ceased upon encountering basalt at 9 ft bgs. However, saturated conditions resulted in no recovery for the first 5 ft of the boring.

Two borings (SRA-008 and SRA-009) were advanced in areas where seasonal pooling occurs east of SWN-MW-2. The boring to the northeast of SWN-MW-2 (SRA-008) was advanced 5 ft and sample collection ceased upon encountering basalt at 3 ft bgs. The boring to the east-southeast of SWN-MW-2 (SRA-009) was advanced 5 ft and one surface sample was collected as basalt was encountered immediately below the surface. One boring north of monitoring well SWN-MW-5 (SRA-010) was advanced 15 ft and sample collection ceased upon encountering basalt at 10 ft bgs. One boring west of monitoring well SWN-MW-14 (SRA-011) was advanced 20 ft and sample collection ceased upon encountering basalt at 15 ft bgs.

7.1.8 Triangle Ramp Training Area

In the Triangle Ramp Training Area, two shallow surface samples (TRP-001 and TRP-002) were collected along the southeastern perimeter of the Triangle Ramp. The samples were collected from topographical lows and adjacent to where water-only training would have taken place (Figure 3-2B).

7.1.9 West Park Drive / Waste to Energy Facility Area

Two borings were advanced in the West Park Drive / Waste to Energy Facility Area (Figure 3-2B). To the west and upslope of monitoring well PD-MW-1A, one boring (PDW-001) was advanced 40 ft. Sampling ceased upon encountering groundwater at 34 ft bgs, one foot above encountering basalt. East of the densely vegetated slope and above the water feature within the Waste to Energy Facility fenceline, one boring (PDW-002) was advanced 40 ft and sampling ceased upon encountering groundwater at 30 ft bgs.

7.2 Analytical Results – Physical Chemistry

All soil samples were analyzed for TOC and pH. The average plus the range of values observed for each area are given in Exhibit 7-1. For pH, elevated values were observed at three locations: two in the Joint Fire Training area at JTA-004 (10 ft bgs) and JTA-002 (20 ft bgs) and one in the Stormwater Recovery Area at SRA-005 (3 ft bgs). The two locations in the JTA were associated with soil layers consisting of concrete rubble (JTA-004) and a hard, packed clay that may be associated with the clay liner from the Geiger Field Landfill (JTA-002). TOC varied but was typically low and within the range commonly observed for sandy soils with maximum concentrations observed in surface versus subsurface soils. Table 4-3 provides a full reporting of TOC and pH results in soil.

Exhibit 7-1. Total Organic Carbon and pH in Soil

Area	pH (s.u.)	TOC (mg/kg)
Current Fire House	7.8 (6.9 – 8.9)	3,100 (240 – 29,000)
FAA Inspection Testing	7.7 (6.6 – 9.1)	1,600 (290 – 3,800)
Field Maintenance Building	9.2 (6.9 – 11)	2,600 (160 – 7,800)
Historical Fire House	8.5 (7.5 – 11.4)	1,600 (160 – 9,600)
Joint Fire Training	8.2 (7.0 – 12)	3,800 (320 – 18,000)
Land Treatment	7.7 (6.7 – 8.7)	6,200 (610 – 15,000)
Stormwater Recovery	7.9 (6.4 – 11.7)	4,800 (340 – 37,000)
Triangle Ramp Training	8.2 (7.7 – 8.7)	2,300 (1,300 – 3,200)
West Park Drive / Waste to Energy Plant	8.0 (7.3 – 8.5)	3,800 (160 – 14,000)

Notes:

- 1) Values represent the average for each area with the minimum and maximum given in parentheses.
- 2) s.u. = Standard Units

7.3 Analytical Results - PFAS

The IPI sampling event included the analysis of 221 primary samples and 30 field duplicate samples collected from 47 soil borings and 10 hand auger samples for a total of 251 soil samples (excluding QA/QC samples). Analysis of soil samples proceeded as described in the IPI Work Plan in a stepwise manner proceeding down core. Data from the ten PFAS analytes listed in Ecology’s CLARC tables are shown in Table 7-1. These include analytes from four PFAS subgroups:

- Perfluoroalkyl carboxylic acids (PFCAs): PFBA, PFHxA, PFOA, PFNA, PFDA
- Perfluoro sulfonic acids (PFSAs): PFBS, PFHxS, and PFOS
- Perfluoro ether carboxylic acids (PFECAs): HFPO-DA
- Fluorotelomer sulfonic acids (FTSs): 6:2 FTS

Figures 7-1 through 7-9 show soil results by location and depth (in feet bgs) for PFOA, PFHxS, and PFOS. These PFAS compounds were selected because they showed the greatest frequency of detection across the soil samples analyzed. Table 4-4 provides a full reporting of all analytical PFAS results in soil.

7.4 Distributions of PFAS in Soils

Figures 7-10 through 7-19 provide an overview of soil boring results for PFOS and PFOA across all areas sampled. The results for each sampling area are discussed in the following subsections.

7.4.1 Current Fire House Area

Figure 7-10 provides an overview of the samples collected in the Current Fire House Area. Of the 32 primary samples collected in this area, a total of 28 soil samples were analyzed. Four samples were not analyzed because the samples collected from the adjacent shallower horizon were either below method detection limits or resulted in no exceedances for any of the PFAS listed in the CLARC table for soil (Method B). PFOS was detected in 89% of the samples in this area, while PFOA was detected in 64% of the samples analyzed. The highest PFAS concentrations were observed in the three locations northeast of the Current Fire House building, where required testing of Airport Rescue and Fire Fighting (ARFF) equipment occurred historically (CFH-004, CFH-005, and CFH-006). At these locations, the maximum PFOS concentration per location ranged from 390 to 610 micrograms per kilogram ($\mu\text{g}/\text{kg}$; Figure 7-1). The three locations east and southeast of the Current Fire House building (CFH-001, CFH-002, and CFH-003) had maximum PFOS concentrations ranging from 2.8 to 18 $\mu\text{g}/\text{kg}$. Concentrations measured in samples collected from surface to 3 ft bgs near the oil-water separator at CFH-007 were low, ranging from 0.21 to 1.2 $\mu\text{g}/\text{kg}$ (Figure 7-1).

7.4.2 FAA Inspection Training Area

A total of 20 soil samples were analyzed out of the 27 primary samples collected in the FAA Inspection Training Area (Figure 7-11). Seven samples were not analyzed because the samples collected from the adjacent horizon were either below method detection limits or resulted in no exceedances for any of the PFAS listed in the CLARC table for soil (Method B). PFAS concentrations observed in both the soil borings and hand auger samples were low with maximum concentrations for PFOA and PFOS at 0.09 and 2.8 $\mu\text{g}/\text{kg}$, respectively. Generally, soil borings in this area show a pattern of low-concentration PFAS detections at the surface with values decreasing to below method detection limits within 3 ft bgs (Figure 7-2).

7.4.3 Field Maintenance Building Area

Figure 7-12 shows the results for PFOA and PFOS by depth at the four locations sampled in the Field Maintenance Building Area. All soil samples collected in this area were analyzed. All locations sampled are covered with an impervious surface, which would limit the vertical transport of any PFAS present due to processes such as precipitation. The depth profile is indicative of clean fill over soil containing detectable levels of PFAS, with maximum concentrations of PFOS and PFOA occurring between 3 and 6 ft bgs. The observed concentrations ranged from below method detection limits to 32 $\mu\text{g}/\text{kg}$ for PFOS and below detection to 2 $\mu\text{g}/\text{kg}$ for PFOA (Figure 7-3).

7.4.4 Historical Fire House Area

Figure 7-13 shows the binned results for the six locations sampled in the Historical Fire House Area. All soil samples collected were analyzed. The two samples located southwest of the Historical Fire House building (HFH-001 and HFH-002) had the highest PFOS concentrations of 330 $\mu\text{g}/\text{kg}$ at 3 ft bgs and 150 $\mu\text{g}/\text{kg}$ at 6 ft bgs (Figure 7-4). The hand auger sample collected nearest to a dry well (HFH-006) showed PFOA and PFHxS below detection (<0.07 $\mu\text{g}/\text{kg}$ and <0.06 $\mu\text{g}/\text{kg}$, respectively), while PFOS was detected at 0.55 $\mu\text{g}/\text{kg}$. Further delineation would be

needed to determine whether, and to what extent, there was discharge from the location holding tanks where AFFF concentrate was stored within the Historical Fire House building based on results obtained at location HFH-004. PFOS concentrations at this location ranged from 38 $\mu\text{g}/\text{kg}$ in the soil below the concrete surface to 2.4 $\mu\text{g}/\text{kg}$ across the depths sampled with the deepest sample collected at 10 ft bgs (Figure 7-4). The location sampled to the northeast of the building (HFH-005) showed low concentrations, with a maximum PFOS detection of 3.4 $\mu\text{g}/\text{kg}$ at 3 ft bgs.

7.4.5 Joint Fire Training and Remtech Areas

Figures 7-14 and 7-16 show the binned results for soil borings collected in the Joint Fire Training and Remtech Areas. The most elevated concentrations of PFAS for the IPI were observed in the Joint Fire Training Area. This result is in line with historical usage in this area by the DoD, WA ANG and SIA for firefighting training. Of the 72 primary samples (excluding field duplicates) collected in this area, 55 soil samples were analyzed. Seventeen samples were not analyzed because the samples collected from the next shallowest depth horizon were either below method detection limits or fell below the PFAS targets listed in the Ecology's CLARC table for soil (Method B).

The highest concentration of PFAS observed in soil across the Site was located at JTA-008 with PFOS at 1,900 $\mu\text{g}/\text{kg}$ and PFOA at 40 $\mu\text{g}/\text{kg}$ at 1 ft bgs (Figure 7-5). Concentrations substantively decrease below the 3 ft bgs soil horizon, with PFOS detected at 37 $\mu\text{g}/\text{kg}$ at 17 ft bgs. For the northernmost Joint Fire Training Area sample location, JTA-009, PFOS concentrations were 6.1 $\mu\text{g}/\text{kg}$ at 3 ft bgs and below the method detection limit at 15 and 30 ft bgs.

Locations JTA-002, JTA-003, JTA-004, JTA-005 and JTA-006 fall within the approximate boundary of the Former Geiger Field Landfill (Figure 7-5). At JTA-002 and JTA-003, PFAS was detected in surface soils at low concentrations. Higher concentrations were detected at JTA-004, JTA-005, and JTA-006, with a maximum of 160 $\mu\text{g}/\text{kg}$ at 10 ft bgs at JTA-005.

The southernmost Joint Fire Training Area sample location (JTA-001) had low PFOS concentrations of 0.13 $\mu\text{g}/\text{kg}$ in the surface soil sample and below the method detection limit at 3 ft bgs (Figure 7-5). PFOA and PFHxS were below the method detection limit (ranging from <0.05 to <0.07) in all soil samples at this location.

In the Remtech Area, a total of 11 soil samples were analyzed out of the 20 samples collected (not including field duplicates). Any detected PFAS concentrations in this area were low, with PFAS concentrations less than 2 $\mu\text{g}/\text{kg}$.

7.4.6 Land Treatment Area

Detected PFAS concentrations in the Land Treatment Area were low (Figures 7-6 and 7-16). A total of 10 soil samples were analyzed in this area out of the 18 primary samples collected (excluding field duplicates). The maximum PFOS concentration was 0.16 $\mu\text{g}/\text{kg}$ at 1 ft bgs (LTA-002). In addition, the PFAS profiles in the Land Treatment Area were dominated by PFCAs with PFOA concentrations at 0.07 $\mu\text{g}/\text{kg}$ (LTA-001), 0.29 $\mu\text{g}/\text{kg}$ (LTA-002), and 2.6 $\mu\text{g}/\text{kg}$ (LTA-003). These low concentrations may be indicative of a nonpoint source for PFAS such as precipitation (Adamson et al. 2026).

7.4.7 Stormwater Recovery Area

The PFAS concentrations observed in the Stormwater Recovery Area were highly variable (Figures 7-7 and 7-17). A total of 39 soil samples were analyzed out of the 43 primary samples

collected. Given the winter weather conditions during January 2025, many of the soil samples collected in this area were saturated from precipitation. As detailed in Section 7.1, soil saturation inhibited boring recovery for intervals of SRA-006 and SRA-007A. Apart from SRA-008, where the PFOS concentration was 49 µg/kg in the surface soil, PFOS concentrations were below 10 µg/kg at all other locations sampled within the Stormwater Recovery Area. Concentrations of PFOA and PFHxS were similarly low (ranging from below the method detection limit to 3.3 µg/kg) across this area.

7.4.8 Triangle Ramp Training Area

Two hand auger samples were collected in this area. PFOA, PFHxS, and PFOS were all below method detection limits (ranging from <0.05 to <0.06 µg/kg) in both samples (Figure 7-8).

7.4.9 West Park Drive / Waste to Energy Facility Area

Two soil borings collected from this area showed low PFAS concentrations (Figures 7-9 and 7-19). A total of 7 soil samples were analyzed out of the 19 primary samples collected in this area. PFOA and PFHxS concentrations were below detection at all depths analyzed. At PDW-002, PFOS was detected at low concentrations in samples from 0 to 3 ft bgs (0.07 to 0.44 µg/kg) and below the method detection limit at the next depth horizon of 6 ft bgs.

8.0 SUMMARY AND DATA GAPS

The purpose of the IPI was to establish a preliminary dataset to support the development of the RI/FS Work Plan. A Remedial Investigation is required to (a) evaluate the nature and extent of hazardous substances including PFAS in the identified potential and known areas of concern at SIA, (b) support risk assessments, and (c) allow evaluation of remedial alternatives during the Feasibility Study. The IPI represents the most extensive evaluation of on-Site groundwater conducted to date. In addition, this is the first dataset containing PFAS soil data. Preliminary findings are summarized below:

Groundwater

- PFAS concentrations from monitoring wells sampled in March 2024 and January 2025 events varied widely across the Site. The highest concentrations were observed in the Joint Fire Training Area. Wells sampled in the Stormwater Recovery Area also had detectable concentrations of specific PFAS compounds; however, PFAS constituent patterns in this area differ from those in other SIA areas and show high variability among wells.
- Samples from one upgradient SIA well (LA-MW-08) in the Land Treatment Area contained higher concentrations of PFOS and PFOA than other wells within the same area, potentially suggesting an offsite source.
- Groundwater elevation data show a north-to-northeast direction of groundwater flow with vertical gradients typically ranging from negligible to downward. While downward gradients suggest a downward component of flow, the potential connection between different aquifers is still unknown and the vertical gradients do not imply that there is a strong hydraulic connection and/or flux.
- The results from stable isotopes in groundwater suggest that many of the Site monitoring wells have minimal mixing with the deeper aquifers and are primarily recharged by local precipitation and surface waters.

Soil

- The highest PFAS concentrations were observed in the areas with known historical releases of AFFF associated with FAA mandated training and maintenance activities: the Joint Fire Training Area, Historical Fire House Area, and Current Fire House Area. Additional sampling during the Remedial Investigation is needed to further characterize PFAS within these areas.
- In areas of potential concern, such as the FAA Inspection Testing Area, Triangle Ramp Training Area, and West Park Drive / Waste to Energy Facility Area, PFAS concentrations were low and in the range of observed ambient concentrations observed in studies from rural areas.

8.1 Data Gaps

The soil and additional groundwater data gathered as part of the IPI provides the basis to formulate the RI/FS Work Plan. Many uncertainties and data gaps remain regarding PFAS distributions, fate and transport, and hydrogeology for the Site. The following presents a set of data gaps based on current understanding; this list will be further expanded during development of the RI:

- Additional data is needed to delineate and characterize PFAS in soils for the Joint Fire Training and Current Fire House Areas. These areas displayed the highest PFAS concentrations in soils across the areas sampled and are largely unpaved, representing a potential source zone to shallow groundwater. Current data in the Joint Fire Training Area indicates elevated PFAS concentrations in groundwater remain shallow; however, further studies are required to evaluate these areas.
- Several locations had low PFAS concentrations in soil that fell within ranges reported from multiple studies on anthropogenic background (Brusseau et al. 2020; McIntosh et al. 2025; Adamson et al. 2026; Zhu et al. 2022). The potential influence of bulk-deposition of PFAS to soil due to anthropogenic background and non-point sources such as precipitation stemming from the regional or global scale will be further considered during the Remedial Investigation.
- Groundwater flux through the Site remains an uncertainty. Characterization of Site-specific permeabilities in both unconsolidated material and flow zones within the Wanapum basalt will be evaluated during the RI/FS. Furthermore, information regarding the degree of vertical groundwater flow remains a key uncertainty for the Site. Vertical groundwater flow will be further evaluated during the RI/FS with support from the quarterly groundwater monitoring results.
- Further investigations are needed to understand the temporal nature (including seasonality) of groundwater flow (direction and magnitude) and PFAS concentrations. When comparing PFAS concentrations from the March 2024 and January 2025 sampling events, the data showed (a) greater variability among shallow groundwater samples (predominantly screened in unconsolidated materials) and (b) less variability among deeper wells.
- The IPI dataset does not currently establish a complete downgradient pathway to potential receptors or support delineation of a downgradient release area. As will be discussed further in the RI/FS Work Plan, the installation of additional monitoring wells would support filling current data gaps. Areas under consideration include the following:
 - Deeper basalt wells east of the Site in the Stormwater Recovery Area
 - Both unconsolidated and basalt wells west of the Stormwater Recovery Area
 - Both unconsolidated and basalt wells in the Current Fire House Area
 - West of the Site along the potential flow path from FAFB
- Portions of areas impacted by Fairchild Air Force Base (FAFB) PFAS use may be located upgradient of the Site in discrete aquifer units. The FAFB impact areas consistently have elevated levels of PFAS constituents in soil, surface water, and groundwater. The extent and magnitude of PFAS migrating from FAFB via groundwater pathways onto the SIA property (and into groundwater beneath SIA) is a current data gap. This gap presents an uncertainty in understanding sources of PFAS to the groundwater at SIA. In 2025, maximum groundwater concentrations of PFOS and PFOA at FAFB were 210,000 ng/L and 23,000 ng/L, respectively (EA Engineering 2025, Figures 7-22a and 7-22e). PFAS in groundwater is also known to have migrated away from the FAFB property via groundwater and surface water flow. FAFB has a flowage easement from their property along a series of ditches onto a parcel currently owned by SIA (GSI Environmental Inc.

2024a). The FAFB January 2025 sampling event included groundwater samples collected in boreholes near the flowage easement (along S. Craig Lane), nearly a mile from the FAFB AFFF release location and crossing onto SIA property (No Name Ditch; Figure 1-1). These samples had PFOS concentrations as high as 6,200 ng/L just before crossing onto SIA property and as high as 4,400 ng/L at the end of a FAFB drainage ditch on SIA property (EA Engineering 2025). These concentrations are nearly equivalent to peak concentrations measured directly below the Joint Fire Training Area on SIA property. Additional investigations and analyses are needed to determine whether groundwater below and downgradient of the Site has been impacted by PFAS from FAFB sources.

- Further investigations are needed to determine potential impacts to groundwater from off-Site sources located upgradient from SIA. For example, LA-MW-8 is designated as upgradient monitoring well for the Land Treatment Area (Valley 2021). The concentrations of PFOS and PFOA at this upgradient location (LA-MW-8) were greater than those observed in the downgradient monitoring wells indicative of a PFAS source that is migrating into the Land Treatment Area.

9.0 REFERENCES

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Table 6-2. Groundwater Results for Select PFAS

Table 7-1. Soil Results for Select PFAS

TABLE 3-1. Groundwater Sampling Locations

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Area Name	Area Notation	Location ID	Original MW ID	Sampled January 2025	Well Depth (ft bgs)	Geological Stratum	Latitude	Longitude	Top of Casing Elevation (ft)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
Former Gieger Field	FGF	FGF-MW-18	MW-18	X	13.0	Unconsolidated/Basalt	47.619864	-117.517183	2364.37	8.0	13.0
Geiger Correctional Facility	GCF	GCF-MW-5	MW-5	X	13.5	Unconsolidated/Basalt	47.621621	-117.513692	2355.11	3.5	13.5
		GCF-MW-5D	MW-5D	X	45.0	Basalt/Interbed	47.62163	-117.51372	2355.00	25.0	45.0
		GCF-MW-7	MW-7	X	45.0	Basalt/Interbed	47.621694	-117.513377	2356.24	25.0	45.0
		GCF-MW-8	MW-8	X	45.0	Basalt/Interbed	47.621959	-117.51315	2356.60	25.0	45.0
		GCF-MW-10	MW-10	X	15.0	Unconsolidated	47.622223	-117.513599	2354.27	3.0	15.0
		GCF-MW-11	MW-11	X	15.0	Unconsolidated	47.622083	-117.51337	2354.12	3.0	15.0
		GCF-MW-13	MW-13	X	15.0	Unconsolidated	47.622354	-117.514112	2352.55	3.0	15.0
		GCF-MW-11A	MW-11A	X	99.5	Basalt	47.620975	-117.512465	2357.27	84.5	97.0
		GCF-MW-11B	MW-11B	X	50.7	Basalt	47.62095	-117.512469	2356.74	24.7	44.7
		GCF-MW-12A	MW-12A	X	81.0	Basalt	47.621005	-117.511385	2355.15	68.0	78.0
GCF-MW-12B	MW-12B	X	51.0	Basalt	47.620989	-117.511383	2355.07	24.0	45.0		
Geiger Delivery Facility	GDF	GDF-GR-2	GR-2	X	15.0	Unconsolidated	47.614264	-117.516504	2376.49	5.0	15.0
		GDF-GR-3	GR-3	X	15.0	Unconsolidated	47.614327	-117.518189	2379.42	5.0	15.0
		GDF-GR-4	GR-4	X	20.0	Unconsolidated	47.6153	-117.516809	2370.90	10.0	20.0
		GDF-GR-5	GR-5	X	25.0	Unconsolidated	47.615422	-117.517541	2368.55	10.0	25.0
		GDF-GR-7D	GR-7D	X	63.0	Basalt	47.613933	-117.516408	2377.49	48.0	63.0
		GDF-GR-7S	GR-7S	X	35.0	Basalt	47.613933	-117.516372	2377.59	25.0	35.0
		GDF-GR-8	GR-8	X	18.0	Unconsolidated/Basalt	47.614002	-117.515638	2373.10	8.0	18.0
		GDF-MW-10A	MW-10A	X	88.0	Basalt	47.6144	-117.515221	2372.10	73.0	83.0
GDF-MW-10R	MW-10R	X	16.0	Unconsolidated/Basalt	47.61438	-117.51522	2372.14	6.0	16.0		
Joint Fire Training Area	JTA	EA-MW-5A	MW-5A	X	96.0	Basalt	47.610417	-117.541175	2394.25	81.0	91.0
		EA-MW-5B	MW-5B	X	60.0	Unconsolidated/Basalt	47.610415	-117.541702	2394.32	23.0	43.0
		EA-MW-6B	MW-6B	DAMAGED	40.0	Unconsolidated/Basalt	47.612202	-117.542189	2375.74	10.5	30.5
		EA-MW-7A	MW-7A	X	73.2	Basalt	47.612409	-117.541216	2378.90	58.0	68.0
		EA-MW-7B	MW-7B	X	35.0	Unconsolidated/Basalt	47.612431	-117.541162	2379.05	7.5	27.5
		EA-MW-8A	MW-8A	X	85.5	Basalt	47.61205	-117.540441	2382.58	66.5	76.5
		EA-MW-8B	MW-8B	X	51.0	Unconsolidated/Basalt	47.612045	-117.540394	2381.94	13.0	33.0
		EA-MW-13A	MW-13A	X	42.0	Unconsolidated/Fill/Basalt	47.612358	-117.540771	2383.53	32.0	42.0
		EA-MW-13B	MW-13B	X	20.0	Unconsolidated	47.612384	-117.54077	2383.75	10.0	20.0
		EA-MW-14A	MW-14A	X	35.0	Unconsolidated/Fill/Basalt	47.612067	-117.541018	2385.10	25.0	35.0
EA-MW-14B	MW-14B	X	20.5	Unconsolidated	47.612075	-117.540986	2385.31	9.0	19.0		
Land Treatment Area	LA	LA-MW-8	MW-8	X	22.0	Unconsolidated	47.629258	-117.56043	2373.75	12.0	22.0
		LA-MW-9	MW-9	X	20.0	Unconsolidated/Basalt	47.634977	-117.545114	2349.74	10.0	20.0
		LA-MW-10	MW-10	X	25.0	Basalt	47.630587	-117.545143	2361.63	15.0	25.0
		LA-MW-11	MW-11	X	19.0	Unconsolidated/Basalt	47.62856	-117.552001	2370.81	9.0	19.0
		LA-MW-12	MW-12	X	26.0	Unconsolidated/Basalt	47.635727	-117.54847	2352.56	6.0	26.0
Park Drive West / Waste to Energy Plant	PD	PD-MW-1A	MW-1A	X	79.3	Basalt	47.627678	-117.508036	2323.10	65.0	75.0
Stormwater Recovery Area	SWN	SWN-MW-1	MW-1	X	14.5	Unconsolidated/Basalt	47.634854	-117.507709	2292.20	8.5	14.5
		SWN-MW-2	MW-2	X	14.7	Unconsolidated/Basalt	47.635547	-117.507767	2292.48	9.5	14.7
		SWN-MW-3	MW-3	X	8.5	Unconsolidated/Basalt	47.636535	-117.510448	2295.88	6.5	8.4
		SWN-MW-4	MW-4	X	12.4	Unconsolidated/Basalt	47.63674	-117.50966	2296.50	7.5	12.5
		SWN-MW-5	MW-5	X	20.0	Unconsolidated/Basalt	47.635611	-117.501811	2282.20	5.0	20.0
		SWN-MW-6	MW-6	X	20.0	Unconsolidated/Basalt	47.637144	-117.503723	2292.03	5.0	20.0
		SWN-MW-7	MW-7	X	19.0	Basalt/Interbed	47.635519	-117.516597	2304.86	5.0	19.0
		SWN-MW-13	MW-13	X	11.5	Unconsolidated	47.635605	-117.497654	2280.22	5.5	11.5
		SWN-MW-14	MW-14	X	14.5	Unconsolidated	47.638575	-117.498087	2280.43	4.5	14.5
		SWN-MW-321	MW-321	X	15.0	Unconsolidated/Basalt	47.632627	-117.514049	2309.02	5.0	15.0
SWN-MW-A	MW-A	X	15.0	Unconsolidated	47.634075	-117.51529	2307.40	5.0	15.0		
West Peripheral	W	W-MW-15	MW-15	X	12.0	Unconsolidated	47.622137	-117.552506	2378.46	7.0	12.0
		W-MW-16	MW-16	DRY	8.5	Unconsolidated	47.611555	-117.558968	2384.33	6.0	8.5
		W-MW-17	MW-17	X	25.0	Unconsolidated	47.605371	-117.555523	2393.96	15.0	25.0

Notes:

- 1) ft bgs- feet below ground surface
- 2) Latitude and Longitude reported in Washington State Plane North (NAD83)
- 3) Elevations reported in North American Vertical Datum (NAVD88)

TABLE 3-2. Soil Sampling Locations

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Area Name	Area Notation	Location ID	Method	Latitude	Longitude
Current Fire House	CFH	CFH-001	SB	47.61959457	-117.54080200
		CFH-002	SB	47.61980820	-117.54071808
		CFH-003	SB	47.61997604	-117.54095459
		CFH-004	SB	47.62042618	-117.54148102
		CFH-005	SB	47.62051392	-117.54173279
		CFH-006	SB	47.62045670	-117.54196930
		CFH-007	SB	47.61971664	-117.54242706
FAA Inspection Testing	FIT	FIT-001	SB	47.61647415	-117.53307343
		FIT-002	SB	47.61640930	-117.53183746
		FIT-003	SB	47.61717224	-117.53305817
		FIT-004	SB	47.61719894	-117.53176880
		FIT-005	SS	47.61651611	-117.53293610
		FIT-006	SS	47.61651230	-117.53196716
		FIT-007	SS	47.61713409	-117.53292084
		FIT-008	SS	47.61714554	-117.53195190
Field Maintenance Building	FMB	FMB-001	SB	47.63222504	-117.52674866
		FMB-002	SB	47.63253403	-117.52629852
		FMB-003	SB	47.63281250	-117.52592468
		FMB-004	SB	47.63309860	-117.52653503
Historical Fire House	HFH	HFH-001	SB	47.62631989	-117.53227234
		HFH-002	SB	47.62637329	-117.53201294
		HFH-003	SB	47.62652588	-117.53172302
		HFH-004	SB	47.62666321	-117.53125000
		HFH-005	SB	47.62689590	-117.53114319
		HFH-006	SS	47.62667847	-117.53250122
Joint Fire Training and Remtech	JTA	JTA-001	SB	47.61029434	-117.54154968
		JTA-002	SB	47.61096573	-117.54122162
		JTA-003	SB	47.61125946	-117.54201508
		JTA-004	SB	47.61163712	-117.54139709
		JTA-005	SB	47.61199951	-117.54141998
		JTA-006	SB	47.61192322	-117.54080963
		JTA-007	SB	47.61228561	-117.54077911
		JTA-008	SB	47.61247635	-117.54112244
	RTA	RTA-001	SB	47.61274338	-117.54071045
		RTA-002	SB	47.61180878	-117.54020691
		RTA-003	SB	47.61252975	-117.54020691
Land Treatment Area	LTA	LTA-001	SB	47.62878036	-117.56063843
		LTA-002	SB	47.62959671	-117.54858398
		LTA-003	SB	47.63511658	-117.54693604
Park Drive West / Waste to Energy Facility	PDW	PDW-001	SB	47.62765884	-117.50846100
		PDW-002	SB	47.62777710	-117.50709534
Stormwater Recovery Area	SRA	SRA-001	SB	47.63256454	-117.51383972
		SRA-002	SS	47.63420105	-117.51542664
		SRA-003	SB	47.63519669	-117.51670074
		SRA-004A	SB	47.63636017	-117.51029968
		SRA-004B	SS	47.63640976	-117.51029968
		SRA-005	SB	47.63338089	-117.50984955
		SRA-006	SB	47.63473892	-117.50833130
		SRA-007A	SB	47.63549423	-117.50816345
		SRA-007B	SS	47.63547516	-117.51034546
		SRA-008	SB	47.63682175	-117.50624084
		SRA-009	SB	47.63516617	-117.50479126
Triangle Ramp Training	TRP	SRA-010	SB	47.63572311	-117.50189209
		SRA-011	SB	47.63864517	-117.49835205
		TRP-001	SS	47.62586212	-117.51863098
		TRP-002	SS	47.62547302	-117.51883698

Notes:

- Coordinates in NAD 83 State Plane Washington North.
- Method indicates which the soil sampling method at each location:

SB = soil sonic boring
 SS = surface soil sampling (0 - 6 inches) via hand auger

Table 4-3. Soil pH and and Total Organic Carbon Results
Spokane International Airport
 Spokane, WA

Area	Location ID	Date	Depth (ft bgs)	pH	TOC (mg/kg)
Current Fire House Area (CFH)	CFH-001	1/24/2025	0	7.5	3800 J
	CFH-001	1/24/2025	1	7.8	3100
	CFH-001	1/24/2025	3	7.5	2500
	CFH-001	1/24/2025	6	8.6	980 J
	CFH-001	1/24/2025	10	8.9	97 UJ
	CFH-002	1/24/2025	0	7.6	4900 J
	CFH-002	1/24/2025	1	7.3	2100
	CFH-002	1/24/2025	3	8.3	900
	CFH-002 FD	1/24/2025	1	7.3	2100
	CFH-003	1/24/2025	0	7.3	4700 J
	CFH-003	1/24/2025	1	7.7	2600
	CFH-003	1/24/2025	3	7.3	3000 J
	CFH-003	1/24/2025	6	7.8	510 J
	CFH-003	1/24/2025	9	7.1	500
	CFH-003 FD	1/24/2025	9	7.2	520
	CFH-004	1/24/2025	0	7.5	8400 J
	CFH-004	1/24/2025	1	6.9	7900
	CFH-004	1/24/2025	3	7.2	1300
	CFH-004	1/24/2025	6	8.2	570 J
	CFH-004	1/24/2025	10	7.6	470
	CFH-004	1/24/2025	15	8.7	240 J
	CFH-004 FD	1/24/2025	10	7.8	240
	CFH-005	1/24/2025	0	7.7	5800 J
	CFH-005	1/24/2025	1	7.4	3700
	CFH-005	1/24/2025	3	7.4	650
	CFH-005 FD	1/24/2025	3	7.4	320
	CFH-006	1/24/2025	0	8.7	2600 J
	CFH-006	1/24/2025	1	8.2	400
CFH-006	1/24/2025	3	7.8	360	
CFH-007	1/24/2025	0	8.5	2200 J	
CFH-007	1/24/2025	1	8.2	1900	
CFH-007	1/24/2025	3	8.5	29000	
CFH-007 FD	1/24/2025	1	8.3	3400	
FAA Inspection Testing Area (FIT)	FIT-001	1/21/2025	0	7	3800 J
	FIT-001	1/21/2025	1	7.1	2700
	FIT-001	1/21/2025	3	7.2	1800
	FIT-001	1/21/2025	5	8.4	750 J
	FIT-001 FD	1/21/2025	3	7.2	1300
	FIT-002	1/21/2025	0	6.6	2900 J
	FIT-002	1/21/2025	1	7.2	1500
	FIT-002	1/21/2025	3	7.4	330
	FIT-002	1/21/2025	6	6.8	450 J
	FIT-002	1/21/2025	10	7.8	380 J
	FIT-002	1/21/2025	15	8.2	97 UJ
	FIT-003	1/21/2025	0	7.9	1400 J
	FIT-003	1/21/2025	1	7.3	600
	FIT-004	1/21/2025	0	9.1	3100 J
	FIT-004	1/21/2025	1	8.1	1400
	FIT-004	1/21/2025	3	8.5	3500
	FIT-004 FD	1/21/2025	3	8.5	2200
	FIT-005	1/21/2025	0	7.8	500 J
	FIT-006	1/21/2025	0	7.8	2300 J
	FIT-007	1/21/2025	0	8.7	1600 J
FIT-008	1/21/2025	0	8.5	2300 J	
Field Maintenance Building Area (FMB)	FMB-001	1/27/2025	0	10.1	2900 J
	FMB-001	1/27/2025	1	10	1300
	FMB-001	1/27/2025	3	8.5	520 J
	FMB-001	1/27/2025	5	8.8	340 J
	FMB-001	1/27/2025	6	9.1	1100 J
	FMB-001 FD	1/27/2025	1	10.7	1800
	FMB-002	1/24/2025	0	11.4	5100 J
	FMB-002	1/24/2025	1	11.6	5100
	FMB-002	1/24/2025	3	7.7	5100
	FMB-002	1/24/2025	6	8.9	570 J
	FMB-002	1/24/2025	10	8.4	97 UJ
	FMB-002	1/24/2025	13	6.9	97 UJ
	FMB-003	1/24/2025	0	11.6	6900 J
	FMB-003	1/24/2025	1	11.7	5200
	FMB-003	1/24/2025	3	10.1	3000
	FMB-003	1/24/2025	6	9	360 J
	FMB-003	1/24/2025	10	8.1	440
	FMB-003	1/24/2025	15	8.9	290 J
	FMB-003 FD	1/24/2025	1	11.7	4700
	FMB-003 FD	1/24/2025	10	7.7	380
FMB-004	1/23/2025	0	10.8	7800 J	

Table 4-3. Soil pH and and Total Organic Carbon Results
Spokane International Airport
 Spokane, WA

Area	Location ID	Date	Depth (ft bgs)	pH	TOC (mg/kg)
Field Maintenance Building Area (FMB)	FMB-004	1/23/2025	1	8.1	4500
	FMB-004	1/23/2025	3	7.3	5700
	FMB-004	1/23/2025	6	8.3	250 J
	FMB-004	1/23/2025	10	7.7	180
	FMB-004 FD	1/23/2025	3	7.3	5400
	FMB-004 FD	1/23/2025	10	7.7	160
Historical Fire House Area (HFH)	HFH-001	1/22/2025	0	8.7	9600 J
	HFH-001	1/22/2025	1	8.2	3600
	HFH-001	1/22/2025	3	8.4	680
	HFH-001	1/22/2025	6	8.5	360 J
	HFH-001 FD	1/22/2025	3	8.2	860
	HFH-002	1/23/2025	0	9.5	1500 J
	HFH-002	1/23/2025	1	8.6	390
	HFH-002	1/23/2025	3	8.1	240
	HFH-002	1/23/2025	6	8.3	290 J
	HFH-002	1/23/2025	10	7.9	97 UJ
	HFH-002	1/23/2025	12	8	97 UJ
	HFH-002 FD	1/23/2025	1	8.6	460
	HFH-003	1/23/2025	0	9.2	4000 J
	HFH-003	1/23/2025	1	7.6	430
	HFH-003	1/23/2025	3	8.2	220
	HFH-003	1/23/2025	6	8.5	250
	HFH-003	1/23/2025	10	8.8	240 J
	HFH-003	1/23/2025	12	8.1	410 J
	HFH-003 FD	1/23/2025	6	8.5	370
	HFH-004	1/23/2025	0	9	3400 J
	HFH-004	1/23/2025	1	8.2	3600
	HFH-004	1/23/2025	3	7.9	350
	HFH-004	1/23/2025	6	8.1	410 J
	HFH-004	1/23/2025	10	9.1	1200
	HFH-004 FD	1/23/2025	3	7.8	430 J
	HFH-004 FD	1/23/2025	10	8	160
	HFH-005	1/23/2025	0	9.4	1400 J
	HFH-005	1/23/2025	1	8.5	230
	HFH-005	1/23/2025	3	11.4	7800
	HFH-005	1/23/2025	6	8.8	590 J
HFH-005	1/23/2025	10	7.9	97 UJ	
HFH-005 FD	1/23/2025	1	8.5	320	
HFH-006	1/22/2025	0	7.5	8400	
Joint Fire Training Area (JTA)	JTA-001	1/15/2025	0	8.2	18000 J
	JTA-001	1/15/2025	1	8.1	2000
	JTA-001	1/15/2025	3	7.5	2200
	JTA-002	1/15/2025	0	7.7	8700 J
	JTA-002	1/15/2025	1	7.6	8600
	JTA-002	1/15/2025	3	8	1100
	JTA-002	1/15/2025	6	8.3	1900 J
	JTA-002	1/15/2025	10	8.7	4300 J
	JTA-002	1/15/2025	15	9	4500 J
	JTA-002	1/15/2025	20	11.3	8500 J
	JTA-002	1/15/2025	25	7.7	2300 J
	JTA-002 FD	1/15/2025	3	8.1	1000
	JTA-003	1/16/2025	0	8	5500 J
	JTA-003	1/16/2025	1	7.8	5000
	JTA-003	1/16/2025	3	8.2	5200
	JTA-003	1/16/2025	6	8.1	1900 J
	JTA-003	1/16/2025	10	8.5	97 UJ
	JTA-004	1/16/2025	0	7.7	15000 J
	JTA-004	1/16/2025	1	7.2	12000
	JTA-004	1/16/2025	3	7.6	5000
	JTA-004	1/16/2025	6	7.8	8900 J
	JTA-004	1/16/2025	10	12.4	6200 J
	JTA-004 FD	1/16/2025	3	8	4900
	JTA-005	1/16/2025	0	8.4	6300 J
	JTA-005	1/16/2025	1	8.2	5600
	JTA-005	1/16/2025	3	8	800
	JTA-005	1/16/2025	6	8.2	500 J
	JTA-005	1/16/2025	10	8.4	97 UJ
	JTA-005	1/16/2025	15	8.5	97 UJ
	JTA-005	1/16/2025	17	8.7	1200 J
	JTA-005	1/16/2025	25	7.9	97 UJ
	JTA-005 FD	1/16/2025	3	7.8	660
	JTA-006	1/16/2025	0	8.4	6500 J
	JTA-006	1/16/2025	1	7.9	4200
	JTA-006	1/16/2025	3	7.9	420
	JTA-006	1/16/2025	6	8.4	460 J

Table 4-3. Soil pH and and Total Organic Carbon Results
Spokane International Airport
 Spokane, WA

Area	Location ID	Date	Depth (ft bgs)	pH	TOC (mg/kg)
Joint Fire Training Area (JTA)	JTA-006	1/16/2025	10	9	2300 J
	JTA-006 FD	1/16/2025	1	7.9	3100
	JTA-007	1/17/2025	0	7.7	10000 J
	JTA-007	1/17/2025	1	7.8	6900 J
	JTA-007	1/17/2025	3	7.7	3900
	JTA-007	1/17/2025	6	7.9	3600 J
	JTA-007	1/17/2025	10	8.1	470 J
	JTA-007	1/17/2025	13	8.5	97 UJ
	JTA-007 FD	1/17/2025	3	7.5	5900
	JTA-008	1/17/2025	0	7.7	9400 J
	JTA-008	1/17/2025	1	7	5500
	JTA-008	1/17/2025	3	7.6	450
	JTA-008	1/17/2025	6	7.7	460 J
	JTA-008	1/17/2025	10	8.9	97 UJ
	JTA-008	1/17/2025	15	8.1	840 J
	JTA-008	1/17/2025	17	8.5	97 UJ
	JTA-009	1/17/2025	0	8.1	1100 J
	JTA-009	1/17/2025	1	7.8	2000
	JTA-009	1/17/2025	3	7.8	1900
	JTA-009	1/17/2025	6	8.2	320 J
	JTA-009	1/17/2025	10	7.7	870
	JTA-009	1/17/2025	15	8	97 UJ
	JTA-009	1/17/2025	20	8.6	97 UJ
JTA-009	1/17/2025	30	8.1	1900 J	
JTA-009 FD	1/17/2025	3	7.8	2400	
Land Treatment Area (LTA)	LTA-001	1/15/2025	0	7.5	8300 J
	LTA-001	1/15/2025	1	7.2	3400
	LTA-001	1/15/2025	3	7.4	3100
	LTA-002	1/15/2025	0	7.6	7200 J
	LTA-002	1/15/2025	1	6.9	7000
	LTA-002	1/15/2025	3	6.7	1300
	LTA-002	1/15/2025	6	7.7	610
	LTA-003	1/15/2025	0	8.7	11000 J
	LTA-003	1/15/2025	1	8.3	9200 J
	LTA-003	1/15/2025	3	7.7	2100
LTA-003 FD	1/15/2025	1	8.7	15000 J	
West Park Drive / Waste to Energy Area (PDW)	PDW-001	1/20/2025	1	7.8	1000
	PDW-001	1/20/2025	3	8	300
	PDW-001	1/20/2025	6	8.3	160 J
	PDW-001 FD	1/20/2025	3	8.3	360
	PDW-002	1/20/2025	0	7.3	14000 J
	PDW-002	1/20/2025	1	8	5700
	PDW-002	1/20/2025	3	8	7800
PDW-002	1/20/2025	6	8.5	1200 J	
Remtech (RT)	RTA-001	1/20/2025	1	7.1	2800
	RTA-001	1/20/2025	3	7.2	1100
	RTA-002	1/20/2025	0	7.7	1900 J
	RTA-002	1/20/2025	1	7	410
	RTA-002	1/20/2025	3	7.1	350
	RTA-002	1/20/2025	6	7.7	300 J
	RTA-003	1/17/2025	0	7.8	20000
	RTA-003	1/17/2025	1	7.2	6200
	RTA-003	1/17/2025	3	7.7	3800
RTA-003	1/17/2025	6	7.9	6500	
RTA-003	1/17/2025	10	7.7	450	
RTA-003 FD	1/17/2025	3	7.7	3800	
Stormwater Recovery Area (SRA)	SRA-001	1/22/2025	0	7.3	11000 J
	SRA-001	1/22/2025	1	6.4	4900
	SRA-001	1/22/2025	3	7.2	680
	SRA-001	1/22/2025	6	8.7	370 J
	SRA-002	1/22/2025	0	7.2	14000
	SRA-003	1/21/2025	0	8.7	3300 J
	SRA-003	1/21/2025	1	7.6	420
	SRA-003	1/21/2025	3	7.7	420
	SRA-003	1/21/2025	6	8.6	480 J
	SRA-003	1/21/2025	10	7.3	340 J
	SRA-003	1/21/2025	12	7.6	97 UJ
	SRA-004A	1/21/2025	0	8.4	4500 J
	SRA-004A	1/21/2025	1	7.3	9400 J
	SRA-004A	1/21/2025	3	7.1	3300
	SRA-004A	1/21/2025	6	8.6	3100 J
	SRA-004A FD	1/21/2025	1	7.3	3700 J
	SRA-004B	1/21/2025	0	8	37000 J
SRA-005	1/22/2025	0	7.3	5400 J	
SRA-005	1/22/2025	1	7.5	2300	

Table 4-3. Soil pH and and Total Organic Carbon Results
Spokane International Airport
 Spokane, WA

Area	Location ID	Date	Depth (ft bgs)	pH	TOC (mg/kg)
Stormwater Recovery Area (SRA)	SRA-005	1/22/2025	3	11.7	4700
	SRA-006	1/21/2025	0	7.9	18000 J
	SRA-006	1/21/2025	1	7.4	11000
	SRA-006	1/21/2025	6	7.7	670 J
	SRA-007A	1/21/2025	6	8.2	1600 J
	SRA-007B	1/21/2025	0	8.5	19000 J
	SRA-008	1/22/2025	0	8.3	8100 J
	SRA-008	1/22/2025	1	7.3	2600
	SRA-008	1/22/2025	3	7.6	2000
	SRA-008 FD	1/22/2025	1	7.6	2900
	SRA-009	1/22/2025	0	8.1	1100 J
	SRA-010	1/22/2025	0	7.9	2400 J
	SRA-010	1/22/2025	1	7.5	2900
	SRA-010	1/22/2025	3	7.7	1800
	SRA-010	1/22/2025	6	8.1	2700 J
	SRA-010	1/22/2025	10	7.4	740 J
	SRA-010 FD	1/22/2025	3	7.6	1600
	SRA-011	1/22/2025	0	9.2	7700 J
	SRA-011	1/22/2025	1	8.7	3600
	SRA-011	1/22/2025	3	7.7	1300
SRA-011	1/22/2025	6	8.7	740 J	
SRA-011	1/22/2025	10	7.2	660 J	
SRA-011	1/22/2025	14	7.3	720 J	
Triangle Ramp Training Area (TRP)	TRP-001	1/22/2025	0	7.7	1300
	TRP-002	1/22/2025	0	8.7	3200

Notes: Laboratory qualifier: U = non-detect; J = estimated concentration

1. All samples were measured on a dry weight basis.

2. TOC = Total Organic Carbon

Table 4-4. Soil PFAS Results
 Spokane International Airport
 Spokane, WA

Area	Location ID	Date	Depth (ft bgs)	Result (ug/kg) ¹																																								
				PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFUFA	PFDoA	PFTfDA	PFTtDA	PFBS	PFPeS	PFHxS	PFHpS	PFOS	PFNS	PFDS	PFDoS	4:2FTS	6:2FTS	8:2FTS	PFOSA	NMeFOSA	NEFOSA	NMeFOSAA	NEFOSAA	NMeFOSE	NEFOSE	HFPO-DA	ADONA	PFMFA	PFMBA	NFDHA	9Cl-PFOuS	11Cl-PFOuS	PFEESA	3:3FTCA	5:3FTCA	7:3FTCA	
Current Fire House Area (CFH)	CFH-001	1/24/2025	0	0.095 U	0.17 J	0.08 J	0.047 U	0.059 U	0.26	1	0.18 J	0.062 J	0.047 U	0.055 U	0.047 U	0.047 U	0.058 J	0.047 U	10	0.047 U	0.047 U	0.047 U	0.095 U	0.45	0.15 J	0.091 J	0.047 U	0.047 U	0.047 U	0.047 U	0.24 U	0.24 U	0.047 U	0.047 U	0.047 U	0.047 U	0.059 U	0.047 U	0.071 U	0.047 U	0.095 U	0.24 U	0.24 U	
	CFH-001	1/24/2025	1	0.25 J	0.58	0.17 J	0.1 J	0.088 J	0.37	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.055 U	0.048 U	0.096 J	0.058 J	4.4	0.048 U	0.048 U	0.048 U	0.095 U	0.65	0.095 U	0.06 U	0.048 U	0.048 U	0.048 U	0.048 U	0.24 U	0.24 U	0.048 U	0.048 U	0.048 U	0.048 U	0.059 U	0.048 U	0.071 U	0.048 U	0.12 J	2.2	0.24 U	
	CFH-001	1/24/2025	3	0.27 J	0.5	0.25	0.24	0.16 J	0.17 J	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.24	0.089 J	0.34	0.051 U	0.051 U	0.051 U	0.1 U	0.67	0.1 U	0.064 U	0.051 U	0.051 U	0.051 U	0.051 U	0.25 U	0.25 U	0.051 U	0.051 U	0.051 U	0.063 U	0.051 U	0.076 U	0.051 U	0.12 J	1.3	0.25 U		
	CFH-001	1/24/2025	6	0.1 U	0.19 J	0.14 J	0.14 J	0.063 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.059 U	0.051 U	0.051 U	0.2	0.051 U	0.058 J	0.051 U	0.051 U	0.051 U	0.1 U	0.1 U	0.1 U	0.064 U	0.051 U	0.051 U	0.051 U	0.25 U	0.25 U	0.051 U	0.051 U	0.051 U	0.063 U	0.051 U	0.076 U	0.051 U	0.1 U	0.25 U	0.25 U		
	CFH-001	1/24/2025	10	0.095 U	0.094 J	0.1 J	0.068 J	0.059 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.055 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.095 U	0.095 U	0.095 U	0.06 U	0.048 U	0.048 U	0.048 U	0.048 U	0.24 U	0.24 U	0.048 U	0.048 U	0.048 U	0.048 U	0.059 U	0.048 U	0.072 U	0.048 U	0.095 U	0.24 U	0.24 U	
	CFH-002	1/24/2025	0	0.21 J	0.49	0.41	0.059 J	0.062 U	0.43	0.73	0.26	0.19 J	0.064 J	0.074 J	0.05 U	0.05 U	0.069 J	0.082 J	18	0.05 U	0.05 U	0.05 U	0.1 U	24	1	0.14 J	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.062 U	0.05 U	0.075 U	0.05 U	0.62	7.6	0.25 U
	CFH-002	1/24/2025	1	0.35 J	0.45	0.35	0.07 J	0.12 J	0.062 J	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.058 U	0.05 U	0.05 U	0.11 J	0.05 U	0.28	0.05 U	0.05 U	0.05 U	0.1 U	14	0.1 U	0.063 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.062 U	0.05 U	0.075 U	0.05 U	0.89	6.1	0.25 U
	CFH-002	1/24/2025	3	0.092 J	0.045 U	0.081 J	0.045 U	0.056 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.09 U	33	0.09 U	0.057 U	0.045 U	0.045 U	0.045 U	0.045 U	0.22 U	0.22 U	0.045 U	0.045 U	0.045 U	0.045 U	0.056 U	0.045 U	0.067 U	0.045 U	0.09 U	0.56 J	0.22 U	
	CFH-002 FD	1/24/2025	1	0.28 J	0.43	0.27	0.059 J	0.11 J	0.099 J	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.061 U	0.057 U	0.053 U	0.098 J	0.053 U	0.38	0.053 U	0.053 U	0.053 U	0.11 U	11	0.11 U	0.066 U	0.053 U	0.053 U	0.053 U	0.26 U	0.26 U	0.053 U	0.053 U	0.053 U	0.065 U	0.053 U	0.079 U	0.053 U	1	7.1	0.26 U		
	CFH-003	1/24/2025	0	0.29 J	0.6	0.22	0.32	0.29	0.27	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.059 U	0.051 U	0.051 U	0.94	0.099 J	2.8	0.051 U	0.051 U	0.051 U	0.1 U	0.78	0.1 U	0.064 U	0.051 U	0.051 U	0.051 U	0.25 U	0.25 U	0.051 U	0.051 U	0.051 U	0.063 U	0.051 U	0.076 U	0.051 U	0.1 U	0.92 J	0.25 U		
	CFH-003	1/24/2025	1	0.31 J	0.8	1.2	0.9	0.064 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.06 U	0.097 U	0.16 J	0.21	0.052 U	0.26	0.052 U	0.052 U	0.052 U	0.1 U	0.13 J	0.1 U	0.065 U	0.052 U	0.052 U	0.052 U	0.26 U	0.26 U	0.052 U	0.052 U	0.052 U	0.064 U	0.052 U	0.077 U	0.052 U	0.1 U	0.26 U	0.26 U		
	CFH-003	1/24/2025	3	0.61	1.2	1	1.6	0.17 J	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.056 U	0.074 U	0.12 J	1.1	0.048 U	0.065 J	0.048 U	0.048 U	0.048 U	0.096 U	0.16 J	0.096 U	0.061 U	0.048 U	0.048 U	0.048 U	0.048 U	0.24 U	0.24 U	0.048 U	0.048 U	0.048 U	0.048 U	0.06 U	0.048 U	0.072 U	0.048 U	0.096 U	0.49 J	0.24 U
	CFH-003	1/24/2025	6	0.099 U	0.31	0.18 J	0.085 J	0.062 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.058 U	0.05 U	0.05 U	0.059 J	0.05 U	0.13 J	0.05 U	0.05 U	0.05 U	0.09 U	0.099 U	0.099 U	0.063 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.062 U	0.05 U	0.075 U	0.05 U	0.099 U	0.25 U	0.25 U
	CFH-003	1/24/2025	9	0.12 J	0.17 J	0.1 J	0.052 U	0.065 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.061 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.1 U	0.1 U	0.1 U	0.066 U	0.052 U	0.052 U	0.052 U	0.26 U	0.26 U	0.052 U	0.052 U	0.052 U	0.065 U	0.052 U	0.078 U	0.052 U	0.1 U	0.26 U	0.26 U		
	CFH-003 FD	1/24/2025	9	0.13 J	0.23	0.16 J	0.045 U	0.055 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.089 U	0.089 U	0.089 U	0.056 U	0.045 U	0.045 U	0.045 U	0.22 U	0.22 U	0.045 U	0.045 U	0.045 U	0.045 U	0.055 U	0.045 U	0.067 U	0.045 U	0.089 U	0.22 U	0.22 U	
	CFH-004	1/24/2025	0	0.57	1.4	0.78	0.3	3.4	7.5	4.2	2.6	0.24	0.26	0.057 U	0.18 J	1.5	14	1.5	390	0.41	0.3	0.049 U	0.099 U	8.9	4.7	3.4	0.049 U	0.049 U	0.049 U	0.049 U	0.25 U	0.25 U	0.049 U	0.049 U	0.049 U	0.061 U	0.049 U	0.074 U	0.049 U	0.21 J	1.8	0.25 U		
	CFH-004	1/24/2025	1	0.94	1.6	1.5	0.95	4.1	5.4	2	2.6	0.3	0.7	0.11 J	0.12 J	0.97	40	1.7	310	0.36	0.51	0.049 U	0.099 U	26	6.7	2.3	0.049 U	0.049 U	0.049 U	0.049 U	0.25 U	0.25 U	0.049 U	0.049 U	0.049 U	0.061 U	0.049 U	0.074 U	0.049 U	1	7.6	0.99		
	CFH-004	1/24/2025	3	0.77	2.3	5.4	1.1	4.6	0.96	1.3	2.4	0.12 J	0.39	0.059 U	1.3	2.6	33	0.77	110	0.36	0.26	0.051 U	0.1 U	39	21	4.7	0.083 J	0.051 U	0.15 J	0.051 U	0.25 U	0.25 U	0.051 U	0.051 U	0.051 U	0.051 U	0.063 U	0.051 U	0.076 U	0.051 U	0.22 J	1.6	1.5	
	CFH-004	1/24/2025	6	0.37 J	0.94	1.4	0.22	1.2	1.1	0.97	0.4	0.049 U	0.076 J	0.057 U	0.54	0.87	5.7	0.53	120	0.067 J	0.057 J	0.049 U	0.099 U	12	18	0.92	0.049 U	0.049 U	0.049 U	0.049 U	0.25 U	0.25 U	0.049 U	0.049 U	0.049 U	0.049 U	0.061 U	0.049 U	0.074 U	0.049 U	0.099 U	0.25 U	0.25 U	
	CFH-004	1/24/2025	10	0.1 U	0.11 J	0.2 J	0.051 U	0.21	0.3	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.059 U	0.079 J	0.19 J	2.1	0.16 J	21	0.051 U	0.051 U	0.051 U	0.1 U	3.9	0.28 J	0.064 U	0.051 U	0.051 U	0.051 U	0.25 U	0.25 U	0.051 U	0.051 U	0.051 U	0.051 U	0.063 U	0.051 U	0.076 U	0.051 U	0.1 U	0.25 U	0.25 U	
	CFH-004	1/24/2025	15	0.1 U	0.056 J	0.08 J	0.05 U	0.062 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.058 U	0.05 U	0.05 U	0.15 J	0.05 U	1.4	0.05 U	0.05 U	0.05 U	0.1 U	0.73	0.1 U	0.063 U	0.05 U	0.05 U	0.05 U	0.25 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.062 U	0.05 U	0.075 U	0.05 U	0.1 U	0.25 U	0.25 U	
	CFH-004 FD	1/24/2025	10	0.13 J	0.18 J	0.3 J	0.06 J	0.26	0.27	0.046 U	0.046 U	0.046 U	0.046 U	0.046 U	0.054 U	0.14 U	0.24	2.5	0.14 J	20	0.046 U	0.046 U	0.046 U	0.093 U	4.2	0.29 J	0.059 U	0.046 U	0.046 U	0.046 U	0.23 U	0.23 U	0.046 U	0.046 U	0.046 U	0.046 U	0.058 U	0.046 U	0.07 U	0.046 U	0.093 U	0.23 U	0.23 U	
	CFH-005	1/24/2025	0	0.65	1.1	0.88	0.13 J	0.63	3.8	6.3	6.7	1.3	2	0.34	0.11 J	0.22	2.5	1.1	420	0.64	1	0.12 J	0.1 U	7.1	80	12	0.15 J	0.051 U	0.076 J	0.051 U	0.25 U	0.25 U	0.051 U	0.051 U	0.051 U	0.051 U	0.063 U	0.051 U	0.076 U	0.051 U	0.61	2.4	1.9	
	CFH-005	1/24/2025	1	0.52	0.6	0.42	0.066 J	2.2	5	0.81	0.44	0.082 J	0.14 J	0.058 U	0.05 U	0.12 J	2.3	1.7	540	0.05 U	0.092 J	0.05 U	0.1 U	12	20	0.84	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.062 U	0.05 U	0.075 U	0.05 U	0.84	4	0.75 J
	CFH-005	1/24/2025	3	0.2 J	0.14 J	0.31	0.18 J																																					

Table 4-4. Soil PFAS Results
 Spokane International Airport
 Spokane, WA

Area	Location ID	Date	Depth (ft bgs)	Result (ug/kg) ¹																																							
				PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFUdA	PFDoA	PFTdA	PFTdA	PFBS	PFHxS	PFHpS	PFOS	PFNS	PFDS	PFdS	4:2FTS	6:2FTS	8:2FTS	PFOSA	NMeFOSA	NEiFOSA	NMeFOsAA	NEiFOsAA	NMeFOSE	NEiFOSE	HFPODA	ADONA	PFMFA	PFMBA	NFDHA	9ClPFOuS	11ClPFOuS	PFEESA	3:3FTCA	5:3FTCA	7:3FTCA	
Field Maintenance Building Area (FMB)	FMB-003 FD	1/24/2025	10	0.16 J	0.21	0.29	0.1 J	0.32	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.057 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.099 U	7.4	0.15 J	0.062 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.25 U	0.25 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.061 U	0.049 U	0.074 U	0.049 U	0.099 U	0.25 U	0.25 U	
	FMB-004	1/23/2025	0	0.1 U	0.05 U	0.05 U	0.05 U	0.062 U	0.05 U	0.1 J	0.05 U	0.41	0.05 U	0.18 J	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.1 U	0.063 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.062 U	0.05 U	0.075 U	0.05 U	0.1 U	0.25 U	0.25 U		
	FMB-004	1/23/2025	1	0.11 U	0.056 U	0.056 U	0.056 U	0.069 U	0.056 U	0.12 J	0.088 J	0.32	0.056 U	0.065 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.11 U	0.11 U	0.11 U	0.071 U	0.056 U	0.056 U	0.056 U	0.056 U	0.28 U	0.28 U	0.056 U	0.056 U	0.056 U	0.056 U	0.069 U	0.056 U	0.084 U	0.056 U	0.11 U	0.28 U	0.28 U		
	FMB-004	1/23/2025	3	0.12 U	0.058 U	0.058 U	0.058 U	0.85	0.77	0.058 U	0.058 U	0.058 U	0.058 U	0.067 U	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U	0.12 U	0.23 J	0.12	0.073 U	0.058 U	0.058 U	0.058 U	0.058 U	0.29 U	0.29 U	0.058 U	0.058 U	0.058 U	0.072 U	0.058 U	0.087 U	0.058 U	0.12 U	0.29 U	0.29 U			
	FMB-004	1/23/2025	6	0.1 U	0.19 J	0.2	0.11 J	0.74	0.095 J	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.058 U	0.077 J	0.082 J	2	0.19 J	3.4	0.05 U	0.05 U	0.05 U	0.1 U	1.9	0.1 U	0.063 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.25 U	0.05 U	0.05 U	0.05 U	0.062 U	0.05 U	0.075 U	0.05 U	0.1 U	0.25 U	0.25 U
	FMB-004	1/23/2025	10	0.1 U	0.12 J	0.12 J	0.065 J	0.094 J	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.058 U	0.05 U	0.058 J	0.63 J	0.05 U	0.61 J	0.05 U	0.05 U	0.05 U	0.1 U	0.53 J	0.1 U	0.063 U	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.25 U	0.05 U	0.05 U	0.05 U	0.062 U	0.05 U	0.075 U	0.05 U	0.1 U	0.25 U	0.25 U
	FMB-004 FD	1/23/2025	3	0.096 U	0.048 U	0.048 U	0.048 U	0.87	0.63	0.048 U	0.048 U	0.048 U	0.048 U	0.055 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.096 U	0.18 J	0.096 U	0.06 U	0.048 U	0.048 U	0.048 U	0.048 U	0.24 U	0.24 U	0.048 U	0.048 U	0.048 U	0.048 U	0.059 U	0.048 U	0.072 U	0.048 U	0.096 U	0.25 J	0.24 U		
	FMB-004 FD	1/23/2025	10	0.11 J	0.23 J	0.21 J	0.094 J	0.13 J	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.057 U	0.089 J	0.093 J	0.86 J	0.049 U	0.82 J	0.049 U	0.049 U	0.049 U	0.097 U	0.77 J	0.097 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.24 U	0.24 U	0.049 U	0.049 U	0.049 U	0.06 U	0.049 U	0.073 U	0.049 U	0.097 U	0.24 U	0.24 U
Historical Fire House Area (HFH)	HFH-001	1/22/2025	0	0.098 U	0.061 J	0.2	0.049 U	0.2	0.25	0.29	0.24	0.15 J	0.094 J	0.07 J	0.049 U	0.049 U	0.17 J	0.049 U	3.4	0.049 J	0.17 J	0.049 U	0.098 U	0.098 U	0.26 J	0.09 J	0.049 U	0.049 U	0.049 U	0.14 J	0.24 U	0.24 U	0.049 U	0.049 U	0.049 U	0.061 U	0.049 U	0.073 U	0.049 U	0.098 U	0.24 U	0.24 U	
	HFH-001	1/22/2025	1	0.098 U	0.049 U	0.12 J	0.049 U	0.17 J	0.082 J	0.45	1.1	0.55	0.5	0.13 J	0.049 U	0.049 U	0.32	0.049 U	4.8	0.23	0.59	0.34	0.098 U	0.56	2.1	0.67	0.049 U	0.049 U	0.049 U	0.095 J	0.25 U	0.25 U	0.049 U	0.049 U	0.049 U	0.061 U	0.049 U	0.074 U	0.049 U	0.098 U	0.28 J	0.67 J	
	HFH-001	1/22/2025	3	0.098 U	0.079 J	0.31	0.054 J	1.7 J	0.93 J	3.1	0.049 U	0.049 U	0.049 U	0.057 U	0.049 U	0.049 U	1.1 J	1.1 J	330	0.68 J	0.49 U	0.49 U	0.098 U	6.6	150	12	0.49 U	0.49 U	0.49 U	0.59 J	2.5 U	2.5 U	0.049 U	0.049 U	0.049 U	0.061 U	0.049 U	0.074 U	0.049 U	0.098 U	0.28 J	0.86 J	
	HFH-001	1/22/2025	6	0.23 J	0.66	1.9	0.62	3.7	0.74	0.12 J	0.049 U	0.049 U	0.049 U	0.057 U	0.12 J	0.46	11	0.99	180	0.049 U	0.049 U	0.049 U	0.098 U	27	9.5	0.26	0.049 U	0.049 U	0.049 U	0.049 U	0.24 U	0.24 U	0.049 U	0.049 U	0.049 U	0.061 U	0.049 U	0.073 U	0.049 U	0.098 U	0.24 U	0.24 U	
	HFH-001 FD	1/22/2025	3	0.1 U	0.05 U	0.24	0.05 U	0.6 J	0.66 J	3	0.05 U	0.05 U	0.05 U	0.058 U	0.05 U	0.05 U	0.55 J	0.68 J	320	0.61 J	0.5 U	0.5 U	0.1 U	4.9	150	13	0.5 U	0.5 U	0.5 U	0.59 J	2.5 U	2.5 U	0.05 U	0.05 U	0.05 U	0.062 U	0.05 U	0.075 U	0.05 U	0.14 J	0.25 U	0.86 J	
	HFH-002	1/23/2025	0	0.098 U	1.2	0.42	0.54	0.31	0.078 J	0.049 U	0.049 U	0.049 U	0.049 U	0.057 U	0.049 U	0.049 U	0.24	0.049 U	0.4	0.049 U	0.049 U	0.049 U	0.098 U	0.098 U	0.098 U	0.062 U	0.049 U	0.049 U	0.049 U	0.049 U	0.25 U	0.25 U	0.049 U	0.049 U	0.049 U	0.061 U	0.049 U	0.074 U	0.049 U	0.098 U	0.25 U	0.25 U	
	HFH-002	1/23/2025	1	0.16 J	1.3	1	0.59	0.74	0.1 J	0.11 J	0.064 J	0.049 U	0.049 U	0.049 U	0.057 U	0.053 J	0.068 J	0.61	0.049 U	6 J	0.049 U	0.049 U	0.049 U	0.098 U	0.27 J	1.4 J	0.086 J	0.049 U	0.049 U	0.049 U	0.049 U	0.24 U	0.24 U	0.049 U	0.049 U	0.049 U	0.061 U	0.049 U	0.073 U	0.049 U	0.098 U	0.24 U	0.24 U
	HFH-002	1/23/2025	3	0.1 U	0.14 J	0.4	0.14 J	0.46	0.25	0.85	0.066 J	0.049 U	0.052 U	0.061 U	0.052 U	0.052 U	0.052 U	1.5	0.083 J	66	0.08 J	0.052 U	0.052 U	0.1 U	5.4	8.3	0.28	0.052 U	0.052 U	0.052 U	0.26 U	0.26 U	0.052 U	0.052 U	0.052 U	0.065 U	0.052 U	0.078 U	0.052 U	0.1 U	0.26 U	0.26 U	
	HFH-002	1/23/2025	6	0.098 U	0.37	1.2	0.098 J	0.49	0.42	0.94	0.39	0.049 U	0.049 U	0.057 U	0.3	0.059 J	0.69	0.15 J	150	0.67	0.049 U	0.049 U	0.098 U	4.2	20	4.1	0.049 U	0.049 U	0.12 J	0.3	0.24 U	0.24 U	0.049 U	0.049 U	0.049 U	0.061 U	0.049 U	0.073 U	0.049 U	0.098 U	0.25 J	0.24 U	
	HFH-002	1/23/2025	10	0.1 J	0.2	0.48	0.16 J	0.39	0.29	0.76	0.059 J	0.05 U	0.05 U	0.058 U	0.05 U	0.05 J	1.3	0.077 J	64	0.063 J	0.05 U	0.05 U	0.1 U	6.6	7.6	0.24	0.05 U	0.05 U	0.05 U	0.05 U	0.25 U	0.25 U	0.05 U	0.05 U	0.05 U	0.062 U	0.05 U	0.075 U	0.05 U	0.1 U	0.25 U	0.25 U	
	HFH-002	1/23/2025	12	0.1 U	0.22	0.75	0.072 J	0.27	0.097 J	0.22	0.34	0.051 U	0.051 U	0.059 U	0.051 U	0.051 U	0.4	0.051 U	47	0.27	0.37	0.051 U	0.1 U	3.6	8.3	2.6	0.051 U	0.051 U	0.051 U	0.23	0.25 U	0.25 U	0.051 U	0.051 U	0.051 U	0.063 U	0.051 U	0.076 U	0.051 U	0.1 U	0.25 U	0.25 U	
	HFH-002 FD	1/23/2025	1	0.15 J	1.1	0.94	0.55	0.83	0.12 J	0.19 J	0.12 J	0.049 U	0.049 U	0.057 U	0.049 U	0.065 J	0.72	0.049 U	10 J	0.049 U	0.049 U	0.049 U	0.098 U	0.43	2.2 J	0.14 J	0.049 U	0.049 U	0.049 U	0.049 U	0.25 U	0.25 U	0.049 U	0.049 U	0.049 U	0.061 U	0.049 U	0.074 U	0.049 U	0.098 U	0.25 U	0.25 U	
	HFH-003	1/23/2025	0	0.13 J	0.27	0.51	0.094 J	0.2	0.049 U	0.089 J	0.063 J	0.73	0.64	0.12 J	0.1 J	0.13 J	1	0.067 J	7.8	0.049 U	0.28	1.5	0.099 U	2.3	3.6	1.9	0.15 J	0.049 U	0.049 U	0.058 J	0.25 U	0.25 U	0.049 U	0.049 U	0.049 U	0.061 U	0.049 U	0.074 U	0.049 U	0.099 U	0.42 J	0.5 J	
	HFH-003	1/23/2025	1	0.16 J	0.54	0.91	0.29	1.5	0.22	0.29	2.4	0.05 U	0.05 U	0.059 U	0.2	0.23	3.2	0.34	19	0.23	0.51	0.05 U	0.1 U	1.6	22	11	0.59	0.05 U	0.066 J	1.3	0.25 U	0.25 U	0.05 U	0.05 U	0.05 U	0.063 U	0.05 U	0.076 U	0.05 U	0.1 U	0.29 J	0.63 J	
	HFH-003	1/23/2025	3	0.14 J	0.44	0.78	0.28	0.79	0.06 J	0.56	0.051 U	0.051 U	0.051 U	0.059 U	0.13 J	0.18 J	2.5	0.11 J	17	0.15 J	0.051 U	0.051 U	0.1 U	2.9	13	0.89	0.051 U	0.051 U	0.051 U	0.051 U	0.26 U	0.26 U	0.051 U	0.051 U	0.051 U	0.063 U	0.051 U	0.077 U	0.051 U	0.1 U	0.26 U	0.26 U	
	HFH-003	1/23/2025	6	0.18 J	0.56	1	0.28	0.8	0.056 J	0.47	0.056 J	0.051 U	0.051 U	0.059 U	0.16 J	0.2	2.3	0.1 J	17	0.13 J	0.061 J	0.051 U	0.1 U	2.5	11	0.95	0.051 U	0.051 U	0.051 U	0.054 J	0.26 U	0.26 U	0.051 U	0.051 U	0.051 U	0.063 U	0.051 U	0.077 U	0.051 U	0.1 U	0.26 U	0.26 U	
	HFH-003	1/23/2025	10	0.35 J	1.1	1.7	0.32	0.65	0.15 J	0.13 J	0.16 J	0.052 U	0.052 U	0.06 U	0.22	0.26	2.5	0.11 J	27	0.052 U	0.052 U	0.052 U	0.1 U	5.6	2.9	0.65	0.052 U	0.052 U	0.052 U	0.052 U													

**Table 4-1. Groundwater Nutrients, Stable Isotopes, Ions, and Water Quality Results
 Spokane International Airport
 Spokane, WA**

Area	Location ID	Date	Screen Depth (ft bgs)	Nutrients ¹		Oxygen Isotope		Alkalinity ²	Anions and Cations						Water Quality Parameters ³					
				Nitrate N (mg/L)	Sulfate (mg/L)	d2H-H2O (%)	d18O-H2O (%)	CaCO3 (mg/L)	Bromide (mg/L)	Chloride (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	DO (mg/L)	ORP (mV)	pH (SU)	SpConductivity (uS/cm)	Temperature (degC)	Turbidity (NTU)
Former Geiger Field (FGF)	FGF-MW-18	1/9/2025	8 - 13	2.2	11	-115	-15	60	0.12 U	28	22	7.3	3	9.3	4.2	19	6.5	240	9.7	6.9
Geiger Correctional Facility (GCF)	GCF-MW-5	1/13/2025	3.5 - 13.5	14	11	-122	-16	20	0.12 U	39	25	7.8	3.3	8.4	11	140	6.3	280	7.3	4.1
	GCF-MW-5 FD	1/13/2025	3.5 - 13.5	12	9.9	-122	-15.9	25	0.12 U	32	25	7.7	3.3	8.3	--	--	--	--	--	--
	GCF-MW-5D	1/13/2025	25 - 45	2.5	14	-115	-14.9	170	0.16 J	340	150	36	1.5 J	14	3.5	-340	7	1300	12	8.7
	GCF-MW-7	1/13/2025	25 - 45	2.4	37	-114	-14.8	170	0.12 U	3000	720	180	1.5 U	210	1.8	180	7	6800	12	0.74
	GCF-MW-8	1/17/2025	25 - 45	0.24	20	-109	-14.1	270	0.12 U	300	130	36	1.1 J	29	2.8	170	7.2	1300	10	26
	GCF-MW-8 FD	1/17/2025	25 - 45	0.24	21	-110	-14.6	270	0.12 U	290	130	36	1.1 J	29	--	--	--	--	--	--
	GCF-MW-10	1/17/2025	3 - 15	55	32	-114	-15	140	0.12 U	7	66	22	1.2 J	13	12	170	7.1	700	8.1	2.6
	GCF-MW-11	1/13/2025	3 - 15	3.4	17	-114	-14.7	65	0.12 U	730	140	33	1.7 J	230	6.9	180	7	2000	11	1.2
	GCF-MW-11A	1/14/2025	84.5 - 97	3.3	19	-118	-15.3	140	0.12 U	95	69	18	2.7	8.5	2.2	120	7	600	10	50
	GCF-MW-11B	1/13/2025	24.7 - 44.7	0.75 J	16	-117	-15.2	120	0.13 J	86	58	14	2.5	9	1.7	150	7.6	500	12	9.2
	GCF-MW-12A	1/14/2025	68.1 - 78.1	4.8	24	-117	-15.2	140	0.12 U	92	69	18	2.4	8.8	3.4	120	7	590	12	11
	GCF-MW-12A FD	1/14/2025	68.1 - 78.1	4.6	20	-118	-15.2	130	0.12 U	87	69	18	2.5	8.8	--	--	--	--	--	--
	GCF-MW-12B	1/14/2025	24 - 45	5.8	37	-113	-14.6	180	0.12 U	820	310	67	1.3 J	24	7	120	7.1	2500	12	2
GCF-MW-13	1/13/2025	3 - 15	0.65 J	31	-110	-14.1	240	0.12 U	370	74	21	1.7 J	180	2	140	7	1400	9.4	50	
Geiger Delivery Facility (GDF)	GDF-GR-2	1/15/2025	5 - 15	7.3	56	-113	-14.8	30	0.18 J	470	130	40	2.7	24	7.4	-260	6.1	1500	12	16
	GDF-GR-2 FD	1/15/2025	5 - 15	7.3	56	-113	-14.8	30	0.18 J	450	130	42	2.8	26	--	--	--	--	--	
	GDF-GR-3	1/15/2025	5 - 15	2.7	5.5	-112	-14.6	150	0.12 U	29	37	14	4.1	8.2	1.5	160	6.6	390	11	7.2
	GDF-GR-4	1/15/2025	10 - 20	4.7	9.6	-109	-14.1	70	0.23 J	250	80	22	2.6	15	4.8	350	6.2	870	12	3.2
	GDF-GR-5	1/14/2025	10 - 25	3.1	6.8	-131	-17.1	75	0.12 U	15	22	8.2	3.2	5.5	13	-280	7.1	210	7.3	0.02
	GDF-GR-7S	1/10/2025	25 - 35	0.057 U	0.38 J	-114	-14.8	170	0.19 J	170	81	23	2.4	10	0.11	10	6.7	840	12	1.9
	GDF-GR-7D	1/10/2025	48 - 63	4	11	-114	-14.8	160	0.29 J	180	92	25	2.8	12	2.4	36	6.8	840	12	0.49
	GDF-GR-8	1/10/2025	8 - 18	3.2	15	-112	-14.5	75	0.18 J	350	100	35	6.1	17	4.1	160	6.1	1100	12	0.02
	GDF-MW-10R	1/14/2025	6 - 16	0.57 U	16	-109	-14.2	50	0.56 J	890	260	64	5.7	49	0.19	200	6.2	2600	14	3.4
	GDF-MW-10A	1/14/2025	73 - 83	1.3 J	7.8	-116	-15	200	0.17 J	130	90	22	2.6	10	0.39	140	6.8	760	13	3.4
Joint Fire Training Area (JTA)	EA-MW-5A	1/8/2025	81 - 91	2.3	5.1	-122	-15.8	80	0.12 U	1.9	19	5.5	3	7.8	5.4	160	7.4	190	11	5.3
	EA-MW-5A FD	1/8/2025	81 - 91	2.4	5.1	-122	-15.7	80	0.12 U	1.9	19	5.7	3	8	--	--	--	--	--	
	EA-MW-5B	1/13/2025	23 - 43	3.5	86	-114	-14.8	360	0.12 U	3	120	24	11	9.8	3.5	-300	6.8	820	12	0.02
	EA-MW-7A	1/17/2025	58 - 68	1.1	4.4	-124	-16.3	85	0.12 U	1.4	17	5.6	1.2 J	7.3	4.7	-330	7.4	180	12	6.7
	EA-MW-7B	1/17/2025	7.5 - 27.5	9.5	31	-114	-15.3	170	0.12 U	170	96	20	6.4	17	7.3	-290	7.1	900	12	1.4
	EA-MW-8A	1/8/2025	66.5 - 76.5	0.76	2.9	-123	-15.9	85	0.12 U	1.1	18	5.6	1.8 J	7.1	5.9	1.8	7.3	170	12	3.8
	EA-MW-8B	1/14/2025	13 - 33	6.8	14	-115	-14.9	160	0.12 U	3.3	22	5.3	2	7.3	10	-210	7.1	190	12	6.5
	EA-MW-13A	1/7/2025	32 - 42	1.8	5.9	-122	-15.8	80	0.12 U	1.1	15	3.8	0.71 J	9.1	1.6	130	7.3	180	12	38
	EA-MW-13A FD	1/7/2025	32 - 42	1.8	5.7	-122	-15.7	80	0.12 U	1	16	3.7	0.7 J	9.3	--	--	--	--	--	
	EA-MW-13B	1/8/2025	10 - 20	35	26	-112	-14.4	190	0.12 U	1.8	72	23	10	13	6.9	160	6.8	670	13	0.64
EA-MW-14A	1/7/2025	25 - 35	1.2	16	-124	-16	75	0.12 U	1.3	19	4.9	0.42 J	5.4	5	140	7.5	190	9.5	3.5	

**Table 4-1. Groundwater Nutrients, Stable Isotopes, Ions, and Water Quality Results
 Spokane International Airport
 Spokane, WA**

Area	Location ID	Date	Screen Depth (ft bgs)	Nutrients ¹		Oxygen Isotope		Alkalinity ²	Anions and Cations						Water Quality Parameters ³					
				Nitrate N (mg/L)	Sulfate (mg/L)	d2H-H2O (%)	d18O-H2O (%)	CaCO3 (mg/L)	Bromide (mg/L)	Chloride (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	DO (mg/L)	ORP (mV)	pH (SU)	SpConductivity (uS/cm)	Temperature (degC)	Turbidity (NTU)
Joint Fire Training Area (JTA)	EA-MW-14B	1/7/2025	9 - 19	4.8	31	-114	-15.2	180	0.12 U	190	110	17	5.2	15	8.6	160	7	920	12	5.9
Land Treatment Area (LTA)	LA-MW-8	1/6/2025	12 - 22	4.9	11	-116	-15.1	85	0.12 U	49	38	9.7	4.3	14	7.5	130	7	360	10	3.7
	LA-MW-9	1/6/2025	10 - 20	0.057 U	1.6	-122	-15.8	230	0.12 U	300	110	31	7.1	59	0.18	-27	7.1	1200	6.1	0.02
	LA-MW-10	1/6/2025	15 - 25	3.9	7.7	-114	-14.7	75	0.12 U	30	25	7.1	3	14	5.5	120	7.2	260	10	1.7
	LA-MW-10 FD	1/6/2025	15 - 25	4.1	7.8	-114	-14.7	70	0.12 U	30	24	7	2.9	13	--	--	--	--	--	--
	LA-MW-11	1/6/2025	9 - 19	6.5	5.5	-115	-14.8	60	0.12 U	19	22	7.2	4.6	7.2	5.8	84	6.7	230	9.9	0.02
	LA-MW-12	1/6/2025	6 - 26	3.4	19	-112	-14.5	120	0.19 J	45	43	13	3.5	19	10	62	7.3	420	9	0.02
Stormwater Recovery Area (SRA)	SWN-MW-1	1/9/2025	8.5 - 14.5	5	15	-119	-15.6	45	0.12 U	200	62	18	6.4	30	11	110	6.7	720	6.4	2
	SWN-MW-2	1/9/2025	9.5 - 14.7	0.057 U	4.7	-123	-16.2	90	0.12 U	43	21	5.4	21	18	10	140	7.1	300	4.4	20
	SWN-MW-3	1/9/2025	6.5 - 8.4	0.057 U	5.3	-123	-16.2	260	0.12 U	570	58	20	15	250	0.25	-73	6.8	2000	5.5	2.3
	SWN-MW-4	1/9/2025	7.5 - 12.4	0.057 U	0.66	-123	-16.3	260	0.12 U	480	61	19	14	210	0.3	-29	6.9	1900	7.3	0.27
	SWN-MW-5	1/10/2025	5 - 20	0.057 U	3.3	-125	-16.4	100	0.12 U	190	32	9.5	21	70	0.81	88	6	720	7.6	1.1
	SWN-MW-5 FD	1/10/2025	5 - 20	0.057 U	3.6	-125	-16.4	110	0.12 U	170	32	9.3	22	69	--	--	--	--	--	--
	SWN-MW-6	1/9/2025	5 - 20	0.057 U	0.58	-126	-16.5	190	0.12 U	220	44	14	35	110	0.57	45	6.7	1100	5.4	4.8
	SWN-MW-7	1/9/2025	5 - 19	0.91	9	-117	-15.2	65	0.12 U	530	97	28	8.9	68	7.2	250	6.4	1300	10	0.26
	SWN-MW-7 FD	1/9/2025	5 - 19	0.92	9.4	-117	-15.2	65	0.12 U	480	100	29	9.1	70	--	--	--	--	--	--
	SWN-MW-13	1/9/2025	5.5 - 11.5	0.057 U	15	-114	-14.8	210	0.12 U	400	130	34	16	60	1.8	34	6.9	1400	9.8	15
	SWN-MW-14	1/9/2025	4.5 - 14.5	0.057 U	10	-112	-14.4	200	0.12 U	530	170	50	9.1	33	3	26	6.6	1700	8.3	0.33
	SWN-MW-321	1/8/2025	5 - 15	4.8	21	-121	-15.8	30	0.12 U	690	110	34	6.6	150	2.3	270	5.9	1800	6.9	0.02
SWN-MW-A	1/9/2025	5 - 15	5.3	97	-116	-15	160	0.59 J	5700	450	160	34	1400	0.73	88	6.5	13000	7.6	1	
West Park Drive Waste Disposal Area (PDW)	PD-MW-1A	1/10/2025	65 - 75	2.4	21	-118	-15.2	130	0.12 U	53	49	15	3.1	9.2	2.7	32	7.3	430	9.8	0.61
West Peripheral (W)	W-MW-15	1/7/2025	7 - 12	16	9.4	-116	-14.8	60	0.12 U	6.3	19	4.8	1.8 J	18	10	150	7.3	280	9.7	35
	W-MW-17	1/6/2025	15 - 25	2.7	21	-113	-14.7	160	0.12 U	180	65	16	6.7	81	9.2	120	7.1	900	11	3.9

Notes: Laboratory qualifier: U = non-detect; J = estimated concentration

1. All Samples were measured on a whole water basis.

2. Total Alkalinity as CaCO3.

3. DO - dissolved oxygen; ORP = oxidation-reduction potential

Table 4-2. Results for PFAS in Groundwater
 Spokane International Airport
 Spokane, WA

Area	Location ID	Date	Screen Depth (ft)	Result (ng/L) ¹																																								
				PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFUnA	PFDoA	PFTtDA	PFTeDA	PFBS	PFPeS	PFHxS	PFHpS	PFOS	PFNS	PFDS	PFDoS	4:2FTS	6:2FTS	8:2FTS	PFOSA	NMeFOSA	NEFOSA	NMeFOSAA	NEFOSAA	NMeFOSE	NEFOSE	HFPO-DA	ADONA	PFMPA	PFMPA	PFMBA	NFDHA	9Cl-PF3ONS	11Cl-PF3OUs	PFESA	3:3FTCA	5:3FTCA	7:3FTCA
Joint Fire Training Area (JTA)	EA-MW-13B	1/8/2025	10 - 20	200	440	1100	230	710	5 U	5 U	5 U	5.5 U	5.8 U	8.1 U	720	960	12000	290	7200	6.6 J	5 U	5.3 U	10 U	22 J	10 U	36	5 U	5 U	5 U	5 U	25 U	25 U	3.9 U	5 U	5 U	5 U	7.2 U	5.8 U	5 U	5 U	10 U	25 U	25 U	
	EA-MW-14A	1/7/2025	25 - 35	28	42	170	30	170	0.84 J	0.43 U	0.43 U	0.47 U	0.5 U	0.7 U	180	230	910	62	2500	0.43 U	0.43 U	0.46 U	0.86 U	0.86 U	0.86 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	2.2 U	2.2 U	0.34 U	0.43 U	0.43 U	0.43 U	0.62 U	0.5 U	0.43 U	0.43 U	0.86 U	2.2 U	2.2 U	
	EA-MW-14B	1/7/2025	9 - 19	30	79	290	20	130	8.6	0.47 U	0.47 U	0.51 U	0.54 U	0.75 U	110	100	2100	43	5000	0.47 U	0.47 U	0.49 U	0.93 U	3.7	1 J	0.61 J	0.47 U	0.47 U	0.47 U	0.47 U	2.3 U	2.3 U	0.36 U	0.47 U	0.47 U	0.47 U	0.67 U	0.54 U	0.47 U	0.47 U	0.93 U	2.3 U	2.3 U	
Land Treatment Area (LTA)	LA-MW-8	1/6/2025	12 - 22	22	13	12	5.5	13	1.9	0.46 U	0.46 U	0.5 U	0.53 U	0.74 U	3.2 J	1 J	6.7	0.46 U	14 J	0.46 U	0.46 U	0.48 U	0.91 U	0.91 U	0.91 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	2.3 U	2.3 U	0.36 U	0.46 U	0.49 J	0.46 U	0.66 U	0.53 U	0.46 U	0.46 U	0.91 U	2.3 U	2.3 U	
	LA-MW-9	1/6/2025	10 - 20	12	20	22	7.7	24	4.9	9	0.44 U	0.48 U	0.5 U	0.71 U	4.1	1.1 J	16	0.44 U	11 J	0.44 U	0.44 U	0.46 U	0.87 U	1.4 J	0.87 U	0.44 U	0.44 U	0.44 U	0.44 U	2.2 U	2.2 U	0.34 U	0.44 U	0.44 U	0.44 U	0.63 U	0.5 U	0.44 U	0.44 U	0.87 U	6 J	2.2 U		
	LA-MW-10	1/6/2025	15 - 25	42	160	180	10	0.42 U	0.42 U	0.42 U	0.42 U	0.47 U	0.49 U	0.69 U	2 J	0.43 J	2.6	0.42 U	0.42 U	0.42 U	0.42 U	0.45 U	0.85 U	0.85 U	0.85 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	2.1 U	2.1 U	0.33 U	0.42 U	0.42 U	0.42 U	0.61 U	0.49 U	0.42 U	0.42 U	0.85 U	2.1 U	2.1 U	
	LA-MW-10 FD	1/6/2025	15 - 25	37	170	180	10	0.42 U	0.42 U	0.42 U	0.42 U	0.47 U	0.49 U	0.69 U	1.8 J	0.47 J	2.7	0.42 U	0.42 U	0.42 U	0.42 U	0.45 U	0.85 U	2.5 J	0.85 U	0.42 U	0.42 U	0.42 U	0.42 U	2.1 U	2.1 U	0.33 U	0.42 U	0.42 U	0.42 U	0.61 U	0.49 U	0.42 U	0.42 U	0.85 U	2.1 U	2.1 U		
	LA-MW-11	1/6/2025	9 - 19	0.79 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.43 U	0.46 U	0.64 U	0.39 U	0.39 U	0.61 U	0.39 U	7.6 J	0.39 U	0.39 U	0.42 U	0.79 U	0.79 U	0.79 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	2 U	2 U	0.31 U	0.39 U	0.39 U	0.39 U	0.57 U	0.46 U	0.39 U	0.39 U	0.79 U	2 U	2 U
	LA-MW-12	1/6/2025	6 - 26	3.5	7	6	4.5	7.2	0.4 U	0.4 U	0.4 U	0.44 U	0.47 U	0.66 U	4	1.1 J	4.7	0.4 U	2.2 J	0.4 U	0.4 U	0.43 U	0.81 U	0.88 J	0.81 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U	2 U	0.32 U	0.4 U	0.4 U	0.4 U	0.58 U	0.47 U	0.4 U	0.4 U	0.81 U	2 U	2 U	
Stormwater Recovery Area (SRA)	SWN-MW-1	1/9/2025	8.5 - 14.5	23	48	96	23	58	9.7	2.3	0.45 U	0.49 U	0.52 U	0.72 U	14	12	300	1.7 J	58	0.45 U	0.45 U	0.47 U	0.89 U	2.3 J	0.89 U	0.45 U	0.45 U	0.45 U	0.45 U	2.2 U	2.2 U	0.35 U	0.45 U	0.45 U	0.45 U	0.64 U	0.52 U	0.45 U	0.45 U	0.89 U	2.2 U	2.2 U		
	SWN-MW-2	1/9/2025	9.5 - 14.7	14	20	29	8.4	22	17	11	0.47 U	0.51 U	0.54 U	0.76 U	1.5 J	1.8 J	100	3.1	93	0.47 U	0.47 U	0.49 U	0.93 U	11	1.2 J	0.47 U	0.47 U	0.47 U	0.47 U	2.3 U	2.3 U	0.36 U	0.47 U	0.47 U	0.47 U	0.67 U	0.54 U	0.47 U	0.47 U	0.93 U	2.3 U	2.3 U		
	SWN-MW-3	1/9/2025	6.5 - 8.4	71	160	150	110	370	53	98	8.9	1.1 U	1.2 U	1.6 U	5.3	6.4	68	1.2 J	60	1 U	1 U	1.1 U	2 U	3.9 J	2 U	1.9 J	1 U	1 U	1 U	1 U	5 U	5 U	0.78 U	1 U	1 U	1 U	1.4 U	1.2 U	1 U	1 U	2 U	5 U	5 U	
	SWN-MW-4	1/9/2025	7.5 - 12.4	26	45	48	40	100	26	170	3.2 J	1.1 U	1.2 U	1.6 U	1.6 J	2.2 J	18	1 U	62	1 U	1 U	1.1 U	2 U	3.9 J	2 U	2.5 J	1 U	1 U	1 U	1 U	5 U	5 U	0.78 U	1 U	1 U	1 U	1.4 U	1.2 U	1 U	1 U	4.5 J	8.7 J	5 U	
	SWN-MW-5	1/10/2025	5 - 20	21	48	51	22	70	13	26	1.3 J	0.56 J	0.51 U	0.71 U	2.7	3	100	0.99 J	35	0.44 U	0.44 U	0.46 U	0.88 U	3.3 J	0.88 U	0.44 U	0.44 U	0.44 U	0.44 U	2.2 U	2.2 U	0.34 U	0.44 U	0.44 U	0.44 U	0.63 U	0.51 U	0.44 U	0.44 U	0.88 U	2.2 U	2.2 U		
	SWN-MW-5 FD	1/10/2025	5 - 20	20	46	53	21	70	12	26	1.2 J	0.49 U	0.52 U	0.73 U	2.4	2.8	97	0.97 J	35	0.45 U	0.45 U	0.48 U	0.9 U	3.1 J	0.9 U	0.45 U	0.45 U	0.45 U	0.45 U	2.2 U	2.2 U	0.35 U	0.45 U	0.45 U	0.45 U	0.65 U	0.52 U	0.45 U	0.45 U	0.9 U	2.2 U	2.2 U		
	SWN-MW-6	1/9/2025	5 - 20	14	27	42	14	52	12	31	5.1	5.9	0.49 U	1.2 J	2.8	2.6	65	0.42 U	21	0.42 U	0.42 U	0.45 U	0.85 U	3.7	1.6 J	0.47 J	0.42 U	0.42 U	0.42 U	0.42 U	2.1 U	2.1 U	0.33 U	0.42 U	0.42 U	0.42 U	0.61 U	0.49 U	0.42 U	0.42 U	0.94 J	5.7 J	2.1 U	
	SWN-MW-7	1/9/2025	5 - 19	9	20	18	8.7	33	4.5	5.5	0.43 U	0.47 U	0.5 U	0.7 U	3.5	3.3	32	0.73 J	23	0.43 U	0.43 U	0.46 U	0.86 U	0.86 U	0.86 U	0.43 U	0.43 U	0.43 U	0.43 U	2.1 U	2.1 U	0.34 U	0.43 U	0.43 U	0.43 U	0.62 U	0.5 U	0.43 U	0.43 U	0.86 U	2.1 U	2.1 U		
	SWN-MW-7 FD	1/9/2025	5 - 19	8.9	23	21	11	32	4.1	6.1	0.44 U	0.49 U	0.51 U	0.72 U	3.4	3	34	0.75 J	22	0.44 U	0.44 U	0.47 U	0.89 U	0.89 U	0.89 U	0.44 U	0.44 U	0.44 U	0.44 U	2.2 U	2.2 U	0.35 U	0.44 U	0.44 U	0.44 U	0.64 U	0.51 U	0.44 U	0.44 U	0.89 U	2.2 U	2.2 U		
	SWN-MW-13	1/9/2025	5.5 - 11.5	10	20	28	9.2	33	4.2	6.5	0.43 U	0.47 U	0.5 U	0.7 U	15	11	100	0.57 J	19	0.43 U	0.43 U	0.46 U	0.86 U	0.86 U	0.86 U	0.43 U	0.43 U	0.43 U	0.43 U	2.2 U	2.2 U	0.34 U	0.43 U	0.43 U	0.43 U	0.62 U	0.5 U	0.43 U	0.43 U	0.86 U	2.2 U	2.2 U		
	SWN-MW-14	1/9/2025	4.5 - 14.5	45	170	130	60	300	16	1.5 J	0.44 U	0.49 U	0.51 U	0.72 U	10	11	140	2	49	0.44 U	0.44 U	0.47 U	0.89 U	0.89 U	0.89 U	0.44 U	0.44 U	0.44 U	0.44 U	2.2 U	2.2 U	0.35 U	0.44 U	0.44 U	0.44 U	0.64 U	0.51 U	0.44 U	0.44 U	0.89 U	2.2 U	2.2 U		
	SWN-MW-321	1/8/2025	5 - 15	17	32	140	13	62	3.5	1.8	0.42 U	0.47 U	0.49 U	0.69 U	22	17	1100	4.7	86	0.42 U	0.42 U	0.45 U	0.85 U	0.85 U	0.85 U	3.7	0.42 U	0.42 U	0.42 U	0.42 U	2.1 U	2.1 U	0.33 U	0.42 U	0.42 U	0.42 U	0.61 U	0.49 U	0.42 U	0.42 U	0.85 U	2.1 U	2.1 U	
SWN-MW-A	1/9/2025	5 - 15	48	46 J	60	35	95	39	32	0.43 U	0.48 U	0.5 U	0.7 U	16	4.2	110	1.8	66	0.43 U	0.43 U	0.46 U	0.87 U	4.2	0.87 U	0.43 U	0.43 U	0.43 U	0.43 U	2.2 U	2.2 U	0.34 U	0.43 U	0.43 U	0.43 U	0.63 U	0.5 U	0.43 U	0.43 U	0.87 U	2.2 U	2.2 U			
West Park Drive Waste Disposal Area (PDW)	PD-MW-1A	1/10/2025	65 - 75	3.6 J	0.46 U	2.7	2.8	5.4	0.46 U	0.46 U	0.46 U	0.5 U	0.53 U	0.74 U	4	4.2	26	1.3 J	29	0.46 U	0.46 U	0.49 U	0.92 U	0.92 U	0.92 U	0.46 U	0.46 U	0.46 U	0.46 U	2.3 U	2.3 U	0.36 U	0.46 U	0.46 U	0.46 U	0.66 U	0.53 U	0.46 U	0.46 U	0.92 U	2.3 U	2.3 U		
West Peripheral (W)	W-MW-15	1/7/2025	7 - 12	0.89 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.49 U	0.52 U	0.72 U	7.2	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.47 U	0.89 U	0.89 U	0.89 U	0.45 U	0.45 U	0.45 U	0.45 U	2.2 U	2.2 U	0.35 U	0.45 U	0.45 U	0.45 U	0.64 U	0.52 U	0.45 U	0.45 U	0.89 U	2.2 U	2.2 U		
	W-MW-17	1/6/2025	15 - 25	4.6	1.1 J	1.5 J	0.99 J	1.9	0.43 U	0.43 U	0.43 U	0.47 U	0.5 U	0.7 U	3 J	0.43 U	1.2 U	0.43 U	2.3 J	0.43 U	0.43 U	0.46 U	0.86 U	0.86 U	0.86 U	0.43 U	0.43 U	0.43 U	0.43 U	2.1 U	2.1 U	0.33 U	0.43 U	0.43 U	0.43 U	0.62 U	0.5 U	0.43 U	0.43 U	0.86 U	2.1 U	2.1 U		

Notes: NA = not applicable. Laboratory qualifier: U = non-detect; J = estimated concentration
 1. All samples were measured on a whole water basis via EPA Method 1633.

Table 6-2. Results for PFAS in Groundwater
Spokane International Airport
 Spokane, WA

Area	Location ID	Date	Screen Depth (ft)	Result (ng/L) ¹									
				PFBA	PFHxA	PFOA	PFNA	PFDA	PFBS	PFHxS	PFOS	6:2FTS	HFPO-DA
Former Geiger Field (FGF)	FGF-MW-18	1/9/2025	8 - 13	3.1 J	6.2	3.2	0.43 U	0.43 U	0.73 J	7.8	17	0.87 U	0.34 U
Geiger Correctional Facility (GCF)	GCF-MW-5	1/13/2025	3.5 - 13.5	2.1 J	0.39 U	1.5 J	0.49 J	0.52 J	1.8	4.9	2.9	0.79 U	0.31 U
	GCF-MW-5D	1/13/2025	25 - 45	3.8	3	4.6	0.46 U	0.46 U	1.3 J	11	11	0.92 U	0.36 U
	GCF-MW-7	1/13/2025	25 - 45	13	9.4	4.6	0.7 J	0.45 U	1.3 J	6.3	11	0.9 U	0.35 U
	GCF-MW-8	1/17/2025	25 - 45	0.97 J	0.66 J	1.6 J	0.43 U	0.43 U	1.4 J	2.5	2.5 J	0.86 U	0.33 U
	GCF-MW-10	1/17/2025	3 - 15	5.9	2.9	3	0.42 U	0.42 U	7.9	4.8	0.71 J	0.84 U	0.33 U
	GCF-MW-11	1/13/2025	3 - 15	1.8 J	1.2 J	1.5 J	0.47 U	0.47 U	2.5	3.9	1.6 J	0.93 U	0.36 U
	GCF-MW-11A	1/14/2025	84.5 - 97	2.4 J	3.4	8.5	0.44 J	0.42 U	2.6	27	19	0.84 U	0.33 U
	GCF-MW-11B	1/13/2025	24.7 - 44.7	5.6	12	9	0.6 J	0.43 U	3.4	27	32	0.86 U	0.33 U
	GCF-MW-12A	1/14/2025	68.1 - 78.1	3.5	8.8	15	0.81 J	0.4 U	4.5	42	28	0.81 U	0.31 U
	GCF-MW-12B	1/14/2025	24 - 45	4.4	5.8	5.3	1 J	0.41 U	1.9	7.2	57	0.83 U	0.32 U
	GCF-MW-13	1/13/2025	3 - 15	17	12	30	6.3	24	1.1 J	1.7 J	20	0.91 U	0.36 U
Geiger Delivery Facility (GDF)	GDF-GR-2	1/15/2025	5 - 15	18	8.1	3.8	0.34 J	0.45 U	3.6	1.4 J	5.8	0.89 U	0.35 U
	GDF-GR-3	1/15/2025	5 - 15	3.5	0.64 J	0.55 J	0.43 U	0.43 U	0.97 J	1.4 J	3.1	0.87 U	0.34 U
	GDF-GR-4	1/15/2025	10 - 20	2.1 J	0.42 U	0.63 J	0.42 U	0.42 U	1.4 J	0.84 J	2.9	0.84 U	0.33 U
	GDF-GR-5	1/14/2025	10 - 25	1.7 J	0.43 U	0.81 J	0.43 U	0.43 U	0.94 J	8.8	1.6 J	0.86 U	0.33 U
	GDF-GR-7S	1/10/2025	25 - 35	19	0.45 U	0.48 J	0.45 U	0.45 U	2.3 J	0.65 J	0.71 J	0.89 U	0.35 U
	GDF-GR-7D	1/10/2025	48 - 63	3.3	1.6 J	2.5	0.42 U	0.42 U	1.9	2.6	3.1	0.84 U	0.33 U
	GDF-GR-8	1/10/2025	8 - 18	4.1	0.5 U	2.2	0.5 U	0.5 U	1.5 J	1.1 J	2.9 J	1 U	0.39 U
	GDF-MW-10R	1/14/2025	6 - 16	6.8	6.4	3.9	0.43 U	0.43 U	2.5	1 J	2.5 J	0.86 U	0.33 U
	GDF-MW-10A	1/14/2025	73 - 83	3.7	2.5	3.3	0.47 J	0.42 U	2.4	2.8	8.2	0.84 U	0.33 U
Joint Fire Training Area (JTA)	EA-MW-5A	1/8/2025	81 - 91	0.83 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.45 J	0.83 U	0.32 U
	EA-MW-5B	1/13/2025	23 - 43	0.95 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.99 J	0.48 U	0.95 U	0.37 U
	EA-MW-7A	1/17/2025	58 - 68	0.85 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	1.1 J	4.7	0.85 U	0.33 U
	EA-MW-7B	1/17/2025	7.5 - 27.5	23	160	200	3.9	0.78 J	60	830	5300	0.93 U	0.36 U
	EA-MW-8A	1/8/2025	66.5 - 76.5	0.85 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.85 U	0.33 U
	EA-MW-8B	1/14/2025	13 - 33	10	23	14	0.47 U	0.47 U	3.9	68	8.8	0.95 U	0.37 U
	EA-MW-13A	1/7/2025	32 - 42	3.9	16	18	0.75 J	1.2 J	5.3	160	130	0.84 U	0.33 U
	EA-MW-13B	1/8/2025	10 - 20	200	1100	710	5 U	5 U	720	12000	7200	22 J	3.9 U
	EA-MW-14A	1/7/2025	25 - 35	28	170	170	0.84 J	0.43 U	180	910	2500	0.86 U	0.34 U
	EA-MW-14B	1/7/2025	9 - 19	30	290	130	8.6	0.47 U	110	2100	5000	3.7	0.36 U
Land Treatment Area (LTA)	LA-MW-8	1/6/2025	12 - 22	22	12	13	1.9	0.46 U	3.2 J	6.7	14 J	0.91 U	0.36 U
	LA-MW-9	1/6/2025	10 - 20	12	22	24	4.9	9	4.1	16	11 J	1.4 J	0.34 U
	LA-MW-10	1/6/2025	15 - 25	40	180	0.42 U	0.42 U	0.42 U	1.9 J	2.7	0.42 U	1.5 J	0.33 U
	LA-MW-11	1/6/2025	9 - 19	0.79 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.61 U	7.6 J	0.79 U	0.31 U
	LA-MW-12	1/6/2025	6 - 26	3.5	6	7.2	0.4 U	0.4 U	4	4.7	2.2 J	0.88 J	0.32 U
Stormwater Recovery Area (SRA)	SWN-MW-1	1/9/2025	8.5 - 14.5	23	96	58	9.7	2.3	14	300	58	2.3 J	0.35 U
	SWN-MW-2	1/9/2025	9.5 - 14.7	14	29	22	17	11	1.5 J	100	93	11	0.36 U
	SWN-MW-3	1/9/2025	6.5 - 8.4	71	150	370	53	98	5.3	68	60	3.9 J	0.78 U
	SWN-MW-4	1/9/2025	7.5 - 12.4	26	48	100	26	170	1.6 J	18	62	3.9 J	0.78 U
	SWN-MW-5	1/10/2025	5 - 20	20	52	70	12	26	2.5	100	35	3.2 J	0.34 U
	SWN-MW-6	1/9/2025	5 - 20	14	42	52	12	31	2.8	65	21	3.7	0.33 U
	SWN-MW-7	1/9/2025	5 - 19	8.9	20	32	4.3	5.8	3.4	33	22	0.86 U	0.34 U
	SWN-MW-13	1/9/2025	5.5 - 11.5	10	28	33	4.2	6.5	15	100	19	0.86 U	0.34 U
	SWN-MW-14	1/9/2025	4.5 - 14.5	45	130	300	16	1.5 J	10	140	49	0.89 U	0.35 U
	SWN-MW-321	1/8/2025	5 - 15	17	140	62	3.5	1.8	22	1100	86	0.85 U	0.33 U
	SWN-MW-A	1/9/2025	5 - 15	48	60	95	39	32	16	110	66	4.2	0.34 U
West Park Drive Waste Disposal Area (PDW)	PD-MW-1A	1/10/2025	65 - 75	3.6 J	2.7	5.4	0.46 U	0.46 U	4	26	29	0.92 U	0.36 U
West Peripheral (W)	W-MW-15	1/7/2025	7 - 12	0.89 U	0.45 U	0.45 U	0.45 U	0.45 U	7.2	0.45 U	0.45 U	0.89 U	0.35 U
	W-MW-17	1/6/2025	15 - 25	4.6	1.5 J	1.9	0.43 U	0.43 U	3 J	1.2 U	2.3 J	0.86 U	0.33 U

Notes: NA = not applicable. Laboratory qualifier: U = non-detect; J = estimated concentration
 1. All samples were measured on a whole water basis via EPA Method 1633.
 2. The primary sample and field duplicate were averaged.

TABLE 6-1. Depth to Groundwater and Groundwater Elevations

Initial PFAS Investigation Report
 Spokane International Airport
 Spokane, WA

Area Name	Area Notation	Location ID	Geological Stratum	Top of Casing Elevation (ft)	Static Water Level (ft bgs)	Groundwater Elevation (ft amsl)		
Geiger Correctional Facility	GCF	GCF-MW-5	Basalt	2355.11	2.51	2352.60		
		GCF-MW-5D	Basalt/Interbed	2355.00	32.62	2322.38		
		GCF-MW-7	Basalt/Interbed	2356.24	32.20	2324.04		
		GCF-MW-8	Basalt/Interbed	2356.60	33.63	2322.97		
		GCF-MW-10	Unconsolidated	2354.27	0.06	2354.21		
		GCF-MW-11	Unconsolidated	2354.12	1.65	2352.47		
		GCF-MW-13	Unconsolidated	2352.55	2.72	2349.83		
		GCF-MW-11A	Basalt	2357.27	34.19	2323.08		
		GCF-MW-11B	Basalt	2356.74	33.89	2322.85		
		GCF-MW-12A	Basalt	2355.15	31.90	2323.25		
Geiger Delivery Facility	GDF	GDF-GR-2	Unconsolidated	2376.49	5.38	2371.11		
		GDF-GR-3	Unconsolidated	2379.42	9.18	2370.24		
		GDF-GR-4	Unconsolidated	2370.90	18.87	2352.03		
		GDF-GR-5	Unconsolidated	2368.55	3.41	2365.14		
		GDF-GR-7D	Basalt	2377.49	9.74	2367.75		
		GDF-GR-7S	Basalt	2377.59	11.13	2366.46		
		GDF-GR-8	Unconsolidated/Basalt	2373.10	5.83	2367.27		
		GDF-MW-10A	Basalt	2372.10	17.4	2354.70		
		GDF-MW-10R	Unconsolidated/Basalt	2372.14	8.05	2364.09		
		Former Gieger Field	FGF	FGF-MW-18	Unconsolidated/Basalt	2364.37	8.74	2355.63
Joint Fire Training Area	JTA	EA-MW-5A	Basalt	2394.25	26.68	2367.57		
		EA-MW-5B	Unconsolidated/Basalt	2394.32	21.58	2372.74		
		EW-MW-6B	Unconsolidated/Basalt	2375.74	DAMAGED			
		EA-MW-7A	Basalt	2378.90	11.44	2367.61		
		EA-MW-7B	Unconsolidated/Basalt	2379.05	11.53	2371.05		
		EA-MW-8A	Basalt	2382.58	15.10	2366.84		
		EA-MW-8B	Unconsolidated/Basalt	2381.94	14.53	2367.41		
		EA-MW-13A	Unconsolidated/Fill/Basalt	2383.53	16.39	2367.14		
		EA-MW-13B**	Unconsolidated	2383.75	18.15**	2365.60**		
		EA-MW-14A	Unconsolidated/Fill/Basalt	2385.10	17.66	2367.44		
Land Treatment Area	LA	EA-MW-14B	Unconsolidated	2385.31	15.05	2370.26		
		LA-MW-8	Unconsolidated	2373.75	11.66	2362.09		
		LA-MW-9	Unconsolidated/Basalt	2349.74	7.00	2342.74		
		LA-MW-10	Basalt	2361.63	10.36	2351.27		
		LA-MW-11	Unconsolidated/Basalt	2370.81	12.16	2358.65		
Park Drive West / Waste to Energy Plant	PD	LA-MW-12	Unconsolidated/Basalt	2352.56	10.75	2341.81		
		PD-MW-1A	Basalt	2323.10	12.15	2310.95		
		Stormwater Recovery Area	SWN	SWN-MW-1	Unconsolidated/Basalt	2292.20	5.52	2286.68
				SWN-MW-2	Unconsolidated/Basalt	2292.48	6.48	2286.00
SWN-MW-3	Unconsolidated/Basalt			2295.88	3.16	2292.72		
SWN-MW-4	Unconsolidated/Basalt			2296.50	4.76	2291.74		
SWN-MW-5	Unconsolidated/Basalt			2282.20	3.04	2279.16		
SWN-MW-6	Unconsolidated/Basalt			2292.03	9.90	2282.13		
SWN-MW-7	Basalt/Interbed			2304.86	10.14	2294.72		
SWN-MW-13	Unconsolidated			2280.22	5.95	2274.27		
SWN-MW-14	Unconsolidated			2280.43	7.17	2273.26		
West Peripheral	W	SWN-MW-321	Unconsolidated/Basalt	2309.02	7.36	2301.66		
		SWN-MW-A	Unconsolidated	2307.40	6.87	2300.53		
		W-MW-15	Unconsolidated	2378.46	10.47	2367.99		
		W-MW-16	Unconsolidated	2384.33	DRY			
		W-MW-17	Unconsolidated	2393.96	17.71	2376.25		

Notes:

- 1) ft bgs- feet below ground surface
- 2) ft amsl - feet above mean sea level

**Static water level recorded for EA-MW-13B was deemed erroneous compared to recorded water level at the time of sampling, the static water level of adjacent monitoring wells screened at similar depths, and March 2024 data.

**Table 7-1. Results for PFAS in Soil
 Spokane International Airport
 Spokane, WA**

Area	Location ID	Date	Depth (ft bgs)	Result (ug/kg) ¹									
				PFBA	PFHxA	PFOA	PFNA	PFDA	PFBS	PFHxS	PFOS	6:2FTS	HFPO-DA
Current Fire House (CFH)	CFH-001	1/24/2025	0	0.095 U	0.08 J	0.059 U	0.26	1	0.047 U	0.058 J	10	0.45	0.047 U
	CFH-001	1/24/2025	1	0.25 J	0.17 J	0.088 J	0.37	0.048 U	0.062 UJ	0.096 J	4.4	0.65	0.048 U
	CFH-001	1/24/2025	3	0.27 J	0.25	0.16 J	0.17 J	0.051 U	0.051 U	0.24	0.34	0.67	0.051 U
	CFH-001	1/24/2025	6	0.1 U	0.14 J	0.063 U	0.051 U	0.051 U	0.051 U	0.2	0.058 J	0.1 U	0.051 U
	CFH-001	1/24/2025	10	0.095 U	0.1 J	0.059 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.095 U	0.048 U
	CFH-002	1/24/2025	0	0.21 J	0.41	0.062 U	0.43	0.73	0.05 U	0.069 J	18	24	0.05 U
	CFH-002	1/24/2025	1	0.32 J	0.31	0.11 J	0.08 J	0.05 U	0.05 U	0.1 J	0.33	12	0.05 U
	CFH-002	1/24/2025	3	0.092 J	0.081 J	0.056 U	0.045 U	0.045 U	0.047 UJ	0.045 U	0.045 U	33	0.045 U
	CFH-003	1/24/2025	0	0.29 J	0.22	0.29	0.27	0.051 U	0.051 U	0.94	2.8	0.78	0.051 U
	CFH-003	1/24/2025	1	0.31 J	1.2	0.064 U	0.052 U	0.052 U	0.097 UJ	0.21	0.26	0.13 J	0.052 U
	CFH-003	1/24/2025	3	0.61	1	0.17 J	0.048 U	0.048 U	0.074 UJ	1.1	0.065 J	0.16 J	0.048 U
	CFH-003	1/24/2025	6	0.099 U	0.18 J	0.062 U	0.05 U	0.05 U	0.05 U	0.059 J	0.13 J	0.099 U	0.05 U
	CFH-003	1/24/2025	9	0.12 J	0.13 J	0.055 U	0.045 U	0.045 U	0.046 UJ	0.045 U	0.045 U	0.089 U	0.045 U
	CFH-004	1/24/2025	0	0.57	0.78	3.4	7.5	4.2	0.18 J	14	390	8.9	0.049 U
	CFH-004	1/24/2025	1	0.94	1.5	4.1	5.4	2	0.12 J	40	310	26	0.049 U
	CFH-004	1/24/2025	3	0.77	5.4	4.6	0.96	1.3	1.3	33	110	39	0.051 U
	CFH-004	1/24/2025	6	0.37 J	1.4	1.2	1.1	0.97	0.54	5.7	120	12	0.049 U
	CFH-004	1/24/2025	10	0.09 J	0.25 J	0.23	0.29	0.046 U	0.079 J	2.3	20	4	0.046 U
	CFH-004	1/24/2025	15	0.1 U	0.08 J	0.062 U	0.05 U	0.05 U	0.05 U	0.15 J	1.4	0.73	0.05 U
	CFH-005	1/24/2025	0	0.65	0.88	0.63	3.8	6.3	0.11 J	2.5	420	7.1	0.051 U
	CFH-005	1/24/2025	1	0.52	0.42	2.2	5	0.81	0.05 U	2.3	540	12	0.05 U
	CFH-005	1/24/2025	3	0.18 J	0.25 J	2.5	0.048 J	0.05 U	0.05 U	6.9 J	1.8 J	32	0.05 U
	CFH-006	1/24/2025	0	0.38 J	1.2	0.25	0.45	5.6	0.15 J	0.84	100	12	0.051 U
	CFH-006	1/24/2025	1	0.24 J	0.59	0.29	0.67	2.8	0.05 U	0.5	320	5.6	0.05 U
	CFH-006	1/24/2025	3	0.47	0.6	0.45	0.5	1.2	0.05 U	0.37	610	20	0.05 U
	CFH-007	1/24/2025	0	0.095 U	0.048 U	0.059 U	0.048 U	0.1 J	0.048 U	0.048 U	0.39	0.095 U	0.048 U
	CFH-007	1/24/2025	1	0.12 J	0.043 J	0.08 J	0.073 J	0.046 J	0.05 U	0.066 J	1.7 J	0.1 U	0.05 U
	CFH-007	1/24/2025	3	0.13 J	0.065 J	0.12 J	0.05 U	0.05 U	0.05 U	0.093 J	0.21	0.1 U	0.05 U
FAA Inspection Testing Area (FIT)	FIT-001	1/21/2025	0	0.11 J	0.049 U	0.077 J	0.057 J	0.049 U	0.049 U	0.049 U	0.049 U	0.099 U	0.049 U
	FIT-001	1/21/2025	1	0.11 J	0.05 U	0.062 U	0.05 U	0.05 U	0.05 U	0.05 U	0.16 J	0.1 U	0.05 U
	FIT-001	1/21/2025	3	0.096 U	0.048 U	0.06 U	0.048 U	0.048 U	0.048 U	0.048 U	0.042 J	0.096 U	0.048 U
	FIT-001	1/21/2025	5	0.098 U	0.049 U	0.06 J	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.098 U	0.049 U
	FIT-002	1/21/2025	0	0.099 U	0.05 J	0.062 U	0.05 U	0.057 J	0.05 U	0.05 U	2.8	0.29 J	0.05 U
	FIT-002	1/21/2025	1	0.1 U	0.05 U	0.063 U	0.05 U	0.05 U	0.05 U	0.05 U	1.4	0.1 U	0.05 U
	FIT-002	1/21/2025	3	0.1 U	0.05 U	0.062 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5	0.1 U	0.05 U
	FIT-002	1/21/2025	6	0.099 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.44	0.099 U	0.049 U
	FIT-002	1/21/2025	10	0.099 U	0.05 U	0.062 U	0.05 U	0.05 U	0.05 U	0.05 U	0.098 J	0.099 U	0.05 U
	FIT-002	1/21/2025	15	0.099 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.11 J	0.099 U	0.049 U
	FIT-003	1/21/2025	0	0.1 U	0.051 U	0.085 J	0.057 J	0.051 U	0.051 U	0.051 U	0.42	0.1 U	0.051 U
	FIT-003	1/21/2025	1	0.097 U	0.049 U	0.06 U	0.052 J	0.049 U	0.049 U	0.049 U	0.21	0.097 U	0.049 U
	FIT-004	1/21/2025	0	0.098 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.32	0.098 U	0.049 U
	FIT-004	1/21/2025	1	0.098 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.26	0.098 U	0.049 U
	FIT-004	1/21/2025	3	0.098 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.098 U	0.049 U
	FIT-005	1/21/2025	0	0.098 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.14 J	0.098 U	0.049 U
	FIT-006	1/21/2025	0	0.1 U	0.051 U	0.063 U	0.051 U	0.051 U	0.051 U	0.051 U	0.13 J	0.1 U	0.051 U
	FIT-007	1/21/2025	0	0.096 U	0.048 U	0.06 U	0.061 J	0.058 J	0.048 U	0.048 U	1.1	0.096 U	0.048 U
	FIT-008	1/21/2025	0	0.1 U	0.051 U	0.063 U	0.088 J	0.076 J	0.051 U	0.051 U	1.7	0.1 U	0.051 U
	Field Maintenance Area (FMB)	FMB-001	1/27/2025	0	0.1 U	0.05 U	0.062 U	0.05 U	0.05 U	0.05 U	0.05 U	0.051 J	0.17 J
FMB-001		1/27/2025	1	0.1 J	0.08 J	0.059 U	0.048 U	0.32 J	0.048 U	0.048 U	0.18 J	0.66	0.048 U
FMB-001		1/27/2025	3	0.11 J	0.071 J	0.13 J	0.049 U	0.049 U	0.049 U	0.067 J	0.22	0.097 U	0.049 U
FMB-001		1/27/2025	5	0.099 U	0.05 U	0.087 J	0.05 J	0.38	0.05 U	0.069 J	0.52	0.1 J	0.05 U
FMB-001		1/27/2025	6	0.097 U	0.059 J	0.12 J	0.12 J	2.4	0.049 U	0.098 J	1.7	0.12 J	0.049 U
FMB-002		1/24/2025	0	0.097 U	0.049 U	0.32	0.084 J	0.4	0.049 U	0.049 U	0.49	0.097 U	0.049 U
FMB-002		1/24/2025	1	0.097 U	0.065 J	0.36	0.1 J	0.39	0.049 U	0.062 J	0.58	0.097 U	0.049 U
FMB-002		1/24/2025	3	0.13 J	0.064 J	2	0.9	0.052 U	0.052 U	3.1	32	6.2	0.052 U
FMB-002		1/24/2025	6	0.098 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.3	0.049 U	0.098 U	0.049 U
FMB-002		1/24/2025	10	0.1 U	0.05 U	0.062 U	0.05 U	0.05 U	0.05 U	0.066 J	0.14 J	0.1 U	0.05 U
FMB-002		1/24/2025	13	0.1 U	0.063 J	0.062 U	0.05 U	0.05 U	0.05 U	0.13 J	0.1 J	0.1 U	0.05 U
FMB-003		1/24/2025	0	0.098 U	0.049 U	0.14 J	0.049 U	0.24	0.049 U	0.049 U	0.049 U	0.098 U	0.049 U
FMB-003		1/24/2025	1	0.097 U	0.049 U	0.29 J	0.086 J	0.32 J	0.049 U	0.041 J	0.42 J	0.23	0.049 U
FMB-003		1/24/2025	3	0.1 U	0.098 J	0.29	0.091 J	2.9	0.052 U	0.15 J	4	0.74	0.052 U
FMB-003		1/24/2025	6	0.099 U	0.33	1	0.091 J	0.049 U	0.049 U	0.62	17	19	0.049 U
FMB-003		1/24/2025	10	0.15 J	0.26	0.3	0.049 U	0.06 J	0.049 U	0.54	2.5	6.8	0.049 U
FMB-003		1/24/2025	15	0.1 U	0.05 U	0.062 U	0.05 U	0.05 U	0.05 U	0.05 U	0.23	0.27 J	0.05 U
FMB-004		1/23/2025	0	0.1 U	0.05 U	0.062 U	0.05 U	0.1 J	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U
FMB-004		1/23/2025	1	0.11 U	0.056 U	0.069 U	0.056 U	0.12 J	0.056 U	0.056 U	0.38	0.11 U	0.056 U
FMB-004		1/23/2025	3	0.096 U	0.048 U	0.86	0.7	0.048 U	0.048 U	0.52	20	0.2 J	0.048 U
FMB-004	1/23/2025	6	0.1 U	0.2	0.74	0.095 J	0.05 U	0.077 J	2	3.4	1.9	0.05 U	

**Table 7-1. Results for PFAS in Soil
 Spokane International Airport
 Spokane, WA**

Area	Location ID	Date	Depth (ft bgs)	Result (ug/kg) ¹										
				PFBA	PFHxA	PFOA	PFNA	PFDA	PFBS	PFHxS	PFOS	6:2FTS	HFPO-DA	
Field Maintenance Area (FMB)	FMB-004	1/23/2025	10	0.08 J	0.16 J	0.11 J	0.049 U	0.049 U	0.057 J	0.74 J	0.72 J	0.65 J	0.049 U	
Historical Fire House (HFH)	HFH-001	1/22/2025	0	0.098 U	0.2	0.2	0.25	0.29	0.049 U	0.17 J	3.4	0.098 U	0.049 U	
	HFH-001	1/22/2025	1	0.098 U	0.12 J	0.17 J	0.082 J	0.45	0.049 U	0.32	4.8	0.56	0.049 U	
	HFH-001	1/22/2025	3	0.098 U	0.28	1.1 J	0.8 J	3	0.049 U	0.8 J	320	5.8	0.049 U	
	HFH-001	1/22/2025	6	0.23 J	1.9	3.7	0.74	0.12 J	0.12 J	11	180	27	0.049 U	
	HFH-002	1/23/2025	0	0.098 U	0.42	0.31	0.078 J	0.049 U	0.049 U	0.24	0.4	0.098 U	0.049 U	
	HFH-002	1/23/2025	1	0.16 J	1	0.78	0.11 J	0.15 J	0.039 J	0.66	8 J	0.35 J	0.049 U	
	HFH-002	1/23/2025	3	0.1 U	0.4	0.46	0.25	0.85	0.052 U	1.5	66	5.4	0.052 U	
	HFH-002	1/23/2025	6	0.098 U	1.2	0.49	0.42	0.94	0.3	0.69	150	4.2	0.049 U	
	HFH-002	1/23/2025	10	0.1 J	0.48	0.39	0.29	0.76	0.05 U	1.3	64	6.6	0.05 U	
	HFH-002	1/23/2025	12	0.1 U	0.75	0.27	0.097 J	0.22	0.051 U	0.4	47	3.6	0.051 U	
	HFH-003	1/23/2025	0	0.13 J	0.51	0.2	0.049 U	0.089 J	0.1 J	1	7.8	2.3	0.049 U	
	HFH-003	1/23/2025	1	0.16 J	0.91	1.5	0.22	0.29	0.2	3.2	19	1.6	0.05 U	
	HFH-003	1/23/2025	3	0.14 J	0.78	0.79	0.06 J	0.56	0.13 J	2.5	17	2.9	0.051 U	
	HFH-003	1/23/2025	6	0.17 J	0.9	0.78	0.059 J	0.46	0.15 J	2.3	18	2.6	0.049 U	
	HFH-003	1/23/2025	10	0.35 J	1.7	0.65	0.15 J	0.13 J	0.22	2.5	27	5.6	0.052 U	
	HFH-003	1/23/2025	12	0.19 J	0.84	0.28	0.074 J	0.14 J	0.078 J	0.61	17	2.3	0.048 U	
	HFH-004	1/23/2025	0	0.1 U	0.39	0.43	0.65	0.32	0.17 J	7.4	38	0.32 J	0.05 U	
	HFH-004	1/23/2025	1	0.1 U	0.13 J	0.69	0.65	0.17 J	0.068 J	6.9	22	0.19 J	0.05 U	
	HFH-004	1/23/2025	3	0.099 U	0.25 J	0.9 J	0.096 J	0.16 J	0.09 J	4.4	7	0.54 J	0.05 U	
	HFH-004	1/23/2025	6	0.098 U	0.049 U	0.19 J	0.13 J	0.049 U	0.049 U	0.81	2.4	0.38 J	0.049 U	
	HFH-004	1/23/2025	10	0.099 U	0.078 J	0.18 J	0.09 J	0.08 J	0.049 U	1 J	4.8 J	0.14 J	0.049 U	
	HFH-005	1/23/2025	0	0.099 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.064 J	0.099 U	0.049 U	
	HFH-005	1/23/2025	1	0.1 U	0.051 U	0.063 U	0.051 U	0.051 U	0.051 U	0.051 U	0.15 J	0.1 U	0.051 U	
	HFH-005	1/23/2025	3	0.099 U	0.058 J	0.39	0.05 U	0.05 U	0.05 U	0.39	3.4	0.099 U	0.05 U	
	HFH-005	1/23/2025	6	0.1 U	0.24	0.7	0.05 U	0.05 U	0.05 U	1.1	0.39 J	5.8	0.05 U	
	HFH-005	1/23/2025	10	0.098 J	0.34	0.25	0.049 U	0.055 J	0.09 J	0.67	0.96	2	0.049 U	
	HFH-006	1/22/2025	0	0.12 U	0.058 U	0.073 U	0.058 U	0.11 J	0.058 U	0.058 U	0.55	0.12 U	0.058 U	
	Joint Fire Training Area (JTA)	JTA-001	1/15/2025	0	0.099 U	0.049 U	0.061 U	0.052 J	0.049 U	0.049 U	0.049 U	0.13 J	0.099 U	0.049 U
JTA-001		1/15/2025	1	0.1 U	0.052 U	0.065 U	0.052 U	0.052 U	0.052 U	0.052 U	0.058 J	0.1 U	0.052 U	
JTA-001		1/15/2025	3	0.098 U	0.049 U	0.061 U	0.049 U	0.049 U	0.11 J	0.049 U	0.049 U	0.098 U	0.049 U	
JTA-002		1/15/2025	0	0.099 U	0.05 U	0.061 U	0.05 U	0.05 U	0.05 U	0.05 U	2	0.099 U	0.05 U	
JTA-002		1/15/2025	1	0.1 U	0.051 U	0.063 U	0.051 U	0.051 U	0.051 U	0.051 U	1.8	0.1 U	0.051 U	
JTA-002		1/15/2025	3	0.1 U	0.05 U	0.062 U	0.05 U	0.05 U	0.05 U	0.063 J	36	0.1 U	0.05 U	
JTA-002		1/15/2025	6	0.1 U	0.065 J	0.13 J	0.05 U	0.05 U	0.05 U	0.19 J	22 J	0.1 U	0.05 U	
JTA-002		1/15/2025	10	0.099 U	0.14 J	0.062 U	0.05 U	0.05 U	0.05 U	1.2	0.05 U	0.099 U	0.05 U	
JTA-002		1/15/2025	15	0.1 U	0.05 U	0.062 U	0.05 U	0.05 U	0.05 U	0.48	0.05 U	0.1 U	0.05 U	
JTA-002		1/15/2025	20	0.098 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.3	0.42	0.098 U	0.049 U	
JTA-002		1/15/2025	25	0.099 UJ	0.049 UJ	0.061 UJ	0.049 UJ	0.049 UJ	0.049 UJ	0.049 UJ	0.049 UJ	0.049 UJ	0.099 UJ	0.049 UJ
JTA-003		1/16/2025	0	0.098 U	0.049 U	0.061 U	0.052 J	0.065 J	0.049 U	0.049 U	0.93	0.098 U	0.049 U	
JTA-003		1/16/2025	1	0.095 U	0.047 U	0.059 U	0.047 U	0.047 U	0.047 U	0.047 U	0.27	0.095 U	0.047 U	
JTA-003		1/16/2025	3	0.096 U	0.048 U	0.059 U	0.048 U	0.048 U	0.048 U	0.077 J	0.13 J	0.096 U	0.048 U	
JTA-003		1/16/2025	6	0.099 U	0.05 U	0.061 U	0.05 U	0.05 U	0.05 U	0.078 J	0.05 U	0.099 U	0.05 U	
JTA-003		1/16/2025	10	0.096 U	0.048 U	0.06 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.096 U	0.048 U	
JTA-004		1/16/2025	0	0.1 J	0.05 U	0.087 J	0.057 J	0.053 J	0.05 U	0.087 J	8.2	0.099 U	0.05 U	
JTA-004		1/16/2025	1	0.2 J	0.1 J	0.25	0.051 U	0.051 U	0.051 U	0.18 J	5	0.1 U	0.051 U	
JTA-004		1/16/2025	3	0.095 U	0.04 J	0.059 U	0.048 U	0.048 U	0.09 J	0.22 J	0.045 J	0.095 U	0.048 U	
JTA-004		1/16/2025	6	0.098 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.071 J	0.84	0.098 U	0.049 U	
JTA-004		1/16/2025	10	0.099 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.099 U	0.049 U	
JTA-005		1/16/2025	0	0.1 U	0.39	0.75	0.05 U	0.05 U	0.1 J	2.1	36	0.1 U	0.05 U	
JTA-005		1/16/2025	1	0.097 U	0.27	0.27	0.049 U	0.049 U	0.049 U	1.1	27	0.097 U	0.049 U	
JTA-005		1/16/2025	3	0.095 U	0.047 U	0.059 U	0.047 U	0.047 U	0.6	0.17 J	2.9	0.095 U	0.047 U	
JTA-005		1/16/2025	6	0.1 U	0.056 J	0.24	0.05 U	0.05 U	0.05 U	1.3	44	0.1 U	0.05 U	
JTA-005		1/16/2025	10	0.1 U	0.16 J	0.15 J	0.05 U	0.05 U	0.05 U	2.1	160	0.1 U	0.05 U	
JTA-005		1/16/2025	15	0.098 U	0.16 J	0.061 U	0.049 U	0.049 U	0.049 U	0.5	19	0.098 U	0.049 U	
JTA-005		1/16/2025	17	0.1 U	0.097 J	0.11 J	0.05 U	0.05 U	0.05 U	0.71	27	0.1 U	0.05 U	
JTA-005		1/16/2025	25	0.098 UJ	0.049 UJ	0.061 UJ	0.049 UJ	0.049 UJ	0.049 UJ	0.064 UJ	0.056 UJ	0.098 UJ	0.049 UJ	
JTA-006		1/16/2025	0	0.098 U	0.049 U	0.1 J	0.049 U	0.063 J	0.049 U	0.21	4.4	0.098 U	0.049 U	
JTA-006		1/16/2025	1	0.097 U	0.081 J	0.18 J	0.048 U	0.048 U	0.048 U	0.34	5.8	0.097 U	0.048 U	
JTA-006		1/16/2025	3	0.098 U	0.049 U	0.066 J	0.049 U	0.049 U	0.049 U	0.31	1.1	0.098 U	0.049 U	
JTA-006	1/16/2025	6	0.1 U	0.05 U	0.13 J	0.05 U	0.05 U	0.05 U	0.65	0.24	0.1 U	0.05 U		
JTA-006	1/16/2025	10	0.098 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.098 U	0.049 U		
JTA-007	1/17/2025	0	0.1 J	0.61	1	0.069 J	0.048 U	0.61	7.1	99	0.096 U	0.048 U		
JTA-007	1/17/2025	1	0.099 U	0.54	0.32	0.078 J	0.049 U	0.097 J	3.3	140	0.099 U	0.049 U		
JTA-007	1/17/2025	3	0.095 U	0.5	0.43 J	0.2 J	0.048 U	0.11 J	4.2	370	0.095 U	0.048 U		
JTA-007	1/17/2025	6	0.1 U	0.66	1.9	3.7	0.05 U	0.14 J	12	190 J	0.1 U	0.05 U		
JTA-007	1/17/2025	10	0.1 U	0.32	1.5	0.051 J	0.05 U	0.059 J	6.8	0.17 J	0.1 U	0.05 U		

**Table 7-1. Results for PFAS in Soil
 Spokane International Airport
 Spokane, WA**

Area	Location ID	Date	Depth (ft bgs)	Result (ug/kg) ¹									
				PFBA	PFHxA	PFOA	PFNA	PFDA	PFBS	PFHxS	PFOS	6:2FTS	HFPO-DA
Joint Fire Training Area (JTA)	JTA-007	1/17/2025	13	0.11 J	2.1	5	0.55	0.082 J	0.067 J	5.9	580	0.098 U	0.049 U
	JTA-008	1/17/2025	0	0.26 J	2.9	7.3	0.86	0.27	1.1	37	810	0.099 U	0.05 U
	JTA-008	1/17/2025	1	0.57	7.4	12	0.37	0.11 J	4.1	210	1900	0.099 U	0.049 U
	JTA-008	1/17/2025	3	0.15 J	2	3.1	0.26	0.052 U	0.98	67	240	0.1 U	0.052 U
	JTA-008	1/17/2025	6	0.15 J	2.9	2.9	0.18 J	0.049 U	1.4	26	140	0.099 U	0.049 U
	JTA-008	1/17/2025	10	0.17 J	2.9	0.94	0.1 J	0.049 U	0.76	14	42	0.098 U	0.049 U
	JTA-008	1/17/2025	15	0.15 J	1.9	40	0.66	0.049 U	0.75	38	120	0.099 U	0.049 U
	JTA-008	1/17/2025	17	0.18 J	3.2	1.3	0.064 J	0.049 U	0.97	17	37	0.098 U	0.049 U
	JTA-009	1/17/2025	0	0.1 U	0.05 U	0.062 U	0.05 U	0.05 U	0.05 U	0.16 J	1.1	0.1 U	0.05 U
	JTA-009	1/17/2025	1	0.1 U	0.055 J	0.063 U	0.051 U	0.051 U	0.051 U	0.13 J	1.8	0.1 U	0.051 U
	JTA-009	1/17/2025	3	0.099 U	0.038 J	0.061 U	0.049 U	0.049 U	0.049 U	0.13 J	5.1 J	0.099 U	0.049 U
	JTA-009	1/17/2025	6	0.096 U	0.048 U	0.06 U	0.048 U	0.048 U	0.048 U	0.077 J	0.048 U	0.096 U	0.048 U
	JTA-009	1/17/2025	10	0.099 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.053 J	0.099 U	0.049 U
	JTA-009	1/17/2025	15	0.097 U	0.048 U	0.068 J	0.048 U	0.048 U	0.048 U	0.23	0.048 U	0.097 U	0.048 U
	JTA-009	1/17/2025	20	0.098 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.051 J	0.098 U	0.049 U
JTA-009	1/17/2025	30	0.099 U	0.05 U	0.061 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.099 U	0.05 U	
Land Treatment Area (LTA)	LTA-001	1/15/2025	0	0.11 J	0.049 U	0.07 J	0.051 J	0.049 U	0.049 U	0.049 U	0.16 J	0.098 U	0.049 U
	LTA-001	1/15/2025	1	0.17 J	0.066 J	0.059 U	0.048 U	0.048 U	0.048 U	0.048 U	0.069 J	0.095 U	0.048 U
	LTA-001	1/15/2025	3	0.1 U	0.05 U	0.062 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U
	LTA-002	1/15/2025	0	0.097 U	0.057 J	0.29	0.53	3.7	0.068 J	0.049 U	0.11 J	0.097 U	0.049 U
	LTA-002	1/15/2025	1	0.098 U	0.059 J	2.5	1.2	0.52	0.049 U	0.049 U	0.16 J	0.098 U	0.049 U
	LTA-002	1/15/2025	3	0.097 U	0.048 U	2.8	0.048 U	0.048 U	0.051 J	0.048 U	0.048 U	0.097 U	0.048 U
	LTA-002	1/15/2025	6	0.1 U	0.092 J	0.062 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.05 U
	LTA-003	1/15/2025	0	0.32 J	0.43	2.6	0.12 J	0.12 J	0.049 U	0.049 U	0.088 J	0.098 U	0.049 U
	LTA-003	1/15/2025	1	0.39 J	1.6	0.08 J	0.049 U	0.049 U	0.049 U	0.049 U	0.04 J	0.099 U	0.049 U
West Park Drive Waste Disposal Area (PDW)	PDW-001	1/20/2025	1	0.1 U	0.05 U	0.062 U	0.05 U	0.05 U	0.24	0.05 U	0.05 U	0.1 U	0.05 U
	PDW-001	1/20/2025	3	0.098 U	0.044 J	0.07 J	0.049 U	0.049 U	0.049 U	0.07 J	0.17 J	0.11 J	0.049 U
	PDW-001	1/20/2025	6	0.096 U	0.048 U	0.06 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.096 U	0.048 U
	PDW-002	1/20/2025	0	0.1 J	0.049 U	0.061 U	0.086 J	0.052 J	0.049 U	0.049 U	0.27	0.099 U	0.049 U
	PDW-002	1/20/2025	1	0.12 J	0.05 U	0.062 U	0.05 U	0.05 U	0.05 U	0.05 U	0.07 J	0.1 U	0.05 U
	PDW-002	1/20/2025	3	0.099 U	0.049 U	0.084 J	0.049 U	0.049 U	0.049 U	0.049 U	0.44	0.099 U	0.049 U
	PDW-002	1/20/2025	6	0.1 U	0.051 U	0.063 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.1 U	0.051 U
Remtech (RTA)	RTA-001	1/20/2025	1	0.098 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.098 U	0.049 U
	RTA-001	1/20/2025	3	0.098 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.098 U	0.049 U
	RTA-002	1/20/2025	0	0.097 U	0.048 U	0.061 J	0.048 U	0.083 J	0.048 U	0.048 U	1.9	0.097 U	0.048 U
	RTA-002	1/20/2025	1	0.099 U	0.05 U	0.061 U	0.05 U	0.05 U	0.05 U	0.05 U	0.44	0.099 U	0.05 U
	RTA-002	1/20/2025	3	0.097 U	0.049 U	0.06 U	0.049 U	0.049 U	0.049 U	0.049 U	0.21	0.097 U	0.049 U
	RTA-002	1/20/2025	6	0.099 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.099 U	0.049 U
	RTA-003	1/17/2025	0	0.1 U	0.05 U	0.062 U	0.05 U	0.05 U	0.05 U	0.13 J	1.2	0.1 U	0.05 U
	RTA-003	1/17/2025	1	0.1 U	0.051 U	0.063 U	0.089 J	0.051 U	0.051 U	0.073 J	1.2	0.1 U	0.051 U
	RTA-003	1/17/2025	3	0.096 U	0.048 U	0.43	0.048 U	0.048 U	0.048 U	0.28	0.068 J	0.096 U	0.048 U
Stormwater Recovery Area (SRA)	SRA-001	1/22/2025	0	0.096 U	1.3	1.4	0.28	1.1	0.048 U	3.3	7.5	0.096 U	0.048 U
	SRA-001	1/22/2025	1	0.19 J	2.2	2.9	0.28	0.32	0.087 J	12	5.3	0.097 U	0.049 U
	SRA-001	1/22/2025	3	0.098 U	0.66	0.28	0.049 U	0.051 J	0.053 J	2	0.77	0.098 U	0.049 U
	SRA-001	1/22/2025	6	0.18 J	2.3	0.095 J	0.048 U	0.048 U	0.048 U	0.12 J	0.048 U	0.097 U	0.048 U
	SRA-002	1/22/2025	0	0.1 U	0.05 U	0.26	0.44	1.7	0.05 U	0.05 U	0.43	0.1 U	0.05 U
	SRA-003	1/21/2025	0	0.1 U	0.051 U	0.063 U	0.053 J	0.055 J	0.051 U	0.051 U	0.97	0.1 J	0.051 U
	SRA-003	1/21/2025	1	0.1 U	0.05 U	0.062 U	0.05 U	0.056 J	0.05 U	0.05 U	0.87	0.1 U	0.05 U
	SRA-003	1/21/2025	3	0.097 U	0.048 U	0.06 U	0.048 U	0.048 U	0.048 U	0.048 U	0.13 J	0.097 U	0.048 U
	SRA-003	1/21/2025	6	0.098 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.056 J	0.098 U	0.049 U
	SRA-003	1/21/2025	10	0.097 U	0.049 U	0.06 U	0.049 U	0.049 U	0.049 U	0.049 U	0.053 J	0.097 U	0.049 U
	SRA-003	1/21/2025	12	0.098 U	0.049 U	0.06 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.098 U	0.049 U
	SRA-004A	1/21/2025	0	0.1 U	0.085 J	0.37	0.28	3	0.05 U	0.072 J	0.81	0.1 U	0.05 U
	SRA-004A	1/21/2025	1	0.1 J	0.14 J	0.66	0.5	6.1	0.05 U	0.19 J	2.1	0.1 U	0.05 U
	SRA-004A	1/21/2025	3	0.1 U	0.051 U	0.2	0.15 J	1	0.051 U	0.051 U	0.46	0.1 U	0.051 U
	SRA-004A	1/21/2025	6	0.1 U	0.078 J	0.49	0.48	3.1	0.05 U	0.11 J	1.3	0.1 U	0.05 U
	SRA-004B	1/21/2025	0	0.16 J	0.76	2.3	0.87	7.1	0.05 U	0.13 J	1.5	0.1 U	0.05 U
	SRA-005	1/22/2025	0	0.1 U	0.051 U	0.063 U	0.056 J	0.051 U	0.051 U	0.051 U	0.098 J	0.1 U	0.051 U
	SRA-005	1/22/2025	1	0.099 U	0.049 U	0.061 U	0.06 J	0.049 U	0.049 U	0.049 U	0.1 J	0.099 U	0.049 U
	SRA-005	1/22/2025	3	0.096 U	0.048 U	0.059 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.096 U	0.048 U
	SRA-006	1/21/2025	0	0.18 J	0.075 J	1.2	0.18 J	0.17 J	0.05 U	0.42	1.5	0.099 U	0.05 U
	SRA-006	1/21/2025	1	0.2 J	0.16 J	0.7	0.088 J	0.1 J	0.051 U	0.73	1.1	0.1 U	0.051 U
SRA-006	1/21/2025	6	0.1 U	0.071 J	0.063 J	0.051 U	0.064 J	0.051 U	0.17 J	0.7	0.1 U	0.051 U	
SRA-007A	1/21/2025	6	0.098 U	0.049 U	0.061 U	0.049 U	0.12 J	0.049 U	0.11 J	0.87	0.098 U	0.049 U	
SRA-007B	1/21/2025	0	0.097 U	0.11 J	0.15 J	0.13 J	1	0.049 U	0.37	3.1	0.097 U	0.049 U	

Table 7-1. Results for PFAS in Soil
Spokane International Airport
 Spokane, WA

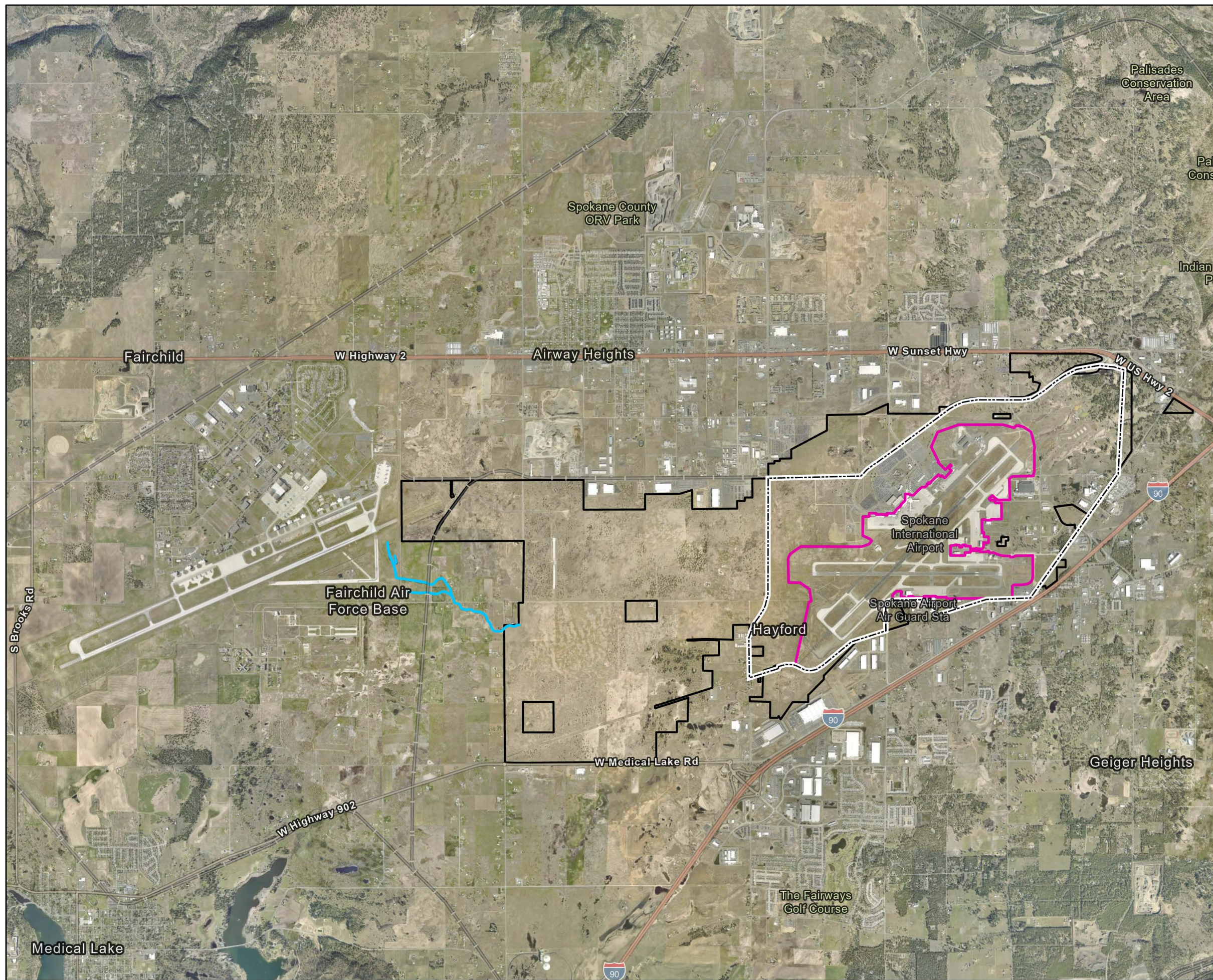
Area	Location ID	Date	Depth (ft bgs)	Result (ug/kg) ¹									
				PFBA	PFHxA	PFOA	PFNA	PFDA	PFBS	PFHxS	PFOS	6:2FTS	HFPO-DA
Stormwater Recovery Area (SRA)	SRA-008	1/22/2025	0	0.097 U	1.1	0.86	0.2	2.7	0.049 U	1.6	49	0.097 U	0.049 U
	SRA-008	1/22/2025	1	0.096 U	0.6 J	0.52 J	0.23 J	1.1 J	0.048 U	0.8 J	32 J	0.096 U	0.048 U
	SRA-008	1/22/2025	3	0.098 U	0.084 J	0.58	0.14 J	0.095 J	0.049 U	0.22	2.2	0.098 U	0.049 U
	SRA-009	1/22/2025	0	0.099 U	0.05 UJ	0.061 U	0.05 U	0.05 U	0.05 U	0.054 J	0.16 J	0.099 U	0.05 U
	SRA-010	1/22/2025	0	0.098 U	0.049 U	0.1 J	0.11 J	2.2	0.049 U	0.13 J	0.87	0.098 U	0.049 U
	SRA-010	1/22/2025	1	0.095 U	0.047 UJ	0.061 J	0.059 J	1.2	0.047 U	0.084 J	0.53	0.095 U	0.047 U
	SRA-010	1/22/2025	3	0.097 U	0.042 J	0.06 J	0.12 J	1.6	0.048 U	0.076 J	0.9 J	0.097 U	0.048 U
	SRA-010	1/22/2025	6	0.097 U	0.049 U	0.07 J	0.094 J	2.6	0.049 U	0.13 J	1	0.097 U	0.049 U
	SRA-010	1/22/2025	10	0.1 U	0.05 U	0.062 U	0.05 U	0.085 J	0.05 U	0.05 U	0.11 J	0.1 U	0.05 U
	SRA-011	1/22/2025	0	0.19 J	0.097 J	0.25	0.07 J	0.05 U	0.14 J	0.078 J	0.16 J	0.1 U	0.05 U
	SRA-011	1/22/2025	1	0.14 J	0.084 J	0.24	0.049 U	0.049 U	0.3	0.17 J	0.049 U	0.097 U	0.049 U
	SRA-011	1/22/2025	3	0.1 U	0.34	1.4	0.05 U	0.05 U	0.05 U	0.29	3.8	0.1 U	0.05 U
	SRA-011	1/22/2025	6	0.097 U	0.22	0.61	0.049 U	0.049 U	0.049 U	0.18 J	0.74	0.097 U	0.049 U
	SRA-011	1/22/2025	10	0.099 U	0.12 J	0.51	0.054 J	0.05 U	0.05 U	0.12 J	1.3	0.099 U	0.05 U
	SRA-011	1/22/2025	14	0.096 U	0.056 J	0.2	0.071 J	0.41	0.048 U	0.065 J	0.39	0.096 U	0.048 U
Triangle Ramp Training Area (TRP)	TRP-001	1/22/2025	0	0.099 U	0.049 U	0.061 U	0.049 U	0.49	0.049 U	0.049 U	0.049 U	0.099 U	0.049 U
	TRP-002	1/22/2025	0	0.098 U	0.049 U	0.061 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.098 U	0.049 U

Notes: Laboratory qualifier: U = non-detect; J = estimated concentration
 1. All samples were measured on a dry weight basis via EPA Method 1633.
 2. The primary sample and field duplicate were averaged.





INITIAL PFAS INVESTIGATION REPORT
Spokane International Airport
Spokane, WA

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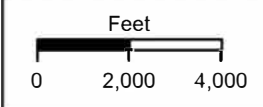
LEGEND

-  SIA Property Boundary
-  Primary Airport Area
-  AOA Feneline
-  No Name Ditch (Willow Creek)



Notes

- 1) SIA - Spokane International Airport
- 2) AOA - Air Operations Area
- 3) Aerial imagery provided by Esri ArcGIS Online, 2023.



Projected Coordinate System
 Datum: NAD 83
 State Plane Washington North
 Units: Feet

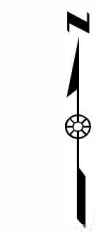
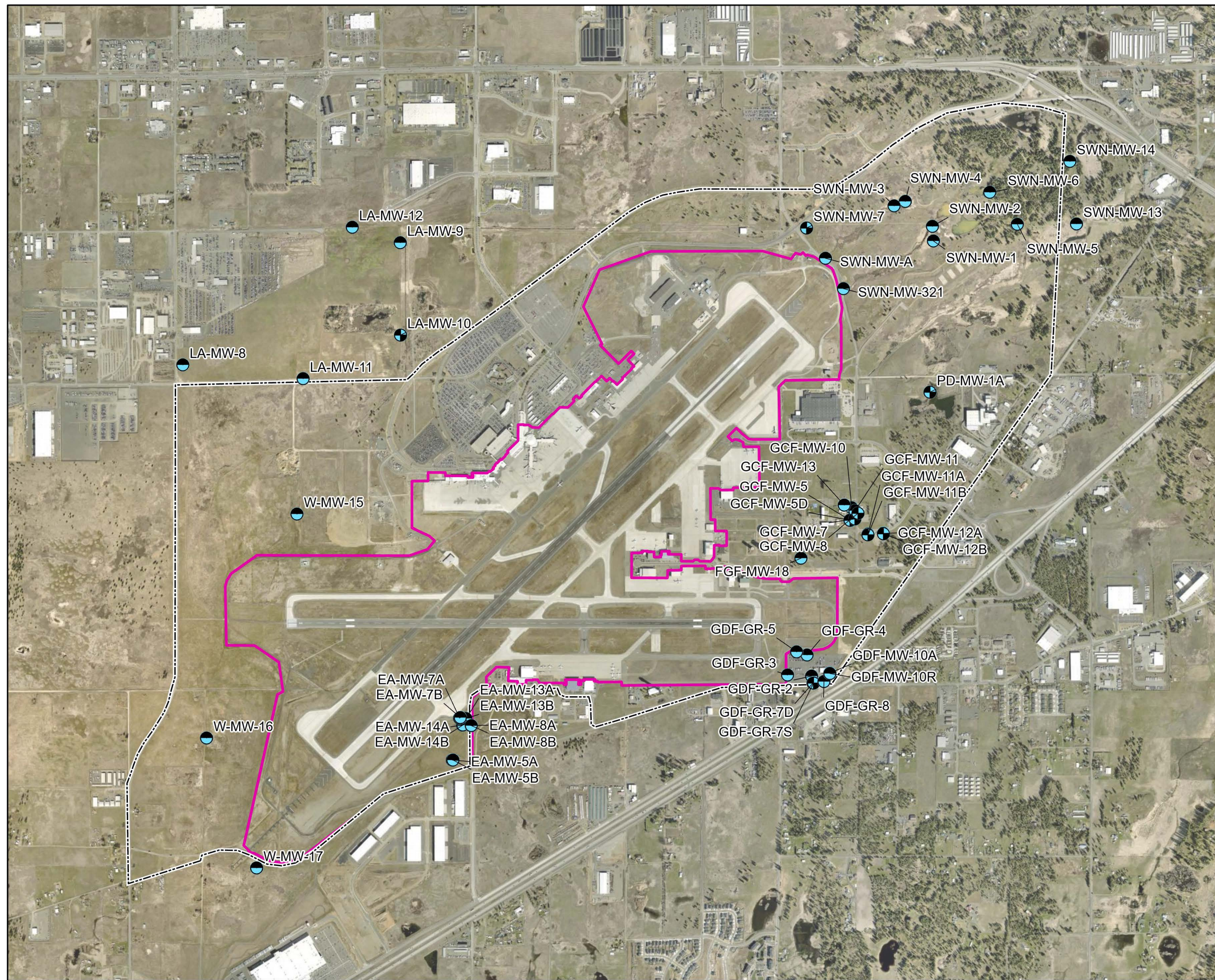


Site Location Map

Initial PFAS Investigation Report
 Spokane International Airport
 Spokane, Washington

GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	IPIR_1	App'd By:	DR

FIGURE 1-1



LEGEND

- Primary Airport Area
- AOA Feneline
- Monitoring Wells**
 - Unconsolidated
 - ⊕ Upper Wanapum

Notes

1. AOA - Air Operations Area
2. Aerial imagery provided by Esri ArcGIS Online, 2025.
3. Unconsolidated category includes: 1) wells screened across unconsolidated material and 2) wells screened across both unconsolidated material and upper Wanapum (see Table 3-1).

	<p>Projected Coordinate System Datum: NAD 83 State Plane Washington North Units: Feet</p>
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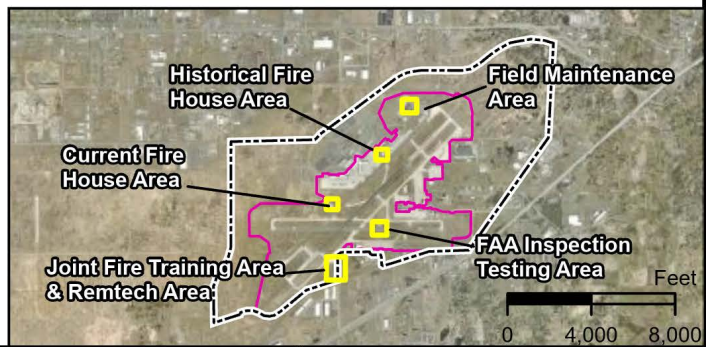
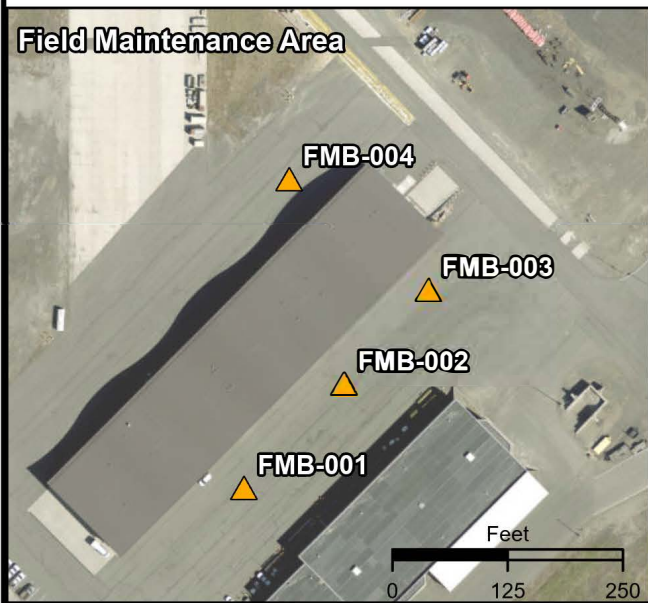
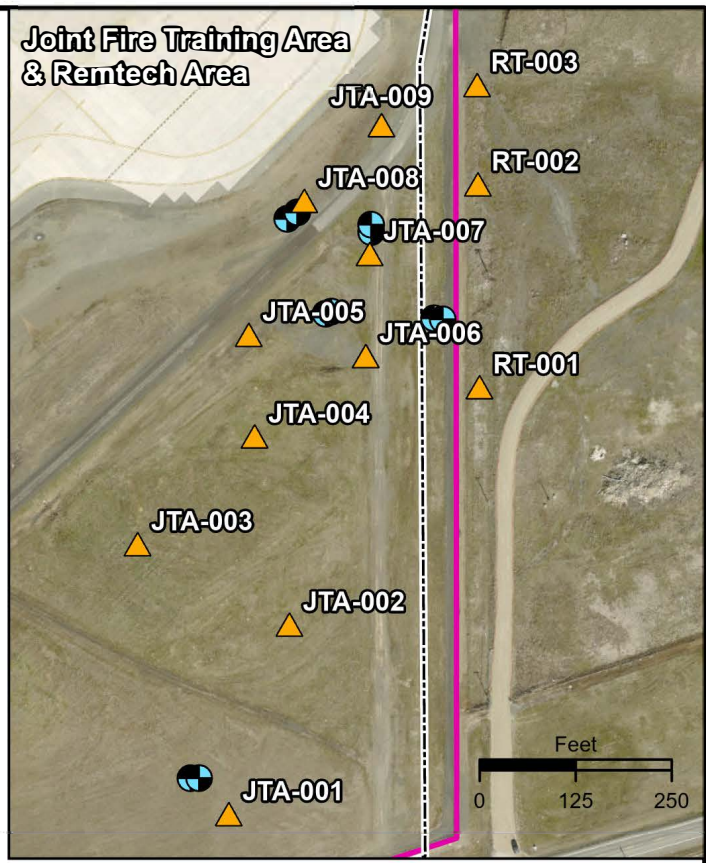
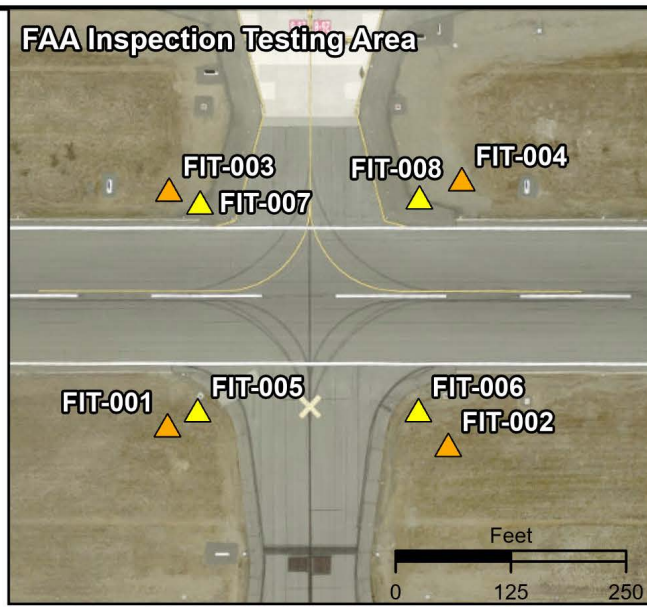
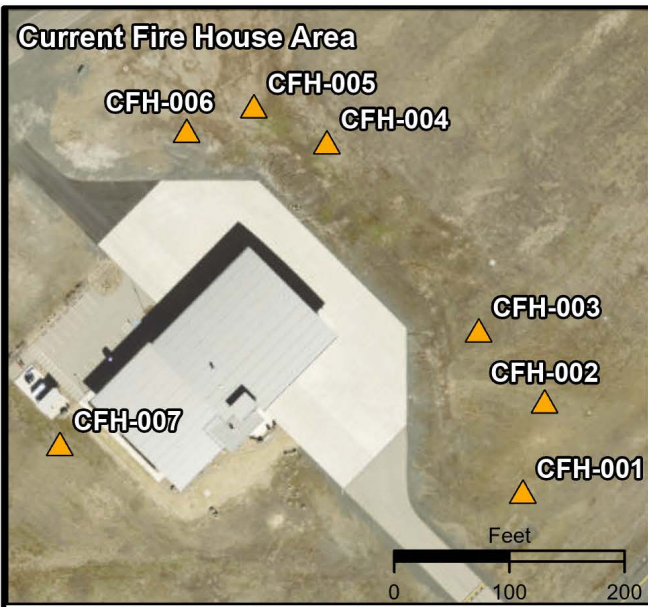


Groundwater Sampling Locations

Initial PFAS Investigation Report
Spokane International Airport
Spokane, Washington

GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	IPIR_6	App'd By:	DR

FIGURE 3-1



LEGEND

North
 Primary Airport Area
 AOA Fencline
 Sample Locations
 Soil Boring
 Hand Auger
 Monitoring Well

Notes

1. AOA - Air Operations Area
2. Aerial imagery provided by Esri ArcGIS Online, 2025.

Projected Coordinate System
 Datum: NAD 83
 State Plane Washington North
 Units: Feet

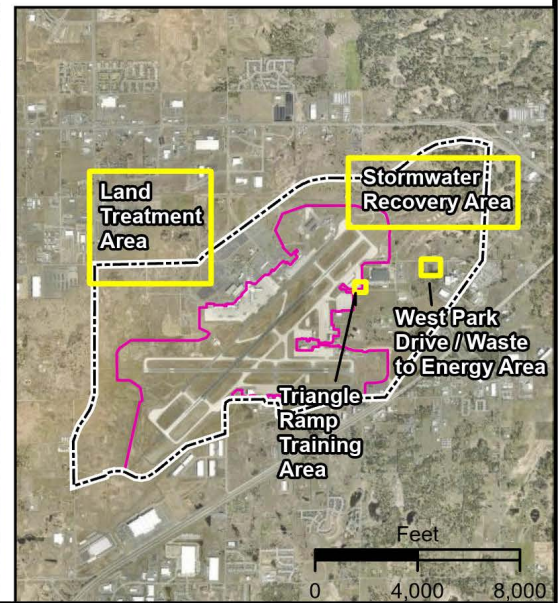
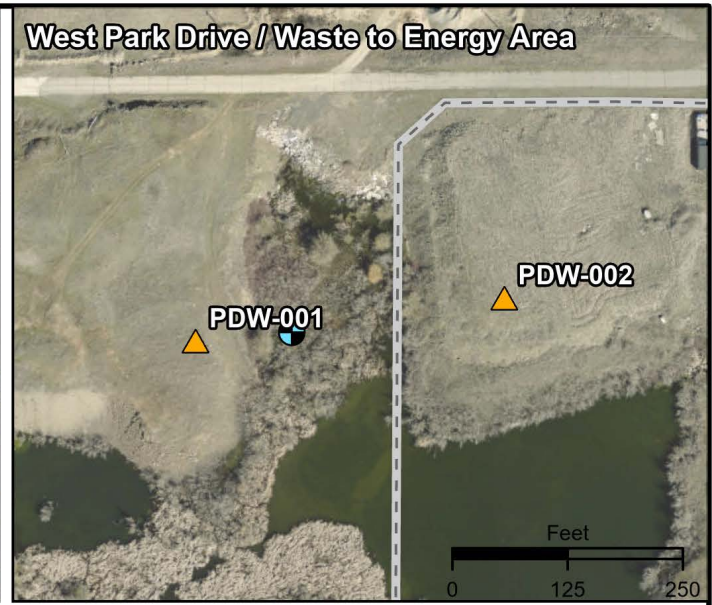
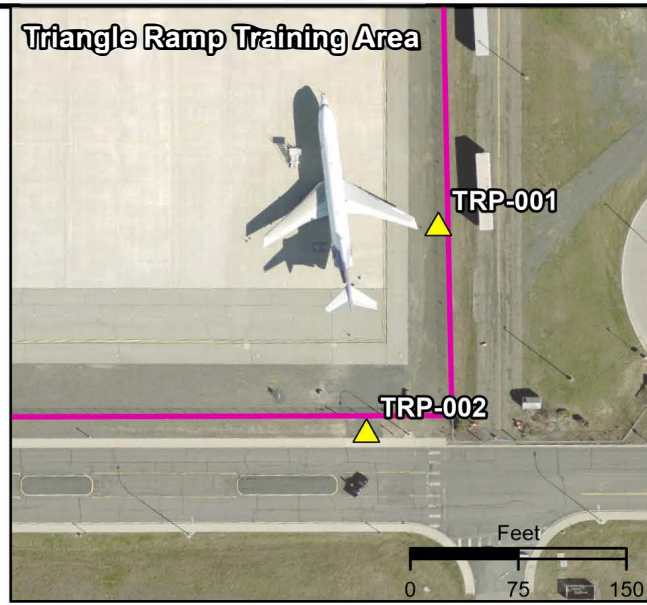
Soil Sample Locations

Initial PFAS Investigation Report
 Spokane International Airport
 Spokane, Washington

GSI ENVIRONMENTAL

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Map ID: IPIR_3_a	App'v'd By: DR

FIGURE 3-2A



LEGEND		
	Primary Airport Area	
	AOA Feneline	
	Sample Locations	
	Soil Boring	
	Hand Auger	

Projected Coordinate System
 Datum: NAD 83
 State Plane Washington North
 Units: Feet

Notes

1. AOA - Air Operations Area
2. WtE - Waste to Energy Facility
3. Aerial imagery provided by Esri ArcGIS Online, 2025.

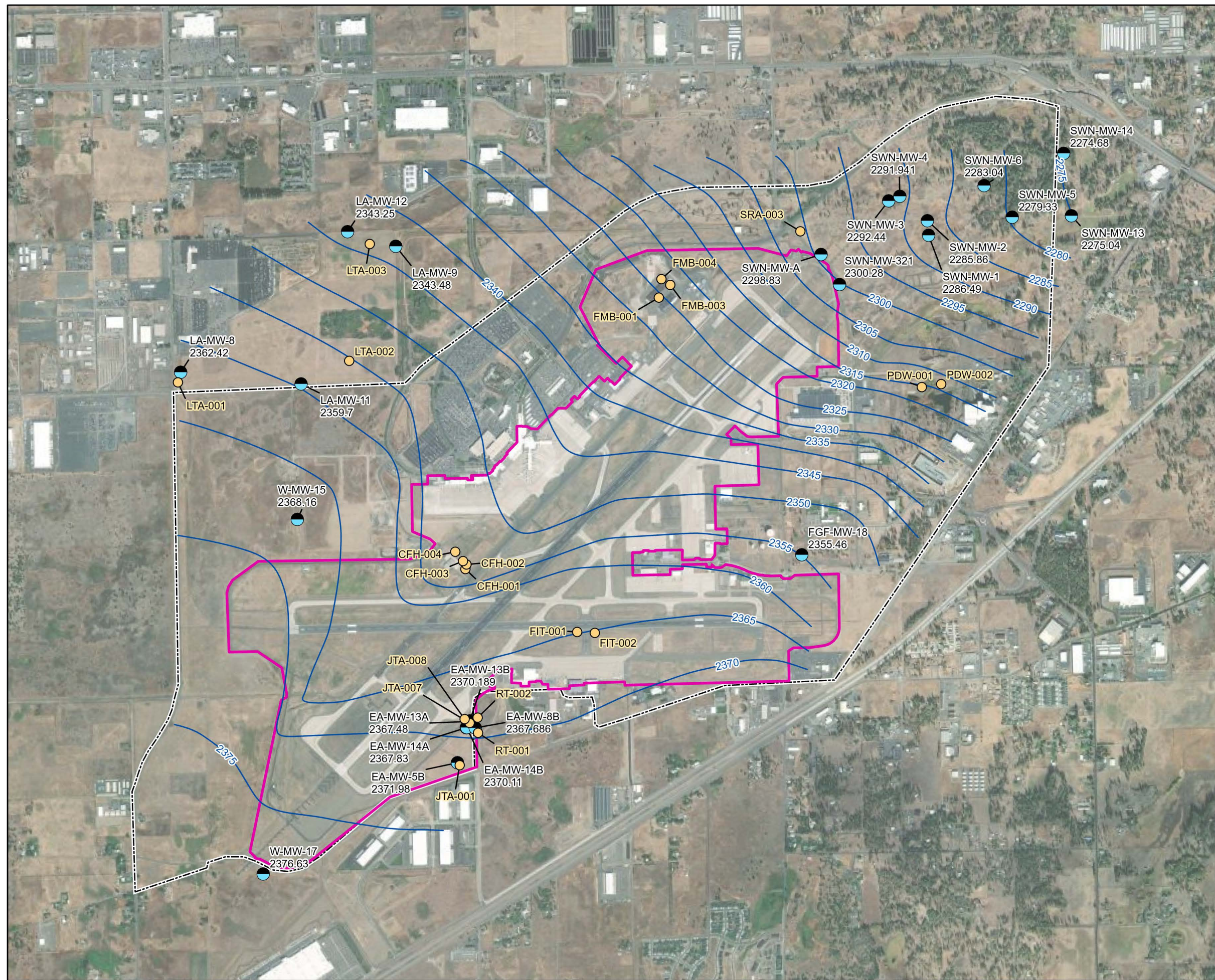
Soil Sample Locations

Initial PFAS Investigation Report
 Spokane International Airport
 Spokane, Washington

GSI ENVIRONMENTAL

GSI Job No. 6892	Drawn By: EKS
Issued: 13 Mar 2026	Chk'd By: KW
Map ID: IPIR_3_b	Appv'd By: DR

FIGURE 3-2B



LEGEND

- Wells - Unconsolidated Formation
####.# Groundwater Elevation (ft amsl)
- Soil Boring Locations
- 5 Foot Groundwater Elevation Contours - Unconsolidated Formation
- AOA Fenceline
- Primary Airport Area

Notes

1. AOA - Air Operations Area
2. Aerial imagery provided by Esri ArcGIS Online, 2023.
3. Potentiometric contours consider ground surface elevation and depth to water encountered in soil boreholes during the January 2025 IPI event.

Projected Coordinate System
 Datum: NAD 83
 State Plane Washington North
 Units: Feet

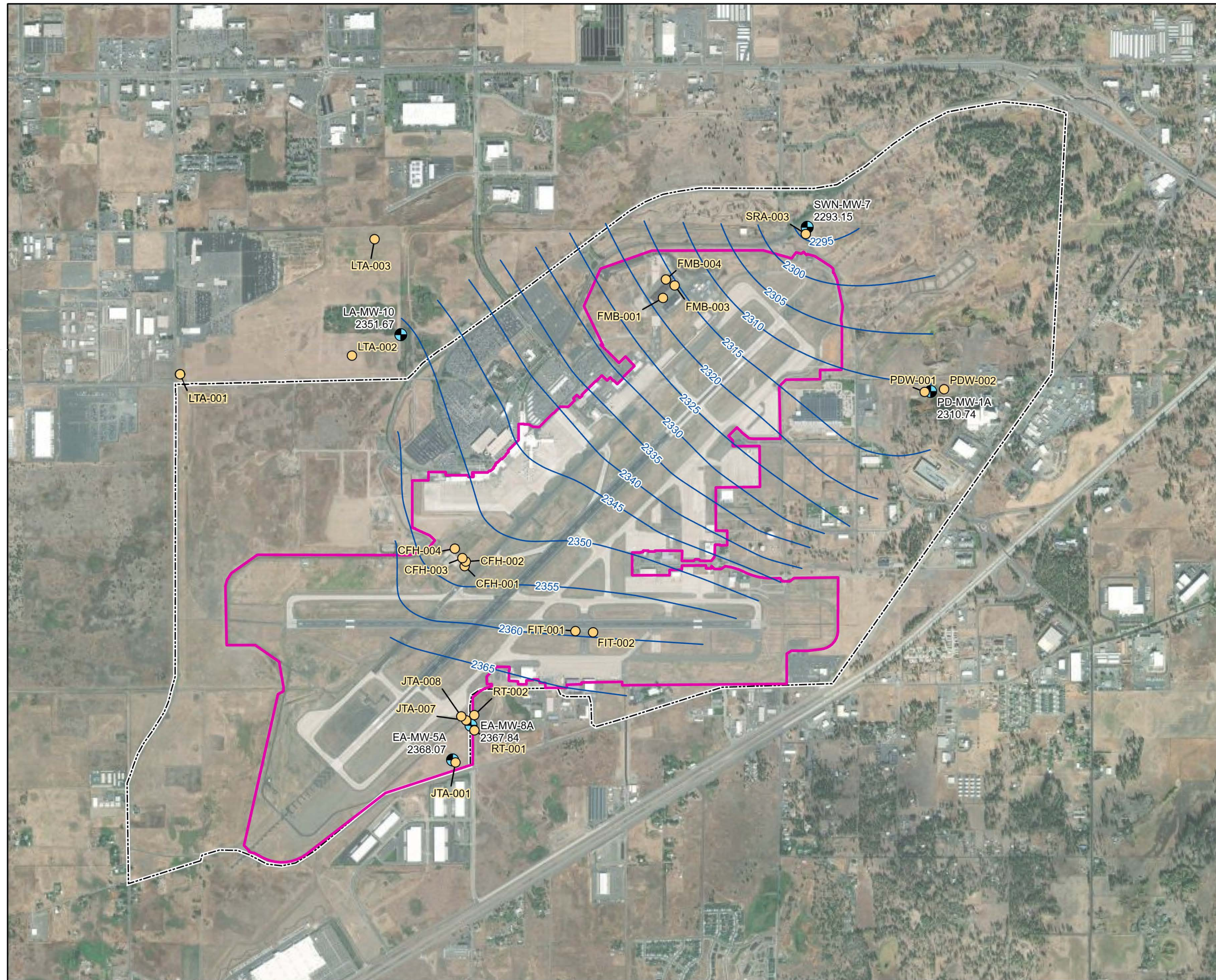


**Site Potentiometric Surface:
Unconsolidated - March 2024**






Initial PFAS Investigation Report
 Spokane International Airport
 Spokane, Washington

GSI job No.	6892	Drawn By:	NK
Issued:	13-Mar-2026	Chk'd By:	AT
Map ID:	GW_IPI_Mar_24	App'd By:	DR

FIGURE 6-1

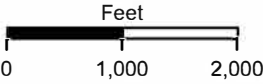


LEGEND

-  Wells - Upper Wanapum Formation
####.# Groundwater Elevation (ft amsl)
-  Soil Boring Locations
-  5 Foot Groundwater Elevation Contours - Upper Wanapum
-  AOA Fenceline
-  Primary Airport Area

Notes

1. AOA - Air Operations Area
2. Aerial imagery provided by Esri ArcGIS Online, 2023.
3. Potentiometric contours consider ground surface elevation and depth to water encountered in soil boreholes during the January 2025 IPI event.


 Projected Coordinate System
 Datum: NAD 83
 State Plane Washington North
 Units: Feet

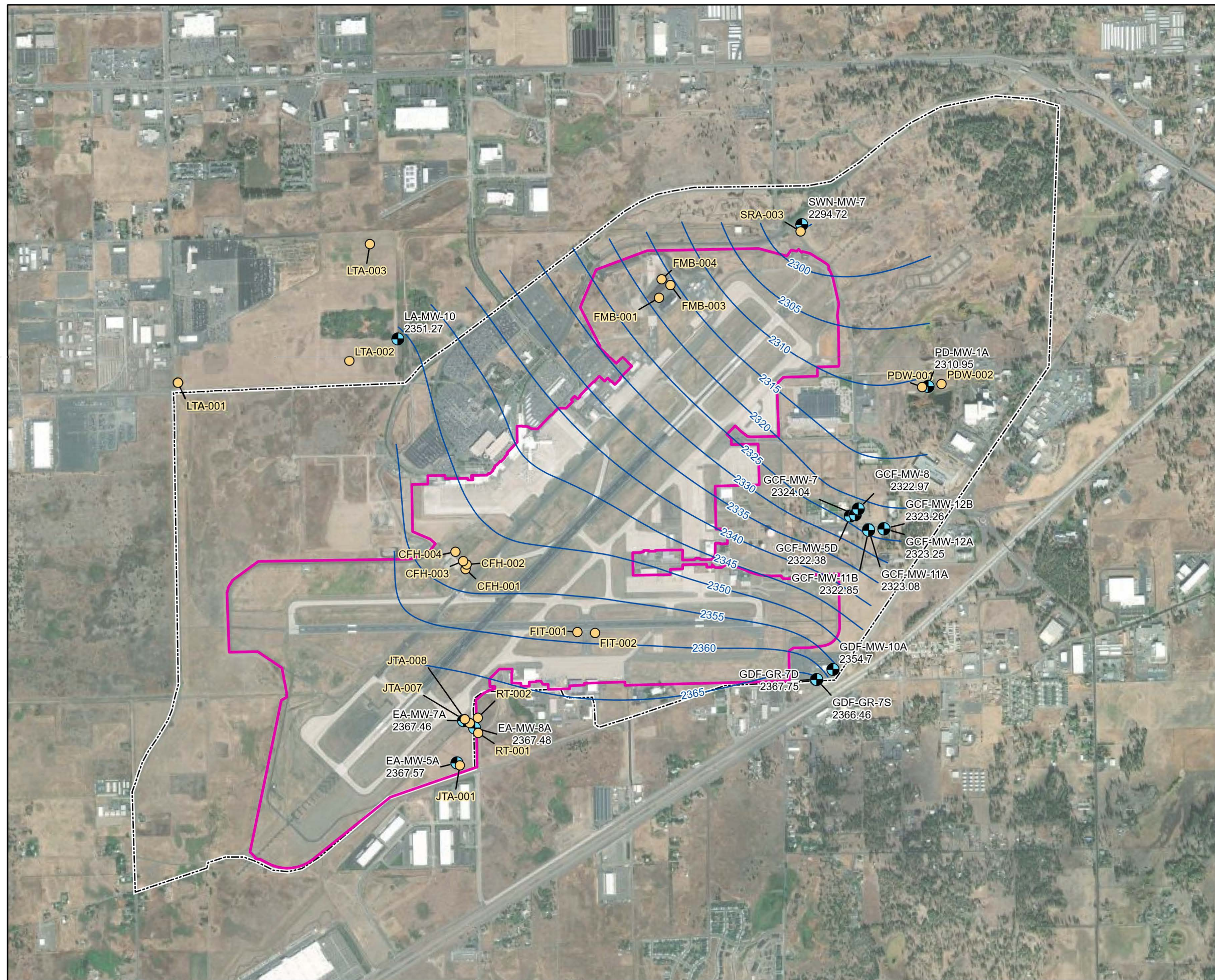


**Site Potentiometric Surface:
Upper Wanapum - March 2024**

Initial PFAS Investigation Report
 Spokane International Airport
 Spokane, Washington

GSI job No.	6892	Drawn By:	NK
Issued:	13-Mar-2026	Chk'd By:	AT
Map ID:	GW_IPI_Mar_24	App'd By:	DR

FIGURE 6-3



LEGEND

- Wells - Upper Wanapum Formation
####.## Groundwater Elevation (ft amsl)
- Soil Boring Locations
- 5 Foot Groundwater Elevation Contours - Upper Wanapum Formation
- AOA Fenceline
- Primary Airport Area

Notes

1. AOA - Air Operations Area
2. Aerial imagery provided by Esri ArcGIS Online, 2023.
3. Potentiometric contours consider ground surface elevation and depth to water encountered in soil boreholes during the January 2025 IPI event.

Feet
 Projected Coordinate System
 Datum: NAD 83
 State Plane Washington North
 Units: Feet

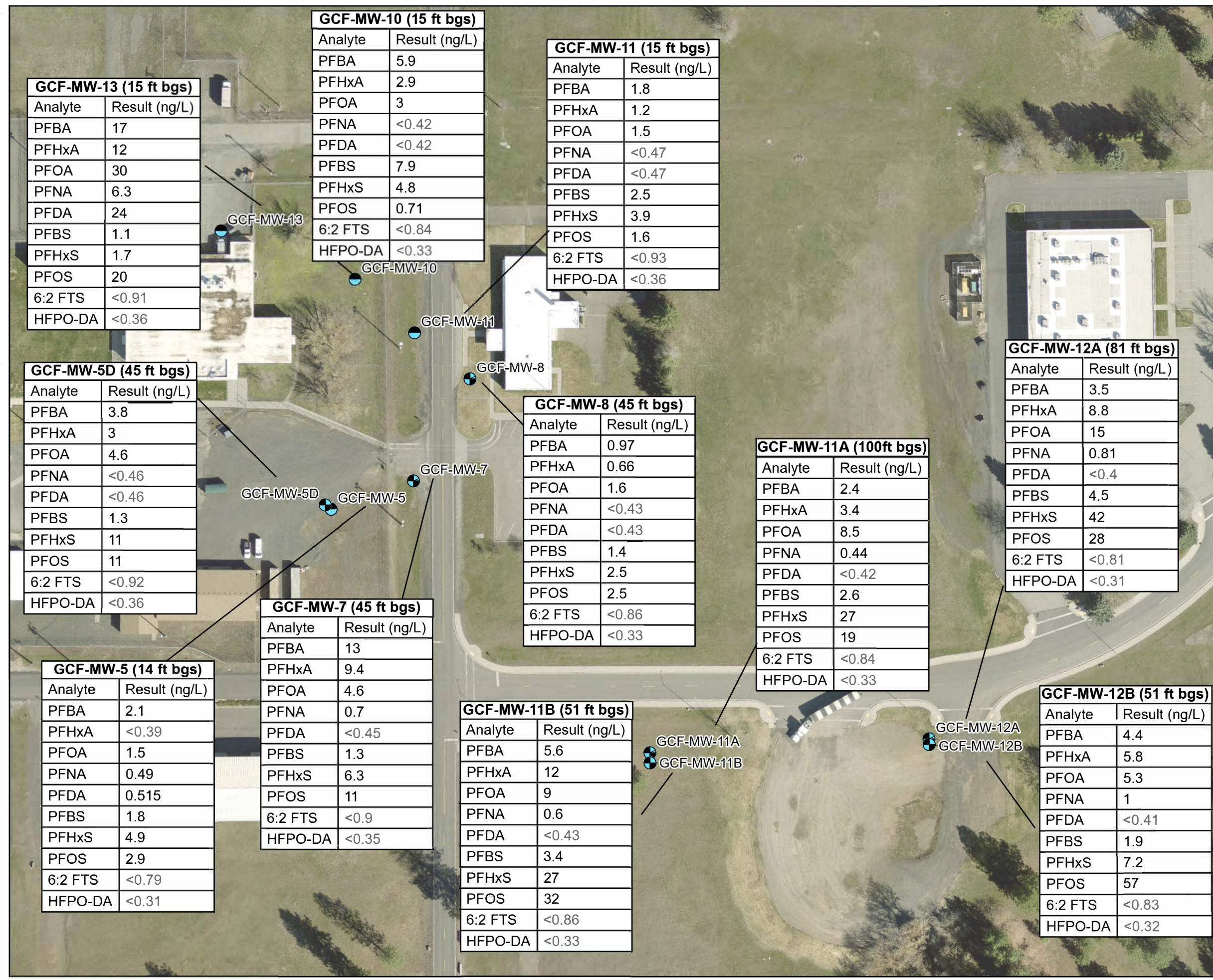


**Site Potentiometric Surface:
Upper Wanapum - January 2025**

Initial PFAS Investigation Report
Spokane International Airport
Spokane, Washington

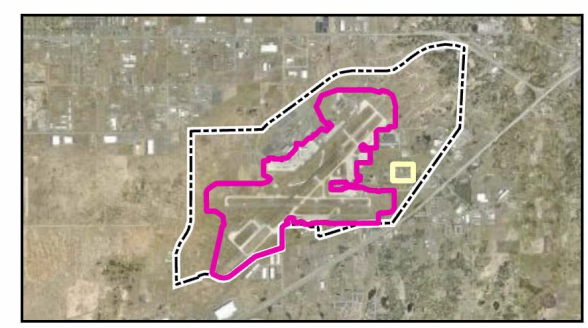
GSI job No.	6892	Drawn By:	NK
Issued:	13-Mar-2026	Chk'd By:	AT
Map ID:	SIAWA_PAA	App'd By:	DR

Figure 6-4



LEGEND

- Primary Airport Area
- AOA Fencline
- Monitoring Wells**
 - Unconsolidated
 - Upper Wanapum
- (### ft bgs) = Well total depth feet below ground surface



- Notes**
1. AOA - Air Operations Area.
 2. ng/L = nanograms per Liter.
 3. Non-detects are represented by "<" followed by the method detection limit.
 4. Aerial imagery provided by Esri ArcGIS Online.

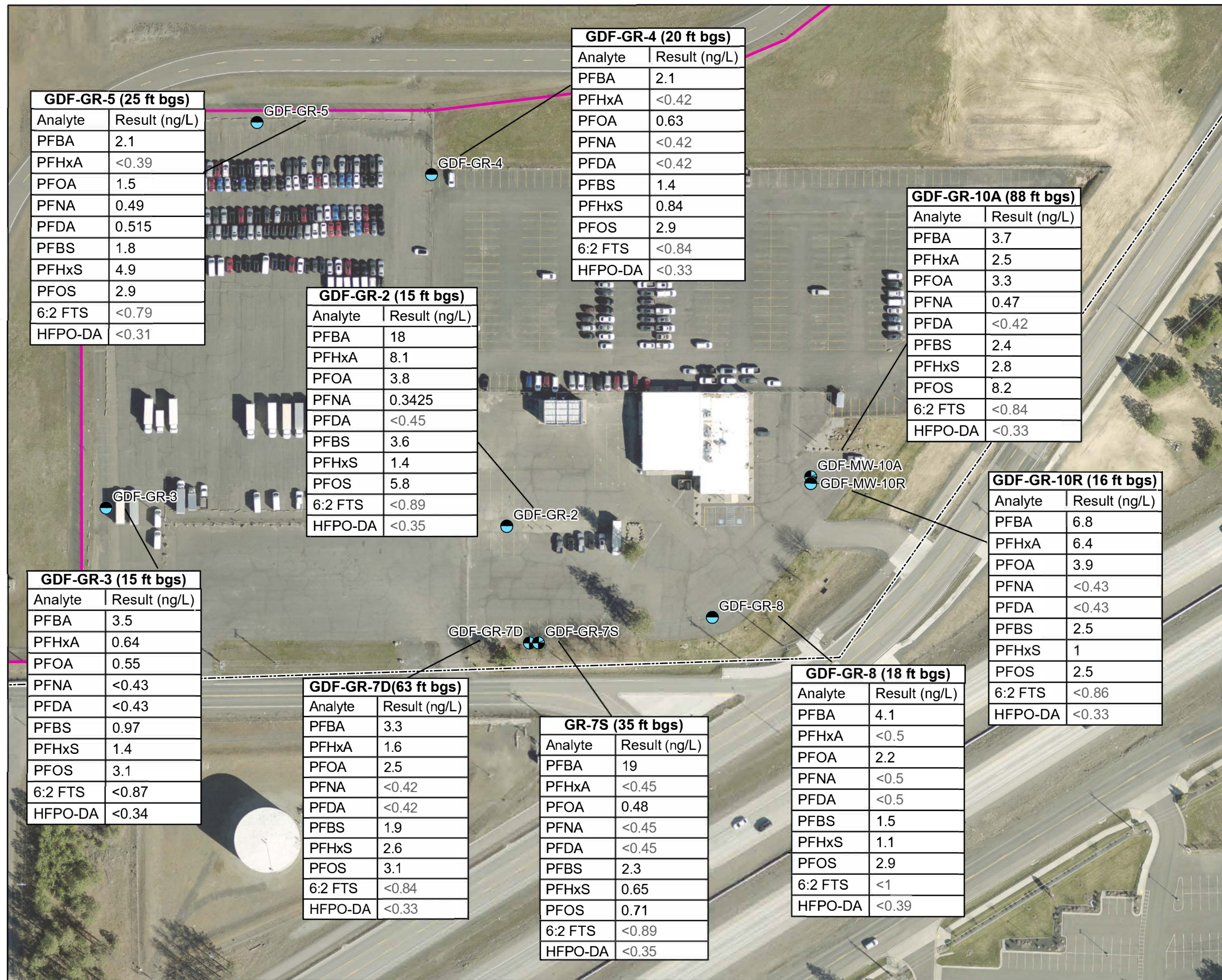


**Groundwater Results:
Geiger Correctional Facility Area**

Initial PFAS Investigation Report
Spokane International Airport
Spokane, Washington

GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	IPIR_6_GCF	App'd By:	DR

FIGURE 6-5



GDF-GR-5 (25 ft bgs)

Analyte	Result (ng/L)
PFBA	2.1
PFHxA	<0.39
PFOA	1.5
PFNA	0.49
PFDA	0.515
PFBS	1.8
PFHxS	4.9
PFOS	2.9
6:2 FTS	<0.79
HFPO-DA	<0.31

GDF-GR-4 (20 ft bgs)

Analyte	Result (ng/L)
PFBA	2.1
PFHxA	<0.42
PFOA	0.63
PFNA	<0.42
PFDA	<0.42
PFBS	1.4
PFHxS	0.84
PFOS	2.9
6:2 FTS	<0.84
HFPO-DA	<0.33

GDF-GR-10A (88 ft bgs)

Analyte	Result (ng/L)
PFBA	3.7
PFHxA	2.5
PFOA	3.3
PFNA	0.47
PFDA	<0.42
PFBS	2.4
PFHxS	2.8
PFOS	8.2
6:2 FTS	<0.84
HFPO-DA	<0.33

GDF-GR-2 (15 ft bgs)

Analyte	Result (ng/L)
PFBA	18
PFHxA	8.1
PFOA	3.8
PFNA	0.3425
PFDA	<0.45
PFBS	3.6
PFHxS	1.4
PFOS	5.8
6:2 FTS	<0.89
HFPO-DA	<0.35

GDF-GR-10R (16 ft bgs)

Analyte	Result (ng/L)
PFBA	6.8
PFHxA	6.4
PFOA	3.9
PFNA	<0.43
PFDA	<0.43
PFBS	2.5
PFHxS	1
PFOS	2.5
6:2 FTS	<0.86
HFPO-DA	<0.33

GDF-GR-3 (15 ft bgs)

Analyte	Result (ng/L)
PFBA	3.5
PFHxA	0.64
PFOA	0.55
PFNA	<0.43
PFDA	<0.43
PFBS	0.97
PFHxS	1.4
PFOS	3.1
6:2 FTS	<0.87
HFPO-DA	<0.34

GDF-GR-7D (63 ft bgs)

Analyte	Result (ng/L)
PFBA	3.3
PFHxA	1.6
PFOA	2.5
PFNA	<0.42
PFDA	<0.42
PFBS	1.9
PFHxS	2.6
PFOS	3.1
6:2 FTS	<0.84
HFPO-DA	<0.33

GR-7S (35 ft bgs)

Analyte	Result (ng/L)
PFBA	19
PFHxA	<0.45
PFOA	0.48
PFNA	<0.45
PFDA	<0.45
PFBS	2.3
PFHxS	0.65
PFOS	0.71
6:2 FTS	<0.89
HFPO-DA	<0.35

GDF-GR-8 (18 ft bgs)

Analyte	Result (ng/L)
PFBA	4.1
PFHxA	<0.5
PFOA	2.2
PFNA	<0.5
PFDA	<0.5
PFBS	1.5
PFHxS	1.1
PFOS	2.9
6:2 FTS	<1
HFPO-DA	<0.39

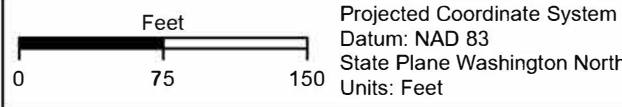


LEGEND

- Primary Airport Area
 - AOA Fence Line
 - Monitoring Wells**
 - Unconsolidated
 - Upper Wanapum
- (### ft bgs) = Well total depth feet below ground surface



- Notes**
1. AOA - Air Operations Area.
 2. ng/L = nanograms per Liter.
 3. Non-detects are represented by "<" followed by the method detection limit.
 4. Unconsolidated category includes: 1) wells screened across unconsolidated material and 2) wells screened across both unconsolidated material and upper Wanapum (see Table 3-1).
 5. Aerial imagery provided by Esri ArcGIS Online.

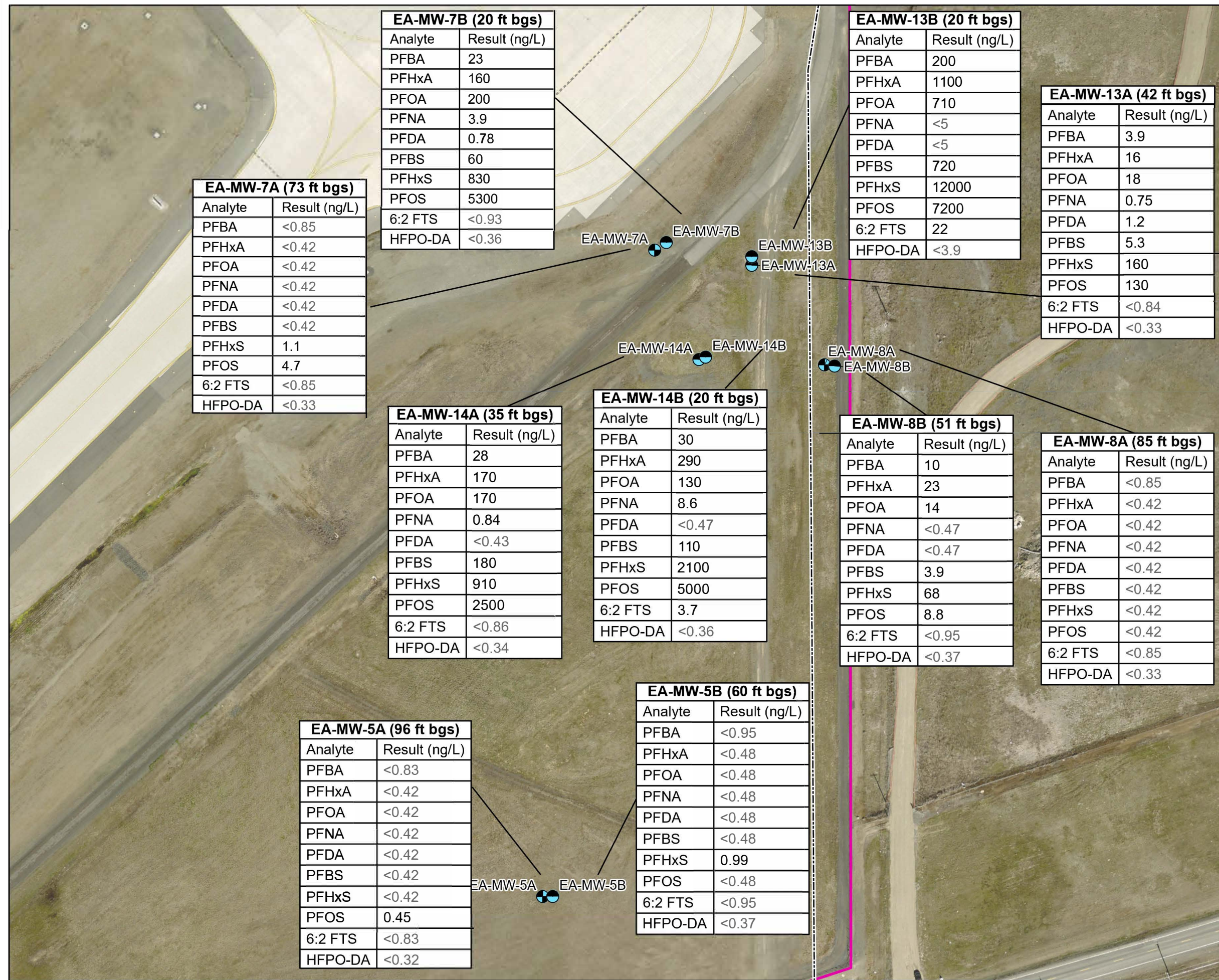


**Groundwater Results:
Geiger Delivery Facility**

Initial PFAS Investigation Report
Spokane International Airport
Spokane, Washington

GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	IPIR_6_GDF	App'd By:	DR

FIGURE 6-6



EA-MW-7A (73 ft bgs)

Analyte	Result (ng/L)
PFBA	<0.85
PFHxA	<0.42
PFOA	<0.42
PFNA	<0.42
PFDA	<0.42
PFBS	<0.42
PFHxS	1.1
PFOS	4.7
6:2 FTS	<0.85
HFPO-DA	<0.33

EA-MW-7B (20 ft bgs)

Analyte	Result (ng/L)
PFBA	23
PFHxA	160
PFOA	200
PFNA	3.9
PFDA	0.78
PFBS	60
PFHxS	830
PFOS	5300
6:2 FTS	<0.93
HFPO-DA	<0.36

EA-MW-13B (20 ft bgs)

Analyte	Result (ng/L)
PFBA	200
PFHxA	1100
PFOA	710
PFNA	<5
PFDA	<5
PFBS	720
PFHxS	12000
PFOS	7200
6:2 FTS	22
HFPO-DA	<3.9

EA-MW-13A (42 ft bgs)

Analyte	Result (ng/L)
PFBA	3.9
PFHxA	16
PFOA	18
PFNA	0.75
PFDA	1.2
PFBS	5.3
PFHxS	160
PFOS	130
6:2 FTS	<0.84
HFPO-DA	<0.33

EA-MW-14A (35 ft bgs)

Analyte	Result (ng/L)
PFBA	28
PFHxA	170
PFOA	170
PFNA	0.84
PFDA	<0.43
PFBS	180
PFHxS	910
PFOS	2500
6:2 FTS	<0.86
HFPO-DA	<0.34

EA-MW-14B (20 ft bgs)

Analyte	Result (ng/L)
PFBA	30
PFHxA	290
PFOA	130
PFNA	8.6
PFDA	<0.47
PFBS	110
PFHxS	2100
PFOS	5000
6:2 FTS	3.7
HFPO-DA	<0.36

EA-MW-8B (51 ft bgs)

Analyte	Result (ng/L)
PFBA	10
PFHxA	23
PFOA	14
PFNA	<0.47
PFDA	<0.47
PFBS	3.9
PFHxS	68
PFOS	8.8
6:2 FTS	<0.95
HFPO-DA	<0.37

EA-MW-8A (85 ft bgs)

Analyte	Result (ng/L)
PFBA	<0.85
PFHxA	<0.42
PFOA	<0.42
PFNA	<0.42
PFDA	<0.42
PFBS	<0.42
PFHxS	<0.42
PFOS	<0.42
6:2 FTS	<0.85
HFPO-DA	<0.33

EA-MW-5A (96 ft bgs)

Analyte	Result (ng/L)
PFBA	<0.83
PFHxA	<0.42
PFOA	<0.42
PFNA	<0.42
PFDA	<0.42
PFBS	<0.42
PFHxS	<0.42
PFOS	0.45
6:2 FTS	<0.83
HFPO-DA	<0.32

EA-MW-5B (60 ft bgs)

Analyte	Result (ng/L)
PFBA	<0.95
PFHxA	<0.48
PFOA	<0.48
PFNA	<0.48
PFDA	<0.48
PFBS	<0.48
PFHxS	0.99
PFOS	<0.48
6:2 FTS	<0.95
HFPO-DA	<0.37



LEGEND

- Primary Airport Area
- AOA Fenceline
- Monitoring Wells**
 - Unconsolidated
 - Upper Wanapum
- (### ft bgs) = Well total depth feet below ground surface



Notes

1. AOA - Air Operations Area.
2. ng/L = nanograms per Liter.
3. Non-detects are represented by "<" followed by the method detection limit.
4. Unconsolidated category includes: 1) wells screened across unconsolidated material and 2) wells screened across both unconsolidated material and upper Wanapum (see Table 3-1).
5. Aerial imagery provided by Esri ArcGIS Online.

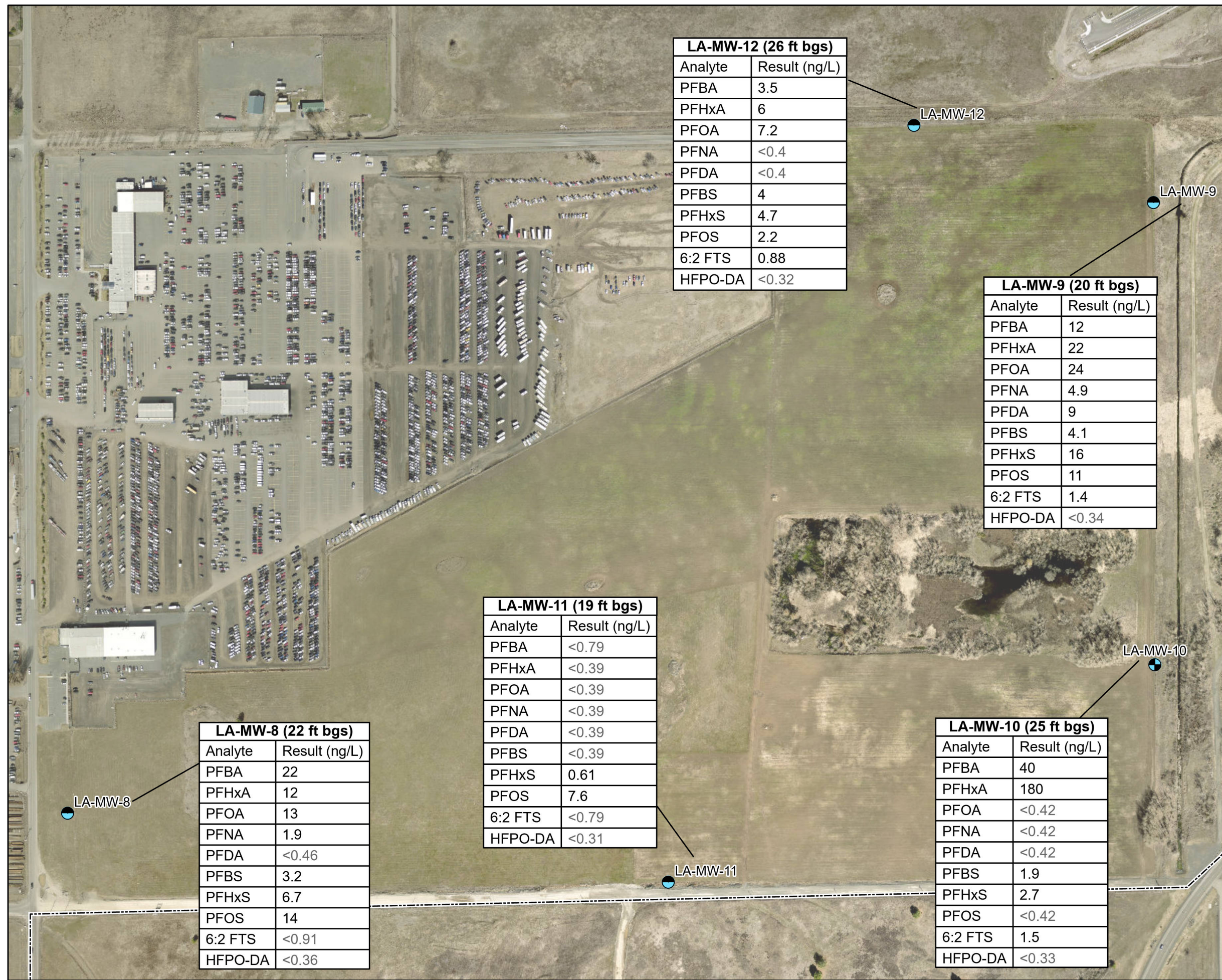


**Groundwater Results:
Joint Fire Training Area**

Initial PFAS Investigation Report
Spokane International Airport
Spokane, Washington

GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	IPIR_6_JTFA	Appv'd By:	DR

FIGURE 6-7



LA-MW-12 (26 ft bgs)

Analyte	Result (ng/L)
PFBA	3.5
PFHxA	6
PFOA	7.2
PFNA	<0.4
PFDA	<0.4
PFBS	4
PFHxS	4.7
PFOS	2.2
6:2 FTS	0.88
HFPO-DA	<0.32

LA-MW-9 (20 ft bgs)

Analyte	Result (ng/L)
PFBA	12
PFHxA	22
PFOA	24
PFNA	4.9
PFDA	9
PFBS	4.1
PFHxS	16
PFOS	11
6:2 FTS	1.4
HFPO-DA	<0.34

LA-MW-11 (19 ft bgs)

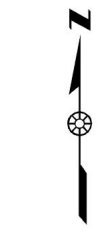
Analyte	Result (ng/L)
PFBA	<0.79
PFHxA	<0.39
PFOA	<0.39
PFNA	<0.39
PFDA	<0.39
PFBS	<0.39
PFHxS	0.61
PFOS	7.6
6:2 FTS	<0.79
HFPO-DA	<0.31

LA-MW-10 (25 ft bgs)

Analyte	Result (ng/L)
PFBA	40
PFHxA	180
PFOA	<0.42
PFNA	<0.42
PFDA	<0.42
PFBS	1.9
PFHxS	2.7
PFOS	<0.42
6:2 FTS	1.5
HFPO-DA	<0.33

LA-MW-8 (22 ft bgs)

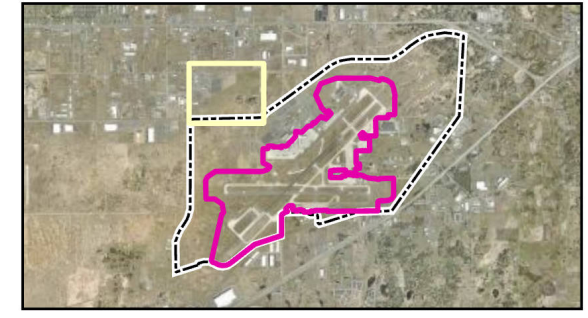
Analyte	Result (ng/L)
PFBA	22
PFHxA	12
PFOA	13
PFNA	1.9
PFDA	<0.46
PFBS	3.2
PFHxS	6.7
PFOS	14
6:2 FTS	<0.91
HFPO-DA	<0.36



LEGEND

- Primary Airport Area
- AOA Fencline
- Monitoring Wells**
 - Unconsolidated
 - Upper Wanapum

(### ft bgs) = Well total depth feet below ground surface



Notes

1. AOA - Air Operations Area.
2. ng/L = nanograms per Liter.
3. Non-detects are represented by "<" followed by the method detection limit.
4. Unconsolidated category includes: 1) wells screened across unconsolidated material and 2) wells screened across both unconsolidated material and upper Wanapum (see Table 3-1).
5. Aerial imagery provided by Esri ArcGIS Online.

Projected Coordinate System
Datum: NAD 83
State Plane Washington North
Units: Feet

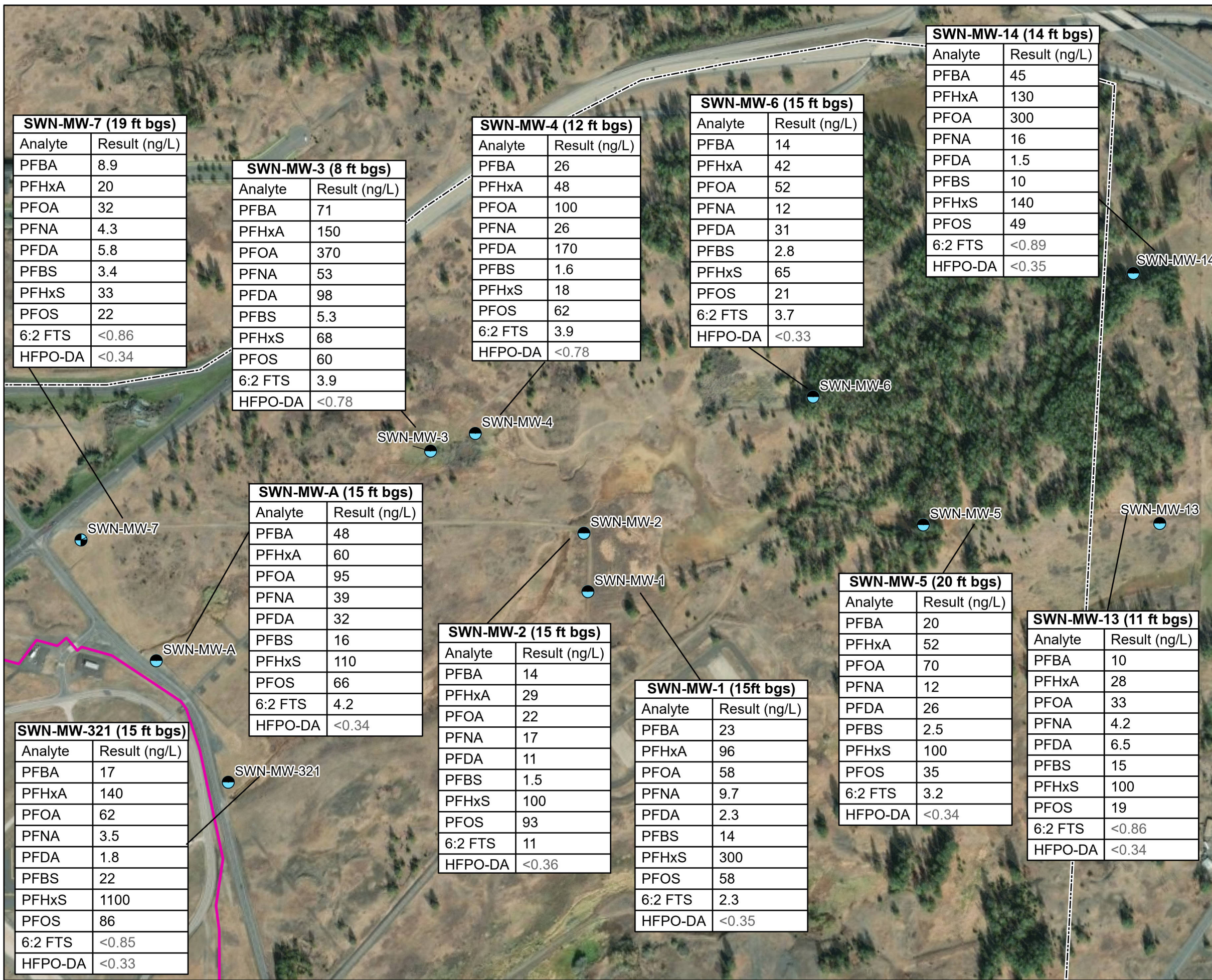


**Groundwater Results:
Land Treatment Area**

Initial PFAS Investigation Report
Spokane International Airport
Spokane, Washington

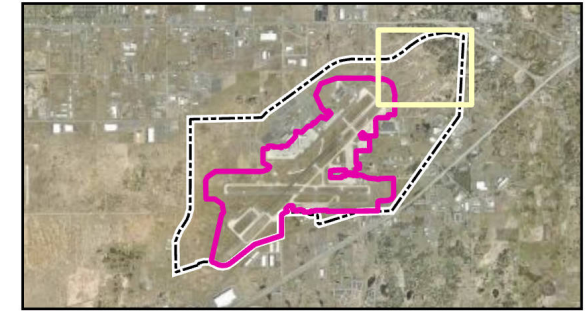
GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	IPIR_6_LTA	App'd By:	DR

FIGURE 6-8



LEGEND

- Primary Airport Area
 - AOA Fencline
 - Monitoring Wells**
 - Unconsolidated
 - ⊕ Upper Wanapum
- (### ft bgs) = Well total depth feet below ground surface



- Notes**
1. AOA - Air Operations Area.
 2. ng/L = nanograms per Liter.
 3. Non-detects are represented by "<" followed by the method detection limit.
 4. Unconsolidated category includes: 1) wells screened across unconsolidated material and 2) wells screened across both unconsolidated material and upper Wanapum (see Table 3-1).
 5. Aerial imagery provided by Esri ArcGIS Online.

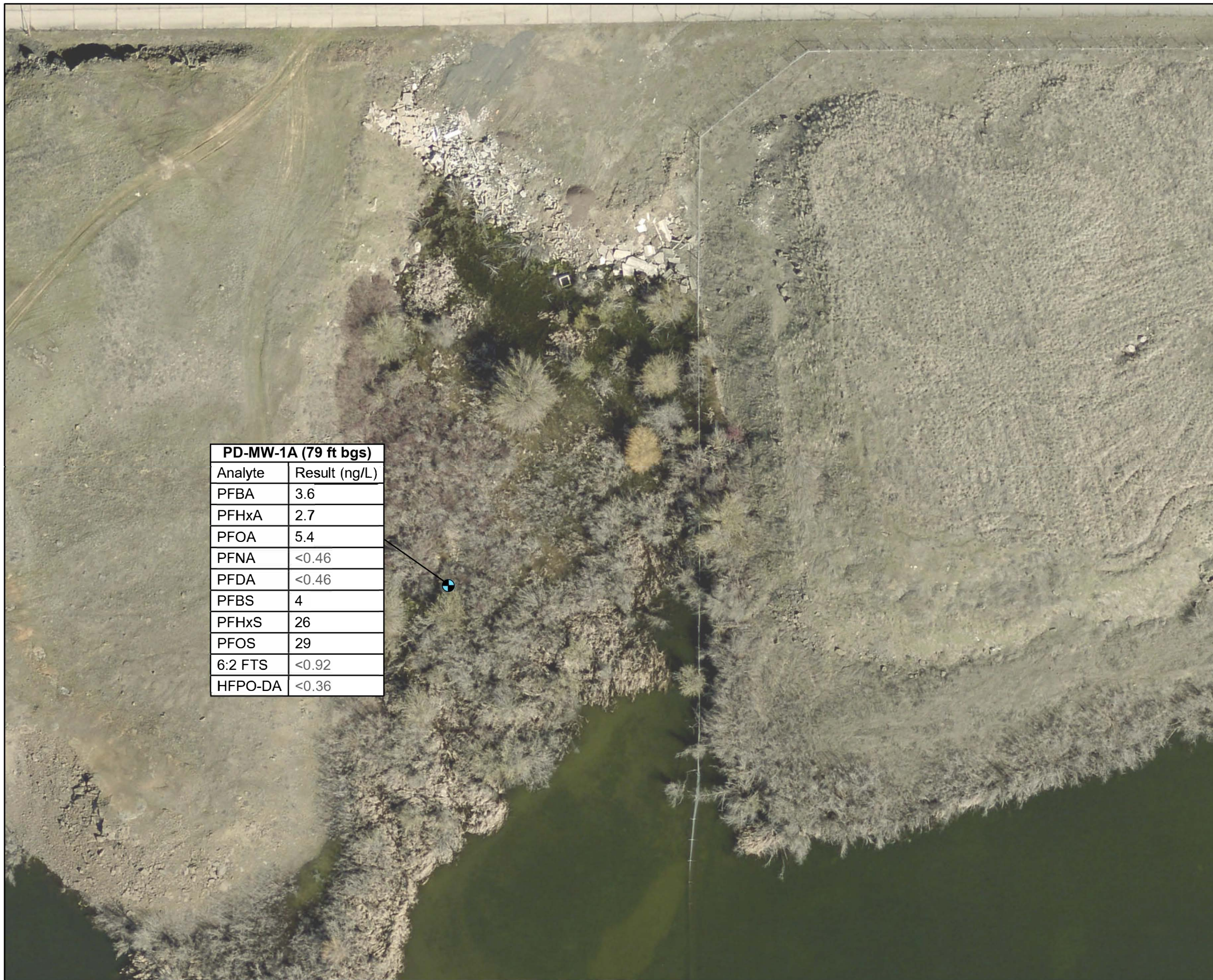


**Groundwater Results:
Stormwater Recovery Area**

Initial PFAS Investigation Report
Spokane International Airport
Spokane, Washington

GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	IPIR_6_SRA	App'd By:	DR

FIGURE 6-9



PD-MW-1A (79 ft bgs)	
Analyte	Result (ng/L)
PFBA	3.6
PFHxA	2.7
PFOA	5.4
PFNA	<0.46
PFDA	<0.46
PFBS	4
PFHxS	26
PFOS	29
6:2 FTS	<0.92
HFPO-DA	<0.36



LEGEND

Primary Airport Area

AOA Fenceline

Monitoring Wells

Upper Wanapum

(### ft bgs) = Well total depth feet below ground surface



Notes

1. AOA - Air Operations Area.
2. ng/L = nanograms per Liter.
3. Non-detects are represented by "<" followed by the method detection limit.
4. Aerial imagery provided by Esri ArcGIS Online.



Projected Coordinate System
Datum: NAD 83
State Plane Washington North
Units: Feet

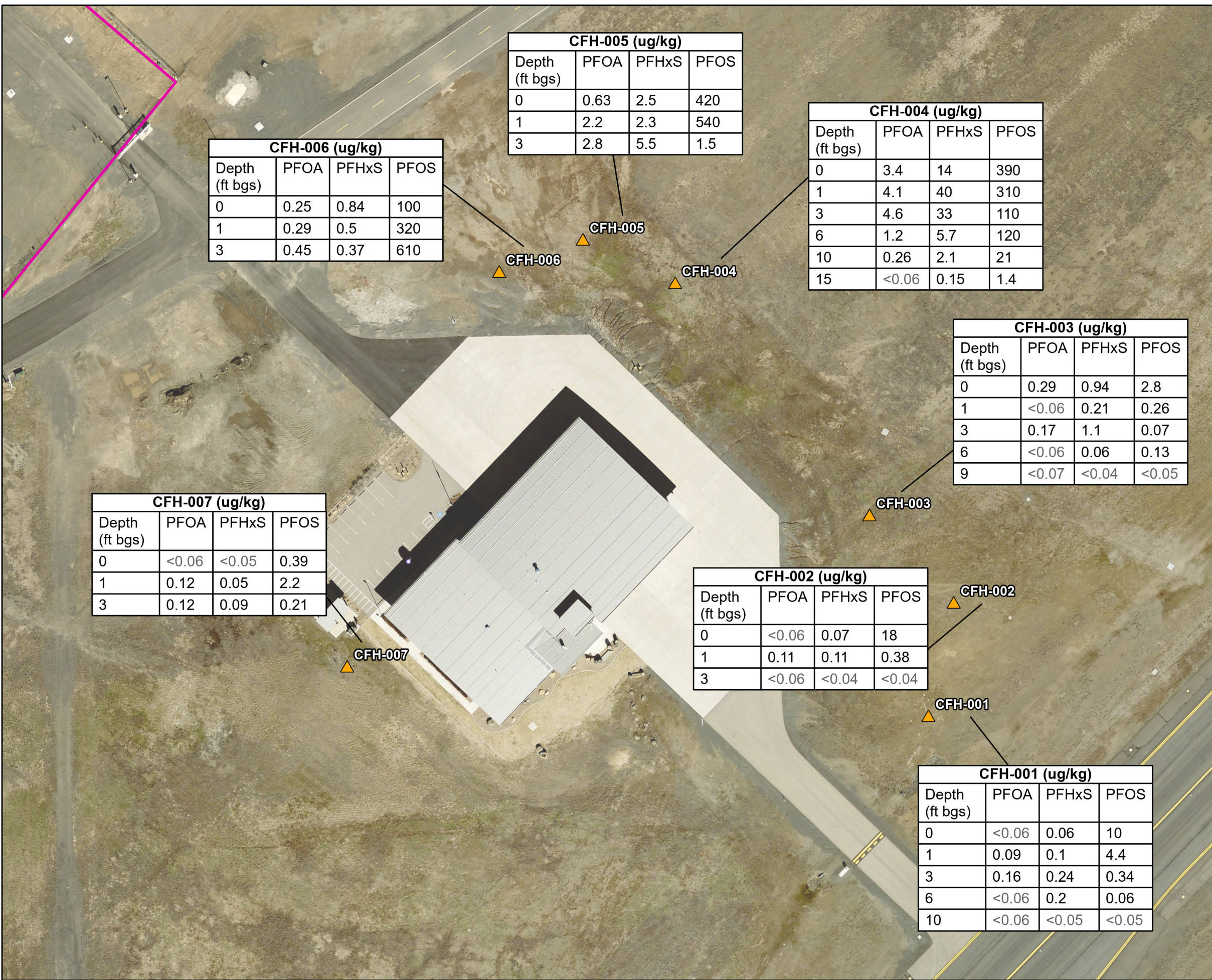


Groundwater Results: West Park Drive / Waste to Energy Facility Area

Initial PFAS Investigation
Spokane International Airport
Spokane, Washington

GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	IPIR_6_WPD	App'v'd By:	DR

FIGURE 6-10



CFH-006 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.25	0.84	100
1	0.29	0.5	320
3	0.45	0.37	610

CFH-005 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.63	2.5	420
1	2.2	2.3	540
3	2.8	5.5	1.5

CFH-004 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	3.4	14	390
1	4.1	40	310
3	4.6	33	110
6	1.2	5.7	120
10	0.26	2.1	21
15	<0.06	0.15	1.4

CFH-003 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.29	0.94	2.8
1	<0.06	0.21	0.26
3	0.17	1.1	0.07
6	<0.06	0.06	0.13
9	<0.07	<0.04	<0.05

CFH-007 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	<0.06	<0.05	0.39
1	0.12	0.05	2.2
3	0.12	0.09	0.21

CFH-002 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	<0.06	0.07	18
1	0.11	0.11	0.38
3	<0.06	<0.04	<0.04

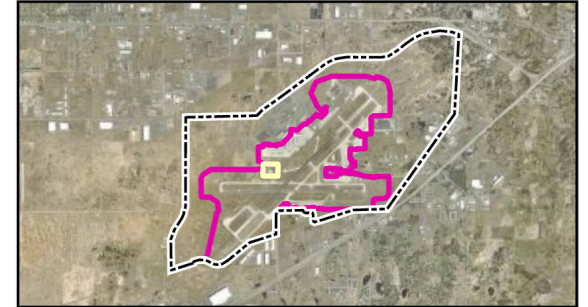
CFH-001 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	<0.06	0.06	10
1	0.09	0.1	4.4
3	0.16	0.24	0.34
6	<0.06	0.2	0.06
10	<0.06	<0.05	<0.05



LEGEND

- Primary Airport Area
- AOA Fenceline
- Soil Sample Locations
- Soil Boring



Notes

1. AOA - Air Operations Area
2. ug/kg = microgram per kilogram
3. ft bgs = feet below ground surface
4. Non-detects are represented by "<" followed by the method detection limit.
5. Aerial imagery provided by Esri ArcGIS Online, 2025.

Feet

 0 50 100

Projected Coordinate System
 Datum: NAD 83
 State Plane Washington North
 Units: Feet

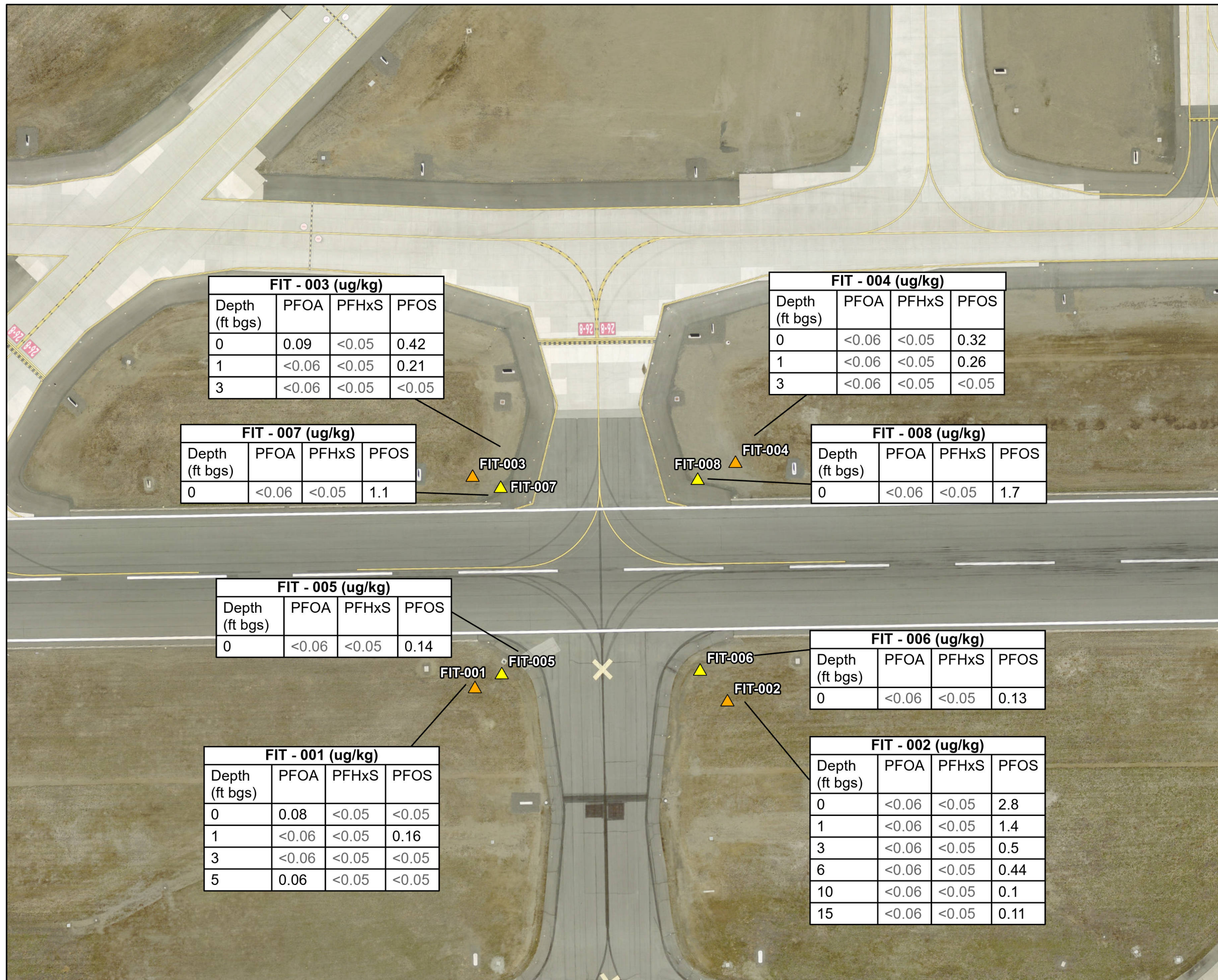


**Soil Results:
Current Fire House Area**

Initial PFAS Investigation Report
 Spokane International Airport
 Spokane, Washington

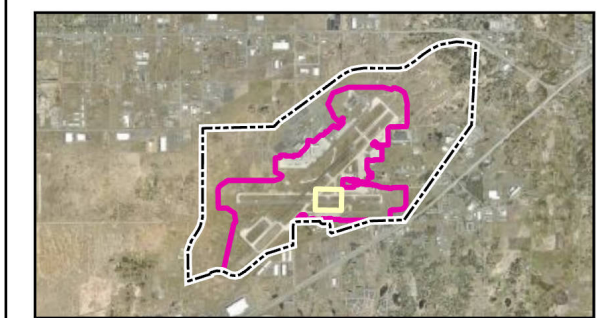
GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	SIAWA_CFH	App'v'd By:	DR

FIGURE 7-1



LEGEND

- Primary Airport Area
- AOA Fenceline
- Soil Sample Locations
 - ▲ Soil Boring
 - ▲ Hand Auger



Notes

1. AOA - Air Operations Area
2. ug/kg = microgram per kilogram
3. ft bgs = feet below ground surface
4. Non-detects are represented by "<" followed by the method detection limit.
5. Aerial imagery provided by Esri ArcGIS Online, 2025.

Projected Coordinate System
 Datum: NAD 83
 State Plane Washington North
 Units: Feet

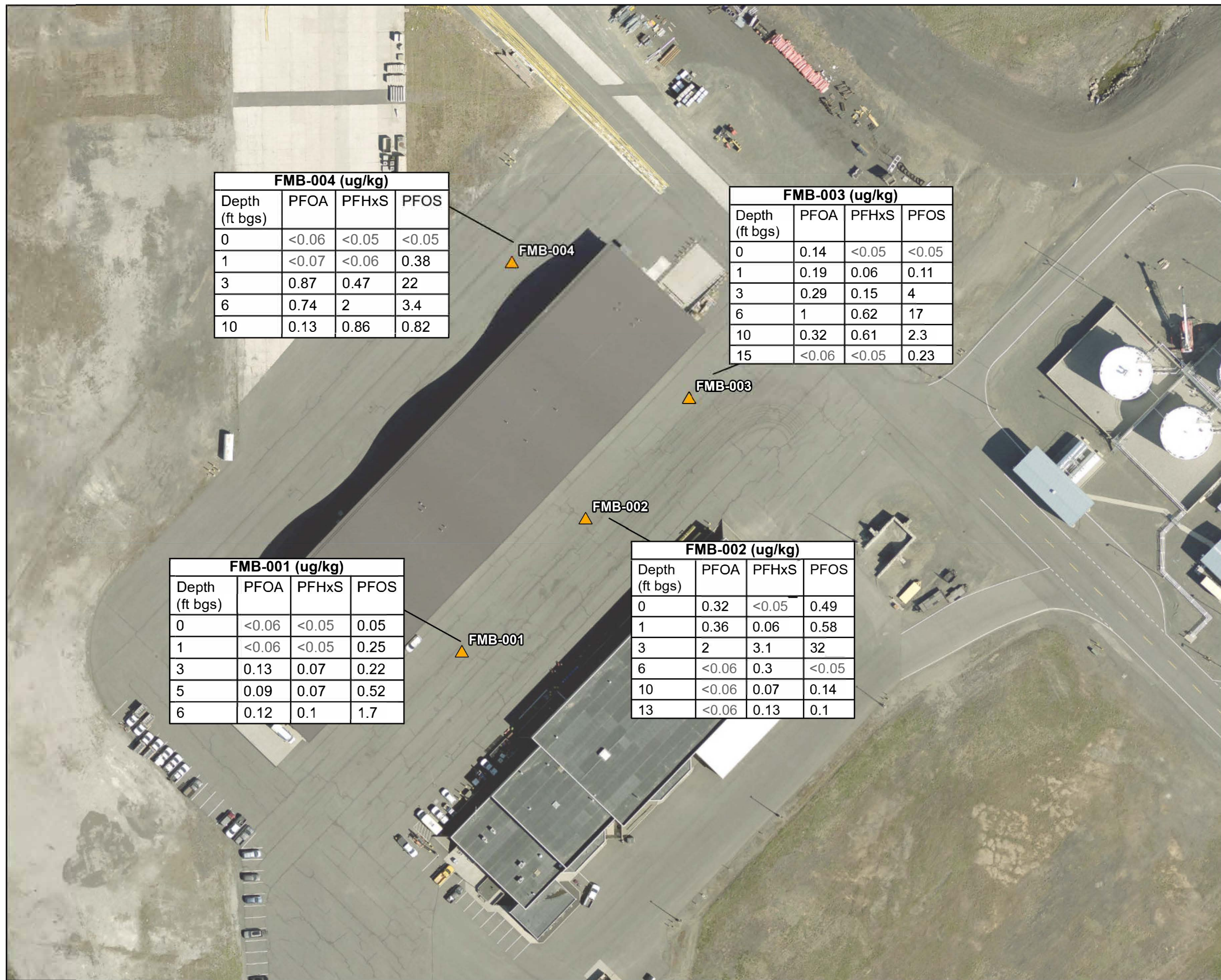


**Soil results:
FAA Inspection Area**

Initial PFAS Investigation Report
 Spokane International Airport
 Spokane, Washington

GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	SIAWA_FAA	App'd By:	DR

FIGURE 7-2



FMB-004 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	<0.06	<0.05	<0.05
1	<0.07	<0.06	0.38
3	0.87	0.47	22
6	0.74	2	3.4
10	0.13	0.86	0.82

FMB-003 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.14	<0.05	<0.05
1	0.19	0.06	0.11
3	0.29	0.15	4
6	1	0.62	17
10	0.32	0.61	2.3
15	<0.06	<0.05	0.23

FMB-001 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	<0.06	<0.05	0.05
1	<0.06	<0.05	0.25
3	0.13	0.07	0.22
5	0.09	0.07	0.52
6	0.12	0.1	1.7

FMB-002 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.32	<0.05	0.49
1	0.36	0.06	0.58
3	2	3.1	32
6	<0.06	0.3	<0.05
10	<0.06	0.07	0.14
13	<0.06	0.13	0.1



LEGEND

- Primary Airport Area
- AOA Fenceline
- Soil Sample Locations
 - Soil Boring



Notes

1. AOA - Air Operations Area
2. ug/kg = microgram per kilogram
3. ft bgs = feet below ground surface
4. Non-detects are represented by "<" followed by the method detection limit.
5. Aerial imagery provided by Esri ArcGIS Online, 2025.

Feet

 0 50 100
 Projected Coordinate System
 Datum: NAD 83
 State Plane Washington North
 Units: Feet

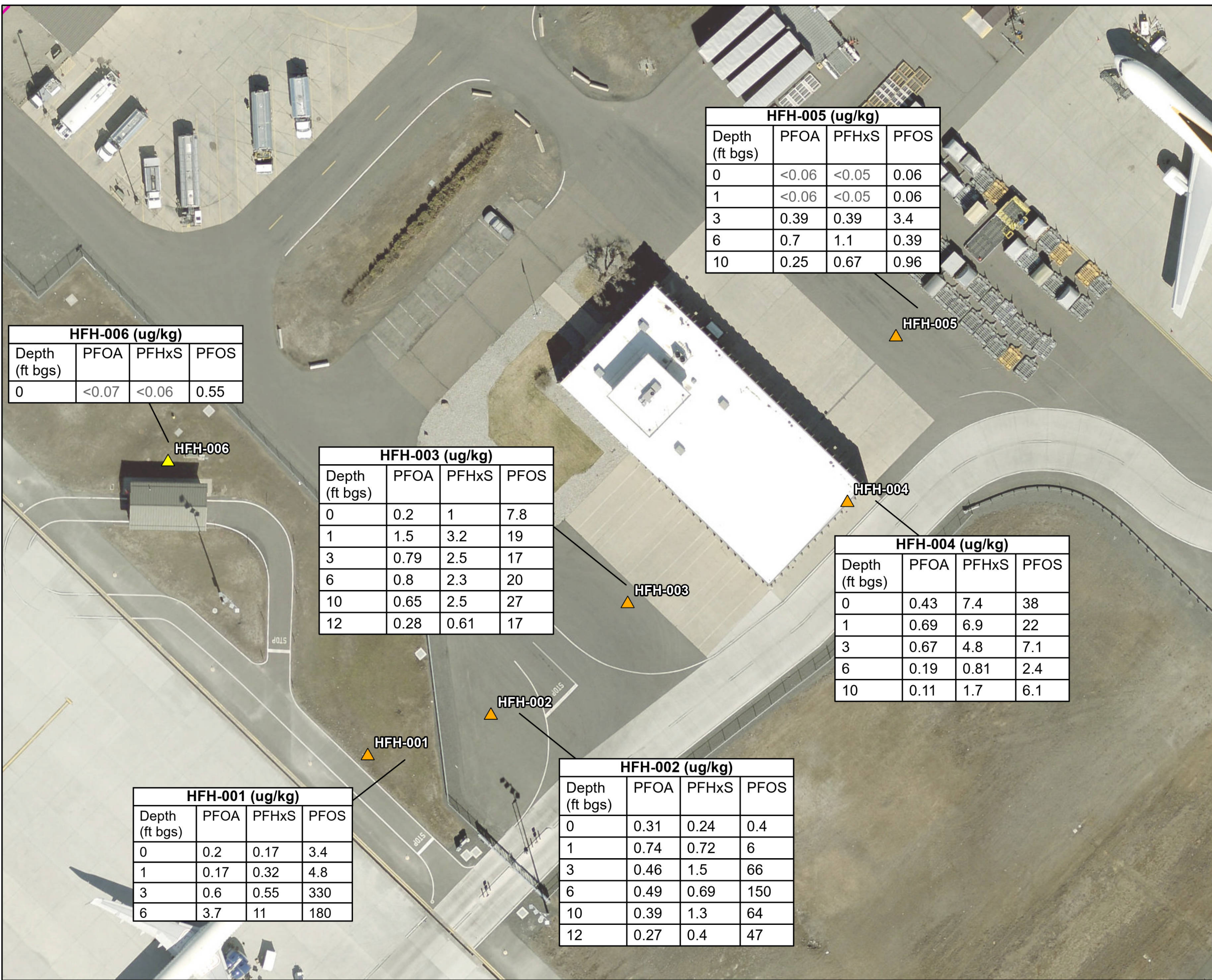


**Soil Results:
Field Maintenance Building Area**

Initial PFAS Investigation Report
 Spokane International Airport
 Spokane, Washington

GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	SIAWA_FMA	App'd By:	DR

FIGURE 7-3



HFH-005 (ug/kg)			
Depth (ft bgs)	PFOA	PFHxS	PFOS
0	<0.06	<0.05	0.06
1	<0.06	<0.05	0.06
3	0.39	0.39	3.4
6	0.7	1.1	0.39
10	0.25	0.67	0.96

HFH-006 (ug/kg)			
Depth (ft bgs)	PFOA	PFHxS	PFOS
0	<0.07	<0.06	0.55

HFH-003 (ug/kg)			
Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.2	1	7.8
1	1.5	3.2	19
3	0.79	2.5	17
6	0.8	2.3	20
10	0.65	2.5	27
12	0.28	0.61	17

HFH-004 (ug/kg)			
Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.43	7.4	38
1	0.69	6.9	22
3	0.67	4.8	7.1
6	0.19	0.81	2.4
10	0.11	1.7	6.1

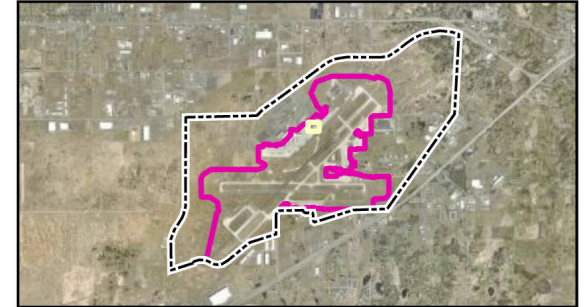
HFH-002 (ug/kg)			
Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.31	0.24	0.4
1	0.74	0.72	6
3	0.46	1.5	66
6	0.49	0.69	150
10	0.39	1.3	64
12	0.27	0.4	47

HFH-001 (ug/kg)			
Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.2	0.17	3.4
1	0.17	0.32	4.8
3	0.6	0.55	330
6	3.7	11	180



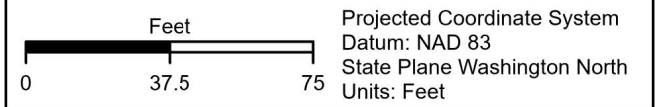
LEGEND

- Primary Airport Area
- AOA Fenceline
- Soil Sample Locations
 - Soil Boring
 - Hand Auger



Notes

1. AOA - Air Operations Area
2. ug/kg = microgram per kilogram
3. ft bgs = feet below ground surface
4. Non-detects are represented by "<" followed by the method detection limit.
5. Aerial imagery provided by Esri ArcGIS Online, 2025.

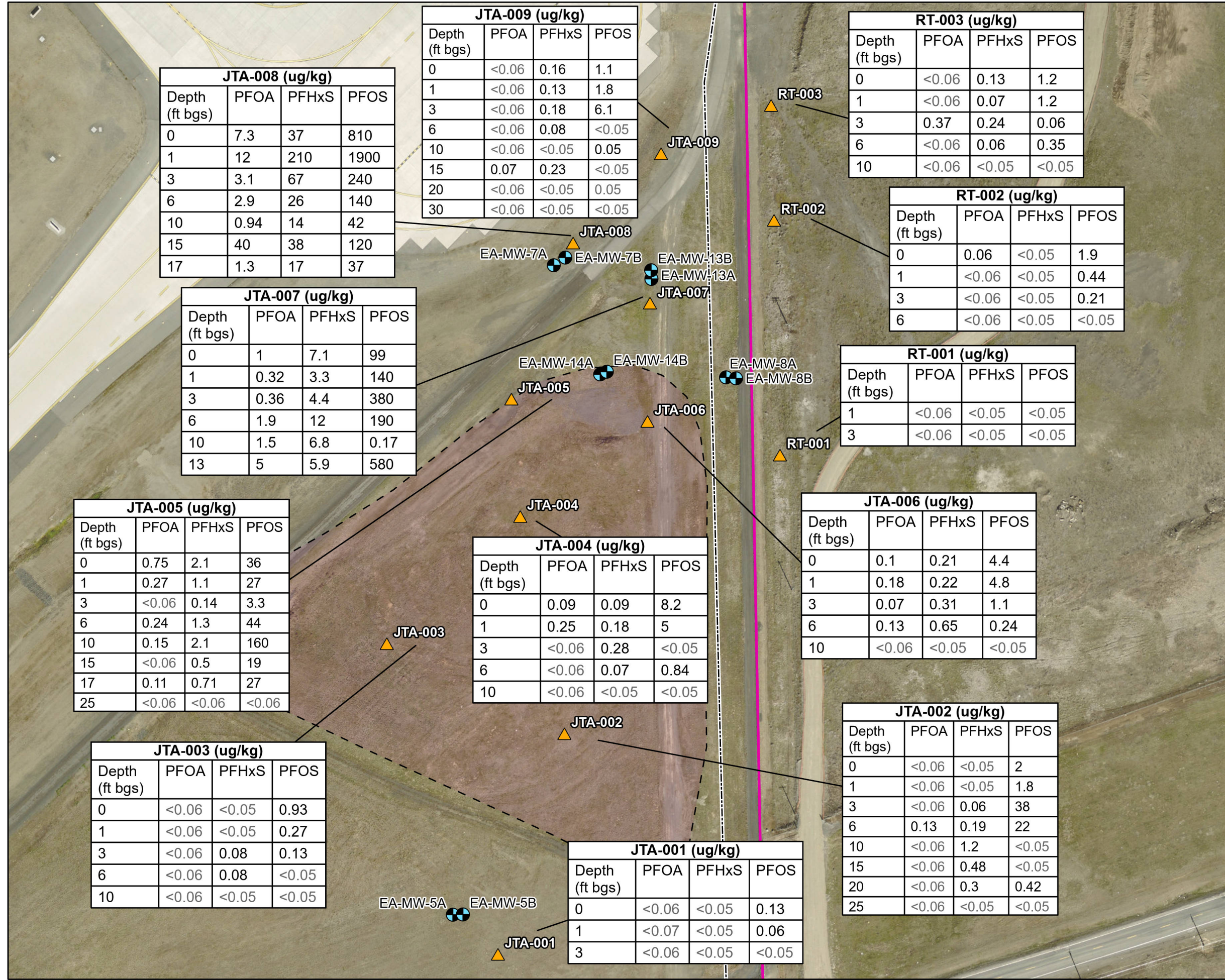


**Soil Results:
Historical Fire House Area**

Initial PFAS Investigation Report
Spokane International Airport
Spokane, Washington

GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	SIAWA_HFH	App'd By:	DR

FIGURE 7-4



JTA-008 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	7.3	37	810
1	12	210	1900
3	3.1	67	240
6	2.9	26	140
10	0.94	14	42
15	40	38	120
17	1.3	17	37

JTA-009 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	<0.06	0.16	1.1
1	<0.06	0.13	1.8
3	<0.06	0.18	6.1
6	<0.06	0.08	<0.05
10	<0.06	<0.05	0.05
15	0.07	0.23	<0.05
20	<0.06	<0.05	0.05
30	<0.06	<0.05	<0.05

RT-003 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	<0.06	0.13	1.2
1	<0.06	0.07	1.2
3	0.37	0.24	0.06
6	<0.06	0.06	0.35
10	<0.06	<0.05	<0.05

RT-002 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.06	<0.05	1.9
1	<0.06	<0.05	0.44
3	<0.06	<0.05	0.21
6	<0.06	<0.05	<0.05

JTA-007 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	1	7.1	99
1	0.32	3.3	140
3	0.36	4.4	380
6	1.9	12	190
10	1.5	6.8	0.17
13	5	5.9	580

RT-001 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
1	<0.06	<0.05	<0.05
3	<0.06	<0.05	<0.05

JTA-005 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.75	2.1	36
1	0.27	1.1	27
3	<0.06	0.14	3.3
6	0.24	1.3	44
10	0.15	2.1	160
15	<0.06	0.5	19
17	0.11	0.71	27
25	<0.06	<0.06	<0.06

JTA-006 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.1	0.21	4.4
1	0.18	0.22	4.8
3	0.07	0.31	1.1
6	0.13	0.65	0.24
10	<0.06	<0.05	<0.05

JTA-004 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.09	0.09	8.2
1	0.25	0.18	5
3	<0.06	0.28	<0.05
6	<0.06	0.07	0.84
10	<0.06	<0.05	<0.05

JTA-002 (ug/kg)

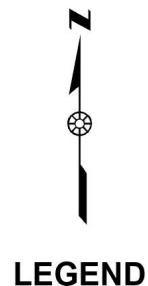
Depth (ft bgs)	PFOA	PFHxS	PFOS
0	<0.06	<0.05	2
1	<0.06	<0.05	1.8
3	<0.06	0.06	38
6	0.13	0.19	22
10	<0.06	1.2	<0.05
15	<0.06	0.48	<0.05
20	<0.06	0.3	0.42
25	<0.06	<0.05	<0.05

JTA-003 (ug/kg)

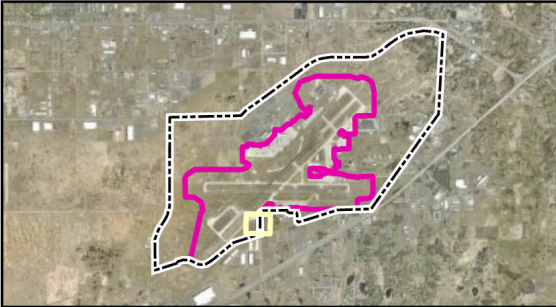
Depth (ft bgs)	PFOA	PFHxS	PFOS
0	<0.06	<0.05	0.93
1	<0.06	<0.05	0.27
3	<0.06	0.08	0.13
6	<0.06	0.08	<0.05
10	<0.06	<0.05	<0.05

JTA-001 (ug/kg)

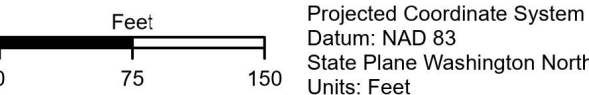
Depth (ft bgs)	PFOA	PFHxS	PFOS
0	<0.06	<0.05	0.13
1	<0.07	<0.05	0.06
3	<0.06	<0.05	<0.05



- LEGEND**
- Primary Airport Area
 - AOA Fenceline
 - Monitoring Well
 - Soil Boring



- Notes**
1. AOA - Air Operations Area
 2. ug/kg = microgram per kilogram
 3. ft bgs = feet below ground surface
 4. Non-detects are represented by "<" followed by the method detection limit.
 5. Aerial imagery provided by Esri ArcGIS Online, 2025.

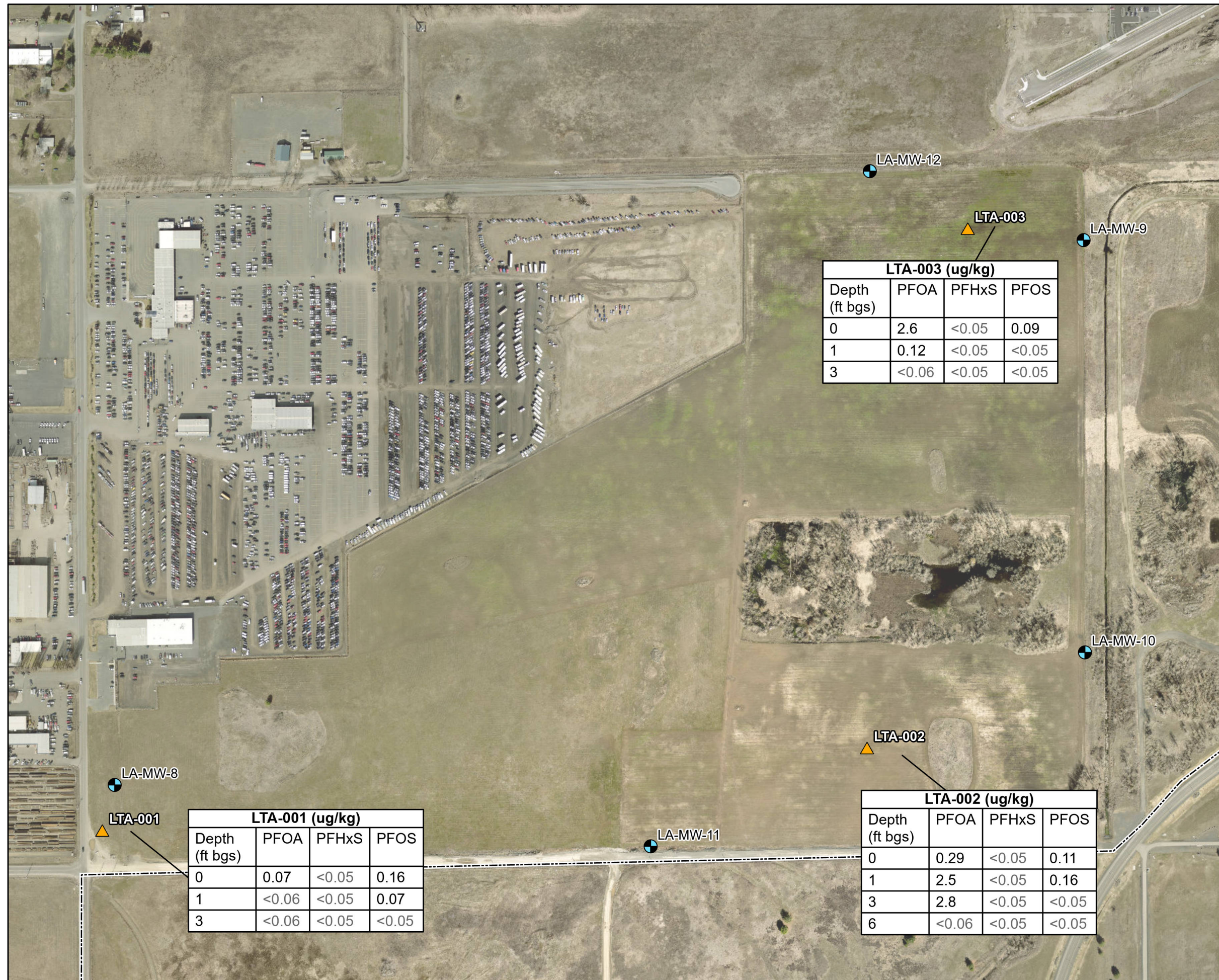


**Soil Results:
Joint Fire Training and Remtech Areas**

Initial PFAS Investigation Report
Spokane International Airport
Spokane, Washington

GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	SIAWA_JFTA	App'd By:	DR

FIGURE 7-5



LTA-001 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.07	<0.05	0.16
1	<0.06	<0.05	0.07
3	<0.06	<0.05	<0.05

LTA-003 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	2.6	<0.05	0.09
1	0.12	<0.05	<0.05
3	<0.06	<0.05	<0.05

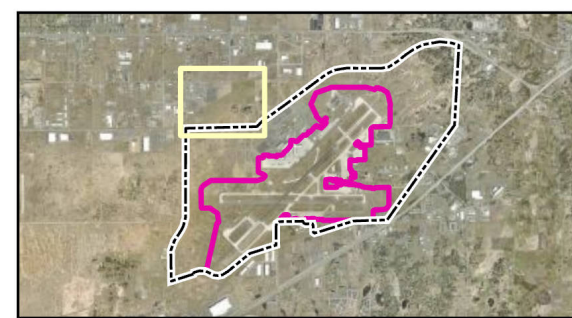
LTA-002 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	0.29	<0.05	0.11
1	2.5	<0.05	0.16
3	2.8	<0.05	<0.05
6	<0.06	<0.05	<0.05



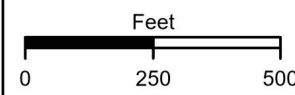
LEGEND

- Primary Airport Area
- AOA Fence Line
- Monitoring Well
- Soil Boring



Notes

1. AOA - Air Operations Area
2. ug/kg = microgram per kilogram
3. ft bgs = feet below ground surface
4. Non-detects are represented by "<" followed by the method detection limit.
5. Aerial imagery provided by Esri ArcGIS Online, 2025.



Projected Coordinate System
Datum: NAD 83
State Plane Washington North
Units: Feet

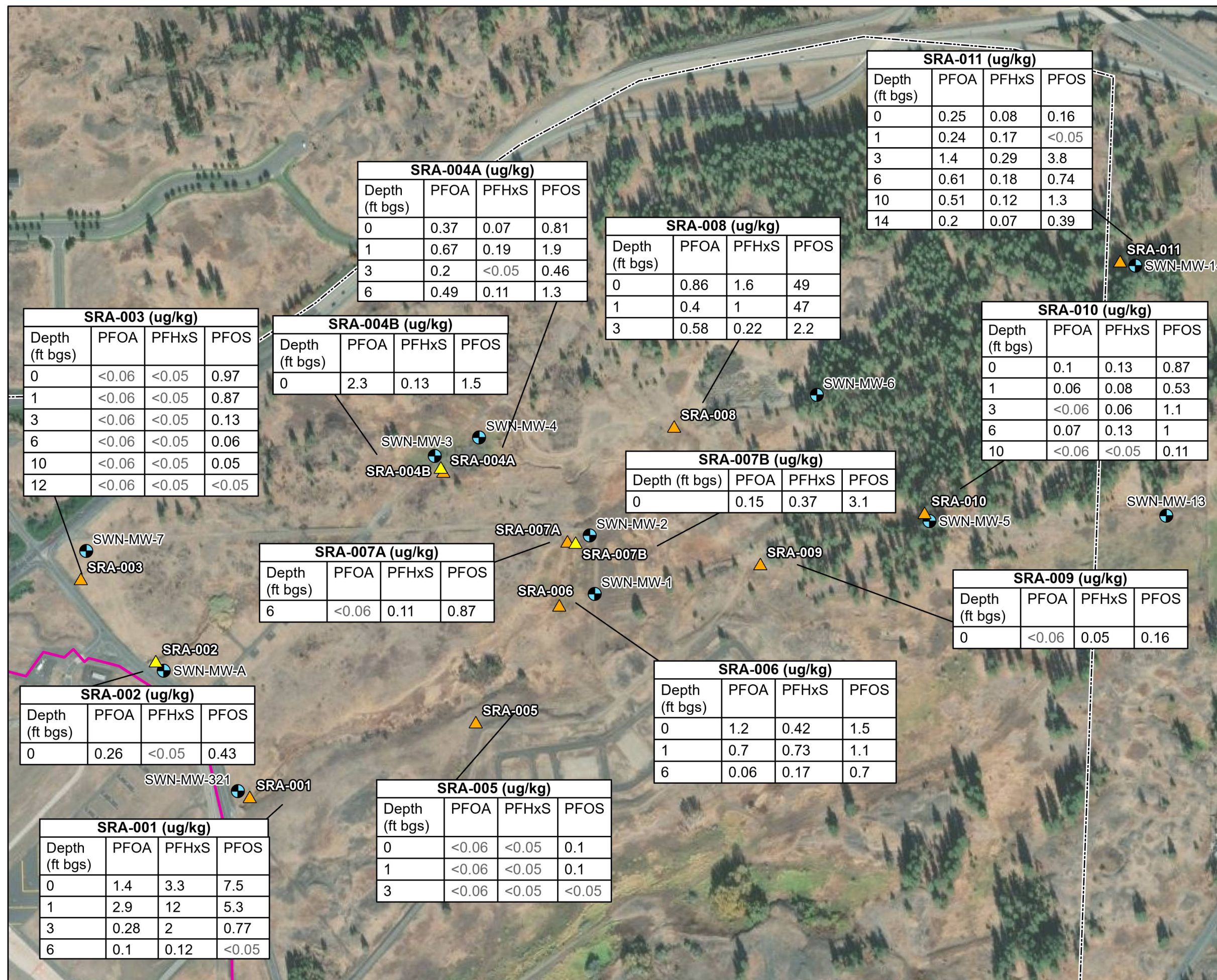


**Soil Results:
Land Treatment Area**

Initial PFAS Investigation Report
Spokane International Airport
Spokane, Washington

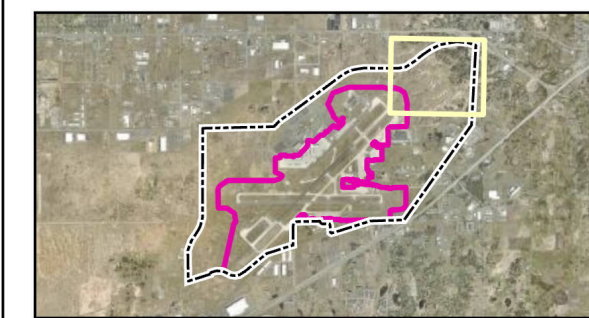
GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	SIAWA_LTA	App'd By:	DR

FIGURE 7-6



LEGEND

- Primary Airport Area
- AOA Fencline
- Monitoring Well
- Soil Sample Locations**
- Soil Boring
- Hand Auger



Notes

1. AOA - Air Operations Area
2. ug/kg = microgram per kilogram
3. ft bgs = feet below ground surface
4. Non-detects are represented by "<" followed by the method detection limit.
5. Aerial imagery provided by Esri ArcGIS Online, 2025.

Projected Coordinate System
 Datum: NAD 83
 State Plane Washington North
 Units: Feet

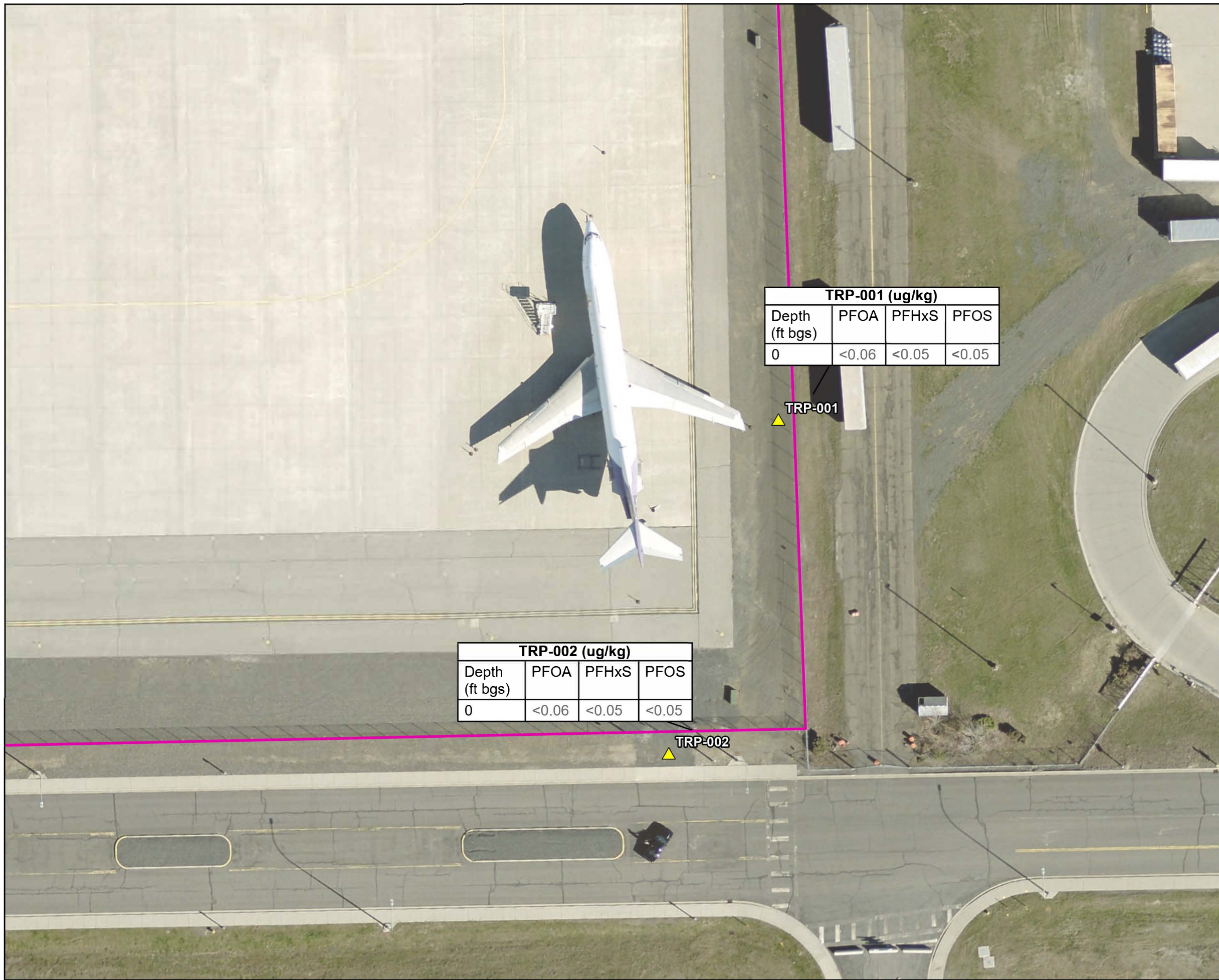


**Soil Results:
Stormwater Recovery Area**



Initial PFAS Investigation Report
 Spokane International Airport
 Spokane, Washington

GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	SIAWA_SRA	App'd By:	DR

FIGURE 7-7



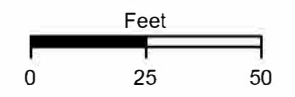
LEGEND

-  Primary Airport Area
-  AOA Fence Line
- Soil Sample Locations
 -  Hand Auger



Notes

1. AOA - Air Operations Area
2. ug/kg = microgram per kilogram
3. ft bgs = feet below ground surface
4. Non-detects are represented by "<" followed by the method detection limit.
5. Aerial imagery provided by Esri ArcGIS Online, 2025.



Projected Coordinate System
 Datum: NAD 83
 State Plane Washington North
 Units: Feet

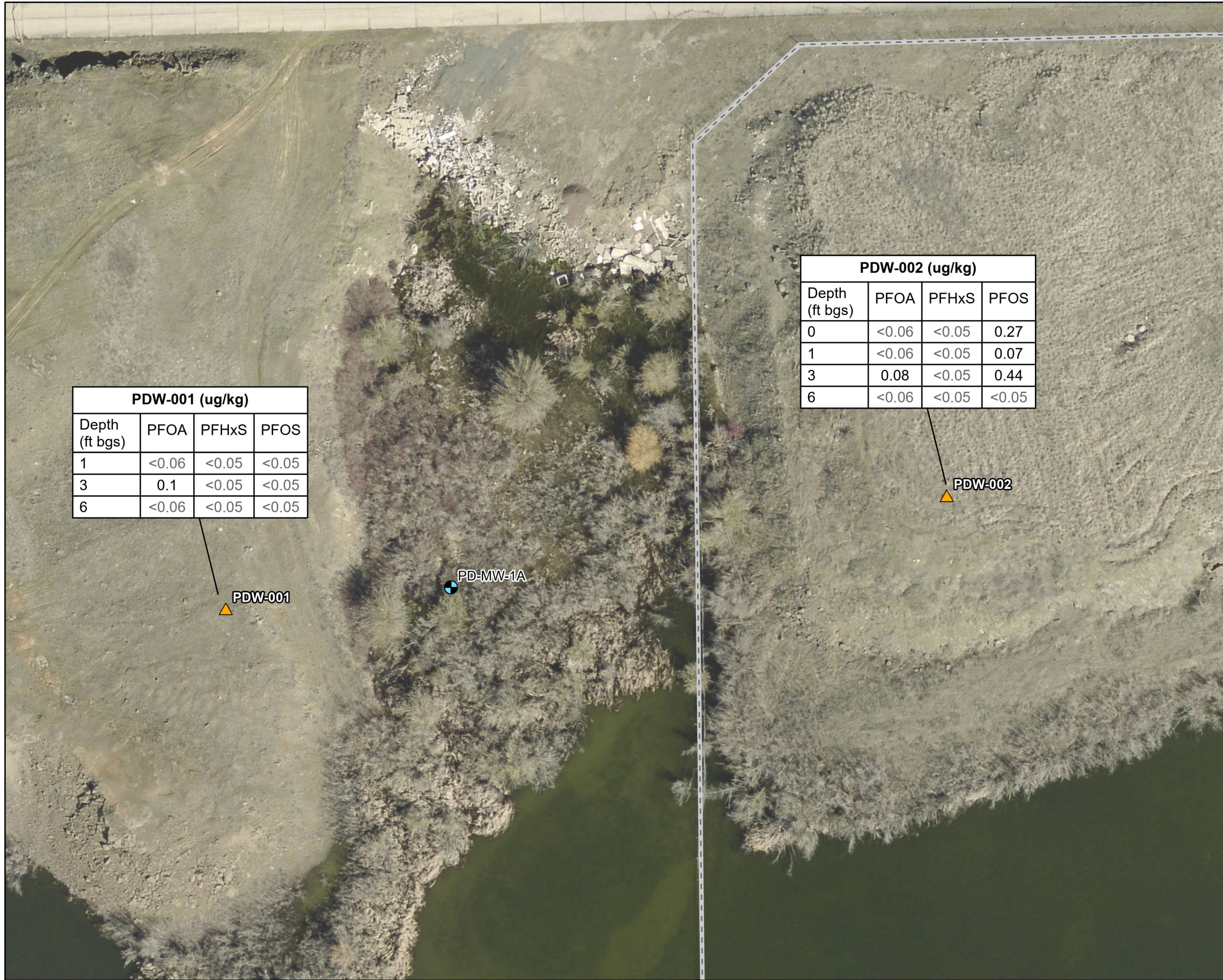


**Soil Results:
 Triangle Ramp Training Area**

Initial PFAS Investigation Report
 Spokane International Airport
 Spokane, Washington

GSI Job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	SIAWA_TRP	App'd By:	DR

FIGURE 7-8



PDW-001 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
1	<0.06	<0.05	<0.05
3	0.1	<0.05	<0.05
6	<0.06	<0.05	<0.05

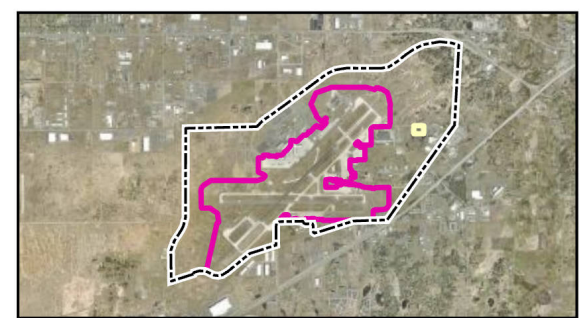
PDW-002 (ug/kg)

Depth (ft bgs)	PFOA	PFHxS	PFOS
0	<0.06	<0.05	0.27
1	<0.06	<0.05	0.07
3	0.08	<0.05	0.44
6	<0.06	<0.05	<0.05

N

LEGEND

- Primary Airport Area
- AOA Fenceline
- WtE Fenceline
- Monitoring Well
- Soil Sample Locations
- Soil Boring



- Notes**
1. AOA - Air Operations Area
 2. WtE - Waste to Energy
 3. ug/kg = microgram per kilogram
 4. ft bgs = feet below ground surface
 5. Non-detects are represented by "<" followed by the method detection limit.
 6. Aerial imagery provided by Esri ArcGIS Online, 2025.

Feet

0 25 50

Projected Coordinate System
Datum: NAD 83
State Plane Washington North
Units: Feet



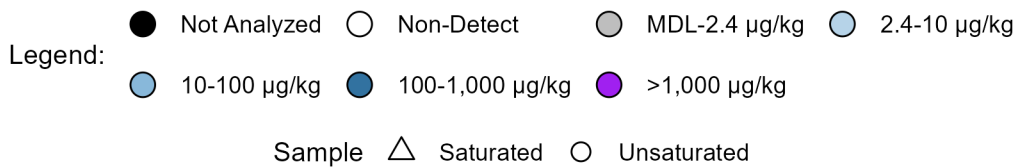
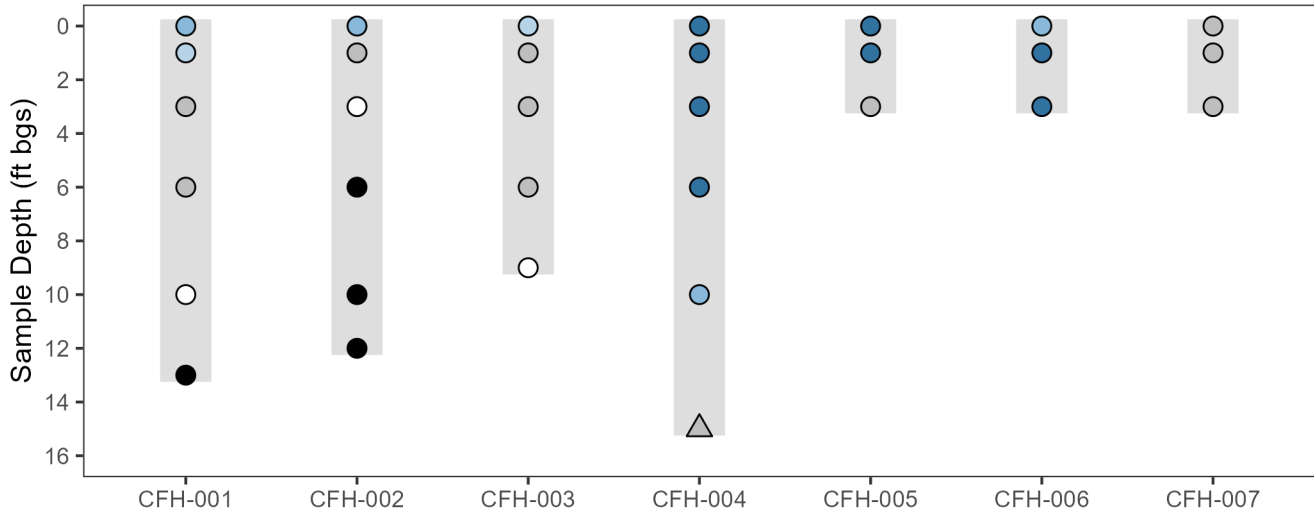
Soil Results:
West Park Drive / Waste to Energy Area

Initial PFAS Investigation Report
Spokane International Airport
Spokane, Washington

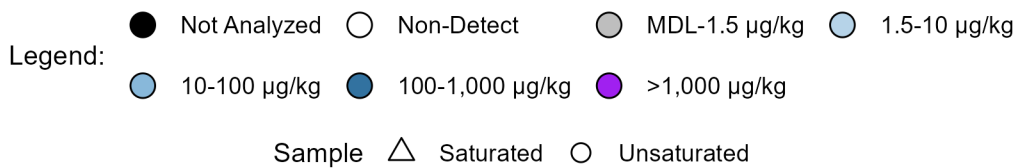
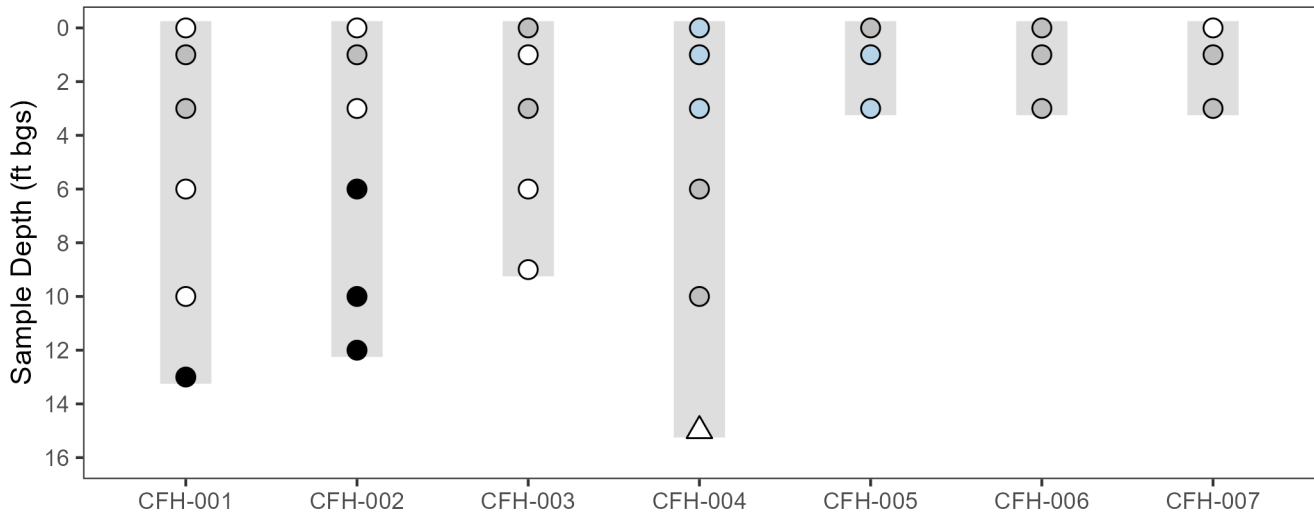
GSI job No.	6892	Drawn By:	EKS
Issued:	13-Mar-2026	Chk'd By:	KW
Map ID:	SIAWA_WPD	App'd By:	DR

FIGURE 7-9

PFOS



PFOA



Notes: MDL = method detection limit

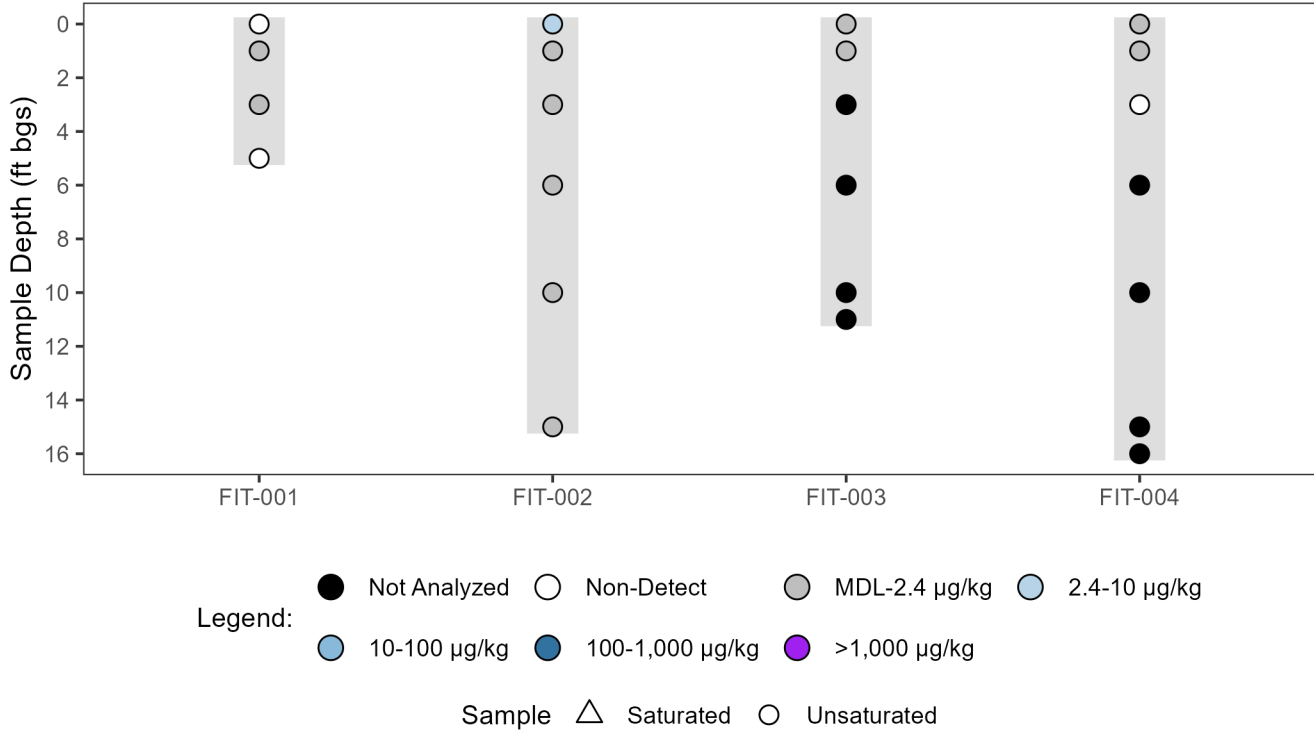


**Figure 7-10. Concentrations of PFOA and PFOS:
Current Fire House Area**

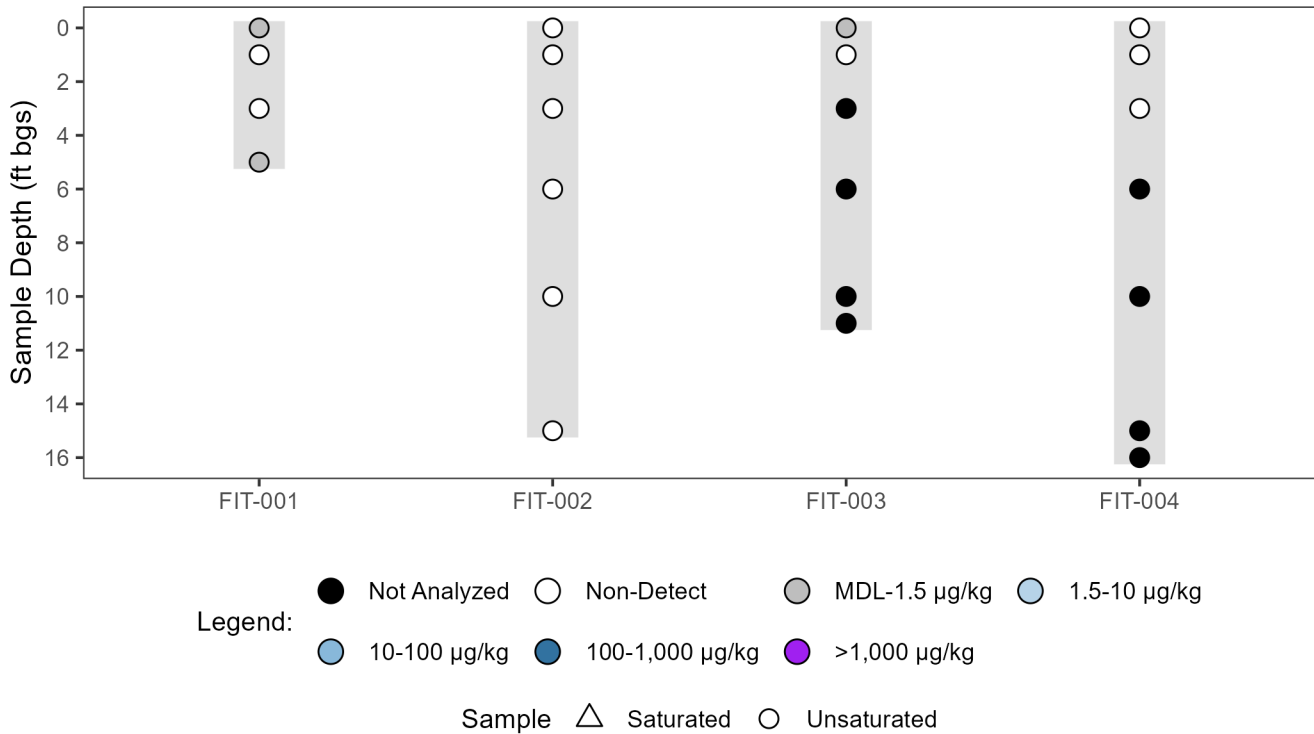
Initial PFAS Investigation
Spokane International Airport
Spokane, Washington

GSI Job No.: 6892
Issued: 13 March 2026

PFOS



PFOA



Notes: MDL = method detection limit

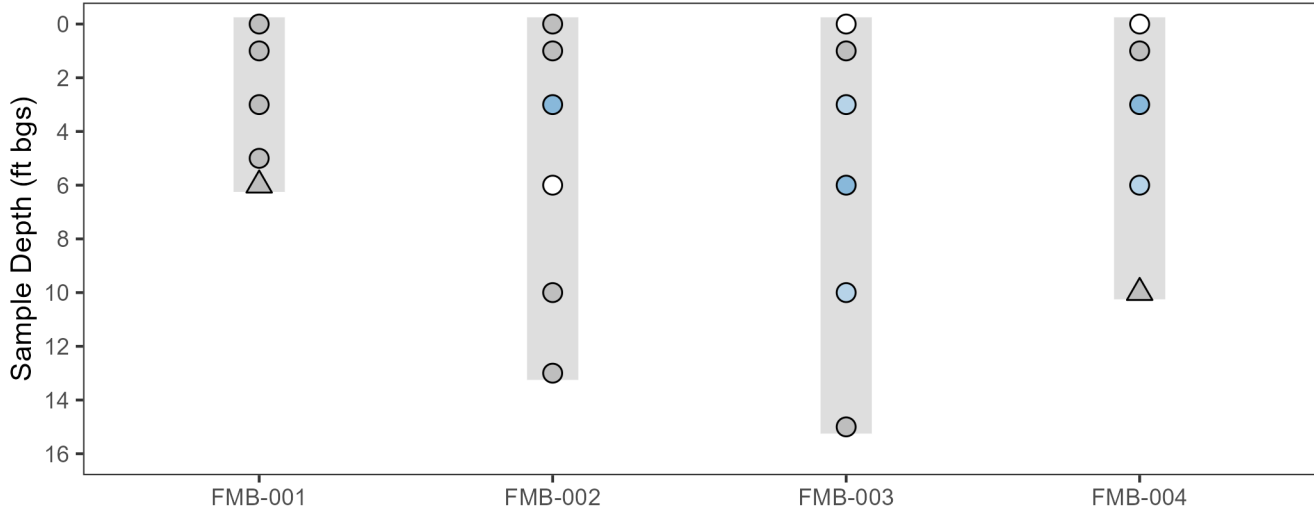
**Figure 7-11. Concentrations of PFOA and PFOS:
FAA Inspection Testing Area**

GSI Job No.: 6892
Issued: 13 March 2026



Initial PFAS Investigation
Spokane International Airport
Spokane, Washington

PFOS

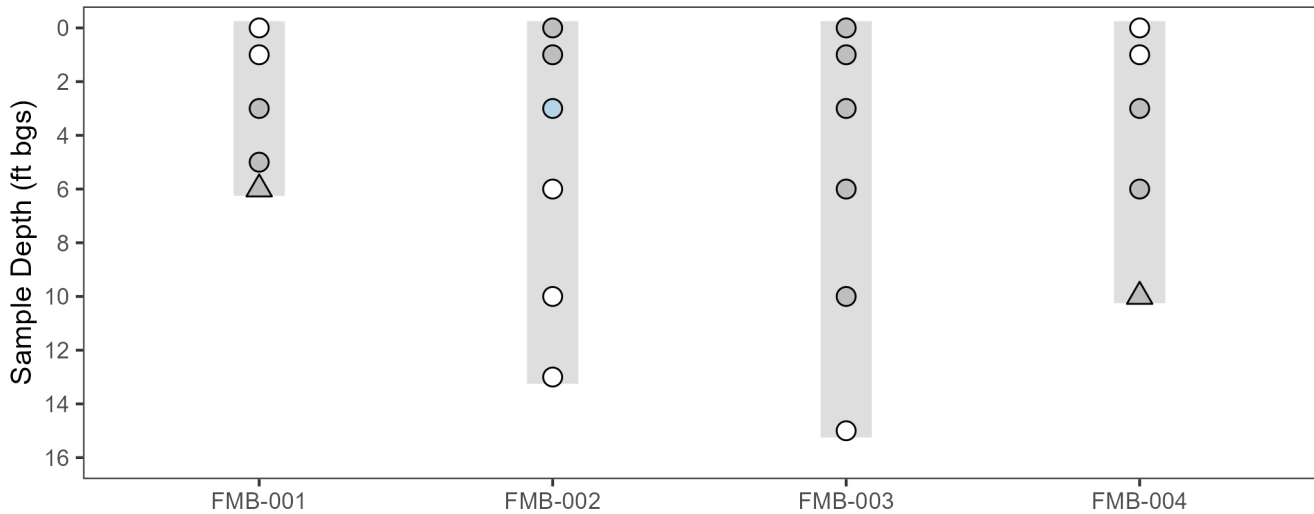


Legend:

- Not Analyzed
- Non-Detect
- MDL-2.4 µg/kg
- 2.4-10 µg/kg
- 10-100 µg/kg
- 100-1,000 µg/kg
- >1,000 µg/kg

Sample △ Saturated ○ Unsat

PFOA



Legend:

- Not Analyzed
- Non-Detect
- MDL-1.5 µg/kg
- 1.5-10 µg/kg
- 10-100 µg/kg
- 100-1,000 µg/kg
- >1,000 µg/kg

Sample △ Saturated ○ Unsat

Notes: MDL = method detection limit

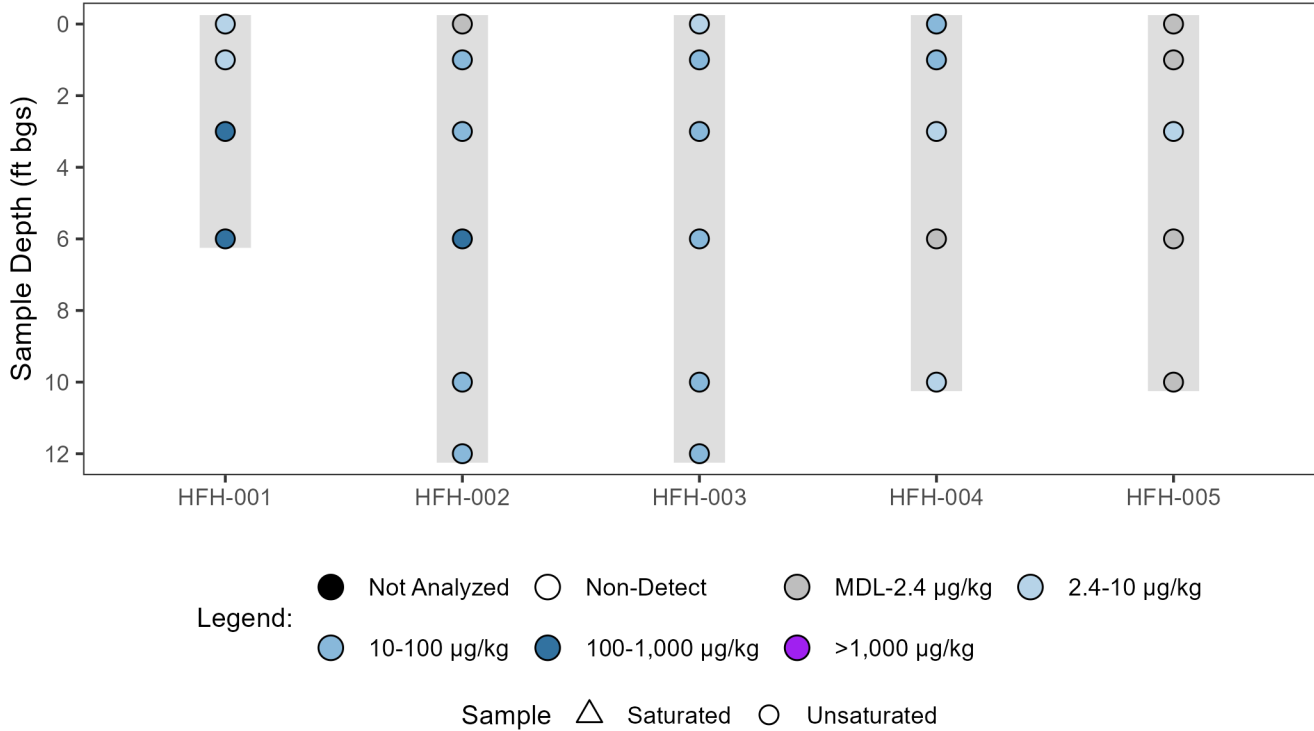


**Figure 7-12. Concentrations of PFOA and PFOS:
Field Maintenance Building Area**

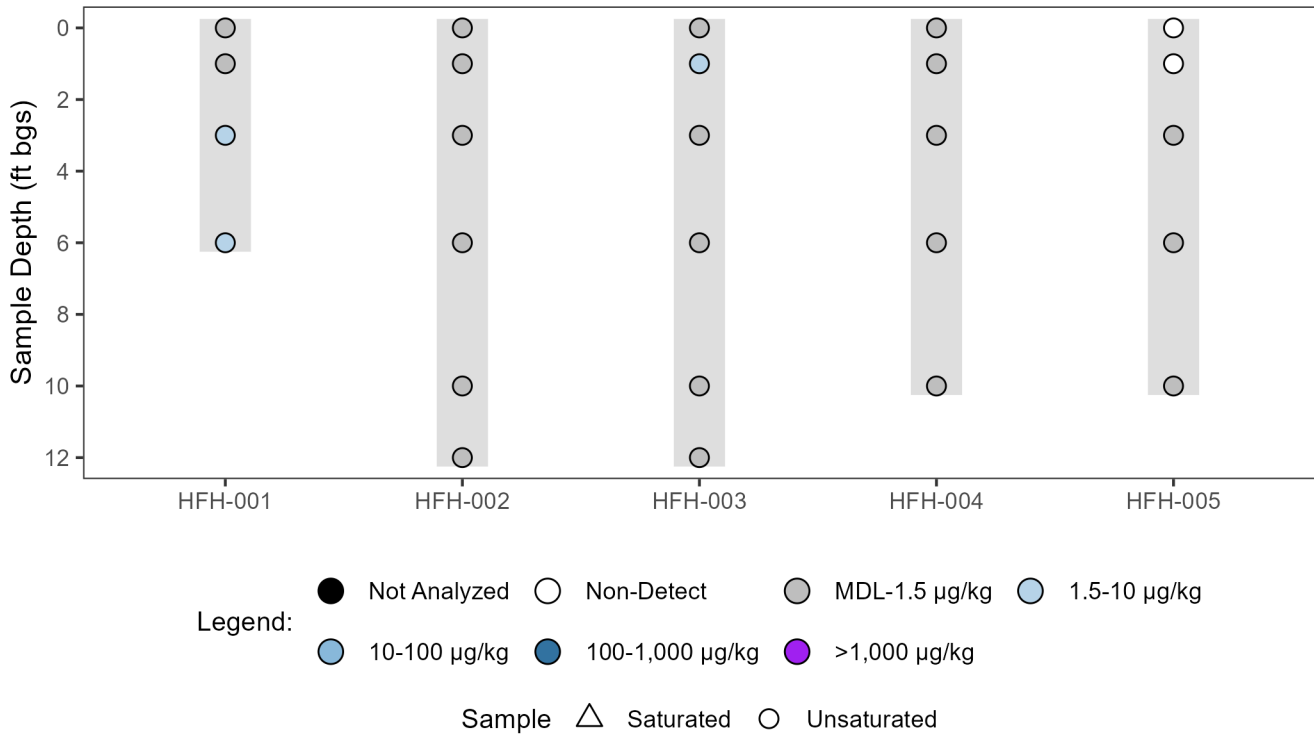
Initial PFAS Investigation
Spokane International Airport
Spokane, Washington

GSI Job No.: 6892
Issued: 13 March 2026

PFOS



PFOA



Notes: MDL = method detection limit

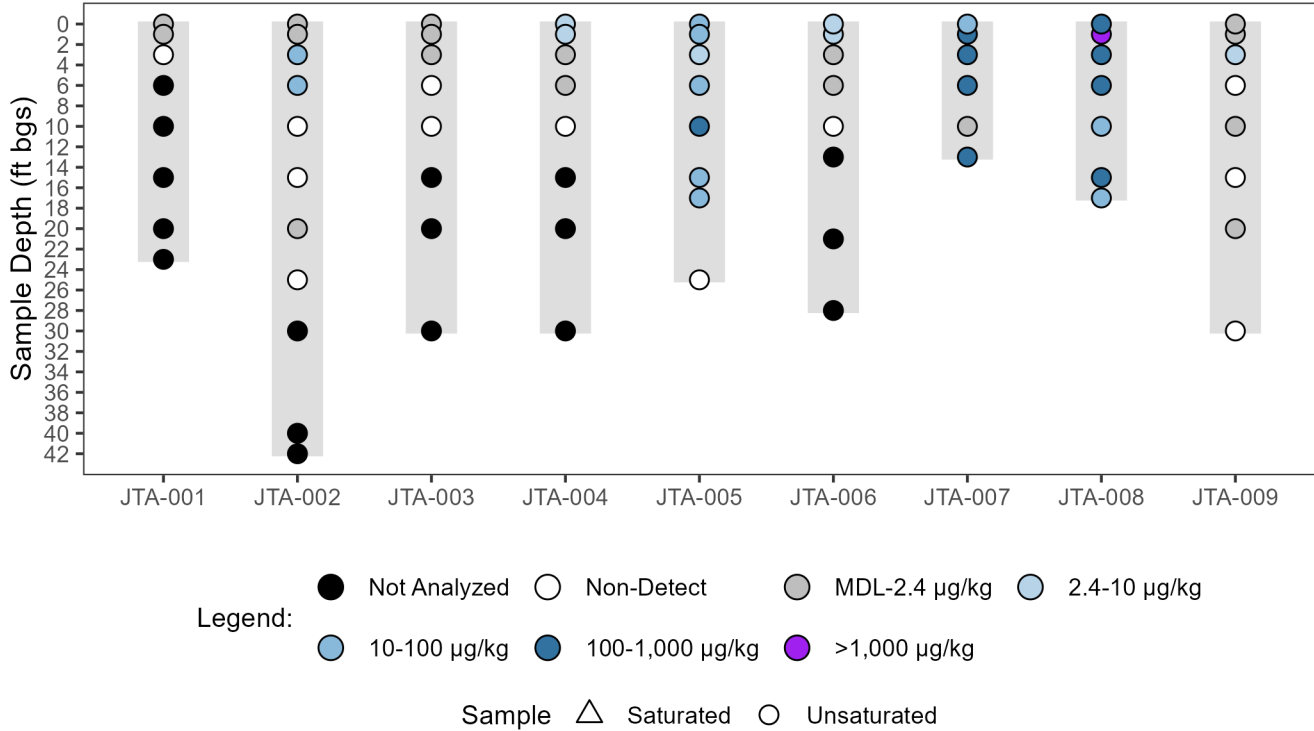


**Figure 7-13. Concentrations of PFOA and PFOS:
Historical Fire House Area**

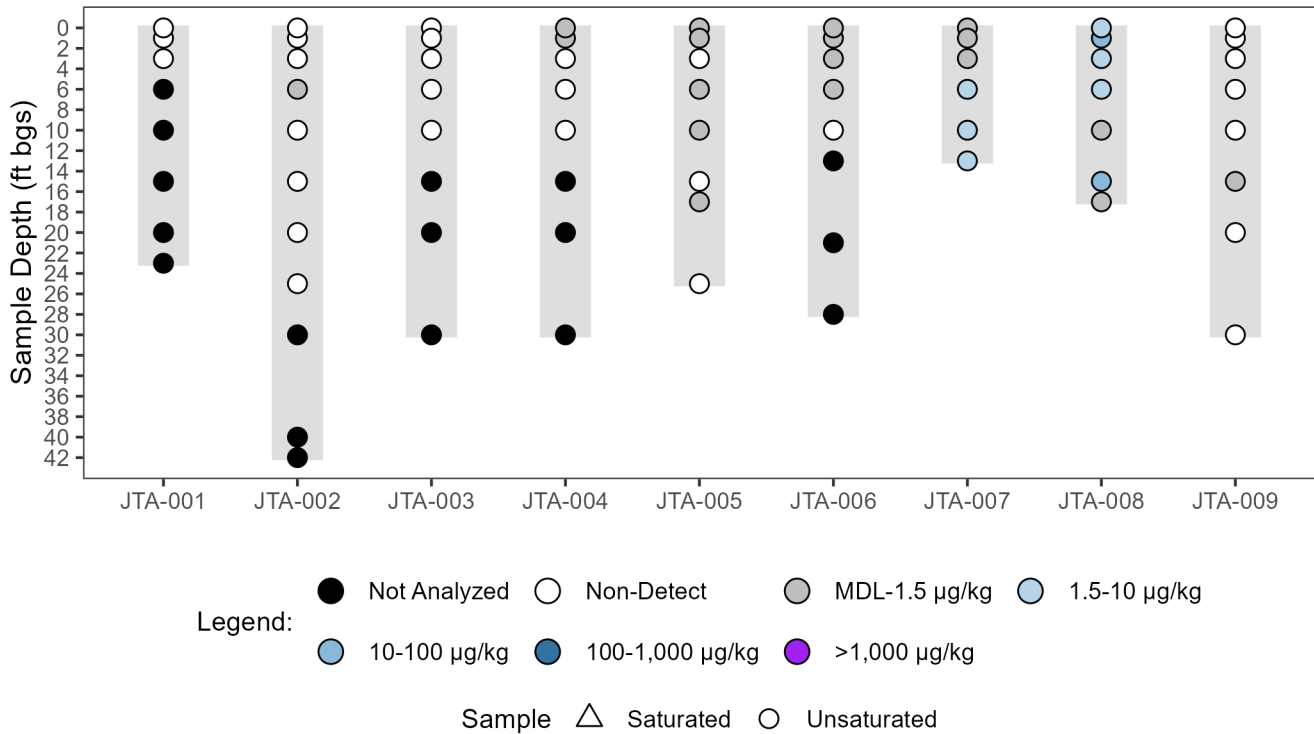
Initial PFAS Investigation
Spokane International Airport
Spokane, Washington

GSI Job No.: 6892
Issued: 13 March 2026

PFOS



PFOA



Notes: MDL = method detection limit

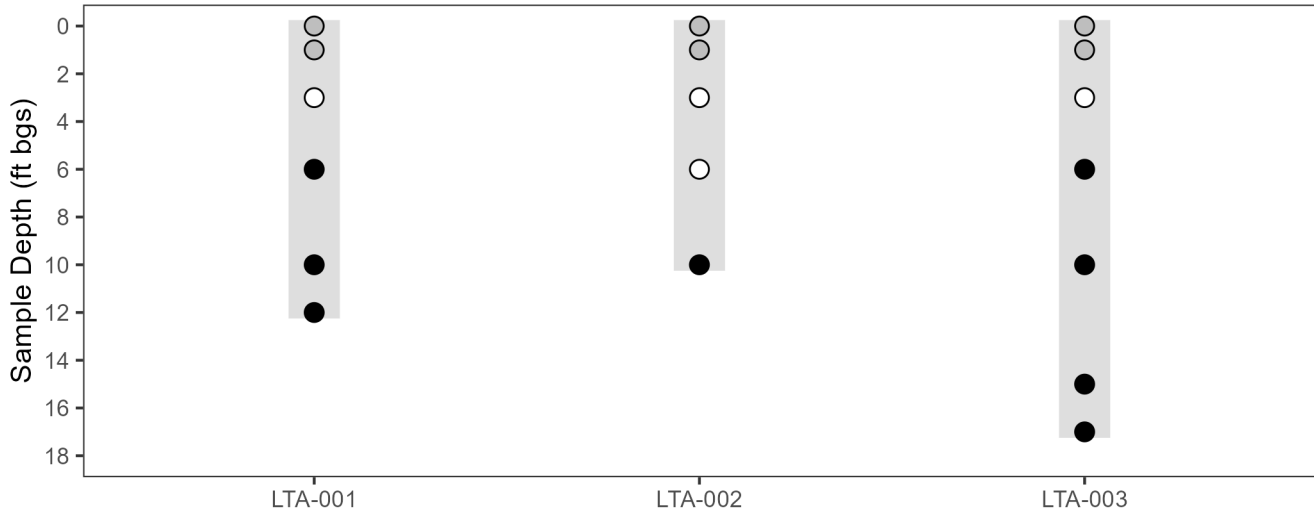


**Figure 7-14. Concentrations of PFOA and PFOS:
Joint Fire Training Area**

GSI Job No.: 6892
Issued: 13 March 2026

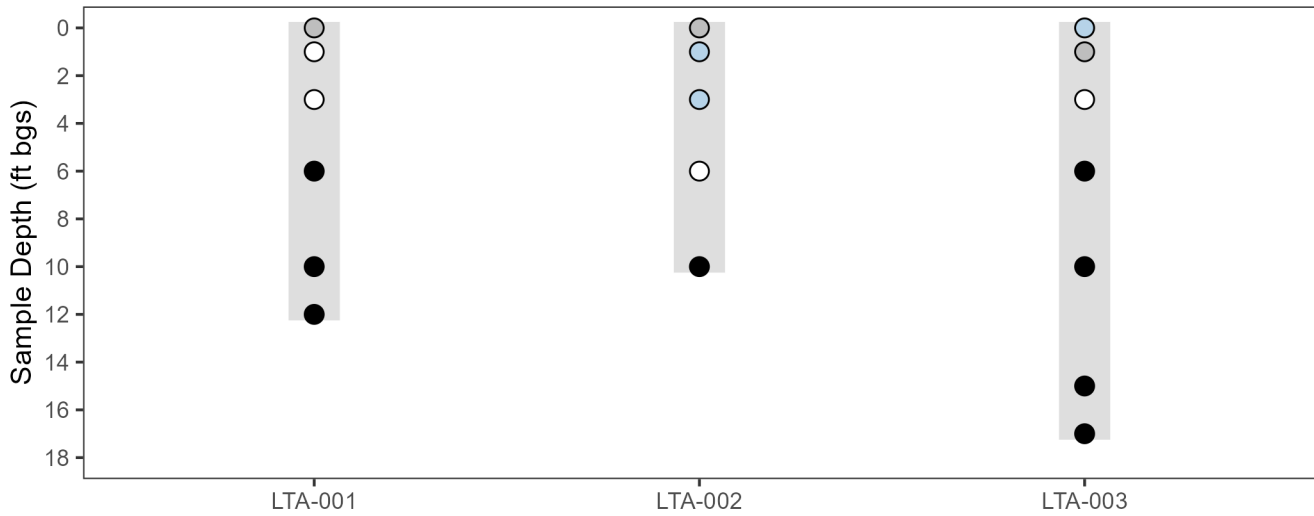
Initial PFAS Investigation
Spokane International Airport
Spokane, Washington

PFOS



- Legend:
- Not Analyzed
 - Non-Detect
 - MDL-2.4 µg/kg
 - 2.4-10 µg/kg
 - 10-100 µg/kg
 - 100-1,000 µg/kg
 - >1,000 µg/kg
- Sample △ Saturated ○ Unsaturated

PFOA



- Legend:
- Not Analyzed
 - Non-Detect
 - MDL-1.5 µg/kg
 - 1.5-10 µg/kg
 - 10-100 µg/kg
 - 100-1,000 µg/kg
 - >1,000 µg/kg
- Sample △ Saturated ○ Unsaturated

Notes: MDL = method detection limit

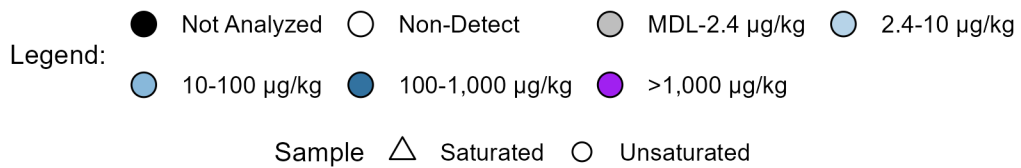
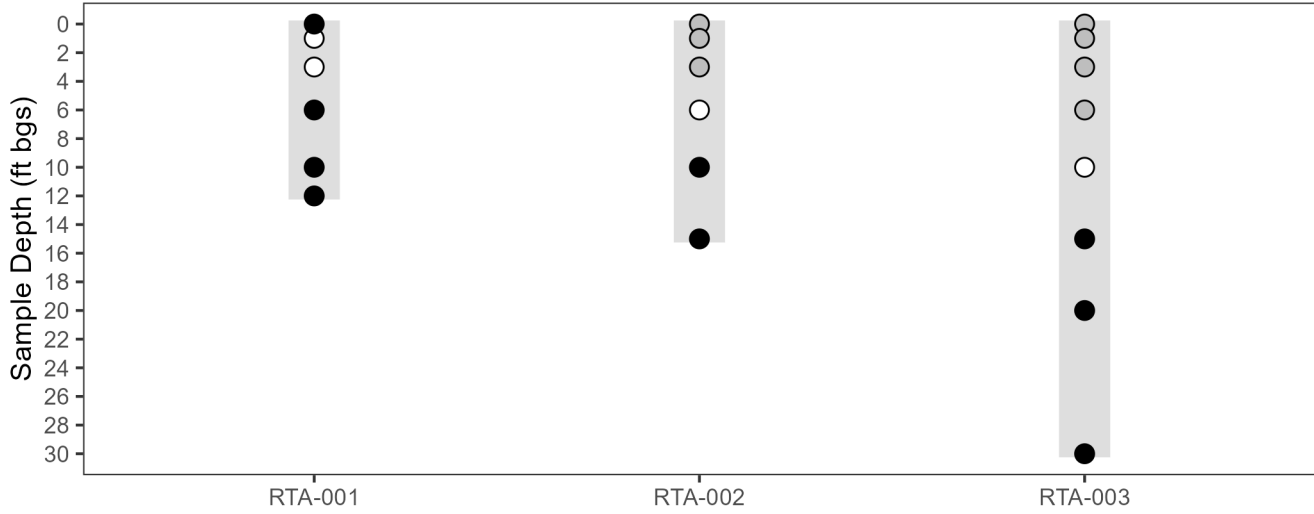


**Figure 7-15. Concentrations of PFOA and PFOS:
Land Treatment Area**

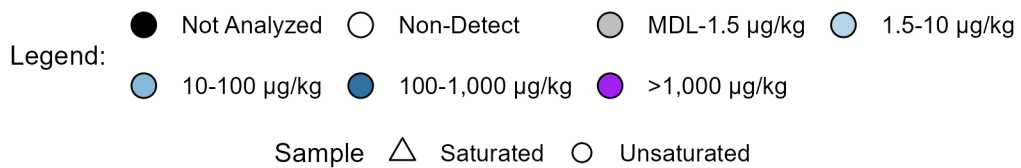
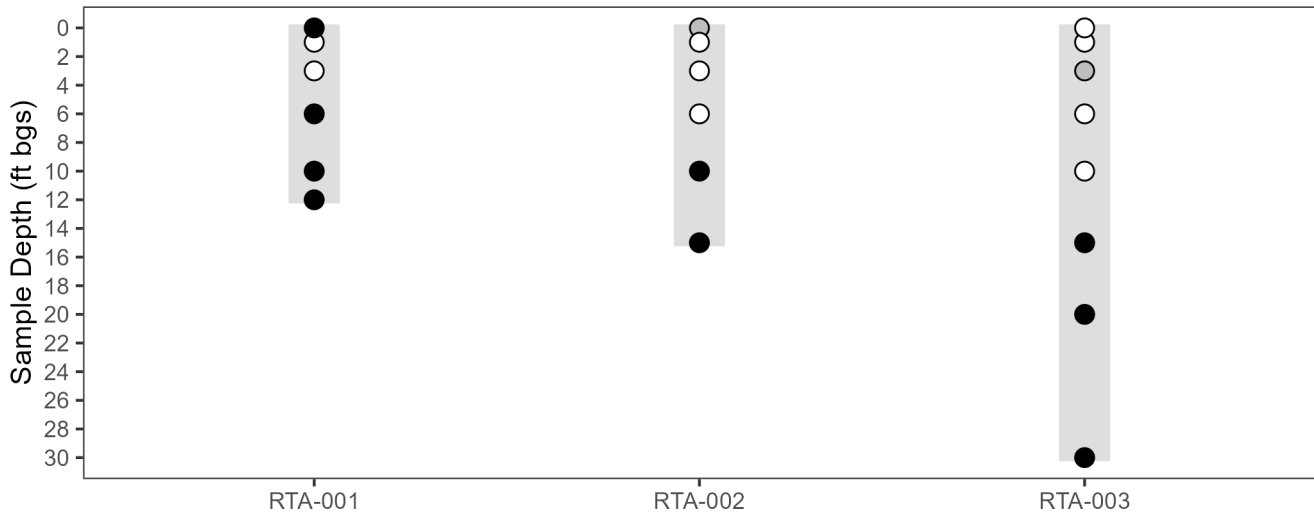
GSI Job No.: 6892
Issued: 13 March 2026

Initial PFAS Investigation
Spokane International Airport
Spokane, Washington

PFOS



PFOA



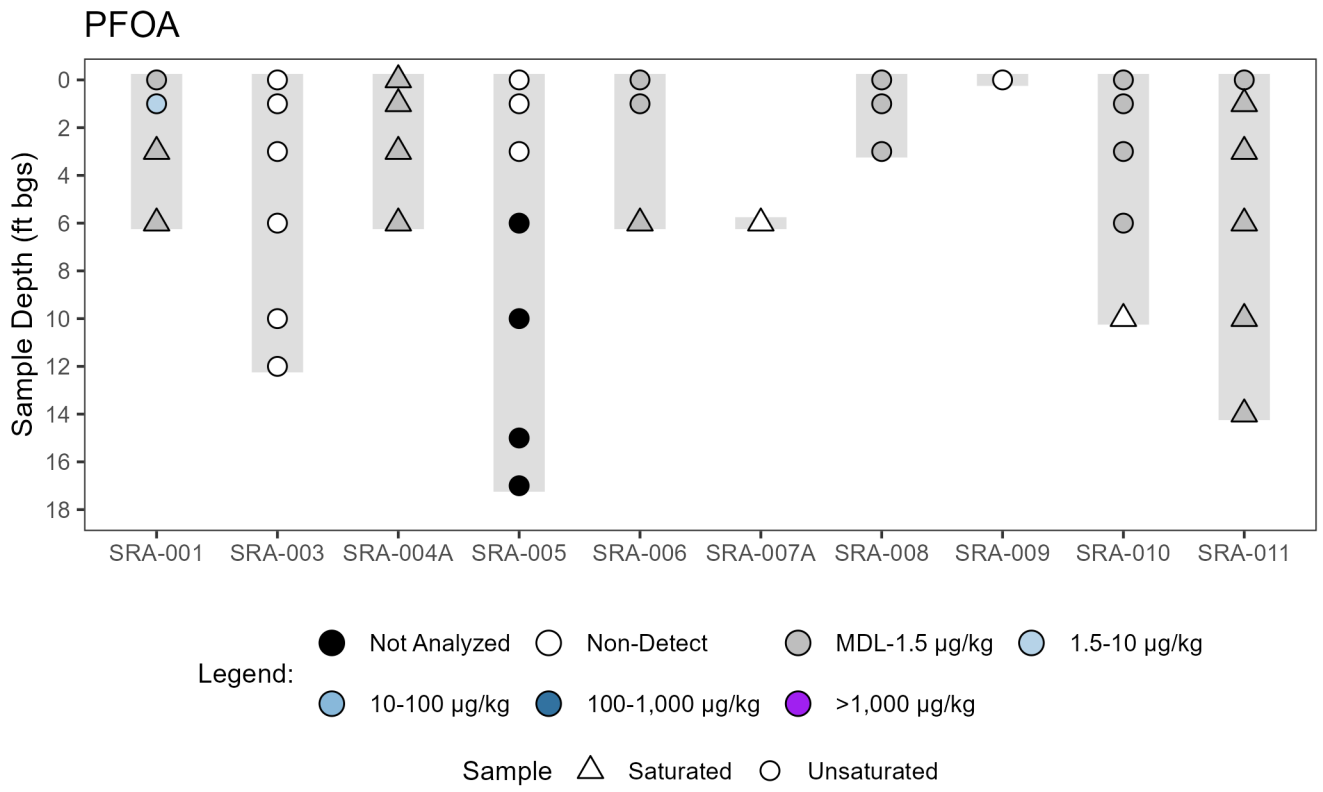
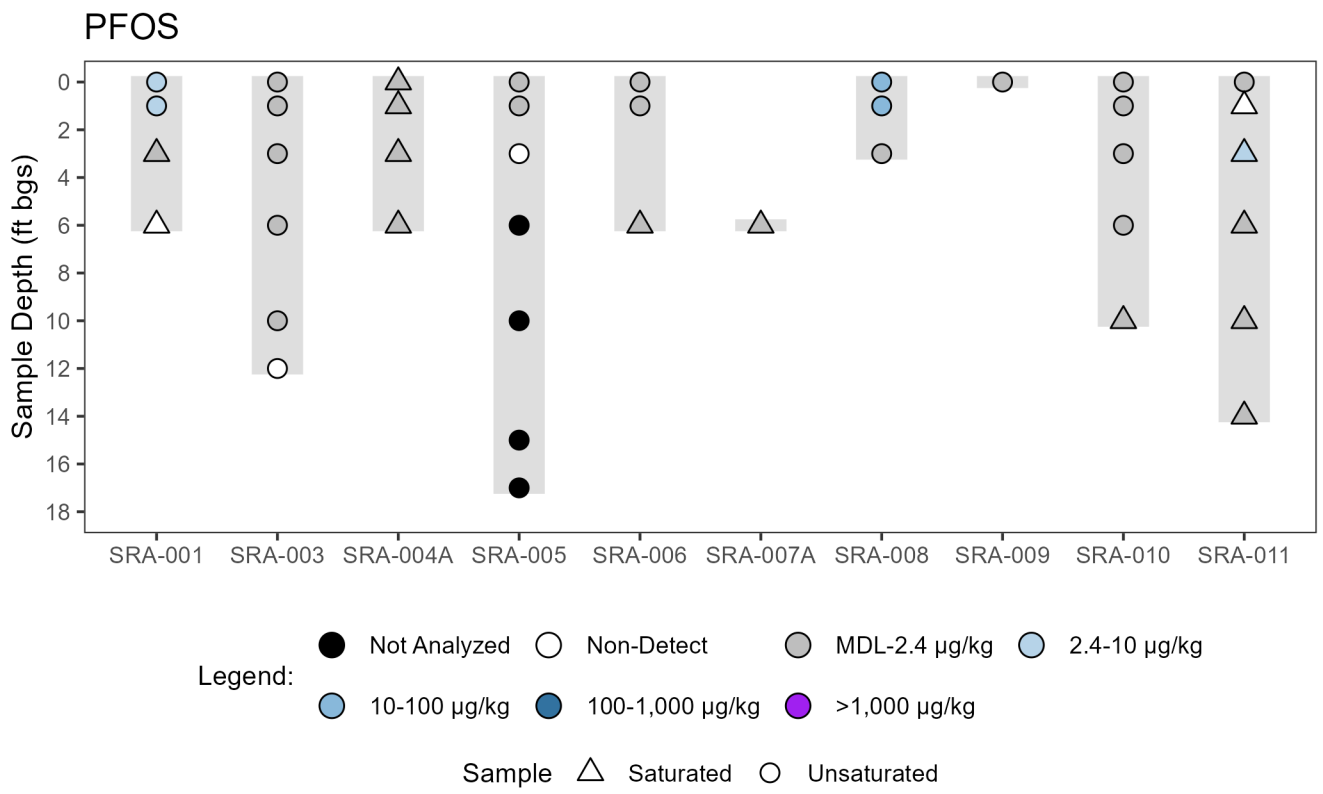
Notes: MDL = method detection limit



**Figure 7-16. Concentrations of PFOA and PFOS:
Remtech Area**

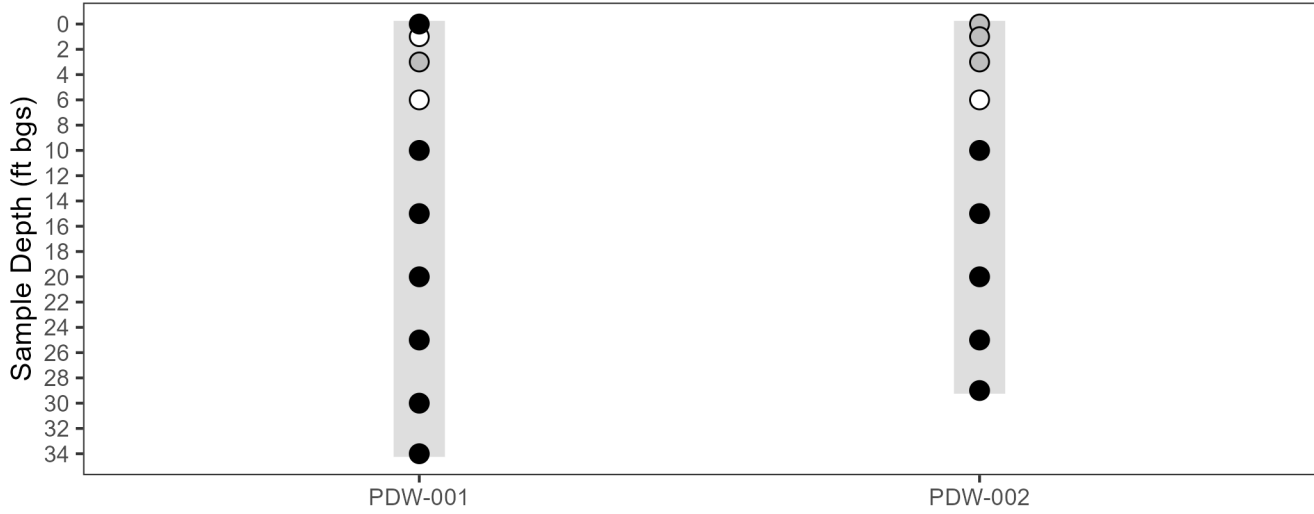
Initial PFAS Investigation
Spokane International Airport
Spokane, Washington

GSI Job No.: 6892
Issued: 13 March 2026



Notes: MDL = method detection limit

PFOS

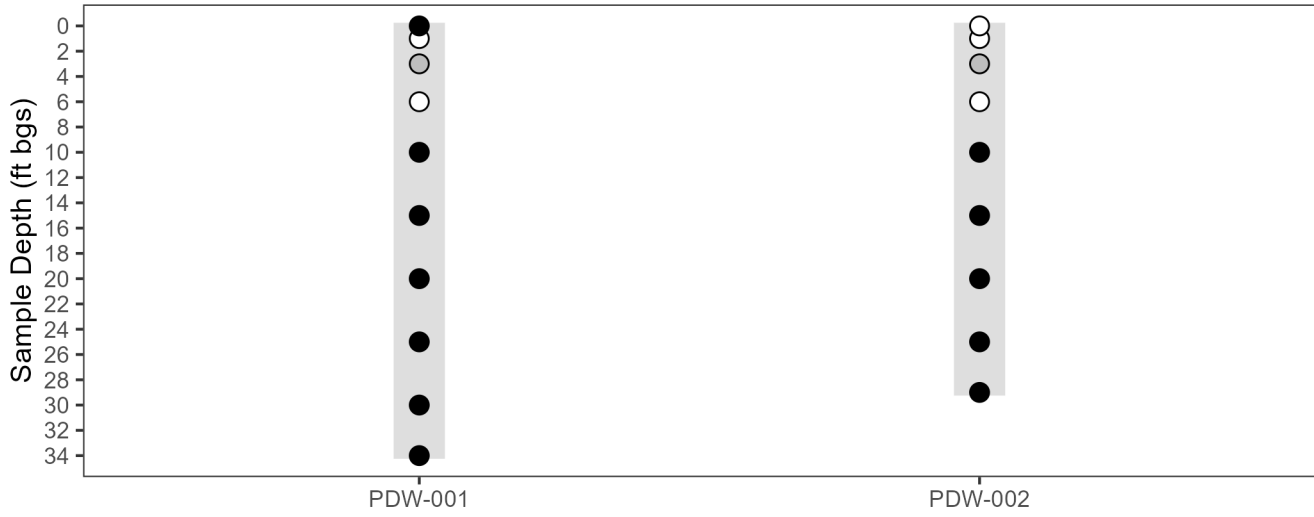


Legend:

- Not Analyzed
- Non-Detect
- MDL-2.4 µg/kg
- 2.4-10 µg/kg
- 10-100 µg/kg
- 100-1,000 µg/kg
- >1,000 µg/kg

Sample △ Saturated ○ Unsat

PFOA



Legend:

- Not Analyzed
- Non-Detect
- MDL-1.5 µg/kg
- 1.5-10 µg/kg
- 10-100 µg/kg
- 100-1,000 µg/kg
- >1,000 µg/kg

Sample △ Saturated ○ Unsat

Notes: MDL = method detection limit



**Figure 7-18. Concentrations of PFOA and PFOS:
West Park Drive / Waste to Energy Facility Area**

GSI Job No.: 6892
Issued: 13 March 2026

Initial PFAS Investigation
Spokane International Airport
Spokane, Washington

INITIAL PFAS INVESTIGATION REPORT
Spokane International Airport
Spokane, WA

APPENDICES

- Appendix A. Field and Chains of Custody Forms
- Appendix B. Investigation Derived Waste
- Appendix C. Data Usability Summary
- Appendix D. Analytical Laboratory Reports
- Appendix E. Monitoring Well Survey Report
- Appendix F. Lithologic Logs of Soil Borings